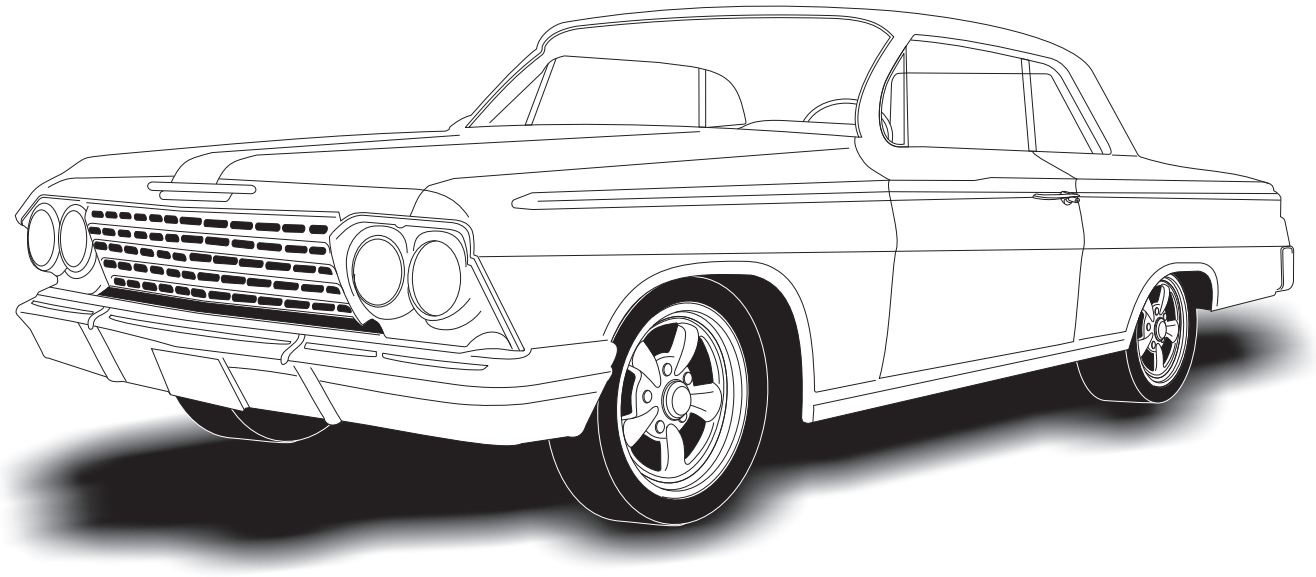
200 MPH AIR CONDITIONING

SINCE Vintage Air 1976

1961-62 CHEVY IMPALA

GEN IV w/o FACTORY AIR

561062



18865 GOLL ST. - SAN ANTONIO, TX. - 78266 ph.210-654-7171 - fax 210-654-3113

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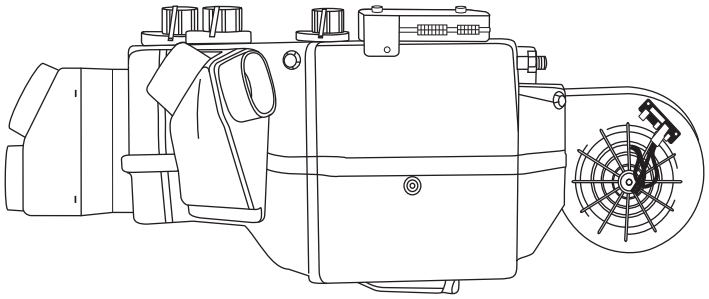
EVAPORATOR KIT PACKING LIST

EVAPORATOR KIT
561062

No.	QTY.	PART No.	DESCRIPTION
1.	1	744004-VUE	GEN IV MAGNUM EVAP. SUBCASE
2.	1	784061	1961-62 IMPALA w/o AC ACC. KIT

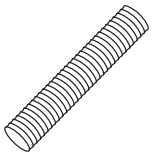
***** BEFORE BEGINNING INSTALLATION OPEN ALL PACKAGES AND CHECK CONTENTS OF SHIPMENT. PLEASE REPORT ANY SHORTAGES DIRECTLY TO VINTAGE AIR WITHIN 15 DAYS. AFTER 15 DAYS, VINTAGE AIR WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED ITEMS.***

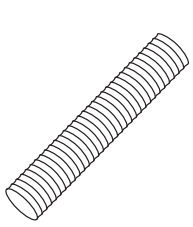
①

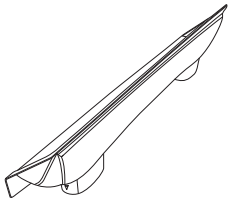


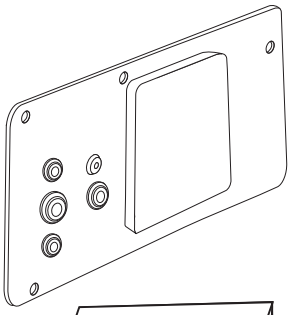
GEN IV MAGNUM
EVAP. SUB CASE
744004-VUE

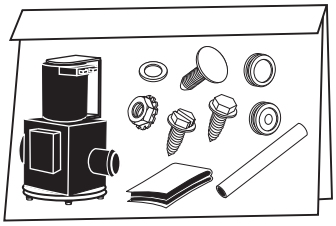
②

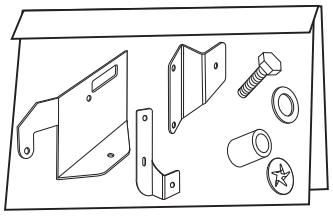


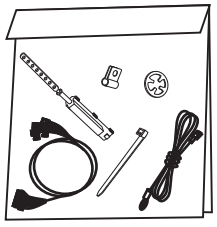


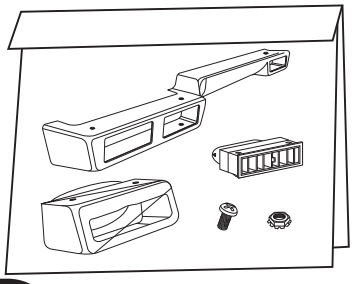


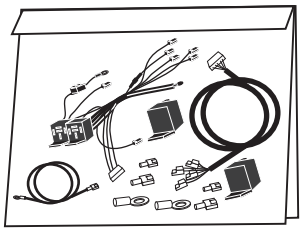


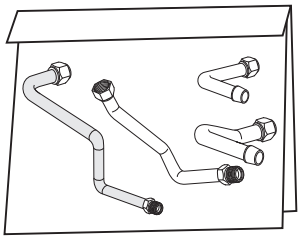


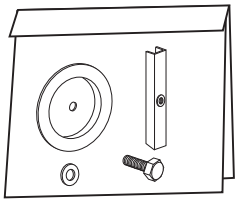












ACCESSORY KIT
784061

1961-62 IMPALA GEN IV

IMPORTANT NOTICE-PLEASE READ

FOR MAXIMUM SYSTEM PERFORMANCE VINTAGE AIR RECOMMENDS THE FOLLOWING:

THIS KIT DOES NOT CONTAIN HEATER HOSE. YOU MUST PURCHASE 8 FEET OF 5/8" DIA. HEATER HOSE FROM VINTAGE AIR(31800-VUD) OR FROM YOU LOCAL PARTS RETAILER

SAFETY SWITCHES:

YOUR VINTAGE AIR SYSTEM IS EQUIPPED WITH A BINARY PRESSURE SAFETY SWITCH. A BINARY SWITCH (11078-VUS) DISENGAGES THE COMPRESSOR CLUTCH IN CASE OF EXTREME LOW PRESSURE CONDITION (REFRIGERANT LOSS) OR EXCESSIVELY HIGH HEAD PRESSURE (406 PSI), TO PREVENT COMPRESSOR DAMAGE OR HOSE RUPTURE. A TRINARY SWITCH (11076-VUS) COMBINES HI/LO PRESSURE PROTECTION WITH AN ELECTRIC FAN OPERATION SIGNAL AT 254 PSI., AND MAY BE SUBSTITUTED FOR USE WITH ELECTRIC CONDENSER FANS. COMPRESSOR SAFETY SWITCHES ARE EXTREMELY IMPORTANT SINCE AN A/C SYSTEM RELIES ON REFRIGERANT TO CARRY LUBRICATION THROUGH THE SYSTEM.

SERVICE INFO:

ATTENTION: SYSTEM COMPONENTS: THE COMPRESSOR, EVAPORATOR, CONDENSER & DRIER ARE CAPPED. 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 or R-12 REFRIGERANT ONLY ! USE OF ANY OTHER REFRIGERANTS RISKS A DANGER OF FIRE 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 CAPACITIES FOR VINTAGE AIR SYSTEMS

(FOR OTHER SYSTEMS, CONSULT MANUFACTURER GUIDELINES)

134a SYSTEM

CHARGE WITH 1.8 lbs.
(1lbs. 12ozs) OF REFRIGERANT

R-12 SYSTEM

CHARGE WITH 2.0 lbs. OF REFRIGERANT

LUBRICANT CAPACITIES: NEW COMPRESSOR - NO ADDITIONAL OIL NEEDED
USED COMPRESSOR - CONSULT VINTAGE AIR

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 TO THE 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 TURNING SOME OF THE VEHICLE'S OTHER SYSTEMS ON AND OFF. MODERN COMPUTER OPERATED EQUIPMENT CAN BE SENSITIVE TO VOLTAGE SPIKES ON THEIR POWER LEADS, WHICH CAN CAUSE UNEXPECTED RESETS, STRANGE BEHAVIOR, AND MAY ALSO CAUSE PERMANENT DAMAGE.

VINTAGE AIR STRIVES TO HARDEN THEIR 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 & TRUCK PARTS SUPPLIERS. THEY TYPICALLY ARE CYLINDRICAL IN SHAPE, A LITTLE OVER AN INCH LONG, A LITTLE OVER A HALF INCH IN DIAMETER, THEY HAVE A SINGLE LEAD COMING FROM ONE END OF THE CYLINDER WITH A TERMINAL ON THE END OF THE WIRE, AND THEY WILL HAVE 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 ANY OTHER AUXILIARY DEVICE. SHORTING TO GROUND OR CONNECTING TO A CONDENSER FAN OR ANY OTHER AUXILIARY DEVICE WILL CAUSE SEVERE DAMAGE TO THE ECU.
- WHEN INSTALLING GROUND LEADS ON GEN IV SYSTEMS, THE BLOWER CONTROL GROUND AND ECU GROUND MUST BE CONNECTED DIRECTLY TO THE NEGATIVE BATTERY POST.
- THE HEATER CONTROL VALVE IS A NORMALLY OPEN VALVE. IT MUST BE CONNECTED TO THE ECU TO BLOCK WATER FLOW IN AC MODE.

INSTALLATION INSTRUCTIONS FOR 1961-62 IMPALA

BEFORE STARTING THE AIR CONDITIONER INSTALLATION, CHECK FOR PROPER OPERATION OF ALL COMPONENTS (RADIO, LIGHTS, WIPERS, ETC.). STUDY THE INSTRUCTIONS, ILLUSTRATIONS AND DIAGRAMS. FOR EASE OF INSTALLATION CHECK OFF (☑) EACH PROCEDURE PRIOR TO MOVING ON TO THE NEXT STEP.

ENGINE COMPARTMENT

- ☐ DISCONNECT BATTERY AND REMOVE
- ☐ DRAIN RADIATOR
- ☐ REMOVE PASSENGER SIDE HOOD HINGE. SEE FIGURE 1a
- ☐ REMOVE O.E.M. BLOWER ASSEMBLY (DISCARD) SEE FIGURE 1

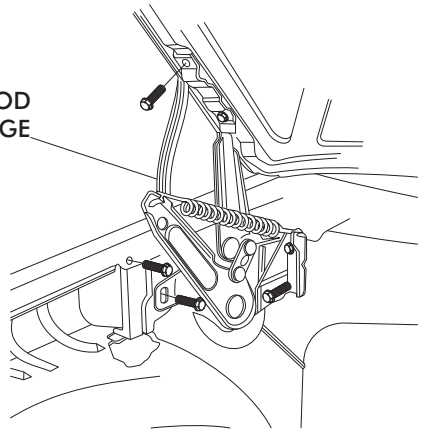


FIGURE 1a

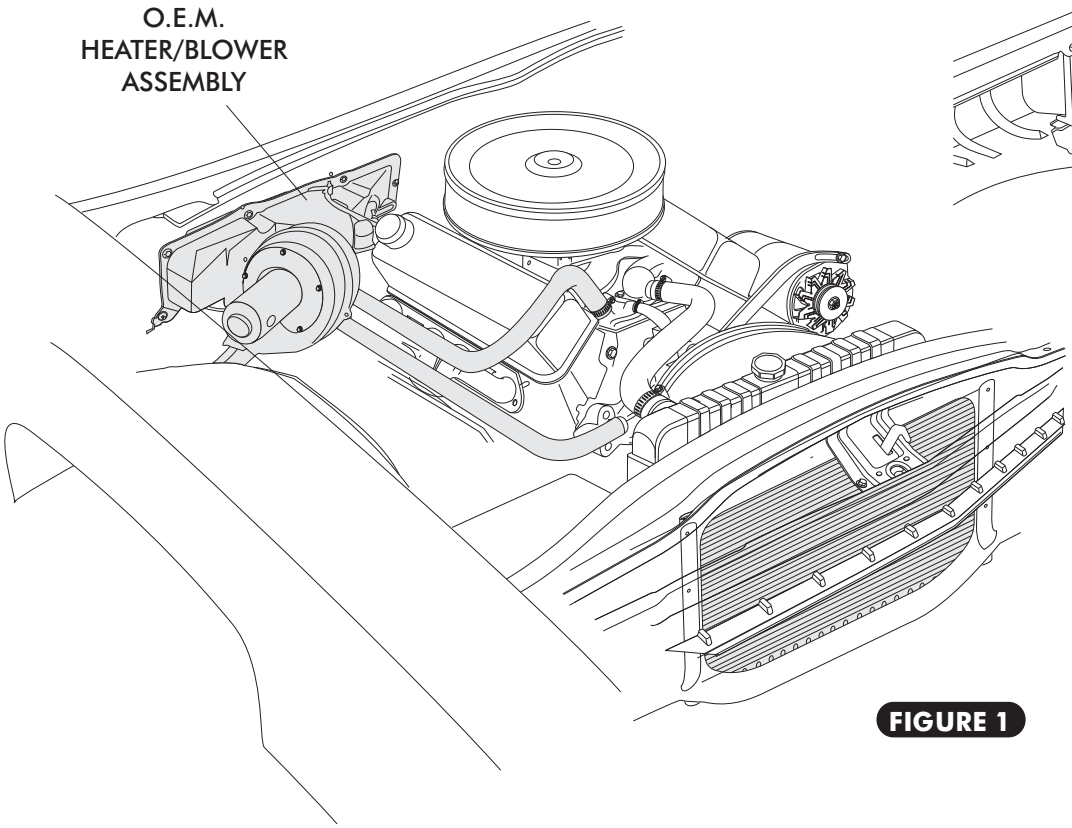


FIGURE 1

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.

