48" Snow Blade

for Yard Tractors

Model No. 79252 - 4900001 & Up

Model No. 99251 - 4900001 & Up

Model No. 9861907 - T4S0001 & Up

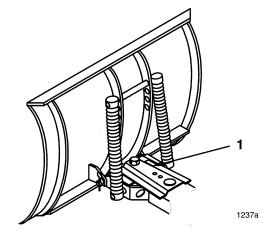
Operator's Manual

IMPORTANT: Read this manual carefully. It contains information about your safety and the safety of others. Also become familiar with the controls and their proper use before you operate the product.

Introduction

We want you to be completely satisfied with your new product, so feel free to contact your local Authorized Service Dealer for help with service, genuine replacement parts, or other information you may require.

Whenever you contact your Authorized Service Dealer or the factory, always know the model and serial numbers of your product. These numbers will help the Service Dealer or Service Representative provide exact information about your specific product. You will find the model and serial number plate located in a unique place on the product as shown below.



1. Model and Serial Number Plate

For your convenience, write the product model and serial numbers in the space below.

Model No:	
Serial No	

The warning system in this manual identifies potential hazards and has special safety messages that help you and others avoid personal injury, even death. DANGER, WARNING and CAUTION are signal words used to identify the level of hazard. However, regardless of the hazard, be extremely careful.

DANGER signals an extreme hazard that will cause serious injury or death if the recommended precautions are not followed.

WARNING signals a hazard that may cause serious injury or death if the recommended precautions are not followed.

CAUTION signals a hazard that may cause minor or moderate injury if the recommended precautions are not followed.

Two other words are also used to highlight information. "Important" calls attention to special mechanical information and "Note" emphasizes general information worthy of special attention.

The left and right side of the machine is determined by sitting on the seat in the normal operator's position.

Contents

	Page		Page
Installation	2	Adjusting Blade Index	8
Assemble Blade	2	Adjusting Blade Trip Springs	8
Tractor Set-Up	3	Tips for Using Snow Blade	ç
Installing Snow Blade to Tractor	5	Maintenance	10
Removing the Snow Blade	6	Service Interval Chart	10
Operation	7	Greasing and Lubrication	11
Attachment Lift Lever		Reversing the Scraper Blade	12
Adjusting Dial-A-Height	7	Storage	12

Installation

Assemble Blade

- 1. Attach channel assemble and blade trip springs to blade with rods and hairpin cotters and cotter pins (Fig. 1).
- Apply liberal amount of general purpose grease 2. to pivot area of frame and channel (Fig. 1) and attach with 3/4-16 x 3/4 inch bolt and nut.

IMPORTANT: Do not tighten nut and bolt excessively to cause binding on channel weldment as it pivots side-to-side.

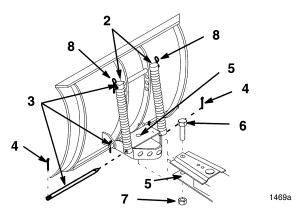


Figure 1

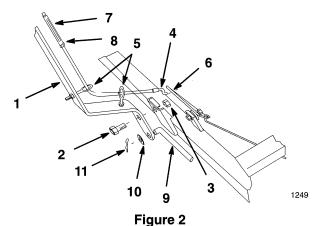
- 1. Channel Assembly
- Trip spring
- Rod
- Cotter pin

- 5. Grease here
- Bolt
- 7. Nut
- Hairpin cotter
- 3. Attach index lever to frame bracket with bolt and nut (Fig. 2). Install eyelets with lock nuts.

IMPORTANT: Do not tighten nut and bolt excessively to cause binding of lever at bracket.

- 4. Route cable through eyelets and attach "Z" end to outer hole of index plate (Fig. 2).
- 5. Adjust turnbuckle so the index pin is pulled out of channel when the release lever is squeezed, for easy side-to-side movement (Fig. 2). Tighten jam nut securely.

Attach one end of control rod to index lever with hairpin cotter. (Fig. 3).



- Index lever
- Bolt
- 3. Nut
- Cable "Z" end
- Eyelet
- Outer hole of index plate
- 7. Turnbuckle
- Jam nut
- Control rod
- 10. Washer
- 11. Hairpin cotter

Insert control rod end with welded washer thru hole in bottom plate of channel weldment (Fig. 3). Secure with cotter pin, between the plates.

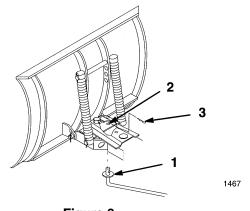


Figure 3

- Control rod
- Plate

3. Cotter pin

- **8.** Place front lift weldment between frame and attach captured plate to frame with bolts and lock nuts (Fig. 4).
- 9. Slide remaining plate over shaft and secure to frame with bolts and lock nuts. Secure lift assembly shaft to plate with washer and cotter pin (Fig. 4).
- **10.** Attach lift rod to lift weldment and secure with washer and cotter pin (Fig. 4).

