Polaris Ranger Full Size 570 Underhood Ice Crusher Heater ICCH-UH-S-RNGRF570RT









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.

Using supplied hole templates position templates in correct locations as shown in Figures 1a – 1d and 2a and 2b, mark out hole saw centers as stated on template, remove templates. Remove under hood firewall panel. Using supplied hole templates position on panel as shown in Figure 2c Using supplied Hole Saws drill holes as stated on templates.

Please Note: The position of these holes may need to be relocated, depending on equipment fitted to the UTV i.e. Power steering. Carefully drill holes using supplied hole saws as directed on templates.

Position the RH vent bracket as shown in Figure 3, mark hole centers.

Remove lower dash panel and center gauge/switch panel by removing push-pins and screws.

Drill the 1/4" holes for the RH vent bracket, fit bracket attaching with the supplied Push-Pins.

Using Figure 4 as a guide cut duct hoses to length (lengths measured with the duct hose in its compressed state, measure and cut accordingly) Make up hoses assemblies using supplied 2" Y connectors as shown in Figure 4.**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.

Using Figures 5a – 5e as a guide route all the 2" duct hose from the vent positions to the heater mounting position under the hood as shown in Figure 5e. Stretch hose as you route the hose to ensure you have enough hose to complete the installation. Pull 2" duct hoses through the drilled vent holes, attach the correct size vent to the duct hoses. Use cable ties around all duct hose connections. Clip Vents into position.

Refit lower dash panel.

Install 3" intake fitting to the under hood firewall panel with the hose connection end facing out into the under hood area. Use supplied #8 x $\frac{1}{2}$ " screws to secure fitting. Refit under hood firewall panel as shown in Figure 5f pulling the corresponding 2" duct hose through the 55mm hose drilled in the panel.

Polaris Ranger Full Size

Install heater mounting brackets to heater as shown in Figure 7 using supplied 5/16"x5" bolts and $#10 \times \frac{1}{2}$ " screws. Do not tighten.

Remove plug and loom clip as shown in Figure 8.

Move heater into position, attach duct hoses to the 49mm connectors on heater as shown in Figure 9. Attach the supplied 3" duct hose to the heater intake and the intake fitting. Use cable ties around all duct hose connections.

Fit heater into position as shown in Figure 9. Align passenger side bracket with the factory holes in the frame. Attach using the two supplied 5/16" self drilling screws. Using the two supplied #10 self drilling screws and attach the drivers side bracket to UTV's frame.

Choose position to locate the heater switch (limited by switch wiring loom) such as shown in Figure 10. Use supplied switch template to mark the position of the switch hole centers. Drill a 7/16" hole. Attach the harness to the switch and route the heater switch and wiring to the switch mounting hole, install switch, red bezel, switch bezel, 7/16 washer and switch nut. Tighten nut and attach the knob.

Crimp the two 1/4" Ringer Terminals to the Blue and Black wire of the heater harness, route the ends to the accessory power block shown in Figure 11. Attach the Blue wire to the Accessory Power terminal and the black wire to the Negative Terminal.

Fit supplied foam tape to the left side front area as shown in Figure 12.

Cut the 5/8" Heater Hose in half. Connect both ends of the 5/8" Heater Hose to the Copper Heater Ports. **Please Note: Be sure to remove factory shipping plugs from heater fittings if so fitted.** It does not matter which hose connects to the two copper pipes. Secure the hose with the supplied #10 Hose Clamps as shown in Figure 14. Install Fill Tee in the top hose as shown in Figure 14. Route the 5/8" Heater Hose through area as shown in Figure 13.

Tip: Using dish soap or a rubber/plastic cleaner on the hose will make the hose slip through the grommets easier. This can also be used on any hoses fittings and connectors to make connecting into hoses easier.

Drain cooling system by removing lower radiator hose. **Important Tip:** If you have the equipment to clamp off the hoses where the Y fitting is to be installed you won't have to drain cooling system this makes installation much easier.

Please Note: Before cutting any hose, be sure that the placement of the hoses and connectors will not interfere with any part of the UTV.

Route the cut ends of the heater hoses following the OEM coolant pipes from the front of UTV to the engine compartment. Make sure all hoses are as far away as possible from driveshaft, steering shaft and sharp areas etc. Make sure the heater hoses are not kinked in any way. Use cable ties as necessary to secure hoses.

