Form No. 3357-963 Rev B

BBA Compliance Kit

for Multi-Pro 1250 Turf Sprayer

Model No. 41339

Installation Instructions

Note: Teflon tape is used during the installation of this kit. The tape is used 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).

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

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

- The Compliance Kit comprises three separate kits: the Spray Gun Kit, the Rinse Kit and the CE compliance kit. The following setup instructions install each kit in order to keep parts from separately packaged kits together during installation for clarity. It is acknowledged the resulting instructions that follow have steps that rework installations performed in preceding steps.
- Disregard any installation instructions found in those individual kits.
- Loose parts not packaged within individual kits are denoted as BBA kit parts in this kit.

Loose Parts

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

Procedure	Description	Qty.	Use
1	No parts required	–	Preparing the machine.
2	Hose hook, single bend Spray gun bracket Carriage bolt (5/16 x 3/4 inch) Locknut (5/16 inch)	1 1 2 2	Install the hose hooks (Spray Gun Kit).
3	Control valve Control valve bracket Phillips screw Support bracket (for Multi-Pro Sprayers) Flange-head bolt (1/4 x 3/4 inch) Flange nut (1/4 inch) Tee assembly Pressure gauge Barbed fitting (1/2 inch) Retainer fork, large	1 1 2 1 4 4 1 1 1 1	Install the control valve (Spray Gun Kit).
4	Hose, long O-ring, small clear Spray gun Hose clamp, small	1 1 1 1	Install the spray gun (Spray Gun Kit).
5	Bulkhead Plastic ring nut	1 1	Install the rinse tank bulkhead fitting (Rinse Kit).

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CE

Original Instructions (EN)
Printed in the USA.

Procedure	Description	Qty.	Use
6	Rinse nozzle tube Plastic threads Nozzle bulb Bulkhead O-ring, large clear O-ring, small black Plastic ring nut 60 degree fitting 1/2 inch connector fitting Plastic retainer ring Retainer nut, large Retainer nut, small Retainer nut, medium Hose barb fitting O-ring, clear small Hose clamp	1 2 1 1 1 1 1 1 1 1 1 1 1 1 2 1	Install the Rinse Nozzle (Rinse Kit)
7	Decal, 107-8784, rinse tank valve Decal, 107-8785, rinse nozzle valve Rinse tank valve Rinse nozzle valve Reducer Retainer fork, large	1 1 1 1 1 4	Install the valves (Rinse Kit).
8	Suction hose Rinse tank suction hose Rinse nozzle hose Retainer fork, small Retainer fork, large Plastic tie	1 1 1 3 1 3	Install the hoses (Rinse Kit).
9	Flange bolt (5/16 x 3/4 inch) Flange nut (5/16 inch)	2 2	Install the battery cover fasteners (CE Kit).
10	Horn Bolt (5/16 x 3/4 inch) Locknut (5/16 inch)	1 1 1	Install the horn (CE Kit).
11	Decal 104-6957, horn	1	Apply the horn decal (CE Kit).
12	Decal 108-3308, Multi-Pro 1200	1 1	Apply the Spray-Pro™ decal (CE Kit).
13	Tail light Tail light bracket Palnut (1/4 inch) Bolt (5/16 x 3/4 inch) Locknut (5/16 inch)	1 1 2 2 2	Install the tail light and bracket (CE Kit).
14	Decal, 104-8904 boom	2	Apply the decals on the booms (CE Kit).
15	Horn button assembly Wire harness Plastic ties	1 1 7	Install the wire harness and horn button (CE Kit).
16	 Bolt (3/16 x 5/8 inch) Lock washer Nut (3/16 inch)	1 2 2 2	Install the brake switch (CE Kit).

Procedure	Description	Qty.	Use
17	Pressure gauge	1	Install the pressure gauge (BBA Kit).
18	Pressure filter Spring Ball Reducer, red Hose, filter flush	1 1 1 1 1	Assemble the pressure filter (BBA Kit)
19	Pressure filter mount Bolt (5/16 x 1 inch) Washer (5/16 inch) Flange nut (5/16 inch)	1 4 4 4	Mount the pressure filter (BBA Kit).
20	Tank drain assembly Lock washer Lock nut Template 90 degree elbow fitting	1 4 4 1 1	Install the tank drain (BBA Kit).
21	Mixing tee Retainer forks, small Bypass hose	1 3 1 1	Install the bypass line (BBA Kit).
22	Filter supply hose Manifold supply hose	1 1	Install the pressure filter hoses (BBA Kit).
23	Straight fitting, brass Tee fitting, metal Pipe plug	1 1 1	Install the pressure tap (BBA Kit).
24	Decal 112-7906	1	Install the decal (BBA Kit).
25	Retainer fork Straight hose barb Bulkhead fitting Test beaker	2 2 1 1	Finish the installation (BBA Kit).

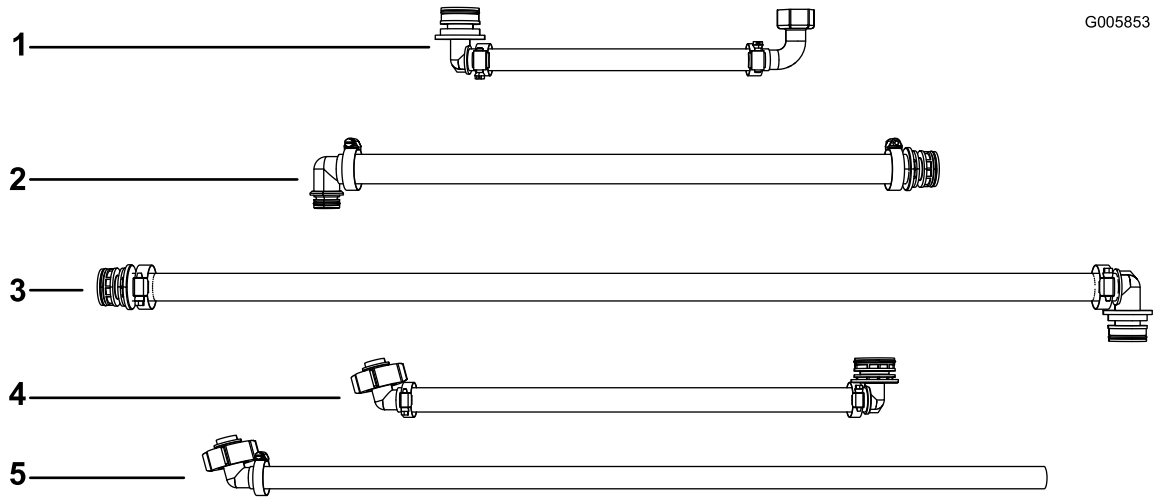

Figure 1
BBA Kit Hose Legend

1. Filter flush hose
2. Bypass hose
3. Tank return hose
4. Filter supply hose
5. Manifold supply hose

1

Preparing the Machine

No Parts Required

Procedure

1. Move the sprayer onto a level surface, set the parking brake, stop the pump, stop the engine, and remove the ignition key.
2. Drain the contents of the tank to remove any solution in lines. Refer to the *Operator's Manual* for more information.

   Note: Take caution while disconnecting any hoses during the installation of this kit and have a catch bucket ready for any solutions remaining in the hose.

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.**

2

Installing the Hose Hooks

Parts needed for this procedure:

1	Hose hook, single bend
1	Spray gun bracket
2	Carriage bolt (5/16 x 3/4 inch)
2	Locknut (5/16 inch)

Procedure

1. Remove the fasteners securing the right side of the front tank strap (Figure 2).

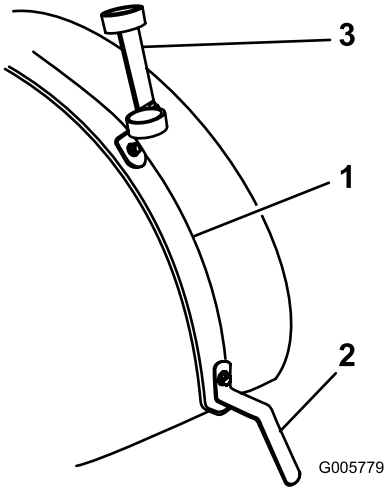

Figure 2

1. Front tank strap
2. Hose hook
3. Spray gun bracket

2. Install the hose hook and spray gun bracket as shown in Figure 2, using 2 carriage bolts (5/16 x 3/4 inch) and locknuts (5/16 inch).
3. 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)
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 fork, large

Procedure

1. Remove hose large retainer fork to disconnect the boom supply hose from the supply tee (Figure 3).

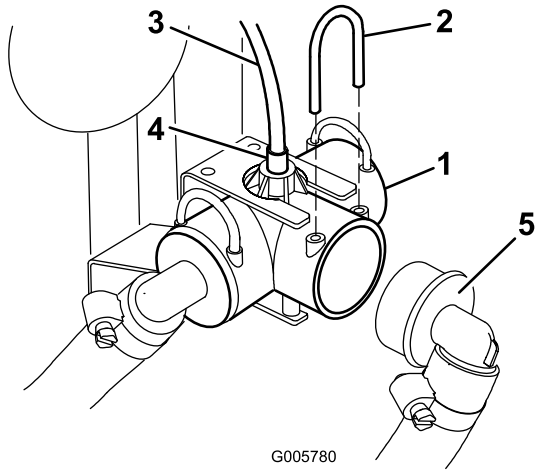

Figure 3

1. Supply tee
2. Hose retainer
3. Pressure gauge tube
4. Tube fitting
5. Boom supply hose

2. Remove the four screws securing the supply tee to the mounting bracket (Figure 4). Remove the supply tee and hoses.

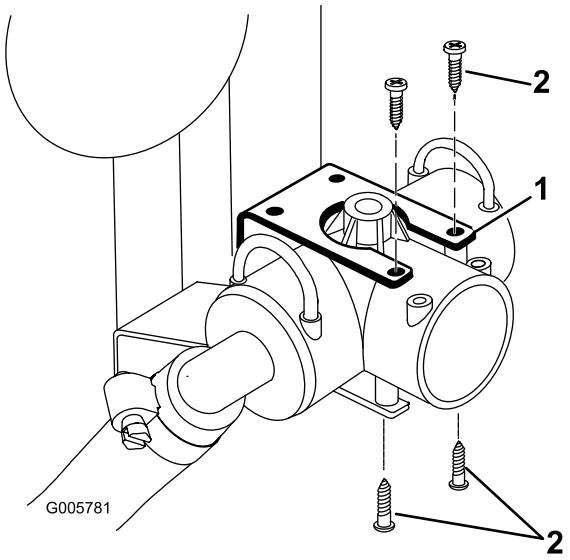

Figure 4

1. Supply tee mounting bracket
2. Screws

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

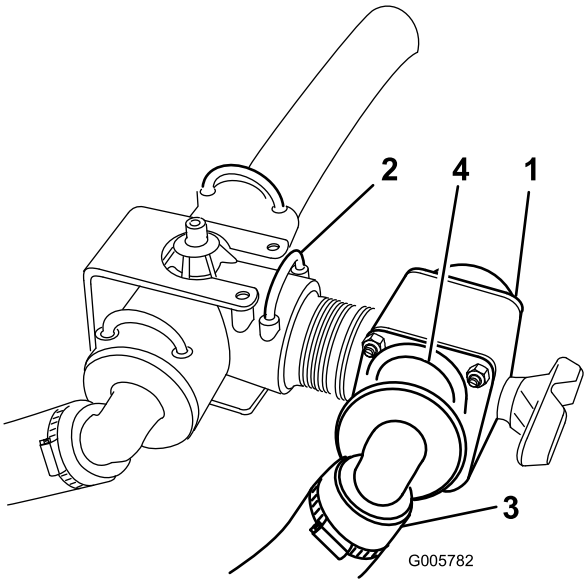

Figure 5

1. Control Valve
2. Retainer fork, new
3. Boom hose
4. Retainer fork, existing

4. 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 1 (Figure 5).
5. Remove the 2 bolts securing the supply tee mounting bracket to the vehicle. Retain the fasteners.
6. Install the control valve bracket between the supply tee bracket and the vehicle (Figure 6).