PULLEYS

- ☐ IN MOST INSTANCES THE BELT LENGTHS WILL REMAIN THE SAME.

PASSENGER COMPARTMENT

- ☐ REMOVE THE OEM CONTROL PANEL ASM. SEE FIGURE 2 BELOW
- ☐ REMOVE O.E.M HEATER ASSEMBLY SEE FIGURE 2 BELOW.
- ☐ REMOVE GLOVE BOX (DISCARD)
- ☐ REMOVE RADIO,SPEAKER (RETAIN)
- ☐ REMOVE O.E.M DEFROST DUCT ASSEMBLY, SEE FIGURE 3 BELOW.
- ☐ (REMOVE 3 SPOT WELDS ON DEF DUCT BY CHISEL OR DIE GRINDER. SEE FIGURE 3 BELOW.)

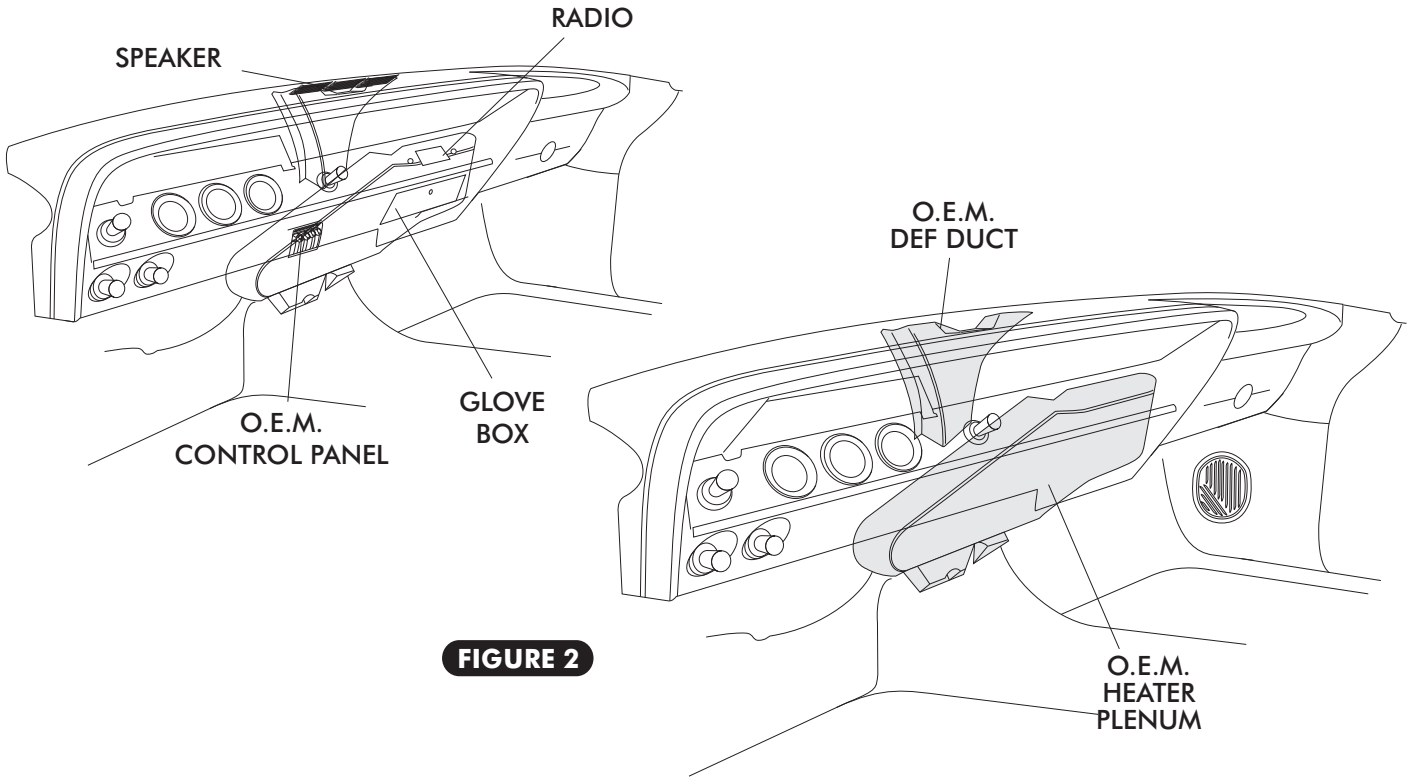


FIGURE 2

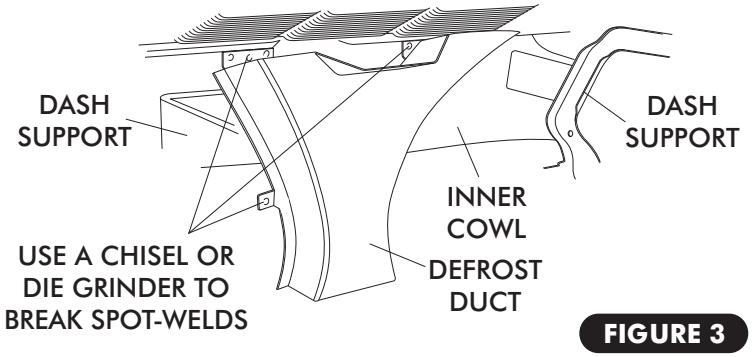
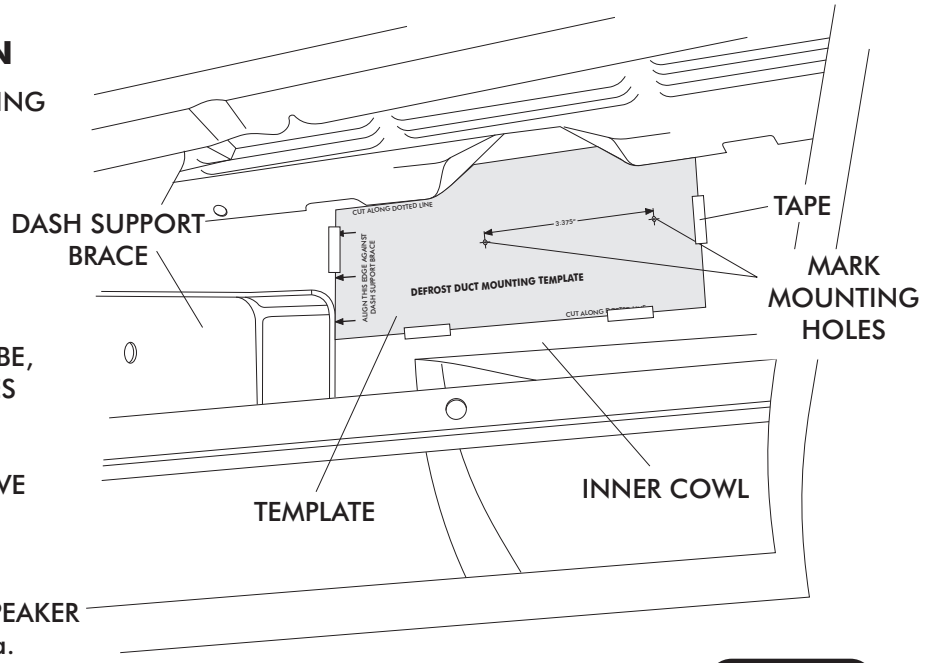


FIGURE 3

DEFROST DUCT INSTALLATION

- ☐ CUT OUT DEFROST DUCT MOUNTING TEMPLATE ON PAGE 25.
- ☐ PLACE TEMPLATE ON INNER COWL AND ALIGN TEMPLATE AS SHOWN AND TAPE TEMPLATE IN PLACE. SEE FIGURE 4.
- ☐ USING A CENTER PUNCH OR SCRIBE, MARK THE TWO MOUNTING HOLES ON INNER COWL.
- ☐ ONCE HOLES ARE MARKED, REMOVE THE TEMPLATE AND DRILL (2) 1/8" HOLES IN INNER COWL.
- ☐ INSTALL J-NUT ON END OF THE SPEAKER BRACKET AS SHOWN IN FIGURE 4a.
- ☐ PLACE DEFROST DUCT UNDER DASH, ALIGN WITH O.E.M. DEFROST OPENING IN DASH AND MOUNTING HOLES IN INNER COWL.
- ☐ ONCE DEFROST DUCT AND SPEAKER BRACKET ARE ALIGNED, SECURE DEFROST DUCT AND SPEAKER BRACKET TO INNER COWL USING (2) #10 X ½"SHEETMETAL SCREWS. SEE FIGURE 4a, BELOW.



VIEW SHOWN THROUGH GLOVE BOX OPENING IN DASH

FIGURE 4

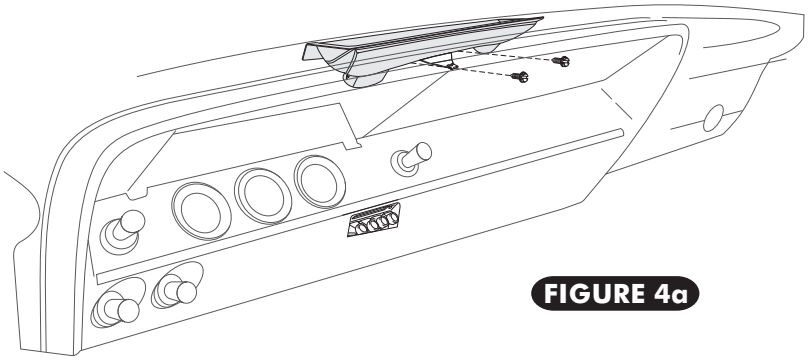
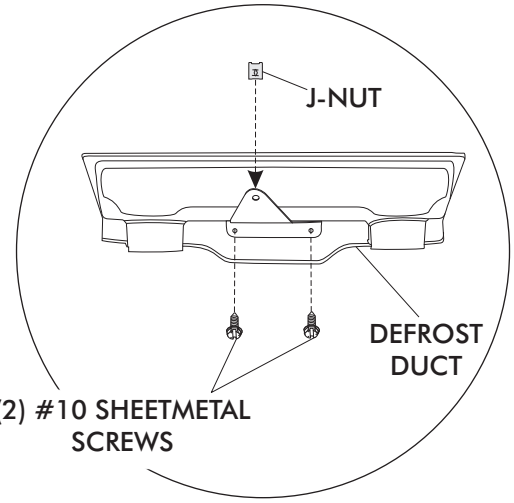


FIGURE 4a



SPEAKER MOUNTING

- ☐ USING A #10 x ½" SHEET METAL SCREW SECURE THE SPEAKER BRACKET TO THE BRACKET ON THE DEFROST DUCT. SEE FIGURE 5 BELOW.

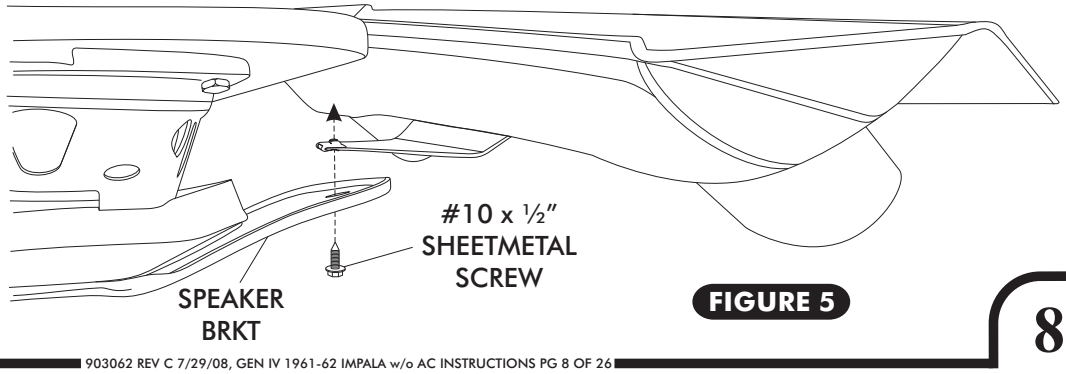


FIGURE 5

EVAPORATOR INSTALLATION

☐ ON A WORK BENCH INSTALL EVAPORATOR FRONT & REAR MOUNTING BRACKETS ON EVAPORATOR USING (6) 1/4-20 x 1/2" HEX BOLTS AND TIGHTEN AS SHOWN IN FIGURE 6 & 6a BELOW.

