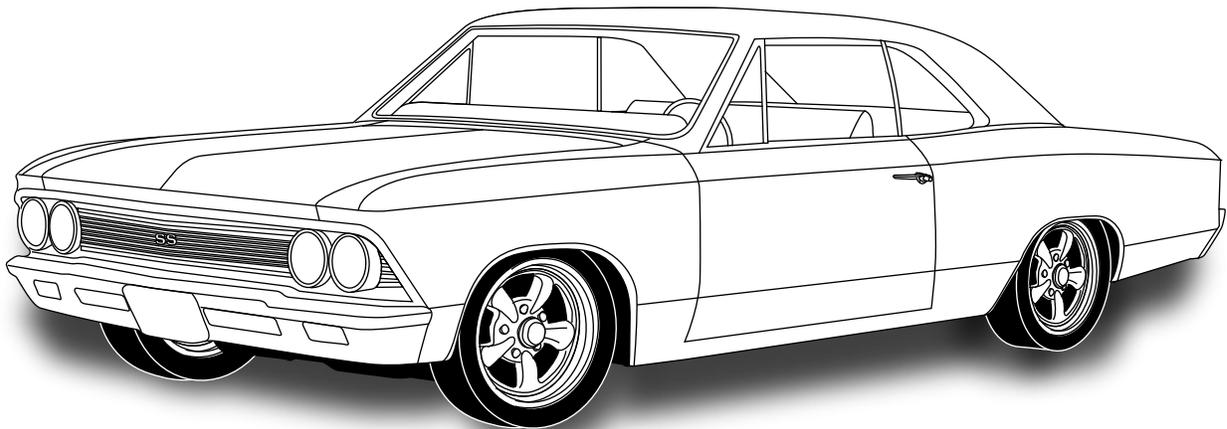




an ISO 9001:2015 Registered Company

# 1966-67 Chevrolet Chevelle

*without* Factory Air  
Evaporator Kit  
(561066)



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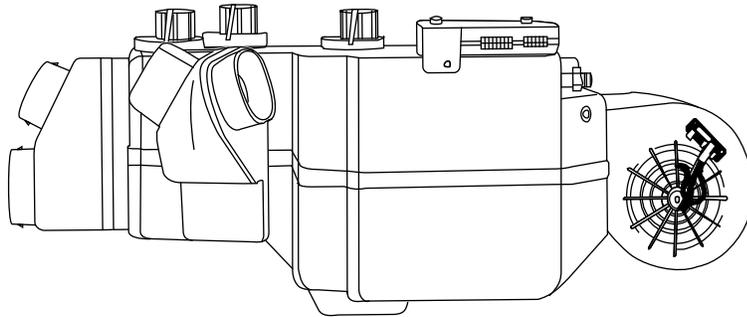
## Packing List: Evaporator Kit (561066)

No.	Qty.	Part No.	Description
1.	1	762169	Gen IV 4-Vent with 2" & 2 1/2" Evaporator Sub Case
2.	1	784161	Accessory Kit

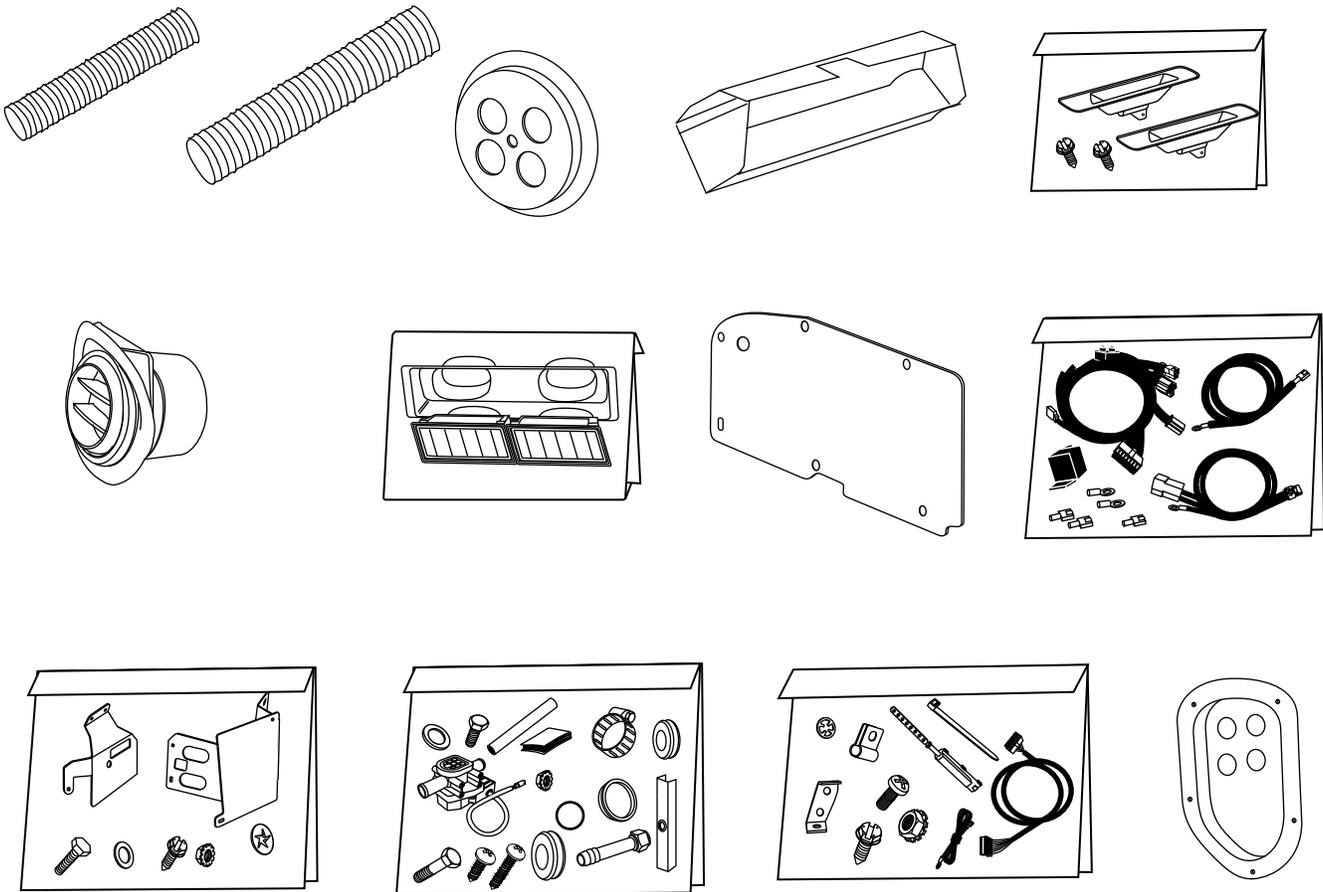
**\*\* Before beginning installation, open all packages and check contents of shipment. Please report any shortages directly to Vintage Air within 15 days. After 15 days, Vintage Air will not be responsible for missing or damaged items.**

1

Gen IV 4-Vent  
with 2" & 2 1/2"  
Evaporator Sub Case  
762169



2



Accessory Kit  
784161

**NOTE: Images may not depict actual parts and quantities. Refer to packing list for actual parts and quantities.**



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## Important Notice—Please Read

*For Maximum System Performance, Vintage Air Recommends the Following:*

**NOTE:** Vintage Air systems are designed to operate with R134a refrigerant only. Use of any other refrigerant could damage your A/C system and/or vehicle, and possibly cause a fire, in addition to potentially voiding the warranties of the A/C system and its components.

### Refrigerant Capacities:

**Vintage Air System:** 1.8 lbs. (28.8 oz.) or 816 grams of **R134a**, charged by weight with a quality charging station or scale. **NOTE: Use of the proper type and amount of refrigerant is critical to system operation and performance.**

**Other Systems:** Consult manufacturer's guidelines.

### Lubricant Capacities:

**New Vintage Air-Supplied Sanden Compressor:** No additional oil needed (Compressor is shipped with proper oil charge).

**All Other Compressors:** Consult manufacturer (Some compressors are shipped dry and will need oil added).

### Safety Switches

Your Vintage Air system is equipped with a binary pressure safety switch. A binary switch disengages the compressor clutch in cases of extreme low pressure conditions (refrigerant loss) or excessively high head pressure (406 PSI) to prevent compressor damage or hose rupture. A trinary switch combines Hi/Lo pressure protection with an electric fan operation signal at 254 PSI, and should be substituted for use with electric fans. Compressor safety switches are extremely important since an A/C system relies on refrigerant to circulate lubricant.

### Service Info:

**Protect Your Investment:** Prior to assembly, it is critical that the compressor, evaporator, A/C hoses and fittings, hardlines, condenser and receiver/drier remain capped. Removing caps prior to assembly will allow moisture, insects and debris into the components, possibly leading to reduced performance and/or premature failure of your A/C system. This is especially important with the receiver/drier.

Additionally, when caps are removed for assembly, **BE CAREFUL!** Some components are shipped under pressure with dry nitrogen.

**Evacuate the System for 35-45 Minutes:** Ensure that system components (Drier, compressor, evaporator and condenser) are at a temperature of at least 85°F. On a cool day, the components can be heated with a heat gun **or** by running the engine with the heater on before evacuating. Leak check and charge to specifications.

### Bolts Passing Through Cowl and/or Firewall:

To ensure a watertight seal between the passenger compartment and the vehicle exterior, for all bolts passing through the cowl and/or firewall, Vintage Air recommends coating the threads with silicone prior to installation.

### Heater Hose (not included with this kit):

Heater hose may be purchased from Vintage Air (Part#31800-VUD) or your local parts retailer. Routing and required length will vary based on installer preference.



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## Important Wiring Notice—Please Read

*Some vehicles may have had some or all of their radio interference capacitors removed. There should be a capacitor found at each of the following locations:*

- 1. On the positive terminal of the ignition coil.**
- 2. If there is a generator, on the armature terminal of the generator.**
- 3. If there is a generator, on the battery terminal of the voltage regulator.**

Most alternators have a capacitor installed internally to eliminate what is called “whining” as the engine is revved. If whining is heard in the radio, or just to be extra cautious, a radio interference capacitor can be added to the battery terminal of the alternator.

It is also important that the battery lead is in good shape and that the ground leads are not compromised. There should be a heavy ground from the battery to the engine block, and additional grounds to the body and chassis.

If these precautions are not observed, it is possible for voltage spikes to be present on the battery leads. These spikes come from ignition systems and charging systems, and from switching some of the vehicle’s other systems on and off. Modern computer-operated equipment can be sensitive to voltage spikes on the power leads, which can cause unexpected resets, strange behavior and/or permanent damage.

Vintage Air strives to harden our products against these types of electrical noise, but there is a point where a vehicle’s electrical system can be degraded so much that nothing can help.

Radio interference capacitors should be available at most auto and truck parts suppliers. They typically are cylindrical in shape, a little over an inch long and a little over a half-inch in diameter, and they have a single lead coming from one end of the cylinder with a terminal on the end of the wire, as well as a mounting clip which is screwed into a good ground on the vehicle. The specific value of the capacitance is not too significant in comparison to ignition capacitors that are matched with the coil to reduce pitting of the points.

- Care must be taken, when installing the compressor lead, not to short it to ground. The compressor lead must not be connected to a condenser fan or to any other auxiliary device. Shorting to ground or connecting to a condenser fan or any other auxiliary device may damage wiring or the compressor relay, and/or cause a malfunction.
- When installing ground leads on Gen IV systems, the blower control ground and ECU ground must be connected directly to the negative battery post.
- For proper system operation, the heater control valve must be connected to the ECU.



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## Engine Compartment Disassembly

**NOTE:** Before starting the installation, check the function of the vehicle (horn, lights, etc.) for proper operation, and study the instructions, illustrations, & diagrams.

### Perform the Following:

1. Disconnect battery.
2. Remove battery and battery tray (retain).
3. Drain radiator.
4. Remove radiator (retain).
5. Remove the OEM blower assembly (discard). **NOTE: To remove the blower assembly (under hood) and the air distribution system (under dash), the factory manual recommends removing the passenger side inner fender.**
6. Remove the OEM heater hoses (discard) (See Figure 1, below).
7. Remove the OEM heater wiring (discard).

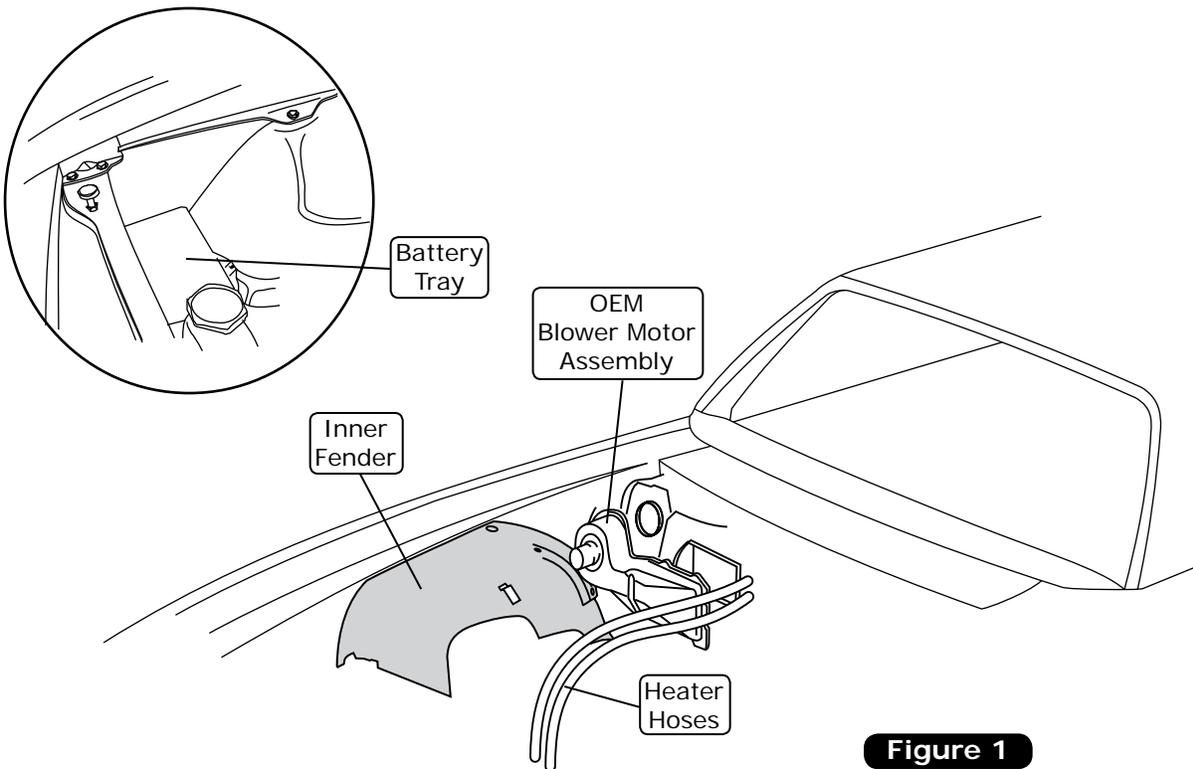


Figure 1

## Condenser Assembly and Installation

1. Refer to separate instructions included with the condenser kit to install the condenser.
2. Binary switch installation (Refer to condenser instructions).

