

1967-1968 Camaro A/C Install Instructions

This kit is designed for the 1967-1968 non A/C equipped Camaro.
This kit can be used with or without Astro vents



Step One

Remove the following factory components:

- Heater box
- Heater box firewall cover
- Defrost plenums
- Controls and control cables DO NOT DISCARD BEZEL !!!
- Ducting
- Astro vents (if equipped) DO NOT DISCARD !!!!
- Driver and passenger side kick panels DO NOT DISCARD !!!



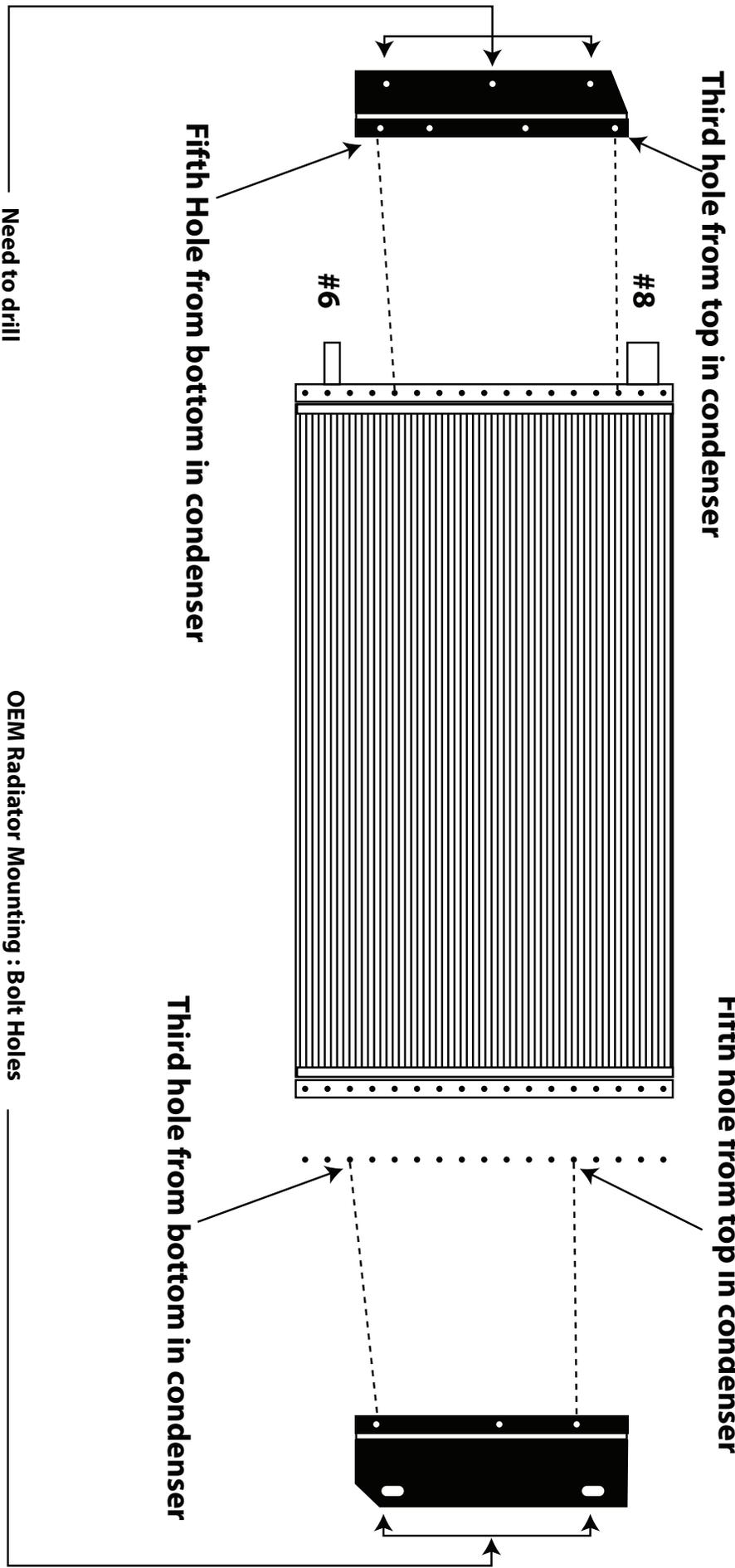
Step Two

Condenser installation

- 1) Remove hood latch from core support
- 2) Assemble condenser and brackets as shown (FIG 1)
- 3) Drivers side bracket will use factory radiator mounting holes (big block or small block)
- 4) Bolt driver side condenser bracket to core support using supplied hardware (FIG 1)
- 5) Level condenser and drill the 3 required in passenger side condenser bracket using supplied hardware (FIG 1)
Make sure condenser is mounted horizontal with #8 (larger fitting) on top and #6 (smaller fitting) on the bottom