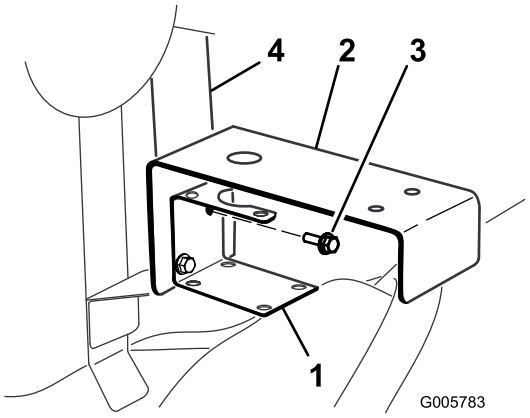

Figure 6

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

7. Secure the supply tee bracket and control valve bracket to the mounting frame using the bolts you removed in 5 (Figure 6).
8. Secure the supply tee bracket and control valve bracket using the screws you removed in step 2.
9. Secure the control valve to the bracket with two Phillips screws.
10. Install the support bracket as shown in Figure 7, using 4 flange-head bolts (1/4 x 3/4 inch) and 4 flange nuts (1/4 inch).

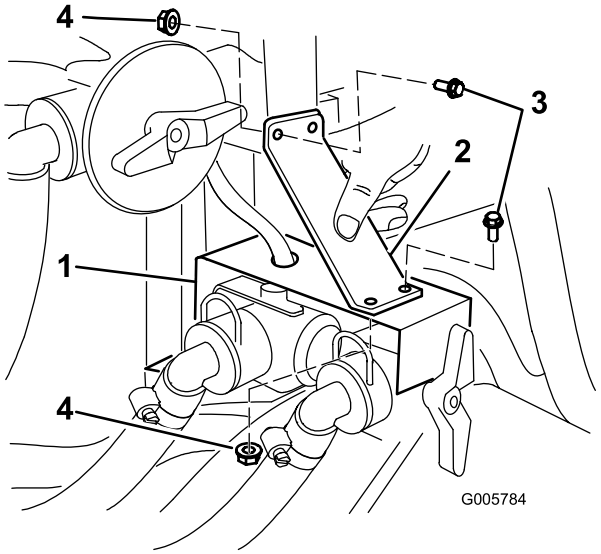

Figure 7

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

11. Connect the large adapter end of the tee assembly to the control valve (Figure 8).

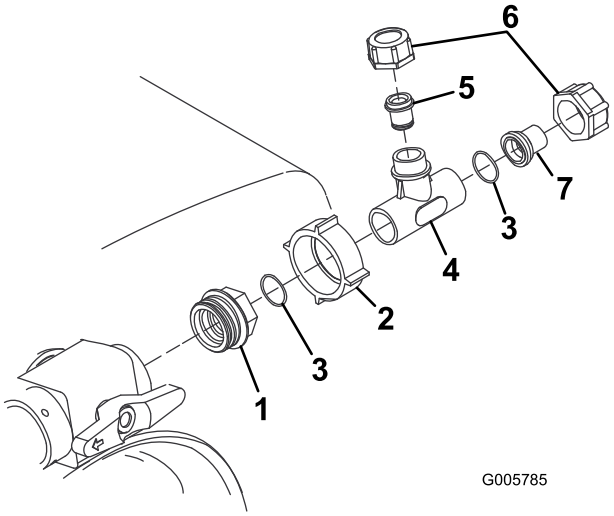

Figure 8

Tee assembly shown exploded

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

12. Turn the large plastic nut to secure the tee assembly to the control valve (Figure 8).
13. Wrap Teflon tape around the threads of the pressure gauge (Figure 9).

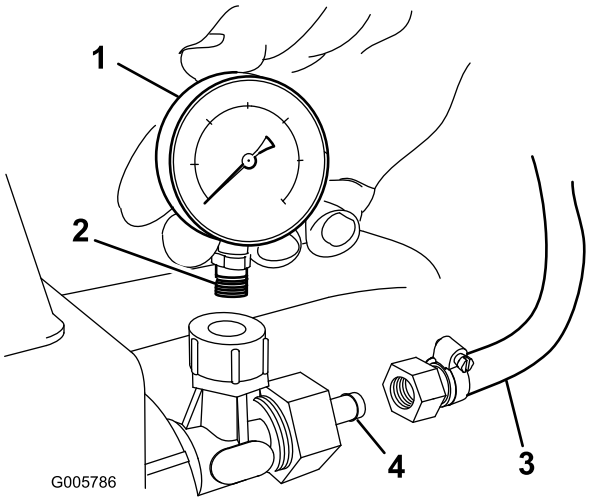

Figure 9

1. Pressure gauge
2. Wrapped threads
3. Long hose
4. O-ring, small clear

14. Install the pressure gauge into the open port to the right of the control valve (Figure 9).

4

Installing the Spray Gun

Parts needed for this procedure:

1	Hose, long
1	O-ring, small clear
1	Spray gun
1	Hose clamp, small

Procedure

1. Locate the small, clear 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 (Figure 9).
2. Connect the threaded fitting on the end of the long hose to the control valve assembly (Figure 9).
3. Remove any plugs in the free end of the hose. Then connect the long hose to the fitting on the gun (Figure 10).

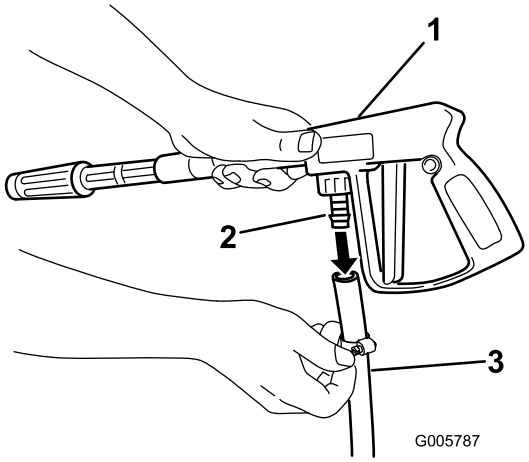

Figure 10

1. Spray gun
2. Hose fitting
3. Hose

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.

5

Installing the Rinse Tank Bulkhead Fitting

Parts needed for this procedure:

1	Bulkhead
1	Plastic ring nut

Procedure

1. Remove the fastener securing the right side of the front tank strap to the main tank assembly.

   Note: Retain all parts and fasteners.
2. Lift the front tank strap and remove the rinse tank (Figure 11). Remove the cap from the rinse tank and retain.

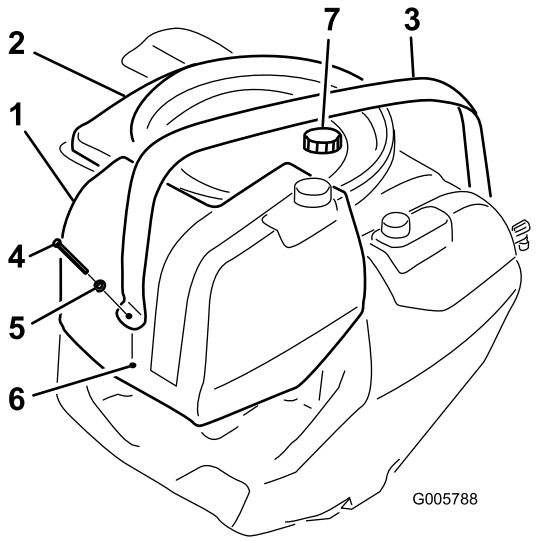

Figure 11

1. Rinse tank
2. Main tank
3. Front strap
4. Bolt
5. Washer
6. Lock nut
7. Cap, rinse tank

3. Turn the rinse tank upside down and locate the drill point in tank sump area.
4. Drill a hole in the sump of the rinse tank using a 5.4 cm (2-1/8 inch) hole saw.

   Important: Do not elongate the opening. An elongated opening will not be sealed correctly by the bulkhead fitting yet to be installed and the rinse system will leak.
5. Use a blade to clean the plastic burrs and excess material from the drilled hole.

6. Turn the tank right side up and use compressed air to blow out any debris deposited in the tank.

   Important: Debris left inside a tank can clog and damage the spray system during operation.

7. Insert the bulkhead fitting through top opening and maneuver it into place so that the seal side of the bulkhead fitting is in contact with the interior of the drilled tank opening (Figure 12).

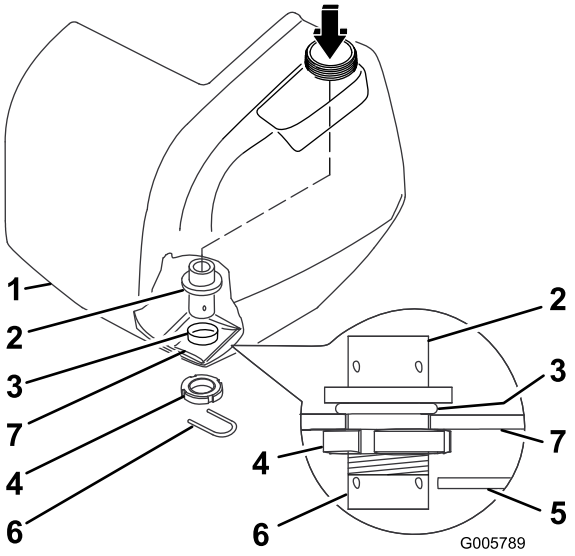

Figure 12

1. Rinse tank
2. Bulkhead
3. O-ring, clear
4. Plastic nut
5. Retainer fork holes, correct orientation
6. Retainer fork
7. Sump, rinse tank

8. Secure the new bulkhead fitting to the rinse tank using the plastic nut in loose parts as shown in Figure 12.

   Note: The seal must be seated between the fitting and tank around the entire circumference of the hole edge (Figure 12).

   Note: Orientate the bulkhead so that the retainer fork will come from the front to the back of the machine (Figure 12).

9. Install the rinse tank cap.
10. Install the rinse tank assembly with the new fitting to the machine.
11. Secure the tank using the front tank strap and fasteners removed previously.

6

Installing the Rinse Nozzle

Parts needed for this procedure:

1	Rinse nozzle tube
2	Plastic threads
1	Nozzle bulb
1	Bulkhead
1	O-ring, large clear
1	O-ring, small black
1	Plastic ring nut
1	60 degree fitting
1	1/2 inch connector fitting
1	Plastic retainer ring
1	Retainer nut, large
1	Retainer nut, small
1	Retainer nut, medium
1	Hose barb fitting
2	O-ring, clear small
1	Hose clamp

Drilling the Main Tank

1. Open the tank lid and remove the strainer basket.
2. Locate the tank ridge area to the back and right of the main tank lid.
3. Measure 6.4 cm (2-1/2 inches) from the ridge edges as shown in Figure 13. Mark the tank at that spot.

   Note: The tank may already have a drill point at the spot being measured. Use this indentation, if present, to drill the hole.

