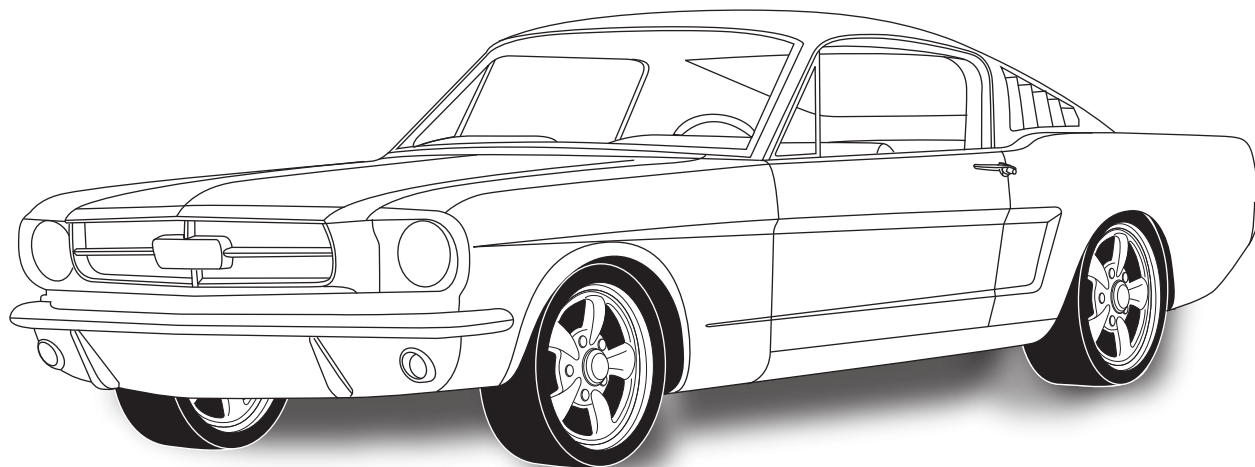




an ISO 9001: 2008 Registered Company

# 1964 1/2 TO 66 MUSTANG

with & without A/C  
554164





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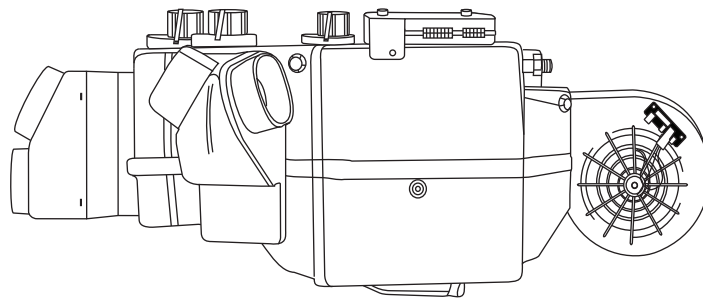
## EVAPORATOR KIT PACKING LIST

EVAPORATOR KIT  
554164

No.	QTY.	PART No.	DESCRIPTION
1.	1	744004-VUE	GEN IV 4-VENT EVAPORATOR SUB CASE
2.	1	781066	1964 1/2-66 MUSTANG ACCESSORY KIT

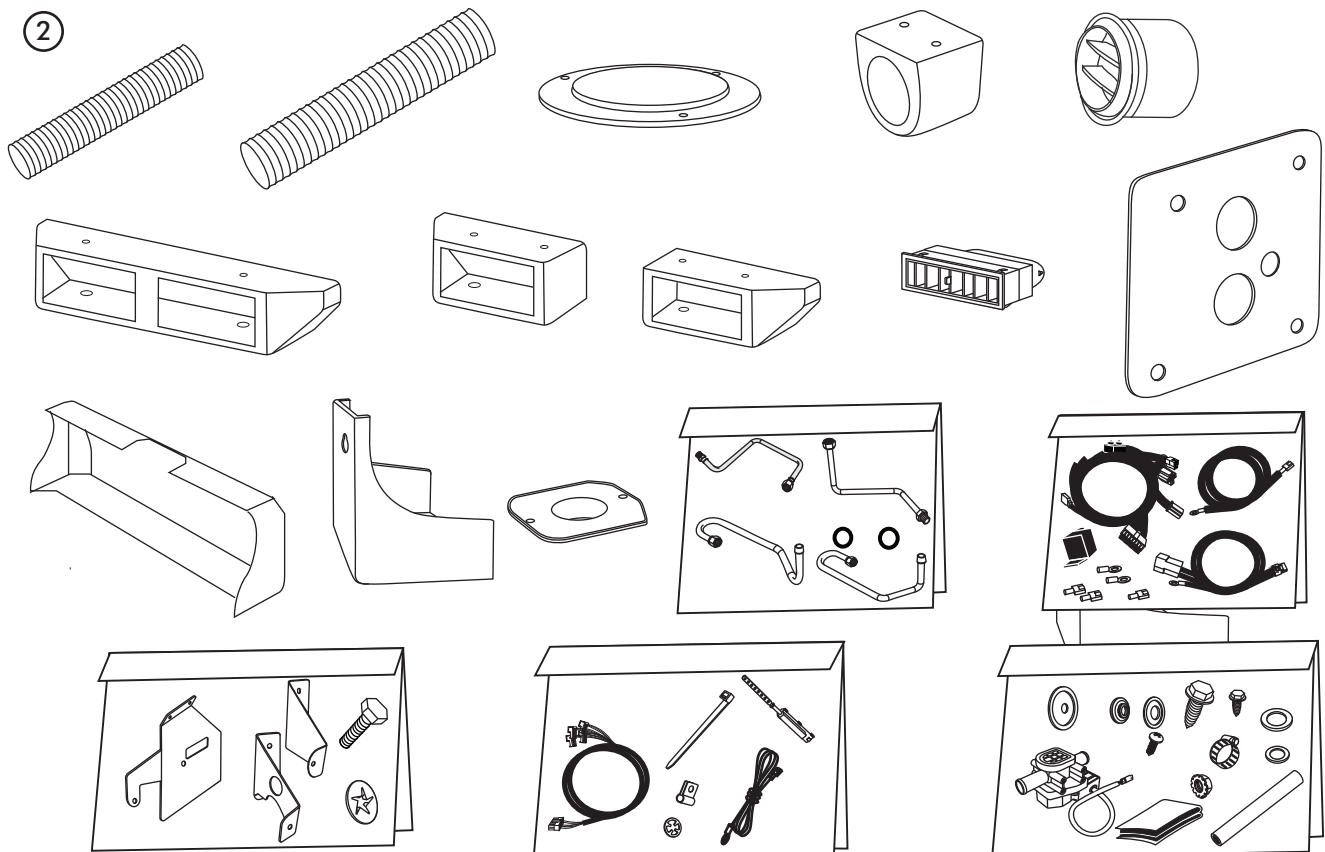
**\*\* BEFORE BEGINNING INSTALLATION, OPEN ALL PACKAGES AND CHECK CONTENTS OF SHIPMENT. PLEASE REPORT ANY SHORTAGES DIRECTLY TO VINTAGE AIR WITHIN 15 DAYS. AFTER 15 DAYS, VINTAGE AIR WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED ITEMS.**

①



GEN IV 4-VENT  
EVAP SUB CASE  
744004-VUE

②



ACCESSORY KIT  
781066

**NOTE: IMAGES MAY NOT DEPICT ACTUAL PARTS AND QUANTITIES. REFER TO PACKING LIST FOR ACTUAL PARTS AND QUANTITIES.**



## Important Notice—Please Read

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

### **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.

### **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.

### **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:**

**Attention:** The following system components are capped: Compressor, evaporator, condenser & drier. Caps may be under pressure with dry nitrogen. Be careful removing caps. Do not remove caps prior to installation. Removing caps prior to installation will cause components to collect moisture and lead to premature failure and reduced performance.

Evacuate the system for 35-45 minutes with system components (Drier, compressor, evaporator and condenser) 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.

***Vintage Air Systems Are Designed to Operate With R134a Refrigerant Only! Use of Any Other Refrigerants Is a Fire Hazard and Could Damage Either Your Air Conditioning System or Your Vehicle.***

***Use of Any Other Refrigerants Will Void All Warranties of the Air Conditioning System and Components. Use of the Proper Type and Amount of Refrigerant Is Critical to Proper System Operation. Vintage Air Recommends Our Systems Be Charged By Weight With a Quality Charging Station or Scale.***

### **Refrigerant Capacity for Vintage Air Systems:**

*(For other systems, consult manufacturer's guidelines)*

#### **R134a System**

Charge with 1.8 lbs. (1 lb., 12 oz.) of refrigerant.

### **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).



## 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.

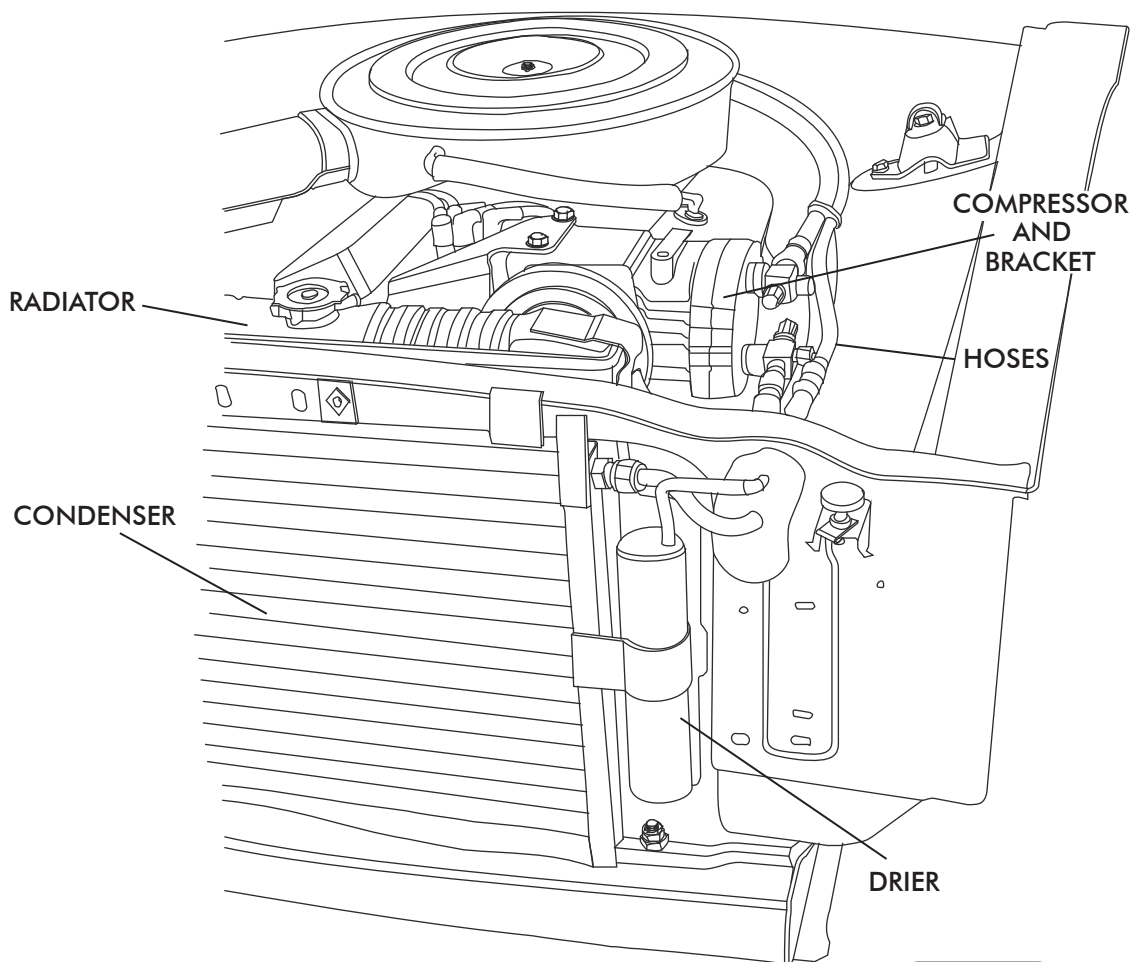


**BEFORE STARTING THE INSTALLATION, CHECK THE FUNCTION OF THE VEHICLE (HORN, LIGHTS, ETC.) FOR PROPER OPERATION. STUDY THE INSTRUCTIONS, ILLUSTRATIONS & DIAGRAMS.**

## ENGINE COMPARTMENT

### REMOVE THE FOLLOWING:

- ☐ BATTERY (RETAIN).
- ☐ DRAIN RADIATOR, REMOVE RADIATOR (RETAIN).
- ☐ EVACUATE THE A/C SYSTEM IF NECESSARY.
- ☐ OEM CONDENSER AND DRIER (DISCARD). SEE FIGURE 1, BELOW.
- ☐ OEM COMPRESSOR AND BRACKET (DISCARD). SEE FIGURE 1.
- ☐ OEM HEATER HOSES, A/C HOSES (DISCARD). SEE FIGURE 1.



