



TECHNICAL & SERVICE MANUAL



<Indoor unit>

Models PLFY-P06NLMU-E **PLFY-P08NLMU-E** PLFY-P12NLMU-E PLFY-P15NLMU-E PLFY-P18NLMU-E



INDOOR UNIT

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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

A Warning:

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

A Caution:

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

Symbols used in the illustrations

 \bigcirc : 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.

A 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



88H ----- Electromagnetic contactor

2. Precautions for devices that use R410A refrigerant

A 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 deteriorated.
- 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.

FEATURES

1

Series PLFY Ceiling Cassettes



Indoor unit

Madala	Cooling capacity/Heating capacity			
Models	kW	BTU / h		
PLFY-P06NLMU-E	1.8 / 2.0	6000 / 6700		
PLFY-P08NLMU-E	2.3 / 2.6	8000 / 9000		
PLFY-P12NLMU-E	3.5 / 4.0	12000 / 13500		
PLFY-P15NLMU-E	4.4 / 5.0	15000 / 17000		
PLFY-P18NLMU-E	5.3 / 5.9	18000 / 20000		

2

PART NAMES AND FUNCTIONS

Indoor (Main) Unit



Remote controller

[PAR-21MAA]

[Operation buttons]



• 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.

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

[Display]



3-1. Specification

PLFY-P-NMLU-E

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Item Model				PLFY-P06NLMU-E	PLFY-P08NLMU-E	PLFY-P12NLMU-E	PLFY-P15NLMU-E	PLFY-P18NLMU-E	
Power sourse					208/230V, 60Hz				
	Cooling	k٧	V	1.8	2.3	3.5	4.4	5.3	
Capacity	Cooling	BTL	J/h	6000	8000	12000	15000	18000	
*1	Heating	k٧	V	2.0	2.6	4.0	5.0	5.9	
	Healing	BTI	J/h	6700	9000	13500	17000	20000	
	Height	mi	n			290 (20)			
	Height	ir	I			11-7/16 (13/16)			
Dimension	Width	mm		776 (1080)				946 (1250)	
*4	WIGHT	in		30-9/16 (42-17/32)				37-1/4 (49-7/32)	
	Donth	mm		634 (710)					
	Deptil	in		24-31/32 (27-31/32)					
Net weight		kg		23 (6.5)	24 (6.5)	27 (7.5)	
Net weight		lt)	51 (15)		53 (15)		60 (17)	
	Airflow rate		m³/min	6.5-8.0-9.5	6.5-8.0-9.5	6.5-8.0-9.5	7.0-8.5-10.5	9.0-11.0-12.5	
FAN	(Low-Middle-High)	High) cfm		230-282-335	230-282-335	230-282-335	247-300-371	318-388-441	
	External static	Po	208V	-	-	-	-	-	
	pressure	ιa	230V	-	-	-	-	-	
Noise level		$dB(\Lambda)$	208V	27-30-33	27-30-33	27-30-33	29-33-36	31-34-37	
(Low-Middle-H	igh) *2	uD(A)	230V	28-31-34	28-31-34	28-31-34	30-34-37	32-35-38	
Filter					Standard filter				

 Image
 Image
 Standard fil

 Notes: *1 Cooling/Heating capacity indicates the maximum value at operation under the following condition.
 Outdoor: 35 °C [95 °F] DB

 Cooling: Indoor: 21.1 °C [70 °F] DB
 Outdoor: 35 °C [95 °F] DB/6.1 °C [43 °F] WB

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

 *4 The figure in () indicates Panel's.

