DETHATCHER
FOR SWEEPERS

45-03433
SAFETY RULES

Any power equipment can cause injury if operated improperly or if the user does not understand how to operate the equipment. Exercise caution at all times, when using power equipment.

- Read this owners manual carefully for operating and service instructions before attempting to assemble or operate the dethatcher. Be thoroughly familiar with the proper use of the dethatcher.
- Read the vehicle owners manual and vehicle safety rules, and know how to operate the vehicle before using the dethatcher.
- Read the lawnsweeper owners manual and safety rules, and know how to operate the lawnsweeper before using the dethatcher.
- Never allow children to operate the tractor or dethatcher attachment, and do not allow adults to operate without proper instructions.
- This dethatcher attachment has sharp tine points. Always handle with care and wear substantial foot wear when operating this dethatcher.
- Do not allow anyone to ride or sit on the dethatcher, lawnsweeper or towing vehicle.
- Keep the area of operation clear of all persons, particularly small children, and also pets.
- Always begin with the transmission in first (low) gear and engine at low speed, and gradually increase speed as conditions permit.
- Vehicle braking and stability may be affected with the attachment of this equipment. Be aware of changing conditions on slopes. Refer to safety rules in the vehicle owner's manual concerning safe operation on slopes. STAY OFF OF STEEP SLOPES.
- Always operate up and down a slope, never across the face of a slope
- This equipment should be operated at reduced speed on rough terrain, along creeks and ditches and on hillsides, to prevent tipping and loss of control. Do not drive too close to a creek or a ditch.
- Follow the maintenance instructions as outlined in this owners manual.

LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS — ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

CARTON CONTENTS

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ASSEMBLY (ALL MODELS)

- Assemble seven spring tines to the top of the frame tube. Use a 5/16" x 1-1/2" hex bolt, two 3/8" flat washers and a 5/16" nylock nut for each spring tine. Place one 3/8" flat washer on top of the frame tube and the second 3/8" flat washer on top of the spring tine. See figure 1.

**NOTE:** On sweepers smaller than 42", use only five spring tines.

- Assemble a vinyl cap onto each end of the frame tube. See figure 1.

**FIGURE 1**

- Assemble a 1/2" washer, the wheel, another 1/2" washer and a 1/2" plain jam nut onto the 1/2" x 4" hex bolt. See figure 2.
- Insert the bolt through the welded bracket and assemble a 1/2" nylock jam nut onto the bolt. Adjust nuts so that there is no end play in the wheel and then tighten securely against the welded bracket. Make sure the wheel still turns freely. See figure 2.

**FIGURE 2**

ASSEMBLY (MODELS 45-0521 42" & 45-0492 44")

**NOTE:** The dethatcher attaches to the offset tube. This prevents you from offsetting the sweeper hitch.

- Assemble the four bearings to the two spacers and then slide each through a clamp. See figure 3.

**FIGURE 3**

- Attach each of the bearing, spacer, and clamp assemblies to a mount bracket using a 1/2 x 4" hex bolt and 1/2" nylock jam nut. See figure 4.

**FIGURE 4**

- Assemble one 5/16 x 4" hex bolt and 5/16" nylock nut to the bottom hole of each mount bracket.

**FIGURE 5**
• Assemble a conduit clamp onto each end of the sweeper height adjustment tube so that the straight part of the clamp is on top of the tube. See figure 9.

• Remove the hitch brackets and the bolts, if present, from the ends of the sweeper's hitch tubes. Slide the transport hook onto the L.H. hitch tube as shown in figure 9.

• Reassemble the hitch brackets and bolts to the hitch tubes. Refer to your sweeper owner's manual.

**ASSEMBLY**

**(ALL OTHER SWEPPER MODELS)**

• Assemble a conduit clamp onto each end of the sweeper height adjustment tube so that the straight part of the clamp is on top of the tube. See figure 9.

• Remove the hitch brackets and the bolts, if present, from the ends of the sweeper's hitch tubes. Slide the transport hook onto the L.H. hitch tube as shown in figure 9.

• Reassemble the hitch brackets and bolts to the hitch tubes. Refer to your sweeper owner's manual.

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**FIGURE 6**

- Secure the two mount brackets to the drawbar offset tube of the sweeper using two 3/8" U-bolts, four 3/8" lock washers and four 3/8" hex nuts. Do not tighten yet.

**FIGURE 7**

- Center dethatcher on front of the sweeper housing.
- Place the double transport hook onto the sweeper hitch tube. Lift up the front of the dethatcher and slide it into the double hooks to secure it in the transport position.
- Tighten the U-bolts and nuts assembled in figure 7.

**FIGURE 8**

**FIGURE 9**

- Connect the sweeper to the tractor. Set the sweeper height adjustment handle to about the middle of it's adjustment range.
- Place the dethatcher in front of the sweeper housing, underneath the hitch tubes.
- Connect the dethatcher to the conduit clamp using two 5/16" x 1-3/8" clevis pins, 5/16" washers and 3/32" hair cotter pins. See figure 10.

**FIGURE 10**

- Fasten each clamp to the spring mount frame assembly using one 5/16 x 1-3/8" clevis pin, 5/16" washer, and 3/32" hair cotter pin.
If you have a 30" sweeper, skip steps 7 through 9.
- Make sure the sweeper height adjustment handle is still set to about the middle of its adjustment range.
- Center the dethatcher with the sweeper.
- Assemble the keeper brackets (bend to the inside) to the sweeper's hitch tube, outside of the conduit clamps. Use a u-bolt and two 1/4" nylock nuts per bracket. Position the keeper brackets against the sides of the conduit clamps, approximately perpendicular to the ground. Tighten the nylock nuts without bending the keeper brackets. See figure 11.

OPERATION

RAISING/LOWERING THE DETHATCHER
- To raise the dethatcher for transport, lift up on the front of the dethatcher and secure it with the transport or double transport hook. Lower the dethatcher by releasing the hook.

SETTING THE OPERATING POSITION
- The operating height of the dethatcher is controlled by the gauge wheel at the front of the dethatcher and is not adjustable. The correct wheel position was determined in figure 2 when you assembled the wheel.
- Set the sweeper to the desired operating height. (The best height is usually with the brushes set about 1/2" down into the grass.) Refer to your sweeper owner's manual for sweeper.

USING THE DETHATCHER
Regular removal of thatch is critical to the maintenance of a healthy lawn. Thatch is layer of stems, clippings, runners, roots and leaves that have not decayed. Excessive thatch prevents air, water and fertilizer from reaching the roots. The dethatcher will effectively dislodge excessive thatch from your lawn.

- Start with the tractor in low gear. Vary the forward speed to determine the best speed for maximum dethatcher performance.
- Use a crisscross pattern to achieve the most even removal of thatch.
- On slopes, always operate in an up and down direction only.
- Avoid extremely sharp turns.
- Avoid towing the dethatcher across sudden steep dips in the ground while dethatching. Loss of ground contact with the gauge wheel could cause the dethatcher to be pulled back underneath the sweeper.

MAINTENANCE
- Before each use, check all nuts and bolts for tightness.
- Clean after each use to help prevent rust.
- If rust appears on the spring tines, sand lightly and coat with enamel paint.

STORAGE
- Always store in a dry area, and coat exposed metal with light oil when not in use.
## REPAIR PARTS FOR MODEL 45-03433 DETHATCHER FOR SWEEPERS

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