

#### Revision A:

- MUZ-A12YV-E1 and MUZ-A12YVH-E1 can be connected to MCFZ-A12WV-E1.
- Some mistakes were corrected.

Please void OB328.

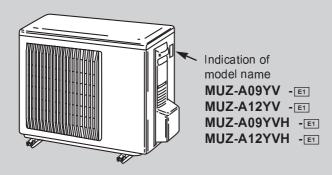
### HFC utilized R410A

No. OB328 REVISED EDITION-A

### **SERVICE MANUAL**

Wireless type Models

MUZ-A09YV - ET MUZ-A12YV - ET MUZ-A09YVH - ET MUZ-A12YVH - ET



#### **CONTENTS**

1. TECHNICAL CHANGES	2
2. PART NAMES AND FUNCTIONS	5
3. SPECIFICATION	5
4. NOISE CRITERIA CURVES	7
5. OUTLINES AND DIMENSIONS	8
6. WIRING DIAGRAM ······	9
7. REFRIGERANT SYSTEM DIAGRAM ····	11
8. PERFORMANCE CURVES	12
9. ACTUATOR CONTROL	21
10. SERVICE FUNCTIONS	22
11. TROUBLESHOOTING	22
12. DISASSEMBLY INSTRUCTIONS	34
13. PARTS LIST	

#### NOTE

This service manual describes technical data of the outdoor units.

•As for indoor units MSZ-A09YV-E1 and MSZ-A12YV-E1, refer to the service manual OB327. •As for indoor unit MCFZ-A12WV-E1, refer to the service manual OB344.

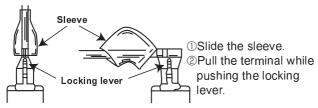


#### **DISASSEMBLY INSTRUCTIONS**

#### <"Terminal with lock mechanism" Detaching points>

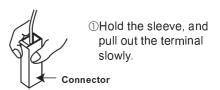
In case of terminal with lock mechanism, detach the terminal as shown below. There are two types (Refer to (1) and (2)) of the terminal with lock mechanism. The terminal with no lock mechanism can be removed by pulling it out. Check the shape of the terminal and work.

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



(2) The terminal with this connector is a terminal with lock mechanism

**PHOTOS** 



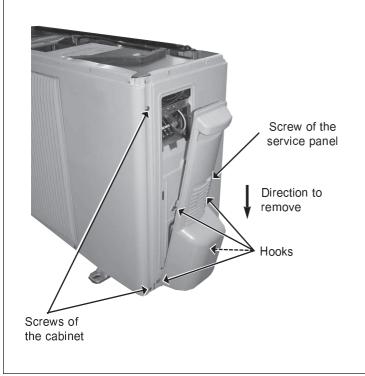
MUZ-A09YV -E1 MUZ-A09YVH -E1 OUTDOOR UNIT MUZ-A12YV -E1 MUZ-A12YVH -E1

#### OPERATING PROCEDURE

#### 1. Removing the cabinet.

- (1) Remove the screws fixing the top panel. (Photo 1)
- (2) Remove the top panel. (Photo 1)
- (3) Remove the screw fixing the service panel. (Photo 2)
- (4) Pull down the service panel and remove it. (Photo 2)
- (5) Remove the screws fixing the cabinet.
- (6) Remove the cabinet.
- (7) Disconnect the indoor/outdoor connecting wire.
- (8) Remove the screws fixing the back panel.
- (9) Remove the back panel.

#### Photo 2



# Photo 1 Screws of the top panel Screws of the top panel Back panel Service Screws of panel the cabinet

#### **OPERATING PROCEDURE**

### 2. Removing the inverter assembly, inverter P.C. board and power P.C. board

- (1) Remove the top panel, cabinet and service panel. (Refer to 1.)
- (2) Disconnect the indoor/outdoor connecting wire and remove the back panel. (Refer to 1.)
- (3) Disconnect the ground wire, the lead wire to the reactor and the following connectors;

<Power P.C. board>

CN721 (4-way valve)

CN722 (Defrost heater) MUZ-A09/A12YVH-E1

CN771 (Fan motor)

<Inverter P.C. board>

CN641 (Defrost thermistor and discharge temperature thermistor)

CN643 (Ambient temperature thermistor)

CN724 (LEV)

- (4) Remove the compressor connector (CN61).
- (5) Remove the screws fixing the relay panel. (Photo 3)
- (6) Remove the inverter assembly. (Photo 3)
- (7) Disconnect all connectors and lead wires on the inverter P.C. board. (Photo 4)
- (8) Remove the inverter P.C. board from the inverter assembly.
- (9) Remove the screw fixing the power P.C. board. (Photo 4)
- (10) Disconnect all connectors and lead wires on the power P.C. board.
- (11) Remove the power P.C. board from the inverter assembly.

