## Intimidator GC1K ICCH-UD-C-INTGC1K

1x 55mm Hole Saw

1x 3" Hole Saw

1x Hole Saw Arbor

4x #16 Hose Clamp

6x #10 Hose Clamp





2x 5/8" Barb



1x - Pre-Made Power Loom



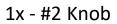
1x 7/8" Y

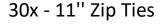




1x - Blower Switch







10x - #8 Sheet Metal Screws

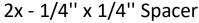






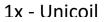




















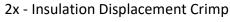








## **Water Pump Option**







3x 1/4" Nylock Nut





3x 1/4" x 1 1/2" SFB

2x - #10 Hose Clamp





5" - 3" Duct Hose

1x Standard Heater

50" - 2" Duct Hose







3" Grill Port

3 x 2" Plastic Y's

12' 5/8" Hose (2 Seat)





6 x 2" Vents

3 x 50mm Connectors







#1132



# **Water Pump Option**



1x - Water Pump Dash Switch



1x- Water Pump

## Ice Crusher Cab Heater Kit



# Ice Crusher Intimidator GC1K Heater Kit ICCH-UD-C-INTGC1K

Custome	er Name:	
	Standard Heater Unit Heater Brackets Hardware Bag Heat Control Kit Vent/Duct Bag 11" Cable Ties Wiring Loom 2" Duct Hose 3" Duct Hose 5/8 Heater Hose Instructions/Templates	Options Water Pump Upgrade Water Pump Dash Switch Clamp-off Tools Packed By





Please read all instructions before beginning installation. It is easiest to physically split the instructions in two halves, one the text portion and the other the picture portion. It makes referring back and forth between the two much simpler.

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. Pre-Installation

- a. Remove driver and passenger side doors for best access.
- b. Open the front hood and disconnect the negative battery terminal and secure the cable away from the terminal as shown in Figure 1.
- c. Remove the hood by first disconnecting the pneumatic cylinders. Use a flat head screw driver to remove the retainer clips (See Figure 1) on each cylinder, then pull the cylinder away from its mounting bolt. Remove the two hood hinges to disconnect the hood (See Figure 2). It may be helpful to place a 2"x4" under the hood to keep it from closing all the way while removing the hardware. Set hood aside.
- d. Remove the Front Lower Skid Plate as shown in Figure 3, this will aid in coolant line routing later.
- e. Remove the bench seat top to gain access to the engine as shown in Figure 4

#### 2. Panel Modification for Vents

- a. Using the Driver Side Top Dash Template, cut out the templates and position it as shown in Figure 5. Transfer the three hole centers to the plastic dash, drill the Defrost Vent hole using the included 55mm Hole Saw. Drill the two Switch holes using a 7/16" Drill Bit. Debur as necessary. Installation Tip: After cutting the 2" vent holes, use a razor blade to cut a small "V" shaped notch anywhere along the hole. Each 2" Vent has an anti-rotation notch molded into it, fit the notch into the 'V' groove for easier install, See Figure 6
- b. Position the Driver Side Hand Vent Template as shown in Figure 5. Transfer the hole center and drill using the 55mm Hole.



- c. Use the 3" Hole Saw to drill the Air Intake Hole as shown in Figure 7. Position the hole in the middle of the two vertical metal uprights and close to the horizontal support bracket without hitting the metal. The location of this hole is not crucial.
- d. Position the Passenger Side Top Dash Template as shown in Figure 8. Transfer the hole centers and drill using the 55mm Hole Saw. Due to the uneven surface it might help to pilot drill the holes first.
- e. Position the Lower Vent Template as shown in Figure 9. Transfer the two hole centers and drill using the 55mm Hole Saw.
- f. Refer to Figure 10 to drill two 55mm Holes at the rear of the Passenger Side dash area.
- g. Refer to Figure 11 to drill one 55mm Hole and one 7/16" hole as shown. The exact position is not crucial.

### 3. Air Intake Hookup and Heater Mounting

- a. Insert the Air Intake Flange through the 3" hole drilled under the steering wheel as shown Figure 12. Install four of the #8 x ½" plastic screws to secure the flange. Press the Intake Cover on to the flange until it snaps into place.
- b. Attach the 5" piece of 3" Duct Hose to the Air Intake Flange as shown in Figure 13. Loosely connect a zip tie together and slide it down to the flange. Tighten the hose to flange.
- c. Install the Main Heater bracket as shown in Figure 14. Mount the front of the bracket to the suspension mount using the ¼" hardware shown in Figure 14. The bolt installs from the back to the front leaving the standard ¼" Washer and ¼" Nylock Nut located between to two upright brackets.
- d. With the bracket tightened at the front, install the ½" x ¾" Self Drilling and Tapping bolt to secure the back to the frame.
- e. Assemble the heater ports using the #1005 Face Plate Bracket, 50mm Connectors, #8 and #10 screws as shown in Figure 15.
- f. If the copper ports of the heater have black plugs in the end, remove them with a pliers. Be sure not to pinch the copper ports as they will dent.
- g. Attach the Heater assembly to the Main Heater bracket using the 5/16" x 5" Carriage Bolts and 5/16" Serrated Flange Nuts. **Note:** Install the Carriage bolts first from the bottom of the heater as shown in Figure 16. With the heater secured, attach the 3" Duct Hose to the opening on the motor and secure using a zip tie as shown in Figure 16.

## 4. Coolant Hose Routing and Plumbing

- a. Cut a section of 5/8" Coolant Hose that is 9 feet long. Locate the silver Unicoil shown in Figure 17 and slide it over the end of the 5/8" Coolant Hose. Install the hose on the Top copper port of the heater as shown in Figure 17. Secure the hose using a #10 Hose Clamp (Smaller). Do not use an impact gun on the copper ports, they can collapse with too much force. Position the Unicoil so that the hose cannot rub against the radiator.
- b. Route the 9 foot piece of 5/8" Coolant hose to the engine bay following the OEM coolant lines. Leave the hose unattached in the engine bay.



