

# CFMoto UForce 1000

## ICCH-BD-C-CFU1000

1x 1 1/4" Hole Saw



1x 3" Hole Saw

1x Hole Saw Arbor

4x #16 Hose Clamp



10x #10 Hose Clamp



2x 1 1/4" Grommet



1x 3/4" Grommet



2x 1" Aluminum Y's



1x - Heat Control Valve

1x - Heat Control cable

1x - Pre-Made Power Loom



30x - 11" Zip Ties



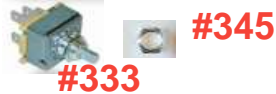
2x - 1035 Red Plate



2x - #2 Knob

1x - Blower Switch

1x - Blower Switch Nut



2x - Plastic 90 Degree Fittings



4x - Plastic Pushpins



2x - 1/4" x 3/4" Carriage Bolt



2x - 1/4" Fender Washer



2x - 1/4" Nylock Nuts



2x - 5/16" x 5" Carriage Bolts



2x - 5/16" Serrated Flange Nuts





#505

32" - 2" Duct Hose



#620

1x - Standard Heater

2 Seater

10' - 5/8" Coolant Hose

4 Seater

13' - 5/8" Coolant Hose



#504



#1005P

Heater Face Bracket with Ports

4x - 2" Vents



#501

2x - 3" Vents



#502

3x - 2" Plastic



#503



1x - 1120 Center Vent Bracket #1120

1x - 1122 Main Heater Bracket



#1122



1x - 1123 Lower Vent Bracket #1123

## CFMoto Uforce 1000 Ice Crusher Heater



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.**

**Always disconnect vehicles negative battery lead before working on electrical systems.**

**Please note: Before drilling** any holes check area behind firewall/dash panels to make sure no damage or interference with equipment will occur by drilling holes and fitting of vents.

### 1. Preparation

- a. Remove the windshield, driver side door and passenger side door.
- b. Remove the center cup holder shown in Figure 1 by pulling upward and releasing the four push clips.
- c. Remove the lower center cubby shown in Figure 2 and set aside.
- d. Disconnect the negative battery terminal and secure the cable away from the terminal.

### 2. Vents, heater hose and mounting holes

- a. **Important Note & Tip for all hole saw holes: Do not allow the drill and hole saw to plunge through the plastic. Use a knife to remove any burrs created by the hole saw.**
- b. Position the Center Cup Holder Templates as shown in Figure 3. Transfer the hole centers as shown on the template and use the 3" hole saw with arbor to drill the holes.
  - i. Use a razor blade to cut straight lines between each pair of holes. This will result in two slotted holes as shown in Figure 4.
- c. Position the Coolant Hose Template as shown in Figure 5. Transfer the hole center locations and drill using the 1 1/4" Hole Saw. Insert the two 1 1/4" Rubber Grommets into the two holes.
- d. Position the 3/4" Rubber Grommet in the lower right corner (Passenger side) of the Cup Holder area as shown in Figure 6. Mark the circle and drill a hole using 3/4" Drill Bit. Insert the 3/4" Grommet.

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- e. The Lower Vent Bracket (contains two 2" Vent holes) takes the place of the template shown in Figure 7. Position the leading edge of the bracket along the leading edge of the angled plastic feature shown in Figure 7 and then center the bracket right to left. Once the bracket is centered, mark the hole locations and drill using a 1/4" Drill Bit.
- f. Position the Main Heater Bracket as shown in Figure 8. The bracket should be parallel to the bend in the firewall, shown in Figure 8. Position the passenger side of the bracket approximately 2.75" from the right hand side firewall feature. Position the bracket approximately 2.25" from the top firewall bend. Mark the hole centers and drill using a 1/4" drill bit.

### 3. Bracket & Heater Mounting

- a. Use the 1/4" Carriage Bolts to attach the Main Heater Bracket to the firewall. Insert the Carriage Bolts through the heater bracket and then into the firewall. Position the two 1/4" Fender washers on the back side of the firewall and secure the bolts using the include 1/4" Nylock Nuts.
- b. Instruction removed.
- c. Refer to the 2" Duct Hose layout shown in Figure 10. The measurements are referring to compressed hose dimensions. Lay a tape measure on a tape and compress the hose, mark the lengths needed, and use a pliers to cut the metal banding to create each of the hose lengths.
  - i. With the copper fittings on the left side of the heater, attach the two 6" pieces of 2" Duct hose to the middle and right 50mm connectors. **Tip:** To attach duct hoses to Y's and/or Vents either twist Duct Hose or Vents in a "screw" action. Use cable ties around all duct hose connections.
  - ii. Attach the 10" piece of hose to the left most 50mm connector.
- d. Position the Heater and hose assembly over the heater bracket and insert the 5/16" x 5" Carriage bolts through the heater and into the bracket. Secure with the 5/16" Serrated Flange bolts. Allow the 2" Duct hose to hang down behind the center console. It may be necessary to relocate an accessory wiring harness mounted to the dash panel crossbar. Refer to Figure 11.
- e. Position the Center Vent Bracket over the Cup Holder area, press it firmly into its position and mark the hole locations with a pen. Drill the hole locations with a 1/4" drill bit. Refer to Figure 12. It's easiest to drill these holes before assembling the Center Vent Bracket components as shown in Figure 12.
- f. Place a 7/16" Flat Washer over the switch armature, then place one of the Red metal plates as shown in Figure 13. Insert the switch from behind the Center Vent Bracket and secure it with the Low Profile Hex Nut. Tighten firmly.
- g. Press the 3" and 2" vents into their respective holes on the Center Vent Bracket.
- h. Cut the 2" Duct Hose lengths shown in Figure 15. Assemble the hoses over the 2" Plastic Y's, secure the hoses using the included zip ties.



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- i. Attach the 2" Y Fitting assemblies to the 2" and 3" vents as shown in Figure 16. Be sure to orient the 1" and 1.5" piece of 2" duct hose according to Figure 16.
- j. From the Passenger Side wheel well, insert the Heat Control Cable through the opening in the frame shown in Figure 17. The cable can be routed through the 3/4" Rubber Grommet and into the cup holder area.
- k. Install the Heat Control Mechanism using the stamped metal clip to secure the cable to the Control Mechanism. Supplemental instructions are included with the Heat Control Mechanism packaging. See Figure 18.
- l. With the Heat Control Mechanism attached to the cable, route the mechanism between the 2" duct hose as shown in Figure 19. Refer to Figure 14 to orient the Heat Control Mechanism and the Flat Spot on the red metal plate. Note: There is no need to use a 7/16" Flat washer on this assembly. Secure using the remaining low profile hex nut.
- m. Insert the two black knobs onto the switch armatures.
- n. Position the Center Vent Bracket assembly near the 3" slotted hole openings, pull the right most and middle 2" duct hose through the openings and attach them to the base of the plastic Y's. Secure using zip ties.
- o. Position the Center Vent Bracket assembly over the four 1/4" holes and use the include plastic push pins to attach the bracket.
- p. Cut 2" Duct hose according to Figure 22, attach it to the remaining 2" Plastic Y using Zip Ties. Insert the 2" Vents into the Bracket (Figure 22 shows a prototype bracket, the final version is slightly different but materially the same). Attach the 2" Duct hose to the 2" Vents.
- q. Lift the bracket up to the holes drilled earlier, use the 1/4" hardware to attach the bracket to the plastic dash.
- r. Connect the remaining 2" Duct Hose to the 2" Plastic Y.

### 4. Wiring

- a. Using the included wiring harness, insert the 1/4" Spade (female) terminals on to the back of the switch as shown in Figure 20.
- b. Route the four pin connector to the heater's four pin connector and firmly attach the two.
- c. Route the black and blue wires to the area near the cigarette lighter.
- d. Pull the panel that contains the cigarette lighter straight out to expose the cigarette light wiring. Strip back a small amount of the black electrical tape toward the rear of the cigarette lighter cable and use the insulation displacement crimps to attach the Blue wire to the White with Green Stripe wire. The Black wire connects to the Green with White Strip wire. Refer to Figure 21.
- e. Reconnect the negative battery terminal and test the fan operation at all three speeds.

### 5. Heater Hose Routing & Hookup— **NOTE: Check the two copper fittings on the heater and remove the black shipping plugs if they are present.**

- a. Cut two pieces of 5/8" Heater Hose, one at 10" and one at 8".

