## CONTENTS

1. PREFACE	2.4 REFRIGERATING CYCLE12
1.1 SAFETY PRECAUTIONS2	2.4.1 CONDENSER12
1.2 INSULATION RESISTANCE TEST 2	2.4.2 EVAPORATOR12
1.3 SPECIFICATIONS 3	2.4.3 CAPILLARY TUBE13
1.4 FEATURES 6	3. INSTALLATION
1.5 CONTROL LOCATIONS 6	3.1 SELECT THE BEST LOCATION15
2. DISASSEMBLY INSTRUCTIONS	3.2 HOW TO INSTALL15
2.1 MECHANICAL PARTS 8	3.2.1 WHEN USING GASKET15
2.1.1 FRONT GRILLE 8	3.2.2 WHEN USING INSTALLATION KITS 15
2.1.2 CABINET 8	4. TROUBLE SHOOTING GUIDE
2.1.3 CONTROL BOX 8	4.1 OUTSIDE DIMENSIONS19
2.2 AIR HANDLING PARTS 9	4.2 PIPING SYSTEM20
2.2.1 AIR GUIDE 9	4.3 TROUBLE SHOOTING GUIDE21
2.2.2 BLOWER 9	5. SCHEMATIC DIAGRAM
2.2.3 FAN, SHROUD10	5.1 CIRCUIT DIAGRAM26
2.3 ELECTRICAL PARTS10	5.2 ELECTRONIC CONTROL DEVICE
2.3.1 OVERLOAD PROTECTOR10	5.3 COMPONENTS LOCATION (OF MAIN P.C.B. ASM) 32
2.3.2 COMPRESSOR10	,
2.3.3 CAPACITOR11	5.4 COMPONENTS LOCATION (FOR DISPLAY P.C.B ASM) 32
2.3.4 POWER CORD11	6. EXPLODED VIEW33
2.3.5 THERMOSTAT11	7. SVC PARTS LIST34
2.3.6 ROTARY SWITCH11	
2.3.7 MOTOR12	

# 1. PREFACE

This SERVICE MANUAL provides various service information, the mechanical and electrical parts, etc. This room air conditioner was manufactured and assembled under a strict quality control system.

The refrigerant is charged at the factory. Be sure to read the safety precautions prior to servicing the unit.

## 1.1 SAFETY PRECAUTIONS

- 1. When servicing the unit, set the ROTARY SWITCH or POWER SWITCH to OFF and unplug the power cord.
- Observe the original lead dress.If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit
- 3. After servicing the unit, make an insulation resistance test to protect the customer from being exposed to shock hazards.

## 1.2 INSULATION RESISTANCE TEST

- 1. Unplug the power cord and connect a jumper between 2 pins (black and white).
- 2. The grounding conductor (green or green & yellow) should be open.
- 3. Measure the resistance value with an ohm meter between the jumpered lead and each exposed metallic part on the equipment at all the positions (except OFF or O) of the ROTARY SWITCH.
- 4. The value should be over  $1M\Omega$ .

# **1.3 SPECIFICATIONS**

# 1.3.1 FOR LW-B0811CL, LW-B0810CL, LW-B0712CL

ITEMS	MODE	LS	LW-B0811CL	LW-B0810CL	LW-B0712CL
POWER SUPPLY			1∝", 115V, 60Hz		
COOLING CAPACITY (Btu/h)		(Btu/h)	8,000	8,000	7,000
INPUT (W)		(W)	800	885	760
RUNNING CURR	ENT	(A)	7.0	7.8	7.0
E.E.R (Btu/W.h)		3tu/ <b>W</b> .h)	10.0	9.0	9.2
OPERATING	INDOO	R (℃)	26.7 (DB) <sup>f</sup>		fT
TEMPERATURE	OUTDO	OR (℃)	35 (DB) 23.9 (WB)		
REFRIGERANT (R-22) CHARGE		ARGE	415g (14.6Oz) 320g (11.30		320g (11.3Oz)
EVAPORATOR		2 ROW 14 STACKS, S-FIN(LG-SLIT) TYPE			
CONDENSOR			2 ROW 16 STACKS, S-FIN(LG-LOUVER) TYPE		
FAN, INDOOR			BLOWER		
FAN, OUTDOOR			PROPELLER TYPE FAN WITH SLINGER-RING		
FAN SPEEDS, FAN/COOLING		NG	2/2		
FAN MOTOR			6 POLES		
OPERATION CONTROL			ROTARY SWITCH		
ROOM TEMP. CONTROL			THERMOSTAT		
AIR DIRECTION CONTROL			HORIZONTAL LOUVER (RIGHT & LEFT)		
		VANE (UP & DOWN)			
CONSTRUCTION			SLIDE IN-OUT CHASSIS		
PROTECTOR	COMPR	ESSOR	OVERLOAD PROTECTOR		
PROTECTOR	FAN MOTOR		INTERNAL THERMAL PROTECTOR		
DOMED CODD			1.8m (7') (3 WIRE WITH GROUDING)		
POWER CORD		ATTACHMENT PLUG (CORD-CONNECTED TYPE)			
DRAIN SYSTEM		SPLASHED BY FAN SLINGER			
NET WEIGHT		(lbs/kg)		71/32	
OUTSIDE DIMEN	ISION	(inch)	20¹/₁6" ; ¿13²/8" ; ¿19³/₁6"		
(U; H; W)		(mm)	510 ¡¿353 ¡¿487		

