motoalliance

FIRESTORM

CAB HEATERS

Cab Heater for Polaris RZR Turbo, XP1000, & Trail Models

HT_CU_406_Turbo

INSTALLATION INSTRUCTIONS

motoalliance
22000 Industrial Blvd Ste 250
Rogers, MN 55374
866.527.7637

Polaris RZR Turbo Cab Heater
HT_CU_406-Turbo

FIRESTORM CAB HEATERS

PARTS LIST

Part#	Qty	Item Description
1	1	FIRESTORM Cab Heater Unit
2	1	36" Wiring Harness
		Orange/Yellow/Black Wire
		Red Wire
		Black Wire
		5-Pin Black Connector
		4-Pin White Connector
3	1	HT_CU_406-Turbo-1 Heater Bracket
4	1	Hardware Pack
	2	Installation Displacement Crimps

Part#	Qty	Item Description
	2	M6-1.0x12mm Hex Head Screws
	2	#10x¾" Self-Tapping Screws
	10	#10 Stainless Steel Hose Clamps
	2	#16 Stainless Steel Hose Clamps
	2	Rubber Grommets
5	1	Shut-Off Valve
6	1	½" Shut-Off Valve
7	4	2" Vents
8	2	HT_CU_406-Turbo-2 Vent Brackets
9	20"	2" Compressed Duct Hose

Part#	Qty	Item Description
10	1	Hole Saw Pilot Bit
11	1	2" Hole Saw
12	1	1¼" Hole Saw
13	20	Zip Ties
14	1	1" Aluminum Y
15	1	½" Aluminum Y
16	20'	⅝" Radiator Hose
17	1	3-Position Switch

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FIRESTORM CAB HEATERS

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 and set it aside.
2. Remove the dash and set it aside. ***FIGURE 1***

