

4. Troubleshooting

4-1 Wired Remote Controller

If the error occurs,  and the error code are displayed on the wired remote controller. The error code blinks for 5 seconds and it disappears. If you would like to see the error code after disappearing it, press the Test button.

Meaning of Error Code

The error code is composed of two-digit figures or letters. The first means (*) an indoor unit address and the second means an error code.

<u>Error Code</u>	<u>Meaning</u>	<u>Checking area</u>
* 1	Indoor unit thermistor sensor error	◆ Indoor unit thermistor sensor ◆ PCB of the indoor unit
* 5	Indoor unit pipe sensor error	◆ Indoor unit pipe sensor ◆ PCB of the indoor unit
* 6	Outdoor unit thermistor sensor error	◆ Outdoor unit thermistor sensor ◆ PCB of the outdoor unit
* 9	Float switch error	◆ Drain pump, Float switch ◆ Drain system ◆ DIP switch(SW2) of the indoor unit (The No.2 and No.3 switches must be at "ON" position.)
* A	A Indoor and Outdoor communication error	◆ Communication cables of indoor and outdoor units ◆ PCB of indoor and outdoor units
* C	Wired remote controller communication error	◆ Wired remote controller cables, Wired remote controller ◆ Main/Sub PCB of the indoor unit
* D	Outdoor pipe sensor error	◆ Outdoor pipe sensor ◆ PCB of the outdoor unit
* L	Three phase power incorrect connecting error (In case of three phase power models)	◆ Three phase power connecting ◆ PCB of the outdoor unit

Example : "39" means the address "3" indoor unit has a trouble with a float switch.

4-2 Wireless Remote Controller

If the error occurs, the indicators on the receiver & display unit displays the error.

Meaning of Error Code

Indicators			Meaning	Checking area
Timer	Operating	Filter		
◐	○	○	Indoor unit thermistor sensor error	<ul style="list-style-type: none"> ◆ Indoor unit thermistor sensor ◆ PCB of the indoor unit
▲	▲	○	Indoor unit pipe sensor error	<ul style="list-style-type: none"> ◆ Indoor unit pipe sensor ◆ PCB of the indoor unit
○	▲	▲	Outdoor unit thermistor sensor error	<ul style="list-style-type: none"> ◆ Outdoor unit thermistor sensor ◆ PCB of the outdoor unit
■	○	■	Float switch error	<ul style="list-style-type: none"> ◆ Drain pump, Float switch ◆ Drain system
▲	○	▲	Indoor and Outdoor communication error	<ul style="list-style-type: none"> ◆ Communication cables of indoor and outdoor units ◆ PCB of indoor and outdoor units
■	■	○	Wired remote controller communication error	<ul style="list-style-type: none"> ◆ Wired remote controller cables, Wired remote controller ◆ Main/Sub PCB of the indoor unit
○	○	◐	Outdoor pipe sensor error	<ul style="list-style-type: none"> ◆ Outdoor pipe sensor ◆ PCB of the outdoor unit
○	■	■	Three phase power incorrect connecting error (In case of three phase power models)	<ul style="list-style-type: none"> ◆ Three phase power connecting ◆ PCB of the outdoor unit

○ : OFF ◐ : Blinking ▲▲ : Blinking at once ■■ : Blinking alternately

4-3 Outdoor Unit

Meaning of Error Code

Indicated in Outdoor PCB in case of error occurred

Error Code	Meaning	Checking area
E1	Indoor unit thermistor sensor error	<ul style="list-style-type: none"> ◆ Indoor unit thermistor sensor ◆ PCB of the indoor unit
E5	Indoor unit pipe sensor error	<ul style="list-style-type: none"> ◆ Indoor unit pipe sensor ◆ PCB of the indoor unit
E6	Outdoor unit thermistor sensor error	<ul style="list-style-type: none"> ◆ Outdoor unit thermistor sensor ◆ PCB of the outdoor unit
E9	Float switch error	<ul style="list-style-type: none"> ◆ Drain pump, Float switch ◆ Drain system
EA	A Indoor and Outdoor communication error	<ul style="list-style-type: none"> ◆ Communication cables of indoor and outdoor units ◆ PCB of indoor and outdoor units
EC	Wired remote controller communication error	<ul style="list-style-type: none"> ◆ Wired remote controller cables, Wired remote controller ◆ Main/Sub PCB of the indoor unit
ED	Outdoor pipe sensor error	<ul style="list-style-type: none"> ◆ Outdoor pipe sensor ◆ PCB of the outdoor unit
EL	Three phase power incorrect connecting error (In case of three phase power models)	<ul style="list-style-type: none"> ◆ Three phase power connecting ◆ PCB of the outdoor unit

4-4 Reading temperature from sensor

Press tact switch on the outdoor PCB

Press once	Outside temperature from outdoor thermistor sensor
Press twice	Outdoor unit coil temperature from outdoor pipe sensor
Press three times	Defrost setting option/Power type
Press four times	Indoor unit coil temperature from indoor pipe sensor
Press five times	Indoor unit setting temperature
Press six times	Inside temperature from indoor thermistor sensor

4-5 Trouble Shooting

■ Trouble shooting by outdoor unit error code

ERROR CODE	ERROR DESCRIPTION	REFERENCE PART
E1	Indoor unit room thermistor error	EC01
E5	Indoor unit pipe thermistor error	EC02
E6	Outdoor unit thermistor error	EC03
E9	Float switch open error	EC04
EA	Communication error between indoor unit and outdoor unit	EC05
EC	Communication error between wired remote controller and indoor unit	EC06
ED	Outdoor unit pipe thermistor error	EC07

■ Trouble shooting by indoor unit receiver & Display unit

ERROR CODE	ERROR CODE	REFERENCE PART
Reservation LED flickering(1Hz period)	Indoor temperature sensor abnormal	EC01
Operation LED and reservation LED flickering (1Hz period)	Indoor pipe temperature sensor abnormal	EC02
Operation LED and filter LED flickering (1Hz period)	Outdoor temperature sensor abnormal	EC03
Reservation LED filter LED alternating flickering (1Hz period)	Float switch open abnormal	EC04
Reservation LED and filter LED flickering (1Hz period)	Indoor and outdoor communication abnormal	EC05
Operation LED and reservation LED alternating flickering (1Hz period)	Wired remote controller communication abnormal	EC06
Filter LED flickering (1Hz period)	Outdoor pipe temperature sensor abnormal	EC07

■ Trouble shooting by wired remote controller error code

ERROR CODE	ERROR DESCRIPTION	REFERENCE PART
*1	Indoor unit room thermistor error	EC01
*5	Indoor unit pipe thermistor error	EC02
*6	Outdoor unit thermistor error	EC03
*9	Float switch open error	EC04
*A	Communication error between indoor unit and outdoor unit	EC05
*C	Communication error between wired remote controller and indoor unit	EC06
*D	Outdoor unit pipe thermistor error	EC07

* The asterisk mark “*” + “ERROR” CODE of wired remote controller stands for the set number.
ex) ERROR CODE “39” is the FLOAT SWITCH OPEN ERROR of SET no.3.

■ Trouble shooting by centralized controller

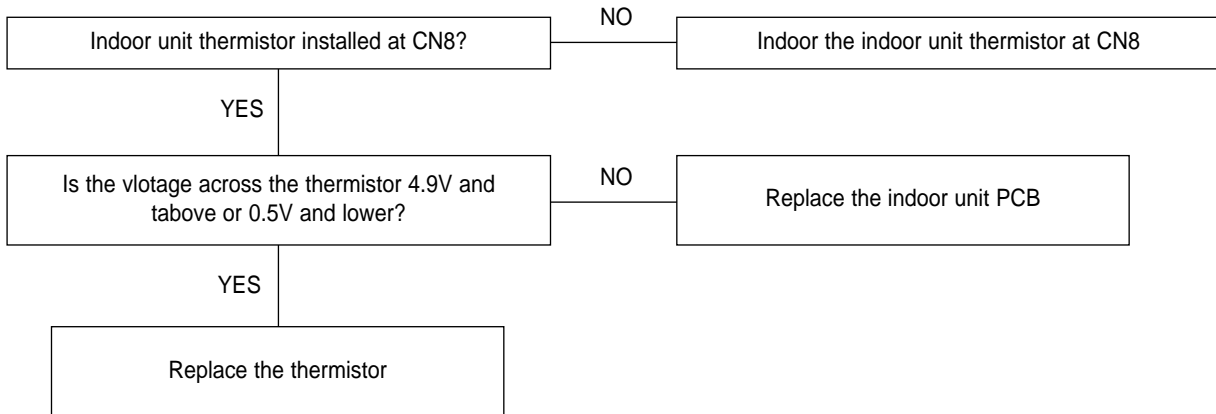
ERROR CODE	ERROR DESCRIPTION	REFERENCE PART
LED flickering	Communication error between indoor unit and centralized controller	EC19

■ EC01 : Trouble on the thermistor related part of indoor unit.

- EC01 : Trouble on the room thermistor related part of indoor unit.
 - E1 of outdoor unit PCB 7-segment
 - Reservation lamp of wireless receiving board is flickering with 1 Hz.
 - Action items when “*1” displays on the wired remote controller.

