

LOSSNAY

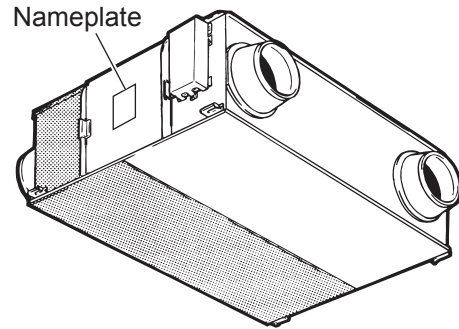
# HANDBOOK

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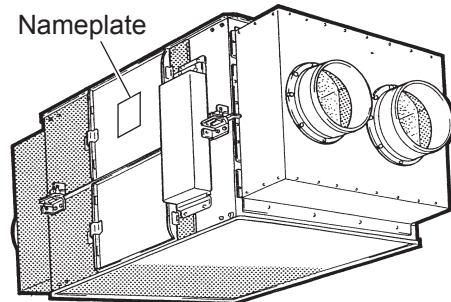
## MODELS

**LGH-F300RX3-E**

**LGH-F600RX3-E**



**LGH-F1200RX3-E**



**Warning:**

Repair work must be performed by the manufacturer, its service agent or a similarly qualified person in order to avoid hazards.









**MITSUBISHI ELECTRIC CORPORATION**




# Contents

Safety precautions .....	3
1. Specifications .....	4-5
2. Dimensions .....	5-6
3. Wiring diagrams .....	7-8
4. Troubleshooting .....	9-22
4-1 Service Flow .....	9-10
4-2 Items to Check.....	11-21
4-3 Circuit Test Point.....	22
5. Overhaul procedures.....	23-28
5-1 Blower Parts .....	23-25
5-2 Damper Movement Motor Part (All units available)...	25-26
5-3 Circuit Board Part.....	26-28
6. Parts list .....	29-41
LGH-F300RX3-E .....	30-33
LGH-F600RX3-E .....	34-37
LGH-F1200RX3-E .....	38-41

# Safety precautions

- Please be sure to read the following safety precautions thoroughly before commencing with the maintenance work, and conduct the inspection and repair of the product in a safe manner.
- The types and levels of danger that may arise if the product is handled incorrectly are described by using the warning symbols shown below.

 <b>Warning</b>		Incorrect handling of the product may result in serious injury or death.	
<p>◇ <b>Electric shock</b> If you must inspect the circuitry while the power is on, do not touch the live parts.</p> <p>(Failure to heed this warning may result in electric shock.)</p>	 <small>Caution for electric shock</small>	<p>◇ <b>Turn off the power supply</b> Be sure to shut off the breaker before disassembling the unit for repair.</p> <p>(Failure to heed this warning may result in electric shock.)</p>	 <small>Be sure to follow this instruction.</small>
<p>◇ <b>Modification is prohibited</b> Do not modify the unit.</p> <p>(Failure to heed this warning may result in electric shock, fire and/or bodily injury.)</p>	 <small>Prohibited</small>	<p>◇ <b>Use proper parts and tools</b> For repair, be sure to use the parts listed in the service parts list of the applicable unit model and use the proper tools.</p> <p>(Failure to heed this warning may result in electric shock, fire and/or bodily injury.)</p>	 <small>Be sure to follow this instruction.</small>
<p>◇ <b>Proper electric work</b> Use the electric wires designated for electric work, and conduct electric work in accordance with the "Electric Installation Engineering Standard," the "Indoor Wiring Regulations," and the Installation Work Guide.</p> <p>(Incomplete connection or wiring installation may result in electric shock and/or fire.)</p>	 <small>Be sure to follow this instruction.</small>	<p>◇ <b>Replace damaged and/or degraded parts</b> Be sure to replace the power-supply cord and lead wire in the event that they are damaged and/or degraded.</p> <p>(Failure to heed this warning may result in electric shock and/or fire.)</p>	 <small>Be sure to follow this instruction.</small>
		<p>◇ <b>Check insulation</b> Be sure to measure the insulation resistance once the repair work is complete, and turn on the power supply after verifying that an insulation resistance of at least 10MΩ is obtained.</p> <p>(If an insulation problem exists, it may result in electric shock.)</p>	 <small>Be sure to follow this instruction.</small>

 <b>Caution</b>		Incorrect handling of the product may result in serious injury or damage to properties including buildings and equipment.	
<p>◇ <b>Caution for bodily injury</b> Do not conduct any work at a location where you do not have a sure footing.</p> <p>(Failure to heed this caution may result in a fall.)</p>	 <small>Prohibited</small>	<p>◇ <b>Wear gloves</b> Wear gloves when conducting work.</p> <p>(Failure to heed this caution may result in injury to your hands from sharp metal or other edges.)</p>	 <small>Be sure to follow this instruction.</small>

## Request during repair

- Inspect the grounding, and repair it if incomplete.
- Make sure that the product operates correctly upon completion of repair. Clean the product as well as the surrounding area, and then notify the customer of the completion of repair.

# 1. Specifications

MODEL	LGH-F300RX3-E					
Control signal	Serial single communication (M-NET transmission)					
Heat exchange system	Air-to-air total heat (sensible heat + latent heat)exchange					
Heat exchanger material	Partition, spacing plate-special treated paper					
Cladding	Galvanized steel sheet					
Heat insulating material	Self-extinguishing urethane foam					
Motor	Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 2 units					
Blower	8 3/4in dia. centrifugal fan					
Operating environment (Supply air)	14°F to 104°F, RH 80% or less (5°F (※) to 104°F, RH 80% or less) This environment is the general condition in air-conditioned room					
Functions	Lossnay ventilation/Bypass ventilation High(Extra high)-Low switching					
Weight	73lbs					
Power supply	Single phase 208-230V 60Hz					
Ventilation mode	Lossnay ventilation			Bypass ventilation		
Fan speed	Extra high	High	Low	Extra high	High	Low
Current (A)	1.3	1.1	0.6	1.4	1.1	0.6
Power consumption (W)	278	260	146	280	262	146
Air volume (CFM)	300	300	180	300	300	180
External static pressure (in.H <sub>2</sub> O)	0.65	0.10	0.02	0.65	0.10	0.02
Temperature recovery efficiency (%)	69	70	77	-	-	-
Enthalpy recovery efficiency (%)	Heating	62	64	71	-	-
	Cooling	44	46	55	-	-
Sound level (dB)	Measured at 59in. under the center of panel	36	32	25	36	32
	Air outlets	44	40	31	44	40
Starting current	Under (2.5A) or less					
Insulation resistance	10MΩ or more (500V megger)					
Dielectric strength	AC 1500V 1 minute					

※The defrosting mode must be operated under 14°F or below.  
(Air supply fan drives 60 min.ON/10 min. OFF)

MODEL	LGH-F600RX3-E					
Control signal	Serial single communication (M-NET transmission)					
Heat exchange system	Air-to-air total heat (sensible heat + latent heat)exchange					
Heat exchanger material	Partition, spacing plate-special treated paper					
Cladding	Galvanized steel sheet					
Heat insulating material	Self-extinguishing urethane foam					
Motor	Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 2 units					
Blower	9 5/8in. dia. centrifugal fan					
Operating environment (Supply air)	14°F to 104°F, RH 80% or less (5°F (※) to 104°F, RH 80% or less) This environment is the general condition in air-conditioned room					
Functions	Lossnay ventilation/Bypass ventilation High(Extra high)-Low switching					
Weight	159 lbs					
Power supply	Single phase 208-230V 60Hz					
Ventilation mode	Lossnay ventilation			Bypass ventilation		
Fan speed	Extra high	High	Low	Extra high	High	Low
Current (A)	2.9	2.6	1.7	2.8	2.6	1.7
Power consumption (W)	654	600	390	648	600	396
Air volume (CFM)	600	600	430	600	600	430
External static pressure (in.H <sub>2</sub> O)	0.80	0.48	0.24	0.80	0.48	0.24
Temperature recovery efficiency (%)	69	70	75	-	-	-
Enthalpy recovery efficiency (%)	Heating	62	63	69	-	-
	Cooling	44	47	53	-	-
Sound level (dB)	Measured at 59in. under the center of panel	39	37	30	40	39
	Air outlets	47	45	37	48	45
Starting current	Under (7.0A) or less					
Insulation resistance	10MΩ or more (500V megger)					
Dielectric strength	AC 1500V 1 minute					

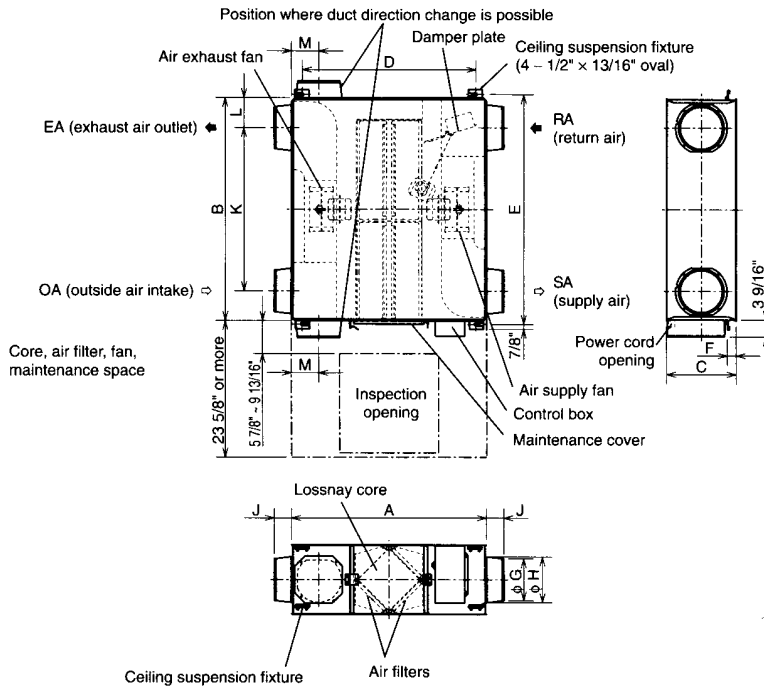
※The defrosting mode must be operated under 14°F or below.  
(Air supply fan drives 60 min.ON/10 min. OFF)

MODEL	LGH-F1200RX <sub>3</sub> -E					
Control signal	Serial single communication (M-NET transmission)					
Heat exchange system	Air-to-air total heat (sensible heat + latent heat) exchange					
Heat exchanger material	Partition, spacing plate-special treated paper					
Cladding	Galvanized steel sheet					
Heat insulating material	Self-extinguishing urethane foam					
Motor	Totally enclosed capacitor permanent split-phase induction motor, 4 poles, 4 units					
Blower	8 3/4in dia. centrifugal fan					
Operating environment (Supply air)	14°F to 104°F, RH 80% or less (5°F (※) to 104°F, RH 80% or less) This environment is the general condition in air-conditioned room					
Functions	Lossnay ventilation/Bypass ventilation High(Extra high)-Low switching					
Weight	395lbs					
Power supply	Single phase 208-230V 60Hz					
Ventilation mode	Lossnay ventilation			Bypass ventilation		
Fan speed	Extra high	High	Low	Extra high	High	Low
Current (A)	5.7	5.6	3.6	5.6	5.5	3.6
Power consumption (W)	1290	1200	810	1265	1190	800
Air volume (CFM)	1200	1200	800	1200	1200	800
External static pressure (in. H <sub>2</sub> O)	0.75	0.43	0.20	0.75	0.43	0.20
Temperature recovery efficiency (%)	69	70	76	-	-	-
Enthalpy recovery efficiency (%)	Heating	62	63	-	-	-
	Cooling	44	47	53	-	-
Sound level (dB)	Measured at 59in. under the center of panel	41	39	32	42	40
	Air outlets	52	49	41	52	49
Starting current	Under (14A) or less					
Insulation resistance	10MΩ or more (500V megger)					
Dielectric strength	AC 1500V 1 minute					

※The defrosting mode must be operated under 14°F or below.  
(Air supply fan drives 60 min.ON/10 min. OFF)

## 2. Dimensions

LGH-F300RX<sub>3</sub>-E, LGH-F600RX<sub>3</sub>-E

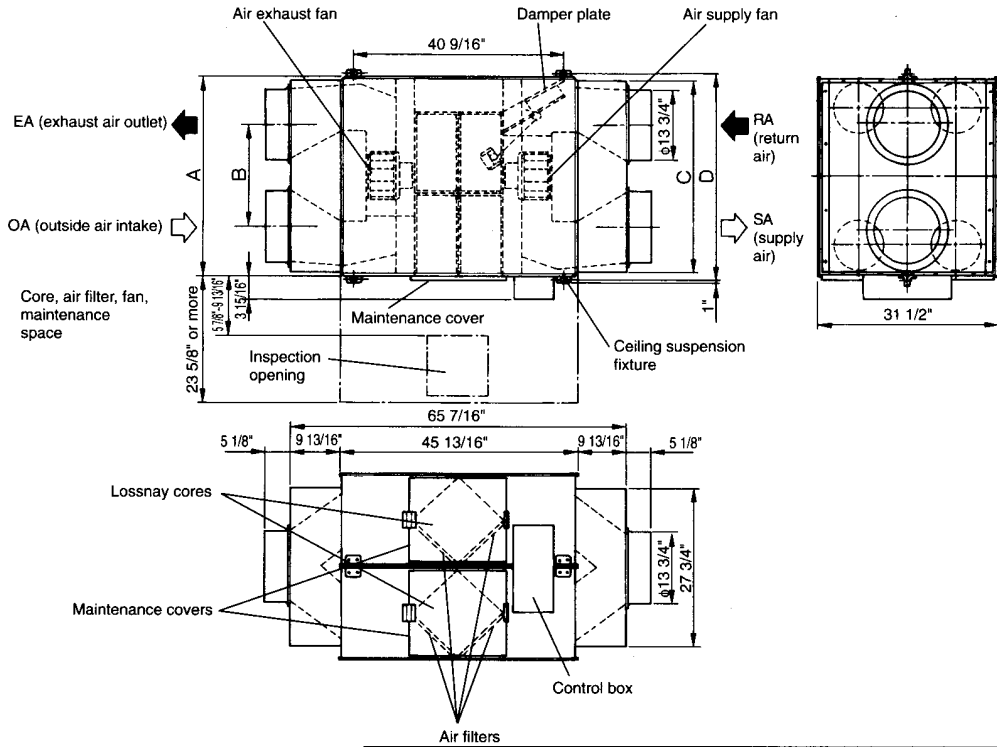


Model	Dimensions			Ceiling suspension fixture pitch			Nominal diameter	Duct connecting flange			Duct pitch		
	A	B	C	D	E	F		G	H	J	K	L	M
LGH-F300RX <sub>3</sub> -E	34 15/16"	40"	12 1/2"	31 1/8"	41 1/4"	1 9/16"	φ 7 7/8"	7 9/16"	8 3/16"	3 1/8"	29 5/16"	5 5/16"	4 7/8"
LGH-F600RX <sub>3</sub> -E	45 13/16"	48 7/16"	15 11/16"	40 9/16"	49 3/4"	3/8"	φ 9 7/8"	9 1/2"	10 3/16"	3 1/8"	36 3/16"	6 1/8"	5 7/8"

\* Shows the distance from the ceiling.

Unit (inch)

LGH-F1200RX3-E



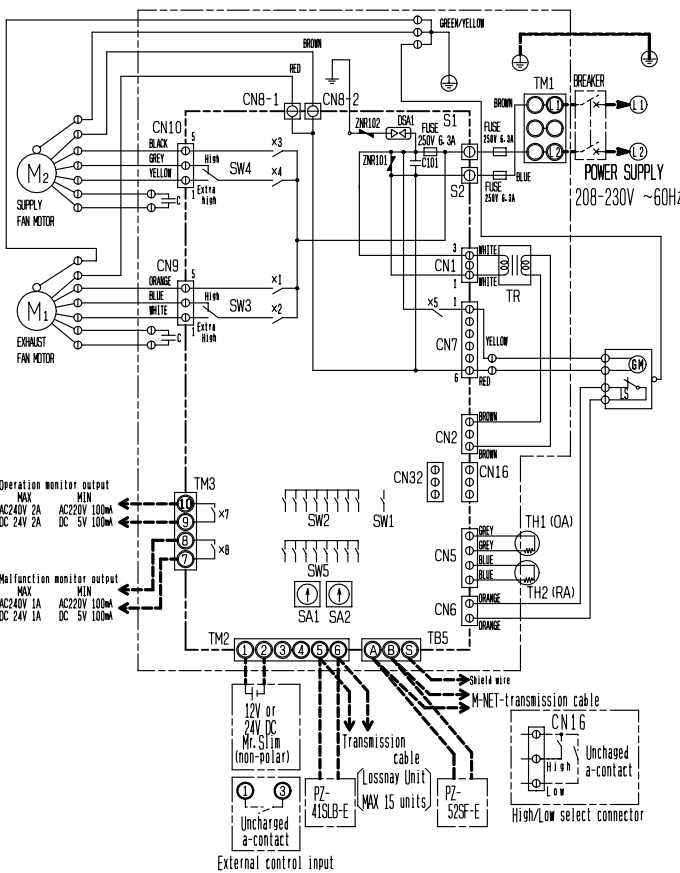
Model	A	B	C	D
LGH-F1200RX3-E	48 7/16"	29 1/8"	47"	50 1/8"

Unit (inch)

# 3. Wiring diagrams

LGH-F300RX3-E, LGH-F600RX3-E

- \* Connect the wires shown as dotted lines.
- \* Be sure to connect the grounding wire.
- \* Breaker should be provided by the customer.