**FIGURE 1**

## CONDENSER ASSEMBLY & INSTALLATION

- ☐ REFER TO SEPARATE INSTRUCTIONS INCLUDED WITH THE CONDENSER KIT TO INSTALL THE CONDENSER.
- ☐ BINARY SWITCH INSTALLATION (REFER TO CONDENSER INSTRUCTIONS).

## COMPRESSOR & BRACKETS

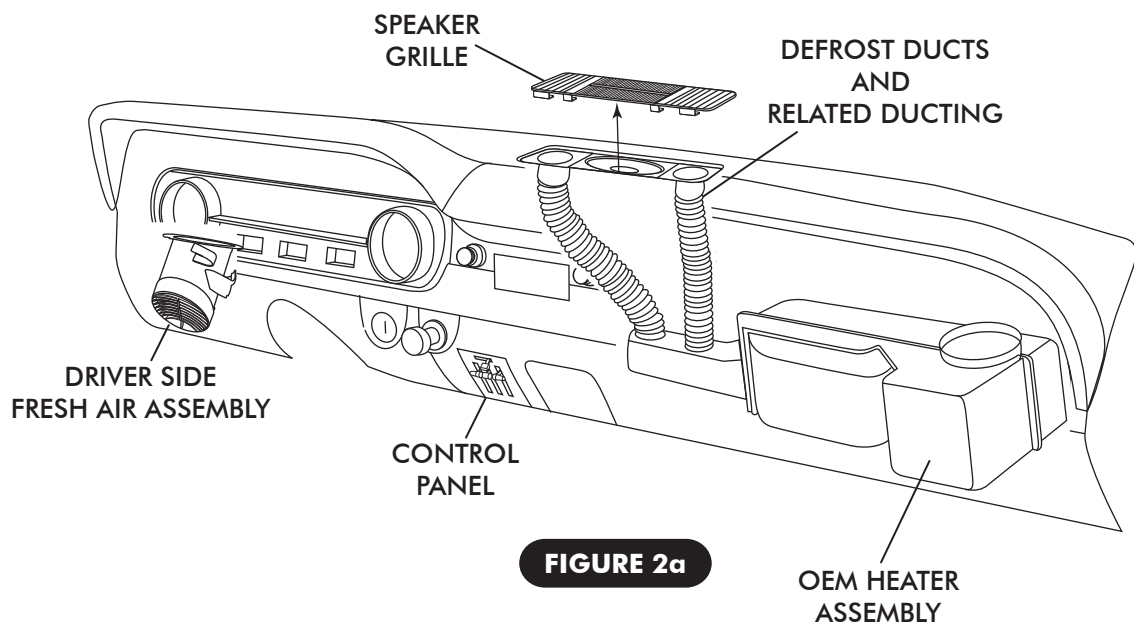
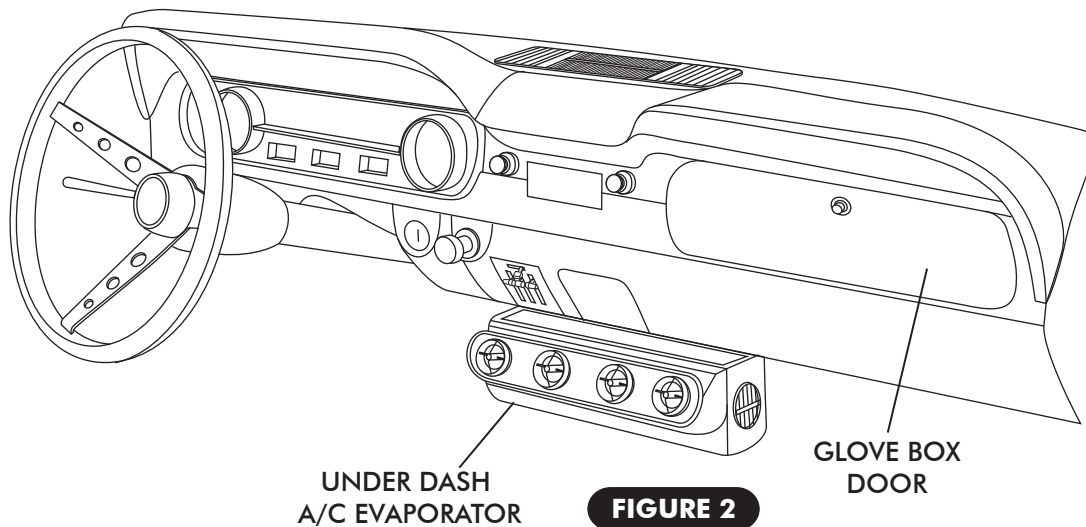
- ☐ REFER TO SEPARATE INSTRUCTIONS INCLUDED WITH THE BRACKET KIT TO INSTALL THE COMPRESSOR BRACKET.



## PASSENGER COMPARTMENT

### REMOVE THE FOLLOWING:

- ☐ GLOVE BOX DOOR (RETAIN). SEE FIGURE 2.
- ☐ GLOVE BOX (DISCARD).
- ☐ CENTER CONSOLE (IF EQUIPPED).
- ☐ UNDER DASH A/C EVAPORATOR (IF EQUIPPED). SEE FIGURE 2.
- ☐ OEM HEATER ASSEMBLY (DISCARD). SEE FIGURE 2a.
- ☐ DRIVER SIDE FRESH AIR ASSEMBLY WITH CABLE. SEE FIGURE 2a.
- ☐ CONTROL PANEL ASSEMBLY & RADIO (RETAIN). SEE FIGURE 2a.
- ☐ REFER TO CONTROL PANEL CONVERSION KIT INSTRUCTIONS FOR INSTALLATION OF CONTROLS.
- ☐ SPEAKER GRILLE (RETAIN). SEE FIGURE 2a.
- ☐ OEM DEFROST DUCT ASSEMBLY AND ALL RELATED DUCTING. SEE FIGURE 2a.

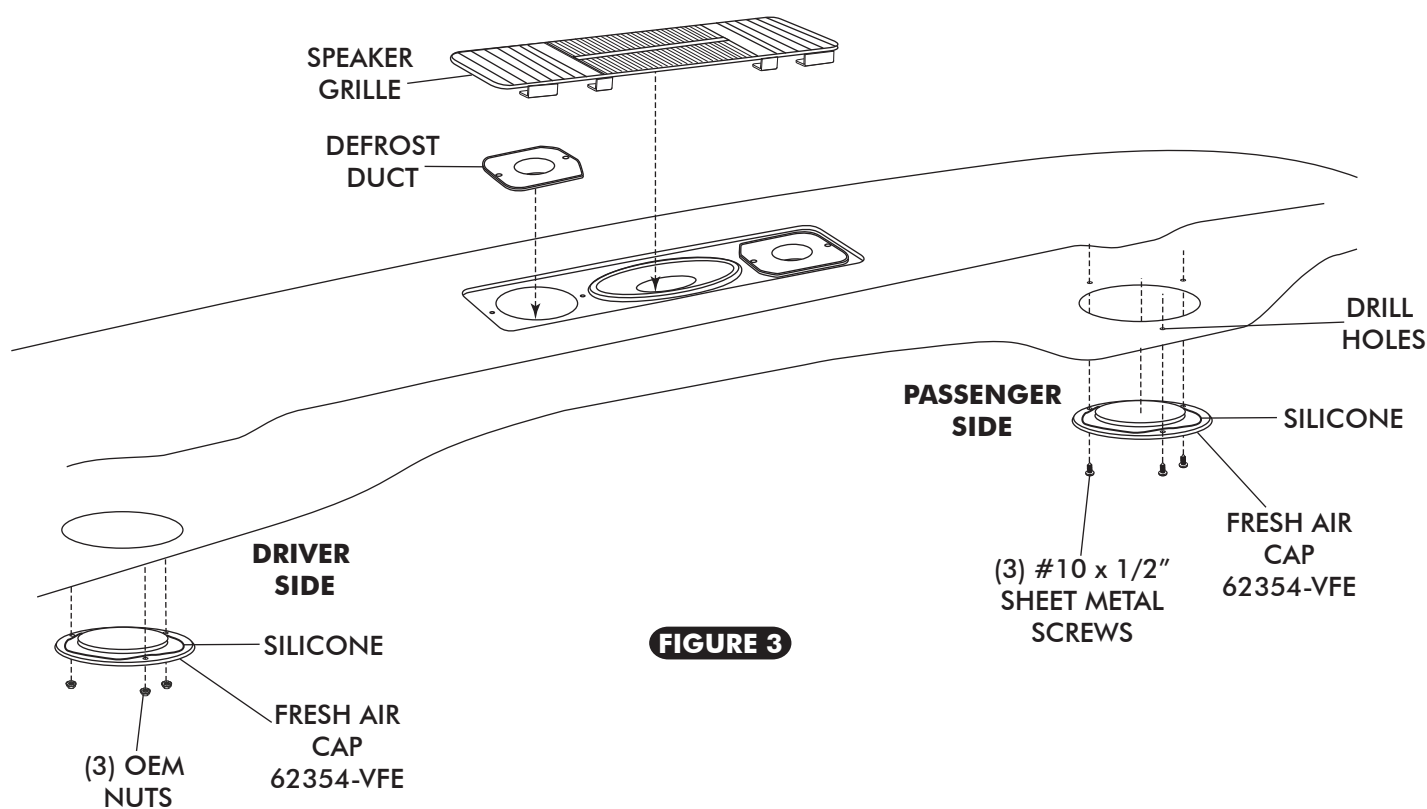






## DEFROST DUCT/FRESH AIR CAP INSTALLATION

- ☐ INSTALL DEFROST DUCTS IN DASH USING OEM MOUNTING CLIPS. SEE FIGURE 3, BELOW.
- ☐ REINSTALL SPEAKER GRILLE.
- ☐ HOLD FRESH AIR CAP UNDER DASH AND MARK THE (3) MOUNTING HOLES (PASSENGER SIDE ONLY).
- ☐ DRILL (3) 1/8" MOUNTING HOLES UNDER DASH (PASSENGER SIDE ONLY).
- ☐ APPLY A 1/4" BEAD OF SILICONE AROUND THE BACK SIDE OF THE FRESH AIR CAP AS SHOWN.
- ☐ SECURE FRESH AIR CAP TO FRESH AIR HOLE USING (3) #10 x 1/2" SHEET METAL SCREWS AS SHOWN.
- ☐ INSTALL DRIVER SIDE FRESH AIR CAP USING OEM NUTS AS SHOWN.



