



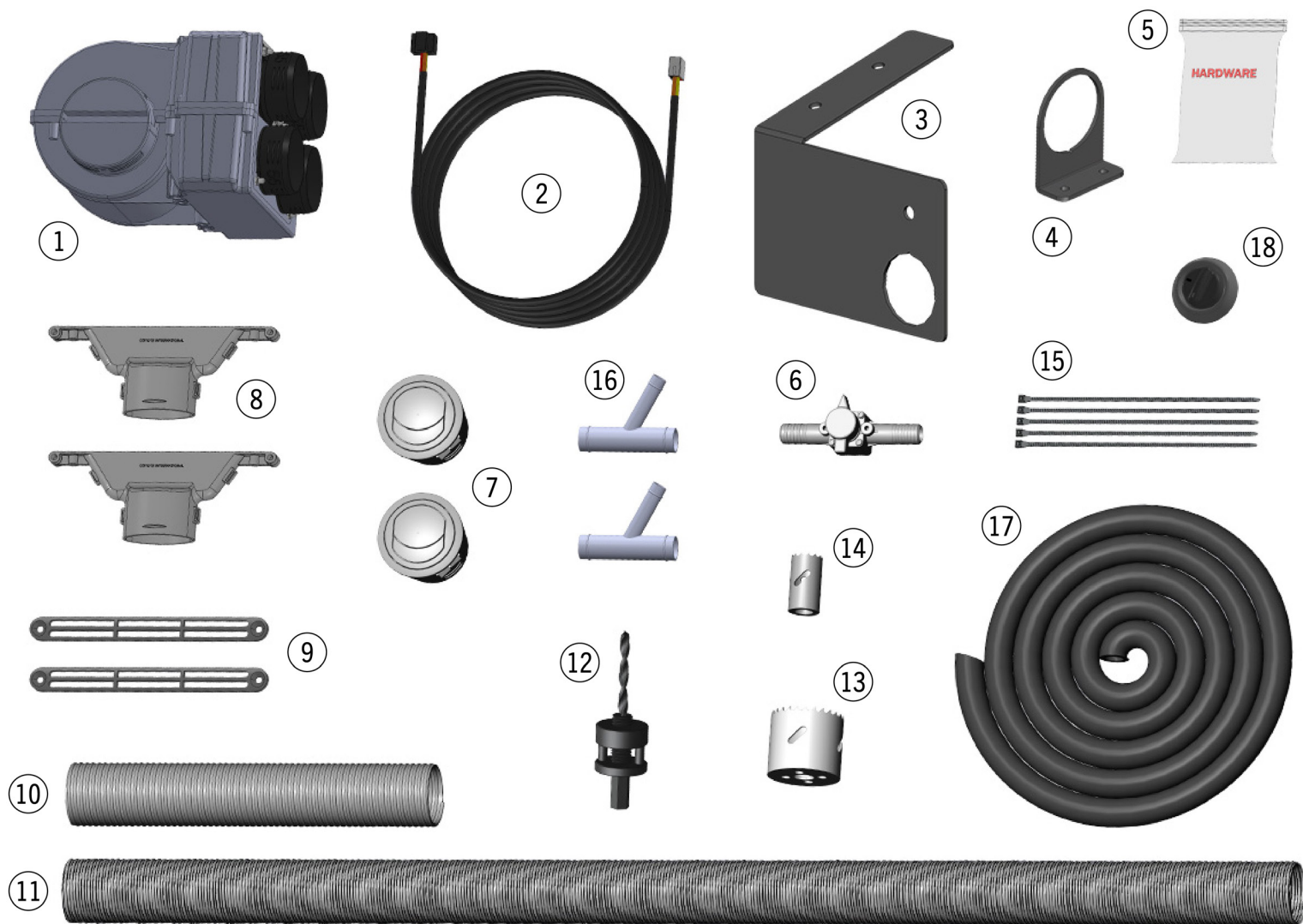
FIRESTORM
C A B H E A T E R S

CanAm Defender Cab Heater

HT_CU_448

INSTALLATION INSTRUCTIONS

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_448-1 Heater Bracket
4	1	HT_CU_448-2 Vent Bracket
5	1	Hardware Pack

Part#	Qty	Item Description
	2	M6-1x18 Hex Bolts
	2	M6 Washers
	6	Self-tapping Screws
	2	Insulation Displacement Crimp
	6	#10 Stainless Steel Hose Clamps
	4	#16 Stainless Steel Hose Clamps
6	1	Plastic Shut-Off Valve
7	2	50mm Vent
8	2	Defrost Vent
9	2	Defrost Vent Grille

Part#	Qty	Item Description
10	10"	2" Compressed Duct Hose
11	24"	2" Compressed Duct Hose
12	1	Hole Saw Pilot Bit
13	1	2 1/8" Hole Saw
14	1	1 1/4" Hole Saw
15	10	Zip Ties
16	2	1" Aluminum Y
17	10'	5/8" Coolant 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 lower dash.
2. Cut out indented section on passenger side glove box. **FIGURE 1**

