11-1-1. Selecting functions using the wired remote controller <PAR-3xMAA ("x" represents 0 or later)>

<service men<="" th=""><th>u></th><th></th></service>	u>	
Maintenance pas	ssword is required	
① Select "Service"	from the Main menu, and press the \bigodot button.	Main Main menu 3/3 Maintenance
*At the main disp maintenance se	play, the menu button and select "Service" to make the tting.	Initial setting ▶Service
		Main display: ℑ ▼Cursor ▲
② When the Servic word.	e menu is selected, a window will appear asking for the pass-	Service menu
To enter the cur cursor to the digi	rrent maintenance password (4 numerical digits), move the t you want to change with the F1 or F2 button.	Select: V
Set each number	r (0 through 9) with the $\boxed{F3}$ or $\boxed{F4}$ button.	Cursor ▶ - + F1 F2 F3 F4
Then, press the (w button.	
Note: The initial password a password a : If you forg password t	maintenance password is "9999". Change the default as necessary to prevent unauthorized access. Have the available for those who need it. The tyour maintenance password, you can initialize the to the default password "9999" by pressing and holding of F_2 buttons simultaneously for three seconds on the	
maintenand	ce password setting screen.	
③ If the password r	natches, the Service menu will appear.	Service menu 1/2
The type of menu	u that appears depends on the connected indoor units' type.	 ▶ Test run Input maintenance info. Function setting Check Self check Main menu: ▲
Note: Air condition tings. Ther system is c	oning units may need to be stopped to make certain set- e may be some settings that cannot be made when the centrally controlled.	Service menu 2/2 ► Maintenance password Remote controller check
A screen will app	ear that indicates the setting has been saved.	Main menu: Cursor
		Not available.
	Navigating through the screens • To go back to the Service menu	Service menu: 3
	To return to the previous screen	



11-1-2. Selecting functions using the wireless remote controller (Type C)

Functions can be selected with the wireless remote controller. Function selection using wireless remote controller is available only for refrigerant system with wireless function. Refrigerant address cannot be specified by the wireless remote controller.

[Flow of function selection procedure]



① Check the function settings.

② Press the \square button twice continuously. \rightarrow \square button is lit and "00" blinks.

Press the TEMP () button once to set "50". Direct the wireless remote controller toward the receiver of the indoor unit and press the button.

Press the TEMP 🔕 🕑 button to set the unit number. (Press "01" to specify the indoor unit whose unit number is 01.) Direct the wireless remote controller toward the receiver of the indoor unit and press the _____ button.

By setting unit number with the 🛄 button, specified indoor unit starts performing fan operation.

Detect which unit is assigned to which number using this function. If unit number is set to AL, all the indoor units in same refrigerant system start performing fan operation simultaneously.

Notes:

1. If a unit number that cannot be recognized by the unit is entered, 3 beeps of 0.4 seconds will be heard. Reenter the unit number setting.

2. If the signal was not received by the sensor, you will not hear a beep or a "double beep" may be heard. Reenter the unit number setting. ④ Select a mode.

Press the TEMP 🕅 🕑 button to set a mode. Press "24" to turn on the function that raises the set temperature by 4 degrees during heat operation. Direct the wireless remote controller toward the sensor of the indoor unit and press the n button. → The sensor-operation indicator will flash and beeps will be heard to indicate the current setting number.

Current setting number: 1 = 1 beep (1 second)

2 = 2 beeps (1 second each) 3 = 3 beeps (1 second each)

Notes:

1. If a mode number that cannot be recognized by the unit is entered, 3 beeps of 0.4 seconds will be heard. Reenter the mode number. 2. If the signal was not received by the sensor, you will not hear a beep or a "double beep" may be heard. Reenter the mode number.

Select the setting number.

Press the TEMP () button to select the setting number. (02: Not available)

Direct the wireless remote controller toward the receiver of the indoor unit and press the indoo

→ The sensor-operation indicator will flash and beeps will be heard to indicate the setting number.

- Setting number: 1 = 2 beeps (0.4 seconds each)
 - 2 = 2 beeps (0.4 seconds each, repeated twice)
 - 3 = 2 beeps (0.4 seconds each, repeated 3 times)

Notes:

- 1. If a setting number that cannot be recognized by the unit is entered, the setting will turn back to the original setting.
- 2. If the signal was not received by the sensor, you will not hear a beep or a "double beep" may be heard. Reenter the setting number. 6 Repeat steps 4 and 5 to make an additional setting without changing unit number.
- ⑦ Repeat steps ③ to ⑤ to change unit number and make function settings on it.
- ⑧ Complete the function settings

Press () button.

Do not use the wireless remote controller for 30 seconds after completing the function setting.

11-1-3. Selecting functions using the wireless remote controller <PAR-SL100A-E>



Fig. 11-1



Fig. 11-2



Fig. 11-3



Fig. 11-4

- ① Going to the function select mode Press the MENU button between of 5 seconds. (Start this operation from the status of remote controller display turned off.) [CHECK] is lighted and "00" blinks. (Fig. 11-1) Press the 🚺 button to set the "50" Direct the wireless remote controller toward the receiver of the indoor unit and press the SET button. ② Setting the unit number Press the i button to set unit number A. (Fig. 11-2) Direct the wireless remote controller toward the receiver of the indoor unit and press the SET button.
- ③ Select a mode

Press the induction to set Mode number B. (Fig. 11-3) Direct the wireless remote controller toward the receiver of the indoor unit and press the SET button. Current setting number: 1=1 beep (1 second)

2=2 beep (1 second each) 3=3 beep (1 second each)

④ Selecting the setting number

Use the button to change the Setting number C. (Fig. 11-4) Direct the wireless remote controller toward the receiver of the indoor unit and press the SET button.

