



Spray Gun Kit

Multi Pro® 1200/1250 Turf Sprayer and Workman® 200 Spray System

Model No. 41133—Serial No. 313000001 and Up

Installation Instructions

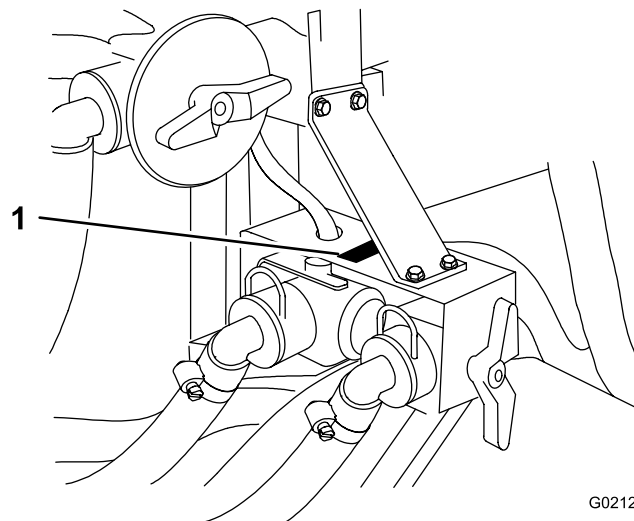
The hand spray gun kit is an attachment for a turf spray application vehicle and is intended to be used by professional, hired operators in commercial applications. It is primarily designed for spraying on well-maintained lawns in parks, golf courses, sports fields, and on commercial grounds.

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

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.



G021201

Figure 1

1. Model and serial number plate

Model No. _____

Serial No. _____

Safety

This manual identifies potential hazards and has safety messages identified by the safety alert symbol (Figure 2), which signals a hazard that may cause serious injury or death if you do not follow the recommended precautions.



Figure 2

1. Safety alert symbol



This manual uses 2 words to highlight information.

Important calls attention to special mechanical information and **Note** emphasizes general information worthy of special attention.

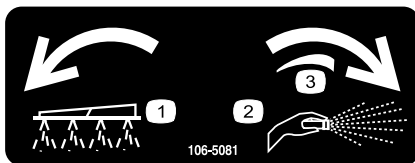
Read also the safety and operation instructions in the vehicle *Operator's Manual*.

- 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; the spray stream could contact the power lines and give you a potentially fatal electrical shock.
- 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.

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
2. Hand spray
3. Continuous variable setting

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	Upper hose hook Lower hose hook Spray gun bracket R-clamp Carriage bolt (5/16 x 1 inch) Carriage bolt (5/16 x 3/4 inch) Flange nut (5/16 inch)	1 1 1 2 2 2 2	Install the hose hooks.
3	Control valve Control valve bracket Phillips screw Support bracket (for Multi Pro Sprayers) Support bracket (for Workman Spray Systems) Flange-head bolt (1/4 x 3/4 inch) Flange nut (1/4 inch) Tee assembly Pressure gauge Barbed fitting (1/2 inch) Retainer	1 1 2 1 1 4 4 1 1 1 1	Install the control valve.
4	Hose Hose clamp Spray gun O-ring	1 1 1 1	Install the supply hose.

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

Note: Thread-sealing tape is used in the installation of this kit.

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 and drain the water; refer to your vehicle *Operator's Manual* for instructions.
2. Disconnect the negative battery cable from the battery.

Note: Connect the battery cable after the installation is complete.

2

Installing the Hose Hooks

Parts needed for this procedure:

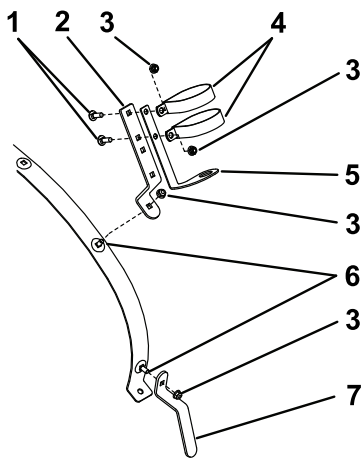
1	Upper hose hook
1	Lower hose hook
1	Spray gun bracket
2	R-clamp
2	Carriage bolt (5/16 x 1 inch)
2	Carriage bolt (5/16 x 3/4 inch)
2	Flange nut (5/16 inch)

Installing the Hose Hooks

1. Remove the fasteners securing the right side of the front tank strap.

Note: Save the fasteners for installing the tank strap.

