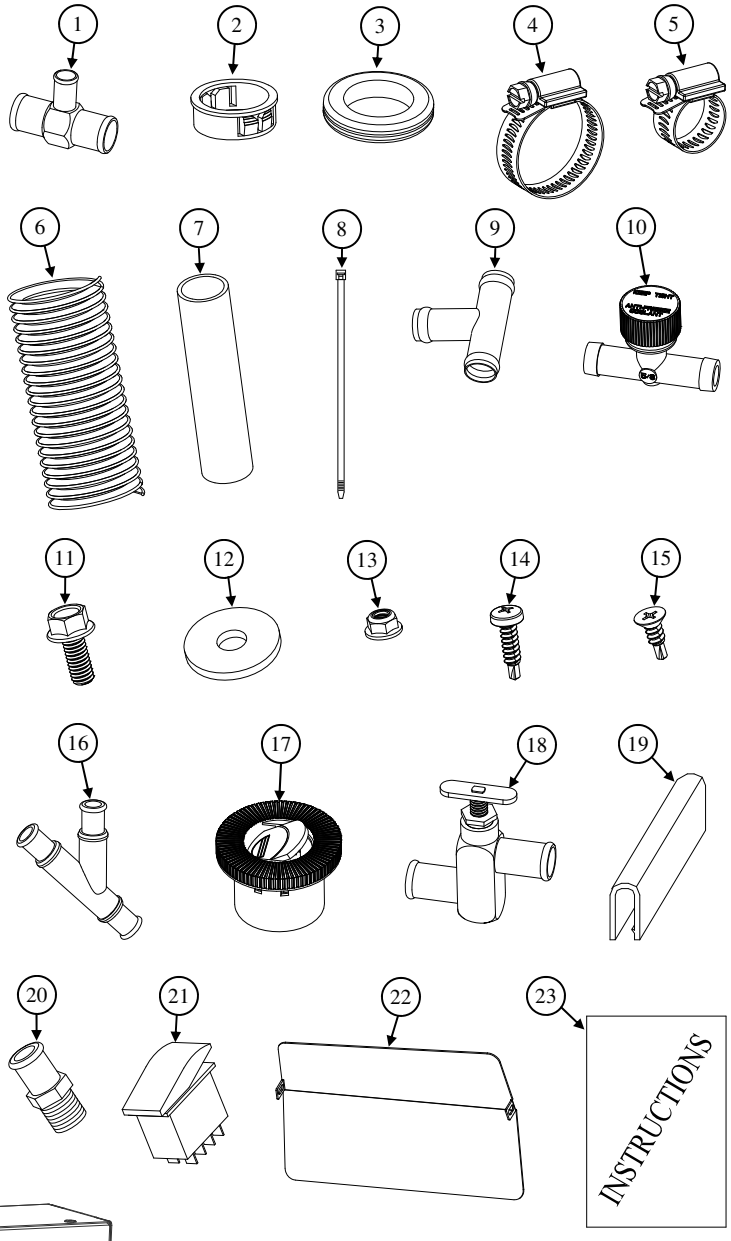
CURTIS INDUSTRIES LLC

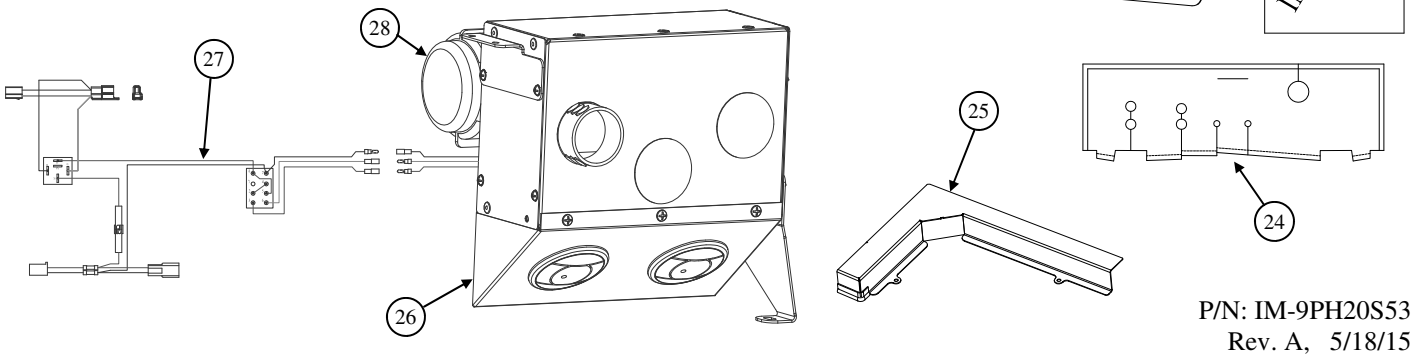
JOHN DEERE GATOR XUV 825i S4 and 855d S4
4 PASSENGER HEATER INSTALLATION INSTRUCTIONS
(p/n: 9PH20S53)

This manual is the property of the owner. Be sure to leave with the owner when installation is complete.