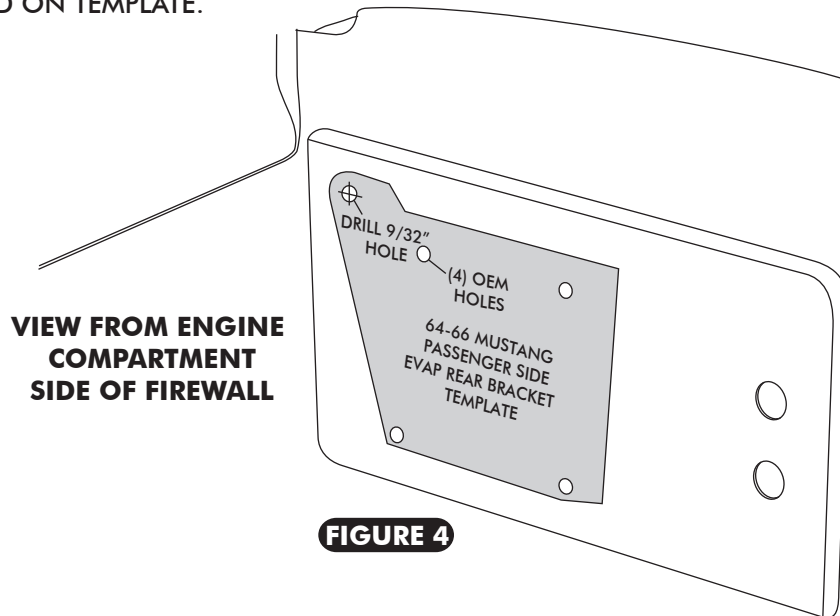
**FIGURE 3**





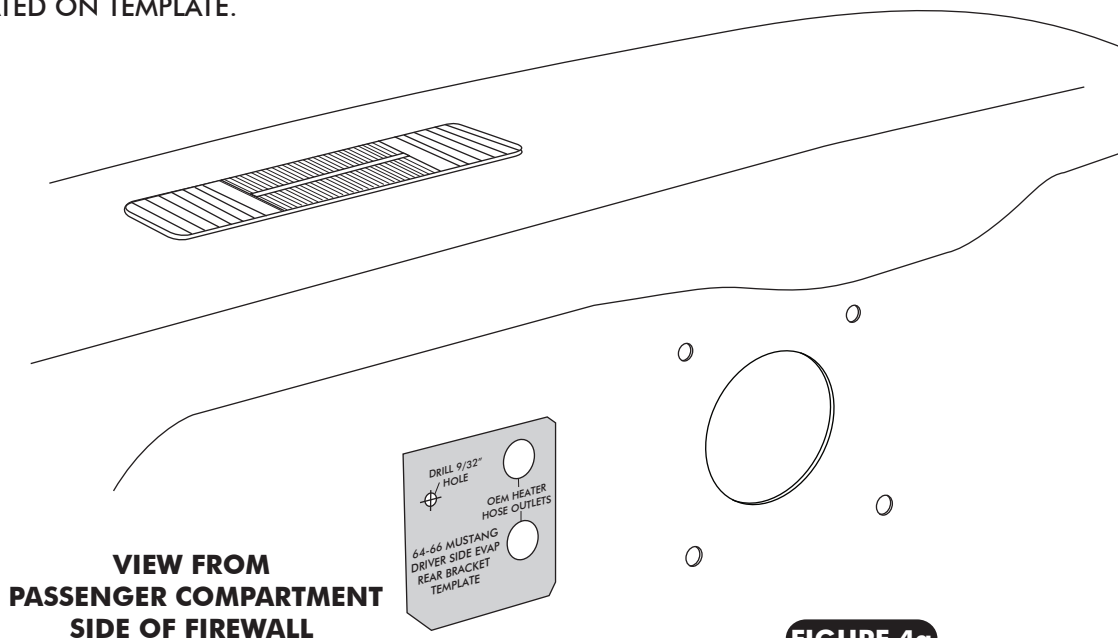
## PASSENGER SIDE EVAPORATOR REAR BRACKET TEMPLATE INSTRUCTIONS

- ☐ CUT OUT PASSENGER SIDE EVAP REAR BRACKET TEMPLATE ON PAGE 26.
- ☐ ALIGN TEMPLATE WITH (4) OEM HOLES AS SHOWN IN FIGURE 4, BELOW. DRILL A 9/32" HOLE AS INDICATED ON TEMPLATE.



## DRIVER SIDE EVAPORATOR REAR BRACKET TEMPLATE INSTRUCTIONS

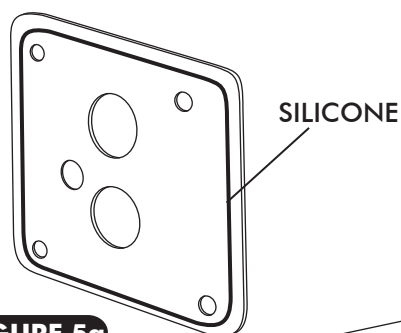
- ☐ CUT OUT DRIVER SIDE EVAP REAR BRACKET TEMPLATE ON PAGE 27.
- ☐ ALIGN TEMPLATE WITH OEM HEATER HOLES AS SHOWN IN FIGURE 4a, BELOW. DRILL A 9/32" HOLE AS INDICATED ON TEMPLATE.



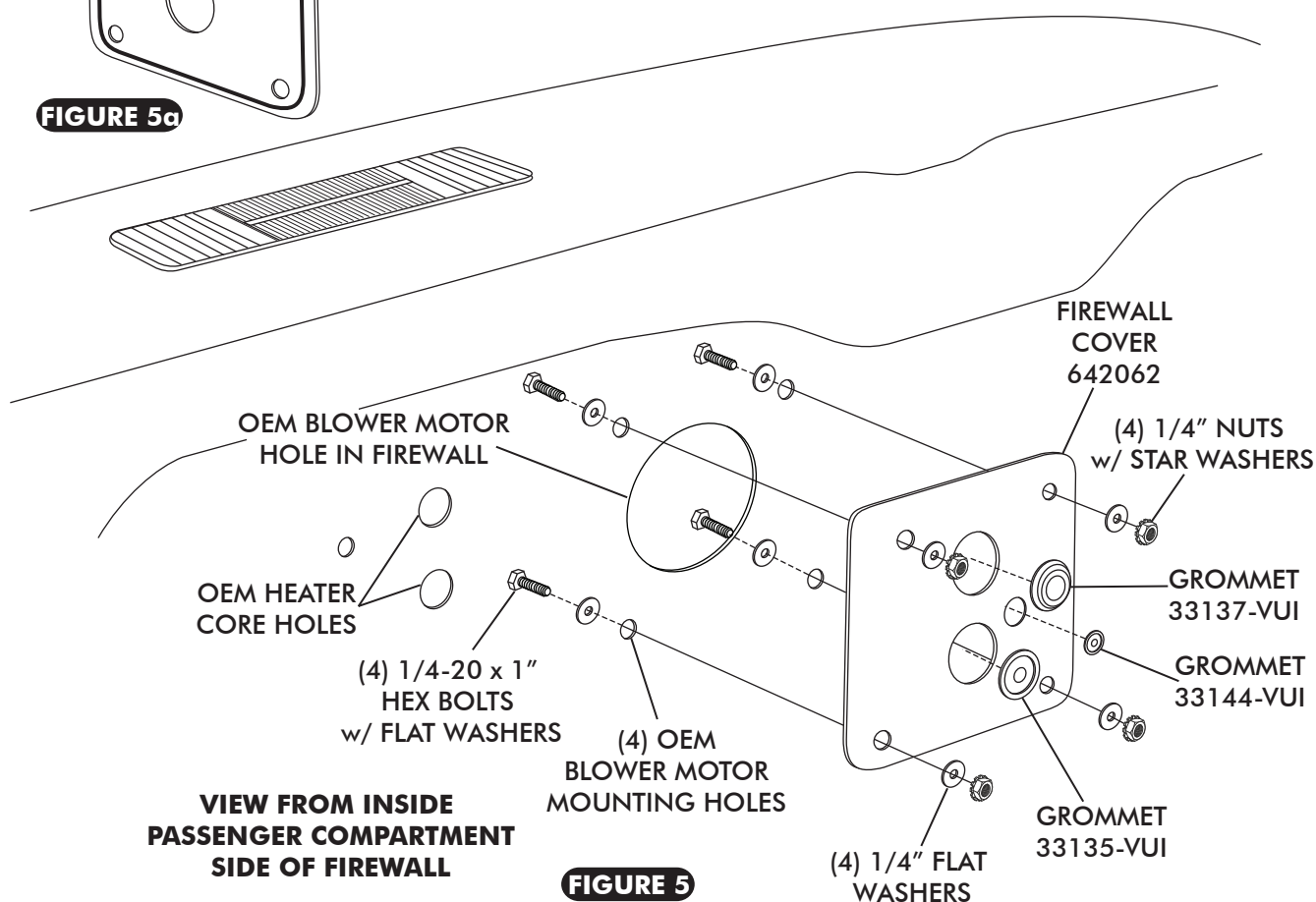


## FIREWALL COVER INSTALLATION

- INSTALL (3) GROMMETS ON FIREWALL COVER AS SHOWN IN FIGURE 5, BELOW.
- APPLY A 1/4" BEAD OF SILICONE AROUND THE BACK SIDE OF THE FIREWALL COVER AS SHOWN IN FIGURE 5a, BELOW.
- SECURE FIREWALL COVER TO FIREWALL USING (4) 1/4-20 x 1" HEX BOLTS w/ FLAT WASHERS AND NUTS.  
**NOTE: FIREWALL COVER INSTALLS FROM INSIDE PASSENGER COMPARTMENT.**



**FIGURE 5a**

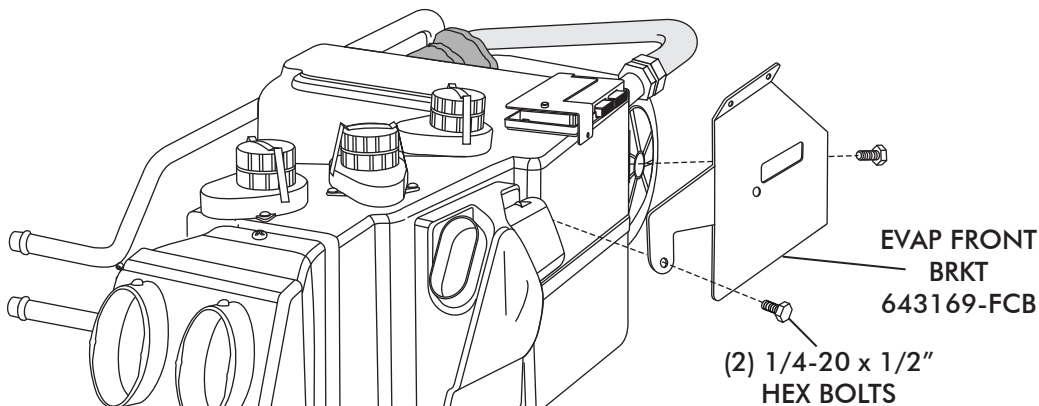


**FIGURE 5**

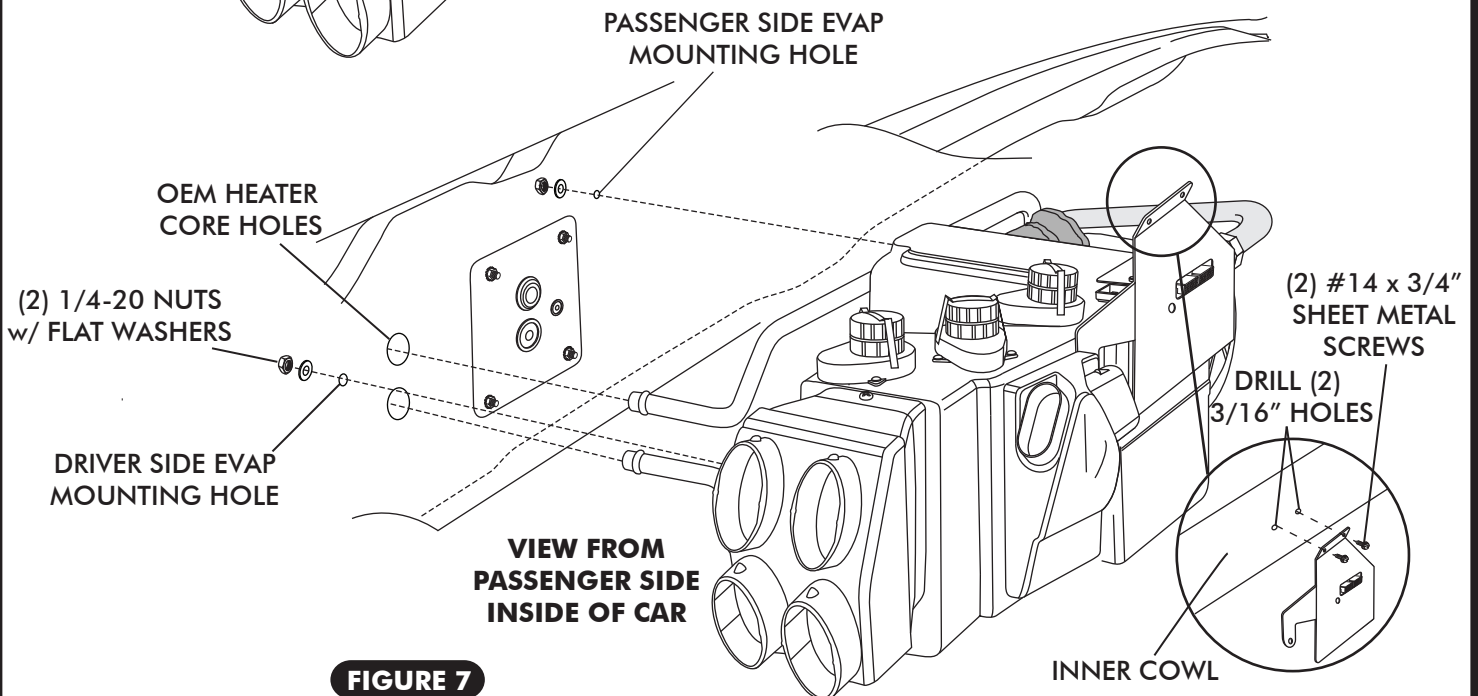


## EVAPORATOR INSTALLATION

- ON A WORKBENCH, INSTALL EVAPORATOR REAR BRACKET AND HARDLINES WITH PROPERLY LUBRICATED O-RINGS (SEE FIGURE 10, PAGE 13, AND FIGURE 17, PAGE 20).
- INSTALL FRONT MOUNTING BRACKET ON EVAPORATOR USING (2) 1/4-20 x 1/2" HEX BOLTS, AND TIGHTEN AS SHOWN IN FIGURE 6, BELOW.
- LIFT EVAPORATOR UNIT UP UNDER THE DASHBOARD. SEE FIGURE 7. SECURE LOOSELY TO THE FIREWALL FROM THE ENGINE COMPARTMENT SIDE USING (2) 1/4-20 NUTS AND WASHERS. SEE FIGURE 7, BELOW.
- USING (2) #14 x 3/4" SHEET METAL SCREWS, SECURE THE FRONT EVAPORATOR MOUNTING BRACKET TO THE INNER COWL. SEE FIGURE 7a, BELOW.
- VERIFY THAT EVAPORATOR UNIT IS LEVEL AND SQUARE TO THE DASH, THEN TIGHTEN ALL MOUNTING BOLTS. **NOTE: TIGHTEN THE BOLT ON FIREWALL FIRST. THEN TIGHTEN THE FRONT MOUNTING BRACKET SCREWS.**