- To select multiple functions continuously (5)
- Repeat select 3 and 4 to change multiple function settings continuously. 6) Complete function selection

Direct the wireless remote controller toward the sensor of the indoor unit and press the ①OFF/ON button.

Note:

- Make the above settings on Mr. Slim units as necessary.
- · Be sure to write down the settings for all functions if any of the initial settings has been changed after the completion of installation work.

11-2. FUNCTION SELECTION OF REMOTE CONTROLLER

11-2-1. <PAR-32MAA>



1 ON/OFF button

Press to turn ON/OFF the indoor unit.

2 SELECT button

Press to save the setting.

3 RETURN button

Press to return to the previous screen.

(4) MENU button

Press to bring up the Main menu.

5 Backlit LCD

Operation settings will appear.

When the backlight is off, pressing any button turns the backlight on and it will stay lit for a certain period of time depending on the screen.

When the backlight is off, pressing any button turns the backlight on and does not perform its function. (except for the 0 (ON/OFF) button)

The functions of the function buttons change depending on the screen. Refer to the button function guide that appears at the bottom of the LCD for the functions they serve on a given screen.

When the system is centrally controlled, the button function guide that corresponds to the locked button will not appear.



6 ON/OFF lamp

This lamp lights up in green while the unit is in operation. It blinks while the remote controller is starting up or when there is an error.

? Function button **F1**

Main display : Press to change the operation mode. Main menu : Press to move the cursor down.

8 Function button F2

Main display : Press to decrease temperature. Main menu : Press to move the cursor up.

9 Function button F3

Main display : Press to increase temperature. Main menu : Press to go to the previous page.

10 Function button **F4**

Main display : Press to change the fan speed. Main menu : Press to go to the next page.

Menu structure



Main menu list

Setting and display items		Setting details		
Vane · Louver · Vent. (Lossnay)		Use to set the vane angle. • Select a desired vane setting from 5 different settings. Use to turn ON/OFF the louver. • Select a desired setting from "OI" and "OFF." Use to set the amount of ventilation. • Select a desired setting from "Off," "Low," and "High."		
High power		Use to reach the comfortable room temperature quickly. • Units can be operated in the High-power mode for up to 30 minutes.		
Timer	ON/OFF timer*	Use to set the operation ON/OFF times. • Time can be set in 5-minute increments.		
	Auto-Off timer	Use to set the Auto-Off time. • Time can be set to a value from 30 to 240 in 10-minute increments.		
Weekly timer*		Use to set the weekly operation ON/OFF times. • Up to 8 operation patterns can be set for each day. (Not valid when the ON/OFF timer is enabled.)		
Restriction	Temp. range	Use to restrict the preset temperature range. • Different temperature ranges can be set for different operation modes.		
	Operation lock	Use to lock selected functions. • The locked functions cannot be operated.		
Energy saving	Auto return	Use to get the units to operate at the preset temperature after performing energy-save operation for a specified time period. • Time can be set to a value from 30 and 120 in 10-minute increments. (This function will not be valid when the preset temperature ranges are restricted.)		
	Schedule*	Set the start/stop times to operate the units in the energy-save mode for each day of the week, and set the energy-saving rate. • Up to 4 energy-save operation patterns can be set for each day. • Time can be set in 5-minute increments. • Energy-saving rate can be set to a value from 0% or 50 to 90% in 10% increments.		
Night setback*		Use to make Night setback settings. • Select "Yes" to enable the setting, and "No" to disable the setting. The temperature range and the start/stop times can be set.		
Filter information		Use to check the filter status. • The filter sign can be reset.		
Error information		 Use to check error information when an error occurs. Check code, error source, refrigerant address, unit model, manufacturing number, contact information (dealer's phone number) can be displayed. (The unit model, manufacturing number, and contact information need to be registered in advance to be displayed.) 		
Maintenance	Auto descending panel	Auto descending panel (Optional parts) Up/Down you can do.		
	Manual vane angle	Use to set the vane angle for each vane to a fixed position.		
	3D i-see sensor	Use to set the following functions for 3D i-see Sensor. • Air distribution • Energy saving option • Seasonal airflow		
Initial setting	Main/Sub	When connecting 2 remote controllers, one of them needs to be designated as a sub controller.		
	Clock	Jse to set the current time.		
	Main display	Use to switch between "Full" and "Basic" modes for the Main display. • The initial setting is "Full."		
	Contrast	Use to adjust screen contrast.		
	Display details	Make the settings for the remote controller related items as necessary. Clock: The initial settings are "Yes" and "24h" format. Temperature: Set either Celsius (°C) or Fahrenheit (°F). Room temp. : Set Show or Hide. Auto mode: Set the Auto mode display or Only Auto display.		
	Auto mode	Whether or not to use the Auto mode can be selected by using the button. This setting is valid only when indoor units with the Auto mode function are connected.		
	Administrator password	The administrator password is required to make the settings for the following items. • Timer setting • Energy-save setting • Weekly timer setting • Restriction setting • Outdoor unit silent mode setting • Night set back		
	Language selection	Use to select the desired language.		
Service	Test run	Select "Test run" from the Service menu to bring up the Test run menu.		
	Input maintenance	 Test run • Drain pump test run Select "Input maintenance Info." from the Service menu to bring up the Maintenance information screen. The following settings can be made from the Maintenance Information screen. Model name input • Serial No. input • Dealer information input 		
	Function setting	Make the settings for the indoor unit functions via the remote controller as necessary.		
	Check	Error history: Display the error history and execute "delete error history". Refrigerant leak check: Refrigerant leaks can be judged. Smooth maintenance: The indoor and outdoor maintenance data can be displayed. Request code: Details of the operation data including each thermistor temperature and error history can be checked.		
	Maintenance password	Use to change the maintenance password.		
	Remote controller check	When the remote controller does not work properly, use the remote controller checking function to trouble- shoot the problem.		