Kit Contents:

Item:	Qty:	Description
1	1	1" x 1" x 5/8" Tee Fitting
2	2	Plastic Snap-in Hose Grommet
3	2	Rubber Grommet
4	2	1-1/2" Hose Clamps
5	10	1" Hose Clamps
6	1	2" Vent Hose (4 feet)
7	2	5/8" Heater Hose (18 feet)
8	15	Heavy Duty Cable Ties (11")
9	1	5/8" x 5/8" x 5/8" Tee Fitting
10	1	5/8" Flushing Tee / Bleeder Cap
11	3	1/4-20 x 3/4" Flange Bolt
12	1	1/4 x 1" Fender Washer
13	3	1/4-20 Nylock Flange Nut
14	2	#10 x 3/4" Pan Head Self Drill Screw
15	4	#8 x 1/2" Flat Head Self Drill Screw
16	1	5/8" x 5/8" x 5/8" Y-Adaptor
17	1	2" Round Vent
18	1	5/8" Shut-off Valve
19	1	Edge Rubber (18")
20	1	Diesel Supply Nipple
21	1	Heater Switch Assembly
22	1	Glove Box Cover
23	1	Installation Instructions
24	1	Vinyl Hood Seal Panel
25	1	Heater Hose Cover
26	1	Heater Assembly with Wire Harness
27	1	Heater Wire Harness
28	1	Blower Motor





Parking Safety

1. Stop machine on level surface
2. Set parking brake
3. Remove key
4. Wait for engine and all moving parts to stop before leaving the vehicle.

CAUTION: Avoid Injury! Touching hot surfaces can burn skin. The engine, components, and fluids will be hot if the engine has been running. Allow engine to completely cool before servicing or working near the engine or components.

FIGURE 1.2

1. Install Glove Box Cover

1.1 Remove and discard the under hood storage compartment.

1.2 Remove and retain the (2) Phillips head screws on the inside of the glove box. The plastic push-in clip retainer can be discarded. Remove the glove box and retain the (2) clip nuts from the glove box. Install the clip nuts onto the dash board and install the supplied glove box cover using the Phillips head hardware from the glove box. (See Figure 1.2)

2. Install Heater

2.1 Connect the 2" vent hose to the plastic outlet on the front face of the heater box and secure with a cable tie.

2.2 Move the heater into position and loosely bolt the bottom right bracket through the hole in the vehicle fender with the hardware listed below. (Note: the fender washer should be on the underside of the fender. Leave finger tight)

Qty	Hardware
1	1/4-20 x 3/4" Flange Bolt
1	1/4 x 1" Steel Fender Washer
1	1/4-20 Flanged Locknut

2.3 Fasten the left bracket to the vehicle frame with the following hardware using the two holes as a guide. See Figure 2.3.

Qty	Hardware
2	#10 x 3/4" Pan Head Self Drill Screw

2.4 Tighten the lower bolt installed in step 2.2 at this time.

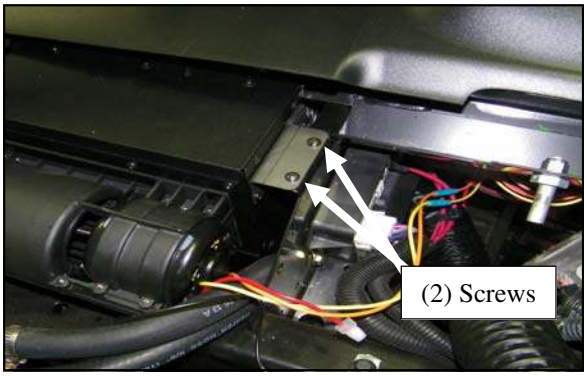


FIGURE 2.3

3. Install Defroster Vent

3.1 Position the vent on the driver's side of the hood and mark the center of the hole as shown in Figure 3.1.a. The 2" dimensions for the center are measured off the edges of the flat section of the plastic hood. **Note: Be sure to check under the hood before drilling to make sure there is no interference.** Drill a 2" hole in the hood with a hole saw. Use a small reamer or Dremel tool to remove more material in four places for the vent retaining tabs (see Figure 3.1.b). Test fit the vent frequently so as not to remove too much material.