fT DB: dry bulb ffT WB: wet bulb

# 1.3.2 FOR LW-B0760CL, LW-B0960CL

ITEMS	MODE	LS	LW-B0820CL	LW-B0760CL	LW-B0960CL	
POWER SUPPLY		1 × ", 220V~, 60Hz 1 × ", 220-240V~, 50Hz		10 <b>V</b> ~, 50Hz		
COOLING CAPACITY (Btu/h)		8,000	7,000	9,000		
INPUT (W)		720	775	1,000		
RUNNING CURR	ENT	(A)	3.4	3.4	4.4	
E.E.R	(8	3tu/ <b>W</b> .h)	11.0	9.0	9.0	
OPERATING	INDOO	R (℃)	27 (DB) 19 (WB)			
TEMPERATURE	OUTDO	OOR (℃)	35 (DB) 24 (WB)			
REFRIGERANT (R-22) CHARGE		380g(13.4Oz)	325g (11.5Oz)	445g (15.7Oz)		
EVAPORATOR		2 ROW 14 STACKS, S-FIN(LG-SLIT) TYPE				
CONDENSOR		2 ROW 16 STACKS, S-FIN(LG-LOUVER) TYPE				
FAN, INDOOR		BLOWER				
FAN, OUTDOOR		PROPELLER TYPE FAN WITH SLINGER-RING				
FAN SPEEDS, FAN/COOLING		2/2				
FAN MOTOR		6 POLES				
OPERATION CONTROL		ROTARY SWITCH				
ROOM TEMP. CONTROL		THERMOSTAT				
AIR DIRECTION CONTROL		HORIZONTAL LOUVER (RIGHT & LEFT)				
AIR DIRECTION	JN CONTROL		VANE (UP & DOWN)			
CONSTRUCTION		SLIDE IN-OUT CHASSIS				
PROTECTOR	COMPRESSOR		OVERLOAD PROTECTOR			
PROTECTOR	FAN MC	TOR	INTER	NAL THERMAL PROTEC	THERMAL PROTECTOR	
DOWED CODD			1.8m (7') (3 WIRE WITH GROUDING)			
POWER CORD		ATTACHMENT PLUG (CORD-CONNECTED TYPE)				
DRAIN SYSTEM		SPLASHED BY FAN SLINGER				
NET WEIGHT		(lbs/kg)		71/32		
OUTSIDE DIMENSION (inch) (W; ¿H; ¿D) (mm)		(inch)	20¹/16" ; ¿13²/8" ; ¿19³/16"			
		(mm)	510 ¡¿353 ¡¿487			

# 1.3.3 FOR LW-B0713CL, LW-B0961CL

MODELS		LW-B0713CL	LW-B0961CL	
POWER SUPPLY		1¤", 110V, 60Hz	1 × ", 220-240V~, 50Hz	
COOLING CAPAG	COOLING CAPACITY (Btu/h)		7,142	9,000
INPUT	INPUT (W)		790	1,000
RUNNING CURR	ENT	(A)	7.2	4.4
E.E.R	(1	Stu/ <b>W</b> .h)	9.0	9.0
OPERATING	INDOOF	(℃)	27 (DB) 19.5 ( <b>W</b> B)	27 (DB) 19 (WB)
TEMPERATURE	OUTDO	OR (℃)	35 (DB) 24 ( <b>W</b> B)	35 (DB) 24 (WB)
REFRIGERANT (	REFRIGERANT (R-22) CHARGE		320g (11.3Oz)	445g (15.7Oz)
EVAPORATOR	EVAPORATOR		2 ROW 14 STACKS, S-FIN(LG-SLIT) TYPE	
CONDENSOR	CONDENSOR		2 ROW 16 STACKS, S-FIN(LG-LOUVER) TYPE	
FAN, INDOOR		BLOWER		
FAN, OUTDOOR		PROPELLER TYPE FAN WITH SLINGER-RING		
FAN SPEEDS, FAN/COOLING		2/2		
FAN MOTOR		6 POLES		
OPERATION CONTROL		REMOTE CONTROL		
ROOM TEMP. CONTROL		THERMISTOR		
AIR DIRECTION CONTROL		HORIZONTAL LOUVER (RIGHT & LEFT)		
		VANE (UP & DOWN)		
CONSTRUCTION	CONSTRUCTION		SLIDE IN-OUT CHASSIS	
PROTECTOR	PROTECTOR COMPRESSOR FAN MOTOR		OVERLOAD PROTECTOR	
PROTECTOR			INTERNAL THERMAL PROTECTOR	
POWER CORD		1.8m (7') (3 WIRE WITH GROUDING)		
		ATTACHMENT PLUG (CORD-CONNECTED TYPE)		
DRAIN SYSTEM		SPLASHED BY FAN SLINGER		
NET WEIGHT		(lbs/kg)	71/32	
OUTSIDE DIMEN	OUTSIDE DIMENSION (inch)		201/16" ; ; 137/8" ; ; 193/16"	
(W ¡¿H ¡¿D	(Mm) (U3; H3; W)		510 ¡¿353 ¡¿487	

