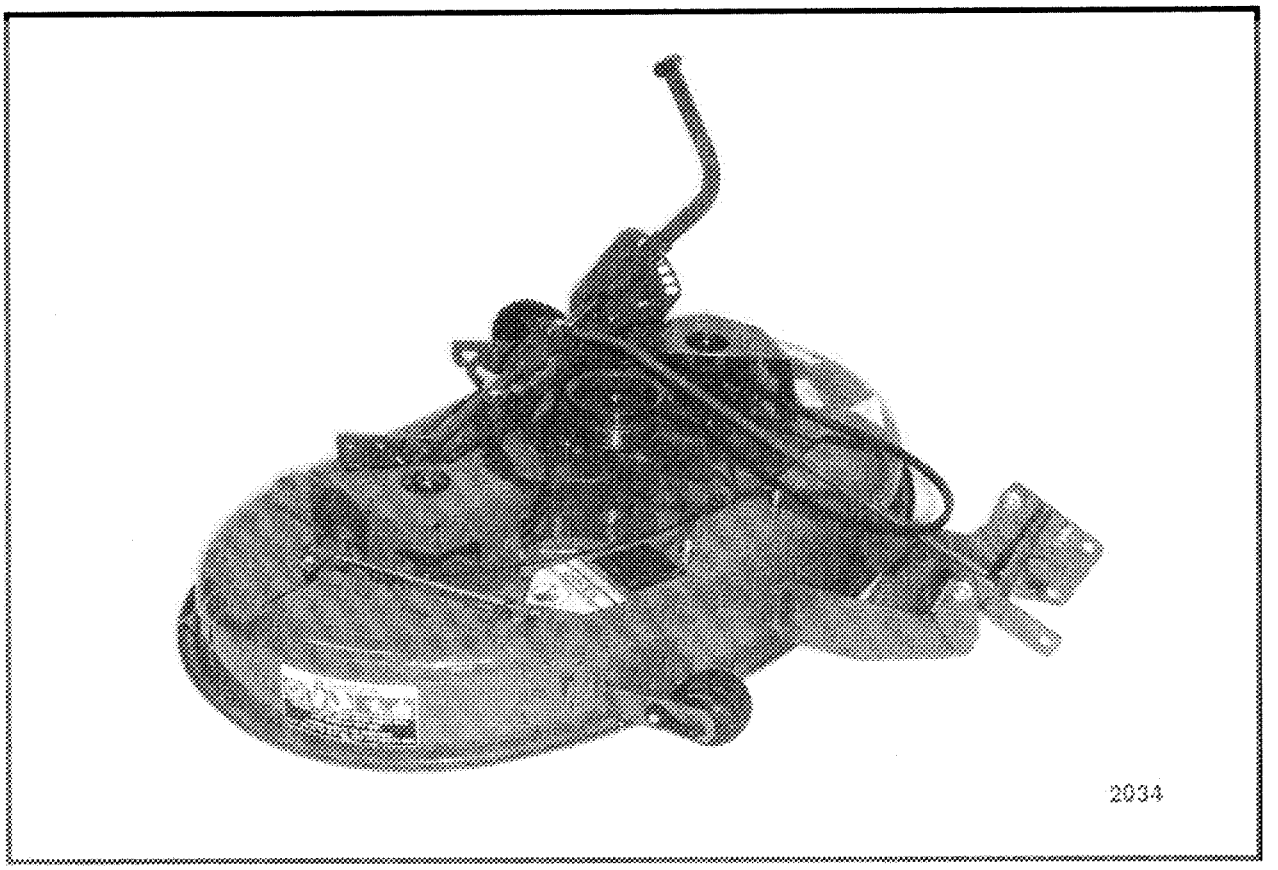
Operating & Maintenance Instructions



38 in. (96.5 cm) Recycler® Mower

200-Series Lawn Tractor Recycler® Mower

TORO®

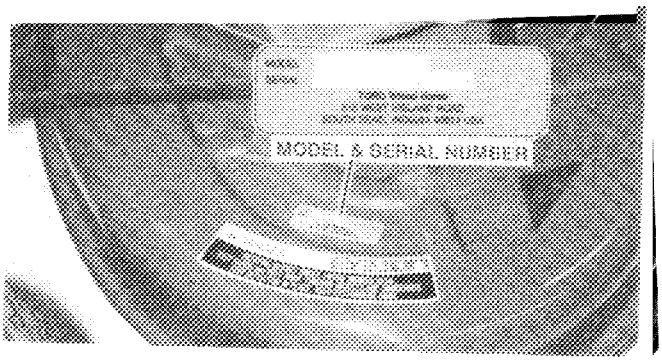
Wheel Horse®
Tractors & Riding Mowers

PRINTED IN U.S.A. 0391

PART NUMBER 810830R1

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. If plate is removed during repair operations it should always be replaced. For your reference, record numbers from Model and Serial Number plate on your attachment.



