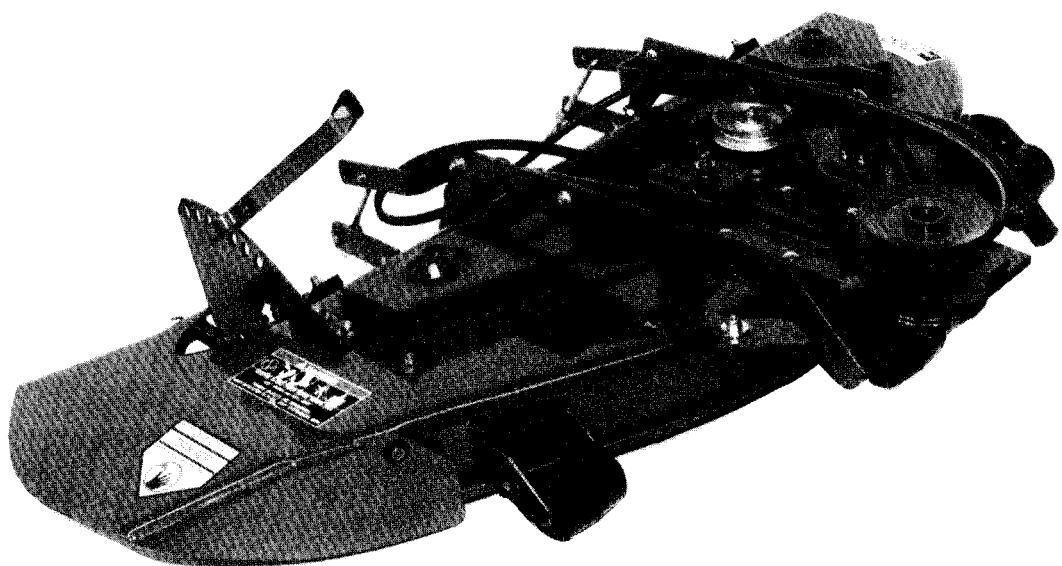


TORO[®]

MODEL NO. 78415 - 390001 & UP

INSTALLATION
INSTRUCTIONS

PROLINE
42 in. Side Discharge Mower - ZRT



2312

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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.



Each Side of Deck
Part Number 66-1340



Each Side of Deck
Part Number 76-4070

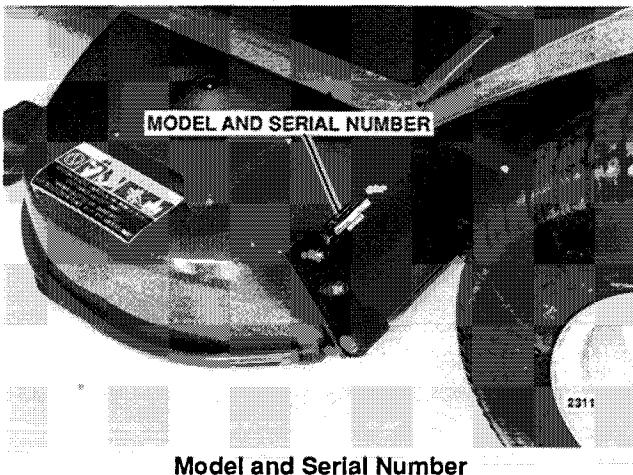


Discharge Chute
Part Number 43-8480

MODEL AND SERIAL NUMBER

A Model and Serial Number identifies your Toro ProLine 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 number from Model and Serial Number plate on your attachment.

MODEL	_____
SERIAL NO.	_____



Model and Serial Number

ATTACH DISCHARGE CHUTE

Locate discharge chute. Remove rear cotter pin, front nut and one plastic flat washer from deck (Fig. 1). Make sure second front washer and rubber bushing is retained on deck bolt. Hook spring end into small rear hole of discharge chute and install chute on rear deck pin using removed cotter pin. Install front of discharge chute on front deck bolt and secure using removed flat washer and nut. Check that discharge chute moves freely up and down with spring down pressure.

