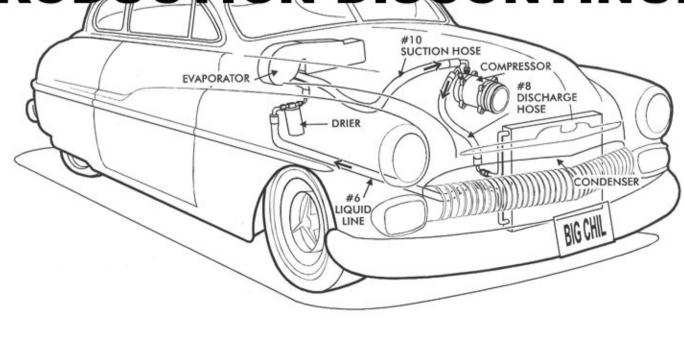


INSTALLATION INSTRUCTIONS FOR

ALL IN ONE MONSTER COOLER

HEAT / COOL & DEFROST

PRODUCTION DISCONTINUED



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10/22/98

ALL IN ONE MONSTER COOLER HEAT/COOL & DEFROST

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.

REFRIGERANT CAPACITIES

134a SYSTEM

CHARGE WITH 1.8 LBS. 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



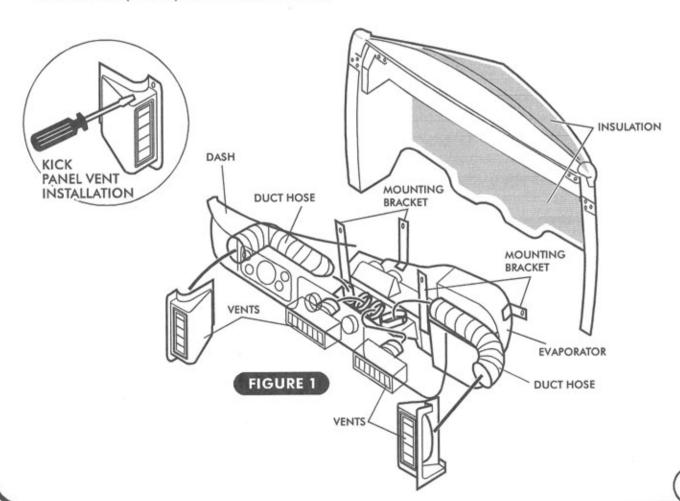
INSTALLATION INSTRUCTIONS ALL IN ONE MONSTER COOLER HEAT/COOL & DEFROST

THE VINTAGE AIR MONSTER COOLER HEAT/COOL DEFROST SYSTEM WAS DESIGNED FOR STREET RODS, CUSTOM CARS AND TRUCKS. EVAPORATOR NEATLY FITS UP BEHIND THE DASH OF YOUR CAR OR TRUCK. READ THE DIRECTIONS COMPLETELY AND REMOVE ALL PARTS FROM BOX. IDENTIFY EACH OF THEM USING PACKING LIST LOCATED ON BACK COVER.

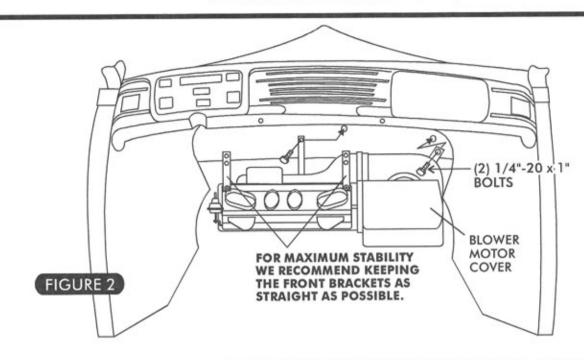
THE INSTALLATION OF THIS UNIT VARIES ACCORDING TO THE BODY MANUFACTURER OR MODIFICATIONS TO ORIGINAL BODY. DOUBLE CHECK YOUR MEASUREMENTS FOR HOLES, BRACKETS AND VENTS BEFORE DRILLING OR CUTTING.

THE EVAPORATOR WAS DESIGNED TO FIT ON THE PASSENGER SIDE.