☐ INSTALL HARDLINES WITH PROPERLY LUBRICATED O-RINGS. (SEE FIGURE 14 PAGE 14, AND FIGURE 19 PAGE 19.)

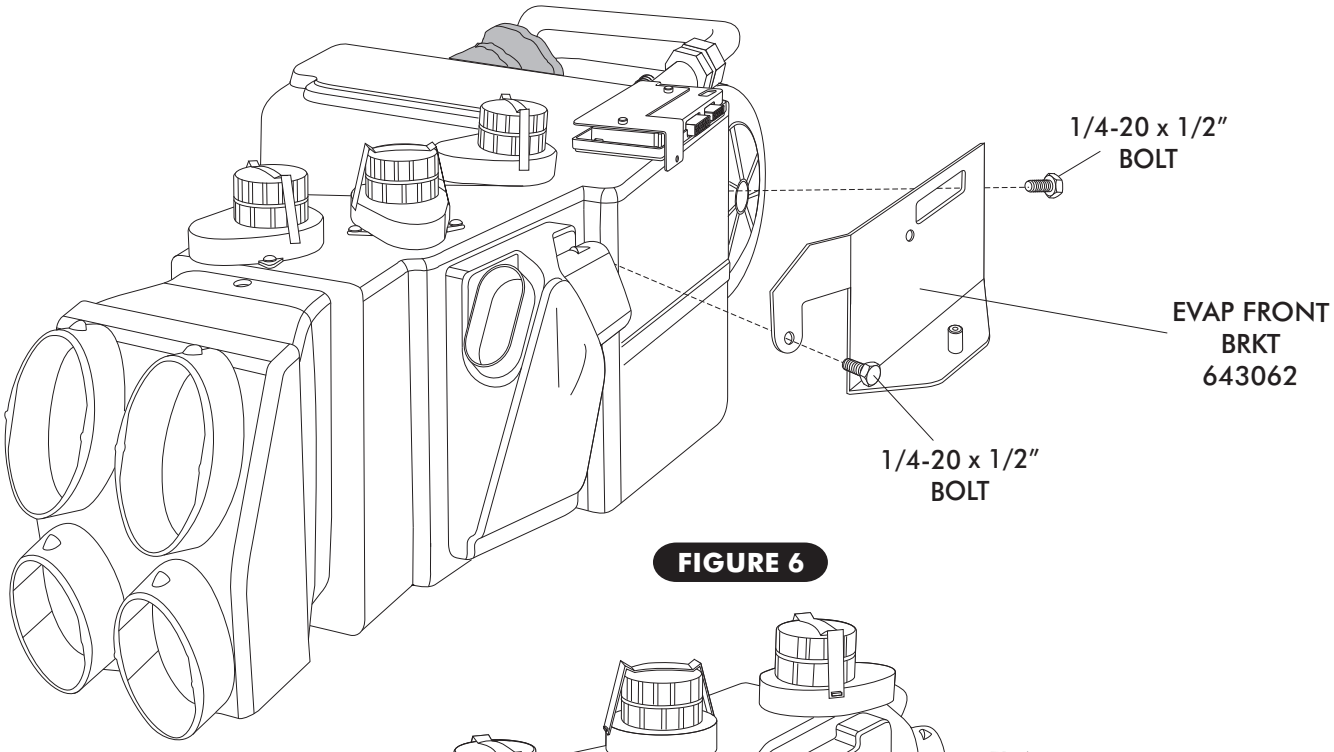


FIGURE 6

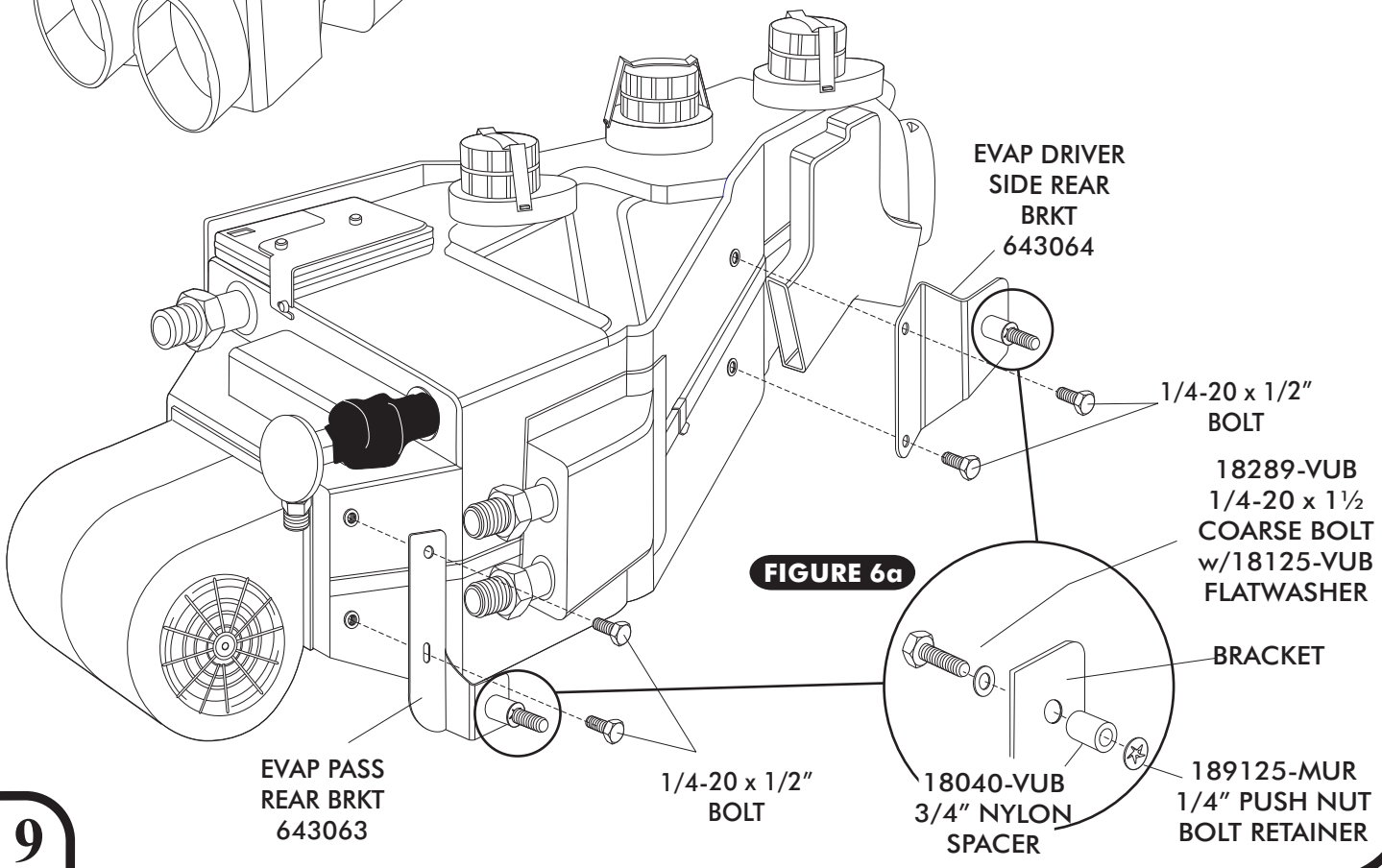


FIGURE 6a

FRESH AIR CAP INSTALLATION

- ☐ APPLY A 1/4" BEAD OF SILICONE AROUND THE BACK SIDE OF THE FRESH AIR CAP AS SHOWN IN FIGURE 7, BELOW.
- ☐ ATTACH FRESH AIR CAP TO FIREWALL USING A 1/4-20 x 1" BOLT AND WASHER, SEE FIGURE 7, BELOW.

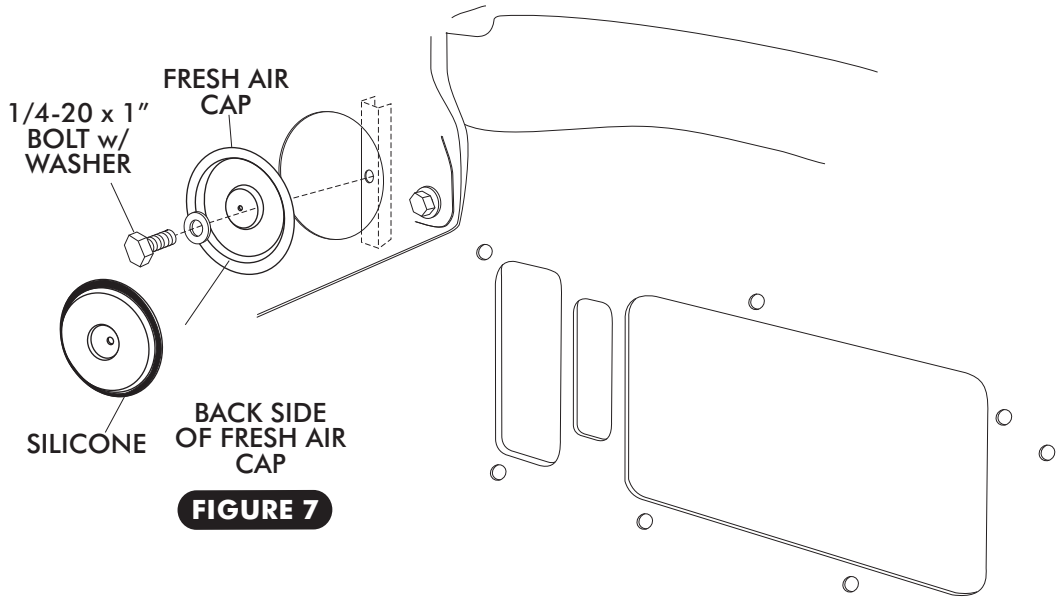


FIGURE 7

FIREWALL COVER

☐ APPLY A 1/4" BEAD OF SILICONE AROUND THE BACK SIDE OF THE FIREWALL COVER AND FASTEN TO FIREWALL w/ (5) 1/4" x ½" BOLTS w/ FLAT WASHER AND NUT AS SHOWN IN FIGURE 8 BELOW.

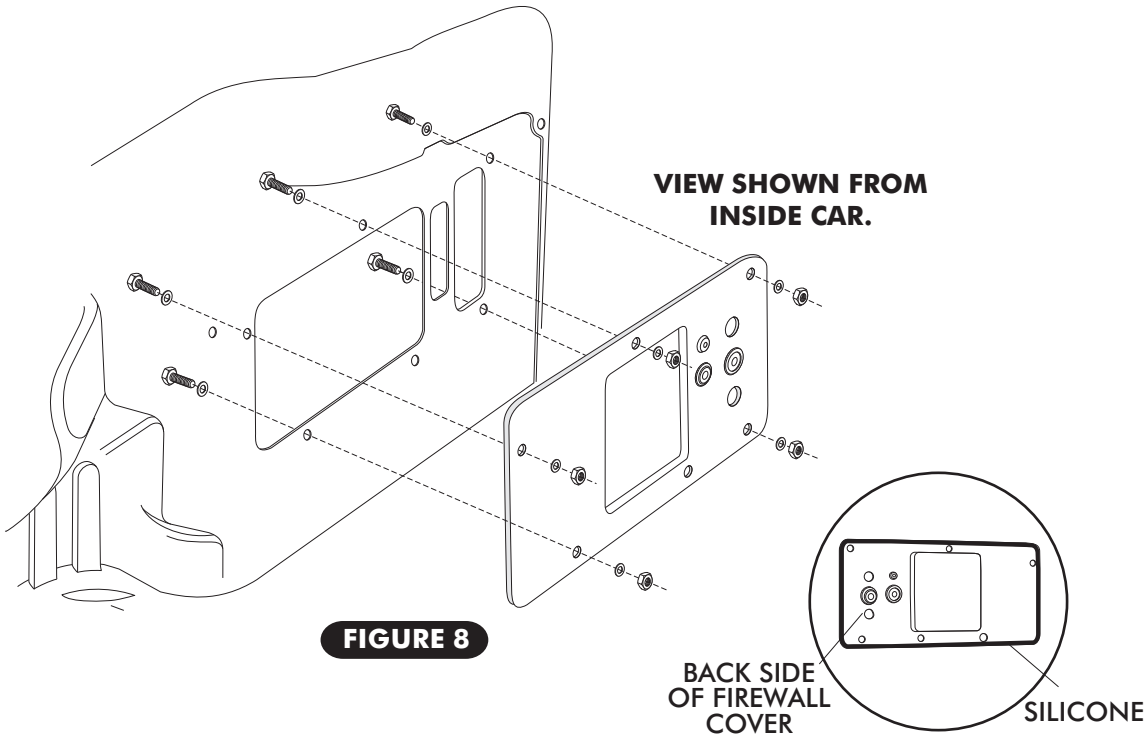


FIGURE 8

EVAPORATOR INSTALLATION CONT.

- ☐ **NOTE:** REMOVE #6 GROMMET, SEE FIGURE 9.
- ☐ 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 9.
- ☐ USING 1/4-20 X 1 1/4" PAN HEAD SCREW w/ 1/4" x 3/4" FLAT WASHER SECURE THE FRONT EVAPORATOR MOUNTING BRACKET TO DASH. SEE FIGURE 9 AND 9a.
- ☐ VERIFY THAT EVAPORATOR UNIT IS LEVEL AND SQUARE TO THE DASH, THEN TIGHTEN ALL MOUNTING BOLTS. (***NOTE**: TIGHTEN THE BOLT ON FIREWALL FIRST, THEN THE FRONT MOUNTING BRACKET SCREWS.*)
- ☐ ONCE EVAPORATOR IS INSTALLED. INSTALL #6 GROMMET OVER #6 HARDLINE FROM ENGINE COMPARTMENT.