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- b. Insert right angle fittings into both pieces and secure using #10 Hose Clamps.
- c. Insert the 8" piece of 5/8" Heater Hose into the copper fitting that is nearest to the firewall. Secure with a #10 Hose Clamp.
- d. Insert the 10" piece of 5/8" Heater Hose into the copper fitting that is furthest from the firewall. Secure with a #10 Hose Clamp.
- e. From the Passenger side wheel well, locate the lower heater hose coming from the radiator. Use a razor blade to score the protective plastic shielding 5 inches along the radiator hose as shown in Figure 23. Use a flat head screw driver from the end nearest the radiator to rip the plastic along the score line.
- f. Do the same thing on the upper radiator hose shown in Figure 24.
- g. Temporarily disconnect the lower radiator hose from the radiator. Collect the coolant using a funnel as it can be used again.
- h. Mark off a 1-1.5" chunk of the Upper and Lower radiator hoses to be cut and removed. This will make room for the CNC machined aluminum Y's. Refer to Figure 25 and Figure 26.
- i. Before installing the Aluminum Y's, using some teflon tape on the 5/8" Brass barb fittings to ensure no leaks are possible. Insert the 5/8" Barbs securely. Then proceed with installing the aluminum Y's exactly as shown in Figure 25 and Figure 26. Secure the 1" Radiator Hoses using the #16 hose clamps.
- j. Attach the Black Heat Control Valve to the end of the Heat Control Cable, use the supplemental instructions for guidance on attaching the cable.
- k. Insert the 5/8" Heater Hose from the Radiator Side of the firewall into the upper most 1 1/4" Rubber Grommet. Tip: Use windex to lubricate the hose if it is tight going through the grommet. Insert the 5/8" Hose to the right angle fitting and secure using a #10 hose clamp. Route the 5/8" hose up to the Upper Radiator hose Aluminum Y, make sweeping loops as to not kink the coolant line. Cut the hose to length but do not connect it to the Aluminum Y.
- l. Insert the remaining 5/8" Heater Hose into the bottom most rubber grommet, attach it to the lower right angle fitting, secure using a #10 hose clamp. Again make a large radius loop until the coolant hose reaches the Aluminum Y, but do not attach it.
- m. Identify an area of hose just above the Aluminum Y that is connected to the Upper radiator hose and cut the 5/8" hose so the Heat Control Valve can be inserted. Secure with #10 Hose Clamps.
- n. Please read and perform this step!! Prior to final hookup of the 5/8" heater hoses, attach a garden hose to the 5/8" heater hose. Run water through the heater system for 30-60 seconds. Wetting the inner walls saves you a great deal of frustration and makes bleeding the system a breeze and allows for excellent heat quickly.**
- o. Connect each end to their respective Aluminum Y fittings. Avoid sharp bends in the hose and cut off excess hose if needed. Secure the heater hose using #10 hose clamps. Refer to Figure 27 and Figure 28.

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### 6. Bleeding & Reassembly

- a. Refill the radiator and reservoir (if needed) using manufacturer approved coolant. Start the vehicle and run at a fast idle. Check for leaks and do not allow the vehicle to exceed 230 degree Fahrenheit.
- b. Allow vehicle to cool and recheck cooling system level, fill as required. Refill cooling system as per manufacturer's procedure. Start and run the vehicle at a fast idle and run up to normal operating temperature. Check for leaks. Check heater operation. Allow vehicle to cool and recheck cooling system level, fill as required.
- c. 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. Temporarily block off the top/inlet radiator hose at the radiator. Start and run vehicle up to operating temperature. Feel the outlet/lower hose from heater until it feels hot. The heater now should be blowing hot/warm air. Remove clamp from radiator hose. The heater should continue to blow hot/warm air. This procedure may have to be repeated a few times to remove air from system. Allow vehicle to cool, restart the vehicle and run up to operating temperature, recheck heater operation. **Please note:** Heater output will be limited at idle, all testing should be done at a fast idle.