- AFTER A VISUAL INSPECTION YOU MAY FIND THAT REMOVAL OF COWL VENT HANDLE AND GLOVE BOX WILL EASE INSTALLATION. CHECK FOR AND FILL IN ANY HOLES IN THE FIREWALL AND FLOOR. INSULATE AND SEAL FIREWALL, UPPER COWL, FLOOR, DOOR PANELS AND HEAD LINER TO REDUCE THE AMOUNT OF HEAT ENTERING YOUR CAR.
- THE EVAPORATOR FITS WITH BLOWER MOTOR TOWARD FIREWALL. DUCT HOSE OUTLETS FACE UPPER CAVITY AND BACKSIDE OF DASH. DRAIN OUTLET POINTS TO DRIVER'S SIDE AND IS ALWAYS ON BOTTOM (DOWN) SIDE OF EVAPORATOR.







- 3. BRACKETS ARE FURNISHED TO MOUNT THE EVAPORATOR CASE TO THE FIREWALL (SEE FIGURE 2).
- 4. THE COWL VENT HANDLE MAY NEED TO BE MOVED TO THE SIDE. YOU CAN ALSO CONVERT TO ELECTRIC OR CABLE OPERATION. IF YOU CLOSE OFF THE COWL VENT THE UNIT WILL FIT HIGHER IN THE CAR. NOTE: TO MOUNT UNIT HIGHER, SIMPLY DETERMINE THE NEW LOCATION, MARK AND REDRILL THE BRACKET TO FIT AS DESCRIBED IN STEP 6 - FIGURE 2.
- 5. WHEN FITTING EVAPORATOR:
 - A. REMOVE BLOWER MOTOR COVER (SEE FIGURE 2).
 - B. ATTACH REAR BRACKET TO THE EVAPORATOR USING (2) 1/4-20 X 1/2" BOLTS.
 - C. FIT REFRIGERATION FITTINGS WITH HOSES FOR PROPER CLEARANCE INSIDE THE CAR. (REFER TO HOSE ROUTING - FIGURE 6, PG.6).
- 6. HOLD THE UNIT UP AS HIGH AS POSSIBLE, WITH BLOWER HOUSING AGAINST PASSENGER SIDE KICK PANEL. LOCATE THE BRACKET ON THE TOP RIGHT OF THE BLOWER HOUSING, LEVEL THE EVAPORATOR AND MARK THE NEW HOLE LOCATION USING THE HOLE IN THE BRACKET AS A TEMPLATE. CHECK TO SEE IF THE LOCATION YOU MARKED LOOKS CORRECT AND WILL CLEAR OBSTRUCTIONS ON BOTH SIDES OF THE FIREWALL. IF LOCATION IS CORRECT DRILL A 5/16" HOLE IN FIREWALL AND ATTACH THE EVAPORATOR TO THE FIREWALL BY THE BLOWER MOTOR BRACKET WITH A 1/4" x 20 x 1" BOLT AND NUT. USING THE REAR CENTER EVAPORATOR BRACKET AS A GUIDE, MARK AND DRILL A 5/16" HOLE. ATTACH THIS BRACKET TO THE FIREWALL WITH A 1/4" x 20 x 1" BOLT. THIS WILL LOCATE THE EVAPORATOR HORIZONTALLY. DRILL FRONT EVAPORATOR BRACKET HOLES AND SECURE THEM TO THE BACKSIDE OF THE DASH WITH TWO (2) #8 x 1/2" SCREWS (SUPPLIED).

NOTE: THE VENTS THAT ARE BEING USED SHOULD BE IN PLACE AT THIS TIME.

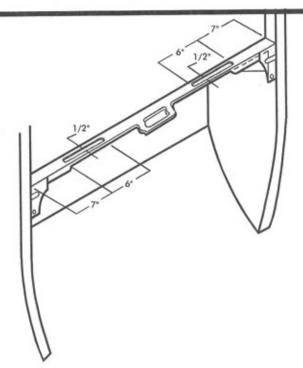
7. THE DUCT HOSE SHOULD BE PUT ON THE EVAPORATOR AT THIS POINT AND RUN TO THE VENTS TO INSURE PROPER CLEARANCE. STRETCH HOSES AND ROUTE WITH A MINIMUM OF BENDS TO INSURE SMOOTH AND QUITE AIRFLOW. CUT DUCT HOSE NOW INSURING THAT YOU HAVE ADEQUATE LENGTH, BUT WHEN IN PLACE - THE HOSE IS TAUT.