## Compressor and Brackets

1. Refer to separate instructions included with the bracket kit to install the compressor bracket.

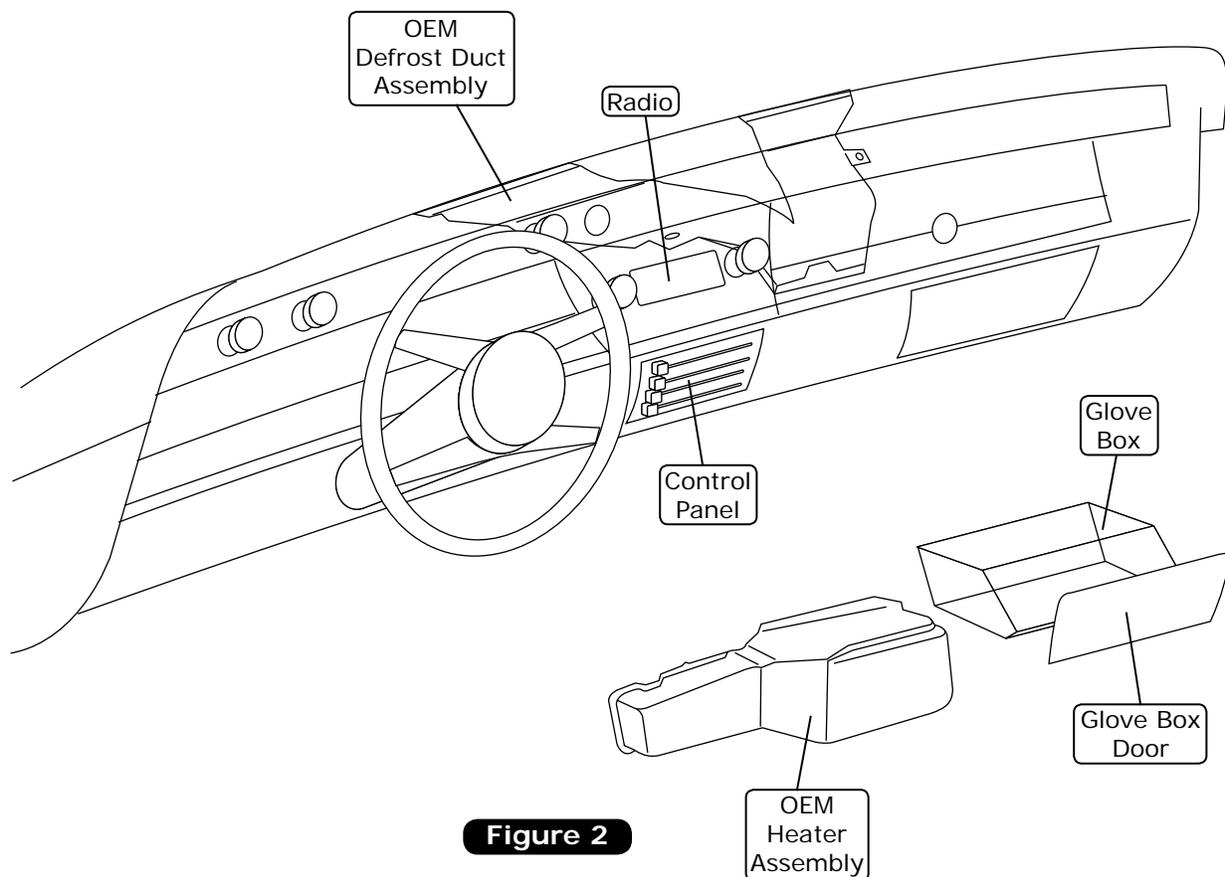


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## Passenger Compartment Disassembly

### Perform the Following:

1. Remove glove box door (retain) (See Figure 2, below).
2. Remove glove box (discard) (See Figure 2, below).
3. Disconnect all wires and cables from the OEM heater assembly (discard).
4. Disconnect all wires and cables from control panel and radio.
5. Remove OEM defrost duct assembly (discard) (See Figure 2, below).
6. Remove OEM control panel (retain) (See Figure 2, below).
7. Remove Radio (retain) (See Figure 2, below).
8. Remove OEM heater assembly (discard) (See Figure 2, below).
9. Remove the passenger side kick panel/fresh air door assembly (See Figure 3, Page 8, and Figure 5, Page 9).





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## 66 Chevelle Kick Panel Modification

1. Remove the kick panel.
2. Remove the kick panel fresh air door assembly by removing (5) OEM screws (See Figure 3, below).
3. Disconnect the pull cable assembly from under the dash (discard) (See Figure 3, below).
4. Cut out the kick panel modification template provided on Page 28.
5. Align the template onto the back side of the kick panel as shown in Figure 4, below.
6. Cut out the kick panel grille as shown in Figure 4, below.
7. Drill (5) 3/16" holes into the Kick Panel (See Figure 4, below).

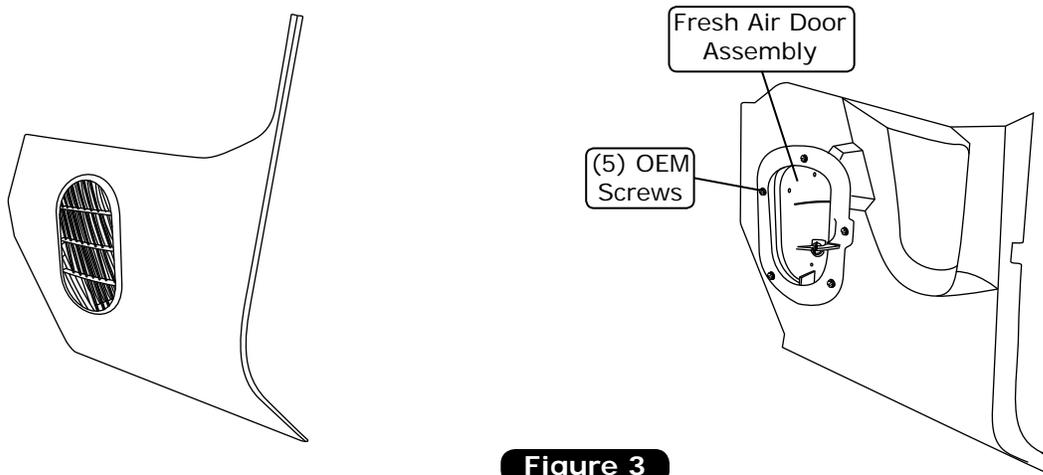


Figure 3

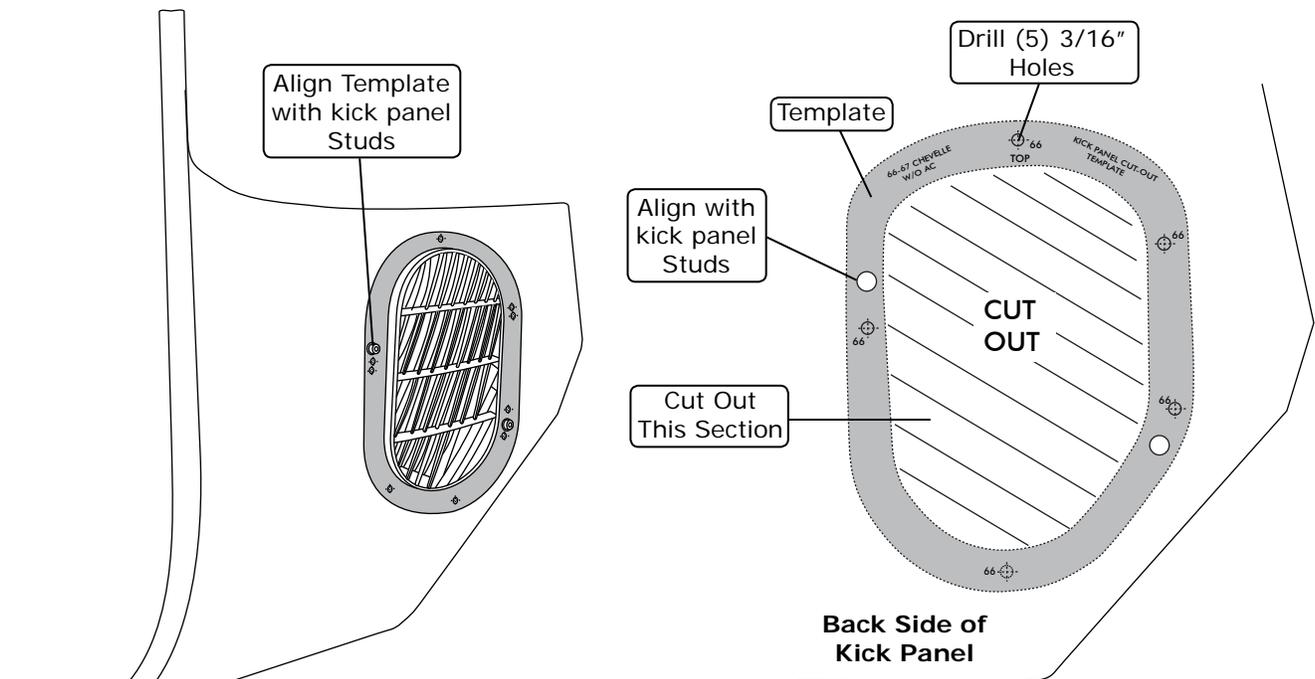


Figure 4



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## 67 Chevelle Kick Panel Modification

1. Remove the kick panel grille (discard) (See Figure 5, below).
2. Remove the kick panel by removing (5) OEM screws from the fresh air door assembly (See Figure 5, below).
3. Disconnect the pull cable assembly from the kick panel (discard) (See Figure 5, below).
4. Install a 1/2" plastic plug to fill the hole left from the removal of the pull cable assembly (See Figure 6, below).
5. Cut out the kick panel modification template provided on Page 29.
6. Place template onto kick panel and cut out fresh air door assembly as shown in Figures 6 & 6a, below.

