

**Revision A:**

- MUX-A22WV -[E1] can be connected to MSC-A07/A12YV -[E1].
- PARTS LIST has partially modified.

Please void OB318.

**No. OB318**  
REVISED EDITION-A

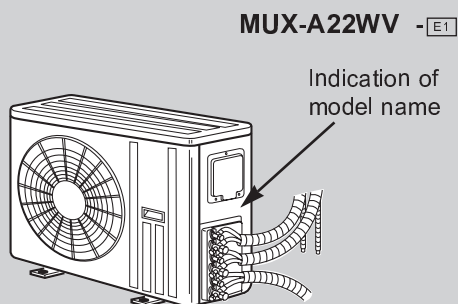


# SERVICE MANUAL

Multi system type

Model

**MUX-A22WV** -[E1]



**NOTE:**

- This manual describes technical data of outdoor unit.
- As for indoor unit MSC-A07WV -[E1] or MSC-A12WV -[E1], refer to the service manual OB307 REVISED EDITION-C.
- As for indoor unit MSC-A07YV -[E1] or MSC-A12YV -[E1], refer to the service manual OB329.

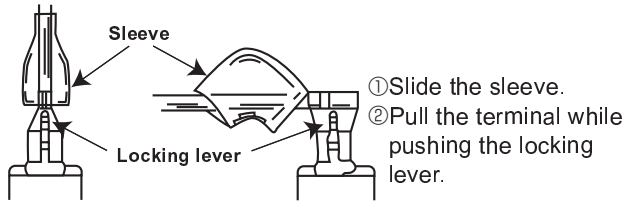
## CONTENTS

1. TECHNICAL CHANGES .....	2
2. PART NAMES AND FUNCTIONS .....	4
3. INDOOR / OUTDOOR CORRESPONDENCE TABLE .....	5
4. SPECIFICATION .....	5
5. NOISE CRITERIA CURVES .....	6
6. OUTLINES AND DIMENSIONS .....	6
7. WIRING DIAGRAM .....	7
8. REFRIGERANT SYSTEM DIAGRAM .....	8
9. PERFORMANCE CURVES .....	9
10. MICROPROCESSOR CONTROL .....	15
11. TROUBLESHOOTING .....	15
12. DISASSEMBLY INSTRUCTIONS .....	21
13. PARTS LIST .....	23

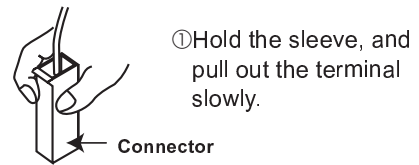
<"Terminal with lock mechanism" Detaching points>

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.

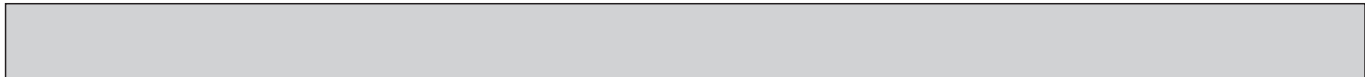


(2) The terminal with this connector is a terminal with lock mechanism



12-1. MUX-A22WV -[E1]  
 OUTDOOR UNIT

OPERATING PROCEDURE	PHOTOS
<p><b>1.Removing the cabinet</b></p> <ol style="list-style-type: none"> <li>(1) Remove the screws of the top panel.</li> <li>(2) Remove the screws of the service panel.</li> <li>(3) Remove the top panel.</li> <li>(4) Remove the service panel.</li> <li>(5) Remove the screws of the front panel.</li> <li>(6) Remove the front panel.</li> <li>(7) Remove the screws of the back panel.</li> <li>(8) Remove the back panel.</li> </ol> <p><b>Photo 3</b></p>	<p><b>Photo 1</b></p> <p><b>Photo 2</b></p>



