

Thermostat in COOL - No Operation

Thermostat is located in the "COOL" position and the marine air conditioner is not turning on.

Make sure that Thermostat delay period has expired. Delay may be as long as 4 minutes. Also, if applicable, check the thermostat batteries located in the front of the display.

Check SET temperature to make sure temperature is set below cabin temperature.

Note: If cabin temperature is displayed as "HI" or "OL" this indicates cabin temperature is over 99 degrees. This does not effect unit operation and the normal temperature display will appear once the cabin temperature falls below 100 degrees. "HI" = High Temperature, "OL" = Out of Limit.

Once you are satisfied that the delay period has expired, check that both boat main circuit breaker and air conditioner circuit breakers are in the ON position.

If both breakers are in the ON position, check to see if boat power source is present. If power source is present, turn on another boat 115 vac accessory to make sure main breaker is operational.

If main breaker is operational, using an AC voltmeter, check for 115 vac power at the unit electrical box.

WARNING

ALWAYS USE EXTREME CARE WHEN CHECKING 115 VAC POWER. CONTACT WITH 115 VAC POWER CAN CAUSE SERIOUS INJURY OR DEATH.

If power is not present, check 115 power leads on unit electrical box WHITE terminal block for

polarity, tightness and for signs of discoloration. If power is still not present, check the air conditioner circuit breaker in the Main Circuit Breaker Panel for loose connections (SEE ABOVE WARNING).

If 115 vac power was present at the WHITE terminal block, using your AC voltmeter, check for 24 vac on the "RED" wire attached to the BLACK terminal board located directly above the WHITE terminal block on the side of the electrical box. You should get a reading by placing one voltmeter lead on the "RED" wire and the other on any other color thermostat lead wires.

If 24 vac is present and all of the above checks and procedures are positive, most likely the thermostat is faulty or a wire has loosened inside the electrical box. To check the thermostat, take a 5 or 6 inch piece of insulated wire, strip the insulation back about 1/8 inch on each end and use it to short the "RED" wire to the "BLACK" wire on the BLACK terminal board located on the side of the electrical box. If the unit immediately comes on, the thermostat is faulty and needs replacing. If the unit does not operate, the problem is in the electrical box.

If 24 vac was not present in step 3 above, most likely the transformer inside the electrical box is faulty or a wire has loosened inside the box.

Note: Once a problem has been isolated to the internal portion of the electrical box the box must now be opened. Before proceeding further, you must disconnect all 115 vac electrical power to the boat. (SEE WARNING BELOW)

WARNING

IF ALL 115 VAC POWER IS NOT DISCONNECTED FROM THE BOAT YOU MAY INCUR ELECTRICAL SHOCK WHICH CAN CAUSE SERIOUS INJURY OR DEATH.

After you have removed all 115 vac electrical power, the electrical box cover may be removed by removing the three retaining screws on each side of the box. Once the screws are removed the cover will slide off the box.

Closely check the box for loose or disconnected wires. If all wiring is tight and in place, replace the transformer. A new transformer maybe purchased from your nearest Mermaid dealer, refrigeration supply store or directly from the Mermaid factory.