#### 3. Removing R.V. coil

- Remove the top panel, cabinet and service panel. (Refer to 1.)
- (2) Disconnect the indoor/outdoor connecting wire and remove the back panel. (Refer to 1.)
- (3) Remove the inverter assembly. (Refer to 2.)
- (4) Remove the R.V. coil. (Photo 5)

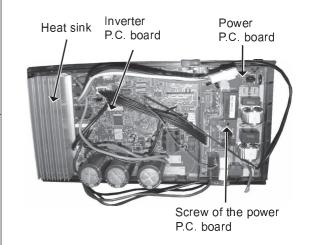
#### **PHOTOS**

#### Photo 3

Screws of the relay panel

Screw of the ground wire

#### Photo 4



#### **OPERATING PROCEDURE**

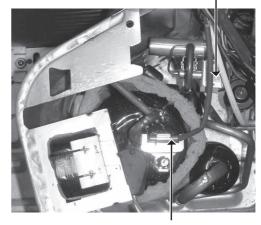
### 4. Removing the defrost thermistor and discharge temperature thermistor

- (1) Remove the top panel, cabinet and service panel. (Refer to 1.)
- (2) Disconnect the indoor/outdoor connecting wire and remove the back panel. (Refer to 1.)
- (3) Remove the inverter assembly (Refer to 2.)
- (4) Pull out the defrost thermistor from its holder. (Photo 6)
- (5) Pull out the discharge temperature thermistor from its holder. (Photo 5)

#### **PHOTOS**

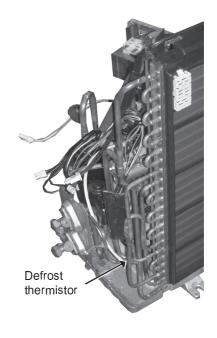
Photo 5

R.V. coil



Discharge temperature thermistor

#### Photo 6



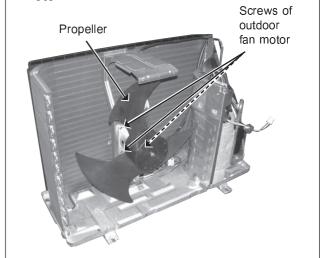
#### **OPERATING PROCEDURE**

#### 5. Removing outdoor fan motor

- (1) Remove the top panel, cabinet and service panel. (Refer to 1.)
- (2) Disconnect the indoor/outdoor connecting wire and remove the back panel. (Refer to 1.)
- (3) Remove the inverter assembly (Refer to 2.)
- (4) Remove the propeller.
- (5) Remove the screws fixing the fan motor. (Photo 7)
- (6) Remove the fan motor. (Photo 7)

#### **PHOTOS**

#### Photo 7



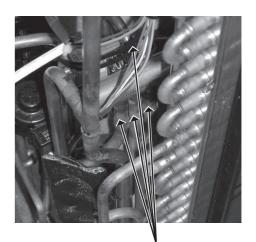
#### 6. Removing the compressor and 4-way valve

- (1) Remove the top panel, cabinet and service panel. (Refer to 1.)
- (2) Disconnect the indoor/outdoor connecting wire and remove the back panel. (Refer to 1.)
- (3) Remove the inverter assembly. (Refer to 2.)
- (4) Recover gas from the refrigerant circuit.
- (5) Detach the welded part of the suction and the discharge pipe connected with compressor.
- (6) Remove the nuts of compressor legs.
- (7) Remove the compressor.
- (8) Detach the welded part of pipes conneced with 4-way valve. (Photo 8)

#### **NOTE**

- Before using a burner, reclaim gas from the pipes until the pressure gauge shows 0 kg/cm² (0MPa).
- Use the burner under the condition that gas can be recovered even when the inner pressure rises by heat.

#### Photo 8



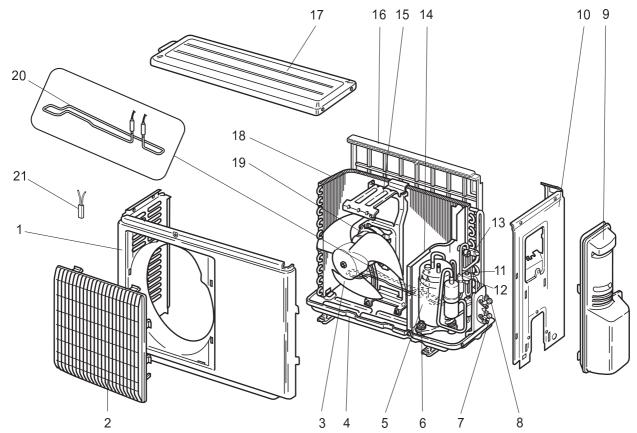
Welded parts of 4-way valve

### 13

### **PARTS LIST**

MUZ-A09YV -E1 MUZ-A12YV -E1 MUZ-A09YVH -E1

#### 13-1. OUTDOOR UNIT STRUCTURAL PARTS AND FUNCTIONAL PARTS

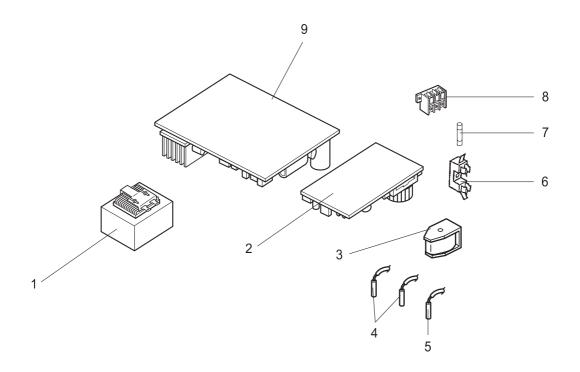


Part number that is circled is not shown in the illustration.

