

## 9. Troubleshooting

### 9.1 Indoor Unit Error Display

Display	Operation lamp flash times	Timer lamp	Failure
E0	1	X	EEPROM error
E1	2	X	Indoor and outdoor communication error
E2	3	X	Zero crossing detection error
E3	4	X	Indoor fan speed has been out of control
E4	5	X	Indoor room temperature sensor T1 open circuit or short circuit
E5	6	X	Evaporator coil temperature sensor T2 open circuit or short circuit
EC	7	X	Refrigerant leak detection error
F1	2	O	Outdoor temperature sensor T4 open circuit or short circuit
F2	3	O	Condenser coil temperature sensor T3 open circuit or short circuit
F3	4	O	Compressor discharge temperature sensor T5 open circuit or short circuit
F4	5	O	Outdoor EEPROM parameter error
P0	1	☆	IPM malfunction or IGBT over-strong current
P1	2	☆	Over voltage or too low voltage protection
P2	3	☆	Temperature protection of compressor top
P4	5	☆	Inverter compressor drive error

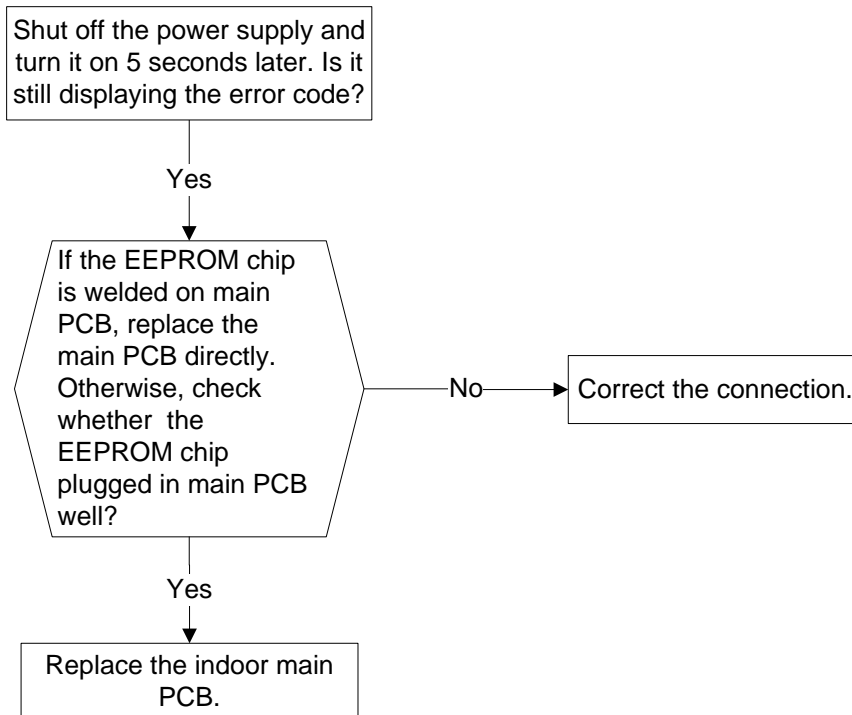
O (light)

X (off)

☆ (flash)