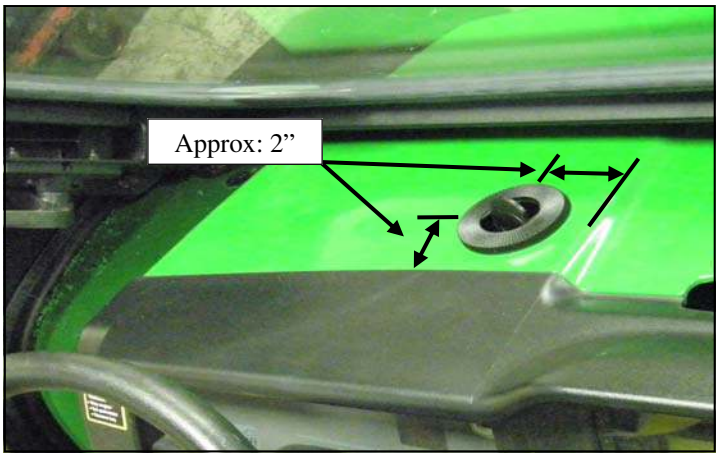


FIGURE 3.1.A

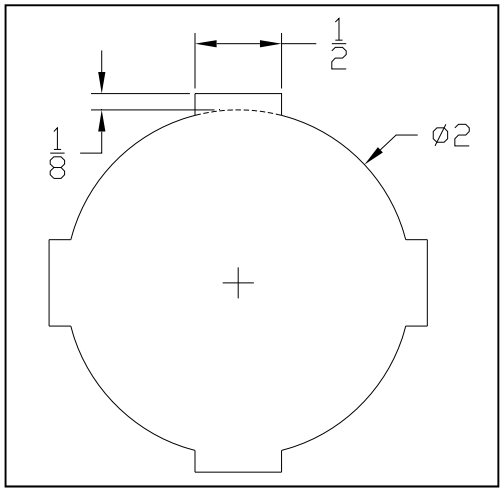


FIGURE 3.1.B

3.2 Pull the vent apart and install the listed hardware through the trim ring to secure the vent to the hood. **Do not over tighten screws or you risk stripping the holes in the hood or cracking the vent.** Re-assemble the vent.

Qty	Hardware
4	#8 x 1/2" Flat Head Self Drill Screw

3.3 Route the vent hose as shown in Figure 3.3 and check the length. It may need to be trimmed to length so that the hood can be opened all the way but not kink when the hood is closed. Attach hose to vent with heavy duty wire tie. Install a second wire tie to secure the hose to the vehicle wiring beneath the dashboard to prevent the hose from dropping down into the footwell when the hood is closed.

FIGURE 3.3

4. Electrical Connections

4.1. Locate an empty switch location in the dash panel and remove the blank plug. Feed the black switch plug from the heater wiring through the opening from the back. Connect the plug to the supplied switch and install the switch into the dash panel.

4.2 Route the wiring from the switch to the driver's side beneath the dashboard. Plug in to the mating connectors on the vehicle wiring as seen in Figure 4.2. The black and red heater wire with male terminals should mate up with the black and red vehicle plug. The black and yellow heater wire with the male terminals should mate up with the black and yellow vehicle plug.

4.3 Turn the key on and test heater fan operation. If fan is not working, check the fuse.

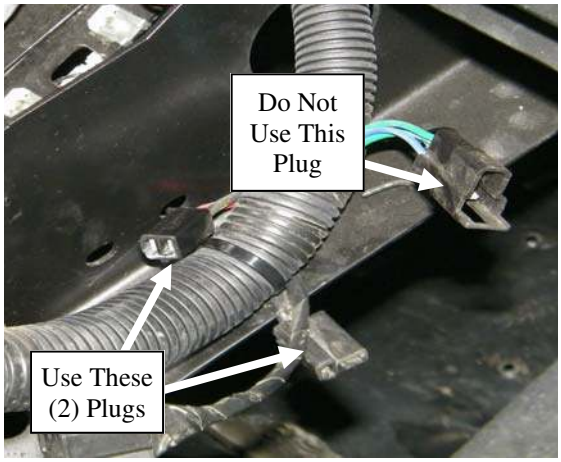


FIGURE 4.2

5. Plumbing

5.1 Remove plastic plugs from front right panel and install the supplied plastic snap in hose grommets in their place. (See Figure 5.1)

5.2 Route both sections of heater hose through these holes from the rear side, along the seat pan, against the center console, up the firewall, and around the front of the heater box to the nipples. (See Figure 5.1)

5.3 Attach the hoses to the nipples on the heater using small hose clamps with the hose coming through the outer hole on the cab panel going to the upper nipple. (See Figure 5.1 and 5.3) Pull the slack back through to the passenger compartment, leaving enough of a service loop under the hood to allow the hood to close easily, without kinking the hose.

5.4 Cut the hose installed on the upper nipple at the highest point and install the bleeder cap. (See Figure 5.3) **Note: Ensure that the bleeder cap will not interfere with closing the hood. This may require it to be tipped forward.**

5.5 Stack the hoses, one on top of the other, to prevent kinking in the corner where the center console meets the seat pan and feed the slack back through the holes in the air intake cover or fender. (See Figure 5.5)

5.6 Mark the free end of the hose going to the upper nipple on the heater with a marker or cut a notch in it to show the difference between the two hoses.

