



Electric Hose Reel Kit

for Multi-Pro® 1200/1250 Turf Sprayers

Model No. 41135—Serial No. 250000001 and Up

Form No. 3353-445 Rev B

Installation Instructions

Installation

Note: Determine the left and right sides of the machine from the normal operating position.

Note: If you are installing this kit on a sprayer with a covered boom kit, you will need additional parts and instructions; contact your Authorized Toro Distributor for more information.

Description	Qty.	Use
Hose reel support, left	1	Assemble the frame
Hose reel support, right	1	
U-bolts	4	
Spacer brackets	2	
Flange nuts, 3/8 inch	8	
Hose reel mounting tubes	2	
Flange-head bolt, 5/16 x 3-1/4 inch	4	
Flange nut, 5/16 inch	9	
Washer, 11/16 inch outside dia	4	
Hose reel assembly	1	
Flange-head bolt, 5/16 x 1-1/2 inch	4	
Washer, 7/8 inch outside dia	4	
Electrical box	1	
Flange-head bolt, 5/16 x 1 inch	1	
Plastic tie	10	
Control valve	1	Install the control valve
Control valve bracket	1	
Phillips screw	2	
Support bracket	1	
Flange-head bolt, 1/4 x 3/4 inch	4	
Flange nut, 1/4 inch	4	
Pressure gauge	1	
Barbed fitting, 1/2 inch	1	
Retainer	1	
Long hose with fitting, 1/2 inch dia	1	Connect the spray hose
O-ring	1	
Spray gun	1	
Hose clamp, small	2	

Important Teflon tape is used in the installation of this kit. Use the tape to wrap threads of fittings before assembly. Threads should be wrapped from left to right, starting at the base and traveling to the tip of fitting (if looking down the axis of a fitting, tape should be wrapped clockwise from back to front).

Important A non-petroleum based lubricant, such as vegetable oil, will be required for the installation of this kit.

Preparing the Machine

Note: When installing this kit on a machine with a Rinse kit, refer to the Rinse Kit *Installation Instructions* for special instructions to accommodate this installation.

1. Ensure that the machine is empty of all fluids. If chemicals have been used in the machine, flush the system thoroughly with clean water; refer to your vehicle *Operator's Manual* for instructions.
2. Disconnect the negative battery terminal from the battery.

Assembling the Frame

Note: Do Not remove the bolts. Loosen the bolt by 2 revolutions and then tap the frame with a mallet to back the boom frame out. Repeat until desired clearance has been achieved.

1. Loosen the 2 bolts securing the boom frame to the vehicle. Back the boom frame out 2 inches (Fig. 1) to allow for installation of hose reel supports.

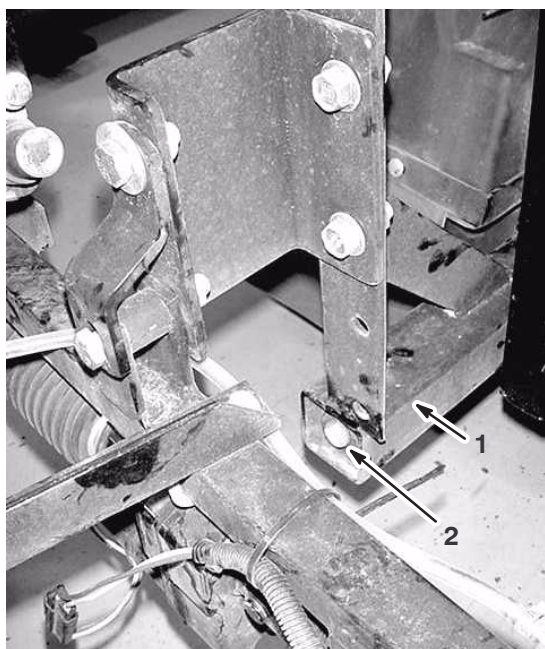


Figure 1

Boom frame, left side

1. Boom frame
2. Boom frame bolt

2. Install the left hose reel support (support without the spray gun holder tube on it) to the vehicle frame using 2 U-bolts, 4 flange nuts (3/8 inch) and a spacer. The support should wrap around the rear end of the tank (Fig. 2 and 3). Do not fully tighten the flange nuts to allow for later adjustment.
3. Install the right hose reel support (support with the spray gun holder tube) to the vehicle frame using 2 U-bolts and 4 flange nuts (3/8 inch) (Fig. 2 and 3). Do not fully tighten the flange nuts to allow for later adjustment.