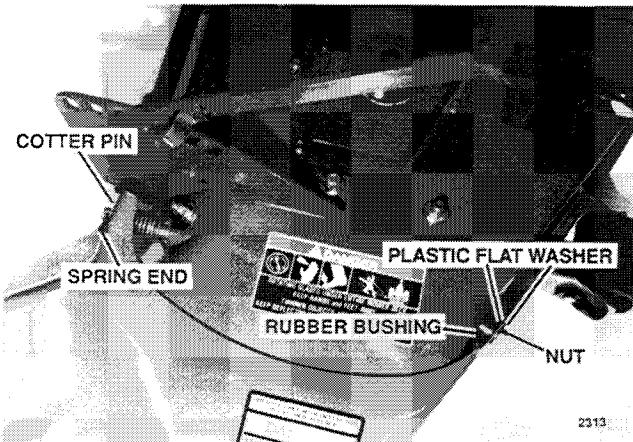


FIG. 1 Install Discharge Chute-Side Discharge Mower

MOWER INSTALLATION

ATTACH MOWER TO MACHINE

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

Blade nut Torque 80-100 ft. lbs. (112-140Nm)

Check that mower spindles, front belt pulley and belt arm pivot have been lubricated. Use a pressure grease gun and #2 Multipurpose lithium grease. See Maintenance section for locations.

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.

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

Position mower belt tensioning lever to outside of mower. Position height control lever in center adjustment. Place drive belt over top of front drive pulley.

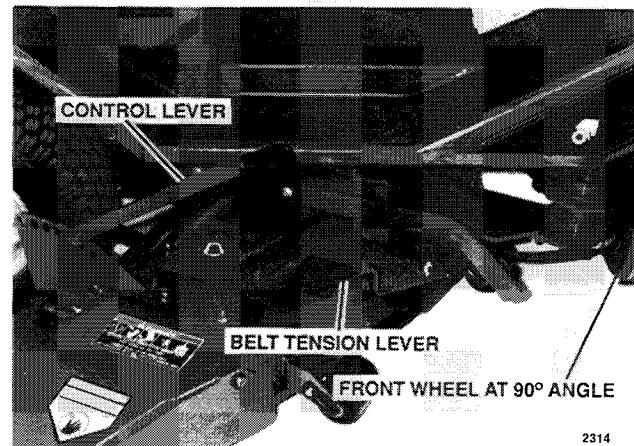


FIG. 2 Position Mower at Right Side of Machine

Slide mower under machine. Front pulley must pass between front Attach-A-Matic hitch and front shield (Fig. 3).

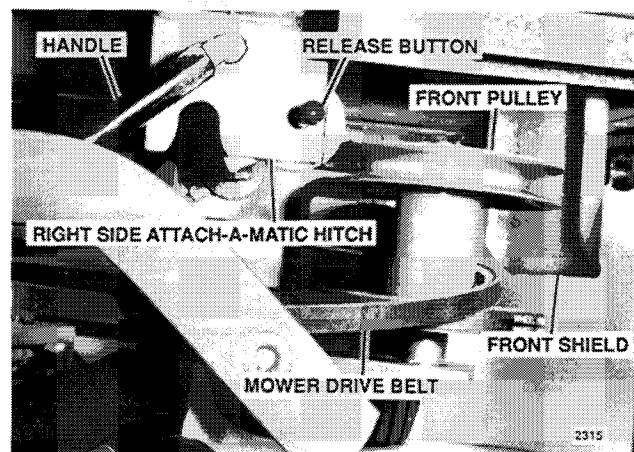


FIG. 3 Position Mower Under Machine

Open right and left Attach-A-Matic hitches (Fig. 3); push release buttons in and lower handles. Lower height control

lever down as far as it will go. Raise left and right front mower attaching arms into hitches (Fig. 4). Raise handles and be sure they lock in raised position. Position drive belt on front pulley.

