# Service Manual PRF90DX PRF125DX PRF155DX PRF907DX PRF1257DX PRF1557DX

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# **PARTS IDENTIFICATION**

- 1. Grid
- 2. Glass Door
- 3. Lamp Box
- 4. Control Panel
- 5. Cabinet
- 6. Decorated Panel
- 7. Adjustable Feet
- 8. Compressor Cabin



# **REFRIGERATION CIRCUIT**

**Basic refrigeration schematic** 



compressor



# **Caution for safety**

#### **CAUTION FOR SAFETY**

- Range of workable voltage: 98-133V. In order to avoid damaging the electrical performance of the compressor, please equip with a power regulated appliance, with the power not less than 500W, when the voltage is lower than 98V or higher then 133V.
- Individual single-phase socket must be used. It should be reliably connected to be a grounding wire. Caution: The grounding wire is not allowed to connect to a water pipe or a gas pipe.
- Strong base, strong acid, organic solvent and corrosive goods or those are easy to pollute to food are prohibited storing in the showcase, otherwise, it can cause corrosiveness or accident
- Don't raise the showcase or the shell of the electric parts, or it will cause the decline in insulation and the corrosiveness
- When the showcase will be out of use for a long time, disconnect the power first, and then clean it. Please examine the circuit. Whether it is ok before reuse.

#### **CAUTION FOR USING**

- Unpack all packages before using the showcase don't topple it over more then 60  $^\circ\,$  while moving it.
- The showcase should be installed in the environment of good ventilation. Cool and dry and without corrosive gas, it should not be installed close to heat sources or directly under the sunlight. The space more than 10cm, between the wall of the front and the back of the refrigerator should be allowed. When installing, the wheels should be padded well. So as to make the refrigerator be level and stable, or it will cause vibration and too much noise.WARNING: Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
- When initial operation, the refrigerator should run emptily about one hour before storing food in it.

# **Caution for safety**

#### **CAUTION FOR USING**

• Temperature range inside the refrigerator is 32 Deg. F - 50 Deg. F, and the inside temperature could be adjusted by the thermostat, when you turn the knob in clockwise. The bigger the figure, the lower the temperature. Generally, the position or "3-4" is suitable. "0" position stands for stopping operation "6" position will be operating continually.

- To save energy, the door should not be frequently opened or left open for a long time.
- The surface and the inside of the refrigerator should be dry and clean. Long time moisture will cause the refrigerator rust slowly. (There will be some stains on the surface)
- Periodical clean is suggested for your reference. Generally, 30-45 days once is best. When cleaning, it is best to wipe the inside and the surface of the refrigerator with the soft cloth ok in neutral soapsuds or detergent.

Caution: To ensure safety, the power plug must be pulled out before cleaning.

# **USING INTRODUCTION**

#### LOCATION

- Two people should be used when moving the appliance.
- Remove interior and exterior packaging prior to installation. Wipe the outside of the appliance with a soft, dry cloth and the inside with a lukewarm wet cloth.
- Place the appliance on a floor that is strong enough to support it when it is fully loaded.
- Do not place the appliance in direct sunlight or near sources of heat, such as a stove or heater, as this can increase electrical consumption. Extreme cold ambient temperatures may also cause the appliance to perform improperly.
- Do not use the appliance near water, for example in a wet basement or near a sink.
- This appliance is intended for household and commercial use only. Freezer are tested to perform in temperatures ranging from 0°Fto 100°F (-18°C to 38°C). It is not designed for outside installation, including anywhere that is not temperature controlled, such as porches, vehicles, etc.
- Before connecting the appliance to a power source, let it stand upright for approximately 6 hours. This will reduce the possibility of a malfunction in the cooling system from handling during transportation.
- PRF90DX appliance is 57.5cm (22.63 inches) wide by 61.0 cm (24.01 inches) deep by 171.0 cm (67.32 inches) high.
- PRF125DX appliance is 61.5cm (24.21 inches) wide by 61.0 cm (24.01 inches) deep by 199.0 cm (78.35 inches) high.
- PRF155DX appliance is 65.5cm (25.78 inches) wide by 70.5 cm (27.75 inches) deep by 199.0 cm (78.35 inches) high.
- Allow 12.7 cm (5 inches) of space between the back, sides and top of the appliance and all adjacent walls.
- This appliance is intended for free-standing installation only and is not intended to be built into a cabinet or counter. Building in this appliance can cause it to malfunction.

#### LEVELING INSTRUCTIONS

There are two adjustable feet on the bottom of the appliance that can be turned up or down to ensure that the appliance is level.

- 1. Turn the leveling leg counter-clockwise as far as it will go, until the top of the foot is touching the bottom of the cabinet.
- 2. Slowly turn the leveling leg clockwise until the appliance is level.

#### SETTING TEMPERATURE

• Turn the temperature control knob to set the temperature ,the higher

the number, the lower the temperature.

- Temperature can be set between 10 °C to 0 °C(50°F to 32°F).
- The number on the knob represents the gear, not the temperature
- it is appropriate to switch to 3-5 for use.



## **USING INTRODUCTION**



**CAUTION:** If the appliance is placed on its back or side for any length of time during this process, it must be allowed to remain upright for 6 hours before plugging it in to avoid damage to the internal components.

#### **1.Level Adjustment**

Adjust the leveling leg, make the showcase stable. See Figure 1.

#### 2.Changing Door Gasket:

Remove the old door gasket, Install the new one by mounting groove to the  $\Omega$  groove, press it tightly, See Figure 2.



