8. Operation

8.1 Precautions

(1) Absolutely do not stack the cabinets.

(2) Do not use the top panel as a work table or put anything on it.

(3) Avoid operating by putting in specimens that generate heat. If it is necessary to energize a heat-generating specimen, contact us.

(4) Be sure the unit is grounded properly.

(5) Always use a power supply of more than 100VAC 1ø at 15A.

(6) The accessory shelf is designed to withstand 1.2 kg of concentrated loading. Make sure not to load over 1.2 kg. Distribute the specimens over the entire shelf as much as possible without putting all the specimens in one place.

8.2 Operating Procedure (local operation)

(1) Turn the remote/local select switch to OFF.

(2) Set the temperature setting digital switch to the desired temperature.

(3) Set the humidity setting digital switch to the desired relative humidity, however, it should be set to 00% R.H. in the case of temperature operation.

(4) Subsequently turn on the power switch.

By the above procedure, the temperature or temperature/relative humidity will be controlled.

8.3 Overheat Protection Circuit

When the overheat protection circuit functions, the digital display lamp blinks, and power to the heater and control circuit is cut off. In this case, power supply to the air circulator remains on. When the temperature drops to the vicinity of the set temperature, the heater is automatically energized and control is resumed.

(Note): The cabinet temperature will drop when set to a temperature lower than the present operating temperature, and the digital display lamp blinks until the temperature stabilizes.

10. Maintenance

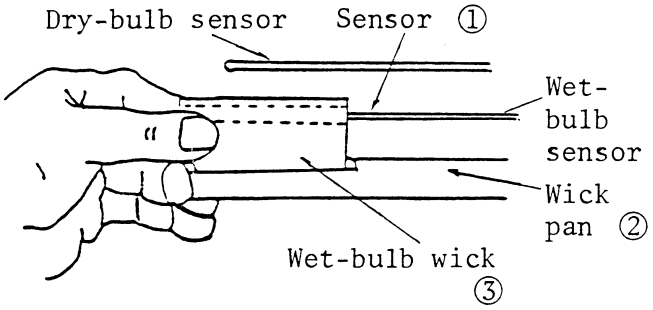

Fig. 28

10.1 Replacing the Wet-bulb Wick

(1) Clean the sensor ① (two wet-bulb sensors only) with a clean gauze or cloth.

(2) Mount a new wet-bulb wick ③ in the wick pan ②. The new wet-bulb wick ③ is sterilized, therefore, wash hands thoroughly with soap and water before touching the new wet-bulb wick ③.

10.2 Cleaning the Wick Pan Water Supplier

(1) If the wick pan water supplier ① inside is clean.

(a) First connect the water supply/drain hose with quick disconnect plug to the drain pipe for humidifying tray cleaning, and open the other hose end into the atmosphere to drain water.

(b) Then set the cabinet to 25°C, 60%R.H. and operate for about five minutes to drain water through the hose. However, first replenish water into the tank, if the built-in tank water level is EMPTY.

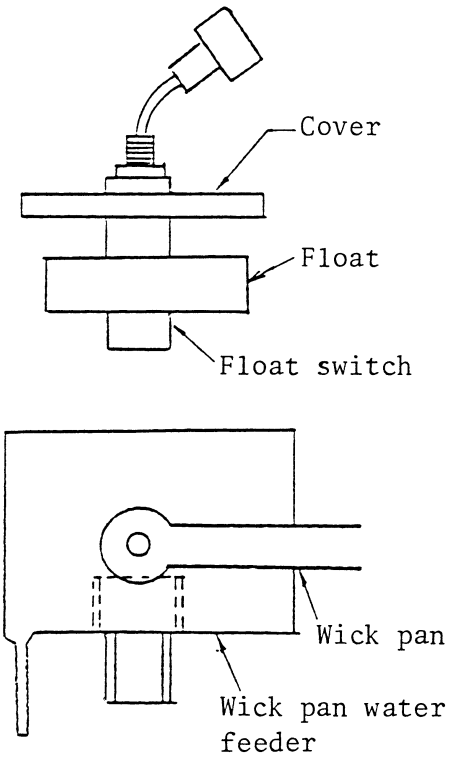

Fig. 29

(2) If the wick pan water supplier ① inside is soiled.

(a) Drain water out of the wick pan water supplier as described above.

(b) Unplug the power cord and remove six screws holding the rear panel using a Phillip's screwdriver. Remove the rear panel.

