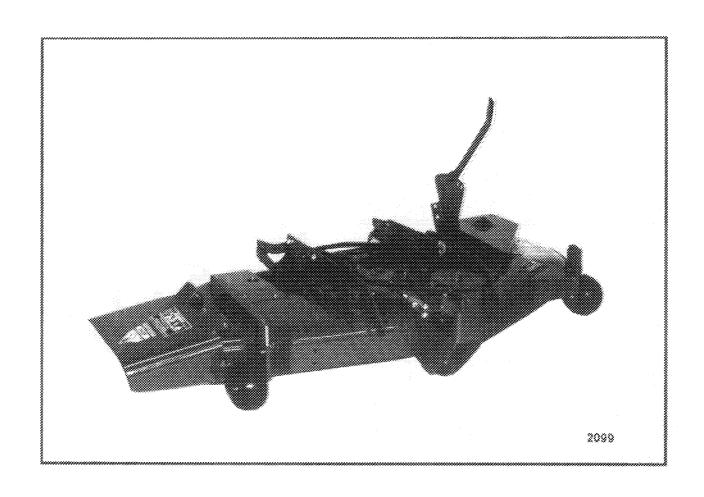


MODEL NO. 78460 - 390001 & UP

**INSTALLATION INSTRUCTIONS** 

## **PROLINE**

52 in. (132 cm) Side Discharge Mower



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# Λ

# SAFETY DECALS AND INSTRUCTIONS

Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.

# A DANGER DEFLECTOR IS NOT IN PLACE DO NOT OPERATE. 66-6380

Under Discharge Chute Part Number 66-6380



OPERATE ONLY WITH DEFLECTOR OR ENTIRE CATCHER IN PLACE



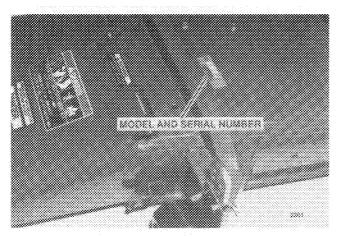
Each Side of Deck Part Number 66-1340

#### MODEL AND SERIAL NUMBER

A Model and Serial Number identifies your Toro Wheel Horse attachment. These numbers should always be referred to when consulting with your dealer or factory concerning service, replacement parts, or questions you may have. For your reference, record numbers from Model and Serial Number plate on your attachment.

MODEL SERIAL

> TORO Wheel Horse 515 WEST IRELAND ROAD SOUTH BEND, INDIANA 46514 USA



Model and Serial Number

### MOWER INSTALLATION

#### MOWER ASSEMBLY

Install discharge chute to mower using two 3/8 x 3 3/4 bolts, springs and locknuts. Hooks on springs must be positioned as shown in Figure 1. Check that discharge chute moves freely up and down with spring down pressure.

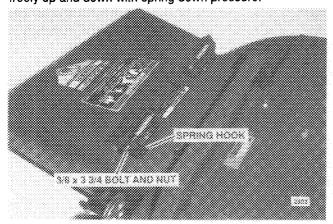


FiG. 1 Install Discharge Chute

#### ATTACH MOWER TO MACHINE

Position mower along left side of machine. Turn both front wheels to the left at a 90° angle (Fig. 2). Block left front wheel

with two 2" x 4" wood blocks. Position height control lever in bottom slot of quadrant. Place drive belt over top of front drive pulley.

## igwedge CAUTION igwedge

Sharp edges of mower blades can cut you during blade maintenance or adjustment. Use suitable covering over cutting edges of blade to prevent bodily harm.

IMPORTANT: Before installation, check that all mower blade bolts are tight:

Blade bolt Torque is 80-100 ft. lbs (112-140 Nm)
Check that front belt pulley, belt arm pivots and spindles have been lubricated. Use a pressure grease gun and #2 multi-purpose lithium grease. See Maintenance section for locations.

Slide mower under machine (Fig. 3). Open right and left Attach-A-Matic hitches, push release buttons in and lower handles. Remove wood blocks from left front wheel. Place wood block under mower front center roller.

