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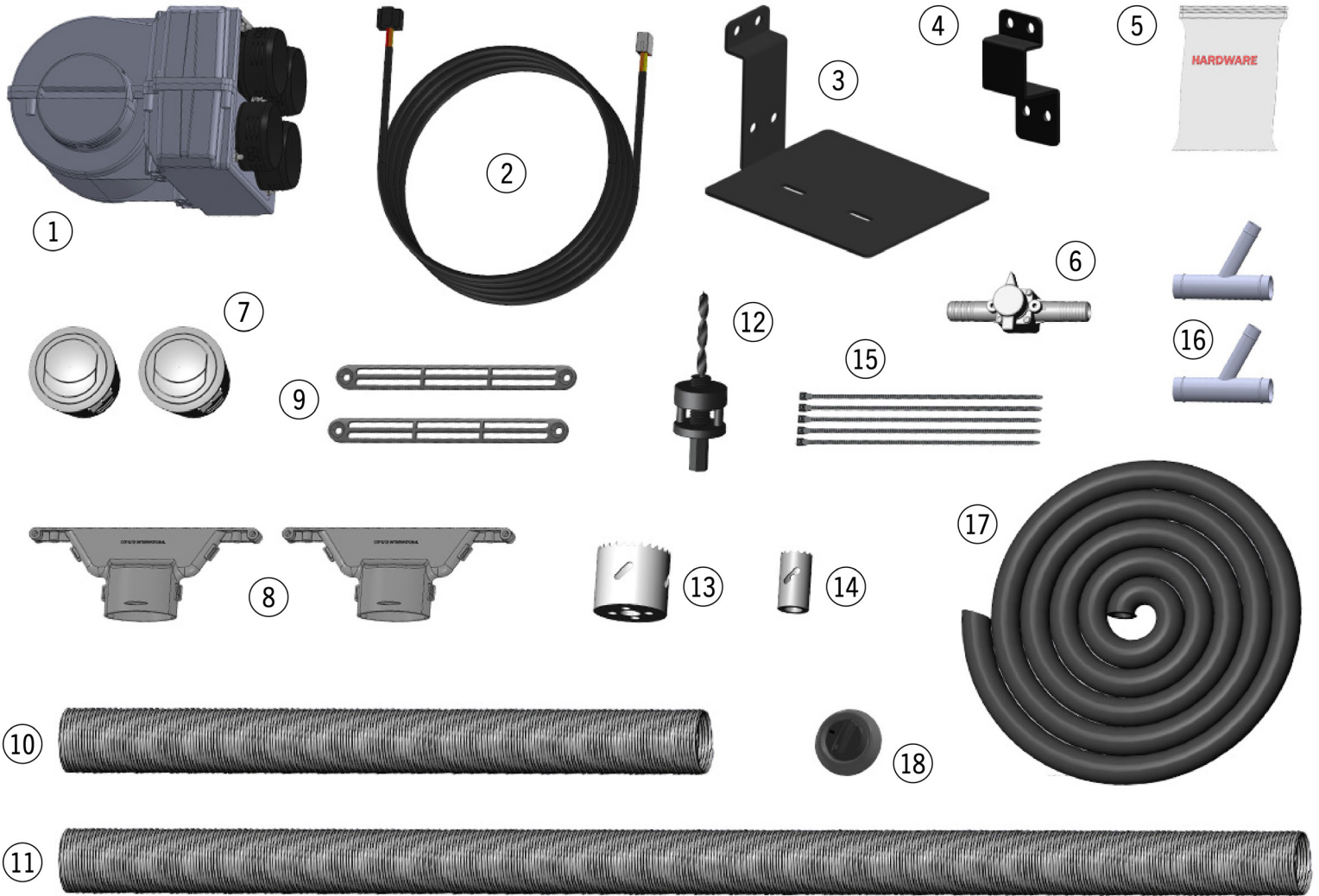


**FIRESTORM**  
C A B H E A T E R S

**Kawasaki Mule Cab Heater**  
**HT\_CU\_439**

INSTALLATION INSTRUCTIONS

### PARTS LIST



Part#	Qty	Item Description
1	1	FIRESTORM Cab Heater Unit
2	1	60" Wiring Harness
		Orange/Yellow/Black Wire
		Red Wire
		Black Wire
		5-Pin Black Connector
		4-Pin White Connector
3	1	HT_CU_439-1 Heater Mount Bracket
4	1	HT_CU_439-2 Heater Mount Bracket
5	1	Hardware Pack

Part#	Qty	Item Description
4	4	5/16 x 1" Flange Bolt
	4	5/16" Flange Nut
	2	M6 x 0.25" Bolts
	2	M6 Washers
	2	Insulation Displacement Crimp
6	1	Plastic Shut-Off Valve
7	2	50mm Vent
8	2	Plenum Vent

Part#	Qty	Item Description
9	2	Plenum Vent Grille
10	24"	2" Compressed Duct Hose
11	40"	2" Compressed Duct Hose
12	1	Hole Saw Pilot Bit
13	1	2 7/8" Hole Saw
14	1	1 1/4" Hole Saw
15	10	Zip Ties
16	2	1" Aluminum Y
17	20'	5/8" Radiator Hose
18	1	3-Position Switch



Please read all instructions before beginning installation. Verify that all parts listed are present.

We have found that several steps in this installation are easier with two people. We recommend finding a partner to assist with this installation.



When working on cooling systems, always allow vehicles to cool to avoid being burned or scalded by hot coolant.

Before working with any electrical system on your vehicle, **ALWAYS** remove the negative battery cable and secure it away from the battery terminal.

### Figures Color Key



Parts native to the machine



Parts native to FIRESTORM Cab Heater

## PREPARATION

1. Remove the front hood access cover. *FIGURE 1*



**FIGURE 1**



2. Remove all screws and plastic clips connecting the hood to the frame and bumper. **FIGURE 2**

There are hidden screws and clips in cab and behind dash panel.



