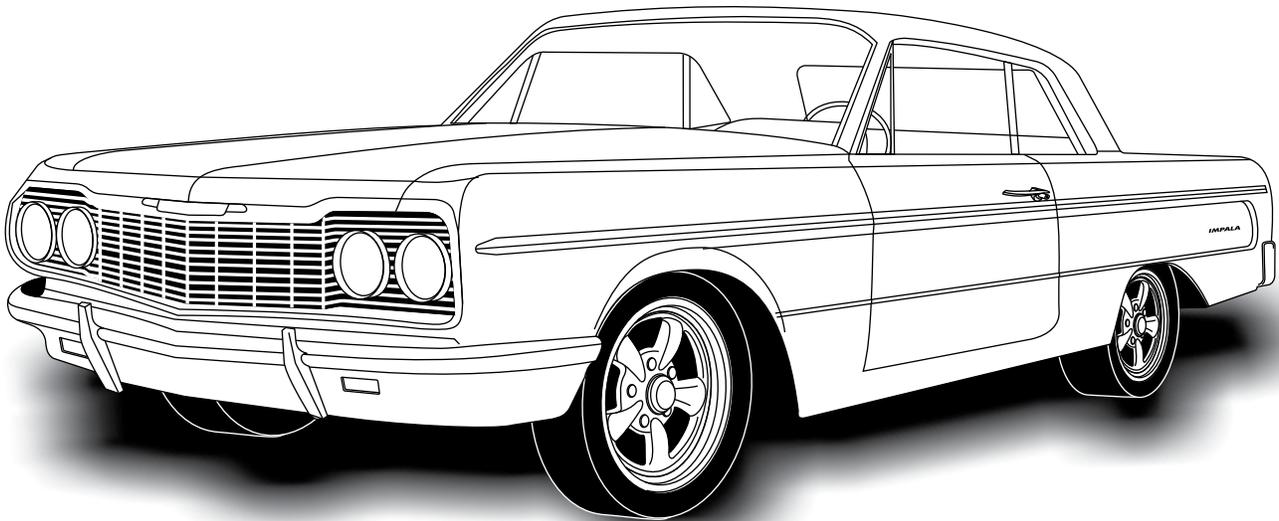




an ISO 9001:2008 Registered Company

1964 Chevrolet Impala

without **Factory Air
Evaporator Kit
(561064)**



18865 Goll St. San Antonio, TX 78266
Phone: 210-654-7171
Fax: 210-654-3113
www.vintageair.com



www.vintageair.com

Table of Contents

Thank you for purchasing this evaporator kit from Vintage Air. When installing these components as part of a complete SureFit™ system, Vintage Air recommends working from front to back on the vehicle, installing the condenser kit, hose kit, and compressor first, followed by the wiring, evaporator, and finally the control panel.

- Cover..... 1
- Table of Contents..... 2
- Packing List/Parts Disclaimer..... 3
- Information Page.....4
- Wiring Notice..... 5
- Engine Compartment Disassembly, Condenser Assembly and Installation, Compressor and Brackets, Pulleys..... 6
- Passenger Compartment Disassembly..... 7
- Defrost Duct Installation, Fresh Air Cap Installation..... 8
- Kick Panel Installation, Firewall Cover Installation..... 9
- Evaporator Bracket & Evaporator Hardline Installation..... 10
- Evaporator Installation..... 11
- Firewall Cap Installation, Drain Hose Installation..... 12
- Driver Side Under Dash Louver Installation, Center/Passenger Side Under Dash Louver Installation..... 13
- Lubricating O-rings, A/C Hose Installation..... 14
- Heater Hose & Heater Control Valve Installation..... 15
- A/C and Heater Hose Routing..... 16
- Final Steps, Glove Box Installation..... 17
- Control Panel & Duct Hose Routing..... 18
- Evaporator Hardline Installation (Cont.)..... 19
- Wiring Diagram..... 20
- Gen IV Wiring Connection Instruction..... 21
- Operation of Controls..... 22
- Troubleshooting Guide..... 23
- Troubleshooting Guide (Cont.)..... 24
- Packing List..... 25



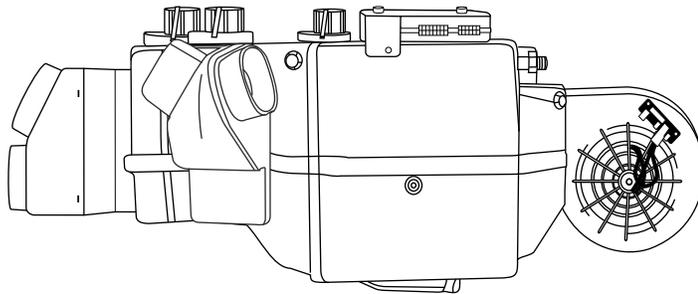
www.vintageair.com

Packing List: Evaporator Kit (561064)

No.	Qty.	Part No.	Description
1.	1	744004-VUE	Gen IV 4-Vent Evaporator Sub Case
2.	1	784163	Accessory Kit

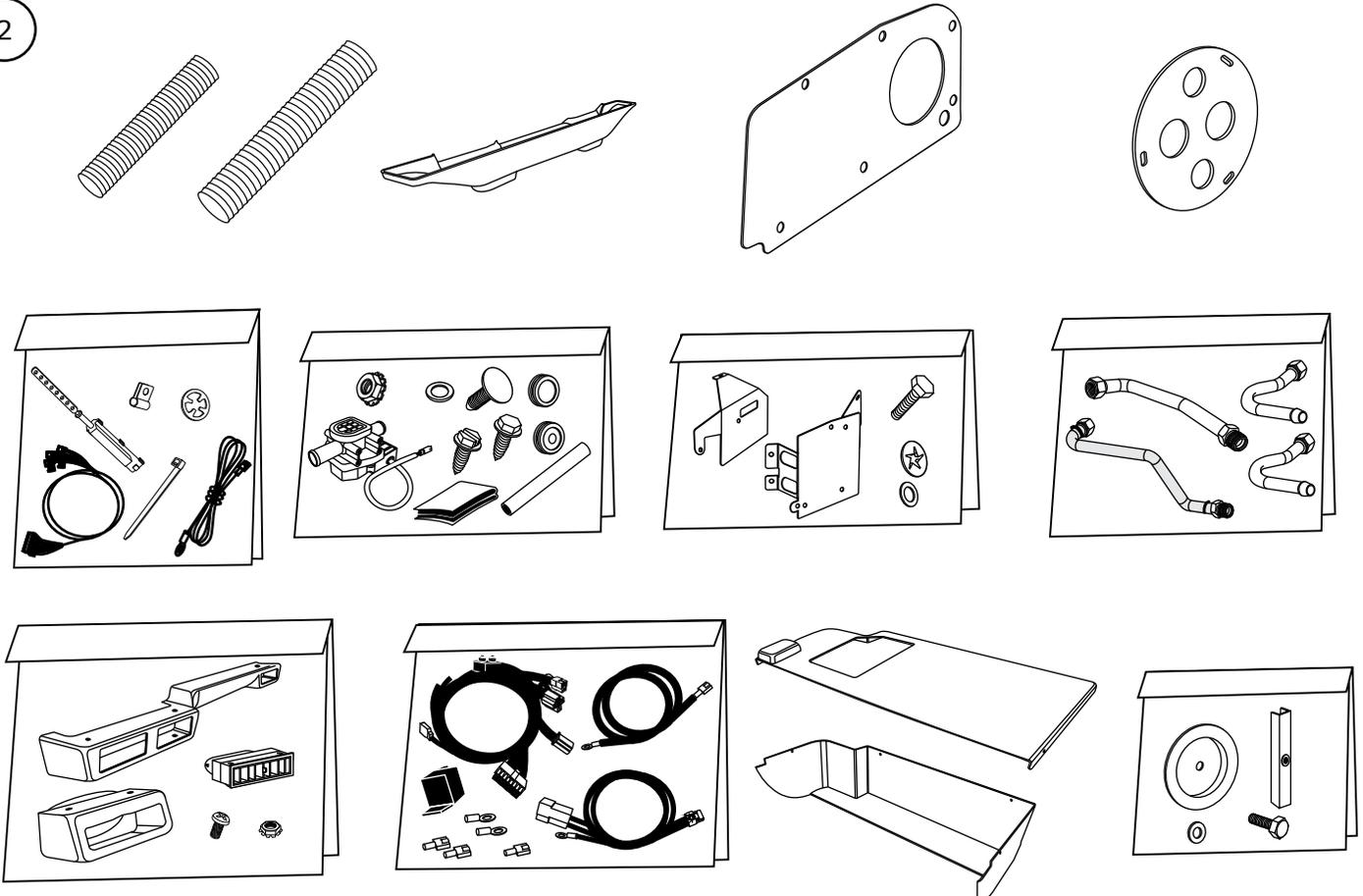
**** Before beginning installation, open all packages and check contents of shipment. Please report any shortages directly to Vintage Air within 15 days. After 15 days, Vintage Air will not be responsible for missing or damaged items.**

1



**Gen IV 4-Vent
Evaporator Sub Case
744004-VUE**

2



**Accessory Kit
784163**

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



www.vintageair.com

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. (1 lb., 12 oz.) 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 remained 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.



www.vintageair.com

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, 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, 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, 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.



www.vintageair.com

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 (retain).
3. Drain radiator.
4. Remove OEM heater hoses (discard) (See Figure 1, below).
5. Remove OEM heater/blower assembly (discard) (See Figure 1, below).
6. To remove the OEM heater/blower assembly, the factory manual recommends removing the right inner fender.