* Clock setting is required.

MONITORING THE OPERATION DATA BY THE REMOTE CONTROLLER

12-1. HOW TO "MONITOR THE OPERATION DATA"

12-1-1. <PAR-3xMAA ("x" represents 0 or later)>

12

Details on the operation data including each thermistor temperature and error history can be confirmed with the remote controller.



12-2. Request code list

Certain indoor/outdoor combinations do not have the request code function; therefore, no request codes are displayed.

Request code	Request content	Description (Display range)	Unit	Remarks
0	Operation state	Refer to 12-2-1. Detail Contents in Request Code.	-	
1	Compressor-Operating current (rms)	0–50	A	
2	Compressor-Accumulated operating time	0–9999	10 hours	
3	Compressor-Number of operation times	0–9999	100 times	
4	Discharge temperature (TH4)	3–217	°C	
5	Outdoor unit -Liquid pipe 1 temperature (TH3)	-40-90	°C	
6				
7	Outdoor unit-2-phase pipe temperature (TH6)	-39-88	°C	
8				
9	Outdoor unit-Outside air temperature (TH7)	-39-88	Ĉ	
10	Outdoor unit-Heatsink temperature (TH8)	-40-200	°C	
11				
12	Discharge superheat (SHd)	0–255	°C	
13	Sub-cool (SC)	0–130	°C	
14				
15				
16	Compressor-Operating frequency	0–255	Hz	
17	Compressor-Target operating frequency	0–255	Hz	
18	Outdoor unit-Fan output step	0–10	Step	
	Outdoor unit-Fan 1 speed			
19	(Only for air conditioners with DC fan motor)	0–9999	rpm	
	Outdoor unit-Ean 2 speed			0° is displayed if the air conditioner is a single-fan
20	(Only for air conditioners with DC fan motor)	0–9999	rpm	type
21				
22	LEV (A) opening	0-500	Pulses	
23	LEV (B) opening	0-500	Pulses	
24	LEV (C) opening	5-500	Pulses	
25	Primary current	0-50	A	
26	DC bus voltage	180-370	V	
27			•	
28				
29	Number of connected indoor units	0-4	Units	
30	Indoor unit-Setting temperature	17–30	°C	
31	Indoor unit-Intake air temperature <measured by="" thermostat=""></measured>	8–39	ີ ເ	
0.	Indoor unit-Intake air temperature (Unit No. 1)	8–39	•	"0" is displayed if the target unit is not present
32	<pre><heat correction="" mode-4-deg=""></heat></pre>		Ĵ	
	Indoor unit-Intake air temperature (Unit No. 2)	8_39		
33	<pre>cHeat mode-4-deg correction></pre>		Ĵ	1
	Indoor unit-Intake air temperature (Unit No. 3)	8–39		
34	<pre><heat correction="" mode-4-deg=""></heat></pre>		Ĉ	1
	Indoor unit-Intake air temperature (Unit No 4)	8–39		
35	<heat correction="" mode-4-deg=""></heat>		Ű	1
36				
37	Indoor unit -Liquid pipe temperature (Unit No. 1)	-39-88	°C	"0" is displayed if the target unit is not present
38	Indoor unit -Liquid pipe temperature (Unit No. 2)	-39-88	°C	↑
39	Indoor unit -Liquid pipe temperature (Unit No. 3)	-39-88	°C	↑
40	Indoor unit -Liquid pipe temperature (Unit No. 4)	-39-88	°C	↑
41				
42	Indoor unit-Cond./Eva. pipe temperature (Unit No 1)	-39-88	°C	"0" is displayed if the target unit is not present.
43	Indoor unit-Cond./Eva. pipe temperature (Unit No. 2)	-39-88	°C	↑
44	Indoor unit-Cond./Eva. pipe temperature (Unit No. 3)	-39-88	°C	↑
45	Indoor unit-Cond./Eva, pipe temperature (Unit No. 4)	-39-88	°C	↑
46			-	
47				
48	Thermostat ON operating time	0–999	Minutes	
49	Test run elapsed time	0–120	Minutes	← Not possible to activate maintenance mode during the test run.

