Old Water Vessel Removal

1 TURN UNIT OFF AND UNPLUG CORD. Allow unit to fully cool before proceeding to the next step.
REMOVE ANY ACCESSORIES FROM WATER VESSEL(S) AND EMPTY WATER VESSEL(S).

2 REMOVE THERMOSTAT KNOB and knob guard, if your unit includes one. (Pointer type knobs have a setscrew.)

3 DISASSEMBLE SHROUD FROM WATER VESSEL(S) enough to access wiring between these two parts. Place unit on its side and unscrew shroud from vessel(s). You may need to remove the four rubber feet first (they secure the bottom closer to the shroud), depending on which unit you have. Slowly pull vessel(s) away from shroud by tilting shroud until thermostat shaft(s) clears hole provided in shroud.

4 Cut wire ties if necessary to pull vessel(s) further away from shroud. Disconnect wires from (each) water vessel:
DISCONNECT CORD ASSEMBLY YELLOW/GREEN GROUND WIRE FROM SHROUD OR BOTTOM CLOSER NUT.
DISCONNECT CORD ASSEMBLY WHITE/BLUE LEAD FROM HEATING ELEMENT LEAD (A).
DISCONNECT HEATING ELEMENT LEAD (B) FROM THERMOSTAT STRAIGHT TERMINAL.
DISCONNECT THERMAL CUTOUT LEAD FROM ANGLED TERMINAL ON THERMOSTAT.
All of these wires can be best accessed when the vessel(s) can be set upside down on your work surface.

5 REMOVE THERMOSTAT FROM THERMOSTAT BRACKET BY REMOVING SCREW, NUT, AND WASHER(S).
Save the old thermostat(s), screw, nut, and washer for re-installation.
Discard old water vessel(s), old heating element, and old thermostat bracket.

SERVER

Water Vessel Replacement Kit

Stock No. 81087 or 81068

Each Kit includes:
1 Water Vessel Assembly
1 Heating Element
1 Thermostat Bracket

New Water Vessel Installation

6 POSITION OLD THERMOSTAT(S) ONTO NEW THERMOSTAT BRACKET (which is pre-assembled onto the new water vessel), and secure with screw, nut, and a single lockwasher.
Make sure lockwasher is under nut. Tighten nut to 18 in. lbs. (2.03 Nm) torque.

7 Begin to assemble vessel(s) back into shroud. Connect wires to (each) water vessel:
CONNECT THERMAL CUTOUT LEAD TO ANGLED TERMINAL ON THERMOSTAT.
CONNECT HEATING ELEMENT LEAD (B) TO THERMOSTAT STRAIGHT TERMINAL.
CONNECT CORD ASSEMBLY WHITE/BLUE LEAD TO HEATING ELEMENT LEAD (A).
CONNECT CORD ASSEMBLY YELLOW/GREEN GROUND WIRE TO SHROUD OR BOTTOM CLOSER WITH NUT.

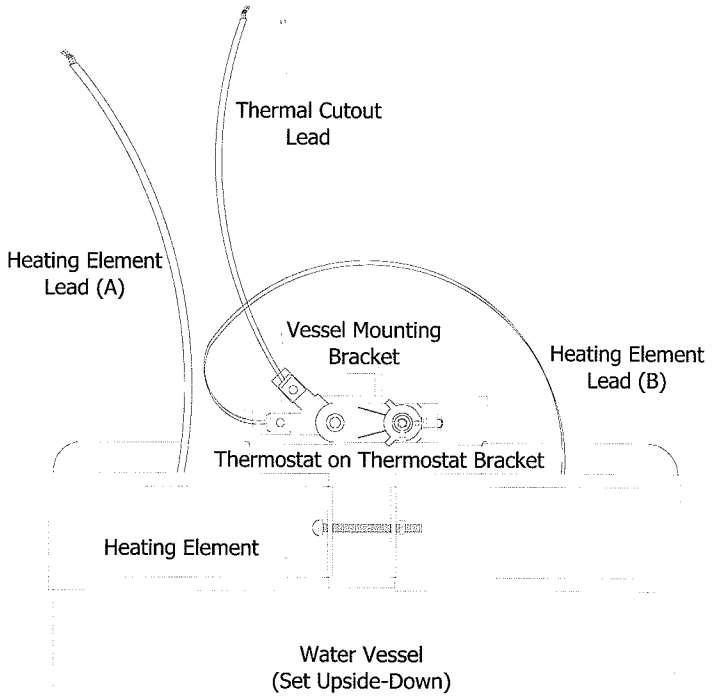
8 CONTINUE ASSEMBLING VESSEL(S) INTO SHROUD until thermostat shaft(s) aligns into hole(s) provided in shroud and the vessel(s) aligns with the screw holes in the shroud.

