



website <http://www.lgservice.com>

LG

LG

Ventilation System

SERVICE MANUAL

MODELS: LZ-H0106BA0 LZ-H1006BA0
LZ-H0156BA0 LZ-H1002BA0
LZ-H0256BA0 LZ-H1506BA0
LZ-H0506BA0 LZ-H1502BA0
LZ-H0502BA0 LZ-H2006BA0
LZ-H0806BA0 LZ-H2002BA0
LZ-H0802BA0

CAUTION

- BEFORE SERVICING THE UNIT, READ THE SAFETY PRECAUTIONS IN THIS MANUAL.
- ONLY FOR AUTHORIZED SERVICE PERSONNEL.

TABLE OF CONTENTS

| | |
|---|----|
| Safety Precautions | 3 |
| Standards for Model | 6 |
| Product Standards | 7 |
| Descriptions for operation and functions | 14 |
| How to disassemble | 17 |
| Disassemble Diagram(Deal Drawing) and SVC Parts List | 22 |
| Wiring Diagram | 32 |
| Control Part Detailed Drawing | 36 |
| Descriptions for Control Circuit | 38 |
| Troubleshooting | 40 |
| Feature Dimensions Diagram | 47 |
| Accessaries / Option | 52 |

Safety Precautions

To prevent injury to the user or other people and property damage, the following instructions must be followed.

- Incorrect operation due to ignoring instruction will cause harm or damage. The seriousness is classified by the following indications.

⚠ WARNING This symbol indicates the possibility of death or serious injury.

⚠ CAUTION This symbol indicates the possibility of injury or damage.

- Meanings of symbols used in this manual are as shown below.

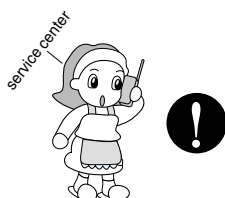
| | |
|--|---|
| | Be sure not to do. |
| | Be sure to follow the instruction. |

⚠ WARNING

■ For Installation

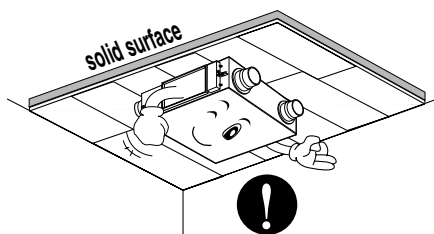
For electric working(wiring work), contact Service Center or agency you purchased the product.

- If you disassemble or repair arbitrarily, it may cause fire or electric shock.



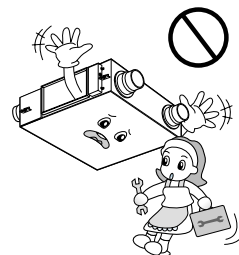
Install in a place capable of the product's weight.

- If the product is installed in a place incapable of its weight, it may cause an accident by its dropping.



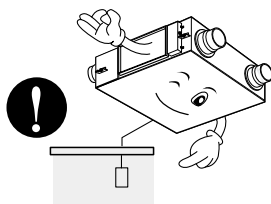
Do not arbitrarily disassemble, repair, or modify the product.

- It may cause fire or electric shock.



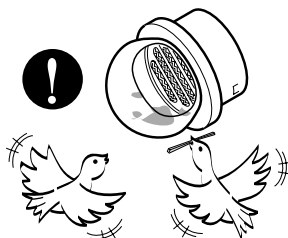
Be sure to undertake grounding work.

- If you do not undertake grounding work, it may cause electric shock.



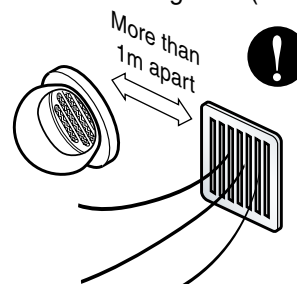
Use an netted inlet for external air to prevent birds from entering.

- Remove any clogs such as bird nest. It may cause an oxygen deficiency in a room.



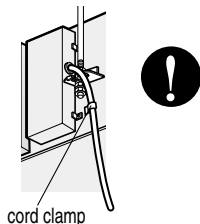
Install the air intake where polluted air can not be directly sucked in.

- It may cause various accidents, including suffocation, due to the suction of harmful gasses(CO, etc.)



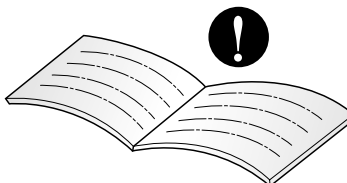
Wire with prescribed wire and fix firmly to prevent it from being pulled out by external impact.

- Improper wiring and fixing may cause fire.



Install in accordance with installation manual.

- Improper installation may cause fire and electric shock.



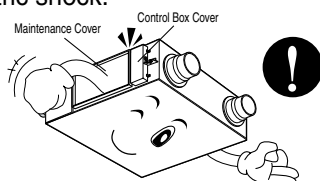
Electric works should be undertaken by an expert in accordance with installation manual and the indicated circuit diagram.

- Improper use of wires and electric may cause fire and electric shock.



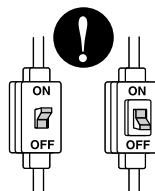
Be sure to install covers for inspection and control box.

- If not, water and dust infiltrating into the product may cause fire and electric shock.



Be sure to install electric leakage circuit breakers(ELB) and exclusive switch(switch for electrics).

- If not, it may cause fire and electric shock.



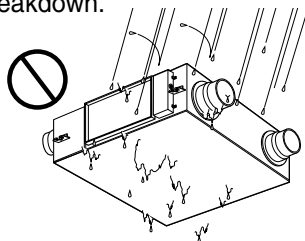
Do not keep flammable materials or volatile gas near the product.

- It may cause fire and breakdown.



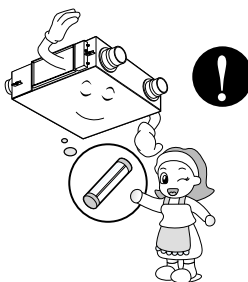
Be sure to keep the product out of water.

- It may cause electric shock and breakdown.



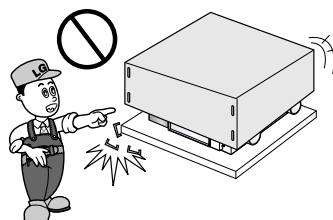
Use a fuse in standardized capacity.(Use a standardized capacity fuse)

- It may cause fire and electric shock.



When unpacking, keep the product from scratches and sharp materials(object).

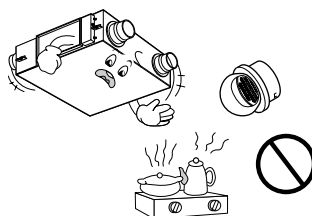
- If not, it may cause physical damage.



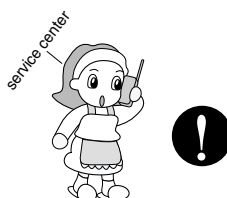
■ For use

Keep out of inflammable.

- It may cause fire.

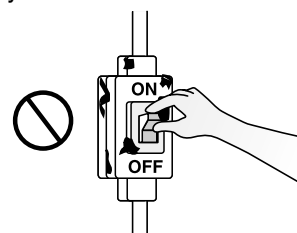


For the flooded product, contact Service Center.



Do not use damaged electric leakage circuit breaker or switch.

- It may cause fire and electric shock.

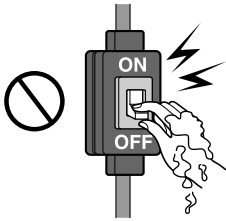


CAUTION

■ For Installation

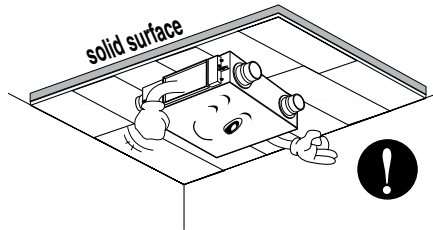
Do not touch electric leakage circuit breaker or switch with wet hands.

- It may cause electric shock.



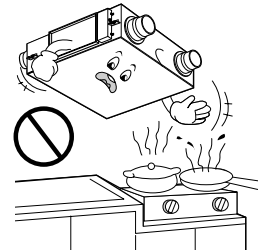
Install the product in an insulated space.

- If the product is installed outside of insulating layer(surface), it may cause a dew formation inside main body, electric shock, and dropping of condensed water.



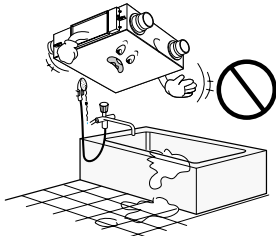
Do not install in oily place such as kitchen and factory.

- It may cause breakdown due to oils stained to filter or electric heat exchanger.



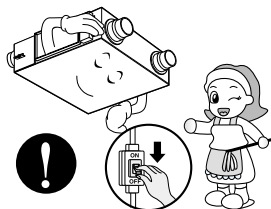
Do not install in humid place such as bathroom.

- It may cause electric shock and breakdown.



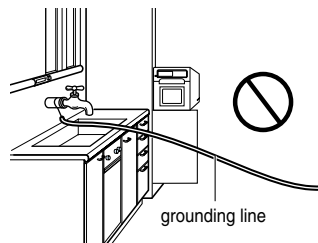
Switch the power off during cleaning.

- It may cause fire and electric shock.



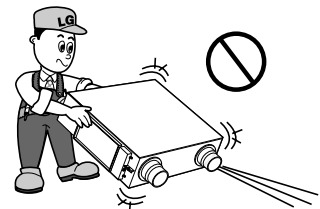
Do not connect grounding line to window frame (chassis) and tap.

- It has a danger of electric shock.



Do not carry the product alone.

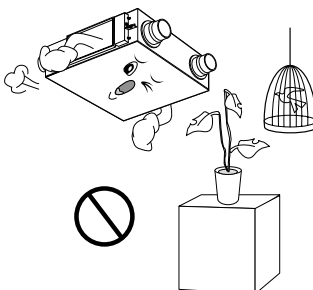
- Otherwise, it may cause physical damage.



■ For use

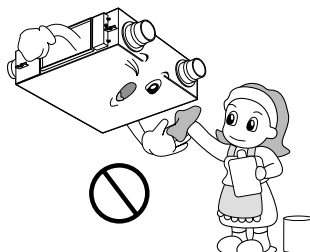
Do not use for special purposes and places including animals and plants, sensitive equipment, and art pieces.

- Otherwise, it may cause physical damage.



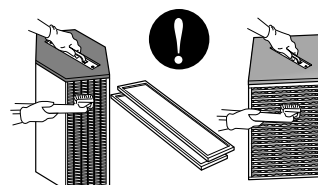
Do not use strong detergent such as wax or thinner in case of cleaning, instead use soft cloth.

- It ruins external appearance due to discoloration or scratches on the product.



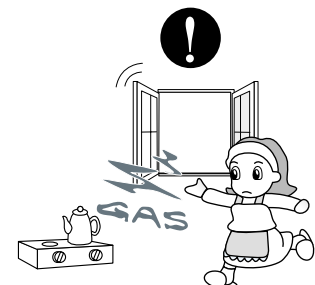
Clean filter and heat exchanger regularly with your gloves on.

- With a large quantity of dust in the product, the effect of ventilation may be reduced. (it may not well ventilated)



In case of gas leakage, open the window to change air(ventilate) before using remote controller.

- It may cause explosion and fire.



Standards for Model

LZ-H0506BA0

Serial No.

Marking in a developed order.

Function

A : Basic L : Nano Plasma + Clean(Wall mounted)
C : Plasma(Ceiling Cassette) G : Low Static Moter

Product Type

B: duct type hidden in ceiling
T: cassette type for ceiling
W: for window

Electrical Rating

6 : 1Ø, 220-240V, 50Hz

Ventilation Capacity(Ventilating Ability)

Excluding the first digit of ventilating capacity per hour
50:500CMH

Heat Exchange Mode

H: Total heat(including humidity)
T: Sensible heat(temperature only)

Product classification

LZ : ventilation

ZCON - BS2

Serial No.

Marking in a developed order.

Grade

S:Standard
D: Deluxe

Additional Functions

B: Base Model
M : possible to connect Multi V

Product Name

ZCON(Controller)

Product Standards

| Item(format) | | Unit | LZ-H0106BA0 | | |
|-------------------------|---------|--------|--------------------------|------|------|
| Power | | Ø,V,Hz | 1, 220-240, 50 | | |
| Ventilation Mode | | - | Total heat ventilation | | |
| Wind velocity | | - | Super High | High | Low |
| Electric current | | A | 0.32 | 0.3 | 0.28 |
| Electricity consumption | | W | 68 | 60 | 50 |
| Airflow | | m³/h | 100 | 100 | 70 |
| External static press | | Pa | 40 | 35 | 30 |
| Temperature efficiency | | % | 78 | 78 | 80 |
| Enthalpy efficiency | Heating | % | 68 | 68 | 70 |
| | Cooling | % | 58 | 58 | 60 |
| Noise | | dB(A) | 28 | 26 | 20 |
| Air Filter | | - | Non-woven fabric filter | | |
| Weight | | kg | 24 | | |
| Dimensions | | mm | 590(W) x 590(D) x 204(H) | | |

| Item(format) | | Unit | LZ-H0156BA0 | | |
|-------------------------|---------|--------|--------------------------|------|------|
| Power | | Ø,V,Hz | 1, 220-240, 50 | | |
| Ventilation Mode | | - | Total heat ventilation | | |
| Wind velocity | | - | Super High | High | Low |
| Electric current | | A | 0.36 | 0.36 | 0.35 |
| Electricity consumption | | W | 83 | 80 | 78 |
| Airflow | | m³/h | 150 | 150 | 90 |
| External static press | | Pa | 70 | 55 | 45 |
| Temperature efficiency | | % | 75 | 75 | 79 |
| Enthalpy efficiency | Heating | % | 62 | 62 | 69 |
| | Cooling | % | 55 | 55 | 59 |
| Noise | | dB(A) | 32 | 30 | 22 |
| Air Filter | | - | Non-woven fabric filter | | |
| Weight | | kg | 24 | | |
| Dimensions | | mm | 590(W) x 590(D) x 204(H) | | |

| Item(format) | | Unit | LZ-H0256BA0 | | |
|-------------------------|---------|--------|--------------------------|------|------|
| Power | | Ø,V,Hz | 1, 220-240, 50 | | |
| Ventilation Mode | | - | Total heat ventilation | | |
| Wind velocity | | - | Super High | High | Low |
| Electric current | | A | 0.55 | 0.5 | 0.34 |
| Electricity consumption | | W | 130 | 115 | 80 |
| Airflow | | m³/h | 250 | 250 | 150 |
| External static press | | Pa | 65 | 50 | 40 |
| Temperature efficiency | | % | 80 | 80 | 85 |
| Enthalpy efficiency | Heating | % | 70 | 70 | 78 |
| | Cooling | % | 64 | 64 | 68 |
| Noise | | dB(A) | 32 | 28 | 21 |
| Air Filter | | - | Non-woven fabric filter | | |
| Weight | | kg | 27 | | |
| Dimensions | | mm | 596(W) x 640(D) x 320(H) | | |

| Item(format) | | Unit | LZ-H0506BA0 | | | | | |
|-------------------------|---------|--------|----------------------------|------|------|---------------------|------|------|
| Power | | Ø,V,Hz | 1, 220-240, 50 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Super High | High | Low | Super High | High | Low |
| Electric current | | A | 1.51 | 1.39 | 1.06 | 1.51 | 1.39 | 1.06 |
| Electricity consumption | | W | 260 | 225 | 200 | 260 | 225 | 200 |
| Airflow | | m³/h | 500 | 500 | 320 | 500 | 500 | 320 |
| External static press | | Pa | 150 | 60 | 28 | 150 | 60 | 28 |
| Temperature efficiency | | % | 82 | 82 | 86 | - | - | - |
| Enthalpy efficiency | Heating | % | 79 | 79 | 83 | - | - | - |
| | Cooling | % | 76 | 76 | 80 | - | - | - |
| Noise | | dB(A) | 34 | 32 | 25 | 34 | 32 | 25 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 52 | | | | | |
| Dimensions | | mm | 988(W) x 1,014(D) x 273(H) | | | | | |

| Item(format) | | Unit | LZ-H0502BA0 | | | | | |
|-------------------------|---------|--------|----------------------------|------|-----|---------------------|------|-----|
| Power | | Ø,V,Hz | 1, 220, 60 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Super High | High | Low | Super High | High | Low |
| Electric current | | A | 1.25 | 1.07 | 0.9 | 1.25 | 1.07 | 0.9 |
| Electricity consumption | | W | 258 | 235 | 195 | 258 | 235 | 195 |
| Airflow | | m³/h | 500 | 500 | 320 | 500 | 500 | 320 |
| External static press | | Pa | 200 | 70 | 28 | 200 | 70 | 28 |
| Temperature efficiency | | % | 82 | 82 | 86 | - | - | - |
| Enthalpy efficiency | Heating | % | 79 | 79 | 83 | - | - | - |
| | Cooling | % | 76 | 76 | 80 | - | - | - |
| Noise | | dB(A) | 34 | 32 | 25 | 34 | 32 | 25 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 45 | | | | | |
| Dimensions | | mm | 988(W) x 1,014(D) x 273(H) | | | | | |

| Item(format) | | Unit | LZ-H0806BA0 | | | | | |
|-------------------------|---------|--------|------------------------------|------|-----|---------------------|------|-----|
| Power | | Ø,V,Hz | 1, 220-240, 50 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Super High | High | Low | Super High | High | Low |
| Electric current | | A | 2.8 | 2.7 | 2.6 | 2.8 | 2.7 | 2.6 |
| Electricity consumption | | W | 405 | 360 | 320 | 405 | 360 | 320 |
| Airflow | | m³/h | 800 | 800 | 660 | 800 | 800 | 660 |
| External static press | | Pa | 200 | 110 | 60 | 200 | 110 | 60 |
| Temperature efficiency | | % | 79 | 79 | 82 | - | - | - |
| Enthalpy efficiency | Heating | % | 70 | 70 | 75 | - | - | - |
| | Cooling | % | 65 | 65 | 70 | - | - | - |
| Noise | | dB(A) | 36 | 34 | 30 | 36 | 34 | 30 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 67 | | | | | |
| Dimensions | | mm | 1,062(W) x 1,140(D) x 365(H) | | | | | |