Figure 1

## CFMoto Uforce 1000 Ice Crusher Heater

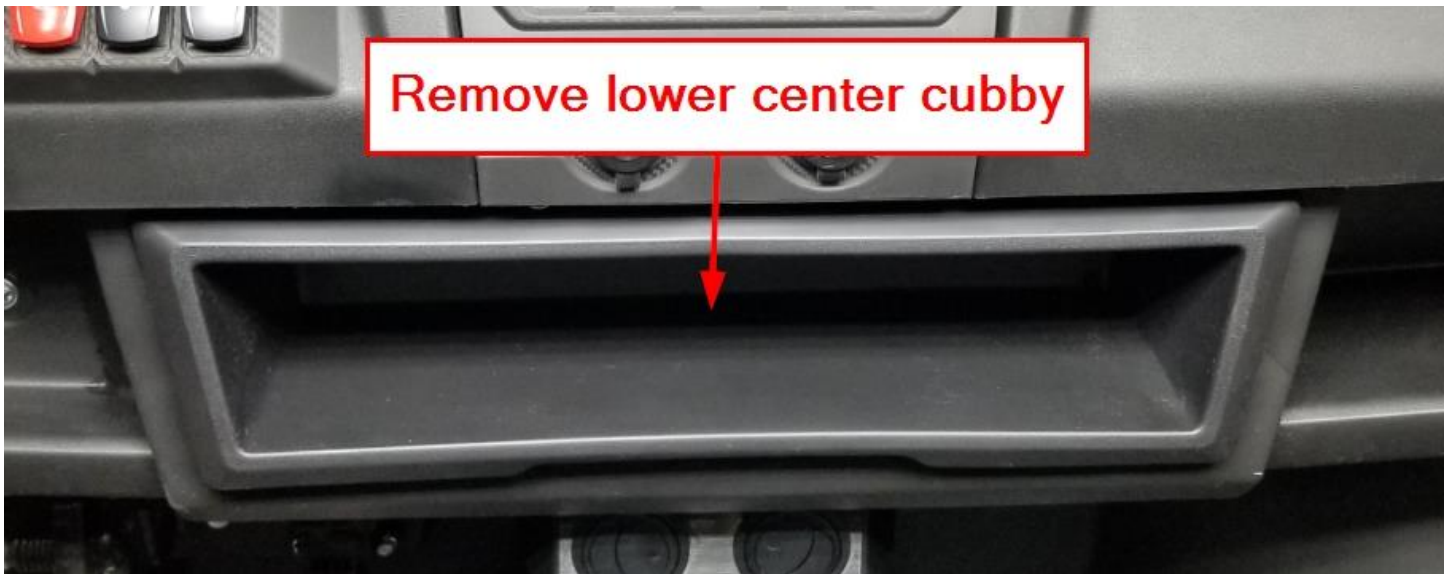


Figure 2

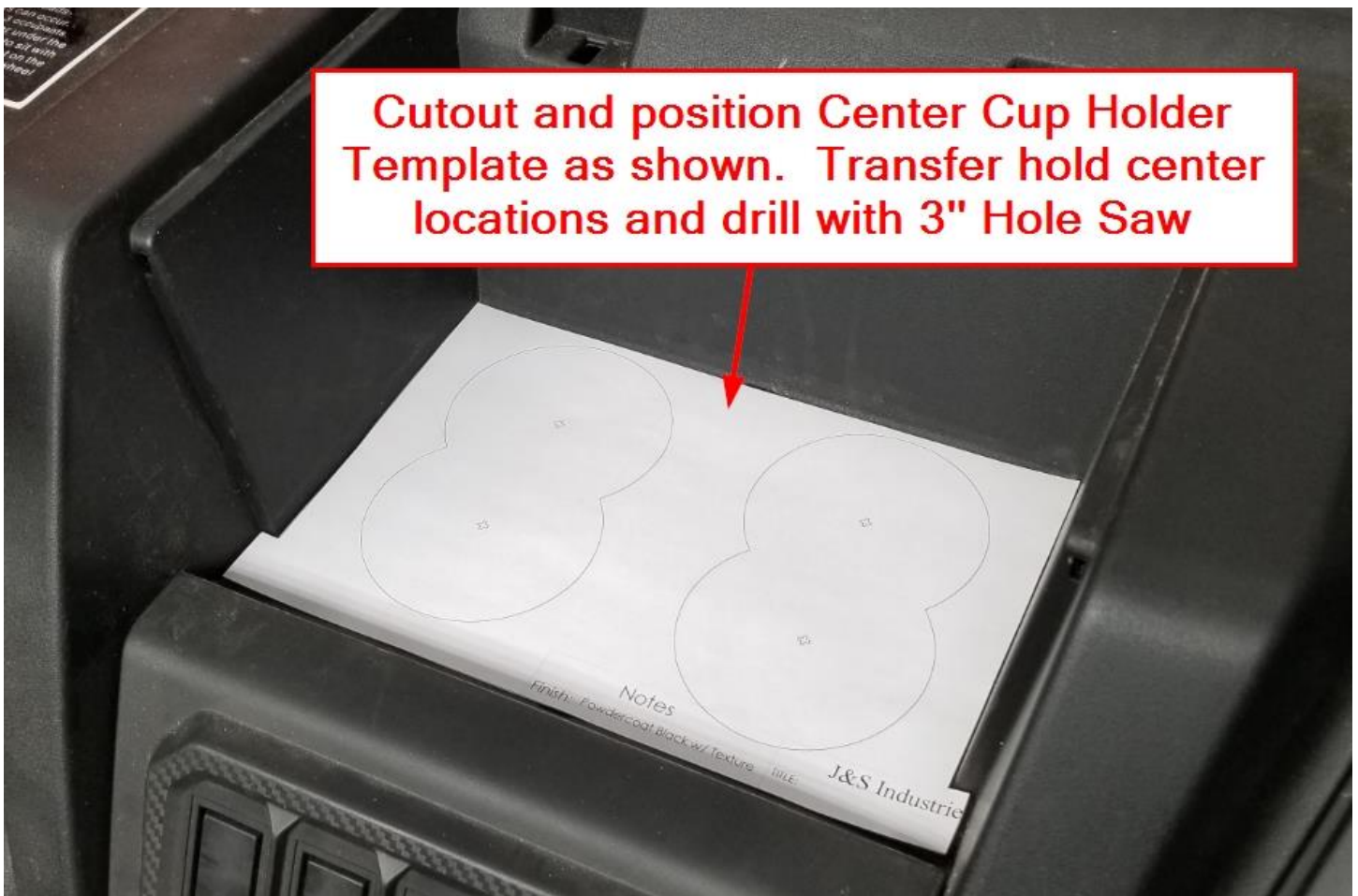


Figure 3



## CFMoto Uforce 1000 Ice Crusher Heater



Figure 4

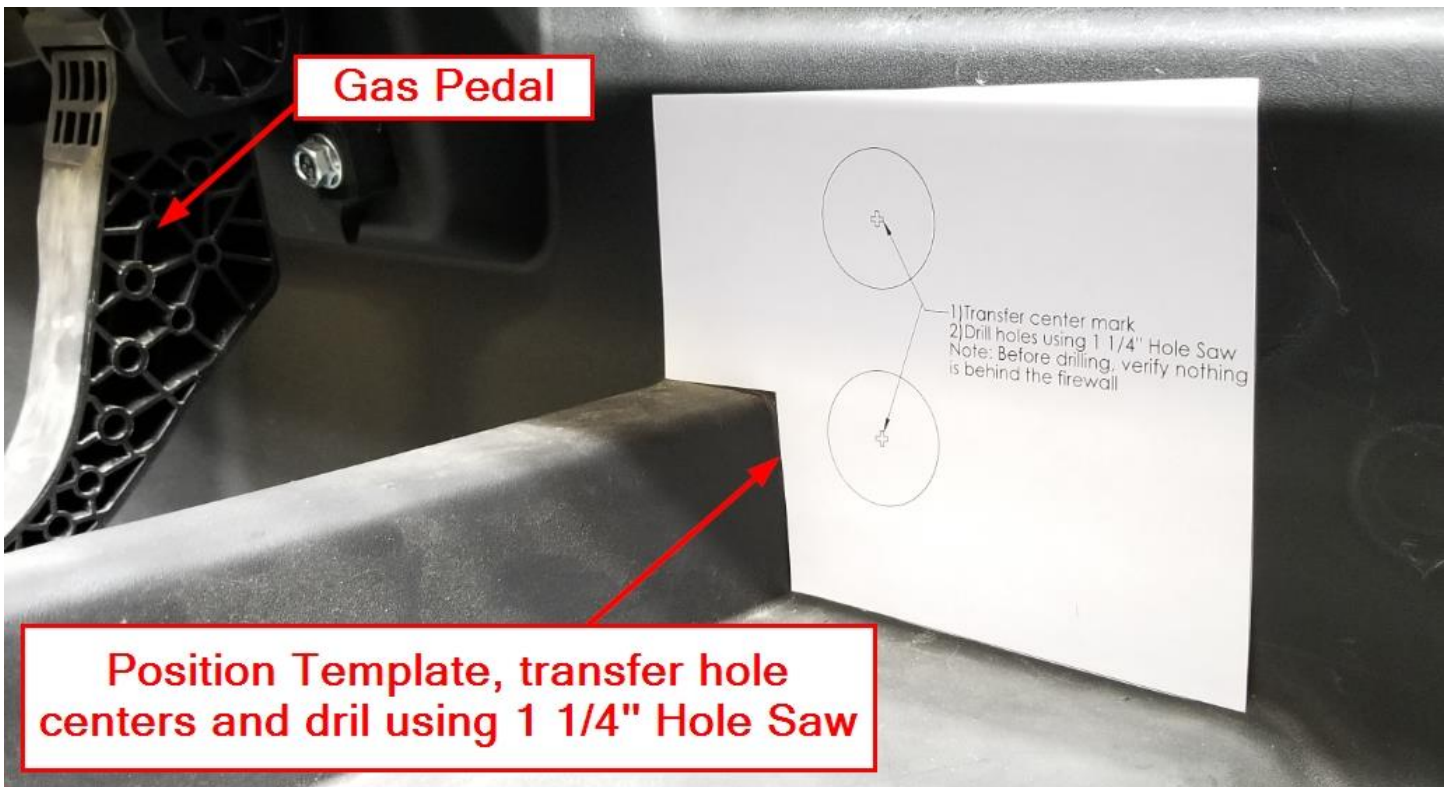


Figure 5

## CFMoto Uforce 1000 Ice Crusher Heater



Figure 6

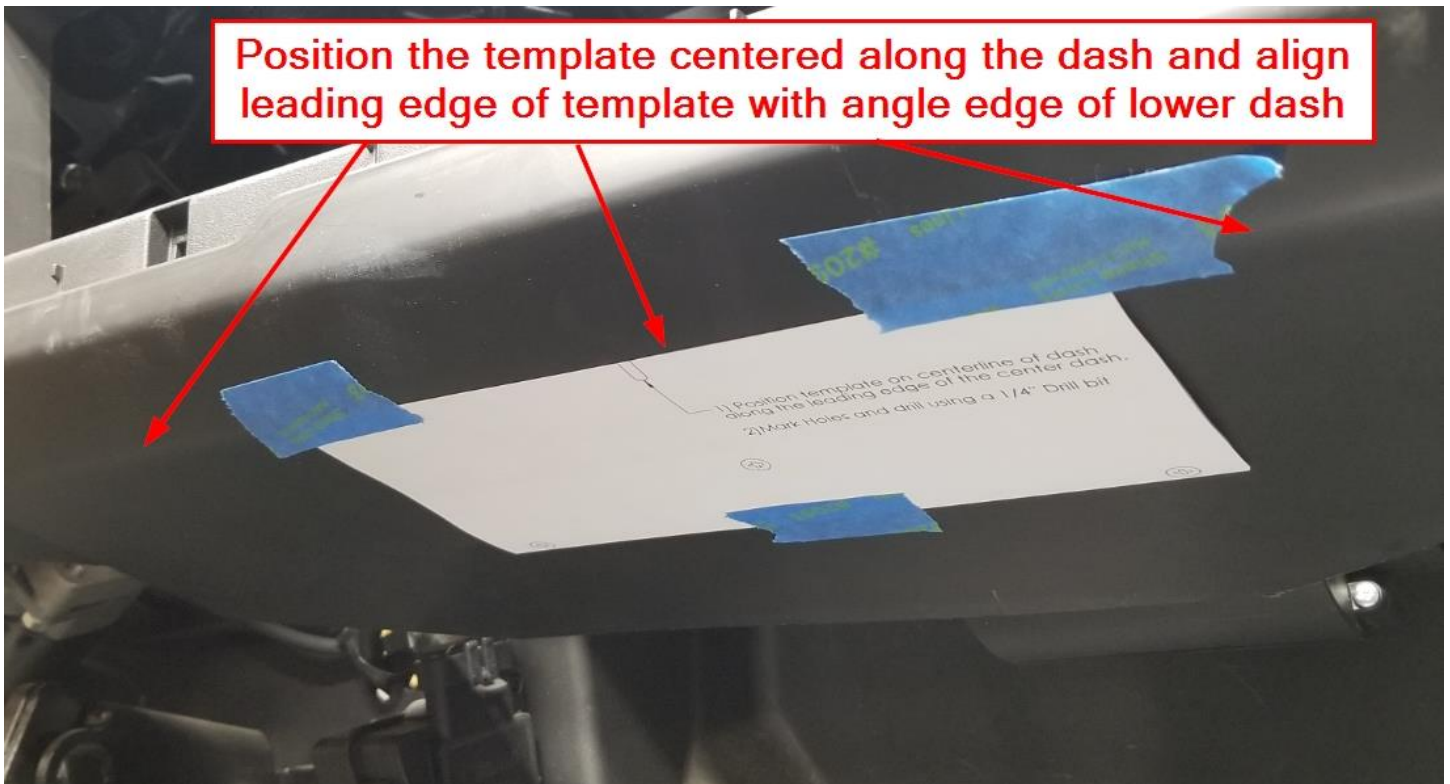


Figure 7

## CFMoto Uforce 1000 Ice Crusher Heater

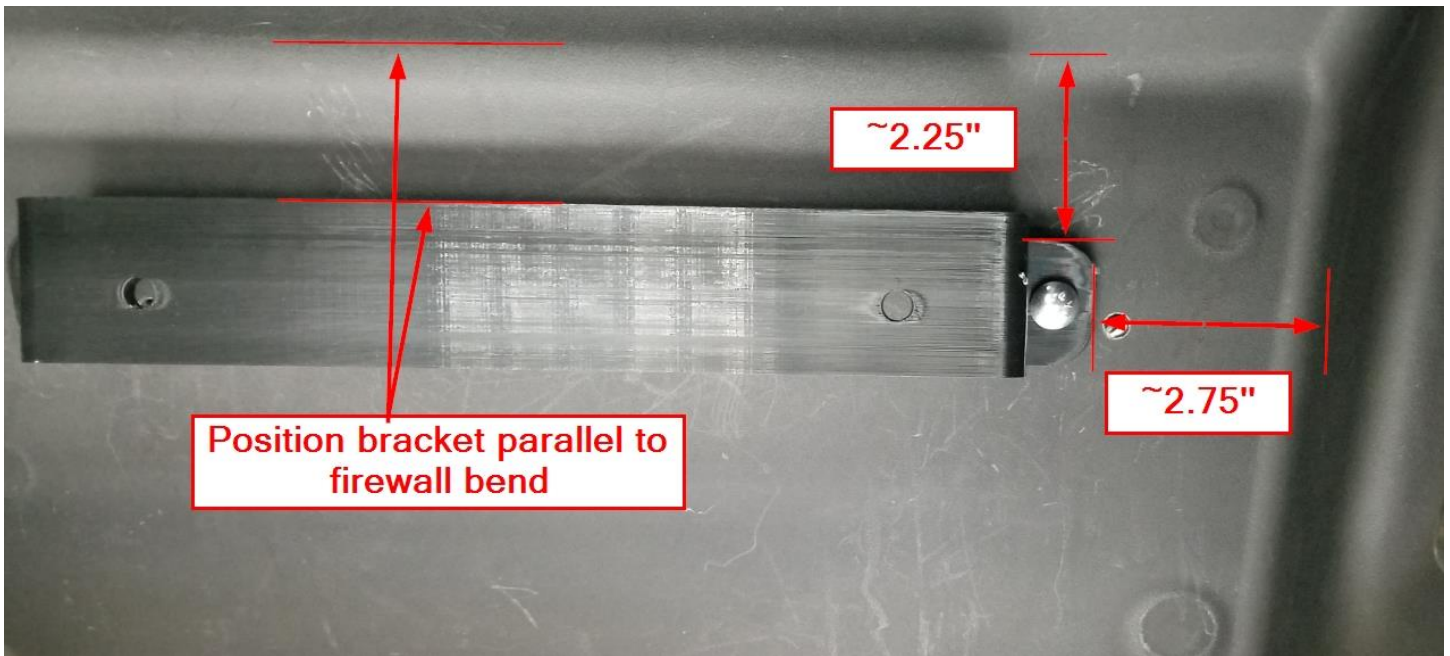


Figure 8

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Figure 9

## CFMoto Uforce 1000 Ice Crusher Heater

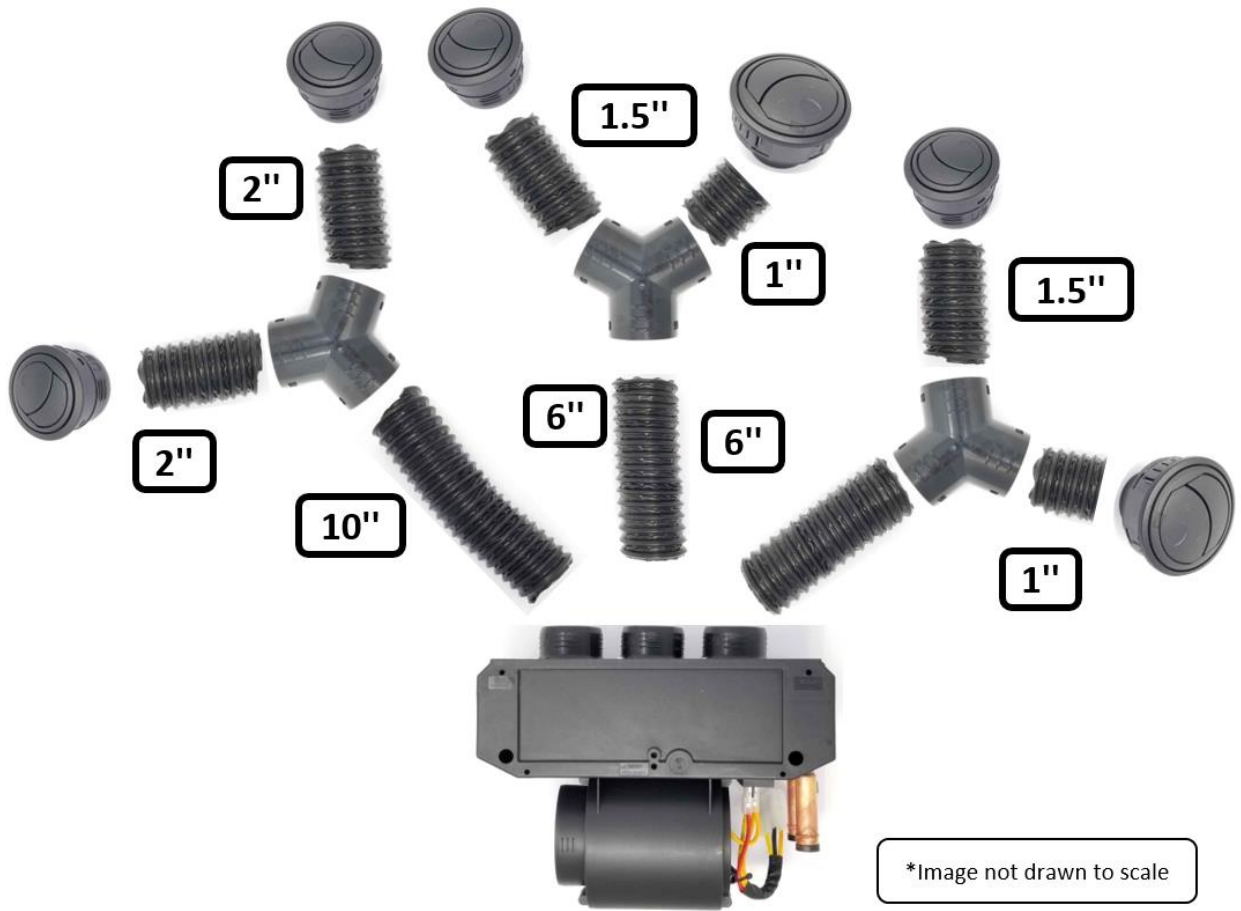


Figure 10



## CFMoto Uforce 1000 Ice Crusher Heater

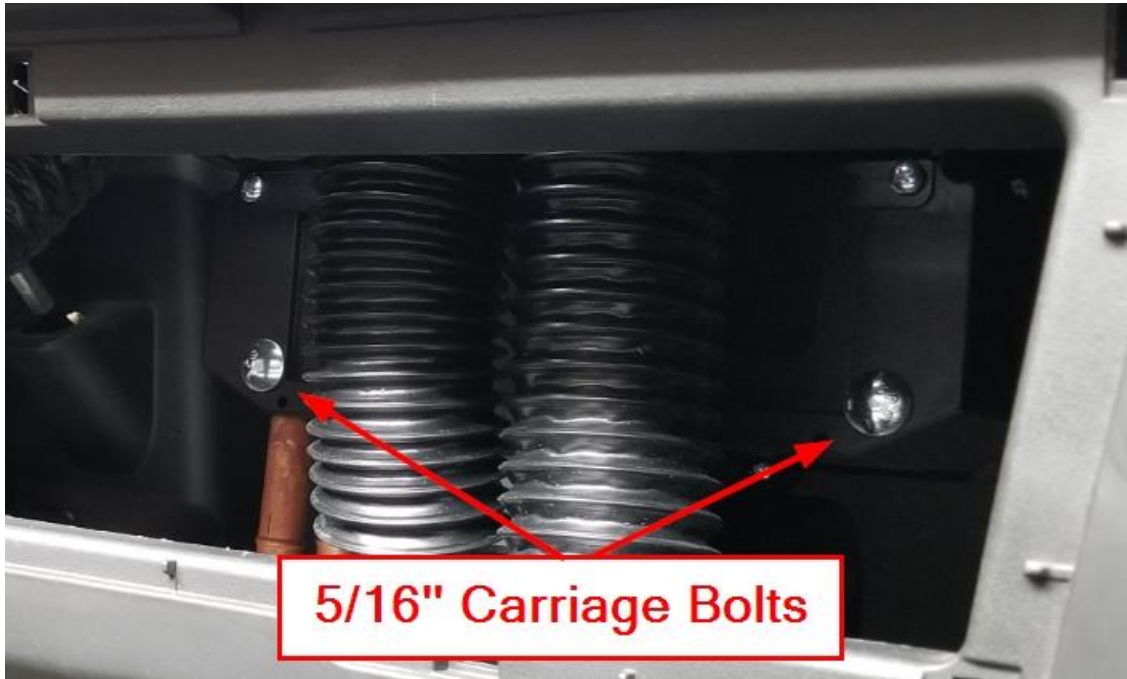


Figure 11



Figure 12

## CFMoto Uforce 1000 Ice Crusher Heater

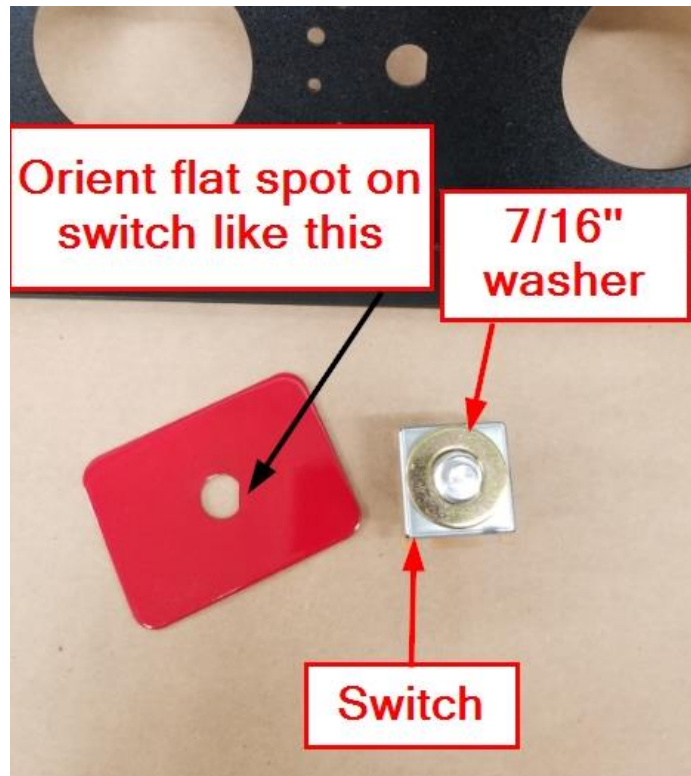


Figure 13

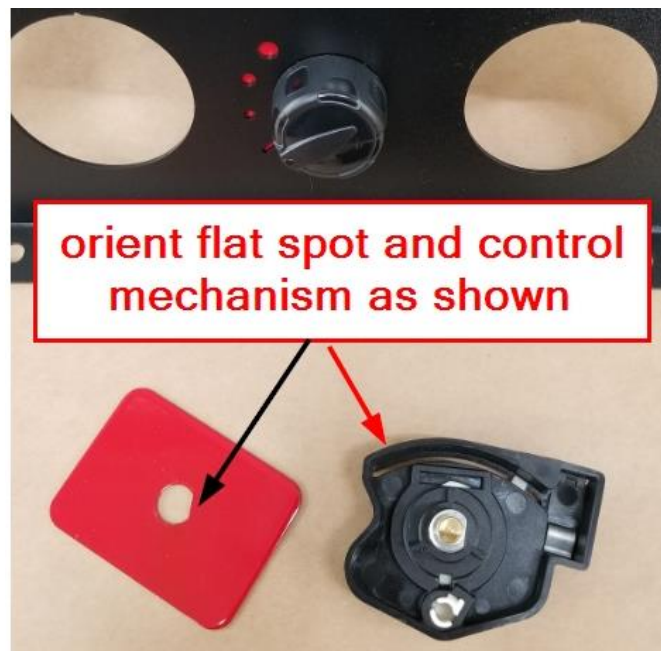