9 INSTALL SCREWS OR RUBBER FEET WHICH SECURE THE VESSEL TO THE SHROUD OR BOTTOM CLOSER.

10 SET UNIT UPRIGHT ON A LEVEL SURFACE.

11 PLUG UNIT INTO POWER SOURCE.

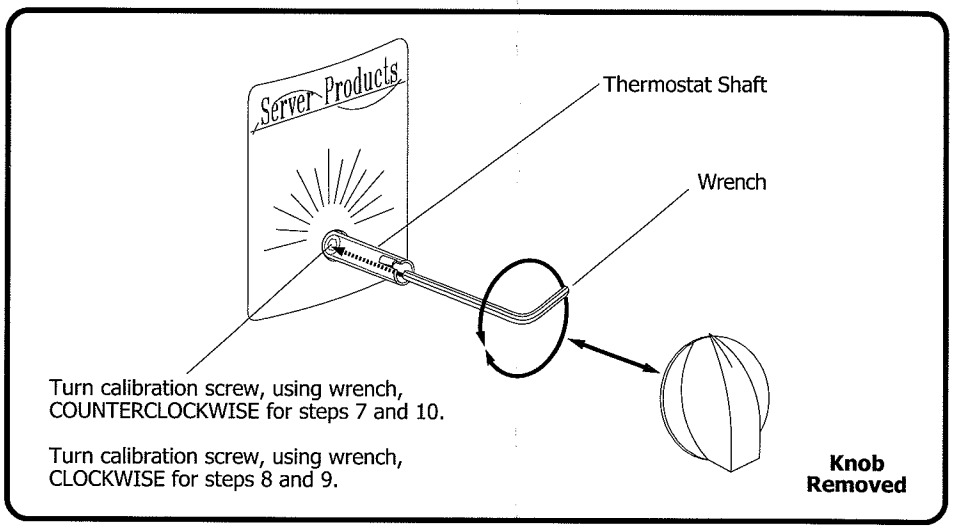
12 CALIBRATE UNIT per calibration instructions (opposite page).



FACTORY-INSTALLED THERMOSTATS ARE SEALED AFTER CALIBRATION. DO NOT ATTEMPT TO CALIBRATE A FACTORY-INSTALLED THERMOSTAT.

TOOLS NEEDED FOR CALIBRATION PROCEDURE

- Hexagonal Wrench or Allen Wrench (1.5 mm)
- Dial Thermometer (stem type)
  -to measure water temperature of 90°-170°F (32.2°-76.7°C)
- Cover Plate (with hole in it)
  - to hold the Dial Thermometer
  - to contain heat within water vessel(s)



CALIBRATION PROCEDURE (FOLLOWS THERMOSTAT INSTALLATION)

1 ALIGN KNOB ONTO THERMOSTAT SHAFT AND PRESS KNOB ONTO SHAFT.

2 TURN KNOB TO SETTING OF:
100°F (37.8°C)
-for models which have a knob range of 50°F (9.99°C) to 150°F (65.6°C)
OR
150°F (65.6°C)
-for FS-4 models and models which have a knob range of 100°F (37.77°C) to 200°F (93.3°C)

3 CAREFULLY REMOVE KNOB with straight pull to avoid turning thermostat shaft.

4 FILL WATER VESSEL AT LEAST 1/2 FULL OF WATER.

5 PLACE WATER VESSEL COVER (WITH HOLE IN IT) ON VESSEL AND INSERT THERMOMETER THROUGH COVER OPENING.

6 TURN UNIT ON AND ALLOW UNIT TO HEAT UP TO A MINIMUM OF:
110°F (43.3°C)
-for models which have a knob range of 50°F (9.99°C) to 150°F (65.6°C)
OR
160°F (71.1°C)
-for models which have a knob range of 100°F (37.77°C) to 200°F (93.3°C)
OR
170°F (76.7°C)
-for FS-4 models
- The above "Heat Up-To" temperatures are considered minimum temperatures because exceeding these temperatures, for each model type, will not affect the final calibration.

7 IF THE TEMPERATURE DOES NOT REACH THE MINIMUM "HEAT UP TO" TEMPERATURES, FOR EACH MODEL TYPE, HOLD THE THERMOSTAT SHAFT WITH ONE HAND AND ROTATE THE CALIBRATION SCREW 1/2 TURN COUNTERCLOCKWISE, USING THE SUPPLIED WRENCH. Continue to repeat the 1/2 turn of the calibration screw, until the temperature reaches the minimum.

8 WHEN THE TEMPERATURE REACHES THE MINIMUM "HEAT UP TO" TEMPERATURES, FOR EACH MODEL TYPE, TURN CALIBRATION SCREW TWO FULL TURNS CLOCKWISE.

9 ALLOW APPLIANCE TO COOL TO:
100°F (37.8°C)
-for models which have a knob range of 50°F (9.99°C) to 150°F (65.6°C)
OR
150°F (65.6°C)
-for models which have a knob range of 100°F (37.77°C) to 200°F (93.3°C)
OR
160°F (71.1°C)
-for FS-4 models
- IF UNIT DOES NOT COOL TO THE ABOVE "COOL TO" TEMPERATURES, FOR EACH MODEL TYPE, TURN CALIBRATION SCREW TWO ADDITIONAL FULL TURNS CLOCKWISE.

10 WHEN THE TEMPERATURE REACHES THE "COOL TO" TEMPERATURE, FOR EACH MODEL TYPE, TURN CALIBRATION SCREW COUNTERCLOCKWISE UNTIL A SOFT AUDIBLE CLICK IS HEARD.

11 REPEAT STEPS 6 THROUGH 10 UNTIL THE FOLLOWING STEADY TEMPERATURES ARE REACHED IN THE WATER:
97°F (36.1°C) to 107°F (41.6°C)
-for models which have a knob range of 50°F (9.99°C) to 150°F (65.6°C)
OR
147°F (63.8°C) to 157°F (69.4°C)
-for models which have a knob range of 100°F (37.77°C) to 200°F (93.3°C)
OR
157°F (69.4°C) to 167°F (75°C)
-for FS-4 models

12 SECURE THE CALIBRATION SCREW BY PLACING SUITABLE THREAD-LOCKING MATERIAL, SUCH AS LOCTITE, IN THE SHAFT CENTER.

13 ALIGN KNOB ONTO THERMOSTAT SHAFT AND PRESS KNOB ONTO SHAFT.
If unit includes a knob guard, install knob guard.

14 RE-CHECK SETTING AND RETURN UNIT TO SERVICE.

Clockwise rotation of the calibration screw lowers operating temperature. Counterclockwise rotation of the screw raises the operating temperature. Rotation of the knob or the thermostat shaft does just the opposite.