



Air-Conditioners For Building Application

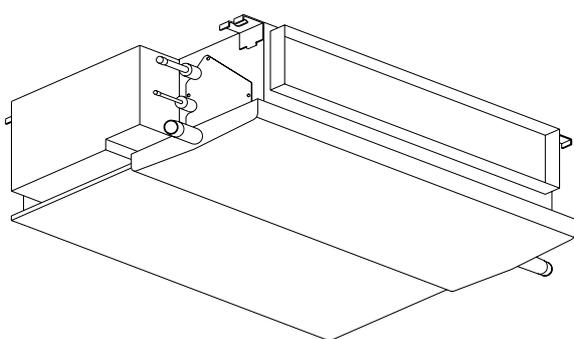
2005

TECHNICAL & SERVICE MANUAL

Series PEFY Ceiling Concealed

<Indoor unit>

Models **PEFY-P06NMLU-E**
PEFY-P08NMLU-E
PEFY-P12NMLU-E



INDOOR UNIT

CONTENTS

SAFETY PRECAUTIONS	1
1. FEATURES	3
2. PART NAMES AND FUNCTIONS	4
3. SPECIFICATION	6
4. OUTLINES AND DIMENSIONS	8
5. WIRING DIAGRAM	9
6. REFRIGERANT SYSTEM DIAGRAM	10
7. TROUBLE SHOOTING	11
8. DISASSEMBLY PROCEDURE	14

CITY MULTI

For use with the R410A & R22

SAFETY PRECAUTIONS

1. Before installation and electric work

- ▶ **Before installing the unit, make sure you read all the “Safety precautions”.**
- ▶ **The “Safety precautions” provide very important points regarding safety. Make sure you follow them.**
- ▶ **This equipment may cause the adverse effect on the same supply system.**
- ▶ **Please report to or take consent by the supply authority before connection to the system.**

Symbols used in the text

Warning:

Describes precautions that should be observed to prevent danger of injury or death to the user.

Caution:

Describes precautions that should be observed to prevent damage to the unit.

Symbols used in the illustrations



: Indicates an action that must be avoided.



: Indicates that important instructions must be followed.



: Indicates a part which must be grounded.



: Indicates that caution should be taken with rotating parts. (This symbol is displayed on the main unit label.) <Color: Yellow>



: Beware of electric shock (This symbol is displayed on the main unit label.) <Color: Yellow>

Warning:

Carefully read the labels affixed to the main unit.

Warning:

- **Ask the dealer or an authorized technician to install the air conditioner.**
 - Improper installation by the user may result in water leakage, electric shock, or fire.
- **Install the air unit at a place that can withstand its weight.**
 - Inadequate strength may cause the unit to fall down, resulting in injuries.
- **Use the specified cables for wiring. Make the connections securely so that the outside force of the cable is not applied to the terminals.**
 - Inadequate connection and fastening may generate heat and cause a fire.
- **Prepare for typhoons and other strong winds and earthquakes and install the unit at the specified place.**
 - Improper installation may cause the unit to topple and result in injury.
- **Always use an air cleaner, humidifier, electric heater, and other accessories specified by Mitsubishi Electric.**
 - Ask an authorized technician to install the accessories. Improper installation by the user may result in water leakage, electric shock, or fire.

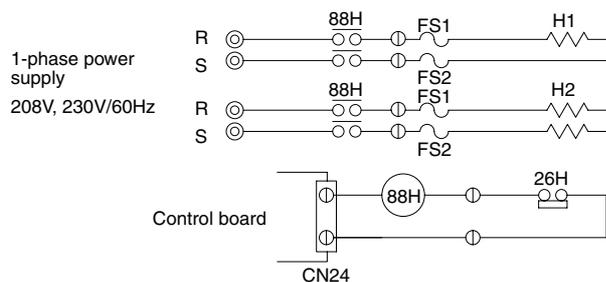
- **Never repair the unit. If the air conditioner must be repaired, consult the dealer.**
 - If the unit is repaired improperly, water leakage, electric shock, or fire may result.
- **Do not touch the heat exchanger fins.**
 - Improper handling may result in injury.
- **If refrigerant gas leaks during installation work, ventilate the room.**
 - If the refrigerant gas comes into contact with a flame, poisonous gases will be released.
- **Install the air conditioner according to this Installation Manual.**
 - If the unit is installed improperly, water leakage, electric shock, or fire may result.
- **Have all electric work done by a licensed electrician according to “Electric Facility Engineering Standard” and “Interior Wire Regulations” and the instructions given in this manual and always use a special circuit.**
 - If the power source capacity is inadequate or electric work is performed improperly, electric shock and fire may result.
- **Keep the electric parts away from water (washing water etc.).**
 - It might result in electric shock, catching fire or smoke.
- **Securely install the cover of control box and the panel.**
 - If the cover and panel are not installed properly, dust or water may enter the outdoor unit and fire or electric shock may result.
- **When installing and moving the air conditioner to another site, do not charge the it with a refrigerant different from the refrigerant specified on the unit.**
 - If a different refrigerant or air is mixed with the original refrigerant, the refrigerant cycle may malfunction and the unit may be damaged.
- **If the air conditioner is installed in a small room, measures must be taken to prevent the refrigerant concentration from exceeding the safety limit even if the refrigerant should leak.**
 - Consult the dealer regarding the appropriate measures to prevent the safety limit from being exceeded. Should the refrigerant leak and cause the safety limit to be exceeded, hazards due to lack of oxygen in the room could result.
- **When moving and reinstalling the air conditioner, consult the dealer or an authorized technician.**
 - If the air conditioner is installed improperly, water leakage, electric shock, or fire may result.
- **After completing installation work, make sure that refrigerant gas is not leaking.**
 - If the refrigerant gas leaks and is exposed to a fan heater, stove, oven, or other heat source, it may generate noxious gases.
- **Do not reconstruct or change the settings of the protection devices.**
 - If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Mitsubishi Electric are used, fire or explosion may result.
- **To dispose of this product, consult your dealer.**
- **Do not use a leak detection additive.**

⚠ Warning:

- **Note the following when building a heater in the air conditioning system.**
 - Leave enough space between units for proper ventilation so that the indoor unit temperature does not exceed 40°C when windless.
 - Keep the heater clean, and take appropriate measures so that the indoor unit does not suck in the dust particles that accumulate on the heater.
 - Use the optional heater cable (PAC-YU24HT) to perform an interlocked operation with indoor units.
 - Do not build a heater inside the indoor unit.

Recommended circuit

Wiring diagram



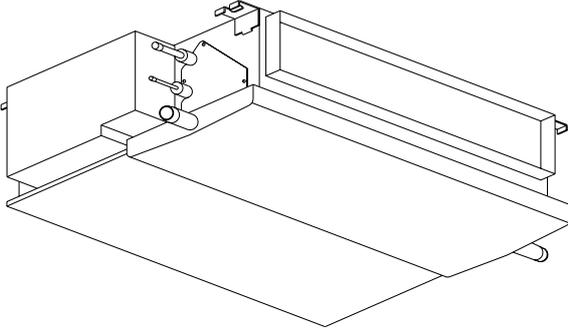
- FS1, 2 ----- Thermal fuse
- H1, H2 ----- Heater
- 26H ----- Overheat protection thermostat
- 88H ----- Electromagnetic contactor

2. Precautions for devices that use R410A refrigerant

⚠ Caution:

- **Do not use the existing refrigerant piping.**
 - The old refrigerant and refrigerator oil in the existing piping contains a large amount of chlorine which may cause the refrigerator oil of the new unit to deteriorate.
 - **Use refrigerant piping made of C1220 (Cu-DHP) phosphorus deoxidized copper as specified in the *JIS H3300 "Copper and copper alloy seamless pipes and tubes". In addition, be sure that the inner and outer surfaces of the pipes are clean and free of hazardous sulphur, oxides, dust/dirt, shaving particles, oils, moisture, or any other contaminant.**
 - Contaminants on the inside of the refrigerant piping may cause the refrigerant residual oil to deteriorate.
- *JIS: Japanese Industrial Standard
- **Store the piping to be used during installation indoors and keep both ends of the piping sealed until just before brazing. (Store elbows and other joints in a plastic bag.)**
 - If dust, dirt, or water enters the refrigerant cycle, deterioration of the oil and compressor trouble may result.
 - **Use ester oil, ether oil or alkylbenzene (small amount) as the refrigerator oil to coat flares and flange connections.**
 - The refrigerator oil will degrade if it is mixed with a large amount of mineral oil.
 - **Use liquid refrigerant to fill the system.**
 - If gas refrigerant is used to seal the system, the composition of the refrigerant in the cylinder will change and performance may drop.
 - **Do not use a refrigerant other than R410A.**
 - If another refrigerant (R22, etc.) is used, the chlorine in the refrigerant may cause the refrigerator oil to deteriorate.
 - **Use a vacuum pump with a reverse flow check valve.**
 - The vacuum pump oil may flow back into the refrigerant cycle and cause the refrigerator oil to deteriorate.
 - **Do not use the following tools that are used with conventional refrigerants. (Gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, refrigerant recovery equipment)**
 - If the conventional refrigerant and refrigerator oil are mixed in the R410A, the refrigerant may deteriorate.
 - If water is mixed in the R410A, the refrigerator oil may deteriorate.
 - Since R410A does not contain any chlorine, gas leak detectors for conventional refrigerants will not react to it.
 - **Do not use a charging cylinder.**
 - Using a charging cylinder may cause the refrigerant to deteriorate.
 - **Be especially careful when managing the tools.**
 - If dust, dirt, or water gets in the refrigerant cycle, the refrigerant may deteriorate.

Series PEFY Ceiling Concealed



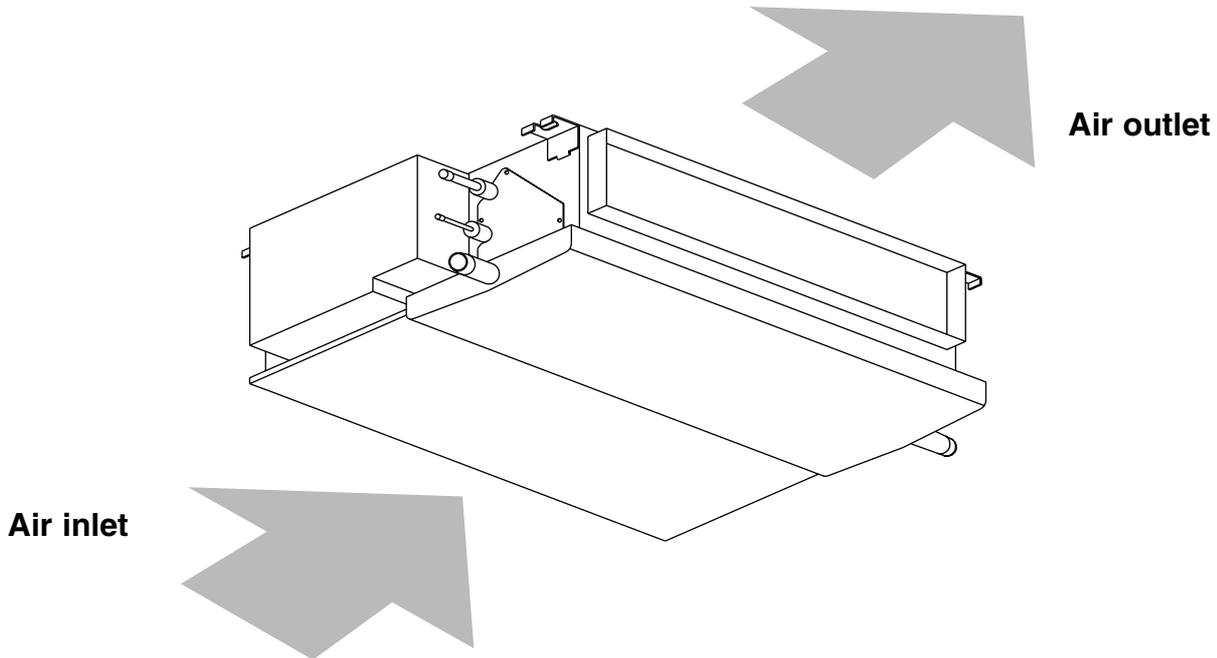
Indoor unit

Models	Cooling capacity/Heating capacity	
	kW	BTU / h
PEFY-P06NMLU-E	1.8 / 2.0	6000 / 6700
PEFY-P08NMLU-E	2.3 / 2.6	8000 / 9000
PEFY-P12NMLU-E	3.5 / 4.0	12000 / 13500

2

PART NAMES AND FUNCTIONS

● Indoor (Main) Unit

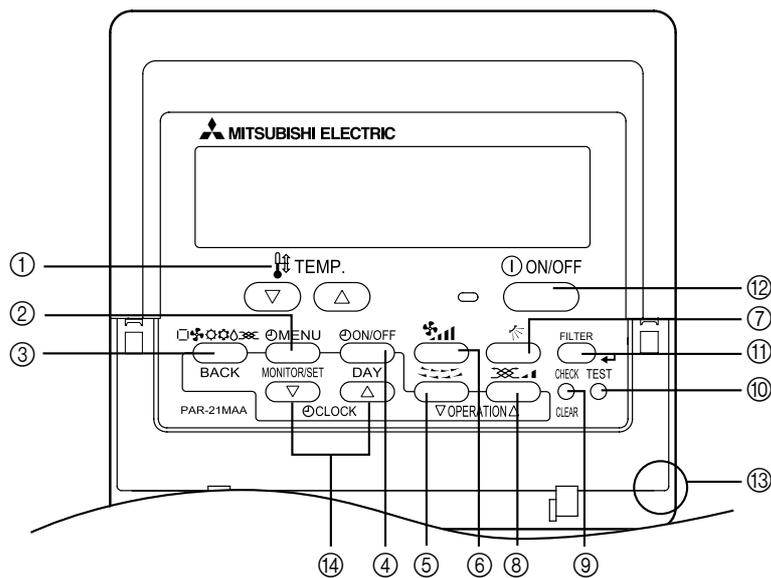


● Remote controller

[PAR-21MAA]

- Once the controls are set, the same operation mode can be repeated by simply pressing the ON/OFF button.

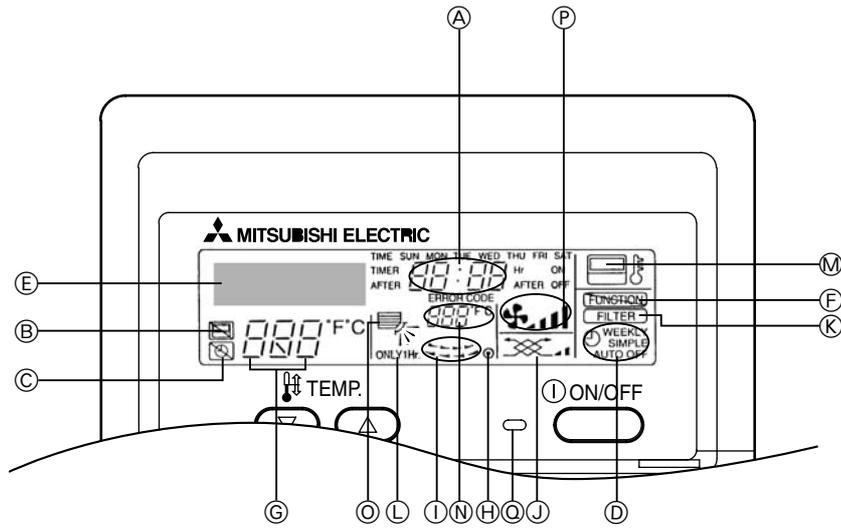
[Operation buttons]



- | | | |
|----------------------------|----------------------------|---|
| ① [Set Temperature] Button | ⑤ [Louver] Button | ⑩ [Test run] Button |
| ② [Timer Menu] Button | [Operation] Button | ⑪ [Filter] Button |
| [Monitor/Set] Button | ⑥ [Fan Speed] Button | [↵] Button |
| ③ [Mode] Button | ⑦ [Airflow Up/Down] Button | ⑫ [ON/OFF] Button |
| [Return] Button | ⑧ [Ventilation] Button | ⑬ Position of built-in room temperature |
| ④ [Timer On/Off] Button | [Operation] Button | ⑭ [Set Time] Button |
| [Set Day] Button | ⑨ [Check/Clear] Button | |

- Never expose the remote controller to direct sunlight. Doing so can result in the erroneous measurement of room temperature.
- Never place any obstacle around the lower right-hand section of the remote controller. Doing so can result in the erroneous measurement of room temperature.