## 1.4 FEATURES

- · Designed for COOLING ONLY.
- · Power and whisper cooling.
- Slide-in and slide-out chassis for simple installation and service.
- · Side air-intake, side cooled-air discharge.
- Built-in adjustable THERMOSTAT.
- · Washable one-touch filter.
- · Compact size.
- Reliable and efficient rotary compressor is equipped.

### 1.5 CONTROL LOCATIONS

### 1.5.1 COOLING ONLY MODEL

### VENTILATION

The ventilation lever must be in the CLOSE position in order to maintain the best cooling conditions.

When fresh air is necessary in the room, set the ventilation lever to the OPEN position.

The damper is opened and room air is exhausted.

### NOTE

Before using the ventilation feature, make a ventilation kit. First pull down part  $\mathfrak L$  to horizontal line with part  $\mathfrak L$  .

#### ENERGY SAVER

Energy saver provides more energy efficient operation of the air conditioner by cycling the fan on and off with compressor.

REGULAR: Energy saver is not operated. ECONOMY: Energy saver is operated.

(FOR LW-B0811CL)

### THERMOSTAT

Thermostat will automatically control the temperature of the room. Select a higher number for a cooler temperature in the room. The temperature is selected by positioning the knob to the desired position.

The **5** or **6** position is a normal setting for average conditions.

#### OPERATION

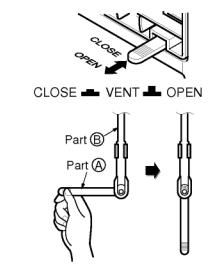
OFF (0): Turns the air conditioner off.

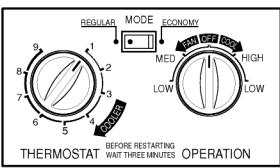
HIGH FAN ( ((S)): High fan speed operation without cooling.

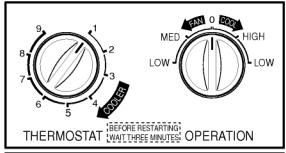
LOW FAN ( ( ) : Low fan speed operation without cooling.

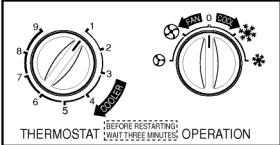
HIGH COOL(\*\*): Cooling with the high fan speed operation.

LOW COOL ( \* ): Cooling with the low fan speed operation.

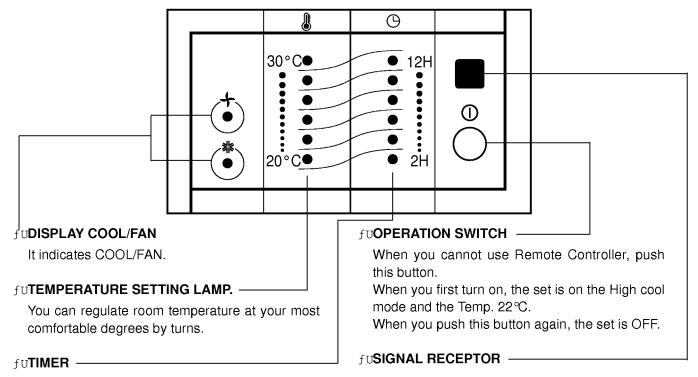








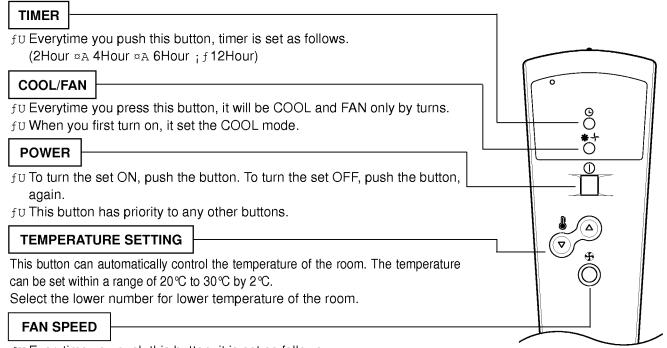
#### 1.5.2 COOLING ONLY MODEL WITH REMOTE CONTROL



It displayes the operating of timer.

## **FUREMOTE CONTROL**

**Precaution:** The Remote Control unit will not function properly if strong light strikes the sensor window of the air conditioner or if there are obstacles between the Remote Control unit and the air conditioner.



 ${\it f} \, {\tt U}$  Everytime you push this button, it is set as follows.

(High ¤ALow ¤AHigh ¤A;f)

 $\operatorname{f} \operatorname{U} When$  you first turn on, it set the High mode.