

# Hunter® GOLF



# ETC

## INNOVATION IN IRRIGATION CONTROL

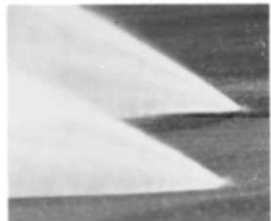
The most advanced electronic irrigation controller available today is sophisticated, versatile and yet easy to use. The Hunter ETC calculates precise water needs for each of up to 24 stations, based on local evapotranspiration (or ET) rates, and automatically schedules and controls the application of that water.

By turning and pressing a single knob, you can direct the ETC to schedule watering day after day, season to season, throughout the year.

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Golf 500 Sprinkler



Uninterrupted stream (top photo) can reach out to a 70' radius; diffused stream is used for close-in coverage.

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tive changes which would merit further consideration and put to rest those proposed changes which offer little value to the membership.

In that line of thinking, we have offered brief descriptions of what some of the changes might be changed for the betterment of the association. To conserve space, we deliberately made them brief and are available for further discussion on the options we feel are open to us.

### TURFGRASS QUIZ

**Answer:** Paul Frank, Hole-In-The-Wall Country Club, had just weathered the 1962 hurricane. Fairways had plenty of water. A jeep was used to check the damage.

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# A former FGCSA president discusses the proposed GCSAA bylaws changes

*The letter below was received from past president Cecil Johnston. His thoughts and concerns on the proposed bylaw changes are of such great interest to our association that it was deemed appropriate to publish them in this issue. We appreciate Cecil's candid statements and encourage other members to write letters to the editor on topics they would like to share their viewpoints on.*

Dear Tom:

I received the bylaw change information today and I'm wondering what you are thinking.

I guess what bothers me the most is the way our (GCSAA) media has given such a one-sided viewpoint. Before the vote has even been taken, brochures have been sent out about the changes that only express the need for change with no dissenting opinions. I saw a lot of smiling faces saying how necessary and important the changes are and that was it.

Surely there is some wisdom in the bylaws we have successfully lived with all of these years.

When it comes time for the mail-in votes next year, will all of the individuals voting get the same one-sided snow job? Is it really better for mail-in voters to choose candidates they have never even met? I wonder if this type of voting might lead to a lot of "yes" men as directors with no consideration as to how these individuals may interact with others on the board.

I know as a past voting delegate that even after meeting the candidates, hearing them speak, and watching them interact with others, it was still very difficult to decide who would be best for our organization. Will these people give a fair analysis of character and abilities of each candidate so the mail-in voters can make a wise decision or will they, in fact, control the elections even more than at present?

**Ballot C.** What is so bad about trusting your vote to someone who knows the people and understands the politics better than you do? If businesses and governments elected their leaders without proxy and delegate votes, many would be in much worse condition.

**Ballot D.** I don't like saying that a "Golf Course Superintendent" is responsible for the environmentally sound management of a golf course. I wouldn't want to be sued by someone who tries to use this document to prove my responsibility. I think even greater responsibility lies with the owners of these properties and then maybe general managers. I wouldn't want an owner someday saying that the superintendent accepted responsibility for the environment and was negligent.

**Example:** "After all, the superintendent said he was a GCSAA member. The GCSAA Bylaws state that the superintendent is responsible for the environmentally sound management of the golf course. I even paid his dues to be a member."

Maybe we are going a little overboard here. Is mentioning environmental responsibility really necessary?

This is a minute point but are 30 members constituting a quorum at a special meeting really a fair representation of an association of more than 11,000 members?

**Ballot F** (Section 3). What is wrong with members voting on what membership classes they want in their organization? If the board wants to make other membership classifications, why don't they just come out and tell us? Can't they call a meeting or wait until the annual meeting? If they say they have a plan to expand our membership base, why doesn't someone tell our members what the plan is or are they worried that most members (a two-third majority) might not really want everyone remotely in-

olved with our industry as members?

It already bothers me somewhat when I see an affiliate or associate member advertise that they are a member of the GCSAA. People on this side of the planet still think it is important when someone says they are a member of the GCSAA and I hate to see this privilege abused.

**Ballot G.** Let me get this straight. The board wants to set all different types of (discount?) dues rates for all different types of memberships so more people are involved. Then the GCSAA will need a larger staff to help all of these people.

Next, they want to increase our dues \$40-50 per year to pay for increased services. Some of this new staff will be assigned to visit courses where the superintendents are not members and try to encourage the superintendent and owners of courses that they should become members of the GCSAA (I hope they don't start going door-to-door on Sundays!). Maybe they can also start a consulting service like the USGA Greens Section soon after that!

**Ballot H.** You already know my concerns about individual voting.

**Article IV, Elections.** Brings a few more questions to mind. It is going to take seven to 20 days for me to receive a letter. If that letter must be returned to the association within 15 days, I guess I had better vote at the annual meeting. Does a ballot being postmarked by a certain day qualify the same as being returned to the Association by a certain day?

When you establish a 15-day window for members to mail in their votes, and no longer permit proxy or delegate voting, I wonder how many people will actually be making the decision of who will lead our Association.