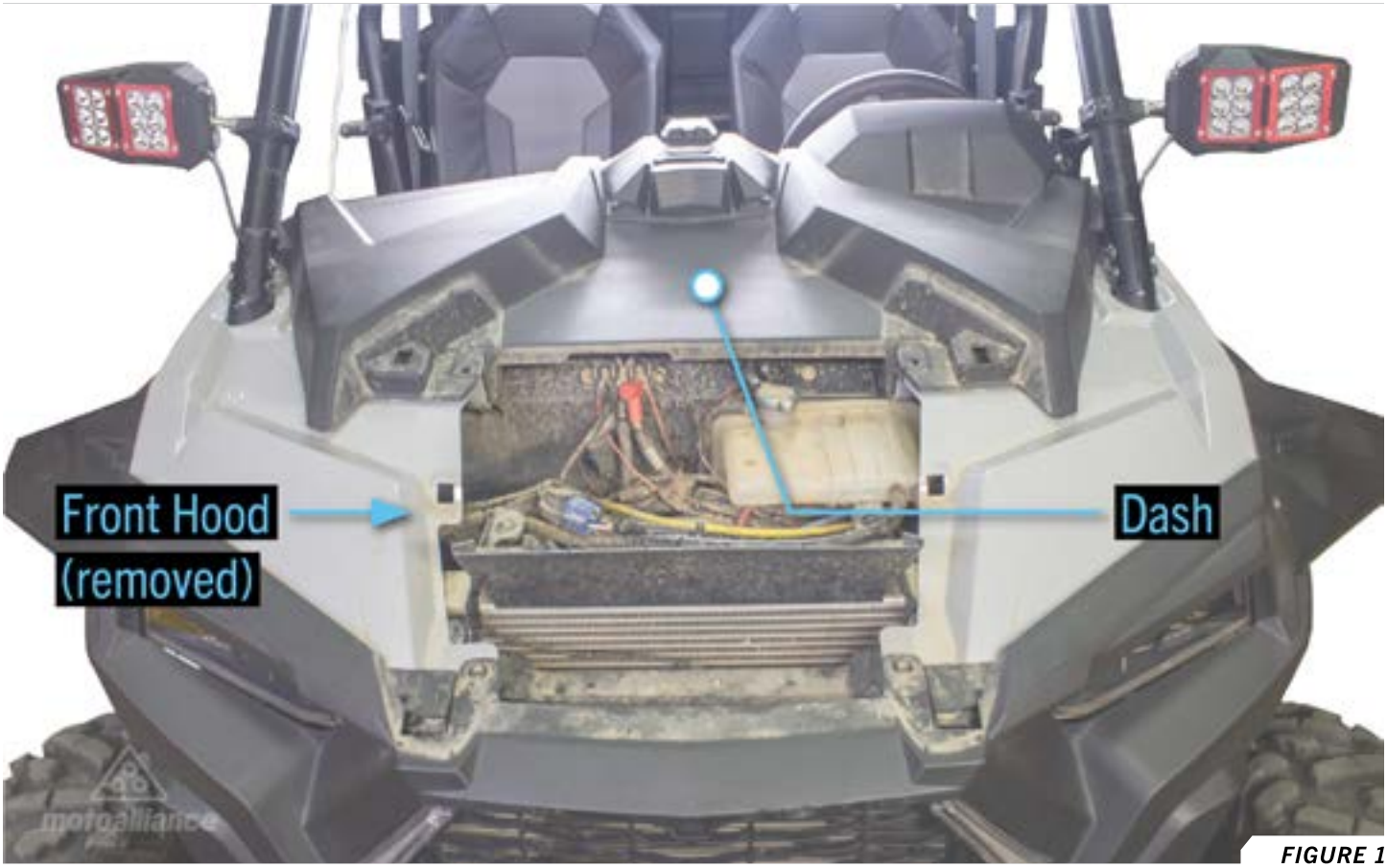


FIGURE 1

MOUNTING HEATER

3. Secure heater unit onto HT_CU_406-Turbo-1 bracket using the M6 bolts. ***FIGURE 2***

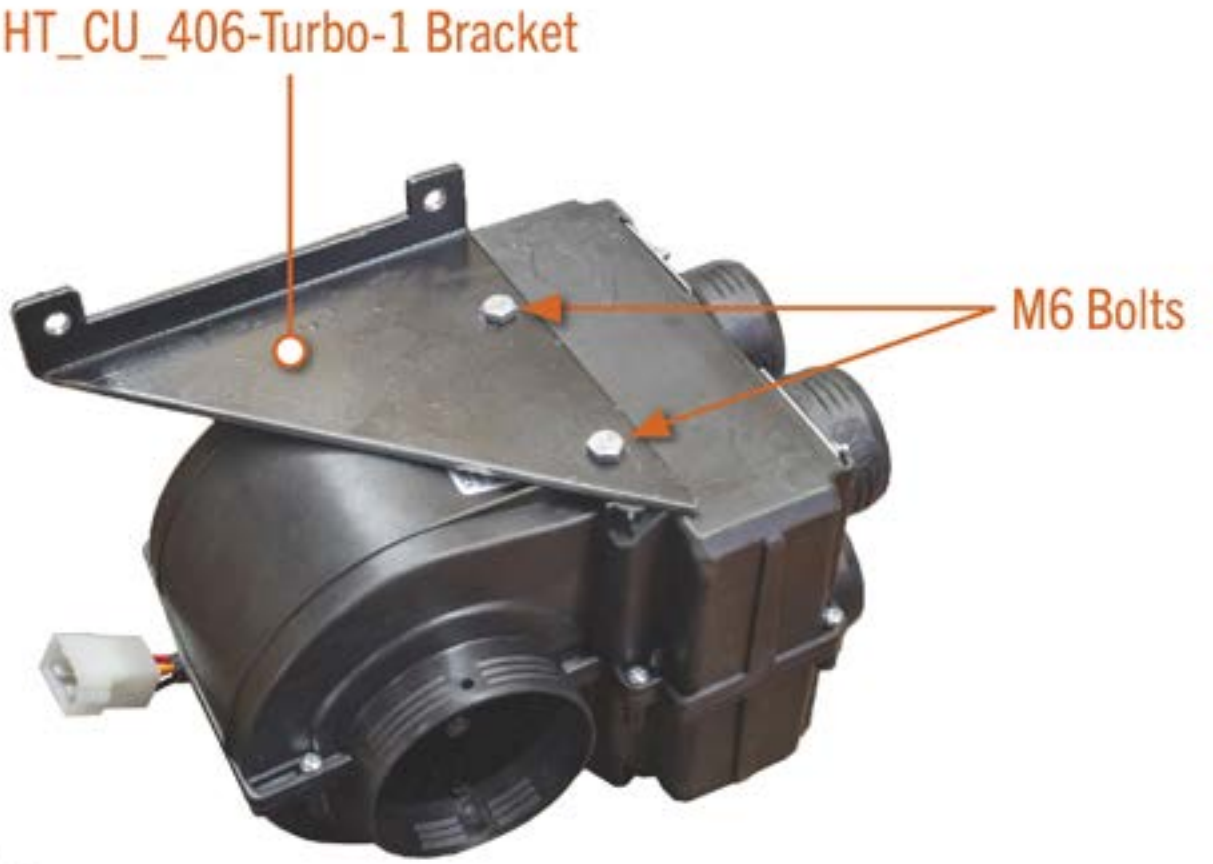


FIGURE 2

4. Remove throttle pedal bracket. ***FIGURE 3***

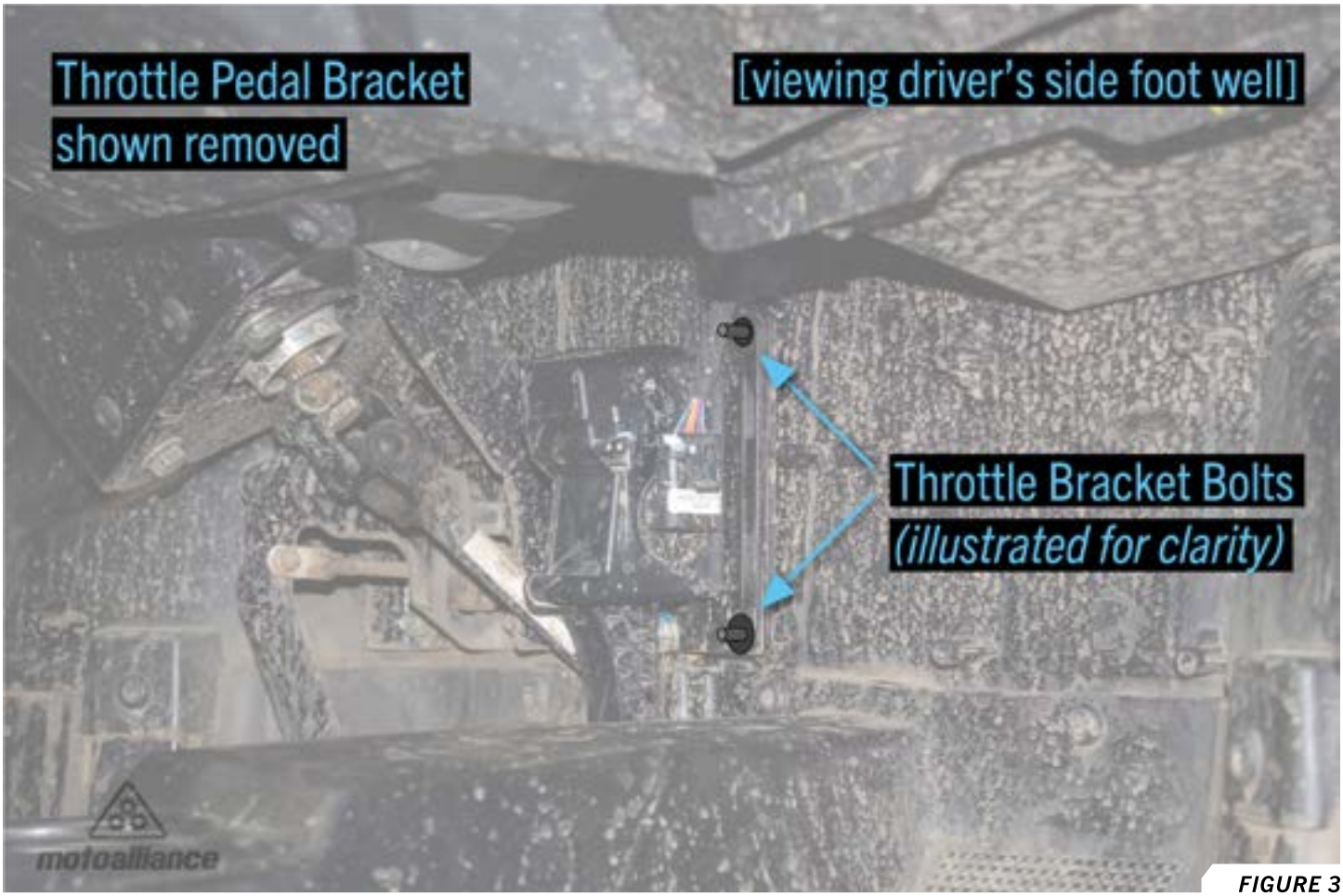


FIGURE 3

5. Mount the HT_CU_406-Turbo-1 bracket onto the throttle bracket bolts on your machine. Some posts might need to be clipped to make the heater unit fit. ***FIGURE 4***