MARK ○ : Indicates terminal block  
 ⊕ : Connector  
 ⊞ : Board insertion connector or fastening connector of control board

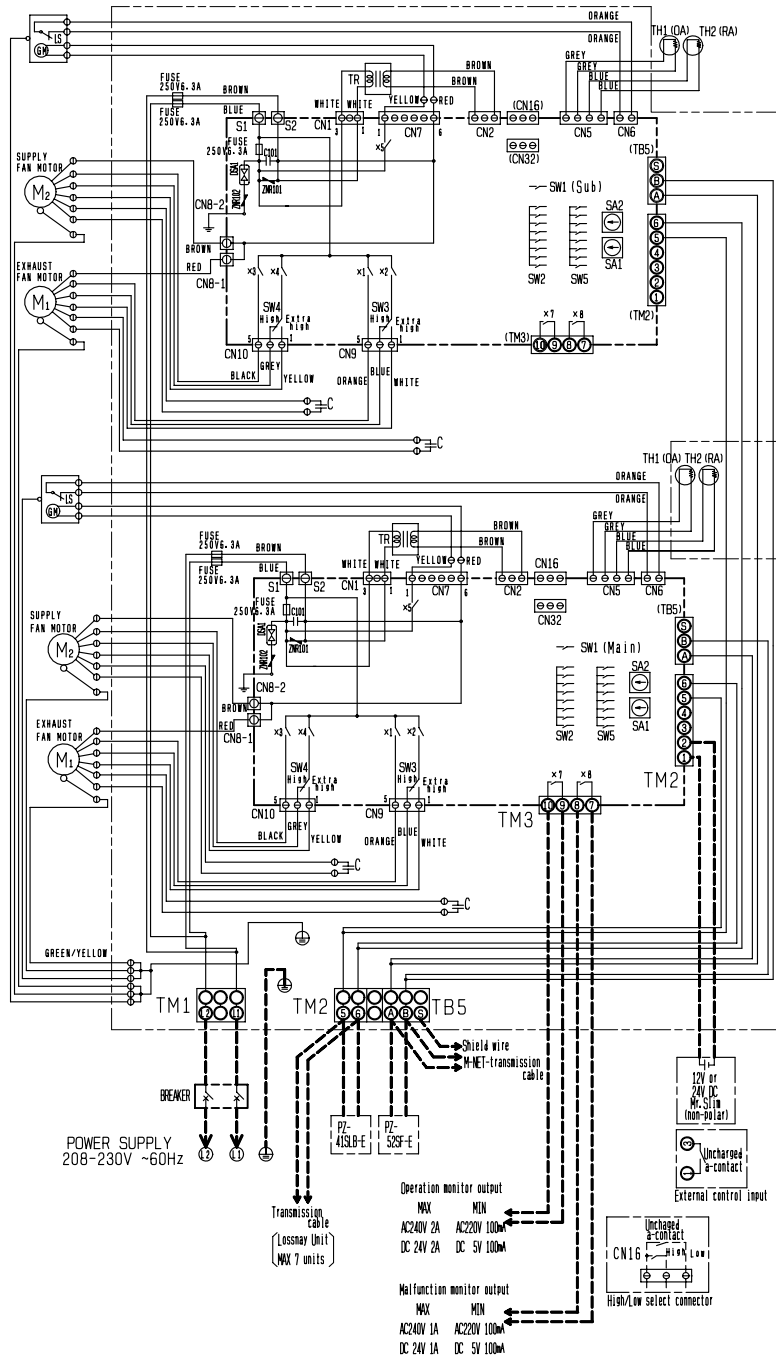
### Symbol explanation

M1:	Motor for exhaust fan	X8:	Relay contact (For malfunction monitor output)
M2:	Motor for supply fan	CN1:	Connector (Transformer primary)
C:	Capacitor	CN2:	Connector (Transformer secondary)
GM:	Motor for Bypass movement	CN5:	Connector (Thermistor)
LS:	Microswitch	CN6:	Connector (Microswitch)
TH1:	Thermistor for outside air	CN7:	Connector (Motor for Bypass operation)
TH2:	Thermistor for return air	CN8-1:	Tab connector (Fan motor)
SW1:	Switch (Main/Sub change)	CN8-2:	Tab connector (Fan motor)
SW2,5:	Switch (Function selection)	CN9:	Connector (Fan motor)
SW3:	High/E.High select switch (Exhaust fan)	CN10:	Connector (Fan motor)
SW4:	High/E.High select switch (Supply fan)	CN16:	Connector (High/Low switch)
TM1:	Terminal block (Power supply)	TM3:	Terminal block (Monitor output)
TM2:	Terminal block (Transmission cable and external control input)	CN32:	Connector (Remote control selection)
TM3:	Terminal block (Monitor output)	SA1:	Address setting rotary switch (10 digit)
TB5:	Terminal block (M-NET Transmission cable)	SA2:	Address setting rotary switch (1 digit)
S1,S2:	Connector (Power supply)	LED1:	Inspection indicator lamp
TR:	Control circuit transformer	LED2:	Inspection indicator lamp
X7:	Relay contact (For operation monitor output)	LED4:	Power supply indicator lamp
		LED6:	M-NET indicator lamp

- PZ-41SLB-E and PZ-52SF-E cannot be used simultaneously.

# LGH-F1200RX3-E

- \* Connect the wires shown as dotted lines.
- \* Be sure to connect the grounding wire.
- \* Breaker should be provided by the customer.



### Symbol explanation

M1: Motor for exhaust fan	TM1: Terminal block (Power supply)	CN1: Connector (Transformer primary)	CN32: Connector (Remote control selection)
M2: Motor for supply fan	TM2: Terminal block (Transmission cable and external control input)	CN2: Connector (Transformer secondary)	SA1: Address setting rotary switch (10 digit)
C: Capacitor	TM3: Terminal block (Monitor output)	CN5: Connector (Thermistor)	SA2: Address setting rotary switch (1 digit)
GM: Motor for Bypass movement	TB5: Terminal block (M-NET Transmission cable)	CN6: Connector (Microswitch)	MARK ⊙: Indicates terminal block
LS: Microswitch	S1,S2: Connector (Power supply)	CN7: Connector (Motor for Bypass operation)	⊕: Connector
TH1: Thermistor for outside air	TR: Control circuit transformer	CN8-1: Tab connector (Fan motor)	Ⓜ: Board insertion connector or fastening connector of control board
TH2: Thermistor for return air	X7: Relay contact (For operation monitor output)	CN8-2: Tab connector (Fan motor)	
SW1: Switch(Main/Sub change)	X8: Relay contact (For malfunction monitor output)	CN9: Connector (Fan motor)	
SW2,5: Switch (Function selection)		CN10: Connector (Fan motor)	
SW3: High/E.high select switch (Exhaust fan)		CN16: Connector (High/Low switch)	
SW4: High/E.high select switch (Supply fan)			

•PZ-41SLB-E and PZ-52SF-E cannot be used simultaneously.



# 4. Troubleshooting

## 4-1 Service Flow

### Confirmation items

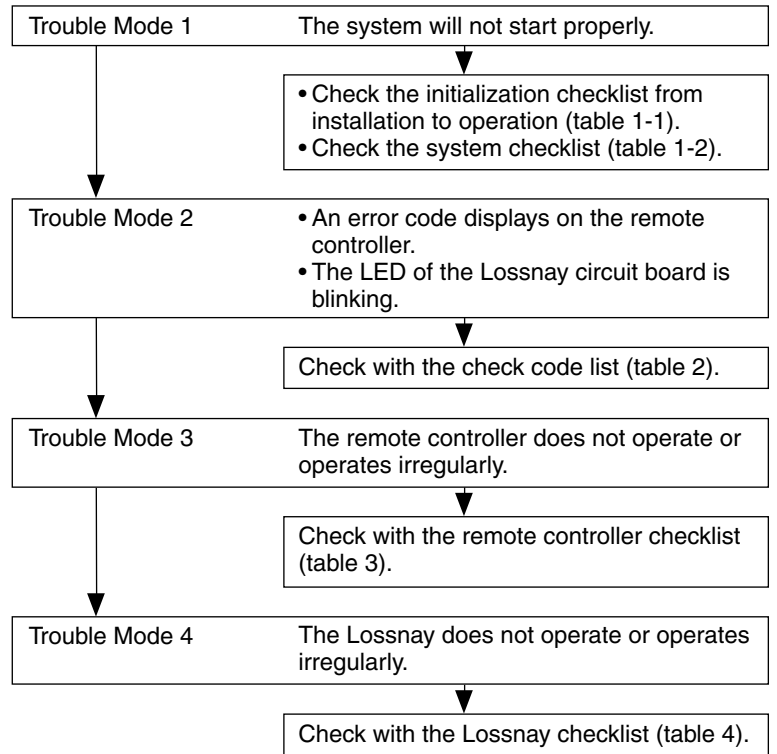
- ① Condition of trouble – remote controller display, etc.
- ② Frequency of trouble – date of start of operation and occurrence
- ③ Occurrence timing
- ④ Existence of drawings, equipment (including controllers and equipment sold separately), cables, wiring, and settings.

### Applicable models

Lossnay  
LGH-F300 to F1200RX types

### Remote controller

PZ-41SLB-E  
PZ-52SF-E



### Precautions when diagnosing malfunctions

- When removing a transistor or printed circuit board, make sure the breaker is thrown.
- When removing the circuit board, always hold it at both ends and remove carefully so as not to apply force to the surface mounted parts.
- When removing the circuit board, be careful of the metal edges on the board.
- When removing or inserting the connectors for the circuit board, hold the entire housing section. Never pull on the lead wires.
- When servicing, be sure to recreate the malfunction 2 to 3 times before starting repairs.
- If a malfunction of the printed circuit board is suspected, check for disconnected wires in the print pattern, burnt parts or discoloration.
- If the printed circuit board is replaced, make sure that the switch settings on the new board are the same as the old board.

## Error List

Classification	Error item	Measures taken by Lossnay	Remote controller display error code	LED 1 (green) Display (No. of blinks)	LED 2 (red) Display (No. of blinks)	Error monitor output	Cancellation measures			
							Reset power supply	Change address	Stop ↓ Start	Error delete
Unit error	Fan motor operation device error	• Cancellation	4000/4116 *1)	2 times	—	○	○	○	—	○
	Damper motor error	• Cancel damper operation • Other controls as normal	3602	3 times	—	○	○	○	○	—
	OA temperature sensor error	• Lossnay ventilation fixed (for “Auto” modes) • Other controls as normal	5101	4 times	—	○	○	○	—	○
	RA temperature sensor error	• Lossnay ventilation fixed (for “Auto” modes) • Other controls as normal	5102	5 times	—	○	○	○	—	○
	Test operation	• Fan: High speed • Lossnay ventilation fixed	0900	—	—	—	—	—	—	—
Communication error	Dual address	—	6600	—	6 times	○	○	○	○	—
	No ACK	—	6607	—	—	—	○	○	—	○
	No response	—	6608	—	—	—	○	○	—	○
	Controller communication error	• Cancellation	6607/6608	—	8 times	○	○	○	—	○
	Communication circuit error	—	6602/6603/6604	—	1 - 5 times	○	○	○	—	○
	Polarity not set	—	—	—	LED 6 turn off	—	○	○	—	○
	PZ-41SLB-E communication error	• Cancellation	6608	9 times	—	○	○	—	—	○

\*1) “4000” is displayed on PZ-41SLB-E only.

## 4-2 Items to Check

### (1) Trouble Mode 1: The system will not start properly.

Initialization checklist from installation to operation (Table 1-1)

After checking the system, check the points below up to operation.

No.	Checkpoint
1	Do the capacity of the main power supply on/off unit and wiring span meet specification?
2	Is the specified power supplied to the Lossnay power terminal (TM1)?
3	Is the wiring length of the transmission cable within specifications? When using PZ-41SLB-E: Overall extension within 1640 ft When using M-NET: Maximum power supply length within 656 ft, maximum distance between ends within 1640 ft
4	Does the transmission cable meet regulations? (Type, diameter)
5	Is the transmission cable wired at least 1 15/16 inch away from the power supply cable?
6	Are multiple transmission or signal cables wired to the same power cable duct?
7	Are multiple transmission cables wired with multi core cables?
8	Is the transmission cable connected to the terminal unit? (PZ-41SLB-E to TM2 ⑤, ⑥; M-NET to TB5 ①, ②)
9	Is the transmission cable securely connected to the Lossnay terminal unit?
10	When not using M-NET If using 1 Lossnay unit, is the Main/Sub change switch (SW1) on the Lossnay circuit board set to "Main"? If using 2 or more Lossnay units, is the Main/Sub switch set to "Main" on only one unit, and the other units are set to "Sub"?
11	When using M-NET Is the address switch on the Lossnay circuit board (SA1, SA2) set to the correct number?
12	When using external control input Do the specifications of the external signal match specifications of signals that can be input to the Lossnay?
13	When the external input signal is a pulse signal Is the pulse input switch (SW2-2) on the Lossnay circuit board set to ON?
14	When the external signal is 12V DC, 24V DC, or Mr. Slim (A-control) signal Is it connected to ①, ② on the Lossnay external control input terminal unit (TM2)?
15	When the external signal is an uncharged a-contact signal Is it connected to ①, ③ on the Lossnay external control input terminal unit (TM2)?
16	When M-NET is not being used Is the external input signal connected to the Lossnay set to "Main"?
17	Is the signal cable length within wiring specifications? 12V DC, 24V DC signal: Within limitation of the external device Uncharged a-contact signal: Within 1640 ft Mr. Slim (A-control) signal: Within 1640 ft
18	Is the signal cable wired at least 5 cm away from the power supply cable?
19	Is the output capacity of the Lossnay operation monitor/error monitor within specifications? Operation monitor output: Maximum 240V AC/24V DC 2A, minimum 220V AC/5V DC 100 mA Error monitor output: Maximum 240V AC/24V DC 1A, minimum 220V AC/5V DC 100 mA
20	Are the power supply cable, transmission cable, signal cable, etc., securely connected to the proper terminals?
21	Are the settings for the Mai/Sub switch, address switch, and function select switch correct?