One factor to consider is that 60-45 days before the annual meeting, some

*What is wrong with members voting on what membership classes they want in their organization?*

members may consider budget planning and holiday affairs more important. I am also a little skeptical about the future efficiency of the mail system preceding the holidays. Time will tell.

I assume that all mail-in votes will be kept in confidence until after the vote at the annual meeting. Now that there may or may not be an Election Committee, I suppose it is possible that members of the Board or others could hear some of the preliminary results. I prefer that the existence of an impartial Election Committee be specified in the bylaws.

Sincerely,  
Cecil Johnston, CGCS  
Green Valley Engineering Co  
Thailand

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## About the Hurricane Andrew Research Project...

A total of 42 superintendents responded to the FGCSA hurricane research survey, three with photos.

The surveys revealed a wealth of information and each questionnaire contributed something to this issue — even the ones which reported no damage.

When the questionnaires were written, we had hoped to tabulate some comparative data on damage totals, operating days lost, trees lost, etc., but we discovered that the questions had not been worded precisely enough to yield comparable answers. Each superintendent interpreted the damage estimates differently; superintendents who were able to get part of their courses back in operation quickly while taking their time with the remaining holes were unsure how to estimate the number of revenue days lost; private courses do not happily reveal financial data. And so on.

The inadequacy of our questions became more apparent as each survey came back.

Furthermore, superintendents at some severely damaged courses could not find the time to fill out the questionnaires. Therefore, any chart or table based on the surveys returned would be incomplete and misleading. So no comprehensive damage report is possible.

But the survey responses did enable us to present the “big picture” quite accurately. We are extremely grateful to Scott Wahlin and Ed Ramey for their eyewitness accounts and to the



Gouge at Deering Bay CC #4 green.

PHOTO COURTESY OF APMG



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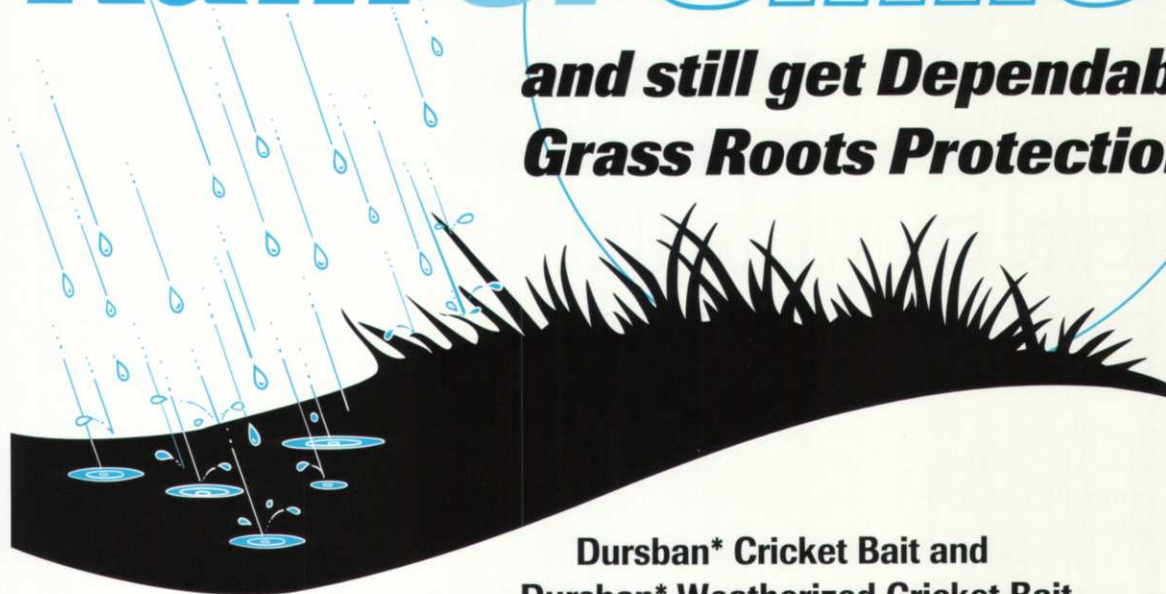
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## Florida Green Hurricane Andrew Research Project

continued

following superintendents for responding to the survey:

**Surveys with photos:** Bob Allen, Hibiscus GC; Robert G. Klitz, Inverrary CC; John Snyder, Kendale Lakes G&CC.

**Surveys:** Tad Altman, Marriott's GC at Marco; Mark Atwood, Bears Paw CC; Robert Bittner, Club at Pelican Bay; Allen R. Bunn, Orangebrook; Jim Campoli, Woodland CC; Buddy Carmouche, Hole-in-the-Wall GC; Tom Chandler, Island CC; David Court, Boca Lago CC; John Cowndon, Sombrero CC; David Demmery, CGCS, Quail Ridge CC; Cliff Downing, Jacaranda GC; Scott Foster, Villa Del Ray GC; Dan Garson, Coral Ridge CC; Mark Hampton, CGCS, Royal Poinciana GC; Rick Hill, Kendall GC; Glen Klauk, Delray Dunes G&CC; Jeff A. Klontz, CC of Florida; Dale Kuehner, Colony West CC; William J. Lanthier, North Palm Beach CC; Dick McCoy, Wyndemere CC; Bill McKee, Oak Tree CC; Carlos McKeon, Palmetto GC; John Mike, Palm Beach Lakes GC; David Moyer, Broken Sound GC; Dick Naccarato, Naples Beach Hotel; Jeff Newman, Boca Woods CC; Joe Panteleo, Fort Lauderdale CC; Steve Pearson, The Falls CC; Peter Powell, Boca Greens CC; George Ralish, Polo Trace G&TC; John Sherban, Greenview Cove GC; Bryan Singleton, Riviera CC; Wayne Spano, Key Colony Beach Par 3 GC; Bill Sutton, Sunset GC; Jeffrey C. Taylor, Indian Creek CC; James R. Walker, Briar Bay GC; Dale Walters, Royal Palm CC; C. Stanley Weaver, Cypress Creek CC; Terry Wood, Royal Wood G&CC.



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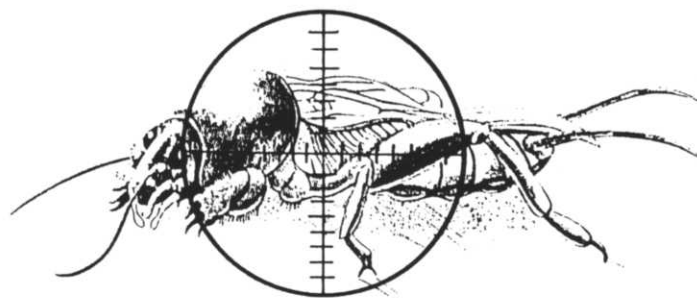
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PHOTO COURTESY APMG

A virtually undamaged boat was deposited in the palms to the right of #13 fairway, Deering Bay CC.  
See Page 36 for story on Deering Bay.

## *South Florida golf courses endure, recover*

# Storm over land

BY LARRY KIEFFER

**N**othing can withstand the forces of nature. No matter how well built the structure, how deeply rooted the tree or firmly padded the pumping station, somewhere there's a hurricane, tornado, earthquake or flood that can take it out in a flash.

Man at his finest is no physical match for the raw power of nature.

By the same token, no force of nature can dominate the human spirit. No matter how devastating the physical blow, man's incredible will to survive will make him crawl out from the debris, pick himself up and dust himself off.

And start all over again.

By an exponential factor, Hurricane Andrew was the greatest natural disaster in this nation's history. Early damage estimates of \$10 billion have since proven to be far too low. The final cost will never be calculated.

Impact of the storm on Florida's golf industry is difficult to

and

**TORO**®

present...





# Reelmaster<sup>®</sup> 5100-D

with **AUTOMATED CONTROL ELECTRONICS**<sup>™</sup>



An advanced standard of lightweight fairway mowing—delivering enhanced playability, reliability and a new dimension of serviceability.



# The Reelmaster<sup>®</sup> 5100-D



The pinnacle in design, performance and quality of cut, the Reelmaster 5100-D responds to lightweight fairway mowing demands never before approached.

## Automated Control Electronics™

With the 5100-D, Toro introduces Automated Control Electronics, ACE™. A revolutionary control system for specialized turf equipment, yet a proven technology, ACE provides additional

capabilities and features that increase equipment reliability, functionality and serviceability.

At the heart of ACE, is a solid state electronic control system. This enhanced system employs improved switches along with a simplified wire harness for added reliability. With electrically actuated hydraulic spools, there are no external moving spools, minimizing the potential for leaks. And operator benefits include simpler controls — a single joystick enables straight line tracking — no pedals or switches — for reduced fatigue and a more consistent quality of cut.

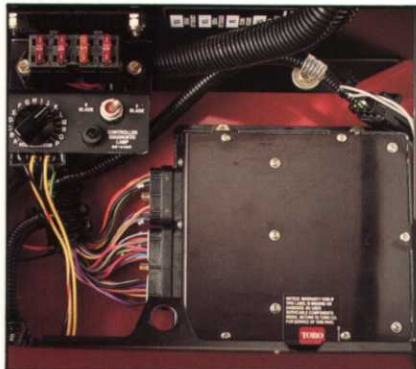
## Course Conditions Demand ACE™!

With ACE, Toro also brings about Automatic Clip Control, ClipACE™. Reel speed is automatically adjusted according to

mowing speed for an ideal relationship that optimizes cutting efficiencies as it accommodates varied turf conditions.

All you need do is:

- 1) Select whether 5 or 8 blade reels are in use.
- 2) Input your desired height of cut using the letter coded dial.