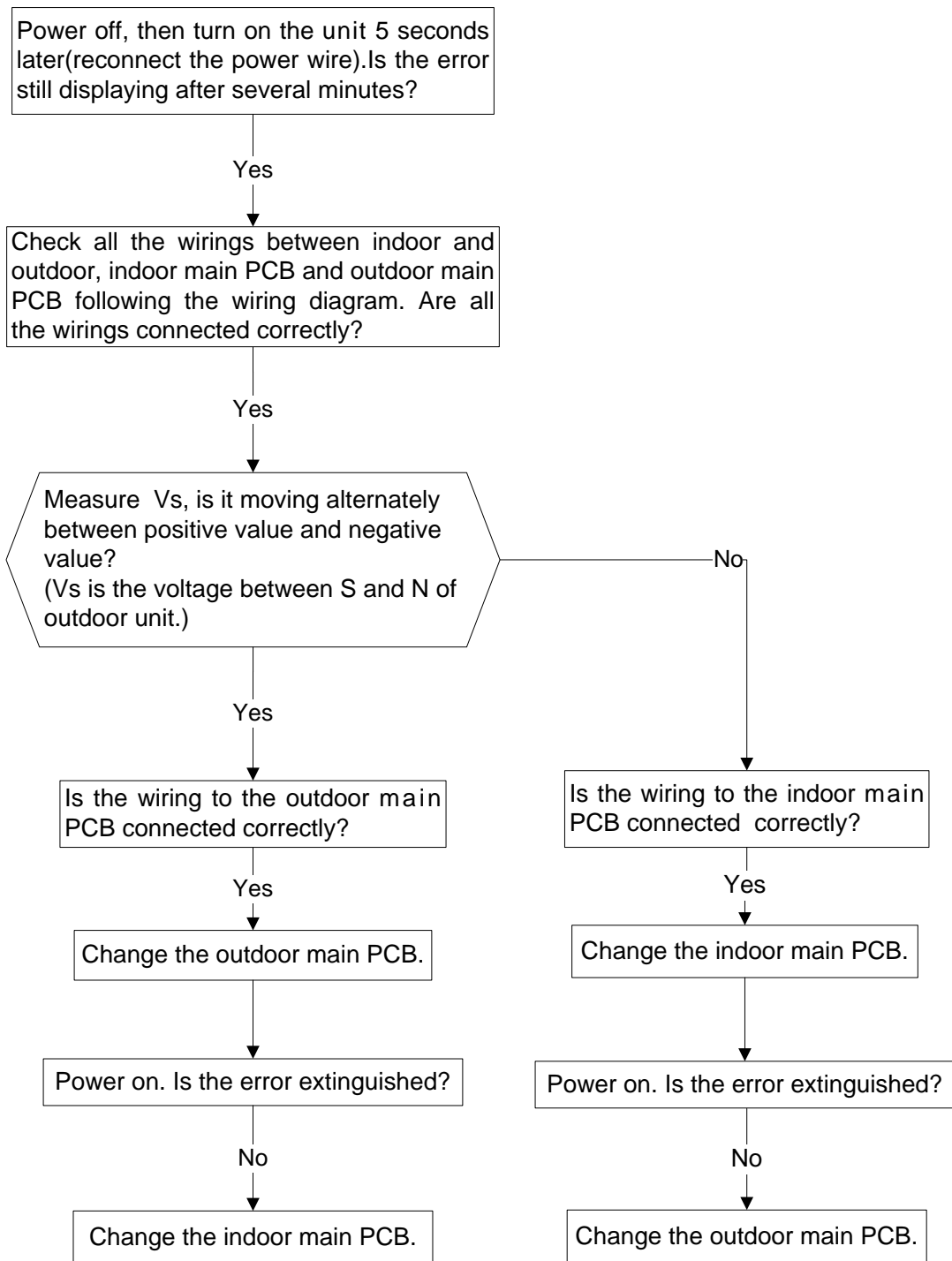
## 9.2 Diagnosis and Solution

### 9.2.1 EEPROM parameter error diagnosis and solution(E0/F4)

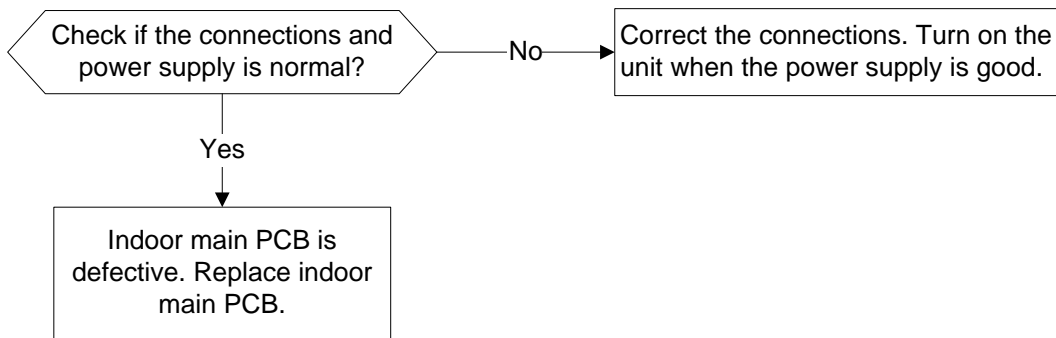


