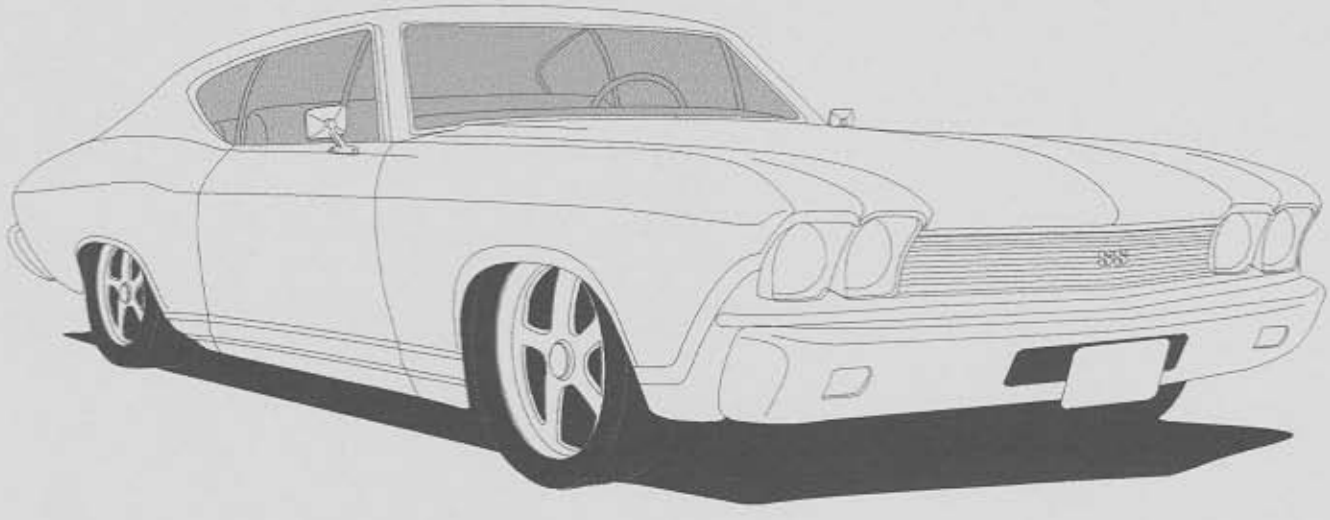
VINTAGE AIR
18865 GOLL ST. - SAN ANTONIO, TX. - 78266 - ph.210-654-7171 - fax 210-654-3113

INSTALLATION INSTRUCTIONS FOR

1968-69 CHEVELLE

W/ FACTORY AIR CONDITIONING
(55169-VCZ-A)



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1968-69 CHEVELLE W/FA EVAPORATOR KIT PACKING LIST

EVAPORATOR KIT
55169-VCZ-A

No.	QTY.	PART No.	DESCRIPTION
1.	1	55469-VCE-A	EVAPORATOR SUBCASE W/BRKT
2.	1	78168-ACF	1968-69 CHEVELLE W/ AC 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.***

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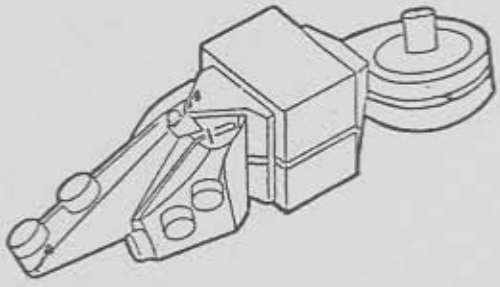

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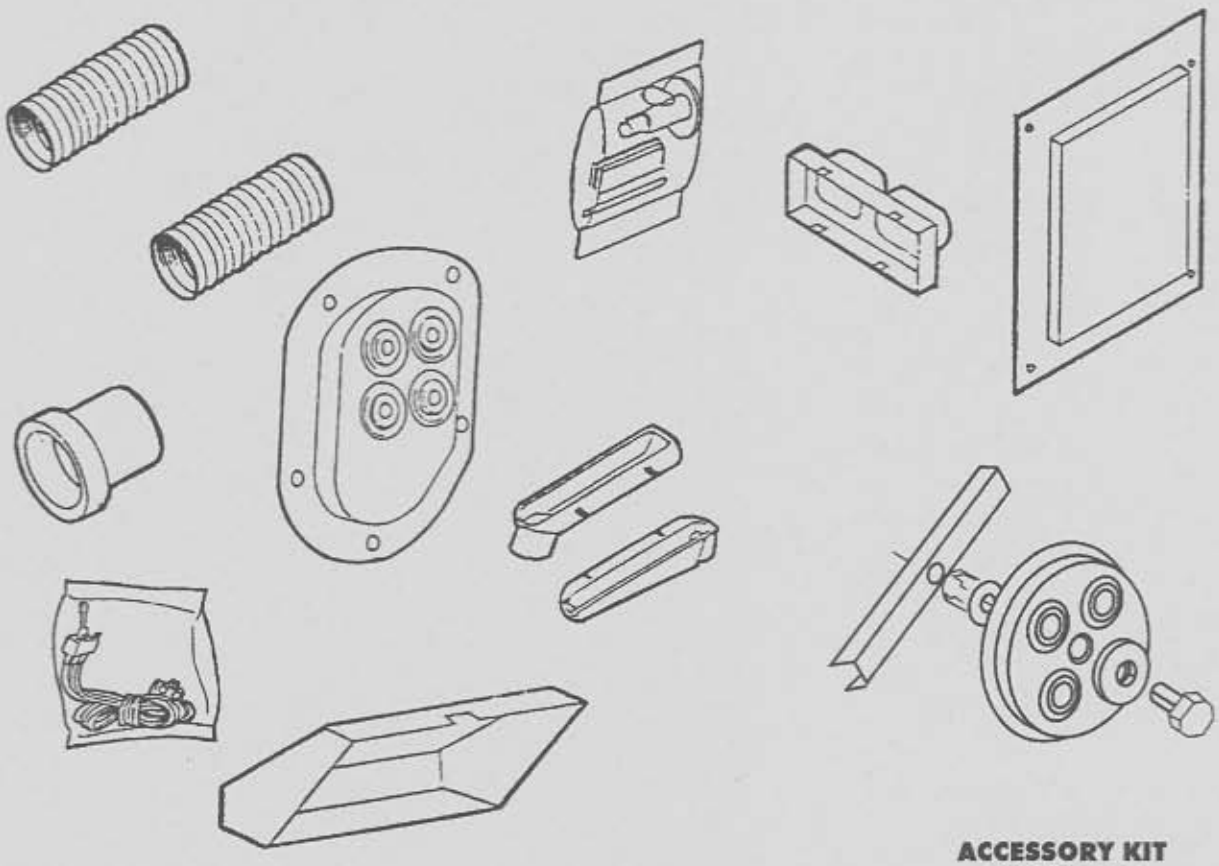


ACCESSORY KIT
78168-ACF

1968-69 CHEVELLE
WITH FACTORY AIR CONDITIONING

IMPORTANT NOTICE-PLEASE READ

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 lb.), 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 lbs., 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:

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.

THE PROPER 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

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

PASSENGER COMPARTMENT

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

1. REMOVE STEERING COLUMN COVER.
2. DROP STEERING COLUMN DOWN.
3. DROP GAUGE PANEL DOWN.
4. REMOVE GLOVE BOX DOOR.
5. REMOVE GLOVE BOX (DISCARD).
6. REMOVE OEM SIDE VENTS.
7. REMOVE OEM CONTROL PANEL.
8. REMOVE PASSENGER SIDE KICK PANEL.
9. REMOVE OEM HEATER/AC COVER - DISCARD (INNER FENDER MUST BE LOOSENED & LOWERED DOWN TO ALLOW REMOVAL. NOTE: CAR MAY NEED TO BE JACKED UP SLIGHTLY TO ALLOW ENOUGH SPACE FOR UNIT TO BE REMOVED).
10. REMOVE OEM HEATER (DISCARD).
11. REMOVE OEM DEFROST DUCTS (DISCARD).
12. REMOVE KICK-PANEL VACUUM DOOR.

