

SHARP

SERVICE MANUAL

SY5M387SSC308



SUPER STEAM PLUS OVEN

SSC3088AS

In the interest of user-safety the oven should be restored to its original condition and only parts identical to those specified should be used.

WARNING TO SERVICE PERSONNEL: Ovens contain circuitry capable of producing very high voltage and current. Contact with the following parts may result in a severe, possibly fatal, electrical shock.

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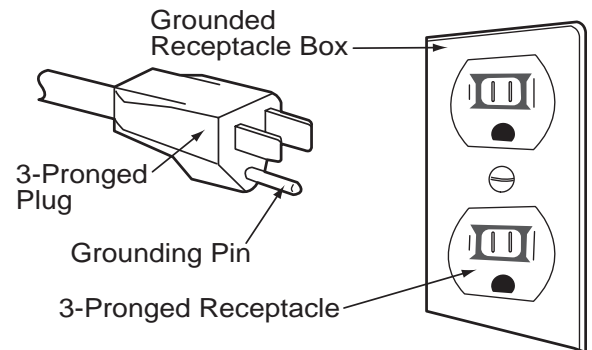
PRECAUTIONS TO BE OBSERVED BEFORE AND DURING SERVICING

- (a) Do not operate or allow the oven to be operated with the door open.
- (b) Make the following safety checks on all ovens to be serviced before and/or making repairs as necessary: (1) interlock operation, (2) proper door closing, (3) seal and sealing surfaces (wear, and other damage), (4) damage to or loosening of hinges and latches, (5) evidence of dropping or abuse.
- (c) Any defective or misadjusted components in the interlock, monitor, door seal, and transmission systems shall be repaired, replaced, or adjusted by procedures described in this manual before the oven is released to the owner.

GROUNDING INSTRUCTIONS

This appliance must be grounded. The oven is equipped with a cord having a grounding wire with a grounding plug. It must be plugged into a wall receptacle that is properly installed and grounded in accordance with the National Electrical Code and local codes and ordinances. In the event of an electrical short circuit, grounding reduces risk of electric shock by providing an escape wire for the electric current.

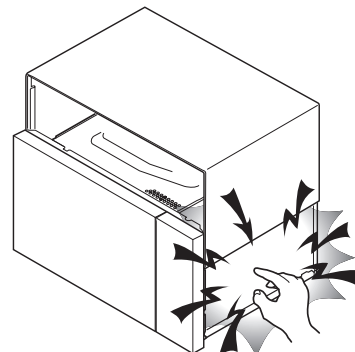
– Improper use of the grounding plug can result in a risk of electric shock. Do not use an extension cord. If the power supply cord is too short, have a qualified electrician or serviceman install an outlet near the appliance.



WARNING TO SERVICE PERSONNEL

Steam ovens contain circuitry capable of producing very high voltage and current, contact with following parts may result in a severe, possibly fatal, electrical shock.

Read the Service Manual carefully and follow all instructions.



**Don't Touch !
Danger High Voltage**

SERVICE MANUAL

SHARP

SuperSteam Plus Oven

SSC3088AS

FOREWORD

This Manual has been prepared to provide Sharp Electronics Corp. Service Personnel and Service Information for the **SUPERSTEAM PLUS OVEN**.

It is recommended that service personnel carefully study the entire text of this manual so that they will be qualified to render satisfactory customer service.

Check the interlock switches and the door seal carefully. Special attention should be given to avoid electrical shock hazard.

WARNING

Never operate the oven until the following points are ensured.

- (A) The door is tightly closed.
- (B) The door brackets and hinges are not defective.
- (C) The door packing is not damaged.
- (D) The door is not deformed or warped.
- (E) There is not any other visible damage with the oven.

Servicing and repair work must be carried out only by trained service personnel.

DANGER

Certain initial parts are intentionally not grounded and present a risk of electrical shock only during servicing.

PRODUCT DESCRIPTION

SCHEMATICS

TEST PROCEDURE

MICROWAVE DRAWER
DISSASSEMBLY AND
ADJUSTMENT PROCEDURE

WIRING DIAGRAM

PARTS LIST

SHARP ELECTRONICS OF CANADA LTD.

335 Britannia Road East, Mississauga, Ontario L4Z 1W9

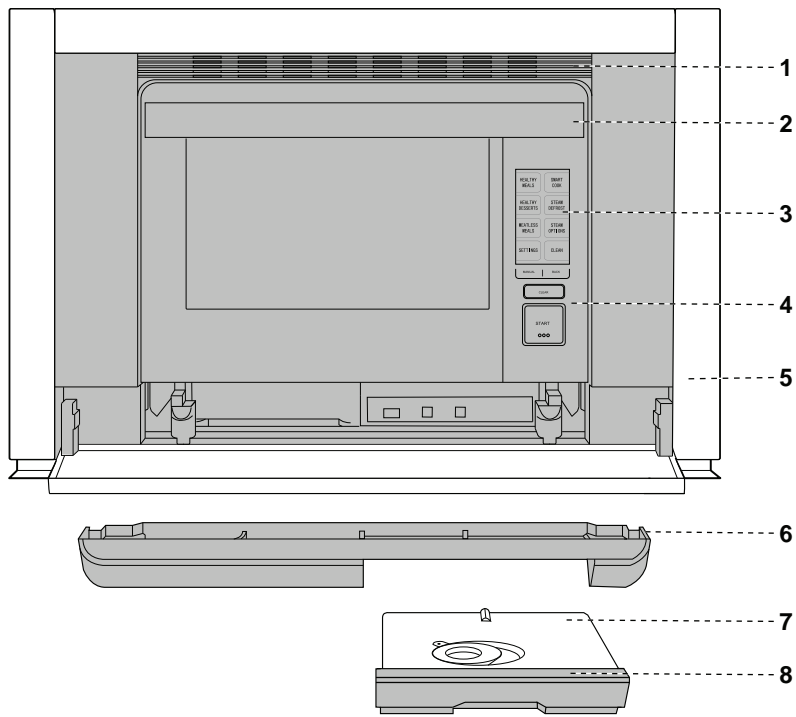
(905) 568-7140

Website: www.sharp.ca

SPECIFICATION

ITEM	DESCRIPTION
Power Requirements	120 Volts 12.04 Amperes 60 Hertz / Single phase, 3 wire grounded
Power Output	Top Heater - 750 Watts Mid Heater - 600 Watts Rear Heater - 400 Watts Engine Heater - 1350 Watts
Convection Power Output	1450 Watts
Outside Dimensions	Width 30" Height 19.0" Depth 18.92" (with handle)
Cooking Cavity Dimensions (1.1 Cubic Feet) (Stainless Steel)	Width 15.55" Height 9.45" Depth 12.1"
Control Complement	<p>Heating modes: Super Steam Convection Steam Grill/Broil</p> <p>Home Page: Healthy Meals, Smart Cook, Healthy Desserts, Steam Defrost, Meatless Meals, Steam Options, Settings and Clean.</p> <p>Manual Page: Conv Bake, Conv Broil, Steam Roast, Steam Grill, Stea, and Steam Refresh.</p> <p>Settings: Manual, Back, Clear and Start</p>
Oven Cavity Light	Yes
Safety Standard	UL Listed Canadian Standards Association.

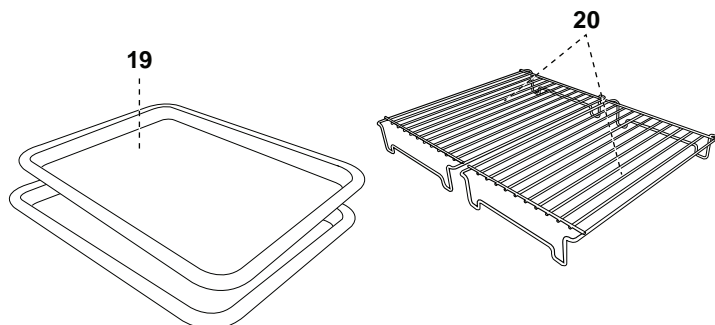
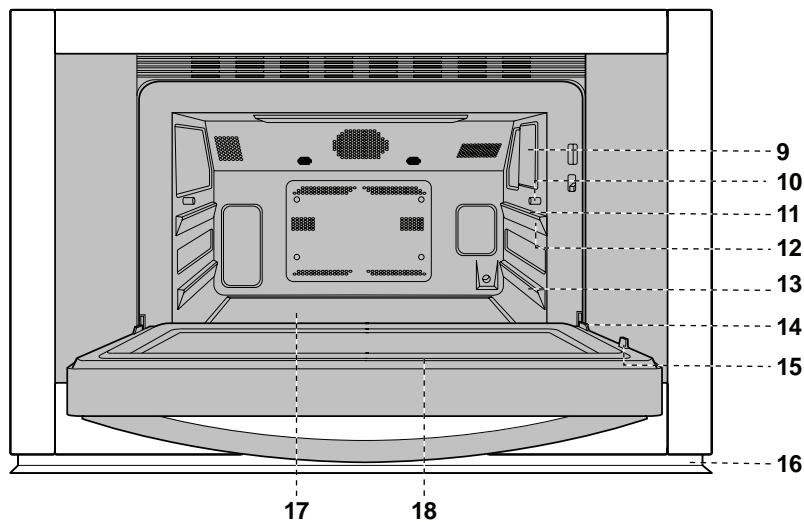
OVEN COMPONENTS



- 1 Air vent opening
- 2 Handle
- 3 LCD display
- 4 Control panel
- 5 Frame
- 6 Drip tray (see page 11)
- 7 Reservoir lid (see page 11)
- 8 Reservoir (see page 11)
- 9 Oven light
- 10 Anti-tip stubs
- 11 Tray guide
- 12 Upper level
- 13 Lower level
- 14 Door hinges
- 15 Latches
- 16 Air deflector
- 17 Ceramic oven floor
- 18 Door gasket