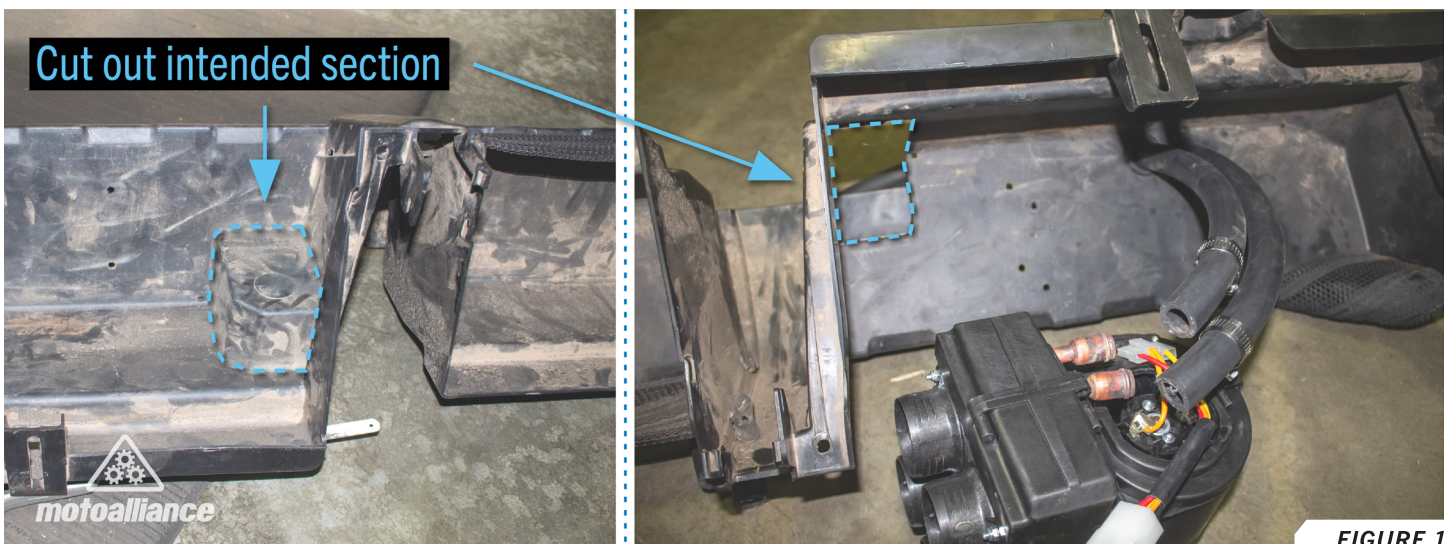


FIGURE 1

3. Remove the little compartment to the left of the steering column. **FIGURE 2**

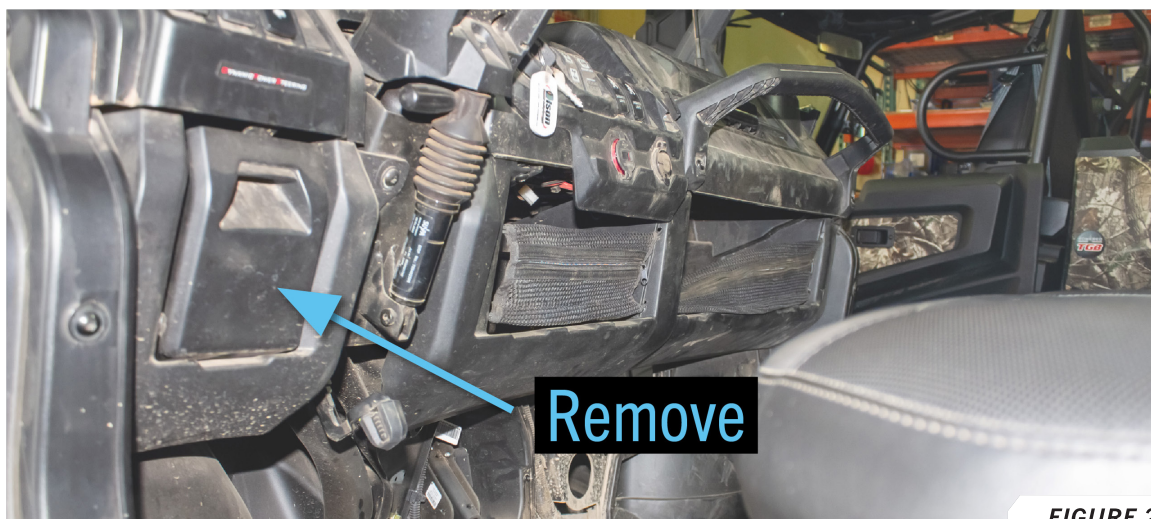


FIGURE 2

4. Unbolt the plastic cover around the gear shift. *FIGURE 3*



FIGURE 3

HEATER

5. Place HT_CU_448-1 heater bracket into the passenger side glove box with the bracket touching the back and left side of the glove box.
6. Mark the holes of the two holes from HT_CU_448-1 onto the bottom of the glove box.