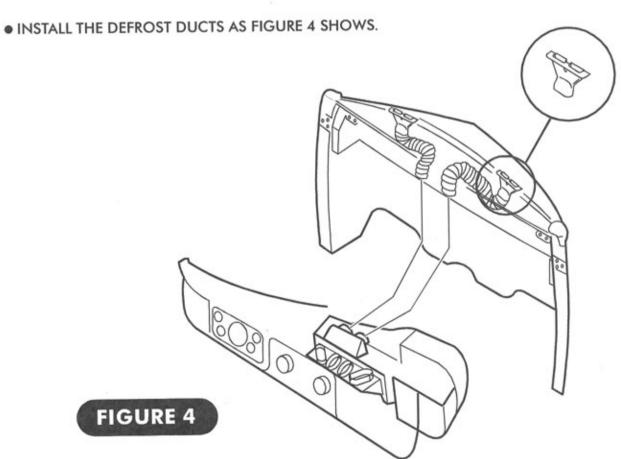


DEFROST DUCTS INSTALLATION

- FIGURE 3 SHOWS GENERAL LOCATIONS OF DEFROSTER DUCT HOLES. THE LOCATION OF THESE DUCTS WILL VARY.
 - 8. FIT & CUT YOUR DUCT HOSE AT THIS TIME.
 - FIT AND CUT YOUR DEFROSTER DUCT HOSE NOW IF APPLICABLE.

FIGURE 3

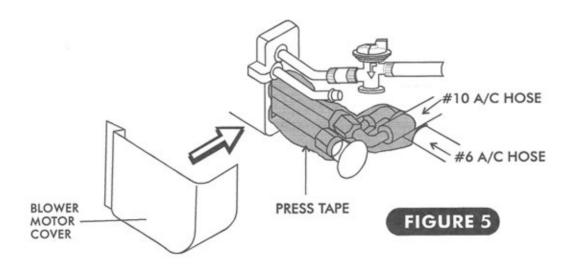






- 10. INSTALL AND TIGHTEN EVAPORATOR FITTINGS WITH REFRIGERATION HOSES ATTACHED TO THE EVAPORATOR. PLACE THE EVAPORATOR ON A WORK BENCH AND TIGHTEN EACH CONNECTION WITH TWO WRENCHES, ONE ON THE FITTING AND ONE ON THE COUNTERPART FITTING ATTACHED TO THE EVAPORATOR. REINSTALL EVAPORATOR BLOWER MOTOR COVER AT THIS TIME. SEE FIGURE 5.
- 11. CHECK TO INSURE THAT THE THERMOSTAT CAPILLARY TUBE IS IN THE COIL FULLY. WITH THE REFRIGERATION HOSES AND DUCT HOSES ON THE UNIT, LIFT IT IN PLACE. MAKE SURE THAT THE FIREWALL FITTINGS ARE ACCESSIBLE WITH THE UNIT IN PLACE. IF NOT, TIGHTEN ALL REFRIGERATION FITTINGS INSIDE THE CAR NOW WHILE YOU CAN REACH THEM. LIFT THE UNIT INTO PLACE AND TIGHTEN THE BRACKET BOLTS TO SECURE TO THE EVAPORATOR.
- 12. RUN REFRIGERATION AND HOT WATER LINES (REFER TO HOSE ROUTING INSTRUCTIONS). WARNING: FILL RADIATOR WITH A 50/50 MIXTURE OF APPROVED ANTIFREEZE AND 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.
- 13. MAKE ELECTRICAL AND VACUUM CONNECTION ACCORDING TO THE DIAGRAMS ON PAGE 8.