Check point :

- Defect of indoor unit
- Indoor unit thermistor defect



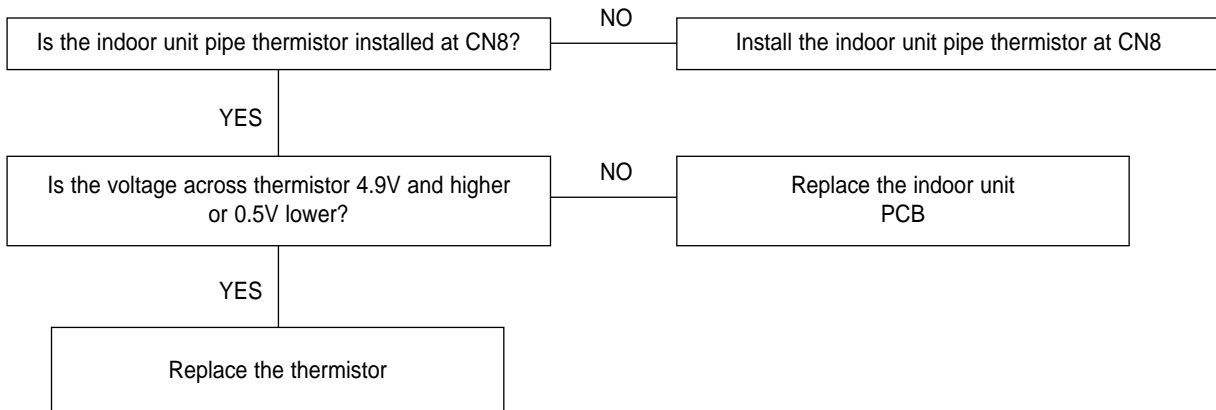
* “*” stands for the indoor unit address.

■ EC02 : Trouble on the pipe thermistor related part of indoor unit.

- E5 of outdoor unit PCB 7-segment.
- Reservation lamp of wireless receiving board is flickering with 1 Hz.
- Action items when “*5” displays on the wired remote controller.

Check point :

- Indoor unit PCB defect
- Indoor unit pipe thermistor defect

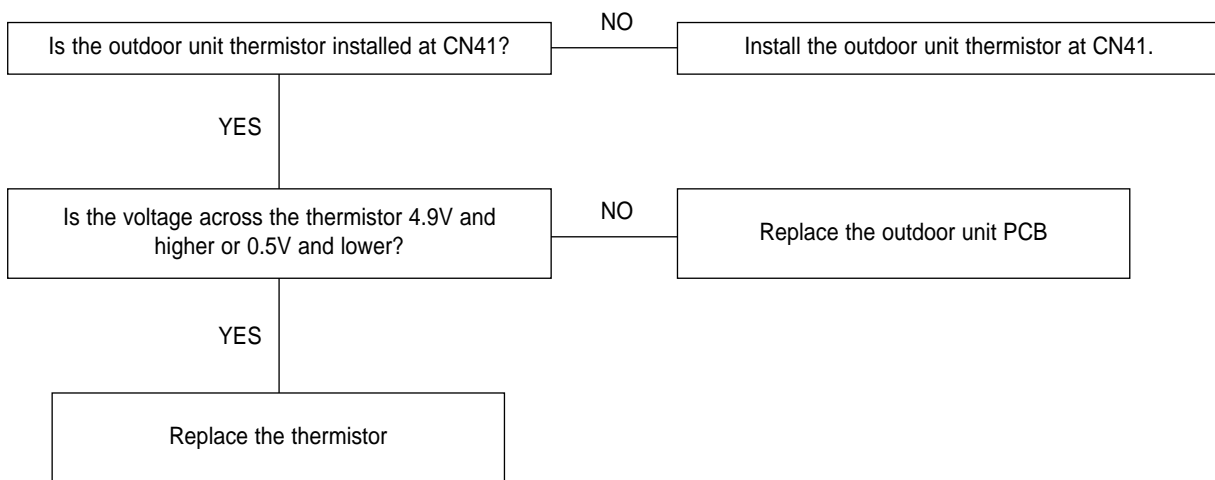


■ EC03 : When the trouble is found on the part related to the outdoor unit thermistor.

- E6 of outdoor unit PCB 7-segment
- Operation lamp and filter lamp of wireless receiving board are flickering with 1Hz.
- Action items when “*6” displays on the wired remote controller.

Check point :

- Defect of indoor unit
- Indoor unit thermistor defect



* “*” stands for the indoor unit address.

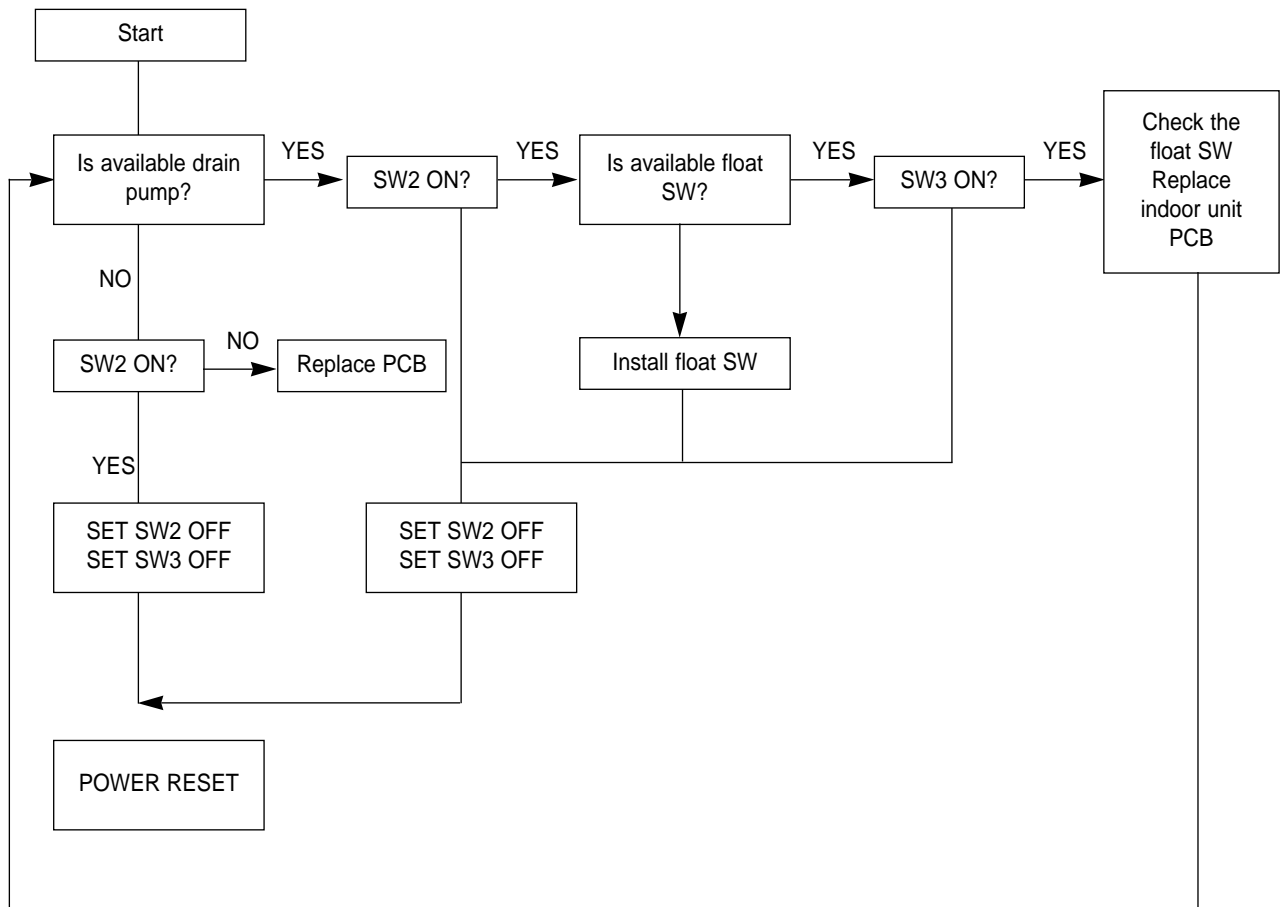
■ **EC04 : When the trouble is found on the drain pump and float switch installed on the indoor unit.**

EC01 : Trouble on the thermistor related part of indoor unit.

- E9 of 7-segment of outdoor unit PCB.
- Reservation lamp of wireless receiving board and filter lamp are flickering with 1 Hz.
- Action item when “*9” displays on the wireless remote controller.

