

1967-1972 Chevrolet Truck Install Instructions (SECOND EDITION)

This kit is designed for the 1967-1972 Chevrolet or GMC trucks
without factory air conditioning.



Step One

Remove the Following Factory Components:

- Glove box
- Heater box
- Heater box firewall cover
- Controls and control cables **DO NOT DISCARD BEZEL!**
- Ducting
- Battery

Step Two

Condenser Installation

- 1) Remove hood latch from core support.

- 2) Assemble condenser and brackets as shown (Figure 1) using 8-32 x 1/2 screws and locking nuts supplied in hardware pack. (maybe necessary to drill condenser holes to accomodate screws)

- 3) Lower condenser brackets will mount to the factory holes in the lower core support.

- 4) Top condenser bracket will sandwich behind the two top hood latch bolts in the core support.

- 5) Install two 1/4" bolts with stamped steel flat nuts into the existing holes in the lower core support to act as studs for final assembly. (Figure 1)

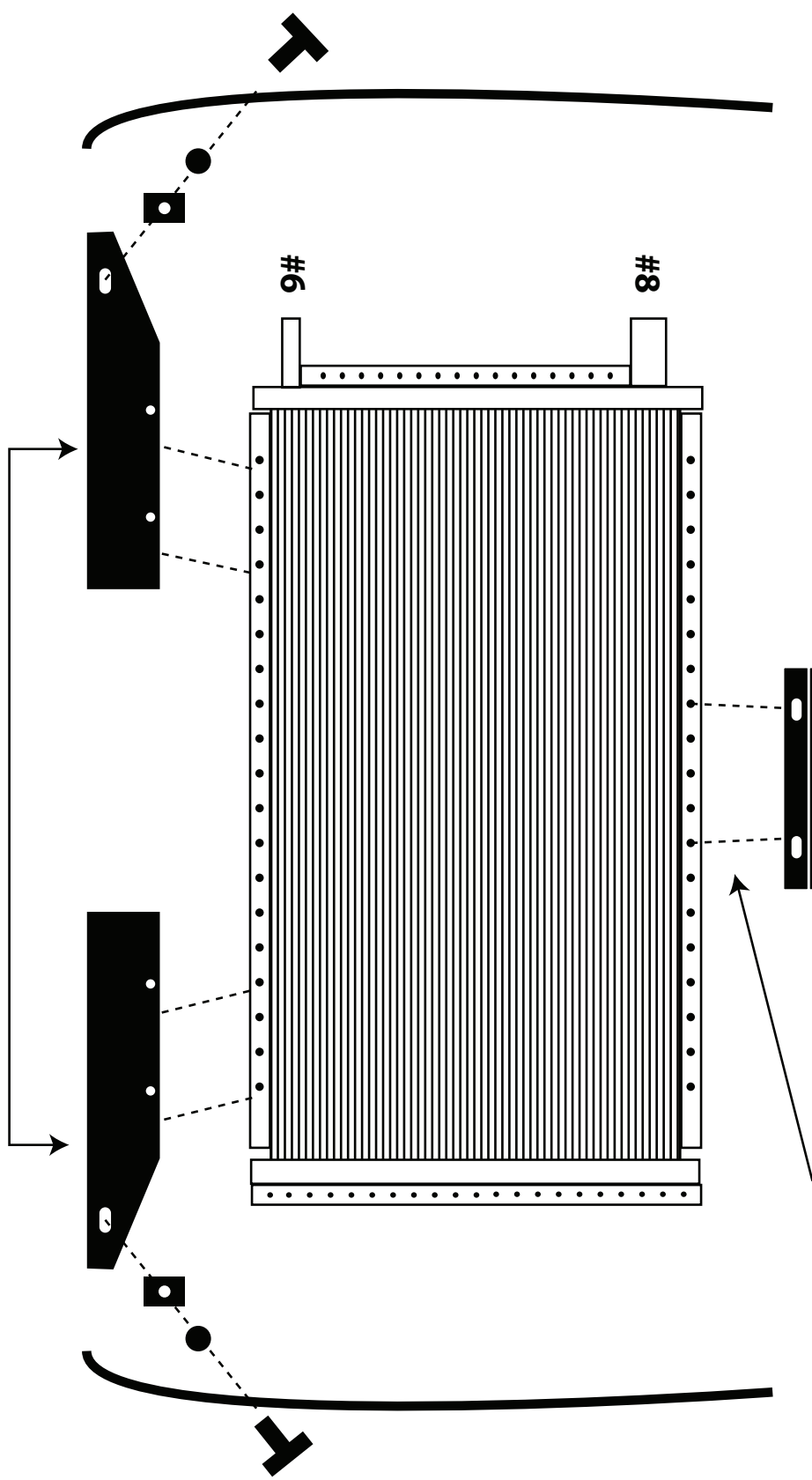
Figure 1

Condenser Location

Figure 1

Factory hood latch bolts.