NOTE: THE RED 12GA WIRE WITH THE CIRCUIT BREAKER SHOULD RUN TO 30 AMP POWER SOURCE. CONNECT MOLDED PLUG WITH THE (RED, YELLOW, ORANGE) WIRES TO THE CORRESPONDING PLUG FROM THE RESISTOR. THE BLUE CLUTCH WIRE RUNS FROM THE THERMOSTAT ON THE UNIT OR ON PROLINE CONTROL PANEL, THRU THE FIREWALL AND TO THE BLACK WIRE ON THE COMPRESSOR. BE CAREFUL TO INSURE THAT THIS WIRE IS NOT PINCHED OR IN A POSITION TO RUB ON A SHARP EDGE AS IT GOES THRU THE FIREWALL. ENGINES WITH LOW VACUUM WILL NEED A VACUUM ACCUMULATOR WITH CHECK VALVE TO HELP SYSTEM WORK UNDER A VARIETY OF CONDITIONS, INCLUDING ENGINE OFF (VINTAGE AIR PART #31200-VUS VACUUM RESERVOIR).





REFRIGERATION HOSE ROUTING INSTRUCTIONS -

EVERY INSTALLATION IS A LITTLE DIFFERENT DEPENDING ON THE :

- 1. TYPE OF CAR/ENGINE AND LOCATION OF ENGINE.
- 2. TYPE OF AIR CONDITIONING COMPONENTS USED.
- 3. OWNERS PREFERENCES.

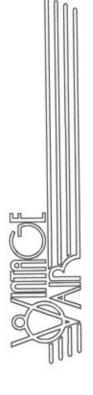
THERE ARE MANY FACTORS THAT GO INTO MAKING EACH AIR CONDITIONING INSTALLATION DIFFERENT. USUALLY ALL OF THE ABOVE DECISIONS ARE MADE BEFORE ANY CONSIDERATION IS GIVEN TO THE AIR CONDITIONING INSTALLATION. THE AIR CONDITIONER IS THEN INSTALLED AROUND EVERYTHING.

PLANNING YOUR HOSE ROUTING:

- MOUNT THE MAJOR COMPONENTS ON YOUR CAR.
 - A THE COMPRESSOR
 - **B THE CONDENSER**
 - C EVAPORATOR (NOTE: THE EVAPORATOR IS MOUNTED IN PLACE FOR HOSE ROUTING, BUT MUST BE REMOVED AND PLACED ON A WORK BENCH TO TIGHTEN THE EVAPORATOR HOSE FITTINGS. TWO WRENCHES MUST BE USED TO TIGHTEN THE FITTINGS ON THE EVAPORATOR. ONE ON THE FITTING AND ONE ON THE COUNTER PART FITTING ATTACHED TO THE EVAPORATOR).
- NOTES: A. WHILE MAKING THESE LINES, DETERMINE HOW THEY WILL BE HELD IN PLACE (CLAMPS, BRACKETS, ETC.), YOU SHOULD RUN THEM EXACTLY LIKE THEY WILL BE WHEN FINISHED BEFORE YOU CUT THEM TO LENGTH.
 - B. WHEN THE HOSES ARE MADE, REMOVE THEM AND LUBRICATE ALL O'RINGS AND FITTING SEATS WITH REFRIGERATION OIL BEFORE FINAL TIGHTENING.
 - C. HAVE A PROFESSIONAL AIR CONDITIONING TECHNICIAN LEAK CHECK AND SERVICE YOUR AIR CONDITIONER.
 - D. IT IS A GOOD IDEA TO LEAVE THE RADIATOR SHELL OFF UNTIL THE SYSTEM IS LEAK CHECKED IN CASE RESEALING IS NECESSARY.
- 2. AFTER ALL THE COMPONENTS ARE MOUNTED, REMOVE THE HOSE COVER FROM THE EVAPORATOR UNIT. PUSH THE #6 HOSE ONTO FITTING AND SCREW IT LOOSELY TO THE EXPANSION VALVE. PUSH THE #10 HOSE ONTO FITTING (SEE FIGURE 6, PG. 6) AND SCREW IT LOOSELY TO THE LARGE THREADED FITTINGS COMING OUT OF THE EVAPORATOR.
- 3. AT THIS TIME, TRY TO DETERMINE WHERE YOU WANT YOUR LINES TO GO THRU THE FIREWALL. MOVE THE HOSES TO THAT POINT. HOLD THE FITTINGS UP TO THEIR RESPECTIVE HOSES AND DETERMINE IF THE HOSE WILL CONFORM TO THE LOCATION FOR THE BULKHEAD FITTINGS OR VINTAGE AIR PROLINE BULKHEAD PLATE. THE 1/2" HOSE IS HARD TO BEND AT A SHARP ANGLE AND THE FITTINGS TAKE UP A CERTAIN AMOUNT OF SPACE. SO BEFORE YOU DRILL HOLES IN YOUR FIREWALL MAKE SURE THAT YOU CAN MAKE THE HOSES FIT WHAT YOU HAVE PLANNED. THE ENGINE COMPARTMENT APPEARANCE IS A CONSIDERATION WHEN CHOOSING THIS LOCATION.