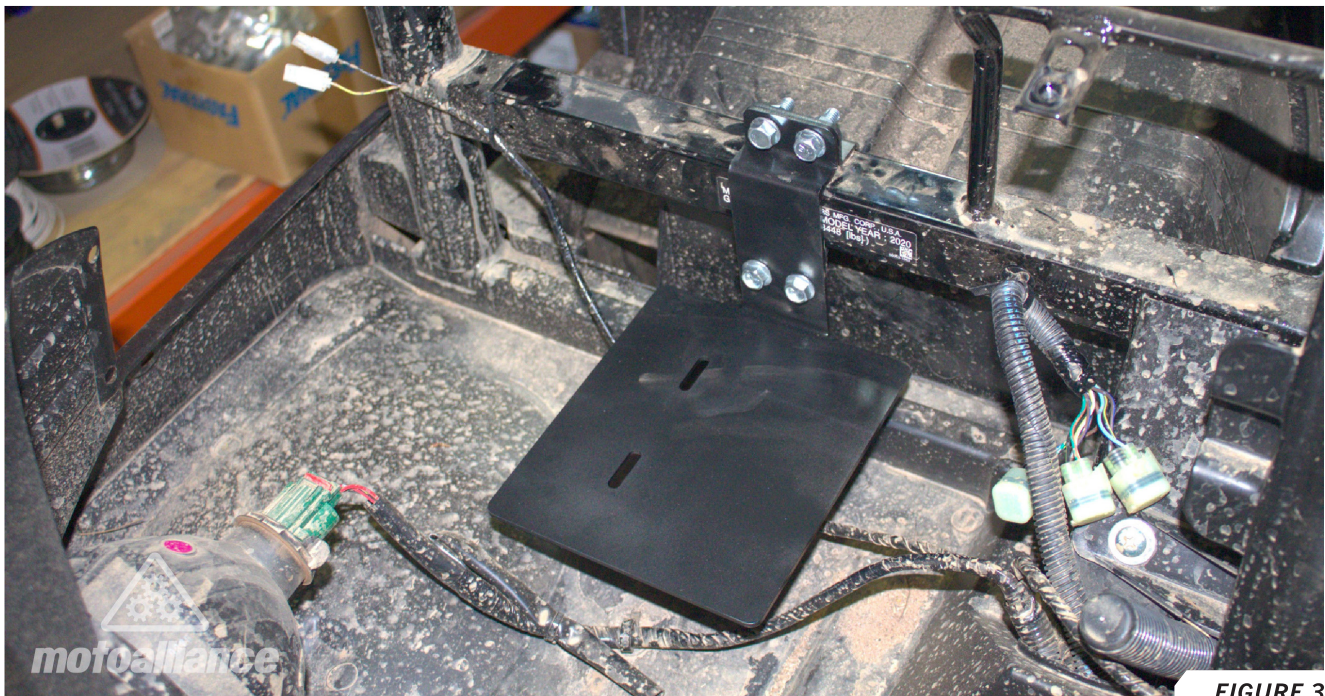
**FIGURE 2**

3. Move the dash and hood out of the way to work in the under-hood area.

## HEATER BRACKET

4. Mount the bracket to the square tubing on the passenger side hood area. **FIGURE 3**

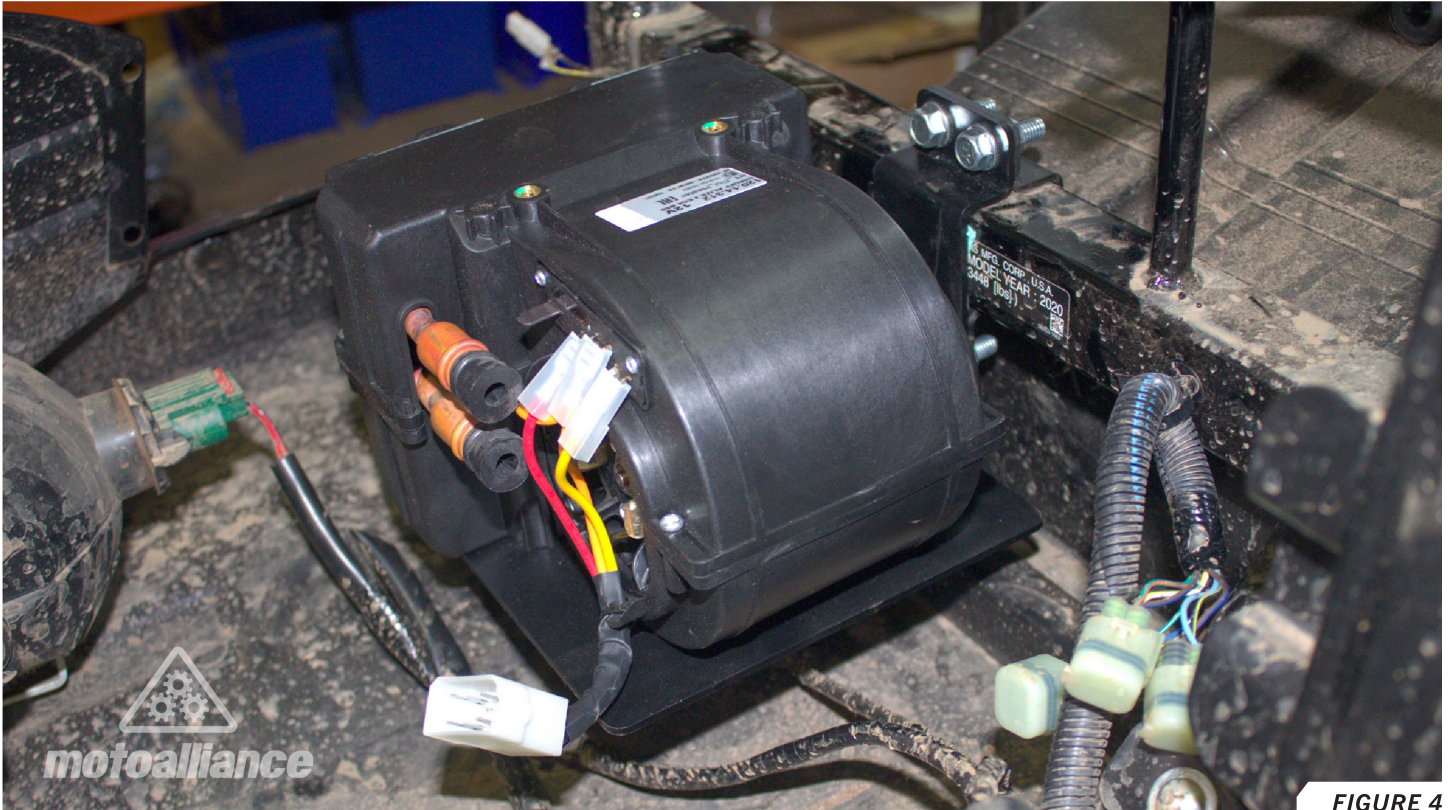
If it fits loosely, use cardboard to shim so the bracket fits snugly.