2. Install the lower hose hook as shown in Figure 3, using a carriage bolt (5/16 x 3/4 inch) and a flange nut (5/16 inch).



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Figure 3

- | | |
|-----------------------------------|-------------------------------------|
| 1. Carriage bolts (5/16 x 1 inch) | 5. Spray gun bracket |
| 2. Upper hose hook | 6. Carriage bolts (5/16 x 3/4 inch) |
| 3. Flange nut | 7. Lower hose hook |
| 4. R-clamps | |

3. Install the upper hose hook as shown in Figure 3, using a carriage bolt (5/16 x 3/4 inch) and a flange nut (5/16 inch).
4. Assemble the spray gun bracket to the upper hose hook as shown in Figure 3.

5. Secure the tank strap using the fasteners you removed previously.

3

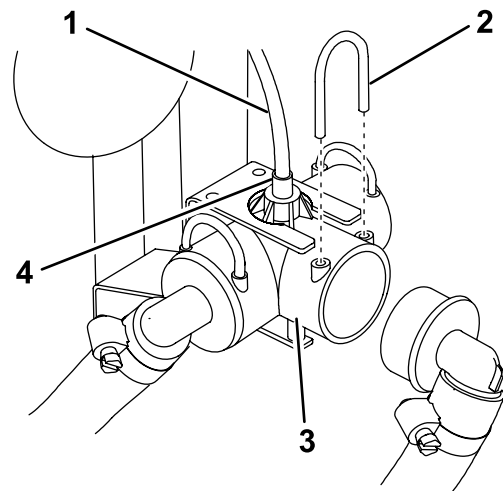
Installing the Control Valve

Parts needed for this procedure:

1	Control valve
1	Control valve bracket
2	Phillips screw
1	Support bracket (for Multi Pro Sprayers)
1	Support bracket (for Workman Spray Systems)
4	Flange-head bolt (1/4 x 3/4 inch)
4	Flange nut (1/4 inch)
1	Tee assembly
1	Pressure gauge
1	Barbed fitting (1/2 inch)
1	Retainer

Procedure

1. Remove the retainer to disconnect the boom hose from the supply tee (Figure 4).



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Figure 4

- | | |
|------------------------|-----------------|
| 1. Pressure gauge tube | 3. Supply tee |
| 2. 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 (Figure 4).

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

3. Remove the 2 screws securing the supply tee to the mounting bracket. Remove the supply tee and hoses (Figure 5).

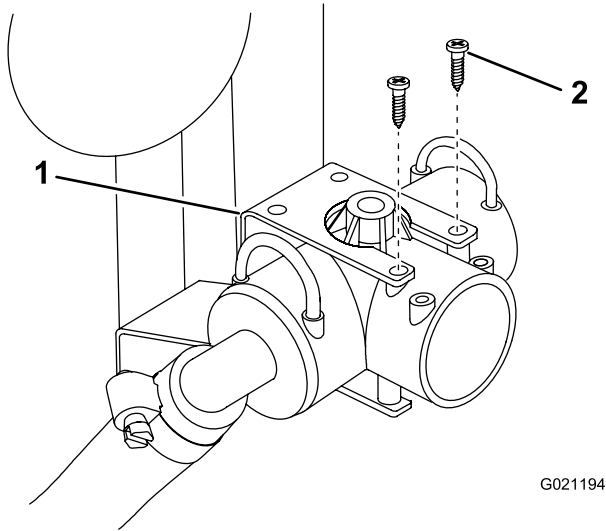


Figure 5

- | | |
|--------------------------------|--------------|
| 1. Supply-tee mounting bracket | 2. Screw (2) |
|--------------------------------|--------------|

