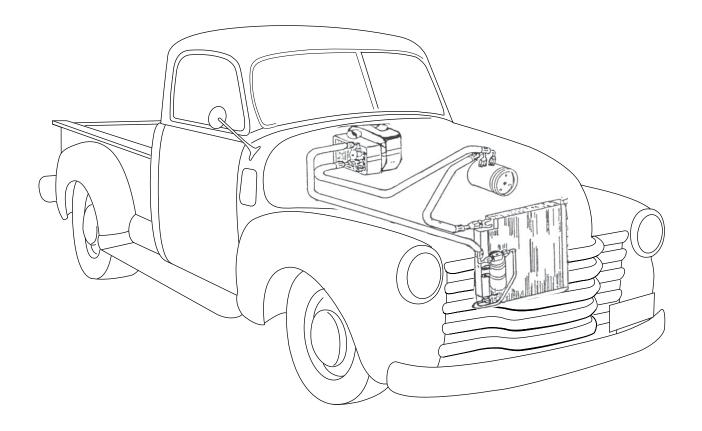


# ShortPac

(05000-QUZ-A/05000-VUZ-A)



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



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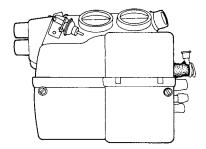


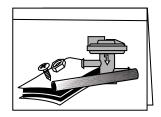
EVAPORATOR KIT 05000-QUZ-A 05000-VUZ-A

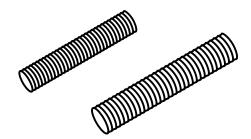
### **EVAPORATOR KIT PACKING LIST**

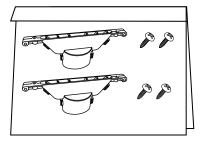
No.	QTY.	PART No.	DESCRIPTION	
1.	1	55150-VUE-A	EVAPORATOR w/ BLOWER SUB CASE	
2.	1	63250-VUE	INSTALLATION KIT	
3.	5	06200-VUE	2" DUCT HOSE	
4.	8	06250-VUE	2 1/2" DUCT HOSE	
5.	1	633810-VUA	UNIVERSAL DEFROST DUCT KIT	
6.	2	64143-VUE	EVAPORATOR MTG. KIT	

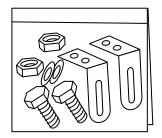
\*\* BEFORE BEGINNING INSTALLATION OPEN ALL PACKAGES AND CHECK CONTENTS OF SHIPMENT. PLEASE REPORT ANY SHORTAGES DIRECTLY TO VINTAGE AIR WITHIN 15 DAYS. AFTER 15 DAYS, VINTAGE AIR WILL NOT BE RESPONSIBLE FOR MISSING OR DAMAGED ITEMS.













## ShortPac HEAT/COOL/DEFROST

# 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 YOUR LOCAL PARTS RETAILER.

### **SAFETY SWITCHES:**

A COMPRESSOR SAFETY SWITCH MUST BE INSTALLED ON EVERY A/C SYSTEM. A BINARY SWITCH (PART# 24679-VUS) DISENGAGES THE COMPRESSOR CLUTCH IN CASE OF EXTREME LOW PRESSURE CONDITIONS (REFRIGERANT LOSS) OR EXCESSIVELY HIGH HEAD PRESSURE (406 PSI.) TO PREVENT COMPRESSOR DAMAGE OR HOSE RUPTURE. A TRINARY SWITCH (PART# 24678-VUS) COMBINES HI/LOW PRESSURE PROTECTION WITH AN ELECTRIC FAN OPERATION SIGNAL AT 254 PSI. 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
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 CAPACITIES FOR VINTAGE AIR SYSTEMS

(FOR OTHER SYSTEMS, CONSULT MANUFACTURER GUIDELINES)

