FORM NO. 3315-414

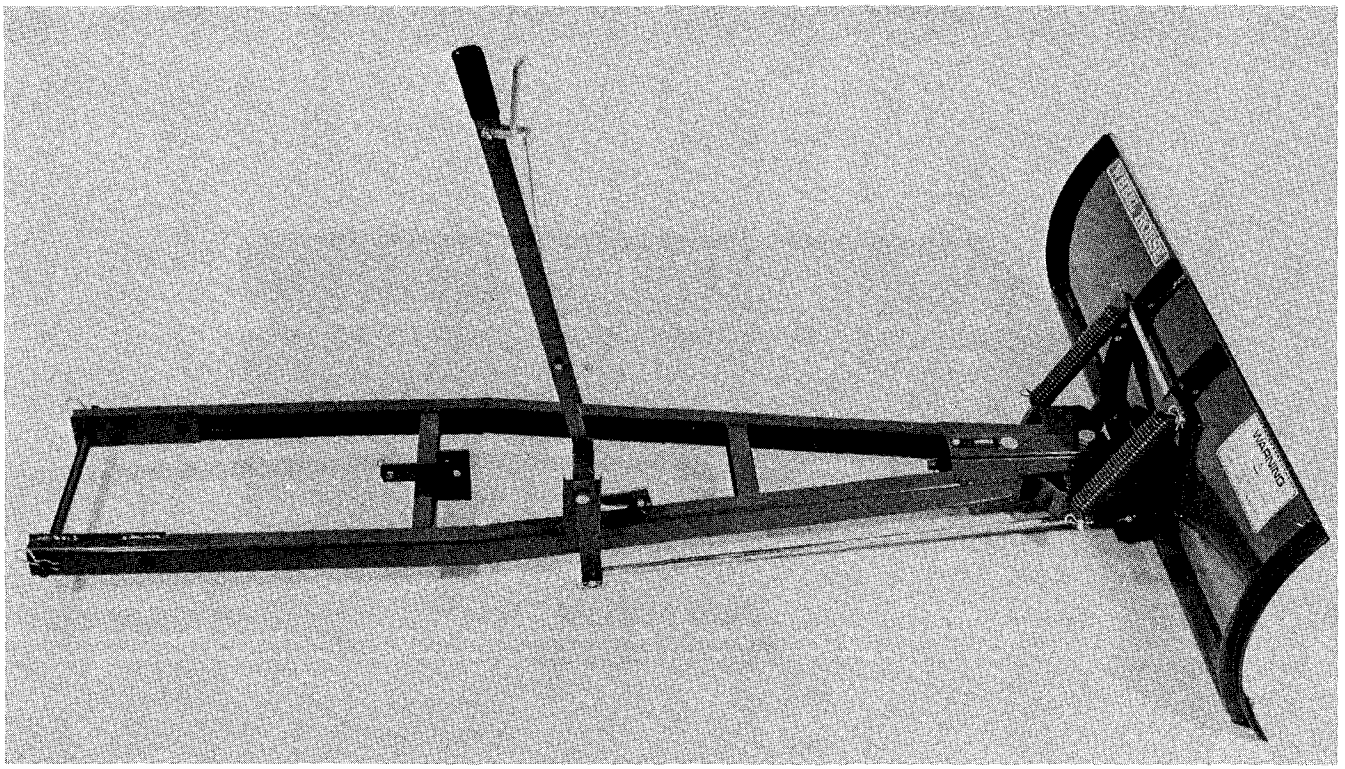
TORO®

MODEL NO. 79350 - 3900001 & UP

INSTALLATION INSTRUCTIONS

WHEEL HORSE®

48" (122 cm) Garden Tractor Snow/Dozer Blade



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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.



Back of Blade
Part No. 92-1745

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 No: _____

Serial No: _____

MOUNTING INFORMATION

As shipped, this Snow/Dozer Blade can be installed on 1973 and later tractors. To install this blade on 1972 and prior tractors, a long lift link, P/N 7706, must be purchased. Early model tractors with a wheel base **under** 45.5 in. (116 cm) also require mounting shaft, P/N 7701, and two hairpin cotters, P/N 933506.