4. Install the new control valve into the open port on the supply tee and secure it with a new retainer (Figure 5).

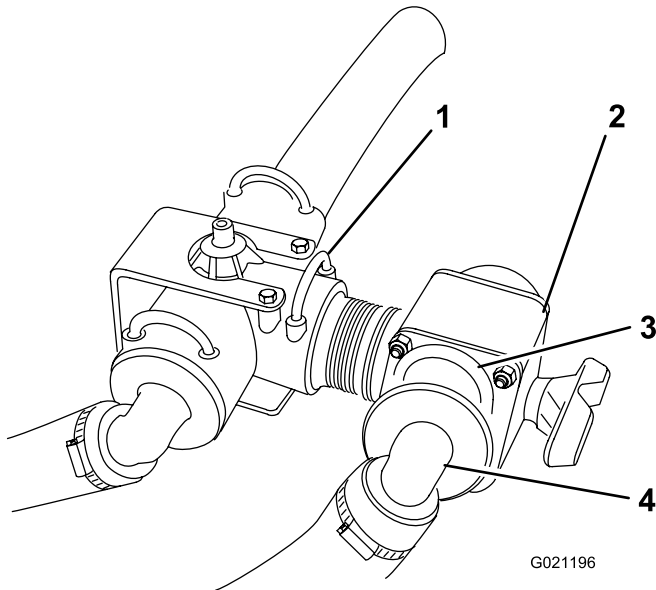


Figure 6

- | | |
|-------------------|------------------------|
| 1. Retainer (new) | 3. Retainer (existing) |
| 2. Control valve | 4. Boom hose |

5. Connect the boom hose that you disconnected in step 1 to the open port on the control valve and secure it with the retainer you removed in step 1 (Figure 6).
6. Remove the 2 bolts securing the supply tee mounting bracket to the vehicle.

Note: Retain the fasteners.

7. Install the control valve bracket between the supply tee bracket and the vehicle (Figure 7).

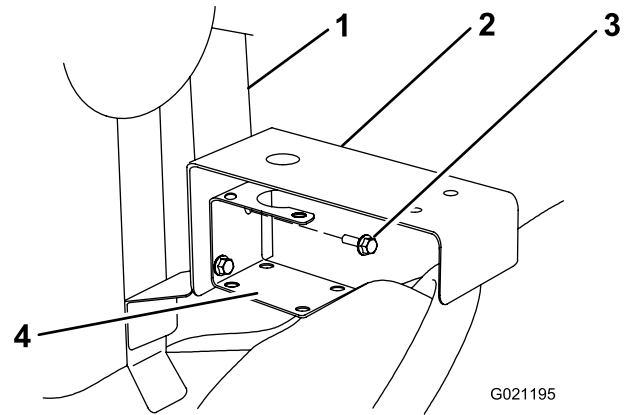


Figure 7

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

8. Secure the supply tee bracket and control valve bracket to the mounting frame using the bolts that you removed in step 6 (Figure 7).
9. Secure the supply tee bracket and control valve bracket using the screws that you removed in step 3.
10. Secure the control valve to the bracket with 2 Phillips screws.
11. On a Multi Pro 1200 Sprayer, push the red pressure gauge tube into the green tube fitting on top of the supply tee.
12. Install the support bracket as follows:
 - On a Multi Pro Sprayer (Figure 8), install the support bracket using 4 flange-head bolts (1/4 x 3/4 inch) and 4 flange nuts (1/4 inch).

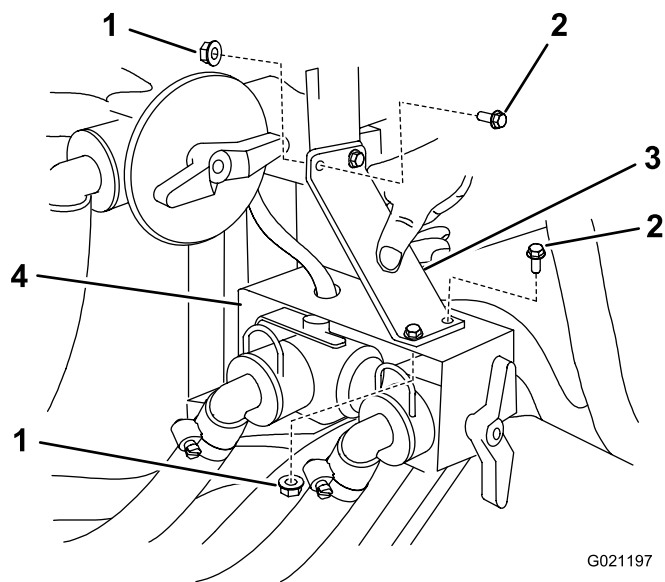


Figure 8

- | | |
|---------------------|--------------------------|
| 1. Flange nut | 3. Support bracket |
| 2. Flange-head bolt | 4. Control valve bracket |

- On a Workman Spray System (Figure 9), remove the 2 screws securing the upper tee and install the support bracket using the screws, 2 flange-head bolts (1/4 x 3/4 inch), and 2 flange nuts (1/4 inch).

