



Electric Hose Reel Kit

2005 and After Multi-Pro® 1200/1250 Turf Sprayer

Model No. 41135—Serial No. 312000001 and Up

Installation Instructions

Introduction

Read this manual carefully to learn how to operate and maintain your product properly. The information in this manual can help you and others avoid injury and product damage. Although Toro designs and produces safe products, you are responsible for operating the product properly and safely.

You may contact Toro directly at www.Toro.com for product and accessory information, help finding a dealer, or to register your product.

Whenever you need service, genuine Toro parts, or additional information, contact an Authorized Service Dealer or Toro Customer Service and have the model and serial numbers of your product ready. Figure 1 illustrates the location of the model and serial numbers on the product.

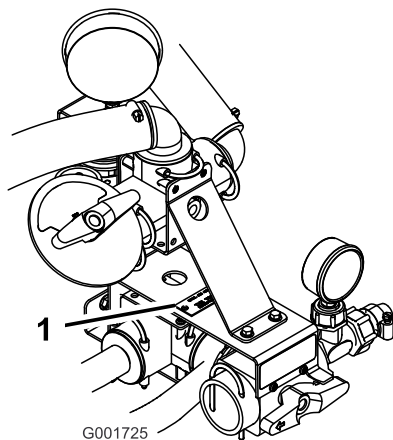


Figure 1

1. Model and serial number plate

Model No. _____
Serial No. _____

Note: This product complies with all relevant European directives, for details please see the separate product specific Declaration of Conformity (DOC) sheet.

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

Important: Teflon tape is required for the installation of this kit. The tape is used to wrap threads of fittings

before assembly. Threads should be wrapped starting at the base and traveling to the tip of fitting to ensure a waterproof seal.

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

Safety

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.
- Lightning can cause severe injury or death. If lightning is seen or thunder is heard in the area, do not operate the machine; seek shelter.

⚠ CAUTION

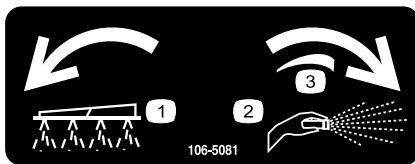
Chemicals are hazardous and can cause personal injury.

- Read the directions on the chemical labels before handling the chemicals and follow all manufacturer recommendations and precautions.
- Keep chemicals away from your skin. Should contact occur, wash the affected area thoroughly with soap and clean water.
- Wear goggles and any other protective equipment recommended by the chemical manufacturer.

Safety and Instructional Decals

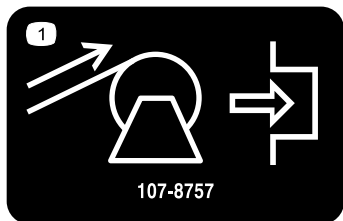


Safety decals and instructions are easily visible to the operator and are located near any area of potential danger. Replace any decal that is damaged or lost.



106-5081

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



107-8757

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

Installation

Loose Parts

Use the chart below to verify that all parts have been shipped.

Procedure	Description	Qty.	Use
1	No parts required	–	Prepare the machine.
2	Hose reel mount, left Hose reel mount, right Flange bolt (1/2 x 1-1/4 inches) Flange nut (1/2 inch) Hose reel mounting tubes Bolt (5/16 x 3-1/2 inch) Washer Flange nut, (5/16 inch) Hose reel assembly Bolt (5/16 x 1-1/2 inches) Plastic tie	1 1 4 4 2 4 8 8 1 4 8	Assemble the frame.
3	Control valve Retaining fork Control valve bracket Flange bolt (1/4 x 3/4 inch) Flange nut (1/4 inch) Screw Pressure gauge Plastic nut Reducer Tee Plastic O-ring Adapter Plastic nut, large Hose assembly Splice fitting (Multi-Pro 1200 only) Hose clamp (Multi-Pro 1200 only) Supply hose splice section (Multi-Pro 1200 only)	1 1 1 2 2 2 1 1 1 1 2 1 1 1 2 4 1	Install the control valve.
4	Long hose with fitting Spray gun Plastic hose clamp, small	1 1 1	Connect the spray hose.

1

Preparing the Machine

No Parts Required

Procedure

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.