EEPROM: a read-only memory whose contents can be erased and reprogrammed using a pulsed voltage.

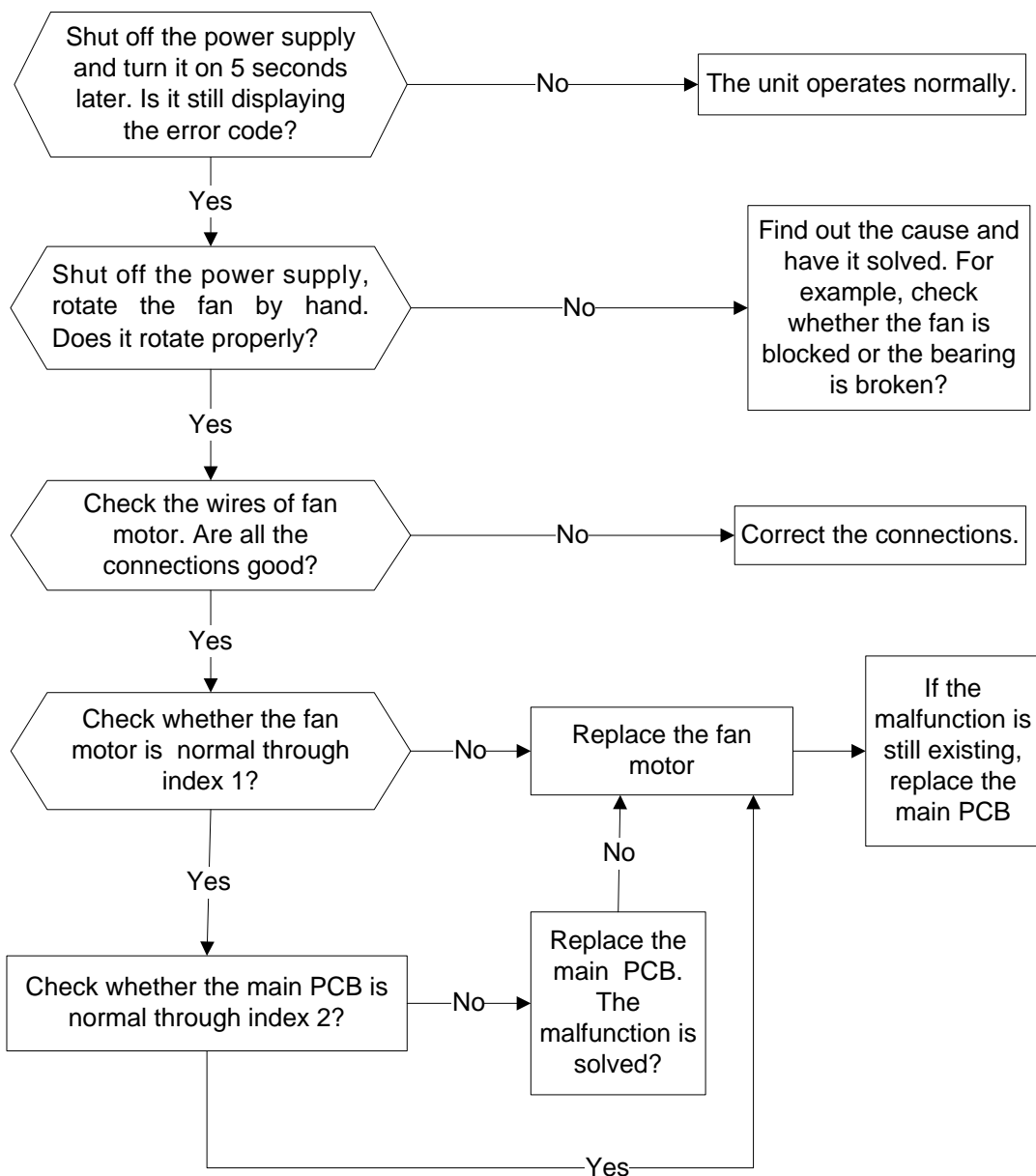
### 9.2.2 Indoor / outdoor unit's communication error diagnosis and solution(E1)



