



**MITSUBISHI  
ELECTRIC**

SPLIT-TYPE AIR CONDITIONERS

**Revision A:**

- MSXY-FP05VG-**[SG1]**, MSXY-FP07/10/13/18/20/24VG-**[SG2]**  
have been added.

OBH837 is void.

## INDOOR UNIT

**No. OBH837  
REVISED EDITION-A**

# SERVICE MANUAL

### Models

**MSXY-FP05VG** - **[SG1]**

**MSXY-FP07VG** - **[SG1], [SG2]**

**MSXY-FP10VG** - **[SG1], [SG2]**

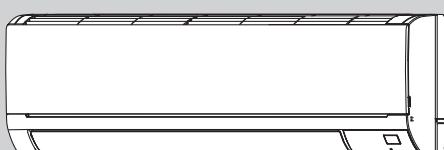
**MSXY-FP13VG** - **[SG1], [SG2]**

**MSXY-FP18VG** - **[SG1], [SG2]**

**MSXY-FP20VG** - **[SG1], [SG2]**

**MSXY-FP24VG** - **[SG1], [SG2]**

Outdoor unit service manual  
MXY-H·VF(VG) Series (OBH842)



MSXY-FP20VG MSXY-FP24VG

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**PARTS CATALOG (OBB837)**

**starMEX**

# Use the specified refrigerant only

## Never use any refrigerant other than that specified.

Doing so may cause a burst, an explosion, or fire when the unit is being used, serviced, or disposed of.

Correct refrigerant is specified in the manuals and on the spec labels provided with our products.

We will not be held responsible for mechanical failure, system malfunction, unit breakdown or accidents caused by failure to follow the instructions.

### <Preparation before the repair service>

- Prepare the proper tools.
- Prepare the proper protectors.
- Provide adequate ventilation.
- After stopping the operation of the air conditioner, turn off the power-supply breaker and pull the power plug.
- Discharge the capacitor before the work involving the electric parts.

### <Precautions during the repair service>

- Do not perform the work involving the electric parts with wet hands.
- Do not pour water into the electric parts.
- Do not touch the refrigerant.
- Do not touch the hot or cold areas in the refrigeration cycle.
- When the repair or the inspection of the circuit needs to be done without turning off the power, exercise great caution not to touch the live parts.

### ⚠ WARNING

- When the refrigeration circuit has a leak, do not execute pump down with the compressor.
- When pumping down the refrigerant, stop the compressor before disconnecting the refrigerant pipes.  
The compressor may burst if air etc. get into it.
- When opening or closing the valve below freezing temperatures, refrigerant may spurt out from the gap between the valve stem and the valve body, resulting in injuries.

## Revision A:

### 1

## TECHNICAL CHANGES

**MSXY-FP07VG - [SG1]**

**MSXY-FP10VG - [SG1]**

**MSXY-FP13VG - [SG1]**

**MSXY-FP18VG - [SG1]**

**MSXY-FP20VG - [SG1]**

**MSXY-FP24VG - [SG1]**

1. New model

**MSXY-FP05VG - [SG1]**

1. New model

**MSXY-FP07VG - [SG1] → MSXY-FP07VG - [SG2]**

**MSXY-FP10VG - [SG1] → MSXY-FP10VG - [SG2]**

**MSXY-FP13VG - [SG1] → MSXY-FP13VG - [SG2]**

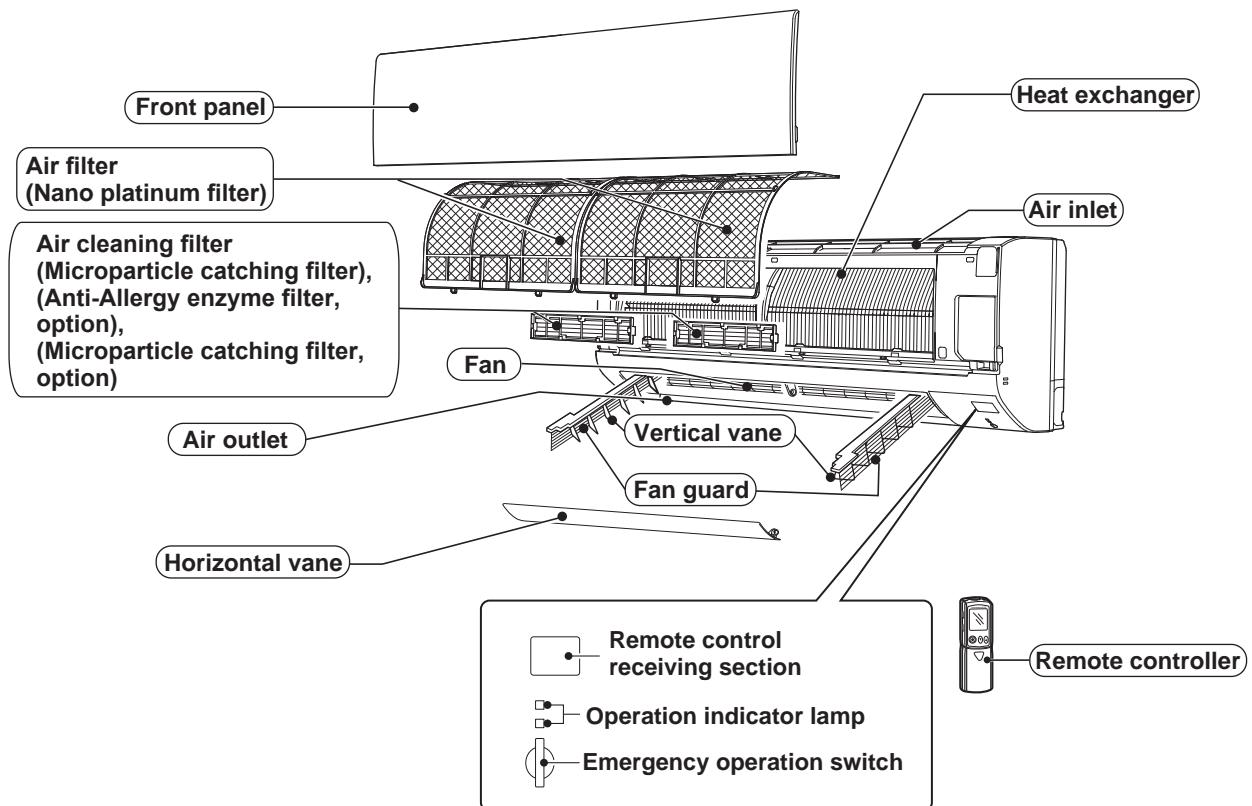
**MSXY-FP18VG - [SG1] → MSXY-FP18VG - [SG2]**

**MSXY-FP20VG - [SG1] → MSXY-FP20VG - [SG2]**

**MSXY-FP24VG - [SG1] → MSXY-FP24VG - [SG2]**

1. Indoor electronic control P.C. board has been changed.

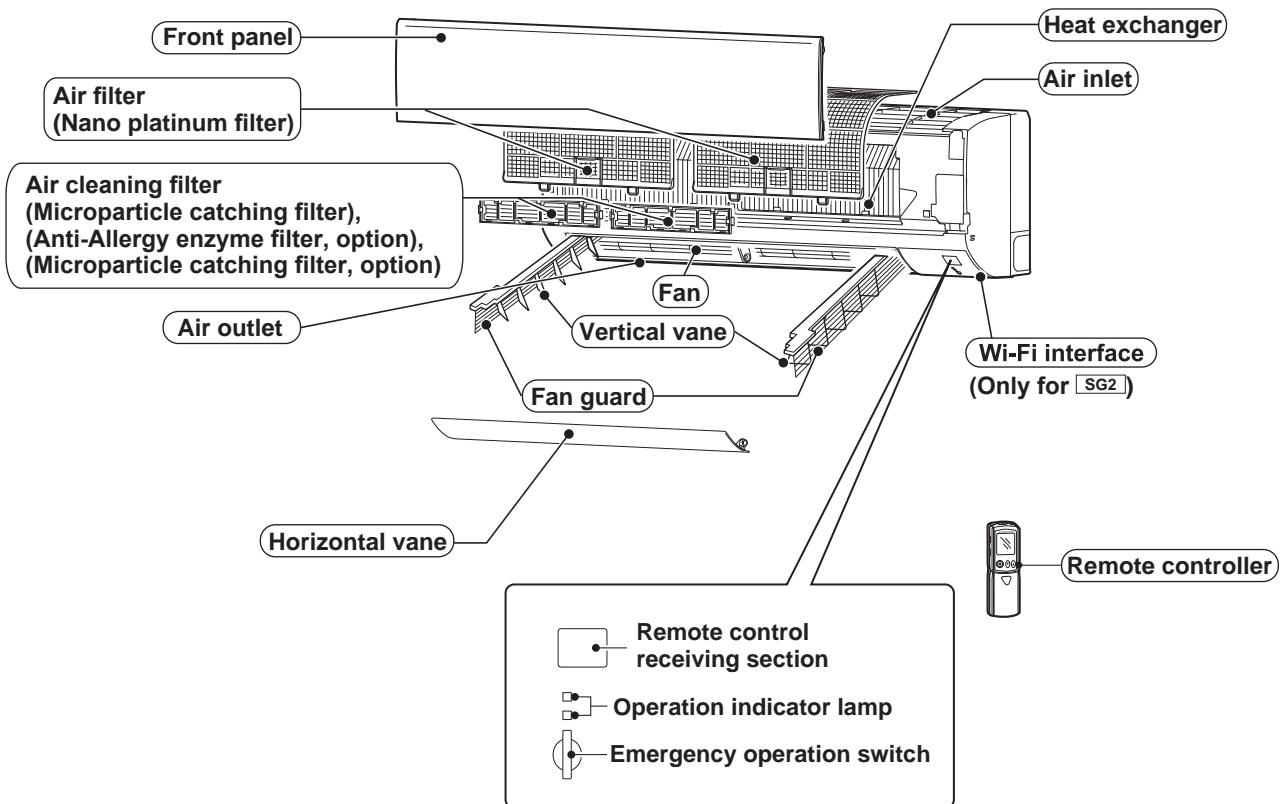
**MSXY-FP05VG MSXY-FP07VG MSXY-FP10VG MSXY-FP13VG MSXY-FP18VG**



## ACCESSORIES

①	Installation plate	1
②	Installation plate fixing screw 4 × 25 mm	5
③	Wireless remote controller	1
④	Felt tape (Used for left or left-rear piping)	1
⑤	Battery (AAA) for remote controller	2
⑥	Remote controller holder	1
⑦	Fixing screw for ⑥ 3.5 × 16 mm (Black)	2
⑧	Air cleaning filter	2

## MSXY-FP20VG MSXY-FP24VG



## ACCESSORIES

①	Installation plate	1
②	Installation plate fixing screw 4 × 25 mm	5
③	Wireless remote controller	1
④	Felt tape (Used for left or left-rear piping)	1
⑤	Battery (AAA) for remote controller	2
⑥	Remote controller holder	1
⑦	Fixing screw for ⑥ 3.5 × 16 mm (Black)	2
⑧	Air cleaning filter	2

Indoor model		MSXY-FP05VG	MSXY-FP07VG	MSXY-FP10VG	MSXY-FP13VG	MSXY-FP18VG	MSXY-FP20VG	MSXY-FP24VG			
Power supply		Single phase 230-240V, 50Hz									
Electrical data	Power input *1	W	21	28	36	42	59				
	Running current *1	A	0.21	0.27	0.33	0.38	0.52				
Fan motor	Model		RC0J40-EF				RC0J30-MD				
	Current *1	A	0.21	0.27	0.33	0.38	0.52				
Dimensions W × H × D		mm	799 x 290 x 232				923 x 305 x 250				
Weight		kg	9				13				
Air direction			5								
Airflow	Super High	m³/h	666	774	846	888	1,200				
	High		546	726			966				
	Med.		378	570			822				
	Low		306	462			666				
	Slow		246	372			558				
Sound level	Super High	dB(A)	42	45	47	49	50				
	High		36	44			45				
	Med.		29	38			41				
	Low		24	33			35				
	Slow		19	28			30				
Fan speed	Super High	rpm	1,000	1,120	1,200	1,250					
	High		860	1,070			1,050				
	Med.		660	890			920				
	Low		570	760			780				
	Slow		500	650			680				
Fan speed regulator			5								
Remote controller model			KH18A								

**NOTE:** Test conditions are based on ISO 5151.

Cooling: Indoor Dry-bulb temperature 27°C      Wet-bulb temperature 19°C  
 Outdoor Dry-bulb temperature 35°C      Wet-bulb temperature 24°C

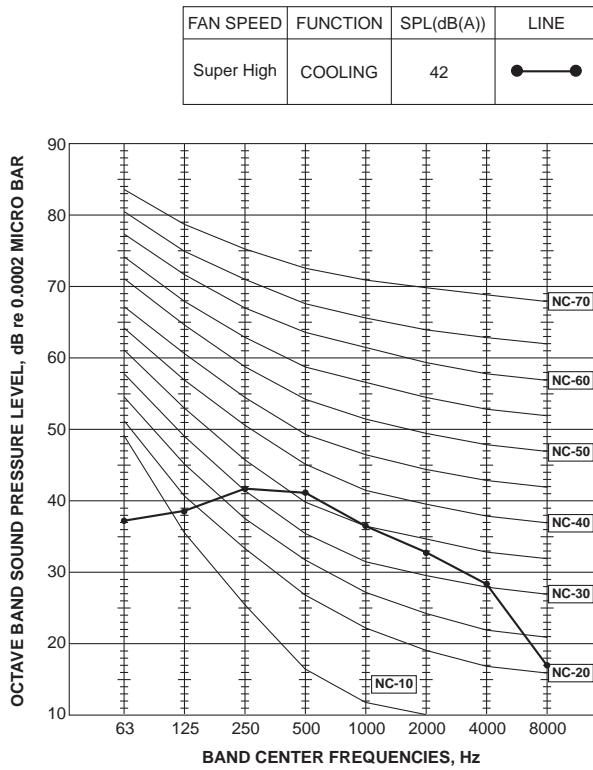
\*1 Measured under rated operating frequency.

#### Specifications and rated conditions of main electric parts

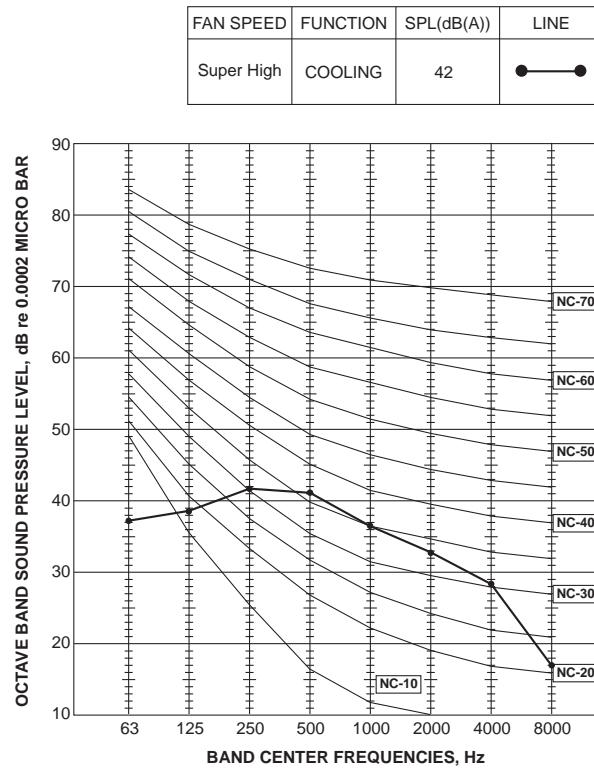
Fuse	(F11)	T3.15AL250V
Vane motor	(MV)	12 V DC
Varistor	(NR11)	470 V
Terminal block	(TB)	3P