| Item(format) | | Unit | LZ-H0802BA0 | | | | | |
|-------------------------|---------|--------|------------------------------|--------|------------|---------------------|--------|------------|
| Power | | Ø,V,Hz | 1, 220, 60 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Extremely strong | Strong | Weak(mild) | Extremely strong | Strong | Weak(mild) |
| Electric current | | A | 3.1 | 3.0 | 2.5 | 3.1 | 3.0 | 2.5 |
| Electricity consumption | | W | 585 | 555 | 470 | 585 | 555 | 470 |
| Airflow | | m³/h | 800 | 800 | 660 | 800 | 800 | 660 |
| External static press | | Pa | 200 | 110 | 60 | 200 | 110 | 60 |
| Temperature efficiency | | % | 79 | 79 | 82 | - | - | - |
| Enthalpy efficiency | Heating | % | 70 | 70 | 75 | - | - | - |
| | Cooling | % | 65 | 65 | 70 | - | - | - |
| Noise | | dB(A) | 36 | 34 | 30 | 36 | 34 | 30 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 67 | | | | | |
| Dimensions | | mm | 1,062(W) x 1,140(D) x 365(H) | | | | | |

| Item(format) | | Unit | LZ-H1006BA0 | | | | | |
|-------------------------|---------|--------|------------------------------|--------|------------|---------------------|--------|------------|
| Power | | Ø,V,Hz | 1, 220-240, 50 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Extremely strong | Strong | Weak(mild) | Extremely strong | Strong | Weak(mild) |
| Electric current | | A | 3.0 | 2.9 | 2.6 | 2.8 | 2.7 | 2.4 |
| Electricity consumption | | W | 560 | 540 | 470 | 560 | 540 | 470 |
| Airflow | | m³/h | 1,000 | 1,000 | 800 | 1,000 | 1,000 | 800 |
| External static press | | Pa | 160 | 90 | 50 | 200 | 110 | 60 |
| Temperature efficiency | | % | 75 | 75 | 78 | - | - | - |
| Enthalpy efficiency | Heating | % | 66 | 66 | 71 | - | - | - |
| | Cooling | % | 61 | 61 | 66 | - | - | - |
| Noise | | dB(A) | 37 | 35 | 31 | 37 | 35 | 31 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 67 | | | | | |
| Dimensions | | mm | 1,062(W) x 1.140(D) x 365(H) | | | | | |

| Item(format) | | Unit | LZ-H1002BA0 | | | | | |
|-------------------------|---------|-------------------|------------------------------|--------|------------|---------------------|--------|------------|
| Power | | Ø,V,Hz | 1, 220, 60 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Extremely strong | Strong | Weak(mild) | Extremely strong | Strong | Weak(mild) |
| Electric current | | A | 3.5 | 3.4 | 2.9 | 3.5 | 3.4 | 2.9 |
| Electricity consumption | | W | 675 | 655 | 560 | 675 | 655 | 560 |
| Airflow | | m ³ /h | 1,000 | 1,000 | 800 | 1,000 | 1,000 | 800 |
| External static press | | Pa | 200 | 110 | 60 | 200 | 110 | 60 |
| Temperature efficiency | | % | 75 | 75 | 78 | - | - | - |
| Enthalpy efficiency | Heating | % | 66 | 66 | 71 | - | - | - |
| | Cooling | % | 61 | 61 | 66 | - | - | - |
| Noise | | dB(A) | 37 | 35 | 31 | 37 | 35 | 31 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 67 | | | | | |
| Dimensions | | mm | 1,062(W) x 1,140(D) x 365(H) | | | | | |

| Item(format) | | Unit | LZ-H1506BA0 | | | | | |
|-------------------------|---------|-------------------|------------------------------|--------|------------|---------------------|--------|------------|
| Power | | Ø,V,Hz | 1, 220-240, 50 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Extremely strong | Strong | Weak(mild) | Extremely strong | Strong | Weak(mild) |
| Electric current | | A | 5.6 | 5.4 | 5.2 | 5.6 | 5.4 | 5.2 |
| Electricity consumption | | W | 950 | 925 | 795 | 950 | 925 | 795 |
| Airflow | | m ³ /h | 1,500 | 1,500 | 1,200 | 1,500 | 1,500 | 1,200 |
| External static press | | Pa | 200 | 110 | 60 | 200 | 110 | 60 |
| Temperature efficiency | | % | 79 | 79 | 82 | - | - | - |
| Enthalpy efficiency | Heating | % | 70 | 70 | 75 | - | - | - |
| | Cooling | % | 65 | 65 | 70 | - | - | - |
| Noise | | dB(A) | 39 | 37 | 33 | 39 | 37 | 33 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 146 | | | | | |
| Dimensions | | mm | 1,313(W) x 1,140(D) x 737(H) | | | | | |

| Item(format) | | Unit | LZ-H1502BA0 | | | | | |
|-------------------------|---------|--------|------------------------------|-------|-------|---------------------|-------|-------|
| Power | | Ø,V,Hz | 1, 220, 60 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Super High | High | Low | Super High | High | Low |
| Electric current | | A | 6.2 | 6.0 | 5.0 | 6.2 | 6.0 | 5.0 |
| Electricity consumption | | W | 1,190 | 1,151 | 960 | 1,190 | 1,151 | 960 |
| Airflow | | m³/h | 1,500 | 1,500 | 1,280 | 1,500 | 1,500 | 1,280 |
| External static press | | Pa | 200 | 110 | 70 | 200 | 110 | 70 |
| Temperature efficiency | | % | 79 | 79 | 82 | - | - | - |
| Enthalpy efficiency | Heating | % | 70 | 70 | 75 | - | - | - |
| | Cooling | % | 65 | 65 | 70 | - | - | - |
| Noise | | dB(A) | 39 | 37 | 33 | 39 | 37 | 33 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 146 | | | | | |
| Dimensions | | mm | 1,313(W) x 1,140(D) x 737(H) | | | | | |

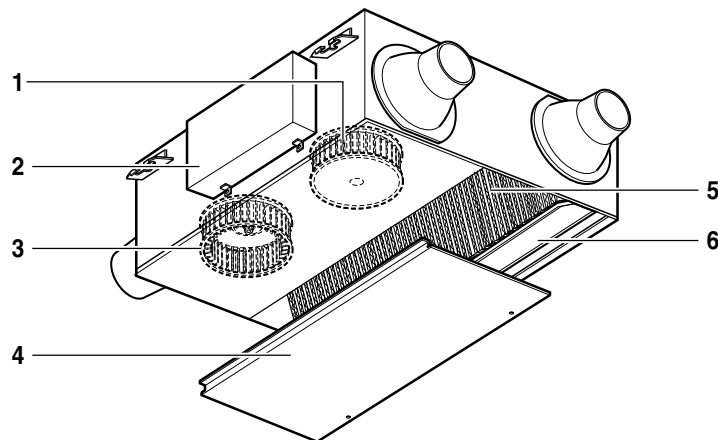
| Item(format) | | Unit | LZ-H2006BA0 | | | | | |
|-------------------------|---------|--------|------------------------------|-------|-------|---------------------|-------|-------|
| Power | | Ø,V,Hz | 1, 220-240, 50 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Super High | High | Low | Super High | High | Low |
| Electric current | | A | 6.0 | 5.8 | 5.2 | 5.6 | 5.4 | 4.8 |
| Electricity consumption | | W | 1,020 | 970 | 860 | 1,020 | 970 | 860 |
| Airflow | | m³/h | 2,000 | 2,000 | 1,600 | 2,000 | 2,000 | 1,600 |
| External static press | | Pa | 160 | 90 | 50 | 200 | 110 | 60 |
| Temperature efficiency | | % | 75 | 75 | 78 | - | - | - |
| Enthalpy efficiency | Heating | % | 66 | 66 | 71 | - | - | - |
| | Cooling | % | 61 | 61 | 66 | - | - | - |
| Noise | | dB(A) | 42 | 38 | 33 | 42 | 38 | 33 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 146 | | | | | |
| Dimensions | | mm | 1,313(W) x 1,140(D) x 737(H) | | | | | |

| Item(format) | | Unit | LZ-H2002BA0 | | | | | |
|-------------------------|---------|--------|------------------------------|-------|-------|---------------------|-------|-------|
| Power | | Ø,V,Hz | 1, 220, 60 | | | | | |
| Ventilation Mode | | - | Total heat ventilation | | | General ventilation | | |
| Wind velocity | | - | Super High | High | Low | Super High | High | Low |
| Electric current | | A | 7.0 | 6.8 | 5.8 | 7.0 | 6.8 | 5.8 |
| Electricity consumption | | W | 1,344 | 1,306 | 1,122 | 1,344 | 1,306 | 1,122 |
| Airflow | | m³/h | 2,000 | 2,000 | 1,600 | 2,000 | 2,000 | 1,600 |
| External static press | | Pa | 200 | 110 | 70 | 200 | 110 | 70 |
| Temperature efficiency | | % | 75 | 75 | 78 | - | - | - |
| Enthalpy efficiency | Heating | % | 66 | 66 | 71 | - | - | - |
| | Cooling | % | 61 | 61 | 66 | - | - | - |
| Noise | | dB(A) | 42 | 38 | 33 | 42 | 38 | 33 |
| Air Filter | | - | Non-woven fabric filter | | | | | |
| Weight | | kg | 146 | | | | | |
| Dimensions | | mm | 1,313(W) x 1,140(D) x 737(H) | | | | | |

Descriptions for operation and functions

Main Body

Models: LZ-H0106BA0 / LZ-H0156BA0



1. Blower for Air Supply

A blower for sucking outside air.

2. Control Box

3. Blower for Exhausting

A blower for draining polluted air outside.

4. Maintenance cover

5. Total Heat Exchanger

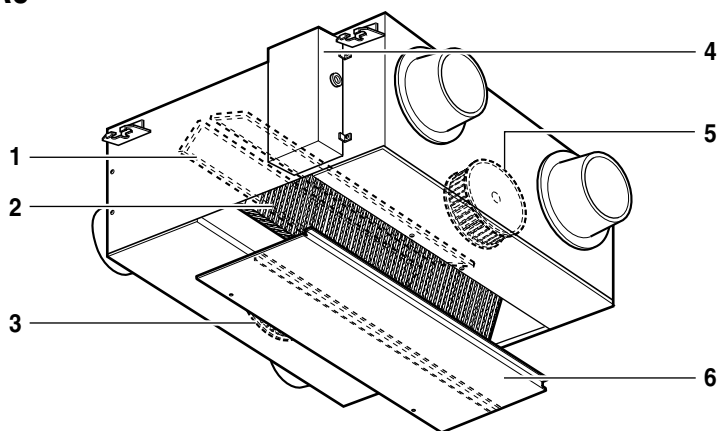
Exchanges temperature and moisture between air supply air and exhaust air.

6. Air Filter

Prevents clogging of the Total heat exchanger due to

※ The figure of Total heat Exchanger can be different by the Product Model.

Models: LZ-H0256BA0



1. Air Filter

Prevents clogging of the Total heat exchanger due to dust.

2. Total Heat Exchanger

Exchanges temperature and moisture between air supply air and exhaust air.

3. Blower for Exhausting

A blower for draining polluted air outside.

4. Control Box

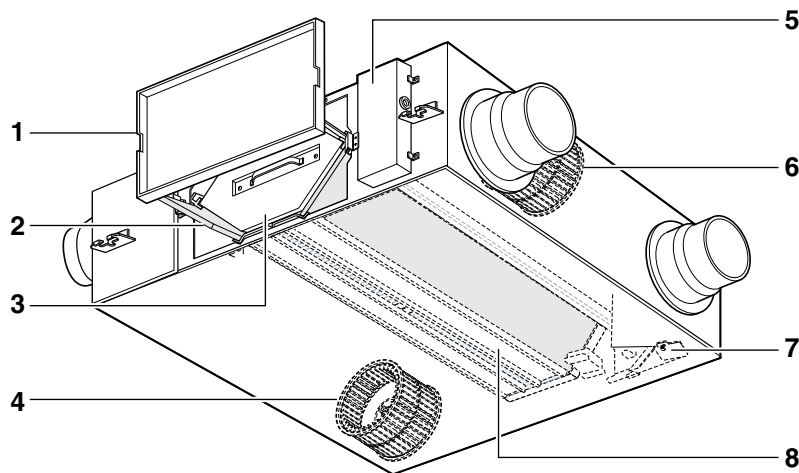
5. Blower for Air Supply

A blower for sucking outside air.

6. Maintenance cover

※ The figure of Total heat Exchanger can be different by the Product Model.

Models: LZ-H0506BA0 / LZ-H0502BA0



1. Maintenance Cover

2. Air Filter

It prevents dust from clogging in Total Heat Exchanger.

3. Total Heat Exchanger

It changes temperature and humidity between Supplying Air and exhausted air.

4. Blower for Exhausting Air

It is a fan for discharging the contaminated air to outdoor.

5. Control box

6. Blower for Exhausting Air

It is a fan for inhaling exterior air into an indoor space.

7. Damper plate(board)

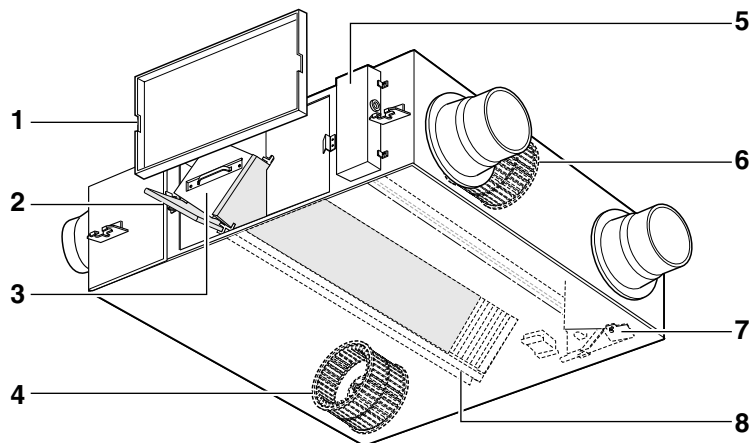
It converts exchanging mode between total heat ventilation and general ventilation.

8. Total Heat Exchanger holder

It is used in guiding for the installation of Total Heat Exchanger.

※ The form of Total Heat Exchanger varies according to models.

Models: LZ-H0806BA0 / LZ-H0802BA0 / LZ-H1002BA0 / LZ-H1006BA0



1. Maintenance Cover

2. Air Filter

It prevents dust from clogging in Total Heat Exchanger.

3. Total Heat Exchanger

It changes temperature and humidity between Supplying Air and exhausted air.

4. Blower for Exhausting Air

It is a fan for discharging the contaminated air to outdoor.

5. Control box

6. Blower for Supplying Air

It is a fan for inhaling exterior air into an indoor space.

7. Damper plate(board)

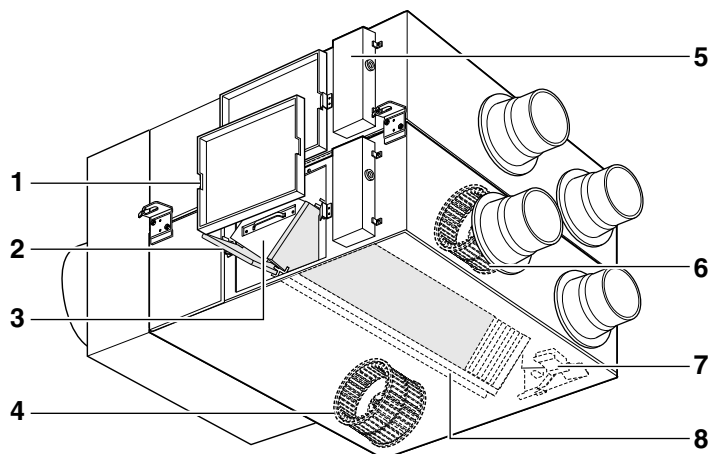
It converts exchanging mode between total heat ventilation and general ventilation.

8. Total Heat Exchanger holder

It is used in guiding for the installation of Total Heat Exchanger.

※ The form of Total Heat Exchanger varies according to models.

Models: LZ-H1506BA0 / LZ-H1502BA0 / LZ-H2006BA0 / LZ-H2002BA0



1. Maintenance Cover

2. Air Filter

It prevents dust from clogging in Total Heat Exchanger.

3. Total Heat Exchanger

It changes temperature and humidity between Supplying Air and exhausted air.

4. Blower for Exhausting Air

It is a fan for discharging the contaminated air to outdoor.

5. Control box

6. Blower for Supplying Air

It is a fan for inhaling exterior air into an indoor space.

7. Damper plate(board)

It converts exchanging mode between total heat ventilation and general ventilation.

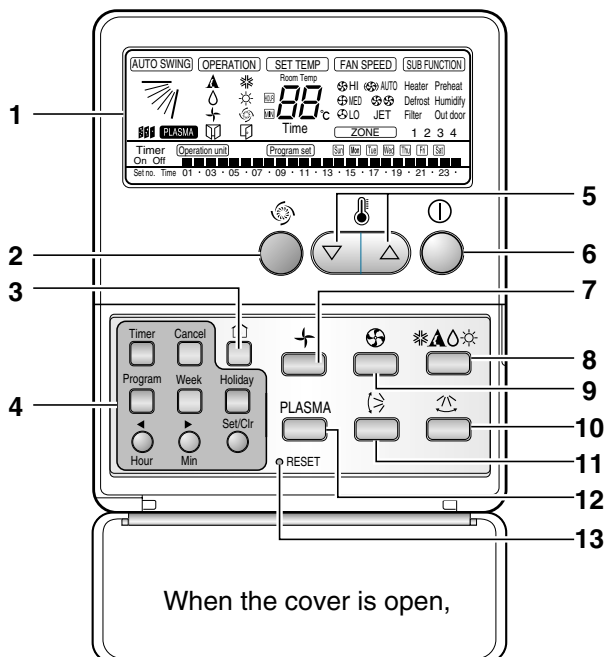
8. Total Heat Exchanger holder

It is used in guiding for the installation of Total Heat Exchanger.

※ The form of Total Heat Exchanger varies according to models.

LCD remote controller

(Ventilation System remote controller ZCON-BS2) remote controller is a separate purchase.



1. Display Screen

2. Heater Button

3. Button for time setting/ canceling, and weekend setting/date selecting/ weekend selecting

4. Play/ Stop Button

5. Delaying time Button

6. Quick ventilation Button

7. Ventilating Mode Button

8. Air flow selection Button

9. Humidification Button

10. Power-saving/filter cleaning Button

11. Plasma Button

12. Time Reset Button

※ Some functions may not work depending on models. (according to models).

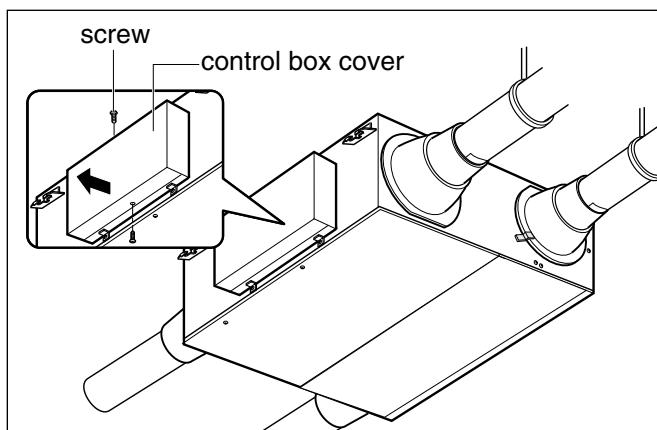
How to disassemble

In case of service, operate through inspecting tool(hole) installed on the surface of ceiling.
For main part disassembly, follow the instructions below.

