




## 6.5 Troubleshooting

|  <b>DANGER</b> |   |
|---|---|
|                | <p><b>When taking action on the primary side of the equipment's breaker, be sure to turn off the main power supply switch at your facility before de-energizing. Also, use caution not to apply voltage accidentally.</b></p> <p>Attempting to solve a problem with the power on can result in an electric shock and create a very dangerous situation.</p> |
|                | <p><b>Be sure to turn off the breaker before opening the electrical compartment door, the exhaust duct, or the water circuit chamber door.</b></p>  |

This section describes problems that the chamber cannot self-diagnose and operations that can be easily mistaken for a malfunction.

If the chamber does not operate properly even after taking the actions listed here, contact your distributor or ESPEC.

Table 6.1 Troubleshooting

| Problem   | Cause  | Solution  |
|---|--|---|
| Blank instrumentation display   | The breaker is not on.   | Turn on the breaker.  |
|   | Electrical compartment door is open.                                   | Close the door.   |
|   | Power supply is open phase.  | Connect properly.<br>See the Installation guide.  |
|   | Fuse is blown.   | Replace the fuse.<br>If the fuse blows immediately after replacement, make a service call.              |
| Display suddenly goes blank or screen contents are abnormal.                              | System error or internal board error.                                  | Turn the chamber's breaker back on. If this occurs again after resuming operation, make a service call. |
| External memory tab contents are not displayed.   | Function is being suppressed by the external memory protect setting.   | Check with the chamber administrator or check the protect setting.                                      |
| The message "Remove external memory" is displayed even while external memory is inserted. |  |   |
| Door is difficult to close.   | An object is blocking the door.  | Remove the object.  |
|   | Test area has become hot and humid, creating strong internal pressure. | This is not a malfunction. Continue operation.  |
| Unusual smell   | Unusual smell remains.   | Clean the test area.  |
|   | Specimen is emitting an unusual smell.                                 | This is not a malfunction. Continue operation.  |
| Chamber vibrates.   | Adjustable feet are not installed properly.                            | Adjust the adjustable feet.   |
| Temperature (humidity) is unstable.   | The door is not closed.  | Close the door.   |
|   | Ambient temperature has changed by 5°C or more per minute.             | Eliminate the cause of fluctuation in outside temperature.  |
|   | Rubber plug to seal the through-hole for the sensor is off.            | Attach the plug.  |
| Set points cannot be changed.   | Key lock is activated.   | Release the key lock.   |

| Problem  | Cause  | Solution  |
|--|--|---|
| Displayed humidity always shows 100%.                                | Condensation has formed on the humidity sensor.  | Dry the humidity sensor by running the temperature operation at 40°C or higher. |
| Displayed humidity exceeds 100%.                                     | Humidity sensor wiring is about to be disconnected or terminal is poorly connected.          | Make a service call.  |
| Instrumentation display value does not match recorder display value. | A calibration value was entered using the offset adjustment function on the instrumentation. | This is not a malfunction. Continue operation.                                  |

## 6.6 Fuse and water filter replacement

### Replacing the fuse

If nothing is displayed when the breaker is pressed, follow the procedure below to check the fuse and replace it if necessary.

Prepare the fuse (7A) that is included.

#### <Procedure>

- 1) Check to make sure that the breaker is turned off.
- 2) Remove the two Phillips screws from the electrical compartment cover and then remove the cover. The electrical compartment cover is wired to the door switch, so take care not to break the connection.
- 3) Remove the fuse from the electrical compartment and check if it is blown.

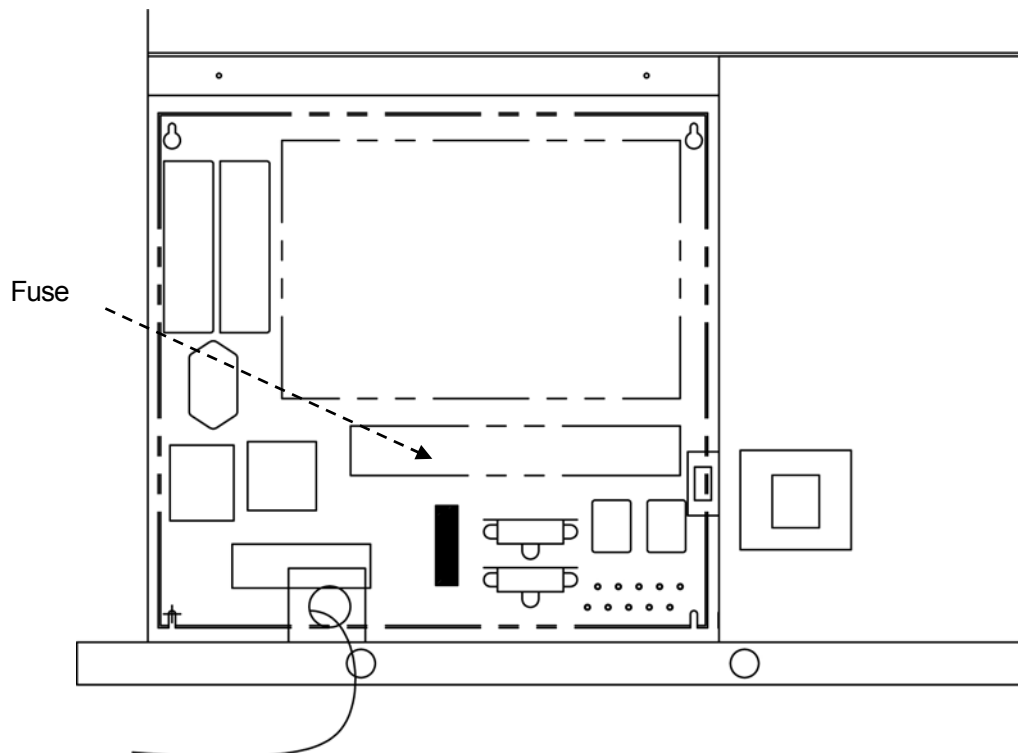


Fig 6.1 Fuse location

- 4) If the fuse is blown, replace it with the provided fuse.

## Replacing the water filter

Follow the procedure below to replace the water filter inside the water circuit chamber on the lower right side of the chamber. Prepare a pair of long pliers and a Phillips screwdriver.

### <Procedure>

- 1) If the chamber is directly connected to the optional pure water circuit or connected to a water purifier, be sure to close the water circuit on side that supplies pure water to the chamber.
- 2) Remove the hoses connected to the water filter. Replace the water filter, reconnect the hoses, and secure the water filter with the two provided crescent clamps.

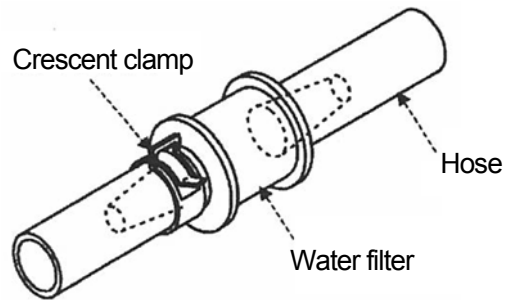


Fig. 6.2 Replacing the water filter