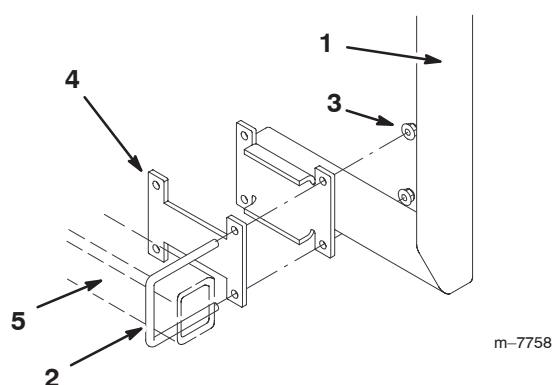


Figure 2

Hose reel frame, left side

- | | |
|-------------------------------|-------------------|
| 1. Hose reel frame, left side | 4. Spacer bracket |
| 2. U-bolt | 5. Boom frame |
| 3. Flange nut, (3/8 inch) | |

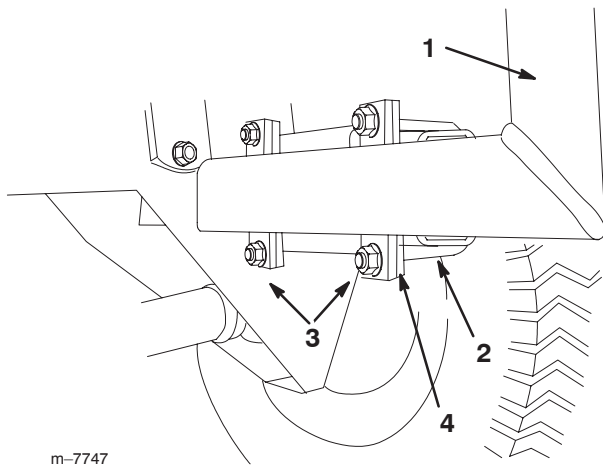


Figure 3

Hose reel frame, right side

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|----------------------------|----------------|
| 1. Hose reel support, left | 3. Flange nuts |
| 2. U-bolt | 4. Spacer |

4. The supports should wrap around the rear end of the tank (Fig. 4).

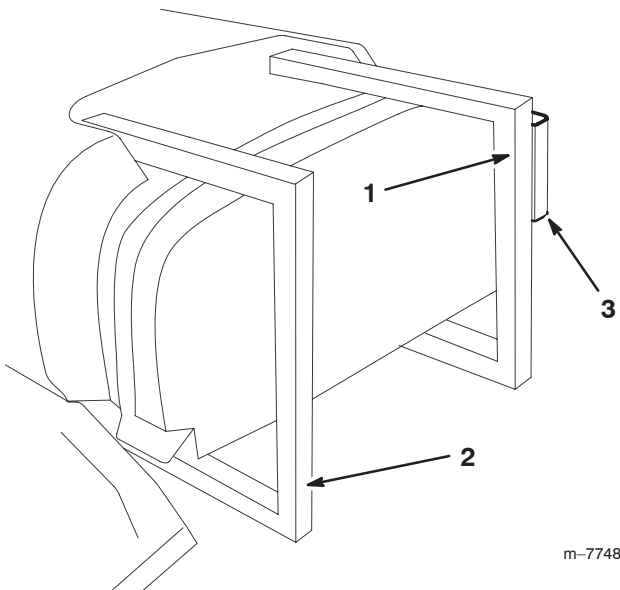


Figure 4

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|-----------------------------|---------------------|
| 1. Hose reel support, right | 3. Spray gun holder |
| 2. Hose reel support, left | |

5. Slide the boom frame in so that there is 1-1/2 inches (4 cm) of clearance between it and the vehicle or hose reel frames (Fig. 1).

6. Tighten the boom frame bolts (Fig. 1) until the clearance between the boom frame and the vehicle or hose reel frame is 1 inch (2.5 cm).

7. Install the 2 hose reel mounting tubes to the top of the hose reel frames (Fig. 5) using 4 bolts (5/16 x 3-1/4 inch), 4 washers (11/16 inch outside dia), and 4 flange nuts (5/16 inch). Do not fully tighten the fasteners to allow for later adjustment.