### 9.2.3 Zero crossing detection error diagnosis and solution(E2)



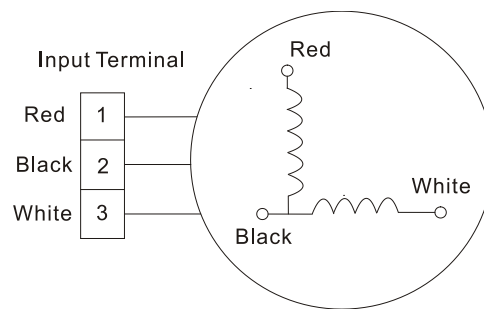
### 9.2.4 Indoor fan speed has been out of control diagnosis and solution(E3)



Index 1:

#### 1. Indoor AC Fan Motor

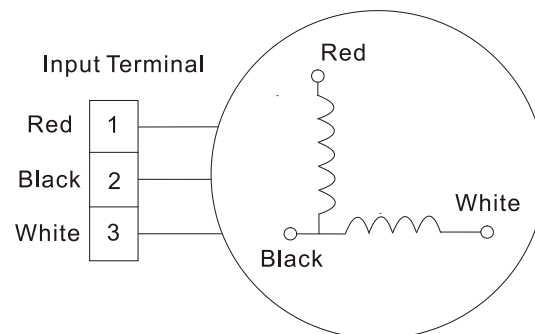
Measure the resistance value of each winding by using the tester.



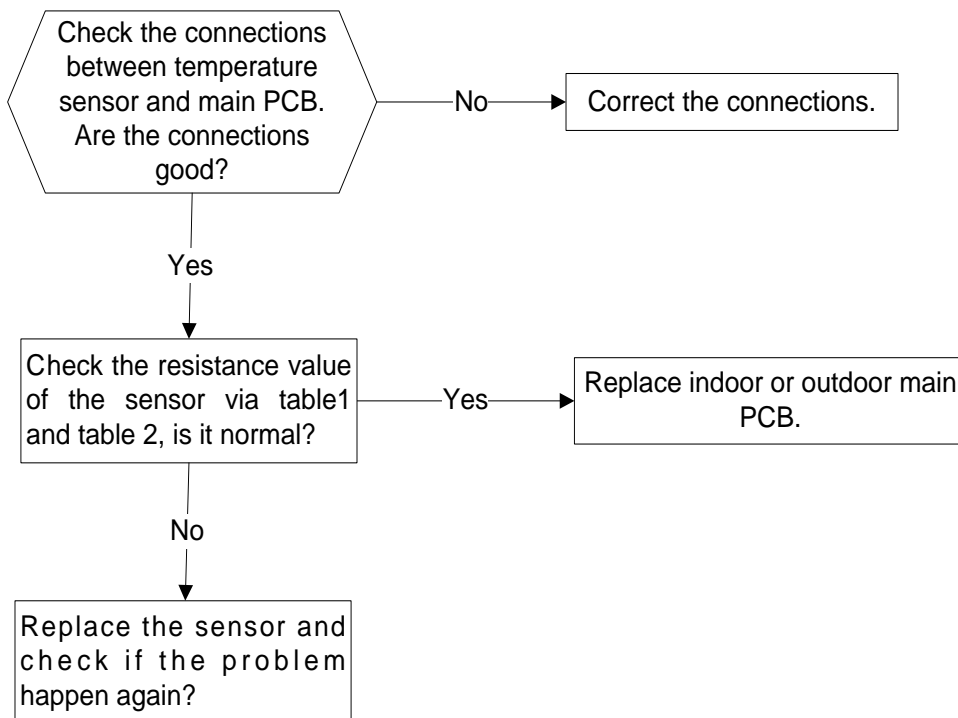
Index2:

#### 1: Indoor AC Fan Motor

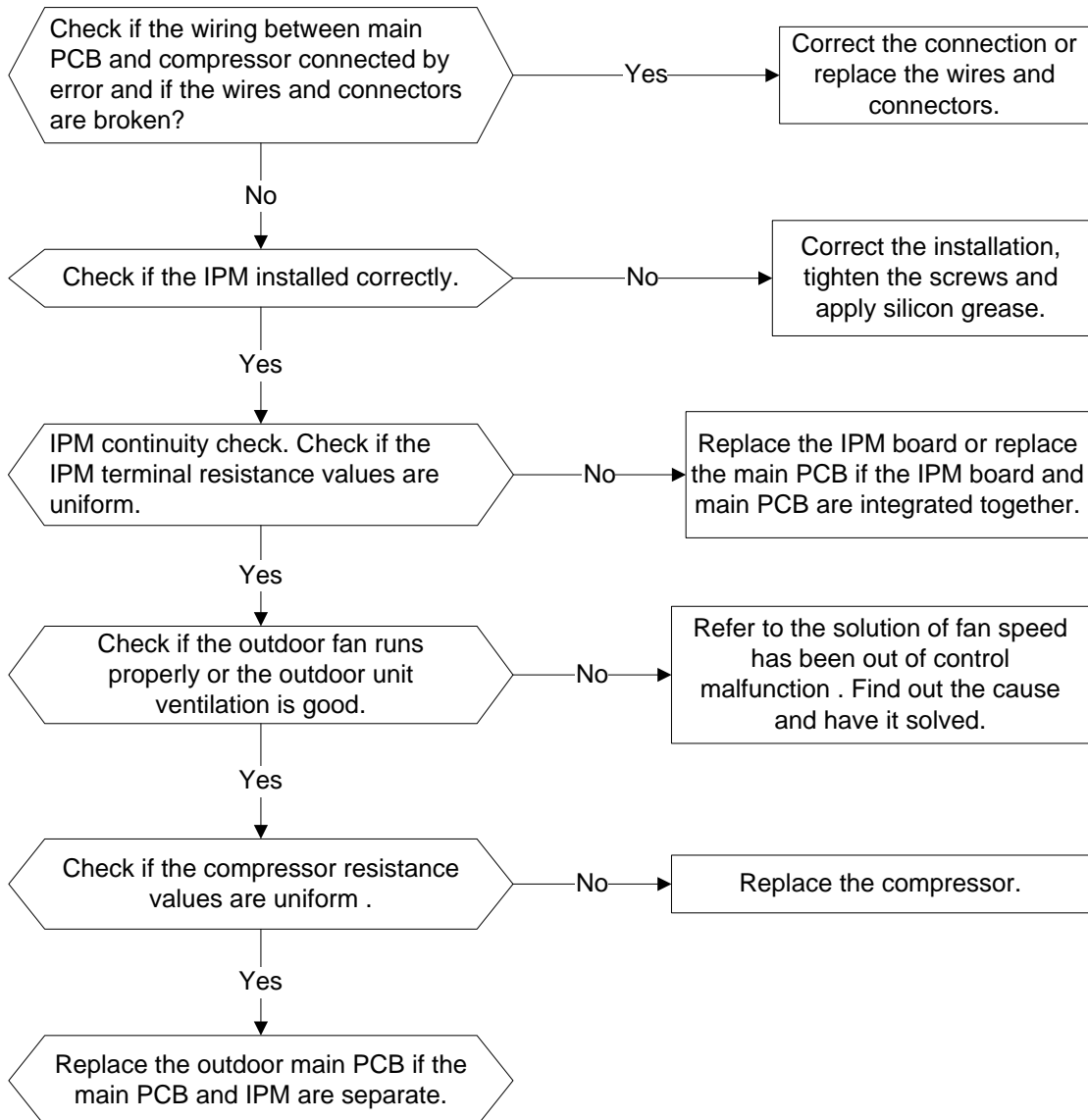
Power on and set the unit running in fan mode at high fan speed. After running for 15 seconds, measure the voltage of pin1 and pin2. If the value of the voltage is less than 100V(208~240V power supply) or 50V(115V power supply), the PCB must have problems and need to be replaced.