ASSEMBLY

There are two sizes of hairpin cotters used, which will be identified as "Large" and Small" during assembly.

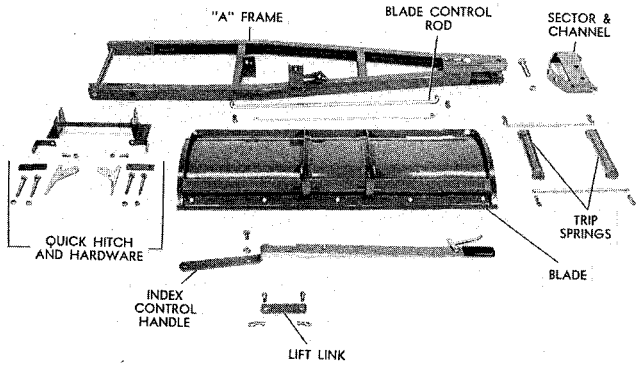


FIG. 1 Snow/Dozer Blade Package

MOUNTING SHAFT (Fig. 2)

If applicable (See "Mounting Information", above), install the P/N 7701 mounting shaft in the pair of holes ahead of the welded shaft at the rear of the "A" frame (Fig. 2A). Secure with two hairpin cotters.

Attach lower index rod to index pin as shown in Figure 2B. Bend the end of the rod over to hold it in place.

BLADE CONTROL ROD, FRONT (Fig. 3)

Locate the sector and channel assembly, the blade control rod, and one large hairpin cotter. The sector and channel has a wide channel plate across the top and a narrow channel plate across the bottom. With the narrow channel plate facing up, insert either end of the blade control rod into the smaller hole located at the end of the plate (Fig. 3). Secure with the hairpin cotter.

SECTOR AND CHANNEL (Fig. 4)

Apply a liberal amount of general purpose grease to the sector and channel. Attach the sector and channel assembly to the "A" frame using the 3/4-16 x 3 3/4 hex bolt and secure with the 3/4-16 hex nut. Leave the bolt loose enough to allow the sector and channel to operate freely (Fig. 4).

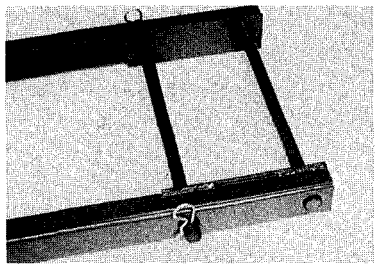


FIG. 2A Mounting Shaft Installation (Early Tractors with Wheel Base Under 45.5 in. /116 cm)

