**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.

---

**SHEET INDEX**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>SHEET NO.</th>
<th>REVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAIN PAN REMOVAL</td>
<td>1</td>
<td>C</td>
</tr>
<tr>
<td>HEATER COIL MOUNTING</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>ENGINE WATER UNIT PREPARATION</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>WATER VALVE ASSEMBLY/INSTALL.</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>MAIN CONTROL BOX WIRING</td>
<td>5</td>
<td>B</td>
</tr>
<tr>
<td>WATER HEAT INSTALL. (ENGINE)</td>
<td>6</td>
<td>C</td>
</tr>
<tr>
<td>FINAL INSTALL.</td>
<td>7</td>
<td>C</td>
</tr>
</tbody>
</table>

---

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**

---

**INSTALLATION INSTRUCTIONS**

SUPRA 6/722/44 WATER HEAT KIT
HEATER MOUNTING

2.) ASSEMBLE THE WATER COIL(1T.5), HEATER BRACKET ASSY'S(1T.11S) AND HEATERS (1T.4D) WITH HARDWARE SHOWN. NOTE: THE SMALLER WASHERS(1T.6B) 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(SAS(1T.23S)) TO THE EVAPORATOR WRAPPER.

6.) PLUG THE SAS INTO THE EXISTING HARNESS CONNECTOR.

7.) REINSTALL DRAIN-PAN USING PREVIOUSLY REMOVED HARDWARE, NEW PRESTITE(1T.9), & NEW BANDING CLAMPS(1T.9).

(CONTINUED ON NEXT SHEET)
8.) OPEN THE UNIT DOOR.
9.) LIFT UP TO REMOVE THE DOOR.
10.) REMOVE THE FRONT GRILLE BY REMOVING THE HARDWARE SHOWN. RETAIN THE HARDWARE FOR RE-ASSEMBLY.
11.) REMOVE THE FRONT GRILLE & PLACE THE DOOR & GRILLE IN A SECURE PLACE TO AVOID DAMAGE.

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

(CONTINUED ON NEXT SHEET)
15.) CREATE THE VALVE ASSEMBLY (SHOWN BELOW) MAKING CERTAIN TO USE THREAD SEALANT ON ALL THREADS.

16.) REPLACE EXISTING WATER TUBE ASSEMBLY WITH NEW WATER TUBE ASSEMBLY (IT. 157). NOTE: IT MAY BE NECESSARY TO REMOVE THE WATER PUMP BELT TO REPLACE THE WATER TUBE.

17.) SECURE THE VALVE ASSEMBLY TO THE BRACKET (IT. 178) USING CLAMPS (IT. 133) AND HARDWARE (IT. 65, 134 & 135).

18.) CUT A PIECE OF TUBE (IT. 172) TO 9 INCHES (229 mm) AND INSTALL BETWEEN THE WATER TUBE ASSEMBLY AND VALVE ASSEMBLY USING CLAMPS (IT. 157).

19.) ROUTE ONE OF THE HOSES FROM THE EVAPORATOR TO THE VALVE ASSEMBLY AND ASSEMBLE IT TO THE VALVE WITH CLAMP (IT. 157).

(CONTINUED ON NEXT SHEET)
20.) SECURE THE HARNESS CONNECTOR TO THE "MAIN CONTROL BOX".

21.) INSTALL THE SWITCH BY REMOVING THE CONTROL BOX PLUG, INSERTING THE SWITCH INTO THE HOLE CREATED BY REMOVING THE PLUG, AND INSTALLING THE RETAINING NUT.

22.) FIND THE CONNECTOR WITH WIRES MARKED "ECS" INSIDE THE LOWER PORTION OF THE "MAIN CONTROL BOX" AND PLUG IN THE CONNECTOR.

23.) ROUTE THE WATER HARNESS TO THE WATER SOLENOID, MAKE CERTAIN THAT THE HARNESS CANNOT COME IN CONTACT WITH THE CONDENSER FAN.

24.) REMOVE THE COVER FROM THE COIL (11.132) BY LOOSENING THE FOUR SCREWS ShOWN.

25.) ASSEMBLE THE HARNESS (11.7) TO THE COVER AS SHOWN.

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

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

28.) REINSTALL THE COVER TO THE COIL, AND INSTALL THE COIL TO THE WATER VALVE.
31.) Install the tube (IT, 171) between the tee (IT, 166) & the thermostat housing using clamps (IT, 181).

32.) Install the tube (IT, 175) to the tee (IT, 156) with clamp (IT, 159) & secure the existing hose to tee with clamp (IT, 159).

33.) Remove the thermostat bolt from the side of the thermostat housing.

34.) Remove the thermostat cover & replace the existing hose with the thermostat supplied (IT, 156).

29.) Remove the water tube (shown) from the thermostat housing.

30.) Rotate the tube 90 degrees counter-clockwise.

35.) Create the water heat thermostat assembly (shown above) using the thermostat which was removed from the engine.

36.) Install the assembly into the engine thermostat housing in place of the bolt which was removed earlier.

37.) Route the remaining hose from the evaporator to the thermostat assembly & secure the hose with clamp (IT, 147).

38.) Route the hose coming from the tee to the thermostat assembly & secure the hose with clamp (IT, 159).

39.) Add the support bracket (IT, 176) between the frame & condenser.

40.) Support the tubes coming from the evaporator to the support bracket with clamps (IT, 133) & hardware (IT'S, 134 & 156).

(Continued on next sheet)
41.) REINSTALL THE WATER BOTTLE BRACKET BY ALIGNING THE WATER SOLENOID BRACKET TO THE HOLES IN THE WATER BOTTLE BRACKET.
42.) REMOUNT THE WATER BOTTLE BRACKET WITH PREVIOUSLY REMOVED HARDWARE.
43.) ROUTE THE REMAINING HOSE FROM THE EVAPORATOR TO THE THERMOSTAT ASSEMBLY &
44.) REASSEMBLY THE FRONT GRILLE & DOOR TO THE UNIT.
45.) ADD WATER & ANTIFREEZE BACK INTO THE SYSTEM AT THE DESIRED MIXTURE.
46.) RECONNECT THE UNIT BATTERY AND RUN-TEST THE UNIT CHECKING FOR PROPER OPERATION. MAKE SURE TO TOP OFF THE COOLANT LEVELS.
47.) REINSTALL ALL CONTROL BOX DOORS/ANELS.