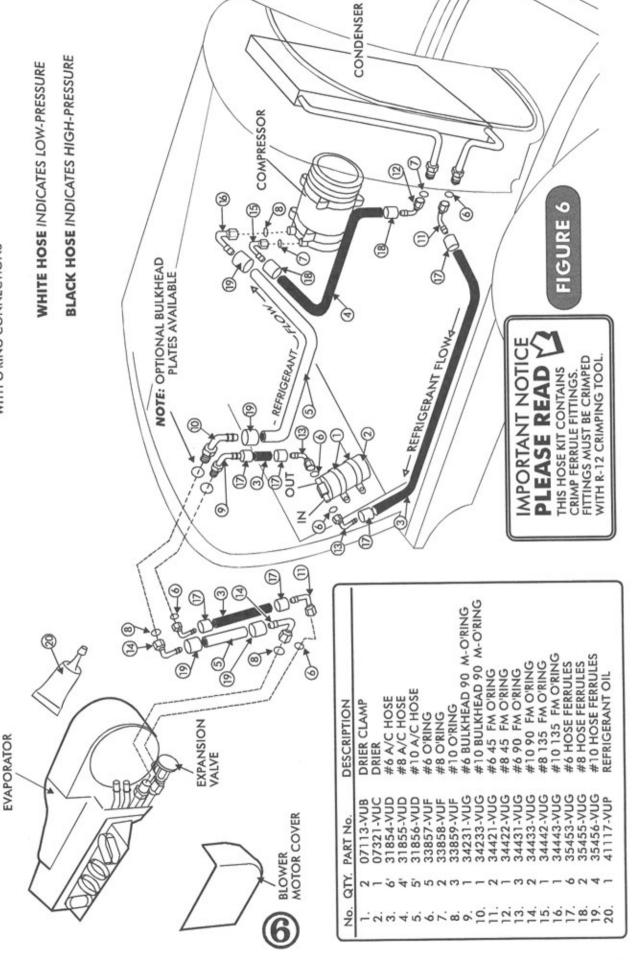
WHEN YOU HAVE DECIDED WHERE YOU WANT TO PLACE YOUR BULKHEAD FITTINGS:

- 4. MARK THESE POINTS WITH A GREASE PENCIL AND MAKE A TEMPLATE FROM THE INSIDE LOCATING WHERE THE HOLES WILL BE CUT. WITH THIS TEMPLATE LOCATE THE SAME POINTS ON THE OUTSIDE OF THE FIREWALL. MARK THESE POINTS WITH A GREASE PENCIL.
- 5. MOUNT THE DRIER (KEEP THE DRIER CAPPED AS MUCH AS POSSIBLE, IF YOU MUST SCREW THE FITTING TO THE DRIER, TAPE IT CLOSED).
- NOTE: THE DRIER IS USUALLY MOUNTED WHEREVER YOU HAVE ROOM FOR IT. JUST REMEMBER TO MOUNT IT IN THE COOLEST SPOT POSSIBLE AND VERTICAL SO THE SIGHT GLASS IS DIRECTLY ON TOP (NOT NEXT TO THE EXHAUST MANIFOLD). INSIDE THE CAR IS OKAY!
- 6. IF ALL LOOKS OKAY, AT THIS POINT, CUT HOLES FOR BULKHEAD FITTINGS AND INSTALL THEM.



