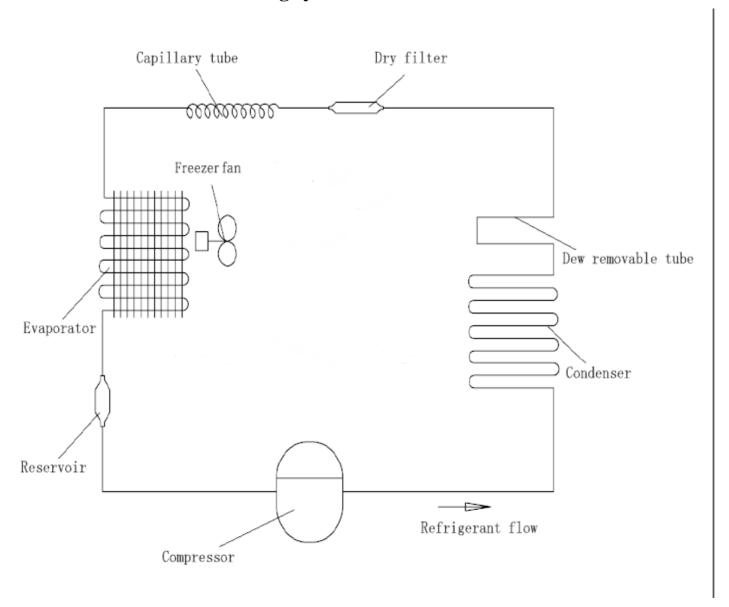
Service Manual

Models: RN-BH460NPTA

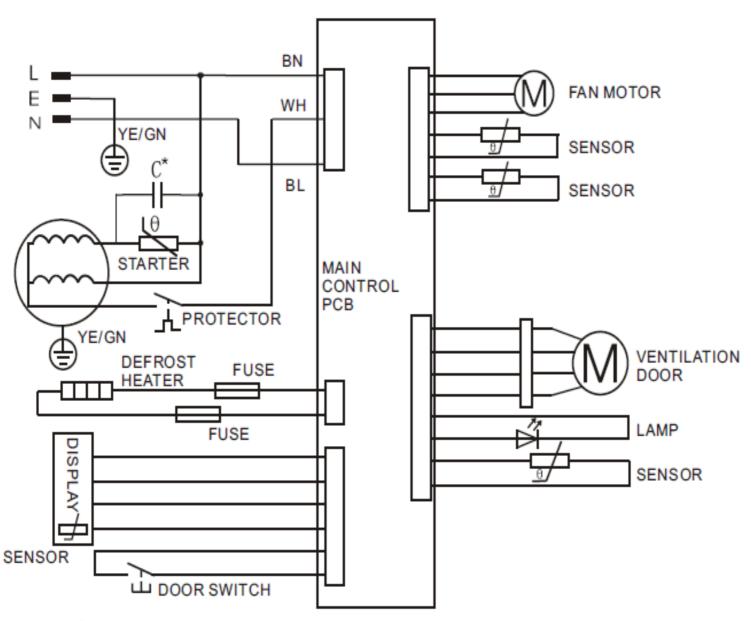
Features

- Energy efficiency
- Micro foam technology
- Low noise operation
- Thick insulation for energy efficiency
- Latest No. 2 micro-biological technology