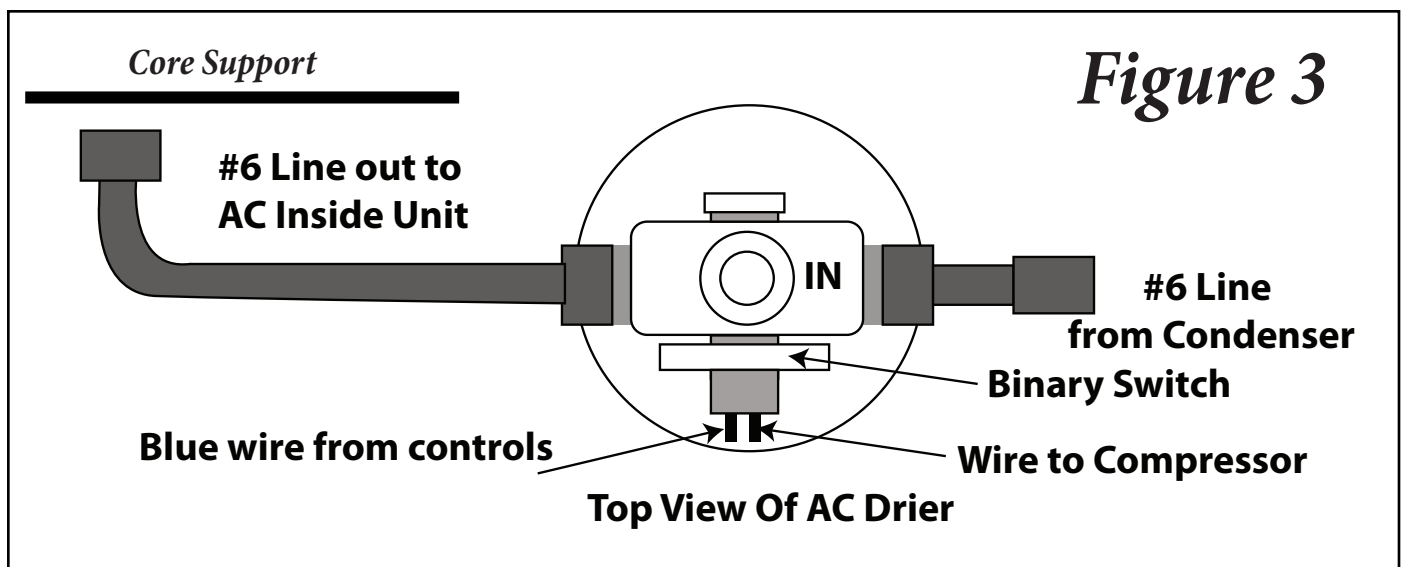
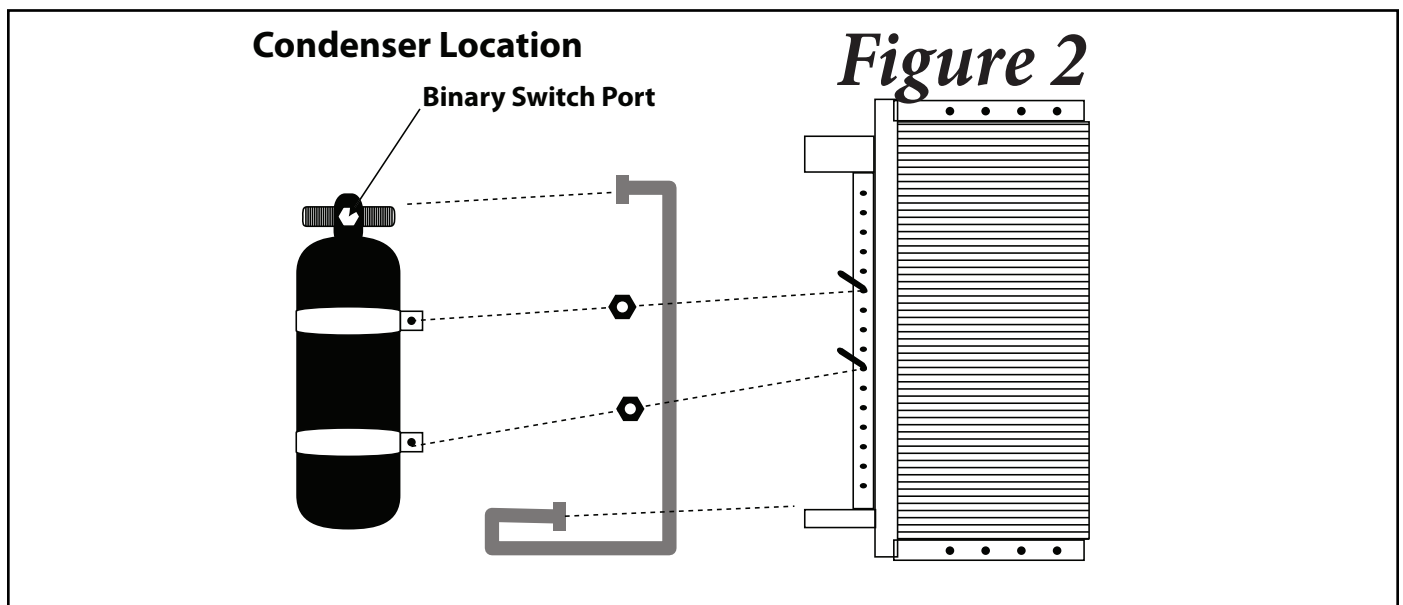
Mount Top condenser brackets on the back-side row of condenser bolt holes. In the 8th from left side and the 12th from left side. Centering bracket in top of condenser.



Mount bottom condenser brackets in the 1st and 4th bolt hole.

Step Three Drier and Binary Switch Installation

- 1) Install the drier using the two supplied clamps. Attach the drier to the two existing studs on the condenser. Figure 2.
- 2) Using a 9/16 wrench remove the plug from the top of the drier. Install binary switch be sure to lubricate the o-ring. (Figure 3)
- 3) Install #6 hardline from condenser to drier using supplied o-rings. Be sure to lubricate o-rings with a thin film of refrigerant oil. DO NOT OVER TIGHTEN
- 4) Install #6 hardline from drier and align to core support in front of battery and bore a hole in the core support. To align with AC hose, (See **Figure 14**)



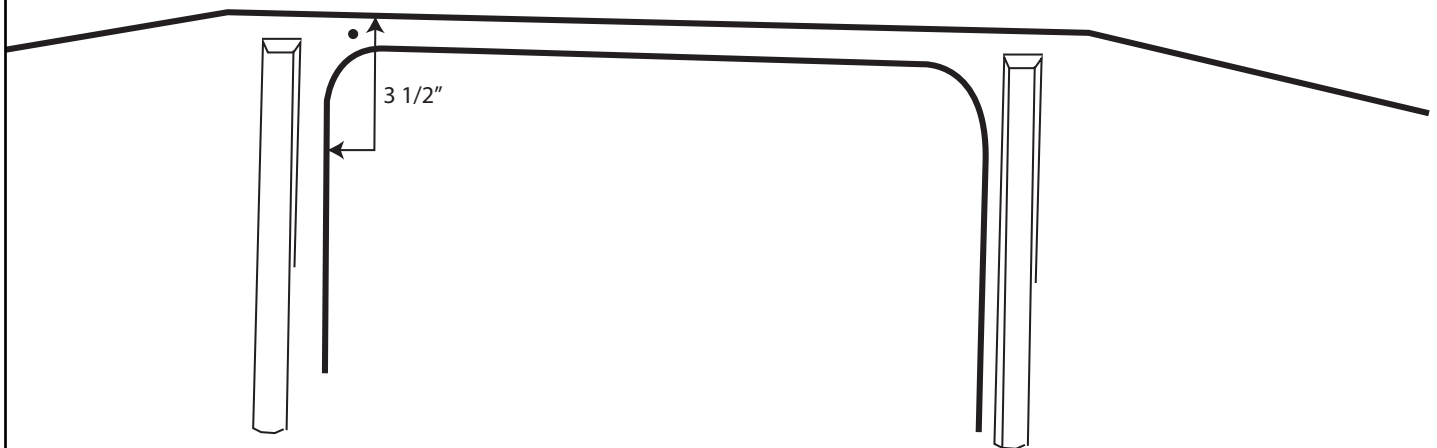
Step Four

#8 Hardline Location for Condenser

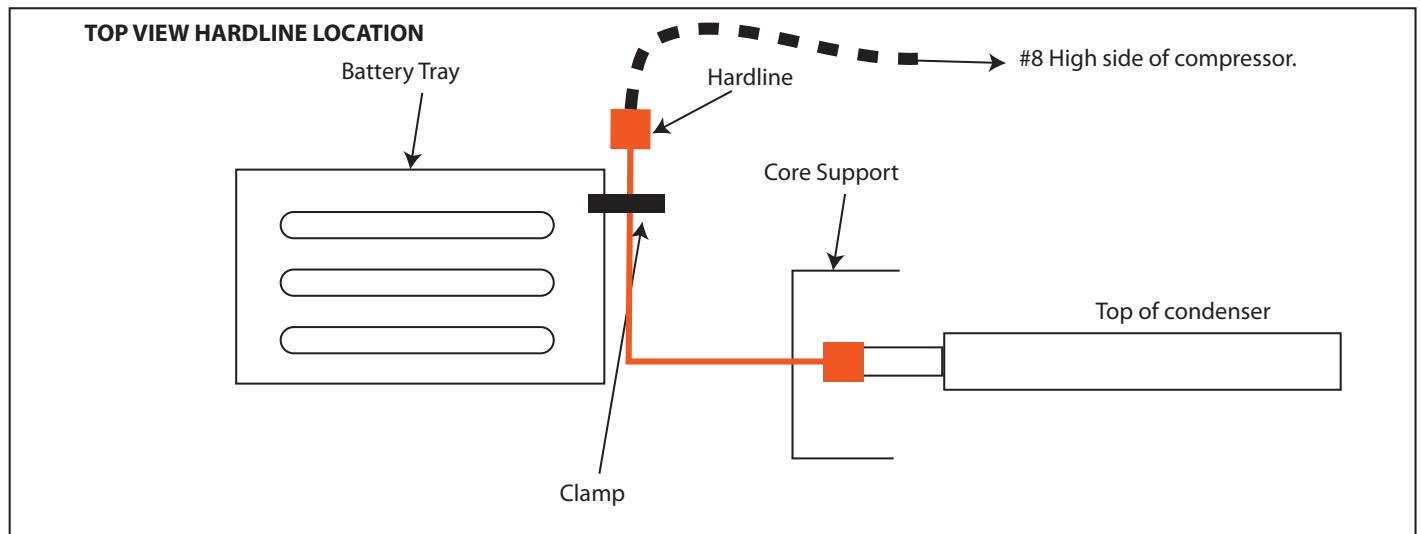
1) Measure from top of core support 3 1/2" down and bore an 1 1/4" hole through the side of the core support to line up with the number 8 fitting on the top of condenser. Install #8 90 Degree hardline from condenser through the core support and attach to side of battery tray with supplied clamp. Figure 4