Request code	Request content	Description (Display range)	Unit	Remarks
50	Indoor unit-Control state	Refer to 12-2-1. Detail Contents in Request Code.	_	
51	Outdoor unit-Control state	Refer to 12-2-1. Detail Contents in Request Code.	_	
52	Compressor-Frequency control state	Refer to 12-2-1.Detail Contents in Request Code.	_	
53	Outdoor unit-Fan control state	Refer to 12-2-1.Detail Contents in Request Code.	_	
54	Actuator output state	Refer to 12-2-1. Detail Contents in Request Code.	_	
55	Error content (19)	Refer to 12-2-1.Detail Contents in Request Code.	_	
56				
57				
57				
50				
59	Circul transmission demond and site	0.055	0/	
60		0-255	%	
61		Refer to 12-2-1.Detail Contents in Request Code.	_	
62	External input state (silent mode, etc.)	Refer to 12-2-1. Detail Contents in Request Code.	-	
63				
64				
65				
66				
67				
68				
69				
70	Outdoor unit-Capacity setting display	Refer to 12-2-1.Detail Contents in Request Code.	_	
71	Outdoor unit-Setting information	Refer to 12-2-1.Detail Contents in Request Code.	_	
72				
73			_	
74			_	
75				
76				
77				
70				
70				
79				
80			_	
81			_	
82			_	
83				
84	M-NET adapter connection (presence/absence)	"0000": Not connected "0001": Connected	-	
85				
86				
87				
88				
89	Display of execution of replace/wash operation	"0000": Not washed "0001": Washed	-	
90	Outdoor unit-Microprocessor version information	Examples) Ver 5.01 \rightarrow "0501"	Ver	
	• • • • • •	Auxiliary information (displayed after		
91	Outdoor unit-Microprocessor version information (sub No.)	version information)	_	
01		Examples) Ver 5.01 $\triangle 000 \rightarrow "\triangle 000"$		
02				
92				
93				
94				
95				
96				
97				
98				
99				
100	Outdoor unit - Error postponement history 1 (latest)	Displays postponement code. (" " is	Code	
		Displayed in no postponement code is present)		
101	Outdoor unit - Error postponement history 2 (previous)	displayed if no postponement code is present)	Code	
102	Outdoor unit - Error postponement history 3 (last but one)	Displays postponement code. (" " is displayed if no postponement code is present)	Code	

Request code	Request content	Description (Display range)	Unit	Remarks
103	Error history 1 (latest)	Displays error history. (" " is displayed if no history is present.)	Code	
104	Error history 2 (second to last)	Displays error history. (" " is displayed if no history is present.)	Code	
105	Error history 3 (third to last)	Displays error history. (** is displayed if no history is present.)	Code	
106	Abnormal thermistor display (TH3/TH6/TH7/TH8)	3 : TH3 6 : TH6 7 : TH7 8 : TH8 0 : No thermistor error	Sensor number	
107	Compressor Operating current at time of error	Displayed in the same way as request code 0.	_	
100	Compressor-Operating current at time of error	0_000	A 10 hours	
109	Compressor-Accumulated operating time at time of error	0-9999		
110	Discharge temperature (TH4) or comp. surface	0–9999	100 times	
111	temperature (TH33) at time of error	3–217	Ĵ	
112	Outdoor unit - Liquid pipe 1 temperature (TH3) at time of error	-40-90	°C	
113				
114	Outdoor unit-2-phase pipe temperature (TH6) at time of error	-39-88	°C	
115				
116	Outdoor unit-Outside air temperature (TH7) at time of error	-39-88	°	
110	Outdoor unit-Outside an temperature (TTI II) at time of error	-40, 200	ີ ເ	
117	Dudoor unit-Heatsink temperature (1H8) at time or error	-40-200	C °C	
118	Discharge superneat (SHd) at time of error	0-255	U C	
119	Sub-cool (SC) at time of error	0–130	C	
120	Compressor-Operating frequency at time of error	0–255	Hz	
121	Outdoor unit at time of error • Fan output step	0–10	Step	
122	Outdoor unit at time of error • Fan 1 speed (Only for air conditioners with DC fan)	0–9999	rpm	
123	Outdoor unit at time of error • Fan 2 speed (Only for air conditioners with DC fan)	0–9999	rpm	"0" is displayed if the air conditioner is a single-
	ranz opoda (only for an contantonoro wan bo fair)			lan type.
124				
124	LEV(A) opening at time of error	0-500	Pulses	
124 125	LEV (A) opening at time of error	0-500	Pulses	
124 125 126	LEV (A) opening at time of error LEV (B) opening at time of error	0–500 0–500	Pulses Pulses	
124 125 126 127	LEV (A) opening at time of error LEV (B) opening at time of error	0–500 0–500	Pulses Pulses	
124 125 126 127 128	LEV (A) opening at time of error LEV (B) opening at time of error	0–500 0–500	Pulses Pulses	
124 125 126 127 128 129	LEV (A) opening at time of error LEV (B) opening at time of error	0–500 0–500	Pulses Pulses	
124 125 126 127 128 129 130	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error	0–500 0–500 0–999	Pulses Pulses Minutes	
124 125 126 127 128 129 130 131	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error	0–500 0–500 0–999	Pulses Pulses Minutes	
124 125 126 127 128 129 130 131 132	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error	0–500 0–500 0–999 –39–88	Pulses Pulses Minutes	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error	0–500 0–500 0–909 0–999 –39–88 –39–88	Pulses Pulses Minutes °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 133	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""></thermostat>	0–500 0–500 0–909 0–999 -39–88 -39–88	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 134	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""></thermostat>	0–500 0–500 0–909 0–999 -39–88 -39–88	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 134 135 136	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""></thermostat>	0–500 0–500 0–999 -39–88 -39–88	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 134 135 136 137	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""></thermostat>	0–500 0–500 0–999 0–999 -39–88 -39–88 -39–88	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 134 135 136 137 122	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""></thermostat>	0–500 0–500 0–999 0–999 -39–88 -39–88 -39–88	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 134 135 136 137 138	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""></thermostat>	0–500 0–500 0–909 0–999 -39–88 -39–88 -39–88	Pulses Pulses Minutes	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""></thermostat>	0–500 0–500 0–909 0–999 -39–88 -39–88 -39–88 -39–88	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""></thermostat>	0–500 0–500 0–909 -39–88 -39–88 -39–88 -39–88	Pulses Pulses Minutes	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 133 134 135 136 137 138 139 140 ~	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""> —</thermostat>	0–500 0–500 0–909 -39–88 -39–88 -39–88 -39–88 -39–88 -39–88 -39–88	Pulses Pulses Minutes	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 133 134 135 136 137 138 139 140 ~ 146	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""> — — — — — — — — — — — — —</thermostat>	0–500 0–500 0–909 -39–88 -39–80 -	Pulses Pulses Minutes	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 133 134 135 136 137 138 139 140 ~ 146 147	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""> 0 0 0 0 0 0 0 0 0 0 0 0 0</thermostat>	0–500 0–500 0–909 -39–88 -39–80 -	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 133 134 135 136 137 138 139 140 ~ 146 147 148	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""> 0 0 0 0 0 0 0 0 0 0 0 0 0</thermostat>	0–500 0–500 0–909 -39–88 -39–80 -	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 133 134 135 136 137 138 139 140 ~ 146 147 148 149	LEV (A) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""> 0 0 0 0 0 0 0 0 0 0 0 0 0</thermostat>	0–500 0–500 0–909 -39–88 -39–80 -30–80 -	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 133 134 135 136 137 138 139 140 ~ 146 147 148 149 150	LEV (A) opening at time of error LEV (B) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""> </thermostat>	0-500 0-500 -500 -39-999 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).
124 125 126 127 128 129 130 131 132 133 133 134 135 136 137 138 139 140 ~ 146 147 148 149 150	LEV (A) opening at time of error LEV (B) opening at time of error LEV (B) opening at time of error Thermostat ON time until operation stops due to error Indoor -Liquid pipe temperature at time of error Indoor -Cond/Eva. pipe temperature at time of error Indoor at time of error • Intake air temperature <thermostat judge="" temperature=""> </thermostat>	0-500 0-500 -500 -30-999 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88 -39-88	Pulses Pulses Minutes °C °C °C	Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad). Average value of all indoor units is displayed if the air condi- tioner consists of 2 or more indoor units (twin, triple, quad).

