

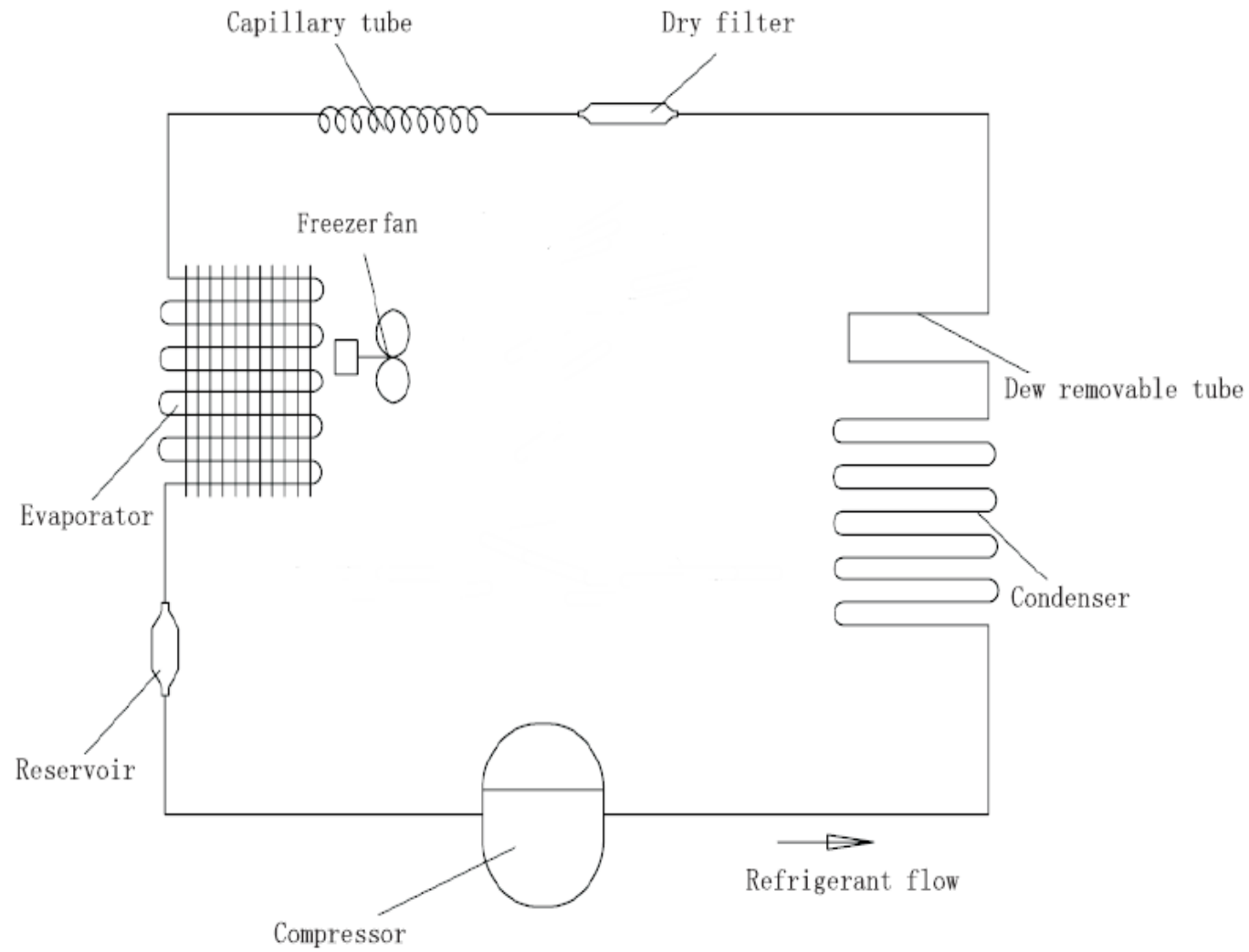
# Service Manual

**Models: RN-BH460NPWA**

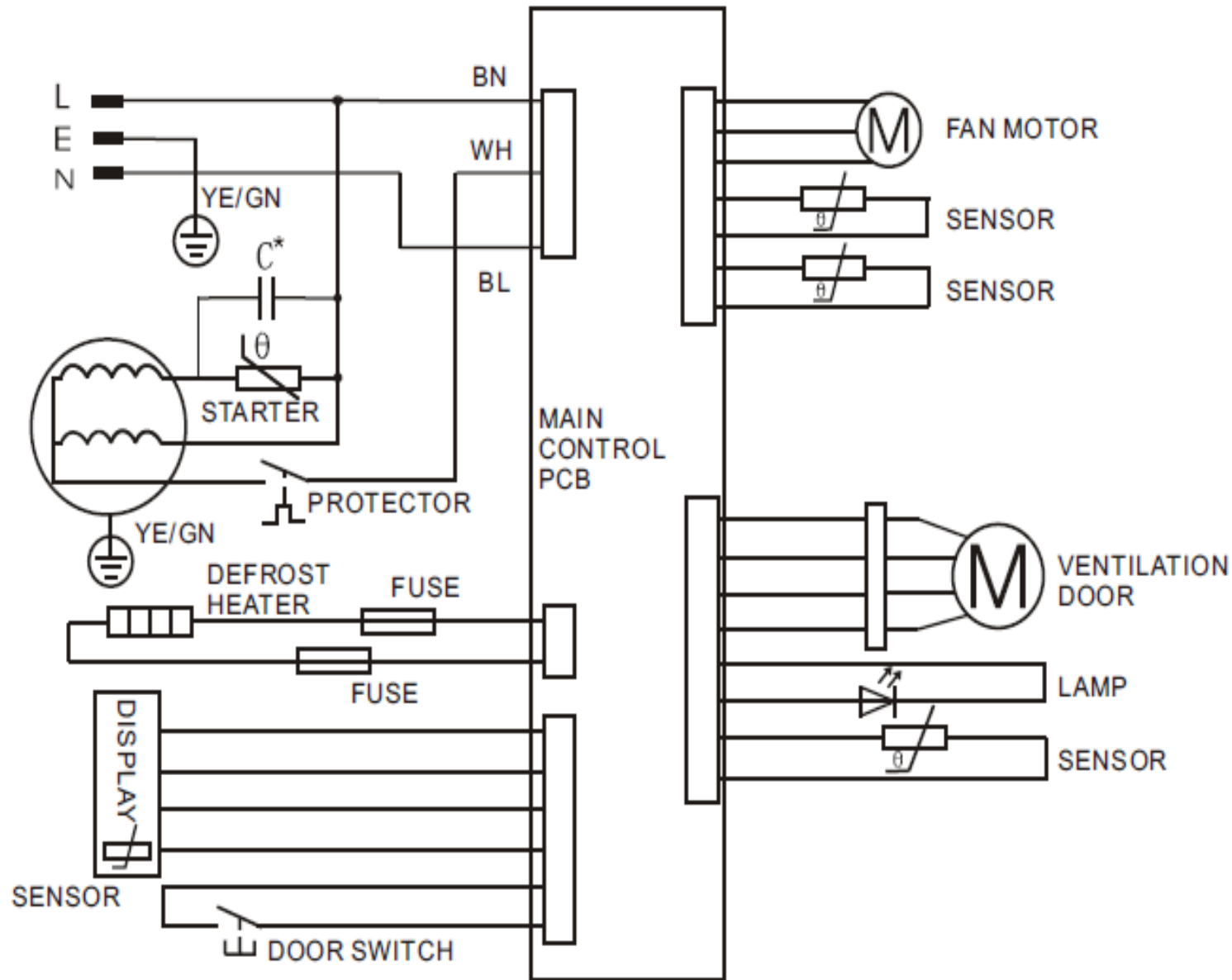
## **Features**

- **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

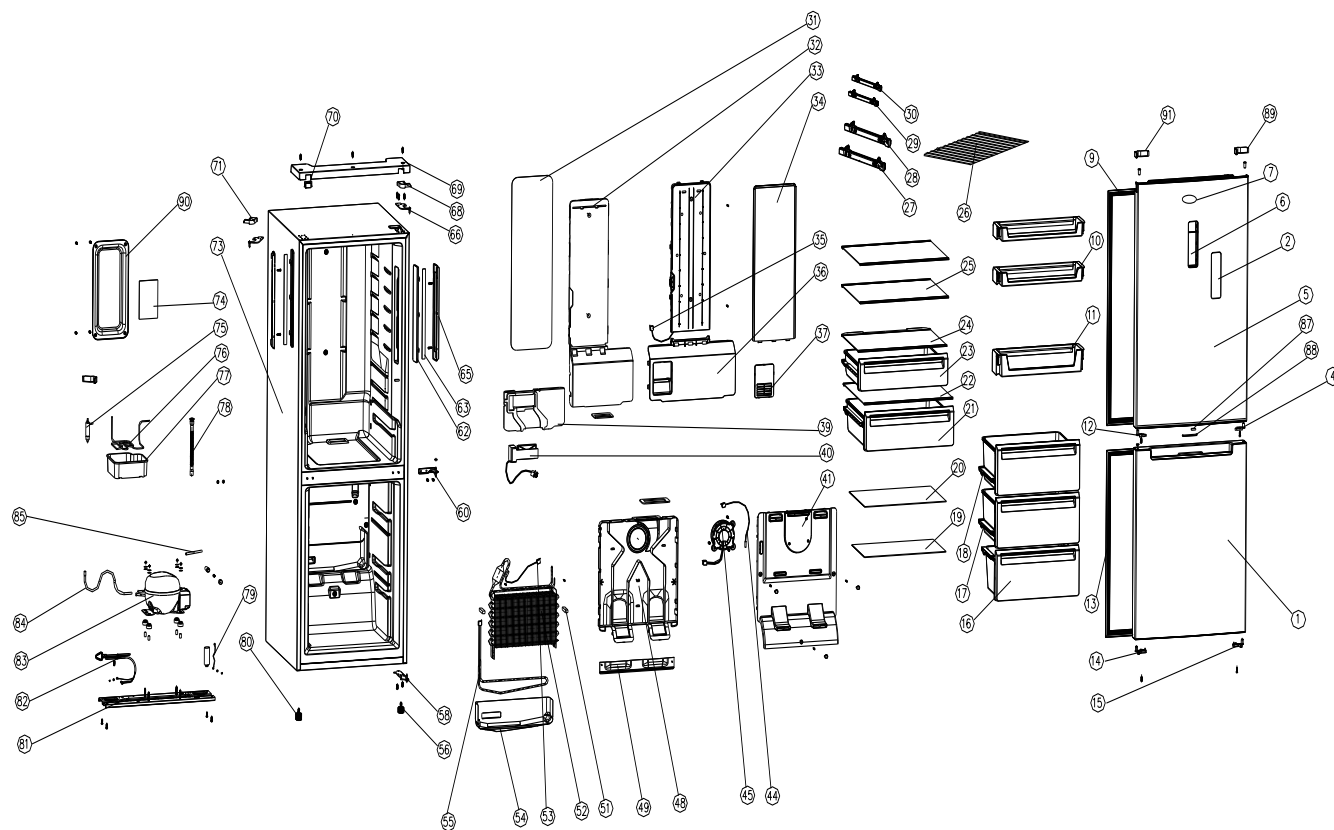


## Trouble shooting guide

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
2	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
		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.
3	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),
		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	2100280028W	Lower door	1
2	2208100228	Display panel	1
4	2208510008	Right limit block of door	1
5	2100280094W	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	20122080130W	Upper door hinge Cover	1
69	20122020490W	Top Cover,Front	1
70	20122020491W	Top front decorative block	1
71	20122090508W	Upper door hinge Cover,Left	1
73	20102190002	Cabinet	1
74	2500300029	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	20122990674W	Door switch cover,Magnetic control	1
89	20122990677W	Decorative Cover of Right Door	1
90	3039900302	Cover of Control board	1
91	20122990676W	Decorative Cover of left Door	1

FOB
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Percentage