**FIGURE 3**



5. Connect the cab heater unit to the bracket using the provided M6 hardware. **FIGURE 4**



**FIGURE 4**

### VENTS AND DUCT HOSE

6. Drill 50mm vent holes inside the cab using the provided 2 1/8" hole saw. **FIGURE 5**

It may be easier to drill the driver side hole from the top, inside the hood.



**FIGURE 5**



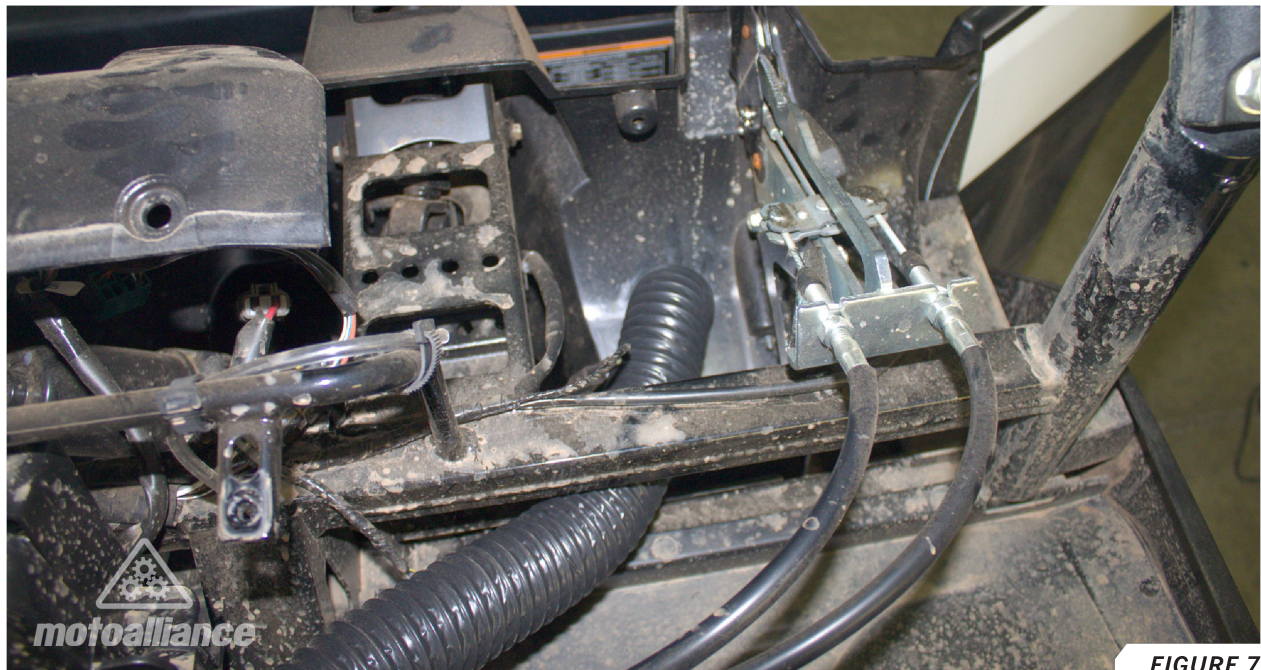
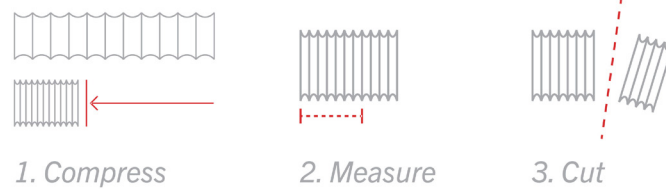
7. Cut the 40" length of duct hose in half.
8. Cut the 24" length of duct hose in half.
9. Insert a 50mm vent into the passenger side vent hole. Attach a 12" section of 2" duct hose to the vent.

**FIGURE 6**



**FIGURE 6**

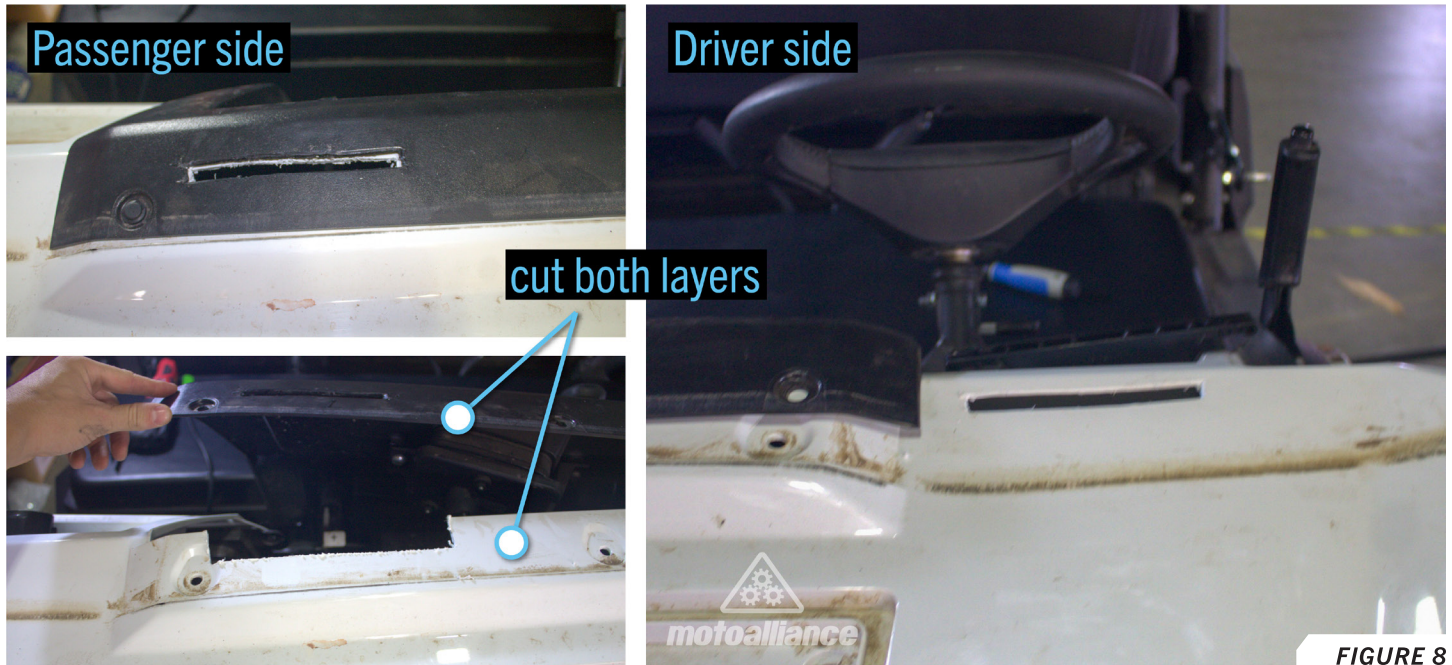
10. Insert a 50mm vent into the driver side vent hole. Attach a 20" section of 2" duct hose to the vent. **FIGURE 7**