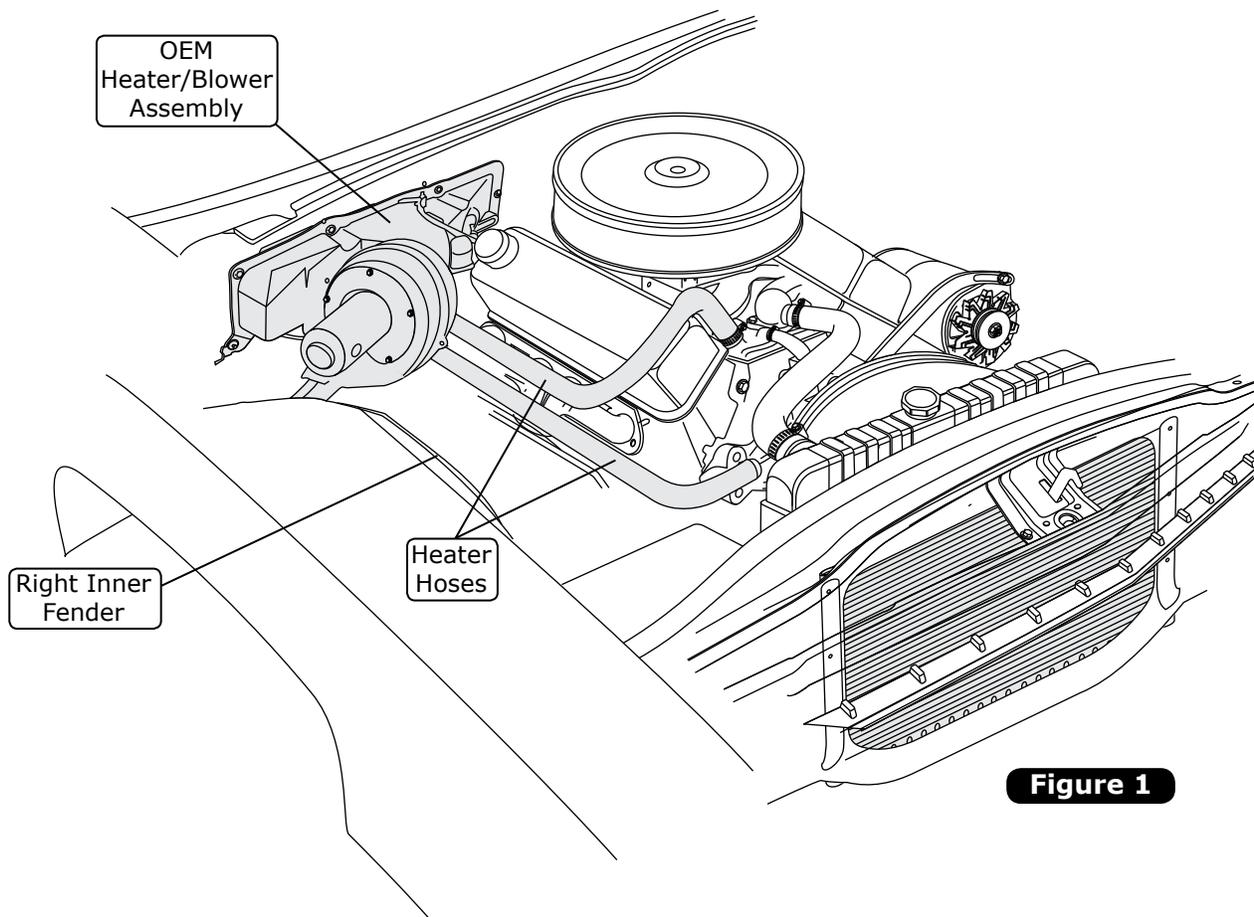


Figure 1

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.

Pulleys

1. In most instances, the belt lengths will remain the same.



www.vintageair.com

Passenger Compartment Disassembly

Perform the Following:

1. Remove the instrument panel (See Figure 2, below).
2. Remove the OEM control panel assembly (retain).
3. Remove the glove box door (retain).
4. Remove the glove box (discard).
5. Remove the radio and speaker (retain) (See Figure 2, below).
6. Remove the OEM heater assembly (discard) (See Figure 2a, below).
7. Using a chisel or die grinder, remove the spot welds on the defrost duct (See Figure 3, below).
8. Remove the OEM defrost duct assembly (discard) (See Figures 2a & 3, below).

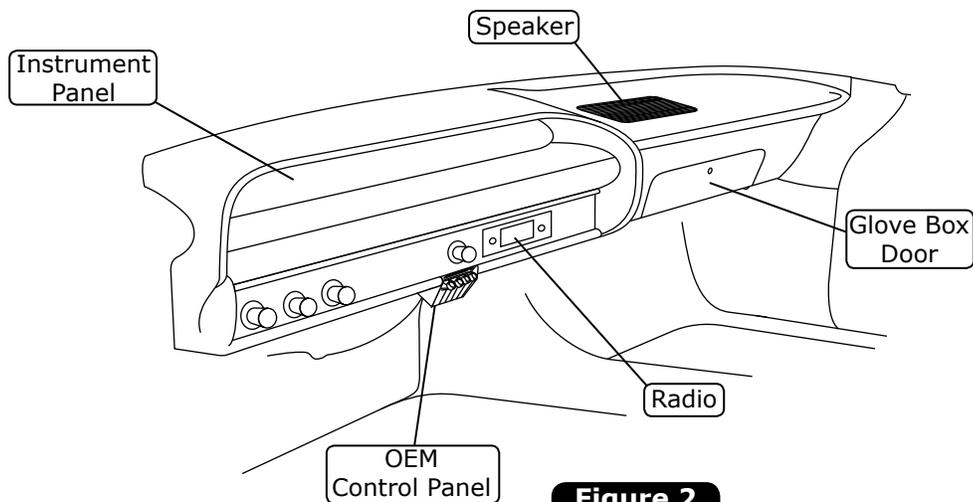


Figure 2

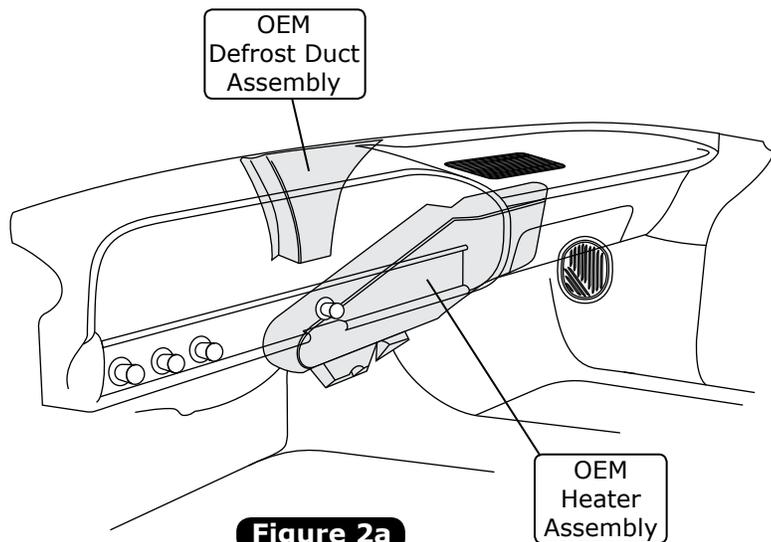
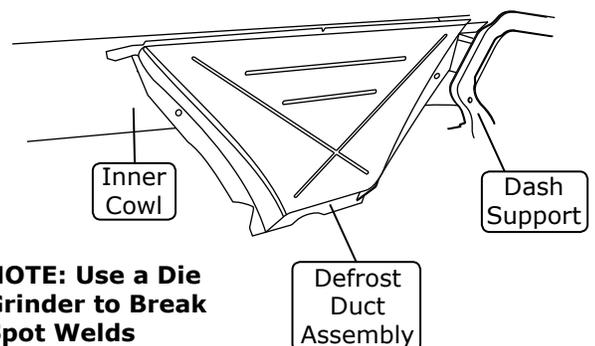


Figure 2a



**NOTE: Use a Die
Grinder to Break
Spot Welds**

Figure 3



www.vintageair.com

Defrost Duct Installation

1. Place the defrost duct under the dash, and align it with the OEM defrost opening in the dash. Drill (2) 1/8" holes in the cowl, using the defrost duct hole as a template. Secure using (2) #10 x 1/2" sheet metal screws as shown in Figure 4, below.

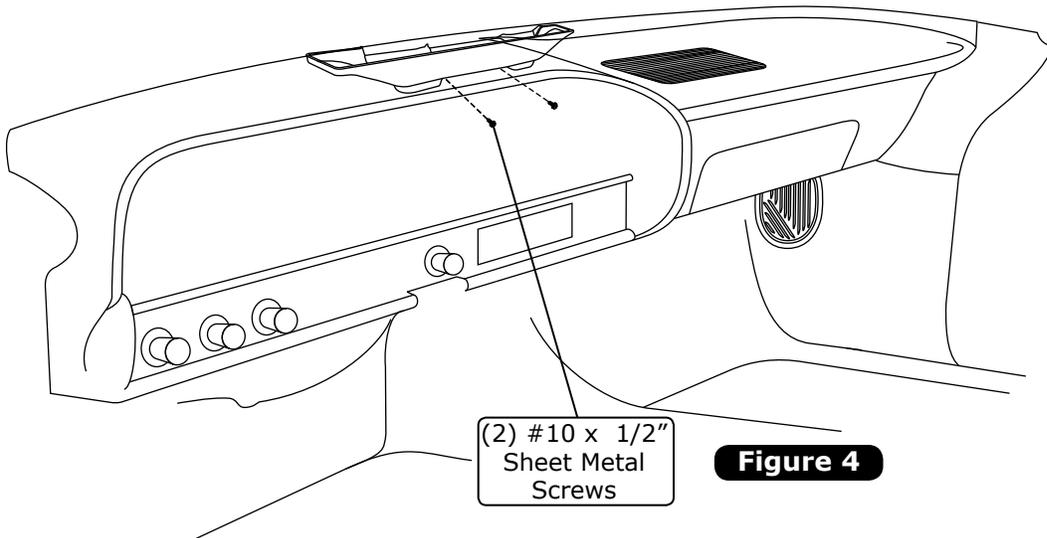


Figure 4

Fresh Air Cap Installation

1. Apply a 1/4" bead of silicone around the mating surface of the fresh air cap as shown in Figure 5, below.
2. Attach the fresh air cap to the firewall using a 1/4-20 x 1" bolt and washer (See Figure 5, below).