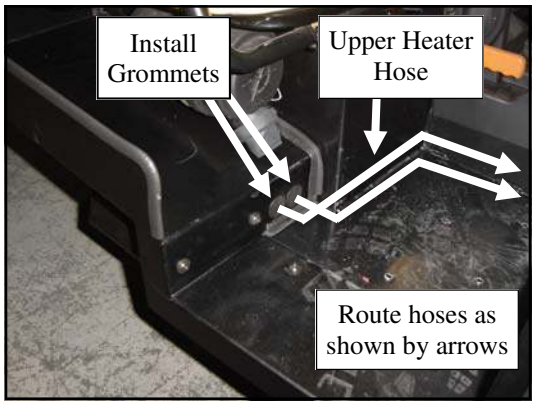


FIGURE 5.1

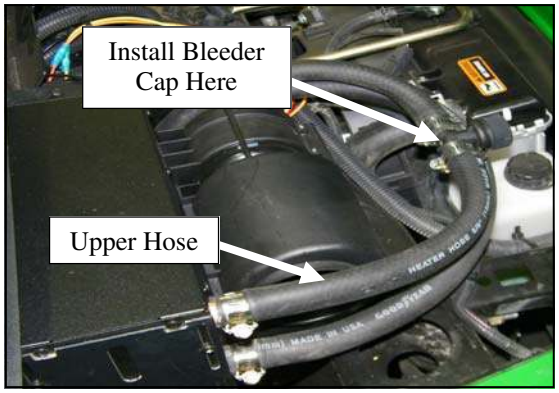


FIGURE 5.3

FIGURE 5.5

5. Plumbing (continued)

5.7 Using the heater hose cover as a guide, drill through the floorpan with a 5/16" drill bit. Install the heater hose cover to the floorpan using the hardware listed below. (See Figure 5.7)

Qty	Hardware
2	1/4-20 x 3/4" Flange Bolt
2	1/4-20 Flanged Locknut

Caution: While routing the remaining section of hose, avoid hot or moving components within the engine compartment.

5.8 Remove the hole plug from the rear hole under the passenger seat and install the supplied grommet in its place.

5.9 Remove the rear center floor cover. Save cover and plastic clips for re-use.

5.10 Remove the rear seat and also the large storage compartment under the rear seat. Save compartment and plastic clips for re-use.

5.11 Route the hoses through the grommet as shown in Figure 5.11. Be sure to leave enough slack so that the hoses do not kink.

5.12 Cut a 4" section of edge rubber and install along the edge of the cutout as shown in Figure 5.12. Route the upper hose through the upper opening and the lower hose through the lower opening and under the hard line running to the radiator. Be sure to cable tie the lower hose to the radiator hose to prevent it from contacting the sharp edge of the steel.

5.13 Cut a 4" section of edge rubber and install on the bracket supporting the differential lock cable as shown in Figure 5.13.