Check point :

- Indoor unit defect
- Drain pump, float switch defect



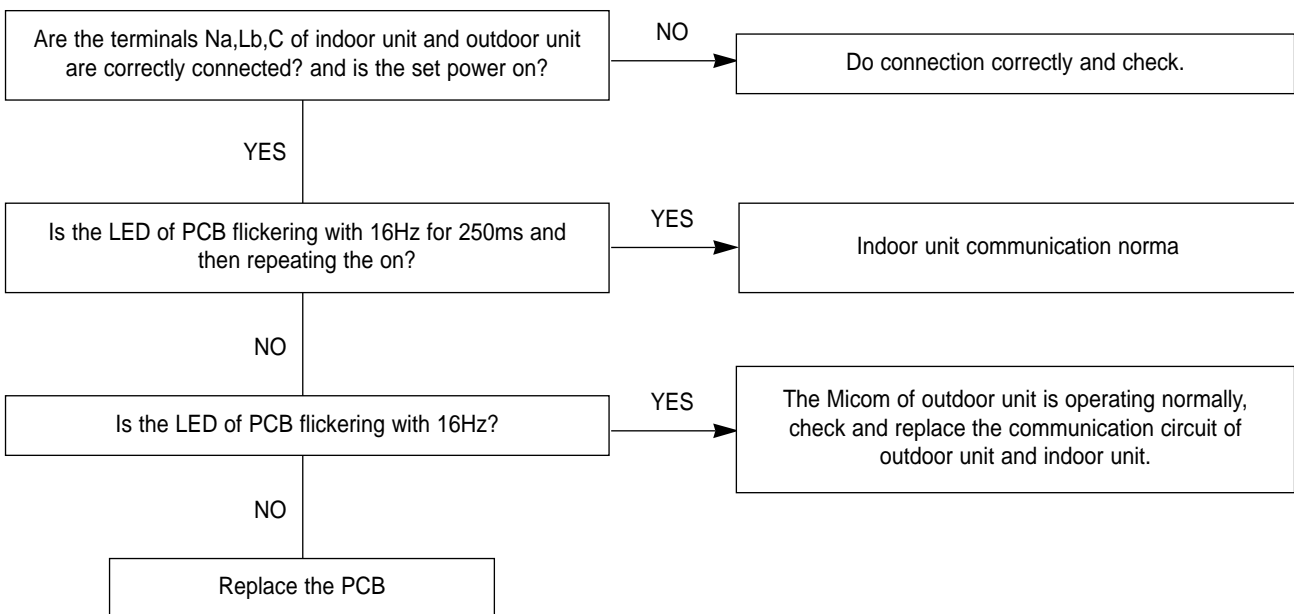
* “*” stands for the indoor unit address.

■ EC05 : When the trouble is found in the communication related part between indoor unit and outdoor unit.

- EA of 7-segment of outdoor unit PCB.
- Reservation lamp and filter lamp of wireless receiving board is flickering with 1 Hz.
- Action item when “*A” displays on the wired remote controller.

Check point :

- Indoor unit ↔ outdoor unit mis-connection
- Indoor unit PCB defect
- Outdoor unit PCB defect



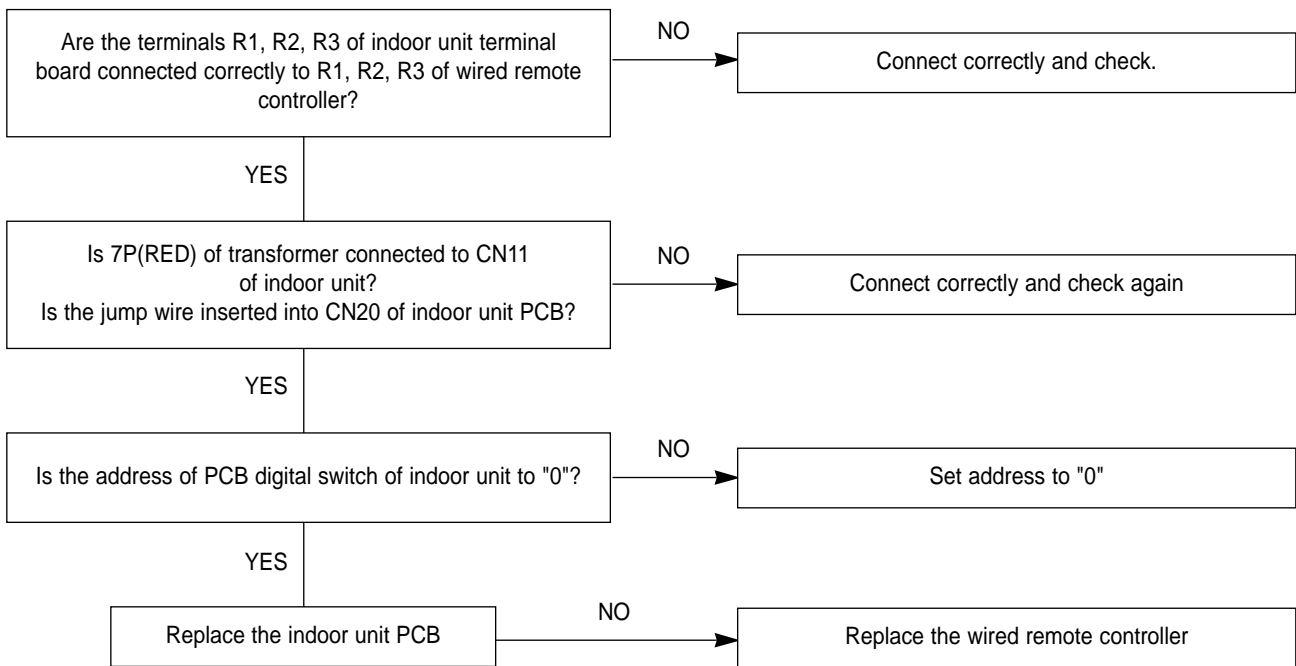
* “*” stands for the indoor unit address.

■ EC06 : When the trouble is found in the communication related part between indoor unit and wired remote controller. (during single operation, not group control)

- EC of 7-segment of outdoor unit PCB.
- Wireless receiving board lamp and reservation lamp is flickering with 1Hz.
- Action item when “C” displays on the wired remote controller.

Check point :

- Short circuit or mis-connection of the communication line between indoor unit and wireless remote controller
- Indoor unit PCB defect
- Wired remote controller PCB defect



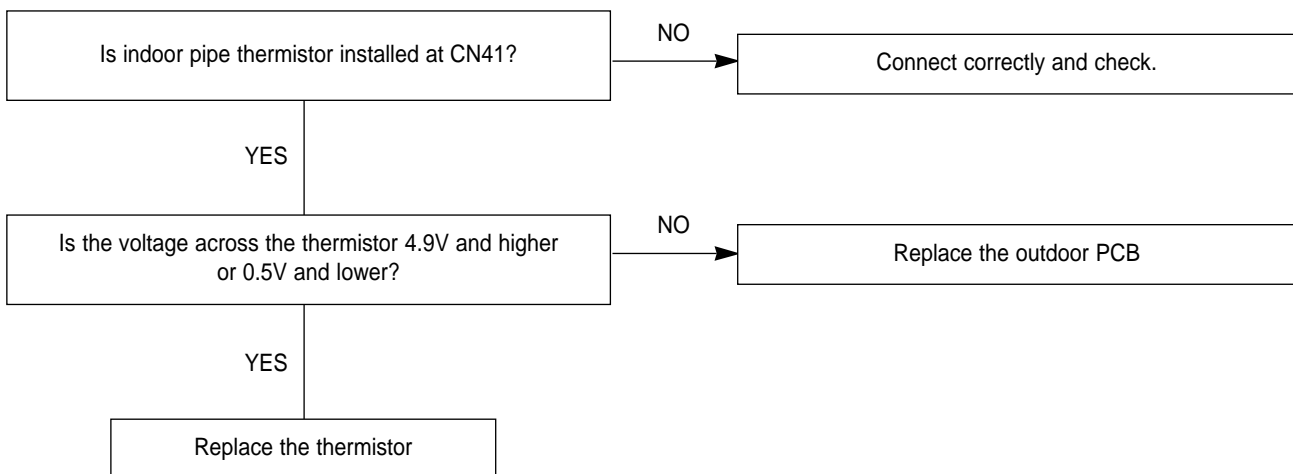
* “0” stands for the indoor unit address.

■ EC07 : When the trouble is found in the communication related part between outdoor unit pipe thermistor.

- ED of 7-segment of outdoor unit PCB.
- Reservation lamp and filter lamp of wireless receiving board is flickering with 1Hz.
- Action item when “D” displays on the wired remote controller.

Check point :