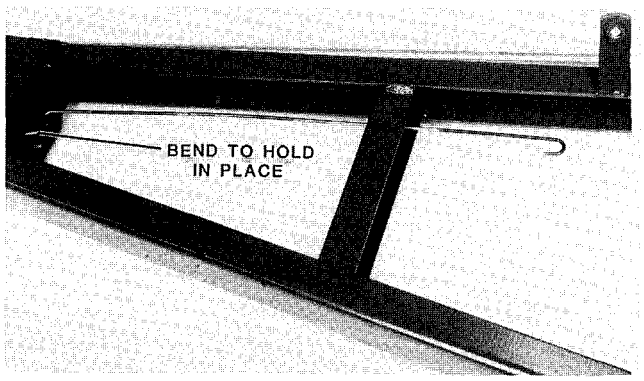


FIG. 2B Attach Lower Index Rod

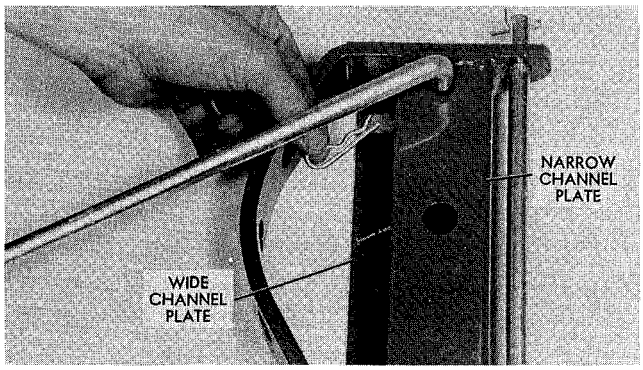


FIG. 3 Install Blade Control Rod

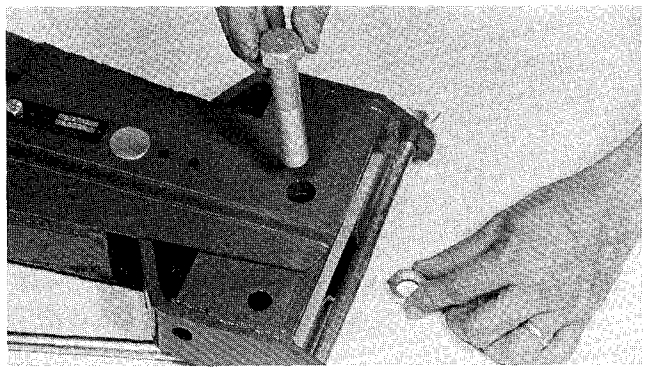


FIG. 4 Attach Sector & Channel to "A" Frame

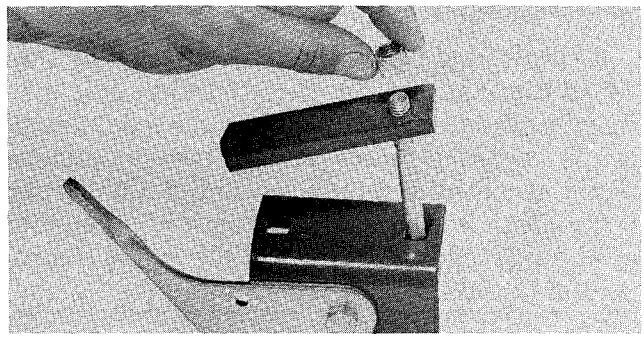


FIG. 6 Install Metal Links

ASSEMBLE REAR "QUICK HITCH" (Figs. 5 & 6)

Locate the hitch mounting bracket, two latching plates, two metal links, two 3/8-16 x 1 hex bolts, two 3/8 washers, six 3/8-16 E.S. nuts, two angle spacers, and four 3/8-16 x 3 1/2 carriage bolts.

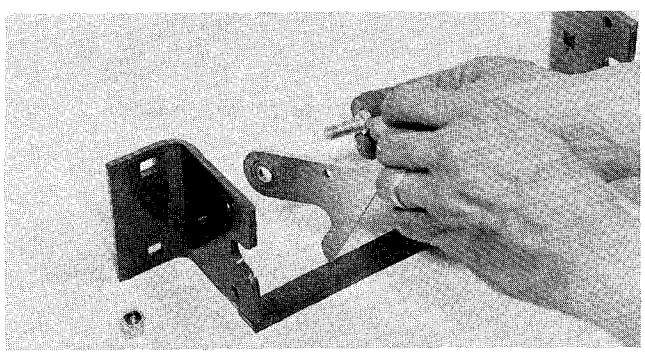


FIG. 5 Attach Latching Plates to Mounting Bracket

Attach the two latching plates to the hitch mounting bracket using the 3/8-16 x 1 hex bolts, 3/8 washers and 3/8-16 E.S. nuts. The washers are used between the mounting bracket and the latching plate. The latching plates are installed on the inside of the mounting bracket (Fig. 5). Tighten bolts so the latching plates will move with a small amount of force.

Install the two metal links on the hitch mounting bracket using two 3/8-16 x 3 1/2 carriage bolts and two 3/8 -16 E. S. nuts. Install the bolts in the holes farthest from the latching plates (Fig. 6). Finger tighten nuts only.

ATTACH REAR "QUICK HITCH" TO AXLE (Figs. 7& 8)

From the rear of the tractor, install rear hitch assembly to the tractor's rear axle housings. This is done by placing the hitch assembly under the tractor's transmission so the latch plate ends face rearward. Turn the metal links toward the front of the tractor (Fig. 7) .