- c. Connect the remaining 3 feet of 5/8" Coolant Hose to the Heaters bottom copper port and secure using a #10 Hose Clamp.
- d. If Hose Pinch Off Clamps are available, use them to clamp off the coolant line in front and behind the blue area shown in Figure 18. If they are not available, drain the radiator by disconnecting the lower radiator hose. Save the coolant for reuse.
- e. Mark a 1-1/2" section of hose and remove it with a razor blade as shown in Figure 18.
- f. Assemble the 7/8" Aluminum Y with a 5/8" Brass fitting. Use Teflon tape on the brass fitting to seal the threads. Insert the Aluminum Y assembly with the Y facing toward the radiator. Secure the two larger ends of the Aluminum Y with the #16 Hose Clamps. Attach the 3 foot piece of 5/8" Coolant Hose to the Brass fitting and secure using a #10 Hose Clamp.
- g. In the engine bay locate the hose shown in Figure 19. Mark a 1-1/2" section of hose as shown and remove it using a razor blade.
- h. Assemble the <sup>3</sup>/<sub>4</sub>" Aluminum Y with a 5/8" Brass fitting. Use Teflon tape on the brass fitting to seal the threads. Insert the Aluminum Y assembly with the Y facing toward the radiator. Secure the two larger ends of the Aluminum Y with the #16 Hose Clamps.
- i. If the optional Auxiliary Water Pump kit was purchased skip to the end of the instructions for specific plumbing and mounting instructions.
- j. If the Auxiliary Water Pump Kit was not purchased, route the 9 foot piece of 5/8" Coolant Hose to the Brass Fitting, cut it to length and secure the Hose using a #10 Hose Clamp as shown in Figure 20.

#### 5. Electrical Hookup and Heat Control Cable.

- a. Attach the White 4-Pin Connector to the 4-Pin Connector on the Heater Unit. Connect the ½" Female Spade terminals to the 3-Speed Fan Switch as shown Figure 21. Route the switch to the 7/16" hole drilled nearest the driver, push the switch through the hole, place the red bezel over the switch and the black bezel over the red one as shown in Figure 22. Secure the switch and Brackets together using a 7/16" Low Profile Nut and a 9/16" Socket. Pull the rest of the harness toward the front of the vehicle.
- b. Assemble the Heat Control Mechanism as shown in Figure 23. Insert the cable end through the Driver Side 2" Defrost Vent opening shown in Figure 24. Route the cable through the 7/16" Hole. Insert the threaded piece of the Heat Control Mechanism through the Red and Black brackets as shown in Figure 22. Secure the Mechanism with a 7/16" Low Profile Nut and a 9/16" Socket. Press the Heat Control Knob and Speed Control Knob onto the armatures as shown in Figure 30.
- c. Attach the remaining end of the cable to the Heat Control Actuator as shown in Figure 25. The Heat Control Actuator will be installed in the Top 5/8" Heater Hose line, find a natural position for the actuator along the Top Heater Hose line, cut the hose and insert the Actuator. Secure using #10 Hose Clamps as shown in Figure 26.
- d. Remove the two cables attached to the vehicle cigarette lighter. Use the Blue Insulation Displacement crimps to connect the Blue Heater Wire to the Orange cigarette wire.



Connect the Black Heater Wire to the remaining wire as shown in Figure 27. Use electrical tape to secure the connectors and reinstall to the cigarette lighter.

e. Reconnect the vehicle battery and test that each speed of the heater fan is working.

#### 6. Duct Hose Routing

- a. Use Figure 28 as a guide to cut the 2" Duct Hose. All measurements refer to the hose length in a compressed state. It's easiest to place an extended tape measure on a table and then use two hands to compress the hose to length. Use a pliers to cut the metal reinforcement wire and cut the plastic lining. Assemble the three hose legs using zip ties to secure each connection. Do not attach the vents at this time.
- b. Connect each leg to the 50mm Connectors on the Heater according to the diagram. Route the hoses through their respective 55mm openings. Refer to Figure 29, Figure 30, Figure 31 and Figure 32.

#### 7. Reassembly

- a. Secure duct hoses, wires and 5/8" Heater Hoses away from sharp, moving or hot parts of the vehicle using the remaining zip ties.
- b. Reinstall the Bench Seat, Doors, Skid Plate, and Hood.

## 8. Coolant Bleeding

- a. Refill the reservoir at the front of the vehicle using manufacturer approved coolant. Open the radiator cap and fill the radiator completely. Replace radiator cap. Start the vehicle and run at a fast idle. Monitor the vehicle temperature, do not allow the vehicle temperature to exceed 210 degree Fahrenheit. Run the vehicle until the radiator fan has turned on and cooled the vehicle to normal operating temperature. Turn off vehicle and check for leaks at all connection points.
- b. Allow vehicle to cool completely (this can take several hours), 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 heater operation while running the vehicle. Run the vehicle until the radiator fan has turned on and off, then turn the vehicle off and check for leaks. 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 is likely 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.



# Intimidator GC1K Ice Crusher Heater Auxiliary Water Pump Installation:

- a. Position the Water Pump Template on the Passenger Side Engine Bay wall as shown in Figure
   33. Transfer hole centers, verify nothing is behind the holes and drill using a 5/16" Bit.
- b. Remove the Silver bracket from the Water Pump and throw the bracket away.
- c. Attach the Water Pump to the sidewall as shown in Figure 33 using the three  $\frac{1}{4}$ "-20 x 1  $\frac{1}{2}$ " Serrated Flange Bolts,  $\frac{1}{4}$ " Flat Washers and  $\frac{1}{4}$ " Nylock Nuts.
- d. Cut approximately 1 ½ Feet of 5/8" Heater Hose off of the 9 foot hose and connect the ¾" Aluminum Y to the Top port of the Water Pump. Secure using #10 Hose Clamps.
- e. Attach the remaining hose to the outlet port of the Water Pump and secure using #10 Hose Clamps.
- f. Connect the included 12 Foot wiring harness to the Water Pump harness using the included Butt Splice Connectors. Connect Red to Red and Black to Black. Route the harness along the coolant hoses to the area behind the Center instrument panel.
- g. Remove the switch panel from the center console and route the Harness into this compartment.
- h. Use the Blue Insulation Displacement Crimps to connect the Harnesses Red wire to one of the Auxiliary power wires in the switch compartment and connect the Harnesses Black wire to one of the ground wires. Refer to Figure 34. Insert the Dash Switch into an open slot and insert the connector plug to the back of the Dash Switch.
- i. Turn the vehicle ON and let it run for a minute prior to turning the Water Pump ON. This will prime the pump with coolant and eliminate air locks in the pump.