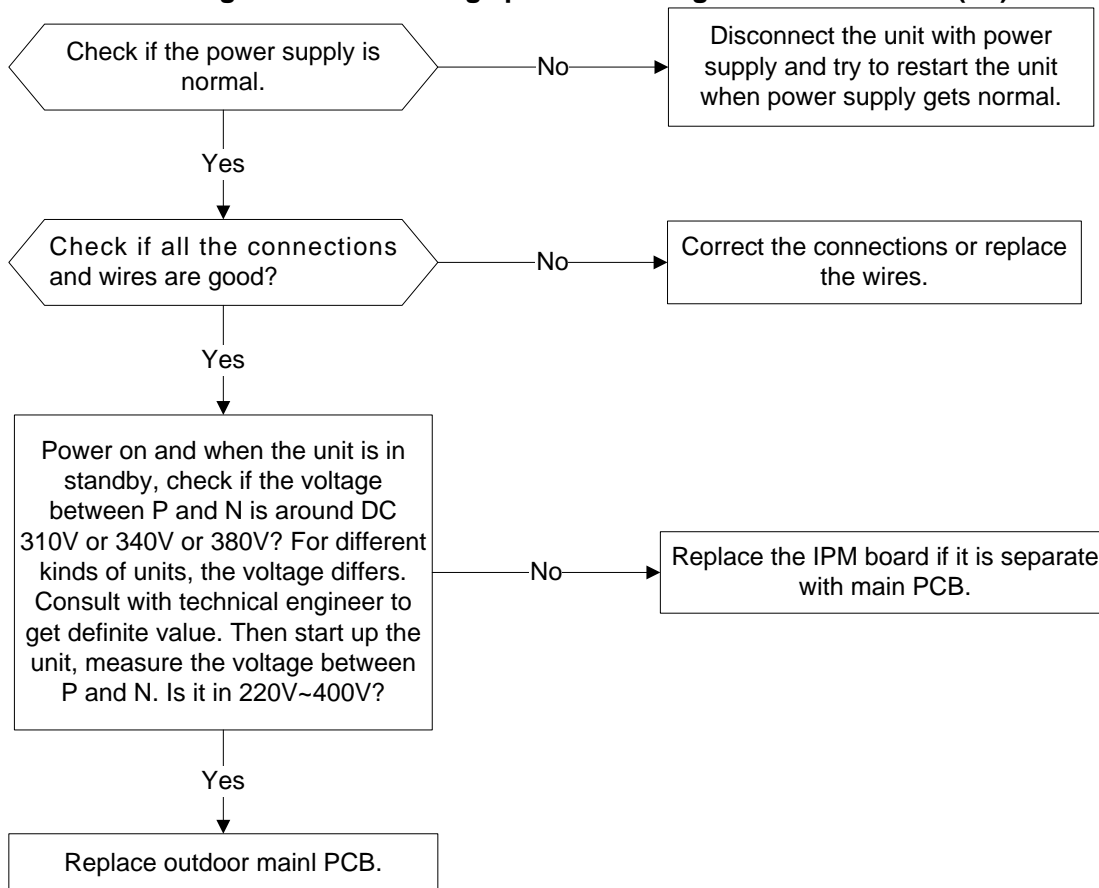
### 9.2.5 Open circuit or short circuit of temperature sensor diagnosis and solution(E4/E5/F1/F2/F3)