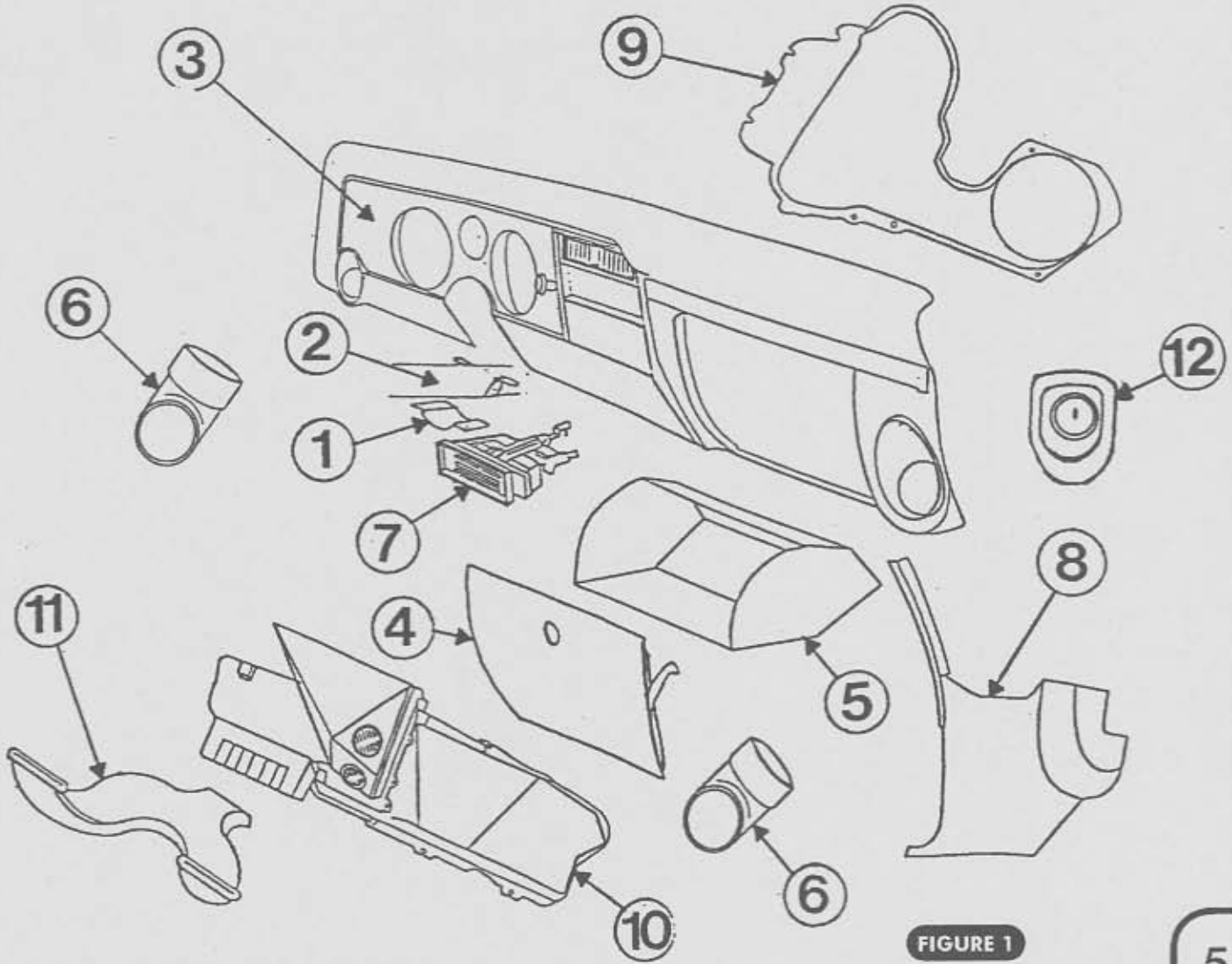


FIGURE 1

O.E.M. CONTROLS

REPLACEMENT BLOWER SWITCH INSTALLATION

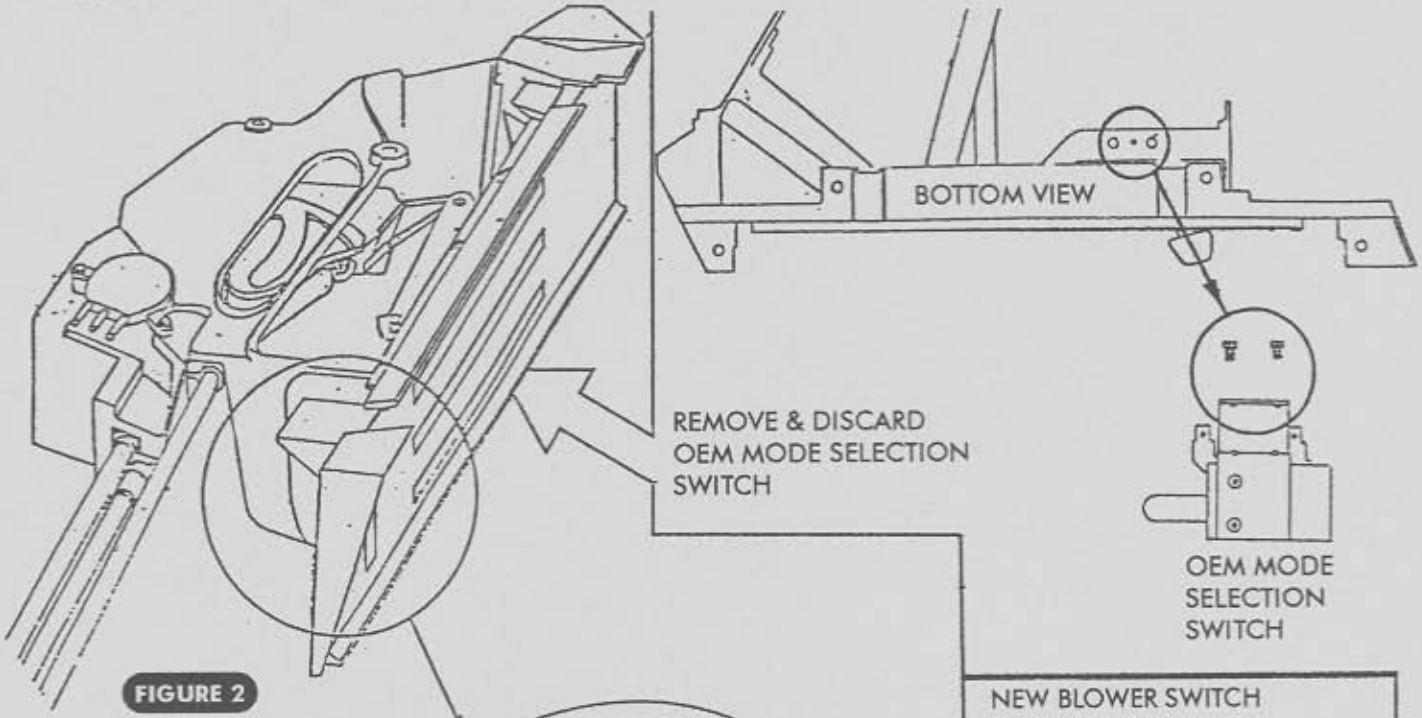


FIGURE 2

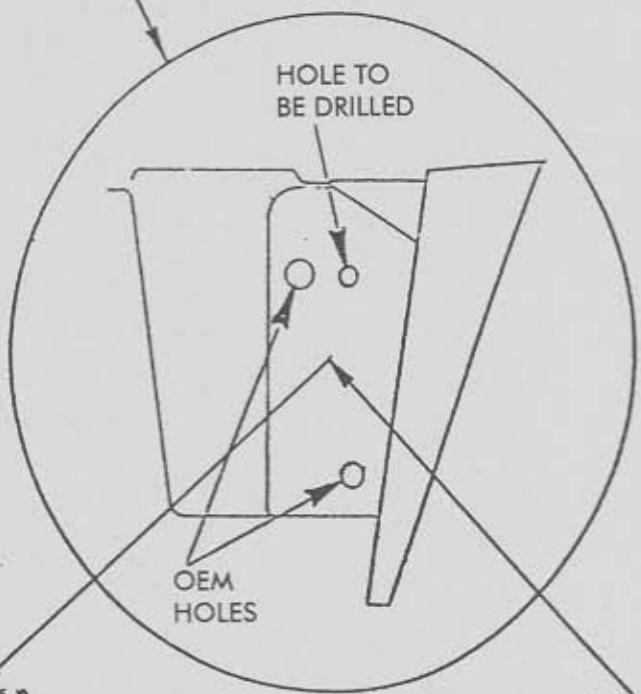
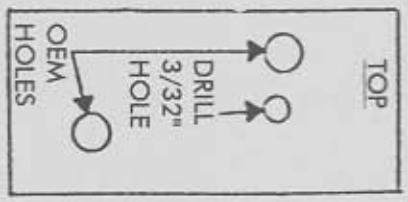


FIGURE 3

NEW BLOWER SWITCH INSTALLATION

1. REMOVE & DISCARD OEM BLOWER SWITCH.
2. DRILL 3/32" HOLE FOR THE REPLACEMENT SWITCH.
3. INSTALL REPLACEMENT BLOWER SWITCH USING LOWER OEM HOLE & NEW UPPER HOLE.

TEMPLATE



REMOVE **(DISCARD)** INSTALL

EVAPORATOR INSTALLATION

1. INSTALL DEFROSTER DUCTS ON PASSENGER AND DRIVER SIDE AS FIGURE 4 SHOWS AND ATTACH TO DASH VENTS AS FIGURE 4A SHOWS.

2. LAY THE EVAPORATOR ON THE FLOORBOARD AND ATTACH #6 & #10 A/C HOSES AS FIGURE 4B SHOWS. IT IS ALSO NECESSARY TO INSTALL THE HEATER HOSES AT THIS TIME AS FIGURE 11A SHOWS ON PAGE 13. THE HEATER HOSES PASS THRU THE LOWER HOLES IN BOTH BULKHEADS AND FOLLOW THE SAME ROUTING OUT OF THE PASSENGER COMPARTMENT AS THE A/C HOSES (REFER TO PAGE 13).