# NOISE CRITERIA CURVES

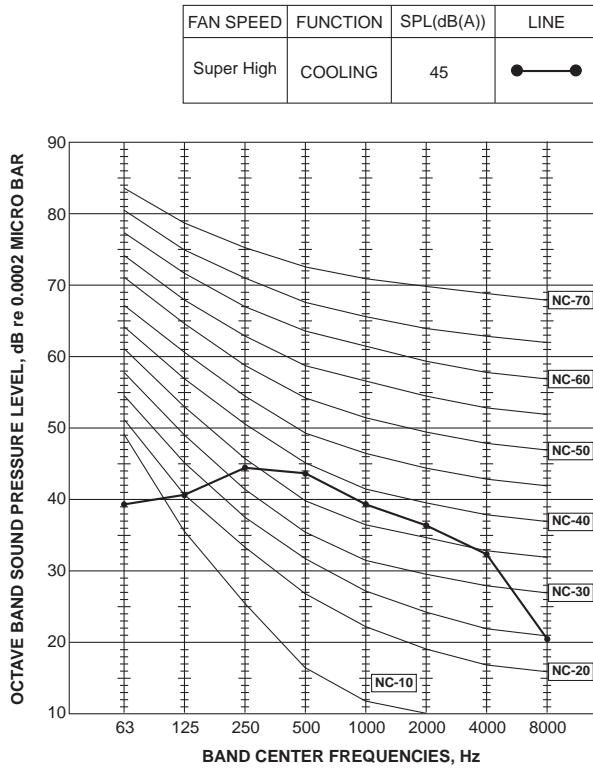
**MSXY-FP05VG**



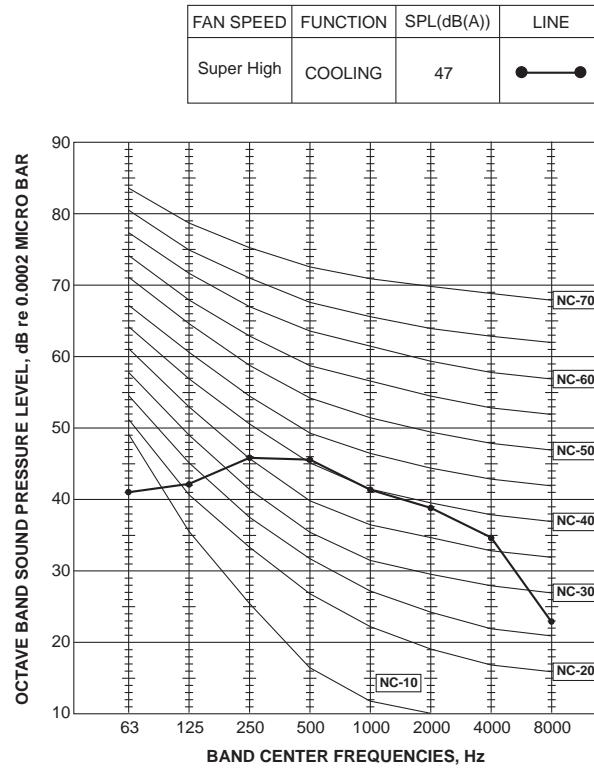
**MSXY-FP07VG**



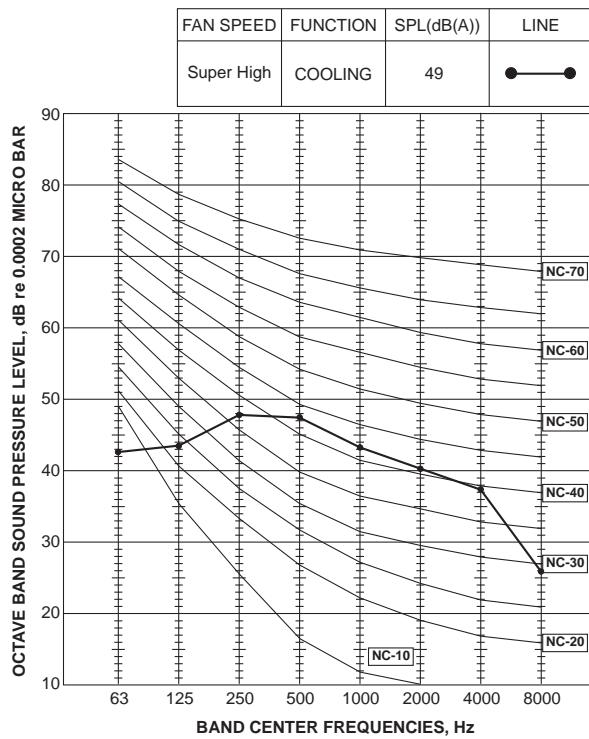
**MSXY-FP10VG**



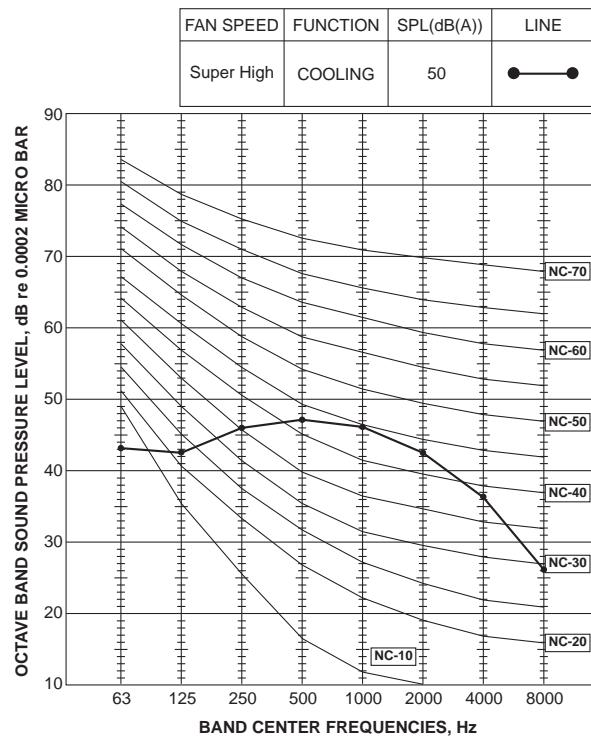
**MSXY-FP13VG**



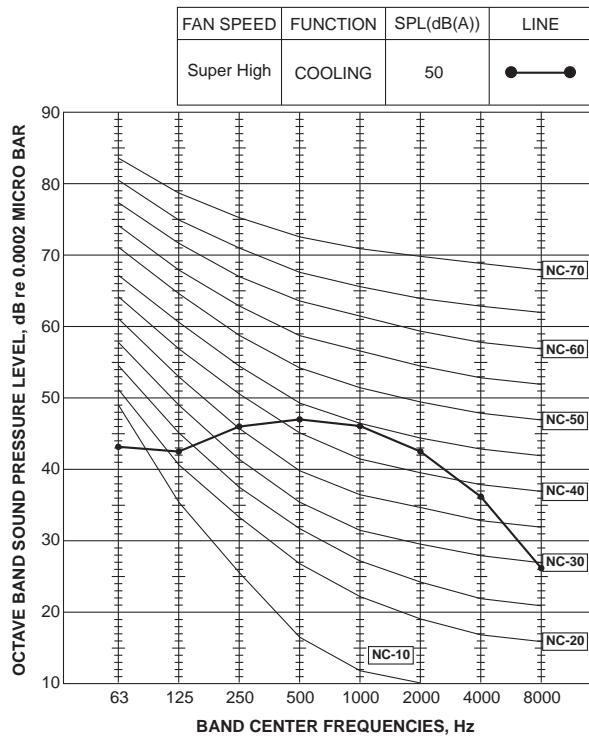
## MSXY-FP18VG



## MSXY-FP20VG

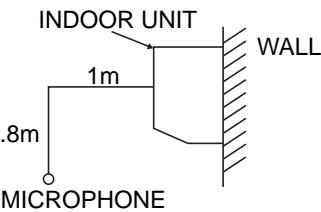


## MSXY-FP24VG



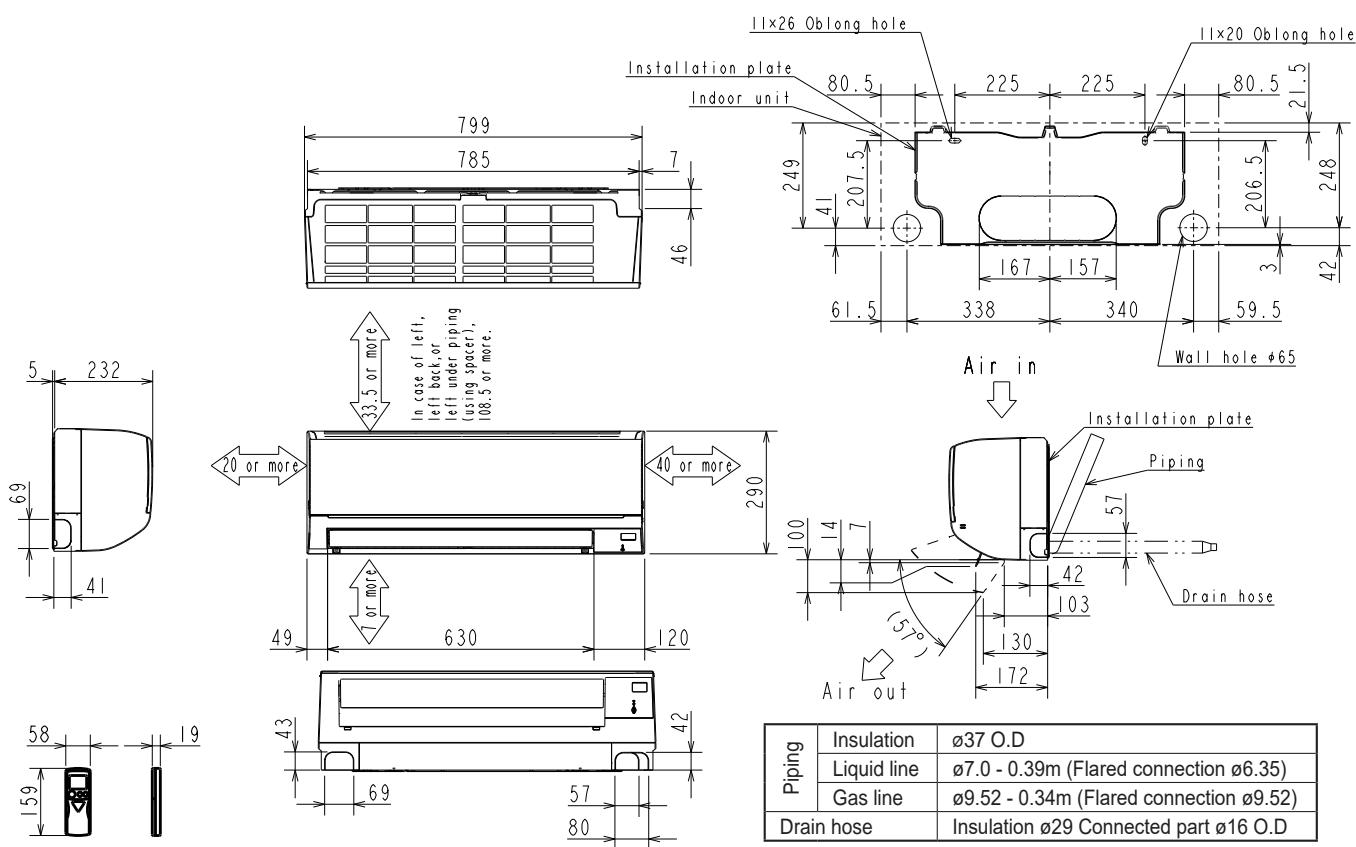
### Test conditions

Cooling: Dry-bulb temperature 27°C  
Wet-bulb temperature 19°C

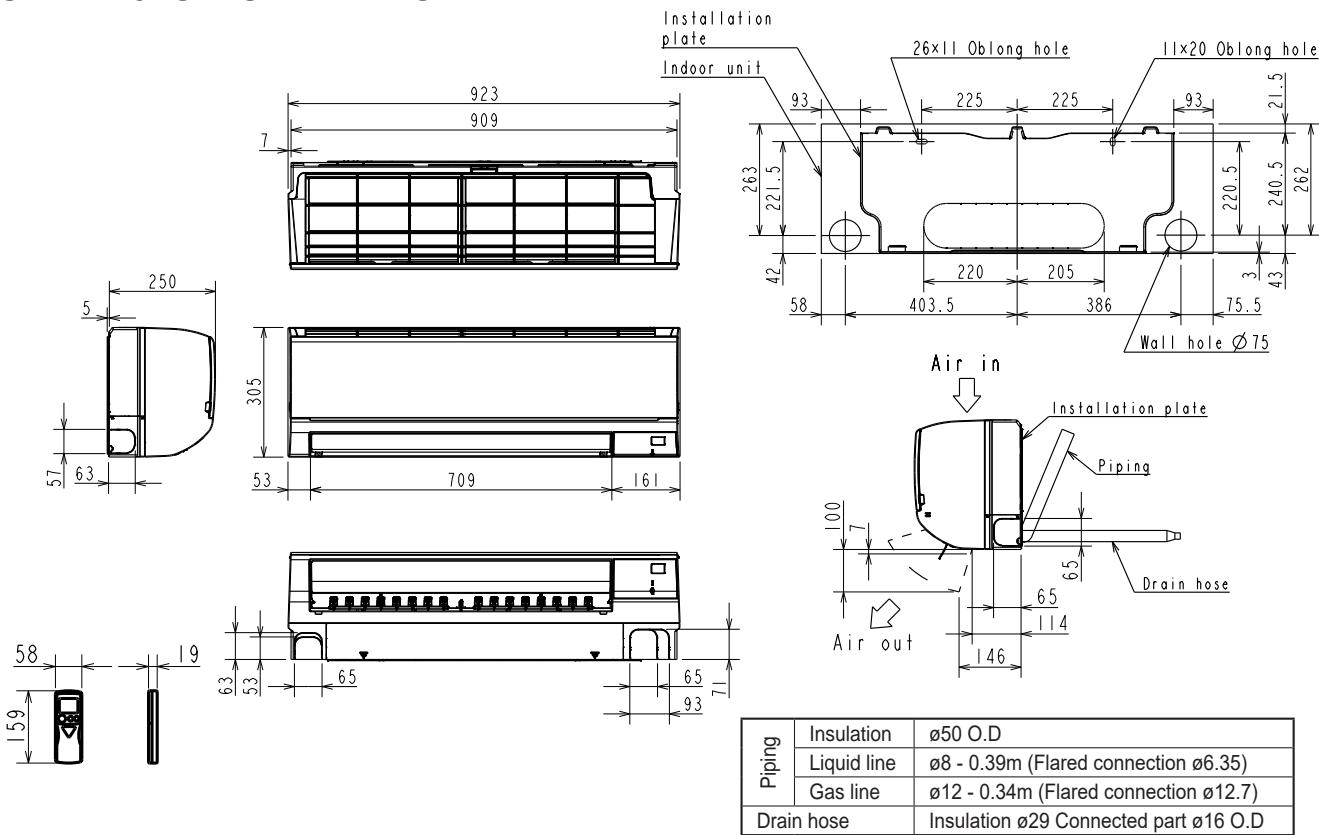


# OUTLINES AND DIMENSIONS

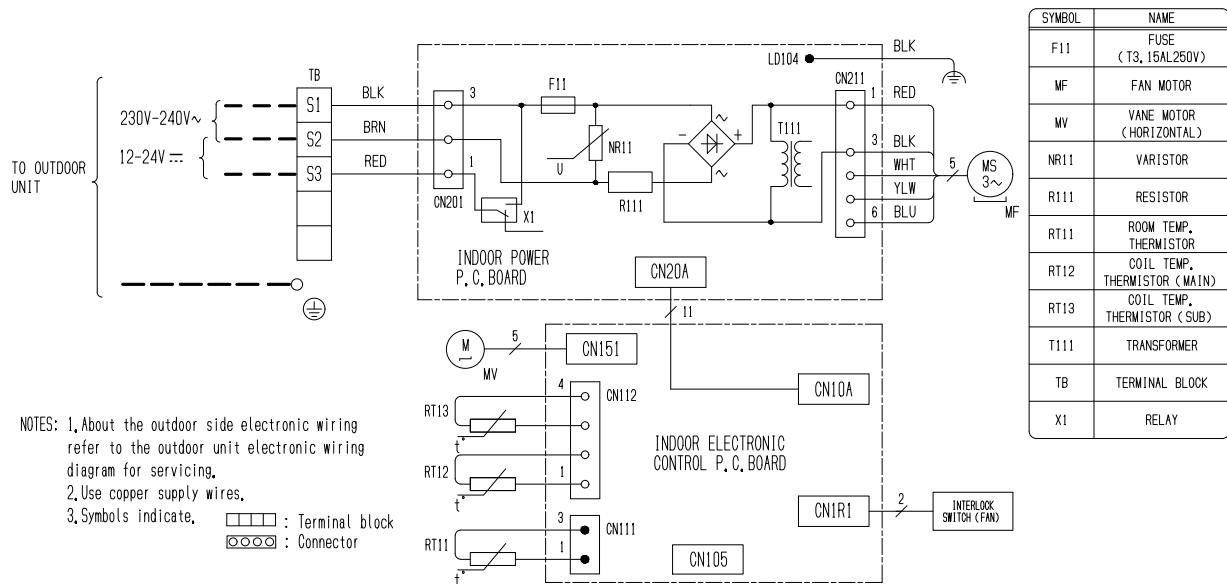
**MSXY-FP05VG MSXY-FP07VG MSXY-FP10VG MSXY-FP13VG MSXY-FP18VG** Unit: mm



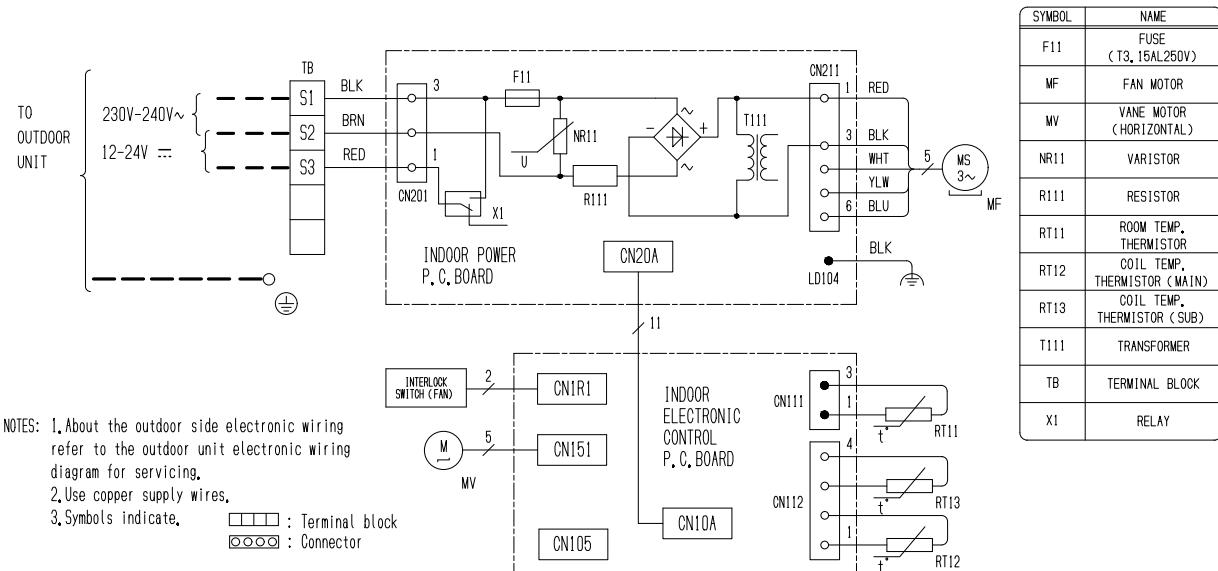
**MSXY-FP20VG MSXY-FP24VG**



**MSXY-FP07VG - SG1 MSXY-FP10VG - SG1 MSXY-FP13VG - SG1 MSXY-FP18VG - SG1**

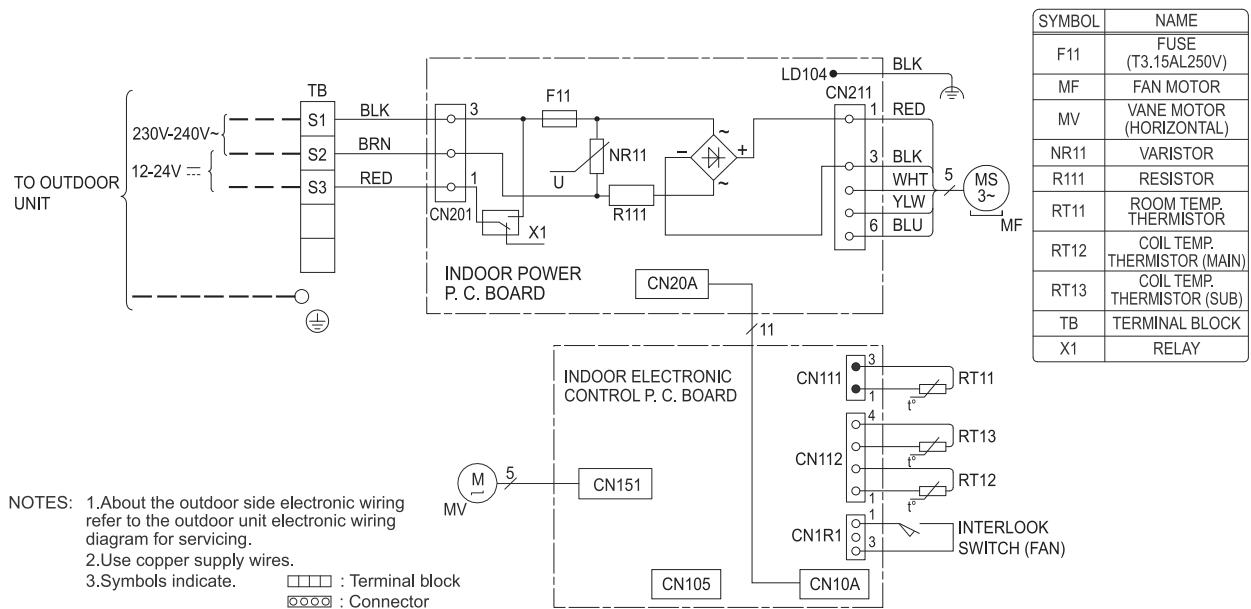


**MSXY-FP20VG - SG1 MSXY-FP24VG - SG1**

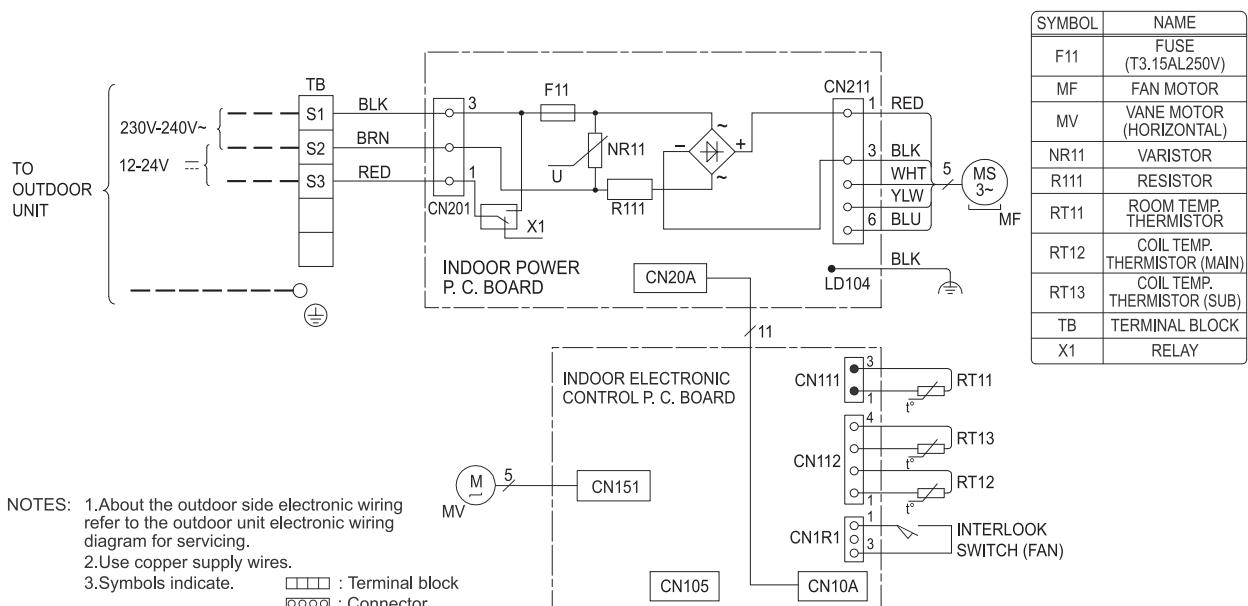


**MSXY-FP05VG - [SG1]**

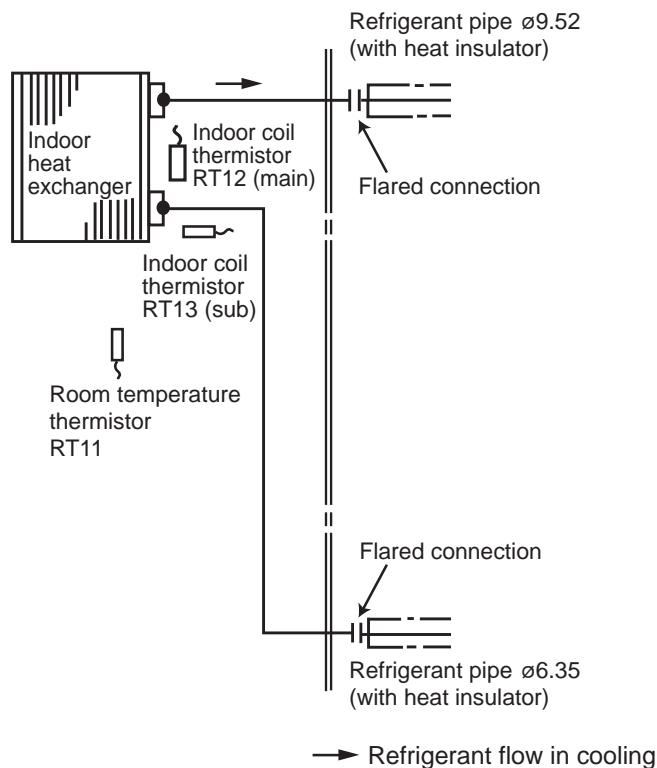
**MSXY-FP07VG - [SG2] MSXY-FP10VG - [SG2] MSXY-FP13VG - [SG2] MSXY-FP18VG - [SG2]**



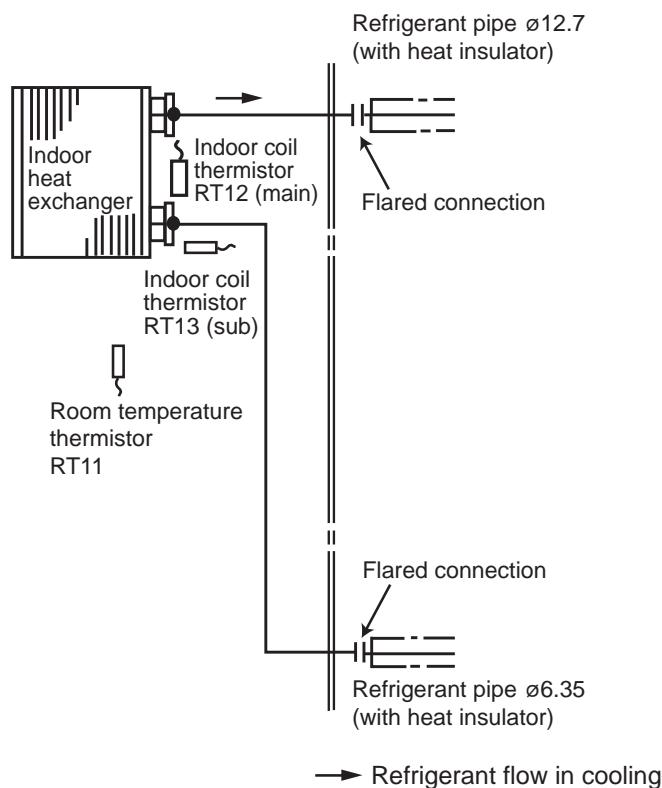
**MSXY-FP20VG - [SG2] MSXY-FP24VG - [SG2]**



**MSXY-FP05VG MSXY-FP07VG MSXY-FP10VG MSXY-FP13VG MSXY-FP18VG**      Unit: mm



**MSXY-FP20VG MSXY-FP24VG**



**MSXY-FP05VG MSXY-FP07VG MSXY-FP10VG MSXY-FP13VG MSXY-FP18VG  
MSXY-FP20VG MSXY-FP24VG**

## 8-1. TIMER SHORT MODE

**TIMER SHORT MODE**  
For service, the following set time can be shortened by bridging the timer short mode point on the electronic control P.C. board. (Refer to 10-7-2.)