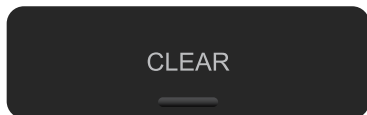
ACCESSORIES

- 19 2 Trays
- 20 2 Racks

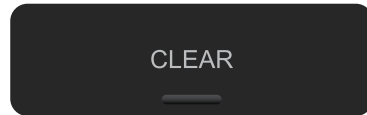
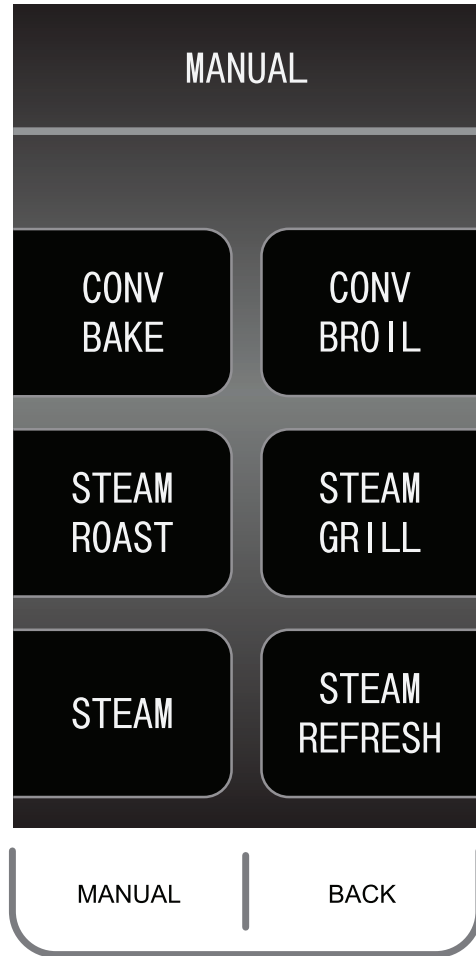


CONTROL

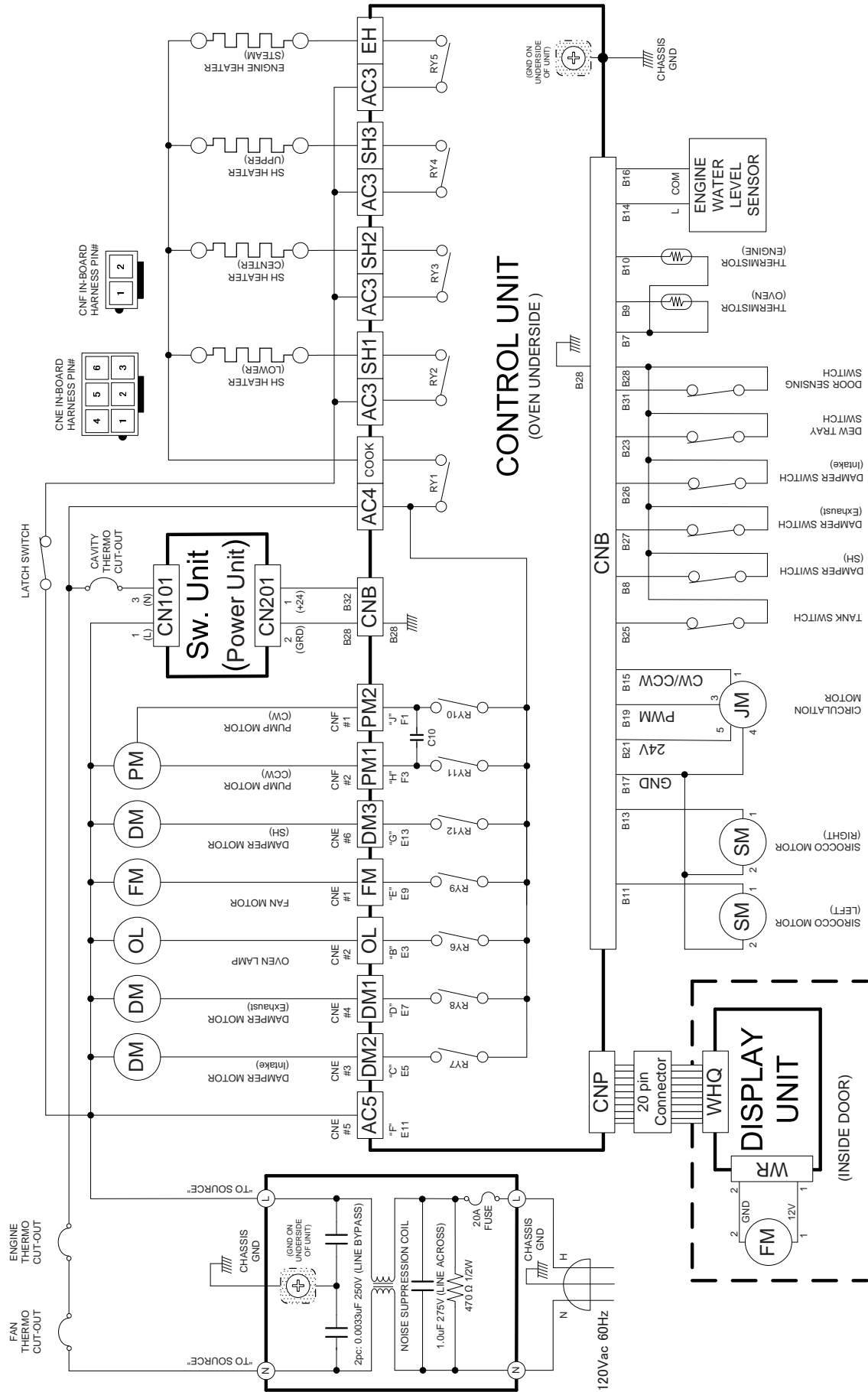
HOME PAGE



MANUAL PAGE

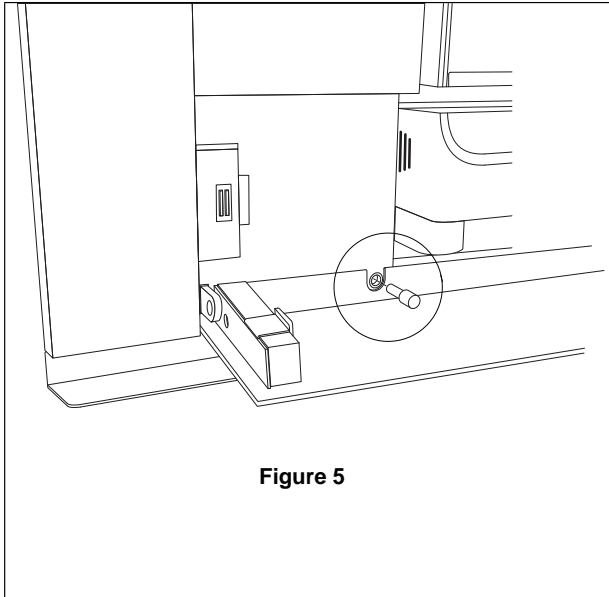


SCHEMATIC

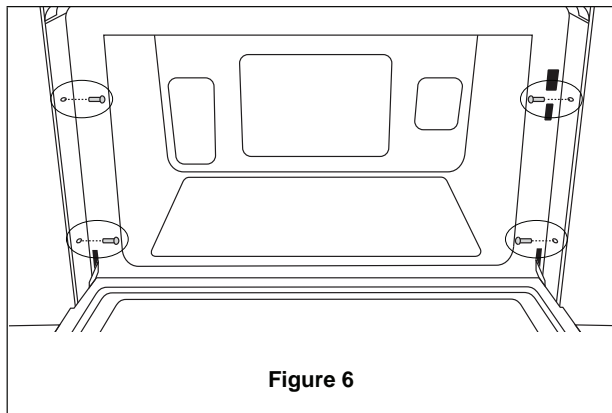


SUPER STEAM REMOVAL FROM CABINET

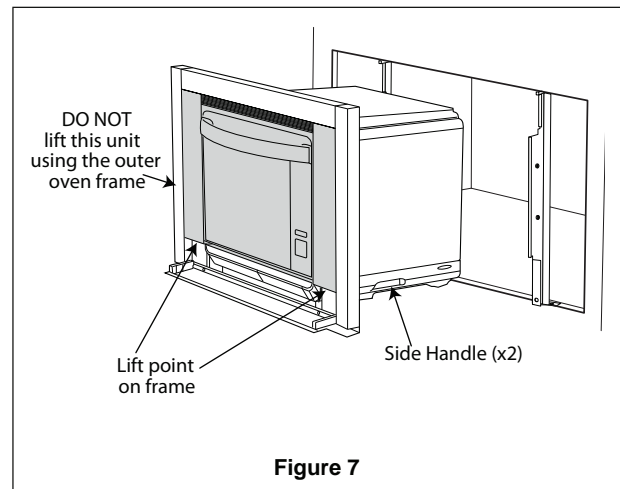
1. Open the drip tray door and remove the 2 shoulder bolts/sleeve (**Figure 5**).



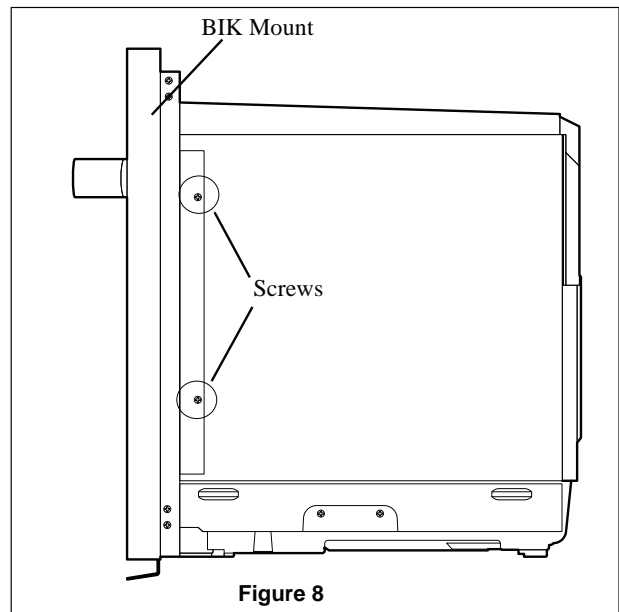
2. Open the oven door and remove the 4 mounting screws from the Mounting Bracket (**Figure 6**).



3. Use a minimum of 2 people to lift and remove oven. Partially remove oven from cabinet and unplug the power supply cord from the electrical outlet (**Figure 7**).
4. When removing the unit, careful not to use the outer oven frame. Use only the Side Handles (**Figure 7**).



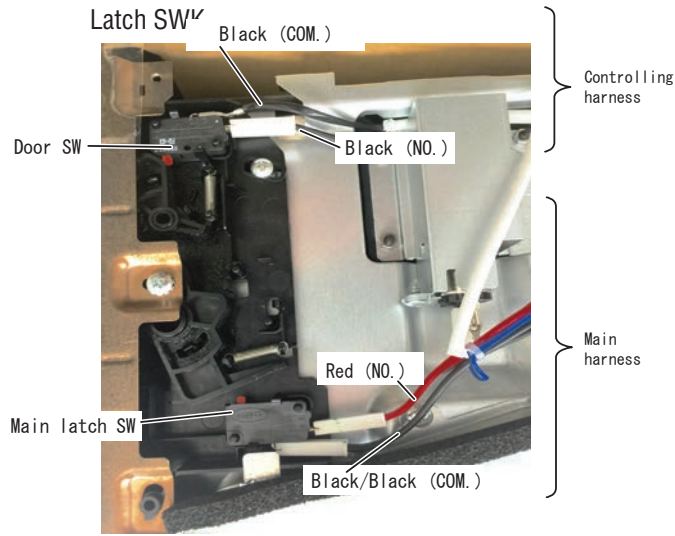
5. Remove 4 screws (2 each side) from the BIK Mount. After the BIK Mount is removed, careful not to scratch or damage (**Figure 8**).