2

Assembling the Frame

Parts needed for this procedure:

1	Hose reel mount, left
1	Hose reel mount, right
4	Flange bolt (1/2 x 1-1/4 inches)
4	Flange nut (1/2 inch)
2	Hose reel mounting tubes
4	Bolt (5/16 x 3-1/2 inch)
8	Washer
8	Flange nut, (5/16 inch)
1	Hose reel assembly
4	Bolt (5/16 x 1-1/2 inches)
8	Plastic tie

Procedure

1. Install 2 U-bolts, and a spacer to the boom frame as shown in Figure 2. Position the assembly forward on

the boom frame so that it is in contact with the boom frame pin.

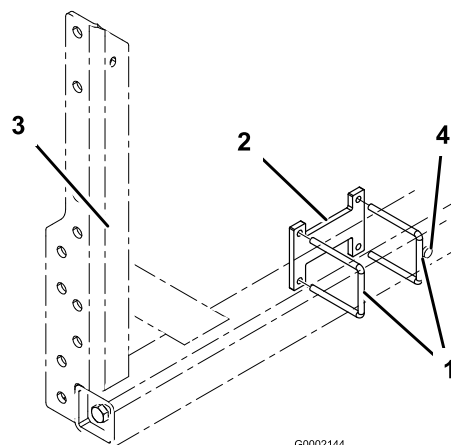


Figure 2

Boom frame, right side

- | | |
|-------------------|---------------------------|
| 1. U-bolt | 3. Boom frame, right side |
| 2. Spacer bracket | 4. Pin, boom frame |

2. Install the right hose reel support (support with the spray gun holder tube on it) to the vehicle frame at the 2 U-bolts and spacer installed previously (Figure 3). Secure the frames with 4 flange nuts (3/8 inch). The support should wrap around the rear end of the tank.

Do not fully tighten the flange nuts to allow for later adjustment.

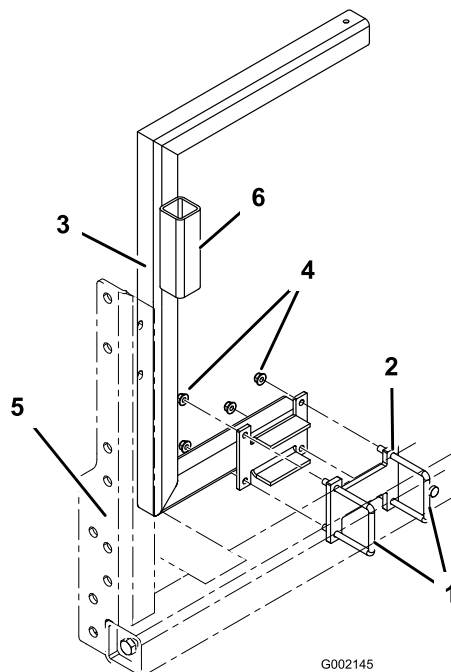


Figure 3

- | | |
|--------------------------------|---------------------------|
| 1. U-bolt | 4. Flange nut, (3/8 inch) |
| 2. Spacer bracket | 5. Boom frame, right side |
| 3. Hose reel frame, right side | 6. Spray gun holder |

3. Install the left hose reel support (support without the spray gun holder tube) to the vehicle frame using 2 U-bolts, spacer and 4 flange nuts (3/8 inch) as described in steps 1 and 2. Do not fully tighten the flange nuts to allow for later adjustment.
4. The supports should wrap around the rear end of the tank (Figure 4).

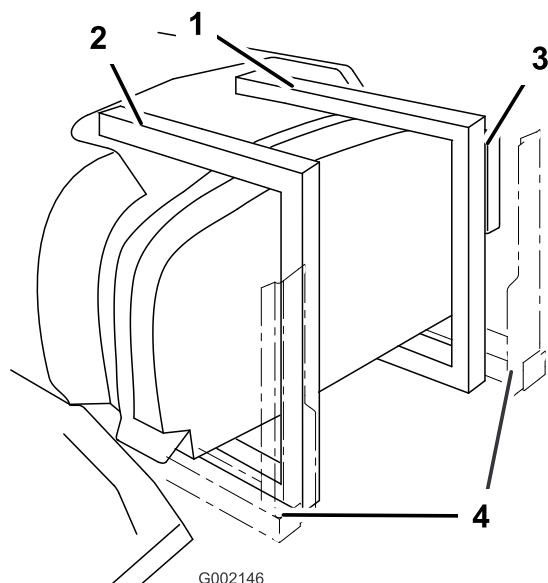


Figure 4

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|-----------------------------|---------------------|
| 1. Hose reel support, right | 3. Spray gun holder |
| 2. Hose reel support, left | 4. Boom frame |

5. Install the 2 hose reel mounting tubes to the top of the hose reel frames (Figure 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.