- The set time for the ON/OFF timer can be reduced to 1 second for each minute.
  - After the breaker is turned on, the time for starting the compressor, which normally takes 3 minutes, can be reduced to 1 minute. Restarting the compressor, which takes 3 minutes, cannot be reduced.

## **8-2. P.C. BOARD MODIFICATION FOR INDIVIDUAL OPERATION**

A maximum of 4 indoor units with wireless remote controllers can be used in a room.

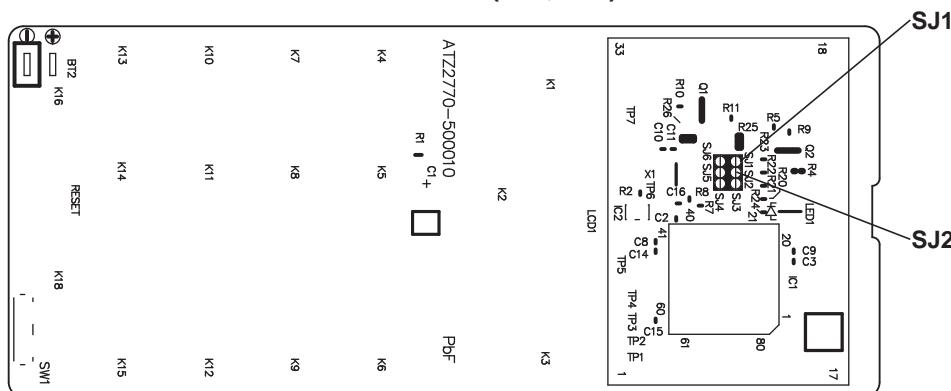
In this case, to operate each indoor unit individually by each remote controller, P.C. boards of remote controller must be modified according to the number of the indoor unit.

## How to modify the remote controller P.C. board

**Remove batteries before modification.**

The board has a print as shown below:

MSXY-FP05/07/10/13/18/20/24VG: KH18A (SJ1, SJ2)



The P.C. board has the print "SJ1" and "SJ2/J2". Solder "SJ1" and "SJ2/J2" according to the number of indoor unit as shown in Table 1.

After modification, press the RESET button.

**Table 1**

	1 unit operation	2 units operation	3 units operation	4 units operation
No. 1 unit	No modification	Same as at left	Same as at left	Same as at left
No. 2 unit	—	Solder SJ1	Same as at left	Same as at left
No. 3 unit	—	—	Solder SJ2	Same as at left
No. 4 unit	—	—	—	Solder both SJ1 and SJ2

#### **How to set the remote controller exclusively for particular indoor unit**

After you turn the breaker ON, the first remote controller that sends the signal to the indoor unit will be regarded as the remote controller for the indoor unit.

The indoor unit will only accept the signal from the remote controller that has been assigned to the indoor unit once they are set. The setting will be cancelled if the breaker is turned OFF, or the power supply is shut down.

Please conduct the above setting once again after the power has been restored.

### 8-3. AUTO RESTART FUNCTION

When the indoor unit is controlled with the remote controller, the operation mode, the set temperature, and the fan speed are memorized by the indoor electronic control P.C. board. "AUTO RESTART FUNCTION" automatically starts operation in the same mode just before the shutoff of the main power.

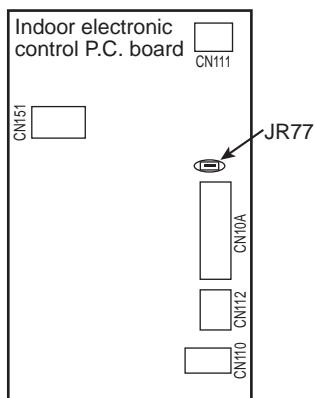
#### Operation

- ① If the main power has been cut, the operation settings remain.
- ② After the power is restored, the unit restarts automatically according to the memory.  
(However, it takes at least 3 minutes for the compressor to start running.)

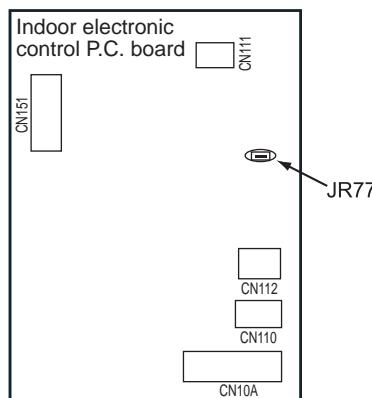
#### How to disable "AUTO RESTART FUNCTION"

- ① Turn off the main power for the unit.
- ② Cut the Jumper wire to JR77 on the indoor electronic control P.C. board. (Refer to 10-7.)

**MSXY-FP07/10/13/18VG - SG1**

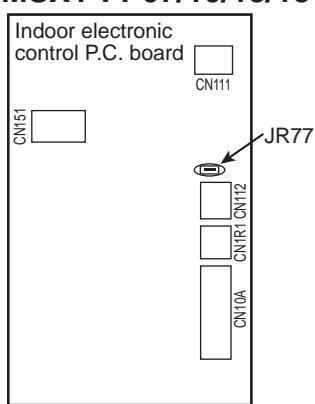


**MSXY-FP20/24VG - SG1**

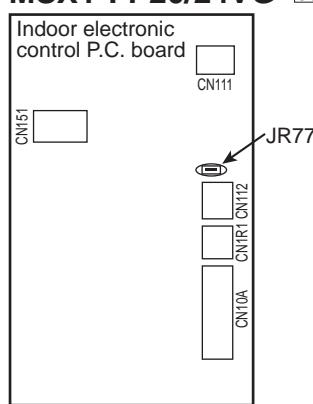


**MSXY-FP05VG - SG1**

**MSXY-FP07/10/13/18VG - SG2**



**MSXY-FP20/24VG - SG2**

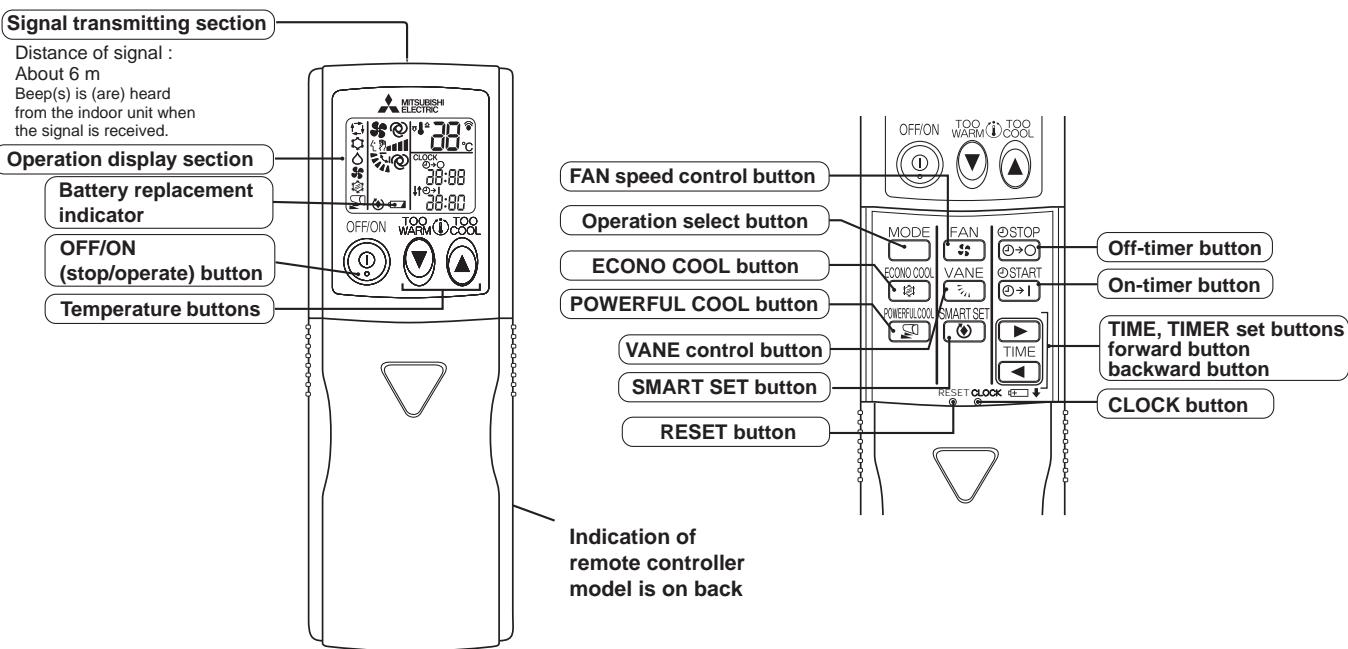


#### NOTE:

- The operation settings are memorized when 10 seconds have passed after the indoor unit was operated with the remote controller.
- If main power is turned OFF or a power failure occurs while AUTO START/STOP timer is active, the timer setting is cancelled.
- If the unit has been off with the remote controller before power failure, the auto restart function does not work as the power button of the remote controller is off.
- To prevent breaker OFF due to the rush of starting current, systematize other home appliance not to turn ON at the same time.
- When some air conditioners are connected to the same supply system, if they are operated before power failure, the starting current of all the compressors may flow simultaneously at restart. Therefore, the special countermeasures are required to prevent the main voltage-drop or the rush of the starting current by adding to the system that allows the units to start one by one.

**MSXY-FP05VG MSXY-FP07VG MSXY-FP10VG MSXY-FP13VG MSXY-FP18VG  
MSXY-FP20VG MSXY-FP24VG**

### WIRELESS REMOTE CONTROLLER



**NOTE:** Last setting will be stored after the unit is turned OFF with the remote controller. Indoor unit receives the signal of the remote controller with beeps.

### INDOOR UNIT DISPLAY SECTION

#### Operation Indicator lamp

The operation indicator at the right side of the indoor unit indicates the operation state.

- The following indication applies regardless of shape of the indication.

Indication	Operation state	Room temperature
●	The unit is operating to reach the set temperature	About 2°C or more away from set temperature
● ○	The room temperature is approaching the set temperature	About 1 to 2°C from set temperature
● ○	Standby mode (only during multi system operation)	—

● Lit  
 ○ Blinking  
 ○ Not lit

#### 9-1. COOL (○) OPERATION

- Press OFF/ON (stop/operate) button.

OPERATION INDICATOR lamp of the indoor unit turns ON with a beep tone.

- Select COOL mode with Operation select button.

- Press Temperature buttons TOO WARM or TOO COOL button to select the set temperature. The setting range is 16 - 31°C.

#### 1. Coil frost prevention

The compressor operational frequency is controlled by the temperature of the indoor heat exchanger to prevent the coil from frosting.

When the temperature of indoor heat exchanger becomes too low, the coil frost prevention mode works.

The indoor fan operates at the set speed and the compressor stops. This mode continues until the temperature of indoor heat exchanger rises.

#### 2. Low outside temperature operation

When the outside temperature is lower, low outside temperature operation starts, and the outdoor fan slows or stops.

## 9-2. DRY (△) OPERATION

- (1) Press OFF/ON (stop/operate) button.  
OPERATION INDICATOR lamp of the indoor unit turns ON with a beep tone.

- (2) Select DRY mode with Operation select button.

- (3) The set temperature is determined from the initial room temperature.

### 1. Coil frost prevention

Coil frost prevention works the same way as that in COOL mode. (9-1.1.)

### 2. Low outside temperature operation

Low outside temperature operation works the same way as that in COOL mode. (9-1.2.)

## 9-3. FAN(✉) OPERATION

- (1) Press OFF/ON (stop/operate) button.  
OPERATION INDICATOR lamp of the indoor unit turns ON with a beep tone.

- (2) Select FAN mode with Operation select button.

- (3) Select the desired fan speed. When AUTO, it becomes Low.

Only indoor fan operates. Outdoor unit does not operate.

## 9-4. "I FEEL CONTROL" (□) OPERATION

- (1) Press OFF/ON (stop/operate) button on the remote controller. OPERATION INDICATOR lamp of the indoor unit turns ON with a beep tone.

- (2) Select "I FEEL CONTROL" mode with Operation select button.

- (3) The operation mode is determined by the room temperature at startup of the operation.

- Once the mode is fixed, the mode does not change by room temperature afterwards.

- Under the ON-TIMER (⊕→↓) operation, mode is determined according to the room temperature at the startup of operation.

- (4) The initial set temperature is decided by the initial room temperature.

Initial room temperature	Model	Initial set temperature
26°C or more	COOL mode of "I FEEL CONTROL"	24°C
25 to 26°C	"I FEEL CONTROL"	Initial room temperature minus 2°C
Less than 25°C	DRY mode of "I FEEL CONTROL"	Initial room temperature minus 2°C

- (5) Temperature buttons

In "I FEEL CONTROL" (□) mode, set temperature is decided by the microprocessor based on the room temperature.

In addition, set temperature can be controlled by TOO WARM or TOO COOL button when you feel too cool or too warm.

Each time the TOO WARM or TOO COOL button is pressed, the indoor unit receives the signal and emits a beep tone.

### • Fuzzy control

When the TOO COOL or TOO WARM button is pressed, the microprocessor changes the set temperature, considering the room temperature, the frequency of pressing TOO COOL or TOO WARM button and the user's preference to heat or cool. So this is called "Fuzzy control", and works only in "I FEEL CONTROL" mode.

In DRY mode of "I FEEL CONTROL", the set temperature does not change.



…To raise the set temperature 1~2°C



…To lower the set temperature 1~2°C

## 9-5. AUTO VANE OPERATION

### 1. Horizontal vane

#### (1) Vane motor drive

These models are equipped with a stepping motor for the horizontal vane. The rotating direction, speed, and angle of the motor are controlled by pulse signals (approximately 12 V) transmitted from indoor microprocessor.

#### (2) The horizontal vane angle and mode change as follows by pressing VANE control button.



#### (3) Positioning

To confirm the standard position, the vane moves until it touches the vane stopper. Then the vane is set to the selected angle.

Confirming of standard position is performed in the following cases:

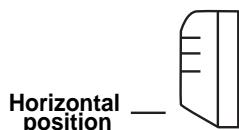
- (a) When the operation starts or finishes (including timer operation).
- (b) When the test run starts.

#### (4) VANE AUTO (@) mode

In VANE AUTO mode, the microprocessor automatically determines the vane angle to make the optimum room temperature distribution.

In COOL and DRY operation

Vane angle is fixed to Horizontal position.



#### (5) STOP (operation OFF) and ON TIMER standby

In the following cases, the horizontal vane returns to the closed position.

- (a) When OFF/ON (stop/operate) button is pressed (POWER OFF).
- (b) When the operation is stopped by the emergency operation.
- (c) When ON TIMER is ON standby.

#### (6) Dew prevention

During COOL or DRY operation with the vane angle at Angle 4 or 5 when the compressor cumulative operation time exceeds 1 hour, the vane angle automatically changes to Angle 3 for dew prevention.

#### (7) SWING (↷) mode

By selecting SWING mode with VANE control button, the horizontal vane swings vertically.

#### (8) POWERFUL COOL (⚡) mode

When POWERFUL COOL button is pressed in COOL mode, the fan speed and the set temperature are automatically adjusted.

Operation becomes POWERFUL COOL mode.

POWERFUL COOL mode is automatically released 15 minutes after operation starts, and the operation mode returns to the mode prior to POWERFUL COOL operation.

POWERFUL COOL mode is also cancelled when POWERFUL COOL button is pressed once again, OFF/ON (stop/operate) button is pressed, FAN speed control button is pressed, ECONO COOL button is pressed or change to other operation mode.

**NOTE1** : The temperature buttons are not available during POWERFUL COOL operation.

**2** : VANE control button is available.

#### (9) ECONO COOL (节能) operation (ECONOmical operation)

When ECONO COOL button is pressed in COOL mode, set temperature is automatically set 2°C higher by the microprocessor.

Also the horizontal vane swings in various cycles.

SWING operation makes you feel cooler than set temperature. So, even though the set temperature is higher, the air conditioner can keep comfort. As a result, energy can be saved.

To cancel this operation, select a different mode or press one of the following buttons in ECONO COOL operation: ECONO COOL, VANE control or POWERFUL COOL button.

## 9-6. TIMER OPERATION

### 1. How to set the time

(1) Check that the current time is set correctly.

**NOTE:** Timer operation will not work without setting the current time. Initially "0:00" blinks at the current time display of TIME MONITOR, so set the current time correctly with CLOCK button.

#### How to set the current time

(a) Press the CLOCK button.

(b) Press the TIME, TIMER set buttons ( $\blacktriangleright$  and  $\blacktriangleleft$ ) to set the current time.

- Each time forward button ( $\blacktriangleright$ ) is pressed, the set time increases by 1 minute, and each time backward button ( $\blacktriangleleft$ ) is pressed, the set time decreases by 1 minute.

- Pressing those buttons longer, the set time increases/decreases by 10 minutes.

(c) Press the CLOCK button.

(2) Press OFF/ON (stop/operate) button to start the air conditioner.

(3) Set the time of timer.

#### ON timer setting

(a) Press On-timer button ( $\text{O} \rightarrow \text{I}$ ) during operation.

(b) Set the time of the timer using TIME, TIMER set buttons ( $\blacktriangleright$  and  $\blacktriangleleft$ ). \*

#### OFF timer setting

(a) Press Off-timer button ( $\text{O} \rightarrow \text{O}$ ) during operation.

(b) Set the time of the timer using TIME, TIMER set buttons ( $\blacktriangleright$  and  $\blacktriangleleft$ ). \*

- \* Each time forward button ( $\blacktriangleright$ ) is pressed, the set time increases by 10 minutes: each time backward button ( $\blacktriangleleft$ ) is pressed, the set time decreases by 10 minutes.

### 2. To release the timer

To release ON timer, press On-timer button ( $\text{O} \rightarrow \text{I}$ ).

To release OFF timer, press Off-timer button ( $\text{O} \rightarrow \text{O}$ ).

TIMER is cancelled and the display of set time disappears.

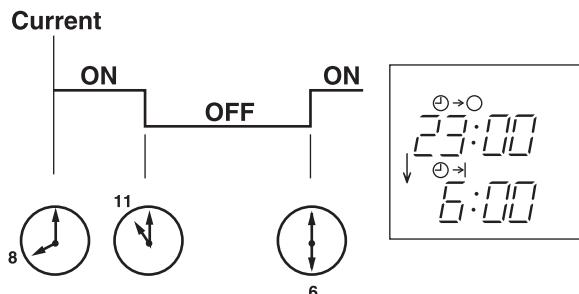
## PROGRAM TIMER

• OFF timer and ON timer can be used in combination. The set time that is reached first will operate first.

• "↓" and "↑" display shows the order of OFF timer and ON timer operation.

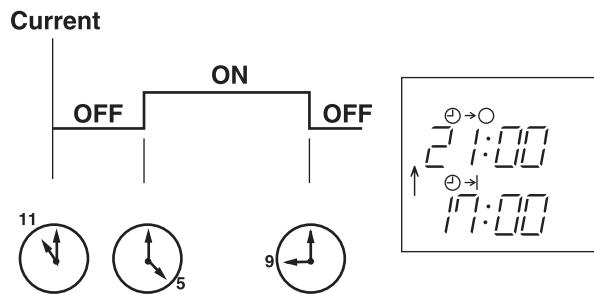
(Example 1) The current time is 8:00 PM.

The unit turns off at 11:00 PM, and on at 6:00 AM.



(Example 2) The current time is 11:00 AM.

The unit turns on at 5:00 PM, and off at 9:00 PM.



**NOTE:** If the main power is turned OFF or a power failure occurs while ON/OFF timer is active, the timer setting is cancelled. As these models are equipped with an auto restart function, the air conditioner starts operating with timer cancelled when power is restored.

## 9-7. SMART SET (◎) OPERATION

### 1. How to SET SMART SET operation

(1) Press OFF/ON (stop/operate) button.

(2) Select COOL or ECONO COOL mode.

(3) Press SMART SET button.

(4) Set the temperature, fan speed, and airflow direction for SMART SET operation.

**NOTE:**

- SMART SET operation cannot be selected during DRY or AUTO mode operation.

- 1 group of setting can be saved.

### 2. How to cancel operation

• Press SMART SET button again.

• SMART SET operation can also be cancelled by pressing Operation select button to change the operation mode.

The preferred setting can be saved for the next time with a single press of SMART SET button.

## 9-8. EMERGENCY/TEST OPERATION

In the case of test run operation or emergency operation, use the emergency operation switch on the right side of the indoor unit. Emergency operation is available when the remote controller is missing or has failed, or when the batteries in the remote controller are running down. The unit will start and OPERATION INDICATOR lamp will light up.

The first 30 minutes of operation is the test run operation. This operation is for servicing. The indoor fan runs at High speed and the temperature control does not work.

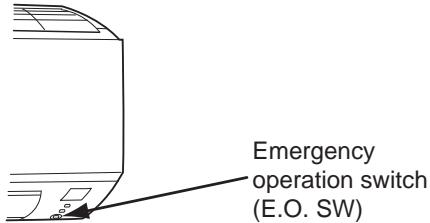
After 30 minutes of test run operation, the system shifts to EMERGENCY COOL MODE with a set temperature of 24°C. The fan speed shifts to Medium.

The coil frost prevention works even in the test run or the emergency operation.

In the test run or the emergency operation, the horizontal vane operates in VANE AUTO (◎) mode.

Emergency operation continues until the emergency operation switch is pressed once the unit receives any signal from the remote controller. In the latter case, normal operation will start.

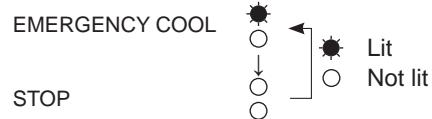
**NOTE:** Do not press the emergency operation switch during normal operation.



Operation mode	COOL
Set temperature	24°C
Fan speed	Medium
Horizontal vane	Auto

The operation mode is indicated by the Operation Indicator lamp as following

### Operation Indicator lamp



## 9-9. 3-MINUTE TIME DELAY OPERATION

When the system turns OFF, compressor will not restart for 3 minutes as 3-minute time delay function operates to protect compressor from overload.

## MSXY-FP05VG MSXY-FP07VG MSXY-FP10VG MSXY-FP13VG MSXY-FP18VG MSXY-FP20VG MSXY-FP24VG

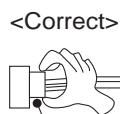
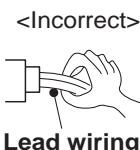
### 10-1. CAUTIONS ON TROUBLESHOOTING

#### 1. Before troubleshooting, check the following

- 1) Check the power supply voltage.
- 2) Check the indoor/outdoor connecting wire for miswiring.