## System checklist

① Use this checklist when using a PZ-41SLB-E or an external device (Table 1-2-1)

No.	Symptom	Cause	Corrective action						
1	Remote controller display does not appear.	<ul style="list-style-type: none"> <li>○ Power is not supplied to the Lossnay, or power outside specifications is connected.</li> <li>○ When using only 1 Lossnay, the Main/Sub switch (SW1) on the Lossnay circuit board is set to "Sub."</li> <li>○ The overall wiring length of the transmission cable is longer than specifications (longer than 1640 ft).</li> <li>○ The remote controller is connected to TB5 (M-NET transmission cable).</li> <li>○ PZ-52SF-E is connected to the Lossnay local remote controller.</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the power supply to the Lossnay.</li> <li>○ Set the Main/Sub (SW1) switch to "Main."</li> <li>○ Check the length of the transmission cable wiring.</li> <li>○ Connect the transmission cable to TM2 ⑤,⑥.</li> <li>○ Change to the PZ-41SLB-E remote controller.</li> </ul>						
2	Remote controller does not operate (Communication error display)	<ul style="list-style-type: none"> <li>○ When using multiple Lossnay units, the Main/Sub switch (SW1) on the Lossnay circuit board of the second or following unit is set to "Main."</li> <li>○ The overall wiring length of the transmission cable is longer than specifications (longer than 1640 ft).</li> <li>○ Multiple transmission cables are wired with multi core cables.</li> </ul>	<ul style="list-style-type: none"> <li>○ Set the Main/Sub switch (SW1) of the second and following Lossnay units to "Sub."</li> <li>○ Check the length of the transmission cable wiring.</li> <li>○ For the applied transmission cable, wire the transmission cables away from the other transmission cable.</li> </ul>						
3	Interlocked operation with external device does not occur.	<ul style="list-style-type: none"> <li>○ The type of external signal does not match the connected terminal unit (charged, uncharged, Mr. Slim signal).</li> <li>○ The type of external signal does not match the pulse input switch (SW2-2) setting (level signal, pulse signal).</li> <li>○ The external device signal is not being input.</li> <li>○ The external device and signal cable wiring is longer than specifications.</li> <li style="margin-left: 20px;"> <table border="0" style="border: none;"> <tr> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">12V DC, 24V DC:</td> <td style="padding: 0 5px;">Longer than limitations of external device</td> </tr> <tr> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">Uncharged a-contact:</td> <td style="padding: 0 5px;">Longer than 1640 ft</td> </tr> <tr> <td style="border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;">Mr. Slim signal:</td> <td style="padding: 0 5px;">Longer than 1640 ft</td> </tr> </table> </li> <li>○ The Delayed Start mode is set at the remote controller (PZ-41SLB-E).</li> <li>○ The ON Interlocked Operation mode or OFF Interlocked Operation mode is set at the remote controller (PZ-41SLB-E).</li> <li>○ When using multiple Lossnay units, the external control input signal is connected to a unit with the "Sub" setting made.</li> </ul>	12V DC, 24V DC:	Longer than limitations of external device	Uncharged a-contact:	Longer than 1640 ft	Mr. Slim signal:	Longer than 1640 ft	<ul style="list-style-type: none"> <li>○ Check the connection to the external control input terminal (TM2) for the type of external signal.</li> <li>○ Check the type of external signal and the setting of the pulse input switch (SW2-2).</li> <li>○ Check the external device.</li> <li>○ Check the length of the signal cable wiring.</li> <li>○ Check the Delayed Start mode setting at the remote controller (PZ-41SLB-E).</li> <li>○ Check the Interlocked Operation mode setting at the remote controller (PZ-41SLB-E).</li> <li>○ Connect the external control input signal to the Lossnay unit set to "Main."</li> </ul>
12V DC, 24V DC:	Longer than limitations of external device								
Uncharged a-contact:	Longer than 1640 ft								
Mr. Slim signal:	Longer than 1640 ft								

②System checklist when using the M-NET (Table 1-2-2)

No.	Symptom	Cause	Corrective action
1	Does not interlock with City Multi. (The Lossnay cannot be operated by the ventilation switch on the ME remote controller, MA remote controller, or MELANS.)	<ul style="list-style-type: none"> <li>○ The Lossnay is not set for interlocked operation, or is set for interlocked operation at the wrong address.</li> <li>○ The length of the M-NET transmission cable wiring from the outdoor unit or the system's overall wiring length is longer than specifications. (Longer than 656 ft from the outdoor unit, longer than 1640 ft between ends.)</li> <li>○ PZ-41LSB-E is connected to the Lossnay local remote controller.</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the Lossnay address, and set for an address corresponding to interlocked operation.</li> <li>○ Check the length of the transmission cable wiring.</li> <li>○ Change to the PZ-52SF-E remote controller (PZ-41SLB-E can not be used with the M-NET).</li> </ul>
2	Cannot operate using the MELANS or Lossnay remote controller.	<ul style="list-style-type: none"> <li>○ The address that has been set for the group in MELANS and the address for the Lossnay are different.</li> <li>○ The length of the M-NET transmission cable wiring from the power supply unit or the system's overall wiring length is longer than specifications. (Longer than 656 ft from the power supply unit, longer than 1640 ft between ends.)</li> <li>○ PZ-41LSB-E is connected to the Lossnay local remote controller.</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the registered address in MELANS.</li> <li>○ Check the length of the transmission cable wiring.</li> <li>○ Change to the PZ-52SF-E remote controller (PZ-41SLB-E can not be used with a M-NET system).</li> </ul>
3	A unit should operate independently by MELANS or the Lossnay remote controller, but it interlocks with another City Multi unit.	<ul style="list-style-type: none"> <li>○ It has been set for interlocked operation with the City Multi unit.</li> </ul>	<ul style="list-style-type: none"> <li>○ Cancel the interlocked operation setting.</li> </ul>
4	Cannot perform group settings for the Lossnay using MELANS, ME remote controller, or MA remote controller. (The remote controller shows "88" at the time of registration.)	<ul style="list-style-type: none"> <li>○ Power is not supplied to the Lossnay, or power outside specifications is connected.</li> <li>○ The M-NET transmission cable is connected to TM2 ⑤,⑥.</li> <li>○ The transmission cable is not properly connected to the MELANS or the City Multi.</li> <li>○ The length of the transmission cable wiring is longer than specifications (longer than maximum 656 ft from the power supply unit, longer than 1640 ft between ends.)</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the power for the Lossnay and perform the registration again.</li> <li>○ Connect the transmission cable to TB5 ④, ⑤.</li> <li>○ Check the transmission cable connection.</li> <li>○ Check the length of the transmission cable wiring.</li> </ul>
5	When power is supplied to the system, the Lossnay remote controller continues to display "HO" and does not start. (Group registration information disappears.)	<ul style="list-style-type: none"> <li>○ The Group setting was made on a Lossnay remote controller in a system connected to a centralised controller MELANS.</li> <li>○ The length of the transmission cable wiring is longer than specifications (longer than maximum 656 ft from the power supply unit, longer than 1640 ft between ends.)</li> </ul>	<ul style="list-style-type: none"> <li>○ In a system connected to MELANS, make the group setting with the MELANS (Do not make the group setting with the Lossnay remote controller).</li> <li>○ Check the length of the transmission cable wiring.</li> </ul>
6	When power is supplied to the system, the remote control display goes blank and the system does not start.	<ul style="list-style-type: none"> <li>○ Over the number of units that can be controlled with the Lossnay remote controller.</li> <li>○ The length of the transmission cable wiring is longer than specifications (longer than maximum 656 ft from the power supply unit, longer than 1640 ft between ends.)</li> </ul>	<ul style="list-style-type: none"> <li>○ Check remote control unit number limitations when using a power supply unit</li> <li>○ Check the length of the transmission cable wiring.</li> </ul>

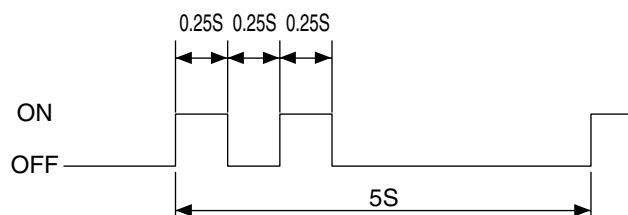
No.	Symptom	Cause	Corrective action
7	The power display “●” does not display when power is supplied to the system.	① When using City Multi and Lossnay interlocked system (connected to the indoor unit system) <ul style="list-style-type: none"> <li><input type="radio"/> The transmission cable is not correctly connected to the Lossnay remote controller.</li> <li><input type="radio"/> The power is not turned on for the outdoor unit.</li> <li><input type="radio"/> The length of wiring for the outdoor unit's M-NET transmission cable is longer than specification (longer than 656 ft).</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the transmission cable connection.</li> <li><input type="radio"/> Check the power to the outdoor unit.</li> <li><input type="radio"/> Check the length of the transmission cable wiring.</li> </ul>
		② When using a Lossnay individual system or City Multi and Lossnay interlocked system connected to the central system. <ul style="list-style-type: none"> <li><input type="radio"/> The power supply unit is not connected to the transmission cable.</li> <li><input type="radio"/> The power to the power supply unit is not turned on.</li> <li><input type="radio"/> The length of wiring of the M-NET transmission cable from the power supply unit is longer than specification (longer than 656 ft).</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Connect to the power supply unit.</li> <li><input type="radio"/> Check the power to the power supply unit.</li> <li><input type="radio"/> Check the length of the transmission cable wiring.</li> </ul>
8	The “HO” on the remote controller continues to flash when the power is supplied to the system.	<ul style="list-style-type: none"> <li><input type="radio"/> Lossnay is Not supplied with specified power.</li> <li><input type="radio"/> The address for the Lossnay remote controller does not have a group setting at the MELANS.</li> <li><input type="radio"/> The M-NET transmission cable is connected to TM2 ⑤,⑥.</li> <li><input type="radio"/> For a Lossnay individual system with no MELANS, Lossnay registration has not been performed by the Lossnay remote controller.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the power to the Lossnay.</li> <li><input type="radio"/> Check the Lossnay remote controller address registration with the MELANS (“HO displays for 3 – 10 minute when electricity is supplied to the system).</li> <li><input type="radio"/> Connect the transmission cable to TB5 ①, ②.</li> <li><input type="radio"/> Check the Lossnay registration with the Lossnay remote controller.</li> </ul>
9	“LC 6608” displays on the remote controller and the Lossnay does not operate.	<ul style="list-style-type: none"> <li><input type="radio"/> The remote controller is PZ-41LSB-E and connected to the TB5 ①, ②.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Change to the PZ-52SF-E remote controller (PZ-41SLB-E can not be used with a M-NET system).</li> </ul>
10	The operation specified by the centralised controller differs from the operation of the Lossnay.	<ul style="list-style-type: none"> <li><input type="radio"/> The remote controller is PZ-41SLB-E and connected to the TM2 ⑤,⑥.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Change to the PZ-52SF-E remote controller (PZ-41SLB-E can not be used with a M-NET system).</li> </ul>

## (2) Trouble Mode 2

●An error code displays on the remote controller.

●The LED of the Lossnay circuit board is blinking.

An error code displayed on the remote controller (PZ-41SLB-E, PZ-52SF-E) or the M-NET controller and blinking or illumination of LED1 (green) or LED2 (red) on the circuit board shows the type of error. The LED blink interval is 0.25 seconds for both on and off. The display duration is approximately 5 seconds.



Error display example: Fan motor operation device error

① Checklist of error codes displayed on the PZ-41SLB and LED displays (Table 2-1)

Error code	LED1 (green)	LED 2 (red)	Symptom	Cause	Corrective action
LC 6608	—	—	Lossnay communication error	<ul style="list-style-type: none"> <li>○ When using multiple Lossnay units, the main/sub setting has not been made for the second unit and following units.</li> <li>○ Multiple transmission cables have been wired using multi core wires.</li> <li>○ Transmission cable and power cable are too close.</li> <li>○ Transmission cable is not securely connected.</li> <li>○ The length of wiring of the transmission cable is longer than specification (longer than 1640 ft).</li> </ul>	<ul style="list-style-type: none"> <li>○ Turn off the main power supply and set the Main/Sub switch (SW1) (first unit to main, second and following units to sub).</li> <li>○ Wire the transmission cable away from the other transmission cable.</li> <li>○ Wire the transmission cable at least 5 cm away from the power supply cable.</li> <li>○ Check the transmission cable connection.</li> <li>○ Check the length of the transmission cable wiring.</li> </ul>
RC6608 SRC 6608	—	—	Communication error between remote controllers (when 2 remote controllers are connected)	<ul style="list-style-type: none"> <li>○ Multiple transmission cables have been wired using multi core wires.</li> <li>○ Transmission cable and power supply cable are too close.</li> <li>○ Transmission cable is not securely connected.</li> <li>○ The length of wiring of the transmission cable is longer than specification (longer than 1640 ft).</li> </ul>	<ul style="list-style-type: none"> <li>○ Wire the transmission cable away from the other transmission cable.</li> <li>○ Wire the transmission cable at least 5 cm away from the power supply cable.</li> <li>○ Check the transmission cable connection.</li> <li>○ Check the length of the transmission cable wiring.</li> </ul>
LC 0900 SLC 0900	—	—	Lossnay trial operation	<ul style="list-style-type: none"> <li>○ Trial operation switch on the Lossnay circuit board (SW 2-1 or SW 2-3) is set to ON board.</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the test operation switch.</li> </ul>
LC 4000 SLC 4000	2 blinks	—	Fan motor operation device error	<ul style="list-style-type: none"> <li>○ Lossnay fan will not stop.</li> </ul>	<ul style="list-style-type: none"> <li>○ Replace the table.</li> </ul>
LC 3602 SLC 3602	3 blinks	—	Damper related error	<ul style="list-style-type: none"> <li>○ Damper board operation is not correct.</li> <li>○ Connectors for the damper unit are not correctly connected.</li> </ul>	<ul style="list-style-type: none"> <li>○ Remove the load and check or move the damper board by hand.</li> <li>○ Check the connection of the lead wire's connectors and the circuit connector.</li> </ul>
LC 5101 SLC 5101	4 blinks	—	OA thermistor related error	<ul style="list-style-type: none"> <li>○ Connectors for the thermistor are not correctly connected.</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the connection of the lead wires connectors and the circuit connector.</li> </ul>
LC 5102 SLC 5102	5 blinks	—	RA thermistor related error	<ul style="list-style-type: none"> <li>○ Connectors for the thermistor are not correctly connected.</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the connection of the lead wires connectors and the circuit connector.</li> </ul>
———	9 blinks	—	Remote controller communication error	<ul style="list-style-type: none"> <li>○ Multiple transmission cables have been wired using multi core wires.</li> <li>○ Transmission cable and power supply cable are too close.</li> <li>○ Transmission cable is not securely connected.</li> <li>○ The length of wiring of the transmission cable is longer than specification (longer than 1640 ft).</li> </ul>	<ul style="list-style-type: none"> <li>○ Wire the transmission cable away from the other transmission cable.</li> <li>○ Wire the transmission cable at least 5 cm away from the power supply cable.</li> <li>○ Check the transmission cable connection.</li> <li>○ Check the length of the transmission cable wiring.</li> </ul>
"Filter" blinking	—	—	Warning to clean air filter by cumulative operation time	<ul style="list-style-type: none"> <li>○ Interval for cleaning Lossnay air filter has elapsed.</li> </ul>	<ul style="list-style-type: none"> <li>○ After cleaning the air filter press the "Filter" button on the remote controller 2 times.</li> </ul>
"HO" blinking	blinking	—	System is starting	<ul style="list-style-type: none"> <li>○ LED1 blinks at 1 second intervals during starting operation (maximum of 45 seconds.)</li> </ul>	<ul style="list-style-type: none"> <li>○ There is no error.</li> </ul>

\*1 LC: Lossnay set to Main SLC: Lossnay set to Sub RC, SRC: remote controller (PZ-41SLB-E)

\*2 Because the LGH-F1200RX type is loaded with 2 control circuit units, "SLC" may display even with only 1 Lossnay. When "SLC" displays, check and perform maintenance on the upper side circuit.

② Checklist of error codes displayed on the PZ-52SF-E, M-NET controllers, and LED displays (Table 2-2)

Error code	LED1 (green)	LED 2 (red)	Symptom	Cause	Corrective action
6600	—	6 blinks	Multiple address error	<input type="radio"/> There is another unit with the same address setting.	<input type="radio"/> Check the addresses of devices in the system.
6607 6608	—	8 blinks	No ACK error  No answer error (M-NET communication error)	<input type="radio"/> Power supply to Lossnay is not turned on. <input type="radio"/> Lossnay address was changed. <input type="radio"/> Multiple transmission cables have been wired using multi core wires. <input type="radio"/> Transmission cable is not securely connected. <input type="radio"/> The length of wiring of the transmission cable is longer than specifications (longer than maximum 656 ft from the power supply unit, longer than 1640 ft between ends).	<input type="radio"/> Check the power to the Lossnay. <input type="radio"/> Check the Lossnay address. <input type="radio"/> Wire the transmission cable away from the other transmission cable. <input type="radio"/> Check the transmission cable connection. <input type="radio"/> Check the length of the transmission cable wiring.
0900	—	—	Lossnay trial operation	<input type="radio"/> Trial operation switch on the Lossnay circuit board (SW 2-1 or SW 2-3) is set to ON.	<input type="radio"/> Check the trial operation switch.
4116	2 blinks	—	Fan motor operation device error	<input type="radio"/> Lossnay fan will not stop.	<input type="radio"/> Replace the table.
3602	3 blinks	—	Damper related error	<input type="radio"/> Damper board operation is not correct. <input type="radio"/> Connectors for the damper unit are not correctly connected.	<input type="radio"/> Remove the load and check or move the damper board by hand. <input type="radio"/> Check the connection of the lead wires connectors and the circuit connector.
5101	4 blinks	—	OA thermistor related error	<input type="radio"/> Connectors for the thermistor are not correctly connected.	<input type="radio"/> Check the connection of the lead wires connectors and the circuit connector.
5102	5 blinks	—	RA thermistor related error	<input type="radio"/> Connectors for the thermistor are not correctly connected.	<input type="radio"/> Check the connection of the lead wires connectors and the circuit connector.
6602 6603 6604	—	1 - 5 blinks	Communication circuit section error	<input type="radio"/> Error with transmission cable. <input type="radio"/> Controller where error originally occurred is defective. <input type="radio"/> Lossnay board is defective.	<input type="radio"/> Check transmission cable relations. <input type="radio"/> Check the controller where the error occurred. <input type="radio"/> Replace the circuit board.
———	—	Lit	No M-NET connection information	<input type="radio"/> Lossnay does not have Group setting (registration) made.	<input type="radio"/> Check the Lossnay address and confirm that the group setting is made.
Filter blinking	—	—	Warning to clean air filter by cumulative operation time	<input type="radio"/> Interval for cleaning Lossnay air filter has elapsed.	<input type="radio"/> After cleaning the air filter press the "Filter" button on the remote controller 2 times.
———	Lit	—	In delayed start operation	<input type="radio"/> Delayed start operation is set at the function select switch (SW 5-1) on the Lossnay circuit board.	<input type="radio"/> There is no error.
———	LED6 (red) off	—	No power to M-NET transmission cable	<input type="radio"/> Power supply is not supplied to the M-NET transmission cable.  <input type="radio"/> Wiring length of the transmission cable is from the power supply unit or the outdoor unit is longer than specification (maximum extension 656 ft).	<input type="radio"/> Check the connection of the power supply unit, outdoor unit and transmission cable.  <input type="radio"/> Check the length of the transmission cable wiring.