**SELECTING CLIP RATE (REEL SPEED)**

TO SELECT THE CORRECT CLIP RATE:

1. SET THE 5/8 BLADE SWITCH TO THE CORRECT SETTING INDICATING HOW THE MACHINE IS EQUIPPED.
2. USING THE COLUMN OF THE CHART BELOW FOR EITHER 5 OR 8 BLADE REELS (IN ACCORDANCE WITH HOW THE MACHINE IS EQUIPPED) LOOK DOWN THE CHART TO FIND THE HEIGHT OF CUT LISTING NEAREST THE ACTUAL HEIGHT OF CUT SETTING.
3. LOOK ACROSS THE CHART TO FIND THE LETTER CORRESPONDING TO THAT HEIGHT OF CUT.
4. TURN THE HOC SELECTOR KNOB TO THE LETTER SETTING DETERMINED IN STEP 2.

| CLIP RATE (REEL SPEED) SELECTION CHART |                       |                   |                       |
|--|-----------------------|-------------------|-----------------------|
| HOC KNOB POSITION                      | 8 BLADE HEIGHT OF CUT | HOC KNOB POSITION | 5 BLADE HEIGHT OF CUT |
| A                                      | FULL SPEED            | A                 | FULL SPEED            |
| B                                      | 26 in. 6.6 mm         | B                 | 26 in. 127 mm         |
| C                                      | 30 7/8                | C                 | 30 7/8 143            |
| D                                      | 35 8/8                | D                 | 35 8/8 152            |
| E                                      | 40 19/2               | E                 | 40 19/2 163           |
| F                                      | 45 11/4               | F                 | 45 11/4 174           |
| G                                      | 50 13/2               | G                 | 50 13/2 181           |
| H                                      | 55 14/2               | H                 | 55 14/2 188           |
| I                                      | 60 15/2               | I                 | 60 15/2 194           |
| J                                      | 65 16/2               | J                 | 65 16/2 202           |
| K                                      | 70 17/2               | K                 | 70 17/2 209           |
| L                                      | 75 18/2               | L                 | 75 18/2 214           |
| M                                      | 80 19/2               | M                 | 80 19/2 221           |
| N                                      | 85 20/2               | N                 | 85 20/2 227           |
| O                                      | 90 21/2               | O                 | 90 21/2 233           |
| P                                      | 95 22/2               | P                 | 95 22/2 239           |

FULL SPEED - CUTTING UNITS ALWAYS SET TO FULL SPEED IN THIS POSITION.

**REEL CONTROL LIGHT**

IF THE REEL CONTROL LIGHT ILLUMINATES, IT MEANS ONE OF THE FOLLOWING THINGS:

1. THE MACHINE IS BEING OPERATED AT A TRACTION SPEED TOO SLOW TO ALLOW DESIRED CLIP.
2. THE MACHINE IS BEING OPERATED AT A TRACTION SPEED TOO FAST TO ALLOW DESIRED CLIP.
3. TO CORRECT THE SITUATION, CHANGE THE TRACTION SPEED WITH THE LIGHT GOES OUT.

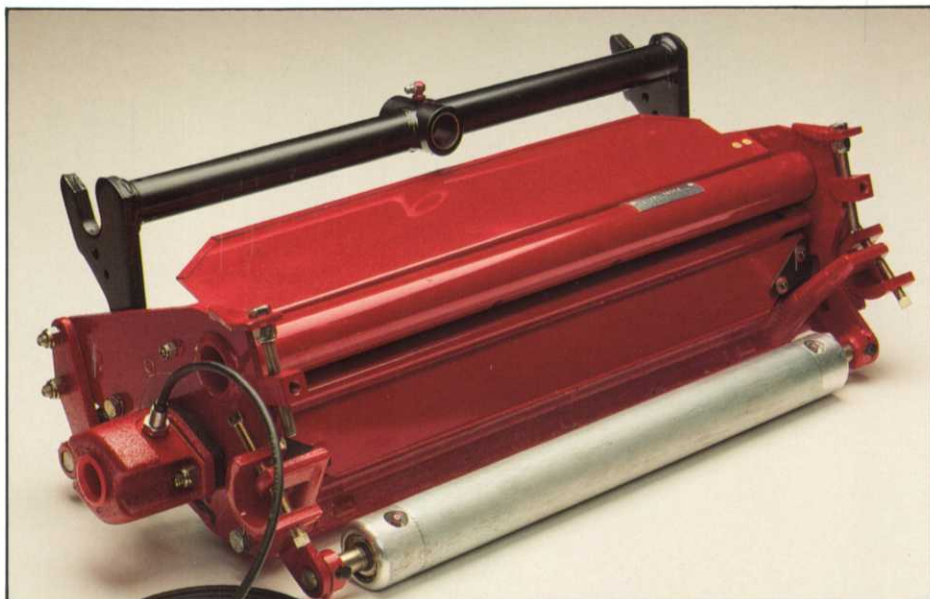
Conveniently located directly under the seat is a range chart referencing the HOC relationship.

This simple task will adjust the reel speed automatically whether

you speed up or slow down providing a more consistent quality of cut and optimum playing surface.

If the mowing speed reaches a range where it's impossible for the reels to accommodate, a red indicator light on the control panel will alert the operator of the need to either slow down or speed up.

ClipACE monitors reel speed every 80 milliseconds. Key to its sensing capability are Hall Effect switches, which have no moving parts, and offer unparalleled reliability. The reel speed sensor allows the electronic control unit (ECU) to compute the correct reel speed as the mowing speed changes.