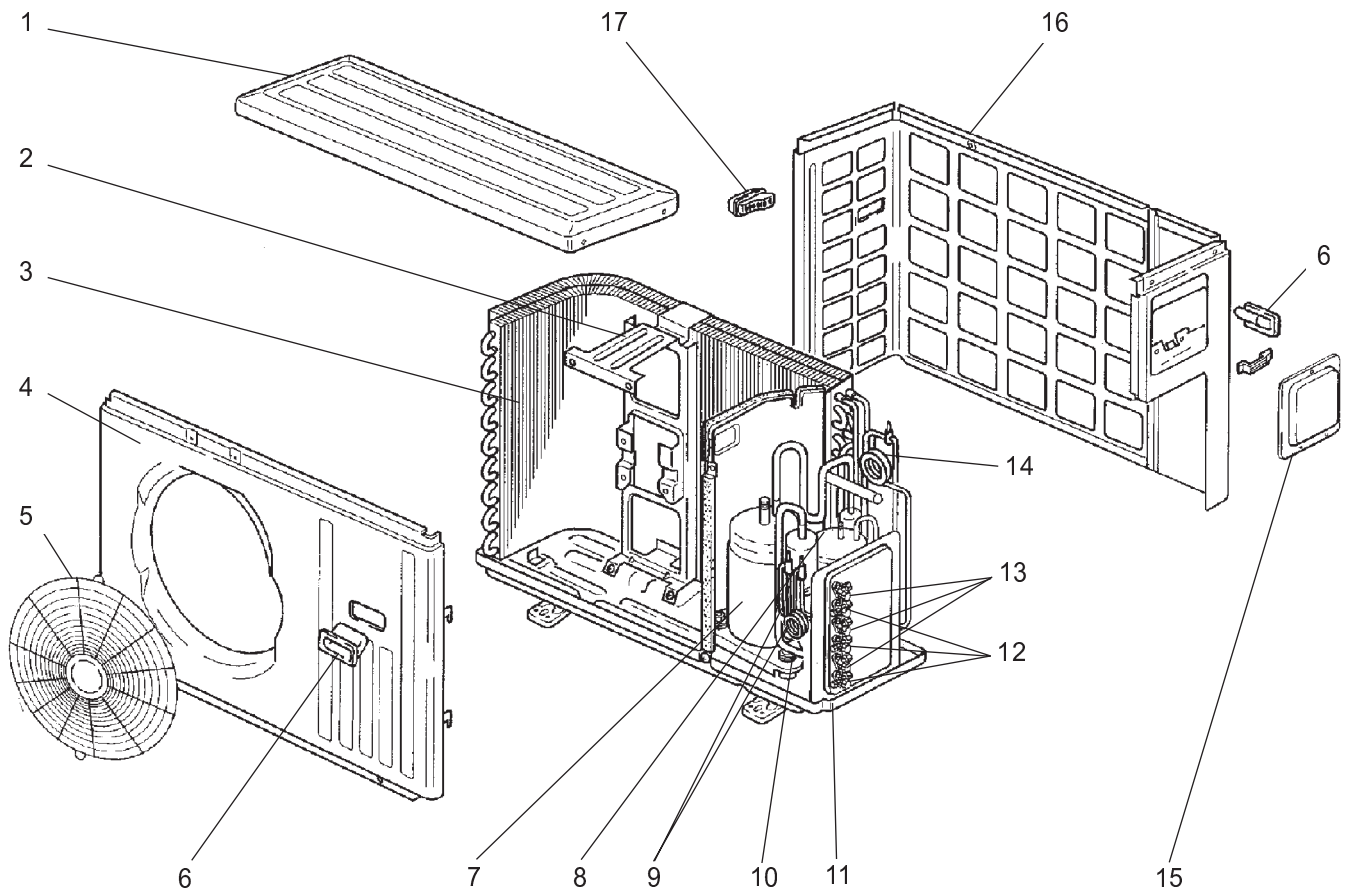
OPERATING PROCEDURE	PHOTOS
<p><b>2. Removing the relay panel</b></p> <p>(1) Remove the cabinet. (Refer to 1.)</p> <p>(2) Disconnect the following connectors.</p> <ul style="list-style-type: none"> <li>· Outdoor fan motor</li> <li>· Solenoid coil (21RB, 21R3, 21R4)</li> </ul>	<p><b>Photo 4</b></p>
<p><b>3. Removing the propeller</b></p> <p>(1) Remove the cabinet. (Refer to 1.)</p> <p>(2) Remove the propeller nut.</p> <p>(3) Remove the propeller.</p> <p><b>NOTE : Loose the propeller in the rotating direction for removal.</b></p> <p>When attaching the propeller, align the mark on the propeller and the motor shaft cut section.</p> <p>Set the propeller in position by using the cut on the shaft and the mark on the propeller.</p>	
<p><b>4. Removing the outdoor fan motor</b></p> <p>(1) Remove the cabinet. (Refer to 1.)</p> <p>(2) Remove the propeller. (Refer to 3.)</p> <p>(3) Remove the clamp of outdoor fan motor lead wire and disconnect the outdoor fan motor connector.</p> <p>(4) Remove the screws fixing the outdoor fan motor.</p> <p>(5) Remove the outdoor fan motor.</p>	
<p><b>5. Removing the compressor (A, B)</b></p> <p>(1) Remove the cabinet. (Refer to 1.)</p> <p>(2) Remove the relay panel.</p> <p>(3) Remove the soundproof felt.</p> <p>(4) Remove the terminal cover on the compressor.</p> <p>(5) Disconnect lead wires from the compressor.</p> <p>(6) Recover gas from the refrigerant circuit.</p> <p>(7) Disconnect the welded part of the discharge pipe.</p> <p>(8) Disconnect the welded part of the suction pipe.</p> <p>(9) Remove nuts fixing the compressor.</p> <p>(10) Remove the compressor.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>● Before using a burner, reclaim gas from the pipes until the pressure gauge shows 0 kg/cm<sup>2</sup> (0 MPa).</li> <li>● Use the burner under the condition that gas can be recovered even when the inner pressure rises by heat.</li> </ul>	<p><b>Photo 5</b></p>
<p><b>6. Removing the compressor (C)</b></p> <p>(1) Remove the cabinet. (Refer to 1.)</p> <p>(2) Remove the relay panel. (Refer to 2.)</p> <p>(3) Remove the screws fixing back panel.</p> <p>(4) Remove the back panel.</p> <p>(5) Remove the soundproof felt.</p> <p>(6) Remove the terminal cover on the compressor.</p> <p>(7) Disconnect lead wires from the compressor.</p> <p>(8) Recover gas from the refrigerant circuit.</p> <p>(9) Disconnect the welded part of the discharge pipe.</p> <p>(10) Disconnect the welded part of the suction pipe.</p> <p>(11) Remove nuts fixing the compressor.</p> <p>(12) Remove the compressor.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>● Before using a burner, reclaim gas from the pipes until the pressure gauge shows 0 kg/cm<sup>2</sup> (0 MPa).</li> <li>● Use the burner under the condition that gas can be recovered even when the inner pressure rises by heat.</li> </ul>	