Figure 4

Condenser Hardline Location

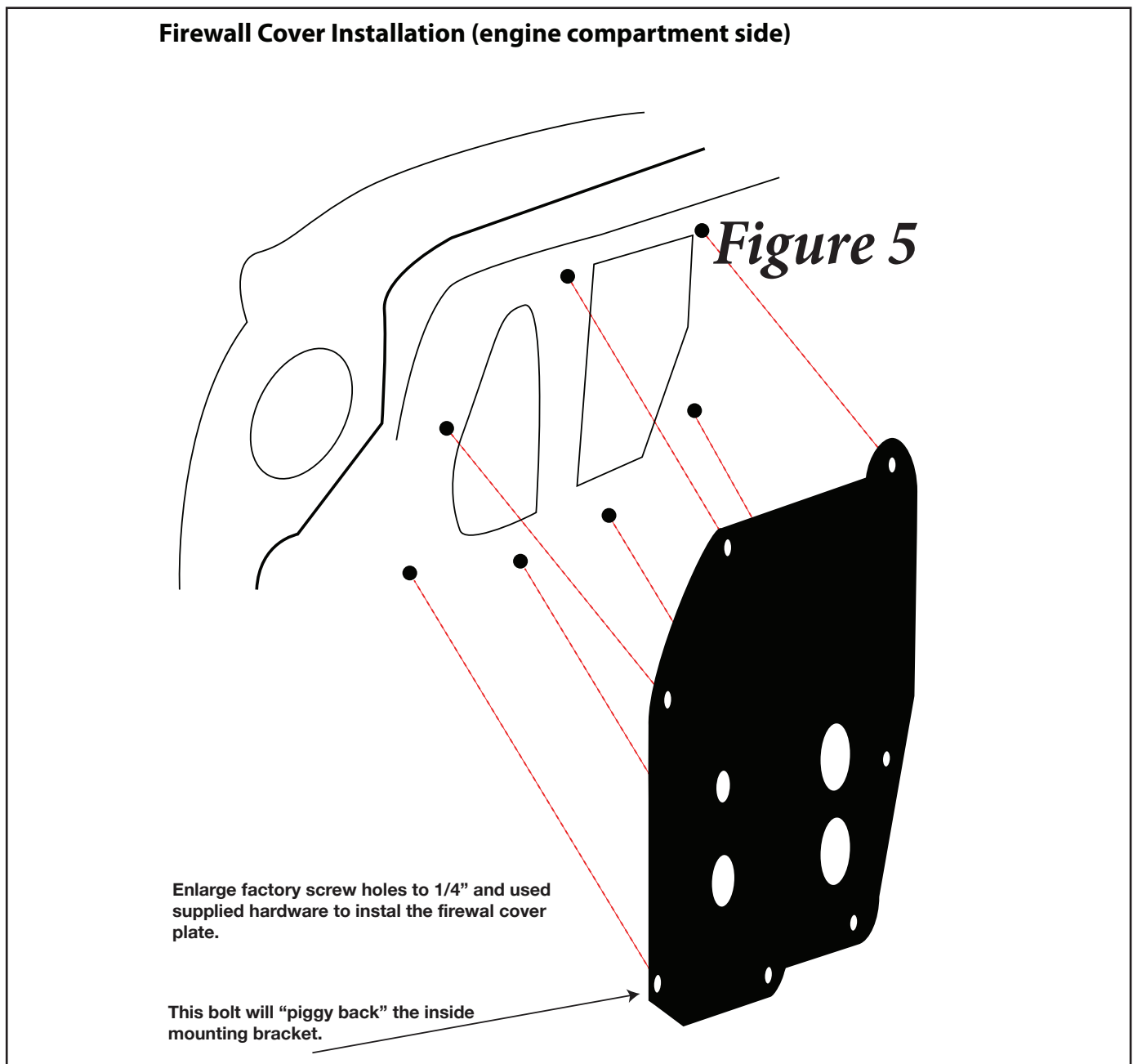


TOP VIEW HARDLINE LOCATION



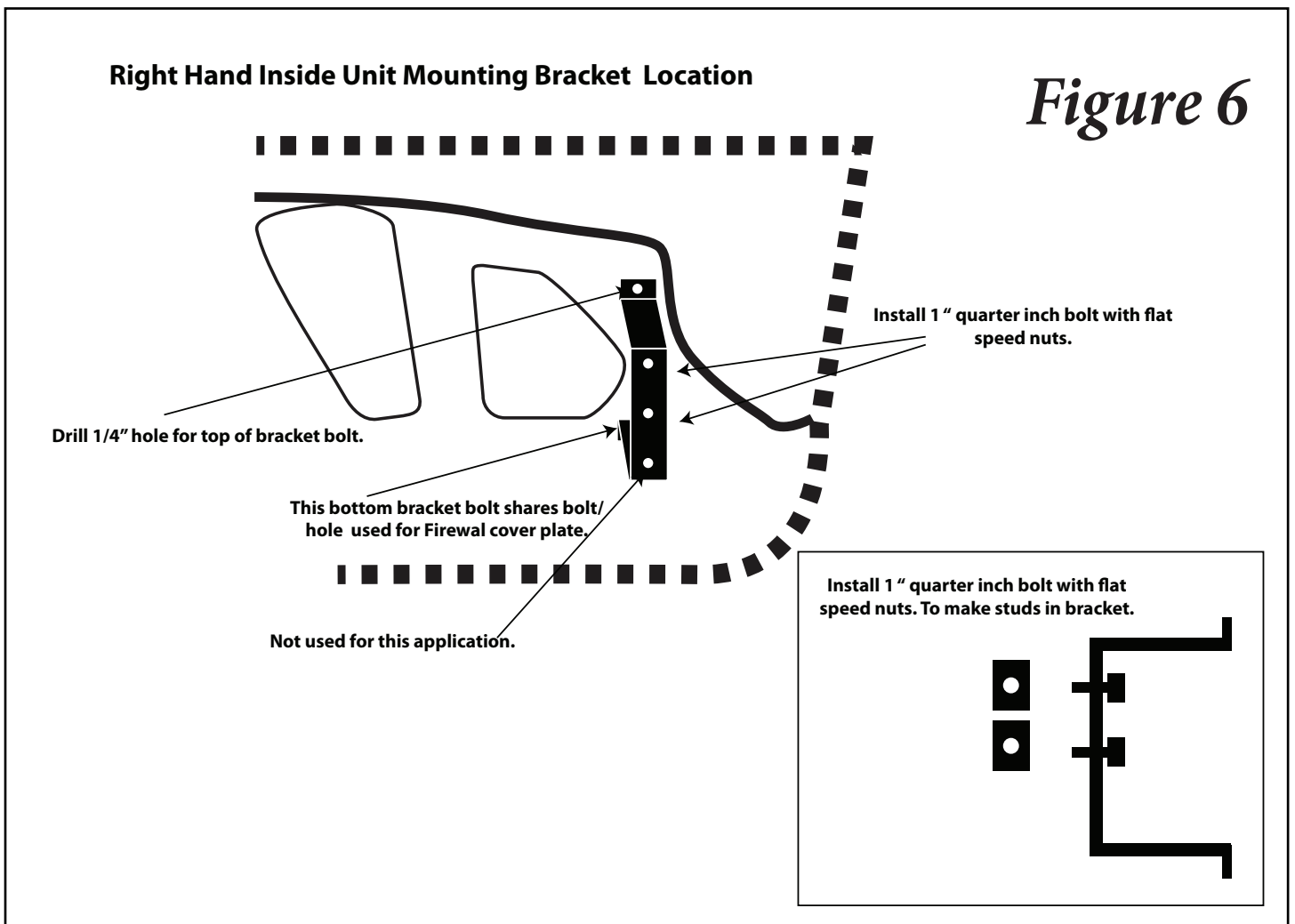
Step Five Firewall Cover installation

- 1) Apply supplied foam tape to the firewall side of the of the firewall cover plate (Figure 5)
- 2) Using the supplied hardware mount cover plate on the outside of the firewall as shown (Figure 5)
- 3) Enlarge the five factory screw holes to $\frac{1}{4}$ " it will be necessary to drill a sixth hole. Install using $\frac{1}{4}$ " hardware. (Figure 5)
- 4) We highly recommend insulating the firewall at this time for maximum performance of you're A/C system.