#### 2. Take care of the following during servicing

- 1) Before servicing the air conditioner, be sure to turn OFF the main unit first with the remote controller, and then after confirming the horizontal vane is closed, turn OFF the breaker and/or disconnect the power plug.
- 2) Be sure to turn OFF the power supply before removing the front panel, the cabinet, the top panel, and the P.C. board.
- 3) When removing the P.C. board, hold the edge of the board with care NOT to apply stress on the components.
- 4) When connecting or disconnecting the connectors, hold the connector housing. DO NOT pull the lead wires.



#### 3. Troubleshooting procedure

- 1) Check if the OPERATION INDICATOR lamp on the indoor unit is blinking ON and OFF to indicate an abnormality.  
To make sure, check how many times the OPERATION INDICATOR lamp is blinking ON and OFF before starting service work.
- 2) Before servicing, verify that all connectors and terminals are connected properly.
- 3) When the electronic control P.C. board seems to be defective, check for disconnection of the copper foil pattern and burnt or discolored components.
- 4) When troubleshooting, refer to 10-2, 10-3 and 10-4.

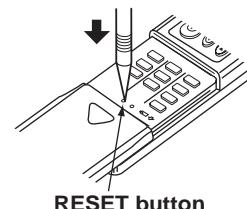
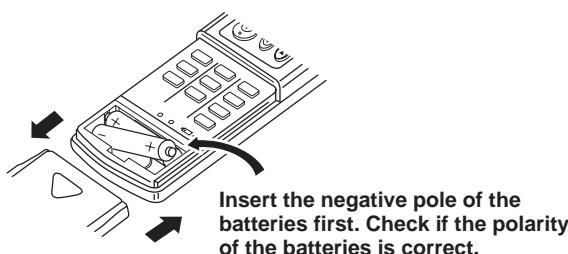
#### 4. How to replace batteries

Weak batteries may cause the remote controller malfunction.

In this case, replace the batteries to operate the remote controller normally.

- ① Remove the front lid and insert batteries.  
Then reattach the front lid.

- ② Press RESET button with a fine-tipped object, and then use the remote controller.



**NOTE:** 1. If RESET button is not pressed, the remote controller may not operate correctly.

2. This remote controller has a circuit to automatically reset the microprocessor when batteries are replaced.

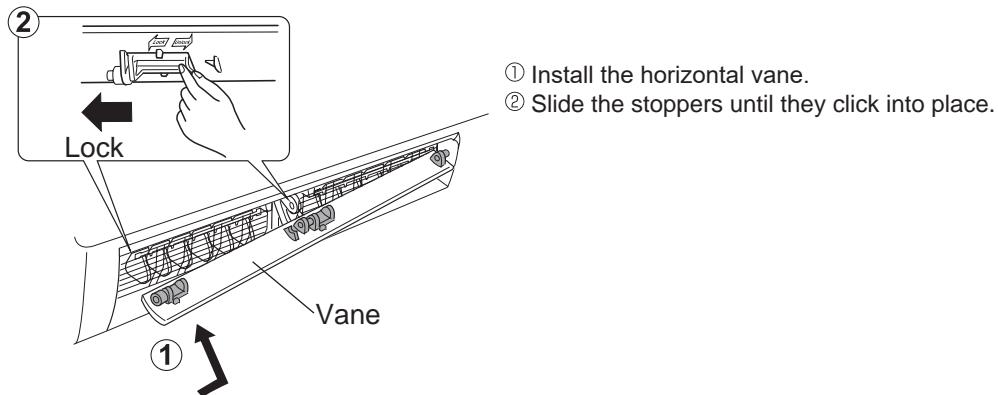
This function is equipped to prevent the microcomputer from malfunctioning due to the voltage drop caused by the battery replacement.

3. Do not use the leaking batteries.

## 5. How to install the horizontal vane

If horizontal vane is not installed correctly, all of the operation indicator lamps will blink.  
In this case, install the horizontal vane correctly by following the procedures ① to ②.

**NOTE:** Before installation of the horizontal vane, turn OFF the power supply.



## 10-2. FAILURE MODE RECALL FUNCTION

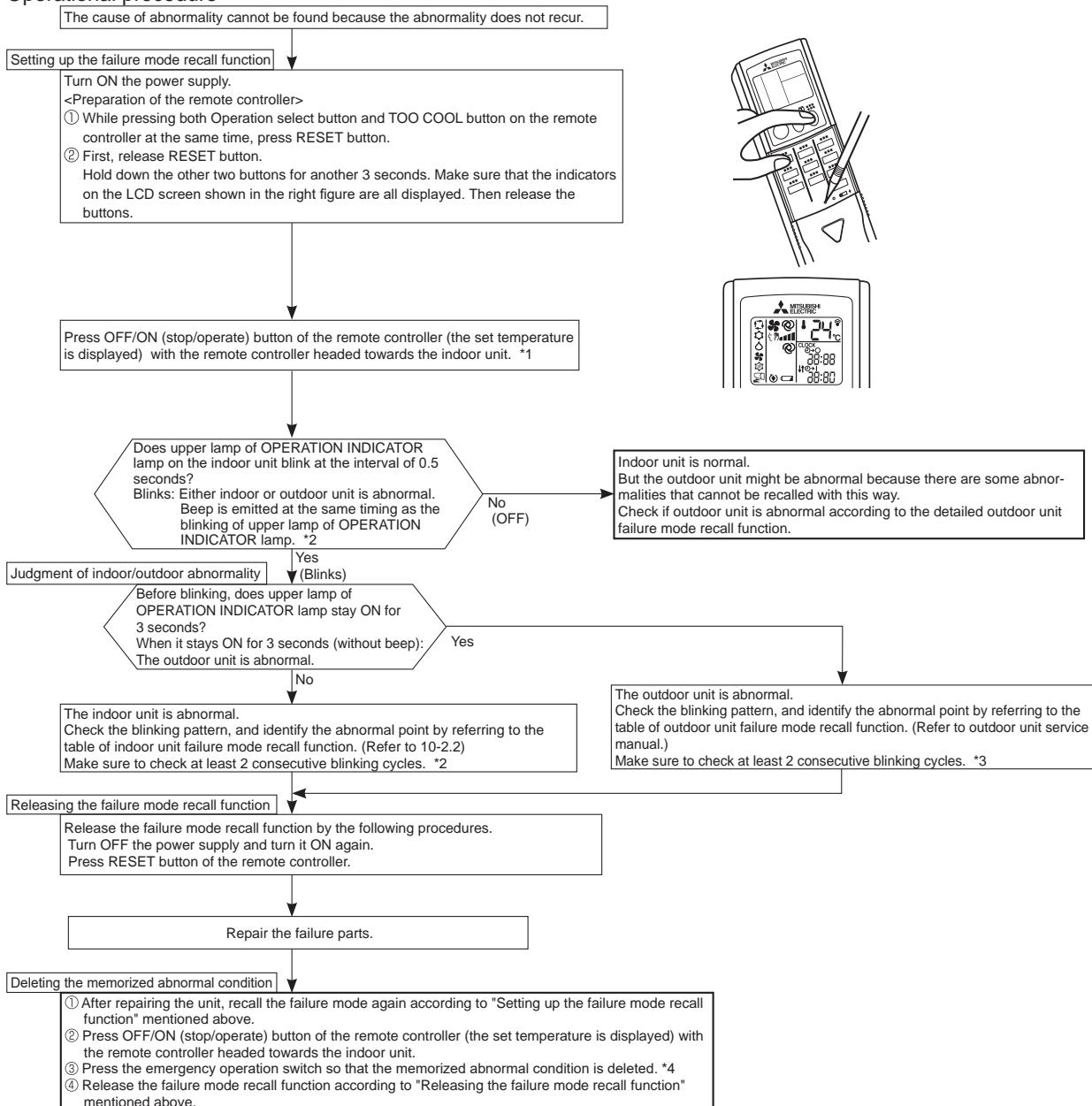
Outline of the function

This air conditioner can memorize the abnormal condition which has occurred once.

Even though LED indication listed on the troubleshooting check table (10-4.) disappears, the memorized failure details can be recalled.

### 1. Flow chart of failure mode recall function for the indoor/outdoor unit

Operational procedure

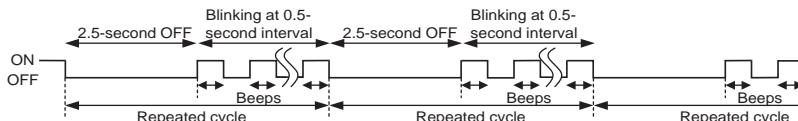


**NOTE:** 1. Make sure to release the failure mode recall function after it is set up, otherwise the unit cannot operate properly.

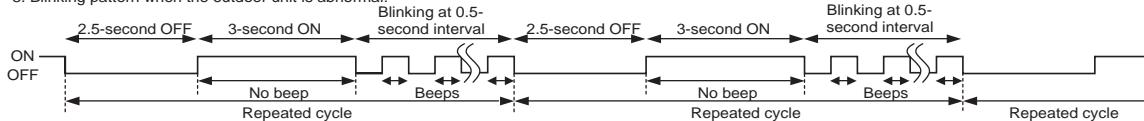
2. If the abnormal condition is not deleted from the memory, the last abnormal condition is kept memorized.

\*1. Regardless of normal or abnormal condition, a short beep is emitted once the signal is received.

\*2. Blinking pattern when the indoor unit is abnormal:



\*3. Blinking pattern when the outdoor unit is abnormal:



\*4. The information regarding whether the connected outdoor unit is a low-standby-power model or a non-low-standby-power model will also be initialized.  
(Default= compatible with a low-standby-power model)

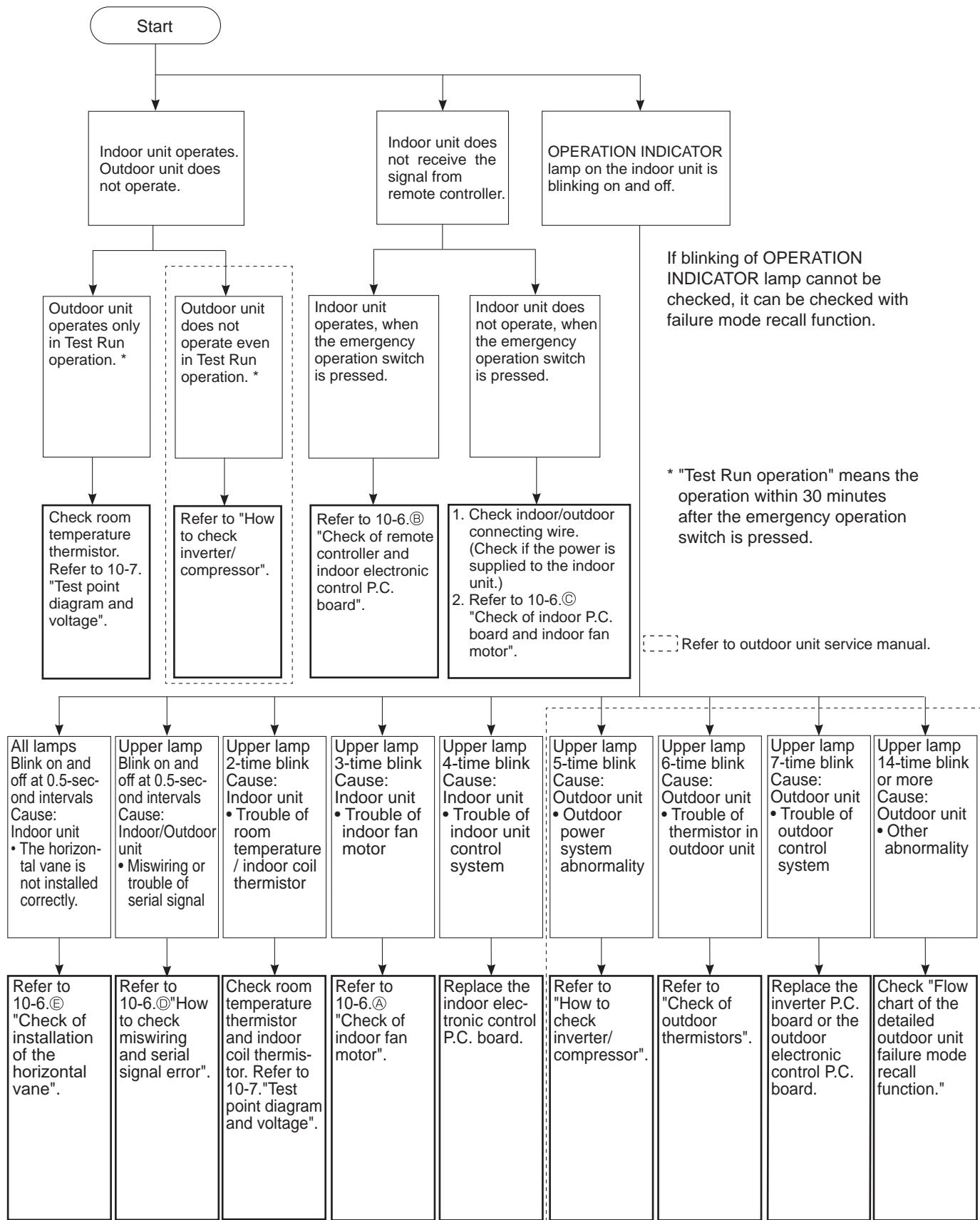
**NOTE:** Blinking patterns of this mode differ from the ones of  
TROUBLESHOOTING CHECK TABLE (10-4.).

**2. Table of indoor unit failure mode recall function**

Upper lamp of OPERATION INDICATOR lamp	Abnormal point (Failure mode)	Condition	Remedy
Not lit	Normal	—	—
1-time blink every 0.5-second	Room temperature thermistor	The room temperature thermistor short or open circuit is detected every 8 seconds during operation.	Refer to the characteristics of the room temperature thermistor (10-7.).
2-time blink 2.5-second OFF	Indoor coil thermistor	The indoor coil thermistor short or open circuit is detected every 8 seconds during operation.	Refer to the characteristics of the indoor coil thermistor (10-7.).
3-time blink 2.5-second OFF	Serial signal	The serial signal from outdoor unit is not received for a maximum of 6 minutes.	Refer to 10-6.⑩ "How to check miswiring and serial signal error".
11-time blink 2.5-second OFF	Indoor fan motor	The rotational frequency feedback signal is not emitted for 12 seconds after the indoor fan motor is operated.	Refer to 10-6.Ⓐ "Check of indoor fan motor".
12-time blink 2.5-second OFF	Indoor control system	It cannot properly read data in the nonvolatile memory of the indoor electronic control P.C. board.	Replace the indoor electronic control P.C. board.

## 10-3. INSTRUCTION OF TROUBLESHOOTING

### 1. Check of the unit

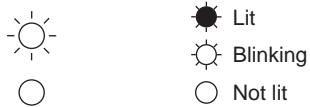


## 10-4. TROUBLESHOOTING CHECK TABLE

Before taking measures, make sure that the symptom reappears for accurate troubleshooting.

When the indoor unit has started operation and detected an abnormality of the following condition (the first detection after the power ON), the indoor fan motor turns OFF and OPERATION INDICATOR lamp blinks.

### OPERATION INDICATOR



No.	Abnormal point	Operation indicator lamp	Symptom	Condition	Remedy
1	Miswiring or serial signal	Upper lamp blinks. 0.5-second ON 0.5-second OFF	Indoor unit and outdoor unit do not operate.	The serial signal from the outdoor unit is not received for 6 minutes. The indoor unit is connected to a low-standby-power model after once connected to a non-low-standby-power model.	<ul style="list-style-type: none"> <li>Refer to 10-6. ① "How to check miswiring and serial signal error".</li> <li>Refer to <b>NOTE</b>.</li> </ul>
2	Indoor coil thermistor	Upper lamp blinks. 2-time blink 2.5-second OFF		The indoor coil or the room temperature thermistor is short or open circuit.	<ul style="list-style-type: none"> <li>Refer to the characteristics of indoor coil thermistor, and the room temperature thermistor (10-7.).</li> </ul>
3	Indoor fan motor	Upper lamp blinks. 3-time blink 2.5-second OFF		The rotational frequency feedback signal is not emitted during the indoor fan operation.	<ul style="list-style-type: none"> <li>Refer to 10-6. ② "Check of indoor fan motor".</li> </ul>
4	Indoor control system	Upper lamp blinks. 4-time blink 2.5-second OFF		It cannot properly read data in the nonvolatile memory of the indoor electronic control P.C. board.	<ul style="list-style-type: none"> <li>Replace the indoor electronic control P.C. board.</li> </ul>
5	Outdoor power system	Upper lamp blinks. 5-time blink 2.5-second OFF		It consecutively occurs 3 times that the compressor stops for overcurrent protection or startup failure protection within 1 minute after startup.	<ul style="list-style-type: none"> <li>Refer to "How to check of inverter/compressor".</li> <li>Refer to outdoor unit service manual</li> <li>Check the stop valve.</li> </ul>
6	Outdoor thermistors	Upper lamp blinks. 6-time blink 2.5-second OFF		The outdoor thermistors short or open circuit during the compressor operation.	<ul style="list-style-type: none"> <li>Refer to "Check of outdoor thermistor".</li> <li>Refer to outdoor unit service manual.</li> </ul>
7	Outdoor control system	Upper lamp blinks. 7-time blink 2.5-second OFF		It cannot properly read data in the nonvolatile memory of the inverter P.C. board or the outdoor electronic control P.C. board.	<ul style="list-style-type: none"> <li>Replace the inverter P.C. board or the outdoor electronic control P.C. board.</li> <li>Refer to outdoor unit service manual.</li> </ul>
8	Other abnormality	Upper lamp blinks. 14-time blink or more 2.5-second OFF		An abnormality other than above mentioned is detected.	<ul style="list-style-type: none"> <li>Check the stop valve.</li> <li>Check the 4-way valve.</li> <li>Confirm the abnormality in detail using the failure mode recall function for outdoor unit.</li> </ul>
9	Outdoor control system	Upper lamp lights up	Outdoor unit does not operate	It cannot properly read data in the nonvolatile memory of the inverter P.C. board or the outdoor electronic control P.C. board.	<ul style="list-style-type: none"> <li>Check the blinking pattern of the LED on the inverter P.C. board or the outdoor electronic control P.C. board.</li> </ul>

**NOTE:** The indoor unit may have been connected to a non-low-standby-power model outdoor unit. To use a low-standby-power model, clear the error history by referring to "Deleting the memorized abnormal condition" described in 10-2.1. When the error history is being cleared, the connection information also will be initialized. The indoor unit will be compatible with a low-standby-power model after initialization. If the operation indicator lamp continues to blink as shown in No.1 after the procedure, refer to 10-6. ① "How to check miswiring and serial error".

OPERATION INDICATOR

	Lit
	Blinking
	Not lit

No.	Abnormal point	Operation indicator lamp	Symptom	Condition	Remedy
1	Attachment of the horizontal vane	All lamps blink at the same time. 0.5-second ON 0.5-second OFF	Indoor unit and outdoor unit do not operate.	The electricity is not conducted to the interlock switch (Fan) of the horizontal vane.	• Refer to 10-6. ② "Check of installation of the horizontal vane".

#### 10-5. TROUBLESHOOTING CRITERION OF MAIN PARTS

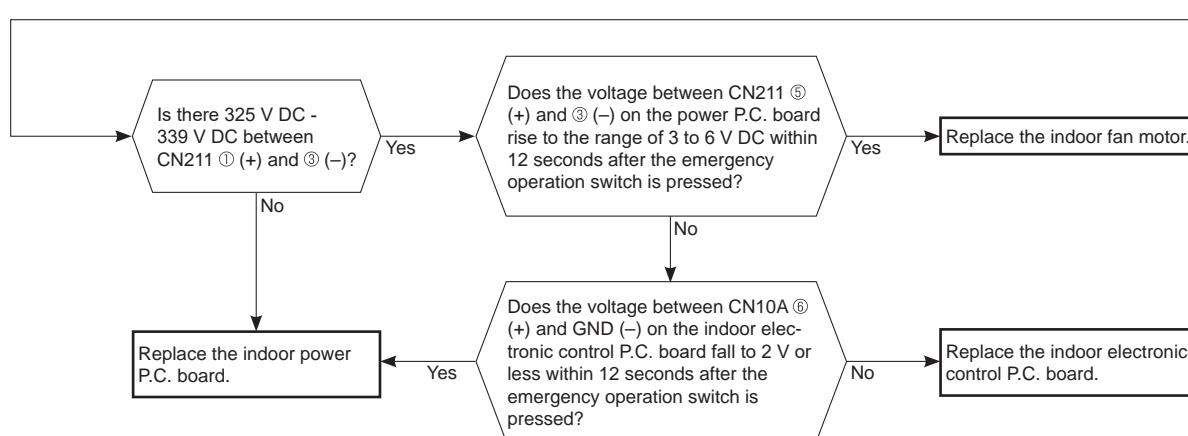
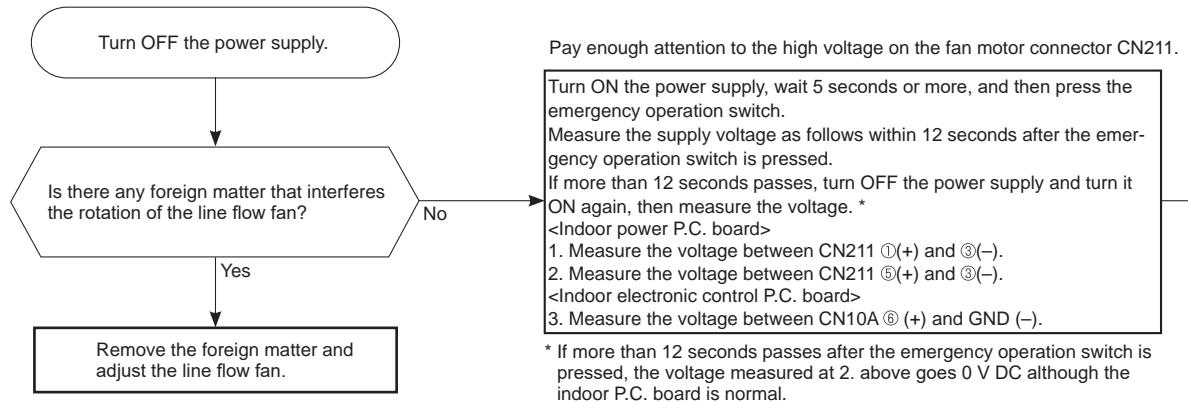
Part name	Check method and criterion		Figure
Room temperature thermistor (RT11)	Measure the resistance with a multimeter.		
Indoor coil thermistor (RT12, RT13)	Refer to 10-7. "Test point diagram and voltage", "2. Indoor electronic control P.C. board", for the chart of thermistor.		
Indoor fan motor (MF)	Check 10-6.④ "Check of indoor fan motor".		
Vane motor (MV)	Measure the resistance between the terminals with a multimeter. (Part temperature 10 ~ 30°C)		

\*SKY=SKY BLUE

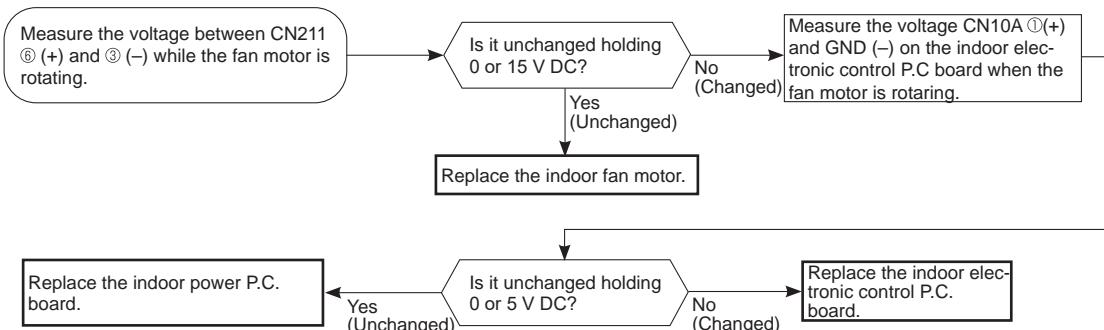
## 10-6. TROUBLESHOOTING FLOW

### (A) Check of indoor fan motor

The indoor fan motor error has occurred, and the indoor fan does not operate.

