6.2 Other troubles

The following tables explain troubles not detected in self-checks (not displayed either) and common cases of misoperation or mishandling that appear as trouble at first but which in fact are not.

Trouble	Probable cause(s)	Remedy	Refer to
Main power breaker cannot be set in ON position.	• Breaker is currently tripped.	• Set lever in OFF position then ON.	5.2
	• Electric parts compartment door is open. * For safety reasons, the breaker trips when the door is open.	• Close door.	
	• Current leak exists or air conditioner insulation has deteriorated.	• Call for service.	
Display remains out even when [POWER] key is set to ON position.	• Primary power supply is OFF.	• Activate primary power supply.	
	• Main power breaker is OFF.	• Set main power breaker to ON position. • Call for service.	4.1
	• Control circuit fuse has blown.	• Turn main power breaker OFF and then replace fuse inside electric parts compartment. • 250V 3A cartridge fuse.	
	• LCD picture tube is burnt out.	• Call for service. * Picture tube life is approximate 10,000 hrs.	
Cannot change settings.	• Instrumentation keys are locked.	• Unlock keys.	P-instrumentation Reference Manual
Chamber is stopped and instrumentation irresponsive.	• Operating system is down.	• Reset main power breaker.	
Temperature does not drop or drops slowly.	• Evaporator is heavily frosted over. (Check condition through inspection hole.)	• Defrost system. • Check ventilation is OFF and cap is closed.	P-instrumentation Reference Manual
	• Refrigerator now defrosting. (Check status on Alarm report display.)	• Operation is restored automatically when defrosting is finished. (Max. defrost time: about 30 min.)	
	• Specimens are generating a large amount of heat. (Check allowed heat load in Specifications.)	• Reduce the number of specimens.	
	• Insufficient refrigeration capacity.	• Eliminate cause of trouble in down refrigerator and restart operation.	6.1
	• Refrigerator breaker is OFF.	• Turn main power breaker OFF and then reset refrigerator breaker.	

Trouble	Probable cause(s)	Remedy	Refer to
Temperature does not drop or drops slowly.	• Cooling water temperature is too high. (above 32℃)	• Inspect cooling system. (cooling tower, fan, pump, etc.)	
	• Wrongly input test temperature setting.	• Check settings.	4.5
	• Heater control solid state relay malfunctioned.		
	• Economy power mode is engaged and keeping refrigerator capacity too low.	• Select the normal power mode.	2.2
Temperature does not rise or rise slowly.	• Specimens are generating a large amount of heat.	• Reduce the number of specimens.	
	• Wrongly input test temperature setting.	• Check settings.	4.5
	• Heater control solid state relay malfunctioned.	• Call for service.	
	• Disconnected heater	• Call for service.	
Humidity does not drop or drops slowly.	• Evaporator is heavily frosted over. (Check condition through inspection hole.)	• Defrost system. • Check ventilation is OFF and cap is closed.	P-instrumentation Reference Manual
	• Refrigerator now defrosting. (Check status on the Alarm Report screen.)	• Operation is restored automatically when defrosting is finished. (Max. defrost time: about 30 min.)	
	• Specimens are generating a large amount of moisture. (Check allowed moisture load in Specifications.)	• Reduce the number of specimens.	
	• Insufficient refrigeration capacity.	• Eliminate cause of trouble in down refrigerator and restart operation.	6.1
	• Refrigerator breaker is OFF.	• Turn main power breaker OFF and then reset refrigerator breaker.	
	• Wet-bulb wick has dried completely. (100% indicated) or wet-bulb sensor temperature does not drop because of soiling.	• Change wet-bulb wick.	5.12
	• Wrongly input test Humidity setting. • Humidity control is OFF.	• Check settings.	4.5

Trouble	Probable cause(s)	Remedy	Refer to
Humidity does not drop or drops slowly.	• Economy power mode is engaged and keeping refrigerator capacity too low.	• Select the normal power mode.	2.2
Humidity does not rise or rise slowly	• Foreign matter inside humidifier	• Clean humidifier.	5.5
	• Now cleaning humidifier (Check status on the Alarm Report screen.)	• Operation is restored automatically when cleaning is finished. (Approximately 15 minutes required for cleaning.)	
	• Humidifier fuse has blown.	• Call for service.	
	• Disconnected humidifying heater.		
	• Wrongly input test Humidity setting. • Humidity control is OFF.	• Check settings.	4.5
It takes a while for humidity to begin to rise (immediately after operation switches from temperature operation to humidity operation when using program operation).	• It takes about 15 minutes to supply the humidifier with water and warm up. Does not indicate equipment failure.	• The time of first switched humidity operation is extended 15 minutes. • Operates by turn soak control.	
Poor temperature & humidity uniformity	• Specimens are generating a large amount of heat.	• Reduce the number of specimens.	
	• Specimens are poorly arranged inside chamber.	• Rearrange specimens. • Regulate air blow register.	4.2
Temperature and humidity do not remain stable.	• Economy power mode is engaged and chamber cannot keep up with fluctuations in heat load generated by specimens.	• Select the normal power mode.	2.2
Temperature and humidity ramp control cannot keep pace with the program.	• The set temperature and humidity exceed chamber performance during transition.	• Change settings to allow more ramp time during temperature and humidity transition.	
Cannot run the selected program. (Message “Program not registered.” appears on the display.)	• “Hold End Step” has been selected as the end mode, so settings for the last step are being held. The program has ended.	• Stop the chamber or switch to the constant mode, and then execute the desired program.	

Trouble	Probable cause(s)	Remedy	Refer to
Program does not proceed to the next step.	• In backup operation after trouble to a humidity control unit, humidity control is kept OFF even if the program is resumed. Therefore, steps programmed with humidity control and soak control may not attain target conditions, preventing the program from proceeding to the next step.	• Turn soak control OFF.	
Chamber lamp does not light up.	• Broken wire in lamp. • With incandescent bulbs, the lamp goes out automatically when the test area reaches 60℃ to protect the lamp. • With fluorescent bulbs, the lamp goes out automatically when the test area reaches 45℃ to protect the lamp.	• Change bulb. • Lower temperature in the test area.	
The testing laboratory has a strong odor.	• If the testing laboratory is kept closed for a long time immediately after the installation, the laboratory might be filled with an odor. (The odor comes from trapped trace gases caused by depth curing reaction of a seal material, which does not immediately increase to a harmful concentration.)	• Use ventilation procedures, such as turning on fans and opening doors, so that the room is not filled with the odor. • If the odor has already filled in the room, wiping interior surfaces with a damp cloth, as well as ventilating, might accelerate removing the odor.	
Have an unusual odor.	• The inside of the air-conditioner or the surface of walls is dirty, or gets moldy. • The drainpipe is dirty.	• Service call	
Viewing window fogs up.	• The window normally fogs up when temperature rises.	• There is nothing wrong with the equipment. • Proceed as planned.	

Trouble	Probable cause(s)	Remedy	Refer to
The door opens on its own.	• Door is not locked completely.	• Lock the door completely.	1.2
	• Emergency escape device is loose.	• Make sure to fasten the emergency escape device	5.1
Steam or cooling air is leaking from around door	• Door is not locked completely.	• Lock the door completely.	1.2
	• Emergency escape device is loose.	• Make sure to fasten the emergency escape device	5.1