\*1 The letters "LC" that display with the error code show a Lossnay unit type, and the number in the third column shows the address.

\*2 Because the LGH-F1200RX type is loaded with 2 control circuit units, 1 Lossnay unit has 2 addresses. Check and perform maintenance on the table related to the address set at the address switch (SA1, SA2).



### (3) Trouble Mode 3: The remote controller does not operate or operates irregularly.

#### ① Checklist for when using the PZ-41SLB-E (Table 3-1)

No.	Symptom	Cause	Corrective action
1	Nothing displays on the LCD.	<ul style="list-style-type: none"> <li><input type="radio"/> Transmission cable is connected to the wrong terminal</li> <li><input type="radio"/> No Lossnay is set to "Main."</li> <li><input type="radio"/> Power supply to the Lossnay is not turned on.</li> <li><input type="radio"/> Lossnay is connected to a power supply with a rating outside specification.</li> <li><input type="radio"/> Transmission cable is not securely connected.</li> <li><input type="radio"/> The length of wiring of the transmission cable is longer than specification (longer than 1640 ft).</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the transmission cable connection (connected to ⑤, ⑥ of terminal unit TM2 on the Lossnay board).</li> <li><input type="radio"/> Turn off the main power supply and set the Main/Sub switch (SW1) (first unit to main, second and following units to sub).</li> <li><input type="radio"/> Check the power supply to the Lossnay.</li> <li><input type="radio"/> Check the power supply.</li> <li><input type="radio"/> Check the transmission cable connection.</li> <li><input type="radio"/> Check the length of the transmission cable wiring.</li> </ul>
2	Starts or stops, or the display changes, by itself.	<ul style="list-style-type: none"> <li><input type="radio"/> Multiple transmission cables have been wired using multi core wires.</li> <li><input type="radio"/> Transmission cable and power supply cable are too close.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Wire the transmission cable away from the other transmission cable.</li> <li><input type="radio"/> Wire the transmission cable at least 5 cm away from the power supply cable.</li> </ul>
3	Displays a error code that is not in the check list.	<ul style="list-style-type: none"> <li><input type="radio"/> Letters on the remote controller LCD are dim.</li> <li><input type="radio"/> The release of the Delay Start button or the Filter Reset button is not good.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Replace the remote control.</li> <li><input type="radio"/> Replace the remote control.</li> </ul>
4	Cannot stop the Lossnay with the remote controller (display shows "Interlocked").	<ul style="list-style-type: none"> <li><input type="radio"/> External priority ON/OFF setting is made.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the interlocked operation mode setting.</li> </ul>
5	Cannot switch fan speed with the remote controller.	<ul style="list-style-type: none"> <li><input type="radio"/> High/Low change input (CN16) is ON.</li> <li><input type="radio"/> The function select switch (SW2-4.5) on the Lossnay circuit has the fixed high or fixed low speed set.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the High/Low change input (CN16).</li> <li><input type="radio"/> Check the function select switch (SW 2-4.5)</li> </ul>
6	Lossnay operates when the main power supply turns on and the remote controller displays.	<ul style="list-style-type: none"> <li><input type="radio"/> Main power supply was cut during Lossnay operation.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Stop the Lossnay with the remote controller, then wait at least 10 second and turn off the main power supply .</li> </ul>

#### ② Checklist for when using PZ-52SF-E (Table 3-2)

No.	Symptom	Cause	Corrective action
1	Nothing displays on the LCD.	<ul style="list-style-type: none"> <li><input type="radio"/> Transmission cable is connected to the wrong terminal</li> <li><input type="radio"/> There is no power supply unit (for Lossnay only systems).</li> <li><input type="radio"/> The power supply unit is not turned on.</li> <li><input type="radio"/> Transmission cable is not securely connected.</li> <li><input type="radio"/> Wiring length of the transmission cable is from the power supply unit or the outdoor unit is longer than specifications (maximum extension 656 ft).</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the transmission cable connection (connected to ㉠ , ㉡ of terminal unit TB5 on the Lossnay board).</li> <li><input type="radio"/> Install the power supply unit.</li> <li><input type="radio"/> Check the power to the power supply unit.</li> <li><input type="radio"/> Check the transmission cable connection.</li> <li><input type="radio"/> Check the length of the transmission cable wiring.</li> </ul>

No.	Symptom	Cause	Corrective action
2	Displays "HO" and does not start.	<ul style="list-style-type: none"> <li><input type="radio"/> It is less than 10 minutes since the power was supplied to the system.</li> <li><input type="radio"/> Group setting (registration) has not been made.</li> <li><input type="radio"/> Remote control address has not been registered in the group setting by the centralised controller.</li> <li><input type="radio"/> Power supply to the Lossnay is not turned on.</li> <li><input type="radio"/> Lossnay is connected to a power supply with a rating outside specification.</li> <li><input type="radio"/> Lossnay transmission cable connection terminal is wrong.</li> <li><input type="radio"/> Lossnay address was changed.</li> <li><input type="radio"/> Lossnay board was changed.</li> <li><input type="radio"/> The length of wiring of the transmission cable is longer than specifications (longer than maximum 656 ft from the power supply unit, longer than 1640 ft between ends).</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> After supplying power to the system, HO blinks for a maximum of about 10 minutes. (This is not an error.)</li> <li><input type="radio"/> Make the group setting (registration). If using a system with a centralised controller, register at the centralised controller. If there is only the Lossnay remote controller, register at the remote controller.</li> <li><input type="radio"/> Check the group setting at the MELANS.</li> <li><input type="radio"/> Check the power supply to the Lossnay.</li> <li><input type="radio"/> Check the power supply.</li> <li><input type="radio"/> Check the transmission cable connection (connected to ①, ② of terminal unit TB5 on the Lossnay board).</li> <li><input type="radio"/> Check the Lossnay address.</li> <li><input type="radio"/> If the board has been replaced, reset the group settings.</li> <li><input type="radio"/> Check the length of the transmission cable wiring.</li> </ul>
3	Cannot register the Lossnay from the remote controller or the controller.	<ul style="list-style-type: none"> <li><input type="radio"/> Power supply to the Lossnay is not turned on.</li> <li><input type="radio"/> Lossnay is connected to a power supply with a rating outside specification.</li> <li><input type="radio"/> Transmission cable to the Lossnay is not connected.</li> <li><input type="radio"/> Lossnay transmission cable connection terminal is wrong.</li> <li><input type="radio"/> Lossnay address is wrong.</li> <li><input type="radio"/> The length of wiring of the transmission cable is longer than specifications (longer than maximum 656 ft from the power supply unit, longer than 1640 ft between ends).</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the power supply to the Lossnay</li> <li><input type="radio"/> Check the power supply.</li> <li><input type="radio"/> Check the transmission cable connection.</li> <li><input type="radio"/> Check the transmission cable connection (connected to ①, ② of terminal unit TB5 on the Lossnay table).</li> <li><input type="radio"/> Check the Lossnay address.</li> <li><input type="radio"/> Check the length of the transmission cable wiring.</li> </ul>
4	Starts or stops, or the display changes, by itself.	<ul style="list-style-type: none"> <li><input type="radio"/> Set for interlocked operation with City Multi.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Cancel interlocked operation setting.</li> </ul>
5	Displays a error code that is not in the checklist.	<ul style="list-style-type: none"> <li><input type="radio"/> Letters on the remote controller LCD are dim.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Replace the remote controller.</li> </ul>
6	Cannot stop the Lossnay with the remote controller (display shows "Central").	<ul style="list-style-type: none"> <li><input type="radio"/> "Cancel Operation" setting is made from the MELANS.</li> <li><input type="radio"/> External priority ON/OFF setting is made.</li> <li><input type="radio"/> Remote/nearby switch input (CN32) is set to "Remote."</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the settings of the MELANS.</li> <li><input type="radio"/> Check the interlocked operation mode setting.</li> <li><input type="radio"/> Check the remote/nearby change input (CN32).</li> </ul>

## (4) Trouble Mode 4: The Lossnay does not operate or operates irregularly.

① Lossnay checklist (Table 4).

No.	Symptom	Cause	Corrective action
1	The fan does not operate. The fan does not operate normally.	<ul style="list-style-type: none"> <li>○ Connectors for the fan connection or connectors for the control circuit section connection are not secure.</li> <li>○ Power supply is not supplied to the Lossnay, or power outside specifications is connected.</li> <li>○ Lossnay group setting is not made by using the M-NET. (LED2 lights)</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the lead wire connectors and the control circuit section connectors.</li> <li>○ Check the power supply</li> <li>○ Check the Lossnay address and the group setting (LED2 lights when not using M-NET. This is no error.)</li> </ul>
2	Interlocked operation with external device (air conditioner) does not occur.	<ul style="list-style-type: none"> <li>○ The type of external signal does not match the connected terminal unit (charged, uncharged, Mr. Slim signal).</li> <li>○ The type of external signal does not match the pulse input switch (SW2-2) setting (level signal, pulse signal).</li> <li>○ The external device signal is not being input.</li> <li>○ The external device and signal cable wiring is longer than specifications                      (12V DC, 24V DC: Longer than limitations of external device                      Uncharged a-contact: Longer than 1640 ft                      Mr. Slim signal: Longer than 1640 ft)</li> <li>○ The Delayed Start mode is set at the remote controller (PZ-41SLB-E) or the function select switch (SW 5-1) on the Lossnay circuit board.</li> <li>○ The ON Interlocked Operation mode or OFF Interlocked Operation mode is set at the remote controller (PZ-41SLB-E) or the function select switch (SW 5-7,8) on the Lossnay circuit board.</li> <li>○ When using multiple Lossnay units, the external control input signal is connected to a unit with the "Sub" setting made.</li> <li>○ In a group of multiple Lossnay units with the M-NET, the external control input signal is connected to a Lossnay unit other than the one with the smallest address.</li> <li>○ There is a communication error with the remote controller or controller.</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the external signal type and the external control input terminal (TM2) connection.</li> <li>○ Check the external signal type and the pulse input switch (SW2-2) setting.</li> <li>○ Check the external device.</li> <li>○ Check the wiring length of the signal cable.</li> <li>○ Check the delayed start settings of the remote controller (PZ41SLB-E) and the function select switch (SW5-1).</li> <li>○ Check the interlocked operation mode settings of the remote controller (PZ41SLB-E) and the function select switch (SW5-7, 8).</li> <li>○ Connect the external control input signal to the Lossnay set to "Main."</li> <li>○ Connect the external control input signal to the Lossnay in the group with the lowest address.</li> <li>○ Check the remote controller or controller.</li> </ul>
3	Fan will not stop.	<ul style="list-style-type: none"> <li>○ The trial operation switch (SW 2-1) is ON.</li> </ul>	<ul style="list-style-type: none"> <li>○ Check the test operation switch (SW2-1).</li> </ul>
4	Lossnay operates when main power is turned on.	<ul style="list-style-type: none"> <li>○ The PZ-41SLB-E is being used.</li> <li>○ By using the M-NET, the power supply ON/OFF setting is set to ON at the function select switch (SW 2-6) on the Lossnay circuit board.</li> <li>○ By using the M-NET, the automatic recovery following power supply interruption (refer to page 168) setting is made at the function select switch (SW 5-4) on the Lossnay circuit board.</li> </ul>	<ul style="list-style-type: none"> <li>○ When the main power supply is turned off while the Lossnay is operating from the remote controller, the Lossnay will resume operation when the main power is turned back on (this is no error).</li> <li>○ Check the power supply ON/OFF setting of the function select switch (SW2-6).</li> <li>○ Check the automatic recovery following power supply interruption setting of the function select switch (SW5-4).</li> </ul>

No.	Symptom	Cause	Corrective action
5	Supply air fan periodically stops operating.	<ul style="list-style-type: none"> <li><input type="radio"/> When the outdoor air temperature is 14°F or less, operation stops after a fixed period of about 10 minutes to keep the Lossnay Core from freezing. (Cold weather area spec)</li> <li><input type="radio"/> When connected to a Mr. Slim or a City Multi by a duct, operation stops when the air conditioner is defrosting.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> This is no error.</li> <li><input type="radio"/> This is no error.</li> </ul>
6	Takes in air from outdoors during interlocked operation with a Mr. Slim or a City Multi, but supply air fan doesn't stop operating when defrosting.	<ul style="list-style-type: none"> <li><input type="radio"/> The indoor unit's outside air intake selection is invalid.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Set the outdoor air intake selection of a indoor unit to "ON."</li> </ul>
7	The supply air fan and exhaust fan both periodically stop operating.	<ul style="list-style-type: none"> <li><input type="radio"/> When connected to Mr. Slim or City Multi by a duct and the function select switch (SW 5-3) on the Lossnay circuit board is ON, operation stops when the air conditioner is defrosting.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the function select switch (SW5-3).</li> </ul>
8	Fan speed will not change.	<ul style="list-style-type: none"> <li><input type="radio"/> The High/Low switching extermary input (CN16) is set to ON.</li> <li><input type="radio"/> The function select switch (SW2-4,5) on the Lossnay circuit board is set to the high fixed or low fixed fan speed.</li> <li><input type="radio"/> The trial operation switch (SW2-1) is turned ON.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the High/Low change input (CN16).</li> <li><input type="radio"/> Check the function select switch (SW2-4,5).</li> <li><input type="radio"/> Check the trial operation switch (SW2-1).</li> </ul>
9	Damper board does not operate.	<ul style="list-style-type: none"> <li><input type="radio"/> The outside air temperature is less than 46.4°F.</li> <li><input type="radio"/> The damper board operation is defective.</li> <li><input type="radio"/> The thermistor related connectors are not securely connected.</li> <li><input type="radio"/> The damper related connectors are not securely connected.</li> <li><input type="radio"/> The trial operation switch (SW2-1 or SW2-3) is turned ON.</li> <li><input type="radio"/> When using the remote controller to change ventilation mode, there may be a delayed start of up to 30 seconds depending on the timing.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the outdoor air temperature.</li> <li><input type="radio"/> Remove the load and check or move the damper board by hand.</li> <li><input type="radio"/> Check the connections of the lead wire connectors and the circuit connectors.</li> <li><input type="radio"/> Check the connections of the lead wire connectors and the control circuit connectors.</li> <li><input type="radio"/> Check the trial operation switch (SW2-1 or SW2-3).</li> <li><input type="radio"/> This is no error.</li> </ul>
10	Operation monitor output is late with regard to external control input ON/OFF.	<ul style="list-style-type: none"> <li><input type="radio"/> When using the PZ-41SLB-E there is a maximum delay of 7 seconds, or without using there is a maximum delay of 3 seconds.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> This is no error.</li> </ul>
11	Operation monitor output is OFF during operation.	<ul style="list-style-type: none"> <li><input type="radio"/> When the function select switch (SW 5-2) on the Lossnay circuit board is ON, for operation monitor output for interlocked operation with the supply air fan, it turns OFF when the outside air is 14°F or less or when the air conditioner is defrosting.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Check the function select switch (SW5-2).</li> </ul>
12	Delayed start operation does not work when Delayed start is set.	<ul style="list-style-type: none"> <li><input type="radio"/> When using the PZ-41SLB-E, the circuit function select switch is set for delayed start.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Set delayed start at the remote controller (the circuit board switch is not in effect when using the PZ-41SLB-E).</li> </ul>
13	Lossnay does not operate when power is on even when the power on/off setting is made.	<ul style="list-style-type: none"> <li><input type="radio"/> Using the PZ-41SLB-E.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> The power supply ON/OFF setting is not in effect when using PZ-41SLB-E.</li> </ul>
14	Interlocked operation is different from the settings.	<ul style="list-style-type: none"> <li><input type="radio"/> When using the PZ-41SLB-E, the circuit function select switch is set for interlocked operation.</li> </ul>	<ul style="list-style-type: none"> <li><input type="radio"/> Set interlocked operation at the remote controller (the circuit board switch is not in effect when using the PZ-41SLB-E).</li> </ul>