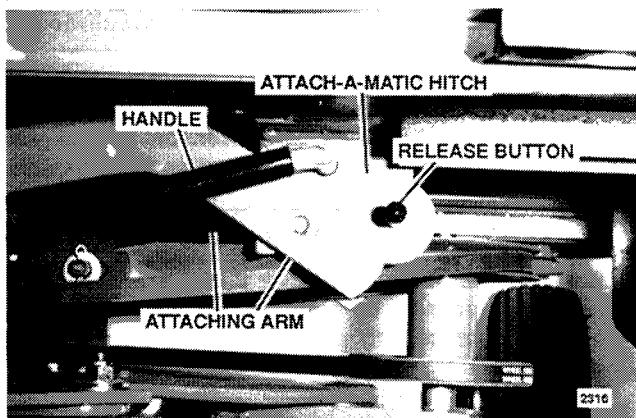


FIG. 4 Front Attach-A-Matic Hitch

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

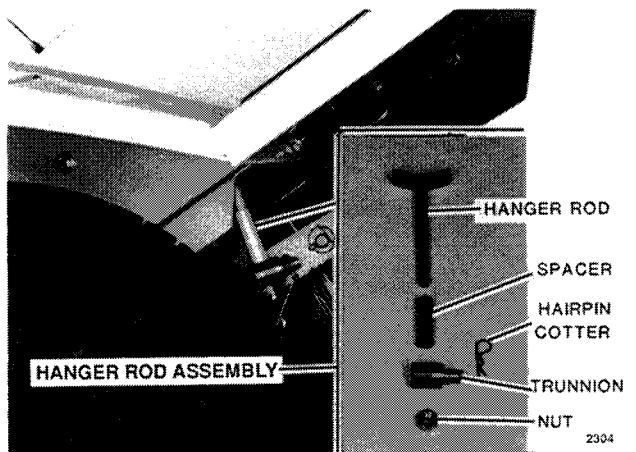


FIG. 5 Hanger Rods

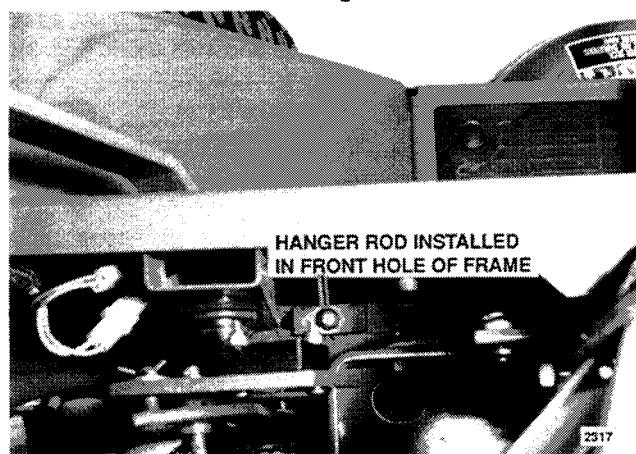


FIG. 6 Hanger Rod Installed

Install left and right trunnions on mower lift arms using hairpin cotters (Fig. 7). Adjust left and right nuts to obtain 3 1/4" from machine frame to bottom of trunnions.

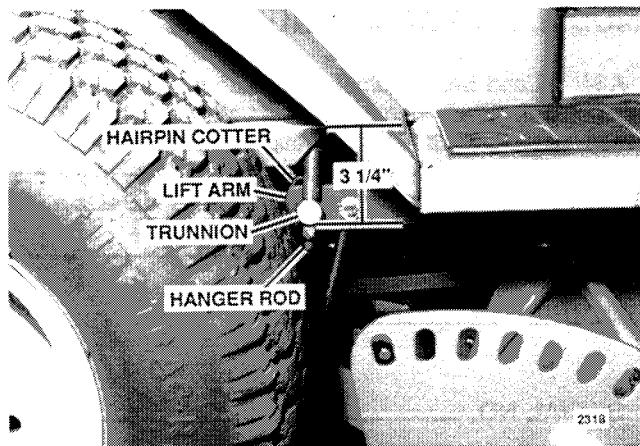


FIG. 7 Adjust Length of Rod

Install Mower drive belt and level mower as described under "INSTALL DRIVE BELT" and "LEVEL MOWER" sections in this manual.

INSTALL DRIVE BELT

Position height control lever in bottom hole of quadrant (Fig. 8).