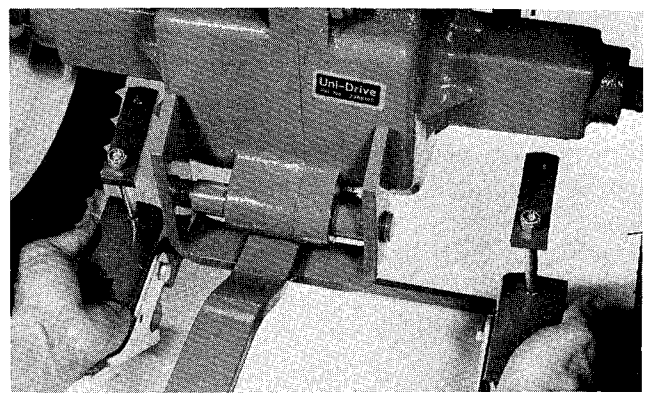


FIG. 7 Attach Rear Hitch

Raise the rear hitch so the hitch touches the bottom of the axle housing. Turn the metal links rearward so they hold the hitch in place. Install the two remaining 3/8-16 x 3 1/2 carriage bolts in the rear mount holes and secure with two 3/8-16 E.S. nuts.

Note: On 8-Speed tractors, use the angle spacers to take out undue slack between the hitch and the rear axle. Install the angle spacers between the metal links and the tractor axle housings.

Center the rear hitch evenly between the rear wheels. Tighten the 3/8-16 nuts evenly to insure maximum strength.

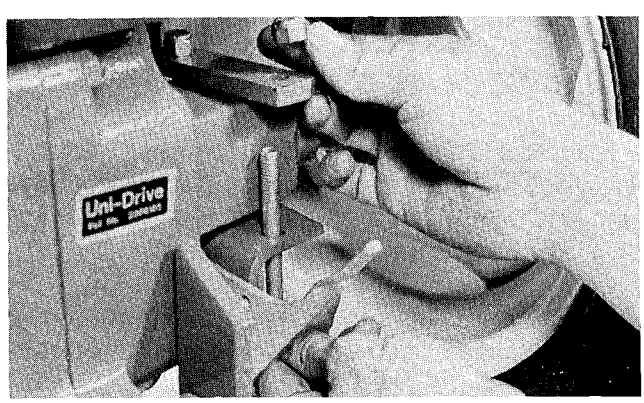


FIG. 8 Install Two 3/8-16 x 3 3/4 Carriage Bolts & Nuts

INSTALL "A" FRAME TO TRACTOR (Figs. 9 & 10)

Slide the "A" frame under the tractor so the rear mounting shaft is directly under the rear hitch assembly. Open both sides of the hitch by lifting the latching plates. Raise the rear of the "A" frame so the mounting shaft slips into the hitch bracket. Close the hitch by pushing down on both latching plates (Fig. 9). Tighten the bolts that secure the latching plates.

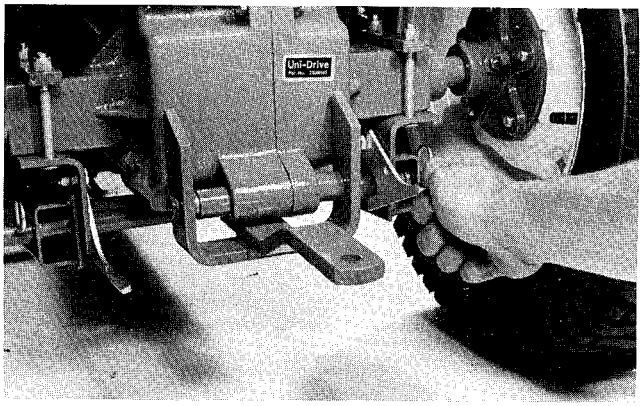


FIG. 9 Attach "A" Frame to Hitch

The supplied short lift link is used on 1973 and later tractors, and is used for normal operation. Lower the tractor's attachment lift and install the short lift link as shown in Fig. 10. Retain with two clevis pins and two small hairpin cotters.

