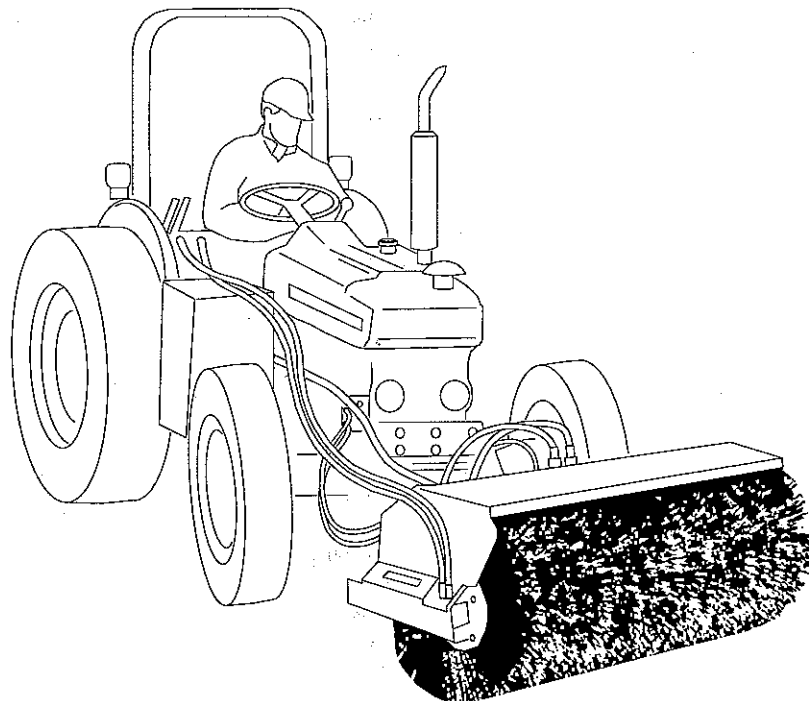


# **SWEEPSTER**

## **AS Series**

---

**Auto-Sensing  
Windrow Sweepers for Tractors**



**SWEEPSTER, Inc.**  
2800 N. Zeeb Road • Dexter, MI 48130  
(734) 996-9116 • FAX (734) 996-9014  
1-800-456-7100  
[www.sweepster.com](http://www.sweepster.com)

51-3204



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# Introduction

## Serial & Part Numbers

On your unit you will find a serial number plate and/or part number plate(s). The numbers on these plates are very important if you wish to order parts or accessories. For your convenience, record numbers in the appropriate spaces below.

<b>SWEEPSTER</b>	
Model #	Serial #
<input type="text"/>	<input type="text"/>
Empty	GVW
<input type="text"/>	<input type="text"/>
Dexter, MI 48130	1-800-456-7100

<b>SWEEPSTER</b>	
Dexter, MI 48130 1-800-456-7100	
Part Number	Date
<input type="text"/>	<input type="text"/>

<b>SWEEPSTER</b>	
Dexter, MI 48130 1-800-456-7100	
Part Number	Date
<input type="text"/>	<input type="text"/>

<b>SWEEPSTER</b>	
Dexter, MI 48130 1-800-456-7100	
Part Number	Date
<input type="text"/>	<input type="text"/>

# Introduction

## Importance of this Manual



Read this manual before attempting to operate the equipment.

This operator's manual should be regarded as part of the sweeper. Suppliers of both new and secondhand sweepers are advised to keep documentation indicating that this manual was provided with the sweeper.

The manual contains information regarding installation, operation and maintenance required for this sweeper model and optional equipment. It also includes detailed parts lists.

---

## Purpose of Sweeper

This sweeper is designed solely for use in construction cleanup, road maintenance, grounds maintenance, snow removal and similar operations. Use in any other way is considered contrary to the intended use. Compliance with and strict adherence to operation, service and repair conditions, as specified by the manufacturer, are also essential elements of the intended use.

This sweeper should be operated, serviced and repaired only by persons who are familiar with its characteristics and acquainted with relevant safety procedures.

Accident prevention regulations, all other generally recognized safety regulations and all road traffic regulations must be observed at all times.

Any modifications made to this sweeper may relieve the manufacturer of liability for any resulting damage or injury.

---

## Safety Alert Symbol



This safety alert symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of injury. Carefully read the message that follows and inform other operators.

## Contacting SWEEPSTER

If you have any questions about information in this manual or need to order parts, please call, write, FAX or e-mail SWEEPSTER.

SWEEPSTER, Inc.  
2800 North Zeeb Road  
Dexter, Michigan 48130  
Phone: (734) 996-9116 • (800) 456-7100  
FAX: (734) 996-9014  
e-mail: sweep@sweepster.com

For help with installation, operation or maintenance procedures, contact our Technical Service Department. Direct product questions and parts orders to our Sales Department.

When ordering parts or accessories, be prepared to give the following information:

- Sweeper model, serial number and date of purchase
- Prime mover make and model
- Part number, description and quantity

---

## Terms Used in Manual

*Right-hand, left-hand, front and rear* are determined from the operator's perspective (either the operator's seat or standing behind a walk-behind unit), facing forward in the normal operating position.

*Prime mover* refers to the tractor, truck, loader or tow vehicle that a sweeper is mounted on or towed by.

---

## Optional Equipment

Installation instructions for optional equipment, if applicable, appear with parts lists in the back of the manual.

---

## Specifications & Features

Due to continuous product improvement, specifications and features may change without notice.

---

## Warranty

To validate the warranty for this unit, fill out the warranty card or warranty pages located at the back of this manual. Then, send this information to SWEEPSTER.


# Safety Information


## Read this Manual


Read all safety information in this manual. All operators must read and understand the entire contents of this manual before sweeping. General safety practices are listed on Safety Information pages, and specific safety information is located throughout this manual.

## Hazard Definitions

Four hazard classifications are used in this manual. They are

 **CAUTION** – Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

 **WARNING** – Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **DANGER** – Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**IMPORTANT** – Used for instructions when machine damage may be involved.

## Operation


**CAUTION** – A sweeper is a demanding machine. Only fully trained operators or trainee operators under the close supervision of a fully trained person should use this machine.

Before sweeping:

- Learn sweeper and prime mover controls in an off-road location.

- Be sure that you are in a safe area, away from traffic or other hazards.
- Check all hardware holding the sweeper to the prime mover, making sure it is tight.
- Replace any damaged or fatigued hardware with properly rated fasteners.
- Check prime mover tire pressure before sweeping.
- Check tire ratings to be sure they match the prime mover load. Weigh the sweeper end of the prime mover, if necessary, to insure proper tire rating.
- Remove from the sweeping area all property that could be damaged by debris flying from the sweeper.
- Be sure all persons not operating the sweeper are clear of the sweeper discharge area.
- Always wear proper apparel such as a long-sleeve shirt buttoned at the cuffs; safety glasses, goggles or a face shield; ear protection; and a dust mask.

When sweeping, adhere to all government rules, local laws and other professional guidelines for your sweeping application.

 **WARNING** – Never raise the sweeper more than a few feet off the ground. The sweeper can tip back or the prime mover can tip over causing death or serious injury.

## Safety Information

Before leaving the operator's area for any reason – lower the sweeper to the ground, stop the prime mover engine, set the brakes and remove the key from the ignition.

Keep hands, feet, hair and loose clothing away from all moving parts.

Leave all safety equipment in place when operating the sweeper and prime mover.

Be aware of the extra weight and width a sweeper adds. Reduce travel speed accordingly.

When sweeping on rough terrain, reduce speed to avoid “bouncing” the sweeper. Loss of steering can result.

Never sweep toward people, buildings, vehicles or other objects that can be damaged by flying debris.

---

### Service & Repair



**CAUTION** – Do not modify the sweeper in any way. Personal injury could result. If you have questions, contact your dealer or SWEEPSTER.

Repair or adjust the sweeper in a safe area, away from road traffic and other hazards.

Before adjusting or servicing the sweeper – lower the sweeper to the ground, stop the prime mover engine, set the brakes and remove the key from the ignition.

---

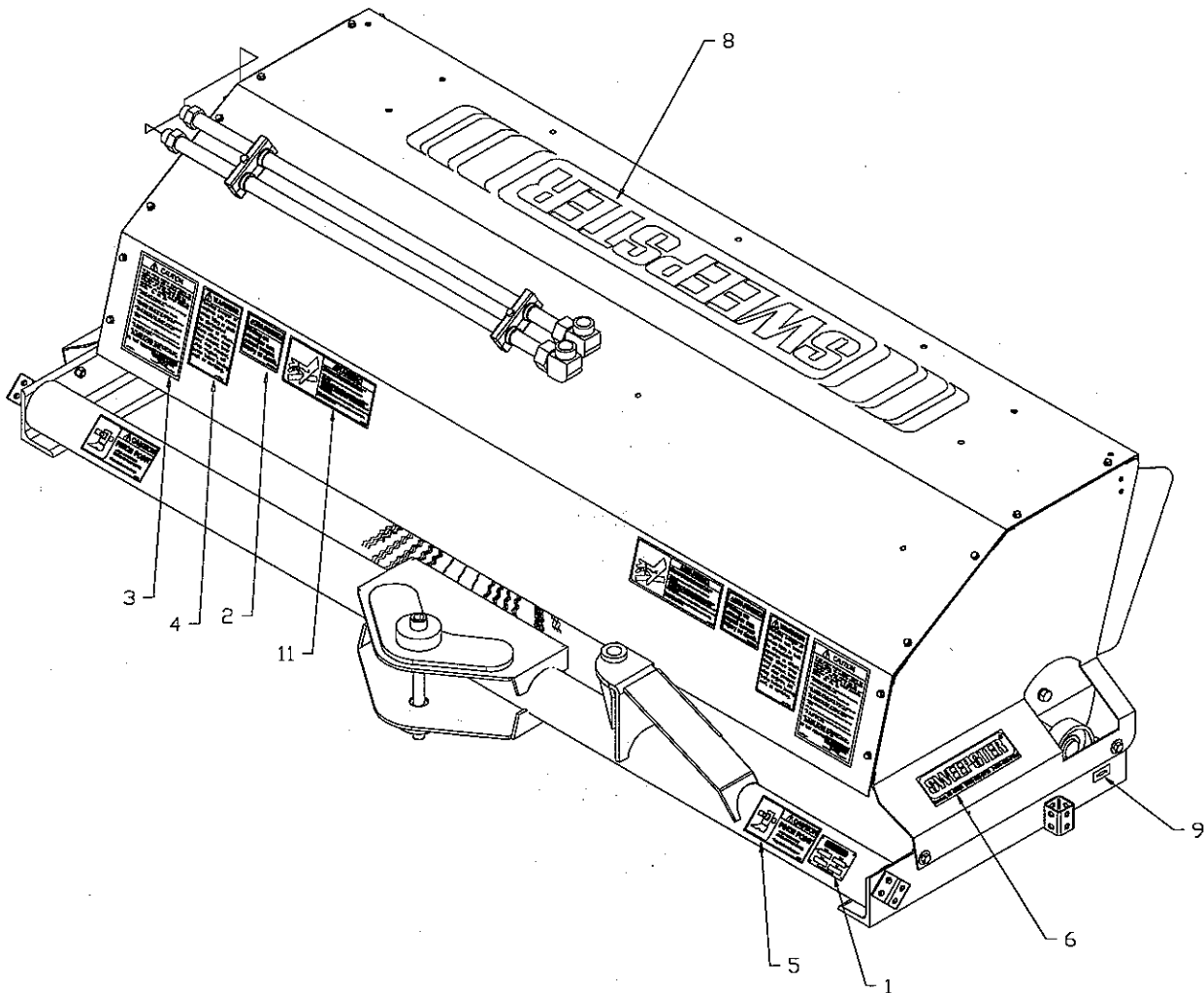
# Safety Signs & Labels

## Important

Always keep safety signs clean and readable, and always replace any damaged or missing safety signs with new ones from SWEEPSTER. Replacement parts must have pertinent safety signs applied to them. See page 3 for information about how to contact SWEEPSTER.

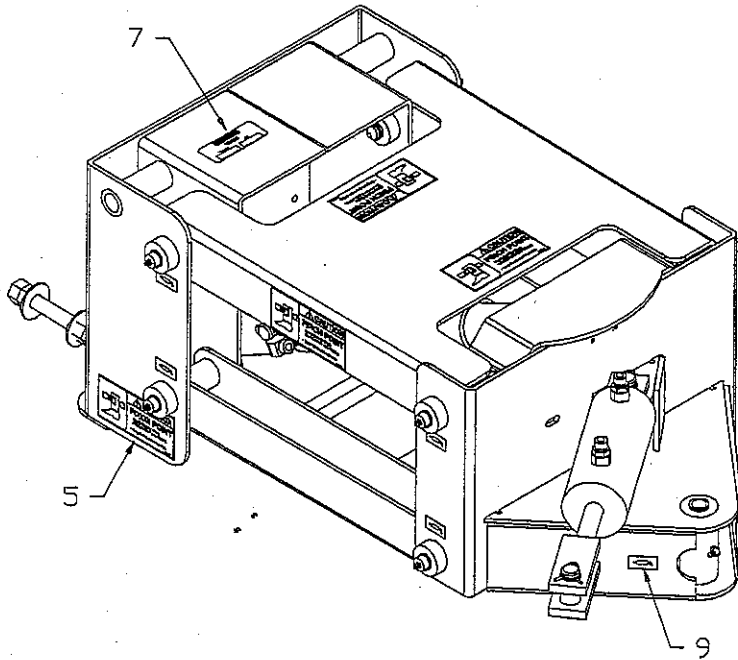
Safety sign and label locations are shown on this and the next page. For representations of these safety signs and labels, refer to pages 10 and 11.

## Locations

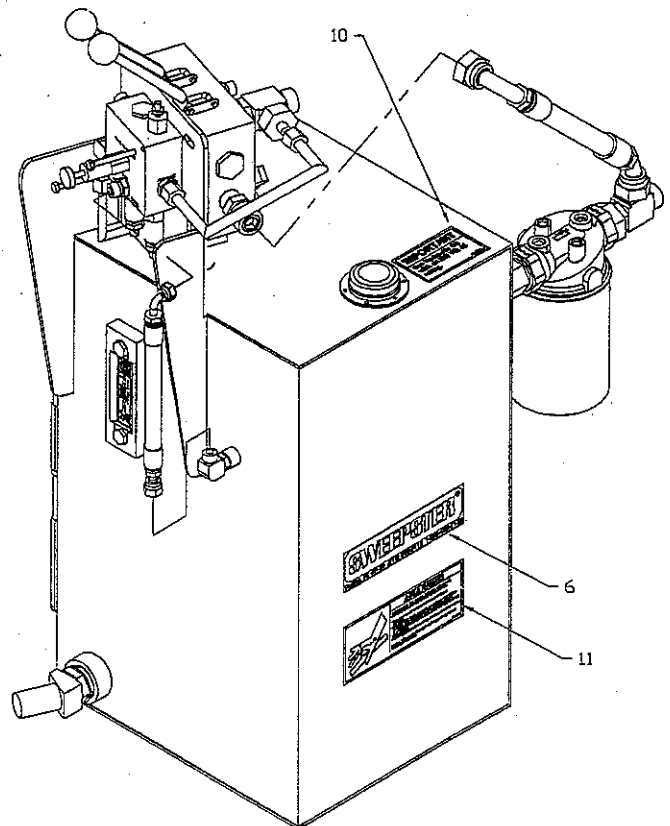




# Safety Signs & Labels



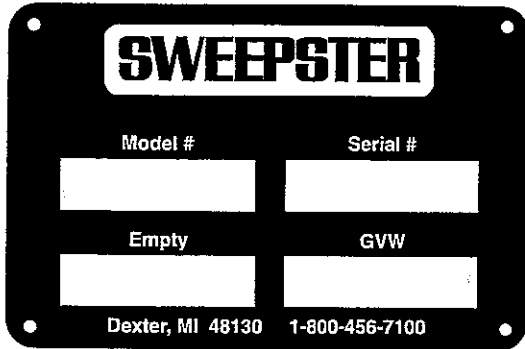
Item	Part	Qty	Description
1.	50-0004	1	Label, Plate, Serial Number
2.	50-0008-1	2	Label, Danger, No Riders
3.	50-0014-1	2	Label, Caution, Read Manual, General Safety
4.	50-0014-2	2	Label, Warning, Running Sweeper & Engine
5.	50-0721	12	Label, Warning Crush Hazard
6.	50-0184	3	Label, Small, White, SWEEPSTER
7.	50-0249	1	Label, Plate, Part Number/Date
8.	50-0252	1	Label, Logo, Large, White, Die Cut
9.	50-0270	11	Label, Grease Location (Single Motor Only)
10.	50-0272	1	Label, Oil, ISO VG-46
11.	50-0725	3	Label, Warning, High Pressure Fluid Hazard



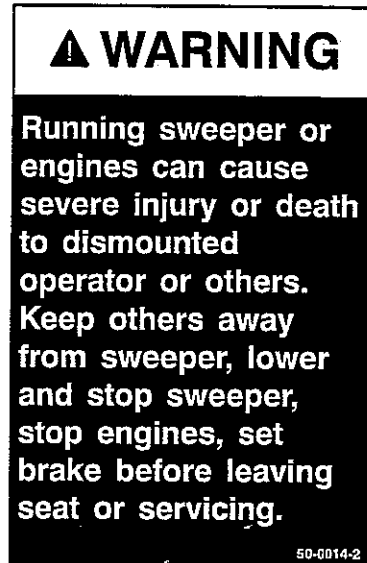
# Safety Signs & Labels

## Representations

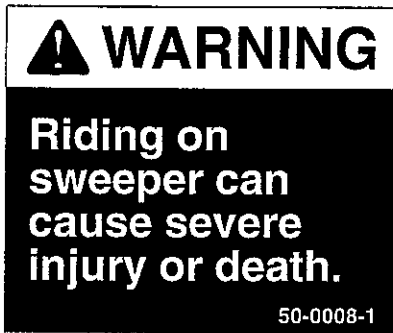
NOTE -- Locations shown on the previous page.



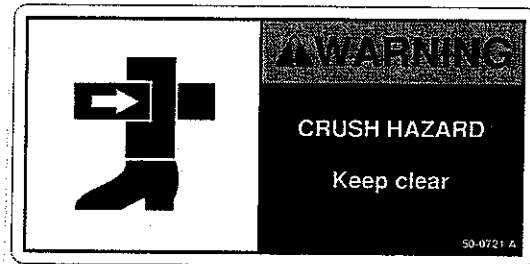
1. 50-0004



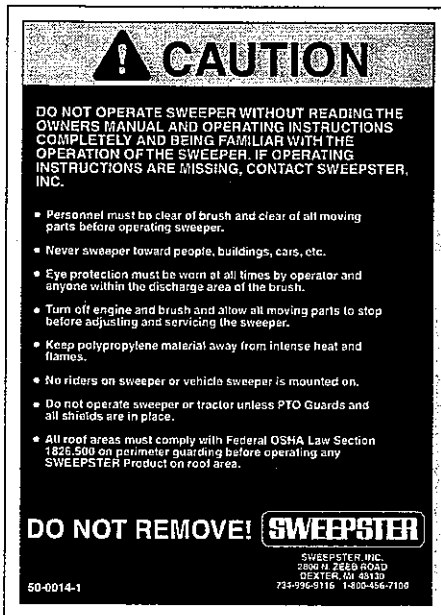
4. 50-0014-2



2. 50-0008-1



5. 50-0721



3. 50-0014-1

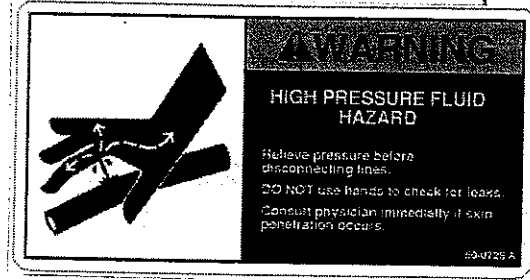


6. 50-0184

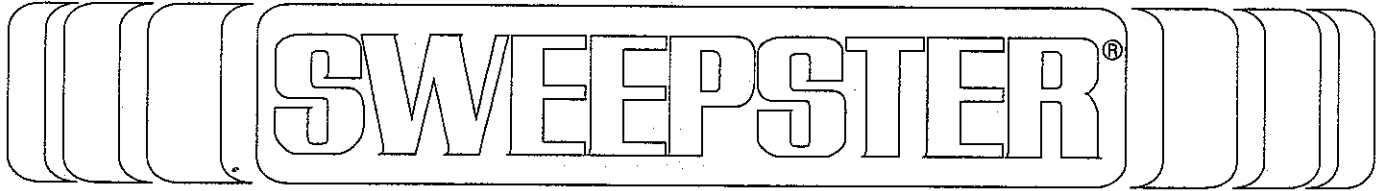
# Safety Signs & Labels



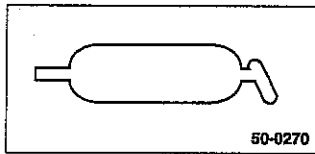
7. 50-0249



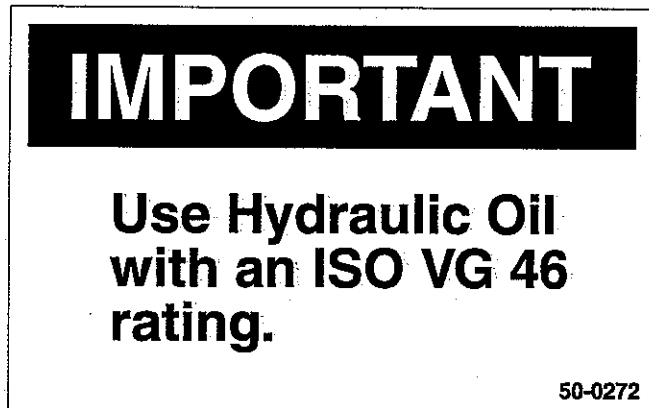
11. 50-0725



8. 50-0252



9. 50-0270



10. 50-0272

# Installation

## Mounting Assembly

Install the mounting assembly according to instructions on the sheet included with those parts.