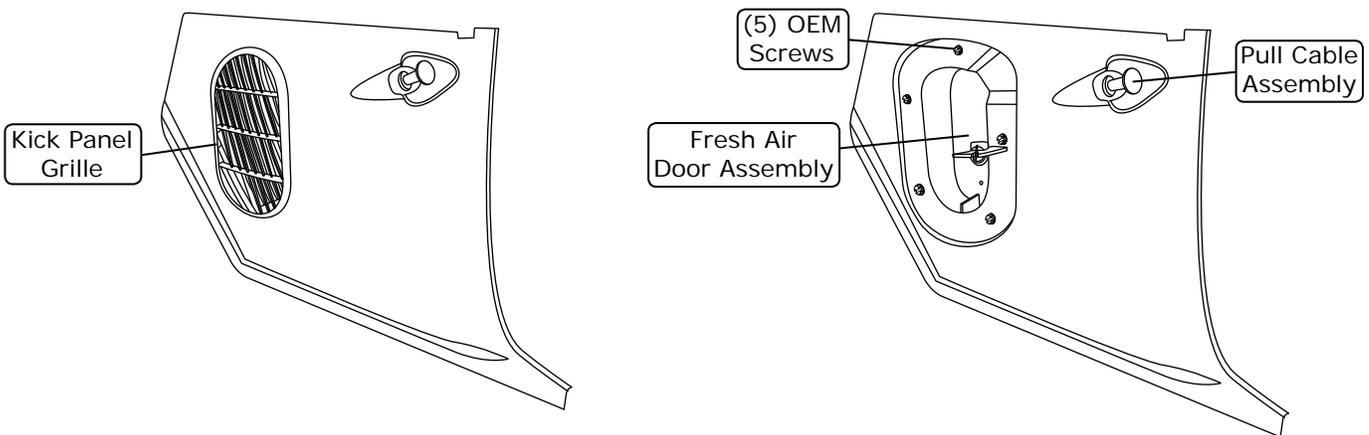


Figure 5

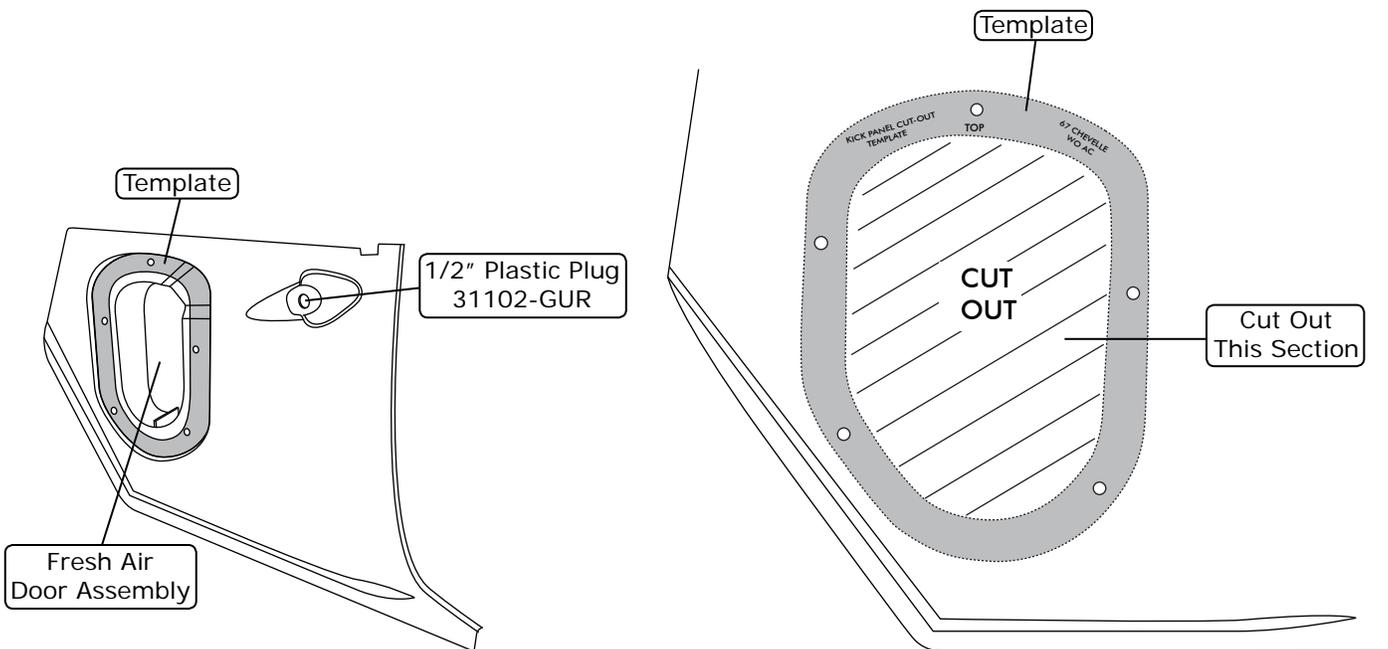


Figure 6

Figure 6a

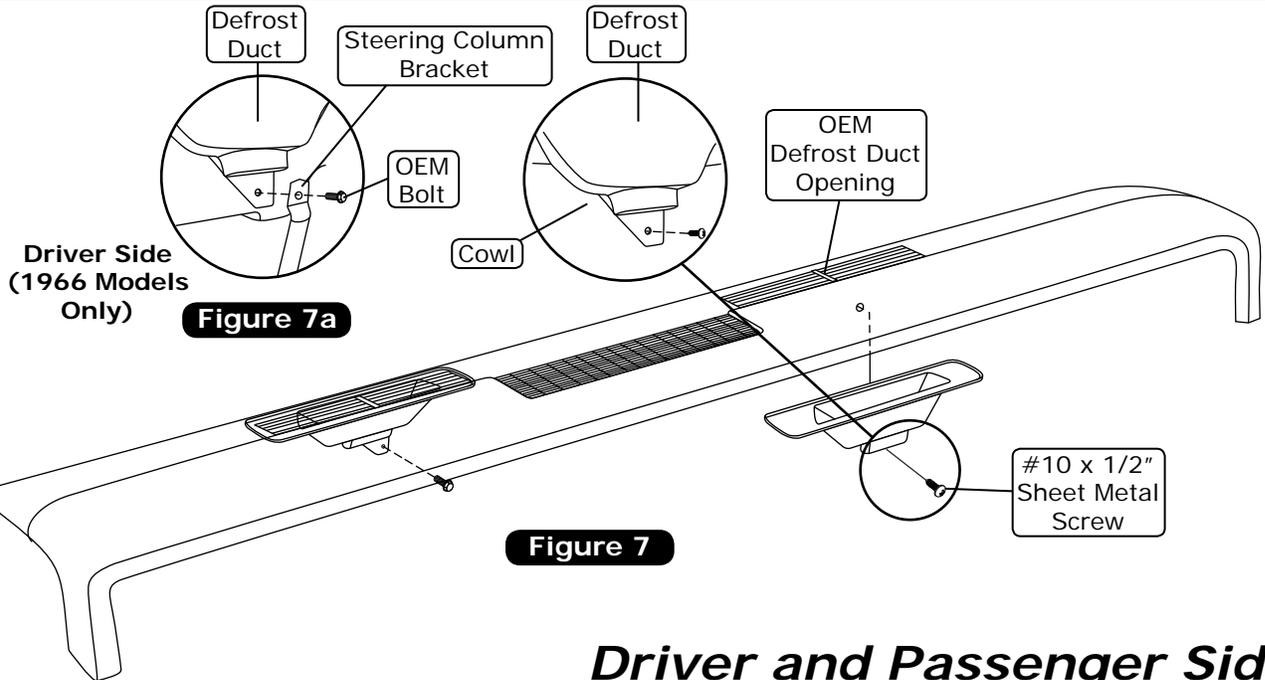


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## Defrost Duct Installation

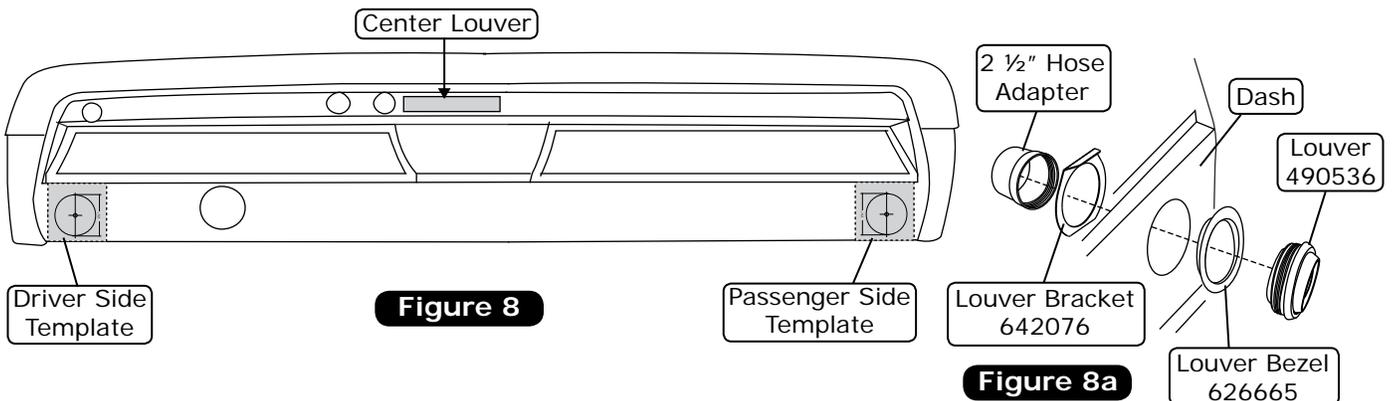
1. Install the defrost ducts under the dash, aligning them with the OEM openings. Attach the driver and passenger side defrost ducts to the cowl using (2) #10 x 1/2" sheet metal screws (See Figure 7, below).

**NOTE: On 1966 models, the driver side defrost duct installs behind the steering column bracket and is secured using the steering column OEM bolt as shown in Figure 7a, below.**



## Driver and Passenger Side Louver Installation

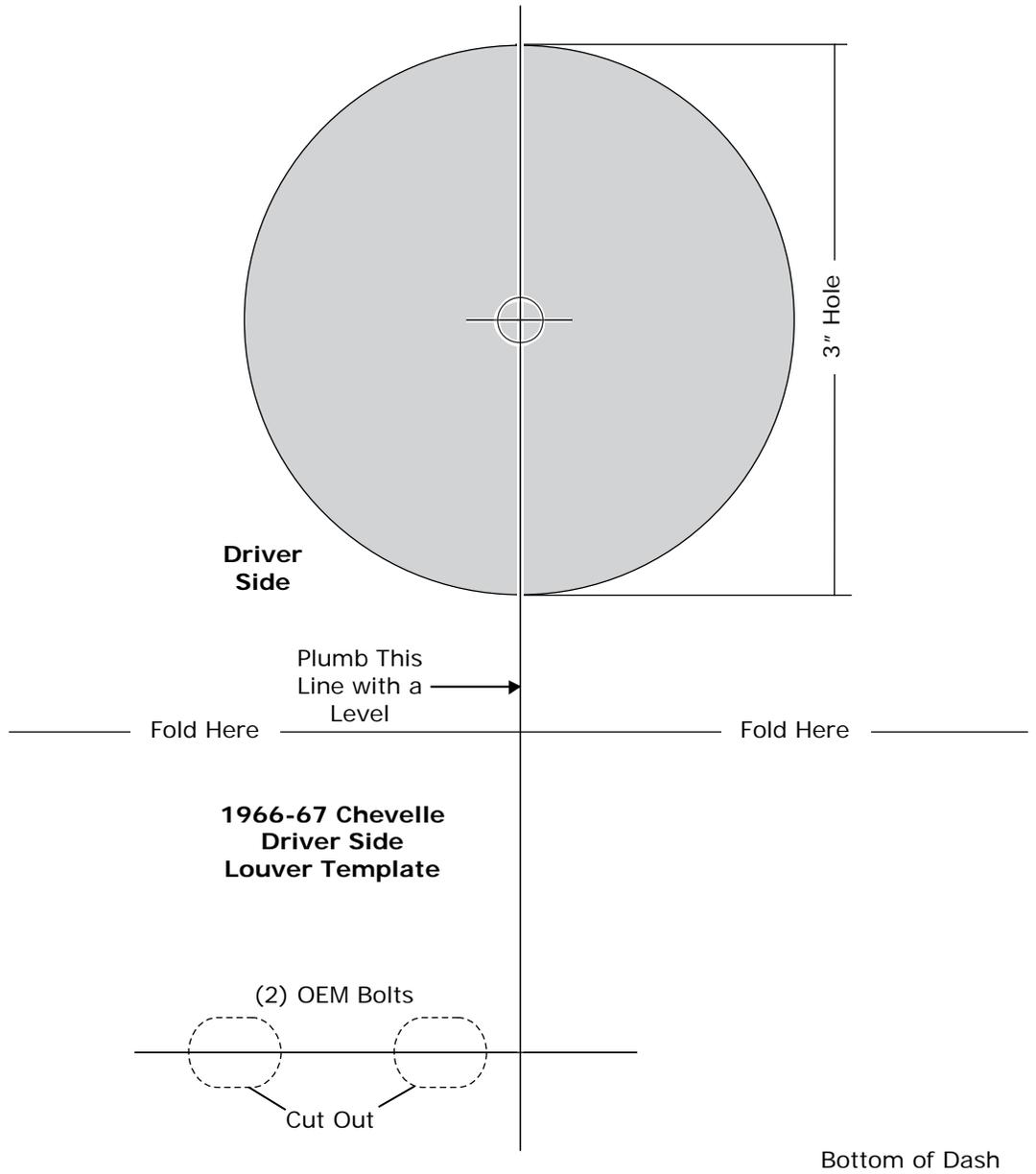
1. Cut out template provided on Page 11. Place the driver side template onto the dash by aligning the left side of the template against the edge of the dash, then align the bottom of the template to the bottom of the dash as shown in Figure 8, below.
2. Cut template provided on Page 12. Place the passenger side template onto the dash by aligning the right side of the template against the edge of the dash, then align the bottom of the template to the bottom of the dash as shown in Figure 8, below.
3. Once the templates are aligned correctly, use a center punch to mark the holes on the dash. Remove the templates. Use a 3" hole saw to cut the holes in the dash (See Figure 8, below).
4. Install louvers into the dash as shown in Figure 8a, below.





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# Driver Side Louver Template



**Figure 9**

**NOTE:** Due to printing variances, measure the line below before using this template. If template is scaled properly, the line should measure 6 inches.

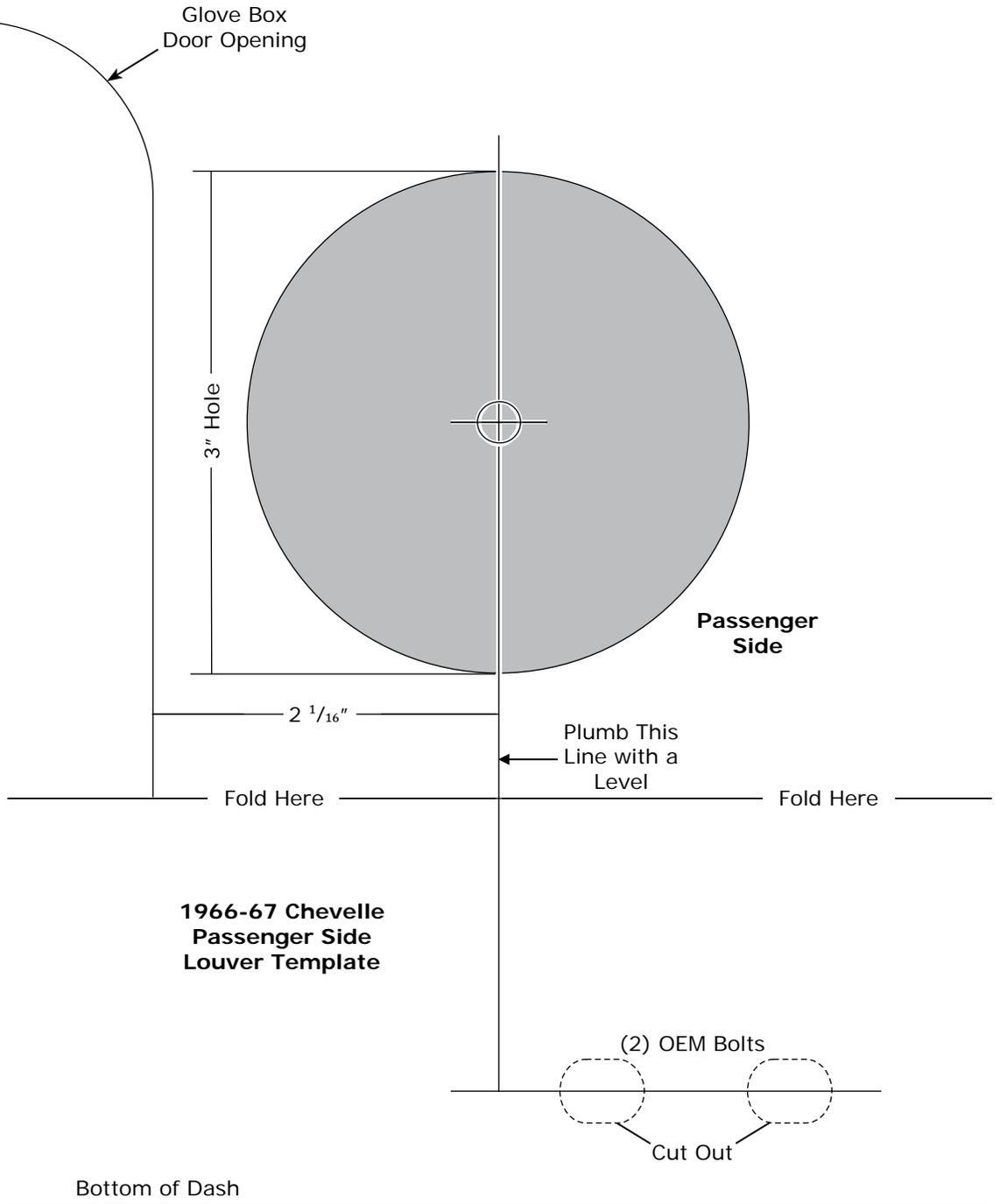






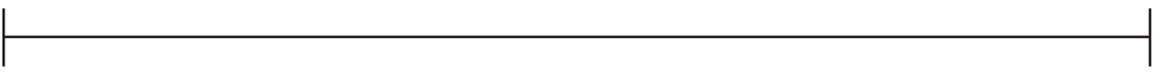
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# Passenger Side Louver Template



**Figure 10**

**NOTE:** Due to printing variances, measure the line below before using this template. If template is scaled properly, the line should measure 6 inches.