- Indoor unit pipe thermistor available or not
- Indoor unit PCB defect

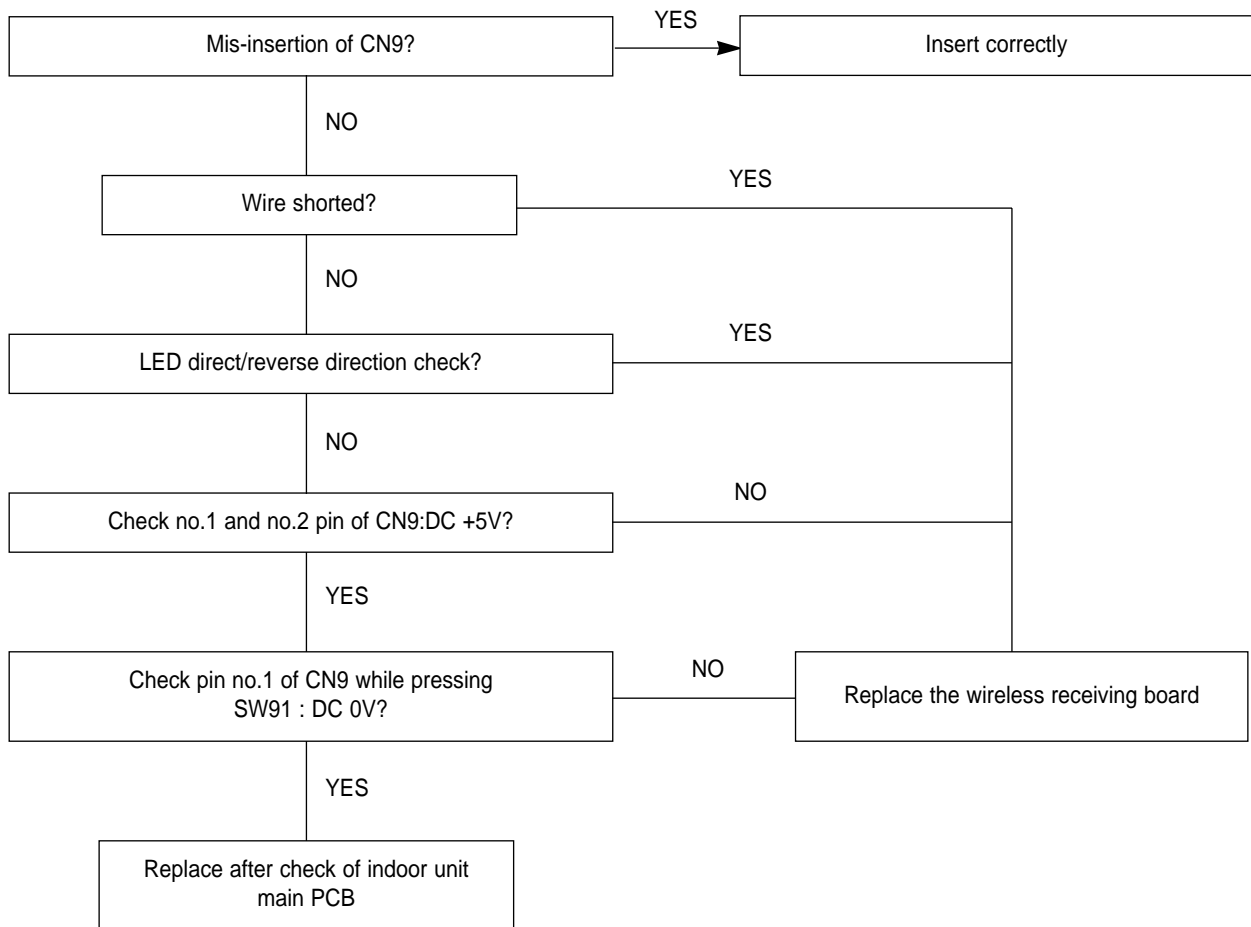


* “*” stands for the indoor unit address.

■ EC08 : When the trouble is found on the part related to the wireless receiving board of the indoor unit.

Check point :

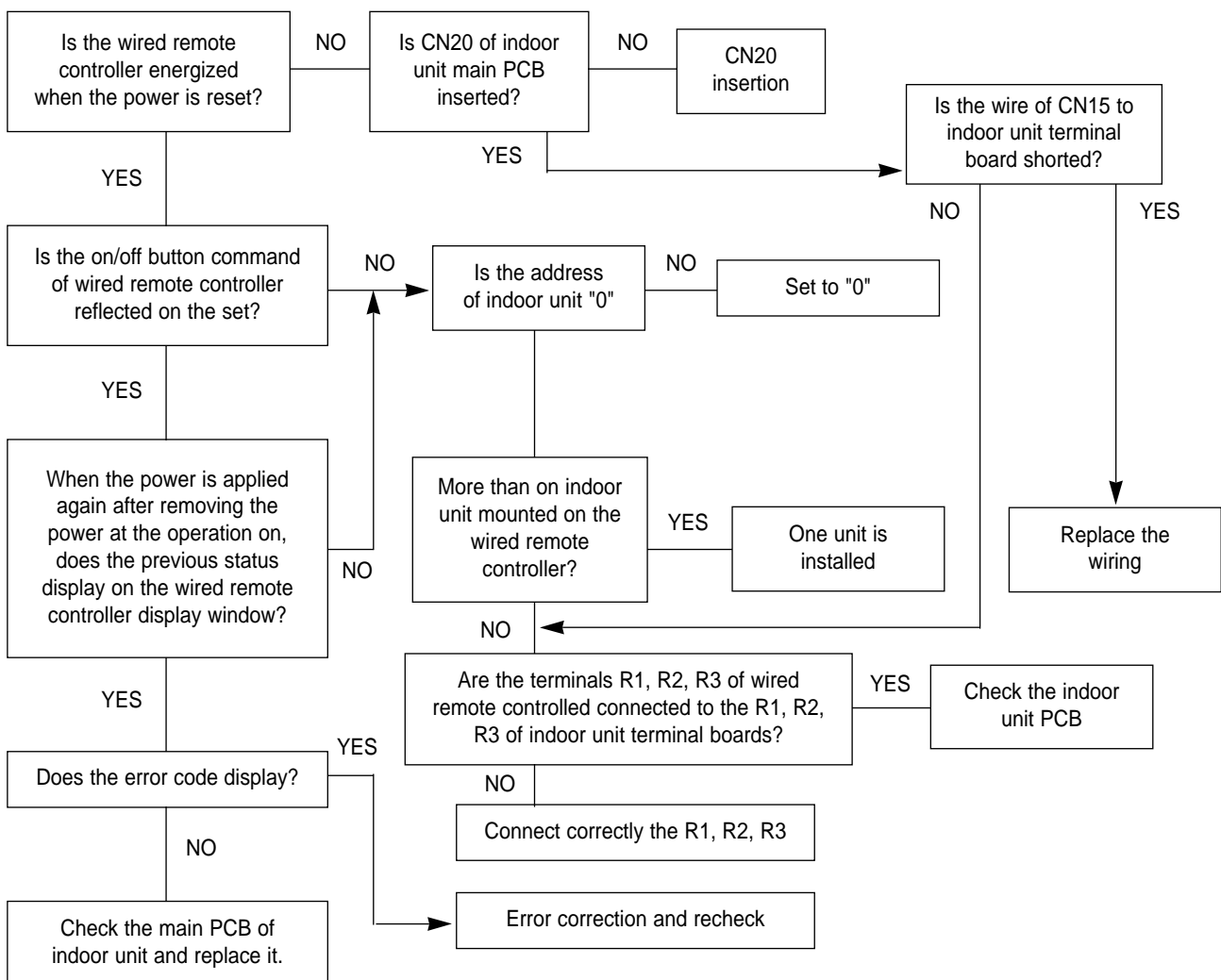
- Defect of wireless remote controller PCB
- Defect of wireless remote controller receiving board PCB
- Indoor unit PCB defect



**■ EC09 : When the trouble is found on the part related to the wired remote controller.
(single operation)**

Check point :

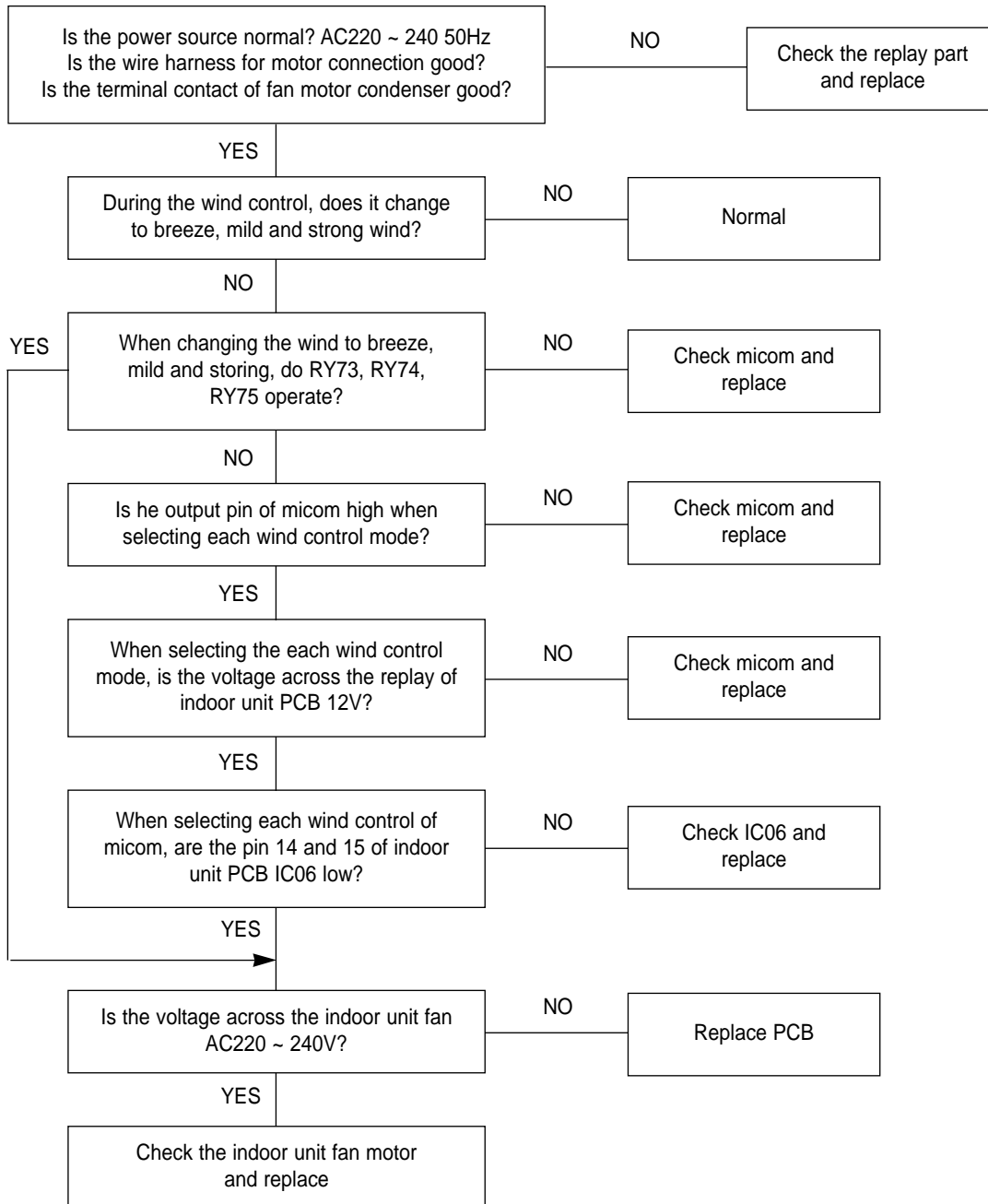
- Defect of communication line between indoor unit and wired remote controller.
- Output of indoor unit Micom
- Defect of wired remote controller PCB
- Indoor unit PCB defect



■ EC10 : When the trouble is found on the part related to the fan motor of indoor unit.