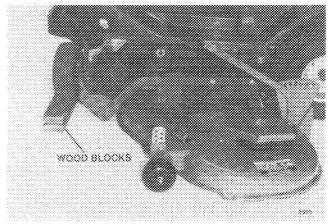


FIG. 2 Position Mower at Left Side of Machine

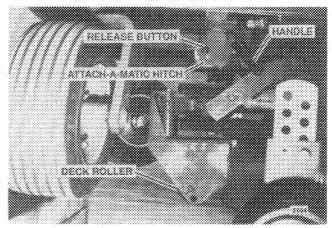


FIG. 3 Position Mower Under Machine

Raise left and right front mower attaching arms into hitches (Fig. 4). Raise handles and be sure they lock in raised position. Remove wood block from mower front roller.

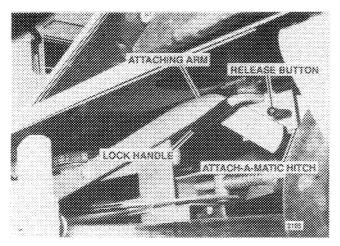


FIG. 4 Front Attach-A-Matic Hitch (One Each Side)

Locate two hanger rod assemblies (Fig. 5). Insert mower hanger rods into left and right front holes of machine frame. Access holes from under seat (Fig. 6). Install spacers and trunnions on rods with nuts. Tighten nuts until nut ends are flush with rod.

Install trunnion on mower lift arms using hairpin cotters (Fig. 7). Adjust left and right nuts to obtain 2 3/4" from machine frame to bottom of trunnions.

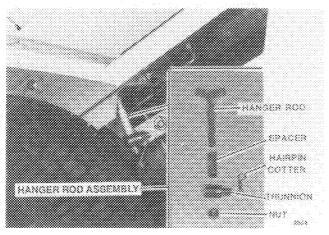


FIG. 5 Hanger Rod Assembly



FIG. 6 Hanger Rod installed

Install mower drive belt and level mower as described

under "INSTALL DRIVE BELT" and "LEVEL MOWER".

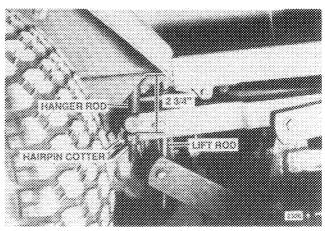


FIG. 7 Adjust Length of Rod

#### **INSTALL DRIVE BELT**

Lower height control lever all the way down (Fig. 8).

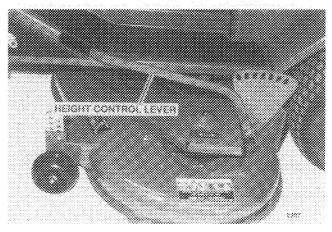


FIG. 8 Lower Height Control Lever

Move belt tension handle to center of mower (Fig. 9). Position drive belt on top groove of front pulley. Check that deck belt is on lower pulley of front pulley and top groove of light spindle pulley.

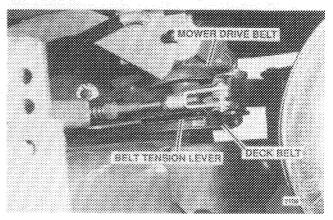


FIG. 8 Front Orive Belt Mounting

Install Belt on PTO Pulley (Fig. 10).

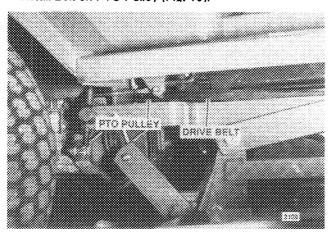


FIG. 10 Rear Drive Belt Mounting

Move belt tension lever to outside and all the way into operate position (Fig. 11). Check and adjust mower level as necessary.

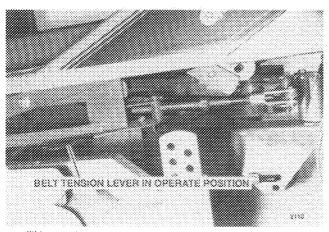


FIG. 11 Belt Tension Handle (Operate Position)

#### MOWER REMOVAL

Remove drive belt by reversing procedures outlined under "INSTALL DRIVE BELT" section of this manual.