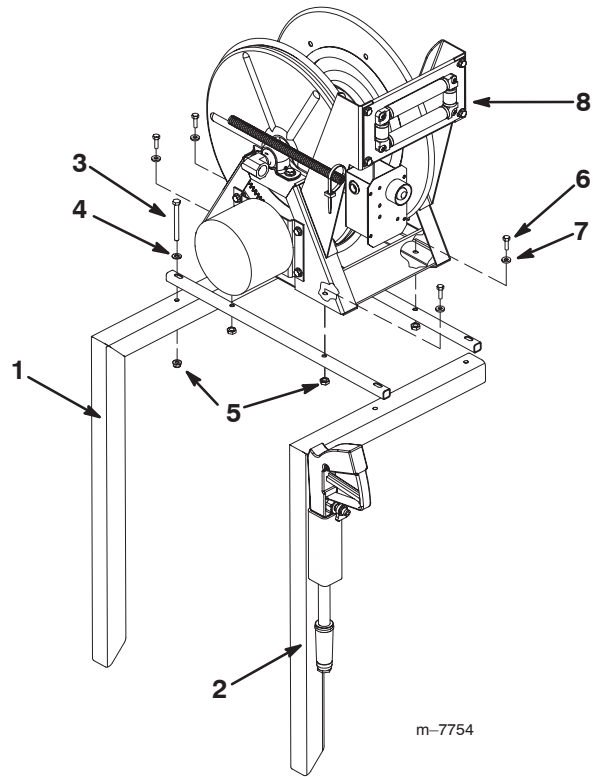


Figure 5

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|-----------------------------------|--|
| 1. Hose reel support, left | 6. Flange-head bolt, 5/16 x 1-1/2 inch |
| 2. Hose reel support, right | 7. Washer, 7/8 inch outside dia |
| 3. Bolt, 5/16 x 3-1/4 inch | 8. Hose reel assembly |
| 4. Washer, 11/16 inch outside dia | |
| 5. Flange nut, 5/16 inch | |

8. Install the hose reel assembly onto the hose reel mounting tubes (Fig. 5) using 4 flange-head bolts (5/16 x 1-1/2 inches), 4 washers (7/8 inch outside dia), and 4 flange nuts (5/16 inch). Do not fully tighten the fasteners to allow for later adjustment.

9. Level the hose reel assembly and then tighten all fasteners in the reverse order they were installed.

10. Remove and discard the bolt and nut from the lower inside roller support on the hose reel and install the electrical box in that hole (Fig. 6), using a flange-head bolt (5/16 x 1 inch) and a flange nut (5/16 inch).

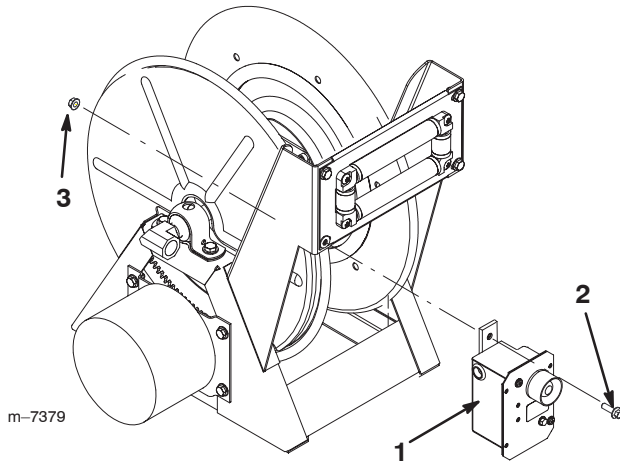


Figure 6

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|------------------------------------|--------------------------|
| 1. Electrical box | 3. Flange nut, 5/16 inch |
| 2. Flange-head bolt, 5/16 x 1 inch | |

11. Route the wiring harness under the right hose reel support, down along the vehicle frame, to the starter solenoid and ground terminal block located in the engine compartment and seat box.
12. Secure the wiring harness to the existing wires and hoses to remove any slack using plastic ties included in the kit.

Important Ensure that you secure the wiring harness away from any moving parts.