Model and Serial Number Plate

Model and Serial Number Plate

ASSEMBLY

INSTALL HEIGHT CONTROL LEVER

If not already done, install height control lever & spring on mower with plate and two carriage bolts and nuts (Fig. 1).

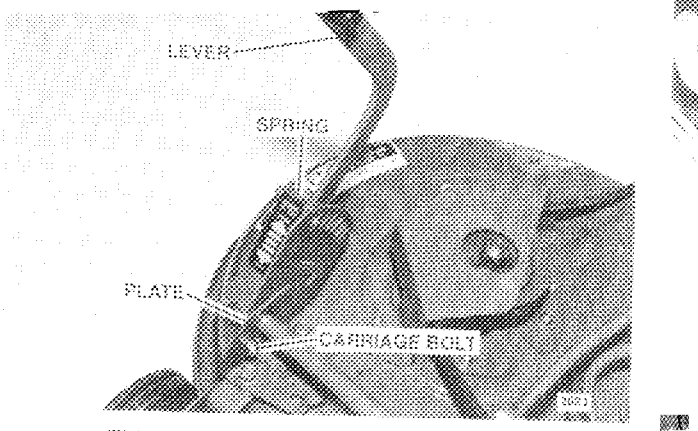


FIG. 1 Install Height Control Lever

FIG. 1 Install Height Control Lever

INSTALL LEVELING ROD

Locate leveling rod, roll pin, trunnion, flat washer and hairpin cotter. Screw trunnion on leveling rod, install trunnion on mower lever and secure with flat washer and hairpin cotter (Fig. 2).

Position drive belt as shown in Figure 2. Install front rod into slot in front mount and drive roll pin into rod so that 1/4 inch of roll pin extends past bottom edge of rod.

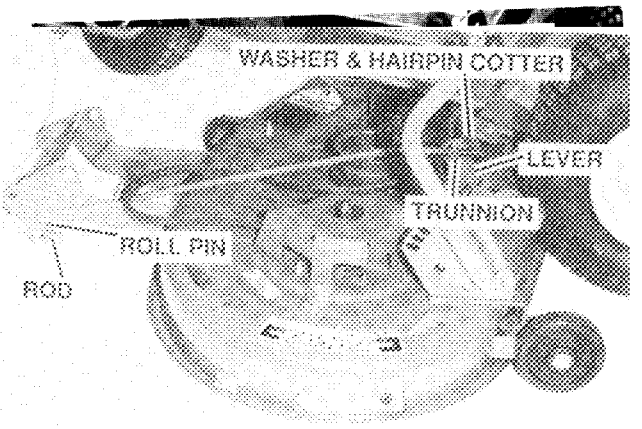


FIG. 2 Belt Position and Leveling Rod Roll Pin

INSTALLATION

IMPORTANT

Before installation, check that all mower blade nuts are tight:
Blade Nut Torque - 50 ft. lbs. (68 Nm) Minimum

Set mower height adjustment in top hole on quadrant.

Position mower on left side of tractor, turn front wheels all the way right and block left front wheel with two 2" x 4" wood blocks (Fig. 3).