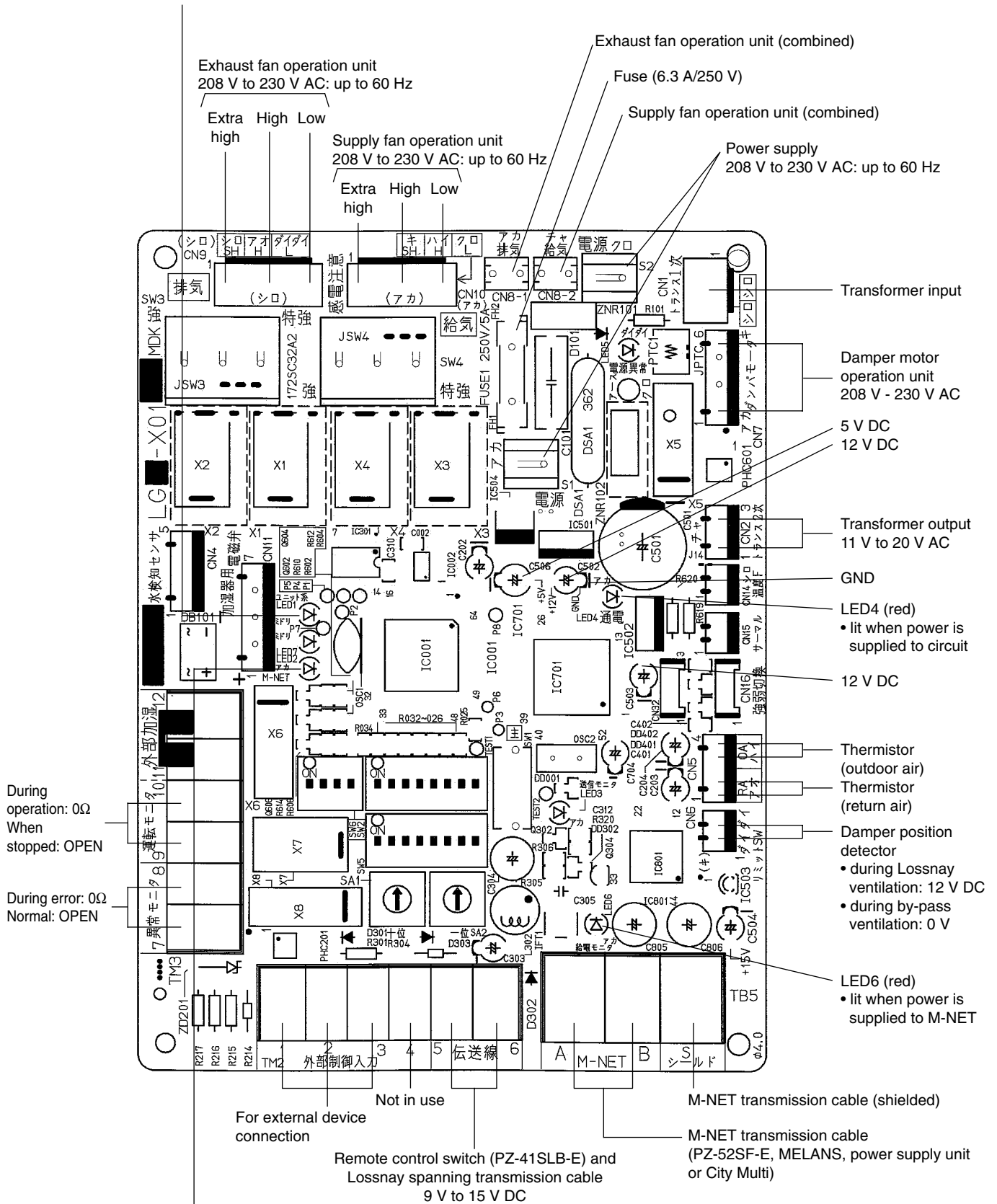
②Temperatures vs. thermistor resistance table

Temperature (°F)	Resistance value (kΩ)	Temperature (°F)	Resistance value (kΩ)	Temperature (°F)	Resistance value (kΩ)	Temperature (°F)	Resistance value (kΩ)	Temperature (°F)	Resistance value (kΩ)
-40	88.85 - ∞	19.4	17.92	46.4	9.57	73.4	5.38	100.4	3.17
⋮	⋮	21.2	17.16	48.2	9.20	75.2	5.19	102.2	3.06
-4	32.43	23	16.43	50	8.84	77	5.00	104	2.96
-2.2	30.92	24.8	15.74	51.8	8.49	78.8	4.82	105.8	2.86
-0.4	29.50	26.6	15.08	53.6	8.17	80.6	4.65	107.6	2.77
1.4	28.14	28.4	14.45	55.4	7.85	82.4	4.49	109.4	2.68
3.2	26.87	30.2	13.86	57.2	7.55	84.2	4.33	111.2	2.59
5	25.65	32	13.29	59	7.27	86	4.18	113	2.51
6.8	24.51	33.8	12.74	60.8	6.99	87.8	4.03	114.8	2.43
8.6	23.42	35.6	12.22	62.6	6.73	89.6	3.89	116.6	2.35
10.4	22.39	37.4	11.72	64.4	6.48	91.4	3.76	118.4	2.28
12.2	21.41	39.2	11.25	66.2	6.24	93.2	3.63	120.2	2.21
14	20.48	41	10.80	68	6.01	95	3.51	122	2.14
15.8	19.58	42.8	10.37	69.8	5.79	96.8	3.39	⋮	⋮
17.6	18.73	44.6	9.96	71.6	5.58	98.6	3.28	189.5	0.72 - 0

# 4-3 Circuit Test Point

LED1 (green)

- When blinking, there is an error with the Lossnay unit (number of blinks indicates the type of error).
- Blinks at 1 second intervals when starting.
- Lit during delayed start, normally off at other times.



LED2 (red)

- Blinking indicates M-NET communication error (number of blinks indicated the type of error).
- Lit when not connected to other M-NET units (registered).

# 5. Overhaul procedures

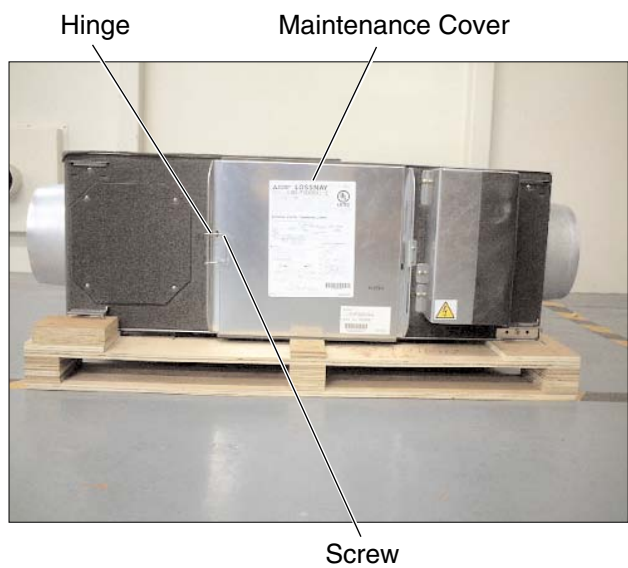
## 5-1 Blower Parts

① Remove the cover fixing screw.

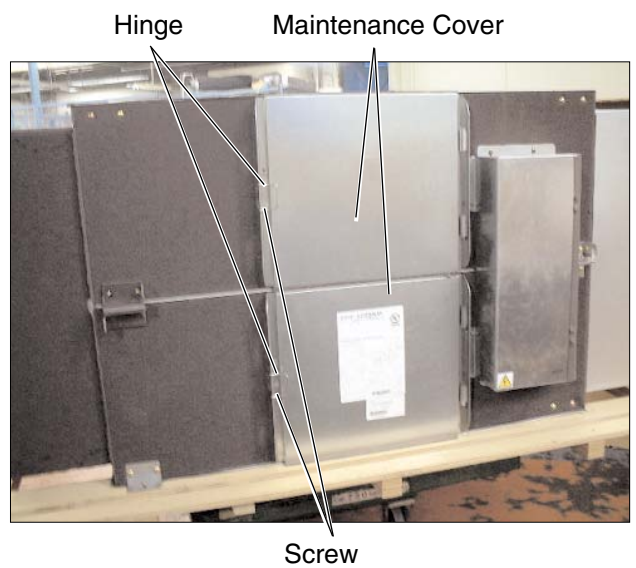
② Pull back the hinged clip.

Open the door and lift off of the hinge brackets.

LGH-F300RX3-E, LGH-F600RX3-E

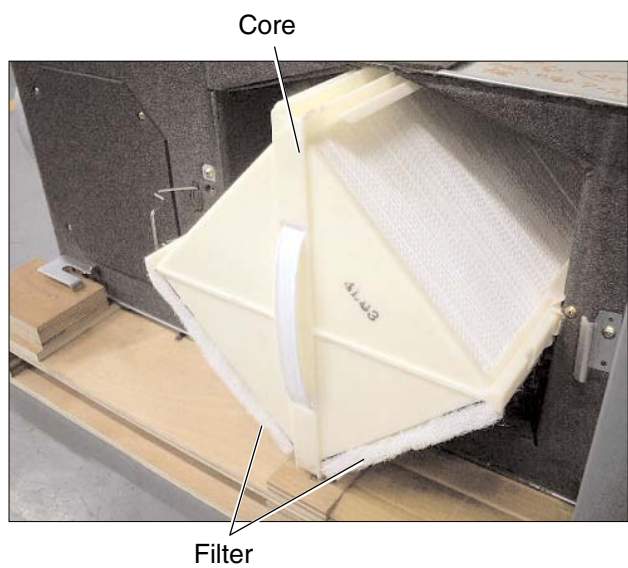


LGH-F1200RX3-E

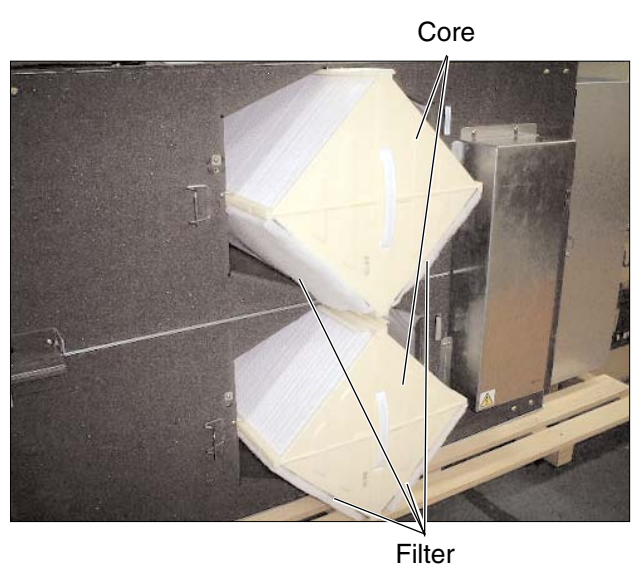


③ Take hold of the handle and draw the Lossnay cores out from the unit.

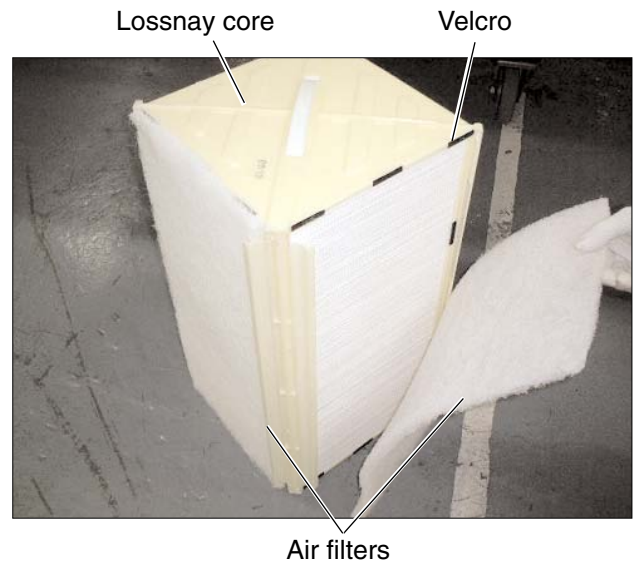
LGH-F300RX3-E, LGH-F600RX3-E



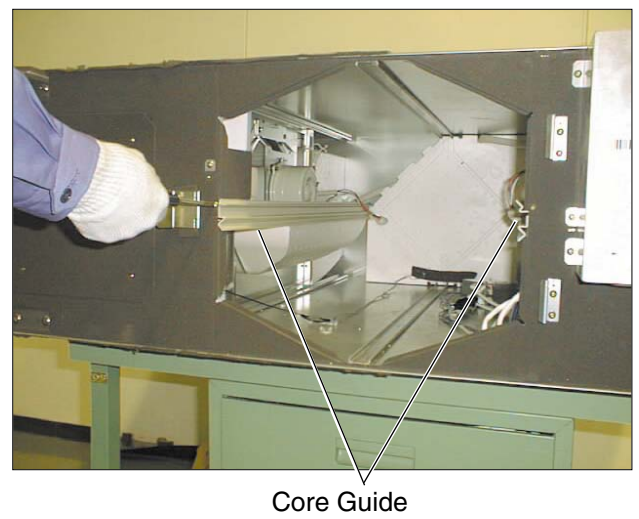
LGH-F1200RX3-E



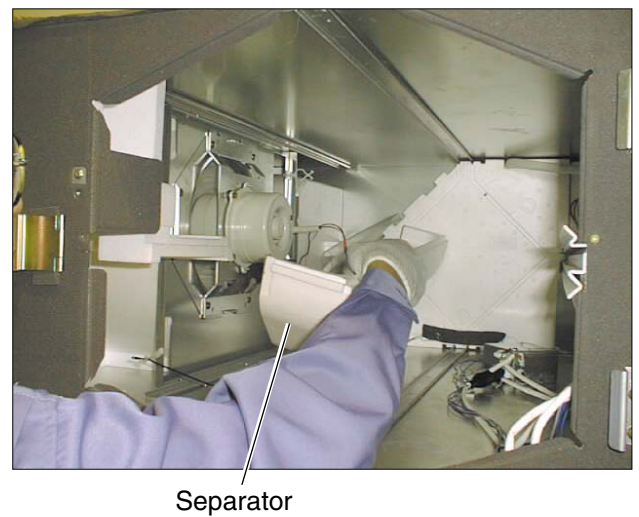
④ After pulling out the Lossnay cores. Pull the air filters, located at the bottom left and right of the Lossnay cores, off the velcro that holds them in place.



⑤ Remove screw from the core-guide, Remove core-guide.

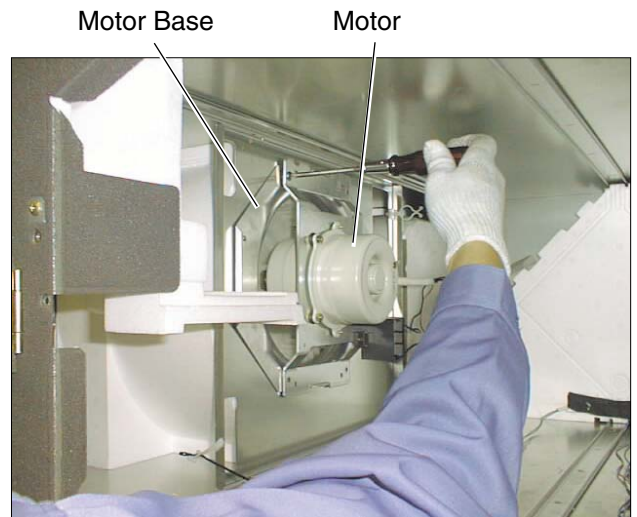


⑥ Remove separator from the blower portion.

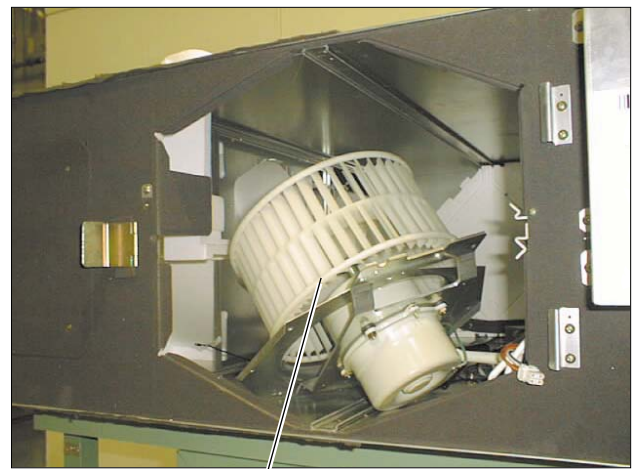




⑦ Remove screws from the motor base.