Lower mower all the way down and remove left and right hanger rod trunnions from mower (Fig. 12).

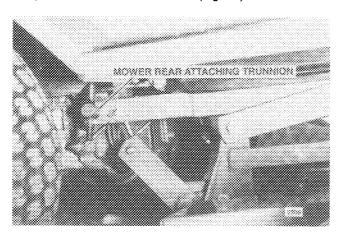


FIG. 12 Rear Mower Mounting

Open left and right front Attach-A-Matic hitches (Fig. 13). Paise lift lever into middle cutting height. Remove attaching times from hitches. Turn wheels to the left 90° and block left tont wheel with two 2" x 4" wood blocks. Remove mower from left side of machine.

#### ...EVEL MOWER

Position machine on a level surface and adjust front tire Pressure to 8 PSI and rear tires pressure to 8 PSI.

Adjust left and right hanger rod nuts to obtain 2 3/4 inches from frame to bottom of trunnions (Fig. 14). Place front heels in forward operating position and place mower height ontrol in middle notch of quadrant.

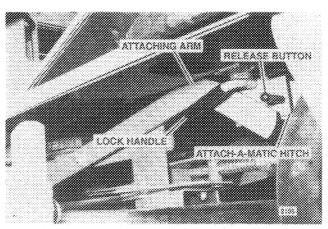


FIG. 13 Front Mower Mounting

#### Adjust side-to-side mower level:

- 1. Turn each outside mower blade side-to-side.
- 2. Measure outside end of each side blade tip and adjust sither right or left lift rod adjustment nut to obtain equal distances from surface to blade tips (Figs. 15 & 16).

#### Adjust front-to-back mower level:

- 1. Turn mower blades front-to-back.
- 2. Measure blade tips and adjust hanger rods evenly so that distance from surface to front and rear of blade tips are equal to 1/8 inch low in front (Figs. 15 & 16). Tighten nut to lower front or loosen nut to raise front.

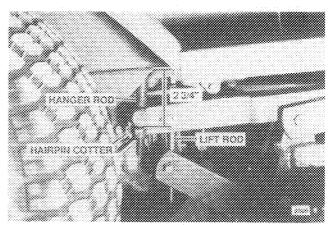


FIG. 14 Adjust Red Length

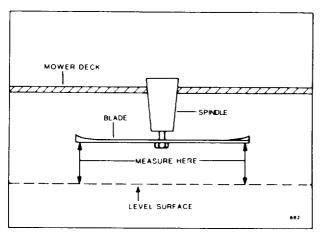


FIG. 15 Mower Level Measurement



FIG. 16 Level Adjusting Rods

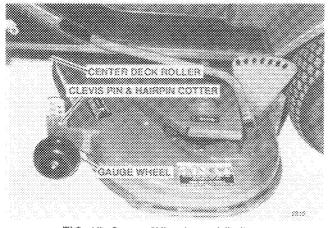


FIG. 17 Gauge Wheels and Rollers

#### **ADJUST GAUGE WHEELS AND ROLLERS**

IMPORTANT: Gauge wheels and rollers must be adjusted each time height setting is changed, so that deck will follow contour of ground and does not scalp turf.

With machine on a flat surface, all tires inflated to 8 PSI and height-of-cut in desired setting, outside gauge wheels and center deck rollers are to be positioned so they are approximately 1/4" to 3/8" above the ground (Fig. 17).

#### FRONT AND BACK CENTER DECK ROLLERS

Mowers are shipped with rollers in top holes for a cutting height of 1 1/2" or less. To cut above 1 1/2", remove roller shaft, move roller to lower hole and reinstall shaft (Figs. 3 & 17).