The cooling system



The electrical diagram

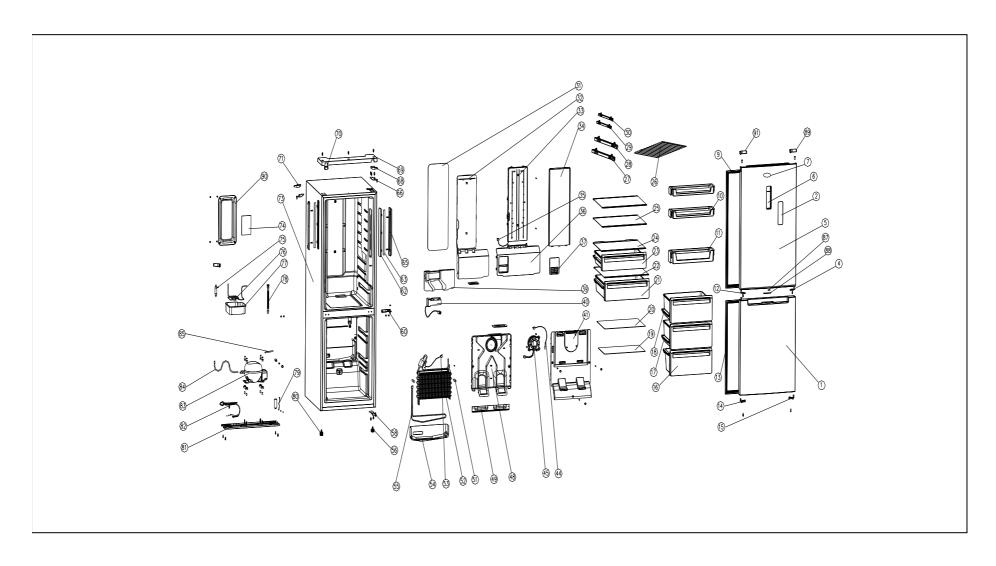


Trouble shooting guide

| No | Problem | Possible Cause | What To Do |
|----|---|--|---|
| 1 | Fan no work | the the fan motor is failure and replace it with a new one | open the cover board of air duct in freezer room, check the fan if it no running, then measure the voltage between the red wire and black wire of fan, if the voltage is 12V,the the fan motor is failure and replace it with a new one |
| | No defrost.Freezer room temperature no enough cold and refrigerator room OK and open the cover board of are duct and find ice formation on evaporator | the drainpipe contain impurity | disconnect power, and let the ice defrost and inspect the water if it is flow through the drainpipe, if could not flow out, check if it contain impurity and clean the drainpipe |
| 2 | | the sensor failure or PCB failure | check the fuse if it is melt or not. If the fuse is melt, it mean that the sensor failure or PCB failure, need change the sensor or PCB. |
| | | the defrost heater is break or PCB failure | inspecting the CN4 defrost heater two connector. If the heater is OK then it must be PCB failure and change the PCB. |
| | the temperature of freezer and refrigerator are no enough cold and the temperature no change by adjusting the potentiometer (thermostat) | the potentiometer failure | inspect the potentiometer (thermostat), and measure the resistance value by adjusting the potentiometer (thermostat), if the resistance value no change by adjusting the potentiometer (thermostat), |
| 3 | | the sensor failure | When the sensor failure and the compressor will be running like this—if the potentiometer (thermostat) setting below 3 position, the compressor will be running 20 minutes and then stop 30 minutes, if the potentiometer (thermostat) setting more than 3 position, the compressor will be running 30 minutes and then stop 20 minutes. If find the compressor work like above situation, it mean the sensor failure and need open the back of refrigerator and change sensor of refrigerator evaporator |

| 4 | Compressor no starting | no problem | the time between two starting is shorter than 12min; or refrigerator room temperature is lower than the setting temperature, in this case, it is no problem. You need waiting more time. |
|---|------------------------|--|---|
| | | PCB failure | PCB had automatic self-examination: open the cover of PCB at the back of product, plug in power and push the SW101 switch 3 seconds and the PCB begin automatic self-examination program, then the led and compressor and fan and defrost heater all work two second and then stop, all wore one time and then quit automatic self-examination program, and the program will return the original setting. If the automatic self-examination program no work, it mean the PCB failure and need change it |
| | | Compressor wire not right or compressor damage | measure the voltage of compressor input connector, if it is OK then check the starting and relay of compressor, also check the wire if it is OK |
| 6 | product no any work | the PCB failure | check the power by multimeter, if the input voltage is 220V-240, but the led, compressor, fan, defrost heater are all no work, it mean the PCB failure and need change a new PCB |