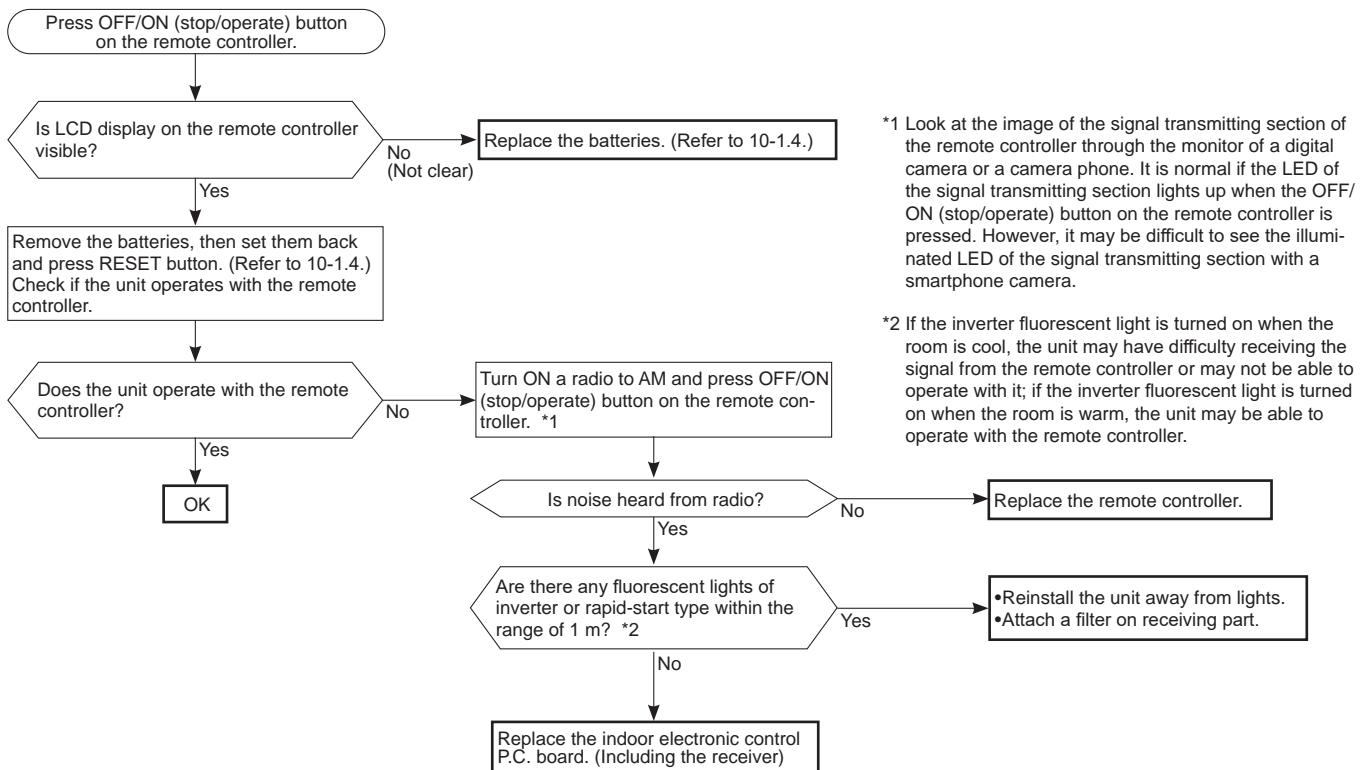


The indoor fan motor error has occurred, and the indoor fan repeats "12-second ON and 30-second OFF" 3 times, and then stops.



## ② Check of remote controller and indoor electronic control P.C. board

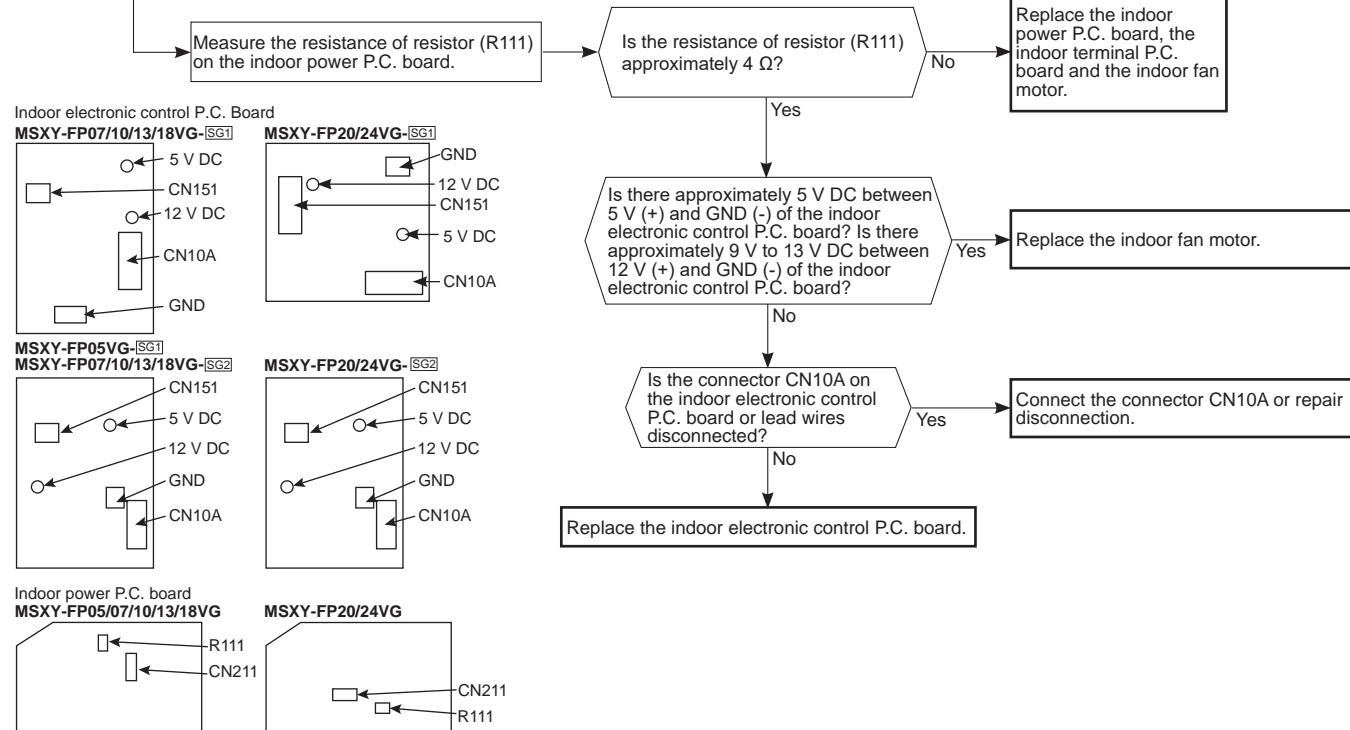
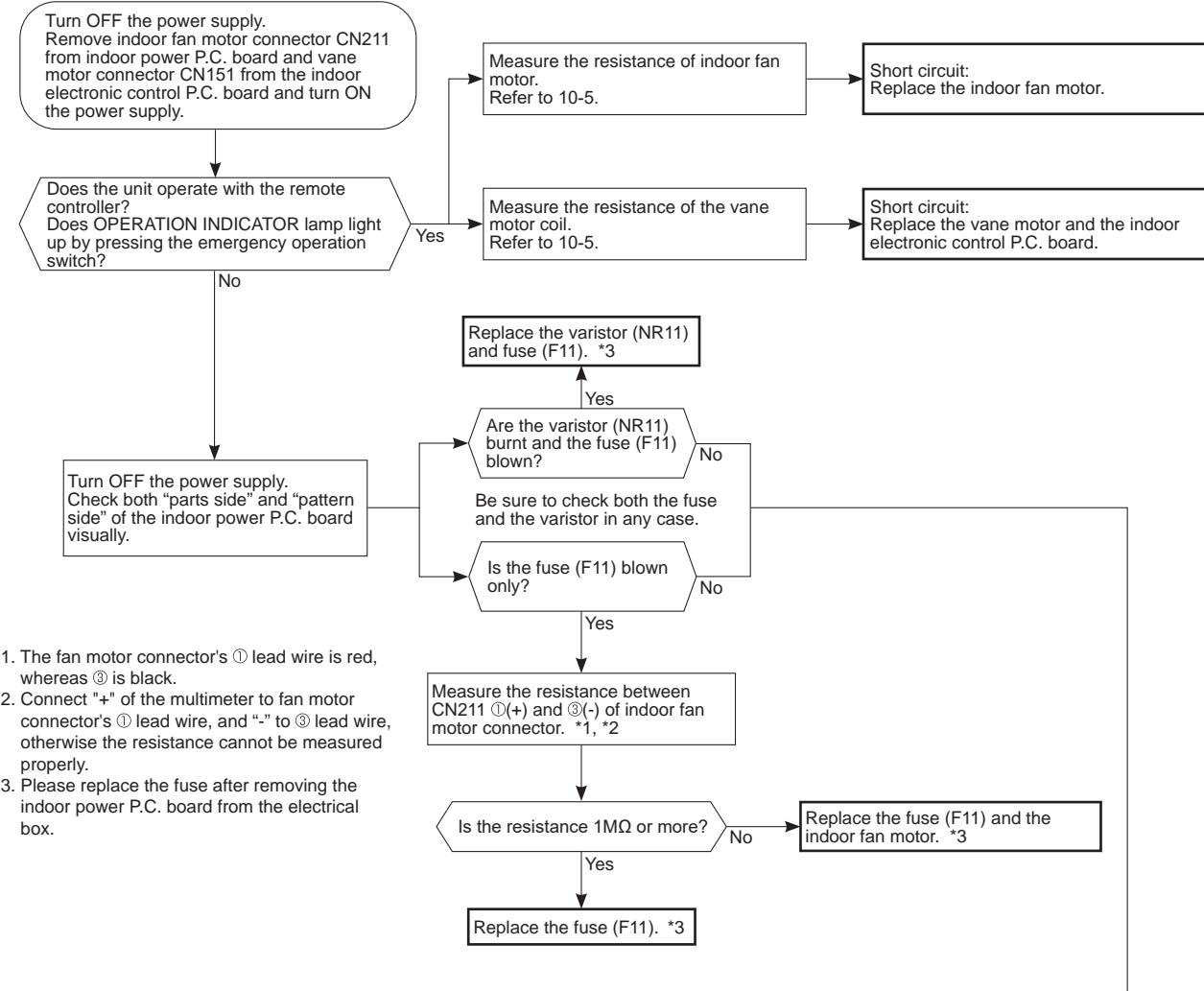
Check if the remote controller is exclusive for this air conditioner.



\*1 Look at the image of the signal transmitting section of the remote controller through the monitor of a digital camera or a camera phone. It is normal if the LED of the signal transmitting section lights up when the OFF/ON (stop/operate) button on the remote controller is pressed. However, it may be difficult to see the illuminated LED of the signal transmitting section with a smartphone camera.

\*2 If the inverter fluorescent light is turned on when the room is cool, the unit may have difficulty receiving the signal from the remote controller or may not be able to operate with it; if the inverter fluorescent light is turned on when the room is warm, the unit may be able to operate with the remote controller.

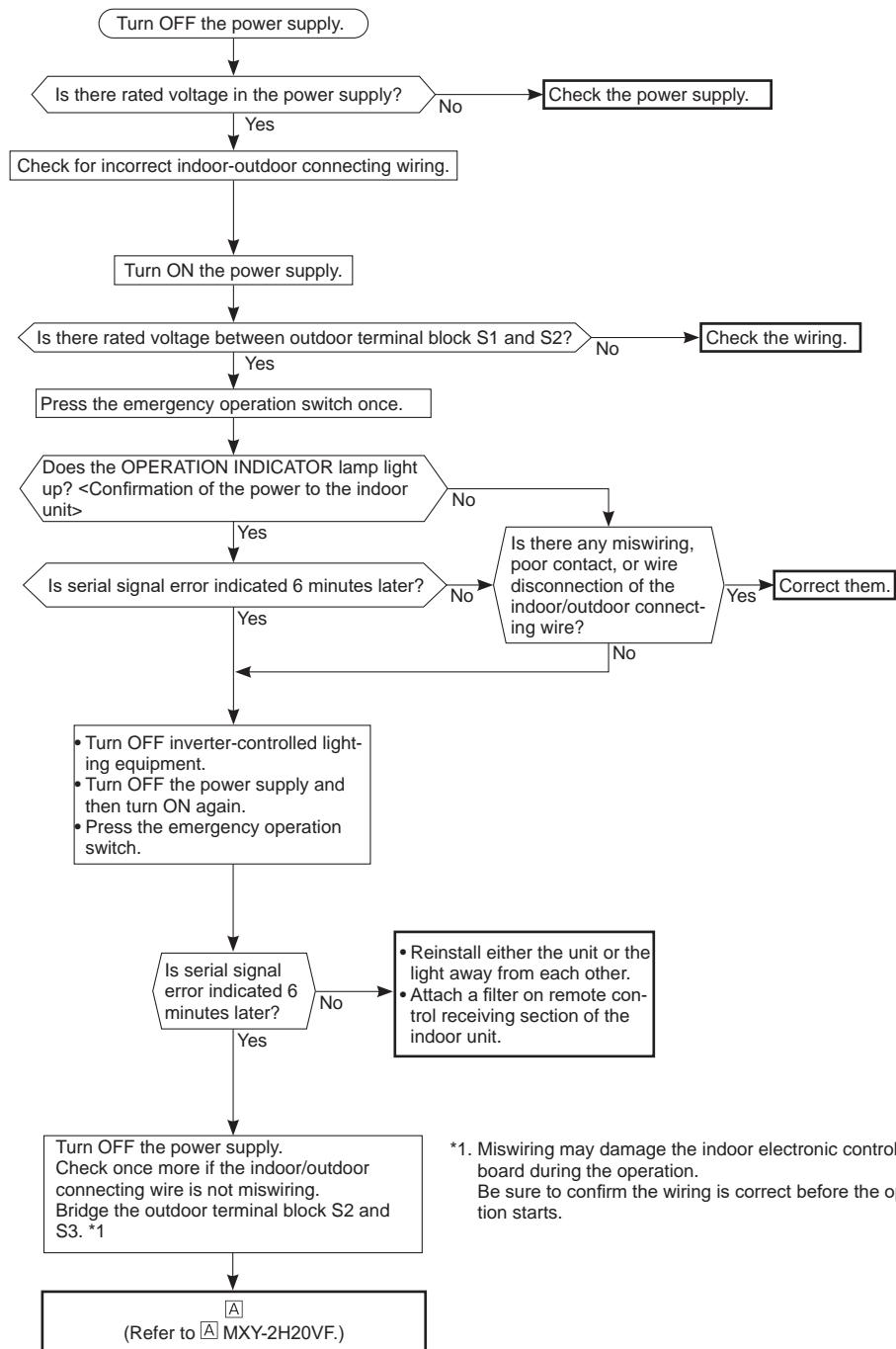
## C Check of indoor P.C. board and indoor fan motor



## ④ How to check miswiring and serial signal error

Outdoor unit is a non-low-standby-power model.

MXY-2H20VF



\*1. Miswiring may damage the indoor electronic control P.C. board during the operation.  
Be sure to confirm the wiring is correct before the operation starts.

A

## MXY-2H20VF

## LED indication for communication status

Communication status is indicated by the LED.

## Unit status

Blinking: normal communication

Lit: abnormal communication or not connected

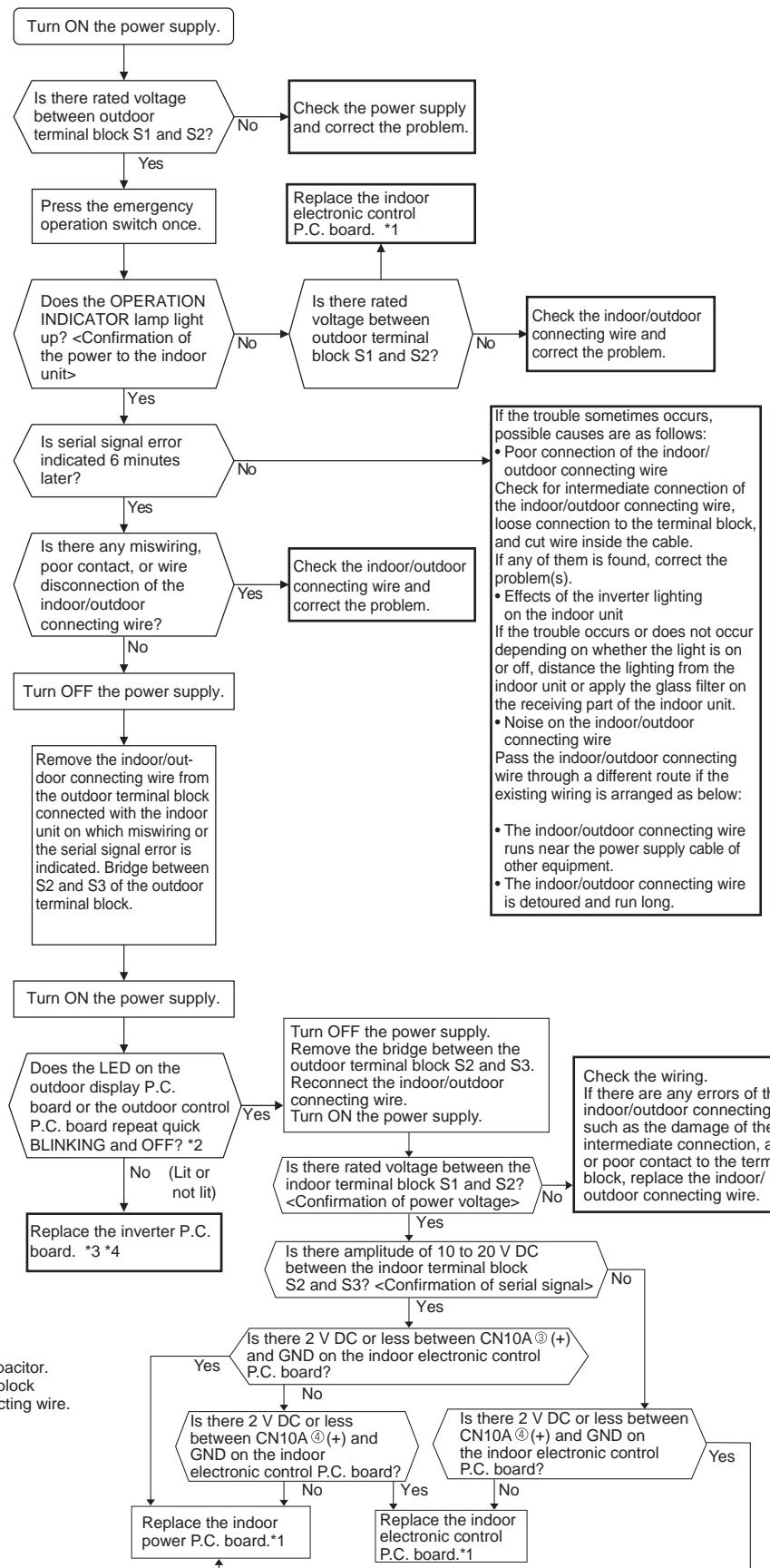
Not lit: The outdoor P.C. board is abnormal.

NOTE: "Lit" and "Not lit" in the table below does not indicate abnormal.

## Outdoor display P.C. board

LED1 LED2	
Unit A	Unit B
status	status
Lit	Lit
Not lit	Not lit

Lit  
Not lit



\*1 Turn OFF the power supply before replacing the indoor P.C. board.

Refer to indoor unit service manual.

\*2 The LED indicates the status of serial communication.