**FIGURE 6**



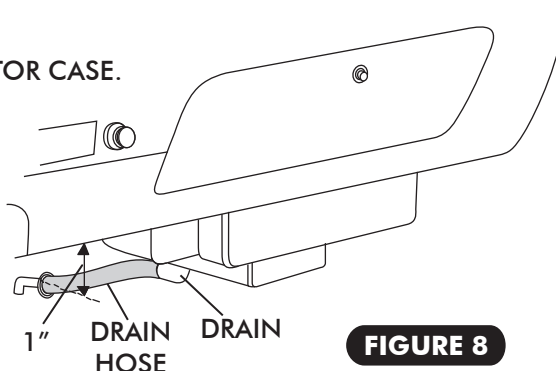
**FIGURE 7**

**FIGURE 7a**



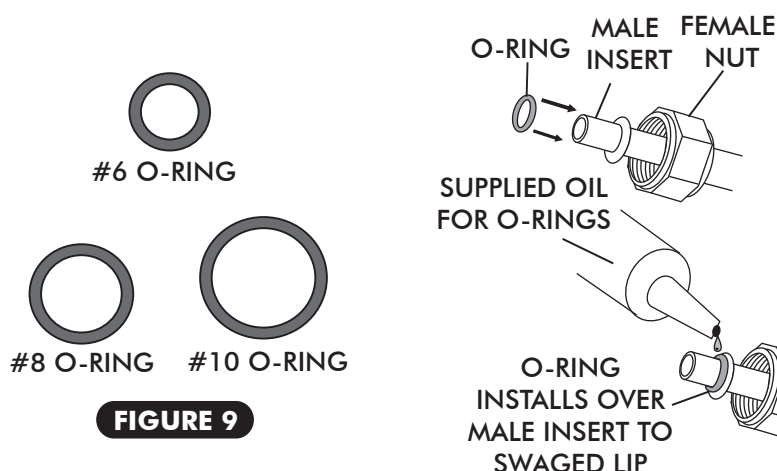
## DRAIN HOSE INSTALLATION

- ☐ LOCATE EVAPORATOR DRAIN ON BOTTOM OF EVAPORATOR CASE.
- ☐ IN LINE WITH THE DRAIN, LIGHTLY MAKE A MARK ON THE FIREWALL. MEASURE ONE INCH DOWN AND DRILL A 5/8" HOLE THROUGH THE FIREWALL (SEE FIGURE 8).
- ☐ INSTALL DRAIN HOSE TO BOTTOM OF EVAPORATOR UNIT AND ROUTE THROUGH FIREWALL. INSTALL 1/2" 90° DRAIN ELBOW ON DRAIN HOSE.



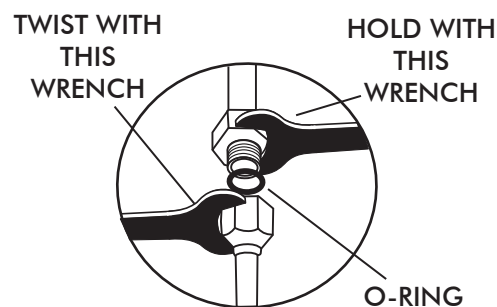
**FIGURE 8**

## LUBRICATING O-RINGS



**FIGURE 9**

**FOR A PROPER SEAL OF FITTINGS:  
INSTALL SUPPLIED O-RINGS AS SHOWN,  
AND LUBRICATE WITH SUPPLIED OIL.**



## STANDARD HOSE KIT

- ☐ LOCATE THE #8 COMPRESSOR A/C HOSE. LUBRICATE (2) #8 O-RINGS (SEE FIGURE 9, ABOVE) AND CONNECT THE 45° FITTING TO THE #8 DISCHARGE PORT ON THE COMPRESSOR. ROUTE THE STRAIGHT FEMALE w/ 134a SERVICE PORT FITTING TO THE #8 CONDENSER HARDLINE COMING THROUGH THE RADIATOR CORE SUPPORT. SEE FIGURE 11, PAGE 14. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 9, ABOVE.
- ☐ LOCATE THE #10 COMPRESSOR A/C HOSE. LUBRICATE (2) #10 O-RINGS AND CONNECT THE 90° FEMALE w/ 134a SERVICE PORT FITTING TO THE #10 SUCTION PORT ON THE COMPRESSOR, AND ROUTE THE 90° FEMALE FITTING TO THE #10 EVAPORATOR HARDLINE COMING THROUGH THE FIREWALL. SEE FIGURE 10, PAGE 13, & FIGURE 11, PAGE 14. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 9, ABOVE. WRAP THE #10 FITTING CONNECTIONS WITH PRESS TAPE. SEE FIGURE 10, PAGE 13.
- ☐ LOCATE THE #6 EVAP/DRIER A/C HOSE. LUBRICATE (2) #6 O-RINGS AND CONNECT THE STRAIGHT FEMALE FITTING TO THE #6 DRIER HARDLINE COMING THROUGH THE RADIATOR CORE SUPPORT. ROUTE THE 90° FEMALE FITTING TO THE #6 EVAPORATOR HARDLINE COMING THROUGH THE FIREWALL. SEE FIGURE 10, PAGE 13. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 9, ABOVE.
- ☐ USE (6) TIE WRAPS TO SECURE THE #6 A/C HOSE TO THE BRACE AS SHOWN IN FIGURE 11, PAGE 14.

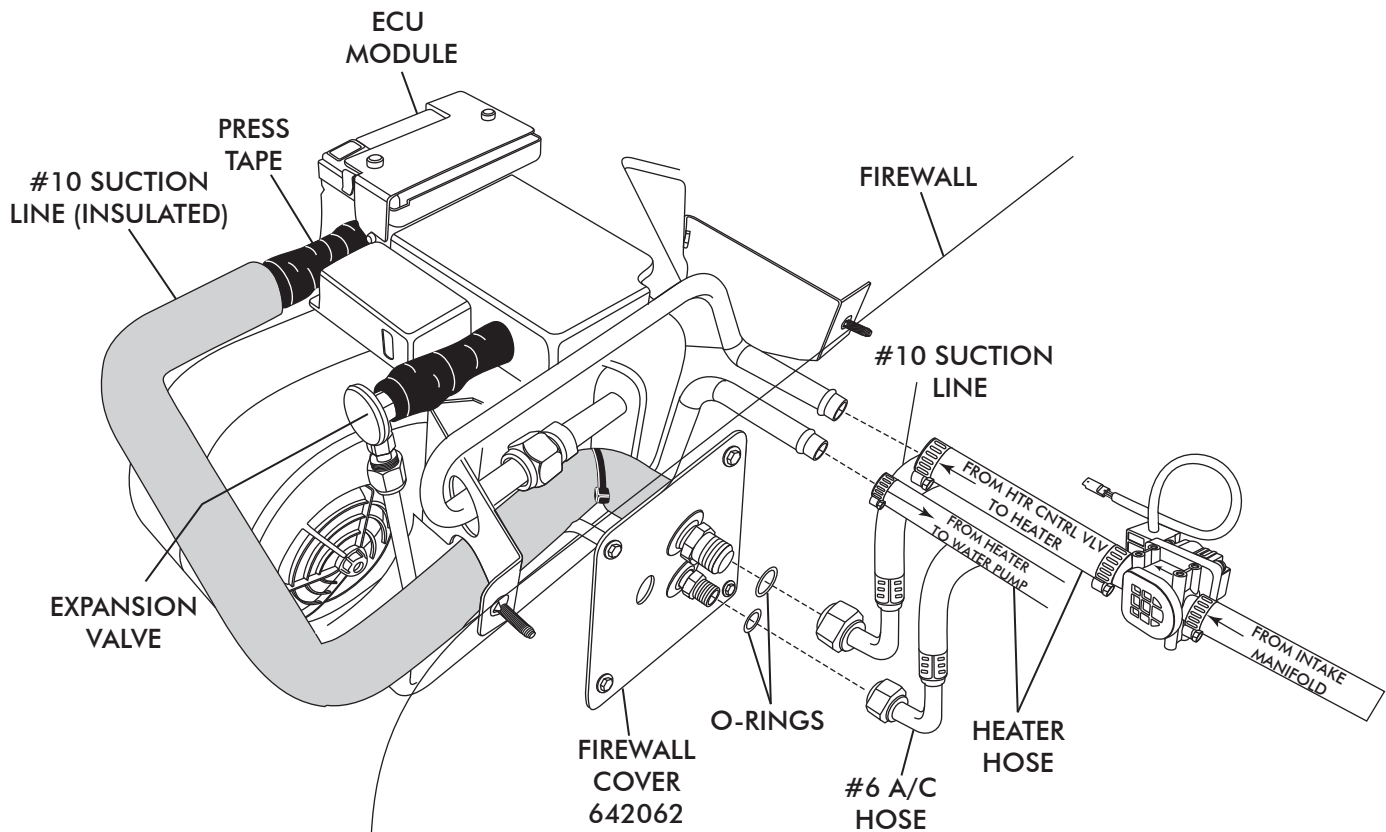
## MODIFIED A/C HOSE KIT

- ☐ REFER TO SEPARATE INSTRUCTIONS INCLUDED WITH MODIFIED HOSE KIT.



## HEATER HOSE & HEATER CONTROL VALVE INSTALLATION

- ROUTE A PIECE OF HEATER HOSE FROM WATER PUMP TO THE HEATER LINE COMING THROUGH THE FIREWALL AS SHOWN IN FIGURE 10, BELOW. SECURE USING HOSE CLAMPS.
- ROUTE A PIECE OF HEATER HOSE FROM THE INTAKE TO THE HEATER LINE COMING THROUGH THE FIREWALL AS SHOWN IN FIGURE 10, BELOW. **NOTE: INSTALL HEATER CONTROL VALVE IN LINE WITH INTAKE MANIFOLD (PRESSURE SIDE) HEATER HOSE, AND SECURE USING HOSE CLAMPS AS SHOWN IN FIGURE 10, BELOW. ALSO NOTE PROPER FLOW DIRECTION.**