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## Center Louver Installation

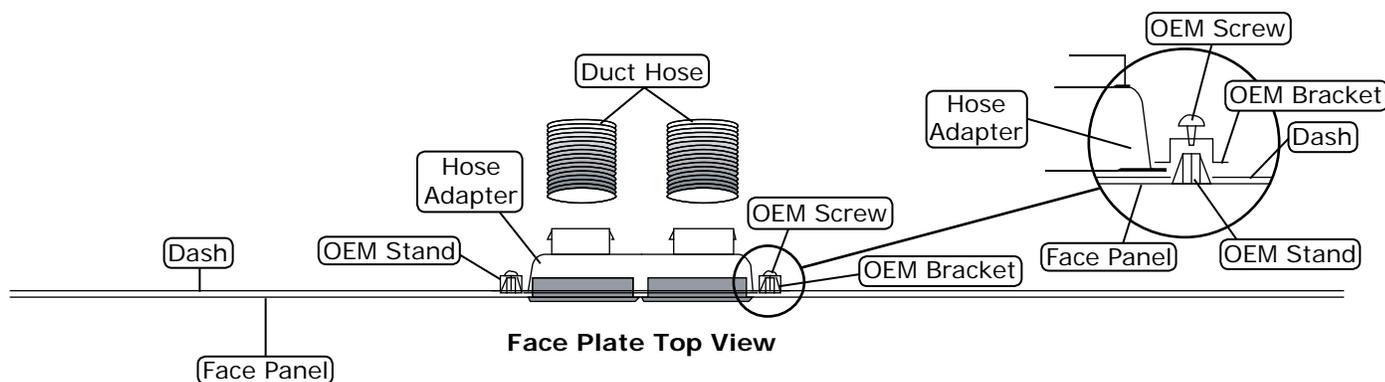
**NOTE: If face panel is not equipped with plastic stands and brackets you must use the alternate mounting procedure.**

1. Remove the face panel from the dash. Drill a 9/64" hole through the center stand from back of the face panel. Using template provided on Page 14, turn panel over (face up) and align the 9/64" hole drilled on the template with the 9/64" hole drilled on the face panel. **NOTE: Do not exceed the dimensions shown on template when cutting.**
2. After checking to make sure both vents fit into the face panel correctly, remove them and reinstall the face panel onto the dash. Center the ignition switch hole and mark the dash using the inside of the face panel vent opening as a template.
3. Remove the face panel and cut out the dash hole. Cut outside of the line about 1/32 of an inch.

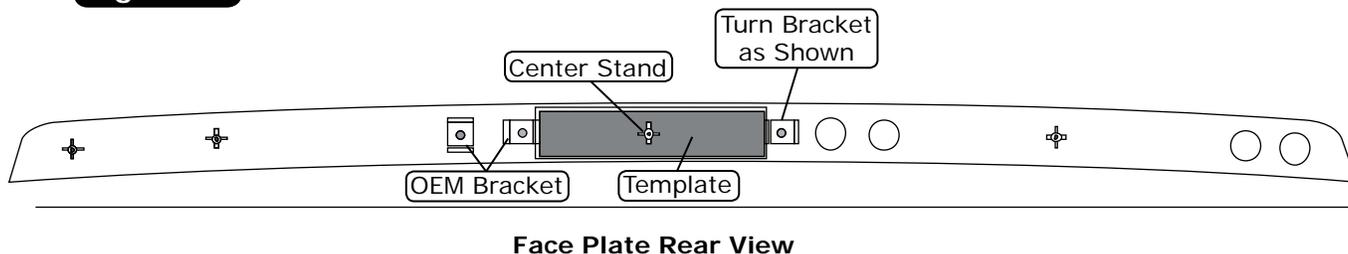
## Alternate Mounting Procedure

**NOTE: Remove OEM speaker (if equipped), and reinstall after hose adapter is Attached.**

1. Using the Template provided on Page 14, Locate the holes for the alternate mounting location.
2. Align the template over the opening cut in the dash. Mark mounting hole location and remove template.
3. Drill 1/8" holes into dash.
4. Countersink the 1/8" holes by drilling part way into the metal with a 1/4" drill bit.
5. Locate the (2) center vent duct hoses and connect them to the center vent hose adapter.
6. Install face panel and vents. Install hose adapter onto vents from behind the dash. **NOTE: Hoses must be attached to the hose adapter before installing it onto the vents.**
7. Loosen the OEM screws and rotate the OEM brackets 90°. Tighten the screws with the hose adapter flange between the bracket and the dash (See Figure 11, below).



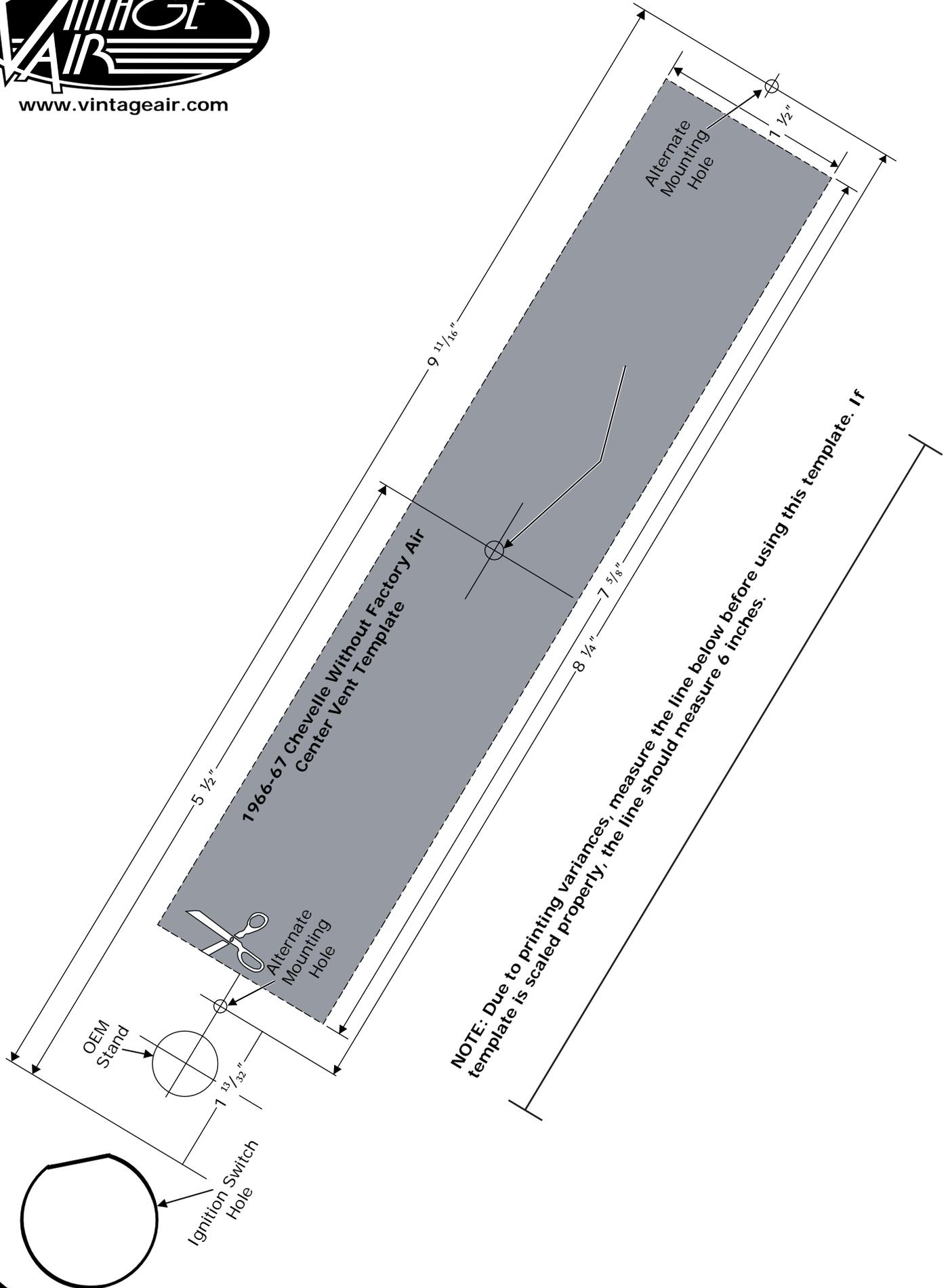
**Figure 11**







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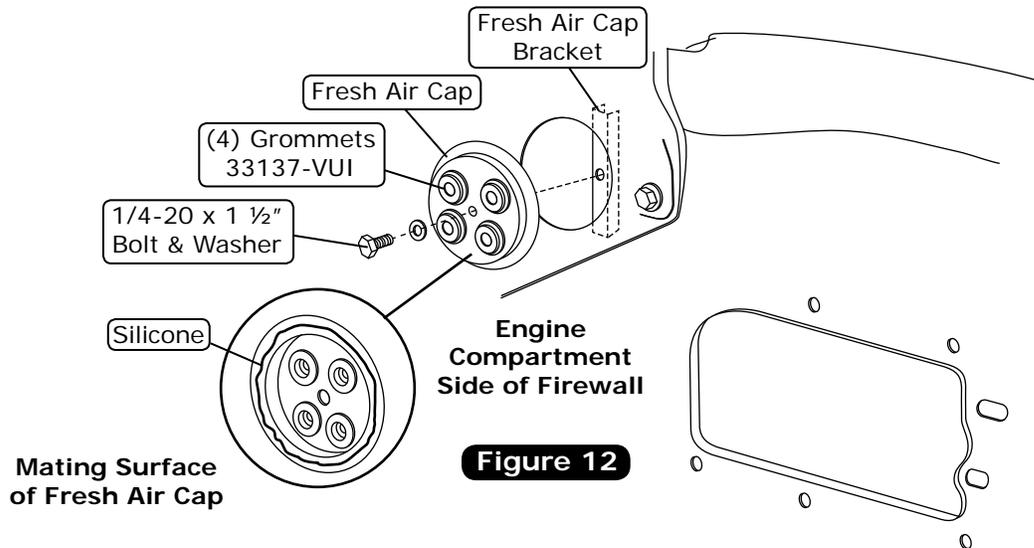


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## Fresh Air Cap Installation

**NOTE:** To ensure a watertight seal between the passenger compartment and the vehicle exterior, for all bolts passing through the firewall, Vintage Air recommends coating the threads with silicone prior to installation.

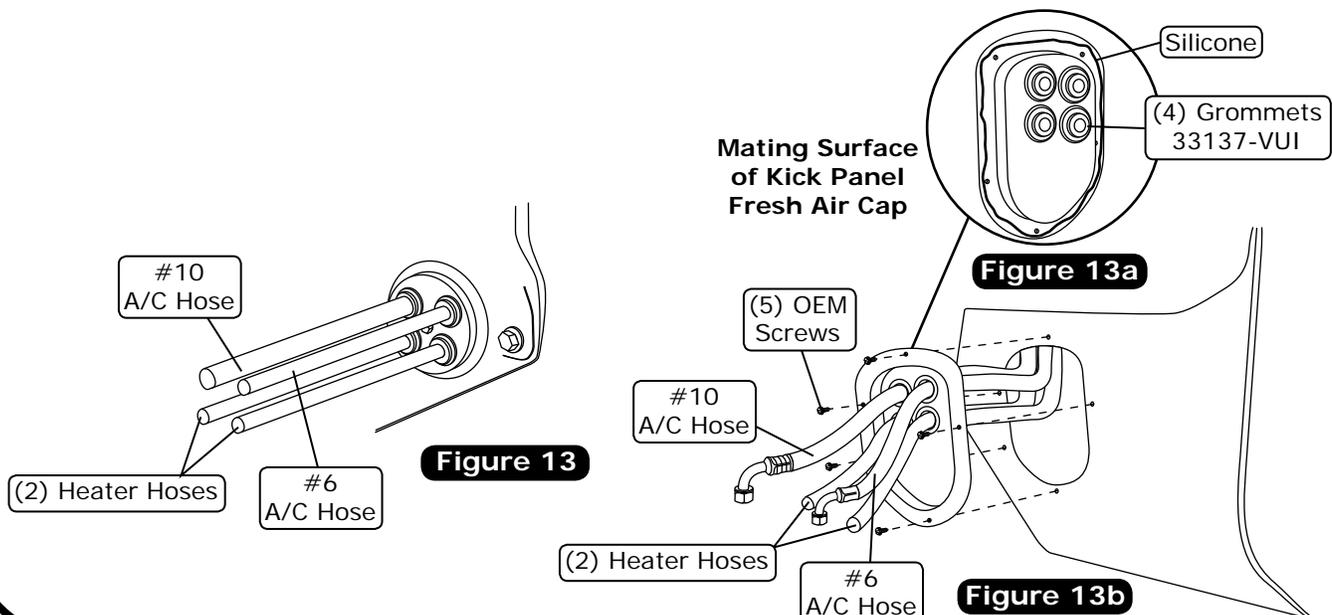
1. Install (4) grommets into the fresh air cap (See Figure 12, below).
2. Apply a 1/4" bead of silicone around the mating surface of the fresh air cap as shown in Figure 12, below.
3. Attach the fresh air cap to the firewall using the fresh air cap bracket, a 1/4-20 x 1 1/2" bolt, and a washer as shown in Figure 12, below. **NOTE: The fresh air cap installs on the engine side of the firewall.**



**Figure 12**

## Kick Panel Fresh Air Cap Installation

1. Install (4) grommets into the kick panel fresh air cap (See Figure 13a, below).
2. Route the A/C and heater hoses through the fresh air cap and kick panel fresh air cap as shown in Figures 13 and 13b, below.
3. Apply a 1/4" bead of silicone around the mating surface of the kick panel fresh air cap as shown in Figure 13a, below.
4. Secure the kick panel fresh air cap using OEM screws as shown in Figure 13b, below.