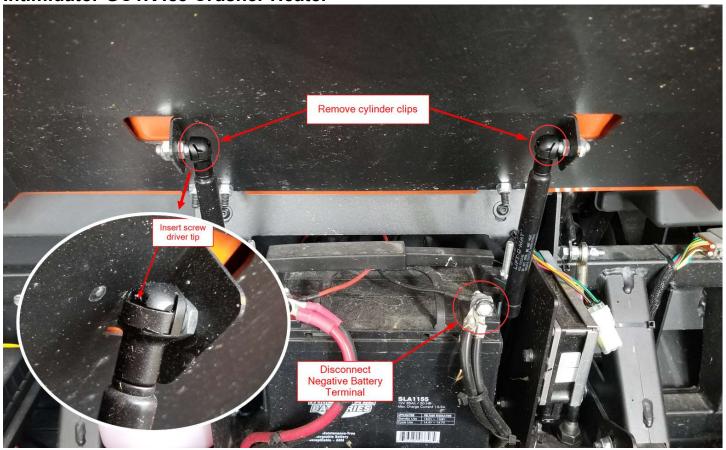


Figure 1

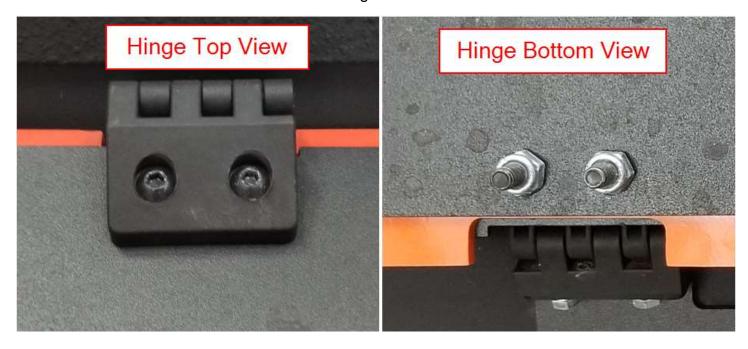


Figure 2





Figure 3

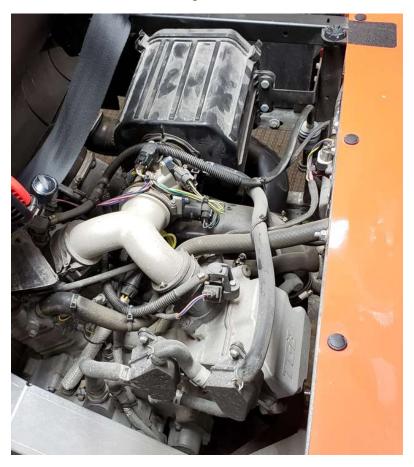
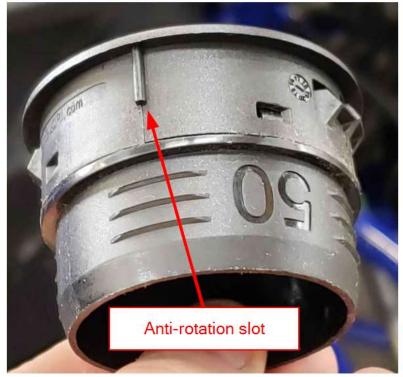


