



7145 West Tidwell Road ~ Houston, Texas 77092
(713) 744-6835
www.esc4.net

Publication Date: May 29, 2014

NOTICE TO OFFEROR

SUBMITTAL DEADLINE: Tuesday, July 1, 2014 @ 2:00 PM CDT

Questions regarding this solicitation must be submitted in writing to Robert Zingelmann at questions@esc4.net or (713) 744-6835 no later than *June 24, 2014*. All questions and answers will be posted to both www.esc4.net and www.tcpn.org under Solicitations. Offerors are responsible for viewing either website to review all questions and answers prior to submitting proposals. Please note that oral communications concerning this RFP shall not be binding and shall in no way excuse the responsive Offeror of the obligations set forth in this proposal.

Request for Proposal (RFP)
by

Region 4 Education Service Center ("ESC")

for

Grounds Keeping Products and Services

On behalf of itself, other government agencies and non-profits, made available through The Cooperative Purchasing Network "TCPN."

Solicitation Number 14-12

Note: Envelopes must be sealed, prominently marked with the RFP solicitation number, RFP title, RFP opening time/date and name of vendor. Electronic submissions of the RFP will not be accepted. **Submissions must be received by the Region 4 ESC office at: 7145 West Tidwell Road, Houston, TX 77092 no later than 2:00 pm CDT, at which time the bid opening process shall commence. Proposals will be collected in a conference room to be determined by Region 4 ESC and opened and recorded publicly.**

ATTENTION OFFERORS:

Submission of a proposal confers NO RIGHT on an Offeror to an award or to a subsequent contract. Region 4 ESC, in its sole discretion and for any reason or no reason, reserves the rights to reject any or all proposals, accept only a part of any proposal, accept the proposal deemed most advantageous to Region 4 ESC, and waive any technicalities. The issuance of this RFP does not obligate Region 4 ESC to make an award or negotiate or execute a contract. Region 4 ESC reserves the right to amend the terms and provisions of the RFP, negotiate with a proposer, add, delete, or modify the contract and/or the terms of any proposal submitted, extend the deadline for submission of proposals, ask for best and final offers, or withdraw the RFP entirely for any reason solely at Region 4 ESC's discretion. An individual proposal may be rejected if it fails to meet any requirement of this RFP. Region 4 ESC may seek clarification from a proposer at any time, and failure to respond within a reasonable time frame is cause for rejection of a proposal.

Please be advised that all information and documents submitted will be subject to the Public Information Act requirements governed by the State of Texas.

Because contracts are awarded by a governmental entity, all responses submitted are subject to release as public information after contracts are executed. If an Offeror believes that its response, or parts of its response, may be exempted from disclosure, the Offeror must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt. In addition, the Offeror must specify which exception(s) are applicable and provide detailed reasons to substantiate the exception(s). Offeror must provide this information on the "Acknowledgement and Acceptance to Region 4 ESC's Open Record Policy" form found on the next page of this solicitation. Any information that is unmarked will be considered public information and released, if requested under the Public Information Act.

The determination of whether information is confidential and not subject to disclosure is the duty of the Office of Attorney General (OAG). Region 4 Education Service Center ("ESC") must provide the OAG sufficient information to render an opinion and therefore, vague and general claims to confidentiality by the Offeror are not acceptable. Region 4 ESC must comply with the opinions of the OAG. Region 4 ESC assumes no responsibility for asserting legal arguments on behalf of any Offeror. Offerors are advised to consult with their legal counsel concerning disclosure issues resulting from this procurement process and to take precautions to safeguard trade secrets and other proprietary information.

After completion of award, these documents will be available for public inspection.

ACKNOWLEDGMENT AND ACCEPTANCE
OF REGION 4 ESC's OPEN RECORDS POLICY

Signature below certifies complete acceptance of Region 4 ESC's Open Records Policy, except as noted below (additional pages may be attached, if necessary).

Check one of the following responses to the Acknowledgment and Acceptance of Region 4 ESC's Open Records Policy below:

- We acknowledge Region 4 ESC's Open Records Policy and declare that no information submitted with this proposal, or any part of our proposal, is exempt from disclosure under the Public Information Act.

(Note: All information believed to be a trade secret or proprietary must be listed below. It is further understood that failure to identify such information, in strict accordance with the instructions below, will result in that information being considered public information and released, if requested under the Public Information Act.)

- We declare the following information to be a trade secret or proprietary and exempt from disclosure under the Public Information Act.

(Note: Offeror must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt. In addition, Offeror must specify which exception(s) are applicable and provide detailed reasons to substantiate the exception(s).

All pricing listed in Appendix C is to be considered proprietary and exempt from disclosure. This represents critical competitive information and we request that Toro be contacted by government entities to receive the data.

Date

Authorized Signature & Title

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A. INTRODUCTION

I. Background on Region 4 Education Service Center

Region 4 Education Service Center ("Region 4 ESC" herein "Lead Public Agency") on behalf of itself and all state, local governments, school districts, and higher education institutions in the United States of America, and other government agencies and non-profit organizations (herein "Participating Agencies") solicits proposals from qualified Offerors to enter into a Vendor Contract ("contract") for the goods or services solicited in this proposal.

Contracts are approved and awarded by a single governmental entity, Region 4 ESC, and are only available for use and benefit of all entities complying with state procurement laws and regulations (public and private schools, colleges and universities, cities, counties, non-profits, and all governmental entities).

Region 4 ESC's purchasing cooperative was established in 1997 as a means to increase their economic and operational efficiency. The purchasing cooperative has since evolved into a National Cooperative used to assist other government and public entities increase their economical and operational efficiency when procuring goods and services.

II. What is the role of The Cooperative Purchasing Network ("TCPN")

The Cooperative Purchasing Network ("TCPN") assists Region 4 ESC in helping other public agencies and non-profits reap the benefits of national leveraged pricing, with no cost to the member. TCPN leverages one of the largest pools of purchasing potential. This is accomplished by competitively soliciting proposals and awarding contracts for commonly purchased products and services. Through the TCPN solicitation process, Region 4 ESC awards contracts covering Facilities, Furniture, Office Supplies & Equipment, Security Systems, and Technology and other goods and services industries.

III. Purpose of TCPN

- Provide governmental and public entities opportunities for greater efficiency and economy in procuring goods and services.
- Take advantage of state-of-the-art purchasing procedures to ensure the most competitive contracts.
- Provide competitive price and bulk purchasing for multiple government or public entities that yields economic benefits unobtainable by the individual entity.
- Provide quick and efficient delivery of goods and services.
- Equalize purchasing power for smaller agencies that are unable to command the best contracts for themselves.
- Help in assisting with use of best business practices.

IV. Customer Service

- TCPN is dedicated to making our contracts successful for both our members and our awarded vendors.
- TCPN is committed to providing our members and awarded vendors with high quality service.
- TCPN has dedicated staff available to answer questions, offer guidance and help in any way possible.

B. SCOPE

It is the intention of Region 4 ESC to establish a contract with vendor(s) for **Grounds Keeping Products and Services**. Awarded vendor(s) shall perform covered services under the terms of this agreement. Offerors shall provide pricing based on a discount from a manufacturer's price list or catalog, or fixed price, or a combination of both with indefinite quantities. Electronic Catalog and/or price lists must accompany the proposal. Include an electronic copy of the catalog from which discount, or fixed price, is calculated. Multiple percentage discount structure is also acceptable. Please specify where different percentage discounts apply. Additional pricing and/or discounts may be included. If Offeror has existing cooperative contracts in place, Offeror is requested to submit pricing equal or better than those in place.

Each service proposed is to be priced separately with all ineligible items identified. Services may be awarded to multiple vendors. Offerors may elect to limit their proposals to a single service within any category, or multiple services within any or all categories.

Region 4 ESC is seeking a service provider that has the depth, breadth and quality of resources necessary to complete all phases of this contract. In addition, TCPN also requests any value add commodity or service that could be provided under this contract.

While this solicitation specifically covers Grounds Keeping Products and Services, respondents are encouraged to submit an offering on any and all products or services available that they currently perform in their normal course of business.

C. KEY DEFINITIONS

Days: means calendar days.

Lead agency: means the government entity advertising, soliciting, evaluating and awarding the contract. This definition also includes a public agency that meets the definition of a political subdivision, including a county, city, school district, state, public higher education or special district.

Procurement: means buying, purchasing, renting, leasing or otherwise acquiring any materials, services or construction. Procurement also includes all functions that pertain to the obtaining of any material, service, or construction, including description of requirements, selection and solicitation of sources, preparation and award of contract and all phases of contract administration.

Responsive Offeror: means a person, company, firm, corporation, partnership or other organization who submits a proposal which conforms in all material respects to the invitation for bids or request for proposals.

Solicitation: means an invitation for bids, a request for technical offers, a request for proposals, a request for quotations or any other invitation or request by which we invite a person to participate in a procurement.

Specifications: means any description of physical or functional characteristics, or of the nature of a material, service or construction of item. Specifications may include a description or any requirement for inspecting, testing or preparing a material, service or construction item for delivery.

Vendor: means any provider or seller of goods and/or services that has a contractual relationship with Region 4 or TCPN.

D. GENERAL TERMS AND INSTRUCTIONS TO OFFERORS

- I. **Submission of Response:** Unless otherwise specified in the solicitation, all submitted proposals must contain one (1) bound and signed original copy of the solicitation, and two (2) electronic copies on CD, DVD or flash drives (i.e. pin or jump drives) shall be provided. Please see format requirements below. Vendor must also submit one (1) electronic proposal free of propriety information to be posted on Vendor information page if awarded a contract.

Only sealed responses will be accepted. Faxed or electronically transmitted responses will not be accepted. Sealed responses may be submitted on any or all items, unless stated otherwise. Proposal may be rejected for failure to comply with the requirements set forth in this proposal.

Deviations from any terms, conditions and/or specifications must be conspicuously noted in writing by the Offeror and shall be included with the response. (See Appendix D).

- II. **Proposal Format:** Responses must be provided in a three-ring binder or report cover using 8.5 x 11 paper clearly identified with the name of the Offeror's company and the solicitation name and number on both the outside front cover and vertical spine. All forms are to be completed electronically.

Include a copy of the entire RFP document that you are responding to, prior to your tabulated response. This means that all pages prior to the Appendixes must be included before Tab 1. Tabs should be used to separate the proposal into sections. The following items identified must be included behind the tabs listed below. Offerors failing to organize in the manner listed may be considered non-responsive and may not be evaluated.

III. **Binder Tabs:**

- Tab 1 – Entire Vendor Contract and Signature Form
 - General Terms and Conditions Acceptance Form (Appendix D)
- Tab 2 – Questionnaire (Appendix E)
- Tab 3 – Company Profile (Appendix F, excluding References section)
- Tab 4 – Evaluation Criteria Questionnaire (Appendix I)
- Tab 5 – Product / Services (Appendix B)
- Tab 6 – References (Appendix F)
- Tab 7 – Pricing (Appendix C)
- Tab 8 – Value Add (Appendix G)
- Tab 9 – Required Documents
 - Additional Required Documents (Appendix H)
 - Acknowledgement & Acceptance of Region 4 ESC Open Records Policy (Page 4).

- IV. **Mailing of Proposals:** All bids and proposals submitted in response to the solicitation must be clearly identified as listed below with the solicitation number, title, name and address of the company responding. All packages must be clearly identified as listed below, sealed and delivered to the Region 4 ESC office no later than the submittal deadline assigned for this solicitation.

From _____
Company _____
Address _____
City, State, Zip _____
Solicitation Name and Number _____ Due Date and Time _____

- V. **Time for Receiving Proposals:** Proposals received prior to the submittal deadline will be time-stamped upon receipt and kept secure and unopened. At the submittal deadline, Region 4 will begin the process of opening all bids publicly by collecting all proposals received before the deadline in the room designated for the bid opening. No proposals received after the submittal time and deadline will be considered. Late proposals will be returned to sender unopened.
- VI. **Inquiries and/or Discrepancies:** Questions regarding this solicitation must be submitted in writing to Robert Zingelmann at questions@esc4.net or (713) 744-6835 no later than *June 24*. All questions and answers will be posted to both www.esc4.net and www.tcpn.org under **Solicitations**. Offerors are responsible for viewing either website to review all questions and answers prior to submitting proposals. Please note that oral communications concerning this RFP shall not be binding and shall in no way excuse the responsive Offeror of the obligations set forth in this proposal.
- VII. **Restricted and Prohibited Communications with Region 4 ESC:** During the period between the date Region 4 ESC issues this RFP and the selection of the vendor who is awarded a contract by Region 4 ESC, if any, Offerors shall restrict all contact with Region 4 ESC and direct all questions regarding this RFP, including questions regarding terms and conditions, only to the individual identified above in Section "Inquiries and/or Discrepancies" in the specified manner. **Do not contact members of the Board of Directors, other employees of Region 4 ESC or any of Region 4 ESC's agents or administrators. Contact with any of these prohibited individuals after issuance of this RFP and before selection is made, may result in disqualification of the Offeror.**

The communications prohibition shall terminate when the contract is recommended by the administration, considered by the Board of Directors at a noticed public meeting, and a contract has been awarded. In the event the Board of Directors refers the recommendation back to staff for reconsideration, the communications prohibition shall be re-imposed. Additionally, during the time period between the award by the Board of Directors and the execution of the contract, Offerors shall not engage in any prohibited communications as described in this section.

Prohibited communications includes direct contact, discussion, or promotion of any Offeror's response with any member of Region 4 ESC's Board of Directors or employees except for communications with Region 4 ESC's designated representative as set forth in this RFP and only in the course of inquiries, briefings, interviews, or presentations. This prohibition is intended to create a level playing field for all potential Offerors, assure that decisions are made in public, and to protect the integrity of the RFP process. Except as provided in the above stated exceptions, the following communications regarding a particular invitation for bids, requests for proposal, requests for qualifications, or other solicitation are prohibited:

- Communications between a potential vendor, service provider, bidder, offeror, lobbyist or consultant and any member of Region 4 ESC's Board of Directors;
- Communications between any director and any member of a selection or evaluation committee; and
- Communications between any director and administrator or employee.

The communications prohibition shall not apply to the following:

- Communications with Region 4 ESC's purchasing agent specifically named and authorized to conduct and receive such communications under this RFP or upon the request of Region 4 ESC, with Region 4 ESC's legal counsel; and
- Presentations made to the Board of Directors during any duly noticed public meeting.

Nothing contained herein shall prohibit any person or entity from publicly addressing Region 4 ESC's Board of Directors during any duly noticed public meeting, in accordance with applicable Board policies, on a matter other than this RFP or in connection with a presentation requested by Region 4 ESC's representatives.

VIII. Calendar of Events (subject to change):

<u>Event</u>	<u>Date:</u>
Issue RFP	May 29, 2014
Pre-proposal Conference	None
Deadline for receipt of questions via email	June 24, 2014
Issue Addendum/a (if required)	To Be Determined
Proposal Due Date	July 1, 2014
Approval from Region 4 ESC	August 26, 2014
Contract Effective Date	October 1, 2014

CONDITIONS OF SUBMITTING PROPOSALS

IX. Amendment of Proposal: A proposal may be amended up to the time of opening by submitting a sealed letter to the location indicated on the front page of this solicitation.

X. Withdrawal of Proposals: Withdrawal of proposals prior to the opening date will be permitted. Withdrawal of response will not be allowed for a period of 120 days following the opening. Pricing will remain firm for 120 days from submittal. However, consideration may be given in cases where Offeror advises that it made a clerical error that is substantially lower than it intended. In such case, Offeror must provide written notice of their desire to withdraw, along with supporting documents, within 3 business days of receiving the acceptance letter or of being requested by Region 4 ESC for clarification of the proposal, whichever is later. Any contracts entered into prior to Region 4 ESC receiving notice must be honored.

No Offeror should assume that their withdrawal request has been accepted unless, and until, they receive written acknowledgment and acceptance of their proposal withdrawal.

XI. Clarifications: Offeror may receive a written request to clarify, in writing, its proposal in order to determine whether a proposal should be considered for award. The process of clarification is not an opportunity for an Offeror to revise or modify its proposal, and any response by an Offeror to a written request for clarification that attempts to revise or modify its proposal shall be given no effect. The purpose of the request for clarification will be solely made for the purpose of eliminating minor irregularities, informalities, or apparent clerical mistakes in the proposal, which may be corrected or waived in the leading agency's sole discretion.

XII. Non-Responsive Proposals: All proposals will be reviewed for responsiveness to the material requirements of the solicitation. A proposal that is not materially responsive shall not be eligible for further consideration for award of the contract, and the Offeror shall receive notice of the rejection of its proposal.

XIII. Negotiations: Region 4 ESC shall determine which responsive proposals are in the competitive range and/or are reasonably susceptible of being selected for award. Proposals not in the competitive range may not be further evaluated. Proposals in the competitive range shall be evaluated on the basis of price and the other evaluation criteria set forth in the solicitation. In the event that Region 4 ESC decides to conduct negotiations, notice shall be provided to each Offeror whose proposal is being considered for award, which notice may identify, in general terms, the elements or factors upon which Region 4 ESC intends to base its negotiations. Offerors will not be assisted, in any way, to bring their proposal up to the level of other proposals through discussions.

During the course of negotiations, no Offeror's technical proposal or pricing shall be revealed to any other Offeror or to any other person who is not involved with the evaluation process. Region 4 ESC will also not indicate to Offeror a cost or price that it must meet to either obtain further consideration nor will it provide any information about other Offerors' proposals or prices.

XIV. **Best and Final Offer:** Region 4 ESC, in its sole discretion, may request all Offerors in the competitive range to submit a Best and Final Offer. Offerors must submit their Best and Final Offers in writing. If an Offeror does not respond to the request for a Best and Final Offer, that Offeror's most recent prior offer will be considered to be its Best and Final Offer.

XV. **Specifications:** When a solicitation contains a specification that states no substitutions, no deviation from this requirement will be permitted. Offeror must comply with the true intent of the specifications and drawings and not take advantage of any unintentional error or omission. In cases where no type and kind of product is specified, specifications have been developed to indicate minimal standards as to the usage, materials, and contents based on the needs of the members.

References to manufacturer's specifications (Design Guides), when used by Region 4 ESC, are to be considered informative to give the Offeror information as to the general style, type and kind requested. Responses proposing goods, materials or equipment regularly produced by a reputable manufacturer shall be evaluated by Region 4 ESC which will, in its sole discretion, determine whether such proposed goods, materials or equipment are substantially equivalent to the Design Guides, considering quality, workmanship, economy of operation, and suitability for the purpose intended. Offerors should include all documentation required to evaluate whether or not their proposed goods, materials or equipment are substantially equivalent to the Design Guides.

XVI. **Quality of Materials or Services:** Offeror shall state the brand name and number of the materials being provided. If none is indicated then it is understood that the offeror is quoting on the exact brand name and number specified or mentioned in the solicitation.

However, unless specifically stated otherwise, comparable substitutions will be permitted in cases where the material is equal to that specified, considering quality, workmanship, economy of operation and suitability for the purpose intended.

XVII. **Samples:** Upon request, samples shall be furnished, free of cost, within seven (7) days after receiving notice of such request. By submitting the proposal Offeror certifies that all materials conform to all applicable requirements of this solicitation and of those required by law. Offeror agrees to bear the costs for laboratory testing, if results show that the sample does not comply with solicitation requirements.

Submissions may be rejected for failing to submit samples as requested.

XVIII. **Deviations and Exceptions:** Deviations or exceptions stipulated in response may result in disqualification. It is the intent of Region 4 ESC to award a manufacturer's complete line of products, when possible.

XIX. **Formation of Contract:** A response to this solicitation is an offer to contract with Region 4 ESC based upon the terms, conditions, scope of work, and specifications contained in this request. A solicitation does not become a contract until it is awarded by Region 4 ESC. A contract is formed when Region 4 ESC's board signs the Vendor Contract Signature Form. The prospective vendor must submit a signed Vendor Signature Form with the response thus, eliminating the need for a formal signing process.

XX. **Estimated Quantities:** Region 4 ESC anticipates that a substantial number of participating members will enter into contracts resulting from this solicitation based on multiple surveys and usage of other

contracts that may have included similar services, however, Region 4 ESC makes no guarantee or commitment of any kind concerning quantities or usage of contracts resulting from this solicitation. The volume for this contract is estimated to be from \$10 million a year to \$30 million a year. This information is provided solely as an aid to contract vendors in preparing proposals only. The successful Vendor(s) discount and pricing schedule shall apply regardless of the volume of business under the contract.

- XXI. Multiple Awards:** membership includes a large number of potential entities which may utilize this contract throughout the nation. In order to assure that any ensuing contract(s) will allow Region 4 ESC to fulfill current and future needs, Region 4 ESC reserves the right to award contract(s) to multiple vendors. The decision to award multiple contracts, award only one contract, or to make no awards rests solely with Region 4 ESC.
- XXII. Non-Exclusive:** Any contract resulting from this solicitation shall be awarded with the understanding and agreement that it is for the sole convenience and benefit of participating members. Region 4 ESC and participating entities reserve the right to obtain like goods and services from other sources.

AWARD PROCESS

- XXIII. Award or Rejection of Proposals:** In accordance with applicable laws, rules, and regulations for public purchasing, award(s) will be made to the prospective vendor whose response is determined to be the most advantageous to participating agencies, price and other factors considered. Region 4 ESC reserves the right to use a "Market Basket Survey" method, based on randomly selected criteria to determine the most advantageous response. To qualify for evaluation, a proposal must have been submitted on time, and satisfy all mandatory requirements identified in this solicitation. Proposals that are materially non-responsive will be rejected and the Offeror will be provided notice of such rejection.
- XXIV. Evaluation Process:** In evaluating the responses the following predetermined criteria is considered:

Products/Pricing (40 Points)

1. All products and services available
2. Pricing for all available products and services
3. Pricing for warranties on all products and services
4. Ability of Customers to verify that they received contract pricing
5. Payment methods
6. Other factors relevant to this section as submitted by the proposer

Performance Capability (30 Points)

1. Ability to deliver products and services nationally
2. Response to emergency orders
3. Average Fill Rate
4. Average on time delivery rate
5. Shipping charges
6. Return and restocking policy and applicable fees
7. History of meeting the shipping and delivery timelines
8. Ability to meet service and warranty needs of members
9. Customer service/problem resolution
10. Invoicing process
11. Contract implementation/Customer transition
12. Financial condition of vendor
13. Website ease of use, availability, and capabilities related to ordering, returns and reporting

14. Offeror's safety record
15. Instructional materials
16. Other factors relevant to this section as submitted by the proposer

Qualification and Experience (20 Points)

1. Offeror's reputation in the marketplace
2. Reputation of products and services in the marketplace
3. Past relationship with Region 4 ESC and/or TCPN members
4. Experience and qualification of key employees
5. Location and number of sales persons who will work on this contract
6. Past experience working with the government sector
7. Exhibited understanding of cooperative purchasing
8. Past litigation, bankruptcy, reorganization, state investigations of entity or current officers and directors
9. Minimum of 10 customer references relating to the products and services within this RFP
10. Other factors relevant to this section as submitted by the proposer

Value Add (10 Points)

1. Marketing plan and capability
2. Sales force training
3. Other factors relevant to this section as submitted by the proposer

XXV. Competitive Range: It may be necessary to establish a competitive range. Factors from the predetermined criteria will be used to make this determination. Responses not in the competitive range are unacceptable and do not receive further award consideration.

.VI. Evaluation: A committee will review and evaluate all responses and make a recommendation for award of contract(s). The recommendation for contract awards will be based on the predetermined criteria factors outlined in this solicitation, where each factor is assigned a point value based on its importance.

XXVII. Past Performance: An Offeror's performance and actions under previously awarded contracts are relevant in determining whether or not the Offeror is likely to provide quality goods and services to TCPN members; including the administrative aspects of performance; the Offeror's history of reasonable and cooperative behavior and commitment to customer satisfaction; and generally, the Offeror's businesslike concern for the interests of the customer.

OPEN RECORDS POLICY

XXVIII. Proprietary Information: Because contracts are awarded by a governmental entity, all responses submitted are subject to release as public information after contracts are executed. If an Offeror believes that its response, or parts of its response, may be exempted from disclosure, the Offeror must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt. In addition, the Offeror must specify which exception(s) are applicable and provide detailed reasons to substantiate the exception(s). Offeror must provide this information on the "Acknowledge and Acceptance to Region 4 ESC's Open Record Policy" form found at the beginning of this solicitation. Any information that is unmarked will be considered public information and released, if requested under the Public Information Act.

The determination of whether information is confidential and not subject to disclosure is the duty of the Office of Attorney General (OAG). Region 4 ESC must provide the OAG sufficient information to render an opinion and therefore, vague and general claims to confidentiality by the Offeror are not

acceptable. Region 4 ESC must comply with the opinions of the OAG. Region 4 ESC assumes no responsibility for asserting legal arguments on behalf of any Offeror. Offeror is advised to consult with their legal counsel concerning disclosure issues resulting from this procurement process and to take precautions to safeguard trade secrets and other proprietary information.

After completion of award, these documents will be available for public inspection.

PROTEST OF NON-AWARD

XXIX. Protest Procedure: Any protest of an award or proposed award must be filed in writing within ten (10) days from the date of the official award notification and must be received by 5:00 pm CDT. No protest shall lie for a claim that the selected Vendor is not a responsible Offeror. Protests shall be filed with Robert Zingelmann and sent to the Region 4 ESC office at: 7145 West Tidwell Road, Houston, TX 77092. Protests shall include the following:

1. Name, address and telephone number of protester
2. Original signature of protester or its representative
3. Identification of the solicitation by RFP number
4. Detailed statement of legal and factual grounds including copies of relevant documents; and the form of relief requested.
5. Any protest review and action shall be considered final with no further formalities being considered.

LIMITATION OF LIABILITY

XXX. Waiver: BY SUBMITTING A PROPOSAL, OFFER EXPRESSLY AGREES TO WAIVE ANY CLAIM IT HAS OR MAY HAVE AGAINST BOTH THE COOPERATIVE PURCHASING NETWORK AND REGION 4 EDUCATION SERVICE CENTER, ITS DIRECTORS, OFFICERS, ITS TRUSTEES, OR AGENTS ARISING OUT OF OR IN CONNECTION WITH (1) THE ADMINISTRATION, EVALUATION, RECOMMENDATION OF ANY PROPOSAL; (2) ANY REQUIREMENTS UNDER THE SOLICITATION, PROPOSAL PACKAGE, OR RELATED DOCUMENTS; (3) THE REJECTION OF ANY PROPOSAL OR ANY PART OF ANY PROPOSAL; AND/OR (4) THE AWARD OF A CONTRACT, IF ANY.

XXXI. NEITHER REGION 4 ESC NOR TCPN SHALL BE RESPONSIBLE OR LIABLE FOR ANY COSTS INCURRED BY PROPOSERS OR THE SELECTED VENDOR IN CONNECTION WITH RESPONDING TO THE RFP, PREPARING FOR ORAL PRESENTATIONS, PREPARING AND SUBMITTING A PROPOSAL, ENTERING OR NEGOTIATING THE TERMS OF A CONTRACT, OR ANY OTHER EXPENSES INCURRED BY A PROPOSER. THE PROPOSER OR SELECTED VENDOR IS WHOLLY RESPONSIBLE FOR ANY SUCH COSTS AND EXPENSES AND SHALL NOT BE REIMBURSED IN ANY MANNER BY REGION 4 ESC OR TCPN.

APPENDIX A

VENDOR CONTRACT AND SIGNATURE FORM

This Vendor Contract and Signature Form ("Contract") is made as of 6-27-2014 by and between The Toro Company ("Vendor") and Region 4 Education Service Center ("Region 4 ESC") for the purchase of _____
Grounds Keeping Products and Services ("the products and services").

RECITALS

WHEREAS, both parties agree and understand that the following pages will constitute the contract between the successful vendor(s) and Region 4 ESC, having its principal place of business at 7145 West Tidwell Road, Houston, TX 77092.

WHEREAS, Vendor agrees to include, in writing, any required exceptions or deviations from these terms, conditions, and specifications; and it is further understood that, if agreed to by Region 4 ESC, said exceptions or deviations will be incorporated into the final contract "Vendor Contract."

WHEREAS, this contract consists of the provisions set forth below, including provisions of all attachments referenced herein. In the event of a conflict between the provisions set forth below and those contained in any attachment, the provisions set forth below shall control.

WHEREAS, the Vendor Contract will provide that any state, county, special district, local government, school district, private K-12 school, technical or vocational school, higher education institution (including community colleges, colleges and universities, both public and private), other government agencies or non-profit organization may purchase products and services at prices indicated in the Vendor Contract upon registering and becoming a member with TCPN; and it being further understood that Region 4 ESC shall act as the Lead Public Agency with respect to all such purchase agreements.

WHEREAS, TCPN has the administrative and legal capacity to administer purchases on behalf of Region 4 ESC under the Vendor Contract with participating public agencies and entities, as permitted by applicable law.

ARTICLE 1- GENERAL TERMS AND CONDITIONS

- 1.1 TCPN shall be afforded all of the rights, privileges and indemnifications afforded to Region 4 ESC under the Vendor Contract, and such rights, privileges and indemnifications shall accrue and apply with equal effect to TCPN, including, without limitation, Vendors obligation to provide insurance and other indemnifications to Lead Public Agency.
- 1.2 Awarded vendor shall perform all duties, responsibilities and obligations, set forth in this agreement, and required under the Vendor Contract.
- 1.3 TCPN shall perform its duties, responsibilities and obligations as administrator of purchases, set forth in this agreement, and required under the Vendor Contract.

1.4 **Purchasing procedure:**

- Purchase orders are issued by participating governmental agencies to the awarded vendor indicating on the PO “Per TCPN Contract # R_____.”
- Vendor delivers goods/services directly to the participating agency.
- Awarded vendor invoices the participating agency directly.
- Awarded vendor receives payment directly from the participating agency.
- Awarded vendor reports sales monthly to TCPN.

1.5 **Customer Support:** The vendor shall provide timely and accurate technical advice and sales support to Region 4 ESC staff, TCPN staff and participating agencies. The vendor shall respond to such requests within one (1) working day after receipt of the request.

ARTICLE 2- ANTICIPATED TERM OF AGREEMENT

- 2.1 Unless otherwise stated, all contracts are for a period of three (3) years with an option to renew annually for an additional two (2) years if agreed to by Region 4 ESC. Region 4 ESC will notify the vendor in writing if the contract is extended. Awarded vendor shall honor all administrative fees for any sales made based on the contract whether renewed or not.
- 2.2 Region 4 ESC shall review the contract prior to the renewal date and notify the current awarded vendor, no less than ninety (90) days of Region 4 ESC's intent renew the contract. Upon receipt of notice, awarded vendor must notify Region 4 ESC if it elects not to renew. Awarded vendor shall honor the administrative fee for any sales incurred throughout the life of the contract on any sales made based on a Region 4 ESC contract whether awarded a renewal or not. Region 4 ESC reserves the right to exercise each two-year extension annually.

ARTICLE 3- REPRESENTATIONS AND COVENANTS

- 3.1. **Scope:** This contract is based on the need to provide the economic benefits of volume purchasing and reduction in administrative costs through cooperative purchasing to schools and other members. Although contractors may restrict sales to certain public units (for example, state agencies or local government units), any contract that prohibits sales from being made to public school districts may not be considered. Sales without restriction to any Members are preferred.
- 3.2. **Compliance:** Cooperative Purchasing Agreements between TCPN and its Members have been established under state procurement law.
- 3.3. **Offeror's Promise:** Offeror agrees all prices, terms, warranties, and benefits granted by Offeror to Members through this contract are comparable to or better than the equivalent terms offered by Offeror to any present customer meeting the same qualifications or requirements.

ARTICLE 4- FORMATION OF CONTRACT

- 4.1. **Offeror Contract Documents:** Region 4 ESC will review proposed offeror contract documents. Vendor's contract document shall not become part of Region 4 ESC's contract with vendor unless and until an authorized representative of Region 4 ESC reviews and approves it.
- 4.2. **Form of Contract:** The form of contract for this solicitation shall be the Request for Proposal, the awarded proposal(s) and best and final offer(s), and properly issued and reviewed purchase orders

referencing the requirements of the Request for Proposals. If a firm submitting an offer requires Region 4 ESC and/or Member to sign an additional agreement, a copy of the proposed agreement must be included with the proposal.

- 4.3. **Entire Agreement (Parol evidence)**: The contract, as specified above, represents the final written expression of agreement. All agreements are contained herein and no other agreements or representations that materially alter it are acceptable.
- 4.4. **Assignment of Contract**: No assignment of contract may be made without the prior written approval of Region 4 ESC. Purchase orders and payment can only be made to awarded vendor unless otherwise approved by Region 4 ESC. Awarded vendor is required to notify Region 4 ESC when any material change in operations is made that may adversely affect members (i.e. bankruptcy, change of ownership, merger, etc.).
- 4.5. **Novation**: If contractor sells or transfers all assets or the entire portion of the assets used to perform this contract, a successor in interest must guarantee to perform all obligations under this contract. Region 4 ESC reserves the right to accept or reject any new party. A simple change of name agreement will not change the contractual obligations of contractor.
- 4.6. **Contract Alterations**: No alterations to the terms of this contract shall be valid or binding unless authorized and signed by a Region 4 ESC staff member.
- 4.7. **Order of Precedence**: In the event of a conflict in the provisions of the contract as accepted by Region 4 ESC, the following order of precedence shall prevail:
- Special terms and conditions
 - General terms and conditions
 - Specifications and scope of work
 - Attachments and exhibits
 - Documents referenced or included in the solicitation
- 4.8. **Supplemental Agreements**: The entity participating in the Region 4 ESC contract and awarded vendor may enter into a separate supplemental agreement to further define the level of service requirements over and above the minimum defined in this contract i.e. invoice requirements, ordering requirements, specialized delivery, etc. Any supplemental agreement developed as a result of this contract is exclusively between the participating entity and awarded vendor. Neither Region 4 ESC, TCPN, its agents, members and employees shall be made party to any claim for breach of such agreement.
- 4.9. **Adding authorized distributors/dealers**: Awarded vendors are prohibited from authorizing additional distributors or dealers, other than those identified at the time of submitting their proposal, to sell under their contract award without notification and prior written approval from TCPN. Awarded vendors must notify TCPN each time it wishes to add an authorized distributor or dealer. Purchase orders and payment can only be made to awarded vendor unless otherwise approved by TCPN. Pricing provided to members by added distributors or dealers must also be less than or equal to the pricing offered by the awarded contract holder, unless otherwise approved by TCPN.

ARTICLE 5- TERMINATION OF CONTRACT

5.1. **Cancellation for Non-Performance or Contractor Deficiency:** Region 4 ESC may terminate any contract if Members have not used the contract, or if purchase volume is determined to be low volume in any 12-month period. Region 4 ESC reserves the right to cancel the whole or any part of this contract due to failure by contractor to carry out any obligation, term or condition of the contract. Region 4 ESC may issue a written deficiency notice to contractor for acting or failing to act in any of the following:

- i. Providing material that does not meet the specifications of the contract;
- ii. Providing work and/or material that was not awarded under the contract;
- iii. Failing to adequately perform the services set forth in the scope of work and specifications;
- iv. Failing to complete required work or furnish required materials within a reasonable amount of time;
- v. Failing to make progress in performance of the contract and/or giving Region 4 ESC reason to believe that contractor will not or cannot perform the requirements of the contract; and/or
- vi. Performing work or providing services under the contract prior to receiving a Region 4 ESC reviewed purchase order for such work.

Upon receipt of a written deficiency notice, contractor shall have ten (10) days to provide a satisfactory response to Region 4 ESC. Failure to adequately address all issues of concern may result in contract cancellation. Upon cancellation under this paragraph, all goods, materials, work, documents, data and reports prepared by contractor under the contract shall become the property of the Member on demand.

5.2. **Termination for Cause:** If, for any reason, the Vendor fails to fulfill its obligation in a timely manner, or if the vendor violates any of the covenants, agreements, or stipulations of this contract Region 4 ESC reserves the right to terminate the contract immediately and pursue all other applicable remedies afforded by law. Such termination shall be effective by delivery of notice, to the vendor, specifying the effective date of termination. In such event, all documents, data, studies, surveys, drawings, maps, models and reports prepared by vendor for this solicitation may become the property of the participating agency or entity. If such event does occur then vendor will be entitled to receive just and equitable compensation for the satisfactory work completed on such documents.

5.3. **Delivery/Service Failures:** Failure to deliver goods or services within the time specified, or within a reasonable time period as interpreted by the purchasing agent or failure to make replacements or corrections of rejected articles/services when so requested shall constitute grounds for the contract to be terminated. In the event that the participating agency or entity must purchase in an open market, contractor agrees to reimburse the participating agency or entity, within a reasonable time period, for all expenses incurred.

5.4. **Force Majeure:** If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch.

The term Force Majeure as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, orders of any kind of government of the United States or the State of Texas or any civil or military authority; insurrections; riots; epidemics; landslides; lighting; earthquake; fires; hurricanes; storms; floods; washouts; droughts; arrests; restraint of government and people; civil disturbances; explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability. It is understood and agreed that the settlement of strikes and lockouts shall be entirely within the discretion of the

party having the difficulty, and that the above requirement that any Force Majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demands of the opposing party or parties when such settlement is unfavorable in the judgment of the party having the difficulty.

- 5.5 **Standard Cancellation**: Either party may cancel this contract in whole or in part by providing written notice. The cancellation will take effect 30 business days after the other party receives the notice of cancellation. After the 30th business day all work will cease following completion of final purchase order. Vendor may be requested to provide additional items not already on contract at any time.

ARTICLE 6- LICENSES

- 6.1 **Duty to keep current license**: Vendor shall maintain in current status all federal, state and local licenses, bonds and permits required for the operation of the business conducted by vendor. Vendor shall remain fully informed of and in compliance with all ordinances and regulations pertaining to the lawful provision of services under the contract. Region 4 ESC reserves the right to stop work and/or cancel the contract of any vendor whose license(s) expire, lapse, are suspended or terminated.
- 6.2 **Survival Clause**: All applicable software license agreements, warranties or service agreements that were entered into between Vendor and Customer under the terms and conditions of the Contract shall survive the expiration or termination of the Contract. All Purchase Orders issued and accepted by Order Fulfiller shall survive expiration or termination of the Contract.

ARTICLE 7- DELIVERY PROVISIONS

- 7.1 **Delivery**: Vendor shall deliver said materials purchased on this contract to the Member issuing a Purchase Order. Conforming product shall be shipped within 7 days of receipt of Purchase Order. If delivery is not or cannot be made within this time period the vendor must receive authorization from the purchasing agency for the delayed delivery. At this point the participating entity may cancel the order if estimated shipping time is not acceptable.
- 7.2 **Inspection & Acceptance**: If defective or incorrect material is delivered, purchasing agency may make the determination to return the material to the vendor at no cost to the purchasing agency. The vendor agrees to pay all shipping costs for the return shipment. Vendor shall be responsible for arranging the return of the defective or incorrect material.

ARTICLE 8- BILLING AND REPORTING

- 8.1 **Payments**: The entity using the contract will make payments directly to the awarded vendor. Payment shall be made after satisfactory performance, in accordance with all provisions thereof, and upon receipt of a properly completed invoice.
- 8.2 **Invoices**: The awarded vendor shall submit invoices to the participating entity clearly stating "*Per TCPN Contract*". The shipment tracking number or pertinent information for verification shall be made available upon request.
- 8.3 **Tax Exempt Status**: Since this is a national contract, knowing the tax laws in each state is the sole responsibility of the vendor.

8.4 **Reporting:** The awarded vendor shall electronically provide TCPN with a detailed monthly report showing the dollar volume of all sales under the contract for the previous month. Reports shall be sent via e-mail to TCPN offices at reporting@tcpn.org. Reports are due on the **fifteenth (15th)** day after the close of the previous month. It is the responsibility of the awarded vendor to collect and compile all sales under the contract from participating Members and submit one (1) report. The report shall include at least the following information listed below:

- Vendor Name
- TCPN Contract Number
- Reporting Period/Year
- Entity Name
- Entity Address (Including Street, City, State & Zip)
- Entity Purchase Order Number (Individual Purchase Order Numbers)
- Purchase Order Date
- Gross Sale Amount
- Administrative Fee (Based on Gross Sale Amount)

ARTICLE 9- PRICING

9.1 **Best price guarantee:** The awarded vendor agrees to provide pricing to Region 4 ESC and its participating entities that are the lowest pricing available and the pricing shall remain so throughout the duration of the contract. The awarded vendor agrees to lower the cost of any product purchased through TCPN following a reduction in the manufacturer or publisher's direct cost.

9.2 **Price increase:** Should it become necessary or proper during the term of this contract to make any change in design or any alterations that will increase expense Region 4 ESC must be notified immediately. Price increases must be approved by Region 4 ESC and no payment for additional materials or services, beyond the amount stipulated in the contract, shall be paid without prior approval. All price increases must be supported by manufacture documentation, or a formal cost justification letter.

Awarded vendor must honor previous prices for thirty (30) days after approval and written notification from Region 4 ESC if requested.

It is the awarded vendor's responsibility to keep all pricing up to date and on file with Region 4 ESC. All price changes must be provided to Region 4 ESC, using the same format as was accepted in the original contract.

9.3 **Additional Charges:** All deliveries shall be freight prepaid, F.O.B. destination and shall be included in all pricing offered unless otherwise clearly stated in writing.

9.4 **Price reduction and adjustment:** Price reduction may be offered at any time during contract and shall become effective upon notice of acceptance from Region 4 ESC. Special, time-limited reductions are permissible under the following conditions: 1) reduction is available to all Members equally; 2) reduction is for a specific time period, normally not less than thirty (30) days; 3) original price is not exceeded after the time-limit; and 4) Region 4 ESC has approved the new prices prior to any offer of the prices to a Member. Vendor shall offer Region 4 ESC any published price reduction during the contract period.

9.5 **Prevailing Wage:** It shall be the responsibility of the Vendor to comply, when applicable, with the prevailing wage legislation in effect in the jurisdiction of the purchaser (Region 4 ESC or its Members). It shall further be the responsibility of the Vendor to monitor the prevailing wage rates as established by the appropriate department of labor for any increase in rates during the term of this contract and adjust wage rates accordingly.

9.6 **Administrative Fees:** All pricing submitted to Region 4 ESC shall include the administrative fee to be remitted to TCPN by the awarded vendor.

The awarded vendor agrees to pay administrative fees to TCPN as calculated as follows: (Sales will be calculated for fiscal year of January 1st through December 31st and reset each year)

<u>Annual Sales Through Contract</u>	<u>Administrative Fee</u>
0 - \$50,000,000	2%
\$50,000,001 - \$100,000,000	1.75%
\$100,000,001 - \$150,000,000	1.5%
\$150,000,001 - \$200,000,000	1.25%
\$200,000,001 - \$500,000,000	1%
\$500,000,001 - \$1,000,000,000	0.75%
\$1,000,000,000+	0.5%

ARTICLE 10- PRICING AUDIT

10.1 **Audit rights:** Vendor shall, at Vendor's sole expense, maintain appropriate due diligence of all purchases made by Region 4 ESC and any entity that utilizes this Agreement. TCPN and Region 4 ESC each reserve the right to audit the accounting for a period of three (3) years from the time such purchases are made. This audit right shall survive termination of this Agreement for a period of one (1) year from the effective date of termination. In the State of New Jersey, this audit right shall survive termination of this Agreement for a period of five (5) years from the date of final payment. Such records shall be made available to the New Jersey Office of the State Comptroller upon request. Region 4 ESC shall have the authority to conduct random audits of Vendor's pricing that is offered to eligible entities at Region 4 ESC's sole cost and expense. Notwithstanding the foregoing, in the event that Region 4 ESC is made aware of any pricing being offered to eligible agencies that is materially inconsistent with the pricing under this agreement, Region 4 ESC shall have the ability to conduct an extensive audit of Vendor's pricing at Vendor's sole cost and expense. Region 4 ESC may conduct the audit internally or may engage a third-party auditing firm. In the event of an audit, the requested materials shall be provided in the format and at the location designated by Region 4 ESC or TCPN.

ARTICLE 11- OFFEROR PRODUCT LINE REQUIREMENTS

11.1 **Current products:** Proposals shall be for materials and equipment in current production and marketed to the general public and education/government agencies at the time the proposal is submitted.

11.2 **Discontinued products:** If a product or model is discontinued by the manufacturer, vendor may substitute a new product or model if the replacement product meets or exceeds the specifications and performance of the discontinued model and if the discount is the same or greater than the discontinued model.

- 11.3 **New products/Services:** New products and/or services that meet the scope of work may be added to the contract. Pricing shall be equivalent to the percentage discount for other products. Vendor may replace or add product lines to an existing contract if the line is replacing or supplementing products on contract, is equal or superior to the original products offered, is discounted in a similar or to a greater degree, and if the products meet the requirements of the solicitation. No products and/or services may be added to avoid competitive procurement requirements. Region 4 ESC may require additions to be submitted with documentation from Members demonstrating an interest in, or a potential requirement for, the new product or service. Region 4 ESC may reject any additions without cause.
- 11.4 **Options:** Optional equipment for products under contract may be added to the contract at the time they become available under the following conditions: 1) the option is priced at a discount similar to other options; 2) the option is an enhancement to the unit that improves performance or reliability.
- 11.5 **Product line:** Offerors with a published catalog may submit the entire catalog. Region 4 ESC reserves the right to select products within the catalog for award without having to award all contents. Region 4 ESC may reject any addition of equipment options without cause.
- 11.6 **Warranty conditions:** All supplies, equipment and services shall include manufacturer's minimum standard warranty and one (1) year labor warranty unless otherwise agreed to in writing.
- 11.7 **Buy American requirement:** (for New Jersey and all other applicable States) Vendors may only use unmanufactured construction material mined or produced in the United States, as required by the Buy American Act. Where trade agreements apply, to the extent permitted by applicable law, then unmanufactured construction material mined or produced in a designated country may also be used. Vendors are required to check state specific requirements to ensure compliance with this requirement.

ARTICLE 12- SITE REQUIREMENTS

- 12.1 **Cleanup:** Vendor shall clean up and remove all debris and rubbish resulting from their work as required or directed by Member. Upon completion of the work, the premises shall be left in good repair and an orderly, neat, clean and unobstructed condition.
- 12.2 **Preparation:** Vendor shall not begin a project for which Member has not prepared the site, unless vendor does the preparation work at no cost, or until Member includes the cost of site preparation in a purchase order. Site preparation includes, but is not limited to: moving furniture, installing wiring for networks or power, and similar pre-installation requirements.
- 12.3 **Registered sex offender restrictions:** For work to be performed at schools, vendor agrees that no employee or employee of a subcontractor who has been adjudicated to be a registered sex offender will perform work at any time when students are or are reasonably expected to be present. Vendor agrees that a violation of this condition shall be considered a material breach and may result in the cancellation of the purchase order at the Member's discretion. Vendor must identify any additional costs associated with compliance of this term. If no costs are specified, compliance with this term will be provided at no additional charge.
- 12.4 **Safety measures:** Vendor shall take all reasonable precautions for the safety of employees on the worksite, and shall erect and properly maintain all necessary safeguards for protection of workers and the public. Vendor shall post warning signs against all hazards created by its operation and work in progress. Proper precautions shall be taken pursuant to state law and standard practices to protect workers, general public and existing structures from injury or damage.
- 12.5 **Smoking:** Persons working under the contract shall adhere to local smoking policies. Smoking will only be permitted in posted areas or off premises.

- 12.6 **Stored materials:** Upon prior written agreement between the vendor and Member, payment may be made for materials not incorporated in the work but delivered and suitably stored at the site or some other location, for installation at a later date. An inventory of the stored materials must be provided to Member prior to payment. Such materials must be stored and protected in a secure location, and be insured for their full value by the vendor against loss and damage. Vendor agrees to provide proof of coverage and/or addition of Member as an additional insured upon Member's request. Additionally, if stored offsite, the materials must also be clearly identified as property of buying Member and be separated from other materials. Member must be allowed reasonable opportunity to inspect and take inventory of stored materials, on or offsite, as necessary.

Until final acceptance by the Member, it shall be the Vendor's responsibility to protect all materials and equipment. The Vendor warrants and guarantees that title for all work, materials and equipment shall pass to the Member upon final acceptance.

ARTICLE 13- MISCELLANEOUS

- 13.1 **Funding Out Clause:** Any/all contracts exceeding one (1) year shall include a standard "funding out" clause. A contract for the acquisition, including lease, of real or personal property is a commitment of the entity's current revenue only, provided the contract contains either or both of the following provisions:

"Retains to the entity the continuing right to terminate the contract at the expiration of each budget period during the term of the contract and is conditioned on a best efforts attempt by the entity to obtain appropriate funds for payment of the contract."

- 13.2 **Disclosures:** Offeror affirms that he/she has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor or service to a public servant in connection with this contract.

Include a complete description of any and all relationships that might be considered a conflict of interest in doing business with participants in TCPN.

The Offeror affirms that, to the best of his/her knowledge, the offer has been arrived at independently, and is submitted without collusion with anyone to obtain information or gain any favoritism that would in any way limit competition or give an unfair advantage over other vendors in the award of this contract.

- 13.3 **Indemnity:** The awarded vendor shall protect, indemnify, and hold harmless both Region 4 ESC and TCPN and its participants, administrators, employees and agents against all claims, damages, losses and expenses arising out of or resulting from the actions of the vendor, vendor employees or vendor subcontractors in the preparation of the solicitation and the later execution of the contract, including any supplemental agreements with members. Any litigation involving either Region 4 ESC or TCPN, its administrators and employees and agents will be in Harris County, Texas. Any litigation involving TCPN members shall be in the jurisdiction of the participating agency.

- 13.4 **Franchise Tax:** The Offeror hereby certifies that he/she is not currently delinquent in the payment of any franchise taxes.

- 13.5 **Marketing:** Awarded vendor agrees to allow Region 4 ESC to use their name and logo within website, marketing materials and advertisement. Any use of Region 4 ESC name and logo or any form of publicity, inclusive of press releases, regarding this contract by awarded vendor must have prior approval from Region 4 ESC.

- 13.6 **Certificates of Insurance**: Certificates of insurance shall be delivered to the Region 4 ESC participant prior to commencement of work. The insurance company shall be licensed in the applicable state in which work is being conducted. The awarded vendor shall give the participating entity a minimum of ten (10) days notice prior to any modifications or cancellation of policies. The awarded vendor shall require all subcontractors performing any work to maintain coverage as specified.
- 13.7 **Legal Obligations**: It is the Offeror's responsibility to be aware of and comply with all local, state, and federal laws governing the sale of products/services identified in this RFP and any awarded contract and shall comply with all while fulfilling the RFP. Applicable laws and regulation must be followed even if not specifically identified herein.
- 13.8 **Open Records Policy**: Because Region 4 ESC contracts are awarded by a governmental entity, responses submitted are subject to release as public information after contracts are executed. If a vendor believes that its response, or parts of its response, may be exempted from disclosure, the vendor must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt. In addition, the Offeror must specify which exception(s) are applicable and provide detailed reasons to substantiate the exception(s). Offeror must provide this information on the "Acknowledgement and Acceptance to Region 4 ESC's Open Record Policy" form found at the beginning of this solicitation. Any information that is unmarked will be considered public information and released, if requested under the Public Information Act.

The determination of whether information is confidential and not subject to disclosure is the duty of the Office of Attorney General (OAG). Region 4 ESC must provide the OAG sufficient information to render an opinion and therefore, vague and general claims to confidentiality by the Offeror are not acceptable. Region 4 ESC must comply with the opinions of the OAG. Region 4 ESC assumes no responsibility for asserting legal arguments on behalf of any vendor. Offeror are advised to consult with their legal counsel concerning disclosure issues resulting from this procurement process and to take precautions to safeguard trade secrets and other proprietary information.

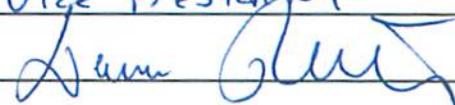
After completion of award, these documents will be available for public inspection.

[Remainder of Page Intentionally Left Blank-Signatures follow on Signature Form]

VENDOR CONTRACT SIGNATURE FORM

The undersigned hereby proposes and agrees to furnish goods and/or services in strict compliance with the terms, specifications and conditions at the prices proposed within response unless noted in writing. The undersigned further certifies that he/she is an officer of the company and has authority to negotiate and bind the company named below and has not prepared this proposal in collusion with any other Respondent and that the contents of this proposal as to prices, terms or conditions of said proposal have not been communicated by the undersigned nor by any employee or agent to any person engaged in this type of business prior to the official opening of this proposal.

Prices are guaranteed: **120 days**

Company name The Toro Company
Address 8111 Lyndale Ave. South
City/State/Zip Blainvinton, MN 55420
Telephone No. 952-887-7936
Fax No. 952-887-8694
Email address darren.redetzke@toro.com
Printed name Darren Redetzke
Position with company Vice President
Authorized signature 

Accepted by The Cooperative Purchasing Network:

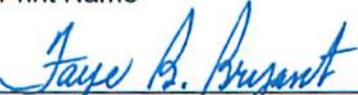
Term of contract October 1, 2014 to September 30, 2017

Unless otherwise stated, all contracts are for a period of three (3) years with an option to renew annually for an additional two (2) years if agreed to by Region 4 ESC and the awarded vendor. Awarded vendor shall honor all administrative fees for any sales made based on a contract whether renewed or not.


Region 4 ESC Authorized Board Member

August 26, 2014
Date

Rita Drabek
Print Name


Region 4 ESC Authorized Board Member

8-26-2014
Date

Faye B. Bryant
Print Name

TCPN Contract Number R141201

Appendix B:

PRODUCT / SERVICES SPECIFICATIONS

It is the intention of Region 4 ESC to establish an annual contract with highly qualified Vendor(s) for **Grounds Keeping Products and Services** on a national basis. Vendor(s) shall, at the request of TCPN member, provide these covered products and associated services under the terms of this RFP and the CONTRACT TERMS AND CONDITIONS. Vendor(s) shall assist the TCPN member with making a determination of its individual needs, as stated below.

Scope

This agreement should include all types of equipment necessary to maintain these facilities. Grounds maintenance equipment should include all forms of operation (power), whether gas powered, diesel powered, propane powered, electric powered or powered by other means. Ground maintenance equipment will include but not be limited to the following equipment:

- Heavy Duty Mowers
- Zero Turn Mowers
- Deck Mowers
- Drag Mowers
- Push Mowers
- Brush Hog Mower
- Fairway Mowers
- Greens and Tee Mowers Riding and Walking
- Greens Rollers
- Rough Mowers (for Golf Courses)
- Trap Rakes
- Golf Greens Top Dressers
- Reel Mowers
- Golf Course Rollers
- Trucksters and Utility Vehicles
- Club Cab
- Golf Carts
- Heavy Duty Sprayers
- Hand Operated Sprayers
- Water Trucks
- Boom Mowers
- Ditch Bank Mowers
- 7 Gang, 9 Gang Mower Attachments
- Heavy Duty Tractors With PTO For Attachments
- Skid Steer Loaders
- Field Markers and Groomers both Riding and Hand Operated
- Seeder
- Aerators
- Leaf Blower or Vacuum
- Wood Chipper
- Stump Grinder
- Shavings Processing Equipment
- Paving and Curbing Equipment
- Utility Vehicles Mid Duty and Heavy Duty
- Rakes
- Sprayers

Appendix D:

GENERAL TERMS & CONDITIONS ACCEPTANCE FORM

Signature on Vendor Contract Signature form certifies complete acceptance of the General Terms and Conditions in this solicitation, except as noted below (additional pages may be attached, if necessary).

Check one of the following responses to the General Terms and Conditions:

- We take no exceptions/deviations to the general terms and conditions

(Note: If none are listed below, it is understood that no exceptions/deviations are taken.)

- We take the following exceptions/deviations to the general terms and conditions. All exceptions/deviations must be clearly explained. Reference the corresponding general terms and conditions that you are taking exceptions/deviations to. Clearly state if you are adding additional terms and conditions to the general terms and conditions. Provide details on your exceptions/deviations below:

(Note: Unacceptable exceptions shall remove your proposal from consideration for award. Region 4 ESC shall be the sole judge on the acceptance of exceptions/deviations and the decision shall be final.)

Page 11, XVII Samples: *Due to the nature and cost of this equipment, free samples are not available. We do however; have demonstration equipment available at your request.*

Page 20, 9.1 Best Price guarantee: *Insert "Toro will encourage and incent our distributors and dealers to provide contract pricing to TCPN members at the agreed upon price but cannot guarantee that they will participate in the program."*

Page 21, 9.6 Administrative Fees: *Insert "Toro agrees to pay administrative fees to TCPN in the amount of 1.5% of all sales associated with the contract."*

Page 27 Proposer Qualifications: *Toro declines the request to disclose this information. The product recalls in the past have no relevance to the current product that would be sold and received from this agreement. All past issues are addressed to ensure Toro product quality standards.*

Page 28, Specific Warranties: *Toro cannot guarantee that our distributors will have a loaner available in the event a unit under warrantee is down for more than 48 hours. They do however make their best efforts to meet customer needs.*

Appendix E:
QUESTIONNAIRE

Please provide responses to the following questions that address your company's operations, organization, structure and processes for providing products and services.

1. States Covered

Offeror must indicate any and all states where products and services can be offered.

Please indicate the price co-efficient for each state if it varies.

50 States & District of Columbia (Selecting this box is equal to checking all boxes below)

- | | |
|--|---|
| <input type="checkbox"/> Alabama | <input type="checkbox"/> Montana Alaska |
| <input type="checkbox"/> | <input type="checkbox"/> Nebraska |
| <input type="checkbox"/> Arizona | <input type="checkbox"/> Nevada |
| <input type="checkbox"/> Arkansas | <input type="checkbox"/> New Hampshire |
| <input type="checkbox"/> California | <input type="checkbox"/> New Jersey |
| <input type="checkbox"/> Colorado | <input type="checkbox"/> New Mexico |
| <input type="checkbox"/> Connecticut | <input type="checkbox"/> New York |
| <input type="checkbox"/> Delaware | <input type="checkbox"/> North Carolina |
| <input type="checkbox"/> District of Columbia | <input type="checkbox"/> North Dakota |
| <input type="checkbox"/> Florida | <input type="checkbox"/> Ohio |
| <input type="checkbox"/> Georgia | <input type="checkbox"/> Oklahoma |
| <input type="checkbox"/> Hawaii <u>8% price adder for Hawaii</u> | <input type="checkbox"/> Oregon |
| <input type="checkbox"/> Idaho | <input type="checkbox"/> Pennsylvania |
| <input type="checkbox"/> Illinois | <input type="checkbox"/> Rhode Island |
| <input type="checkbox"/> Indiana | <input type="checkbox"/> South Carolina |
| <input type="checkbox"/> Iowa | <input type="checkbox"/> South Dakota |
| <input type="checkbox"/> Kansas | <input type="checkbox"/> Tennessee |
| <input type="checkbox"/> Kentucky | <input type="checkbox"/> Texas |
| <input type="checkbox"/> Louisiana | <input type="checkbox"/> Utah |
| <input type="checkbox"/> Maine | <input type="checkbox"/> Vermont |
| <input type="checkbox"/> Maryland | <input type="checkbox"/> Virginia |
| <input type="checkbox"/> Massachusetts | <input type="checkbox"/> Washington |
| <input type="checkbox"/> Michigan | <input type="checkbox"/> West Virginia |
| <input type="checkbox"/> Minnesota | <input type="checkbox"/> Wisconsin |
| <input type="checkbox"/> Mississippi | <input type="checkbox"/> Wyoming |
| <input type="checkbox"/> Missouri | |

Territories & Outlying Areas (Selecting this box is equal to checking all boxes below)

- | | |
|---|--|
| <input type="checkbox"/> American Samoa | <input type="checkbox"/> Northern Marina Islands |
| <input type="checkbox"/> Federated States of Micronesia | <input type="checkbox"/> Puerto Rico |
| <input type="checkbox"/> Guam | <input type="checkbox"/> U.S. Virgin Islands |
| <input type="checkbox"/> Midway Islands | |

2. Diversity Programs

- Do you currently have a diversity program or any diversity partners that you do business with? Yes No
- If the answer is yes, do you plan to offer your program or partnership through through TCPN Yes No

(If the answer is yes, attach a statement detailing the structure of your program, along with a list of your diversity alliances and a copy of their certifications.)

- Will the products accessible through your diversity program or partnership be offered to TCPN members at the same pricing offered by your company?
 Yes No

(If answer is no, attach a statement detailing how pricing for participants would be calculated.)

3. Minority and Women Business Enterprise (MWBE) and (HUB) Participation

It is the policy of some entities participating in TCPN to involve minority and women business enterprises (M/WBE), small and/or disadvantaged business enterprises, disable veterans business enterprises, historically utilized businesses (HUB) and other diversity recognized businesses in the purchase of goods and services. Respondents shall indicate below whether or not they hold certification in any of the classified areas and include proof of such certification with their response.

a. Minority Women Business Enterprise

Respondent certifies that this firm is an MWBE Yes No

List certifying agency: _____

b. Small Business Enterprise (SBE) or Disadvantaged Business Enterprise (DBE)

Respondent certifies that this firm is a SBE or DBE Yes No

List certifying agency: _____

c. Disabled Veterans Business Enterprise (DVBE)

Respondent certifies that this firm is a DVBE Yes No

List certifying agency: _____

d. Historically Underutilized Businesses (HUB)

Respondent certifies that this firm is a HUB Yes No

List certifying agency: _____

e. Historically Underutilized Business Zone Enterprise (HUBZone)

Respondent certifies that this firm is a HUBZone Yes No

List certifying agency: _____

f. Other

Respondent certifies that this firm is a recognized diversity certificate holder Yes No

List certifying agency: _____

4. Residency

Responding Company's principal place of business is in the city of Bloomington State of MN

5. **Felony Conviction Notice**

Please check applicable box:

- A publicly held corporation; therefore, this reporting requirement is not applicable.
- Is not owned or operated by anyone who has been convicted of a felony.
- Is owned or operated by the following individual(s) who has/have been convicted of a felony.

*If the third box is checked a detailed explanation of the names and convictions must be attached.

6. **Processing Information**

Company contact for:

Contract Management

Contact Peter E. Whitacre Person:
Title: Sales Manager, STATE + Local Government
Company: The Toro Company
Address: 8111 Lyndale Ave. South
City: Bloomington State: MN Zip: 55420
Phone: 952-887-7936 Fax: 952-887-8694
Email: peter.whitacre@toro.com

Billing & Reporting/Accounts Payable

Contact Josh Goodwin Person:
Title: Marketing Analyst
Company: The Toro Company
Address: 8111 Lyndale Ave. South
City: Bloomington State: MN Zip: 55420
Phone: 952-887-8853 Fax: 952-887-8694
Email: josh.goodwin@toro.com

Marketing

Contact Paula Sliefert Person:
Title: Sr. Marketing Manager
Company: The Toro Company
Address: 8111 Lyndale Ave South
City: Bloomington State: MN Zip: 55420
Phone: 952-887-7107 Fax: 952-887-8694
Email: paula.sliefert@toro.com

7. **Distribution Channel:** Which best describes your company's position in the distribution channel:

- Manufacturer direct Certified education/government reseller
 Authorized distributor Manufacturer marketing through reseller
 Value-added reseller Other _____

8. **Pricing Information**

- In addition to the current typical unit pricing furnished herein, the Vendor agrees to offer all future product introductions at prices that are proportionate to Contract Pricing.

Yes No

(If answer is no, attach a statement detailing how pricing for participants would be calculated.)

- Pricing submitted includes the required administrative fee. Yes No

(Fee calculated based on invoice price to customer)

- Additional discounts for purchase of a guaranteed quantity? Yes No

Negotiable

9. **Cooperatives**

List any other cooperative or state contracts currently held or in the process of securing

Cooperative/State Agency	Discount Offered	Expires	Annual Sales Volume
NATIONAL IPA	21.8%	11/2017	
Commonwealth of Virginia	20%	9/2017	
STATE of UTAH	20%	7/2014	
STATE of Missouri	20%	9/2017	
STATE of New Mexico	20%	9/2017	
STATE of South Dakota	20%	9/2017	
STATE of Wisconsin	20%	9/2017	
STATE of Delaware	20%	9/2017	

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Vendor Orientation

Respondent companies must commit to attending a vendor orientation meeting at TCPN's offices should they be awarded a contract with Region 4 ESC through this RFP. Vendor orientation meetings are meant to establish a good relationship with awarded vendors and help to ensure compliance and effective administration over the life of the contract.

Respondents should indicate below what date they would like to have their vendor orientation and who the participants will be. TCPN highly recommends that the individuals who will handle contract management, reporting and accounting, and marketing all come to the vendor orientation.

Vendor orientations for this RFP will be held between September 2 and September 26.

If awarded, our company will plan to attend vendor orientation on 9/17/2014

Potential attendees will include:

Pete Whitacre - Sales Manager, STATE & Local Govt
Paula Sliefert - Sr. Marketing Manager

Signature: _____ Date: _____

Appendix F:
COMPANY PROFILE

Please provide the following:

1. Company's official registered name.

TORO COMPANY, THE

2. Brief history of your company, including the year it was established.

The Toro Company is proud of its legacy of quality and innovation. Founded in 1914 to build tractor engines for The Bull Tractor Company, the company survived the tumultuous years of World War I by building steam steering engines for merchant ships to support the war effort. In 1920, Toro entered the turf industry when it mounted five reel mowers to the front of a Toro tractor to cut the fairways at The Minikahda Club in Minneapolis.

We take pride in our responsibility to employees, customers, shareholders and the environment. Since 1914, we have cultivated our reputation around trusted relationships and constant innovation to help anticipate the future needs of our customers. At the same time, we are building on a tradition of excellence around a number of strong brands to help customers care for golf courses, sports fields, public green spaces, commercial and residential properties, and agricultural fields.

Over the years, we have strengthened our position as a leading worldwide provider of turf and landscape maintenance equipment, and precision irrigation solutions due in large part to a strong network of distributors, dealers and retailers in nearly 80 countries around the world.

3. Company's Dun & Bradstreet (D&B) number.

00-647-7400

4. Corporate office location.

**8111 Lyndale Ave S,
Bloomington, MN 55420**

5. List the total number of sales persons employed by your organization within the United States, broken down by market.

The Toro Company, Commercial Division, employs 12 Regional and District Sales Managers that work with our distributors to call directly on customers. These resources are located in Minnesota, Indiana, Connecticut, Maryland, Florida and California.

Most customer activity will be conducted through our Commercial distributors' sales force of approximately 200 sales representatives. These distributor resources are located in every state except Alaska.

6. List the number and location of offices, or service centers for all states being offered in solicitation. Additionally, list the names of key contacts at each location with title, address, phone and e-mail address.

All of Toro's Commercial products are shipped from our warehouse in Tomah, Wisconsin to distribution. Distributors' facilities range in size depending on the services offered at the facility such as sales, service, parts etc. Toro's Commercial distribution network has over 100 offices nationally ranging in size from 10,000 square feet to 150,000 square feet. Please refer to our distributor list that includes the location and contact information.

7. Please provide contact information for the person(s) who will be responsible for the following areas, including resumes:
- a. Sales

Pete Whitacre, Sales Manager – State and Local Government, will manage the contract for Toro. He is focused on helping all of Toro's Commercial Division distributors to grow their state and local government business. Pete has been with the Toro Company for 9 years and was previously employed by Honeywell and Grainger. He has 25 years of experience selling to the government market and understands the buying and selling process that is specific to government. He holds a Certified Sales Executive(CSE) designation from Sales & Marketing Executives International. His commitment to this market is shown through his achievement of the Government Contractor Certificate (GCC) through the National Institute for Government Purchasing (NIGP). He has been a member of the NIGP National Business Council for over 7 years and serves as an advisor to the NIGP Board.

- b. Sales Support

Joan Olson, Administrative Assistant. Joan has been with Commercial Division for 18 years and is responsible for sales support of our other state and cooperative contracts. She interfaces with the sales, marketing team, program administration as well as our national cooperative support group.

- c. Marketing

Paula Sliefert, Senior Marketing Manager, will be responsible for the marketing of this contract nationwide. She is the signing agent for Toro's GSA contract and is a member of the NIGP National Business Council. Paula leads the marketing effort for Toro's Sports Fields and Grounds business nationally and represents Toro to organizations such as the Sports Turf Managers Association (STMA), The National Recreation and Parks Association(NRPA), Major League Baseball (MLB), American Public Works Association (APWA).

- d. Financial Reporting

Josh Goodwin, Analyst. Josh has been with The Toro Company for over five years and is our resource for reporting and payment of administration fees for our current contracts.

- e. Executive Support

Region IV ESC will have the backing and resources of Toro to successfully implement this contract. This includes our senior management, sales teams, training teams, technical support teams, marketing, information systems and engineering.

Darren Redetzke, Vice President Commercial Division is the executive sponsor of this contract.

Darren was appointed vice president, commercial business, in July 2010.

Redetzke joined The Toro Company in 1988 as a senior design engineer for consumer power products. He served in multiple roles within the international group, including sales and marketing manager consumer products; senior marketing manager, irrigation products; director, marketing commercial and irrigation products; and director, marketing, golf commercial products in the United States. In 2006, he was promoted to managing director of Toro's growing international business, and in 2008 was appointed to vice president, international.

Redetzke received his Bachelor of Science in electrical engineering from the University of Minnesota - Institute of Technology. He also holds an MBA from the University of Saint Thomas in Saint Paul, Minnesota and is a member of the Board of Trustees for the Environmental Institute for Golf and serves on the Golf 20/20 Executive Committee.

8. Define your standard terms of payment.

Payment terms are 0% 30 days for cash/check payments and EFT payments only.

9. Who is your competition in the marketplace?

The competition is dependent on the particular products being considered. For our Commercial Division, our primary competition is John Deere and Jacobsen in the Golf and Grounds markets. For our Landscape Contractor Equipment, there are numerous competitors for zero-turn mowing equipment and walk behind mowers. Some of these are Scag, Grasshopper, Deere, and Kubota. For our golf irrigation business, the primary competitor is Rainbird.

10. Overall annual sales for last three (3) years; 2010, 2011, 2012.

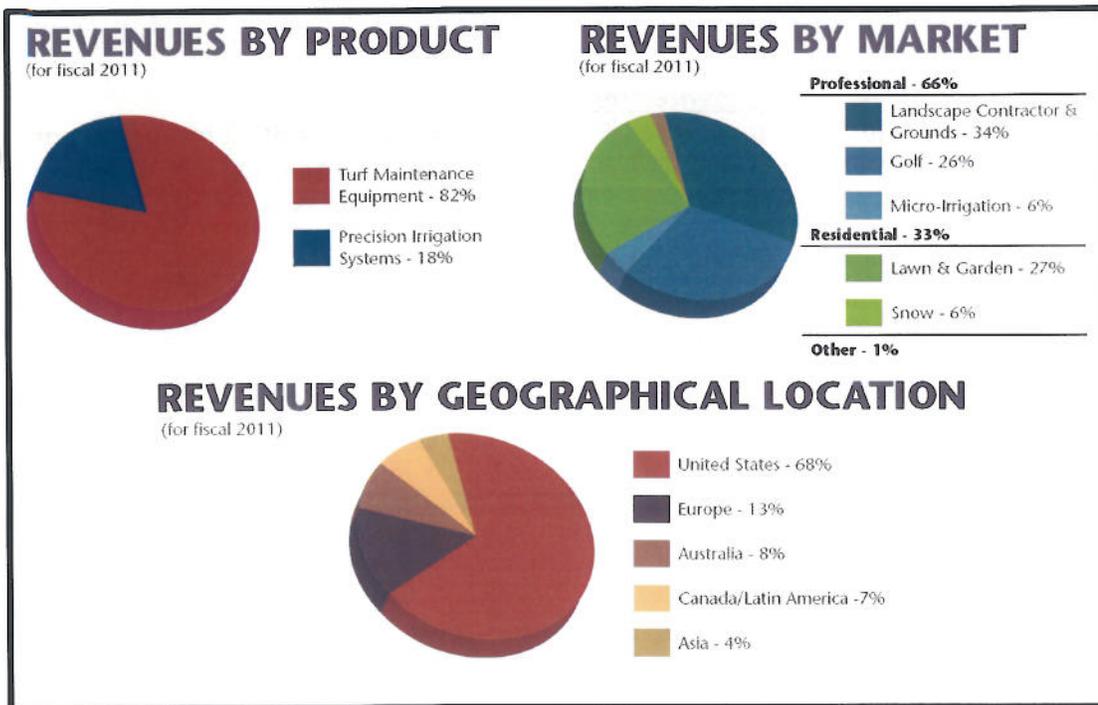
Toro fiscal 2010: \$1.7 billion

Toro fiscal 2011: \$1.9 billion

Toro fiscal 2012: \$1.96 billion

11. Overall public sector sales, excluding Federal Government, for last three (3) years; 2010, 2011, 2012.

Unfortunately, we cannot divulge the specific information requested but we can provide a breakout of our sales revenues by product group, market and geography.



12. What is your strategy to increase market share?

Toro is the market share leader in providing turf equipment to the domestic golf market. We will continue to grow our business in golf and grounds by adding value for our customers from both a product and service perspective. We will continue to develop innovative products or acquire market leading products to add to our offerings and grow our market share. With our distributors, we will continue to invest in processes, people and infrastructure to provide high levels of customer service.

13. What differentiates your company from competitors?

Toro is unique is that the turf business is our primary reason for being. We are dedicated and focused on the turf industry and that shows in our product and service offerings. No one offers a wider variety of equipment as well as offering the requisite irrigation products and services. Year after year, Toro provides innovative products that allow customers to perform their jobs better, faster and reduce their cost of operations.

We also believe that our strength of channel separates us from our competitors. Our distributors have made the necessary investments in their businesses that allow them to provide the level of service required for these assets. Typically, Toro products make up 70 to 80% of their annual sales. This means they are also very focused on the industry. This is a very financially stable group of independent businesses that have provided long-standing support of their customers, communities and the turf industry.

Our distributors stock parts to meet the needs of their customers and in the event they cannot meet the need, Toro will ship the products from our distribution center. This combination of parts availability allows us to achieve a 98% same day shipping rate nationally.

Here are some examples of our innovative products:

GM3500: Sidewinder® patented feature

The Sidewinder cutting units shift left and right a total of 24 inches (61 cm). This increases the cutting unit overhang for precise trimming. The tire tracks can also be shifted within the mowing path to reduce wear on the turf.

GM5900, GM4000, GM4100, GM4500, GM4700: SmartCool™ System

SmartCool™ The hydraulically driven cooling fan automatically reverses to blow off chaff buildup on the top and rear air intake screens. The reversal is triggered by rising coolant temperature, hydraulic oil temperature, or air intake temperature. Toro.com/5900

GM360: QuadSteer™

Unique Quad-Steer all-wheel steering means you can turn on a dime without tearing turf

GM5910, GM4010, GM4110:

Factory installed safety cab, competitors have cabs installed by distributor. The factory-installed cab unit includes an integrated four post ROPS, and provides an exceptionally quiet and comfortable environment for the operator. The low profile air conditioning and heating unit is built into the headliner of the cab for increased clearance under trees and storage areas. The front and rear windows open to allow fresh air to the interior of the cab and a front wiper and washer keeps the windshield clean.

GM7200: Polar Trac system, only ZRT that converts to a winter tracked machine

- 1. Converts the Groundsmaster® 7200 into a snow removal machine complete with two rubber tracks and a climate control cab*
- 2. Track tread is designed for slick ground such as an ice rink*
- 3. Switch between snow attachments in minutes*
- 4. POLAR TRAC™ attachments: snow blower, rotary broom, angled snow blade, and v-plow*

GM5900: InfoCenter™

The onboard InfoCenter monitors and displays machine functions to help keep diagnostic time down, and operating hours UP.

ProCore 648

Rear Wheel Placement

The unique design places the wheels in front of the aeration head so adjacent passes can be made without running over cores or freshly aerated turf. This prevents damage to the turf and the fresh holes. Eliminating crushed cores makes cleanup easier, which in turn leads to a more efficient aeration process.

Series/Parallel 3WD

Patented system that improves traction by maintaining power to the wheels. This leads to improved performance on undulating turf and more consistent hole spacing.

TrueCore™ Ground Following System

System enables consistent hole depths of up to 4 inches to be achieved. It



automatically adjusts the aeration head to maintain the desired tine depth on undulating turf.

This leads to a consistent aeration result and uniform turf conditions.

RotaLink™ Tine Guide Mechanism

Ensures tines remain vertical as they enter and exit the ground. This produces consistently clean holes for better looking turf and easier top dressing fill.

Precision Balanced Drive System

Drive system is modeled after a 6-cylinder engine with precision balancing. This configuration eliminates hopping, rocking and uncomfortable vibration. This leads to less operator fatigue and discomfort, while providing a more productive aeration experience.

ProCore 864/1298

RotaLink™ Tine Guide Mechanism

Ensures tines remain vertical as they enter and exit the ground. This produce consistently clean holes for better looking turf and easier top dressing fill.

Precision Balanced Drive System

Toro's precision balanced coring heads provide exceptionally smooth operation allowing the operator to run the unit in the up position. This simplifies operator interface and improves efficiency.

Articulating Coring Heads (1298)

The ProCore 1298 features two independent coring heads that articulate for exceptional ground following.

ProCore SR Series (deep tine)

Hydraulic depth control

Allows operator to easily and quickly adjust aeration depth on the fly from the tractor's seat

Intelligently Engineered

Unique geometry of the aerator maintains tine-to-turf engagement angle as depth is adjusted. This provides consistent aeration across the depth spectrum without additional adjustments

GreensPro 1200

Overlapping smoothing rollers

The overlapping smoothing rollers deliver uniform roll across the entire machine. Competitive models do not have feature resulting in a strip of unrolled turf between rolling heads

Integrated Trailer

The GreensPro features an integrated trailer allowing for simple and fast transport. Many competitive models require a separate trailer which makes transport slower and often requires flat ground for the roller to be dismounted

Familiar Steering

The GreensPro 1200 is controlled by a steering wheel which is familiar to most operators. Other rollers have a variety of steering techniques providing a steeper learning curve and can be challenging and less safe for new operators.

ProStripe 560

Simple Height of Cut Adjustment

The cutting height on the ProStripe 560 can be adjusted via a single lever.

Competitive models feature three points to adjust cutting height which is more complicated and more likely for error

Split Rear Roller

The ProStripe 560 features a split differential allowing each half of the roller to move independently. This feature provides two key benefits: (1) It helps protect turf from scuffing in sharp turns; (2) It provides the needed flexibility for the ProStripe to mow a wider variety of locations competitive models cannot easily operate.

MP 5800

- *Exclusive 6 Diaphragm Pump provides not just the pressure but also the proper volume needed to maintain proper application rate.*
- *Elliptical chemical tank with side agitation nozzles – together with the 6 Diaphragm pump creates a rolling agitation action in the tank for a homogenous mix and also has the benefit of exceptional chemical mixing capabilities.*
- *Tri Truss booms with impact breakaway feature protects nozzle turrets and nozzles from damage.*
- *Exclusive Ultra Sonic Boom accessory kit that automatically maintains the proper 20" boom height, maintaining proper application rate.*
- *Available chemical loading Eductor kit that lowers down to waist height for safe and easy loading of chemicals.*
- *Exclusive available chemical tank Triple Rinse kit that automatically triple rinses the inside of the tank. The system can be operated while the machine is being driven.*

MD Series

SRQ™ - Superior Ride Quality

SRQ™ combines a coil-over shock absorber suspension design with the Active In-Frame™ twister joint. Front suspension is Independent A-Frame design with coil-over shock absorbers. Rear suspension is Swing Arm design with coil-over shock absorbers. Benefits include operator comfort, safety, reduced operator fatigue, and productivity and efficiency gains.

Active In-Frame™ Twister Joint

The innovative Active In-Frame™ Twister Joint allows each axle to react independently to the terrain. The result is the smoothest ride over the most undulating surfaces. All four wheels maintain constant contact with the ground for better traction, stability and less potential turf damage.

Operator/Passenger Platform

Extended front frame for additional legroom to enhance SRQ™ benefits of operator and passenger comfort.

Payload Capacity

The Workman® MD Series utility vehicles have the highest total payload capacities in their class for maximum productivity. Get more jobs done in less time. MDX/MDX-D - 1,650 lbs. (748 kg); MD - 1,250 lbs. (567 kg); MDE - 1,200 lbs. (544 kg)

Rugged Body Styling

New rugged injection-molded body styling. Latch opened hood design for ease of access for technicians.

Durable Plastic Cargo Bed

Double-walled composite bed can withstand the elements and heavy loads, and won't rust or dent.

HD Series

Tough Frames

The Workman® front space frame design is multi-dimensional or truss like, providing superior strength and torsional rigidity in rough terrain. The rear frame uses a C-channel design to provide superior strength in hauling heavy loads.

On Demand 4-wheel Drive

The Workman is available with an on-demand four-wheel drive system that delivers surefooted traction in forward and reverse, without damaging your turf.

Front Impact Bumper

A specially designed composite bumper with seven (7) energy absorbing crush zone cones protects the Workman to withstand impacts up to 3 mph (4.8 km/h) under full load with no permanent deformation.

DeDion Rear Axle

The DeDion rear axle design is an automotive technology which isolates the engine, transmission and main frame from all load forces, eliminating stress to these main components. The I-beam design provides superior ability to handle vertical loading, exactly the reason I-beams are used extensively in the construction industry.

Ride Quality

Independent front suspension consisting of two double A-frames with opposing dual coil springs and dual shock absorbers provides 5.75 in. (14.6 cm) of front suspension travel. Rear suspension design consists of a DeDion rear axle and dual independent leaf springs and shock absorbers to provide 3 in. (7.6 cm) of rear travel. Benefits include operator comfort, safety, reduced operator fatigue, productivity and efficiency gains.

Disc Brakes

4 wheel hydraulic disc brakes provide greater stopping power and easier servicing than traditional drum brakes.

Payload Capacity

The Workman® HD vehicle provides the highest industry total payload capacity up to 3,002 lbs. (1,364 kg).

Turbo Force Blower

Wireless Remote Control

Start or stop the engine of the blower for complete operational control. Adjust engine throttle up and down for high to low RPM range of operation. Rotate the nozzle 360 degrees in either direction.

Efficient Turbine-type Fan Assembly Design

Greater air flow to move debris further and finish the job faster.

Durable Nozzle

Single piece rotomolded plastic nozzle is more resistant to damage and is more durable for lower repair costs and less downtime.

Electronic Governor

Coupled with functionality of wireless remote control, the Kohler® electronic governor allows the operator to have precise engine speed control.

Fully Enclosed Exhaust System

Muffler enclosed in protective cage for increased operator safety.

Heavy-Duty Trailer & Tow Hitch

Height and length of tow hitch are adjustable to accommodate different towing utility vehicles. DOT approved trailer also available.

Rugged Construction

Rugged construction, including 1/4" (6 mm) steel frame, provides years of trouble-free service.

14. Describe the capabilities and functionality of your firm's on-line catalog/ordering website.

Parts can be ordered on-line through our distributor network's websites. This allows order placement 24 hours a day, 7 days a week. Through our myTurf website you can receive parts schematics, catalogs, manuals and product training.

15. Describe your company's Customer Service Department (hours of operation, number of service centers, etc.).

The Toro Company provides technical assistance and support to our distributor operations teams. This includes troubleshooting equipment issues, providing updates to equipment, issuing service bulletins, working through warranty issues, implementing performance standards and measurements, providing on-site support when needed for product quality concerns and developing action plans for improvement.

We require our Service Technicians to maintain and increase their skills by studying and passing courses and exams through the International Golf Course Equipment Manager's Association (IGCEMA) or the Equipment and Engine Training Council (EETC). Skill set development is targeted in gasoline and diesel engines, hydraulic and drivetrains, electrical systems, sprayer calibration and turf equipment specialized technology. We have 195 technicians or 80% currently systems certified. Once systems certification is achieved technicians can achieve product specific certification. We have 96 technicians with product certifications. Each service facility has a Toro Master certified technician aboard to conduct training and provide expert assistance in service and repair.

Our Service Directors are 100% Certified Service Managers (CSM) through the National Association of Service Managers (NASM)

Toro has instituted a Red Iron Service Certification program that includes elements that measure customer satisfaction and the amount of effort required to do business with Toro service. The Toro scores for each of these elements are considered best in class.