If the tractor is a 1972 or prior model which requires the long lift link (See Mounting Information), lower the tractor's lift lever and install the lift link as shown in Figure 19.

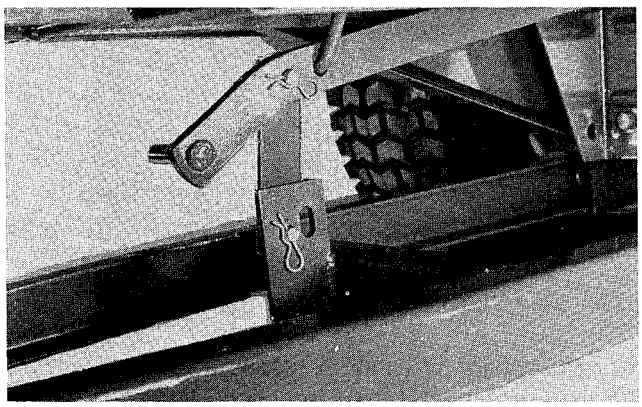


FIG. 10 Attach Lift Link -1973 and Later Models

INSTALL BLADE TO "A" FRAME (Figs. 11-13)

Raise the "A" frame with the attachment lift. Locate the blade assembly, the two trip spring assemblies, one short mounting rod, two long mounting rods, four large hairpin cotters, and two cotter pins. Align the lower mounting holes of the blade assembly with the front holes of the sector and channel assembly. Install the short mounting rod and secure with two cotter pins (Fig. 11).

Mount the trip spring assemblies by inserting the mounting rod through the second hole from the top of the blade. Secure with two hairpin cotters (Fig. 12).

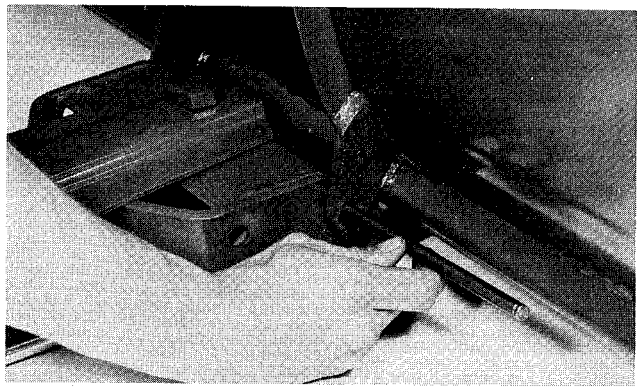


FIG. 11 Install Lower Mounting Rod

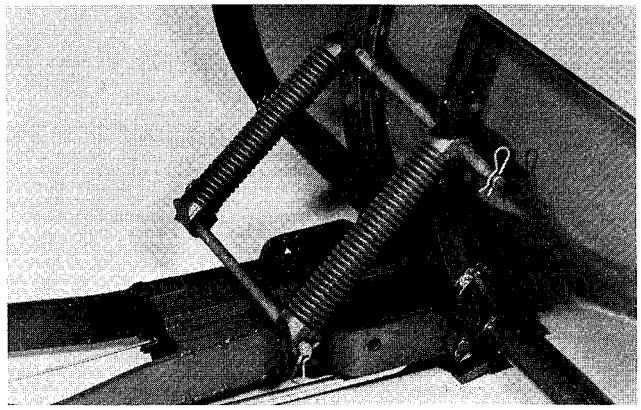


FIG. 12 Attach Trip Springs to Blade

Mount the bottom of the springs to the rear hole of the sector and channel assembly (Fig. 13). Secure with two hairpin cotters.