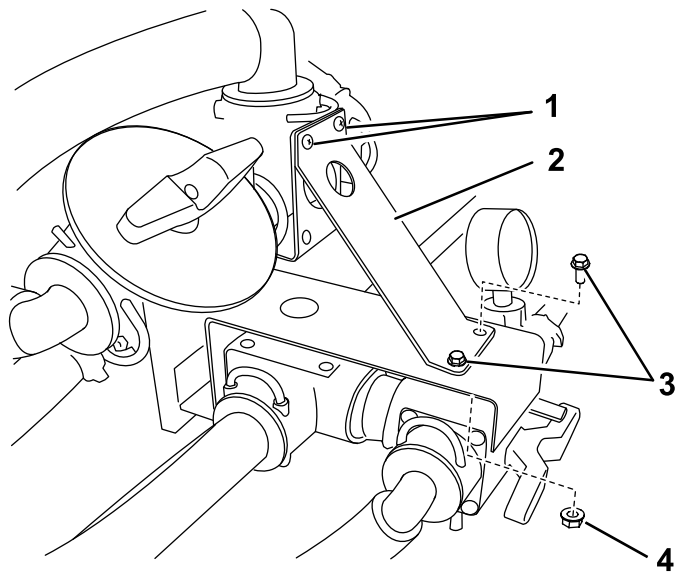


Figure 9

- | | |
|--------------------|----------------------|
| 1. Screws | 3. Flange-head bolts |
| 2. Support bracket | 4. Flange nut (2) |

- Connect the large adapter end of the tee assembly to the control valve (Figure 10).

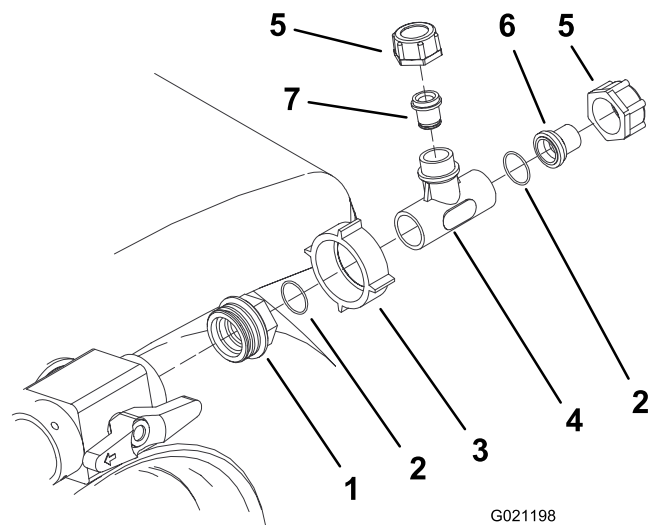


Figure 10

- | | |
|----------------------|---------------------|
| 1. Adapter | 5. Plastic nut |
| 2. Large O-ring | 6. Reducer nipple |
| 3. Large plastic nut | 7. Reducer assembly |
| 4. Tee | |

- Turn the large plastic nut to secure the tee assembly to the control valve (Figure 10).
- Wrap thread-sealing tape counterclockwise around the threads of the gauge (Figure 11).

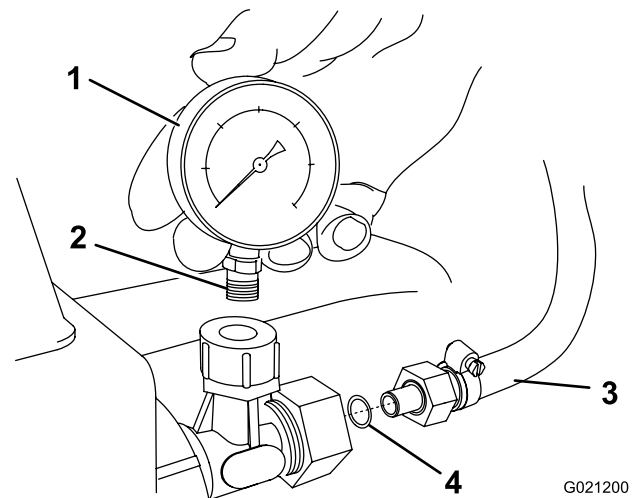


Figure 11

- | | |
|--------------------|--------------|
| 1. Pressure gauge | 3. Long hose |
| 2. Wrapped threads | 4. O-ring |

- Install the pressure gauge into the open port to the right of the control valve (Figure 11).

4

Installing the Supply Hose

Parts needed for this procedure:

1	Hose
1	Hose clamp
1	Spray gun
1	O-ring

Procedure

1. 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 the control valve assembly (Figure 11).
2. Connect the threaded fitting on the end of the long hose to the control valve assembly (Figure 11).
3. Connect the free end of the long hose to the fitting on the gun (Figure 12).