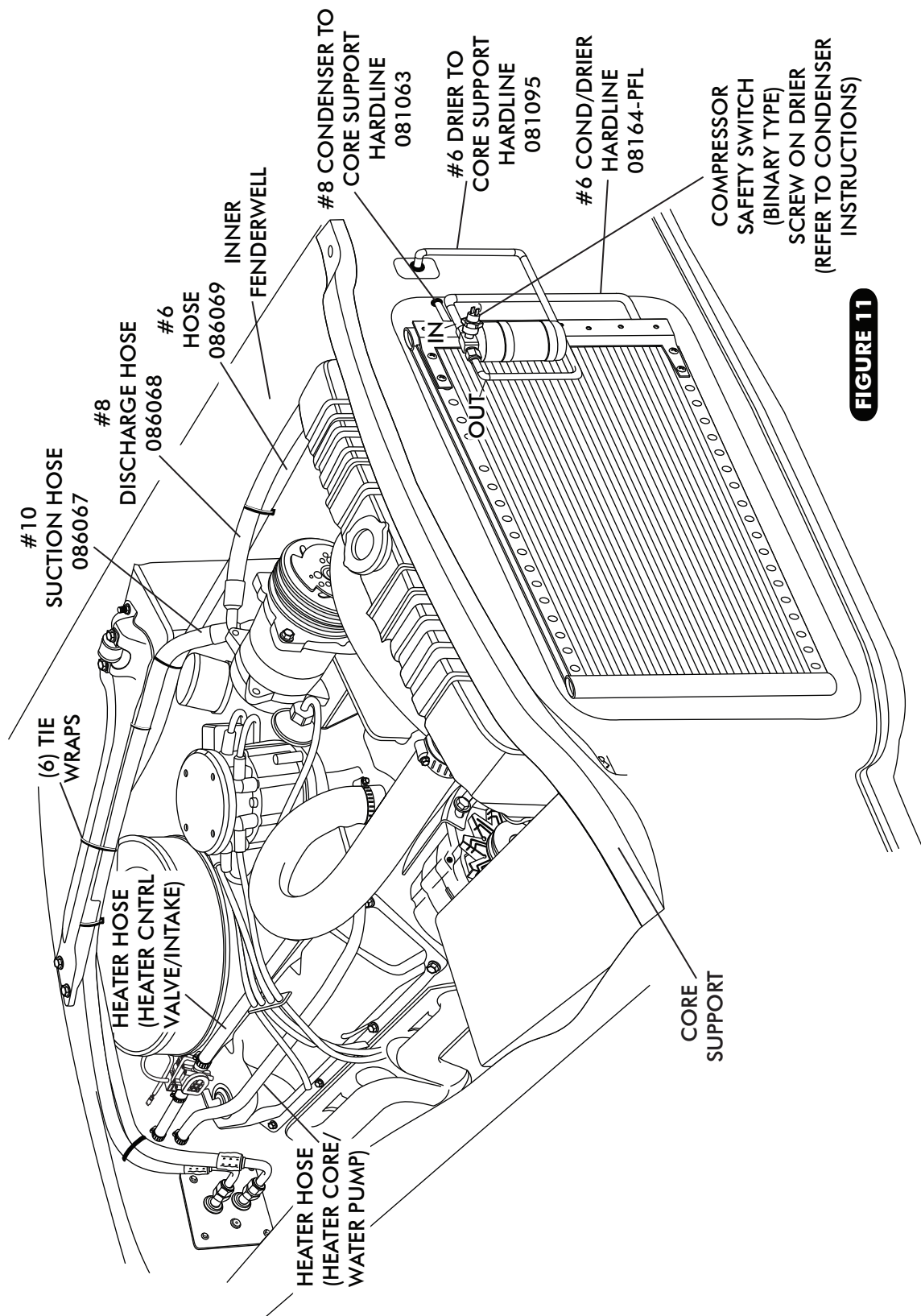
**FIGURE 10**

**NOTE: FLOW DIRECTION FOLLOWS MOLDED ARROW ON VALVE.**



## A/C & HEATER HOSE ROUTING DRIVER SIDE

**NOTE: VINTAGE AIR SYSTEMS REQUIRE  
(2) 5/8" HOSE NIPPLES (NOT SUPPLIED).**

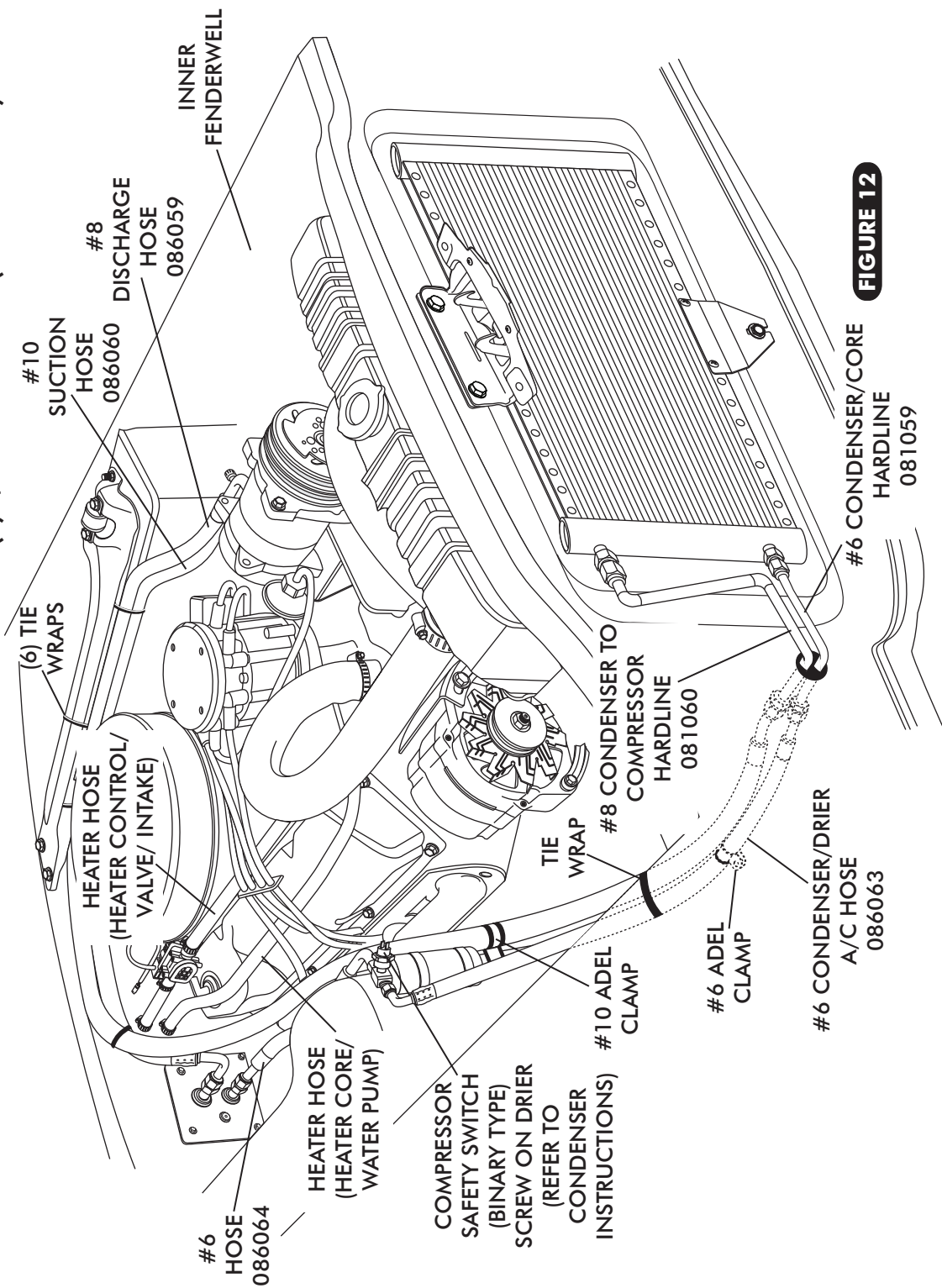


**FIGURE 11**



## A/C & HEATER HOSE ROUTING PASSENGER SIDE WITH 16" x 18" CONDENSER

**NOTE: VINTAGE AIR SYSTEMS REQUIRE  
(2) 5/8" HOSE NIPPLES (NOT SUPPLIED).**



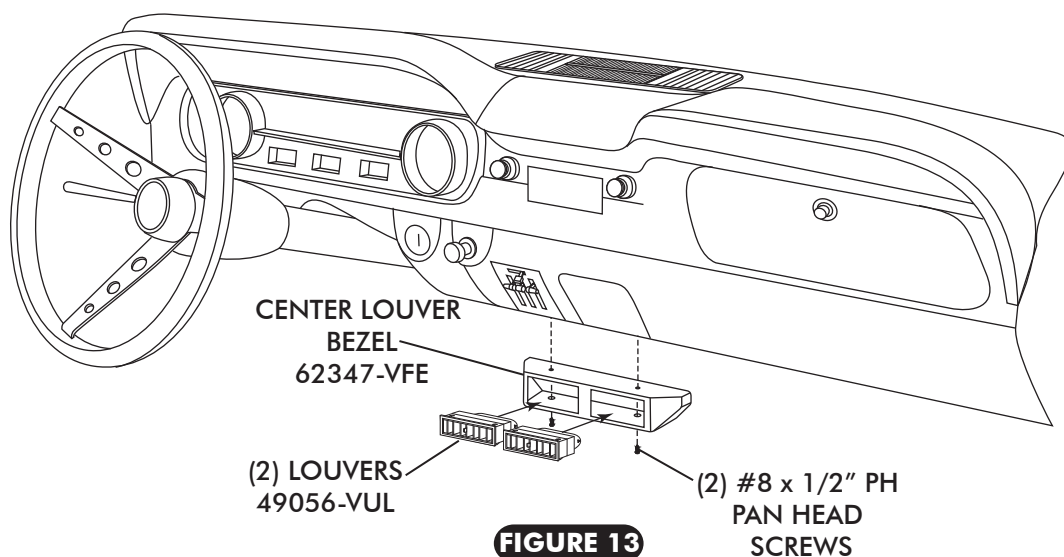
**FIGURE 12**





## CENTER LOUVER INSTALLATION (WITHOUT CENTER CONSOLE)

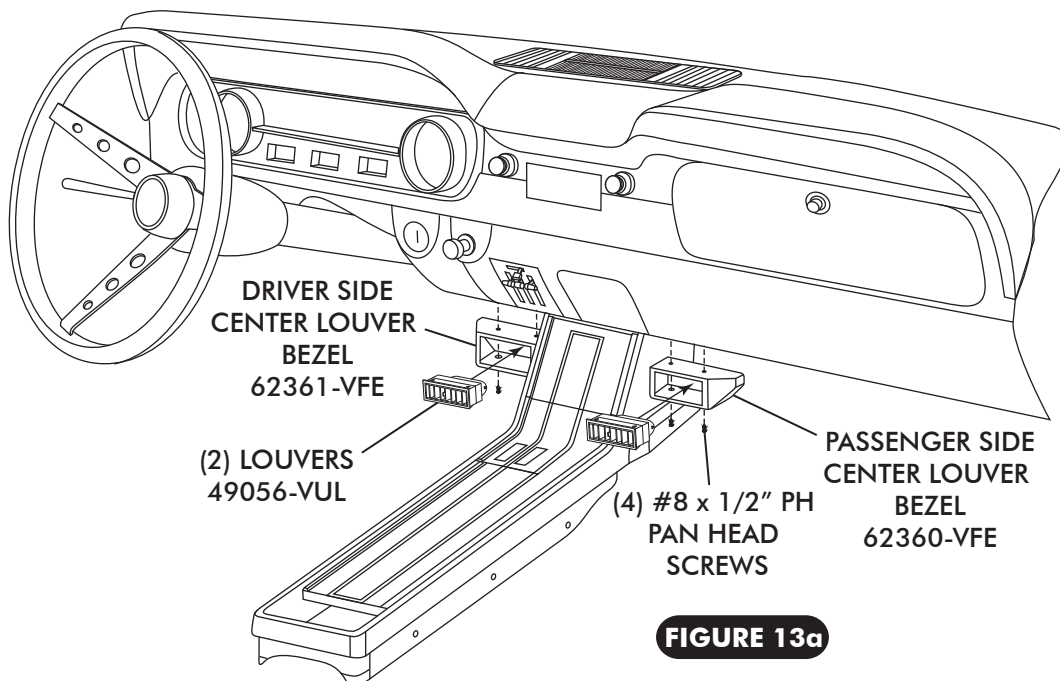
- ☐ MOUNT CENTER LOUVER BEZEL UNDER DASH USING (2) #8 x 1/2" PH PAN HEAD SCREWS AS SHOWN IN FIGURE 13, BELOW.
- ☐ INSTALL LOUVERS IN CENTER LOUVER BEZEL AS SHOWN.



**FIGURE 13**

## CENTER LOUVER INSTALLATION (WITH CENTER CONSOLE)

- ☐ MOUNT DRIVER AND PASSENGER SIDE CENTER LOUVER BEZELS UNDER DASH USING (4) #8 x 1/2" PH PAN HEAD SCREWS AS SHOWN IN FIGURE 13a, BELOW.
- ☐ INSTALL LOUVERS IN CENTER LOUVER BEZEL AS SHOWN.