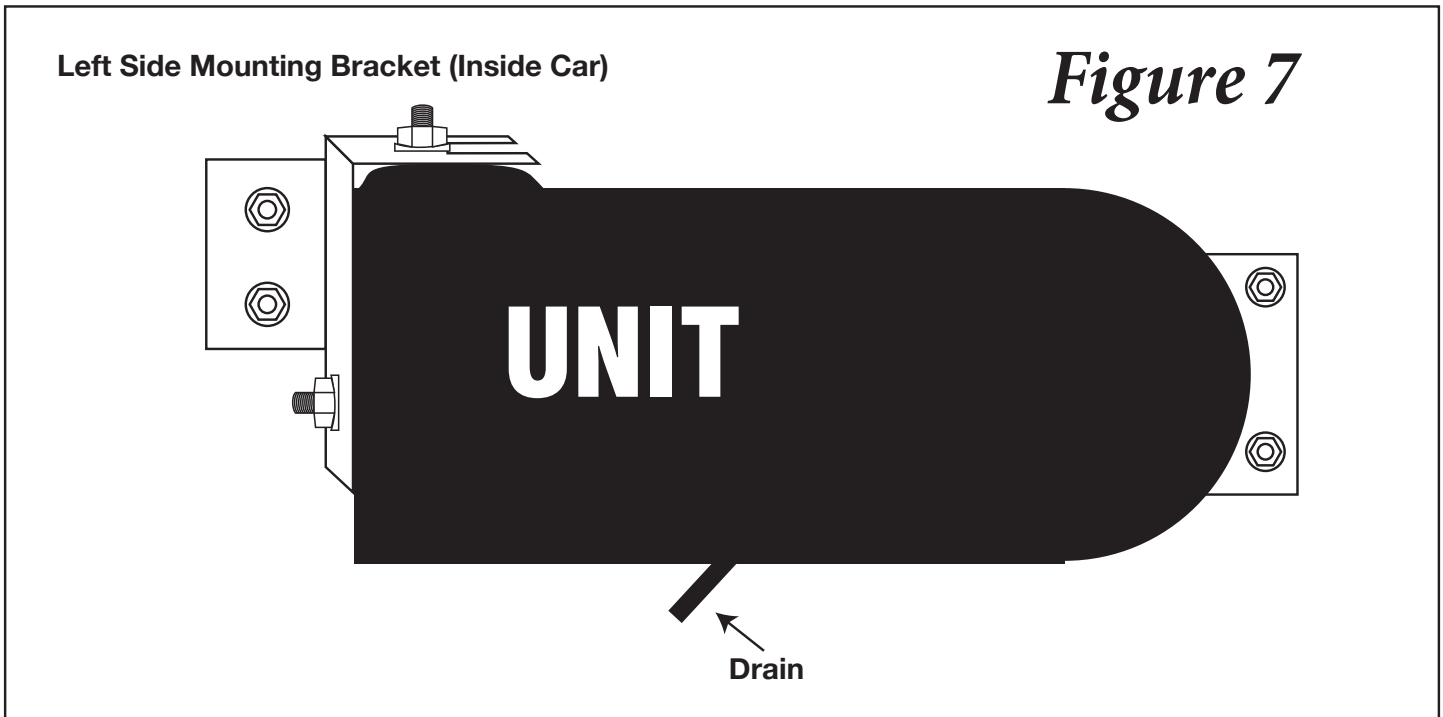
Step Six Installing Inside Mounting Brackets

- 1) Mount right hand bracket to the inside of firewall shown in figure 6.
- 2) Mount left hand side mount bracket to the unit using supplied hardware shown in figure 6.



Step Seven (Figure 7) Mounting Evaporator Unit

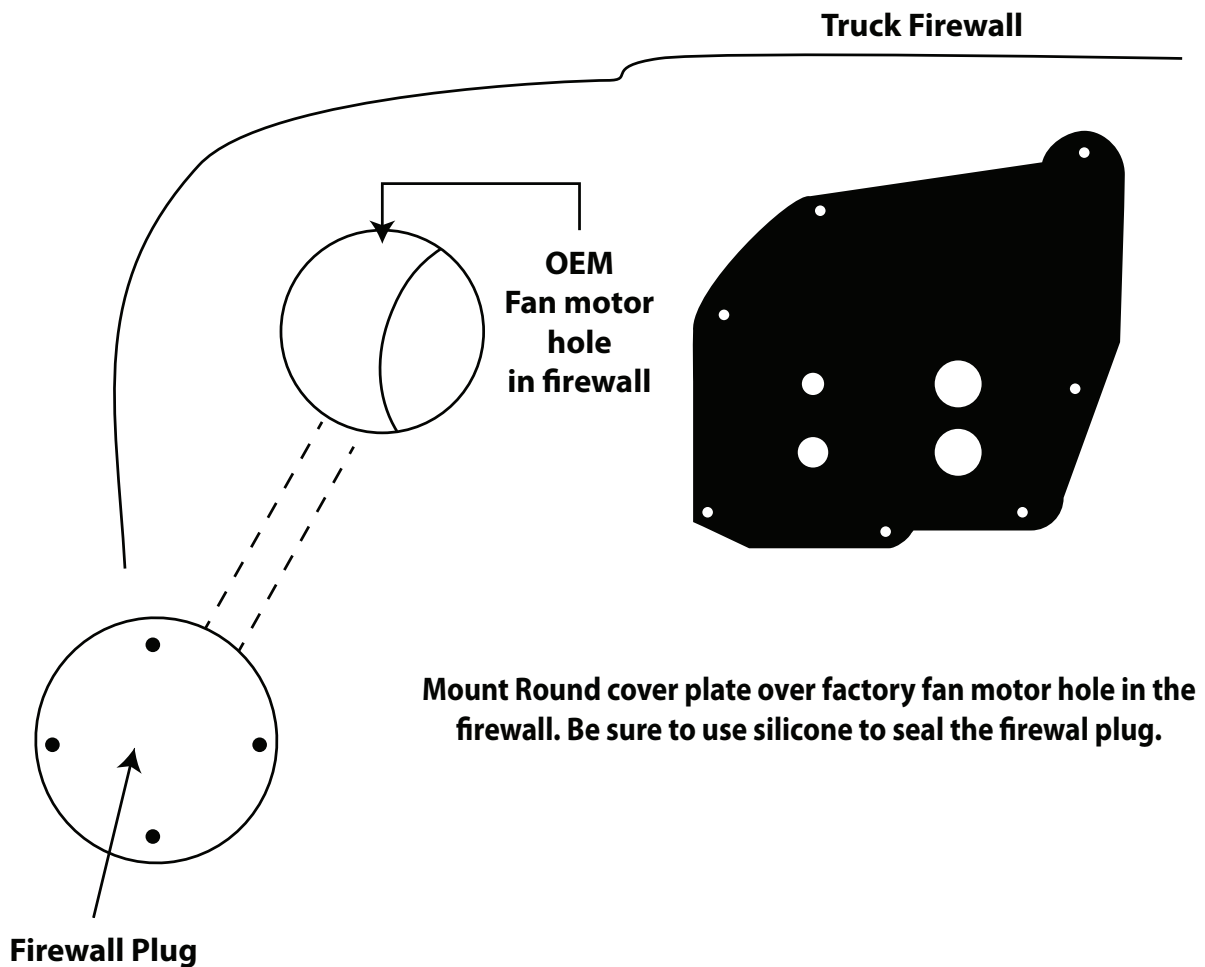
- 1) Lift evaporator into place. Attach to the two studs on the right side through the bracket on the evaporator.
- 2) Level unit and drill the firewall on the left side for the left side mounting bracket.
- 3) Use supplied hardware to permanently attach unit.
- 4) Locate drain on unit and drill hole in floor for drain tube.