Figure 14

## CFMoto Uforce 1000 Ice Crusher Heater

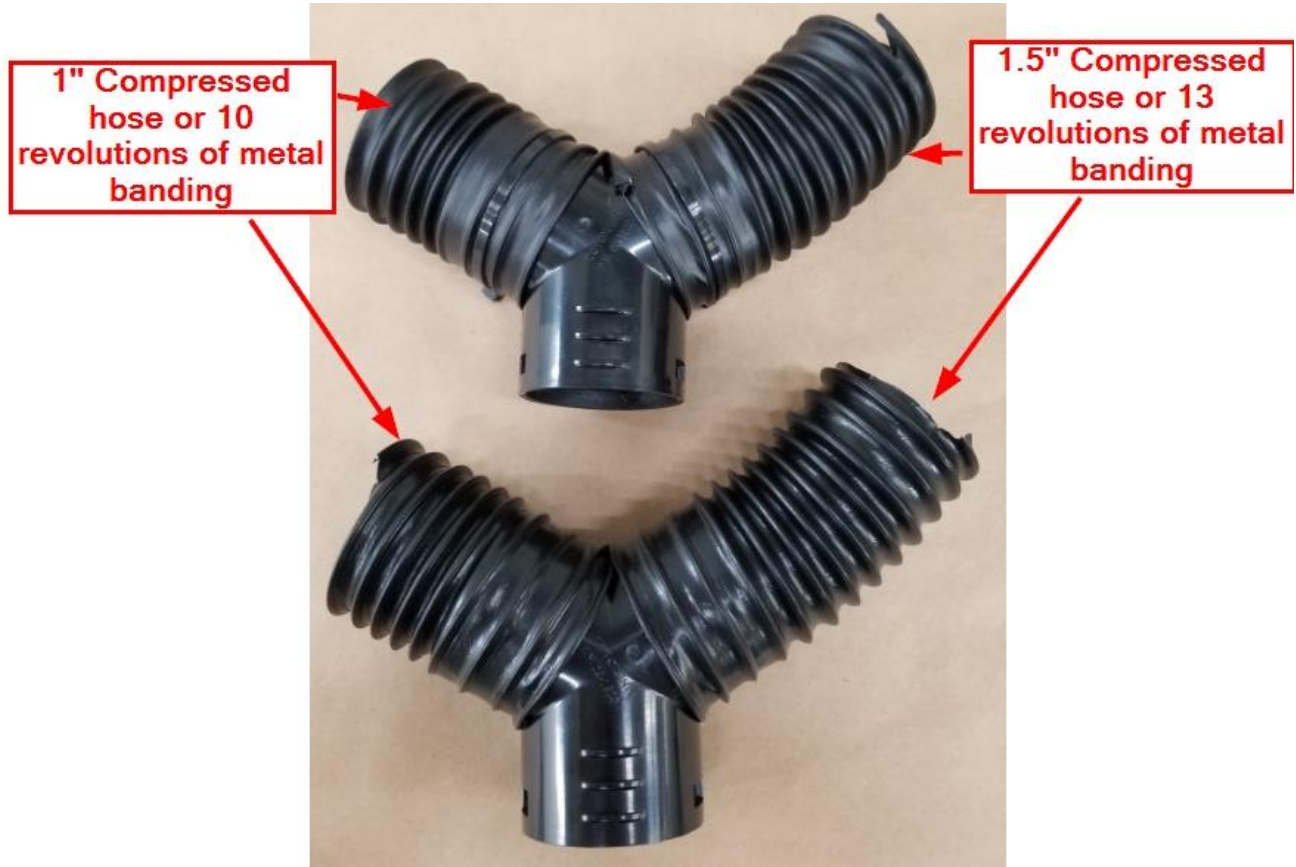


Figure 15



## CFMoto Uforce 1000 Ice Crusher Heater

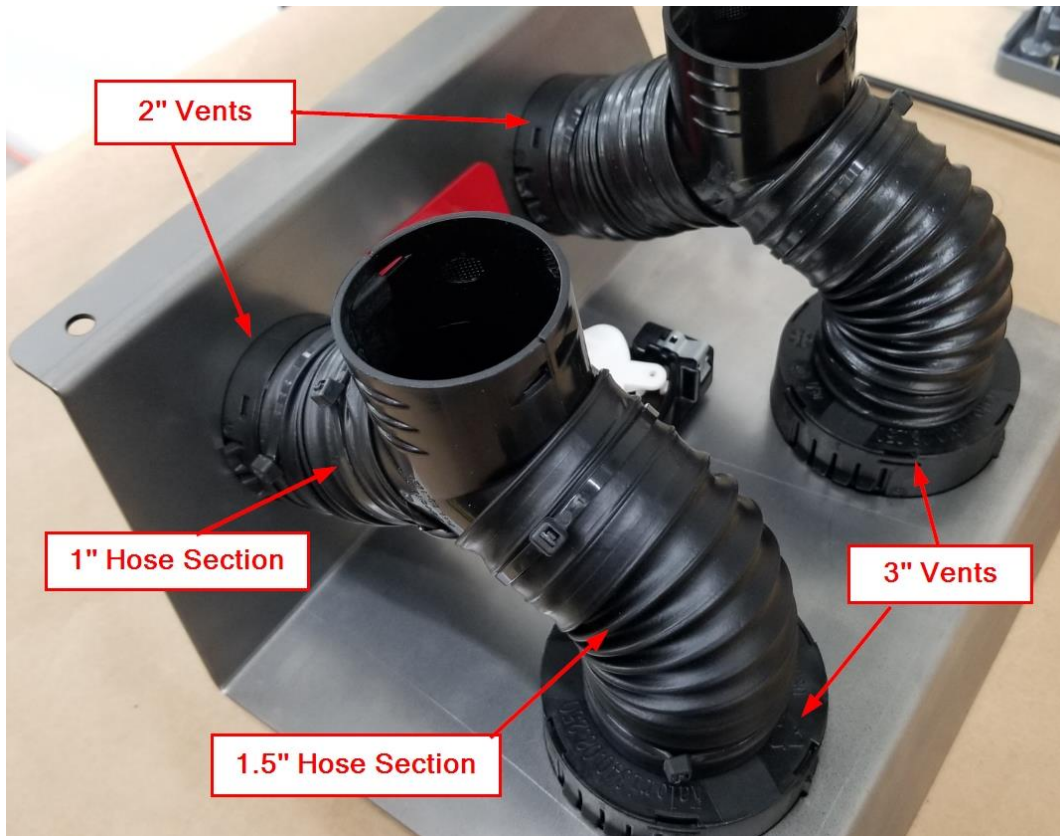


Figure 16

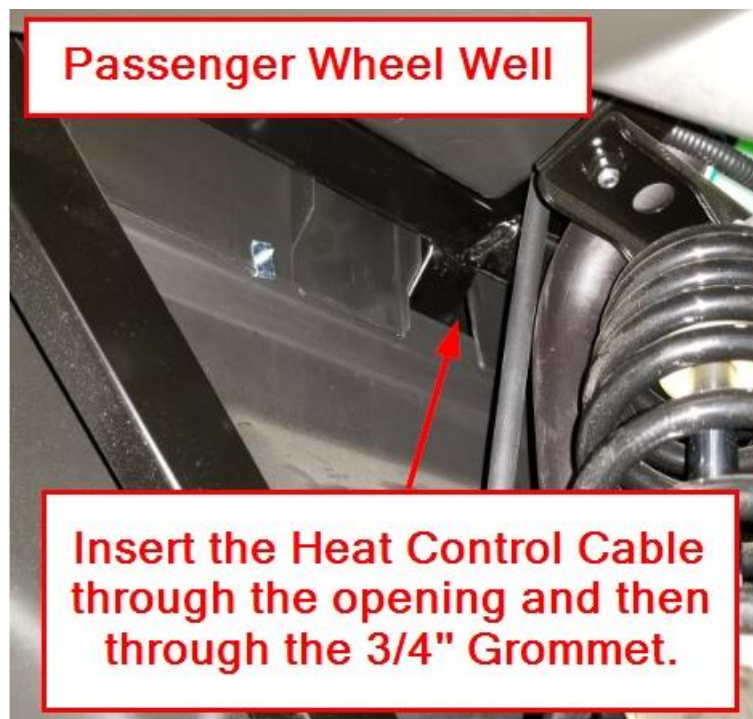


Figure 17



## CFMoto Uforce 1000 Ice Crusher Heater



Figure 18

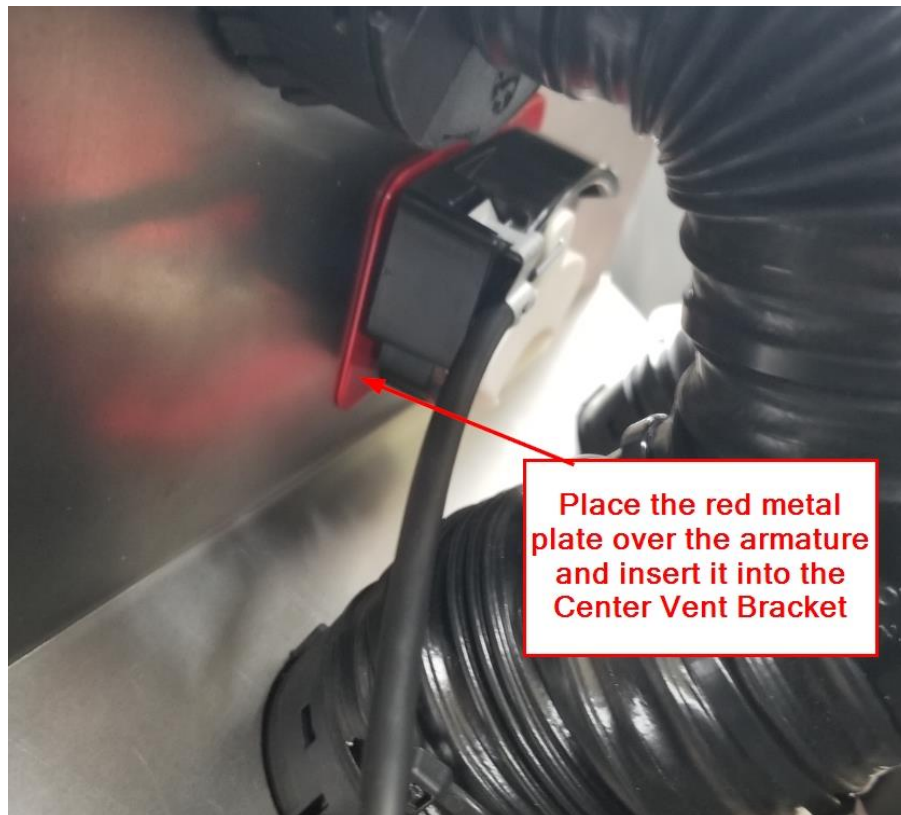


Figure 19

## CFMoto Uforce 1000 Ice Crusher Heater

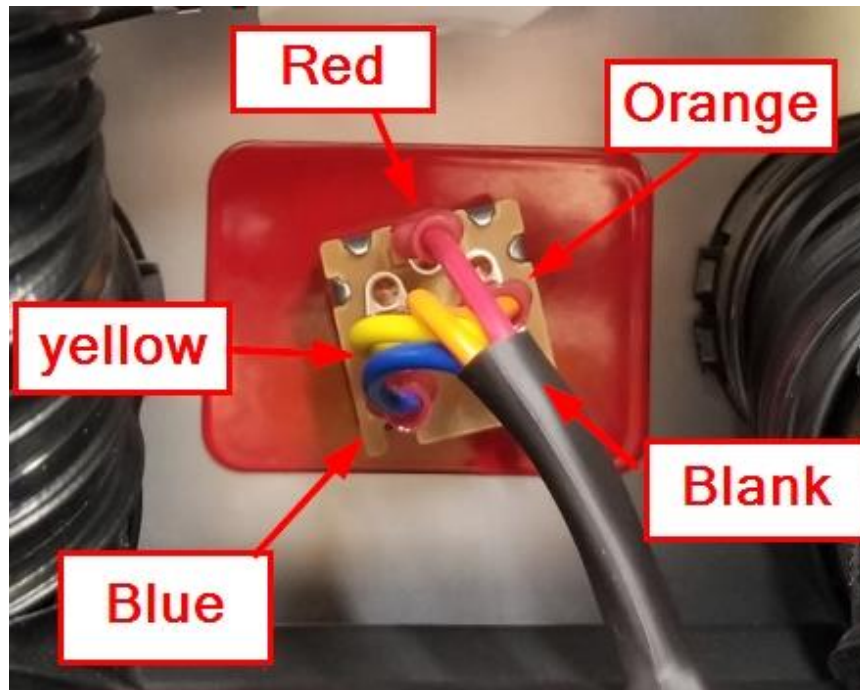


Figure 20

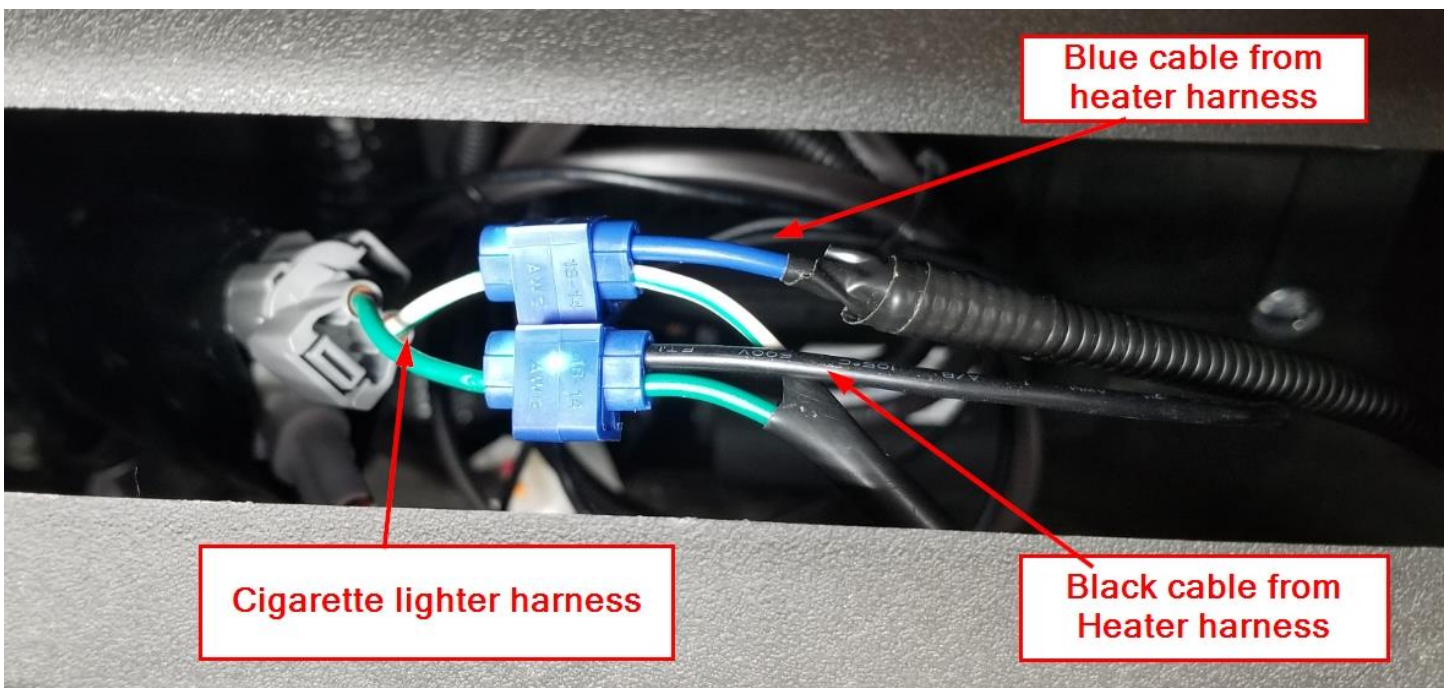


Figure 21



## CFMoto Uforce 1000 Ice Crusher Heater

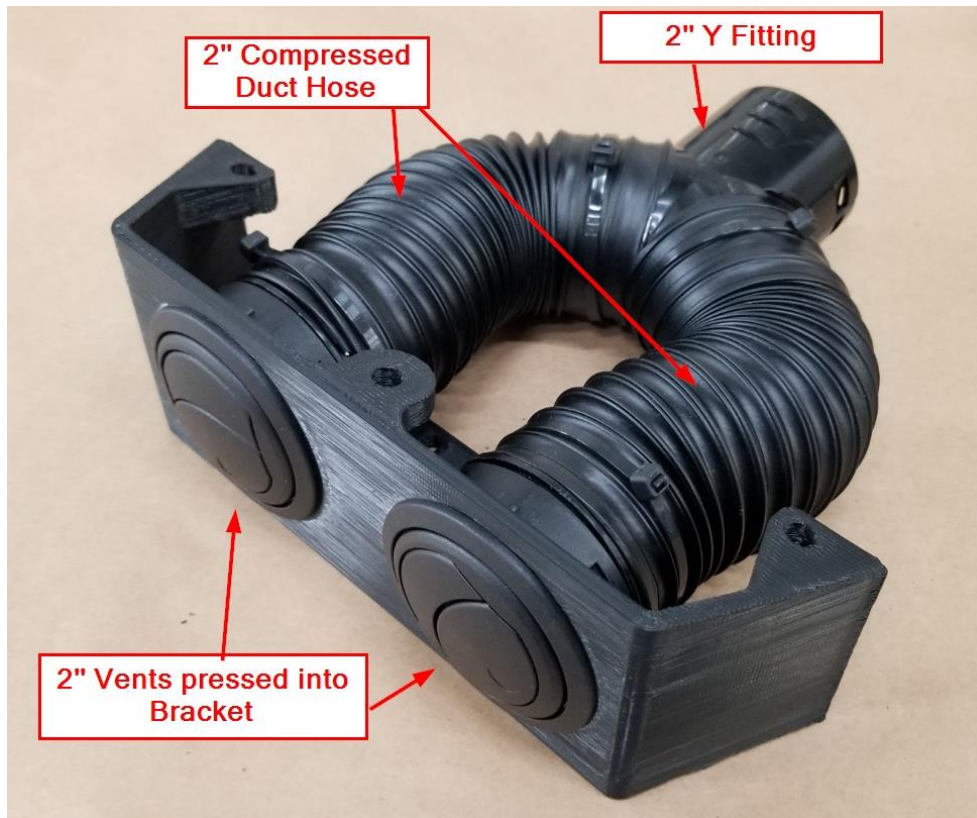


Figure 22

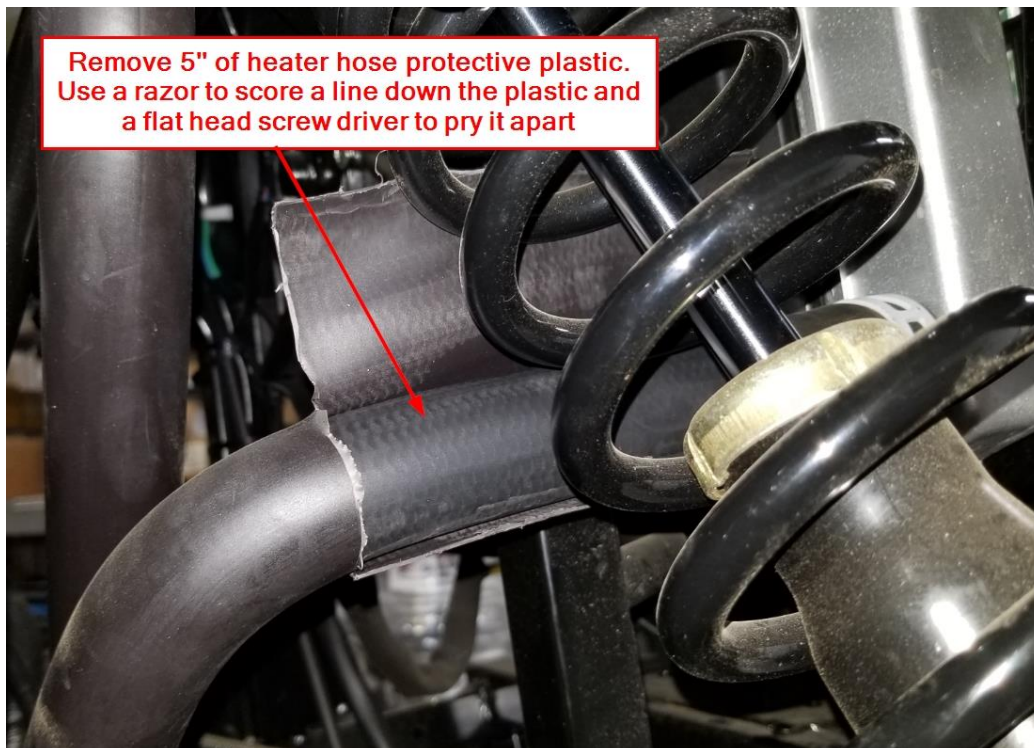


Figure 23

## CFMoto Uforce 1000 Ice Crusher Heater



Figure 24

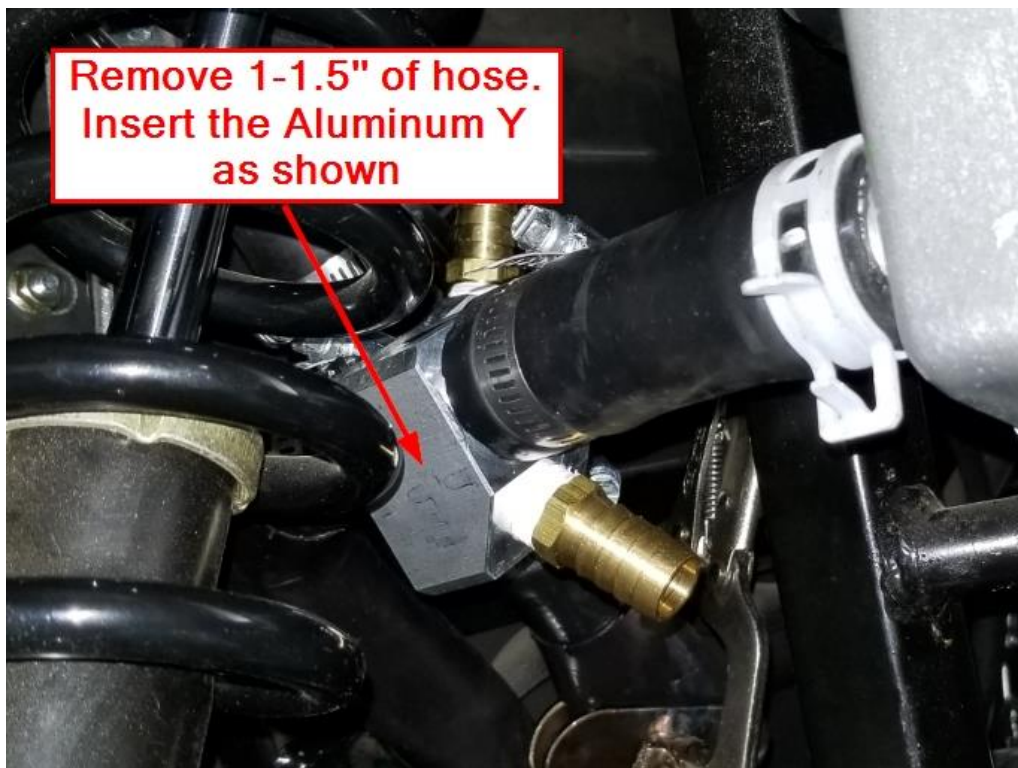


Figure 25



## CFMoto Uforce 1000 Ice Crusher Heater

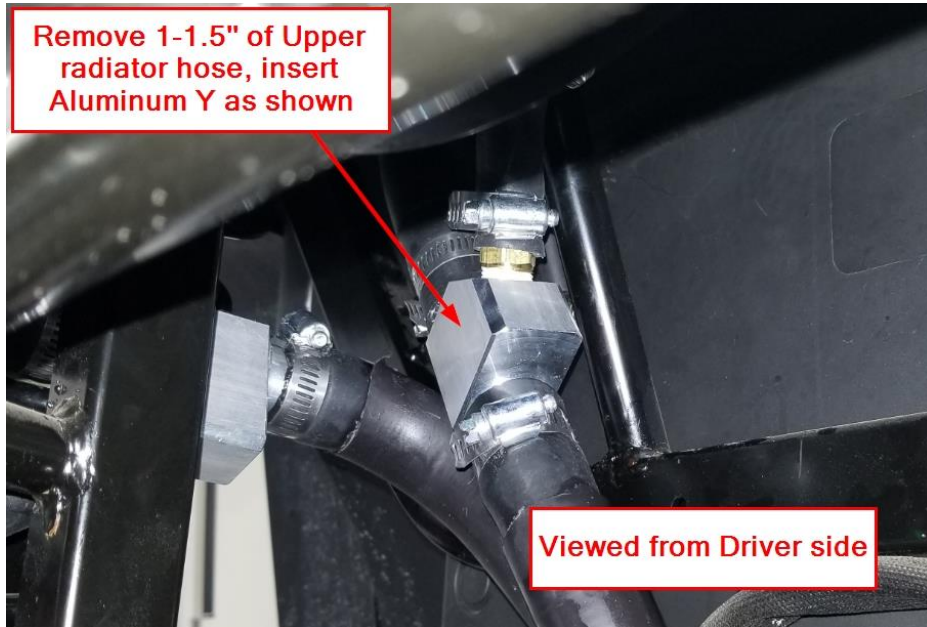