Locate the water pump bypass coolant hose as shown in Figure 15a and 15b. Cut hose approx. at center of hose. Install one ½"x 5/8" hose connector into each end of water pump bypass coolant hose and secure using #10 Hose Clamps. Cut the 5/8" Heater Hoses to length and connect them to the 1/2" x 5/8" Brass Ports. Secure using #10 Hose Clamps.

Important: Refill cooling system as per manufacturer's procedure. Reconnect battery. Start and run the vehicle at a fast idle and run up to normal operating. Initially, crack the bleed Fill Tee untill coolant drains out. Check for leaks. Check operation of heater.

Reassemble UTV as required.

Allow vehicle to cool and recheck cooling system level and coolant ratio, 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 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. Temporarily block off the top/inlet radiator hose at 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 1a



Figure 1b



Figure 1c





Figure 2a



Figure 2b

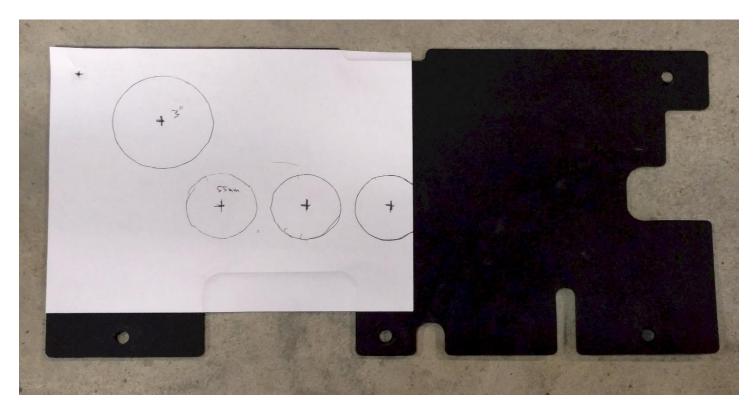
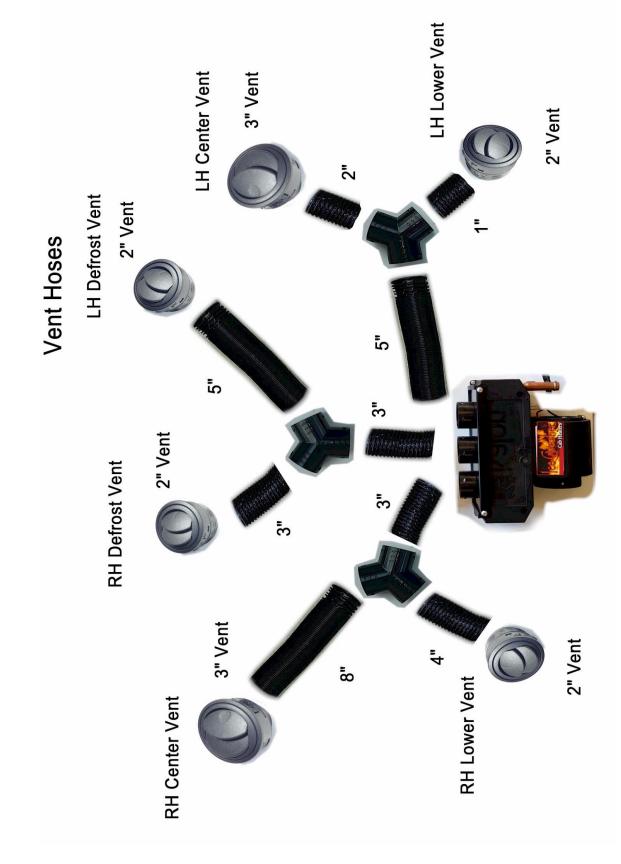


