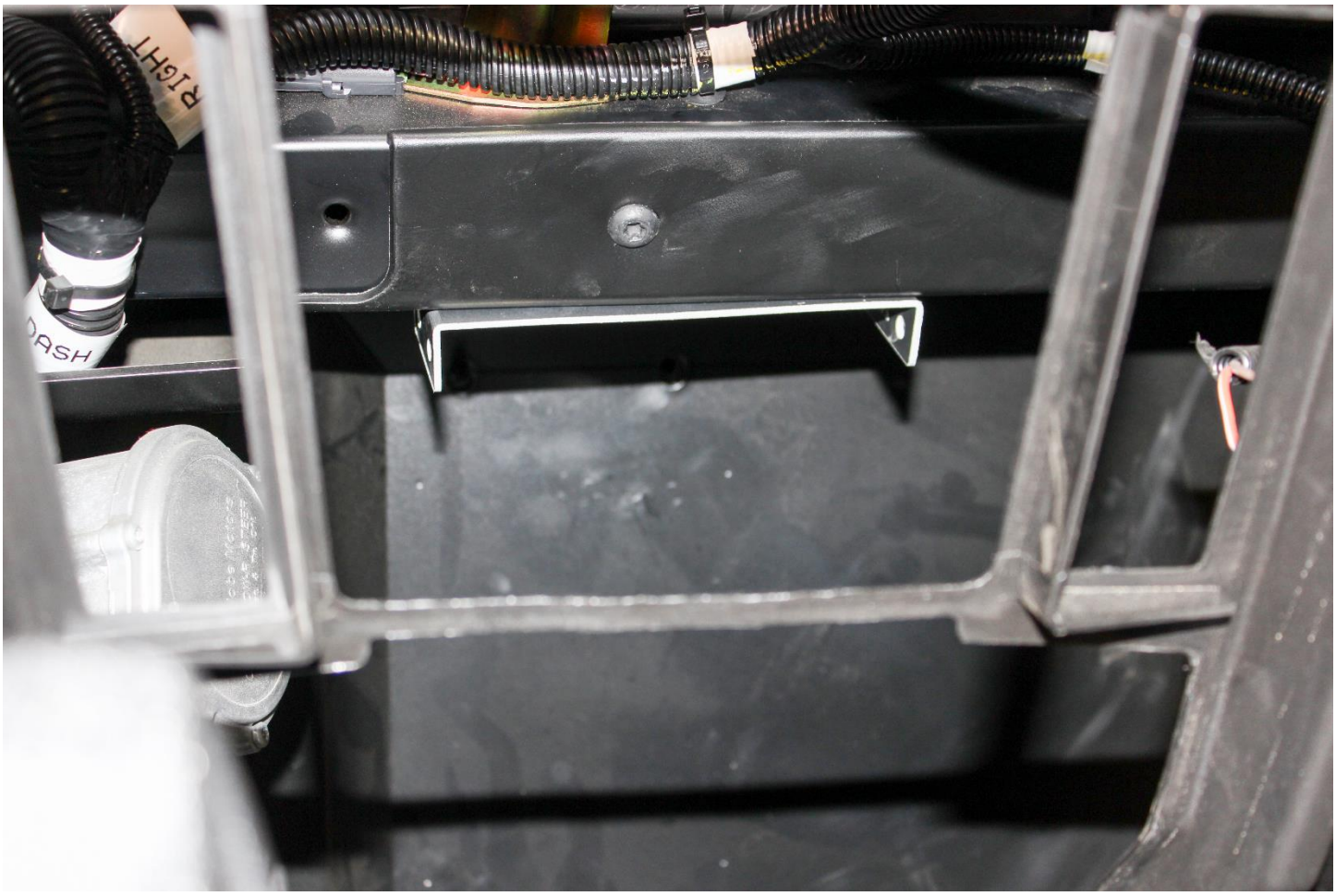
Z4302

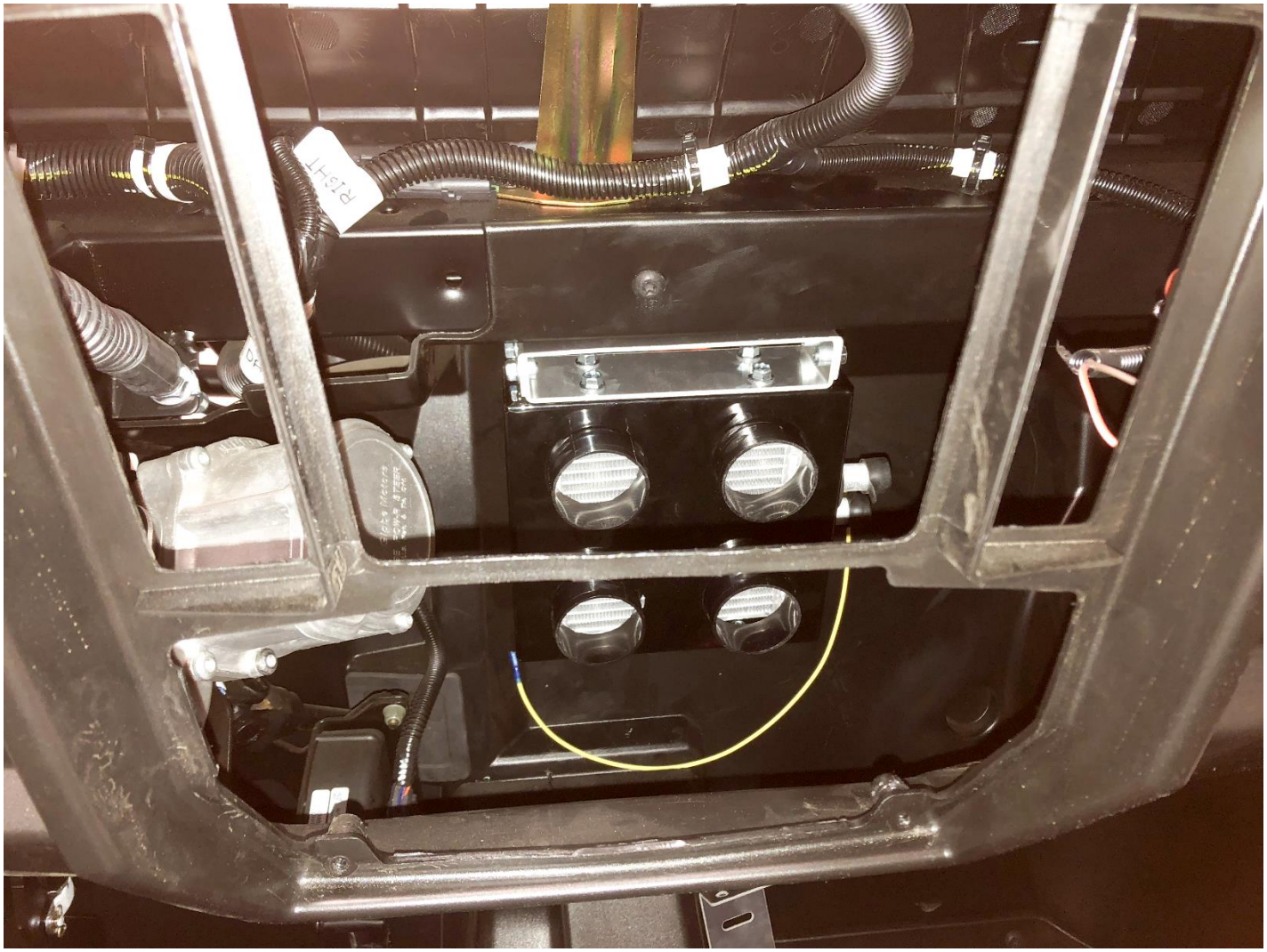
Gravely Atlas JSV 3000 6000 Cab Heater

PRE-INSTALLATION
The Dash has 3 panels (top, middle, and bottom). For ease of installation you will want to remove all the hex bolts and plastic rivets that hold these 3 pieces together, and then remove the top and the bottom panels. The middle panel fits around the steering wheel and is easier to keep in place.