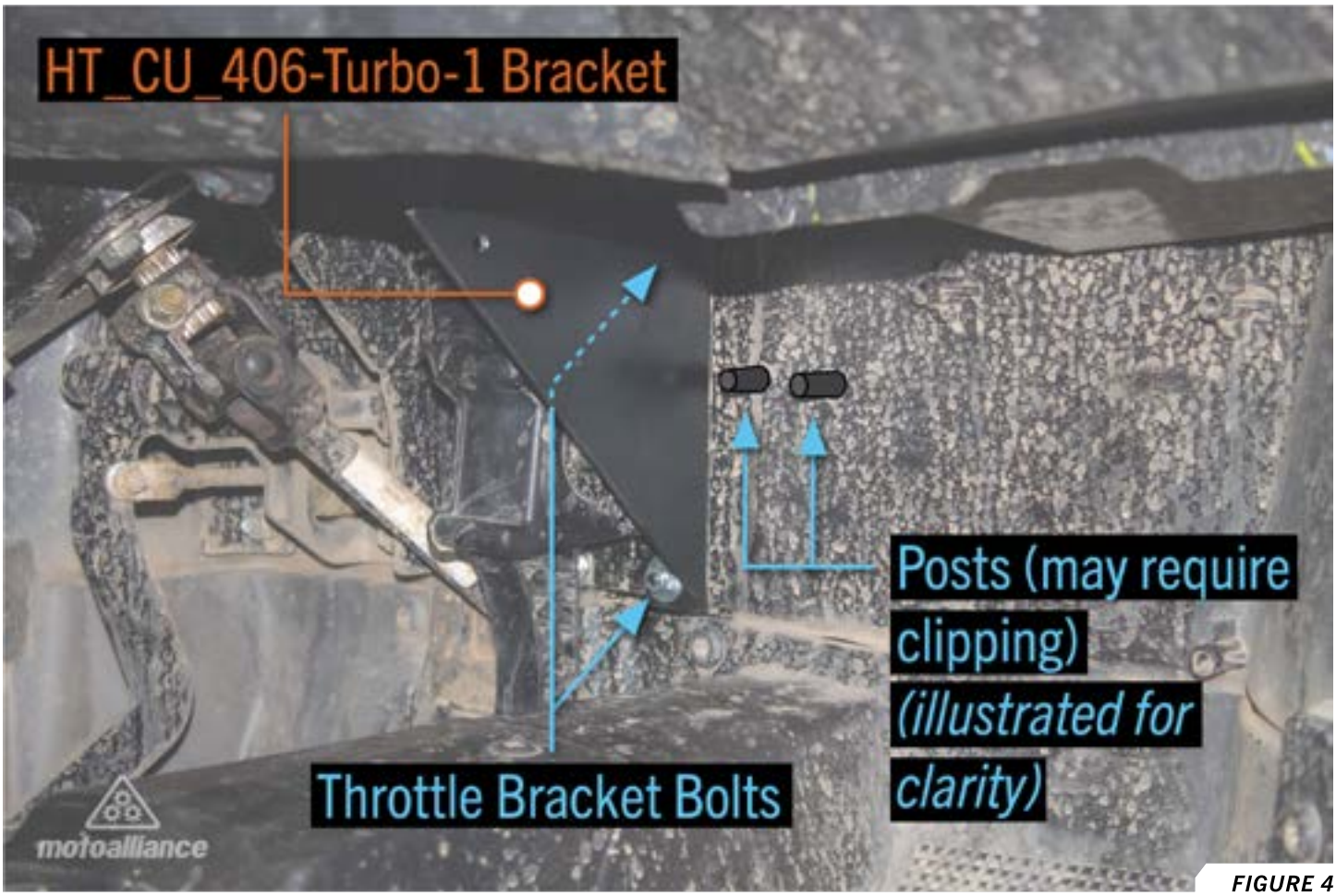


FIGURE 4

COOLANT HOSE ROUTING

6. Use 1¼" hole saw to drill two holes into the firewall below the heater unit. Make sure that the radiator hose will not kink when bending from the heater unit to the hole in the firewall. ***FIGURE 5***

7. Insert the grommets into the two holes in the firewall. ***FIGURE 5***

FIGURE 5

8. Cut a 12' section of radiator hose.

9. Connect the 12' section and the 8' section to the inlets of the heater unit and then feed through the two holes in the firewall. ***FIGURE 6***