(c) Remove the wick pan water supplier cover, and clean the water supplier

inside carefully with a cloth.

(d) Assemble the wick pan water supplier and install the rear panel (all six screws).

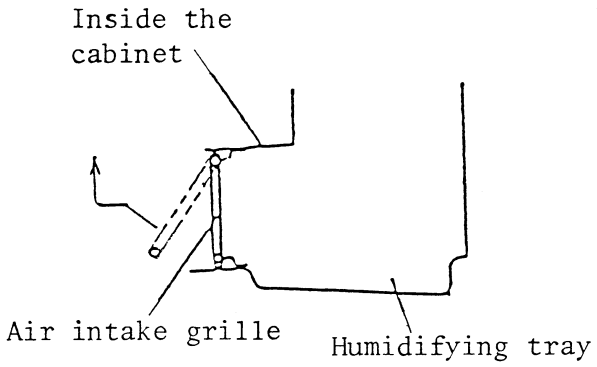

Fig. 30

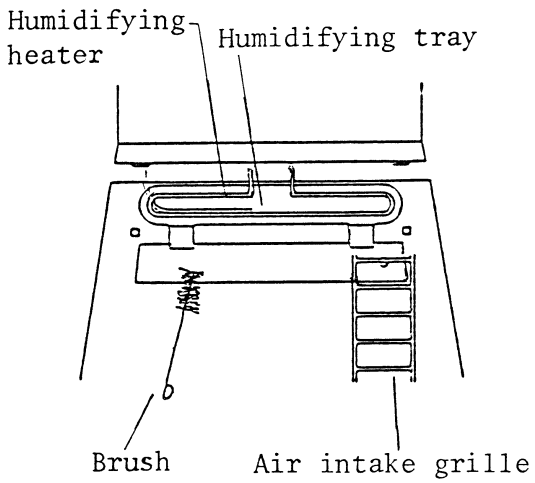

Fig. 31

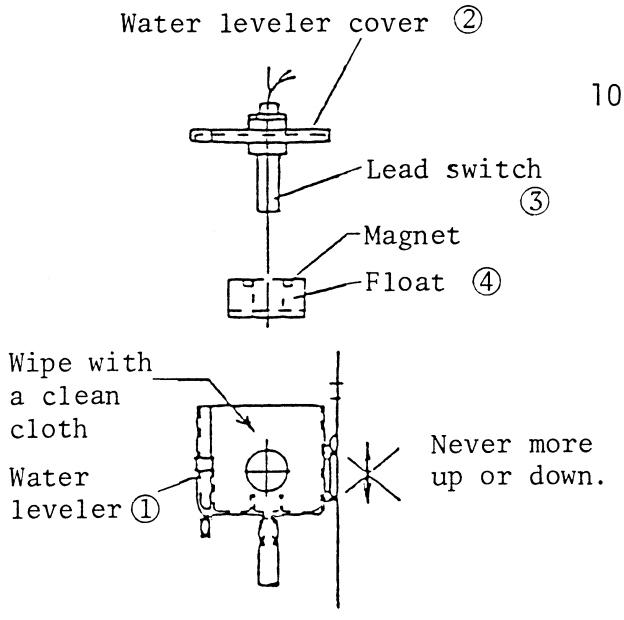

Fig. 32

10.3 Cleaning the Humidifying Tray

(1) Lift out the air intake grille forward and remove it.

(2) Clean the humidifying tray and heater surfaces with the accessory brush.

(3) Plug the accessory water supply/drain hose into the socket of the drain port for cleaning of the humidifying tray inside the rear panel and drain water out of the humidifying tray. Make draining easy at this time by opening the other hose end into the atmosphere.

(4) Clean with use of the accessory brush while wetting the humidifying tray and heater surfaces with water. Repeat this two or three times.

(5) Disconnect the water supply/drain hose from the drain port.

(6) Put back the air intake grille onto the cabinet in the reverse procedure to Step (1) above.

10.4 Cleaning the Water Leveler of the Humidifying Tray

Never move the position of the water leveler.

Moving it may change the water level in the humidifying tray.

(1) Remove the rear panel.

(2) Remove the water leveler cover ② from the water leveler ① slowly without undue force. Never move the lead switch ③.

(3) Record the upper and lower levels of the float, and lift it up and out.