Models: LZ-H0106BA0 / LZ-H0156BA0

Control Box

- Unscrew the control box cover, and disassemble.

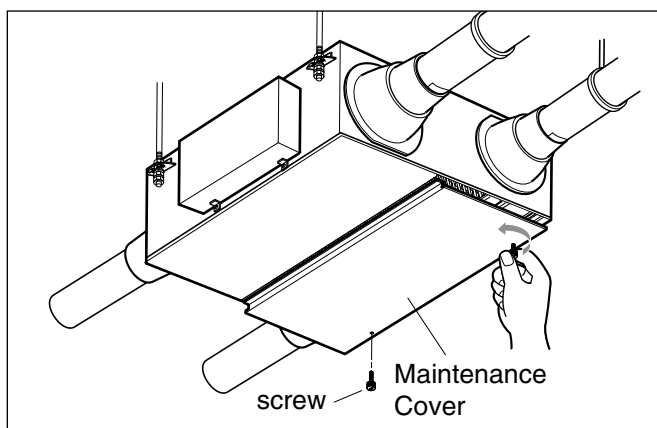


Total Heat Exchanger, Filter

- Take the Maintenance Cover off, and take them out. (in case that the Maintenance Cover is screwed up, unscrew it first.)

⚠ CAUTION

- Be careful of sharp area when taking the Air Filter out.
- Be careful not to drop the Total Heat Exchanger from the main body when detaching.

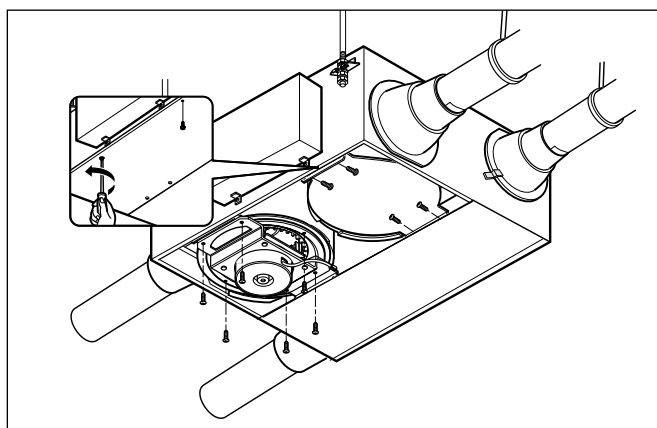


Fan

- Take the fan out after taking the Maintenance Cover off. (in case that the Maintenance Cover is screwed up, unscrew it first.)

⚠ CAUTION

- Be careful of sharp area when taking the fan out.

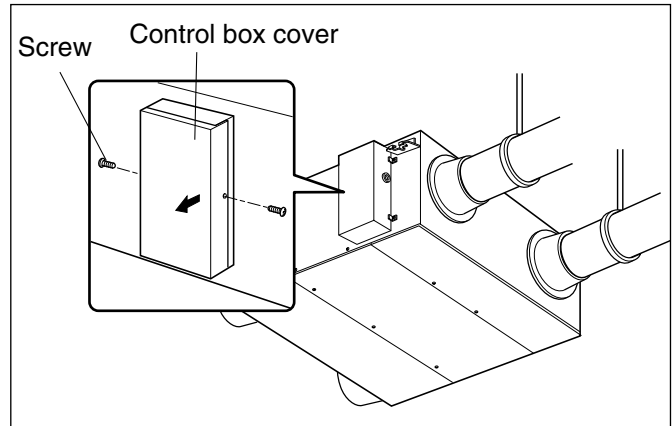


In case of service, operate through inspecting tool(hole) installed on the surface of ceiling.
For main part disassembly, follow the instructions below.

Models: LZ-H0256BA0

Control Box

- Unscrew the control box cover, and disassemble.

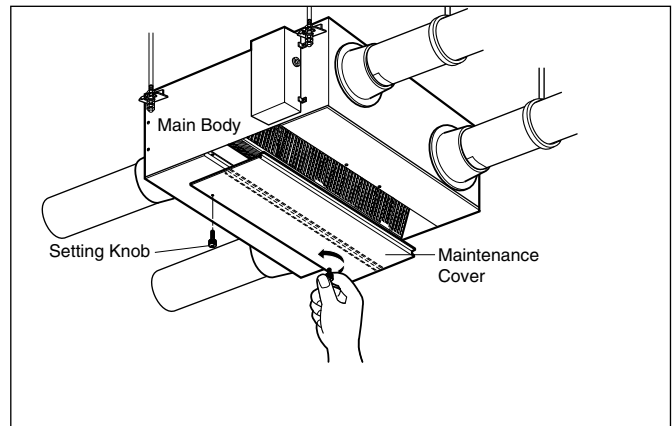


Total Heat Exchanger, Filter

- Take the Maintenance Cover off, and take them out. (in case that the Maintenance Cover is screwed up, unscrew it first.)

⚠ CAUTION

- Be careful of sharp area when taking the Air Filter out.
- Be careful not to drop the Total Heat Exchanger from the main body when detaching.

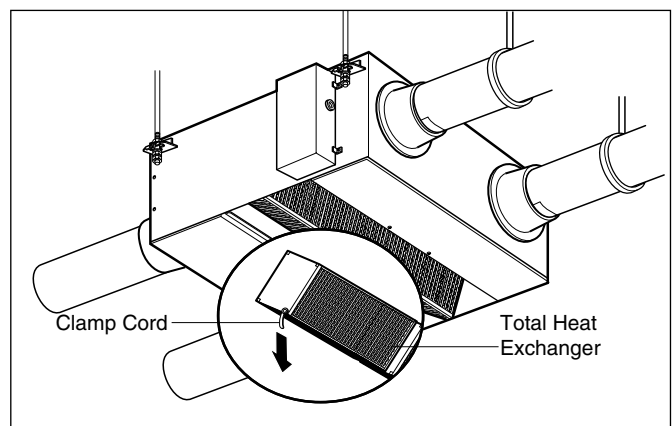


Fan

- Take the fan out after taking the Maintenance Cover off. (in case that the Maintenance Cover is screwed up, unscrew it first.)

⚠ CAUTION

- Be careful of sharp area when taking the fan out.

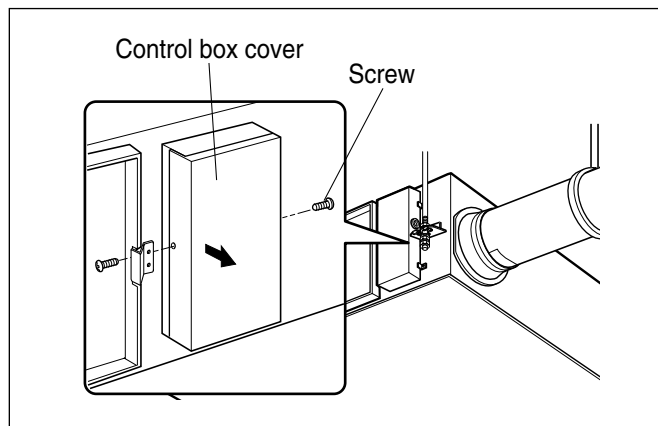


In case of service, operate through inspecting tool(hole) installed on the surface of ceiling.
For main part disassembly, follow the instructions below.

Models: LZ-H0506BA0 / LZ-H0502BA0

Control Box

- Unscrew the control box cover, and disassemble.

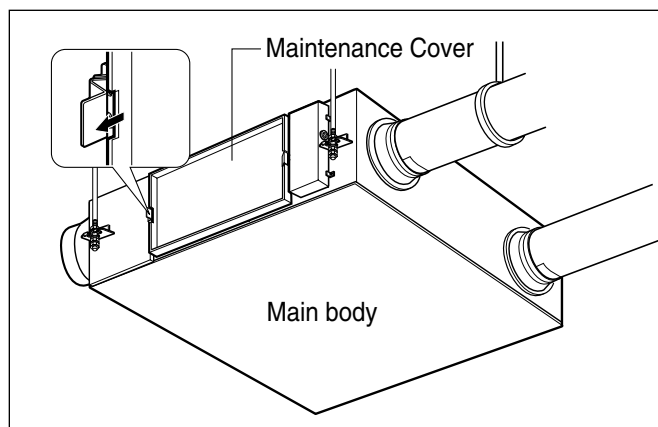


Total Heat Exchanger, Filter

- Take the Maintenance Cover off, and take them out. (in case that the Maintenance Cover is screwed up, unscrew it first.)

▲ CAUTION

- Be careful of sharp area when taking the Air Filter out.
- Be careful not to drop the Total Heat Exchanger from the main body when detaching.

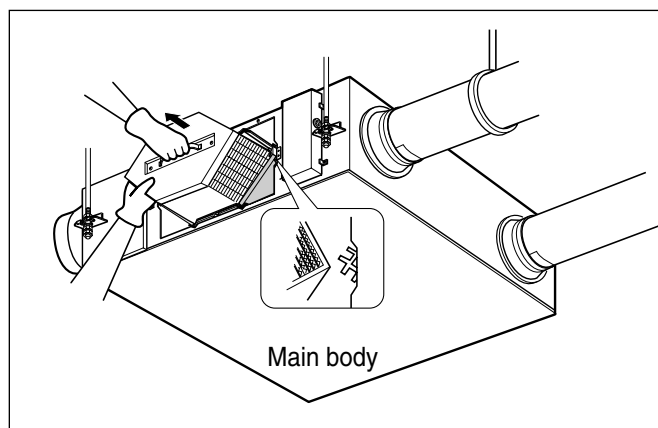


Fan

- Take the fan out after taking the Maintenance Cover off. (in case that the Maintenance Cover is screwed up, unscrew it first.)

▲ CAUTION

- Be careful of sharp area when taking the fan out.

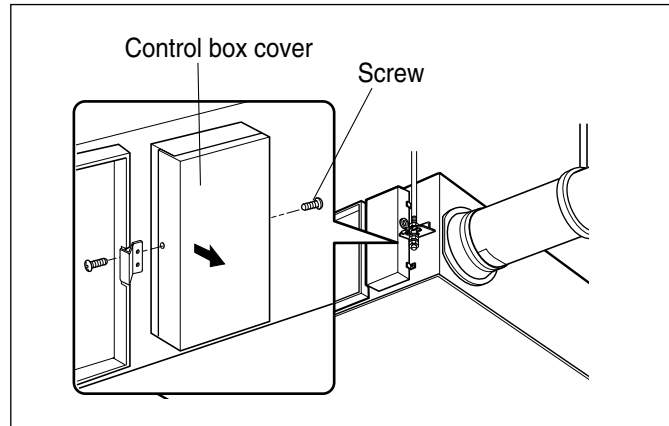


In case of service, operate through inspecting tool(hole) installed on the surface of ceiling.
For main part disassembly, follow the instructions below.

Models: LZ-H0806BA0 / LZ-H0802BA0 / LZ-H1006BA0 / LZ-H1002BA0

Control Box

- Unscrew the control box cover, and disassemble.

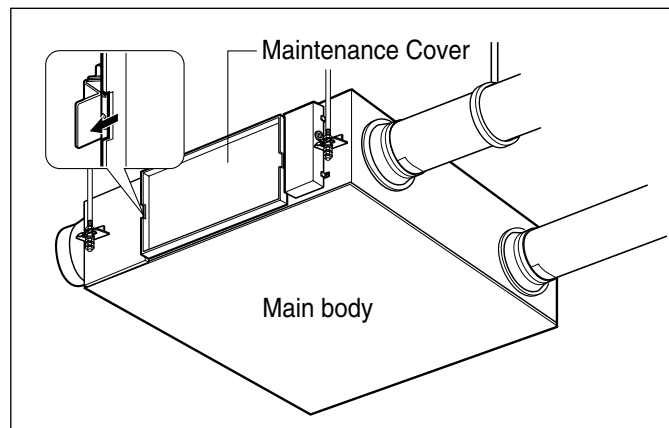


Total Heat Exchanger, Filter

- Take the Maintenance Cover off, and take them out. (in case that the Maintenance Cover is screwed up, unscrew it first.)

⚠ CAUTION

- Be careful of sharp area when taking the Air Filter out.
- Be careful not to drop the Total Heat Exchanger from the main body when detaching.

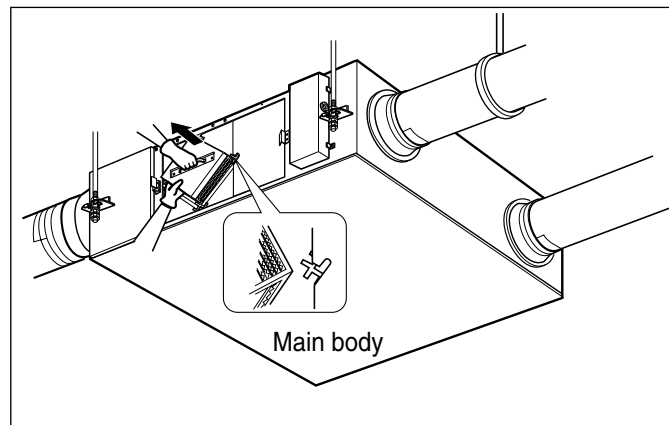


Fan

- Take the fan out after taking the Maintenance Cover off. (in case that the Maintenance Cover is screwed up, unscrew it first.)

⚠ CAUTION

- Be careful of sharp area when taking the fan out.

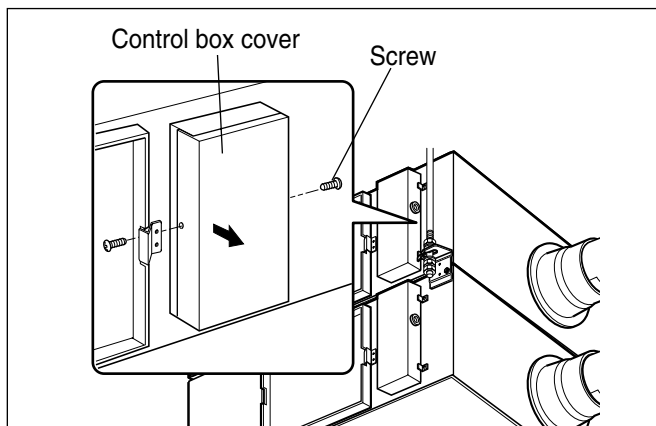


In case of service, operate through inspecting tool(hole) installed on the surface of ceiling.
For main part disassembly, follow the instructions below.

Models: LZ-H1506BA0 / LZ-H1502BA0 / LZ-H2006BA0 / LZ-H2002BA0

Control Box

- Unscrew the control box cover, and disassemble.

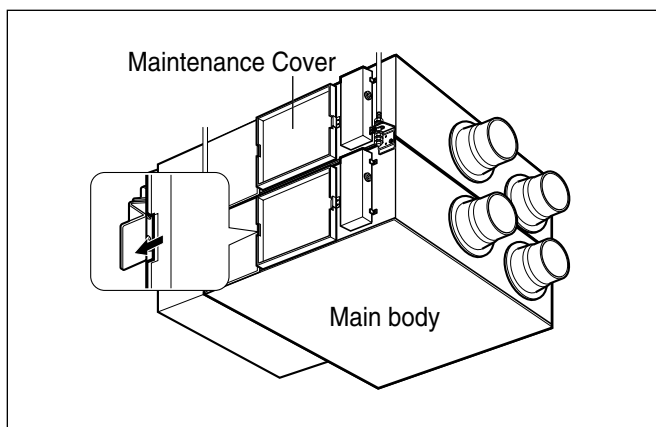


Total Heat Exchanger, Filter

- Take the Maintenance Cover off, and take them out. (in case that the Maintenance Cover is screwed up, unscrew it first.)

▲ CAUTION

- Be careful of sharp area when taking the Air Filter out.
- Be careful not to drop the Total Heat Exchanger from the main body when detaching.

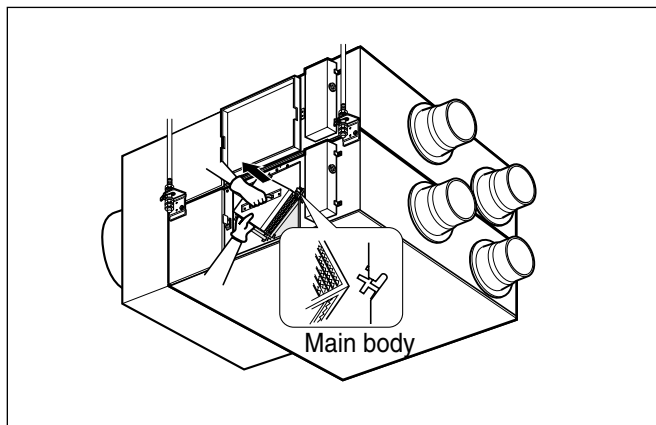


Fan

- Take the fan out after taking the Maintenance Cover off. (in case that the Maintenance Cover is screwed up, unscrew it first.)