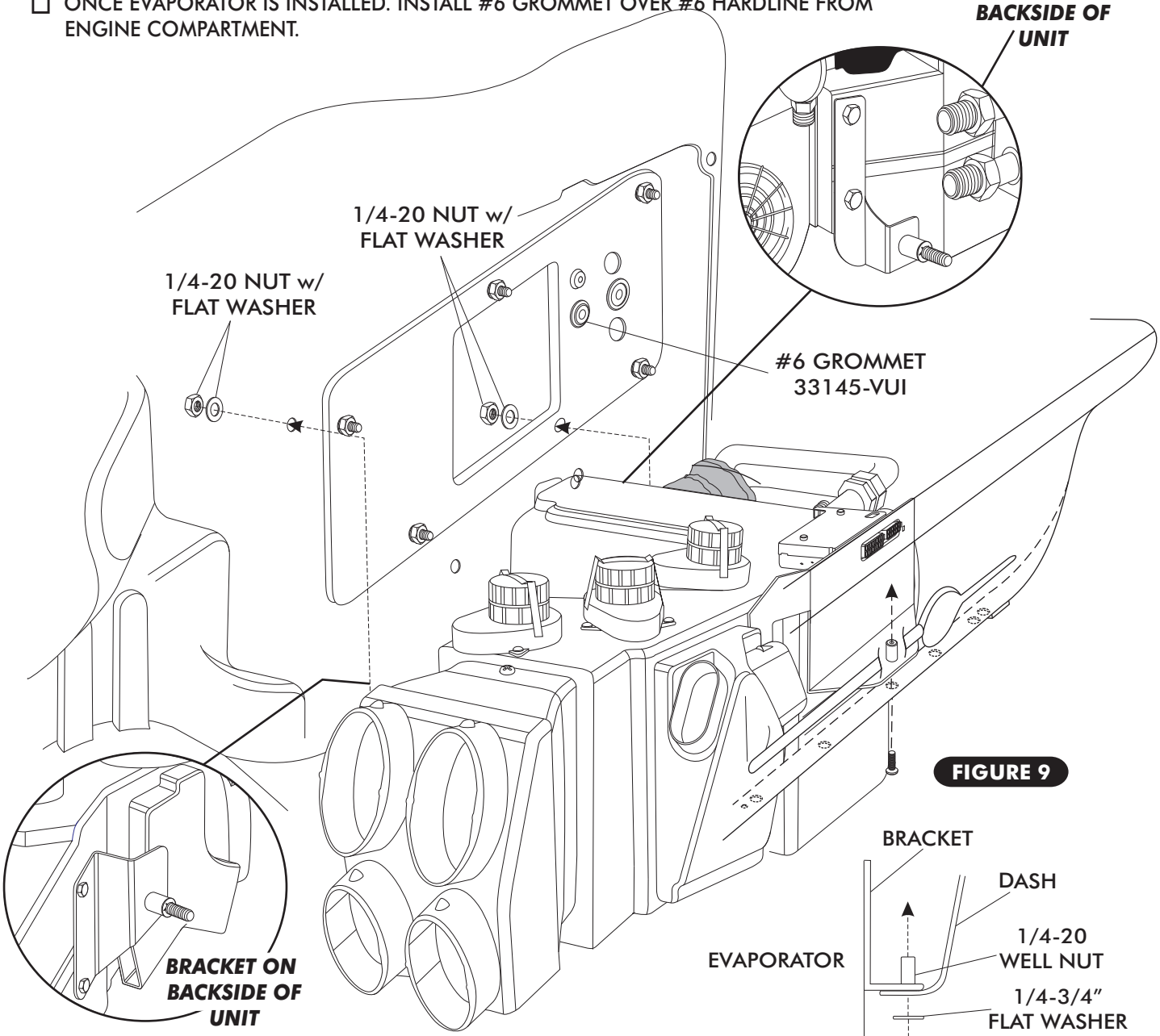


FIGURE 9

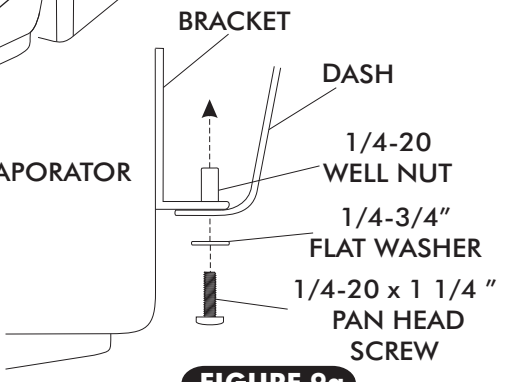


FIGURE 9a

DRAIN HOSE INSTALLATION

- ☐ LOCATE EVAPORATOR DRAIN ON BOTTOM OF EVAPORATOR CASE.
- ☐ IN-LINE WITH DRAIN, LIGHTLY MAKE A MARK ON THE FIREWALL MEASURE ONE INCH DOWN AND DRILL A 5/8" HOLE THROUGH THE FIREWALL. SEE FIGURE 10 BELOW.
- ☐ INSTALL DRAIN HOSE TO BOTTOM OF EVAPORATOR UNIT AND ROUTE THROUGH FIREWALL. SEE FIGURE 10.

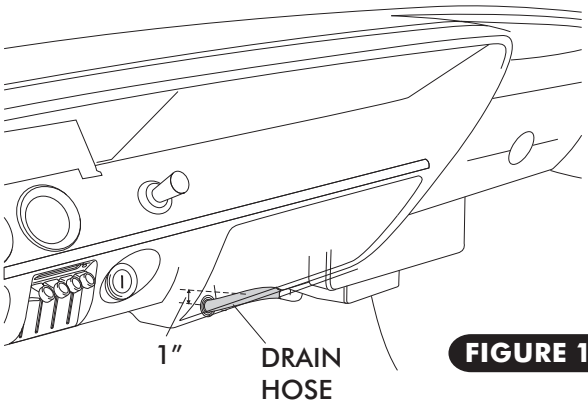


FIGURE 10

DRIVER SIDE UNDER DASH LOUVER MOUNTING HOLES

- ☐ CUT OUT TEMPLATE PROVIDED ON PAGE 25. PLACE THE TEMPLATE UNDER THE DASH ON THE DRIVER SIDE, BY ALIGNING THE LEFT SIDE OF THE TEMPLATE AGAINST THE EDGE OF THE DASH AS SHOWN. MAKE SURE THE OEM HOLES LINE UP WITH THE HOLES ON THE TEMPLATE AS SHOWN IN FIGURE 11, BELOW.
- ☐ ONCE TEMPLATE IS ALIGNED CORRECTLY AND TAPED INTO PLACE MARK MOUNTING HOLES ON DASH. ONCE HOLES ARE MARKED IN THE CORRECT LOCATION, DRILL (2) 3/16" HOLES IN THE DASH FOR THE DRIVER SIDE LOUVER BEZEL. SEE FIGURE 11.

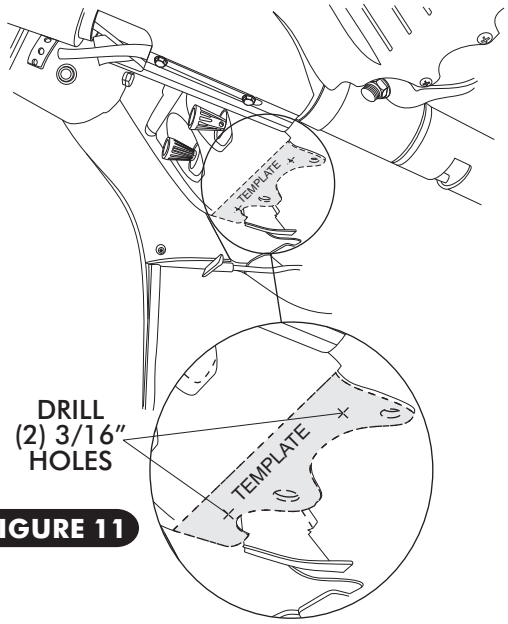


FIGURE 11

PASSENGER SIDE UNDER DASH LOUVER MOUNTING HOLES

- ☐ USING THE (2) OEM DIMPLES UNDER THE DASH AS SHOWN IN FIGURE 12. DRILL (2) 3/16" HOLES IN DASH AS SHOWN BELOW IN FIGURE 12.

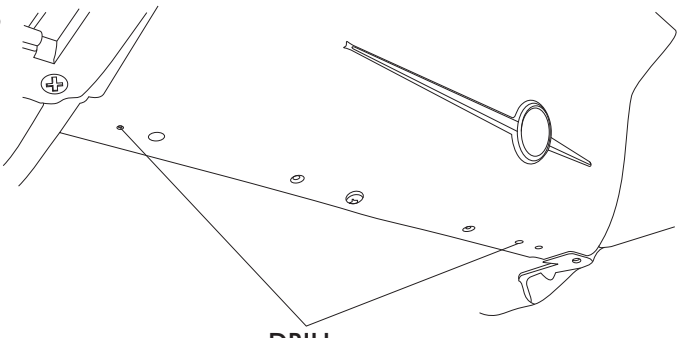


FIGURE 12

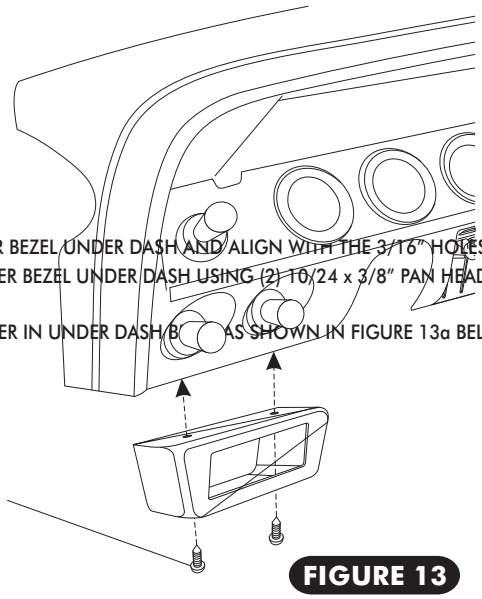
DRIVER SIDE UNDER DASH LOUVER INSTALLATION

☐

☐

SEE FIGURE 13 BELOW.

☐



PLACE LOUVER BEZEL UNDER DASH AND ALIGN WITH THE 3/16" HOLES IN DASH.
SECURE LOUVER BEZEL UNDER DASH USING (2) 10/24 x 3/8" PAN HEAD SCREW w/ 10/24 NUT w/ STAR WASHER

INSTALL LOUVER IN UNDER DASH B AS SHOWN IN FIGURE 13a BELOW.

FIGURE 13

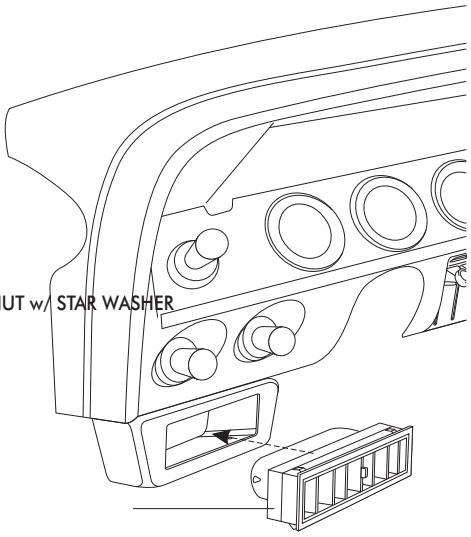


FIGURE 13a

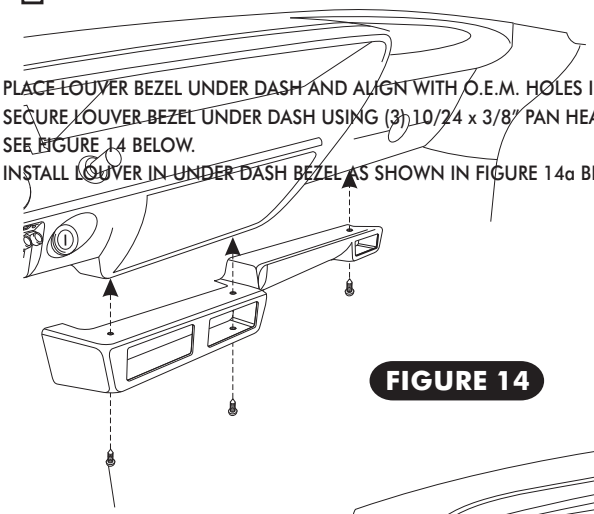
CENTER/PASSENGER SIDE UNDER DASH LOUVER INSTALLATION

(2) 10/24 x 3/8
☐ PAN
HEAD SCREWS
/NUT w/ STAR WASHER

☐

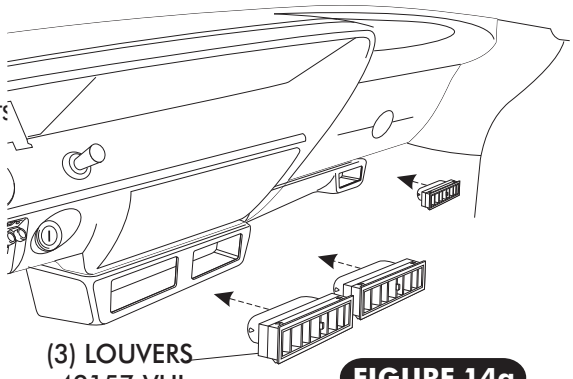
49157-VUL
LOUVERS

☐



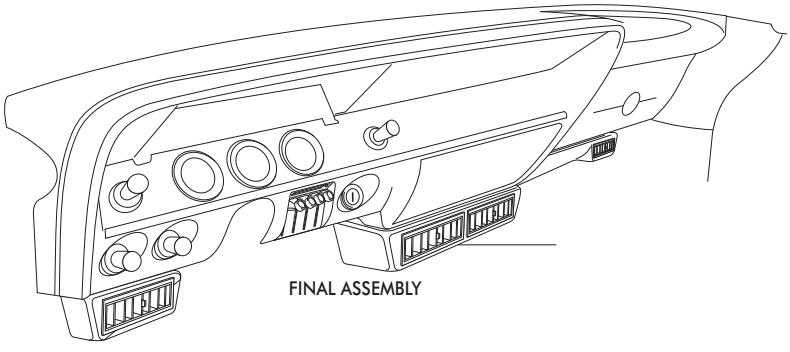
PLACE LOUVER BEZEL UNDER DASH AND ALIGN WITH O.E.M. HOLES IN DASH.
SECURE LOUVER BEZEL UNDER DASH USING (3) 10/24 x 3/8" PAN HEAD SCREW w/ 10/24 NUTS
SEE FIGURE 14 BELOW.
INSTALL LOUVER IN UNDER DASH BEZEL AS SHOWN IN FIGURE 14a BELOW.