#### **OUTSIDE GAUGE WHEELS**

- 1. Remove hairpin cotter and clevis pin securing gauge wheel to cutting deck (Fig. 17).
- 2. Move gauge wheel up or down to required setting and reinstall clevis pin and cotter pin.
- 3. Reposition gauge wheels each time height-of-cut setting is changed.

#### OPERATION

MPORTANT: Every time mower is installed, check for proper operation of PTO clutch and brake. Adjustment of PTO is covered in machine Operator's Manual.



Keep shields and mower discharge chute in place. Never attempt to clear discharge areas or mower blades, or make any adjustments or repairs, without first disengaging PTO clutch/brake and removing ignition key. Debris can fly from mower deck and injure you and blades can cut you seriously.

Move mower height control lever to hole on quadrant corresponding to desired cutting height. This can be set forcutting heights between 1 and 4 in (2.5-10.2cm). Recommended cutting height is 2 to 3 inches (5-7.6 cm) for most mowing situations. Set gauge wheels and rollers as outlined under "ADJUST GAUGE WHEELS AND ROLLERS".

Start engine and set engine speed to full throttle. Engage PTO clutch. Regulate ground speed with transmissions for best cutting results. Uneven cutting often results from excessive ground speed. To correct, reduce ground speed while maintaining full engine throttle setting.

#### MAINTENANCE AND STORAGE

#### **LUBRICATION**

Front belt pulley, spindle bearings and belt tension arm pivots should be lubricated at 50 operating hour interval (Figs. 18 & 19). Use a pressure type grease gun and #2 multi-purpose lithium grease.

Four to six pumps of a hand type grease gun will usually fill spindles after 50 hours use. Grease fittings are conveniently located at top of spindle shafts.

Lubricate pivoting arms and levers at 25 hour intervals with light machine oil applied directly to wear surfaces. Rollers and gauge wheels should NOT be lubricated.

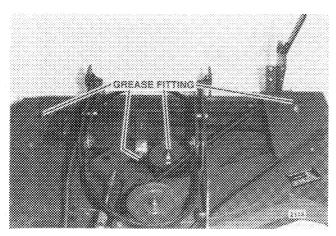


FIG. 18 Mower Lubrication Fittings

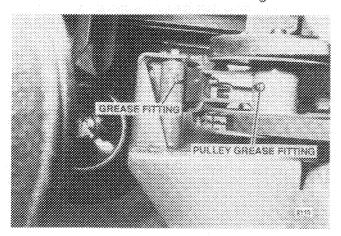


FIG. 19 Front Pulley and Pivot Grease Fittings

#### **BLADE MAINTENANCE**

## **⚠** CAUTION **⚠**

Sharp edges of mower blades can cut you during blade maintenance or adjustment. Use suitable covering over cutting edges of blade to prevent bodily harm.

To obtain optimum mowing results, mower blades should be kept sharp and well balanced. To sharpen blades, remove mower from machine, invert mower and remove blades. A short piece of 2" x 4" lumber may be placed between side of mower deck and blade to "lock" it in position while removing attaching hardware.

File or grind blades evenly. Take care to retain angle of original cutting edge. Blade balance can be checked with a blade balancer, available at most hardware stores.

Reinstall blades with lift area (turned up section) facing mower deck. Tighten blade attaching bolts to a torque of 30-100 ft. lbs. (112-140 Nm).

Reinstall mower on machine.

#### **UNDERSIDE CLEANING**

It is of vital importance to clean underside of mower deck frequently. Accumulation of matted clippings seriously impairs mower's ability to "lift" grass blades into cutting position and discharge clippings evenly. Matted grass clogging underside of mower is often times a cause of uneven cutting.

#### MOWER DRIVE BELT REPLACEMENT

Remove drive belt by reversing procedures under "IN-STALL DRIVE BELT" section of this manual.

Be sure to purchase genuine Toro Wheel Horse belts for explacement purposes as these belts are designed specifically for each application.

Install new drive belt as outlined under "INSTALL DRIVE SELT" section of this manual.

#### SPINDLE AND DECK BELT REPLACEMENT

Remove mower from machine. Note routing of belts. Remove left and right belt covers. Check to be sure all pulleys work freely. Install new Toro Wheel Horse belts. Reinstall belt covers. Reinstall mower on machine.