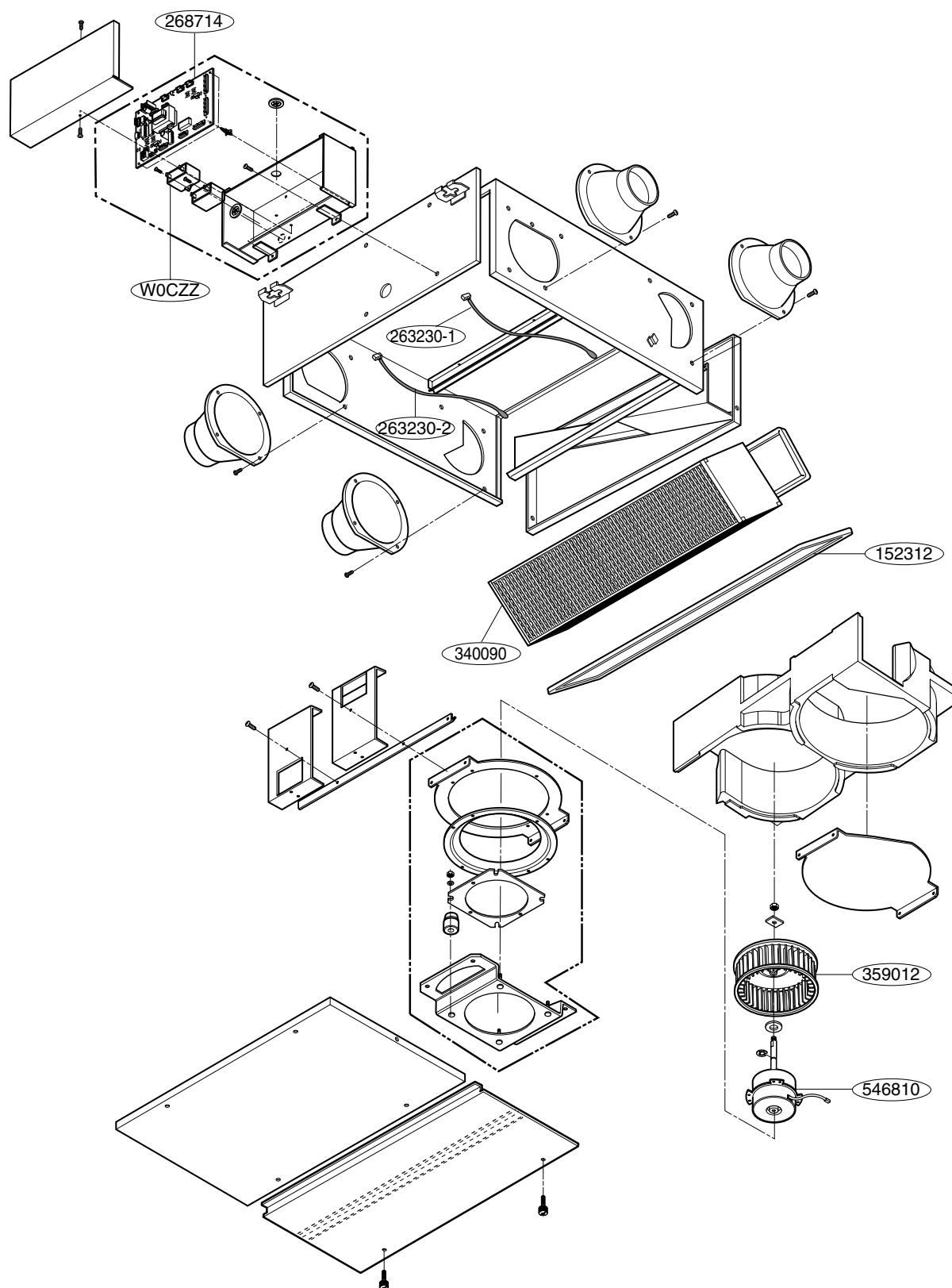
▲ CAUTION

- Be careful of sharp area when taking the fan out.



Disassemble Diagram(Deal Drawing) and SVC Parts List

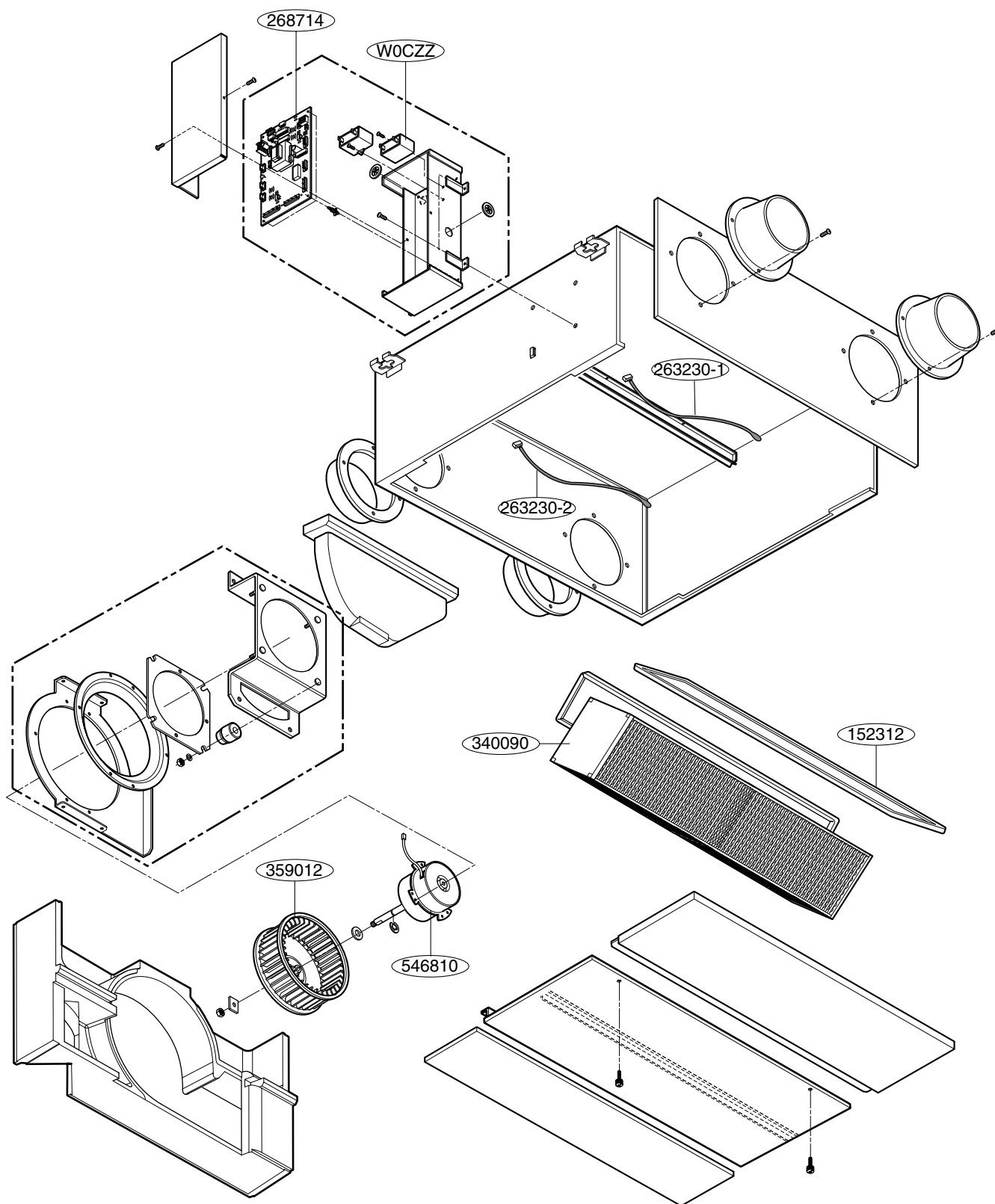
Models: LZ-H0106BA0 / LZ-H0156BA0



SVC Parts List

| Location No. | Item | Part No. | Quantity(Volume/Amount) | | SVC | Remarks |
|--------------|-----------------------------|-------------|-------------------------|-------------|-----|---------|
| | | | LZ-H0106BA0 | LZ-H0156BA0 | | |
| 359012 | FAN ASSEMBLY, BLOWER | 5834AC1012C | 2 | 2 | R | |
| 546810 | MOTOR ASSEMBLY,AC,OUTDOOR | 4681A20068J | 2 | - | R | |
| | | 4681A20068H | - | 2 | R | |
| 268714 | PCB ASSEMBLY,MAIN | 6871A10118E | 1 | 1 | R | |
| W0CZZ | CAPACITOR,FILM,BOX | 3H00660P | 2 | 2 | R | |
| 263230-1 | THERMISTOR,NTC | 6323A30004L | 1 | 1 | R | Indoor |
| 263230-2 | THERMISTOR,NTC | 6323A30004M | 1 | 1 | R | Outdoor |
| 152312 | FILTER ASSEMBLY,AIR CLEANER | 5231A30003E | 2 | 2 | R | |
| 340090 | EXCHANGER ASSEMBLY | 4009A20002D | 1 | 1 | R | |

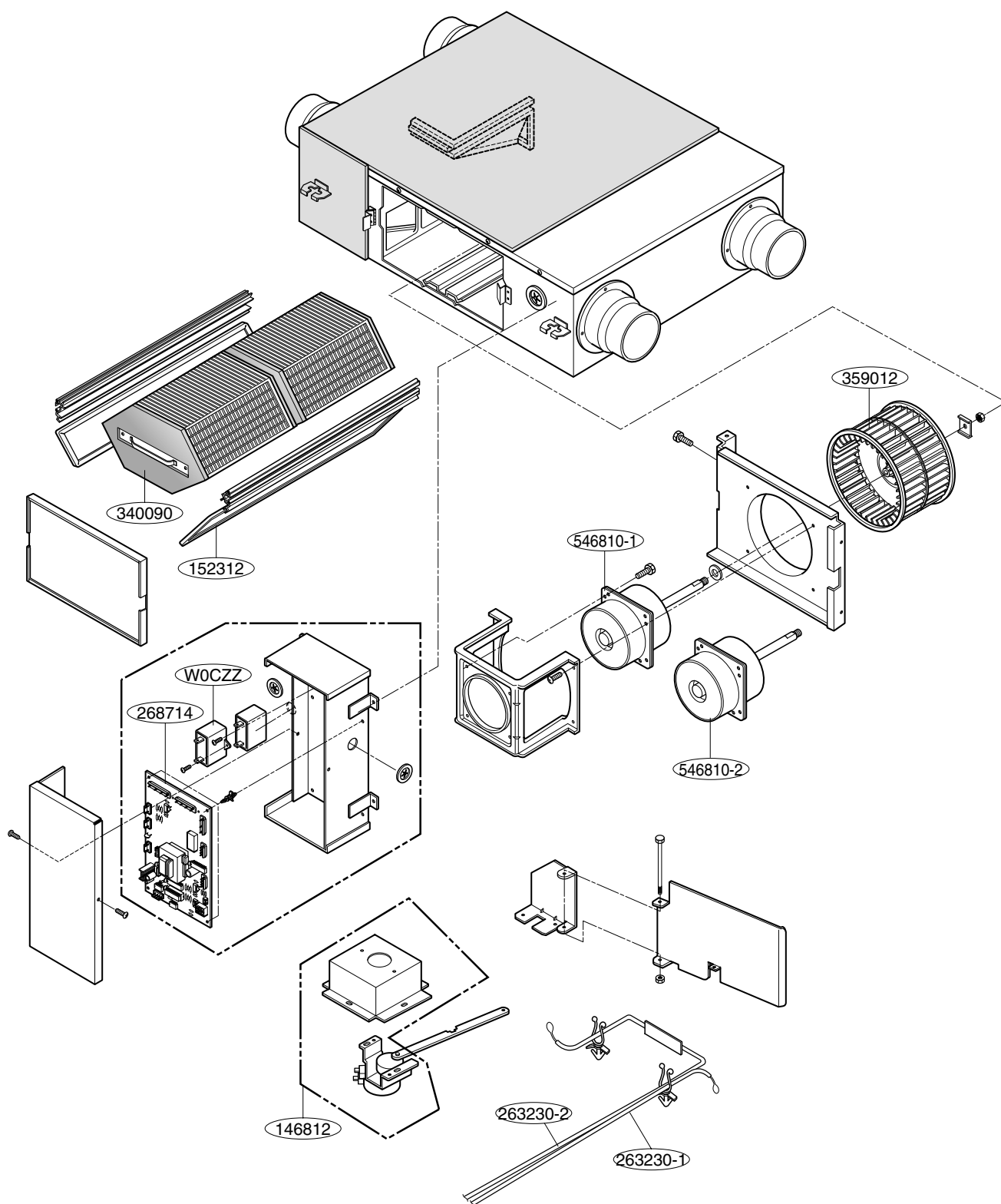
Models: LZ-H0256BA0



SVC Parts List

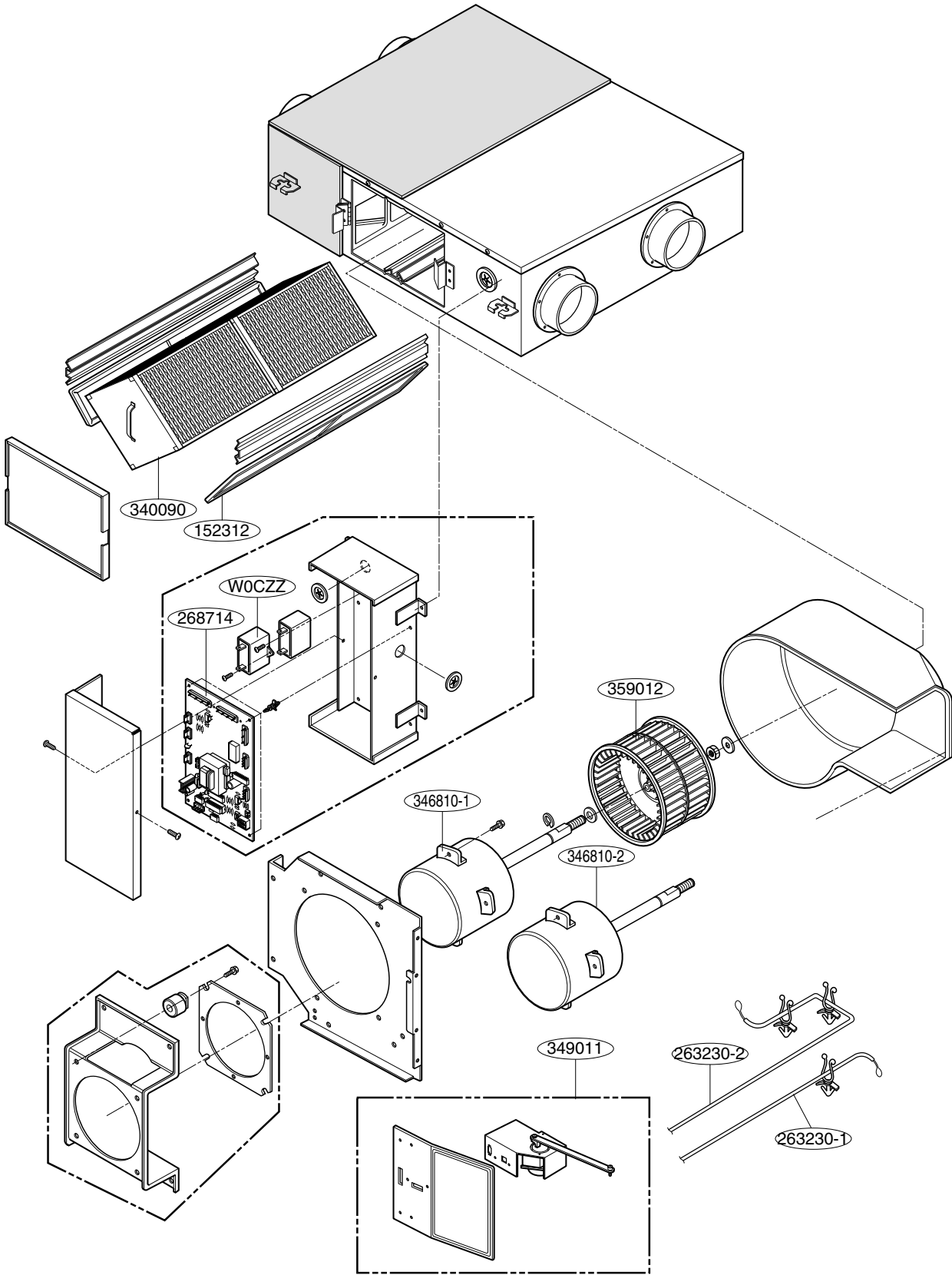
| Location No. | Item | Part No. | Quantity(Volume/Amount) | SVC | Remarks |
|--------------|-----------------------------|-------------|-------------------------|-----|---------|
| | | | LZ-H0256BA0 | | |
| 359012 | FAN ASSEMBLY, BLOWER | 5834AC1012C | 2 | R | |
| 546810 | MOTOR ASSEMBLY,AC,OUTDOOR | 4681A20068M | 2 | R | |
| 268714 | PCB ASSEMBLY,MAIN | 6871A10118E | 1 | R | |
| W0CZZ | CAPACITOR,FILM,BOX | 3H00660P | 2 | R | |
| 263230-1 | THERMISTOR,NTC | 6323A30004L | 1 | R | Indoor |
| 263230-2 | THERMISTOR,NTC | 6323A30004M | 1 | R | Outdoor |
| 152312 | FILTER ASSEMBLY,AIR CLEANER | 5231A30003C | 2 | R | |
| 340090 | EXCHANGER ASSEMBLY | 4009A20002B | 1 | R | |

Models: LZ-H0506BA0 / LZ-H0502BA0



SVC Parts List

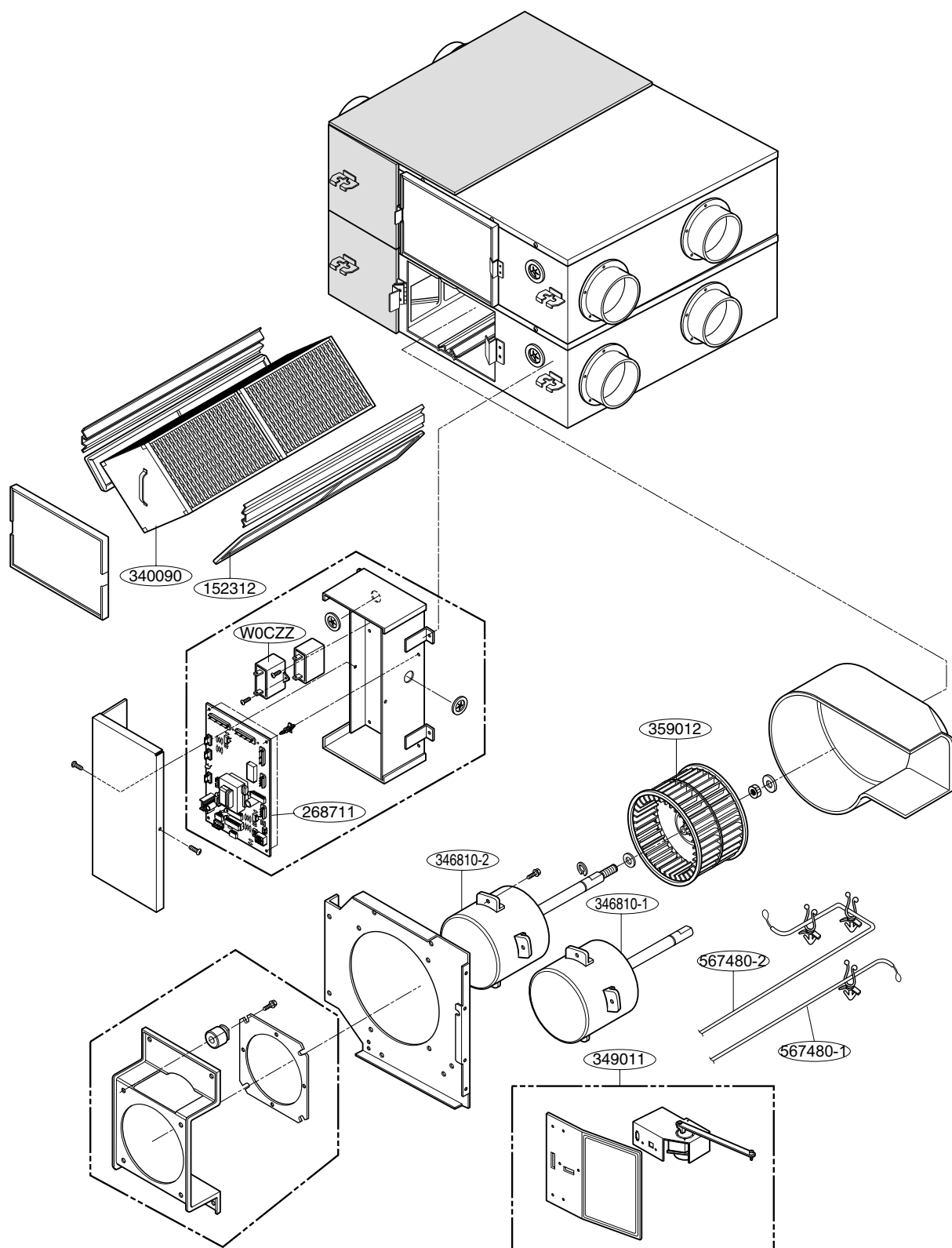
| Location No. | Item | Part No. | Quantity(Volume/Amount) | SVC | Remarks |
|--------------|-------------------------------|-------------|---------------------------|-----|---------|
| | | | LZ-H0506BA0 / LZ-H0502BA0 | | |
| 359012 | FAN ASSEMBLY, BLOWER | 5901A20029A | 2 | R | |
| 546810-1 | AC,MOTOR ASSEMBLY | 4681A20028M | 1 | R | Indoor |
| 546810-2 | AC,MOTOR ASSEMBLY | 4681A20028N | 1 | R | Outdoor |
| 263230-1 | THERMISTOR,NTC | 6323A30004G | 1 | R | Indoor |
| 263230-2 | THERMISTOR,NTC | 6323A30004H | 1 | R | Outdoor |
| 268714 | PCB ASSEMBLY,MAIN | 6871A10118A | 1 | R | |
| W0CZZ | CAPACITOR,FILM,BOX | 3H00660Z | 2 | R | |
| 340090 | EXCHANGER ASSEMBLY | 4009A20001A | 2 | R | |
| 152312 | FILTER ASSEMBLY,AIR CLEANER | 5231A30003A | 2 | R | |
| 146812 | MOTOR ASSEMBLY,AC,SYNCHRONOUS | 4681A20120A | 1 | R | |