R134a SYSTEM

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

LUBRICANT CAPACITIES: NEW COMPRESSOR - NO ADDITIONAL OIL NEEDED

USED COMPRESSOR - CONSULT VINTAGE AIR



# ShortPac INSTALLATION INSTRUCTIONS

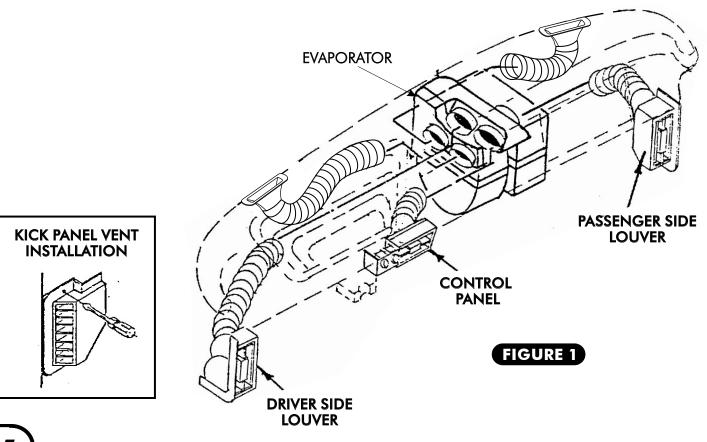
THE VINTAGE AIR ShortPac HEAT & COOL WITH DEFROST SYSTEM WAS DESIGNED ESPECIALLY FOR YOUR STREET ROD. IT WILL FIT NEATLY BEHIND THE DASH OF YOUR CAR, OUT OF SIGHT.

READ THE DIRECTIONS COMPLETELY AND REMOVE ALL PARTS FROM THE BOX TO IDENTIFY EACH OF THEM WITH THE PACKING LIST.

THE INSTALLATION OF THIS UNIT VARIES ACCORDING TO THE BODY MANUFACTURER OR MODIFICATIONS TO THE ORIGINAL BODY. THE COWL VENT MAY REMAIN OPERATIONAL (SEE STEP 2, BELOW). TAKE YOUR TIME AND DOUBLE CHECK BEFORE DRILLING OR CUTTING.

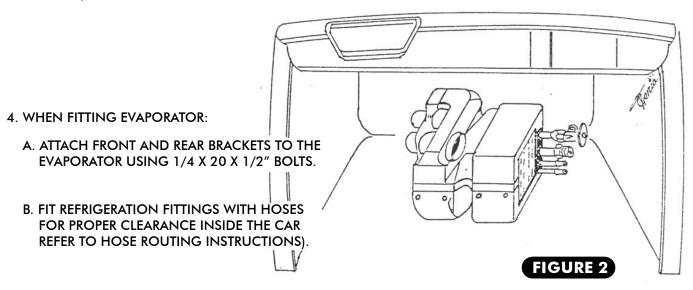
THE EVAPORATOR WAS DESIGNED TO FIT ON THE PASSENGER SIDE.

- 1. CHECK FOR AND FILL IN ANY HOLES IN THE FIREWALL AND FLOOR. INSULATE AND SEAL THE FIREWALL, FLOOR, DOOR PANELS AND HEADLINER TO REDUCE THE AMOUNT OF HEAT ENTERING INTO THE CAR.
- 2. THE EVAPORATOR SHOULD FIT AS SHOWN IN FIGURE 1, BELOW. THE DRAIN OUTLET IS ON THE BOTTOM (DOWN) SIDE OF THE EVAPORATOR. THE EVAPORATOR DRAIN MUST REMAIN ON THE BOTTOM OF THE UNIT (SEE FIGURE 1, BELOW). IF YOU NEED TO RELOCATE THE DRAIN, CONTACT VINTAGE AIR FOR INSTRUCTIONS.