Figure 2c



Figure 3

ICCH-UH-S-RNGRF570RT



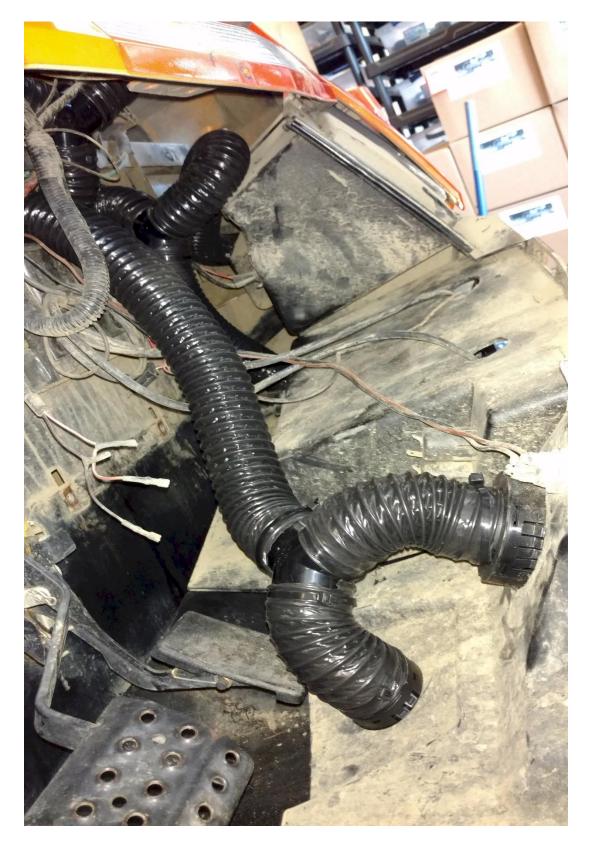


Figure 5a



Figure 5b



Figure 5c ICCH-UH-S-RNGRF570RT



Figure 5d



Figure 5e ICCH-UH-S-RNGRF570RT

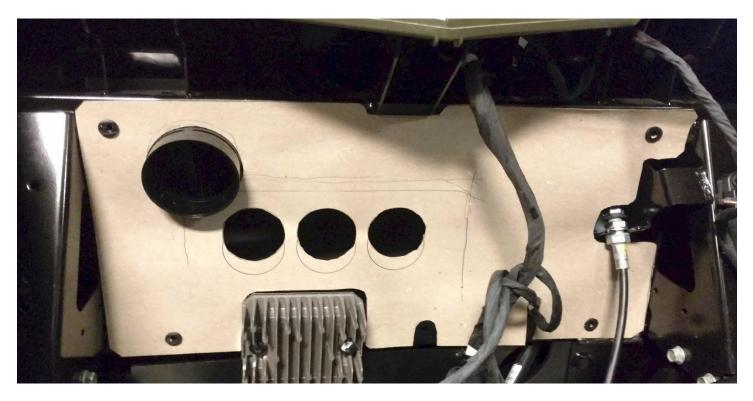


Figure 5f

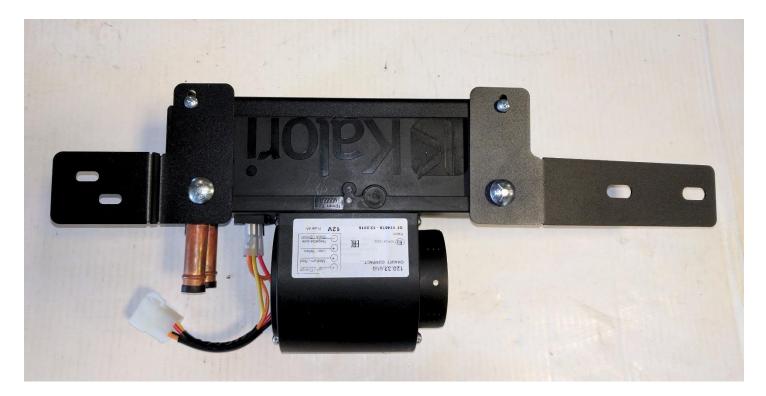


Figure 7

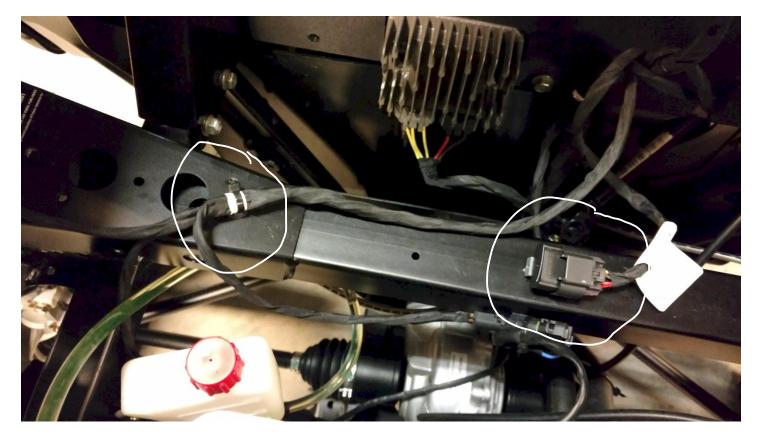


Figure 8

ICCH-UH-S-RNGRF570RT



Figure 9





Figure 11





Figure 13



Figure 14

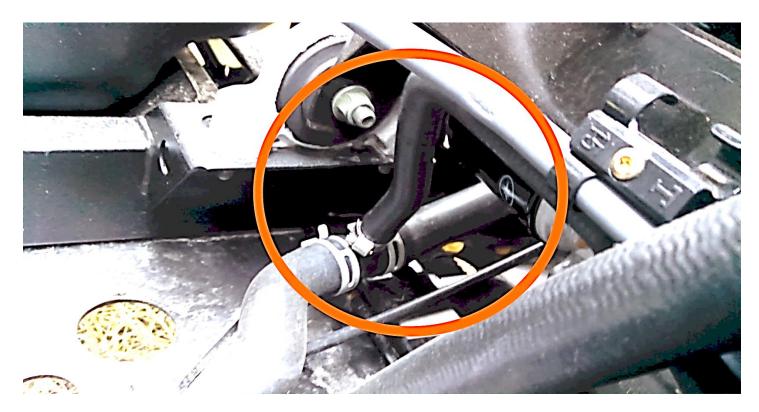


Figure 15a



Figure 15b

ICCH-UH-S-RNGRF570RT

HEATER WARRANTY - utvheaters.com and coupersproducts.com

*Couper's Products/UTV Heaters.com Heater Warranty. 3 Year/36 Month Limited Warranty

Couper's Products warrants your 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 except electrical components including but not limited to, motor, switch, wiring and resistor. Electrical components are warranted to be free from defects in material and craftsmanship under normal use and service by the original consumer purchaser for a period of One (1) year from the date of purchase. 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.