Distributor/dealer service center locations are found on the distributor and dealer list and typically are open 7:00am – 4:30pm

16. Provide information regarding whether your firm, either presently or in the past, has been involved in any litigation, bankruptcy, or reorganization.

We've not been involved in bankruptcy or reorganization, but we have been involved in litigation from time to time, primarily involving intellectual property and product liability.

Marketing / Sales

17. Detail how your organization plans to market this contract within the first ninety (90) days of the award date. This should include, but not be limited to:
- a. A co-branded press release within first 30 days
 - b. Announcement of award through any applicable social media sites
 - c. Direct mail campaigns
 - d. Co-branded collateral pieces
 - e. Advertisement of contract in regional or national publications
 - f. Participation in trade shows
 - g. Dedicated TCPN and Region 4 ESC internet web-based homepage with:
 - i. TCPN and Region 4 ESC Logo
 - ii. Link to TCPN and Region 4 ESC website
 - iii. Summary of contract and services offered
 - iv. Due Diligence Documents including; copy of solicitation, copy of contract and any amendments, marketing materials

The first 90 days we would conduct training about this contract with our distributor and dealer partners. We have employed many different techniques to provide training, including 'train the trainer' type events. We will provide Power Point presentations to our distributors and dealers which will be co-authored by Toro and TCPN. We will conduct individual conference calls with distributors and dealers to review the contract, discuss the benefits to the customer and them as well as answer any questions they may have. We would ask that joint sales calls with a Toro & TCPN representatives take place with strategic target accounts.

Our marketing department will create a specific document that provides our distributors and customers with an overview of the contract and the benefits to them. Marketing pieces will be made available to all of our distributors and dealers to be used in their local markets.

As a part of an on-going training process, Toro representatives will drive participation in local and regional trade shows and conferences with our distributors and dealers where we model the selling of this contract to customer. Toro views training as a constant therefore training will continue to be supported throughout the duration of the contract.

Other details of implementation would include:

- *Press Release to the marketplace and industry associations*
- *Social Media – Toro FaceBook page posting and Twitter comment*
- *Email Blast – TCPN list*
- *Email Blast – NIGP list*
- *Email Blast – Toro list via the 'Grounds for Success' eNewsletter*
- *TCPN logo would become a part of our National Ads in Government Sector publications*
- *Torogov.com website would be updated to reflect new contract*
- *Participation in industry trade shows – NIGP & various local events (CAPPO, FAPPO, etc)*
- *Print collateral pieces would be released*
- *A Webinar with distribution and dealers would be conducted*

18. Describe how your company will demonstrate the benefits of this contract to eligible entities if awarded.

In addition to those efforts listed in #17, we will work with TCPN and our distributors to target accounts to approach with this contract. Because we currently have a national cooperative contract, our distributor network is trained and very familiar with the benefits that cooperative purchasing offers to their customers. We will reference other entities currently using the contract and work to sign up new participating agencies if they are not already. We realize that this contract is only a tool to use with our customers. They still have to want to purchase Toro products and that is our job.

19. Explain how your company plans to market this agreement to existing government customers.

The Toro Company will release a Distributor Operating Bulletin (DOB) to its channel partners, endorsed by the executive sponsor Darren Redetzke. A press release will also be distributed to the marketplace as well as the various associations with which Toro is affiliated (e.g. GCSAA, STMA, NRPA, NIGP, etc.) This Press Release will be posted in the on-line Toro website media room. Additionally Toro University hosts regional training events and additional training on the contract may be addressed at that time.

Other details of marketing would include:

- *Social Media – Toro FaceBook page posting and Twitter comment*
- *Email Blast – TCPN list*
- *Email Blast – NIGP list*
- *Email Blast – Toro list via the ‘Grounds for Success’ eNewsletter*
- *TCPN logo would become a part of our National Ads in Government Sector publications*
- *Torogov.com website would be updated to reflect new contract*
- *Participation in industry trade shows – NIGP & various local events (CAPPO, FAPPO, etc)*
- *Print collateral pieces would be released*
- *A Webinar with distribution and dealers would be conducted*

20. Provide a detailed ninety (90) day plan describing how the contract will be implemented within your firm.

The first step is a release of a Distributor Operating Bulletin (DOB) to its channel partners, endorsed by the executive sponsor Darren Redetzke.

The first 90 days we would conduct training about this contract with our distributor and dealer partners. We have employed many different techniques to provide training, including ‘train the trainer’ type events. We will provide Power Point presentations to our distributors and dealers which will be co-authored by Toro and TCPN. We will conduct individual conference calls with distributors and dealers to review the contract, discuss the benefits to the customer and them as well as answer any questions they may have. We would ask that joint sales calls with a Toro & TCPN representatives take place with strategic target accounts.

The training would include a history and overview of Region IV ESC and TCPN, rationale for the contract, target markets, pricing, and reporting processes.

Pricing for this contract will be established in our iQuote system that distributors use to provide quotes to customers.

From a reporting standpoint, we will add the Region IV/TCPN contract to the management reporting dashboard database and charts that we currently use to monitor performance. We will establish TCPN as an account in our system so that we can issue administration fee payments as required.

21. Describe how you intend on train your national sales force on the Region 4 ESC agreement.

As described in #20 we will review with our distributors using various communication tools how to position, price, quote, fulfill, invoice and report sales on this contract. We will look to link the TCPN sale and marketing resources with our sales teams to make joint sales calls and attend distributor sales meetings. We will also be inviting TCPN personnel to attend Toro sales meetings to introduce the contract and build our relationship.

Toro has a department called Toro University that organizes monthly webcasts with our distribution partners and is a part of their ongoing training and certification. We will coordinate with Toro U to have a webcast to review this contract as well as a session at our next full Toro University meeting. This meeting is a national sales meeting of all our distributors and sales representatives where we will commit time to review this contract.

22. Acknowledge that your organization agrees to provide its company logo(s) to Region 4 ESC and agrees to provide permission for reproduction of such logo in marketing communications and promotions.

Toro will provide the use of the Toro logo to Region 4 ESC as long as each use of the logo is approved by Toro prior to publication and complies with Toro's brand standards.

23. Provide the revenue that your organization anticipates each year for the first three (3) years of this agreement.

\$2,000,000 in year one

\$5,000,000 in year two

\$10,000,000 in year three

Administration

24. Describe your company's implementation and success with existing cooperative purchasing programs, if any, and provide the cooperative's name(s), contact person(s) and contact information as reference(s).

In 2007 we were awarded a national cooperative contract with the lead agency being the City of Tucson, AZ. The contract manager is Lloyd Windell. He can be reached at 520.837.4105 or lloyd.windle@tucsonaz.gov.

At the time, cooperative contracting through the lead agency model was new to Toro and to our distributors. We developed a training plan to reach out to our distributors through written

communication, presentations and independent meetings with our distributors and cooperative partners. This proved very successful in educating the team on the legalities of the contract, who could use it, how to position the contract, and how to develop quotes and ultimately close the deals. The success of the contract vastly exceeded our expectations. In 2012, the contract was up for re-bid and Toro was again awarded the contract by the City of Tucson for another five years.

In 2012, the Commonwealth of Virginia developed and solicited a contract for use as a national cooperative through the WSCA-NASPO association. Toro was awarded a contract and through a very focused sales effort, we have added seven other states through the Participating Addendum process. The contract manager for the Virginia contract is Katherine Bosdell. Katherine can be reached at (804) 786-2397 or katherine.bosdell@dqs.virginia.gov.

25. Describe the capacity of your company to report monthly sales through this agreement.

We have a process in place that will allow us to capture and report sales through this agreement. When a distributor makes a sale on the contract they file a claim to Toro's Programs Administration team that will capture the sale as a TCPN Program sale. Our distributors must provide the Participating Agency number on this claim. From this Program, we can run reporting on whatever interval we need to report this to TCPN. This report is automatically generated monthly to Joan Olson who then forwards to TCPN. When an administrative fee needs to be paid, Joan forwards the report to Josh Goodwin to initiate payment.

26. Describe the capacity of your company to provide management reports, i.e. consolidated billing by location, time and attendance reports, etc. for each eligible agency.

As described in the previous question, we have a process in place that captures sales to whatever contract is utilized to generate the sale. We have established management data dashboards that provide daily updates on activity by; program, distributor, customer name, products purchased, date, invoice number and price. We can provide reports from this database on a scheduled basis or upon request.

27. Please provide any suggested improvements and alternatives for doing business with your company that will make this arrangement more cost effective for your company and Participating Public Agencies.

The Toro Company is willing to negotiate a deeper discount on product pricing in consideration for a single award contract.

Green Initiatives

We are committed to helping to build a cleaner future! As our business grows, we want to make sure we minimize our impact on the Earth's climate. So we are taking every step we can to implement innovative and responsible environmental practices throughout Region 4 ESC to reduce our carbon footprint, reduce waste, promote energy conservation, ensure efficient computing, and much more. We would like vendors to partner with us in this enterprise. To that effort, we ask respondents to provide their companies environmental policy and/or green initiative.

28. Please provide your company's environmental policy and/or green initiative.

The Toro Company continually strives to develop innovative and safe products that yield performance, productivity and environmental benefits for our customers.

Unique to the industry, Toro's Center for Advanced Turf Technology (CATT) has been influential in the development of products that increase productivity, save water, reduce fuel consumption, and improve growing conditions. This group, comprised of leading agronomists and engineers, has also laid the foundation for future innovations in robotics, fuel cells, advanced battery technologies and site assessment.

Toro is a good corporate steward of the environment. We have introduced many products that will reduce emissions, noise and fossil fuel usage. These include our Workman MDE electric utility vehicle, our propane powered zero turn mowers, our Hybrid Triplex greensmowers and our latest is a Lithium Ion walking greensmower. This mower will mow nine average greens on one charge! No competitor has anything like it.

EnergySmart™ - Toro Innovation & Environmental Responsibility

The EnergySmart concept is about efficiency with an eye on environmental sustainability, economic social responsibility. It represents customer-valued innovation with a "green" twist. Investment in product innovation must balance efficiency and sustainability. Reducing or eliminating key resource inputs like fuel and/or labor, by developing new equipment solutions, is fundamentally sound – but no longer enough to satisfy customers or our communities. We must do more. We must be attentive to both your ongoing financial and environmental needs. Greensmaster® TriFlex™ Hybrid riding mowers and Greensmaster® eFlex™ walk mowers are the first products from The Toro Company to display the EnergySmart label. Numerous innovations come together to justify this mark. The energy source, itself, is not always the most significant source for generating related value.

The new Greensmaster® TriFlex™ Hybrid riding greensmowers, have:

- *Custom designed, highly efficient, energy-saving components*
- *Productivity features that reduce the time to operate, maintain, or perform repairs*
- *The ability to easily utilize the same traction unit for multiple applications*
- *Features that enhance turf health – to reduce the likelihood of rework*

The EnergySmart™ label is Toro's way to communicate a meaningful combination of innovative features that yield resource savings and sustainability improvements for your golf courses, parks and sports fields. Moreover, it is a symbol to your community of your commitment to a more sustainable environment.

Vendor Certifications (if applicable)

29. Provide a copy of all current licenses, registrations and certifications issued by federal, state and local agencies, and any other licenses, registrations or certifications from any other governmental entity with jurisdiction, allowing respondent to perform the covered services including, but not limited to licenses, registrations or certifications. M/WBE, HUB, DVBE, small and disadvantaged business certifications and other diverse business certifications, as well as manufacturer certifications for sales and service must be included if applicable.

This certification is not applicable

References (refer to tab 6)

Provide a minimum of ten (10) customer references for product and/or services of similar scope dating within the past three (3) years. Please try to provide an equal number of references for K12, Higher Education and City/County entities. Provide the following information for each reference:

- Entity Name
- Contact Name and Title
- City and State
- Phone Number
- Years Serviced
- Description of Services
- Annual Volume

Distributor	Name	Address	City	State	Zip	Location Type	Main Phone	Main Fax	Contact	email
Professional Turf Products		1010 No. Industrial Blvd.	Eulless	TX	76039	Headquarters	(817) 785-1900	(817) 785-1901	George Spillman	spillmang@proturf.com
Professional Turf Products		5026 Service Center Drive	San Antonio	TX	78218	Branch	(210) 666-0808	(210) 666-0171	George Spillman	spillmang@proturf.com
Professional Turf Products		5520 Britton Moore Rd.	Houston	TX	77041	Branch	(713) 983-0700	(713) 896-0988	George Spillman	spillmang@proturf.com
Professional Turf Products		3621 South 73rd East Ave.	Tulsa	OK	74145	Branch	(918) 622-8676	(918) 663-0116	George Spillman	spillmang@proturf.com
Century Equipment		5959 Angola Road	Toledo	OH	43615-6390	Headquarters	(419) 865-7400	(419) 865-8215	Ron Smolik	rsmolik@centuryequip.com
Century Equipment		8650 Bilstein Blvd.	Hamilton	OH	45015-2204	Branch	(513) 285-1800	(513) 285-1805	Ron Smolik	rsmolik@centuryequip.com
Century Equipment		4199 Leap Road	Hilliard	OH	43026	Branch	(614) 771-9995	(614) 771-9990	Ron Smolik	rsmolik@centuryequip.com
Century Equipment II		26565 Miles Road	Warrens Heights	OH	44128	Headquarters	(216) 292-6911	(216) 292-7635	Ron Smolik	rsmolik@centuryequip.com
Midwest Turf & Irrigation		14201 Chalco Valley Parkway	Omaha	NE	68138	Headquarters	(402) 895-8900	(402) 895-8913	Jerry Deines	jdeines@midwestturf.net
Ness Turf Equipment		91-220 Kalaela Blvd.	Kapolei	HI	96707	Headquarters	(808) 486-8330	(808) 486-8338	Leonard Smith	lsmith@nessturf.com
Ness Turf Equipment		196 East Harmon Industrial Park Road	Tamuning	GU	96913	Branch	(671) 649-4228	(671) 649-2340	Leonard Smith	lsmith@nessturf.com
Ness Turf Equipment		171 Railroad Avenue	Hilo	HI	96720	Branch	(808) 961-3437	(808) 961-2551	Leonard Smith	lsmith@nessturf.com
Ness Turf Equipment		470 South Hana Hwy	Kahului, Maui	HI	96732	Branch	(808) 877-6538	(808) 871-4963	Leonard Smith	lsmith@nessturf.com
Turf Products Corp.		157 Moody Road	Enfield	CT	06082	Headquarters	(860) 763-3581	(860) 763-5550	John Ferry	jferry@turfproductscorp.com
Grassland Equipment		892-898 Troy Schenectady Road	Latham	NY	12110-1698	Headquarters	(518) 785-5841	(518) 785-5740	Roger Lind	rlind@grasslandcorp.com
Grassland Equipment		315 Commerce Blvd.	Liverpool	NY	13088	Branch	(315) 457-0181	(315) 457-0312	Roger Lind	rlind@grasslandcorp.com
E. H. Griffith, Inc.		2250 Palmer Street	Pittsburgh	PA	15218	Headquarters	(412) 271-3365	(412) 271-2614	Jim Guesman	jimg@ehgriffith.com
Hector Turf		1301 N.W. 3rd Street	Deerfield Beach	FL	33442	Headquarters	(954) 429-3200	(954) 360-7657	Joe Limberg	jlimberg@hextorturf.com
L. L. Johnson Distributing		4701 Ivy St.	Denver	CO	80216-6400	Headquarters	(303) 320-1270	(303) 355-8250	Dan Melchior	dmelchior@ljohnson.com
Kenny Machinery Corp.		8420 Zionsville Road	Indianapolis	IN	46268	Headquarters	(317) 872-4793	(317) 879-2331	Dan Gamble	dan.gamble@kmccturf.com
Kenny Machinery Corp.		13205 Complete Court	Louisville	KY	40223	Branch	(502) 253-9868	(502) 253-9725	Dan Gamble	dan.gamble@kmccturf.com
Kona Irrigation		73-5582 Olowalu Street	Kailua-Kona	HI	96740	Headquarters	(808) 329-1167	(808) 326-1132	Leonard Smith	lsmith@nessturf.com
Kona Irrigation		2629 Waiwai Loop	Honolulu	HI	96819	Branch	(808) 836-8500	(808) 836-4973	Leonard Smith	lsmith@nessturf.com
Midland Implement		402 Daniels Street	Billings	MT	59101	Headquarters	(406) 248-7771	(406) 252-5772	Randy Pates	rpates@midlandimplement.com
Midland Implement		5650 Alloy South	Missoula	MT	59808	Branch	(406) 721-7867	(406) 721-2899	Randy Pates	rpates@midlandimplement.com
MTI Distributing		4830 Azelia Ave. N. Ste. 100	Brooklyn Center	MIN	55429	Headquarters	(763) 592-5600	(763) 592-6600	Shane Andrews	shane.andrews@mtidistributing.com
MTI Distributing		2131 16th St. N., Ste. C	Fargo	ND	58102	Branch	(701) 365-4260	(701) 365-4270	Shane Andrews	shane.andrews@mtidistributing.com
MTI Distributing		8901 Springdale Avenue	Berkeley	MO	63134-2400	Branch	(314) 506-4100	(314) 506-4150	Shane Andrews	shane.andrews@mtidistributing.com
MTI Distributing		3841 SE Capitol Circle	Grimes	IA	50111-4857	Branch	(515) 661-6800	(515) 661-6850	Shane Andrews	shane.andrews@mtidistributing.com
MTI Distributing		6125 Valley Drive	Bettendorf	IA	52722-5564	Branch	(563) 449-5470	(563) 449-5490	Shane Andrews	shane.andrews@mtidistributing.com
Simpson-Norton Corporation		4144 S. Bullard Ave.	Goodyear	AZ	85338-3613	Headquarters	(623) 932-5116	(623) 932-5299	Joe Goodwin	joe.goodwin@simpsonnorton.com
Simpson-Norton Corporation		2682 N. Ahels Lane #10	Las Vegas	NV	89115-4453	Branch	(702) 644-4066	(702) 644-5302	Joe Goodwin	joe.goodwin@simpsonnorton.com
Jerry Pate Turf & Irrigation		3850 Old Getwell Road	Memphis	TN	38118	Branch	(901) 795-1216	(901) 795-1228	Chris Kurpuis	ckurpuis@jerrypate.com
Jerry Pate Turf & Irrigation		301 Schubert Drive	Pensacola	FL	32504-6958	Headquarters	(850) 479-4653	(850) 479-4653	Chris Kurpuis	ckurpuis@jerrypate.com
Jerry Pate Turf & Irrigation		5350 Tulane Dr.	Atlanta	GA	30336	Branch	(404) 346-5340	(404) 349-0019	Chris Kurpuis	ckurpuis@jerrypate.com
Jerry Pate Turf & Irrigation		604 28th Street North	Birmingham	AL	35203	Branch	(205) 945-9144	(205) 945-0491	Chris Kurpuis	ckurpuis@jerrypate.com
Reinders		W227 N6225 Sussex Road	Sussex	WI	53089	Headquarters	(262) 786-3300	(262) 786-6111	John Jensen	jjensen@reinders.com
Reinders		900 Randolph Drive	Appleton	WI	54913	Branch	(920) 788-0200	(920) 788-4272	John Jensen	jjensen@reinders.com
Reinders		4217 Nakooa Trail	Madison	WI	53714	Branch	(608) 244-6101	(608) 244-6101	John Jensen	jjensen@reinders.com
Reinders		3816 Carnation St.	Franklin Park	IL	60131	Branch	(847) 678-5555	(847) 678-5511	John Jensen	jjensen@reinders.com

Turf Equipment & Irrigation	1630 South Gladiaola Street	Salt Lake City	UT	84104	Headquarters	(801) 566-3256	(801) 566-5889	Dave Jeffries	dave.jeffries@turfequip.com
Turf Equipment & Irrigation	7479 Lemhi St.	Boise	ID	83709	Branch	(208) 331-0074	(208) 331-0076	Dave Jeffries	dave.jeffries@turfequip.com
Turf Equipment & Supply	576 Rosedale Rd.	Kennett Square	PA	19348	Branch	(888) 384-8676		Brian Pardoe	brianpardoe@turf-equipment.com
Turf Equipment & Supply	8015 Dorsey Run Road	Jessup	MD	20794	Headquarters	(410) 799-5575	(410) 799-6953	Brian Pardoe	brianpardoe@turf-equipment.com
Turf Equipment & Supply	33180 Dupont Blvd.	Frankford	DE	19945	Branch	(302) 732-9290	(302) 732-7879	Brian Pardoe	brianpardoe@turf-equipment.com
Spartan Distributors	487 W. Division Street	Sparta	MI	49345	Headquarters	(616) 887-7301	(616) 887-6288	Kris Early	kris.early@spartandist.com
Spartan Distributors	1050 Opdyke Road	Auburn Hills	MI	48326	Branch	(248) 373-8800	(248) 373-8899	Kris Early	kris.early@spartandist.com
Smith Turf & Irrigation	4355 Golf Acres Drive	Charlotte	NC	28208	Headquarters	(704) 393-8873	(704) 398-1428	Brent Miller	brent.miller@smithturf.com
Smith Turf & Irrigation	525 Fairground Court	Nashville	TN	37211-2008	Branch	(615) 726-8811	(615) 242-3274	Brent Miller	brent.miller@smithturf.com
Smith Turf & Irrigation	4656 Highway 17 Bypass South	Myrtle Beach	SC	29588	Branch	(843) 293-7846	(843) 293-6492	Brent Miller	brent.miller@smithturf.com
Smith Turf & Irrigation	10629 Lexington Avenue	Knoxville	TN	37932-3214	Branch	(865) 675-5666	(865) 671-0997	Brent Miller	brent.miller@smithturf.com
Smith Turf & Irrigation	2201 Dabney Road	Richmond	VA	23230-0327	Branch	(804) 355-6404	(804) 358-9189	Brent Miller	brent.miller@smithturf.com
Storr Tractor Company	3191 U.S. Hwy 22 East	Branchburg	NJ	08876-3481	Headquarters	(908) 722-9830	(908) 722-9847	Ken Indyk	kindyk@storrtactor.com
Storr Tractor Company	175 13th Avenue	Ronkonkoma	NY	11779	Branch	(631) 588-5222	(631) 588-5398	Ken Indyk	kindyk@storrtactor.com
Western Equipment	20224 - 80th Avenue South	Kent	WA	98032-1288	Headquarters	(253) 872-8858	(253) 872-6942	Dick Bergeron	dick.bergeron@western-equip.com
Western Equipment	E. 2824 Garland	Spokane	WA	99207-5810	Branch	(509) 483-8665	(509) 483-7563	Dick Bergeron	dick.bergeron@western-equip.com
Western Equipment	19635 SW 129th	Tualatin	OR	97062	Branch	(503) 691-0250	(503) 691-0849	Dick Bergeron	dick.bergeron@western-equip.com
Wesco Turf	2101 Cantu Court	Sarasota	FL	34232-6242	Headquarters	(941) 377-6777	(941) 371-2967	Ron Diccio	ron.diccio@wescoturf.com
Wesco Turf	7037-37 Commonwealth Avenue	Jacksonville	FL	32220	Branch	(904) 783-0500	(904) 783-3835	Ron Diccio	ron.diccio@wescoturf.com
Wesco Turf	300 Technology Park	Lake Mary	FL	32746	Branch	(407) 333-3600	(407) 333-9246	Ron Diccio	ron.diccio@wescoturf.com
Turf Star, Inc.	2110 La Mirada Dr., Ste. 100	Vista	CA	92081	Headquarters	760 734-4285	760 734-4285	Chuck Talley	chuck.talley@turfstar.com
Turf Star, Inc.	79-253 Country Club Drive	Bermuda Dunes	CA	92203	Branch	(760) 345-4297		Doug Dahl	doug.dahl@turfstar.com
Turf Star, Inc.	955 Beacon Street	Brea	CA	92821	Branch	(714) 990-8729		Doug Dahl	doug.dahl@turfstar.com
Turf Star, Inc.	11373 Sunrise Gold Circle	Rancho Cordova	CA	95742-6533	Branch	(916) 635-3448		Chuck Talley	chuck.talley@turfstar.com
Turf Star, Inc.	2438 Radley Court	Hayward	CA	94545-1159	Branch	(510) 785-3576		Chuck Talley	chuck.talley@turfstar.com
Turf Star, Inc.	5646 W. Barstow Ave.	Fresno	CA	93772	Branch	(559) 277-7123		Doug Dahl	doug.dahl@turfstar.com

Distributor Name	FirstName	LastName	Title	Address	City	State	PostalCode	WorkPhone
Professional Turf Products	Mike	McCue	Sales Manager	1010 No. Industrial Blvd.	Euless	TX	76039	(817) 785-1900 x5149
Professional Turf Products	Kenny	Buxton	Sales Territory Manager	3621 South 73rd East Ave.	Tulsa	OK	74145	(918) 622-8676 x5613
Century Equipment	Kent	Detrick	Sales Manager	1316 Stoney Springs Road	Vandalia	OH	45377	(614) 771-9995
Midwest Turf & Irrigation	Robert	Pease	Sales Manager	14201 Chalco Valley Parkway	Omaha	NE	68138	(402) 895-8900 x406
PMA Outdoor Equipment	Duane	Cotte	Sales Manager	3725 Swenson	St. Charles	IL	60174-3439	(630) 377-3000 x177
PMA Outdoor Equipment	Michael	Averett	Sales Manager	3725 Swenson	St. Charles	IL	60174-3439	(630) 377-3000 x173
Ness Turf Equipment	Leonard	Smith	Sales Manager	91-220 Kalaeloa Blvd.	Kapolei	HI	96707	(808) 486-8330 x321
Turf Products Corp.	Rick	Turner	Sales Manager	4 Midlands Drive	East Greenwich	RI	02818	(860) 763-3581 x7885
Grassland Equipment	Stephen	Piper	Sales Manager	44 Oliver Place	Hamburg	NY	14075	(315) 457-0181
Hector Turf	Mike	Mantey	Sales Manager	1301 N.W. 3rd Street	Deerfield Beach	FL	33442	(954) 429-3200 x130
Hector Turf	Jason	DuPree	Sales Manager	1653 Feather Trail	Royal Palm Beach	FL	33411	(954) 429-3200
L. L. Johnson Distributing	Chuck	Perry	Sales Manager	4701 Ivy St.	Denver	CO	80216-6400	(303) 320-1270 x256
Kennedy Machinery Corp.	Dan	Diehl	Sales Manager	8420 Zionsville Road	Indianapolis	IN	46268	(317) 872-4793 x7669
Midland Implement	Guy	Raidiger	Sales Manager	402 Daniels Street	Billings	MT	59101	(406) 248-7771 x239
MTI Distributing	James	Strange	Sales Manager	4830 Azelia Ave. N. Ste. 100	Brooklyn Center	MN	55429	(763) 592-5600 x5640
Jerry Pate Turf & Irrigation	Chad	Draiss	Sales Manager	5918 Rustic Ridge Circle	Milton	FL	32570	(850) 479-4653
R. L. Ryerson Company	Robert	Thom	Sales Manager	N58 W14500 Shawn Circle	Menomonee Falls	WI	53051-5966	(262) 252-7985
Turf Equipment & Irrigation	Dale	Jones	Sales Manager	1630 South Gladiola Street	Salt Lake City	UT	84104	(801) 566-3256 x229
Turf Equipment & Supply	Ed	Washburn	Sales Director	187 Stotler Drive	Delmont	PA	15626	(410) 799-5575 x4013
Turf Equipment & Supply	Chrissy	Hale	Sales Coordinator	67 Whitmire St	Brevard	NC	28712	(410) 799-5575 x4046
Spartan Distributors	Mark	Oldenburg	Sales Director	487 W. Division Street	Sparta	MI	49345	(616) 887-7301 x4515
Storr Tractor Company	Thomas	Boglioli	Sales Director	3191 U.S. Hwy 22 East	Branchburg	NJ	08876-3481	(908) 722-9830 x142
Western Equipment	Paul	Veach	Sales Manager	20224 - 80th Avenue South	Kent	WA	98032-1288	(253) 872-8858
Wesco Turf	Ron	DiCicco	Sales Vice President	2101 Cantu Court	Sarasota	FL	34232-6242	(941) 377-6777 x6831
Turf Star, Inc.	Ron	Brunone	Sales Manager	11373 Sunrise Gold Circle	Rancho Cordova	CA	95742-6533	(800) 585-8001 x 7920

SWS SVC-Only Dealer List
Last Updated: 10/27/2011

Number	DealerName	DealerAddress	City	State	Zip	Phone
6/2/2009	American Rental & Power Equipment	5480 Willis Road	Mobile	AL	36582	(251)653-5900
440572	The Lawn Mower Shop	5527 Hwy 53	Harvest	AL	35749	256-701-5595
409772	Bingham Equipment Company	5225 North Casa Grande Highway	Tucson	AZ	85743	(520)887-7799
409684	ArborQuip	1430 Auburn Boulevard	Sacramento	CA	95815	(916)564-1015
409165	Hawthorne Rent-It Service	1600 East Mission Road	San Marcos	CA	92069	(760)740-2900
440084	Miller Tractor & Equipment, Inc.	2025 Barney Road	Anderson	CA	96007	(530)378-1116
970348	Best Rentals Inc	1540 Riverside Avenue	Ft Collins	CO	80524	970-282-0700
407768	G & G Equipment	3770 Eureka Way, Unit A	Frederick	CO	80516	303-255-3227
409721	Lafayette Lawnmower Repair	STE C 780 W BASELINE ROAD	LAFAYETTE	CO	80026-2559	303-604-6424
409659	Valley Craine & Equipment	1795 Launa Drive PO Box 1663	Montrose	CO	81402	
3467	Dubay's Tractor Center LLC	65 Dubay Drive	Danielson	CT	06239	(860)774-7595
440426	Interconex, Inc.	10220 W. State Road 84, Suite 8	Davie	FL	33324	954-370-1305
440182	German-Bliss Equipment	215 Fairlane Drive	East Peoria	IL	61611	309-694-3700
408733	Patten Industries, Inc.	1001 SOUTH MAIN STREET	ELBURN	IL	60119	630-365-2360
407017	Bobcat Enterprises	13117 MIDDLETOWN INDUSTRIAL BLVD.	Louisville	KY	40223	502-245-1911
406956	Bobcat Enterprises	1309 CAHILL DRIVE	Lexington	KY	40504	859-254-3936
409844	Cunningham General Rental	16155 Airline Highway	Baton Rouge	LA	60817	(225)755-2277
385770	WEINGARTZ	39050 GRAND RIVER	FARMINGTON HILLS	MI	48335	248-471-3050
440229	Weingartz Supply Co., Inc.	5436 Jackson Road	Ann Arbor	MI	48103	734-239-8200
407814	Weingartz Supply Co., Inc.	6585 Dixie Highway	Clarkston	MI	48346	
409949	Weingartz Supply Co., Inc.	11875 Northland Drive	Cedar Springs	MI	49319	
385770	Weingartz Supply Co., Inc.	39050 GRAND RIVER	FARMINGTON HILLS	MI	48335	
430139	AAA Rental Inc	33110 Old Highway 371	Pequot Lakes	MN	56472	218-568-5393
5962	King Hardware Co Inc.	610 N Grove Street P O Box 585	Hendersonville	NC	28739	828-693-3478
5636	Sharpe's Lawn Equip & Service	609 MOCKSVILLE HWY	STATESVILLE	NC	28625	704-872-1135
408166	Voorhees Hardware Inc.	508 HADDONFIELD -BERLIN RD	VOORHEES	NJ	08043	856-429-7839
406692	Green Valley Turf Equipment, Inc.	6145 Annie Oakley Drive	Las Vegas	NV	89120	(702) 454-4300
408309	Leiser's of Easton Inc.	2212 SULLIVAN TRAIL	EASTON	PA	18040	610-258-2963
7640	Meetinghouse Garage	448 GROFF MILL RD	HARLEYSVILLE	PA	19438-2112	215-256-8131
409282	Power Up Equipment, Inc.	520 Evans City Road	Butler	PA	16001	(724)482-2131
5954	Shugarts Lawn & Garden Power	418 Park Avenue / State Route 153	Clearfield	PA	16830	(814)765-4512
406827	Blanchard Machinery Company	851 Buckner Road	Columbia	SC	29203	(843) 754-7368
1075077	Blanchard Rental Services	2334 Chestnut Road	Longs	SC	29568	(864) 963-3645
1074580	Blanchard Rental Services	224 Neely Ferry Road	Simpsonville	SC	29680	(803) 754-7368
1075078	Blanchard Rental Services	151 Farmington Road	Summerville	SC	29483	(843) 399-1692
1078407	Blanchard Rental Services	1410 Asheville Highway	Spartanburg	SC	29301	(864) 582-1245
408741	Lincoln Contractors Supply, Inc.	11111 W HAYES AVE	MILWAUKEE	WI	53227	414-541-1327

Dealer Name	DBA	Dealer Address	City	State	Zip	Phone
NB Attachments Ltd		26 East Lake Green	Airdrie	AB	T4A 2A2	403-831-1055
OakCreek Golf & Turf, Inc.		3816 - 64th Avenue SE	Calgary	AB	T2C 2B4	(604)882-8399
Joe Johnson Equipment Inc		12274 - 44th Street SE	Calgary	AB	T2Z 4A2	705-733-7700
Totem Equipment & Supply, Inc.		2536 Commercial Drive	Anchorage	AK	99501	(907)276-2858
Yukon Equipment Inc		2020 3rd Avenue	Anchorage	AK	99501	907-277-1541
Advanced Mower Inc		2212 Morgan Road	Bessemer	AL	35022	(205)428-1546
Topline Equipment of AL, LLC		780 Walnut Street	Centerville	AL	35042	205-976-9606
Kingline Equipment		19425 State Hwy 59	Sumterdale	AL	36580	251-989-9693
Arkansas OnSite Service		18100 Interstate 30	Benton	AR	72019	501-860-6318
Bingham Equipment Company		710 North 195th Avenue	Buckeye	AZ	85326	623-853-1000
Bingham Equipment Company		2694 Union Drive	Cottonwood	AZ	86326	928-646-5388
Bingham Equipment Company		1655 S Country Club Drive	Mesa	AZ	85210	(480)610-4001
Bingham Equipment Company		5225 North Casa Grande Highway	Tucson	AZ	85743	520-887-7799
OakCreek Golf & Turf		18785 - 96th Avenue	Surry	BC	V4N 3P5	(604)882-8399
B & M Lawn & Garden Center		2801 East Miraloma Avenue	Anaheim	CA	92806	(800) 214-2733
Cal-Line Equipment		6010 South Front Road	Livermore	CA	94551	(925)443-6571
Pacific Equipment	Van Buren Equipment, Inc.	3897 N. Southbank Road	Oxnard	CA	93036	(805) 983-4000
Global Machinery West		1755 A Helena Avenue	Sacramento	CA	95815	916-453-2780
L. L. Johnson Distributing		4700 Holly St	Denver	CO	80216	(330)320-1270
Global Machinery		705 West 62nd Avenue	Denver	CO	80216	303-430-7130
Schmidt's & Serafine's		464 Chase Avenue	Waterbury	CT	06704	(203)754-5981
Chesapeake Supply & Equipment Co.		12915 South Dupont Highway	Felton	DE	19943	(302)284-1000
Kingline Equipment		1576 Hwy. 90 West	Baker	FL	32531	850-423-9693
Pensacola Tractor & Equipment	Kingline Equipment, Inc.	1100 N Highway 29	Cantonment	FL	32533	850-937-9693
Kelly Tractor Company		801 E. Sugarland Highway	Clewiston	FL	33440	(863)983-8177
Kelly Tractor Company		2801 Reese Road	Davie	FL	33314	(954)581-8181
Kelly Tractor Company		2801 Reese Road	Davie	FL	33314	(954)581-8181
Kelly Tractor Company		9651 Kelly Tractor Drive	Fort Myers	FL	33905	(239)693-6563
Kelly Tractor Company		3636 Prospect Avenue	Naples	FL	34104	(239)403-3636
Flagler Construction Equipment		9601 Boogycreek Rd	Orlando	FL	32824	407-659-8700
St. Augustine Power House, Inc.		125 Pope Road	St. Augustine	FL	32080	904-461-0310
Kelly Tractor Company		5460 Okeechobee Blvd.	West Palm Beach	FL	33417	(561)683-1231
Keystone Sales	Keystone Equipment Rental	4478 Abbotts Bridge Road	Duluth	GA	30097	(770)476-2999
Harry's Saw Shop Inc.		237 Bobby Jones Expressway	Martinez	GA	30907	706-863-5272
Star Tractor & Equipment Inc		3551 Camp Creek Rd	Mount Airy	GA	30563	706-776-7827
Hawthorne Pacific Corp.		94-025 Farrington Hwy.	Waipahu	HI	96797	808-676-0287
Titan Machinery		4250 Grain Lane	Cedar Point	IA		52213 319-849-3889
Titan Machinery		4005 - 7th Avenue North	Clear Lake	IA		50428 641-557-2511
Titan Machinery		3136 - 76th Street West	Davenport	IA		52806 563-386-0400
Titan Machinery		2290 - 54th Avenue NE	Des Moines	IA		50313 515-974-5100
Titan Machinery		33952 Frelon Drive	Sioux City	IA		51108 712-239-4941
RMT Equipment		2150 Century Way	Boise	ID		(208)362-2714
Russo Power Equipment		5848 W. Montrose Avenue	Chicago	IL	60634	847-678-9525
Double Y Sales & Service		417 Nth 2nd Street	Cissna Park	IL	60924	1-800-891-3916
Russo Power Equipment		39 E. Belvidere Road	Hainesville	IL	60030	847-678-9525
Russo Power Equipment		1636 N. Aurora Road	Naperville	IL	60563	847-678-9525
Martin Implement Sales, Inc.		18405 115th Avenue	Orland Park	IL	60467	(708) 349-8430
Awesome Machines	Tuscola True Value Hardware, Inc.	109 South Dunlap	Savoy	IL	61874	(217)352-0622
Russo Power Equipment		9525 W. Irving Park Road	Springfield	IL	62707	309-385-4316
German Bliss		4151 West Jefferson	Springfield	IL	62707	309-385-4316
Awesome Machines		104 E. Southline-Hwy 36	Tuscola	IL	61953	(217)253-5241
J & S Locksmith		508 W. 17th Street	Bloomington	IN	47404	812-332-4533
More Farm Store, Inc.		751 E Business 30	Columbia City	IN	46725	(260) 244-5186
The Mower Shop (Hoosier Mower)		12923 Ford Drive	Fishers	IN	46038	(317) 849-9500
Scotty's Lawn Equipment Corp.		1141 East Warrington Road	Haubstadt	IN	47639	(812)867-6978
A&M Farm Center, Inc.		300 South State Road 49	Valparaiso	IN	46383	219-464-8640
Coleman Equipment		24000 West 43rd Street	Bonner Springs	KS	66012	(913)422-3040
Price Brothers Equipment		619 S. Washington	Wichita	KS		
Sanders Kubota	James Sanders Implement	40 Commerce Drive	Hickory	KY	42051	(270)856-4355
Bobcat Enterprises Inc		1309 Cahill Drive	Lexington	KY	40504	(859)254-3936
Bobcat Enterprises Inc		13120 Aiken Rd	Louisville	KY	40223	(502)245-1911
Ascension Equipment		13173 Airline Highway	Louisville	KY	40223	(502)245-1911

Dealer Name	DBA	Dealer Address	City	State	Zip	Phone
Quachita Lawn & Garden Inc.		809 WELL RD	WEST MONROE	LA	71291	318-387-7971
Richey & Clapper		33 Boston Post Road	Sudbury	MA	01776	(978)443-1333
Joe Johnson Equipment Inc		1201 Grassmere Road Unit 10	West St Paul	MB	R4A 1C4	705-733-7700
Tamarack Equipment		761 Spangston Road	Winnipeg	MB	R2J 4E6	(204)253-2900
Security Equipment Co.		3828 Washington Blvd.	Baltimore	MD	21227	(410) 247-9600
Frederick Equipment Co.		9640 Liberty Road	Frederick	MD	21701	(301) 898-1200
Chesapeake Supply & Equipment Co.		8366 Washington Blvd	Savage	MD	20763	410-792-4750
Flint New Holland, Inc.		3266 East Bristol Road	Burton	MI	48529	(810)744-2030
Weingartz Supply		11875 Northland Drive	Cedar Springs	MI	49319	(586)731-2535
Capital Equipment & Supply		12263 IIS 27	DeWitt	MI	48820	(517)669-5533
Weingartz Supply		39050 Grand River Avenue	Farmington Hills	MI	48335	(248)471-3030
Weingartz Supply Co Inc.		46061 Van Dyke Avenue	Utica	MI	48317	586-731-7535
Weingartz Supply		5395 Dixie Highway	Waterford	MI	48329	(248) 623-8450
Alfa Construction Equipment		28775 Beck Road	Watson	MI	48393	248-356-5200
Iano Equipment Inc		6140 Highway 10	Anoka	MN	55303	763-479-8200
Tool Crib of the North		2025 30th Street Northwest	Benndi	MN	56601	218-751-6268
Tri-State Bobcat, Inc.		1800 Highway 13 W	Brantville	MN	55337	952-894-0894
Tool Crib of the North		4332 Grand Ave	Duluth	MN	55807	218-628-3523
Tri-State Bobcat, Inc.		3101 Spruce Street	Little Canada	MN	55117	651-407-5727
Schaber & Sons, Inc.		2315 West Wayzata Boulevard	Long Lake	MN	55356	(952)473-5634
Titan Machinery		1201 N Hwy 59	Marshall	MN	56258	507-532-5783
Schaber & Sons, Inc.		13725 Main Street	Rogers	MN	55374	(763)428-4107
Lees Lawn Care & Equipment		2600 Ramsgate Street	Columbia	MO	65202	(573) 442-5834
Machine Maintenance		2300 Cassens Drive	Fulton	MO	65026	636-543-9970
Scott's Tractor & Equipment, LLC		112 NE 92 Highway	Smithville	MO	64089	(816)532-8288
Scott's Power Equipment		10602 Trenton Avenue	St. Louis	MO	63132	314-429-3600
Black Prairie Sales, Inc.		901 Highway 45 North	Columbus	MS	39701	662-328-1800
Revell Hardware Co		3876 Terry Road	Jackson	MS	39212	(601)371-8429
Equipment Inc		5276 Terry Rd	Jackson	MS	39272	(601)671-8429
Midland Implement Co Inc		2309 Highway 80 West	Jackson	MS	39204	601-948-3272
Midland Implement Co Inc		402 Daniels Street	Billings	MT	59102	(406)248-7771
Carriage Saw & Mower, Inc.		845 Roman	Missoula	MT	59801	406-721-7867
STI Turf Care Equip #2		3812 Hwy 15-501	Carthage	NC	28327	910-947-2041
STI Turf Care Equipment #1		9908 Albemarle Road	Charlotte	NC	28227	(704) 573-1005
STI Turf Care Equipment		1334 Hill Road	Charlotte	NC	28210	(704) 554-0500
Rob's Hydraulics Inc		9023 W Market St	Colefax	NC	27235	336-564-1999
STI Turf Care Equipment		Lynch Leasing Inc	Grimesland	NC	27837	252-752-1500
Right of Way Equipment Co.		1203 Mooreville Road	Ramapoils	NC	28081	(704)932-3166
Milligan Power & Lawn Equipment		5500 Hillsborough Street	Raleigh	NC	27606	(919) 851-1750
Hobson's Choice Inc		501 Whiteville Rd	Shallotte	NC	28470	(910)754-8535
Tool Crib of the North		13948 Capital Blvd.	Wake Forest	NC	27587	919-554-1444
Tool Crib of the North		3840 E Rosser Ave	Bismarck	ND	58201	701-258-1267
Tool Crib of the North		920 36th Street SW	Fargo	ND	58103	701-476-6600
Tool Crib of the North		1605 12th Avenue North	Grand Forks	ND	58203	701-746-6481
Tool Crib of the North		1705 13th Avenue North	Grand Forks	ND	58203	(701)746-6481
Tool Crib of the North		700 20th Avenue SE	Minot	ND	58701	701-839-2263
Titan Machinery		6310 North 56th Street	Lincoln	NE	68504	402-464-3711
Titan Machinery		3827 - 42nd Street South	Omaha	NE	68107	402-733-3700
Soils Power Equipment		YC Power Assoc	Manchester	NH	03109-4200	603-622-1100
Granz Power Equipment		YC Power Assoc	Salem	NH	03079-2171	603-898-2871
South Jersey Mowers		605 Stiles Avenue	Maple Shade	NJ	08052	(856)667-4814
Pride Landscape Supply		350 Eriston Road	Parlin	NJ	08859	(732)721-0554
Pride Landscape		11 American Way	Spotswood	NJ	08884	(721)251-8838
Mesa Tractor		3826 4th Street NW	Albuquerque	NM	87107	(505)344-1631
Joe Johnson Equipment Inc		25 Ilsey Avenue	Dartmouth	NS	B3B 1L5	705-753-7700
Grassland Equip & Irr Corp		250 Lake Avenue	Blissford	NY	14219	(716)822-2020
Central Irrigation		8 Williams Street	Elmsford	NY	10523	(914) 347-5656
Central Irrigation Supply		8 William Street	Elmsford	NY	10523	914-347-5656
AGC Irrigation Supply		1111 Lincoln Ave	Holbrook	NY	11741	631-218-0901
Grassland Equip & Irrigation		892-898 Troy-Schenectady Rd	Latham	NY	12110	(518)785-5841
Grassland Equip & Irr Corp		315 Commerce Blvd	Liverpool	NY	13088	(315)457-0181
Atlantic Irrigation		111 Lafayette Ave N	N White Plains	NY	10603	914-686-0008
Grassland Equip & Irr Corp		100 Monticest Drive	Rochester	NY	14623	(716) 292-1510

Dealer Name	DBA	Dealer Address	City	State	Zip	Phone
Joe Johnson Equipment		62 LaGrange Avenue	Rochester	NY	14613	585-254-7700
Buckeye Power Sales		6850 Commerce Court Dr	Blacklick	OH	43004	(614) 861-6000
Franklin Equipment		4141 Hamilton Square Blvd.	Groveport	OH	43125	614-228-2014
Bobcat Enterprises, Inc.		9605 Princeton Glendale Rd	Hamilton	OH	45011	(513) 874-8945
Bobcat Enterprises		3666 LACON ROAD	Hilliard	OH	43026	(614) 876-1116
Middlefield Farm & Garden		15980 Georgia Road	Middlefield	OH	44062	440-632-5590
Barrs Inc		6956 PORTAGE ST N W	North Canton	OH	44720	330-499-4544
Kinnunen Sales & Rental, Inc.		707 East 6th Street	Stillwater	OK	74074	(405) 743-4400
Clarke Moore Motors		15-A Fisherman Drive Unit 18	Brampton	ON	L7A 1B7	905-846-2511
Trenchless Utility Equipment Inc		2070 Queensway Drive	Burlington	ON	L7R 4L9	
Windmill Power Equipment, Ltd.		368 Mill Street	Dundas	ON	L9H 2M1	(905) 628-3055
Ken Brownlee & Sons Equipment Corp.		Highway 11 North	Earlton	ON	P0J 1E0	(705) 563-2212
Campau Small Engine Service		1214 County Road 22	Emeryville	ON	N0R 1C0	(519) 727-5031
PIC's Motor Clinic		2514 Highway 20 East	Fonthill	ON	L0S 1E6	905-892-3041
Joe Johnson Equipment Inc		2521 Bowman Street	Innisfil	ON	L9S 3V6	705-733-7700
Turf Care Products Canada Ltd.		3551 White Oak Road	London	ON	N6E 1N9	905-836-0988
Haltom Turf and Tractor		15 Steeles Avenue	Milton	ON	L9T 1X9	(905) 878-2121
B & T MacFarlane Ottawa Ltd		45 Slack Road	Nepean	ON	K2G 0B7	(613) 225-0555
Coleman Equipment, Inc.		3541 Trussler RR #1	New Dundee	ON	N0B 2F0	(519) 696-2213
Turf Care Products Canada Ltd.		200 Pony Drive	New Market	ON	L3Y 7B6	905-836-0988
Green Tractors, Inc.		Nobleton Farm Service	Nobleton	ON	L0G 1N0	(905) 859-0581
Kooy Brothers Lawn Equipment		6176 South Highway 97	Toronto	ON	M3L 1G5	(416) 242-3513
Superior Tractor & Equipment		19633 SW 129th Street	Redmond	OR	97756	(541) 923-2370
Western Equipment		2605 Columbia Blvd	Tualatin	OR	97062	(503) 691-0250
TPC Power Center		2501 Durham Road	Bloomsburg	PA	17815	(570) 784-0250
Modern Handling Equipment Co		9835 CHARGER HIGHWAY	Bristol	PA	19007	610-825-6010
Blair Auto Service & Power Equipment		5220 E. Trindle Road	Duncansville	PA	16635	(814) 695-3673
Kerry's Lawn & Garden		1300 East Ridge Road	Mechanicsburg	PA	17050	(717) 697-3366
Norris Sales		160 Titus Avenue	Plymouth Meeting	PA	19462	(610) 297-5777
Earthborne Inc		115 King Georges Street	Warrington	PA	18976	215-343-2000
A Jean Enr.		6500 Armand-Viau	Longueuil	QC	J4J 2Y2	(450) 468-6837
Equipments ESF, Inc.		160 Old Denver Road	Quebec	QC	G2C 2J6	(418) 845-2318
STEC Equipment		1110 Jack Primus Road	Anderson	SC	29625	864-225-3666
STI Turf Care Equipment		201 S. Buncombe Road	Charleston	SC	29492	835-352-5160
DTS Rents Inc		8521 Augusta Road	Greer	SC	29650	864-879-2772
Huff's Outdoor Power		1741 Deadwood Avenue	Pelzer	SC	29669	864-243-4078
Titan Machinery		4201 North Cliff Avenue	Rapid City	SD	57702	605-388-0266
OakCreek Golf & Turf		235 - 103 Street East	Sion Falls	SD	57104	605-336-3434
TriGreen Equipment, LLC		340 - 9th Avenue North	Saskatoon	SK	S7N 1Y8	306-975-1110
Mid-South Small Engine, Inc.		2645 Mount Moriah Road	Franklin	TN	37064	(615) 794-8187
54 Lawn & Garden LLC		5030 Hwy 54	Memphis	TN	38115	(901) 794-6400
Proffitt's Lawn & Leisure		2401 Paramount Boulevard	Paris	TN	38242	731-642-5454
Horizon		8412 South Congress Avenue	Anarillo	TX	79109	806-358-9726
Bobcat of Austin		16336 I.H. 35 North	Austin	TX	78745	512-282-2331
Audiler Tractor Sales Inc.		440127 Washington Blvd.	Austin	TX	78728	512-251-3415
Valley Equipment Sales, Inc.		949 Cantwell	Beaumont	TX	77707	409-842-4720
Horizon		6601 Petro Park Drive	Corpus Christi	TX	78407	361-884-3959
C&O Equipment Co.		2815 Prestige Road	Houston	TX	77041	(713) 934-9500
Howard's Lawn Equipment		1710 Avenue J	Keller	TX	76244	817-337-5800
Horizon		1776 Jay Ell Drive	Lubbock	TX	79401	(806) 744-3946
Horizon		17645 Blanco Road	Richardson	TX	75081	(972) 680-0007
Bobcat of San Antonio		11146 135 No	San Antonio	TX	78232	210-408-9090
Ross Equipment Company, Inc.		7285 South 700 West	San Antonio	TX	78233	210-337-6136
The Cat Rental Store		18471 Spring Creek Road	Midvale	UT	84047	(801) 566-2437
STI Turf Care Equipment		1001 Executive Blvd	Abingdon	VA	24210	(276) 698-3162
The Cat Rental Store		Cavaller Ind Park 3420 Business Center Drive	Chesapeake	VA	23320	757-436-9394
The Cat Rental Store		Heritage Ind Park 50 Commerce Pkwy	Chesapeake	VA	23323	(757) 558-6506
The Cat Rental Store		1501 Mountain Road	Fredericksburg	VA	22406	(540) 371-2844
The Cat Rental Store		4711 South Valley Pike	Glen Allen	VA	23060	(804) 266-4911
The Cat Rental Store		Spring Hill Ind Park 45 Industrial Circle	Harrisonburg	VA	22801	(540) 432-6701
E&S Equipment		11715 Pump Station Way	Lynchburg	VA	24501	(434) 821-7701
Land and Coates Inc		830 Poplar Hall Drive	Manassas	VA	20109	(703) 919-1379

DealerName	DBA	DealerAddress	City	State	Zip	Phone
STI Turf Care Equipment		2201 Dabney Road	Richmond	VA	23230	(804)355-6404
The Car Rental Store		2332 Willis Road	Richmond	VA	24019	(804) 271-5952
The Car Rental Store		5130 Peters Creek Rd	Roanoke	VA	24019	(540) 563-0402
Carter Machinery Co.		1330 Lynchburg Turnpike	Salem	VA	24153	(804) 271-5952
STI Turf Care Equipment		6831 George Washington Memorial Hwy	Yorktown	VA	23692	757-872-6660
STI Turf Care Equipment		6831 George Washington Memorial Hwy	Yorktown	VA	23692	(253)872-8858
Western Equipment Dist. Inc.		20224 80th Ave S	Kent	WA	98032	509-483-8665
Western Equipment		2824 East Garland	Spokane	WA	99207	715-531-0801
Tri-State Bobcat, Inc.		745 Exchange Drive	Hudson	WI	54016	715-597-3191
L. F. George, Inc.		51012 Rose Lane	Osseo	WI	54758	(262)542-9400
L. F. George, Inc.		W231 N129 County Road F	Waukesha	WI	53186	

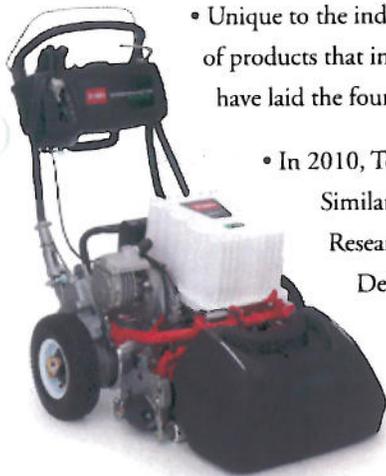


Our Commitment to Responsible Environmental Practices

Consistent with the principles on which we were founded, The Toro Company is committed to helping customers enrich the beauty, productivity and sustainability of the land with innovative turf and landscape maintenance equipment, and irrigation solutions. At the same time, we employ strategies and practices to protect, support and enhance the human and natural resources important to our future.

Product Innovation

Innovation is a constant driver in our success – as we strive every day to develop products that yield performance, productivity, and environmental benefits to our customers. This includes efforts to advance fuel efficiency and reduce emissions through propane, biofuels, hybrid, advanced battery, electronic fuel injection, and hydrogen fuel cell technologies.



- Unique to the industry, Toro's Center for Advanced Turf Technology (CATT) has been influential in the development of products that increase productivity, save water, reduce fuel consumption, and improve growing conditions. They also have laid the foundation for future innovations in robotics, fuel cells, advanced battery technologies and site assessment.
- In 2010, Toro partnered with ATK to develop two utility vehicles powered by advanced hydrogen technology. Similar to what Toro successfully demonstrated as part of a three-year project with the New York State Energy Research and Development Authority (NYSERDA), these prototype vehicles were delivered to the U.S. Defense Logistics Agency for operational demonstration.
- Toro's Greensmaster® eFlex® walk greens mower, the industry's first lithium-ion battery-powered machine, can mow up to nine greens on a single charge.

*Toro® Greensmaster® eFlex®
lithium-ion battery-powered greensmower*

- Toro's Greensmaster® TriFlex™ Hybrid riding greens mower features an all-electric reel drive system.
- Toro and Exmark propane-powered professional mowing equipment utilize a cleaner-burning fuel that can reduce maintenance cost and extend engine life.
- Toro and Exmark were first in the turf industry to approve B20 biodiesel fuel for most commercial and landscape contractor equipment.



Exmark Lazer Z® propane-powered mower

- Compliant with applicable worldwide exhaust and evaporative emission standards set forth by the U.S. Environmental Protection Agency (EPA), California Air Resources Board (CARB), and the European Union.

For gasoline-powered products:

- The EPA's Phase 3 emission standards, implemented during 2011 and 2012 for small off-road engines, have reduced exhaust hydrocarbons by roughly 35 percent and evaporative emissions by about 45 percent.
- Product changes include low permeation fuel lines and tanks, sealed and tethered fuel caps, carbon canisters, and other modifications – in accordance with EPA and CARB guidelines.

For diesel-powered products:

- The EPA's Tier 4 emissions regulations for non-road diesel engines (25-74 horsepower) took effect January 1, 2013. These require particulate matter emissions to be reduced 90 percent, plus additional reductions in hydrocarbons and nitrous oxide emissions. Toro has partnered with Yanmar America as supplier of Tier 4 compliant engines for its innovation, low lifecycle ownership cost, and reduced environmental impact.



EPA Tier 4 compliant diesel engines

- Our proprietary Recycler® cutting system mulches grass clippings into fine particles to return vital nutrients and moisture back to the soil, helping reduce yard waste in landfills.

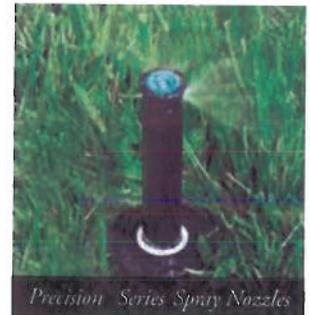
Irrigation Efficiency

Our innovative water-saving irrigation technologies continue to revolutionize the irrigation industry, and help customers in diverse turf and agricultural markets use this critical resource more efficiently.



Turf Guard® soil sensors

- Advanced solutions in site assessment, like Toro's new PrecisionSense™ technology, help customers measure and map variability in soil moisture, salinity, compaction and turf health to more efficiently manage water and other resources.
- Leveraging Toro's innovative Turf Guard® wireless soil sensing technology used on golf courses and sports fields, the award-winning Precision™ Soil Sensor helps homeowners maximize irrigation efficiency by watering only when the soil needs moisture.



Precision™ Series Spray Nozzles

- Toro's patented Precision™ Spray and Rotating Nozzles, which easily retrofit existing irrigation systems, reduce flow rates by 35% while still covering the same distances, and deliver a lower application rate to provide up to 30% water savings.
- In partnership with water districts in California, Toro introduced freesprinklernozzles.com in 2011 to help homeowners realize significant water savings. To date, over 120 cities are participating and interest is growing in other states. Collectively, hundreds of thousands of Toro's Precision™ Spray Nozzles have been redeemed by customers with the potential to save more than 1 billion gallons of water over a five-year period.



Toro Drip Irrigation

- Agricultural growers around the world seek technologies that help increase productivity of existing land and water resources. Led by Toro's patented Aqua-Traxx® tape and BlueLine™ offerings, our innovative solutions help growers worldwide maximize efficiencies in water usage and improve crop yields.
- With global concerns surrounding water availability and cost, Toro's WaterSmart® Symposium brings together customers and industry experts to discuss resource challenges, improved management practices, and advanced irrigation technologies.

Recycling Programs

- Recycling program converts used irrigation drip tape into reusable products like garbage bags, plastic lumber and highway barriers. (El Cajon, CA; Italy; and Australia)
- On a global level, the company and its distributor partners are actively involved in various product take-back and recycling programs.

Operational Efficiency

Our focus remains constant on eliminating waste and increasing efficiencies in our operations.

- The Tomah (Wisconsin) manufacturing facility, which produces commercial equipment sold in North America and exported worldwide, is registered as ISO 14001 compliant. This requires integration of environmental protections and compliance into all aspects of the business to ensure continuous improvement. The site also has been recognized by the Wisconsin environmental program, Green Tier, for excellence of its environmental programs.
- Our Riverside irrigation testing facility includes a closed-loop system that utilizes filtered, recycled water to minimize overall water and energy consumption. (Riverside, CA)
- Toro installed new exhaust scrubbing technology at its engineering test facility to reduce carbon monoxide and other contaminants by more than 90 percent. (Bloomington, MN)
- All worldwide manufacturing facilities recycle steel, aluminum, plastics, cardboard packaging and paper.
- Recover and reuse powder (paint) coating at manufacturing sites.
- Recycle water used in production through a wastewater treatment system. (Tomah, WI; Windom, MN; Juarez, Mexico)
- Installed new cleaning systems with reduced energy and water requirements. (Beatrice, NE)
- Replacing inefficient lighting fixtures at many facilities to reduce our energy usage and carbon footprint.
- Recycle and reuse 90+ percent of plastic waste generated by manufacturing drip irrigation products. (El Cajon, CA; Sanford, FL; Australia; and Italy)
- Rainwater collection and redistribution system to irrigate garden and grounds. (Australia)
- Transport product components from suppliers to our facilities in returnable, reusable or recyclable packaging.
- Transport many professional products in returnable, reusable steel crating to reduce wood packaging waste.

Community

The Toro Company has built a legacy of environmental, educational and community support deeply rooted in our culture.

- Provide annual financial support to environmental organizations.
- Initiate employee activities to renovate parks and restore lakes, rivers and landscapes to their natural beauty.
- Support environmental research projects on water use efficiency, resource management and turf health. (Environmental Institute for Golf, Irrigation Foundation, and SAFE Foundation)
- Educate individuals of all ages on efforts in environmental sustainability. (Golf Environment Organization, National Recreation and Park Association, The First Tee, and Audubon International)
- Fund turf management research programs at leading academic institutions to further the science of turf management and improve efficiency in resource management.
- Donate turf and landscape equipment, and irrigation solutions, to nonprofits to help maintain landscapes and reduce water use.



Appendix I:

EVALUATION QUESTIONNAIRE/SELF CHECKLIST

Products/Pricing (40 Points)

1. Are all products and services being proposed listed under APPENDIX B on a corresponding electronic device? Yes No
2. Is there a price list for all available products/services on a corresponding electronic device? Yes No
3. Did you provide the warranty information that is offered by your company? Yes No
4. Will customers be able to verify they received the contract price? Yes No

Please explain how they would verify the contract price.

Our first step is to assure price integrity by loading the contract pricing into our iQuote pricing system. This is a system that our distributors use nationally to quote to customers. This assures that the customer will receive the correct price. If they want to verify the price they can contact TCPN or the key Toro contacts to receive the contract pricing schedules. As we are providing a simple discount off list price, it will be very easy to verify the discount.

Product Name	Product ID	MSRP
GM360 2WD with No Deck (31230 / 31230N)	31230	\$24,171.00

TRACTION UNIT HAS NO CUTTING DECK		
Accessory Guide - Printable		
Mowing Unit Accessories		
<input type="checkbox"/> Differential Lock	30588	\$274.00
<input type="checkbox"/> Operator Seat with Air Ride Suspension and Vinyl Cushions	30532	\$1,326.00
<input type="checkbox"/> Cap - Diesel/Green	155-2172	\$19.00
<input type="checkbox"/> Engine Air Filter Safety Element - 5"	154-4932	\$17.00
<input type="checkbox"/> Speed Reduction Kit	30547	\$296.00
<input type="checkbox"/> Locking Latch	95-8513	\$66.47
<input type="checkbox"/> North America Road Light Kit (Includes headlights, rear amber reflectors and turn signals)	30512	\$680.00
<input type="checkbox"/> Large Steel Cover	120-5179	\$34.00
<input type="checkbox"/> GM360 100 in Deck (Attachment Kit Required to Mount to GM360)	31261	\$12,224.00
<input type="checkbox"/> Leaf Blowing Kit For 100 in Deck (Available after August 2014)	31350	\$976.00
Mowing Unit Attachments		
<input type="checkbox"/> Snow-Cover Blade	30258	\$220.00
<input type="checkbox"/> Universal Sunshade	30248	\$648.00
<input type="checkbox"/> Universal Sunshade (Red)	30252	\$788.00
<input type="checkbox"/> GM360 Front Jack Stand	30578	\$263.00
Service Deck, Works With Both GM7200 and GM360 Models		
<input type="checkbox"/> Service Deck - 66 in side discharge	30258	\$3,908.00
<input type="checkbox"/> Service Deck - 62 in base deck	30462	\$5,192.00
<input type="checkbox"/> Service Deck - 72 in side discharge	30462	\$5,680.00
<input type="checkbox"/> Service Deck - 72 in base deck	31262	\$3,262.00

5. What payment methods do you accept?

A. Cash, Check

B. Credit Card

This is dependent upon the individual distributors but most will accept these forms of payment.

Performance Capability (30 Points)

1. Did you indicate which states you can deliver to under APPENDIX E, Question 1? Yes No

2. What is the capability of your company to respond to emergency orders?
Please explain what actions you would take.

Toro has an effective, repeatable process that handles all incoming service and parts unit down requests that facilitates a rapid response and solution. We work with customers on an ongoing basis that have high profile events such as national golf and other sporting events that require quick response and resolution. Our distributors have mobile service to take care of issues in the field in an effective manner. As mentioned, our distributors have product and parts on hand to deal with most situations. In addition, we have been supportive in national emergencies such as 9/11, hurricane Katrina and Sandy when product was needed on site to help facilitate moving people and equipment.

3. Please provide your company's average fill rate over the last three fiscal years.

1) 97.8% 2) 97.3% 3) 97.1%

4. Please provide your company's average on time delivery rate over the last fiscal year.

Typically, equipment is setup and delivered to customer's designated delivery location 2 – 30 days after receipt of purchase order. Delivery times vary based on the type of equipment.

5. Does your company agree to the following statement on shipping charges "All deliveries shall be freight prepaid, F.O.B. destination and shall be included in all pricing offered unless otherwise clearly stated in writing."? Yes No

If not please explain.

6. What is your company's return and restocking policy? Are there any applicable fees?
Please provide a brief description and example.

New, unused, uninstalled items are eligible for return and subject to a 15% restock fee. Used or installed items cannot be returned. Parts are to be returned at customer's expense within 90 days of purchase.

6. What is your company's history of meeting shipping and delivery timelines?

We ship 96% of the time, on time. We have our own fleet of trucks to allow us to control our shipping schedules and reduce costs.

8. Will your company be able to meet the one year warranty guarantee as stated on page 16 under pricing? Yes No

If not, please explain.

9. Did you provide your company's information regarding your customer service department as per APPENDIX F, Question 15? Yes No
10. What is your company's current invoicing process?
- Invoicing procedures vary somewhat by distributor, but a typical process is that invoicing is conducted daily for all deliveries made that day. Invoices can be emailed if requested but are normally mailed the following business day. Electronic invoicing is not available at this time.***
11. Did you indicate how your company will implement the contract as per APPENDIX F, Question 20? Yes No
12. Did you provide your Dun & Bradstreet number? Yes No
13. Did you provide information on your website and on-line ordering capacities as per APPENDIX F, Question 14? Yes No

Qualification and Experience (20 points)

1. What is your company's reputation in the marketplace?

Toro is considered the leader in the turf industry for equipment quality and innovation. We are the market share leader in the golf equipment market by a wide margin. This year marks Toro's 100th year in business. We are committed to the turf industry and of the three leading brands, Toro is the only one whose primary business is the turf industry.

2. What is the reputation of your products and/or services in the marketplace?

We have included an article reproduced from Golf Course Industry magazine that ranks market competitors based on information generated from golf course superintendents. Toro consistently ranks as the number one brand for reliability, support and most admired. This is not a local or regional ranking but a national one that shows The Toro Company to be held in very high regard by our customers. That means we are providing a consistent quality of product and a consistent quality of service from our distributors nationally.

3. Does your company have past experience with Region 4 ESC and/or TCPN members? If so, please list them and their contact information (Up to five).

The members are all on our reference list. Contact information is listed there.

***City of College Station, TX
College Station ISD, College Station, TX
Travis County, TX
City of Round Rock, TX
City of Los Angeles, CA***

4. Did you list your key employees and their qualifications as per APPENDIX F, Question 6? Yes No
5. Did you provide the locations and sales persons who will work on the contract as per APPENDIX F, Question 6 & 7? Yes No
6. What past experience does your company have working in the government sector?

All of our distributors and dealers have worked with their area federal, state, and local forms of government as a daily activity. The government market segment represents a significant portion of our annual sales. In addition, both Toro and our distributors are active in NIGP events. As mentioned, Pete Whitacre and Paula Sliefert both are active in the NIGP Business Council and have been for over 7 years. We are familiar with the processes that our government customers have to abide by when purchasing products and services. We recognize the benefits that this contract would provide them in efficiency, cost savings, reduced purchase cycle time and being able to buy on Best Value.

Toro or our distributors hold federal, state, local and national cooperative contracts to use with our customers. These contracts represent the bulk of our government business.

7. Did you provide information on working with cooperative purchasing programs as per APPENDIX F, Question 24? Yes No
8. Did you provide information on any litigation, bankruptcy, reorganization, etc. as per APPENDIX F, Question 16? Yes No
9. Did you submit at least 10 customer references relating to the products and services within this RFP, with an equal representation coming from K12, Higher Education and City/County/non-profits entities as per APPENDIX F? Yes No
10. Did you list and submit all applicable MWBE, HUB, DVBE, small and disadvantaged business certifications that your company holds? Yes No
11. Did you list and submit all applicable M/WBE, HUB, DVBE, small and disadvantaged business and other diverse certifications that your company holds? Yes No

Value Add (10 Points)

1. Did you submit a marketing plan as per APPENDIX F, Question 17? Yes No
2. Did you provide a national sales training plan as per APPENDIX F, Question 21? Yes No

Appendix B:

PRODUCT / SERVICES SPECIFICATIONS

It is the intention of Region 4 ESC to establish an annual contract with highly qualified Vendor(s) for **Grounds Keeping Products and Services** on a national basis. Vendor(s) shall, at the request of TCPN member, provide these covered products and associated services under the terms of this RFP and the CONTRACT TERMS AND CONDITIONS. Vendor(s) shall assist the TCPN member with making a determination of its individual needs, as stated below.

Scope

This agreement should include all types of equipment necessary to maintain these facilities. Grounds maintenance equipment should include all forms of operation (power), whether gas powered, diesel powered, propane powered, electric powered or powered by other means. Ground maintenance equipment will include but not be limited to the following equipment:

- Heavy Duty Mowers
- Zero Turn Mowers
- Deck Mowers
- Drag Mowers
- Push Mowers
- Brush Hog Mower
- Fairway Mowers
- Greens and Tee Mowers Riding and Walking
- Greens Rollers
- Rough Mowers (for Golf Courses)
- Trap Rakes
- Golf Greens Top Dressers
- Reel Mowers
- Golf Course Rollers
- Trucksters and Utility Vehicles
- Club Cab
- Golf Carts
- Heavy Duty Sprayers
- Hand Operated Sprayers
- Water Trucks
- Boom Mowers
- Ditch Bank Mowers
- 7 Gang, 9 Gang Mower Attachments
- Heavy Duty Tractors With PTO For Attachments
- Skid Steer Loaders
- Field Markers and Groomers both Riding and Hand Operated
- Seeder
- Aerators
- Leaf Blower or Vacuum
- Wood Chipper
- Stump Grinder
- Shavings Processing Equipment
- Paving and Curbing Equipment
- Utility Vehicles Mid Duty and Heavy Duty
- Rakes
- Sprayers

Aeration and Seeders
Greens Rollers
Top Dressers / Spreaders
Tractors
Grinders / Reel Sharpeners
Sod Cutter Power
Washer Portable
Generators Water
pumps Trenchers
Bed Knife Grinder
Chainsaw Pole
Saw Hedge
trimmer
Weed Eater/Trimmer
Push Edgers
Backpack Blower
Tiller
Auger
Brush Cutter
Post Hole Digger

Any other equipment to maintain landscaping and turf and any equipment used to maintain artificial turf. Large agricultural tractors are not considered to be within the scope of this RFP.

Additionally, Region 4 ESC is seeking maintenance and repair services for the above products. Respondents should submit auditable pricing for any and all services offered as indicated in Appendix C of this RFP.

Proposer Qualifications

Proposers will have demonstrated that they have been in the business of selling and supporting grounds maintenance equipment for a period of not less than ten years. Proposers will include any equipment recall notices for equipment sold over the past 3 years and the nature of the recall and the number of units affected. It will also include how the recall was initiated, i.e. manufacturer or other.

Proposers shall be recognized by the manufacturer as an authorized dealer for sales and service of the equipment they are proposing. Proposers shall provide a letter from the manufacturer evidencing same. Dealers may include a consortium of other dealers in their proposal. However, any award will be made with the vendor submitting the proposal. The Dealer may extend their contract to the other Dealers with existing terms and conditions as a novation agreement and accepted by TCPN.

It is preferred that Manufacturers submit proposals on this equipment. Manufacturers submitting a proposal should submit a list of dealers that will be included as part of this contract. This list may be updated periodically upon mutual consent of the manufacturer and TCPN and the dealers proposed. TCPN has contracts with manufacturers in other commodities that are extended to a Dealer network.

It is not necessary for a vendor to supply all types of grounds maintenance equipment but proposers are encouraged to submit a complete list of equipment that they sell and what the list price is along with the price after their manufacturer discount. Extended warranties may be offered as part of the respondent's submission under the guidelines of Appendix C of this RFP.

Equipment Requirements

Each piece of equipment shall be delivered with all safety, emissions and noise control equipment required by Federal and State laws. All equipment will be delivered as new and never been used before. No equipment will be delivered as "demo" to participating members of TCPN. If a member wishes to accept a "Demo" unit it will be a substantial discount accepted in the TCPN contract (by TCPN) and will be covered as a new piece of equipment under warranty.

Equipment meeting the most recent EPA and CARB emission standards will be given priority over less environmentally-friendly equipment.

Specific Warranties

Equipment (except hand-held equipment) shall have a minimum two-year warranty beginning the date the equipment is delivered. Awarded vendors shall be responsible for all repairs to all components under warranty, and shall coordinate the pick-up and delivery of equipment, if needed, to complete repairs covered under the warranties. Warranties shall be non-prorated 100% for parts and labor. When equipment under warranty is down for more than 48 hours, vendor shall, upon request by participating member, provide a comparable loaner at no cost to the participating member.

Hand-held equipment shall include the standard warranty typically offered for that piece of equipment, beginning on the date the equipment is delivered.

Financing

Proposers are encouraged to submit a bid price for the leasing equipment up to 60 months. This should include an option to return the equipment or keep the equipment at the end of the leasing period.

Service Contracts

Proposers are encouraged to include a separate price that includes routine maintenance for the equipment. Participating members may or may not elect to use this option. Pricing may include from 12-60 months. Another option may include the cost of routine parts on equipment to be maintained by the participating member.

Training

Upon request and at a location to be determined, the successful vendors shall provide at least two training courses to cover proper operation and safety features of the equipment. When requested, training will be conducted within two (2) weeks of delivery of equipment. Awarded vendors may include equipment maintenance training at the Participating member's location or at the local vendor's offices. The vendor may provide training onsite at the manufacturer's offices providing the participating member's policies allow for this. Cost for travel will be borne by the participating member.

Toro Company Product Portfolio

Commercial Division Products

- Rotary Mowers
 - Outfront
 - 4-wheel steer
 - Contour
 - Wide area
- Greens Mowers
 - Walking and riding
- Reel Mowers
- Utility Vehicles
 - Medium and Heavy duty
- Cultivation Equipment
 - Aerators
 - Core processors
 - Thatchers and seeders
- Application Equipment
 - Topdressers
 - Sprayers
- Miscellaneous Equipment
 - Debris blowers
 - Trap rakes/infield rakes
 - Greens rollers
 - Turf vacuums

Landscape Contractor Products

- Commercial Zero Turn Mowers
- Commercial Stand-on Mowers
- Commercial Walk-behind Mowers

Site Works Systems Division

- Compact Utility Loaders
- Stump Grinders
- Chippers
- Log Splitters
- Stand-on Aerators
- Trenchers
- Directional Drillers

Irrigation Products

- Sentinel controllers
- Turf guard sensors
- Eagle controllers

Warrantees

Commercial Division

Toro's standard Commercial Products Warranty states that "Your Toro Commercial product will be free from defects in materials or workmanship for two years or 1500 operational hours whichever occurs first. Where a warrantable condition exists, we will repair the Product at no cost to you including diagnosis, labor, parts and transportation."

Landscape Contractor Products

See following page for details

Rainmaster Irrigation Products

All Rain Master controllers include a 5-year manufacturer's warranty. All accessories include a 2-year manufacturer's warranty with purchase.



The Toro Total Coverage Warranty

A Limited Warranty (see warranty periods below)

Landscape
Contractor
Equipment (LCE)

Conditions and Products Covered

The Toro Company and its affiliate, Toro Warranty Company, pursuant to an agreement between them, jointly promise to the original purchaser to repair the Toro Products listed below if defective in materials or workmanship.

The following time periods apply from the date of purchase by the original owner:

Products	Warranty Period
21 in. Mowers	2 years Residential Use ¹ 1 year Commercial Use
• Engines ⁴	Honda – 2 years Kawasaki – 3 years
30 in. Mowers	2 years Residential Use ¹ 1 year Commercial Use
• Engines ⁴	Kawasaki – 3 years
Mid-Size Walk-Behind Mowers	2 years
• Engines ⁴	Kawasaki – 3 years
Grand Stand® Mowers	5 years or 1,200 hours ²
• Engines ⁴	3 years
• Frame	Lifetime (original owner only) ³
Z Master® 2000 Series Mowers	4 years or 500 hours ²
• Engines ⁴	3 years
• Frame	Lifetime (original owner only) ³
Z Master® 3000 Series Mowers	5 years or 1,200 hours ²
• Engines ⁴	3 years
• Frame	Lifetime (original owner only) ³
Z Master® 5000 Series Mowers	5 years or 1,200 hours ²
• Engines ⁴	Kohler Command – 2 years Kohler EFI – 3 years
• Frame	Lifetime (original owner only) ³
Z Master® 6000 Series Mowers	5 years or 1,200 hours ²
• Engines ⁴	Kawasaki – 3 years
• Frame	Lifetime (original owner only) ³
Z Master® 7000 Series Mowers	5 years or 1,200 hours ²
• Engines ⁴	2 years
• Frame	Lifetime (original owner only) ³
All Mowers	
• Battery	90 days Parts and Labor 1 year Parts only
• Belts and Tires	90 days
• Attachments	1 year

¹Residential use means use of the product on the same lot as your home. Use at more than one location is considered commercial use and the commercial warranty would apply.

²Whichever occurs first.

³Lifetime Frame Warranty - If the main frame, consisting of the parts welded together to form the tractor structure that other components such as the engine are secured to, cracks or breaks in normal use, it will be repaired or replaced, at Toro's option, under warranty at no cost for parts and labor. Frame failure due to misuse or abuse and failure or repair required due to rust or corrosion are not covered.

⁴Some engines used on Toro Products are warranted by the engine manufacturer.

Instructions for Obtaining Warranty Service

If you think that your Toro Product contains a defect in materials or workmanship, follow this procedure:

1. Contact any Authorized Toro Service Dealer to arrange service at their dealership. To locate a dealer convenient to you, refer to the Yellow Pages of your telephone directory (look under "Lawn Mowers") or access our web site at www.Toro.com. You may also call the numbers listed in item #3 to use the 24-hour Toro Dealer locator system.
2. Bring the product and your proof of purchase (sales receipt) to the Service Dealer. The dealer will diagnose the problem and determine if it is covered under warranty.
3. If for any reason you are dissatisfied with the Service Dealer's analysis or with the assistance provided, contact us at:

RLC Customer Care Department
Toro Warranty Company
8111 Lyndale Avenue South
Bloomington, MN 55420-1196
888-865-5676 (U.S. Customers)
888-865-5691 (Canada customers)

Owner Responsibilities

You must maintain your Toro Product by following the maintenance procedures described in the *Operator's Manual*. Such routine maintenance, whether performed by a dealer or by you, is at your expense.

Items and Conditions Not Covered

There is no other express warranty except for special emission system coverage and engine warranty coverage on some products. This express warranty does not cover the following:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, oil changes, spark plugs, air filters blade sharpening or worn blades, cable/linkage adjustments, or brake and clutch adjustments
- Components failing due to normal wear
- Any product or part which has been altered or misused or neglected and requires replacement or repair due to accidents or lack of proper maintenance
- Pickup and delivery charges
- Repairs or attempted repairs by anyone other than an Authorized Toro Service Dealer
- Repairs necessary due to failure to follow recommended fuel procedure (consult *Operator's Manual* for more details)
 - Removing contaminants from the fuel system is not covered
 - Use of old fuel (more than one month old) or fuel which contains more than 10% ethanol or more than 15% MTBE
 - Failure to drain the fuel system prior to any period of non-use over one month

General Conditions

All repairs covered by these warranties must be performed by an Authorized Toro Service Dealer using Toro approved replacement parts.

Neither The Toro Company nor Toro Warranty Company is liable for indirect, incidental or consequential damages in connection with the use of the Toro Products covered by this warranty, including any cost or expense of providing substitute equipment or service during reasonable periods of malfunction or non-use pending completion of repairs under this warranty.

All implied warranties of merchantability (that the product is fit for ordinary use) and fitness for use (that the product is fit for a particular purpose) are limited to the duration of the express warranty.

Some states do not allow exclusions of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Countries Other than the United States or Canada

Customers who have purchased Toro products outside the United States or Canada should contact their Toro Distributor (Dealer) to obtain guarantee policies for your country, province, or state. If for any reason you are dissatisfied with your Distributor's service or have difficulty obtaining guarantee information, contact the Toro importer. If all other remedies fail, you may contact us at Toro Warranty Company.

Australian Consumer Law: Australian customers will find details relating to the Australian Consumer Law either inside the box or at your local Toro Dealer.

Toro References

Name: City of Bryan Parks Department
Contact: Darrell Lovelett, Director
City: Bryan, TX
Phone: 979-209-5529
Years Serviced: Over 3 years
Services: Grounds keeping equipment
Annual Volume: >\$20,000

Name: Travis County
Contact: Mike Joyce
City: Austin, TX
Phone: 512-854-4658
Years Serviced: over 3 years
Services: Grounds keeping equipment
Annual Volume: >\$100,000

Name: City of College Station Parks
Contact: Steve Richardson
City: College Station, TX
Phone: 979-764-3564
Years Serviced: over 3 years
Services: Grounds keeping equipment
Annual Volume: >\$50,000

Name: College Station ISD
Contact: Denna Thompson, Grounds Supt
City: College Station, TX
Phone: 979-764-5443
Years Serviced: Over 3 years
Services: Grounds keeping equipment
Annual Volume: >\$50,000

Name: City of Round Rock
Contact: Marshall Reynolds, Fleet Manager
City: Round Rock, TX
Phone: 512-218-5567
Years Serviced:
Services: Grounds keeping equipment
Annual Volume: >\$50,000

Name: Angleton ISD
Contact: Rudy Santos, Director of Maintenance
City: Angleton, TX
Phone: 979-864-8740
Years Serviced: over 3 years
Services: Grounds keeping equipment
Annual Volume: >\$20,000

Name: Goose Creek ISD
Contact: Felipe Cervantes, Fleet Maintenance
City: Baytown, TX
Phone: 281-425-3278
Years Serviced: over 3 years
Services: Grounds keeping equipment
Annual Volume: >\$50,000

Name: City of Los Angeles
Contact: Claudia Landrum, Purchasing
City: Los Angeles, CA
Phone: (323) 526-9262
Years Serviced: over 3 years
Services: Grounds keeping equipment
Annual Volume: >\$100,000

Name: Lyndsey Lyons Park, Harris County Pct 4
Contact: Clinton Wenzell, Park Manager
City: Humble, TX
Phone: 281-353-4196
Years Serviced: over 3 years
Services: Grounds keeping equipment
Annual Volume: >\$20,000

Name: Milwaukee County
Contact: Dan Goeden, Fleet Manager
City: Milwaukee, WI
Phone: 414-257-6585
Years Serviced: over 3 years
Services: Grounds keeping equipment
Annual Volume: >\$100,000

Appendix G: VALUE ADD

Please include any additional products and/or services not included in the scope of the solicitation that you think will enhance and/or add value to this contract for participating agencies.



MYTURF OVERVIEW

myTurf, Toro's Fleet Management system, offers a unique combination of tools that increase the efficiency of your team, adds automation to remove manual tasks all while making it one of the easiest systems to use.

A key benefit of modern information technology, is its ability to improve the efficiency and quality of our output. myTurf reproduces the process of a turf equipment maintenance facility and improves it by eliminating unnecessary steps and reducing task time.

Time savings can be used to re-focus on more value-added work. Examples are: With myTurf you will be able to order parts online 24x7 from your Toro Distributor; track your entire fleet online; Toro and non-Toro; access the latest manuals; catalogs; bulletins and product training; get automatic alerts when service is due; easily create and manage Work Orders; view cost reports, and much, much more - All in an easy to use system!