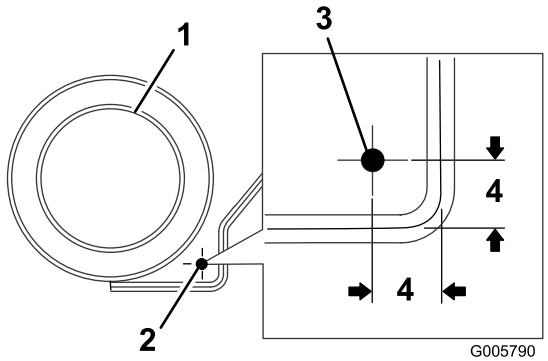

Figure 13

1. Main tank lid
2. Tank ridge, back and right of lid
3. Drill point
4. 6.4 cm (2-1/2 inches)

Note: Place a receptacle inside the tank and below the area to be drilled to catch any debris created during the drilling process.

Important: Debris left inside a tank could clog and damage the spray system during operation.

4. Drill a 3.5 cm (1-3/8 inch) diameter hole in the tank at the spot marked previously (Figure 13).
5. Use a blade to clean the plastic burrs and excess material from the hole drilled.
6. Clean any debris from the drilling process left inside the tank.

Assembling the Rinse Nozzle

1. Snap a threaded fitting over one end of the rinse tube as shown in Figure 14.

Important: *Do not* install threaded fittings on both ends of the rinse tube at this time.

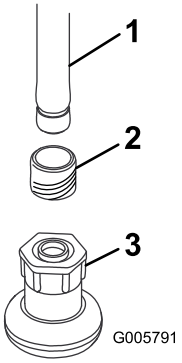

Figure 14

1. Rinse tube
2. Threaded fitting
3. Rinse nozzle bulb

2. Install the rinse nozzle bulb over the threaded side of the rinse tube (Figure 14).

Installing the Rinse Nozzle

1. Locate the rinse nozzle bulkhead in loose parts. If the bulkhead is shipped assembled, disassemble as shown in Figure 15.
   A. Remove the plastic ring nut from the bulkhead.
   B. Push the large, clear O-ring on the bulkhead up flush to the flange fitting to keep it seated.
   C. Remove the large retainer nut and O-ring
   D. Retain all parts.

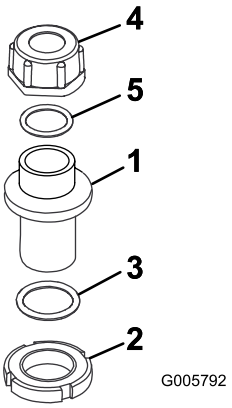

Figure 15

1. Bulkhead fitting
2. Plastic ring nut
3. O-ring, large clear
4. Retainer nut, large
5. O-ring, small black

2. Install the bulkhead fitting with the seal facing down into the hole drilled in the main tank (Figure 16).

Important: Ensure that the seal is seated correctly between the bulkhead flange and the tank surface (Figure 16).

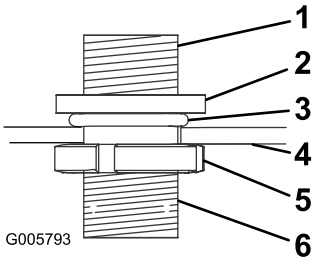

Figure 16

1. Bulkhead
2. Flange, bulkhead
3. O-ring, clear
4. Main tank
5. Threaded end, bulkhead
6. Plastic ring nut

3. Secure the fitting and seat the seal by installing the plastic ring nut to the threads of the fitting in the tank interior and hand tightening (Figure 16).
4. Install assembled rinse nozzle and tube up through the bulkhead fitting installed in the main tank (Figure 17).

Important: ***Do not*** **install the remaining threaded fitting on the end of the rinse tube at this time.**

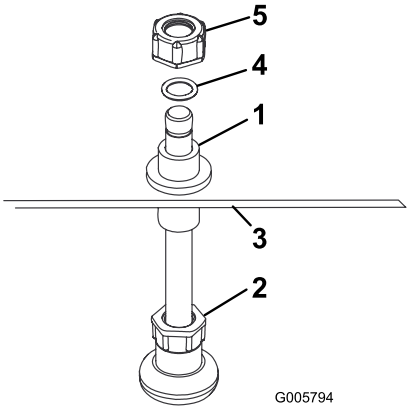

Figure 17

1. Bulkhead assembly
2. Rinse nozzle and tube assembly
3. Main tank surface
4. O–ring, small, black
5. Retainer nut, large

5. Install the small, black O-ring and large retainer nut, which you previously removed, over the top of the **un-threaded** end of the rinse tube protruding from the bulkhead fitting (Figure 17).

   Note: Do not tighten the nut at this time.

6. Adjust the rinse nozzle assembly position so the top of the **un-threaded** end of the tube stands approximately 10 cm (4 inches) from the tank surface (Figure 18).

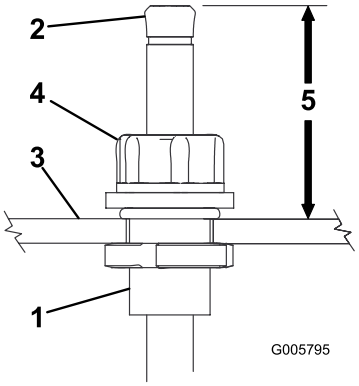

Figure 18

1. Rinse nozzle assembly
2. Un–threaded end of tube
3. Tank surface
4. Retainer nut, large
5. 10 cm (4 inches)

7. Set the tube height by tightening the larger retainer nut installed above (Figure 18).
8. Snap the threaded fitting over the remaining end of the rinse tube.
9. Install the 1/2 inch middle fitting into place and secure it with the medium retainer nut from loose parts (Figure 19).

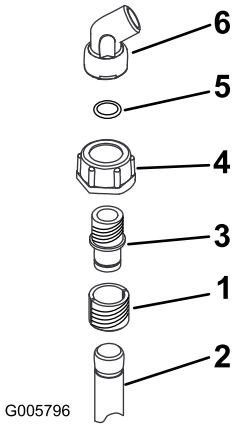

Figure 19

1. Threaded fitting
2. Rinse tube
3. 1/2 inch middle fitting
4. Retainer nut, medium
5. O-ring, small clear
6. 60 degree elbow

10. Install a small, clear O-ring into the 60 degree elbow fitting and then install the fitting onto 1/2 inch middle fitting.
11. Position the elbow fitting so that it faces to the right and to the rear of the machine.
12. Use the following procedure to assemble the rinse nozzle hose as shown in (Figure 20). Locate a small, clear O-ring, the hose barb, small retainer nut, metal clamp, and rinse nozzle hose in loose parts.

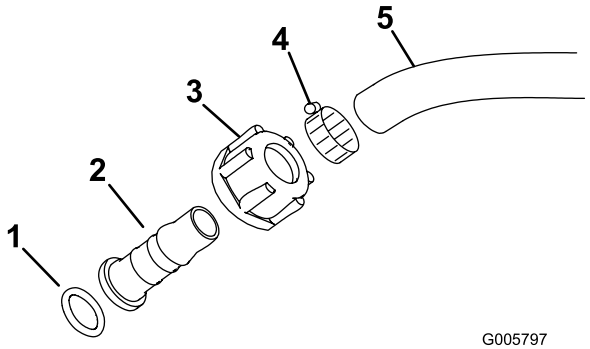

Figure 20

1. O-ring, small clear
2. Hose barb
3. Retainer nut, small
4. Hose clamp
5. Hose

   A. Slide the hose clamp, loose, over the rinse nozzle hose.

   B. Install the O-ring over the barbed end of the fitting and push it flush to the fitting flange.

   C. Install the plastic nut over the barbed end of the fitting and O-ring.

D. Install the barbed fitting assembly into the open end of the rinse nozzle hose.

E. Tighten the hose clamp.

13. Set the rinse nozzle hose assembly aside for later installation.

7

Installing the Valves

Parts needed for this procedure:

1	Decal, 107-8784, rinse tank valve
1	Decal, 107-8785, rinse nozzle valve
1	Rinse tank valve
1	Rinse nozzle valve
1	Reducer
4	Retainer fork, large

Installing the Rinse Tank Valve

1. Locate the blue rinse tank valve in loose parts and the decal.
2. Install the decal number 107-8784 onto the valve face in the correct orientation (Figure 21). Make sure the decal aligns with the flow of the valve.

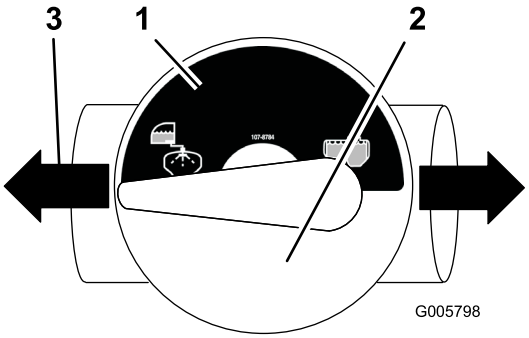

Figure 21

1. Rinse tank valve decal, part number 107-8784
2. Rinse tank valve, blue
3. Flow of valve

3. Disconnect the suction hose running from the top of the main tank to the upper mixer tee. Discard this hose and retain the forks for later use.
4. Brush a non-petroleum based lubricate such as vegetable oil on the bulkhead fitting reducer and O-ring (Figure 22)

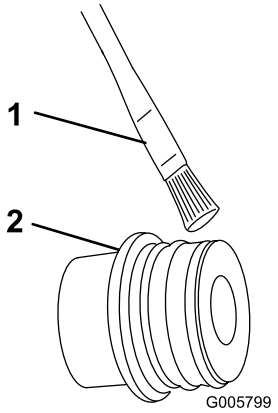

Figure 22

1. Brush
2. Reducer

5. Install the bulk reducer fitting to the rinse tank side of the valve (Figure 23). Secure it with a large retainer fork from loose parts.

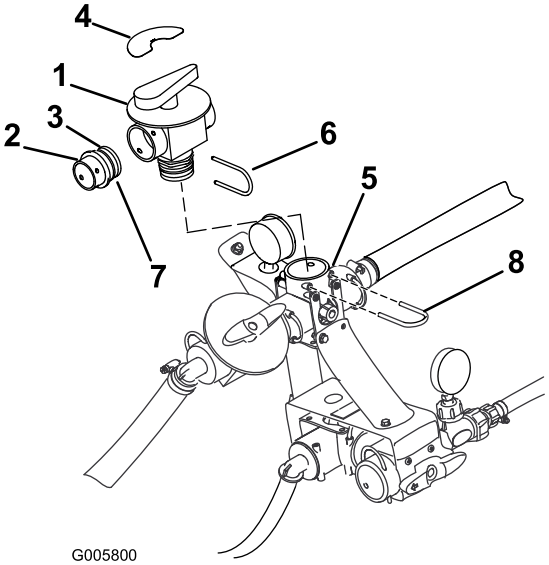

Figure 23

1. Rinse tank valve, blue
2. Reducer bulkhead fitting
3. O-ring
4. Decal, 107–8784
5. Upper mixer tee
6. Retainer fork, large
7. Apply non-petroleum based lubricant here.
8. Retainer fork, existing

6. Install the tank rinse valve onto the top mixer tee as shown in Figure 23 with the bulkhead facing rearward. Secure the valve with an existing, large retainer fork.

Install the Rinse Nozzle Valve

1. Locate green rinse nozzle valve in loose parts.
2. Install decal 107-8785 onto the valve face in the correct orientation (Figure 24). Make sure the decal aligns with the flow of the valve.