MOUNTING THE HEATER
With the upper and lower dash panels removed, take the heater mounting bracket and put it under the 2x2 steel square framing that runs under the dash (from passengers to drivers side). The mount generally works best just off the center of the machine, as shown below. Mark the 3 mounting holes and drill up into the steel with a 1/8" drill bit. After the holes are drilled use the 3 self taping screws and securely mount the bracket. The edge of the mounting bracket should just hang over the lip of the 2x2 square framing, this will make sure the blower wheel is not touching the firewall when installed.

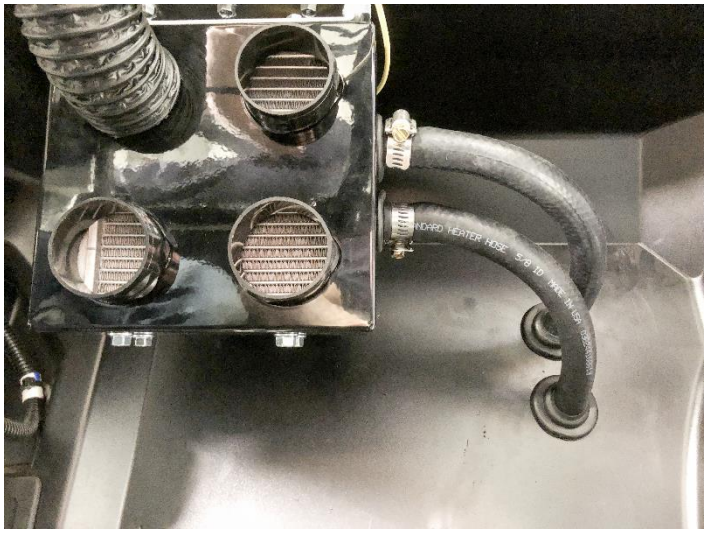


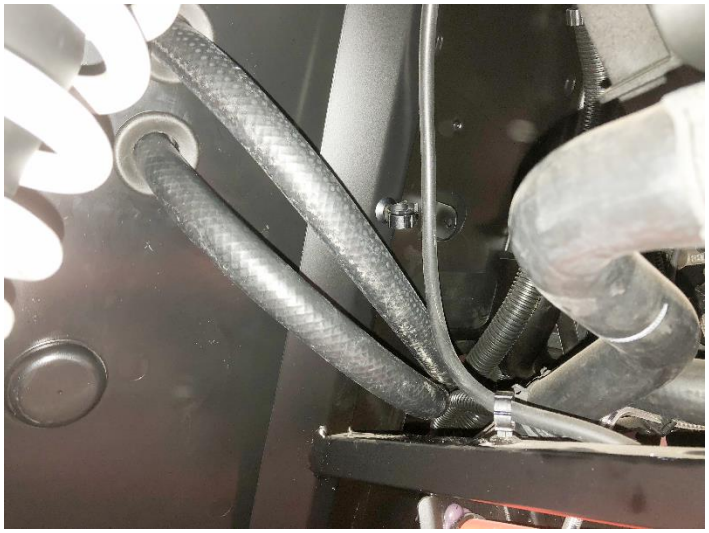
Once the top mounting place is secured to the framing, you can then mount the heater box bracket to it. This will require a 3/8 socket to secure the 4 bolts from the sides. Mount the heater so that the duct holes are facing towards the rear of the machine and the core fittings are pointed toward the passenger side, as shown below.