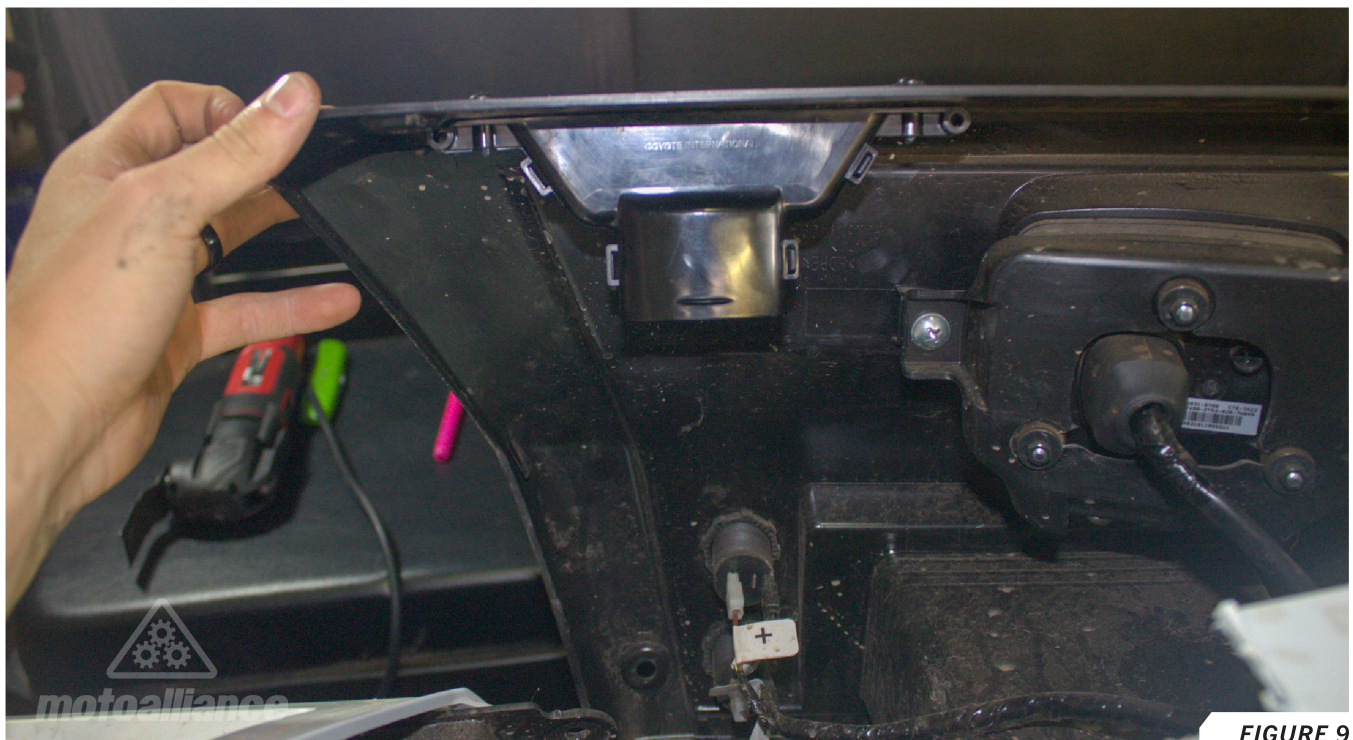
**FIGURE 7**



11. Reconnect the upper dash and hood. Cut plenum vent locations through both layers of plastic. **FIGURE 8**
12. Separate the dash and hood. Cut and remove 1" of material on either side of the cuts on the lower layer of plastic. **FIGURE 8**



13. Connect the defrost vent and vent grille to the upper layer passenger side using the provided self-tapping screws. Connect a 12" section of 2" duct hose to the defrost vent. **FIGURE 9**





14. Connect the defrost vent and vent grille to the upper layer driver side using the provided self-tapping screws. Connect a 20" section of 2" duct hose to the defrost vent. **FIGURE 10**



**FIGURE 10**

### SWITCH WIRING

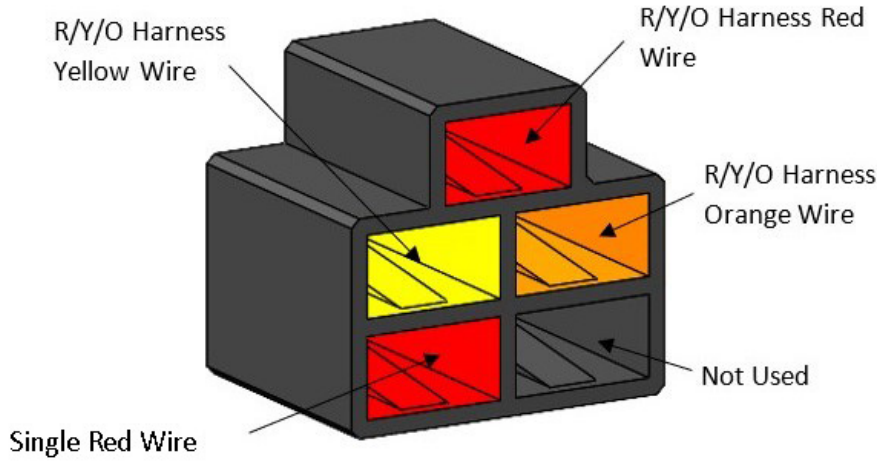
15. Mark the center of the 3-position switch bezel, then remove the bezel and drill out the hole with a  $\frac{7}{16}$ " drill bit. **FIGURE 11**