SVC Parts List

| Location No. | Item | Part No. | Quantity(Volume/Amount) | | | | SVC | Remarks |
|--------------|-----------------------------|-------------|-------------------------|-------------|-------------|-------------|-----|---------|
| | | | LZ-H0806BA0 | LZ-H0802BA0 | LZ-H1006BA0 | LZ-H1002BA0 | | |
| 359012 | FAN ASSEMBLY, BLOWER | 5901A30005A | 2 | 2 | 2 | 2 | R | |
| 346810-1 | MOTOR ASSEMBLY,AC,INDOOR | 4681A20139A | 1 | - | 1 | - | R | Indoor |
| 346810-2 | MOTOR ASSEMBLY,AC,INDOOR | 4681A20139B | 1 | - | 1 | - | R | Outdoor |
| 346810-1 | MOTOR ASSEMBLY,AC,INDOOR | 4681A20139C | - | 2 | - | 2 | R | |
| 263230-1 | THERMISTOR,NTC | 6323A30004J | 1 | 1 | 1 | 1 | R | Indoor |
| 263230-2 | THERMISTOR,NTC | 6323A30004K | 1 | 1 | 1 | 1 | R | Outdoor |
| 349011 | DAMPER ASSEMBLY | 4901A20002A | 1 | 1 | 1 | 1 | R | |
| 268714 | PCB ASSEMBLY,MAIN | 6871A10118C | 1 | 1 | - | - | R | |
| | | 6871A10118B | - | - | 1 | 1 | R | |
| W0CZZ | CAPACITOR,FILM,BOX | 3H00660W | 2 | 2 | 2 | 2 | R | |
| 152312 | FILTER ASSEMBLY,AIR CLEANER | 5231A30003B | 2 | 2 | 2 | 2 | R | |
| 340090 | EXCHANGER ASSEMBLY | 4009A20002A | 2 | 2 | 2 | 2 | R | |

Models: LZ-H1506BA0 / LZ-H1502BA0 / LZ-H2006BA0 / LZ-H2002BA0



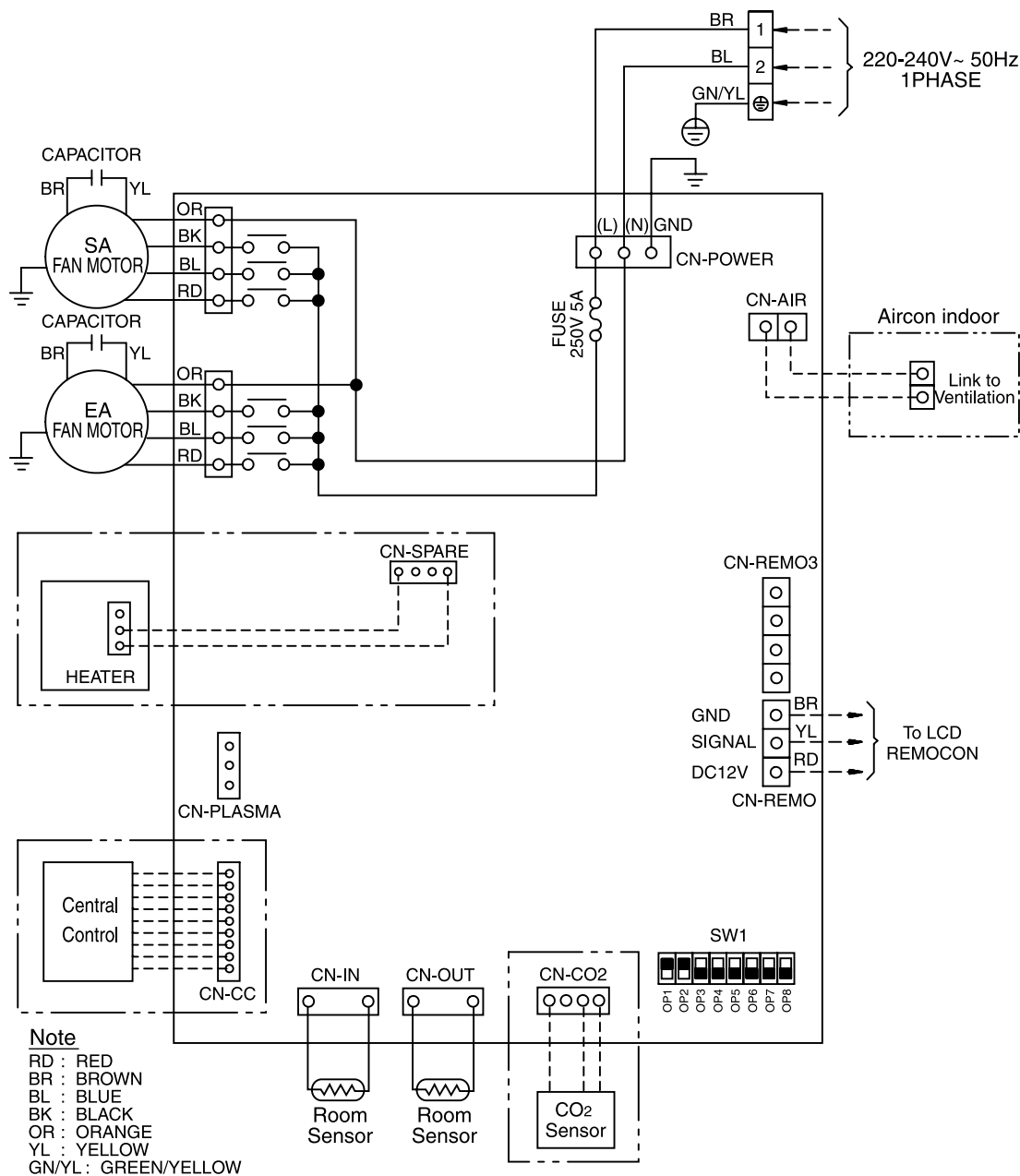
SVC Parts List

| Location No. | Item | Part No. | Quantity(Volume/Amount) | | | | SVC | Remarks |
|--------------|-----------------------------|-------------|-------------------------|-------------|-------------|-------------|-----|---------|
| | | | LZ-H1506BA0 | LZ-H1502BA0 | LZ-H2006BA0 | LZ-H2002BA0 | | |
| 359012 | FAN ASSEMBLY, BLOWER | 5901A30005A | 4 | 4 | 4 | 4 | R | |
| 346810-1 | MOTOR ASSEMBLY,AC,INDOOR | 4681A20139A | 2 | - | 2 | - | R | Indoor |
| 346810-2 | MOTOR ASSEMBLY,AC,INDOOR | 4681A20139B | 2 | - | 2 | - | R | Outdoor |
| 346810-1 | MOTOR ASSEMBLY,AC,INDOOR | 4681A20139C | - | 4 | - | 4 | R | |
| 263230-1 | THERMISTOR,NTC | 6323A30004J | 2 | 2 | 2 | 2 | R | Indoor |
| 263230-2 | THERMISTOR,NTC | 6323A30004K | 2 | 2 | 2 | 2 | R | Outdoor |
| 349011 | DAMPER ASSEMBLY | 4901A20002A | 2 | 2 | 2 | 2 | R | |
| 268714 | PCB ASSEMBLY,MAIN | 6871A10118C | 2 | 2 | - | - | R | |
| | | 6871A10118B | - | - | 2 | 4 | R | |
| W0CZZ | CAPACITOR,FILM,BOX | 3H00660W | 4 | 4 | 4 | 4 | R | |
| 152312 | FILTER ASSEMBLY,AIR CLEANER | 5231A30003B | 4 | 4 | 4 | 4 | R | |
| 340090 | EXCHANGER ASSEMBLY | 4009A20002A | 4 | 4 | 4 | 4 | R | |

Wiring Diagram

Models: LZ-H0106BA0 / LZ-H0156BA0 / LZ-H0256BA0

- This product has different wiring method by system configuration. Perform the wiring work(electric working) on several necessary parts(areas).



WARNING

- There is risk of electric shock due to failure or electric leakage.
- Always ground the product.
- You can install the product by referring to owner's manual.

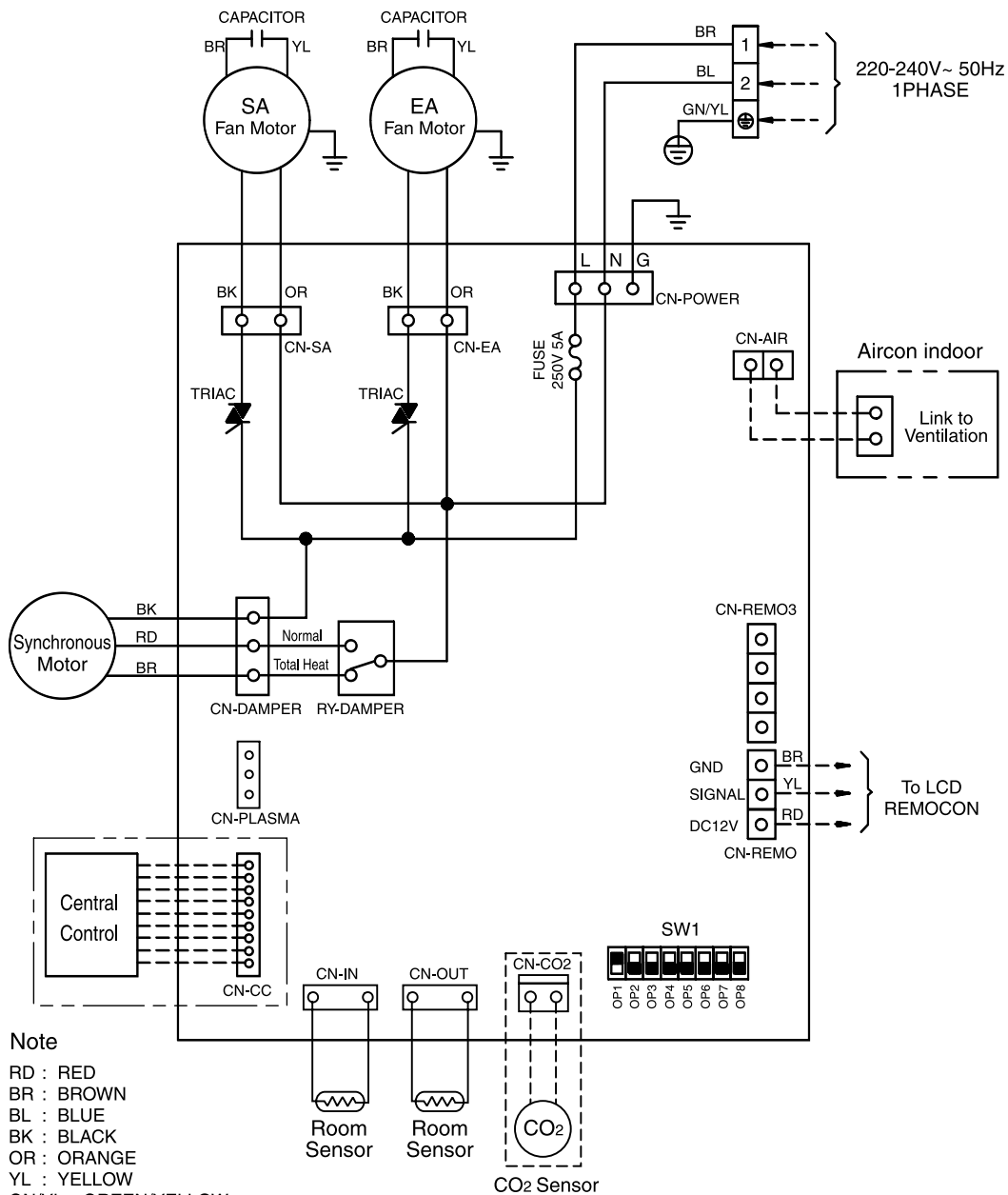
INFORMATION

- * You need to buy a dedicated circuit separately.
- * ----- Field Wiring

P/No : 3854A20450D

Models: LZ-H0506BA0 / LZ-H0502BA0

- This product has different wiring method by system configuration. Perform the wiring work(electric working) on several necessary parts(areas).



WARNING

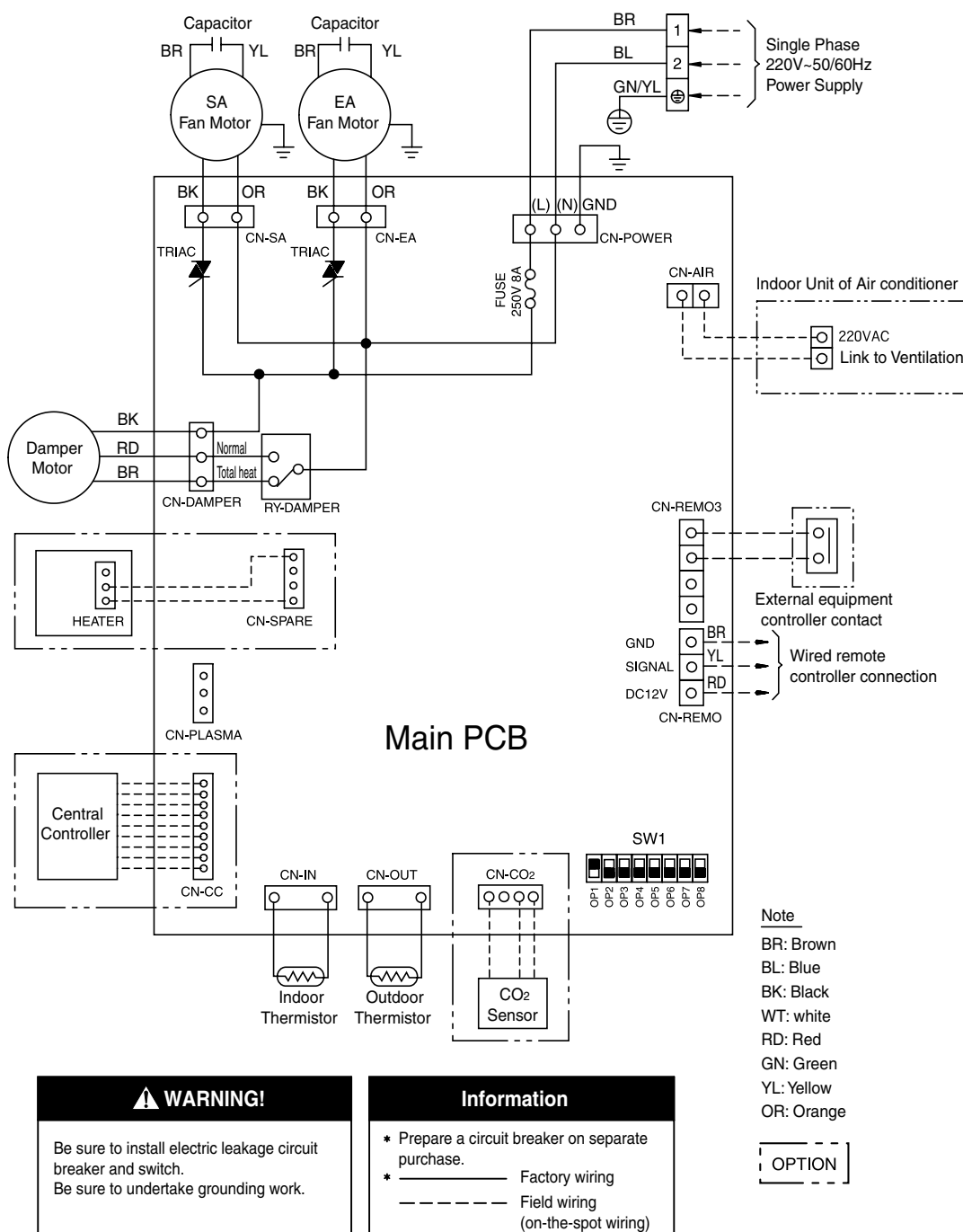
- There is risk of electric shock due to failure or electric leakage.
- Always ground the product.
- You can install the product by referring to owner's manual.