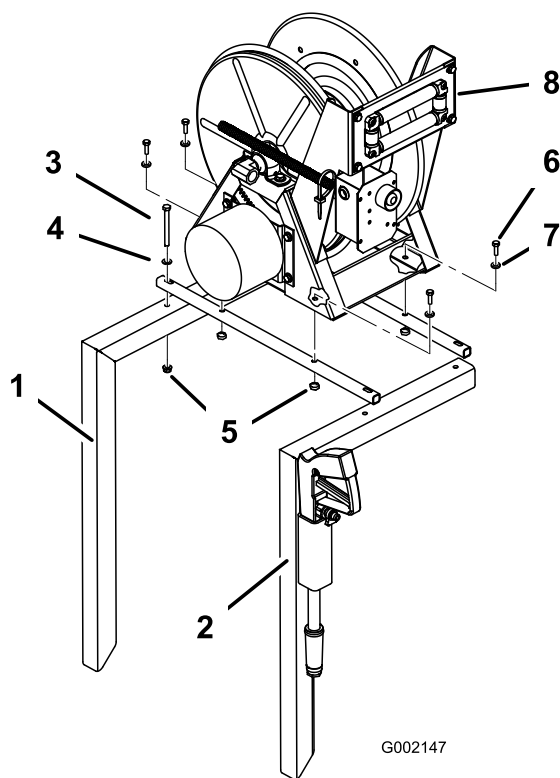


Figure 5

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

6. Install the hose reel assembly onto the hose reel mounting tubes (Figure 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.
7. Level the hose reel assembly and then tighten all fasteners in the reverse order they were installed.
8. 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.
9. Secure the wiring harness to the existing wires and hoses to remove any slack using plastic ties included in the kit.

Important: Secure the harness a safe distance from any hot or moving parts that may damage the wiring harness.

10. Connect the red power wire to the left side of the solenoid (Figure 6), located under the seat.

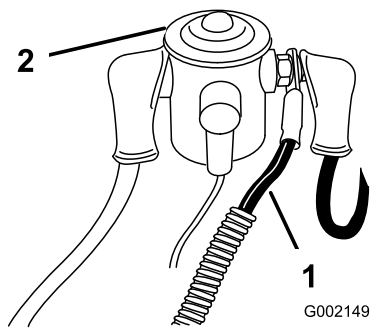


Figure 6

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

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

3

Installing the Control Valve

Parts needed for this procedure:

1	Control valve
1	Retaining fork
1	Control valve bracket
2	Flange bolt (1/4 x 3/4 inch)
2	Flange nut (1/4 inch)
2	Screw
1	Pressure gauge
1	Plastic nut
1	Reducer
1	Tee
2	Plastic O-ring
1	Adapter
1	Plastic nut, large
1	Hose assembly
2	Splice fitting (Multi-Pro 1200 only)
4	Hose clamp (Multi-Pro 1200 only)
1	Supply hose splice section (Multi-Pro 1200 only)

Procedure

1. Locate the valve assembly on the right side of the tank, and remove the retaining fork to disconnect the boom supply hose from the supply tee (Figure 7).

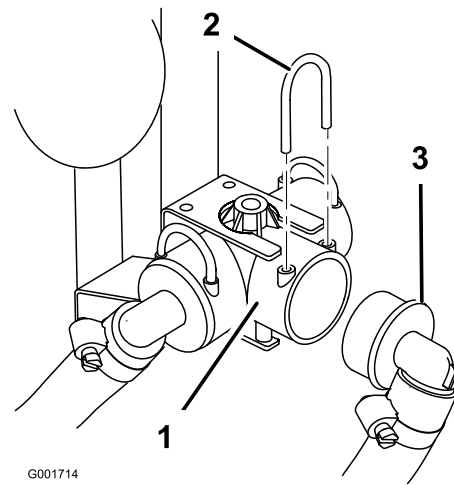


Figure 7

1. Supply tee
2. Retaining fork
3. Boom supply hose

2. **Multi-Pro 1200 sprayer only:** Disconnect the small red pressure gauge tube from the green tube fitting on top of the supply tee (Figure 8).

