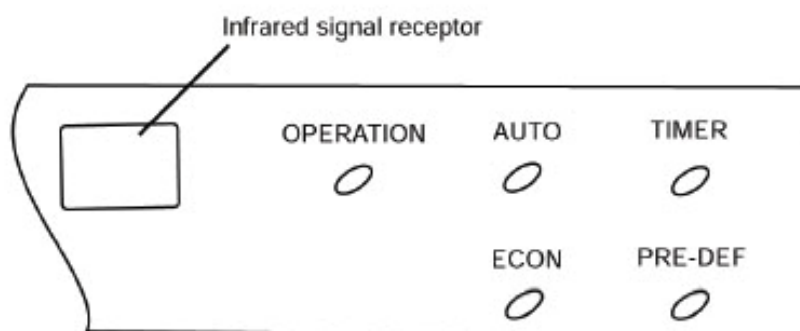


## 12. Troubleshooting

### 12.1 Display board



- Operation

The indicator flashes once every second after power is on and illuminates when the air conditioner is in operation.

- Timer indicator:

The indicator illuminates then TIMER is set ON.

- PRE-DEF. indicator (For cooling & heating mode only)

The air conditioner starts defrosting automatically if outdoor unit frosts in heating operating. At this time, PRE-DEF. indicator illuminates.

- Auto indicator:

This indicator flashes when the air conditioner is in AUTO operation.

- ECON indicator

This indicator illuminates while the air conditioner is in economic operation.

## 12.2 Troubleshooting

For cooling mode:

Failure phenomenon	Operation lamp	Timer lamp
Indoor fan speed has been out of control for over 1 minute	☆	X
Indoor room temp. or evaporator sensor is open circuit or short circuit	☆	On
Over current protection of the compressor occurs 4 times	X	☆
EEROM error	On	☆
No over-zero signal	☆	☆

✕ Extinguish

☆ Flash at 5Hz

For heat pump mode:

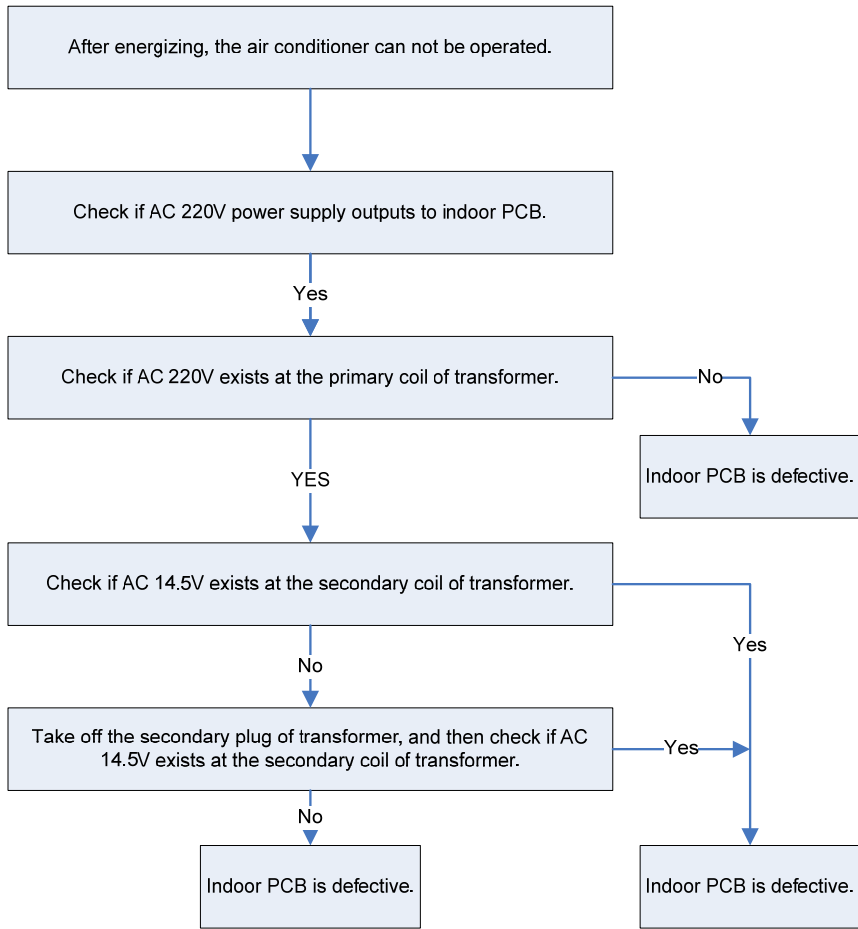
Failure phenomenon	Operation lamp	Timer lamp	Defrosting lamp
Over current protection of the compressor occurs 4 times	☆	X	☆
Indoor fan speed has been out of control for over 1 minute	X	☆	☆
No over-zero signal	☆	☆	☆
Temp. sensor on indoor evaporator is open circuit or short circuit	X	X	☆
Indoor room temp. sensor is open circuit or short circuit	X	☆	X
EEROM error	On	☆	X

