

HT CP-460

23001 Industrial Blvd Rogers, MN 55374 866.527.7637

# ARCTIC CAT PROWLER COMPACT CAB HEATER KIT INSTALLATION INSTRUCTIONS

Please read all instructions before beginning 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.

Please check your kit with the parts list and picture below for all required parts.

Part #	Qty	Description
HT_CP-460	1	Arctic Cat Prowler Heater Unit
	1	Standard Heater Mount Bracket
	1	5 feet x 5/8 Heater Hose
	4	11-12" Cable Ties
	4	#16 Hose Clamps
	4	#10 Hose Clamps
	1	1 1/4" Hole Saw
	1	Prowler 12" Wiring Loom
	3	4-6" Cable Ties
HT_RP415	2	1" Y Fittings (Aluminum)
	2	Side Mounting Support Brackets
	2	Mounting Support Brackets
	2	Heater Core Support Brackets
	2	Grommets (Rubber)
	1	1/4-20x1 1/2" Bolt & 1/4-20 Nylock Nut
	2	Unicoil (not shown)

Part #	Qty	Description
	1	#10-16 x 3/4 Self Drilling Screw
	8	1/4-20x3/4" Serrated Flange Bolts
	8	U Nuts 1/4 x 20
	6	#10 x 5/8 Screws for Plastic
	1	Duct Elbow Mounting Bracket
	1	90□ Duct Elbow
	6	12" Cable Ties
	2	2" Defrost Vents
	2	Stepdowns
	1	2.5" Duct Y
	1	2" Hole Saw
	1	Pilot Bit (not shown)
	14"	2" Duct Hose (Compressed)
	6"	2.5" Duct Hose (Compressed)

# motoalliance

# Firestorm Arctic Cat Prowler Cab Heater

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**Please note**: Before drilling holes, check area behind the firewall panel to make sure no damage will occur by drilling holes.

**Important Tip:** Raise the front of vehicle on jack stands or ramps before draining cooling system. This will help in preventing air locks and you won't have to drain the whole cooling system.

# **Cab Heater Installation**

# **Prowler 700** (without a factory console)

1. Cut out the heater hose hole template.

2. Position the template on the firewall as shown in Figure 1 and as stated on the template.



Figure 1

- 3. Mark the hole saw centers and remove the template.
- 4. Carefully drill the heater hose holes using the supplied 1 1/4" hole saw.
- 5. Place the supplied grommets into the drilled holes.

#### Prowler 550

- 1. Mount the heater system first as outlined in these instructions.
- 2. Mark the hole positions directly behind the heater hose outlets. Note: check the area behind the dash panels to make sure no damage will occur by drilling the holes.
- 3. Mark the hole saw centers.
- 4. Carefully drill the heater hose holes using the supplied 1 1/4" hole saw.
- 5. Place the supplied grommets into the drilled holes.



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# **Prowler 550/700 Instructions**

- 6. Assemble the main heater mounting bracket, defrost duct mounting bracket and defrost duct elbow as shown in Figure 2:
  - The end of the defrost duct elbow with the plastic tabs should face the opening of the defrost duct mounting bracket.
  - The end of the defrost duct elbow without the plastic tabs should rest in the oval hole of the main heater mounting bracket.
- 7. Secure the assembly using the supplied plastic mounting screws on both the top and bottom side of the bracket.

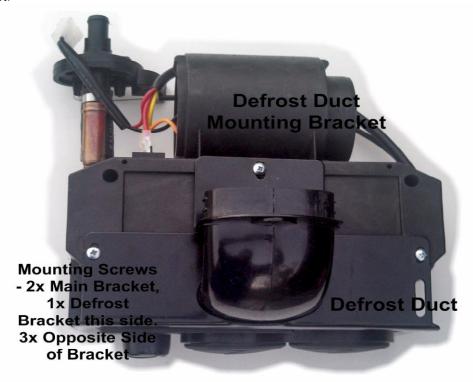


Figure 2



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8. Using the two side mounting brackets install the U-Nuts onto the bracket as shown in Figure 3.



Figure 3



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9. Using the heater support brackets install U-Nuts onto the bracket as shown in Figure 4.



Figure 4

10. Fit the side mounting brackets to the main heater mounting bracket using the ½" x ¾" bolts as shown in Figure 5. *Do not tighten the bolts*.



Figure 5

11. Take the heater and hold it up under the center of the dash.



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12. Line up the heater with the dash as required making sure that the temperature control valve is just past the rear of the dash edge as shown in Figure 6.