13. Connect the red power wire to the left side of the solenoid (Fig. 7), located under the seat.

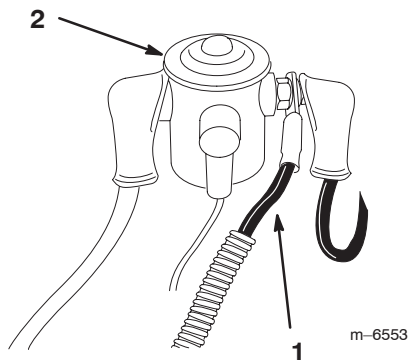


Figure 7

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|---|
| 1. Power wire from the electrical box on the hose reel. |
| 2. Solenoid |

14. Connect the black wire to a post on the ground terminal block, located under the solenoid.

Installing the Control Valve

1. Remove hose retainer to disconnect the boom hose from the supply tee (Fig. 8).

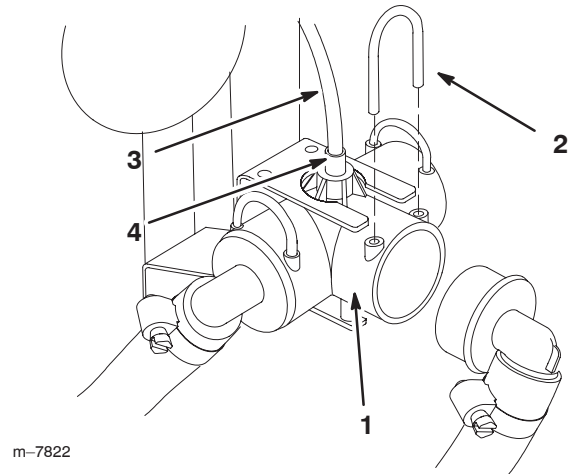


Figure 8

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|------------------|------------------------|
| 1. Supply tee | 3. Pressure gauge tube |
| 2. Hose retainer | 4. Tube fitting |

2. On a Multi-Pro 1200 Sprayer, disconnect the small red pressure gauge tube from the green tube fitting on top of the supply tee (Fig. 8). To disconnect, press down on the tube fitting while pulling up on the tube.
3. Remove the supply tee assembly and hoses.
4. Install the new control valve into the open port on the supply tee and secure it with a new retainer (Fig. 9).

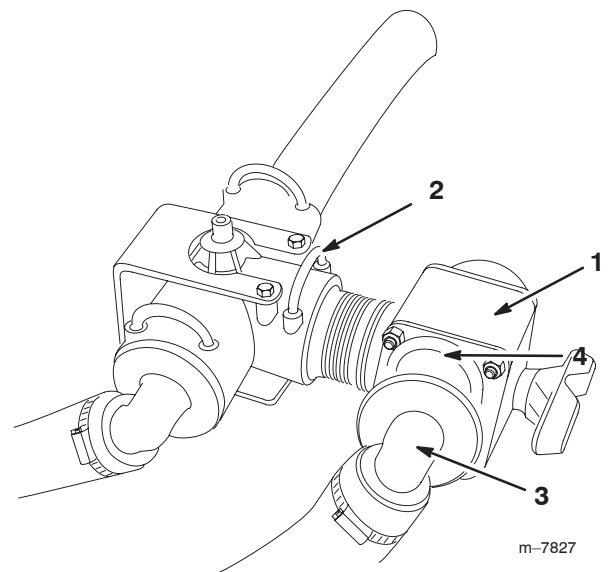


Figure 9

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|-----------------------|--------------------------------|
| 1. Control Valve | 3. Boom hose |
| 2. Retainer ring, new | 4. Retainer ring, pre-existing |

5. Connect the boom hose you disconnected in step 1 to the open port on the control valve and secure it with the retainer you removed in step 1 (Fig. 9).
6. Loosen the 2 bolts securing the supply tee mounting bracket to the vehicle. Keep the fasteners in the supply tee mounting bracket.
7. Install the control valve bracket between the supply tee bracket and the mounting frame (Fig. 10).