## Pump

Install the pump on the rear PTO (figure 1).

1. Slide the pump onto the rear PTO.
2. Attach the chain to the pump and to the tractor. The chain should allow the pump to move slightly but not enough for the pump to slide off the PTO.
3. Install the barb fitting on the pump inlet and the elbow fitting on the pump outlet.

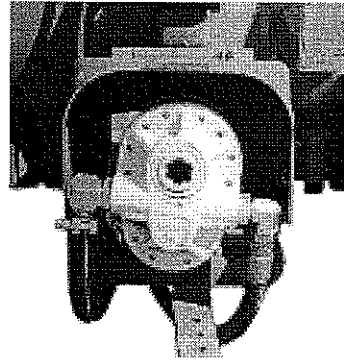


figure 1

## Lift/Swing Assembly

Install the lift/swing assembly on the mounting assembly.

1. Lift the rear of the lift/swing assembly, aligning pivot holes in the mounting assembly with those in the lift/swing assembly.
2. Insert the pivot rod through the right-hand mounting plate, lift/swing assembly and left-hand mounting plate. Secure with 2 cotter pins (figure 2).
3. Attach 2 adjustment links. Figure 3 shows an adjustment link installed. View is from underneath the lift/swing assembly.
  - a. Install 2, 3/4-10 in. nuts and 3/4 in. flat washer on the rod end of each link.
  - b. Secure the ball end of each link to tabs on the lift/swing assembly with a 5/8 x 2 1/2 in. clevis pin and 1/8 x 1 1/4 in. cotter pin.
  - c. Slide the rod end through the front mounting plate.
  - d. Place 1, 3/4 in. flat washer and 2, 3/4-10 in. nuts on the end of each link.
4. Level the lift/swing assembly from front to back with adjustment links.
  - a. Place a bubble level on the swing (figure 4).
  - b. Loosen jam nuts on adjustment links.

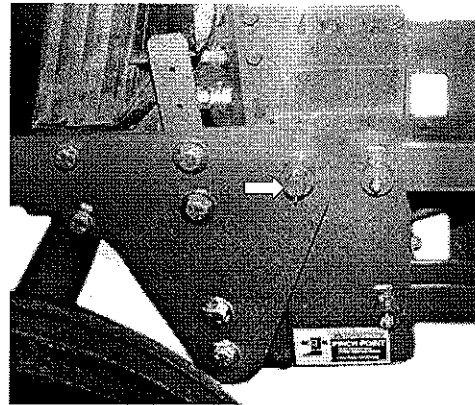


figure 2

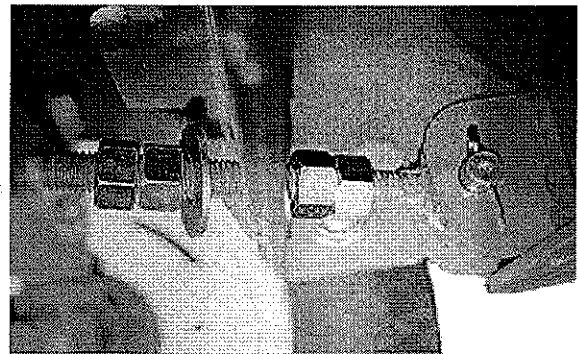


figure 3

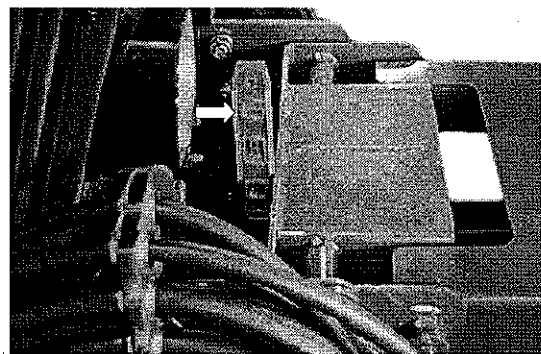


figure 4

## Installation

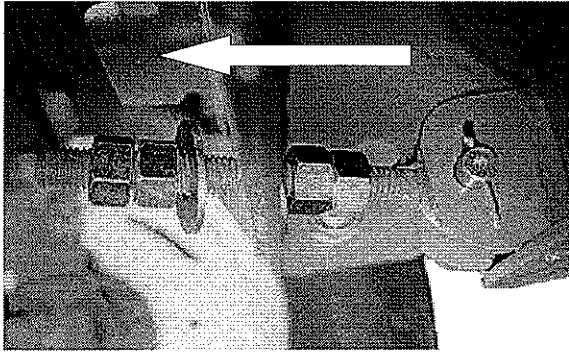


figure 5

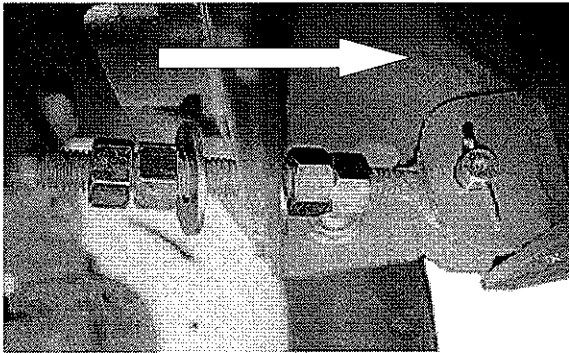


figure 6

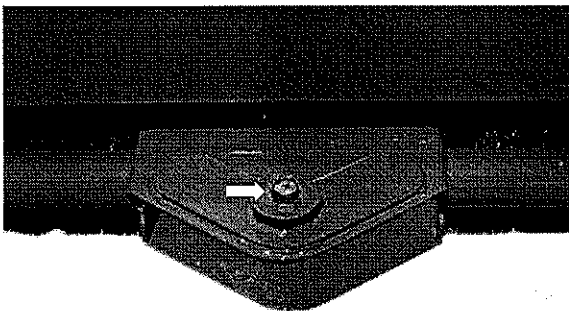


figure 7

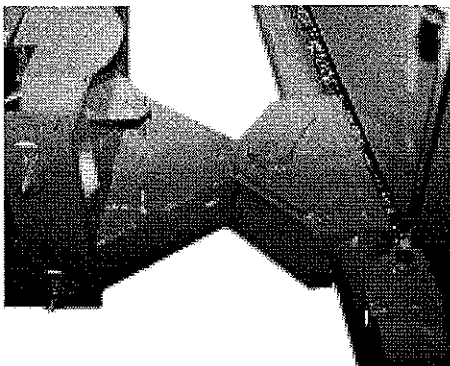


figure 8

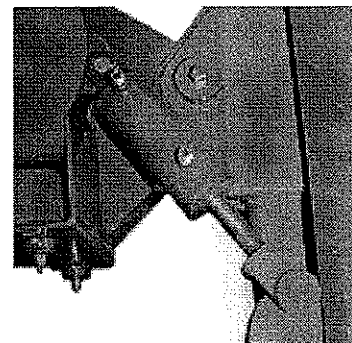


figure 9

- c. Make adjustments. If the front of the assembly is too low, turn nuts on adjustment links toward the tractor (figure 5). If the front of the lift/swing assembly is too high, turn nuts on adjustment links away from the tractor (figure 6).
- d. Lock jam nuts in place on both sides.

---

### Brush Head Assembly & Swing Cylinder

Attach the brush head assembly to the lift/swing assembly. Then install the swing cylinder.

1. Remove the 3/4 x 9 in. cap screw and lock nut from the brush frame swing point (figure 7).
2. Slide the brush frame swing point over the lift/swing assembly swing point (figure 8). Align holes and install the 3/4 x 9 in. cap screw and lock nut.
3. Attach the swing cylinder with the rod end on the brush frame and the barrel end to the tab on the lift/swing assembly (figure 9). Secure using clevis pins packaged with the cylinder.

---

### Tank Assembly

#### Side Tank

Install the tank assembly according to instructions included with the mounting assembly.

#### 3-Point Tank

1. Fasten the tank assembly to the rear 3-point hitch. Use 2 lin pin and 2 klik pins in the bottom arms and a toplink pin and 2 linch pins in the toplink.
2. Install a barb fitting on the tank outlet.

# Installation

## Hydraulic Hoses

### Manual Valves

1. Connect the suction hose to the tank outlet. Then, route the hose under the tractor and connect to the pump inlet. Secure with 2 T-bolt clamps.

**IMPORTANT** – Avoid hose damage. Route hoses away from hot and/or moving parts.

2. Connect the pressure line from the pump to the inlet port on the valve. Tighten fittings.
3. Connect hoses for swing and lift cylinders and brush motor(s).
  - a. Lay out hoses and measure each one starting at the end that will face toward the brush head assembly. Refer to separate mounting instructions for specific measurements. Place rubber bushings at measurements indicated.
  - b. Referring to figure 10 for placement, install 3-position clamps and hoses by doing as follows:

Attach a 3-position clamp to the outside of the clamp plate on the mounting assembly. Use 2, 5/16-18 x 1 in. cap screws, lock washers and stack nuts. Tighten the hardware. Place hoses for the swing cylinder and lift cylinder (rod end) in the 3-position clamp. Attach another clamp with 2, 5/16 in. studs.

Fasten a 3-position clamp to those just installed; use 2 stack nuts. Place hoses for the lift cylinder (barrel end) and brush head tubes in the 3-position clamp. Attach another 3-position clamp using 2, 5/16-18 x 1 in. cap screws, lock washers and stack nuts.

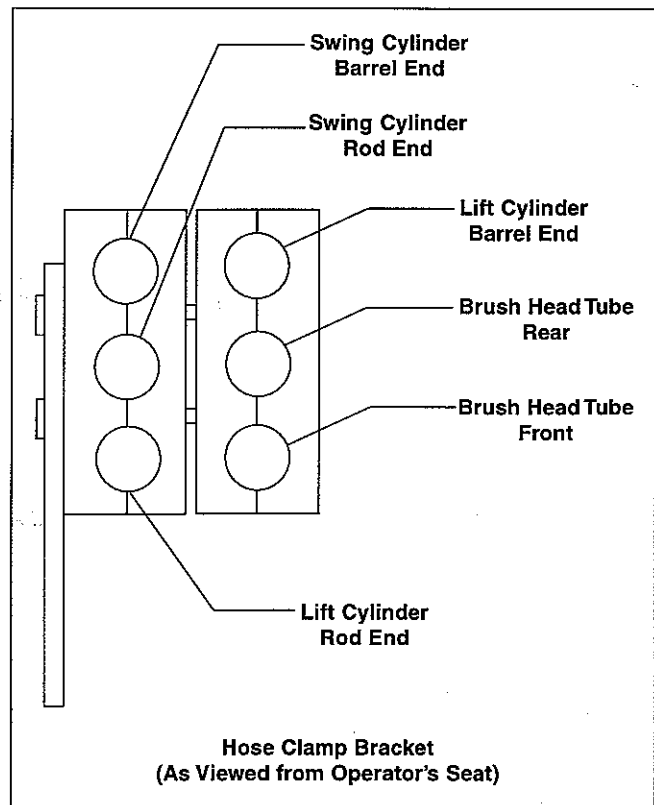


figure 10

- c. Connect hose ends.
    - Swing cylinder, barrel end to top port on spool closer to operator
    - Swing cylinder, rod end to bottom port on spool closer to operator
    - Lift cylinder, rod end to center port on auto-sensing valve
    - Lift cylinder, barrel end to top port on auto-sensing valve
    - Brush head tube, rear to directional control valve
    - Brush head tube, front to filter base
4. Tie hoses with straps to keep them out of the way of hot and/or moving parts even when angled.

## Installation

### Electric Valves – Rear Tank

1. Connect the suction hose to the tank outlet and the pump inlet. Secure with 2 T-bolt clamps.
2. Attach the 3/4 in. hose with 90° end to the pump outlet (straight end) and to the P port on the valve (90° end).
3. Attach 2 remaining 3/4 in. hoses to Mt Run and Mt Return ports on the valve. Route hoses underneath the tractor.

**IMPORTANT** – Avoid hose damage. Keep all hoses away from hot and/or moving parts.

Connect hoses to tubes on the brush head. The rear tube is pressure (run) and the front is return.

4. Attach the 3/8 in. hose with 90° end to the D port on the valve (90° end). Route the hose underneath the tractor and attach it to the rod end of the lift cylinder (straight end).
5. Connect 3 remaining 3/8 in. hoses to Up, L and R ports on the valve. Route hoses underneath the tractor. Attach the Up hose to the barrel end of the lift cylinder, the L hose to the barrel end of the swing cylinder and the R hose to the rod end of the swing cylinder.
6. Place hoses in 3-position clamps.
  - a. Measure lift, swing and brush head hoses, starting at the end toward the brush head assembly. Refer to separate mounting instructions for specific measurements. Place rubber bushings at measurements indicated.

- b. Referring to figure 10 for placement, install 3-position clamps and hoses by doing as follows:

Place hoses for the swing cylinder and lift cylinder (rod end) in the 3-position clamp. Attach another clamp with 2, 5/16 in. studs.

Fasten a 3-position clamp to those just installed; use 2 stack nuts. Place hoses for the lift cylinder (barrel end) and brush head tubes in the 3-position clamp. Attach another 3-position clamp using 2, 5/16-18 x 1 in. cap screws, lock washers and stack nuts.

- c. Tie hoses with straps to keep them out of the way of hot and/or moving parts even when angled.

---

### **Control Box for Electric Valves**

1. Locate a convenient place to mount the control box. Transfer mark holes from the mounting plate to this location.
2. Drill 2, 5/16 in. holes for the mounting plate.

**IMPORTANT** – Avoid damage to tractor. Before drilling, check that you will not drill into wires or other parts.

3. Install the control box mounting plate with 2, 5/16-18 x 1 in. cap screws and nuts.
4. Route the cable with plug to the tank assembly.

**IMPORTANT** – Avoid damage to cable. Route away from hot and/or moving parts.

5. Connect the power wire to the tractor's fuse box or ignition switch. (Black goes to ground and white goes to a 12-volt power source.)
-

# Installation

## Before First Operation

1. Fill the tank to the High line on the sight gauge (figure 11). Use ISO VG-46 oil.
2. Make sure the parking brake is on and the tractor is in Neutral. Then, start the tractor. Prime the pump by rapidly engaging and disengaging the rear PTO.
3. Check the amount of the oil in the tank. Add oil as required to bring it to the proper level.
4. Run the engine at a slow idle. Stop the tractor; then, check for hydraulic leaks. Make corrections before proceeding.
5. Start the tractor again. Engage the brush and let it run while watching for excess vibration or other problems. Test swing and lift functions. Stop the sweeper and tractor; make corrections before proceeding.

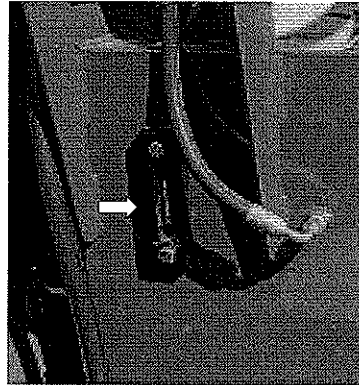


figure 11

**NOTE** – See the Operation section for instructions about how to run the sweeper.

6. Manual Valves Only – Adjust the shut-off valve set screw (figure 12).
  - a. Make sure the parking brake is on and the tractor is in Neutral. Then, start the tractor.
  - b. Raise the sweeper by depressing the brush function handle.

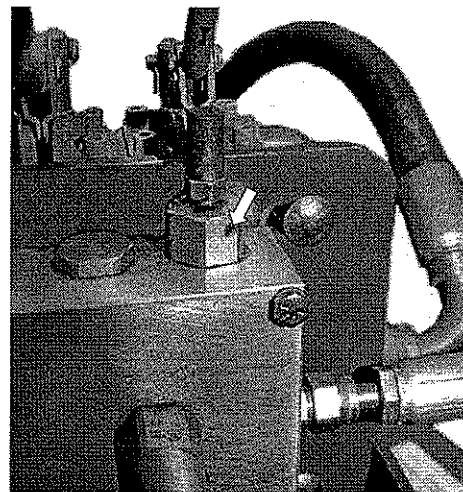


figure 12

**NOTE** – As the sweeper raises, the handle remains down. When the sweeper has raised completely, the handle returns to the neutral position automatically.

- c. If the valve remains down, go to step 6d.

If the shut-off valve pops up and allows the unit to lower, tighten the set screw 1/2 turn. Repeat steps 6b-6c until the valve remains down.

**IMPORTANT** – Avoid valve damage. Tightening the set screw too much will score the shaft and the valve will not function properly. Do not overtighten the set screw.



## Installation

- d. Engage the brush by lifting the brush function handle.
- e. If the shut-off valve pops up, it is adjusted properly. Go to step 6f.

If the shut-off valve does not pop up, unscrew the set screw 1/2 turn. Repeat this step until the valve pops up.

- f. Stop the tractor.
7. Test the auto-sensing valve.
- a. Move the tractor to a level, paved area.
  - b. Make sure the tractor is in Neutral and the parking brake is on. Start the tractor and then engage the PTO at idle.
  - c. Turn the control knob (figure 13) out completely. Raise engine speed to 1500 rpm. Then, engage the sweeper. Sweep in 1 spot for 10 seconds. Stop the sweeper.
  - d. Back the tractor away from the area swept; see brush pattern (figure 14). Set the parking brake and stop the tractor.
  - e. Note the width of the brush pattern. It should be 8 in. (203 mm) the entire length of the brush. If not, refer to Troubleshooting: Adjusting Auto Sensing Valve.
  - f. Make sure the tractor is in Neutral and the parking brake is on. Start the tractor and then engage the PTO at idle.
  - g. Turn the control knob in completely. Then, engage the sweeper. Sweep in 1 spot for 10 seconds. Stop the sweeper.
  - h. Back the tractor away from the area swept; see brush pattern (figure 14). Set the parking brake and stop the tractor.
  - i. Note the width of the brush pattern. It should be 2 in. (51 mm) the entire length of the brush. If not, refer to Troubleshooting: Adjusting Auto Sensing Valve.
8. Level the sweeper according to Maintenance: Leveling.

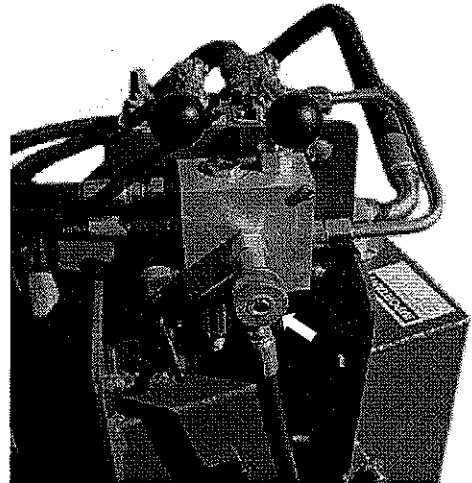


figure 13

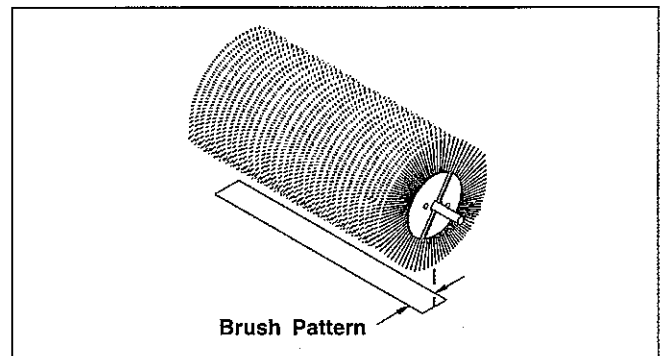


figure 14

# Operation

## Before Each Operation

Perform daily maintenance as indicated in Maintenance: Schedule.