Check point :

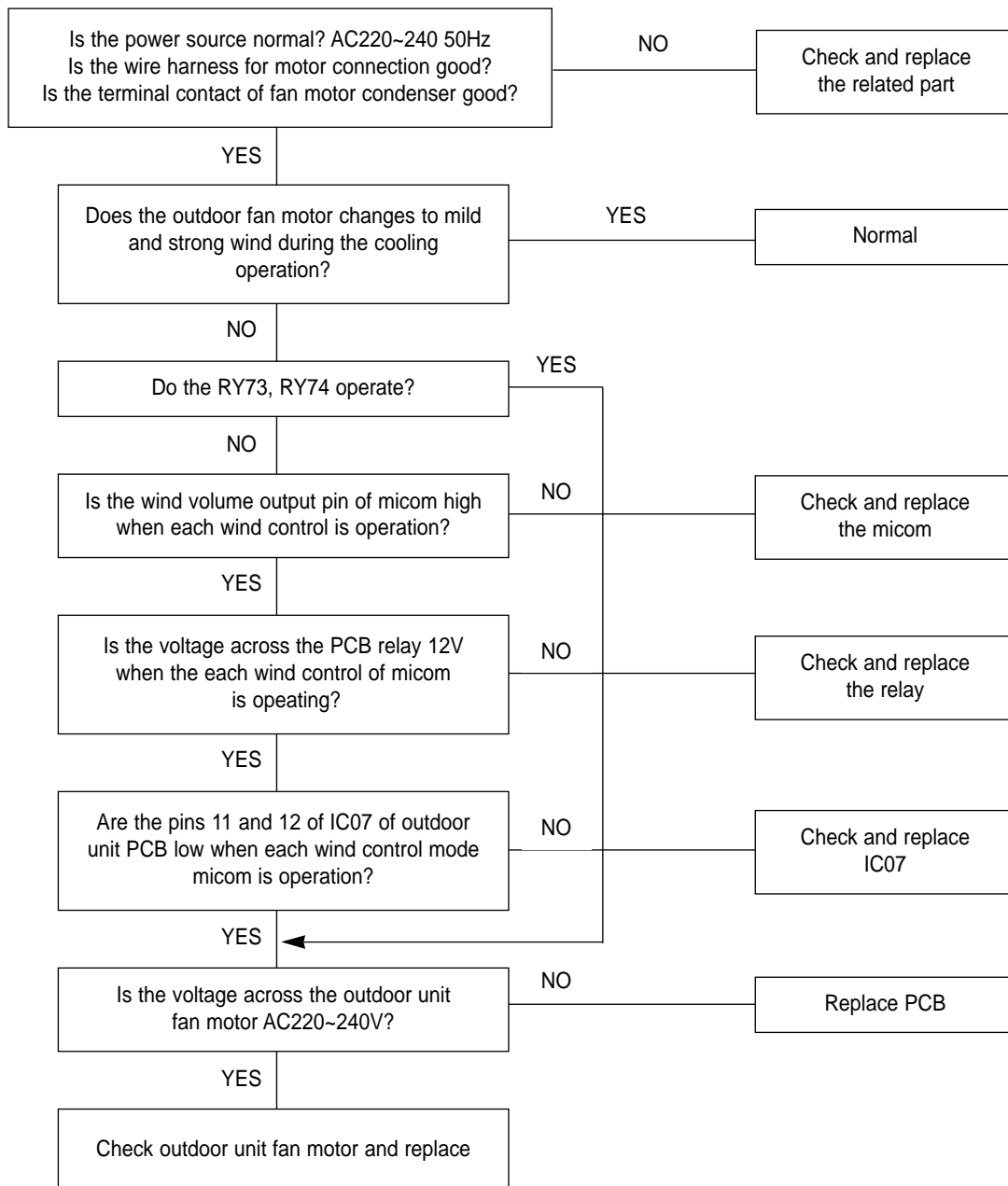
- Defect of PCB relay of indoor unit.
- Output of indoor unit Micom
- Indoor fan motor defect
- Defect of PCB IC06 of indoor unit



■ EC11 : When the trouble is found on the part related to the fan motor of outdoor unit.

Check point :

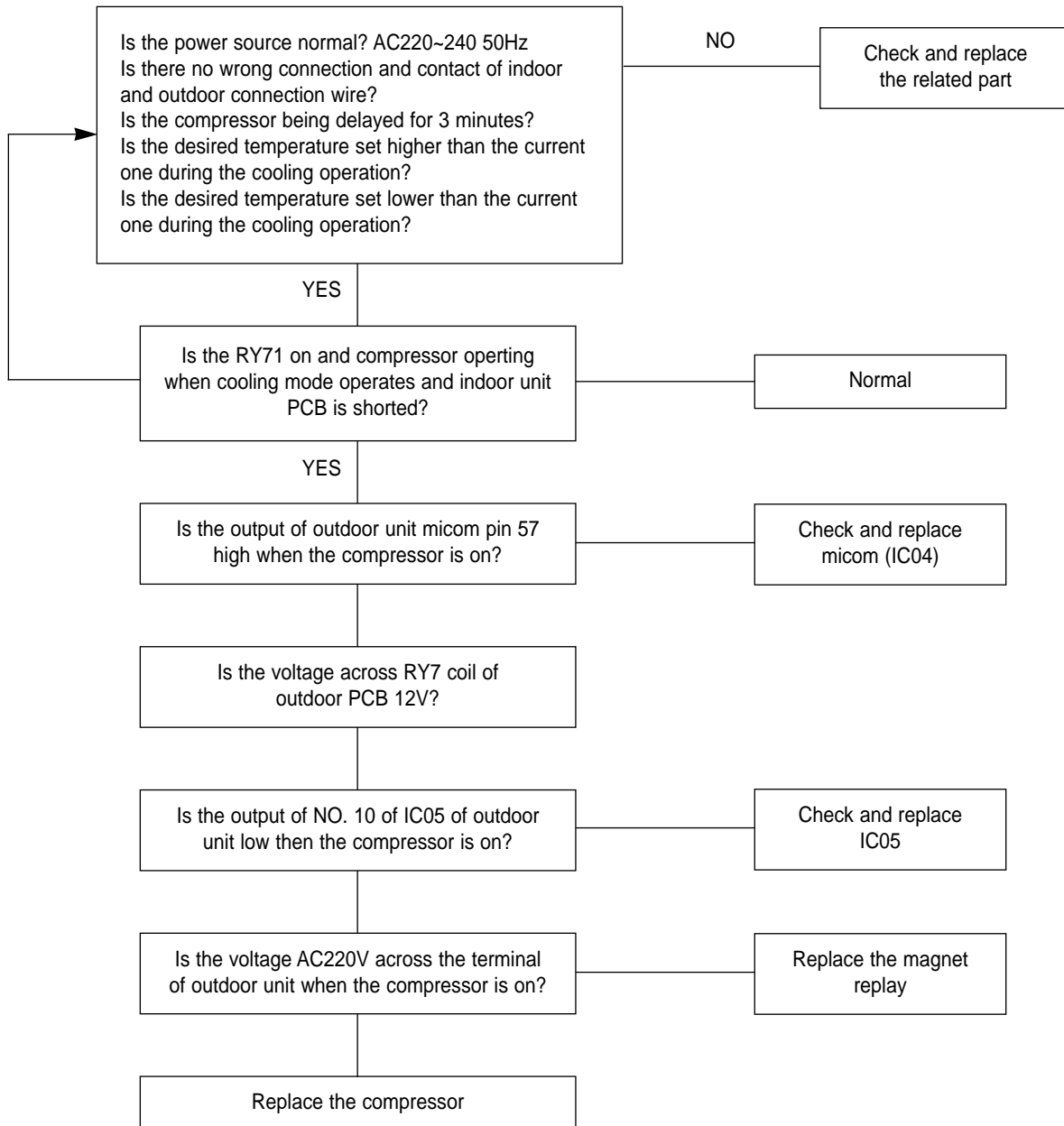
- Outdoor unit PCB relay defect
- Output of outdoor unit micom
- Outdoor unit fan motor defect
- Defect of IC07 of outdoor unit PCB



■ EC12 : When the trouble is found on the part related to comp of outdoor unit.