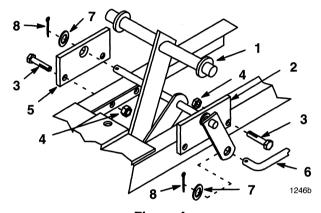


Figure 4

- 1. Lift weldment
- 2. Captured plate
- 3. Bolt
- 4. Lock nut

- 5. Plate
- 6. Lift rod
- 7. Washer
- 8. Cotter pin

Tractor Set-Up

- 1. Remove E-ring and all except one thick washer from tractor front axle pivot pin. Discard unused washers. (Fig. 5). Remove muffler shield.
- 2. Install 3/8 x 1 carriage bolts into keyhole slots in axle bracket. Install muffler shield and place front hitch onto the tractor securing with washers, lock nuts and previously removed E-ring (Fig. 5).

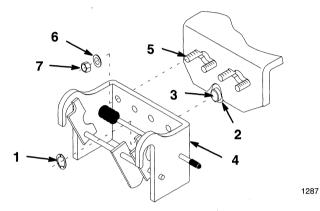


Figure 5

- 1. E-ring
- 2. Thick Washer
- 3. Axle pivot
- 4. Front hitch
- 5. Carriage bolt
- 6. Washer
- Lock nut

- **3.** Assemble rear mounting plate and blade bracket with bolts (heads toward the rear) and lock nuts through holes in vertical plates (Fig. 6).
- 4. For blade use latch levers must be installed onto the blade bracket (Fig. 6). If necessary remove latch levers from rear mounting plate and move to the blade bracket. Secure with previously removed hardware (Fig. 6).

IMPORTANT: Do not tighten nut and bolt excessively to cause binding of levers at bracket.

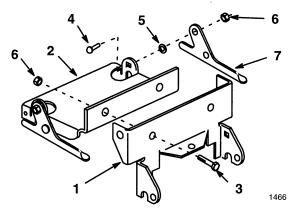


Figure 6

- 1. Rear mounting plate
- 2. Blade bracket
- 3. Bolt
- 4. Carriage bolt
- 5. Washer
- 6. Lock nut
- 7. Latch lever

5. Install rear mounting plate\blade bracket assembly under and inside rear frame member with short tongue rearward (Fig. 7). Secure with bolts and lock nuts at holes in frame side members and tongue forward hole (Fig. 7).

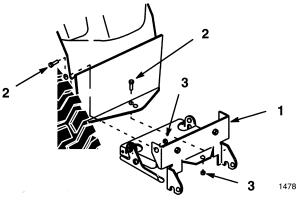


Figure 7

- 1. Plate\blade bracket assembly
- 2. Bolt
- 3. Lock nut
- 6. Install steering spindle stops in front of the rear tab on front wheel spindles (Fig. 8). Align so stops contact the axle during tight turns and wheels do not contact the frame. Secure with self tapping screw (Fig. 8).

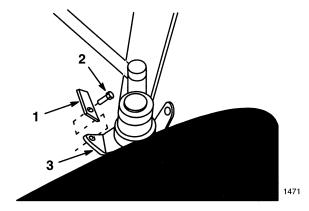
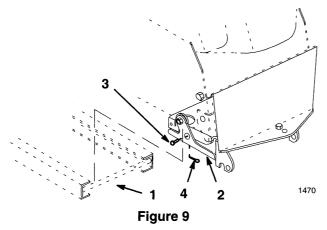


Figure 8

- 1. Steering wheel stop
- 2. Self tapping screw
- 3. Spindle stop

Installing Snow Blade to Tractor

- **1.** Position snow blade on a level surface with space behind for tractor.
- **2.** Remove bolt securing index lever to frame and lay lever next to frame.
- 3. Open front hitch on tractor and park the tractor behind snow blade, with frame between the front wheels. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
- 4. Slide frame under tractor and center between rear latches. Open latch levers and lift frame into position. (Fig. 9).
- **5.** Secure latch levers with clevis pins and hairpin cotters (Fig. 9).
- **6.** Attach index lever to frame with previously removed hardware.



- 1. Frame mount
- 2. Latch lever
- 3. Clevis pin
- Hairpin cotter
- 7. Slide front lift arm of blade into tractor front hitch. Close and lock front hitch (Fig. 10).

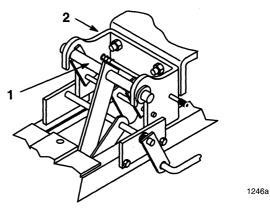


Figure 10

1. Lift arm

- 2. Front hitch
- **8.** Set Dial-a-Height to the Mounting Position, and lower attachment lift all the way; refer to Setting Height-of-Cut.
- **9.** Position lift plate notch around left side lift rod and slide lift plate onto attachment lift arm (Fig. 11). Secure with hairpin cotter at lift arm.
- **10.** Connect lift rod trunnion at one of the holes in the attachment lift plate with washer and hairpin cotter (Fig. 11).