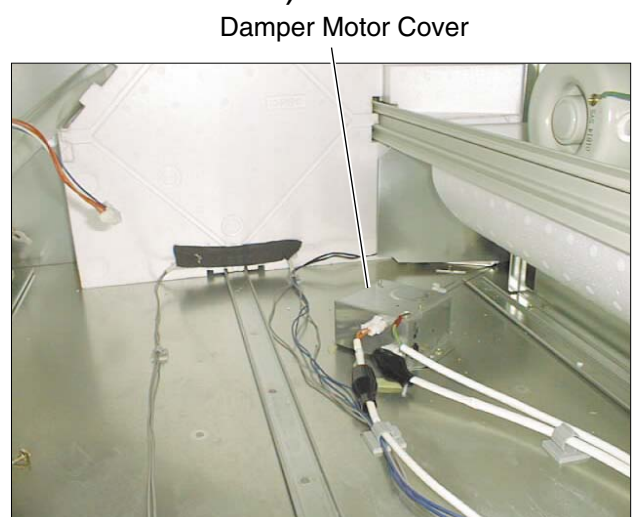
⑧ Remove the pre-assembled blower.



Pre-assembled Blower

## 5-2 Damper Movement Motor Part (All units available)

① Remove (2) screws out from the damper motor cover.



②Take the damper movement motor out of the cover.

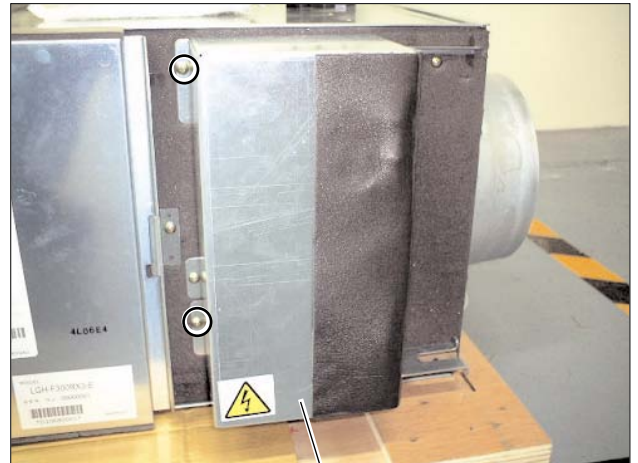


Damper Movement Motor

### 5-3 Circuit Board Part

(1) LGH-F300RX3-E, LGH-F600RX3-E

①Remove (2) screws from the control cover and open the control cover.



Control Cover

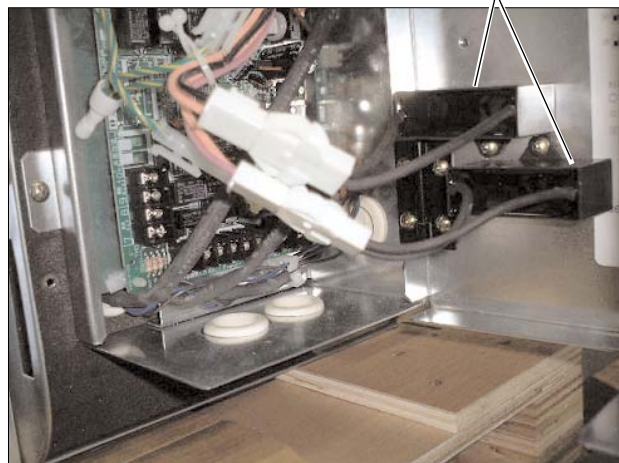
### Caution:

When assembling again, should clamp same as right fig.



② Remove (2) screws from capacitors.

Capacitors



③ Remove all harnesses connected to the circuit board.

④ Take the circuit board out.



Circuit Board

## (2) LGH-F1200RX3-E

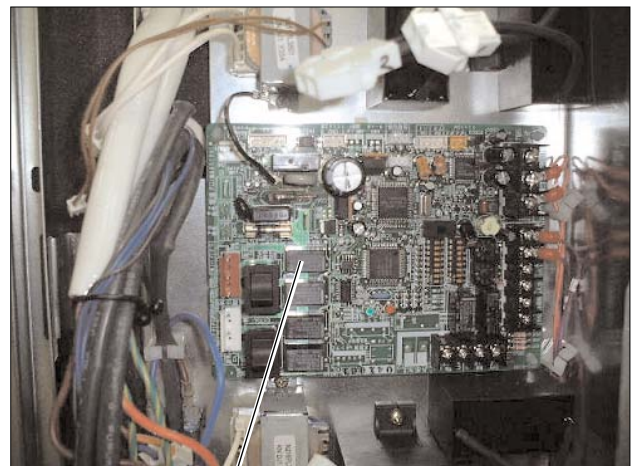
① Remove (2) screws from the control cover and open the control cover.



Control Cover



- ② Remove all harnesses connected to the circuit board.
- ③ Take the circuit board out.





Circuit Board

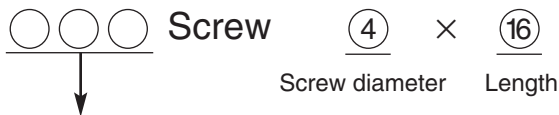


## 6. Parts list

### Please note the following when using the parts list.

1. When ordering parts, always indicate the part number, part name, and the number of parts required.
2. It may take time for you to receive the parts. Make an inquiry about a rush order.
3. No further notice if the specification changes.
4. Parts marked with  and  are critical for safety.
5. To maintain safety and performance, always replace the parts with the parts prescribed.
6. The numbers that are circled in the exploded view are the same as the reference number for the part being indicated.
7. When replacing the parts to which the nameplate is attached, remove the nameplate and attach it to the new parts.

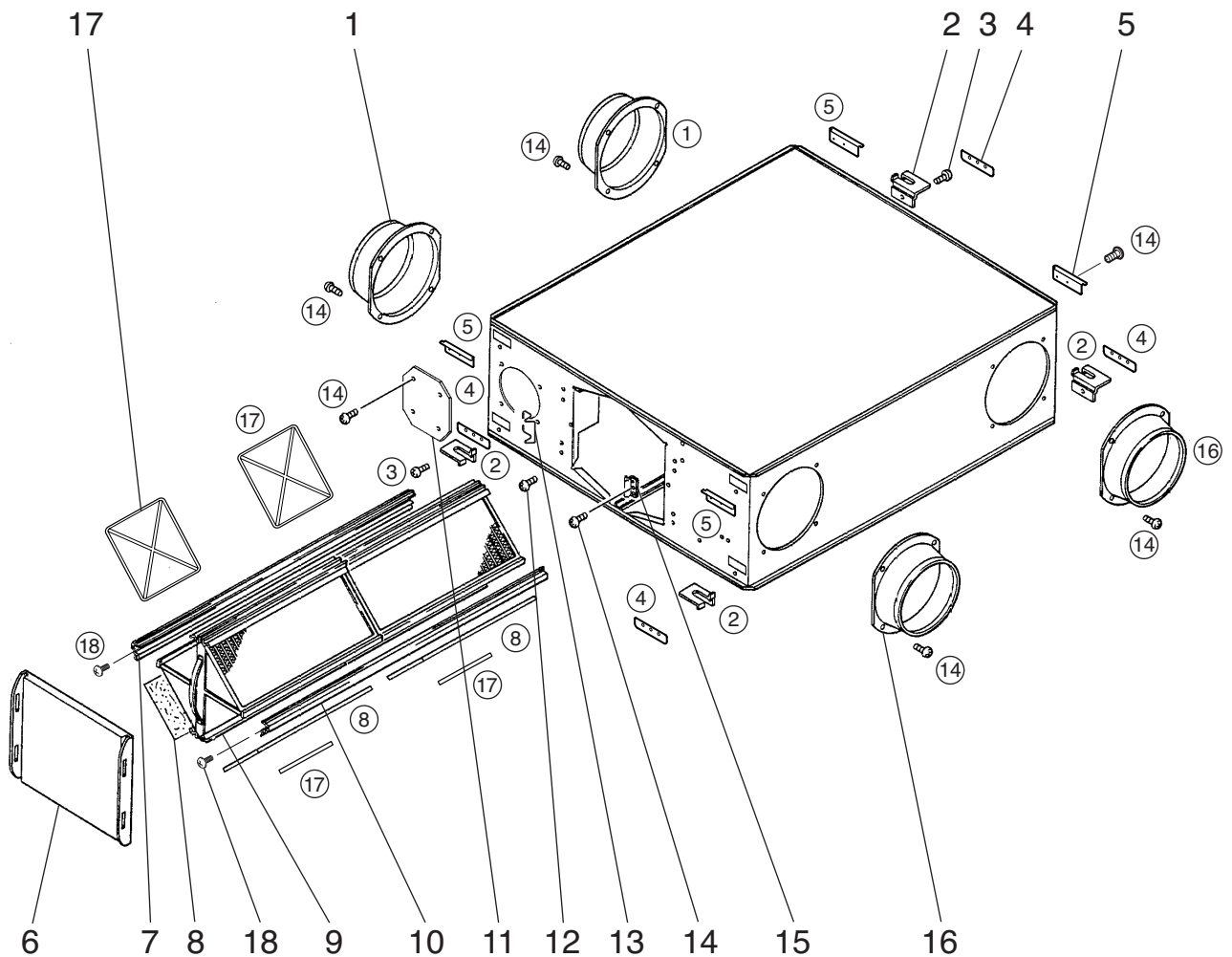
### Description of screw abbreviations



Abbreviation	Description
PC screw	Cross recess flat head machine screw
PRC screw	Cross recess oval head machine screw
PP screw	Cross recess pan head machine screw
SW · PP screw	Cross recess pan head screw with spring washer
PPT screw	Cross recess tapping screw
PCT screw	Cross recess flat head tapping screw
PTT screw	Cross recess truss head tapping screw
PT screw	Cross recess truss head machine screw
SET screw	Slotted head stop screw
SQ · SET screw	Square head stop screw
P · SET screw	Pan head stop screw
PMT screw	Primer truss head screw
HS · SET screw	Hexagon head stop screw
P · R · W screw	Cross recess round wood screw
P · C · W screw	Cross recess flat head wood screw
P · R · C · W screw	Cross recess round and flat wood screw
R · W screw	Slotted round wood screw
PW · PP screw	Cross recess pan head screw with small washer
SW-PW · PP screw	Cross recess pan head machine screw with spring washer and flat washer

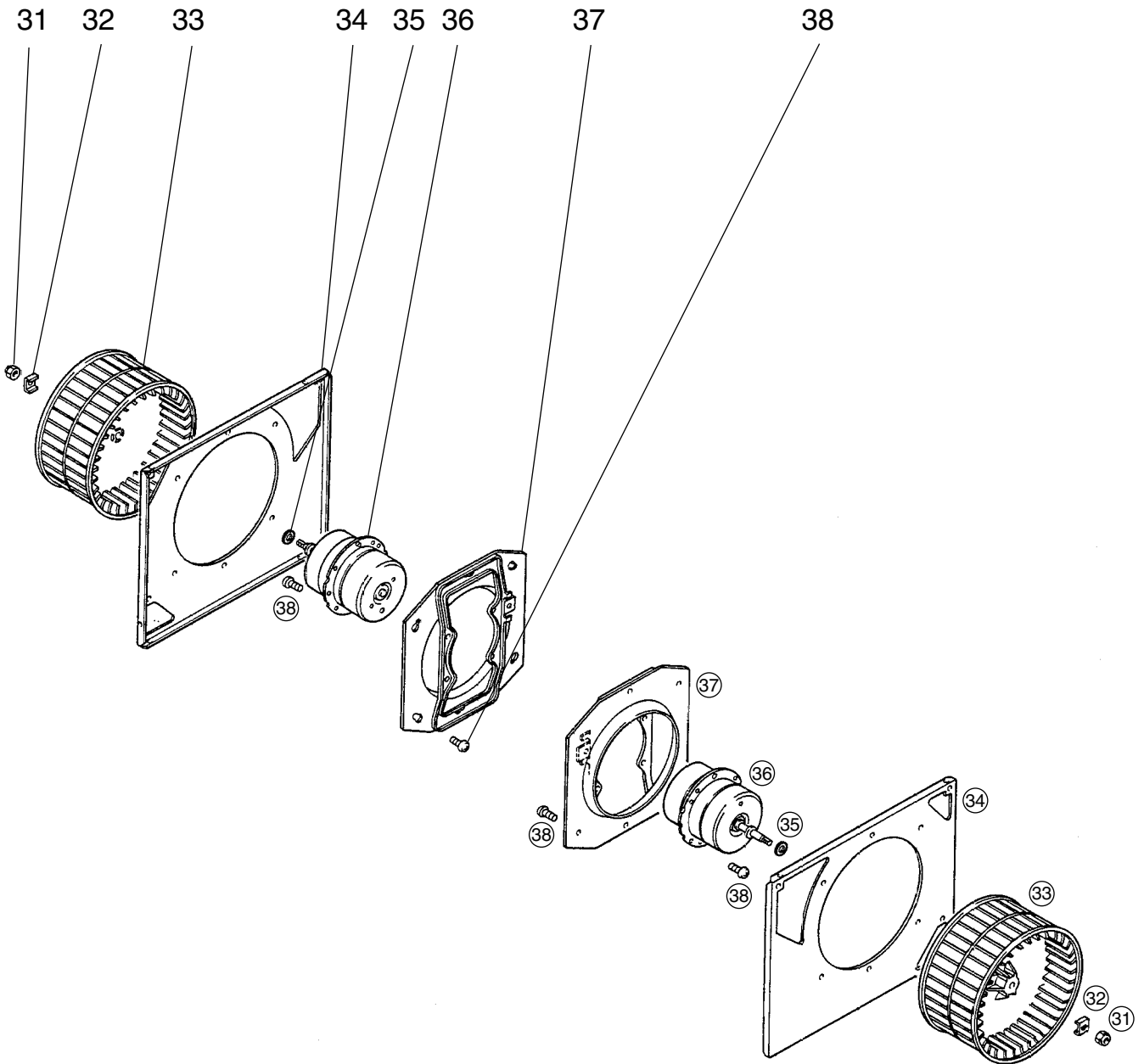
# LGH-F300RX3-E

No.	Name of part	Parts No.	Q'ty pcs/unit	Critical for safety	Remarks
1	Flange	R50 028 610	2		
2	Hanger	R50 476 380	4		
3	PTT screw 5x10	H00 189 007	4		
4	Hanger support	R50 483 705	4		
5	Hanger cover	Y50 061 704	4		
6	Maint. cover	Y50 062 707	1		
7	Core guide	R50 216 381	1		
8	Filter	R50 521 717	4	⚠	
9	Lossnay core	R50 478 713	2	⚠	
10	Core guide	R50 478 382	1		
11	Cover	R50 351 708	2		
12	Spl screw 4x11	M34 074 017	1		
13	Hinge	R50 466 344	1		
14	PTT screw 4x8	H00 000 487	39		
15	Fix piece	Y50 029 712	1		
16	Flange	R50 429 609	2		
17	Filter stopper	R50 521 710	8		
18	PTT screw 4x12	H00 000 488	2		