SPLICE INTO THE COOLANT LINES

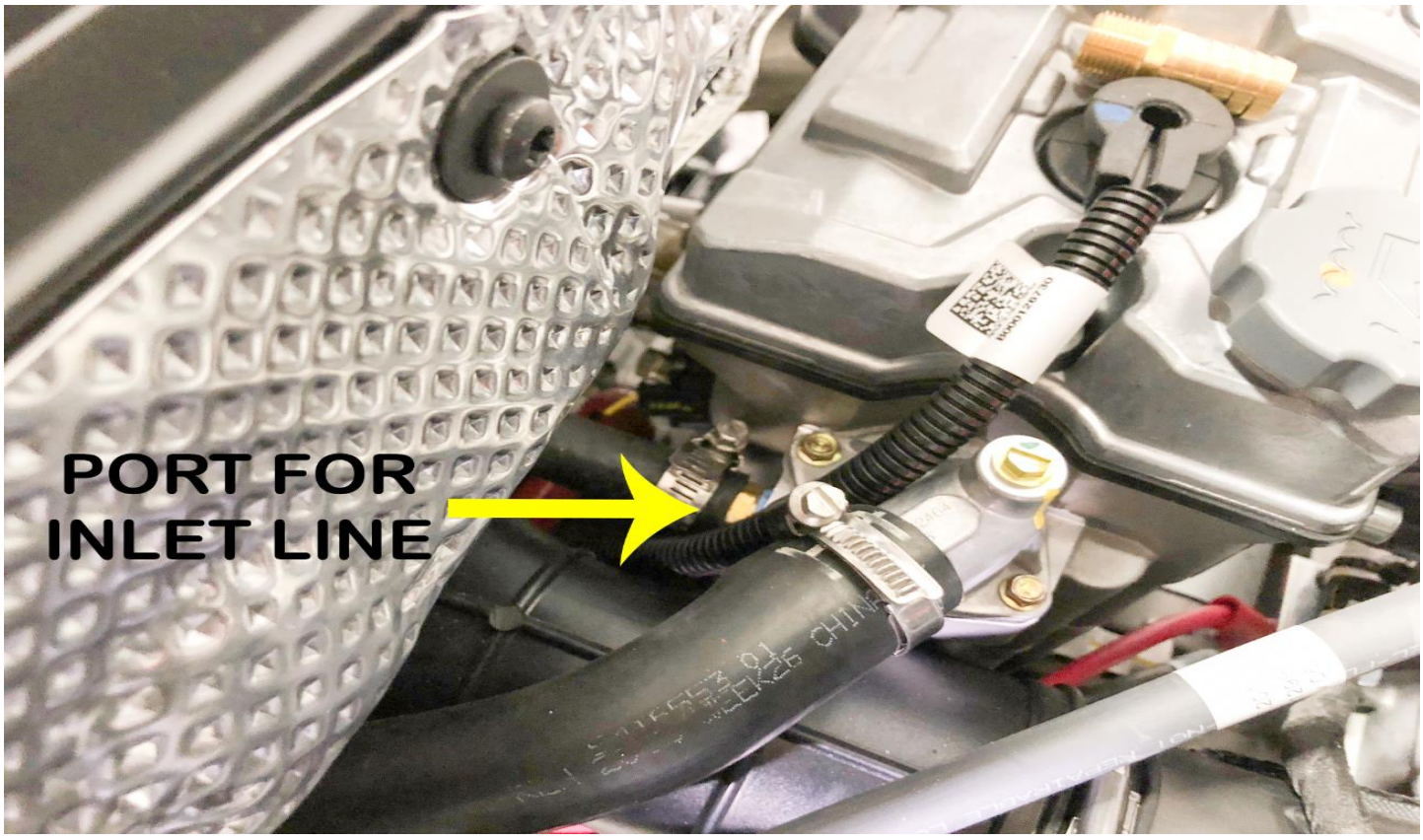
The first thing we will do is install the rubber grommets included in the kit, into the firewall. Use a 1 3/8" hole-saw and put 2 holes in the firewall in the spots shown below:

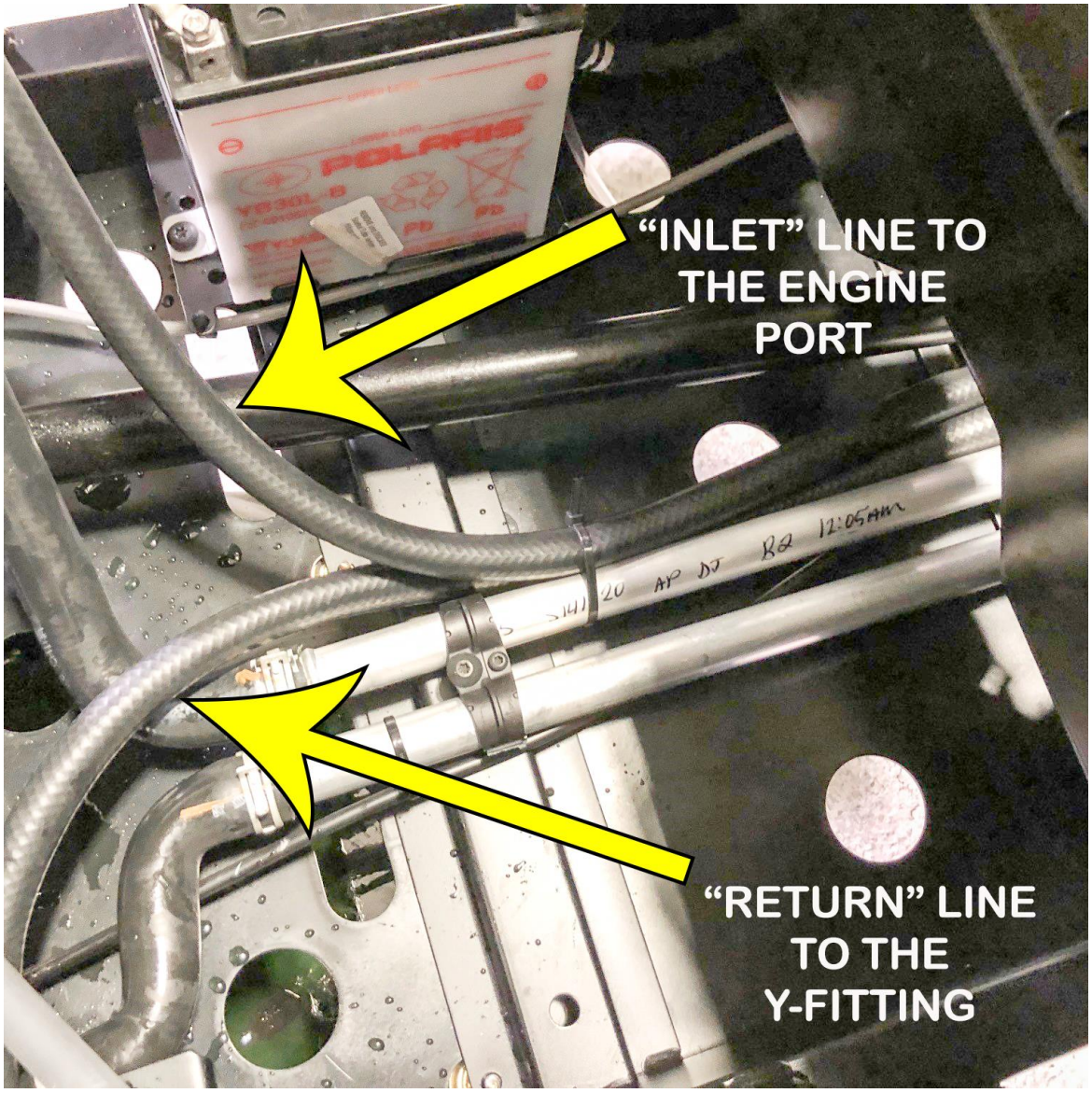


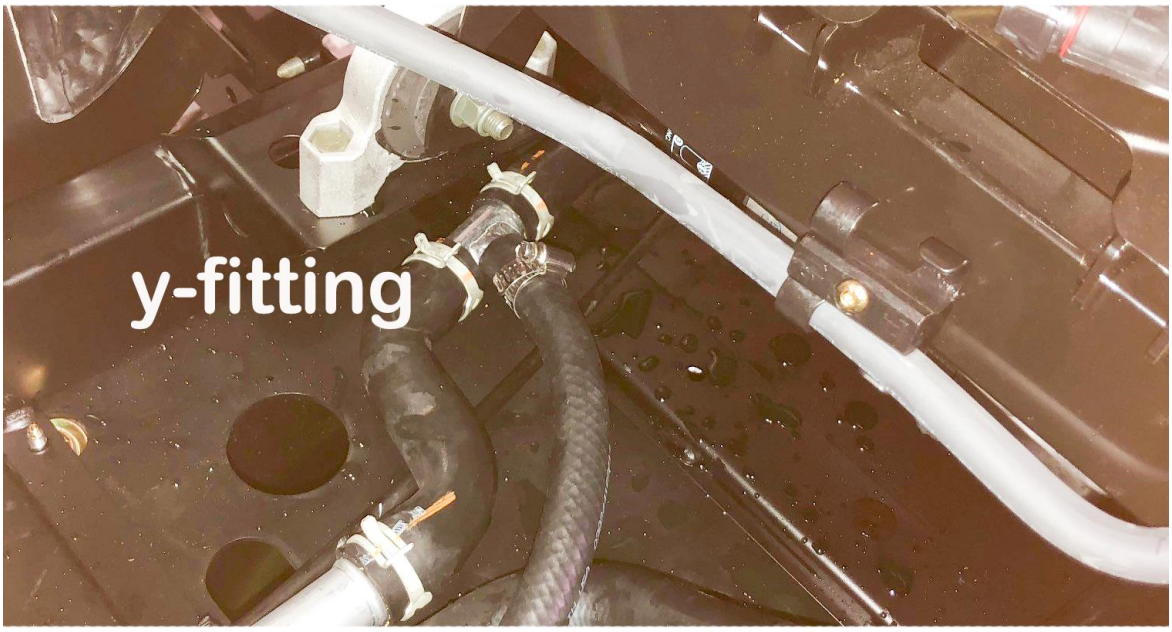


14-feet of heater hose is provided in the kit, cut this into 87" (inlet) and 81" (return) hose pieces. You will run your heater hose from the heater box to the back of the machine where we will splice into the coolant lines. Start by running your heater hose from the front of the machine, down under skid plate. With the seat and the

center floor plate removed you will have access to feed the hose through. Now locate the factory plastic T and replace this with the Y-Fitting included in the kit (see photo below). Make sure the 5/8" splice off this Y-fitting is pointing towards the radiator, you want this coolant to flow back inline. Next, locate the barbed port fitting by the thermostat and replace this with the barbed fitting included in the kit, use thread tape to install (see photo below). There is a ½" hose that connects both of these fittings, remove this hose.
The 87" hose goes to the barbed port coming off the engine (inlet line), this connects to the heater core fitting that is lowest relative to gravity. The 81" hose goes to the Y-Fitting (return line), this connects to the heater core fitting that is highest relative to gravity. Zip tie the heater hoses to the steel radiator lines to keep out of the way of the drive shaft. Re-use the existing hose clamps, two hose clamps are included in the kit for the heater core fittings. Once all hose clamps are re-secured, go ahead and refill the system with coolant.