HOSE ROUTING ILLUSTRATION WITH STANDARD DRIER (31300-VUD)

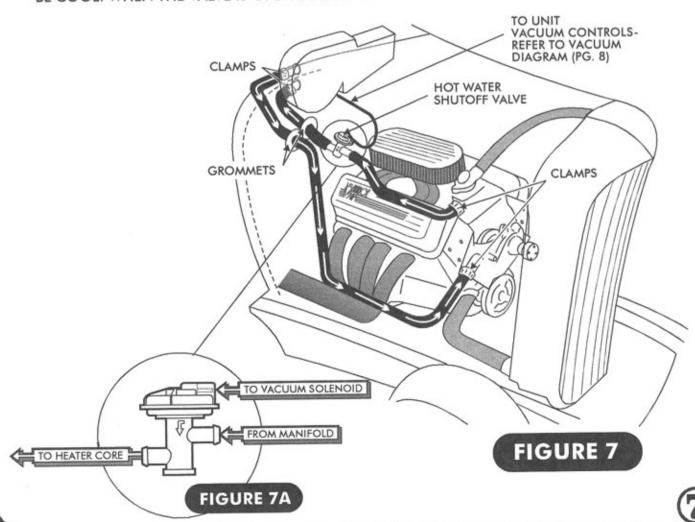
FOR R-12 SANDEN 04508 COMPRESSOR WITH O'RING CONNECTIONS