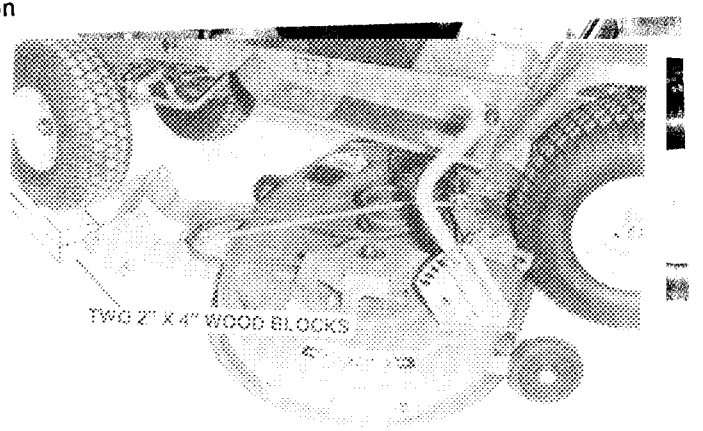
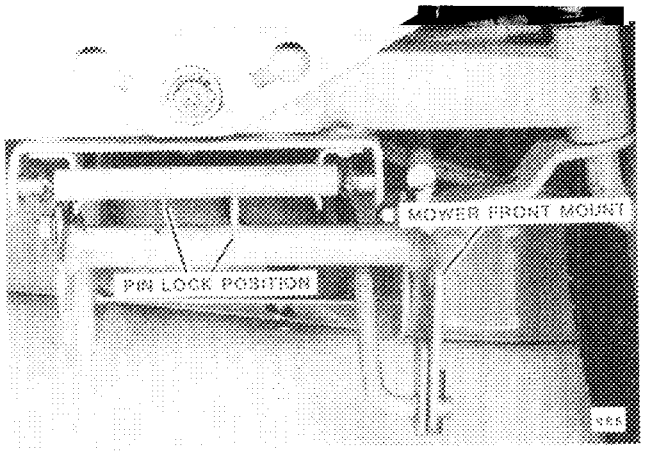


FIG. 3 Slide Mower Under Tractor

Slide mower under tractor and remove 2" x 4" from front wheel.. Straighten front wheels, move left and right spring loaded front mounting pins to center and lock in position (Fig. 4) Set mower in lowest height position and place a 2" x 4" under front center of deck. Raise mower front hitch hanger bracket, align mounting holes and release spring loaded pins (Fig. 5). Remove 2" x 4".

Remove hairpin cotters from left and right rear mounts and swing locks forward (Fig. 6). Lift rear of mower, insert hooks in hangers, position locking brackets on hangers and retain with hairpin cotters (Fig. 7).