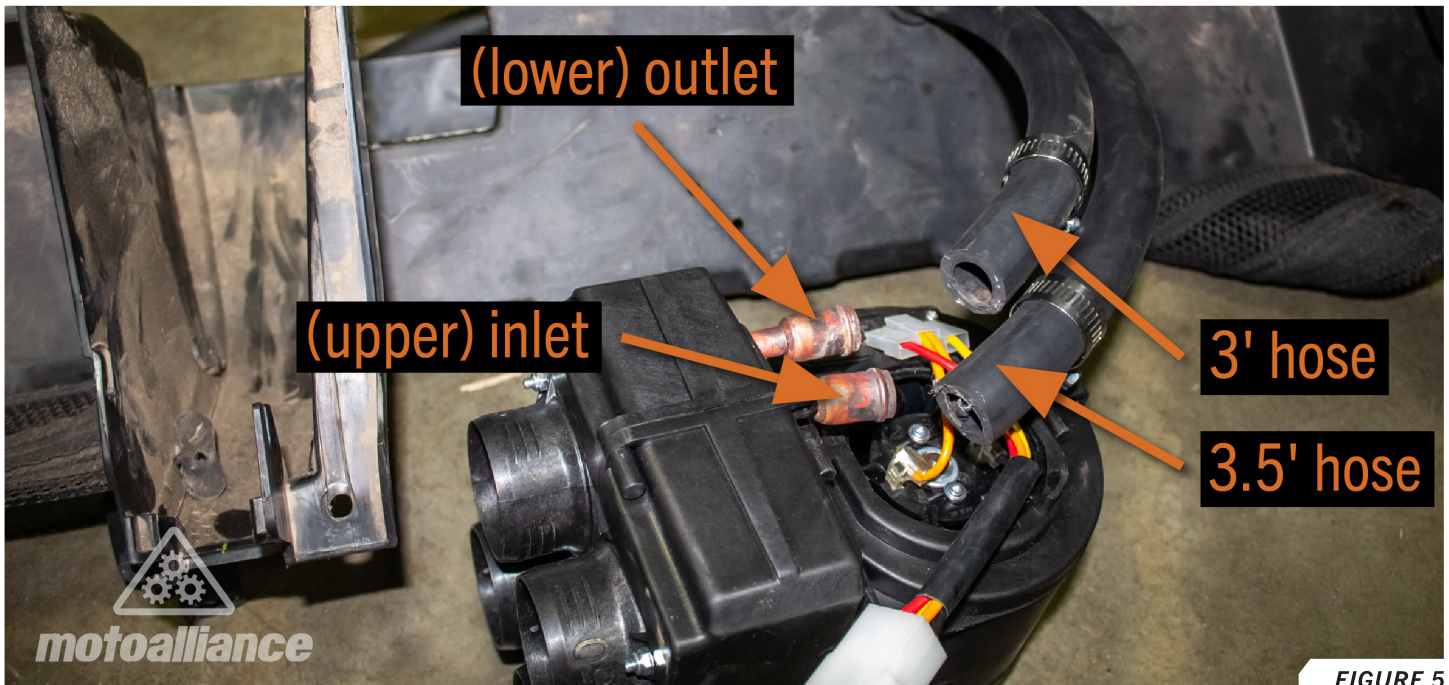
7. Remove the bracket and use a 1/4" drill bit to drill out the two holes. *FIGURE 4*