#### GENERAL CARE AND STORAGE

Top of mower deck should be washed with a garden hose after each use. A mild detergent may be used to remove stubborn dirt. After washing, allow mower to dry. Then start machine and engage mower for approximately one minute to remove excess water from belts and pulleys.

Touch-up painted surfaces with a fresh coat of "Toro Wheel Horse Red", available from your authorized Toro Wheel Horse dealer in aerosol cans.

Store mower in a clean, dry place or protect it with a weather-proof cover when stored outdoors.



# THE TORO TOTAL COVERAGE GUARANTEE

A Full Two-Year Warranty (Limited Warranty for Commercial Use)

#### What Is Covered By This Express Warranty?

The Toro Company promises to repair any TORO Product used for residential purposes if defective in materials or workmanship for a period of two years from the date of purchase. The cost of parts and labor are included, but the customer pays the transportation costs.

Transportation within a 15 mile radius of the servicing dealer is covered under this warranty for two-stage snowthrowers, walk behind debris equipment and all TORO Wheel Horse riding products. Walk power mowers, single stage snowthrowers, and other products not specifically covered, are excluded from the transportation coverage provided by this warranty.

#### What Products Are Covered By This Warranty?

This warranty applies to all gasoline powered Consumer Products (including TORO Wheel Horse riding products). ProLine riding products, wide area walk behind mowers and 21" Commercial mowers without blade stop controls are covered by separate warranty statements.

#### **How About Commercial Use?**

TORO Consumer Products used for commercial, institutional or rental use are covered by a limited warranty for the following time periods from the date of purchase:

Products

Warranty Period

Garden Tractors

Chassis . . . . . 1 year limited warranty Engine . . . . . 2 year limited warranty

- 21" Commercial Duty Walk Mower with blade stop controls . . . . . 1 year limited warranty
- Lawn Tractors, Yard Tractors, Rear Engine Riders, 3.0 and 3.5 HP Edgers, Straight Shaft Trimmers, and Backpack Blowers . . . . . 90 day limited warranty
- All Others ...... 45 day limited warranty

#### How Do You Get Warranty Service?

Should you feel your TORO product contains a defect in material or workmanship, contact the dealer who sold you the product or any Authorized TORO Service Dealer or TORO Master Service Dealer. The Yellow Pages of your telephone directory is a good reference source. The dealer will either arrange service at his/her dealership or recommend another Authorized Service Dealer who may be more convenient. You may need proof of purchase (copy of registration card, sales receipt, etc.) for warranty validation.

If for any reason you are dissatisfied with the Service Dealer's analysis of the defect in materials or workmanship or if you need a referral to a TORO Service Dealer, please feel free to contact us at the following address:

Toro Customer Service Department 8111 Lyndale Avenue South Bloomington, MN 55420-1196 612-888-8801

#### What Must You Do To Keep The Warranty In Effect?

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.

# What Does This Warranty Not Cover? and How Does Your State Law Relate To This Warranty?

There is no other express warranty except the TORO Starting Guarantee on GTS Engines. This express warranty does not cover:

- Cost of regular maintenance service or parts, such as filters, fuel, lubricants, tune—up parts, blade sharpening, brake and clutch adjustments.
- Any product or part which has been altered or misused or required replacement or repair due to normal wear, accidents, or lack of proper maintenance.
- Repairs necessary due to improper fuel, contaminants in the fuel system, or failure to properly prepare the fuel system prior to any period of non-use over three months.
- Pickup and delivery charges for distances beyond a 15 mile radius from an Authorized TORO Service Dealer (covered products only).

All repairs covered by this warranty must be performed by an Authorized TORO Service Dealer using Toro approved replacement parts.

Repair by an Authorized TORO Service Dealer is your sole remedy under this warranty.

The Toro Company is not 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. Some states do not allow exclusions of incidental or consequential damages, so the above exclusion 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 exported from 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 The Toro Company.