Run the tractor and sweeper at a slow idle. Check for hydraulic leaks or other problems and make corrections, if necessary, before using the sweeper.

**! WARNING** – Avoid personal injury. Check for objects that could harm the operator or others if thrown by the sweeper. Remove these items before sweeping.

Observe wind direction. Sweeping with the wind makes sweeping more effective and helps keep dust off the operator.

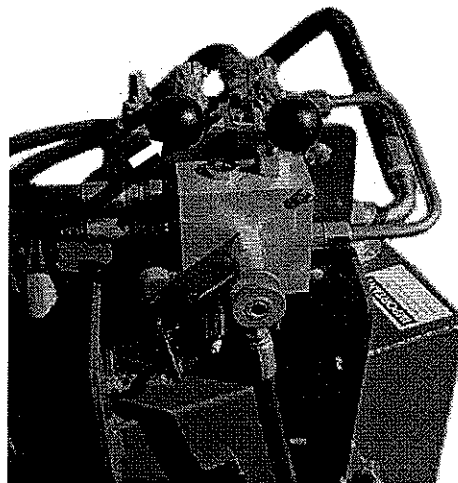


figure 15

## Activating Functions

### Manual Valves

**Swing Function Handle** – Use the swing function handle, the handle closer to the operator's seat (figure 15), to swing the sweeper. Lift the handle to angle the sweeper to the left or depress the handle to swing it to the right. The tractor engine and PTO must be engaged for this function to operate.

Angling the brush head assembly allows the operator to determine the direction that the sweeper will sweep debris.

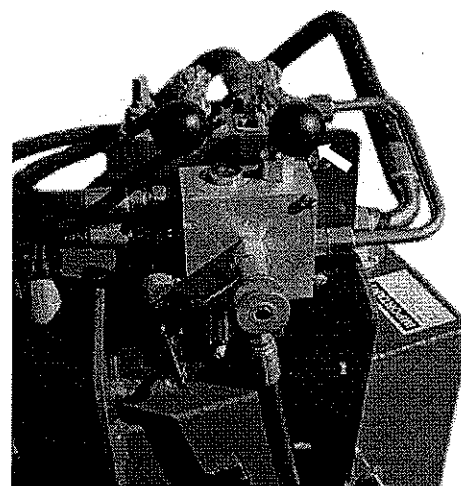


figure 16

**Brush Function Handle** – To activate the brush, start the tractor engine and PTO; then, lift the brush function handle (figure 16), the handle further from the operator's seat. Lifting this handle simultaneously lowers the brush head assembly and starts brush rotation.

Place the brush function handle in the neutral (center) position to stop the brush.

To raise the brush head assembly, depress the brush function handle. Once the brush head assembly raises completely, the brush function handle automatically returns to the neutral position.

# Operation

## Electric Valves

**Raise & Run/Float Switch** – Use this switch to raise, stop, lower and run the sweeper. Pressing it toward Raise lifts the brush head assembly and stops the brush if it is running. Putting it in Run/Float position lowers the brush head assembly and runs the brush. To stop brush rotation, center the switch.

**Right & Left Switch** – Pressing this switch to Right swings the brush head assembly to the right, and pressing it toward Left swings the brush head assembly left.

---

## **Sweeping**

To sweep:

1. Start the tractor engine and engage the PTO.
2. Swing the brush head assembly in the direction you wish to direct material.
3. Lower the brush head assembly and start brush rotation.
4. Travel forward at 5 mph (8 kph) or less.

At the end of a run: slow engine and travel speeds, disengage the brush, raise the brush head assembly and then make the turn.

**IMPORTANT** – Avoid sweeper damage. When approaching obstacles, like utility poles or fire hydrants, slow engine and travel speeds to avoid hitting these hazards.

---

## **Operating Tips**

### Brush Pattern

Always sweep with brush patterns from 2 in. (51 mm) to 8 in. (203 mm) wide. Use narrow brush patterns for light material such as dirt, pea gravel and light snow. When sweeping heavy debris – like rocks and hard packed mud – use wider brush patterns.

### Brush, Engine & Travel Speeds

While sweeping, vary brush, engine and travel speeds to match sweeping conditions.

### Large Areas

When sweeping a large area, such as a parking lot, make a path down the middle and sweep to both sides. This reduces the amount of debris that windrows in front of the sweeper.

### Snow

High brush speeds and slow ground speeds are needed to sweep snow effectively. Start at 3/4 throttle and the lowest gear of the prime mover. For wet and/or deep snow, increase to almost full throttle. This helps keep snow from packing inside the brush hood.

In deep snow you may need to make more than one pass to get down to a clean surface.

### Dirt & Gravel

Low brush speeds and moderate ground speeds work best for cleaning debris from hard surfaces. Brush speeds that are too fast tend to raise dust because of the aggressive sweeper action.

To sweep gravel, use just enough brush speed to “roll” the gravel, not throw it.

### Heavy Debris

When sweeping heavy debris or using the sweeper for chip sealing, use high brush speeds and low ground speeds, less than 5 mph (8 kph). Stop traveling forward, if needed, to loosen packed mud.

Sweep a path less than the full width of the sweeper.

Increase engine speed if debris becomes very heavy.

---

# Maintenance

## Schedule

Procedure	Before Each Use	After Each Use	100 Hours	When Necessary
<b>Air Filter on Tractor</b> – Clean; also see tractor maintenance manual		✓		
<b>Brush Head Assembly</b> – Level; see Maintenance: Leveling	✓			
<b>Cylinders</b> – Retract rods		✓		
<b>Hardware</b> – Tighten	✓			
<b>Hydraulic Filter</b> – Replace			✓	
<b>Hydraulic Hoses and Fittings</b> – Tighten	✓			
<b>Hydraulic Oil</b> – Check level on sight gauge; add ISO VG-46 oil if low	✓			
– Replace if milky or burnt smelling				✓
<b>Lubrication Points</b> – Lubricate with high quality grease; points are marked with grease gun label; also see Maintenance: Lubrication Points	✓			
<b>Wash Unit</b> – Remove grease and debris from all components especially hoses, tank, motor and pump		✓		



# Maintenance

## Leveling

For best sweeper performance, level the sweeper immediately after installation and as a part of regular maintenance.

1. Move the tractor to a level surface.
2. Verify that pressure is correct in tractor tires. Refer to the tractor operator's manual.
3. Make sure that the tractor parking brake is on; start the tractor and sweeper. Adjust the sweeper to the minimum brush pattern. Stop the sweeper.
4. Swing the sweeper to the right; stop the tractor. Then, on both sides of the sweeper measure from the ground to the bottom of the brush frame (figure 17).
5. Start the tractor. Swing the sweeper to the left; stop the tractor. Then, on both sides of the sweeper measure from the ground to the bottom of the brush frame.
6. If measurements in steps 4 and 5 are all equal, the sweeper is level.

If not, loosen jam nuts on adjustment links and make adjustments shown in figures 18-21. Tighten jam nuts.

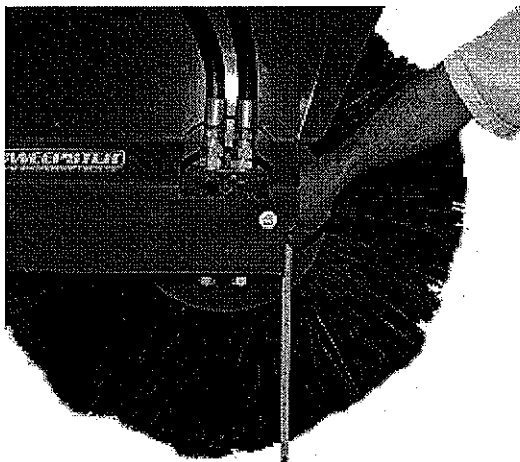


figure 17

To correct this leveling problem, turn nuts on adjustment links away from the tractor (figure 19).

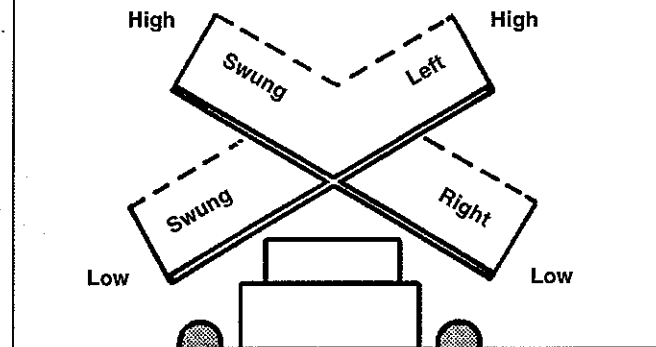


figure 18

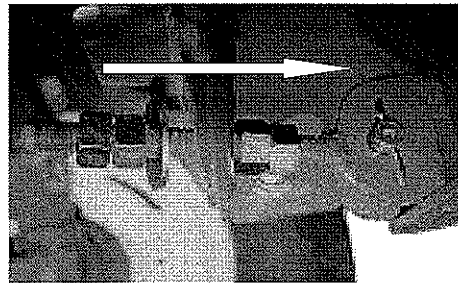


figure 19

To correct this leveling problem, turn nuts on adjustment links toward the tractor (figure 21).

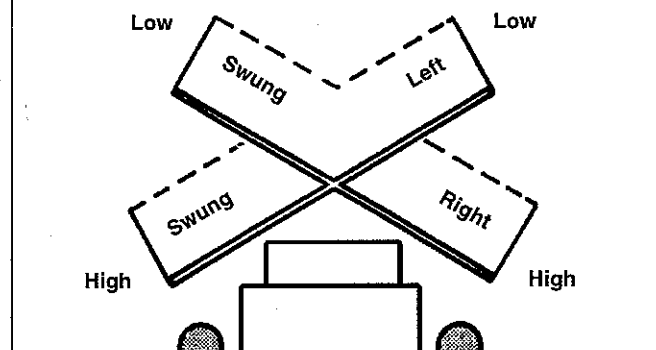


figure 20

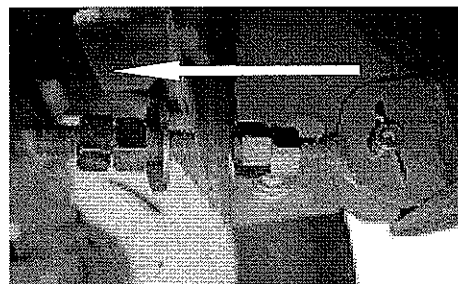


figure 21

## Replacing Brush Sections

1. Support the brush head assembly with stands.
2. Remove hoses from the motor(s).

**IMPORTANT** – Avoid hydraulic system contamination and damage. Clean and then cover hose ends, fittings and motor ports with fitting plugs and caps.

3. Remove 2, 3/8-16 x 1 in. cap screws from each side of the hood (figure 22) and then lift the hood off the rest of the assembly.
4. Remove 2, 1/2-13 x 3 1/2 in. cap screws from the bearing mounting (single motor only) and 2 carriage bolts from the motor housing(s) (figures 23 and 24). This detaches the brush from the brush frame.
5. Pull the brush out of the brush frame.
6. Remove 4 cap screws and the retainer (figure 25).
7. Stand the brush upright, placing it on blocks so the motor is off the ground.
8. Remove old sections.
9. Install the first section. Be sure drive pins (figure 26) straddle a tube to prevent the section from spinning on the core.

**Continued on the next page**

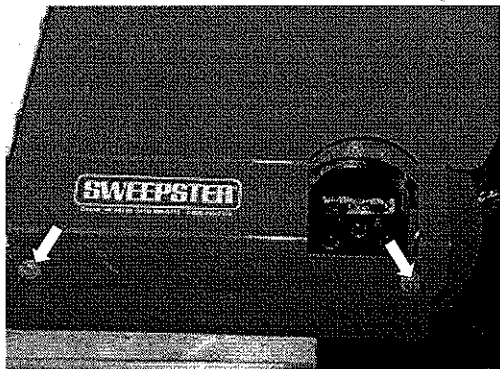


figure 22

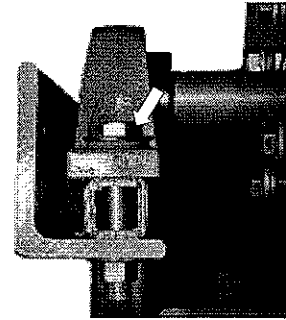


figure 23

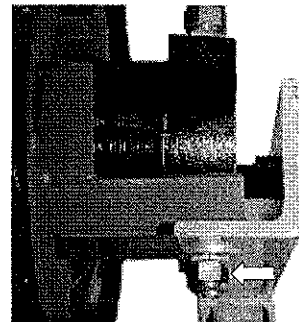


figure 24

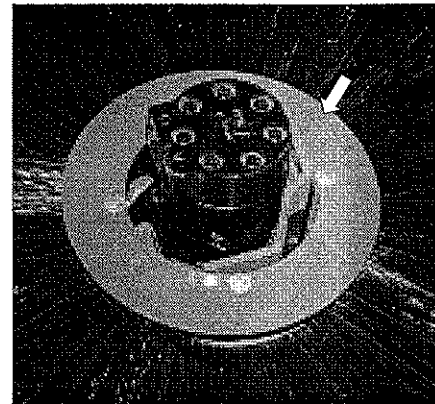


figure 25

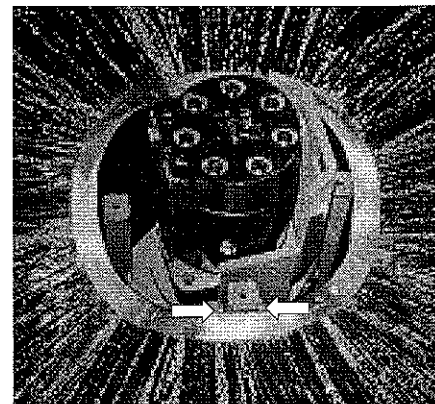


figure 26

## Maintenance

10. Install a second section with drive pins rotated 180° from those on the first section.
11. Continue installing sections, rotating each section 180° until the core is full.

**NOTE** – If the last section will take more space than remains but more than 1/2 in. (13 mm) of the core needs to be filled, nest the last section on the previous one. Do this by placing both sections' drive pins on the same tube.

12. Reinstall the retainer and hardware.
13. Lay the brush down.
14. Place the core in the frame. Reinstall and finger-tighten hardware on the bearing (single motor only) and motor housing(s).
15. Tighten hardware on the bearing (single motor only). Pull the motor housing(s) against the motor flange(s) (figure 27); tighten the hardware.
16. Place the hood on the brush frame. Reinstall and tighten hardware.
17. Thoroughly clean hose fittings and motor ports. Install hoses on the motor.
18. Check the level of the oil in the tank. Add ISO VG-46 oil as required to bring it to the proper level.
19. Run the engine at a slow idle. Stop the tractor; then, check for hydraulic leaks. Make corrections before proceeding.
20. Start the tractor again. Engage the brush and let it run while watching for excess vibration or other problems. Make corrections before using the sweeper.

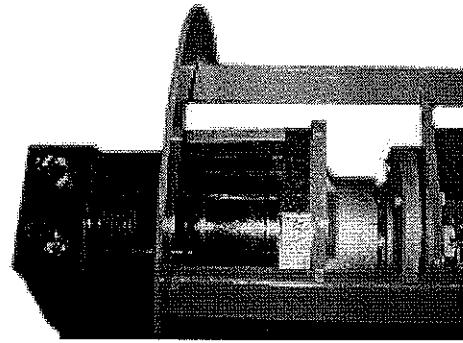


figure 27

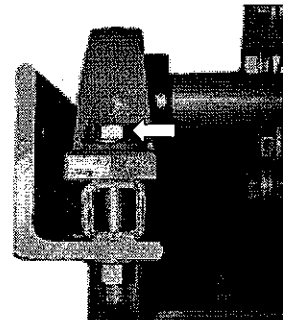


figure 28

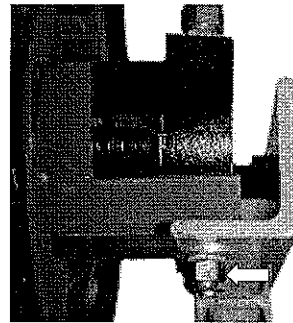


figure 29

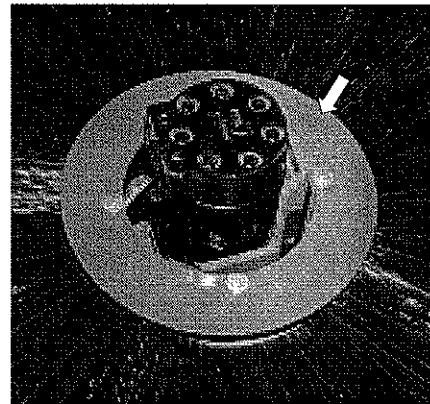


figure 30

### Replacing Motor & Hub

1. Support the brush head with stands.
2. Remove hydraulic hoses at the motor.

**IMPORTANT** – Avoid hydraulic system contamination and damage. Clean and then cover hose ends, fittings and motor ports with fitting plugs and caps.



## Maintenance

3. Remove 2, 3/8-16 x 1 in. cap screws from each side of the hood and then lift the hood off the rest of the assembly.
  4. Remove 2, 1/2-13 x 3 1/2 in. cap screws from the bearing mounting (single motor only) and 2 carriage bolts from the motor housing(s) (figures 28 and 29). This detaches the brush from the brush frame.
  5. Remove 4 cap screws and the retainer (figure 30) from the end that the hub and/or motor needs replacing.
  6. Remove a few sections and expose the motor and hub inside the core.
  7. Remove the hairpin clip and castle nut from the motor shaft (figure 31). Slide the motor and housing off the core.
  8. If replacing the hub, remove cap screws that hold it on the core. Take the hub out of the core.
  9. Replace the hub.
  10. Place the new motor in the housing and slide the assembly into the core and hub.
  11. Reinstall the nut and hairpin on the motor shaft.
  12. Reinstall sections. Make sure to rotate each section 180° from the last.
- NOTE** – If the last section will take more space than remains but more than 1/2 in. (13 mm) of the core needs to be filled, nest the last section on the previous one. Do this by placing both sections' drive pins on the same tube.
  13. Reinstall 4 cap screws and the retainer.
  14. Place the core in the brush frame. Reinstall and finger-tighten hardware on the bearing (single motor only) and motor housing(s).
  15. Tighten hardware on the bearing (single motor only). Pull the motor housing(s) against the motor flange(s) (figure 27); tighten the hardware.
  16. Place the hood on the brush frame. Reinstall and tighten hardware.
  17. Thoroughly clean the hose fittings and motor ports. Connect hydraulic hoses to the motor.

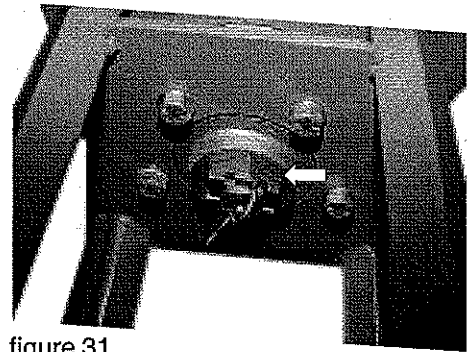


figure 31

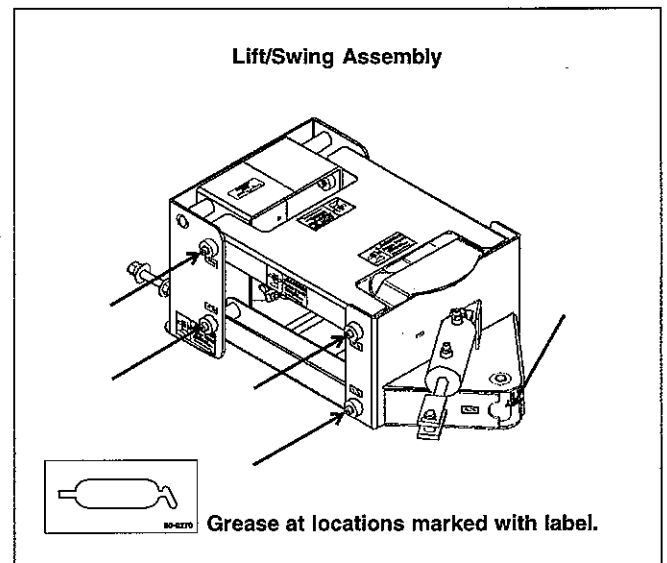


figure 32

18. Check the level of the oil in the tank. Add ISO VG-46 oil as required to bring it to the proper level.
19. Run the engine at a slow idle. Stop the tractor; then, check for hydraulic leaks. Make corrections before proceeding.
20. Start the tractor again. Engage the brush and let it run while watching for excess vibration or other problems. Make corrections before using the sweeper.