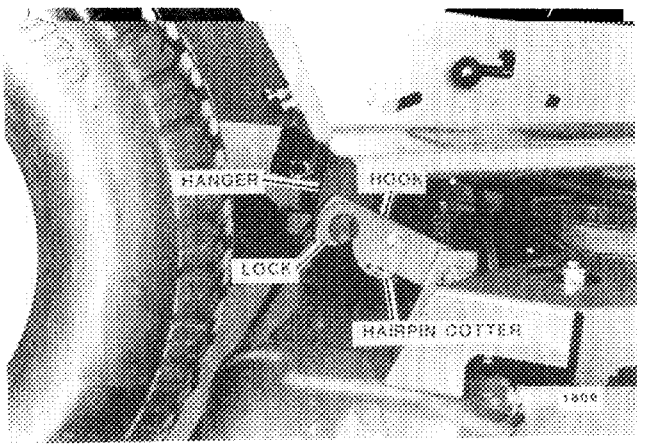


FIG. 7 Attach Rear Mounts

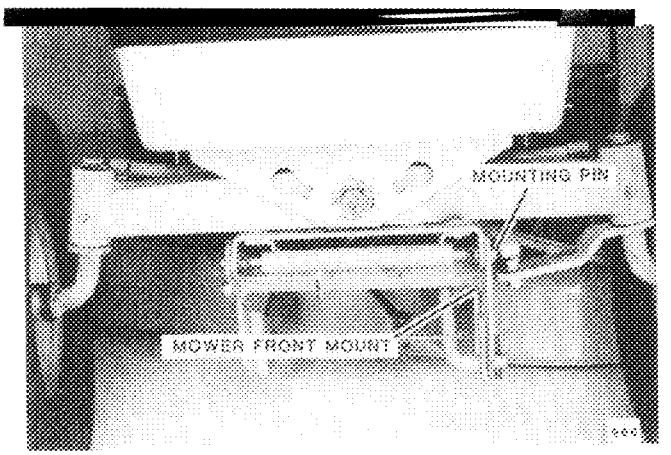


FIG. 8 Attach Front Mount

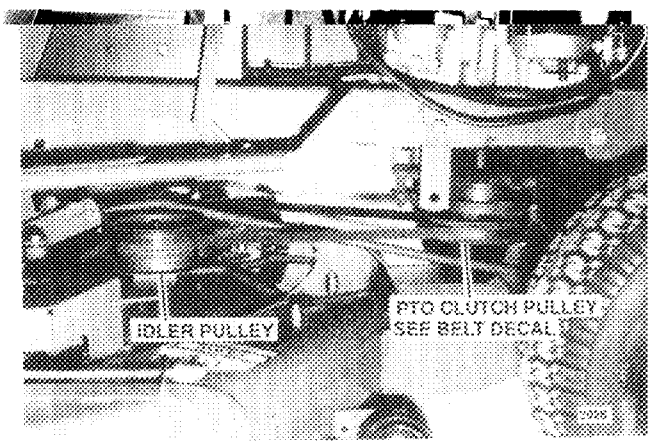


FIG. 9 Mower Belt Routing

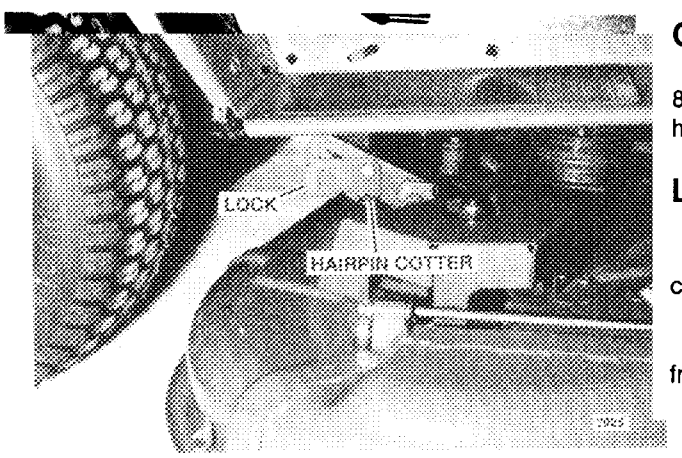


FIG. 6 Prepare Rear Mounts

Position drive belt on spindle and idler pulleys (Fig. 8). Pull on idler pulley and install drive belt on PTO clutch pulley. Level mower as described under "Level Mower".

ADJUSTMENTS

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.

CUTTING HEIGHT

Mower cutting height can be set from 1 - 3 1/2 inches (2.5-8.9 cm) by using height control lever. Recommended cutting height is 2-3 in. (5.7.6 cm) for most applications.

LEVEL MOWER

Park tractor on a smooth level surface

Check tires for proper inflation pressure - 12PSI (.85kg/cm^2).

Set mower in middle cutting height position.

Loosen left front mower attaching bolt so that bolt moves freely in slot (Fig. 9).

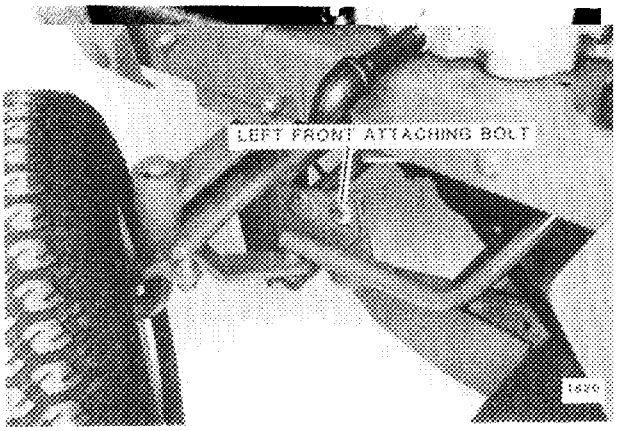


FIG. 9 Left Front Mower Attaching Bolt

Loosen right hand frame nut, turn eccentric screw in middle of adjustment and retighten nut (Fig. 10).

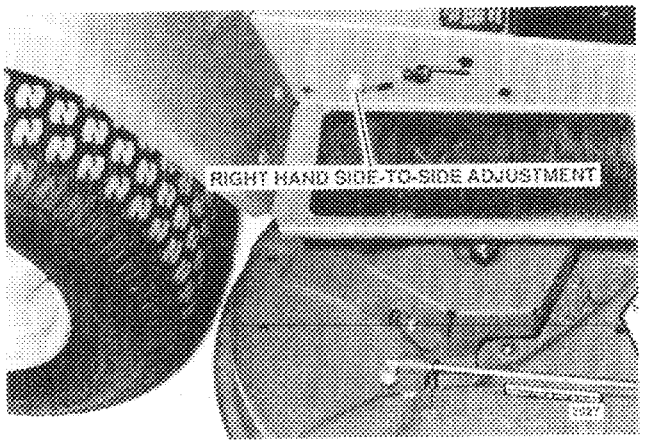


FIG. 10 Right Hand Frame Eccentric

Turn blades side-to-side.