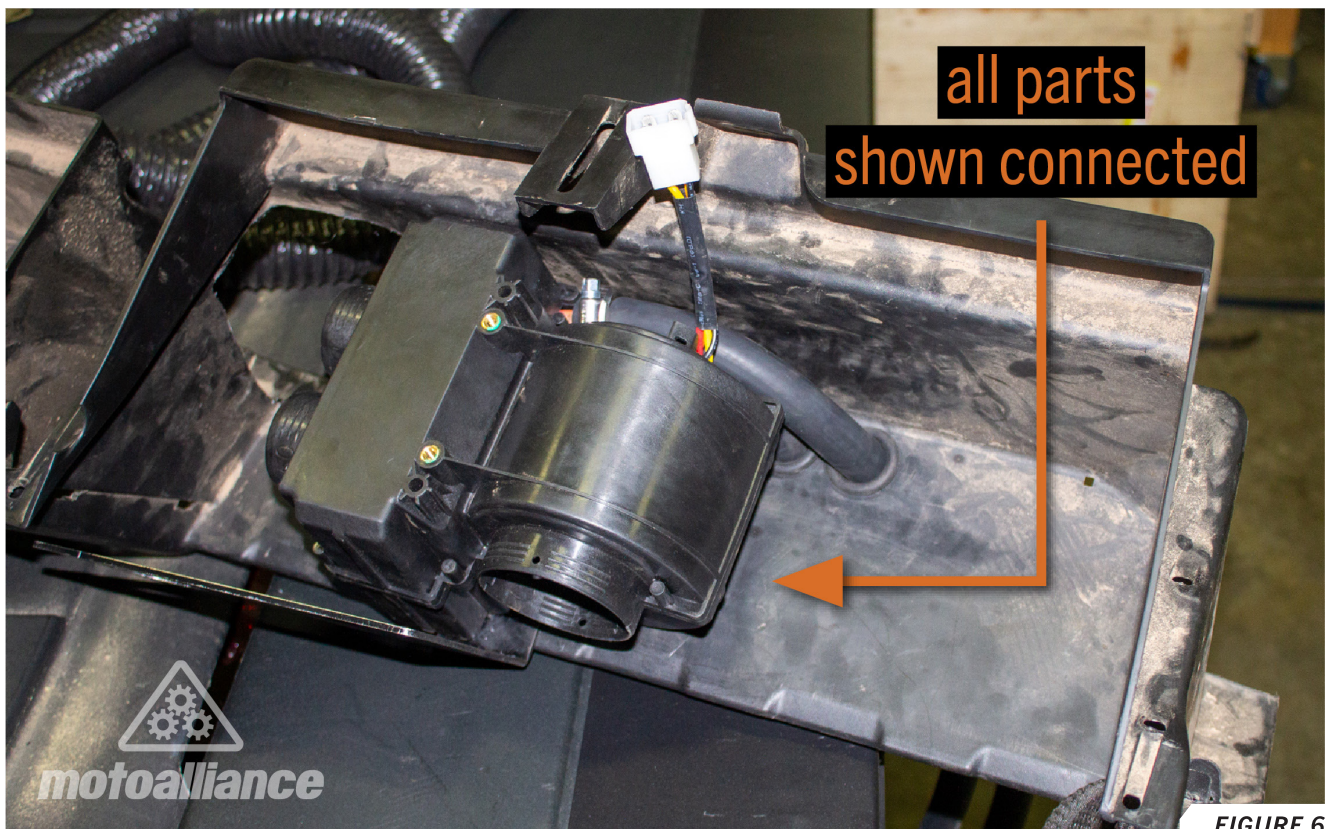
FIGURE 4

8. Cut radiator hose into a 3.5' section and 3' section.

9. Connect the 3.5' radiator hose to the upper inlet of the heater and the 3' radiator hose on the lower outlet of the heater. Secure using #10 hose clamps. **FIGURE 5**



10. Connect the heater unit and HT_CU_448-1 bracket to the passenger side glove box using the M6 bolts and washers. **FIGURE 6**



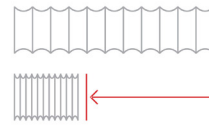
11. Mark one location behind the heater for the radiator hose to go through.
12. Use the 1¼" hole saw to drill a hole through the glove box.
13. Mark another location behind the previously drilled hole.
14. Use the 1¼" hole saw to drill a hole through the glove box. *FIGURE 6*
15. Deburr the holes and insert the rubber gromets.
16. Raise the lower dash back into place.
17. Mark the holes side by side in the access panel to the front of the machine. *FIGURE 7*



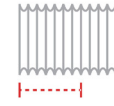
18. Use the 1¼" hole saw to drill the holes in to the front of the machine.
19. Deburr the holes and insert the rubber gromets.

DUCT HOSE

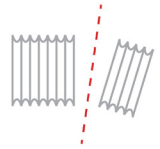
20. Cut the 24" duct hose into two 8" sections.
21. Cut the remainder into a 2" section.
22. Cut the 10" compressed duct hose into a 6" section.



1. Compress



2. Measure



3. Cut

DEFROST

23. Locate the pre marked defrost vents place on the driver side of the machine.
24. Place the vent grille on the desired location and mark the edges of the inside of the vent grille. **FIGURE 8**