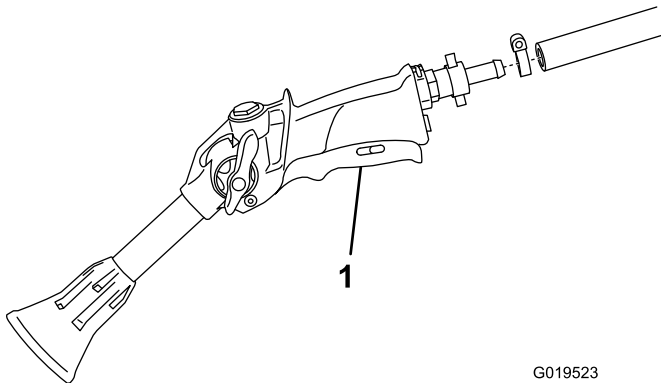


Figure 12

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1. Spray gun

4. Secure the end of the hose with a small hose clamp.
5. Wrap the hose around the hooks on the tank and place the spray gun in the gun bracket as shown in Figure 13.

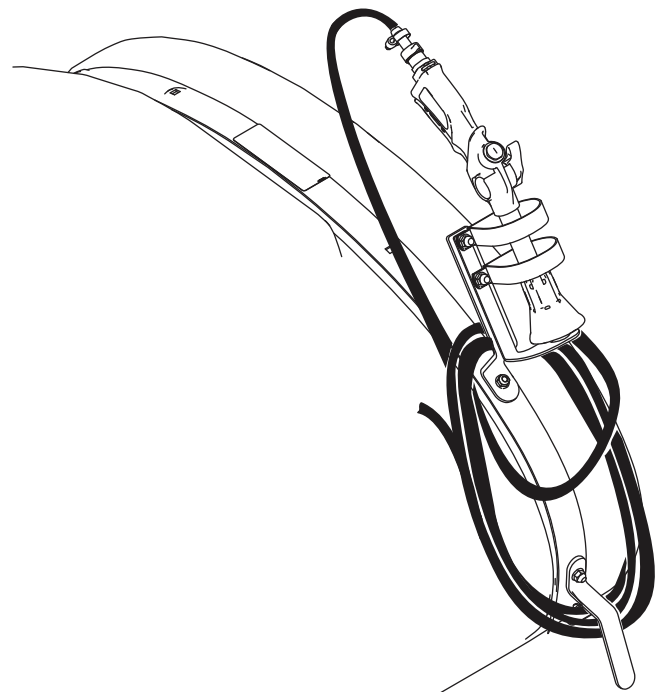


Figure 13

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Operation

⚠ WARNING

Fluid under pressure can penetrate skin and cause injury.

Hot liquids and chemicals can cause burns or other harm.

- Keep your body and hands away from nozzles that eject high-pressure fluid.
- Do not aim the sprayer at any person or animal.
- Ensure that 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 the skin.

Taking Precautions while Operating in Stationary Modes

Important: Under some conditions, heat from the engine, radiator, and muffler can potentially damage the grass when operating the sprayer in a stationary mode. Stationary modes include tank agitation, hand spraying, or using a walking boom.

Use the following precautions:

- **Avoid** stationary spraying when conditions are very hot and/or dry, as turf can be more stressed during these periods.
- **Avoid** parking on the turf while stationary spraying. Park on a cart path whenever possible.
- **Minimize** the amount of time the machine is left running over any particular area of turf. Both time and temperature affect how much the grass may be damaged.
- **Set the engine speed as low as possible** to achieve the desired pressure and flow. This will minimize the heat generated and the air velocity from the cooling fan.
- **Allow heat to escape** upward from the engine compartment by raising the engine guard/seat assemblies during stationary operation rather than being forced out under the vehicle. Refer to your *Operator's Manual* for more information on raising the seat assemblies.

Note: Use a heat shield blanket underneath the vehicle during stationary operation if you desire additional heat protection. Contact an Authorized Toro Dealer to obtain a Toro heat shield blanket kit for turf sprayers.

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 (1034 kPa) and set it at that speed.

Important: Do not use a pressure setting higher than 150 psi (1034 kPa) with the spray gun.

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 the spray gun.

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. Turn the red knob on the face of the control valve to the Boom Spray position.
2. 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.
3. Wrap the hose around the hooks on the tank and place the spray gun in the gun bracket.
4. Return the engine to idle speed and stop the pump.

Spraying with the Spray Gun

1. Unwrap the hose from the hose hooks.