Note: Low hole provides maximum blade lift, but requires the greatest lift effort.

Top hole requires less lift effort, but has lower lift height.

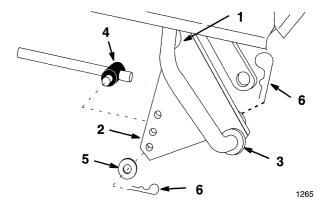


Figure 11

- . Notch
- 2. Lift plate
- Lift arm

- 4. Lift rod trunnion
- 5. Washer
- 6. Hairpin cotter

Removing the Snow Blade

Note: Save all hardware, rods, washers and hairpin cotters for reuse when

installing blade.

- 1. Park the machine on a level surface, disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
- 2. Raise attachment lift to the transport position.

 Turn the Dial-a-Height knob counterclockwise,
 all the way, and lower the attachment lift lever to
 the mounting position; refer to Lowering
 Attachments.
- **3.** Remove hairpin cotter and washer from trunnion at lift plate (Fig. 12).
- **4.** Remove hairpin cotter and slide lift plate off attachment lift (Fig. 12).

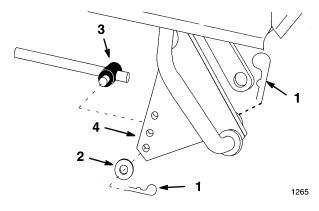


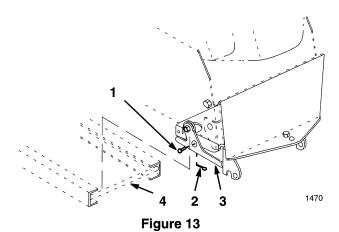
Figure 12

- 1. Hairpin cotter
- 3. Trunnion

2. Washer

4. Lift plate

5. Remove hairpin cotters and clevis pins from latch levers (Fig. 13). Open latch levers and lower the frame (Fig. 13).



- 1. Clevis pin
- 2. Hairpin cotter
- 3. Latch lever
- 4. Frame
- **6.** Push in on the front hitch release rod to open the hitch and remove blade lift arm (Fig. 14).
- 7. Remove hairpin cotter and clevis pin from idler pulley assembly, unhook and remove (Fig. 14).

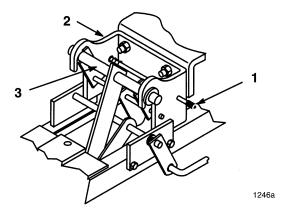


Figure 14

- 1. Release rod
- 3. Lift arm

2. Hitch

Note: Save all hardware, rods, washers and hairpin cotters for reuse when installing snow blade.

Operation

DANGER

POTENTIAL HAZARD

• Hitting fixed objects can cause the tractor to stop abruptly.

WHAT CAN HAPPEN

• Stopping abruptly can cause loss of control, equipment damage and personal injury.

HOW TO AVOID THE HAZARD

- Travel at a safe, slow speed.
- Check area to be plowed and mark all fixed objects so they can be avoided.

Attachment Lift Lever

The attachment lift lever (Fig. 15) is used to raise and lower various attachments.

Raising Attachments

- 1. Depress the clutch and/or brake pedal(s) to stop the machine.
- 2. Pull attachment lift lever rearward until latch locks. In this position the lift will hold the attachment in the up, or raised position.

Lowering Attachments

- 1. Depress the clutch and/or brake pedal(s) to stop the machine.
- 2. Pull attachment lift lever rearward, to release lift pressure, and push the button on top to release the latch. Move lift lever forward to lower attachment.

Adjusting Dial-A-Height

The Dial-A-Height control (Fig. 15) is used to limit the downward travel of the attachment. The Dial-A-Height knob is rotated to change the location of this stop, up or down.

- 1. Raise the attachment lift lever: Refer to Raising Attachments. In the raised position the Dial-A-Height knob (Fig. 15) can be rotated to change the stop location. Turn clockwise to raise and counterclockwise to lower the height of the attachment.
- 2. The Dial-A-Height indicator (Fig. 15) will show the change, high to low, in attachment lift height as adjustment is made.

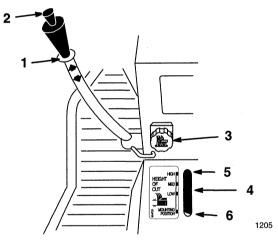


Figure 15

- 1. Lift lever
- 2. Button
- 3. Dial-A-Height
- 4. Indicator
- 5. High
- 6. Mounting position

Adjusting Blade Index

The blade can be indexed side to side, in 5 positions. The direction is controlled by the handle on the right frame (Fig. 16).