3. ATTACH BLOWER HOUSING BRACKET AS FIGURE 4C SHOWS.

NOTE: PRIOR TO RAISING EVAPORATOR UNIT BEHIND DASH, CONNECT WIRING HARNESS PER DIAGRAM ON PAGE 16. BE SURE TO CONNECT BLACK WIRE FROM A/C TERMINAL ON BLOWER SWITCH TO A/C MICROSWITCH ON TOP OF EVAPORATOR PLENUM.

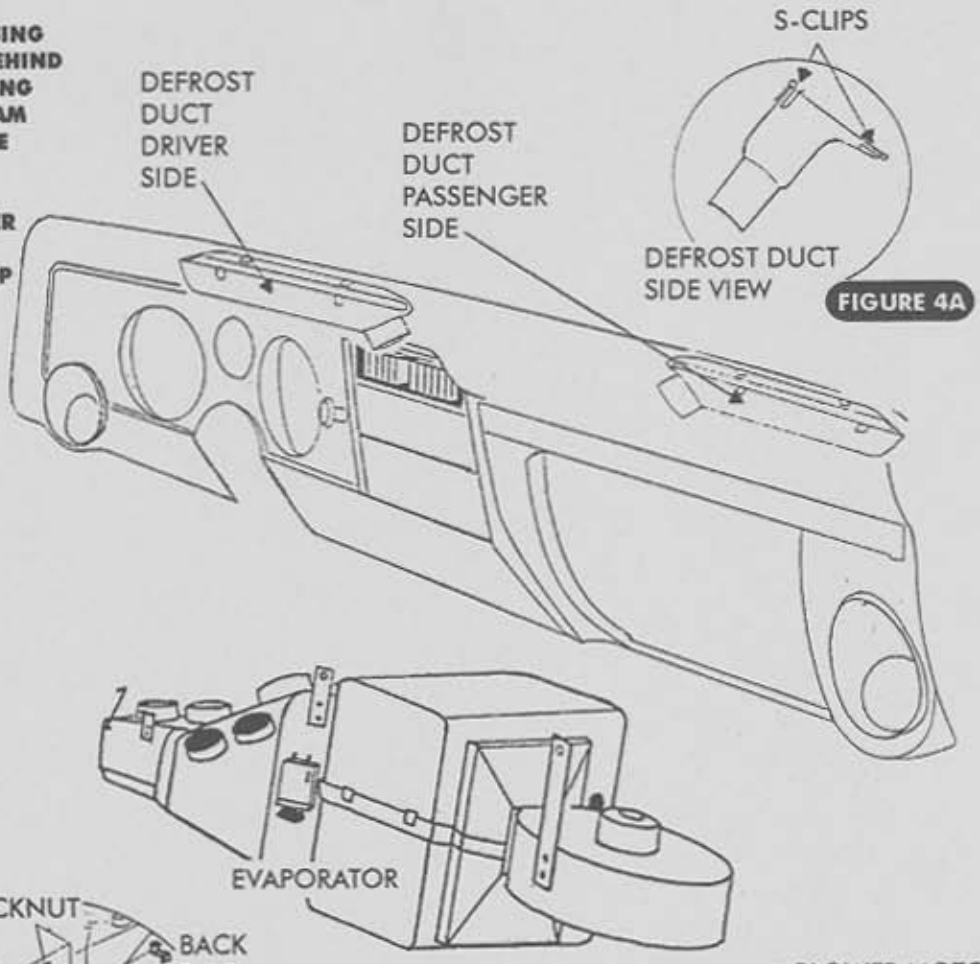


FIGURE 4A

FIGURE 4

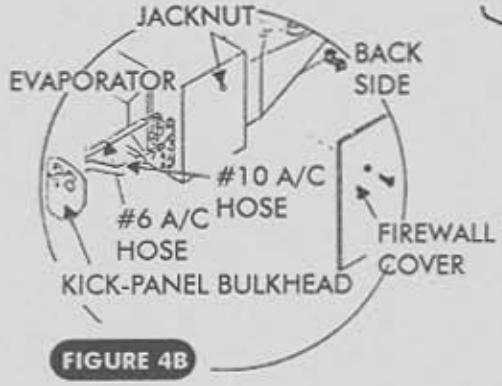


FIGURE 4B

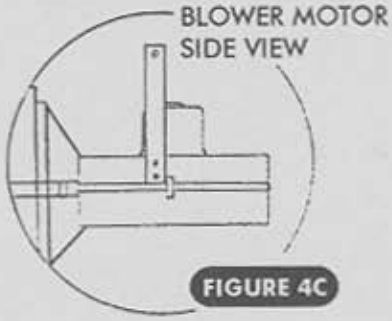


FIGURE 4C

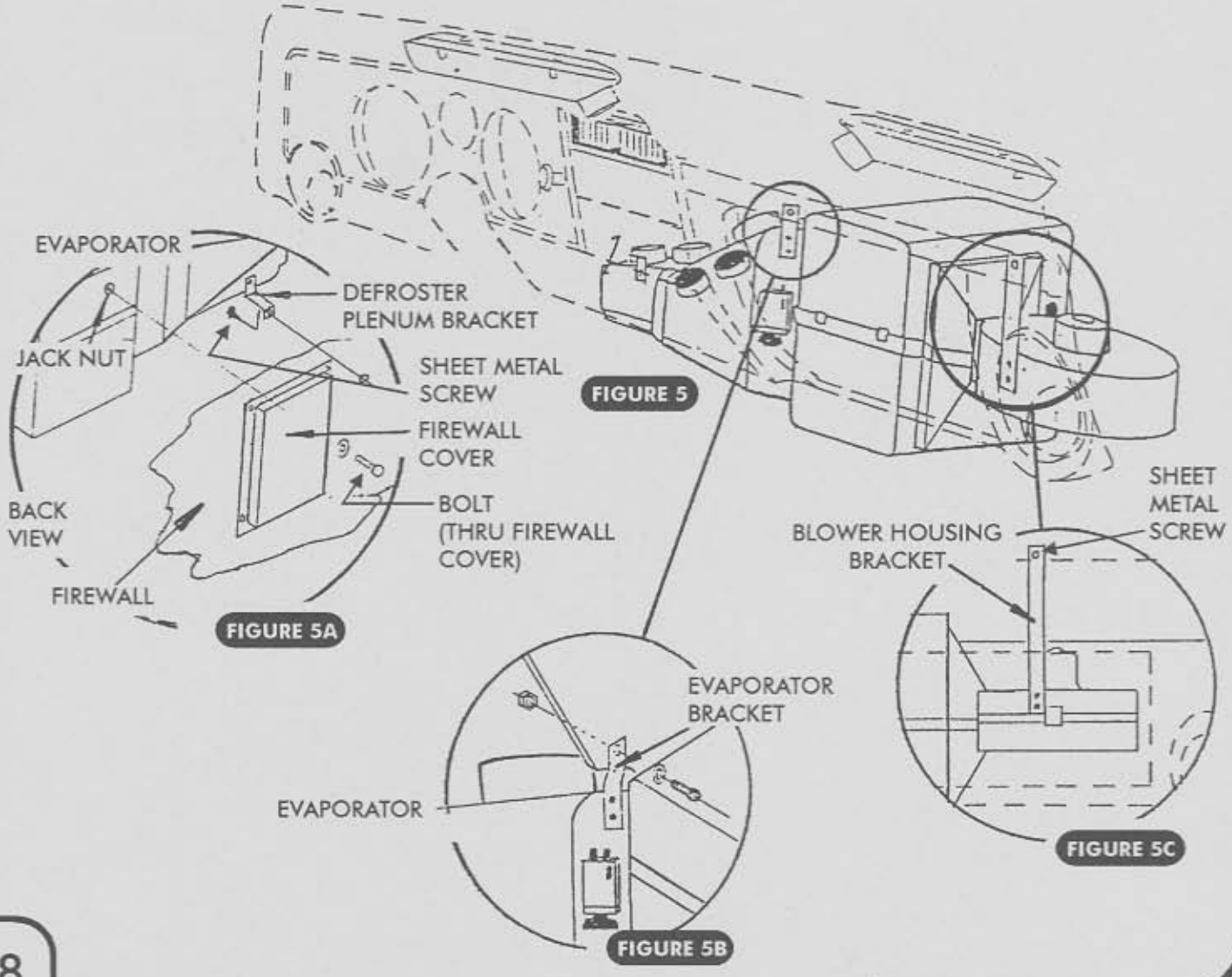
4. INSTALL FIREWALL COVER TO ENGINE SIDE OF FIREWALL USING ORIGINAL HARDWARE. APPLY A THIN BEAD OF SILICONE AROUND INSIDE EDGE OF FIREWALL COVER BEFORE INSTALLING. RAISE EVAPORATOR UP AND POSITION UNDER DASH. THE BACK OF THE EVAPORATOR IS SUPPORTED BY A BOLT THRU THE FIREWALL COVER (FROM ENGINE COMPARTMENT) TO THE JACKNUT IN THE BACK OF THE EVAPORATOR CASE (SEE FIGURE 5a).

5. ATTACH THE EVAPORATOR BRACKET DIRECTLY TO THE BRACING UNDER THE DASH (SEE FIGURE 5b).

6. ATTACH THE DEFROSTER PLENUM BRACKET DIRECTLY TO THE FIREWALL, USING A SHEET METAL SCREW (SUPPLIED), AS SHOWN IN FIGURE 5a.