Figure 26

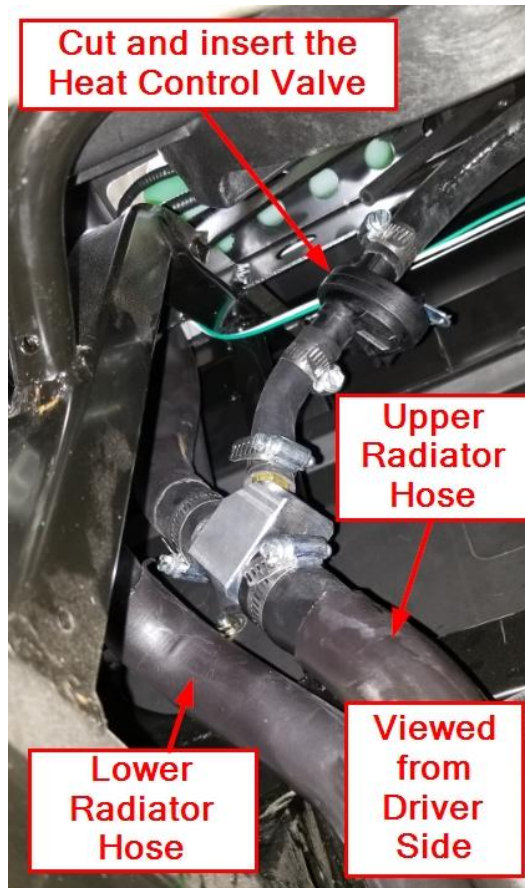


Figure 27

## CFMoto Uforce 1000 Ice Crusher Heater

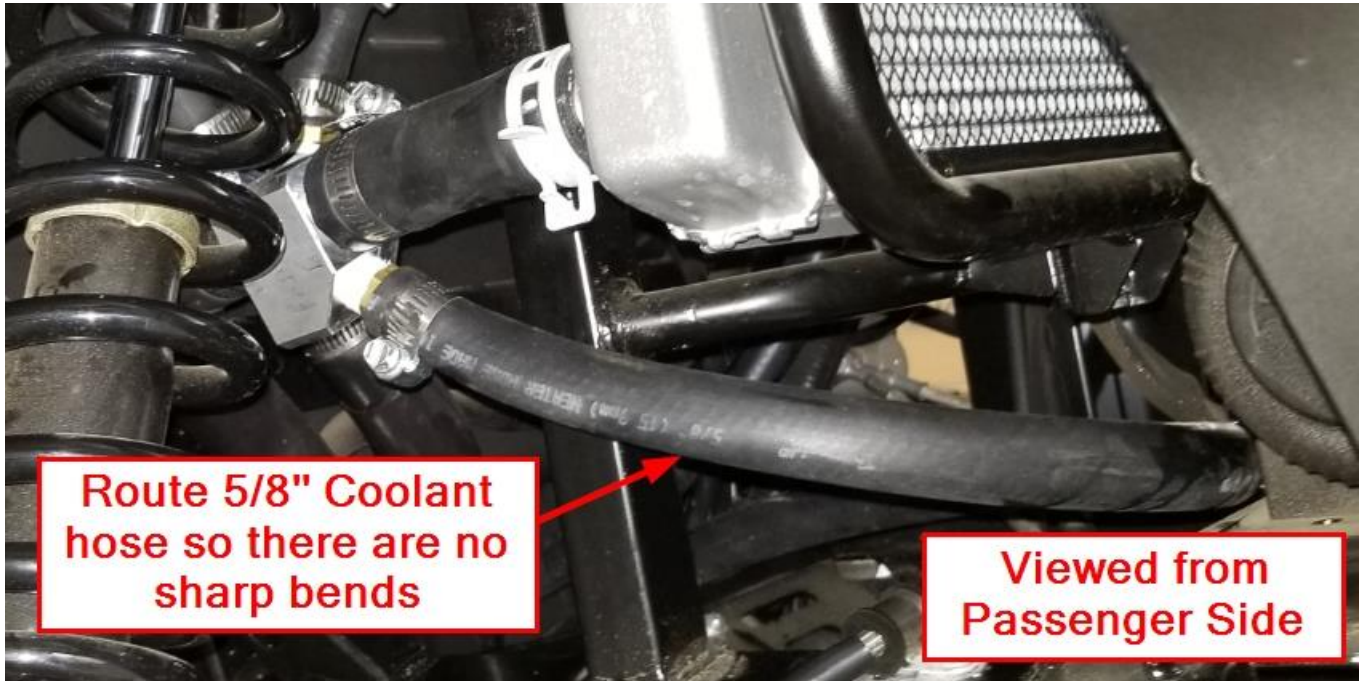


Figure 28



Figure 29

## CFMoto Uforce 1000 Ice Crusher Heater

HEATER WARRANTY – [utvheaters.com](http://utvheaters.com) and [coupersproducts.com](http://coupersproducts.com)

### **\*Coutersproducts.com/UTV Heaters.com Heater Warranty. 3 Year/36 Month Limited Warranty**

UTV Heaters warrants your Ice Crusher UTV Heater System to be free from defects in material and craftsmanship under normal use and service by the original consumer purchaser (end user) for a period of Three (3) year from the date of purchase on all components including electrical components. The warranty is null and void if the system has been damaged by accident, improper installation, unreasonable use, lack of proper maintenance, unauthorized repairs or modifications, or causes not arising from defects in materials and craftsmanship.