Figure 4





Figure 5



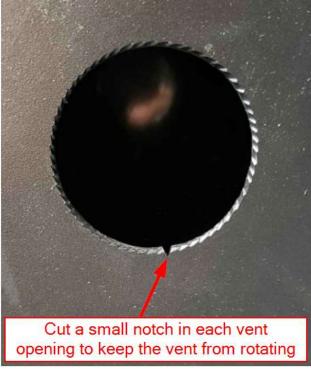


Figure 6



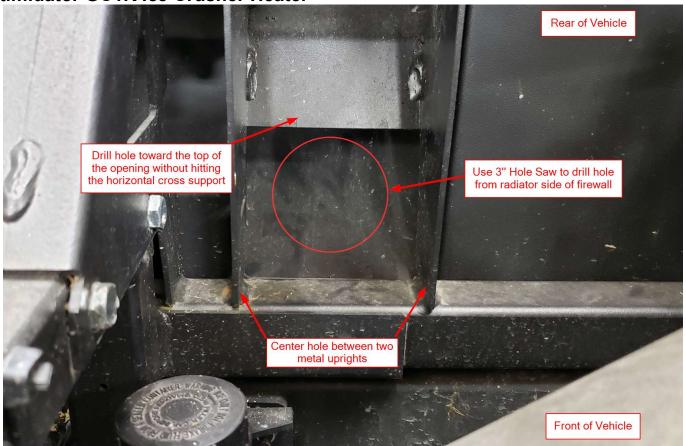


Figure 7

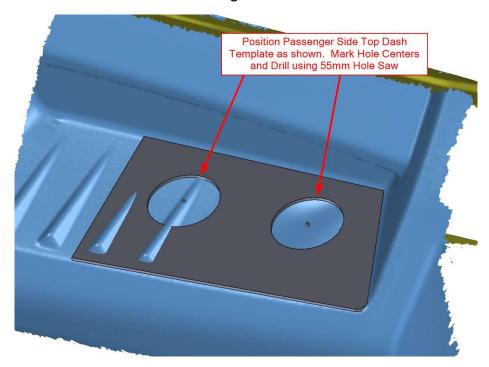


Figure 8





Figure 9

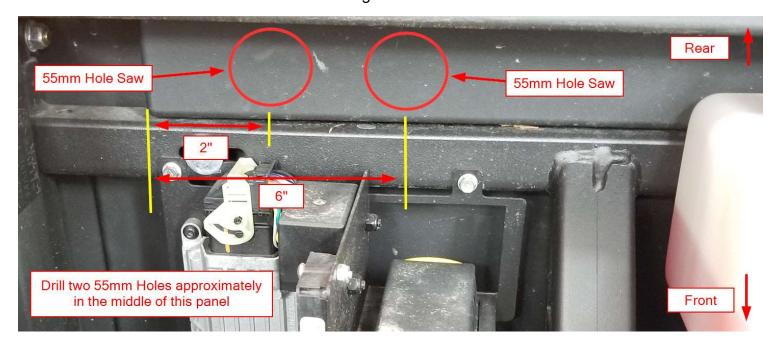


Figure 10



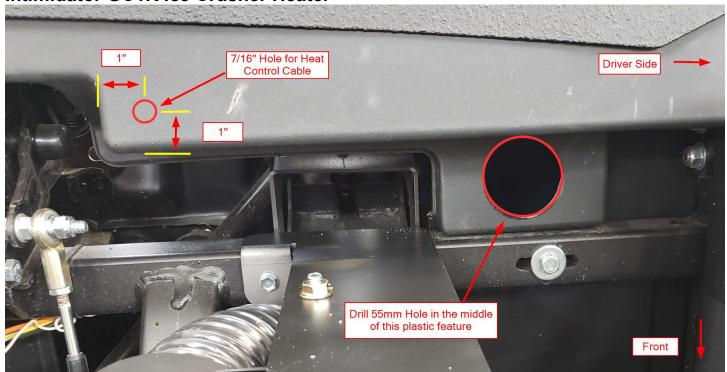


Figure 11



Figure 12



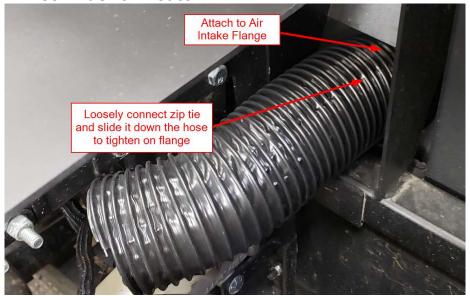


Figure 13

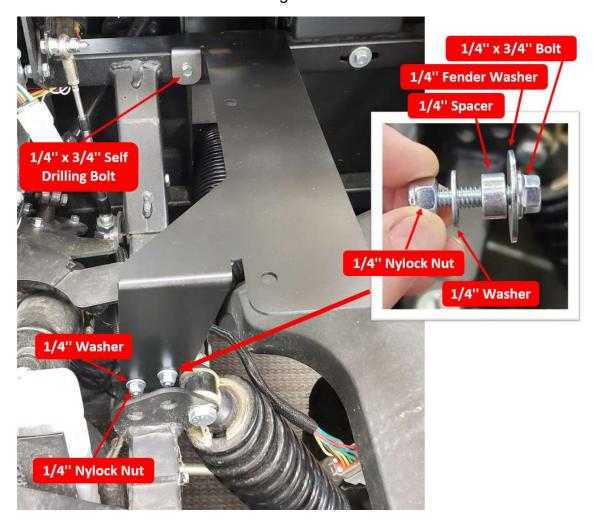


Figure 14



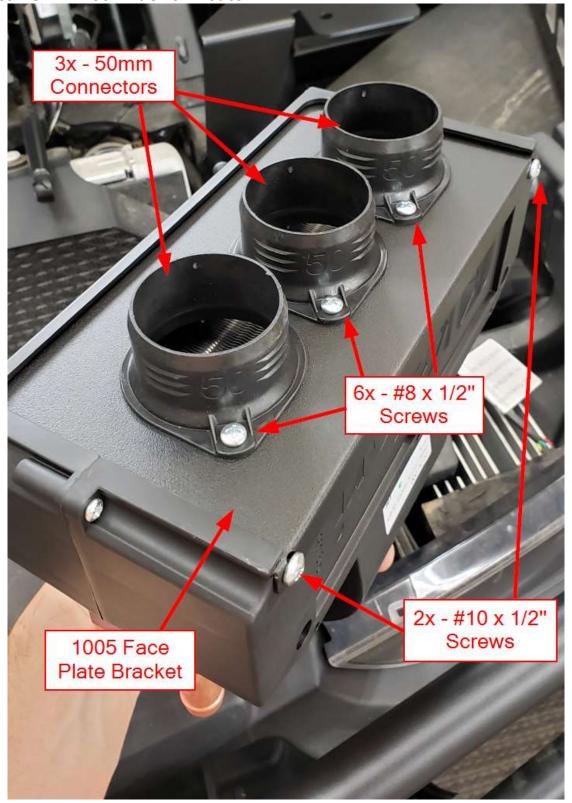


Figure 15



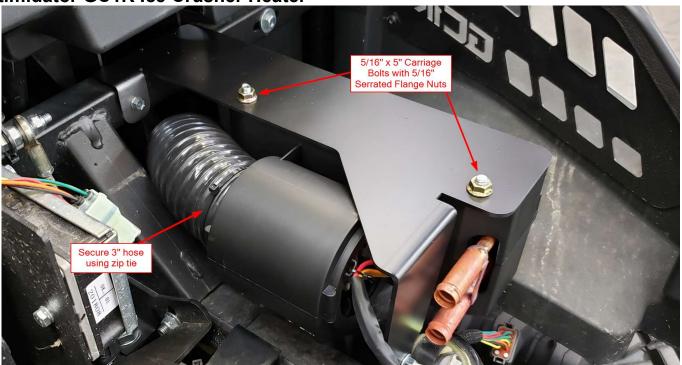


Figure 16

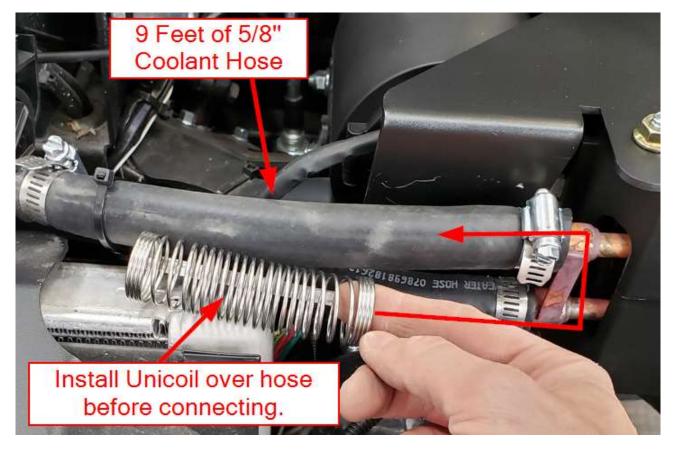