Figure 1

Condenser Location

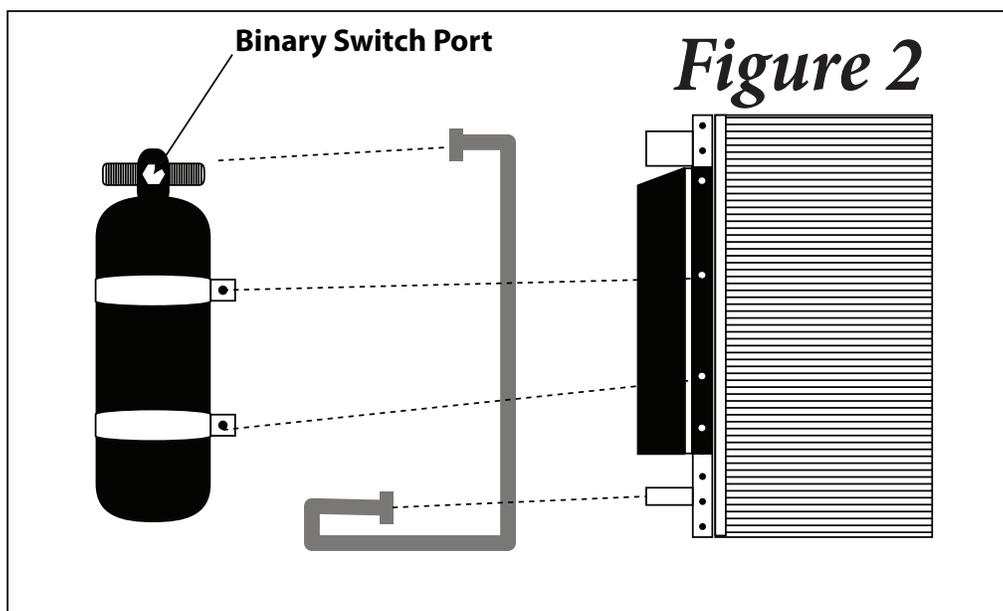


Step Three

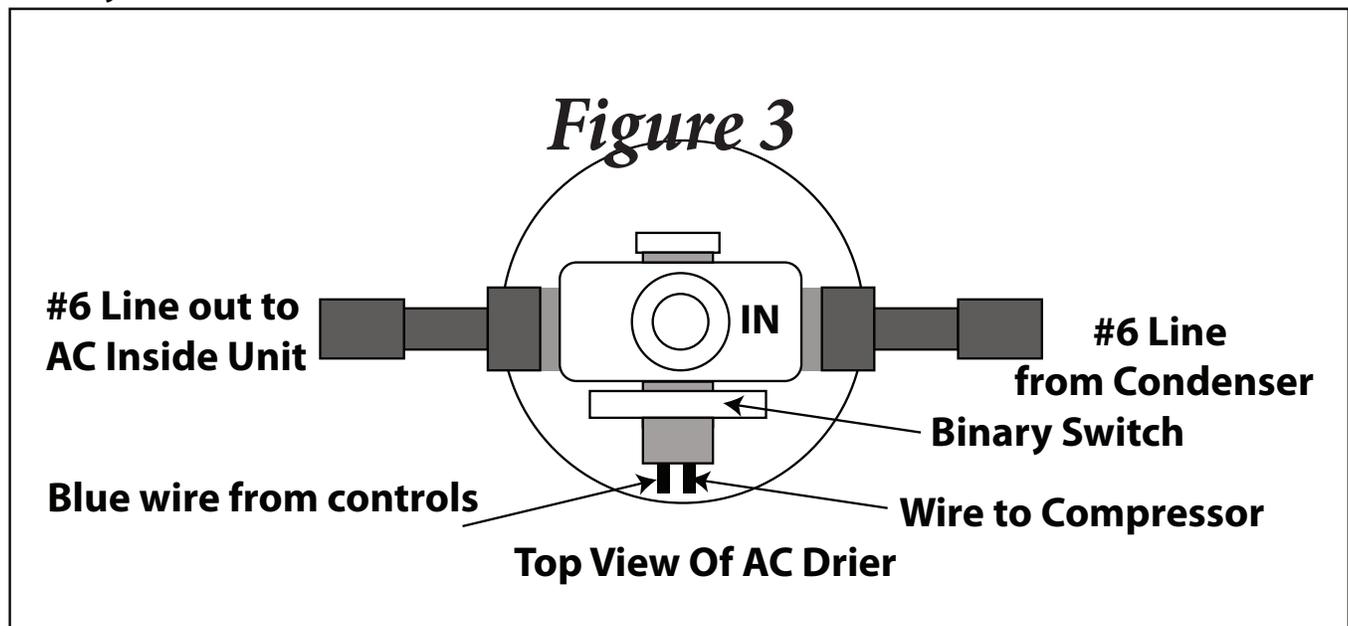
Drier and binary switch installation

- 1) Install drier using supplied clamps and hardware to the pre drilled holes on the passenger side condenser bracket (FIG 2). The drier is directional make sure it is installed as per (FIG 3)
- 2) Install #6 hardline from condenser to drier using supplied hardware and o-rings. Be sure to lubricate o-rings with a thin film of refrigerant oil. DO NOT OVER TIGHTEN
- 3) Using a 9/16 wrench remove the plug from the top of the drier. Install binary switch once again lubricating the o-ring. (FIG 3)

Condenser Location



Binary Switch Installation

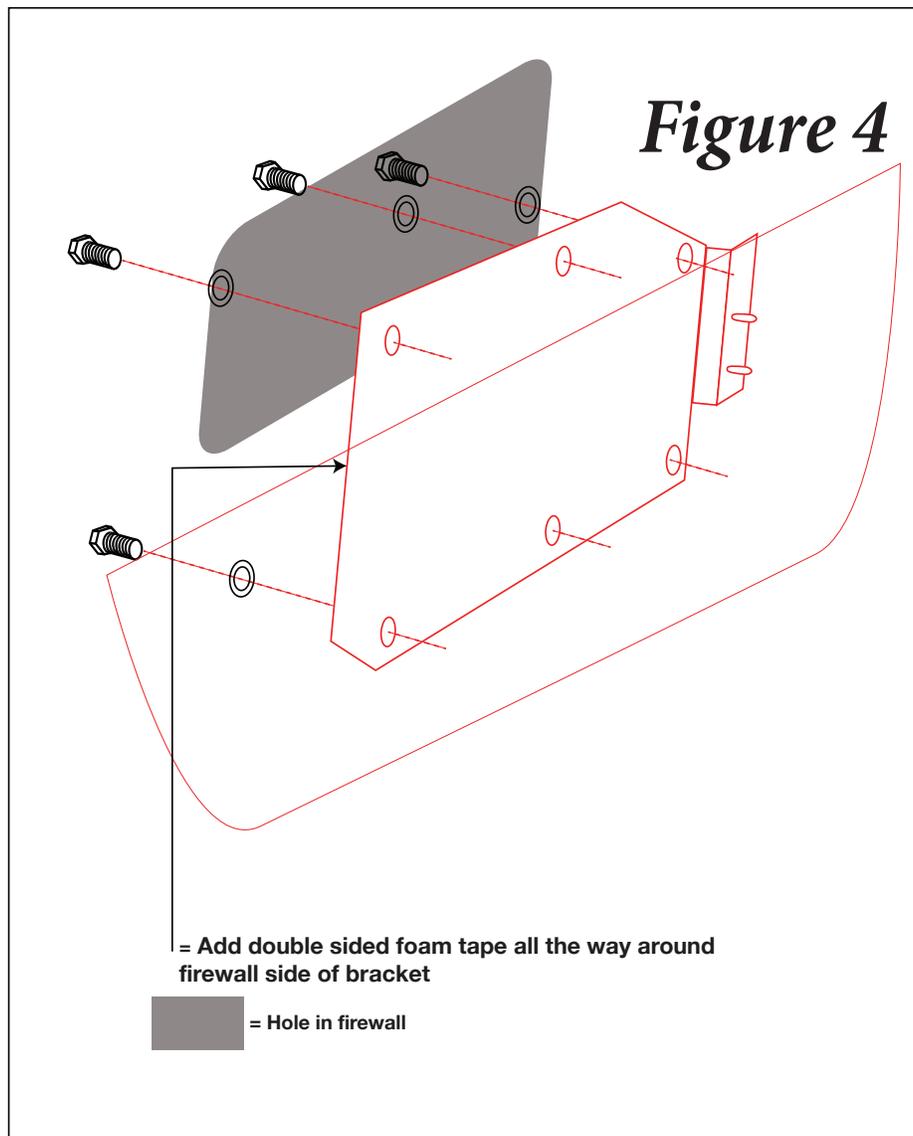


Step Four

Firewall cover installation

- 1) Apply supplied double sided tape to the firewall side of the of the firewall cover plate (FIG 4)
- 2) Using the supplied hardware mount cover plate on the inside of the firewall as shown (FIG 4)
- 3) The factory supplies five holes in the firewall. Once the factory holes have been used it is necessary to drill a ¼" hole located at the top right of the cover plate. (FIG 4)
- 4) Install round bulkhead plug and grommets on the OEM fan motor hole. (FIG 7)
- 5) We highly recommend insulating the firewall at this time for maximum performance of you're A/C system