- 1. Squeeze the release lever toward the handle (Fig. 16).
- 2. Push or pull lever to change index position and release lever. Index pin must snap into hole in channel to retain position.

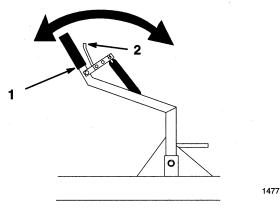


Figure 16

1. Handle

2. Release lever

Adjusting Blade Trip Springs

The blade trip springs can be mounted in 4 positions. The top hole provides greatest scraping pressure and the lower hole least scraping pressure (Fig. 17).

- 1. Remove hairpin cotter and slide rod out from blade and springs (Fig. 17).
- 2. Slide rod through springs and new hole position in blade (Fig. 17).

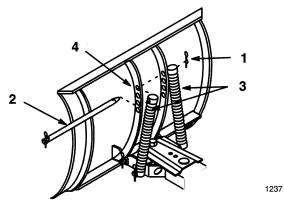


Figure 17

- 1. Hairpin cotter
- Hairpin cotte
 Rod
- 3. Spring
- 4. Top hole

Tips for Using Snow Blade

Remove snow as soon as possible after it falls. This produces best snow removal results.

Snow is generally removed from driveway by making one pass down the center and then plowing snow to either side on successive passes.

If tractor looses traction when using snow blade, wheel weights and tire chains may be available from your dealer.

Blade trip springs can be adjusted for scraping aggressiveness and surface conditions. Second hole from the top is recommended for snow. Refer to adjusting blade trip springs.

Maintenance

Service Interval Chart

Service Operation	Each Use	5 Hours	25 Hours	Storage Service	Fall Service	Notes
Grease-Channel pivot			Х	Х	Х	
Oil-Linkages			Х	Х	Х	
Chipped Surfaces-paint				Х		
Scraper-check for wear				Х	Х	

A CAUTION

POTENTIAL HAZARD

• If you leave the key in the ignition switch, someone could start the engine.

WHAT CAN HAPPEN

• Accidental starting of the engine could seriously injure you or other bystanders.

HOW TO AVOID THE HAZARD

• Remove the key from the ignition switch and pull the wire off the spark plug before you do any maintenance. Also push the wire aside so it does not accidentally contact the spark plug.

Greasing and Lubrication

Service Interval/Specification

Grease and oil the machine after every 25 operating hours or once a year, whichever occurs first.

Grease Type: General-purpose grease.

Oil Type: SAE 10W or 10W30.

Grease Channel Pivot

- 1. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
- 2. Clean the area around channel pivot with a rag. Apply grease to pivot bolt, frame and sector (Fig. 18).
- **3.** Wipe off excess grease.

Oil Linkages

- 1. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
- **2.** Place a few drops of oil on all movable linkages (Fig. 18).
- 3. Wipe off excess oil.

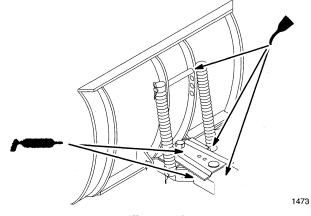
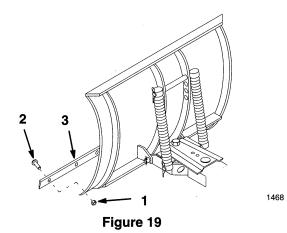


Figure 18

Reversing the Scraper Blade

The scraper blade contacts the ground preventing damage to the snow blade. Periodically inspect the scraper blade for wear. When scraper becomes worn, before working surface contacts the housing, reverse the scraper blade.

- 1. Disengage the power take off (PTO), set the parking brake, and turn the ignition key to "OFF" to stop the engine. Remove the key.
- 2. Raise the attachment lift lever: Refer to Raising Attachments, and support the housing off the ground.
- **3.** Remove lock nuts and carriage bolts to remove scraper blade (Fig. 19).
- **4.** Reverse scraper blade to replace a worn edge and install with previously removed hardware (Fig. 19).



- 1. Lock nut
- 3. Scraper blade
- 2. Carriage bolt

Storage

- 1. Before long term storage wash the machine with mild detergent and water to remove dirt and grime from the entire machine.
- **2.** Check the condition of the scraper blade; refer to Reversing Scraper Blade, page 12.
- **3.** Grease and oil the blade; refer to Greasing and Lubrication, page 11.
- **4.** Check and tighten all bolts, nuts, and screws. Repair or replace any part that is damaged or defective.
- Paint all scratched or bare metal surfaces. Paint is available from your Authorized Service Dealer.
- **6.** Store the machine in a clean, dry garage or storage area. Cover the machine to protect it and keep it clean.