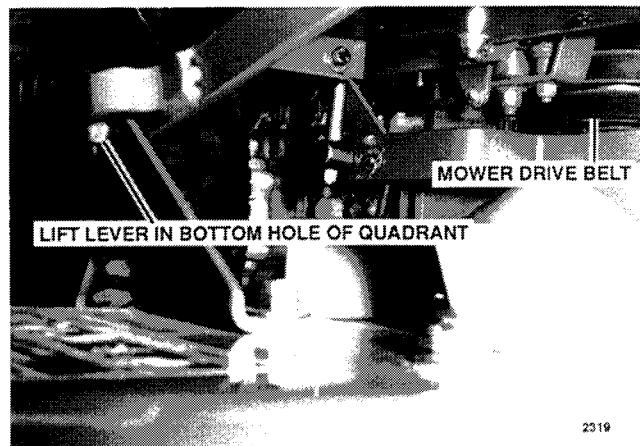


FIG. 8 Position Height Control Lever

Move belt tension handle to center of mower (Fig. 9). Position drive belt on top groove of front pulley.

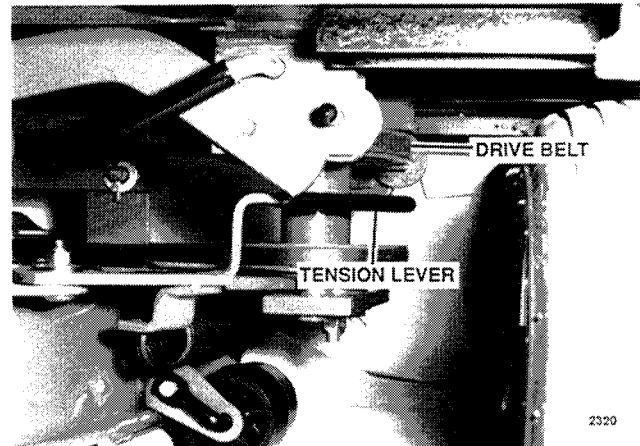


FIG. 9 Front Drive Belt Mounting

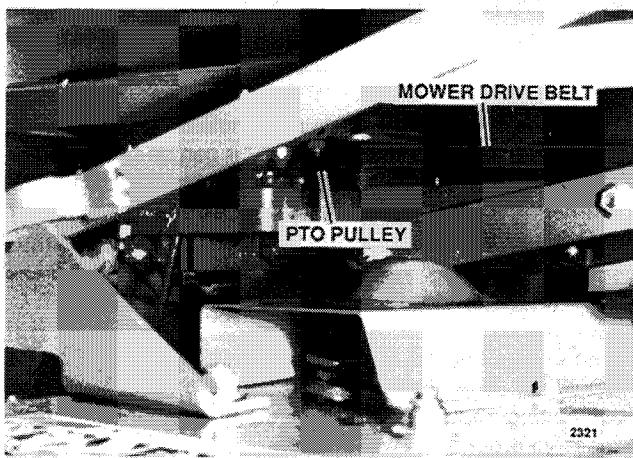


FIG. 10 Rear Drive Belt Mounting

Install belt on PTO pulley (Fig. 10). Move belt tension lever to operate position (Fig. 11). Check and adjust mower level as necessary.