3-2. Electrical parts specifications

Model Parts name	Symbol	PLFY-P06NLMU-E	PLFY-P08NLMU-E	PLFY-P12NLMU-E	PLFY-P15NLMU-E	PLFY-P18NLMU-E		
Tranrsformer	т	(Primary	r) 220-240V 50Hz, 2	20-230V 60Hz (Secc	ondry) 23.2V 1.1A			
Room temperature thermistor	TH21	Resistance	Ͻ°C[32°F]/15kΩ, 10° 30°C[86°	C[50°F]/9.6kΩ, 20°C F]/4.3kΩ, 40°C[104°	[68°F]/6.3kΩ,25°C[7 F]/3.0kΩ	7°F]/5.4kΩ,		
Liquid pipe thermistor	TH22	Resistance	0°C[32°F]/15kΩ, 10° 30°C[86°	C[50°F]/9.6kΩ, 20°C F]/4.3kΩ, 40°C[104°	[68°F]/6.3kΩ,25°C[7 F]/3.0kΩ	7°F]/5.4kΩ,		
Gas pipe thermistor	TH23	Resistance	0°C[32°F]/15kΩ, 10° 30°C[86°	C[50°F]/9.6kΩ, 20°C F]/4.3kΩ, 40°C[104°	[68°F]/6.3kΩ,25°C[7 F]/3.0kΩ	7°F]/5.4kΩ,		
Fuse (Indoor controller board)	F901			250V 6.3A				
Fan motor (with Inner- thermostat)	MF1		6-pole OUTPUT 15W UEM6Q-11SA3P 0UTPUT 20W UEM6Q-21SA3P					
Inner- thermostat (Fan motor)	-		OFF 145±8°C[293±46°F] ON 88±15°C[190±59°F]					
Fan motor capacitor	C1		1.3μF x 440V 1.5μF x 440V 1.7μF x 44					
Vane motor	MV		DC12V Stepping motor					
Drain-up mechanism	DP		INPUT 6.4/5.5W 400cm ³ /min					
Drain sensor	DS	Resistance 0°C[32°F]/6.0kΩ, 10°C[50°F]/3.9kΩ, 20°C[68°F]/2.6kΩ,25°C[77°F]/2.2kΩ, 30°C[86°F]/1.8kΩ, 40°C[104°F]/1.3kΩ						
Linear expansion valve	LEV	DC12V Stepping motor drive port dimension Ø 3.2 (0~2000pulse) $\begin{pmatrix} 0 \sim 1800 \text{pulse} < \text{at R410A outdoor unit>} \\ 0 \sim 2000 \text{pulse} < \text{at the other outdoor unit>} \end{pmatrix}$						
Power supply terminal bed	TB2		(L1,L2,G) 330V 30A					
Transmission terminal bed	TB5 TB15	(M1,M2,S),(1,2) 300V 10A						

OUTLINES AND DIMENSIONS

PLFY-P06-08-12-15-18NLMU-E

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Unit :mm(in.)



PLFY-P06-08-12-15-18NLMU-E with OA duct flange

Unit :mm(in.)



PLFY-P06-08-12-15-18NLMU-E

5



10



mm <in.>

Capacity Item		PLFY-P06,08,12,15NLMU-E	PLFY-P18NLMU-E	
Gas pipe	R410A	ø 12.7 (1/2)		
	R22	ø 12.7 (1/2)	Ø 15.88 (5/8)	
Liquid pipe	R410A	Ø 6.35 (1/4)		
	R22	Ø 6.35 (1/4)	ø 9.52 (3/8)	