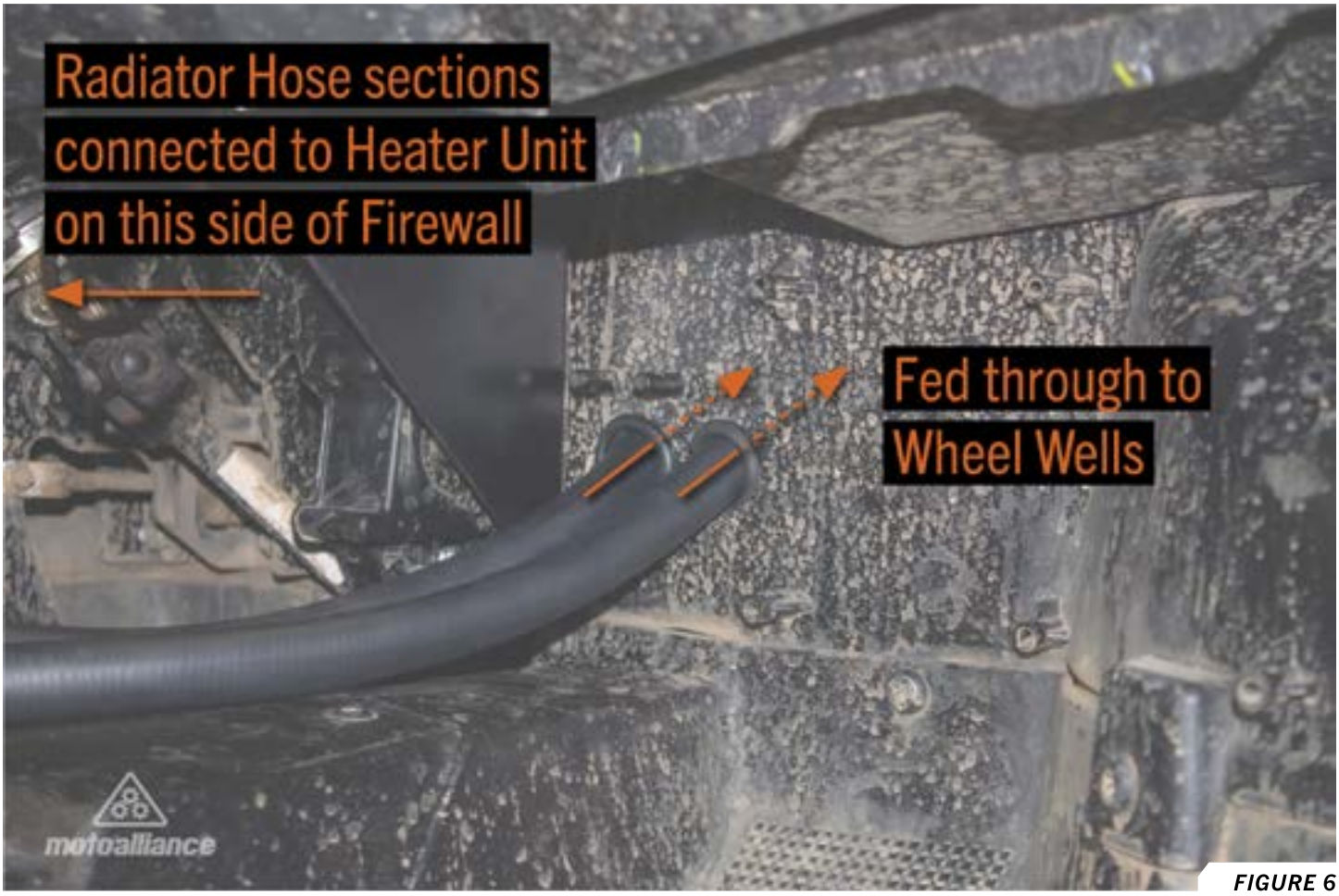


FIGURE 6

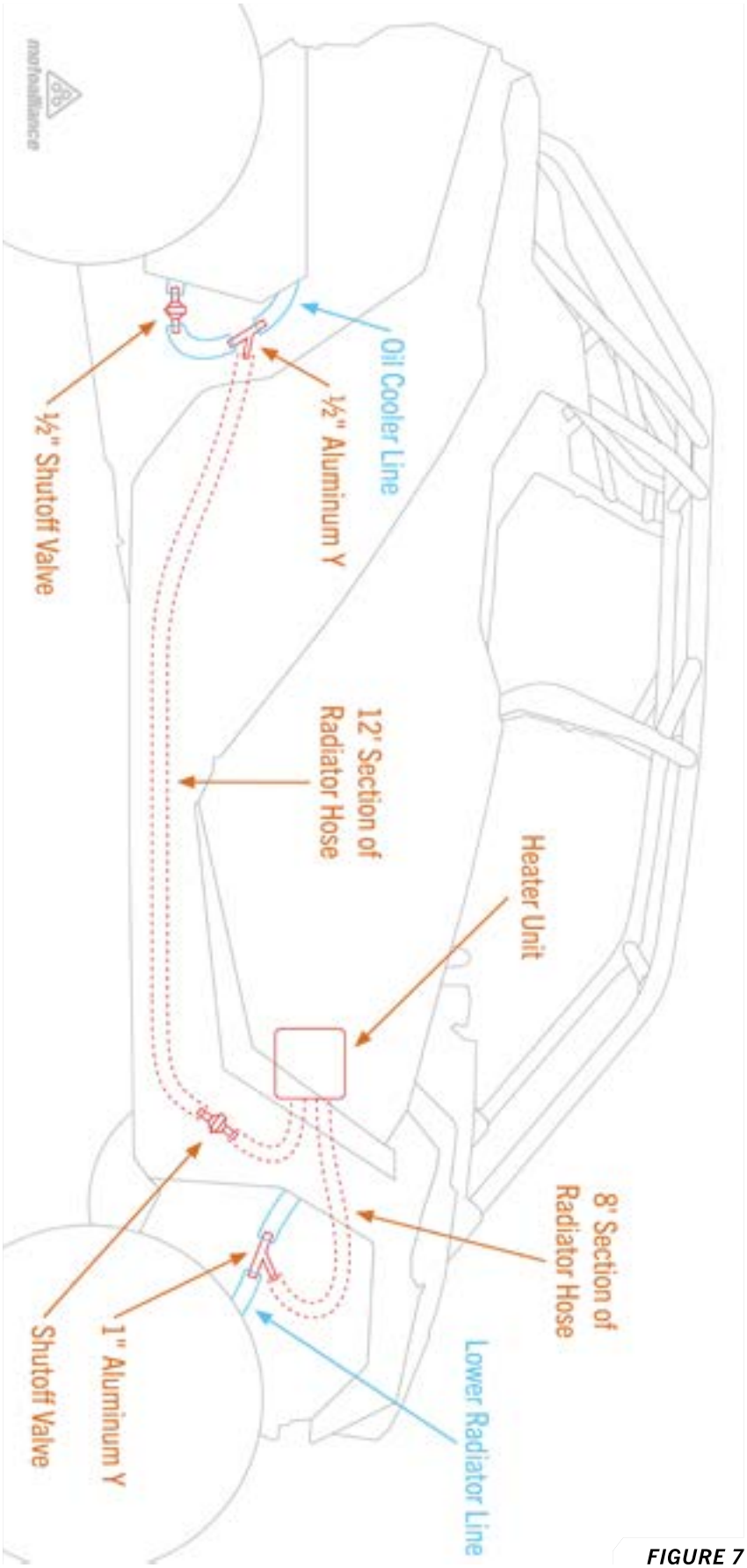

½" Shutoff Valve
½" Aluminum Y
Oil Cooler Line
12" Section of Radiator Hose
Heater Unit
8" Section of Radiator Hose
Lower Radiator Line
1" Aluminum Y
Shutoff Valve

FIGURE 7

10. With the 12' section of radiator hose, follow the machine's factory radiator hoses under the machine, along the drive shaft cavity. ***FIGURE 7***

11. Run the radiator hose up into the engine compartment.

12. Locate the oil cooler line in the back passenger side of your machine. ***FIGURE 7***

13. Cut the oil cooler line and insert the ½" aluminum Y with the branch facing the passenger rear wheel well. Secure the oil cooler line with the #10 hose clamps. ***FIGURE 8***

Use locking pliers to prevent coolant from spilling out of the oil cooler line.