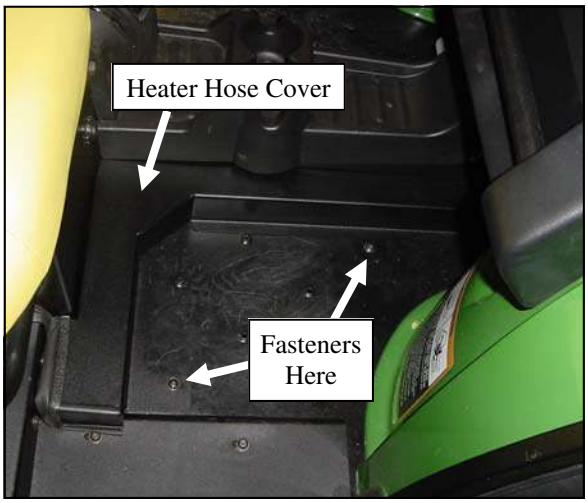


FIGURE 5.7

FIGURE 5.11

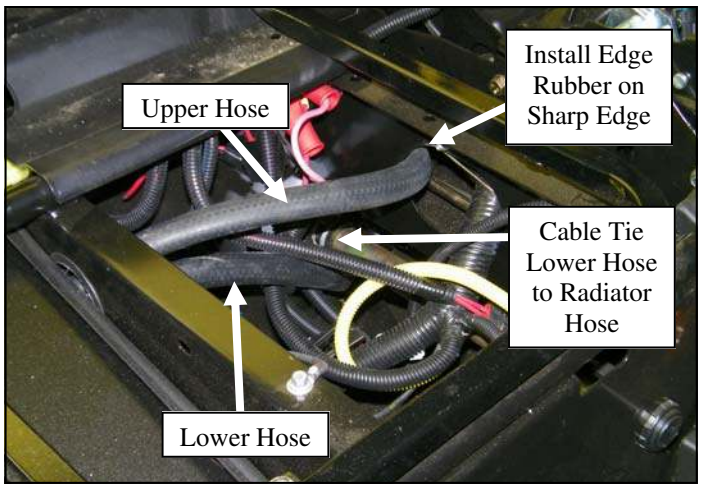


FIGURE 5.12

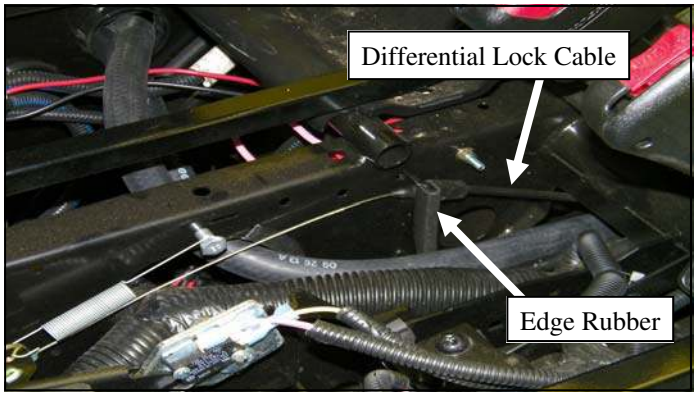


FIGURE 5.13

5. Plumbing (continued)

5.14 Route the hoses back under the rear seat through the chaseway as shown in Figure 5.14. The upper hose should run in the chaseway next to the vehicle wire harness. The lower hose should run beneath the vehicle coolant hose. Be sure to install edge rubber on the sharp steel edges where the lower heater hose enters into the rear foot well as well as where it exits under the rear seat.

5.15 Once under the rear seat, route the lower hose up around the vehicle coolant hose as shown in Figure 5.15. Be sure to avoid the drive shaft.

5.16 Install a rubber grommet into the oval hole in the steel panel under the rear seat as shown in Figure 5.15.

5.17 Route the hoses back toward the engine through the grommet.

5.18 (GAS ENGINE (2013 and earlier) ONLY) The upper hose that is in the wire chaseway should be run towards the passenger side of the vehicle. The lower hose should be run towards the driver's side of the vehicle and should run through the coolant line hangar bracket with the vehicle coolant lines. Be sure the lines do not kink when exiting the grommet.

5.19 (GAS ENGINE (2014 - PRESENT) ONLY) Route both hoses towards the drivers side of the engine and through the coolant line hanger bracket with the vehicles coolant lines. Be sure the lines do not kink when exiting the grommet.

5.20 (GAS ENGINE ONLY (All years)) Disconnect the lower radiator return hose (lower hose in Figure 5.20) and drain coolant into a drain pan for re-use then reconnect hose and clamp.

5.21 (GAS ENGINE ONLY (All years)) Per Figure 5.20, cut a 1" section out of the lower radiator return hose where shown and install the supplied 1" x 1" x 5/8" tee fitting. Secure with two large hose clamps. Cut the lower heater hose to length and install onto the tee using a small hose clamp. Make sure to rotate the tee to keep the hose from kinking and also to be sure it avoids the hot exhaust pipe.

5.22 (GAS ENGINE (2013 and earlier) ONLY) Cut 2" and 3" pieces from the leftover lower hose and attach them to the y-fitting with hose clamps as shown in Figure 5.22.