## No Other Mower Knows Your Fairways Better

ClipACE offers a unique feature that will surely improve your cutting efficiency, but the Reelmaster 5100-D provides much more for increased productivity and to ensure a consistent quality of cut.

To keep the reels down for better ground contour following, better penetration and thatch control, Toro gives you a geometrically equal cutting unit suspension design. And, a spring loaded, **Positive Down Pressure System**, adjustable at 4 positions in 8 lb. increments, helps to maintain the reels in position over varying contours. This enables you to productively mow at a faster rate, beyond traditional mowing speeds, and maintain a consistent height of cut.

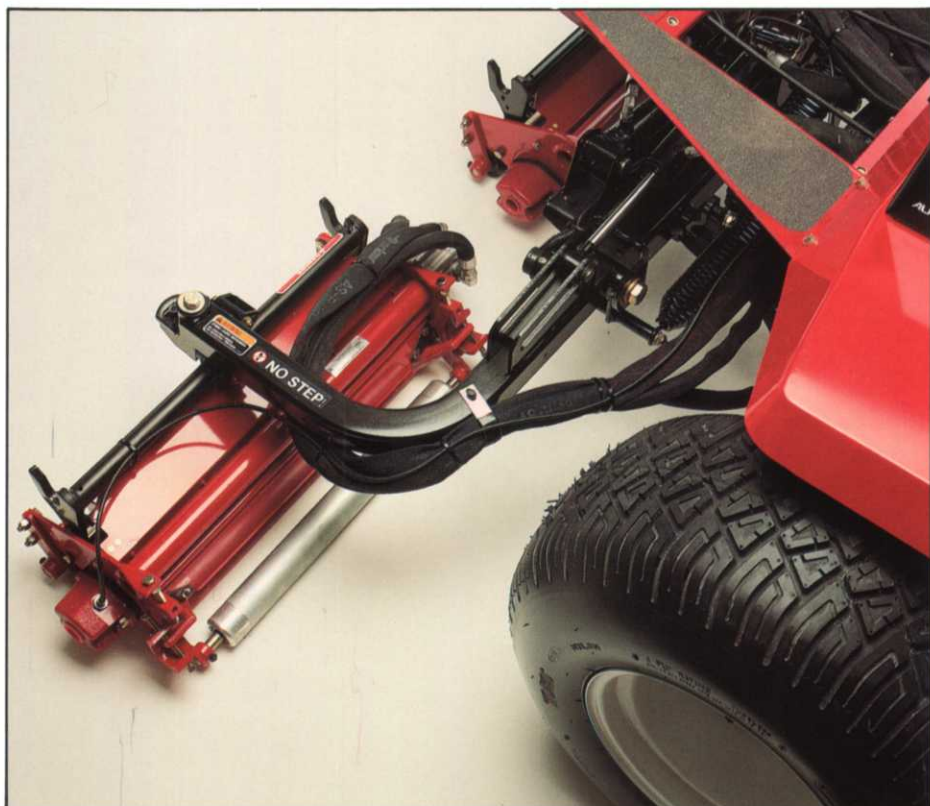
When you combine the ground hugging ability of Toro's cutting units with the better maneuverability of this machine, you can cross-cut fairways in different directions easier than ever. This ensures upright growth, and provides better playability for your golfers.

**Trailing cutting units are free to float** in all directions to ensure ground following over undulations and to minimize scalping. In the event of impact, each cutting unit incorporates a breakaway device to help lessen damage.



*Positive Down Pressure System*

**Large diameter, narrow width tires** provide a properly oriented footprint to minimize scuffing and attain the desired contact area to reduce ground pressure.





## AUTOMATED CONTROL ELECTRONICS™



### Score with ACE™!

Here again, ACE offers a new dimension of productivity, simply improving your control over product reliability and serviceability.

ACE includes a hand-held diagnostic tool that assists the mechanic in pinpointing problems. Rather than spend non-productive time searching for the problem, this tool allows the mechanic to easily troubleshoot the electrical system, and helps determine whether the problem is hydraulic or electrical. Enjoy the added productivity this tool brings to your maintenance shop. It's like adding another expert mechanic to your staff. Superintendents will benefit from more uptime meeting the increasing demands of play.

## Data Log™ System



To ease frustrations associated with intermittent problems, the ACE system also features Toro's exclusive Data Log System. It's another diagnostic tool that captures and records machine data, and is available to install on units experiencing intermittent problems. The distributor's service representa-

tive no longer needs to be on-site to witness the problem. You record it for him to analyze in the shop. Data Log facilitates solving problems from long distances. Once the cause is known, the problem can be fixed — usually in one trip, or on the phone!



## Servicing So Easy, Equipment So Reliable

The 5100-D aims to keep you on the course, not in the shop, with high-tech reliability built-in for trouble-free operations. One self-contained hydraulic manifold serves

to eliminate the need for individual valves and their plumbing to give you simplified controls and reduce the possibility of leaks.