✕ Extinguish

☆ Flash at 5Hz

### 12.3 Diagnostic chart

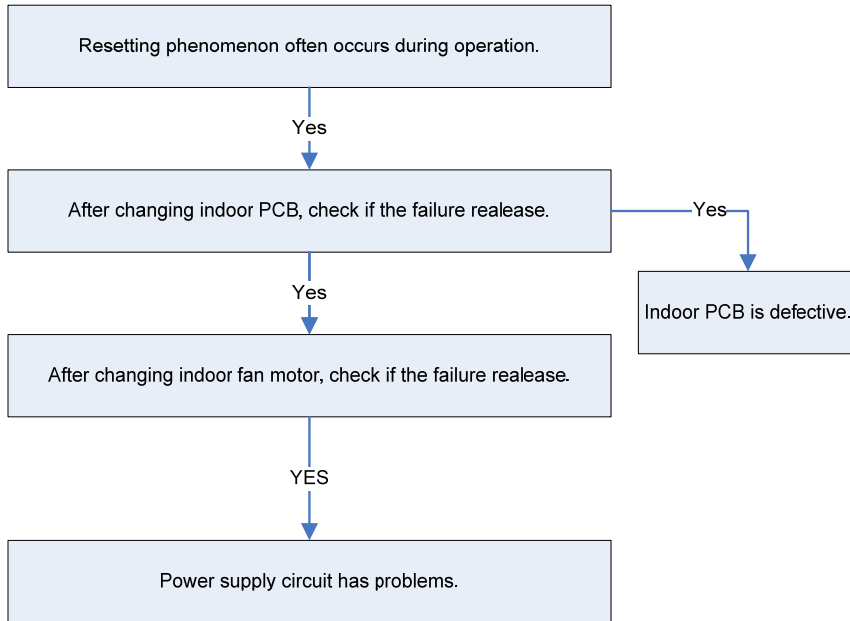
After energizing, no indicator is lighted and the air conditioner can't be operated.



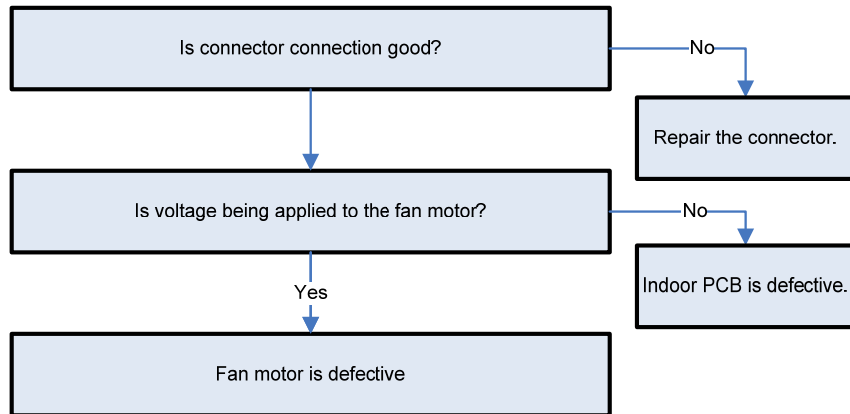
### 12.4 Resetting phenomenon often occurs during operation.

(That is automatically entering to the status when power is on.)