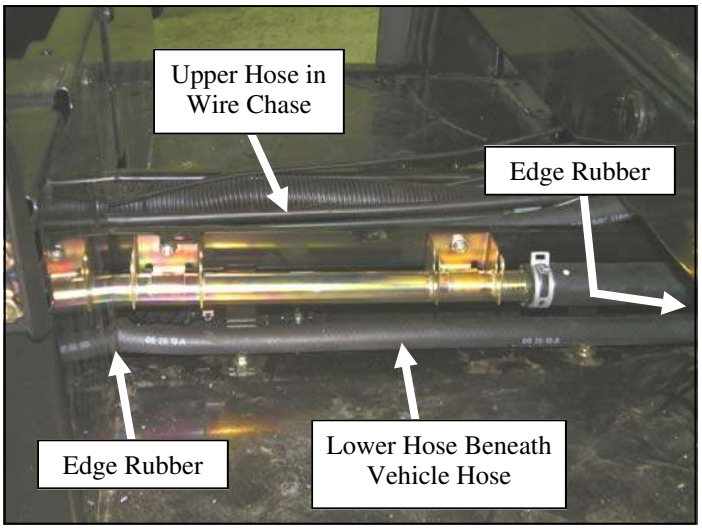


FIGURE 5.14

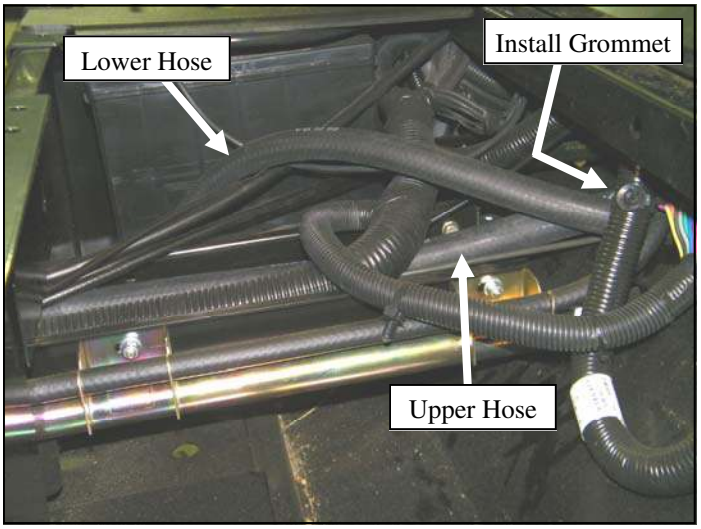


FIGURE 5.15

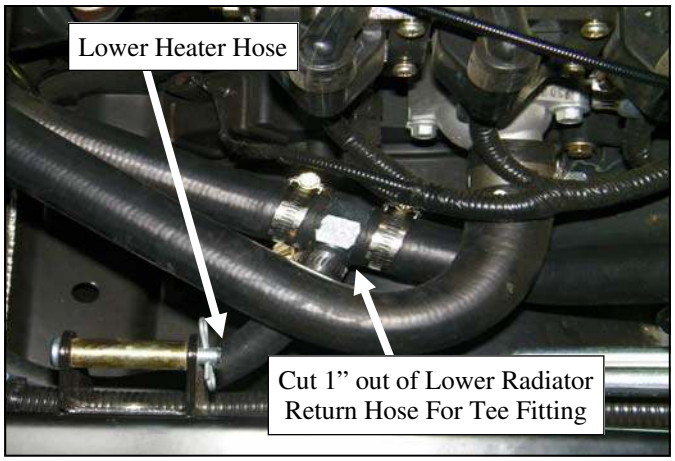


FIGURE 5.20

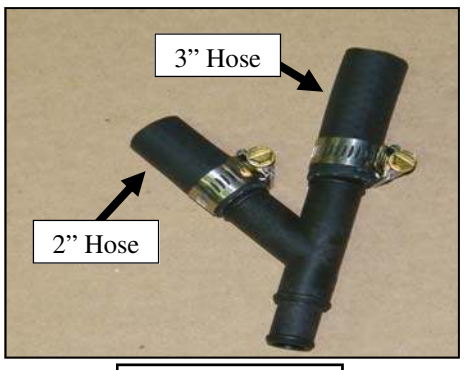


FIGURE 5.22

5. Plumbing (continued)

5.23 (GAS ENGINE (2013 and earlier) ONLY) Remove the bleeder fitting from the larger diameter hose and insert the open end of the y-fitting from step 5.22 into its place. Rotate the y-fitting to appear as in Figure 5.23 and tighten hose clamp.

5.24 (GAS ENGINE (2013 and earlier) ONLY) Insert the bleeder fitting into the 3" hose installed in step 5.22 and secure with a hose clamp. Cut the small diameter by-pass hose to length and secure to the open end of the bleeder fitting.

5.25 (GAS ENGINE (2013 and earlier) ONLY) Open the shut off valve completely and install into the 2" hose installed in step 5.22 and secure with a hose clamp.

5.26 (GAS ENGINE (2013 and earlier) ONLY) Cut the upper heater hose to length and attach it to the shut off valve and secure with a hose clamp.

5.27 (GAS ENGINE (2014 - PRESENT) ONLY) Remove the short bypass hose that connects the water pump to the solid radiator return line. See Figure 5.23 for the approximate bypass hose location.

5.28 (GAS ENGINE (2014 - PRESENT) ONLY) Cut a 7/8" section out of the center of the bypass hose and install the supplied 5/8" x 5/8" x 5/8" Tee fitting in the center as shown in Figure 5.28.

5.29 (GAS ENGINE (2014 - PRESENT) ONLY) Re-install the hose onto the vehicle. Note: it may be necessary to temporarily loosen the solid return line mounting bolts to install.

5.30 (GAS ENGINE (2014 - PRESENT) ONLY) Cut 13" off the leftover lower heater hose. Install on the tee fitting and secure with a hose clamp. Be sure to route the hose along the upper radiator hose as shown in Figure 5.30.

5.31 (GAS ENGINE (2014 - PRESENT) ONLY) Install the supplied shutoff valve in the end of the 13" hose and secure with a hose clamp as shown in Figure 5.30.

5.32 (GAS ENGINE (2014 - PRESENT) ONLY) Cut the upper heater hose to length and secure to the shut-off valve with a hose clamp.