Note: To disconnect, press down on the tube fitting while pulling up on the tube.

3. Remove the two bolts and two nuts securing the supply tee and supply tee mounting bracket to the vehicle (Figure 8). Retain the fasteners for later use.

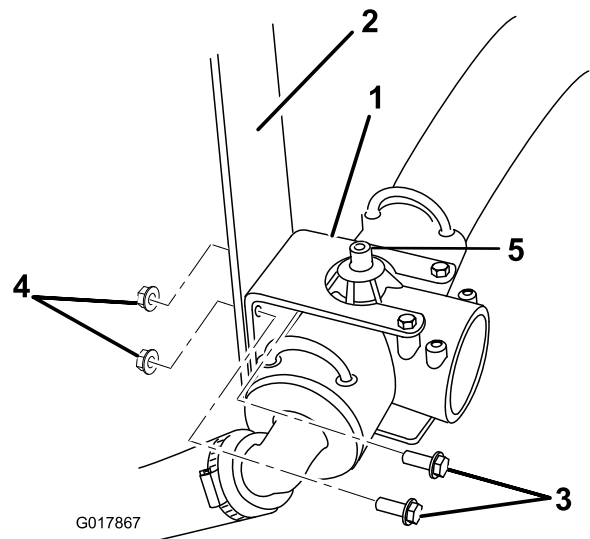


Figure 8

1. Supply tee mounting bracket
2. Tank strap
3. Bolt
4. Nut
5. Green tube fitting (1200 sprayers—red tube not shown)

4. Install the new control valve into the rear facing open port on the supply tee, and secure it with a new retaining fork (Figure 9).

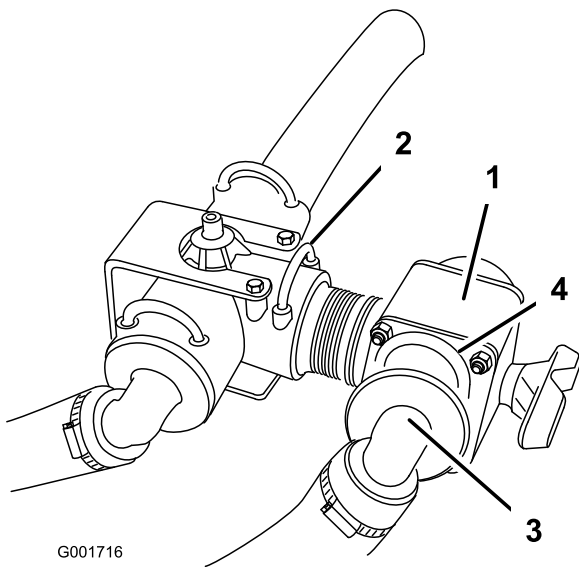


Figure 9

- | | |
|------------------------|-----------------------------|
| 1. Control Valve | 3. Boom supply hose |
| 2. Retaining fork, new | 4. Retaining fork, existing |

5. **Multi-Pro 1200 sprayer only:** lengthen the boom supply hose using a hose splice, straight fittings, and hose clamps as follows:
- Disconnect the boom supply hose from the pressure control valve tee.
 - Cut the boom supply hose 24 inches from the end of the fitting (Figure 10).

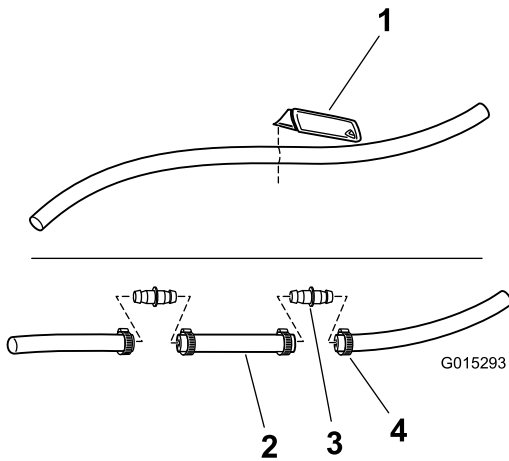


Figure 10

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|--------------------------------------|-----------------------|
| 1. Cut the existing boom supply hose | 3. Splice fitting (2) |
| 2. Hose splice | 4. Hose clamp (4) |

- Install the hose splice using 2 straight adapters and 4 hose clamps (Figure 10).
6. Connect the boom supply hose to the open port on the control valve and secure it with the retainer removed previously (Figure 9).