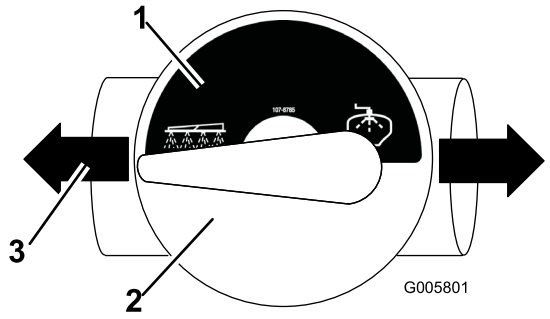

Figure 24

1. Rinse nozzle valve decal, part number 107-8785
2. Rinse nozzle valve, green
3. Flow of valve

3. Brush a non-petroleum based lubricate such as vegetable oil on the bulkhead fitting reducer (Figure 22).
4. Install the bulk reducer fitting to the rinse tank side of the valve. Secure it with a large retainer fork from loose parts.
5. Install the rinse nozzle valve in the orientation shown in Figure 25 for machines with a spray gun attachments installed.

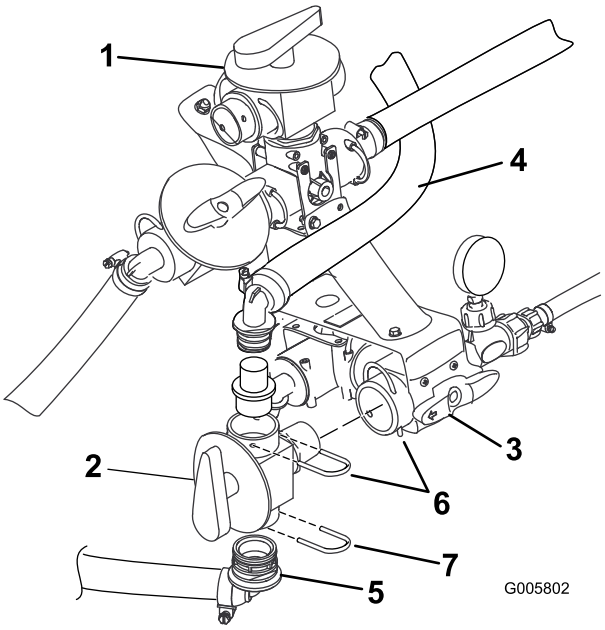

Figure 25

1. Rinse tank valve, blue
2. Rinse nozzle valve, green
3. Control valve, spray gun
4. Rinse nozzle hose
5. Boom supply hose, existing
6. Retainer fork, large
7. Retainer fork, large, existing

6. Remove the retainer fork and the boom supply hose from the spray gun control valve.
7. Install the rinse nozzle valve into the control valve at the now open port. Orientate the flow of the valve vertically so the rinse nozzle hose side of the decal is on the top and the boom supply side is on the bottom.
8. Use a existing, large retainer fork to secure the rinse nozzle valve in the correct orientation.
9. Secure the boom supply hose to the boom supply side of the rinse nozzle valve with the existing, large retainer fork.

8

Installing the Hoses

Parts needed for this procedure:

1	Suction hose
1	Rinse tank suction hose
1	Rinse nozzle hose
3	Retainer fork, small
1	Retainer fork, large
3	Plastic tie

Procedure

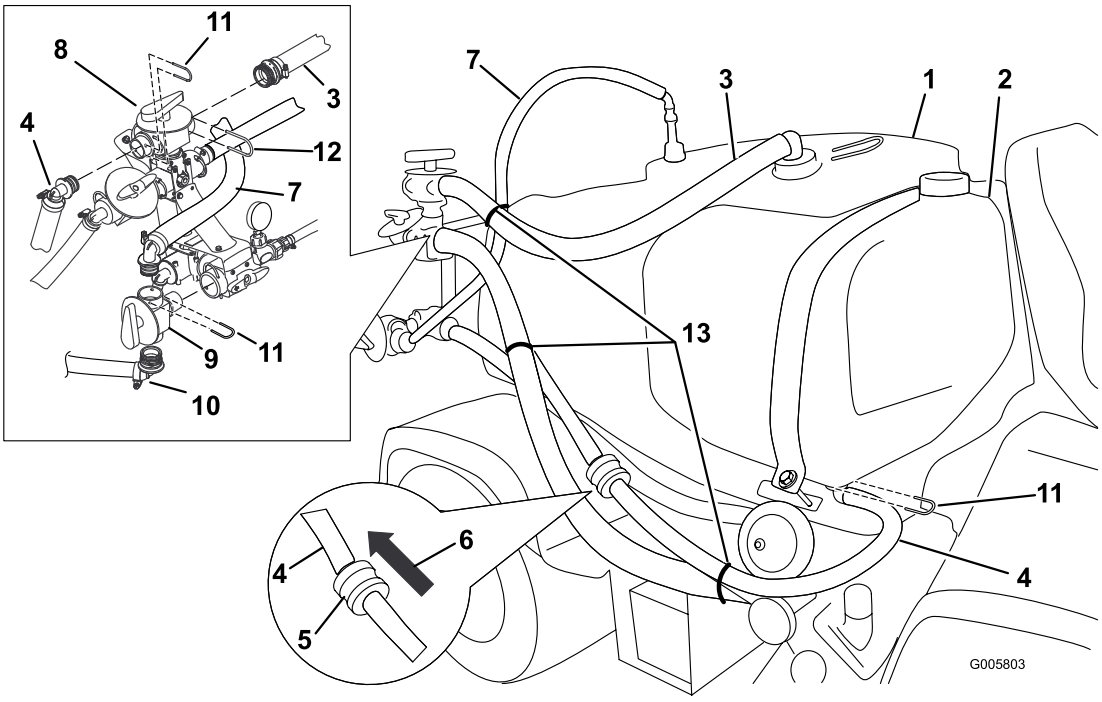

Figure 26

1. Main tank
2. Rinse tank
3. Suction hose
4. Rinse tank suction hose
5. Check valve
6. Correct flow direction
7. Rinse nozzle hose
8. Rinse tank valve
9. Rinse nozzle valve
10. Boom supply hose, existing
11. Retainer fork, small
12. Retainer fork, large
13. Plastic tie

Installing the Suction Hose

1. Locate suction hose in loose parts.
2. Install the hose from the main tank upper port to the main tank side of the rinse tank rinse valve (Figure 26).
3. Secure one end of the hose with the existing, extra large retainer fork to the upper port on the main tank.
4. Secure the other end of the hose to the rinse tank valve with a large retainer fork from loose parts.

Install the Rinse Tank Suction Hose

1. Locate rinse tank suction hose from the loose parts.

2. Plumb the hose from the bottom of the rinse tank to the rinse tank valve so that the hose wraps around the pump and is routed along the main pump hose.
3. Route the rinse tank suction hose behind the valve assembly to the rinse tank side of the rinse tank valve.

   Important: Install the rinse tank suction hose so that the check valve arrow shows the direction of flow from the rinse tank to the rinse tank valve.
4. Secure the hose to the rinse tank using the small retainer fork in loose parts.
5. Install the hose to the input side of the rinse tank valve and secure it with the retainer fork included in loose parts.
6. Use the plastic ties located in loose parts to secure the rinse tank suction hose to the main pump hose as shown in Figure 26.

Installing the Rinse Nozzle Hose

1. Locate rinse nozzle hose assembly set aside earlier.
2. Install the hose to the input side of the rinse nozzle valve.
3. Plumb the hose under and behind the main pump and main tank suction hose, to the barbed elbow fitting in the rinse tube (Figure 26).
4. Secure the rinse nozzle hose to the 60 degree elbow fitting by threading the small retainer nut over the elbow fitting. Make sure the small, clear O-ring is seated in the small retainer nut at the end of the rinse nozzle hose. Hand tighten.

9

Installing the Battery Cover Fasteners

Parts needed for this procedure:

2	Flange bolt (5/16 x 3/4 inch)
2	Flange nut (5/16 inch)

Procedure

Replace the battery cover hand knobs with fasteners from the CE kit.

1. Loosen and remove the two hand knobs securing battery cover to battery base (Figure 27).

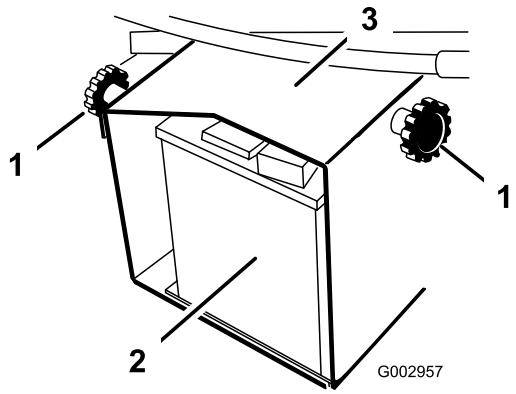

Figure 27

1. Hand knob
2. Battery
3. Battery cover

2. Install the two flange bolts (5/16 x 3/4 inch) and two flange nuts (5/16 inch) in place of the removed hand knob to secure the battery cover.

10

Installing the Horn

Parts needed for this procedure:

1	Horn
1	Bolt (5/16 x 3/4 inch)
1	Locknut (5/16 inch)

Procedure

Prepare the machine for the installation of the horn.

1. Drill a hole, 8.5 mm (11/32 inch) in diameter, in the vehicle frame under the floorboard. The hole should be 4 cm (1-1/2 inches) down from the frame top and 5 cm (2 inches) from the front of the frame (Figure 28).
2. Secure the horn to the frame using a bolt (5/16 x 3/4 inch) and a locknut (5/16 inch) as shown in Figure 28.

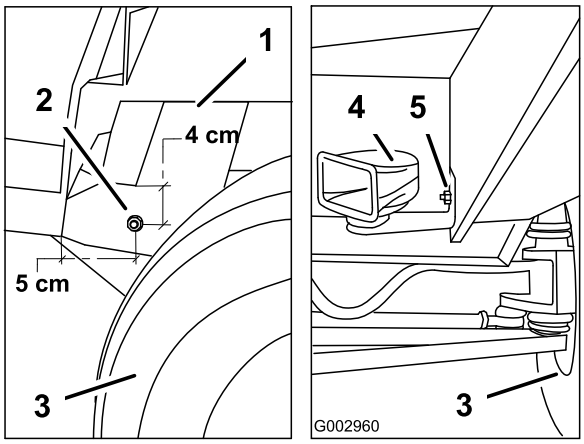

Figure 28

1. Vehicle frame
2. Bolt (5/16 x 3/4 inch)
3. Tire, left front
4. Horn
5. Locknut (5/16 inch)

3. Drill a hole, 16 mm (5/8 inch) in diameter, in the dash panel. The hole should be 23 cm (9 inches) to the left of the steering column base and 5 cm (2 inches) from the top of the dash (Figure 29).

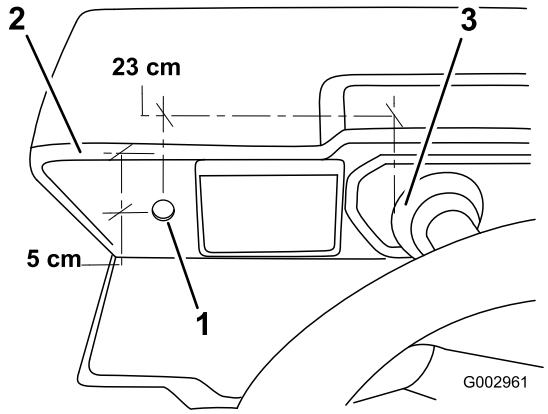

Figure 29

1. Drill hole here
2. Dash
3. Steering column

Note: Do not install the horn button at this time.

11

Applying the Horn Decal

Parts needed for this procedure:

1	Decal 104-6957, horn

Procedure

Install the horn decal above the dash hole.