Request code	Request content	Description (Display range)	Unit	Remarks	
153					
154	Indoor-Fan operating time (After filter is reset)	0–9999	1 hour		
155	Indoor-Total operating time (Fan motor ON time)	0–9999	10 hours		
156					
157	Indoor fan output value (Sj value)	0–255 Fan control data	_	For indoor fan phase control	
158	Indoor fan output value (Pulsation ON/OFF)	"00 **" "**" indicates fan control data.	-	For indoor fan pulsation control	
159	Indoor fan output value (duty value)	"00 **" "**" indicates fan control data.	—	For indoor DC brushless motor control	
160					
161					
162					
163	Indoor unit-Capacity setting information	Refer to 12-2-1. Detail Contents in Request Code.	-		
164	Indoor unit-SW3 information	Undefined	-		
165	Wireless pair No. (indoor control board side) setting	Refer to 12-2-1. Detail Contents in Request Code.	-		
166	Indoor unit-SW5 information	Undefined	_		
167					
~					
189					
190	Indoor unit-Microprocessor version information	Examples) Ver 5.01 \rightarrow "0501"	Ver		
191	Indoor unit-Microprocessor version information (sub No.)	Auxiliary information (displayed after version information) Examples) Ver 5.01 A000 \rightarrow "A000"	_		
192					

12-2-1. Detail Contents in Request Code

[Operation state] (Request code :" 0")

Data display

Display	Power currently supplied to compressor	Compressor	4-way valve	Solenoid valve
0	-	-	-	-
1				ON
2			ON	
3			ON	ON
4		ON		
5		ON		ON
6		ON	ON	
7		ON	ON	ON
8	ON			
А	ON		ON	

Operation mode

Display	Operation mode	
0	STOP • FAN	
С	COOL • DRY	
Н	HEAT	
d	DEFROST	

[Indoor unit - Control state] (Request code : " 50 ")

Data display * * * Unit No. 4 state Unit No. 3 state Unit No. 2 state Unit No. 1 state

Display	State
0	Normal
1	Preparing for heat operation
2	_
3	-
4	Heater is ON.
5	Anti-freeze protection is ON.
6	Overheat protection is ON.
7	Requesting compressor to turn OFF
F	There are no corresponding units.

[Outdoor unit - Control state] (Request code :" 51")

_								
	Data display				State			
	0	0	0	0	Normal			
	0	0	0	1	Preparing for heat operation			
	0	0	0	2	Defrost			

[Compressor - Frequency control state] (Request code : " 52")

Data display



Frequency control state $\ensuremath{\mathbb O}$

Display	Current limit control
0	No current limit
1	Primary current limit control is ON.
2	Secondary current limit control is ON.