**Figure 13**

**Figure 13a**

**Figure 13b**

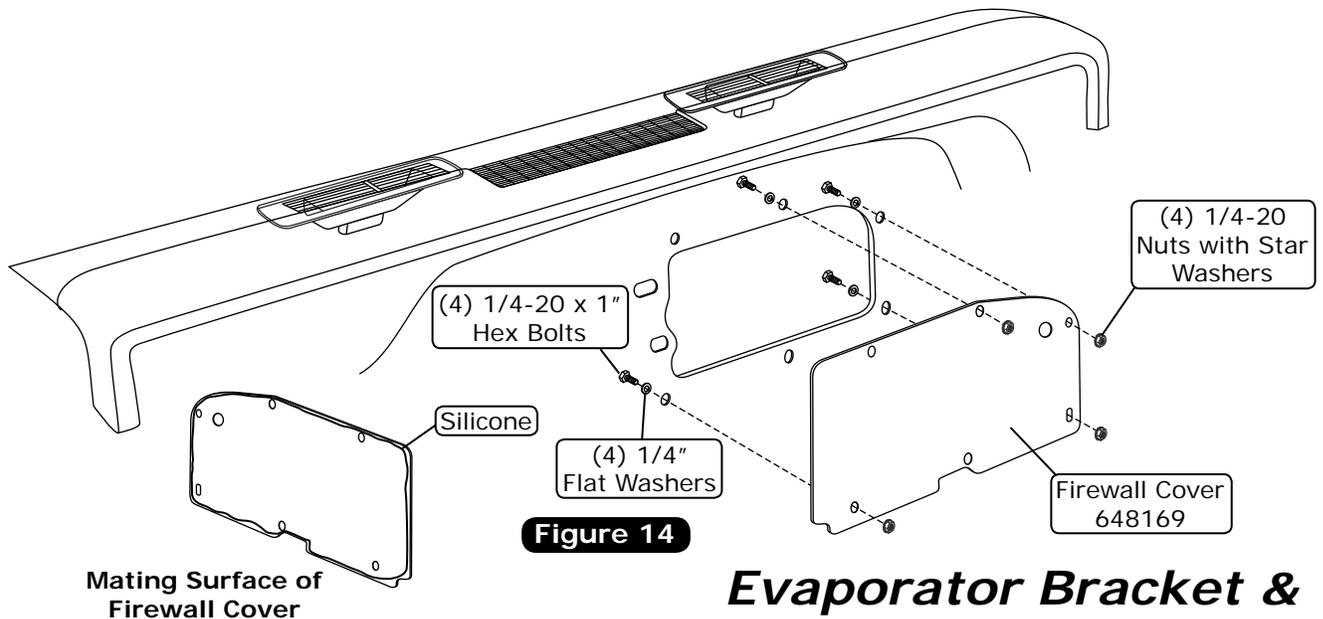


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## Firewall Cover Installation

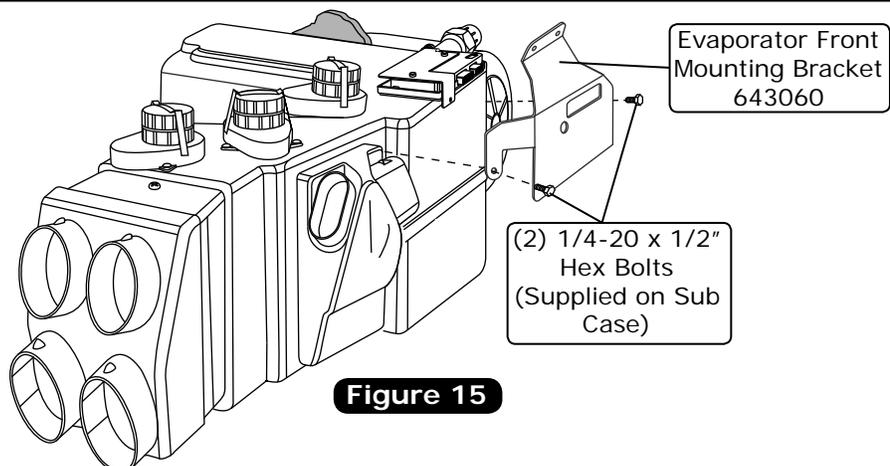
**NOTE:** To ensure a watertight seal between the passenger compartment and the vehicle exterior, for all bolts passing through the firewall, Vintage Air recommends coating the threads with silicone prior to installation.

1. Apply a 1/4" bead of silicone around the mating surface of the firewall cover as shown in Figure 14, below.
2. From the passenger compartment, install the firewall cover onto the firewall. Secure the firewall cover to the firewall using (4) 1/4-20 x 1" hex bolts, (4) 1/4" flat washers and (4) 1/4-20 nuts with star washers as shown in Figure 14, below.



## Evaporator Bracket & Heater Fitting Installation

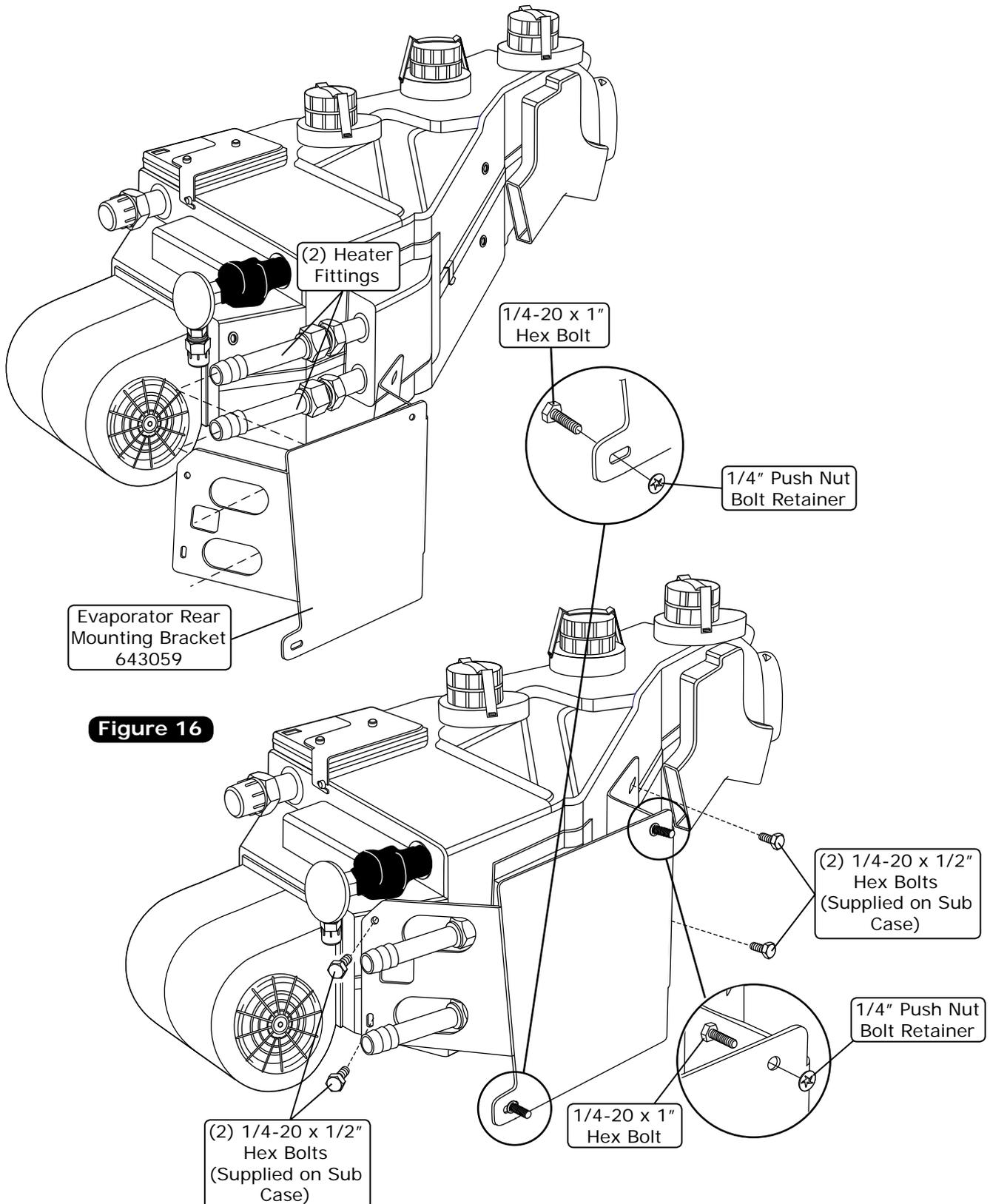
1. On a workbench, install (2) heater fittings with properly lubricated O-rings (See Figure 20, Page 19, and Figure 16, Page 17).
2. Install (2) 1/4-20 x 1" hex bolts and (2) 1/4" push nut bolt retainers onto the evaporator rear mounting bracket as shown in Figure 16, Page 17.
3. Install the evaporator front and rear mounting brackets onto the evaporator using (6) 1/4-20 x 1/2" hex bolts, (supplied on the evaporator sub case) and tighten as shown in Figure 15, below, and Figure 16, Page 17.
4. Place the evaporator sub case on the passenger side floorboard. Using properly lubricated O-rings, install the A/C hoses onto the evaporator (See Figure 20, Page 19, and Figure 17, Page 18). **NOTE: Wrap the #10 fitting connections with press tape (See Figure 17, Page 18).**
5. Install the heater hoses, securing them with hose clamps (See Figure 17, Page 18).





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# Evaporator Bracket & Heater Fitting Installation (Cont.)



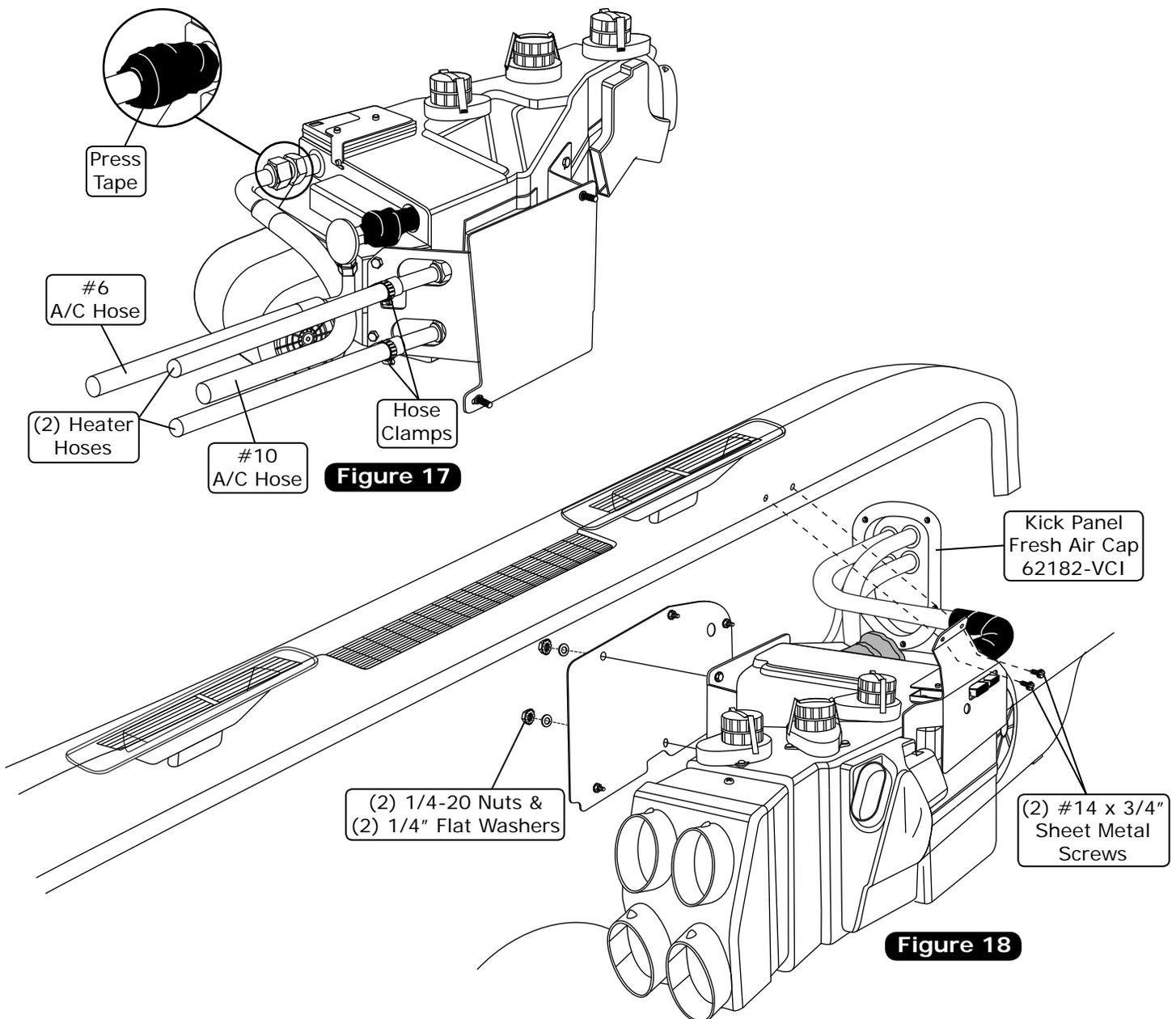


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## Evaporator Installation

**NOTE:** To ensure a watertight seal between the passenger compartment and the vehicle exterior, for all bolts passing through the firewall, Vintage Air recommends coating the threads with silicone prior to installation.

1. Lift the evaporator unit up under the dashboard. Secure loosely to the firewall using (2) 1/4-20 nuts and (2) flat washers (See Figure 18, below). **NOTE:** To ensure proper drainage, it is very important that the evaporator is level, both left-right and fore-aft. Check for level on the flat portions of the case around the drain.
2. Using (2) #14 x 3/4" sheet metal screws, secure the front evaporator mounting bracket to the cowl (See Figure 18, below).
3. Verify that the evaporator unit is level and square to the dash. Then, tighten all mounting bolts. **NOTE:** Tighten the bolt on the firewall first. Then tighten the front mounting bracket.