1. Clean the decal area above the horn button hole and make sure it is free of dirt, grease, or other foreign material.
2. Remove the backing of the new decal and place about 6.5 mm (1/4 inch) above the horn button on the dash (Figure 30).

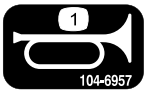

Figure 30

1. Horn

12

Applying the Spray-Pro™ Decal

Parts needed for this procedure:

1	Decal 108-3308, Multi-Pro 1200
1	

Procedure

Install the following decals for appropriate model of Multi-Pro Sprayer:

- Multi-Pro 1200 decal number 108-3308
- Multi-Pro 1250 decal number 108-3309

1. Clean the decal area around the Spray-Pro monitor and make sure it is free of dirt, grease, or other foreign material.
2. Remove the top part of the decal from the backing and place it just above the dial on the monitor face. Be sure to cover the existing completely. Repeat the process for the bottom part of the decal just below the dial.

   Important: Do not attempt to remove the dial to facilitate the installation of the decals. Removing the dial will damage to the monitor and your ability to manipulate the controls.

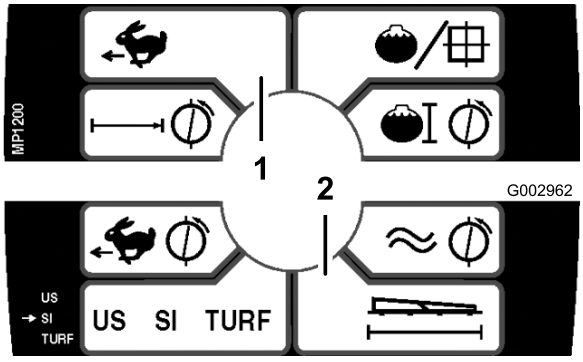

Figure 31
Multi-Pro 1200 decal,108-3308

1. Top part
2. Bottom part

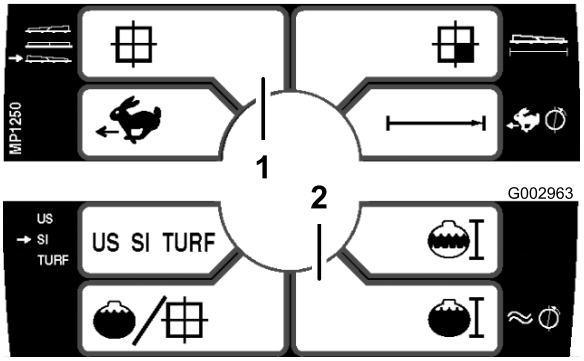

Figure 32
Multi-Pro 1250 decal,108-3309

1. Top part
2. Bottom part

13

Installing the Tail Light and Bracket

Parts needed for this procedure:

1	Tail light
1	Tail light bracket
2	Palnut (1/4 inch)
2	Bolt (5/16 x 3/4 inch)
2	Locknut (5/16 inch)

Procedure

1. Locate the tail light bracket shown in Figure 33 in loose parts. This will be the only tail light bracket used for this kit.

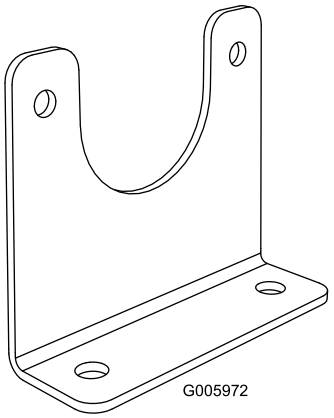

Figure 33

2. Install the tail light bracket to the center boom support with 2 bolts (5/16 x 3/4 inch) and 2 locknuts (5/16 inch) (Figure 34).
3. Install the tail light to the tail light bracket with 2 palnuts (1/4 inch) (Figure 34).

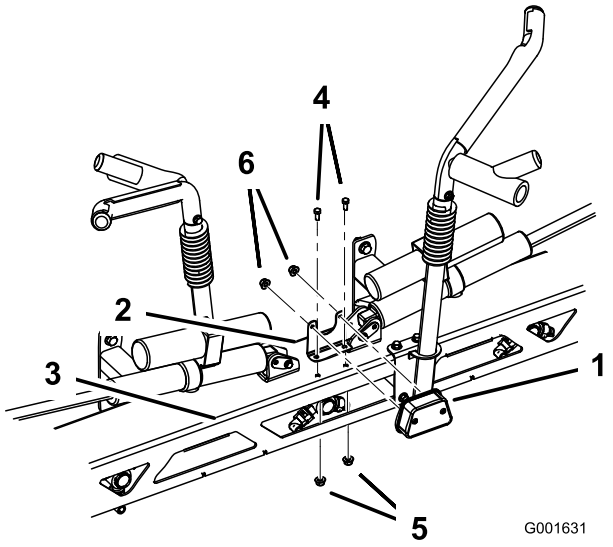

Figure 34

1. Tail light
2. Tail light bracket
3. Left side boom support
4. Bolt (5/16 x 3/4 inch)
5. Locknut (5/16 inch)
6. Palnut (1/4 inch)

14

Applying the Decals on the Booms

Parts needed for this procedure:

2	Decal, 104-8904 boom

Procedure

1. Measure from the end of the booms as shown in Figure 35.

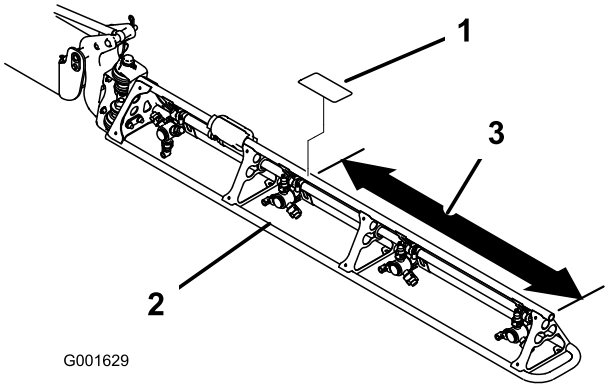

Figure 35

1. Decal
2. Boom
3. Measure 90 cm (35-1/2 inches)

2. Clean the decal area and make sure the area is free of dirt, grease, or other foreign material.
3. Remove the backing of the new decal and place onto the boom (Figure 35).

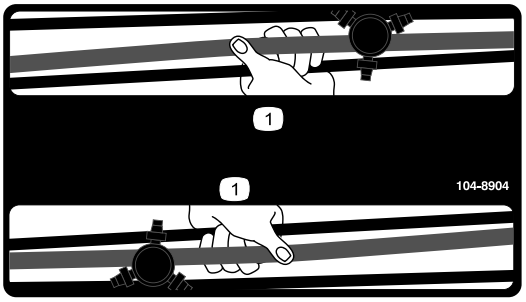

Figure 36
Boom decal, 104-8904

1. Grab boom here

4. Repeat the procedure on the opposing boom.

15

Installing the Wire Harness and Horn Button

Parts needed for this procedure:

1	Horn button assembly
1	Wire harness
7	Plastic ties

Installing the Horn Button

1. Open the horn button packing that includes the horn switch and button cap, 2 screws, and a retaining ring.

2. Remove the horn button cap and thread the retaining ring onto the exposed threads of the switch.
3. Connect the white and yellow wires at the end of the wire harness to the back of the horn switch using the two screws included (Figure 37).

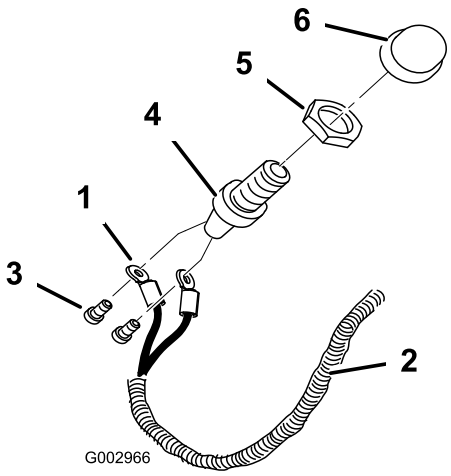

Figure 37

1. White and red wires
2. Wire harness
3. Screws
4. Horn switch
5. Retaining ring
6. Horn button

4. Move the switch assembly under the dash and push it through the hole drilled in the dash previously.
5. Screw the horn button cap onto the switch threads to secure the assembly to the dash.

   Note: Adjust the retaining ring and horn button cap as necessary.

Installing the Wire Harness for Horn and Brake

1. Run the wire harness from the horn button, under the dash panel, through the wire access hole in the floorboard, and through the frame hooks along side of the headlight wire harness to the electrical panel located under the operator's seat.
2. Under the floorboard, connect the wire harness to the new brake switch. Secure the harness to the switch using a plastic wire tie.
3. Under the floor board, connect the two quick connect terminals on the black and white wires to the horn.
4. Under the operator's seat, connect the single black wire (ground) in the middle of the wire harness to the ground block (Figure 38) located under the seat near to the solenoid.

   Note: Right and left sides are determined from the normal operating position.

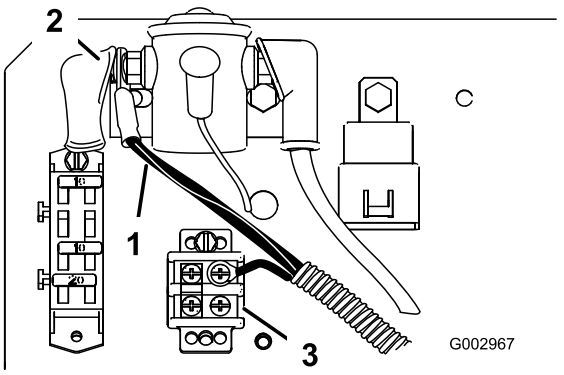

Figure 38

1. Red power wire from the wire harness.
2. Solenoid, hot or input side
3. Black wire to ground block

5. Connect the red power wire to the right side of the solenoid (Figure 38), located under the seat.

   Note: Connecting the wire harness to the hot or input side solenoid post will allow the horn to be active when the ignition key is in the Off position.

   Note: The hot or input side has constant 12V power.
6. Run the wire harness end with the tail light connector along the left side of the frame toward the rear of the machine.
7. Connect the tail light connector on the wire harness to the tail light (Figure 39).

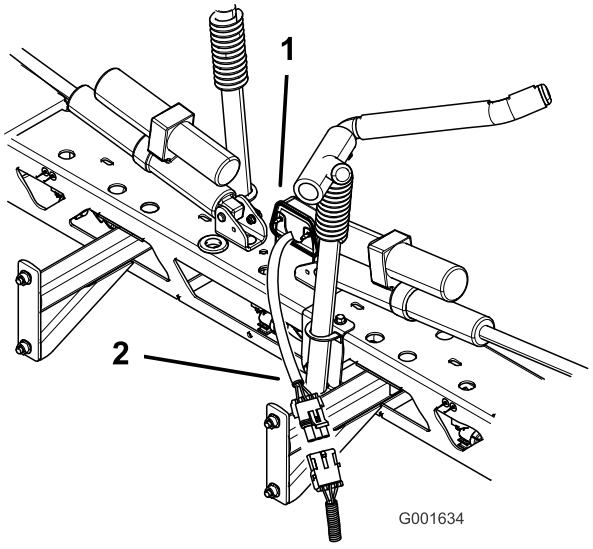

Figure 39

1. Tail light
2. Pigtail connector

8. Tie the wire harness down to the frame along with the existing wiring.

   Note: Make sure the harness does not touch any part of the engine exhaust system.

16

Installing Brake Switch

Parts needed for this procedure:

1	
2	Bolt (3/16 x 5/8 inch)
2	Lock washer
2	Nut (3/16 inch)

Procedure

Install the brake switch to operate the tail light.