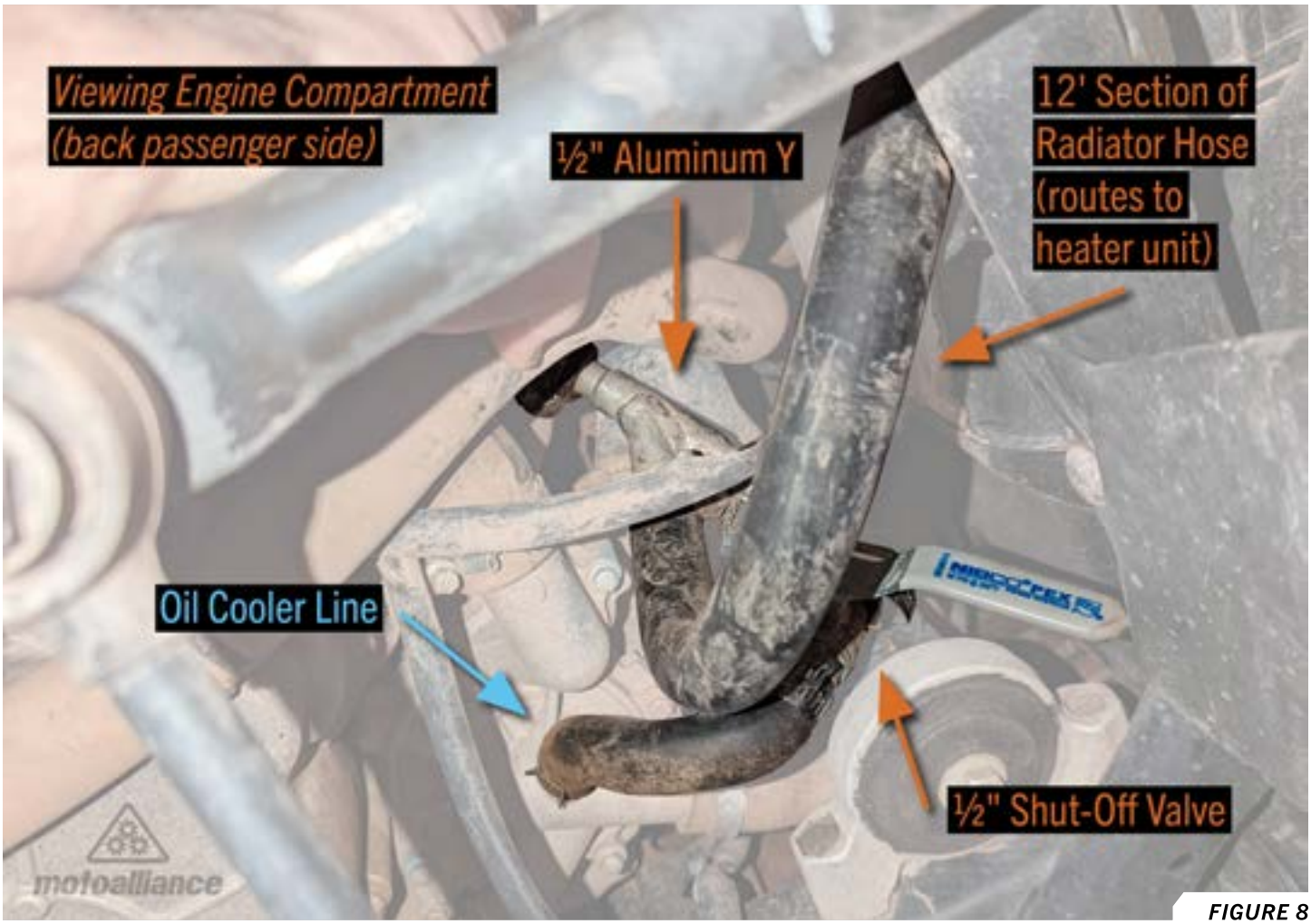


FIGURE 8

14. Run the 12' radiator hose to the branch of the aluminum Y and cut any excess hose. Secure using a #10 hose clamp. ***FIGURE 7***

15. Use zip ties to secure the hose.

16. Locate an accessible spot along the oil cooler line on the side of the Y that the branch points to. Cut the line, insert the ½" shut-off valve, and secure using #10 hose clamps. ***FIGURE 8***

17. Pull the 8' section of radiator hose from the heater unit into the passenger side wheel well.

18. Locate the machine's main radiator line on the passenger side wheel well. ***FIGURE 9***

FIGURE 9

19. Cut the machine's main radiator line and insert a 1" aluminum Y, facing toward the machine's radiator, and secure the Y using 2 #16 hose clamps. ***FIGURE 10***

20. Cut any excess off the 8' radiator hose from the heater unit and connect to the top of the aluminum Y. Secure using a #10 hose clamp. ***FIGURE 10***

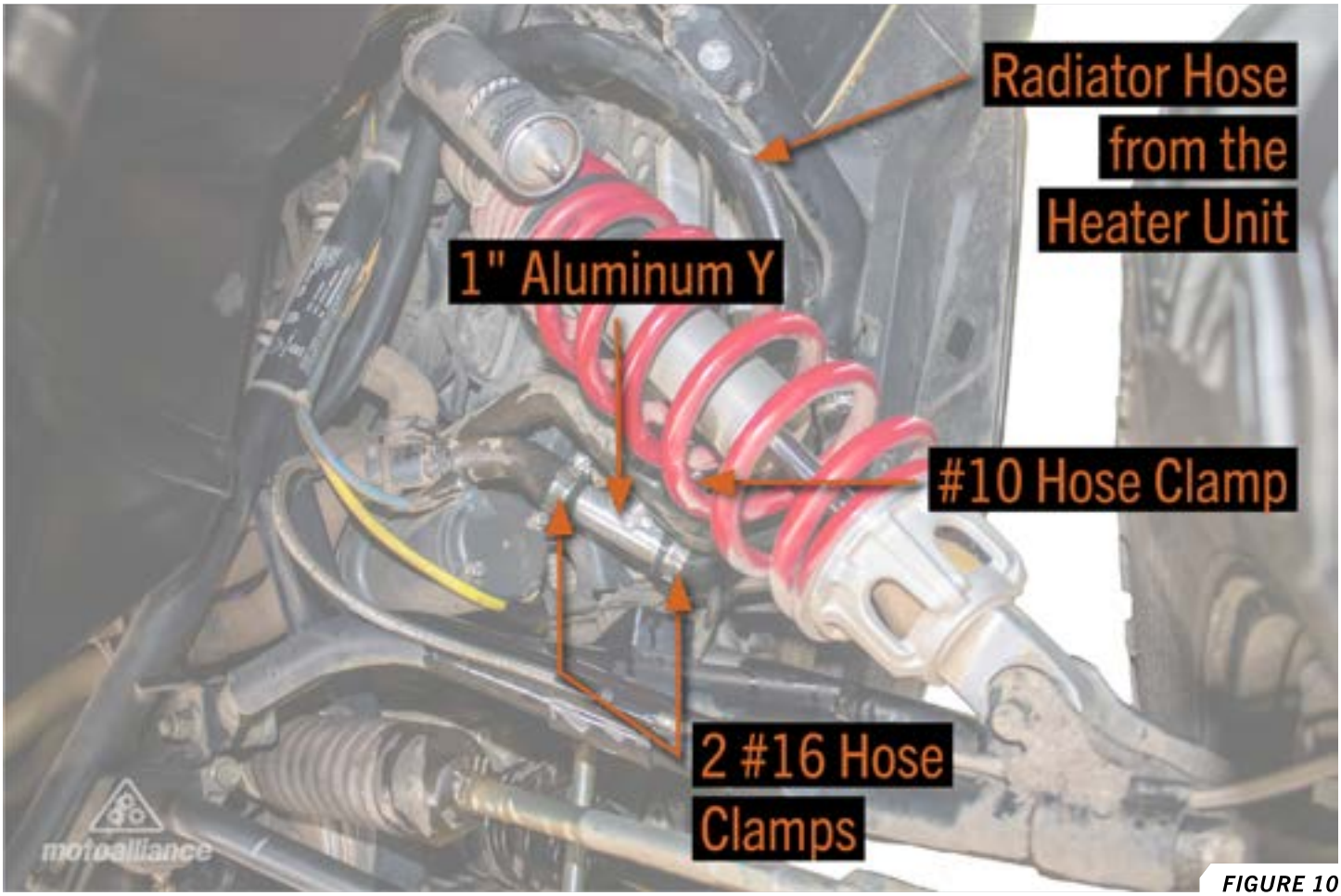


FIGURE 10

21. Secure the radiator hose going to the heater unit away from any sharp or moving parts using zip ties.

22. In the passenger side wheel well, locate an accessible spot along the 12' section of radiator hose going to the oil cooler line. Cut the line, insert the shut-off valve, and secure using #10 hose clamps. ***FIGURE 7***

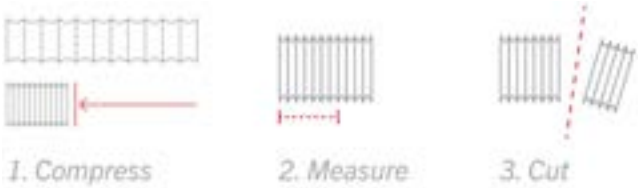
DUCT HOSE ROUTING

Check behind where the vents will go to ensure that no damage will occur when drilling holes.