### Lubrication Points

Before each use, grease 9 lubrication points on the lift/swing assembly and 1 point on the brush head bearing (single motor only). Each point is marked with a label (figure 32). Refer to figure 32 for lift/swing assembly locations.

Use high-quality grease for lubrication.

# Troubleshooting

## Run Function

Problem	Possible Cause	Possible Solution
No functions operate	PTO is not running	Engage PTO
	No hydraulic oil in tank	Fill tank with ISO VG-46 oil
	<u>Electric Valves</u> – No power to solenoid because of plug or wires	Insert plug securely; check plug and wires for damage; repair as necessary
	<u>Electric Valves</u> – No power to solenoid because of fuse	Check with test light; replace as necessary
	<u>Electric Valves</u> – No power because system is not grounded	Ground electrical system to tractor frame
Brush slows or stops when making contact with sweeping surface	Hydraulic motor is failing	Test flow according to Troubleshooting: Testing Motors; replace motor if more than 3 gpm (.19 liters/sec) flow
	Relief valve set incorrectly	Test flow according to Troubleshooting: Testing Relief Setting; set relief valve to 2000 psi (138.0 bars)
Brush stalls when sweeping	Auto-sensing valve set incorrectly	Adjust brush pattern to 2-8 in. (51-203 mm) wide; see Troubleshooting: Adjusting Auto Sensing Valve
	Travel speed too fast	Travel at 5 mph (8 kph) or less
	Trying to sweep too much material	Sweep with less than the full width of the brush head assembly
	Relief valve set too low	Set relief to 2000 psi (138.0 bars); see Troubleshooting: Testing Relief Setting
	System cannot reach 2000 psi (138.0 bars) because of relief valve failure	Replace relief valve
Brush rotates slowly	<u>Electric Valves</u> – Flow divider not adjusted properly	Loosen jam nut and then turn setscrew until it stops; turn set-screw out 1 1/2 turns; tighten jam nut

## Troubleshooting

### Swing & Lift Functions

Problem	Possible Cause	Possible Solution
Lift cylinder does not raise brush head assembly	<u>Electric Valves</u> – Lift/swing relief valve set too low	Tighten valve 1 turn at a time until it raises
	<u>Electric Valves</u> – Wires not connected or damaged	Reconnect or replace wires
Swing cylinder does not swing brush head assembly	<u>Electric Valves</u> – No power to solenoid because of plug or wires	Insert plug securely; check plug and wires for damage; repair as necessary
	<u>Electric Valves</u> – No power to solenoid because of fuse	Check with test light; replace as necessary
	<u>Electric Valves</u> – Flow divider not adjusted properly	Loosen jam nut and then turn setscrew until it stops; turn setscrew out 1 1/2 turns; tighten jam nut
Swing cylinder angles brush head assembly while sweeping without being activated	<u>Electric Valves</u> – Flow divider not adjusted properly	Loosen jam nut and then turn setscrew until it stops; turn setscrew out 1 1/2 turns; tighten jam nut

### Brush

Problem	Possible Cause	Possible Solution
Brush wears into cone shape	Sweeper not level.	Level lift/swing assembly; see Maintenance: Leveling
	Tires on prime mover at different pressures or are different sizes	Check tire sizes and ratings; make corrections as necessary
Premature section or core failure	Brush pattern too wide	Use 2-8 in. (51-203 mm) brush patterns; use lightest brush pattern that completes job

# Troubleshooting

## Hydraulic System

Problem	Possible Cause	Possible Solution
Hydraulic motor moves when operating	Housing designed to allow motor to "float," minimizing stress on motor shafts	No remedy needed
Hydraulic system overheats	Quick couplers not connected securely	Connect quick couplers securely
	Hydraulic oil level too low	Add ISO VG-46 hydraulic oil to tank until it comes to High line on gauge
Hydraulic motor seals leaking	Hose restricted	Remove bends in hoses; replace hoses if blocked internally
	Hydraulic filter blocked	Replace filter
	Hydraulic pressure set too high	Set pressure to 2000 psi (138.0 bars)
	Motor failing (high hours on unit)	Have dealer rebuild or replace motor
Hydraulic oil flows from breather on hydraulic tank	Hydraulic tank too full	Drain, flush and refill hydraulic tank with new ISO-VG 46 oil; change filter

Manual Valves

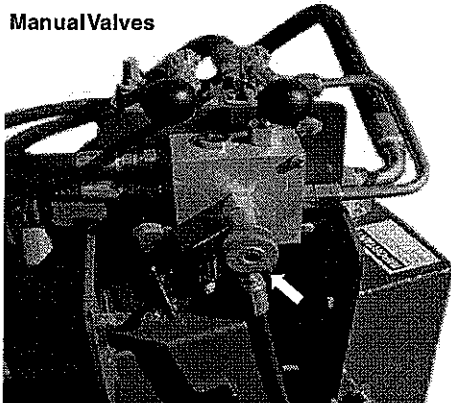


figure 33

Electric Valves

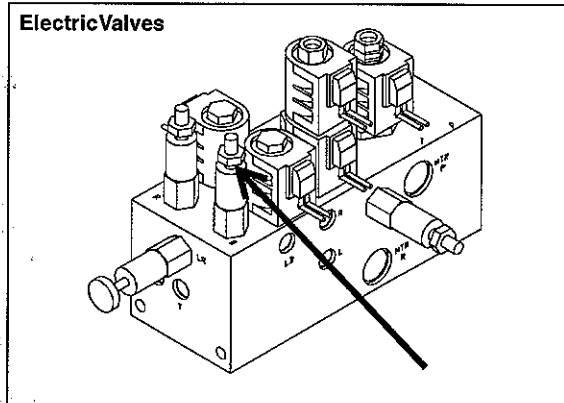


figure 34

## Troubleshooting

### Adjusting Auto Sensing Valve

1. Check the brush pattern.
  - a. Move the tractor to a level, paved area.
  - b. Make sure the tractor is in Neutral and the parking brake is on. Start the tractor and then engage the PTO at idle.
  - c. Engage the sweeper. Sweep in 1 spot for 10 seconds. Stop the sweeper.
  - d. Back the tractor away from the area swept. Set the parking brake and stop the tractor.
  - e. Note the width of the brush pattern.
2. Turn the control knob out completely.
3. Loosen the jam nut and adjust the barrel end valve (figures 33 and 34), turning it in for a lighter pattern or out for a heavier pattern. Repeat this step until the brush makes an 8 in. (203 mm) pattern.
4. Turn the control knob in completely.
5. Check the brush pattern by following step 1. Loosen the jam nut and adjust the rod end valve (figures 35 and 36), turning it in for a heavier pattern or out for a lighter pattern. Repeat this step until the brush makes an even 2 in. (51 mm) pattern.
6. Test the function of the control knob: Turn the control knob in to create a narrow pattern; turn the control knob out to make a wider pattern.
7. Tighten jam nuts on the valves.
8. **Electric Valves** – If the brush head assembly does not raise, tighten the lift/swing relief valve (figure 37) 1 turn at a time until the brush head assembly raises.

Manual Valves

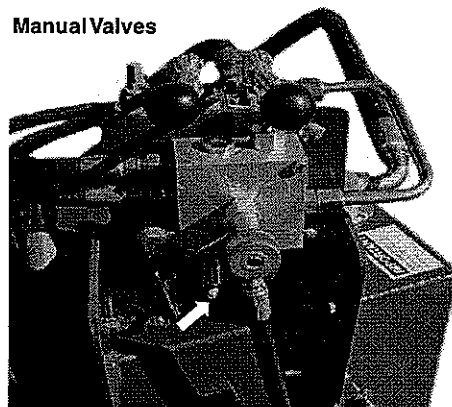


figure 35

Electric Valves

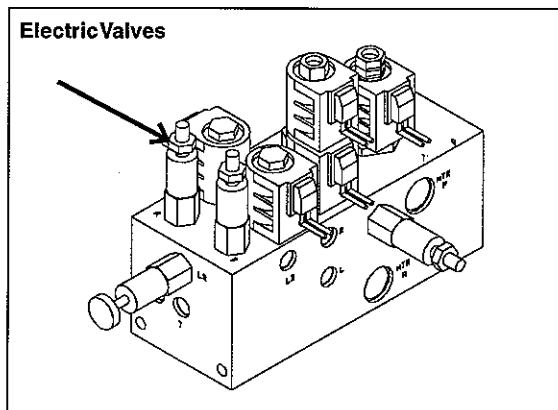


figure 36

Electric Valves

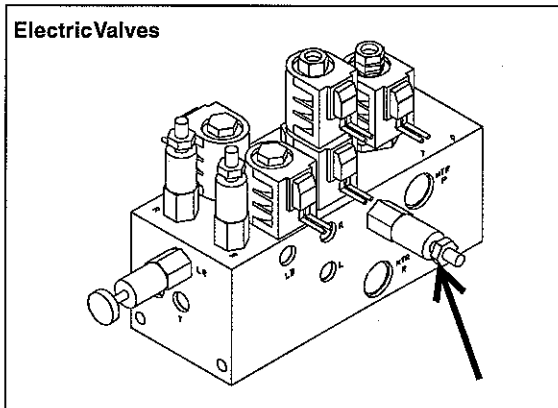


figure 37

## Hydraulic Problems

If hydraulic problems – which include the brush failing to rotate, the brush slowing or stopping when making contact with the sweeping surface or swing/lift cylinders not functioning – occur, complete all of the following checks on the hydraulic system.

**! WARNING** – Avoid serious injury.

Test components must have a minimum rating of 3000 psi (206.0 bars). Otherwise, components could rupture, causing serious injury. Open the gate valve before beginning any tests.

Do not operate the pump more than 5 seconds with pressure over 2000 psi (138.0 bars). Higher pressures can rupture hydraulic components and can cause serious injury.

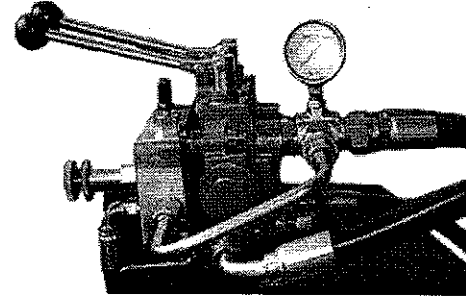


figure 38

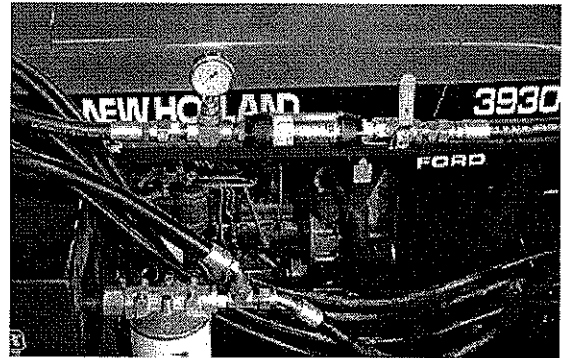


figure 39

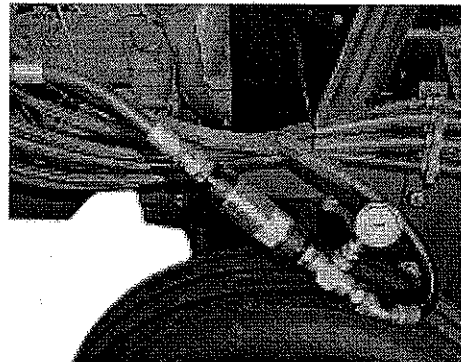


figure 40

## Testing For Relief Setting

For proper operation, the relief on the valve must be set at 2000 psi (138.0 bars). Use the following instructions to check its setting.

1. Add a T-fitting and pressure gauge (rated at 3000 psi) to the swing circuit (figure 38).
2. Make sure the tractor is in Neutral with the parking brake on. Start the tractor at idle and engage the sweeper.
3. Swing the sweeper to the maximum stroke of the cylinder.
4. Note the reading on the pressure gauge.
  - If the reading is 2000 psi (138.0 bars) the relief is set properly. Go on to step 7.
  - If the reading is above or below 2000 psi (138.0 bars) go to step 5 to adjust the relief.
5. Remove the cap nut from the relief and loosen the jam nut.

6. With the tractor in Neutral, the parking brake on and the unit running, adjust the relief. To raise the pressure, turn the Allen screw in or to lower it, turn it out.

**IMPORTANT** – Avoid pump damage. Do not allow the pressure to rise above 2000 psi (138.0 bars).

7. Remove the T-fitting and pressure gauge and then reconnect hoses.
8. Go on to Testing Pump.

## Troubleshooting

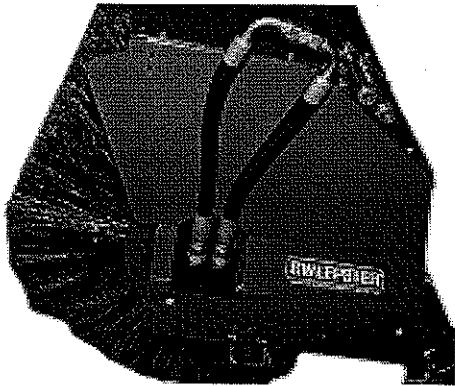


figure 41

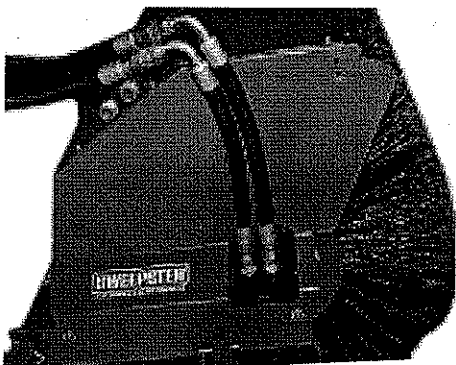


figure 42

### Testing Pump

1. Place a pressure gauge, flow gauge and gate valve between the motor run port on the valve and the rear tube on the brush hood (figure 39).
2. Make sure the tractor is in Neutral with the parking brake on. Start the tractor at idle and engage the sweeper.
3. Raise engine speed to 2600 rpm and adjust the sweeper to a 3 in. (76 mm) brush pattern.
4. Note the reading on the flow gauge. Then, shut the gate valve. Note the reading on the pressure gauge.
  - If the flow gauge reads 10-12 gpm (.63-.76 liters/sec) for a 12 gpm pump or 18-20 gpm (1.14-1.26 liters/sec) for a 20 gpm pump and the pressure gauge reached 2000 psi (138.0 bars), the pump is functioning properly.
  - If the flow and/or pressure did not reach the proper reading, the pump has failed. Take it to your dealer to have it rebuilt or replaced.

5. Remove the pressure gauge, flow gauge and gate valve and reconnect hoses.
6. Go on to Testing Motors.

---

### Testing Motors

1. Place a pressure gauge and flow gauge between the filter base and the front tube on the brush hood (figure 40).
2. Make sure the tractor is in Neutral with the parking brake on. Start the tractor at idle and engage the sweeper. Then, adjust the brush to the maximum sweeping pattern.
3. When the brush stalls, note the reading on the flow gauge. If it is 3 gpm (.19 liters/sec) or more, the motor(s) need(s) to be replaced.
4. For dual motor units, isolate each motor and test separately.
  - a. Remove hoses from tubes to motors at the tube end.
  - b. Remove hoses from T-fittings on tubes.
  - c. On one motor, connect hoses removed from the tubes (figure 41).
  - d. On the other motor, connect the hose from the front tube to the hose on the motor's front port. Connect the hose from the rear tube to the motor's rear port (figure 42).
  - e. Make sure the tractor is in Neutral with the parking brake on. Start the tractor at idle and engage the sweeper. Then, adjust the brush to the maximum sweeping pattern.
  - f. When the brush stalls, note the reading on the flow gauge. If it is 3 gpm (.19 liters/sec) or more, the motor need to be replaced.
  - g. Repeat steps 4c-f to test the other motor.

# Torqmotor™ Troubleshooting Guide

NOTE: Before troubleshooting any system problem, check service literature published by the equipment and/or component manufacturers. Follow their instructions, if given, for checking any component other than the Torqmotor™ unit.

## Preparation

Make your troubleshooting easier by preparing as follows:

- work in a clean, well-lighted place;
- have proper tools and materials nearby;
- have an adequate supply of clean petroleum-based solvent.

**WARNING: SINCE SOLVENTS ARE FLAMMABLE, BE EXTREMELY CAREFUL WHEN USING ANY SOLVENT, EVEN A SMALL EXPLOSION OR FIRE COULD CAUSE INJURY OR DEATH.**

**WARNING: WEAR EYE PROTECTION AND BE SURE TO COMPLY WITH OSHA AND OTHER MAXIMUM AIR PRESSURE REQUIREMENTS.**

## Preliminary Checks

Hydraulic systems are often trouble-free. Hence, the problem an operator complains of could be caused by something other than the hydraulic components.

Thus, once you have determined that a problem exists, start with the easy-to-check items, such as:

- parts damaged from impact that were not properly repaired, or that should have been replaced; and
- improper replacement parts used in previous servicing
- mechanical linkage problems such as binding, broken, or loose parts or slipping belts

## Hydraulic Components

If you think the problem is caused by a hydraulic component, start by checking the easy-to-reach items.

Check all hoses and lines for cracks, hardening, or other signs of wear. Reroute any useable hoses that are kinked, severely bent, or that rest against hot engine parts. Look for leaks, especially at couplings and fittings. Replace any hoses or lines that don't meet system flow and pressure ratings.

Next, go to the reservoir and filter or filters. Check fluid level and look for air bubbles. Check the filter(s). A filter with a maximum 50 micron filtration is recommended for the Torqmotor system.

Visually check other components to see if they are loosely mounted, show signs of leaks, or other damage or wear.

Excessive heat in a hydraulic system can create problems that can easily be overlooked. Every system has its limitation for the maximum amount of temperature. After the temperature is attained and passed, the following can occur:

- oil seal leaks
- loss of efficiency such as speed and torque
- pump loss of efficiency
- pump failure
- hoses become hard and brittle
- hose failure

A normal temperature range means an efficient hydraulic system. Consult the manuals published by equipment and/or component manufacturers for maximum allowable temperature and hydraulic tests that may be necessary to run on the performance of the hydraulic components. The Torqmotor™ is not recommended for hydraulic systems with maximum temperatures above 200°F (93.3°C).



# Torqmotor™ Troubleshooting Checklist

Trouble	Cause	Remedy
Oil Leakage	1. Hose fittings loose, worn or damaged.	Check & replace damaged fittings or "O" Rings. Torque to manufacturers specifications.
	2. Oil seal rings (4) deteriorated by excess heat.	Replace oil seal rings by disassembling Torqmotor™ unit.
	3. Special bolt (1, 1A, 1B or 1C) loose or its sealing area deteriorated by corrosion.	(a) Loosen then tighten single bolt to torque specification. (b) Replace bolt.
	4. Internal shaft seal (16) worn or damaged.	Replace seal. Disassembly of Torqmotor™ unit necessary.
	5. Worn coupling shaft (12) and internal seal (16).	Replace coupling shaft and seal by disassembling Torqmotor™ unit.
Significant loss of speed under load	1. Lack of sufficient oil supply	(a) Check for faulty relief valve and adjust or replace as required. (b) Check for and repair worn pump. (c) Check for and use correct oil for temperature of operation.
	2. High internal motor leakage	(a) Replace worn rotor set by disassembling Torqmotor™ unit.
	3. Severely worn or damaged internal splines.	Replace rotor set, drive link and coupling shaft by disassembling Torqmotor™ unit.
	4. Excessive heat.	Locate excessive heat source (usually a restriction) in the system and correct the condition.
Low mechanical efficiency or undue high pressure required to operate Torqmotor™ unit	1. Line blockage	Locate blockage source and repair or replace.
	2. Internal interference	Disassemble Torqmotor™ unit, identify and remedy cause and repair, replacing parts as necessary.
	3. Lack of pumping pressure	Check for and repair worn pump.
	4. Excessive binding or loading in system external to Torqmotor™ unit.	Located source and eliminate cause.

CAUTION: If the hydraulic system fluid becomes overheated [in excess of 200°F (93.3°C)], seals in the system can shrink, harden or crack, thus losing their sealing ability.

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## Tips for Maintaining the Torqmotor™ Hydraulic System

- Adjust fluid level in reservoir as necessary.
- Encourage all operators to report any malfunction or accident that may have damaged the hydraulic system or component.
- Do not attempt to weld any broken Torqmotor™ component. Replace the component with original equipment only.
- Do not cold straighten, hot straighten, or bend any Torqmotor™ part.
- Prevent dirt or other foreign matter from entering the hydraulic system. Clean the area around and the filler caps before checking oil level.
- Investigate and correct any external leak in the hydraulic system, no matter how minor the leak.
- Comply with manufacturer's specifications for cleaning or replacing the filter.