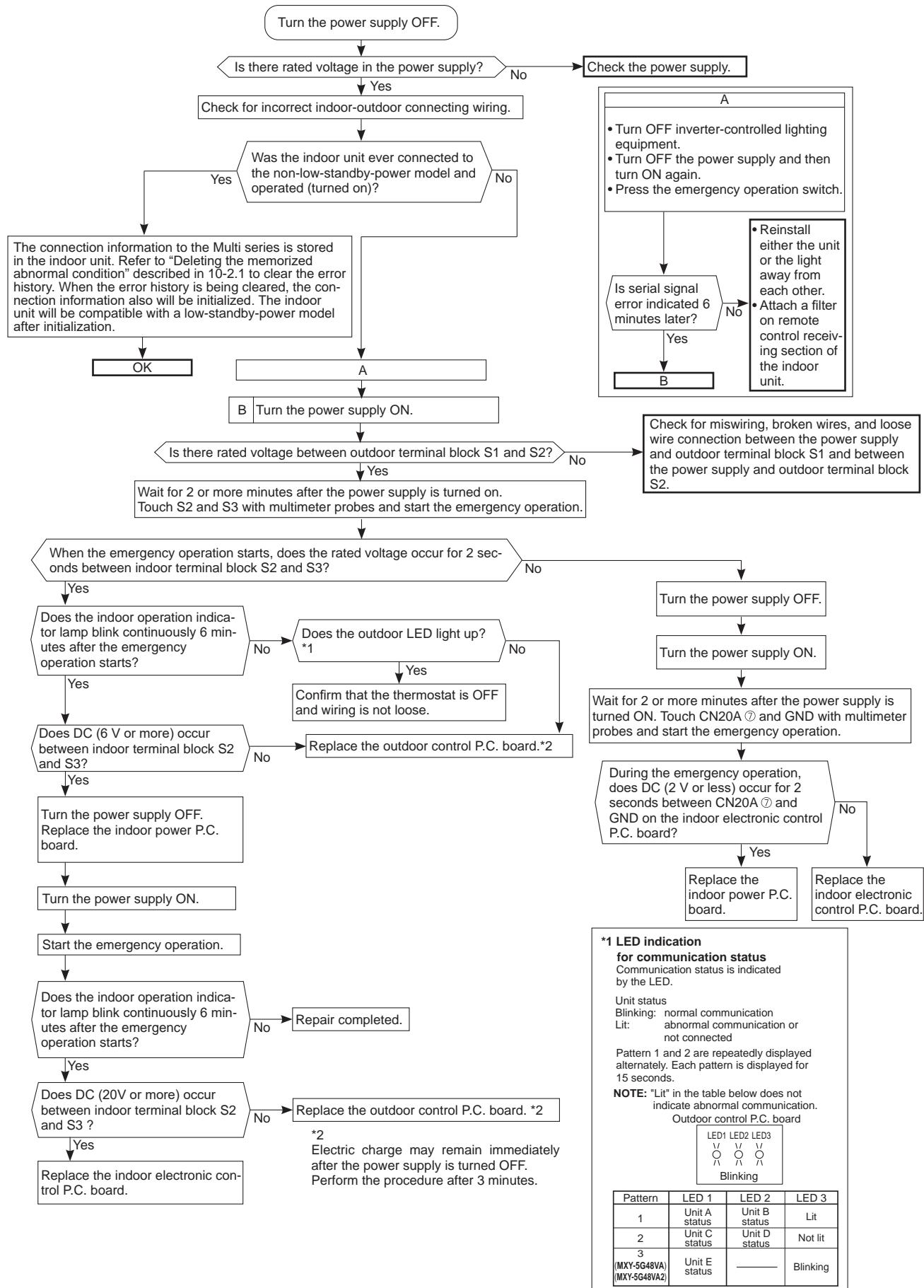
Check the communication status.

\*3 Turn OFF the power supply before replacing the inverter P.C. board.

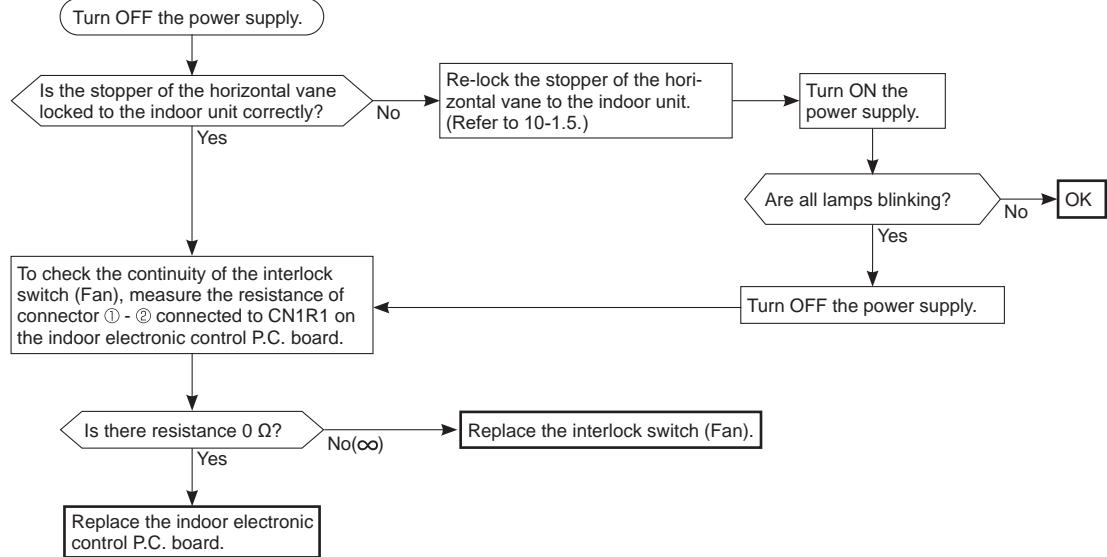
Be careful of residual voltage of smoothing capacitor.

\*4 Remove the bridge between outdoor terminal block S2 and S3. Connect the indoor/outdoor connecting wire.

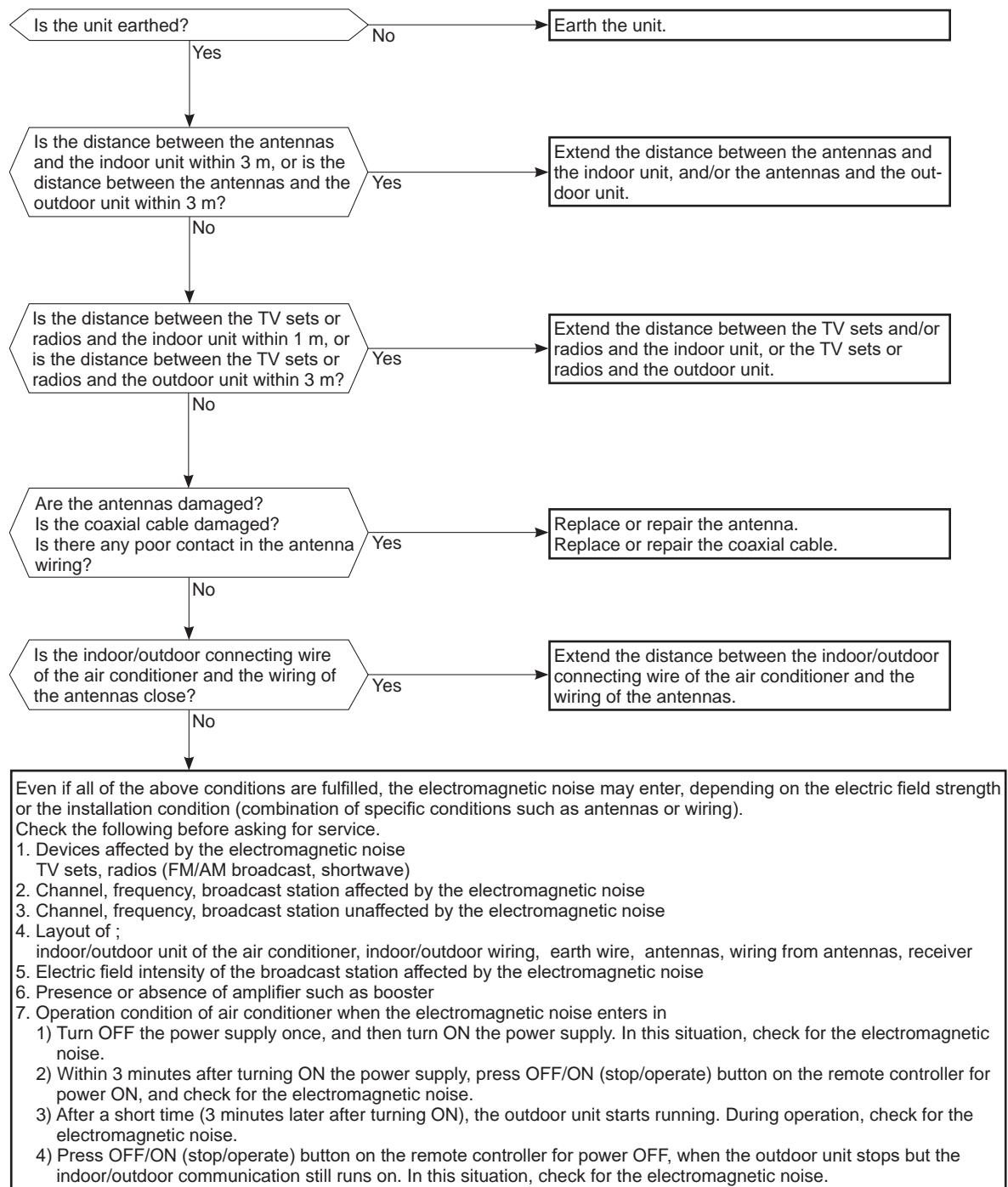
**Outdoor units are low-standby-power models.**  
**MXY-3H28VG MXY-4H33VG MXY-4H38VG MXY-5H48VG**



## ⑤ Check of installation of the horizontal vane



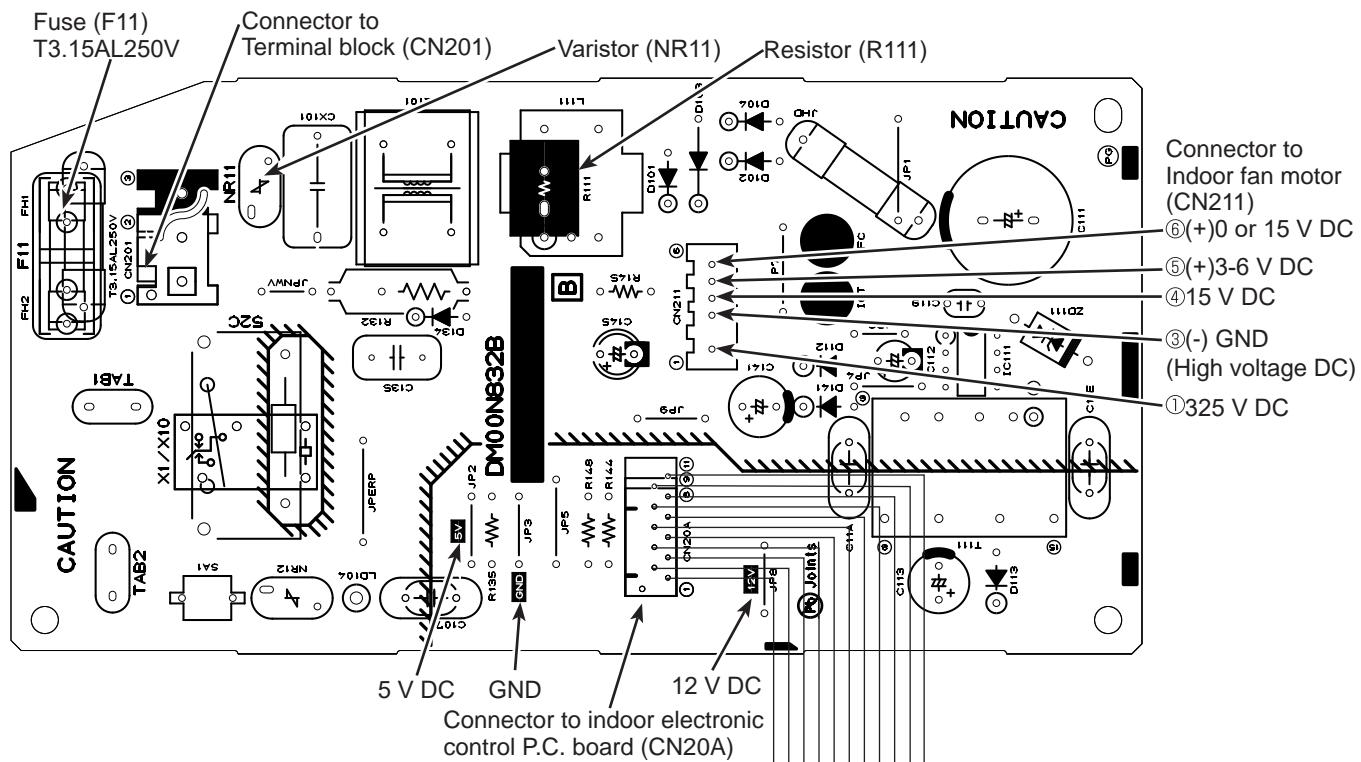
## F Electromagnetic noise enters into TV sets or radios



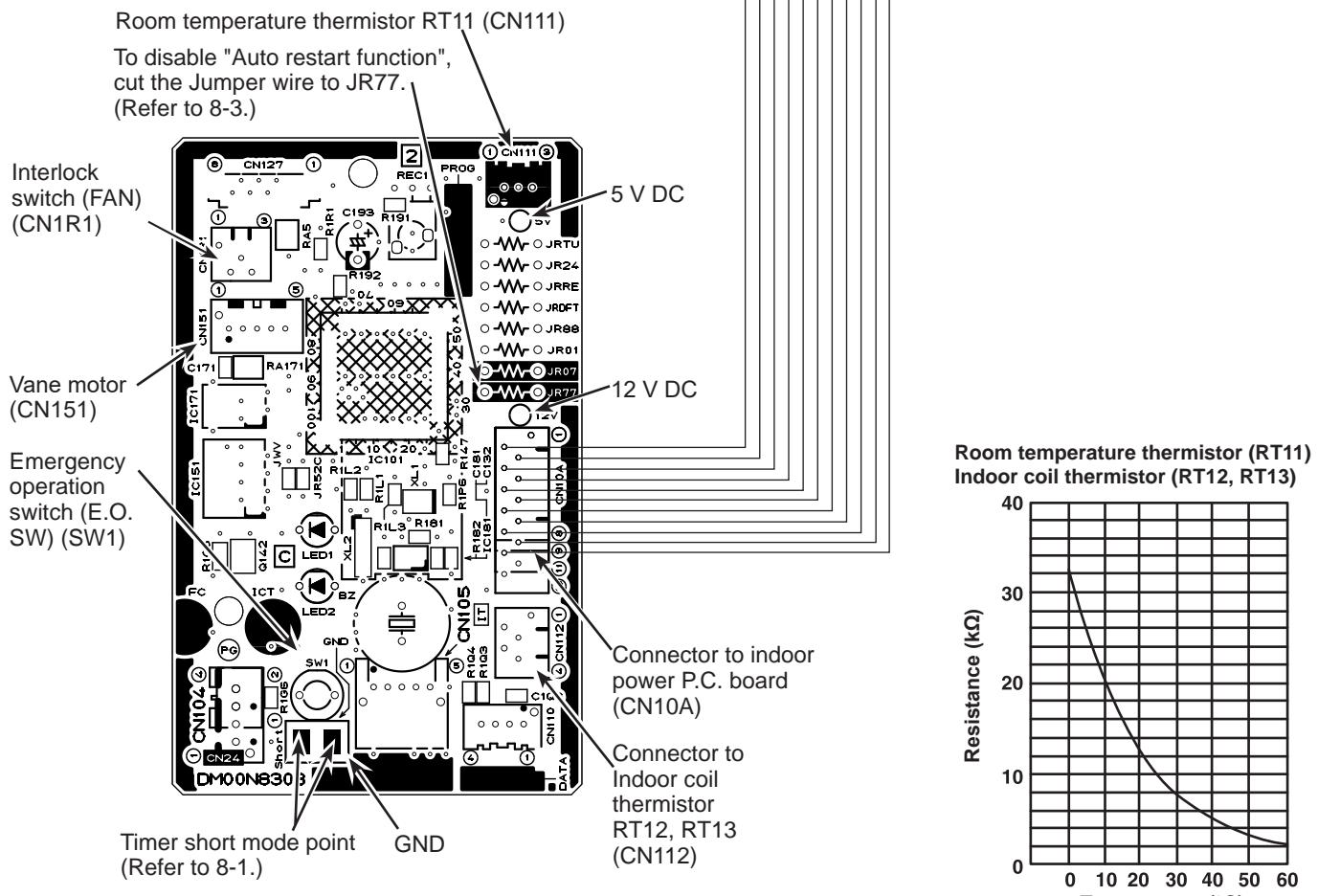
## 10-7. TEST POINT DIAGRAM AND VOLTAGE

**MSXY-FP07VG -<sub>SG1</sub> MSXY-FP10VG -<sub>SG1</sub> MSXY-FP13VG -<sub>SG1</sub> MSXY-FP18VG -<sub>SG1</sub>**

### 1. Indoor power P.C. board



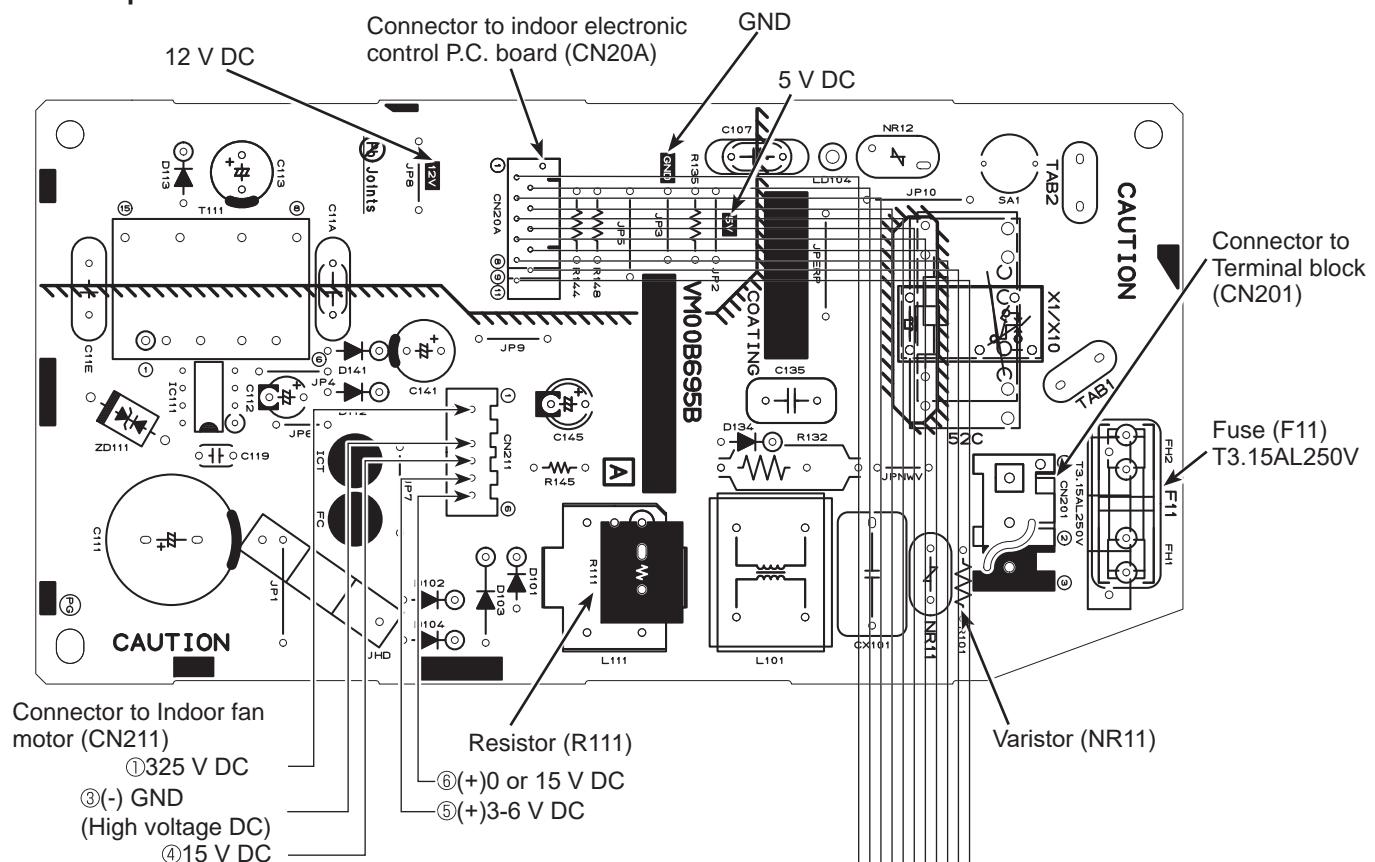
### 2. Indoor electronic control P.C. board



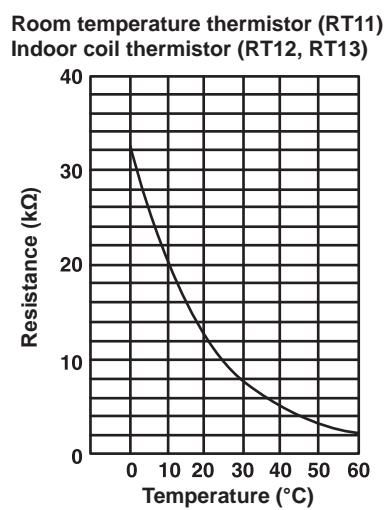
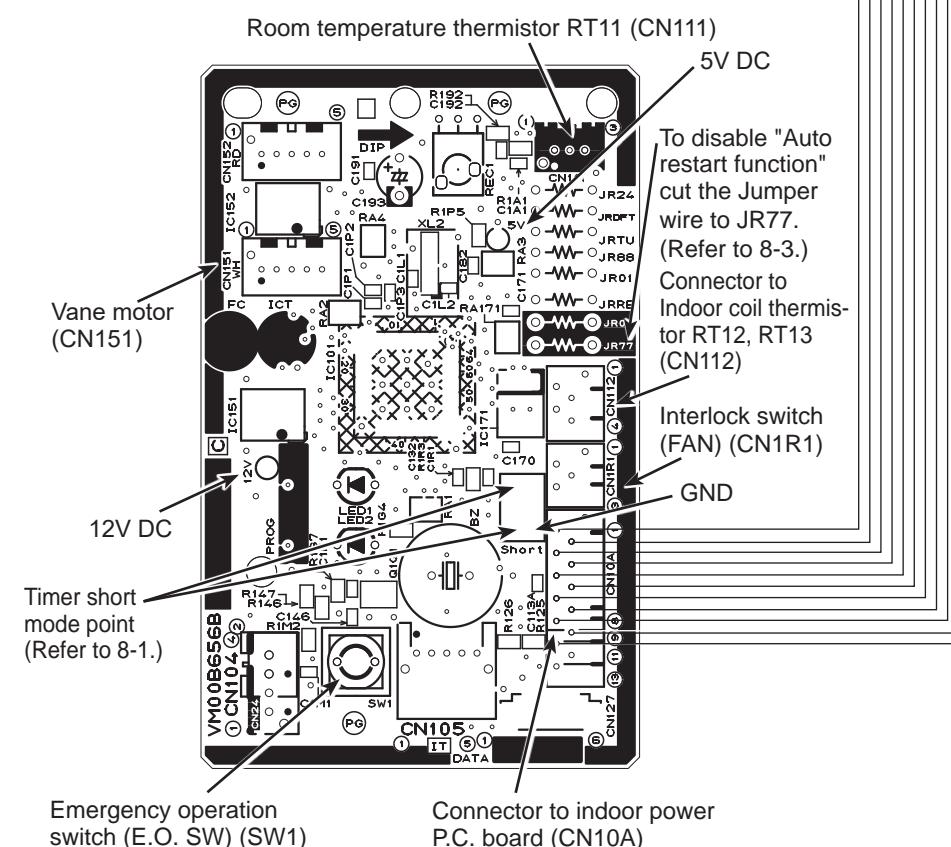
**MSXY-FP05VG - SG1**