1. Install the brake switch to the brake lever using the 2 bolts (3/16 x 5/8 inch), lock washer, and nut (3/16 inch) as shown in Figure 40.

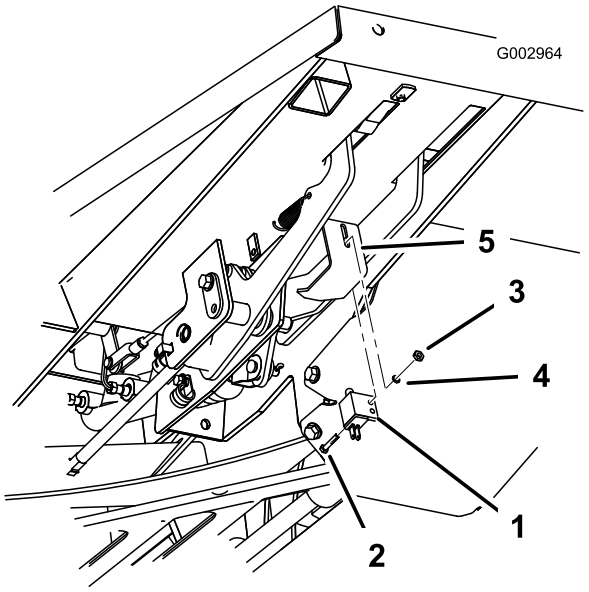

Figure 40

1. Brake switch
2. Bolt (3/16 x 5/8 inch)
3. Nut (3/16 inch)
4. Lock washer
5. Mount

2. Adjust the new switch so the brake button is depressed 6 mm (1/4 inch) when the brake is released (Figure 41).

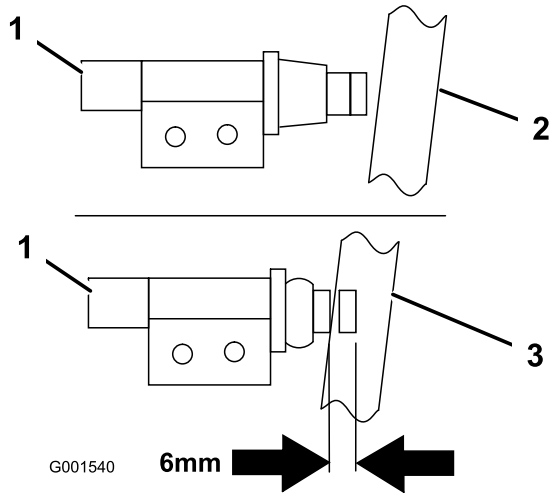

Figure 41

1. New brake switch
2. Brake engaged
3. Brake released

Note: If the brake light stays on when the pedal released, loosen the bolts securing the brake switch and adjust position of the switch so the light extinguishes when the pedal is released.

17

Installing the Pressure Gauge

Parts needed for this procedure:

1	Pressure gauge

Procedure

Note: Discard the pressure gauge that comes with the CE kit. Use the pressure gauge located in the loose parts of the BBA kit that displays only Bar.

1. Using a wrench, hold the reducer at the tee bracket and loosen the existing pressure gauge. Remove the gauge (Figure 42).

   Note: The hole in the tee bracket should be slotted. If not, use a drill to slightly elongate hole to allow for the larger pressure gauge to fit.

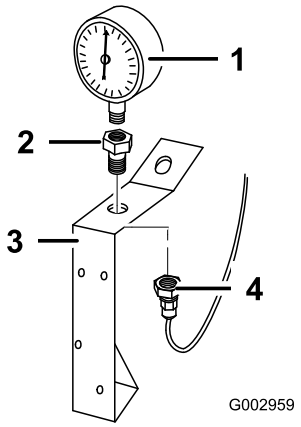

Figure 42

1. Pressure gauge
2. Reducer
3. Tee bracket
4. Reducer nut and coupler

2. Apply sealer tape to threads of the new pressure gauge and install it into the reducer. Use a wrench to hold reducer while tightening the new pressure gauge.
3. Position the gauge so it can be viewed by the operator.

Note: The reducer nut may need to be loosened and the whole assembly turned to allow the gauge to be viewed.

18

Assembling the Pressure Filter

Parts needed for this procedure:

1	Pressure filter
1	Spring
1	Ball
1	Reducer, red
1	Hose, filter flush

Procedure

1. Locate the pressure filter in loose parts. Locate the small spring, ball and red reducer in loose parts. Locate the filter flush hose in loose parts; refer to Figure 1.
2. Install the spring, ball, and red plug then elbow on hose assembly into the vertical pressure inlet on the bottom of the filter (Figure 43).

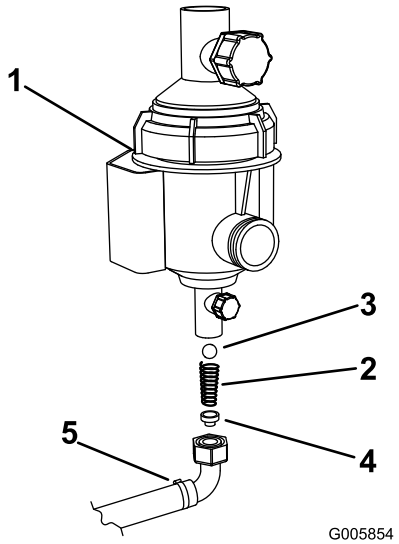

Figure 43

1. Pressure filter
2. Spring
3. Ball
4. Reducer, red
5. Filter flush hose

3. Secure the parts internal by connecting the threaded nut side of filter flush hose to pressure inlet on the bottom of the filter (Figure 43).

19

Mounting the Pressure Filter

Parts needed for this procedure:

1	Pressure filter mount
4	Bolt (5/16 x 1 inch)
4	Washer (5/16 inch)
4	Flange nut (5/16 inch)

Procedure

1. Locate the pressure filter mount bracket in loose parts.
2. Mount the pressure filter assembly as shown in Figure 44 to the filter bracket using two bolts (5/16 x 1 inch), two washers (5/16 inch) and two lock nuts (5/16 inch).

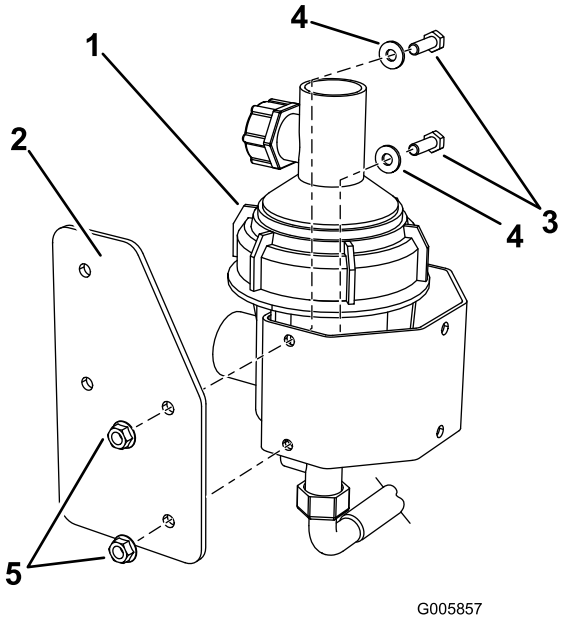

Figure 44

1. Pressure filter assembly
2. Pressure filter mount
3. Bolt (5/16 x 1 inch)
4. Washer (5/16 inch)
5. Flange nut (5/16 inch)

3. Mount the pressure filter and mount assembly to the right boom upright frame on the machine at the location as shown Figure 45. Use two bolts (5/16 x 1 inch), two washers (5/16 inch) and two flange nuts (5/16 inch) to secure the assembly to the frame.

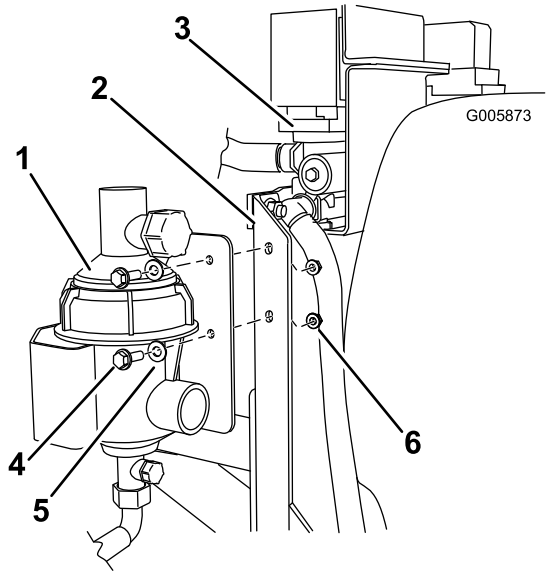

Figure 45

1. Pressure filter and mount assembly
2. Right boom frame
3. Valve manifold
4. Bolt (5/16 x 1 inch)
5. Washer (5/16 inch)
6. Lock nut (5/16 inch)

20

Installing the Tank Drain

Parts needed for this procedure:

1	Tank drain assembly
4	Lock washer
4	Lock nut
1	Template
1	90 degree elbow fitting

Procedure

1. Remove the tank drain hose. Loosen the clamp securing the hose to the existing elbow fitting and slide the clamp up the hose toward the tank drain ball valve assembly.
2. Remove the drain hose from the existing elbow fitting.
3. Loosen the retaining nut on the existing elbow fitting and remove it from the tank drain outlet (Figure 46). Discard the fitting.

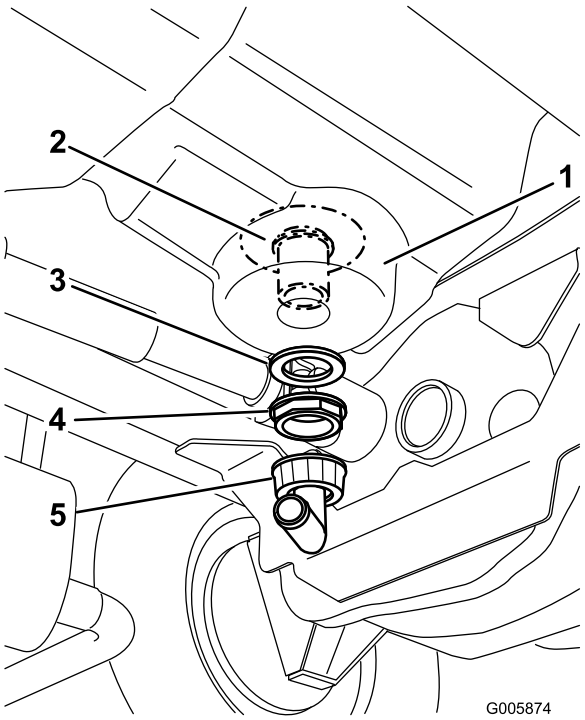

Figure 46

1. Sump, main tank
2. Outlet drain
3. Seal
4. Plastic ring nut
5. Retaining nut, existing elbow fitting

4. Remove the plastic ring nut on the existing outlet drain and push the drain up into the tank. From the inside of the machine remove the outlet drain (Figure 46). Discard the valve outlet and locking nut.
5. Locate the metal template in loose parts. Line up the large hole in the template over the hole in the tank (Figure 47).