Check point :

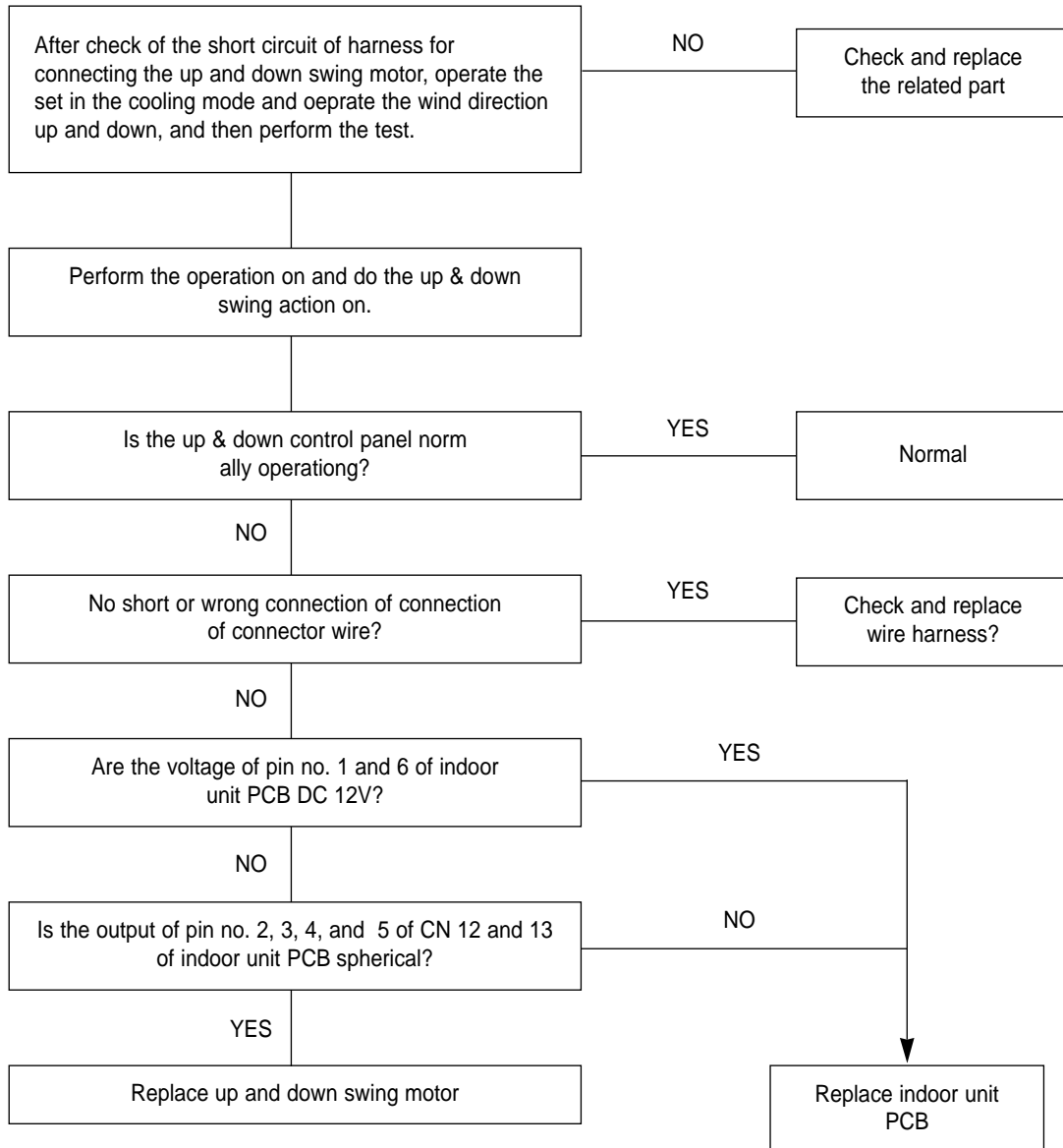
- Indoor unit PCB relay defect
- Output of indoor unit micom
- Comp defect
- Magnet switch defect



■ EC13 : When the trouble is found on the part related to the up & down swing motor of indoor unit (cassette model)

Check point :

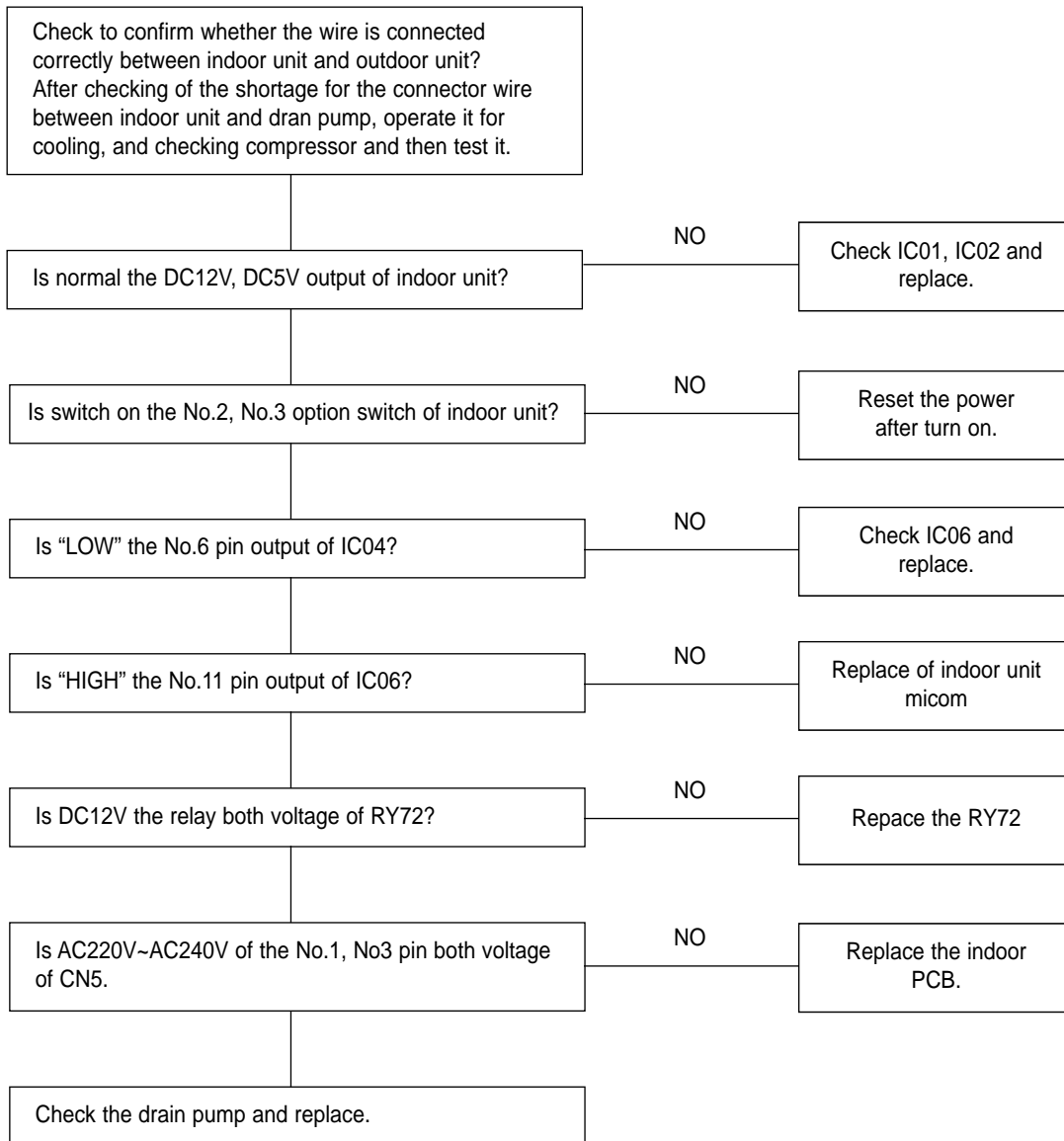
- Wire short between indoor unit PCB up & down swing motor connector or bad contact.
- Output of indoor unit micom
- Defect of up and down swing motor



■ EC14 : When the trouble is found on the part related to drain pump of indoor unit.