Figure 17



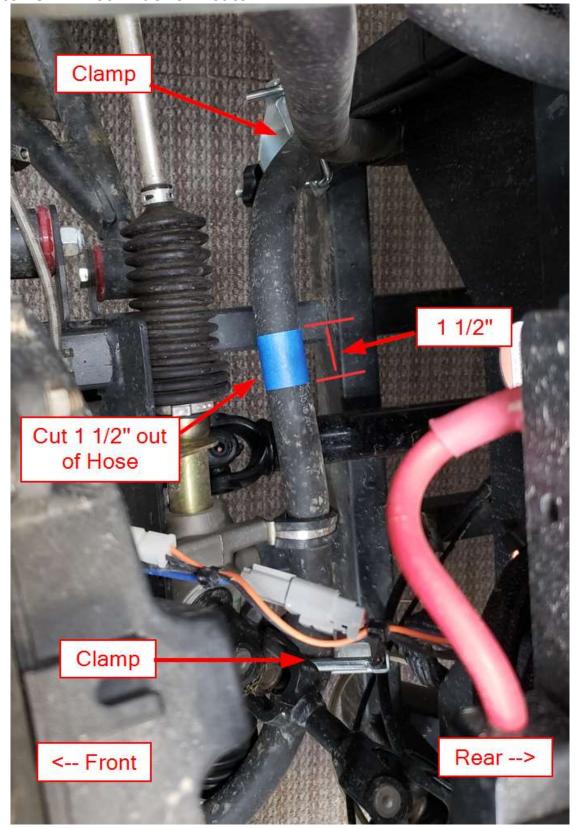


Figure 18



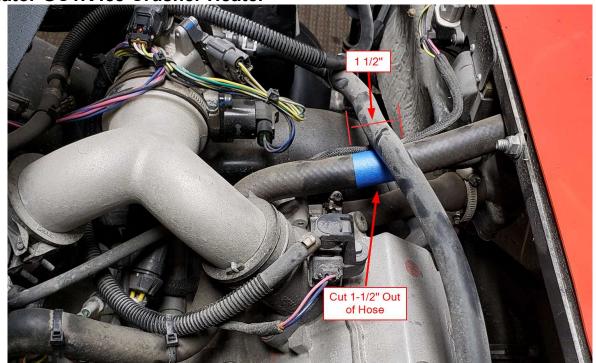


Figure 19

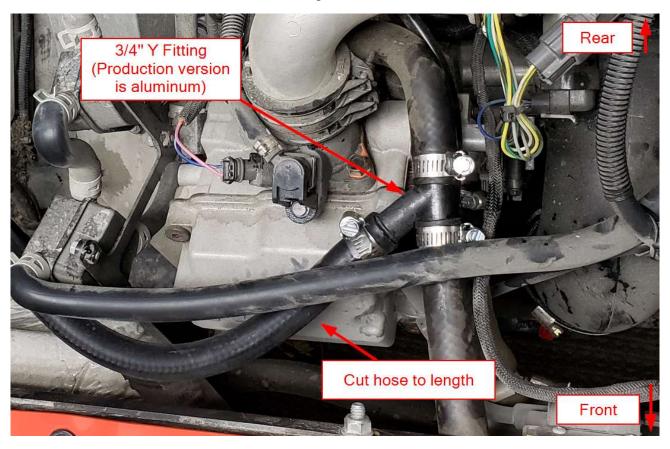


Figure 20



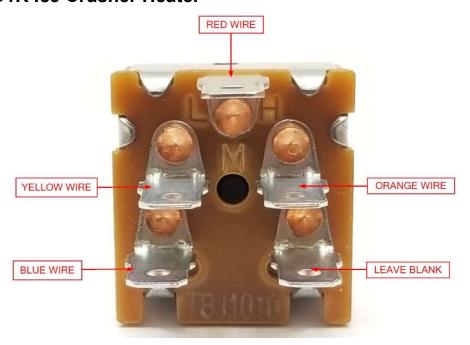


Figure 21

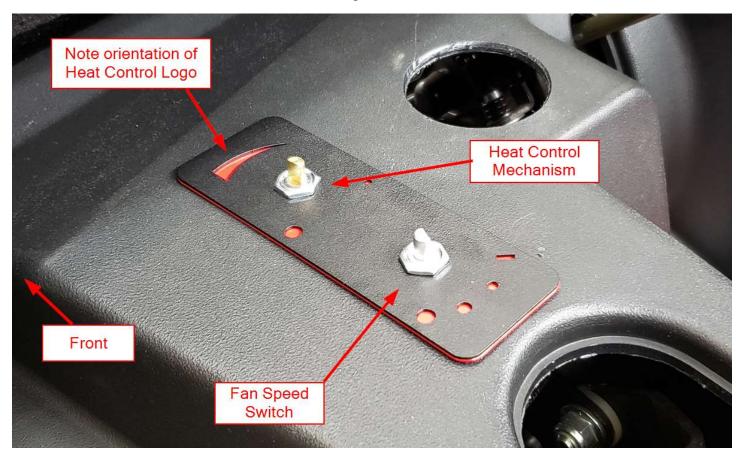


Figure 22



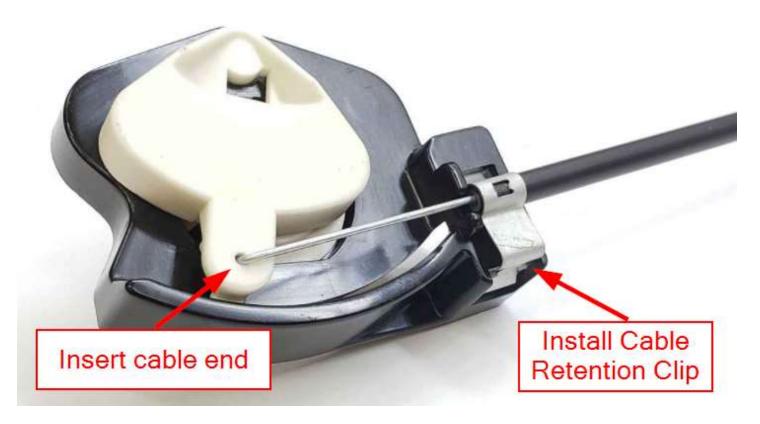


Figure 23

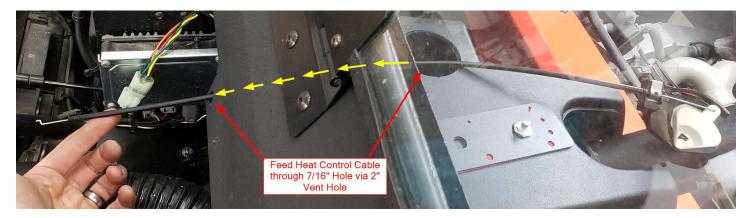


Figure 24



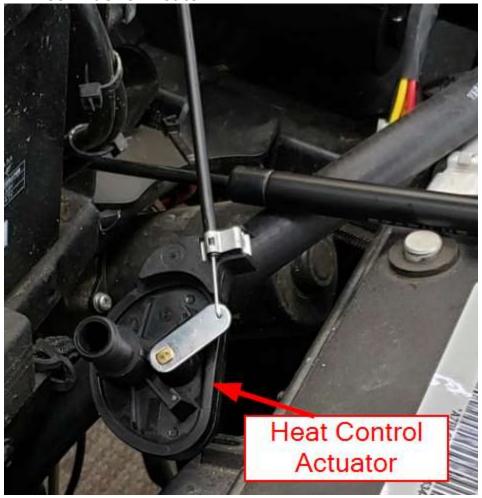


Figure 25



Figure 26



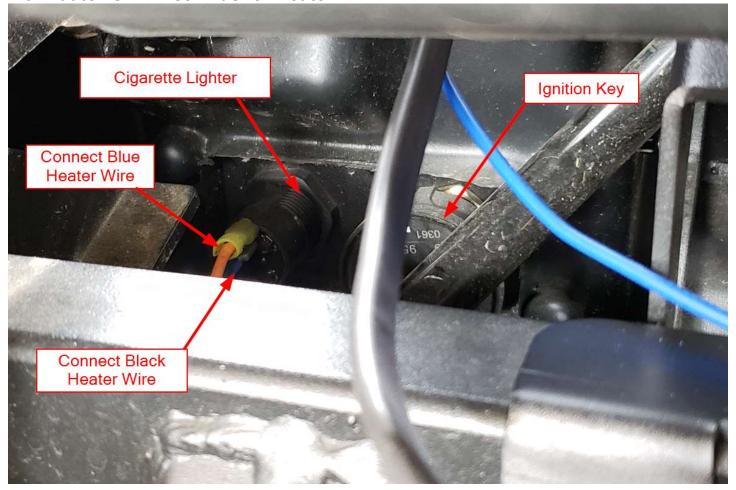


Figure 27



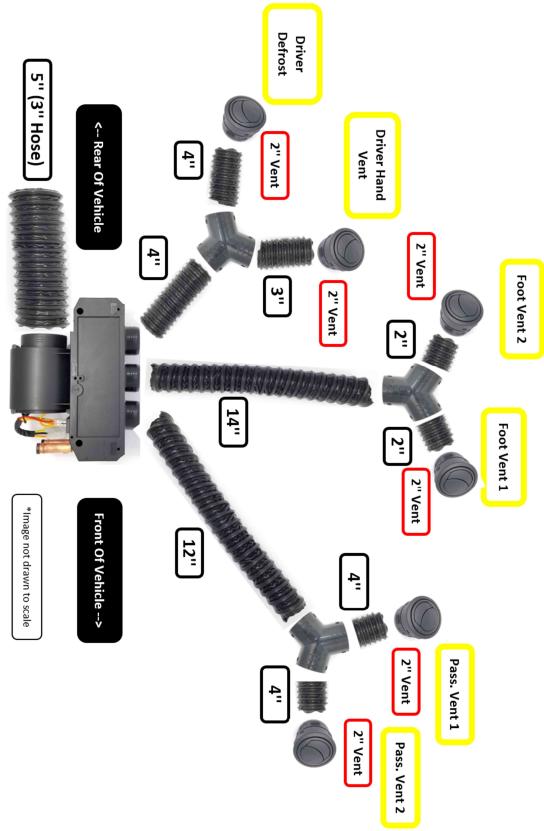


Figure 28