FIGURE 14



(3) LOUVERS
49157-VUL

FIGURE 14a



(3) 10/24 x 3/8"
PAN HEAD SCREWS
w/ NUT w/STAR WASHER

FINAL ASSEMBLY

LUBRICATING O-RINGS

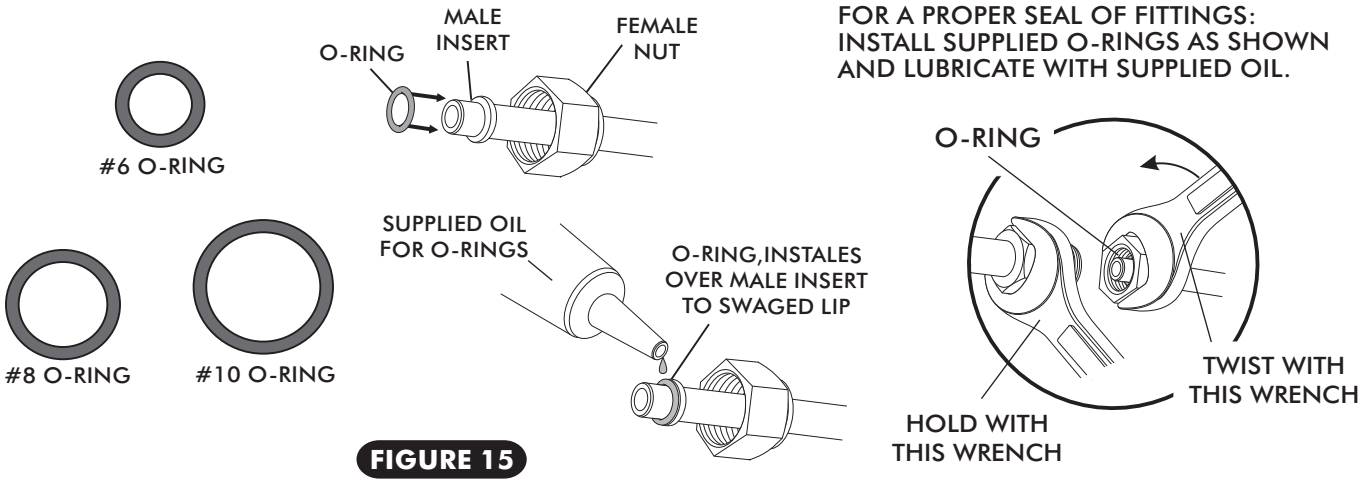


FIGURE 15

A/C HOSE INSTALLATION

STANDARD HOSE KIT

☐ LOCATE THE #8 COMPRESSOR A/C HOSE. LUBRICATE (2) #8 O-RINGS (SEE FIGURE 15, ABOVE) AND CONNECT THE 135° FEMALE FITTING w/ 134a SERVICE PORT TO THE #8 DISCHARGE PORT ON THE COMPRESSOR. ROUTE THE STRAIGHT FEMALE FITTING TO THE #8 CONDENSER HARDLINE COMING THROUGH CORE SUPPORT. SEE FIGURE 17, PAGE 16. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 15 ABOVE.

☐ LOCATE THE #10 COMPRESSOR A/C HOSE. LUBRICATE (2) #10 O-RINGS AND CONNECT THE #10 135° FEMALE FITTING w/134a SERVICE PORT TO THE #10 SUCTION PORT ON THE COMPRESSOR. ROUTE THE 45° FEMALE FITTING TO THE #10 EVAPORATOR HARDLINE COMING THROUGH THE FIREWALL SEE FIGURE 17, PAGE 16. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN 15 ABOVE. **(NOTE: WRAP THE #10 FITTING CONNECTIONS WITH PRESS TAPE. SEE FIGURE 16, PAGE 15.)**

☐ LOCATE THE #6 EVAP/ CORE HARDLINE AND LUBRICATE (2) #6 O-RINGS AND CONNECT THE HARDLINE TO THE #6 HARDLINE COMING THROUGH THE CORE SUPPORT FROM DRIER. ATTACH THE OTHER END OF THE HARDLINE WITH LUBRICATED O-RING TO THE #6 EVAPORATOR HARDLINE COMING THROUGH THE FIREWALL. SEE FIGURE 17, PAGE 16. TIGHTEN EACH FITTING CONNECTION AS SHOWN IN FIGURE 15, ABOVE.

☐ USE A #2 & #10 ADEL CLAMP TO SECURE THE #6 EVAP/ CORE HARDLINE AND THE 5/8" HEATER HOSE TO THE INNER FENDER WELL AS SHOWN IN FIGURE 17, PAGE 16. SECURE THE ADEL CLAMP TO THE INNER FENDER USING (2)10-32 x ½" PAN HEAD SCREWS w/ NUTS.

MODIFIED A/C HOSE KIT

☐ REFER TO SEPARATE INSTRUCTIONS INCLUDED WITH MODIFIED HOSE KIT.

HEATER HOSE & HEATER CONTROL VALVE INSTALLATION

NOTE: *VINTAGE AIR SYSTEMS REQUIRE (2) 5/8 HOSE NIPPLES (NOT SUPPLIED). ONE FOR THE INTAKE (PRESSURE) AND ONE FOR THE WATER PUMP (SUCTION) - IF REQUIRED REMOVE EXISTING HOSE NIPPLE OR NIPPLES AND INSTALL NEW 5/8 HOSE NIPPLES IN INTAKE AND WATER PUMP.*

☐ ROUTE HEATER HOSE FROM THE WATER PUMP TO THE HEATER LINE COMING THROUGH THE FIREWALL AS SHOWN IN FIGURE 16, BELOW. SECURE USING HOSE CLAMPS.

☐ ROUTE HEATER HOSE FROM THE INTAKE TO THE HEATER LINE COMING THROUGH THE FIREWALLAS SHOWN IN FIGURE 16, BELOW. NOTE: INSTALL HEATER CONTROL VALVE IN-LINE WITH INTAKE MANIFOLD (PRESSURE SIDE) HEATER HOSE, SECURE USING HOSE CLAMPS AS SHOWN IN FIGURE 16, BELOW. ***NOTE PROPER FLOW DIRECTION***.