[Display]



- Ⓐ Current time/Timer
- Ⓑ Centralized control
- Ⓒ Timer OFF
- Ⓓ Timer indicator
- Ⓔ Operation mode: ❄️COOL, 💧DRY, 📺AUTO, 🌀FAN, 🔥HEAT
- Ⓕ "Locked" indicator
- Ⓖ Set temperature
- Ⓗ Power ON
- Ⓘ Louver
- Ⓝ Ventilation
- Ⓚ Filter sign
- Ⓛ Set effective for 1 hr.
- Ⓜ Sensor position
- Ⓝ Room temperature
- Ⓞ Airflow
- Ⓟ Fan speed

3-1. Specification

PEFY-P-NMLU-E

Item		Model	PEFY-P06NMLU-E	PEFY-P08NMLU-E	PEFY-P12NMLU-E		
Power source			208/230V, 60Hz				
Capacity *1	Cooling	kW	1.8	2.3	3.5		
		BTU/h	6000	8000	12000		
	Heating	kW	2.0	2.6	4.0		
		BTU/h	6700	9000	13500		
Dimension	Height	mm	225				
		in	8-7/8				
	Width	mm	790				
		in	31-1/8				
	Depth	mm	550				
		in	21-21/32				
Net weight		kg	18				
		lb	40				
FAN	Airflow rate (Low-Middle-High)		m ³ /min	4.8-5.8-7.9	4.8-5.8-7.9	4.8-5.8-9.5	
			cfm	169-205-279	169-205-279	169-205-335	
	External static pressure		Pa	208V	5	5	5
				230V	5	5	5
Noise level (Low-Middle-High) *2		dB(A)	208V	25-29-36	25-29-36	25-29-40	
			230V	25-29-36	25-29-36	25-29-40	
Filter			Standard filter				

Notes: *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.

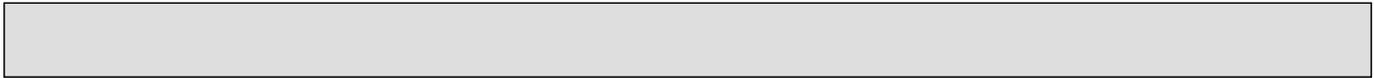
Cooling: Indoor: 26.7 °C [80 °F] DB/19.4 °C [67 °F] WB

Outdoor: 35 °C [95 °F] DB

Heating: Indoor: 21.1 °C [70 °F] DB

Outdoor: 8.3 °C [47 °F] DB/6.1 °C [43 °F] WB

*2 The operating noise is the data that was obtained in an anechoic room.

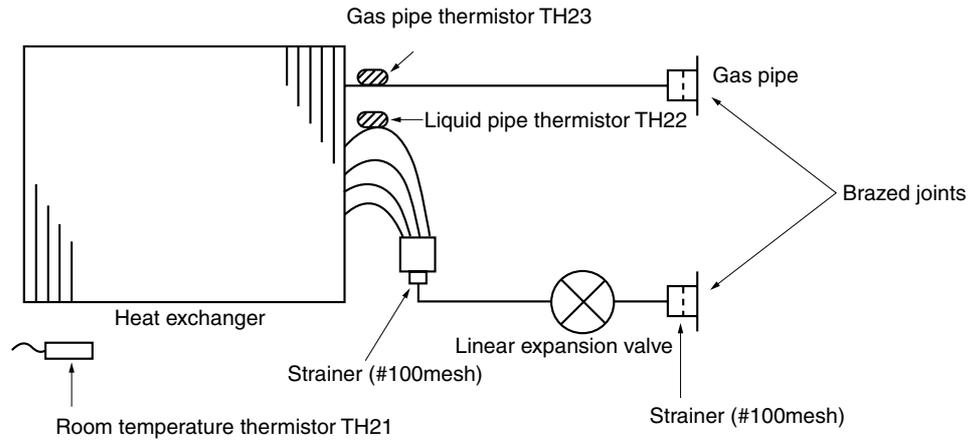


3-2. Electrical parts specifications

Model Parts name	Symbol	PEFY-P06NMLU-E	PEFY-P08NMLU-E	PEFY-P12NMLU-E
Transformer	T	(Primary) 50/60Hz 220-240V (Secondary) (23.5V 0.9A)		
Room temperature thermistor	TH21	Resistance 0°C[32°F]/15kΩ, 10°C[50°F]/9.6kΩ, 20°C[68°F]/6.3kΩ, 25°C[77°F]/5.4kΩ, 30°C[86°F]/4.3kΩ, 40°C[104°F]/3.0kΩ		
Liquid pipe thermistor	TH22	Resistance 0°C[32°F]/15kΩ, 10°C[50°F]/9.6kΩ, 20°C[68°F]/6.3kΩ, 25°C[77°F]/5.4kΩ, 30°C[86°F]/4.3kΩ, 40°C[104°F]/3.0kΩ		
Gas pipe thermistor	TH23	Resistance 0°C[32°F]/15kΩ, 10°C[50°F]/9.6kΩ, 20°C[68°F]/6.3kΩ, 25°C[77°F]/5.4kΩ, 30°C[86°F]/4.3kΩ, 40°C[104°F]/3.0kΩ		
Fuse (Indoor controller board)	FUSE	250V 6.3A		
Fan motor (with Inner-thermostat)	MF1,2	4-pole Output 23W CRC4417BB		4-pole Output 32W CRC4418BB
Inner-thermostat (Fan motor)		OFF 135°C±5°C[275°F±41°F] ON 95°C±15°C[203°F±59°F]		
Fan motor capacitor	C1	1.7μFX440V		2.5μFX440V
Linear expansion valve	LEV	DC12V Stepping motor drive port dimension ø3.2 (0~1800pulse <at R410A outdoor unit>, 0~2000pulse <at the other outdoor unit>)		
Power supply terminal bed	TB2	(L1,L2,G) 330V 30A		
Transmission terminal bed	TB5 TB15	(1,2),(M1,M2,S) 300V 10A		

6

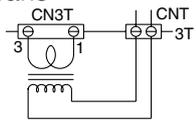
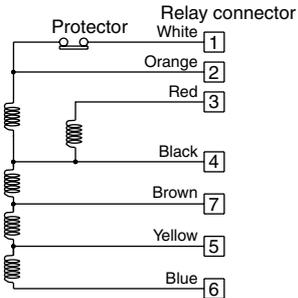
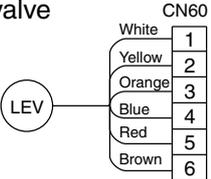
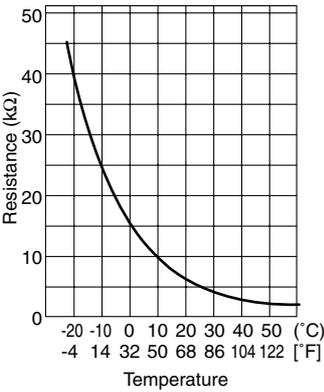
REFRIGERANT SYSTEM DIAGRAM