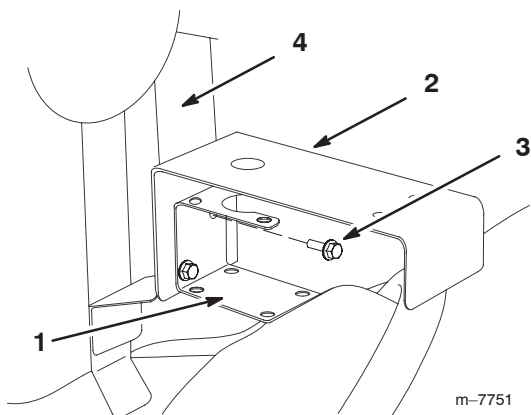


Figure 10

Supply tee assembly not depicted for clarity

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|--------------------------------|-------------------|
| 1. Supply tee mounting bracket | 3. Bolt |
| 2. Control valve bracket | 4. Mounting frame |

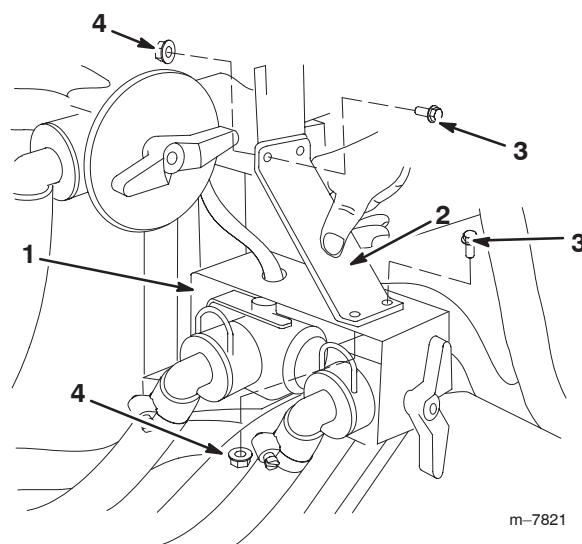


Figure 11

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|--------------------------|-------------------------------------|
| 1. Control valve bracket | 3. Flange-head bolt, 1/4 x 3/4 inch |
| 2. Support bracket | 4. Flange nut, 1/4 inch |

8. Secure the supply tee bracket and control valve bracket to the mounting frame using the bolts in the supply tee mounting bracket loosened in step 6 (Fig. 10).
9. Install the supply tee and control valve assemblies to the mounting brackets as shown in Figure 11.

10. On a Multi-Pro 1200 Sprayer, push the red pressure gauge tube into the green tube fitting on top of the supply tee.
11. Install the support bracket as shown in Figure 11, using 4 flange-head bolts (1/4 x 3/4 inch) and 4 flange nuts (1/4 inch).
12. Route the hoses from the supply tee and control valve between the hose reel support frame and tank as shown in Figure 12.

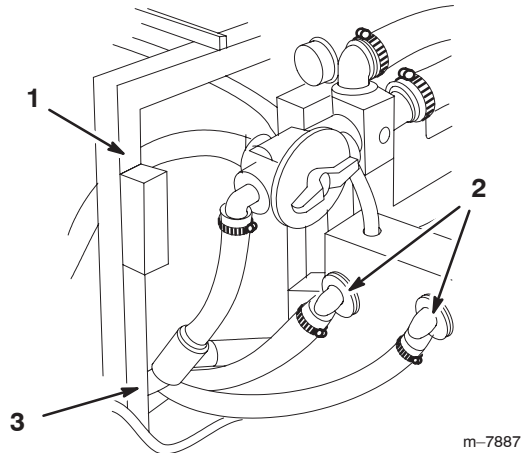


Figure 12

1. Hose reel frame
2. Hoses from supply tee and control valve
3. Routed between frame and tank

13. Wrap Teflon tape counterclockwise around the threads of the gauge (Fig. 13).

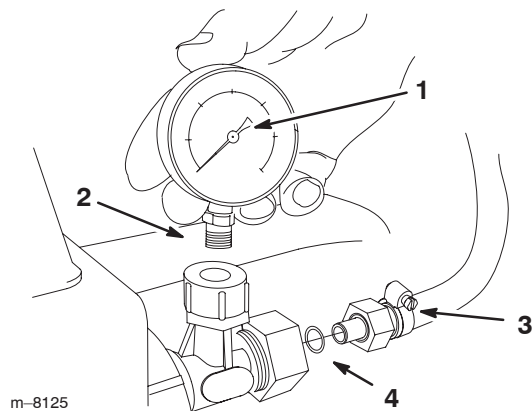


Figure 13

1. Pressure gauge
2. Wrapped threads
3. Hose clamp, metal
4. O-ring

14. Install the pressure gauge into the open port to the right of the control valve (Fig. 13).

15. Locate the O-ring in loose parts and lubricate it using a non-petroleum based lubricant such as vegetable oil. Install the O-ring between the long hose and control valve assembly. (Fig. 13).