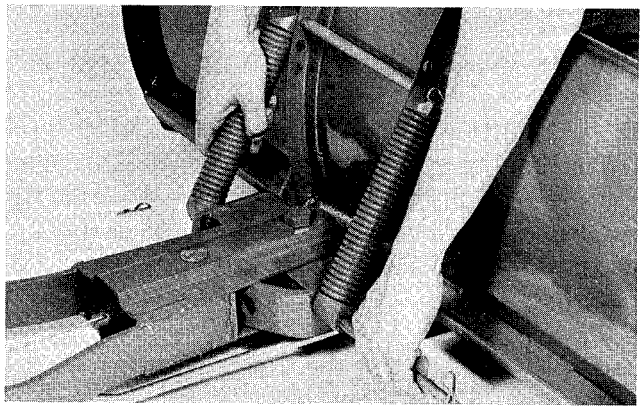


FIG. 13 Attach Trip Springs to Sector and Channel Assembly

ATTACH INDEX HANDLE TO "A" FRAME (Fig. 14)

Attach the index handle to the "A" frame using a 1/2-13 x 1 bolt and 1/2-13 nut. The handle has a 2 in. (5 cm) offset. Mount the handle with the top of the offset inboard for all 1974 and later manual shift transmission models with separate clutch and brake pedals. Mount the handle with the top of the offset outboard for all other models (Fig. 14).

Thread the bolt into the mounting bracket so that the index handle is still free to move and then install the jam nut securely.

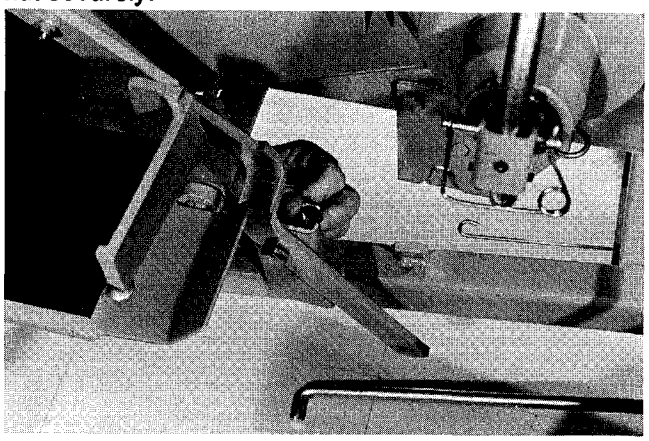


FIG. 14 Mount Index Handle to "A" Frame

ATTACH BLADE CONTROL ROD TO INDEX HANDLE (FIG. 15)

Insert blade control rod into hole at bottom of the index handle. Secure with a large hairpin cotter (Fig. 15).

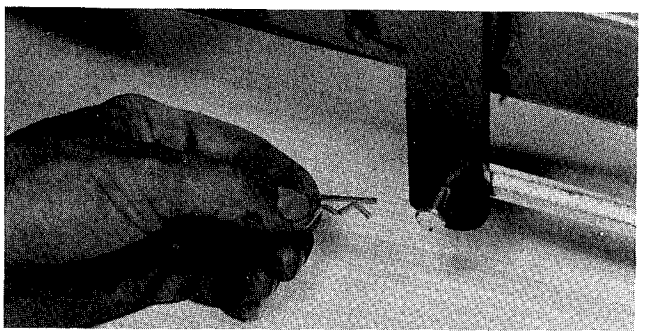


FIG. 15 Attach Blade Control Rod to Index Handle

INSTALL INDEX RODS AND PLATE (Figs. 16 & 17)

Check that the eyebolt on the index handle is mounted with the "eye" on the inside of the handle. Slide the top index release rod through the eye bolt. Hook this rod and the lower index release rod to the triangular index plate (Fig. 16).

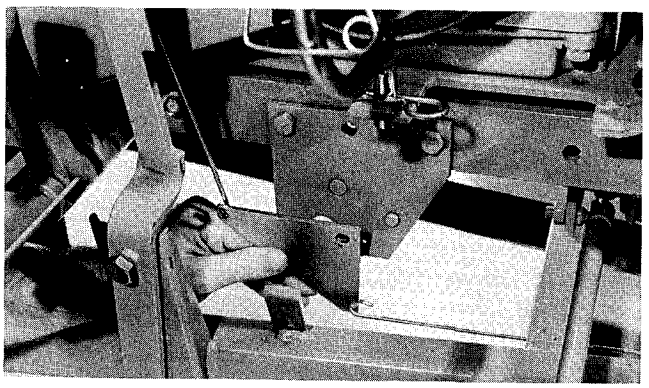


FIG. 16 Connect Release Rods to Index Plate

Attach the index plate to the mounting bracket on the "A" frame with a 3/8-16 x 1 bolt, 3/8 washer and 3/8-16 nut. The washer should be placed between the index plate and mounting bracket. Thread the bolt into the mounting bracket so that the index plate is still free to move, then tighten the nut (Fig. 17).