mm <in.>

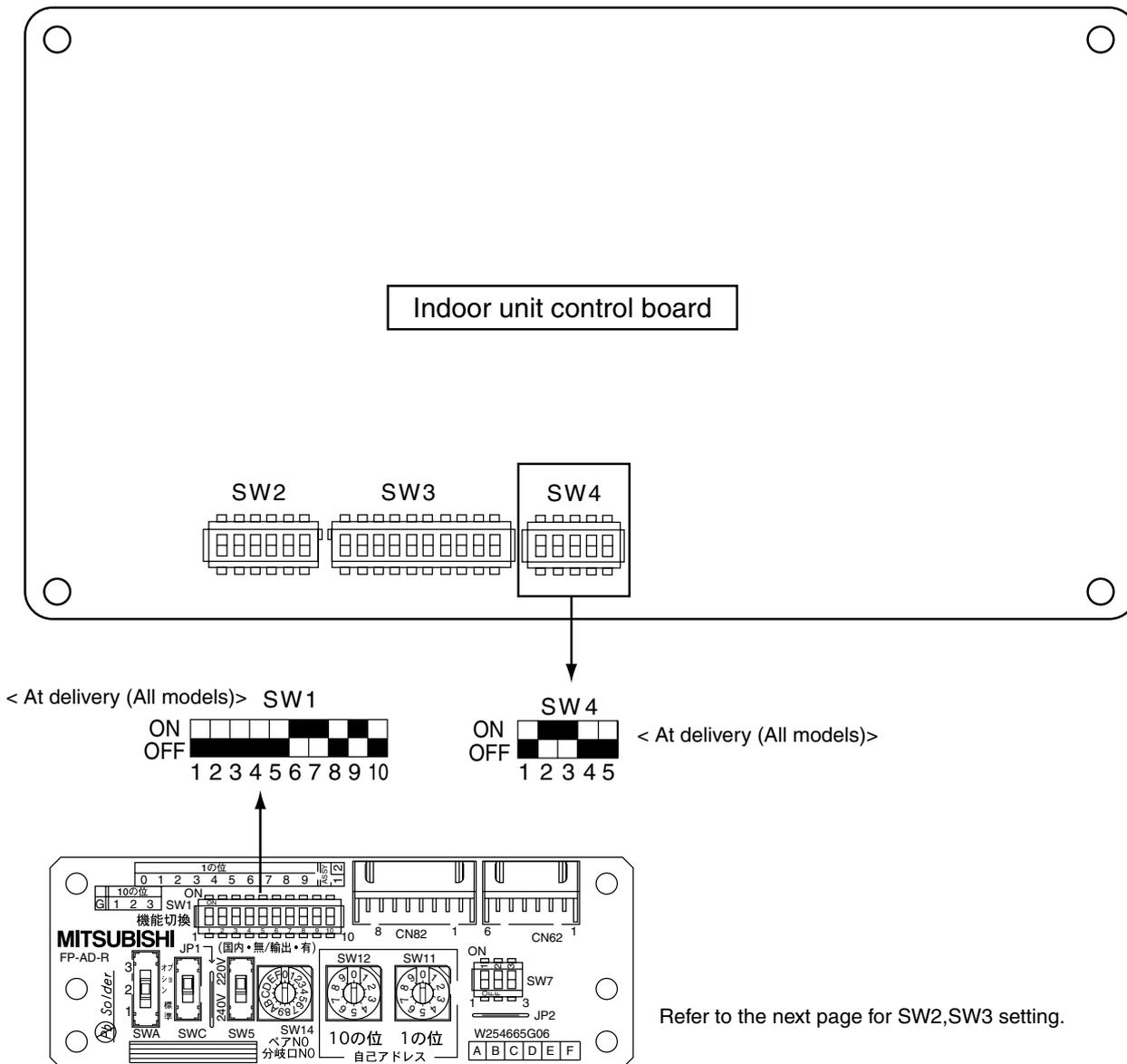
Item	Capacity	PEFY-P06-08-12NMLU-E
Gas pipe		ø12.7<1/2>
Liquid pipe		ø6.35<1/4>

7-1. How to check the parts

Parts name	Check points																				
Room temperature thermistor (TH21) Liquid pipe thermistor (TH22) Gas pipe thermistor (TH23)	Disconnect the connector, then measure the resistance using a tester. (Surrounding temperature 10°C~30°C[50°F~86°F]) <table border="1" data-bbox="379 398 887 474"> <thead> <tr> <th>Normal</th> <th>Abnormal</th> </tr> </thead> <tbody> <tr> <td>4.3kΩ~9.6kΩ</td> <td>Open or short</td> </tr> </tbody> </table> (Refer to the thermistor characteristic graph)		Normal	Abnormal	4.3kΩ~9.6kΩ	Open or short															
Normal	Abnormal																				
4.3kΩ~9.6kΩ	Open or short																				
Trans 	Disconnect the connector and measure the resistance using a tester. <table border="1" data-bbox="379 533 1099 645"> <thead> <tr> <th></th> <th>Normal</th> <th>Abnormal</th> </tr> </thead> <tbody> <tr> <td>CNT(1)-(3)</td> <td>App.15Ω</td> <td rowspan="2">Open or short</td> </tr> <tr> <td>CN3T(1)-(3)</td> <td>App.4Ω</td> </tr> </tbody> </table>			Normal	Abnormal	CNT(1)-(3)	App.15Ω	Open or short	CN3T(1)-(3)	App.4Ω											
	Normal	Abnormal																			
CNT(1)-(3)	App.15Ω	Open or short																			
CN3T(1)-(3)	App.4Ω																				
Fan motor PEFY-P06-08-12 	Measure the resistance between the terminals using a tester. (at 20°C[68°F]) <table border="1" data-bbox="547 705 1460 898"> <thead> <tr> <th rowspan="2">Motor terminal or Relay connector</th> <th colspan="2">Normal</th> <th rowspan="2">Abnormal</th> </tr> <tr> <th>P06-08</th> <th>P12</th> </tr> </thead> <tbody> <tr> <td>White-Black</td> <td>261 Ω</td> <td>232 Ω</td> <td rowspan="5">Open or short</td> </tr> <tr> <td>White-Brown</td> <td>294 Ω</td> <td>259 Ω</td> </tr> <tr> <td>White-Yellow</td> <td>389 Ω</td> <td>450 Ω</td> </tr> <tr> <td>White-Blue</td> <td>475 Ω</td> <td>536 Ω</td> </tr> </tbody> </table>		Motor terminal or Relay connector	Normal		Abnormal	P06-08	P12	White-Black	261 Ω	232 Ω	Open or short	White-Brown	294 Ω	259 Ω	White-Yellow	389 Ω	450 Ω	White-Blue	475 Ω	536 Ω
Motor terminal or Relay connector	Normal			Abnormal																	
	P06-08	P12																			
White-Black	261 Ω	232 Ω	Open or short																		
White-Brown	294 Ω	259 Ω																			
White-Yellow	389 Ω	450 Ω																			
White-Blue	475 Ω	536 Ω																			
Linear expansion valve 	Disconnect the connector then measure the resistance valve using a tester. <table border="1" data-bbox="379 1070 1230 1227"> <thead> <tr> <th colspan="4">Normal</th> <th>Abnormal</th> </tr> </thead> <tbody> <tr> <td>(1)-(5) White-Red</td> <td>(2)-(6) Yellow-Brown</td> <td>(3)-(5) Orange-Red</td> <td>(4)-(6) Blue-Brown</td> <td rowspan="2">Open or short</td> </tr> <tr> <td colspan="4">150Ω ±10%</td> </tr> </tbody> </table>			Normal				Abnormal	(1)-(5) White-Red	(2)-(6) Yellow-Brown	(3)-(5) Orange-Red	(4)-(6) Blue-Brown	Open or short	150Ω ±10%							
Normal				Abnormal																	
(1)-(5) White-Red	(2)-(6) Yellow-Brown	(3)-(5) Orange-Red	(4)-(6) Blue-Brown	Open or short																	
150Ω ±10%																					
<p><Thermistor characteristic graph> Room temperature thermistor(TH21) Liquid pipe thermistor(TH22) Gas pipe temperature thermistor(TH23) Drain sensor(DS)</p> <p>Thermistor R₀=15kΩ ± 3% Fixed number of B=3480kΩ ± 2% $R_t = 15 \exp \left\{ 3480 \left(\frac{1}{273+t} - \frac{1}{273} \right) \right\}$</p> <table border="1" data-bbox="395 1503 730 1659"> <tbody> <tr> <td>0°C</td> <td>32°F</td> <td>15kΩ</td> </tr> <tr> <td>10°C</td> <td>50°F</td> <td>9.6kΩ</td> </tr> <tr> <td>20°C</td> <td>68°F</td> <td>6.3kΩ</td> </tr> <tr> <td>25°C</td> <td>77°F</td> <td>5.2kΩ</td> </tr> <tr> <td>30°C</td> <td>86°F</td> <td>4.3kΩ</td> </tr> <tr> <td>40°C</td> <td>104°F</td> <td>3.0kΩ</td> </tr> </tbody> </table> 			0°C	32°F	15kΩ	10°C	50°F	9.6kΩ	20°C	68°F	6.3kΩ	25°C	77°F	5.2kΩ	30°C	86°F	4.3kΩ	40°C	104°F	3.0kΩ	
0°C	32°F	15kΩ																			
10°C	50°F	9.6kΩ																			
20°C	68°F	6.3kΩ																			
25°C	77°F	5.2kΩ																			
30°C	86°F	4.3kΩ																			
40°C	104°F	3.0kΩ																			

7-2. Setting of address switch

Make sure that power source is turning off.