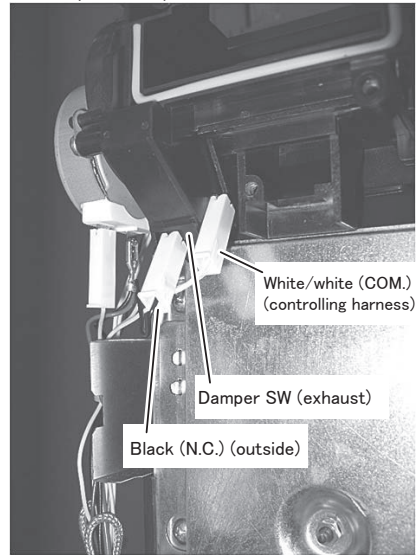
WARNING Always take caution lifting heavy products.

SUPER STEAM COMPONENTS

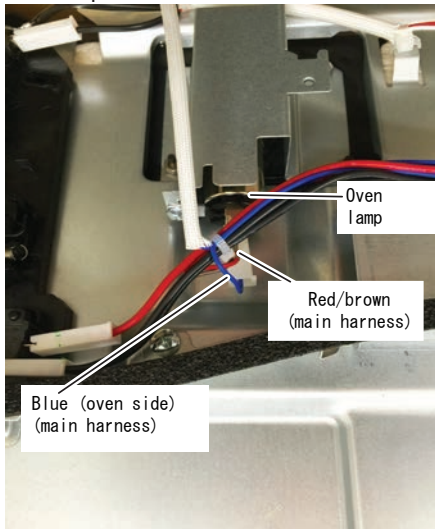
[1] Wiring method of each part



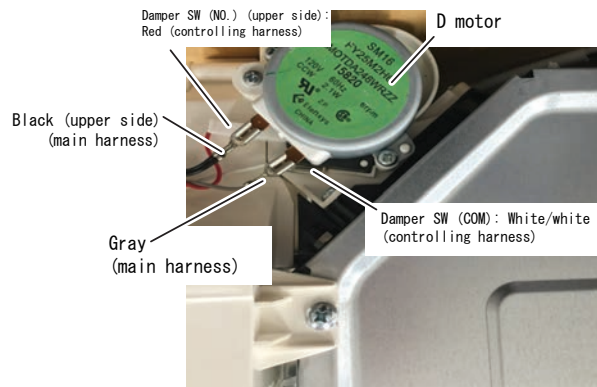
Damper SW (exhaust)



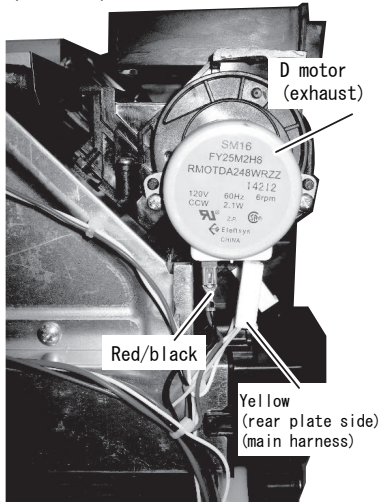
Oven lamp



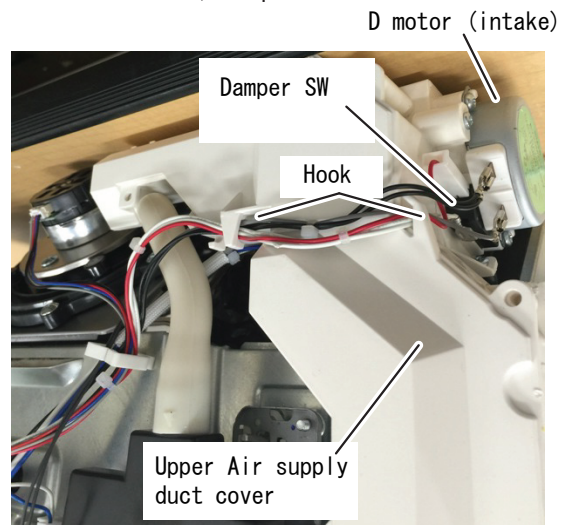
D Motor (Intake), Damper SW (Intake)



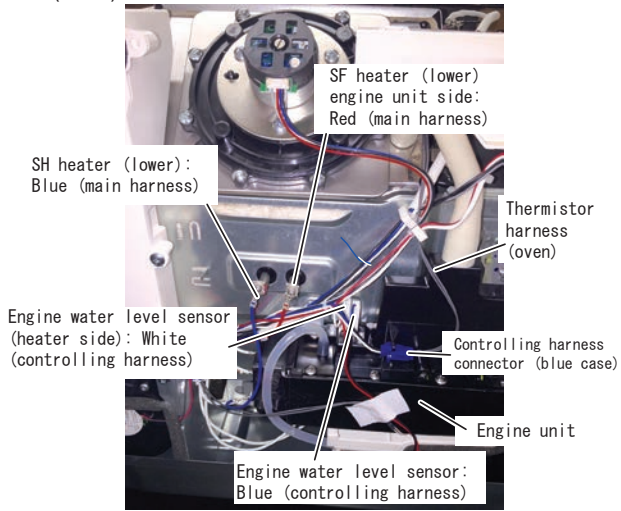
D Motor (exhaust)



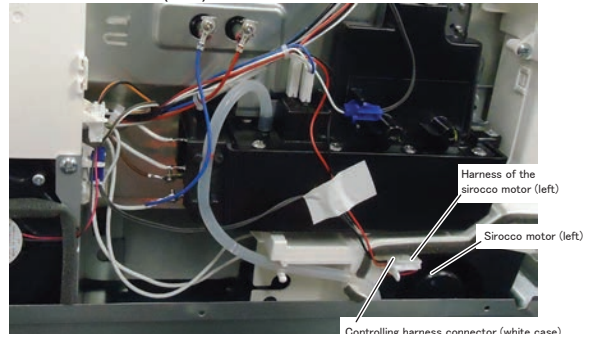
Harness to D Motor, Damper SW



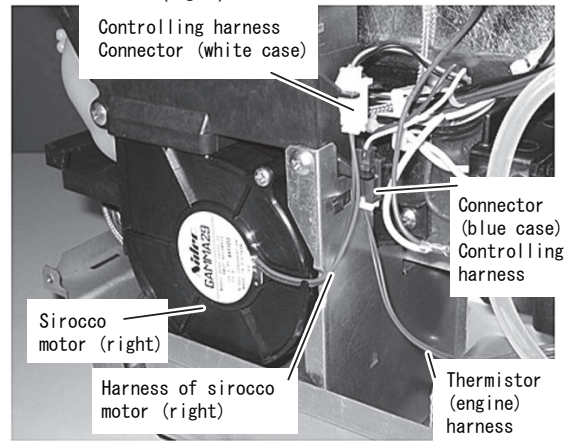
SH Heater (lower), Engine liquid-level sensor , Thermistor (oven)



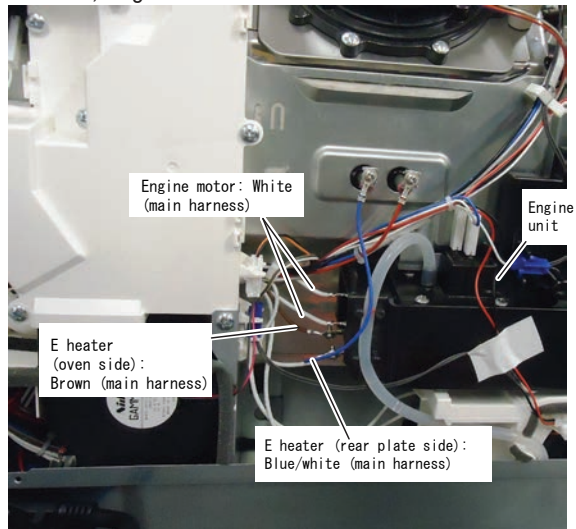
Sirocco motor (left)



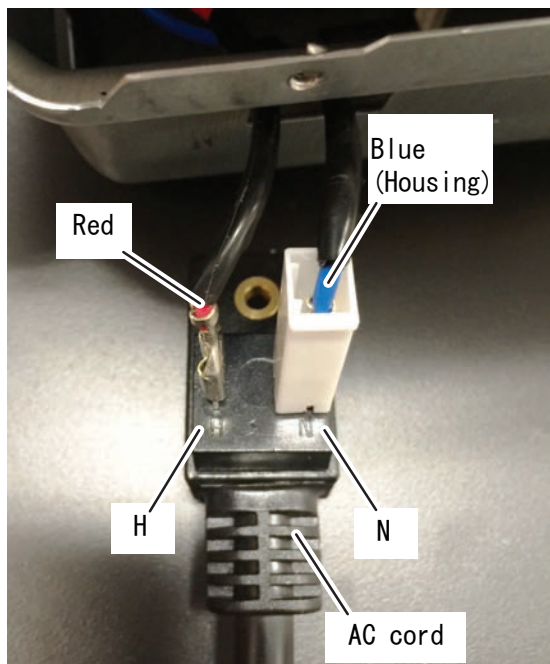
Sirocco motor (right)