23. Measure and cut the following lengths of COMPRESSED duct hose:

    a. 5" (qty. **3**)

    b. 3½" (qty. **1**)



24. Connect the 3½" compressed duct hose to the passenger side vent on the heater unit, furthest row away from firewall, and secure using zip ties. ***FIGURE 11***

25. Connect one 5" compressed duct hose to the driver's side vent on the heater unit, furthest row away from firewall, and secure using zip ties. ***FIGURE 11***

26. Connect the remaining two 5" compressed duct hoses to the heater core, on the openings closest to the firewall, and secure using zip ties. ***FIGURE 11***

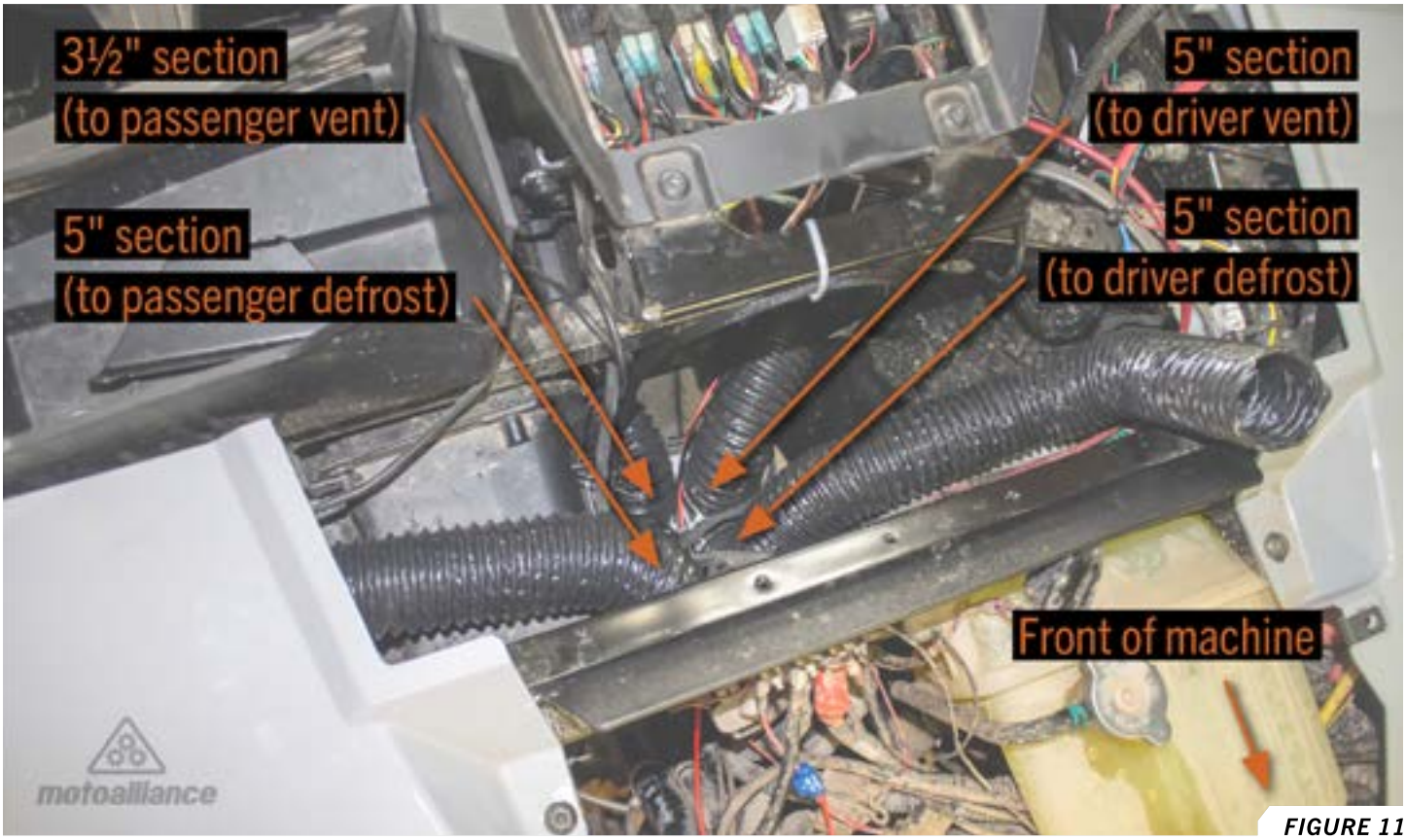


FIGURE 11

27. Use four self-tapping screws to mount the HT_CU_406-Turbo-2 vent brackets under the center console on the passenger side. ***FIGURE 12***

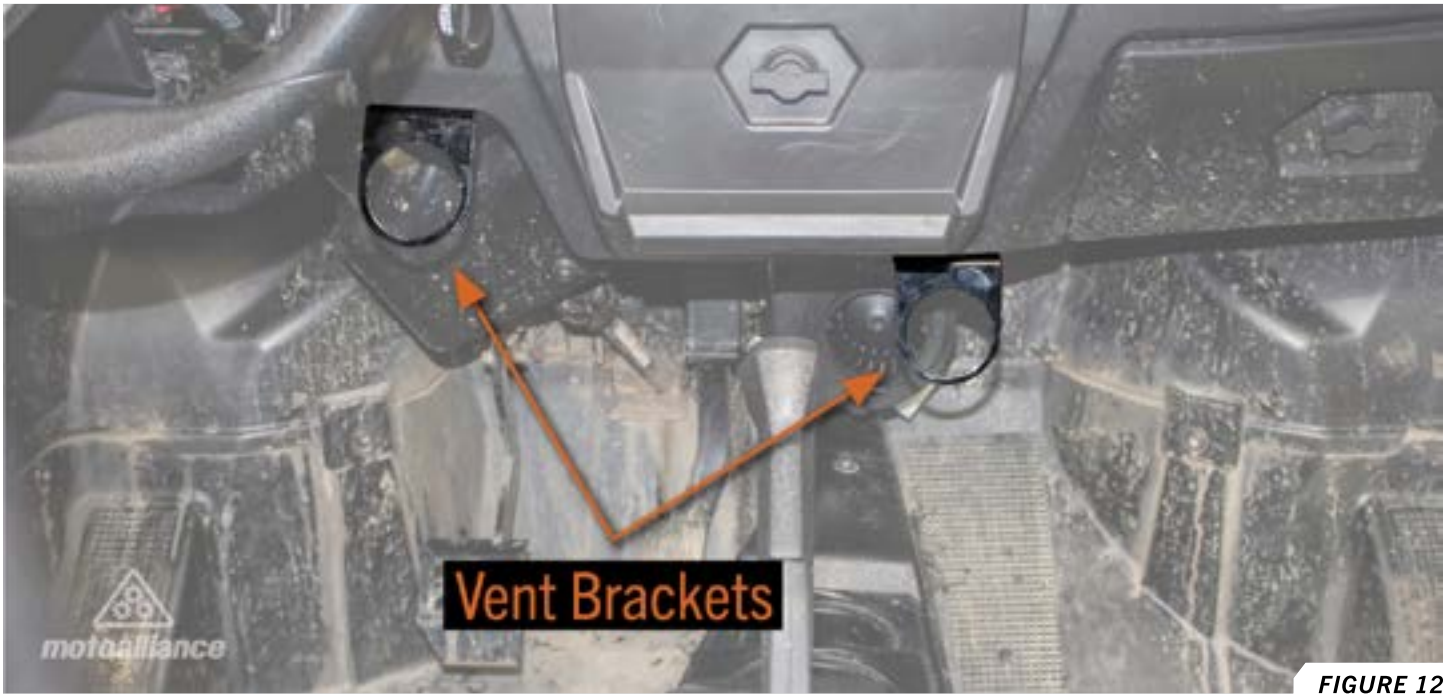


FIGURE 12

28. Insert the 2" vents into the brackets, connect the heater hoses to the vents, and secure using zip ties. ***FIGURE 13***