Frequency control state 2							
Dicploy	Discharge temperature	Condensation temperature	Anti-freeze	Heatsink temperature			
Display	overheat prevention	overheat prevention	protection control	overheat prevention			
0							
1	Controlled						
2		Controlled					
3	Controlled	Controlled					
4			Controlled				
5	Controlled		Controlled				
6		Controlled	Controlled				
7	Controlled	Controlled	Controlled				
8				Controlled			
9	Controlled			Controlled			
A		Controlled		Controlled			
b	Controlled	Controlled		Controlled			
С			Controlled	Controlled			
d	Controlled		Controlled	Controlled			
E		Controlled	Controlled	Controlled			
F	Controlled	Controlled	Controlled	Controlled			

Relay output state

[Fan control state] (Request code :" 53")

Data display

0 0 * *

Fan step correction value by heatsink temperature overheat prevention control Fan step correction value by cool condensation temperature overheat prevention control

Display	Correction value
– (minus)	-1
0	0
1	+1
2	+2

[Actuator output state] (Request code :"54")

Data display 0 0 * * Actuator output state ① -Actuator output state 2

Actuator output state $\ensuremath{\mathbb{O}}$

Display	SV1	4-way valve	Compressor	Compressor is warming up
0				
1	ON			
2		ON		
3	ON	ON		
4			ON	
5	ON		ON	
6		ON	ON	
7	ON	ON	ON	
8				ON
9	ON			ON
А		ON		ON
b	ON	ON		ON
С			ON	ON
d	ON		ON	ON
E		ON	ON	ON
F	ON	ON	ON	ON

Actuator output state 2

Display	52C	SV2	SS
0			
1	ON		
2		ON	
3	ON	ON	
4			ON
5	ON		ON
6		ON	ON
7	ON	ON	ON

[Error content (U9)] (Request code : "55")



Error content ①

Error content ①				
Display	Overvoltage	Undervoltage	L1-phase	Power synchronizing
Diopidy	error	error	open error	signal error
0				
1	•			
2				
3	•			
4			•	
5	•		•	
6			•	
7	•		•	
8				
9	•			
А				
b	•			
С	C d		•	
d			•	•
E			•	
F	•		•	

	Error content 2		
	Display	Converter Fo	
	Diopidy	error	

Display	Converter Fo error	PAM error
0		
1	•	
2		
3		

[Contact demand capacity] (Request code : " 61")

Data display			Setting content			
Data diopidy	0	0	0	— Setting content	Display	Setting value
					0	0%
					1	50%
					2	75%
					3	100%

[External input state] (Request code : "62")

Data display 0 0 0

* Input state

nput state •: Input present				
Dicolov	Contact demand	Silent mode	Spare 1	Spare 2
Display	input	input	input	input
0				
1				
2				
3		•		
4			•	
5			•	
6			•	
7		•	•	
8				
9				
А				
b		•		
С			•	
d			•	
E		•	•	
F		•	•	

[Outdoor unit - Capacity setting display] (Request code : "70")

Data display	Capacity
9	35
10	50
11	60
14	71
20	100
25	125
28	140
40	200
50	250

[Outdoor unit - Setting information] (Request code : "71")



Setting information ①

0	
Display	Defrost mode
0	Standard
1	For high humidity

Setting information 2

	Display	Single-/	Heat pump/		
		3-phase	cooling only		
	0	Single-phase	Heat pump		
	1	Single-phase	Cooling only		
	2	2 phase	Heat pump		
	3	5-phase	Cooling only		

[Indoor unit - Capacity setting information] (Request code : "163")



Display	Capacity setting state	Display	Capacity setting state
00	12	10	112
01	16	11	125
02	22	12	140
03	25	13	160
04	28	14	200
05	32	15	224
06	35, 36	16	250
07	40	17	280
08	45	18	
09	50	19	
0A	56	1A	
0b	63	1b	
0C	71	1C	
0d	80	1d	
0E	90	1E	
0F	100	1F	

[Wireless pair No. (indoor control board side) setting] (Request code :"165")

Data display



— See the table on the right.

Display	Pair No. setting state		
00	No. 0		
01	No. 1 J41 disconnected		
02	No. 2 J42 disconnected		
03	No. 3 J41, J42 disconnected		

EASY MAINTENANCE FUNCTION

13-1. SMOOTH MAINTENANCE

13

1

2

3

13-1-1. <PAR-3xMAA ("x" represents 0 or later)>

Maintenance data, such as the indoor/outdoor unit's heat exchanger temperature and compressor operation current can be displayed with "Smooth maintenance".

This cannot be executed during test operation.

Depending on the combination with the outdoor unit, this may not be supported by some models.

- Reduces maintenance work drastically.
- Enables you to check operation data of the indoor and outdoor units by remote controller. Furthermore, use of maintenance stable-operation control that fixes the operating frequency, allows smooth inspection, even for inverter models.



Select "Service" from the Main menu, and press the vector. Select "Check" with the F1 or F2 button, and press the vector.	① Check menu Error history Refrigerant volume check Refrigerant leak check > Smooth maintenance Request code Service menu: ▼ Cursor ▲
Select "Smooth maintenance" with the F1 or F2 button, and press the 슞 button.	F1 F2 F3 F4
Set each item. Select the item to be changed with the F1 or F2 button. Select the required setting with the F3 or F4 button. = <ref.address>setting [0]-[15] =<stable mode="">setting [Cool]/ [Heat]/ [Normal]</stable></ref.address>	Smooth maintenance ▶ Ref.address Stable mode Cool / Heat/ Normal Begin: ✓ Cursor ▲ -Address+
Press the 🕢 button, Fixed operation will start. Stable mode will take approx. 20 minutes.	Smooth maintenance Ref.address Ø Stable mode Cool/ Heat/ Normal Stabilization→Collecting Fxit: (1)

The operation data will appear.

The Compressor-Accumulated operating (COMP. run) time is 10-hour unit, and the Compressor-Number of operation times (COMP. ON/OFF) is a 100-time unit (fractions discarded).