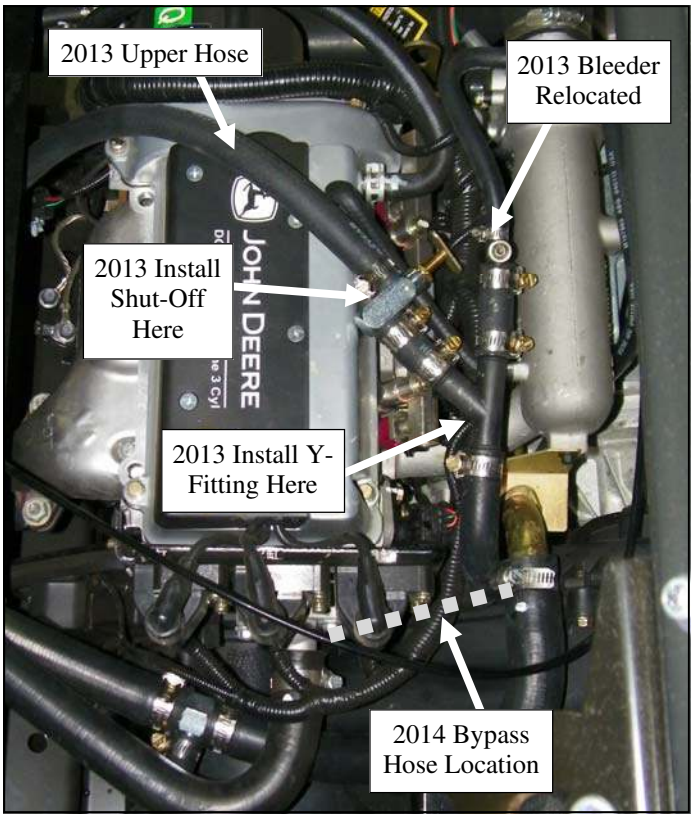


FIGURE 5.23 (2013 engine shown)

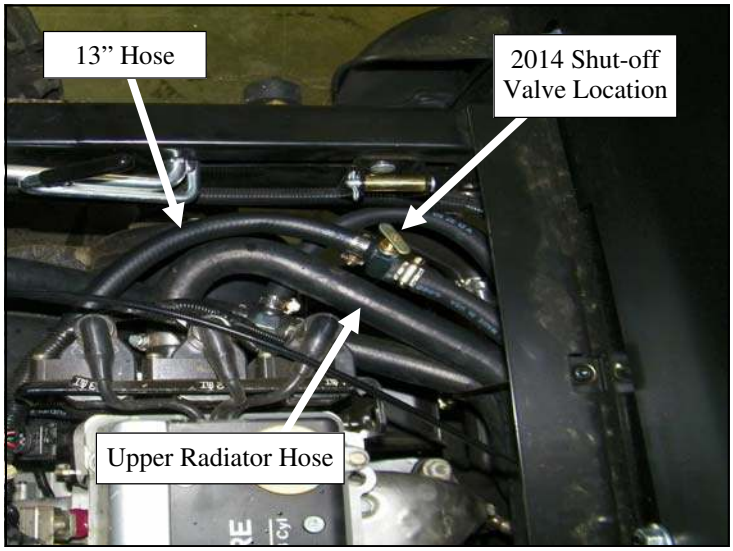


FIGURE 5.30 (2014 engine shown)

FIGURE 5.28

5. Plumbing (continued)

5.33 (DIESEL ENGINE ONLY) Remove the drain fitting from the bottom of the engine block and drain coolant into a drain pan for re-use.

5.34 (DIESEL ENGINE ONLY) Install supplied fitting using thread sealant into the spot where the drain fitting was removed. (See Figure 5.34)

5.35 (DIESEL ENGINE ONLY) Cut the supply hose (hose going to the top nipple on the heater unit) and install it on the hose barb. Secure it with a hose clamp.

5.36 (DIESEL ENGINE ONLY) Install the in-line shut off valve in a convenient location on the heater supply hose.

5.37 (DIESEL ENGINE ONLY) Cut the existing vehicle coolant hose on the passenger side of the engine just rearward of the drive shaft pillow block and install the 1" x 1" x 5/8" tee fitting. (allow any coolant in the line to empty into a drain pan for re-use)

5.38 (DIESEL ENGINE ONLY) Route the lower heater hose over to this tee fitting and cut to length. Secure to the nipple with a hose clamp. Be sure not to kink the hose when routing.