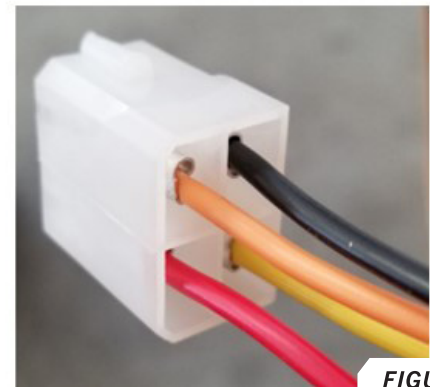
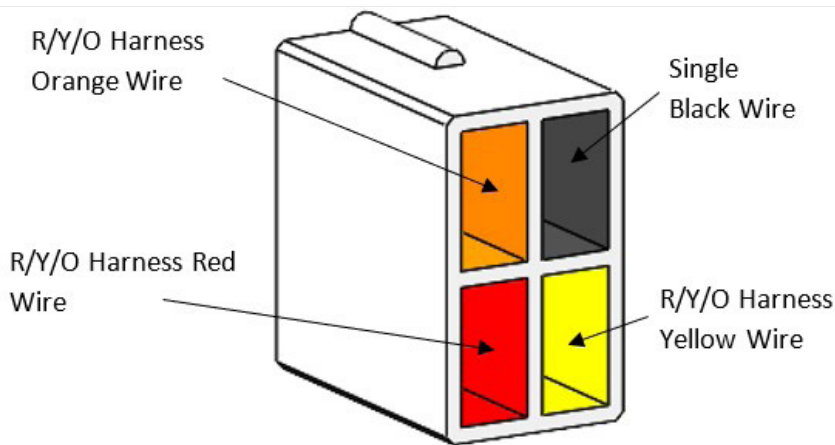
**FIGURE 11**



16. Locate the 36" wiring harness and ensure the wires are correctly connected to the 5-pin black connector as shown in *FIGURE 12* and the 4-pin white connector as shown in *FIGURE 13*.



**FIGURE 12**



**FIGURE 13**

17. Connect the 5-pin black connector to the 3-position switch included in the kit.
18. Prior to pressing the switch bezel on, use a pair of pliers to remove the two nubs on the back of the switch bezel as shown in *FIGURE 14*.
19. Place the bezel over the switch so that the 0, 1, 2, 3 markings are visible.



**FIGURE 14**

20. Press the switch dial onto the switch until it is seated firmly.
21. Connect the white 4-pin connector to the white terminal housing on the heater unit.

22. Connect the red wire to a keyed powered source (any power source that is only powered when the vehicle is on) using the terminated end. If you have no connection spot for the terminated end, cut the ring terminal off and use the insulation displacement crimps to connect the red wire to a keyed power source. This can be found by testing wires with a multimeter.
23. Connect the black wire to the negative battery terminal.
24. Test the switch to ensure that it can control the fan speed in all three positions.

Common examples may include the ignition, radios, and winches, though this may vary with your vehicle.