3. BRACKETS ARE FURNISHED TO MOUNT THE EVAPORATOR CASE (ATTACH TO FIREWALL AS SHOWN IN FIGURE 2, BELOW.



5. HAVE A HELPER HOLD THE UNIT UP AS HIGH AS POSSIBLE, AND THEN LOCATE THE BRACKET ON THE TOP RIGHT SIDE OF THE BLOWER HOUSING. DRILL THROUGH THE 1/4" HOLE IN THE BRACKET TO MARK THE FIREWALL. CHECK TO SEE IF THE LOCATION YOU MARKED LOOKS CORRECT AND WILL CLEAR OBSTRUCTIONS ON BOTH SIDES OF THE FIREWALL. IF SO, DRILL A 1/4" HOLE IN THE FIREWALL. ATTACH THE EVAPORATOR TO THE FIREWALL BY THE BLOWER MOTOR BRACKET WITH A 1/4" X 20 X 1/2" BOLT AND NUT. USING THE REAR EVAPORATOR BRACKET AS A GUIDE, MARK AND DRILL THROUGH THE 1/4" HOLE IN THE BRACKET. ATTACH THIS BRACKET TO THE FIREWALL WITH A 1/4" X 20 X 1/2" BOLT. THIS WILL LOCATE THE EVAPORATOR HORIZONTALLY. NOW SECURE THE FRONT EVAPORATOR SUPPORT STRAP TO THE UNIT WITH THE 1/4" X 20 X 1/2" BOLT FURNISHED. THIS SUPPORT BRACKET WILL ATTACH TO THE DASH MOUNT HEADER. WITH THE UNIT HELD IN PLACE AND LEVEL, MARK THROUGH THE 1/4" HOLE AT THE TOP OF THE BRACKET. MAKE SURE THAT THE SPOT MARKED WILL PROVIDE A GOOD MOUNTING LOCATION FOR THIS BRACKET, AND DRILL A 1/4" HOLE. SECURE THE MOUNT STRAP TO THE COWL HEADER WITH A 1/4" BOLT, AS SHOWN IN FIGURE 2. ABOVE.

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

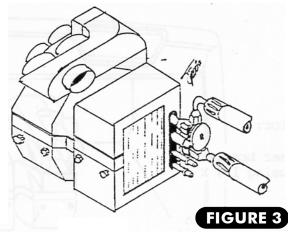
6. THE DUCT HOSE SHOULD BE PUT ON THE EVAPORATOR AT THIS POINT AND RUN TO THE VENTS TO ENSURE PROPER CLEARANCE.

NOTE: IF YOUR KIT HAS THE DEFROST OPTION, MOUNT THE DEFROSTER BUTTERFLY AND DEFROSTER DUCTS AT THIS TIME, AS SHOWN ON THE DEFROSTER INSTALLATION SHEET.

- 7. FIT AND CUT YOUR DUCT HOSE TO LENGTH AT THIS TIME.
- 8. PLACE DUCT HOSE THAT YOU HAVE CUT TO LENGTH ON THE EVAPORATOR DUCT HOSE ADAPTERS BEFORE YOU FINALLY INSTALL THE UNIT INTO THE CAR (SEE FIGURE 1, PAGE 5).



9. INSTALL AND TIGHTEN EVAPORATOR FITTINGS WITH HOSE ATTACHED TO THE EVAPORATOR. PLACE THE EVAPORATOR ON A WORKBENCH AND TIGHTEN EACH CONNECTION WITH TWO WRENCHES: ONE ON THE FITTING AND ONE ON THE COUNTERPART FITTING ATTACHED TO THE EVAPORATOR (SEE FIGURE 3, BELOW).



- 10. CHECK TO ENSURE THAT THE THERMOSTAT CAPILLARY TUBE IS FULLY IN THE COIL. WITH THE REFRIGERATION HOSES AND DUCT HOSES ON THE UNIT, LIFT IT INTO PLACE. MAKE SURE THAT THE FIREWALL FITTINGS ARE ACCESSIBLE WITH THE UNIT IN PLACE. IF NOT, TIGHTEN ALL REFRIGERATION FITTINGS INSIDE THE CAR AT THIS TIME, WHILE YOU CAN REACH THEM. LIFT THE UNIT INTO PLACE AND TIGHTEN THE BRACKET BOLTS TO SECURE THE EVAPORATOR.
- 11. RUN REFRIGERATION AND HOT WATER LINES. WARNING: FILL THE ENGINE COOLING SYSTEM WITH 50% ANTIFREEZE AND DISTILLED WATER. FAILURE TO DO SO COULD DAMAGE YOUR SYSTEM.
- 12. LEAK CHECK YOUR SYSTEM AT THIS TIME, IF POSSIBLE. IT WILL BE EASIER TO CORRECT A LEAK IF YOU FIND IT NOW, BEFORE THE CAR IS BACK TOGETHER (REFER TO LEAK CHECK INSTRUCTIONS).
- 13. WITH YOUR UNIT IN PLACE, STRETCH THE DUCT HOSE TIGHTLY TO THE DASH VENT AND RECHECK THE LENGTH. TRIM TO ENSURE THAT THE HOSE IS PULLED TIGHTLY WITH A MINIMUM OF KINKS OR SHARP BENDS IN THE HOSE. THIS WILL ENSURE MAXIMUM AIR FLOW.
- 14. MAKE ELECTRICAL AND VACUUM CONNECTIONS ACCORDING TO THE DIAGRAMS FURNISHED.