Figure 6

- 13. Mark the hole centers of the slotted holes in the two side mounting brackets onto under the dash panel.
- 14. Remove the heater.
- 15. Drill the four mounting holes using a 3/8" drill.
- 16. Using the supplied heater hose, pass each end through the grommets in the firewall from the *radiator side* of the firewall. *Do not cut hose to do this*.
- 17. Place the UniCoil over the hose that goes to the temperature control valve.
- 18. Attach the heater hoses to the heater unit. (Note the lower hose clamp placement):
  - Attach the top heater hose to the temperature control valve
  - · Attach the lower hose to the heater core, pushing the hose completely on the fitting



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19. Install the heater core support bracket to the hoses as shown in Figure 7. Do not over tighten through bolt.



Figure 7

- 20. Lift the heater up into position by pushing the heater hoses back through the grommets.
- 21. Bend the UniCoil so the hose does not kink.
- 22. Fit the ½" x ¾" mounting bolts though the two side mounting brackets and through the holes in the dash and into the heater support brackets with the U-Nuts which are placed on the inside of the dash panel. *Do not tighten.*
- 23. Adjust the heater position and tighten all of the mounting bolts.
- 24. Connect the wiring loom to the heater:
  - · red wire to red
  - black wire to black
- 25. Run the wiring loom up to the aux power plug.
- 26. Using the quick connector connect the red wire of loom to the factory power side aux power plug loom.
- 27. Connect the black wire to a good chassis ground using the supplied self drilling screw.
- 28. Reconnect the battery and turn the key on to check fan operation.
- 29. Disconnect the battery.
- 30. Use cable ties as necessary to secure the wiring loom.

# **Coolant Setup**

1. Drain the cooling system by removing the lower radiator hose.

**Important Tip:** Raise the front of vehicle on jack stands or ramps before draining the cooling system. This will help in preventing air locks and you won't have to drain the whole cooling system.

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2. Cut the Radiator hoses as shown in Fig 8a, 8b, 8c and 8d depending on your model.

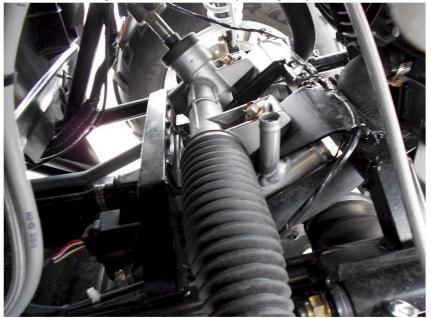


Figure 8a - 550 Lower Hose



Figure 8b - 550 Upper Hose

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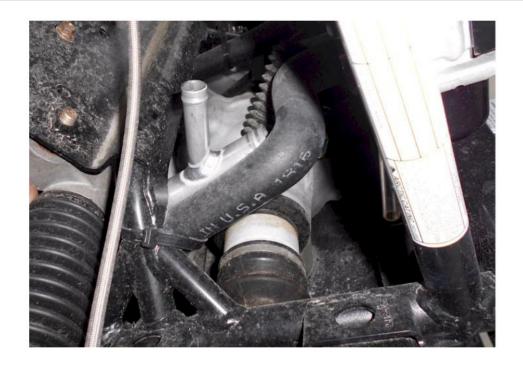


Figure 8c - 700 Lower Hose

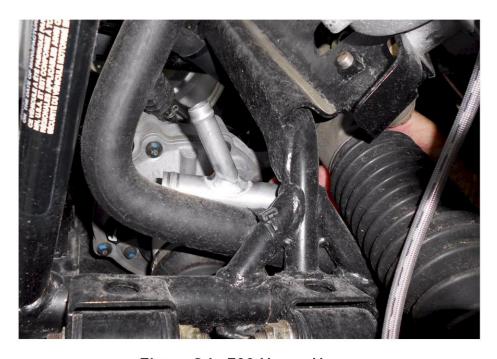


Figure 8d - 700 Upper Hose

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3. Insert the Y connectors exactly as shown in Fig 9 in the radiator hoses. Before cutting the radiator hoses, be sure that the placement of Y's will not interfere with any part of the vehicle. Be sure the hose connected to the temperature control valve of the heater is connected to the top radiator hose.