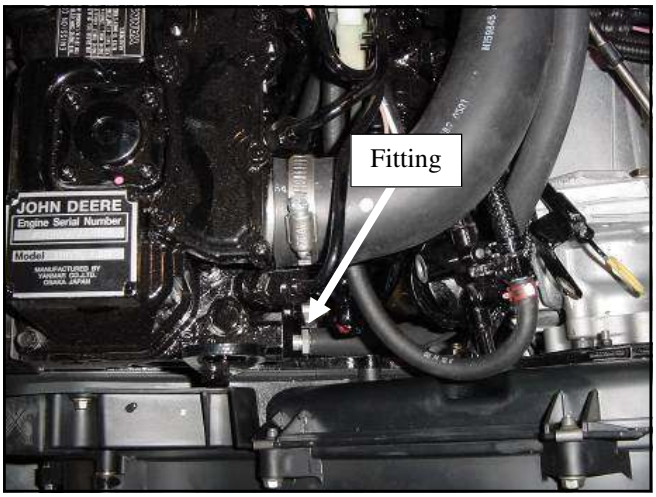


FIGURE 5.34

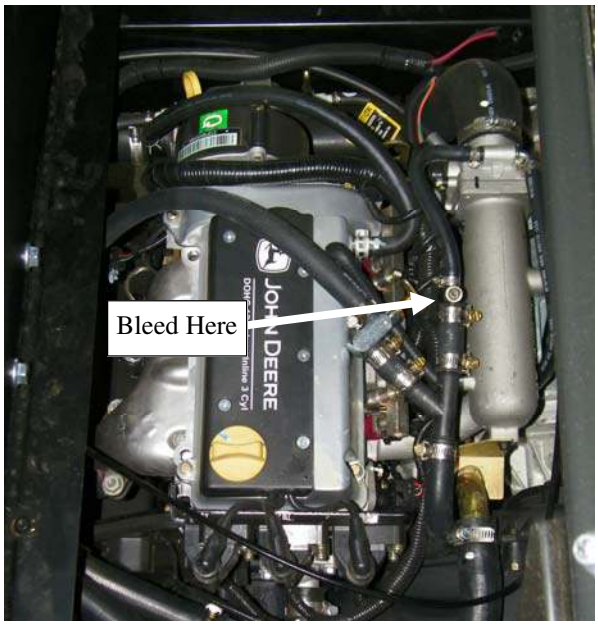


Fig. 6.2 (Gas Shown)

6. Refilling and Bleeding Air from System

6.1 Make sure heater shut off valve is fully open and the bleeder cap for the heater (see step 5.4) is open. Loosen the engine bleed screw. On gas engines the bleed screw is in the by-pass hose near the y-fitting. On diesel engines it is located on the side of the thermostat housing.

6.2 Remove the radiator cap and add coolant to the radiator until it runs out of the bleed screw.

6.3 Tighten the bleed screw and continue to fill the radiator.

6.4 Add coolant to the bleeder cap for the heater (see step 5.4) to fill the upper hose, heater core, and lower hose until no more air comes out and replace the cap.

6.5 Add coolant to the recovery tank until it is filled to the top line.

Warning: If overheat light does come on in the next steps, shut the engine off and add more coolant to the radiator.

6.6 Start engine and run heater until both lines feel warm. Continue to run engine until radiator fan cycles and both upper and lower radiator hoses have become warm indicating that the thermostat has opened.

6.7 Shut the engine off and allow it to cool. Loosen the bleed screw and allow any air to bubble out. Also loosen the heater bleed cap and allow air to bubble out.

6.8 Open the radiator cap and fill with coolant.

6.9 Check to make sure the recovery tank is filled to the lower line.

7. Troubleshooting

The cooling systems on these vehicles can sometimes be very difficult to bleed. If the bleeding procedure was unsuccessful or was successful but you are not getting much heat out of the heater, try the following:

A. **Temporarily** clamp the upper radiator hose shut. Start and rev the engine until the heater blows hot air or the temp light comes on. If the temp light comes on, make sure the overflow bottle is full and repeat procedure. Once successful, remove the clamp.

If that does not work, try the following:

B. Start engine and run heater until both lines feel warm. Continue to run engine until radiator fan cycles. If the overheat warning light does not come on, then the system is properly bled. If overheat light does come on, shut the engine off. Make sure overflow bottle is full. **Using caution to avoid burns and wearing a face shield and gloves,** use pliers to crack open the heater bleeder valve and allow air to vent until **hot** coolant flows and quickly close valve.

8. Install Underhood Vinyl Sealing Panel

8.1 Orient the supplied vinyl panel under the hood as shown in Figure 8.1.

8.2 Install the supplied Velcro to the steel frame components around the perimeter of the vinyl. Use the vinyl panel as a guide for Velcro location. The frame components must be cleaned and should be at room temperature for best adhesion.

8.3 Depending on vehicle wiring or any other accessory routing, you may need to cut the vinyl to best fit with any obstacle.

9. Proper Operation

In warm weather, shut off the valve to stop coolant flow to the heater. The fan will still be operable for defogging or air circulation. **Note: Be sure to wear a glove when handling the shut-off valve because the valve will be hot.**

When cold weather returns, simply open the valve and heat will be restored.

Figure 8.1