By automating processes you are manually tracking, myTurf not only saves you time, but it ensures Preventative Maintenance occurs when it should, extending the life and performance of your equipment.

Services

We have included extended equipment protection information and service contract information in the pricing section.

Toro Used Equipment

Used Toro equipment will be made available to you from your local Toro Distributor. Customers will be able to purchase good quality used equipment "as-is" at a price not to exceed 90% of the Region IV/TCPN contract pricing.

Equipment Availability:

Our off lease equipment can be found by either contacting our Toro distributor network directly or by accessing www.toroused.com. Toro will work with you to assure that you can find quality used

equipment that can meet your particular needs.

Financing

Toro has partnership agreements with two different finance companies, PNC Equipment Finance and TCF Equipment Finance, to provide competitive financing to the public sector. These companies are familiar with Non-appropriation clauses that public entities require and that language is included in their documents.

Based on tax exempt pricing (\$1 purchase option at end of lease term), the monthly lease rate is indexed to a spread not to exceed 450 basis point (BPS) over the like term U.S. Treasuries (as published by the U.S. Federal Reserve Statistical Release H. 15). Individual transaction pricing will be priced to market based on specific transaction details.

For Fair Market Value leases, terms from three to five years will be available. The monthly payments will not exceed 3.5% of the award price (at 600 hours per year of use). Alternative hours and payment terms (skip pays, annual payments, etc.) can be quoted by one of our financing partners. At the end of lease (assuming all terms and conditions of the lease have been met), the equipment may be returned (subject to turn-in requirements identified in the lease documents), renewed for additional time, on mutually agreeable terms between the parties, or purchased at the then, fair market value of the equipment.

Contact information:

PNC Equipment Finance: 1-800-263-9499

TCF Equipment Finance: 1-866-204-8897

Sales and Marketing Executives International (SMEI)

Toro is the only turf equipment provider that requires all Toro Commercial sales representatives and Commercial distributor sales representatives to be SMEI Certified Professional Salesperson (SCPS) and our sales managers to be Certified Sales Executives (CSE). These certifications are required by Toro to participate in any incentive based programs that we implement and therefore command a very high compliance rate. Ethics is a very big part of this certification and that is important when dealing with any customer but especially our government customers. We believe that Sales Certification indicates a high level of professionalism in the following areas:

Leadership -- Sales Certification and Marketing Certification signifies we are dedicated to continuous improvement.

Recognition -- Only the top sales and marketing professionals seek sales certification, indicating that we are a leading sales professional.

Knowledge -- Sales Certification improves our understanding of the most current sales and marketing processes and trends.

Rainmaster Brand Products

5825 Jasmine St
Riverside, CA 92504
1-800-777-1477 www.rainmaster.com

June 17th, 2014

The Toro Company: TCPN® RFQ : Rain Master® Control Systems

Rain Master provides innovative control solutions to the landscape irrigation industry under the Irritrol® Brand. Irritrol is one of several brands under the Toro Irrigation Division; owned and operated by The Toro Company. The variety of available Rain Master products allows potential customers to choose from the most basic standalone controller to the most sophisticated operating system. Product capabilities and highlights include:

- Web-based central control platform
- Mobile/tablet access
- Full weather adjustment from a wide variety of ET sources
- Software-based central control platform
- Flow monitoring & Advanced Irrigation Management (AIM)
- Basic or Advanced ET capability
- 2-wire design capability up to 204 zones
- Plug-and-play handheld remote capability
- Full aerial mapping suite available
- A wide range of enclosure options

All Rain Master controllers include a 5-year manufacturer's warranty. All accessories include a 2-year manufacturer's warranty with purchase.

Product & Agency Certifications Include:

EPA WaterSense™ compliance and approval for Eagle™ and Eagle Plus with iCentral™
SocialWatersmart™ rebate approved product
UL & cUL certification for all controllers
NEMA – certified enclosures
LEED Credit eligibility
Qualifies under Federal Buy American Act Legislation & Criteria
Radio products are FCC tested & licensed.

Services

Protection Plus

You can also purchase additional protection for your products through Toro Protection Plus (TPP). These are optional programs designed to provide you with budget protection and security after the initial 2 year warranty period. You can elect the Drive Train Protection or the Comprehensive Protection. A sample contract is attached.

Drive Train Protection: This program covers the engine, transmission/transaxle including; hydrostatic pumps, valves and motors; drive axles/drive assemblies including; all parts contained in the drive axle, PTO housing, 4-wheel drive assemblies, hydraulic drive pumps, valves, steel lines and motors within the frame.

Comprehensive Protection: This program covers all operational parts and assemblies for your mower, vehicle or other machinery against mechanical breakdown. The items not covered are; normal maintenance items, tune-ups, tires, batteries, blades, belts and hoses.

Used Equipment

Qualified used equipment can be covered with Toro Protection Plus Pre-owned.

Service Contracts

Our Toro service network provides service agreements and contracts upon request on commercial turf equipment. The pricing is based on the length of the agreement /contract and the actual operating hours and is quoted by each Toro service provider.

Toro Distributor Service offers Planned Maintenance programs that will perform all required scheduled maintenance. The scheduled maintenance can be performed at your location with mobile service vehicles or transported to the local service facility. The maintenance programs are designed and priced based on estimated hours of use per year.

On a three year service agreement the pricing will not exceed 15% of the MSRP. On a five year service agreement the pricing will not exceed 20% of the MSRP. Service agreements/contract pricing includes service labor and maintenance parts specified in the Toro maintenance schedules and does not include common wear items.



Topdresser 1800

An 18 cubic foot, bed-mounted topdresser that is durable, flexible and delivers an even rate of application—whether light or heavy materials are required.



TOPDRESSER 1800, MODEL 44225*				
HOPPER CAPACITY	18 cu. ft. (502 liter) or 1,476 lbs. (670 kg)			
SPREADING WIDTH	60" (152 cm)			
TOP DRESSING SPEED	Up to 8 mph (13 km/h).			
TRANSPORT SPEED	Up to 12 mph (19 km/h).			
CONVEYOR BELT	Seamless 60" (152 cm) wide belt, polyester mono-filament interwoven material w/gray PVC "v-pattern" traction surface.			
METERING GATE	Infinitely variable from closed to 3.5" (9 cm) opening for light to heavy applications. Flexible edge and spring release.			
CONTROLS	Hydraulic engage/disengage lever from operators console.			
DRIVE	Remote hydraulic to utility vehicle.			
DIMENSIONS /WEIGHT	Height 43" (109 cm)	Length 52" (132 cm)	Width 72.5" (184 cm)	Shipping Weight 893 lbs. (405 kg)
WARRANTY	Two-year limited warranty. refer to Operator's Manual for further details.			

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in design, required attachments and safety features. Consult your local Toro Distributor.





Topdresser 2500

This 25 cu. ft. Topdresser gives you precise control and consistently delivers an even application—whether light or heavy topdressing is desired.



TOPDRESSER 2500, MODEL 44507*											
HOPPER CAPACITY	25 cu. ft. (698 liter) or up to 2,050 lbs. (930 kg).										
SPREADING WIDTH	60" (152 cm)										
TOP DRESSING SPEED	Variable to desired application rate. 2-8 mph (3-13 km/h).										
TRANSPORT SPEED	Up to 12 mph (19 km/h). Optional brake kit available.										
CONVEYOR BELT	Seamless 60" (152 cm) wide belt, polyester mono-filament interwoven material w/gray PVC "v-pattern" traction surface.										
METERING GATE	Infinitely variable from closed to 3.5" (9 cm) opening for light to heavy applications. Flexible edge and spring release.										
CONTROLS	12-volt on/off switch at operator's position to engage conveyor and brush. Metering gate runs full width in front of brush.										
DRIVE	Hydraulic with chain driven pumps. Belt motor with chain reduction. Brush motor direct drive. Electric hydraulic solenoid control to activate topdress motors. Closed loop hydraulic system with charge pump and 25 micron filtration.										
TIRES	(4) 18 x 10.5-8, 4-ply ribbed, high floatation turf tires on oscillating axle sets.										
DIMENSIONS /WEIGHT	<table border="1"> <thead> <tr> <th>Height</th> <th>Width</th> <th>Overall Length</th> <th>Shipping Weight</th> <th>Maximum Weight</th> </tr> </thead> <tbody> <tr> <td>43" (109 cm)</td> <td>72.5" (184 cm)</td> <td>97.5" (248 cm)</td> <td>1,454 lbs. (659 kg)</td> <td>3,500 lbs. (1,589 kg)</td> </tr> </tbody> </table>	Height	Width	Overall Length	Shipping Weight	Maximum Weight	43" (109 cm)	72.5" (184 cm)	97.5" (248 cm)	1,454 lbs. (659 kg)	3,500 lbs. (1,589 kg)
Height	Width	Overall Length	Shipping Weight	Maximum Weight							
43" (109 cm)	72.5" (184 cm)	97.5" (248 cm)	1,454 lbs. (659 kg)	3,500 lbs. (1,589 kg)							
WARRANTY	Two-year limited warranty. refer to Operator's Manual for further details.										

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The Topdresser 2500 is manufactured in Tomah, WI ISO 2002 Certified Plant.





ProPass™ 200

The ProPass 200 Series broadcast-style topdressers provide the ultimate in application versatility. Intuitive color-coded adjustment settings deliver extremely accurate spread patterns from ultra-light dustings to ultra-heavy aeration filling applications. The four-wheel, walking-beam suspension means a light footprint that is easy on the most sensitive turf. If you are looking for one topdresser to do it all – the ProPass 200 is the only one. Choice of bed-mounted or trailer configurations and manual or wireless controls.



PROPASS 200, MODEL 44701 / PROPASS 200 WIRELESS, MODEL 44700*			
GENERAL	Hopper Capacity: 21 ft ³ / 0.54 m ³ struck (25 ft ³ / 0.71 m ³ heaped) Controls: Standard or Electronic Wireless Belt: One-piece vulcanized, self-tracking (no seams or staples) Hydraulic Power Pack (optional): 11 Hp engine Cross Conveyor / Swivel Kit Assembly (option): Cross Conveyor rotates 180 degrees		
	WEIGHT	Base Model: 546 lbs (248 kg) Tow Behind Chassis: 480 lbs (218 kg) Truck Mount Kit: 90 lbs (41 kg) Twin Spinner: 140 lbs (66 kg) Truck Mount Storage Stand: 65 lbs (30 kg) Hydraulic Power Pack Engine: (dry) 220 lbs (100 kg) Cross Conveyor / Swivel Kit Assembly: 140 lbs (63.5 kg)	
DIMENSIONS		Tow-Behind Configuration Length 134 in (3.4 m) Height 56 in (1.4 m) Width 65 in (1.7 m) Total Unit Weight: 1166 lbs (531 kg) Payload 2,000 lbs (905 kg)	Truck Mount Configuration Length 78 in (1.98 m) Height 56 in (1.4 m) Width 65 in (1.7 m) Total Unit Weight: 776 lbs (355 kg) Payload: 2,000 lbs (905 kg)
	TIRES ON CHASSIS	24 x 13 x 12 in (60 x 32.5 x 30 cm) , 4 ply Suspension: 4-wheel walking beam	
TOW VEHICLE REQUIREMENTS	Towing Capacity: 3400 lbs (1550 kg) Tongue Weight: 300 lbs (136 kg)		
HYDRAULICS	Minimum 6 US gal/m @ 2,000 psi (23 L/m @ 138 bar) Maximum 10 US gal/m @ 2,800 psi (38 L/m @ 190 bar)		
WARRANTY	Two-year limited warranty. Refer to operators manual for further details.		
CE REQUIREMENTS	Meets the CE requirements for the EU		

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MH-400

The MH-400 handles everything: Topdressing, Cross-Conveyor, Material Delivery & Hauling/Transport. Designed to perform everyday as part of your maintenance program. By being an integral component to daily tasks the MH-400 reduces labor, saves time and cuts operating costs. Optional wireless remote control available.



MH-400, MODELS 44930 & 44931 / MH-400 WIRELESS, MODELS 44933 & 44934*	
GENERAL	Hopper Capacity: 4 yd ³ (3.06 m ³) Main Conveyor Belt: One Piece Vulcanized, Self Tracking, 30" wide Controls: Standard Hydraulic (SH) or Electronic Hydraulic (EH)
WEIGHT	Base Model: 3,000 lbs (1,360 kg) - empty with no options installed
CHASSIS	Payload (tare): 11,800 lbs (5,353 kg) GVWR: 14,800 lbs (6,713 kg) Suspension: 4 Wheel Walking Beam with 10 ply turf tires Tire Size: 33 x 16 x 16.1 in (82.5 x 40 x 40.25 cm) 10 ply Brakes (electric) - Optional 2 or 4 wheel
DIMENSIONS	Length 190 in (4.8 m) Height 86 in (2.2 m) Width 78 in (1.98 m)
TOW VEHICLE REQUIREMENTS	Towing Capacity: 15,850 lbs (7,175 kg) - maximum payload Minimum Power: 45 Hp (34 Kw)
HYDRAULICS	Recommended Flow (min no options installed): 6 US gal/min (23 L/min) Recommended Flow (min options installed): 10 US gal/min (38 l.min) Recommended Input Pressure (min): 2,000 psi (138 bar)
WARRANTY	Two-year limited warranty. Refer to operators manual for further details.
CE REQUIREMENTS	Meets the CE requirements for the EU

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Multi Pro® 1200 & 1250



Dependable work vehicles featuring Spray Pro™ - the most accurate and precise turf spraying system available for your liquid application requirements. Multi Pro delivers the ultimate in precision, simplicity and convenience.

MULTI PRO 1200, MODEL 41199, MULTI PRO 1250, MODEL 41198*					
VEHICLE	4-wheel, rear wheel drive, front steer, single operator turf sprayer.				
ENGINE	20 hp (14.9 kW) Kohler® V-Twin horizontal shaft governed to 3,350 rpm, w/25 amp alternator, accel. pump carburetor.				
BATTERY	12-volt with 540 cold cranking amps @ 0°F (-18°C).				
FUEL CAPACITY	5 gallon (19 liter).				
SUSPENSION	Front: Fully independent rubber torsion swing arm. Rear: Rigid.				
STEERING	Hydraulic power, center pivot linkage, 60° steering angle 9' or 108" (2.4 m) inside turning radius, 7'7" (2.3 m) rear tire radius.				
TIRES	Front: 18 x 9.5-8 slick. (2) Rear: 24 x 13-12 Multi-Trac. (2)				
BRAKES	4-wheel hydraulic drum type with dual chamber master cylinder.				
LIGHTS	Twin halogen headlights.				
TRANSMISSION	Integrated transaxle with 3 forward speed ranges and reverse.				
GROUND SPEED	1st speed range: 0-3.1 mph (0-4.9 km/h). 2nd speed range: 0-5.0 mph (0-8 km/h). 3rd speed range: 0-11.0 mph (0-17.6 km/h).				
CLUTCH	Centrifugally engaged variable belt drive (CVT).				
SPRAY BOOM (STANDARD)	Standard Electric 18.5' (5.6 m) working width, 3-section triangular truss open boom. Bi-directional break-away. Raise criss-cross for storage and transportation. Optional Sonic Boom™ for ground following boom control.				
SPRAY NOZZLES	Color-coded, stainless steel, drift reduction mounted on triple nozzle bodies. Quick disconnect with diaphragm check valve.				
SPRAYER TANK	175 gallon (662 liter) polyethylene tank, inductive agitation, includes imbedded 20 gallon (75 liter) rinse tank and 5 gallon (18 liter) fresh water tank. Low profile. Translucent with level gauge.				
SPRAY PUMP	Dual diaphragm pump, proportional ground speed control system. 21.5 gpm (81.3 liter/min) output, capacity range up to 220 psi (15 bar) max.				
SPRAY CONTROLS	Electronic switches on Multi Pro 1250. Manual levers and dial on Multi Pro 1200.				
SPRAY MONITOR	Spray Pro™ fully functional with liquid crystal display. Back lit for late evening/early morning operation.				
DIMENSIONS	Overall Width: 69" (175 cm). Overall Length: 133" (337 cm) w/spray system. Height: 94" (238 cm). Ground Clearance: 4.5" (11.4 cm). Wheelbase: 58" (147 cm).				
WEIGHT	Base unit with standard spray system and operator: (empty vehicle) 2,261 lbs. (1,025 kg); (full w/operator) 3,861 lbs. (1,751 kg). MGWW: 4,136 lbs. (1,888 kg).				
CERTIFICATION	SAE J2258 and machinery directive 2006/42/EC; ANSI B71.4-2004				
WARRANTY	Two-year limited warranty. See operations manual for details.				
OPTIONS					
Model	Description	Model	Description	Model	Description
41024	Single Nozzle kit	41133	Spray Gun Kit	41361	ROPS
41135	Elec. Hose Reel Kit	41236	Foam Marker	106-4842	Rinse Kit
41607	Pro-Foam Concentrate	41157	Pro-Foam Concentrate (4x 41607)	106-4843	Heat Blanket

A Safety Reminder: Prior to any application, know the chemical content and the manufacturer's recommendation for protective clothing. Always wear proper clothing and mask when applying chemicals.

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The Multi Pro 1200 & 1250 are manufactured in Tomah, WI ISO 9002 Certified Plant.



TORO

Multi Pro® 1750

Toro's new 175-gallon dedicated vehicle sprayer is the culmination of hundreds of hours of insightful customer input. This totally new sprayer uses the advanced spray system design of Toro's extremely successful Multi Pro 5800, 300-gallon sprayer, combined with cutting-edge sprayer controls and productive vehicle features to create the most advanced, efficient and accurate 175 gallon sprayer on the market. From aggressive agitation, faster response, consistent and accurate application rates, and intuitive rate set up, to precise vehicle control, this sprayer has it all.





Multi Pro® 1750 Specifications*

MULTI PRO 1750, MODEL 41188	
ENGINE	Kohler,® CH740 Command Series, twin-cylinder, air-cooled, 4-cycle, 27 hp (20 kW) gross.
TRACTION SYSTEM	Kanzaki / Tuff Torq 3-speed (forward), 1-speed (reverse), mechanical transaxle with differential lock.
GROUND SPEEDS	Forward: 0 – 11.5 mph (0 – 18.5 kph). Reverse: 0 – 2.5 mph (0 – 4 kph).
TIRES	Front: Kenda K404 smooth (treadless); 20x10-10. Rear: Kenda turf tread; 24x13-12.
BRAKES	Four wheel hydraulic disc, 2-piston calipers; Front: 7.5" (19 cm) diameter rotor Rear: 9.5" (24 cm) diameter rotor.
MAIN FRAME	High-strength, formed steel rear frame channels welded to steel tubular crossmembers and upper/lower steel tubular structure, ROPS standard.
SUSPENSION	Front suspension – coil over shock; Rear suspension – rigid; rubber tires.
STEERING	Fully hydraulic; steering wheel turns, lock to lock: 3.5
GAUGES/INDICATORS	Multi-function display (Mini InfoCenter™), Pressure Gauge, Mechanical Fuel Gauge.
VEHICLE CONTROLS	Ignition key switch, Choke, Headlight Switch. Optional Wireless Hour Meter. Speed Lock.
SEAT	Single, high back cushion seat standard with manual position adjustment w/seatbelts.
WEIGHT	2200 lbs. (998 kg) shipping weight
DIMENSIONS	Measurements with spray system: Length = 140" (3.56 m) (w/booms folded in cradles) Width = 70" (1.78 m) (w/booms folded in cradles) Height = 97" (2.4 m) (w/booms folded in cradles)
WARRANTY	Two-year limited warranty. Refer to Operator's Manual for further details.

SPRAYER SPECIFICATIONS	
SOLUTION TANK	High density, impact resistant polyethylene with large 16" (41cm) fill well; tapered bottom and sump with drain.
RATED CAPACITY	175 gallons (662 liters)
SPRAY PUMP	Hardi 363/5.5, 6-diaphragm positive displacement w/1" (2.5cm) input shaft; input speed 300~1150 rpm, Flow rate of 41gpm (155 lmp) @ 40psi (860 rpm).
AGITATOR	3, side-mounted jet agitation nozzles for full tank agitation.
CONTROLS	Spray pump control switch, agitator jet switch, rate switch, individual boom On/Off switches, boom actuator switches, indicator lights on pump, agitation and boom switches, throttle lock.

OPEN BOOM (STANDARD)	
BOOM ASSEMBLY	18.5' (5.6 m) three section, triangular truss-style open booms.
BOOM ACTUATORS	Heavy-duty hydraulic lift actuators with nitro-steel plated shafts; 1-3/4" (4.4 cm) Bore x 10.06" (25.6 cm) Stroke
SPRAY NOZZLES	Eleven nozzle turrets, triple turret-mount, quick-disconnect with diaphragm check valves.

MULTI PRO 1750 ACCESSORIES	
CLEANLOAD™ EDUCTOR	This on-board mixing station allows rapid and safe loading of any chemical without the need to first mix into a slurry. Incorporates a built-in bottle wash nozzle and has an optional suction lance to pull in powered to liquid products from their container. Stores within the width of the spray vehicle.
FRESH WATER RINSE KIT	Simplifies and automates the triple-rinse process, saving hours and hours of clean-up time.
ELECTRIC HOSE REEL	150' (45.7 m) of hose for hand or walk spraying applications. Convenient electric powered rewind. Spray gun has an adjustable nozzle from stream to fan.
PRO FOAM™ MARKING KIT	Foam dollops ensure accurate parallel path tracking. Select foam for either boom or both.
ULTRA SONIC BOOM™ KIT	New sonar sensors automatically maintain proper spray height over undulating turf.
COVERED BOOM KIT	Extends 12" (30.5 cm) below the boom to minimize chemical drift in breezy conditions while retaining full boom system functionality.
AIR INDUCTION TURBO TWIN JET NOZZLES	Exclusive to Toro in the 0.8 gpm (3.02 lpm), 1.0 gpm (3.79 lpm) and 1.5 gpm (5.68 lpm) sizes, for exceptional contact coverage.
CONTACT & SYSTEMIC NOZZLES	See complete nozzle listing in the Multi Pro® Nozzle Selection Brochure – available for download on toro.com

A Safety Reminder: Prior to any application, know the chemical content and the manufacturer's recommendation for protective clothing. Always wear proper clothing and mask when applying chemicals.

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The Multi Pro 1750 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Multi Pro® 5800

Extensive customer input and advanced sprayer technology are built into this innovative dedicated sprayer providing numerous performance and operational enhancements.





Multi Pro® 5800 Specifications*

MULTI PRO 5800, MODEL 41593	
ENGINE	Kubota, V1505 N/A, Horizontal, 4-cylinder, 4-cycle, water-cooled, diesel, 1.498L. Rated output 36.5 hp (27.2 kW). Biodiesel B-20 compatible.
COOLING SYSTEM	Mid-mounted 3.3 quart radiator with oil cooler mounted in front
FUEL SYSTEM	10.0 gallon (38L) polyethylene fuel tank with 1.5" opening on drivers side for fueling; Vented fuel cap; with mechanical float style fuel gauge; In-line replacement filter (diesel fuel).
TRACTION SYSTEM	Hydrostatic system driving double planetary gear reduction rear wheel drives; Foot pedal control of forward/reverse ground speed
GROUND SPEED/CLEARANCE	Forward: 0-10 mph (0-16.1 km/h). Reverse: 0-4 mph (0-6.4 km/h).
TIRES	Front: 23" diameter, 4-ply rated tire with turf tread pattern; Wheel has 5-hole bolt pattern for lugs. Rear: 26.5" diameter, 4-ply rated tire with turf tread pattern; Wheel has 8-hole bolt pattern for lugs.
BRAKES	2 wheel mechanical cable operated multi disc wet brakes with additional hydrostatic braking through drive train
MAIN FRAME	Welded high strength steel tubular construction
SUSPENSION	Front: Straight axle with twin independent leaf springs and dual shock absorbers. Rear: Rigid with high floatation tires.
STEERING	Fully hydraulic with dedicated power source 48° steering angle
GAUGES/INDICATORS	Ignition key switch; Voltage level warning lamp; Coolant temperature warning lamp; Glow plug indicator lamp; Engine oil pressure warning lamp; Spray system pressure gauge.
CONTROLS	Throttle control; Spray pump control switch; Jet agitator switch; Individual boom On/Off switches; Indicator lights on pump Switch; Agitator and boom switches; Headlight Switch; Hour Meter; Speed control switch with indicator light; Plugs for accessory switches
SEATS	Bucket seats with easy tilt forward bracket; removable bolts allow for adjustment for various seat positions; Seats are interchangeable from left to right
ELECTRICAL FEATURES	12 volt. 690 cold cranking amps at 0° F (-18° C). 12 volt, 40 Amp alternator. Dash mounted ignition switch, with glow plug timing circuit.
LIGHTS	Rectangular 12 volt halogen sealed beam headlights.
SOUND LEVEL	86 dB(A) at operator ear under normal operation
WEIGHT	Drive-on weight: 2,700 lbs. (1,225 kg), Shipping weight: 2,700 lbs. (1,225 kg), Empty vehicle: 2,700 lbs. (1,225 kg), 5525 lbs.(2506 kg), MGWV: 6525 lbs.(2960 kg).
DIMENSIONS	Measurements with spray system— Turning Diameter: Overall Length: 154" (391 cm) booms forward. 15'-7" (4.7m) front tire inside Overall Width: 81" (175 cm) booms forward. 26'-7" (8.1m) front tire outside Height: 57.5" (146 cm)
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.
CERTIFICATION	SAE 2258 Dec 2003 and EU 98/37EC Machinery Directive

SPRAYER SPECIFICATIONS	
SOLUTION TANK	High density, impact resistant polyethylene with large 16" (41cm) fill well
RATED CAPACITY	300 gallon (1,136 liter)
SPRAY PUMP	6-diaphragm adjustable hydraulic drive; 40 gpm (151 lpm), 220 psi (1500 kpa) maximums
AGITATOR	4, side-mounted jet agitation nozzles for full tank agitation.
CONTROLS	Throttle lock, agitation on/off switch, master pump switch, boom raise/lower rocker switches. Boom section on/off rocker switches, manual/automatic mode switch and engine speed control.
OPTIONS	Pro Control™ XP Spray System console Model Number 41604; Speedometer Kit Part Number 106-4839; Turf Sprayer Kit (CE) 106-4841; Heat Shield Blanket Kit 106-4843; Eductor (Clean Load) Model Number 41612; Rinse Kit Model Number 41614; Electric Hose Reel Kit Model Number 41613; Spray Gun Kit Model Number 41605; Foam Marker Model Number 41228; Ultra Sonic Boom Kit Model Number 41615; Cab with A/C (From Custom Products); Sunshade (From Custom Products); Kubota 60 Amp alternator kit Part Number 117-5540; Toro Covered Boom Shroud Kit Model Number 41602. Nozzles: Single Nozzle Kit Model Number 41024; Homologation Kit Model Number 41603

OPEN BOOM (STANDARD)	
BOOM ASSEMBLY	18.5' three sections, triangular truss style open boom.
SPRAY NOZZLES	Drift reduction, quick-disconnect with diaphragm check valves. Triple turret mount.

A Safety Reminder: Prior to any application, know the chemical content and the manufacturer's recommendation for protective clothing. Always wear proper clothing and mask when applying chemicals.

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The Multi Pro 5800 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Multi Pro® 5800 Accessories*

MULTI PRO 5800 ACCESSORIES	
PRO CONTROL XP SPRAY SYSTEM CONSOLE	The eXtra Precision avoids waste and ensures maximum efficacy of chemical applications. Simple programming for two preset application rates, plus a manual override mode for spot spraying. XP system automatically and instantaneously calibrates flow to maintain an even and accurate spray application rate. Also compensates for system input changes, such as ground speed variations caused by terrain, and when turning on/off boom sections. Model Number 41604
SPEEDOMETER KIT	Part Number 106-4839
TURF SPRAYER KIT (CE)	Part Number 106-4841
HEAT SHIELD BLANKET KIT	Part Number 106-4843
CLEANLOAD EDUCATOR KIT	This on-board mixing station allows rapid and safe loading of any chemical without the need to first mix into a slurry. Incorporates a built-in bottle wash nozzle and has an optional suction lance to pull in powered to liquid products from their container. Stores within the width of the spray vehicle. Model Number 41612
30 GAL (114 l) FRESH WATER RINSE KIT	Nesting inconspicuously behind the main tank, this system includes a separate electric pump, plumbing and dual rinse nozzles. At 10 gallons (38 l) per cycle, it has on-board capacity to complete a triple rinse process. Model Number 41614
ELECTRIC HOSE REEL KIT	150' (45.7 m) of hose for hand or walk spraying applications. Convenient electric powered rewind. Spray gun has an adjustable nozzle from stream to fan. Model Number 41613. Also requires Heat Shield Kit, Model Number 41601 for stationary spraying.
SPRAY GUN KIT	Model Number 41605
PRO FOAM MARKING KIT	Foam dollops ensure accurate parallel path tracking. Select foam for either boom or both. Model Number 41236
ULTRA SONIC BOOM LEVELING KIT	New sonar sensors automatically maintain proper spray height over undulating turf. Model Number 41615
FULLY ENCLOSED CAB	Full-view operator safety cab with AC, wiper and mirror options. (From Custom Products of Litchfield, 1-800-CAB-LINE)
AIR CONDITIONER	Custom Products of Litchfield, 1-800-CAB-LINE.
KUBOTA 60 AMP ALTERNATOR KIT	Part Number 117-5540
DRIFT REDUCTION BOOM SHROUD	Extends 12" (30.5 cm) below the boom to minimize chemical drift in breezy conditions while retaining full boom system functionality. Model Number 41602
SINGLE NOZZLE KIT	Model Number 41024
SPRAY NOZZLES	Full range of contact, systemic and low drift nozzles are available. New air inclusion nozzles provide improved accuracy, more uniform droplets, reduced drift and even coverage.
ENCLOSED WALKING BOOM	Model Number 41358
ENCLOSED WALKING BOOM TRAILER	Model Number 41359
SUNSHADE	Hard shell sunshade canopy w/windshield option. (From Custom Products of Litchfield, 1-800-CAB-LINE)
HOMOLOGATION KIT	Model Number 41603. Road light kit (turn signals, beacon, license plate holder).
BBA KIT	Model Number 41617. CE/German requirement. Includes fresh water rinse kit and plumbing for BBA compliance.

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The Multi Pro 5800 is manufactured in Tomah, WI ISO 9002 Certified Plant.





ProCore® 648

The most productive walk greens aerator with a 48" swath. Innovative wheels-behind design eliminates crushed cores and hole damage.





ProCore 648 Specifications*

PROCORE 648, MODEL 09200																				
ENGINE	Kohler®, 2-cylinder, air-cooled, 23 hp (17.2 kW) gross, 19 hp (14.2 kW) net @ 3000 rpm, 41 cu-in. (674 cc) displacement. Dry, large capacity, replaceable element air filter. External spin-on oil filter, 2-quart (1.9-liter).																			
FUEL CAPACITY	7.5-gallon (28.4-liter), gasoline.																			
ELECTRICAL	12-volt, 15 amp regulated charging alternator/generator. BCI Group No.: U1 battery, 300 cold cranking amp @ 0°F. Micro-processor logic control.																			
DRIVETRAIN	3WD, Series-Parallel hydrostatic, closed loop. Variable displacement piston type pump. High-torque, low-speed wheel motor drive.																			
HYDRAULIC SYSTEM	Remote spin-on filter. 3.0- gallon (13.2-liter), Mobilfluid 424 (std.) or Mobil EAL biodegradable (opt.).																			
CONSTRUCTION	Traction unit: welded steel frame. Coring head: welded steel frame with cast crank and arm assembly.																			
TIRES	20 x 10-10, 2-ply rated, smooth tread, tubeless, inflated to 12 psi, de-mountable rims.																			
BRAKES	Dynamic braking through hydrostatic transmission service brake. Hand actuated parking brake.																			
GROUND SPEED	<table border="0"> <tr> <td>Transport:</td> <td></td> <td>Aerating:</td> </tr> <tr> <td>Forward:</td> <td>0-3.5 mph (0-6.4 km/h), variable</td> <td>Detent 1:</td> <td>1.5" (3.8 cm) spacing (2 x 1.5" pattern)</td> </tr> <tr> <td>Reverse:</td> <td>0-2.0 mph (0-3.2 km/h), variable</td> <td>Detent 2:</td> <td>2.0" (5.1 cm) spacing (2 x 2.0" pattern)</td> </tr> <tr> <td>Aerating:</td> <td>.77-1.51 mph (1.23-2.42 km/h), variable</td> <td>Detent 3:</td> <td>2.5" (6.4 cm) spacing (2 x 2.5" pattern)</td> </tr> <tr> <td></td> <td></td> <td>Detent 4:</td> <td>3.0" (7.6 cm) spacing (2 x 3.0" pattern)</td> </tr> </table>	Transport:		Aerating:	Forward:	0-3.5 mph (0-6.4 km/h), variable	Detent 1:	1.5" (3.8 cm) spacing (2 x 1.5" pattern)	Reverse:	0-2.0 mph (0-3.2 km/h), variable	Detent 2:	2.0" (5.1 cm) spacing (2 x 2.0" pattern)	Aerating:	.77-1.51 mph (1.23-2.42 km/h), variable	Detent 3:	2.5" (6.4 cm) spacing (2 x 2.5" pattern)			Detent 4:	3.0" (7.6 cm) spacing (2 x 3.0" pattern)
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Forward:	0-3.5 mph (0-6.4 km/h), variable	Detent 1:	1.5" (3.8 cm) spacing (2 x 1.5" pattern)																	
Reverse:	0-2.0 mph (0-3.2 km/h), variable	Detent 2:	2.0" (5.1 cm) spacing (2 x 2.0" pattern)																	
Aerating:	.77-1.51 mph (1.23-2.42 km/h), variable	Detent 3:	2.5" (6.4 cm) spacing (2 x 2.5" pattern)																	
		Detent 4:	3.0" (7.6 cm) spacing (2 x 3.0" pattern)																	
INSTRUMENTATION	Hourmeter, tachometer.																			
CONTROLS	Hand controlled bail on handle, coring head lifts and de-clutches if control bail is released. Parking brake and transaxle shift on handle. Coring head raise/lower switch on handle console. Side console with ignition, aeration spacing, manual ground follow and system reset. Aeration depth adjustment on coring head. Throttle and choke on engine.																			
INTERLOCKS	Clutch latch, traction neutral, coring head raise/lower.																			
DIMENSIONS	<table border="0"> <tr> <td>Length</td> <td>Width</td> <td>Height</td> <td>Wheelbase</td> <td>Track Width</td> <td>Weight (dry)</td> <td>Ground Clearance</td> </tr> <tr> <td>104.5" (265.4 cm)</td> <td>50.12" (127.3 cm)</td> <td>Head Raised 45" (114.3 cm) Head Lowered 36.5" (92.7 cm) Top of Handle 41.0" (104.1 cm)</td> <td>44.5" (113 cm)</td> <td>38.3" (97.3 cm)</td> <td>1,590 lbs. (722 kg)</td> <td>4.75" (12.1 cm)</td> </tr> </table>	Length	Width	Height	Wheelbase	Track Width	Weight (dry)	Ground Clearance	104.5" (265.4 cm)	50.12" (127.3 cm)	Head Raised 45" (114.3 cm) Head Lowered 36.5" (92.7 cm) Top of Handle 41.0" (104.1 cm)	44.5" (113 cm)	38.3" (97.3 cm)	1,590 lbs. (722 kg)	4.75" (12.1 cm)					
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CERTIFICATION	ANSI B71.4-1999. CE & EU machinery directives.																			
WARRANTY	Two-year or 500 hour limited warranty. Refer to the Operator's Manual for further details.																			

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	 <p>Over 100 Titan Tines in multiple varieties available from Toro See the Toro Titan Tines Catalog or visit www.toro.com/titantines</p>																																				

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The ProCore 648 is manufactured in Tomah, WI ISO 9002 Certified Plant.





ProCore® 864 & 1298

The same ground-breaking technology that allowed the ProCore 648 to revolutionize greens aeration is now available for large-scale applications in the new ProCore 864 and 1298. Aerate fairways and sports fields in efficient 64" and 98" swaths with the smooth operation and precision performance you demand. You've never used a tractor-mounted aerator quite like it. And once you try it, you'll never go back.





ProCore® 864 & 1298 Specifications*

	PROCORE 864, MODEL 09715	PROCORE 1298, MODEL 09716
AERATION WIDTH	64 inches	98 inches
AERATION DEPTH	5 Inches Maximum*	5 Inches Maximum*
TRACTOR SIZE	30 HP @ PTO minimum 35 HP @ PTO recommended	40 HP @ PTO minimum 50 HP @ PTO recommended
TRACTOR CONNECTION	3-point Category 1 or 2	3-point Category 2
TRACTOR PTO	540 RPM	540 RPM
FORWARD HOLE SPACING (TRACTOR DEPENDENT)	Variable up to 5.0 inches	Variable up to 5.0 inches
LATERAL HOLE SPACING (TINE HEAD DEPENDENT)	1.3 - 2.6 inches	1.3 - 2.6 inches
# OF TINE HEADS	8	12
OVERALL WIDTH	67.0 inches	101.0 inches
HEIGHT	38.5 inches	38.5 inches
LENGTH	35.0 inches	35.0 inches
WEIGHT	1575 lbs	2300 lbs
CERTIFICATION	ANSI B71.4-1999, CE and EU machinery directives	
WARRANTY	Two-year or 500-hour limited warranty. Refer to Operator's Manual for further details	

*Hole depths greater than 4 inches can only be achieved with 6.5 inch length tines and with turf holders removed. Some degradation in hole quality may be observed in this configuration.

TINE HEADS

Model	Tine Heads:	Lateral Spacing	Mount Diameter
09737	Mini Tine Head (1 row of 6)	1.3"	3/8" (10 mm)
09736	Mini Tine Head (2 rows of 5)	1.6"	3/8" (10 mm)
09739	Needle Tine Head	1.6"	5mm or 8mm
09794	3 Tine Head	2.6"	3/4" (19 mm)
09796	4 Tine Head	2.0"	3/4" (19 mm)
09797	3 Tine Head HD	2.6"	7/8" (22 mm)
09711	Quick Change 3-Tine	2.6" (6.8 cm)	3/4" (19 mm) or 7/8" (22 mm)
09719	Quick Change 4-Tine	2.0" (5.1 cm)	3/4" (19 mm) or 7/8" (22 mm)

PRODUCTIVITY RATES

Tractor Speed mph (km/hr)	Spacing Forward Hole Spacing	ProCore 864		ProCore 1298	
		sq. ft. / hr.	(sq. m / hr.)	sq. ft. / hr.	(sq. m / hr.)
0.5 (0.8)	1.0" (25mm)	14,400	(1,338)	22,050	(2,049)
0.8 (1.2)	1.5" (38mm)	21,600	(2,007)	33,075	(3,073)
1.0 (1.6)	2.0" (51mm)	28,800	(2,676)	44,100	(4,097)
1.3 (2.1)	2.5" (64mm)	36,000	(3,345)	55,125	(5,121)
1.5 (2.5)	3.0" (76mm)	43,200	(4,013)	66,150	(6,146)
1.8 (2.9)	3.5" (89mm)	50,400	(4,682)	77,175	(7,170)
2.0 (3.3)	4.0" (102mm)	57,600	(5,351)	88,200	(8,194)
2.3 (3.7)	4.5" (114mm)	64,800	(6,020)	99,225	(9,218)

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ProCore® SR Series

With its fast, efficient performance, Toro's deep-tine aeration line relieves pressure-packed soil with unsurpassed hole quality. The deep-tine aerators vary in width from 48" to 75" and varies in depth capability from 1" to 16" allowing you to perform any aeration task.





ProCore® SR Series Specifications*

	PROCORE SR48 MODEL 09930	PROCORE SR54 MODEL 09931	PROCORE SR54-S MODEL 09932	PROCORE SR70 MODEL 09933	PROCORE SR70-S MODEL 09934	PROCORE SR72 MODEL 09935	PROCORE SR75HD MODEL 09936
WEIGHT WITH PTO & TOP LINK	1,530 lbs. (694 kg)	1,165 lbs. (528 kg)	1,250 lbs. (567 kg)	1,500 lbs. (681 kg)	1,655 lbs. (750 kg)	2,091 lbs. (945 kg)	3,250 lbs. (1,475 kg)
WORKING WIDTH	48" (1.22 m)	54" (1.37 m)	54" (1.37 m)	73" (1.85 m)	73" (1.85 m)	72" (1.83 m)	78" (1.98 m)
WORKING DEPTH (ADJUSTABLE)	1" - 14" (25-356 mm)	1" - 10" (25-250 mm)	1" - 10" (25-250 mm)	1" - 10" (25-250 mm)	1" - 10" (25-250 mm)	1" - 16" (25-406 mm)	1" - 16" (25-406 mm)
HOLE SPACING	3" - 6" (75-150 mm)	2.5" - 4" (64-102 mm)	2.5" - 4" (64-102 mm)	2.5" - 4" (64-102 mm)	2.5" - 4" (64-102 mm)	3" - 6" (75-150 mm)	3" - 6" (75-150 mm)
PRODUCTIVITY	25,000 sq.ft./hr. (2,325 sq. m/hr.)	36,000 sq.ft./hr. (3,345 sq. m/hr.)	36,000 sq.ft./hr. (3,345 sq. m/hr.)	48,000 sq.ft./hr. (4,460 sq. m/hr.)	48,000 sq.ft./hr. (4,460 sq. m/hr.)	38,000 sq.ft./hr. (3,530 sq. m/hr.)	48,000 sq.ft./hr. (4,460 sq. m/hr.)
RECOMMENDED TRACTOR SIZE	25 HP	16-18 HP	18 HP	25-35 HP	25-35 HP	45 HP	55+ HP
RECOMMENDED LIFT CAPACITY	1,800 lbs. (817 kg)	1,200 lbs. (682 kg)	1,500 lbs. (682 kg)	1,700 lbs. (773 kg)	1,800 lbs. (817 kg)	2,800 lbs. (1,270 kg)	4,000 lbs. (1,815 kg)
RECOMMENDED COUNTER WEIGHT	300 lbs. (135 kg)	150 lbs. (70 kg)	150 lbs. (70 kg)	250 lbs. (115 kg)	250 lbs. (115 kg)	300-500 lbs. (135-225 kg)	700-900 lbs. (315-410 kg)
RECOMMENDED PTO SPEED	400-500 rpm	400-500 rpm	400-500 rpm	400-500 rpm	400-500 rpm	400-500 rpm	400-500 rpm
ACTUAL WORKING SPEED @ 400 PTO RPM (VARIES WITH HOLE SPACING)	.8 -1.3 mph (1.29 - 2.09 kph)	1.5 -2.5 mph (2.41 - 4.02 kph)	1.5 -2.5 mph (2.41 - 4.02 kph)	1.5 -2.5 mph (2.41 - 4.02 kph)	1.5 -2.5 mph (2.41 - 4.02 kph)	0.8 -1.5 mph (1.29 - 2.41 kph)	0.8 -1.5 mph (1.29 - 2.41 kph)
LIFT SYSTEM	Std. 3-point	Std. 3-point	Std. 3-point	Std. 3-point	Std. 3-point	Std. 3-point	Std. 3-point
CERTIFICATION	ANSI B71.4-1999, CE and EU machinery directives						
WARRANTY	Two-year or 500-hour limited warranty. Refer to Operator's Manual for further details						

PROCORE SR SERIES ACCESSORIES	
REAR ROLLER OPTIONS	
09952	Rear Roller Kit for ProCore SR54 / SR54S
09953	Rear Roller Kit for ProCore SR70 / SR70S
09954	Rear Roller Kit for ProCore SR72
09956	Rear Roller Kit for ProCore SR75

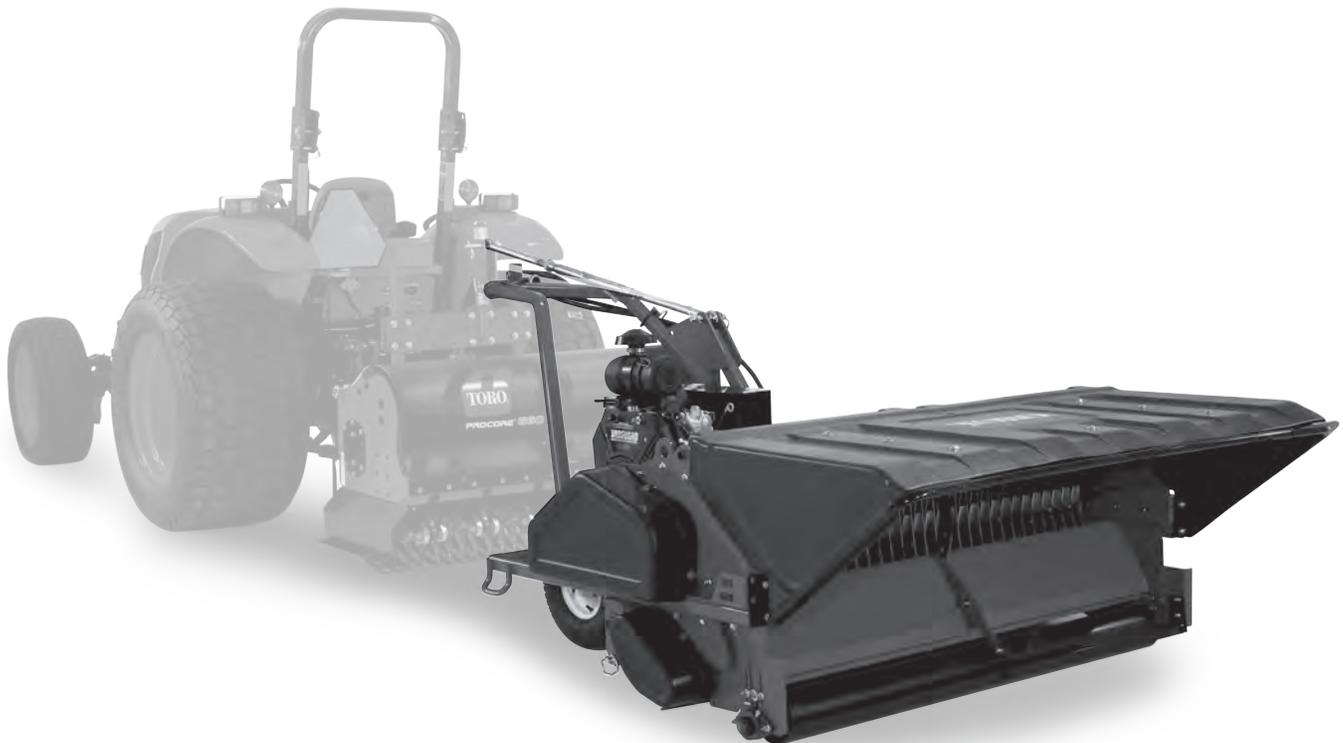
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ProCore® Processor

The new ProCore Processor sweeps, processes and disperses aeration cores in one pass directly behind the ProCore aerator. A single operator and tractor can now accomplish the work of many.





ProCore® Processor Specifications*

PROCORE PROCESSOR, MODEL 09749	
ENGINE	Briggs® Vanguard® 2 cylinder air-cooled 35 HP Gross, 31 HP Net, 993 cc displacement. High filtration replaceable element air filter. External spin on oil filter.
FUEL CAPACITY	10 gallons
PROCESSING WIDTH	70 inches
PROCESSING SYSTEM	Belt driven nylon brush sweeps material into chopper assembly equipped with carbide tips.
OPERATING SPEED	0-5 MPH
ROLLER	6" (15.2 cm) diameter full width rear roller.
CONSTRUCTION	Welded steel frame
HITCH SYSTEMS	Exclusive OnePass hitch allows attachment directly behind 3-point aerator. Offset tow hitch allows attachment to heavy duty work vehicle or tractor.
CONTROLS	Engine mounted key switch, choke and throttle. Remote mounted kill switch and offset control.
TRANSPORT TIRES	6-ply, 18 x 9.5 - 8
OVERALL WIDTH	88 inches
HEIGHT	44 inches
LENGTH	133 inches with OnePass hitch (09753), 170 inches with Tow Hitch (09750)
WEIGHT	2200 lbs
OPTIONS	Rear Wheel Kit (09768), Windrow Kit (09760), SMV (Slow Moving Vehicle) Kit
CERTIFICATION	ANSI B71.4-2004, OSHA, CE and EU machinery directives
WARRANTY	Two-year or 500-hour limited warranty. Refer to Operator's Manual for further details

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Turf Aerators 686 & 687

The 686 and 687 Turf Aerators give excellent depth performance and follow ground contours, vertically and horizontally, like no other aerator available.



	TURF AERATOR 686, MODEL 44850	TURF AERATOR 687, MODEL 44860
CAST WHEELS	3 sets of 4, each set moves independently. 70 lbs. (32 kg), 13" (33 cm) diameter.	
AERATING SWATH	78" (198 cm)	78" (198cm)
TINES	Choice of 1/2" (12.7 mm) or 3/4" (19 mm) open or closed tines. 4" (10 cm) and 6" (15 cm) slicing blades.	
PATTERN	6" (15 cm) on center, 8 per wheel.	6" (15 cm) on center, 8 per wheel.
HITCH	Drop pin, tow type with hydraulic cylinder for lift, hand pump standard.	3 pt., Category 1.
OPERATING SPEED	1-10 mph (1.6-16.1 km/h)	1-10 mph (1.6-16.1 km/h)
LENGTH	78" (198 cm)	48" (122 cm)
WIDTH	90" (229 cm)	82" (208 cm)
HEIGHT	Approx. 40" (102 cm)	Approx. 40" (102 cm)
OPTIONS	Weights: 35 lbs. (16 kg) each, 2 maximum per coring head; set of 3 - Model 44866. Tractor Remote Kit, Model 68-608-3521.	Weights: 35 lbs. (16 kg) each, 2 maximum per coring head; set of 3 - Model 44866.
SHIPPING WEIGHT	1,420 lbs. (644 kg)	1,300 lbs. (590 kg)
WARRANTY	Two-year limited warranty; Refer to the Operator's Manual for further details.	

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Aerothatch 83 & Seeder 93

Provides relief from troublesome thatch and compaction and slit seeds all in one pass.



AEROTHATCH 83, MODELS 44830	
SWATH	48" (122 cm), 45" (114 cm) blade tip to blade tip.
SPACING	Model 44830: 3" (7.6 cm)
HITCH	Standard 3 point hitch, Category 1.
DRIVE	Std. 13/8" splined Ag. type drive shaft. PTO to gearbox, sealed bearing and sprocket, #H80 chain to blade shaft.
GEARBOX	Heavy duty 1:1 right angle reversible gearbox.
BLADES	(16) 12 ga./10 pt. (Optional: 7 ga. & 10 ga./10 pt.).
BLADE SHAFT	1.5" (38 mm) square high carbon steel.
BLADE DEPTH	0-3" (7.6 cm) in 1/4" (6.3 mm) increments.
FRAME	All welded steel construction.
ROLLER	Full width, 3.5" (8.9 cm) dia. roller with sealed bearings. Roller is integral with the skid shoes and spring loaded wiper for full width of roller.
DIMENSIONS	Height: 36" (91 cm) (with 3 pt. hitch). Length: 57" (145 cm). Width: 60" (152 cm).
SHIPPING WEIGHT	550 lbs. (250 kg)

SEEDER 93, MODEL 44835[1]	
DRIVE	Ground powered.
SEED HOPPER	100 lbs. (45.4 kg) capacity.
HOPPER AUGER	Metal cogs on a steel shaft.
SEED SHUT OFF	Remote from the operator's position.
SEED TUBES	Delivers seed to 16 discs.
FEED OPENINGS	Adjustable to the desired rate.
DIMENSIONS	Height: 33" (84 cm). Length: 13" (33 cm) Width: 56" (142 cm)
SHIPPING WEIGHT	300 lbs. (136 kg)
OPTIONAL	Drag Mat, 72-002-0021.

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[1] Must be used with 44830 Aerothatch.





Greensmaster® Flex™ 1800 & 2100

The Greensmaster® Flex™, available in both 18 and 21 inch cutting widths, takes Toro's industry leading cutting performance to a whole new level. Additional innovations in the areas of productivity, operational versatility and serviceability combine to make this mower an outstanding value.





Greensmaster® Flex 1800 & 2100 Specifications*

	GREENSMaster FLEX 1800, MODEL 04041	GREENSMaster FLEX 2100, MODEL 04040
ENGINE	Subaru® Heavy-Duty Industrial, 4.3 HP, OHC, 4-cycle, CARB, EPA, EU, China certified gasoline engine with integral lighting coil. Displacement: 7.7 cu in. (126 cc). Cast iron cylinder sleeve. Electronic ignition. Maximum noise suppression muffler.	
FUEL CAPACITY	3.17 quarts (3.0 liters) regular grade unleaded gasoline.	
TRANSMISSION	Engine powered ramp-engagement style friction clutch to the first stage of a multi-ribbed poly-V belt drive. The traction drums are belt driven through a spur gear planetary differential with integral band style service/parking brake.	
MAINTENANCE	No grease zerks, sealed bearing design reduces daily maintenance.	
GROUND SPEED	Mowing speed: 1.6-3.7 mph (2.5-5.9 km/h). Transport speed (maximum): 5.7 mph (9.2 km/h).	
TRACTION DRUM	Dual cast aluminum 7.5" (19 cm) diameter with taper on outer 2" (5 cm).	
CONTROLS	Engine Controls: Recoil starter, choke, fuel shut-off. Handle Controls: on/off ('ignition') switch, hour meter, throttle, dual function traction/reel control lever, operator presence control, service/park brake lever, on/off light switch (optional blank slot in console).	
HANDLE	Loop style, molded contour upper, 1" (2.5 cm) diameter lower tube. Two angular adjustments and lift assist kickstand with 2.0 inches of telescoping adjustment.	
TRANSPORT TIRES/KICKSTAND	Quick detachable 3.00/3.25 x 6 pneumatic. Kickstand standard equipment. Loop style with service position lock, 1" (2.5 cm) diameter tube.	
REEL CONSTRUCTION	8-Blade Reel: 5" (12.7 cm) diameter, 8 high carbon steel blades welded to 5 steel spiders (no 8-blade, 18" available). 11-Blade Reel: 5" (12.7 cm) diameter, 11 high carbon steel blades welded to 5 steel spiders. 14-Blade Reel: 5" (12.7 cm) diameter, 14 high carbon steel blades welded to 5 steel spiders.	
SUSPENSION	Semi-floating cutting unit separable from drive unit, pivoting around reel centerline (pitch axis) and pivoting around bedknife centerline side to side (roll axis).	
WIDTH OF CUT	18" (45.7 cm)	21" (53.3 cm)
HEIGHT OF CUT	Front roller adjustable with 2 position rear roller: 1st position (spacer on top) 1/16" - 5/32" (1.59 - 3.97 mm). 2nd position (spacer below) 1/8" - 19/64" (3.17 - 7.54 mm).	
CLIP FREQUENCIES	Reel drive consists of three pulleys of different diameter. 6-clip adjustments per reel, based on pulley configuration.	
REEL DRIVE	Transmission reel clutch shaft to a telescoping drive shaft with a pair of beam style couplers. Telescoping sleeve is retractable for ease of cutting unit removal.	
CUTTING UNIT CONST.	Cast aluminum and machined tubular steel frame.	
CUTTING UNIT ADJUST./SERVICE	Cutting unit detachable from traction unit. Dual screw "click" adjustments to reel. Front roller height of cut adjustment. Sealed stainless steel reel bearings.	
BEDKNIFE	Bedknife is high carbon through-hardened steel. EdgeMax™ Microcut Bedknife is standard on 11 & 14-blade cutting unit. EdgeMax bedknife is solid tool steel.	
GRASS BASKET	Molded polyethylene with integrated graphics highlighting overlap guidelines, vented for high-efficiency collection.	
ROLLERS	Front Roller: Optional - must be ordered. Rear Roller: Aluminum full roller 2" (5.1 cm) diameter with sealed bearings.	
WORKING WEIGHT	254 lbs. (115 kg) w/basket, w/o transport tires and groomer.	260 lbs. (118 kg) w/basket, w/o transport tires and groomer.
CERTIFICATION	ANSI & CE	
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.	

GREENSMaster FLEX 1800 ACCESSORIES

CUTTING UNITS & REEL OPTIONS	
04254	14-Blade DPA Cutting Unit
04253	11-Blade DPA Cutting Unit
119-4102	14-Blade Reel
119-4101	11-Blade Reel
STANDARD CUTTING UNIT EQUIPMENT	
110-2282-01	Less Aggressive Bedbar
117-1530	EdgeMax™ Microcut Bedknife
BEDKNIFE & BEDBAR OPTIONS	
98-7260	Tournament Bedknife
110-2301	Low Cut Bedknife
110-2300	Extended Microcut Bedknife
98-7261	Microcut Bedknife
117-1532	EdgeMax™ Tournament Bedknife
117-1530	EdgeMax™ Microcut Bedknife
120-9600	High Height of Cut Kit
110-2281-03	Aggressive Bedbar
94-9010	Height of Cut Adjustment Bar
ROLLER OPTIONS	
120-9607	Front Narrow Wiehle Roller
120-9609	Front Wide Wiehle Roller
120-9611	Front Full Steel Roller (2.5" dia.)
115-7361	Front Roller Extension Kit
121-4680	Front Full Extended Width Roller
121-4681	Front Extended Wiehle Roller
125-3537	Extended Rear Roller Kit
120-9602	Rear Roller Adjustment Kit
121-4682	Rear Full Roller - Steel
115-7361	Auxiliary Roller Kit
GROOMER OPTIONS	
04259	Flex Groomer Drive, Fwd Rotating
04260	Flex Groomer Drive, Counter Rotating
04263	Groomer Reel, Carbide (18")
04264	Grooming Brush (18")
127-6119	Groomer Quick Up Kit (w/o groomer)
04272	Greens Perfection Brush (18") - Soft
04273	Greens Perfection Brush (18") - Stiff
SCRAPER OPTIONS	
120-9615	Narrow Wiehle Roller Scraper
120-9616	Wide Wiehle Roller Scraper
120-9617	Full Roller Scraper
120-9621	Narrow Wiehle Roller Scraper Brush
120-9622	Wide Wiehle Roller Scraper Brush
120-9623	Full Roller Scraper Brush
120-9624	Narrow Wiehle Roller Scraper Comb
120-9625	Wide Wiehle Roller Scraper Comb
120-9626	Full Roller Scraper Comb
120-9627	Scraper Kit with Rear Roller
TRACTION UNIT ACCESSORIES	
04265	LED Light Kit
04266	Push Broom Brush
04123	Wheel Kit
04399	Turf Evaluator
TOOLS	
04399	Turf Evaluator
125-5610	Paper - Reel
125-5611	Shim - Reel
94-9010	Height of Cut Bar Assembly

GREENSMaster FLEX 2100 ACCESSORIES

CUTTING UNITS & REEL OPTIONS	
04251	11-Blade DPA Cutting Unit
04252	14-Blade DPA Cutting Unit
119-4105	14-Blade Reel
119-4104	11-Blade Reel
119-4103	8-Blade Reel
STANDARD CUTTING UNIT EQUIPMENT	
115-1880	EdgeMax™ Microcut Bedknife
106-2648-01	Less Aggressive Bed Bar
BEDKNIFE & BEDBAR OPTIONS	
93-4263	Tournament Bedknife
93-4264	Low Cut Bedknife
108-4303	Extended Microcut Bedknife
93-4262	Microcut Bedknife
108-4302	Extended Tournament Bedknife
115-1881	EdgeMax™ Tournament Bedknife
120-9600	High Height of Cut Kit
99-3794-03	Aggressive Bedbar
94-9010	Height of Cut Adjustment Bar
ROLLER OPTIONS	
04255	Front Narrow Wiehle Roller
04256	Front Wide Wiehle Roller
107-3514	Front Wide Wiehle Roller - Steel
04257	Front Full Roller
04258	Long Front Narrow Wiehle Roller
04267	Paspalum Roller
115-7356	Rear Full Roller - Aluminum
120-9595	Rear Full Roller - Steel
115-7361	Front Roller Extension Kit
120-9602	Rear Roller Adjustment Kit
GROOMER OPTIONS	
04259	Flex Groomer Drive, Fwd Rotating
04260	Flex Groomer Drive, Counter Rotating
04711	Groomer Reel, Carbide (RH)
04712	Groomer Reel, Spring Steel (RH)
04713	Grooming Brush
127-6119	Groomer Quick Up Kit (w/o groomer)
04708	Groomer Reel, Carbide (21", LH)
04274	Greens Perfection Brush (21") - Soft
04275	Greens Perfection Brush (21") - Stiff
TRACTION UNIT ACCESSORIES	
04265	LED Light Kit
04266	Push Broom Brush
04123	Wheel Kit
04399	Turf Evaluator
TOOLS	
04399	Turf Evaluator
125-5610	Paper - Reel
125-5611	Shim - Reel
94-9010	Height of Cut Bar Assembly
SCRAPER OPTIONS	
125-3503	Narrow Wiehle Roller Scraper
125-3504	Wide Wiehle Roller Scraper
125-3505	Full Roller Scraper
115-7377	Narrow Wiehle Roller Scraper Brush
115-7378	Wide Wiehle Roller Scraper Brush
115-7379	Full Roller Scraper Brush
115-7380	Narrow Wiehle Roller Scraper Comb
115-7381	Wide Wiehle Roller Scraper Comb
115-7382	Full Roller Scraper Comb
115-7383	Rear Roller Scraper

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Greensmaster® eFlex® 1800 & 2100

The Greensmaster eFlex, available in both 18 and 21 inch cutting widths, takes Toro's industry leading cutting performance to a whole new level. Game-changing Lithium Ion battery technology combined with Toro innovations for improved cutting performance, allow you to quietly mow up to 9 average greens (45,000 sq. feet) on a single charge! Additional innovations in the areas of productivity, operational versatility and serviceability combine to provide a more environmentally friendly "EnergySmart™" solution and ROI.





Greensmaster® eFlex® 1800 & 2100 Specifications*

	GREENSMaster eFLEX 1800, MODEL 04043	GREENSMaster eFLEX 2100, MODEL 04042
POWER	Lithium-Ion battery pack – nominal 53-Volt 35 A-Hr (42 – 64 volt, 1.68 kW-hr) with integrated battery management system utilizing CAN communication with the machine controller and charger. Single battery affixed to unit and charged onboard.	
ELECTRIC MOTOR	Brushless permanent magnet DC motor – nominal 1.2 kW (~20A continuous, 30A peak) with integral motor controller and helical gear reduction.	
BATTERY CHARGER	Voltage and current controlled with CAN communication to manage storage wake-up and maintenance features. Complies to max voltage and current limits directed by the battery management system.	
TRANSMISSION	Permanent Magnet DC motor directly coupled to the first stage of a multi-ribbed poly-V belt drive. The traction drums are belt driven through a spur gear planetary differential with integral band style service/parking brake.	
MAINTENANCE	No grease zerks, sealed bearing design reduces daily maintenance.	
GROUND SPEED	Mowing speed: 0.9-3.7 mph (1.4-5.9 km/h). Transport speed (maximum): 5.7 mph (9.2 km/h).	
TRACTION DRUM	Dual cast aluminum 7.5" (19 cm) diameter with taper on outer 2" (5 cm).	
CONTROLS	Start/On/Off ("ignition") switch, LCD Information Center (reports multiple parameters including hours, battery life, faults, etc.) throttle, dual function traction/reel control lever, operator presence control, on/off 'EZ-Turn' switch, service/park brake lever, on/off light switch (optional blank slot in console).	
HANDLE	Loop style, molded contour upper, 1" (2.5 cm) diameter lower tube. Two angular adjustments and lift assist on kickstand with 2.0 inches of telescoping adjustment.	
TRANSPORT TIRES/KICKSTAND	Quick detachable 3.00/3.25 x 6 pneumatic. Kickstand standard equipment. Loop style with service position lock, 1" (2.5 cm) diameter tube.	
REEL CONSTRUCTION	8-Blade Reel: 5" (12.7 cm) diameter, 8 high carbon steel blades welded to 5 steel spiders (no 8-blade, 18" available). 11-Blade Reel: 5" (12.7 cm) diameter, 11 high carbon steel blades welded to 5 steel spiders. 14-Blade Reel: 5" (12.7 cm) diameter, 14 high carbon steel blades welded to 5 steel spiders.	
SUSPENSION	Semi-floating cutting unit separable from drive unit, pivoting around reel centerline (pitch axis) and pivoting around bedknife centerline side to side (roll axis).	
WIDTH OF CUT	18" (45.7 cm)	21" (53.3 cm)
HEIGHT OF CUT	Front roller adjustable with 2 position rear roller: 1st position (spacer on top) 1/16" - 5/32" (1.59 – 3.97 mm). 2nd position (spacer below) 1/8" - 19/64" (3.17 – 7.54 mm)	
CLIP FREQUENCIES	Reel drive consists of three pulleys of different diameter. 6-clip adjustments per reel, based on pulley configuration.	
REEL DRIVE	Transmission reel clutch shaft to a telescoping drive shaft with a pair of beam style couplers. Telescoping sleeve is retractable for ease of cutting unit removal.	
CUTTING UNIT CONST.	Cast aluminum and machined tubular steel frame.	
CUTTING UNIT ADJUST./SERVICE	Cutting unit detachable from traction unit. Dual screw "click" adjustments to reel. Front roller height of cut adjustment. Sealed stainless steel reel bearings.	
BEDKNIFE	Bedknife is high carbon through-hardened steel. EdgeMax™ Microcut Bedknife is standard on 11 & 14-blade cutting unit. EdgeMax bedknife is solid tool steel.	
GRASS BASKET	Molded polyethylene with integrated graphics highlighting overlap guidelines, vented for high-efficiency collection.	
ROLLERS	Front Roller: Optional – must be ordered. Rear Roller: Aluminum full roller 2" (5.1 cm) diameter with sealed bearings.	
WORKING WEIGHT	285 lbs. (129 kg) w/basket, w/o transport tires and groomer.	293 lbs. (133 kg) w/basket, w/o transport tires and groomer.
CERTIFICATION	ANSI/CE/IEEE/ROHS/C-TICK	
WARRANTY	Two-year limited warranty. Years 3-5 prorated warranty on Lithium-Ion Battery. Refer to the Operator's Manual for further details.	

GREENSMaster eFLEX 1800 ACCESSORIES

CUTTING UNITS & REEL OPTIONS	
04254	14-Blade DPA Cutting Unit
04253	11-Blade DPA Cutting Unit
119-4102	14-Blade Reel
119-4101	11-Blade Reel

GROOMER OPTIONS	
04259	Flex Groomer Drive, Fwd Rotating
04260	Flex Groomer Drive, Counter Rotating
04263	Groomer Reel, Carbide (18")
04264	Grooming Brush (18")
127-6119	Groomer Quick Up Kit (w/o groomer)
04272	Greens Perfection Brush (18") – Soft
04273	Greens Perfection Brush (18") – Stiff

STANDARD CUTTING UNIT EQUIPMENT	
110-2282-01	Less Aggressive Bedbar
117-1530	EdgeMax™ Microcut Bedknife

SCRAPER OPTIONS	
120-9615	Narrow Wiehle Roller Scraper
120-9616	Wide Wiehle Roller Scraper
120-9617	Full Roller Scraper
120-9621	Narrow Wiehle Roller Scraper Brush
120-9622	Wide Wiehle Roller Scraper Brush
120-9623	Full Roller Scraper Brush
120-9624	Narrow Wiehle Roller Scraper Comb
120-9625	Wide Wiehle Roller Scraper Comb
120-9626	Full Roller Scraper Comb
120-9627	Scraper Kit with Rear Roller

BEDKNIFE & BEDBAR OPTIONS	
98-7260	Tournament Bedknife
110-2301	Low Cut Bedknife
110-2300	Extended Microcut Bedknife
98-7261	Microcut Bedknife
117-1532	EdgeMax™ Tournament Bedknife
117-1530	EdgeMax™ Microcut Bedknife
120-9600	High Height of Cut Kit
110-2281-03	Aggressive Bedbar
94-9010	Height of Cut Adjustment Bar

ROLLER OPTIONS	
120-9607	Front Narrow Wiehle Roller
120-9609	Front Wide Wiehle Roller
120-9611	Front Full Steel Roller (2.5" dia.)
115-7361	Front Roller Extension Kit
121-4680	Front Full Extended Width Roller
121-4681	Front Extended Wiehle Roller
125-3537	Extended Rear Roller Kit
120-9602	Rear Roller Adjustment Kit
121-4682	Rear Full Roller – Steel
115-7361	Auxiliary Roller Kit

TRACTION UNIT ACCESSORIES	
04265	LED Light Kit
04266	Push Broom Brush
04123	Wheel Kit
04399	Turf Evaluator

TOOLS	
04399	Turf Evaluator
125-5610	Paper – Reel
125-5611	Shim – Reel
94-9010	Height of Cut Bar Assembly

GREENSMaster eFLEX 2100 ACCESSORIES

CUTTING UNITS & REEL OPTIONS	
04251	11-Blade DPA Cutting Unit
04252	14-Blade DPA Cutting Unit
119-4105	14-Blade Reel
119-4104	11-Blade Reel
119-4103	8-Blade Reel

ROLLER OPTIONS	
04255	Front Narrow Wiehle Roller
04256	Front Wide Wiehle Roller
107-3514	Front Wide Wiehle Roller – Steel
04257	Front Full Roller
04258	Long Front Narrow Wiehle Roller
04267	Paspalum Roller
115-7356	Rear Full Roller – Aluminum
120-9595	Rear Full Roller – Steel
115-7361	Front Roller Extension Kit
120-9602	Rear Roller Adjustment Kit

STANDARD CUTTING UNIT EQUIPMENT	
115-1880	EdgeMax™ Microcut Bedknife
106-2648-01	Less Aggressive Bed Bar

BEDKNIFE & BEDBAR OPTIONS	
93-4263	Tournament Bedknife
93-4264	Low Cut Bedknife
108-4303	Extended Microcut Bedknife
93-4262	Microcut Bedknife
108-4302	Extended Tournament Bedknife
115-1881	EdgeMax™ Tournament Bedknife
120-9600	High Height of Cut Kit
99-3794-03	Aggressive Bedbar
94-9010	Height of Cut Adjustment Bar

GROOMER OPTIONS	
04259	Flex Groomer Drive, Fwd Rotating
04260	Flex Groomer Drive, Counter Rotating
04711	Groomer Reel, Carbide (RH)
04712	Groomer Reel, Spring Steel (RH)
04713	Grooming Brush
127-6119	Groomer Quick Up Kit (w/o groomer)
04708	Groomer Reel, Carbide (21", LH)
04274	Greens Perfection Brush (21") – Soft
04275	Greens Perfection Brush (21") – Stiff

TRACTION UNIT ACCESSORIES	
04265	LED Light Kit
04266	Push Broom Brush
04123	Wheel Kit
04399	Turf Evaluator

TOOLS	
04399	Turf Evaluator
125-5610	Paper – Reel
125-5611	Shim – Reel
94-9010	Height of Cut Bar Assembly

SCRAPER OPTIONS	
125-3503	Narrow Wiehle Roller Scraper
125-3504	Wide Wiehle Roller Scraper
125-3505	Full Roller Scraper
115-7377	Narrow Wiehle Roller Scraper Brush
115-7378	Wide Wiehle Roller Scraper Brush
115-7379	Full Roller Scraper Brush
115-7380	Narrow Wiehle Roller Scraper Comb
115-7381	Wide Wiehle Roller Scraper Comb
115-7382	Full Roller Scraper Comb
115-7383	Rear Roller Scraper

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Greensmaster® 800

Uniquely weighted, front to rear, the Greensmaster 800 deeply penetrates the turf's surface for a lower, more consistent height of cut, and straight tracking.





Greensmaster® 800 Series Specifications*

GREENSMASTER 800, MODEL 04054										
ENGINE	Subaru® Heavy-Duty Industrial, 4.3 hp, OHC, 4-cycle, CARB, EPA, EU, China certified gasoline engine with integral lighting coil. Displacement: 7.7 cu in. (126 cc). Cast iron cylinder sleeve. Electronic ignition. Maximum noise suppression muffler.									
FUEL CAPACITY	3.17 quarts (3.0 liters) regular grade unleaded gasoline.									
TRACTION AND IMPLEMENT DRIVE	Engine to countershaft drive: two "A" section V-belts. Timing belts from countershaft to differential, drive drum and reel.									
GROUND SPEED	Mowing speed: 1.5 mph (2.4 km/h) to 3.3 mph (5.3 km/h). Transport speed (maximum): 5.0 mph (8.0 km/h) with transport tires installed.									
DIFFERENTIAL	Peerless Series 100.									
CLUTCHES	Traction: inside belt idler. Reel: jaw type.									
BRAKE	Service/parking-band type.									
TRACTION DRUM	Dual cast aluminum, 7.5" (19 cm) diameter.									
CONTROLS	Engine mounted; recoil starter, choke. Handle mounted: hour meter, on/off switch, throttle lever, traction engage lever, service/park brake lever. Frame mounted: reel drive engage lever. Safety devices: neutral interlock system, servicing/park brake, enclosed drive system. Optional: Operator Presence Control.									
HANDLE	Loop style; 1" (2.5 cm) diameter with easy pull pin height adjustment, operator selected.									
TRANSPORT TIRES/ KICKSTAND	Optional – Two quick detachable pneumatic tires, 3.00 x 3.25-6. 15 psi (1.03 bars) tire pressure. Kickstand is standard.									
REEL CONSTRUCTION	5" (12.7 cm) diameter, 14 carbon steel blades welded to 5 stamped steel spiders. Optional 11-blade reel.									
WIDTH OF CUT	18" (45.7 cm)									
HEIGHT OF CUT	1/16" to 1.25" (1.58-31.75 mm)									
CLIP	<table border="0"> <tr> <td></td> <td></td> <td>w/Clip Kit</td> </tr> <tr> <td>Standard 14-Blade:</td> <td>.13" (3.3 mm)</td> <td>.194" (4.9 mm)</td> </tr> <tr> <td>Optional 11-Blade:</td> <td>.17" (4.3 mm)</td> <td>.25" (6.4 mm)</td> </tr> </table>			w/Clip Kit	Standard 14-Blade:	.13" (3.3 mm)	.194" (4.9 mm)	Optional 11-Blade:	.17" (4.3 mm)	.25" (6.4 mm)
		w/Clip Kit								
Standard 14-Blade:	.13" (3.3 mm)	.194" (4.9 mm)								
Optional 11-Blade:	.17" (4.3 mm)	.25" (6.4 mm)								
BEDKNIFE/BEDBAR	Dual screw "click" adjustment to reel. EdgeMax™ Microcut Bedknife standard									
GRASS BASKET	Patented design: molded polyethylene, baffled and vented for high efficiency collection.									
FRONT ROLLER	Aluminum Wiehle roller standard; 2" (5.1 cm) diameter, .200 spacing.									
WEIGHT	216 lbs. (97.9 kg) with aluminum Wiehle roller, kickstand and grass basket, without transport tires and groomer.									
CERTIFICATION	Certified to meet ANSI specifications B71.4-2004 and European Community (CE) specifications with required kits installed.									
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.									

GREENSMASTER 800 ACCESSORIES

REEL OPTIONS	
127-2160	11-Blade Reel

BEDKNIFE & BEDBAR OPTIONS	
98-7260	Tournament Bedknife
98-7261	Microcut Bedknife
110-2301	Low Cut Bedknife
110-2300	Extended Microcut Bedknife
117-1530	EdgeMax™ Microcut Bedknife
117-1532	EdgeMax™ Tournament Bedknife
94-9010	Height of Cut Adjustment Bar
120-2731-03	Bedbar – Aggressive

ROLLER & ROLLER SCRAPER OPTIONS	
99-6240	Narrow Wiehle Roller (Standard)
98-7264	Wide Wiehle Roller
104-2640	Full Roller
98-7257	Full Roller Scraper
65-8560	Roller Extension
121-2616	Scraper Brush
121-2617	Wide Wiehle Scraper
99-6239-01	Narrow Wiehle Scraper

TRACTION UNIT ACCESSORIES	
112-9282	Operator Presence Bail Kit
04266	Push Broom Brush
04123	Wheel Kit
115-1886	Traction Slow Down Kit
65-9000	Clip Kit
115-4754	Wireless Hour Meter
120-9690	Wire Harness (For Wireless Hour Meter)
117-0073	High Altitude Kit
04062	LED Light Kit

GROOMING OPTIONS	
04133	Groomer
04134	Groomer Drive Reverse
125-3457	Forward Rotating Kit
120-2742	Grooming Brush
04268	Greens Perfection Brush – Soft
04269	Greens Perfection Brush – Stiff
04250	Spring Steel Grooming Reel
04281	Carbide Grooming Reel
04282	Spiral Brush Grooming Reel

TOOLS	
04399	Turf Evaluator
125-5610	Paper – Reel
125-5611	Shim – Reel
94-9010	Height of Cut Bar Assembly

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Greensmaster® 1000

Uniquely weighted, front to rear, the Greensmaster 1000 deeply penetrates the turf's surface for a lower, more consistent height of cut, and straight tracking.





Greensmaster® 1000 Series Specifications*

GREENSMASTER 1000, MODEL 04055													
ENGINE	Subaru® Heavy-Duty Industrial, 4.3 HP, OHC, 4-cycle, CARB, EPA, EU, China certified gasoline engine with integral lighting coil. Displacement: 7.7 cu in. (126 cc). Cast iron cylinder sleeve. Electronic ignition. Maximum noise suppression muffler.												
FUEL CAPACITY	3.17 quarts (3.0 liters) regular grade unleaded gasoline.												
TRACTION AND IMPLEMENT DRIVE	Engine to countershaft drive: two "A" section V-belts. Timing belts from countershaft to differential, drive drum and reel.												
GROUND SPEED	Mowing speed: 1.5 mph (2.4 km/h) to 3.3 mph (5.3 km/h). Transport speed (maximum): 5.0 mph (8.0 km/h) with transport tires installed.												
DIFFERENTIAL	Peerless Series 100.												
CLUTCHES	Traction: inside belt idler. Reel: jaw type.												
BRAKE	Service/parking-band type.												
TRACTION DRUM	Dual cast aluminum, 7.5" (19 cm) diameter.												
CONTROLS	Engine mounted; recoil starter, choke. Handle mounted: hour meter, on/off switch, throttle lever, traction engage lever, service/park brake lever. Frame mounted: reel drive engage lever. Safety devices: neutral interlock system, servicing/park brake, enclosed drive system. Optional: Operator Presence Control.												
HANDLE	Loop style; 1" (2.5 cm) diameter with easy pull pin height adjustment, operator selected.												
TRANSPORT TIRES/ KICKSTAND	Optional – Two quick detachable pneumatic tires, 3.00 x 3.25-6. 15 psi (1.03 bars) tire pressure. Kickstand is standard.												
REEL CONSTRUCTION	5" (12.7 cm) diameter, 11 carbon steel blades welded to 5 stamped steel spiders. Optional 8-blade & 14-blade reel.												
WIDTH OF CUT	21" (53.3 cm)												
HEIGHT OF CUT	1/16" to 1.25" (1.58-31.75 mm)												
CLIP	<table border="0"> <tr> <td></td> <td></td> <td>w/Clip Kit</td> </tr> <tr> <td>Standard 11-Blade:</td> <td>.17" (4.3 mm)</td> <td>.25" (6.4 mm)</td> </tr> <tr> <td>Optional 8-Blade:</td> <td>.23" (5.8 mm)</td> <td>.34" (8.6 mm)</td> </tr> <tr> <td>Optional 14-Blade:</td> <td>.13" (3.3 mm)</td> <td>.194" (4.9 mm)</td> </tr> </table>			w/Clip Kit	Standard 11-Blade:	.17" (4.3 mm)	.25" (6.4 mm)	Optional 8-Blade:	.23" (5.8 mm)	.34" (8.6 mm)	Optional 14-Blade:	.13" (3.3 mm)	.194" (4.9 mm)
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Optional 8-Blade:	.23" (5.8 mm)	.34" (8.6 mm)											
Optional 14-Blade:	.13" (3.3 mm)	.194" (4.9 mm)											
BEDKNIFE/BEDBAR	Dual screw "click" adjustment to reel. EdgeMax™ Microcut Bedknife standard												
GRASS BASKET	Patented design: molded polyethylene, baffled and vented for high efficiency collection.												
FRONT ROLLER	Aluminum Wiehle roller standard; 2" (5.1 cm) diameter, .200 spacing.												
WEIGHT	220 lbs. (99.8 kg) with aluminum Wiehle roller, kickstand and grass basket, without transport tires and groomer.												
CERTIFICATION	Certified to meet ANSI specifications B71.4-2004 and European Community (CE) specifications with required kits installed.												
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.												

GREENSMASTER 1000 ACCESSORIES

REEL OPTIONS	
93-6087	8-Blade Reel
117-1449	14-Blade Reel
04109	Dethatching Reel

BEDKNIFE & BEDBAR OPTIONS	
93-4262	Microcut Bedknife
108-4303	Extended Microcut Bedknife
93-4264	Low Cut Bedknife
115-1881	EdgeMax™ Tournament Bedknife
93-4263	Tournament Bedknife
112-9279-03	Bedbar – Aggressive
108-4302	Extended Tournament Bedknife
112-7175	EdgeMax Fairway Bedknife
63-8600	Fairway Bedknife
94-6392	High Cut Bedknife
94-9010	Height of Cut Adjustment Bar

ROLLER OPTIONS	
88-6790	Wide Wiehle Roller
52-3590	Swaged Roller
93-9045	Long Front Wiehle Roller
71-1550	Cast Iron Wiehle Roller
104-2642	Full Roller
65-8560	Front Roller Extension Kit
107-1588	Rebuild Kit

SCRAPER OPTIONS	
112-9285	Smooth Scraper
112-9288	Wide Wiehle Roller Scraper
112-9286	Scraper Brush
112-9289	Narrow Wiehle Roller Scraper
112-9287	Scraper Comb

TOOLS	
04399	Turf Evaluator
125-5610	Paper – Reel
125-5611	Shim – Reel
94-9010	Height of Cut Bar Assembly

GROOMING OPTIONS	
04134	Reverse Groomer Drive
125-3451	Forward Rotating Kit
04270	Greens Perfection Brush – Soft
04271	Greens Perfection Brush – Stiff
04283	Spring Steel Grooming Reel
04284	Carbide Grooming Reel
04285	Spiral Brush Grooming Reel

TRACTION UNIT ACCESSORIES	
04062	LED Light Kit
112-9282	Operator Presence Bail Kit
04266	Push Broom Brush
04123	Wheel Kit
115-1886	Traction Slow Down Kit
65-9000	Clip Kit
115-4754	Wireless Hour Meter
120-9690	Wire Harness (For Wireless Hour Meter)
117-0073	High Altitude Kit

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Greensmaster® 1600

Its wider 26" cut and extended height of cut range offers greater productivity. Ideal for tees, aprons, even large greens.