(4) Clean the inside the water leveler ① with a cloth. Clean the lead switch ③ with a cloth. Wash the float ④ with water.

(5) Check the upper and lower levels of the float ④, and put it back in the center of the water leveler.

(6) Firmly secure the water leveler cover ② onto the water leveler ①.
If it is not secure, the water level in the humidifying tray may change.

10.5 Cleaning the Inside Tank

(1) Connect the accessory water supply/drain hose with quick disconnect plug to the water supply/drain port of the tank and drain water out of the tank. This may take about eight minutes.

(2) Remove the rear panel.

(3) Use the water supply/drain hose to fill the tank, (as described in Step (1) above) to about two-thirds level. Then drain the tank again.

(4) Repeat step (3) above two or three times.

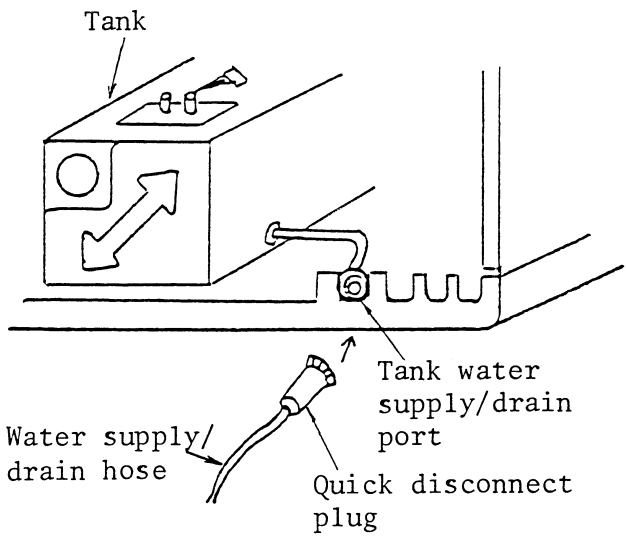

Fig. 33

10.6 Cleaning the Electromagnetic Pump Strainer

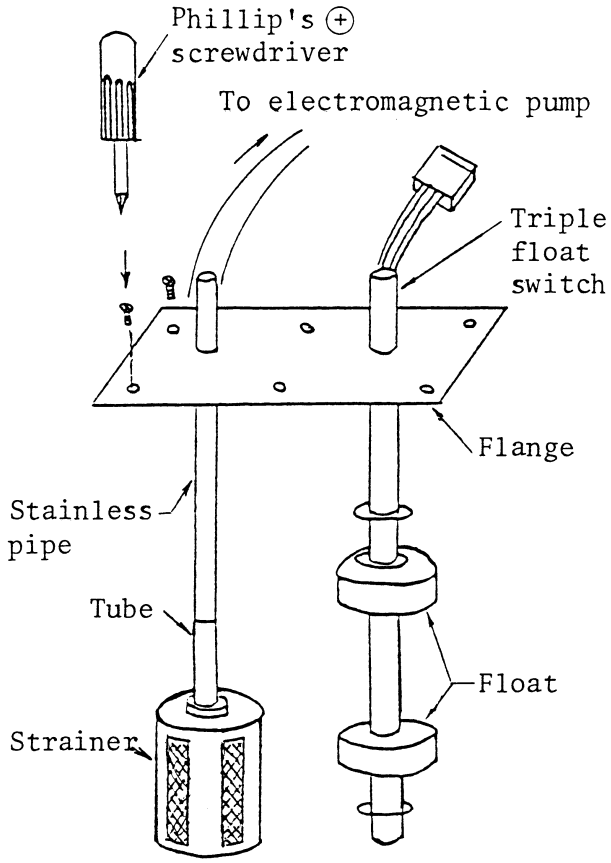

Fig. 34

(1) Unplug the power cord.

(2) Remove the rear panel.

(3) Using a Phillip's screwdriver, lift up and remove the triple float switch and strainer flange fitted on the upper part of the built-in tank.

(4) Pull out the strainer fitted on the tube end, and wash it clean with fresh water.

(5) Reassemble in the reverse procedure.

10.7 Cleaning the Inside of the Distribution Compartment

Before cleaning the inside of the distribution compartment, always open and close the door to remove any water condensed on the door.