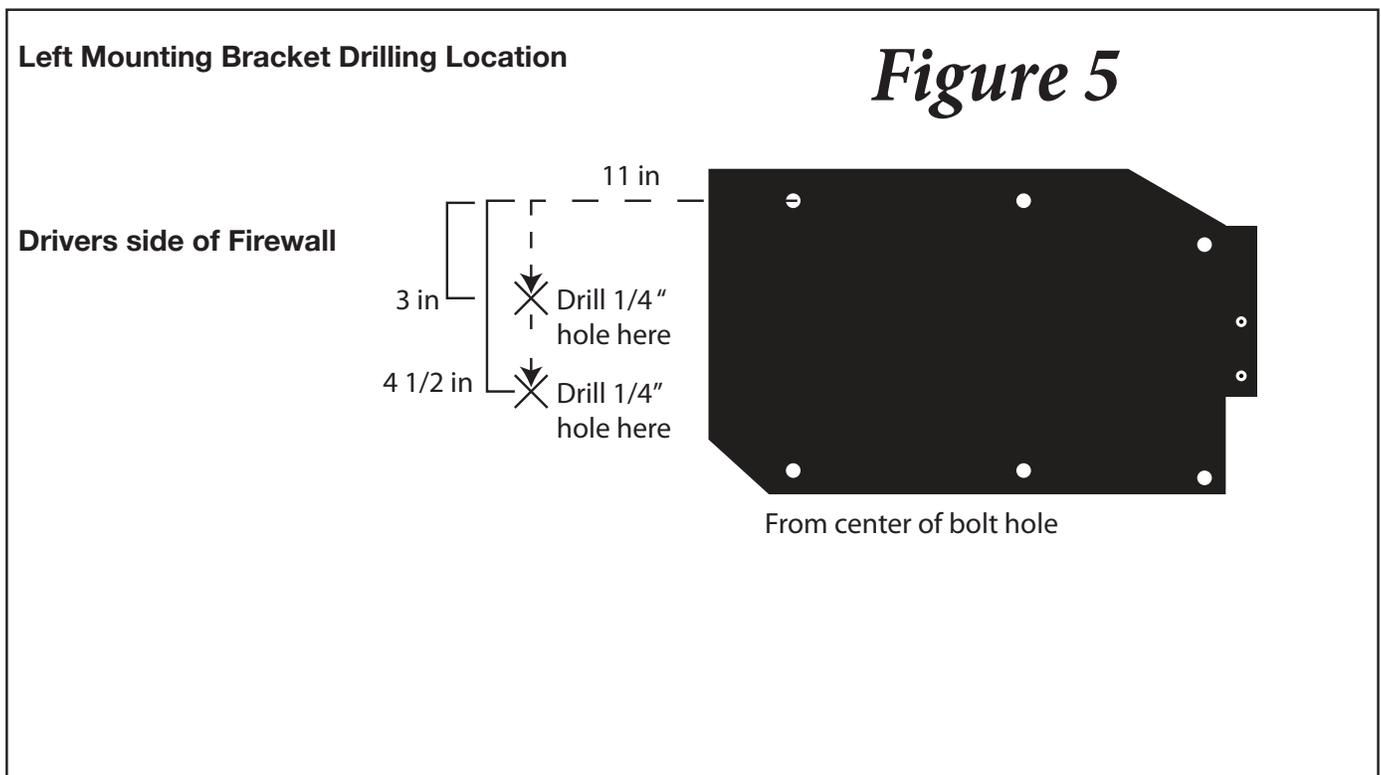
Firewall Cover Installation



Step Five

Left side evaporator bracket

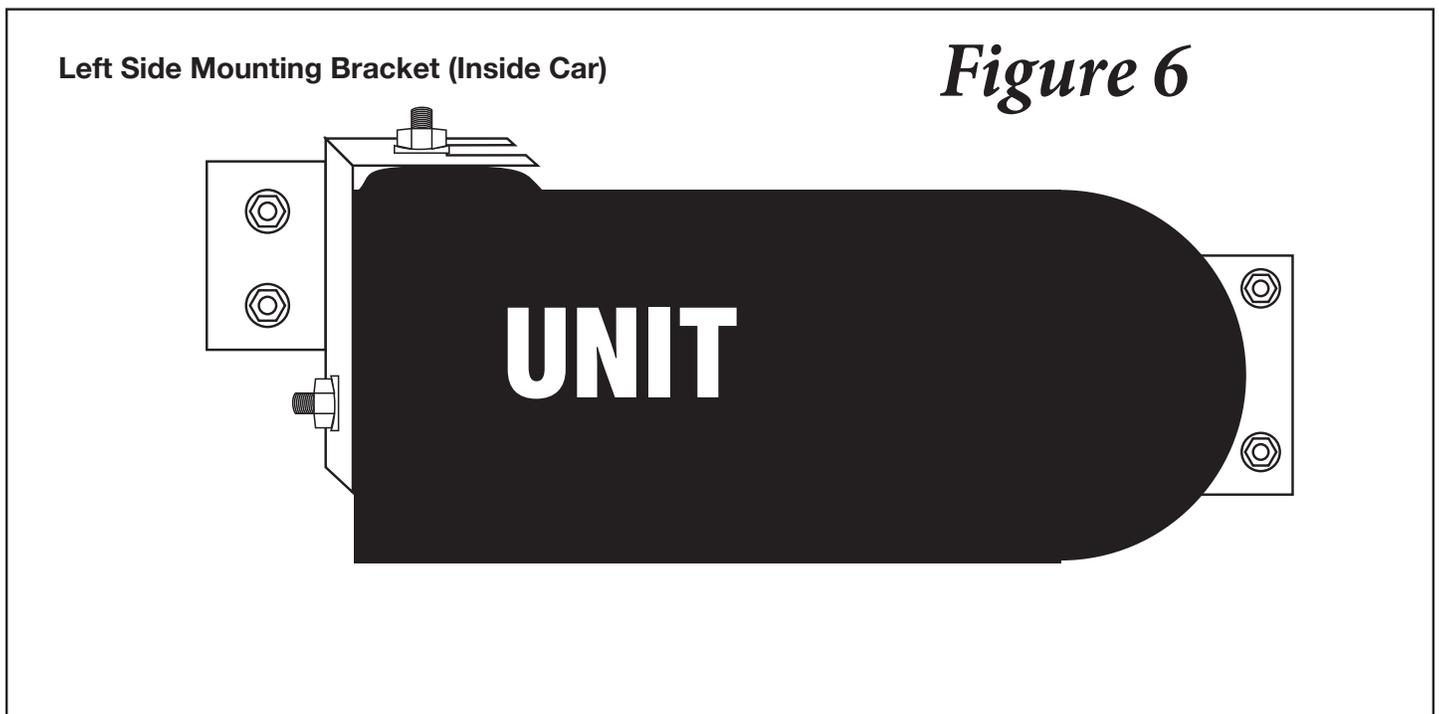
- 1) Drill two 1/4" holes using the measurements shown (FIG 5)
- 2) Install two supplied 1/4" x 1" bolts and washers from the engine compartment into driver's compartment and install 2 supplied flat nuts. This will allow you to have two studs to hang the evaporator from.
- 3) Attach left side mounting bracket to left side of the evaporator using supplied hardware (FIG 6)



Step Six

Mounting evaporator

1) Lift evaporator into place. Attach to the two studs on the left side firewall and the two studs on the right side firewall bracket using supplied hardware (FIG 6)



Step Seven

Cutting cowl for refrigerant lines and heater hoses

- 1) This is the only major modification that needs to be done to complete install
- 2) Install (finger tight) the #6 90 degree and #10 straight fittings onto the evaporator. Using this as a reference you will need to cut an access hole in the cowl area above the kick panel. This will give you access into the fresh air cavity so you can exit your hoses thru the plastic bulkhead plug in the factory blower motor location. (FIG 8)
- 3) Drill hole in floorboard in line with the condensate drain from the unit. Instal plastic drain tube. (FIG 7)