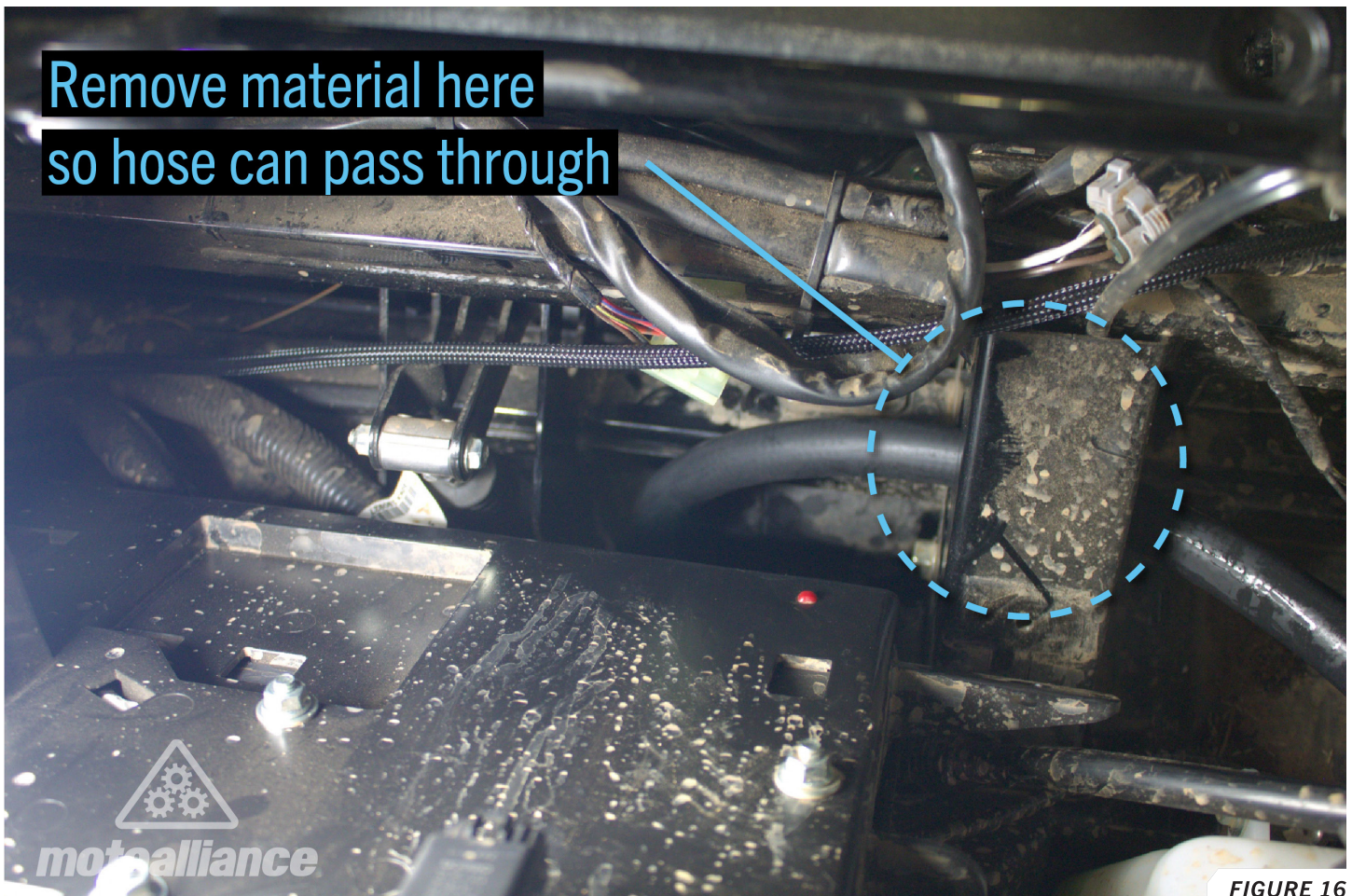
## RADIATOR HOSE

25. Move the fuse box in the hood area. *FIGURE 15*





26. Remove material in the location shown in *FIGURE 16*

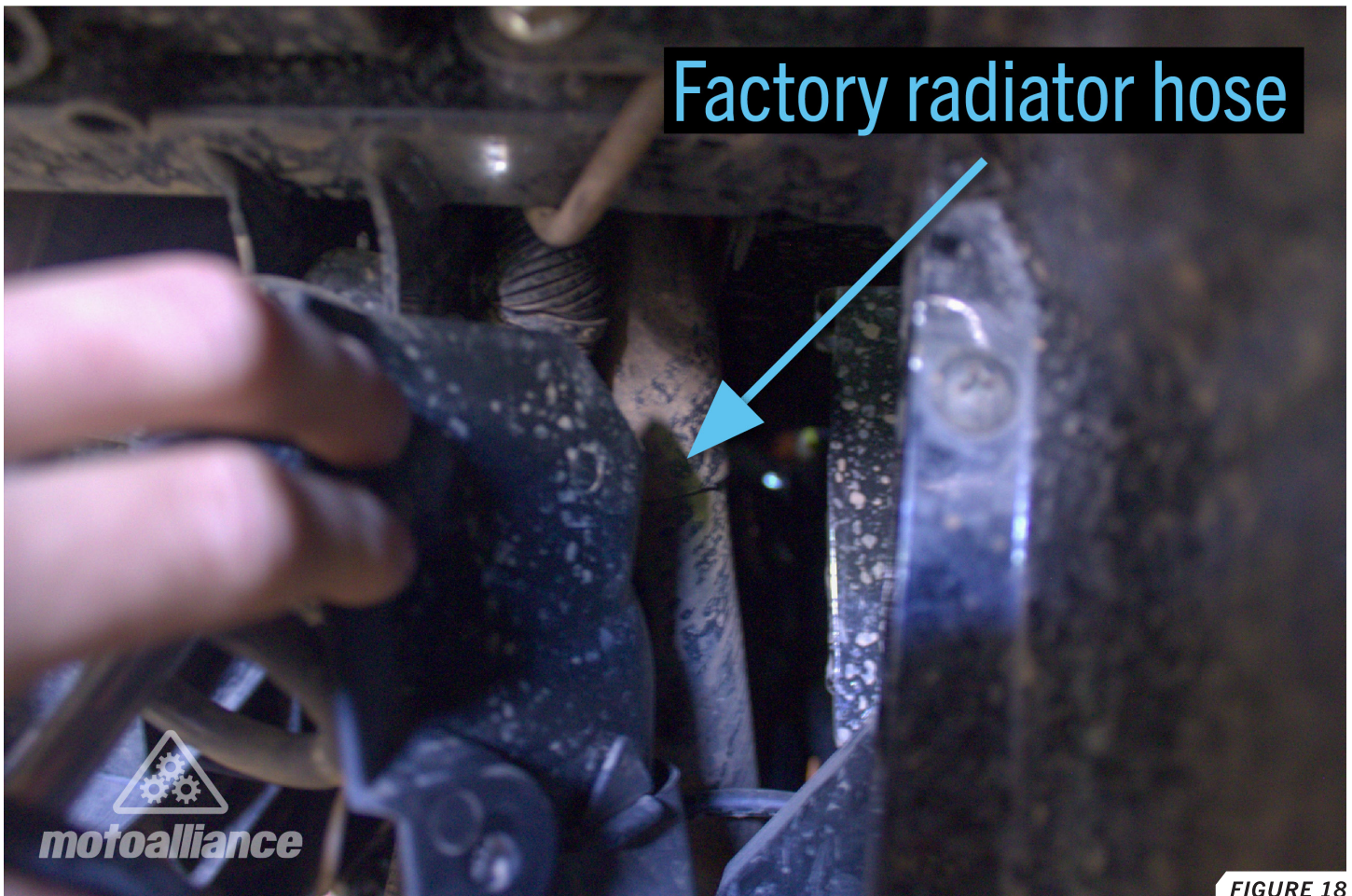


27. Remove the screw behind driver side shock. *FIGURE 17*





28. Move the plastic panel to access the factory radiator hose. *FIGURE 18*



**FIGURE 18**



29. Clamp both ends of the factory radiator hose. Make a cut, then install a 1" aluminum Y with the branch facing upwards. Secure with #16 hose clamps. *FIGURE 19*