Step Eight (Figure 8) Cutting Inside Firewall for Refrigerant Lines & Heater Hoses

Hose Plug Location

Figure 8



Important*

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

Step Nine (Figure 9) Ash Tray Vent Installation

- 1) Remove factory ash tray.
- 2) Install vent louver into vent bezel.
- 3) Align in the ash tray opening.
- 4) Mark and drill two mounting holes,
- 5) Attach with stainless button head hardware provided.

Figure 9

Ash tray vent bezel is made from bare material to be painted the same color as your dash.



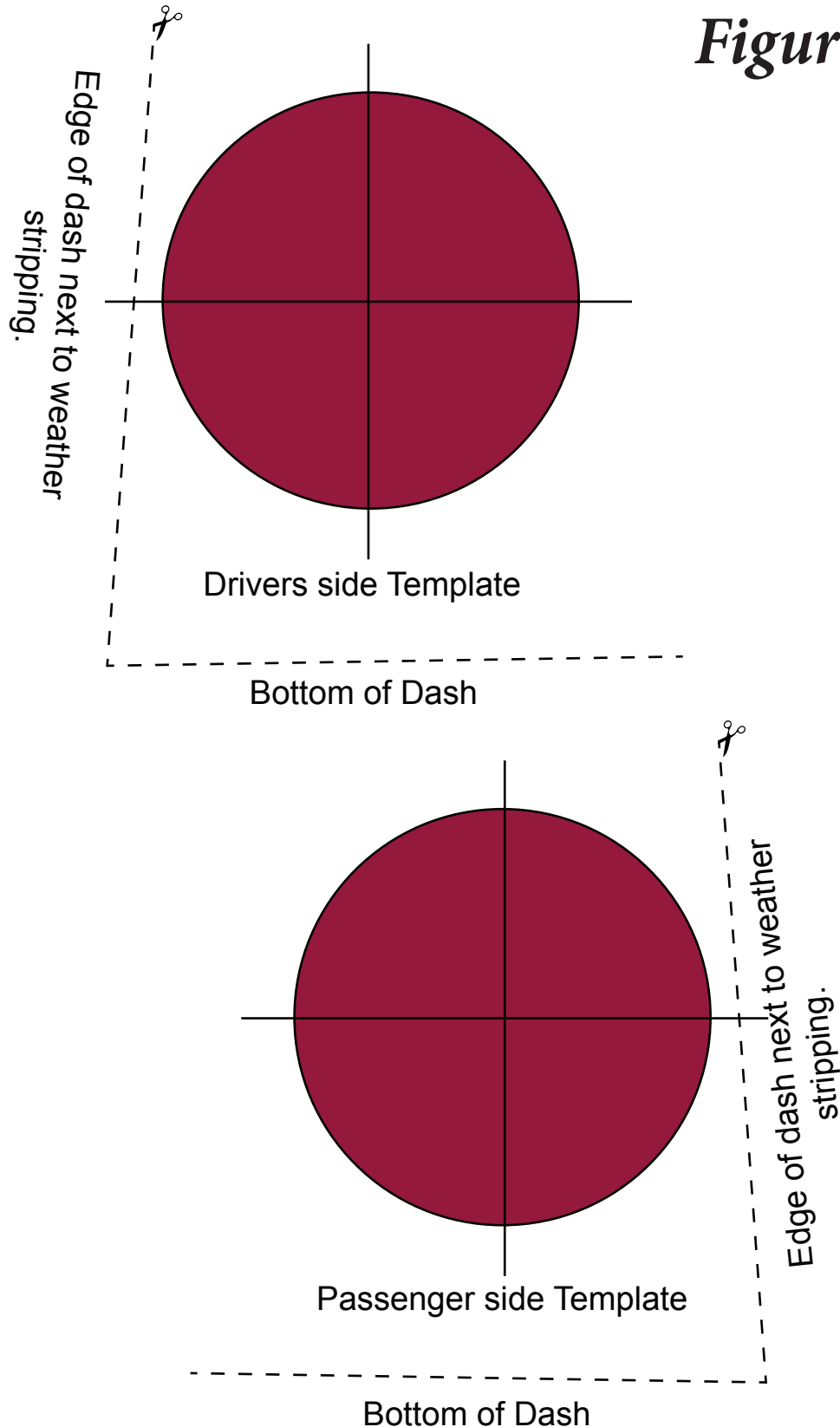
Step Ten (Figure 10) Duct Installation

- 1) Defrost ducts- no aftermarket parts required for this step.
- 2) The two inch duct hose supplied with this kit will attach to the factory defrost plenums.
- 3) Dash vents. Dash vents require a 2 1/2" hole. Drill dash using templates in Figure 10. We recommend cutting the hole slightly smaller and filing for final fit.

MEASURE TWICE CUT ONCE!