Smooth mai	ntenance 1/3
Ref. address 8 C COMP. current COMP. run time	Cool 12 A 1000 Hr 2000 timos
COMP. frequency	80 Hz
Return: 3	
▼ Page 🔺	
Smooth mai	ntenance 2/3
Ref.address 0 C Sub cool OU TH4 temp.	Cool 3 °C 6 0 °C
OU TH6 temp.	38 °C
Return: 3	
▼ Page ▲	
Smooth mai	ntenance 3/3
Ref.address 0 C	Cool
IU air temp.	28 °C
IU HEX temp.	10 °C
IU filter time	120 Hr
Poturn: 1	
Return.O	

(3)

Navigating through the screens To go back to the Service menu button To return to the previous screen (5) button

Refrigerant address Single refrigerant system Multi refrigerant system (group control) In the case of single refrigerant system, the refrigerant address Up to 16 refrigerant systems (16 outdoor units) can be conis "00" and no operation is required. nected as a group by 1 remote controller. To check or set the Simultaneous twin, triple units belong to this category refrigerant addresses. (single refrigerant system). [Twin] Refrigerant Refrigerant Refrigerant Refrigerant [1:1] Refrigerant Refrigerant address address address address address=00 address=00 00 01 02 15 Outdoor Outdoor Outdoor Outdoor Outdoor Outdoor unit unit unit unit unit unit Indoor unit Indoor unit Indoor unit Indoor unit Indoor unit I Indoor unit Indoor unit 01 01 02 01 01 01 01 Remote Remote Remote controller controller controller

<Guide for operation condition>

Inspection item				Re	sult		
Ipply	se con- tion		Breaker	Good		Retigh	tened
		Terminal block	Outdoor Unit	Good		Retigh	tened
L SI	Loo		Indoor Unit	Good		Retigh	tened
DWG		(Insulation resista	ance)				MΩ
۲ ۵		(Voltage)					V
		 Accumulated o 	perating time				Time
Con	1-	② Number of ON	OFF times				Times
pres	sor	③ Current					А
	e	④ Refrigerant/heat exc	hanger temperature	COOL	°C	HEAT	°C
L	ratu	⑤ Refrigerant/dischated in the second sec	arge temperature	COOL	°C	HEAT	°C
Uni	Tempe	6 Air/outside air t	emperature	COOL	°C	HEAT	°C
oor		(Air/discharge t	emperature)	COOL	°C	HEAT	°C
utd	eanli- ss	Appearance		Good		Cleaning	required
0		Heat exchanger		Good		Cleaning	required
	U G	Sound/vibration		None		Pres	sent
	ē	⑦ Air/intake air te	mperature	COOL	°C	HEAT	°C
	ratu	(Air/discharge t	emperature)	COOL	°C	HEAT	°C
	upe	⑧ Refrigerant/heat exc	changer temperature	COOL	°C	HEAT	°C
Juit	Ter	9 Filter operating	time*				Time
Indoor L	nliness	Decorative panel		Good		Cleaning	required
		Filter		Good		Cleaning	required
		Fan		Good		Cleaning	required
	Clea	Heat exchanger		Good		Cleaning	required
		Sound/vibration		None		Pres	sent

* The filter operating time is the time that has elapsed since the filter was reset.

Check Points

Enter the temperature differences between 5 , 4 , 7 and 8 into the graph given below.

Operation state is determined according to the plotted areas on the graph.

For data measurements, set the fan speed to "Hi" before activating maintenance mode.

Classification		Item		Result		
	Inspection	Is "D000" displayed stably on the remote Stable Un controller?				
0	Temperature	(5) Discharge temperature) – (4) Outdoor		Э°		
0	difference	heat exchanger temperature)	l ü			
	(⑦ Indoor intake air temperature) - (⑧		÷			
	Indoor heat exchanger temperature)					
	Inspection	Is "D000" displayed stably on the remote		Unstable		
		controller?	Stable	Ulislable		
at	Temperature	(⑤ Discharge temperature) - (⑧ Indoor		<u>م</u>		
Ť	ゴ difference heat exchanger temperature)					
		(Indoor heat exchanger temperature) –	- ~			
		(⑦ Indoor intake air temperature)				

Notes:

1. Fixed Hz operation may not be possible under the following temperature ranges.

- A)In cool mode, outdoor intake air temperature is 40 °C or higher or indoor intake air temperature is 23 °C or lower.
- B)In heat mode, outdoor intake air temperature is 20°C or higher or indoor intake air temperature is 25°C or lower.
- 2. If the air conditioner is operated at a temperature range other than the ones above but operation is not stabilized after 30 minutes or more have elapsed, carry out inspection.
- 3. In heat mode, the operation state may vary due to frost forming on the outdoor heat exchanger.



[5] Discharge temperature] – [4] Outdoor heat exchanger temperature)

Area	Check item	Judgement	
Area	Chook item	Cool	Heat
Normal	Normal operation state		ľ
Filter inspection	Filter may be clogged.*		
Inspection A	Performance has dropped. Detailed in-		
	spection is necessary.		
Inspection B	Refrigerant amount is dropping.		
Inspection C	Filter or indoor heat exchanger may be		
clogged.			

Note: The above judgement is just guide based on Japanese standard conditions.

It may be changed depending on the indoor and outdoor temperature.

* It may be judged as "Filter inspection" due to the outdoor and indoor temperature, even though it is not clogged.