#### Checking the compressor

Compressor Model TB1111HY: Resistance range at 25°C: Resistance between C and M 5.67~6.93 $\Omega$ (6.3 $\Omega \pm 10\%$ ); Resistance between C and S 6.03~7.37 $\Omega$ (6.70 $\Omega \pm 10\%$ ); Resistance between S and M 11.70~14.30 $\Omega$ (13.00 $\Omega \pm 10\%$ )



# **DISASSEMBLY COMMON PARTS OF SHOWCASE**

#### Checking the compressor accessory

Disassemble the PTC starter and Over loaded Protector

- 1.Remove the PTC and OLP components separately
- 2. Use a flat-head screwdriver against the hook of the OLP, then press it down

3.When the clip is unhooked, the PTC and OLP can be separated









# **DISASSEMBLY COMMON PARTS OF SHOWCASE**

#### Checking the compressor accessory

Compressor Protector test ——

Use a multi-meter to test the resistance between the two end as the pic show :

If there show 000 or almost 0 then it is OK.

If there is no response then it is broken.



OLP protector : DRB29T61B2

# **DISASSEMBLY COMMON PARTS OF SHOWCASE**

#### Checking the compressor accessory

Compressor PTC starter test ——

Use a multi-meter to test the resistance between the two end as the pic show

If there show the number is between about 3.5-5.8 then it is OK.

If there show 000 or no response then it is broken.

After the replacement of the PTC and OLP, the compressor still does not start. If there is no exhaust, the compressor is fault.



PTC starter:QPE2-B4R7MD3

#### The instruction of replacing PTC and Overload protector

- 1.Remove the fastening screws
- 2.Remove the Compressor Wire Clamp Screw
- and Compressor Wire Clamp
- 3.Remove the cover
- 4.Replace the PTC Starter & OLP



#### 1. Cleaning and care

If the appliance is dirty, proceed as follows:

1. Before beginning with repair or cleaning works make sure the device has been disconnected from power socket (pull the power plug!!!) and has cooled down.

- 2. Clean the interior (including the rear wall and bottom) with warm water and a mild cleaning product. Do not use any aggressive cleaning products!
- 3. Dry all surfaces carefully.
- 4. After cleaning reconnect the refrigerator to the mains supply.
- 5. Never clean the appliance with steam cleaning equipment.
- 6. Regularly clean the refrigerator and aslo check the condensation water outflow hole.
- 7. If the light is damaged, it must be replaced with a same size, power and shape one. and must be replaced by the manufacturer or its service agent.

#### 2. Repairs

1. only be carried out by an expert qualified to do so.A repair carried out incorrectly or unprofessionally puts the user at risk and leads to the warranty becoming invalid!

2. Do not damage the refrigerant circuit.

3. Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.

#### 3. What to do if... Solutions to problems

The design of the appliance guarantees interruption-free operation and a long working life. If nevertheless a fault does occur during operation, check whether this can be traced back to an operating error. Any subsequent faults can be eliminated by yourself by checking the possible causes:

Fault	Possible Causes	Measures
The appliance is not cooling	Is the mains plug in the socket? Has the fuse in the socket been triggered?	Insert the mains plug correctly in the mains socket, switch on the fuse, if required call for expert assistance.
The appliance is noisy when operating	Is the appliance standing vertically or horizontally?	Adjust the appliance using the feet. The flow noises in therefrigerant circuit are normal.
Water is lying on the bottom of the refrigerator	Has the temperature regulator been set correctly? Is the condensation water channel blocked by dirt? Is the condensation drain disrupted by bottles on the bottom?	Correct the temperature regulator setting. Clean the outflow opening with a pipe cleaner or a small brush. Place the bottles on a shelf.
The appliance is not cooling correctly	Is the appliance ventilation blocked?	Clear the ventilation slot, position the appliance freely.

#### 4. Tips for saving energy

- 1. Do not place the appliance close to stoves, heating elements or other heat sources. With a high ambient temperature the compressor runs more frequently and for longer. This leads to unavoidable high power consumption.
- 2. Make sure that there is sufficient aeration and ventilation at theappliance base and to the back of the appliance. Ventilation openings must never be covered.
- 3. The door should only remain open for as long as required.
- 4. The door seals of your appliance must be fully intact so that the doors close correctly.
- 5. Do not set the temperature any lower than required.

# PRF90DX PRF907DX PRF125DX PRF1257DX EXPLODED DRAWING



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### PRF155DX PRF1557DX EXPLODED DRAWING



# TROUBLESHOOTING

#### No power

- A fuse may be blown or the circuit breaker tripped
- Plug not fully inserted into the wall outlet Internal temperature not cold enough
- Temperature setting is too warm
- The door is not shut properly or opened excessively
- Recently added a large quantity of warm food to the cabinet
- Close proximity to heat source or direct sunlight
- Ambient temperature or humidity is very high Refrigerator runs continuously
- Temperature setting is too cold
- The door is not shut properly or opened excessively
- Recently added a large quantity of warm food to the cabinet
- Close proximity to heat source or direct sunlight
- Ambient temperature or humidity is very high Refrigerator makes a gurgling noise when operating This noise is completely normal. The refrigerant inside the appliance will make a gurgling noise as it changes from a liquid to a gas and back again.

#### Note:

•Before doing these operations above, disconnect the main power supply. Failure to do so could result in electrical shock or personal injury

• In case of any detailed technical information please check with the technical specifications.