POLARIS
"INLET" LINE TO THE ENGINE PORT
"RETURN" LINE TO THE Y-FITTING


y-fitting

INSTALL LOUVERS AND RUN DUCT

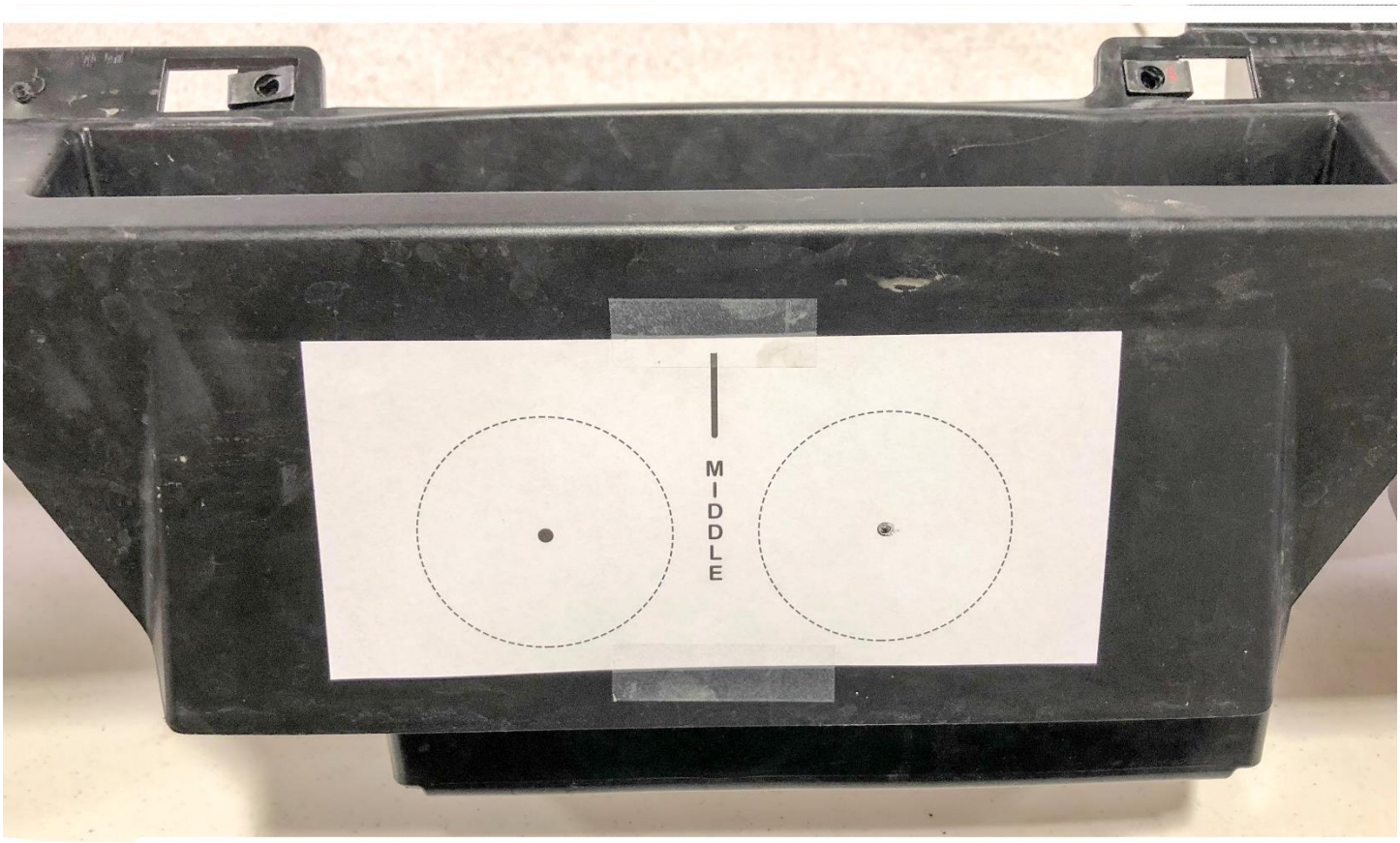
A 2 1/16” hole-saw is the size of hole you need for the louvers (2” hole-saw will work as well, but you may need to use a razor blade and shave the hole a little bigger). Stretch your duct out and cut into the following lengths: The two runs of duct for the defrost runs were cut at 20” each and the two runs of duct for the floor louvers were cut at 16” each.