7. ATTACH THE BLOWER HOUSING BRACKET TO THE UNDER-DASH PANEL, USING A SHEET METAL SCREW, (SUPPLIED), AS SHOWN IN FIGURE 5c.

NOTE: STEPS 6 & 7 MAY REQUIRE DRILLING A 1/8" HOLE TO GET THE SCREW STARTED. IF SO, USE THE LOCATION OF THE BRACKET AS A GUIDE FOR MARKING THE HOLES TO BE DRILLED. MACHINE SCREWS WITH NUT MAY BE SUBSTITUTED FOR SHEET METAL SCREWS IF DESIRED. (NOT SUPPLIED)



DUCT HOSE INSTALLATION

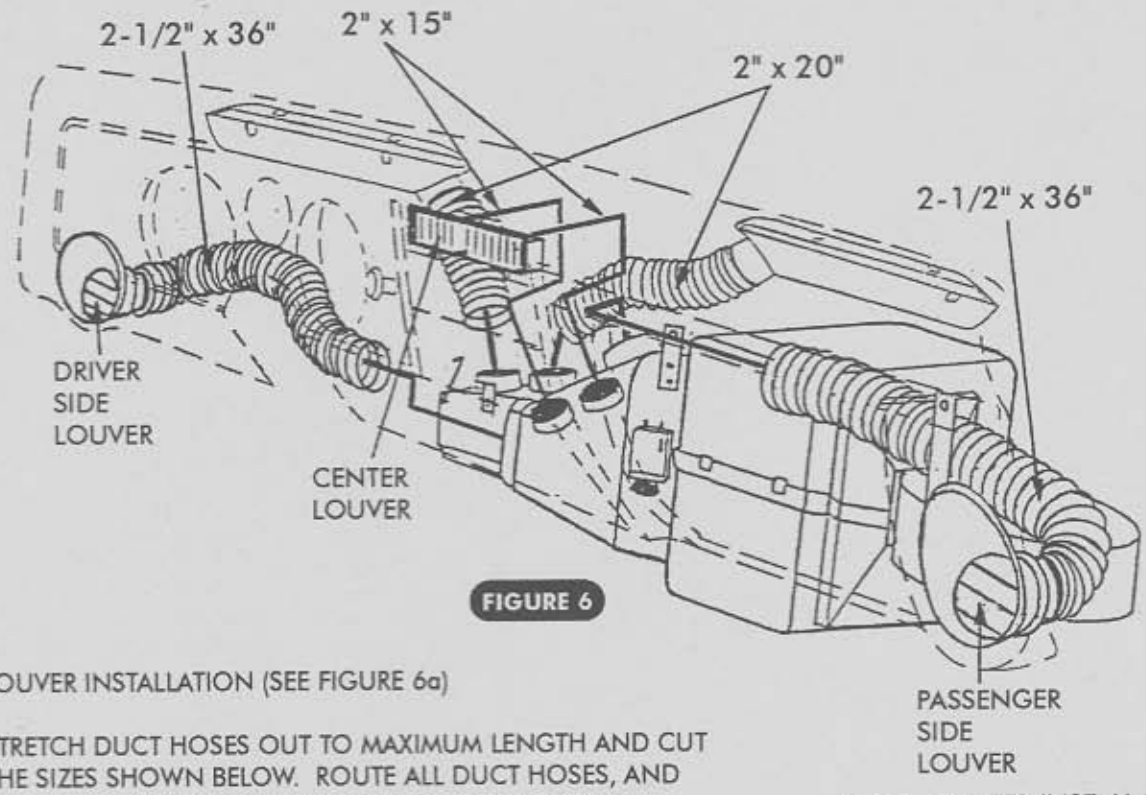


FIGURE 6

8. LOUVER INSTALLATION (SEE FIGURE 6a)

9. STRETCH DUCT HOSES OUT TO MAXIMUM LENGTH AND CUT THE SIZES SHOWN BELOW. ROUTE ALL DUCT HOSES, AND ATTACH TO DEFROST AND A/C VENTS. (SEE FIGURE 6).

NOTE: WITH THE UNIT IN PLACE, STRETCH THE DUCT HOSES TIGHTLY TO THEIR CORRESPONDING OUTLETS ON THE UNIT, AND RECHECK THE LENGTH. ENSURE THAT THE HOSE IS PULLED TIGHTLY WITH A MINIMUM OF KINKS OR SHARP BENDS. THIS WILL ENSURE MAXIMUM AIR FLOW THRU THE HOSE.

DUCT HOSE LENGTH:

DRIVERS SIDE VENT: 2-1/2" x 36"	(1 HOSE)
DRIVERS SIDE DEFROST VENT: 2" x 20"	(1 HOSE)
CENTER LOUVER: 2" x 15"	(2 HOSES)
PASSENGER SIDE DEFROST: 2" x 20"	(1 HOSE)
PASSENGER SIDE VENT: 2-1/2" x 36"	(1 HOSE)

10. DRILL A 5/8" HOLE 1" BELOW THE FIREWALL COVER AND IN-LINE WITH THE DRAIN TUBE IN THE BOTTOM OF THE UNIT. INSERT A 1/2" DRAIN HOSE THRU THE FIREWALL AND ATTACH TO THE DRAIN TUBE ON THE UNIT.

HOSE ADAPTER INSTALLATION

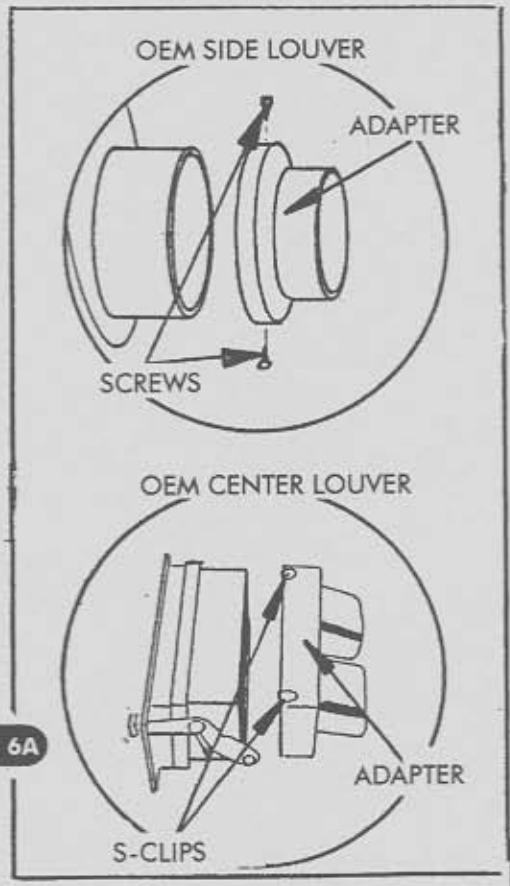


FIGURE 6A

CONTROL LEVER OPERATION

1. CONNECT THE TOP OEM CABLE TO THE HEATER CONTROL VALVE (SUPPLIED). ADJUST FOR POSITIVE SHUT-OFF

* NOTE: POSITIVE HEATER CONTROL VALVE IS CRITICAL TO PROPER A/C SYSTEM OPERATION

2. CONNECT THE MIDDLE OEM CABLE TO THE MOUNT ON TOP OF THE EVAPORATOR (NEXT TO MICROSWITCH).

3. CONNECT THE BOTTOM OEM CABLE TO THE MOUNT ON THE DEFROSTER PLENUM (WHERE THE DEFROSTER OUTLETS ARE POSITIONED ON THE UNIT).

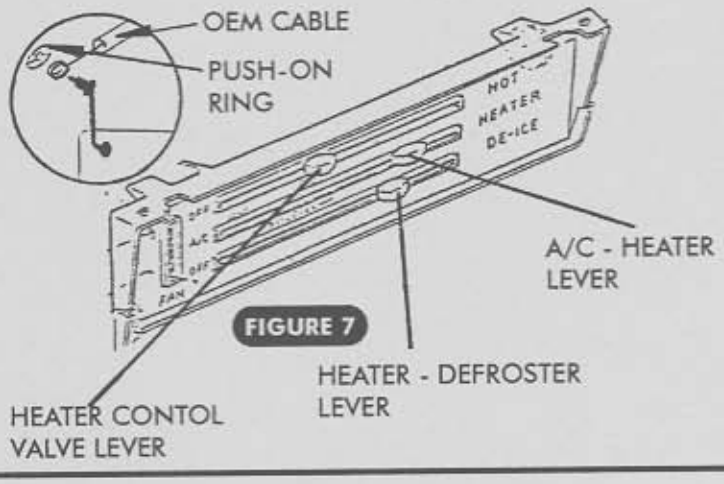


FIGURE 7

PASSENGER SIDE KICK PANEL

TRIM KICK PANEL TO ALLOW CLEARANCE FOR THE A/C & HEATER HOSES AS FIGURE 7a SHOWS.