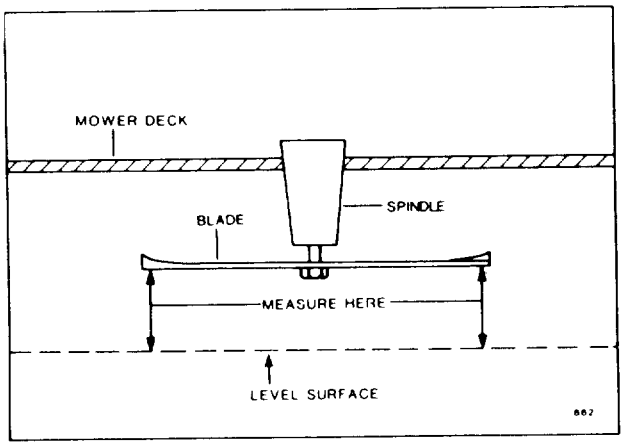


FIG. 11 Blade Level

Adjust and secure left hand eccentric screw so that distance between right and left blade tip ends and surface is the same (Figs. 11 & 12). If equal distance on blade tips to surface can not be achieved, secure left hand eccentric screw and readjust and secure right hand eccentric screw to get equal distance.



FIG. 12 Left Hand Frame Eccentric

After Side-to-side level is achieved and left and right frame eccentrics are tight, lightly shake left side of deck a few times to position left front attaching bolt in slot. Tighten left front attaching bolt (Fig. 9).

NOTE: If level can not be achieved with eccentric screws, adjust front attaching bolt up or down in slot and lock to achieve side-to-side level.

Turn blades front-to-rear and adjust trunnion on rod so that blade tips are equal distance from surface (Figs. 11 & 13). Support front of mower with wooden block to relieve pressure on trunnion and remove wood block after trunnion is reinstalled.



FIG. 13 Front-To-Rear Adjustment

MOWER REMOVAL

Set mower height adjustment in lowest notch on quadrant.

Pull on idler puller and remove drive belt from PTO clutch pulley (Fig. 8).

Remove left and right rear attaching mount hairpin cotters (Fig. 7). Rotate locks forward, lift up on rear of deck and release rear hooks. Reinstall hairpin cotters in locks.

Support front of mower with a wooden block.

Move left and right spring loaded front mounting pins to center of tractor and into lock position (Fig. 4). Lower front mount all the way down. Remove wood block. Set mower height adjustment lever in top notch.

Turn front wheels all the way right and place two 2" x 4" wooden blocks under left front tire. Slide mower out from under left side of tractor. Remove wooden blocks.

OPERATION

IMPORTANT

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

⚠ CAUTION ⚠

Mower can be equipped with a rear grass bagger attachment. Make sure steel discharge chute or Recycler® discharge cover is in place whenever bagger is removed.

⚠ CAUTION ⚠

To avoid loss of control, slow down when turning, backing and changing direction. Look behind tractor to ensure area is clear before backing.

RECYCLER® MOWER TIPS

RECYCLER® MOWER FEATURES

Your Recycler® mower has a new and completely different cutting concept. It leaves your lawn with a bagged look without bagging clippings.

Mower is equipped with special parts which increase ability to cut and recut grass clippings, leaves, and other yard debris into tiny particles which are injected down into the grass.

TIPS FOR CUTTING GRASS

Follow these instructions for best cutting results and lawn appearance:

1. Always use FAST (full) throttle when mowing.

2. Maintain sharp blades throughout the cutting season. A sharp blade cuts cleanly and without tearing or shredding grass blades like a dull blade. Tearing and shredding causes grass to turn brown at edges which impairs growth and increases susceptibility to diseases. About every 30 days, remove wire from tractor engine spark plug and check cutter blade for sharpness. File down any nicks on blade to restore its sharp edge.

3. Clean any residue from under side of mower deck and kickers after each use. If residue is allowed to build up in mower deck and on kickers, cutting performance may be unsatisfactory.