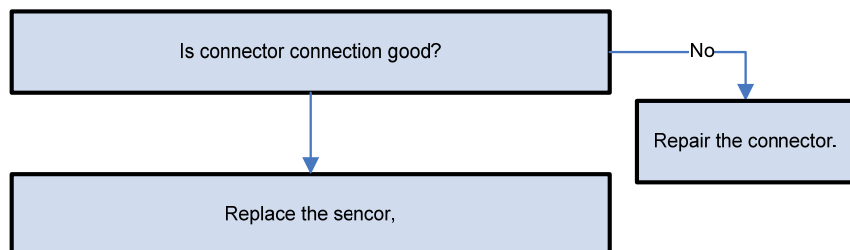
The reason is that the instantaneous voltage of main chip is less than 4.5V. Check according to the following procedure:



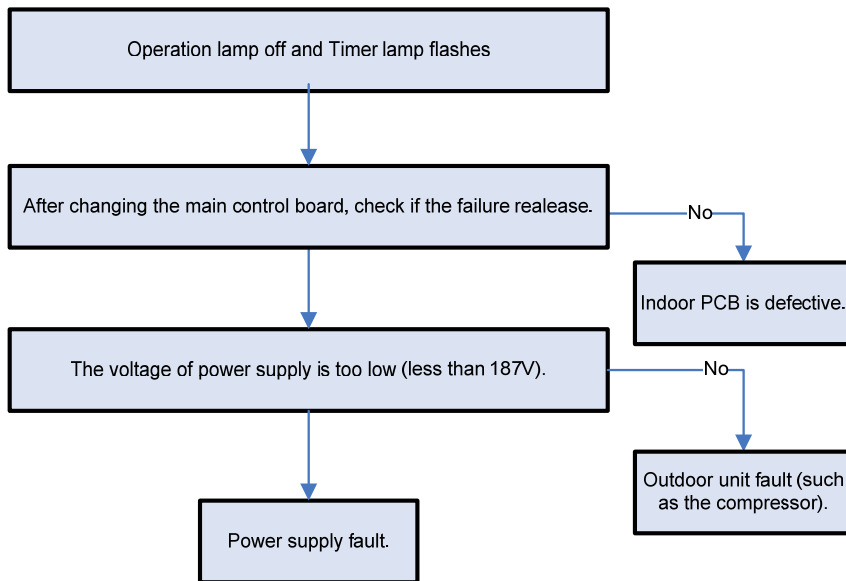
### 12.5 Operation lamp flashes and Timer lamp off.



### 12.6 Operation lamp flashes and Timer lamp on.



## 12.7 Operation lamp off and Timer lamp flashes



## 12.8 Operation lamp on and Timer lamp flashes

EEROM error, indoor PCB is defective.

## 12.9 Operation lamp flashes, Timer lamp flashes .

This is alarm signal when the main chip can't detect over-zero signal. When such failure occurs, the main control board must have fault.

### 13. Characteristic of temperature sensor

Temp. °C	Resistance KΩ	Temp. °C	Resistance KΩ	Temp. °C	Resistance KΩ
-10	62.2756	17	14.6181	44	4.3874
-9	58.7079	18	13.918	45	4.2126
-8	56.3694	19	13.2631	46	4.0459
-7	52.2438	20	12.6431	47	3.8867
-6	49.3161	21	12.0561	48	3.7348
-5	46.5725	22	11.5	49	3.5896
-4	44	23	10.9731	50	3.451
-3	41.5878	24	10.4736	51	3.3185
-2	39.8239	25	10	52	3.1918
-1	37.1988	26	9.5507	53	3.0707
0	35.2024	27	9.1245	54	2.959
1	33.3269	28	8.7198	55	2.8442
2	31.5635	29	8.3357	56	2.7382
3	29.9058	30	7.9708	57	2.6368
4	28.3459	31	7.6241	58	2.5397
5	26.8778	32	7.2946	59	2.4468
6	25.4954	33	6.9814	60	2.3577
7	24.1932	34	6.6835	61	2.2725
8	22.5662	35	6.4002	62	2.1907
9	21.8094	36	6.1306	63	2.1124
10	20.7184	37	5.8736	64	2.0373
11	19.6891	38	5.6296	65	1.9653
12	18.7177	39	5.3969	66	1.8963
13	17.8005	40	5.1752	67	1.83
14	16.9341	41	4.9639	68	1.7665
15	16.1156	42	4.7625	69	1.7055
16	15.3418	43	4.5705	70	1.6469