ELECTRIC & WATER HEAT INSTALLATION PROCEDURE

CAUTION: TURN THE UNIT OFF, DISCONNECT THE BATTERY & ALLOW SUFFICIENT TIME FOR THE ENGINE & ITS FLUIDS TO COOL BEFORE PROCEEDING.

NOTE: IT IS EXTREMELY IMPORTANT THAT THE UNIT REMAIN DISABLED THROUGHOUT THIS PROCEDURE.

ASSEMBLY NOTE: APPLY THREAD SEALANT DURING ASSEMBLY AS REQUIRED TO ALL FITTINGS.

1.) REMOVE EVAPORATOR DRAIN PAN ASSEMBLY FROM UNIT (RETAIN HARDWARE FOR RE-ASSEMBLY). ONCE THE DRAIN PAN HAS BEEN REMOVED, REMOVE THE EXISTING PRESTITE (IF PRESENT) FROM THE Drip PAN OF THE EVAPORATOR.

(CONTINUED ON NEXT SHEET)

SEE SEPARATE PARTS LIST

SUPRA 57722/44 ELECTRIC & WATER HEAT KIT
HEATER MOUNTING

2.) Assemble the water coil (17.5), heater bracket assembly (17.115) and heaters (17.40) with hardware shown. Note: The smaller washers (17.60) should be used to mount the heaters and coil.

3.) Install the assembly into the evaporator wrapper making sure that the mounting holes align correctly.

4.) Install and tighten hardware securing the assembly to the housing.

5.) Mount the supply air sensor (SA5(17.23)) and the high temperature safety geyser (17.20) to the evaporator wrapper as shown in "Figure A".

6.) Remove the junction box (17.120) cover & locate the box inside the bulkhead.

7.) Mark the position of the mounting holes. Using a #0(0.199 DIA) drill bit, drill the two holes for the box & one hole for the clamp.

8.) Mount the junction box & clamp (see "Figure A").

(continued on next sheet)
9.) Use the wire assembly supplied (marked 2HT) to connect the HTs. Use butt splices (IT.21) to make the connections.

10.) Plug the SAS into the existing harness connector.

11.) Separate the SAS wires into pairs of each heater rod, tape each pair together.

12.) Route the heater wires along with the HTS wires through the split tubing (IT.95) and through the coil as shown. Route the wires to the "JUNCTION BOX".

13.) Remove the flag terminals located on the HTS (2HT) wires.

14.) Trim all wires to the appropriate lengths to make connections inside of the junction box. Trim 1/4" off of each wire & make connections as shown in the "JUNCTION BOX DIAGRAM".

15.) Route the harness shown through the evaporator bulkhead. Add caulking around the opening to prevent air leaks.

16.) Add TY-WRAPS (IT.75) as required to support loose harnesses.

17.) Reinstall drain-pan using previously removed hardware, new PRESTITE (IT.8), & new banding clamps (IT.9).

(Continued on next sheet)
18.) ROUTE THE WIRES THROUGH THE BOTTOM OF THE UNIT DOWN THE FRONT OF THE TRUCK BODY.

19.) REFER TO "HEATER BOX INSTALL," FOR MOUNTING THE "HEATER CONTROL BOX" (IT.10).

20.) ROUTE THE HARNESS FROM THE EVAPORATOR JUNCTION BOX TO THE "HEATER CONTROL BOX".

21.) SECURE THE HARNESS TO THE TRUCK WALL WITH CLAMPS (IT.43) & HARDWARE (IT.53).

(CONTINUED ON NEXT SHEET)
22.) SECURE THE HARNESS CONNECTOR TO THE "HEATER CONTROL BOX".
23.) INSTALL THE GROUND WIRE "GRO" TO THE GROUND STUD. STRIP 1/4" OF INSULATION FROM EACH WIRE AND MAKE REQUIRED CONNECTIONS.