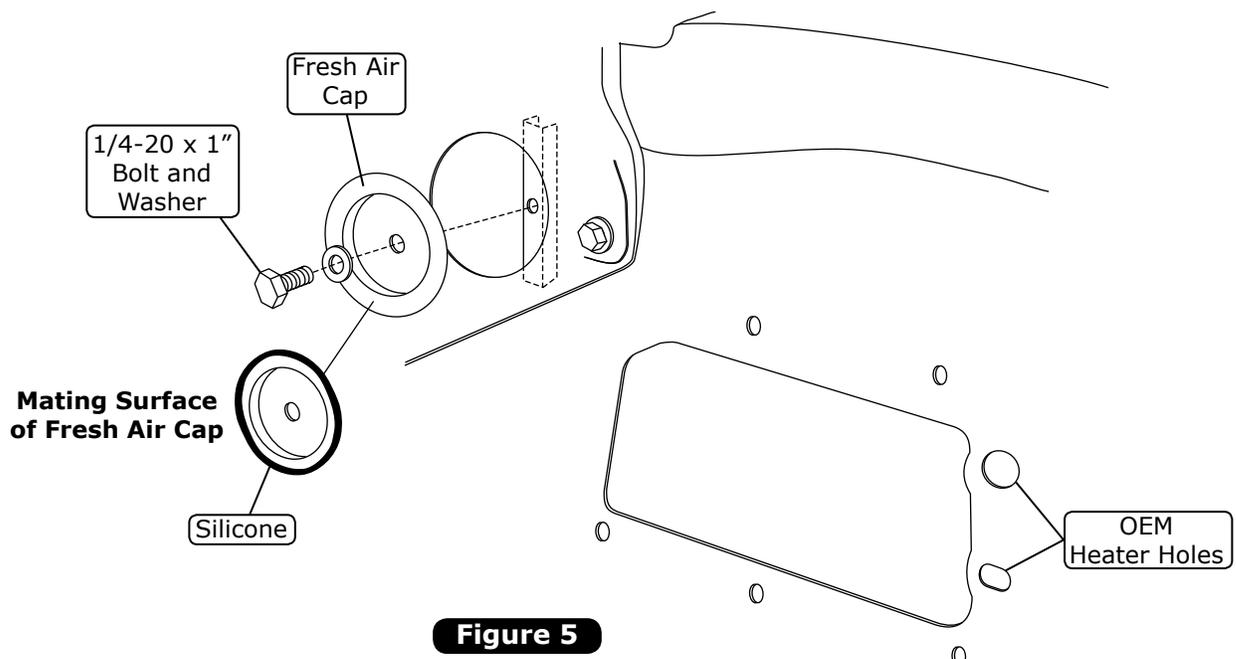


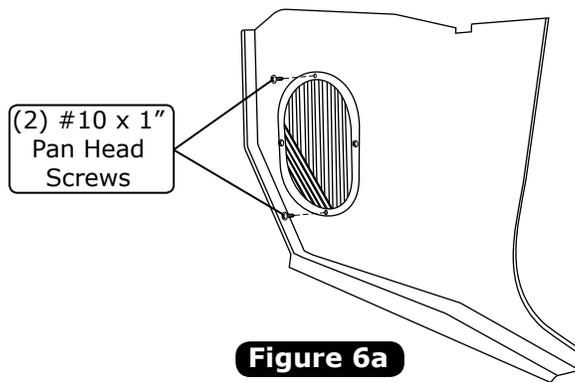
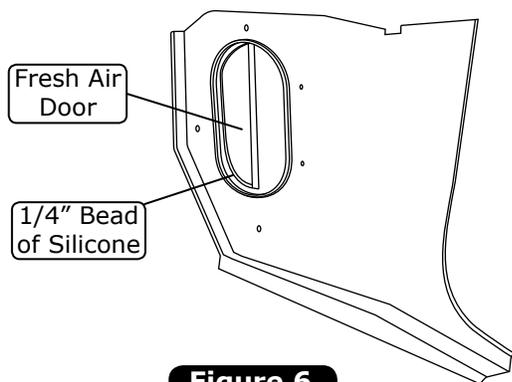
Figure 5



www.vintageair.com

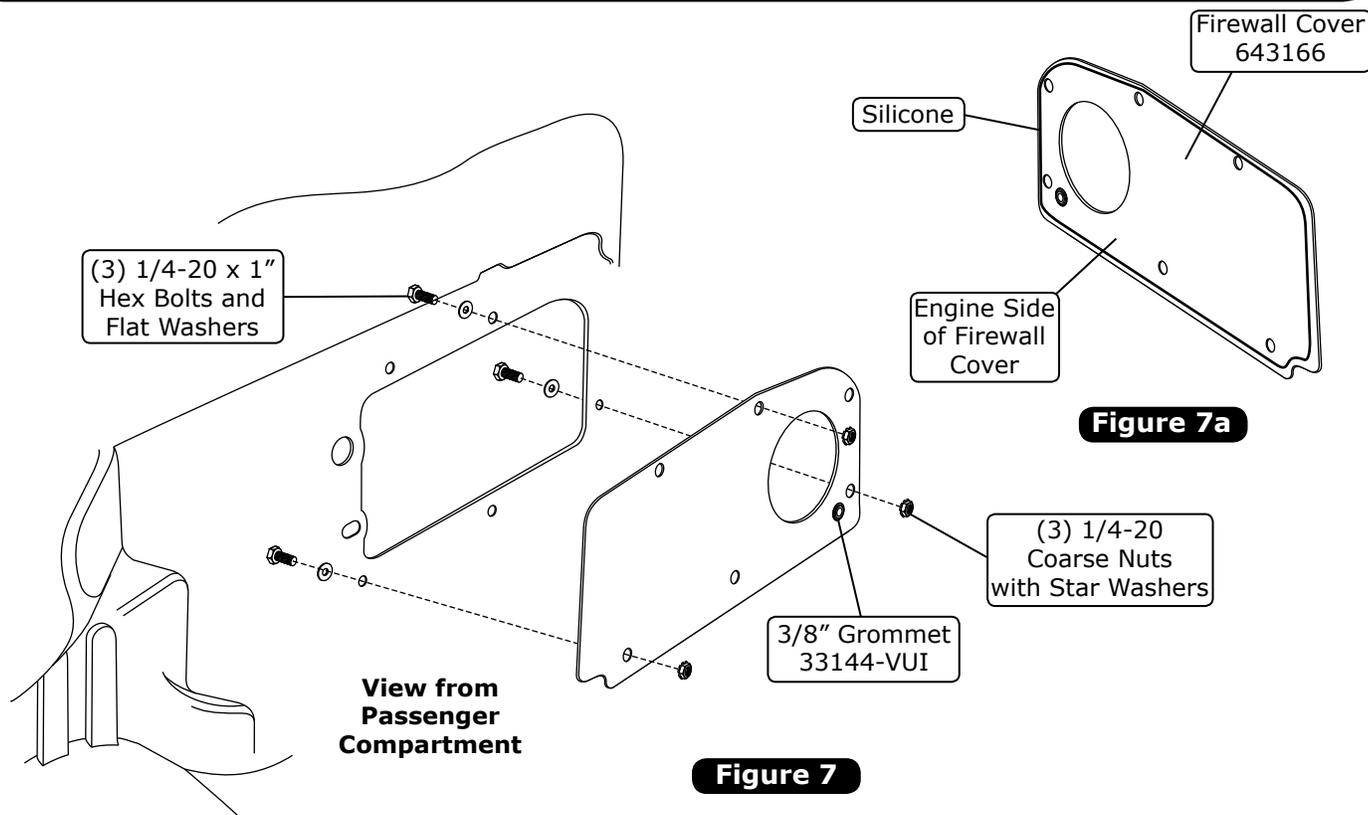
Kick Panel Installation

1. Remove the passenger side kick panel by removing the (2) #10 x 1" pan head screws. Disconnect the fresh air cable from the door, and discard the cable assembly. Close the fresh air door assembly in the kick panel, and seal the door with a 1/4" bead of silicone around it as shown in Figure 6, below.
2. Install the passenger side kick panel using (2) OEM screws as shown in Figure 6a, below.



Firewall Cover Installation

1. Install a grommet onto the firewall cover as shown in Figure 7, below.
2. Apply a 1/4" bead of silicone around the firewall cover as shown in Figure 7a, below.
3. From the passenger compartment, install the firewall cover onto the firewall. From the engine compartment, secure the firewall cover to the firewall using (3) 1/4-20 x 1" hex bolts, washers and 1/4-20 coarse nuts with star washers (See Figure 7, below).

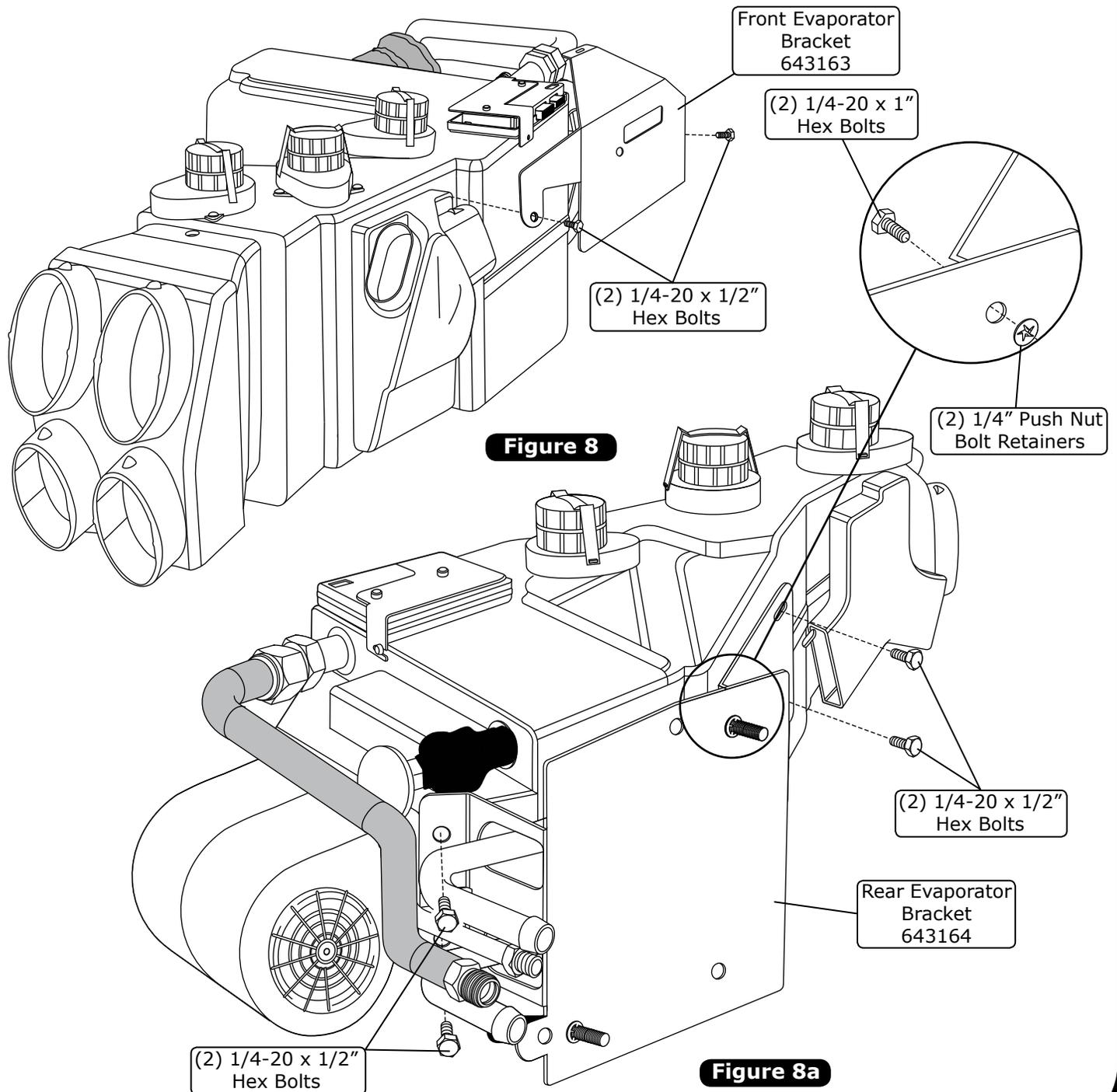




www.vintageair.com

Evaporator Bracket & Evaporator Hardline Installation

1. On a workbench, install (2) heater lines with properly lubricated O-rings (See Figure 14, Page 14, and Figure 20, Page 19).
2. Install (2) 1/4-20 x 1" hex bolts and (2) 1/4" push nut bolt retainers onto the evaporator rear bracket as shown in Figure 8a, below.
3. Install the evaporator front & rear mounting brackets onto the evaporator using (6) 1/4-20 x 1/2" hex bolts. Tighten as shown in Figures 8 & 8a, below.
4. Install (2) A/C hardlines with properly lubricated O-rings (See Figure 14, Page 14, and Figure 20, Page 19).