6

TROUBLE SHOOTING

7-1. Simple check of main components

Parts name	Check points					
Room temperature thermistor (TH21)	Disconnect the (Surrounding te	connector, th mperature 10	nen measure the i 0°C to 30°C[50°F	resistance using a te to 86°F])	ester.	
Liquid pipe thermistor	Normal	ormal Abnormal				
(1H22) Gas pipe thermistor	4.3kΩ~9.6kΩ	Oper	n or short	(Refer to the	e thermistor)	
(TH23)					,	
Power transformer	Disconnect the c	onnector and	measure the resis	tance using a tester. (S	Surrounding tempe	erature: 25°C[77°F])
CN3T CNT		No	rmal	Abnormal		
10 00 3T 3	CNT(1)~(3)	App.112.5Ω	(Model:06~18)	Open or sho	ort	
	CN3T(1)~(3)	Αρρ.1.2Ω	(Model:06~18)			
	Measure the resis	tance between	the terminals using	a tester. (Surrounding to	emperature: 20°C t	o 30°C[68°F to 86°F])
			Normal	Abnormal		
Vane motor		1-2 1-3				
	Model:06~18	1-4	App.300Ω	Open or sho	ort	
		1-5				
Fan motor	Measure the res	sistance betv	veen the terminal	s using a tester (Sur	rounding temper	ature: 20°C[68°E])
Protector Relay connector			06 to 15	18		
Black 1	(1)-(2) Whit	te-Black	517.6Ω	369.6Ω		
Blue 3	(1)-(3) Whit	te-Blue	420.6Ω	310.1Ω		
Red 4	(1)-(4) Whi	te-Red	352.2Ω	268.9Ω		
Orange 5	(1)-(5) VVNI	te-Orange	<u>304Ω</u>	229Ω 4210		
Yellow 7	(1)-(9) VVIII		54752	43112		
9						
Linear expansion	Disconnect the	connector th	en measure the r	esistance valve using	g a tester.	
valve CN60	(Surrounding te	mperature: 2	0°C[68°F])			-
Yellow 2			Normal		Abnormal	
LEV Blue 3	(1)-(5)	(2)-(6) (3)-(5)	(4)-(6)	Open or	
Red 5	White-neu	Tellow-Did	150Ω +10%		short	
Brown 6						
Drain-pump	Measure the resis	tance betweer	the terminals using	a tester.(Surrounding te	emperature: 20°C t	o 30°C[68°F to 86°F])
Red 1	Norm	nal	Abno	rmal		
Red 3	572 Ω (Mode	el:06~18)	Open o	r short		
Drain sensor	Measure the res	sistance betv	veen the terminal	s using a tester.		
	0	°C[32°F]/6.0kg	Ω,10°C[50°F]/3.9kΩ			
	20)°C[68°F]/2.6k	Ω,25°C[77°F]/2.2kΩ	2		
└ 1 ╙	30°C[86°F]/1.8kΩ,40°C[104°F]/1.3kΩ					



Linear expansion valve

(1) Operation summary of the linear expansion valve.

• Linear expansion valve open/close through stepping motor after receiving the pulse signal from the indoor controller board.

• Valve position can be changed in proportion to the number of pulse signal.

<Connection between the indoor controller board and the linear expasion valve>



<Output pulse signal and the valve operation>

Output	Output					
(Phase)	1	2	3	4		
ø1	ON	OFF	OFF	ON		
ø2	ON	ON	OFF	OFF		
ø3	OFF	ON	ON	OFF		
ø4	OFF	OFF	ON	ON		

② Linear expansion valve operation



Closing a value $: 1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 1$ Opening a value $: 4 \rightarrow 3 \rightarrow 2 \rightarrow 1 \rightarrow 4$

The output pulse shifts in above order.

- * 1. When linear expansion valve operation stops, all output phase become OFF.
- 2. At phase interruption or when phase does not shift in order, motor does not rotate smoothly and motor will locks and vibrates.
- \ast When the switch is turned on, 2200 pulse closing valve signal will be send till it goes to A point in order to define the valve position.

When the valve move smoothly, there is no noise or vibration occurring from the linear expansion valve : however, when the pulse number moves from $\textcircled{}{}$ to $\textcircled{}{}$ or when the valve is locked, more noise can be heard than normal situation.

- * Noise can be detected by placing the ear against the screw driver handle while putting the screw driver to the linear expansion valve.
- *1:1800pulse at R410A outdoor unit. 2000pulse at the other outdoor unit.

Symptom	Check points	Countermeasures
Operation circuit fail- ure of the micro processor.	Disconnect the connector on the controller board, then connect LED for checking. $\bigcirc 6$ $\bigcirc 5$ $\bigcirc 4$ $\bigcirc 0$ $\square 5$ $\bigcirc 4$ $\bigcirc 1$ $1 k\Omega$ LED Pulse signal will be sent out for 10 seconds as soon as the main switch is turn on. If there is LED with lights on or lights off, it means the operation circuit is abnormal.	Exchange the indoor con- troller board at drive circuit failure.
Linear expansion valve mechanism is locked.	Motor will idle and make ticking noise when motor is operated while the linear expansion valve is locked. This ticking sound is the sign of the abnormality.	Exchange the linear expansion vale.
Short or breakage of the motor coil of the linear expansion valve.	Measure the resistance between the each coil (red-white, red-orange, brown-yellow, brown-blue) using a tester. It is normal if the resistance is in the range of $_{150\Omega\pm10\%}$.	Exchange the linear expansion valve.
Valve doesn 't close completely (thermis- tor leaking).	To check the linear expansion valve, operate the indoor unit in fan mode and at the same time operate other indoor units in cooling mode, then check the pipe temperature quid pipe temperature quid pipe temperature quid pipe temperature Thermistor Thermistor CITA21) CLinear expansion valve is closed completely and if there are some leaking, detecting temperature of the thermistor will go lower. If the detected temperature indicated in the remote controller, it means the valve is not closed all the way. It is not necessary to exchange the linear expansion valve, if the leakage is small and not making any trouble. 	If large amount of refriger- ation is leaked, exchange the linear expansion valve.
Wrong connection of the connector or contact failure.	Check the color of lead wire and missing terminal of the con- nector.	Disconnect the connector at the controller board, then check the continuity.