Check point :

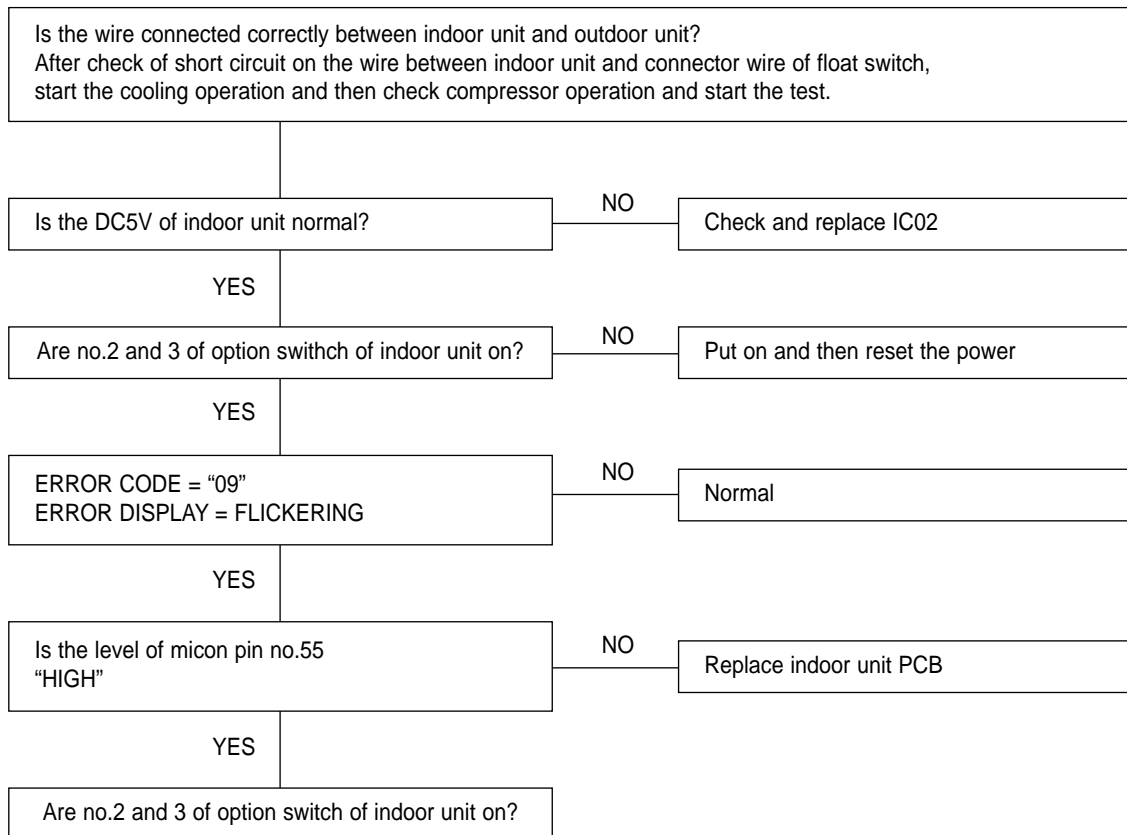
- Indoor unit PCB ↔ Drain pump connector wire, indoor unit Micom No.6 Pin output, IC06 No.6 Pin output.
- Drain pump, RY72, DC12V power, AC220~240V 50Hz power, indoor unit option switch.



■ EC15 : When the trouble is found on the part related to float switch of indoor unit.

Check point :

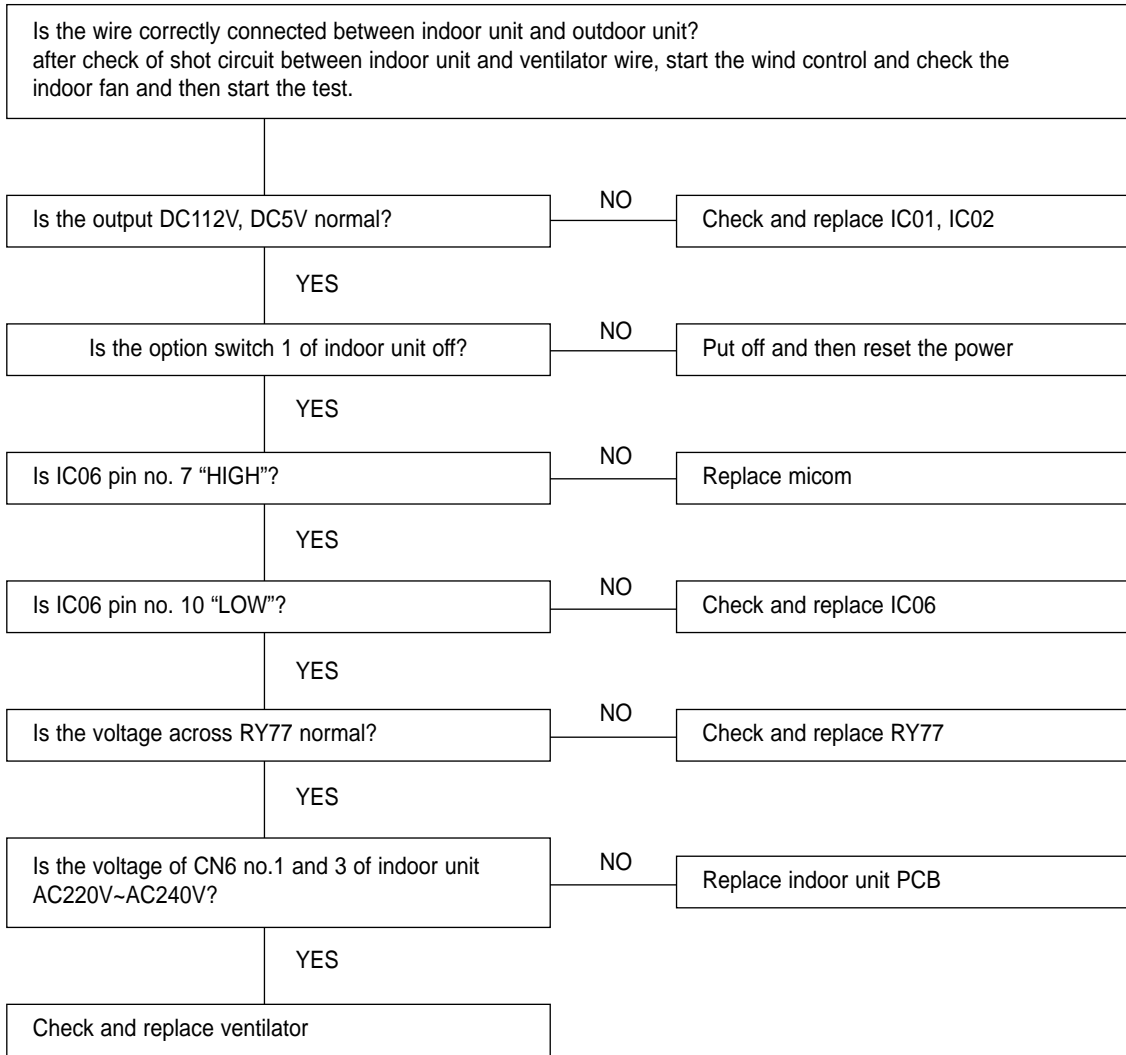
- Indoor unit PCB ↔ float switch connector wire, voltage level of indoor unit micom pin no. 55
- Float switch, DC5V power, indoor unit option switch



■ EC16 : When the trouble is found on the part related to ventilator of indoor unit.

Check point :

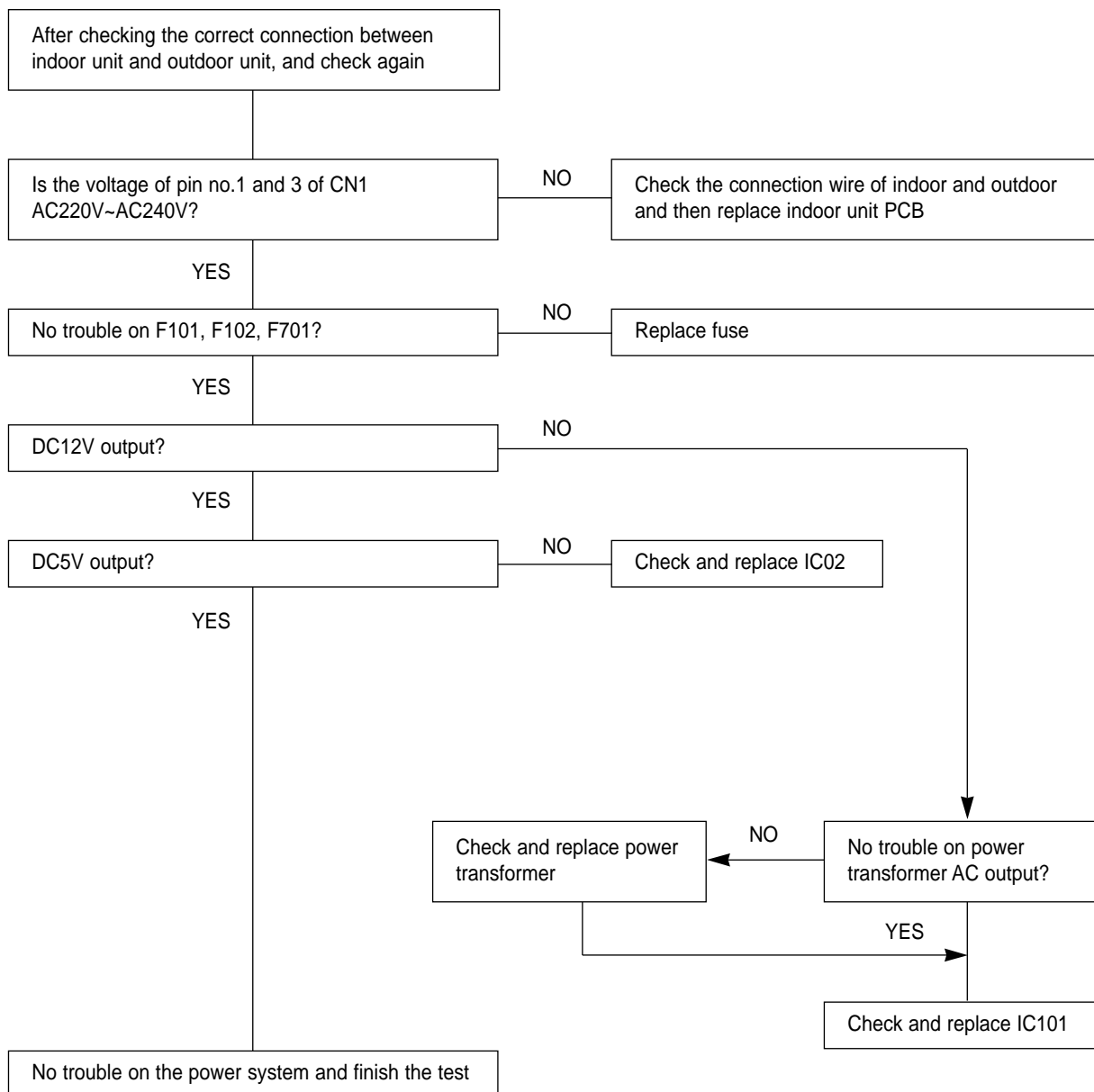
- Indoor unit PCB ↔ ventilator connector wire, output voltage of indoor unit micom pin No. 5
- Ventilator, DC 12V power, DC5V power, indoor unit option switch.