^{[5} Discharge temperature] – [8 Indoor heat exchanger temperature)

14 DISASSEMBLY PROCEDURE

PUZ-ZM100VKA.UK PUZ-ZM100YKA.UK

PUZ-ZM125VKA.UK PUZ-ZM125YKA.UK

PUZ-ZM140VKA.UK PUZ-ZM140YKA.UK











OPERATING PROCEDURE	PHOTOS
 8. Removing the 4-way valve coil (21S4), LEV coil (LEV (A), LEV (B), (LEV (C)) and lead wire for high pressure switch. (1) Remove the electrical parts box. (See Photo 4 or 5) (2) Loosen the clamp for the lead wire on separator. 	Photo 15 (ZM100/125 model)
[Removing the lead wire for high pressure switch] (3) Disconnect the lead wire from the high pressure switch.	High pressure switch
 [Removing the 4-way valve coil] (3) Remove the 4-way valve coil fixing screw (1 for front/ M5) to remove the 4-way valve coil. (4) Slide the 4-way valve coil forward to remove it. 	4-way valve coil (21S4)
[Removing the LEV coil] (3) Loosen the lead wires fixed to the pipes with bands. (4) Slide the LEV coil upward to remove it.	LEV coil (LEV B)
Note: LEV-C is for ZM140 model only. 9. Removing the 4-way valve, LEV (LEV (A), LEV (B)), (LEV (C))	Power receiver
 and high pressure switch. (1) Remove the electrical parts box. (See Photo 4 or 5) (2) Remove the cover panel (front) fixing screws (1 for front and 1 for side/ 5 x 12), then slide the cover panel (front) upward to remove it. 	Compressor
 (The cover panel (front) is fixed to the cover panel (rear) with hooks on the rear side.) (See Photo 1) (3) Remove the cover panel (rear) fixing screw (2 for right side and 2 for rear/ 5 x 12), the slide the cover panel (rear) upward to remove it. (The cover panel (rear) is fixed to the side plate with hooks 	
 on the rear side.) (See Photo 1) (4) Remove the valve bed fixing screws (3 for front/ 5 x 12) and the ball valve and stop valve fixing screws (4 for front/ 5 x 16) to remove the valve bed. (5) Demove the valve bed. 	Photo 16 (ZM140 model)
 (5) Remove the side panel (R) fixing screws (3 for rear/ 5 x 12), then slide the side panel (R) upward to remove it. (The side panel (R) is fixed to the side plate with hooks on the rear side.) (6) Recover refrigerant. 	LEV coil (LEV C)
 [Removing the 4-way valve] (7) Remove the 4-way valve coil. (See Photo 15 or 16) (8) Remove the welded part of 4-way valve (4 positions) to remove the 4-way valve. 	High pressure switch
 [Removing the LEV] (7) Remove the LEV coil. (See Photo 15 or 16) (8) Remove the welded part of LEV (2 positions) to remove the LEV. 	4-way valve coil (21S4)
 [Removing the high pressure switch] (7) Disconnect the lead wire from the high pressure switch. (8) Remove the welded part of high pressure switch (1 position) to remove the high pressure switch. 	Power
 Note 1: Recover refrigerant without spreading it in the air. Note 2: The welded part can be removed easily by removing the side panel (R). Note 3: When installing the following parts, cover it with a wet cloth to prevent it from heating as the temperature below, then braze the pipes so that the inside of pipes are not oxidized; 4-way valve, 120°C or more 	Compressor

[•] High pressure switch, 100°C or more Note 4: LEV-C is for ZM140 model only.

	PHOTOS
 10. Removing the compressor (MC) (1) Remove the electrical parts box. (See Photo 4 or 5) (2) Remove the cover panel (front). (See Photo 1) (3) Remove the cover panel (rear). (See Photo 1) (4) Remove the stop valve fixing screws (2 for front/ 5x16). (5) Remove the valve bed. (See Photo 16) (7) Remove the side panel (R). (See Photo 1) (8) Remove the front panel fixing screws (5 for front/ 5x12 and 2 for front/ 4x10), then slide the front panel upward to remove it. (The front panel is fixed with 4 hooks; 3 on the left side fixing to the side panel (L), and the other on the right side fixing to the separator.) (9) Release the lead wire for FM1 and FM2 from the hole on separator. (10) Remove the separator fixing screws (4 for front/ 4x10), then slide the separator upward to remove it. (The separator is fixed to hooks of the side plate.) (11) Remove the and and the damper. (See Figure 5) (12) Recover refrigerant. (13) Remove the 3 compressor fixing nuts (M6) to remove the compressor. Note 1: Recover refrigerant without spreading it in the air. Note 2: The compressor can be easily removed by removing separator. Note 3: When replacing the compressor, ensure that the surrounding parts are completely cold after brazing, then fix the accessory damper with a locally-procured band: Ensure to maintain at least 10 mm distance from the surrounding piping. 	Photo 17 Stop valve fixing screws Valve bed Valve bed fixing screws Separator Separator Separator fixing screws Separator Figure 5
 11. Removing the power receiver (1) Remove the electrical parts box. (See photo 4 or 5) (2) Remove the cover panel (front). (See Photo 1) (3) Remove the cover panel (rear). (See Photo 1) (4) Remove the ball valve fixing screws (See Photo 17). (5) Remove the stop valve fixing screws (See Photo 17). (6) Remove the valve bed. (See Photo 17) (7) Remove the side panel (R). (See Photo 1) (8) Recover refrigerant. (9) Remove the welded part of the power receiver to remove it. (10) Remove the receiver leg fixing screws (2 for front /4 x 10), then slide the power receiver forward to remove it. (The power receiver is fixed to the base with a hook on the bottom.) Note: Recover refrigerant without spreading it in the air. 	Photo 18 Inlet Outlet Compressor (MC) Receiver leg Receiver leg



Mr.SLIM

MITSUBISHI ELECTRIC CORPORATION

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