NOTE: THE BLUE 12GA WIRE WITH THE CIRCUIT BREAKER SHOULD BE RUN TO A POWER SOURCE OF AT LEAST 12GA WIRE. CONNECT MOLDING PLUG WITH THE (RED, YELLOW, ORANGE) WIRES TO THE CORRESPONDING PLUG FROM THE BLOWER MOTOR. THE RED WIRE FROM THE BLOWER MOTOR WITH THE BLACK EXTENSION AND RING TERMINAL MUST BE GROUNDED. THE BLUE AND YELLOW WIRES FROM THE BLOWER MOTOR MUST BE PLUGGED TOGETHER. THE BLACK CLUTCH WIRE RUNS FROM THE THERMOSTAT ON THE UNIT THROUGH THE FIREWALL AND TO THE BLACK WIRE ON THE COMPRESSOR. BE CAREFUL TO ENSURE THAT THIS WIRE IS NOT PINCHED OR IN A POSITION TO RUB ON A SHARP EDGE AS IT GOES THROUGH THE FIREWALL. A VACUUM ACCUMULATOR WITH CHECK VALVE WILL HELP THE SYSTEM WORK UNDER A VARIETY OF CONDITIONS, INCLUDING ENGINE OFF (FORD DEALER PARTS).

15. CENTER OUTLET: YOU MAY USE THE CENTER PANEL FURNISHED, OR YOU CAN MOUNT THE VENTS IN THE DASH. IF YOU USE THE CONTROL PANEL, THE TOP MOUNTING LIP SHOULD BE BACK 1/4" TO 1/2" FROM THE LOWER LEADING EDGE OF THE DASH (SEE FIGURE 1, PAGE 5).



- 16. ENSURE THAT THE DUCT HOSE IS SNUGLY ON THE DASH VENT HOSE ADAPTERS.
- 17. CHECK OPERATION.
  - THE SWITCH ON THE LEFT IS THE FAN SWITCH. IT CONTROLS THE 3-SPEED FAN MOTOR (SEE FIGURE 4, BELOW).
  - THE SWITCH ON THE RIGHT IS THE MODE SELECTION SWITCH. THE FULL COUNTERCLOCKWISE POSITION IS ECONOMY POSITION. AIR SHOULD COME OUT OF THE DASH VENTS. IN THE FIRST POSITION, THE A/C POSITION, COLD AIR SHOULD COME OUT OF THE DASH OUTLETS. THE SECOND POSITION IS HEAT. HOT AIR SHOULD COME OUT OF THE DASH VENTS. THE HEATER VALVE LINE SHOULD HAVE VACUUM. THE LAST POSITION ON THE MODE SWITCH IS DEFROST (IF APPLICABLE). HEAT COMES OUT OF TWO OUTSIDE VENTS AND DEFROST IN THIS POSITION.
  - THE FAN SPEED CAN BE ADJUSTED IN ANY MODE POSITION.

### NOTE:

- A. WRAP THE SUCTION LINE AND EXPANSION VALVES ACCORDING TO THE HOSE ROUTING INSTRUCTIONS.
- B. IF YOU HAVE THE ALUMINUM CONTROL PANEL OPTION, REFER TO THE INSTRUCTIONS FURNISHED WITH THAT KIT FOR OPERATION.