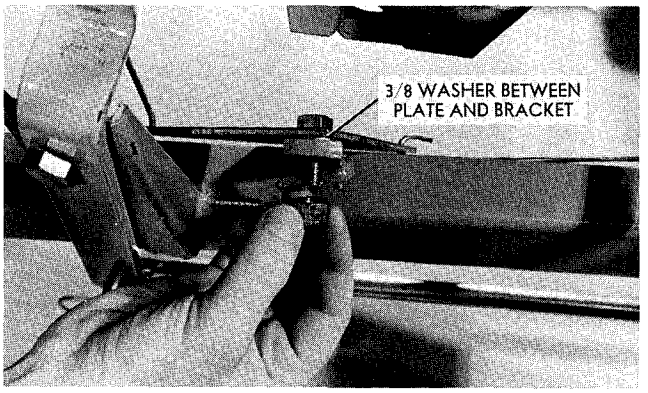


FIG. 17 Install Index Plate

ATTACH RELEASE LEVER TO INDEX HANDLE (Fig. 18)

Locate the release lever, the 1/4-20 x 1 bolt and 1/4-20 hex nut. Connect the index release rod to the release lever and attach the lever to the front side of the index handle, installing the bolt through the lower hole on the handle. Finger tighten the nut (Fig. 18).

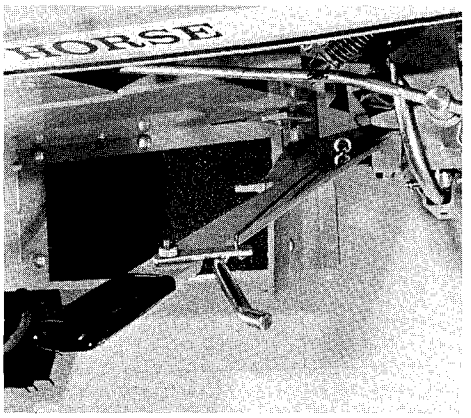


FIG. 18 Attach Release Lever to Index Handle

Test the action of the index mechanism by squeezing the release lever and index handle together. The blade should move right and left as the index handle is moved forward and backward. If the blade remains locked in position, move the release lever to the upper hole position on the index handle. Now tighten the bolt and nut on the release lever so that it is still free to move. Lubricate all moving parts of the linkage with light machine oil.

REMOVAL

The blade is easily removed from the tractor by following these simple steps.

1. Lower attachment lift and disconnect lift link from tractor.

2. Open the rear "Quick Hitch" to release the "A" frame from the tractor.

3. Either lift right front wheel of tractor with an overhead hoist so the "A" frame can be maneuvered from under the tractor, or disassemble the index handle so the "A" frame can be slid out from under the tractor.

Rear "Quick Hitch" need not be removed from tractor.

INSTALLATION

After the initial assembly, the blade can be installed quickly by following these simple steps:

1. Lift the right front wheel of the tractor with an overhead hoist so the "A" frame can be maneuvered under the tractor or disassemble the index handle so the "A" frame can be slid under the tractor.

2. Attach the "A" frame to the rear "Quick Hitch". Tighten bolts that retain latch plates.

3. Attach lift link. Reassemble index handle.

OPERATION AND ADJUSTMENT

Although this blade is primarily designed for snow removal, it can also be used for pushing dirt, sand, gravel, or other loose substance. Tire chains and wheel weights are available from your dealer and will minimize tire slippage. Clearing snow from a driveway is usually done by making first pass down center of drive, and pushing snow off to sides on the following passes.