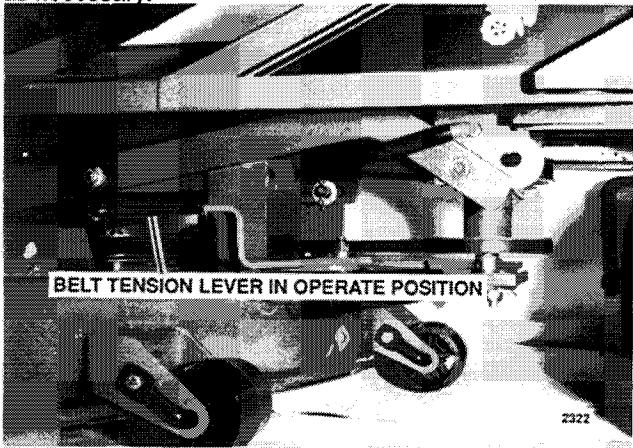


FIG. 11 Belt Tension Handle

MOWER REMOVAL

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

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

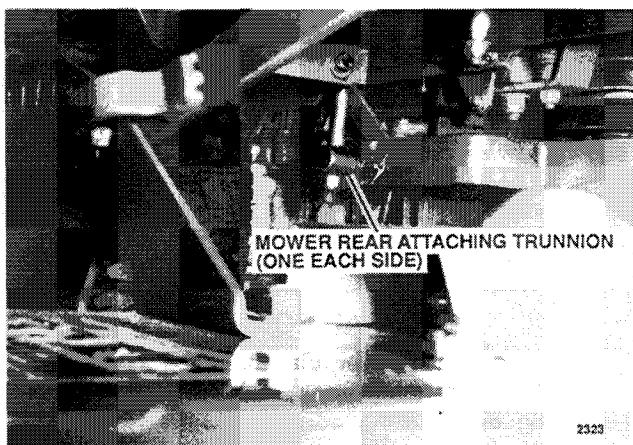


FIG. 12 Rear Mower Mounting

Open left and right front Attach-A-Matic hitches (Fig. 13). Raise lift lever into middle cutting height. Remove attaching arms from front Attach-A-Matic hitches. Turn front wheels to the right 90° and remove mower from right side of machine.

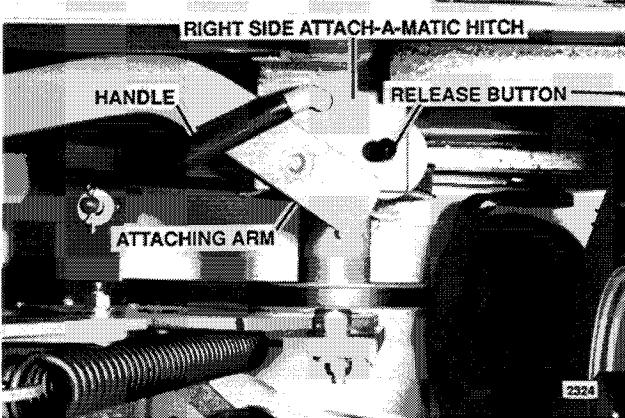


FIG. 13 Front Mower Mounting

LEVEL MOWER

Position machine on a level surface and adjust front and rear tire pressures to 8 PSI.

Adjust left and right hanger rod nuts to obtain 3 1/4 inches from frame to bottom of trunnions (Fig. 14). Place front wheels in forward operating position and place mower height control in 4th hole from top.

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 either 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 rod nuts evenly so that distance from surface to front and rear of blade tips are equal to 1/8 inch low in front (Figs. 15 & 17).