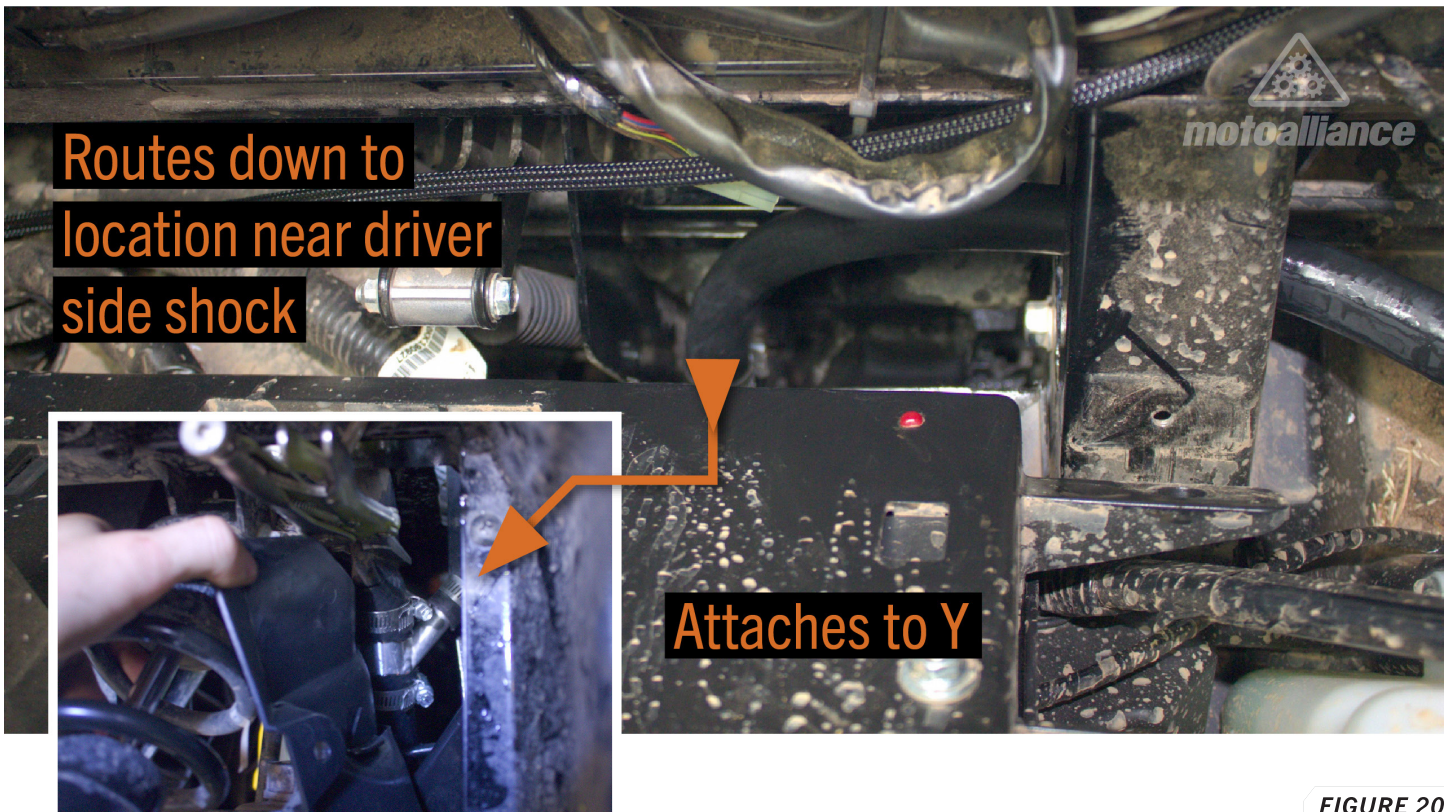


*FIGURE 19*

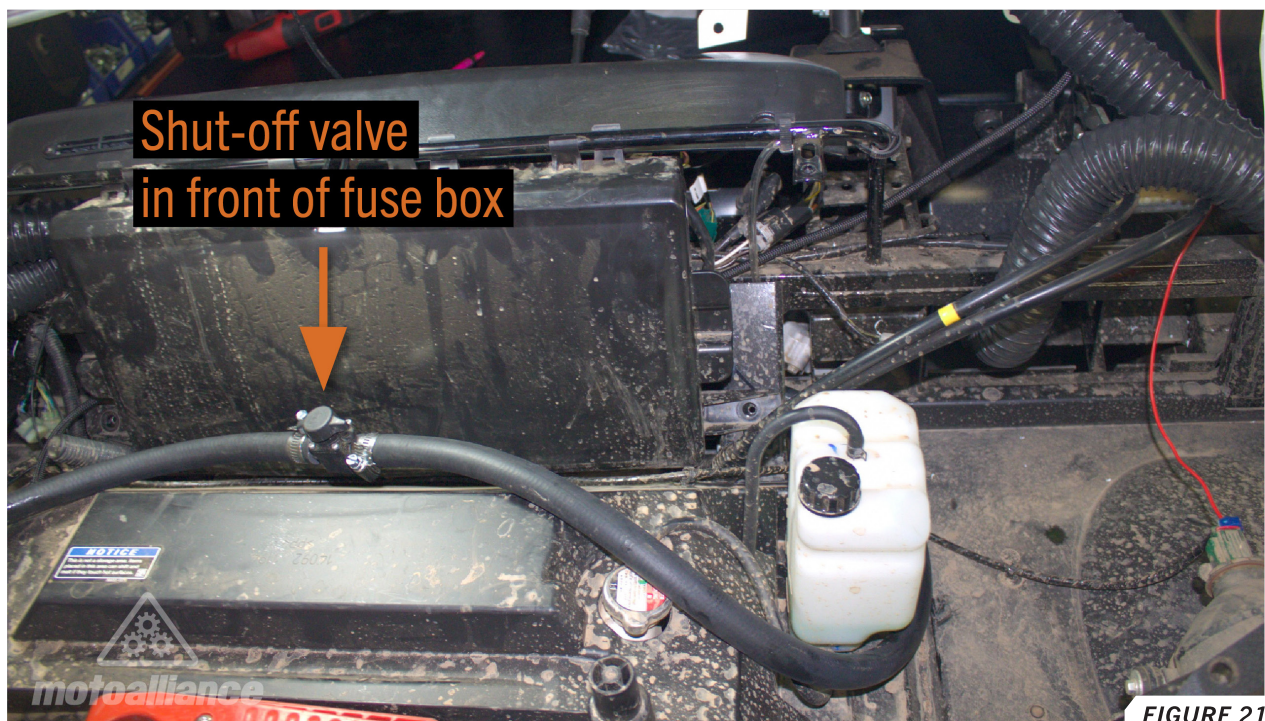
30. Cut the provided radiator hose into two sections
31. Attach one section of provided radiator hose to the upper port on the cab heater unit. Secure with a #10 hose clamp.
32. Route the provided radiator hose through the previously cut hole behind the fuse box.



33. Connect the provided radiator hose to the 1" aluminum Y. Secure with a #10 hose clamp. *FIGURE 20*



34. Mark an accessible location on the provided radiator hose for the shut-off valve. Make a cut, then install the shut-off valve and secure with #10 hose clamps. *FIGURE 21*





35. Mark a location on passenger side hood area for the second section of provided radiator hose to route through. *FIGURE 22*