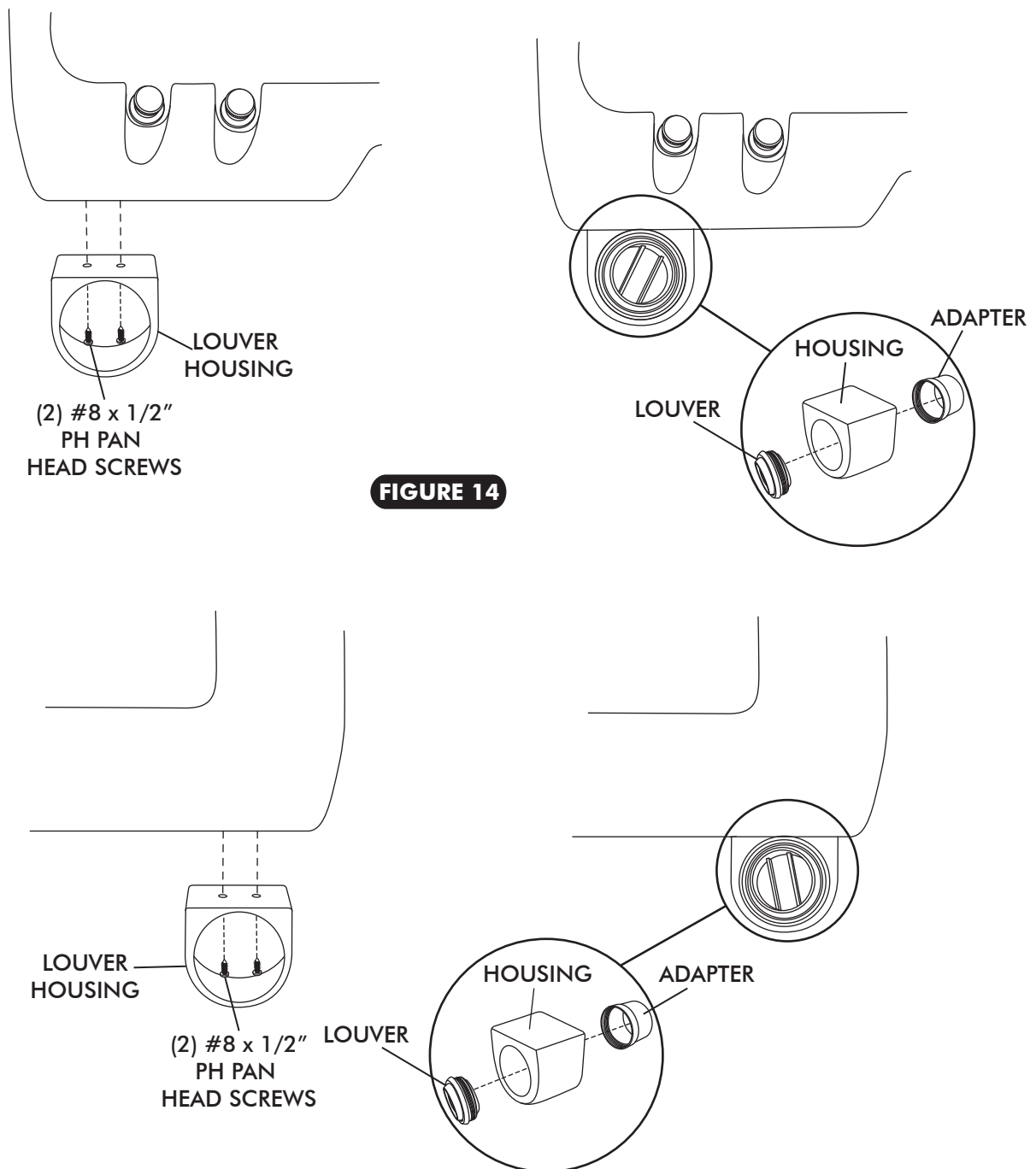


**FIGURE 13a**



## DRIVER/PASSENGER SIDE UNDER DASH LOUVER INSTALLATION

- ☐ MOUNT DRIVER/PASSENGER SIDE LOUVER HOUSING UNDER DASH USING (2) #8 x 1/2" PH PAN HEAD SCREWS AS SHOWN IN FIGURE 14.
- ☐ INSTALL LOUVER IN DRIVER/PASSENGER LOUVER HOUSING AS SHOWN.

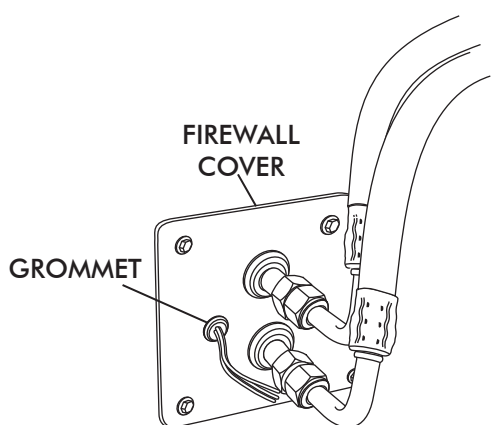


**FIGURE 14**

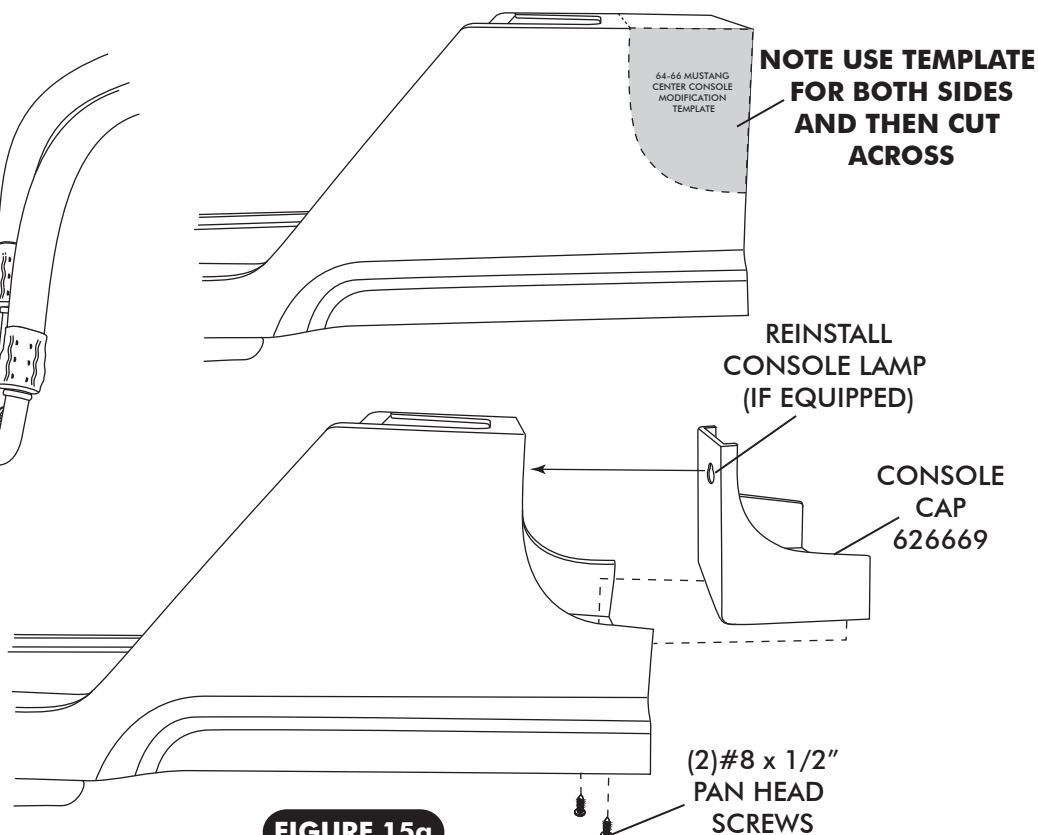


## FINAL STEPS

- ☐ INSTALL DUCT HOSES AS SHOWN IN FIGURE 16, PAGE 19.
- ☐ ROUTE A/C WIRES THROUGH 3/8" GROMMET AS SHOWN IN FIGURE 15 (12 VOLT/GROUND/BINARY SWITCH/HEATER VALVE).
- ☐ REINSTALL CONTROL PANEL ASM. **NOTE: CONTROLS MUST BE CALIBRATED FOR PROPER OPERATION. REFER TO CONTROL PANEL INSTRUCTIONS.**
- ☐ PLUG THE WIRING HARNESSES INTO THE ECU MODULE ON SUB CASE AS SHOWN IN FIGURE 16, PAGE 19 (WIRE ACCORDING TO WIRING DIAGRAM ON PAGE 21 AND 22).
- ☐ INSTALL NEW GLOVE BOX AND GLOVE BOX DOOR.
- ☐ CUT OUT TEMPLATE ON PAGE 28. MODIFY CONSOLE (IF EQUIPPED) AS SHOWN IN FIGURE 15a. REINSTALL.
- ☐ REINSTALL ALL PREVIOUSLY REMOVED ITEMS (BATTERY, RADIATOR, RADIO).
- ☐ 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 MAY CAUSE HEATER CORE TO CORRODE PREMATURELY AND POSSIBLY FREEZE AND BURST IN A/C MODE AND/OR FREEZING WEATHER, VOIDING YOUR WARRANTY.
- ☐ DOUBLE CHECK ALL FITTINGS, BRACKETS AND BELTS FOR TIGHTNESS.
- ☐ VINTAGE AIR RECOMMENDS THAT ALL A/C SYSTEMS BE SERVICED BY A CERTIFIED AUTOMOTIVE AIR CONDITIONING TECHNICIAN.
- ☐ EVACUATE THE SYSTEM FOR MINIMUM OF 45 MINUTES AND LEAK CHECK PRIOR TO CHARGING.
- ☐ CHARGE THE SYSTEM TO THE CAPACITIES STATED ON THE INFORMATION PAGE (PAGE 4) OF THIS INSTRUCTION MANUAL.
- ☐ SEE OPERATION OF CONTROLS PROCEDURES ON PAGE 23.



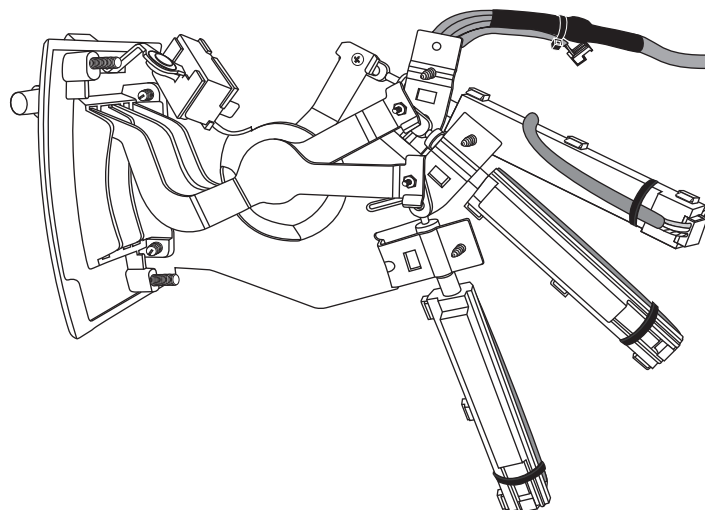
**FIGURE 15**



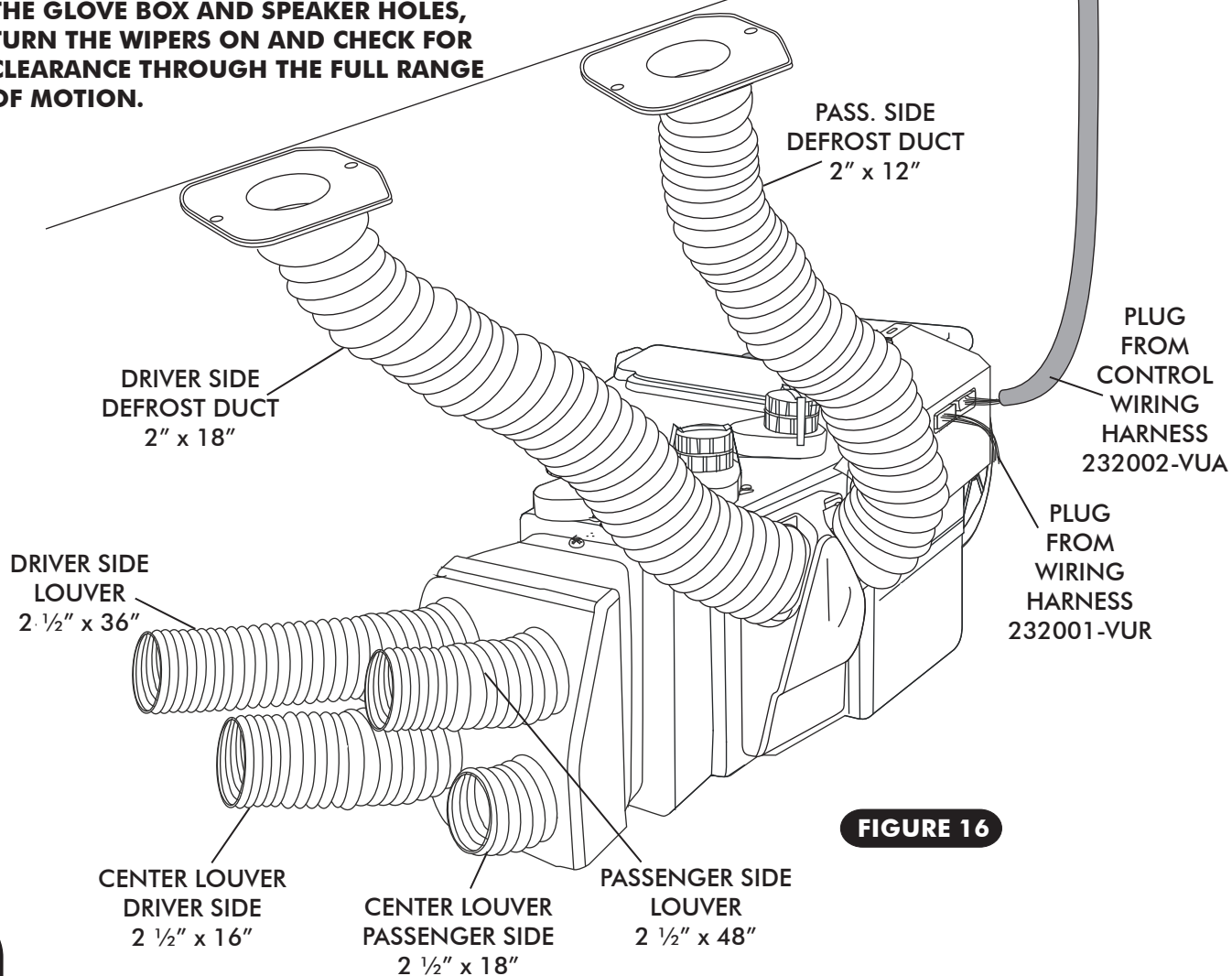
**FIGURE 15a**



## CONTROL PANEL & DUCT HOSE ROUTING



**CAUTION: WHILE LOOKING THROUGH THE GLOVE BOX AND SPEAKER HOLES, TURN THE WIPERS ON AND CHECK FOR CLEARANCE THROUGH THE FULL RANGE OF MOTION.**