INFORMATION

- * You need to buy a dedicated circuit separately.
- * ----- Field Wiring

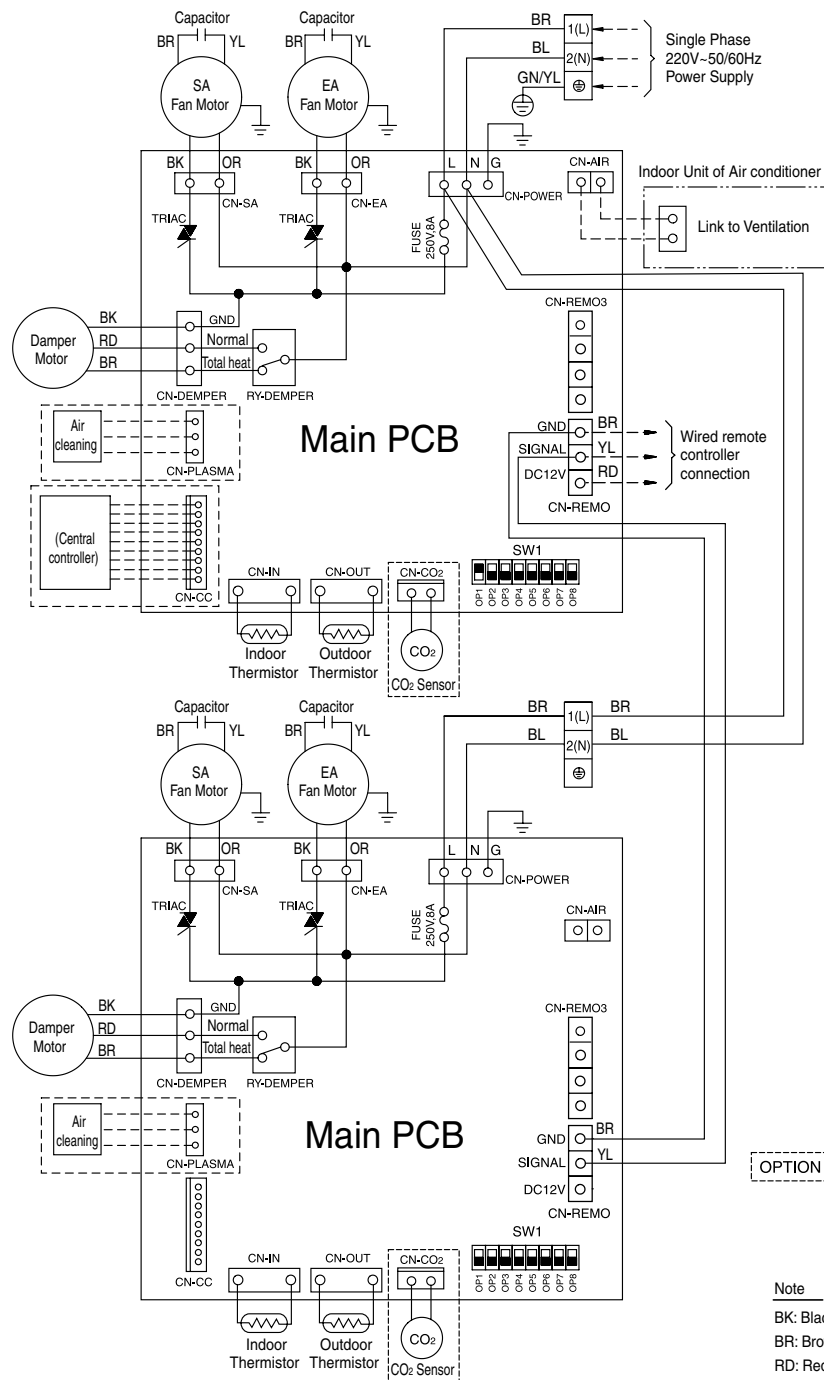
Models: LZ-H0806BA0 / LZ-H0802BA0 / LZ-H1006BA0 / LZ-H1002BA0

- This product has different wiring method by system configuration. Perform the wiring work(electric working) on several necessary parts(areas).



Models: LZ-H1506BA0 / LZ-H1502BA0 / LZ-H2006BA0 / LZ-H2002BA0

- This product has different wiring method by system configuration. Perform the wiring work(electric working) on several necessary parts(areas).



Note
 BK: Black
 BR: Brown
 RD: Red
 YL: Yellow
 BL: Blue
 OR: Orange
 GN/YL: Green/Yellow

WARNING!

Be sure to install electric leakage circuit breaker and switch.
 Be sure to undertake grounding work.

Information

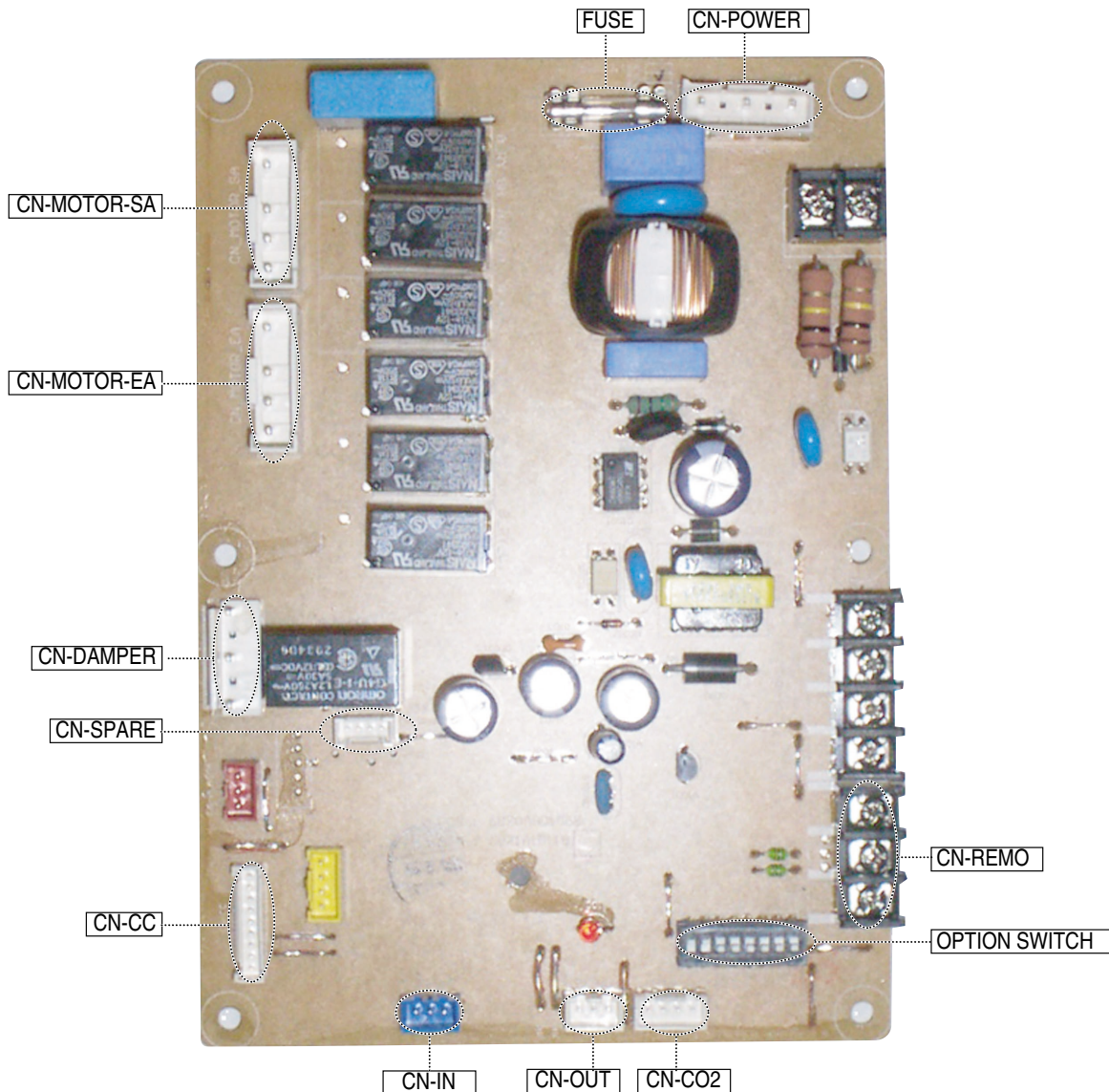
- * Prepare a circuit breaker on separate purchase.
- * ——— Factory wiring
- Field wiring (on-the-spot wiring)

Control Part Detailed Drawing

Models: LZ-H0106BA0 / LZ-H0156BA0 / LZ-H0256BA0

This product has different wiring method by system configuration. Perform the wiring work(electric working) on several necessary parts(areas).

Identification of inside control box



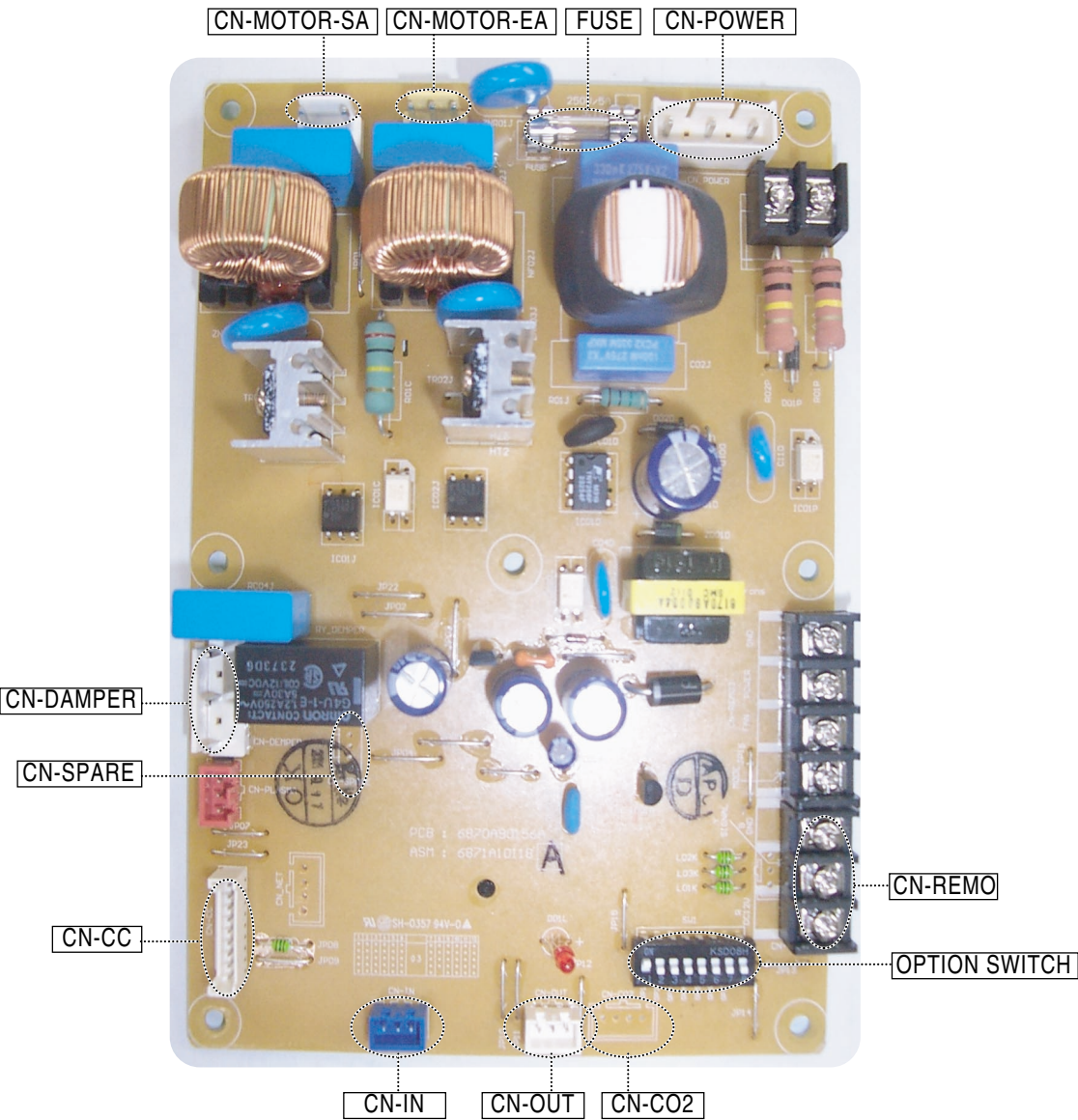
Descriptions of symbols(marking)

| Marking | Name | Marking | Name |
|-------------|------------------------------------|---------------|----------------------------------|
| CN-POWER | Power Code Connector | CN-IN | Thermistor(indoor) connector |
| FUSE | Fuse | CN-OUT | Thermistor(outdoor) connector |
| CN-MOTOR-SA | Fan motor connector(Supplying Air | CN-CO2 | CO2 Sensor connector |
| CN-MOTOR-EA | Fan motor connector(Exhausted air) | OPTION SWITCH | Option Switch |
| CN-DAMPER | Synchronous Motor connector | CN-REMO | Remote controller terminal block |
| CN-SPARE | Heater connector | | |
| CN-CC | Central controller connector | | |

Models: LZ-H0506BA0 / LZ-H0502BA0 / LZ-H0806BA0 / LZ-H0802BA0 / LZ-H1006BA0 / LZ-H1002BA0 / LZ-H1506BA0 / LZ-H1502BA0 / LZ-H2006BA0 / LZ-H2002BA0

This product has different wiring method by system configuration. Perform the wiring work(electric working) on several necessary parts(areas).

Identification of inside control box

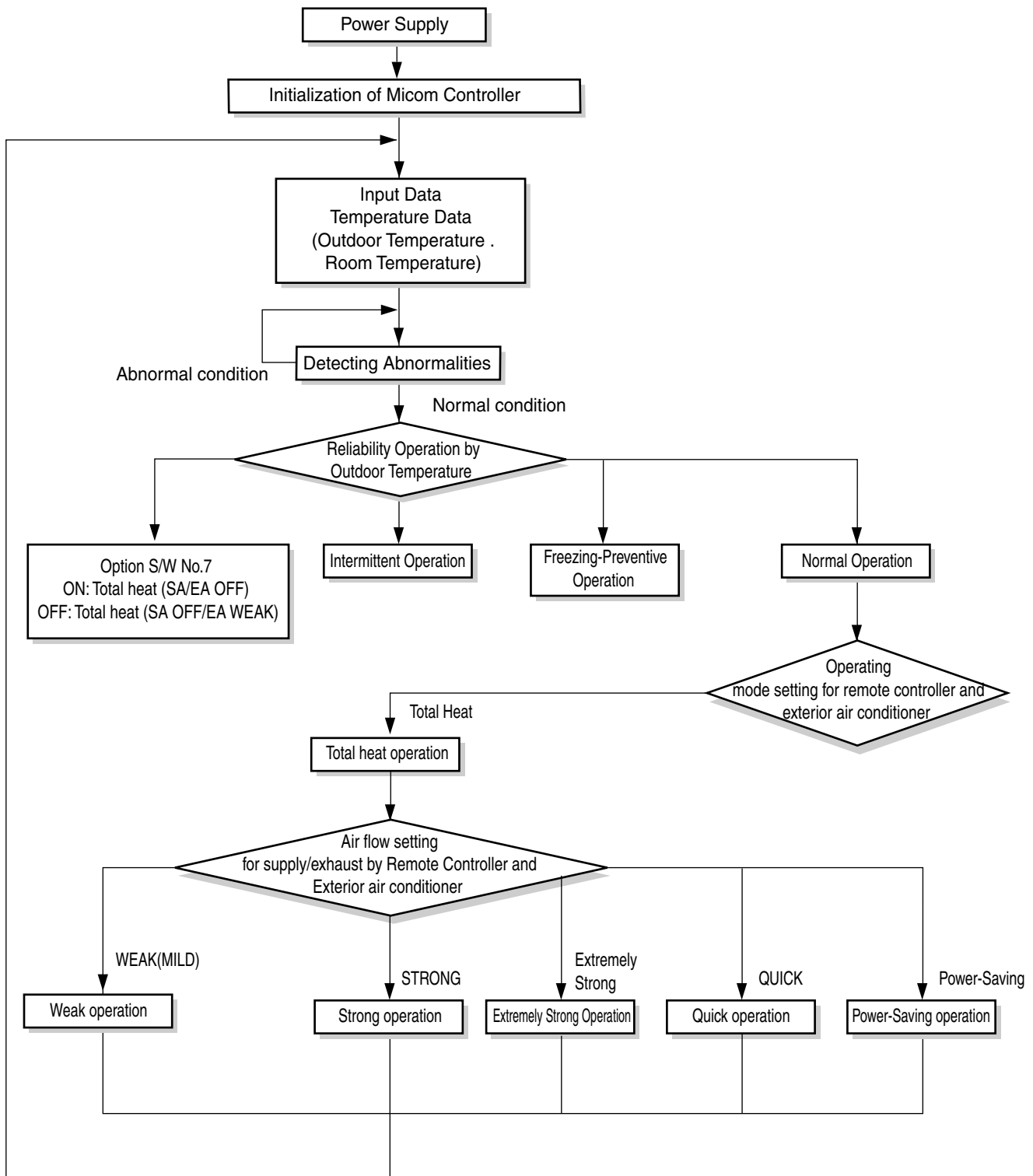


Descriptions of symbols(marking)

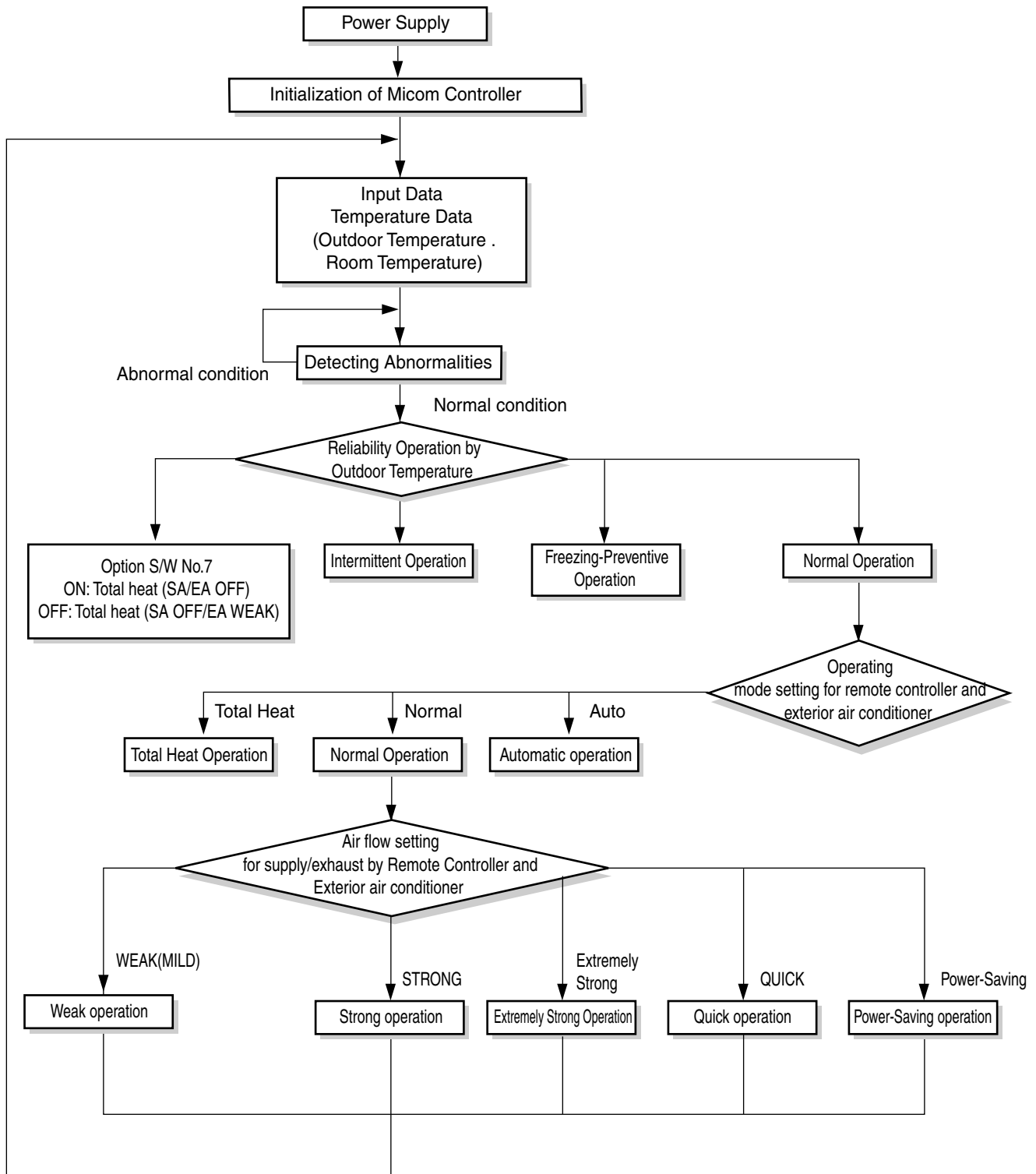
| Marking | Name | Marking | Name |
|-------------|------------------------------------|---------------|----------------------------------|
| CN-POWER | Power Code Connector | CN-IN | Thermistor(indoor) connector |
| FUSE | Fuse | CN-OUT | Thermistor(outdoor) connector |
| CN-MOTOR-EA | Fan motor connector(Exhausted air) | CN-CO2 | CO2 Sensor connector |
| CN-MOTOR-SA | Fan motor connector(Supplying Air) | OPTION SWITCH | Option Switch |
| CN-DAMPER | Synchronous Motor connector | CN-REMO | Remote controller terminal block |
| CN-SPARE | Heater connector | | |
| CN-CC | Central controller connector | | |

Descriptions for Control Circuit

Models: LZ-H0106BA0 / LZ-H0156BA0 / LZ-H0256BA0



Models: LZ-H0506BA0 / LZ-H0502BA0 / LZ-H0806BA0 / LZ-H0802BA0 / LZ-H1006BA0 / LZ-H1002BA0 / LZ-H1506BA0 / LZ-H1502BA0 / LZ-H2006BA0 / LZ-H2002BA0



Troubleshooting

Instructions for diagnostics

- When separating main PCB, hold the tip of main PCB to prevent any force into over-all parts.
- When separating main PCB, be careful of the edge of metal plate.
- When pulling or putting a connector on main PCB, do not pull the lead wire, instead pull the entire housing.