Blade can be indexed to 5 positions from driver's seat. This is done by squeezing release lever and either pushing, or pulling handle to desired position. Releasing lever will lock the blade in position. The blade can be lifted or lowered by using the attachment lift.

The blade "Trip Springs" can be mounted in one of four positions on the blade. The top position provides maximum scraping aggressiveness. The bottom hole provides the minimum aggressiveness and is mostly used for leveling loose material. The second hole from the top is generally recommended for snow removal.

⚠ CAUTION ⚠

Avoid hitting solid objects with blade, as this could result in damage to the blade and injury to the operator. Always travel at a safe, slow speed.

On 1973 and later models the short lift link should be installed between the mower lift arm and the snow/dozer blade "A" frame, as shown in Fig. 19. For maximum blade height, relocate the trunnion on the lift chain (or lift rod) to the end hole of the lift bellcrank (Fig. 19).

The blade can be set up for "down pressure" by purchasing a long lift link (P/N 7706). Remove the lift chain (or lift rod) and trunnion from the tractor, and install the long link as shown in Fig. 19.

For 1972 and prior models, install the long lift link as shown in Fig. 19.

⚠ CAUTION ⚠

When moving trunnion for maximum blade height, check models with separate (right hand) brake pedal for interference between the brake pedal and the index handle. Pull the index handle back to its extreme rearward position and raise the blade. If the index handle prevents normal brake pedal travel, loosen the nut on top of the trunnion until the interference is eliminated.

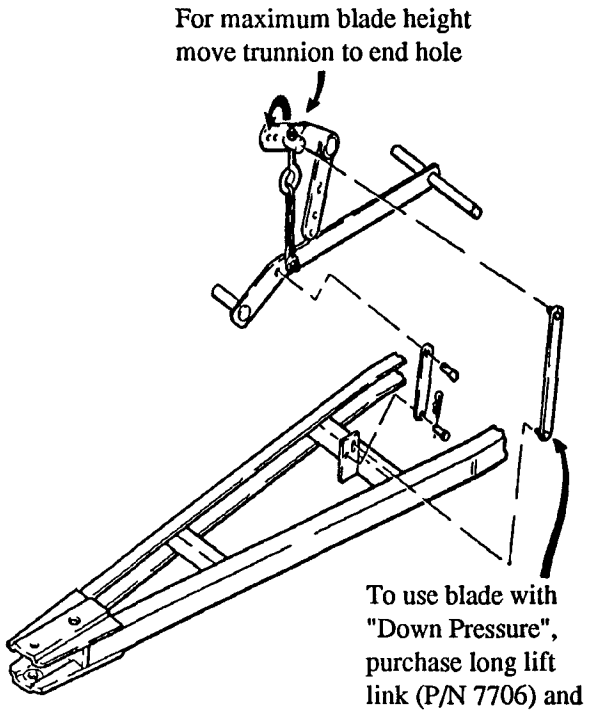


FIG. 19 Linkage Connections

MAINTENANCE AND STORAGE

Like all mechanical equipment, blade should be cleaned after each use. Wash blade using a garden hose. A mild automotive detergent may be used to remove a stubborn dirt. During the snow season, when washing is impractical, avoid areas exposed to road salt. Thoroughly clean the blade at the end of the season.

Exposed bare metal surfaces should be coated with oil or grease to prevent rust until permanent repairs can be made. Aerosol cans of touch up paint are available through your Authorized Toro Wheel Horse Dealer.

Before operation, make sure all bolts are tight and cotter pins are in place. Excessive play in the pivot sector can be removed by tightening the large pivot bolt. A light grade of machine oil should be applied to all moving parts of the linkage after every 10 hours of use. Lubricate the channel and sector assembly with general purpose grease at the same interval.

Blade edge is reversible and replaceable. When the edge becomes worn, remove the attaching bolts and turn the blade plate over, providing a new cutting edge.

Store the blade in a clean, dry place or protect it with a weather-proof cover if stored outdoors.

TORO Consumer Products

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.

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