Greensmaster® 1600 Specifications*

GREENSMASTER 1600**, MODEL 04056									
ENGINE	Subaru® Heavy-Duty Industrial, 4.3 HP, OHC, 4-cycle, CARB, EPA, EU, China certified gasoline engine with integral lighting coil. Displacement: 7.7 cu in. (126 cc). Cast iron cylinder sleeve. Electronic ignition. Maximum noise suppression muffler.								
FUEL CAPACITY	3.17 quarts (3.0 liters) regular grade unleaded gasoline.								
TRACTION AND IMPLEMENT DRIVE	Engine to countershaft drive: two "A" section V-belts. Timing belts from countershaft to differential, drive drum and reel.								
REEL DRIVE	Positive drive belt powered reel. Manually activated jaw-type clutch provides drive engagement/disengagement.								
GROUND SPEED	Mowing speed: 1.5 mph (2.4 km/h) to 3.3 mph (5.3 km/h). Transport speed (maximum): 5.0 mph (8.0 km/h) with transport tires installed.								
DIFFERENTIAL	Peerless Series 100.								
CLUTCHES	Traction: inside belt idler. Reel: jaw type.								
BRAKE	Servicing brake; band type.								
TRACTION DRUM	Dual cast aluminum. 7.5" (19 cm) diameter.								
CONTROLS	Engine mounted: recoil starter, choke. Handle mounted: Hour meter, on/off switch, throttle lever, traction engage lever, service/part brake lever. Frame mounted: reel drive engage lever. Safety devices: neutral interlock system, servicing/park brake, enclosed drive system.								
TRANSPORT/TIRES/KICKSTAND	Optional – Two quick detachable pneumatic tires, 3.00 x 3.25-6. 15 psi (1.03 bar) tire pressure. Kickstand is standard.								
REEL CONSTRUCTION	5" (12.7 cm) diameter, 8 high carbon steel blades welded to 6 stamped steel spiders. Optional 11-blade reel.								
WIDTH OF CUT	26" (66 cm)								
HEIGHT OF CUT	.125"-1.25" (3.2 -31.8 mm)								
CLIP	.23" (5.8 mm) - 8-blade reel; .34" (8.6 mm) with Clip Kit, P/N 65-9000. .17" (4.3 mm) - 11-blade reel; .25" (6.4 mm) with Clip Kit.								
BEDKNIFE/BEDBAR	Dual screw "click" adjustment to reel. Low-cut bedknife standard.								
GRASS BASKET	Molded polyethylene. 2 position.								
FRONT ROLLER	Aluminum Wiehle roller standard; 2" (5.1 cm) diameter.								
DIMENSIONS	<table border="1"> <thead> <tr> <th>Overall Length</th> <th>Overall Width</th> <th>Overall Height</th> <th>Weight</th> </tr> </thead> <tbody> <tr> <td>59" (150 cm)</td> <td>41" (104 cm)</td> <td>48" (122 cm) w/o transport tires</td> <td>232 lbs. (146.5 kg) w/o transport tires</td> </tr> </tbody> </table>	Overall Length	Overall Width	Overall Height	Weight	59" (150 cm)	41" (104 cm)	48" (122 cm) w/o transport tires	232 lbs. (146.5 kg) w/o transport tires
Overall Length	Overall Width	Overall Height	Weight						
59" (150 cm)	41" (104 cm)	48" (122 cm) w/o transport tires	232 lbs. (146.5 kg) w/o transport tires						
CERTIFICATION	Certified to meet ANSI specifications, B71.4-2004 and European Community (CE) specifications with required kits.								
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.								

** 04035 Greensmaster 1600 CARB (California Air Requirements Board)

GREENSMASTER 1600 ACCESSORIES

STANDARD EQUIPMENT	
93-9039	Narrow Wiehle Roller
112-9280-01	Bedbar - Standard (Red)
93-9015	Low Cut Bedknife

REEL OPTION	
127-2206	8-Blade Reel (standard)
127-2207	11-Blade Reel

BEDKNIFE & BEDBAR OPTIONS	
94-5885	Tournament Bedknife
104-2646	High Cut Bedknife
107-8181	Fairway Bedknife
112-9275	Microcut Bedknife
117-1548	EdgeMax™ Tournament Bedknife
94-9010	Height of Cut Adjustment Bar
112-9278-03	Bedbar - Aggressive (Black)
99-4286	High Height of Cut Arm

ROLLER & ROLLER SCRAPER OPTIONS	
95-0930	Full Roller
112-9290	Wiehle Roller Scraper
65-8560	Front Roller Extension Kit
107-1588	Rebuild Kit

GROOMING OPTIONS	
04134	Reverse Groomer Drive
125-3451	Forward Rotating Kit
04276	Greens Perfection Brush – Stiff
04286	Spring Steel Grooming Reel
04287	Carbide Grooming Reel
04288	Spiral Brush Grooming Reel

TRACTION UNIT ACCESSORIES	
04062	Light Kit
112-9282	Operator Presence Bail Kit
115-1886	Traction Slow Down Kit
65-9000	Clip Kit
04123	Wheel Kit
117-0073	High Altitude Jet
115-4754	Wireless Hour Meter
120-9690	Wire Harness (for Wireless Hour Meter)

TOOLS	
04399	Turf Evaluator
125-5610	Paper – Reel
125-5611	Shim – Reel
94-9010	Height of Cut Bar Assembly

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in design, required attachments and safety features. Consult your local Toro Distributor.

The Greensmaster 1600 is manufactured in Tomah, WI ISO 9002 Certified Plant.





TransPro 80 & 100

Safely and easily transports one or two walk greensmowers to and from the green.



	TRANSPRO 80, MODEL 04238*	TRANSPRO 100, MODEL 04240*
LOAD CAPACITY	400 lbs. (181.6 kg) including weight of trailer.	800 lbs. (363 kg) including weight of trailer.
SUSPENSION	Large low pressure tires (20 x 10-8).	
TRANSPORT SPEED	Maximum of 15 mph (24 km/h).	
RAMP	Quick latch to secure loading ramp during transport. Rubber mats to protect front roller. Flat Ramp Kit or Rail or Ramp Kit required.	Quick latch to secure loading ramp during transport. Rubber to protect front roller and provide safe surface during loading unloading of Greensmaster. High Rail Ramp Kit optional.
HITCH	Pin type hitch is standard; tongue is 2.5" (6.4 cm) wide and adjustable in length (will accept standard ball hitch).	Pin type hitch is standard; tongue is 2" (5 cm) wide and adjustable in length (will accept standard ball hitch).
TOWING	Designed to tow behind a utility vehicle; tongue height 7"-13" (18-33 cm); maximum tongue load 55 lbs. (25 kg). Incorporates a tongue stand and tongue lift handle.	
BED	Hold down bails fold around mower tires to during transport. Drain holes in trailer bed for greensmower on trailer, allowing water and trailer floor.	
FINISH	Rust/corrosion-resistant paint.	
AXLES	Heavy-duty stub. Greaseable.	
DIMENSIONS	Height: 19" (48.3 cm) Width: 62" (157.5 cm) Length: 81" (205.7 cm)	Height: 36" (91.4 cm) Width: 60.5" (153.7 cm) Length: 101" (256.5 cm)
	Easily adjustable to fit all Toro walk greensmowers.	For 21" mowers with transport tires std. Kits available for conversion to fit 18" Rail kits available for 18 and 21" mowers. Not recommended for Greensmaster 1600.

TRANSPRO 80 ACCESSORIES	TRANSPRO 100 ACCESSORIES
04245 Flat Ramp Kit	04248 Rail Ramp Conversion Kit (RoHS Compliant)
04247 Rail Ramp Kit	04246 Rail Ramp Conversion Kit
107-8188 Hitch Kit	110-7355 18" Transport Wheel Conversion Kit
	110-7345 18" Rail Conversion Kit

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Greensmaster® 3150-Q

The next generation of the world's favorite riding greensmower.





Greensmaster® 3150-Q Specifications*

GREENSMASTER 3150-Q, MODEL 04358	
ENGINE	18 hp (13.4 kW) Briggs & Stratton® gasoline engine, governed to 2850 rpm high idle, 1650 rpm low idle. Air-cooled.
FUEL CAPACITY	7 gallon (26.5 liter) capacity; unleaded gasoline.
TRACTION DRIVE	Hydraulic piston pump, closed loop system. 2WD Parallel Hydrostatic or 3WD Series Parallel piston pump closed loop system. Foot pedal forward and reverse; infinitely variable.
GROUND SPEED	Forward-mowing speed is variable from 2-5 mph (3.2-8 km/h), adjusted by stop on pedal mechanism. Mow speed setting does not affect transport speed. Maximum Greensmaster 3150-Q transport speed is 8.8 mph (14.4 km/h), may be reduced by adjusting stop in footrest pan without affecting mow speeds. Reverse is 2.5 mph (4.0 km/h) maximum.
TURF COMPACTION IMPLEMENT DRIVE	8-10 psi (dependent on tire pressure) with operator and cutting units down.
STEERING	Single gear pump, mono valve block, series reel drive to 3 motors.
ELECTRICAL FEATURES	Power steering. Adjustable steering wheel tilt and a 5-position steering arm tilt.
CONTROLS/GAUGES	12-volt lead acid, group size U1, with 300 minimum cold cranking amps at 0° F and 34 minutes reserve capacity at 85° F/25 amps draw. 16 amp alternator. Ignition switch/key. Seat switch. Harness terminals and fuse slot available for optional lights installation.
TIRES/WHEELS/PRESSURE	Raise/lower-mow lever (joystick). Functional control lever (neutral, mow, transport). Foot operated traction drive and brakes. Hour meter. Hand operated throttle and choke. Mechanical engine speed control.
BRAKES	Three tires: Three 18 x 10.5-8, 4-ply pneumatic tubeless demountable and interchangeable with smooth tread. 8-12 psi front; 8-15 psi rear. Optional Traction Tire (4-ply): P/N 119-3516.
HYDRAULIC OIL	Two 6" (15.2 cm) drum type.
LEAK DETECTION	7.5 gallon (28.4 liter) tank with internal baffle. 1.0 gallon (3.8 liter) auxiliary tank.
SOUND LEVEL	Equipped with Turf Guardian™ leak detection system.
OVERALL DIMENSIONS	82 dB(A) at operator's ear under normal conditions.
WIDTH OF CUT	Wheel Tread: 49.5" (149.9 cm), Wheel Base: 47" (119 cm), Length: 90" (229 cm), Width: 69.7" (177 cm) w/reels, Height: 74.5" (189 cm), Weight: 1,087 lbs. (493 kg).
REEL SPEED	59" (150 cm)
BACKLAPPING	Approximately 1975 RPM at 2850 engine RPM. Adjustable.
CUTTING UNIT SUSPENSION	Standard equipment.
ROPS	Cutting units are completely free-floating, each attaching to the tractor by direct pull links and lifted by a centered lift arm. Baskets are supported by carrier frames that are ground following. Cutting unit floatation is unaffected by basket content. Grass baskets are all interchangeable and accessible from the front of the machine.
CERTIFICATION	Roll Over Protection System standard.
WARRANTY	Certified to meet ANSI specification B71.4-2004 and European CE standards.
	Two-year limited warranty. Refer to the Operator's Manual for further details.

8 BLADE DPA CUTTING UNITS, 04618 11-BLADE DPA CUTTING UNITS, 04619 14-BLADE CUTTING UNITS, 04624	
TRACTOR	These cutting units will mount on any Toro riding Greensmaster (excluding Greensmaster TriFlex™ 33xx/34xx series).
HEIGHT OF CUT (HOC) RANGE	Cutting height is adjusted on front roller by two vertical screws and held by two locking cap screws. Bench HOC range is .062"-.297" (1.6-7.5 mm). With high HOC kit, range is .285-1" (7.3-25.4 mm). Effective HOC may vary depending on turf conditions and bedknife installed.
REEL WELDMENT	Reels are 5" (13 cm) in diameter, 21" (53.3 cm) in length. High carbon steel blades are welded to 5 stamped steel spiders, and heat treated. The reel is ground for diameter and concentricity, and relief ground.
REEL BEARINGS	Two stainless steel ball bearings, 30 +/- .1 mm inside diameter slip fit onto reel shaft retained by internally splined threaded insert. Low drag seals/slingers for added protection with o-ring sealed motor and counterweight. Reel position maintained by a wave washer with no adjusting nut.
MAINTENANCE	No grease zerks, sealed bearing design eliminates daily maintenance.
REEL DRIVE	The reel weldment shaft is a 1.375" (35 mm) diameter tube with internally splined threaded insert.
FRAME	Precision machined, die-cast aluminum cross member with two bolt-on die-cast aluminum side plates.
AGGRESSIVENESS	Aggressiveness stays constant throughout the life of the reel. Patented design.
BEDKNIFE	Replaceable single edged EdgeMax™ Microcut Bedknife is standard.
BEDKNIFE ADJUSTMENT	Dual screw, indexed "click" adjustment to the reel; detents corresponding to .0007" (.018 mm) bedknife movement for each position.
FRONT & REAR ROLLERS	Front: Not included with cutting unit, purchased separately. Option between full, narrow-spaced and wide-spaced Wiehle roller. Rear: Steel full, 2" (5.1 cm) diameter with sealed bearings and through-shaft.
GRASS SHIELD	Non-adjustable shield with adjustable cut-off bar to improve grass discharge from reel in wet conditions.
TOTAL WEIGHT	8-blade: 72 lbs. (32.7 kg) with aluminum Wiehle Roller. 11-blade: 75 lbs. (34 kg) with aluminum Narrow Wiehle Roller. 14-blade: 78 lbs. (35 kg) with aluminum Wiehle Roller.

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The Greensmaster 3150-Q is manufactured in Tomah, WI ISO 9002 Certified Plant.





Greensmaster® 3150-Q Accessories*

GREENSMaster 3150-Q ACCESSORIES

TRACTION UNIT ACCESSORIES	
04476	3-Wheel Drive Kit
04479	Thatching Reel (Set of 1)
04494	Greens Spiker Kit
04495	Greens Tri-Roller Kit
30707	Armrest Kit
119-3516	Traction Tires
105-8336	Light Kit
105-8339	Hydraulic Oil Cooler Kit
108-6472	Traction Speed Control Kit
112-9177	Lamp, LED Low Draw
104-6540	Spark Arrestor Screen
04399	Turf Evaluator
115-4510	Bimini Folding Shade
100-6442	2WD Weight Kit
99-1645	3WD Weight Kit
115-4754	Wireless Hour Meter

ROLLER OPTIONS	
04626	Front Narrow Wiehle Roller (set of 3)
04627	Front Wide Wiehle Roller (set of 3)
04625	Front Full Roller (set of 3)
04628	Solid Steel Roller Kit (front Wiehle & rear steel rollers)
04629	Anti-Bobbing Roller
71-1550	Cast Iron Rear Wiehle Roller
107-3514	Steel Wide Wiehle Roller
121-4675	Extended Wiehle Roller
04258	Extended Narrow Wiehle Roller
04267	Narrow Wiehle Roller (for paspalum)
107-3510	Steel Narrow Wiehle Roller
120-9595	Steel Rear Roller (standard)
120-9600	High Height of Cut Kit
125-5180	DPA Rear Roller Extension Kit

CUTTING UNIT & REEL OPTIONS	
04618	8-Blade Cutting Unit
04619	11-Blade Cutting Unit
04624	14-Blade Cutting Unit
119-4103	8-Blade Reel (Individual)
121-6651	8-Blade Reel, Heavy-Duty (Individual)
119-4104	11-Blade Reel (Individual)
127-2202	14-Blade Reel (Individual)

GROOMER OPTIONS	
04709	Groomer Drive (LH) (Set of 1)
04712	Groomer Reel, Spring Steel (Set of 1)
04713	Groomer Brush (Set of 1)
04726	Rotating Rear Roller Brush (LH) (Set of 1)
04274	Greens Perfection Brush – Soft
04275	Greens Perfection Brush – Stiff
106-2643	Groomer Pull Link Kit

SCRAPER OPTIONS	
125-5303	Front Narrow Wiehle Roller Scraper
125-5304	Front Wide Wiehle Roller Scraper
125-5305	Front Full Roller Scraper
115-7377	Front Narrow Wiehle Roller Scraper Brush
115-7378	Front Wide Wiehle Roller Scraper Brush
115-7379	Front Full Roller Scraper Brush
115-7380	Front Narrow Wiehle Roller Scraper Comb
115-7381	Front Wide Wiehle Roller Scraper Comb
115-7382	Front Full Roller Scraper Comb
115-7383	Rear Roller Scraper
121-2260	Adjustable Rear Roller Scraper
04646	Spring Loaded Rear Roller Scraper (Set of 3)
107-9561	Anti-Bobbing Roller Scraper Kit

BEDKNIFE & BEDBAR OPTIONS	
93-4262	Microcut Bedknife
93-4263	Tournament Bedknife
93-4264	Low Cut Bedknife
94-6392	High Cut Bedknife
63-8600	Fairway Bedknife
108-4303	Extended Microcut Bedknife
108-4302	Extended Tournament Bedknife
115-1880	EdgeMax™ Microcut Bedknife (Standard)
115-1881	EdgeMax™ Tournament Bedknife
112-7475	EdgeMax™ Fairway Bedknife
106-2648-01	Bedbar (Standard)
99-3794-03	Aggressive Bedbar

THATCHING REEL ACCESSORIES	
117-6824	Thin dynaBLADE, (1.2mm Thickness) (Individual)
119-1128	Regular dynaBlade, (2mm Thickness) (Individual)
117-6839	Replacement Kit, 1.2mm dynaBlade (36 Blades)
117-6840	Replacement Kit, 2mm dynaBlade (36 Blades)
121-6675	Spring Steel Kit
121-6674	Blade, Spring Steel
121-9525	Thatching Reel Quick Change Kit

BIO-HYDRAULIC FLUID / HYDRAULIC FLUID / OIL	
119-2157	Bio-Hydraulic Fluid, 5 gal. (18.9 L)
119-2158	Bio-Hydraulic Fluid, 55 gal. (208.2 L)
108-1178	Premium Hydraulic Fluid, 5 gal. (18.9 L)
108-1177	Premium Hydraulic Fluid, 55 gal. (208.2 L)
108-1197	Premium Engine Oil SAE 30, 5 gal. (18.9 L)
108-1196	Premium Engine Oil SAE 30, 55 gal. (208.2 L)

TOOLS	
04399	Turf Evaluator
125-5610	Paper – Reel
125-5611	Shim – Reel
94-9010	Height of Cut Bar Assembly

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The Greensmaster 3150-Q is manufactured in Tomah, WI ISO 9002 Certified Plant.





Greensmaster® 3250-D

Unmatched diesel power, innovative design and a lighter footprint make this the ideal greensmower for greens and surrounding areas.





Greensmaster® 3250-D Specifications*

GREENSMaster 3250-D, MODEL 04384																					
ENGINE	Kubota® 902 tier 4i, 3-cylinder liquid-cooled diesel engine. 55.0 cu. in. (902 cc). Full pressure lubrication, oil filter. 16.2 hp (12.1 kW) at 2400 rpm. Engine governed to 2710 rpm high idle, 1500 rpm low idle (no load).																				
FUEL CAPACITY	6 gallons (22.7 liters). 2008 models Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).																				
TRACTION DRIVE	Hydraulic piston pump, closed loop system. 2WD Parallel Hydrostatic or 3WD Series Parallel piston pump closed loop system. Foot pedal forward and reverse; infinitely variable.																				
GROUND SPEED	Forward-mowing speed is variable from 2-5 mph (3.2-8 km/h), adjusted by stop on pedal mechanism. Mow speed setting does not affect transport speed. Maximum Greensmaster 3250-D transport speed is 8.8 mph (14.4 km/h), may be reduced by adjusting stop in footrest pan without affecting mow speeds. Reverse is 2.5 mph (4.0 km/h) maximum.																				
TURF COMPACTION	10 psi (.68 bar) average at recommended minimum tire pressures, with a 200 lb. operator, and cutting units down.																				
STEERING	Power steering. No-tool quick adjust steering arm position, with arm motion allowing a wide range of operator sizes. Steering cylinder has through shaft design for accurate straight line steering.																				
CONTROLS/GAUGES	Raise/lower-mow lever. Functional control lever (neutral, mow, transport). Foot operated traction drive and brakes. Hour meter and 4 bulb warning cluster. Hand operated choke, throttle. Mechanical engine speed control.																				
ELECTRICAL FEATURES	Maintenance-free 12-volt battery with 530 minimum cold cranking amps at 0° F (-17.7° C) and 95 minutes minimum reserve capacity at 85° F (29.4° C) 40 amp alternator, circuit fused at 40 amps. Ignition switch/key. Seat switch. High temperature engine kill override switch. Harness terminals, fuse slot, and console switch location available for optional lights installation.																				
SOUND LEVEL	84 dBA at operator ear under normal conditions.																				
OVERALL DIMENSIONS	<table border="0"> <tr> <td>Width of Cut:</td> <td>59.0" (150 cm)</td> <td>Overall Height:</td> <td>77.5" (197 cm)</td> </tr> <tr> <td>Wheel Tread:</td> <td>50.5" (128 cm)</td> <td>Net Weight (no fuel, no operator):</td> <td>1,216 lbs. (552 kg)</td> </tr> <tr> <td>Wheel Base:</td> <td>48.6" (123 cm)</td> <td>Reel Speed:</td> <td>1950 rpm minimum (Adj)</td> </tr> <tr> <td>Overall Length (w/baskets):</td> <td>93.9" (238 cm)</td> <td></td> <td></td> </tr> <tr> <td>Overall Width:</td> <td>68.0" (173 cm)</td> <td></td> <td></td> </tr> </table>	Width of Cut:	59.0" (150 cm)	Overall Height:	77.5" (197 cm)	Wheel Tread:	50.5" (128 cm)	Net Weight (no fuel, no operator):	1,216 lbs. (552 kg)	Wheel Base:	48.6" (123 cm)	Reel Speed:	1950 rpm minimum (Adj)	Overall Length (w/baskets):	93.9" (238 cm)			Overall Width:	68.0" (173 cm)		
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TIRES	Three 19 x 10.5-8, 2 ply pneumatic tubeless demountable and interchangeable. Smooth tread (approx. 1290 rev/mile). 8-12 psi front; 8-15 psi rear.																				
LEAK DETECTION	Turf Guardian™ optional.																				
BACKLAPPING	Standard equipment.																				
BRAKES	6" (15.2 cm) drum type mechanical with rack and pawl lock for parking.																				
SEAT	Contour seat with high backrest. 7" (17.8 cm) fore/aft slider adjustment with two mounting positions, allowing 9" (22.8 cm) total seat travel. Operator manual tube mounted on the seat back for easy access.																				
CERTIFICATION	Certified to meet ANSI specification B71.4-2004 and European CE standards.																				
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.																				

8 BLADE DPA CUTTING UNITS, 04618 11-BLADE DPA CUTTING UNITS, 04619 14-BLADE CUTTING UNITS, 04624	
TRACTOR	These cutting units will mount on any Toro riding Greensmaster (excluding Greensmaster TriFlex 33xx/34xx series).
HEIGHT OF CUT (HOC) RANGE	Cutting height is adjusted on front roller by two vertical screws and held by two locking cap screws. Bench HOC range is .062"-.297" (1.6-7.5 mm). With high HOC kit, range is .285-1" (7.3-25.4 mm). Effective HOC may vary depending on turf conditions and bedknife installed.
REEL WELDMENT	Reels are 5" (13 cm) in diameter, 21" (53.3 cm) in length. High carbon steel blades are welded to 5 stamped steel spiders, and heat treated to RC 48-54 hardness. The reel is ground for diameter and concentricity, and backgrind.
REEL BEARINGS	Two double row, self-aligning ball bearings, 30 +/- .1 mm inside diameter slip fit onto reel shaft with lock nut. Multiple seal barriers on both sides of bearing for added protection. Reel position maintained by a wave washer with no adjusting nut.
MAINTENANCE	No grease zerks, sealed bearing design eliminates daily maintenance.
REEL DRIVE	The reel weldment shaft is a 1.375" (35 mm) diameter tube with drive inserts permanently pressed in both ends. A replaceable floating coupler with an internal eight tooth spline is factory installed on the right end, and held in place by a snap ring. The floating coupler may be moved to the other end when the cutting unit is used on the GR3250-D front right position.
FRAME	Precision machined, die-cast aluminum cross member with two bolt-on die-cast aluminum side plates.
AGGRESSIVENESS	Aggressiveness stays constant throughout the life of the reel. Patented design.
BEDKNIFE	Replaceable single edged EdgeMax™ Microcut Bedknife is standard.
BEDKNIFE ADJUSTMENT	Dual screw, indexed "click" adjustment to the reel; detents corresponding positively to .0007" (.018 mm) bedknife movement for each position.
FRONT & REAR ROLLERS	Front: Not included with cutting unit, purchased separately. Option between full, narrow-spaced and wide-spaced roller. Rear: Steel full, 2" (5.1 cm) diameter with sealed bearings and through-shaft.
GRASS SHIELD	Non-adjustable shield with adjustable cut-off bar to improve grass discharge from reel in wet conditions.
TOTAL WEIGHT	8-blade: 72 lbs. (32.7 kg) with aluminum Wiehle Roller. 11-blade: 75 lbs. (34 kg) with aluminum Narrow Wiehle Roller. 14-blade: 78 lbs. (35 kg) with aluminum Wiehle Roller.

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The Greensmaster 3250-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Greensmaster® 3250-D Accessories*

GREENSMaster 3250-D ACCESSORIES

TRACTION UNIT ACCESSORIES	
04477	3-Wheel Drive Kit
04479	Thatching Reel (Set of 1)
04494	Greens Spiker Kit
04495	Greens Tri-Roller Kit
30707	Armrest Kit
99-4506	Traction Tires
104-7701	Hydraulic Oil Cooler Kit
04551	Light Kit
120-1951	Spark Arrestor
04497	Leak Detector
112-0279	Front Wheel Weight Kit
100-6442	2WD Weight Kit
99-1645	3WD Weight Kit
100-6430	Hose Adapter Kit
105-9766	Radiator Screen Kit
104-9400	Ground Follow Kit
115-4510	Bimini Folding Shade

ROLLER OPTIONS	
04626	Front Narrow Wiehle Roller (set of 3)
04627	Front Wide Wiehle Roller (set of 3)
04625	Front Full Roller (set of 3)
04628	Solid Steel Roller Kit (front Wiehle & rear steel rollers)
04629	Anti-Bobbing Roller
71-1550	Cast Iron Rear Wiehle Roller
107-3514	Steel Wide Wiehle Roller
121-4675	Extended Wiehle Roller
04258	Extended Narrow Wiehle Roller
04627	Narrow Wiehle Roller (for paspalum)
107-3510	Steel Narrow Wiehle Roller
120-9595	Steel Rear Roller (standard)
125-5180	DPA Rear Roller Extension Kit
120-9600	High Height of Cut Kit

CUTTING UNIT & REEL OPTIONS	
04618	8-Blade Cutting Unit
04619	11-Blade Cutting Unit
04624	14-Blade Cutting Unit
119-4103	8-Blade Reel (Individual)
121-6651	8-Blade Reel, Heavy-Duty (Individual)
119-4104	11-Blade Reel (Individual)
127-2202	14-Blade Reel (Individual)

GROOMER OPTIONS	
04709	Groomer Drive (LH) (Set of 1)
04710	Groomer Drive (RH) (Set of 1)
04712	Groomer Reel, Spring Steel (Set of 1)
04713	Groomer Brush (Set of 1)
04726	Rotating Rear Roller Brush (LH) (Set of 1)
04724	Rotating Rear Roller Brush (RH) (Set of 1)
04274	Greens Perfection Brush – Soft
04275	Greens Perfection Brush – Stiff
112-9248	Groomer Pull Link Kit

SCRAPER OPTIONS	
125-5303	Front Narrow Wiehle Roller Scraper
125-5304	Front Wide Wiehle Roller Scraper
125-5305	Front Full Roller Scraper
115-7377	Front Narrow Wiehle Roller Scraper Brush
115-7378	Front Wide Wiehle Roller Scraper Brush
115-7379	Front Full Roller Scraper Brush
115-7380	Front Narrow Wiehle Roller Scraper Comb
115-7381	Front Wide Wiehle Roller Scraper Comb
115-7382	Front Full Roller Scraper Comb
115-7383	Rear Roller Scraper
121-2260	Adjustable Rear Roller Scraper
04646	Spring Loaded Rear Roller Scraper (Set of 3)
107-9561	Anti-Bobbing Roller Scraper Kit

BEDKNIFE & BEDBAR OPTIONS	
93-4262	Microcut Bedknife
93-4263	Tournament Bedknife
93-4264	Low Cut Bedknife
94-6392	High Cut Bedknife
63-8600	Fairway Bedknife
108-4303	Extended Microcut Bedknife
108-4302	Extended Tournament Bedknife
115-1880	EdgeMax™ Microcut Bedknife (Standard)
115-1881	EdgeMax™ Tournament Bedknife
112-7475	EdgeMax™ Fairway Bedknife
106-2648-01	Bedbar (Standard)
99-3794-03	Aggressive Bedbar

THATCHING REEL ACCESSORIES	
117-6824	Thin dynaBLADE, (1.2mm Thickness) (Individual)
119-1128	Regular dynaBLADE, (2mm Thickness) (Individual)
117-6839	Replacement Kit, 1.2mm dynaBLADE (36 Blades)
117-6840	Replacement Kit, 2mm dynaBLADE (36 Blades)
121-6675	Spring Steel Kit
121-6674	Blade, Spring Steel

BIO-HYDRAULIC FLUID / HYDRAULIC FLUID / OIL	
119-2157	Bio-Hydraulic Fluid, 5 gal. (18.9 L)
119-2158	Bio-Hydraulic Fluid, 55 gal. (208.2 L)
108-1178	Premium Hydraulic Fluid, 5 gal. (18.9 L)
108-1177	Premium Hydraulic Fluid, 55 gal. (208.2 L)
108-1197	Premium Engine Oil SAE 30, 5 gal. (18.9 L)
108-1196	Premium Engine Oil SAE 30, 55 gal. (208.2 L)

TOOLS	
04399	Turf Evaluator
125-5610	Paper – Reel
125-5611	Shim – Reel
94-9010	Height of Cut Bar Assembly

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. Consult your local Toro Distributor.

The Greensmaster 3250-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Greensmaster® TriFlex™ 3300/3320 Hybrid 3400/3420 Hybrid

The next generation of the world's favorite riding greensmower.





Greensmaster® TriFlex™ 3300/3320/3400/3420 Specifications*

	GREENSMAS ^T ER 3300 TriFlex, MODEL 04510	GREENSMAS ^T ER 3320 TriFlex Hybrid , MODEL 04530	GREENSMAS ^T ER 3400 TriFlex, MODEL 04520	GREENSMAS ^T ER 3420 TriFlex Hybrid , MODEL 04540
ENGINE	Briggs & Stratton® Vanguard®, 21 HP (13.4 kW), 2-cylinder, air cooled, gasoline engine, governed to 2920 high idle, 1650 rpm low idle. Displacement: 38.3 cu-in. (627 cc)		Kubota® D902, Tier 4i, 23.5 HP (17.5 kW), 3-cylinder, liquid cooled, diesel engine, governed to 2880 high idle, 1560 rpm low idle. Displacement: 55.0 cu-in. (902 cc) Radiator: cooled with a 12-volt electric fan	
FUEL CAPACITY	6 gallons (22.7 liter) capacity.		6 gallons (22.7 liter) capacity. Biodiesel ready up to B20	
TRACTION DRIVE	2WD parallel hydrostatic or 3WD series-parallel piston pump closed loop system. Foot pedal forward and reverse; infinitely variable.			
GROUND SPEED	Forward-mowing speed is variable from 0-5 mph (0-8 km/h), adjusted by stop on pedal mechanism. Mow speed setting does not affect transport speed. Maximum Greensmaster TriFlex transport speed is 10 mph (16.1 km/h), may be reduced by adjusting stop in footrest pan without affecting mow speeds. Reverse is 3 mph (4.8 km/h) maximum.			
CUTTING UNIT DRIVE	Single gear pump, valve block, series reel drive to 3 reel motors.	48V-5400 watt air-cooled brushless permanent magnet generator in parallel with 48V 9Ah battery set powers three 48V-1100 watt brushless permanent magnet reel motors.	Single gear pump, valve block, series reel drive to 3 reel motors.	48V-5400 watt air-cooled brushless permanent magnet generator in parallel with 48V 9Ah battery set powers three 48V-1100 watt brushless permanent magnet reel motors.
STEERING	Power steering. No-tool quick adjust steering arm position with power assist, with arm motion allowing a wide range of operator sizes. Steering cylinder has a through shaft design for accurate straight line steering.			
ELECTRICAL SYSTEM	12-volt lead acid, group size U1, with 300 minimum cold cranking amps at 0° F and 34 minutes reserve capacity at 85° F/25 ampsdraw. 50 amp alternator. Ignition switch/key. Seat switch. Harness terminals and fuse slot available for optional lights installation.		Maintenance-free 12-volt battery with 585 minimum cold cranking amps at 0° F (-17.7° C) and 95 minutes minimum reserve capacity at 85° F (29.4° C) 60 amp alternator, circuit fused at 60 amps. Ignition switch/key. Seat switch. High temperature engine shut down. Harness terminals, fuse slot, and console switch location available for optional lights installation.	
48-VOLT SYSTEM FOR ELECTRIC REELS	N/A	4-12V 9Ah sealed, maintenance-free, VRLA batteries. 48-volt system is isolated from 12-volt including the frame/chassis.	N/A	4-12V 9Ah sealed, maintenance-free, VRLA batteries. 48-volt system is isolated from 12-volt including the frame/chassis.
CONTROLS	Ignition: Off/Run/Start. Throttle: Low - High Idle. Choke (AC only): Open /Closes choke plate. Parking Brake: Off - On. Traction Pedal: Rev/Neutral/Forward Joystick: Raises/lowers reels also tap off feature for clean up pass. Functional Control Lever sets neutral/mow/transport limits for traction pedal. Diagnostic Light: Indicates system faults to assist in resolving issues (04510 & 04520). InfoCenter™ Diagnostics (04530 & 04540).			
GAUGES	Fuel and hydraulic sight gauges, hour meter. Low oil pressure warning light.	Fuel and hydraulic sight gauges. InfoCenter™: Onboard LCD display shows gauges, alerts/faults, service reminders, electrical system diagnostics, low oil pressure, alternator, engine hours, engine rpm, voltage, functional control status, parking brake applied, reel speed setting, backlap control.	Fuel and hydraulic sight gauges, hour meter. Low oil pressure warning light, alternator warning light (on if not charging), glow plug indicator, high engine temperature.	Fuel and hydraulic sight gauges. InfoCenter™: Onboard LCD display shows gauges, alerts/faults, service reminders, electrical system diagnostics, low oil pressure, alternator, engine hours, engine rpm, voltage, functional control status, parking brake applied, reel speed setting, backlap control.
TIRES/WHEELS/PRESSURE	Three, 19 x 10.5 x 8, 4-ply rating pneumatic tubeless and demountable. Smooth tread. Tire pressure recommended: 12 - 18 psi front and rear.			
BRAKES	Hand-actuated parking brake lever with two 6" (15.2 cm) diameter drum brakes mounted on the front wheel motors.			
HYDRAULIC OIL	6.8 gallon (25.7 liter) tank	5.5 gallon (20.8 liter) tank	6.8 gallon (25.7 liter) tank	5.5 gallon (20.8 liter) tank
LEAK DETECTION	Equipped with Turf Guardian™ Leak Detection System. System sounds an alarm and turns on a warning light with the loss of 3 to 5 ounces of hydraulic oil.	Optional		
SOUND LEVEL	80 dB(A) at operator's ear under normal conditions.		84 dB(A) at operator's ear under normal conditions.	
OVERALL DIMENSIONS	Wheel Tread: 50.5" (128.3 cm) Wheel Base: 47" (119 cm) Length: 98" (249 cm) Width: 70.62" (179 cm) w/reels Height: 80.83" (205 cm)	Wheel Tread: 50.5" (128.3 cm) Wheel Base: 47" (119 cm) Length: 98" (249 cm) Width: 70.84" (180 cm) w/reels Height: 80.83" (205 cm)	Wheel Tread: 50.5" (128.3 cm) Wheel Base: 48.6" (123 cm) Length: 98" (249 cm) Width: 70.62" (179 cm) w/reels Height: 80.83" (205 cm)	Wheel Tread: 50.5" (128.3 cm) Wheel Base: 48.6" (123 cm) Length: 98" (249 cm) Width: 70.84" (180 cm) w/reels Height: 80.83" (205 cm)
WEIGHT	1161 lbs. (526 kg)	1257 lbs. (570 kg)	1286 lbs. (586 kg)	1406 lbs. (638 kg)
WIDTH OF CUT	59" (150 cm)			
GROUND CLEARANCE	4.5" (11.4 cm)			
CUTTING UNIT SUSPENSION	Double A-arm suspension utilizing sealed ball joints allows free cutting unit motion in pitch, roll, and yaw. The basket is directly mounted to the cutting unit displacing weight evenly over both cutting unit rollers eliminating the carrier frame, roller and pull links.			
QUICK CONNECT CUTTING UNITS	Quick connect/disconnect feature for both the reel drive motor and cutting unit. No tools required.			
REEL SPEED	Approximately 2050 RPM at 2850 engine RPM. Adjustable.			
BACKLAPPING	Standard equipment.			
OPTIONAL ACCESSORIES	Canopy, verticutters, greens rollers, dethatchers, dew whip holder, oil cooler.			
CERTIFICATION	Certified to meet ANSI specification B71.4 - 2004 and European CE standards.			
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.			

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. Consult your local Toro Distributor.

The Greensmaster® TriFlex™ is manufactured in Tomah, WI ISO 9002 Certified Plant.





Greensmaster® TriFlex™ 3300/3320/3400/3420 Accessories*

	8-BLADE DPA CUTTING UNITS, 04613	11-BLADE DPA CUTTING UNITS, 04614	14-BLADE CUTTING UNITS, 04615
DPA CUTTING UNITS	These cutting units will fit on the Greensmaster TriFlex Series.		
HEIGHT OF CUT (HOC) RANGE	Cutting height is adjusted on front roller by two vertical screws and held by two locking cap screws. Bench HOC range is .062"- .297" (1.6-7.5 mm). With high HOC kit, range is .285-1" (7.3-25.4 mm). Effective HOC may vary depending on turf conditions and bedknife installed.		
REEL WELDMENT	Reels are 5" (13 cm) in diameter, 21" (53.3 cm) in length. High carbon steel blades are welded to 5 stamped steel spiders, and heat treated. The reel is ground for diameter and concentricity, and relief grind.		
REEL BEARINGS	Two stainless steel ball bearings, 30 mm inside diameter slip fit onto reel shaft retained by internally splined threaded insert. Low drag seals/slingers for added protection with o-ring sealed motor and counterweight. Reel position maintained by a wave washer with no adjusting nut.		
MAINTENANCE	No grease zerks, sealed bearing design eliminates daily maintenance.		
REEL DRIVE	The reel weldment shaft is a 1.375" (35 mm) diameter tube with internally splined threaded insert.		
FRAME	Precision machined, die-cast aluminum cross member with two bolt-on die-cast aluminum side plates.		
AGGRESSIVENESS	Aggressiveness stays constant throughout the life of the reel. Patented design.		
BEDKNIFE	Replaceable single edged, EdgeMax™ Microcut Bedknife is standard on all cutting units.		
BEDKNIFE ADJUSTMENT	Dual screw, indexed "click" adjustment to the reel; detents correspond to .0007" (.018 mm) bedknife movement for each position.		
FRONT & REAR ROLLERS	Front: Not included with cutting unit, purchased separately. Option between full, narrow-spaced and wide-spaced Wiehle roller. Rear: Steel full, 2" (5.1 cm) diameter with sealed bearings and through-shaft.		
GRASS SHIELD	Non-adjustable shield with adjustable cut-off bar to improve grass discharge from reel in wet conditions.		
TOTAL WEIGHT	8-blade: 80 lbs. (30.4 kg) with aluminum Wiehle Roller. 11-blade: 83 lbs. (37.7 kg) with aluminum Wiehle Roller. 14-blade: 86 lbs. (39 kg) with aluminum Wiehle Roller.		

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Greensmaster® TriFlex™ 3300/3320/3400/3420 Accessories*

GREENSMaster TRIFLEX ACCESSORIES

TRIFLEX TRACTION UNIT ACCESSORIES	
04714	3WD Kit
04715	Leak Detector
04717	Light Kit
04718	Seat Kit, Standard
04719	Seat Kit, Premium
92-7307	Armrest Kit - Standard
119-7105	Armrest Kit - Premium
119-1691	Hydraulic Oil Cooler Kit (Gas)
117-9314	Hydraulic Oil Cooler Kit (Diesel)
119-7129	2WD Weight Kit (Gas) (ANSI compliant)
121-6665	2WD Weight Kit (Diesel) (ANSI compliant)
120-5750	3WD Weight Kit (Gas) (ANSI compliant)
104-6540	Spark Arrestor Kit (Gas)
120-1951	Spark Arrestor Kit (Diesel)
119-7138	Dew Whip Holder
115-4510	Canopy
119-1715	Utility Bag Kit
115-4754	Wireless Hour Meter

OPTIONAL TRIFLEX ACCESSORIES	
04720	Thatching Reel - TriFlex (set of 1)
119-1128	Individual dynaBLADE, 2mm thickness
117-6824	Individual dynaBLADE, 1.2mm thickness
117-6839	Replacement dynaBLADE kit, 1.2mm thickness (36 blades)
117-6840	Replacement dynaBLADE kit, 2mm thickness (36 blades)
121-6674	Individual Spring Steel Blade
121-6675	Replacement Spring Steel Blade Kit (36 pcs)
04722	Greens Tri-Roller - TriFlex (set of 1)
04723	Greens Spiker - TriFlex (set of 1)

TRIFLEX DPA CUTTING UNITS	
04613	8-Blade Cutting Unit
04614	11-Blade Cutting Unit
04615	14-Blade Cutting Unit

TRIFLEX DPA CUTTING UNIT ROLLERS	
04625	Full Roller DPA
04626	Narrow Wiehle Roller DPA
04627	Wide Wiehle Roller DPA
04249	Full Split Roller
04250	Wiehle Split Roller
04628	Solid Steel Roller Kit (Front Wide Wiehle, Rear Full)
04629	Anti Bobbing Roller - DPA (Front and Rear)
71-1550	2" Rear Wiehle Roller (cast iron)
125-5180	Rear Roller Extension Kit
120-9600	High Height of Cut Kit (.35 - .94)
04258	Extended Wiehle Roller
04267	Narrow Wiehle Roller (for paspalum)

TRIFLEX DPA CUTTING UNIT ROLLER SCRAPERS / BRUSHES / COMBS	
04646	Rear Roller Scraper (Spring Loaded)
125-3503	Front Wiehle Roller Scraper - Narrow
125-3504	Front Wiehle Roller Scraper - Wide
125-3505	Front Roller Scraper - Full
115-7377	Front Wiehle Roller Scraper Brush - Narrow
115-7378	Front Wiehle Roller Scraper Brush - Wide
115-7379	Front Roller Scraper Brush - Full
115-7380	Front Wiehle Roller Scraper Comb - Narrow
115-7381	Front Wiehle Roller Scraper Comb - Wide
115-7382	Front Roller Scraper Comb - Full
107-9561	Anti Bobbing Roller - Scraper Kit (Front and Rear)
121-2260	Rear Roller Scraper - Adjustable

TRIFLEX DPA CUTTING UNIT ACCESSORIES	
04710	Groomer Drive, Forward
04260	Groomer Drive, Counter Rotating
04711	Groomer Reel, Carbide
04712	Groomer Reel, Spring Steel
04713	Groomer Brush, Spiral
04274	Greens Perfection Brush, Soft
04275	Greens Perfection Brush, Stiff
04724	Rotating Rear Roller Brush - RH
115-1880	EdgeMax™ Microcut Bedknife
115-1881	EdgeMax™ Tournament Bedknife
93-4262	Microcut Bedknife (HOC Range 1.58mm - 3.18mm)
93-4263	Tournament Bedknife (HOC Range 3.2mm - 6.35mm)
93-4264	Low Cut Bedknife (HOC Range 6.35mm and higher)
94-6392	Bedknife - High Cut
108-4303	Extended Microcut Bedknife
108-4302	Extended Tournament Bedknife
63-8600	Bedknife - Fairway
99-3794-03	DPA Bedbar, Aggressive (optional)
106-2648-01	DPA Bedbar, Less Aggressive (standard equipment)
112-7475	EdgeMax™ Fairway Bedknife

TRIFLEX SERVICE KITS	
30042	400 hour filter Maintenance Kit - Greensmaster TriFlex 3300 / 3320
30043	400 hour filter Maintenance Kit - Greensmaster TriFlex 3400 / 3420

BIO-HYDRAULIC FLUID / HYDRAULIC FLUID / OIL	
119-2157	Bio-Hydraulic Fluid, 5 gal. (18.9 L)
119-2158	Bio-Hydraulic Fluid, 55 gal. (208.2 L)
108-1178	Premium Hydraulic Fluid, 5 gal. (18.9 L)
108-1177	Premium Hydraulic Fluid, 55 gal. (208.2 L)
121-6393	Premium Engine Oil SAE 30, 5 gal. (18.9 L)
121-6392	Premium Engine Oil SAE 30, 55 gal. (208.2 L)

TOOLS	
04399	Turf Evaluator
125-5610	Paper - Reel
125-5611	Shim - Reel
94-9010	Height of Cut Bar Assembly

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The Greensmaster® TriFlex™ is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 3280-D

An all-purpose outfront rotary mower that embodies the Toro standard for durability while meeting today's more stringent cutting demands.





Groundsmaster® 3280-D Specifications*



GROUNDMASTER 3280-D, 2WD - MODEL 30344 GROUNDMASTER 3280-D, 4WD - MODEL 30345																						
ENGINE	Kubota, 3-cylinder, liquid-cooled diesel. Power: 24.8 hp (18.5 kW) gross, at rated speed of 3000 rpm. Torque peak: 71.5 (52.7) Nm (lbs-ft) @ 2200 rpm. Displacement: 1123cc. High idle: 3200 rpm no load (uninstalled) 3100-3200 installed. Remote-mounted 5" Donaldson® air cleaner. Fuel filter/water separator. EPA Tier IV Final Compliant.																					
FUEL CAPACITY	11.3 gallon (42.8 liter), diesel fuel. 2008 and newer models Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).																					
GAUGES & PROTECTION SYSTEMS	Hour meter, fuel gauge, 4 light warning cluster gauge: oil pressure, water temperature, amps and glow plug. High water temperature shut-down. Hood lock, foldable ROPS.																					
RADIATOR	Mid-mounted industrial radiator construction, 8.5 fins per inch. Approx. 7 quart (6.6 liter) capacity. Remote mounted 1 quart (.95 liter) expansion tank.																					
TRACTION DRIVE	Hydrostatic U-type transmission with single pedal control of forward/reverse ground speed. 25 micron replaceable filter. Axle serves as reservoir for hydrostatic transmission; also serves the power steering and lift valve. Approx. lubrication capacity: 6 quarts (5.7 liters). 4WD: Rear axle is mechanically driven from front axle by a universal shaft. An on-demand, bi-directional overrunning clutch prevents rear tire scuffing in turns and maintains turning radius, same as in 2-wheel drive mode. Approx. 3.1 quart (2.9 liter) gear lubricant capacity.																					
SPECIFICATIONS COMMON TO GROUNDMASTER 3280-D & 3320 SERIES																						
GROUND SPEED	0-10 mph (0-16.1 km/h), infinitely variable.																					
MAIN FRAME	All welded formed steel.																					
TIRES/WHEELS/ PRESSURE	Two front traction drive tires-23 x 9.5-12 with demountable rims. Two rear steering tires: 2WD: 16 x 6.5-8; 4WD: 18 x 6.5-8. All tires are tubeless and 4-ply rated. Recommended tire pressure: 20 psi (138 kPa). Optional Wide Tire w/ Rim, 23 x 10.5-12, Part No. 119-2864, 4-ply, or 69-9880, 6-ply.																					
BRAKES	Individual 7" x 1.75" (17.8 cm x 4.4 cm) drum type wheel brakes and parking brakes on front traction wheels. Dynamic braking through traction drive.																					
SEAT & SUSPENSION	Deluxe seat with adjustable fore/aft travel, Model 30398. Requires air ride, Model 30313, or mechanical seat suspensions, Model 30312. Adjustable for height and weight. Available armrests model 30707: required Part No. 108-9687 Armrest adapter kit. 12V Power Port/Electrical Accessory Kit, Model 30382, required for use of air ride seat suspension.																					
STEERING	Hydraulic power steering. 14" (36 cm) tilt steering wheel, released and locked by a single lever control.																					
OPERATOR AREA	Multi-tiered beverage holder, storage box, retractable seatbelt, and available 12V power port Model 30382.																					
IMPLEMENT DRIVE	1" (2.5 cm) diameter PTO shaft clutched by a torque-teamed "HA" section V-belt. PTO engaged by electric clutch/brake. Connection to implement is with a universal joint and telescoping shaft assembly.																					
IMPLEMENT LIFT	Twin 2.75" hydraulic cylinders operate lift arms. Hydraulic counter balance for greater stability and traction.																					
CONTROLS	Foot-operated traction and brake pedals. Hand-operated throttle, PTO switch, brake lock, implement lift switch, ignition switch and glow plugs.																					
ELECTRICAL FEATURES	12-volt maintenance free battery with 530 cold cranking amps at 0° F (-18° C), 80 minute reserve capacity at 80° F (27° C). 40 amp alternator with I.C. regulator/rectifier. 2 amp standard control module log circuit. Seat switch, PTO, traction and parking brake interlock switches. Easy access to fuse panel. Available 12V Power Port/Electrical Accessory Kit, Model 30382.																					
DIMENSIONS & WEIGHT	<table border="1"> <thead> <tr> <th></th> <th>Width</th> <th>Length</th> <th>Height w/ROPS Down</th> <th>Height w/ROPS Up</th> <th>Dry Weight</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>GM3280-D 2WD</td> <td>47" (119 cm)^[1]</td> <td>83.5" (212 cm)</td> <td>56" (142 cm)</td> <td>77" (195 cm)</td> <td>1,340 lbs. (608 kg)</td> <td>46" (117 cm)</td> </tr> <tr> <td>GM3280-D 4WD</td> <td>47" (119 cm)^[2]</td> <td>85" (216 cm)</td> <td>56" (142 cm)</td> <td>77" (195 cm)</td> <td>1,520 lbs. (690 kg)</td> <td>47.5" (121 cm)</td> </tr> </tbody> </table>		Width	Length	Height w/ROPS Down	Height w/ROPS Up	Dry Weight	Wheelbase	GM3280-D 2WD	47" (119 cm) ^[1]	83.5" (212 cm)	56" (142 cm)	77" (195 cm)	1,340 lbs. (608 kg)	46" (117 cm)	GM3280-D 4WD	47" (119 cm) ^[2]	85" (216 cm)	56" (142 cm)	77" (195 cm)	1,520 lbs. (690 kg)	47.5" (121 cm)
	Width	Length	Height w/ROPS Down	Height w/ROPS Up	Dry Weight	Wheelbase																
GM3280-D 2WD	47" (119 cm) ^[1]	83.5" (212 cm)	56" (142 cm)	77" (195 cm)	1,340 lbs. (608 kg)	46" (117 cm)																
GM3280-D 4WD	47" (119 cm) ^[2]	85" (216 cm)	56" (142 cm)	77" (195 cm)	1,520 lbs. (690 kg)	47.5" (121 cm)																
CLEARANCE	Front ground clearance: 6" (15.2 cm), 4WD: rear ground clearance of 4.25" (10.8 cm).																					
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.																					
CERTIFICATION	Certified to meet the American National Standard Institute's (ANSI) specifications, B71.4-2004 and applicable Federal and State regulations based thereon.																					

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[1] Measured from outside of front tires.
[2] Measured from outside of rear tires.





Groundsmaster® 3280-D Accessories Specifications*

FULL FLOTATION CUTTING UNITS			
	72" SIDE DISCHARGE MODEL 31336	72" BASE DECK CONFIGURATION MODEL 30404, WITH 72" REAR DISCHARGE COMPLETION KIT (30303)	72" GUARDIAN® RECYCLER® (31335)
TYPE	72" (183 cm) width of cut, three blade, front mounted rotary. Adjustable front baffle. Side discharge.	72" (183 cm) width of cut, three blade, baffle, front mounted rotary. Rear discharge.	72" (183 cm) width of cut, three blade, front mounted rotary. Recycling with vertical discharge.
TRIMABILITY	Offset 7.1" (18 cm) to the left; 37.9 (96 cm) uncut circle left. Deck overhang: 19.7" (50 cm) from outside of wheel to left trim side. Uncut circle with use of wheel brakes: 0".	Deck offset to the left from centerline: 5.50" (14 cm). Deck trim width from outside of standard traction tire to trim side - left: 17.4" (44 cm). Uncut circle with use of wheel brakes: 0".	Deck offset to left from centerline: 7" (18 cm). Deck trim width from outside of standard tire to trim side - left: 17.4" (44 cm). Uncut circle with use of wheel brakes: 0."
CONSTRUCTION	Welded 7-gauge steel, 5.5" (14 cm) deep. 5/16" (8 mm) rubber discharge chute (30368 model only).		
HEIGHT OF CUT	1.0-5" (2.5-12.7 cm) adjustable front and rear in .5" (12.7 mm) increments with spacers on the front caster shafts.		
MOWING RATE⁽¹⁾	Mows up to 3.6 acres/h (1.46 hectares/h) at 5 mph (8 km/h).		
SPINDLE ASSEMBLY	Ductile cast iron 9" (23 cm) diameter conical spindle housing; Dual greaseable tapered roller bearings; Spindle shaft is 1.25" (3.2 cm) diameter, solid cold finished steel, and splined connection between spindle shaft and pulley; Welded blade retainer plus anti-scalp cups.		
CUTTER DRIVE	Isolation mounted, splined PTO-driven gearbox transfers power to three separate spindles via two separate "B" section belts.		
BLADES	Three 24.5" (62 cm) long, .25" (6 mm) thick, 2.5" (6 cm) wide heat-treated steel blades.	Three 25.18" (64 cm) long, .25" (6 mm) thick, 2.5" (6 cm) wide heat-treated steel blades.	Three 25.18" (64 cm) long, .25" (6 mm) thick, 2.5" (6 cm) wide heat-treated steel blades.
OPTIONAL BLADES	High Flow and Atomic		
SUSPENSION	Independent, 2.5" (6.4 cm) square tubing, lift/push arms each attached to separate castor arms.		
CASTER WHEELS	Two rear 6" (15.2 cm) diameter castor tires. Two front 8.0 x 3.5 pneumatic tires (foam filled optional) with tubes and maintenance free bearings. Tensioning caps, made from impact modified thermoplastic alloy, are used to hold the castor wheels on the castor arms.	Two front 8.0 x 3.5 pneumatic tires (foam filled optional) with tubes and maintenance free bearings. Tensioning caps, made from impact modified thermoplastic alloy, are used to hold the castor wheels on the castor arms.	Two rear 6" (15.2 cm) diameter castor tires. Two front 8.0 x 3.5 pneumatic tires (foam filled optional) with tubes and maintenance free bearings. Tensioning caps, made from impact modified thermoplastic alloy, are used to hold the castor wheels on the castor arms.
ANTI-SCALP FEATURES	Six anti-scalp rollers. Anti-scalp cup located on each blade. Plastic replaceable skid on trim side.	Five anti-scalp rollers. Anti-scalp cup located on each blade. Plastic replaceable skid on each side.	Anti-scalp cup located on each blade. Six anti-scalp rollers. Plastic replaceable skid on each side.
DECK COVERS	Quick-release type latches. (Tools required for EU)		
LIFT ARMS	Independent lift arms and hydraulic weight transfer provide deck flotation.		
WEIGHT	530 lbs. (240 kg)	441 lbs. (200 kg)	491 lbs. (223 kg)
OPTIONAL EQUIPMENT	Rear Weight Kit, High Tip Speed Kit, Recycler Kit, Leaf Mulcher Kit.	Rear Weight Kit, Bahia Tall Grass Kit.	Fine Recycler Completion Kit (30346). Rear Weight Kit, Bahia Tall Grass Kit.
CERTIFICATION	Cutting unit meets specification of American National Standard ANSI B71.4-2004, Safety Specifications for commercial turf care equipment. Cutting unit meets specifications of European standard EN836, CE approved.		

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[1] Mowing rate is dependent on conditions.





Groundsmaster® 3280-D Accessories Specifications* (continued)

	FULL FLOTATION CUTTING UNITS		
	60" SIDE DISCHARGE MODEL 30366	62" BASE DECK CONFIGURATION GUARDIAN® RECYCLER® OR REAR DISCHARGE, MODEL 30403	52" SIDE DISCHARGE MODEL 30555
TYPE	60" (152 cm) width of cut, 3-blade, front mounted rotary. Adjustable front baffle. Side discharge.	62" (157 cm) width of cut, 3-blade, front mounted rotary. Recycling with vertical discharge or rear discharge.	52" (132 cm) width of cut, 3-blade, front mounted rotary. Side discharge.
TRIMABILITY	Offset 4.33" (10.9 cm) to the left; 42.6" (108.2 cm) uncut circle left. Deck overhang: 11.17" (28.4 cm) from outside of wheel to left trim side.	Offset 2.75" (6.9 cm) to the left; 44.5" (113 cm) uncut circle left. Deck overhang: 10.43" (26.5 cm) from outside of wheel to left trim side.	Deck offset from outside of wheel to left trim side: 10.25" (26 cm). Uncut circle left: 26" (66 cm). Uncut circle with use of individual wheel brakes: 0".
CONSTRUCTION	7-gauge steel 5.5" (13.97 cm) deep; welded construction. 5/16" (8 mm) rubber discharge chute.	7-gauge steel 4.25" (10.8 cm) deep, welded construction.	12-gauge formed steel construction with integral structural ribs, 7-gauge welded support brackets 5" (12.7 cm) deep Wind-Tunnel® housing. Steel discharge chute.
HEIGHT OF CUT	1" to 5" (2.5 cm to 12.7 cm) adjustable .5" (12.7 mm) increments with spacers on the front and rear castor shafts. Adjustable HOC links for rear of deck.		Adjustable in .5" (12.7 mm) increments by repositioning 4 clevis pins holding the deck suspended from carrier frame hanger brackets. Height of cut range: 1" to 4" (2.5 to 10.2 cm)
MOWING RATE^[1]	Mows up to 3.0 acres/h (1.22 hectares/h) at 5 mph (8 km/h).	Mows up to 3.1 acres/h (1.25 hectares/h) at 5 mph (8 km/h).	Mows up to 2.6 acres/h (1.1 hectares/h) at 5 mph (8 km/h).
SPINDLE ASSEMBLY	Ductile cast iron 9" (23 cm) diameter conical spindle housing; Dual greaseable tapered roller bearings; Spindle shaft is 1.25" (3.2 cm) diameter, solid cold finished steel, and splined connection between spindle shaft and pulley; Welded blade retainer plus anti-scalp cups.		
CUTTER DRIVE	Isolation mounted, splined PTO-driven gearbox transfers power to three separate spindles via two separate "B" section belts.		PTO shaft driven, isolation mounted gearbox with 1.25:1 spiral bevel gears. Gearbox pulley drives a single "AA" section belt to 3 spindles, self-tensioned with a rubber torsion idler arm and riveted steel idler pulley with ag-type wiper seal and bearing.
BLADES	Three 20.5" (52 cm) long, .25" (6 mm) thick, 2.5" (6.35 cm) wide, heat-treated steel blades. Optional Atomic™ Mulching Blade (110-4703).	Three 21.75" (55 cm) long, .25" (6 mm) thick, 2.5" (6.35 cm) wide, heat-treated steel blades. Optional Atomic Mulching Blade (107-0214).	Three 18" (46 cm) long, 2.5" (6.3 cm) wide, .19" (5 mm) thick, heat-treated steel blades. Optional Atomic Mulching Blade, P/N 104-1301.
CARRIER FRAME SUSPENSION	Independent, 2.5" square tubing, lift/push arms each attached to separate castor arms.		Mower freely suspended in carrier frame. Height of cut bracket design and flexible carrier frame enhance cutting unit flotation and ground following capability.
CASTER WHEELS	Front: Two 8.0" x 3.5" (20.3 cm x 8.9 cm) pneumatic tires (foam filled optional) with tubes and maintenance-free bearings. Tensioning caps made from impact modified thermoplastic alloy – are used to hold the castor wheels on the castor arms.		Pneumatic, 8" turf tread tires, 8 x 3-4 regreaseable roller bearings and heavy duty bushings rotating on a replaceable spanner. (Optional Phenolic Caster Wheel Assembly, P/N 27-1050; two required.)
ANTI-SCALP FEATURES	6 rollers. Anti-scalp cup located on each blade spindle. Plastic skid on trim side.	5 rollers on Rear Discharge Deck, 6 rollers on Guardian Deck. Anti-scalp cup located on each blade spindle. Plastic skid on each side.	4 anti-scalp roller. Anti-scalp cup located on each blade spindle.
DECK COVERS	Quick-release type latches; no tools required. (Tools required for E.U.)		
LIFT ARMS	Independent lift arms and hydraulic weight transfer provide deck flotation.		High strength lift arms with mounting provision for quick attach-detach of mower carrier frame or other attachments.
OPTIONAL EQUIPMENT	Rear Weight Kit, Collection System, High Tip Speed Kit, Striping Kit, Leaf Mulcher Kit, High Flow Blade (110-4702).	Required Equipment: 62" Rear Discharge Deck Completion Kit (30305) or 62" Recycler Deck Completion Kit (30306)	
		Rear Discharge Conversion Kit, Guardian Recycler Conversion Kit, Rear Weight Kit, Bahia Tall Grass Kit.	Rear Weight Kit, Collection System, High Sail Blades (44-5480, 56-2390-03)
CERTIFICATION	Cutting unit meets specification of American National Standard ANSI B71.4-2004, Safety Specifications for commercial turf care equipment. Cutting unit meets specifications of European standard EN836, CE approved, except some blades and the High Tip Speed Kit.	Cutting unit meets specification of American National Standard ANSI B71.4-2004, Safety Specifications for commercial turf care. Cutting unit meets specifications of European standard EN836, CE approved.	Certified to meet the American National Standard Institute's (ANSI) specifications, B71.4-2004 and applicable Federal and State regulations based equipment thereon.

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[1] Mowing rate is dependent on conditions.





Groundsmaster® 3280-D Attachments Specifications* (continued)

GM300 DEBRIS BLOWER RETROFIT KITS	
Converts model 30855 for the GM3280-D/ 3320. Required kits are the following: PN 110-8539: Blower Adapter Kit, and PN 110-8540: Attachment Frame Kit.	

DEBRIS BLOWER, MODEL 30823							
POWER SOURCE	Groundsmaster 3280 tractor's-PTO drive. Belt drive.						
HITCH/MOUNT	Out-front design for Groundsmaster tractors (requires Attachment Frame Kit, PN 110-8540).						
FRAME	All welded steel construction.						
BEARINGS	2 self-sealed, self-aligning.						
IMPELLER	12 blades, reversed curve, 21" (53.3 cm) diameter, sandcast aluminum.						
AIR MOVEMENT	130 mph (209 km/h)@ 2700 rpm, 3650 cfm						
DIRECTIONAL CHUTE	All steel, over-center locking, spring tension control, operated from tractor seat.						
DIMENSIONS	<table border="1"> <thead> <tr> <th>Length</th> <th>Width</th> <th>Height</th> </tr> </thead> <tbody> <tr> <td>46" (117 cm)</td> <td>35.6" (90 cm)</td> <td>34.9" (89 cm)</td> </tr> </tbody> </table>	Length	Width	Height	46" (117 cm)	35.6" (90 cm)	34.9" (89 cm)
Length	Width	Height					
46" (117 cm)	35.6" (90 cm)	34.9" (89 cm)					
SHIPPING WEIGHT	300 lbs. (136 kg)						

ROTARY BROOM M-B MODEL MCT**	
TYPE	MECHANICAL Windrow type, front mounted mechanical drive broom. Hydraulic angling, 30 degrees left and right.
SWING	Swing pivot point inline with 50 degree CV joint
BROOM SIZE	25" (63.5 cm) diameter brush, 60" (152 cm) width.
BRUSH	Sectional brush with choice of polypropylene, wire or combination radial segments.
SHIPPING WEIGHT	60" Broom: 500 lbs., (227 kg).
OPTIONS	Hydraulic Swing Cylinder, Dirt Deflector, Storage Stands.

SUNSHADE	
UNIVERSAL MOUNT	Model 30349
BIMINI CANVAS	Model 30358

V-PLOW, MODEL 30750	
CUTTING WIDTH	48" (121.9 cm)
HITCH/MOUNT	Out-front design for Groundsmaster tractors. Required kits are the following: V-Plow Mounting Kit, PN 115-4917 and Attachment Frame Kit, PN 110-8540.
CONSTRUCTION	All welded steel.

CAB, MODEL 30391	
BODY/FRAME	ROPS engineered and certified frame, Toro red color-capped plastic roof and body panels, rubber isolator mounts. Optional front worklights available.
GLASS	Greylite tinted glass, tempered glass windshield, all-glass tempered door(s), 2-speed front windshield wiper.
DOORS	Left: key locking, interior handhold/grab bar, gas assist open. Right and left: opening swing out.
INTERIOR	Pre-cut textured neoprene floor mat, grey upholstered interior side and rear panels, grey upholstered interior headliner, roof-mounted black color-capped plastic headliner/console.
ELECTRICAL	Full wiring harness with fuse box.
HVAC	Console-mounted pressurized fan, interior louvers and heater.

SNOWTHROWER ERSKINE MODEL 1600***	
STAGE	2
WIDTH OF CUT	53" (135 cm)
CUTTING HEIGHT	22" (56 cm)
CUTTING EDGE	51" (130 cm) bolt-on
SKID SHOES	Adjustable/Hardened
AUGER DIAMETER	12" (30 cm) open flight
FAN DIAMETER	16" (41 cm)
CHUTE ROTATION	Hydraulic
SHEAR PROTECTION	Pressure relief
CASTING DISTANCE	Up to 25' (7.62 m)
APPROXIMATE SHIPPING WEIGHT	418 lbs. (190 kg)
HOSES	Included

15 CU. FT. HI-LIFT HOPPER COLLECTION SYSTEM, MODEL 30356	
CONFIGURATION	A turf collection system consisting of a pivoting three-point, quick detach mounting structure that supports the lift linkage and hydraulically raises to dump collected clippings.
WHEEL WEIGHT	75 lb. (34 kg) wheel weight mounts to the left front wheel to offset RH hopper weight.
HOPPER CAPACITY	15 cu. ft. (440 liters)

52" BLOWER KIT, MODEL 30502 60" BLOWER KIT, MODEL 30357	
BLOWER ASSEMBLY	Blower assembly housing is 16" (41 cm) diameter; welded construction. The blower assembly attaches to the cutting unit's discharge port and is belt driven from the cutting unit. Impeller speed is 1800 rpm at 3200 rpm engine speed. Impeller shaft bearing is outboard mounted.
DECK BAFFLES	Steel baffles mount under deck housing to direct clippings into blower.
BUMPER	Bumper of steel tubing is bolted to deck suspension frame to protect blower housing.

Note: Use with high lift collection system

*Information regarding non-Toro (Allied Vendor) products is included in the Toro Golf and Grounds Equipment Guide as a convenience to Toro customers. Toro does not warrant, endorse or support any products purchased from Allied vendors. Additionally, Toro shall not be responsible for any personal injury or property damage, whether direct or consequential, caused by such Allied products. Toro does not certify fit up, compatibility or functionality of Allied products.

**Manufactured by M-B Companies, Inc.

***Manufactured by Erskine. Depending on mower configuration, an auxiliary valve kit (Toro model 110-5670) must be added to the tractor. Addition wheel weights may be required. The Toro Company does not manufacture or sell the snowthrower, nor does Toro guarantee these accessories in any manner whatsoever.



TORO

Groundsmaster® 360 Quad-Steer™

The all-new Toro Groundsmaster 360 reinvents the way a mower performs. Powered by a 36 hp (26.8 kW) Kubota® 4-cylinder diesel engine, this machine utilizes revolutionary Quad-Steer™ all wheel steering to maximize productivity. Climb hills without slipping. Make 180° turns without tearing turf. Hug the turns or side hills while mowing in total comfort. Save time without sacrificing quality. Intuitive controls and unparalleled maneuverability turn work into play. But this is no toy. It's a performer in every sense of the word. A higher quality of cut, speed and efficiency, lasting dependability. Surprisingly, the world's most exhilarating mower is also the most efficient. The Groundsmaster 360 is the science and the art of mowing, a sensory experience you simply have to feel for yourself.





Groundsmaster® 360 Specifications*

	GROUNDMASTER 360 – 2WD TIER 4 INTERIM DIESEL MODELS 30534(N), 30536(N)	GROUNDMASTER 360 – 4WD TIER 4 INTERIM DIESEL MODELS 30537(N), 30539(N)	GROUNDMASTER 360 – CAB TIER 4 INTERIM DIESEL MODELS 30540(N), 30542(N)
ENGINE	Kubota® 1505 4-cylinder, liquid-cooled diesel engine, 36 hp (26.8 kW) @ 3000 rpm. EPA Tier IV Interim Compliant.		
FUEL CAPACITY	13.5 gallons (51.1 liters) diesel. Biodiesel Ready for use up to B-20 (20% biodiesel and 80% diesel blend).		
TRACTION DRIVE	Independent high-torque, low-speed wheel motors with 280 cc displacement.		
	Dual pump hydrostatic drive system with optional differential lock.	CrossTrax® drive system utilizing series parallel hydraulic drive circuit with full time forward and reverse 4WD. Patent pending.	
TIRES	Front & Rear: (All 4 tires and wheels are the same part number) 23/10.5x12 6 ply pneumatic tubeless, demountable and interchangeable. Tread Kenda K500 TL similar to "Toro Tuff Trac".		
AIR CLEANER	Dry, replaceable primary element.		
GAUGES	Hour meter, fuel gauge, indicator lights for glow plugs, high coolant temperature, battery charge, and low oil pressure. Automatic shutdown for high coolant temperature. Two wheel steer lockout indicator light on 4WD units.		
CONTROLS	Ignition switch, hand-throttle, foot-operated traction pedal with mowing speed control stop, service brake with parking brake latch, switch for raising and lowering cutting unit.		
GROUND SPEED	Transport and Mow: Forward 0-14 mph (0-22.5 km/h), variable. Reverse 0-8.5 mph (0-13.7 km/h), variable.		
RADIATOR	Rear mount, cross flow, 6.5 fins per 1" (25 mm), 8 quart (7.6 liter) capacity		
MAIN FRAME	Rectangular structured steel tube and high strength steel plate welded construction.		
BRAKES	Service Brake: Foot pedal with dynamic braking through hydrostatic transmission. Parking Brake: foot actuated brake lever with two 8" (20.3 cm) diameter drum brakes mounted on the rear wheel motors.		
STEERING	Quad Steer™ all wheel steer with four wheel Ackermann steering. Two turns Lock to Lock controlled via steering wheel and automatic synchronizing hydraulic cylinders. 4WD models have rear wheel steer lock out position, providing front two wheel steering (2WS).		
ELECTRICAL	12-volt, 60 amp internal regulated alternator/generator charging @ 3150 rpm. Battery: BCI Group No. 34, 690 cold cranking amps @ 0° F (-17.78° C).		
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, engine stops. If operator leaves the seat with the unit out of neutral, engine stops. Engine stops if parking brake engaged and traction pedal not in neutral. High temp (PTO shuts down but engine remains running), Over temp (engine shuts down).		
SEAT	High back cushion vinyl seat with drain hole, deluxe low profile mechanical suspension, 4" (10 cm) fore-aft travel with an additional 44 mm (1.75") foreword adjustment, armrests standard, retractable seat belt, lateral shock absorption.	Grammer low profile air ride suspension, cloth cushions, retractable seat belt, lateral shock absorption.	
OPERATOR AREA	Operator platform with isolated operator seat (all models). Storage area behind operator seat, 12-volt power outlet, cup holder.		
HYDRAULICS/COOLING	3 gallon (11.4 liter) capacity, suction spin-on filter mounted to transmission, oil cooler 6.5" x 17" x 3.5" (16.5 cm x 43.2 cm x 8.9 cm). Bar and Plate Core; 6.5 serpentine fins per 1" (25 mm).		
PTO CLUTCH	Hydraulically actuated wet multi disc clutch.		
ROLL-OVER PROTECTION	2 post Standard foldable ROPS certified per ISO/DIS 21299.2 specifications		Cab ROPS certified
ALL-SEASON SAFETY CAB	Factory installed, ROPS certified, pressurized cab with AC and heat. Tempered curved windshield, opening side window, opening rear window, emergency exit side window, tinted side and rear glass; front wiper/washer; interior mirror and exterior side mirrors; SMV sign; interior dome light. Models 30540, 30541 & 30542 only.		
FUEL ECONOMY	3.5 acres/gallon (.38 hectares/litre)*, fuel consumption: 1.4 gallons/hr (5.3 litres/h)**		
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2004)		
CERTIFICATION	Certified to meet SAE J2258. Certified to meet ISO/DIS 21299 for ROPS. Engine meets all applicable emission standards per the manufacturer. Certified to meet C-Tick 2004/108/EC/EMC). Certified to meet the CE Machinery Directive.		
WARRANTY	Two year limited		
DIMENSIONS & WEIGHT WITH CUTTING DECKS			
HEIGHT ROPS UP	78" (198 cm)	78" (198 cm)	86" (218 cm)
OVERALL LENGTH	110" (279 cm)	110" (279 cm) / 117" (297 cm) with front Quick Attach System™ (QAS) only	
OVERALL WIDTH	78" (198 cm) [72" (183 cm) base deck] / 75" (191 cm) [72" (183 cm) side discharge deck] / 55" (140 cm) wheel to wheel		
WHEELBASE	57" (145 cm)		
EST. SHIPPING WEIGHT	2,562 lbs. (1162 kg)	2,658 lbs. (1206 kg)	3,134 lbs. (1422 kg)

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Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.
**Dependent on operator and turf conditions. Assume 85% efficiency for turns and overlap; 8 mph (12.9 km/hr) mow speed.

The Groundsmaster 360 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 360 Specifications*

	GROUNDMASTER 360 – 2WD TIER 4 INTERIM DIESEL MODELS 30534(N), 30536(N)	GROUNDMASTER 360 – 4WD TIER 4 INTERIM DIESEL MODELS 30537(N), 30539(N)	GROUNDMASTER 360 – CAB TIER 4 INTERIM DIESEL MODELS 30540(N), 30542(N)
PART NUMBER	GROUNDMASTER 360 ATTACHMENTS AND ACCESSORIES		
AIR RIDE GRAMMER SEAT	Air ride suspension and vinyl cushions. Model 30511.		
SPARK ARRESTOR KIT	Part No. 119-8018		
SPEED REDUCTION KIT	Model 30547		
ROTATING BEACON KIT	Part No. 120-0256		
BIMINI CANVAS SHADE	Model 30358		NA
UNIVERSAL MOUNT SUNSHADE	Model 30349		NA
FRONT QUICK ATTACH SYSTEM (QAS)	NA	Front Quick Attach System (QAS) with quick connects to PTO coupler and front attachment's hydraulic connections. Model 30509. Electrical accessory kit (PN 115-0019) or Joystick/Electrical Accessory Kit (31219) required.	
V-PLOW	NA	48" (122 cm) wide V-Plow. Model 30750. (V-Plow Mounting Kit 30378 required)	
ROTARY BROOM	NA	Rotary Broom (Supplied by M-B Companies, Model MCT)	
SNOWTHROWER	NA	Snowthrower. Must control with Joystick/Electrical Accessory Kit (31219). (Supplied by Erskine Attachments)	
STRAIGHT BLADE	NA	Straight Blade (Supplied by M-B Companies)	
POWERED V-PLOW	NA	Snow implement combines two useful attachments; V-Plow and Angled Blade Must control with Joystick/Electrical Accessory Kit (31219). (Supplied by M-B Companies)	
DIFFERENTIAL LOCK	Model 30508	NA	
EU ROAD HOMOLOGATION LIGHT KIT	EU Road Homologation Light Kit Model 30512		Model 30516
NORTH AMERICA ROAD LIGHT KIT	Includes headlights, red/amber flashers, turn signals and one rear work light. Model 30513		Model 30517
SMV SIGN KIT	Part No. 115-0014		Included with cab
WORK LIGHT KIT	NA		Part No. 114-6610
WINTER ENCLOSURE	NA	Removable weather-tight enclosure for existing ROPS structure. Heater, wiper, windshield washer and light package. Model 31220.	NA

	CUTTING DECKS	
HEIGHT OF CUT	1"-6" (25 - 152 mm) adjustable in 0.25" (6 mm) increments	
72" SIDE DISCHARGE CONST.	7-gauge (4.5 mm) 5.5" steel (14 cm) deep; welded deck with grass discharged on the right side. An 5/16" (8 mm) thick rubber discharge chute covers the discharge opening to limit the throw distance of clippings.	
72" BASE DECK CONST.	7-gauge (4.5 mm) 4.25" steel (11 cm) deep; welded deck. Requires Guardian® Recycler® or rear discharge completion kit.	
FINE CUT GUARDIAN® COMPLETION KIT	Three deflectors inside the chamber redirect clippings that are elevated in the chambers so that they are cut and re-cut. Deck chambers prevent throwing of objects out from deck.	
SPINDLE ASSEMBLY	Ductile cast iron 9" (23 cm) diameter conical spindle housing; Dual greaseable tapered roller bearings; Spindle shaft is 1.25" (3.2 cm) diameter, solid cold finished steel, and splined connection between spindle shaft and pulley; Welded blade retainer plus anti-scalp cups.	
CUTTER DRIVE BLADES	Isolation mounted, splined PTO-driven gearbox transfers power to three separate spindles via two separate "B" section belts.	
DECK SUSPENSION	Three 0.25" (6 mm) thick, 2.5" (63 mm) wide, heat-treated steel blades.	
BELT IDLER	Frame which supports deck via 4 vertically suspended chains. Front drag links provide fore/aft and left/right stability. Hydraulic deck lift includes load holding check valves and gravity lower. Weight transfer system consisting of two torsion springs counterbalances some cutting deck weight to reduce turf damage.	
DECK SKID	Spring loaded (torsion) idler.	
ANTI-SCALP CUPS	Replaceable, bolt-on, non-marking UHMW skid on both sides for Base decks and on left side on side discharge decks. Interchangeable left to right on base decks.	
	Anti-scalp cup located on each blade spindle.	

	DECK OPTIONS	
WIDTH OF CUT	Base: 72" (183 cm) with Guardian® kit, fine cut Guardian kit, or rear discharge kit	Side Discharge: 72" (183 cm)
BLADE TIP SPEED @ 3250 ENGINE RPM	16,000 ft ± 1,000 ft./min (4877 m ± 305 m/min)	18,000 ft ± 1,000 ft./min (5486 m ± 305 m/min)
RUBBER DISCHARGE CHUTE	NA	Yes, 5/16" (8 mm) thick
CUTTING DECK DEPTH	4.25" (108 mm)	5.5" (140 mm)
DECK ANTI-SCALP ROLLERS	4	5
BUMPER SKIDS	2	1

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The Groundsmaster 360 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 360 Attachments Specifications*

	GROUNDMASTER 360 – 2WD TIER 4 INTERIM DIESEL MODELS 30534(N), 30536(N)	GROUNDMASTER 360 – 4WD TIER 4 INTERIM DIESEL MODELS 30537(N), 30539(N)	GROUNDMASTER 360 – CAB TIER 4 INTERIM DIESEL MODELS 30540(N), 30542(N)
	CUTTING DECK SPECIFIC ACCESSORIES FOR 72" SIDE DISCHARGE DECK (NON-CE)		
RECYCLER KIT	Model 30347		
LEAF MULCHING KIT	Part No. 108-5273		
MEDIUM FLOW BLADE	Part No. 110-0621-03		
HIGH FLOW BLADE	Part No. 110-0622-03		
ATOMIC MULCHING BLADE	Part No. 110-0624-03		
BLADE AND BELT KIT	Part No. 105-7272		
	CUTTING DECK SPECIFIC ACCESSORIES FOR 72" BASE DECK		
COMPLETION KITS (BLADES & BAFFLES)	72" Fine Cut Guardian recycler completion kit – Model 30346, 72" Guardian recycler completion Kit – Model 30304, 72" rear discharge completion kit – Model 30549		
STANDARD BLADE	Part No. 108-1958		
FLAT BLADE	(72" Rear Discharge Guardian Deck Only) Part No. 112-9586		
TALL GRASS BAFFLE KIT	Improves cut of tall grass with seed heads. Part No. 105-7269		
STANDARD BLADE & BELT KIT	Part No. 105-7271		

	100" CUTTING DECK, MODEL 31101
HEIGHT OF CUT	1"-5" (25 - 127 mm) adjustable in 0.25" (6 mm) increments
WIDTH OF CUT	100 in (254cm), by five blades
DECK CONSTRUCTION	Center deck with two wing decks; Welded .120" (11 gauge) high strength steel with steel .180" (7 gauge) stiffener plates and .1046" (12 gauge) chambers.
DISCHARGE	Rear Discharge – complete width of deck.
WING DECK ARTICULATION	15 degrees, up or down.
SPINDLE ASSEMBLY	Ductile cast iron 9" (23 cm) diameter conical spindle housing; Dual greaseable tapered roller bearings; Spindle shaft is 1.25" (3.2 cm) diameter, solid cold finished steel, and splined connection between spindle shaft and pulley; Welded blade retainer plus anti-scalp cups.
CUTTER DRIVE	Isolation mounted, PTO driven gearbox with 1.25:1 spiral bevel gears. "B" section belt drive to all spindles.
BLADES	Wing Decks: 25.2" (64cm) long, .25" (6mm) thick, 2.5 (63mm) wide, heat treated steel blade in each wing; Center Deck: Three 18"(45.7cm) long, .25" (6mm) thick, 2.5" (63mm) wide, heat treated steel blades.
BLADE TIP SPEED	16,000 ± 1,000 ft/min at 3250 engine rpm
DECK SUSPENSION	Center deck is supported via 4 vertically suspended chains to the frame of the machine. Wing decks are supported by pin connections to center deck and castor wheels on the ground. Hydraulic deck lift includes load holding check valves and gravity lower.
CASTOR WHEELS	Four 8 x 3.50-4, 4-ply, smooth, pneumatic, sealed precision ball bearings. Tensioning caps, made from impact modified thermoplastic alloy, are used to hold the castor wheels on the castor arms.
BELT IDLER	Fixed and spring loaded idlers.
DECK SKID	Replaceable, bolt-on, non-marking UHMW skid on both sides.
DECK ANTI-SCALP ROLLERS	5
ANTI-SCALP CUPS	Anti-scalp cup located on each blade spindle.
DECK COVERS	Steel and plastic with rubber latch connectors.
CUTTING DECK DEPTH	4.25" (108 mm)
WING DECK TRANSPORT LOCKS	Manual latches (standard)
WEIGHT	Approximately 790 lbs (358 kg)
WIDTH	Mow: 108" (274 cm) Transport: Overall width with wing decks raised: 88 in (223.5 cm); center deck is 54.5 in (138.4 cm) wide and 5" (12.7 cm) off ground when raised.
REQUIRED EQUIPMENT	Specific completion kit for each Groundsmaster 360 model with > 32hp engine. Check with Toro Distributor for details
OPTIONAL ACCESSORIES	Leaf Mulching Kit (Model 31105) Available in July 2014
CERTIFICATION	Cutting unit meets specification of American National Standard ANSI B71.4-2012, Safety Specifications for commercial turf care equipment. Cutting unit meets specifications of European standard prEN836, CE approved.
MOWING RATE	Mow up to 8.0 acres/hr (3.2 hectare/hr) at 8 mph (12.9 km/hr). Assumes no overlap and 100% efficiency.
WARRANTY	Two year limited

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The Groundsmaster 360 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 360 Attachments Specifications*



SNOWTHROWER, ERSKINE MODEL 1600**	
STAGE	2
WIDTH OF CUT	53" (135 cm)
CUTTING HEIGHT	22" (56 cm)
CUTTING EDGE	51" (130 cm) bolt-on
SKID SHOES	Adjustable/Hardened
AUGER DIAMETER	12" (30 cm) open flight
FAN DIAMETER	16" (41 cm)
CHUTE ROTATION	Hydraulic
SHEAR PROTECTION	Pressure relief
CASTING DISTANCE	Up to 25' (7.62 m)
APPROXIMATE SHIPPING WEIGHT	418 lbs. (190 kg)
HOSES	Included



PRO FORCE® DEBRIS BLOWER, MODEL 44547	
TRACTION UNIT	Works with Groundsmaster 360 4WD models only
TYPE	Turbine debris blower. PTO Shaft-driven off the engine.
QAS MOUNT	Front Quick Attach System (QAS) 30509, required.
NOZZLE ROTATION	245 degrees
OPERATION HEIGHT	Adjustable, 4.5" to 8.5" off the ground.



ROTARY BROOM, M-B MODEL MCT***	
TYPE	MECHANICAL Windrow type, front mounted mechanical drive broom. Hydraulic angling, 30 degrees left and right.
SWING	Swing pivot point inline with 50 degree CV joint
BROOM SIZE	25" (63.5 cm) diameter brush, 60" (152 cm) width.
BRUSH	Sectional brush with choice of polypropylene, wire or combination radial segments.
SHIPPING WEIGHT	60" Broom: 500 lbs., (227 kg).
OPTIONS	Hydraulic Swing Cylinder, Electric Swing Mechanism, Dirt Deflector, Storage Stands.