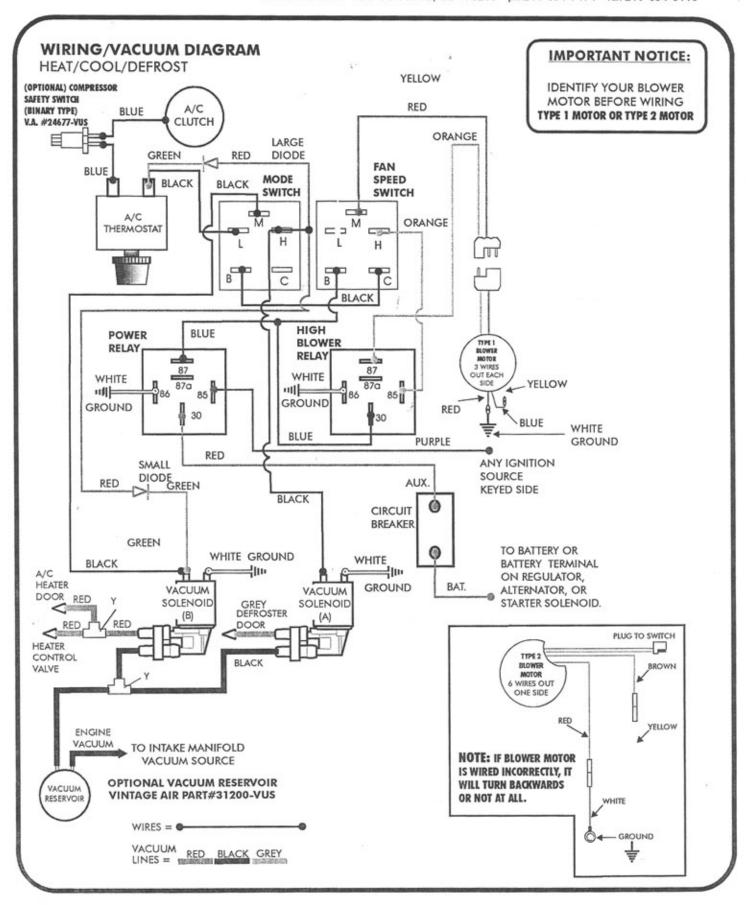


HEATER HOSE INSTALLATION

- AFTER THE HEATER IS IN PLACE, RUN 5/8" HEATER HOSE FROM THE BOTTOM HEATER FITTING THRU FIREWALL OR BEHIND KICK PANEL THRU FLOOR TO THE INTAKE MANIFOLD HEATER HOSE CONNECTION. INSTALL THE VACUUM HEATER CONTROL VALVE IN THIS LINE. SEE FIGURE 7 AND 7A.
- INSTALL 5/8" HEATER HOSE ON TOP FITTING OF HEATER THRU FIREWALL OR BEHIND KICK PANEL THRU FLOOR BOARD AND OUT TO WATER PUMP CONNECTION.
- FILL RADIATOR WITH COOLANT. CHECK ALL HEATER CONNECTIONS FOR LEAKS.
- START ENGINE AND RUN UNTIL NORMAL OPERATING TEMPERATURE IS REACHED. PLACE SWITCH IN HEAT POSITION AND SELECT FAN SPEED DESIRED. THE SYSTEM WILL HEAT THE VEHICLE.
- WHEN VALVE IS CLOSED INLET SIDE OF VALVE SHOULD BE HOT AND OUTLET SIDE SHOULD BE COOL. WHEN THE VALVE IS OPEN BOTH INLET AND OUTLET SIDE SHOULD BE HOT.



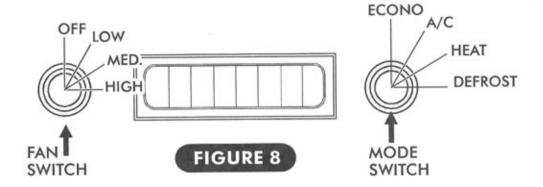






OPERATION OF CONTROLS (SEE FIGURE 8)

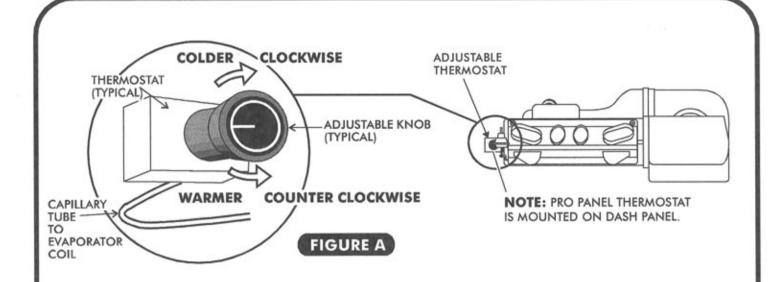
- THE SWITCH ON THE LEFT IS THE FAN SWITCH CONTROLS THREE SPEED MOTOR.
- THE SWITCH ON THE RIGHT IS THE MODE SELECTION. FULL COUNTERCLOCKWISE POSITION IS ECONOMY POSITION. RECIRCULATED AIR SHOULD COME OUT THE DASH VENTS. IN THE FIRST POSITION (A/C POSITION), COLD AIR SHOULD COME OUT OF THE DASH VENTS. THE SECOND POSITION IS HEAT. HOT AIR WILL EXIT THE BOTTOM OF THE A/C PLENUM. THE HEATER VALVE LINE SHOULD HAVE VACUUM.
 LAST POSITION ON MODE SWITCH IS DEFROST. DEHUMIDIFIED DEFROST WILL BE DIRECTED TO THE WINDSHIELD.
- FAN SPEED CAN BE OPERATED IN ANY MODE POSITION.



FINAL STEPS

- RE INSTALL ANY PREVIOUSLY REMOVED COMPONENTS (BATTERY, GLOVE BOX, RADIO, ETC.).
- FILL RADIATOR WITH AT LEAST A 50/50 MIXTURE OF APPROVED ANTIFREEZE AND 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.
- CHECK COMPLETE A/C ASSEMBLY FOR PROPER OPERATION.
- VINTAGE AIR RECOMMENDS THAT ALL A/C SYSTEMS BE SERVICED BY A CERTIFIED AUTOMOTIVE AIR CONDITIONING TECHNICIAN ONLY. SEE INSIDE COVER FOR SERVICE INFORMATION.





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.