Hose Routing Cutout

***Test Mount the unit first before cutting any holes in the cowl or drilling for drain hole.**

Figure 7

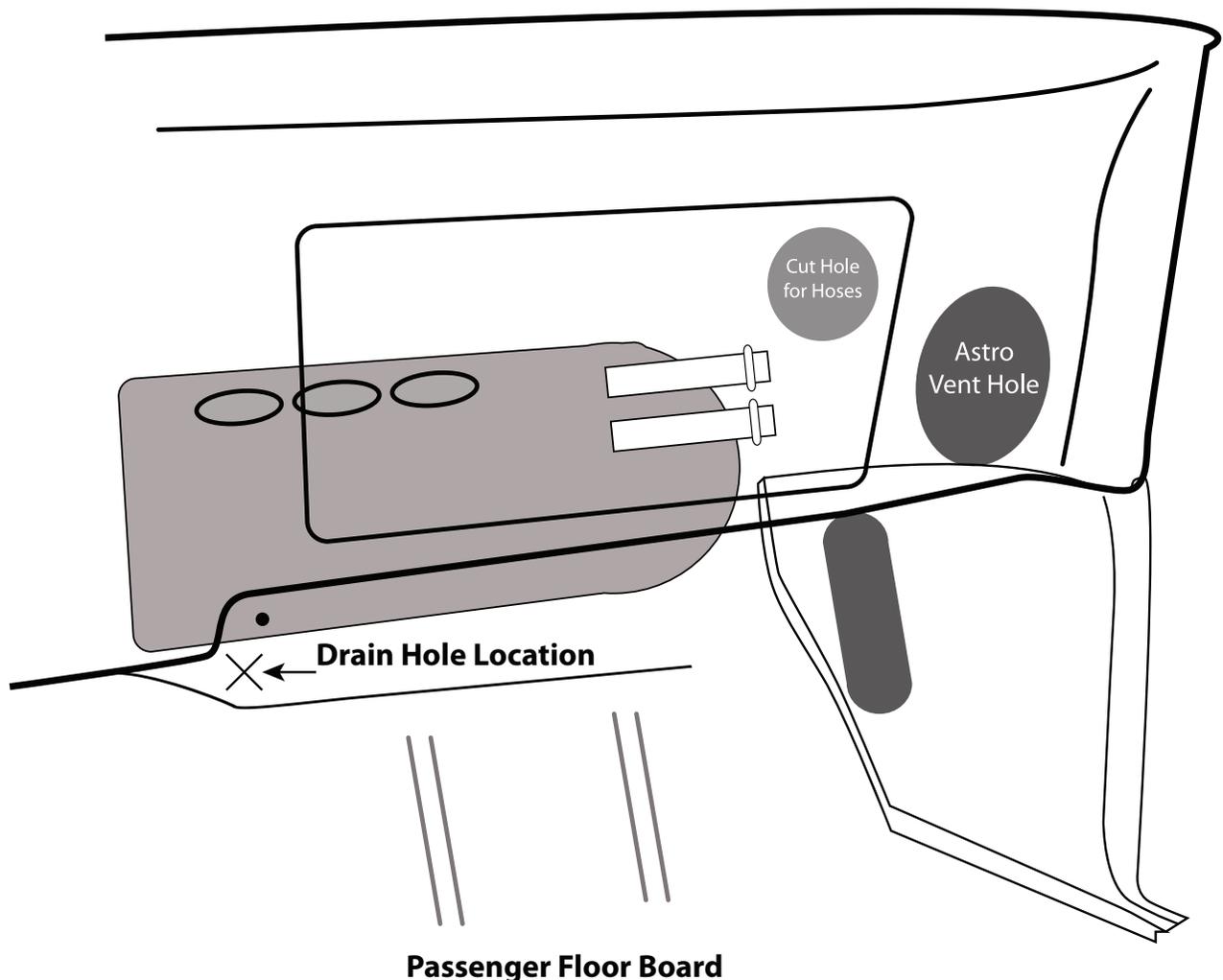
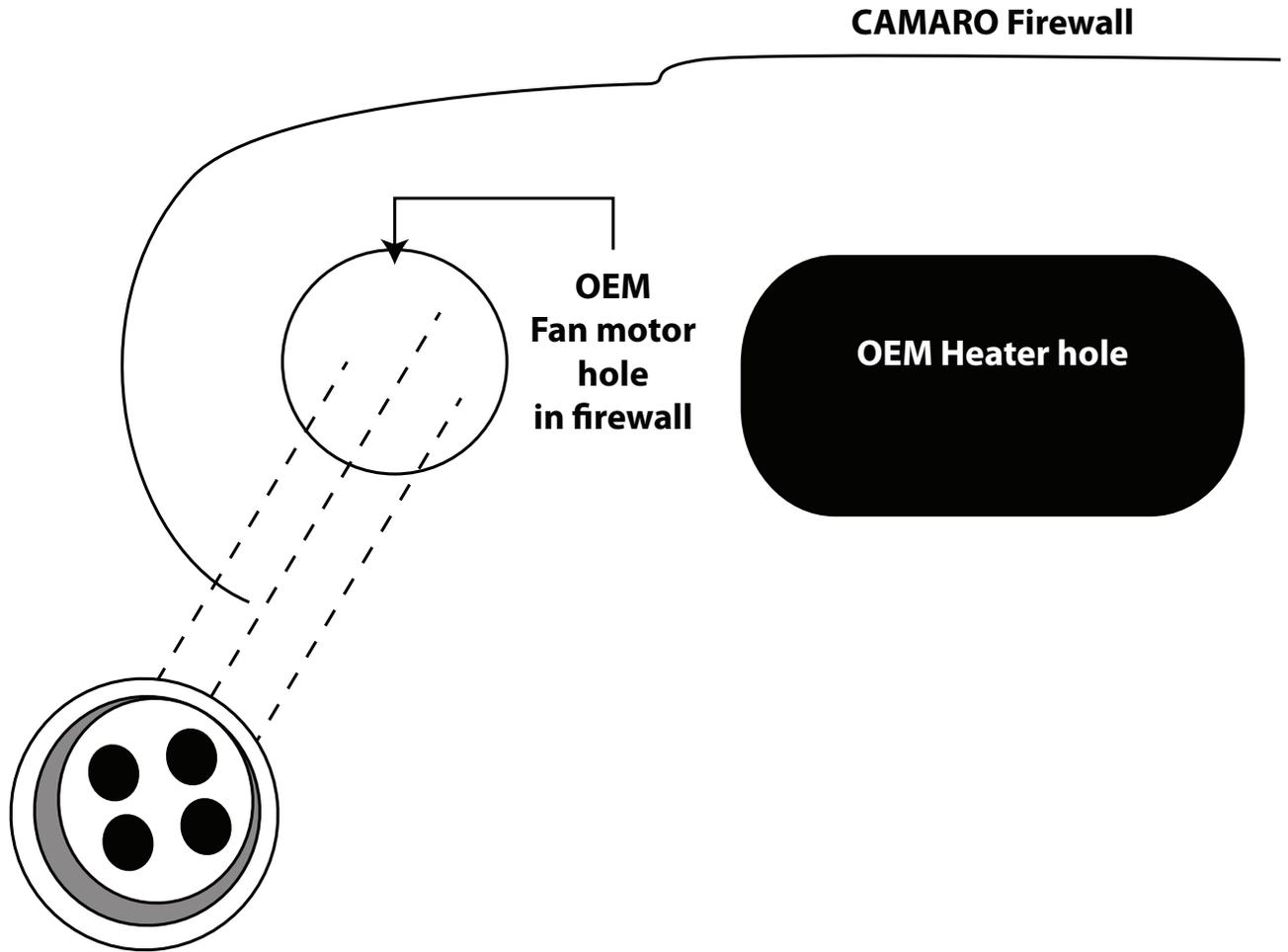


Figure 8

Hose Plug Location



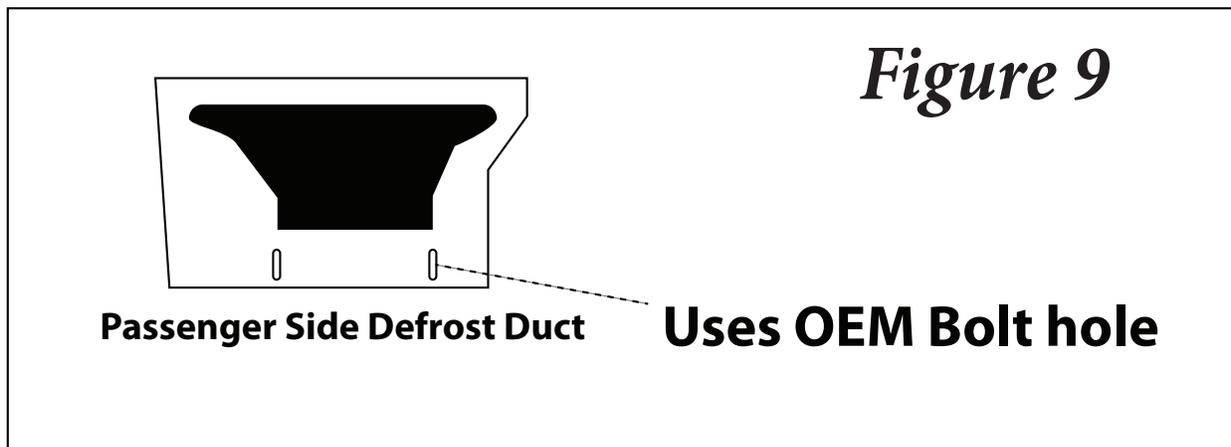
Important*

**Important! You must permanently seal off kick panel fresh air vents.
To properly seal the vehicle for maximum A/C performance.**