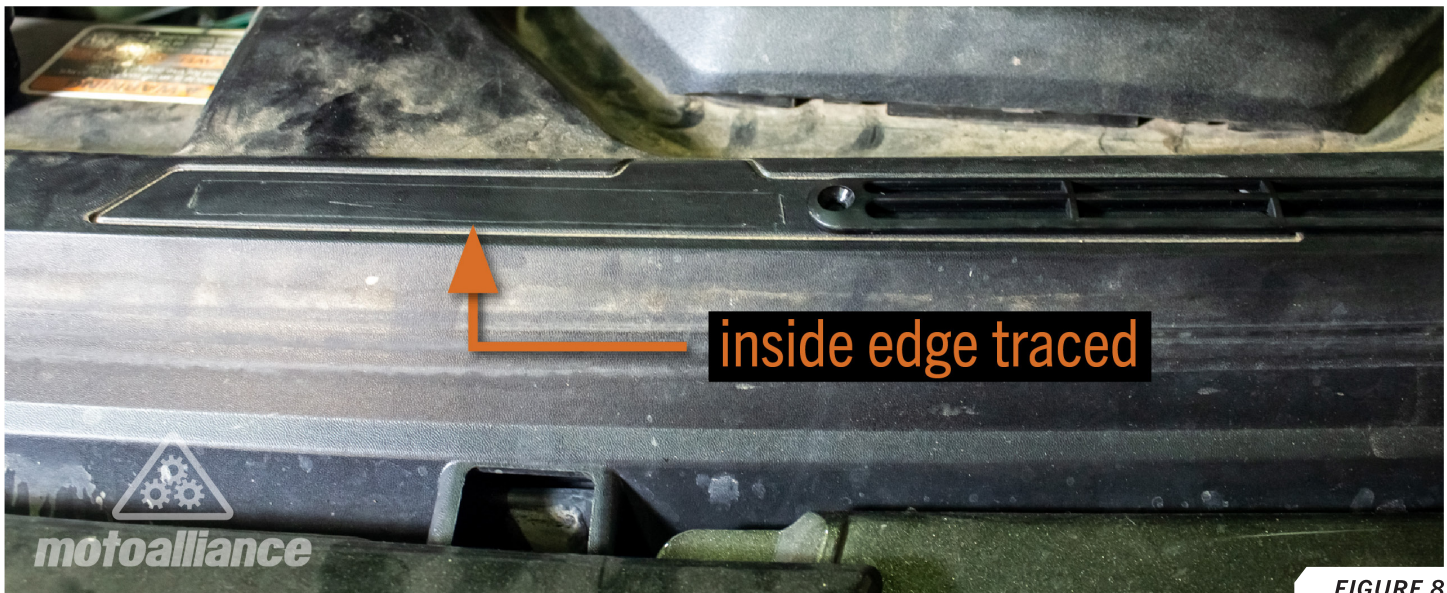
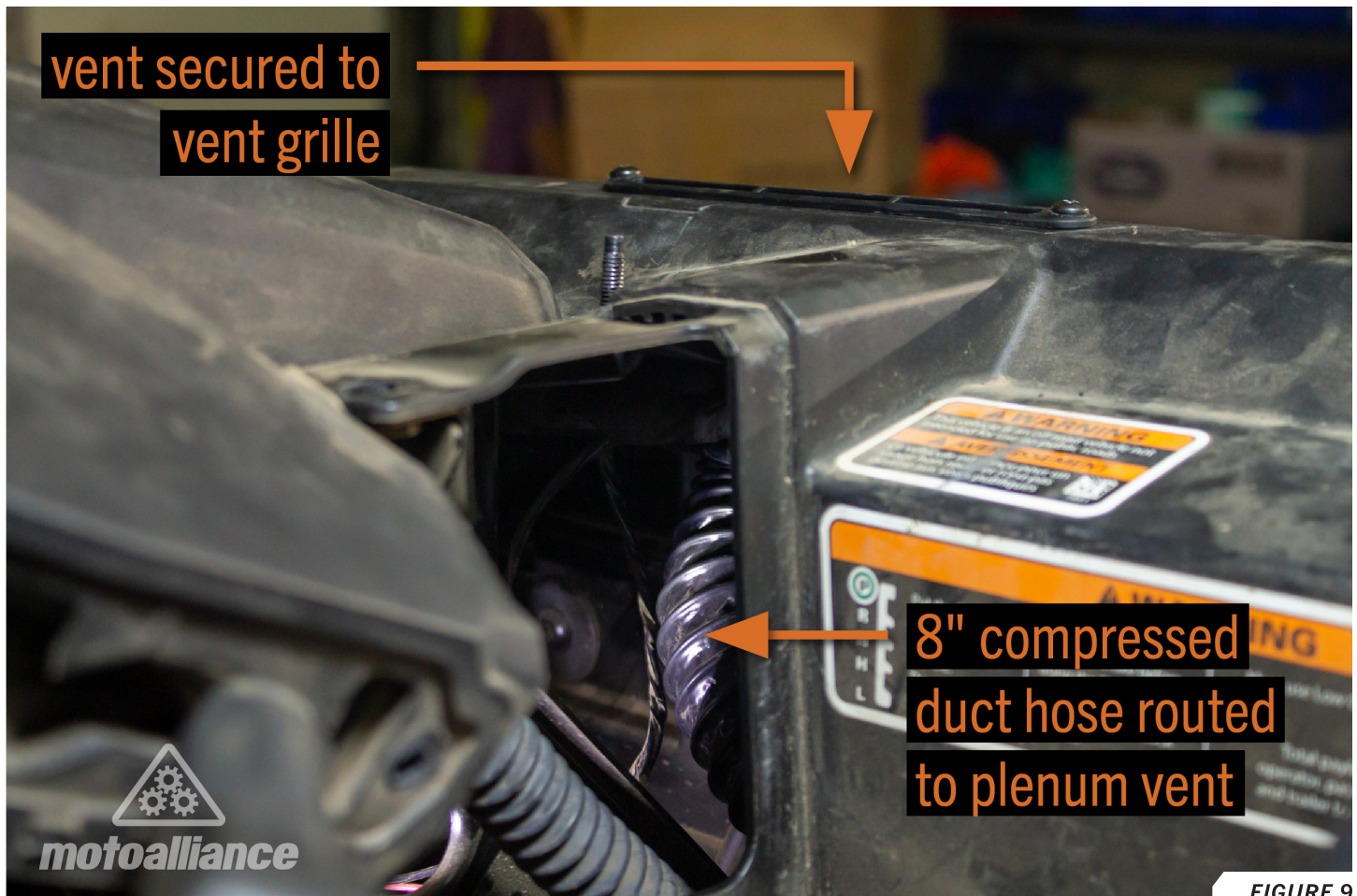