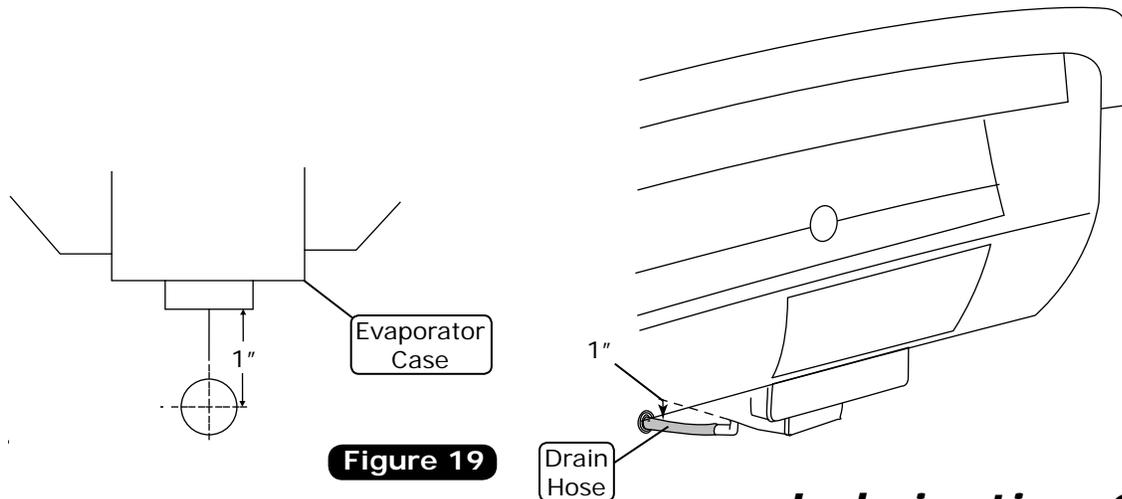




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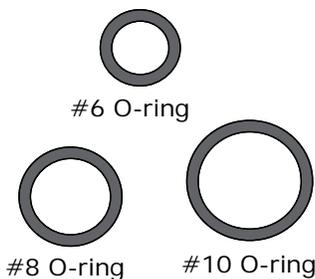
## Drain Hose Installation

1. Locate the evaporator drain on the bottom of the evaporator case.
2. In line with the drain, lightly make a mark on the firewall. Measure 1" down, and drill a 5/8" hole through the firewall (See Figure 19, below).
3. Attach the drain hose to the outlet on the bottom of the evaporator unit, and route it through the firewall.
4. Install a 1/2" 90° drain elbow onto the drain hose (See Figure 19, below).

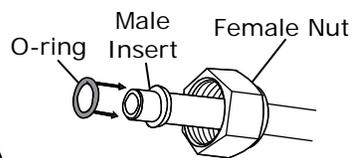


**Figure 19**

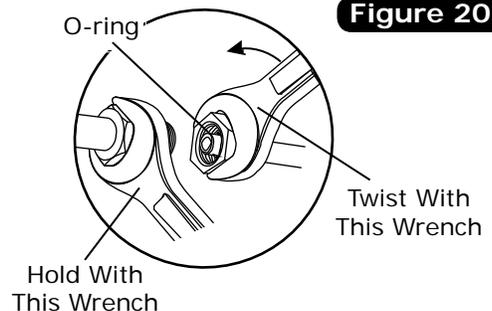
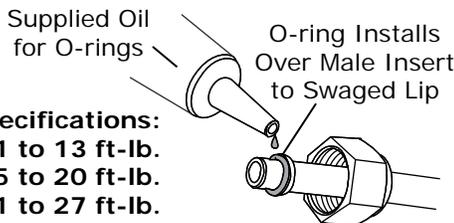
## Lubricating O-rings



**NOTE: Standard torque specifications:**  
 #6: 11 to 13 ft-lb.  
 #8: 15 to 20 ft-lb.  
 #10: 21 to 27 ft-lb.



**For a proper seal of fittings: Install supplied O-rings as shown and lubricate with supplied oil.**



**Figure 20**

## A/C Hose Installation

### Standard Hose Kit:

1. Locate the #8 compressor A/C hose. Lubricate (2) #8 O-rings (See Figure 20, above) and connect the 90° fitting to the #8 discharge port on the compressor. Then route the 45° fitting with service port to the #8 condenser hardline coming through the core support (See Figure 21, Page 20). Tighten each fitting connection as shown in Figure 20, above.
2. Locate the #10 compressor A/C hose. Lubricate (2) #10 O-rings (See Figure 20, above) and connect the 45° fitting with service port to the #10 suction port on the compressor. Then route the 90° fitting to the #10 fitting on the evaporator (See Figure 17, Page 18, and Figure 21, Page 20). Tighten each fitting connection as shown in Figure 20, above.
3. Locate the #6 evaporator A/C hose. Lubricate (2) #6 O-rings (See Figure 20, above) and connect the 90° fitting to the drier. Then route the 90° fitting to the #6 fitting on the evaporator (See Figure 17, Page 18, and Figure 21, Page 20). Tighten each fitting connection as shown in Figure 20, above.

### Modified Hose Kit:

1. Refer to separate instructions included with modified hose kit.



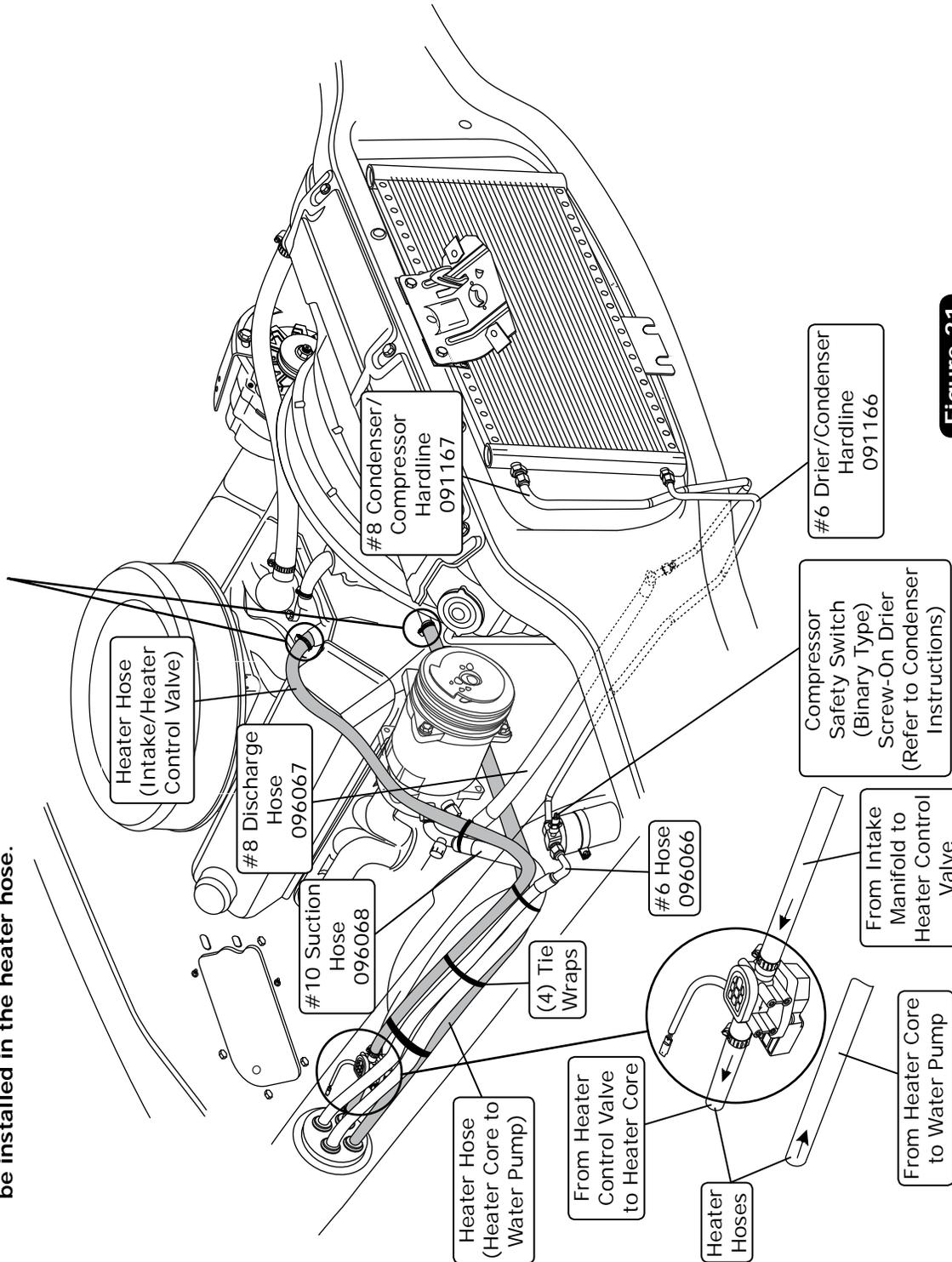
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# Heater Hose & Heater Control Valve Installation

1. Route a piece of heater hose from the water pump to the left heater core fitting as shown in Figure 13, Page 15, and Figure 21, below. Secure using hose clamps.
2. Route a piece of heater hose from the intake to the heater control valve, and from the heater control valve to the right heater core fitting as shown in Figure 13, Page 15, and Figure 21, below. **NOTE: Install the heater control valve in line with the intake manifold (pressure side) heater hose, and secure using hose clamps. Also note proper flow direction.**

## A/C and Heater Hose Routing

**NOTE:** Vintage Air Systems use 5/8" heater connections. On engines equipped with 3/4" hose nipples, these will need to be removed and replaced with 5/8" nipples (not supplied). For water pumps with a cast-in 3/4" heater outlet, a 3/4" x 5/8" reducer fitting (not supplied) will need to be installed in the heater hose.



**Figure 21**

**NOTE:** Flow Direction Follows Molded Arrow on Valve.



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## Final Steps

1. Install the duct hoses as shown in Figure 24, Page 22.
2. Route the A/C wires (12 volt/ground/binary switch/heater control valve) through the 3/8" grommet as shown in Figure 22, below.
3. Install the control panel assembly. Refer to the control panel instructions.
4. Plug the wiring harnesses into the ECU module on the sub case as shown in Figure 24, Page 22. Wire according to the wiring diagrams on Pages 23 and 24.
5. Install the supplied glove box using (4) #8 x 1/2" pan head screws (See Figure 23, below).
6. Reinstall all previously removed items.
7. Fill radiator with at least a 50/50 mixture of approved antifreeze and distilled water. It is the owner's responsibility to keep the freeze protection at the proper level for the climate in which the vehicle is operated. Failure to follow antifreeze recommendations will cause heater core to corrode prematurely and possibly burst in A/C mode and/or freezing weather, voiding your warranty.
8. Double check all fittings, brackets and belts for tightness.
9. Vintage Air recommends that all A/C systems be serviced by a licensed automotive A/C technician.
10. Evacuate the system for a minimum of 45 minutes prior to charging, and perform a leak check prior to servicing.
11. Charge the system to the capacities stated on Page 4 of this instruction manual.
12. See Operation of Controls procedures on Page 25.

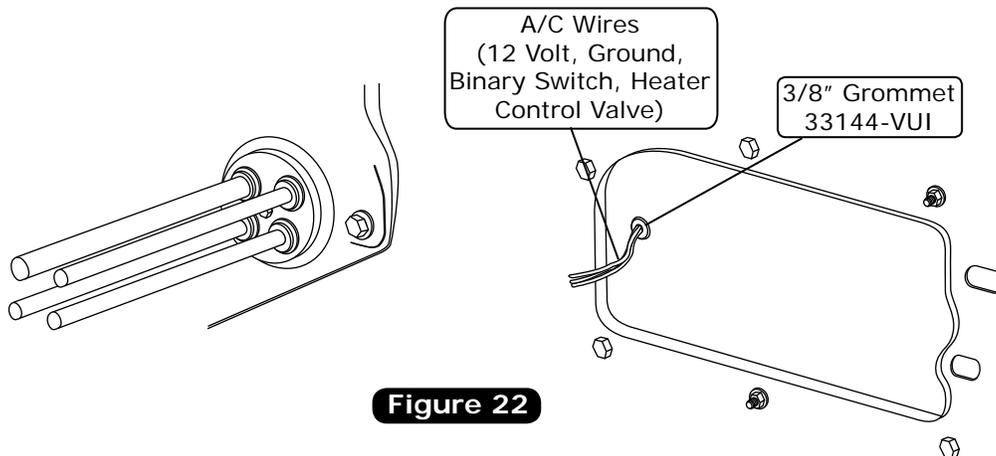


Figure 22

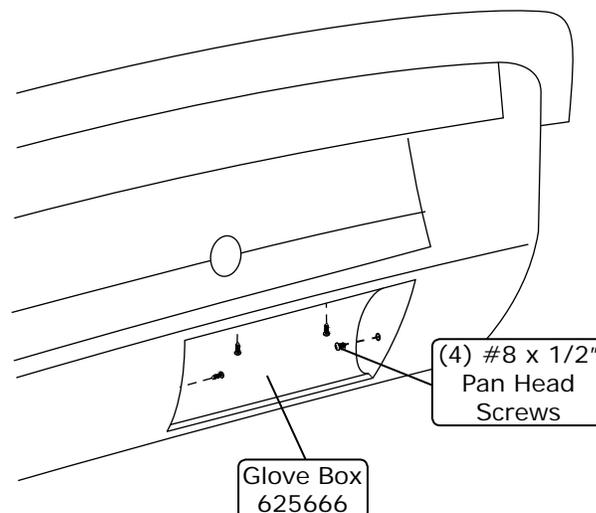


Figure 23



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# Control Panel & Duct Hose Routing