Couper's Products obligation under this warranty are limited to repair of the product at Couper's Products production facility, or the replacement of the product at Couper's Products option and at Couper's Products 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 Couper's Products customer must contact Couper's Products customer service, (802) 294 0016, and obtain a Return Authorization Number. This number must be marked on exterior of carton for easy identification. Warranty product received at Couper's Products without a Return Authorization Number may be returned at expense of sender.*

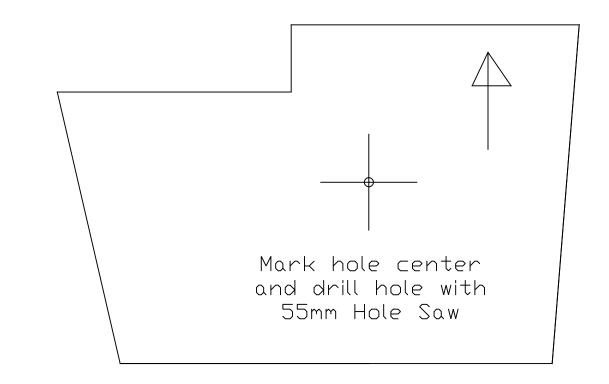
Postage must be prepaid, and the original dated proof-of-purchase must be included. Couper's Products will not be liable for any damages sustained in transport due to improper packaging or handling. The acceptance by Couper's Products of any product returned shall not be deemed as an admission that the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

This warranty is 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:

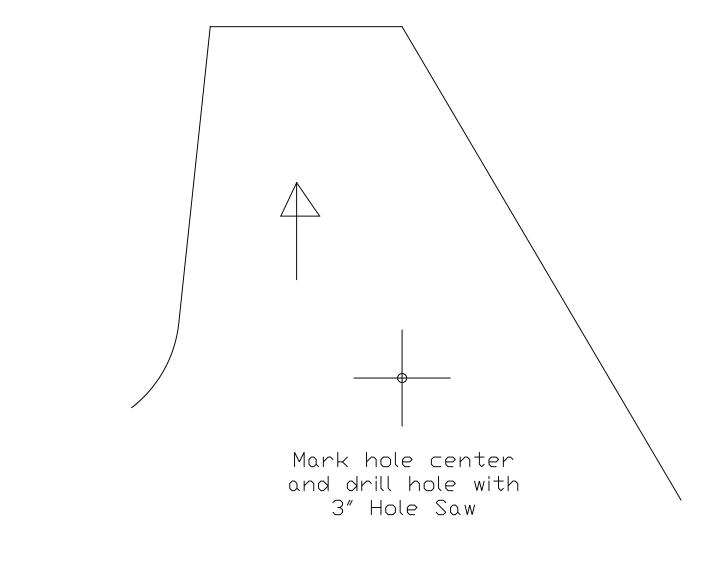
Ice Crusher Heaters 23001 Industrial Blvd Rogers, MN, 55374 888-964-0135