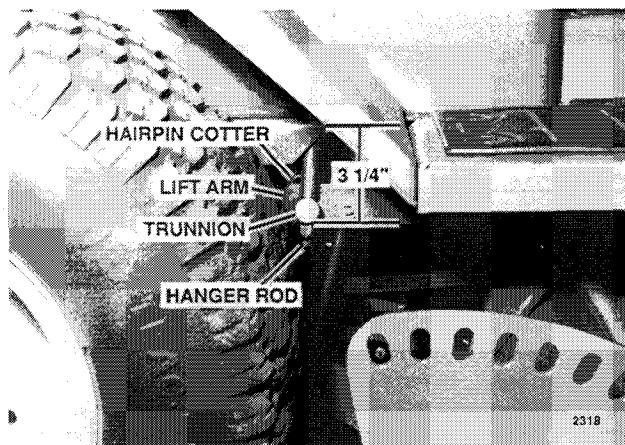


FIG. 14 Adjust Rod Length

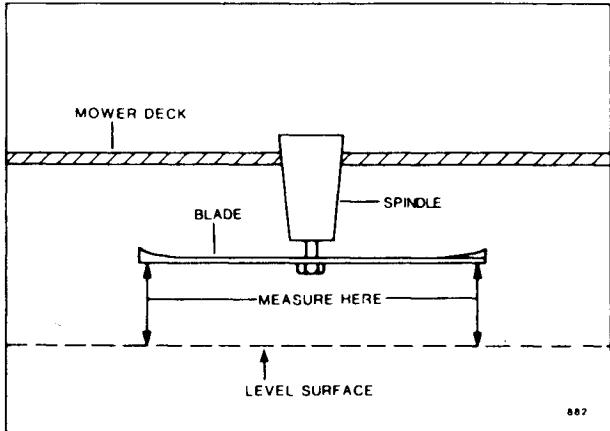


FIG. 15 Mower Level Measurement



FIG. 16 Side-To-Side Level Adjustment

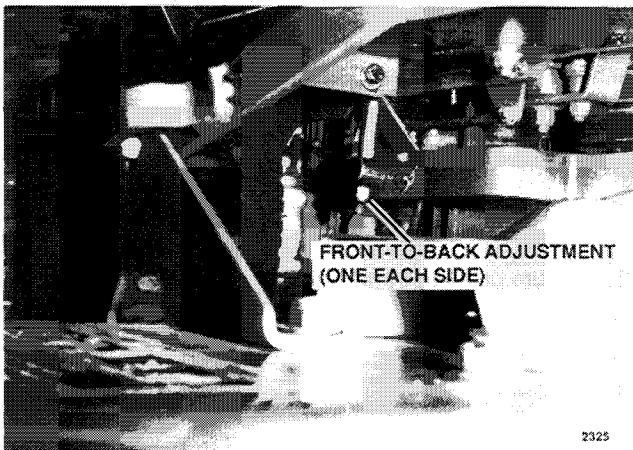


FIG. 17 Front-To-Back Level Adjustment

OPERATION

⚠ DANGER ⚠

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.

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

Move mower height control lever to hole in quadrant corresponding to desired cutting height. This can be set for cutting heights between 1 and 4 in (2.5-10.2cm) in 1/2 inch (1.3 cm) increments. Forth notch (center) slot on quadrant should be set at 2 1/2 in (6.4 cm) height, if not adjust lift rods to get dimension (Fig. 16). Recommended cutting height is 2 to 3 inches (5-7.6 cm) for most mowing situations.

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

To mow extra tall grass, raise mower to its highest position for a first cutting and use a slow ground speed. Then re-cut grass to normal height.

Under some unusual mowing conditions, mower may leave a "streak" of uncut grass, which can be caused by any of the following conditions:

1. Engine being operated at less than full throttle.
2. Dull blades or underside of mower deck clogged with matted grass.
3. Ground speed too high for conditions - adjust speed as necessary.
4. Streaking on turns indicates turns are being made too sharply.
5. If blades have been sharpened a number of times, they may be too short to "overlap" each other and must be replaced.

MAINTENANCE AND STORAGE

LUBRICATION

Mower spindle bearings, front belt pulley and belt tension arm pivot should be lubricated at 50 operating hour intervals (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 each spindle and pulley after 50 hours use. Grease fittings are conveniently located at top of spindle shafts and center of pulley.

Lubricate pivoting arms and levers at 25 hour intervals with light machine oil applied directly to wear surfaces. Anti-scalp rollers should NOT be lubricated.

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.