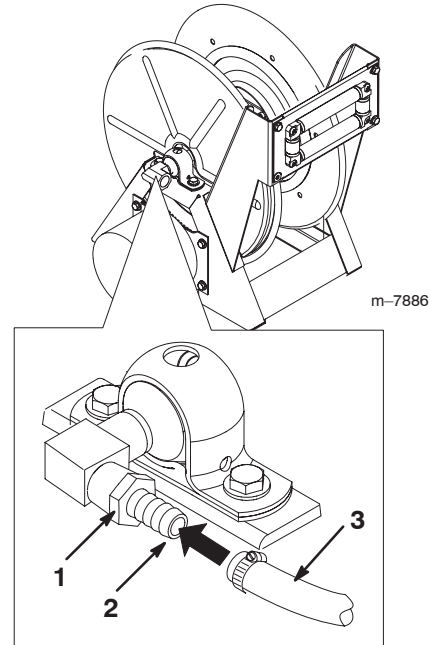


Figure 14

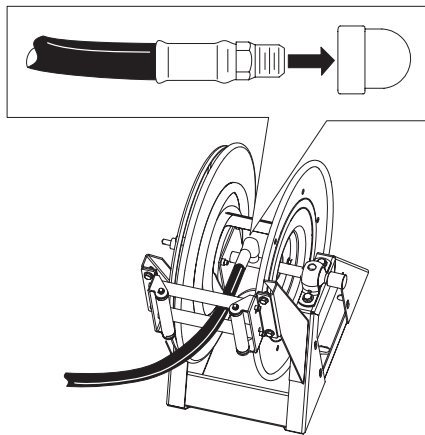
1. Inlet port
2. Barbed fitting, 1/2 inch
3. Hose

16. Wrap Teflon tape from around the threads of a barbed fitting (1/2 inch) while the face of the gauge is facing you and install it into the inlet port on the side of the hose reel (Fig. 14).

17. Connect the end of the hose to the fitting on the hose reel (Fig. 14) and secure both ends with 2 small metal hose clamps.

Connecting the Spray Hose

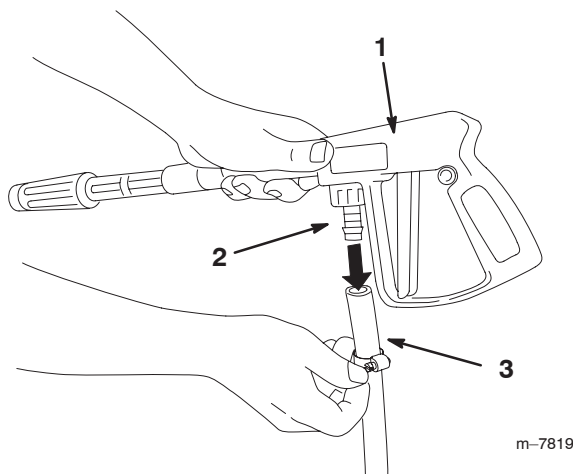
1. Wrap Teflon tape around the threads of the hose fitting on the long hose and install the fitting into the connecting tube on the reel (Fig. 15).



m-6393

Figure 15

2. Connect the free end of the long hose to the fitting on the gun (Fig. 16).



m-7819

Figure 16

1. Spray gun
 2. Hose fitting
 3. Hose
3. Secure the end of the hose with a small metal hose clamp.
 4. Connect the negative battery wire to the battery and turn the ignition key to the Run position.
 5. Press the hose wind button and carefully guide the hose onto the reel.



Caution



Hands, loose clothing, long hair, and jewelry could get caught in the hose and reel while rewinding and cause injury.

- Keep your hands clear of the reel and hose while it is rewinding.
- Do not wear loose clothing or jewelry and tie up long hair.