FIGURE 8

25. Mark the two holes from the vent grille.
26. Cut out the marked defrost vent area and drill out the two holes with the self-tapping screws.
27. Attach one of the 8" compressed duct hoses to the plenum vents and zip tie it to secure.
28. With the help of a partner, grab the vent through the shifter access and align it with the cutout from the underside of the dash.

29. Once the vent is aligned with the cutout use the self-tapping screws to secure the vent and the vent grille. **FIGURE 9**

◀ This step is easier with a partner.



30. Locate the pre marked defrost vents place on the passenger side of the machine.
31. Place the vent grille on the desired location and mark the edges of the inside of the vent grille.
32. Mark the two holes from the vent grille.

33. Cut out the marked defrost vent area and drill out the two holes with the self-tapping screws. **FIGURE 10**



FIGURE 10

34. Attach one of the 8" compressed duct hoses to the plenum vents and zip tie it to secure.
35. With the help of a partner, grab the vent through the shifter access and align it with the cutout from the underside of the dash.
36. Once the vent is aligned with the cutout use the self-tapping screws to secure the vent and the vent grille.

◀ This step is easier with a partner.

SWITCH WIRING

37. Locate the 36" wiring harness and ensure the wires are correctly connected to the 5-pin black connector as shown in **FIGURE 11** and the 4-pin white connector as shown in **FIGURE 12**.

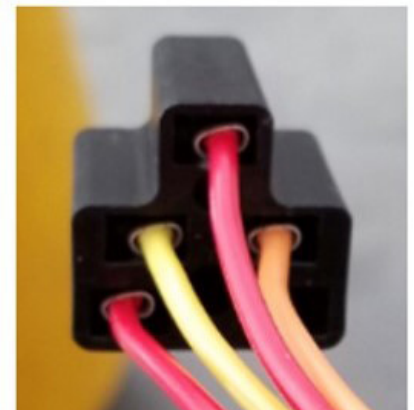
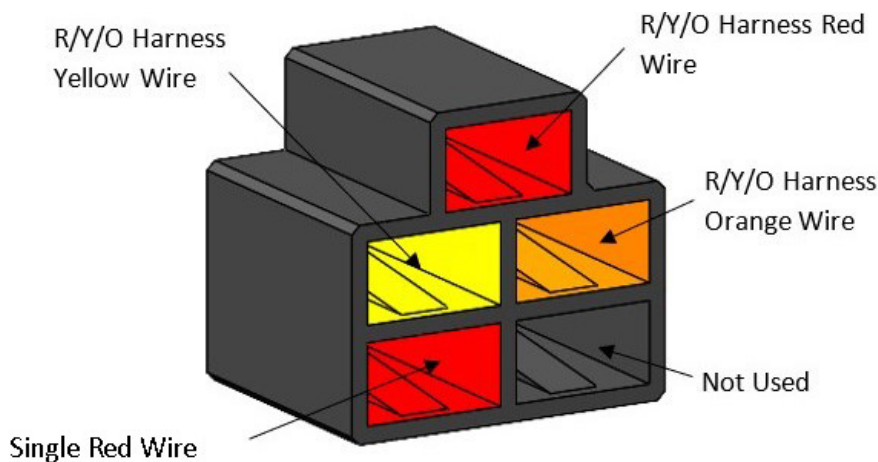


FIGURE 11

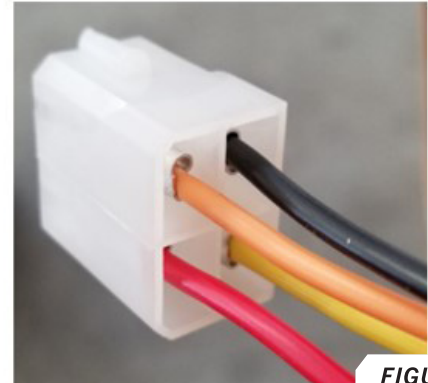
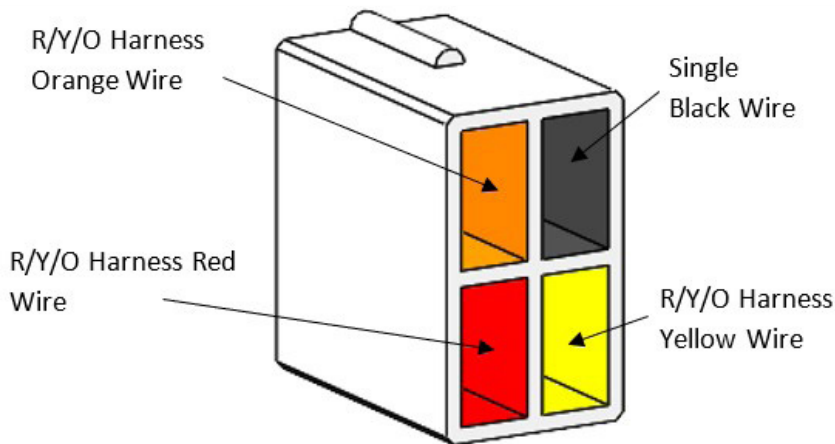