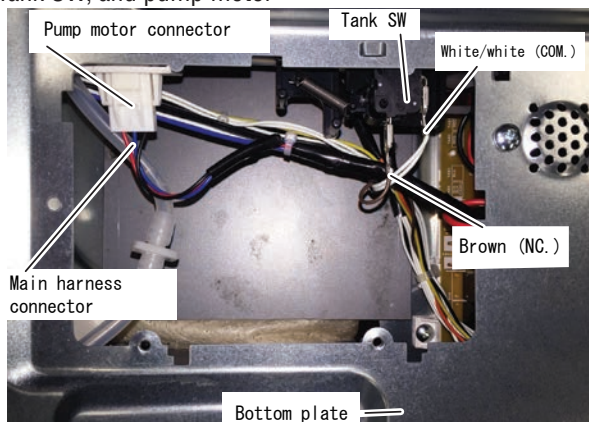
E Heater, Engine thermo



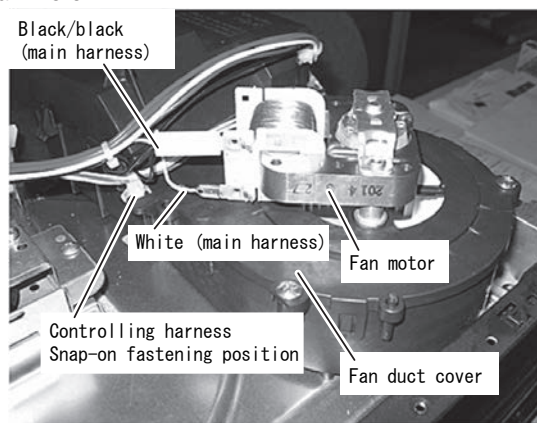
AC code



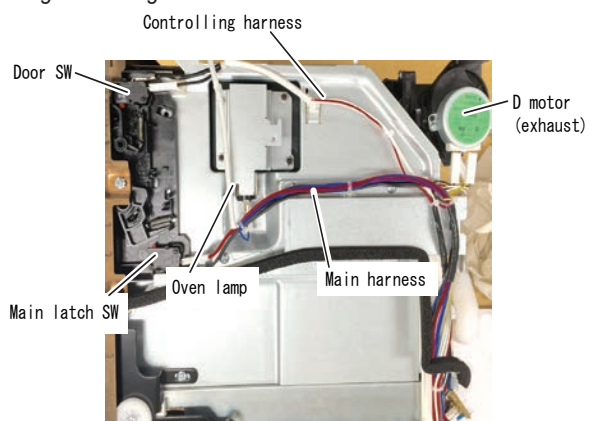
Tank SW, and pump motor



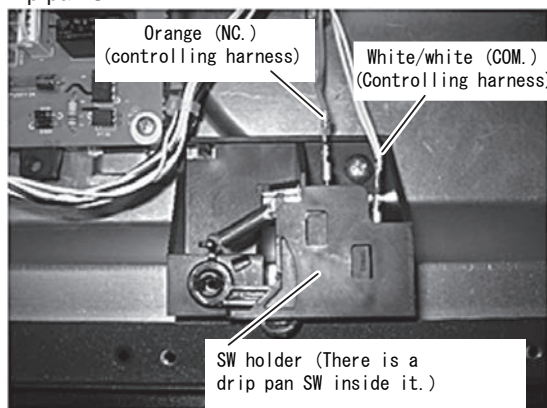
Fan motor



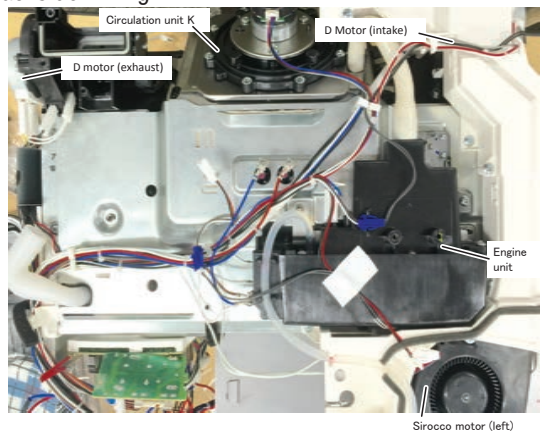
Wiring on the right side



Drip pan SW



Backside wiring



NOISE FILTER

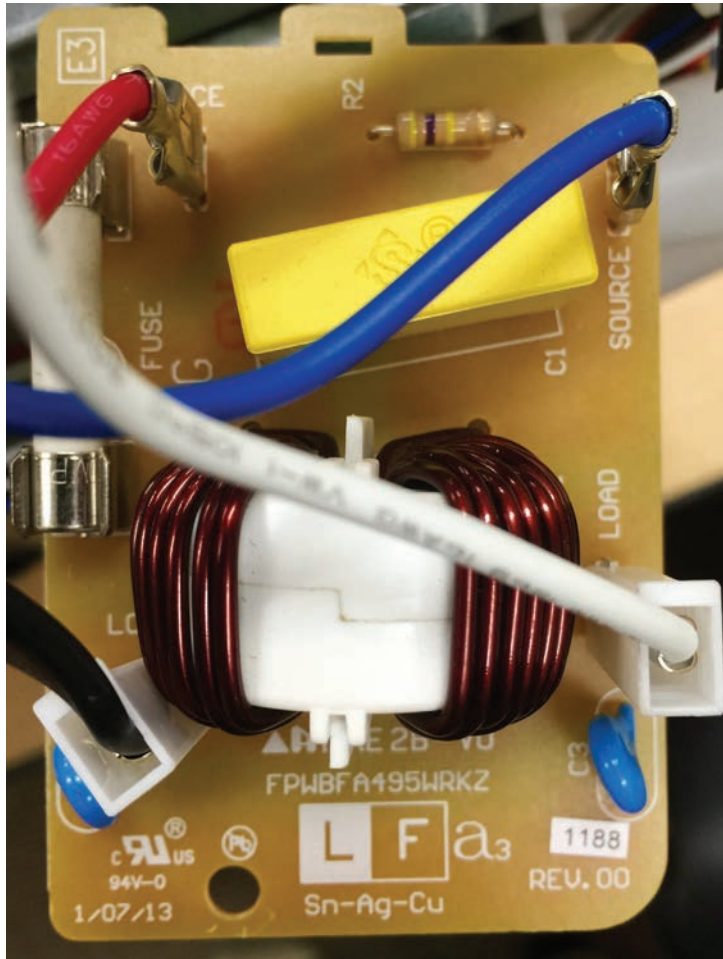
RED (SOURCE)

BLUE (SOURCE)

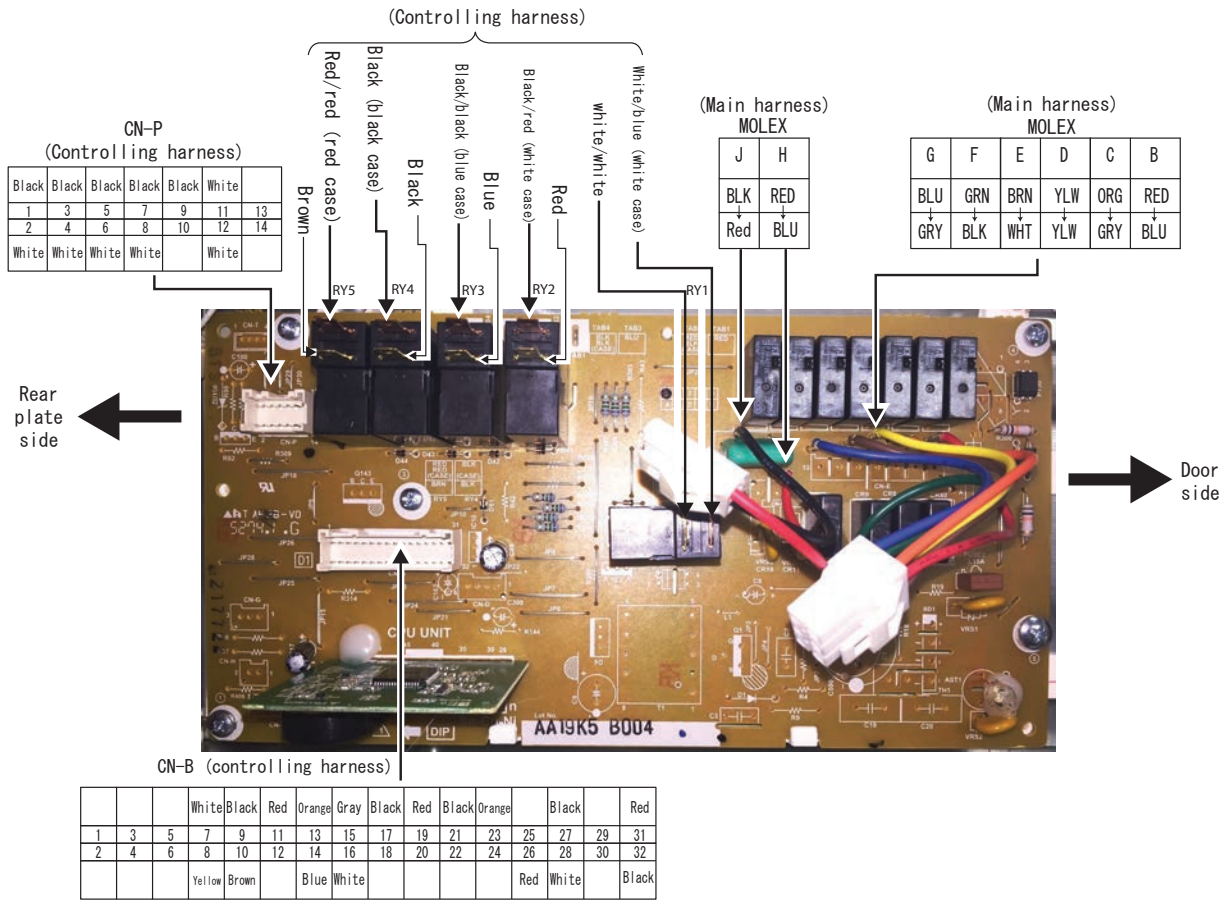
20A FUSE

WHITE (LOAD)

BLACK (LOAD)



CONTROL UNIT



Power unit check:

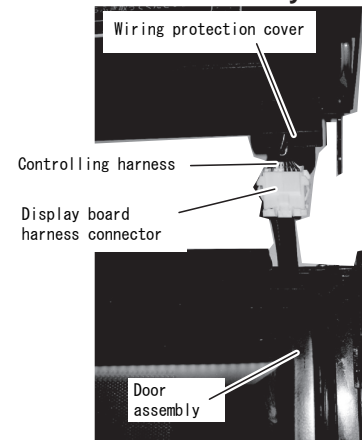
While oven is power and idle:

- 1) CN101: Do you have AC-120V across pins #1 and #3?
 - No – check AC side of harness feeding into Sw. Unit
- 2) Yes then check CN201: Do you have DC-24VDC across pin#1 and pin #2?
 - No – replace large Sw. Unit
- 3) Yes then check Control Unit CN-B: Do you have DC-24VDC across pins #28 & #32?
 - No – check DC side of harness feeding from Large Sw. Unit into Control Unit
 - Yes – check/replace control unit.

POWER UNIT



Connection of door assembly



Note: Do not reversely insert the connector of the controlling harness and the connector of the display board harness when connecting them.