Safety Instructions

Improper use or maintenance by the operator or owner can result in injury. To reduce the potential for injury, comply with these safety instructions and always pay attention to the safety alert  symbol, which means CAUTION, WARNING, or DANGER—“personal safety instruction.” Failure to comply with the instruction may result in personal injury or death.

Read also the safety and operation instructions in the vehicle *Operator's Manual*.

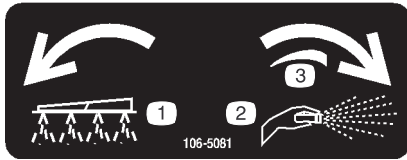
- Do not aim the hand sprayer at any person or animal. Fluids under high pressure can penetrate skin and cause severe injury, possibly resulting in amputation or death. Hot liquids and chemicals can also cause burns or injury. If any part of the body comes in contact with the spray stream, immediately consult a physician familiar with injected fluid injuries.

- Do not place your hand or any other part of your body in front of the spray nozzle.
- Do not leave the equipment under pressure when you are not present.
- Do not use the hand sprayer if the hose, trigger lock, nozzle, or any other part is damaged or missing.
- Do not use the hand sprayer if there are any leaks in any hoses, fittings, or other components.
- Do not spray near power lines.
- Do not drive while spraying with a hand sprayer.
- Wear rubber gloves, safety goggles, and a full body protective suit when spraying chemicals with the hand sprayer.

Safety and Instruction Decals



Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



106-5081

- | | |
|---------------|--------------------------------|
| 1. Boom spray | 3. Continuous variable setting |
| 2. Hand spray | |



107-8757

- | |
|--------------------------------------|
| 1. Hose reel rewind; push to engage. |
|--------------------------------------|

Operation



Warning



Fluid under pressure can penetrate skin and cause injury.

- Keep your body and hands away from nozzles that eject high pressure fluid.
- Do not aim the sprayer at any person or animal.
- Make sure all fluid hoses and lines are in good condition and all connections and fittings are tight before applying pressure to the system.
- Use cardboard or paper to find leaks.
- Safely relieve all pressure in the system before performing any work on it.
- Get immediate medical help if fluid is injected into skin.
- Hot liquids and chemicals can cause burns or other harm.

Switching from Boom Spray Mode to Hand Spray Mode

1. Stop the machine and set the parking brake.



Warning



Driving while using the hand sprayer can cause loss of control, resulting in injury or death. Do not operate the hand sprayer while driving.

2. Ensure that the trigger lock on the spray gun is locked.
3. Turn the red knob on the face of the control valve to the Hand Spray position.
4. Turn the booms off.
5. On Multi-Pro 1250 Sprayers, use the application rate switch to adjust the application rate to the highest setting.
6. Turn the pump on.
7. Increase the engine speed until the pressure gauge reads 150 psi and set it at that speed.

Note: Hose reel accessories that require flows greater than 7 GPM may have reduced performance. The level of performance experienced by the operator is dependant upon accessory pressure required, accessory speed and other adjustable variables. For most reasonable settings, attachments will meet and exceed operator requirements. Please consult you nozzle selection guide for further information.

Important Do not use a pressure setting higher than 150 psi with the hand sprayer.

Note: Use the pressure gauge to the right of the control valve while turning the red knob to achieve the desired amount of pressure at hand sprayer.

Spraying with the Hand Sprayer

1. Pull out the desired amount of hose from the reel.

Important Do not pull the hose with the spray gun. Always hold the hose and pull on it directly. Pulling on the hose with the gun may break the fitting on the gun.

2. Release the trigger lock.
3. Direct the spray gun nozzle at the area to be sprayed and pull the trigger.
4. Release the trigger and set the trigger lock when finished.

Switching from Hand Spray Mode to Boom Spray Mode

1. Press the rewind button on the hose reel until only a few feet of hose is out of the reel.



Caution



Hands, loose clothing, long hair, and jewelry could get caught in the hose and reel while rewinding and cause injury.

- Keep your hands clear of the reel and hose while it is rewinding.
- Do not wear loose clothing or jewelry and tie up long hair.

2. Turn the red nob on the face of the control valve to the Boom Spray position.
3. Direct the spray gun nozzle at an area where it is safe to spray, release the trigger lock, and pull the trigger until all remaining fluid is out of the hose, then set the trigger lock.
4. Return the spray gun to the holder on the back of the reel.
5. Return the engine to idle speed and stop the pump.