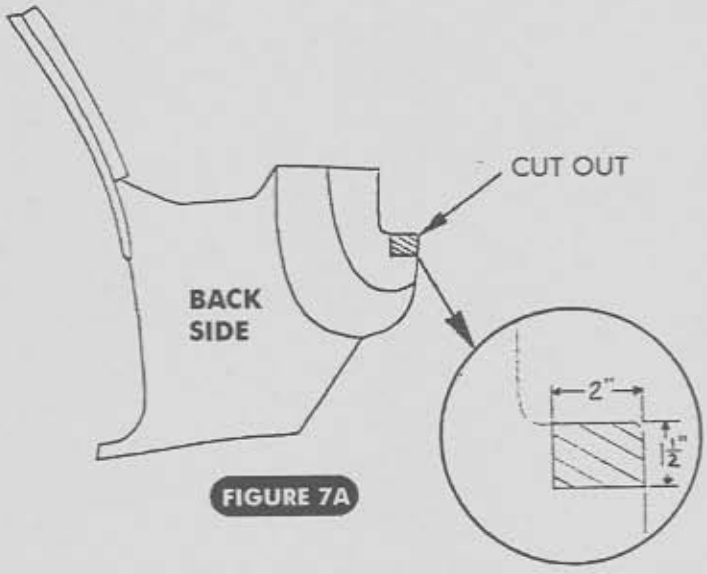


FIGURE 7A

GLOVE BOX INSTALLATION

1. INSTALL NEW GLOVE BOX AS SHOWN IN FIGURE 7b.

2. RE-ATTACH ALL ITEMS PREVIOUSLY REMOVED AT THIS TIME.

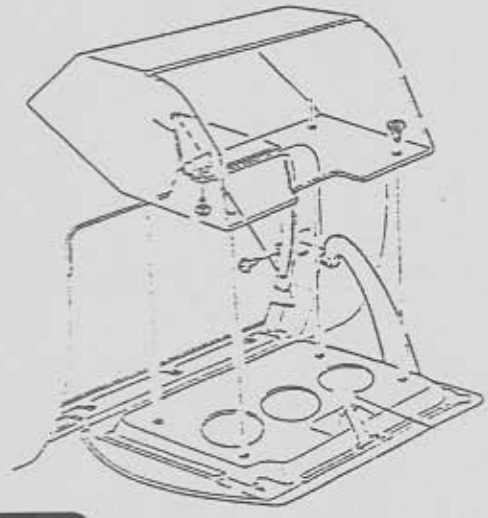


FIGURE 7B

ENGINE COMPARTMENT

COMPRESSOR

1. REFER TO SEPARATE INSTRUCTIONS (INCLUDED WITH COMPRESSOR BRACKET) TO INSTALL COMPRESSOR BRACKET.
2. INSTALL COMPRESSOR AND BRACKET USING HARDWARE INCLUDED WITH BRACKET.

CONDENSER ASSEMBLY INSTALLATION

1. REMOVE HOOD LATCH AS FIGURE 8 SHOWS.

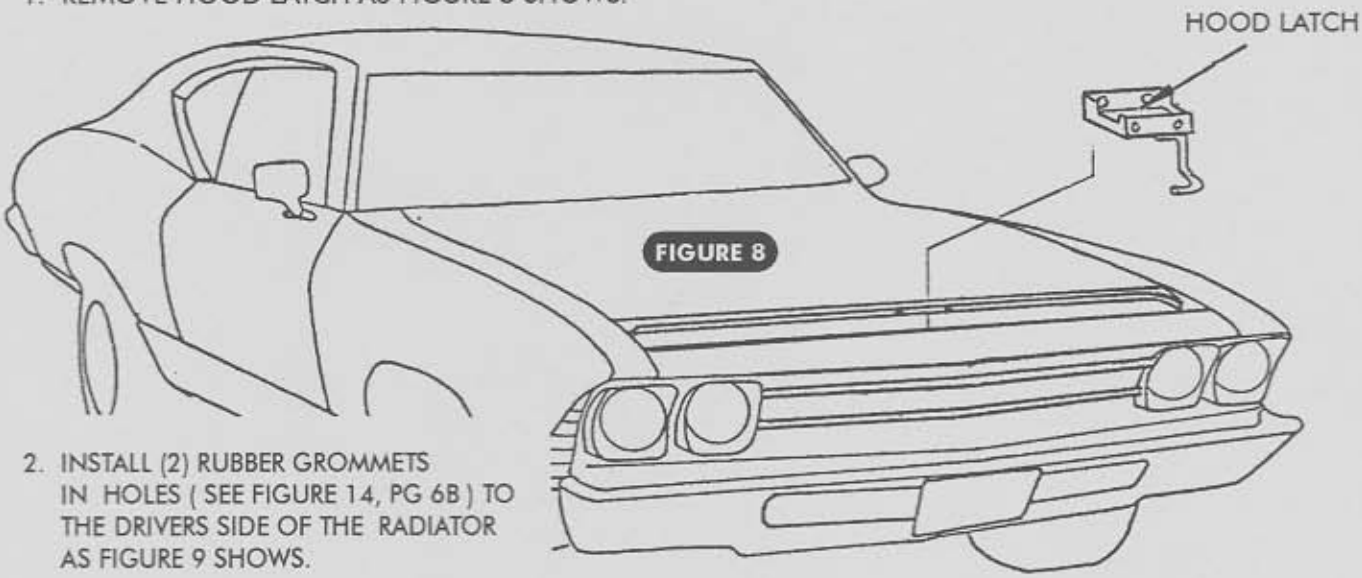


FIGURE 8

2. INSTALL (2) RUBBER GROMMETS IN HOLES (SEE FIGURE 14, PG 6B) TO THE DRIVERS SIDE OF THE RADIATOR AS FIGURE 9 SHOWS.
3. INSTALL (ATTACH) #6 & #8 HOSES TO CONDENSER, THEN SLIDE CONDENSER BETWEEN RADIATOR AND GRILLE
4. THE CONDENSER ASSEMBLY MOUNTS UNDER THE HOOD LATCH AND LOWER HOOD LATCH SUPPORT BRACE MOUNTING POINT THAT IS BELOW THE RADIATOR (SEE FIGURE 10, PAGE 12).
5. ONCE THE CONDENSER IS IN PLACE, RE-INSTALL THE HOOD LATCH AND TIGHTEN BOLTS.
6. PASS THE #6 & #8 HOSES THRU THE RUBBER GROMMETS PREVIOUSLY IN ON THIS PAGE INTO ENGINE COMPARTMENT.