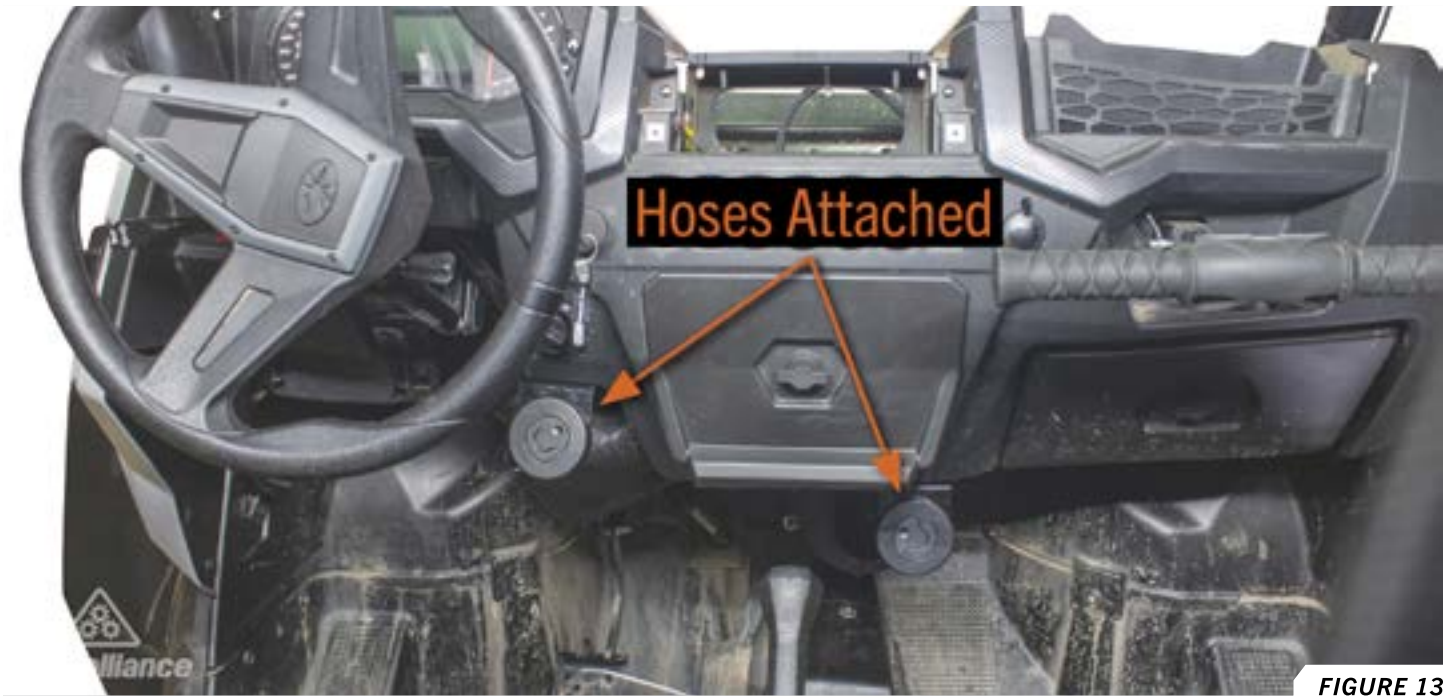


FIGURE 13

29. Place the upper dash back on the machine.

30. Pre-mark the center location for the defrost vents on the upper part of the dash (Note: On the passenger side, be aware of the upper glove box area so you do not drill into it). ***FIGURE 14***

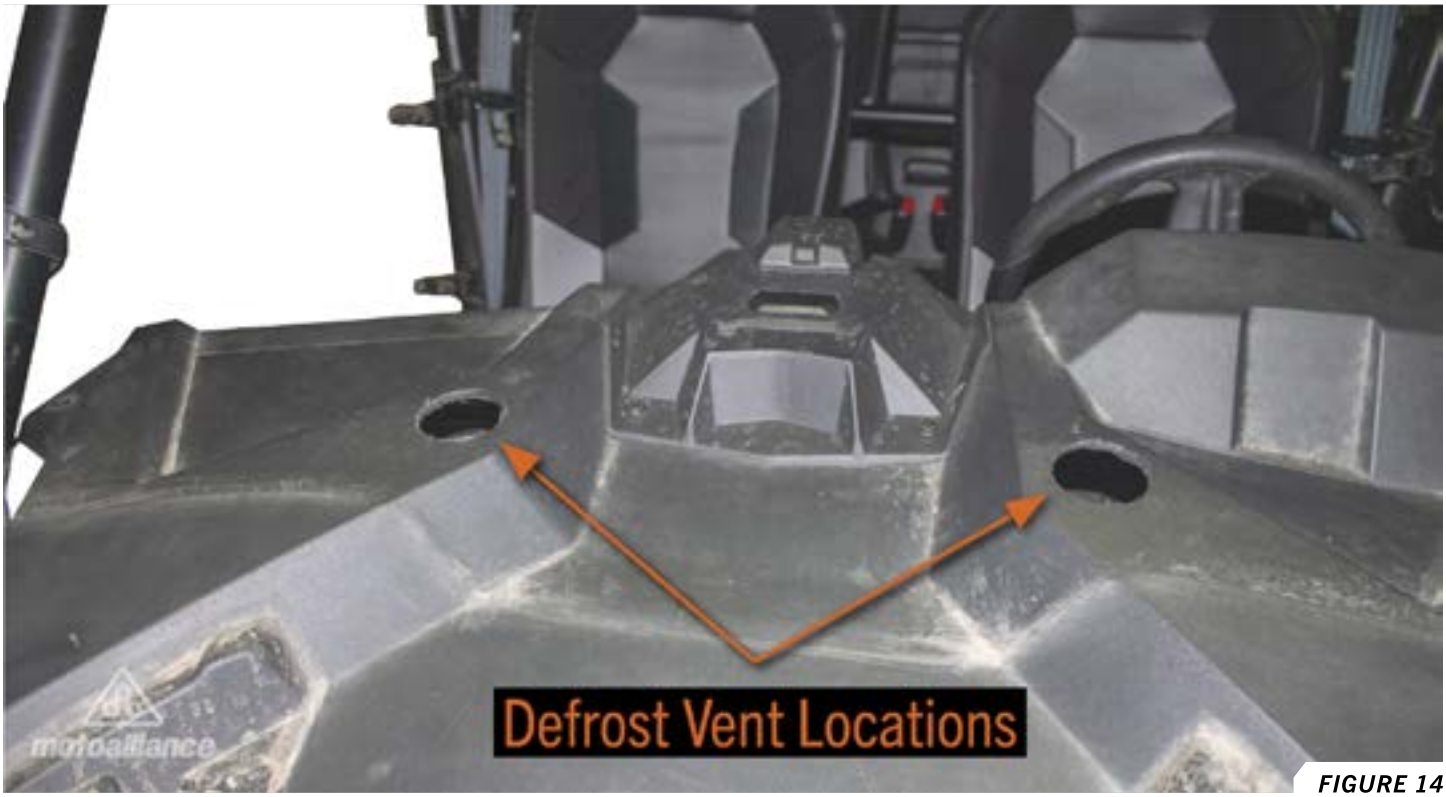


FIGURE 14

31. Using the 2⅛" hole saw, drill out the two defrost vent holes and insert the 2" vents.

32. Insert both the defrost vents, connect the remaining two 5" compressed duct hoses to the vents, and secure using zip ties.