# 13

# PARTS LIST

MUX-A22WV -E1

## 13-1. OUTDOOR UNIT STRUCTURAL PARTS



Part numbers that are circled are not shown in the illustration.

No.	Part No.	Part Name	Symbol in Wiring Diagram	Q'ty / unit		Remarks
					MUX-A22WV- E1	
1	E02 819 297	TOP PANEL		1		NEW WHITE (Brigter)
2	E02 636 515	MOTOR SUPPORT		1		
3	E02 756 630	OUTDOOR HEAT EXCHANGER		1		
4	E02 737 232	CABINET		1		NEW WHITE (Brigter)
5	E02 819 521	FAN GUARD		1		NEW WHITE (Brigter)
6	E02 819 009	HANDLE		2		NEW WHITE (Brigter)
7	E02 742 900	COMPRESSOR	MC2	1		RN092VHSHT
8	E02 744 900	COMPRESSOR	MC1	1		RN145VHSHT
9	E02 289 936	CAPILLARY TUBE	CT1, CT3, CT4	3		φ3.0×φ1.6×900
	E02 134 936	CAPILLARY TUBE	CT2	1		φ3.0×φ1.6×700
10	E02 075 506	COMPRESSOR RUBBER SET		6		3RUBBERS/SET
11	E02 756 290	BASE		1		NEW WHITE (Brigter)
12	E02 756 661	STOP VALVE (GAS)		1		φ12.7
	E02 757 661	STOP VALVE (GAS)		2		φ9.52
13	E02 756 662	STOP VALVE (LIQ)		3		φ6.35
14	E02 024 936	CAPILLARY TUBE	CT5	1		φ3.0×φ1.4×1000
15	E02 756 245	SERVICE PANEL		1		NEW WHITE (Brigter)
16	E02 757 233	BACK PANEL (OUT)		1		NEW WHITE (Brigter)
17	E02 817 009	HANDLE		1		NEW WHITE (Brigter)
18	E02 637 490	SOLENOID COIL	21RB	1		
19	E02 652 490	SOLENOID COIL (B)	21R3	1		
20	E02 652 491	SOLENOID COIL (C)	21R4	1		
21	E02 755 492	SOLENOID VALVE		2		
22	E02 759 492	SOLENOID VALVE		1		