1) In case using M-NET remote controller, address is set by rotary switches.(SW11,SW12)

* It is not necessary setting address in case of using unit remote controller.

Indoor unit do not run without address setting in field.

2) Indoor unit address setting rule is different by each field work.

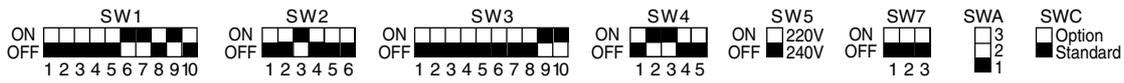
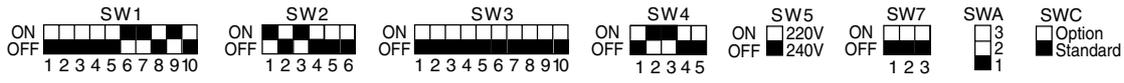
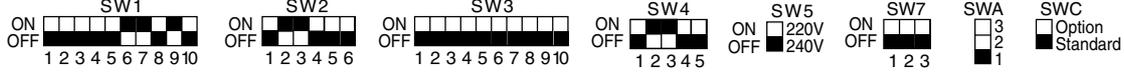
Refer to install manual of outdoor unit , operate the address setting.

3) Setting the address is combination of SW11(1st digit address setting) and SW12(2nd digit address setting).

Address " 3 " setting is composed SW11 " 3 " and SW12 " 0 " .

Address " 25 " setting is composed SW11 " 5 " and SW12 " 2 " .

7-3. Setting of Dip-switch (at delivery)

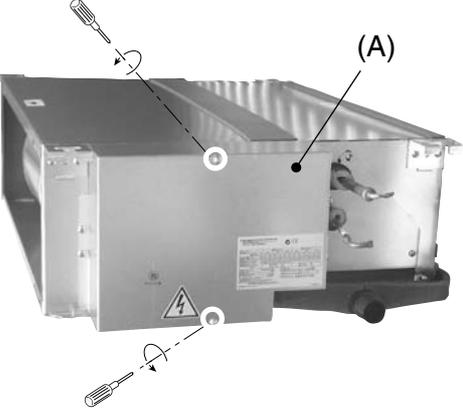
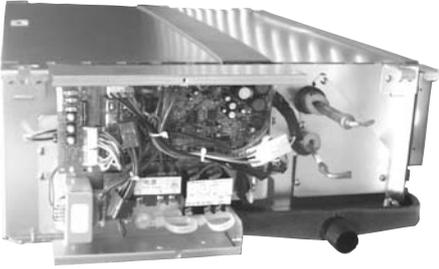
Models	Dip-SW
PEFY-P06NMLU-E	
PEFY-P08NMLU-E	
PEFY-P12NMLU-E	

7-4. Function the LED of the indoor unit service board

Symbol	LED operation under normal state
LED1	At applying main power source → Lighting
LED2	At receiving MA transmission power source → Lighting

8-1. CONTROL BOX

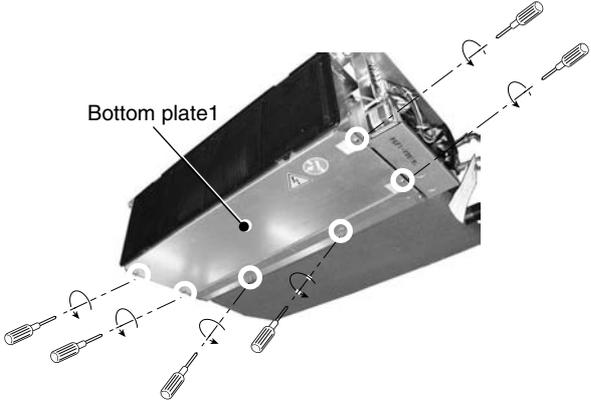
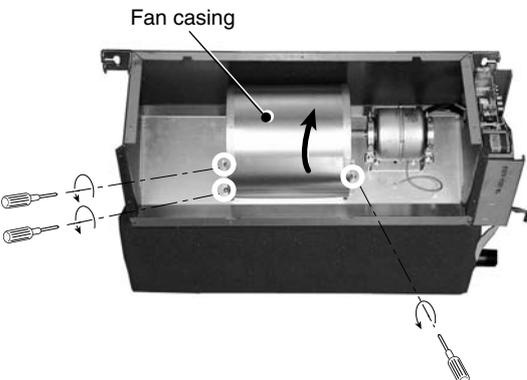
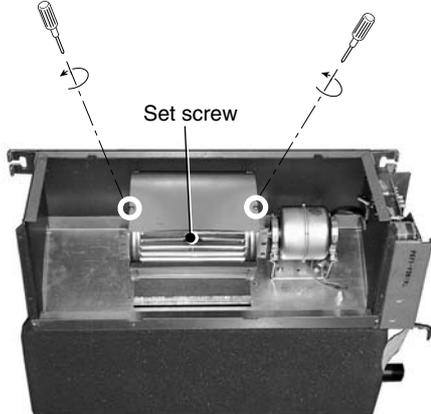
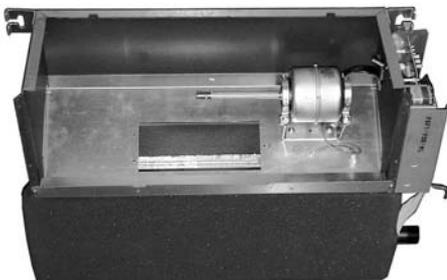
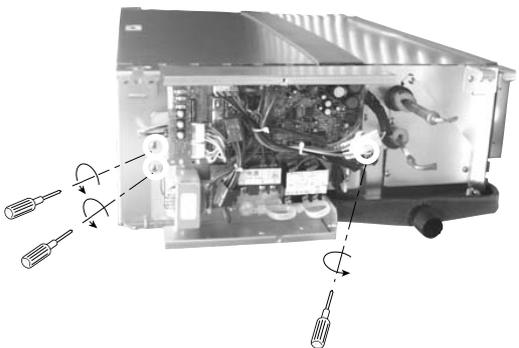
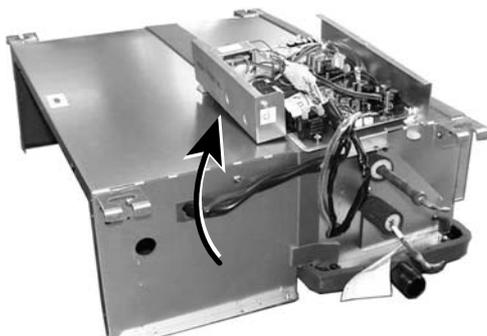
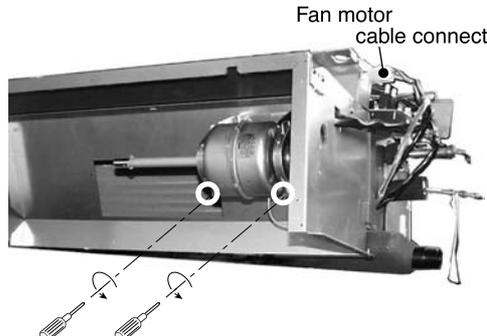
Be careful on removing heavy parts.