⚠ DANGER ⚠

Before removing any obstruction from mower deck, move PTO control into DISENGAGED position, shift into neutral and turn ignition key to OFF position. Remove wire from tractor engine spark plug to prevent possibility of accidentally starting engine.

4. When Recycler®mower is used to cut a lawn for the first time, remove about one inch or not more than one third of the grass blades. When cutting grass over six inches tall, cut twice to hide clippings down in grass.

5. If grass is ever allowed to grow slightly longer than normal, or if it contains a high degree of moisture, raise cutting height higher than usual and cut grass at this setting. Next, cut grass again using a lower normal setting. This method of cutting long grass results in an even distribution of clippings and an acceptable quality-of-cut.

6. In heat of summer, it is best to cut only about one third of the grass blades. Cutting more than one third of grass off is not recommended unless grass is sparse or it is late fall when grass growth begins to slow down. Cutting grass down to thatch will reduce room to hide cut grass and will greatly increase amount of loose clippings.

7. If cutting width of mower is wider than a mower previously used, raise height-of-cut setting one notch to ensure undulations in turf are not cut too short.

8. Very long or extremely wet grass can be cut, using specific operating techniques. Start by setting height-of-cut in highest position. Using slow speed and maximum throttle speed, move mower into grass and cut a swath that is only half as wide as mower deck. Slow forward movement occasionally to allow mower deck to clear itself. Cutting too much grass may clog mower deck. If mower deck does clog, disengage PTO, move to cut grass, raise deck to transport position and engage PTO to clear mower. Lower deck and move slowly over clumps to disperse. If cutting with side discharge chute installed, direct grass clippings toward area that was cut previously.

MOWING IN EXTREME CONDITIONS

Even with the Recycler® mower, you may encounter conditions where it is not possible to incorporate all grass clippings or leaves into grass.

Air is required to cut and recut grass clippings in mower deck. It also takes extra power to recut excess clippings trapped under deck. Do not set height-of-cut too low or totally surround mower deck by uncut grass after initial cut. Always try to have one side of mower deck free from uncut grass, allowing air to be drawn into mower deck. When making an initial cut thru center of uncut area, operate tractor at a slower speed and back up if mower starts to clog. It also may be advisable to convert Recycler mower to side discharge or install complete bagger.

STOPPING TRACTOR WHEN MOWING

If forward motion of tractor has to be stopped while cutting, a clump of grass clippings may be deposited on lawn. Follow this procedure for stopping tractor while cutting:

1. With blade engaged, move onto a previously cut area.

2. Move throttle control lever to SLOW position, stop motion of tractor, disengage PTO and rotate ignition key to OFF position.

MOW AT PROPER INTERVALS

Under most normal conditions you need to mow approximately every 4-5 days. However, grass grows at different rates at different times. This means that in order to maintain same height-of-cut, which is a good practice, your need to

cut more frequently in early spring; as grass growth rate slows in mid summer, cut only every 8-10 days. If you are unable to mow for an extended period due to weather conditions or other reasons, mow first with height-of-cut at a higher level; then mow again 2-3 days later with a normal height setting.

Alternate mowing direction. This helps dispense clippings over lawn for even fertilization.

TIPS FOR CUTTING LEAVES

In the fall, you can cut your leaves up into finely cut particles and inject particles down into grass. When spring arrives, leaf particles will have decomposed and restored valuable nutrients into soil.

When cutting is complete, always be sure that 50% of lawn shows through finely cut leaf cover. This may require one or more passes over leaves.

If there are more than five inches of leaves on lawn, raise mower one or two settings higher. This makes it easier to feed leaves under mower deck.

If leaves are not cut up finely enough to be hidden down in grass, make a second pass 90° to first pass.

If you cut up a lot of oak leaves, you may want to add lime to your grass in the spring. Lime reduces acidity of oak leaves.

SIDE DISCHARGING OR BAGGING

⚠ CAUTION ⚠

Never mow grass without side discharge chute, Recycler® discharge cover or complete bagger installed. If Recycler® discharge cover is removed from mower to side discharge or bag clippings, grass discharge chute or bagger elbow should be installed to route grass down toward ground or into bagger. If discharge chute, Recycler® discharge cover or bagger elbow become damaged, replace them. Without discharge chute, Recycler® discharge cover or complete bagger installed, discharged material could cause personal injury or blade contact could occur.