Par	t number that is	circled is not shown in the illustration.						
			Symbol	Q'ty/unit				
No.	Part No.	Part Name	in Wiring	MUZ- A09YV-	MUZ- A09YVH-	MUZ-	MUZ- A12YVH-	Remarks
			Diagram	E1	E1	E1 V-	E1	
1	E02 838 232	CABINET		1	1	1	1	
2	E02 838 521	GRILLE		1	1	1	1	
3	E02 838 501	PROPELLER		1	1	1	1	
4	E02 838 290	BASE		1		1		
4	E02 840 290	BASE			1		1	
5	E02 838 900	COMPRESSOR	MC	1	1			KNB073FBVH
3	E02 839 900	COMPRESSOR	MC			1	1	KNB092FAAH
6	E02 065 506	COMPRESSOR RUBBER SET		3	3	3	3	3RUBBERS/SET
7	E02 838 661	STOP VALVE (GAS)		1	1	1	1	<b>∮9.52</b>
8	E02 838 662	STOP VALVE (LIQUID)		1	1	1	1	$\phi$ 6.35
9	E02 838 245	SERVICE PANEL		1	1	1	1	
10	E02 838 233	BACK PANEL		1	1	1	1	
11	E02 838 640	EXPANSION VALVE		1	1	1	1	
12	E02 838 493	EXPANSION VALVE COIL	LEV	1	1	1	1	
13	E02 838 961	4-WAY VALVE		1	1	1	1	
14	E02 838 293	SEPARATOR		1		1		
14	E02 840 293	SEPARATOR			1		1	
15	E02 838 515	MOTOR SUPPORT		1	1	1	1	
16	E02 838 523	CONDENSER NET		1	1	1	1	
17	E02 838 297	TOP PANEL		1	1	1	1	
18	E02 838 630	OUTDOOR HEAT EXCHANGER		1	1			
10	E02 839 630	OUTDOOR HEAT EXCHANGER				1	1	
19	E02 838 301	OUTDOOR FAN MOTOR	MF	1	1	1	1	RA6V21-□□
20	E02 840 526	DEFROST HEATER	Н		1		1	
21	E02 840 381	HEATER PROTECTOR	26H		1		1	
22	E02 282 937	CAPILLARY TUBE		1	1	1	1	φ3.0×φ2.0×200

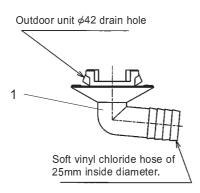
MUZ-A09YV -EI MUZ-A12YV -EI MUZ-A09YVH -EI MUZ-A12YVH -EI

## 13-2. OUTDOOR UNIT ELECTRICAL PARTS



No.				Symbol		Q'ty/				
	0.	Part No. Part Name		Part Name	in Wiring Diagram	MUZ- A09YV-	MUZ- A09YVH-	MUZ- A12YV- E1	MUZ- A12YVH-	Remarks
ľ	1	E02 838	337	REACTOR	L61	1	1	1	1	
Γ,	2	E02 838	444	POWER P.C. BOARD		1		1		
Ľ	_	E02 840	444	POWER P.C. BOARD			1		1	
(	3	E02 838	490	R.V. COIL	21S4	1	1	1	1	
4	4	E02 838	306	THERMISTOR SET	RT61,RT62	1	1	1	1	DEFROST, DISCHARGE
	5	E02 838	308	AMBIENT TEMPERATURE THERMISTOR	RT65	1	1	1	1	
Г	6	E02 735	241	FUSE HOLDER		1	1	1	1	
	7	E02 735	382	FUSE	F61	1	1	1	1	250V/20A
[	8	E02 838	374	TERMINAL BLOCK	TB	1	1	1	1	3P
Г	9	E02 838	451	INVERTER P.C. BOARD		1	1			Including heat sink and RT64
Ľ	9	E02 839	451	INVERTER P.C. BOARD				1	1	Including heat sink and RT64

MUZ-A09YV -E1 MUZ-A12YV -E1 13-3. DRAIN SOCKET



			Symbol	Q'ty.		
No.	Parts No.		in Wiring Diagram	MIII7ΔN9.∀V   F1	MUZ-A12YV- E1	Remarks
1	E02 838 704	DRAIN SOCKET		1	1	



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