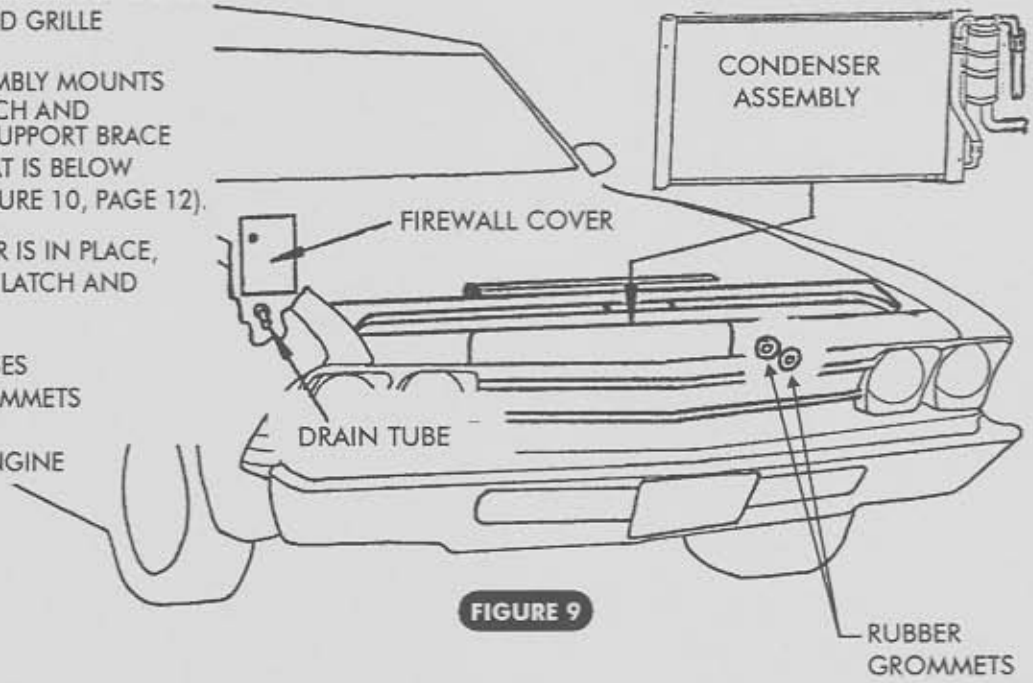


FIGURE 9

CONDENSER ASSEMBLY INSTALLATION

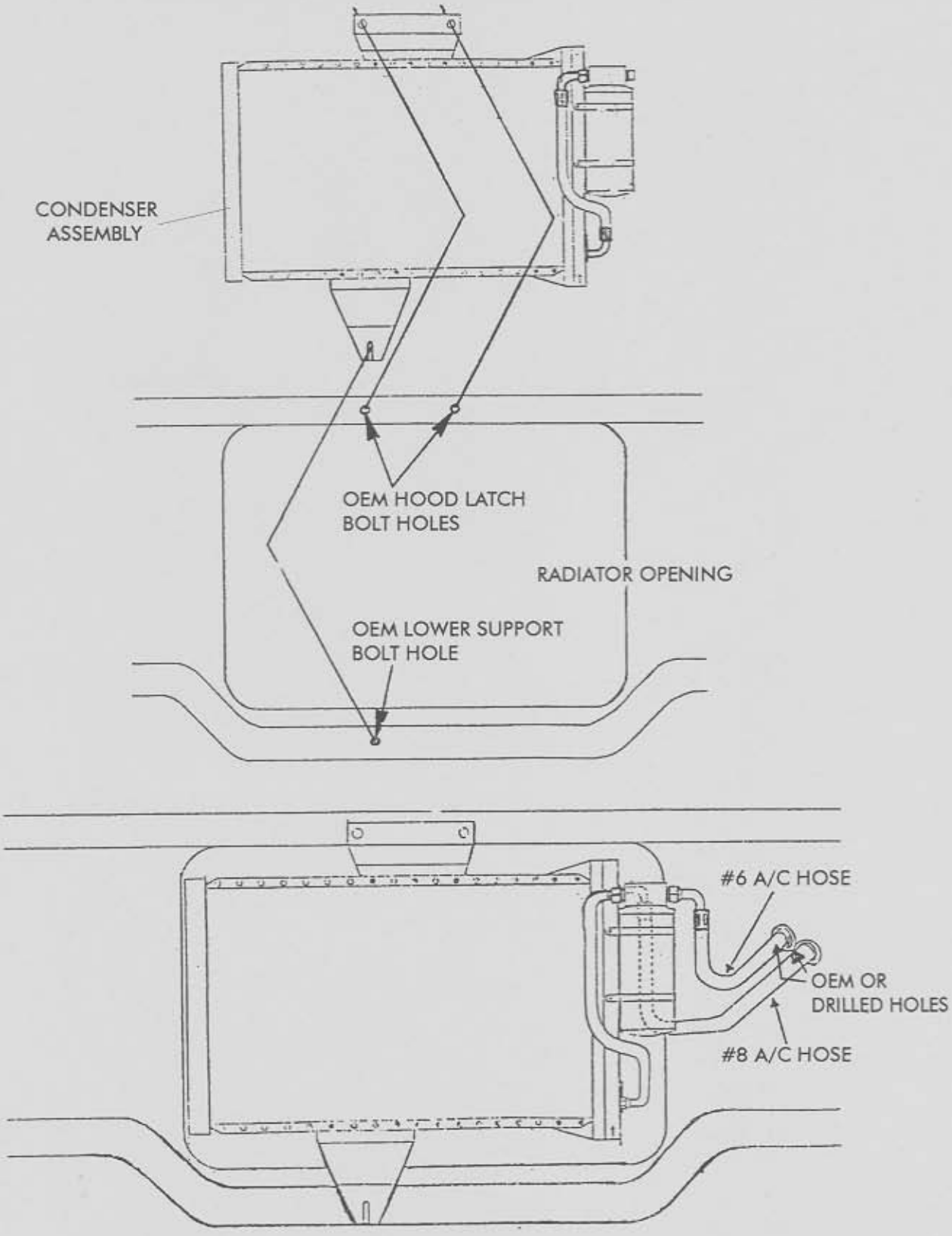


FIGURE 10

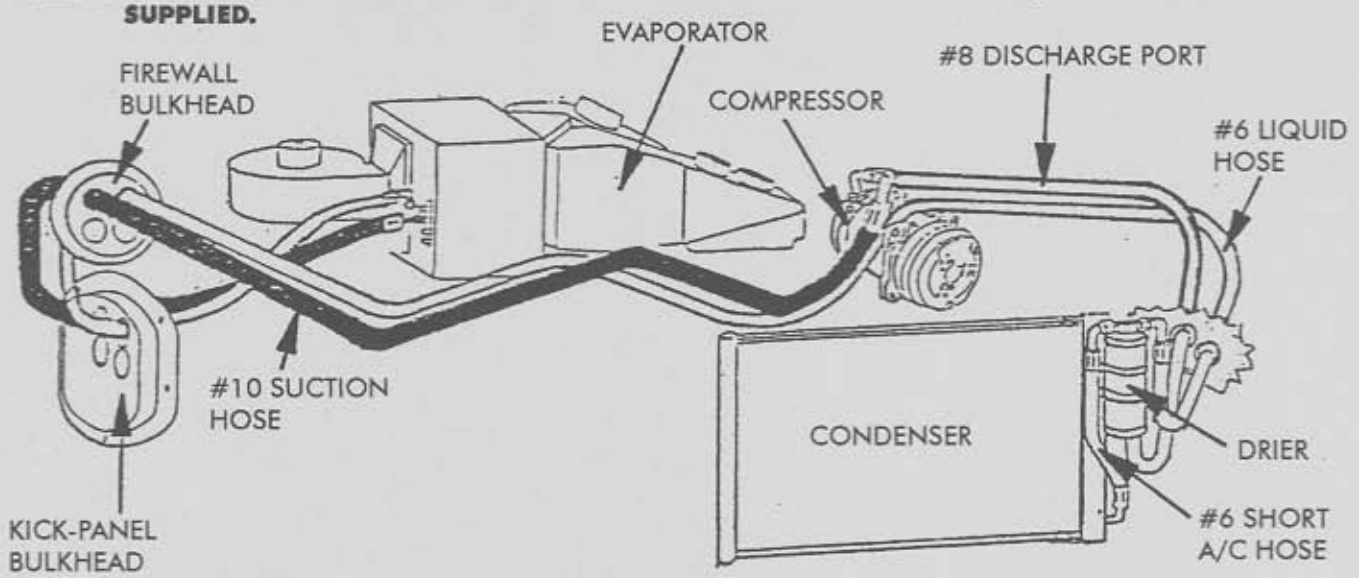
REFRIGERATION HOSES *(FIGURE 11)*

NOTE: PRIOR TO INSTALLING REFRIGERATION LINES, LUBRICATE AND SLIDE THE CORESPONDING O-RING ON THE FITTING

1. LUBRICATE AND ATTACH #10 SUCTION HOSE TO THE COMPRESSOR (1/2" I.D. HOSE 79" LONG STRAIGHT FEMALE O-RING FITTING ON FIREWALL END AND 135° FEMALE O-RING FITTING ON COMPRESSOR END).
2. LUBRICATE AND ATTACH #8 DISCHARGE HOSE TO THE COMPRESSOR (13/32" I.D. HOSE 45" LONG WITH 90° FEMALE O-RING FITTING ON CONDENSER END AND 135° FEMALE O-RING FITTING ON COMPRESSOR END.
3. LUBRICATE AND ATTACH #6 LIQUID HOSE FROM EVAPORATOR TO DRIER (5/16" I.D. HOSE 115" LONG WITH 90° FEMALE O-RING FITTING ON EVAPORATOR END AND 90° FEMALE O-RING FITTING ON THE DRIER.)

INSTALL HEATER HOSES AND HEATER VALVE AS SHOWN IN FIGURE 11a. INSTALL HEATER CONTROL VALVE IN PRESSURE (INTAKE MANIFOLD) HEATER HOSE LINE.

NOTE: THE HEATER HOSES FOR THIS APPLICATION NEED TO BE 5/8" x 6' EACH (HEATER HOSES ARE NOT SUPPLIED.



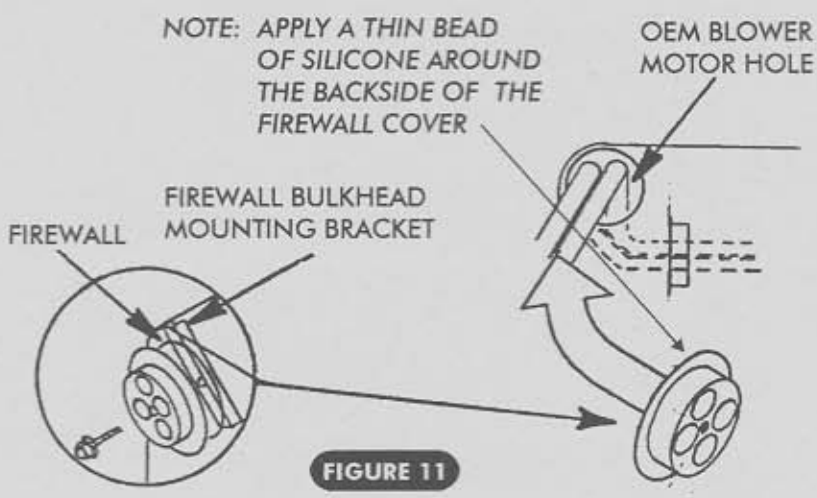


FIGURE 11

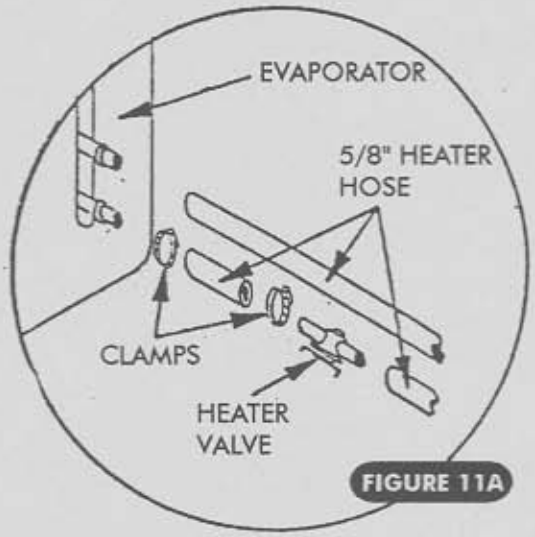
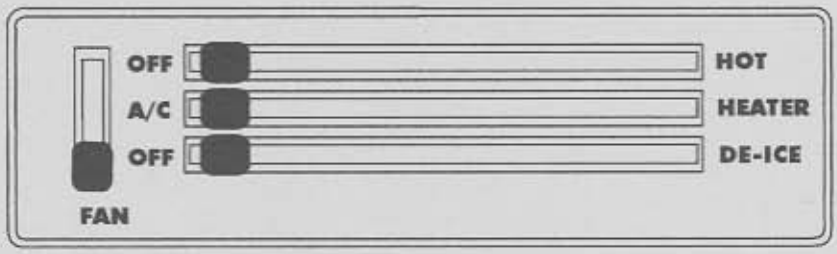