UTV Heaters obligation under this warranty are limited to repair of the product at UTV Heaters production facility, or the replacement of the product at UTV Heaters option and at UTV Heaters expense. Any expense involved *in the removal, reinstallation, or transportation of the product is **not** covered by this warranty.* Prior to return of any product to UTV Heaters, customer must contact UTV Heaters customer service, (802) 294-0016, [utvheaters@gmail.com](mailto:utvheaters@gmail.com), and obtain a Return Authorization Number. This number must be marked on exterior of carton for easy identification. Warranty product received at UTV Heaters without a Return Authorization Number may be returned at expense of sender.

Postage must be prepaid, and the original dated proof-of-purchase must be confirmed or provided. UTV Heaters will not be liable for any damages sustained in transport due to improper packaging or handling. The acceptance by UTV heaters of any product returned shall not be deemed as an admission that the product is defective or in any violation of any warranty.

This warranty is UTV Heaters only express warranty of this product. We reserve the right to make changes to products and policy that are in the best interest of UTV Heaters. No implied warranty shall extend beyond Three (3) year period from the date of the original consumer (end user) purchase. UTV Heaters will not be liable for any damages, for loss of use of this product, nor for any consequential damages, costs or expenses.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights not mentioned here that vary from state to state.

After receiving a Return Authorization Number send defective product to:

UTV Heaters

Attn: Warranty

23001 Industrial Blvd

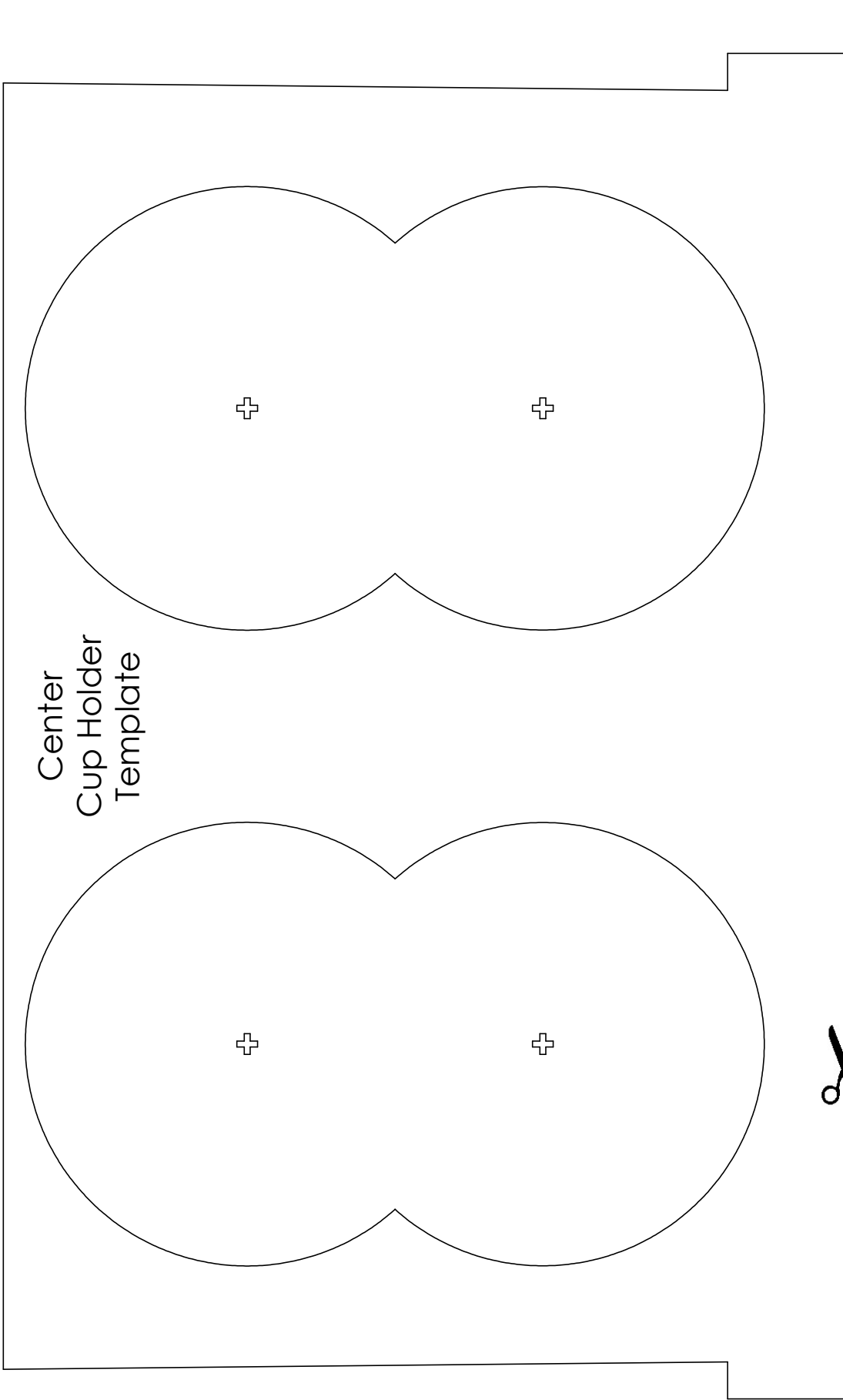
Rogers, Minnesota, 55374

\*UTV Heaters

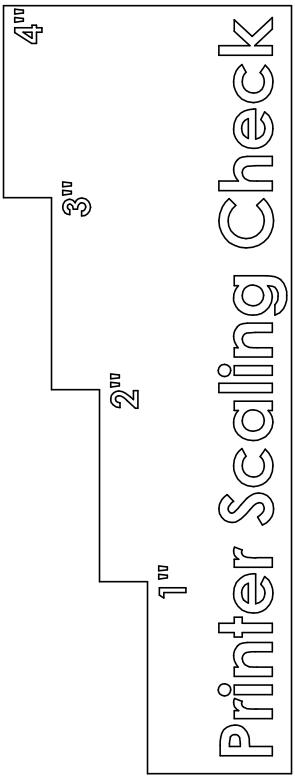




Position Template as shown in the instruction images. Transfer hole center locations and drill the four holes using the Pilot bit and 3" Hole Saw. Do not allow the hole saw to plunge through the plastic material and risk damaging contents behind the dash.



Center  
Cup Holder  
Template



Printer Scaling Check





Position Template as shown in the instruction images. Transfer hole center locations and drill the two holes using the Pilot bit and 1-1/4" Hole Saw. Do not allow the hole saw to plunge through the plastic material and risk damaging contents on the other side.