V-PLOW, MODEL 30750	
CUTTING WIDTH	48" (121.9 cm)
HITCH/MOUNT CONSTRUCTION	V-Plow Mounting Kit 30757 required for installation. All welded steel.

STRAIGHT BLADE, M-B MODEL DOZER BLADE***	
BLADE	Heavy-duty 10-gauge formed plate 60" (152.4 cm)
CUTTING EDGE	3/8"x 4"x 60" (.95 cm x 10.2 cm x 152.4 cm) high carbon steel bar; reversible
ANGLING	0-30 degrees infinitely left & right hydraulically operated
WIDTH	60" (152.4 cm)

POWERED V-PLOW, M-B MODEL V-PLOW**	
CONFIGURATION	This implement combines two useful snow attachments, V-plow and angled blade, into one.
ANGLING	0-30 degrees, left and right, hydraulically
BLADE WIDTHS	Straight – 57.5" (146 cm) "V" – 50" (127 cm) Scoop – 48.25" (123 cm) Angled – 61" (155 cm)
BLADE HEIGHT	23" (58 cm)
CUTTING EDGE	Bolt-on, trip edge
SKID SHOES	Adjustable, cast-hardened

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in design, required attachments and safety features. Consult your local Toro Distributor.

**Manufactured by Erskine. Attachment model ES1600. The Toro Company does not manufacture or sell the snowthrower, nor does Toro guarantee these accessories in any manner whatsoever.

***Manufactured by M-B Companies, Inc.

The Groundsmaster 360 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 360 2WD Specifications*



GROUNDMASTER 360 – 2WD, TIER 4 DIESEL, MODELS 31228, 31229		
ENGINE	Kubota,® 3-cylinder, liquid-cooled diesel. Power: 24.8 hp (18.5 kW) gross, at rated speed of 3000 rpm. Torque peak: 71.5 (52.7 Nm (lbs-ft) @ 2200 rpm. Displacement: 1123cc. High idle: 3200 rpm no load (uninstalled) 3100-3200 installed. Remote-mounted 5" Donaldson® air cleaner. Fuel filter/water separator. EPA Tier IV Final Compliant.	
FUEL CAPACITY	13.5 gallons (51.1 liters) diesel. Biodiesel Ready for use up to B-20 (20% biodiesel and 80% diesel blend).	
TRACTION DRIVE	Independent high-torque, low-speed wheel motors with 280 cc displacement. Dual pump hydrostatic drive system with optional differential lock.	
TIRES	Front & Rear: (All 4 tires and wheels are the same part number) 23/10.5x12 6 ply pneumatic tubeless, demountable and interchangeable. Tread Kenda K500 TL similar to "Toro Tuff Trac".	
AIR CLEANER	Dry, replaceable primary element.	
GAUGES	Hour meter, fuel gauge, indicator lights for glow plugs, high coolant temperature, battery charge, and low oil pressure. Automatic shutdown for high coolant temperature. Two wheel steer lockout indicator light on 4WD units.	
CONTROLS	Ignition switch, hand-throttle, foot-operated traction pedal with mowing speed control stop, service brake with parking brake latch, switch for raising and lowering cutting unit.	
GROUND SPEED	Transport and Mow: Forward 0-10 mph (0-16 km/h), variable. Reverse 0-8.5 mph (0-13.7 km/h), variable.	
RADIATOR	Rear mount, cross flow, 6.5 fins per 1" (25 mm), 8 quart (7.6 liter) capacity	
MAIN FRAME	Rectangular structured steel tube and high strength steel plate welded construction.	
BRAKES	Service Brake: Foot pedal with dynamic braking through hydrostatic transmission. Parking Brake: foot actuated brake lever with two 8" (20.3 cm) diameter drum brakes mounted on the rear wheel motors.	
STEERING	Quad Steer™ all wheel steer with four wheel Ackermann steering. Two turns Lock to Lock controlled via steering wheel and automatic synchronizing hydraulic cylinders.	
ELECTRICAL	12-volt, 40 amp internal regulated alternator/generator charging @ 3150 rpm. Battery: BCI Group No. 34, 690 cold cranking amps @ 0° F (-17.78° C).	
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, engine stops. If operator leaves the seat with the unit out of neutral, engine stops. Engine stops if parking brake engaged and traction pedal not in neutral. High temp (PTO shuts down but engine remains running), Over temp (engine shuts down).	
SEAT	High back cushion vinyl seat with drain hole, deluxe low profile mechanical suspension, 4" (10 cm) fore-aft travel with an additional 44 mm (1.75") foreword adjustment, armrests standard, retractable seat belt, lateral shock absorption.	
OPERATOR AREA	Operator platform with isolated operator seat (all models). Storage area behind operator seat, 12-volt power outlet, cup holder.	
HYDRAULICS/COOLING	3 gallon (11.4 liter) capacity, suction spin-on filter mounted to transmission, oil cooler 6.5" x 17"x 3.5" (16.5 cm x 43.2 cm x 8.9 cm). Bar and Plate Core; 6.5 serpentine fins per 1" (25 mm).	
PTO CLUTCH	Hydraulically actuated wet multi disc clutch.	
ROLL-OVER PROTECTION	2 post Standard foldable ROPS certified per ISO/DIS 21299.2 specifications	Cab ROPS certified
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2004)	
CERTIFICATION	Certified to meet SAE J2258. Certified to meet ISO/DIS 21299 for ROPS. Engine meets all applicable emission standards per the manufacturer. Certified to meet C-Tick 2004/108/EC/EMC). Certified to meet the CE Machinery Directive.	
WARRANTY	Two year limited	
DIMENSIONS & WEIGHT WITH CUTTING DECKS		
HEIGHT ROPS UP	78" (198 cm)	
OVERALL LENGTH	91.5" (232 cm)	
OVERALL WIDTH	78" (198 cm) [72" (183 cm) base deck] / 75" (191 cm) [72" (183 cm) side discharge deck] / 55" (140 cm) wheel to wheel	
WHEELBASE	57" (145 cm)	
EST. SHIPPING WEIGHT	2,522 lbs. (1145 kg)	

GROUNDMASTER 360 ATTACHMENTS AND ACCESSORIES	
PART NUMBER	
AIR RIDE GRAMMER SEAT	Air ride suspension and vinyl cushions. Model 30511.
SPARK ARRESTOR KIT	Part No. 119-8018
SPEED REDUCTION KIT	Model 30547
ROTATING BEACON KIT	Part No. 120-0256
BIMINI CANVAS SHADE	Model 30358
UNIVERSAL MOUNT SUNSHADE	Model 30349
DIFFERENTIAL LOCK	Model 30508
NORTH AMERICA ROAD LIGHT KIT	Includes headlights, red/amber flashers, turn signals and one rear work light. Model 30513
SMV SIGN KIT	Part No. 115-0014

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The Groundsmaster 360 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 360 2WD Specifications*



	CUTTING DECKS
HEIGHT OF CUT	1"-6" (25 - 152 mm) adjustable in 0.25" (6 mm) increments
72" SIDE DISCHARGE CONST.	7-gauge (4.5 mm) 5.5" steel (14 cm) deep; welded deck with grass discharged on the right side. An 5/16" (8 mm) thick rubber discharge chute covers the discharge opening to limit the throw distance of clippings.
72" BASE DECK CONST.	7-gauge (4.5 mm) 4.25" steel (11 cm) deep; welded deck. Requires Guardian® Recycler® or rear discharge completion kit.
FINE CUT GUARDIAN® COMPLETION KIT	Three deflectors inside the chamber redirect clippings that are elevated in the chambers so that they are cut and re-cut. Deck chambers prevent throwing of objects out from deck.
SPINDLE ASSEMBLY	Ductile cast iron 9" (23 cm) diameter conical spindle housing; Dual greaseable tapered roller bearings; Spindle shaft is 1.25" (3.2 cm) diameter, solid cold finished steel, and splined connection between spindle shaft and pulley; Welded blade retainer plus anti-scalp cups.
CUTTER DRIVE	Isolation mounted, splined PTO-driven gearbox transfers power to three separate spindles via two separate "B" section belts.
BLADES	Three 0.25" (6 mm) thick, 2.5" (63 mm) wide, heat-treated steel blades.
DECK SUSPENSION	Frame which supports deck via 4 vertically suspended chains. Front drag links provide fore/aft and left/right stability. Hydraulic deck lift includes load holding check valves and gravity lower. Weight transfer system consisting of two torsion springs counterbalances some cutting deck weight to reduce turf damage.
BELT IDLER	Spring loaded (torsion) idler.
DECK SKID	Replaceable, bolt-on, non-marking UHMW skid on both sides for Base decks and on left side on side discharge decks. Interchangeable left to right on base decks.
ANTI-SCALP CUPS	Anti-scalp cup located on each blade spindle.

	DECK OPTIONS	
WIDTH OF CUT	Base: 72" (183 cm) with Guardian® kit, fine cut Guardian kit, or rear discharge kit	Side Discharge (non-CE): 72" (183 cm)
BLADE TIP SPEED @ 3250 ENGINE RPM	16,000 ft ± 1,000 ft./min (4877 m ± 305 m/min)	18,000 ft ± 1,000 ft./min (5486 m ± 305 m/min)
RUBBER DISCHARGE CHUTE	NA	Yes, 5/16" (8 mm) thick
CUTTING DECK DEPTH	4.25" (108 mm)	5.5" (140 mm)
DECK ANTI-SCALP ROLLERS	4	5
BUMPER SKIDS	2	1

	CUTTING DECK SPECIFIC ACCESSORIES FOR 72" SIDE DISCHARGE DECK (NON-CE)
RECYCLER KIT	Model 30347
LEAF MULCHING KIT	Part No. 108-5273
MEDIUM FLOW BLADE	Part No. 110-0621-03
HIGH FLOW BLADE	Part No. 110-0622-03
ATOMIC MULCHING BLADE	Part No. 110-0624-03
BLADE AND BELT KIT	Part No. 105-7272

	CUTTING DECK SPECIFIC ACCESSORIES FOR 72" BASE DECK
72" FINE CUT GUARDIAN RECYCLER COMPLETION KIT	Model 30346
72" GUARDIAN RECYCLER COMPLETION KIT	Model 30304
72" REAR DISCHARGE COMPLETION KIT	Model 30549
STANDARD BLADE	Part No. 108-1958
FLAT BLADE	(72" Rear Discharge Guardian Deck Only) Part No. 112-9586
TALL GRASS BAFFLE KIT	Improves cut of tall grass with seed heads. Part No. 105-7269
STANDARD BLADE & BELT KIT	Part No. 105-7271

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The Groundsmaster 360 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 3500-D / 3500-G / 3505-D

A breakthrough rotary mower that delivers a superior quality of cut for trimming golf courses and striping sports fields.





Groundsmaster® 3500-G Specifications*

GROUNDMASTER 3500-G, GAS, MODEL 30809									
ENGINE	Kubota® 32.7 hp (24.4 kW) gas engine. 58.7 cu. in. (.962 liter) displacement. Oil capacity: 3.6 quarts (3.4 liters) with standard oil filter.								
FUEL CAPACITY	10 gallons (37.9 liters).								
CONFIGURATION	Rear mounted engine, front operator position. Two post ROPS, seat belt and slope indicator standard. Sidewinder™ cutting unit system.								
TRACTION DRIVE	3-wheel drive in mow and transport. Series/Parallel™ hydrostatic, closed-loop transmission provides infinitely variable ground speed in forward and reverse. Variable displacement piston type pump.								
GROUND SPEED/CLEARANCE	Mow: 0-6 mph (0-10 km/h), mow speed is factory preset at 6 mph but is adjustable; Transport: 0-9 mph (0-14km/h); Reverse: 0-4 mph (0-6 km/h). Ground Clearance: 6" (15.3 cm).								
CONTROLS	Forward and reverse traction control pedals; mow/transport foot lever; hand activated parking brake; hand operated ignition key switch; tilt steering wheel lock; PTO switch; throttle; joystick control for deck raise and lower as well as moving decks side-to-side; cutting deck transport lock.								
GAUGES & DIAGNOSTICS	Fuel gauge and hour meter. Light cluster with check engine and charge indicator lights, low engine oil pressure and high coolant temperature warning lights (high temperature safety shut off).								
ELECTRICAL & INTERLOCKS	Traction pedal, operator presence in seat, PTO engage or disengage, and cutting deck mow or transport safety interlock switches. Parking break set prohibits movement through traction pedal. 40 amp alternator and 12-volt, 585 CCA battery.								
HYDRAULICS	Open center, manual valves, gear pump hydraulic system. System capacity approximately 3.5 gallon (13.2 liter) reservoir.								
STEERING	Hydraulic power steering, tilt wheel.								
TIRES/WHEELS	20 x 12-10, 4-ply rating, Turf Tread front tires. 20 x 10-10, 4-ply rating, Turf Tread rear tires.								
BRAKES	Dynamic through hydrostatic transmission service brake. Hand actuated over center, drum type parking brake.								
OVERALL DIMENSIONS	<table border="1"> <thead> <tr> <th>Height</th> <th>Length</th> <th>Width</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>70.8" (180 cm) w/ROPS</td> <td>116" (295 cm)</td> <td>71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC</td> <td>59.5" (151 cm)</td> </tr> </tbody> </table>	Height	Length	Width	Wheelbase	70.8" (180 cm) w/ROPS	116" (295 cm)	71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC	59.5" (151 cm)
Height	Length	Width	Wheelbase						
70.8" (180 cm) w/ROPS	116" (295 cm)	71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC	59.5" (151 cm)						
WEIGHT	2,145 lbs. (1,075 kg) with cutting units.								
WARRANTY	Two-year limited warranty. Refer to operator's manual for further details.								
CERTIFICATION	Complies with ANSI B71.4-2004 and European Community (CE) with required rear ballast.								
CUTTING DECKS									
TYPE	3 Contour™ Plus 27" (69 cm) rear-discharge rotary with rear roller on each deck. Sidewinder system allows all three decks to slide right and left 12" (30 cm) of center, 24" (61 cm) total travel. Mulching kit optional.								
WIDTH OF CUT	68" (173 cm), standard and 72" (183 cm) optional. Deck overhang for trimming is 12" (30.5 cm) at 68" (173 cm) width of cut and 14" (35 cm) at 72" (183 cm). Overlap: 6.5" (16.5 cm) at standard width of cut.								
HEIGHT OF CUT	.75"-4" (1.9-10.2 cm) in .25" (.6 cm) increments.								
MOWING RATE	Mows up to 4.1 acres/h (1.7 hectares/h) at 6 mph (10 km/h) (assumes no overlap or stops).								
CONSTRUCTION	10-gauge steel constructed chambers with 12-gauge welded reinforcements. 1.5" (3.8 cm) square x .25" (.6 cm) wall tube with 7-gauge side supports. Spindle support 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels.								
SPINDLE ASSEMBLY	Ductile cast iron spindle housing. Dual greaseable tapered roller bearings. 1.25" (3.2 cm) diameter solid cold finished steel spindle shaft. Splined connection between spindle shaft and pulley. Welded blade retainer plus anti-scalp cups.								
ANTI-SCALP FEATURES	6" (15 cm) anti-scalp cups on each blade.								
MULCHING KIT	Model 30836								
ACCESSORIES									
BIMINI SUNSHADE	Model 30358								
WORK LIGHT	Model 30841								

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The Groundsmaster 3500-G is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 3500-D Specifications*

GROUNDMASTER 3500-D, TIER 4 INTERIM DIESEL, MODEL 30839(N)									
ENGINE	Kubota® 35 hp (26.1 kW) turbo-charged, liquid-cooled, 3-cylinder, diesel engine. Available power: 32 hp (23.9 kW) at 2800 rpm. 67.1 cu. in. (1.1 liter) displacement governed to a maximum speed of 3050 rpm. Oil capacity 4 quart (3.8 liter) with standard oil filter. Rear-mounted, cross flow 4-row radiator. EPA Tier IV Interim Compliant.								
FUEL CAPACITY	11 gallons (42 liters). 2008 models Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).								
CONFIGURATION	Rear mounted engine, front operator position. Two post ROPS, seat belt and slope indicator standard. Sidewinder™ cutting unit system.								
TRACTION DRIVE	3-wheel drive in mow and transport. Series/Parallel™ hydrostatic, closed-loop transmission provides infinitely variable ground speed in forward and reverse. Variable displacement piston type pump.								
GROUND SPEED/CLEARANCE	Mow: 0-6 mph (0-10 km/h), mow speed is factory preset at 6 mph but is adjustable; Transport: 0-9 mph (0-14km/h); Reverse: 0-4 mph (0-6 km/h). Ground Clearance: 6" (15.3 cm).								
CONTROLS	Forward and reverse traction control pedals; mow/transport foot lever; hand activated parking break; hand operated ignition key switch; tilt steering wheel lock; PTO switch; throttle; joystick control for deck raise and lower as well as moving decks side-to-side; cutting deck transport lock.								
GAUGES & DIAGNOSTICS	Fuel gauge and hour meter. Light cluster with glow plug and charge indicator lights, amp, low engine oil pressure and high coolant temperature warning lights (high temperature safety shut off).								
ELECTRICAL & INTERLOCKS	Traction pedal, operator presence in seat, PTO engage or disengage, and cutting deck mow or transport safety interlock switches. Parking break set prohibits movement through traction pedal. 40 amp alternator and 12-volt, 585 CCA battery.								
HYDRAULICS	Open center, manual valves, gear pump hydraulic system. System capacity approximately 3.5 gallon (13.2 liter) reservoir.								
STEERING	Hydraulic power steering, tilt wheel.								
TIRES/WHEELS	20 x 10-10, 4-ply rating, Turf Tread rear tires. 20 x 12-10, 4-ply rating, Turf Tread front tires.								
BRAKES	Dynamic through hydrostatic transmission service brake. Hand actuated over center, drum type parking brake.								
OVERALL DIMENSIONS	<table border="1"> <thead> <tr> <th>Height</th> <th>Length</th> <th>Width</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>70.8" (180 cm) w/ROPS</td> <td>116" (295 cm)</td> <td>71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC</td> <td>59.5" (151 cm)</td> </tr> </tbody> </table>	Height	Length	Width	Wheelbase	70.8" (180 cm) w/ROPS	116" (295 cm)	71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC	59.5" (151 cm)
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WEIGHT	2,200 lbs. (1,100 kg) with cutting units.								
WARRANTY	Two-year limited warranty. Refer to operator's manual for further details.								
CERTIFICATION	Complies with ANSI B71.4-2004 and European Community (CE) with required rear ballast.								
CUTTING DECKS									
TYPE	3 Contour™ Plus 27" (69 cm) rear-discharge rotary with rear roller on each deck. Sidewinder system allows all three decks to slide right and left 12" (30 cm) of center, 24" (61 cm) total travel. Mulching kit optional.								
WIDTH OF CUT	68" (173 cm), standard and 72" (183 cm) optional. Deck overhang for trimming is 12" (30.5 cm) at 68" (173 cm) width of cut and 14" (35 cm) at 72" (183 cm). Overlap: 6.5" (16.5 cm) at standard width of cut.								
HEIGHT OF CUT	.75"-4" (1.9-10.2 cm) in .25" (.6 cm) increments.								
MOWING RATE	Mows up to 4.1 acres/h (1.7 hectares/h) at 6 mph (10 km/h) (assumes no overlap or stops).								
CONSTRUCTION	10-gauge steel constructed chambers with 12-gauge welded reinforcements. 1.5" (3.8 cm) square x .25" (.6 cm) wall tube with 7-gauge side supports. Spindle support 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels.								
SPINDLE ASSEMBLY	Ductile cast iron spindle housing. Dual greaseable tapered roller bearings. 1.25" (3.2 cm) diameter solid cold finished steel spindle shaft. Splined connection between spindle shaft and pulley. Welded blade retainer plus anti-scalp cups.								
ANTI-SCALP FEATURES	6" (15 cm) anti-scalp cups on each blade.								
MULCHING KIT	Model 30836								
ACCESSORIES									
BIMINI SUNSHADE	Model 30358								
WORK LIGHT	Model 30841								

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The Groundsmaster 3500-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 3500-D Specifications*



GROUNDMASTER 3500-D, TIER 4 DIESEL MODEL 30807									
ENGINE	Kubota® 3-cylinder, liquid-cooled diesel. Power: 24.8 hp (18.5 kW) gross, at rated speed of 3000 rpm. Torque peak: 71.5 (52.7) Nm (lbs-ft) @ 2200 rpm. Displacement: 1123cc. High idle: 3200 rpm no load (uninstalled) 3100-3200 installed. Remote-mounted 5" Donaldson® air cleaner. Fuel filter/water separator. Oil capacity 4 quarts (3.8 liters) with standard oil filter. Rear-mounted, cross flow 4-row radiator. EPA Tier IV Final Compliant.								
FUEL CAPACITY	11 gallons (42 liters). 2008 models Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).								
CONFIGURATION	Rear mounted engine, front operator position. Two post ROPS, seat belt.								
TRACTION DRIVE	3-wheel drive in mow and transport. Series/Parallel™ hydrostatic, closed-loop transmission provides infinitely variable ground speed in forward and reverse. Variable displacement piston type pump.								
GROUND SPEED/CLEARANCE	Mow: 0-6 mph (0-10 km/h), mow speed is factory preset at 6 mph but is adjustable; Transport: 0-9 mph (0-14km/h); Reverse: 0-4 mph (0-6 km/h). Ground Clearance: 6" (15.3 cm).								
CONTROLS	Forward and reverse traction control pedals; mow/transport foot lever; hand activated parking break; hand operated ignition key switch; tilt steering wheel lock; PTO switch; throttle; joystick control for deck raise and lower; cutting deck transport lock.								
GAUGES & DIAGNOSTICS	Fuel gauge and hour meter, light cluster with glow plug and charge indicator lights, low engine oil pressure and high coolant temperature warning lights (high temperature safety shut off).								
ELECTRICAL & INTERLOCKS	Traction pedal, operator presence in seat, PTO engage or disengage, and cutting deck mow or transport safety interlock switches. Parking break set prohibits movement through traction pedal. 40 amp alternator and 12-volt, 585 CCA battery.								
HYDRAULICS	Open center, manual valves, gear pump hydraulic system. System capacity approximately 3.5 gallon (13.2 liter) reservoir.								
STEERING	Hydraulic power steering, tilt wheel.								
TIRES/WHEELS	20 x 10-10, 4-ply rating, Turf Tread tires. 20 x 12-10, 4-ply rating, Turf Tread Fronts.								
BRAKES	Dynamic through hydrostatic transmission service brake. Hand actuated over center, drum type parking brake.								
OVERALL DIMENSIONS	<table border="1"> <thead> <tr> <th>Height</th> <th>Length</th> <th>Width</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>70.8" (180 cm) w/ROPS</td> <td>116" (295 cm)</td> <td>71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC</td> <td>59.5" (151 cm)</td> </tr> </tbody> </table>	Height	Length	Width	Wheelbase	70.8" (180 cm) w/ROPS	116" (295 cm)	71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC	59.5" (151 cm)
Height	Length	Width	Wheelbase						
70.8" (180 cm) w/ROPS	116" (295 cm)	71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC	59.5" (151 cm)						
WEIGHT	2,095 lbs. (950 kg) with cutting units.								
WARRANTY	Two-year limited warranty. Refer to operator's manual for further details.								
CERTIFICATION	Complies with ANSI B71.4-2004 and European Community (CE) with required rear ballast.								
CUTTING DECKS									
TYPE	3 Contour™ Plus 27" (69 cm) rear-discharge rotary with rear roller on each deck. Sidewinder system allows all three decks to slide right and left 12" (30 cm) of center, 24" (61 cm) total travel. Mulching kit optional.								
WIDTH OF CUT	68" (173 cm), standard and 72" (183 cm) optional. Deck overhang for trimming is 12" (30.5 cm) at 68" (173 cm) width of cut and 14" (35 cm) at 72" (183 cm). Overlap: 6.5" (16.5 cm) at standard width of cut.								
HEIGHT OF CUT	.75-4" (1.9-10.2 cm) in .25" (.6 cm) increments.								
MOWING RATE	Mows up to 4.1 acres/h (1.7 hectares/h) at 6 mph (10 km/h) (assumes no overlap or stops).								
CONSTRUCTION	10-gauge steel constructed chambers with 12-gauge welded reinforcements. 1.5" (3.8 cm) square x .25" (.6 cm) wall tube with 7-gauge side supports. Spindle support 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels.								
SPINDLE ASSEMBLY	Ductile cast iron spindle housing. Dual greaseable tapered roller bearings. 1.25" (3.2 cm) diameter solid cold finished steel spindle shaft. Splined connection between spindle shaft and pulley. Welded blade retainer plus anti-scalp cups								
ANTI-SCALP FEATURES	6" (15 cm) anti-scalp cups on each blade.								
MULCHING KIT	Model 30836								
ACCESSORIES									
BIMINI SUNSHADE	Model 30358								
WORK LIGHT	Model 30841								

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The Groundsmaster 3500-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 3505-D Specifications*



GROUNDMASTER 3505-D, TIER 4 DIESEL, MODEL 30849									
ENGINE	Kubota® 3-cylinder, liquid-cooled diesel. Power: 24.8 hp (18.5 kW) gross, at rated speed of 3000 rpm. Torque peak: 71.5 (52.7) Nm (lbs-ft) @ 2200 rpm. Displacement: 1123cc. High idle: 3200 rpm no load (uninstalled) 3100-3200 installed. Remote-mounted 5" Donaldson® air cleaner. Fuel filter/water separator. Oil capacity 4 quarts (3.8 liters) with standard oil filter. Rear-mounted, cross flow 4-row radiator. EPA Tier IV Final Compliant.								
FUEL CAPACITY	11 gallons (42 liters). 2008 models Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).								
CONFIGURATION	Rear mounted engine, front operator position. Two post ROPS, seat belt.								
TRACTION DRIVE	2WD hydrostatic, closed-loop transmission provides infinitely variable ground speed in forward and reverse. Variable displacement piston type pump.								
GROUND SPEED/CLEARANCE	Mow: 0-6 mph (0-10 km/h), mow speed is factory preset at 6 mph but is adjustable; Transport: 0-9 mph (0-14km/h); Reverse: 0-4 mph (0-6 km/h). Ground Clearance: 6" (15.3 cm).								
CONTROLS	Forward and reverse traction control pedals; mow/transport foot lever; hand activated parking break; hand operated ignition key switch; tilt steering wheel lock; PTO switch; throttle; joystick control for deck raise and lower; cutting deck transport lock.								
GAUGES & DIAGNOSTICS	Fuel gauge, engine coolant temperature gauge, and hour meter. Light cluster with glow plug and charge indicator lights, amp, low engine oil pressure and high coolant temperature warning lights (high temperature safety shut off).								
ELECTRICAL & INTERLOCKS	Traction pedal, operator presence in seat, PTO engage or disengage, and cutting deck mow or transport safety interlock switches. Parking break set prohibits movement through traction pedal. 40 amp alternator and 12-volt, 585 CCA battery.								
HYDRAULICS	Open center, manual valves, gear pump hydraulic system. System capacity approximately 3.5 gallon (13.2 liter) reservoir.								
STEERING	Hydraulic power steering, tilt wheel.								
TIRES/WHEELS	20 x 10-10, 4-ply rating, Turf Tread tires.								
BRAKES	Dynamic through hydrostatic transmission service brake. Hand actuated over center, drum type parking brake.								
OVERALL DIMENSIONS	<table border="1"> <thead> <tr> <th>Height</th> <th>Length</th> <th>Width</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>70.8" (180 cm) w/ROPS</td> <td>116" (295 cm)</td> <td>71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC</td> <td>59.5" (151 cm)</td> </tr> </tbody> </table>	Height	Length	Width	Wheelbase	70.8" (180 cm) w/ROPS	116" (295 cm)	71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC	59.5" (151 cm)
Height	Length	Width	Wheelbase						
70.8" (180 cm) w/ROPS	116" (295 cm)	71.8" (182 cm) with 68" (173 cm) WOC 75.8" (193 cm) with 72" (183 cm) WOC	59.5" (151 cm)						
WEIGHT	2,095 lbs. (950 kg) with cutting units.								
WARRANTY	Two-year limited warranty. Refer to operator's manual for further details.								
CERTIFICATION	Complies with ANSI B71.4-2004 and European Community (CE) with required rear ballast.								
CUTTING DECKS									
TYPE	3 Contour™ Plus 27" (69 cm) rear-discharge rotary with rear roller on each deck. Mulching kit optional.								
WIDTH OF CUT	72" (183 cm), standard. Deck overhang 4.5" (11.4 cm) per side.								
HEIGHT OF CUT	.75-4" (1.9-10.2 cm) in .25" (.6 cm) increments.								
MOWING RATE	Mows up to 4.1 acres/h (1.7 hectares/h) at 6 mph (10 km/h) (assumes no overlap or stops).								
CONSTRUCTION	10-gauge steel constructed chambers with 12-gauge welded reinforcements. 1.5" (3.8 cm) square x .25" (.6 cm) wall tube with 7-gauge side supports. Spindle support 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels.								
SPINDLE ASSEMBLY	Ductile cast iron spindle housing. Dual greaseable tapered roller bearings. 1.25" (3.2 cm) diameter solid cold finished steel spindle shaft. Splined connection between spindle shaft and pulley. Welded blade retainer plus anti-scalp cups								
ANTI-SCALP FEATURES	6" (15 cm) anti-scalp cups on each blade.								
MULCHING KIT	Model 30836								
ACCESSORIES									
BIMINI SUNSHADE	Model 30358								
WORK LIGHT	Model 30841								

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The Groundsmaster 3505-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4000-D & 4010-D

The most powerful rotary mower in its class, this 11' performer delivers unsurpassed productivity and quality of cut.



Groundsmaster® 4000-D
Model 30448N



Groundsmaster® 4010-D
Model 30446N



Groundsmaster® 4000-D/4010-D Specifications*

GROUNDMASTER 4000-D, MODEL 30448(N) / GROUNDMASTER 4010-D, MODEL 30446(N)											
ENGINE	Kubota® V2403-M-T, 4-cylinder, liquid-cooled, turbo-charged diesel. 148.5 cu. in. (2.4 liter) displacement. Engine rated at 60 hp (45 kW) gross, 58 hp (43.3 kW) net and 125 ft.-lbs. torque at 2,000 rpm. 10 quart (9.5 liter) oil capacity. EPA Tier IV Interim Compliant.										
AIR CLEANER	Dry, replaceable primary and safety elements.										
RADIATOR	Rear-mount, 2 pass cross-flow, 7-row, 5 fins per inch, 13 quart (12.3 liter) capacity.										
FUEL CAPACITY	19 gallons (72 liters) diesel fuel. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).										
TRACTION DRIVE	Full-time, bi-directional, hydrostatic, closed-loop, 4WD transmission. Variable displacement piston pump with servo control powers fixed displacement piston motors which drive single reduction planetary gear assemblies at each front wheel. Parallel hydraulic flow powers fixed displacement piston motor which drives mechanical axle in rear. 2WD in forward (transport) range.										
HYDRAULICS/COOLING	8 gallon (30.3 liter) capacity with 2 micron remote spin-on filter. 19 row, single pass cooler that tilts out for cleaning. Variable speed radiator cooling fan with automatic (based on coolant and oil temps) and manual reversing capabilities.										
DIAGNOSTICS	Diagnostic pressure test ports: forward and reverse traction, left, center and right decks, reverse 4WD, lift, steering, charge and deck counterbalance circuits.										
GROUND SPEED	Transport: 0-15 mph (0-24.2 km/h) forward, 0-9 mph (0-14.4 km/h) reverse. Mow: 0-8 mph (0-12.4 km/h) forward, 0-4 mph (0-6.4 km/h) reverse.										
TIRES	Front: 26 x 12-12, 6-ply tubeless Multi-Tread. Rear: 20 x 10-10, 6-ply tubeless Multi-Tread.										
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.										
BRAKES	Mechanically actuated, internal wet disc brakes on input to each planetary drive. Individual foot-operated steering brake control of left and right wheel. Lock pedals together and latch to engage parking brake.										
SEAT	4-way adjustable, right armrest travels with seat and suspension.										
STEERING	Power steering with dedicated power source. Steering wheel tilts to desired operator position.										
GAUGES	Hour meter, fuel gauge, engine temperature gauge. Indicator lights for high temperature, oil pressure, alternator and glow plugs. Audible alarm for low oil pressure and high coolant temperature.										
CONTROLS	Tilt steering, ignition switch, throttle, foot-operated traction pedal, lockable individual brake pedals, parking brake lock, mow/transport speed selector switch, 3-two position switches for individual deck lift/lower, counterbalance adjustment, tow valve, cup holder, toolbox, radio holder, fan switch and 12-volt power outlet.										
ELECTRICAL	12-volt, 690 cold cranking amps battery, 40 amp alternator. Overload protection with automotive type fuses.										
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, engine stops. Mowing only permitted in low range. Engine stops if parking brake engaged and traction pedal not in neutral. Deck transport latches.										
GROUND CLEARANCE	6.5" (16.5 cm)										
OVERALL DIMENSIONS	<table border="1"> <thead> <tr> <th>Height</th> <th>Length</th> <th>Width</th> <th>Transport Width</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>81" (206 cm) w/ROPS</td> <td>135" (343 cm) w/decks down</td> <td>136" (346 cm) w/decks down</td> <td>71" (180 cm) @ 2" (5 cm) HOC</td> <td>55.5" (140 cm)</td> </tr> </tbody> </table>	Height	Length	Width	Transport Width	Wheelbase	81" (206 cm) w/ROPS	135" (343 cm) w/decks down	136" (346 cm) w/decks down	71" (180 cm) @ 2" (5 cm) HOC	55.5" (140 cm)
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WEIGHT	4,166 lbs. (1889 kg) w/ full fluids (GM4000). 4,595 lbs. (2089 kg) w/ full fluids (GM4010).										
FUEL ECONOMY (4000)**	<table border="1"> <thead> <tr> <th>Acres per Gallon</th> <th>Mowing Range</th> <th>Fuel Consumption</th> </tr> </thead> <tbody> <tr> <td>5.0</td> <td>12.1 hours</td> <td>1.57 Gal/Hr (5.95 L/Hr)</td> </tr> </tbody> </table>	Acres per Gallon	Mowing Range	Fuel Consumption	5.0	12.1 hours	1.57 Gal/Hr (5.95 L/Hr)				
Acres per Gallon	Mowing Range	Fuel Consumption									
5.0	12.1 hours	1.57 Gal/Hr (5.95 L/Hr)									
SAFETY CAB (4010)	Factory installed, ROPS certified, climate controls (AC & heating), opening rear window, front wiper/washer, interior mirror, exterior side mirrors, 4-way flashers and turn signals.										
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2012) and applicable CE (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements; Meets ANSI/ ASAE 5279.12 (Lighting and Marking of Agricultural Equipment on Highways).										
WARRANTY	Two-year limited warranty. Refer to Operator's Manual for further details.										
ACCESSORIES	Work light kit model 30442 (Consists of dual taillights, dual headlights, slow moving vehicle sign, turn signal, flasher and lights). Cruise control kit – model 30421, sunshade – model 30349, rotary broom – model 30426										
CUTTING DECKS											
WIDTH OF CUT	Overall: 132" (335 cm), Front: 62" (157.5 cm), Wings: 42" (106.7 cm), Overlap: 7" (12.8 cm).										
MOWING RATE	Mows up to 10.6 acres/h (4.3 hectares/h) at 8 mph (12.4 km/h) (assumes no overlap or stops).										
CONSTRUCTION	Welded .100" (25 mm) steel with 7 and 10-gauge steel channel and plate reinforcements, bullnose bumpers.										
DECK DRIVE	Direct mounted hydraulic motor into spindle. Remaining spindle(s) driven by individual B section kevlar belt. Quick release belt covers.										
HEIGHT-OF-CUT	1"-5" (25-127 mm) in .5" (13 mm) increments.										
SPINDLES	1.25" (3.17 cm) diameter spindle shafts, 9" (22.9 cm) diameter conical ductile iron housing, and 2 greaseable tapered roller bearings.										
BLADES	21.75" (55.2 cm) long, 2.5" (6.4 cm) wide, .25" (.64 cm) thick.										
CASTER WHEELS	8 x 3.50-4, 4-ply, smooth, pneumatic, sealed precision ball bearings.										
GROUND FOLLOWING	6" anti-scalp cups on each blade, adjustable skids on each deck, 4 anti-scalp rollers on front deck and 1 on each wing.										
WING PROTECTION	Bi-directional, impact absorption device on each wing deck.										
RECYCLER® KIT	Model 30420 will convert decks into Guardian® Recycler® decks.										
MULCHING KIT	Model 30422.										
SKIDS	Reversible polymetric.										

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.

**Dependent on operator and turf conditions.

The Groundsmaster 4000-D & 4010-D are manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4000-D/4010-D Specifications*



GROUNDMASTER 4000-D, TIER 4 DIESEL, MODEL 30609 / GROUNDMASTER 4010-D, TIER 4 DIESEL MODEL 30607											
ENGINE	Yanmar® 4-cylinder, liquid-cooled, turbo-charged diesel. 127 cu. in. (2.1 liter) displacement. Engine rated at 55 hp (41 kW) net and 125 ft.-lbs. (169 Nm) torque at 2,000 rpm. 8 quart (7.6 liter) oil capacity. EPA Tier IV Final Compliant										
AIR CLEANER	Dry, replaceable primary and safety elements.										
RADIATOR	Rear-mount, cross-flow, 7-row, 6.3 fins per inch, 9 quart (8.5 liter) capacity.										
FUEL CAPACITY	21 gallons (79.5 liters) diesel fuel.										
TRACTION DRIVE	Parallel hydrostatic, closed loop system with full-time 4WD. Forward/reverse in low (mow) and high (transport) range with full-time, automatic traction assist (forward only) standard on Groundsmaster 4000-D models. Variable displacement piston pump with electronic servo control powers dual speed displacement piston motor drive into double reduction planetary in front, and mechanical axle in rear. SmartPower™ feature controls traction speed to maintain optimal cutting blade speed.										
HYDRAULICS/COOLING	8.75 gallon (33.1 liter) capacity with 10 micron remote spin-on filter. 9 row, single pass cooler, 6.3 fins per inch, that tilts out for cleaning. Variable speed radiator cooling fan with automatic (based on coolant and oil temps) and manual reversing capabilities.										
DIAGNOSTICS	Diagnostic pressure test ports: forward and reverse traction, left, center and right decks, reverse 4WD, lift, steering, charge and deck counterbalance circuits.										
GROUND SPEED	Transport: 0-16.2 mph (0-26.1 km/h) forward, 0-8.1 mph (0-13 km/h) reverse. Mow: 0-8.3 mph (0-13.4 km/h) forward, 0-4 mph (0-6.4 km/h) reverse.										
TIRES	Front: 26 x 12-12, 6-ply tubeless Multi-Trac. Rear: 20 x 10-10, 6-ply tubeless Multi-Trac.										
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.										
BRAKES	Mechanically actuated, internal wet disc brakes on input to each planetary drive. Individual foot-operated steering brake control of left and right wheel. Lock pedals together and latch to engage parking brake.										
SEAT	4-way adjustable, right armrest travels with seat and suspension.										
STEERING	Power steering with dedicated power source. Steering wheel tilts to desired operator position. Uncut circle: 0" diameter.										
INTSTRUMENTATION	InfoCenter™: Onboard LCD display shows gauges, alerts/faulsts, service reminders, electrical system diagnostics. Indicates fuel level, coolant temp, intake temperature, low oil pressure, alternator, engine hours, engine rpm, hydraulic oil temperature, voltage										
CONTROLS	Tilt steering, ignition switch, throttle switch, foot-operated traction pedal, lockable individual brake pedals, parking brake lock, mow/transport speed selector switch, 3-two position switches for individual deck lift/lower, counterbalance adjustment, tow valves, cup holder, toolbox, radio holder, fan switch and 12-volt power outlet.										
ELECTRICAL	12-volt, 690 cold cranking amps battery, 40 amp alternator (4000-D), 80 amp alternator (4010-D). Overload protection with automotive type fuses.										
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, engine stops. Mowing only permitted in low range. Engine stops if parking brake engaged and traction pedal not in neutral. Deck transport latches.										
GROUND CLEARANCE	6.5" (16.5 cm)										
OVERALL DIMENSIONS	<table border="1"> <thead> <tr> <th>Height</th> <th>Length</th> <th>Width</th> <th>Transport Width</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>85" (216 cm) w/ROPS up</td> <td>135" (343 cm) w/decks down</td> <td>136" (346 cm) w/decks down</td> <td>71" (180 cm) @ 2" (5 cm) HOC</td> <td>55.5" (140 cm)</td> </tr> </tbody> </table>	Height	Length	Width	Transport Width	Wheelbase	85" (216 cm) w/ROPS up	135" (343 cm) w/decks down	136" (346 cm) w/decks down	71" (180 cm) @ 2" (5 cm) HOC	55.5" (140 cm)
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WEIGHT	4,172 lbs. (1892 kg) w/ full fluids (GM4000). 4,460 lbs. (2023 kg) w/ full fluids (GM4010).										
SAFETY CAB (4010)	Factory installed, ROPS certified, climate controls (AC & heating), opening rear window, front wiper/washer, interior mirror, exterior side mirrors.										
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2012) and applicable CE (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements; Optional lights. Meets ANSI/ASAE 5279.12 (Lighting and Marking of Agricultural Equipment on Highways). Foldable ROPS, ISO 21299 certified.										
WARRANTY	Two-year limited warranty. Refer to Operator's Manual for further details.										
ACCESSORIES	Work light kit (model 30414 for 4000-D only): Consists of dual taillights, dual headlights, slow moving vehicle sign, turn signal, flasher and lights. Sunshade (model 30349). Accessory Wiring Kit (model 30666).										
CUTTING DECKS											
WIDTH OF CUT	Overall: 132" (335 cm), Front: 62" (157.5 cm), Wings: 42" (106.7 cm), Overlap: 7" (12.8 cm).										
MOWING RATE	Mows up to 10.6 acres/h (4.3 hectares/h) at 8 mph (12.4 km/h) (assumes no overlap or stops).										
CONSTRUCTION	Welded .100" (25 mm) steel with 7 and 10-gauge steel channel and plate reinforcements, bullnose bumpers.										
DECK DRIVE	Direct mounted hydraulic motor into spindle. Remaining spindle(s) driven by individual B section kevlar belt. Quick release belt covers.										
HEIGHT-OF-CUT	1"-5" (25-127 mm) in .5" (13 mm) increments.										
SPINDLES	1.25" (3.17 cm) diameter spindle shafts, 9" (22.9 cm) diameter conical ductile iron housing, and 2 greaseable tapered roller bearings.										
BLADES	21.75" (55.2 cm) long, 2.5" (6.4 cm) wide, .25" (.64 cm) thick.										
CASTER WHEELS	8 x 3.50-4, 4-ply, smooth, pneumatic, sealed precision ball bearings.										
GROUND FOLLOWING	6" anti-scalp cups on each blade, adjustable skids on each deck, 4 anti-scalp rollers on front deck and 1 on each wing.										
WING PROTECTION	Bi-directional, impact absorption device on each wing deck handles 5 mph (8 kmh) impacts.										
RECYCLER® KIT	Model 30420 will convert decks into Guardian® Recycler® decks.										
MULCHING KIT	Model 30422.										
SKIDS	Reversible polymeric.										

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The Groundsmaster 4000-D & 4010-D are manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4000-D Attachment Specifications*



ROTARY BROOM, MB MODEL HCT**	
TYPE	Windrow type, front mounted hydraulic broom with dual motors. Electric/hydraulic angling, 30° left and right.
BROOM SIZE	32" (81 cm) diameter x 60" (153 cm) wide.
BRUSH	Sectional brush with combination polypropylene/wire radial segments.
WEIGHT	460 lbs. (209 kg)
OPTIONS	Dirt Deflector, Storage Stands.



SUNSHADE	
UNIVERSAL MOUNT	Model 30349



SNOWTHROWER ERSKINE MODEL 2000***	
STAGE	2
WIDTH OF CUT	61" (155 cm)
CUTTING HEIGHT	29" (74 cm)
CUTTING EDGE	3/8" x 3" (9.5 mm x 7.6 cm) bolt-on
SKID SHOES	Adjustable
AUGER DIAMETER	16" (41 cm) open flight
FAN DIAMETER	20" (51 cm) 4-blade
CHUTE ROTATION	Hydraulic 270°
SHEAR PROTECTION	Pressure relief
CASTING DISTANCE	Up to 30' (9.14 m)
APPROXIMATE SHIPPING WEIGHT	850 lbs. (386 kg)
HOSES	Included

*Specifications and design subject to change without notice.

** Manufactured by M-B Companies Inc.

*** Manufactured by Erskine Attachments.

Note: The Toro Company does not manufacture or sell the snowthrower or rotary broom, nor does Toro guarantee these accessories in any manner whatsoever.

The Groundsmaster 4000-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4100-D & 4110-D

A powerful 10.5 foot rotary mower that delivers 58 hp of muscle and productivity in an agile machine.



Groundsmaster® 4100-D
Model 30449N



Groundsmaster® 4110-D
Model 30447N



Groundsmaster® 4100-D & 4110-D Specifications*

GROUNDMASTER 4100-D, MODEL 30449(N) / GROUNDMASTER 4110-D, MODEL 30447(N)											
ENGINE	Kubota® 2403-M-T, 4-cylinder, liquid-cooled, turbo-charged diesel. 148.5 cu. in. (2.0 liter) displacement. Engine rated at 60 hp (44.8 kW) gross, 58 hp (43.3 kW) net and 125 ft.-lbs. torque at 2,000 rpm. 10 quart (9.5 liter) oil capacity. EPA Tier IV Interim Compliant.										
AIR CLEANER	Dry, replaceable primary and safety elements.										
RADIATOR	Rear-mount, 2 pass cross-flow, 7-row, 5 fins per inch, 13 quart (12.3 liter) capacity.										
FUEL CAPACITY	19 gallons (72 liters) diesel fuel. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).										
TRACTION DRIVE	Full-time, bi-directional, hydrostatic, closed-loop, 4WD transmission. Variable displacement piston pump with servo control powers fixed displacement piston motors which drive single reduction planetary gear assemblies at each front wheel. Parallel hydraulic flow powers fixed displacement piston motor which drives mechanical axle in rear. 2WD in forward (transport) range.										
HYDRAULICS/COOLING	8 gallon (30.3 liter) capacity with 2 micron remote spin-on filter. 19 row, single pass cooler that tilts out for cleaning. Variable speed radiator cooling fan with automatic (based on coolant and oil temps) and manual reversing capabilities.										
DIAGNOSTICS	Diagnostic pressure test ports: forward and reverse traction, left, center and right decks, reverse 4WD, lift, steering, charge and deck counterbalance circuits.										
GROUND SPEED	Transport: 0-15 mph (0-24.2 km/h) forward, 0-8 mph (0-12.9 km/h) reverse. Mow: 0-8.8 mph (0-14.2 km/h) forward, 0-4.8 mph (0-7.7 km/h) reverse.										
TIRES	Front: 26 x 12-12, 6-ply tubeless Multi-Trac. Rear: 20 x 10-10, 6-ply tubeless Multi-Trac.										
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.										
BRAKES	Mechanically actuated, internal wet disc brakes on input to each planetary drive. Individual foot-operated steering brake control of left and right wheel. Lock pedals together and latch to engage parking brake.										
SEAT	4-way adjustable, right armrest travels with seat and suspension.										
STEERING	Power steering with dedicated power source. Steering wheel tilts to desired operator position.										
GAUGES	Hour meter, fuel gauge, engine temperature gauge. Indicator lights for high temperature, oil pressure, alternator and glow plugs. Audible alarm for low oil pressure and high coolant temperature.										
CONTROLS	Tilt steering, ignition switch, throttle, foot-operated traction pedal, lockable individual brake pedals, parking brake lock, mow/transport speed selector switch, 3-two position switches for individual deck lift/lower, counterbalance adjustment, tow valve, cup holder, toolbox, radio holder, fan switch and 12-volt power outlet.										
ELECTRICAL	12-volt, 690 cold cranking amps battery, 40 amp alternator. Overload protection with automotive type fuses.										
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, engine stops. Mowing only permitted in low range. Engine stops if parking brake engaged and traction pedal not in neutral. Deck transport latches.										
GROUND CLEARANCE	6" (15.2 cm).										
OVERALL DIMENSIONS	<table border="1"> <thead> <tr> <th>Height</th> <th>Length</th> <th>Width</th> <th>Transport Width</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>81" (206 cm) w/ROPS</td> <td>144" (366 cm) w/decks down</td> <td>127" (323 cm) w/decks down</td> <td>71" (180 cm) @ 2" (5 cm) HOC</td> <td>55.5" (140 cm)</td> </tr> </tbody> </table>	Height	Length	Width	Transport Width	Wheelbase	81" (206 cm) w/ROPS	144" (366 cm) w/decks down	127" (323 cm) w/decks down	71" (180 cm) @ 2" (5 cm) HOC	55.5" (140 cm)
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81" (206 cm) w/ROPS	144" (366 cm) w/decks down	127" (323 cm) w/decks down	71" (180 cm) @ 2" (5 cm) HOC	55.5" (140 cm)							
WEIGHT	4,211 lbs. (1910 kg) w/ full fluids (GM4100). 4,715 lbs. (2143 kg) w/ full fluids (GM4110).										
FUEL ECONOMY (4100)**	Acres per Gallon - 4.7 (.5 Hectares/Gal) Mowing Range - 12.1 hours Fuel Consumption - 1.57 Gal/Hr (5.95 L/Hr)										
SAFETY CAB (4110)	Factory installed, ROPS certified, climate controls (AC & heating), opening rear window, front wiper/washer, interior mirror, exterior side mirrors, 4-way flashers and turn signals. meets ANSI/SAE 3279.12 (Lighting and Marking of Agricultural Equipment on Highways).										
SAFETY	Complies with American National Standards Institute (ANSI B71.4-1999) and applicable CE (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements; meets ANSI/SAE 5279.12 (Lighting and Marking of Agricultural Equipment on Highways).										
WARRANTY	Two-year limited warranty. Refer to Operator's Manual for further details.										
ACCESSORIES	Work light Kit, model 30442 (Consists of dual taillights, dual headlights, slow moving vehicle sign, turn signal, flasher and lights). 4WD Flow Divider Kit, model 30445. Rotary Broom, model 30426. Cruise Control Kit, model 30421. Mulching Kit, model 30419. Sunshade, model 30349.										
CUTTING DECK											
TYPE	All outfront rear discharge rotary cutting deck.										
WIDTH OF CUT	Overall: 124" (315 cm), Center deck section: 54" (137.1 cm), Two 37" (93 cm) width of cut wings. 89" (226 cm) width of cut with one wing up.										
MOWING RATE	Mows up to 9.9 acres/hr (4.0 hectares/hr) at 8 mph (12.4 km/hr). Assumes no overlap or stops.										
CONSTRUCTION	Welded .100" (25 mm) high-strength steel with steel 7 and 10-gauge channel and plate reinforcements.										
DECK DRIVE	Direct mounted hydraulic motor into spindle. Remaining spindle(s) driven by individual B section kevlar belt. Quick-release belt covers.										
HEIGHT-OF-CUT	1"-5" (25-127 mm) in .5" (13 mm) increments.										
SPINDLES	1.25" (3.17 cm) diameter spindle shafts, 9" (22.9 cm) diameter conical ductile iron housing, and 2 greaseable tapered roller bearings.										
BLADES	19" (48.3 cm) long, 2.5" (6.4 cm) wide, .25" (.64 cm) thick.										
CASTER WHEELS	8 x 3.50-4, 4-ply, smooth, pneumatic, sealed precision ball bearings.										
GROUND FOLLOWING	6" anti-scalp cups on each blade, adjustable skids, 3 anti-scalp rollers on front deck and 1 on each wing.										
PROTECTION	Impact absorption device on each wing deck.										
LEAF MULCHING KIT	Model 30419										

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.

**Dependent on operator and turf conditions.

The Groundsmaster 4100-D & 4110-D are manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4100-D/4110-D Specifications*



GROUNDMASTER 4100-D, MODEL 30608 / GROUNDMASTER 4110-D, MODEL 30606											
ENGINE	Yanmar® 4-cylinder, liquid-cooled, turbo-charged diesel. 127 cu. in. (2.1 liter) displacement. Engine rated at 55 hp (41 kW) net and 125 ft.-lbs. (169 Nm) torque at 2,000 rpm. 8 quart (7.6 liter) oil capacity. EPA Tier IV Final Compliant.										
AIR CLEANER	Dry, replaceable primary and safety elements.										
RADIATOR	Rear-mount, cross-flow, 7-row, 5 fins per inch, 9 quart (8.5 liter) capacity.										
FUEL CAPACITY	21 gallons (79.5 liters) diesel fuel.										
TRACTION DRIVE	Parallel hydrostatic, closed loop system with full-time 4WD. Forward/reverse in low (mow) and high (transport) range with full-time, automatic traction assist (forward only) optional on Groundsmaster 4010-D models. Variable displacement piston pump with electronic servo control powers dual speed displacement piston motor drive into double reduction planetary in front, and mechanical axle in rear. SmartPower® feature controls traction speed to maintain optimal cutting blade speed.										
HYDRAULICS/COOLING	8.75 gallon (33.1 liter) capacity with 10 micron remote spin-on filter. 9 row, single pass cooler, 6.3 fins per inch, that tilts out for cleaning. Variable speed radiator cooling fan with automatic (based on coolant and oil temps) and manual reversing capabilities.										
DIAGNOSTICS	Diagnostic pressure test ports: forward and reverse traction, left, center and right decks, reverse 4WD, lift, steering, charge and deck counterbalance circuits.										
GROUND SPEED	Transport: 0-16.2 mph (0-26.1 km/h) forward, 0-8.1 mph (0-13 km/h) reverse. Mow: 0-8.3 mph (0-13.4 km/h) forward, 0-4 mph (0-6.4 km/h) reverse.										
TIRES	Front: 26 x 12-12, 6-ply tubeless Multi-Trac. Rear: 20 x 10-10, 6-ply tubeless Multi-Trac.										
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.										
BRAKES	Mechanically actuated, internal wet disc brakes on input to each planetary drive. Individual foot-operated steering brake control of left and right wheel. Lock pedals together and latch to engage parking brake.										
SEAT	4-way adjustable, right armrest travels with seat and suspension.										
STEERING	Power steering with dedicated power source. Steering wheel tilts to desired operator position. Uncut circle: 0" diameter.										
INTSTRUMENTATION	InfoCenter™: Onboard LCD display shows gauges, alerts/faulsts, service reminders, electrical system diagnostics. Indicates fuel level, coolant temp, intake temperature, low oil pressure, alternator, engine hours, engine rpm, hydraulic oil temperature, voltage										
CONTROLS	Tilt steering, ignition switch, throttle switch, foot-operated traction pedal, lockable individual brake pedals, parking brake lock, mow/transport speed selector switch, 3-two position switches for individual deck lift/lower, counterbalance adjustment, tow valves, cup holder, toolbox, radio holder, fan switch and 12-volt power outlet.										
ELECTRICAL	12-volt, 690 cold cranking amps battery, 40 amp alternator (4000-D), 80 amp alternator (4010-D). Overload protection with automotive type fuses.										
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, engine stops. Mowing only permitted in low range. Engine stops if parking brake engaged and traction pedal not in neutral. Deck transport latches.										
GROUND CLEARANCE	6.5" (16.5 cm)										
OVERALL DIMENSIONS	<table border="1"> <thead> <tr> <th>Height</th> <th>Length</th> <th>Width</th> <th>Transport Width</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>85" (216 cm) w/ROPS up</td> <td>144" (366 cm) w/decks down</td> <td>127" (323 cm) w/decks down</td> <td>71" (180 cm) @ 2" (5 cm) HOC</td> <td>55.5" (140 cm)</td> </tr> </tbody> </table>	Height	Length	Width	Transport Width	Wheelbase	85" (216 cm) w/ROPS up	144" (366 cm) w/decks down	127" (323 cm) w/decks down	71" (180 cm) @ 2" (5 cm) HOC	55.5" (140 cm)
Height	Length	Width	Transport Width	Wheelbase							
85" (216 cm) w/ROPS up	144" (366 cm) w/decks down	127" (323 cm) w/decks down	71" (180 cm) @ 2" (5 cm) HOC	55.5" (140 cm)							
WEIGHT	4,060 lbs. (1842 kg) w/ full fluids (GM4100-D). 4,360 lbs. (1978 kg) w/ full fluids (GM4110-D).										
SAFETY CAB (4110)	Factory installed, ROPS certified, climate controls (AC & heating), opening rear window, front wiper/washer, interior mirror, exterior side mirrors.										
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2012) and applicable CE (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements; Optional lights. Meets ANSI/ASAE 5279.12 (Lighting and Marking of Agricultural Equipment on Highways). Foldable ROPS, ISO 21299 certified.										
WARRANTY	Two-year limited warranty. Refer to Operator's Manual for further details.										
ACCESSORIES	Road light kit (model 30414 for 4100-D only): Consists of dual taillights, dual headlights, slow moving vehicle sign, turn signal, flasher and lights. Sunshade (model 30349). Accessory Wiring Kit (model 30666).										
CUTTING DECKS											
WIDTH OF CUT	Overall: 124" (315 cm), Center deck section: 54" (137.1 cm), Two 37" (93 cm) width of cut wings. 89" (226 cm) width of cut with one wing up.										
MOWING RATE	Mows up to 9.9 acres/hr (4.0 hectares/hr) at 8 mph (12.4 km/hr). Assumes no overlap or stops.										
CONSTRUCTION	Welded .100" (25 mm) steel with 7 and 10-gauge steel channel and plate reinforcements, bullnose bumpers.										
DECK DRIVE	Direct mounted hydraulic motor into spindle. Remaining spindle(s) driven by individual B section kevlar belt. Quick release belt covers.										
HEIGHT-OF-CUT	1"-5" (25-127 mm) in .5" (13 mm) increments.										
SPINDLES	1.25" (3.17 cm) diameter spindle shafts, 9" (22.9 cm) diameter conical ductile iron housing, and 2 greaseable tapered roller bearings.										
BLADES	19" (48.3 cm) long, 2.5" (6.4 cm) wide, .25" (.64 cm) thick.										
CASTER WHEELS	8 x 3.50-4, 4-ply, smooth, pneumatic, sealed precision ball bearings.										
GROUND FOLLOWING	6" anti-scalp cups on each blade, adjustable skids on each deck, 4 anti-scalp rollers on front deck and 1 on each wing.										
WING PROTECTION	Impact absorption device on each wing deck.										
MULCHING KIT	Model 30419.										
SKIDS	Reversible polymeric.										

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.

The Groundsmaster 4100-D & 4110-D are manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4100-D & 4110-D Attachment Specifications*



ROTARY BROOM, MB MODEL SHL**	
TYPE	Windrow type, front mounted hydraulic broom with dual motors. Electric/hydraulic angling, 30° left and right.
BROOM SIZE	32" (81 cm) diameter x 60" (153 cm) wide.
BRUSH	Sectional brush with combination polypropylene/wire radial segments.
WEIGHT	575 lbs. (261 kg)
OPTIONS	Dirt Deflector, Storage Stands.



SUNSHADE	
UNIVERSAL MOUNT	Model 30349



SNOWTHROWER ERSKINE MODEL 2000***	
STAGE	2
WIDTH OF CUT	61" (155 cm)
CUTTING HEIGHT	29" (74 cm)
CUTTING EDGE	3/8" x 3" (9.5 mm x 7.6 cm) bolt-on
SKID SHOES	Adjustable
AUGER DIAMETER	16" (41 cm) open flight
FAN DIAMETER	20" (51 cm) 4-blade
CHUTE ROTATION	Hydraulic 270°
SHEAR PROTECTION	Pressure relief
CASTING DISTANCE	Up to 30' (9.14 m)
APPROXIMATE SHIPPING WEIGHT	850 lbs. (386 kg)
HOSES	Included

*Specifications and design subject to change without notice.

** Manufactured by M-B Companies Inc.

*** Manufactured by Erskine Attachments.

Note: The Toro Company does not manufacture or sell the snowthrower or rotary broom, nor does Toro guarantee these accessories in any manner whatsoever.

The Groundsmaster 4100-D/4110-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4300-D

The Groundsmaster 4300-D provides superior hill climbing ability, a lightweight footprint and ample power with its 44 hp turbo diesel engine. Its five Contour Plus cutting units closely follow contours for an even cut on undulating terrain and heavy-duty rear rollers provide a beautiful striping pattern for spectacular results.





Groundsmaster® 4300-D Specifications*

GROUNDMASTER 4300-D, MODEL 30859(N)															
ENGINE	Kubota®, 4-cylinder, 88.5 ft.-lbs. of torque, liquid-cooled, turbo-charged diesel, 44.2 hp (33 kW) 91.4 cu. in. (1.5 liter) displacement. 5.5 quart (4.7 liter) oil capacity. EPA Tier IV Interim Compliant.														
AIR CLEANER	Dry, replaceable primary and optional safety element.														
RADIATOR	Rear-mount, cross flow, 7-row, 6.3 fins per inch, 10 quart (9.5 liter) capacity.														
FUEL CAPACITY	13.5 gallons (51.1 liters) diesel fuel. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).														
TRACTION DRIVE	Front drive wheels powered by a hydrostatic pump with individual wheel motors. Parallel - Series Hydrostatic, closed loop 4 wheel drive, forward direction only. Variable displacement piston pump with direct displacement control. Standard all-wheel drive with CrossTrax® All-Wheel Drive system, which transfers power from the front wheels to the opposite rear wheels via independent rear wheel motors.														
HYDRAULICS/COOLING	14 gallon (53 liter) capacity with two remote spin-on filters; main system, and traction charge. Oil cooler is a double row single pass (11 fin/in) that tilts out for cleaning.														
DIAGNOSTICS	Diagnostics pressure test ports: forward and reverse traction, deck circuit 1 & 2, charge 4WD, and lift.														
GROUND SPEED	Transport: 0-10 mph (0-16.7 km/h) forward, 0-3.5 mph (0-5.6 km/h) reverse. Mow: 0-7 mph (0-11.3 km/h) forward, 0-3.5 mph (0-5.6 km/h) reverse.														
TIRES	Front: 26.5 x 14-12, 6-ply ultra-trac tread. Rear: 20 x 12-10, 6-ply multi-trac tread.														
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.														
BRAKES	8"mechanical drum-type front wheel brakes. Brakes may be actuated for service braking via left foot pedal. Integrated foot pedal lock provides parking brake. Dynamic braking through hydrostatic traction drive system.														
SEAT	Mechanical suspension seat standard with pivoting LH armrest, pivoting RH control arm and retractable seat belt, Air-Ride seat suspension optional.														
STEERING	Rear wheel, power steering with an independent hydraulic pump circuit.														
GAUGES	Hour meter, fuel gauge, engine temperature gauge, indicator lights for glow plugs, high coolant temperature, charge indicator, and low oil pressure. Shutdown for high coolant temperature.														
CONTROLS	Ignition switch, hand-operated throttle, foot-operated traction pedal, engine speed control, mow/transport selector switch, service brake with parking brake latch, joystick control for raising and lowering cutting units, mow/transport speed lever.														
ELECTRICAL	12-volt battery with 570 cold cranking amps, 40 amp alternator. Overload protection with automotive-type fuses.														
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, decks stop. If operator leaves the seat with the unit out of neutral, engine stops. Mowing only permitted in low range. Engine stops if parking brake engaged and traction pedal not in neutral.														
OPERATOR AREA	Beverage holder, radio holder / mobile phone holder, 12-volt power outlet, open compartment for tools, jackets, golf balls, etc. under control arm.														
WORK LIGHTS	Standard.														
ROLL-OVER PROTECTION	2-post standard.														
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FUEL ECONOMY**	Acres per Gallon - 3.0 (.32 Hectars/L) Mowing Range - 9 hours Fuel Consumption - 1.5 Gal/Hr (5.7 L/Hr)														
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2012) and applicable CE (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements.														
WARRANTY	Two-year limited.														
ACCESSORIES	Air ride seat suspension (03667), leaf mulching kit (108-7409-01), combination blade (108-7395-03), angle sail blade (117-0209-03) atomic mulching blade (114-0435), parallel sail blade (114-0434-03), sunshade (30349), rear roller scraper kit,(117-0149), operator fan kit (110-8804), 22" rotary replacement cutting unit (30845), diagnostic display box (85-4750).														
CUTTING UNITS															
TYPE	Five Contour™ Plus 22" (55.9 cm), rear-discharge rotary cutting units w/rear rollers.														
WIDTH OF CUT	90" (229 cm), overlap 5" (12.7 cm), overhang 1" (2.5 cm).														
HEIGHT OF CUT	.75"-4" (1.9-10.2 cm) in .25" (.6 cm) increments.														
DECK DRIVE	Hydraulic, direct coupled to spindle														
CONSTRUCTION	Cutting chamber is 10-gauge steel constructed chambers with 12-gauge welded reinforcements. Spindle support is 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels. Cutting unit frame is welded 1.5" (3.8 cm) square x .25" (.6 cm) wall tube with 7-gauge side supports. Spindle support 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels.														
SPINDLE ASSEMBLY	Ductile cast iron spindle housing. Dual greaseable tapered roller bearings. 1.25" (3.2 cm) diameter solid cold finished steel spindle shaft. Splined connection between spindle shaft and pulley. Welded blade retainer plus anti-scalp cups.														
GROUND FOLLOWING	6" (15.3 cm) anti-scalp cups on each blade. On each deck: two 5" (12.7 cm) diameter front rollers with sealed stainless steel bearings, one 3" (7.6 cm) diameter rear roller with greaseable stainless steel bearings.														
BLADES	22" (55.9 cm) long, 2.5" (6.4 cm) wide, .25" (.64 cm) thick. Standard: combo blade (108-7395-03)														

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**Dependent on operator and turf conditions.

The Groundsmaster 4300-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4300-D Specifications*



GROUNDMASTER 4300-D, TIER 4 DIESEL, MODEL 30864 (A)															
ENGINE	Yanmar® 3-cylinder, 88.5 ft.-lbs. of torque, liquid-cooled, turbo-charged diesel, 43.4 hp (32.4 kW) 91.4 cu. in. (1.5 liter) displacement. 5.5 quart (4.7 liter) oil capacity. EPA Tier IV Final Compliant.														
AIR CLEANER	Dry, replaceable primary and optional safety element.														
RADIATOR	Rear-mount, cross flow, 7-row, 6.3 fins per inch, 5.5 quart (5.2 liter) capacity.														
FUEL CAPACITY	13.5 gallons (51.1 liters) diesel fuel.														
TRACTION DRIVE	Front drive wheels powered by a hydrostatic pump with individual wheel motors. Parallel - Series Hydrostatic, closed loop 4 wheel drive, forward direction only. Variable displacement piston pump with direct displacement control. Standard all-wheel drive with CrossTrax® All-Wheel Drive system, which transfers power from the front wheels to the opposite rear wheels via independent rear wheel motors.														
HYDRAULICS/COOLING	14 gallon (53 liter) capacity with two remote spin-on filters; main system, and traction charge. Oil cooler is a double row single pass (11 fin/in) that tilts out for cleaning.														
DIAGNOSTICS	Diagnostics pressure test ports: forward and reverse traction, deck circuit 1 & 2, change 4WD, and lift.														
GROUND SPEED	Transport: 0-10 mph (0-16.7 km/h) forward, 0-3.5 mph (0-5.6 km/h) reverse. Mow: 0-7 mph (0-11.3 km/h) forward, 0-3.5 mph (0-5.6 km/h) reverse.														
TIRES	Front: 26.5 x 14-12, 6-ply turf tread. Rear: 20 x 12-10, 6-ply turf tread.														
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.														
BRAKES	8"mechanical drum-type front wheel brakes. Brakes may be actuated for service braking via left foot pedal. Integrated foot pedal lock provides parking brake. Dynamic braking through hydrostatic traction drive system.														
SEAT	Mechanical suspension seat standard with pivoting LH armrest, pivoting RH control arm and retractable seat belt, Air-Ride seat suspension optional.														
STEERING	Rear wheel, power steering with an independent hydraulic pump circuit.														
INSTRUMENTATION	InfoCenter™: Onboard LCD display shows gauges, alerts/faults, service reminders, electrical system diagnostics. Indicates fuel level, coolant temp, low oil pressure, alternator, engine hours, engine rpm, voltage, counterbalance settings, glow indicator, lift/lower indicator.														
CONTROLS	Ignition switch, foot-operated traction pedal, engine speed control, mow/transport selector switch, service brake with parking brake latch, joystick control for raising and lowering cutting units, mow/transport lever.														
ELECTRICAL	12-volt battery with 540 cold cranking amps, 55 amp alternator. Overload protection with automotive-type fuses.														
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, decks stop. If operator leaves the seat with the unit out of neutral, engine stops. Mowing only permitted in low range. Engine stops if parking brake engaged and traction pedal not in neutral.														
OPERATOR AREA	Beverage holder, radio holder / mobile phone holder, 12-volt power outlet, open compartment for tools, jackets, golf balls, etc. under control arm.														
WORK LIGHTS	Standard.														
ROLL-OVER PROTECTION	2-post standard.														
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SAFETY	Complies with American National Standards Institute (ANSI B71.4-2004) and applicable CE (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements.														
WARRANTY	Two-year limited.														
ACCESSORIES	Air ride seat suspension (03667), leaf mulching kit (108-7409-01), combination blade (108-7395-03), angle sail blade (117-0209-03) atomic mulching blade (114-0435), parallel sail blade (114-0434-03), sunshade (30349), rear roller scraper kit,(117-0149), operator fan kit (110-8804), 22" rotary replacement cutting unit (30845), diagnostic display box (85-4750).														
CUTTING UNITS															
TYPE	Five Contour™ Plus 22" (55.9 cm), rear-discharge rotary cutting units w/rear rollers.														
WIDTH OF CUT	90" (229 cm), overlap 5" (12.7 cm), overhang 1" (2.5 cm).														
HEIGHT OF CUT	.75"-4" (1.9-10.2 cm) in .25" (.6 cm) increments.														
DECK DRIVE	Hydraulic, direct coupled to spindle														
CONSTRUCTION	Cutting chamber is 10-gauge steel constructed chambers with 12-gauge welded reinforcements. Spindle support is 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels. Cutting unit frame is welded 1.5" (3.8 cm) square x .25" (.6 cm) wall tube with 7-gauge side supports. Spindle support 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels.														
SPINDLE ASSEMBLY	Ductile cast iron spindle housing. Dual greaseable tapered roller bearings. 1.25" (3.2 cm) diameter solid cold finished steel spindle shaft. Splined connection between spindle shaft and pulley. Welded blade retainer plus anti-scalp cups.														
GROUND FOLLOWING	6" (15.3 cm) anti-scalp cups on each blade. On each deck: two 5" (12.7 cm) diameter front rollers with sealed stainless steel bearings, one 3" (7.6 cm) diameter rear roller with greaseable stainless steel bearings.														
BLADES	22" (55.9 cm) long, 2.5" (6.4 cm) wide, .25" (.64 cm) thick. Standard: combo blade (108-7395-03)														

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**Dependent on operator and turf conditions.

The Groundsmaster 4300-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4500-D & 4700-D

Powerful rotary mowers that deliver impressive cutting quality.



Groundsmaster® 4500-D
Model 30857(N)



Groundsmaster® 4700-D
Model 30858(N)



Groundsmaster® 4500-D & 4700-D Specifications*

	GROUNDMASTER 4500-D, MODEL 30857(N)	GROUNDMASTER 4700-D, MODEL 30858(N)		
ENGINE	Kubota® V2403T, 4-cylinder, 117 ft.-lbs. of torque, liquid-cooled, turbo-charged diesel, 60 hp (45 kW) gross, 58 hp (43.5 kW) net, governed to 2600 RPM. 148.5 cu. in. (2.4 liter) displacement. 10 quart (9.5 liter) oil capacity. EPA Tier IV Interim Compliant.			
AIR CLEANER	Dry, replaceable primary and safety elements.			
RADIATOR	Rear-mount, cross flow, 7-row, 5 fins per inch, 13 quart (12.3 liters) capacity.			
FUEL CAPACITY	22 gallons (83 liters) diesel fuel. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).			
TRACTION DRIVE	Full-time, bi-directional, hydrostatic, closed-loop, 4WD transmission. Variable displacement piston pump with servo control powers fixed displacement piston motors which drive single reduction planetary gear assemblies at each front wheel. Parallel hydraulic flow powers fixed displacement piston motor which drives mechanical axle in rear. 2WD transport range. Optional 4WD Flow Divider Kit, model 30871.			
HYDRAULICS/COOLING	8.25 gallon (31.3 liter) capacity with 10 micron remote spin-on filter, 9 row single pass cooler with tilt out for cleaning. Variable speed hydraulic fan drive with automatic (based on coolant and oil temps) and manual reversing capabilities.			
DIAGNOSTICS	Diagnostics pressure test ports: forward and reverse traction, deck circuit 1 & 2, reverse 4WD, lift, steering, traction charge, and counter balance.			
GROUND SPEED	Transport: 0-13 mph (0-21 km/h) forward, 0-6.2 mph (0-10 km/h) reverse. Mow: 0-7 mph (0-11.3 km/h) forward, 0-3.5 mph (0-5.6 km/h) reverse.			
TIRES	Front: 29 x 14-15, 6-ply ultra-tread. Rear: 20 x 10-10, 4-ply multi-trac tread.			
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.			
BRAKES	Mechanically actuated, internal wet disc brakes on input to each planetary drive. Individual foot-operated steering brake control of left and right wheel. Lock pedals together and latch to engage parking brake.			
SEAT	Premium seat with adjustments for operator weight via air ride suspension, seat fore/aft position, seat back angle, arm rest height and retractable seat belt.			
STEERING	Power steering with dedicated power source, tilt steering.			
GAUGES	Hour meter, fuel gauge, engine temperature gauge, indicator lights for glow plugs, high coolant temperature, charge indicator, and low oil pressure. Shutdown for high coolant temperature.			
CONTROLS	Ignition switch, hand-operated throttle, foot-operated traction pedal, two position switches for deck lift (GM 4500) 3 - two position switches for deck lift (GM 4700), Reverse fan two position switch (auto/manual reverse), mow/transport selector switch, lockable individual brake pedals, park brake lock, deck lift levers.			
ELECTRICAL	12-volt, 650 cold cranking amps battery, 40 amp alternator. Overload protection with automotive type fuses.			
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, engine stops. Mowing only permitted in low range. Engine stops if parking brake engaged and traction pedal not in neutral.			
OPERATOR AREA	Beverage holder, radio holder, 12-volt power point, storage box (tools, jackets, golf balls, etc.), seatbelt.			
WORK LIGHT	Standard.			
ROPS	2-post standard.			
DIMENSIONS W/ CUTTING UNITS		GM 4500-D	GM 4700-D	
	Overall length w/decks down	145.8" (370 cm)	145.8" (370 cm)	
	Overall width, lowered/raised	112.8" (286 cm)/88.3" (224 cm)	153.8" (391 cm)/88.3" (224 cm)	
	Height w/2-post ROPS	85" (216 cm)	85" (216 cm)	
	Wheelbase	67.5" (172 cm)	67.5" (172 cm)	
	Track Width, front/rear	88.3" (224 cm)/55.5" (141 cm)	88.3" (224 cm)/55.5" (141 cm)	
WEIGHT	Ground clearance	6" (15.3 cm)	6" (15.3 cm)	
FUEL ECONOMY**	4400 lbs. (1995 kg) - with full fluids.		4950 lbs. (2245 kg) - with full fluids.	
	Acres per Gallon - 3.4		Acres per Gallon - 4.4	
	Mowing Range - 13.8 hours		Mowing Range - 12.9 hours	
	Fuel consumption - 1.6 Gal/Hr (6.06 L/Hr)		Fuel consumption - 1.7 Gal/Hr (6.44 L/Hr.)	
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2012) and applicable CE (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements.			
WARRANTY	Two-year limited.			
ACCESSORIES	Atomic mulching blades (107-0235-03), universal sunshade (30349), operator fan kit (110-8804), 4WD flow divider kit (30871), rear roller scraper kit, 2 post ROPS extension, windscreen, 90 amp alternator kit (115-8473), leaf mulching kit (30836).			
	CUTTING UNITS			
TYPE	Five Contour™ Plus 27" (68.6 cm), rear-discharge rotary cutting units w/rear rollers.	Seven Contour™ Plus 27" (68.6 cm), rear-discharge rotary cutting units w/rear rollers.		
WIDTH OF CUT	109" (277 cm), overlap 6.5" (16.5 cm), overhang 10.4" (26.4 cm).	Overall: 150" (381 cm), 109" (277 cm) with deck 6 and 7 raised. Overlap 6.5" (16.5 cm), overhang 30.9" (78.4 cm).		
HEIGHT OF CUT	.75"-4" (1.9-10.2 cm) in .25" (.6 cm) increments.			
CONSTRUCTION	10-gauge steel constructed chambers with 12-gauge welded reinforcements. 1.5" (3.8 cm) square x .25" (.6 cm) wall tube with 7-gauge side supports. Spindle support 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels.			
SPINDLE ASSEMBLY	Ductile cast iron spindle housing. Dual greaseable tapered roller bearings. 1.25" (3.2 cm) diameter solid cold finished steel spindle shaft. Splined connection between spindle shaft and pulley. Welded blade retainer plus anti-scalp cups.			
GROUND FOLLOWING	6" (15.3 cm) anti-scalp cups on each blade. On each deck: two 5" (12.7 cm) diameter front rollers, one 3" (7.6 cm) diameter rear roller.			
BLADES	27" (68.6 cm) long, 2.5" (6.4 cm) wide, .25" (.64 cm) thick. Standard combo blade optional Atomic Blade for leaf mulching.			
WING PROTECTION	Groundsmaster 4700-D has an impact absorption device on wing decks 6 and 7.			

*Specifications and design subject to change without notice.

**Dependent on operator and turf conditions, assumes 85% efficiency for overlaps and turns
Certification complies with ANSI B71.4-1999 and applicable CE directives.

Warranty: Two-year limited warranty. Refer to operator's manual for further details.

The Groundsmaster 4500-D and 4700-D are manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 4500-D & 4700-D Specifications*



	GROUNDMASTER 4500-D, TIER 4 DIESEL, MODEL 30881	GROUNDMASTER 4700-D, TIER 4 DIESEL, MODEL 30882	
ENGINE	Yanmar® 4-cylinder liquid-cooled, turbo-charged diesel. Power: 55 hp (41.1 kW) gross power at rated speed of 2700 rpm. Torque peak: 125 ft-lbs (169 Nm) @ 2000 rpm. Displacement: 127 cu. in. (2.1 liters). EPA Tier IV Final Compliant.		
AIR CLEANER	Dry, replaceable primary and safety elements.		
RADIATOR	Rear-mount, single pass, 7-row, 6.3 fins per inch, 13 quart (12.3 liters) capacity.		
FUEL CAPACITY	22 gallons (83 liters) diesel fuel.		
TRACTION DRIVE	Parallel hydrostatic, closed loop system with full-time 4WD forward/reverse in low (mow) and high (transport) range with optional full-time, automatic traction flow divider (forward only) (Model 30876). Variable displacement piston pump with electronic servo control powers dual speed piston motor drive into double reduction planetary in front, and mechanical axle in rear. Smart Power™ feature controls traction speed to maintain optimal cutting blade speed.		
HYDRAULICS/COOLING	8.25 gallon (31.3 liter) capacity with 10 micron remote spin-on filter, 9 row single pass cooler with tilt out for cleaning. Variable speed hydraulic fan drive with automatic (based on coolant and oil temps) and manual reversing capabilities.		
DIAGNOSTICS	Diagnostics pressure test ports: forward and reverse traction, deck circuit 1 & 2, reverse 4WD, lift, steering, traction charge, and counter balance.		
GROUND SPEED	Transport: 0-13 mph (0-21 km/h) forward, 0-6.2 mph (0-10 km/h) reverse. Mow: 0-7 mph (0-11.3 km/h) forward, 0-3.5 mph (0-5.6 km/h) reverse.		
TIRES	Front: 29 x 14-15, 6-ply ultra-tread. Rear: 20 x 10-10, 4-ply multi-trac tread.		
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.		
BRAKES	Mechanically actuated, internal wet disc brakes on input to each planetary drive. Individual foot-operated steering brake control of left and right wheel. Lock pedals together and latch to engage parking brake.		
SEAT	Premium seat with adjustments for operator weight via air ride suspension, seat fore/aft position, seat back angle, arm rest height and retractable seat belt.		
STEERING	Power steering with dedicated power source, tilt steering.		
INSTRUMENTATION	InfoCenter™ System: Onboard LCD display shows gauges, alerts/faults, service reminders, electrical system diagnostics. Indicates fuel level, coolant temperature, intake temperature, low oil pressure, alternator, engine hours, engine rpm, hydraulic oil temperature, and voltage.		
CONTROLS	Ignition switch, throttle switch, mow/transport range selection switch, PTO switch, light switch. Foot-operated traction pedal, individual foot-operated steering brake control of left and right wheels with parking brake lock. One 2-position switch (GM 4500-D). Three 2-position switches (GM 4700-D).		
ELECTRICAL	12-volt, 650 cold cranking amps battery, 40 amp alternator. Overload protection with automotive type fuses.		
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and deck is disengaged. If operator leaves seat with deck engaged, engine stops. Mowing only permitted in low range. Engine stops if parking brake engaged and traction pedal not in neutral.		
OPERATOR AREA	Beverage holder, radio holder, 12-volt power point, storage box (tools, jackets, golf balls, etc.), seatbelt.		
WORK LIGHT	Standard.		
ROPS	2-post standard.		
DIMENSIONS W/ CUTTING UNITS		GM 4500-D	GM 4700-D
	Overall length w/decks down	145.8" (370 cm)	145.8" (370 cm)
	Overall width, lowered/raised	112.8" (286 cm)/88.3" (224 cm)	153.8" (391 cm)/88.3" (224 cm)
	Height w/2-post ROPS	85" (216 cm)	85" (216 cm)
	Wheelbase	67.5" (172 cm)	67.5" (172 cm)
	Track Width, front/rear	88.3" (224 cm)/55.5" (141 cm)	88.3" (224 cm)/55.5" (141 cm)
Ground clearance	6" (15.3 cm)	6" (15.3 cm)	
WEIGHT	4400 lbs. (1995 kg) - with full fluids.	4950 lbs. (2245 kg) - with full fluids.	
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2012) and applicable CE (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements.		
WARRANTY	Two-year limited.		
ACCESSORIES	Atomic mulching blades (107-0235-03), universal sunshade (30349), operator fan kit (110-8804), 4WD flow divider kit (30876), rear roller scraper kit, 2 post ROPS extension, windscreen, 90 amp alternator kit (115-8473), mulching kit (30836).		
	CUTTING UNITS		
TYPE	Five Contour™ Plus 27" (68.6 cm), rear-discharge rotary cutting units w/rear rollers.	Seven Contour™ Plus 27" (68.6 cm), rear-discharge rotary cutting units w/rear rollers.	
WIDTH OF CUT	109" (277 cm), overlap 6.5" (16.5 cm), overhang 10.4" (26.4 cm).	Overall: 150" (381 cm), 109" (277 cm) with deck 6 and 7 raised. Overlap 6.5" (16.5 cm), overhang 30.9" (78.4 cm).	
HEIGHT OF CUT	.75"-4" (1.9-10.2 cm) in .25" (.6 cm) increments.		
CONSTRUCTION	10-gauge steel constructed chambers with 12-gauge welded reinforcements. 1.5" (3.8 cm) square x .25" (.6 cm) wall tube with 7-gauge side supports. Spindle support 3/16" (.48 cm) high-strength steel and 10-gauge exterior channels.		
SPINDLE ASSEMBLY	Ductile cast iron spindle housing. Dual greaseable tapered roller bearings. 1.25" (3.2 cm) diameter solid cold finished steel spindle shaft. Splined connection between spindle shaft and pulley. Welded blade retainer plus anti-scalp cups.		
GROUND FOLLOWING	6" (15.3 cm) anti-scalp cups on each blade. On each deck: two 5" (12.7 cm) diameter front rollers, one 3" (7.6 cm) diameter rear roller.		
BLADES	27" (68.6 cm) long, 2.5" (6.4 cm) wide, .25" (.64 cm) thick. Standard combo blade optional Atomic Blade for leaf mulching.		
WING PROTECTION	Groundsmaster 4700-D has an impact absorption device on wing decks 6 and 7.		

*Specifications and design subject to change without notice.