③ Trouble shooting

7-2. FUNCTION OF DIP-SWITCH

Quuitata	Dala	Function	Operation by switch		Demerika	
Switch	Pole	Function		ON	OFF	
	1	Thermistor <intake detection="" temperature="">position</intake>	Built-in r	emote controller	Indoor unit	<at delivery=""></at>
	2	Filter crogging detection	Provideo	b	Not provided	
	3	Filter life	2,500hr		100hr	1 2 3 4 5 6 7 8 9 10
	4	Air intake	Effective)	Not effective	
SW1	5	Remote indication switching	Thermosta	at ON signal indication	Fan output indication	
Selection	6	Humidifier control	Always opera	ted while the heat is ON	Operated depends on the conditio	n
	7	Air flow st	Low		Extra low	
	8	Heat thermostat OFF	Setting a	air flow	Reset to SW1-7	
	9	Auto reset function	Effective)	Not effective	
	10	Power ON/OFF	Effective)	Not effective	
		MODELS	SW2	MODELS	SW2	Set while the unit is off.
SW2		PLFY-P06NLMU-E	FF 1 2 3 4 5 6	PLFY-P15NLMU-E	ON 0FF 1 2 3 4 5 6	<at delivery=""> Set for each capacity.</at>
Capacity code	1~6	PLFY-P08NLMU-E	N FF 1 2 3 4 5 6	PLFY-P18NLMU-E	ON OFF 1 2 3 4 5 6	
Setting		PLFY-P12NLMU-E	N FF 1 2 3 4 5 6			
	1	Heat pump/Cooling only	Cooling	only	Heat pump	Set while the unit is off.
	2	_		_	_	Model 06
	3	Vane	Available	Э	Not available	OFF 00 0FF 00 0F
	4	Vane swing function	Available	е	Not available	Model 12
SW3	5	_		_	_	OFF 1 2 3 4 5 6 7 8 9 10
Selection	6	_		_	_	Model 08~18
	7	_		_	_	OFF 1 2 3 4 5 6 7 8 9 10
	8	Heating 4K up	Not effe	ctive	Effective	
	9	_		_	_	
	10	_		_	_	
	1	_		—	_	Set while the unit is off.
SW4	2	_		—	_	Model 06~18
Selection	3	_		—	_	ON OFF 1 2 3 4 5
	4	_		_	_	
SW8	1	Demand	Not effe	ctive	Effective	Set while the unit is off.
Function	2	_		—	_	Model 06~18
Selection	Selection 3 — — —		—	—	OFF 1 2 3	

Note :The DipSW setting is effective during unit stopping (remote controller OFF) for SW1,2 and 3 commonly and the power souce is not required to reset.

Switch	Pole		Operation by switch	Remarks
SW11 1st digit address setting SW12 2nd degit address setting Note:1	Rotary switch	SW12 SW11 SW12 $\overrightarrow{SW11}$ SW12 $\overrightarrow{SW11}$ SW12 $\overrightarrow{SW11}$ SW11 $\overrightarrow{SW11}$ SW12 $\overrightarrow{SW11}$ $\overrightarrow{SW12}$ SW12	Address setting should be done when network remote controller (PAR-F25MA) is being used.	Address can be set while the unit is stopped. <at delivery=""> SW12 SW11</at>
SW14 Connect ion No. setting Note:1	Rotary switch	SW14	This is the switch to be used when the indoor unit is operated with R2 series outdoor unit as a set.	<at delivery=""> SW14</at>
SW5 Voltage Selection Note:1	2	ON OFF	ON : 208V OFF : 230V If the unit is used at the 208V area, set the switch as ON. If the unit is used at the 230V, set the switch as OFF.	<at delivery=""></at>
SW7	1~4	ON OFF 1 2 3 4		Set while the unit is off. <at delivery=""> OR OFF 1 2 3 4</at>

Note 1 : The DipSW setting is effective during unit stopping (remote controller OFF) for SW11,12,14 and 5.