SIDE DISCHARGE USAGE

To use as a side discharge mower, remove Recycler® discharge cover (Fig. 14). Removed rod, washers and cotter pins are to be used on side discharge chute. Locate supplied side discharge chute and spring (Fig. 15). Position rod in front clip on mower deck. Start retainer rod into front part of discharge chute. Position spring in center slot of discharge chute with long end inward and small end resting on top of discharge chute. Slide retainer rod through center of spring, rear part of discharge chute, one flat washer and rear clip on deck. Secure rod with two washers and cotter pins. Discharge chute should be spring loaded when in down position.

To convert back to a Recycler® mower, reinstall Recycler® discharge cover (Fig. 14). Make sure bottom of discharge cover is locked inside mower deck.

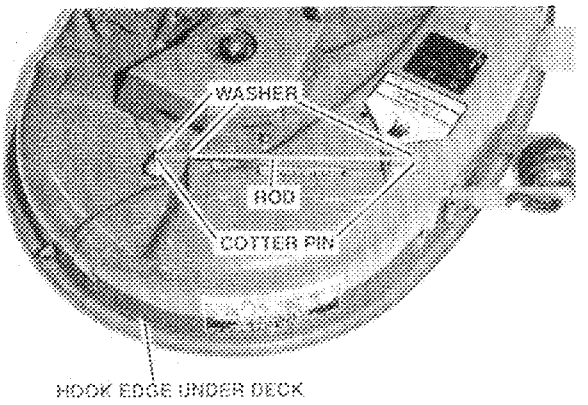


FIG. 14 Recycler® Discharge Cover

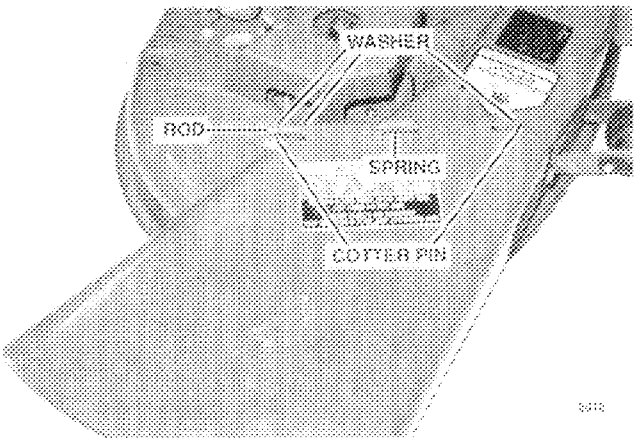


FIG. 15 Side Discharge Chute

BAGGER USAGE

The Recycler® mower's special features reduce clipping size, thus decreasing amount of grass to be disposed of and number of times bagger will have to be emptied. To bag grass, remove discharge cover and retain parts for reinstallation of discharge cover. Install complete bagger as outlined in bagger Operator's Manual.

To convert back to a Recycler® mower, reinstall discharge cover (Fig. 14). Make sure bottom of discharge cover is locked inside mower deck.

MAINTENANCE AND STORAGE

⚠ 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.

BLADE MAINTENANCE

To obtain optimum mowing results, mower blade should be kept sharp and well balanced. To sharpen blades, remove

mower from tractor. Remove blade attaching nuts from end of spindles and remove blades. A 2" x 4" wood block may be placed between side of mower deck and blade to "lock" it in position when loosening attaching hardware.

File or grind blades evenly. Take care to retain angle of original cutting edge. Blade balance can be checked on 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 50 ft. lbs. (68 Nm) Minimum. Reinstall mower on tractor.

LUBRICATION

Lubricate pivoting arms and levers after every 10 hours of operation, with light machine oil, applied directly to wear surfaces. Rollers should NOT be lubricated. Idler pulley arm should be greased at 50 hrs. (Fig. 16).

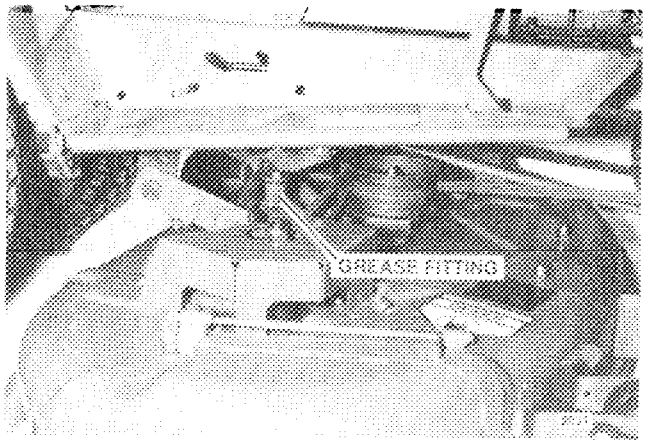


FIG. 16 Idler Pulley Arm Grease Fitting

Mower spindle bearings should be lubricated at 50 operating hour intervals. Use a pressure type grease gun and #2 multi-purpose lithium grease to lubricate spindle bearings. Four to six pumps of a hand type grease gun will usually fill each spindle after 50 hours use. Grease fittings are conveniently located on spindle housings (Fig. 17).