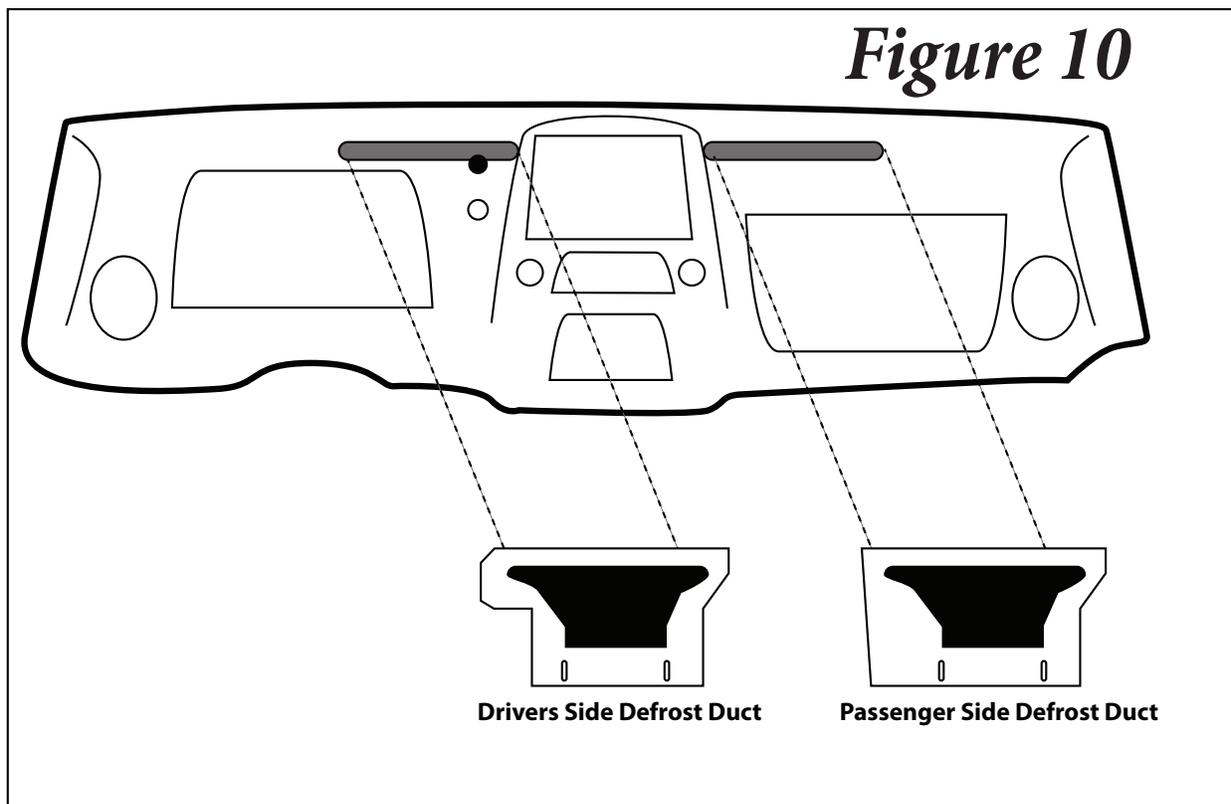
Step Eight Defrost duct installation

- 1) This kit comes supplied with a drivers and passengers side defrost duct.
- 2) Install passenger side defrost duct using the factory bolt hole in the cowl (FIG 9)
- 3) Install drivers side defrost duct using the supplied hardware. It may be necessary to remove the ignition switch to allow a straight line access to install the supplied self-tapping screws. (FIG 10)
- 4) Run the 2" defrost duct hose from the defrost vents to the evaporator. Avoid kinks and sharp bends for maximum airflow

Defrost Duct Location (Passenger side uses OEM bolt Hole)



Defrost Duct Location

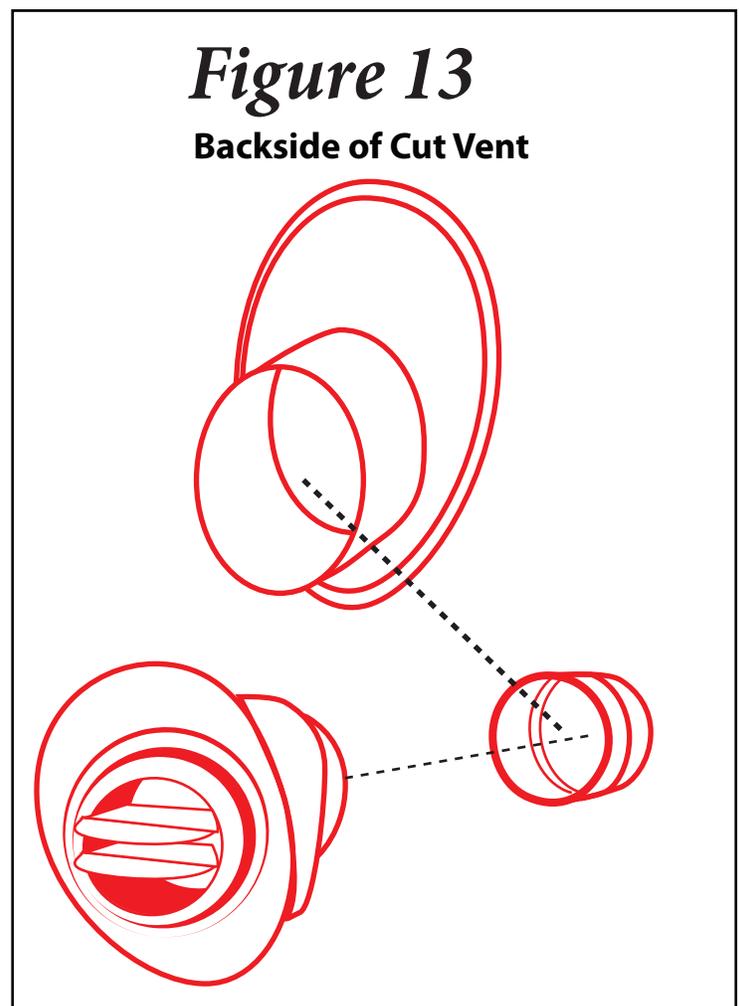
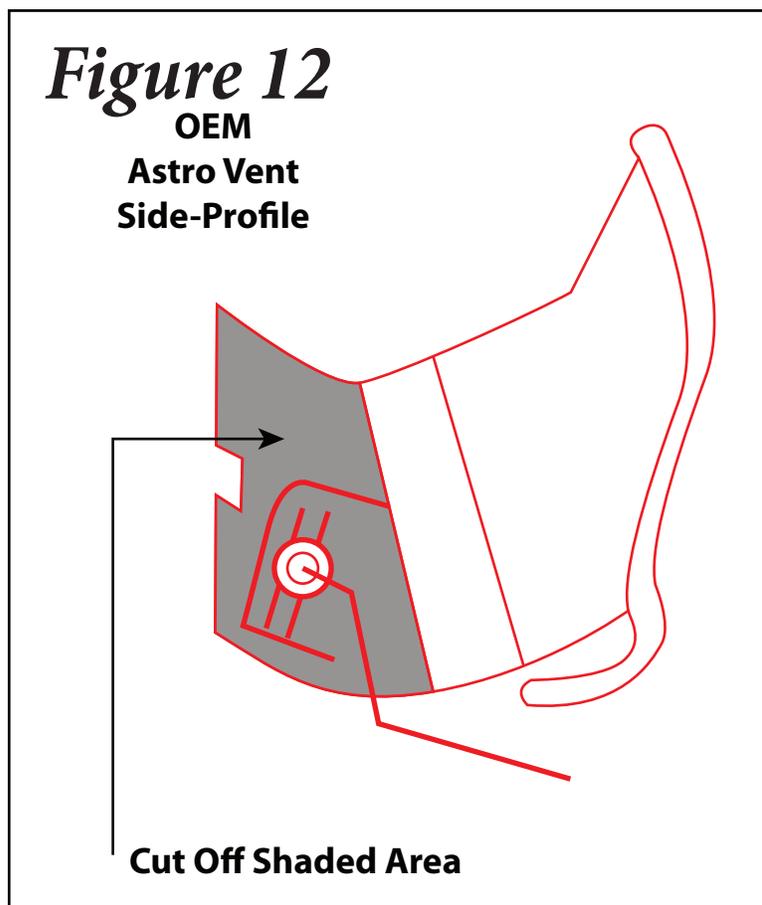