'09-'14 Polaris Ranger RH Dash Cubby Vent Hose Hole Template

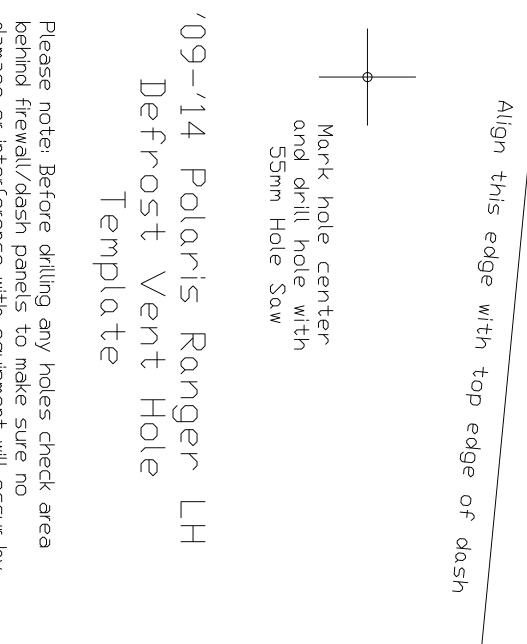
Please note: Before drilling any holes check area behind firewall/dash panels to make sure no damage or interference with equipment will occur by drilling holes and fitting of vents.

Align this edge wth top edge of lower dash panel



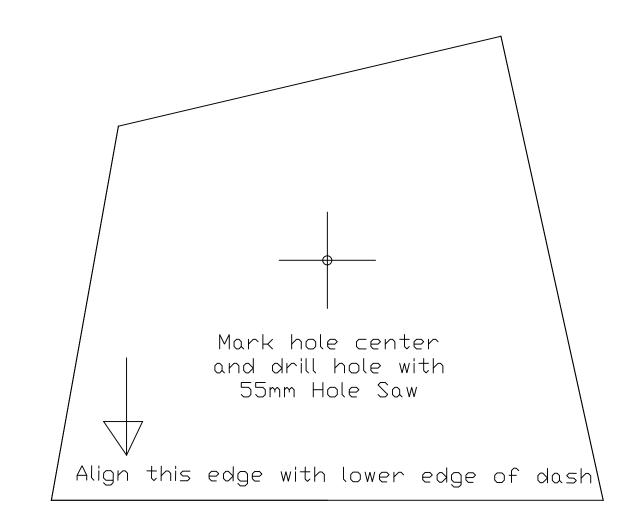
'09-'14 Polaris Ranger LH Dash Center Vent Hole Template

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.



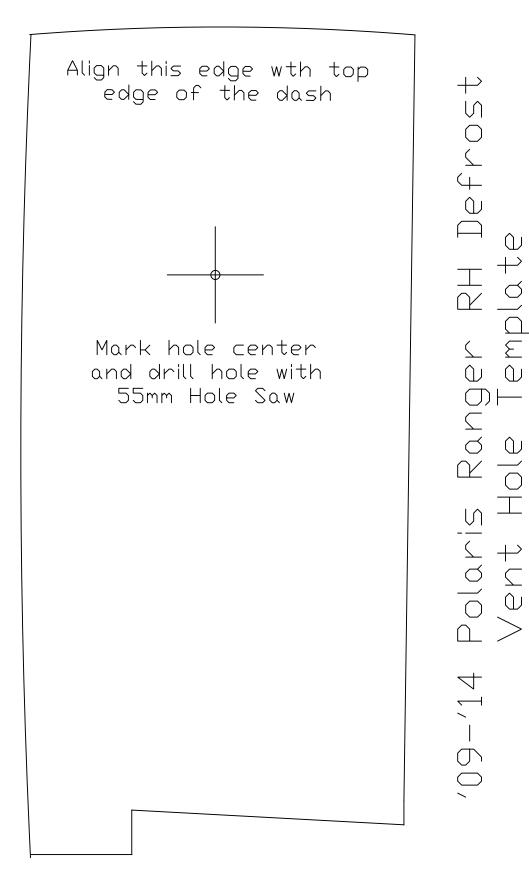
drilling holes and fitting of vents damage or interference with equipment will occur by

Front Of UTV



'09-'14 Polaris Ranger LH Lower Dash Vent Hole Template

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.



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