CAUTION: Do not weld, braze, solder or any way alter any Torqmotor™ component.

CAUTION: Maximum operating pressure must not exceed recommended Torqmotor™ pressure capacity.

CAUTION: Always carefully inspect any system component that may have been struck or damaged during operation or in an accident. Replace any component that is damaged or that is questionable.

CAUTION: Do not force any coupling onto the Torqmotor™ coupling shaft as this could damage the unit internally.

## Storage

### Brushes

**IMPORTANT** – Do not store the sweeper with weight on the brush. Weight will deform the bristles, destroying the sweeping effectiveness. To avoid this problem, place the sweeper on blocks or use optional stands.

Do not store poly brushes in direct sunlight. The material can deteriorate and crumble before the bristles are worn out.

Keep poly material away from intense heat or flame.

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# Brush Head Assembly

Item	Part	Qty	Description	Item	Part	Qty	Description
1.	01-0224	1	Core, 6 ft, Single Motor	22.	07-1718	4	Washer, Lock, Split, 3/8
	01-0276	1	Core, 7 ft, Single Motor	23.	07-1762	6	Washer, Lock, Split, 1/2
	01-0268	1	Core, 8 ft, Single Motor	24.	07-1763	2	Washer, Flat, 1/2
2.	01-0020C	1	Set, Section, 32, Poly, Convoluted, 6 ft	25.	07-1764	2	Nut, Hex, 1/2-13
	01-0930	1	Set, Section, 32, 10, Poly/Wire Combination, 6 ft	26.	07-1872	2	Washer, Lock, Split, 5/8
	01-0079C	1	Set, Section, 32, Poly, Convoluted, 7 ft	27.	07-2952	12	Screw, M6 x 1 x 20
	01-0931	1	Set, Section, 32, 10, Poly/Wire Combination, 7 ft	28.	07-2956	12	Nut, Insert, M6 x 1
	01-0080C	1	Set, Section, 32, Poly, Convoluted, 8 ft	29.	07-3120	2	Washer, Flat, 5/8
	01-0933	1	Set, Section, 32, 10, Poly/Wire Combination, 8 ft	30.	07-3273	4	Washer, Lock, Split, 5/16
3.	03-0400	1	Hub, Taper	31.	07-3275	2	Washer, Flat, 5/16
4.	03-0784	4	Clamp, Hydraulic, Metal, 2 Position	32.	07-3279	4	Washer, Flat, 3/8
5.	03-0786	4	Bushing, Split, 1	33.	07-3441	2	Screw, Cap, 1/2-13 x 3-1/2
6.	03-0788	2	Nut, Stack, Socket Head	34.	07-3624	4	Tack, Metal
7.	03-1826	1	Motor, TRW	35.	07-3654	4	Nut, Hex, 3/8-16
	07-2256		Kit, Seal, for 03-1826	36.	07-3990	1	Screw, Allen Head, 3/4 x 9
	07-0191		Nut, Hex, 1-20, Castellated	37.	08-0035	1	Bearing Assembly, 1-1/4 Round, PBS
	07-0210		Clip, Hairpin, 14 gauge x 1-3/4	38.	11-1637	1	Block, Spacer, Bearing
8.	03-1949	2	Fitting, Adapter, HP, 7/8 MOR-3/4 MFS	39.	11-1837	1	Mounting, Motor
9.	03-3143	2	Fitting, Elbow, HP, 90, 1 MFS-1 MFS	40.	11-9220	1 set	Plate, Retainer, Section Set, 962200 & Up
10.	03-3144	2	Assembly, Tube, Brush Head, 36, with #16 Spud & Nut, #12 M (for 6 ft)	41.	13-8522	1	Plate, Hood End, Right
	03-3145	2	Assembly, Tube, Brush Head, 42, with #16 Spud & Nut, #12 M (for 7 ft)	42.	13-8523	1	Plate, Hood End, Left
	03-3146	2	Assembly, Tube, Brush Head, 48, with #16 Spud & Nut, #12 M (for 8 ft)	43.	13-8524	1	Sheet, Hood, 6 ft
11.	03-3157	1	Hose, 3/4 x 17.5, 2 Wire, 3/4-90 FFS-3/4 FFS		13-8525	1	Sheet, Hood, 7 ft
12.	03-3158	1	Hose, 3/4 x 19.0, 2 Wire, 3/4-90 FFS-3/4 FFS		13-8526	1	Sheet, Hood, 8 ft
13.	07-0018	4	Screw, Cap, 3/8-16 x 1	44.	13-8529	1	Frame, Brush, 6 ft
14.	07-0034	5	Screw, Cap, 7/16-20 x 1		13-8545	1	Frame, Brush, 7 ft
15.	07-0045	4	Screw, Cap, 1/2-13 x 1-1/2		13-8546	1	Frame, Brush, 8 ft
16.	07-0119	2	Bolt, Carriage, 5/8 x 1-3/4	45.	50-0004	1	Label, Plate, Serial #
17.	07-0146	1	Nut, Hex, Nylock, 3/4-10	46.	50-0008-1	2	Label, Danger, No Riders
18.	07-0169	5	Washer, Lock, Split, 7/16	47.	50-0014-1	2	Label, Caution, Read Manual, General Safety
19.	07-0210	1	Clip, Hairpin, 14 gauge x 1-3/4	48.	50-0014-2	2	Label, Warning, Running Sweeper & Engine
20.	07-1294	2	Nut, Hex, 5/8-11	49.	50-0721	2	Label, Warning Crush Hazard
21.	07-1714	4	Screw, Cap, 5/16-18 x 1	50.	50-0184	2	Label, Small, White, SWEEPSTER
				51.	50-0252	1	Label, Logo, Large, White, Die Cut
				52.	50-0270	1	Label, Grease Location
				53.	50-0725	2	Label, Warning, High Pressure Fluid Hazard

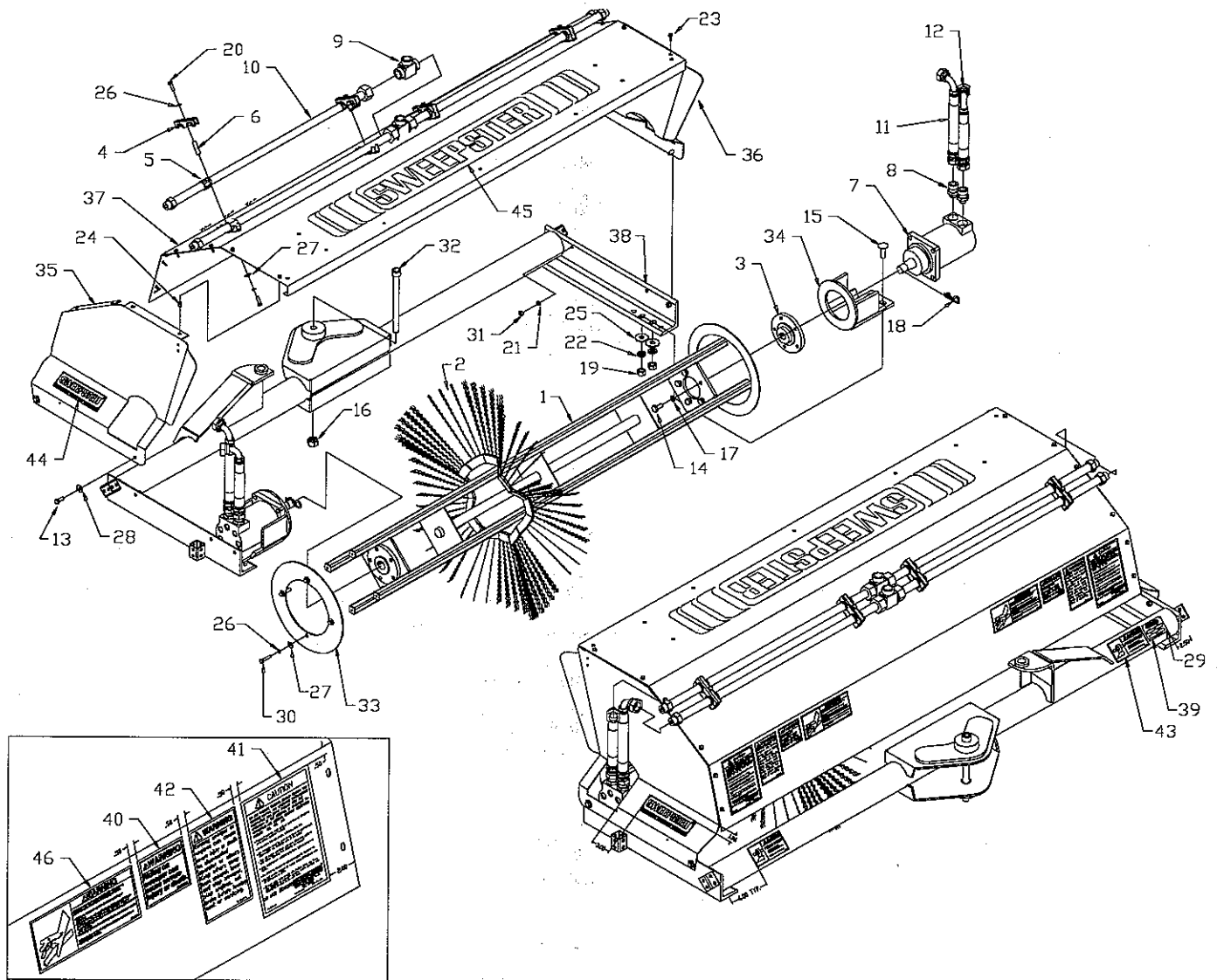
## Brush Head Assembly

Item	Part	Qty	Description	Item	Part	Qty	Description
1.	01-0287	1	Core, 6 ft, Dual Motor	17.	07-0169	10	Washer, Lock, Split, 7/16
	01-0250	1	Core, 7 ft, Dual Motor	18.	07-0210	2	Clip, Hairpin, 14 gauge x 1-3/4
	01-0426	1	Core, 8 ft, Dual Motor	19.	07-1294	4	Nut, Hex, 5/8-11
2.	01-0020C	1	Set, Section, 32, Poly, Convolutd, 6 ft	20.	07-1714	8	Screw, Cap, 5/16-18 x 1
	01-0930	1	Set, Section, 32, 10, Poly/Wire Combination, 6 ft	21.	07-1718	4	Washer, Lock, Split, 3/8
	01-0079C	1	Set, Section, 32, Poly, Convolutd, 7 ft	22.	07-1872	4	Washer, Lock, Split, 5/8
	01-0931	1	Set, Section, 32, 10, Poly/Wire Combination, 7 ft	23.	07-2952	12	Screw, M6 x 1 x 20
	01-0080C	1	Set, Section, 32, Poly, Convolutd, 8 ft	24.	07-2956	12	Nut, Insert, M6 x 1
	01-0933	1	Set, Section, 32, 10, Poly/Wire Combination, 8 ft	25.	07-3120	4	Washer, Flat, 5/8
3.	03-0400	2	Hub, Taper	26.	07-3273	12	Washer, Lock, Split, 5/16
4.	03-0784	8	Clamp, Hydraulic, Metal, 2 Position	27.	07-3275	8	Washer, Flat, 5/16
5.	03-0786	8	Bushing, Split, 1	28.	07-3279	4	Washer, Flat, 3/8
6.	03-0788	4	Nut, Stack, Socket Head	29.	07-3624	4	Tack, Metal
7.	03-1826	2	Motor, TRW	30.	07-3647	4	Screw, Cap, 5/16-18 x 1-1/2
	07-2256		Kit, Seal, fir03-1826	31.	07-3654	4	Nut, Hex, 3/8-16
	07-0191		Nut, Hex, 1-20, Castellated	32.	07-3990	1	Screw, Allen Head, 3/4 x 9
	07-0210		Clip, Hairpin, 14 gauge x 1-3/4	33.	11-1149	1	Ring, End, with Holes
8.	03-1949	4	Fitting, Adapter, HP, 7/8 MOR-3/4 MFS	34.	11-1837	2	Mounting, Motor
9.	03-3134	2	Fitting, Tee, 1 MFS All Ends	35.	13-8522	1	Plate, Hood End, Right
10.	03-3144	4	Assembly, Tube, Brush Head, 36, with #16 Spud & Nut, #12 M (for 6 ft)	36.	13-8523	1	Plate, Hood End, Left
	03-3145	4	Assembly, Tube, Brush Head, 42, with #16 Spud & Nut, #12 M (for 7 ft)	37.	13-8524	1	Sheet, Hood, 6 ft
	03-3146	4	Assembly, Tube, Brush Head, 48, with #16 Spud & Nut, #12 M (for 8 ft)		13-8525	1	Sheet, Hood, 7 ft
11.	03-3157	2	Hose, 3/4 x 17.5, 2 Wire, 3/4-90 FFS-3/4 FFS		13-8526	1	Sheet, Hood, 8 ft
12.	03-3158	2	Hose, 3/4 x 19.0, 2 Wire, 3/4-90 FFS-3/4 FFS	38.	13-8529	1	Frame, Brush, 6 ft
13.	07-0018	4	Screw, Cap, 3/8-16 x 1		13-8545	1	Frame, Brush, 7 ft
14.	07-0034	10	Screw, Cap, 7/16-20 x 1		13-8546	1	Frame, Brush, 8 ft
15.	07-0119	4	Bolt, Carriage, 5/8 x 1-3/4	39.	50-0004	1	Label, Plate, Serial #
16.	07-0146	1	Nut, Hex, Nylock, 3/4-10	40.	50-0008-1	2	Label, Danger, No Riders
				41.	50-0014-1	2	Label, Caution, Read Manual, General Safety
				42.	50-0014-2	2	Label, Warning, Running Sweeper & Engine
				43.	50-0721	2	Label, Warning Crush Hazard
				44.	50-0184	2	Label, Small, White, SWEEPSTER
				45.	50-0252	1	Label, Logo, Large, White, Die Cut
				46.	50-0725	2	Label, Warning, High Pressure Fluid Hazard

# Brush Head Assembly

Dual Motor

52-0516



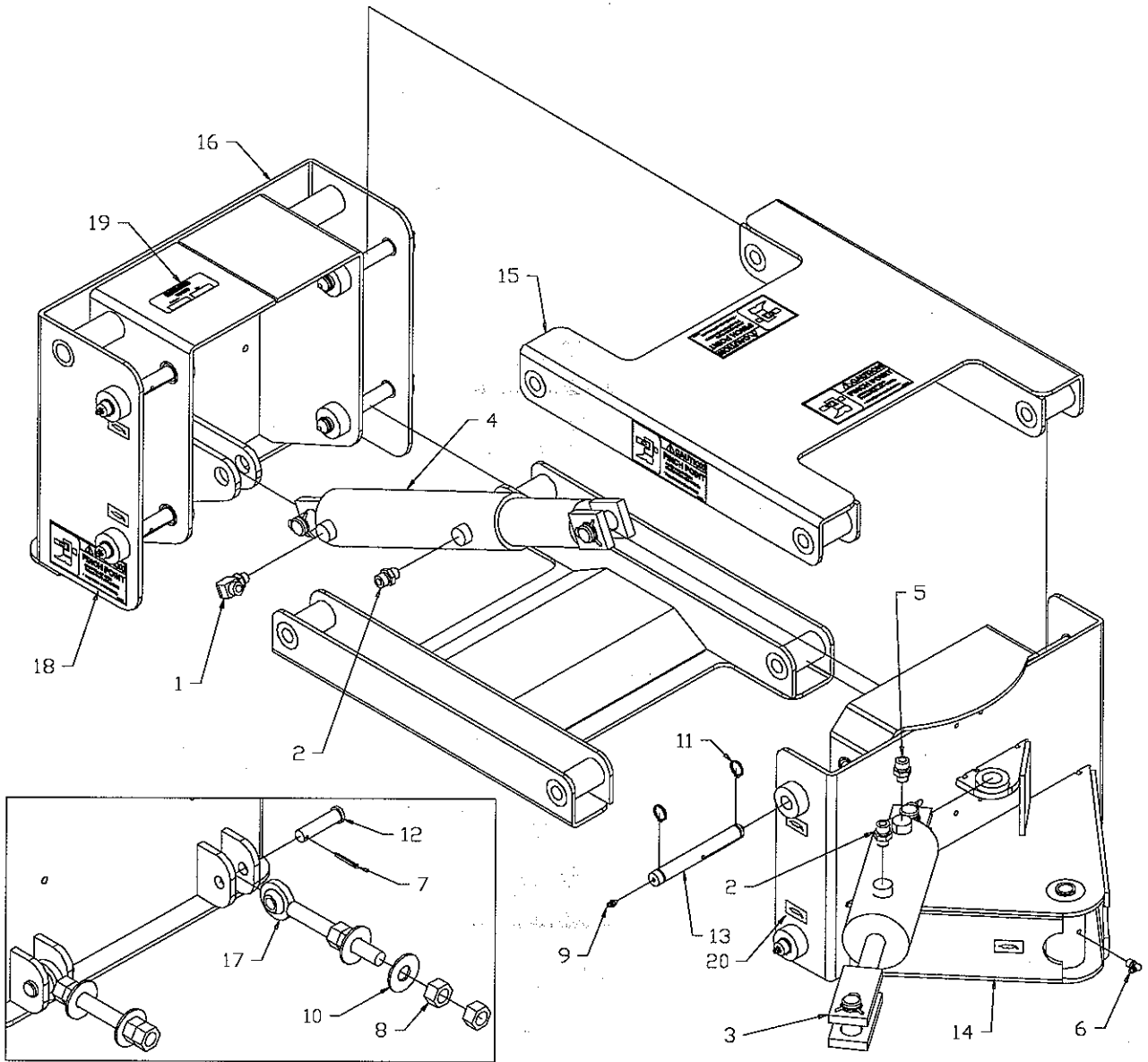
## Lift/Swing Assembly

Item	Part	Qty	Description
1.	03-2092	1	Fitting, Elbow, HP, 90, 9/16 MOR-3/8 MFS
2.	03-2291	2	Fitting, Adapter, HP, 3/8 MFS-9/16 MOR
3.	03-3136	1	Cylinder, Hydraulic, 3 Bore, 4.5 Stroke, 1-1/8 Rod, 9/16 SAE Ports
	03-0928		Kit, Seal, Cylinder
	*****	2	Pin, 1 Dia, 2.75 Effective Length
4.	03-3137	1	Cylinder, Hydraulic, 2.5 Bore, 10 Stroke, 1.75 Rod, 9/16 SAE Ports
	03-3175		Kit, Seal, Cylinder
	*****	2	Pin, 1 Dia, 2.75 Effective Length
5.	03-3164	1	Fitting, Adapter, HP, 3/8 MFS-9/16 MOR, with .062 Restrictor
6.	07-0563	1	Fitting, Zerk, 90°, 1/8 NPT
7.	07-0699	2	Pin, Cotter, 1/8 x 1-1/4
8.	07-3066	8	Nut, Hex, 3/4-10
9.	07-3112	8	Fitting Zerk, 1/4-28
10.	07-3684	16	Washer, Flat, 3/4
11.	07-3938	16	Ring, Snap, .750 x .078
12.	07-3989	2	Pin, Clevis, 5/8 x 2-1/2
13.	13-8519	8	Pin, Pivot, Lift
14.	13-8527	1	Frame, Swing
15.	13-8528	2	Plate, Pivot
16.	13-8530	4	Frame, Rear, Lift
17.	13-8533	1	Rod, Adjustable Link
18.	50-0721	10	Label, Warning Crush Hazard
19.	50-0249	1	Label, Plate, Part #/Date
20.	50-0270	10	Label, Grease Location