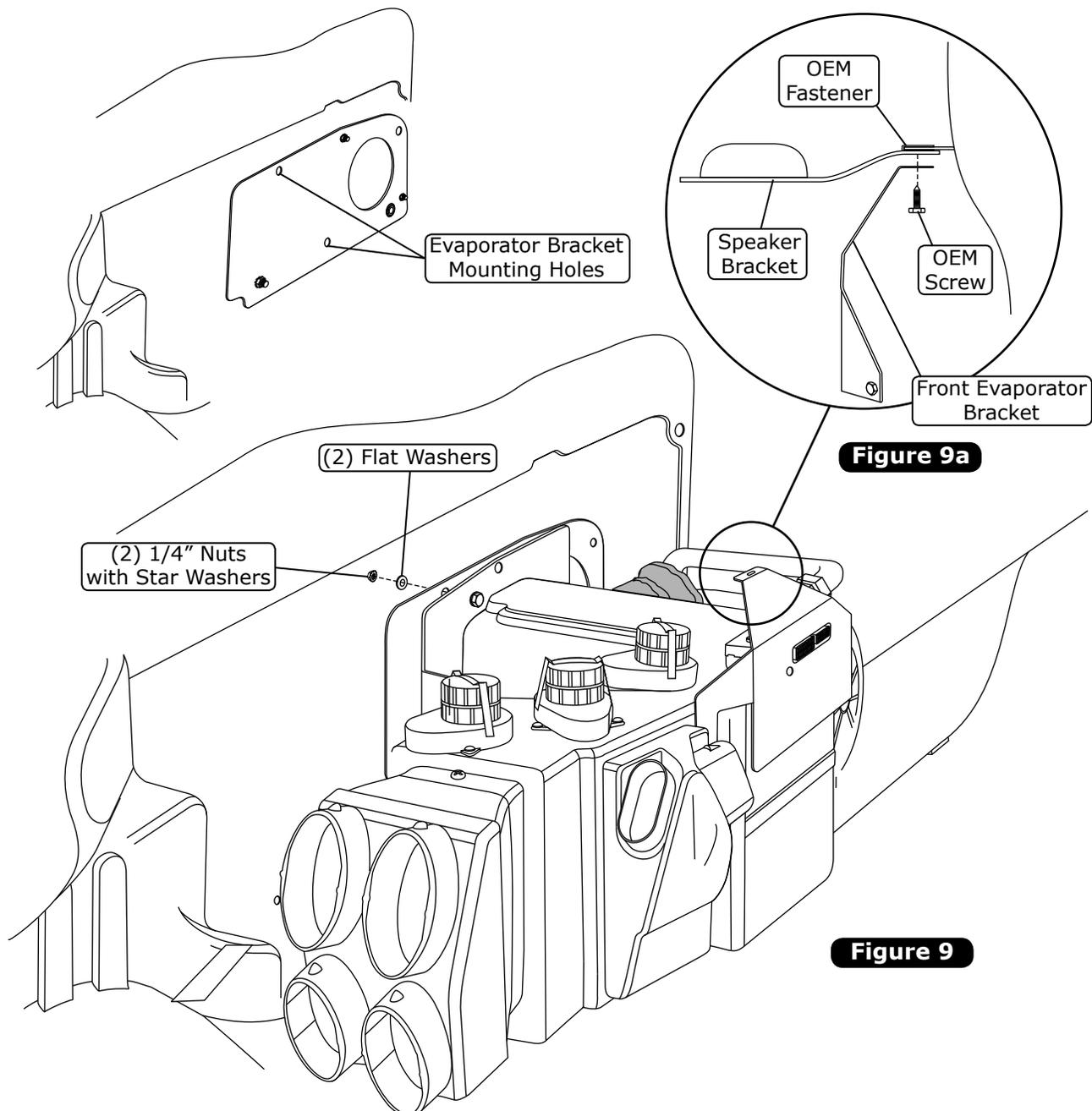


www.vintageair.com

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 it loosely to the firewall from the engine compartment side using (2) 1/4-20 nuts with star washers and (2) flat washers (See Figure 9, 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 the OEM screw, secure the front evaporator mounting bracket to the OEM speaker mounting bracket (See Figures 9 & 9a, below).
3. Verify that 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.**

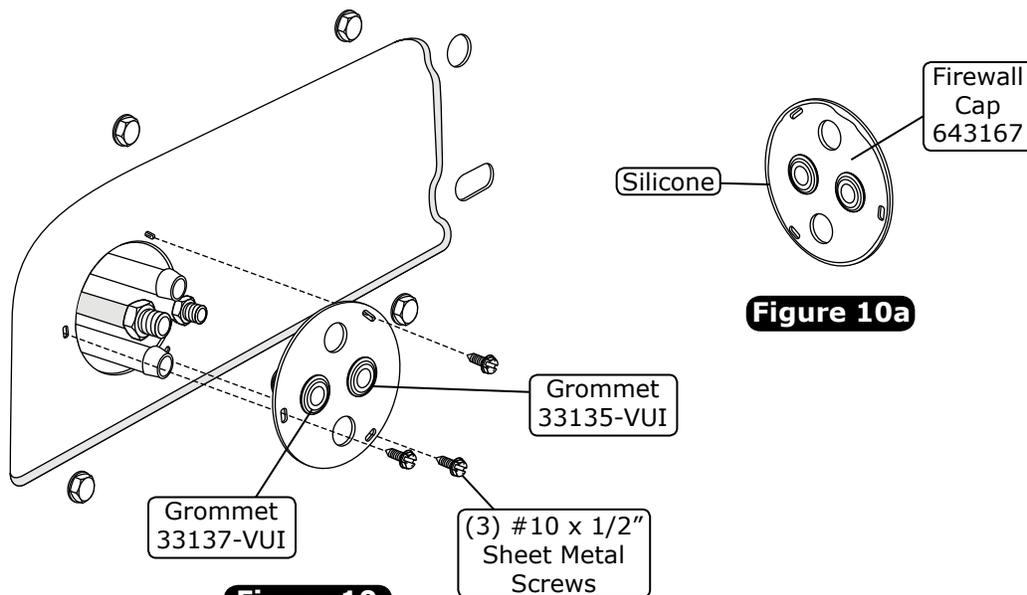




www.vintageair.com

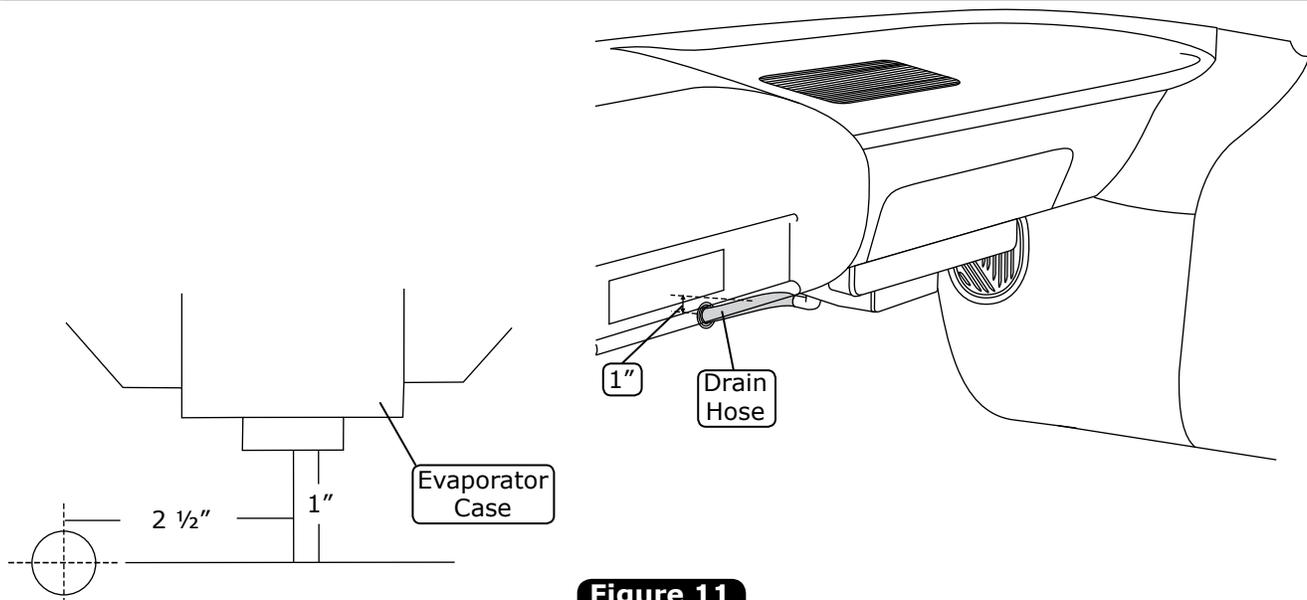
Firewall Cap Installation

1. Install grommets onto the firewall cap as shown in Figure 10, below.
2. Apply a 1/4" bead of silicone around the mating surface of the firewall cap as shown in Figure 10a, below.
3. Pass the lines through the firewall cap, and secure the cap using (3) #10 x 1/2" sheet metal screws (See Figure 10, below).



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 2 1/2" to the left, and drill a 5/8" hole through the firewall (See Figure 11, below).
3. Install the drain hose onto the outlet on the bottom of the evaporator unit, and route it through the firewall (See Figure 11, below).





www.vintageair.com

Driver Side Under Dash Louver Installation

1. Align the louver bezel under the dash, and use the bezel as a guide to mark and drill (2) 3/16" holes under the dash.
2. Secure the louver bezel under the dash using (2) 10-32 x 1/2" pan head screws and (2) 10-32 nuts with star washers (See Figure 12, below).
3. Install the louver into the bezel as shown in Figure 12a, below.