7. Install the control valve bracket between the supply tee bracket and the mounting frame (Figure 11) using the fasteners removed previously.

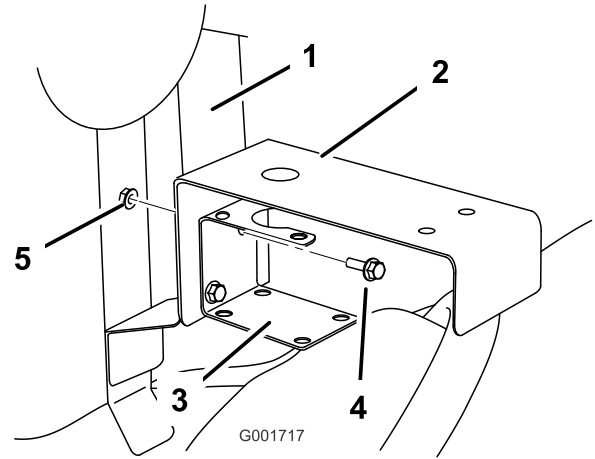


Figure 11

Valve assemblies not depicted for clarity

- | | |
|--------------------------|---------|
| 1. Tank strap | 4. Bolt |
| 2. Control valve bracket | 5. Nut |
| 3. Supply tee bracket | |

- Turn the control valve handle so that the arrow is pointing rearward.
- Install the support bracket over the control valve bracket. Use the two existing screws securing the upper tee assembly to secure upper portion of the support bracket (Figure 12). Secure the lower portion of the support bracket using two flange-head bolts (1/4 x 3/4 inch) and two flange nuts (1/4 inch).

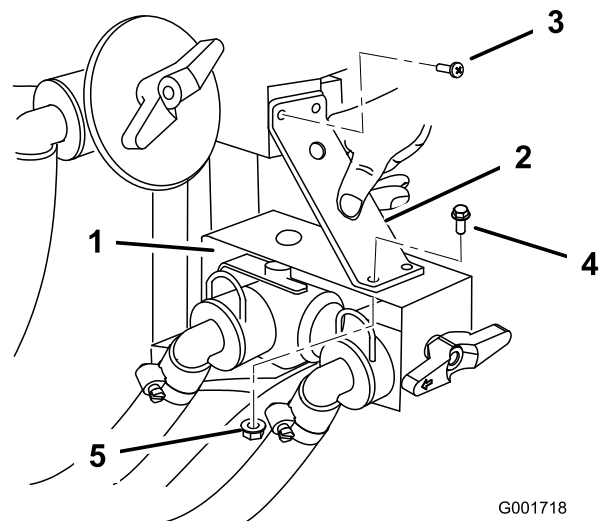


Figure 12

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|--------------------------|--------------------------------------|
| 1. Control valve bracket | 4. Flange-head bolt (1/4 x 3/4 inch) |
| 2. Support bracket | 5. Flange nut (1/4 inch) |
| 3. Screw, existing | |

10. Secure the new control valve to the bracket using two screws (Figure 13).

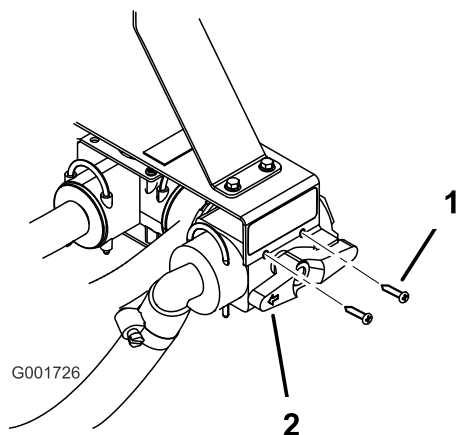


Figure 13

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|----------|--|
| 1. Screw | 2. Control valve handle, pointing rearward |
|----------|--|

11. On a Multi-Pro 1200 sprayer, install the small red pressure gauge tube into the green tube fitting on top of the supply tee. Press down on the tube fitting while inserting the red tube.
12. Lightly lubricate all the O-rings in the kit with a non-petroleum based lubricant, such as vegetable oil.
13. Wrap the pressure gauge threads with Teflon tape. Install the small plastic nut and reducer assembly to the pressure gauge. Use a hex wrench to screw the reducer assembly to the pressure gauge (Figure 14).