■ EC17 : When the trouble is found on the part related to power system of indoor unit.

Check point :

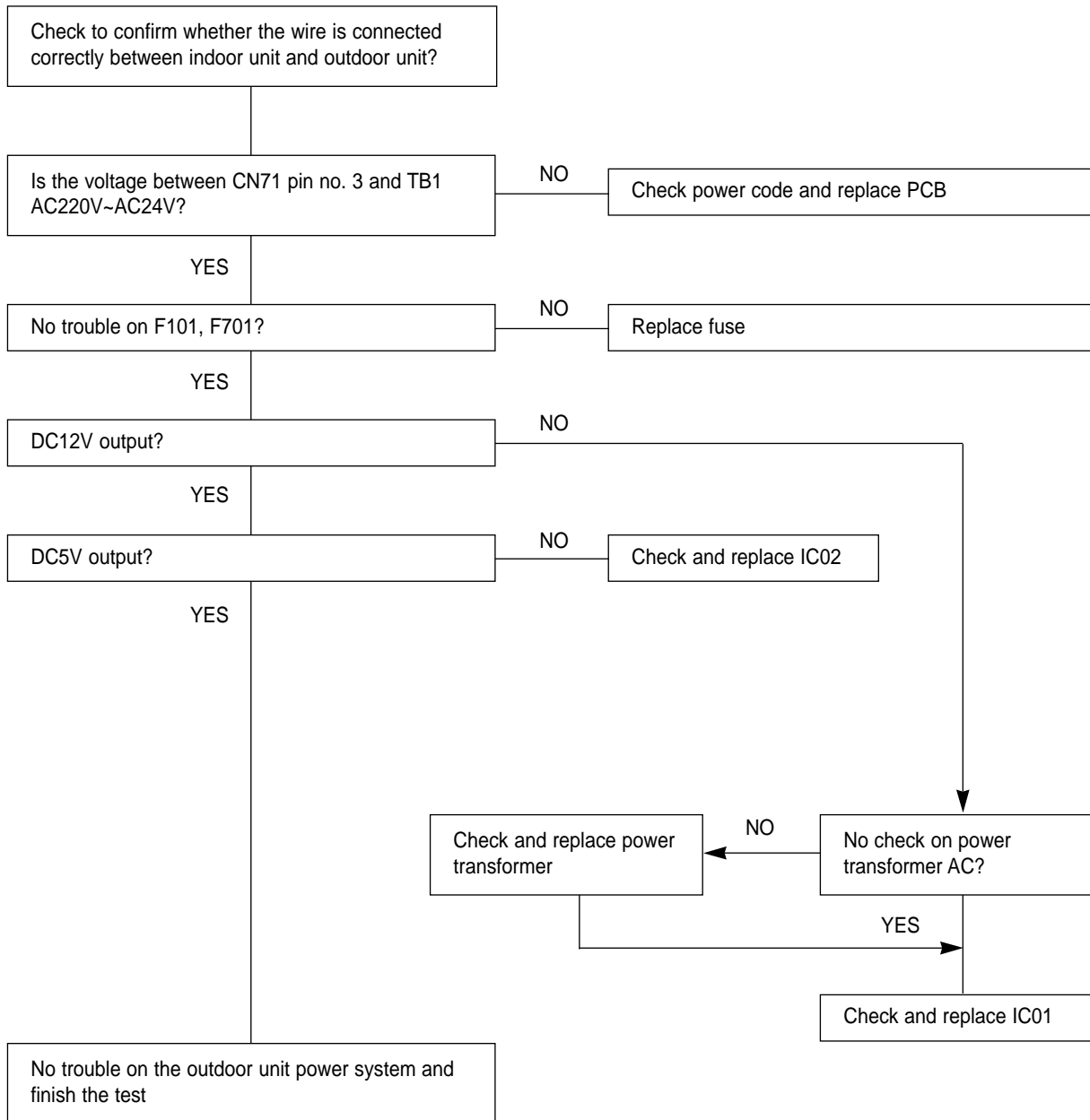
- Indoor unit AC220V~AC240V input voltage, DC12V output, DC5V output, output voltage of pin no.2 and 3 of CN15.
- Power transformer, F101, F102, F701



■ EC18 : When the trouble is found on the part related to power system of output unit.

Check point :

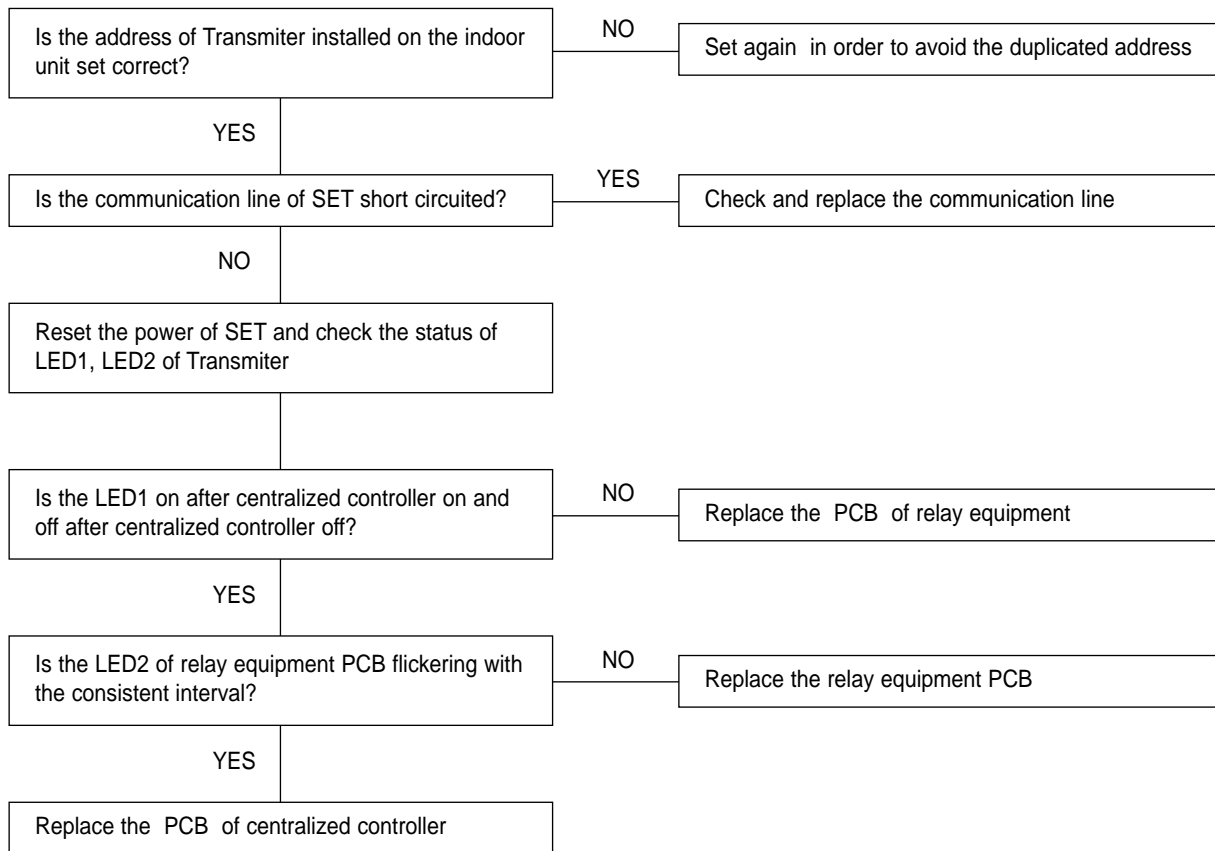
- Outdoor unit AC220V~AC240V input power, DC12V output, DC5V output
- Power transformer, F101, F701



■ EC19 : When the centralized controller lamp is flickering. (during centralized control)

Check point :

- Defect on the address assignment for the relay equipment connected with centralized controller.
- Defect on centralized controller PCB
- Defect on the indoor unit PCB



MEMO