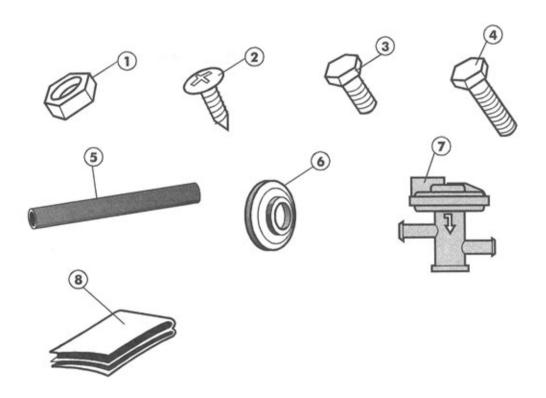
SOLUTION: THE HEATER MAY BE ON AT ALL TIMES. <u>CAREFULLY</u> FEEL AROUND THE HEATER HOSES AT THE FIREWALL. THEY SHOULD BE COLD WHEN THE A/C IS ON. IF THE HOSES ARE HOT......

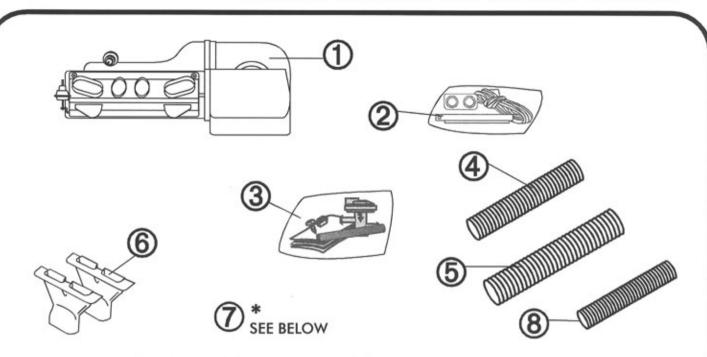
- A) THE HEATER CONTROL VALVE MAY BE INSTALLED BACKWARDS. CHECK THE FLOW DIRECTION ARROW ON THE VALVE AGAINST THE ILLUSTRATION IN YOUR INSTALLATION INSTRUCTIONS.
 - B) CABLE OPERATED: THE VALVE MAY BE MISADJUSTED.
- C) HEATER CONTROL VALVE IS INSTALLED IN WRONG HEATER HOSE.



63250-VUE DRAIN KIT PARTS LIST

No.	QTY.	PART NUMBER	DESCRIPTION
1.	3	18136-VUB	1/4" COARSE NUT
2.	10	18235-VUB	#8 x 1/2" PAN HEAD SCREW
3.	3	18287-VUB	1/4" x 1/2" COARSE BOLT
4.	3	18290-VUB	1/4" x 1" COARSE BOLT
5.	25	31050-VUD	1/2" DRAIN HOSE
6.	2	33137-VUI	LARGE GROMMET
7.	1	46103-VUH	HEATER CONTROL VALVE
8.	20	49003-VUP	PRESS TAPE





MONSTER COOLER (HEAT/COOL & DEFROST) PACKING LIST

No.	QTY.	PART No.	DESCRIPTION
1.	1	55356-VUE-A	EVAPORATOR W/BLOWER
2.	1	49100-VUZ	CONTROL PANEL W/ WIRING
3.	1	63250-VUE	DRAIN KIT
4.	1	06250-VUE	2 1/2" x 4'-0" DUCT HOSE
5.	1	06300-VUE	3" x 6'-0" DUCT HOSE
6.	1	63380-VUE	DEFROST DUCTS
7.	1	SEE BELOW	*VENTS #'S CHECK PAGE BOTTOM
8.	1	06220-VUE	2" x 5'-0" DUCT HOSE
			DATE:
			CHECKED:
			PACKED:

* VENTS:

65100 = 2 - 49049-VUL, AND 2 - 49056-VUL

65200 = 2 - 49050-VUL, 1 - 49251-VUL, AND 1 - 49252-VUL

65300 = 0 LOUVERS

65400 = 2 - 49056-VUL, AND 2 - 49058-VUL



#49049-VUL



#49056-VUL



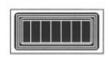
#49251-VUL



#49050-VUL



#49252-VUL



#49058-VUL