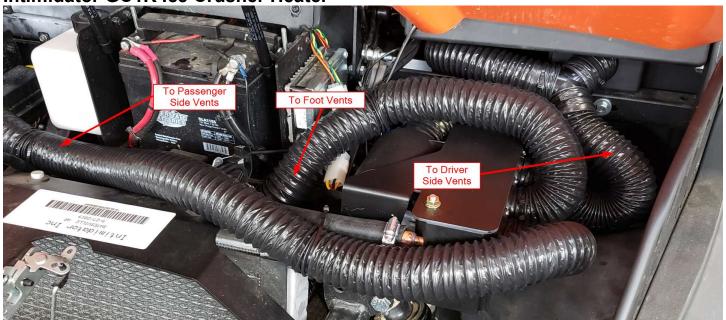


Figure 29

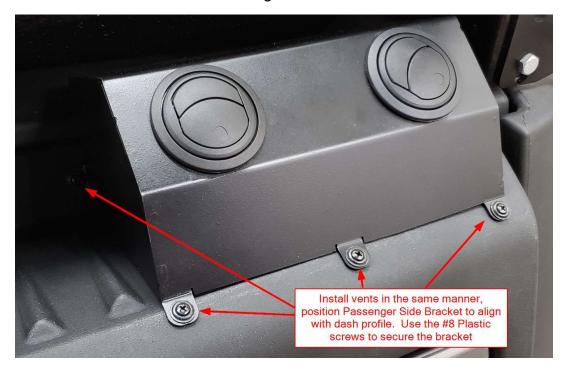


Figure 30





Figure 31



ICCH-UD-C-INTGC1K





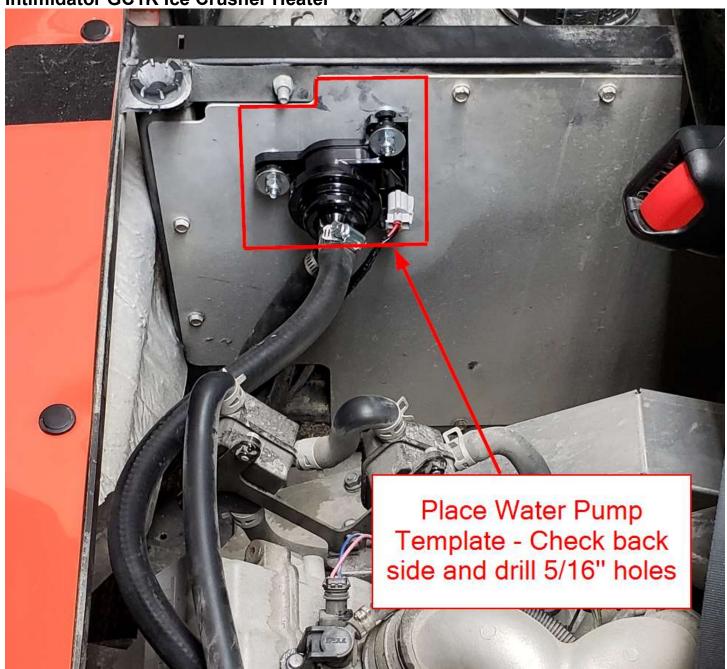


Figure 33



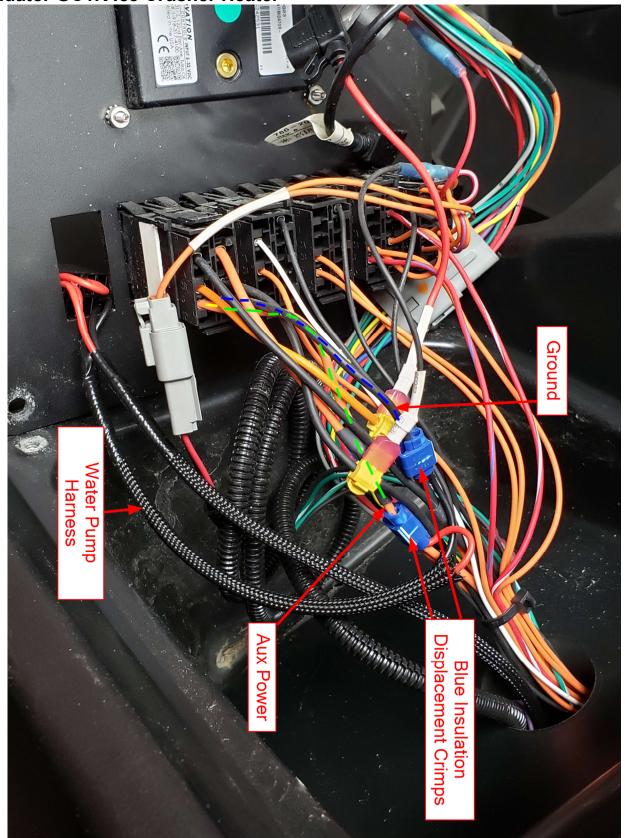


Figure 34



HEATER WARRANTY - utvheaters.com and coupersproducts.com

#### \*Coupersproducts.com/UTVHeaters.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 <u>not</u> covered by this warranty. Prior to return of any product to UTV Heaters, customer must contact UTV Heaters customer service, (888)-964-0135, info@utvheaters.