Step Nine

If your car is not equipped with astro vents skip to step ten

Astro vent modification and installation

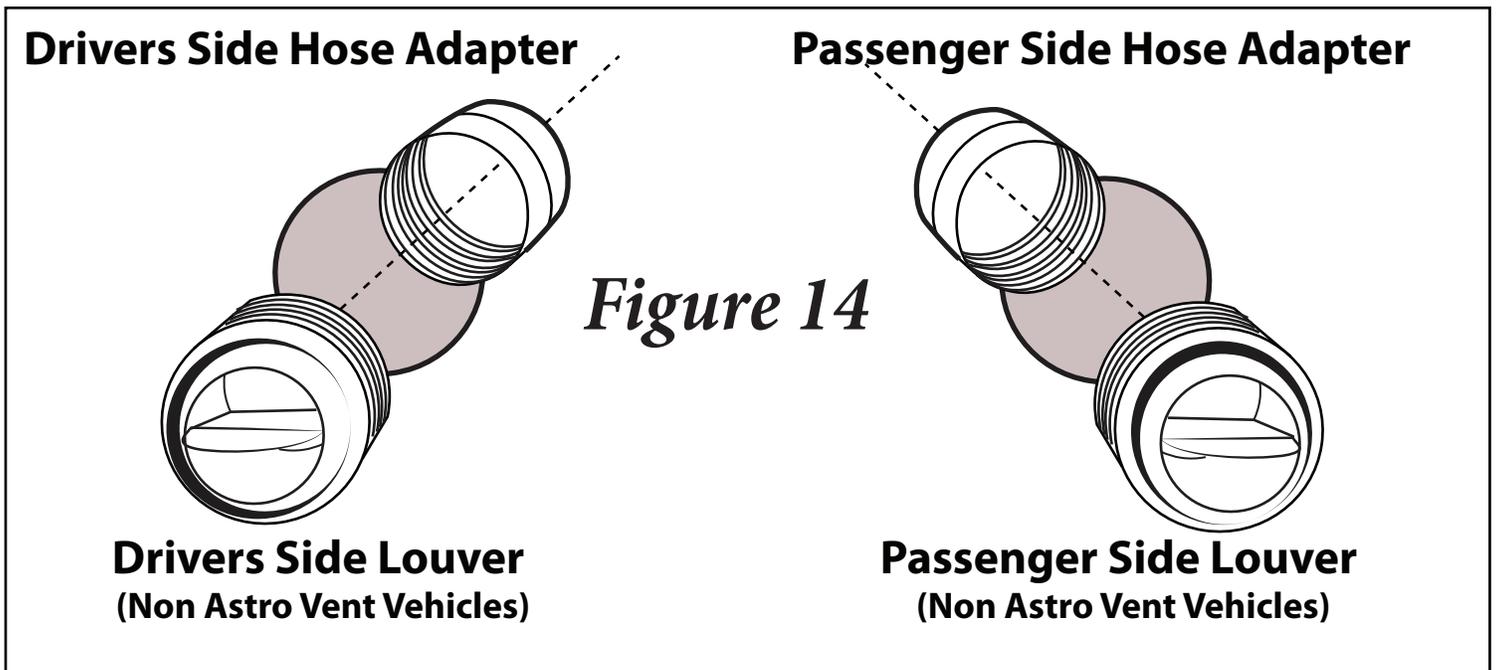
- 1) Using the supplied block off plates (FIG 11) and supplied hardware install cover plates over original astro vent fresh air holes in cowl. It will be necessary to use a bead of silicone between the cover plate and cowl.
- 2) The existing astro vents will need to be modified (FIG 12) . Cut astro vent housing to allow the 2 ½” hose adapter to be fitted inside the astro vent (FIG 13)
- 3) Run the 2 ½” duct hose to the unit. Avoid kinks and sharp bends for maximum airflow.



Step Ten

Vent installation for non astro vent cars.

- 1) On each side of the dash where the factory astro vents would have been, cut one 2 ½" hole on each side of the dash. Using your vent as a pattern cut the hole smaller and file to fit. Measure twice cut once !!! (FIG 14)
- 2) Install vent face and screw on hose adapter from the back side.
- 3) Run the 2 ½" duct hose to the unit. Avoid kinks and sharp bends for maximum airflow.



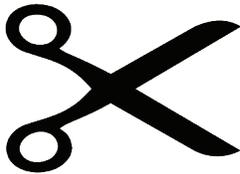
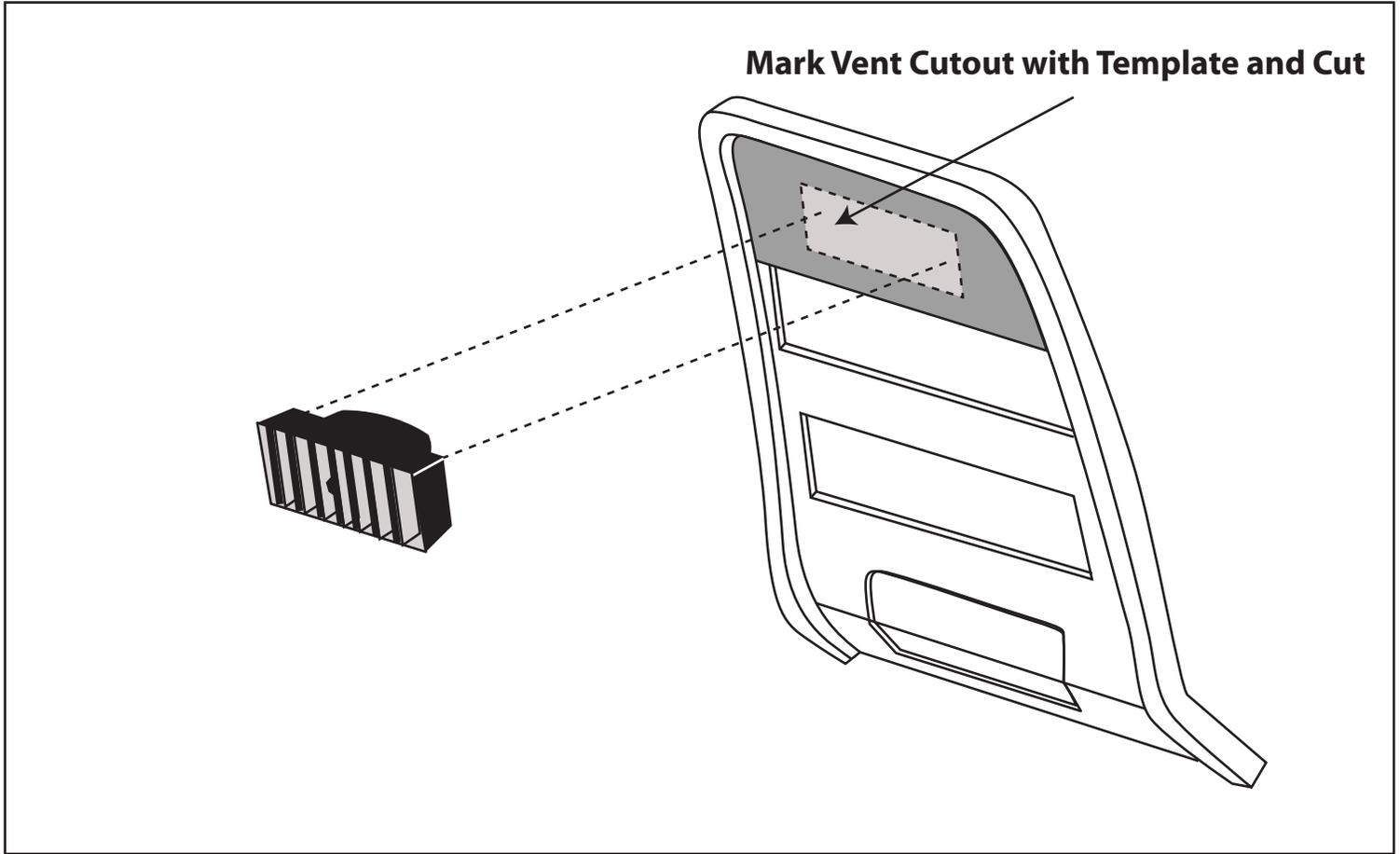
Step Eleven

Center vent installation

- 1) Using the supplied template align on the factory dash trim and cut hole for center vent. Measure twice cut once !!!!. (FIG 15)
- 2) Snap center vent in place
- 3) It will be necessary to remove enough material from the dash to allow the vent to be installed
- 4) Do not install vent hose until step twelve is completed

Figure 15

Center Vent Installation



CUT ALONG DOTTED LINE FOR VENT HOLE TEMPLATE.



DOUBLE CHECK MEASUREMENT
Measure 3 times, cut once.