Error Code list

error display (EEPROM)	details of error	check timing	application menu	error condition	note	check item	change parts
CODE(04)	oven temperature is high.	After 1sec.	fermentation defrost sterilization low temp. steam	oven temperature is too high	fermentation mode over ECh bit error under C0h bit cancel	1 . Check the relay welding 2 . Check the oven thermistor 3 . Check the harness of the CN-B and thermistor	1 . Change the relay board 2 . Change the oven thermistor 3 . Change the control harness
CODE(0A)	shortage of Water	immediately	steam water oven water grill	Water tank is empty when water is necessary to operate.		In the case of water shortage even though there is water in the water tank. Check water.	1. When there is no water : change the pump. 2. When the pump is OK : change the engine
CODE(07)	shortage of Water (It is possible to restart)	After cook	sterilization	Water tank is empty during sterilization mode.			
CODE(08)	shortage of Water (sterilization mode restarts)	After cook	sterilization	4 minutes passed without restart after (CODE07)* appeared.			
CODE(0F)	water tank is frozen	immediately	steam water oven water grill	engine heater temperature is too low.	under 0Fh bit	In the case of an error when at the room temperature	1 . Change oven thermistor 2 . Change relay board
CODE(0C)	dew tray error	After cook	steam water oven water grill	Dew tray is not set when cook is started.		Check the wiring of the dew tray SW. Check the dew tray. Check the lever SW. Check to ensure SW is pushed. Check the hooks (3ea) of the dew tray. Check to ensure there is no disconnection from the dew tray SW.	If the SW is NG: Change the SW. If the lever of SW is NG: Change the lever. If the hook is NG: Change the Dew tray. If the holder of SW is NG: Change the holder.
CODE(0B)	No water tank during water drain	After water drain	water drain	Water tank is not set at water drain.		In the case of error, even though the Tank is in. Check the tank to ensure SW is not disconnect. Check CN-B of the relay board and tank SW.	If SW is NG: Change SW. If SW hook of the tank cover is NG: Change the tank cover. If the board and SW are NG: Change the control harness.
CODE(0D)	No water tank during cook using water	After cook	steam water oven water grill	Water tank is not set at cook using water.		In the case of error, even though the tank is in. check the tank SW to ensure that SW is not disconnect.	If SW is NG: Change SW. If SW hook of the tank cover is NG: Change the tank cover. If the board and SW are NG: Change the control harness.
CODE(0E)	water tank is removed	After cook Water drain	steam water oven water grill drain	Water tank is removed for 5 seconds during cook using water.			
CODE(11)	Oven thermistor error	immediately	all menu	oven thermistor is short or open. Temperature in oven is too high.	open fermentation mode under 08h bit error short oven mode over FBh bit error	Check the wiring of the oven thermistor. Check the wiring of the oven thermistor control harness and CN-B relay board.	If the thermistor is NG: Change the thermistor. If the relay board is NG: Change relay board. If the oven thermistor control harness and relay board are NG: Change the harness.
CODE(14)	Door thermistor error	immediately	all menu	Door thermistor is short or open.	open under 03h bit error short over FDh bit error		Change DISPLAY board
CODE(15)	engine heater error	always	all menu	engine heater temperature is too high.	over F8h bit error	Check the sensor of the engine WL. Check the RY5 of the relay board.	Change the engine. Change the board and also change the engine thermistor at the same time.
CODE(16)	Door fan error	always	all menu	when the temperature inside door is higher than limit, because malfunction occurred in Door fan.	over 8Bh bit and over 2sec continue error	Check the rotation of the door fan. Use a paper. Check the wiring. Check the wiring of the door fan.	Change the door fan. Change the door board.
CODE(17)	Relay monitor error	always	all menu	micro and each heater relay both operated or when off cycle heater relay operated		Check the relay board of the oven RY2/3/4/5.	Change Relay board.
CODE(18)	SH Damper error	After cook	all menu			Check the harness of the SH damper Motor and SW operation. Check the SH duct damper operation.	Change the SW motor of the harness or board. If the SH damper or the SH duct is NG: Change oven.
CODE(1C)	engine thermistor error	After cook	all menu	Engine thermistor is open.	under 08h bit error	Check the wiring of engine thermistor and thermistor. Check the CN-B of control harness and thermistor terminal.	Change the harness of the thermistor or board.
CODE(1D)	Pump error	during water drain	water drain	Water cannot drain away from engine. (Pump or tube is broken.)		Check allocation at the time of drainage. Check WL sensor is open.	If allocation is NG: Change the motor. If WL sensor is continuing display: Change the engine
CODE(1E)	EEPROM error	on test mode	short check program	EERROM Read data is not same as EEPROM write data.			Change the DISPLAY board.

TEST PROCEDURES

Error record confirmation procedure

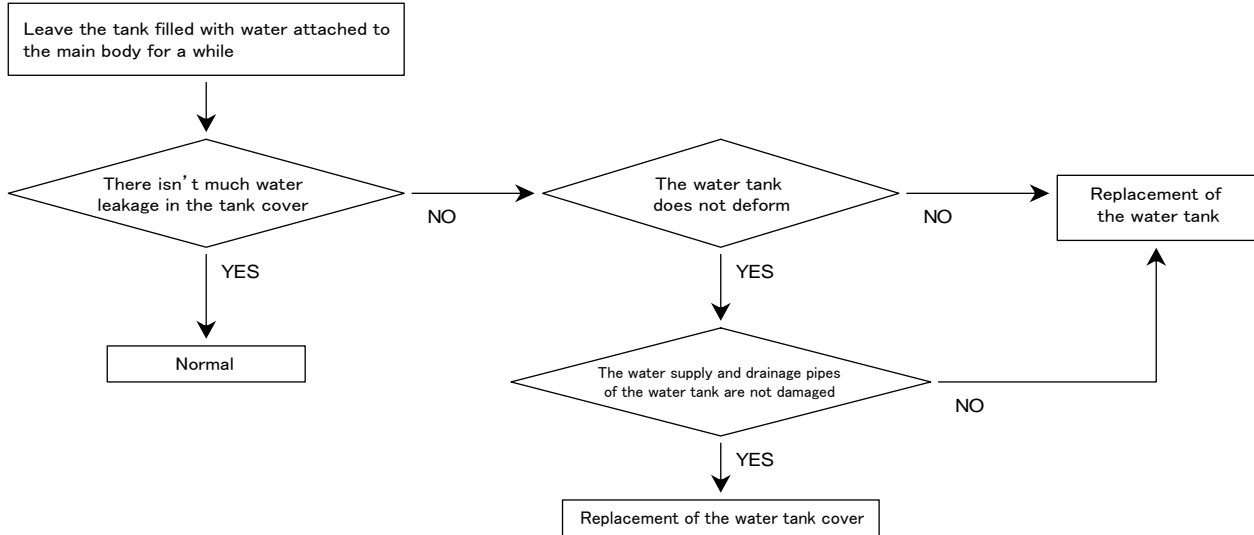
Power on/door open/close [Clear] [Manual heating] [Start] [Start] Door open/close operation Press the [Back] key 14 times to set the test mode number at 16 [Start]

Inspection method when error occurs

1. Inspection method of water supply performance and engine liquid-level sensor performance

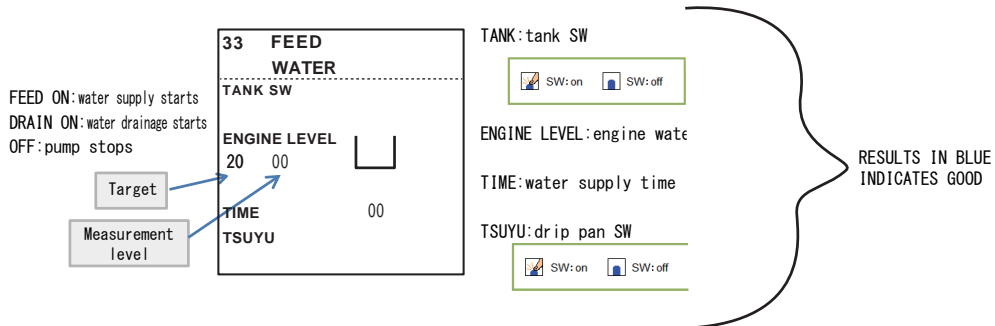
1) Confirm the water tank is installed

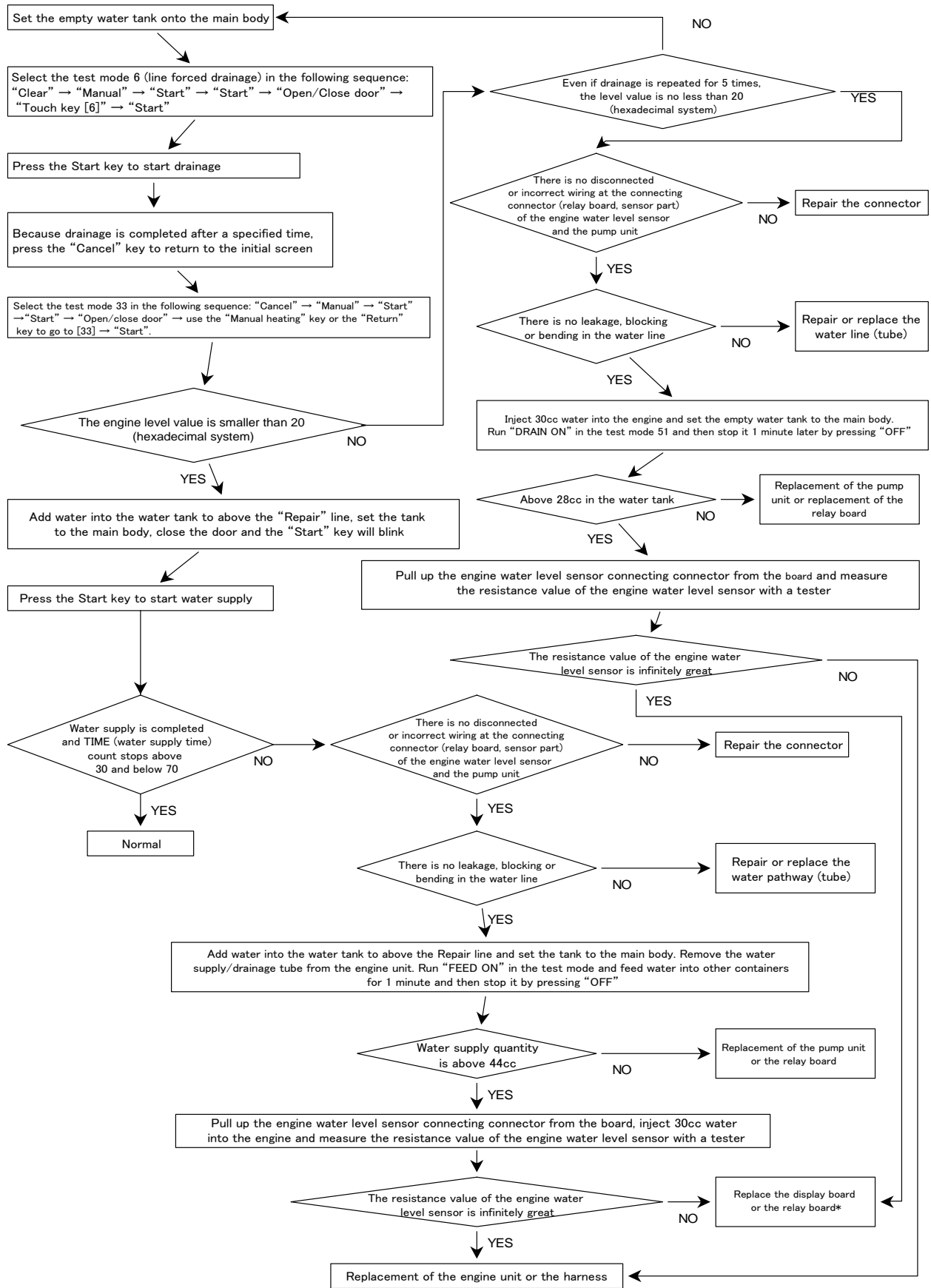
Install the water tank onto the main body and confirm its installation.