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 HEATER WARRANTY – utvheaters.com and coupersproducts.com

This warranty is Couper's Products only express warranty of this product. We reserve the right to make changes to products and policy that are in the best interest of Couper's Products. No implied warranty shall extend beyond One (1) or Three (3) year period from the date of the original consumer (end user) purchase. Couper's Products 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.

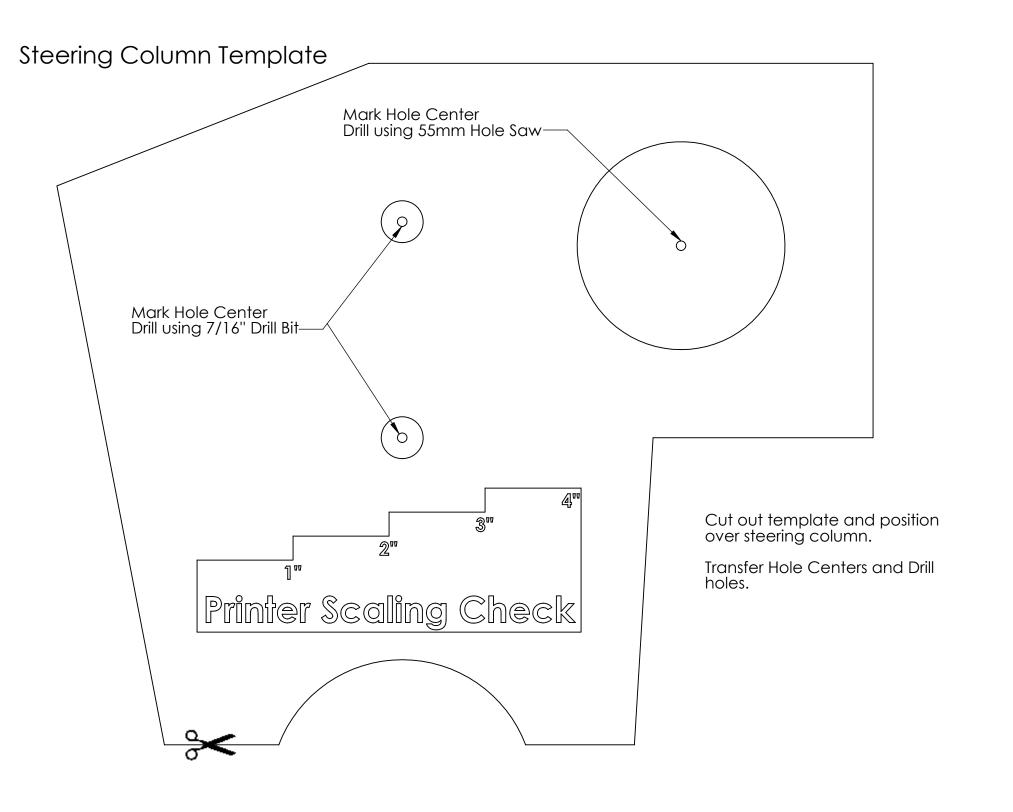
After receiving a Return Authorization Number send defective product to:

**UTV Heaters** 

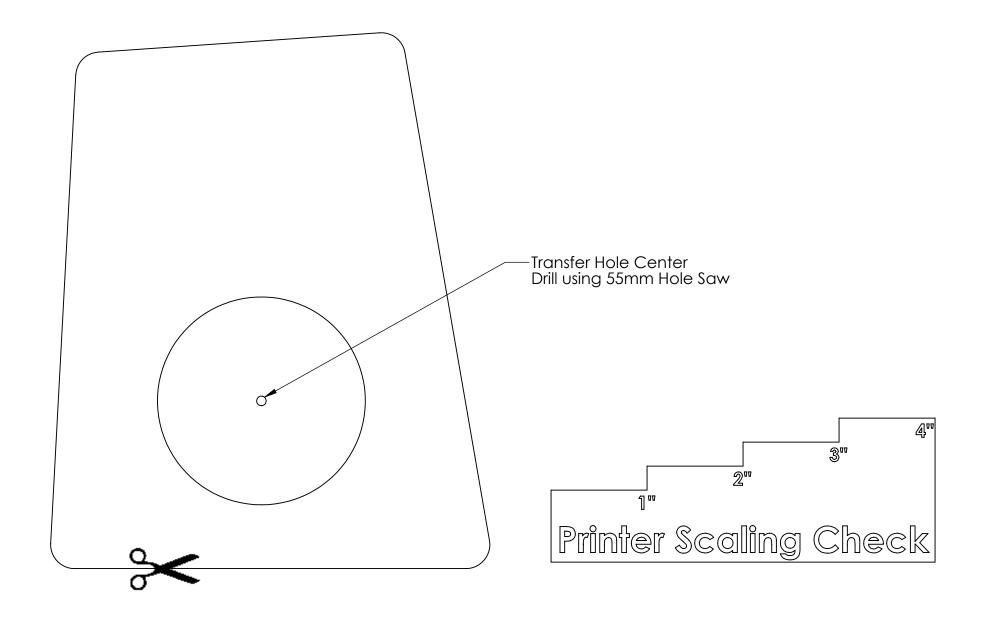
Attn: Warranty

23001 Industrial Blvd

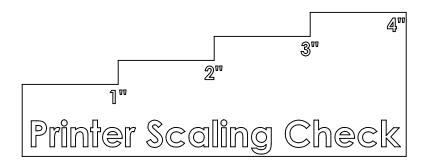
Rogers, Minnesota, 55374

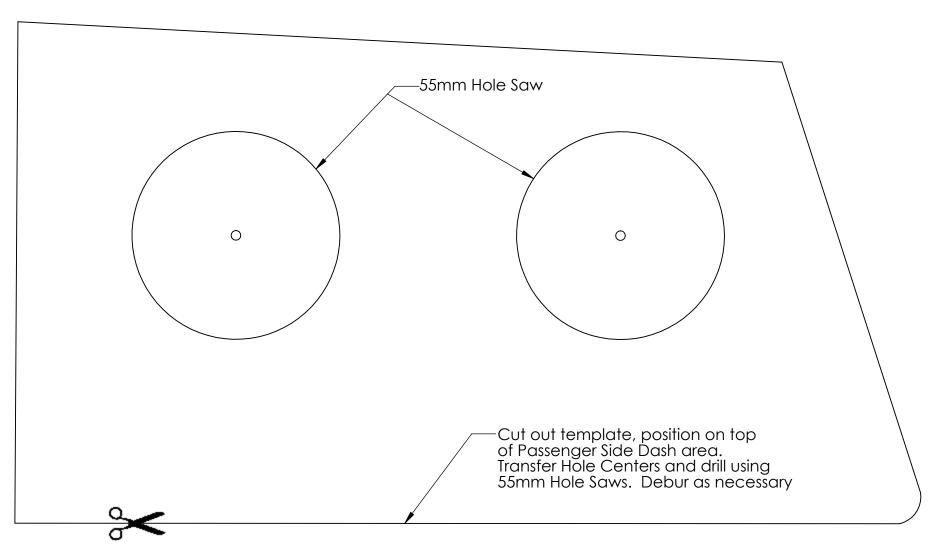


# Driver Side Hand Vent Template



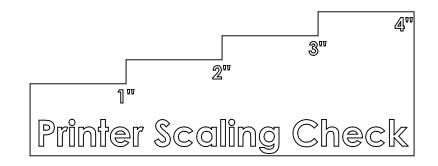
# Passenger Side Dash Template

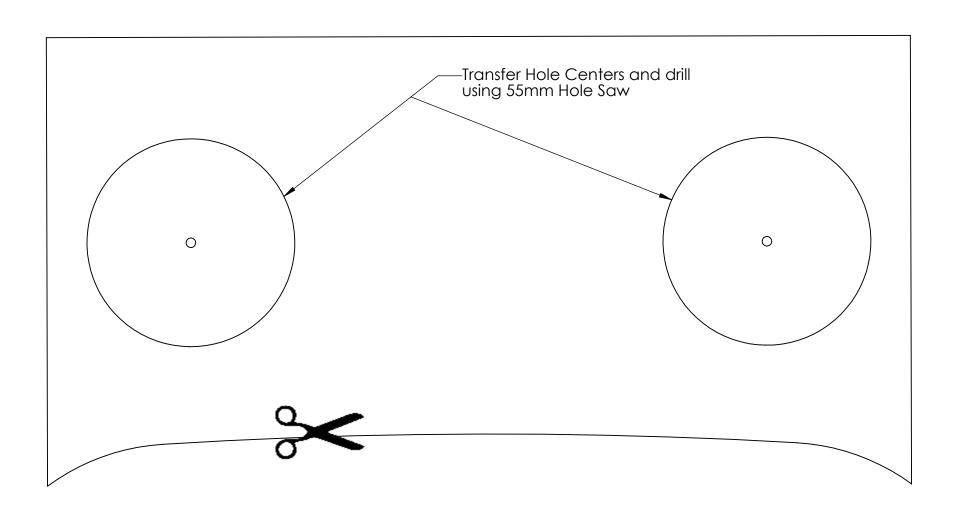




# Lower Vent Template

Position Lower Vent Template along center tunnel and firewall. Transfer the hole centers and drill using the 55mm Hole Saw.





# Water Pump Template