# Lift/Swing Assembly

52-0515

Assembly 11-5877



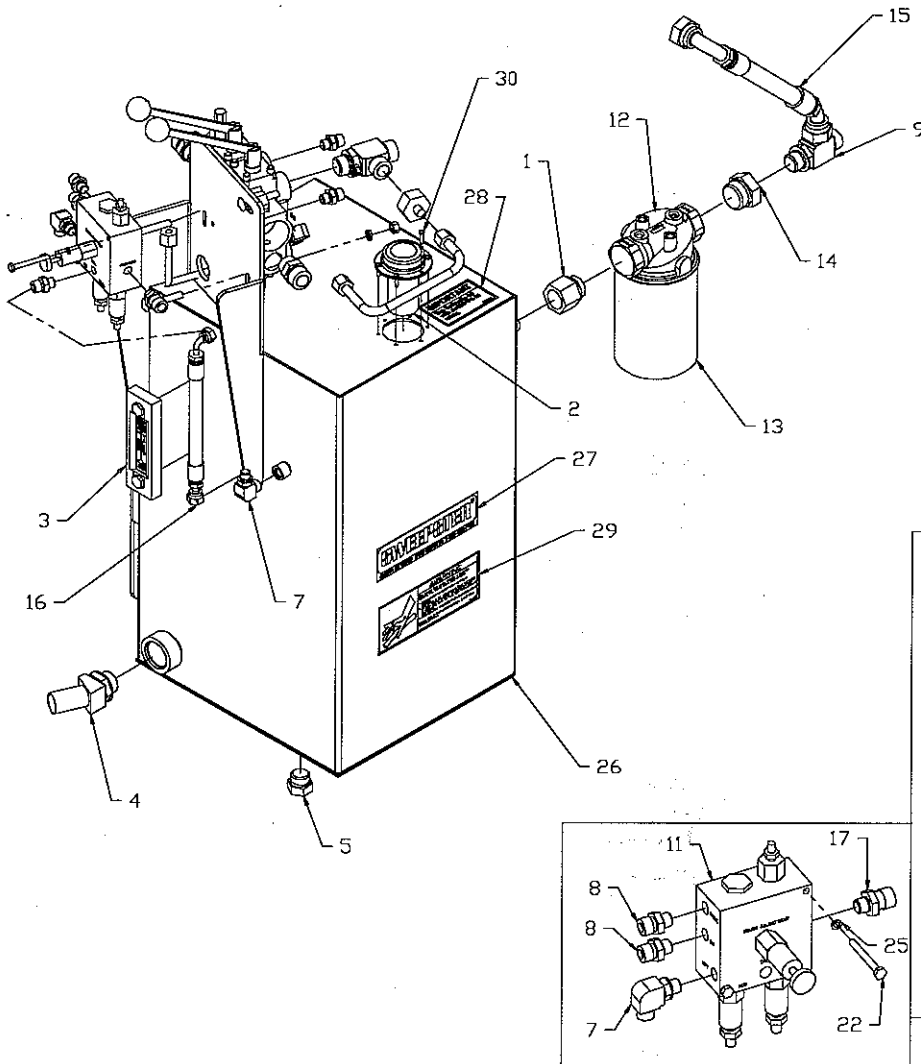


## Tank Assemblies

Item	Part	Qty	Description
1.	03-0087	1	Fitting, Adapter, HP, 1-5/16 MOR-1 FP
2.	03-1010	1	Filler, Assembly, with Magnet
3.	03-1074	1	Gauge, Sight, Hydraulic
4.	03-1457	1	Fitting, Barb, HP, 45, 1-1/4-1-5/8 MOR
5.	03-1499	1	Fitting, Plug, HP, Hex, 1-1/6 MOR
6.	03-1945	2	Fitting, Adapter, HP, 1-1/16 MOR-3/4 MFS
7.	03-2092	3	Fitting, Elbow, HP, 90, 9/16 MOR-3/8 MFS
8.	03-2291	5	Fitting, Adapter, HP, 3/8 MFS-9/16 MOR
9.	03-3135	2	Fitting, Straight, Third, Run, Tee, 3/4 MFS
10.	03-3138	1	Valve, 2 Spool, with Handles
	07-3179		Kit, Seal, for All Components in 03-3138
	03-3178		Kit, Seal, for 03-3138 Valve Assembly, Both Spools
	03-2927		Kit, Seal, Valve, Relief
11.	03-3139	1	Valve, Auto Height Control
	03-3177		Kit, Seal, All Components in 03-3139
	03-3172		Valve, Cartridge, Adjustment, Rod End, for 03-3139
	03-3171		Valve, Cartridge, Adjustment, Barrel End, for 03-3139
	03-3170		Valve, Cartridge, Check, for 03-3139
	03-3174		Valve, Cartridge, Shut Off, for 03-3139
	03-3173		Valve, Cartridge, Height Adjustment, for 03-3139
12.	03-3140	1	Filter Base, Spin-On, 1-5/16 SAE
13.	03-3141	1	Filter Element, 10 micron, Spin-On
14.	03-3142	1	Fitting, Adapter, 1-5/16 MOR-1-1/16 FOR
15.	03-3160	1	Hose, 3/4 x 30, 2 Wire, 3/4-90 FFS-45 FFS 90
16.	03-3165	1	Hose, 3/8 x 14.5, 2 Wire, 3/8-90 FFS-3/8 FFS
17.	03-3166	1	Fitting, Adapter, HP, 1/2 MFS-9/16 MOR
18.	03-3167	1	Tube, Assembly, Bent, 3/8 Tube, 3/8 FFS-3/8 FFS, Auto Lift
19.	03-3168	1	Tube, Assembly, Bent, 1/2 Tube, 1/2 FFS-1/2 FFS, Auto Pressure
20.	03-3169	1	Fitting, Tube, End, Reducer, 1/2 MFS-3/4 FFS, with Nut & O-Ring
21.	07-1718	3	Washer, Lock, Split, 3/8
23.	07-3654	3	Nut, Hex, 3/8-16
24.	07-3703	3	Bolt, Carriage, 3/8-16 x 2-1/4
25.	07-4038	2	Washer, Lock, Split, 1/4
26.	13-8531	1	Tank
27.	50-0184	1	Label, Small, White, SWEEPSTER
28.	50-0272	1	Label, Oil, ISO VG-46
29.	50-0725	1	Label, Warning High Pressure Fluid
30.	07-5760	6	Screw, Self Tap, 10-24 x 1/2

# Tank Assemblies

## Side Tank Assembly 11-5878



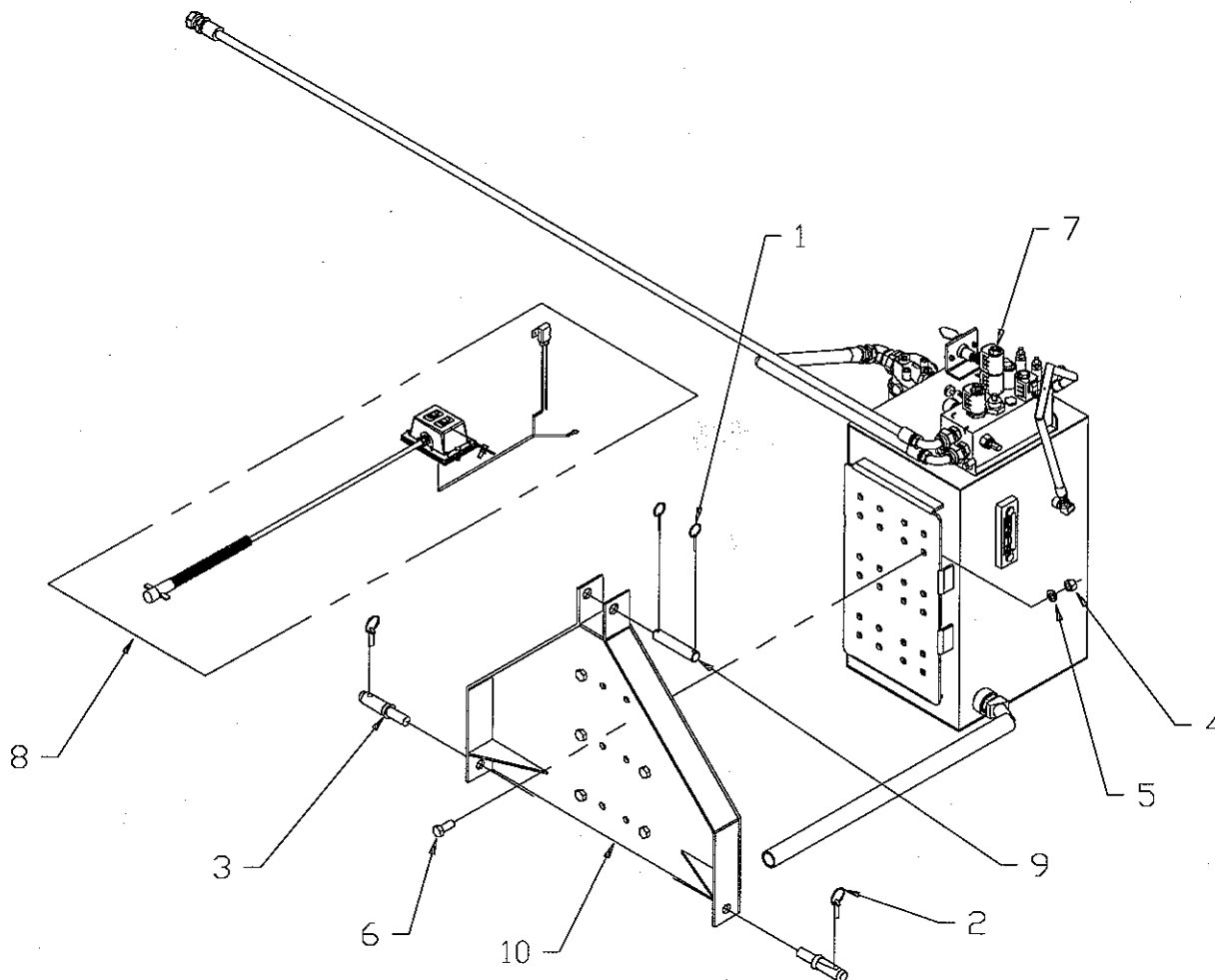
## Tank Assemblies

Item	Part	Qty	Description
1.	03-0087	1	Fitting, Adapter, HP, 1-5/16 MOR-1 FP
2.	03-1010	1	Filler Assembly, with Magnet
3.	03-1074	1	Gauge, Sight, Hydraulic
4.	03-1457	1	Fitting, Barb, HP, 45, 1-1/4-1-5/8 MOR
5.	03-1499	1	Fitting, Plug, HP, Hex, 1-1/6 MOR
6.	03-1945	4	Fitting, Adapter, HP, 1-1/16 MOR-3/4 MFS
7.	03-1956	1	Fitting, Elbow, HP, 90, 1-5/16 MOR-3/4 MFS
8.	03-2092	1	Fitting, Elbow, HP, 90, 9/16 MOR-3/8 MFS
9.	03-2269	1	Hose, 3/4 x 86, 2 Wire, 3/4 FFS-3/4-90 FFS
10.	03-2291	5	Fitting, Adapter, HP, 3/8 MFS-9/16 MOR
11.	03-3140	1	Filter, Base, Spin-On, 1-5/16 SAE
12.	03-3141	1	Filter, Element, 10 Micron, Spin-On
13.	03-3263	1	Manifold, Auto-Sensing
14.	03-3269	1	Hose, 3/8 x 19, 1 Wire, 3/8 FFS-3/8 90 FFS
15.	03-3278	1	Hose, 3/4 x 34, 2 Wire, 3/4 90 FFS-3/4 FFS
16.	07-0018	4	Screw, Cap, 3/8-16 x 1
17.	07-0833	2 ft	Wire, Yellow, 16-gauge
18.	07-0867	2	Terminal, Butt, Split, 14-16
19.	07-0892	1	Wire, Black, 14-gauge
20.	07-0915	1	Terminal, Butt, Split, 12-10
21.	07-1177	1	Clamp, Rubber Coat, 1/2
22.	07-1192	2	Clamp, T-Bolt, 1-1/4
23.	07-1718	4	Washer, Lock, Split, 3/8
24.	07-1834	1.2 ft	Loom, .500
25.	07-2898	1	Connector, 6-Pole, Socket
26.	07-3279	4	Washer, Flat, 3/8
27.	07-3690	2	Bolt, Carriage, 1/4-20 x 3/4
28.	07-4038	2	Washer, Lock, Split, 1/4
29.	07-4039	2	Nut, Hex, 1/4-20
30.	09-0020	4 ft	Hose, Suction, 1-1/4
31.	13-8821	1	Tank, for Electric Valves
32.	50-0184	1	Label, Small, White, Logo
33.	50-0272	1	Label, Oil, ISO VG-46
34.	50-0725	1	Label, Warning High Pressure Fluid
35.	07-5760	6	Screw, Self Tap, 10-24 x 1/2



# Tank Assemblies

## 3-Point Tank Mounting Assembly 11-5917

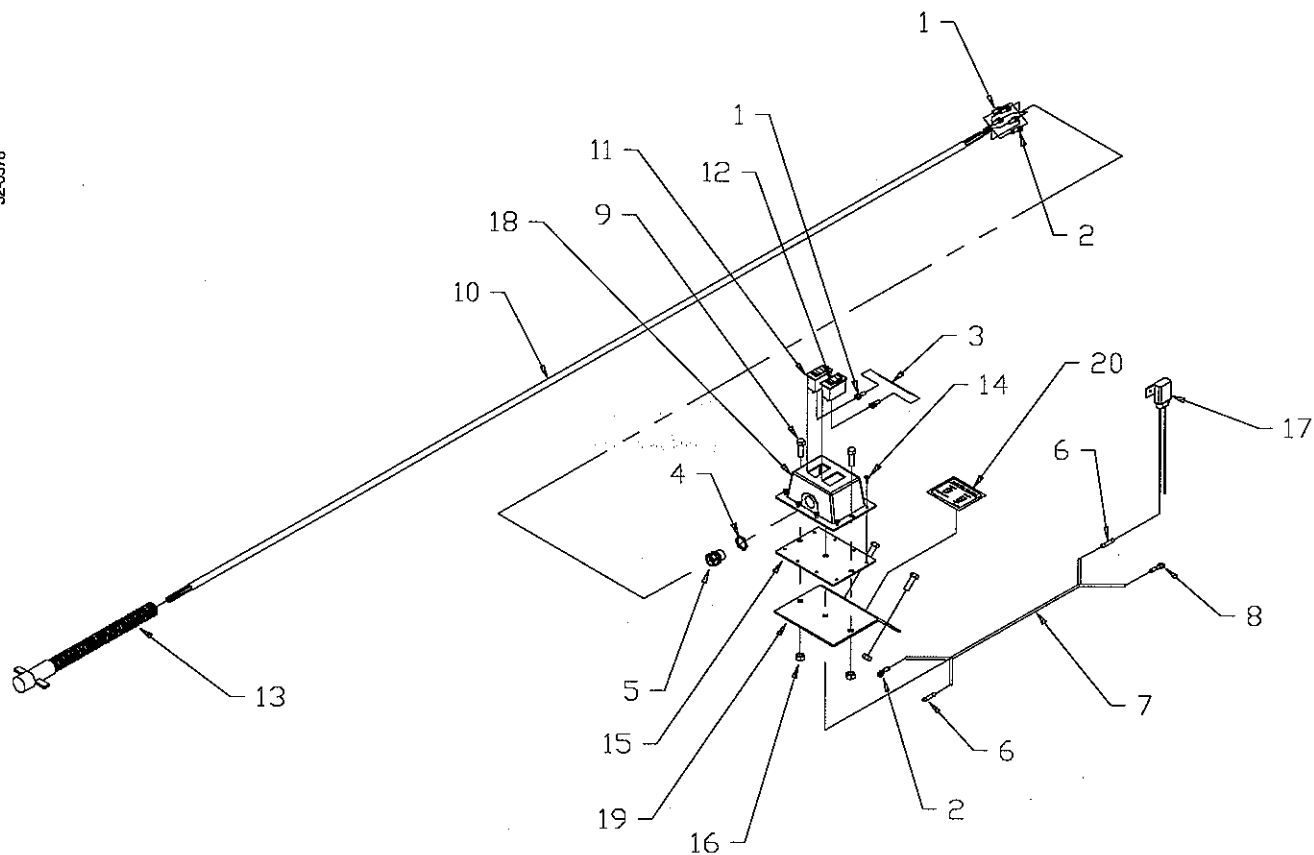


Item	Part	Qty	Description
1.	07-0244	2	Pin, Linch, 1/4
2.	07-0680	2	Pin, Klik, 7/16 x 1 3/8
3.	07-0285	2	Pin, Link, Category I
	07-0688	2	Pin, Link, Category II
4.	07-1294	6	Nut, Hex, 5/8-11
5.	07-1872	6	Washer, Lock, Split, 5/8
6.	07-3433	6	Screw, Cap, 5/8-11 x 1 1/2
7.	11-5915	1	Assembly, Sub, Tank, 3-Point, W/Electric Valves
8.	11-5916	1	Assembly, Control, Box
9.	13-2002	1	Pin, Toplink, 3-Point, Category I
	13-8341	1	Pin, Toplink, 3-Point, 1 in, Round, Category II
10.	13-8827	1	Mounting, Tank, 3-Point

# Electric Valves

Control Box  
Assembly 11-5916

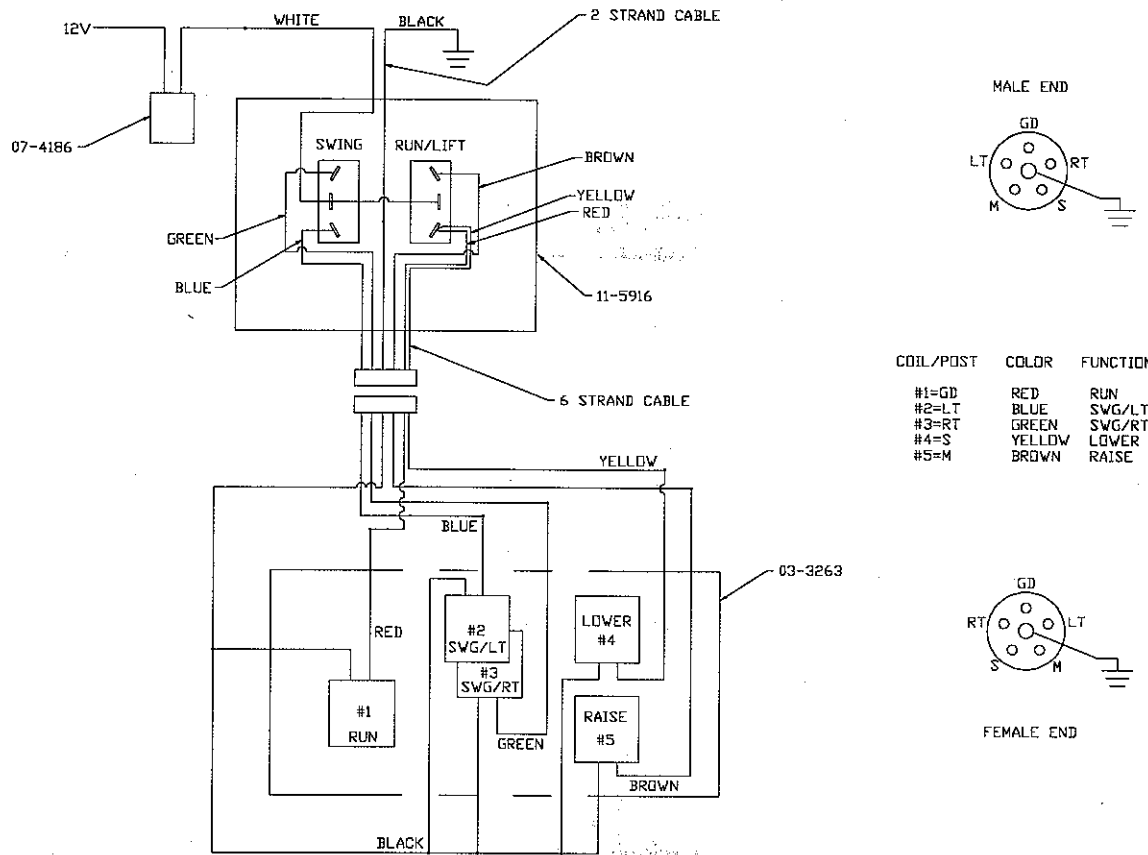
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Item	Part	Qty	Description
1.	07-0812	6	Terminal, Quick Disconnect
2.	07-0815	2	Terminal, Connector
3.	07-0832	.25 ft	Wire, Bulk, Red, 16-gauge
4.	07-0856	1	Nut, Lock, 1/2, for Strain Relief
5.	07-0857	1	Strain, Relief, 1/2
6.	07-0867	2	Terminal, Butt, Split
7.	07-0917	10 ft	Wire, Bulk, Cord, 16-gauge
8.	07-0929	1	Terminal, Ring, 3/8
9.	07-1714	4	Screw, cap, 5/16-18 x 1
10.	07-2133	16 ft	Wire, Cord
11.	07-2895	1	Switch, Rocker, (On)-Off-(On)
12.	07-2896	1	Switch, Rocker, (On)-Off-On
13.	07-2897	1	Connector, 6-Pole, Plug
14.	07-2908	8	Screw, Self-Tap, 8-16 x 3/8
15.	07-2909	1	Plate, Plastic
16.	07-3270	4	Nut, Hex, Nylock, 6/16-18
17.	07-4186	1	Holder, Fuse
18.	07-4238	1	Box, 2 Switch
19.	13-4023	1	Plate, Mounting, Control Box
20.	50-0425	1	Label, Electric Control