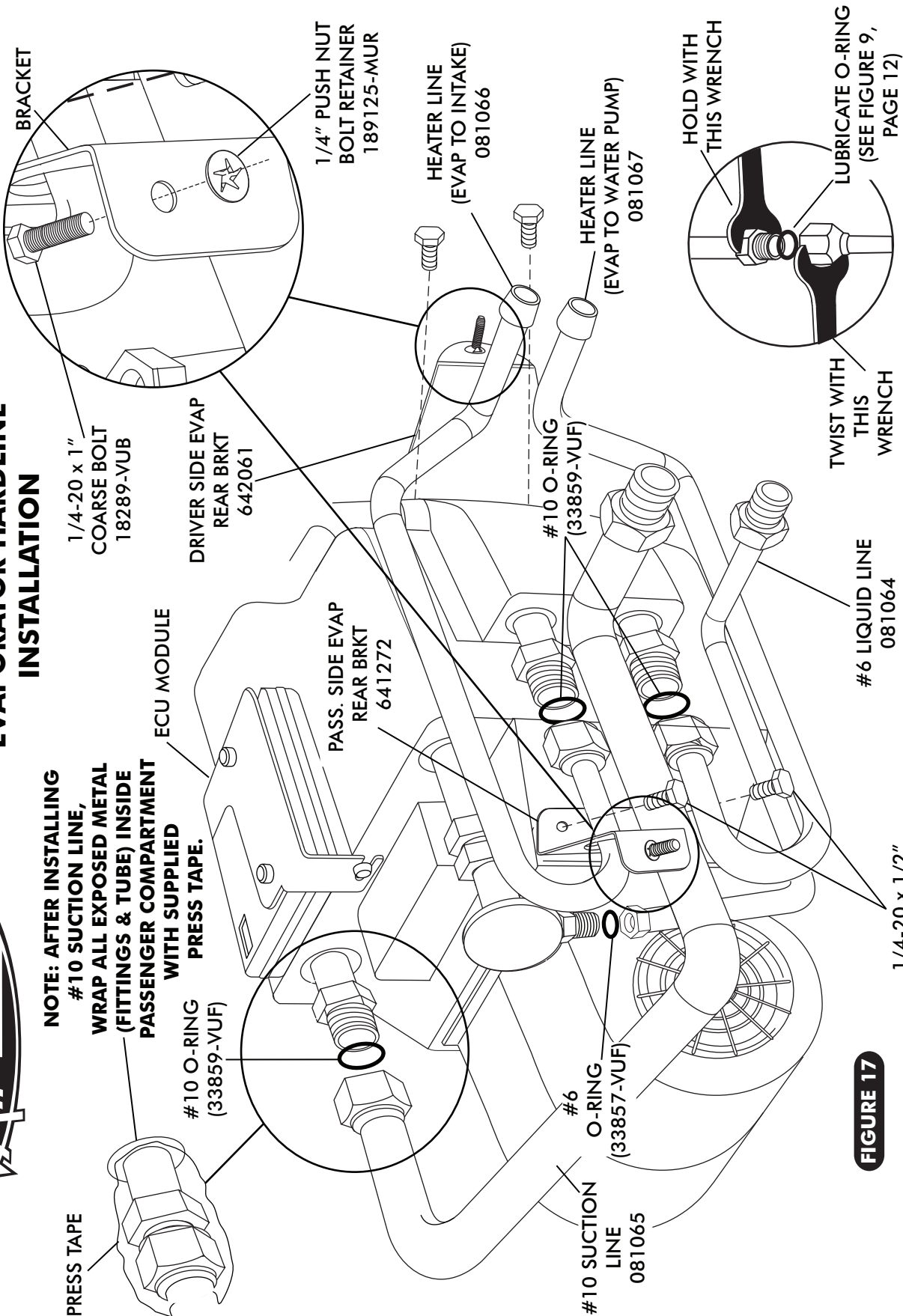


**FIGURE 16**

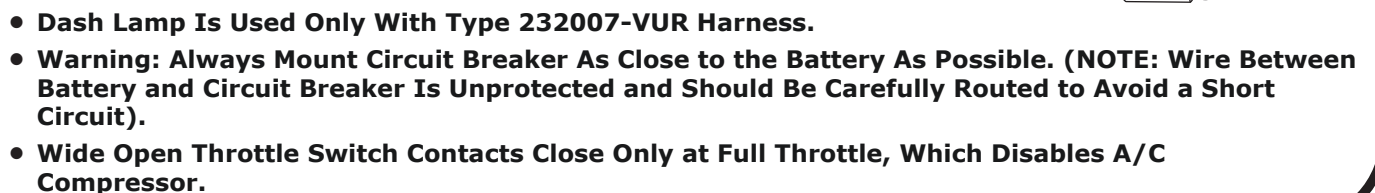


## EVAPORATOR HARDLINE INSTALLATION

**NOTE: AFTER INSTALLING  
#10 SUCTION LINE,  
WRAP ALL EXPOSED METAL  
(FITTINGS & TUBE) INSIDE  
PASSENGER COMPARTMENT  
WITH SUPPLIED  
PRESS TAPE.**



**FIGURE 17**

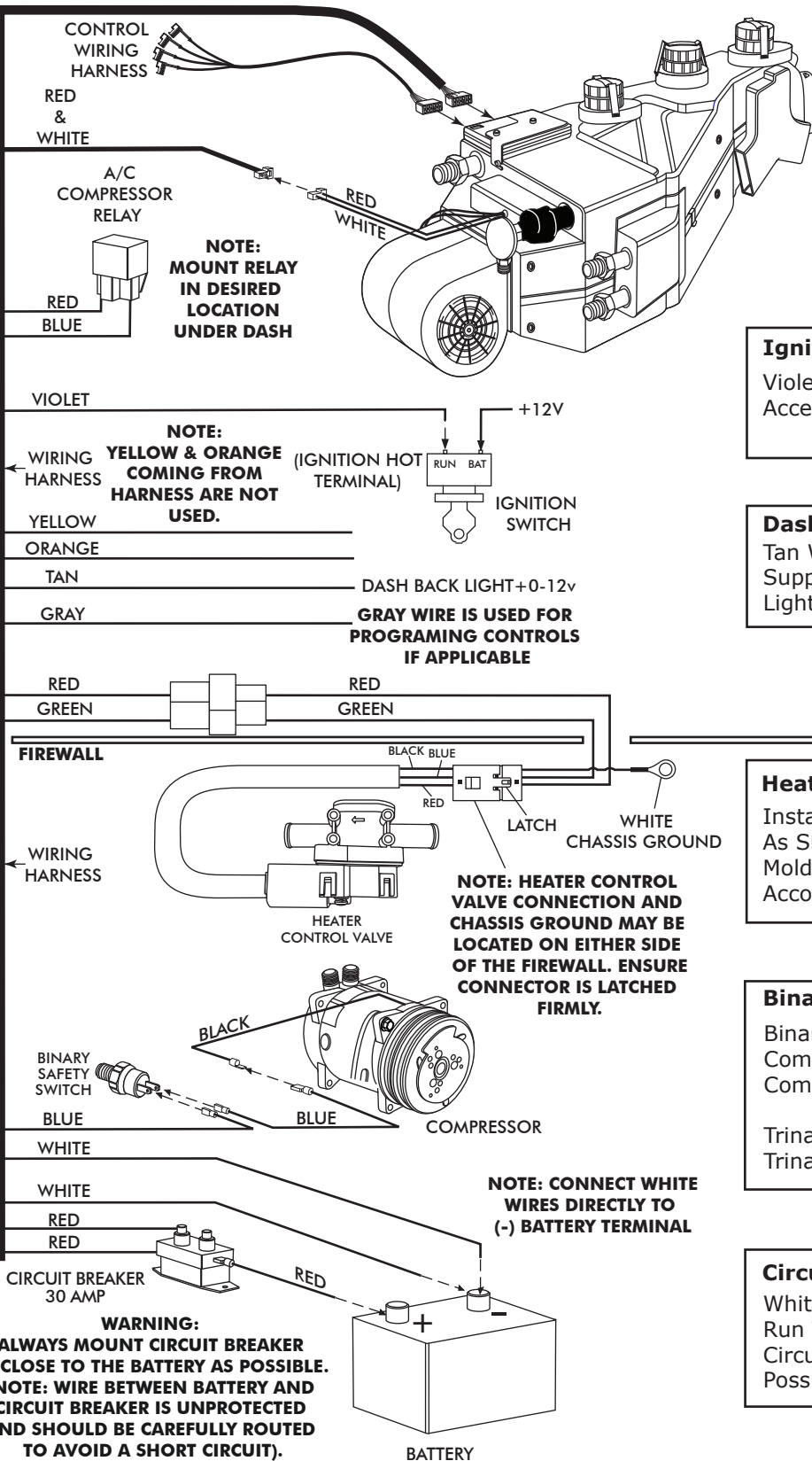






## Gen IV Wiring Connection Instruction

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.





## 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**

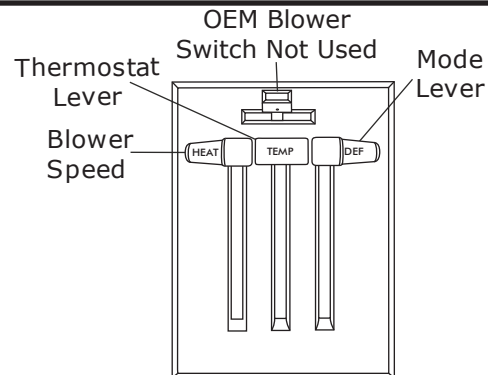
This lever/knob controls blower speed, from OFF to HI.

### **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**

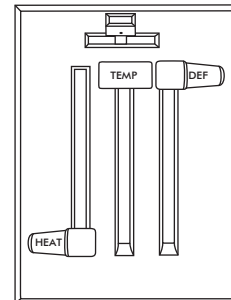
Adjust to desired speed.

### **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**

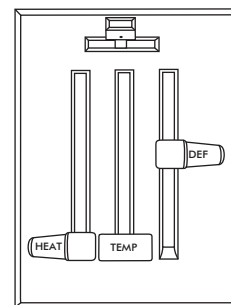
Adjust to desired speed.

### **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**

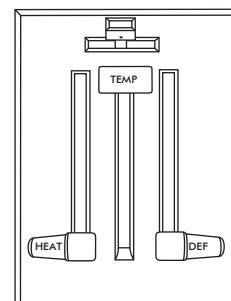
Adjust to desired speed.

### **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).





# 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.
		Check for damaged ground wire (white) in control head harness.	Verify continuity to chassis ground with white control head wire at various points.	
	All other functions work.	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.	
	System is charged.	Check for disconnected or faulty thermistor.	Check 2-pin connector at ECU housing.	
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.	