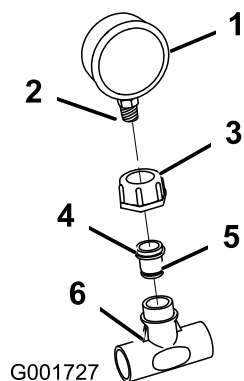


Figure 14

- | | |
|--------------------|---------------------|
| 1. Pressure gauge | 4. Reducer |
| 2. Wrapped threads | 5. Lubricate O-ring |
| 3. Plastic nut | 6. Tee |

14. Install the pressure gauge assembly to the plastic tee (Figure 14).

15. Install the large plastic nut over the pressure gauge and tee assembly. Install a plastic O-ring and adapter to the assembly as shown in Figure 15.

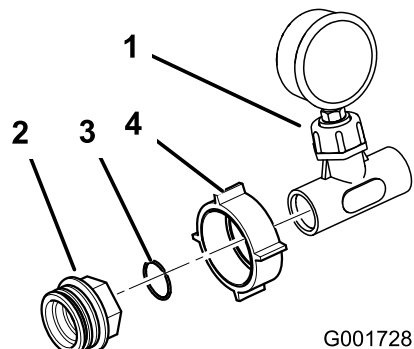


Figure 15

- | | |
|-----------------------|----------------------|
| 1. Gauge tee assembly | 3. O-ring, plastic |
| 2. Adapter | 4. Large plastic nut |

16. Lubricate the O-ring in the adapter with a non-petroleum based lubricant, such as vegetable oil (Figure 16).
17. Install the pressure gauge assembly to the forward facing opening in the control valve installed previously (Figure 16). Tighten the plastic nut to secure the assembly to the valve.

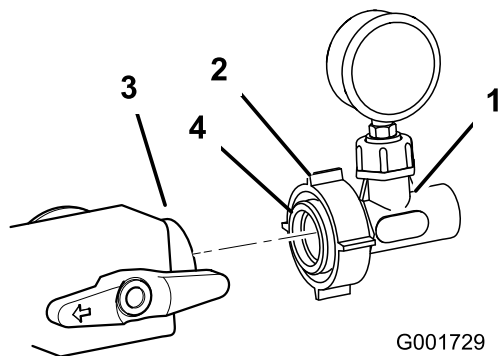


Figure 16

- | | |
|----------------------------|------------------------|
| 1. Pressure gauge assembly | 3. Control valve, open |
| 2. Large plastic nut | 4. Lubricate O-ring |

18. Install a plastic O-ring between the pressure gauge assembly and hose leading to the reel assembly. Connect the hose to the assembly (Figure 17). Tighten

the plastic nut on the hose to secure it to the pressure gauge assembly.

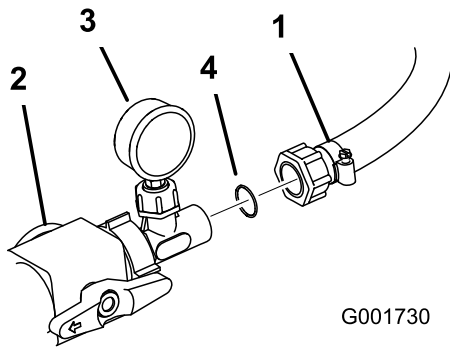


Figure 17

1. Hose, from reel
2. Control valve
3. Gauge assembly
4. O-ring, plastic

19. Route the hose from the gauge assembly to the reel.
20. Slide a hose clamp over the end of the hose and install the hose end over the right angle barb on the hose reel assembly (Figure 18).