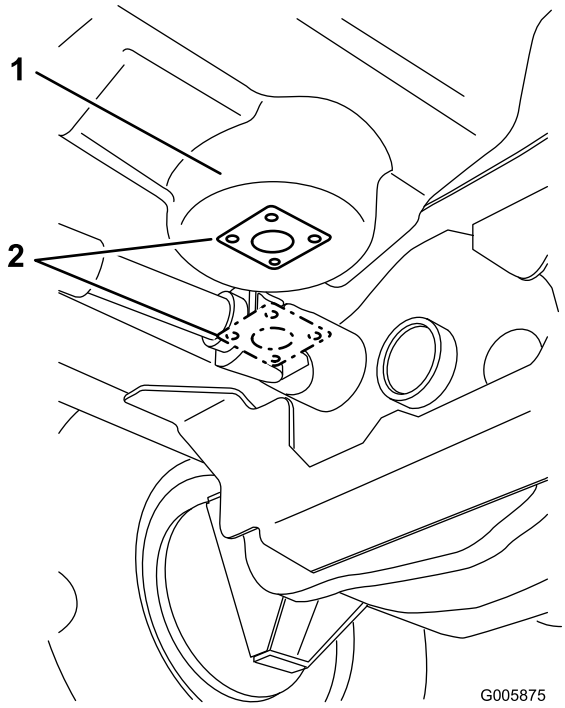

Figure 47

1. Sump, main tank
2. Metal template

6. Mark the four smaller holes and drill four 6.4 mm (1/4 inch) diameter holes at the marked spot (Figure 47).
7. Locate the tank drain in loose parts. Disassemble the drain if needed into the internal tank drain, rubber seal and the external, lower section.
8. Drop the new drain base into the tank and move it into position over the drain hole and new drilled holes (Figure 48).

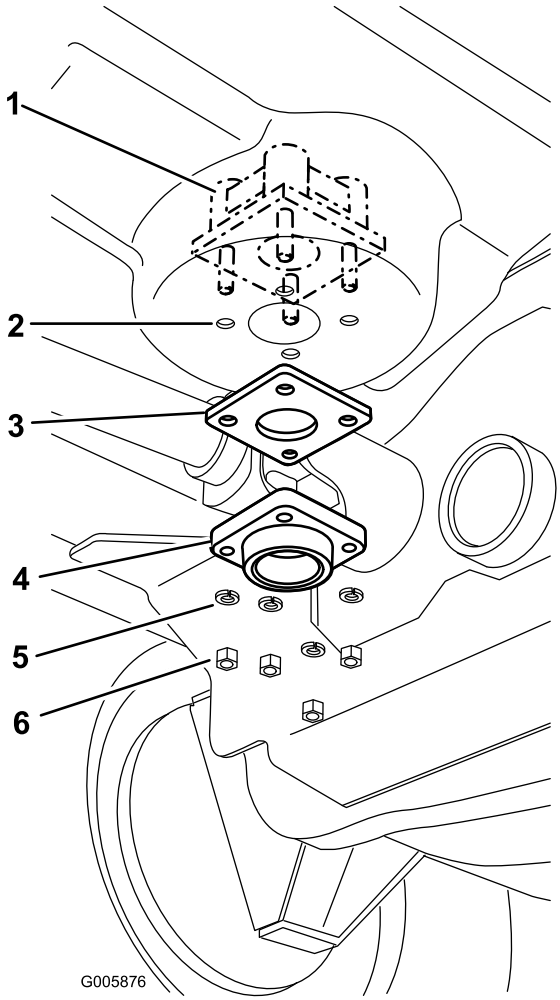

Figure 48

1. Drain base
2. Drilled hole, 6.4 mm (1/4 inch)
3. Rubber seal
4. Cover
5. Lock washer (1/4 inch)
6. Lock nut (1/4 inch)

9. Bring the threaded posts down through the drilled holes. Install the rubber seals over the posts (Figure 48).
10. Install the cover over the rubber seal and posts (Figure 48). Secure the cover with four lock washers (1/4 inch) and four lock nuts (1/4 inch).
11. Locate the 90 degree elbow fitting. Wrap Teflon tape around the threads of the fitting.
12. Install the new elbow fitting to the drain (Figure 49). Once fully installed, make sure the barb of the fitting is pointing to the front, left side of the machine or

in the direction of where the tank drain ball valve assembly is mounted to the frame.

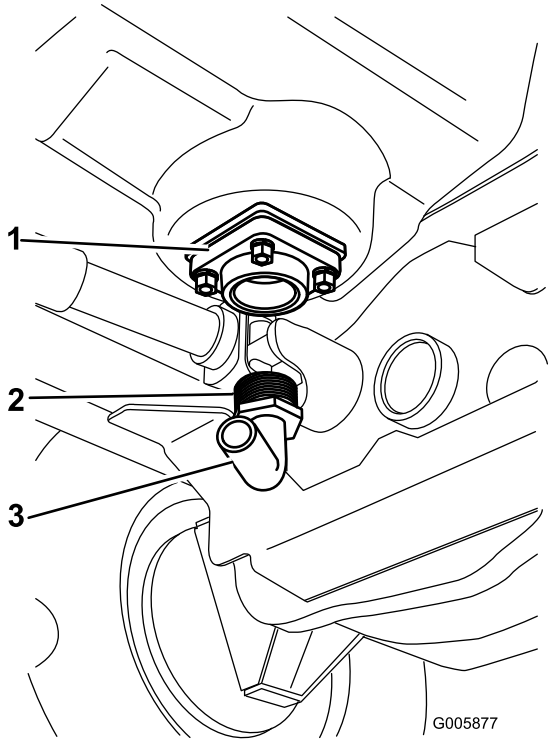

Figure 49

1. New drain, installed
2. Wrapped threads, 90 degree elbow fitting
3. Fitting facing front, left side of the machine

13. Install the existing drain hose over the barb and secure it with a hose clamp.

21

Installing the Bypass Line

Parts needed for this procedure:

1	Mixing tee
3	Retainer forks, small
1	Bypass hose
1	

Procedure

1. Loosen the retaining bolts on the right side of the machine for both front and back tank straps. This will allow the tank to be raised slightly to accommodate the removal and installation of components.
2. Locate the valve manifold at the back of the machine and stretches across the top of the boom frame uprights. The existing bypass line is connected to the right side of the valve manifold (Figure 50). Remove the small retainer fork and disconnect the bypass hose. Retain the small fork at this location for later use.

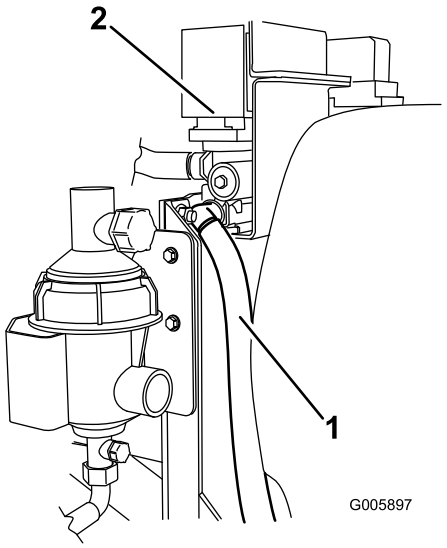

Figure 50

1. Bypass line, existing
2. Valve manifold

3. Under the machine, locate the opposing end of bypass hose where it connects to the under side of the tank. Remove medium retainer fork and

disconnect this end of the bypass hose (Figure 51). Retain the medium fork at this location for later use.

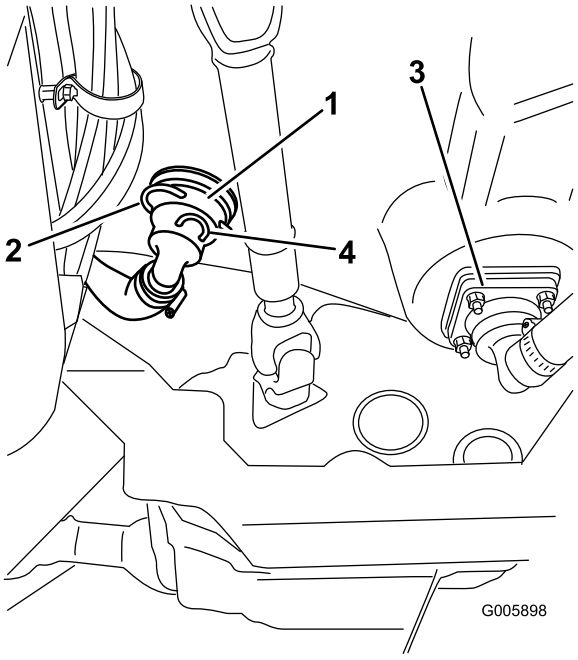

Figure 51

1. Bypass hose, existing
2. Large fork
3. Tank drain, installed previously
4. Retainer fork, medium

4. Remove the bypass hose from the tank underside.
5. Locate the tee connection in loose parts. Remove the retainer forks.
6. Locate the filter flush hose coming from the bottom of the pressure filter assembly installed previously. Install the open 90 degree fitting from this hose to the middle connection of the tee (Figure 52). Use a small retainer fork to secure the connection. Leave the tee fitting laying on the fender of the right, rear wheel.

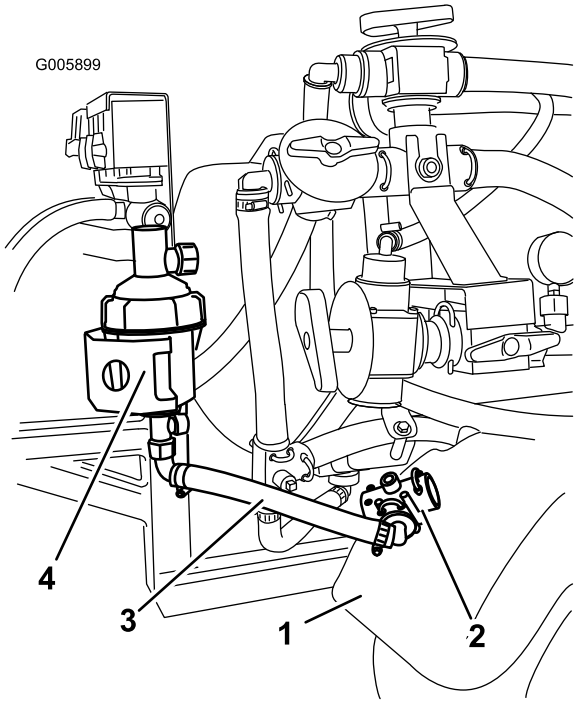

Figure 52

1. Right, rear fender
2. Tee connection
3. Filter flush hose, from pressure filter
4. Pressure filter

7. Locate bypass hose in loose parts (Figure 1). Connect the 90 degree fitting to the open connection on the right side of the valve manifold, see Figure 50, and secure it with the existing, small retainer fork. Route the bypass hose under the existing agitation hose to the tee connection on the fender (Figure 53).