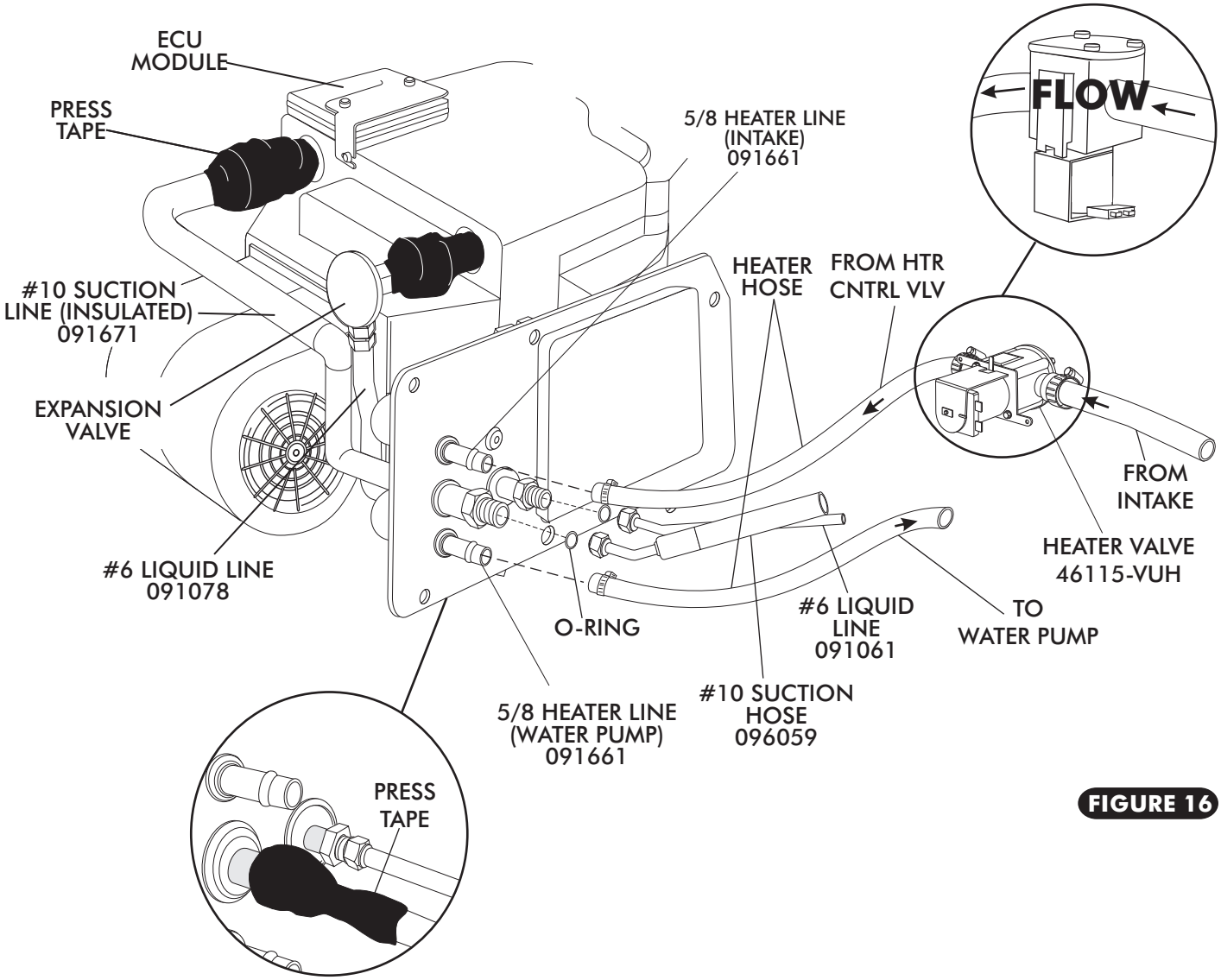


FIGURE 16

AC & HEATER HOSE ROUTING

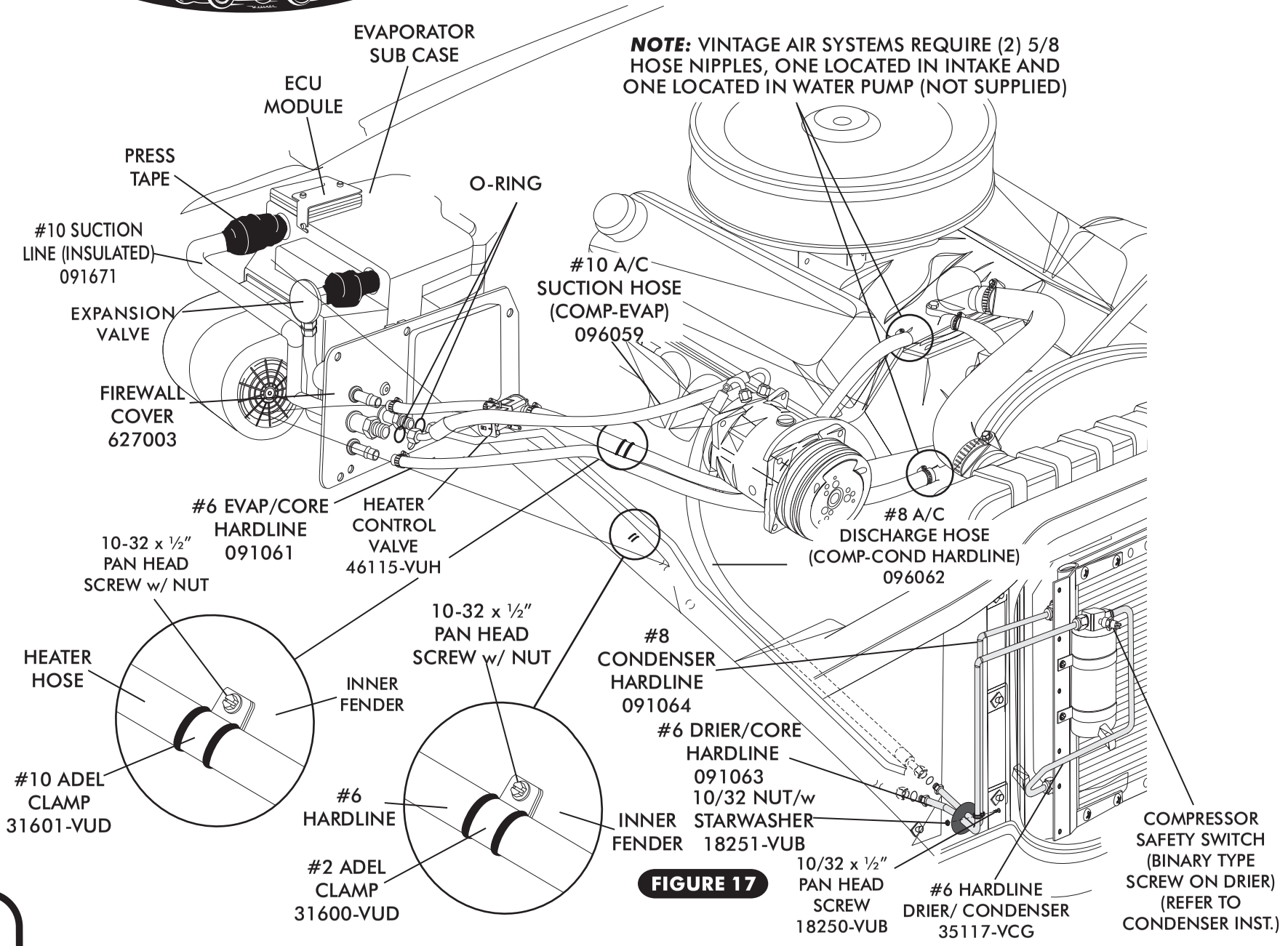


FIGURE 17

FINAL STEPS

- ☐ INSTALL DUCT HOSES AS SHOWN IN FIGURE 19, PAGE 18.
- ☐ ROUTE A/C WIRES THROUGH 5/8 GROMMET AS SHOWN ON FIGURE 18a (12 VOLT/ GROUND/ BINARY SWITCH/ HEATER VALVE)
- ☐ INSTALL CONTROL PANEL ASM.
- ☐ PLUG THE CONTROL PANEL HARNESS INTO THE ECU MODULE ON SUB CASE AS SHOWN IN PAGE 18.
- ☐ PLUG THE WIRING HARNESS INTO THE ECU MODULE ON SUB CASE AS SHOWN IN FIGURE 19, PAGE 18. (WIRE ACCORDING TO WIRING DIAGRAM ON PAGE 20 & 21.)
- ☐ GLOVE BOX INSTALLATION (SEE FIGURE 18)
- ☐ REINSTALL ALL PREVIOUSLY REMOVED ITEMS (BATTERY, RADIO, SPEAKER).
- ☐ FILL RADIATOR WITH AT LEAST A 50/50 MIXTURE OF APPROVED ANTIFREEZE AND DISTILLED WATER.
  IT IS THE OWNERS 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 AC MODE AND/OR FREEZING WEATHER, VOIDING YOUR WARRANTY.
- ☐ DOUBLE CHECK ALL FITTINGS, BRACKETS AND BELTS FOR TIGHTNESS.
- ☐ VINTAGE AIR RECOMMENDS THAT ALL AC SYSTEMS BE SERVICED BY A CERTIFIED AUTOMOTIVE AIR CONDITIONING TECHNICIAN.
- ☐ EVACUATE THE SYSTEM FOR A MINIMUM OF 45 MINUTES PRIOR TO CHARGING AND LEAK CHECK PRIOR TO SERVICING.
- ☐ CHARGE THE SYSTEM TO THE CAPACITIES STATED ON THE INFORMATION PAGE (PAGE 4) OF THIS INSTRUCTION MANUEL.

GLOVE BOX INSTALLATION

- ☐ INSTALL GLOVE BOX PROVIDED, SECURE WITH (3) OEM SCREWS THROUGH OEM HOLES. SEE FIGURE 18.
- ☐ INSTALL GLOVE BOX DOOR.