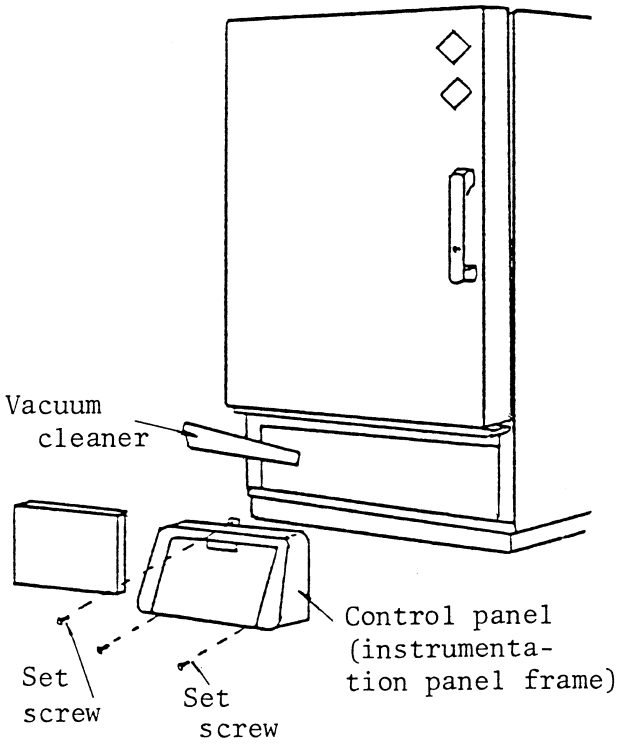

Fig. 35

(1) Unplug the power cord.

(2) Using a Phillip's screwdriver, remove the screw on the top of the control panel.

(3) Remove the two screws on the bottom of the control panel.

(4) Pull out the control panel horizontally, and take out the subpanel.

(5) Remove dust from inside the distribution compartment with a vacuum cleaner.

(Note): Take special care to wirings when removing the control panel.

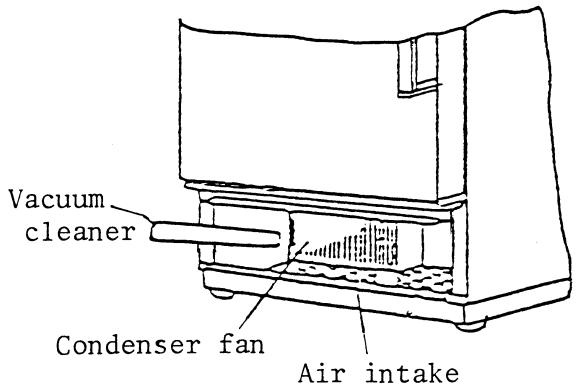

Fig. 36

10.8 Ceaning the Condenser Fin and Air Intake

Before cleaning the condenser fin, always open and close the door to remove water that has condensed on the door.

(1) Remove the control panel and sub-panel as described in Section 10.7.

(2) Remove dust from the condenser fin with a vacuum cleaner.

(3) Remove dust from the air intake grille mesh with a vacuum cleaner.

(Note): Take special care to wirings when removing the control panel.

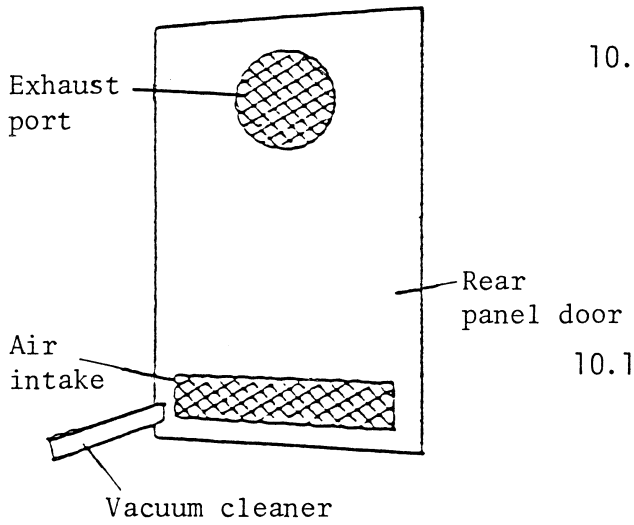

Fig. 37

10.9 Cleaning the Air Intake and Exhaust Port on the Rear Panel

(1) Remove dust from the air intake and exhaust port grille meshes with a vacuum cleaner.

10.10 Cleaning the Inside of the Rear Panel

(1) Unplug the power cord.

(2) Remove the rear panel door, and clean dust from the inside of the rear panel with a vacuum cleaner.