## Durably Built

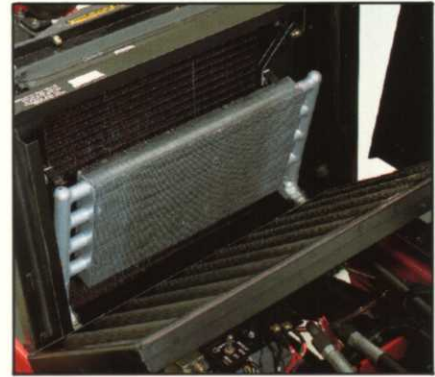
A 23 hp, liquid-cooled diesel engine powers the heavy duty hydrostatic transmission designed for quiet, efficient operations. This

complete drive system delivers full engine horsepower whether in 2- or 4-wheel drive operation for exceptional traction.

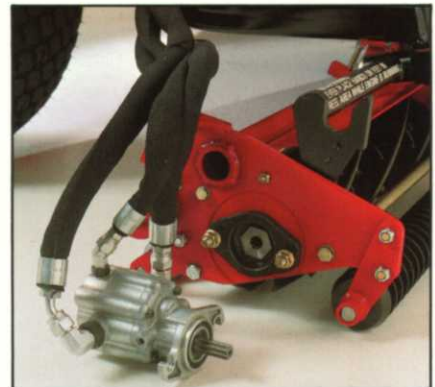


## Outstanding Accessibility and Servicing Features

All servicing areas are conveniently reached for a simpler, easier task of servicing. And, routinely maintained items are especially accessible.



The midmount radiator with easy-to-remove debris screen and tilt-out hydraulic oil cooler is easy to service and proven reliable.



All cutting units are interchangeable, too. Just loosen two fasteners, and the hydraulic motors are quick to release.

Consider the convenience of on-unit backlapping — front 3 at once, rear 2 together — designed to maintain a constant reel speed and eliminate reel stalling.

As with all Toro products, the 5100-D will be backed by Toro's Direct Today 48-Hour Delivery Program, in which any part not immediately available from Toro distributors can be delivered within 48 hours, anywhere in the contiguous United States. No minimum. No maximum. No extra charge.

## Clean, Consistent Cutting Action

Toro's reels are designed to be more responsive to the specifics of fairway cutting to provide a superior quality of cut.

Heavy duty bedknives, reel blades and rollers withstand the more rugged terrain.

**5 or 8 Bladed Floating Cutting Units** match your desired height of cut range and mowing speed. The 8 blade reel is recommended for heights of cut below  $\frac{5}{8}$ " and, the 5 blade reel for heights of cut above  $\frac{5}{8}$ ".

Adjustable grass dispersion shields afford you the flexibility of rear dispersion, or front throw.

The **Rear Roller Height of Cut Adjustment** is engineered to maintain the proper bedknife position for optimum cutting efficiency at  $\frac{1}{4}$ " to  $\frac{3}{4}$ " heights of cut.



## Toro 4-Matic®

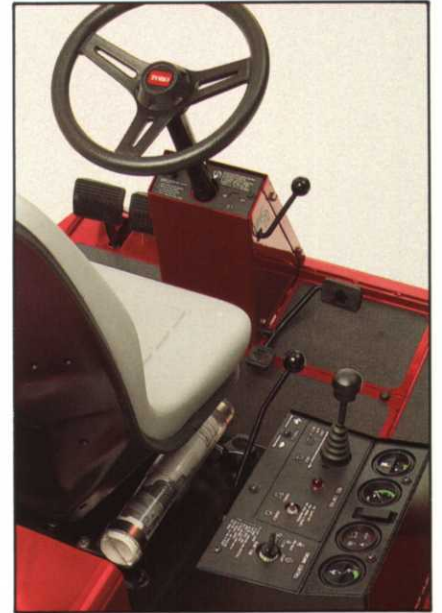
For enhanced traction, the 5100-D offers the exclusive Toro 4-Matic. An automatic on-demand 4 wheel drive system. Power is always available at both front and rear axles, eliminating the need to stop and shift. Its mechanical axle provides smooth power transfer for consistent power under wet or adverse conditions. ROPS and a seat belt are standard.

Full power, quad-link steering and clearly visible out front cutting reels allow for fast and accurate maneuvering in all fairway applications.



## Effortless and Precise Control

The Reelmaster® 5100-D is quiet and easy to operate. A deluxe suspension seat, at-a-glance instrumentation and easy-to-reach fingertip controls provide for an operator-friendly environment. Even the reels are actuated or disengaged through one joystick. An uncluttered floor board promotes the convenience of single pedal hydrostatic drive with a mechanical speed control device to help maintain constant ground speed easily. And, Toro gives you independent steering brakes for incredible control and to minimize skidding.



# Customize Your Reelmaster<sup>®</sup> 5100-D

## Thatching Reels

Standard configuration includes 3/4" spacing, a Wiehle front roller with scraper and a solid rear roller with scraper. Other features:

- Interchange cutting units quickly — 1 bolt makes it easy and convenient.
- Control depth from 1 1/8" above turf to soil level; useful for breaking up cores or verti-cutting.
- Thatcher blades are reversible for extended wear.
- 2 1/2" large rollers are standard.
- Optional spacing combinations are available: 1/2", 1" or 1 1/4".
- Front and rear throw options



## Front Roller Scrapers

Prevent clipping build-up that occurs when mowing wet turf.