FIGURE 11A

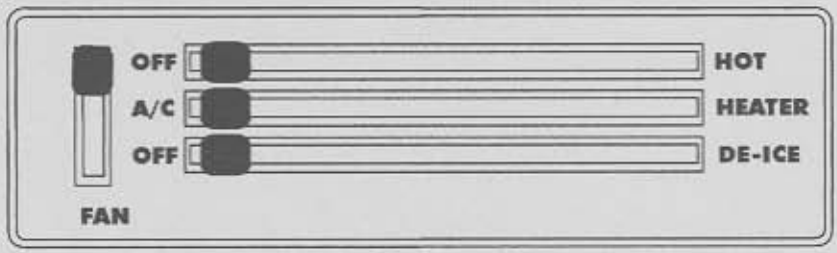
YOUR SYSTEM IS READY TO EVACUATE AND CHARGE. THIS SHOULD BE DONE ONLY BY A CERTIFIED AIR-CONDITIONING TECHNICIAN.

RE-ATTACH ALL COMPONENTS IN REVERSE ORDER OF REMOVAL.

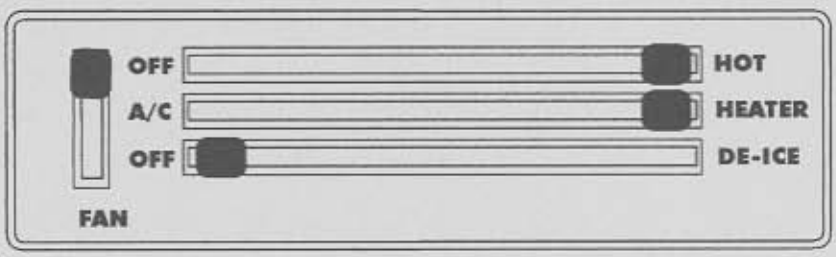
OPERATION OF CONTROLS



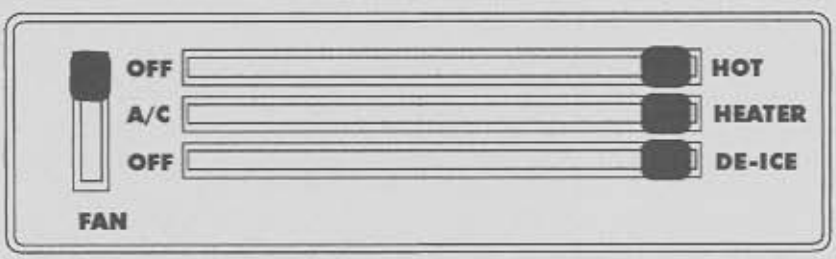
OFF



A/C MODE



HEAT MODE



DEFROST MODE

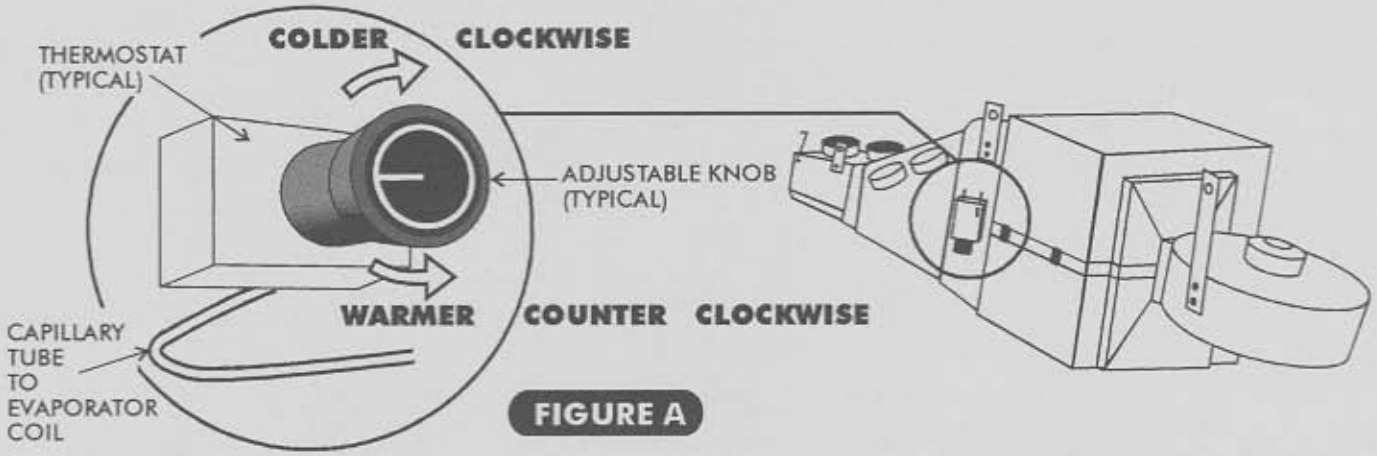


FIGURE A

AIR CONDITIONING ADJUSTMENTS:

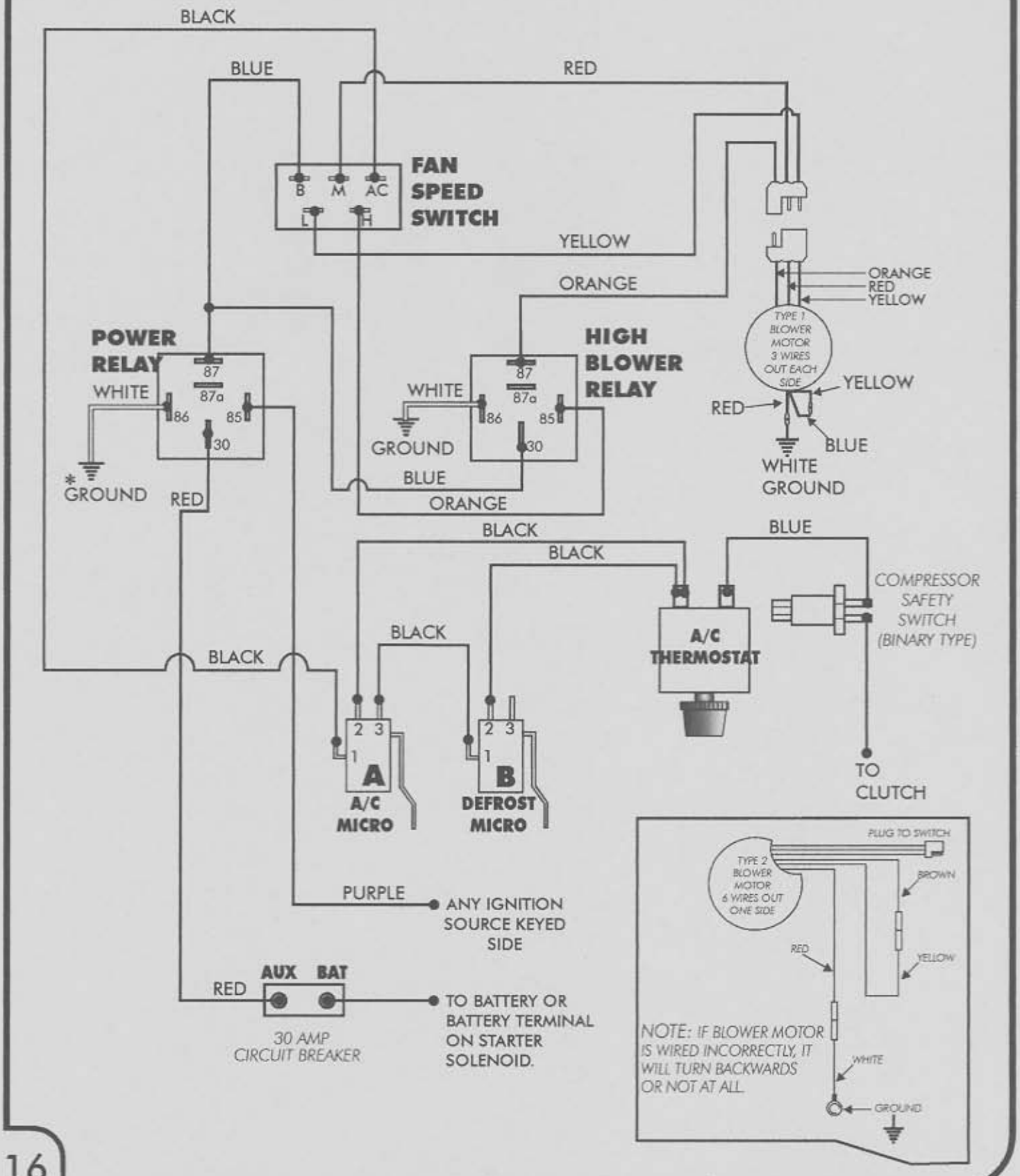
- THE AIR CONDITIONER THERMOSTAT CONTROLS COIL TEMPERATURE, IT IS SHIPPED ADJUSTED FULLY COLD (CLOCKWISE), IN THE MAJORITY OF CASES THE A/C WILL OPERATE CORRECTLY AS SHIPPED.
- TURNING THE KNOB ON THE THERMOSTAT TO THE RIGHT (CLOCKWISE) MAKES THE SYSTEM OPERATE COLDER. IF THE THERMOSTAT IS SET TOO COLD THE EVAPORATOR WILL "ICE UP" - THE EVAPORATOR COIL IS RESTRICTED WITH ICE AND COLD AIR FLOW WILL BE REDUCED.
- TURNING THE KNOB TO THE LEFT (COUNTER CLOCKWISE) MAKES THE SYSTEM OPERATE WARMER. THE COMPRESSOR CLUTCH WILL CYCLE OFF FREQUENTLY AND THE A/C SYSTEM WILL NOT GET AS COOL AS IT COULD.