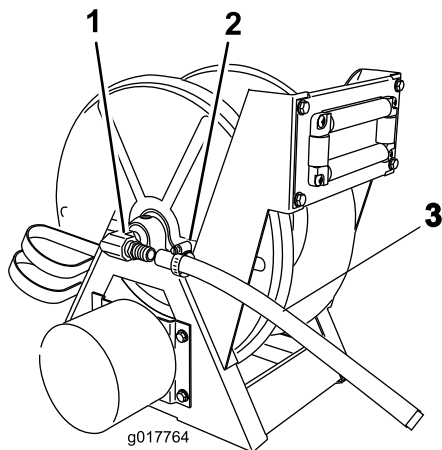


Figure 18

1. Right angle barb
2. Hose clamp
3. Hose to gauge assembly

21. Move the hose clamp over the barb and tighten it to secure the hose.

4

Connecting the Spray Hose

Parts needed for this procedure:

1	Long hose with fitting
1	Spray gun
1	Plastic hose clamp, small

Procedure

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 (Figure 19).

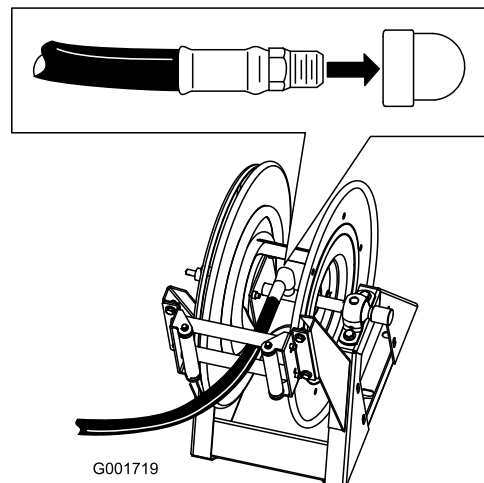


Figure 19

2. Connect the free end of the long hose to the fitting on the spray gun (Figure 20).

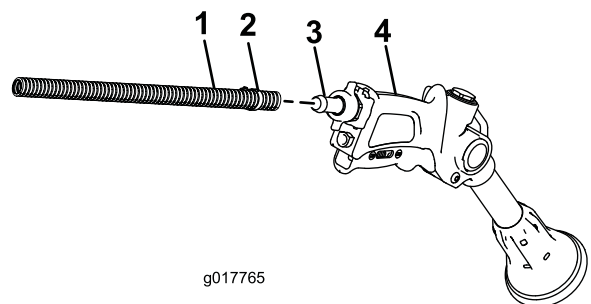


Figure 20

1. Hose
2. Hose clamp
3. Barb
4. Spray gun

3. Secure the end of the hose with a small hose clamp.
4. Connect the negative battery wire to the battery.

5. Press the hose wind button and carefully guide the hose onto the reel moving the hose from side to side to evenly distribute the hose.

⚠ 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.

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.

Important: You must always empty and clean the sprayer immediately after each use. Failure to do so may cause the chemicals to dry or thicken in the lines, clogging the pump and other components.

Clean the spray system after **each** spraying session. To properly clean the spray system:

- Use three separate rinses.
- Use a minimum of 50 gallons for each rinse.
- Use the cleaners and neutralizers as recommended by the chemical manufacturers.
- Use pure clean water (no cleaners or neutralizers) for the **last** rinse.

Switching from Boom Spray Mode to Hand Spray Mode

1. Stop the machine, turn the booms off 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. At the back of the machine, 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 (Figure 21).

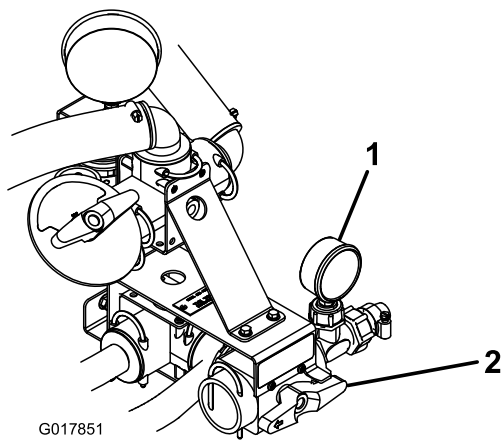


Figure 21

1. Pressure gauge 2. Red control valve knob

4. At the operator's position, turn the pump on.
5. Increase the engine speed until the pressure gauge reads the desired psi and engage the neutral engine speed lock.

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 (Figure 21).

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 or damage the hose.

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 knob on the face of the control valve counterclockwise 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.
6. Stop the pump.

Important: Ensure that you flush the spray gun with fresh clean water during your daily cleaning routine (refer to your sprayer *Operator's Manual*). Failure to properly clean the spray gun may degrade the performance and reliability of the hose reel kit and spray gun.



Count on it.