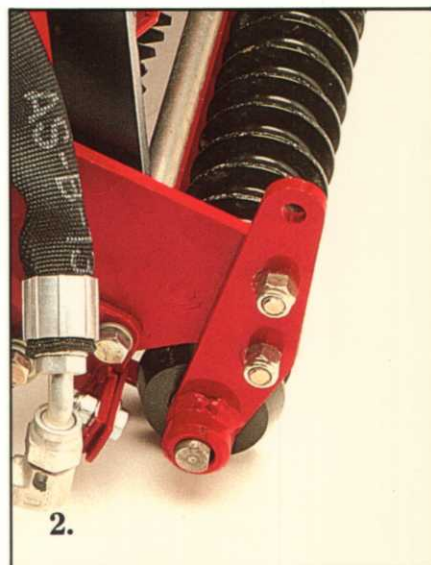
## Height of Cut Extension

Allows you greater flexibility to maintain a wider variety of turf; extend your mowing height up to 1 3/8".

- Standard front and rear roller brackets maintain proper bedknife position.

## Turf Compensation Kit

This kit includes 10 torsion springs (2 per cutting unit) that redistributes weight to help overcome unique turf conditions. It may also allow machine performance to extend into higher mowing speeds if that is a requirement.



## Comb

Designed to assist in preventing excessive horizontal turf growth. Regular use may help control grain and excessive thatch conditions.

- Rigidly mounts to carrier frame behind front roller.
- Vertical adjustment to control aggressiveness.
- Abrasion resistant nylon for long life.

## Grass Basket Kit

Easy to handle, high capacity baskets are mounted to the carrier frame, not the cutting units, ensuring cutting unit stability.

## Roll Over Protective Structure

ROPS is optional for 2-wheel drive and standard on 4-wheel drive traction units.

1. Thatching Reels
2. Height of Cut Extension
3. Comb
4. Grass Basket Kit

# Reelmaster® 5100-D Specifications\*

| MODEL 03502, 2-WHEEL OR 4-WHEEL DRIVE TRACTION UNITS |   |                    |                         |                         |                         |                         |              |                 |               |              |               |
|--|---|--------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------|-----------------|---------------|--------------|---------------|
| <b>ENGINE</b>  | Mitsubishi, 3 cylinder, 4-cycle liquid cooled diesel engine. 23 hp (17 kW) @ governed maximum rpm of 3200. 58.1 cu. in. (952 cc) displacement. Heavy duty, 3-phase, remote mounted air cleaner. Electric fuel pump. 12 volt, mounted on frame with replaceable fuel filter. High water temperature shutdown switch. Fuel filter/water separator.  |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>RADIATOR</b>                                      | Mid-mounted radiator with industrial tube and fin construction; 7 fins per inch. Approx. 6 quart (5.7 liter) capacity. Remote mounted 1 quart (.95 liter) expansion tank.   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>ELECTRICAL FEATURES</b>                           | 12 volt, cold cranking 530 amperes at 0°F (-18°C), 85 minute reserve capacity at 80°F (27°C), maintenance free battery. 35 amp alternator with I.C. regulator/rectifier. Automotive type electrical system. Seat switch, reel and traction interlock switches.  |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>FUEL CAPACITY</b>                                 | 10 gallons (37.9 liters) diesel fuel.   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>CONTROLS</b>                                      | Foot operated traction and brake pedals. Hand operated throttle, speed control lever, parking brake lock, ignition switch with automatic preheat cycle, single joystick control for cutting unit on/off and lift/lower. Cutting unit backlap switch located under operator's seat. Reel speed input located under control panel.  |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>GAUGES</b>  | Hour meter, speedometer, fuel gauge, temp. gauge, 4 bank warning lamp: oil pressure, water temperature, amps, and glow plug.  |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>DIAGNOSTICS</b>                                   | The Automated Control Electronics, ACE™ system allows precision timing and control of machine functions for maximum reliability. Standard 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.   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>TRACTION DRIVE</b>                                | Hydrostatic transmission mounted on drive axle. Foot pedal control of forward/reverse ground speed. 10 micron filter mounted directly on transmission housing. Axle is used as reservoir for hydrostatic transmission, 200 mesh inlet strainer.<br><b>Toro 4-Matic® 4-wheel drive system only:</b> couples rear drive axle to hydrostatic transmission via drive shaft and over-running clutch for full time on-demand 4 wheel drive. A Roll Over Protective Structure (ROPS) and seat belt are standard. |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>GROUND SPEED</b>                                  | 0-10 mph (0-16.1 km/hr) forward, 0-4 mph (0-6.4 km/hr) reverse.   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>TIRES/WHEELS/PRESSURE</b>                         | Two rear steering tires: 19 x 8.50-8, tubeless, 4-ply rating. Two front traction drive tires: 26 x 12.00-12, tubeless, 4-ply rating. Recommended tire pressure: 10-15 psi (69-103 kPa).   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>MAIN FRAME</b>                                    | All welded formed steel frame, includes three tie-down loops.   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>BRAKES</b>  | Individual 7" x 1.75" (17.8 x 4.4 cm) drum type wheel brakes and parking brakes on front traction wheels. Hydrostatic braking through traction drive.   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>STEERING</b>                                      | Power steering with dedicated power source.   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>CUTTING UNIT SUSPENSION</b>                       | Equal length lift arms with free floating, trailing cutting unit attachments with break away protection. Adjustable spring applied down pressure system.  |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>SEAT</b>  | Deluxe high back suspension seat.   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>OVERALL DIMENSIONS</b>                            | <table border="1"> <thead> <tr> <th>Height</th> <th>Length (w/o baskets)</th> <th>Length (w/baskets)</th> <th>Overall Width—transport</th> <th>Overall Width—operation</th> </tr> </thead> <tbody> <tr> <td>56" (142 cm)</td> <td>103.5" (263 cm)</td> <td>116" (295 cm)</td> <td>87" (221 cm)</td> <td>105" (266 cm)</td> </tr> </tbody> </table>  | Height             | Length (w/o baskets)    | Length (w/baskets)      | Overall Width—transport | Overall Width—operation | 56" (142 cm) | 103.5" (263 cm) | 116" (295 cm) | 87" (221 cm) | 105" (266 cm) |
| Height   | Length (w/o baskets)  | Length (w/baskets) | Overall Width—transport | Overall Width—operation |                         |                         |              |                 |               |              |               |
| 56" (142 cm)   | 103.5" (263 cm)   | 116" (295 cm)      | 87" (221 cm)            | 105" (266 cm)           |                         |                         |              |                 |               |              |               |
| <b>WEIGHT (approx.)</b>                              | <b>2-Wheel Drive:</b> 2,200 lbs. (998 kg) with 8 blade cutting units, baskets and full fluid levels.<br><b>4-Wheel Drive:</b> 2,550 lbs. (1,157 kg) with 8 blade cutting units, baskets and full fluid levels.  |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>WARRANTY</b>                                      | One year limited warranty. Refer to the appropriate Operator's Manual for further details.  |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>SOUND LEVEL</b>                                   | 86 dB(A) under normal operating conditions.   |                    |                         |                         |                         |                         |              |                 |               |              |               |
| <b>CERTIFICATION</b>                                 | Certified to meet the B71.4-1984 specifications of the American National Standards Institute's safety standards for riding mowers when 65 lbs. (29.4 kg) of ballast is added to rear wheels and a Rear Weight Kit is installed.   |                    |                         |                         |                         |                         |              |                 |               |              |               |