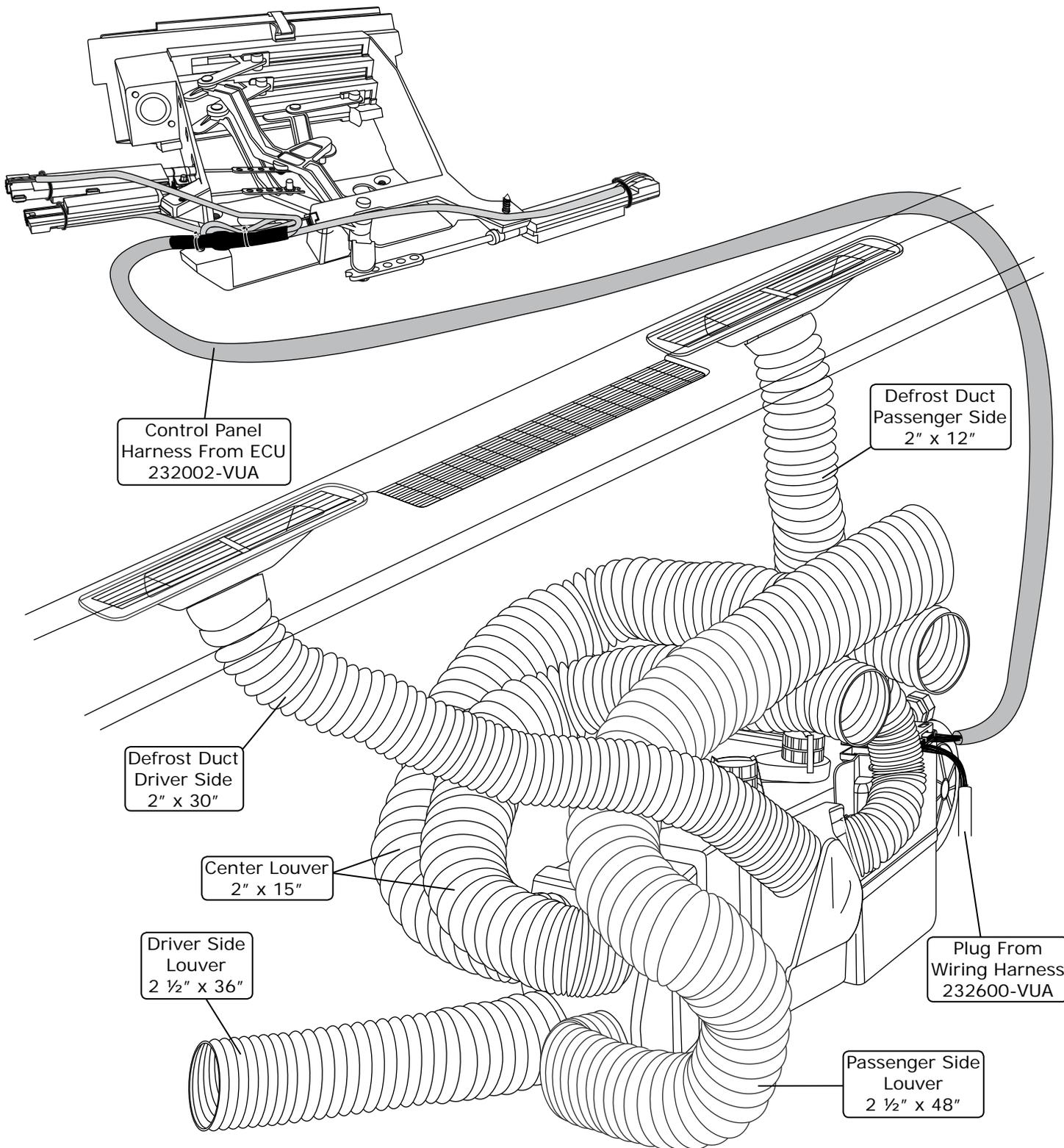


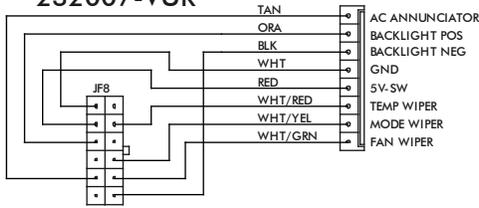
Figure 24



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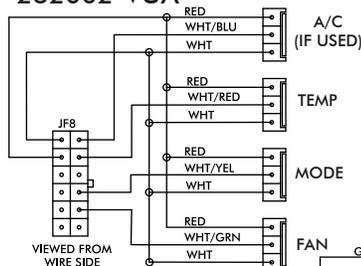
# Wiring Diagram

## 232007-VUR



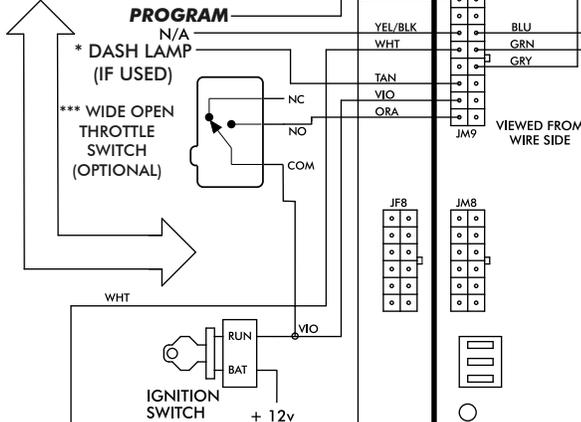
VIEWED FROM WIRE SIDE

## 232002-VUA



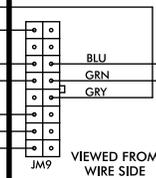
VIEWED FROM WIRE SIDE

## PROGRAM



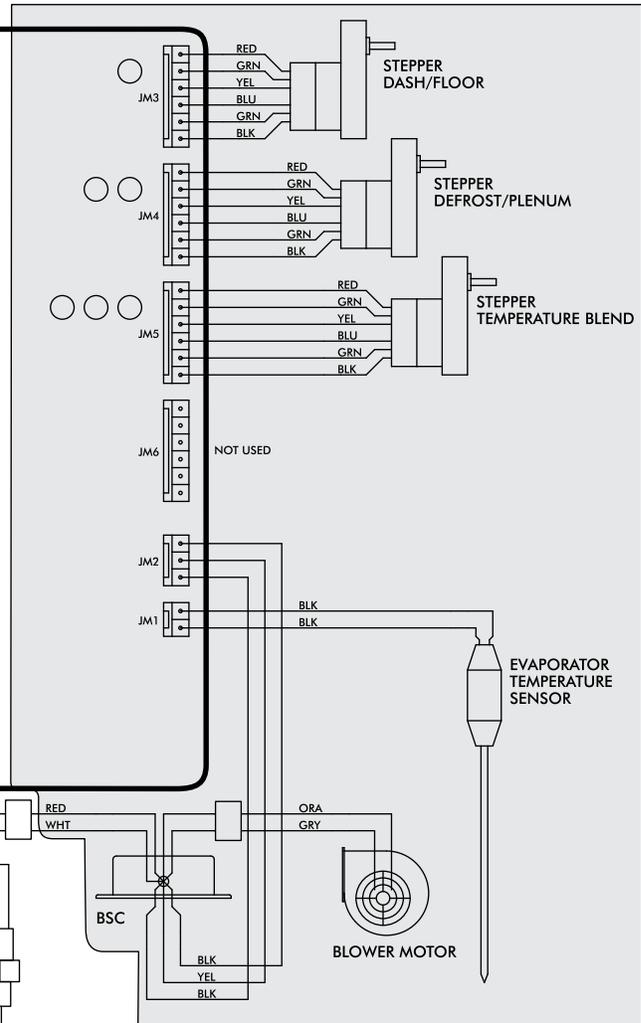
## GEN IV ECU

GEN IV WIRING DIAGRAM  
REV E, 10/6/2017



VIEWED FROM WIRE SIDE

## PRE-WIRED



NOTE: = CHASSIS GROUND

\* Dash lamp is used only with type 232007-VUR harness.

\*\* Warning: Always mount circuit breaker as close to the battery as possible. (NOTE: Wire between battery and circuit breaker is unprotected and should be carefully routed to avoid a short circuit).

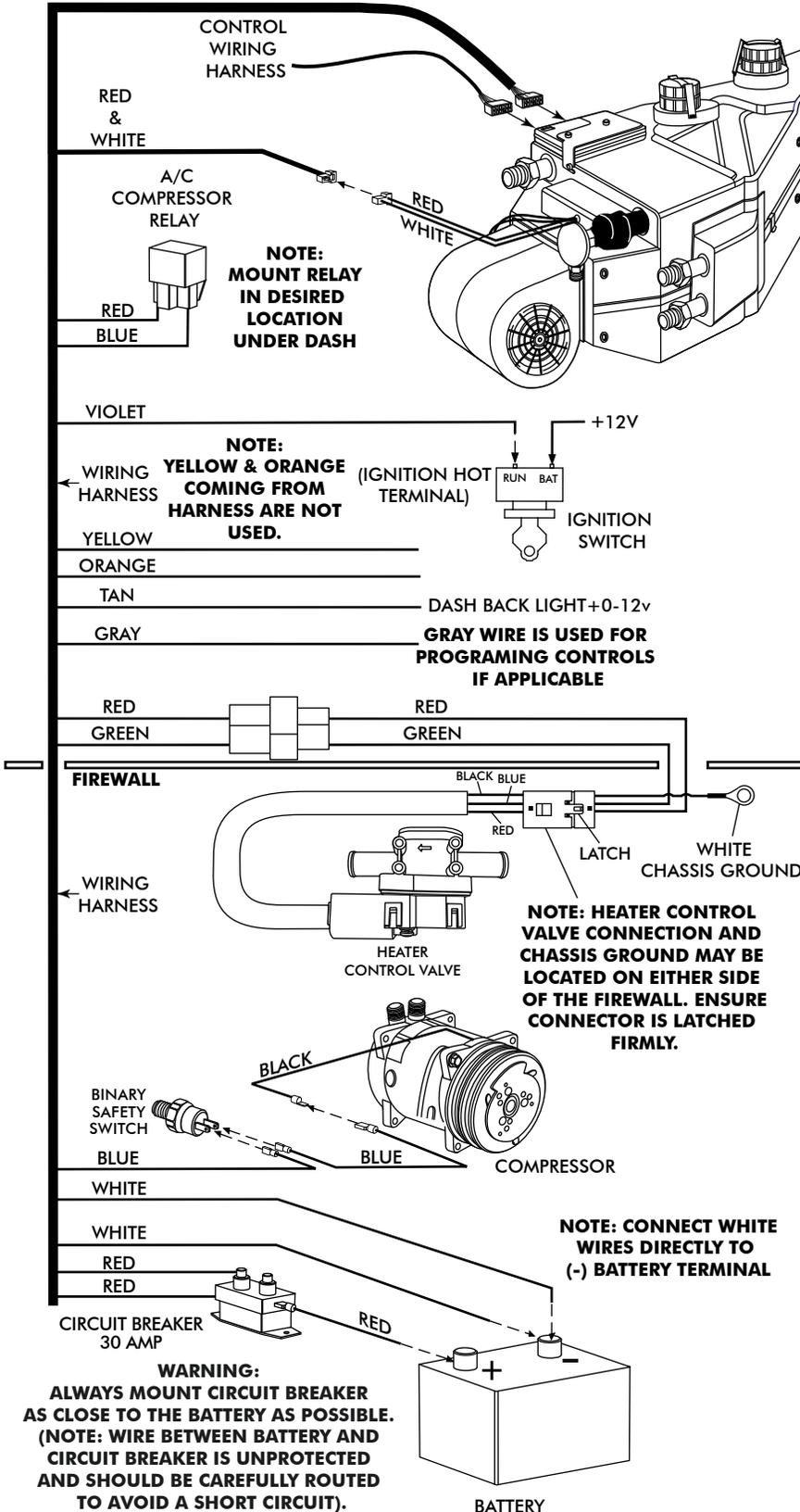
\*\*\* Wide open throttle switch contacts close only at full throttle, which disables A/C compressor.



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# Gen IV Wiring Connection Instruction

WIRING HARNESS



**NOTE:**  
MOUNT RELAY  
IN DESIRED  
LOCATION  
UNDER DASH

**NOTE:**  
YELLOW & ORANGE  
COMING FROM  
HARNESS ARE NOT  
USED.

**GRAY WIRE IS USED FOR  
PROGRAMMING CONTROLS  
IF APPLICABLE**

**NOTE: HEATER CONTROL  
VALVE CONNECTION AND  
CHASSIS GROUND MAY BE  
LOCATED ON EITHER SIDE  
OF THE FIREWALL. ENSURE  
CONNECTOR IS LATCHED  
FIRMLY.**

**NOTE: CONNECT WHITE  
WIRES DIRECTLY TO  
(-) BATTERY TERMINAL**

**WARNING:**  
ALWAYS MOUNT CIRCUIT BREAKER  
AS CLOSE TO THE BATTERY AS POSSIBLE.  
(NOTE: WIRE BETWEEN BATTERY AND  
CIRCUIT BREAKER IS UNPROTECTED  
AND SHOULD BE CAREFULLY ROUTED  
TO AVOID A SHORT CIRCUIT).

**Ignition Switch:**  
Violet 12V ignition switch source (key on accessory) position must be switched.

**Dash Light:**  
When using a Vintage Air-supplied control panel, connect the tan wire from the Gen IV evaporator wiring harness to the factory dash lights to enable panel backlighting.

**Heater Control Valve:**  
Install with servo motor facing down, as shown. Note flow direction arrow molded into valve body and install accordingly.

**Binary/Trinary & Compressor:**  
Binary: Connect as shown (typical compressor wiring). Be sure compressor body is grounded.  
Trinary Switch: Connect according to trinary switch wiring diagram.

**Circuit Breaker/Battery:**  
White **must** run to (-) battery. Red may run to (+) battery or starter. Mount circuit breaker as close to battery as possible.



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## Operation of Controls

On Gen IV systems with three lever/knob controls, the temperature control toggles between heat and A/C operations. To activate A/C, move the temperature lever/knob all the way to cold and then back it off to the desired vent temperature. For heat operation, move the temperature lever/knob all the way to hot and then adjust to the desired vent temperature. The blower will momentarily change speed, each time you toggle between operations, to indicate the change. **NOTE: For proper control panel function, refer to control panel instructions for calibration procedure.**

### Blower Speed

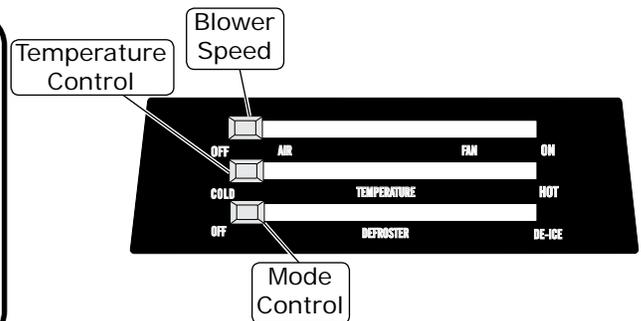
This lever/knob controls blower speed, from OFF to HI.

### Mode Control

This lever/knob controls the mode positions, from DASH to FLOOR to DEFROST, with a blend in between.

### Temperature Control

This lever/knob controls the temperature, from HOT to COLD.



## A/C Operation

### Blower Speed

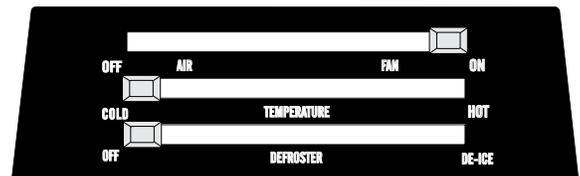
Adjust to desired speed.

### Mode Control

Adjust to desired mode position (DASH position recommended).

### Temperature Control

For A/C operation, adjust to coldest position to engage compressor (Adjust between HOT and COLD to reach desired temperature).



## Heat Operation

### Blower Speed

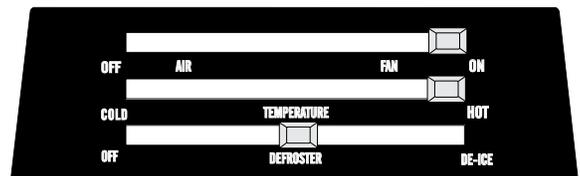
Adjust to desired speed.

### Mode Control

Adjust to desired mode position (FLOOR position recommended).