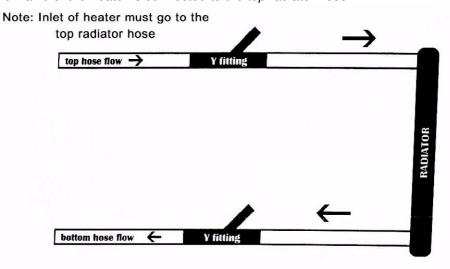


Figure 9

- 4. Cut the hoses to length.
- 5. Install the shutoff valve in the inlet hose in a position convenient for you.
- Before connecting the hoses to the Y connectors we recommend using a garden hose to run water through the heater hose and heater assembly. This step must be carried out as it forces air bubbles out of the heater core. Filling the heater core without the pressure of the garden hose leaves the chance for air pockets inside the core. This will lead to no or limited heating during operation.
- 7. Fit the hose to the Y fittings and tighten the clamps. Make sure all the hoses are as far away as possible from the driveshaft, steering shaft and sharp areas, etc.
- 8. Use cable ties as necessary.
- 9. Refill the cooling system as per the manufacturer's procedure.
- 10. Start and run the vehicle at a fast idle and run up to a normal operating temperature.
- 11. Check for leaks.
- 12. Check the heater operation.
- 13. Allow the vehicle to cool and recheck the cooling system level and coolant ration; fill and/or alter the coolant ration as required. If the heater fails to blow hot/warm air once the vehicle is up to operating temperature, there may be an air lock in the heater unit.
- 14. Temporarily block off the top/inlet radiator hose between the Y fitting and radiator.
- 15. Start and run the vehicle up to operating temperature.
- 16. Feel the outlet/lower hose from the heater until it feels hot. The heater should now continue to blow hot/warm air. This procedure may have to be repeated a few times to remove the air from the system. Allow the vehicle to cool. restart the vehicle and run up to operating temperature. Recheck the heater operation.

Please note: the heater output will be limited at idle. All testing should be done at a fast idle.

- 17. Cut the heater hoses to length.
- 18. Before connecting the hoses to the Y connectors we recommend using a garden hose to run water through the heater hose and heater assembly. This step must be carried out as it forces air bubbles out of the heater core. Filling the heater core without the pressure of the garden hose leaves the chance for air pockets inside the core. This will lead to no or limited heating during operation.
- 19. Fit the hose to the Y fittings and tighten the clamps. Make sure all hoses are as far away as possible from the driveshaft, steering shaft and sharp areas, etc. 11



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- 20. Use cable ties as necessary.
- 21. Refill the cooling system as per the manufacturer's procedure.
- 22. Start and run the vehicle at a fast idle and run up to normal operating temperature.
- 23. Check for leaks.
- 24. Check the heater operation.
- 25. Allow vehicle to cool and recheck the cooling system level and coolant ratio, fill and/or alter coolant ratio as required. If the heater fails to blow hot/warm air once the vehicle is up to operating temperature, there may be an air lock in the heater unit.
- 26. Temporarily block off the top/inlet radiator hose between the Y fitting and radiator.
- 27. Start and run the vehicle up to operating temperature.
- 28. Feel the outlet/lower hose from the heater until it feels hot. The heater now should be blowing hot/warm air. Remove the clamp from the radiator hose. The heater should continue to blow hot/warm air. This procedure may have to be repeated a few times to remove the air from system. Allow the vehicle to cool, restart the vehicle and run up to operating temperature. Recheck the heater operation.

Please note: the heater output will be limited at idle. All testing should be done at a fast idle.

### **Defrost Duct Installation**

- 29. Attach the 2.5" duct hose to the defrost duct and secure with cable ties.
- 30. Determine where you wish to install the defrost vents Figure 10 shows approximately where the vents can be located. *Be sure they clear any windshield fittings*.



Figure 10

31. Using the supplied hole saw, drill the holes for the vents. Before drilling any holes, check the area behind the dash panels to make sure no damage will occur by drilling holes and that there is sufficient room for the vent and hose.



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- 32. Stretch the duct hose from the heater to up behind the dash to a length past up in behind the dash area.
- 33. Cut the hose, making sure you have enough hose to go between the defrost vents.
- 34. Attach the duct Y to the heater duct and secure with a cable tie.
- 35. Divide and cut the remaining duct hose in half.
- 36. Attach each piece to the duct Y and secure with a cable tie.
- 37. Run each hose out to the vent hole and pass through the hole in the dash.
- 38. Attach to the vent inlet and secure with cable ties.
- 39. Use Figure 11 as a guide.

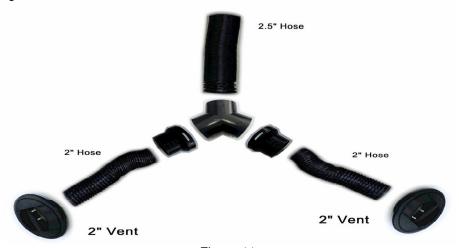


Figure 11

40. Place the vents into the holes and push down carefully until the vents snap into place.

Important Tip: Cleaning any burs from around the hole with a knife will make installing the vent into place easier.





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**Installed View** 

# **Before Your Next Ride:**

Verify that no leaks have occurred and that the radiator fluid level is per the manufacture's specifications.