**MSXY-FP07VG -** SG2 **MSXY-FP10VG -** SG2 **MSXY-FP13VG -** SG2 **MSXY-FP18VG -** SG2

### **1. Indoor power P.C. board**

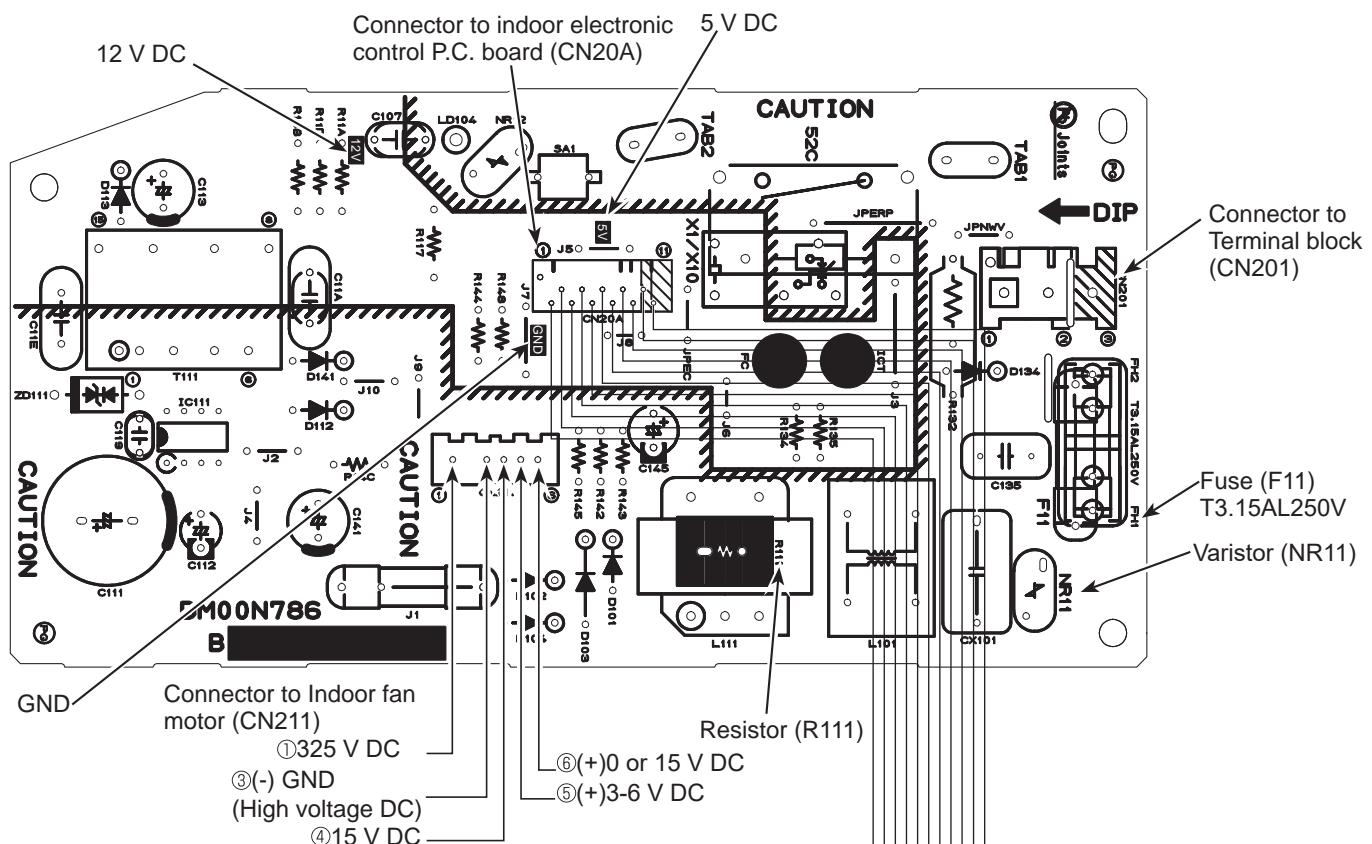


## **2. Indoor electronic control P.C. board**



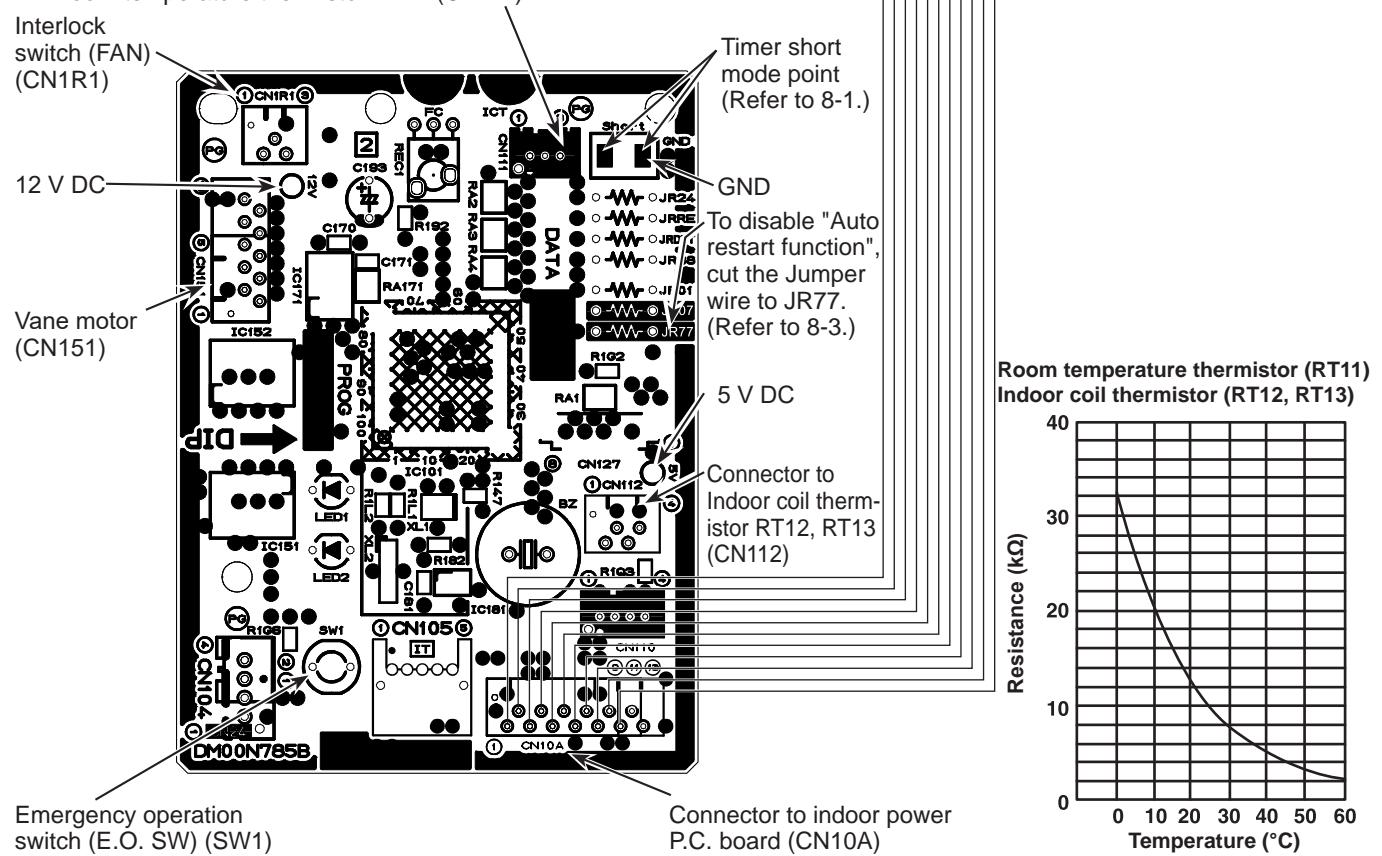
**MSXY-FP20VG - SG1 MSXY-FP24VG - SG1**

## 1. Indoor power P.C. board



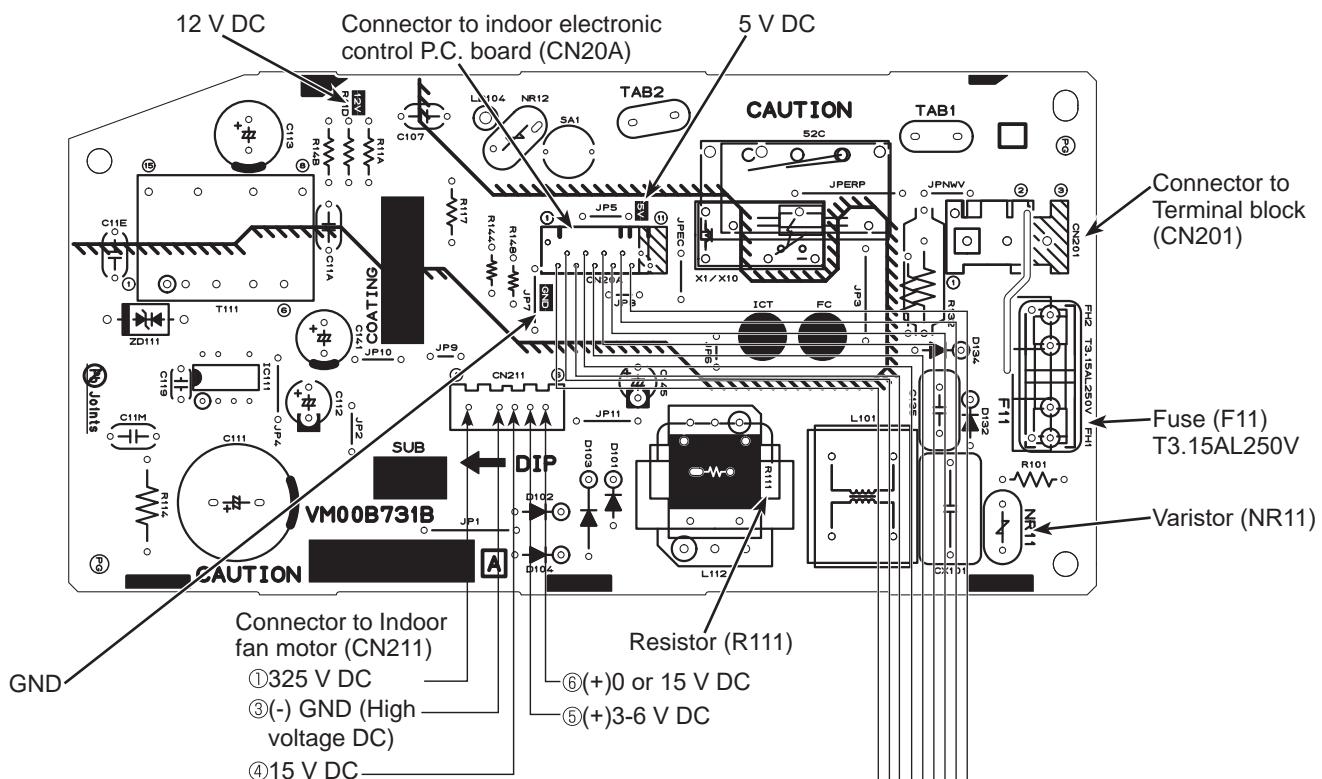
## **2. Indoor electronic control P.C. board**

Room temperature thermistor RT11 (CN111)



## MSXY-FP20VG - SG2 MSXY-FP24VG - SG2

### 1. Indoor power P.C. board



## &lt;Detaching method of the terminal with locking mechanism&gt;

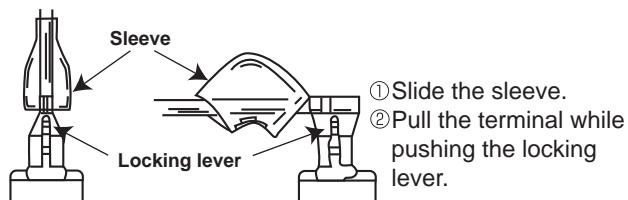
The terminal which has the locking mechanism can be detached as shown below.

There are 2 types of the terminal with locking mechanism.

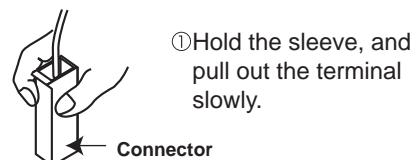
The terminal without locking mechanism can be detached by pulling it out.

Check the shape of the terminal before detaching.

- (1) Slide the sleeve and check if there is a locking lever or not.



- (2) The terminal with this connector shown below has the locking mechanism.



→ : Indicates the visible parts in the photos/figures.

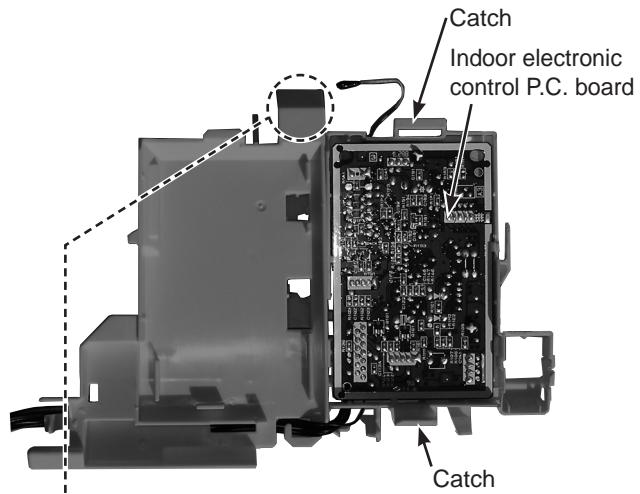
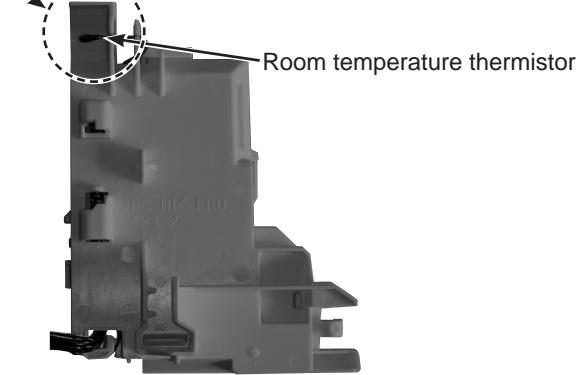
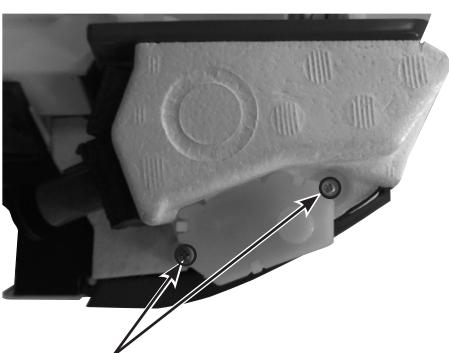
→ : Indicates the invisible parts in the photos/figures.

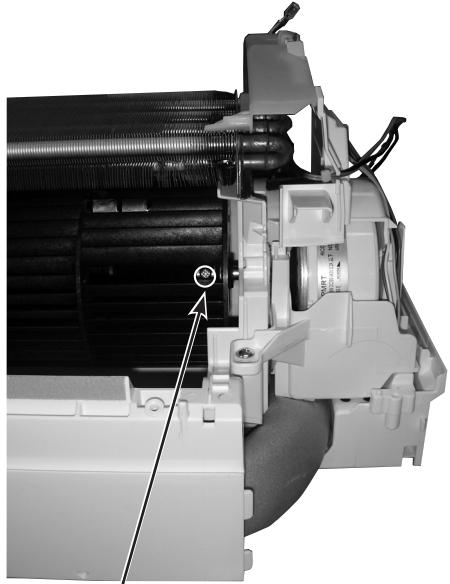
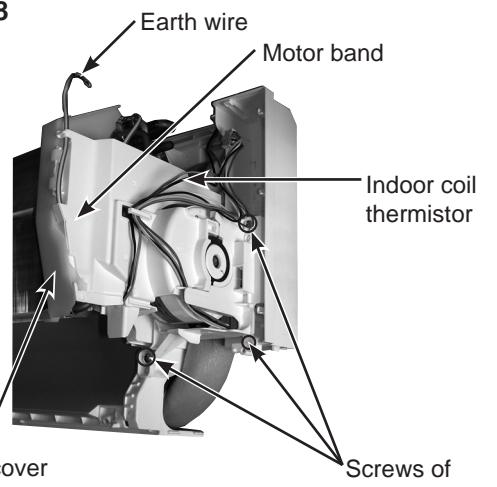
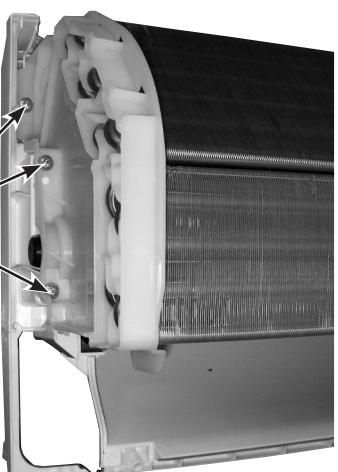
**11-1. MSXY-FP05VG MSXY-FP07VG MSXY-FP10VG MSXY-FP13VG MSXY-FP18VG**

**NOTE:** Turn OFF the power supply before disassembly.

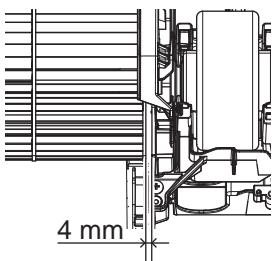
OPERATING PROCEDURE	PHOTOS/FIGURES
<p><b>1. Removing the panel</b></p> <p>(1) Remove the screw caps on the panel and remove the screws of the panel.</p> <p>(2) Pull the panel slightly toward you, and then remove the panel by pushing it upward.</p>	<p><b>Photo 1</b></p>

OPERATING PROCEDURE	PHOTOS/FIGURES
<p><b>2. Removing the indoor power P.C. board and the electrical box</b></p> <p>(1) Remove the panel. (Refer to section 1.) Remove the right corner box.</p> <p>(2) Disconnect the following connectors:</p> <ul style="list-style-type: none"> <li>&lt;Indoor electronic control P.C. board&gt;</li> <li>CN151 (Vane motor)</li> <li>CN112 (Indoor coil thermistor)</li> <li>CN10A (To the indoor power P.C. board)</li> <li>CN1R1 (Interlock switch)</li> </ul> <p>(3) Unhook the catch on the left side of the control P.C. board holder. Pull the control P.C. board holder as if opening the door at 90 degrees. Remove the control P.C. board holder from the axial rod on the electrical box.</p> <p>(4) Remove the screw of the V.A. clamp.</p> <p>(5) Remove the V.A. clamp and the indoor/outdoor connecting wire.</p> <p>(6) Remove the earth wire connected to the indoor heat exchanger from the electrical box.</p> <p>(7) Remove the screw of the electrical cover and remove the electrical cover.</p> <p>(8) Disconnect the following connectors:</p> <ul style="list-style-type: none"> <li>&lt;Indoor power P.C. board&gt;</li> <li>CN211 (Indoor fan motor)</li> <li>CN201 (Terminal block)</li> <li>CN20A (To the indoor electronic control P.C. board)</li> </ul> <p>(9) Remove the upper catch of the electrical box, and pull out the electrical box.</p> <p>* To attach the electrical box, pass the wires connecting the indoor power P.C. board and the indoor electronic control P.C. board through Ⓐ. Pass the lead wires of the fan motor through Ⓑ as shown in the Photo 3 so that it will not be pinched under the electrical box.</p>	<p><b>Photo 2</b></p>

OPERATING PROCEDURE	PHOTOS/FIGURES
<p><b>3. Removing the indoor electronic control P.C. board</b></p> <p>(1) Remove the panel. (Refer to section 1.) Remove the right corner box.</p> <p>(2) Disconnect the following connectors:      &lt;Indoor electronic control P.C. board&gt;      CN151 (Vane motor)      CN112 (Indoor coil thermistor)      CN10A (To the indoor power P.C. board)      CN1R1 (Interlock switch)</p> <p>(3) Unhook the catch on the left side of the control P.C. board holder. Pull the control P.C. board holder as if opening the door at 90 degrees. Remove the control P.C. board holder from the axial rod on the electrical box.</p> <p>(4) Remove the room temperature thermistor from the back side of the control P.C. board holder.</p> <p>(5) Unhook the catches of the control P.C. board holder, and open the control P.C. board holder.</p> <p>(6) Remove the indoor electronic control P.C. board from the control P.C. board holder.</p>	<p><b>Photo 4</b>  <b>Control P.C. board holder (Inside)</b></p> 
<p><b>4. Removing the nozzle assembly</b></p> <p>(1) Remove the panel (Refer to section 1.) and the corner box.</p> <p>(2) Remove the V.A. clamp, and then the indoor/outdoor connecting wire. (Photo 2)</p> <p>(3) Remove the electrical cover. (Photo 2)</p> <p>(4) Disconnect the following connectors on the electronic control P.C. board:      CN151 (Vane motor)      CN1R1 (Interlock switch)</p> <p>(5) Remove the control P.C. board holder (Photo 4).</p> <p>(6) Pull out the drain hose from the nozzle assembly and remove the nozzle assembly.</p> <p>(7) Remove the screws of the interlock switch and remove the interlock switch.</p>	<p><b>Control P.C. board holder (Back side)</b></p> 
<p><b>5. Removing the vane motor</b></p> <p>(1) Remove the panel. (Refer to section 1.) Remove the corner box.</p> <p>(2) Remove the control P.C. board holder and the electrical box. (Refer to section 2.)</p> <p>(3) Pull out the drain hose from the nozzle assembly and remove the nozzle assembly.</p> <p>(4) Remove the screws of the vane motor and remove the vane motor.</p> <p>(5) Disconnect the connector from the vane motor.</p>	<p><b>Photo 5</b></p> 
	<p><b>Photo 6</b></p>  <p>Screws of the vane motor</p>