For the ventilation system failure

| No. | Failure | Possible Causes | Necessary actions |
|-----|---|---|--|
| 1 | Failure in Operation | • Check the power line | • Re-construct the power |
| | | • Check the wiring of PCB remote controller switch | • Wire in accordance with power wiring diagram |
| | | • Check if FUSE is disconnected | • Replace FUSE |
| 2 | Failure in Total Heat Exchange | • * Isn't it normal ventilation mode? | • Convert the function into Total heat exchange mode |
| | | • * Is damper working normally? | • Check whether damper is operating while repeating total heat exchange and normal ventilating alternately |
| | | • Check the PCB remote controller switch wiring | • Wire in accordance with power wiring diagram |
| 3 | Failure in Operating Remote controller switch | • Check the PCB remote controller switch wiring | • Wire in accordance with power wiring diagram |
| 4 | Failure in Supply/Exhaust Fan Operation | • Check the capacitor for fan motor | • Re-wire for capacitor separation, and replacing for inferior capacitor |
| | | • Check the fan motor | • Re-wire for motor Connector separation, and replacing for inferior motor |
| | | • *Defrosting operation | • Check the Thermistor, Check Outdoor Temperature |
| 5 | Failure in Defrosting Operation | • Check the Thermistor | • Replace the Thermistor |
| 6 | Failure in Air flow Control | • Check if it is AC220V for power of PCB fan motor terminal | • If it is AC220V, the air flow control relay is in bad condition (replace PCB) |
| 7 | * Failure in Damper Operation | • Check the connection of connector to PCB | • Re-wire for damper connector separation, and replacing for inferior connector |
| | | • Isn't it in defrosting operation? | Check the Outdoor temperature |

* The part marked with * is not applied to LZ-H102SB/152SB/252SB.

For the remote controller failure

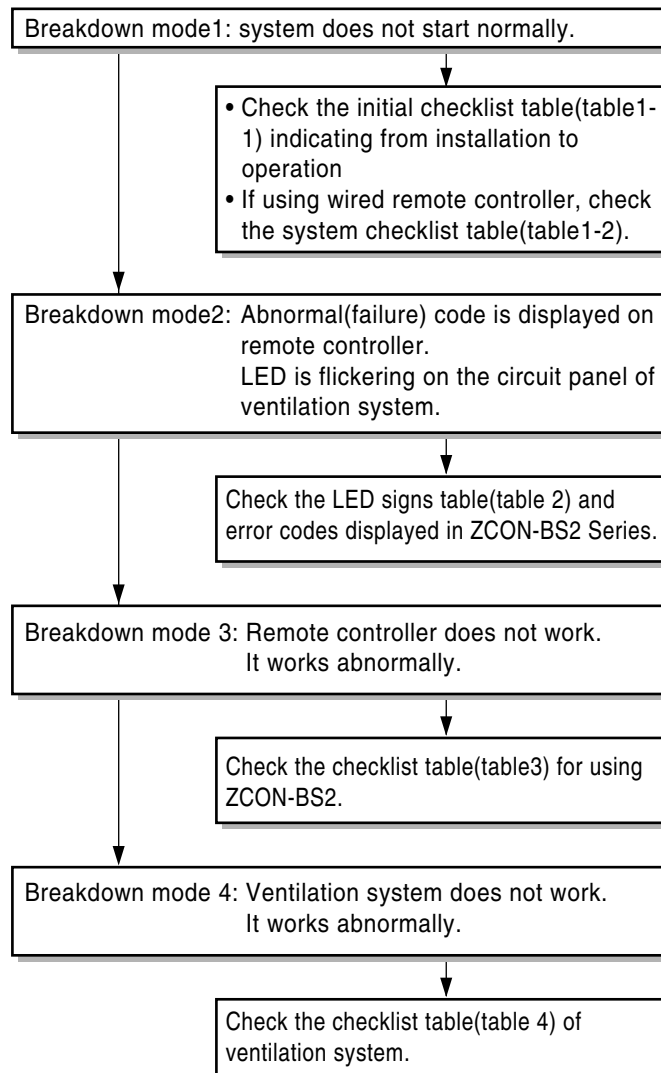
| No. | Failure | Possible Causes | Necessary actions |
|-----|--|--|---|
| 1 | No Display on Remote Controller | • No power supply to ventilation system | • Check power of ventilation system |
| | | • Longer wiring length of transmission wire than standards | • Check the length of transmission wire |
| 2 | Impossible to Operate Remote Controller | • Longer wiring length of transmission wire than standards | • Check the length of transmission wire |
| 3 | No Interlocking with External Equipment | • Delay mode set in remote controller | • Check the delay mode setting of remote controller |
| | | • Single operation mode set in remote controller | • Check the interlocking mode setting of remote controller |
| | | • Longer wiring length of signal wire to external equipment than standards | • Check the wiring length of signal wire |
| | | • No input of external equipment signals | • Check the external equipment |
| 4 | Failure in single operation by remote controller for ventilation system, instead interlocking to other air conditioner | • Interlocking to air conditioner set | • Release the interlocking setting |
| 5 | Communication error in ventilation system | • Connecting failure of transmission line | • Check the connection of transmission line |
| | | • Longer wiring length of transmission line than prescribed | • Check the wiring length of transmission line |
| 6 | Communication error in remote controller | • Communication error in remote controller | • Check the connection of transmission line |
| | | • Longer wiring length of transmission line | • Check the wiring length of transmission line |
| 7 | Failure in screen displaying | • Power off in ventilation system | • Check the power in ventilation system |
| | | • Incorrect power supplied in ventilation system | • Check the power |
| | | • Connecting failure of transmission line | • Check the connection of transmission line |
| | | • Longer wiring length of transmission line than prescribed | • Check the wiring length of transmission line |
| | | • Omission of LED screen on remote controller | • Replace the remote controller |
| 8 | Arbitrarily operated/stop or converted the mark | • Too short distance between transmission line and power line | • Wire the transmission line and power line at more than 5cm interval |
| 9 | when power on, the remote controller is indicated and ventilation system operates | • Power off during operation of ventilation system | • Stop the ventilation system using remote controller, and temporarily turn the power off |

Instructions for diagnostics

- When replacing main PCB, detach the supporter for fixing the main PCB from PCB.
- When separating main PCB, be careful of the edge of metal plate.
- When pulling or putting a connector on main PCB, do not pull the lead wire, instead pull the entire housing.
- After replacing main PCB, establish the switch setting on main PCB in the same manner as the previous main PCB.

Service Checkup procedure

| Checkup items | |
|---------------------------------|---|
| 1. Breakdown condition | : Remote controller display etc. |
| 2. Breakdown frequency | : The first starting date of operation/ the first date of breakdown |
| 3. Breakdown timing | |
| 4. presence of contract drawing | : Equipment (including separate purchase/control equipment) wiring/piping/setting |



Checking Points

Breakdown mode 1 : System does not work normally.

After checking the system, check the following checklist.

Initial checklist table(table1-1) from installation to operation


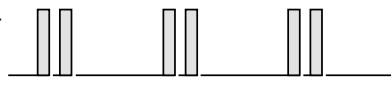
| No. | Checklist |
|-----|---|
| 1 | Are the switch capacity of main power and wiring diameter in accordance with regulations? |
| 2 | Is the prescribed power supplied to power terminal in ventilation system? |
| 3 | Is the wiring length of transmission line in accordance with regulations? for wired remote controller : total extension of less than 500m for interlocking air controls : maximum extension of less than 200m, total extension of less than 500m |
| 4 | Is the prescribed transmission line used? (type of line, diameter of line) |
| 5 | Are the transmission line and power line wired at more than 5cm interval? |
| 6 | Aren't there any multiple transmission line or signal line in the same wire pipe? |
| 7 | Aren't multiple transmission lines wired as multicable? |
| 8 | Does the connecting terminal plate of transmission have trouble? (for LCD remote controller, CN-REMO for air conditioner interlocking controls, CN-AIR) |
| 9 | Is the transmission line precisely connected to the terminal plate of ventilation system? |
| 10 | Are the power line, transmission line, and signal line precisely connected to the indicated terminal plate? |
| 11 | Is the thermistor precisely connected to the terminal plate? |
| 12 | Is the option switch(SW1/SW2) correctly set? |

System checklist table(table1-2) for using wired remote controller(LCD TYPE)

| No. | Details | Possible Causes | Necessary actions |
|-----|---|---|--|
| 1 | No message displayed on remote controller | • No power supplied to ventilation system, or incorrect power connected to the system | • Check the power in ventilation system |
| | | • Longer total wiring length of transmission line than prescribed | • Check the wiring length of transmission line |
| | | • No connection of remote controller to CN-REMO | • Connect the transmission line to CN-REMO |
| 2 | No control with remote controller (display communicate failure) | • Longer total wiring length of transmission line than prescribed (more than 500m) | • Check the length of transmission line |
| | | • Multiple transmission line wired as multicable. | • Use exclusive wires, and wire the transmission lines at more than 5cm intervals. |
| 3 | Odd message displayed on the screen | • Running out of liquid crystal | • Replace the remote controller |

**Breakdown mode2: failure code is displayed on remote controller.
LED light is on or flickering on the circuit panel of ventilation system.**

The failure details are indicated by checking number indicated on air conditioner interlocking controller or on wired remote controller(LCD-TYPE) and the number of on-and-off(flickering) in LED(red color) on the circuit plate.

| Error code | Details display(operation LED/ main body display) | wired remote controller LCD display(screen) | Loading status |
|------------|--|---|--------------------|
| CH1 | Indoor thermistor Open/Short  | CH01 | Turn operation off |
| CH2 | Outdoor thermistor Open/Short  | CH02 | Turn operation off |
| CH3 | Remote controller communication error | CH03 | Turn operation off |

Error codes and LED display table for using ZCON-BS2 (table 2)

| Checking No. | Details | Possible Causes | Necessary actions |
|--------------|--|---|---|
| CH1 | Errors related to indoor thermistor | • Connector failure related to thermistor | • Check the connection of circuit connector and lead line connecting connector |
| CH2 | Errors related to outdoor thermistor | • Connector failure related to thermistor | • Check the connection of circuit connector and lead line connecting connector |
| CH3 | Remote controller communication errors | <ul style="list-style-type: none"> • Several transmission lines wired as multicables • Transmission lines in too close vicinity to power line • Connecting failure of transmission line • Longer wiring length of transmission line than prescribed (more than 500m) | <ul style="list-style-type: none"> • With electric wires, place each transmission line at intervals. • Wire the transmission line and power line at more than 5cm intervals. • Check the connection of transmission line. • Check the wiring length of transmission line. |

Breakdown mode 3: Remote controller does not work. It works abnormally.

Checklist table(table3) for using ZCON-BS2.

| No. | Details | Possible Causes | Necessary actions |
|-----|--|--|---|
| 1 | No message displayed on LC screen | • Different transmission line connection terminal | • Check the connection of transmission line (CN-REMO on the ventilation system panel) |
| | | • No power on ventilation system | • Check the power in ventilation system. |
| | | • Incorrect power on ventilation system | • Check the power |
| | | • Connecting failure of transmission line | |
| | | • Longer wiring length of transmission line than prescribed(more than 500m) | • Check the wiring length of transmission line. |
| 2 | Arbitrarily operated/stop, or converted displays | • Several transmission lines wired with muticables. | • With exclusive wires, wire each transmission line at intervals. |
| | | • Transmission line wired in too closely to power line | • Wire transmission line and power line at more than 5cm intervals. |
| 3 | Checking number other than the checking number list is displayed | • Omission of liquid crystal letter on remote controller | • Replace remote controller |
| 4 | Impossible to stop ventilation system with remote controller (interlocking operation) | • Under interlocking operation in air conditioner | • No error • Activate the ventilation stop in air conditioner to stop ventilating. |
| 5 | Main power is displayed on remote controller and then ventilation system operates | • Disconnected main power during ventilation system operation | • Stop the ventilation system with remote controller, and temporarily disconnect the main power |
| 6 | Impossible to operate or stop ventilation system with remote controller(central controlling sign is displayed) | • LOCK is set in the upper controller • Interlocking ON/OFF preferable to external is set | • Check the upper controller setting |
| 7 | Impossible to operate or stop ventilation system with remote controller (multi remote controller displayed) | • Under operation in LCD remote controller | • No error • Activate the ventilation stop in LCD remote controller to stop ventilating. |

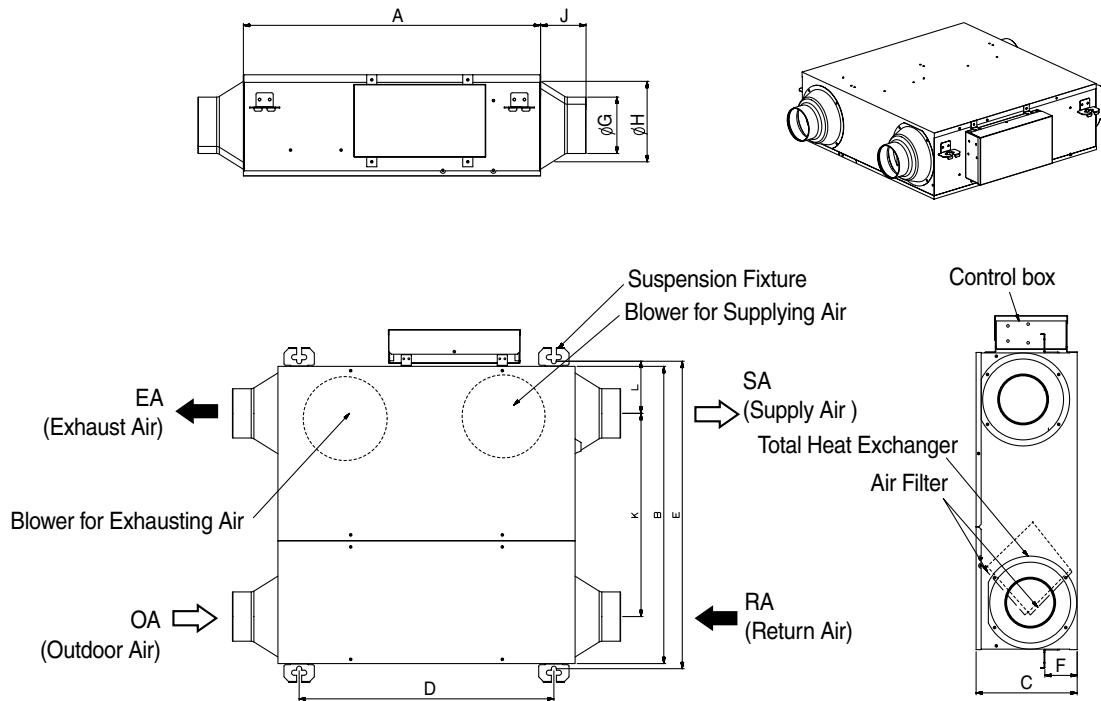
(304) Breakdown mode 4: Ventilation system does not work. It works abnormally.