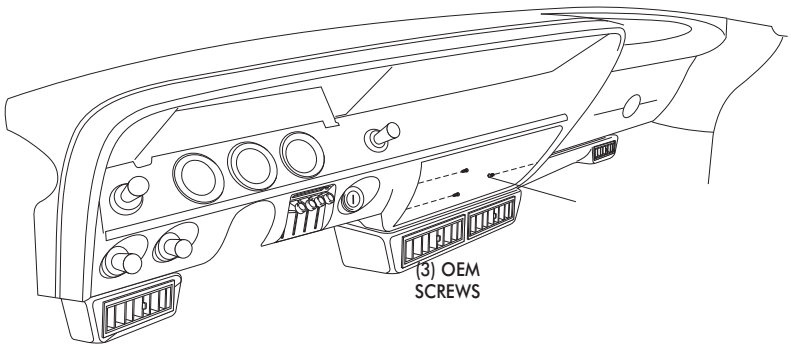


FIGURE 18

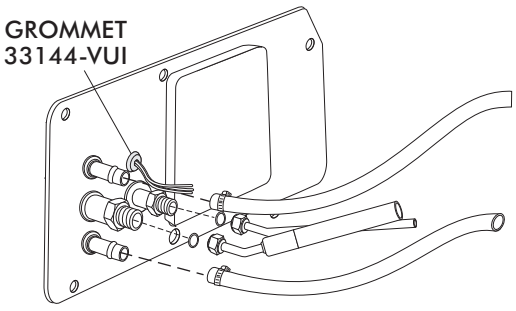


FIGURE 18a

CONTROL PANEL & DUCT HOSE ROUTING

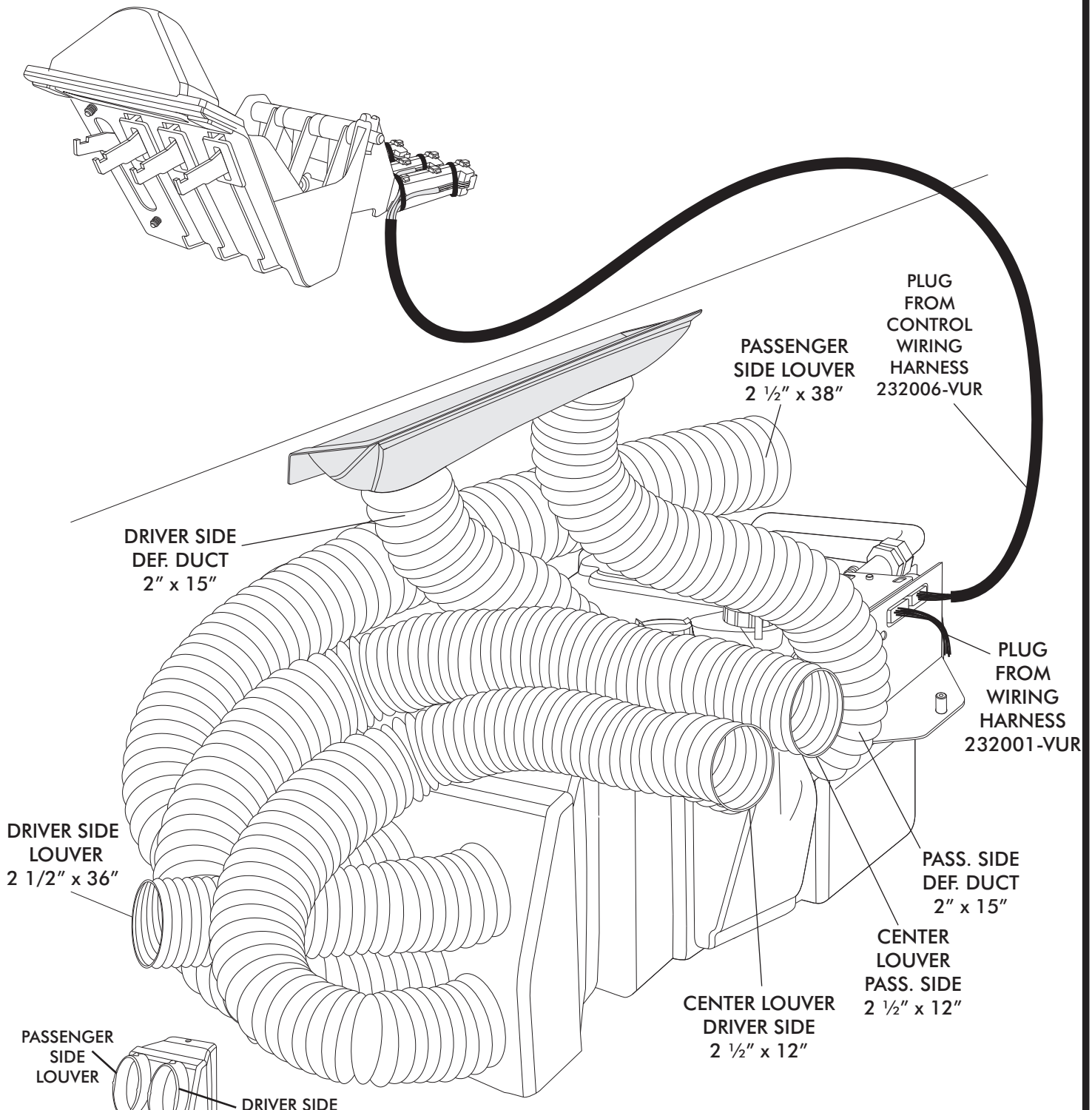


FIGURE 19

EVAPORATOR HARD LINE INSTALLATION

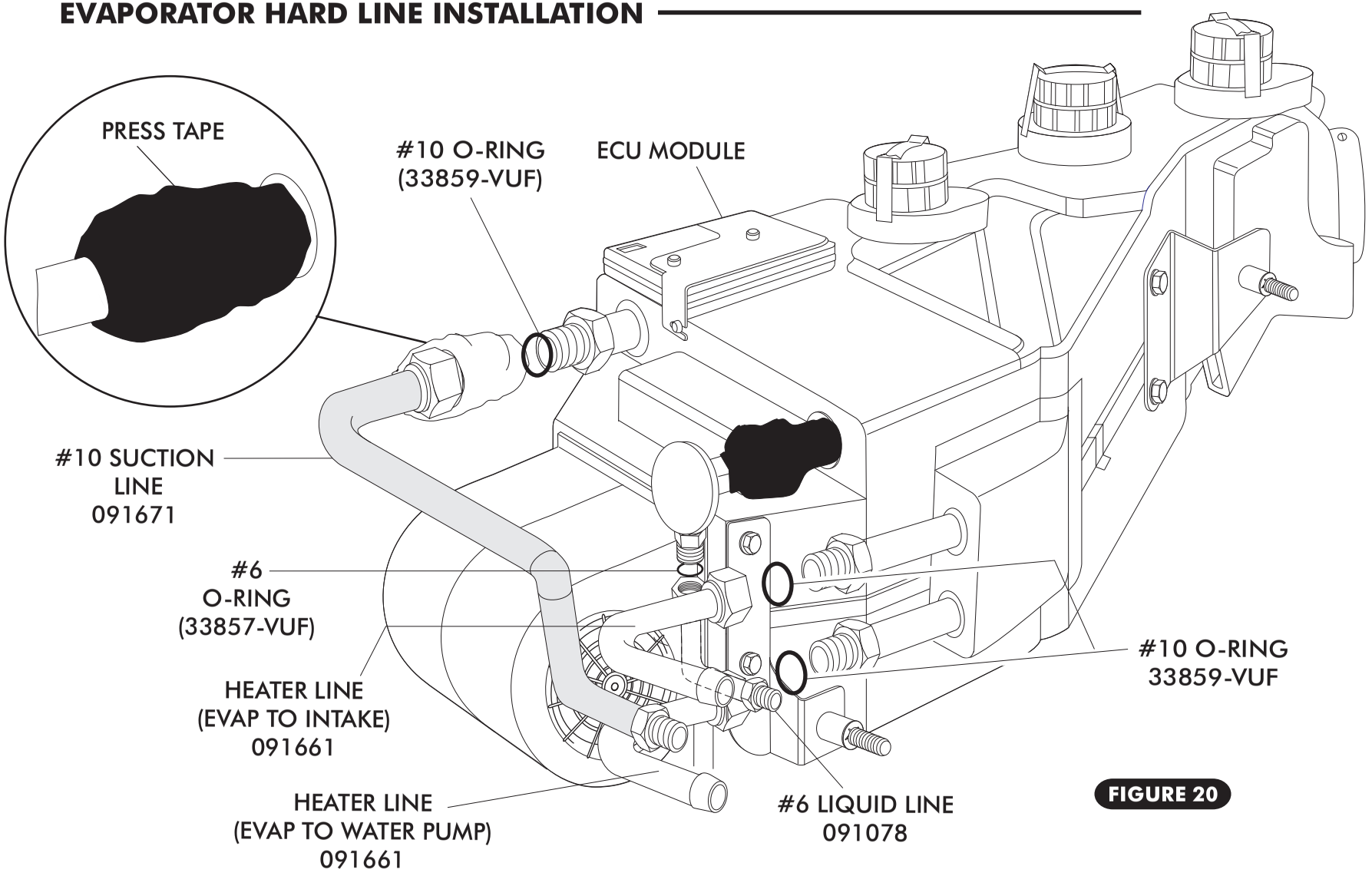
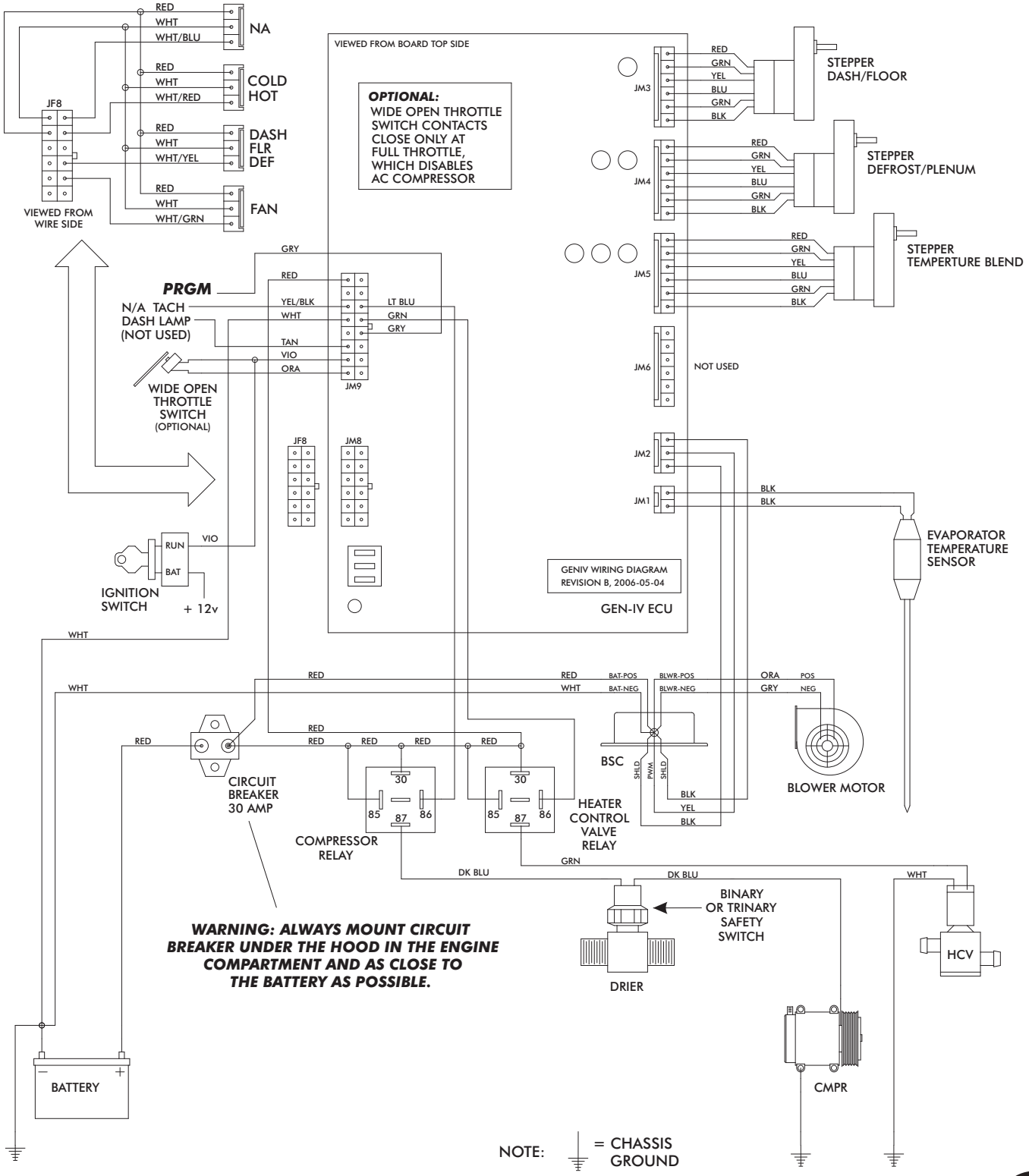
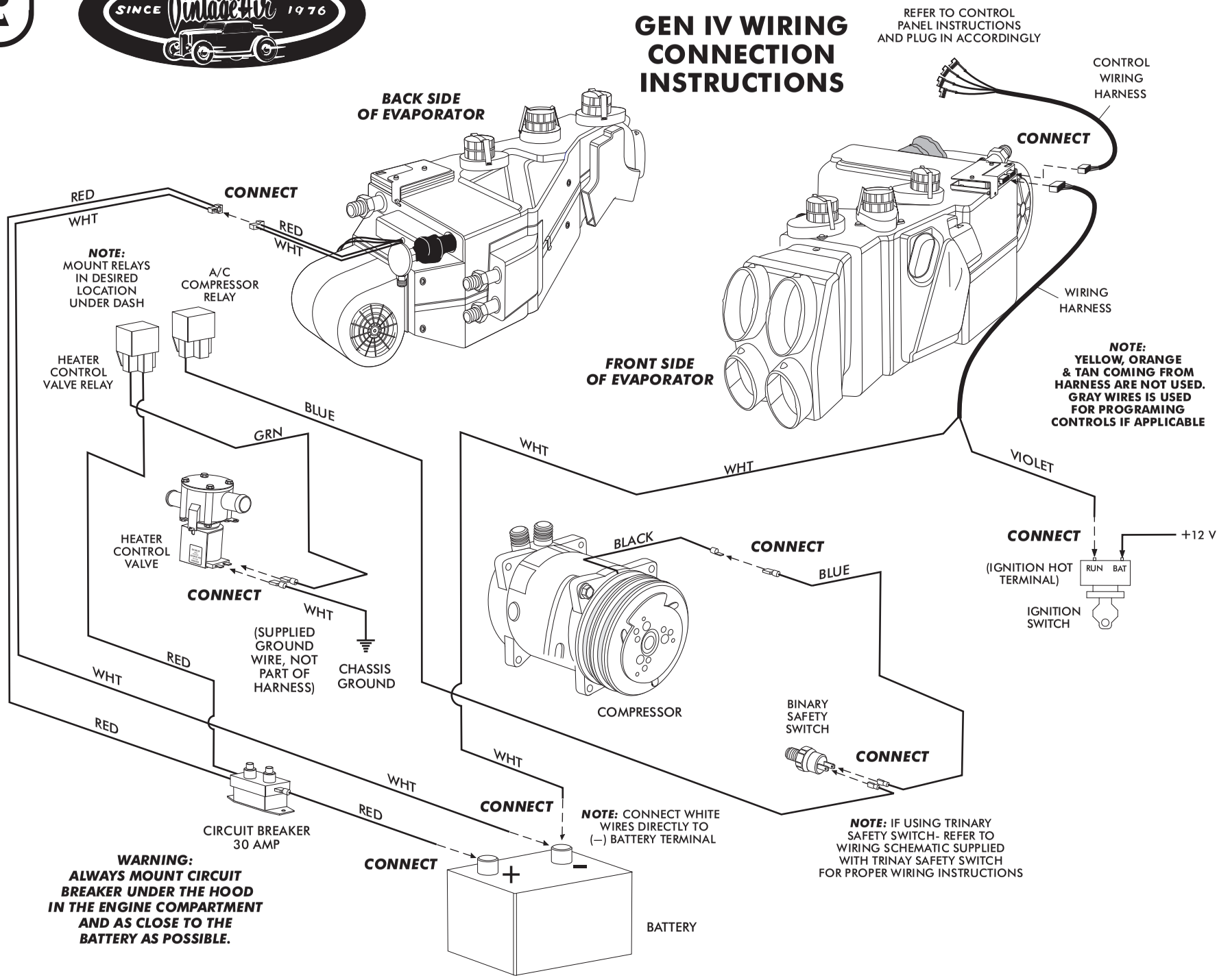


FIGURE 20

WIRING DIAGRAM

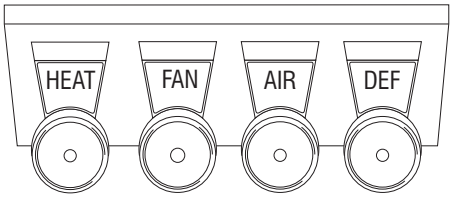


GEN IV WIRING CONNECTION INSTRUCTIONS



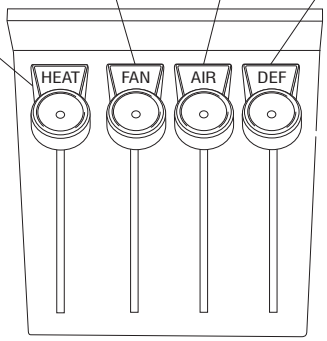
OPERATION OF CONTROLS

NOTE: WHEN BATTERY POWER IS FIRST CONNECTED TO THE ECU, THE COMPUTER GOES THROUGH AN INITIALIZATION SEQUENCE. THIS INITIALIZATION MAY TAKE UP TO 30 SECONDS. DURING INITIALIZATION THE BLOWER WILL NOT OPERATE, BUT THE DOORS INSIDE THE UNIT WILL BE OPERATING. A LOW BATTERY OR DISCONNECTING THE BATTERY MAY ALSO TRIGGER A RE-INITIALIZATION. DURING START UP, A LOW BATTERY MAY DROP BELOW 7 VOLTS, TRIGGERING RE-INITIALIZATION.



INSTALL KNOBS AS SHOWN

NOTE: ORIGINAL BLOWER SWITCH WILL NOT BE USED.



SYSTEM OFF

BLOWER SPEED
THIS LEVER CONTROLS THE BLOWER SPEED, FROM OFF TO HI

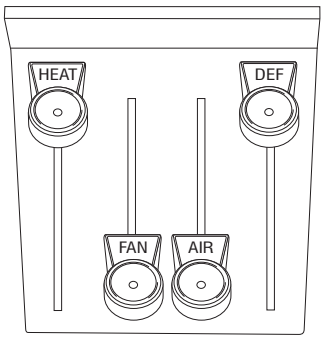
THERMOSTAT LEVER
THIS LEVER CONTROLS THE TEMPERATURE FROM HOT TO COLD

MODE LEVER
THIS LEVER CONTROLS THE MODE POSITIONS FROM DASH TO FLOOR TO DEFROST

BLOWER SPEED
SLIDE THE FAN LEVER UP OR DOWN TO SELECT DESIRE FAN SPEED (SLIDE LEVER ALL THE WAY DOWN FOR MAXIMUM FAN SPEED)

THERMOSTAT LEVER
IN A/C MODE SLIDE THE AIR LEVER ALL THE WAY DOWN TO ENGAGE COMPRESSOR FOR MAXIMUM COOLING. (SLIDE LEVER UP OR DOWN TO ADJUST DESIRED TEMPERATURE)

MODE LEVER
SLIDE THE DEF LEVER ALL THE WAY UP FOR DASH MODE

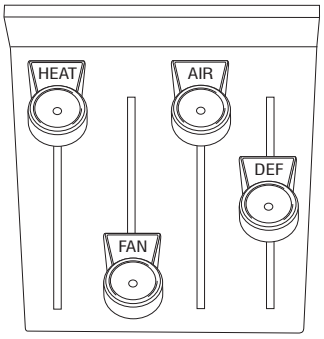


A/C MODE

BLOWER SPEED
SLIDE THE FAN LEVER UP OR DOWN TO SELECT DESIRE FAN SPEED (SLIDE LEVER ALL THE WAY DOWN FOR MAXIMUM FAN SPEED)

THERMOSTAT LEVER
IN HEAT MODE SLIDE THE AIR LEVER ALL THE WAY UP FOR MAXIMUM HEATING. (SLIDE LEVER UP OR DOWN TO ADJUST DESIRED TEMPERATURE)

MODE LEVER
SLIDE THE DEF LEVER TO THE CENTER FOR FLOOR MODE (SLIDE LEVER UP OR DOWN TO BLEND BETWEEN DESIRED MODE POSITIONS)

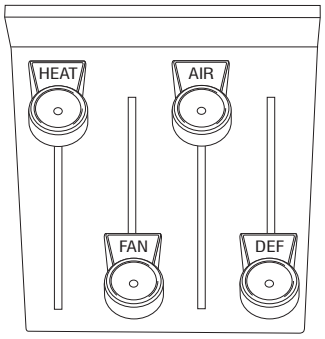


HEAT MODE

BLOWER SPEED
SLIDE THE FAN LEVER UP OR DOWN TO SELECT DESIRE FAN SPEED (SLIDE LEVER ALL THE WAY DOWN FOR MAXIMUM FAN SPEED)

THERMOSTAT LEVER
IN DEF/DEFOG MODE THE COMPRESSOR IS AUTOMATICALLY ENGAGED FOR MAXIMUM COOLING. (SLIDE LEVER UP OR DOWN TO ADJUST DESIRED TEMPERATURE)

MODE LEVER
SLIDE THE DEF LEVER ALL THE WAY DOWN FOR DEFROST MODE (SLIDE LEVER UP OR DOWN TO BLEND BETWEEN DESIRED MODE POSITIONS)



DEFROST/DEFOG MODE

TROUBLE SHOOTING INFORMATION

SYMPTOM	*CONDITION*	*CHECKS*	*ACTIONS*	*NOTES*
1. BLOWER STAYS ON HIGH SPEED WHEN IGNITION IS ON	NO OTHER FUNCTIONS WORK	CHECK FOR DAMAGED PINS OR WIRES IN CONTROL HEAD PLUG.	VERIFY ALL PINS ARE INSERTED INTO PLUG. INSURE NO PINS ARE BENT OR DAMAGED IN ECU.	
		CHECK FOR DAMAGED GROUND WIRE (WHITE) IN CONTROL HEAD HARNESS.	VERIFY CONTINUITY TO CHASSIS GROUND WITH WHITE CONTROL HEAD WIRE AT VARIOUS POINTS.	LOSS OF GROUND ON THIS WIRE WILL RENDER CONTROL HEAD INOPERABLE
	ALL OTHER FUNCTIONS WORK	CHECK FOR DAMAGED BLOWER SWITCH OR POT AND ASSOCIATED WIRING.		SEE BLOWER SWITCH CHECK PROCEDURE
BLOWER STAYS ON HIGH SPEED WHEN IGNITION IS ON OR OFF.		UN-PLUG 3 WIRE BSC CONTROL CONNECTOR FROM ECU. IF BLOWER SHUTS OFF, ECU IS EITHER IMPROPERLY WIRED, OR DAMAGED.	BE SURE SMALL, 20GA. WHITE GROUND WIRE IS CONNECTED TO THE BATTERY GROUND POST. IF IT IS, REPLACE ECU.	
		UN-PLUG 3 WIRE BSC CONTROL CONNECTOR FROM ECU. IF BLOWER STAYS RUNNING, THE BSC IS EITHER IMPROPERLY WIRED, OR DAMAGED.	CHECK TO INSURE THAT NO BSC WIRING IS DAMAGED OR SHORTED TO VEHICLE GROUND. THE BSC OPERATES THE BLOWER BY GROUND SIDE PWM 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 EVAPORATOR TO BE REMOVED 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 COMP. TO ENGAGE.	CHARGE SYSTEM OR BYPASS PRESSURE SWITCH .	***DANGER- NEVER BYPASS SAFETY SWITCH WITH ENGINE RUNNING, SERIOUS INJURY CAN RESULT***
		CHECK FOR FAULTY A/C POT OR ASSOC. WIRING (NOT APPLICABLE TO 3 POT CONTROLS)	CHECK CONTINUITY TO GROUND ON WHITE CONTROL HEAD WIRE. CHECK FOR 5V ON RED CONTROL HEAD WIRE.	TO CHECK FOR PROPER POT FUNCTION, CHECK VOLTAGE AT WHITE/BLUE WIRE. VOLTAGE SHOULD BE BETWEEN 0 AND 5V, AND WILL VARY WITH POT LEVER POSITION.
		CHECK FOR DISCONNECTED OR FAULTY THERMISTOR.	CHECK TWO 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 POT OR ASSOC. WIRING	REPAIR/REPLACE POT/CONTROL WIRING	RED WIRE @ A/C POT SHOULD HAVE APPROX. 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 AND DOWN.
		CHECK FOR FAULTY A/C RELAY	REPLACE RELAY	

TROUBLE SHOOTING INFORMATION CONT.