With the top and bottom dash panels removed from the machine, find an empty table to drill out the holes and install the louvers. Use the templates provided to drill starter holes with a 1/8” drill bit. These bit holes will then be used to start your hole-saw cuts. Zip ties are used to secure the duct hose to the louver adapter and heater box adapter after it is pushed on; use a needle nose pliers to bear down and tighten the zip ties, you do not want them to be loose on the back of the louver adapter.

Now with your two defrost louvers installed in the top dash panel you can move onto the floor louvers. To start you are going to cut open the center cubby hole as shown below. There is no exact way to cut this opening out, we drilled 4 holes with a ½” drill bit and then make cuts connecting them. You could also use a large hole-saw (3+ inches) and create a good access cut-out for this step. See the photo below for how we did it.

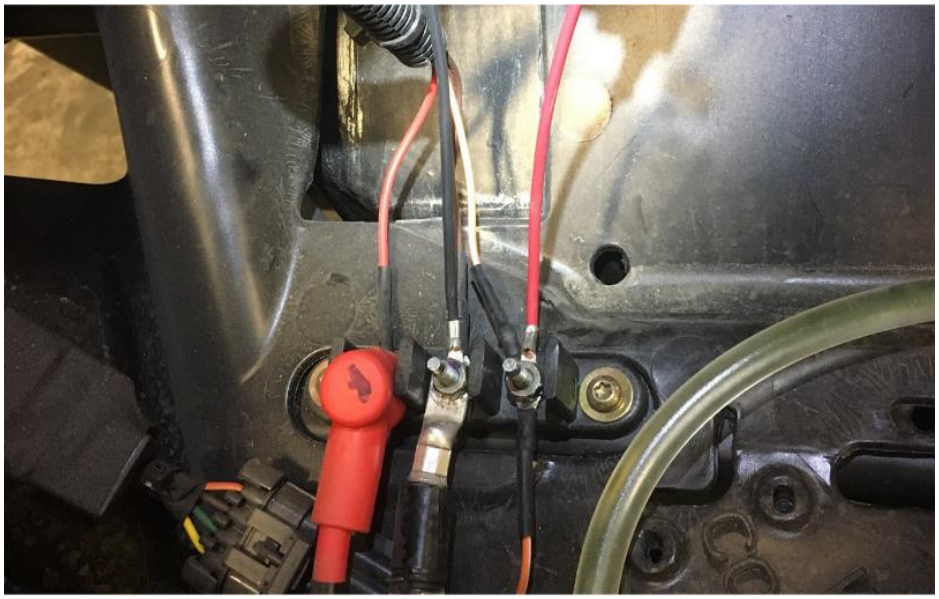
Once the two cubby access cuts have been made you can take the cover panel provided in the kit and block off the cubby opening, as shown below. This is how the Polaris OEM heater kit installs and is the only way to get heat pushed to the floor and still have an a true OEM look to the kit.

Next, cut out the floor louver template provided and tape it to the lower dash panel as shown below. Drill starter holes with a 1/8” drill bit where shown on the template. These bit holes will then be used to start your hole-saw cuts. See the photo below showing the template set up on the lower panel.


MIDDLE

WIRING
There is a yellow and orange wire that needs to go from the blower to the switch. See the picture below for which spade to connect to on the back of the switch.

Also included is a black ground wire and a fused red wire, see the picture below to see what spade these connect to on the back of the switch. You will need to drill out a ½" hole in the firewall to feed the red and black wires through. Then ground it to the bolt shown below and connect the red wire to the 12v supply.



REFILL COOLANT
Now you can refill the radiator and check for leaks. Start the machine and allow the engine to warm up and circulate the coolant, once you start getting good heat run the machine. When done using, recheck coolant level and fill if needed, make sure the radiator is cool before doing so. It is possible you will need to run the machine and recheck fluid levels multiple times before working out all of the air.

If you have any questions please call us at 1-866-730-7169.