# LGH-F300RX3-E

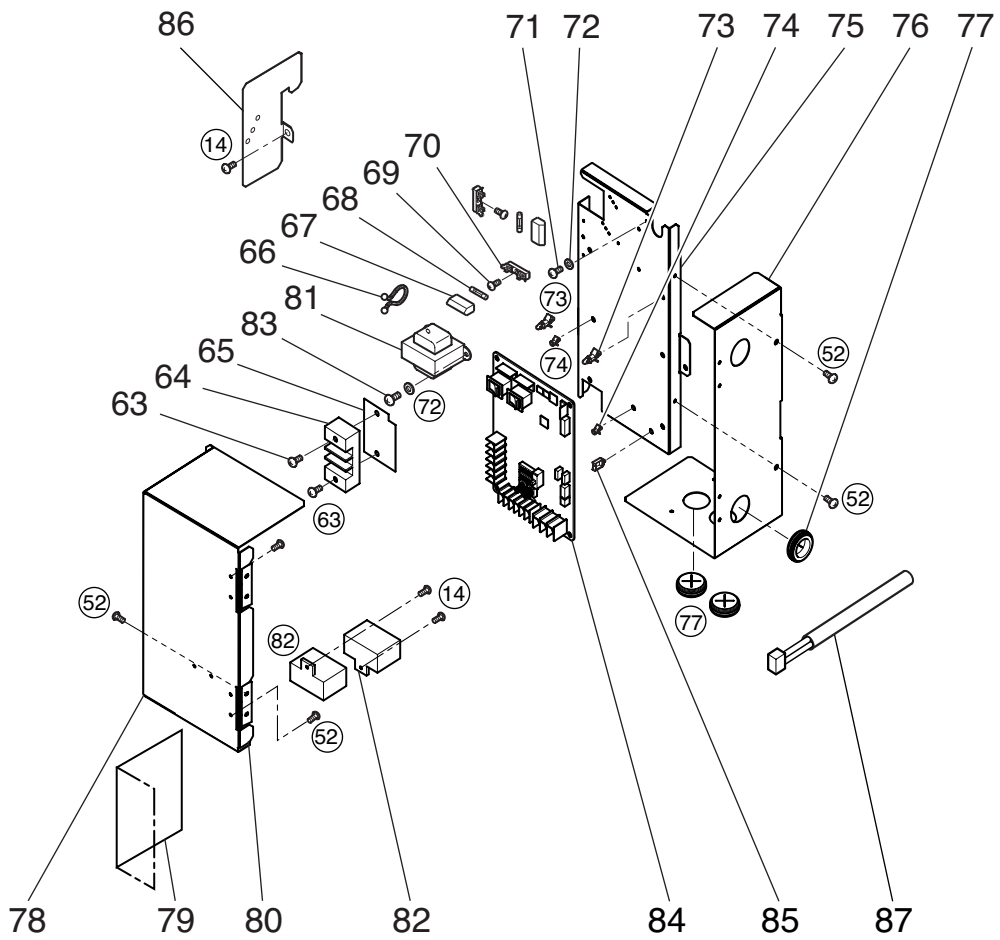
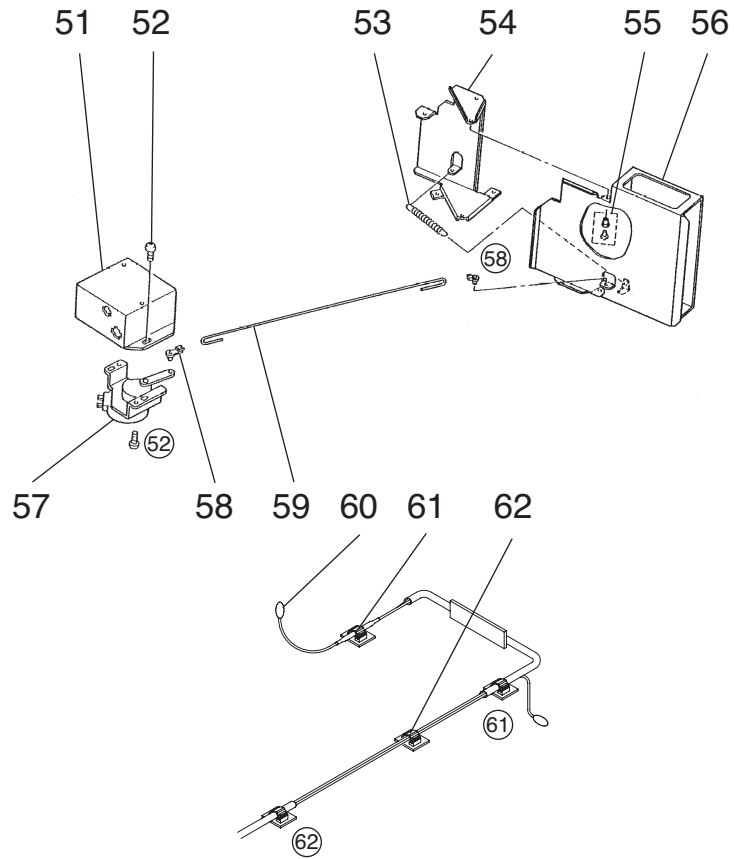
No.	Name of part	Parts No.	Q'ty pcs/unit	Critical for safety	Remarks
31	Special nut (8)	R50 331 067	2		Left-handed
32	Tab washer	M34 398 077	2		
33	Centrifugal fan	R50 351 480	2	⚠	φ 220
34	Fan base	R50 478 707	2		
35	Spl washer (10)	M34 706 465	2		φ40 (Outer dia.)
36	Motor	Y50 113 453	2	⚠	
37	Motor fix plate	R50 351 713	2		
38	PTT screw 5x10	H00 189 007	16		



## LGH-F300RX3-E

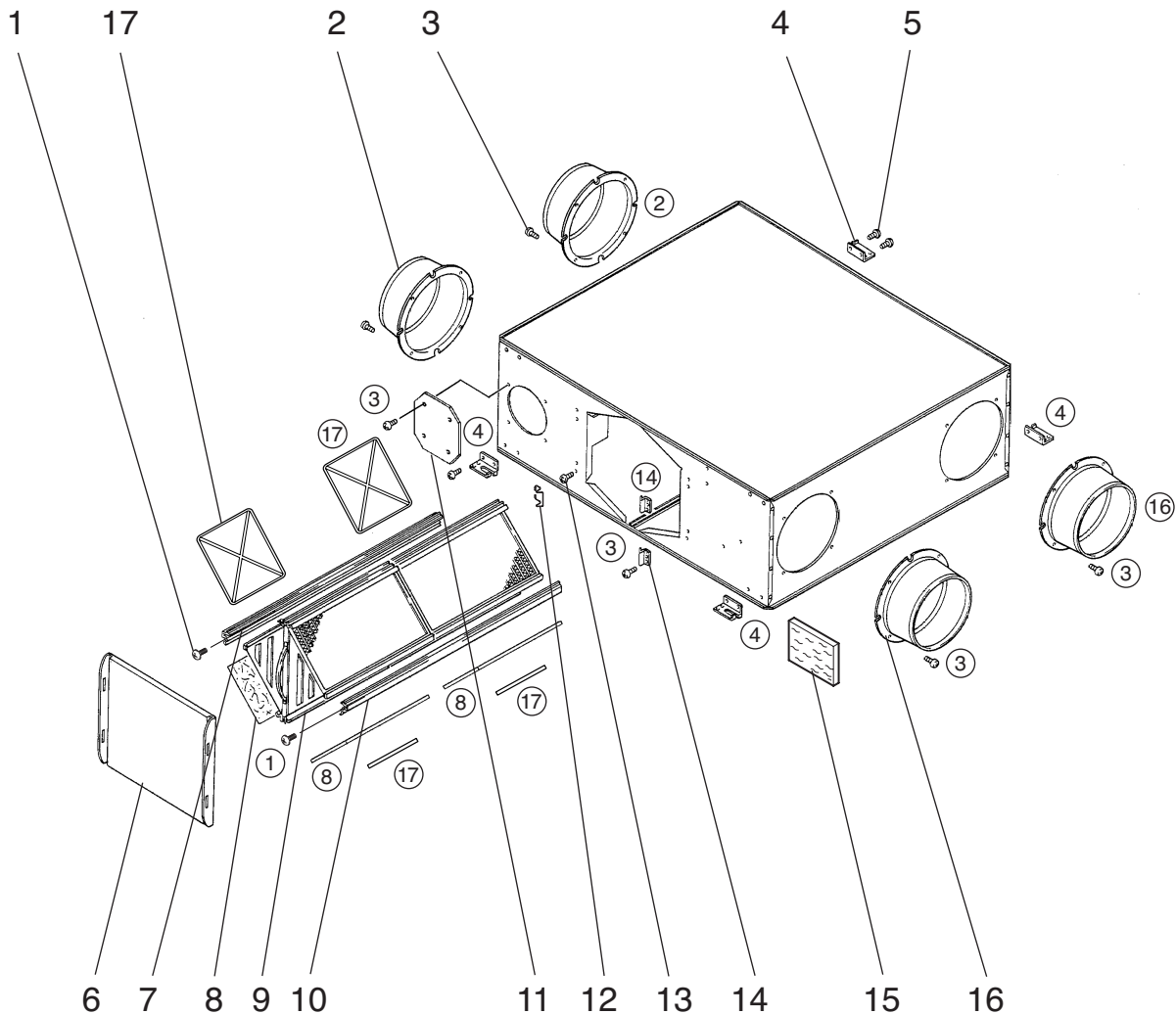
No.	Name of part	Parts No.	Q'ty pcs/unit	Critical for safety	Remarks
51	Motor cover	Y50 061 693	1		
52	PTT screw 4x6	H00 312 007	15		
53	Pull spring	R50 069 156	1		
54	Damper support	R50 472 716	1		
55	Special bush	M31 234 089	2		
56	Damper	R50 472 715	1		
57	Damper motor	Y50 061 260	1	△	AC220·240V
58	Special bush	R50 054 225	2		
59	Rod	R50 232 150	1		
60	Thermistor	Y50 113 215	1	△	
61	Cord clip	R50 399 223	2		
62	Cord clip	R50 399 224	3		
63	PPT screw 4x12	H00 154 005	2		
64	Terminal block	K81 432 236	1	△	3P
65	Insulator plate	Y50 110 226	1		
66	Cord band	M45 017 228	1		Black
67	Fuse cover	Y55 001 280	2		
68	Fuse	Y50 113 280	2	△	6.3A·AC250V
69	PPT screw 3x10	H00 000 676	2		
70	Fuse holder	Y55 001 281	2		
71	PT screw 4x8 BS	H00 011 008	2		
72	Lock washer (4)	H00 013 076	4		
73	Support piece	H00 605 095	4		
74	Support piece	H00 605 096	3		
75	Control base	Y50 113 708	1		
76	Side cover	Y50 113 707	1		
77	Bush	K82 163 225	3		
78	Control cover	Y50 113 706	1		
79	Wiring diagram	Y50 114 361	1		
80	Hinge	R50 155 344	2		
81	Transformer	Y50 047 216	1	△	AC230V
82	Capacitor	Y50 113 235	2	△	4.0μF 440VAC
83	PP screw 4x8	H00 000 003	3		
84	Circuit board	Y50 113 171	1	△	LG-X01-A
85	Cord clip	M35 164 224	1		
86	Fix plate	Y50 126 706	1		
87	Lead wire	Y50 047 231	1	△	100mm





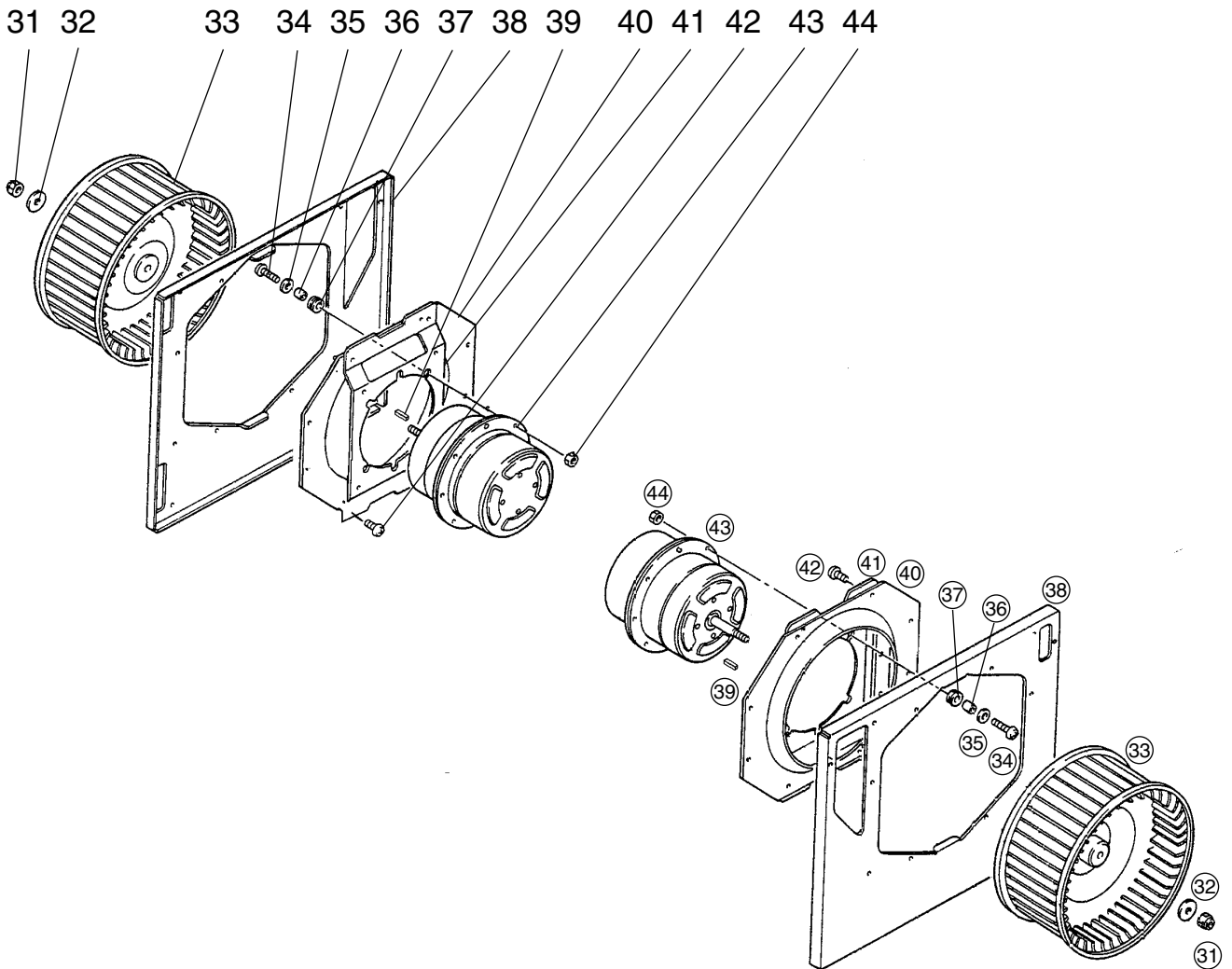
# LGH-F600RX3-E

No.	Name of part	Parts No.	Q'ty pcs/unit	Critical for safety	Remarks
1	PTT screw 4x12	H00 000 488	2		
2	Flange	R50 430 609	2		
3	PTT screw 4x8	H00 000 487	59		
4	Hanger	R50 095 380	4		
5	PT screw 6x12	H00 000 244	16		
6	Maint. cover	Y50 039 707	1		
7	Core guide	R50 219 381	1		
8	Filter	R50 522 717	4	⚠	
9	Lossnay core	R50 524 712	2	⚠	With filter stoppers
10	Core guide	R50 481 381	1		
11	Cover	R50 358 704	2		
12	Hinge	R50 466 344	1		
13	Spl screw 4x11	M34 074 017	1		
14	Fix piece	Y50 029 712	2		
15	Sound absorber	Y50 126 718	1		
16	Flange	Y50 021 609	2		
17	Filter stopper	R50 522 710	8		