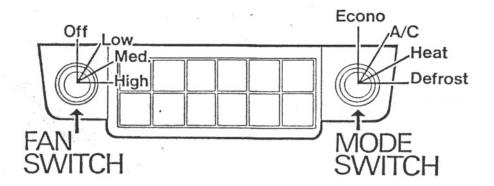
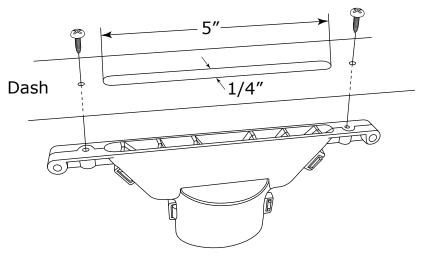


FIGURE 4

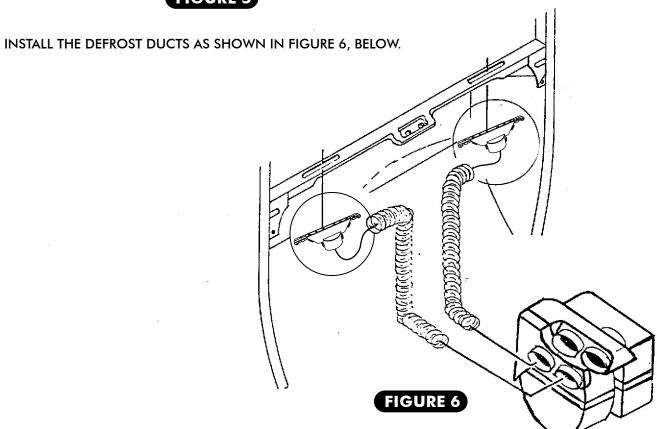


WHEN YOU INSTALL THE ShortPac WITH DEFROST UNIT, DO THE FOLLOWING:

NOTE: FIGURE 5 SHOWS GENERAL LOCATIONS OF DEFROSTER DUCT HOLES. THE LOCATION OF THESE DUCTS WILL VARY.



### FIGURE 5





COMPRESSOR

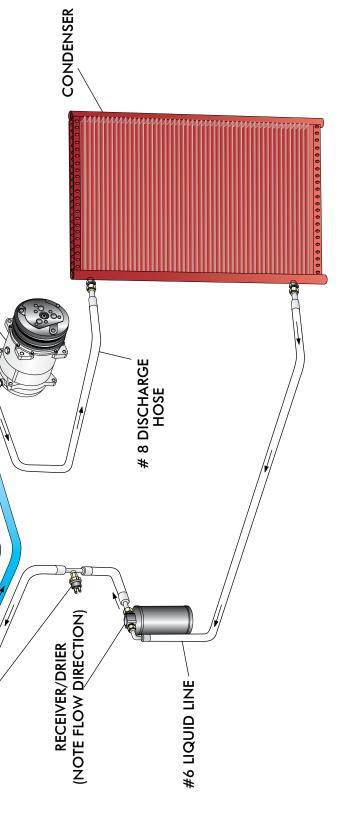
# 10 SUCTION HOSE

BINARY (ELECTRIC FAN)
TRINARY (ELECTRIC FAN)