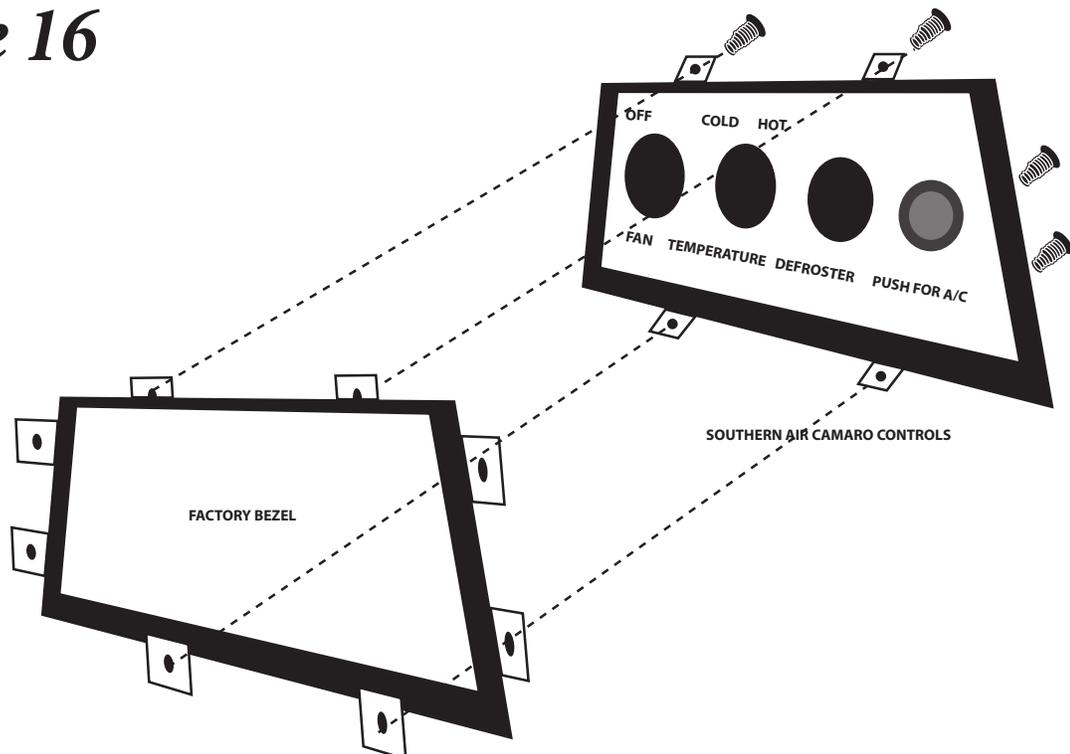
Step Twelve

Control panel modification and installation

- 1) Separate factory bezel from the factory control slide unit
- 2) Line up Southern Air control panel on the factory bezel (FIG 16)
- 3) The four mounting points will need to be tapped 10-32. No drilling required the hole will accept a 10-32 tap
- 4) Attach the supplied Southern Air control face to the factory bezel and install back in the factory location in the car (FIG 16)
- 5) Reinstall factory dash trim with vent. Install 2 ½ " duct hose and run to the evaporator.

Controls Installation

Figure 16

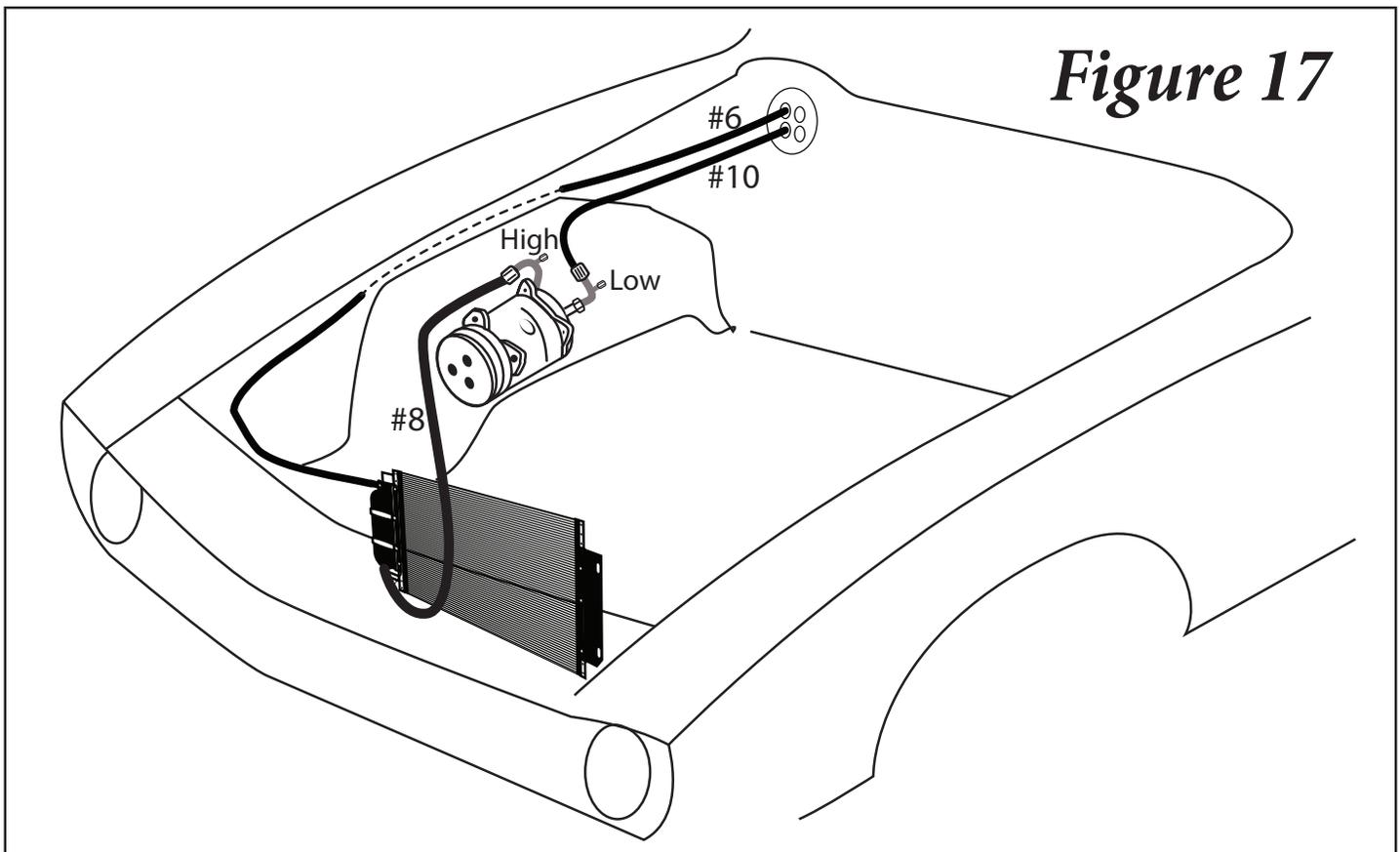


Step Thirteen

Refrigerant hose routing (FIG 17)

- 1) Mount the compressor using instructions included with the bracket kit
- 2) Route #10 A/C hose from the unit thru plastic firewall bulkhead into engine compartment to low side of compressor
- 3) Route #8 A/C hose from the high side compressor to the #8 fitting on the condenser (top fitting)
- 4) Route #6 A/C hose from the evaporator thru the plastic bulkhead into the engine compartment behind the inner fender then to the drier (FIG 17)
- 5) It will be necessary to mock all hoses up in advance before final crimping.