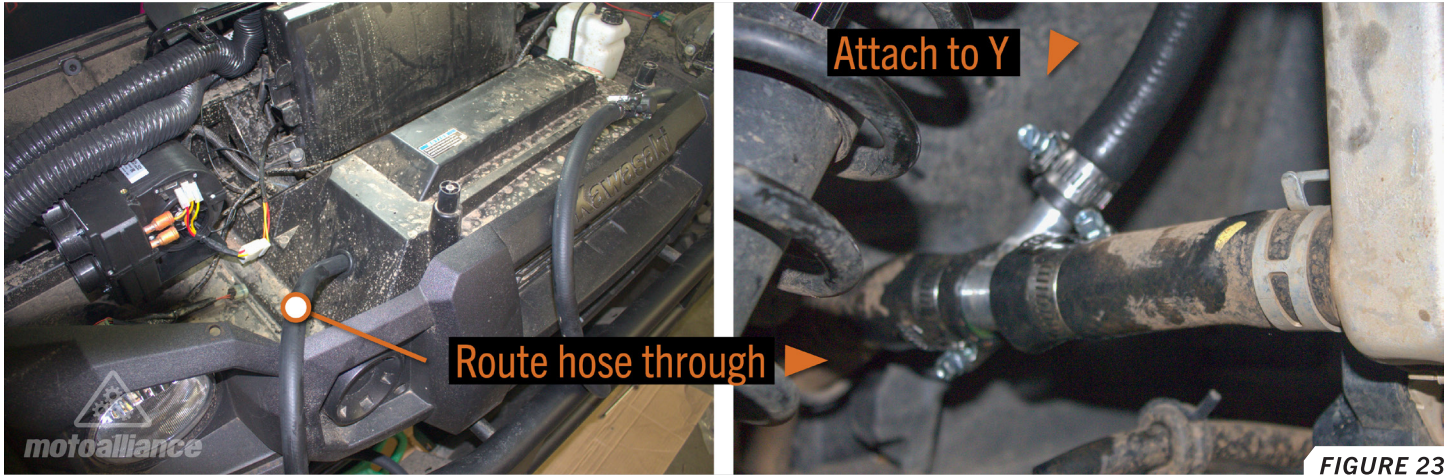


**FIGURE 22**

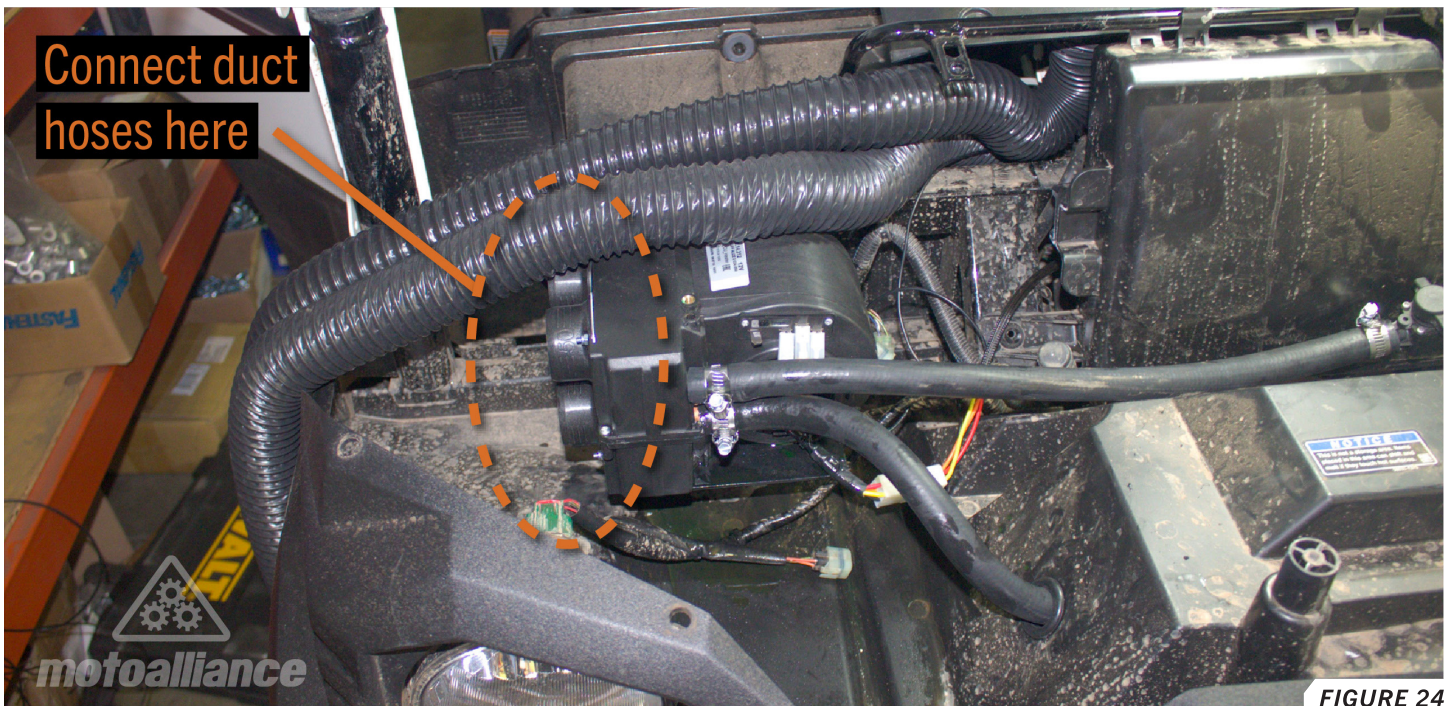
36. Use provided 1¼" hole saw to drill through plastic. Insert a grommet into the hole.
37. Attach the second section of provided radiator hose to the lower port on cab heater unit. Secure with #10 hose clamp.
38. Route the provided radiator hose through the previously drilled hole.
39. Clamp both ends of factory radiator hose. Make a cut, then install a 1" aluminum Y. Secure with #16 hose clamps.



40. Connect the second section of provided radiator hose to the 1" aluminum Y. Secure with #10 hose clamp. **FIGURE 23**



41. Connect all duct hoses to the cab heater and secure with zip ties. **FIGURE 24**





## BLEEDING THE COOLANT SYSTEM

42. Fill radiator with coolant until radiator is full.
43. Open the shut-off valve.
44. Close the radiator cap and drive the machine around until heat comes through the vents or the machine's engine temperature goes above 200°F.
45. Turn off the machine and wait for it to cool down.
46. Open the radiator cap and add more coolant.
47. Repeat the steps in this section until consistent heat is coming out of the vents and machine temperature gauge stays under 200°F.
48. Verify that no leaks have occurred and that the radiator fluid level is per the manufacturer's specifications.

## REPLACEMENT PARTS



Replacement parts can be ordered from [motoalliance.com](http://motoalliance.com). Enter the associated SKU number into the search bar to find the product.

Item Description	SKU
2" Compressed Duct Hose	HT_2inch_Compressed
50mm Vent	HT_50_Louwer
FIRESTORM Heater Motor	RPL_HT_CU_Fan_and_Motor
3-Position Switch	HT-FanSwitch
5/8" Coolant Hose	HT_RadiatorHose_20

Item Description	SKU
1" Aluminum Y	HT_AluminumY_1
Shut-Off Valve	HT_Plastic_Shut-off_Valve
Hole Saw Pilot Bit	HT_PilotBit
2 1/8" Hole Saw	HT_2.125_SAW
1 1/4" Hole Saw	HT_1.25_SAW

**Scan this QR code to see the full list of FIRESTORM replacement parts on [motoalliance.com](http://motoalliance.com)**



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