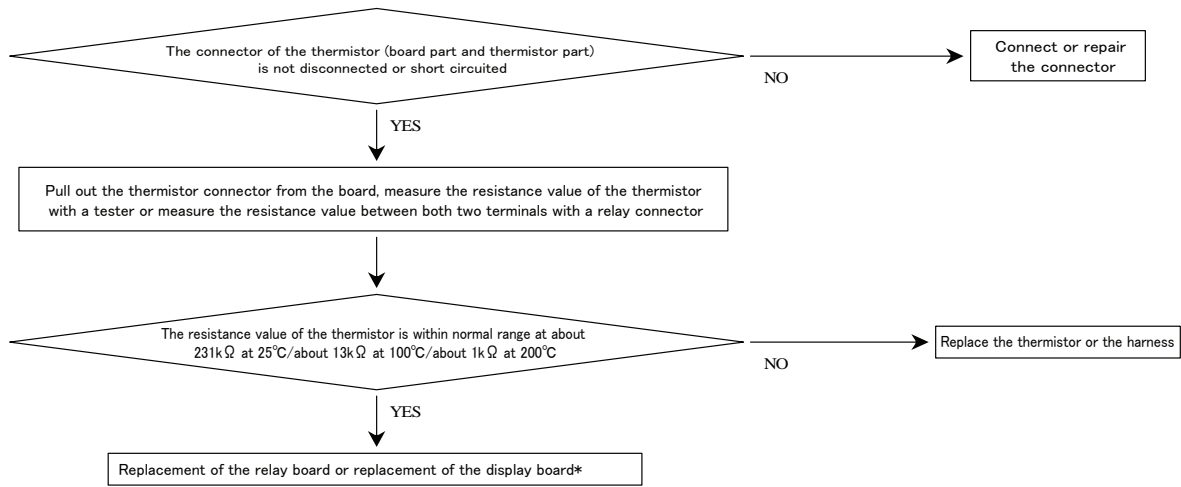
Confirm the water supply performance and engine liquid-level sensor performance

Confirm the water supply performance and engine liquid-level sensor performance by test mode 33.





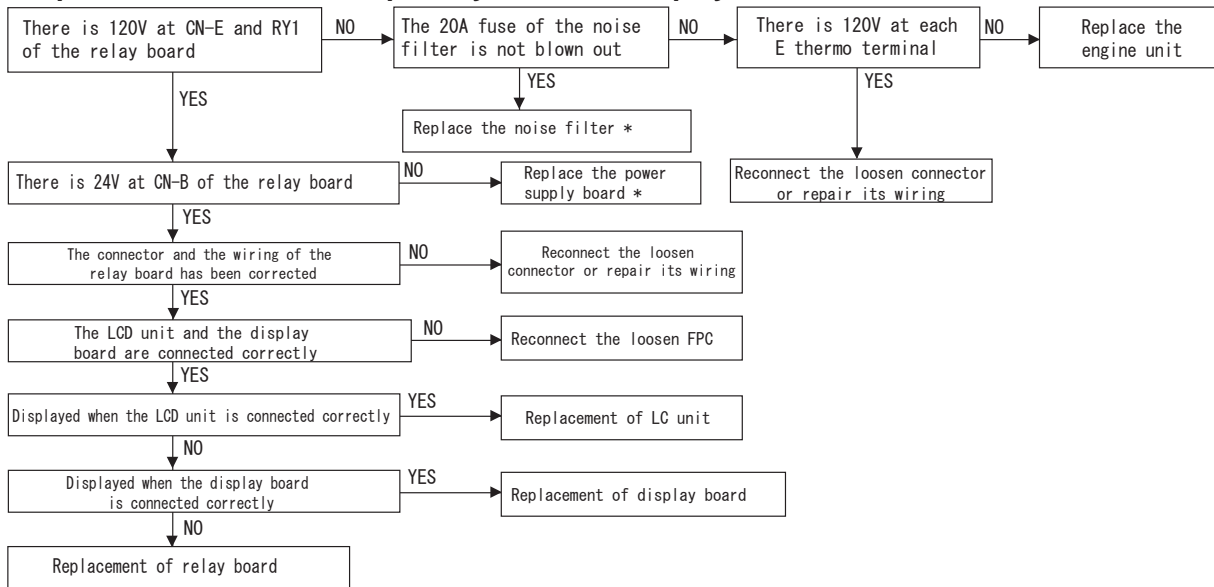
"Message 01" (oven thermistor fault), "Message 05 and Message 12" (engine thermistor fault)"



*Be sure to refer to P3, "Before replacement of board", before replacing the board.
 Note: When the display board is replaced, be sure to perform the citric acid cleaning operation.

NOTE: Message 08 (Damper Motor)

I Inspection method when liquid crystal is not displayed.



Inspection and handling method at the time of abnormal operation

[1] List

Operation	Malfunction	How to check
Even when the door is opened	• Not indicated	<ul style="list-style-type: none"> • Fuse 20A is blown • The thermo is turned off
	• The indicator backlight is not turned on	<ul style="list-style-type: none"> • FPC is correctly connected to CN-2 and CN-3
	• The oven lamp is not turned on (3 minutes after the door is opened, the lamp is turned off)	<ul style="list-style-type: none"> • It is about 100V between terminals of the oven lamp
	• It does not sound	<ul style="list-style-type: none"> • The harness between the relay board (CN-P) and the display board (WH-Q) is connected.
	• If a key which is not displayed on the liquid crystal touch panel is pressed, it will not be accepted	<ul style="list-style-type: none"> • Accept by pressing the center of the key with your finger cushion. <li style="text-align: right;"> <p>Note: The key may not function if you are wearing gloves or covering your finger with a sticking plaster.</p>
	• The key of "warm-up start" or "cancel" is not accepted	<ul style="list-style-type: none"> • Replacement of the display board
Even when it is closed open the door	• "Manual heating" and the "return" key is not accepted	<ul style="list-style-type: none"> • The connector CN-1 of the display board is unplugged
	• The LED of the "warm-up start" key is not turned on	<ul style="list-style-type: none"> • Replacement of the display board
When heating is started	• The "start" key is not in	<ul style="list-style-type: none"> • The door SW is on the door opening side (even when the door is closed, the oven lamp will not be turned off)
	• The fan motor does not rotate • The sirocco motor does not rotate	<ul style="list-style-type: none"> • It comes to 100V between the terminals of the fan motor or the sirocco (in the initial operation, when the inside temperature is below 40°C, the fan motor will stop for 30 seconds. The sirocco operates 10 seconds later.)
	• The SH heater is not heated • The engine heater is not heated	<ul style="list-style-type: none"> • SH heater } It comes to about 100V between the terminals • Engine heater } <li style="text-align: right;"> <li style="text-align: right;"> <li style="text-align: right;"> <li style="text-align: right;"> <li style="text-align: right;">
	• The circulation motor does not rotate	<ul style="list-style-type: none"> • It comes to 24V between the terminals of the circulation motor
	• The suction/exhaust does not rotate	<ul style="list-style-type: none"> • It comes to about 100V between the terminals of the damper motor.
	• Contact 14 appears	<ul style="list-style-type: none"> • Replacement of the display board
	• To be reset	<ul style="list-style-type: none"> • To be reset

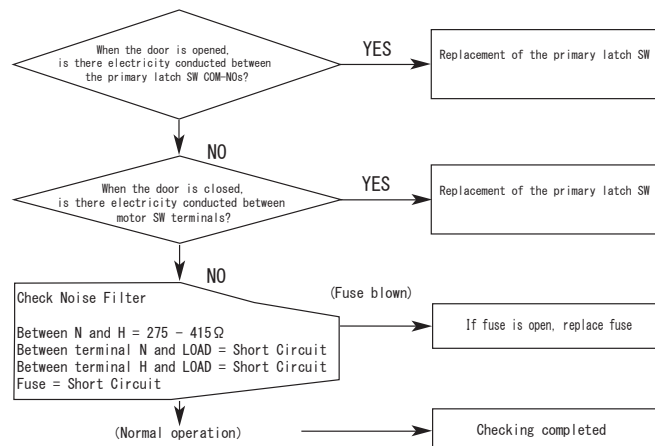
Operation	Malfunction	How to check
When heating is started	• Contact 08 appears	<ul style="list-style-type: none"> • The damper shaft of the SH damper (sub-part of oven DK, refer to the photograph on P50) is fluctuating. <ul style="list-style-type: none"> YES : The damper SW (SH) contact is conducting electricity. <ul style="list-style-type: none"> YES : Check for any disconnection of the harness going to the damper SW (SH) or replace the relay board. NO : Replacement of damper SW (SH). NO : It comes to about 120V between the terminals of the D motor (SH) <ul style="list-style-type: none"> YES : The D motor (SH) rotates singly. <ul style="list-style-type: none"> YES : Checking the SH damper shaft and the damper K (SH) (refer to the figure on P50) NO : Replacement of the D motor (SH). NO : Checking the controlling harness or replacing the relay board.
	• Water is not discharged	<ul style="list-style-type: none"> • Water can be supplied to the engine <ul style="list-style-type: none"> YES : Confirmation of the water level sensor NO : Confirmation of the pump motor
	• Not power saving	<ul style="list-style-type: none"> • The door SW is opened. A screen other than the initial screen appears. The high-temperature indicator is turned on. <ul style="list-style-type: none"> NO : Replacement of the relay board or the noise filter
	• Even if the tank is filled with water, the display shows "water is not enough" and heating is not started.	<ul style="list-style-type: none"> • The tank is inserted fully into place. The tank SW is detected. <ul style="list-style-type: none"> YES : Confirmation of the water tank level sensor. • Confirmation of water leakage of the water pathway. <ul style="list-style-type: none"> YES : Confirmation of water leakage of the water pathway <ul style="list-style-type: none"> YES : Tube replacement NO : Confirmation of the water level sensor wiring <ul style="list-style-type: none"> YES : Replacement of the engine unit NO : Correct the water level sensor wiring NO : Confirmation of tube bending <ul style="list-style-type: none"> YES : Install the tube correctly. NO : It comes to about 120V between the pump motor terminals at the time of water supply (black-blue) or water discharge (black-red). <ul style="list-style-type: none"> YES : Replacement of the pump motor NO : Replacement of the main harness or the relay board NO : Install the tank SW lever correctly
Others	• The oven is not heated.	• Refer to P28 for what to check when the oven is not heated

[2] Inspection at the time of 20A fuse blow

Please check the following points if the 20A fuse blows.