OPERATING PROCEDURE	PHOTOS
<p>1.Removing the control box cover</p> <p>(1) Remove the fixing screws (two) of the control box (A), and remove the cover. (Fig. 1)</p> <p>*At this stage, the following servicing is possible.</p> <p>1 Operation and check of the switches (listed below) which are on the control board.</p> <ul style="list-style-type: none"> • Dip switch SW2 Capacity code setting • Dip switch SW3 Function change • Dip switch SW4 Model code setting <p>2 Operation and check of the switches (listed below) which are on the address board.</p> <ul style="list-style-type: none"> • Rotary switches SW11, 12 Address setting • Rotary switch SW14 Branch port setting • Dip switch SW1 Function change (main) <p>3 Connection check of the lead wires (listed below) which are connected to the controller board.</p> <ul style="list-style-type: none"> • Power supply lead wire. • Network remote controller transmission lead wire. • Fan motor lead wire. • LEV lead wire • Intake air sensor lead wire • Liquid piping sensor lead wire • Gas piping sensor lead wire • Power supply transformer lead wire • Address board lead wire <p>4 Control board exchange</p> <p>5 Address board exchange</p> <p>6 Condenser exchange</p> <p>7 Power supply transformer exchange</p> <p>8 Arrest exchange</p> <p>9 Intake air sensor exchange</p> <p>10 Power supply terminal bed exchange</p> <p>11 Transmission terminal bed exchange</p>	<p>fig.1</p>  <p>fig.2</p> 



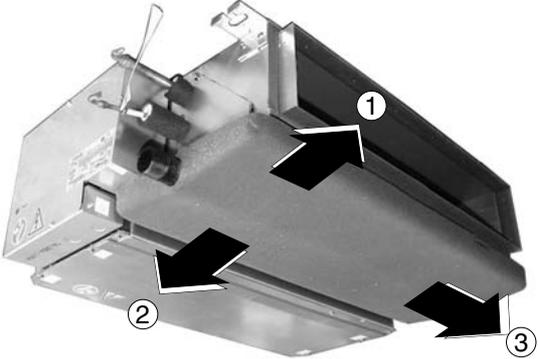
8-2. FAN and FAN MOTOR

Be careful on removing heavy parts.

OPERATING PROCEDURE	PHOTOS
<p>1.Removing the fan casing and sirocco fan.</p> <p>(1) Remove the bottom plate 1. (fixing screws : six) (Fig. 3)</p> <p>(2) Remove the fixing screws (three) of the fan casing, and turn it in direction of arrow. (Fig. 4)</p> <p>(3) Remove the fixing screws (two) of the fan casing, and loosen the set screw of the sirocco fan, and remove the fan casing and sirocco fan. (Fig. 5)</p> <p>2.Removing the fan motor.</p> <p>(1) Remove the control box. (fixing screws : three) (Fig. 7)</p> <p>(2) Move the control box to place that is not block operation. (Fig. 8)</p> <p>(3) Remove the fan motor cable connector in the control box, and remove the screws of the motor support. (Fig. 9)</p>	<p>fig.3</p>  <p>Bottom plate 1</p>
<p>fig.4</p>  <p>Fan casing</p>	<p>fig.5</p>  <p>Set screw</p>
<p>fig.6</p> 	<p>fig.7</p> 
<p>fig.8</p> 	<p>fig.9</p>  <p>Fan motor cable connector</p>

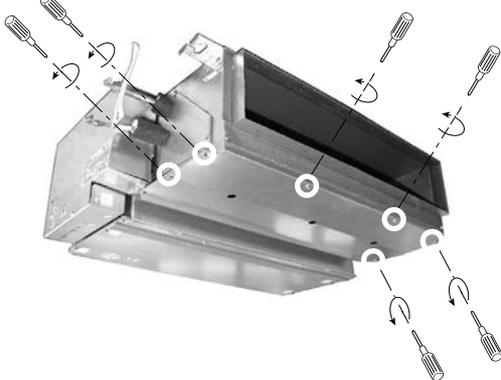
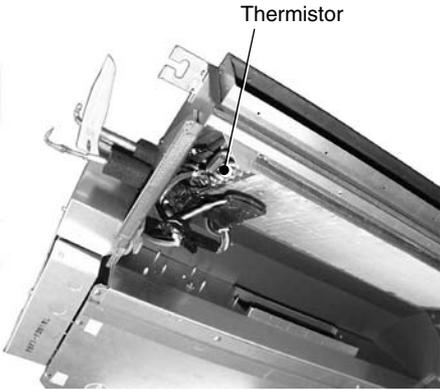
Be careful on removing heavy parts.

8-3. DRAINPAN

OPERATING PROCEDURE	PHOTOS
<p>1.Removing the drainpan.</p> <p>(1) Remove the fixing screw (one) of the drainpan.(Fig. 10).</p> <p>(2) Slide the drainpan in the order of arrow ①,②,③, and remove the drainpan. (Fig. 11)</p>	<p>fig.10</p>  <p>fig.11</p> 

8-4. LEV, THERMISTOR (Liquid/Gas piping temperature detection)

Be careful on removing heavy parts.

OPERATING PROCEDURE	PHOTOS
<p>1. Removing the LEV.</p> <ol style="list-style-type: none">(1) Remove the drainpan with procedure 8-3.(2) Remove the bottom plate 2 (fixing screws : six), and remove the plate. (Fig. 12)(3) Remove the LEV driving motor with a double spanner. (Fig. 13) <p>2. Removing the thermistors.</p> <ol style="list-style-type: none">(1) Remove the thermistors from the thermistor holders which are installed on the piping. (Fig. 14) (liquid piping : fine piping , gas piping : thick piping)	<p>fig.12</p>  <p>fig.13</p>  <p>fig.14</p> 

8-5. HEAT EXCHANGER

Be careful on removing heavy parts.

OPERATING PROCEDURE

1.Removing the heat exchanger.

- (1) Remove the drainpan with procedure 8-3.
- (2) Remove the bottom plate2 with procedure 8-4.
- (3) Remove the heat exchanger cover.(fixing screws : four)
(Fig. 15)
- (4) Remove the heat exchanger.(fixing screws : three)
(Fig. 16),(Fig. 17)