Dash Vent Templates

Figure 10

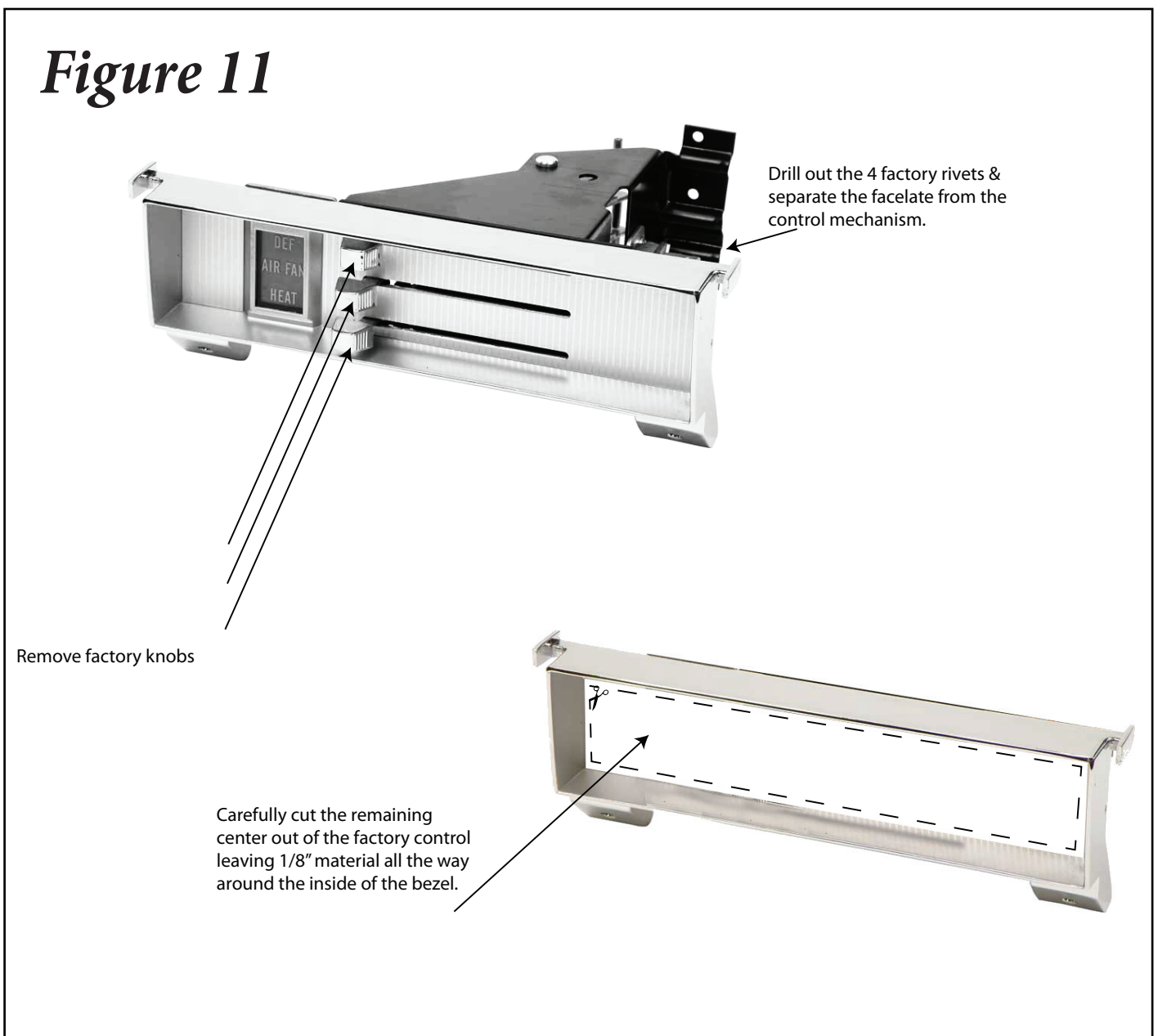


We recommend cutting the hole slightly smaller and filing for final fit.

Step Eleven (Figure 11) Dash Control installation

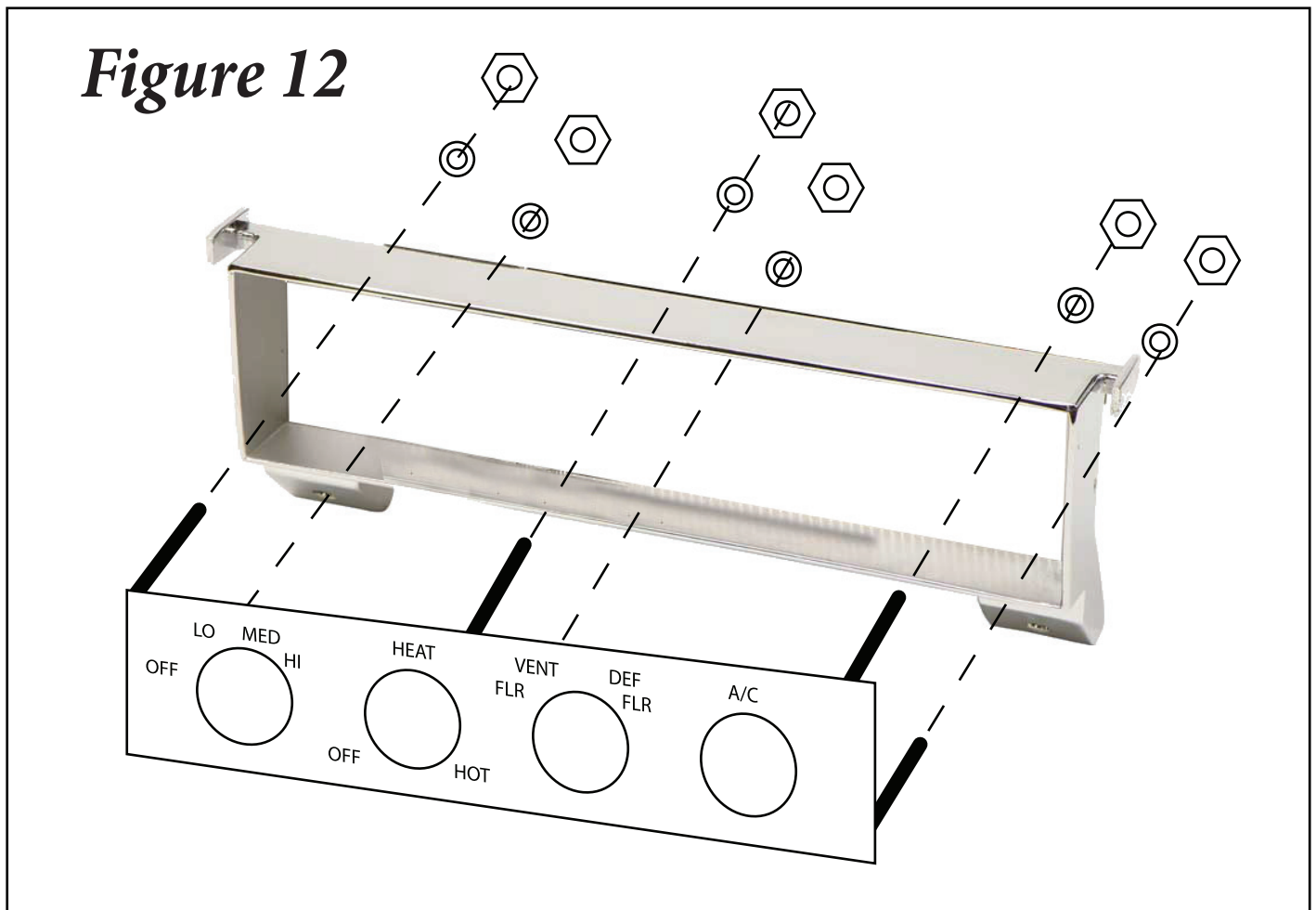
- 1) Remove factory knobs
- 2) Drill out the 4 factory rivets & separate the faceplate from the control mechanism.
- 3) Carefully cut the remaining center out of the factory control leaving 1/8" material all the way around the inside of the bezel.

Figure 11



Step Twelve (Figure 12) Billet Faceplate Installation

- 1) Attach using the 6/32 hardware provided.
- 2) The flat washers will overlap the 1/8" material all the way around the bezel. This will hold the bezel in place.
- 3) Re-install bezel back into the dash.