Exploded view



RN-BH460NPWA Parts list

| No. | Parts code | Description of Spare Part | Quantity |
|-----|-------------|--|----------|
| 1 | 2100280028T | Lower door | 1 |
| 2 | 2208100228 | Display panel | 1 |
| 4 | 2208510008 | Right limit block of door | 1 |
| 5 | 2100280094T | Upper Door | 1 |
| 6 | 3050300054 | Display circuit board | 1 |
| 7 | 2700500137 | Trademark | 1 |
| 9 | 2200200016 | Upper door gasket | 1 |
| 10 | 2207500051 | Upper door Middle balcony | 2 |
| 11 | 2207500052 | Upper door lower balcony | 1 |
| 12 | 2208510009 | Left limit block of door | 1 |
| 13 | 2200200017 | Lower door gasket | 1 |
| 14 | 2208510011 | Lower door left aid-closer | 1 |
| 15 | 2208510010 | Lower door right aid-closer | 1 |
| 16 | 2207300024 | Lower Drawer | 1 |
| 18 | 2207300023 | Upper Drawer | 2 |
| 19 | 3071300098 | Freeze Glass partition,Lower | 1 |
| 20 | 3071300097 | Freeze Glass partition, Upper | 1 |
| 21 | 2106140032 | Crisper drawer | 1 |
| 22 | 2106120033 | Cover of Crisper Box | 1 |
| 23 | 2106140072 | Freezer zone | 1 |
| 24 | 2106120034 | Cover of Freezer zone | 1 |
| 25 | 2106100023 | Shelf of refrigerator chamber | 2 |
| 31 | 3080100082 | Block gine of refrigerator wind tunnel parts | 1 |
| 32 | 3071000286 | Front of refrigerator wind parts | 1 |
| 33 | 20122990686 | Upper holder of refrigerator wind parts | 1 |
| 34 | 20122990688 | Decorative block of refrigerator wind parts | 1 |
| 35 | 3059900046 | Temperature sensor | 1 |
| 36 | 20122990685 | Lower holder of refrigerator wind parts | 1 |
| 37 | 20122990687 | Return air respirator | 1 |
| 39 | 2701000037 | Front Cover of refrigerator wind parts | 1 |
| 40 | 3059900045 | Cold air of refrigerator door parts | 1 |

| 41 | 20122990684 | Decorative block of Freeze wind parts | 1 |
|----|--------------|---------------------------------------|---|
| 44 | 3059900039 | Temperature sensor | 1 |
| 45 | 3059900040 | DC centrifugal motor assembly | 1 |
| 48 | 20122990683 | Freeze wind parts bracket | 1 |
| 49 | 3039900346 | Water board of freeze wind parts | 1 |
| 51 | 2701000085 | Block gine of Wind bubble | 2 |
| 52 | 3040300072 | Fin Evaperator | 1 |
| 53 | 3059900038 | Temperature sensor | 1 |
| 54 | 3039900301 | Fixed slot of heater | 1 |
| 55 | 3050700022 | drip tray of calorifie | 1 |
| 56 | 20122990782 | Short adjust leg | 1 |
| 58 | 3031400198 | Lower door hinge assembly | 1 |
| 60 | 3031400029 | Middle Door Hinge | 1 |
| 62 | 2208100059 | Cover of sidelight | 2 |
| 63 | 3050400031 | LED sidelight | 2 |
| 65 | 20122010187 | Soleplate of sidelight | 2 |
| 66 | 3031400197 | Upper door hinge assembly | 1 |
| 68 | 20122080130T | Upper door hinge Cover | 1 |
| 69 | 20122020490T | Top Cover,Front | 1 |
| 70 | 20122020491T | Top front decorative block | 1 |
| 71 | 20122090508T | Upper door hinge Cover,Left | 1 |
| 73 | 20102190002 | Cabinet | 1 |
| 74 | 2500300115 | Control board assembly | 1 |
| 75 | 3040500011 | Drier filter | 1 |
| 76 | 20114010106 | Evaporative condenser | 1 |
| 77 | 20122990705 | Drain pan | 1 |
| 78 | 2207700024 | Drain pipe | 1 |
| 79 | 3050200094 | Earthing wire of compressor | 1 |
| 80 | 20122990781 | Long adjust leg | 1 |
| 81 | 2107100002 | Compressor Base Support | 1 |
| 82 | 3050100083 | Power supply cord plug | 1 |
| 83 | 2400100016 | Compressor | 1 |
| 84 | 20114070006 | Connecting tube | 1 |

| 85 | 3040600005 | Process tube | 1 |
|----|--------------|-------------------------------------|---|
| 86 | 2700101341 | Carton | 1 |
| 87 | 3059900042 | Door switch, Magnetic control | 1 |
| 88 | 20122990674T | Door switch cover, Magnetic control | 1 |
| 89 | 20122990677T | Decorative Cover of Right Door | 1 |
| 90 | 3039900302 | Cover of Control board | 1 |
| 91 | 20122990676T | Decorative Cover of left Door | 1 |

FOB Percentage