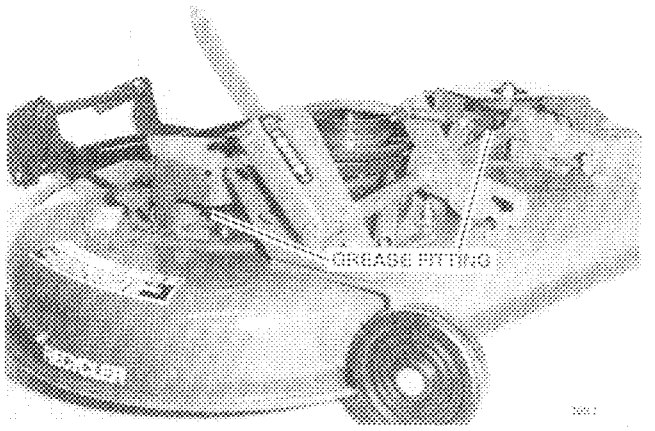


FIG. 17 Spindle Grease Fittings

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. Matted grass clogging underside of mower is often times a cause of uneven cutting. Remove mower from tractor to clean underside of mower.

REPLACEMENT MOWER DRIVE BELT

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

MOWER DRIVE BELT REPLACEMENT

Stop engine and remove spark plug wire. Lower mower all the way down. Pull on idler pulley and remove belt from PTO clutch pulley (Fig. 8). Block front of mower and remove leveling rod trunnion from mower (Fig. 18). Remove right and left belt guards. Remove drive belt from mower. Position belt on mower as shown in figure 18. Reinstall leveling rod trunnion on mower. Reinstall belt guards. Pull on idler pulley, install belt on PTO clutch pulley and remove block.

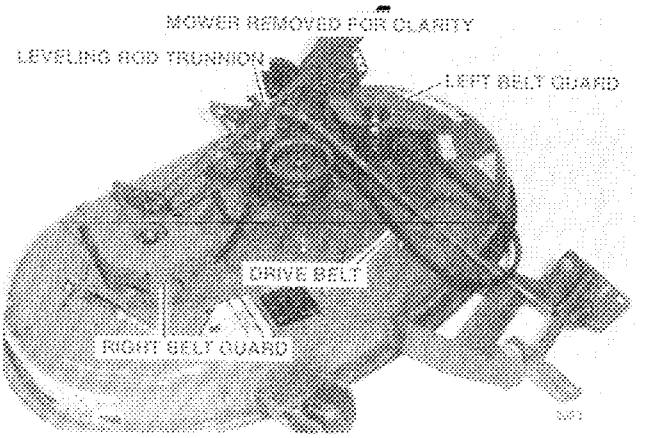


FIG. 18 Drive Belt Routing

GENERAL CARE AND STORAGE

Top of mover deck should be washed with a garden hose after each use. A mild automotive detergent may be used to remove stubborn dirt. After washing, allow mower to dry, then start tractor 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 dealer in aerosol cans.

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

A separate parts manual for your Toro Wheel Horse product can be obtained by completing the attached form below. You will receive an invoice with manual.

PUBLICATIONS
TORO WHEEL HORSE
8111 Lyndale Ave. So.
Bloomington, Minnesota 55420

PARTS MANUAL ORDER FORM

Enter number shown on your attachment:

MODEL
SERIAL

TORO Wheel Horse
515 WEST IRELAND ROAD
SOUTH BEND, INDIANA 46614 USA

MAIL LABEL -- PLEASE PRINT CLEARLY

TO:

Name _____

Address _____

_____

City State Zip

Product information and specifications are shown herein as of the time of printing. Toro Wheel Horse reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligation.

TORO®

Wheel Horse®

Tractors & Riding Mowers