Step Thirteen

Refrigerant Hose Routing (FIG 13)

- 1) Mount the compressor using instructions included with the bracket kit
- 2) Route the #10 AC hose from the AC unit to the #10 bulkhead fitting on the passenger side of the firewall. Route the #6 hose from the AC unit to the #6 Bulkhead fitting on the passenger side of the firewall.
- 3) On the engine compartment side of firewall route the #10 AC hose from the bulkhead fitting to the high side of the compressor attaching to the compressor with the provided service port.
- 4) Route the #8 AC hose from the compressor to the hardline at the battery tray. Attaching the #8 service port at the compressor and using a 90 Degree fitting at the battery tray hardline.
- 5) Route the #6 AC hose from the firewall bulkhead along the fenderwell up under and behind the battery and attach to the hardline using a 90 degree fitting.

Fitting Checklist

Evaporator- #6 Straight, #10 Straight

Inside Firewall- #6, #10 90 Degree Bulkheads

Outside Firewall- #6, #10 Straight

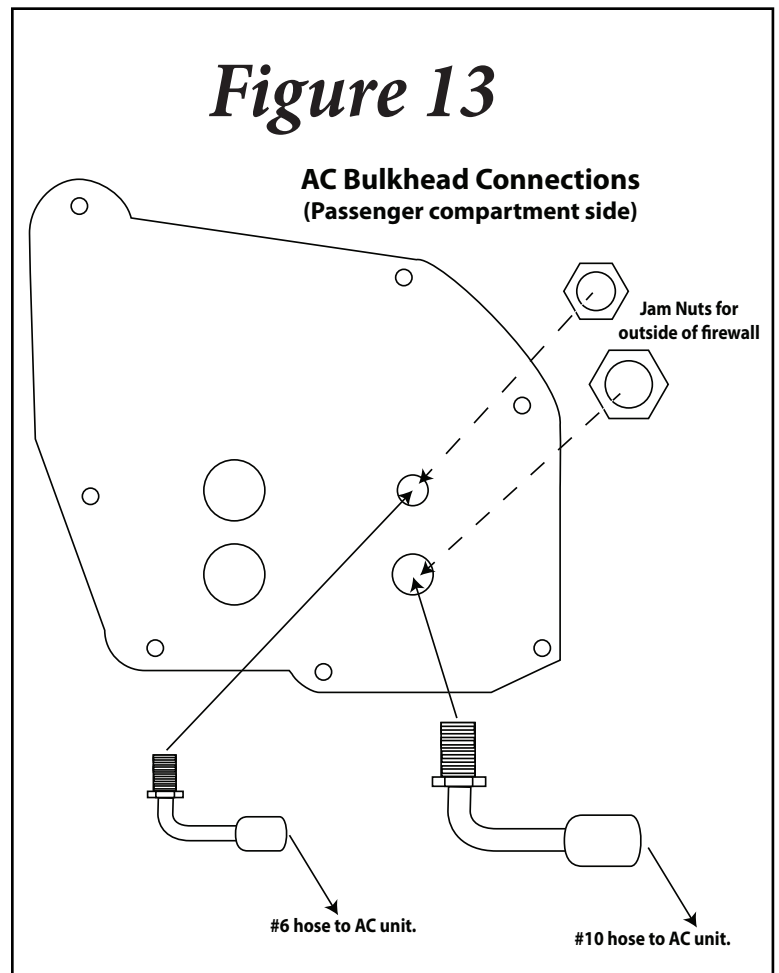
Compressor- High & Low Service ports

Battery Box Hardline- #6 90 Degree

Condenser Hardline- #8 90 Degree

Figure 13

AC Bulkhead Connections
(Passenger compartment side)



AC Hose Routing

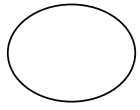
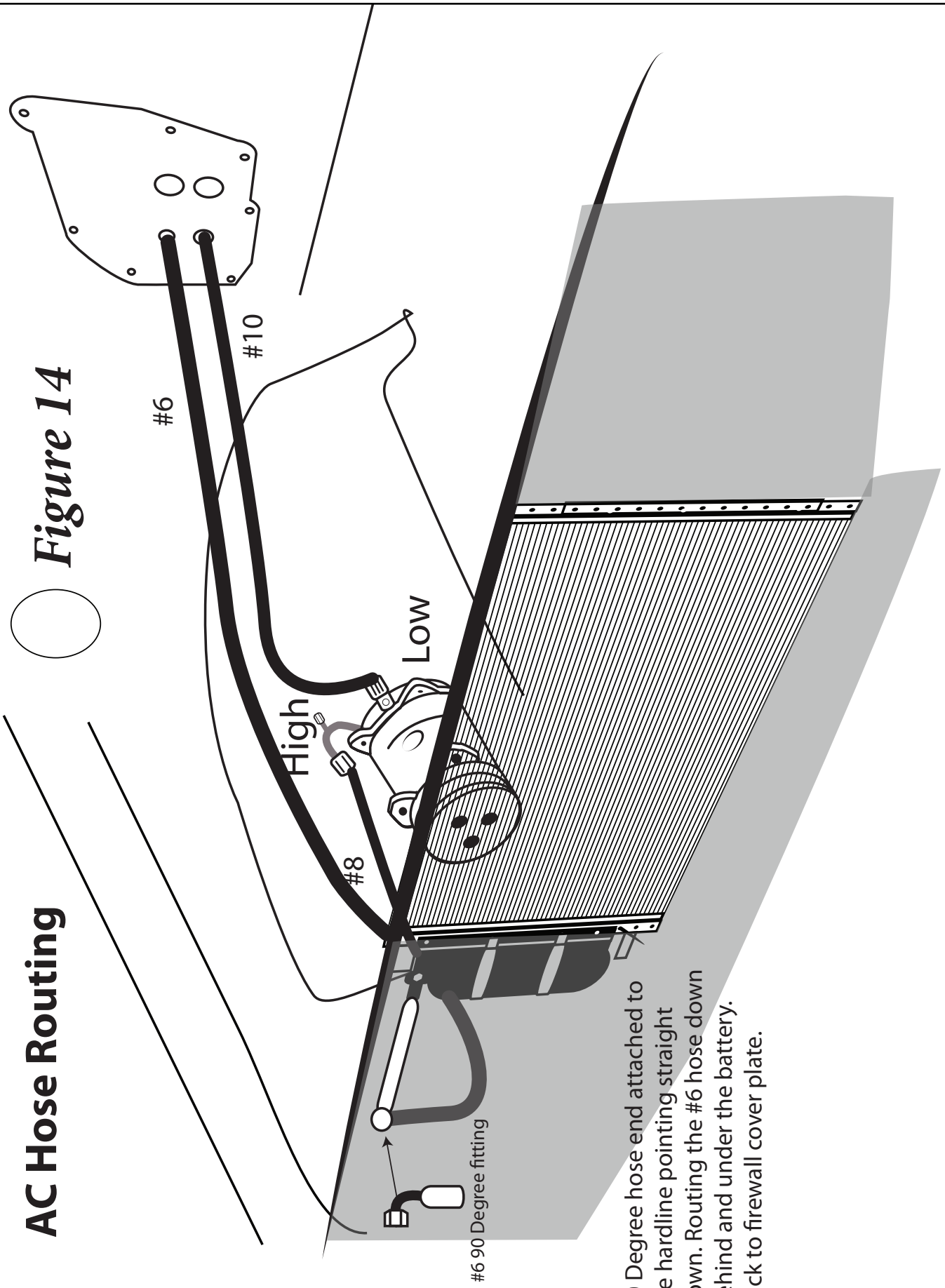