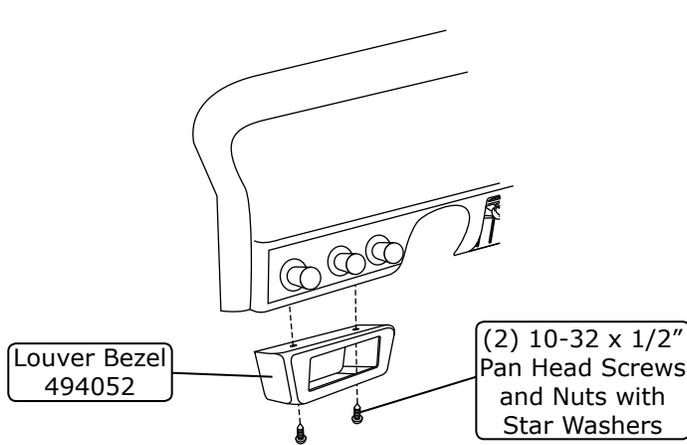


Figure 12

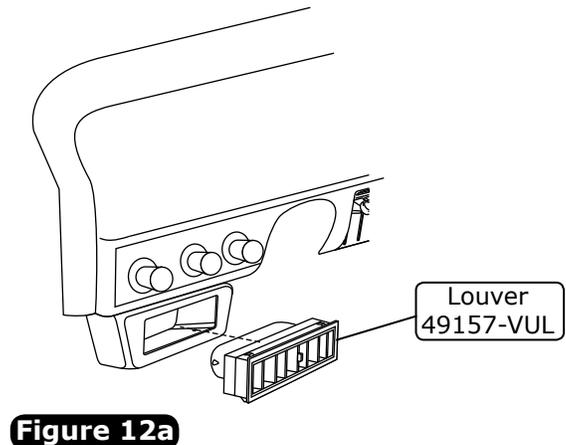


Figure 12a

Center/Passenger Side Under Dash Louver Installation

1. Place the louver bezel under the dash and align it with the OEM hole on the passenger side of the dash (See Figure 13, below).
2. Using the bezel as a guide, mark and drill (2) 3/16" holes under the dash.
3. Secure the louver bezel under the dash using (3) 10-32 x 1/2" pan head screws and (3) 10-32 nuts with star washers (See Figure 13, below).
4. Install the louvers into the bezel as shown in Figure 13a, below.

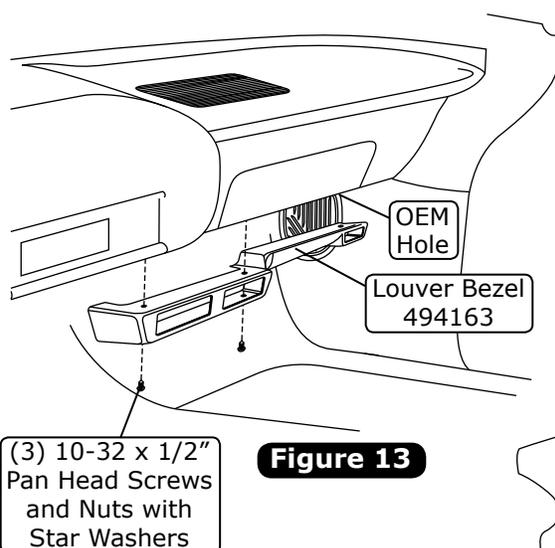


Figure 13

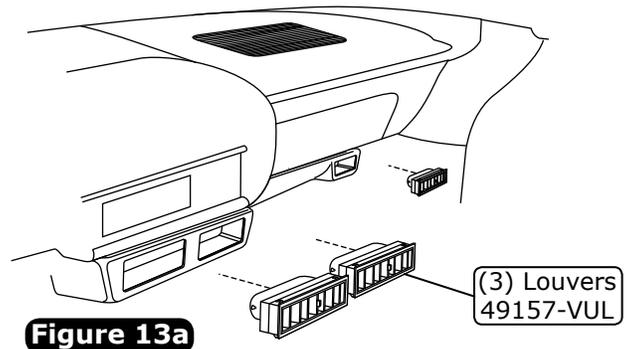
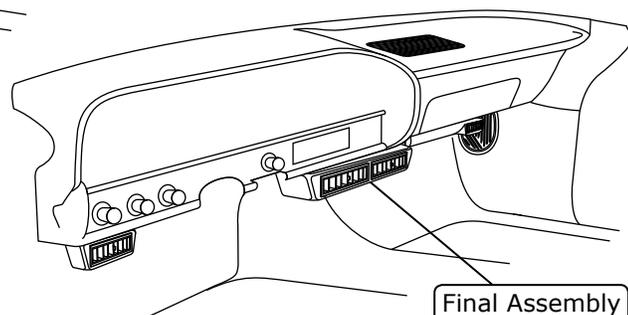


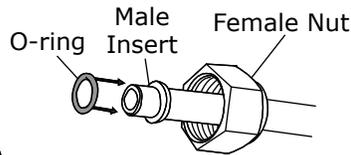
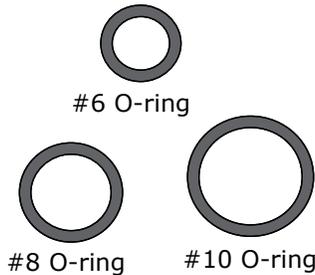
Figure 13a





www.vintageair.com

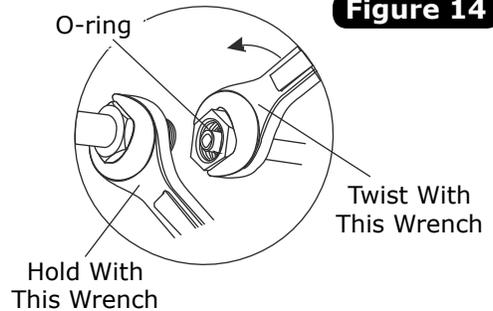
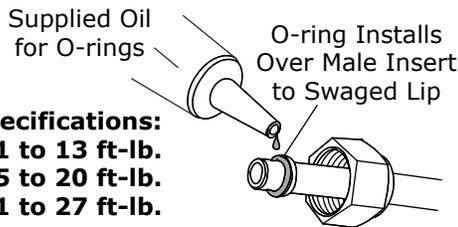
Lubricating O-rings



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

Figure 14

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



A/C Hose Installation

Standard Hose Kit:

1. Locate the #8 compressor A/C hose. Lubricate (2) #8 O-rings (See Figure 14, above) and connect the 135° female fitting with 134a service port to the #8 discharge port on the compressor. Then route the straight female fitting to the #8 condenser hardline coming through the core support (See Figure 16, Page 16). Tighten each fitting connection as shown in Figure 14, above.
2. Locate the #10 compressor A/C hose. Lubricate (2) #10 O-rings (See Figure 14, above) and connect the #10 135° female fitting with 134a service port to the #10 suction port on the compressor. Then route the 45° female fitting to the #10 evaporator hardline coming through the firewall (See Figure 16, Page 16). Tighten each fitting connection as shown in Figure 14, above. **NOTE: Wrap the #10 fitting connections with press tape (See Figure 15, Page 15).**
3. Locate the #6 evaporator/core hardline. Lubricate (2) #6 O-rings (See Figure 14, above) and connect the hardline to the #6 hardline coming through the core support from the drier. Then attach the other end of the hardline with lubricated O-ring to the #6 evaporator hardline coming through firewall (See Figure 16, Page 16). Tighten each fitting connection as shown in Figure 14, above.
4. Use #2 and #10 Adel clamps to secure the #6 evaporator/core support hardline and the 5/8" heater hose to the inner fender as shown in Figure 16, Page 16. Secure the Adel clamps to the inner fender using (2) 10-32 x 1/2" pan head screws and 10-32 nuts.

Modified Hose Kit:

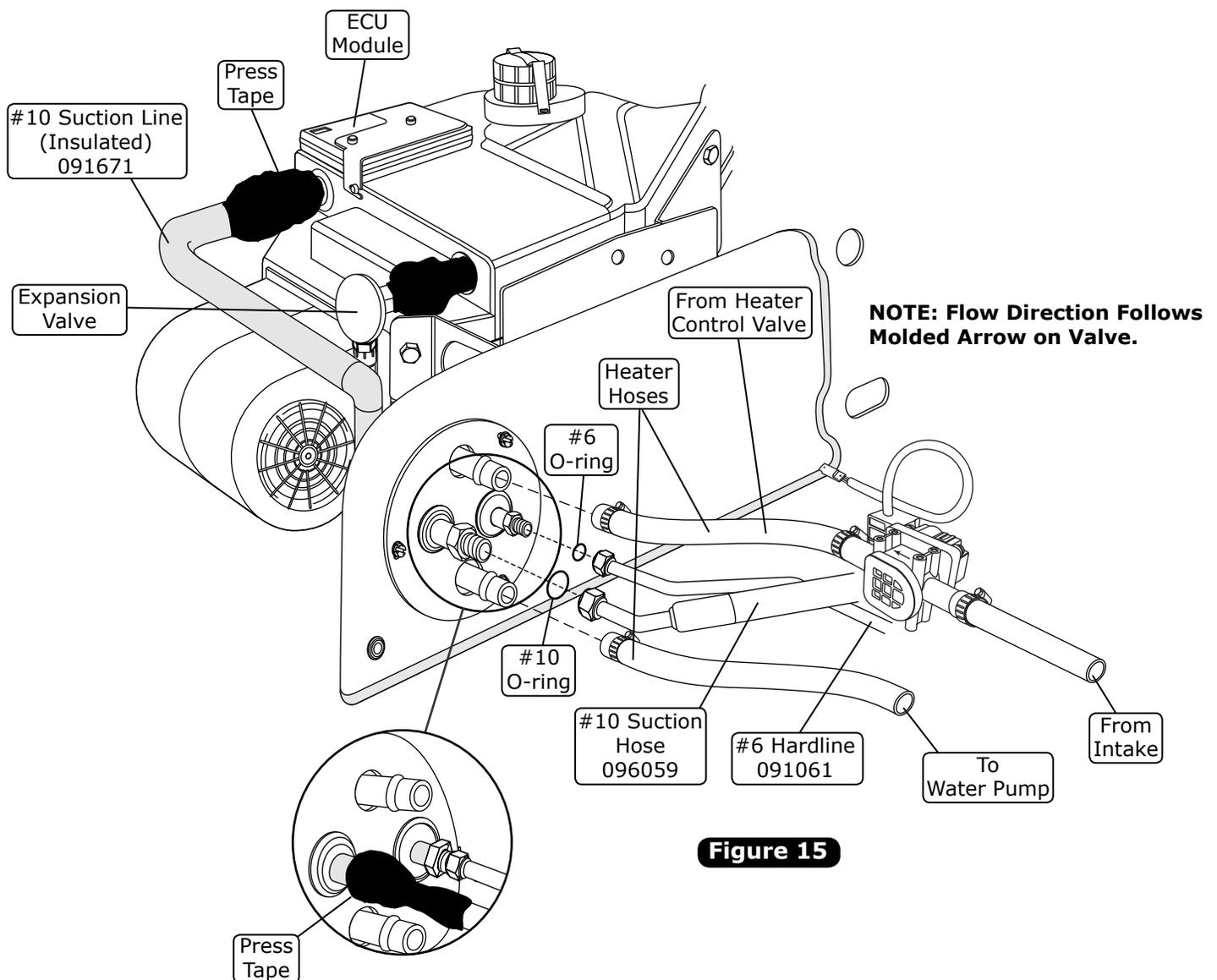
1. Refer to separate instructions included with modified hose kit.



www.vintageair.com

Heater Hose & Heater Control Valve Installation

1. Route a piece of heater hose from the water pump to the lower heater core fitting (See Figure 15, below, & Figure 16, Page 16). 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 upper heater core fitting (See Figure 15, below, & Figure 16, Page 16). **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.**





www.vintageair.com

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.