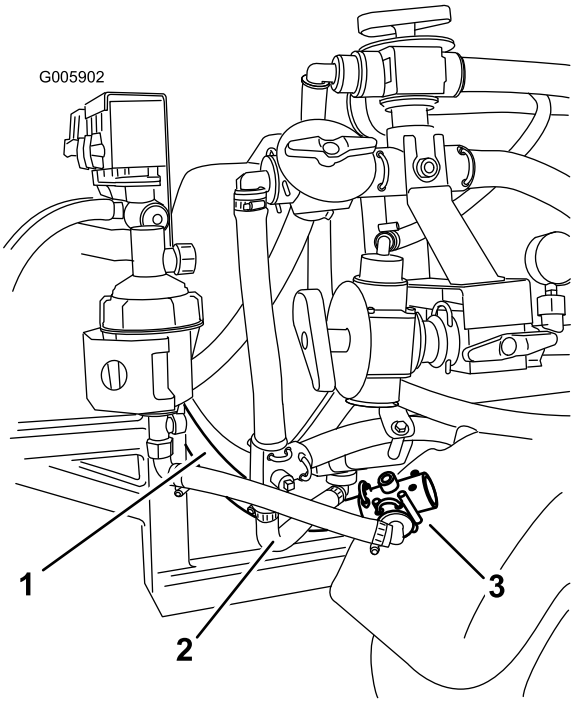

Figure 53

1. Bypass hose
2. Agitation hose, existing
3. Tee connection

8. Connect the opposing end of the hose with the straight connector to the open side of the tee fitting that is facing to the back of the machine. Use a small retainer fork from loose parts to secure the connection (Figure 53).
9. Locate tank return hose in loose parts (Figure 1). Under the machine, locate the opening where the original bypass hose was disconnected (Figure 51). Install the 90 degree fitting at this opening and use the existing large fork to secure the connection.
10. Route the remainder of the hose with a straight fitting out from under the tank, above the frame. The hose should lay over the right, rear fender point toward the rear of the machine. Lower the tank and make sure the hose is not being pinched.
11. Install the end of the hose with the straight fitting to the open connection on the tee fitting facing to the front of the machine (Figure 54). Use the small retainer fork on the tee fitting to secure the connection.

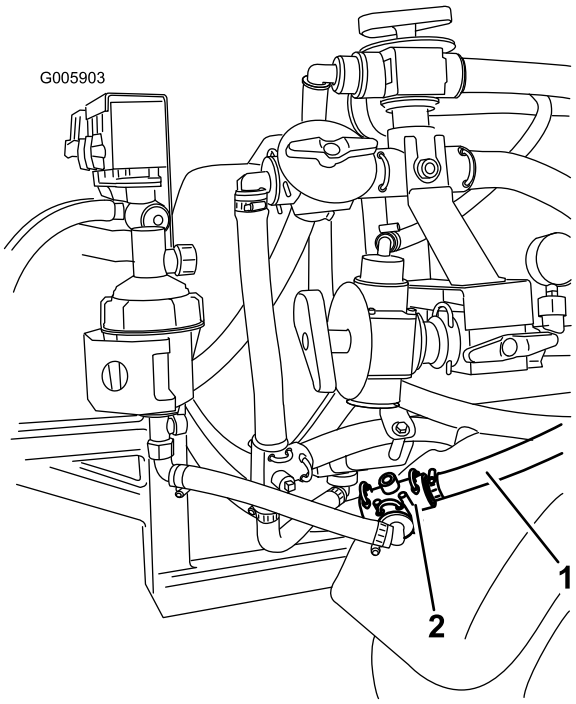

Figure 54

1. Tank return hose
2. Tee connection

12. Tight the retaining bolts on the right side of the machine at both front and rear tank straps.

Important: Make sure the tank and frame does not pinch the hose when tightening the retain bolts on the tank straps. If so, adjust the hose position before continuing.

22

Installing the Pressure Filter Hoses

Parts needed for this procedure:

1	Filter supply hose
1	Manifold supply hose

Procedure

1. At the control valve assembly on the right side and to the rear of the tank. Locate the rinse valve installed vertically during the installation of the Rinse Kit. Locate the existing boom supply hose that comes from the this control valve and is routed between the main tank and the valve manifold. Remove

the retainer fork and disconnect this existing hose. Retain the large fork at this location for later use.

2. Follow this hose until it terminates on the left side of the valve manifold. This hose is connected to the side of the valve manifold facing to the front of the machine (Figure 55). Loosen the hose clamp securing the hose and disconnect it from the barb on the valve manifold. Discard this hose and retain the hose clamp.

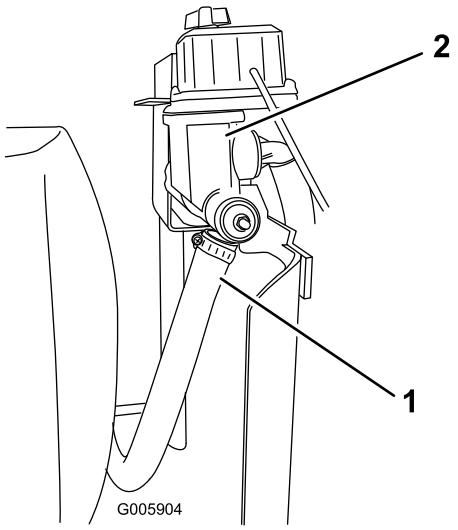

Figure 55

1. Left side of valve manifold
2. Boom supply hose, terminating

3. Locate filter supply hose in loose parts (Figure 1). It has a 70 degree fitting on one end and a 90 degree fitting on the other end.
4. Install the 70 degree fitting on this hose to the open port on the top of the pressure filter installed previously. Use the plastic nut on the fitting to secure the hose to the pressure filter (Figure 56).

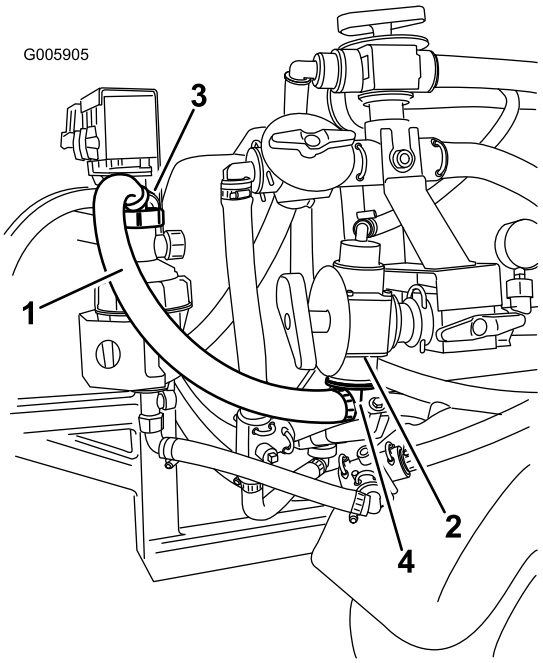

Figure 56

1. Filter supply hose
2. Rinse valve, vertical
3. 70 degree fitting
4. 90 degree fitting

5. Route the remaining end to the vertically orientated rinse valve on the control valve assembly. Install the 90 degree fitting to the open port on the rinse valve and use the existing large fork to secure the connection (Figure 56).
6. Locate manifold supply hose in loose parts (Figure 1). It has a 70 degree fitting on one end and is open on the other end.
7. Install the 70 degree fitting on this hose to the remaining, open port on the side of the pressure filter facing toward the front of the machine. Use the plastic nut on the fitting to secure the hose to the pressure filter.
8. Route the open end from the pressure filter to the left side of the machine between the main tank and the valve manifold.
9. Slide the hose clamp removed previously over the open end of the hose and install the open end onto the open hose barb on the left side of the valve manifold. Use the hose clamp to secure the hose to the valve manifold.

Important: Upon completion of securing the hose fittings, check to see that all hose are not kinking or are twisted. If a hose shows signs of torsion, loosen the metal hose clamp securing the hose to the fitting. Rotate the hose on the fitting until the stress on the hose is relieved. Tighten the metal hose clamp.

23

Installing the Pressure Tap

Parts needed for this procedure:

1	Straight fitting, brass
1	Tee fitting, metal
1	Pipe plug

Procedure

1. At the center of the valve manifold, between the main tank and the manifold, locate the pressure tap and line. The line is routed and connected to the reducer fitting on the pressure gauge that was previously installed. Disconnect the pressure tap and retain.
2. Locate the small, brass straight fitting connector, the metal tee fitting and pipe plug fitting in loose parts (Figure 57). Wrap Teflon tap around the exposed threads on all fittings.

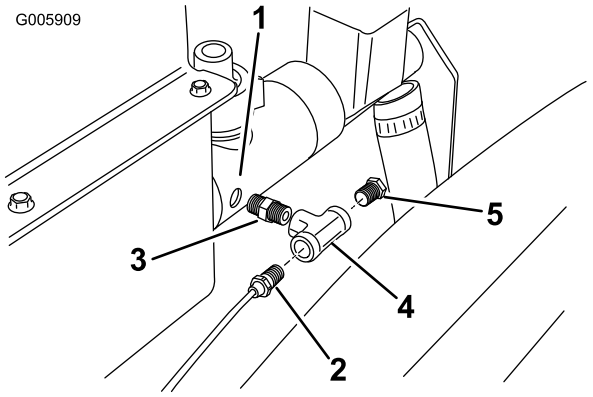

Figure 57

1. Valve manifold, opening
2. Reducer fitting, from pressure gauge
3. Straight fitting, brass
4. Metal tee
5. Pipe plug

3. Install the brass straight fitting connector to the opening in the valve manifold where the pressure tap was removed previously (Figure 57).
4. Install the metal tee fitting to the exposed end of the brass straight fitting. Use the center port on the metal tee fitting (Figure 57). Install the wrapped pipe plug fitting to the open end of the metal tee fitting that faces to the left side of the machine.
5. Wrap the threads of the existing pressure line removed previously and install it to the remaining opening in the metal tee fitting (Figure 57).

24

Installing the Decal

Parts needed for this procedure:

1	Decal 112-7906

Procedure

1. Locate the decal in loose parts. Thoroughly clean the area on the plastic fender above the **left, front** wheel (Figure 58).

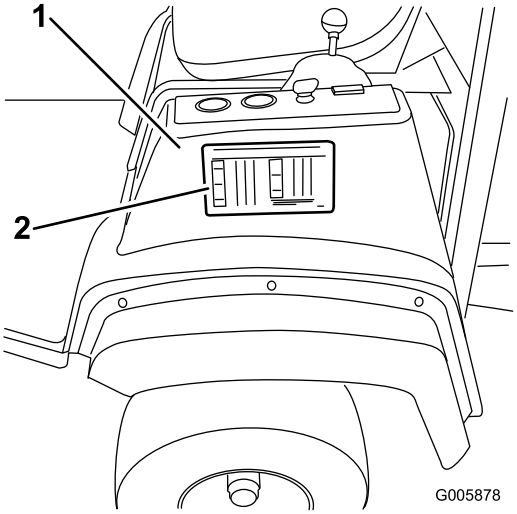

Figure 58

1. Plastic fender, above left, front wheel
2. Decal, 112–7906

2. Dampen the area with water or mildly soapy water.
3. Peel the decal from the backing and install the decal as shown in Figure 58.
4. Squeegee across the surface of the decal, starting at the center of the decal and working toward the edges, using overlapping strokes.

25

Finishing the Installation

Parts needed for this procedure:

2	Retainer fork
2	Straight hose barb
1	Bulkhead fitting
1	Test beaker

Procedure

1. Locate the two retainer forks, two straight hose barb fittings, bulkhead fitting and test beaker. Retain these loose parts for operational testing. Refer to the Compliance Kit *Operator's Manual* for more information.
2. Read the *Operator's Manuals* for the Multi-Pro 1250 and this Compliance Kit.
3. Test the installed hoses and connections for leaks.
   A. Fill the main tank with 50 gallons of clean water.
   B. Spray approximately 30 gallons through the boom system; refer to the Multi-Pro 1250 *Operator's Manual*. Check hose connections for leaks.
   C. Spray approximately 10 gallons through the spray gun; refer to the Compliance Kit *Operator's Manual*. Check hose connections for leaks.
   D. Use the remaining water to cycle through the rinse system; refer to the Compliance Kit *Operator's Manual*. Check hose connections for leaks.
   E. Drain the remaining water from the main tank refer to the Multi-Pro 1250 *Operator's Manual*. Check hose connections for leaks.
4. Check all hose connections for leaks.

Notes:

Count on it.