SAFETY SWITCH

**EVAPORATOR** 

# TYPICAL HOSE ROUTING DIAGRAM



DIRECTION OF REFRIGERANT FLOW INDICATED BY ARROWS

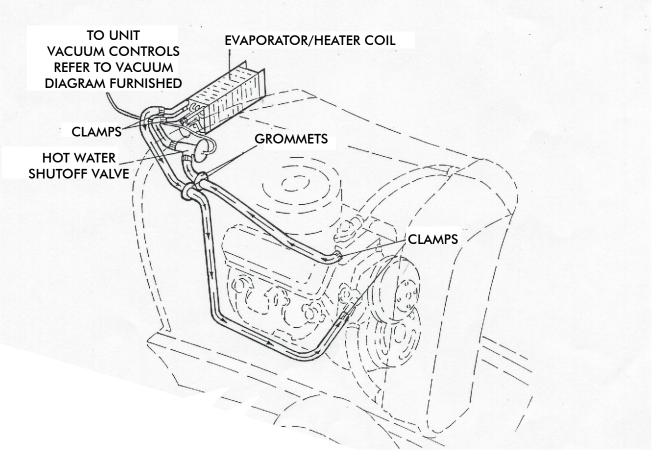


### **HEATER HOSE INSTALLATION**

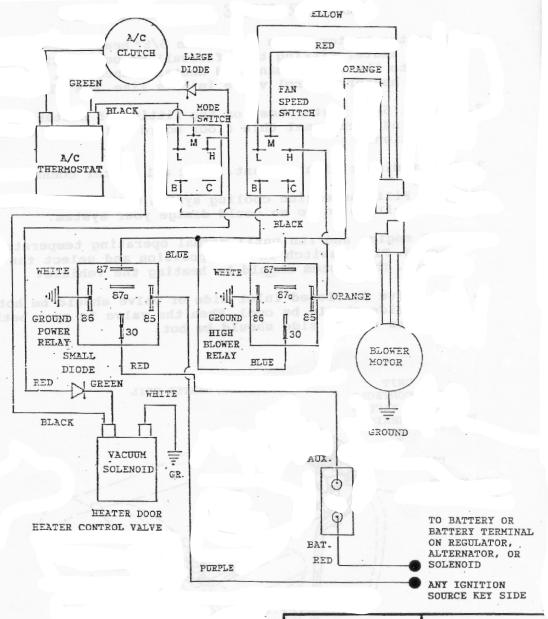
- 1. AFTER THE HEATER IS IN PLACE, RUN 5/8" HEATER HOSE FROM THE BOTTOM HEATER FITTING THROUGH THE FIREWALL OR BEHIND THE KICK PANEL THROUGH THE FLOOR TO THE INTAKE MANIFOLD HEATER CONNECTION. INSTALL THE VACUUM HEATER CONTROL VALVE IN THIS LINE (SEE BELOW).
- 2. INSTALL 5/8" HEATER HOSE ON TOP FITTING OF HEATER THROUGH THE FIREWALL OR BEHIND THE KICK PANEL THROUGH THE FLOORBOARD AND OUT TO THE WATER PUMP CONNECTION.
- 3. FILL RADIATOR WITH COOLANT. CHECK ALL HEATER CONNECTIONS FOR LEAKS.

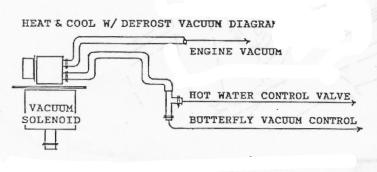
WARNING: FILL THE ENGINE COOLING SYSTEM WITH A MIXTURE OF 50% ANTIFREEZE AND DISTILLED WATER. FAILURE TO DO SO COULD DAMAGE YOUR SYSTEM.

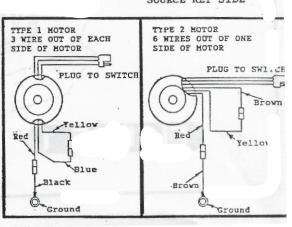
- 4. START ENGINE AND RUN UNTIL NORMAL OPERATING TEMPERATURE IS REACHED. PLACE SWITCH IN HEAT POSITION AND SELECT THE FAN SPEED DESIRED. THE SYSTEM SHOULD BE HEATING THE VEHICLE.
- 5. WHEN VALVE IS CLOSED, INLET SIDE OF VALVE SHOULD BE HOT AND OUTLET SIDE SHOULD BE COOL. WHEN THE VALVE IS OPEN, BOTH THE INLET AND OUTLET SIDES SHOULD BE HOT.













EVAPORATOR KIT 05000-QUZ-A \_\_ 05000-VUZ-A \_\_

### **EVAPORATOR KIT PACKING LIST**

No.	QTY.	PART No.	DESCRIPTION	
1.	1	55150-VUE-A	EVAPORATOR w/ BLOWER SUB CASE	
2.	1	63250-VUE	INSTALLATION KIT	
3.	5	06200-VUE	2" DUCT HOSE	
4.	8	06250-VUE	2 1/2" DUCT HOSE	
5.	1	633810-VUA	UNIVERSAL DEFROST DUCT KIT	
6.	2	64143-VUE	EVAPORATOR MTG. KIT	

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