8-1.SERVICE PANEL and FILTER

8

Be careful removing heavy parts.

OPERATING PROCEDURE	PHOTOS&ILLUSTRATIONS
1. Removing the service panel (A) (Fig.1-1)	(Fig.1-1)
 (1) Slide the service panel (A) in the direction of the arrow ① while lifting it. (depending on the local installation, the slide direction is reverse) (2) After sliding, if it is opened in direction ②, the service panel (A) drops down as shown in Fig.1-2. 	
(3) Remove the service panel (A) from the two pins.(Be care-ful not to allow it to drop).	(A) service panel
2. Removing the filter (Fig.1-2)	© (2)
 (1) Place fingers on the projection near the <u>PUSH</u> mark on the filter, as shown in Fig. A. Remove panel frame with thumb, and press projections with other fingers to remove the hooks. 	(Fig.1-2)
	Fig.A

Be careful removing heavy parts.

8-2.CONTROL BOX



8-3.Fan and fan motor

Be careful removing heavy parts.



8-4. Thermistor <fluid piping temperature detection, gas piping temperature detection>

Be careful removing heavy parts.



Л 87777 A Panel frame ∇ $\langle \neg \rangle$ Control, box Fixing screw Fixing plate B ↓ Fixing plate C Side frame reinforcement plate



Thermistor

8-5.DRAIN PUMP and DRAIN SENSOR

Be careful removing heavy parts.

PHOTOS&ILLUSTRATIONS

1. Remove the service panel and filter with the procedure explained in section 8-1.

OPERATING PROCEDURE

- 2. Remove the decorative panel frame with the procedure explained in section 8-4.
- 3. Remove the bell-mouth with the procedure explained in section 8-3.
- 4. Remove the control box with the procedure explained in section 8-4.
- 5. Remove the drain pan with the procedure explained in section 8-4.
- 6. Remove the binding band on the drain hose connected to the drain pump.
- 7. The drain pump and drain sensor, fixed to the cover, are fixed to the main unit. Remove the two fixing screws and remove. (Photograph 6-1)

(Photo.6-1)



Fixing screw

8-6.LEV and HEAT EXCHANGER

Be careful removing heavy parts.

PHOTOS&ILLUSTRATIONS

1. Remove the service panel and filter with the procedure explained in section 8-1.

OPERATING PROCEDURE

- 2. Remove the decorative panel frame with the procedure explained in section 8-4.
- 3. Remove the bell-mouth with the procedure explained in section 8-3.
- 4. Remove the control box with the procedure explained in section 8-4.
- 5. Remove the drain pan with the procedure explained in section 8-4.
- 6. Remove the LEV drive motor with a double spanner. (Photograph 7-1)
- Remove the fluid piping connection flare, gas piping connection flare, and then lower the unit body to remove the heat exchanger. (Photographs 7-2, 7-3)
 - Remove the two heat exchanger support plates A. (One screw/plate)
 - (2) Remove the heat exchanger support plate B. (Two screws)
 - (3) Remove the piping fixing plate C. (Two screws)
 - (4) Slide the heat exchanger in the direction opposite the piping, and remove it.
 - Note 1: Cover the control box, motor, drain pump and LEV with cloth, etc., to protect them in case water should come in contact when washing the drain pan and heat exchanger.
 - 2: Do not drain the water used to clean the drain pan and heat exchanger with the rain pump. Drain it separately.

<image>





8-7.Vane motor

Be careful removing heavy parts.

OPERATING PROCEDURE	PHOTOS&ILLUSTRATIONS
 Remove the metal cover. (Three screws) (Photograph 8-1) Remove the vane motor cover. The vane motor cover can be removed by pushing it up with fingers. Remove the two motor mounting screws. (Photograph 8-2) 	(Photo.8-1) Vane motor cover Fixing screw Metal cover
	(Photo.8-2)



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