4. SYSTEM WILL NOT TURN ON OR RUNS INTERMITTENTLY	WORKS WHEN ENGINE IS NOT RUNNING, SHUTS OFF WHEN ENGINE IS STARTED. (TYPICALLY EARLY GEN 4, BUT POSSIBLE ON ALL VERSIONS)	NOISE INTERFERENCE FROM EITHER IGNITION OR ALTERNATOR.	INSTALL CAPACITORS ON IGN. COIL, AND ALTERNATOR. ENSURE GOOD GROUND AT ALL POINTS.RE-LOCATE 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 OSCILISCOPE. SPIKES GREATER THAN 16V WILL SHUT DOWN ECU. INSTALL A RADIO CAPACITOR AT THE POSITIVE POST OF THE IGNITION COIL (SEE RADIO CAPACITOR INSTALLATION BULLETEN). A FAULTY ALTERNATOR OR WORN OUT BATTERY CAN ALSO RESULT IN THIS CONDITION. BATTERY MUST BE IN GOOD CONDITION FOR ALTERNATOR REGULATOR TO FUNCTION PROPERLY.
	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 A KNOWN GOOD BATTERY'S VOLTAGE.	

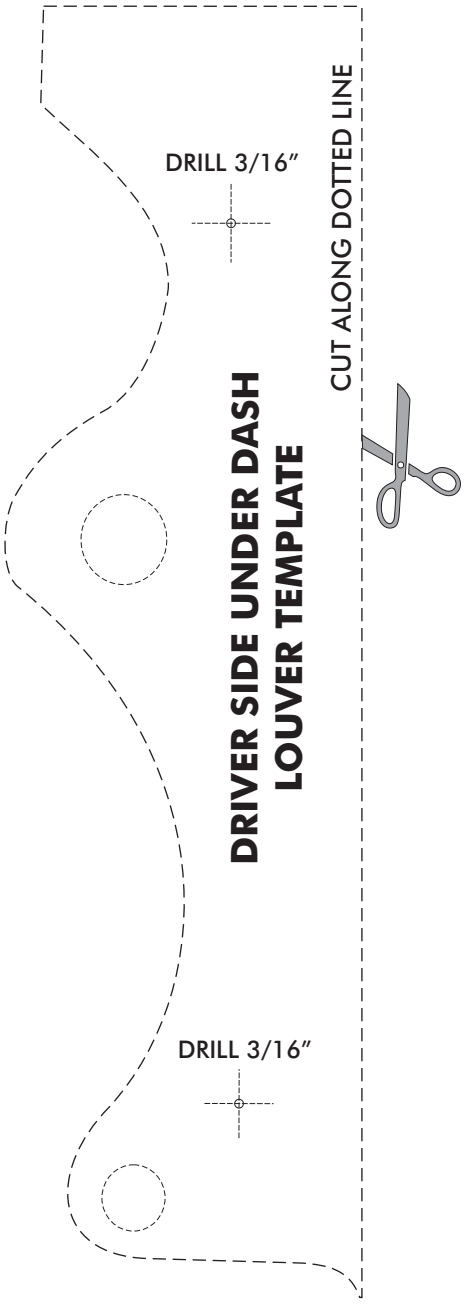
5. LOSS OF MODE DOOR FUNCTION	NO MODE CHANGE AT ALL	CHECK FOR DAMAGED MODE SWITCH OR POT AND ASSOCIATED WIRING		
	PARTIAL FUNCTION OF MODE DOORS	CHECK FOR OBSTRUCTED OR BINDING MODE DOORS		TYPICALLY CAUSED BY EVAPORATOR HOUSING INSTALLED IN A BIND IN THE VEHICLE. BE SURE ALL MOUNTING LOCATIONS LINE UP AND DON'T HAVE TO BE FORCED INTO POSITION.
		CHECK FOR DAMAGED STEPPER MOTOR OR WIRING		

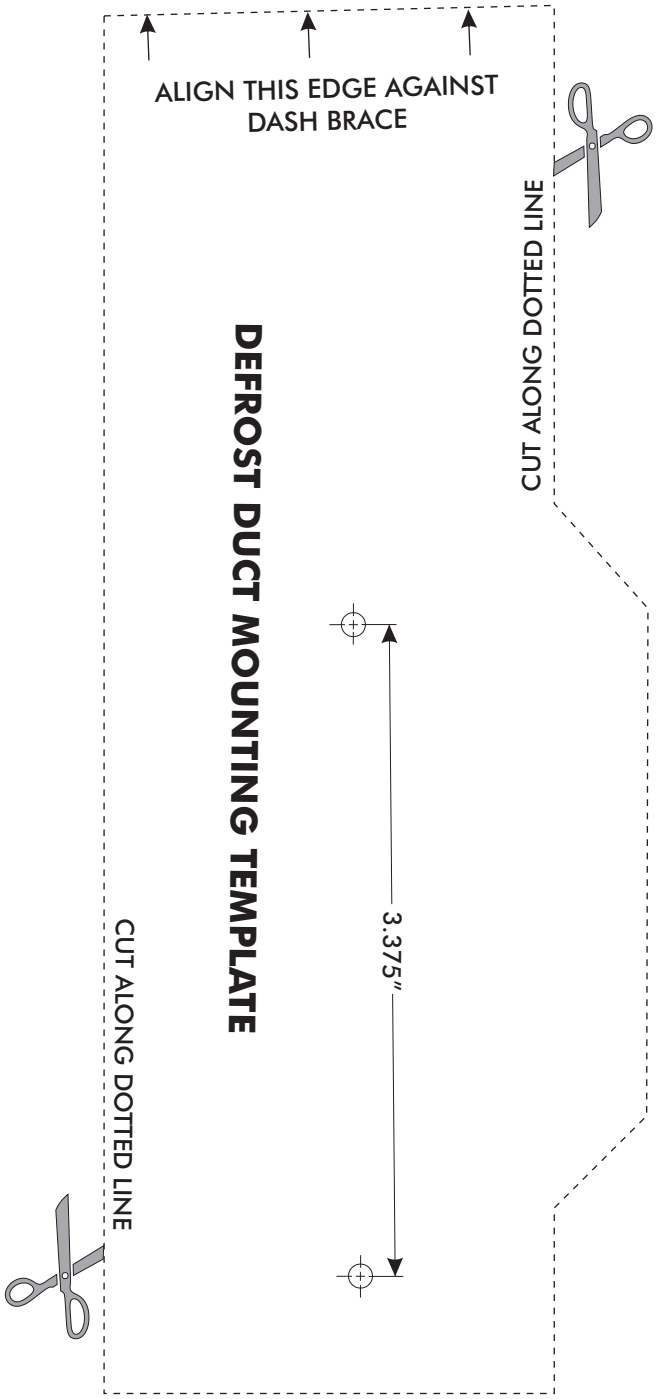
6. BLOWER TURNS ON AND OFF RAPIDLY	BATTERY VOLTAGE IS AT LEAST 12V	CHECK FOR AT LEAST 12V BETWEEN GREEN HEATER VALVE WIRE AND CHASSIS GROUND.	INSURE ALL SYSTEM GROUNDS AND POWER CONNECTIONS ARE CLEAN AND TIGHT.	
	BATTERY VOLTAGE IS LESS THAN 12V	CHECK FOR FAULTY BATTERY OR ALTERNATOR	CHARGE BATTERY	SYSTEM SHUTS OFF BLOWER AT 10V. POOR CONNECTIONS OR WEAK BATTERY CAN CAUSE SHUT DOWN AT UP TO 11V

7. ERATIC FUNCTIONS OF BLOWER, MODE, TEMP, ETC.		CHECK FOR DAMAGED SWITCH OR POT AND ASSOCIATED WIRING	REPAIR OR REPLACE	

8. WHEN THE IGNITION IS TURNED ON, THE BLOWER MOMENTARILY COMES ON, THEN SHUTS OFF. THIS IS WITH THE BLOWER SWITCH IN THE OFF POSITION.		THIS IS AN INDICATOR THAT THE SYSTEM HAS BEEN RE-SET. 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 EVEN FOR A SPLIT SECOND, THE SYSTEM WILL RE-SET.	RUN RED POWER WIRE DIRECTLY TO BATTERY.	

DRIVER SIDE UNDER DASH LOUVER BEZEL TEMPLATE & DEFROST DUCT MOUNTING TEMPLATE





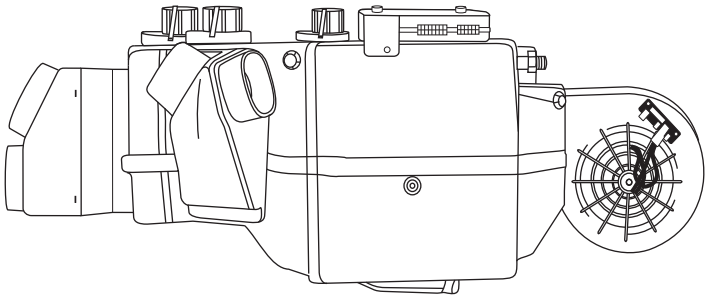
EVAPORATOR KIT PACKING LIST

EVAPORATOR KIT
561062

No.	QTY.	PART No.	DESCRIPTION	
1.	1	744004-VUE	GEN IV MAGNUM EVAP. SUBCASE	_____
2.	1	784061	1961-62 IMPALA w/o AC ACC. KIT	_____

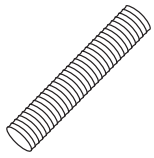
CHECKED BY: _____
PACKED BY: _____
DATE: _____

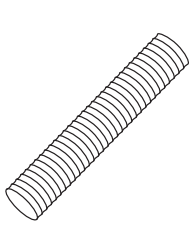
①

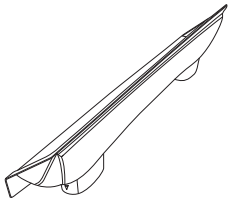


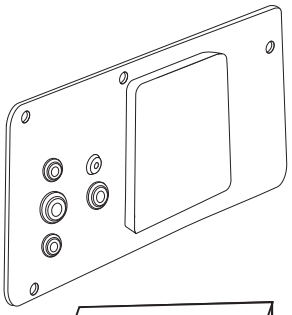
GEN IV MAGNUM
EVAP. SUB CASE
744004-VUE

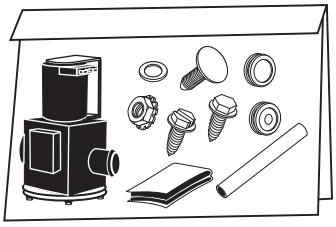
②

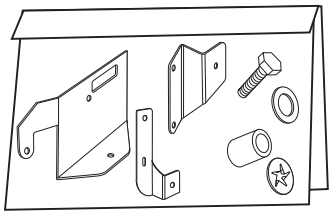


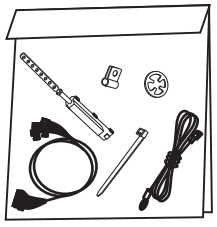


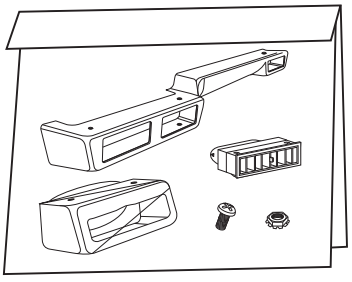


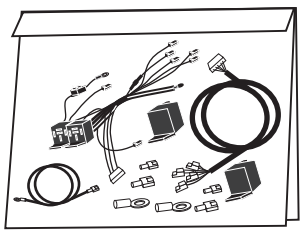


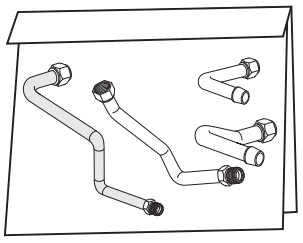


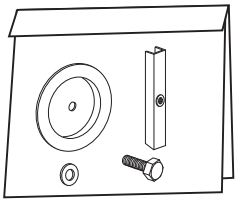












ACCESSORY KIT
784061