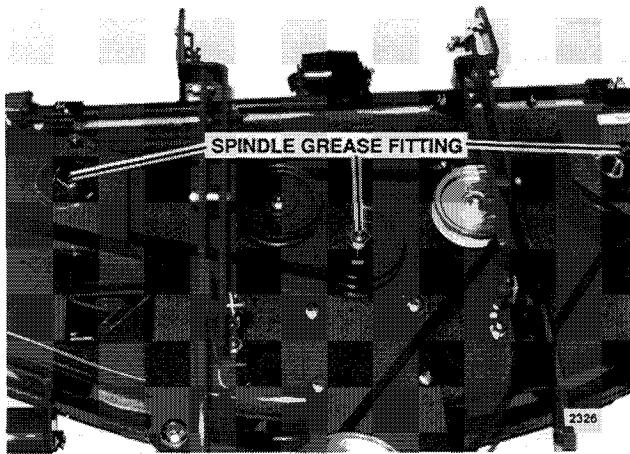


Fig. 18 Spindle Grease Fittings

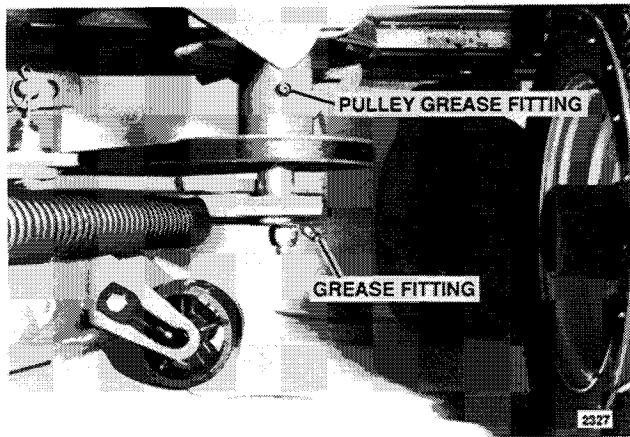


Fig. 19 Front Pulley and Pivot Grease Fittings

To obtain optimum mowing results, mower blades should be kept sharp and well balanced. To sharpen blades, remove mower from machine and invert mower. Remove blades from mower. A optional Toro Proline spindle blade wrench is available from your nearest dealer.

Hold spindle shaft hex nut with wrench while removing blade attaching nuts and washers from end of spindles. If spindle blade wrench is not available when servicing, 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 nuts to a torque of 80-100 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 REPAACEMENT

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

Be sure to purchase genuine Toro ProLine belts for replacement purposes as these belts are designed specifically for each application.

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

SPINDLE BELT REPLACEMENT

Remove mower from machine.

Remove two side belt covers and note routing of belt (Fig. 20). Remove spindle belt. Check to be sure all pulleys work freely. Refer to belt routing decal and install new Toro ProLine belt. Reinstall belt covers.

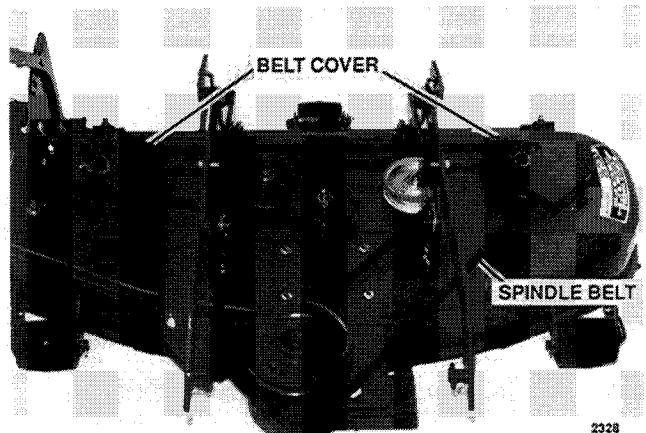


FIG. 20 Spindle Belt

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 ProLine Red" paint, available from your authorized Toro ProLine Dealer in aerosol cans.

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



ProLine
Products

THE TORO TOTAL COVERAGE GUARANTEE

A One Year Limited Warranty (A Full Two-Year Warranty for Residential Use)

What Is Covered By This Express Warranty?

The Toro Company promises to repair any TORO ProLine product used for commercial, institutional, or rental purposes if defective in materials or workmanship for a period of one year from the date of purchase. The cost of parts and labor are included as well as transportation within a 15 mile radius of a TORO ProLine Service Dealer.

What Products Are Covered By This Warranty?

ProLine products covered by this warranty include the ProLine 118, 120, 220, 616, 620, 724 riding products and wide area walk behind mowers and their cutting decks and accessories.

How About Residential Use?

TORO ProLine products used for residential use are covered by a full two-year warranty.

How Do You Get Warranty Service?

Should you feel your TORO ProLine product contains a defect in materials or workmanship, contact the dealer who sold you the product or any TORO ProLine Service Dealer. The Yellow Pages of your telephone directory is a good reference source; look under TORO Commercial Service Dealers. The Service 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 a Service Dealer's analysis of the defect in materials or workmanship or if you need a referral to a TORO ProLine 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 as described above. 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 a TORO ProLine Service Dealer.

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

Repair by a 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.