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# 1. PREFACE

This SERVICE MANUAL provides various service information, including 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

- 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) is to 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) of the ROTARY SWITCH.
- 4. The value should be over  $1M\Omega$ .

# 1.3 SPECIFICATIONS

## ■ FOR HBLG100(LWC1011ACG)/HBLG120(LWC1211ACG)

	M	ODELS	HBLG100(LWC1011ACG)	HBLG120(LWC1211ACG)
ITEMS				· · ·
POWER SUPPLY			1ø, 115, 60Hz	
COOLING CAPACITY (Btu/h)		(Btu/h)	10,000	12,000
INPUT (W)		(W)	1,020	1,220
RUNNING CURRE	NT	(A)	9.2	11.0
E.E.R	E.R (BTU/W.h)		9.8	
OPERATING	INDOOR (℃)		26.7(DB)*	19.4(WB)**
CONDITION	DITION OUTDOOR (°C)		35(DB)* 23.9(WB)**	
REFRIGERANT (R-22) CHARGE		HARGE	540g (19.0 Oz)	530g (18.7 Oz)
EVAPORATOR			2 ROW 16 STACKS, SLIT-FIN TYPE	2 ROW 13 STACKS, LOUVERED-FIN TYPE
CONDENSER			2 ROW 17 STACKS, LOUVERED-FIN TYPE	
FAN, INDOOR		BLOWER		
FAN, OUTDOOR			PROPELLER TYPE FAN WITH SLINGER-RING	
FAN SPEEDS, FAN/COOLING		LING	2/3	
FAN MOTOR			6 POLES	
OPERATION CONTROL			ROTARY SWITCH	
ROOM TEMP. CONTROL			THERMOSTAT	
AIR DIRECTION CONTROL		)	VERTICAL LOUVER (RIGHT & LEFT)	
		, _	HORIZONTAL LOUVER (UP & DOWN)	
CONSTRUCTION			SLIDE IN-OUT CHASSIS	
PROTECTOR	COMPRESSOR		OVERLOAD PROTECTOR	
THOTEOTOR	FAN MOTOR		INTERNAL THERMAL PROTECTOR	
POWER CORD			(3 WIRE WITH GROUDING)	
			ATTACHMENT PLUG (CORD-CONNECTED TYPE)	
DRAIN SYSTEM			DRAIN PIPE OR SPLASHED BY FAN SLINGER	
NET WEIGHT (lbs/kg)		(lbs/kg)	90/41	95/43
OUTSIDE DIMENSION (inch)		(inch)	23 <sup>5</sup> / <sub>8</sub> x 14 <sup>31</sup> / <sub>32</sub> x 22 <sup>5</sup> / <sub>16</sub>	
( <b>W</b> x H x D) (mm)		(mm)	600 x 380 x 567	

<sup>\*</sup> DB:Dry Bulb \*\*WB:Wet Bulb

## 1.3.2 FOR HBLG12H(LWC1230AXG)

ITEMS	MODELS	HBLG12H(LWC1230AXG)	
POWER SUPPLY		1ø, 208/230V, 60Hz	
COOLING CAPACITY (Btu/h)		11,500/12,000	
INPUT (W)		1,250/1,300	
RUNNING CURRENT (A)		6.2/5.8	
E.E.R	(BTU/ <b>W</b> .h)	9.2	
HEATING CAPACITY (Btu/h)		9,200/11,200	
INPUT (W)		2,900/3,500	
RUNNING CURRENT (A)		14/15.3	
OPERATING	NDOOR (℃)	26.7(DB)* 19.4(WB)**	
CONDITION	UTDOOR (℃)	35(DB)* 23.9(WB)**	
REFRIGERANT (R-22) CHARGE		490g (17.3 Oz))	
EVAPORATOR		2 ROW 13 STACKS LOUVERED-FIN TYPE	
CONDENSER		2 ROW 17 STACKS, LOUVERED-FIN TYPE	
FAN, INDOOR		BLOWER	
FAN, OUTDOOR		PROPELLER TYPE FAN WITH SLINGER-RING	
FAN SPEEDS, FAN/HEAT	ING/COOLING	1/2/2	
FAN MOTOR		6 POLES	
OPERATION CONTROL		ROTARY SWITCH OR ROCKER SWITCH	
ROOM TEMP. CONTROL		THERMOSTAT	
AIR DIRECTION CONTROL		VERTICAL LOUVER (RIGHT & LEFT)	
		HORIZONTAL LOUVER (UP & DOWN)	
CONSTRUCTION		SLIDE IN-OUT CHASSIS	
ELECTRIC HEATER		3.5KW, 230V	
CC	MPRESSOR	OVERLOAD PROTECTOR	
PROTECTOR FA	N MOTOR	INTERNAL THERMAL PROTECTOR	
EL	ECTRIC HEATER	FUSE LINK, BIMETAL THERMOSTAT	
POWER CORD		(3 WIRE WITH GROUDING)	
POWER GORD		ATTACHMENT PLUG (CORD-CONNECTED TYPE)	
DRAIN SYSTEM		DRAIN PIPE OR SPLASHED BY FAN SLINGER	
NET WEIGHT	(lbs/kg)	97/44	
OUTSIDE DIMENSION	(inch)	23 <sup>5</sup> /8 x 14 <sup>31</sup> / <sub>32</sub> x 22 <sup>5</sup> / <sub>16</sub>	
$(W \times H \times D)$	(mm)	600 x 380 x 567	

<sup>\*</sup> DB:Dry Bulb \*\*WB:Wet Bulb

## 1.4 FEATURES

- Designed for COOLING ONLY.
- · Powerful and whispering cooling.
- · Slide-in and slide-out chassis for the 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.

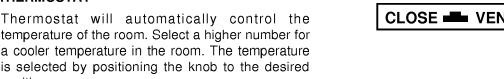
When a fresh air is necessary in the room, set the ventilation lever OPEN position.

The damper is opened and room air is exhausted.



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(HBLG100/HBLG120)

Off - Turns air conditioner off.

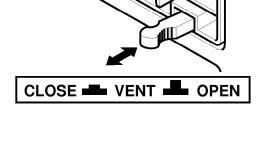
Med Fan - Med speed fan operation without cooling.

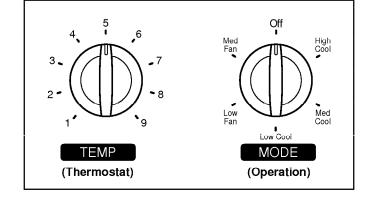
Low Fan - Low speed fan operation without cooling.

High Cool - Cooling with high speed fan operation.

Med Cool - Cooling with med speed fan operation.

Low Cool - Cooling with low speed fan operation.





## OPERATION(HBLG12H)

Off : Turns the air conditioner off.

Low Fan : Permits the low fan speed operation

without cooling (heating).

Low Cool : Permits cooling with the low fan

speed operation.

: Permits cooling with the high fan High Cool

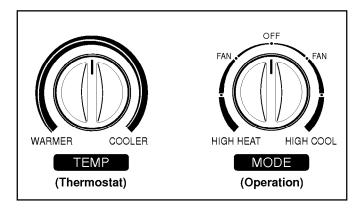
speed operation.

Low Heat : Permits heating with the low fan

speed operation.

High Heat : Permits heating with the high fan

speed operation.



A slight heat odor may come from the unit when first switching to HEAT after the cooling season is over. This odor, caused by fine dust particles on the heater, will disappear quickly.