Because there are many high-voltage parts in the set main body, please disconnect the power plug when conducting an inspection other than confirming the operation.

Regarding harness, please also check caulking fault and contact fault.



NOTES

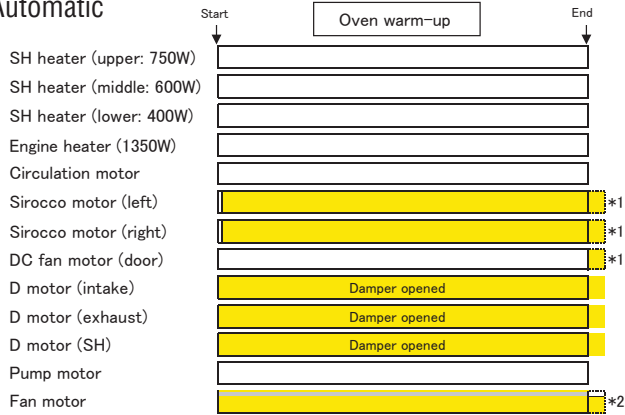
Operation of parts in different cooking methods

[1]When powered on

When oven is first plugged into AC

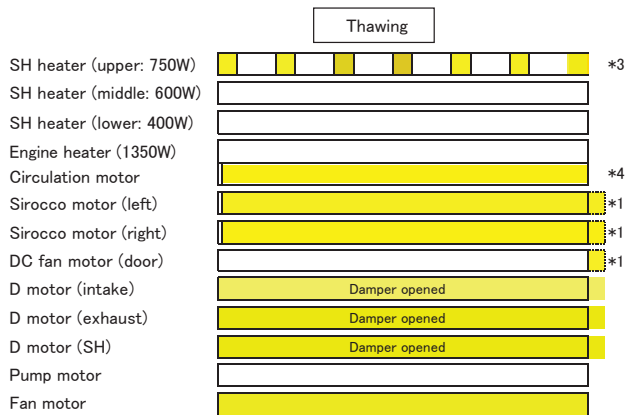
- If the dampers' vents are not in their proper locations, damper motors' for intake, exhaust and SH rotate for a maximum 10~12 seconds until all three damper SW are in OFF.

[2]Automatic



*1 - When cooking is finished
If the door is closed and the temperature is high,
fan cooling operation is controlled by oven thermistor.
If the door is opened, cooling is controlled by amount of operation time.

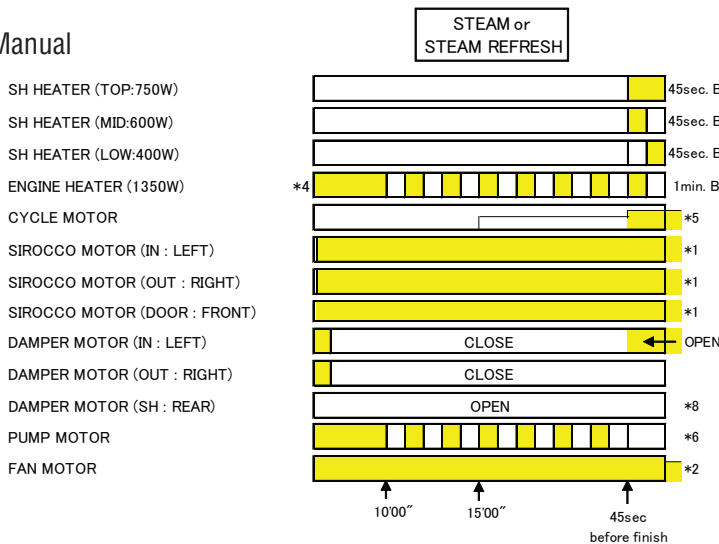
*2 - After cooking is finished, fan rotates at about 1,500 rpm.
The fan operation time varies with the operation time.



*3 - The heater is turned ON or OFF in accordance with temperature setting

*4 - 70% working
*1-When cooking is finished
If the door is closed and the temperature is high, it will rotate until the temperature decreases to a certain degree.
If the door is opened, it will rotate for up to five minutes.

[3]Manual



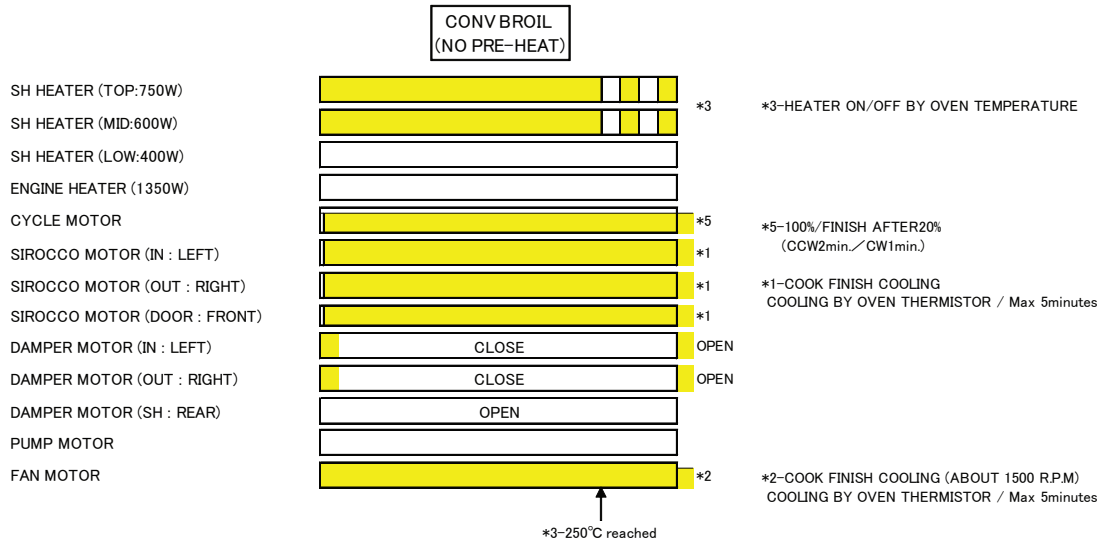
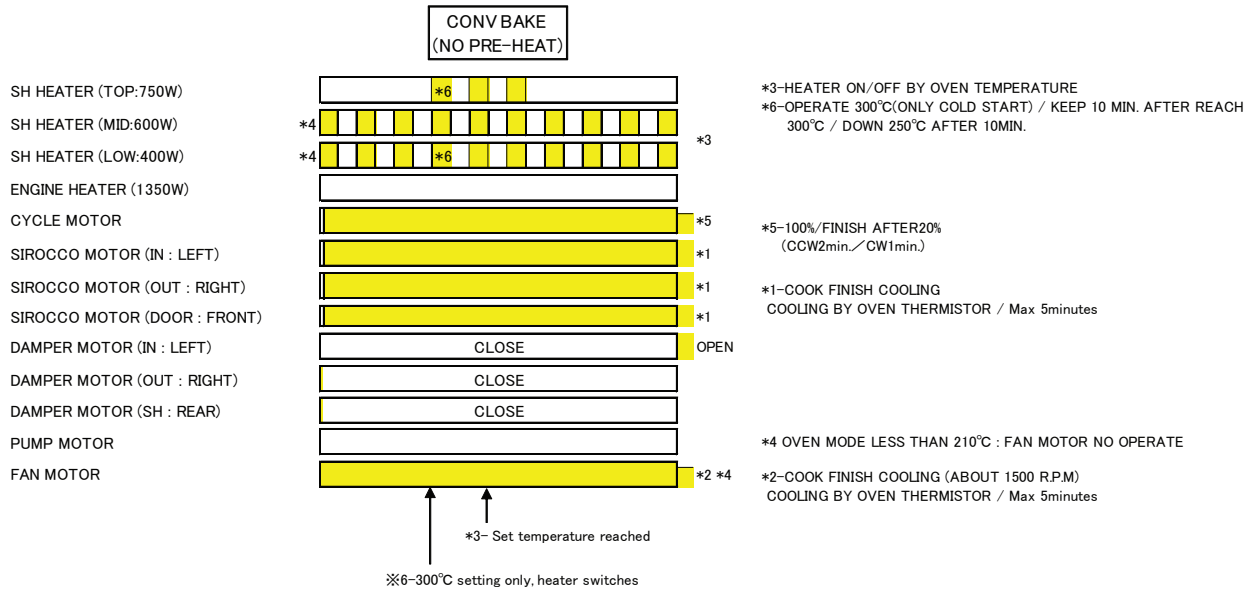
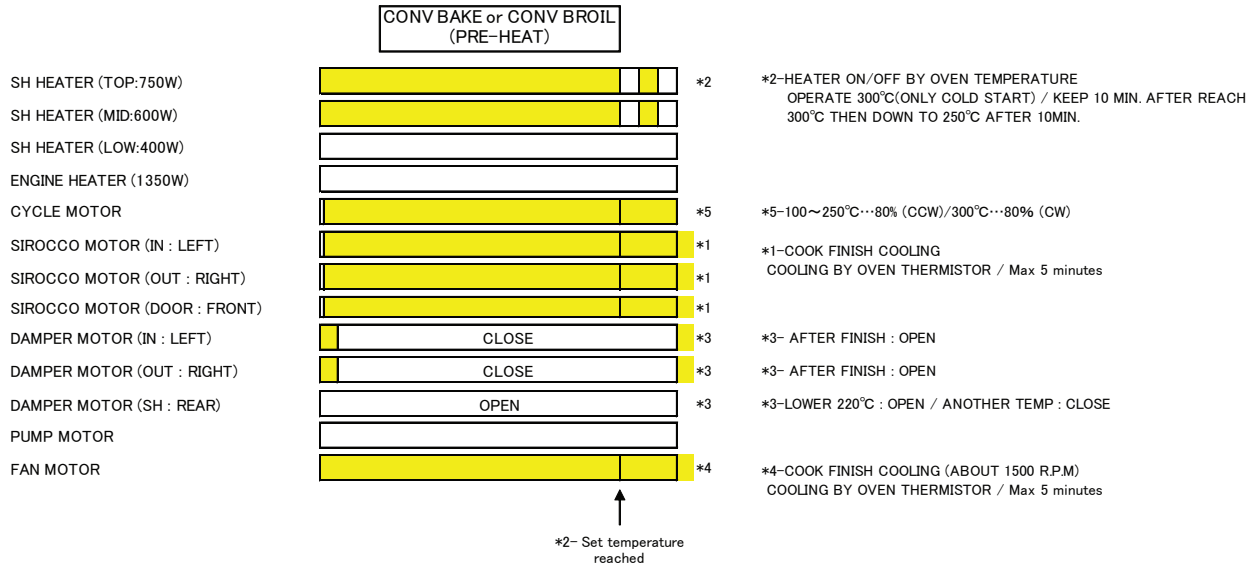
*5 45sec. BEFORE FINISH or AFTER FINISH
DOOR CLOSE : 70% (CCW); DOOR OPEN : 20% (CCW)