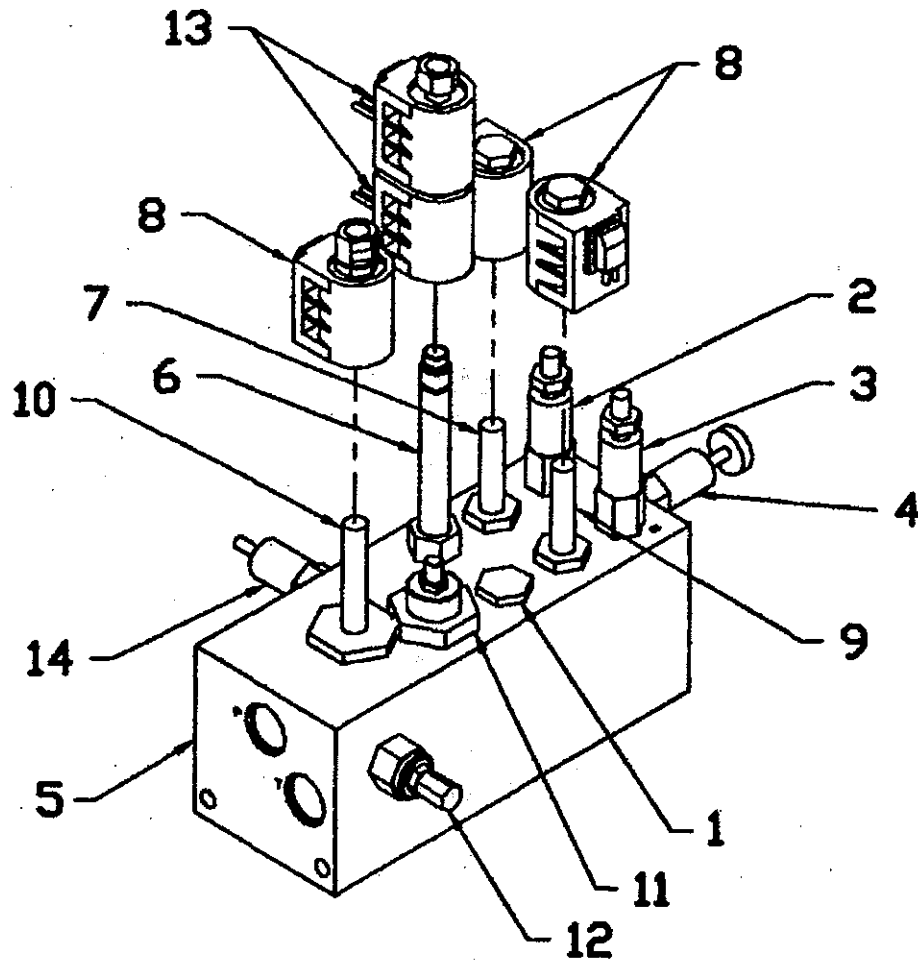
# Electric Valves

## Wiring Diagram for Electric Manifold & Control Box



# Electric Valves

Electric Manifold  
Assembly 03-3263



Item	Part	Qty	Description
1.	03-3170	1	Valve, Cartridge, Check
2.	03-3171	1	Valve, Cartridge, Adjust, Barrel End
3.	03-3172	1	Valve, Cartridge, Adjust, Rod End
4.	03-3173	1	Valve, Cartridge, Height Adjustment, W/Knob
5.	03-3263	1	Manifold, Auto-Sensing
6.	03-3265	1	Cartridge, Valve, Swing, Double
7.	03-3089	1	Valve, Cartridge, Delta, NC, Spool
8.	07-3077	3	Coil, 12 Volt, Delta, Manifold, Valve
9.	07-3078	1	Cartridge, Up, Manifold, Solenoid Valve
10.	07-3081	1	Cartridge, Brush Motor, Manifold, Solenoid Valve
11.	07-3082	1	Cartridge, Flow Divider, Manifold, Solenoid Valve
12.	07-3148	1	Valve, Cartridge, Relief, Manifold, Solenoid Valve
13.	07-4239	2	Coil, 12 Volt
14.	03-3695	1	Valve, Cartridge, Swing & Lift



## Option – Dirt Deflector

### Installation

1. On both sides, remove the front screw (figure 43) from the hood.
2. On both sides, fasten a deflector arm (figure 44) to the brush frame and hood with a 3/8 x 1 1/4 in. cap screw, flat washer, lock washer and nut. Do not tighten the hardware.
3. Attach the deflector plate to the hood with a 3/8-16 x 1 cap screw, 2 flat washers, a lock washer and nut for each slot (figure 45).
4. Attach the flap and retainer plate to the deflector plate by installing a 5/16 x 1 in. carriage bolt, flat washer, lock washer and nut in all but the outer slots (figure 46).
5. Attach the flap and arms to the outer slots using 2 5/16 x 1 1/4 in. carriage bolts, flat washers, lock washers and nuts (figure 47).
6. Tighten all hardware.

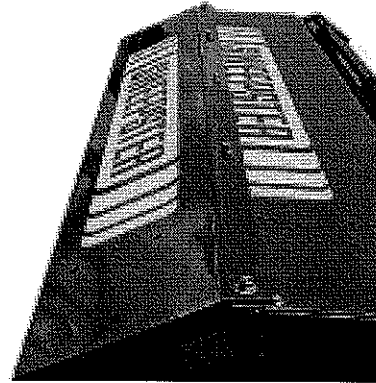


figure 45

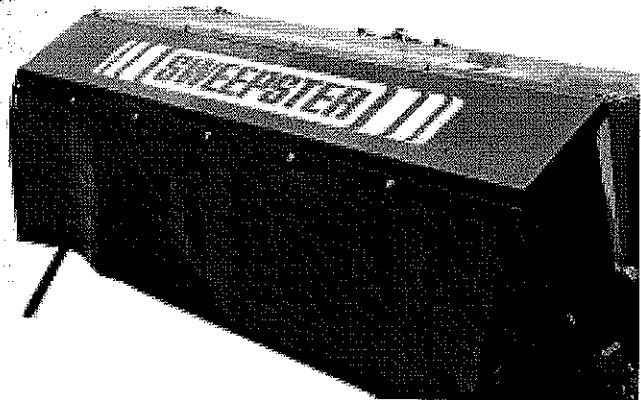


figure 46

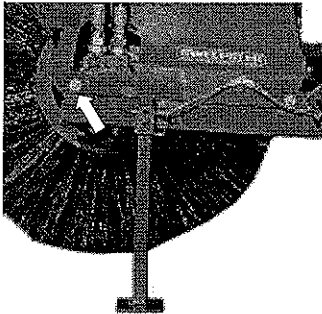


figure 43

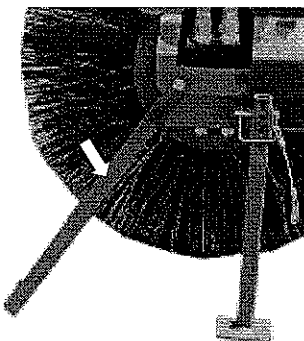


figure 44

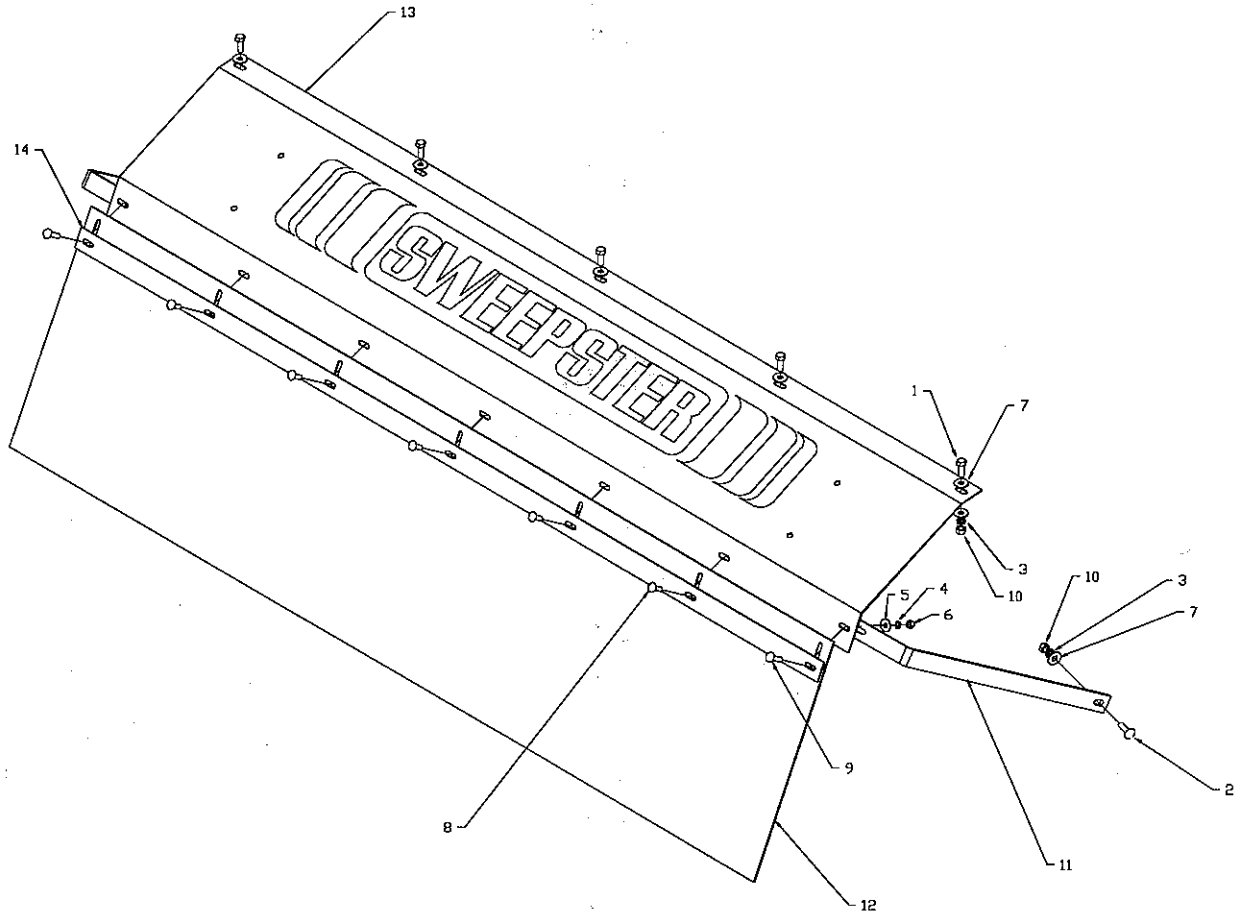


figure 47

# Option – Dirt Deflector

52-0526

To order, ask for kit 11-5900 (6 ft),  
11-5901 (7 ft) or 11-5902 (8 ft).



Item	Part	Qty	Description
1.	07-0018	5	Screw, Cap, 3/8-16 x 1 (6/7 ft)
	07-0018	7	Screw, Cap, 3/8-16 x 1 (8 ft)
2.	07-1717	2	Bolt, Carriage, 3/8-16 x 1-1/4
3.	07-1718	7	Washer, Lock, Split, 3/8 (6/7 ft)
	07-1718	9	Washer, Lock, Split, 3/8 (8 ft)
4.	07-3273	7	Washer, Lock, Split, 5/16 (6/7 ft)
	07-3273	9	Washer, Lock, Split, 5/16 (8 ft)
5.	07-3275	7	Washer, Flat, 5/16 (6/7 ft)
	07-3275	9	Washer, Flat, 5/16 (8 ft)
6.	07-3278	7	Nut, Hex, 5/16-18 (6/7 ft)
	07-3278	9	Nut, Hex, 5/16-18 (8 ft)
7.	07-3279	10	Washer, Flat, 3/8 (6/7 ft)
	07-3279	14	Washer, Flat, 3/8 (8 ft)
8.	07-3438	5	Bolt, Carriage, 5/16-18 x 1 (6/7 ft)
	07-3438	7	Bolt, Carriage, 5/16-18 x 1 (8 ft)

Item	Part	Qty	Description
9.	07-3508	2	Bolt, Carriage, 5/16-18 x 1-1/4
10.	07-3654	7	Nut, Hex, 3/8-16
11.	13-8670	2	Arm, Mounting, Deflector
12.	13-8671	1	Flap, 6 ft
	13-8674	1	Flap, 7 ft
	13-8677	1	Flap, 8 ft
13.	13-8672	1	Plate, Extension, Deflector, 6 ft
	13-8675	1	Plate, Extension, Deflector, 7 ft
	13-8678	1	Plate, Extension, Deflector, 8 ft
14.	13-8673	1	Plate, Retainer, 6 ft
	13-8676	1	Plate, Retainer, 7 ft
	13-8679	1	Plate, Retainer, 9 ft
15.	50-0252	1	Label, Logo, Large, White, Die Cut

## Option – Sight Indicators

### Installation

Figure 48 shows indicators fully installed.

1. Place 2 cap screws in holes at the bottom of 1 sight indicator. Then, insert cap screws in holes in the side of the hood. Inside the hood, place a plate on cap screws. Secure the assembly with 2 lock washers and nuts.
  2. Repeat on the opposite side of the hood.
- 

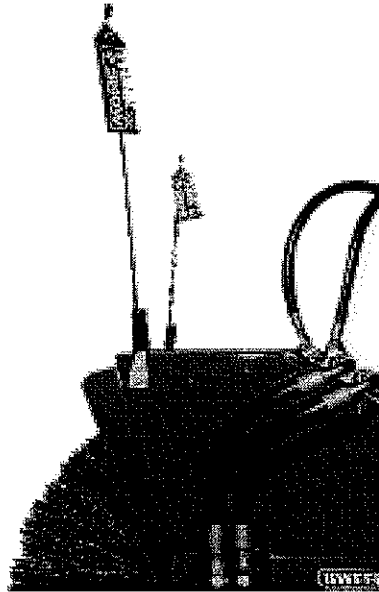
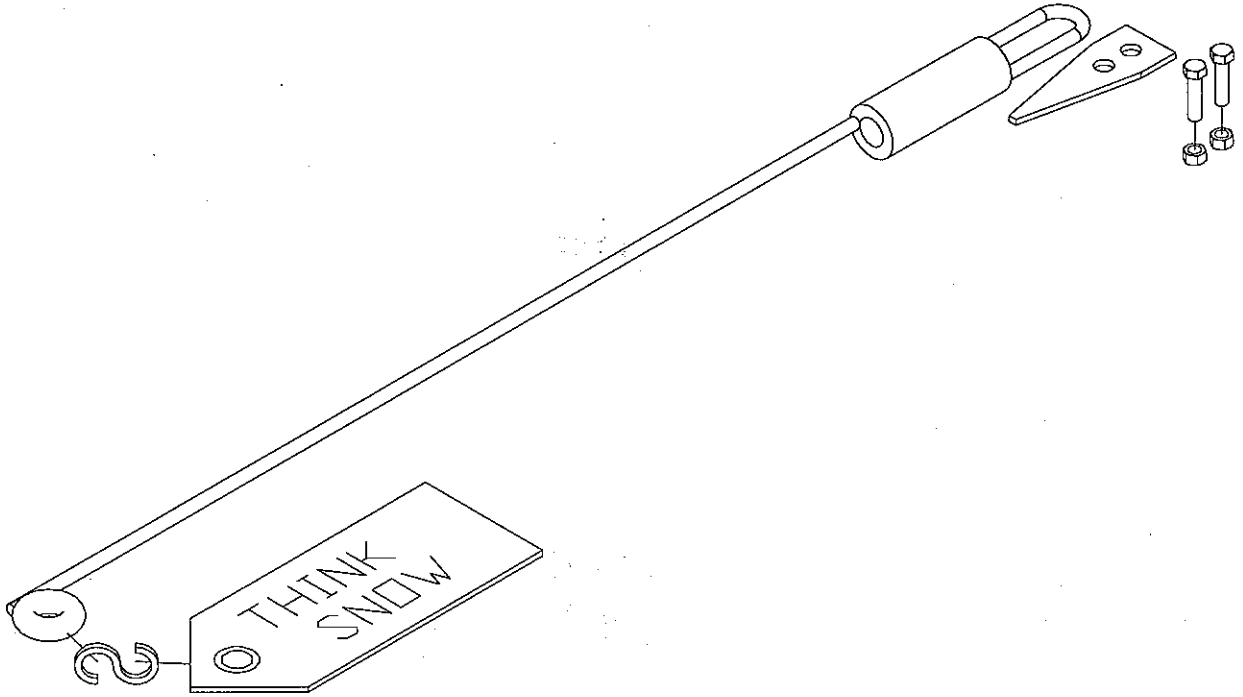


figure 48

# Option – Sight Indicators

07-4150

To order, ask for kit 11-5897.



## Option – Sprinkler System

### Installation

**NOTE** – This kit does not contain a water tank. To purchase a tank from SWEEPSTER, ask for 07-3150 (25 gal [95 liter]) or 11-5734 (200 gal [757 liter]).

1. Fasten the spraybar assembly to holes predrilled in the top edge of the hood. Use 4, 3/8-16 x 1 in. carriage bolts, flat washers, lock washers and nuts.
2. Mount the tank. Placing the tank on the 3-point hitch is best for most applications.
3. Mount the pump within 7 ft (2.1 m) of the tank. Use 4, 1/4-20 x 1 1/4 in. cap screws, flat washers, lock washers and nuts.
4. Install electric controls. Refer to figure 49.
  - a. Find a convenient spot on the prime mover dash to place the toggle switch. Drill a hole with a 13/32 in. bit. Install the switch.

**IMPORTANT** – Avoid prime mover damage. Check behind the dash to make sure that you will not drill into wires or other parts.

- b. Attach the wire cord to wires on the pump using butt end connectors. Black goes to black and white connects to red.
- c. Route the wire cord to the toggle switch.

**IMPORTANT** – Avoid wire damage. Route wire away from hot and/or moving parts.

- d. Strip 3 in. (76 mm) of insulation off the wire cord near the switch, taking care not to damage any wires. Cut the white wire. Attach both ends to wires on the toggle switch using butt end connectors.
  - e. Route the wire cord to the fuse box keeping it away from hot and/or moving parts.
  - f. Connect the white wire to a 15-20 amp fuse or Accessory on the ignition.
  - g. Attach the black wire to the tractor frame with the terminal ring to ground the system.
5. Connect the water system. Use thread seal tape at connections.
    - a. Attach a 3/8 in. barb fitting to the pump outlet.

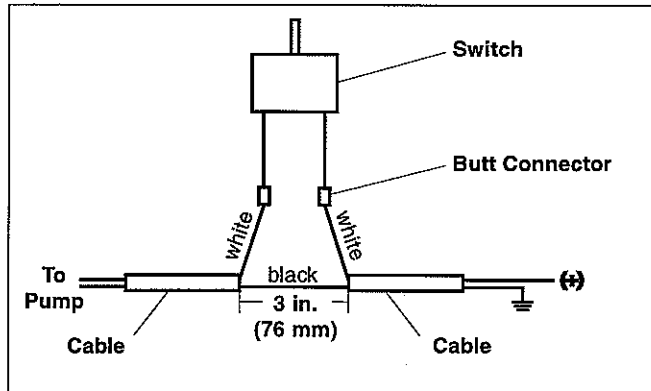


figure 49

- b. Install 2, 1/2 in.–3/8 in. reducer bushing fittings on the strainer outlet.
- c. Use a 3/8 in. nipple fitting to connect the strainer outlet to the pump inlet.
- d. Attach a 5/8 in. barb fitting to the strainer inlet.
- e. Connect the 5/8 in. hose to the barb fitting on the strainer. Secure with a 7/8 in. spring clamp.
- f. Attach a 5/8 in. barb fitting to the water tank. Purchase extra fittings, if needed, to adapt the fitting to the tank.
- g. Connect the 5/8 in. hose to the 5/8 in. barb fitting. Secure with a 7/8 in. spring clamp.
- h. Attach the 3/8 in. hose to the pump outlet. Secure with a 5/8 in. spring clamp.
- i. Route the 3/8 in. hose to the spray bar. Connect the hose to the spraybar and secure with a 5/8 in. spring clamp.