PHOTOS

fig.15

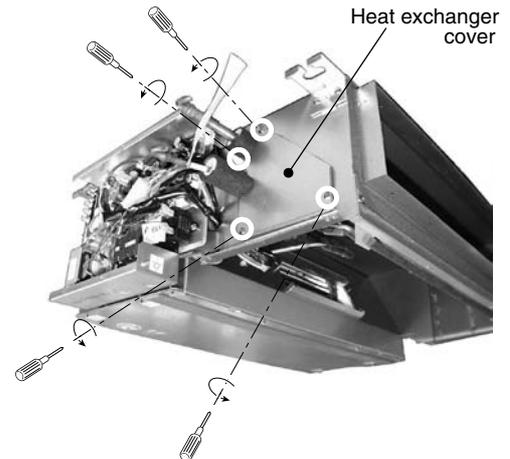


fig16

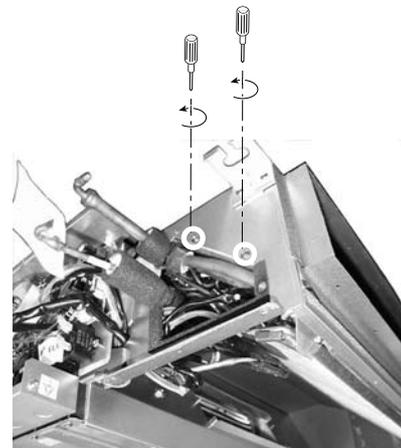
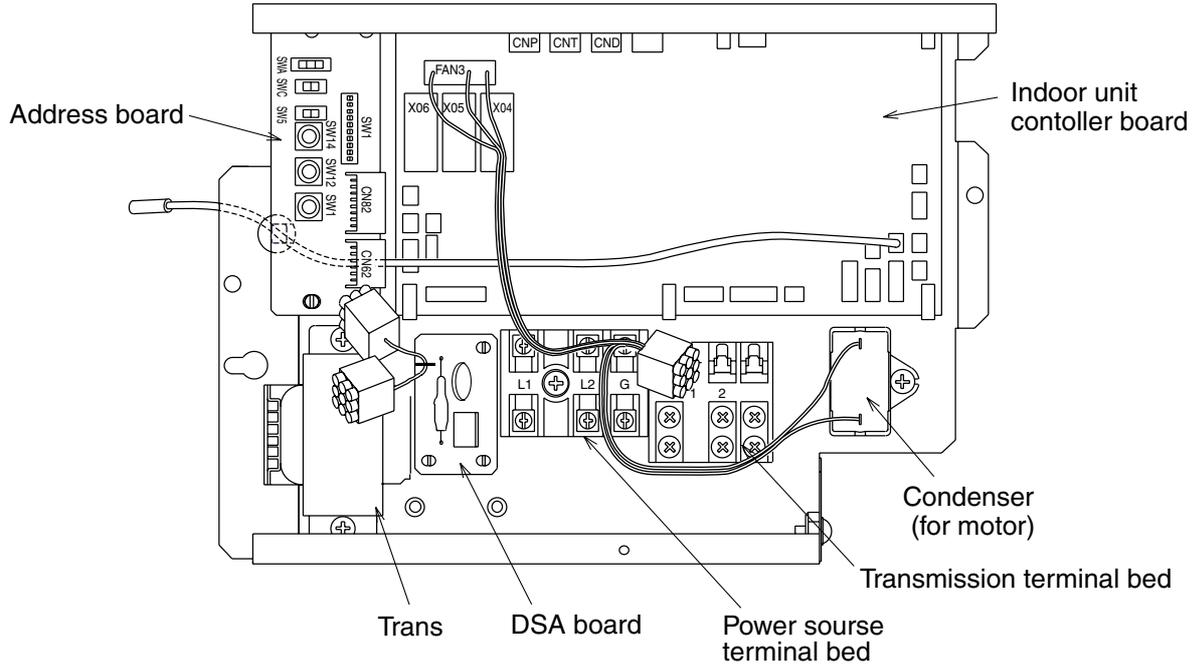


fig.17

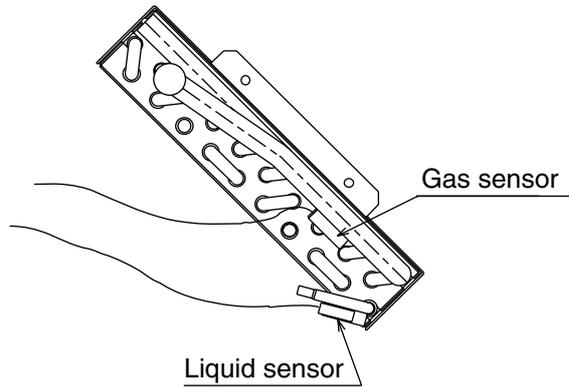




8-6. CONTROL BOX INSIDE LAYOUT



8-7. SENSOR POSITION





HEAD OFFICE: MITSUBISHI DENKI BLDG., 2-2-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN

SERVICE PARTS LIST FOR MITSUBISHI ELECTRIC PACKAGED AIR-CONDITIONERS

Series **PEFY-P·NMLU-E**

For use with the R410A

REVISED

June 2009

BWE0511A

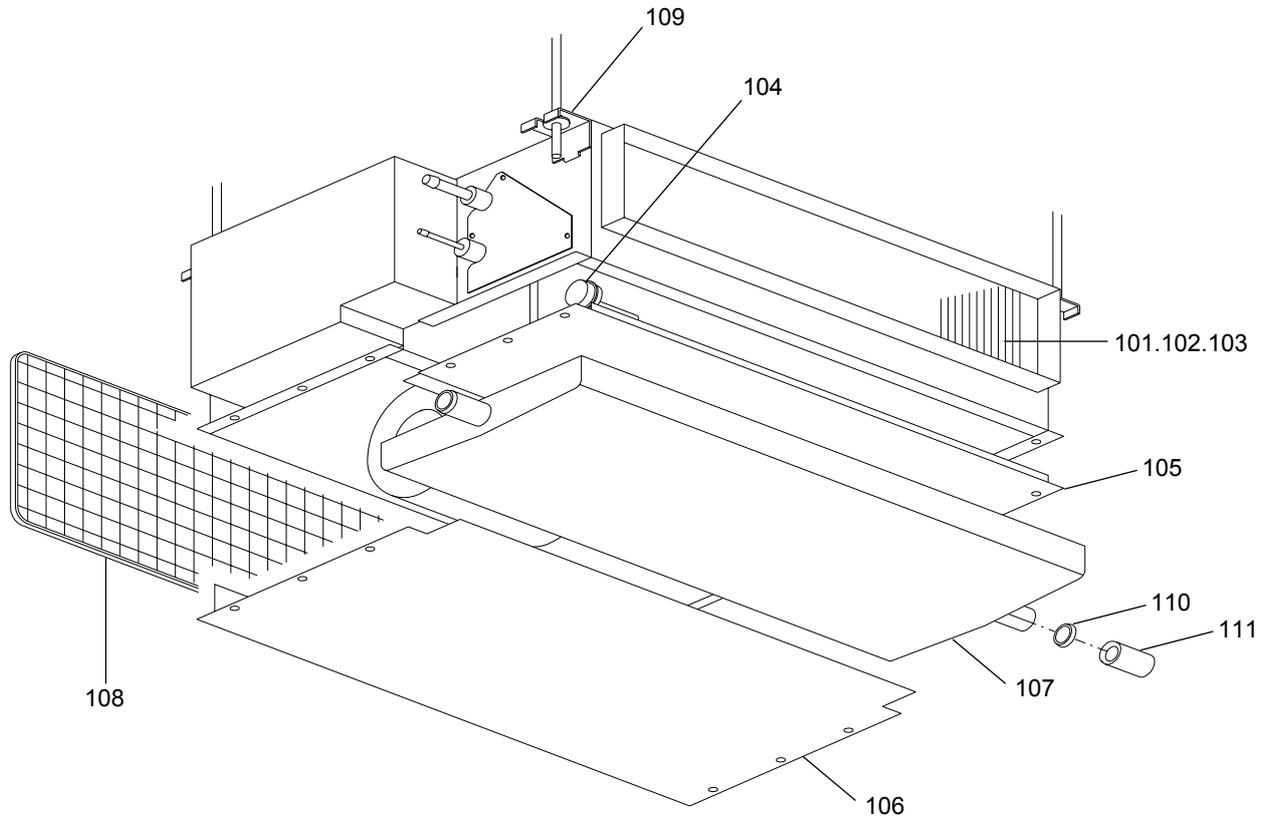
INDEX

PEFY-P06NMLU-E

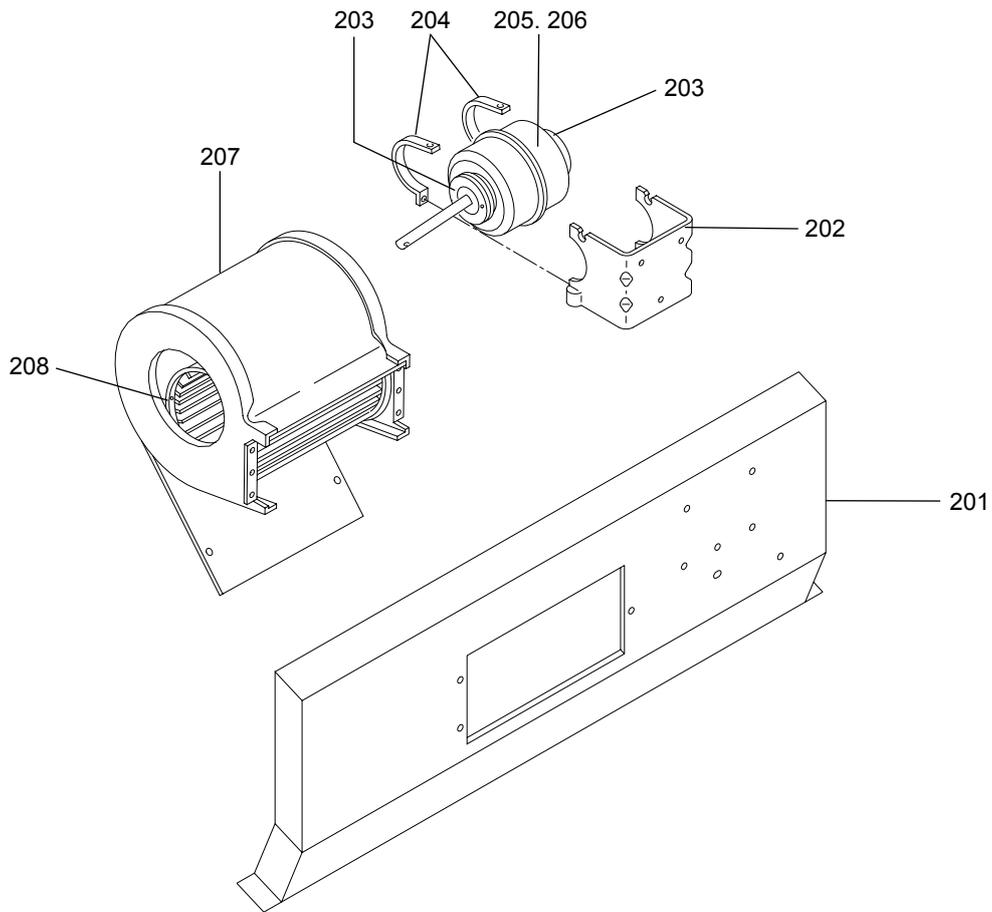
PEFY-P08NMLU-E

PEFY-P12NMLU-E

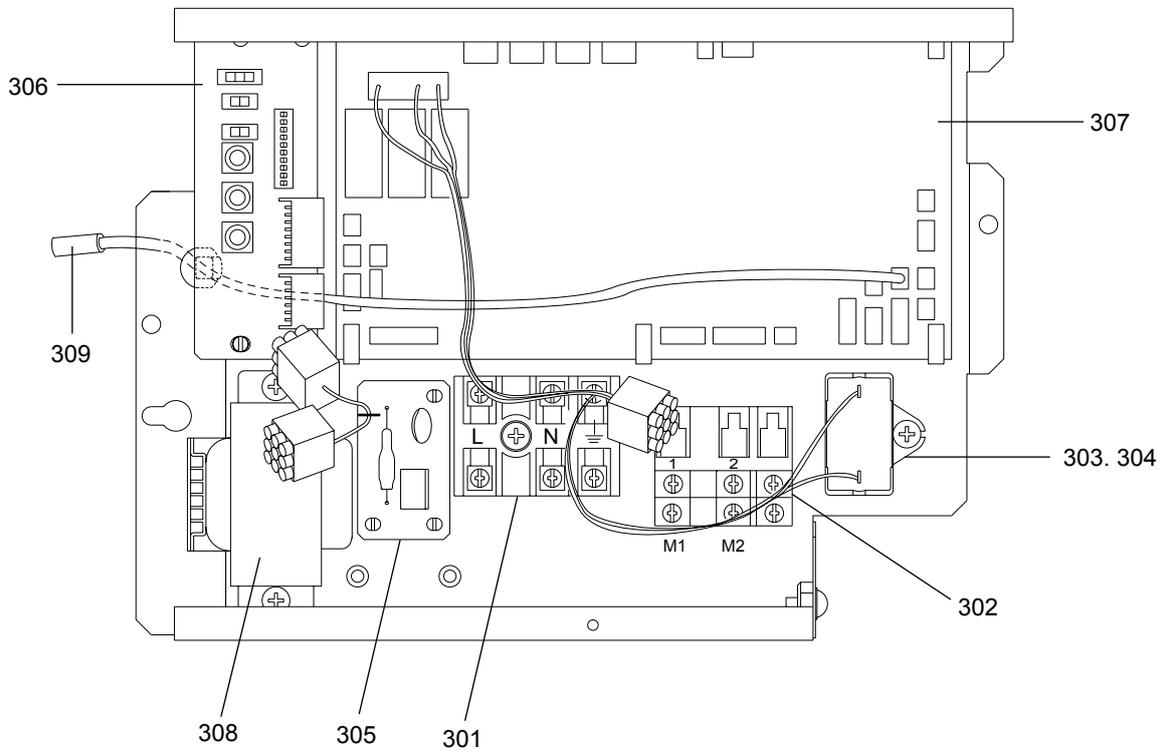




No.	Part No.	G : RoHS Apply Only W : RoHS Apply by Running Change		Spec.	PEFY-P06NMLU-E	PEFY-P08NMLU-E	PEFY-P12NMLU-E			Dwg. No.	Price	Revision History
			Part Name									
101	R61 Y26 483	W	Heat exchanger assy		1	1	1			W265695G25		A
102	R63 902 936	G	Thermistor(gas)	NTH3A23-4<TH23>	1	1	1			P425491X01		A
103	R63 901 936	G	Thermistor(liquid)	NTH3A08-5<TH22>	1	1	1			P425484X01		A
104	R63 S38 401	G	Linear expansion valve	EDM4 XH<LEV>	1	1	1			P632407X02		A
105	R63 Y13 661	G	Bottom plate A		1	1	1			W635907G02		A
106	R63 Y14 661	G	Bottom plate B		1	1	1			W877415G02		A
107	R61 Y30 529	W	Drain pan		1	1	1			W877416G06		A
108	R63 Y06 501	G	Filter		1	1	1			W634781H01		A
109	R63 151 326	G	Hanging metal fittings L		4	4	4			W398770H02		A
110	R61 Y01 601	W	Insulated pipe		1	1	1			W469349H04		
111	R61 E96 558	G	Rubber stopper		1	1	1			P312040X01		



No.	Part No.	G : RoHS Apply Only W : RoHS Apply by Running Change		Spec.	PEFY-P06NMLU-E	PEFY-P08NMLU-E	PEFY-P12NMLU-E				Dwg. No.	Price	Revision History
			Part Name										
201	R63 Y14 140	G	Fan base		1	1	1				W267214G01		A
202	R63 370 130	G	Motor supprt		1	1	1				W234925H06		A
203	R61 220 044	G	Rubber bush		2	2	2				W837244H01		A
204	R63 652 131	G	Fixing plate		2	2	2				W353715H01		A
205	R61 004 221	G	Motor		1	1					P780084X01		A
206	R63 005 221	G	Motor				1				P780085X01		A
207	R63 839 675	G	Fan cover		1	1	1				W234951G01		A
208	R63 045 103	G	Sirocco fan assy		1	1	1				W234904G01		A



No.	Part No.	G : RoHS Apply Only W : RoHS Apply by Running Change		Spec.	PEFY-P06NMLU-E	PEFY-P08NMLU-E	PEFY-P12NMLU-E			Dwg. No.	Price	Revision History
			Part Name									
301	R63 Y08 715	G	Terminal bed	<TB2>	1	1	1			P436239X01		A
302	R63 336 246	G	Terminal bed	<TB5>,<TB15>	1	1	1			P436114X03		A
303	R61 Y34 252	W	Capacitor 1.7μF	<C>	1	1				P412302X01		
304	R61 Y27 252	W	Capacitor 2.5μF	<C>			1			P412298X01		
305	R63 Y22 280	G	Board assy FP-DSA		1	1	1			W849072G13		A
306	R63 Y37 281	G	Board assy AD	<A,B>	1	1	1			W849036G09		A
307	R61 Y72 281	G	Board assy RY	<I,B>	1	1	1			W849072G12		
308	R61 Y22 260	W	Transformer		1	1	1			P715353X01		
309	R63 373 202	G	Thermistor(inlet)	<TH21>	1	1	1			P418059X01		A