### 9.2.6 IPM malfunction or IGBT over-strong current diagnosis and solution(P0)

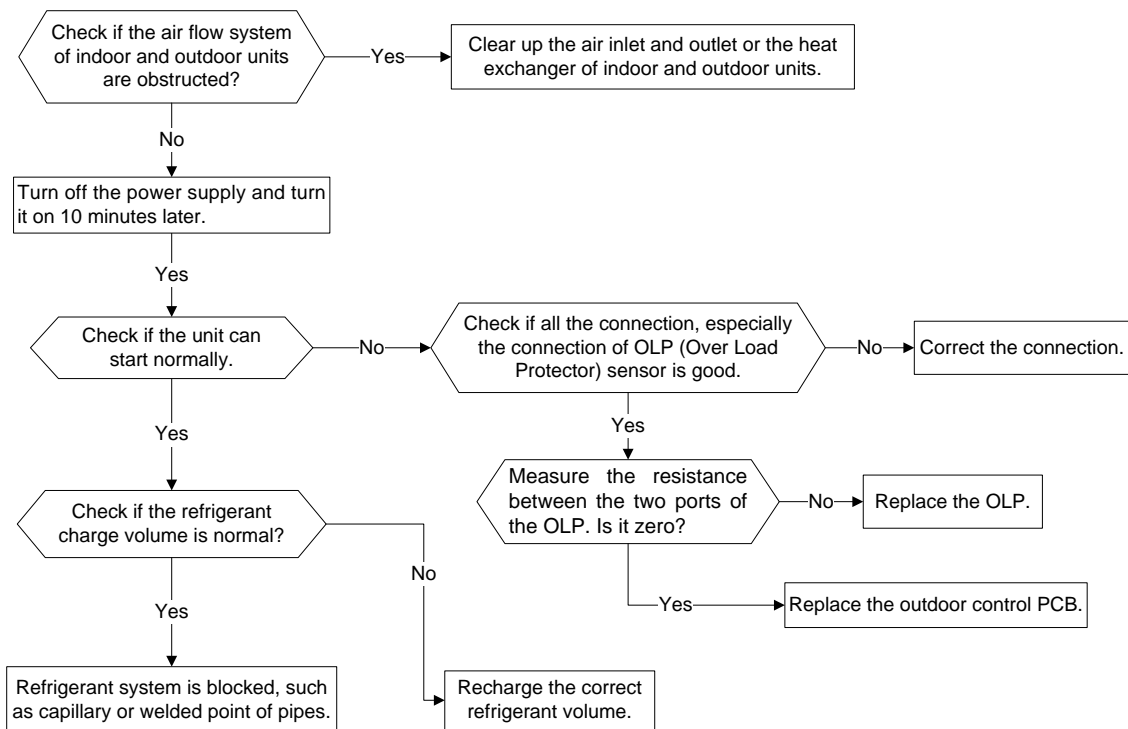


### 9.2.7 Over voltage or too low voltage protection diagnosis and solution(P1)

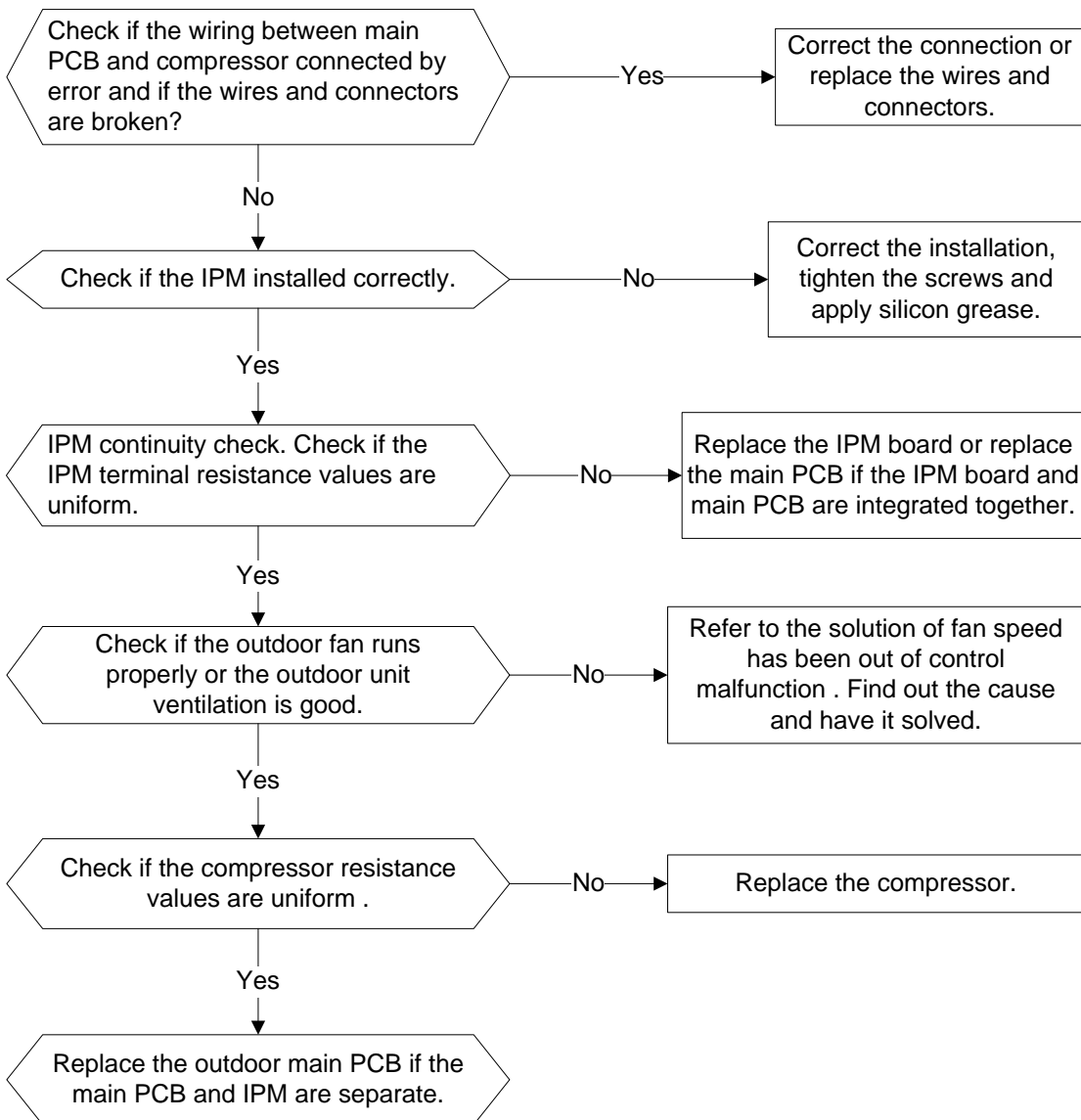




### 9.2.8 High temperature protection of compressor top diagnosis and solution(P2)



### 9.2.9 Inverter compressor drive error diagnosis and solution(P4)



### 9.2.10 Refrigerant Leakage Detection diagnosis and solution