Checklist table(table 4) of ventilation system.

| No. | Details | Possible Causes | Necessary actions |
|-----|---|---|---|
| 1 | Fan does not operate. failure in fan operation | • Connecting failure in control circuit connector or fan related connector | • Check the connection of control circuit connector and lead line connecting connector |
| | | • No power on ventilation system, or incorrect power | • Check the power |
| | | • Central control is set in ventilation system | • Check LOCK of central control and address of ventilation system |
| 2 | No interlocking to external equipment (air conditioner) | • Incorrect terminal plate for connecting to external signals | • Check the connection of external control terminal(CN-AIR) |
| | | • No input of external equipment signals | • Check the external equipment |
| 3 | Ventilation system operated by main power | • Power failure | • If main power is disconnected by remote controlling during ventilation system operation, ventilation system operates. (normal condition with no errors) |
| 4 | Frequent stop of air changing fan | • When the option switch No.8 is set ON and air temperature is below -15°C or above 45°C | • Normal condition with no errors |
| | | • When air temperature ranges from -10C to -15C, it stops to prevent the electric heat exchanger of ventilation system from freezing (intermittent operation) | |
| | | • When ducted with Multi V air conditioner(made by this company) by interlocking, the air conditioner stops in case of defrosting. | • Normal condition with no errors |
| 5 | Frequent stop of air changing and ventilating fans | • Displayed power saving operation • Displayed intermittent operation | • Normal condition with no errors |

Feature Dimensions Diagram

• LZ-H0106BA0 / LZ-H0156BA0

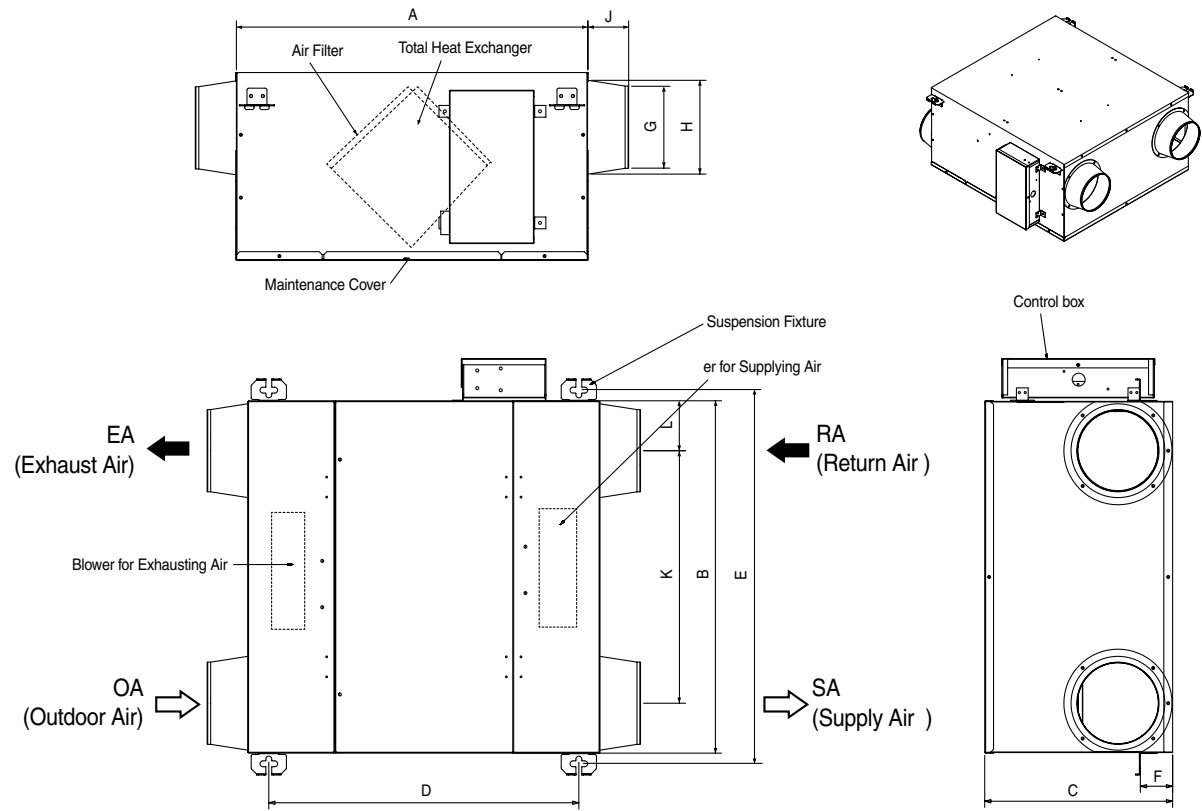


Unit: mm

| Model | Figure | | | Pitch of Suspension Fixture | | | Nominal Diameter | Duct Connection Flange | | | Duct Pitch | | Weight |
|----------------------------|--------|-----|-----|-----------------------------|-------|----|------------------|------------------------|-----|----|------------|-----|--------|
| | A | B | C | D | E | F | | G | H | J | K | L | |
| LZ-H0106BA0 LZ-H0156BA0 | 590 | 590 | 204 | 504 | 624.2 | 64 | 100 | 97.5 | 160 | 90 | 402 | 103 | 24 |

※ It necessary to secure sufficient space for maintenance more than the dimensions described in the product service.

• LZ-H0256BA0

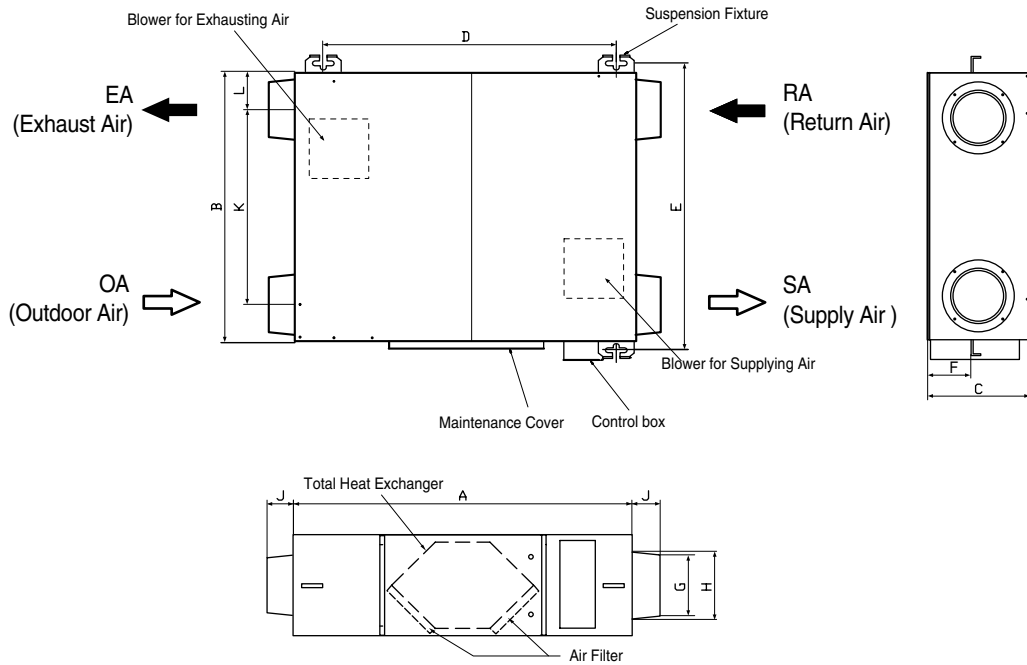


Unit: mm

| Model | Figure | | | Pitch of Suspension Fixture | | | Nominal Diameter | Duct Connection Flange | | | Duct Pitch | | Weight |
|-------------|--------|-----|-----|-----------------------------|-------|----|------------------|------------------------|-----|----|------------|----|--------|
| | A | B | C | D | E | F | | G | H | J | K | L | |
| LZ-H0256BA0 | 640 | 596 | 320 | 568 | 636.2 | 55 | 150 | 140 | 160 | 70 | 430 | 84 | 27 |

※ It necessary to secure sufficient space for maintenance more than the dimensions described in the product service.

• LZ-H0506BA0 / LZ-H0502BA0

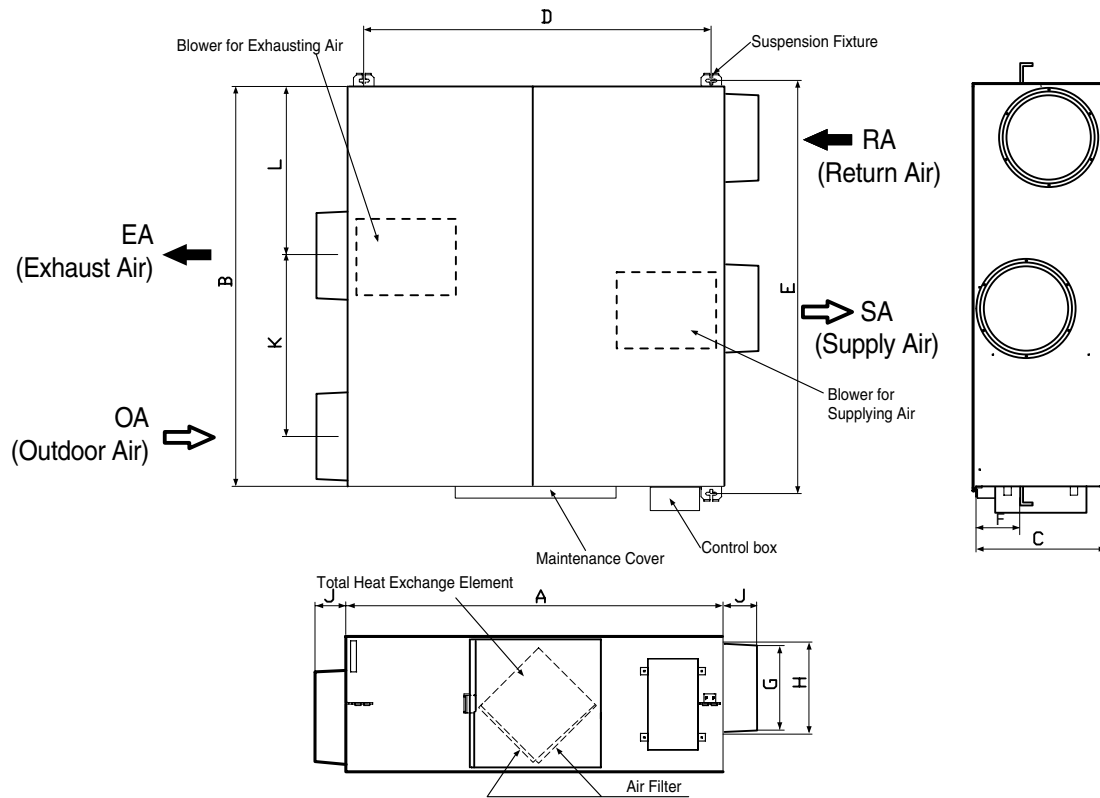


Unit: mm

| Model | Figure | | | Pitch of Suspension Fixture | | | Nominal Diameter | Duct Connection Flange | | | Duct Pitch | | Weight |
|----------------------------|--------|-----|-----|-----------------------------|--------|-----|------------------|------------------------|-----|------|------------|-------|--------|
| | A | B | C | D | E | F | | G | H | J | K | L | |
| LZ-H0502BA0 LZ-H0506BA0 | 1,014 | 988 | 273 | 938.8 | 1024.8 | 135 | 200 | 194 | 252 | 95.8 | 590 | 198.3 | 52 |

※ It necessary to secure sufficient space for maintenance more than the dimensions described in the product service.

• LZ-H0806BA0 / LZ-H0802BA0 / LZ-H1006BA0 / LZ-H1002BA0

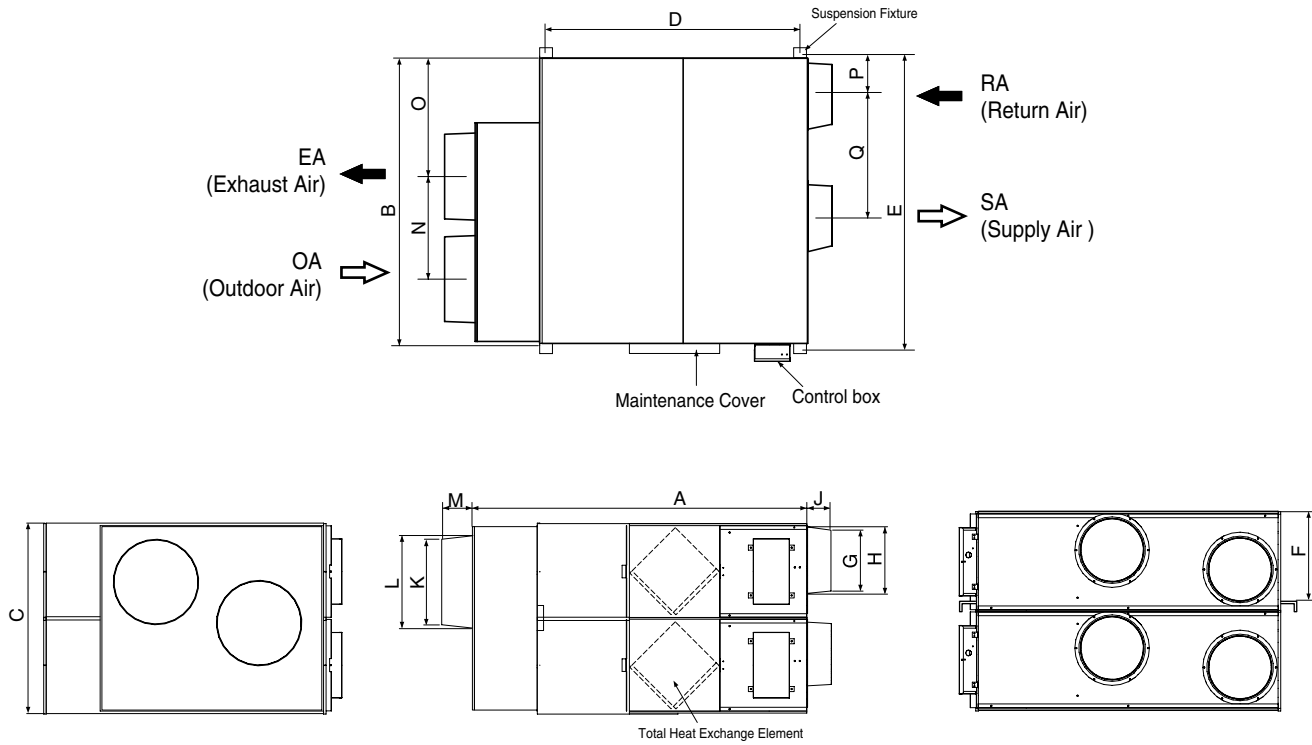


Unit: mm

| Model | Figure | | | Pitch of Suspension Fixture | | | Nominal Diameter | Duct Connection Flange | | | Duct Pitch | | Weight |
|--|--------|------|-----|-----------------------------|------|-----|------------------|------------------------|-----|----|------------|-----|--------|
| | A | B | C | D | E | F | | G | H | J | K | L | |
| LZ-H0806BA0 LZ-H0802BA0 LZ-H1006BA0 LZ-H1002BA0 | 1062 | 1140 | 365 | 987 | 1176 | 180 | 250 | 242 | 253 | 98 | 513 | 481 | 67 |

✱ It necessary to secure sufficient space for maintenance more than the dimensions described in the product service.

• LZ-H1506BA0 / LZ-H1502BA0 / LZ-H2006BA0 / LZ-H2002BA0



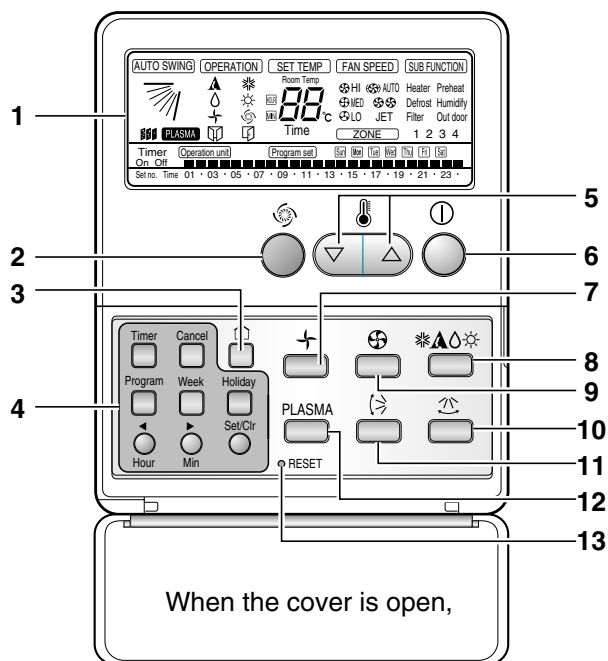
Unit: mm

| Model | Figure | | | Pitch of Suspension Fixture | | | Duct Connection Flange | | | | | | Nominal Diameter | | Duct Pitch | | | | Weight (kg) |
|--|--------|------|-----|-----------------------------|------|-----|------------------------|-----|----|-----|-----|-----|------------------|-----|------------|-----|-----|-----|-------------|
| | A | B | C | D | E | F | G | H | J | K | L | M | EA | SA | N | O | P | Q | |
| LZ-H1506BA0 LZ-H1502BA0 LZ-H2006BA0 LZ-H2002BA0 | 1313 | 1140 | 737 | 987 | 1176 | 150 | 242 | 253 | 98 | 340 | 350 | 130 | 350 | 253 | 410 | 482 | 146 | 513 | 146 |

Accessories / Option

Remote Controller

(Ventilation System remote controller ZCON-BS2) remote controller is a separate purchase.



1. Display Screen
2. Heater Button
3. Button for time setting/ canceling, and weekend setting/date selecting/ weekend selecting
4. Play/ Stop Button
5. Delaying time Button
6. Quick ventilation Button
7. Ventilating Mode Button
8. Air flow selection Button
9. Humidification Button
10. Power-saving/filter cleaning Button
11. Plasma Button
12. Time Reset Button

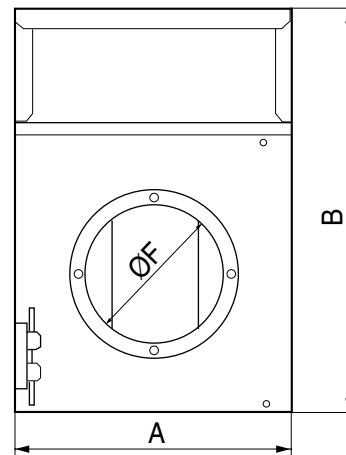
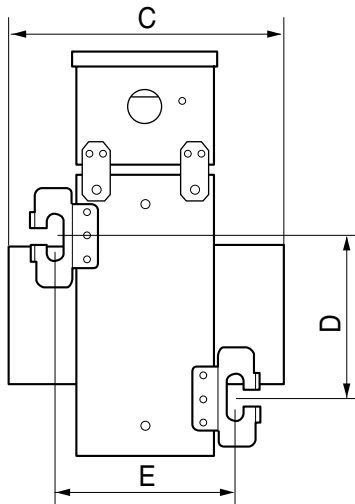
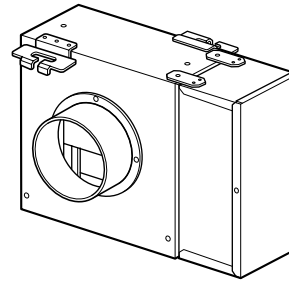
※ Some functions may not work depending on models. (according to models).

HEATER

Heater for ventilation system is a separate purchase.

Product Standard

| Model | Capacity(W) | Connecting Caliber(Ø) |
|----------|-------------|-----------------------|
| PEH-Z4P0 | 400 | 100 |
| PEH-Z8P0 | 800 | 100 |



Unit: mm

| Model | Figure | | Pitch of Suspension Fixture | | Nominal Diameter | Duct Connection Flange | | Weight |
|----------|--------|-----|-----------------------------|-----|------------------|------------------------|-----|--------|
| | A | B | C | D | | E | F | |
| PEH-Z4P0 | 203 | 291 | 134 | 117 | 100 | 97.5 | 202 | 2.5 |
| PEH-Z8P0 | 203 | 291 | 134 | 117 | 100 | 147 | 202 | 2.5 |