**Dependent on operator and turf conditions, assumes 85% efficiency for overlaps and turns
Certification complies with ANSI B71.4-1999 and applicable CE directives.
Warranty: Two-year limited warranty. Refer to operator's manual for further details.

The Groundsmaster 4500-D and 4700-D are manufactured in Tomah, WI ISO 9002 Certified Plant.





Groundsmaster® 5900 & 5910

You won't have to work as hard to be productive with a 16 foot mower that can cut an acre of grass in less than 5 minutes.



Groundsmaster® 5900
Model 31598(N)



Groundsmaster® 5910
Model 31599(N)



Groundsmaster® 5900/5910 Specifications*

GROUNDMASTER 5900, MODEL 31598(N) / GROUNDMASTER 5910, MODEL 31599(N)	
ENGINE	Cummins™, 4-cylinder, turbocharged, intercooled. HP: 99* @ 2600 (73.8 kW), Torque: 306 ft. lbs. (415 N•m) @ 1600 rpm. Displacement 199 cu. in. (3.3 L), Fuel Injection; electronic high-pressure common rail. EPA Tier III Compliant.
COOLING SYSTEM	SmartCool™ System - Variable speed, temperature actuated reversing fan; Top and rear intake; Oil cooler tilts out for service access; Radiator cross flow, 4 row. Intercooler cools air from turbo for improved power, fuel economy and emissions control.
FUEL SYSTEM	Diesel. Biodiesel compatible up to B20
CAPACITIES	Fuel: 35 gallon (132 liter). Hydraulic: 19 gallon (72 liter). Engine Oil: 8.5 qt. (8 liter) w/filter. Coolant: 5900 13.5 qt. (12.8 liter), 5910 18.0 qt. (17.0 liter)
TIRES/WHEELS	Front: 29 x 12.50-15, 10 ply Rear: 23 x 10.50-12, 6-ply.
INSTRUMENTATION	InfoCenter™ : Onboard LCD display shows gauges, alerts/faults, service reminders, electrical system diagnostics. Indicates fuel level, coolant temp., low oil pressure, alternator, engine hours, engine rpm, hydraulic oil temp, voltage.
POWERTRAIN	4 wheel drive; parallel hydrostatic, closed loop; traction drive pump; variable displacement piston, servo control. Front drive: planetary gear type, double reduction. Rear drive: high torque, low speed hydraulic motors. Traction assist: front and rear hydraulic flow divider, steering brakes.
ELECTRICAL SYSTEM	12-volt, 120 amp alternator, battery 1380 CCA
PRODUCTIVITY	Infinitely variable speed. Forward speeds: mow: 0-10.8 mph (17.4 km/h) transport: 0-20 mph (0-32.2 km/h). Reverse speeds mow: 0-5.7 mph (0-9.2 km/h), transport: 0-10.5 mph (0-16.9 km/h). Speed control: Electronic, limits max speed. Maximum mow rate: 20.77 acres/hr. (8.4 ha)* Typical mow rate: 9.6 acres/hr. (3.9 ha)** 15.4 acres/hr (6.3 ha) @ 8 mph**
CONTROLS	Control arm, right armrest, travels with seat and suspension. Deck lift/lower, electrohydraulic switches. Throttle; electronic, 3 position or variable. Traction pedal, electronic. Brakes: internal wet disc. Steering; hydrostatic load sensing. Other: High/low range, PTO, cruise control, hydraulic flow divider, lights, key switch, horn.
OPERATOR STATION	Operator platform: isolated rubber mounted. Seat: 4 way adjustable. Suspension: air-ride with 3 in. (7.6 cm) of adjustability. Steering: power and adjustable tilt. Traction Pedal: adjustable angle uses position sensor. Storage: Toolbox, cup holder, radio holder, phone holder and behind seat (area for cooler, trash bucket, etc.) ROPS: ISO 21299 certified. 12 volt power outlet standard. Audio system: optional 5910 aftermarket accessory.
PERFORMANCE	Sound Level: 5900 - 92 dBA 5910 - 84 dBA
STEERING	Uncut circle - 0" diameter. Turning radius - 86" (218 cm)
FUEL ECONOMY	Acres per gallon** - 5900 - 4.3. 5910 - 3.8. Mowing range*** - 5900 - 15.8 hours, 5910 13.7 hours. Fuel consumption***: 5900 - 2.22 gal/hr (8.4 L/hr), 5910 - 2.55 gal/hr. (9.7 L/hr).
CAB (5910)	Climate controls: air conditioning, heat, opening front and rear windows. Factory installed, ROPS certified, tinted glass, front wiper/washer, interior mirror, side mirrors.
SAFETY	Certification: ANSI B71.4-2004. SMV sign rear mounted. Horn. Lights: headlights, red and amber flashers, turn signals, tail lights, brake lights; meets ANSI/SAE 5279.12 (Lighting and Marking of Agricultural Equipment on Highways). EN 836: 1997
WARRANTY	Two year limited warranty.

OVERALL WEIGHT AND DIMENSIONS (APPROXIMATE)	
WIDTH	Transport: 99" (251 cm). Mow: 199" (488 cm).
WHEELBASE	76" (194 cm).
HEIGHT	5900: 89" (226 cm), 5910: 93" (236 cm).
GROUND CLEARANCE	9.5" (24 cm)
TOTAL WEIGHT	5900: 5,966 lbs. (2,706 kg), 5910: 6,457 lbs. (2,929 kg)

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 Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.
 **Typical Mow Rate/Gallons Per Hour
 ***Dependent on operator and turf conditions





Groundsmaster® 5900/5910 Specifications* (continued)

	CUTTING DECKS
TYPE	Three rear discharge rotary decks.
CUTTING WIDTH	192 in. (488 cm), 57 in. (145 cm), 92 in (234 cm), 144 in. (366 cm).
HEIGHT OF CUT	1-6" in 0.5" increments.
CONSTRUCTION	11/12 gauge high strength steel. 7-gauge, reinforcements, bullnose bumpers.
PROTECTION	Wing decks: 2 way shock absorption.
DECK DRIVE	HybridDrive™ - Hydraulic motor to spindle, remaining spindle(s) driven by "B" section v-belts.
TENSIONING	Automatic, spring loaded idlers.
SPINDLES SHAFT	1.25" (3.2 cm) hardened steel.
SPINDLE HOUSING	9" (22.9 cm) ductile iron.
SPINDLE BEARINGS	Greasable tapered roller.
STANDARD BLADES	20" (50.8 cm), heat-treated steel blades.
OPTIONAL BLADES	Atomic™ mulching blades, flat blades.
SKIDS	Reversible polymeric.

TORO ACCESSORIES AND PARTS	
Model/Part #	Description
30349	Universal Mount Sunshade
117-9440	Windscreen Kit (GM5900)
119-7719	Backrest Extension Kit – Fabric (GM5910)
119-7718	Backrest Extension Kit – Vinyl (GM5900)
114-5610	Work Light Kit (GM5910)
117-9430	2-Post ROPS Extension (GM5900) (includes sunshade)

TORO ACCESSORIES AND PARTS	
Model/Part #	Description
115-8898	Blade & Belt Kit
115-8896	Combo Blade Pack
114-0897	Atomic Blade Pack
31581	Leaf Mulching Kit
119-8268	Flat Blade Kit
31582	Light Kit – EU
119-8256	Beacon Kit – EU
120-7570	Registration Plate Kit – EU
117-2795	Tall Grass Kit
93-5973	10" Foam Filled Caster Tire Assembly
30041	500 Hour Filter Maintenance Kit (oil/fuel)



	SNOWTHROWER ERSKINE MODEL 2000**
STAGE	2
WIDTH OF CUT	85" (216 cm)
CUTTING HEIGHT	29" (74 cm)
CUTTING EDGE	3/8" x 3" (9.5 mm x 7.62 cm) bolt-on
SKID SHOES	Adjustable
AUGER DIAMETER	16" (41 cm) open flight
FAN DIAMETER	20" (51 cm) 4-blade
CHUTE ROTATION	Hydraulic, 270°
SHEAR PROTECTION	Pressure relief
CASTING DISTANCE	Up to 30' (9.4 m)
APPROXIMATE SHIPPING WEIGHT	850 lbs. (386 kg)
HOSES	Included

	ROTARY BROOM M-B MODEL SHL***
TYPE	Windrow type, front mounted hydraulic broom with dual motors. Electric/hydraulic angling, 30° left and right.
BROOM SIZE	32" (81 cm) diameter x 60" (153 cm) wide.
BRUSH	Sectional brush with combination polypropylene/wire radial segments.
OPTIONS	Dirt Deflector, Storage Stands.

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**Manufactured by Erskine.

***Manufactured by M-B Companies, Inc.

The Toro Company does not manufacture or sell the snow thrower, rotary broom, nor does Toro guarantee these accessories in any manner whatsoever.





Groundsmaster® 7200 & 7210

The first zero-radius turn Groundsmaster combines the power, maneuverability and versatility for almost any job. Add the Polar Trac System to transform the Groundsmaster 7200 into a powerful snow removal machine.





Groundsmaster® 7200 Series Specifications*



	GROUNDMASTER 7200	GROUNDMASTER 7210
ENGINE	Kubota®, 3-cylinder, liquid-cooled diesel. Power: 24.8 hp (18.5 kW) gross, at rated speed of 3000 rpm. Torque peak: 52.7 ft. lbs. (71.5 Nm) @ 2200 rpm. Displacement: 1123cc. High idle: 3200 rpm no load (uninstalled) 3100-3200 rpm installed. Remote mounted 5" Donaldson® air cleaner. Fuel filter/water separator. EPA Tier IV Final Compliant.	Kubota®, 3-cylinder, liquid-cooled, turbo diesel. Power: 35 hp (26 kW) gross @ 3000 rpm. Torque peak: 63 ft. lbs. (85.4 Nm) torque @ 2000 rpm. Displacement: 1123cc. High idle: 3220 rpm (uninstalled) 3100-3200 rpm (installed). Remote mounted Donaldson® air filter. Fuel filter/water separator. EPA Tier IV Interim Compliant.
RADIATOR	Rear mounted, 8 fins/inch, 3 rows.	
FUEL CAPACITY	11.5 gallons (43.5 liters), diesel. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).	
ENGINE OIL W/ FILTER	3.9 quarts (3.69 liter).	
HYDRAULIC OIL	3.5 gallons (13.25 liter).	
TRANSMISSION	Transmission directly mounted to engine via bell housing, two independent closed-loop circuits. One pump/motor controlling left side forward, neutral, and reverse, and one pump/motor controlling right side forward, neutral, and reverse. Pumps are variable displacement piston type with slippers and full stroke capacity of 18cc/rev.	
WHEEL DRIVE	Independent high-torque, low-speed wheel motors with 310cc displacement.	
PTO CLUTCH	Hydraulically actuated wet multi-disc clutch.	
STEERING CONTROL	Adjustable twin sticks with high performance KYB® hydraulic dampers. Rev/N/Forward, located on sides of operator.	
GROUND SPEED (MOWING CONFIGURATION)	Forward 0-12.5 mph (0-20 km/h), variable. Reverse 0-8.5 mph (0-13.7 km/h), variable.	
ALTERNATOR/GENERATOR	12-volt, 40 amp internal regulated charging @ 3150 rpm.	
BATTERY	BCI Group No.: 26, 540 cold cranking amps @ 0° F.	
INSTRUMENTATION	Hour meter, glow indicator, high temp indicator, oil pressure indicator, alternator indicator.	
SAFETY LOGIC CONTROLS	Toro Standard SCM.	
INTERLOCKS	Tractor neutral, operator presence (engine shuts down if operator is not in seat and traction sticks are moved to the operation position), parking brake, PTO on, auxiliary hydraulics on, high temp (PTO shuts down but engine still running), over temp (engine shuts down).	
SERVICE BRAKE	Twin levers with dynamic braking through hydrostatic transmission.	
PARKING BRAKE	Hand actuated brake lever with two 10.25" diameter disc brakes mounted on the rear wheel motors.	
DRIVE TIRES	24 x12-12, 6-ply pneumatic tubeless, demountable and interchangeable. Tread "Toro Turf Tread".	
FRONT CASTOR TIRES	4-ply ribbed tread, tubeless 15 x 6-6, 20-22 psi.	
ROPS	Two-post foldable style ROPS certified per OSHA 1928.52 specification.	
SEAT	Two piece, high back cushion seat with drain hole, deluxe low profile suspension, adjustable for operator weight, seat back angle, seat fore/aft position, lumbar support and armrest height, retractable seat belt.	
STORAGE	Built-in cup holder, and personal storage reached from seat. Storage for raingear, tools, etc.	
IGNITION	Off/run/start, located right of operator.	
THROTTLE	Low - high idle, located right of operator.	
DECK HYDRAULIC LIFT	Raise/hold/lower/float, located on right of operator. Hand lever or foot pedal operation (2013 and up models). Switch mounted at end of right handle.	
REAR HYDRAULIC LIFT (OPTIONAL)	Raise/hold/lower/float. Electric switch right side of operator. Remote hydraulics selector switch, located on right console.	
CURB CLIMBING	Capable of climbing 8" curbs.	
TIE DOWNS	Four loops, one located on each corner of the machine.	
CERTIFICATION	Cutting unit meets specification of American National Standard ANSI B71.4-2004, Safety Specifications for commercial turf care equipment. Cutting units sold in EU meets specifications of European standard per CE Machinery Directory EN836.	
WARRANTY	2-year limited warranty. Refer to the Operator's Manual for further details.	

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The Groundsmaster® 7200 and 7210 are manufactured in Tomah, WI, ISO 9002 Certified Plant.





Groundsmaster® 7200 Series Specifications* (continued)

GROUNDMASTER® 7200 SERIES CUTTING DECKS	
HEIGHT OF CUT	1" - 6" (2.5 - 15.2 cm) adjustable in 0.25" (.6 cm) increments.
SIDE DISCHARGE CONSTRUCTION	7-gauge steel 5.50" (13.9 cm) deep; welded deck with grass discharged on the right side. A 5/16" (.8 cm) thick rubber discharge chute cover discharge opening to limit the throw distance of clippings.
BASE DECK CONSTRUCTION	7-gauge steel 4.25" (10.8 cm) deep; welded deck. Requires either Guardian® Recycler completion kit or Rear discharge completion kit.
GUARDIAN® RECYCLER COMPLETION KIT	Three deflectors inside the chamber redirect clippings that are elevated in the chambers so that they are cut and re-cut. Deck chambers prevent throwing of objects out from deck.
REAR DISCHARGE COMPLETION KIT	Rear of the deck is open allowing clippings to escape. A rubber flap discharges the clipping toward the ground.
SPINDLE ASSEMBLY	Ductile cast iron 9" (23 cm) diameter conical spindle housing; Dual greaseable tapered roller bearings; Spindle shaft is 1.25" (3.2 cm) diameter, solid cold finished steel, and splined connection between spindle shaft and pulley; Welded blade retainer plus anti-scalp cups.
CUTTER DRIVE	Isolation mounted, splined PTO-driven gearbox transfers power to three separate spindles via two separate "B" section belts.
BLADES	Three, .25" (.6 cm) thick, 2.5" (6.3 cm) wide, heat-treated steel blades.
DECK SUSPENSION	Rigid front frame which support deck via 4 vertically suspended chains. Front drag links provide fore/aft and left/right stability. Hydraulic deck lift with load holding check valves and gravity lower is standard component. Weight transfer system consisting of two torsion springs counterbalances some cutting deck weight to reduce turf damage.
BELT IDLER	Spring loaded (torsion) idler.
DECK SKID	Replaceable, bolt-on, non-marking polymeric skid on both sides for Base decks and on left side on side discharge decks.
ANTI-SCALP CUPS	Anti-scalp cup located on each blade spindle.

CUTTING DECK CONFIGURATIONS	62" DECK W/ GUARDIAN® KIT	62" DECK W/ REAR DISCHARGE KIT	72" DECK W/ GUARDIAN® KIT OR FINE CUT GUARDIAN® KIT	72" SIDE DISCHARGE*	72" DECK W/ REAR DISCHARGE KIT	60" SIDE DISCHARGE
WIDTH OF CUT	62" (158 cm)	62" (158 cm)	72" (182.8 cm)	72" (182.8 cm)	72" (182.8 cm)	60"
BLADE TIP SPEED (AT 3250 ENGINE RPM)	16,000±1,000 ft./min.	16,000±1,000 ft./min.	16,000±1,000 ft./min.	18,000±1,000 ft./min.	16,000±1,000 ft./min.	18,000±1,000 ft./min.
5/16" THICK RUBBER DISCHARGE CHUTE	NA	Yes	NA	Yes	Yes	Yes
CUTTING DECK DEPTH	4.25" (10.8 cm)	4.25" (10.8 cm)	4.25" (10.8 cm)	5.5" (13.9 cm)	4.25" (10.8 cm)	5.5"
DECK ANTI-SCALP ROLLERS	4	4	4	5	4	5
BUMPER SKIDS	2	2	2	1	2	1
LEAF MULCHING KIT	NA	NA	NA	Yes	NA	NA
STRIPING KIT	NA	NA	NA	Yes	NA	NA

POLAR TRAC™ SYSTEM	
GENERAL	Polar Trac™ system converts the Groundsmaster 7200 into a snow removal machine complete with two rubber tracks and a climate controlled cab. Estimated conversion time is four hours for two people.
TRACTION DRIVE	Three wheels per side with rear wheel mounted in place of mower traction wheel. Front two wheels are mounted to a walking axle that permits motion without losing track tension. Track tread is made of a Kevlar® reinforced rubber compound designed to maintain traction on snow and ice.
GROUND SPEED	8 mph (12.9 km/h).
SAFETY CERTIFICATIONS	OSHA 1928.51, SAE J1194, CSA B352.1.
HYDRAULIC LIFT	Two foot pedals located on center of Polar Trac™ floor board; Left pedal: Raise/Lower/Hold/Float. Right pedal: Attachment angle control—right/left.
ATTACHMENT SYSTEM	Quick-attach A-mount on a hydraulically powered lift arm. PTO coupler to attachment is a quick connect as are the connections for the hydraulic connectors.
ATTACHMENT CONTROLS	Two foot pedals in Polar Trac™; one pedal controls the lift and lower of the attachment. The other pedal controls either the rotation of the snow blower discharge chute or the angular position of both the rotary broom and straight blade.
SNOW ATTACHMENTS	Snow blower, rotary broom, angled snow blade and powered V-plow. (Allied Attachments)
POLAR TRAC™ CAB	Cab is heated and pressurized with the following standard features: heater, pressurized heater/fan, heavy-duty pantograph front 28" long windshield wiper, molded front fenders, tinted right side window which can act as emergency exit, tinted full glass rear window, rubber sound isolator cab mounts and upholstered interior panels and headliner, textured neoprene floor mat.
CAB LIGHT SYSTEM	Lighting consisting of head lamps, turn signals, flashers and tail lamps. Meets ANSI/ASAE S279.12 (Lighting and Marking of Agricultural Equipment on Highways).

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The Groundsmaster® 7200 and 7210 are manufactured in Tomah, WI, ISO 9002 Certified Plant.





Groundsmaster® 7200 Series Specifications* (continued)

DIMENSIONS	GROUNDMASTER® 7200 SERIES CUTTING DECKS	GROUNDMASTER® 7200/7210 WITH POLAR TRAC™ SYSTEM & NO ATTACHMENT
HEIGHT ROPS UP	72" (182.8 cm)	72" (182.8 cm)
OVERALL LENGTH	95" (241.3 cm)	95" (241.3 cm)
OVERALL WIDTH	78" (198.2 cm) (72" (182.8 cm) Base Deck) 68" (172.7 cm) (62" (157.5 cm) Base Deck) 75" (190.5 cm) (72" (182.8 cm) Side Discharge) 64" (162.5 cm) (60" (152.4 cm) Side Discharge)	49.5" (125.7 cm)
WHEELBASE	57" (144.8 cm)	Not Applicable
ESTIMATED SHIPPING WEIGHT	1,900 lbs. (861.8 kg)	2,400 lbs. (1,088.6 kg)

PART NUMBER	MOWING UNIT ACCESSORIES
30349	Universal Mount Sunshade
30358	Bimini Canvas Shade
30374	Road Light Kit (30382 required, not required for Polar Trac™ system)
30382	12V Power Port/Electrical Accessory Kit
112-1688	Spark Arrestor Kit
114-4050	Slow Moving Vehicle (SMV) Sign
30375	Jack Stand Kit
110-6406	Semi-Pneumatic Tire Assembly (front caster wheel)
30392	Hood Lock and Handle Kit
103-6771	Lug Tire (use in applications requiring greater traction)

PART NUMBER	REAR QUICK ATTACH SYSTEM (MOWING UNIT)
30377	Rear Quick Attach System (30382 required for all rear attachments)
30393	Debris Blower (30377, 30380 required)
08761	QAS Nail Drag (30377, 110-6401 required)
30380	Auxiliary Hydraulic Power Kit (30377 required)
110-6401	Extension Handle Kit (qty. 1 required for each 08751, 08757, 08758 attachment)
08756	Drag Mat Carrier System (30377 required)
08751	Tooth Rake (30377, 110-6401 required)
08757	Steel Drag Mat (30377, 110-6401 08756 required)
08758	Cocoa Drag Mat (30377, 110-6401 08756 required)
08754	Finish Grader (30377 required)

NOTE: Front weights are required with use of certain rear attachments.

PART NUMBER	POLAR TRAC™ SYSTEM
30370	Polar Trac™ Frame and Rubber Tracks (required)
30371	Polar Trac™ Cab (required)
30750	V-Plow (30378 required)
30378	V-Plow Mounting Kit
ALLIED	Rotary Broom (M-B Companies model MCT)
ALLIED	Snowthrower (Erskine Attachments)
ALLIED	Straight Blade (M-B Companies)
ALLIED	Polar Trac™ Cab Windshield Washer Kit (Jodale Perry part no. 802081)
ALLIED	Rotating Beacon Kit (Jodale Perry part no. 800005)
30382	12V Power Port/Electrical Accessory Kit

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Groundsmaster® 7200 Series Specifications* (continued)

PART NUMBER	CUTTING DECK SPECIFIC ACCESSORIES FOR 72" SIDE DISCHARGE DECK
30347	Recycler Kit
105-7273	Striping Kit (for 72" (182.8 cm) side discharge deck only)
108-5273	Leaf Mulching Kit
110-0621-03	Medium Flow Blade
110-0622-03	High Flow Blade
110-0624	Atomic Mulching Blade
105-7272	Blade and Belt Kit

PART NUMBER	FOR 72" BASE DECK
108-1958	Standard Blade
105-7271	Blade and Belt Kit
105-7269	Tall Grass Baffle Kit (improves cut of tall grass with seed heads)

PART NUMBER	FOR 62" BASE DECK W/ RECYCLER BAFFLE KIT
92-5608	Standard Blade
107-0214	Atomic Mulching Blade
105-7269	Tall Grass Baffle Kit (improves cut of tall grass with seed heads)
105-7270	Blade and Belt Kit

PART NUMBER	FOR 60" SIDE DISCHARGE DECK
110-4701-03	Med Flow Blade
110-4702-03	High Flow Blade
110-4703-03	Atomic Blade
30460	E-Z Vac DFS Collection System

PART NUMBER	MAINTENANCE KITS
30037	MVP Kit (400 hour kit)

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Groundsmaster® 7200 Series Specifications* (continued)

SNOWTHROWER, ERSKINE MODEL 1600**	
STAGE	2
WIDTH OF CUT	53" (135 cm)
CUTTING HEIGHT	22" (56 cm)
CUTTING EDGE	51" (130 cm) bolt-on
SKID SHOES	Adjustable/Hardened
AUGER DIAMETER	12" (30 cm) open flight
FAN DIAMETER	16" (41 cm)
CHUTE ROTATION	Hydraulic
SHEAR PROTECTION	Pressure relief
CASTING DISTANCE	Up to 25' (7.62 m)
APPROXIMATE SHIPPING WEIGHT	418 lbs. (190 kg)
HOSES	Included



ROTARY BROOM, M-B MODEL MCT***	
TYPE	MECHANICAL Windrow type, front mounted mechanical drive broom. Hydraulic angling, 30 degrees left and right.
SWING	Swing pivot point inline with 50 degree CV joint
BROOM SIZE	25" (63.5 cm) diameter brush, 60" (152 cm) width.
BRUSH	Sectional brush with choice of polypropylene, wire or combination radial segments.
SHIPPING WEIGHT	60" Broom: 500 lbs., (227 kg).
OPTIONS	Hydraulic Swing Cylinder, Electric Swing Mechanism, Dirt Deflector, Storage Stands.



V-PLOW, MODEL 30750	
CUTTING WIDTH	48" (121.9 cm)
HITCH/MOUNT CONSTRUCTION	V-Plow Mounting Kit 30757 required for installation. All welded steel.



STRAIGHT BLADE, M-B MODEL DOZER BLADE***	
BLADE	Heavy-duty 10-gauge formed plate 60" (152.4 cm)
CUTTING EDGE	3/8"x 4"x 60" (.95 cm x 10.2 cm x 152.4 cm) high carbon steel bar; reversible
ANGLING	0-30 degrees infinitely left & right hydraulically operated
WIDTH	60" (152.4 cm)



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**Manufactured by Erskine. Attachment model ES1600. The Toro Company does not manufacture or sell the snowthrower, nor does Toro guarantee these accessories in any manner whatsoever.

***Manufactured by M-B Companies, Inc.

The Groundsmaster® 7200 and 7210 are manufactured in Tomah, WI, ISO 9002 Certified Plant.





Groundsmaster® 7200 Series Specifications* (continued)

	E-Z VAC DFS COLLECTION SYSTEM, MODEL 30348†
CONFIGURATION	Grass collection system that offers quick conversion between bagging and side discharge without tools.
COMPATIBLE MODELS	Works with 60" (152.4 cm) side discharge decks, models 30467 & 30468
BLOWER	Spindle-drive horizontal blower impeller is positioned parallel to and above the mower deck creating continuous air flow from deck to collection system.
CAPACITY	13.7 cu. ft. (402 liters)
DUMP FROM SEAT (DFS) FEATURE	Operator able to dump collected debris without leaving seat.

†Front weights required.



	POWERED V-PLOW, M-B MODEL V-PLOW**
CONFIGURATION	This implement combines two useful snow attachments, V-plow and angled blade, into one.
ANGLING	0-30 degrees, left and right, hydraulically
BLADE WIDTHS	Straight – 57.5" (146 cm) "V" – 50" (127 cm) Scoop – 48.25" (123 cm) Angled – 61" (155 cm)
BLADE HEIGHT	23" (58 cm)
CUTTING EDGE	Bolt-on, trip edge
SKID SHOES	Adjustable, cast-hardened



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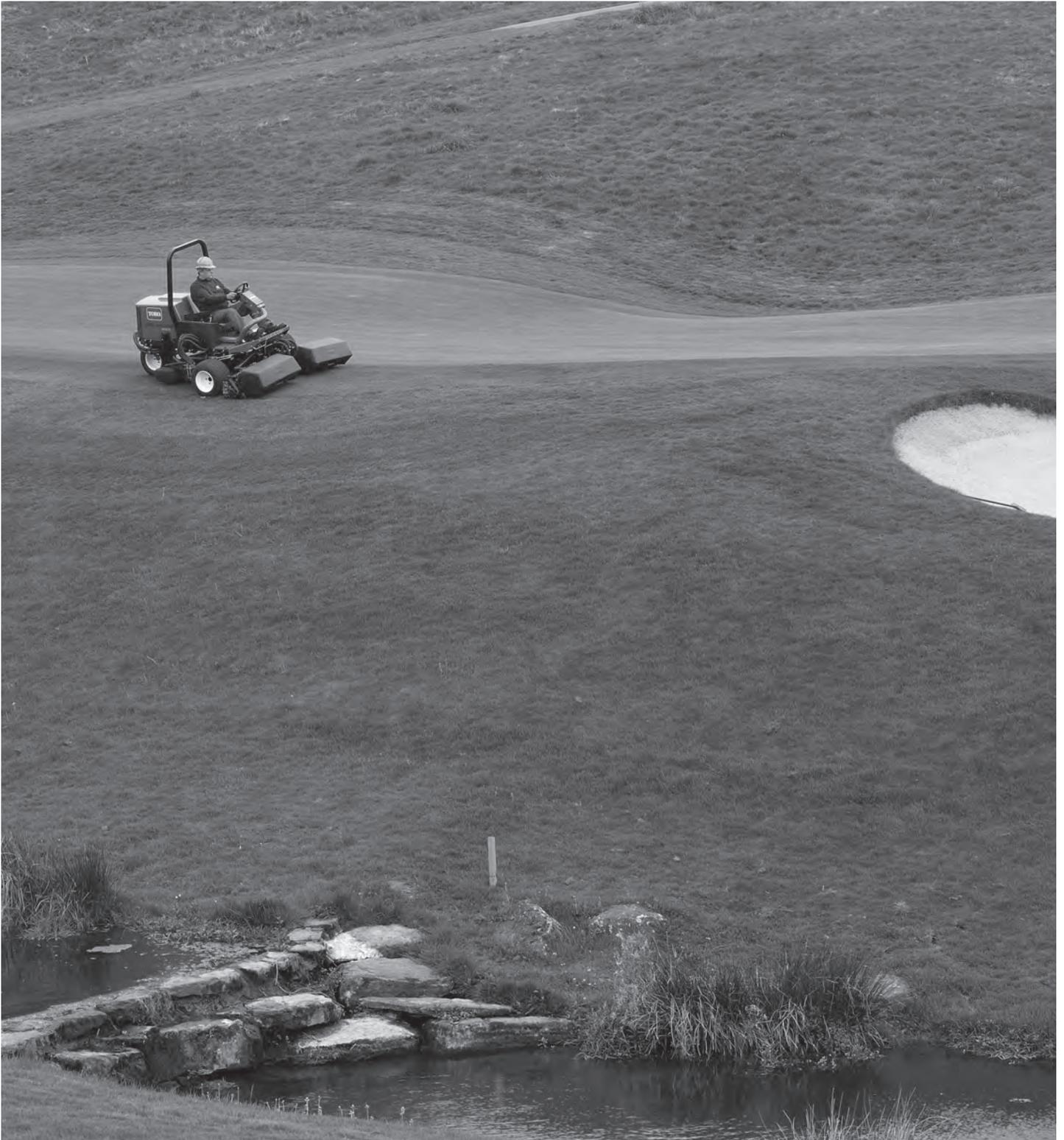
**Manufactured by M-B Companies, Inc. The Toro Company does not manufacture or sell the Powered V-Plow, nor does Toro guarantee these accessories in any manner whatsoever.





Reelmaster® 3100-D

The 3100-D triplex trim mower provides superb cutting, ultra comfort and ease of service – featuring a unique rear engine layout and optional Sidewinder™ cutting units.





Reelmaster® 3100-D Specifications*

	REELMASTER 3100-D, MODEL 03170	REELMASTER 3100-D, MODEL 03171 w/SIDEWINDER
ENGINE	Kubota® liquid-cooled diesel, 3-cylinder, 21.5 hp (16 kW) net @ 2500 RPM. High idle: 2,600 rpm, Low idle: 1,400 rpm (+/- 50 rpm). 68.5 cu. in. (1123 cm ³) displacement. Pressurized lubrication system with 3.5 U.S. qt. (3.3 liter) capacity. Heavy-duty, radial seal air cleaner. Fuel/water separator with visible bowl.	
CONFIGURATION	Rear mounted engine, front operator position. Rear mounted radiator. Two post ROPS and seat belt standard.	
FUEL CAPACITY	7.5 gallons (28 liters). Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).	
TRACTION DRIVE	Series/Parallel hydraulic traction circuit provides continuous 3-wheel drive, in mow and transport. Hydrostatic traction drive provides infinitely variable speed in forward and reverse. 6 gallon (23 liter) hydraulic system capacity.	
GROUND SPEED	Mow: 0-6 mph (0-10 km/h); Transport: 0-9 mph (0-14 km/h). Reverse: 0-4 mph. (0-6 km/h).	
CONTROLS	Forward and reverse traction control pedals, mow/transport lever, hand activated park brake, ignition key switch, tilt steering wheel lock, PTO switch, throttle, joystick control for cutting unit raise and lower (and for moving cutting units side-to-side on Sidewinder equipped models), cutting unit transport lock, reel speed and backlap control knob.	
GAUGES	Hour meter, fuel gauge, cluster gauge with glow plug and charge indicator lights, and low engine oil pressure and high coolant temperature warning lights (high temperature safety shut off).	
ELECTRICAL & INTERLOCKS	12-volt, 585 cold cranking amps at 0° F (-18° C), 40 amps with regulator/rectifier. Traction pedal, operator presence in seat, PTO engage or disengage, and cutting unit mow or transport safety interlock switches.	
TIRES	Front: 20 x 12-10, 4-ply Turf Tread. Rear: 20 x 10-10, 4-ply Turf Tread	
FRAME	Formed steel, welded steel and steel tubing.	
BRAKES	Hydrostatic service brake, hand-operated parking brake.	
STEERING	Power steering with tilt steering wheel.	
OVERALL DIMENSIONS	Track Width: 55" (140 cm) Wheel Base: 56" (142 cm) Overall Length: 93" (248 cm)	Overall Height: 71" (180 cm) with ROPS Transport Width: 80" (203 cm) in 72" (183 cm) woc 92" (234 cm) in 85" (216 cm) woc Approx. Weight with Cutting units: 1860 lbs. (844 kg)
CUTTING UNIT CONFIGURATION	Fixed position cutting units.	Operator controlled moveable cutting units travel ±12" (30 cm) left or right from center; total of 24" (61 cm) of infinite variability.
CUTTING UNIT OFFSET	3" (7.6 cm) in 72" (183 cm) width of cut 10" (25 cm) in 85" (216 cm) width of cut	Maximum 15" (38 cm) in 72" (183 cm) width of cut. Maximum 22" (56 cm) in 85" (216 cm) width of cut.
CERTIFICATION	This product complies with the American National Standards Institute (ANSI B71-4 – 2004) and European Community specifications (CE Certified).	
WARRANTY	Two-year limited warranty, refer to operators manual for details.	

	27" CUTTING UNITS (03180, 03181, 03183) / 32" CUTTING UNITS (03182)
TYPE	Three hydraulically-driven, balanced, 7" (17.8 cm) diameter reels. Cutting units interchangeable to all three positions.
REEL BLADE OPTIONS	5, 8, and 11-blade reels available for 27" (68.6 cm) cutting unit. 8-blade reels available for 32" (81.3 cm) cutting unit.
HOC RANGE	Height of cut ranges .25" to 2" (.63 - 5.1 cm) standard in floating position, 1.5" to 2.5" (3.8 - 6.4 cm) in fixed position.
CUTTING WIDTH	72" (183 cm), or 85" (216 cm) width of cut dependent on cutting unit selection.
CLIP FREQUENCY/BACKLAPPING	Manually controlled variable reel speed for adjustment of clip frequency. Standard on-board backlapping.
BEDKNIFE-TO-REEL ADJUSTMENT	Dual point adjustment (DPA) of bedknife to reel.
ROLLERS	Full roller standard on rear of cutting unit and plastic front Wiehle roller.

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The Reelmaster 3100-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 3100-D Accessories*

CUTTING UNIT OPTIONS	
03180	27" (69 cm) 5-Blade DPA Cutting Unit
03181	27" (69 cm) 8-Blade DPA Cutting Unit
03183	27" (69 cm) 11-Blade DPA Cutting Unit
03184	27" (69 cm) Verticutter Cutting Unit
03182	32" (81 cm) 8-Blade DPA Cutting Unit

27" (69 CM) DPA CUTTING UNIT ACCESSORIES	
03186	Rear Roller Brush Kit
03185	Grass Basket Kit
114-9368	Rear Roller Scraper Kit
114-9372-03	Wiehle Roller Scraper
114-9376	Comb/Scraper Kit
119-0630	Shoulder Roller Asm
114-9381-03	Shoulder Roller Scraper
114-9383	Full Front Roller
114-9386-03	Full Front Roller Scraper
119-4286	Short Rear Roller Asm
115-0838	High HOC Brush
119-0646-03	Fixed Plate (2 per cutting unit)
119-0649	Trim/HD Collar Kit (6 per roller)
119-0635	RM3100 Tipper Roller Kit
98-1852	Gauge Bar

TRACTION UNIT ACCESSORIES	
30358	Bimini Canvas Sunshade
115-4754	myTurf® Wireless Hour Meter Assembly

32" (81 CM) DPA CUTTING UNIT ACCESSORIES	
03187	Rear Roller Brush Kit
115-8282	5-Blade Service Reel
114-9369	Rear Roller Scraper Kit
114-9373-03	Wiehle Roller Scraper
114-9377	Comb/Scraper Kit
115-0849	High HOC Brush
114-9384	Full Front Roller
114-9387-03	Full Front Roller Scraper
119-0640	Shoulder Roller Asm
114-9382-03	Shoulder Roller Scraper
119-4288	Short Rear Roller Asm
119-0646-03	Fixed Plate (2 per cutting unit)
119-0649	Trim/HD Collar Kit (6 per roller)
119-0635	RM3100 Tipper Roller Kit
98-1852	Gauge Bar

BEDKNIFE OPTIONS	
114-9388	Standard (27") - Production
114-9389	Standard (32") - Production
112-8910	EdgeMax™ (27")
112-8956	EdgeMax™ (32")
114-9390	Heavy-Duty (27")
114-9391	Heavy-Duty (32")
120-1641	Extended Low-Cut (27")
120-1642	Extended Low-Cut (32")

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The Reelmaster 3100-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 3550-D

The new Toro® Reelmaster® 3550-D floats effortlessly over contours in fairways and green surrounds. With a productive 82-inch cutting width, turf-friendly tires, the superior traction of a Series/Parallel 3-wheel drive system, and a weight of less than 2,000 pounds,* the Reelmaster 3550-D is engineered to make a big impression...without leaving one.



* Gross vehicle weight for standard configuration, including five 18-inch cutting units, with no optional accessories.



Reelmaster® 3550-D Specifications*

REELMASTER 3550-D, MODEL 03910	
ENGINE	Kubota® 3-cylinder, liquid-cooled diesel engine. 24.8 hp (18.5 kW) @ 3000 RPM. Engine governed to 3220 RPM high idle (± 50 RPM), 1400 RPM low idle (± 50 RPM). Displacement: 68.5 cu.in. (1123 cc). Peak torque: 57.2 lbs-ft @ 2200 RPM.
LUBRICATION	Pressurized lubrication system with 3.5 quarts (3.3 liters) capacity.
FUEL FILTER	10 micron spin-on filter with integral water separator.
COOLING	Aluminum side-by-side oil cooler/radiator. 8.5 fins per inch, wavy fin, non-louvered. 5.25 quart (4.9 liter) capacity.
FUEL TANK CAPACITY	7.5 gallons (28.3 liters), diesel fuel. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).
TRACTION DRIVE	Series/Parallel hydraulic traction circuit provides continuous 3-wheel drive, in mow and transport. Hydrostatic traction drive provides infinitely variable speed in forward and reverse. 6 gallon (23 liter) hydraulic system capacity.
GROUND SPEED	0-10 mph (0-16.1 km/hr) forward transport; 0-7mph (0-11.3 km/hr) mow; 0-3.5 mph (5.6 km/hr) reverse.
TIRES	Three (3) 22x12-12, 4-ply, no tread tires. 12 PSI recommended pressure.
MAIN FRAME	Formed steel, welded steel and steel tubing.
BRAKES	Hydrostatic service brake. Hand-operated parking brake.
STEERING	Power steering with tilt steering wheel.
GAUGES	Hour meter, fuel gauge, diagnostic lamp, cluster gauge with glow plug and charge indicator lights, and low engine oil pressure and high coolant temperature warning lights (high temperature safety shut off).
CONTROLS	Foot operated controls: Forward and reverse traction pedal, mow/transport speed limiter. Hand operated on control panel: Parking brake lever, ignition switch, engine throttle lever, work light switch, on/off switch for cutting units, joystick for cutting unit lift and lower. Other controls: Steering wheel tilt control, reel speed control, backlap engagement lever.
ELECTRICAL & INTERLOCKS	Heavy-duty 12 V battery, 570 CCA; 40 amp alternator/regulator. Electronic control unit is microprocessor based, solid state control unit with diagnostic capabilities. Traction pedal neutral, parking brake, operator presence in seat, and cutting unit engage/disengage safety interlock switches.
REEL DRIVE	Hydraulic, open loop through oil cooler & filter. High efficiency pressure balanced gear type motors and pumps.
SEAT	Mechanical suspension standard.
DIMENSIONS	Height: 74" (188 cm) Length: 110" (279.4 cm) Wheelbase: 59.5" (151.1 cm) Operational Width: 94" (238.8 cm) Transport Width: 91" (213.1 cm)
WEIGHT	1,985 lbs. (900.38 kg) with (5) 18" 8-blade cutting units.
SAFETY	ROPS Standard. Capable of traversing a 25° slope in any direction on dry grass, while mowing.
CERTIFICATION	Complies with ANSI B71.4-2012 and CE requirements.
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.

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The Reelmaster 3550-D is manufactured in Tomah, WI. ISO 9002 Certified Plant.





Reelmaster® 3550-D Accessories*

	18" CUTTING UNITS: 03911 (8-BLADE) & 03912 (11-BLADE) 22" CUTTING UNIT: 03913 (8-BLADE)
TYPE	Five hydraulically driven, balanced, DPA cutting Units. Frame precision manufactured, die-cast aluminum for increased strength, simple click adjustment maintenance.
SIZE	18" (46 cm) wide, 5" (12.7 cm) diameter. Optional 22" (56 cm) wide, 5" (12.7 cm) diameter for the rear positions to increase overlap.
WIDTH OF CUT	82" (2.1 m)
HOC RANGE	8-Blade (18") recommended range 0.5" – 1.0" (13 mm-25 mm). 11-Blade (18") recommended range 0.25" – 0.75" (6 mm – 19 mm). 8-Blade (22") recommended range 0.5" – 1.0" (13 mm-25 mm). High HOC Kit available as an option to increase height of cut range from: 1.0" – 1.5" (25 mm – 38mm).
REEL SPEED	2350 (+/- 150) rpm max reel speed at highest setting. 200 rpm max at low idle and lowest setting for backlapping.
BEDKNIFE ADJUSTMENT	Precision machined cutting units maintain levelness and hold adjustments. Dual Precision Adjustment (DPA) allows quick bedknife to reel adjustment.
ROLLERS	Wiehle front roller and standard rear roller included. Optional front full and shoulder rollers, and longer rear rollers available.
GRASS BASKETS	Optional 18" (46 cm) or 22" (56 cm) baskets.

CUTTING UNIT OPTIONS	
03911	18" (46 cm) 8-Blade DPA Cutting Unit
03912	18" (46cm) 11-Blade DPA Cutting Unit
03913	22" (56 cm) 8-Blade DPA Cutting Unit

22" (56 CM) DPA CUTTING UNIT ACCESSORIES	
03920	Grass Basket Kit
107-3280	Rear Roller Scraper Kit
107-2993-03	Wiehle Roller Scraper
110-1735	Comb/Scraper Kit
114-5412	Full Front Roller
110-9602-03	Full Front Roller Scraper
114-5404	Long Rear Roller Asm
114-5421	Shoulder Roller Asm
110-9609-03	Shoulder Roller Scraper
110-9600	High HOC Kit

TRACTION UNIT ACCESSORIES	
30358	Bimini Canvas Sunshade
121-7924	Tire – Turf Tread
110-8804	Cool Top Fan (U.S. Only)
115-4754	myTurf® Wireless Hour Meter Assembly

18" (46 CM) DPA CUTTING UNIT ACCESSORIES	
03919	Grass Basket Kit
03921	Extended Front Grass Basket Kit
120-9986	Rear Roller Scraper Kit
121-3182-03	Wiehle Roller Scraper
121-6995	Comb/Scraper Kit
110-9600	High HOC Kit
121-3199	High HOC Brush (for 18" RRB kits)
112-1732	Full Front Roller
121-6996-03	Full Front Roller Scraper
112-1728	Long Rear Roller Asm
112-1733	Shoulder Roller Asm
121-6970-03	Shoulder Roller Scraper
108-6715	Gauge Bar
29-9100	Brush & Handle

BEDKNIFE OPTIONS	
121-3165	EdgeMax™ (18")
108-9095	EdgeMax™ (22")
125-2770	Premium Low cut (18")
125-2771	Premium Low cut (22")
121-3166	Standard (18")
108-9096	Standard (22")
121-3167	Standard Low Cut (18")
110-4084	Standard Low Cut (22")

GROOMER AND REAR ROTATING BRUSH OPTIONS	
03914	DPA Groomer (LH) (18") - 3 required
03915	DPA Groomer (RH) (18") - 2 required
03916	Rear Roller Brush ONLY Kit (18")
03917	Rear Roller Brush (for Groomer Kit) (18")
03918	Rear Roller Brush Kit (3 - 18") & (2 - 22")
119-9176	Broomer Kit (For 18" Groomers)
03717	Fairway Perfection Brush (optional replacement for groomer blades)

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The Reelmaster 3550-D is manufactured in Tomah, WI. ISO 9002 Certified Plant.





Reelmaster® 5410 / 5410-G / 5410-D

A lightweight fairway mower that's agile and easy on the turf, yet has the power and cutting capacity to get even the tough jobs done.





Reelmaster® 5410 / 5410-G / 5410-D Specifications*

	REELMASTER 5410 DIESEL, MODEL 03670	REELMASTER 5410-G GAS, MODEL 03673	REELMASTER 5410-D (A) TIER 4 DIESEL, MODEL 03672 
ENGINE	Kubota® 4-cylinder, liquid cooled, diesel engine. 35.5 hp (26.5 kW) @ 3000 rpm.	Kubota® 4-cylinder, liquid cooled, gas engine. 49 hp (36.5 kW), 88.5 ft. lbs. (120 Nm) torque.	Yanmar® 3-cylinder, liquid cooled, diesel engine. 36.8 hp (27.5 kW), 74.4 ft. lbs. (105 Nm) torque, 1.64 liter displacement.
LUBRICATION	Pressurized lubrication system with 5.0 quart (4.7 liter) capacity.		
FUEL FILTER	Replaceable spin-on fuel filter/water separator.		
AIR CLEANER	Heavy-duty three-stage, radial seal air cleaner with restriction indicator.		
COOLING	Rear mounted radiator with industrial tube and fin construction, 6.5 fins per inch, 7.0 quart (6.6 liter) capacity.	Plate and bar radiator/oil cooler combination, 6.3 fins per inch, 10 quart (9.5 liter) capacity.	
FUEL TANK CAPACITY	13.5 gallon (51.1 liter) capacity. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).	14 gallon (53 liter) capacity.	
HYDRAULIC OIL CAPACITY	9.0 gallon (34.1 liter) capacity.	15 gallon (56.8 liter) capacity.	
TRACTION DRIVE	Front drive wheels powered by a hydrostatic pump with individual wheel motors. All-wheel drive optional with CrossTrax® All-Wheel Drive system, which transfers power from the front wheels to the opposite rear wheels via independent rear wheel motors		
GROUND SPEED	0-10 mph (0-16 km/hr) forward transport; 0-8 mph (0-12.8 km/hr) mow; 0-4 mph (0-6.4 km/h) reverse.		
TIRES	Front traction tires: 26.5 x 14-12 turf tires Rear steer tires: 20 x 12-10		
MAIN FRAME	High strength steel frame with welded construction.		
BRAKES	Individual left and right drum-type front wheel brakes. Brakes may be actuated for service braking via left foot pedal. Integrated foot pedal lock provides parking brake. Dynamic braking through hydrostatic traction drive system.		
STEERING	Rear wheel, power steering with an independent hydraulic pump and circuit.		
GAUGES	Hour meter, fuel gauge, engine coolant temperature gauge, and warning light cluster; engine oil pressure, high engine coolant temperature, battery voltage, glow plug indicator, and diagnostic indicator.	InfoCenter™ onboard LCD display shows gauges, alerts/fauls, service reminders, electrical system diagnostics, indicates fuel level, coolant temp., low oil pressure, alternator, engine hours, engine rpm, voltage, reel speed, backlap speed, glow indicator (diesel), lift/lower indicator.	
DIAGNOSTICS	The Automatic Control Electronics, ACE™ system allows precision timing and control of machine functions for maximum performance. Available display connects to an electronic control unit to diagnose electrical system quickly and easily. Available DATA LOG™ system captures intermittent electrical system activity.	N/A	
CONTROLS	Single foot-operated traction pedal, foot actuated mow speed limiter, foot actuated service and parking brake. Hand-operated key ignition switch, throttle, cutting unit raise/lower joystick, cutting unit engage switch, and headlight switch all positioned on right hand pivoting control console.	Single foot-operated traction pedal, foot actuated mow speed limiter, foot actuated service and parking brake. Hand-operated key ignition switch, throttle, isochronous engine speed control, cutting unit raise/lower joystick, cutting unit engage switch, and headlight switch all positioned on right hand pivoting control console.	
ELECTRICAL & INTERLOCKS	Heavy-duty 12-volt battery, 570 CCA, 40 amp alternator. Electronic control unit is a microprocessor based, solid state control unit with diagnostic capabilities. Traction pedal, parking brake, operator presence in seat, and cutting unit engage/disengage safety interlock switches.	Heavy-duty 12-volt battery, 570 CCA, 55 amp alternator. Electronic control unit is a microprocessor based, solid state control unit with diagnostic capabilities. Traction pedal, parking brake, operator presence in seat, and cutting unit engage/disengage safety interlock switches.	
REEL DRIVE	Reel drive circuit is split independently for front and rear cutting units. Hydraulic functions controlled by an integrated hydraulic control block. Reel speeds are manually adjustable in nine incremental settings. Standard on-board backlapping.	Reel drive circuit is split independently for front and rear cutting units. Hydraulic functions controlled by an integrated hydraulic control block. Reel speeds are electronically adjustable in nine incremental settings. Standard on-board backlapping.	
CUTTING UNIT LIFT/LOWER	Front and rear cutting unit lift/lower is sequenced for uniform starting and ending points.		
SEAT	Deluxe high back suspension seat with fore, aft, height and weight adjustment.		
ROPS	2WD: Optional 4WD: Standard with seat belt		
HEIGHT	63" (160 cm) seat top, 85" (217.2 cm) top of ROPS.		
LENGTH (2WD)	111" (281.9 cm)		
WHEEL BASE	60" (152.4 cm)		
OPERATIONAL WIDTH	113.5" (288.3 cm)		
TRANSPORT WIDTH	92" (233.7 cm)		
WEIGHT	2,505 lbs. (1,136 kg) (2WD), 2,615 lbs. (1,186 kg) (4WD)	2,750 lbs. (1,247 kg) (2WD), 2,860 lbs. (1,297 kg) (4WD)	2,943 lbs. (1,335 kg) (2WD), 3,053 lbs. (1,385 kg) (4WD)
CERTIFICATION	Complies with ANSI B71.4-2004 and CE requirements. Certain machine configurations require rear weight kits for standards compliance, see Operator's Manual for details.		
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.		

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.

The Reelmaster 5410 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 5410 / 5410-G / 5410-D Accessories*

		8-BLADE CUTTING UNIT, MODEL 03694	11-BLADE CUTTING UNIT, MODEL 03695
TYPE		5-plex, hydraulically driven, balanced cutting units with adjustable rear weight transfer spring. Cutting units feature quick disconnect for removal/installation and are interchangeable to all positions. Cutting units also feature rear throw capability.	
SIZE		22" (56 cm) wide, 5" (12.7 cm) diameter, 8 & 11" blade cutting units.	
WIDTH OF CUT		100" (254 cm)	
HOC RANGE		0.25" - 1.0" (6.4-25.4 mm) standard. Up to 1.5" (38.1 mm) with high height of cut kit.	
REEL SPEED		Manually controlled, variable reel speed for control of clip frequency. Reel speeds are incrementally adjustable between 200-2,000 rpm with a backlap speed of 200 rpm.	
BEDKNIFE ADJUSTMENT		Dual Precision Adjustment (DPA), bedknife to reel.	
ROLLERS		3" (7.6 cm) diameter, deep groove plastic Wiehle front roller. 2.5" (6.4 cm) diameter shortened steel rear roller. Other roller configurations optional.	

		FAIRWAY GROOMER, MODELS 03665, 03666 & OPTIONAL BROOMER,® PART 110-4085
TYPE		Rotating blades with optional Broomer™ brush strips that are woven within the blade helix for full width turf contact.
GROOMING WIDTH		20.5" (52.1 cm)
GROOMING RANGE		0-0.25" (0-6.4 mm) below height of cut when engaged, 0.5" (0-12.7 mm) above Groomer height of cut when disengaged.
BLADES		2.5" (6.4 cm) diameter, 0.042" (1 mm) thick heat treated spring steel blades with 0.5" (12.7 mm) spacing.

		POWERED REAR ROLLER BRUSH, MODEL 03668
TYPE		Rotating, helically woven, stiff bristled brush. Spring loaded belt drive.
CONTACT POINTS		Tightly woven 11-point contact.
SPIN RATE		Rapid 2000 rpm spin rate.

TRACTION UNIT ACCESSORIES	
03671	CrossTrax® All-Wheel Drive
03667	Air-ride Seat Suspension
30359	Universal Mount Sunshade
03662	Grass Basket Kit

REEL OPTIONS	
108-9072	7" - 5 Blade Reel only
03684	Verticutter Reel
110-9600	High Height of Cut Kit

GROOMER OPTIONS	
110-4085	Broomer (for use with groomer blades)
03718	Fairway Perfection Brush (optional replacement for groomer blades)

BEDKNIFE OPTIONS	
110-4084	Low Cut Bedknife
125-2771	EdgeMax™ Low Cut Bedknife
108-9095	EdgeMax™ Bedknife (Production)
119-4280	EdgeMax™ Extended Low HOC Bedknife
120-1640	Extended Low HOC Bedknife
110-4074	Heavy Duty Bedknife
108-9096	Standard Bedknife

SCRAPER OPTIONS	
107-3280	Rear Roller Scraper
107-2993-03	Wiehle Roller Scraper
110-1735	Comb Scraper Kit

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.

The Reelmaster 5510 & 5610 are manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 5510 / 5510-G / 5510-D

A lightweight fairway mower that's agile and easy on the turf, yet has the power and cutting capacity to get even the tough jobs done.





Reelmaster® 5510 / 5510-G / 5510-D Specifications*

	REELMASTER 5510, MODEL 03680	REELMASTER 5510-G, GAS, MODEL 03689	REELMASTER 5510-D (A), TIER 4 DIESEL, MODEL 03687 
ENGINE	Kubota® 4-cylinder, liquid cooled, diesel engine. 35.5 hp (26.5 kW) @ 3000 rpm.	Kubota® 4-cylinder, liquid cooled, gas engine. 49 hp (36.5 kW), 88.5 ft. lbs. (120 Nm) torque.	Yanmar® 3-cylinder, liquid cooled, diesel engine. 36.8 hp (27.5 kW), 74.4 ft. lbs. (105 Nm) torque, 1.64 liter displacement.
LUBRICATION	Pressurized lubrication system with 5.0 quart (4.7 liter) capacity.		
FUEL FILTER	Replaceable spin-on fuel filter/water separator.		
AIR CLEANER	Heavy-duty three-stage, radial seal air cleaner with restriction indicator.		
COOLING	Rear mounted radiator with industrial tube and fin construction, 6.5 fins per inch, 7.0 quart (6.6 liter) capacity.	Plate and bar radiator/oil cooler combination, 6.3 fins per inch, 10 quart (9.5 liter) capacity.	
FUEL TANK CAPACITY	13.5 gallon (51.1 liter) capacity. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).	14 gallon (53 liter) capacity.	
HYDRAULIC OIL CAPACITY	9.0 gallon (34.1 liter) capacity.	15 gallon (56.8 liter) capacity.	
TRACTION DRIVE	Front drive wheels powered by a hydrostatic pump with individual wheel motors. All-wheel drive optional with CrossTrax® All-Wheel Drive system, which transfers power from the front wheels to the opposite rear wheels via independent rear wheel motors		
GROUND SPEED	0-10 mph (0-16 km/hr) forward transport; 0-8 mph (0-12.8 km/hr) mow; 0-4 mph (0-6.4 km/h) reverse.		
TIRES	Front traction tires: 26.5 x 14-12 turf tires Rear steer tires: 20 x 12-10		
MAIN FRAME	High strength steel frame with welded construction.		
BRAKES	Individual left and right drum-type front wheel brakes. Brakes may be actuated for service braking via left foot pedal. Integrated foot pedal lock provides parking brake. Dynamic braking through hydrostatic traction drive system.		
STEERING	Rear wheel, power steering with an independent hydraulic pump and circuit.		
GAUGES	Hour meter, fuel gauge, engine coolant temperature gauge, and warning light cluster; engine oil pressure, high engine coolant temperature, battery voltage, glow plug indicator, and diagnostic indicator.	InfoCenter™ onboard LCD display shows gauges, alerts/fauls, service reminders, electrical system diagnostics, indicates fuel level, coolant temp., low oil pressure, alternator, engine hours, engine rpm, voltage, reel speed, backlap speed, glow indicator (diesel), lift/lower indicator.	
DIAGNOSTICS	The Automatic Control Electronics, ACE™ system allows precision timing and control of machine functions for maximum performance. Available display connects to an electronic control unit to diagnose electrical system quickly and easily. Available DATA LOG™ system captures intermittent electrical system activity.	N/A	
CONTROLS	Single foot-operated traction pedal, foot actuated mow speed limiter, foot actuated service and parking brake. Hand-operated key ignition switch, throttle, cutting unit raise/lower joystick, cutting unit engage switch, and headlight switch all positioned on right hand pivoting control console.	Single foot-operated traction pedal, foot actuated mow speed limiter, foot actuated service and parking brake. Hand-operated key ignition switch, throttle, isochronous engine speed control, cutting unit raise/lower joystick, cutting unit engage switch, and headlight switch all positioned on right hand pivoting control console.	
ELECTRICAL & INTERLOCKS	Heavy-duty 12-volt battery, 570 CCA, 40 amp alternator. Electronic control unit is a microprocessor based, solid state control unit with diagnostic capabilities. Traction pedal, parking brake, operator presence in seat, and cutting unit engage/disengage safety interlock switches.	Heavy-duty 12-volt battery, 570 CCA, 55 amp alternator. Electronic control unit is a microprocessor based, solid state control unit with diagnostic capabilities. Traction pedal, parking brake, operator presence in seat, and cutting unit engage/disengage safety interlock switches.	
REEL DRIVE	Reel drive circuit is split independently for front and rear cutting units. Hydraulic functions controlled by an integrated hydraulic control block. Reel speeds are manually adjustable in nine incremental settings. Standard on-board backlapping.	Reel drive circuit is split independently for front and rear cutting units. Hydraulic functions controlled by an integrated hydraulic control block. Reel speeds are electronically adjustable in nine incremental settings. Standard on-board backlapping.	
CUTTING UNIT LIFT/LOWER	Front and rear cutting unit lift/lower is sequenced for uniform starting and ending points.		
SEAT	Deluxe high back suspension seat with fore, aft, height and weight adjustment.		
ROPS	2WD: Optional 4WD: Standard with seat belt		
HEIGHT	63" (160 cm) seat top, 85.5" (217.2 cm) top of ROPS.		
LENGTH (2WD)	111" (281.9 cm)		
WHEEL BASE	60" (152.4 cm)		
OPERATIONAL WIDTH	116" (288.3 cm)		
TRANSPORT WIDTH	92" (233.7 cm)		
WEIGHT	2,693 lbs. (1,222 kg) (2WD), 2,803 lbs. (1,271 kg) (4WD)	2,938 lbs. (1,332 kg) (2WD), 3,048 lbs. (1,382 kg) (4WD)	3,131 lbs. (1,420 kg) (2WD), 3,241 lbs. (1,470 kg) (4WD)
CERTIFICATION	Complies with ANSI B71.4-2004 and CE requirements. Certain machine configurations require rear weight kits for standards compliance, see Operator's Manual for details.		
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.		

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The Reelmaster 5510 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 5510 / 5510-G / 5510-D Accessories*

8 AND 11-BLADE CUTTING UNITS, MODELS 03696 AND 03697	
TYPE	5-plex, hydraulically driven, balanced cutting units with adjustable rear weight transfer spring. Cutting units feature quick disconnect for removal/installation and are interchangeable to all positions. Cutting units also feature rear throw capability.
SIZE	22" (56 cm) wide, 7" (17.8 cm) diameter, 8 and 11 blade cutting units.
WIDTH OF CUT	100" (254 cm)
HOC RANGE	0.25" - 1" (6.4-25.4 mm) standard. Up to 2" (50.8 mm) with high height of cut kit.
REEL SPEED	Manually controlled, variable reel speed for control of clip frequency. Reel speeds are incrementally adjustable between 200-1,650 rpm with a backlap speed of 200 rpm.
BEDKNIFE ADJUSTMENT	Dual Precision Adjustment (DPA), bedknife to reel.
ROLLERS	3" (7.6 cm) diameter, deep groove plastic Wiehle front roller. 3" (7.6 cm) diameter steel rear roller. Other roller configurations optional.

FAIRWAY GROOMER, MODELS 03685, 03686 & OPTIONAL BROOMER,® PART 110-4085	
TYPE	Rotating blades with optional Broomer™ brush strips that are woven within the blade helix for full width turf contact.
GROOMING WIDTH	20.5" (52.1 cm)
GROOMING RANGE	0-0.25" (0-6.4 mm) below height of cut when engaged, 0-0.25" (0-6.4 mm) above height of cut when disengaged.
BLADES	2.5" (6.4 cm) diameter, 0.042" (1 mm) thick heat treated spring steel blades with 0.5" (12.7 mm) spacing.

POWERED REAR ROLLER BRUSH, MODEL 03688	
TYPE	Rotating, helically woven, stiff bristled brush. Spring loaded belt drive.
CONTACT POINTS	Tightly woven 11 point contact.
SPIN RATE	Rapid 2000 rpm spin rate.

TRACTION UNIT ACCESSORIES	
03671	CrossTrax® All-Wheel Drive
03667	Air-ride Seat Suspension
30359	Universal Mount Sunshade
03662	Grass Basket Kit

REEL OPTIONS	
108-9072	7" - 5 Blade Reel only
03684	Verticutter Reel
110-9600	High Height of Cut Kit

GROOMER OPTIONS	
110-4085	Broomer (for use with groomer blades)
03718	Fairway Perfection Brush (optional replacement for groomer blades)

BEDKNIFE OPTIONS	
110-4084	Low Cut Bedknife
125-2771	EdgeMax™ Low Cut Bedknife
108-9095	EdgeMax™ Bedknife (Production)
119-4280	EdgeMax™ Extended Low HOC Bedknife
120-1640	Extended Low HOC Bedknife
110-4074	Heavy Duty Bedknife
108-9096	Standard Bedknife

SCRAPER OPTIONS	
107-3280	Rear Roller Scraper
107-2993-03	Wiehle Roller Scraper
110-1735	Comb Scraper Kit

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.

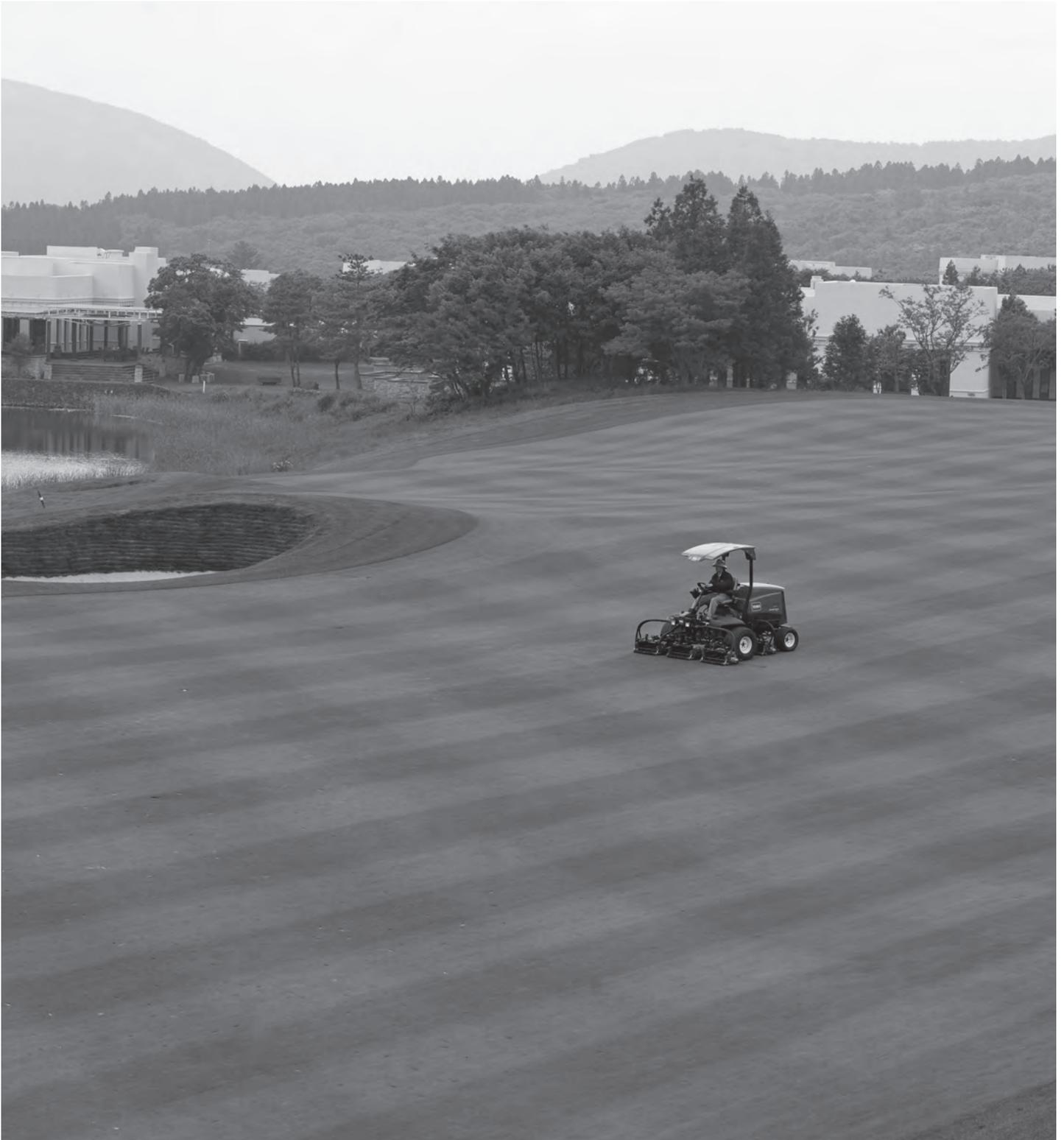
The Reelmaster 5510 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 5610

A lightweight fairway mower that's agile and easy on the turf, yet has the power and cutting capacity to get even the tough jobs done.





Reelmaster® 5610 Specifications*

REELMASTER 5610, MODEL 03690	
ENGINE	Kubota® 4-cylinder, liquid cooled, diesel engine. 44.2 hp (33 kW) @ 3000 rpm.
LUBRICATION	Pressurized lubrication system with 5.0 quart (4.7 liter) capacity.
FUEL FILTER	Replaceable spin-on fuel filter/water separator.
AIR CLEANER	Heavy duty three-stage, radial seal air cleaner with restriction indicator.
COOLING	Rear mounted radiator with industrial tube and fin construction, 6.3 fins per inch, 10.0 quart (9.5 liter) capacity.
FUEL TANK CAPACITY	13.5 gallon (51.1 liter) capacity. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).
HYDRAULIC OIL CAPACITY	9.0 gallon (34.1 liter) capacity.
TRACTION DRIVE	Front drive wheels powered by a hydrostatic pump with individual wheel motors. All-wheel drive optional with CrossTrax® All-Wheel Drive system, which transfers power from the front wheels to the opposite rear wheels via independent rear wheel motors.
GROUND SPEED	0-10 mph (0-16 km/hr) forward transport; 0-8 mph (0-12.8 km/hr) mow; 0-4 mph (0-6.4 km/h) reverse.
TIRES	Front traction tires: 26.5 x 14-12 turf tires; Rear steer tires: 20 x 12-10.
MAIN FRAME	High strength steel frame with welded construction.
BRAKES	Individual left and right drum-type front wheel brakes. Brakes may be actuated for service braking via left foot pedal. Integrated foot pedal lock provides parking brake. Dynamic braking through hydrostatic traction drive system.
STEERING	Rear wheel, power steering with an independent hydraulic pump and circuit.
GAUGES	Hour meter, fuel gauge, engine coolant temperature gauge, and warning light cluster; engine oil pressure, high engine coolant temperature, battery voltage, glow plug indicator, and diagnostic indicator.
DIAGNOSTICS	The Automatic Control Electronics, ACE™ system allows precision timing and control of machine functions for maximum performance. Available display connects to an electronic control unit to diagnose electrical system quickly and easily. Available DATA LOG™ system captures intermittent electrical system activity.
CONTROLS	Single foot-operated traction pedal, foot actuated mow speed limiter, foot actuated service and parking brake. Hand-operated key ignition switch, throttle, cutting unit raise/lower joystick, cutting unit engage switch, and headlight switch all positioned on right hand pivoting control console.
ELECTRICAL & INTERLOCKS	Heavy duty 12-volt battery, 570 CCA, 40 amp alternator. Electronic control unit is a microprocessor based, solid state control unit with diagnostic capabilities. Traction pedal, parking brake, operator presence in seat, and cutting unit engage/disengage safety interlock switches.
REEL DRIVE	Reel drive circuit is split independently for front and rear cutting units. Hydraulic functions controlled by an integrated hydraulic control block. Reel speeds are manually adjustable in nine incremental settings. Standard on-board backlapping.
CUTTING UNIT LIFT/LOWER	Front and rear cutting unit lift/lower is sequenced for uniform starting and ending points.
SEAT	Deluxe high back suspension seat with fore, aft, height and weight adjustment.
ROPS	2WD: Optional 4WD: Standard with seat belt
HEIGHT	63" (160 cm) seat top, 85.5" (217.2 cm) top of ROPS.
LENGTH (2WD)	111" (281.9 cm)
WHEEL BASE	60" (152.4 cm)
OPERATIONAL WIDTH	116" (288.3 cm)
TRANSPORT WIDTH	92" (233.7 cm)
WEIGHT	2,756 lbs. (1,276 kg) (2WD), 2,866 lbs. (1,326 kg) (4WD)
CERTIFICATION	Complies with ANSI B71.4-2004 and CE requirements. Certain machine configurations require rear weight kits for standards compliance, see Operator's Manual for details.
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.

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The Reelmaster 5610 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 5610 Accessories*

8 AND 11-BLADE CUTTING UNITS, MODELS 03696 AND 03697	
TYPE	5-plex, hydraulically driven, balanced cutting units with adjustable rear weight transfer spring. Cutting units feature quick disconnect for removal/installation and are interchangeable to all positions. Cutting units also feature rear throw capability.
SIZE	22" (56 cm) wide, 7" (17.8 cm) diameter, 8 and 11 blade cutting units.
WIDTH OF CUT	100" (254 cm)
HOC RANGE	0.25" - 1" (6.4-25.4 mm) standard. Up to 2" (50.8 mm) with high height of cut kit.
REEL SPEED	Manually controlled, variable reel speed for control of clip frequency. Reel speeds are incrementally adjustable between 200-1,650 rpm with a backlap speed of 200 rpm.
BEDKNIFE ADJUSTMENT	Dual Precision Adjustment (DPA), bedknife to reel.
ROLLERS	3" (7.6 cm) diameter, deep groove plastic Wiehle front roller. 3" (7.6 cm) diameter steel rear roller. Other roller configurations optional.

FAIRWAY GROOMER, MODELS 03685, 03686 & OPTIONAL BROOMER,® PART 110-4085	
TYPE	Rotating blades with optional Broomer™ brush strips that are woven within the blade helix for full width turf contact.
GROOMING WIDTH	20.5" (52.1 cm)
GROOMING RANGE	0-0.25" (0-6.4 mm) below height of cut when engaged, 0-0.25" (0-6.4 mm) above height of cut when disengaged.
BLADES	2.5" (6.4 cm) diameter, 0.042" (1 mm) thick heat treated spring steel blades with 0.5" (12.7 mm) spacing.

POWERED REAR ROLLER BRUSH, MODEL 03688	
TYPE	Rotating, helically woven, stiff bristled brush. Spring loaded belt drive.
CONTACT POINTS	Tightly woven 11 point contact.
SPIN RATE	Rapid 2000 rpm spin rate.

TRACTION UNIT ACCESSORIES	
03671	CrossTrax® All-Wheel Drive
03667	Air-ride Seat Suspension
30359	Universal Mount Sunshade
03662	Grass Basket Kit

REEL OPTIONS	
108-9072	7" - 5 Blade Reel only
03684	Verticutter Reel
110-9600	High Height of Cut Kit

GROOMER OPTIONS	
110-4085	Broomer (for use with groomer blades)
03718	Fairway Perfection Brush (optional replacement for groomer blades)

BEDKNIFE OPTIONS	
110-4084	Low Cut Bedknife
125-2771	EdgeMax™ Low Cut Bedknife
108-9095	EdgeMax™ Bedknife (Production)
119-4280	EdgeMax™ Extended Low HOC Bedknife
120-1640	Extended Low HOC Bedknife
110-4074	Heavy Duty Bedknife
108-9096	Standard Bedknife

SCRAPER OPTIONS	
107-3280	Rear Roller Scraper
107-2993-03	Wiehle Roller Scraper
110-1735	Comb Scraper Kit

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The Reelmaster 5610 is manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 6500-D & 6700-D

These first true mid size fairway mowers offer power, durability, a consistently superb quality of cut and up to 10 acres per hour productivity.





Reelmaster® 6500-D & 6700-D Specifications*

	REELMASTER 6500-D MODEL 03806, 2WD OR MODEL 03807, 4WD	REELMASTER 6700-D MODEL 03808, 4WD																																			
ENGINE	Kubota® V1505-T liquid-cooled diesel engine. 4-cylinder, over-head valve. 1.5 liter displacement. Turbo-charged. 44.2 hp (33 kW) gross rated, 42 hp (31.3 kW) net at 3000 rpm. 40 amp alternator. Donaldson two-stage air cleaner with safety filter and restriction indicator.																																				
RADIATOR	Rear mounted, cross-flow 6.3 fins per inch. Cooling system capacity is 10 quarts (9.5 liters). Air to oil cooler with 2 rows, 6 fins per inch, mounted in front of radiator tips outward for cleaning. Removable oil cooler/radiator screen.																																				
ELECTRICAL FEATURES	12-volt, 650 cold cranking amperes at 0°F (-18°C), 105 minute reserve capacity at 80°F (27°C), maintenance free battery. 1.4 kW electric starter. 40 amp alternator with I.C. regulator/rectifier. Automotive type electrical system. Seat switch, reel and traction interlock switches.																																				
FUEL SYSTEM	Bosch® in-line fuel injection pump with energized-to-run (ETR) fuel flow solenoid. Replaceable spin-on fuel filter/water separator. Fuel capacity: 15 gallons (57 liters). 2008 models Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).																																				
CONTROLS	Foot operated traction and brake pedals. Hand operated throttle, traction speed limiter, parking brake latch, ignition switch, single joystick control for cutting unit on/off and lift/lower. Reel speed and backup controls located under the hood.																																				
GAUGES	Hour meter, speedometer, fuel gauge, engine coolant gauge, and warning light cluster: engine oil pressure, high engine temperature, charge indicator, glow plug. Reel control lamp that lights to indicate glow time, controller fault, and high mow speed warning.																																				
DIAGNOSTICS	The Automatic Control Electronics, ACE™ system allows precision timing and control of machine functions for maximum reliability. Optional diagnostic display connects to an electronic control unit to pinpoint any electrical problems quickly and easily. Available DATA LOG™ system allows mechanic to find intermittent problems. Diagnostic test ports are provided for front and rear cutting unit drive, cutting unit lift, steering, and hydrostatic transmission charge pressure.																																				
TRACTION DRIVE	Power to the front drive wheel is via servo-controlled hydrostatic pump operating individual fixed displacement axial piston wheel motors that operate a planetary gear final drive assembly. Foot pedal control of forward/reverse ground speed. Toro 4-Matic® 4WD System only: couples rear drive axle to hydrostatic transmission via overrunning clutch for full time on-demand 4WD. A Roll Over Protection Structure (ROPS) and seat belt are standard on 4WD models.																																				
GROUND SPEED	0-10 mph (0-16.1 km/hr) forward; 0-4 mph (0-6.4 km/hr) reverse.																																				
TIRES/WHEELS/PRESSURE	Two rear steering tires: 20 x 10-10, tubeless, 6-ply rating. Two front traction drive tires: 29 x 14-15, tubeless, 6-ply rating. Recommended tire pressure: 10-15 psi (59-103 kPa).																																				
MAIN FRAME	All welded steel frame includes tie-down loops.																																				
BRAKES	Wet triple disc brakes on front planetary assemblies may be actuated individually for service brakes or locked together for transport or parking brakes. Dynamic braking through hydrostatic traction drive.																																				
STEERING	Power steering with dedicated power source.																																				
SEAT	Deluxe seat with adjustable suspension and fore-aft location. Optional Armrest Kit, Model 30707.																																				
ROPS	A 2-post ROPS with seat belt and optional canopy; standard on Models 03807 and 03808, optional on Model 03806.																																				
OVERALL DIMENSIONS	<table border="1"> <thead> <tr> <th></th> <th>Height</th> <th>Length</th> <th>Transport Width</th> <th>Operational Width</th> <th>Wheel Tread</th> <th>Wheelbase</th> </tr> </thead> <tbody> <tr> <td>Models 03806/03807:</td> <td>60" (152 cm) w/o ROPS</td> <td>120" (305 cm)</td> <td>84" (213 cm)</td> <td>110" (279 cm)</td> <td>72.25" (178 cm) - front</td> <td>58" (147 cm)</td> </tr> <tr> <td></td> <td>84" (213 cm) w/ ROPS</td> <td></td> <td></td> <td></td> <td>41" (104 cm) - rear</td> <td></td> </tr> <tr> <td>Model 03808:</td> <td>84" (213 cm) w/ ROPS</td> <td>120" (305 cm)</td> <td>84" (213 cm)</td> <td>147" (374 cm)</td> <td>72.25" (178 cm) - front</td> <td>58" (147 cm)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>41" (104 cm) - rear</td> <td></td> </tr> </tbody> </table>			Height	Length	Transport Width	Operational Width	Wheel Tread	Wheelbase	Models 03806/03807:	60" (152 cm) w/o ROPS	120" (305 cm)	84" (213 cm)	110" (279 cm)	72.25" (178 cm) - front	58" (147 cm)		84" (213 cm) w/ ROPS				41" (104 cm) - rear		Model 03808:	84" (213 cm) w/ ROPS	120" (305 cm)	84" (213 cm)	147" (374 cm)	72.25" (178 cm) - front	58" (147 cm)						41" (104 cm) - rear	
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NET WEIGHT WET	Model 03806: 3,100 lbs. (1,407 kg) with 5-blade cutting units and full fluid levels. Model 03807: 3,200 lbs. (1,453 kg) with 5-blade cutting units and full fluid levels. Model 03808: 3,850 lbs. (1,748 kg) with 5-blade cutting units and full fluid levels.																																				
SOUND LEVEL	82 dB(A) under normal operating conditions.																																				
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.																																				
CERTIFICATION	The Reelmaster 6000 series complies with American National Standards Institute (ANSI B71.4-2004) and European Community (CE) specifications with required weight kits and ballast installed.																																				

	HYDRAULIC SYSTEM
PUMP	A three section gear pump provides hydraulic flow to power the cutting units, power steering and cutting unit lift.
CONTROL BLOCKS	All hydraulic functions are controlled by two integrated hydraulic control blocks utilizing cartridge type relief valves, solenoid controlled proportional valves and solenoid operated directional control valves.
REEL SPEED CONTROL	Reel drive circuit is split into front and rear independent circuits. Each circuit has a manually adjustable control for reel speed and backlap adjustment.
LIFT CYLINDERS	All lift and lower sequences are controlled by the ECU.
HYDRAULIC OIL RESERVOIR	100% of oil from reservoir passes through a 100 mesh suction strainer before entering the reel drive circuit. 8.5 gallon (32 liter) capacity.
HYDRAULIC OIL FILTER	11 gram capacity at 10 gallon (37 liter) per minute flow Average Beta = 20 at 3 micron. Filter head has integral 50 psi (3.4 bars) bypass and a true differential pressure service indicator.

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The Reelmaster 6500-D & 6700-D are manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 6500-D & 6700-D Specifications* (continued)

DPA Cutting Units – Retrofit 2001 and newer traction units

8 AND 11-BLADE DPA CUTTING UNITS, MODELS 03698 AND 03699		
	Reelmaster 6500-D	Reelmaster 6700-D
TYPE	Five hydraulically driven, balanced cutting units with adjustable rear weight transfer spring. Cutting units feature quick disconnect for removal/installation and are interchangeable to all positions. Cutting units also feature rear throw capability.	Seven hydraulically driven, balanced cutting units with adjustable rear weight transfer spring. Cutting units feature quick disconnect for removal/installation and are interchangeable to all positions. Cutting units also feature rear throw capability.
WIDTH OF CUT	96" (244 cm).	133" (338 cm)
SIZE	22" (56 cm) wide, 7" (17.8 cm) diameter, 8 and 11 blade cutting units.	
HOC RANGE	0.25" - 1.0" (6.4-25.4 mm) standard. Up to 2.0" (50.8 mm) with high height of cut kit.	
REEL SPEED	Manually controlled, variable reel speed for control of clip frequency.	
BEDKNIFE ADJUSTMENT	Dual Precision Adjustment (DPA), bedknife to reel.	
ROLLERS	3" (7.6 cm) diameter, deep groove Wiehle front roller. 3.0" (7.6 cm) diameter rear roller. Other roller configurations optional.	

FAIRWAY GROOMER, MODELS 03685, 03686 & OPTIONAL BROOMER,™ PART 110-4085	
TYPE	Rotating blades with optional Broomer™ brush strips that are woven within the blade helix for full width turf contact.
GROOMING WIDTH	20.5" (52.1 cm)
GROOMING RANGE	0-0.25" (0-6.4 mm) below height of cut when engaged, 0-0.25" (0-6.4 mm) above height of cut when disengaged.
BLADES	2.5" (6.4 cm) diameter, 0.042" (1 mm) thick heat treated spring steel blades with 0.5" (12.7 mm) spacing.

POWERED REAR ROLLER BRUSH, MODEL 03688	
TYPE	Rotating, helically woven, stiff bristled brush.
CONTACT POINTS	Tightly woven 11 point contact.
SPIN RATE	Rapid 2000 rpm spin rate.

TRACTION UNIT ACCESSORIES	
03671	CrossTrax® All-Wheel Drive
03667	Air-ride Seat Suspension
30349	Universal Mount Sunshade
03662	Grass Basket Kit

REEL OPTIONS	
108-9072	7" - 5 Blade Reel only
03684	Verticutter Reel
110-9600	High Height of Cut Kit

BEDKNIFE OPTIONS	
110-4084	Low Cut Bedknife
125-2771	EdgeMax™ Low Cut Bedknife
108-9095	EdgeMax™ Bedknife (Production)
119-4280	EdgeMax™ Extended Low HOC Bedknife
120-1640	Extended Low HOC Bedknife
110-4074	Heavy Duty Bedknife
108-9096	Standard Bedknife

SCRAPER OPTIONS	
107-3280	Rear Roller Scraper
107-2993-03	Wiehle Roller Scraper
110-1735	Comb Scraper Kit

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The Reelmaster 6500-D & 6700-D are manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 7000-D

The new Reelmaster 7000-D is a multi-use, heavy-duty reel mower designed for productivity and performance in the most extreme fairway and rough conditions. We started with patented DPA cutting units that manicure your turf and save you time with easy set-up and long-lasting adjustments. Then, we added a 49 horsepower Kubota® diesel engine, high-torque reel motors, and the SmartCool™ auto-reversing fan system so southern grasses and high heat don't stand a chance. Finally, we combined it all with a whopping 126" width-of-cut! This mower has it all – power, productivity, and superior aftercut appearance. By the way, it's also an overseeding monster!