### Temperature Control

For maximum heating, adjust to hottest position (Adjust between HOT and COLD to reach desired temperature).



## Defrost/De-fog Operation

### Blower Speed

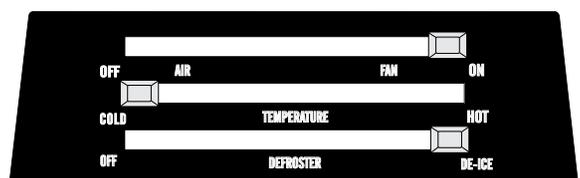
Adjust to desired speed.

### Temperature Control

Adjust to desired temperature.

### Mode Control

Adjust to DEFROST position for maximum defrost, or between FLOOR and DEFROST positions for a bi-level blend (Compressor is automatically engaged).





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# Troubleshooting Guide

Symptom	Condition	Checks	Actions	Notes
1a. Blower stays on high speed when ignition is on.	No other functions work.	Check for damaged pins or wires in control head plug.	Verify that all pins are inserted into plug. Ensure that no pins are bent or damaged in ECU.	Loss of ground on this wire renders control head inoperable.  See blower switch check procedure.
	All other functions work.	Check for damaged ground wire (white) in control head harness.	Verify continuity to chassis ground with white control head wire at various points.	
		Check for damaged blower switch or potentiometer and associated wiring.		
1b. Blower stays on high speed when ignition is on or off.		Unplug 3-wire BSC control connector from ECU. If blower shuts off, ECU is either improperly wired or damaged.	Be sure the small, 20 GA white ground wire is connected to the battery ground post. If it is, replace the ECU.	No other part replacements should be necessary.
		Unplug 3-wire BSC control connector from ECU. If blower stays running, BSC is either improperly wired or damaged.	Check to ensure that no BSC wiring is damaged or shorted to vehicle ground. The BSC operates the blower by ground side pulse width modulation switching. The positive wire to the blower will always be hot. If the "ground" side of the blower is shorted to chassis ground, the blower will run on HI.	
		Replace BSC (This will require removal of evaporator from vehicle).		
2. Compressor will not turn on (All other functions work).	System is not charged.	System must be charged for compressor to engage.	Charge system or bypass pressure switch.	<b>Danger: Never bypass safety switch with engine running. Serious injury can result.</b>  To check for proper pot function, check voltage at white/blue wire. Voltage should be between 0V and 5V, and will vary with pot lever position.  Disconnected or faulty thermistor will cause compressor to be disabled.
		Check for faulty A/C potentiometer or associated wiring (not applicable to 3-pot controls).	Check continuity to ground on white control head wire. Check for 5V on red control head wire.	
		Check for disconnected or faulty thermistor.	Check 2-pin connector at ECU housing.	
3. Compressor will not turn off (All other functions work).	System is charged.	Check for faulty A/C potentiometer or associated wiring.	Repair or replace pot/control wiring.	Red wire at A/C pot should have approximately 5V with ignition on. White wire will have continuity to chassis ground. White/Blue wire should vary between 0V and 5V when lever is moved up or down.
		Check for faulty A/C relay.	Replace relay.	



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# Troubleshooting Guide (Cont.)

Symptom	Condition	Checks	Actions	Notes
4.	Works when engine is not running; shuts off when engine is started (typically early Gen IV, but possible on all versions).	Noise interference from either ignition or alternator.	Install capacitors on ignition coil and alternator. Ensure good ground at all points. Relocate coil and associated wiring away from ECU and ECU wiring. Check for burned or loose plug wires.	Ignition noise (radiated or conducted) will cause the system to shut down due to high voltage spikes. If this is suspected, check with a quality oscilloscope. Spikes greater than 16V will shut down the ECU. Install a radio capacitor at the positive post of the ignition coil (see radio capacitor installation bulletin). A faulty alternator or worn out battery can also result in this condition.
	System will not turn on, or runs intermittently.	Will not turn on under any conditions.	Check for positive power at heater valve green wire and blower red wire. Check for ground on control head white wire.	
		Verify battery voltage is greater than 10 volts and less than 16.	Verify proper meter function by checking the condition of a known good battery.	
5.	No mode change at all.	Check for damaged mode switch or potentiometer and associated wiring.		Typically caused by evaporator housing installed in a bind in the vehicle. Be sure all mounting locations line up and don't have to be forced into position.
	Partial function of mode doors.	Check for obstructed or binding mode doors.		
		Check for damaged stepper motor or wiring.		
6.	Battery voltage is at least 12V.	Check for at least 12V at circuit breaker.	Ensure all system grounds and power connections are clean and tight.	System shuts off blower at 10V. Poor connections or weak battery can cause shutdown at up to 11V.
	Blower turns on and off rapidly.	Check for faulty battery or alternator.	Charge battery.	
7.	Erratic functions of blower, mode, temp, etc.	Check for damaged switch or pot and associated wiring.	Repair or replace.	
8.	When ignition is turned on, blower momentarily comes on, then shuts off. This occurs with the blower switch in the OFF position.	This is an indicator that the system has been reset. Be sure the red power wire is on the battery post, and not on a switched source. Also, if the system is pulled below 7V for even a split second, the system will reset.	Run red power wire directly to battery.	



Cut Along  
Dotted Line



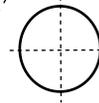
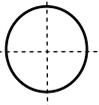
# 1966 Chevelle Kick Panel Modification Template



Cut Along  
Dotted Line

## Cut Out This Area

**NOTE: Due to printing variances, measure the line below before using this template. If template is scaled properly, the line should measure 6 inches.**





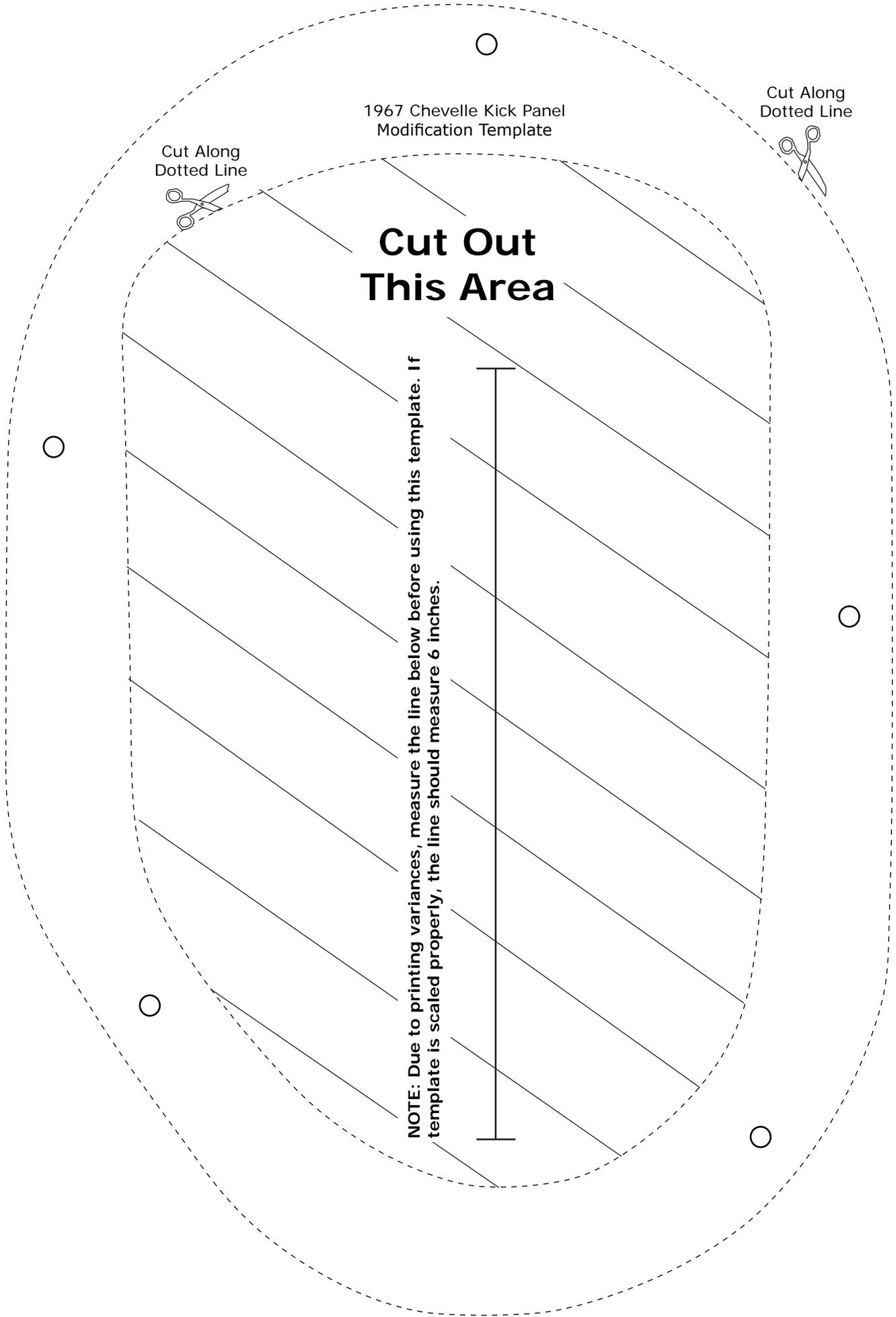
1967 Chevelle Kick Panel  
Modification Template

Cut Along  
Dotted Line

Cut Along  
Dotted Line

**Cut Out  
This Area**

**NOTE: Due to printing variances, measure the line below before using this template. If  
template is scaled properly, the line should measure 6 inches.**









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## Packing List: Evaporator Kit (561066)

No.	Qty.	Part No.	Description
1.	1	762169	Gen IV 4-Vent with 2" & 2 1/2" Evaporator Sub Case
2.	1	784161	Accessory Kit

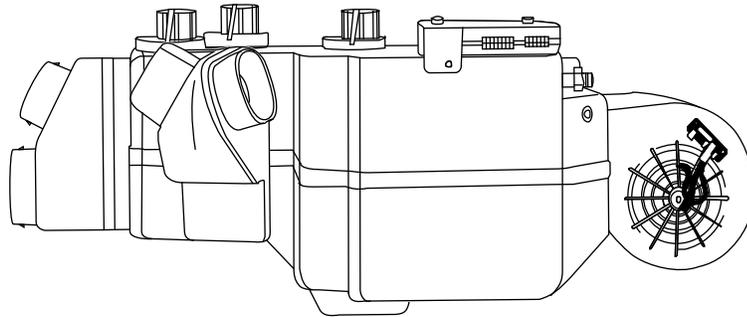
Checked By: \_\_\_\_\_

Packed By: \_\_\_\_\_

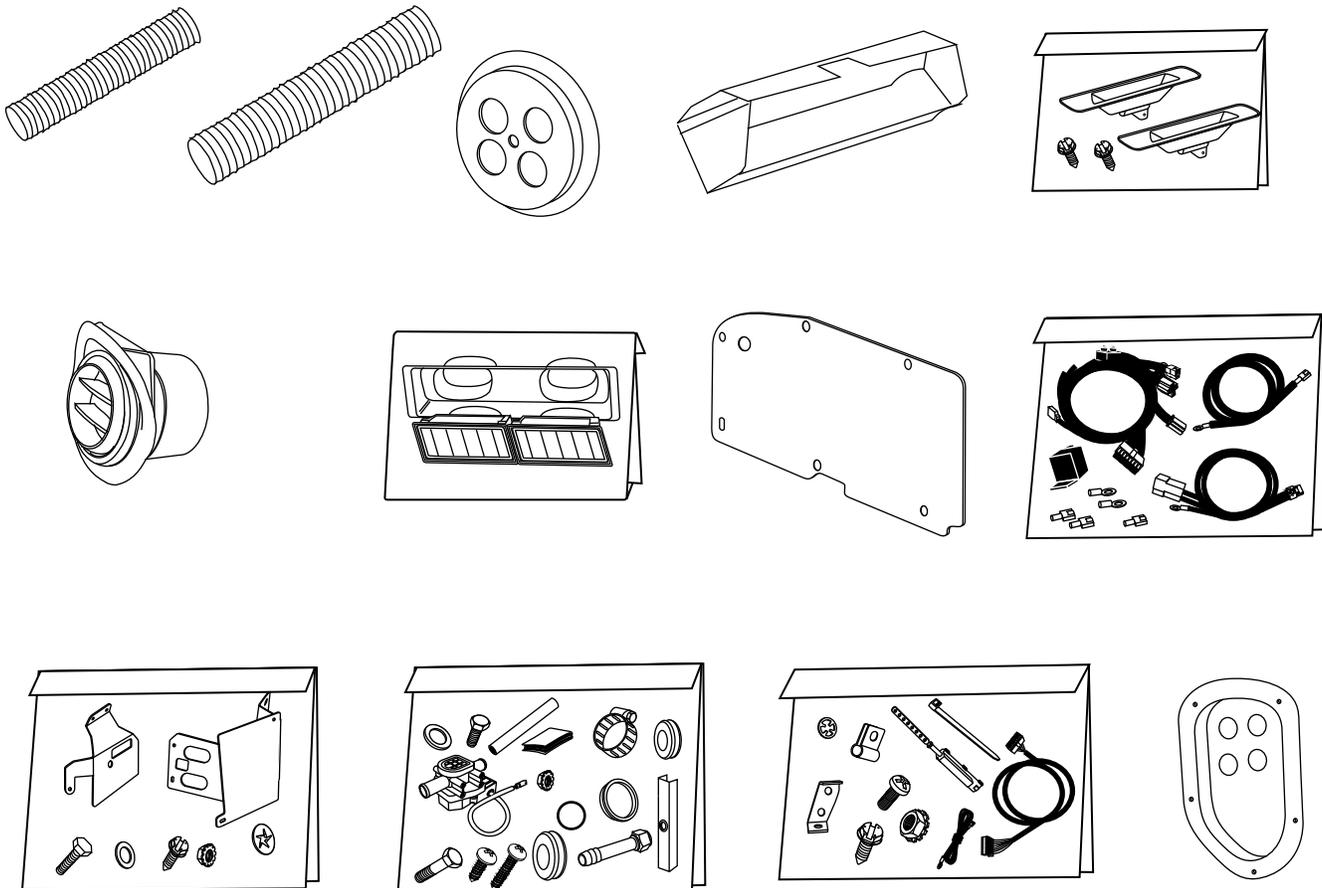
Date: \_\_\_\_\_

1

Gen IV 4-Vent  
with 2" & 2 1/2"  
Evaporator Sub Case  
762169



2



Accessory Kit  
784161

**NOTE: Images may not depict actual parts and quantities.  
Refer to packing list for actual parts and quantities.**