**IMPORTANT** – Avoid hose damage. Route hoses away from hot and/or moving parts.

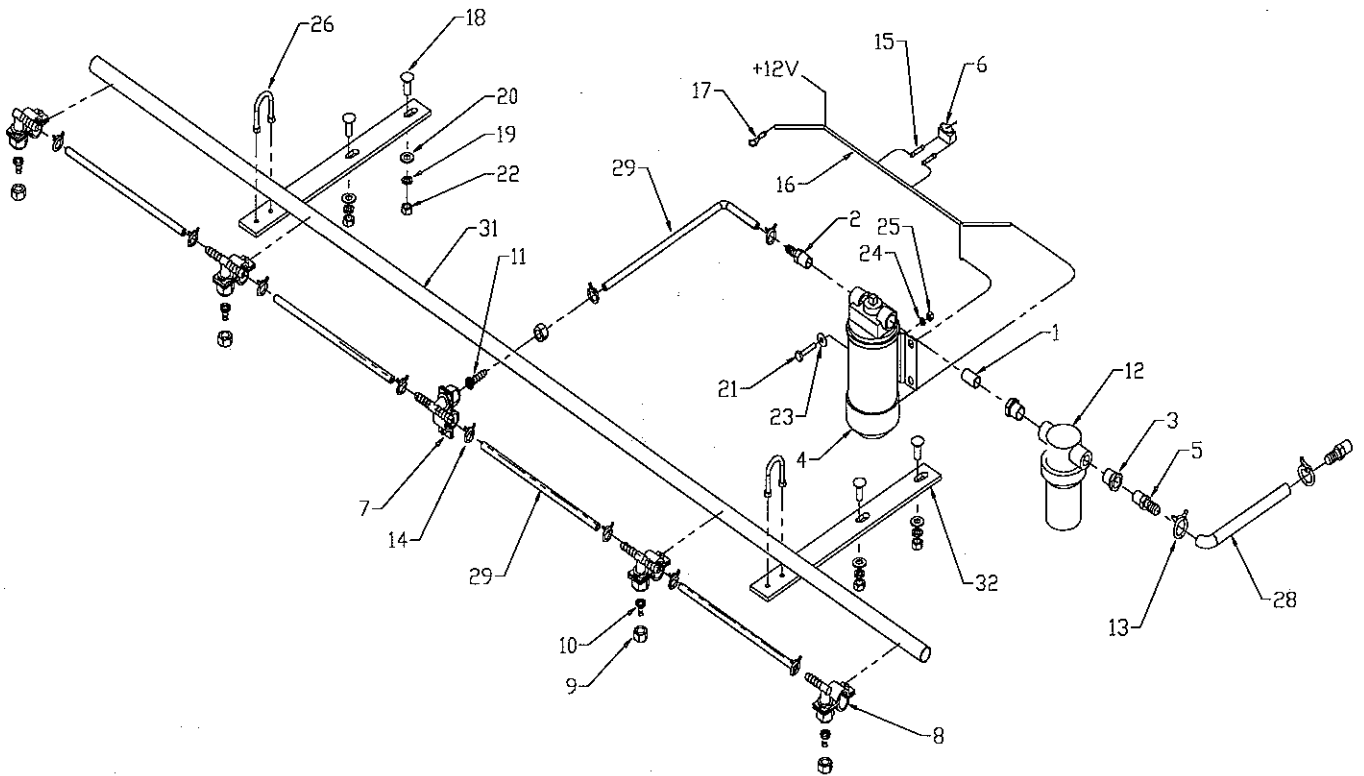
6. Fill the tank with water.
7. Turn on the pump.
8. Adjust nozzles to create a fine curtain of water that falls 8-10 in. (203-254 mm) away from the brush.

**NOTE** – The sprinkler system is designed to spray a fine mist of water to keep dust at a minimum. It will not saturate the sweeping area with water.

9. Check for leaks or other problems. Make corrections if necessary.

## Option – Sprinkler System

To order, ask for kit 11-4045 (6 ft),  
11-4171 (7 ft) or 11-4062 (8 ft).



Item	Part	Qty	Description
1.	03-0076	1	Fitting, Nipple, BP, Close, 3/8
2.	03-0457	1	Fitting, Barb, Nylon, 3/8-3/8 MP
3.	03-0819	2	Fitting, Reducer Bushing, BP, 1/2-3/8
4.	03-1326	1	Pump, Flojet, Water, 2.9 gpm
5.	03-1709	2	Fitting, Barb, Nylon, 5/8-3/8 MP
6.	07-0343	1	Switch, Toggle, 2 Position
7.	07-0411	3	Nozzle, Tee, with Clamp (6/7)
	07-0411	5	Nozzle, Tee, with Clamp (8)
8.	07-0412	2	Nozzle, Elbow, with Clamp
9.	07-0413	5	Nozzle, Cap, Nylon (6/7)
	07-0413	7	Nozzle, Cap, Nylon (8)
10.	07-0414	4	Nozzle, Tip, Brass
	07-0414	6	Nozzle, Tip, Brass (8)
11.	07-0417	1	Fitting, Barb, Brass, 3/8
12.	07-0532	1	Strainer, Hypro, Water
13.	07-0547	2	Clamp, Spring, 7/8 Hose
14.	07-0549	10	Clamp, Spring, 5/8 Hose (6/7)
	07-0549	14	Clamp, Spring, 5/8 Hose (8)

Item	Part	Qty	Description
15.	07-0867	4	Terminal, Butt
16.	07-0917	20 ft	Wire, Bulk, Cord, 16 gauge
17.	07-0929	1	Terminal, Ring, 3/8, 16-14
18.	07-1716	4	Bolt, Carriage, 3/8-16 x 1
19.	07-1718	4	Washer, Lock, Split, 3/8
20.	07-3279	4	Washer, Flat, 3/8
21.	07-3638	4	Screw, Cap, 1/4-20 x 1-1/4
22.	07-3654	4	Nut, Hex, 3/8-16
23.	07-4032	4	Washer, Flat, 1/4
24.	07-4038	4	Washer, Lock, Split, 1/4
25.	07-4039	4	Nut, Hex, 1/4-20
26.	07-4673	2	U-Bolt, 1/4-20 x 1
28.	09-0028	7 ft	Hose, Heater, 5/8 (6/7)
	09-0028	10 ft	Hose, Heater, 5/8 (8)
29.	09-0056	25 ft	Hose, Heater, 3/8 (6)
	09-0056	26.25 ft	Hose, Heater, 3/8 (7)
	09-0056	27.5 ft	Hose, Heater, 3/8 (8)
31.	11-6684	1	Tube, Rd, 7/8 x 16 Gauge x 72
32.	13-10076	2	Plate, Mounting, Sprinkler Bar, Adj

## Option – Stands

### Installation

Figure 50 shows stands fully installed.

1. On one end of the sweeper, secure 2 lanyards to the hole in the hood end. Use a 3/16 in. pop rivet.
2. Raise the brush head assembly.
3. Slide stands into tubes welded to the brush frame angle. Secure stands with pins attached to lanyards.

**NOTE** – Straight stands go in the front and angled stand belong in the rear.

4. Repeat on the other end.
- 

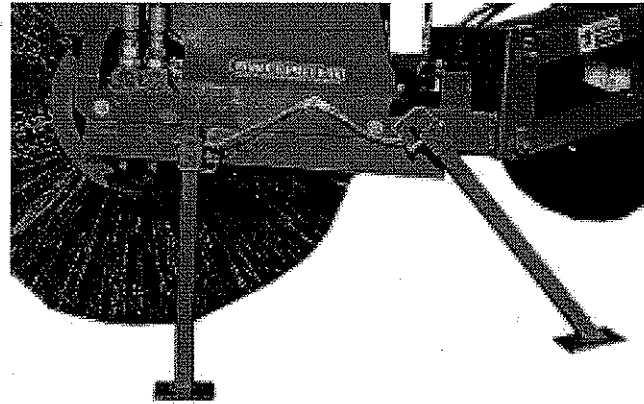
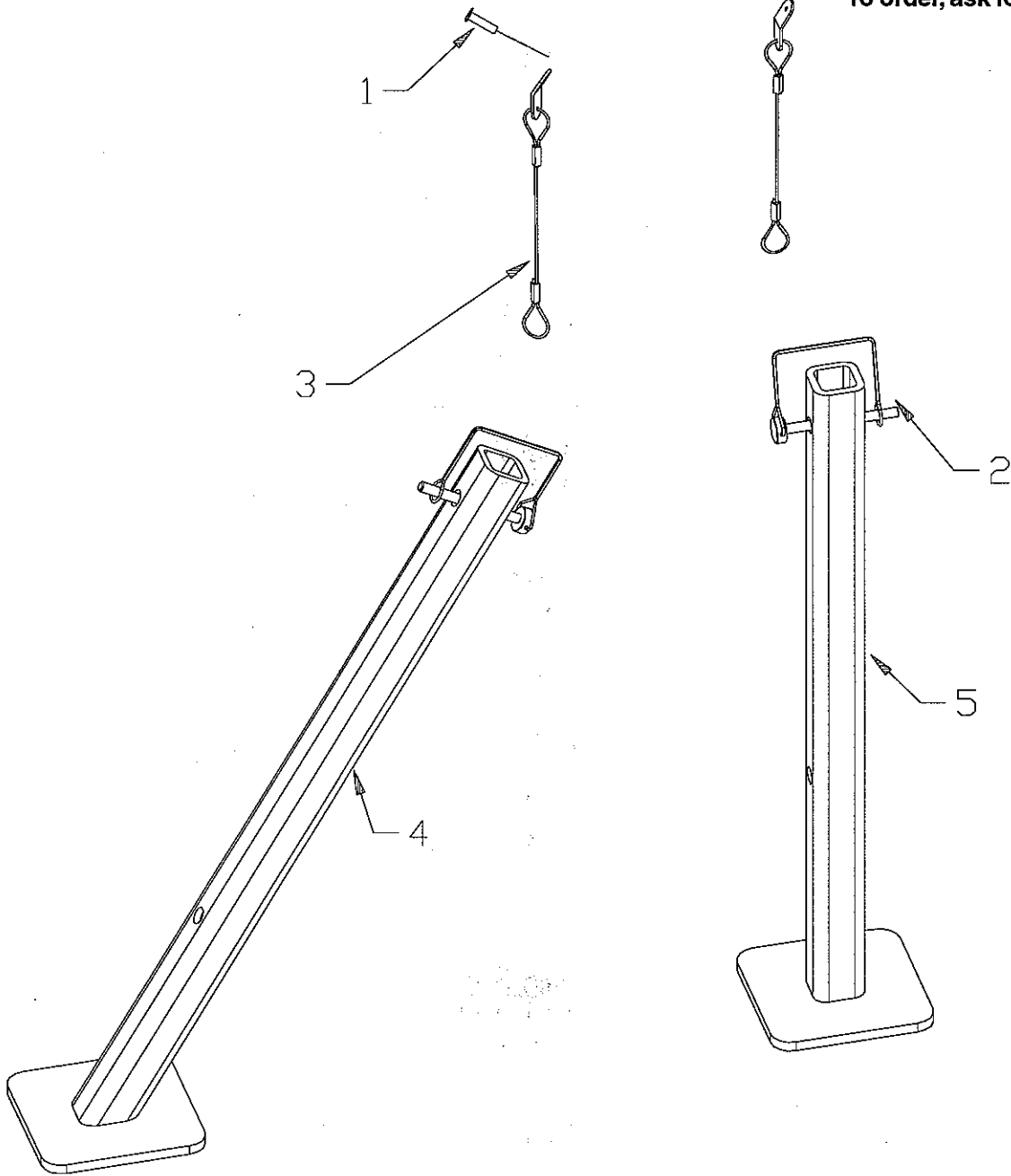


figure 50

## Option – Stands

52-0530

To order, ask for kit 11-5898.



Item	Part	Qty	Description
1.	07-1075	2	Rivet, Pop, 3/16 x 3/4
2.	07-1607	4	Pin, Lock, 5/16, Square Bail
3.	07-3011	4	Lanyard, 1/16 Cable, 1-1/4 Tab x 6
4.	13-0798	2	Leg, Rear
5.	13-0799	2	Leg, Front



# Torque Values

## Bolt Torque Specifications

Body Size Grade 5	Ft-lbs	Body Size Class 8.8	Ft-lbs
1/4 - 20	6 ± 1	M6 - 1.0	5 ± 1
- 28	7 ± 1	n/a	-
5/16 - 18	13 ± 3	n/a	-
- 24	14 ± 3	n/a	-
3/8 - 16	23 ± 5	M8 - 1.25	14 ± 3
- 24	26 ± 5	- 1.0	-
7/16 - 14	37 ± 8	M10 - 1.5	29 ± 6
- 20	41 ± 9	- 0.75	-
1/2 - 13	56 ± 11	M12 - 1.75	50 ± 10
- 20	63 ± 12	- 1.0	-
9/16 - 12	82 ± 14	M14 - 2.0	80 ± 14
- 18	91 ± 16	- 1.5	-
5/8 - 11	113 ± 20	M16 - 2.0	125 ± 22
- 18	127 ± 23	- 1.5	-
3/4 - 10	201 ± 26	n/a	-
- 16	223 ± 29	n/a	-
7/8 - 9	321 ± 41	M20 - 2.5	244 ± 31
- 14	355 ± 46	- 1.5	-
1 - 8	483 ± 62	M24 - 3.0	422 ± 54
- 12	528 ± 68	- 2.0	-

Body Size Grade 8	Ft-lbs	Body Size Class 10.9	Ft-lbs
1/4 - 20	9 ± 2	M6 - 1.0	8 ± 1
- 28	10 ± 2	n/a	-
5/16 - 18	18 ± 4	n/a	-
- 24	20 ± 4	n/a	-
3/8 - 16	32 ± 7	M8 - 1.25	20 ± 4
- 24	37 ± 8	- 1.0	-
7/16 - 14	52 ± 11	M10 - 1.5	40 ± 8
- 20	58 ± 12	- 0.75	-
1/2 - 13	80 ± 16	M12 - 1.75	69 ± 14
- 20	90 ± 18	- 1.0	-
9/16 - 12	115 ± 20	M14 - 2.0	110 ± 20
- 18	128 ± 23	- 1.5	-
5/8 - 11	159 ± 28	M16 - 2.0	173 ± 31
- 18	180 ± 32	- 1.5	-
3/4 - 10	282 ± 36	n/a	-
- 16	315 ± 41	n/a	-
7/8 - 9	454 ± 59	M20 - 2.5	337 ± 44
- 14	500 ± 65	- 1.5	-
1 - 8	681 ± 88	M24 - 3.0	583 ± 75
- 12	746 ± 97	- 2.0	-

Foot-pounds may be converted to Newton Meters by multiplying by 1.35582.

Foot-pounds may be converted to Inch-pounds by dividing by 12.

If the nut and screw are not the same grade, the lower grade will always be used.

**NOTE** – Nylock nuts are utilized when greater resistance to vibrating loose is required, and greater operating temperatures are not a factor. In addition, like lock nuts, nylock nuts have a safety feature that if the bolt does vibrate loose, the nut will remain on the screw. Install nylock nuts to the standard torque shown above.

# Warranty information

**Warranty Registration**  
Return form to 1-734-996-9014



## Warranty Registration Form and Delivery Inspection Report

**IMPORTANT!** Warranty Void if card is not returned with 10 days.  
All Applicable sections must be filled in.

This section to be filled out and signed by Dealer at time of delivery.

### Warranty Registration

Customer's Name _____	Dealer's Name _____
Address _____	Address _____
City _____ State _____ Zip _____	City _____ State _____ Zip _____
Phone _____	<b>CHECK ONE:</b>
Loader / Tractor Model _____	Construction Use _____
Delivery Date _____	Agricultural Use _____
Model or Part # _____	Landscape Use _____
Serial # _____	Other: _____

### Dealer Inspection (check items applicable)

- |  |  |
|--|--|
| <input type="checkbox"/> All Decals installed (see operator's manual)<br><input type="checkbox"/> Hydraulic fittings tight and free of leaks<br><input type="checkbox"/> Fasteners tight | <input type="checkbox"/> Review Operating and Safety Instructions<br><input type="checkbox"/> Guards and covers in place and secure<br><input type="checkbox"/> Does Product Function Properly |
|--|--|

I have thoroughly instructed the buyer on the above described equipment. This review included: The Operator's manual content, equipment care, adjustments, safe operation and applicable warranty policy.

Date \_\_\_\_\_ Dealer's Rep. signature \_\_\_\_\_

### This section to be completed and signed by the customer

	1 Excellent	2 Good	3 Average	4 Unsatisfactory	5 Poor
<b>QUALITY ASSURANCE RATING</b>					
Question:		Sweepster		Local Dealer	
Quality of Product: Appearance .....		_____		_____	
Construction .....		_____		_____	
Quality of Service .....		_____		_____	
Value (Priced Fairly) .....		_____		_____	
Does it perform as claimed .....		_____		_____	

The above described equipment and Operator's Manual have been received by me and I have been thoroughly instructed as to care, adjustments, safe operation and applicable warranty policy.

Date: \_\_\_\_\_ Owner's signature \_\_\_\_\_

**NOTE!** Make one copy each for the dealer's and owner's records. Mail original to Sweepster.

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Sweepster, Inc  
 2800 N. Zeeb Rd.  
 Dexter, MI 48130-9499  
 800-456-7100  
 fax 734-996-9014



**SWEEPSTER ATTACHMENTS LLC**

**Limited 12 Month Warranty**

Thank you for purchasing a Sweepster Attachments, LLC. product. Warranty protection is valid only when this Warranty Registration is completed and signed by the customer and dealer, and mailed to Sweepster Attachments, LLC. I hereby acknowledge that I have received a copy of the owners Limited Warranty and I accept the terms therein.

For a period of 12 months from the date of delivery of product to the original user, Sweepster Attachments, LLC. warrants each product to be free from manufacturing defects, subject to the limitations contained in this policy.

This warranty does not apply to defect caused, in whole or in part, by unreasonable use while in the possession of the user, including, but not limited to: failure to properly set up product; failure to provide reasonable and necessary maintenance; normal wear; routine tune ups or adjustments; improper handling or accidents; operation at speed or load conditions contrary to published specification; improper or insufficient lubrication; improper storage. This warranty is also not a guarantee that performance of each product will meet the expectations of the purchaser.

Sweepster Attachments, LLC. shall not be liable for consequential damages of any kind, including, but not limited to: consequential labor costs or transportation charges in connection with the replacement or repair of defective parts; lost time or expense which may have accrued because of said defects. In no event shall Sweepster Attachments, LLC.'s total liability hereunder exceed the product purchase price.

Sweepster Attachments, LLC. makes no warranty with respect to trade accessories or any component or accessory of the product which was not manufactured by Sweepster Attachments, LLC. including any purchased components of any kind. These are subject to the warranties of their respective manufacturers. The warranty will be considered void if the product or any part of the product is modified or repaired in any way not expressly authorized by Sweepster Attachments, LLC. or if closed components are disassembled prior to return. Closed components include, but are not limited to: gearboxes, hydraulic pumps, motors, cylinders, and actuators.

Our obligation under the warranty is expressly limited, at our option, to the replacement or repair at Sweepster Attachments, LLC or at a service facility designated by us, or such part or parts as inspection shall disclose to have been defective. We are not responsible for unauthorized repairs or replacements. Any implied or statutory warranties, including any warranty of merchantability or fitness for a particular purpose, are expressly limited to the duration of this written warranty. We make no other express or implied warranty, nor is anyone authorized to make any on our behalf. This warranty cannot be extended, broadened, or changed except in writing by an authorized officer of Sweepster Attachments, LLC.

## Glossary – Terms & Abbreviations

**BP** – black pipe

**brush head assembly** – assembly that includes the core, hood and brush frame.

**brush pattern** – area of dirt removed from sweeping surface; with a properly adjusted sweeper, the pattern is the same width for the entire length.

**caution** – indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

**core** – weldment that holds brush sections.

**dirt deflector** – kit made of metal and/or rubber parts designed to direct debris away from the operator.

**F** – female.

**FS** – face seal.

**gpm** – gallons per minute.

**HP** – high pressure.

**hood** – brush shield.

**important** – used for instructions when machine damage may be involved.

**in.** – inches.

**kph** – kilometers per hour.

**lb** – pounds.

**left-hand** – side that is on the left when facing the normal forward direction of travel of the machine.

**lift cylinder** – means of raising the brush head assembly hydraulically.

**lift/swing assembly** – portion of the sweeper that allows the brush head assembly to angle and raise.

**lps** – liters per second.

**M** – male.

**mm** – millimeters.

**mph** – miles per hour.

**mounting assembly** – portion of the sweeper that attaches to the prime mover; designed specifically for each prime mover.

**NPT** – national pipe thread.

**note** – indicates supplementary information.

**OR** – O-ring.

**psi** – pounds per square inch.

**PTO** – power take off; shaft on the prime mover used to drive attachments.

**prime mover** – refers to the tractor, truck, loader or other vehicle to which a sweeper is attached.

**qty** – quantity.

**rpm** – revolutions per minute.

**retainer** – removable plate or set of plates that keeps sections on the core.

**right-hand** – side that is on the right when facing the normal forward direction of travel of the machine.

**section** – single brush wafer.

**section set** – replacement brush wafers.

**sprinkler system** – system that sprays water ahead of the sweeper; used to reduce dust.

**sprinkler tank** – assembly that includes the water reservoir and mounting used in a sprinkler system.

**stands** – devices designed to keep the brush off the ground when the sweeper is dismounted.

**swing cylinder** – means of angling the brush head assembly hydraulically.

**tank assembly, hydraulic** – assembly that includes the hydraulic reservoir, filter and fittings; may also incorporate valves.

**warning** – indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**windrow** – pile of debris.

**zerk** – grease fitting.

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