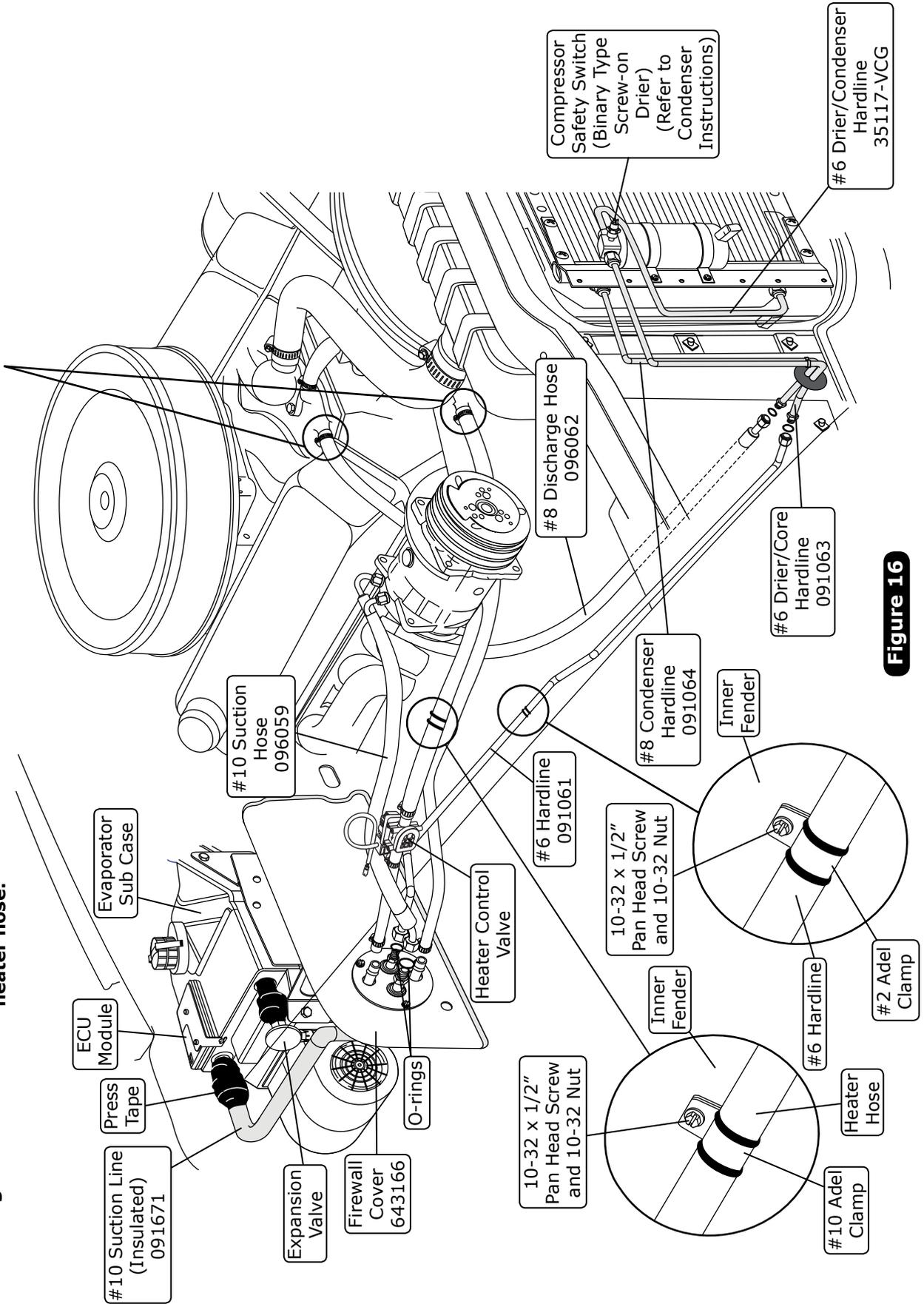


Figure 16



www.vintageair.com

Final Steps

1. Install the duct hoses as shown in Figure 19, Page 18.
2. Route the A/C wires (12 volt/ground/binary switch/heater control valve) through the 3/8" grommet (See Figure 17, 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 19, Page 18. Wire according to the wiring diagrams on Pages 20 & 21.
5. Refer to the instructions below to install the glove box.
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 22.

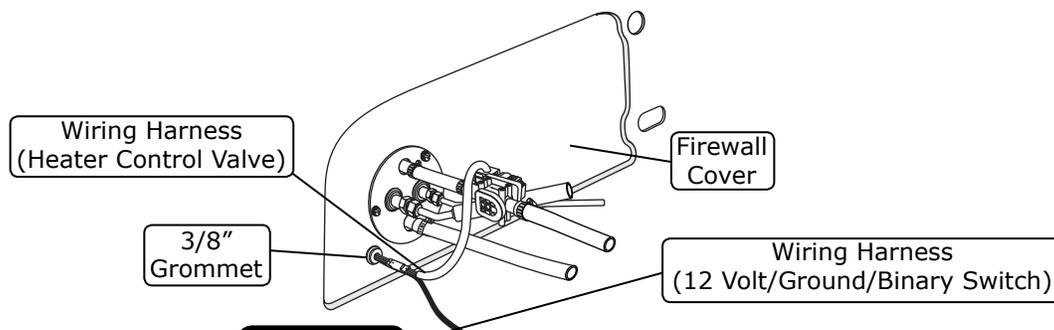


Figure 17

Glove Box Installation

1. Insert the bottom half of the new glove box into the glove box opening, and position it into place (See Figure 18, below).
2. Attach the top half of the glove box to the bottom half using (4) #6 x 3/8" pan head screws (See Figure 18, below).
3. Reinstall the glove box door using (3) OEM screws through the Tinnerman nuts (See Figure 18a, below).
4. Secure the glove box using (2) OEM screws (See Figure 18a, below).

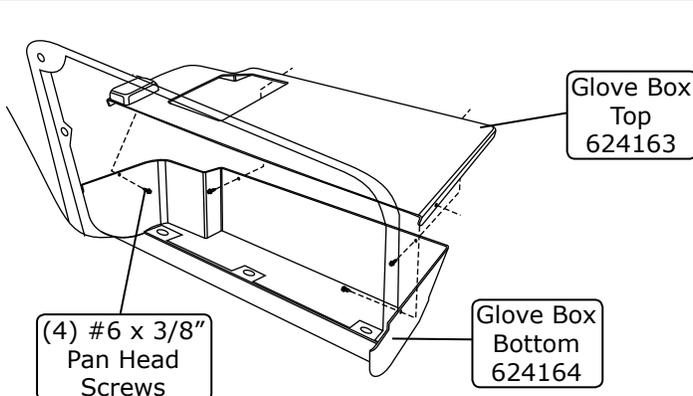


Figure 18

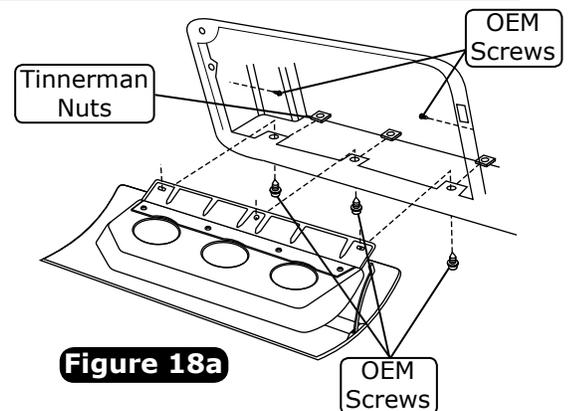


Figure 18a



www.vintageair.com

Control Panel & Duct Hose Routing

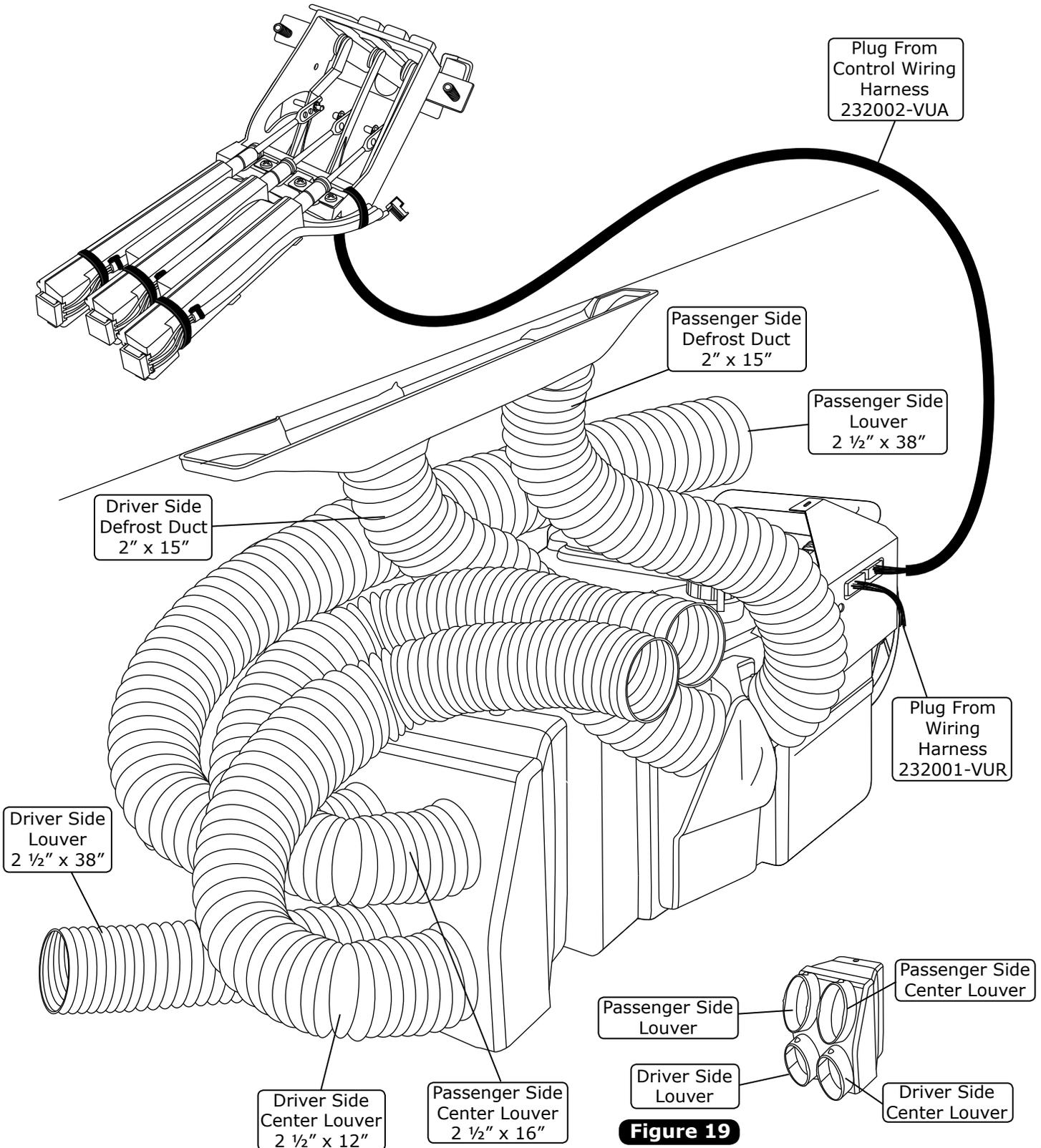


Figure 19



www.vintageair.com

Evaporator Hardline Installation (Cont.)