AC Hose Routing



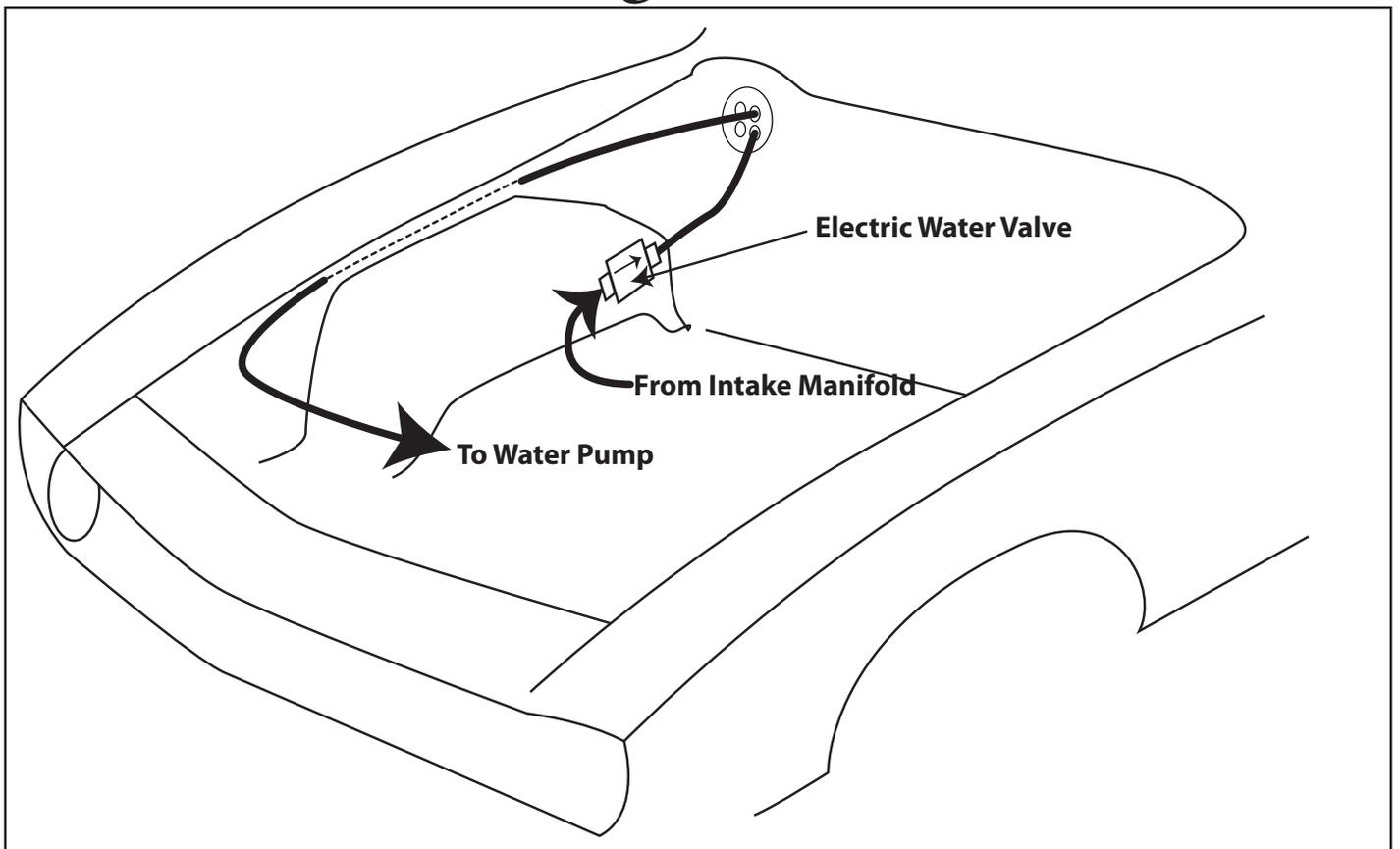
Step Fourteen

Water valve and heater hose installation

- 1) Mount water valve to lower inner fender (FIG 18)
- 2) Route heater hose from evaporator unit thru plastic bulkhead behind the inner fenderwell and attach engine return line (water pump)
- 3) Route hose from intake manifold (pressure) to inlet side of water valve.
- 4) Route hose from the water valve exit thru plastic firewall bulkhead and into the evaporator. (heater core is not directional)
- 5) Water valve is directional. It is marked with an arrow showing the direction of flow to the heater core. (FIG 19)

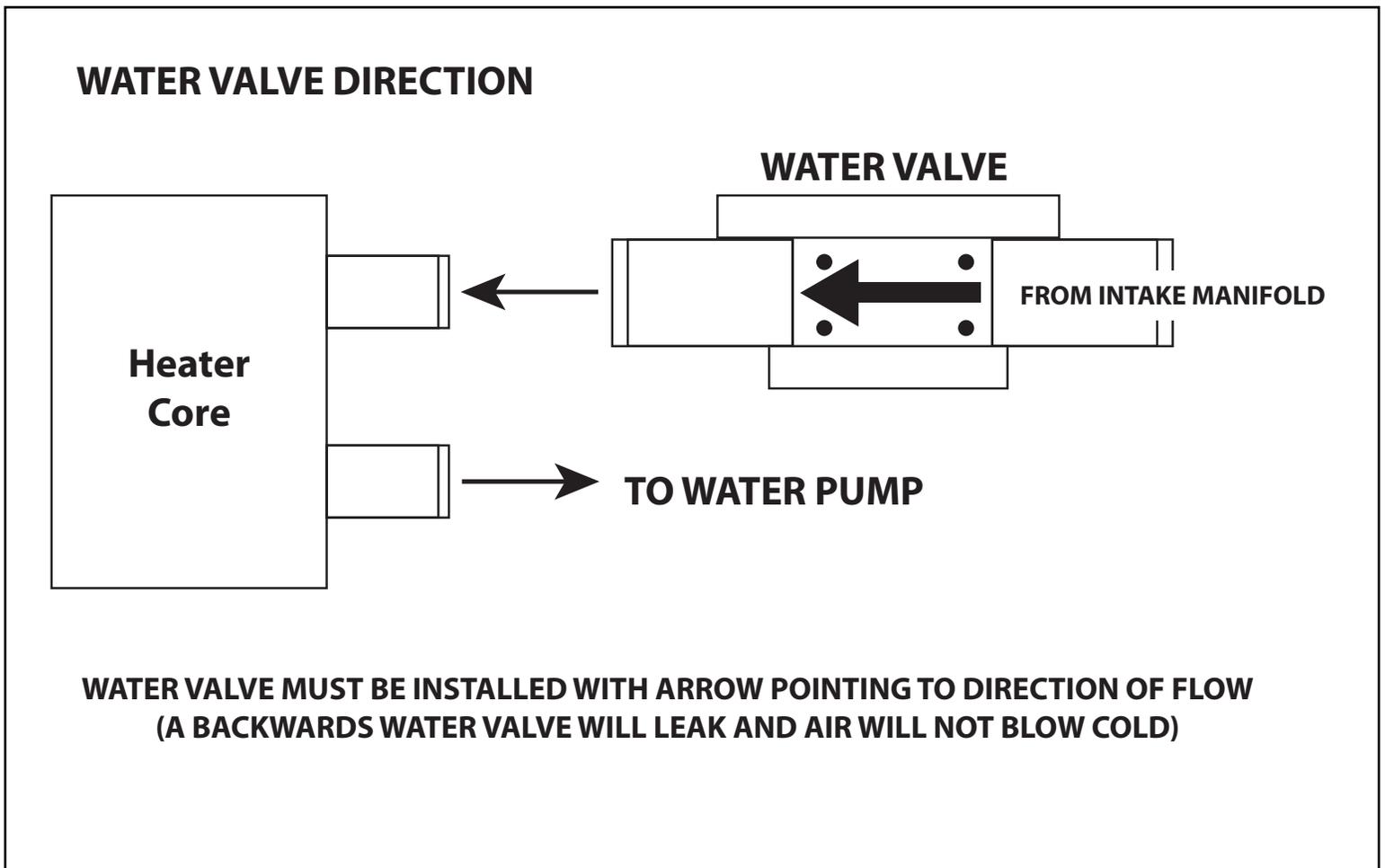
Heater Hose Routing

Figure 18



Continued:

Figure 19



Step Fifteen

Wiring your system

- 1) Make sure your electrical system can handle the load (25AMP)
- 2) If using original wiring we highly recommend putting the system on a 30 AMP relay and 30 AMP circuit breaker available from Southern Rods
- 3) If using aftermarket wire harness locate a proper keyed fused 12V source that can handle a 25 AMP load
- 4) Southern Air systems are plug and play. No need to cut or splice anything. Plug in switch panel as per wiring diagram.
- 5) Route compressor and water valve wires along with the #6 hose on the plastic firewall bulkhead.
- 6) Wire binary switch as per FIG 3
- 7) Make sure your system has a good ground. If you are grounding to the dash or firewall make sure you have a good chassis ground to engine block.

Step Sixteen

**REFER TO THE PRINCIPLES OF AIR CONDITIONING PAMPHLET INCLUDED IN THIS KIT FOR CHARGING AND TROUBLESHOOTING INSTRUCTIONS
AGAIN IF YOU HAVE ANY QUESTIONS CALL
SOUTHERN AIR 864-848-0601**