**ASSEMBLY NOTE:** MAKE SURE THAT EACH PAIR OF HEATER WIRES ARE INSTALLED CORRECTLY.


24.) SECURE THE HARNESS CONNECTOR TO THE "MAIN CONTROL BOX".
25.) INSTALL THE GROUND WIRE "GRO" TO THE GROUND STUD.
26.) FIND THE CONNECTOR WITH WIRES MARKED "PHC" INSIDE THE LOWER PORTION OF THE "MAIN CONTROL BOX" AND PLUG IN THE CONNECTOR.
27.) INSTALL THE RED WIRES MARKED L1, L2 & L3 INTO THE OVERLOAD AS SHOWN.
28.) FIND THE CONNECTOR WITH WIRES MARKED "EHM" INSIDE THE UPPER PORTION OF THE CONTROL BOX AND INSTALL THE RELAY (II/B).
26.) OPEN THE UNIT DOOR.
27.) LIFT UP TO REMOVE THE DOOR.
28.) REMOVE THE FRONT GRILLE BY REMOVING THE HARDWARE SHOWN. RETAIN THE HARDWARE FOR RE-ASSEMBLY.
29.) REMOVE THE FRONT GRILLE & PLACE THE DOOR & GRILLE IN A SECURE PLACE TO AVOID DAMAGE.

33.) REMOVE THE ENGINE COOLANT BY FOLLOWING ALL LOCAL, STATE & FEDERAL REGULATIONS.
34.) LOosen THE ENGINE AIR CLEANER CLAMP, AND REMOVE THE OVERFLOW CLAMP.
35.) REMOVE THE HARDWARE SHOWN(RETAIN FOR LATER RE-USE), AND REMOVE THE WATER BOTTLE BRACKET.

(CONTINUED ON NEXT SHEET)
36.) REMOVE THE COVER FROM THE COIL(11.132) BY LOOSENING THE FOUR SCREWS SHOWN.

37.) ASSEMBLE THE WHS HARNESS TO THE COVER AS SHOWN.

WHS HARNESS (RF) FROM THE JUNCTION BOX LOCATED INSIDE THE EVAP. AREA

38.) STRIP 1/4" OF INSULATION FROM THE END OF WIRES.

39.) MAKE THE CONNECTIONS SHOWN BY LOOSENING THE SCREWS, INSERTING THE WIRES, AND RETIGHTENING THE SCREWS.

40.) REINSTALL THE COVER TO THE COIL.

41.) CREATE THE VALVE ASSEMBLY(SHOWN BELOW) MAKING CERTAIN TO USE THREAD SEALANT ON ALL THREADS.

42.) REPLACE EXISTING WATER TUBE ASSEMBLY WITH NEW WATER TUBE ASSEMBLY(11.157). NOTE, IT MAY BE NECESSARY TO REMOVE THE WATER PUMP BELT TO REPLACE THE WATER TUBE.

43.) SECURE THE VALVE ASSEMBLY TO THE BRACKET(11.178) USING CLAMPS(11.133) AND HARDWARE(11.5: 62, 134 & 135).

44.) CUT A PIECE OF TUBE(11.172) TO 9 INCHES(229 mm) AND INSTALL BETWEEN THE WATER TUBE ASSEMBLY AND VALVE ASSEMBLY USING CLAMPS(11.157).

45.) ROUTE ONE OF THE HOSES FROM THE EVAPORATOR TO THE VALVE ASSEMBLY AND ASSEMBLE IT TO THE VALVE WITH CLAMP(11.157).

(Continued on next sheet)
58.) Reinstall the water bottle bracket by aligning the water solenoid bracket to the holes in the water bottle bracket.

59.) Remount the water bottle bracket with previously removed hardware.

60.) Route the remaining hose from the evaporator to the thermostat assembly.

61.) Reassemble the front grille & door to the unit.

62.) Add water & antifreeze back into the system at the desired mixture.

63.) Reconnect the unit battery and run-test the unit checking for proper operation. Make sure to top off the coolant levels.

64.) Reinstall all control box doors/panels.