Figure 14

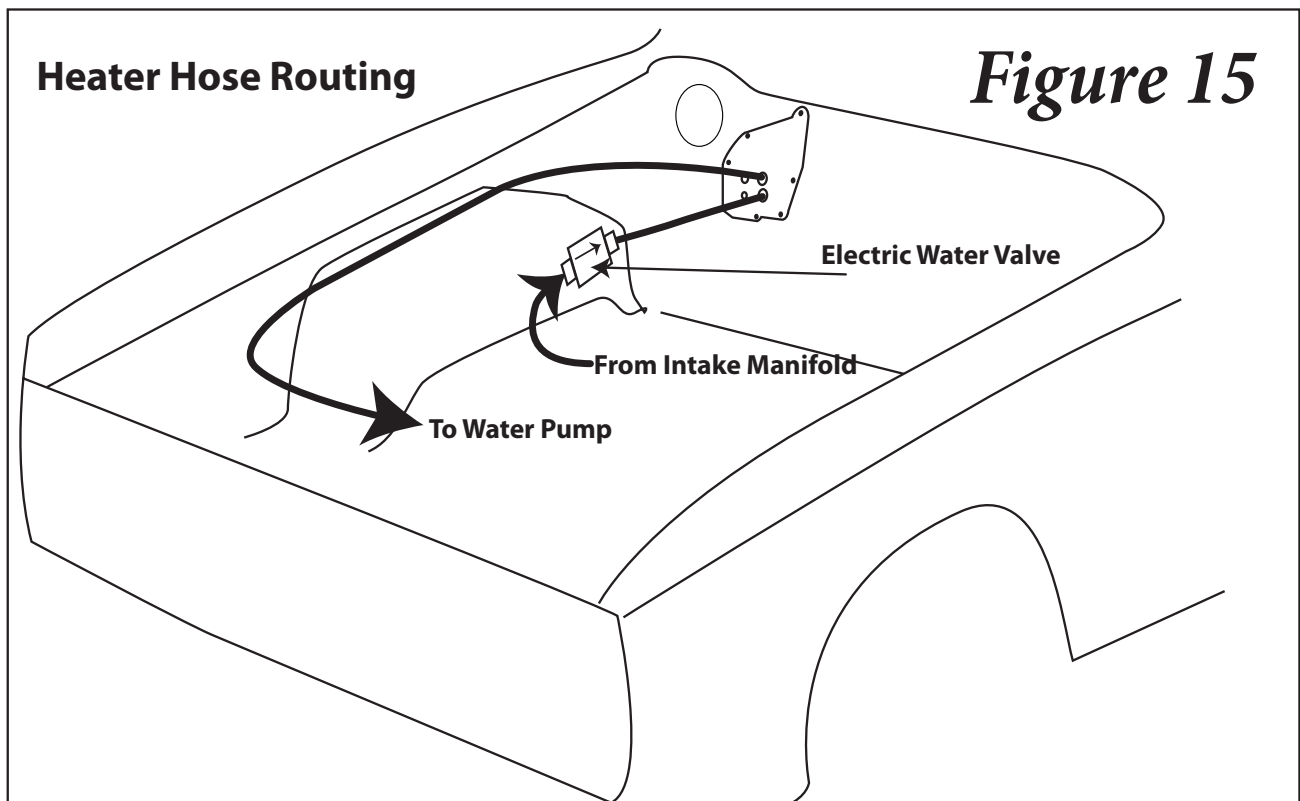


90 Degree hose end attached to the hardline pointing straight down. Routing the #6 hose down behind and under the battery. Back to firewall cover plate.

Step Fourteen

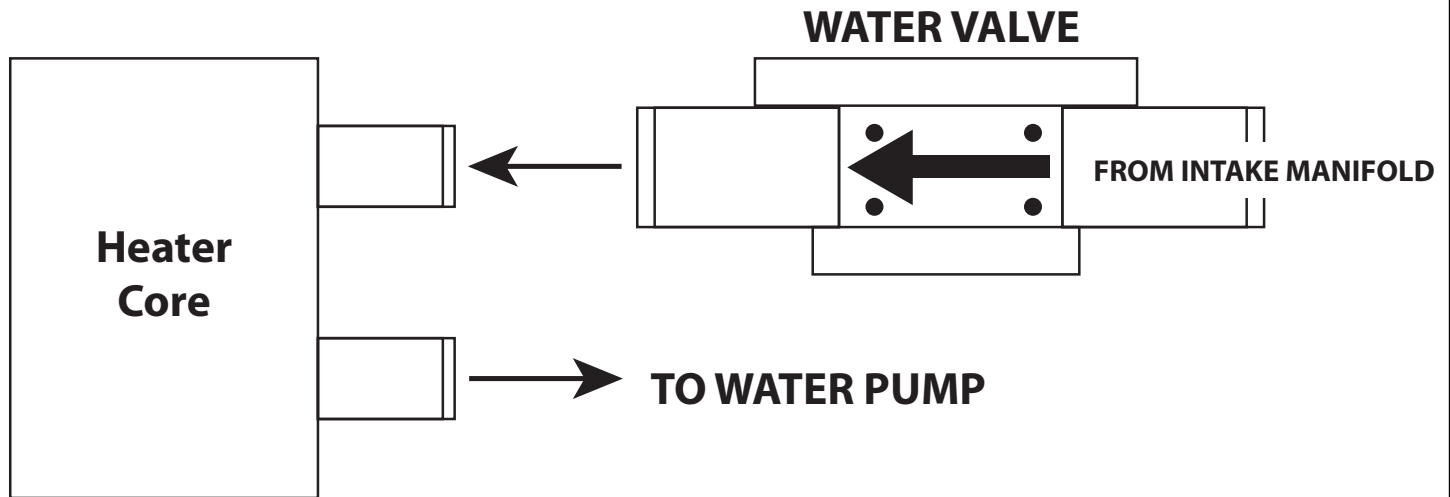
Water valve and Heater Hose Installation

- 1) Mount water valve to lower inner fender (Figure 15)
- 2) Route heater hose from evaporator unit thru the firewall coverplate over the inner fenderwell and attach to engine return line (water pump. Be sure to install the two rubber grommets in the engine firewall cover plate) Figure 15
- 3) Route hose from intake manifold (pressure) to inlet side of water valve. Figure 16
- 4) Route hose from the water valve exit thru firewall cover plate and into the Heater Core. (heater core is not directional) Figure 16
- 5) Water valve is directional. It is marked with an arrow showing the direction of flow to the heater core. (FIG 16)



WATER VALVE DIRECTION

Figure 16



**WATER VALVE MUST BE INSTALLED WITH ARROW POINTING TO DIRECTION OF FLOW
(A BACKWARDS WATER VALVE WILL LEAK AND AIR WILL NOT BLOW COLD)**

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 Part number SRP-AC30.
- 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.

Step Fifteen Continued.. Wiring Your System

5) Route the compressor wire along the #6 reffridgerant line to the binary switch on the drier.

6) Wire binary switch as per Figure 3

7) Route water valve wire along heater hose and plug into water valve.

8) 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 CONDITIONG PAMPHLET
INCLUDED IN THIS KIT FOR CHARGING AND
TROUBLESHOOTING INSTRUCTIONS
AGAIN IF YOU HAVE ANY QUESTIONS CALL
SOUTHERN AIR 864-848-0601**