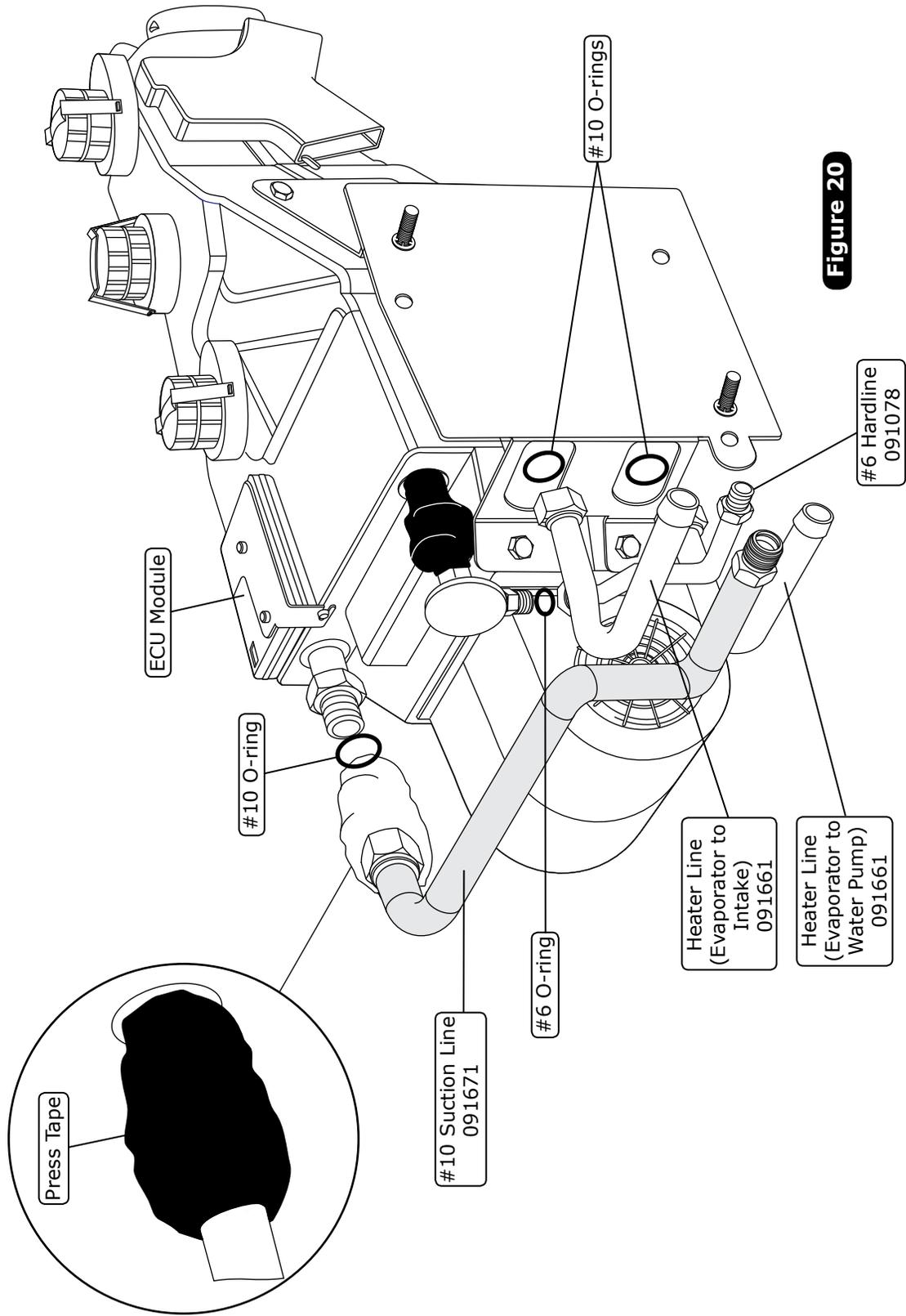


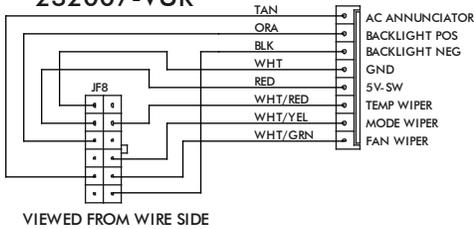
Figure 20



www.vintageair.com

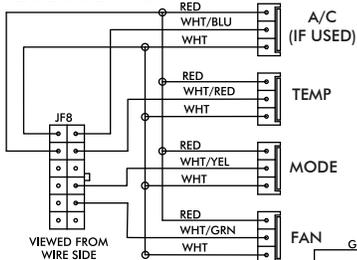
Wiring Diagram

232007-VUR



VIEWED FROM WIRE SIDE

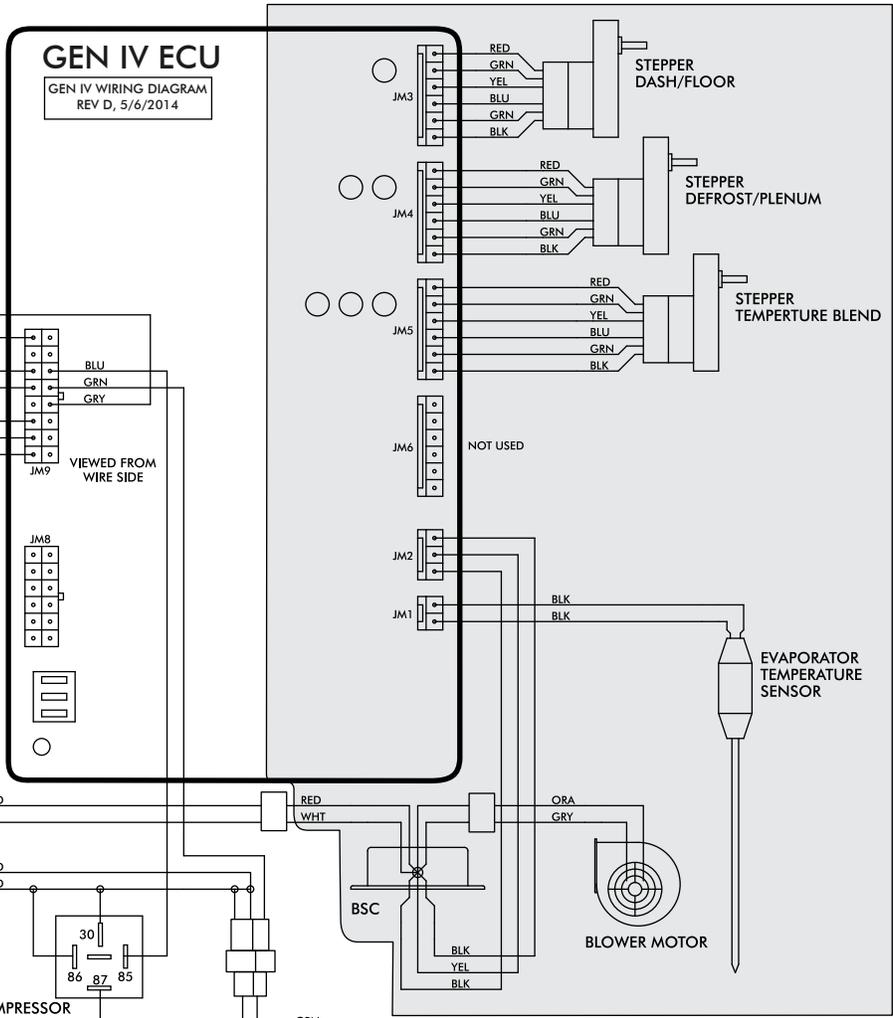
232002-VUA



VIEWED FROM WIRE SIDE

GEN IV ECU

GEN IV WIRING DIAGRAM
REV D, 5/6/2014

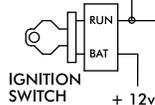


PRE-WIRED

PROGRAM

N/A
* DASH LAMP
(IF USED)