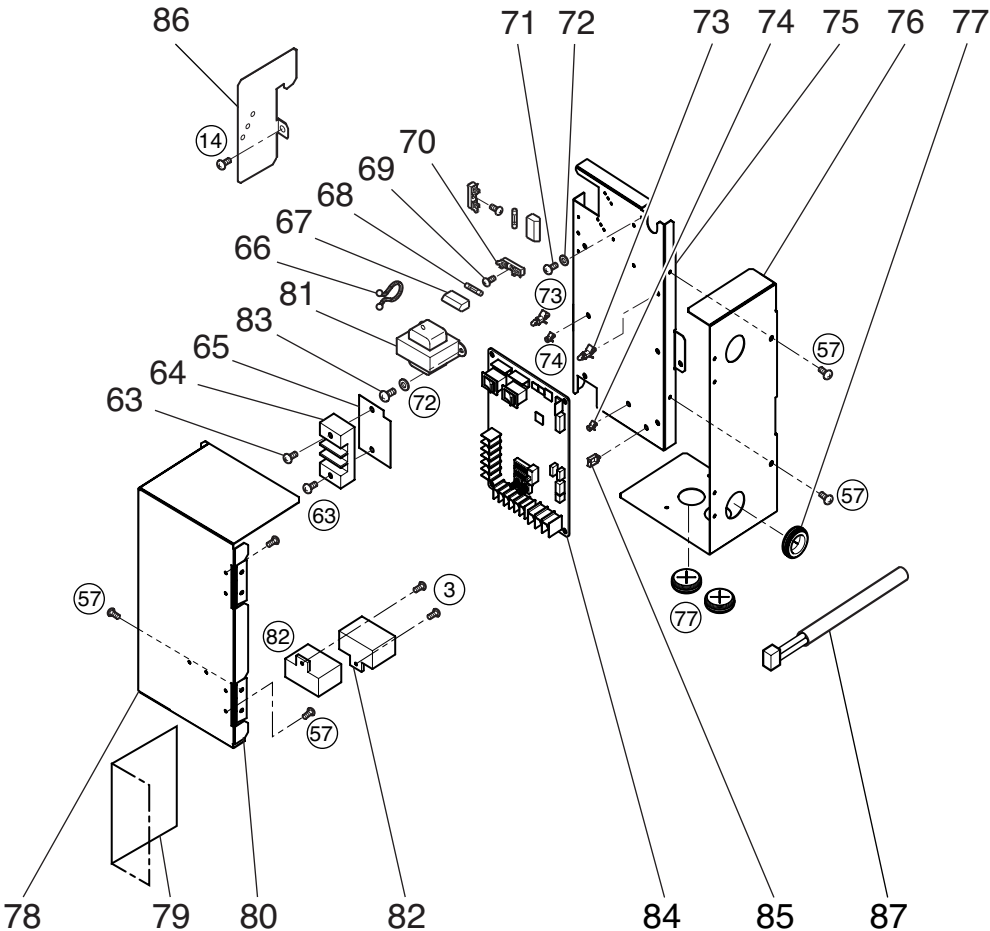
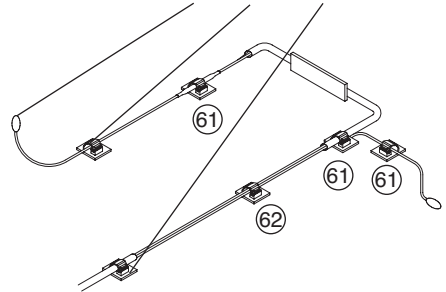
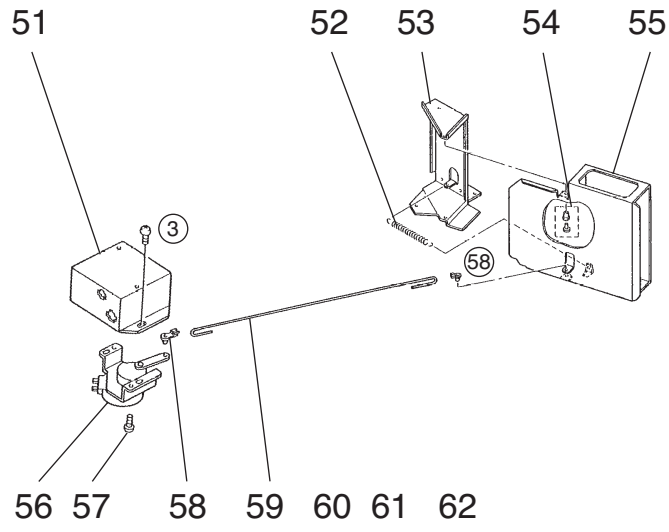
# LGH-F600RX3-E

No.	Name of part	Parts No.	Q'ty pcs/unit	Critical for safety	Remarks
31	Special nut (M12)	R50 218 067	2		Left-handed
32	Washer (12)	K83 466 113	2		
33	Centrifugal fan	R50 479 480	2	⚠	φ 245
34	PT screw 6x20	H00 157 008	8		
35	Spl washer (6)	M34 043 080	8		
36	Spacer	R50 000 095	8		
37	Bush	R50 217 225	8		
38	Fan base	R50 480 707	2		
39	Key	Y50 033 104	2		5x5x11.5
40	Inlet ring	R50 264 711	2		
41	Motor fix plate	R50 218 712	2		
42	PTT screw 5x10	H00 189 007	16		
43	Motor	Y50 114 453	2	⚠	
44	Nut (M6)	H00 061 050	8		



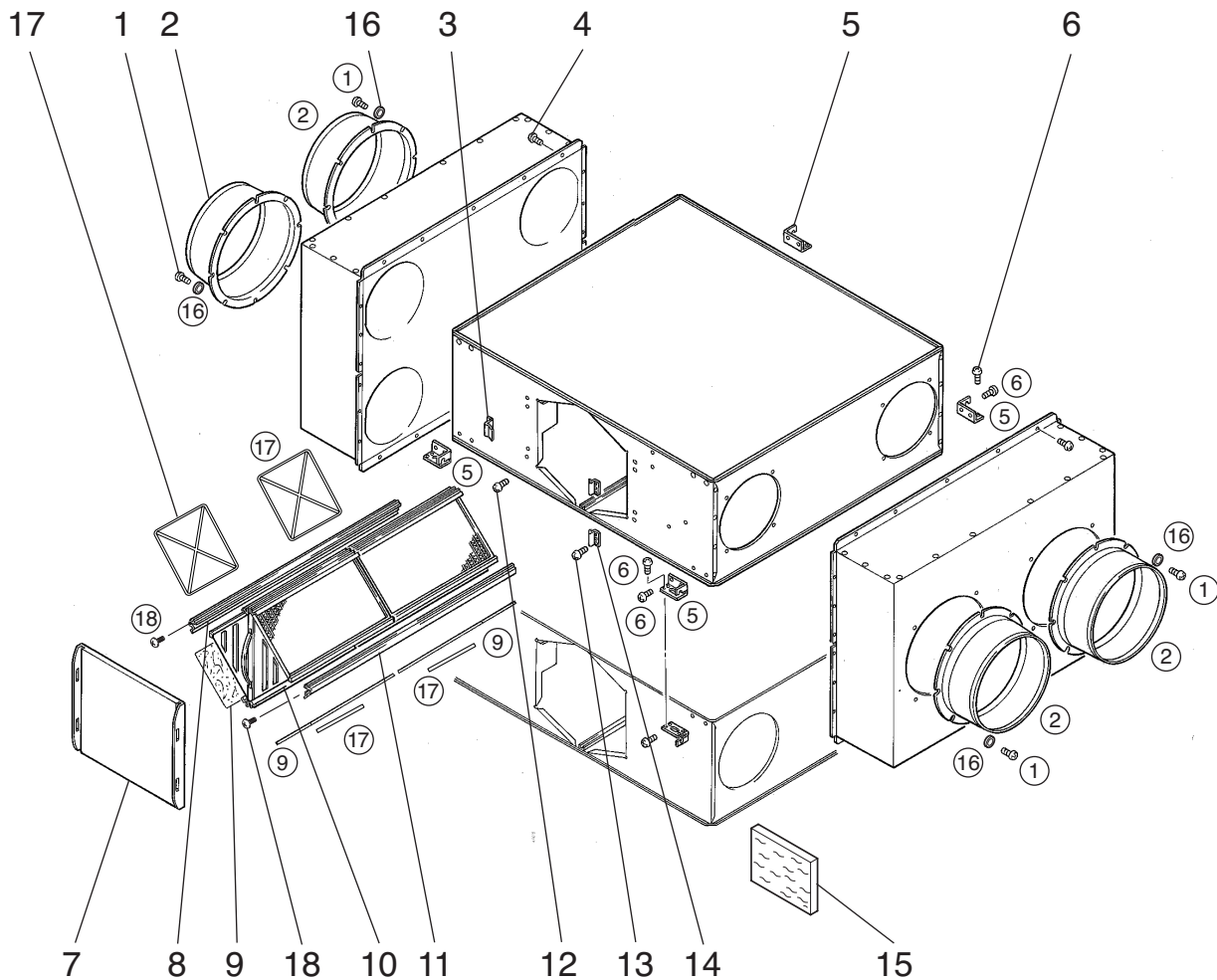
## LGH-F600RX3-E

No.	Name of part	Parts No.	Q'ty pcs/unit	Critical for safety	Remarks
51	Motor cover	Y50 061 693	1		
52	Pull spring	R50 074 156	1		
53	Damper support	R50 473 715	1		
54	Special bush	M31 234 089	2		
55	Damper	R50 473 716	1		
56	Damper motor	Y50 061 260	1	△	AC220·240V
57	PTT screw 4x6	H00 312 007	13		
58	Special bush	R50 054 225	2		
59	Rod	R50 265 150	1		
60	Thermistor	Y50 114 215	1	△	
61	Cord clip	R50 399 223	4		
62	Cord clip	R50 399 224	4		
63	PPT screw 4x12	H00 154 005	2		
64	Terminal block	K81 432 236	1	△	3P
65	Insulator plate	Y50 110 226	1		
66	Cord band	M45 017 228	1		Black
67	Fuse cover	Y55 001 280	2		
68	Fuse	Y50 113 280	2	△	6.3A·AC250V
69	PPT screw 3x10	H00 000 676	2		
70	Fuse holder	Y55 001 281	2		
71	PT screw 4x8 BS	H00 011 008	2		
72	Lock washer (4)	H00 013 076	4		
73	Support piece	H00 605 095	4		
74	Support piece	H00 605 096	3		
75	Control base	Y50 113 708	1		
76	Side cover	Y50 113 707	1		
77	Bush	K82 163 225	3		
78	Control cover	Y50 113 706	1		
79	Wiring diagram	Y50 114 361	1		
80	Hinge	R50 155 344	2		
81	Transformer	Y50 047 216	1	△	AC230V
82	Capacitor	Y50 114 235	2	△	7.0μF 440VAC
83	PP screw 4x8	H00 000 003	3		
84	Circuit board	Y50 113 171	1	△	LG-X01-A
85	Cord clip	M35 164 224	1		
86	Fix plate	Y50 126 706	1		
87	Lead wire	Y50 047 231	1	△	100mm



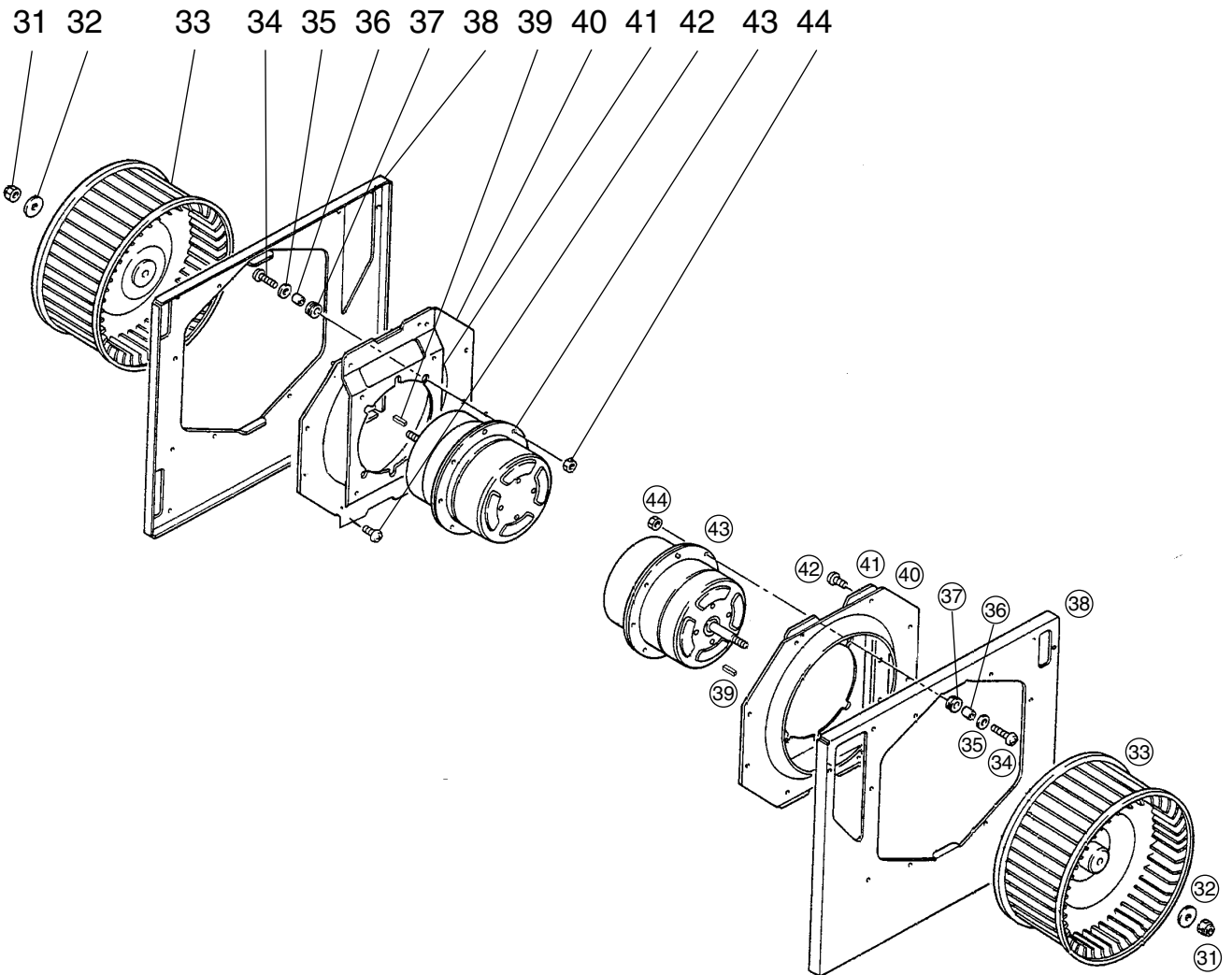
# LGH-F1200RX3-E

No.	Name of part	Parts No.	Q'ty pcs/unit	Critical for safety	Remarks
1	PTT screw 4x14	H00 000 333	32		
2	Flange	R50 220 607	4		
3	Hinge	R50 466 344	2		
4	PTT screw 4x10	H00 000 332	48		
5	Hanger	R50 111 381	8		
6	PT screw 6x12	H00 000 244	40		
7	Maint. cover	Y50 039 707	2		
8	Core guide	R50 219 381	2		
9	Filter	R50 522 717	8	⚠	
10	Lossnay core	R50 524 712	4	⚠	With filter stoppers
11	Core guide	R50 481 381	2		
12	Spl screw 4x11	M34 074 017	2		
13	PTT screw 4x8	H00 000 487	89		
14	Fix piece	Y50 029 712	4		
15	Sound absorber	Y50 126 718	2		
16	Special washer (4.2)	H00 479 081	32		
17	Filter stopper	R50 522 710	16		
18	PTT screw 4x12	H00 000 488	4		



# LGH-F1200RX3-E

No.	Name of part	Parts No.	Q'ty pcs/unit	Critical for safety	Remarks
31	Special nut (M12)	R50 218 067	4		Left-handed
32	Washer (12)	K83 466 113	4		
33	Centrifugal fan	R50 479 480	4	⚠	φ 245
34	PT screw 6x20	H00 157 008	16		
35	Spl washer (6)	M34 043 080	16		
36	Spacer	R50 000 095	16		
37	Bush	R50 217 225	16		
38	Fan base	R50 480 707	4		
39	Key	Y50 033 104	4		5x5x11.5
40	Inlet ring	R50 264 711	4		
41	Motor fix plate	R50 218 712	4		
42	PTT screw 5x10	H00 189 007	32		
43	Motor	Y50 114 453	4	⚠	
44	Nut (M6)	H00 061 050	16		



## LGH-F1200RX3-E

No.	Name of part	Parts No.	Q'ty pcs/unit	Critical for safety	Remarks
51	Motor cover	Y50 061 693	2		
52	Pull spring	R50 074 156	2		
53	Damper support	R50 473 715	2		
54	Special bush	M31 234 089	4		
55	Damper	R50 473 716	2		
56	Damper motor	Y50 061 260	2	△	AC220·240V
57	PTT screw 4x6	H00 312 007	4		
58	Special bush	R50 054 225	4		
59	Rod	R50 265 150	2		
60	Thermistor	Y50 114 215	2	△	
61	Cord clip	R50 399 223	8		
62	Cord clip	R50 399 224	8		
63	Control cover	Y50 115 706	1		
64	Hinge	R50 155 344	2		
65	Wiring diagram	Y50 115 361	1		
66	Circuit board	Y50 113 171	2	△	LG-X01-A
67	Support piece	H00 605 095	8		
68	Support piece	H00 605 096	6		
69	PP screw 4x8	H00 000 003	4		
70	Lock washer (4)	H00 013 076	4		
71	Transformer	Y50 047 216	2	△	AC230V
72	Fuse	Y50 113 280	4	△	6.3A·AC250V
73	Capacitor	Y50 114 235	4	△	7.0μF 440VAC
74	Cord band	K83 170 228	2		White
75	Control base	Y50 115 704	1		
76	Side cover	Y50 115 707	1		
77	PPT screw 4x12	H00 154 005	4		
78	Terminal block	K81 432 236	1	△	3P
79	Insulator plate	Y50 110 226	1		
80	Cord clip	H00 479 230	2		
81	Terminal block	K81 429 236	1	△	6P
82	Cord clip	M35 164 224	8		
83	PT screw 4x8 BS	H00 011 008	2		
84	Bush	K82 163 225	3		
85	Lead wire	Y50 047 231	1	△	100mm
86	Fuse cover	Y55 001 280	4		
87	PPT screw 3x10	H00 000 676	4		
88	Fuse holder	Y55 001 281	4		