## 5 AND 8 BLADE CUTTING UNITS, MODELS 03505 AND 03508

|                                    |  |
|------------------------------------|--|
| <b>TYPE</b>                        | Five 21" (53 cm) reels supported by equal length independent lift arms.  |
| <b>WIDTH OF CUT</b>                | 95" (241 cm)   |
| <b>HOC RANGE</b>                   | 1/4" - 3/4" (6.3 - 19 mm); 5 Blade: 1/2" - 3/4" (12.7 - 19 mm), 8 Blade: 1/4" - 5/8" (6.4 - 15.9 mm)   |
| <b>HOC &amp; ROLLER ADJ.</b>       | Front roller: fixed position. Rear roller: screw adjustable with bolt clamp lock.  |
| <b>REEL CONSTRUCTION</b>           | Fairway designed reels with high carbon steel blades. All welded construction. 5" (13 cm) diameter reels.  |
| <b>REEL DRIVE</b>                  | Reel motors feature quick disconnect for removal/installation onto cutting unit.   |
| <b>BEDKNIFE/BEDBAR</b>             | Opposed screw adjustment, replaceable bedknife mounted on a cast iron bedbar.  |
| <b>CLIP FREQUENCY (ADJUSTABLE)</b> | <b>Model 03505:</b> .62" → 1.17" (15.7 → 29.7 mm); 5 blade reel at 5 mph (8.94 km/h)<br><b>Model 03508:</b> .40" → .73" (10.2 → 18.5 mm); 8 blade reel at 5 mph (8.04 km/h). |
| <b>ROLLERS</b>                     | Front cutting unit rollers are 2.5" (6.4 cm) diameter Wiehle rollers. Rear rollers are 2" (5.1 cm) diameter Full rollers; each roller has regreaseable bearings.             |

## ACCESSORIES

| Model | Description             | Model | Description           | Part No. | Description  | Part No. | Description                              |
|-------|-------------------------|-------|-----------------------|----------|--|----------|--|
| 03513 | Grass Basket Kit        | 30707 | Armrest Kit           | 83-5400  | Front Roller Scraper Kit                             | 75-6690  | Rear Weight Kit                          |
| 03512 | Rear Roller Scraper Kit | 03516 | Thatching Reels       | 83-5300  | High Height of Cut Kit, (3/4" - 1-3/8" (19 - 35 mm)) | 82-6920  | Front Scraper for High Height of Cut Kit |
| 03518 | Comb Kit                | 03510 | Turf Compensation Kit |          |  |          |  |

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