Reelmaster® 7000-D Specifications*

REELMASTER 7000-D, MODEL 03708											
ENGINE	Kubota® V2403, 4-cylinder, liquid-cooled diesel, 49 hp (36.5 kW) net, governed to 2600 RPM. 148.5 cu. in. (2.4 liter) displacement. 10 quart (9.5 liter) oil capacity.										
AIR CLEANER	Dry, replaceable primary and safety elements.										
RADIATOR	Rear-mount, cross flow, 7-row, 6 fins per inch, 13 quart (12.3 liters) capacity.										
FUEL CAPACITY	22 gallons (83 liters) diesel fuel. Biodiesel-Ready for use up to B-20 (20% biodiesel and 80% petroleum blend).										
TRACTION DRIVE	Full-time, bi-directional, hydrostatic, closed-loop, 4WD transmission. Variable displacement piston pump with servo control powers fixed displacement piston motors which drive double reduction planetary gear assemblies at each front wheel. Parallel hydraulic flow powers fixed displacement piston motor which drives mechanical axle in rear. 2WD transport range. Optional 4WD Flow Divider Kit, model 30871.										
HYDRAULICS/COOLING	8.25 gallon (31.3 liter) capacity with 10 micron remote spin-on filter, 9 row single pass cooler with tilt out for cleaning. Variable speed hydraulic fan drive with automatic (based on coolant and oil temps) and manual reversing capabilities.										
DIAGNOSTICS	Diagnostics pressure test ports: forward and reverse traction, cutting unit circuit 1 & 2, reverse 4WD, lift, steering, traction charge and fan.										
GROUND SPEED	Transport: 0-14 mph (0-22.5 km/h) forward, 0-7 mph (0-11 km/h) reverse. Mow: 0-7 mph (0-11 km/h) forward.										
TIRES	Front: 31x13.5-15, 4-ply Turf tread. Rear: 20 x 12-10, 4-ply multi-trac tread.										
MAIN FRAME	All welded formed-steel frame with integral tie-down anchors.										
BRAKES	Mechanically actuated, internal wet disc brakes on input to each planetary drive. Individual foot-operated steering brake control of left and right wheel. Lock pedals together and latch to engage parking brake.										
SEAT	Premium seat with adjustments for operator weight via air ride suspension, seat fore/aft position, seat back angle, arm rest height and retractable seat belt.										
STEERING	Power steering with dedicated power source, tilt steering.										
GAUGES	Hour meter, fuel gauge, engine temperature gauge, indicator lights for glow plugs, high coolant temperature, charge indicator, and low oil pressure. Shutdown for high coolant temperature.										
CONTROLS	Ignition switch, hand-operated throttle, foot-operated traction pedal, two position switch for cutting unit lift, reverse fan two position switch (auto/manual reverse), mow/transport selector switch, lockable individual brake pedals, park brake lock.										
ELECTRICAL	12-volt, 650 cold cranking amps battery, 60 amp alternator. Overload protection with automotive type fuses.										
INTERLOCKS	Prevents engine from starting unless traction pedal is in neutral and PTO is disengaged. If operator leaves seat with PTO engaged, engine stops. Mowing only permitted in low range. Engine stops if parking brake engaged and traction pedal not in neutral. Can't lower cutting unit in transport.										
OPERATOR AREA	Beverage holder, radio holder, 12-volt power point, storage box (tools, jackets, golf balls, etc.), seatbelt.										
WORK LIGHT	Standard.										
ROPS	2-post standard.										
DIMENSIONS W/ CUTTING UNITS	<table border="0"> <tr> <td>Overall length w/cutting units down</td> <td>146" (371 cm)</td> </tr> <tr> <td>Transport width</td> <td>94" (239 cm)</td> </tr> <tr> <td>Mow width</td> <td>136" (345 cm) 141" (358 cm) with optional 32" (81.3 cm) cutting units</td> </tr> <tr> <td>Cutting width</td> <td>121" (307 cm) 126" (320 cm) with optional 32" (81.3 cm) cutting units</td> </tr> <tr> <td>Height w/2-post ROPS</td> <td>87" (220 cm)</td> </tr> </table>	Overall length w/cutting units down	146" (371 cm)	Transport width	94" (239 cm)	Mow width	136" (345 cm) 141" (358 cm) with optional 32" (81.3 cm) cutting units	Cutting width	121" (307 cm) 126" (320 cm) with optional 32" (81.3 cm) cutting units	Height w/2-post ROPS	87" (220 cm)
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Cutting width	121" (307 cm) 126" (320 cm) with optional 32" (81.3 cm) cutting units										
Height w/2-post ROPS	87" (220 cm)										
WEIGHT	3,470 lbs. (1574 kg) - with full fluids, no cutting units. 4,270 lbs (1937 kg) - with full fluids and 27" 8-blade cutting units.										
SAFETY	Complies with American National Standards Institute (ANSI B71.4-2004) and applicable CE (machine directive 89/392, 91/368, 93/44, 84/538, 89/336) requirements.										
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.										

	8-BLADE, 27" CUTTING UNIT, MODEL 03710	11-BLADE, 27" CUTTING UNIT, MODEL 03711	8-BLADE, 32" CUTTING UNIT, MODEL 03712
TYPE	5-plex, hydraulically driven, balanced cutting units with adjustable rear weight transfer spring. Cutting units feature quick disconnect for removal/installation and are interchangeable to all positions. Cutting units also feature rear throw capability.		
SIZE	7" (17.8 cm) diameter, 27" (68.6 cm) wide, 8 & 11" blade cutting units and 32" (81.3 cm) 8-blade cutting units (optional).		
WIDTH OF CUT	121" (307 cm) with 27" (68.6 cm) cutting units; 126" (320 cm) with 32" (81.3 cm) cutting units		
CUTTING UNIT OVERLAP	(5) 27" (68.6 cm) cutting units – 3.5" (8.9 cm) overlap. (3) 27" (68.6 cm) front cutting units and (2) 32" (81.3 cm) rear cutting units – 5.8" (14.7 cm) overlap. (5) 32" (81.3 cm) cutting units – 8.5" (21.6 cm) overlap.		
HOC RANGE	0.25" - 2.50" (6.35 - 63.5 mm)		
REEL SPEED	Manually controlled, variable reel speed for control of clip frequency. Reel speeds are incrementally adjustable between 200-1,650 rpm with a backlap speed of 200 rpm.		
BEDKNIFE ADJUSTMENT	Dual Precision Adjustment (DPA), bedknife to reel.		
ROLLERS	3" (7.6 cm) diameter, deep groove plastic front Wiehle roller. 3.0" (7.6 cm) diameter steel rear roller (other roller configurations optional).		

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The Reelmaster 7000-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® 7000-D Accessories*

27" FAIRWAY GROOMER, MODEL LH 03713, MODEL RH 03714 & OPTIONAL BROOMER, PN 119-4294	
TYPE	Rotating blades with optional Broomer™ brush strips that are woven within the blade helix for full width turf contact.
GROOMING WIDTH	27" (68.6 cm) wide
GROOMING RANGE	0-0.25" (0-6.4 mm) below height of cut when engaged, 0.5" (0-12.7 mm) above Groomer height of cut when disengaged.
BLADES	2.5" (6.4 cm) diameter, 0.042" (1 mm) thick heat treated spring steel blades with 0.5" (12.7 mm) spacing.

POWERED REAR ROLLER BRUSH – 27" MODEL 03186, 32" MODEL 03187	
TYPE	Rotating, helically woven, stiff bristled brush. Spring loaded belt drive.
CONTACT POINTS	Tightly woven 14 & 16-point contact.
SPIN RATE	Rapid 2000 rmp spin rate.

TRACTION UNIT ACCESSORIES	
30359	Universal Mount Sunshade
110-8804	Operator Fan Kit (Not CE Certified)
119-0020	2-Post ROPS Extension
119-9440	Windscreen Kit for ROPS Extension (requires 119-0020)
30871	Traction Flow Divider

OTHER ACCESSORIES	
108-6715	HOC Gauge Bar
29-9100	Backlap Brush and Handle
04399	Turf Evaluator

MYTURF™ WIRELESS SYSTEM	
115-4754	myTurf Wireless Hour Meter Assembly
115-9542	myTurf Base Station Kit
115-9543	myTurf Repeater Kit
115-9524	External Antenna Kit

REEL OPTIONS	
03710	27" - 8-Blade DPA Cutting Unit
03711	27" - 11-Blade DPA Cutting Unit
03712	32" - 8-Blade DPA Cutting Unit
115-8270	27" - 5-Blade Service Reel
115-8282	32" - 5-Blade Service Reel
03716	27" Verticutter Cutting Unit
TOR4074	Reel Drive, Tool Replacement
119-8010-03	Cutting Unit Kickstand
120-7230	HD DPA MVP Kit
117-0975	Reel Bearing Installation Tool

ROLLER & ROLLER BRUSH OPTIONS	
114-9383	27" Full Front Roller
114-9384	32" Full Front Roller
119-0630	27" Shouldered Wiehle Roller
119-0640	32" Shouldered Wiehle Roller
119-4286	27" Short Rear Roller
119-4288	32" Short Rear Roller
115-0838	27" Roller Brush (High HOC - 1"+)
115-0849	32" Roller Brush (High HOC - 1"+)
119-0649	27"/32" Collar Kit for Wiehle Roller (6 per roller)
110-4086	Groomer/Rear Roller Brush Rebuild Kit
114-5430	Roller Rebuild Kit
115-0803	Roller Rebuild Tool Kit

BEDKNIFE OPTIONS	
114-9390	27" Heavy-Duty Fairway Bedknife
114-9391	32" Heavy-Duty Fairway Bedknife
120-1641	27" Ext. Low Cut Fairway Bedknife
120-1642	32" Ext. Low Cut Fairway Bedknife
112-8910	27" EdgeMax™ Bedknife
112-8956	32" EdgeMax™ Bedknife
114-9388	27" Standard Bedknife (Production)
114-9389	32" Standard Bedknife (Production)

SCRAPER OPTIONS	
114-9372-03	27" Wiehle Roller Scraper
114-9373-03	32" Wiehle Roller Scraper
114-9386-03	27" Full Front Roller Scraper
114-9387-03	32" Full Front Roller Scraper
114-9381-03	27" Shouldered Wiehle Roller Scraper
114-9382-03	32" Shouldered Wiehle Roller Scraper
114-9368	27" - Rear Roller Scraper Kit
114-9369	32" - Rear Roller Scraper Kit
114-9376	27" - Front Roller Comb/Scraper Kit
114-9377	32" - Front Roller Comb/Scraper Kit

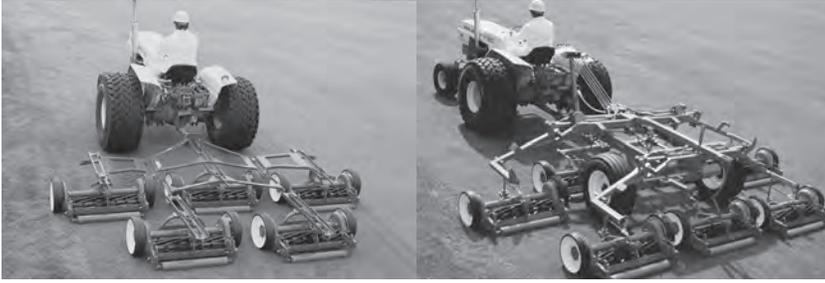
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The Reelmaster 7000-D is manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® Frames & Cutting Units



Reelmaster frames give you economical options that afford you flexibility, maneuverability and transport ease. Proven, ground driven Reelmaster 5, 7 or 11 Blade Cutting Units provide the finishing touch – a quality of cut you've come to expect.

REELMASTER TRANSPORT FRAME - 5 UNIT, MODEL 33455 - 5 TO 7 UNIT CONVERSION KIT, MODEL 33452																									
CUTTING CAPACITY	6.7 acres/h (2.7 hectares/h) @ 5.5 mph (8.8 km/h) with 5 Unit Frame. 9.4 acres/h (3.8 hectares/h) @ 5.5 mph (8.8 km/h) with optional 7 Unit Frame. Assumes no reduction in total area mowed due to overlap, turning, stops, etc.																								
LIFTING MECHANISM	Hydraulic lift - 1st, 2nd and 3rd cutting units operate together. Cutting units 4 and 5 (and optional 6 and 7) operate individually.																								
MAIN FRAME	Tubular and structural steel; bolted and electrically welded construction.																								
WING LIFT ARMS	Tubular steel, reinforced welded construction.																								
AXLE ASSEMBLY	Implement type. Maximum load capacity is 4940 lbs. (2241 kg) at maximum tire inflation of 28 psi (1.9 bars).																								
TRAILER TRANSP. WHEELS	6 bolt, 15 x 8" implement style wheels with 11L-15, 6-ply rating implement rib tires. Recommended tire pressure: 24-28 psi (1.6-1.9 bars).																								
TRAILER TONGUE	Tubular and structural steel; welded construction. Trailer clevis is adjustable to 3 positions.																								
CONTROL TOWER	Adjustable to 12.5" (32 cm) fore/aft and 7" (18 cm) up and down; controls are operable from tractor seat.																								
JACK	Side-screw type trailer jack. 10" (25.4 cm) stroke. Stores inside trailer tongue when not in use. Load capacity: 2200 lbs. (998 kg).																								
HYD. SYSTEM CAPACITY	2 gallons (7.6 liters) hydraulic oil with cylinders retracted.																								
HYD. SYSTEM COUPLERS	Quick-disconnect coupler for easy hook-up to tractor.																								
HYDRAULIC VALVE	Heavy duty directional control valve, parallel circuit open center, stack design. Cast iron valve bodies with hardened spools and plated for corrosion protection. Primary relief valve [approx. 1500 psi (103.4 bars)] shim adjustable. Relief valve prevents excess pressure build-up in the hydraulic system and safeguards the hydraulic pump and hoses.																								
HYDRAULIC CYLINDERS	Tie rod construction, 3" (7.6 cm) bore, double-acting cylinders; chrome-plated rods 1.375" (3.5 cm) diameter for units 1, 2, and 3; and 1.125" (2.8 cm) diameter for units 4, 5, 6, and 7; all with precision finished bore in cylinder tubes.																								
HYDRAULIC HOSES	SAE 100R7, two braid, 1/2" (12.7 mm) ID feed line hoses from tractor to valve body. SAE 100R7, two braid, 5/16" (7.9 mm) ID cylinder hoses from valve body to hydraulic cylinders.																								
CUTTING UNITS	Reelmaster 5, 7 or 11-blade cutting units.																								
FRAME DIMENSIONS	<table border="1"> <thead> <tr> <th>Transport Frame w/ Cutting Unit</th> <th>Tread Width</th> <th>Length</th> <th>Transport Width</th> <th>Mowing Width</th> <th>Transport Height</th> <th>Weight w/ Cutting Units</th> <th>Clearance</th> </tr> </thead> <tbody> <tr> <td>5 Unit Frame</td> <td>68" (173 cm)</td> <td>150" (381 cm)</td> <td>7' 11" (241 cm)</td> <td>11' (335 cm)</td> <td>58" (147 cm)</td> <td>2760 lbs. (1252 kg)</td> <td>71/2" (19 cm)</td> </tr> <tr> <td>7 Unit Frame</td> <td>68" (173 cm)</td> <td>150" (381 cm)</td> <td>7' 11" (241 cm)</td> <td>14' 4" (437 cm)</td> <td>58" (147 cm)</td> <td>3560 lbs. (1615 kg)</td> <td>71/2" (19 cm)</td> </tr> </tbody> </table>	Transport Frame w/ Cutting Unit	Tread Width	Length	Transport Width	Mowing Width	Transport Height	Weight w/ Cutting Units	Clearance	5 Unit Frame	68" (173 cm)	150" (381 cm)	7' 11" (241 cm)	11' (335 cm)	58" (147 cm)	2760 lbs. (1252 kg)	71/2" (19 cm)	7 Unit Frame	68" (173 cm)	150" (381 cm)	7' 11" (241 cm)	14' 4" (437 cm)	58" (147 cm)	3560 lbs. (1615 kg)	71/2" (19 cm)
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OPTIONS	Conversion Kit, 18" (46 cm) Cutting Unit Wheels, P/N 51-3060: Using 18" (46 cm) semi-pneumatic cutting unit wheels. Kit is required for 6 & 7 position cutting units. Hitch Ball Couple Kit, P/N 53-9760: Coupler bolts directly to frame and replaces the standard clevis type hitch. 5-7 Conversion Kit, Model 33452: consists of component parts to allow the installation of two additional cutting units.																								
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.																								

REELMASTER UNIVERSAL FRAME										
FRAME UNITS	5 Unit — Model 33145 & 33155 (required) 7 Unit — Model 33145 & 33155 & 33165 (required)									
CUTTING WIDTH (APPROX.)	5 Unit — 11' (335 cm) 7 Unit — 16' (488 cm)									
CUTTING CAPACITY	<p style="text-align: center;">Acres/hr at 5.5 mph (8.8 km/h)</p> 5 Unit 7.2 (2.9 hectares) 7 Unit 10.5 (4.2 hectares)									
OVERALL WIDTH IN CUTTING POSITION	<table border="1"> <thead> <tr> <th></th> <th>Mowers w/ Iron Wheels</th> <th>Mowers w/ Rubber Wheels</th> </tr> </thead> <tbody> <tr> <td>5 Unit</td> <td>12'4" (376 cm)</td> <td>12'8" (386 cm)</td> </tr> <tr> <td>7 Unit</td> <td>16'10" (513 cm)</td> <td>17'2" (523 cm)</td> </tr> </tbody> </table>		Mowers w/ Iron Wheels	Mowers w/ Rubber Wheels	5 Unit	12'4" (376 cm)	12'8" (386 cm)	7 Unit	16'10" (513 cm)	17'2" (523 cm)
	Mowers w/ Iron Wheels	Mowers w/ Rubber Wheels								
5 Unit	12'4" (376 cm)	12'8" (386 cm)								
7 Unit	16'10" (513 cm)	17'2" (523 cm)								
MAIN FRAME CONSTRUCTION	Reinforced structural steel and tubular steel welded construction.									
CUTTING UNIT	Reelmaster 5, 7 or 11-blade cutting units.									
OVERALL LENGTH	10' (304 cm).									

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The Reelmaster Frames & Cutting Units are manufactured in Tomah, WI ISO 9002 Certified Plant.





Reelmaster® Frames & Cutting Units Specifications* (continued)

REELMASTER GANG MOWERS - 5-BLADE, MODEL 01005; 7-BLADE, MODEL 01007; 11-BLADE, MODEL 01011																										
TYPE OF MOWING	<table border="1"> <thead> <tr> <th>Reel Type</th> <th>Turf Application</th> <th>Width of Cut</th> </tr> </thead> <tbody> <tr> <td>5-Blade w/16" (40.6 cm) wheels</td> <td>Semi-formal</td> <td>30" (76.2 cm)</td> </tr> <tr> <td>5-Blade w/18" (45.7 cm) wheels</td> <td>Informal (rough)</td> <td>30" (76.2 cm)</td> </tr> <tr> <td>7 Blade</td> <td>Formal</td> <td>30" (76.2 cm)</td> </tr> <tr> <td>11 Blade</td> <td>Super-formal</td> <td>30" (76.2 cm)</td> </tr> </tbody> </table>	Reel Type	Turf Application	Width of Cut	5-Blade w/16" (40.6 cm) wheels	Semi-formal	30" (76.2 cm)	5-Blade w/18" (45.7 cm) wheels	Informal (rough)	30" (76.2 cm)	7 Blade	Formal	30" (76.2 cm)	11 Blade	Super-formal	30" (76.2 cm)										
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HOC ADJUSTMENT	Roller brackets adjust the height of cut, offering 53 individual settings in .040" (1 mm) increments.																									
REEL CONSTRUCTION	<p>5-Blade: 8.06" (20.4 cm) diameter with 5 medium carbon steel induction hardened blades.</p> <p>7-Blade: 8.06" (20.4 cm) diameter with 7 medium carbon steel induction hardened blades.</p> <p>11-Blade: 7.06" (18 cm) diameter with 11 medium carbon steel induction hardened blades.</p> <p>All Reels: blades are welded to seven, 7-gauge, steel spiders. 1.5" (3.8 cm) diameter shaft on tapered roller bearings with adjustment nut to compensate for bearing wear.</p>																									
CHASSIS CONSTRUCTION	Ribbed cast iron gear cases with tubular cross member. Front cross member provides lift point for the cutting unit to all Toro Reelmaster Frames. Front cross member provides frame rigidity.																									
REEL DRIVE	Two ground engaged wheels transmit power to gear train in both sides. Machine cut hardened steel gears and clutch idler gear; 75T ring gear to 10T pinion gear through 14T disengaging idler gear. All gears are sealed from dirt. Reel to wheel speed ratio: 7.5:1.																									
DIFFERENTIAL	The differential provides disengaging overrunning idler gear in the gear train to disengage reel for free wheeling in turns and transport.																									
AVERAGE CLIP FREQUENCY	<table border="1"> <thead> <tr> <th></th> <th>Inch</th> <th>Millimeter</th> <th>Wheel Diameter</th> <th>Cuts Per Meter</th> </tr> </thead> <tbody> <tr> <td>11-Blade</td> <td>.58"</td> <td>14.7 mm</td> <td>16" (40.6 cm)</td> <td>68</td> </tr> <tr> <td>7-Blade</td> <td>.91"</td> <td>23.1 mm</td> <td>16" (40.6 cm)</td> <td>43</td> </tr> <tr> <td>5-Blade</td> <td>1.28"</td> <td>32.5 mm</td> <td>16" (40.6 cm)</td> <td>31</td> </tr> <tr> <td>5-Blade</td> <td>1.51"</td> <td>38.3 mm</td> <td>18" (45.7 cm)</td> <td>26</td> </tr> </tbody> </table>		Inch	Millimeter	Wheel Diameter	Cuts Per Meter	11-Blade	.58"	14.7 mm	16" (40.6 cm)	68	7-Blade	.91"	23.1 mm	16" (40.6 cm)	43	5-Blade	1.28"	32.5 mm	16" (40.6 cm)	31	5-Blade	1.51"	38.3 mm	18" (45.7 cm)	26
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BEDKNIFE-TO-REEL ADJUSTMENT	Bedknife adjusts against reel positively with a single hand-controlled knob located at center of bedbar. Adjustment knob contains detent with .001" (.025 mm) movement of bedknife for each indexed position. No tools required. Top pivot points are greaseable.																									
BEDKNIFE & BEDBAR	High carbon steel bedknife attached to a fabricated steel bar; single screw adjustment pivots at three points on vibration isolating bushings with eccentric shoulder bolt leveling adjustment.																									
CUTTING UNIT SUSPENSION	Drawbar attaches to two low pull points on cross tube. Chain pick up at center of cutting unit for transportation. System allows for flotation in all directions in mowing mode.																									
REAR ROLLER	3.5" (8.9 cm) diameter steel roller has greaseable tapered roller bearings with a double lip oil seal and wear sleeve to help keep out grit and moisture. Roller brackets adjust the height of cut.																									
BEARINGS	The reel, roller and wheels have adjustable tapered roller bearings.																									
LUBRICATION	Gears and bearings are continuously lubricated from main reservoirs filled with 16 ounce (473 ml), 80-90 weight gear oil.																									
FRAME APPLICATIONS	5 or 7 unit Reelmaster Transport Frame, 3 unit Reelmaster Lift Frame of 3, 5 or 7 unit Reelmaster Universal Frames. See Reelmaster Frame sales specification literature for more details.																									

OVERALL WEIGHTS[1] & DIMENSIONS (APPROXIMATE)					
	5-Blade Model 01005	7-Blade Model 01007	11-Blade Model 01011	Height	Wheel Tread Width
16" dia. w/ Semi-pneumatic Wheels, Model 01304	239 lbs. (108.4 kg)	244 lbs. (110.6 kg)	248 lbs. (112.5 kg)	16" (40.6 cm)	41.375" (105 cm)
16" dia. w/ Pneumatic Wheels, Model 01323	225.5 lbs. (102.2 kg)	230.5 lbs. (104.5 kg)	234.5 lbs. (106.3 kg)	16" (40.6 cm)	41.375" (105 cm)
16" dia. w/ Steel Wheels, Model 01336	237 lbs. (107.5 kg)	242 lbs. (109.7 kg)	246 lbs. (111.6 kg)	16" (40.6 cm)	41.375" (105 cm)
18" dia. w/ Semi-pneumatic Wheels, Model 01035	252 lbs. (114.3 kg)	N/A	N/A	18" (45.7 cm)	45.5625" (114.7 cm)

OPTIONAL ACCESSORIES	
Part No.	Description
47-4540	Roller Scraper Kit
47-5390 (11-blade)	Grass Dispersion Shield Kit
13-3629	Overhaul Kit

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 [1] Weights exclude drawbars.

The Reelmaster Frames & Cutting Units are manufactured in Tomah, WI ISO 9002 Certified Plant.





Workman® MD/MDX/MDX-D

A series of gasoline & diesel utility vehicles featuring the Toro® SRQ™ suspension system for superior ride quality that delivers extraordinary stability, traction and operator comfort. SRQ combines with hefty payload and towing capacities to provide enhanced productivity to tackle the toughest jobs.





Workman® MD/MDX/MDX-D Specifications*

	WORKMAN MD, MODEL 07266 / WORKMAN MD (CARB Compliant) MODEL 07279	WORKMAN MDX, MODEL 07273	WORKMAN MDX-D, MODEL 07359
ENGINE	357 cc, air-cooled, single-cylinder, Yamaha®. Meets 2011 EPA & CARB exhaust & evaporative emissions regulations.	480 cc, air-cooled, two-cylinder, Briggs & Stratton® Vanguard®. Meets 2011 EPA & CARB exhaust & evaporative emissions regulations.	600 cc, liquid-cooled, 2-cylinder, Kubota® diesel. Biodiesel ready for use up to B-20 (20% biodiesel and 80% petroleum blend).
SRQTM SYSTEM	Active In-Frame™ twister pivot joint, front and rear suspension.		
FRONT SUSPENSION	Independent "A"- Frame with coil over shock absorbers.		
REAR SUSPENSION	Trailing arm with coil over shock absorbers.		
GROUND SPEED	16 mph (25.6 km/h) governed.	16 mph (25.6 km/h) governed. Optional 20 mph (32 km/h) requires ROPS and seatbelts.	
BRAKES	Front wheel hydraulic disc. Rear wheel hydraulic drum.		
FRAME	Welded steel channel and tube in body construction. Frame surfaces are dipped e-coat. Body and bed constructed of dent and corrosion-resistant polyethylene.		
GROUND CLEARANCE	Front: 10" (25.4 cm), Rear: 7" (18 cm)		
TIRES	Front: 22 x 9.5-10, 4-ply, Rear: 22 x 9.5-10, 4-ply.	Front: 22 x 9.5-10, 4-ply, Rear: 24 x 12-10, 4-ply. Optional all-terrain tires	
FUEL CAPACITY	6.5 gallons (24.6 liters)		
DIMENSIONS		Width 59" (150 cm)	Length 117.75" (299 cm) Wheel Base 81" (205.7 cm)
TURNING CLEARANCE CIRCLE	Inside rear tire: 87" (221), outside front tire: 257" (653 cm).		
INSTRUMENTATION	Hour meter, low oil pressure warning light, accessory power port. Dash has 2 cup holders, radio holder and glove box storage.		Hour meter, oil pressure, glow plug, coolant temperature, battery charge indicator lights and accessory power port. Dash has 2 cup holders, radio holder and glove box storage.
STARTING	Pedal start (optional key start)		Key start
CARGO BED SIZE	Length: 44.5" (113 cm), Width: 49" (125 cm), Height: 10.25" (26 cm), reinforced co-polymer.		
TOTAL VEHICLE CAPACITY	1,250 lbs. (567 kg)	1,650 lbs. (750 kg)	
CARGO BED PAYLOAD CAPACITY	850 lbs. (386 kg)	1,250 lbs. (567 kg)	
TRAILER TOWING CAPACITY	400 lbs. (182 kg) trailer, 50 lbs. (23 kg) tongue weight with standard hitch. 800 lbs. (363 kg) trailer, 100 lbs. (45 kg) tongue weight with heavy-duty tow hitch.	400 lbs. (182 kg) trailer, 50 lbs. (23 kg) tongue weight with standard hitch. 1,200 lbs. (545 kg) trailer, 100 lbs. (45 kg) tongue weight with heavy-duty tow hitch.	
OPTIONAL ACCESSORIES	Canopy, Solid Folding Windshield, Electric Bed Lift, HD Bumper, Brush Guard, ROPS, Brake/Tail/Signal Light Kit, Deluxe Hard Cab, Snow Plow, Portable Refreshment Center, Heater Kit, HD Trailer Hitch.		
WARRANTY	Two-year or 1500 hour limited warranty. Refer to the Operator's Manual for further details.		

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The Workman MD/MDX/MDX-D are manufactured in Tomah, WI ISO 9002 Certified Plant.





Workman® MDE

A quiet, electric utility vehicle featuring the Toro® SRQ™ suspension system for superior ride quality that delivers extraordinary stability, traction and operator comfort. SRQ combines with a powerful 500-amp drive train to provide enhanced productivity through hefty payload and towing capacities.





Workman® MDE Specifications*

WORKMAN MDE, MODEL 07299									
MOTOR	48 volt DC motor with external fan.								
SRQ™ SYSTEM	Active In-Frame™ twister joint, front suspension.								
FRONT SUSPENSION	Independent "A"-Frame with coil over shock absorbers.								
MAX SPEED	16 mph (25.6 km/h) with fully charged batteries. Economy/supervisor mode limits maximum speed to 12 mph (19.2 km/h).								
BRAKES	Front wheel: hydraulic disc, Rear wheel: hydraulic drum. Complemented with regenerative motor braking.								
TRANSAXLE	16.99 to 1 ratio with helical gears. Direct drive double reduction with differential.								
GROUND CLEARANCE	Front: 10" (25.4 cm). Rear: 7" (18 cm).								
TIRES	Front: 22.5 x 9.5-10, 4-ply. Rear: 22 x 9.5-10, 4-ply								
BATTERIES	Eight 6 volt heavy-duty T145. 145 min. @ 75 amps.								
CONTROLLER	500 amps max. 48 volt with regenerative motor braking, includes roll away indicator, thermal cutback, sealed/potted, status indicator light.								
CHARGER	Remote charger with drive inhibit on AC connect. 115 volt AC +/- 10% input, 48 volt DC (nominal) 17 amp output. 230 volt AC input for Europe, 48 volt DC (nominal) 17 amp output.								
INSTRUMENTS/DASH	Battery discharge indicator, hour meter, headlight switch, on/off ignition key switch, accessory power port, supervisor speed selector switch. The dash has 2 cup holders, radio holder and glove box storage area.								
DIMENSIONS	<table border="1"> <thead> <tr> <th>Width</th> <th>Length</th> <th>Wheel Base</th> <th>Height</th> </tr> </thead> <tbody> <tr> <td>59" (150 cm)</td> <td>119.75" (304 cm)</td> <td>83" (211 cm)</td> <td>50" (127 cm)</td> </tr> </tbody> </table>	Width	Length	Wheel Base	Height	59" (150 cm)	119.75" (304 cm)	83" (211 cm)	50" (127 cm)
Width	Length	Wheel Base	Height						
59" (150 cm)	119.75" (304 cm)	83" (211 cm)	50" (127 cm)						
STEERING	Manual, pinion and sector gear system with ergonomically positioned non-adjustable column. Steering wheel has 3 turns lock-to-lock and 17.2 to 1 ratio with a 13.75" (34.93 cm) diameter wheel.								
TURNING CLEARANCE CIRCLE	Inside rear tire: 83" (211 cm), outside front tire: 260" (660 cm).								
FRAME	Welded steel channel and tube in body construction. Frame surfaces are dipped e-coat. Body and bed constructed of dent and corrosion resistant polyethylene.								
CARGO BED SIZE	Length: 44.5" (113 cm), Width: 49" (125 cm), Height: 10.25" (26 cm), reinforced co-polymer.								
TOTAL VEHICLE CAPACITY	1,200 lbs. (545 kg).								
CARGO BED PAYLOAD CAPACITY	800 lbs. (363 kg)								
TRAILER TOWING CAPACITY	400 lbs. (182 kg) trailer, 50 lbs. (23 kg) tongue weight with standard hitch. 800 lbs. (363 kg) trailer, 100 lbs. (45 kg) tongue weight with heavy-duty tow hitch.								
OPTIONAL ACCESSORIES	48-Volt Electric Bed Lift, Canopy, Solid Folding Windshield, Electric Bed Lift, HD Bumper, Brush Guard, 12-Volt Adapter Kit, ROPS, Brake/Tail/Signal Light Kit, Deluxe Hard Cab, Snow Plow, Portable Refreshment Center, Heater Kit, HD Trailer Hitch.								
WARRANTY	Two-year or 1,500 hour limited warranty. Refer to the Operator's Manual for further details. Battery warranty through battery manufacturer.								

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The Workman utility vehicle is manufactured in Tomah, WI ISO 9002 Certified Plant.





Workman® HD Series

The Workman® HD Series is designed with your toughest work challenges in mind, from the front bumper to the rear bumper and everything in between. Design components like an I-beam-shaped DeDion rear axle, a truss-like front space frame, integrated wheel bearings and 4-wheel hydraulic disc brakes provide the highest total carrying capacity* in the industry and make the Workman ready for the toughest challenges.





Workman® HD Series Specifications*

	WORKMAN HDX, NO BED, MODEL 07383 WORKMAN HDX, W/BED, MODEL 07384 WORKMAN HDX W/BED, MODEL 07384TC WORKMAN HDX - 4WD, MODEL 07386 WORKMAN HDX - 4WD, MODEL 07386TC	WORKMAN HDX - D MODEL 07385 WORKMAN HDX - D MODEL 07385TC WORKMAN HDX - D - 4WD, MODEL 07387 WORKMAN HDX - D - 4WD, MODEL 07387TC	WORKMAN HD, MODEL 07369
ENGINE	Kubota® 972 EFI, 32.5 hp (24.2 kw), 4-cycle, liquid-cooled, 962 cc, 3-cylinder overheated camshaft, counterbalanced gasoline engine. Governed maximum of 32.5 hp at 3600 rpm. Rear engine location direct coupled to a transaxle. 12-volt electric starter. Fuel Injected is a closed loop system with oxygen sensor to adjust air/fuel ratio and manifold pressure sensor to adjust for altitude. Full pressure lubrication with spin-on oil filter. Meets all EPA & CARB emission standards	Kubota 902D, 3-cylinder, inline vertical, 4-cycle, liquid cooled, counterbalanced diesel engine, 23.3 hp (18.5kw); governed to a maximum speed of 3600 rpm. 58.0 cu. in (950 cc) displacement. Rear engine location. Direct couple to transaxle. 12-volt electric starter. Full pressure lubrication with spin-on oil filter. Meets EPA Tier IV compliance. Biodiesel ready for use up to B-20 (20% biodiesel and 80% petrol blend). Meets all EPA & CARB emission standards.	Kohler Model CH23, 2-cylinder, 4-cycle, air-cooled engine. 23 hp (17.2 kW) at 3600 rpm governed to a maximum speed of 3600 rpm by an internal governor. 41.1 cu. in. (674 cc) displacement. Electronic ignition. Rear engine location direct coupled to a transaxle. 12-volt electric starter. Full pressure lubrication with spin-on oil filter. Meets all EPA & CARB emission standards.
CLUTCH	7.5" (19cm) clutch and pressure plate		
INSTRUMENTATION	Fuel and coolant temperature gauges. Hour meter. Oil pressure, check engine and battery charge indicator lights. Tachometer and speedometer.	Fuel and coolant temperature gauges. Hour meter. Oil pressure, glow plug and battery charge indicator lights. Tachometer and speedometer.	Fuel gauge, hour meter, oil pressure warning light and battery charge indicator light. Tachometer / speedometer optional.
ALTERNATOR	60 amp with electronic regulator		25 amp with electronic regulator
TIRES	Front: 20" x 9" - 12, 6-ply rating, turf tread Rear: 24" x 12" - 12, 6-ply rating, turf tread		
COOLING SYSTEM	Aluminum radiator with 10 fins per inch dual pass. Right side mounted with removable screen for debris cleaning. Thermal controlled DC electric fan.		Fan forced air.
AIR CLEANER	Remote mounted, heavy-duty 2-stage air cleaner with evacuator valve.		Large capacity, dual element.
CLEARANCE CIRCLE 2WD	Inside = 32 in (81 cm); Outside = 194 in (493 cm)		
CLEARANCE CIRCLE 4WD	Inside = 100 in (254 cm); Outside = 300 in (762 cm)		N/A
FUEL CAPACITY	6 gallons (22.7 liters)		
FUEL PUMP	12V internally regulated 42 psi in-tank	Electronic pump	Diaphragm pump
FUEL FILTER	In tank filter sock. 10 micron polyester depth.	Combination fuel filter / water separator with a 30 micron filtration and 50 mesh suction screen in tank.	In-line 40 micron filter and 50 mesh suction screen in tank.
HORN	Standard, button on dash on 07384TC & 07386TC. Optional on 07383, 07384 & 07386.	Standard, button on dash on 07385TC & 07387TC. Optional on 07385 & 07387.	Optional
SOUND LEVEL	75 db(A)**	85 db(A)**	80 db(A)**
VEHICLE SHIPPING WEIGHT	Model 07383: 1623 lbs (738 kg) Model 07384: 1951 lbs (887 kg) Model 07384TC: 2725 lbs (1238 kg) Model 07386: 2010 lbs (914 kg) Model 07386TC: 2784 lbs (1265 kg)	Model 07385: 1956 lbs (889 kg) Model 07385TC: 2730 lbs (1240 kg) Model 07387: 2015 lbs (916 kg) Model 07387TC: 2789 lbs (1268 kg)	Model 07369: 1848 lbs (840 kg)
VEHICLE ACTUAL WEIGHT W/O FUEL	Model 07383: 1623 lbs (738 kg) Model 07384: 1951 lbs (887 kg) Model 07384TC: 2032 lbs (924 kg) Model 07386: 2010 lbs (914 kg) Model 07386TC: 2091 lbs (950 kg)	Model 07385: 1956 lbs (889 kg) Model 07385TC: 2037 lbs (926 kg) Model 07387: 2015 lbs (916 kg) Model 07387TC: 2096 lbs (953 kg)	Model 07369: 1848 lbs (840 kg)
TOTAL CAPACITY	Model 07384:3249(1477kg) Model07384TC:3168(1440kg) Model 07386:3190 (1450kg) Model 07386TC:3109 (1413kg)	Model 07385:3244 lbs. (1475 kg) Model 07385TC:3163 lbs. (1438 kg) Model 07387: 3185 lbs. (1448 kg) Model 07387TC: 3104 lbs. (1411 kg)	Model 07369: 3352 lbs. (1524 kg)
CARGO BED CAPACITY W/200 LB. OPERATOR AND 200 LB. PASSENGER	Model 07384: 2849 lbs (1295 kg) Model 07384TC: 2768 lbs (1258 kg) Model 07386: 2790 lbs (1268 kg) Model 07386TC: 2709 lbs (1231 kg)	Model 07385: 2844 lbs.(1293 kg) Model 07385TC: 2763 lbs. (1256 kg) Model 07387: 2785 lbs. (1266 kg) Model 07387TC: 2704 lbs. (1229 kg)	Model 07369: 2952 lbs. (1342 kg)

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**At operator's ear; 3600 rpm with bed and sides installed.

The Workman HD utility vehicle is manufactured in Tomah, WI ISO 9002 Certified Plant.





Workman® HD Series Specifications* (continued)

SPECIFICATIONS COMMON TO WORKMAN HD SERIES VEHICLES	
FRONT SUSPENSION	Independent system with dual "A" frame control arms, dual coil springs and dual shock absorbers with anti-sway bar. Provides 5 3/4" travel.
REAR SUSPENSION	DeDion rear axle (weight carrying axle) suspension independent of transaxle with dual leaf springs and dual shock absorbers. Provides 3" travel.
BATTERY	12-volt, group 26, with 540 cold cranking amps at 0 degrees F (-18 degrees C).
TRANSMISSION	Rear transaxle directly connected to engine, twin axle drive. 3-speed synchromesh (forward speeds only), h-shift pattern with high-low range providing 6 forward speeds and 2 in reverse. Transmission housing doubles as hydraulic reservoir with outlet screen and external filter.
3RD GEAR HIGH LOCKOUT	Interlock key switch that prevents engine from running in 3rd gear, high range HDX-D. Limits engine RPM to 2,200 in 3rd gear high range (HDX gas).
DIFFERENTIAL LOCK	Manual engage rear differential lock.
4WD SYSTEM	Fully automatic on-demand, bi-directional system. Uses dual bi-directional clutches. In event of rear tire slippage, clutches transmit power proportionally to front wheel with highest traction.
FRAME	Steel space frame front frame and C-channel rear frame.
STEERING	Hydraulic power steering with steering valve coupled to hydraulic cylinder with thru shaft. Maximum steering angle is 70 degrees on 2WD and 50 degrees on 4WD.
2-POST ROPS	2-post rollover protective structure and protective back panel bolted to ROPS.
BRAKES	4-wheel hydraulic disk brake system. 9 1/2" disk with hydraulic service brakes using twin piston floating calipers. Parking brake uses mechanical cable actuated caliper on rear wheels.
HYDRAULICS	4 gpm (15 lpm) gear pump provides hydraulic flow for power steering and lift in series. Lift control valve with quick disconnects for dual lift cylinders or for attachments when quick disconnects are switched. 8 quart total capacity.
LIGHTS	Twin halogen headlights and dual taillights actuated by switch on dash. Dual brake lights actuated by brake pedal.
SEAT BELTS / SEATS	Lap seat belts standard. Bucket seats with adjustable slides to allow for various seat positions. Hip restraint tubes welded to seat mounting straps.
CONTROLS	Throttle, brake and clutch pedals. Gear shifter, differential lock, parking brake, high-low range shifter and hydraulic lift levers.
INTERLOCK	To start engine, clutch pedal must be depressed and remote hydraulic lever must be in neutral position. If installed, high flow hydraulics and rear PTO must be disengaged / switched off.
SAFETY SUPPORT	7-gauge steel channel stores behind seat and fits over extended lift cylinder to prevent accidental lowering of bed.
GROUND CLEARANCE	7" (18 cm) with no load.
REAR TOW HITCH	Steel hitch bracket bolted to rear DeDion axle. Mounting plate provides mounting hole for pin or ball hitch and incorporates two safety chain mounting holes. Maximum tongue weight of 600 lbs (272 kg). Maximum trailer weight of 3500 lbs (1587 kg). Trailers over 1500 lbs. require trailer brakes. (Electric Brake Kit available through parts, 117-4837).
GROUND SPEED	Standard Tires, Gear 1/2/3
	Forward Speeds: High Range 7.6/11.5/19.8 mph (12.2/18.5/31.9 km/h)
	Low Range 2.9/4.5/7.7 mph (4.7/7.2/12.5 km/h)
	Reverse Speeds: High Range 7.1 mph (11.6 km/h)
Low Range 2.8 mph (4.5 km/h)	
DIMENSIONS	Overall Length Overall Width Overall Height (Top of ROPS)
	127.6 in (324 cm) w/o bed 64.7 in (164.3 cm) 75.8 in (192.5 cm) 130 in (330 cm) w/ full bed
CERTIFICATIONS	Certified to meet SAE J2258. Certified to meet ISO/DIS 21299 for ROPS. Engine meets all applicable emission standards per the manufacturer. Certified to meet the CE Machinery Directive.
WARRANTY	Two-year limited warranty. See Operator's Manual for further details.

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Workman® HD Series Specifications* (continued)

WORKMAN VEHICLE ACCESSORIES	
FULL AREA FLAT BED	Welded steel diamond plate flat bed that mounts to vehicle frame. Dimensions: 54.7 x 64.5 in (139 x 164 cm). Weight: 218 lbs (99 kg).
FULL FLAT BED SIDE KIT	Long bed side panels, front panel and tailgate with a fixed pivot.
1/3 FLAT BED	Welded steel diamond plate flat bed. Has (4) corner stake pockets for enhancing specialty mount applications. Dimensions: 21.5 x 54.7 in (55 x 139 cm). Weight: 55 lbs (25 kg)
1/3 FLAT BED STAKE SIDE KIT	Formed 14-gauge steel stake sides for use with 1/3 flat bed.
2/3 FLAT BED	Welded steel diamond plate flat bed. Dimensions: 48.1 x 54.7 in (122 x 139 cm). Weight: 161 lbs (73 kg)
2/3 FLAT BED SIDE KIT	Short bed side panels, front panel and tailgate with a fixed pivot for use with 2/3 flat bed. Optional tailgate release PN 92-1220.
FULL FLAT BED FOLD DOWN SIDE KIT	Hinged side panels, front panel and tailgate can be folded down independently for use with full flat bed. Dimensions: 64.5 x 54.7 x 11 in (164 x 139 x 28 cm) outside. 20 cu ft (.570 cu m) capacity. Weight = 109 lbs (49 kg)
HIGH FLOW HYDRAULICS KIT	Provides 8 gpm (30.3 liter) at 2000 psi hydraulic flow in a separate circuit to power certain attachments and accessories (standard on TC models).
200 GALLON SPRAYER	200 gallon (757 liter) low profile tank sprayer with diaphragm pump and detachable control box. Three-section, 18.5 ft (5.6 m) open boom system.
VICON SPREADER	Pendulum action spreader with polyester hopper. 14.1 cu. ft. (.396 cu. m.), 750 lbs (340.5 kg) capacity. Spread width is 3 - 46 ft. (1 - 14 m).
TOPDRESSER 1800	18 cu. ft. (.504 cu. m), 1450 lbs (541 kg) capacity conveyor belt style topdresser hydraulically driven by remote hydraulics. 60 in (152 cm) spread width. Workman bed lift cylinders raise topdresser. Spring load metering gate.
TOPDRESSER 2500	25 cu. ft. (.7 cu. m) capacity conveyor belt style topdresser towed by Workman vehicle. Textured belt, oscillating axles and all wheel drive. Electrically activated hydraulic brakes.
PROPASS™ 200 TOPDRESSER	21 cu. ft. / 0.54 cu. m) struck (25 cu. ft. / 0.71 cu. m heaped) capacity spin style topdresser. Tow-behind or bed mount versions.
PRO FORCE™ DEBRIS BLOWER	Tow-behind, self-contained engine-driven debris blower operated with a hand-held wireless RF controller. Bed mount kit available.
1/3 VERTICAL LIFT	An elevating, scissor-lift work platform with 600 lb (272 kg) lift capacity that can be raised from 38 in (96.5 cm) to 98 in (249 cm). Slope indicator for safe operation. Removable over-ride key for lift controls.
HARD CAB	Deluxe hard cab, ROPS and CE certified. Vented front glass windshield, interior dome light and a 2-speed windshield wiper. Optional heater and mirrors available.
CAB SLIDING WINDOW DOOR KIT	Door kit for deluxe hard cab. Operator door has a sliding window for ventilation and ability to access exterior elements such as an identification badge security entry. Passenger door has solid window.
CAB SOLID WINDOW DOOR KIT	Door kit for deluxe hard cab. Operator and passenger doors have solid windows.
CAB REAR VIEW MIRROR KIT	Externally mounted to the cab frame, operator and passenger side rear view mirrors for enhancing all around visibility.
CANOPY	Durable, high-density polyethylene canopy with drainage outlets for moisture runoff.
FOLDING WINDSHIELD	Clear high-impact modified acrylic material with fold down capability.
BRAKE & SIGNAL KIT	Consists of turn signal lights for both corners in the front and rear of vehicle and brighter beam headlights.
WORK LIGHT KIT	Consists of (2) front facing and (1) rear facing work lights all mounted on top of ROPS bar.
ROPS SIGNAL LIGHT KIT	Consists of (2) double amber warning lights and (2) single red tail lights all for mounting on top of ROPS bar. Requires either a "Right Side" or "Left Side" light kit.
AUTOMATIC TAILGATE RELEASE	Provides automatic tailgate release when dumping from cargo bed and resets automatically upon lowering of bed. Works on full or 2/3 bed with full sides. Does not work with folding side kit.
REAR PTO KIT	Rear mounted, 540 RPM, PTO shaft mechanically driven by transaxle.
HAND THROTTLE	Throttle and speed limit control that provides constant RPM for stationary attachments or a controlled maximum speed for applications such as spraying or spreading (mechanical – HDX/HD & electric – HDX gas models).
SPARK ARRESTOR	Fits onto end of tailpipe.
PLASTIC BED LINER	A rugged, weatherproof one-piece plastic liner and separate tailgate liner that will protect either a full are bed with sides or a 2/3 bed with sides.
HIGH AIR INTAKE KIT	Kit for extending the air intake system from underneath the cargo bed to a position slightly above the ROPS shield behind the passenger position of the vehicle. Recommended for dusty work applications.
REAR VIEW MIRROR KIT	A single 8 1/2" (21.6 cm) convex mirror with mounting capability on either the operator or passenger side of the vehicle.

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual Products offered for sale may vary in use, design, requirements and safety features. Consult your local Toro Distributor. "Cushman" is a registered trademark of Ransomes.

The Workman HD utility vehicle is manufactured in Tomah, WI ISO 9002 Certified Plant.





Workman® HD Series Specifications* (continued)

WORKMAN VEHICLE ACCESSORIES	
2" RECEIVER HITCH KIT	Provides a 2" square receiver to enable a "drawbar" hitch.
TRAILER BRAKE WIRING KIT	Kit provides a controller which plugs into Workman vehicle and a positive wire to assist the hook up of customer supplied electric trailer brakes.
TRAILER SIGNAL WIRING KIT	Kit provides electrical wire for Workman vehicle to enable easy hook up to customer supplied trailer signal and brake lights.
REMOTE HYDRAULIC MANIFOLD KIT	Hydraulic manifold kit that provides to ability to switch hydraulics between cargo bed actuation and remote port usage via use of a operator panel mounted switch.
REMOTE HYDRAULIC FLOAT KIT	Hydraulic float kit that enables both hydraulic lifting and "float" in the down position. Required when using a Deere TC125 sweeper.
4WD MANUAL CONTROL	Allows auto 4WD to be turned off.
4 POST ROPS CANOPY KIT	Canopy for use with 4-post ROPS kit.
4 POST ROPS KIT	Connects standard 2-post ROPS to 4-post ROPS. Required with 200-gallon sprayer.
HEATER KIT	Heater for use with cab. Adjustable temperature and 2-speed fan (excludes HD).
BACK UP ALARM KIT	Provides an audible alarm when vehicle is in reverse.

Multi Pro® WM – 200-Gallon Sprayer Specifications*

SPRAYER SPECIFICATIONS	
SOLUTION TANK	High-density, impact-resistant polyethylene with large 16" (41cm) fill well, tapered bottom and sump with drain.
RATED CAPACITY	200 gallons (757 liters).
SPRAY PUMP	Hardi 363/10.0, 6-diaphragm positive displacement w/1" (2.5cm) input shaft; input speed 0-540 rpm; Flow rate 49gpm (185.5 lpm) @ 40psi (540 rpm).
AGITATOR	4, side-mounted jet agitation nozzles for full tank agitation.
CONTROLS	Spray pump control switch, agitator jet switch, rate switch, individual boom On/Off switches, boom actuator switches, indicator lights on pump, agitation and boom switches, throttle lock.



OPEN BOOMS (STANDARD)	
BOOM ASSEMBLY	18.5' three section, triangular truss style open booms.
BOOM ACTUATORS	Heavy Duty hydraulic lift actuators with nitro-steel plated shafts; 1-3/4" Bore x 10.06" Stroke.
SPRAY NOZZLES	Eleven nozzles turrets, triple turret mount, quick-disconnect with diaphragm check valves.

MULTI PRO WM ACCESSORIES	
CLEANLOAD™ EDUCTOR KIT	This on-board mixing station allows rapid and safe loading of any chemical without the need to first mix into a slurry Incorporates a built-in bottle wash nozzle and has an optional suction lance to pull in powdered or liquid products from their container. Stores within the width of the machine.
FRESH WATER RINSE KIT	Simplifies and automates the triple-rinse process, saving hours and hours of clean up time.
ELECTRIC HOSE REEL KIT	150' (45.7 m) of hose for hand or walk spraying applications. Convenient electric powered rewind. Spray gun has an adjustable nozzle from stream to fan.
PRO FOAM™ MARKING KIT	Foam dollops ensure accurate parallel path tracking. Select foam independently or both simultaneously.
ULTRA SONIC BOOM™ KIT	New sonar sensors automatically maintain proper spray height over undulating turf.
COVERED BOOM KIT	Extends 12" (30.5 cm) below the boom to minimize chemical drift in breezy conditions while retaining full boom system functionality.
AIR INDUCTION TURBO TWIN JET NOZZLES	Exclusive to Toro in the 0.8gpm (3.02 lpm), 1.0 gpm (3.79 lpm) and 1.5gpm (5.68 lpm) sizes, for exceptional contact coverage.
CONTACT & SYSTEMIC NOZZLES	See complete nozzle listing in the Multi Pro Nozzle Selection Brochure – available for download on toro.com

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WARNING
THE WORKMAN® IS AN OFF-HIGHWAY VEHICLE, AND IS NOT DESIGNED, EQUIPPED, OR MANUFACTURED FOR USE ON PUBLIC STREETS, ROADS OR HIGHWAYS.

The Workman utility vehicle is manufactured in Tomah, WI ISO 9002 Certified Plant.





Workman® HDX Auto Specifications*

WORKMAN HDX AUTO, MODEL 07390	
ENGINE	28 hp (14.9 kW) Kohler® LH775 Twin-cylinder, liquid-cooled electronic fuel injection
DISPLACEMENT	747cc
FUEL	Gasoline
COOLING	Liquid
TRANSMISSION	Variable speed transmission with forward high-low range and reverse featuring Toro SpeedContr'l™
MAXIMUM SPEED	Forward low range 11 mph (17.7 km/h), Forward high range 20 mph (32.2 km/h), Reverse 13 mph (20.9 km/h)
4WD MODEL	Fully automatic on-demand, bi-directional system. Uses dual bi-directional clutches. In event of rear tire slippage, clutches transmit power proportionally to front wheel with highest traction.
BASE MACHINE WEIGHT (INCLUDES BED)	HDX Auto 2WD: 1,905 lbs (866 kg) HDX Auto 4WD: 1,935 lbs (880 kg)
TOTAL PAYLOAD CAPACITY (INCLUDING TWO, 200LB PASSENGERS)	HDX Auto 2WD: 3,295 lbs (1498 kg) HDX Auto 4WD: 3,265 lbs (1484 kg)
CARGO BED CAPACITY (ASSUMES TWO, 200LB PASSENGERS)	HDX Auto 2WD: 2,895 lbs (1316 kg) HDX Auto 4WD: 2,865 lbs (1303 kg)
LENGTH	127.6" (324 cm) without bed; 130" (330 cm) with bed
WIDTH	64.7" (164.3 cm)
HEIGHT	75.8" (192.5 cm) to top of ROPS
CLEARANCE CIRCLE	2WD Inside = 32" (81 cm); Outside = 194" (493 cm) 4WD Inside = 100" (254 cm); Outside = 300" (726 cm)
GROUND CLEARANCE	7" (18 cm) with no load
DIFFERENTIAL LOCK	Electronic switch to engage rear differential lock
FRONT SUSPENSION	Independent suspension with dual A-frame control arms, dual coil springs and dual shock absorbers with anti-sway bar. Provides 5.75" (14.6 cm) travel.
REAR SUSPENSION	DeDion rear axle (weight carrying axle) suspension independent of transaxle with dual leaf springs and dual shock absorbers. Provides 3" (7.6 cm) travel.
BRAKES	4-wheel hydraulic disc brake system
CERTIFICATIONS	Certified to meet SAE J2258. Certified to meet ISO/DIS 21299 for ROPS. Engine meets all applicable emission standards per the manufacturer. Certified to meet the CE Machinery Directive.
WARRANTY	Two-year limited warranty. See Operator's Manual for further details.
TOW HITCH	600 lbs (272 kg) tongue weight 3,500 lbs (1587 kg) trailer weight Trailers over 1,500 lbs (680 kg) require trailer brakes

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The Workman HD utility vehicle is manufactured in Tomah, WI ISO 9002 Certified Plant.





Workman® HDX Auto Specifications* (continued)

WORKMAN HDX AUTO ACCESSORIES	
FULL AREA FLAT BED	Welded steel diamond plate flat bed that mounts to vehicle frame. Dimensions: 54.7 x 64.5 in (139 x 164 cm). Weight: 218 lbs (99 kg).
FULL FLAT BED SIDE KIT	Long bed side panels, front panel and tailgate with a fixed pivot.
1/3 FLAT BED	Welded steel diamond plate flat bed. Has (4) corner stake pockets for enhancing specialty mount applications. Dimensions: 21.5 x 54.7 in (55 x 139 cm). Weight: 55 lbs (25 kg)
1/3 FLAT BED STAKE SIDE KIT	Formed 14-gauge steel stake sides for use with 1/3 flat bed.
2/3 FLAT BED	Welded steel diamond plate flat bed. Dimensions: 48.1 x 54.7 in (122 x 139 cm). Weight: 161 lbs (73 kg)
2/3 FLAT BED SIDE KIT	Short bed side panels, front panel and tailgate with a fixed pivot for use with 2/3 flat bed. Optional tailgate release PN 92-1220.
FULL FLAT BED FOLD DOWN SIDE KIT	Hinged side panels, front panel and tailgate can be folded down independently for use with full flat bed. Dimensions: 64.5 x 54.7 x 11 in (164 x 139 x 28 cm) outside. 20 cu ft (.570 cu m) capacity. Weight = 109 lbs (49 kg)
HIGH FLOW HYDRAULICS KIT	Provides 8 gpm (30.3 liter) at 2000 psi hydraulic flow in a separate circuit to power certain attachments and accessories (standard on TC models).
200 GALLON SPRAYER	200 gallon (757 liter) low profile tank sprayer with diaphragm pump and detachable control box. Three-section, 18.5 ft (5.6 m) open boom system.
VICON SPREADER	Pendulum action spreader with polyester hopper. 14.1 cu. ft. (.396 cu. m.), 750 lbs (340.5 kg) capacity. Spread width is 3 - 46 ft. (1 - 14 m).
TOPDRESSER 1800	18 cu. ft. (.504 cu. m), 1450 lbs (541 kg) capacity conveyor belt style topdresser hydraulically driven by remote hydraulics. 60 in (152 cm) spread width. Workman bed lift cylinders raise topdresser. Spring load metering gate.
TOPDRESSER 2500	25 cu. ft. (.7 cu. m) capacity conveyor belt style topdresser towed by Workman vehicle. Textured belt, oscillating axles and all wheel drive. Electrically activated hydraulic brakes.
PROPASS™ 200 TOPDRESSER	21 cu. ft. / 0.54 cu. m) struck (25 cu. ft. / 0.71 cu. m heaped) capacity spin style topdresser. Tow-behind or bed mount versions.
PRO FORCE™ DEBRIS BLOWER	Tow-behind, self-contained engine-driven debris blower operated with a hand-held wireless RF controller. Bed mount kit available.
1/3 VERTICAL LIFT	An elevating, scissor-lift work platform with 600 lb (272 kg) lift capacity that can be raised from 38 in (96.5 cm) to 98 in (249 cm). Slope indicator for safe operation. Removable over-ride key for lift controls.
HARD CAB	Deluxe hard cab, ROPS and CE certified. Vented front glass windshield, interior dome light and a 2-speed windshield wiper. Optional heater and mirrors available.
CAB SLIDING WINDOW DOOR KIT	Door kit for deluxe hard cab. Operator door has a sliding window for ventilation and ability to access exterior elements such as an identification badge security entry. Passenger door has solid window.
CAB SOLID WINDOW DOOR KIT	Door kit for deluxe hard cab. Operator and passenger doors have solid windows.
CAB REAR VIEW MIRROR KIT	Externally mounted to the cab frame, operator and passenger side rear view mirrors for enhancing all around visibility.
CANOPY	Durable, high-density polyethylene canopy with drainage outlets for moisture runoff.
FOLDING WINDSHIELD	Clear high-impact modified acrylic material with fold down capability.
BRAKE & SIGNAL KIT	Consists of turn signal lights for both corners in the front and rear of vehicle and brighter beam headlights.
WORK LIGHT KIT	Consists of (2) front facing and (1) rear facing work lights all mounted on top of ROPS bar.
ROPS SIGNAL LIGHT KIT	Consists of (2) double amber warning lights and (2) single red tail lights all for mounting on top of ROPS bar. Requires either a "Right Side" or "Left Side" light kit.
AUTOMATIC TAILGATE RELEASE	Provides automatic tailgate release when dumping from cargo bed and resets automatically upon lowering of bed. Works on full or 2/3 bed with full sides. Does not work with folding side kit.
HAND THROTTLE	Throttle and speed limit control that provides constant RPM for stationary attachments or a controlled maximum speed for applications such as spraying or spreading.
SPARK ARRESTOR	Fits onto end of tailpipe.
PLASTIC BED LINER	A rugged, weatherproof one-piece plastic liner and separate tailgate liner that will protect either a full are bed with sides or a 2/3 bed with sides.
HIGH AIR INTAKE KIT	Kit for extending the air intake system from underneath the cargo bed to a position slightly above the ROPS shield behind the passenger position of the vehicle. Recommended for dusty work applications.
REAR VIEW MIRROR KIT	A single 8 1/2" (21.6 cm) convex mirror with mounting capability on either the operator or passenger side of the vehicle.

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The Workman HD utility vehicle is manufactured in Tomah, WI ISO 9002 Certified Plant.





Workman® HDX Auto Specifications* (continued)

WORKMAN HDX AUTO ACCESSORIES	
2" RECEIVER HITCH KIT	Provides a 2" square receiver to enable a "drawbar" hitch.
TRAILER BRAKE WIRING KIT	Kit provides a controller which plugs into Workman vehicle and a positive wire to assist the hook up of customer supplied electric trailer brakes.
TRAILER SIGNAL WIRING KIT	Kit provides electrical wire for Workman vehicle to enable easy hook up to customer supplied trailer signal and brake lights.
REMOTE HYDRAULIC MANIFOLD KIT	Hydraulic manifold kit that provides to ability to switch hydraulics between cargo bed actuation and remote port usage via use of a operator panel mounted switch.
REMOTE HYDRAULIC FLOAT KIT	Hydraulic float kit that enables both hydraulic lifting and "float" in the down position. Required when using a Deere TC125 sweeper.
4WD MANUAL CONTROL	Allows auto 4WD to be turned off.
4 POST ROPS CANOPY KIT	Canopy for use with 4-post ROPS kit.
4 POST ROPS KIT	Connects standard 2-post ROPS to 4-post ROPS. Required with 200-gallon sprayer.
HEATER KIT	Heater for use with cab. Adjustable temperature and 2-speed fan (excludes HD).
BACK UP ALARM KIT	Provides an audible alarm when vehicle is in reverse.

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.

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TORO

Sand Pro® 2040Z

The all-new Sand Pro 2040Z mechanical rake is unlike anything else in the marketplace; a zero-turn mechanical groomer delivering unmatched maneuverability and productivity. This unique machine is a daily bunker rake that will reduce a golf course's labor costs for both mechanical and hand raking of bunkers. A brand new "flex" raking system with the patent-pending "lift in turn" feature enables an operator to turn tightly in bunkers without leaving unraked teardrops or tire marks. As an infield groomer, the SP2040Z with its new nail drag/"flex" groomer rear attachment is the perfect solution for daily infield grooming. The nimble SP2040Z will save you valuable time in your workday, improving infield surface playability and consistency.





Sand Pro® 2040Z Specifications*

SAND PRO 2040Z, MODEL 08706																		
ENGINE	Kawasaki 2 cylinder, air cooled, gasoline engine; Gross HP 13.6 HP (10.1 kW), Governed HP 12.2 HP (9.1 kW) @ 2400 rpm; Max torque 27.3 ft-lbs (37.0 Nm) @1800 rpm; Displacement 36.7 cu-in. (603 cc); Oil capacity w/filter 1.7qts. w/filter (1.5 w/o filter); Oil Filter External, spin-on																	
AIR CLEANER SYSTEM	Heavy duty single stage cyclonic air filter with replacement element																	
FUEL CAPACITY	4.5 gals (17 liters) of unleaded gas (maximum 10% ethanol)																	
TRACTION DRIVE	Belt driven independent infinitely variable unitized transmission, with automatic tensioning system.																	
HYDRAULIC OIL	Factory fill Mobil fluid 424 tractor transmission fluid; Left hand transmission section: 3.1qt (3.25 liters); Right hand transmission section: 3.55 qt (3.75 liters)																	
GROUND SPEED	Forward 0-12 mph (0-19.3 km/h), Reverse 0-4 mph (0-6.4 km/h) With optional speed limiter(Model 08720) installed: Forward 0-7 mph (0-11.3 km/h), Reverse 0-4 mph (0-6.4 km/h)																	
TIRES/WHEELS	Drive Wheels 25x12- 9, 3 ply rating pneumatic tubeless demountable with a Turf Tamer (knobby) tread. Front Wheel 16x7.5-8 4 ply rating pneumatic tubeless demountable with turf traction tread. Recommended tire pressure: 7 psi all tires																	
MAIN FRAME	Rectangular structured steel tube and high strength steel plate welded construction.																	
BRAKES	Twin levers with dynamic braking through hydrostatic transmission. Hand actuated parking brake lever that controls two integral wet disc brakes contained within transmission.																	
STEERING	Power steering, controlled through two independent control sticks with integrated dampeners. Min. turning radius: 0 in (0 cm)																	
CONTROLS/GAUGES	Ignition: Off/Run/Start; Throttle: Low - High Idle; Choke: Open /Closes choke plate; Parking Brake: Off - On LCD logic cluster includes hour meter and safety interlocks for operator presence, neutral and parking brake.																	
REAR ATTACHMENT HYDRAULIC LIFT	Raise/Lower switch mounted at end of right handle.																	
SEAT	High back cushion vinyl seat with drain hole, integrated armrest and retractable seat belt; adjustment is 4 inches fore and aft.																	
ROPS	Two post fixed ROPS, certified per ISO/DIS 21299.2 specifications																	
STORAGE	Built-in cup holder, rake holder and personal storage reached from seat.																	
ELECTRICAL FEATURES	12-volt system, 20-amp alternator at 3600rpm. Battery Voltage is displayed when key switch is moved from off to run (Low Battery LED will illuminate if key voltage is less than 12.3V in run position)																	
SOUND LEVEL	88dBA (Operator Ear)																	
DIMENSIONS/WEIGHT	<table border="1"> <thead> <tr> <th></th> <th>with Flex Tooth Rake</th> <th>with Nail Drag</th> <th></th> </tr> </thead> <tbody> <tr> <td>Length:</td> <td>89.0 in (226 cm)</td> <td>84.8 in (215 cm)</td> <td rowspan="5">Wheelbase: 58.0 in 147 cm Tread width (to centerline of tire): 46.9 in (119 cm)</td> </tr> <tr> <td>Width:</td> <td>84.0 in (213 cm)</td> <td>71.5 in (182 cm)</td> </tr> <tr> <td>Overall Height:</td> <td>73.0 in (185 cm)</td> <td>73.0 in (185 cm)</td> </tr> <tr> <td>Weight:</td> <td>920 lbs (417 kg)</td> <td>970 lbs (439 kg)</td> </tr> </tbody> </table>		with Flex Tooth Rake	with Nail Drag		Length:	89.0 in (226 cm)	84.8 in (215 cm)	Wheelbase: 58.0 in 147 cm Tread width (to centerline of tire): 46.9 in (119 cm)	Width:	84.0 in (213 cm)	71.5 in (182 cm)	Overall Height:	73.0 in (185 cm)	73.0 in (185 cm)	Weight:	920 lbs (417 kg)	970 lbs (439 kg)
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Weight:	920 lbs (417 kg)	970 lbs (439 kg)																
GROUND CLEARANCE	5.5 in (14 cm) (at machine centerline 24 in tire)																	
TIE DOWNS	Four loops, one located on each corner of the machine.																	
WARRANTY	2-year limited warranty. Refer to the Operator's Manual for further details.																	
SAFETY CERTIFICATIONS	Certified to meet ANSI specification B71.4 - 2012 standards when equipped with weight kits supplied with attachments. Certified to meet ISO/DIS 21299 for ROPS. Engine meets all applicable emission standards per the manufacturer. Certified to meet C-Tick 2004/108/EC/EMC and the CE Machinery Directive.																	

REAR ATTACHMENTS (NOTE: Unit must always have a rear attachment installed to meet ANSI and CE specifications)	
FLEX TOOTH RAKE (08716) (GOLF APPLICATIONS)	<ul style="list-style-type: none"> 84 inches wide tooth rake with three reversible rubber trowels that will not tear bunker liners Convex Trowel Design is able to continuously groom a 70" radius surface Lift-in-turn design allows for continuous grooming during a zero radius turn Rubber trowel design reduces damage to bunker edges and liners
OPTIONAL ACCESSORIES FOR TOOTH RAKE	Broom Finishing Kit (three section brush), Model 08719
NAIL DRAG (08717) (INFIELD GROOMING APPLICATIONS)	<ul style="list-style-type: none"> 66" wide with 88 Removable nails arranged in diamond pattern 3 height position for nails increases material flow and extends nail wear 71.5" rubber groomer Back blade allows for moderate or small area leveling of infield surface
OPTIONAL ACCESSORIES FOR NAIL DRAG	Drag mat finishing kit (08718): (78"W X 18"L 1"square steel mat); includes cradles to store mat during transport. Model 08718
OTHER TRACTION UNIT ACCESSORIES	
LIGHT KIT	2 LED lights, one in front one mounts to ROPS and points rearward. 3 Position switch, all lights on, front on or off. Model 08721
SPEED LIMITER KIT	Automatically reduces maximum speed of the traction unit when the rear attachment is lowered. Adjustable to maximum speed of 3 – 7 mph (4.8 – 11.3 km/h). Model 08720, available in January 2014.
SEAT SUSPENSION KIT	Rubber isolators provide cushioning. PN 125-6469
MESH BAG KIT	Storage bag for maintenance tools, trash, debris, etc.; mounts to ROPS. PN 127-0359
TURF TRAC TIRE	Less aggressive tread for rear drive tires. PN 125-6462
BIMINI SUNSHADE	Canvas sunshade that mounts to ROPS. Model 30358
RAKE HOLDER	SP2040Z has a standard rake holder mounted on left hand side, a second optional rake holder can mount to right hand side of SP2040Z. PN 127-0353-03

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Sand Pro® 3040 & 5040

The Quick Attach System™ (QAS) and 21 attachments make the Sand Pro 3040 and 5040 the most versatile vehicles in the bunker.





Sand Pro® 3040 & 5040 Specifications*

	SAND PRO 3040, MODEL 08703	SAND PRO 5040, MODEL 08705
ENGINE	Vanguard® V-twin cylinder, 4-cycle, OHV, air-cooled, gas engine with cast iron sleeves. 16 hp (11.9 kW) at 3600 rpm. Displacement: 29.3 cu. in. (480 cc). Oil capacity: 1.75 quart (1.8 liter). Electronic ignition. Full pressure lubrication, oil filter. Base mounted engine and pump with 4 isolation mounts.	Vanguard®, V-twin cylinder, 4-cycle, OHV, air-cooled, gas engine with cast iron sleeves. 18 hp (13.4 kW) at 3600 rpm. Displacement: 34.8 cu. in. (570 cc). Oil capacity: 1.75 quart (1.8 liter). Electronic ignition. Full pressure lubrication, oil filter. Base mounted engine and pump with 4 isolation mounts.
AIR CLEANER SYSTEM	Remote mounted 3-phase Donaldson® air cleaner.	
FUEL CAPACITY	5.0 gallon (18.9 liter) of unleaded gasoline.	
TRACTION DRIVE	Direct driven hydrostatic variable displacement piston pump to 3 hydraulic motors for 3WD. Large, front mounted hydraulic cooler and fan. Foot pedal control, forward/reverse. Patented Series/Parallel hydraulic traction system keeps three wheels working together, virtually eliminates spin-outs.	
GROUND SPEED	Infinitely variable 0-10 mph (16 km/h) forward; 4.3 mph (6.9 km/h) reverse.	
HYDRAULIC OIL	5.0 gallon (18.9 liter) system capacity. Nylon reservoir to reduce corrosion. 10 (nominal) micron replaceable cartridge.	
TIRES/WHEELS	Three 22 x 11.00-8 pneumatic tubeless tires on demountable, interchangeable wheels. Tire pressure: 4-6 psi (27.5 kPa).	
MAIN FRAME	Tricycle vehicle with welded rectangular tubular steel frame construction. Rear engine placement.	
BRAKES	Dynamic braking through the hydrostatic transmission and hand actuated brake lever.	
STEERING	Manual front wheel steering. 15" (38 cm) diameter steering wheel. Double lubed for life gearbox.	Hydraulic power steering. 15" (38 cm) diameter steering wheel.
CONTROLS/GAUGES	Hand operated choke, throttle, and hydraulic control for raising/lowering with float. Foot pedal controls traction forward/reverse speed. Rear hydraulic lift and lower controls. Gauges: hour meter.	Hand operated choke, throttle, and hydraulic control for raising/lowering with float. Foot pedal controls traction forward/reverse speed. Front and rear hydraulic lift and lower controls. Gauges: hour meter.
SEAT	High-back cushion seat w/drain hole. 4" front-back adjustment w/additional 1.75" mounting adjustment. (arm rests optional)	
ELECTRICAL FEATURES	12-volt battery, 15 amp., 300 CCA @ 0° F, 12-volt electric starter. Dash mounted ignition switch with key. Neutral interlock switch, seat switch. Also provisions for light kit.	12-volt battery, 15 amp., 300 CCA @ 0° F, 12-volt electric starter. Fender mounted ignition switch with key. Neutral interlock switch, seat switch, also provisions for light kit.
POWER	97 dB(A) under normal operating conditions.	
DIMENSIONS	Width: 58" (147 cm), Length: 67.5" (171.5 cm), Height: 45.25" (114.9 cm), Wheelbase: 42.75" (108 cm)	
GROUND CLEARANCE	6.0" (15.2 cm)	
WEIGHT	Net weight (less fluids): 930 lbs. (421.8 kg).	
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details. Briggs & Stratton® provides a two-year commercial engine warranty and a lifetime Magnetron® warranty.	

	FRONT ATTACHMENTS
FRONT LIFT FRAME ASSEMBLY	Front Quick Attach System™ mounting assembly and hydraulic components. Used on Sand Pro 5040 only. Model 08713.
HYDRAULIC FLEX BLADE	Hydraulic QAS flex blade is designed for leveling, packing, and smoothing uneven areas in one pass. Model 08712. Available for SP5040 only (requires Front Lift Frame Assembly – 08712)
MANUAL BLADE	Standard 40" (102 cm) width steel blade. Spring balanced manual blade is used for leveling uneven areas and pushing up bunkers after washouts (cannot be used when 08712 is installed). Model 08714. Blade extension available to increase blade width to 60" (152 cm) for leveling out larger uneven areas. PN 115-5646.

	FRONT & REAR QAS ATTACHMENTS
BUNKER PUMP	Throws water up to 40' (12 m) and can pump 95 gal/min (360 l/min). Adjustable throw direction and angle. Requires Rear Remote Hydraulics (08781) for rear QAS mount. Requires Front Lift Frame Assembly (08712), Rear Remote Hydraulics (08781) and Front Remote Hydraulics for front QAS mount (on SP5040 only) Model 08765.
BUNKER PUMP REMOTE DISCHARGE KIT	An available 50' (15 m) discharge hose allows the QAS Bunker Pump to be removed and dropped into hard to reach areas. PN 115-2084.
LIP BROOM	Eliminates the task of manually maintaining infield lips. Removes ridge buildup by sweeping material back into the infield. Mounts to front QAS (SP5040) and rear QAS (SP3040 & 5040). Requires Front Lift Frame Assembly– 08712 for front attachment (on SP5040 only) Lip Broom available from Rahn Industries at www.rahngroomer.com or 1-800-298-1707.

	MID-MOUNT ATTACHMENTS
MID-MOUNT ASSEMBLY	Base mounting assembly for mid-mount toolbars with spring-loaded regulation to allow relief if obstruction is hit. Model 08731.
WEEDER TINE TOOLBAR	Ideal for removing weeds and grass from less maintained bunkers and fields (requires Mid-Mount Assembly – 08731). Model 08732.
LEVELING BLADE	Attaches to any mid-mount toolbar to quickly level out large areas. Foot operated latch allows operator to lower leveling blade independently from the other mid-mount toolbar. PN 108-8496.
SOLID TINE TOOLBAR	Used for general scarifying applications. Rotate teeth to maximize tine life (requires Mid-Mount Assembly – 08731). Model 08734.
CARBIDE TINE TOOLBAR	Use in the harshest conditions and for extended life –15 carbide tines included (requires Mid-Mount Assembly – 08731). Model 08735.
SPRING TINE TOOLBAR	Use for light to moderate scarifying and daily maintenance in bunkers and on premium fields (requires Mid-Mount Assembly – 08731). Model 08733.
EDGER	Maintains the grass edge of the outfield near the infield skin or warning track. Easily renovate ballfields by removing overgrown turf and infield lip build-up. Significantly reduces labor required for infield edging (requires Rear Remote Hydraulics – 08781). Model 08766.

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The Sand Pro 2020 is manufactured in Tomah, WI ISO 9002 Certified Plant.





SandPro® 3040 & 5040 Accessories*

REAR QAS ATTACHMENTS	
TOOTH RAKE	Designed to lightly scarify, pack, smooth and groom in one pass. Use in dry or wet conditions and can improve the condition of neglected sports fields. Model 08751.
WEIGHT KIT FOR TOOTH RAKE	Additional weight for the Tooth Rake attachment to improve performance in coarse or wet conditions. Set of 5 weights. PN 115-4333.
TOOTH RAKE BROOM	75" (190 cm) Brush – Attaches behind the Tooth Rake (08751) for a smoother finish. Model 08816.
PIVOTING TROWELS KIT	This new kit allows independent outside trowels to pivot and rake across the entire turn which eliminates unraked teardrop – Attaches to Tooth Rake (08751). PN 119-7158.
SPRING RAKE	Leaf rake assembly designed to be used alone or in combination with the tooth rake (08751) to achieve desired appearance. Great for wet conditions and collecting debris in groomed areas (if used independently, requires QAS A-Frame Assembly, 108-9427). Model 08752.
DRAG MAT CARRIER SYSTEM	QAS-mounted carrier frame with hydraulic lifter allows operator to raise and lower drag mats without ever leaving the operator seat. 72" (183 cm) width. Model 08756.
COCO DRAG MAT	Quickly produces a premium finish on dry, level surfaces (requires Drag Mat Carrier System - 08756). Model 08758.
STEEL DRAG MAT	Designed to for more rugged surfaces to quickly groom and finish. Use on wet or dry sand surfaces (requires Drag Mat Carrier System - 08756). Model 08757.
NAIL DRAG	Pivots to follow the contours of uneven field surface. Use to scarify, loosen, or weed before smoothing. Easily adjust nail pattern and depth. Accepts up to a 40D common nail. Model 08761.
SEGMENTED GROOMING BROOM	Designed to minimize top surface disruption, to maximize firmness, and provide a smooth finished look in contoured bunkers. Model 08753.
REPLACEMENT SEGMENTED GROOMING BROOM	Replacement grooming broom with stiffer bristles. PN 110-8182.
WEIGHT KIT FOR SEGMENTED GROOMING BROOM	Additional weight for Segmented Grooming Broom to improve performance in coarse or wet conditions. Set of 4 weights. PN 112-0025.
GROOMING BRUSH	Designed to groom and level synthetic turf fields. Designed to brush in topdressing and stand-up turf on greens and tees – (requires Synthetic Turf Brush Kit, PN 119-7107 or Greens Brush Kit, PN 119-7108). Model 08794.
SYNTHETIC TURF BRUSH	For use with Turf Groomer, 08794. PN 119-7107.
GREENS BRUSH	For use with Turf Groomer, 08794. PN 119-7108.
SPRING TINE KIT	Use to help stand-up and decompact synthetic turf. For use with Turf Groomer, 08794. PN 119-7109.
MAGNET ATTACHMENT	Use to collect ferrous debris on synthetic field. For use with Turf Groomer, 08794. PN 119-2827.
SYNTHETIC TURF CONDITIONER	Stainless spring steel brushes loosen infill from compacted synthetic turf fields. Use to scarify, loosen, or weed infields. Use to groom beaches and rocky trails. Model 08790.
QAS FINISH GRADER	Use to level and/or scarify large areas. Includes box plow and scarifier with spring load regulation to allow relief if obstruction is hit. Model 08754.
RAHN GROOMER	The Rahn GL650 Infield Groomer levels uneven playing fields, helping to prevent ridge build up while creating a safer, more consistent infield. The triple row broom is perfect for finishing the playing surface and can be stored upright for easy transport. The 2-way leveling system provides both a lock and float position to match infield conditions Rahn Groomer available from Rahn Industries at www.rahngroomer.com or 800-298-1707.
QAS SPIKER	Use for spiking greens and other formal turf to increase air flow for healthier turf. Model 08755.
QAS DEBRIS BLOWER	High powered blower designed to quickly clear debris from groomed and unwanted areas. Hydraulically-powered, 2000 rpm fan speed – 2700 cfm @ 81 mph (2700 cfm @ 130 kph). Requires Rear Remote Hydraulics - 08781. Model 08759.
BASIC DRAG MAT SYSTEM	Basic Drag Mat System, Model 112-1424 (requires 108-9427 & 110-1375)

ACCESSORIES	
QAS A-FRAME ASSEMBLY	Can attach Spring Rake 08752 to be used independently. PN 108-9427.
400-HOUR FILTER MAINTENANCE KIT	Includes 9 engine oil filters, 2 hydraulic oil filters and 2 air filters. Model 30035.
REAR REMOTE HYDRAULICS	Quick-connect design allows rear-powered attachments to be connected in under a minute. Model 08781.
FRONT REMOTE HYDRAULICS	Quick-connect design allows front-powered attachments to be connected in under a minute. Model 08782.
VARIABLE ORIFICE KIT	Slows hydraulic lift and lower for increased precision and accuracy when using hydraulically-powered attachments. PN 112-1433.
LIGHT KIT	Front and rear flood lights improve operator visibility during low natural light operation. PN 110-1314.
SPEED CONTROL KIT	Adjustable speed check trains operators to groom at the desired speed while allowing the traction unit to operate in transport speed between tasks without any adjustments or levers. PN 110-1371.
HITCH/TOW BAR	Converts the traction unit to a utility vehicle to transport materials or trailers. Attaches to QAS A-Frame or 108-9427 for quick removal. PN 110-1375.
FRONT WEIGHT KIT	50 lb (22.7kg) – allows the Spiker or Rahn® Groomer attachments without the Front Lift Frame Assembly attached to meet ANSI compliance. PN 100-6442.

OPTIONAL TIRES	
SMOOTH TIRE	Includes individual tire, wheel and stem valve assembly. Typically used on greens. PN 112-0034.
TURF TIRE	Turf tread tire. PN 94-6126.

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The Sand Pro 3040 & 5040 are manufactured in Tomah, WI ISO 9002 Certified Plant.





Rake-O-Vac®

The Rake-O-Vac's Kohler® 23 hp engine insures there is plenty of horsepower to clean debris from the most difficult turf. A spring-loaded flex tip reel provides exceptional sweeping performance especially with those annoying pine needles. The large 4.75 cubic yard hopper provides plenty of capacity for picking up large areas. Compact and maneuverable, the Toro Rake-O-Vac clears debris from even the tightest areas. The rugged impeller fan pulverizes leaves and debris saving space in the hopper yet the airflow in the hopper minimizes dust by directing it back to the ground keeping your neighbors happy.