FIGURE 12

38. Connect the 5-pin black connector to the 3-position switch included in the kit.

39. Insert the switch into the HT_CU_448-1 bracket.

40. 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 13**.

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

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

43. Connect the white 4-pin connector to the white terminal housing on the heater unit.

44. Connect the red wire to a keyed power 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.

45. Connect the black wire to the negative battery terminal.

46. Test the switch to ensure that it can control the fan speed in all three positions.



FIGURE 13

VENTS

47. Insert the 50mm vent into the cut out on the HT_CU_448-1 bracket.

48. Connect the 2" compressed duct hose to the lower right side of the heater unit and secure both with zip ties. **FIGURE 14**
49. Connect the 6" compressed duct hose to the lower left side of the heater unit and secure with a zip tie. **FIGURE 14**
50. Raise the lower dash back into place. Connect the two 8" compressed duct hoses to the heater unit and secure using zip ties. **FIGURE 14**

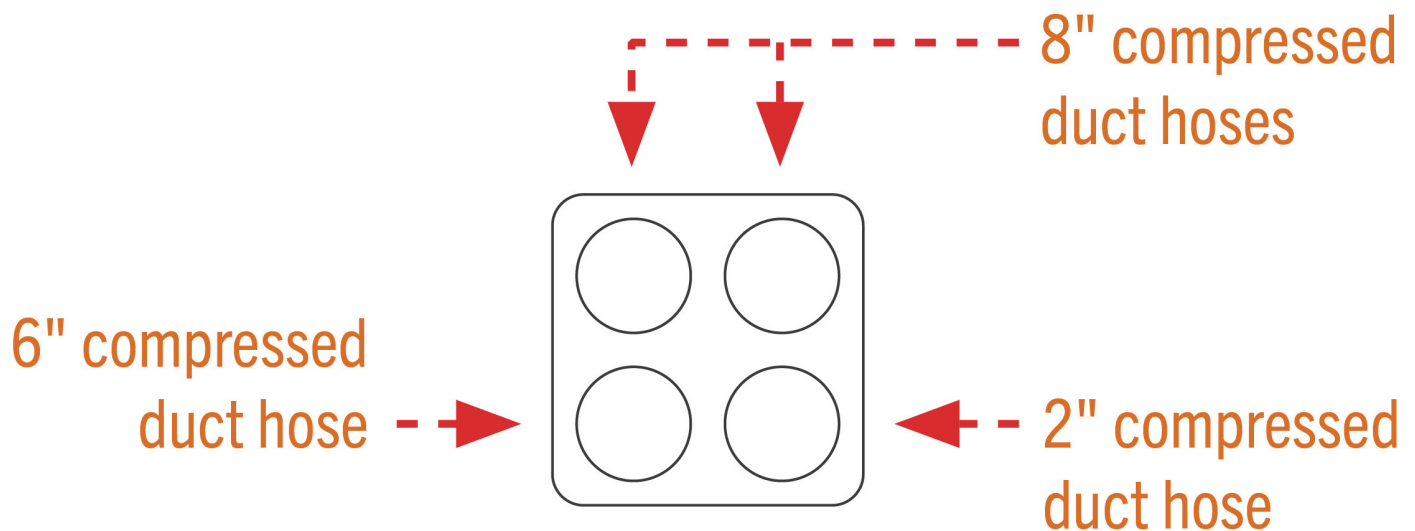


FIGURE 14

51. Route the 6" compressed duct hose out the back of the dash and towards the driver side of the machine.
52. Run the radiator hoses through the holes in the lower dash and access panel.
53. Install the lower dash. **FIGURE 15**

 You may need to cut out a slot in the lower dash panel for the radiator hoses.



FIGURE 15

54. Locate an area under the center glove box and use the self-tapping screws to secure the HT_CU_448-1 facing toward the driver. **FIGURE 16**



FIGURE 16

55. Insert the 50mm vent, attach the 6" compressed duct hose and trim any excess hose.
56. Use zip ties to secure the hose.