SWITCH WIRING

33. Locate the 36" Wiring Harness and ensure the wires are correctly connected to the 5-Pin Black Connector as shown in ***FIGURE 15*** and the 4-Pin White Connector as shown in ***FIGURE 16***.

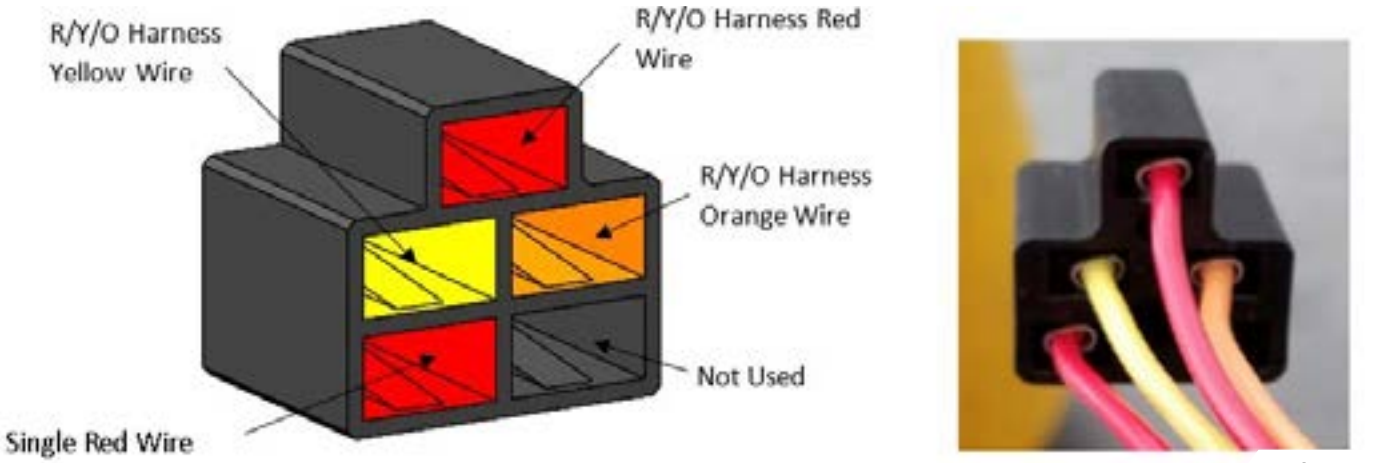


FIGURE 15

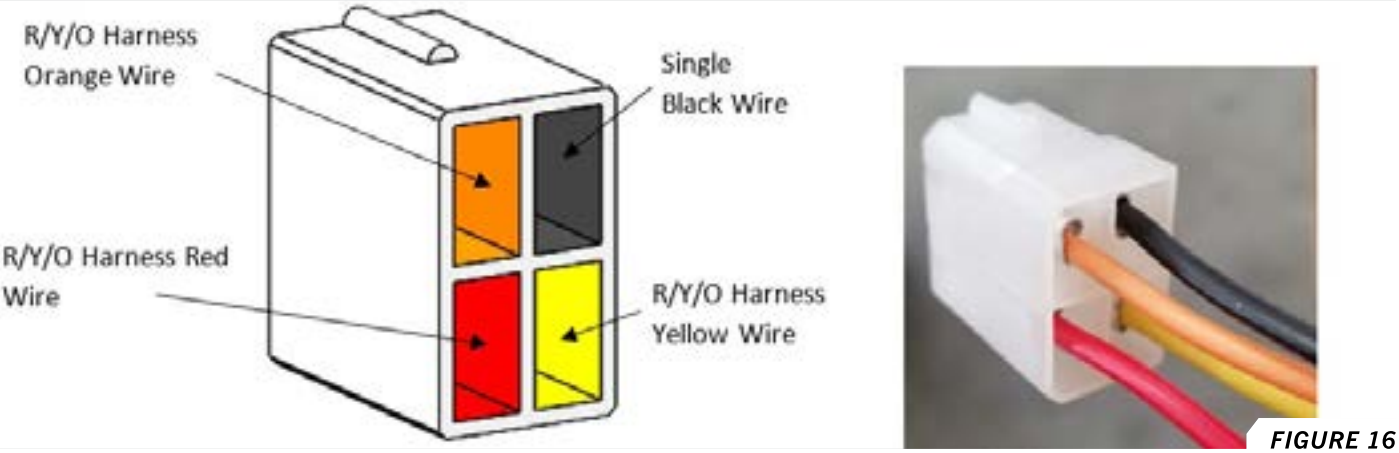


FIGURE 16

34. Connect the 5-Pin Black Connector to the 3-Position Switch included in the kit.

35. Locate an open space on the dash to right of the steering column, under the ignition key. Position the 3-Position Switch Bezel onto the dash panel and mark the center. Remove the 3-Positon Switch Bezel and drill a 7/16" hole at the marked location. Remove any burs around the hole. ***FIGURE 17***

FIGURE 17

36. Insert the switch from the back of the dash panel, where 7/16" hole was drilled, and secure using the low-profile hex nut included in the switch bag. Disregard the flex lock washer.

37. 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 18***.

38. Place the bezel over the switch so that the 0, 1, 2, 3 markings are visible.

FIGURE 18

39. Press the switch dial onto the switch until it is seated firmly.

40. Connect the 4-Pin White Connector to the white terminal housing on the heater unit.
41. 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.

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

BLEEDING THE COOLANT SYSTEM

Read entire section before proceeding

Some amount of air will have made its way into the coolant system. The following bleeding procedure must be performed to eliminate the air and obtain heat. The following procedure is most easily accomplished with the help of a partner.

42. Fill radiator with coolant until radiator is full.

Look at owner's manual for manufacturer-approved coolant

43. Open the shutoff 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.

FINISHING

49. Install the dash on the machine.
50. Install the front hood on the machine.

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REPLACEMENT PARTS

Replacement parts can be ordered from 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
2" Vent	HT_2Louvre
FIRESTORM Heater Motor	RPL_HT_CU_Fan_and_Motor
3-Position Switch	HT-FanSwitch
⅝" Radiator Hose	HT_RadiatorHose_20

Item Description	SKU
1" Aluminum Y	HT_1
½" Aluminum Y	HT_1/2
Shut-Off Valve	HT_Plastic_Shutoff_Valve
½" Shut-Off Valve	HT_Shutoff-Valve.5

Scan this QR code to see the full list of FIRESTORM replacement parts on motoalliance.com

Scan this QR code to get more tech help, watch troubleshooting videos, or submit a help form on motoalliance.com