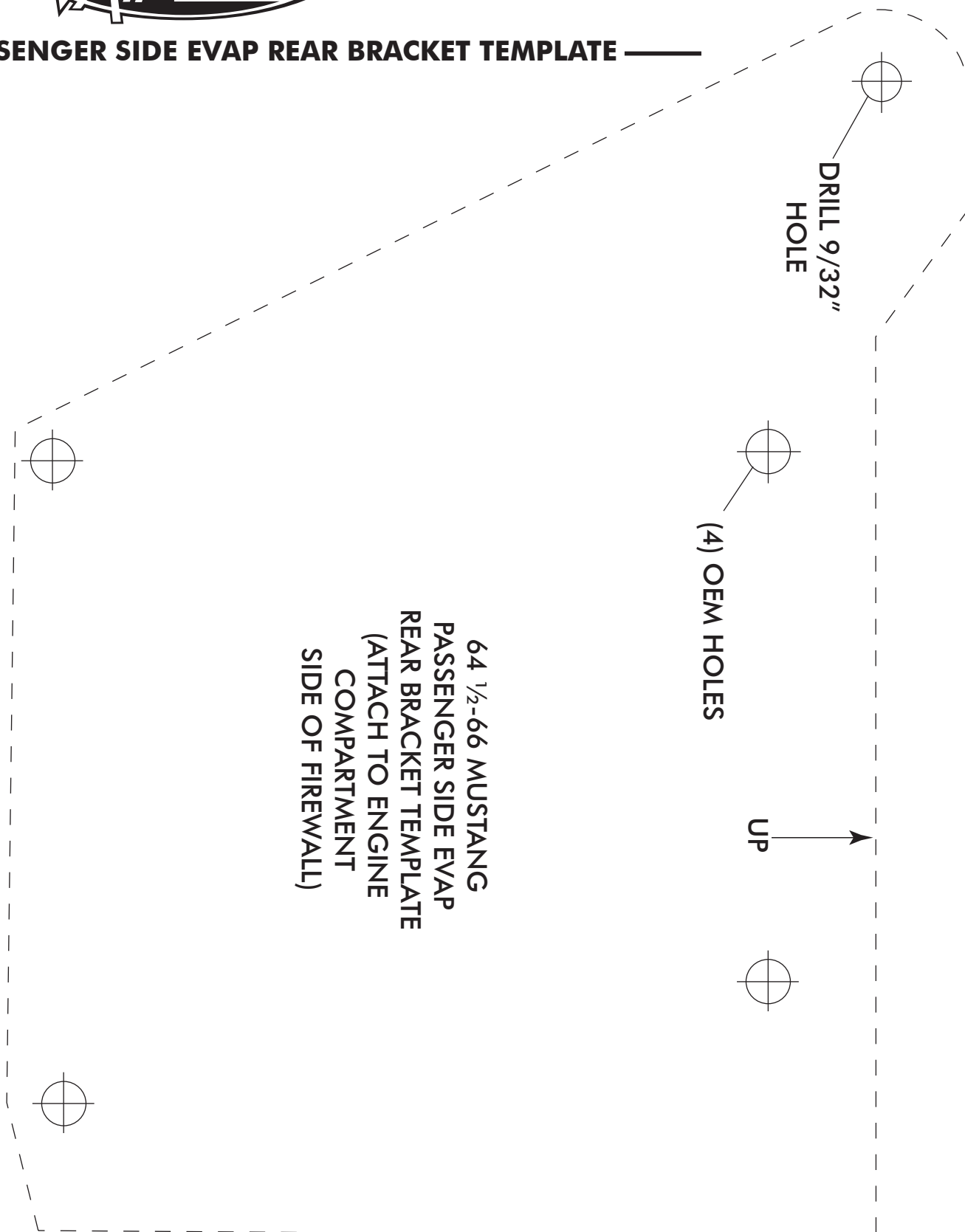
## Troubleshooting Guide (Cont.)

Symptom	Condition	Checks	Actions	Notes
4. System will not turn on, or runs intermittently.	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.
	Will not turn on under any conditions.	Verify connections on power lead, ignition lead, and both white ground wires.	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. 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.	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.
	Battery voltage is less than 12V.	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.	





## PASSENGER SIDE EVAP REAR BRACKET TEMPLATE



64 1/2-66 MUSTANG  
PASSENGER SIDE EVAP  
REAR BRACKET TEMPLATE  
(ATTACH TO ENGINE  
COMPARTMENT  
SIDE OF FIREWALL)

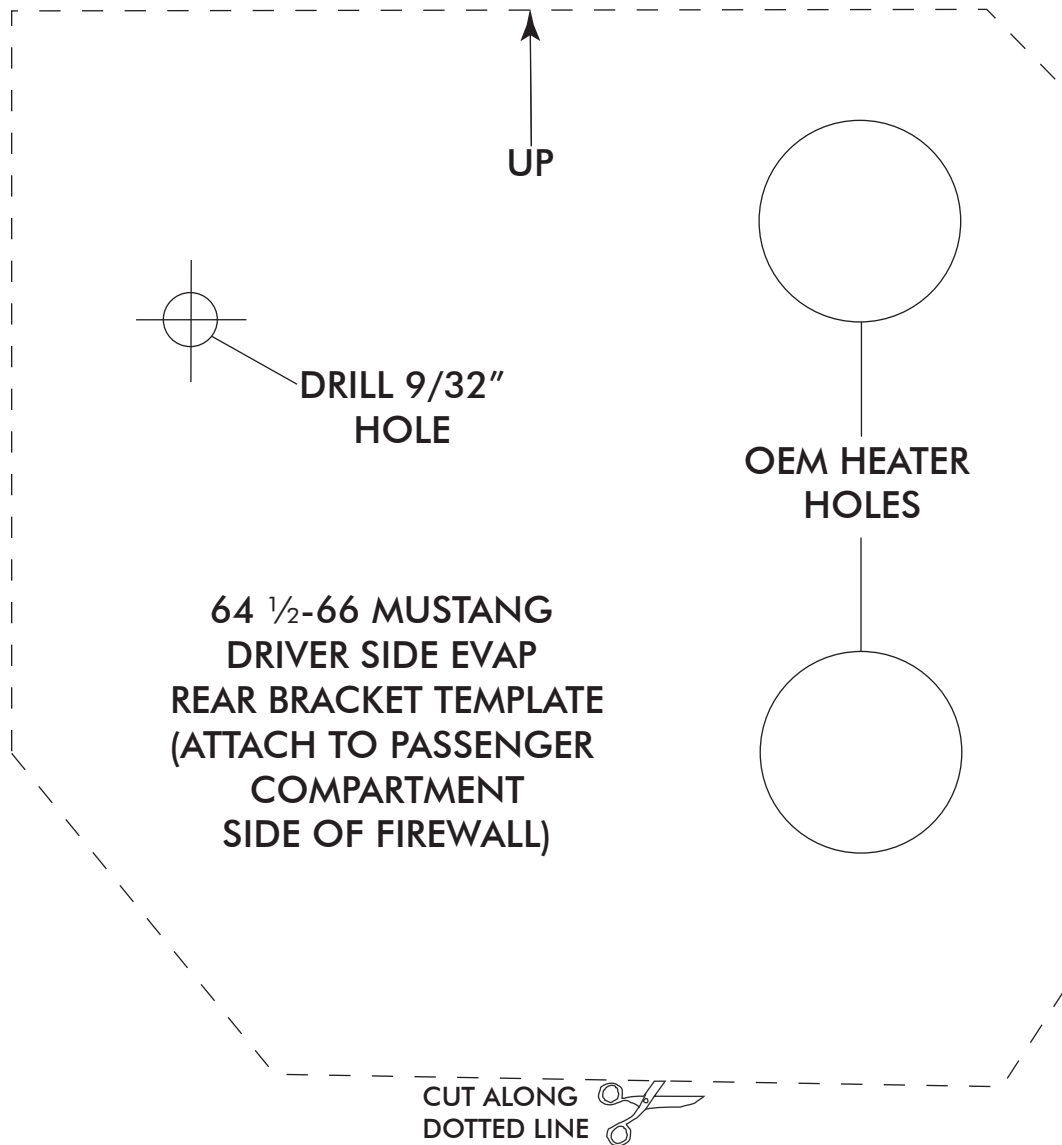
CUT ALONG  
DOTTED LINE







## DRIVER SIDE EVAP REAR BRACKET TEMPLATE





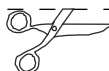




## CENTER CONSOLE MODIFICATION TEMPLATE

64 1/2-66 MUSTANG  
CENTER CONSOLE  
MODIFICATION  
TEMPLATE

CUT ALONG  
DOTTED LINE









## EVAPORATOR KIT PACKING LIST

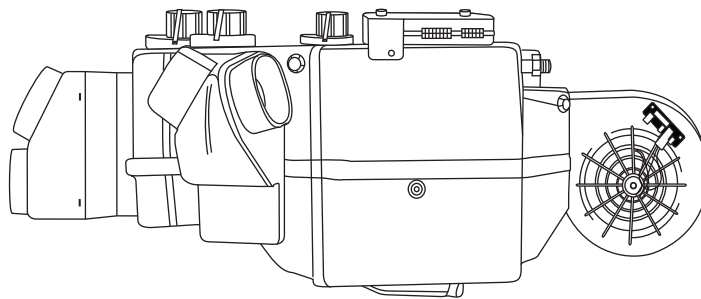
EVAPORATOR KIT  
554164

No.	QTY.	PART No.	DESCRIPTION
1.	1	744004-VUE	GEN IV 4-VENT EVAPORATOR SUB CASE
2.	1	781066	1964 1/2-66 MUSTANG ACCESSORY KIT

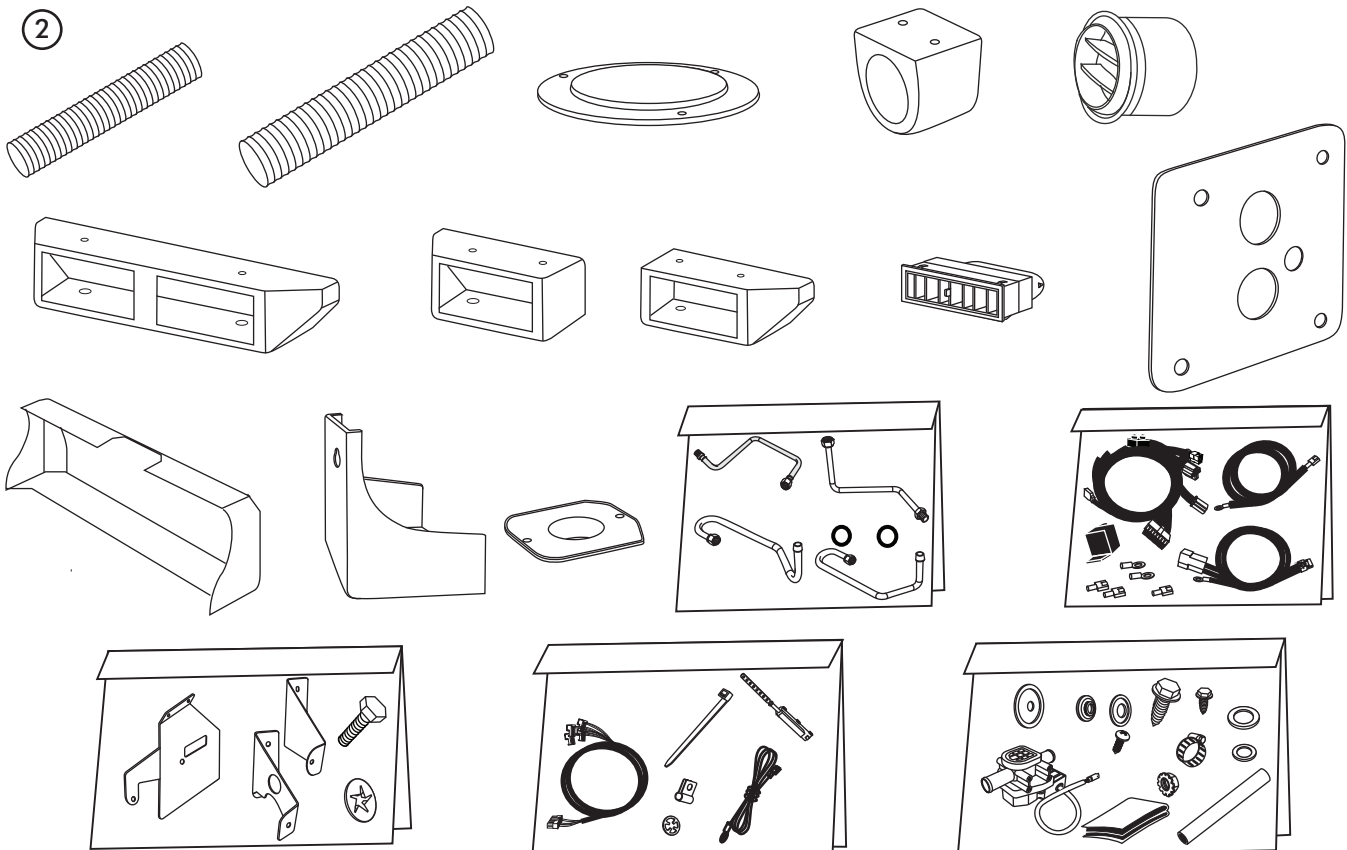
CHECKED BY: \_\_\_\_\_  
PACKED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

①

GEN IV 4-VENT  
EVAP SUB CASE  
744004-VUE



②



ACCESSORY KIT  
781066

**NOTE: IMAGES MAY NOT DEPICT ACTUAL PARTS AND QUANTITIES.  
REFER TO PACKING LIST FOR ACTUAL PARTS AND QUANTITIES**