ADJUSTING A/C THERMOSTAT

1.) SYMPTOM: THE A/C WORKS WELL AT FIRST THEN QUITS COOLING. THE AIR FLOW FROM THE VENTS IS LOW AND THE COMPRESSOR CYCLES INFREQUENTLY.
SOLUTION: THE THERMOSTAT IS SET TOO COLD AND THE EVAPORATOR IS "ICING UP" AND RESTRICTING AIR FLOW. ALLOW THE ICE TO MELT AND SET THE THERMOSTAT WARMER (COUNTER CLOCKWISE) 10% OF A TURN EACH ADJUSTMENT UNTIL THE SYMPTOMS DIMINISH.

2.) SYMPTOM: A/C NEVER GETS COLD AND THE COMPRESSOR CLUTCH CYCLES FREQUENTLY.
SOLUTION: THE THERMOSTAT IS SET TOO WARM. SET THE THERMOSTAT COLDER (CLOCKWISE) 10% OF A TURN EACH ADJUSTMENT UNTIL THE COMPRESSOR CLUTCH CYCLES INFREQUENTLY. AVOID SETTING THE THERMOSTAT TOO COLD.

3.) SYMPTOM: THE A/C NEVER GETS COLD, SOMETIMES EVEN BLOWS HOT, AND THE A/C COMPRESSOR CLUTCH INFREQUENTLY CYCLES OFF.
SOLUTION: THE HEATER MAY BE ON AT ALL TIMES. CAREFULLY FEEL AROUND THE HEATER HOSES AT THE FIREWALL. THEY SHOULD BE COLD WHEN THE A/C IS ON. IF THE HOSES ARE HOT THEN:
A) - THE HEATER CONTROL VALVE MAY BE INSTALLED BACKWARDS. CHECK THE FLOW DIRECTION ARROW ON THE VALVE AGAINST THE ILLUSTRATION IN YOUR INSTALLATION INSTRUCTIONS.
B) - CABLE OPERATED: THE VALVE MAY BE MISADJUSTED.
C) - HEATER CONTROL VALVE IN WRONG HEATER HOSE.


BLACK
BLUE
RED
B M AC
L H
FAN SPEED SWITCH
YELLOW
ORANGE
ORANGE
RED
YELLOW
TYPE 1 BLOWER MOTOR 3 WIRES OUT EACH SIDE
POWER RELAY
WHITE
87
87a
86
85
30
GROUND
HIGH BLOWER RELAY
WHITE
87
87a
86
85
30
GROUND
YELLOW
RED
BLUE
WHITE GROUND
BLUE
ORANGE
BLACK
BLACK
BLUE
COMPRESSOR SAFETY SWITCH (BINARY TYPE)
BLACK
BLACK
A/C THERMOSTAT
2 3
1
A
A/C MICRO
2 3
1
B
DEFROST MICRO
TO CLUTCH
PURPLE
ANY IGNITION SOURCE KEYED SIDE
RED
AUX BAT
TO BATTERY OR BATTERY TERMINAL ON STARTER SOLENOID.
30 AMP CIRCUIT BREAKER
PLUG TO SWITCH
TYPE 2 BLOWER MOTOR 6 WIRES OUT ONE SIDE
BROWN
RED
YELLOW
NOTE: IF BLOWER MOTOR IS WIRED INCORRECTLY, IT WILL TURN BACKWARDS OR NOT AT ALL.
WHITE
GROUND

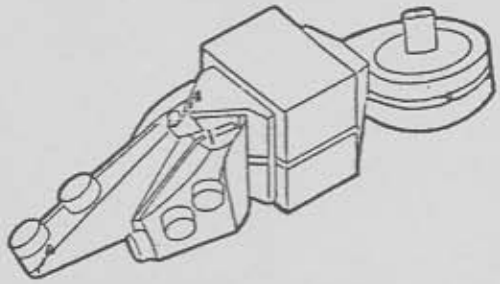
1968-69 CHEVELLE W/FA EVAPORATOR KIT PACKING LIST

EVAPORATOR KIT
55169-VCZ-A

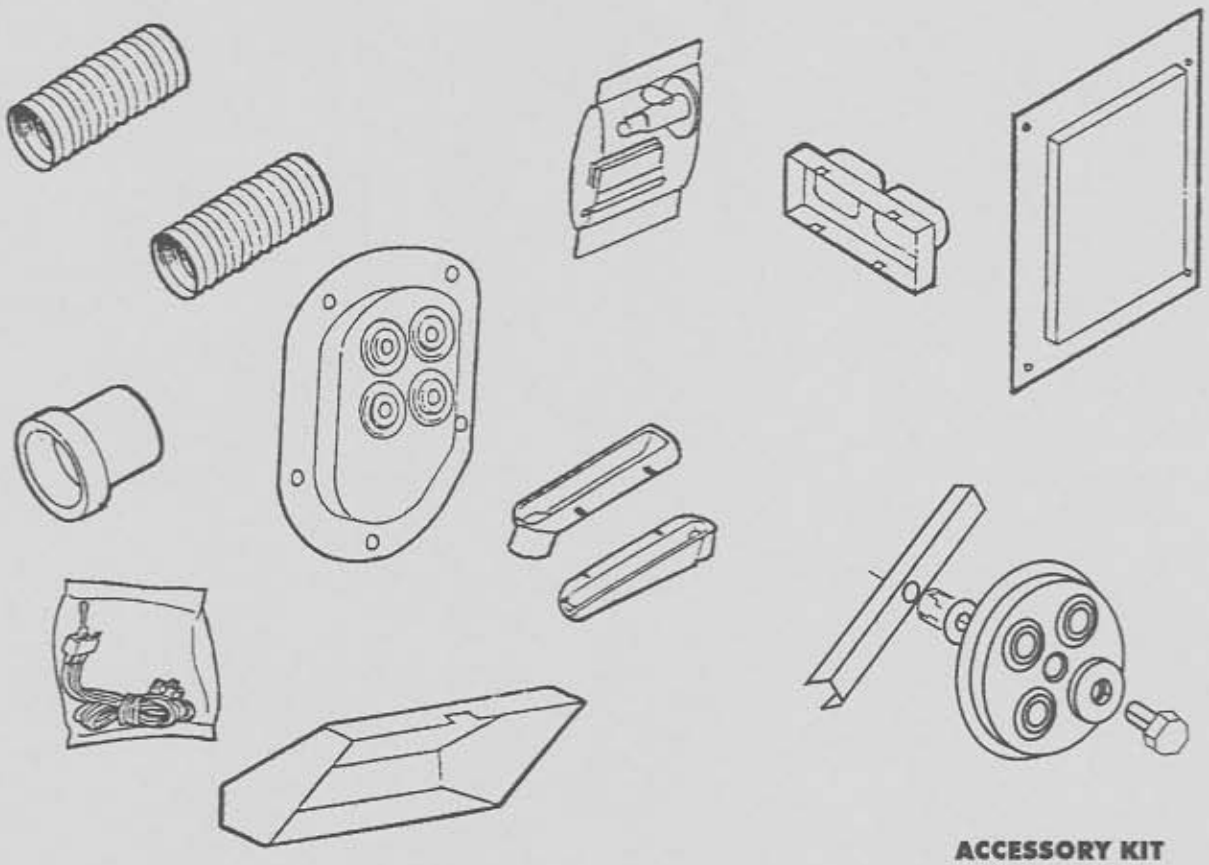
No.	QTY.	PART No.	DESCRIPTION	
1.	1	55469-VCE-A	EVAPORATOR SUBCASE W/BRKT	_____
2.	1	78168-ACF	1968-69 CHEVELLE W/ AC ACCESSORY KIT	_____

CHECKED BY: _____
PACKED BY: _____
DATE: _____

①



②



ACCESSORY KIT
78168-ACF