*** WIDE OPEN
THROTTLE SWITCH
(OPTIONAL)



IGNITION SWITCH +12v

** CIRCUIT
BREAKER
30 AMP

COMPRESSOR
RELAY

BSC

BLOWER MOTOR

HEATER
CONTROL VALVE

NOTE: = CHASSIS GROUND

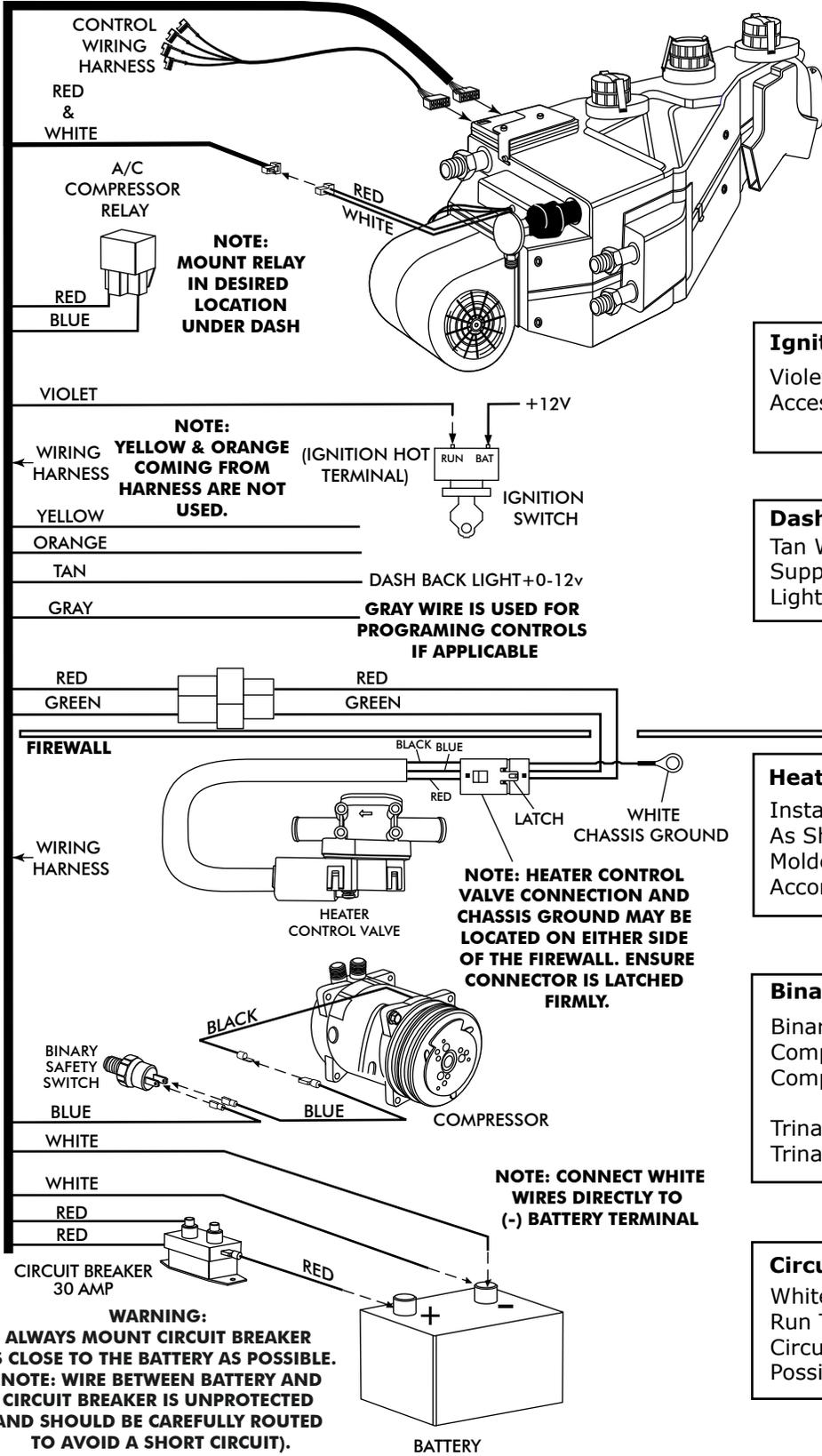
- Dash Lamp Is Used Only With Type 232007-VUR Harness.
- **Warning:** Always Mount Circuit Breaker As Close to the Battery As Possible. (NOTE: Wire Between Battery and Circuit Breaker Is Unprotected and Should Be Carefully Routed to Avoid a Short Circuit).
- Wide Open Throttle Switch Contacts Close Only at Full Throttle, Which Disables A/C Compressor.



www.vintageair.com

Gen IV Wiring Connection Instruction

WIRING HARNESS



Ignition Switch:
Violet 12V Ign Switch Source (Key On Accessory) Position Must Be Switched.

Dash Light:
Tan Wire Used Only With Vintage Air Supplied Control Panel With LED Back Light.

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.

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).



www.vintageair.com

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

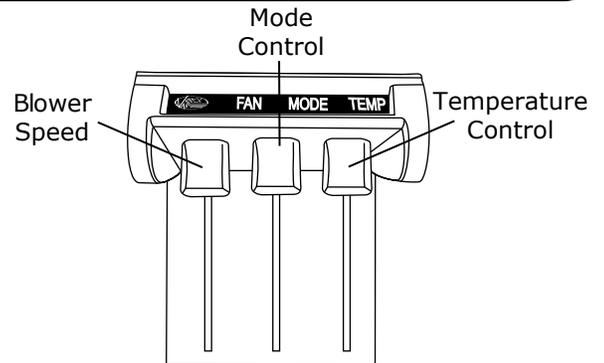
This lever/knob controls blower speed, from OFF to HI.

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

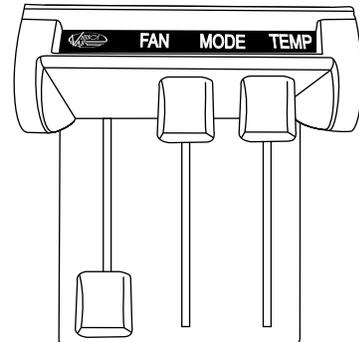
Adjust to desired speed.

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

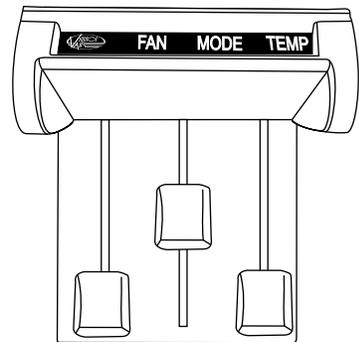
Adjust to desired speed.

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

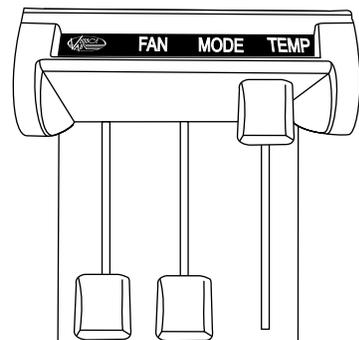
Adjust to desired speed.

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).





www.vintageair.com

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.
	All other functions work.	Check for damaged ground wire (white) in control head harness. Check for damaged blower switch or potentiometer and associated wiring.	Verify continuity to chassis ground with white control head wire at various points.	See blower switch check procedure.
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.	
		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).	No other part replacements should be necessary.
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.	Danger: Never bypass safety switch with engine running. Serious injury can result. 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.
	System is charged.	Check for faulty A/C potentiometer or associated wiring (Not applicable to 3-pot controls). Check for disconnected or faulty thermistor.	Check continuity to ground on white control head wire. Check for 5V on red control head wire. Check 2-pin connector at ECU housing.	Disconnected or faulty thermistor will cause compressor to be disabled.
3. Compressor will not turn off (All other functions work).		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.	



www.vintageair.com

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 connections on power lead, ignition lead, and both white ground wires.		
		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.	Loss of mode door function.	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.	Blower turns on and off rapidly.	Battery voltage is at least 12V.	Check for at least 12V at circuit breaker.	System shuts off blower at 10V. Poor connections or weak battery can cause shutdown at up to 11V.
		Battery voltage is less than 12V.	Check for faulty battery or alternator.	
7.	Erratic functions of blower, mode, temp, etc.	Check for damaged switch or pot and associated wiring.	Ensure all system grounds and power connections are clean and tight.	
			Charge battery.	
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.	Repair or replace.	
			Run red power wire directly to battery.	



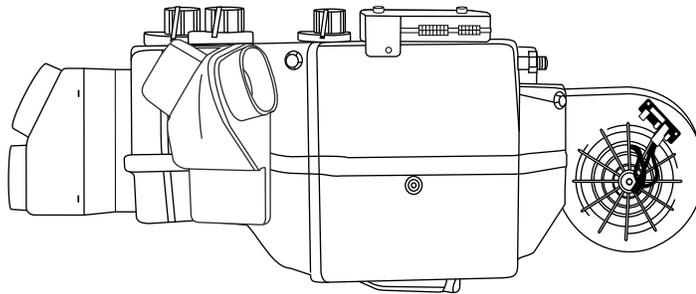
Packing List: Evaporator Kit (561064)

No.	Qty.	Part No.	Description
1.	1	744004-VUE	Gen IV 4-Vent Evaporator Sub Case
2.	1	784163	Accessory Kit

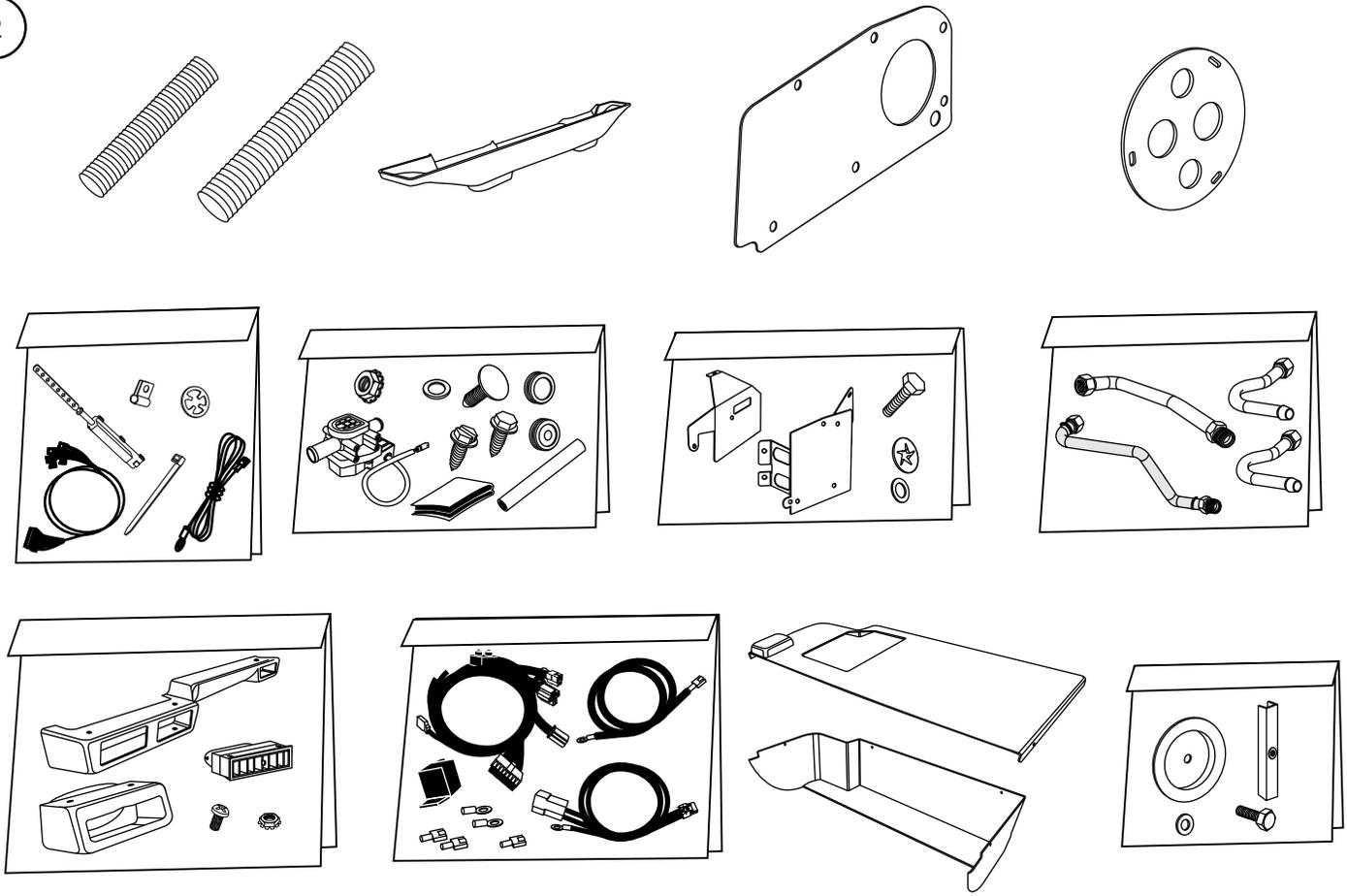
Checked By: _____
 Packed By: _____
 Date: _____

1

**Gen IV 4-Vent
Evaporator Sub Case
744004-VUE**



2



**Accessory Kit
784163**

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