RAKE-O-VAC ENGINE DRIVE, MODEL 07055							
POWER SUPPLY	Kohler® Command Pro® CH680, 23 hp (17.2 kW) @ 3600 rpm, 4 cycle, air-cooled, V-twin cylinders, horizontal crankshaft with a 5.5" (14 cm) dry centrifugal clutch. Compression ratio: 8.5:1. Overhead placement valves; intake, forged high carbon steel, exhaust Stellite® faced. Hydraulic valve lifters. Full pressure 4 pint (2.3 liter) with filter, oil capacity. 12-volt, 15 amp alternator with solid state regulator/rectifier. Solid state electronic ignition system with electronically controlled spark advance. Tri-phase design with screen pre-cleaner, replaceable filter cartridge and dump valve.						
FAN IMPELLER	Centrifugal type housing, double inlet. Four alloy steel blades, 16" (41 cm) wide x 23.25" (59 cm) diameter, .1875" (4.8 mm) thick. High tensile, .5625" (4 cm) stress-proof steel shaft mounted in self-aligning sealed ball bearings. Blower discharge area: 255 in² (1645 cm²).						
DRIVE	Banded double. B-80 drive belt direct from drive shaft to fan impeller drive shaft. Fan impeller runs at 1580 rpm [tip speed 9,720 ft/min. (2963 m/min.)] at 3250 engine rpm.						
FAN HOOD	Twin construction for uniform air distribution; 4.5" (11.4 cm) deep x 63" (160 cm) wide. Inlet area: 283 in² (1826 cm²). Variable position, front weighted rubber flap.						
REEL/BRUSH DRIVE	Belted-double B-53 drive belt from engine to jack shaft. Banded (4) 3V cross section belt, from jack shaft to flex tip reel. Flex tip reel runs at 275 rpm [tip speed 1,355 ft./min. (413 m/min.)] at 3250 engine rpm.						
MAIN FRAME	All welded, structural, rectangular, 2" x 4" (5 cm x 10 cm) and 4" x 4" (10 cm x 10 cm), 11-gauge, steel tubing.						
WHEELS AND TIRES	High flotation type I-1 rib tread, 11L-14SL, 6 ply rating, tubeless construction mounted on 8" (20 cm) x 14" (36 cm) wheel with six bolt attachment. Inflation pressure 28 psi (1.9 bar).						
HOPPER	4.75 cu. yd. (3.6 m³) volume; 18-gauge top section with 16-gauge bottom section - rib reinforced; full width, self-cleaning, semi-automatic dumping.						
HITCH	Pin type, .75" (1.9 cm) diameter; adjustable vertical height for tractor hitches from 7.25" (18.4 cm) to 17.25" (43.8 cm) height.						
FLEX TIP REEL	Forward sweeping, 6 rows of teeth, all steel construction with replaceable .1875" (4.8 mm) extruded nylon teeth; each row containing 11 individually spring loaded flexible sets, 552 total teeth, 18.75" (48 cm) diameter reel, 61" (155 cm) wide, 1.125" (2.9 cm) diameter shaft set in self aligning sealed bearings. Reel supported by adjustable counterbalance springs and adjustable-gauge wheels. Gauge wheels aluminum construction with non-scuffing rubber tires operating on greaseable ball bearings; infinitely adjustable vertically.						
DIMENSIONS	<table border="1"> <thead> <tr> <th>Width</th> <th>Height</th> <th>Length</th> </tr> </thead> <tbody> <tr> <td>85.5" (217 cm)</td> <td>79.5" (202 cm)</td> <td>13'3" (4.0 m)</td> </tr> </tbody> </table>	Width	Height	Length	85.5" (217 cm)	79.5" (202 cm)	13'3" (4.0 m)
Width	Height	Length					
85.5" (217 cm)	79.5" (202 cm)	13'3" (4.0 m)					
WEIGHT	2,980 lbs. (1,355 kg)						
WARRANTY	Two-year limited warranty. Refer to the Operator's Manual for further details.						

OPTIONAL EQUIPMENT	
BRUSH	Forward sweeping continuous, polypropylene bristle, floating action provided by spring counterbalance and gauge wheel height adjustment. Model 07162.
	Brush speed: 275 rpm [tip speed 1,370 ft./min. (417 m/min.)] at 3200 engine rpm.

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The Rake-O-Vac is manufactured in Tomah, WI ISO 9002 Certified Plant.





Versa-Vac™

The Toro® Versa-Vac tackles debris management challenges to meet your collection needs.



VERSA-VAC, MODEL 07053*	
POWER SUPPLY	Power source: 35 PTO hp and larger turf tractor with 540 PTO output shaft, double CV drive line, drive ratio to Impeller: .486 : 1, drive ratio to pump input shaft from impeller shaft: .389 : 1.
FAN IMPELLER	32" (81.3 cm) diameter impeller, 8 blades reinforced .25" (6.4 mm) steel, 9.375" (23.8 cm) wide (radial design) welded to a 27" (68.3 cm) diameter base plate.
DRIVE	Belt drive from input shaft to impeller shaft (4-5VX), belt drive from impeller shaft to pump input shaft (2-5VX).
MAIN FRAME	One piece welded frame of .25" (6.4 cm), 7 and 10-gauge formed steel.
WHEELS AND TIRES	Turf tire, size 24 x 13.00-nhs 4-ply. Stamped and welded steel wheels rated up to 1,800 lbs. (817 kg).
HOPPER	Volume 6.5 cubic yard, self-cleaning tapered box, dump hopper is operated hydraulically by one control, with self opening and closing door, dump hopper hydraulically lifted with a 3 x 18 hydraulic cylinder, vented roof sections with dust hoods to direct dust away from operator.
DIMENSIONS	Width: 78" (198 cm), Height: 83" (211 cm), Length: 15'5" (4.7 m), Weight: 2,300 lbs. (1,044 kg)
OPTION	20' (6.1 m) handheld hose.
WARRANTY	Two-year limited.
COMBINATION DECK, MODEL 07082	
FLAIL ROTOR	72 hardened, straight steel flails with adjustable spacing.
FINGER ROTOR	Four rows of 6" (15 cm) long fingers with 22 fingers per row.
OPERATING WIDTH	72" (183 cm)
CASTER WHEELS	4-adjustable pneumatic caster wheels with full width anti-scalp roller, adjustable in .5" (12.7 mm) increments.
WEIGHT	700 lbs. (318 kg)
RUBBER FINGER DECK, MODEL 07081	
ROTOR	Four rows of 6" (15 cm) long fingers with 22 finger per row.
OPERATING WIDTH	72" (183 cm)
CASTER WHEELS	4-adjustable pneumatic caster wheels, adjustable in .5" (12.7 mm) increments.
WEIGHT	280 lbs. (127 kg)

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Pro Sweep®

A productive tow behind turf sweeper that easily collects cores, grass clippings, leaves and other turf debris. Operated with a new hand-held wireless RF remote controller.



PRO SWEEP, MODEL 07066*	
POWER REQUIREMENTS	Utility vehicle with 8 gpm (30.3 liters/min.) @ 2000 psi, or tractor with a minimum of 25 hp (18.6 kW). Workman® HD Series vehicles require the high-flow hydraulics kit.
CONTROL	Handheld wireless RF controller provides capability to hydraulically off-set the sweeper from transport to sweep position, raise the sweeper to a turn-around height, and fully raise the sweeper to dump the collected debris.
SWEEPING WIDTH	52" (132 cm)
HOPPER CAPACITY	25 cu. feet (7.62 cu. meters)
COLLECTION SYSTEM	Hydraulic-powered rotary brush.
BRUSH SPEED	Forward sweeping speed 0-4 mph (0-6.4 km/h), infinitely variable (recommended speed 3 mph (4.8 km/h)). Forward transport speed with hopper in transport down position 0-15 mph (0-24 km/h).
ROLLER	6" (15.2 cm) diameter full-width roller directly behind rotary brush. Adjustable height.
HITCH	.75" (1.9 cm) hitch pin with safety linchpin.
HYDRAULIC CONNECTION	8 gpm (30.3 liters/min.) @ 2000 psi max (3600 rpm high idle), dual quick couplers with 2-hose connection, dash-mounted ON/OFF switch.
TRANSPORT POSITION	Tow sweeper directly behind or offset to the side of the vehicle.
SWEEP POSITION	Off-set to the left side of the tow vehicle.
TRACTION	Pivoting sub frame allows for positive tongue weight.
GROUND FOLLOWING	Floating brush housing.
LIFT	Hydraulic powered lift cylinder. High-lift.
TIRES	26.5 x 14-12 (67.3 x 35.6-30.5 cm)
DIMENSIONS	Height: 68" (173 cm), Length: 145" (368 cm), Width: 87" (221 cm), Dump Height Clearance: 68" (173 cm).
WEIGHT	1,512 lbs. (686 kgs) empty.
WINDROW KIT	Standard.
OPTIONS	Brake kit, wheel scrapers, adjustable jack stand.
WARRANTY	2-year, comprehensive.

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Pro Force™

The Pro Force™ is a self-contained engine-driven Debris Blower operated with a hand-held wireless RF controller. It utilizes a high-efficiency turbine-type fan assembly designed to deliver greater air power to clear turf or pavement of leaves, grass clippings, twigs, pine needles or other undesirable debris.



PRO FORCE DEBRIS BLOWER, MODEL 44538*	
ENGINE	27 hp Kohler® Command Pro™ 725cc, gas, 2-cylinder, air-cooled, electronically-governed.
AIR FLOW	In 3rd party independent testing, per the ANSI/AMCA 210-07 standard for Laboratory Methods of Testing Fans for Certified Aerodynamic Performance Rating, the Pro Force test results demonstrated greater air flow volume, than any other single nozzle turbine-type debris blower currently on the market.
FAN DESIGN	High efficiency, axial flow, turbine-type fan assembly.
CONTROL	Hand held wireless RF controller provides capability to start and stop the engine, adjust engine throttle up and down for high to low RPM range of operation, and rotate nozzle 360 degrees in either direction. Ergonomic, weather resistant.
NOZZLE	Single-piece impact-resistant plastic with 13" outlet diameter.
ROTOR DIAMETER	14"
FAN ASSEMBLY DIAMETER	14"
WEIGHT	475 lbs.
LENGTH	Standard 97" from adjustable tow hitch to nozzle outlet. 18" adjustable length for length range of 79"-115"
WIDTH	48"
HEIGHT	Standard 33". 6" adjustable height for height range of 27"-39".
TOW-BEHIND TRAILER	Lawn-tractor style hitch (Category 1).
TIRE SIZE:	20 x 10-8, 4-ply turf tire.
FENDERS	Custom injection molded plastic.
WARRANTY	Two-year or 1,500 hour limited warranty*

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Debris Blower 600

The Toro® Debris Blower 600 creates incredible wind power to quickly clear large areas of unwanted debris.



DEBRIS BLOWER 600, MODEL 44536*	
POWER SOURCE	Category one and two 3-point hitch of any tractor in the 25 PTO hp range with a 3-point hitch and 540 PTO.
AIR FLOW	7000 cfm.
FAN SPEED	1173 rpm @ 540 PTO input.
OUTLET AREA	100 square inches (645 cm ²).
DIRECTIONAL CONTROL	Deflector chute for 180° diversion as standard. Rotational control of diversion gate just behind 3-point hitch.
CASTER WHEELS	Two 13 x 5-6 pneumatic rubber tires.
HEIGHT ADJUSTMENT	0-1.5" (0-4 cm) adjustable in .5" (1.3 cm) increments.
TURF PROTECTION	16" (41 cm) long, 4" (10 cm) diameter turf roller behind fan housing. 8" (20 cm) long, 4" (10 cm) diameter turf roller under deflector chute. Beveled skid plate under deflector chute.
GROUND CLEARANCE	Determined by turf tractor 3-point hitch and caster wheels.
FAN	Radial design with 27" (69 cm) diameter center disc, 8 blades. Outer diameter 36" (91 cm).
FAN HOUSING	Split housing: upper and lower. Upper Housing – 12-gauge steel front and rear plates flanged at separation seam with 12-gauge steel rolled and flanged blower band. Lower housing – 10-gauge steel front and rear plates flanged at separation seam with 12-gauge and blower band.
DRIVE	Belt drive 4-5VX. Power source: 30 PTO hp turf tractor with 3-point hitch and 540 PTO.
WEIGHT	500 lbs. (227 kg)
MOUNTING	Category one and two 3-point hitch of any tractor in the 30 PTO hp range with a 3-point hitch and 540 PTO.
DIMENSIONS	Length: 49" (125 cm), Width: 59" (150 cm), Height: 46" (117 cm)

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GreensPro® 1240

The Toro GreensPro 1240 riding greens roller is the perfect rolling tool for fine sporting turf such as golf greens, bowling greens and tennis courts. Turf that requires a smooth, high performance surface for optimum playing will benefit from precision greens rolling with the GreensPro greens roller.



GREENSPRO 1240, MODEL 44912*	
ENGINE	Honda® GX200 6.5 hp (4.8 kW) air-cooled, 4-stroke OHV; mechanically governed.
FUEL	Unleaded gas
TRANSMISSION	Hydrogear BDR-317
DRIVE	Twin chain to rear drive roller
SMOOTHING ROLLS	3.5" (89 mm) diameter - 4 split rollers. Overlapping twin steering heads.
TRACTION DRIVE ROLLER	6.5" (165 mm) diameter vulcanized rubber coated cylinder, 30" (76 cm) long
ROLLING WIDTH	47.2" (120 cm)
GROUND SPEED	Roll: 0-8 mph (0-12.8 km/h) in either direction
CONTROLS	Tilt steering wheel, directional foot pedals
CONTOUR FOLLOW	Yes
GROUND PRESSURE	3.75 PSI (0.26 Bar)
STEERING	Wheel (light), adjustable
SEAT	High-back, adjustable
TRAILER	Integrated
LIFTING TIRES	16 x 6.50 - 8
LIFTING TIRE PRESSURE	10 PSI (0.69 Bar)
OVERALL DIMENSIONS	
WIDTH	48" (122 cm)
LENGTH	53.5" (136 cm)
HEIGHT	42" (107 cm)
WEIGHT	626 lbs. (284 kg)
WARRANTY	Two-year limited warranty. Refer to operator's manual for further details.

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HoverPro® Series

The Toro HoverPro is perfect for maintaining turf on steep slopes, tight undulations, near water or bunker lips. A light footprint makes the HoverPro easy to operate while its rugged design ensures years of quality performance.



	HOVERPRO 400, MODEL 02600*	HOVERPRO 450, MODEL 02601*	HOVERPRO 550, MODEL 02605*
ENGINE	Honda® GXV57	Honda® GCV160	Honda® GCV160
CAPACITY	57cc	160cc	160cc
CUTTING WIDTH	16" (40 cm)	18" (46 cm)	21" (53 cm)
CUTTING HEIGHT	0.7" - 1.2" (18 - 30 mm)	0.7" - 1.2" (18 - 30 mm)	0.6" - 1.3" (14 - 32 mm)
NET WEIGHT	27.5 lbs (12.5 kg)	38.2 lbs (17.6 kg)	41.8 lbs (19 kg)
CUTTER SYSTEM	Nylon Wire	Steel Cutting Blade	Steel Cutting Blade
WARRANTY	Two-year limited warranty. Refer to operator's manual for further details.		



ProStripe® 560

The ProStripe 560 combines exceptional turf striping with the simplicity of a walk power mower. It is the ideal mower for striping smaller turf areas and can easily maneuver into tight locations.



	PROSTRIPE 560, MODEL 02656*
ENGINE	Briggs & Stratton® OHV Series 850 ReadyStart, 190cc
CUTTING WIDTH	22" (56 cm)
CUTTING HEIGHT	0.5" - 2.4" (1.3 - 6 cm)
DECK	Corrosion resistant aluminum
REAR ROLLER	Ribbed for superior traction and perfect striping
WARRANTY	Two-year limited warranty. Refer to operator's manual for further details.



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Dingo® Compact Utility Loaders

The versatile and maneuverable Dingo Compact Utility Loader allows you to work in places where only manual labor could go before. Exceptional hydraulic power allows you to accomplish a variety of tasks, even in the toughest soil conditions. Choose from an amazing selection of over 35 attachment options.





Dingo® Compact Utility Loader Specifications*

DINGO 220, MODEL 22317													
ENGINE	Kohler® Command Series CH20, air-cooled, 1 fuel tank: 4 gallon (15 liter), 2 quart (1.9 liter) oil capacity.												
HYDRAULIC SYSTEM	3000 psi system relief pressure, 4.0 gpm low-flow hydraulic circuit, 10.8 gpm high flow hydraulic circuit, 17 gallon (64 liter) reservoir capacity, 10-micron replaceable hydraulic filter.												
ELECTRIC SYSTEM	Electric start. Battery: 12-volt, 330 CCA. Interlocks: Auxiliary valve neutral to start, traction valve neutral to start.												
TIRES AND RIMS	18 x 8.50-10, 8-ply, SSL-LSW pneumatic tires, 10 x 6.00, 5-bolt, drop center rims.												
STEERING	Zero turning type with two control levers, push for forward, pull back for reverse.												
LOADER/HYDRAULIC	Two control levers push forward to lower/dump, pull back to raise/curl, auxiliary lever for hydraulic attachments; high flow/low flow selector valve lever; hydraulic flow proportioning valve lever.												
DIMENSIONS	<table border="1"> <thead> <tr> <th>Wheelbase</th> <th>Ground Clearance</th> <th>Overall Length</th> <th>Overall Width</th> <th>Overall Height</th> <th>Operating Height</th> </tr> </thead> <tbody> <tr> <td>28" (71 cm)</td> <td>5.8" (15 cm) front 5.8" (15 cm) rear</td> <td>62" (157.5 cm) 82.2" (208.8 cm) w/bucket</td> <td>40.5" (103 cm) standard tires 35" (90 cm) narrow tires</td> <td>48.7" (123.7 cm)</td> <td>91.2" (231.6 cm)</td> </tr> </tbody> </table>	Wheelbase	Ground Clearance	Overall Length	Overall Width	Overall Height	Operating Height	28" (71 cm)	5.8" (15 cm) front 5.8" (15 cm) rear	62" (157.5 cm) 82.2" (208.8 cm) w/bucket	40.5" (103 cm) standard tires 35" (90 cm) narrow tires	48.7" (123.7 cm)	91.2" (231.6 cm)
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GROUND SPEED	4.5 mph (7.2 km/h) forward/reverse.												
HINGE PIN HEIGHT	66" (167.6 cm) std. bucket in highest position.												
DUMP	47" (119 cm) std. bucket height, 34° std. bucket angle.												
REACH	Maximum: 28" (71.1 cm) std. bucket, Fully raised: 26" (66 cm) std. bucket.												
TIP CAPACITY	1,030 lbs. (467 kg) w/200 lb. (91 kg) operator.												
RATED OPERATING CAPACITY	515 lbs. (234 kg) w/200 lb. (91 kg) operator.												
WEIGHT	1,430 lbs. (649 kg) w/o bucket, 1,576 lbs. (715 kg) w/std. bucket.												
WARRANTY*	Two-year engine warranty, one-year product warranty.												

DINGO 323, MODEL 22318													
ENGINE	Kohler® Command Series 23 hp (gross hp), air-cooled, 2 fuel tanks: 4 gallon (15 liter) capacity each, 2 quarts (1.9 liter) oil capacity, high capacity dry-type, remote air filter.												
HYDRAULIC SYSTEM	4.5 mph (7.2 km/h) forward/reverse.												
ELECTRIC SYSTEM	3000 psi system relief pressure, 4 gpm low-flow hydraulic circuit, 10.8 gpm (323) high flow hydraulic circuit, 14.8 gallon (56 liter) reservoir capacity, 10-micron replaceable hydraulic filter.												
TIRES AND RIMS	Electric start. Battery: 12-volt, 380 CCA. (435 CCA diesel). Interlocks: Auxiliary valve neutral to start, traction valve neutral to start.												
STEERING	18 x 8.50-10, 8-ply, SSL-LSW pneumatic tires, 10 x 6.00, 5-bolt, drop center rims.												
LOADER/HYDRAULIC	Zero turning type with two control levers, push for forward, pull back for reverse.												
DIMENSIONS	Two control levers push forward to lower/dump, pull back to raise/curl, auxiliary lever for hydraulic attachments; high flow/low flow selector valve lever; hydraulic flow proportioning valve lever.												
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HINGE PIN HEIGHT	66" (167.6 cm) std. bucket in highest position.												
DUMP	47" (119 cm) std. bucket height, 34° std. bucket angle.												
REACH	Maximum: 28" (71.1 cm) std. bucket. Fully raised: 26" (66 cm) std. bucket.												
TIP CAPACITY	1,030 lbs. (467 kg) w/200 lb. (91 kg) operator.												
RATED OPERATING CAPACITY	515 lbs. (234 kg) w/200 lb. (91 kg) operator.												
WEIGHT	1,567 lbs. (711 kg) w/o bucket, 1,713 lbs. (777 kg) w/std. bucket.												
WARRANTY*	Two-year engine warranty, one-year product warranty.												

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Dingo utility loaders are manufactured in Tomah, WI ISO 9002 Certified Plant.





Dingo® TX Compact Utility Loader

The Dingo TX 427 narrow and wide track offer the latest in compact utility loader technology. Plus, the TX 525 diesel offers improved auxiliary hydraulic performance over gas models (also available in narrow and wide track options). All of the power is harnessed in 3 easy-to-use controls making it simple for any worker to be productive in minutes. An exclusive track drive system provides excellent traction in all conditions without damage to turf. Choose from an amazing selection of over 35 attachment options.





Dingo® TX Compact Utility Loader Specifications*

DINGO TX 427 NARROW TRACK, MODEL 22321													
ENGINE	Kohler® Command PRO™ Series CH740, air-cooled. 1 fuel tank: 6 gallon (23 liter), 2 quarts (1.9 liter) oil capacity, two-stage, heavy-duty remote air filter. Standard oil cooler.												
HYDRAULIC SYSTEM	3000 psi system relief pressure, 11.4 gpm auxiliary flow; 6 gpm (22.7 lpm) loader arm, 16.9 gpm (64 lpm) traction (each pump) 10.5 gallon (40 liter) reservoir capacity, 10-micron replaceable hydraulic filter, hydraulic cooler.												
ELECTRIC SYSTEM	Electric start. Battery: 12-volt, 585 CCA. (450 CCA diesel). Interlocks: Auxiliary valve neutral to start, traction valve neutral to start.												
TRACK	Endless Kevlar™ reinforced rubber 96.6" x 5.9", single internal tooth drive.												
TRACK DRIVE	Sprocket-Drive, 10 road wheels per side, cast-iron track guide.												
STEERING	Single control with reference bar.												
LOADER/HYDRAULIC	Joystick control for all functions, raise/lower, dump/curl and float. Two step motion control for auxiliary hydraulics.												
PARKING BRAKE	Single lever pin in hole system.												
INDICATORS	Audio and visual warning for hydraulic system.												
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GROUND SPEED	1-4.0 mph (1.6 - 6.4 kph) forward, 0-2 mph reverse.												
HINGE PIN HEIGHT	65.8" (167.1 cm)												
DUMP	46.1" (117.1 cm) height, 38° angle.												
REACH	21.8" (54.4 cm), fully raised.												
TIP CAPACITY	1,530 lbs. (694 kg)												
RATED OPERATING CAPACITY	535 lbs. (243 kg)												
WEIGHT	1,880 lbs. (885 kg) w/o standard bucket, 2,006 lbs. (910 kg) w/standard bucket.												
WARRANTY*	Three-year engine warranty, one-year product warranty.												

DINGO TX 427 WIDE TRACK, MODEL 22322													
ENGINE	Kohler® Command PRO™ Series CH740, air-cooled. 1 fuel tank: 6 gallon (23 liter), 2 quarts (1.9 liter) oil capacity, two-stage, heavy-duty remote air filter. Standard oil cooler.												
HYDRAULIC SYSTEM	3000 psi system relief pressure, 11.4 gpm auxiliary flow; 6 gpm (22.7 lpm) loader arm, 16.9 gpm (64 lpm) traction (each pump) 10.5 gallon (40 liter) reservoir capacity, 10-micron replaceable hydraulic filter, hydraulic cooler.												
ELECTRIC SYSTEM	Electric start. Battery: 12-volt, 585 CCA. (450 CCA diesel). Interlocks: Auxiliary valve neutral to start, traction valve neutral to start.												
TRACK	Endless Kevlar™ reinforced rubber 96.6" x 9.5", single internal tooth drive.												
TRACK DRIVE	Sprocket-Drive, 10 road wheels per side, cast-iron track guide.												
STEERING	Single control with reference bar.												
LOADER/HYDRAULIC	Joystick control for all functions, raise/lower, dump/curl and float. Two step motion control for auxiliary hydraulics.												
PARKING BRAKE	Single lever positive lock system.												
INDICATORS	Audio and visual warning for hydraulic system.												
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GROUND SPEED	1-4.0 mph (1.6 - 6.4 km/h) forward, 0-2 mph (0 - .05 km/h) reverse.												
HINGE PIN HEIGHT	65.8" (167.1 cm)												
DUMP	46.1" (117.1 cm) height, 38° angle.												
REACH	21.8" (54.4 cm), fully raised.												
TIP CAPACITY	1,530 lbs. (694 kg)												
RATED OPERATING CAPACITY	535 lbs. (243 kg)												
WEIGHT	2,075 lbs. (941 kg) w/o standard bucket, 2,186 lbs. (992 kg) w/standard bucket.												
WARRANTY*	Three-year engine warranty, one-year product warranty.												

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Dingo utility loaders are manufactured in Tomah, WI ISO 9002 Certified Plant.





Dingo® TX Compact Utility Loader Specifications*

DINGO TX 525 & 525 WIDE TRACK, MODELS 22323 & 22324													
ENGINE	Kubota® D902E3B, 6 gallon (23 liter) tank, 3.84 (3.63) liter oil capacity, liquid cooled, diesel. 2008 models Biodiesel-Ready for use up to B-10 (10% biodiesel and 90% petroleum blend).												
HYDRAULIC SYSTEM	3000 psi system relief pressure, 13.8 gpm auxiliary; 6 gm loader arm; 16.9 gpm traction (each pump), 10.5 gallon (40 liter) reservoir capacity.												
ELECTRIC SYSTEM	Electric start. Battery: 12-volt, 585 CCA. (450 CCA diesel). Interlocks: Auxiliary valve neutral to start, traction valve neutral to start.												
TRACK	Endless Kevlar™ reinforced rubber 96.6" x 9.5" (wide track), 96.6" x 5.9" (narrow track), single internal tooth drive.												
TRACK DRIVE	Sprocket-Drive, 10 road wheels per side, cast iron track guide, dual hydrostatic pump.												
STEERING	Single control with reference bar.												
LOADER/HYDRAULIC	Joystick control for all functions, raise/lower, dump/curt and float. Two step motion control for auxiliary hydraulics.												
PARKING BRAKE	Single lever pin in hole system.												
INDICATORS	Audio and visual warning for hydraulic system.												
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GROUND SPEED	1-4 mph (1.6 - 6.4 kmh) forward, 0-2 mph (0 - .05 km/h) reverse.												
HINGE PIN HEIGHT	65.8" (167.1 cm).												
DUMP	46.1" (117.1 cm) height, 38° angle.												
REACH	21.8" (55.4 cm) fully raised.												
TIP CAPACITY	1,580 lbs. (717 kg).												
RATED OPERATING CAPACITY	50%: 790 lbs. (360 kg); 35%: 553 lbs. (251 kg).												
WEIGHT	1,904 lbs. (864 kg) narrow track, 2,001 lbs. (908 kg) wide track w/o standard bucket. 2,030 lbs. (931 kg) narrow track, 2,127 lbs. (921 kg) wide track w/standard bucket.												
WARRANTY*	Two-year engine warranty, one-year product warranty.												

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Dingo® & Dingo TX Compact Utility Loader Attachments

DINGO ATTACHMENTS	
HIGH TORQUE AUGER POWER HEAD	High torque for digging large holes from 6"-30" in diameter in difficult conditions.
UNIVERSAL SWIVEL AUGER POWER HEAD	High speed auger drive head creates plumb holes on various slopes from 6-18" in diameter.
BACKHOE	Prepare job site by digging, loading, trenching, back filling or doing demolition. Digs up to 82" deep.
SOIL CULTIVATOR	Designed for seed and flower bed preparation. Cultivates and levels soil. Blends landscape materials, compost, and fertilizer.
NARROW BUCKET	Creates incredible digging power in narrow spaces. Equipped with a high carbon cutting edge for superior wear.
STANDARD BUCKET	Use this standard bucket for moving rock, dirt, sand or other materials from the job site. 4 cu. ft. capacity.
LIGHT MATERIALS BUCKET	Larger capacity to move light materials such as chipbark, mulch, and loam. 6.4 cu. ft. capacity.
FORKS - ADJUSTABLE	Carry and maneuver posts, irrigation supplies and plant materials.
LEVELER	Easily spreads and grades dirt. Eliminates hand raking. Also carries a multitude of materials around the job site.
44" 2-STAGE SNOWTHROWER	Great for cleaning sidewalks and driveways and for breaking down huge piles of snow.
TRENCHER	Dig a trench up to 3' deep and 4-12" wide. Great for creating bed edges.
TRENCH FILLER	Overall width: 62"; working width: 48"; auger diameter: 14"; float distance: 6"; weight: 410 lbs.
TILLER	40" wide and able to till over 6" deep on one pass.
HYDRAULIC BLADE	This 4' wide blade is used for back filling trenches, grading, and pushing snow.
BORE DRIVE HEAD AND ROD & REAMER KIT	Compact and functional, used to bore below sidewalks, driveways, etc. in both confined and open areas. A choice of assorted rod lengths allows for operation in both confined and open areas.
HYDRAULIC BREAKER	Multi-position mounting head lets you break in vertical and horizontal positions.
CEMENT BOWL	Lets you mix cement, haul and pour it directly where you want in one step.
MULTI-PURPOSE TOOL (BOOM, RIPPER, TOWBAR)	<ul style="list-style-type: none"> Boom - Excellent for hauling trees. Ripper - Great for breaking hard ground or removing stumps and shrubs. Towbar - Use this for moving trailers.
STUMP GRINDER	17" cutting wheel with 12 carbide-tipped teeth allows you to grind stumps up to 16.5" below grade.
TRAILER	Upfitted with custom racks, tray and stands to accommodate easy access and placement of the Dingo compact utility loader and all of its attachments.
VIBRATORY PLOW	Elliptical vibrating motion pulls irrigation pipe or installs wire through difficult soil conditions. Unique threaded bullet easily and securely connects pipe to puller. Other options available: STD bullet, basket grips x2, link, king pullers x3.
POWER BOX RAKE	Designed for seed preparation. Adjust depth to fill, plane and pulverize soil. Carbide teeth remove rocks and debris, leaving a dimpled surface ideal for moisture retention.
TX PLATFORM	Width: 28"; operating height (from ground): 5"; weight: 94 lbs. *Excluding TX 413.

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TRX Trenchers

Tracks instead of wheels. Simplicity instead of complexity. The new TRX trenchers are the first tracked, dedicated walk-behind trenchers that have it all. Tracks – combined with Toro's exclusive easy-to-use control system – provide unparalleled maneuverability, while offering the ultimate in operational performance.





TRX Trencher Specifications*

	TRX 16, MODEL 22972	TRX 20, MODEL 22973	TRX 26, MODEL 22974
ENGINE	Kawasaki FS481V, V-twin	Kawasaki FH600V, V-twin	Kawasaki FX730V, V-twin
COOLING SYSTEM	Air	Air	Air
FUEL TANK	2.1 gallons (7.9 liters)	2.1 gallons (7.9 liters)	4.8 gallons (18 liters)
OIL CAPACITY	1.8 quarts (1.7 liters)	1.9 quarts (1.8 liters)	2.2 quarts (2.1 liters)
START METHOD	Recoil start	Electric start	Electric start
HOUR METER	Standard	Standard	Standard
TRANSPORT SPEED	3.1 mph / 1.5 mph (5 kph / 2.4 kph) 273 ft/min / 132 ft/min (83.2 m/min / 40.2 m/min)	3.1 mph / 1.5 mph (5 kph / 2.4 kph) 273 ft/min / 132 ft/min (83.2 m/min / 40.2 m/min)	3.1 mph / 1.5 mph (5 kph / 2.4 kph) 273 ft/min / 132 ft/min (83.2 m/min / 40.2 m/min)
HYDRAULIC PRESSURE	2,900 psi	2,900 psi	2,900 psi
HYDRAULIC FLOW	10 gpm (37.9 lpm) trencher chain 9.5 gpm (36 lpm) traction (each pump)	10 gpm (37.9 lpm) trencher chain 9.5 gpm (36 lpm) traction (each pump)	13.5 gpm (51.1 lpm) trencher chain 9.5 gpm (36 lpm) traction (each pump)
HYDRAULIC RESERVOIR CAPACITY	6.3 gallons (23.8 liters)	6.3 gallons (23.8 liters)	6.3 gallons (23.8 liters)
HYDRAULIC OIL COOLER	Standard	Standard	Standard
HEADSHAFT SPEED	226 RPM w/315 ft/lbs of torque	226 RPM w/385 ft/lbs of torque	210 RPM w/554 ft/lbs of torque
TRACK	5.9" (15 cm) wide – endless nylon reinforced rubber track	5.9" (15 cm) wide – endless nylon reinforced rubber track	5.9" (15 cm) wide – endless nylon reinforced rubber track
TRACK DRIVE	Sprocket-drive; 3 road wheels per side Traction dual hydrostatic pump	Sprocket-drive; 3 road wheels per side Traction dual hydrostatic pump	Sprocket-drive; 3 road wheels per side Traction dual hydrostatic pump
GROUND PRESSURE	With 24" (61 cm) boom = 4.1 psi With 36" (91.4 cm) boom = 4.3 psi With 48" (121.9 cm) boom = 4.4 psi	With 24" (61 cm) boom = 4.3 psi With 36" (91.4 cm) boom = 4.4 psi With 48" (121.9 cm) boom = 4.5 psi	With 24" (61 cm) boom = 4.5 psi With 36" (91.4 cm) boom = 4.6 psi With 48" (121.9 cm) boom = 4.7 psi
DIMENSIONS**			
WEIGHT	1,114 lbs (505 kg)	1,133 lbs (514 kg)	1,248 lbs (566 kg)
HEIGHT	46" (116.8 cm)	46" (116.8 cm)	46" (116.8 cm)
LENGTH (BOOM UP)	82.5" (210 cm)	82.5" (210 cm)	82.5" (210 cm)
WIDTH	33.8" (85.9 cm)	33.8" (85.9 cm)	33.8" (85.9 cm)
WHEEL BASE	23" (58.4 cm)	23" (58.4 cm)	23" (58.4 cm)
BOOM OPTIONS			
DEPTHS	24" (61 cm), 36" (91.4 cm) and 48" (121.9 cm)	24" (61 cm), 36" (91.4 cm) and 48" (121.9 cm)	24" (61 cm), 36" (91.4 cm) and 48" (121.9 cm)
WIDTHS	4" (10.2 cm) and 6" (15.2 cm)	4" (10.2 cm) and 6" (15.2 cm)	4" (10.2 cm), 6" (15.2 cm) and 8" (20.3 cm)
CHAIN TYPES	2-pitch chain with 4-pitch soil-cup tooth 2-pitch combo chains (rock and soil) 2-pitch "Shark" welded rock tooth	2-pitch chain with 4-pitch soil-cup tooth 2-pitch combo Chains (rock and soil) 2-pitch "Shark" welded rock tooth	2-pitch chain with 4-pitch soil-cup tooth 2-pitch combo Chains (rock and soil) 2-pitch "Shark" welded rock tooth
ACCESSORIES			
CRUMBER/TRENCH CLEANER	Optional	Optional	Optional
REMOTE AIR CLEANER	N/A	N/A	Standard

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The gross horsepower of this engine was laboratory rated by the engine manufacturer in accordance with SAE J2723. As configured to meet safety, emission, and operating requirements, the actual engine horsepower on this class will be significantly lower.

**Dimensions are based on 2' boom and chain.

TRX trenchers are manufactured in Tomah, WI ISO 9002 Certified Plant.





STX-26 & STX-38 Stump Grinders

From pine to oak, the Toro STX stump grinder turns stumps to chips quickly and efficiently. Its patented Toro® Dingo® TX-style control system has two simple levers that are simple to learn, master and use. Combine these easy-to-use controls with tracks and transport speeds exceeding 4 mph, and you get maximum productivity.



SGR Handle Bar Stump Grinders

Toro's line of handle bar grinders are great for grinding small stumps in areas with tight access. Well-balanced, easy to operate and simple to maintain, these models provide some of the smoothest cutting performance of any handle bar stump grinder on the market.



STX Stump Grinder / SGR Handle Bar Stump Grinders / Brush Chipper / Log Splitter Specifications*

	STX-26 STUMP GRINDER, MODEL 23210	STX-38 STUMP GRINDER, MODEL 23212
ENGINE	Kawasaki® FX-730V, V-twin	Kohler® CV980
HYDRAULICS	13.5 gpm (51.1 liters per minute) hydraulic flow to head.	15 gpm (56.8 lpm) max flow to each side
WHEEL	19" (48.3 cm) diameter to tooth; .75" (1.9 cm) thick; 12 teeth.	22.25" (56.5 cm) diameter, 1.0" (2.54 cm) thick, 16 Greenteeth
CUTTER DEPTH	12.5" (31.7 cm) below grade.	+18" (+45.7 cm)
CUTTER HEIGHT	33" (83.8 cm) above grade.	+35" (+88.9 cm)
HEAD SWING	47" (119.4 cm) arc.	52" (132 cm) Radius, 60 degree arc
DIMENSIONS	Width: 34" (86.4 cm) Length: 78" (198 cm) Height: 46" (116.8 cm)	Width: 33.5" (85.1 cm) Length: 106" (269 cm) / 94.5 (240 cm) (transport) Height: 45.5" (115.6 cm)
WEIGHT	1,200 lbs. (544.3 kg)	TBD

	PORTABLE STUMP GRINDERS	
	SGR-6, MODEL 22601	SGR-13, MODEL 22602
ENGINE	Honda® GX200	Honda® GX390
CLUTCH	Centrifugal	Centrifugal
CUTTER DEPTH	11" (27.9 cm) below grade	6" (15.2 cm) below grade
CUTTER HEIGHT	14" (35.6 cm) above grade	10.4" (26.4 cm) above grade
WHEEL	12-tooth Quadrublade™, 9.5" (24.1 cm) diameter to tooth	12-tooth Quadrublade™, 9.5" (24.1 cm) diameter to tooth
BELT	Cogged Belt	Double 3V Belt
DIMENSIONS	Width: 22" (55.9 cm), Length: 50" (127 cm), Height: 42.3" (107.4 cm)	Width: 29.5" (74.9 cm), Length: 76" (193 cm), Height: 42" (106.7 cm)
WEIGHT	103 lbs. (46.7 kg)	240 lbs. (108.9 kg)



	BC-25 BRUSH CHIPPER, MODEL 22604
ENGINE	Kohler® Command Pro® CH25
CAPACITY	6" (15.2 cm) diameter
HITCH	2" (5 cm) diameter
FEED OPENING	23" x 20" (17.8 x 20.3 cm)
THROAT	7" x 8" (17.8 x 20.3 cm)
DIMENSIONS	Width: 35" (88.9 cm), Length: 100" (254 cm), Height: 80" (203.2 cm)
WEIGHT	1,053 lbs. (477.6 kg)



	LS-9 LOG SPLITTER, MODEL 22606
ENGINE	Subaru® EX27
TONNAGE	28 tons (25.4 metric tons)
STROKE	24" (61 cm)
CYLINDER	5" (5.1 cm)
HITCH	2" (5.1 cm) diameter
DIMENSIONS	Width: 50" (127 cm), Length: 90" (228.6 cm), Height: 39" (99.1 cm)
WEIGHT	715 lbs. (324.3 kg)

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.





30" Stand-On Aerator

Toro's 30" Stand-on Aerator is durable and easy to use. It applies up to 1,200 lbs. of down pressure on the tines to pull up to 5" cores, and operators can finely tune the hydraulic system to pull any length of plug on the fly. Electronic foot pedal controls also allow the operator to raise and lower the tines instantly for quick zero-turn maneuvers without taking their hands off the controls.



30" STAND-ON AERATOR, MODEL 23518*

ENGINE	Kawasaki FS481, V-Twin Engine, 5 gallon (18.9 liter) fuel capacity		
AERATING WIDTH	28" (71 cm)		
AERATING DEPTH	Up to 5" (12.7 cm)		
AERATING SPEED	Up to 7.5 mph (12.1 km/h) forward / 2.2 mph (3.54 km/h) reverse		
COVERAGE RATE	2.1 Acres/Hr (.89 Hectares/hr)		
DIMENSIONS	Width: 47.5" (120.6 cm)	Length: 53" (134.6 cm)	Height: 65" (165.1 cm)
WEIGHT	1,200 lbs. (544.3 kg)		

*Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only.

Actual products offered for sale may vary in use, design, required attachments and safety features. See distributor for details on all warranties.

All walk-behind machines comply with ANSI safety standards: B71.4 for commercial turf care equipment or B71.8 for OPE walk-behind ground-engaging equipment.





UNDERGROUND

SERIES I PRODUCT



TORO.



RT-600 Riding Trencher

- Cummins B3.3 4 Cylinder, Tier 4i diesel engine
- Horsepower: Gross 65 (48kW) @ 2,600rpm; Net 56 (42kW) @ 2,600rpm
- Maximum Torque: Gross 158-lb ft.. (214N-m) @ 1,600rpm
- Maximum Trencher Depth: 60 in (with 60 in rock boom)
- Maximum Trencher Width: 12 in w/planetary drive trencher
- Hydrostatic 4WD, limited-slip, differential and outboard planetaries (6:1 - outboard) on both front and rear axles
- Ground Drive Transmission coupled to the rear axle
- Travel Speeds: 1st 1.25mph (2.0 km/h) 2nd 2.15mph (3.46 km/h) 3rd 3.67mph (5.9 km/h) 4th 6.3mph (10.1 km/h) rated speeds in forward and reverse
- Fuel Tank 20 gal (75.8 L)
- Standard Tires 31 x 15.50 x 15, 8 PR
- Easy access open platform operators station with ergonomic controls
- 2 – post ROPS & Key Start
- Hand and Foot Controls
- Easy – Ride swivel seat with seat belt

Standard Features:

- Backfill Blade 6-way, 72in (1.83 m)
- Hydraulics for front/rear attachments
- Electrical accessories power kit
- Full coverage engine side panels



TORO.

RT-600 Riding Trencher



TORO.



RT-1200 Riding Trencher

- **Cummins QSB4.5 4 Cylinder, Tier 4i compliant diesel engine**
- **Horsepower: Gross 121 (90kW) @ 2,200rpm; Net 117 (87kW) @ 2,200rpm**
- **Maximum Torque: Gross 347-lb ft.. (471N-m) @ 1,500rpm**
- **Maximum Trencher Depth: 60 inches (with 60 in rock boom)**
- **Maximum Trencher Width: 7 to 18 in (177.8 to 457.2 mm)**
- **Hydrostatic 4WD, diff-lock, differential and outboard planetaries (6.9:1 outboard) on both front and rear axles. Axial piston pump- 0-48.5gpm (0-187.3 L/min)**
- **Ground Drive Transmission coupled to the rear axle**
- **Travel Speeds: 1st 1.2mph (2.0 km/h) 2nd 2.7mph (4.3 km/h) 3rd 4.7mph (7.5 km/h) 4th 10.2mph (16.4 km/h) rated speeds in forward and reverse**
- **Fuel Tank 48 gal (182 L)**
- **Standard Tires 38 x 18.00 x 20, 12 PR**
- **Easy access open platform operators station with ergonomic controls**
- **4 – post ROPS & FOPS & Key Start**
- **Hand and Foot Controls**
- **Easy – Ride swivel seat with seat belt**

Standard Features:

- **Backfill Blade 6-way, 83.1in (2.10 m)**
- **Hydraulics for front/rear attachments**
- **Electrical accessories power kit**
- **Full coverage engine side panels**
- **Single lever blade control**
- **Dual battery**

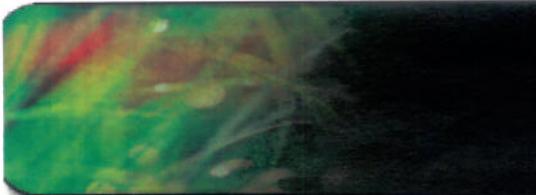


TORO.

RT-1200 Riding Trencher



TORO.



DD 2024 Directional Drill

- 74 HP Cummins Diesel Engine Tier 4i compliant
- 20,000lbs (9.07 Tonnes) maximum thrust/pullback
- 2,400 ft-lb (3,354 Nm) rotary torque
- Quad rack and pinion carriage drive, two-speed floating carriage
- “Cruise control” capability
- Carries 400ft (122 m) of drill pipe
- Dual multi-function joystick controls with multi configuration option
- LCD multi-function operational screen

Standard Equipment:

- Operator Safety is a priority with a Zap Alert System, The ES!LOK (Exit Side Lock Out System) and an emergency shutdown switch at the drillers console

Dimensions:

- Length 207in (5.25 m)
- Width at racks: 51.5in (1.30 m)
- Transport Height: 73.5in (1,866.9 mm)
- Approximate operating weight: including 400ft (122 m) of pipe 10,500lbs (4,763 kg)

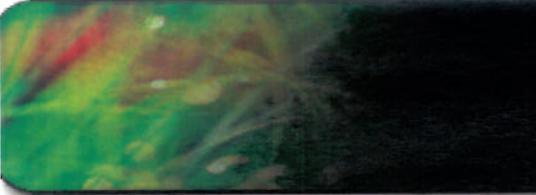


TORO.

DD 2024 Directional Drill



TORO.



DD 4045 Directional Drill

- 160 HP Cummins Diesel Engine Tier 4i compliant
- 40,000lbs (18.14 Tonnes) maximum thrust/pullback
- 4,500 ft-lb (6,101 Nm) rotary torque
- Quad rack and pinion carriage drive, two-speed floating carriage
- “Cruise control” capability
- Carries 520ft (158.5 m) of drill pipe
- Dual multi-function joystick controls with multi configuration option
- LCD multi-function operational screen

Standard Equipment:

- Operator Safety is a priority with a Zap Alert System, The ES!LOK (Exit Side Lock Out System) and an emergency shutdown switch at the drillers console

Dimensions:

- Length: 257in (6,527 mm)
- Width: 85in (2,159 mm)
- Width at Tracks: 83in (2,108 mm)
- Transport Height: 86.25in (2,190.75 mm)
- Approximate operating weight: including 520ft (158.5 m) of pipe 20,000lbs (9,071.84 kg)



TORO.

DD 4045 Directional Drill



TORO.

Series II & III

Compact Utility Loaders



Vibratory Plow



Compaction



Concrete & Masonry



Tree Care



Turf Renovation



**PRO
SHARP**

Compact Utility Loaders

Compact Utility Loaders

22317	Dingo 220
22318	Dingo 323
22321	Dingo TX 427
22322	Dingo TX 427 Wide Track 27
22323	Dingo TX 525
22324	Dingo TX 525 Wide Track
22337	CP 320D Dingo
22475	TX Platform (Gas)
22476	TX Platform (Diesel)



TORO.



Tracked vs. Wheeled

Tracked Models

Improved flotation for better traction and a light footprint in sandy or wet ground conditions.

Higher operating capacity for added lifting ability.

Operator friendly controls.

Wheeled Models

Better maneuverability in tight spaces, due to short wheelbase design.

Longer tire wear on hard surfaces, plus faster transport speed.

Improved visibility of working area from integrated operators platform.



Gas vs. Diesel

Gas Models

Easier “do-it-yourself” maintenance and lower repair costs.

Better starting in cold conditions.

Readily available fuel.

Lower up-front investment.

Diesel Models

Better performance in high altitudes and warmer climates.

More net horsepower improves traction and delivers added torque to attachments.

Longer engine life.

TORO.



45+ Different Toro Attachments

Superior design for long-lasting, dependable performance and the perfect fit.

Genuine Toro® Dingo® attachments are your best assurance for attaining a long life and peak performance from your loader. Toro offers a multitude of attachments that are designed specifically for, and fit the front of, the Dingo machine. The attachments are easy to operate, delivering clear sight lines, excellent operator mobility, plus easy on and off — typically in seconds.

Protect your investment by using only genuine Toro attachments that include ...

- **Optimized performance** that comes from attachments Toro engineers specifically designed for the Toro Dingo.
- **Shielded seals** on hydraulic attachments, providing two protective components to the vital hydraulic mechanism.
- **Heavy-duty, high-performance hydraulic motors** with flow and pressure ratings designed for optimal operation and life of the equipment.
- **Heavy-duty** bearings working in the heart of each design for longer life.
- **High-abrasion-resistant materials** on all ground-engaging parts, proven to sustain years of heavy use.

TORO.

Changing Attachments

**Change attachments in seconds
with no lifting. Easy as 1-2-3.**



1) *Mount to the attachment plate on the unit.*



2) *Twist pins to locked position.*



3) *For powered attachment, connect hydraulic lines to dripless flush-face quick couplers on loader arms.*

TORO.

Attachments



Bucket

Leveler



Dozer / Utility Blade

Trench Filler



Cement Bowl



TORO.

Attachments



Grapple Rake

Auger



Stump Grinder

Backhoe



Soil Cultivator



Attachments

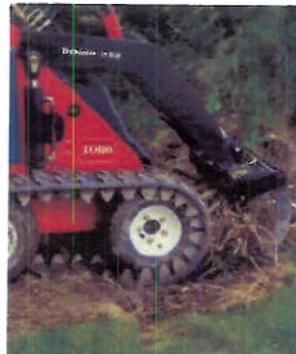


Hydraulic Breaker



Snowthrower

Multi-Purpose Tool
3 tools in 1 : Ripper, Towbar, Boom



TORO.

TRX Trenchers

Trenchers

22972	TRX-16 traction unit only
22973	TRX-20 traction unit only
22974	TRX-26 traction unit only
22978	TRX Bore Drive Head (Fits on all TRX models)
22980	TRX Backfill Blade

Trailers

22979	TRX/STX Trailer
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TORO.



TRX Design

The track drive design provides low center of gravity and large footprint offering stability and increased maneuverability – without causing damage to existing turf. The tracks also disperse the weight of the machine, providing high floatation while delivering the necessary traction in loose sand or mud.

The three-pump Hydraulic system delivers the necessary power to both tracks and the chain. With the Kawasaki twin cylinder engine, these machines provide plenty of power to dig up to 48" by 8" wide deep utility trenches.

TORO.

Control System

The controls are virtually identical to the TX models. Which allows you to trench with one hand while adjusting the boom depth with the other.



Operate The TRX Control System With Three Easy Controls

TRX models work virtually the same as the Toro® Dingo® TX models. Other walk-behind trenchers require up to twice as many levers and controls to operate the machine. Three simple controls operate all traction and trenching functions. And the simple controls are easy for beginners to learn quickly.

- ① Chain Engagement
(forward and reverse)
- ② Left/Right Track Control
(forward, reverse, turn)
- ③ Trencher Boom
(up and down)

TORO.

Trenching Made Easier

Easily bore under driveways and sidewalks to simplify irrigation and cable installation. Design allows for boring unit to be lowered into the trench to aide in level operation.



Installed in less than a minute without tools to allow TRX to complete trenching job. Cuts job time and labor by using the TRX to backfill the open trench efficiently.

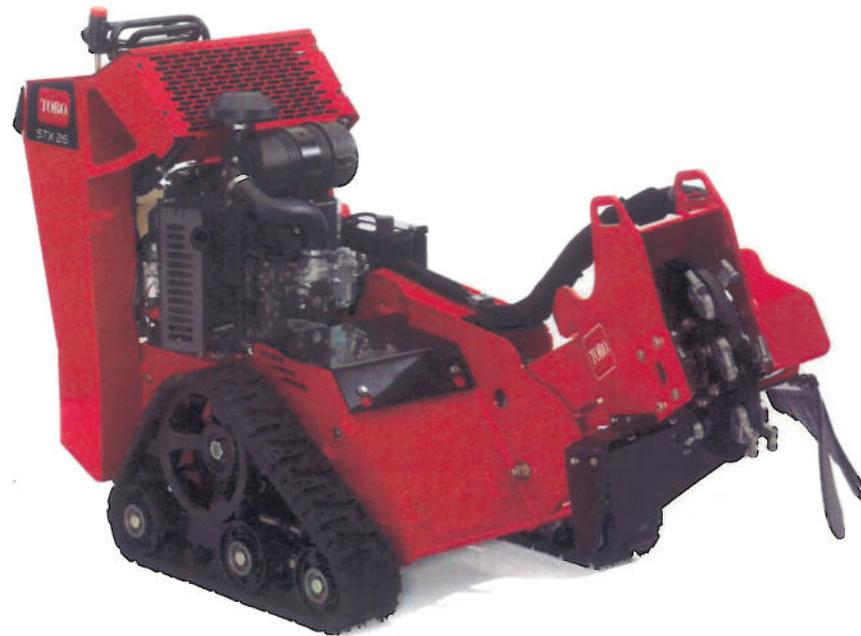


TORO.

Tree Care

Tree Care

23210	STX-26 Stump Grinder
23212	STX-38 Stump Grinder



TORO.



STX Design

It's patented Toro Dingo TX-style control system has two simple levers. Combine these easy to use controls with the tracks and transport speeds exceeding 4 mph, and you get maximum productivity. Wet, hilly terrain won't stop you from accessing tough jobs year-round. The tracks provide a low center gravity adding exceptional side hill stability, In addition, the hydraulically driven head means no chance of expensive belts breaking or slipping and no tension adjustments.

Fits Easily through standard 36" gates

Track design allows for zero turn capability

Offset cutting head provides excellent visibility

Full hydraulic operation – no belts to adjust or pulleys and clutches to replace.

TORO

Control System



TORO.

Vibratory Plow & Trencher

Vibratory Plow & Trencher

25400

Pro Sneak 350



TORO.



Pro Sneak Design

INCREASED TRACTION AND STABILITY

with dual wheel option. Single wheel hubs can be mounted inward for narrow width or outward for added stability and to minimize impact on soft turf.

COMPACT FOOTPRINT

36" (91 cm) width allows easy access to tight spaces — less than any other riding vibratory plow.

MAXIMUM MANEUVERABILITY

as a result of hydraulic steering allowing articulation to a full 28-degrees to the left or right of center for a minimum inside turning radius of 72" (183 cm).

RELIABLE POWER

Caterpillar C1.6 4 cylinder, 4 stroke, liquid cooled engine, provides gross 35.5 HP (26.5 kW) at 3,000 RPM to ensure constant performance while plowing or trenching.



TORO

Appendix H:

ADDITIONAL REQUIRED DOCUMENTS

- DOC #1 Clean Air and Water Act
- DOC #2 Debarment Notice
- DOC #3 Lobbying Certification
- DOC #4 Contractors Requirements
- DOC #5 Antitrust Certification Statement

FOR NEW JERSEY VENDORS ONLY:

- DOC #6 Ownership Disclosure Form
- DOC #7 Non-Collusion Affidavit
- DOC #8 Affirmative Action Affidavit
- DOC #9 Pay to Play Notice and Political Contribution Form
- DOC #10 Stockholder Disclosure Certification

New Jersey vendors are also required to comply with the following New Jersey statutes when applicable:

All anti-discrimination laws, including those contained in N.J.S.A. 10:2-1 through N.J.S.A. 10:2-14, N.J.S.A. 10:5-1, and N.J.S.A. 10:5-31 through 10:5-38.

Compliance with Prevailing Wage Act, N.J.S.A. 34:11-56.26, for all contracts within the contemplation of the Act.

Compliance with Public Works Contractor Registration Act, N.J.S.A. 34:11-56.26

Bid and Performance Security, as required by the applicable municipal or state statutes.

DOC #1

Clean Air and Water Act

I, the Vendor, am in compliance with all applicable standards, orders or regulations issued pursuant to the Clean Air Act of 1970, as Amended (42 U.S. C. 1857 (h), Section 508 of the Clean Water Act, as amended (33 U.S.C. 1368), Executive Order 117389 and Environmental Protection Agency Regulation, 40 CFR Part 15 as required under OMB Circular A-102, Attachment O, Paragraph 14 (1) regarding reporting violations to the grantor agency and to the United States Environment Protection Agency Assistant Administrator for the Enforcement.

Potential Vendor: The Toro Company

Title of Authorized Representative: Vice President

Mailing Address: 8111 Lyndale Ave. South Bloomington, MN 55420

Signature: _____

DOC #2

Debarment Notice

I, the Vendor, certify that my company has not been debarred, suspended or otherwise ineligible for participation in Federal Assistance programs under Executive Order 12549, "Debarment and Suspension", as described in the Federal Register and Rules and Regulations.

Potential Vendor: The Toro Company

Title of Authorized Representative: Vice President

Mailing Address: 8111 Lyndale Ave South Bloomington, MN 55420

Signature: _____

LOBBYING CERTIFICATION

Submission of this certification is a prerequisite for making or entering into this transaction and is imposed by Section 1352, Title 31, U.S. Code. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Any person who fails to file the required certification shall be subject to civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The undersigned certifies, to the best of his/her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of a Federal contract, the making of a Federal grant, the making of a Federal loan, the entering into a cooperative agreement, and the extension, continuation, renewal, amendment, or modification of a Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all covered sub-awards exceeding \$100,000 in Federal funds at all appropriate tiers and that all sub-recipients shall certify and disclose accordingly.

Signature of Respondent

Date

CONTRACTOR CERTIFICATION REQUIREMENTS

Contractor’s Employment Eligibility

By entering the contract, Contractor warrants compliance with the Federal Immigration and Nationality Act (FINA), and all other federal and state immigration laws and regulations. The Contractor further warrants that it is in compliance with the various state statues of the states it is will operate this contract in.

Participating Government Entities including School Districts may request verification of compliance from any Contractor or subcontractor performing work under this Contract. These Entities reserve the right to confirm compliance in accordance with applicable laws.

Should the Participating Entities suspect or find that the Contractor or any of its subcontractors are not in compliance, they may pursue any and all remedies allowed by law, including, but not limited to: suspension of work, termination of the Contract for default, and suspension and/or debarment of the Contractor. All costs necessary to verify compliance are the responsibility of the Contractor.

The offeror complies and maintains compliance with the appropriate statutes which requires compliance with federal immigration laws by State employers, State contractors and State subcontractors in accordance with the E-Verify Employee Eligibility Verification Program.

Contractor shall comply with governing board policy of the Region 4 ESC Participating entities in which work is being performed.

Fingerprint and Background Checks

If required to provide services on school district property at least five (5) times during a month, contractor shall submit a full set of fingerprints to the school district if requested of each person or employee who may provide such service. Alternately, the school district may fingerprint those persons or employees. An exception to this requirement may be made as authorized in Governing Board policy. The district shall conduct a fingerprint check in accordance with the appropriate state and federal laws of all contractors, subcontractors or vendors and their employees for which fingerprints are submitted to the district. Contractor, subcontractors, vendors and their employees shall not provide services on school district properties until authorized by the District.

The offeror shall comply with fingerprinting requirements in accordance with appropriate statutes in the state in which the work is being performed unless otherwise exempted.

Contractor shall comply with governing board policy in the school district or Participating Entity in which work is being performed.

Business Operations in Sudan, Iran

In accordance with A.R.S. 35-391 and A.R.S. 35-393, the Contractor hereby certifies that the contractor does not have scrutinized business operations in Sudan and/or Iran.

Signature of Respondent

Date

**ANTITRUST CERTIFICATION STATEMENTS
(Tex. Government Code § 2155.005)**

I affirm under penalty of perjury of the laws of the State of Texas that:

1. I am duly authorized to execute this contract on my own behalf or on behalf of the company, corporation, firm, partnership or individual (Company) listed below;
2. In connection with this proposal, neither I nor any representative of the Company has violated any provision of the Texas Free Enterprise and Antitrust Act, Tex. Bus. & Comm. Code Chapter 15;
3. In connection with this proposal, neither I nor any representative of the Company has violated any federal antitrust law; and
4. Neither I nor any representative of the Company has directly or indirectly communicated any of the contents of this proposal to a competitor of the Company or any other company, corporation, firm, partnership or individual engaged in the same line of business as the Company.

Vendor The Toro Company

Offeror _____
 Signature

 Printed Name

Address 8111 Lyndale Ave. S.
Bloomington, MN
55420

 Position with Company

Authorizing Official

 Signature

Phone 952-887-8913

 Printed Name

Fax 952-887-8694

 Position with Company

**OWNERSHIP DISCLOSURE FORM
(N.J.S. 52:25-24.2)**

Pursuant to the requirements of P.L. 1999, Chapter 440 effective April 17, 2000 (Local Public Contracts Law), the offeror shall complete the form attached to these specifications listing the persons owning 10 percent (10%) or more of the firm presenting the proposal.

Company Name: The Toro Company

Street: 8111 Lyndale Ave. South

City, State, Zip Code: Bloomington, MN 55420

Complete as appropriate:

I _____, certify that I am the sole owner of _____, that there are no partners and the business is not incorporated, and the provisions of N.J.S. 52:25-24.2 do not apply.

OR:

I _____, a partner in _____, do hereby certify that the following is a list of all individual partners who own a 10% or greater interest therein. I further certify that if one (1) or more of the partners is itself a corporation or partnership, there is also set forth the names and addresses of the stockholders holding 10% or more of that corporation's stock or the individual partners owning 10% or greater interest in that partnership.

OR:

I Darren Redetzke, an authorized representative of The Toro Company, a corporation, do hereby certify that the following is a list of the names and addresses of all stockholders in the corporation who own 10% or more of its stock of any class. I further certify that if one (1) or more of such stockholders is itself a corporation or partnership, that there is also set forth the names and addresses of the stockholders holding 10% or more of the corporation's stock or the individual partners owning a 10% or greater interest in that partnership.

(Note: If there are no partners or stockholders owning 10% or more interest, indicate none.)

Name	Address	Interest
<u>None</u>		

I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

Date

Authorized Signature and Title

NON-COLLUSION AFFIDAVIT

Company The Toro Company Name:

Street: 8111 Lyndale Ave. South

City, State, Zip Code: Bloomington, MN 55420

State of ~~New Jersey~~ Minnesota

County of Hennepin

I, Darren Redetzke of the Toro Company, Bloomington
Name City

in the County of Hennepin, State of Minnesota
of full age, being duly sworn according to law on my oath depose and say that:

I am the Vice President of the firm of The Toro Company
Title Company Name

the offeror making the Proposal for the goods, services or public work specified under the Harrison Township Board of Education attached proposal, and that I executed the said proposal with full authority to do so; that said offeror has not directly or indirectly entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above proposal, and that all statements contained in said proposal and in this affidavit are true and correct, and made with full knowledge that the Harrison Township Board of Education relies upon the truth of the statements contained in said proposal and in the statements contained in this affidavit in awarding the contract for the said goods, services or public work.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bona fide established commercial or selling agencies maintained by

Company Name

Authorized Signature & Title

Subscribed and sworn before me

this _____ day of _____, 20____

Notary Public of ~~New Jersey~~ Minnesota

My commission expires _____, 20____

SEAL

Doc #8

**AFFIRMATIVE ACTION AFFIDAVIT
(P.L. 1975, C.127)**

Company Name: The Toro Company
Street: 8111 Lyndale Ave. South
City, State, Zip Code: Bloomington, MD 55420

Proposal Certification:

Indicate below your compliance with New Jersey Affirmative Action regulations. Your proposal will be accepted even if you are not in compliance at this time. No contract and/or purchase order may be issued, however, until all Affirmative Action requirements are met.

Required Affirmative Action Evidence:

Procurement, Professional & Service Contracts (Exhibit A)
Vendors must submit with proposal:

- 1. A photo copy of their Federal Letter of Affirmative Action Plan Approval _____
OR
- 2. A photo copy of their Certificate of Employee Information Report _____
OR
- 3. A complete Affirmative Action Employee Information Report (AA302) _____

Public Work – Over \$50,000 Total Project Cost:

- A. No approved Federal or New Jersey Affirmative Action Plan. We will complete Report Form AA201-A upon receipt from the Harrison Township Board of Education _____
- B. Approved Federal or New Jersey Plan – certificate enclosed _____

I further certify that the statements and information contained herein, are complete and correct to the best of my knowledge and belief.

Date

Authorized Signature and Title

P.L. 1995, c. 127 (N.J.A.C. 17:27)
MANDATORY AFFIRMATIVE ACTION LANGUAGE

PROCUREMENT, PROFESSIONAL AND SERVICE
CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. The contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this non-discrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisement for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation.

The contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to P.L. 1975, c. 127, as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to attempt in good faith to employ minority and female workers trade consistent with the applicable county employment goal prescribed by N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, C.127, as amended and supplemented from time to time or in accordance with a binding determination of the applicable county employment goals determined by the Affirmative Action Office pursuant to N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, C.127, as amended and supplemented from time to time.

The contractor or subcontractor agrees to inform in writing appropriate recruitment agencies in the area, including employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of it testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the

statutes and court decisions of the state of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

The contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and lay-off to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation, and conform with the applicable employment goals, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor and its subcontractors shall furnish such reports or other documents to the Affirmative Action Office as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Affirmative Action Office for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code (NJAC 17:27).

Signature of Procurement Agent

Darren Redetzke, Vice President

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM Public Agency Instructions

This page provides guidance to public agencies entering into contracts with business entities that are required to file Political Contribution Disclosure forms with the agency. **It is not intended to be provided to contractors.** What follows are instructions on the use of form local units can provide to contractors that are required to disclose political contributions pursuant to N.J.S.A. 19:44A-20.26 (P.L. 2005, c. 271, s.2). Additional information on the process is available in Local Finance Notice 2006-1 (www.nj.gov/dca/lgs/lfns/lfnmenu.shtml).

1. The disclosure is required for all contracts in excess of \$17,500 that are **not awarded** pursuant to a "fair and open" process (N.J.S.A. 19:44A-20.7).
2. Due to the potential length of some contractor submissions, the public agency should consider allowing data to be submitted in electronic form (i.e., spreadsheet, pdf file, etc.). Submissions must be kept with the contract documents or in an appropriate computer file and be available for public access. **The form is worded to accept this alternate submission.** The text should be amended if electronic submission will not be allowed.
3. The submission must be **received from the contractor and** on file at least 10 days prior to award of the contract. Resolutions of award should reflect that the disclosure has been received and is on file.
4. The contractor must disclose contributions made to candidate and party committees covering a wide range of public agencies, including all public agencies that have elected officials in the county of the public agency, state legislative positions, and various state entities. The Division of Local Government Services recommends that contractors be provided a list of the affected agencies. This will assist contractors in determining the campaign and political committees of the officials and candidates affected by the disclosure.
 - a. The Division has prepared model disclosure forms for each county. They can be downloaded from the "County PCD Forms" link on the Pay-to-Play web site at www.nj.gov/dca/lgs/p2p. They will be updated from time-to-time as necessary.
 - b. A public agency using these forms **should edit them to properly reflect the correct legislative district(s)**. As the forms are county-based, **they list all legislative districts in each county. Districts that do not represent the public agency should be removed from the lists.**
 - c. Some contractors may find it easier to provide a single list that covers all contributions, regardless of the county. These submissions are appropriate and should be accepted.
 - d. The form may be used "as-is", subject to edits as described herein.
 - e. The "Contractor Instructions" sheet is intended to be provided with the form. It is recommended that the Instructions and the form be printed on the same piece of paper. The form notes that the Instructions are printed on the back of the form; where that is not the case, the text should be edited accordingly.
 - f. The form is a Word document and can be edited to meet local needs, and posted for download on web sites, used as an e-mail attachment, or provided as a printed document.
5. It is recommended that the contractor also complete a "Stockholder Disclosure Certification." This will assist the local unit in its obligation to ensure that contractor did not make any prohibited contributions to the committees listed on the Business Entity Disclosure Certification in the 12 months prior to the contract. (See Local Finance Notice 2006-7 for additional information on this obligation) A sample Certification form is part of this package and the instruction to complete it is included in the Contractor Instructions. **NOTE: This section is not applicable to Boards of Education.**

C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Contractor Instructions

Business entities (contractors) receiving contracts from a public agency that are NOT awarded pursuant to a "fair and open" process (defined at N.J.S.A. 19:44A-20.7) are subject to the provisions of P.L. 2005, c. 271, s.2 (N.J.S.A. 19:44A-20.26). This law provides that 10 days prior to the award of such a contract, the contractor shall disclose contributions to:

- any State, county, or municipal committee of a political party
- any legislative leadership committee*
- any continuing political committee (a.k.a., political action committee)
- any candidate committee of a candidate for, or holder of, an elective office:
 - of the public entity awarding the contract
 - of that county in which that public entity is located
 - of another public entity within that county
 - or of a legislative district in which that public entity is located or, when the public entity is a county, of any legislative district which includes all or part of the county. The disclosure must list reportable contributions to any of the committees that exceed \$300 per election cycle that were made during the 12 months prior to award of the contract. See N.J.S.A. 19:44A-8 and 19:44A-16 for more details on reportable contributions.

N.J.S.A. 19:44A-20.26 itemizes the parties from whom contributions must be disclosed when a business entity is not a natural person. This includes the following:

- individuals with an "interest" ownership or control of more than 10% of the profits or assets of a business entity or 10% of the stock in the case of a business entity that is a corporation for profit
- all principals, partners, officers, or directors of the business entity or their spouses
- any subsidiaries directly or indirectly controlled by the business entity
- IRS Code Section 527 New Jersey based organizations, directly or indirectly controlled by the business entity and filing as continuing political committees, (PACs). When the business entity is a natural person, "a contribution by that person's spouse or child, residing therewith, shall be deemed to be a contribution by the business entity." [N.J.S.A. 19:44A-20.26(b)] The contributor must be listed on the disclosure. Any business entity that fails to comply with the disclosure provisions shall be subject to a fine imposed by ELEC in an amount to be determined by the Commission which may be based upon the amount that the business entity failed to report. The enclosed list of agencies is provided to assist the contractor in identifying those public agencies whose elected official and/or candidate campaign committees are affected by the disclosure requirement. It is the contractor's responsibility to identify the specific committees to which contributions may have been made and need to be disclosed. The disclosed information may exceed the minimum requirement. The enclosed form, a content-consistent facsimile, or an electronic data file containing the required details (along with a signed cover sheet) may be used as the contractor's submission and is disclosable to the public under the Open Public Records Act. The contractor must also complete the attached Stockholder Disclosure Certification. This will assist the agency in meeting its obligations under the law.

NOTE: This section does not apply to Board of Education contracts.

* N.J.S.A. 19:44A-3(s): "The term "legislative leadership committee" means a committee established, authorized to be established, or designated by the President of the Senate, the Minority Leader of the Senate, the Speaker of the General Assembly or the Minority Leader of the General Assembly pursuant to section 16 of P.L. 1993, c.65 (C.19:44A-10.1) for the purpose of receiving contributions and making expenditures."

List of Agencies with Elected Officials Required for Political Contribution Disclosure

N.J.S.A. 19:44A-20.26

County Name:

State: Governor, and Legislative Leadership Committees

Legislative District #s:

State Senator and two members of the General Assembly per district.

County:

Freeholders

{County Executive}

County Clerk

Surrogate

Sheriff

Municipalities (Mayor and members of governing body, regardless of title):

USERS SHOULD CREATE THEIR OWN FORM, OR DOWNLOAD FROM WWW.NJ.GOV/DCA/LGS/P2P A COUNTY-BASED, CUSTOMIZABLE FORM.

STOCKHOLDER DISCLOSURE CERTIFICATION

Name of Business:

I certify that the list below contains the names and home addresses of all stockholders holding 10% or more of the issued and outstanding stock of the undersigned.

OR

I certify that no one stockholder owns 10% or more of the issued and outstanding stock of the undersigned.

Check the box that represents the type of business organization:

- Partnership, Corporation, Sole, Proprietorship, Limited Partnership, Limited Liability Corporation, Limited Liability Partnership, Subchapter S Corporation

Sign and notarize the form below, and, if necessary, complete the stockholder list below.

Stockholders:

Table with 2 columns (Name, Home Address) and 3 rows for stockholder information.

Notary section with fields for date, signature, and commission expiration.

ACKNOWLEDGMENT AND ACCEPTANCE
OF REGION 4 ESC's OPEN RECORDS POLICY

Signature below certifies complete acceptance of Region 4 ESC's Open Records Policy, except as noted below (additional pages may be attached, if necessary).

Check one of the following responses to the Acknowledgment and Acceptance of Region 4 ESC's Open Records Policy below:

- We acknowledge Region 4 ESC's Open Records Policy and declare that no information submitted with this proposal, or any part of our proposal, is exempt from disclosure under the Public Information Act.

(Note: All information believed to be a trade secret or proprietary must be listed below. It is further understood that failure to identify such information, in strict accordance with the instructions below, will result in that information being considered public information and released, if requested under the Public Information Act.)

- We declare the following information to be a trade secret or proprietary and exempt from disclosure under the Public Information Act.

(Note: Offeror must specify page-by-page and line-by-line the parts of the response, which it believes, are exempt. In addition, Offeror must specify which exception(s) are applicable and provide detailed reasons to substantiate the exception(s).)

All pricing listed in Appendix C is to be considered proprietary and exempt from disclosure. This represents critical competitive information and we request that Toro be contacted by government entities to receive the data.

Date

Authorized Signature & Title

AFFIRMATIVE ACTION PROGRAM
FOR
THE DISABLED & VETERANS

The Toro Company
Worldwide Headquarters

8111 Lyndale Avenue South
Bloomington, MN 55420



**AFFIRMATIVE ACTION PROGRAM
FOR
THE DISABLED & VETERANS**

Contractor : The Toro Company
8111 Lyndale Avenue South
Bloomington, MN 55420

Dun & Bradstreet # : 006477400
EEO-1 # : 0182171/C00563

EEO Coordinator : Cindy Menth
The Toro Company
8111 Lyndale Avenue South
Bloomington, MN 55420

Parent Company : The Toro Company
Dun & Bradstreet # : 006477400
EEO-1 # : 0182171

EQUAL EMPLOYMENT OPPORTUNITY POLICY

41 C.F.R. Section 60-741.44(a); 60-300.44(a)

It is the policy at The Toro Company to provide equal employment and advancement opportunities to all qualified individuals. To achieve this goal, The Toro Company is dedicated to taking affirmative action to employ and advance in employment, qualified disabled persons, disabled veterans, recently separated veterans, Armed Forces service medal veterans and other protected veterans, in compliance with Section 503 of the Rehabilitation Act of 1973, as amended, 29 U.S.C 793, and Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, and 38 U.S.C. 4212 ("Section 4212" or "VEVRAA"). All personnel actions, including compensation, benefits, recruitment, hiring, training, and promotion of persons in all job titles, will be administered without regard to disability or other protected veteran status, and all employment decisions are based solely on valid job requirements. In addition, employees and applicants are protected from harassment, threats, coercion, intimidation, interference or discrimination for:

1. Filing a complaint;
2. Assisting or participating in an investigation, compliance review, hearing, or any other activity under Section 503 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 793, Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, 38 U.S.C. 4212 or any other law requiring equal opportunity for disabled persons and other protected veterans;
3. Opposing any practice made unlawful by the Acts or any other law requiring equal opportunity for disabled persons and other protected veterans; or
4. Exercising any other right protected by these Acts or the implementing regulations.

This EEO policy has the full support of Peter Ramstad, VP Human Resources and Business Development, who has assigned responsibility for its implementation to Cindy Menth, EEO Coordinator. The Toro Company has designed and implemented an audit and reporting system to monitor and maintain its compliance with the Acts.

It is the goal of The Toro Company to utilize qualified disabled persons and covered veterans in as many levels of position classifications as practicable. As provided in United States Code 38 USC 4212, 29 U.S.C 793, and in the Code of Federal Regulations, 60-300 and 60-741, the required policies, practices, and procedures are integrated into this affirmative action program. A copy of the Equal Employment Opportunity statement that reaffirms our commitment to qualified disabled individuals and covered veterans is posted. This program is available for review upon request by any applicant or employee by contacting the EEO Coordinator during regular business hours. Notice of this availability for review is posted for applicants and employees.

REVIEW OF PERSONNEL PROCESSES

41 C.F.R. Section 60-741.44(b); 60-300.44(b)

The Toro Company reviews its employment procedures to ensure careful, thorough and systematic consideration of the job qualifications of known disabled individuals, disabled veterans and other covered veteran applicants for job vacancies filled either by hiring or promotion, and for all training opportunities offered or available. This review ensures that personnel procedures do not stereotype disabled persons and other protected veterans in a manner that limits their access to all jobs for which they are qualified. When covered veterans are considered for employment, only that portion of the individuals' military records, including discharge papers, that is relevant to the requirements of the position will be considered.

To facilitate compliance with this requirement, the following procedures are followed:

1. The application or personnel form of each known applicant with a disability or each known covered veteran is annotated to identify each vacancy for which the applicant was considered and is retrievable for review for use in investigations and internal compliance activities;
2. The application or personnel form of each known applicant with a disability or each known covered veteran includes the identification of each promotion and training program for which that employee was considered;
3. When an employee or applicant with a known disability or a covered veteran status is rejected for employment, promotion, or training, a statement of the reason is appended to the personnel file along with a description of any reasonable accommodation considered.
4. When an employee or applicant is selected for hire, promotion, or training, and reasonable accommodation has been undertaken to enable the selection of an employee or applicant with a disability or special disabled veteran, the applicant form or personnel record contains a description of the reasonable accommodation.

PHYSICAL AND MENTAL QUALIFICATIONS

41 C.F.R. Section 60-741.44(c); 60-300.44(c)

The Toro Company reviews all physical and mental job qualification requirements as openings occur to ensure to the extent that qualification requirements tend to screen out qualified disabled individuals or disabled Veterans, that they are job-related and consistent with business necessity and the safe performance of the job.

To the extent that physical or mental job qualification requirements tend to screen out qualified disabled individuals or disabled veterans in the selection of employees or applicants for employment or other changes in employment status such as promotion or training, The Toro Company assures that the requirements are related to the specific job(s) for which the individual is being considered and are consistent with business necessity and the safe performance of the job.

REASONABLE ACCOMMODATION
41 C.F.R. Section 60-741.44(d), 60-300.44(d)

The Toro Company makes reasonable accommodations to the physical and mental limitations of employees or applicants to the extent that such accommodations do not impose an undue hardship on the conduct of its business. When an employee with a known disability has significant difficulty performing his or her job and it is reasonable to conclude that the performance problem may be related to the known disability, the employee is notified of the performance problem and asked if the problem is related to the disability. If the employee indicates that the performance problems are related to his or her disability, the employee is asked if reasonable accommodation is needed.

The Toro Company makes reasonable accommodation to the special needs of disabled individuals and disabled veterans including access to the building, utilization of restroom facilities, and mobility requirements within the building and parking locations.

HARASSMENT

41 C.F.R. Section 60-741.44(e); 60-300.44(e)

The Toro Company develops and maintains procedures to ensure that its employees are not harassed because of a disability or status as a disabled veteran or other covered veteran.

EXTERNAL DISSEMINATION OF POLICY

41 C.F.R. Section 60-741.44(f), 60-300.44(f)

The Toro Company undertakes appropriate outreach and positive recruitment activities that are reasonably designed to effectively recruit qualified disabled and disabled veterans and other covered veterans, such as the following:

1. The Toro Company notifies all applicants of the EEO policy and invites them to self-identify after an offer of employment is made but before the person begins work. Application forms state our commitment to equal employment opportunity. All employment advertisements and notices to recruitment sources state this EEO policy.
2. Meaningful contacts are established with the State Job Services and other recruiting sources for disabled individuals and covered veterans such as: The Department of Veterans Affairs, veteran's counselors and coordinators on college campuses, service officers of national veterans' groups active in the area, and local veterans' groups and veterans' service centers to provide assistance in locating qualified applicants, including those not currently in the workforce, where applicable and feasible. All employment openings (except executive and top management, positions that are filled from within, and positions lasting three days or less) are listed at the appropriate state employment services office. Formal briefing sessions and facility tours may be conducted with representatives from recruiting sources to explain current and future job openings, position descriptions, worker specifications, and the selection process. Follow-up with these resources and feedback on disposition of applicants are conducted when appropriate.
3. All advertisements seeking applicants for employment identify The Toro Company as an "equal opportunity employer."
4. The Toro Company incorporates the Equal Opportunity Clause regarding disabled individuals, disabled veterans, and other protected veterans in its purchase orders, leases and contracts as required by law, executive order and regulation. Written notification of the Equal Opportunity Policy is sent to all subcontractors, vendors, and suppliers requesting appropriate action on their part.
5. The Toro Company develops internal communication of these outreach efforts in a manner that fosters understanding, acceptance, and support among executive management, supervisors, and all other employees.
6. Meaningful contacts are established with disabled individuals and veteran's service organizations for such purposes as advice, technical assistance and referral of potential employees. Such assistance may consist of advice concerning proper placement, recruitment, training and reasonable accommodation.
7. Recruitment programs established with schools incorporate efforts to reach students with disabilities. Efforts may be made to participate in work-study programs with rehabilitation facilities and schools specializing in training or educating individuals with disabilities.
8. Efforts are made to include individuals with disabilities when employees are pictured in consumer, promotional or help wanted advertisements.
9. Good faith efforts are made to consider covered veterans and applicants with known disabilities for all available positions for which they may be qualified, to the extent practicable.
10. Disabled veterans and other protected veterans are encouraged to participate in career days, youth motivation programs, and related activities in their communities.

INTERNAL DISSEMINATION OF POLICY

41 C.F.R. Section 60-741.44(g), 60-300.44(g)

The Toro Company has developed the following internal procedures to communicate its obligation to engage in affirmative action efforts to employ and advance in employment qualified individuals with disabilities, disabled veterans, and other protected veterans. These procedures are designed to foster understanding, acceptance, and support among executive, management, supervisory and other employees and to encourage such persons to take the necessary actions to meet this obligation.

1. The Toro Company Notices. The EEO policy statement is posted on the employee bulletin board in a manner and place that ensures that individuals with disabilities are informed of its contents. This notice states the name of the EEO Coordinator, the support of top-level management toward this policy, and to whom questions, comments, or complaints should be directed. A statement is included that employees are protected from coercion, intimidation, interference or discrimination for filing a complaint or assisting in an investigation under the Acts. All required state and federal EEO notices are also posted on bulletin boards.
2. Meetings. Our overall commitment, top-level management support, and specific implementation of the plan are discussed with all management personnel. Our commitment to this policy and individual responsibilities are communicated to all employees. This policy is discussed in employee orientation and any management training programs.
3. Notice of affirmative action program. This affirmative action program is available for employee review in the office of the EEO Coordinator.
4. Company publications. This policy and articles on accomplishments of disabled workers are publicized in any company newspapers, magazines, annual reports, or other publications. When employees are featured in publications, disabled individuals are included. This policy is also included in any employee handbook or policy manual.
5. Union Contracts. A non-discrimination clause is included in any union contracts and any such contracts are reviewed to ensure that they are non-discriminatory.

AUDIT & REPORTING SYSTEM
41 C.F.R. Section 60-741.44(h); 60-300.44(h)

The Toro Company has designed and implemented an audit and reporting system that:

- 1) Measures the effectiveness of the affirmative action program.
- 2) Indicates any need for remedial action.
- 3) Determines the degree to which the objectives have been attained.
- 4) Determines whether individuals with known disabilities have the opportunity to participate in all company sponsored educational, training, recreational and social activities.
- 5) Measures compliance with the affirmative action program's specific obligations.

Where the affirmative action program is found to be deficient, corrective action is taken to bring the program into compliance.

The above-cited items are discussed during meetings with all management personnel. The results of this review and corrective actions are reported to top management.

RESPONSIBILITY FOR IMPLEMENTATION

41 C.F.R. Section 60-741.44(i); 60-300.44(i)

Cindy Menth has been designated to direct the activities of the affirmative action program. Cindy Menth has the full support of Peter Ramstad in carrying out the The Toro Company affirmative action policy. Cindy Menth is responsible for:

1. Developing policy statements, affirmative action programs, and internal and external communication to include discussions with managers, supervisors and employees to ensure the policies are followed;
2. Advising managers and supervisors that their work performance is evaluated, in part, on the basis of their affirmative action efforts;
3. Identifying and discussing with management any problem areas;
4. Developing with management solutions for any identified problem areas;
5. Serving as a liaison between The Toro Company and community groups, governmental agencies and vocational rehabilitation organizations;
6. Maintaining an audit and reporting system to monitor the progress of the affirmative action program;
7. Informing management of the latest developments in the affirmative action and equal employment opportunity area;
8. Serving as a liaison between The Toro Company and organizations for disabled persons and covered veterans;
9. Assisting in career counseling for disabled individuals and covered veteran employees;
10. Ensuring that the policy statement and required posters are posted on bulletin boards; and
11. Ensuring that employees placed through these policies are not harassed.

TRAINING

41 C.F.R. Section 60-741.44(j), 60-300.44(j)

All personnel involved in the recruitment, screening, selection, promotion, disciplinary, and related processes are trained to ensure knowledge of equal employment opportunity and affirmative action laws. Educational and training programs are offered to employees to assist in their personal development as well as to increase their skills and ability to perform on the job. The Toro Company continues to ensure that all employees have the opportunity to participate in such programs without regard to disabled or veteran status.