ALUMINUM Y INSTALLATION

57. Run the 3.5' kit radiator hose to the upper factory radiator hose and the 3' kit radiator hose to the lower factory radiator hose. **FIGURE 17**
58. Find a flat place in the upper radiator line and cut the hose. Insert the 1" Aluminum Y with the branch facing the front of the machine. Secure using #16 hose clamps. **FIGURE 17**

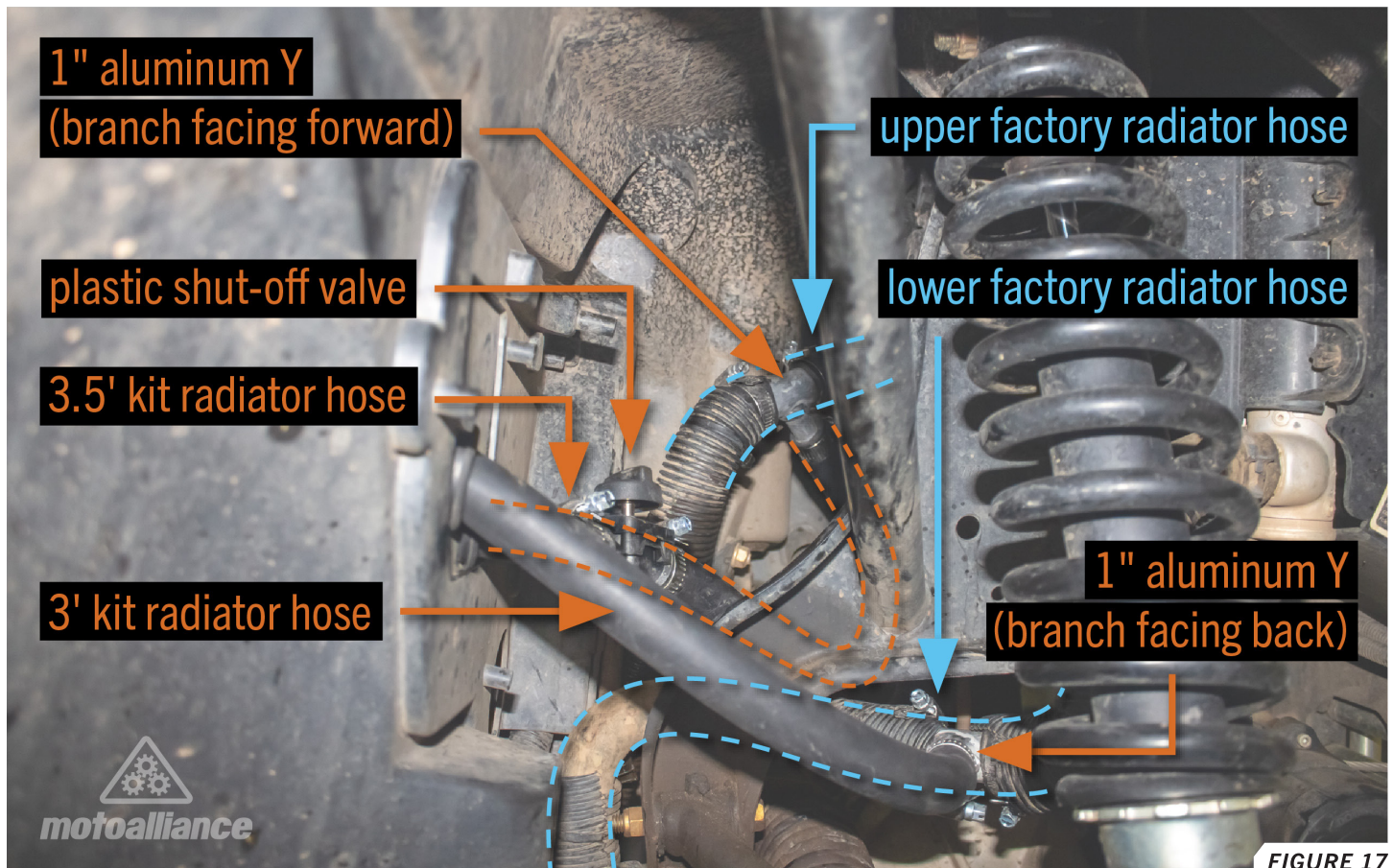


FIGURE 17

59. Connect the 3.5' radiator hose to the branch of the aluminum Y and secure using #10 hose clamps.
60. Locate a flat place in the lower radiator line and make a cut. Insert 1" aluminum Y with the branch facing toward the back of the machine. Secure using #16 hose clamps.
61. Connect the 3' radiator hose to the branch of the aluminum Y and secure using a #10 hose clamps.
62. On the hose running from the heater to the upper radiator line locate an accessible area.
63. Cut the line and insert the plastic shut-off valve. Secure using two #10 hose clamps. **FIGURE 17**

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.

64. Fill radiator with coolant until radiator is full.
65. Open the shut-off valve.
66. 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.
67. Turn off the machine and wait for it to cool down.
68. Open the radiator cap and add more coolant.
69. Repeat the steps in this section until consistent heat is coming out of the vents and machine temperature gauge stays under 200°F.
70. Verify that no leaks have occurred and that the radiator fluid level is per the manufacturer's specifications.

 Look at owner's manual for manufacturer-approved coolant

FINISHING

71. Reattach the little compartment to the left of the steering column and the plastic cover around the shifter.

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
50mm Vent	HT_50mm_Louver
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



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