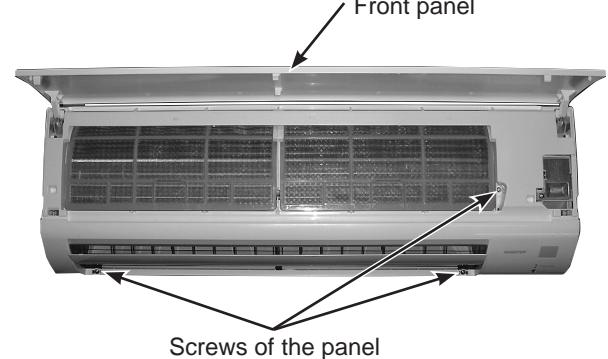
OPERATING PROCEDURE	PHOTOS/FIGURES
<p><b>6. Removing the indoor fan motor, the indoor coil thermistor and the line flow fan</b></p> <p>(1) Remove the panel. (Refer to section 1.) Remove the corner box.</p> <p>(2) Remove the control P.C. board holder, the electrical box and the nozzle assembly. (Refer to section 2 and section 4.)</p> <p>(3) Remove the screws fixing the motor bed.</p> <p>(4) Disengage the hooks of the water cover and remove the water cover.</p> <p>(5) Disconnect the earth wire from the motor band.</p> <p>(6) Remove the indoor coil thermistor from the motor band.</p> <p>(7) Loosen the screw fixing the line flow fan.</p> <p>(8) Remove the motor bed together with the indoor fan motor and the motor band.</p> <p>(9) Disconnect the lead wire of the fan motor from the motor band.</p> <p>(10) Disengage the hooks of the motor band and remove the motor band. Pull out the indoor fan motor.</p> <p>(11) Remove the indoor coil thermistor from the heat exchanger. * Install the indoor coil thermistor in its former position when assembling it.</p> <p>(12) Remove the screws fixing the left side of the heat exchanger.</p> <p>(13) Lift the heat exchanger, and pull out the line flow fan to the lower-left. * When attaching the line flow fan, screw the line flow fan so 4 mm gap is provided between the right end of the line flow fan and the right wall of the air passage of the box (Figure 1).</p>	<p><b>Photo 7</b></p>  <p>Screw of the line flow fan</p> <p><b>Photo 8</b></p>  <p>Earth wire</p> <p>Motor band</p> <p>Indoor coil thermistor</p> <p>Water cover</p> <p>Screws of the motor bed</p> <p><b>Photo 9</b></p>  <p>Screws of the left side of the heat exchanger</p>

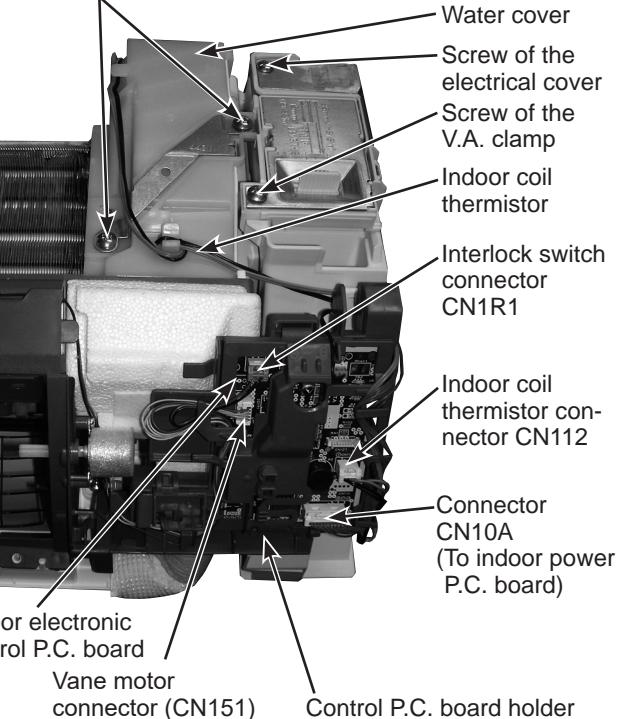
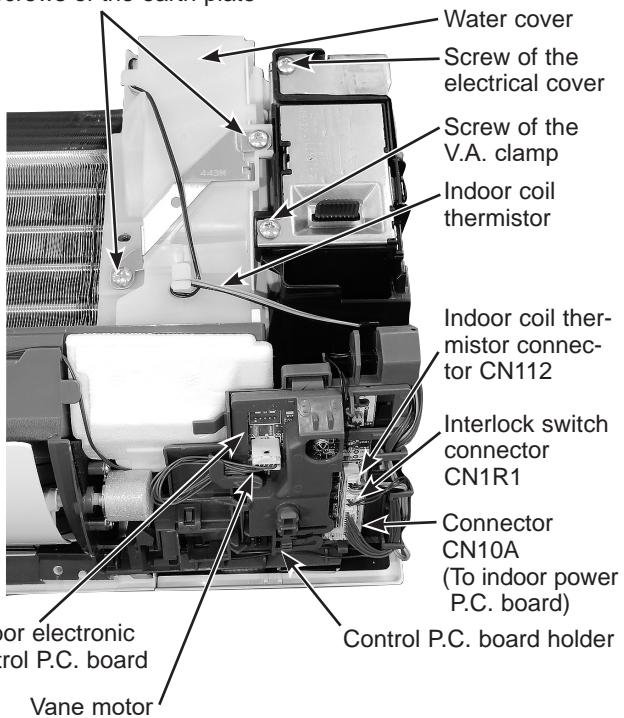
**Figure 1**



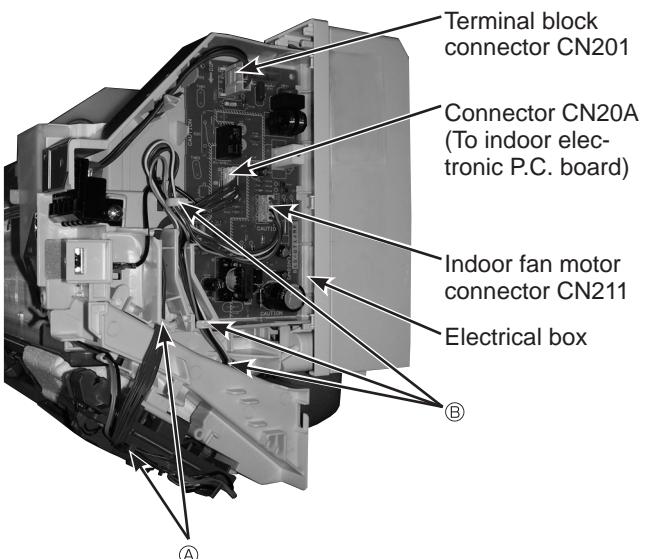
## 11-2. MSXY-FP20VG MSXY-FP24VG

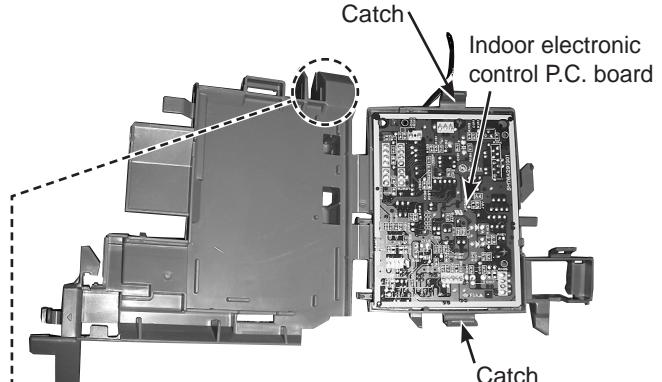
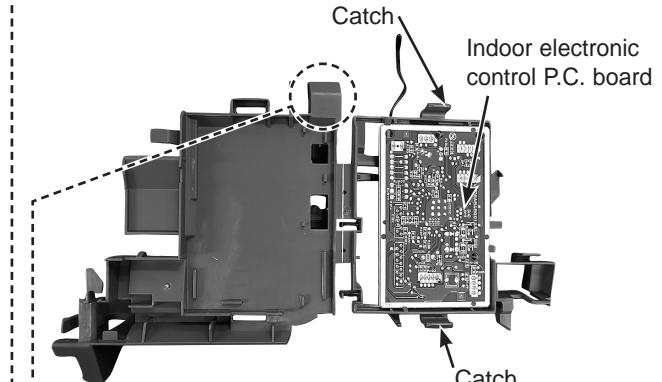
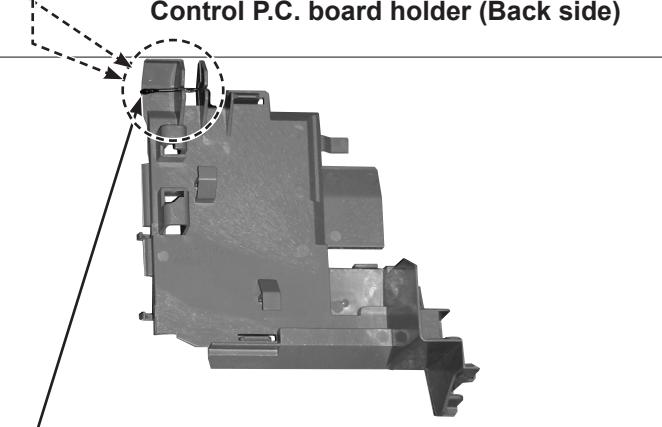
NOTE: Turn OFF the power supply before disassembly.

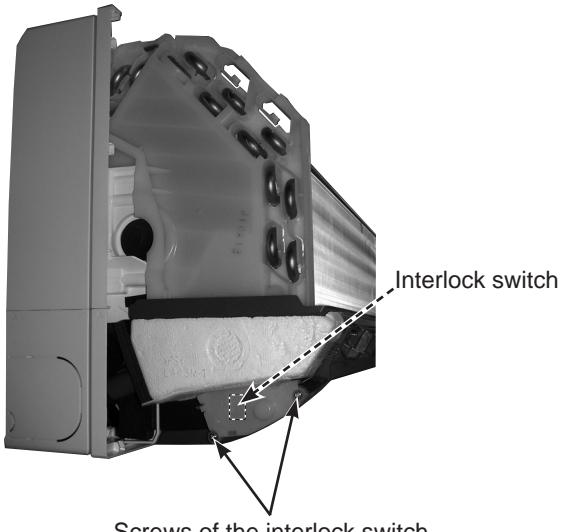
OPERATING PROCEDURE	PHOTOS/FIGURES
<p><b>1. Removing the panel</b></p> <p>(1) Remove the screw caps on the panel and remove the screws of the panel.</p> <p>(2) Pull the panel slightly toward you, and then remove the panel by pushing it upward.</p>	<p><b>Photo 1</b></p> 

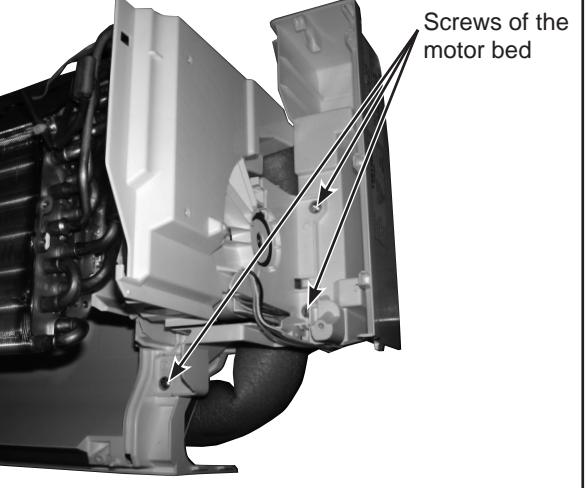
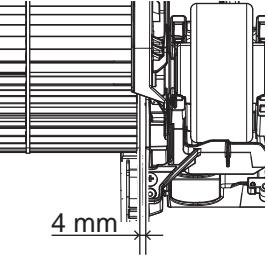
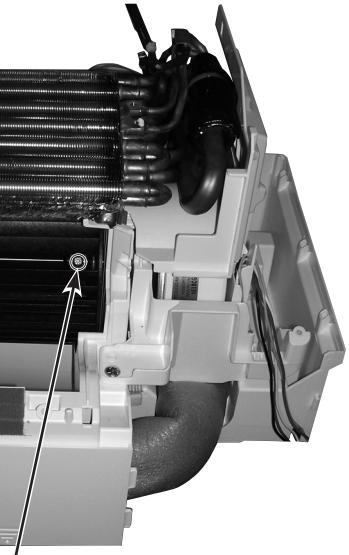
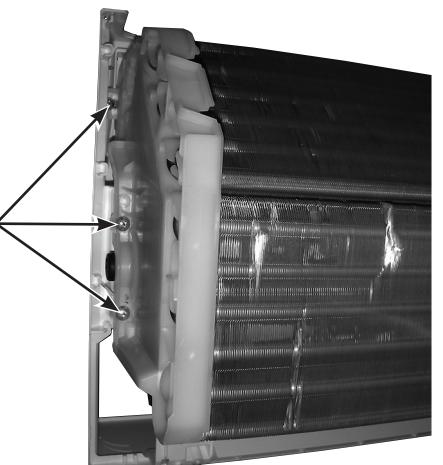
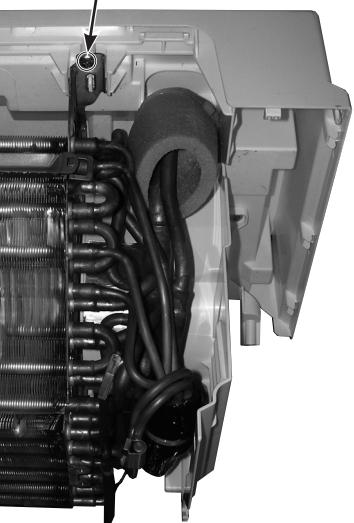
OPERATING PROCEDURE	PHOTOS/FIGURES
<p><b>2. Removing the indoor power P.C. board and the electrical box</b></p> <p>(1) Remove the panel. (Refer to section 1.) Remove the right corner box.</p> <p>(2) Disconnect the following connectors:      &lt;Indoor electronic control P.C. board&gt;      CN151 (Vane motor)      CN1R1 (Interlock switch)      CN112 (Indoor coil thermistor)      CN10A (To the indoor power P.C. board)</p> <p>(3) Unhook the catch on the left side of the control P.C. board holder. Pull the control P.C. board holder as if opening the door at 90 degrees. Remove the control P.C. board holder from the axial rod on the electrical box.</p> <p>(4) Remove the screw of the V.A. clamp.</p> <p>(5) Remove the V.A. clamp and the indoor/outdoor connecting wire.</p> <p>(6) Remove the screws of the earth plate. (Photo 2)</p> <p>(7) Remove the indoor coil thermistor from the water cover.</p> <p>(8) Disengage the hooks of the water cover and remove the water cover.</p> <p>(9) Remove the screw of the electrical cover and remove the electrical cover.</p> <p>(10) Disconnect the CN211 (Indoor fan motor) from the indoor power P.C. board.</p> <p>(11) Remove the upper catch of the electrical box, and pull out the electrical box.</p> <p>(12) Disconnect the following connectors.      &lt;Indoor power P.C. board&gt;      CN201 (Terminal block)      CN20A (To the indoor electronic control P.C. board)</p> <p>* To attach the electrical box, pass the wires connecting the indoor power P.C. board and the indoor electronic control P.C. board through Ⓐ. Pass the lead wires of the fan motor through Ⓑ as shown in the Photo 3 so that it will not be pinched under the electrical box.</p>	<p><b>Photo 2-1 MSXY-FP20/24VG - SG1</b></p> <p>Screws of the earth plate</p>  <p>Water cover      Screw of the electrical cover      Screw of the V.A. clamp      Indoor coil thermistor      Interlock switch connector CN1R1      Indoor coil thermistor connector CN112      Connector CN10A (To indoor power P.C. board)      Indoor electronic control P.C. board      Vane motor connector (CN151)      Control P.C. board holder</p> <p><b>Photo 2-2 MSXY-FP20/24VG - SG2</b></p> <p>Screws of the earth plate</p>  <p>Water cover      Screw of the electrical cover      Screw of the V.A. clamp      Indoor coil thermistor      Indoor coil thermistor connector CN112      Interlock switch connector CN1R1      Connector CN10A (To indoor power P.C. board)      Indoor electronic control P.C. board      Vane motor connector CN151      Control P.C. board holder</p>

**Photo 3**



OPERATING PROCEDURE	PHOTOS/FIGURES
<p><b>3. Removing the indoor electronic control P.C. board.</b></p> <p>(1) Remove the panel. (Refer to section 1.) Remove the right corner box.</p> <p>(2) Disconnect the following connectors:      &lt;Indoor electronic control P.C. board&gt;      CN151 (Vane motor)      CN112 (Indoor coil thermistor)      CN1R1 (Interlock switch)      CN10A (To the indoor power P.C. board)</p> <p>(3) Unhook the catch on the left side of the control P.C. board holder. Pull the control P.C. board holder as if opening the door at 90 degrees. Remove the control P.C. board holder from the axial rod on the electrical box.</p> <p>(4) Remove the room temperature thermistor from the back side of the control P.C. board holder.</p> <p>(5) Unhook the catches of the control P.C. board holder, and open the control P.C. board holder.</p> <p>(6) Remove the indoor electronic control P.C. board from the control P.C. board holder.</p>	<p><b>Photo 4-1 MSXY-FP20/24VG - [SG2] Control P.C. board holder (Inside)</b></p>  <p><b>Photo 4-2 MSXY-FP20/24VG - [SG2] Control P.C. board holder (Inside)</b></p>  <p><b>Control P.C. board holder (Back side)</b></p> 

OPERATING PROCEDURE	PHOTOS/FIGURES
<p><b>4. Removing the nozzle assembly and the interlock switch.</b></p> <p>(1) Remove the panel. (Refer to section 1.) Remove the right corner box.</p> <p>(2) Disconnect the following connectors:      &lt;Indoor electronic control P.C. board&gt;      CN151 (Vane motor)      CN112 (Indoor coil thermistor)      CN1R1 (Interlock switch)      CN10A (To the indoor power P.C. board)</p> <p>(3) Unhook the catch on the left side of the control P.C. board holder. Pull the control P.C. board holder as if opening the door at 90 degrees. Remove the control P.C. board holder from the axial rod on the electrical box.</p> <p>(4) Pull out the drain hose from the nozzle assembly and remove the nozzle assembly.</p> <p>(5) Remove the interlock switch.</p>	<p><b>Photo 5</b></p>  <p>A photograph of the nozzle assembly. A callout points to two screws labeled "Screws of the interlock switch". Another callout points to a component labeled "Interlock switch".</p>
<p><b>5. Removing the vane motor</b></p> <p>(1) Remove the panel. (Refer to section 1.) Remove the right corner box.</p> <p>(2) Remove the control P.C. board holder, water cover and the electrical box. (Refer to section 2.)</p> <p>(3) Pull out the drain hose from the nozzle assembly and remove the nozzle assembly.</p> <p>(4) Remove the screws of the vane motor and remove the vane motor.</p> <p>(5) Disconnect the connector from the vane motor.</p>	<p><b>Photo 6</b></p>  <p>A photograph of the nozzle assembly with the vane motor removed. A callout points to three screws labeled "Screws of the vane motor".</p>

OPERATING PROCEDURE	PHOTOS/FIGURES
<p><b>6. Removing the indoor fan motor, the indoor coil thermistor and the line flow fan</b></p> <p>(1) Remove the panel. (Refer to section 1.) Remove the right corner box.</p> <p>(2) Remove the control P.C. board holder, the water cover, the electrical box and the nozzle assembly. (Refer to section 2.)</p> <p>(3) Remove the screws fixing the motor bed.</p> <p>(4) Loosen the screw fixing the line flow fan.</p> <p>(5) Remove the motor bed together with the indoor fan motor and the motor band.</p> <p>(6) Disconnect the lead wire of the fan motor from the motor band.</p> <p>(7) Disengage the hooks of the motor band and remove the motor band. Pull out the indoor fan motor.</p> <p>(8) Remove the indoor coil thermistor from the heat exchanger.</p> <p>* Install the indoor coil thermistor in its former position when assembling it.</p> <p>(9) Remove the screws fixing the left side and upper right side of the heat exchanger.</p> <p>(10) Lift the heat exchanger, and pull out the line flow fan to the lower-left.</p> <p>* When attaching the line flow fan, screw the line flow fan so 4 mm gap is provided between the right end of the line flow fan and the right wall of the air passage of the box (Figure 1).</p>	<p><b>Photo 7</b></p> 
<p><b>Figure 1</b></p> 	<p><b>Photo 8</b></p> 
<p><b>Photo 10</b></p> 	<p><b>Photo 9</b></p> 

## Fixing the indoor coil thermistor

\* There are 2 forms of parts for fixing the indoor coil thermistor.

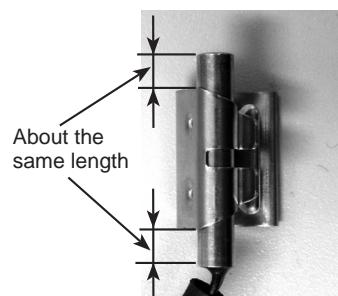
**Clip shape**



**Holder shape**



When fixing the indoor coil thermistor to the clip-shape/holder-shape part, the lead wire should point down.

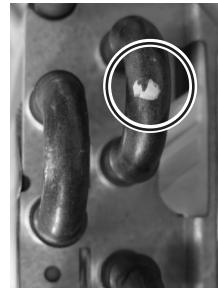


### Position and procedure for mounting the clip-shape part

1. Set the indoor coil thermistor in the center of the clip-shape part.



2. Check the (marked) mounting position.



3. Mount the clip-shape part.



#### NOTE:

- Take care to avoid loss and accidental falling of the clip-shape part inside the unit.
- Mount the clip-shape part on the marked position.
- Do not pull the lead wire when removing the indoor coil thermistor.

# **MITSUBISHI ELECTRIC CORPORATION**

HEAD OFFICE: TOKYO BUILDING, 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN

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Specifications are subject to change without notice.