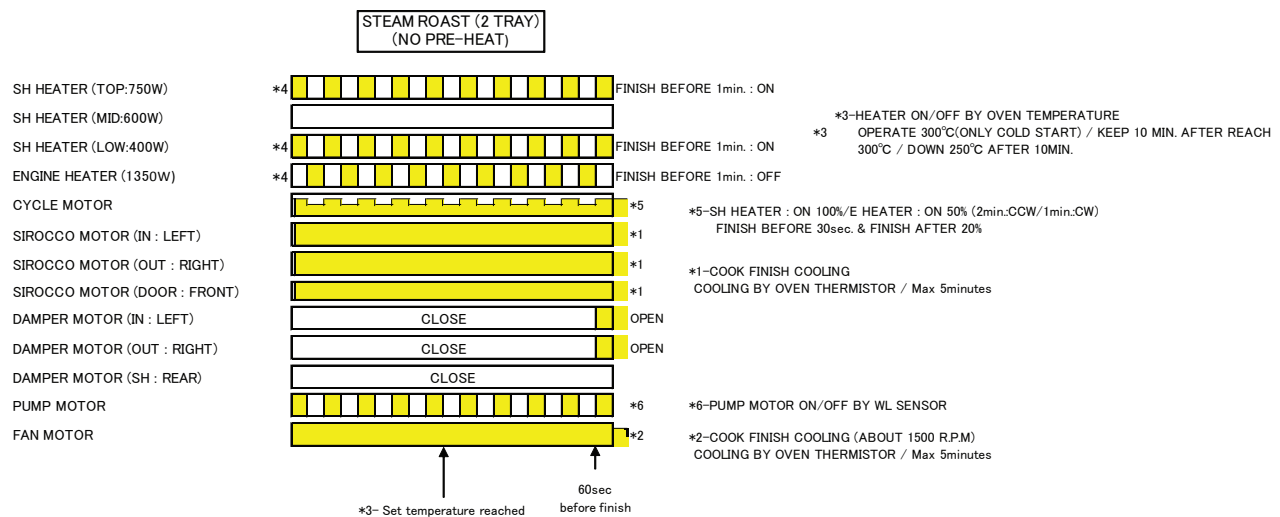
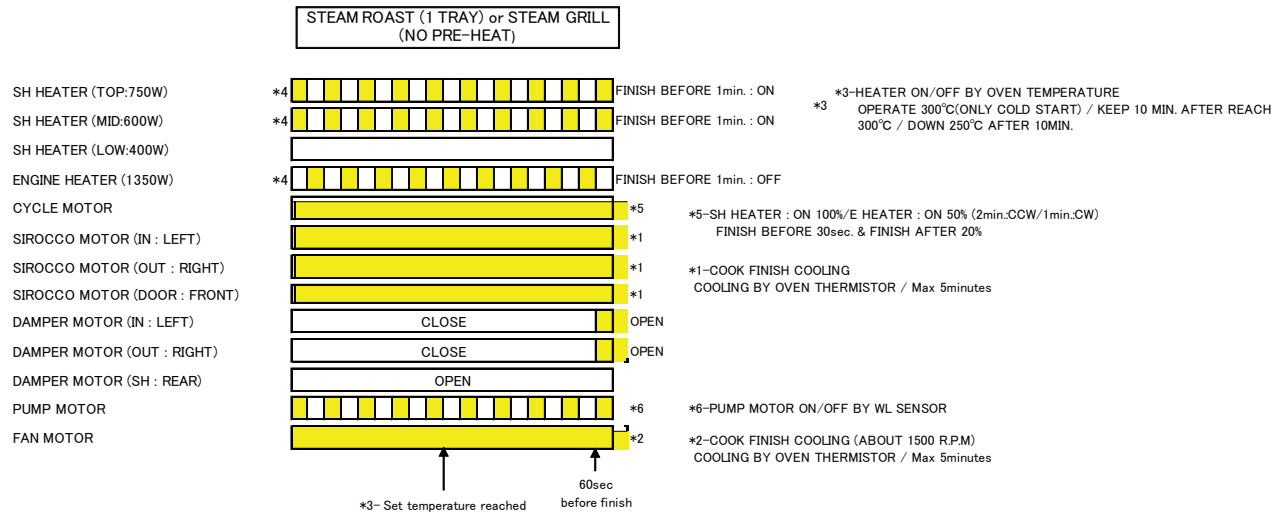
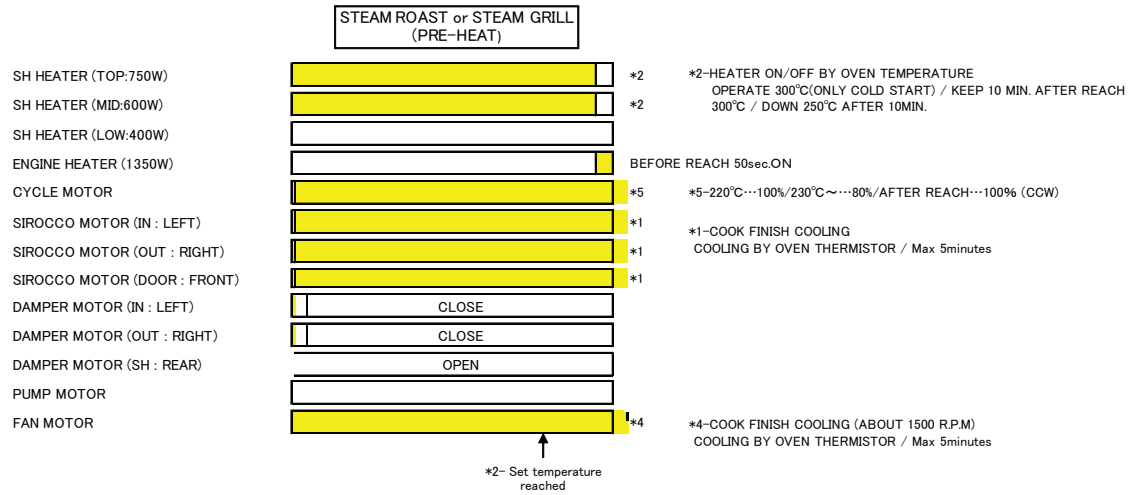
*8- AFTER FINISH: OPEN

*6-MOTOR ON/OFF BY WL SENSOR

*2-COOLING AFTER FINISH : ABOUT 1500 R.P.M. for 10 MINUTES

*4 START~10'00" 100%
E HEATER 10'00"~15'00" 75%
15'00"~ 67%





How to replace the main parts

[1] Necessary tools

- Phillips screwdriver
- Round nose plier with side cutter
- Slotted screwdriver
- 7mm nut driver
- Spacer/ carpenter's square (width of 0.8 mm)

[2] Preparation

Before the work, be sure to complete the following in order to prevent electric devices from being watered.

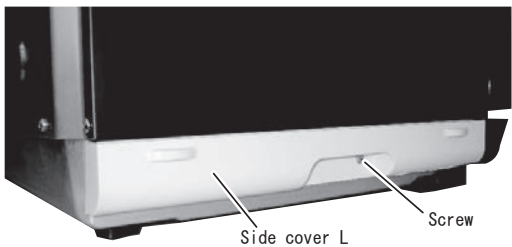
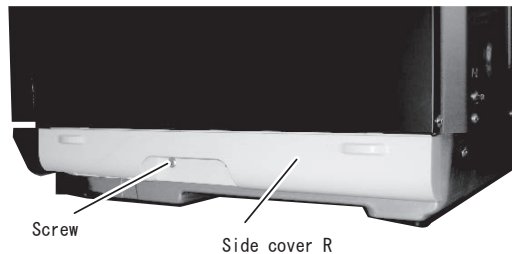
1. After operating the product when water is used with such function as "steamed food", sometimes water remains inside the product (tube pump K, various tubes, engine unit).

Fit the water tank and the drip pan and perform the "forced draining" of test mode 6.

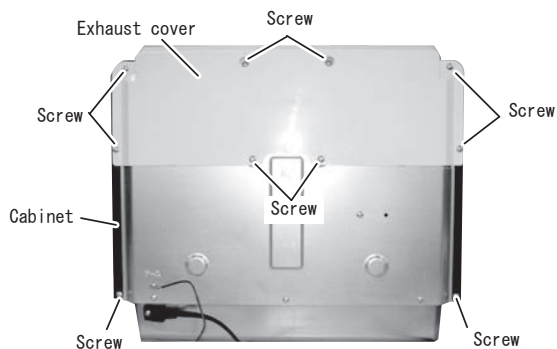
2. After the "forced draining", please first remove the water tank and the drip pan. When turning over the main body, residual water in the water tank and the drip pan may leak sometimes.

[3] Cabinet


1. Remove the screw which fastens the side cover R onto the bottom plate.
2. Slide the side cover R onto the rear plate and remove the hooks (3x) from the cabinet.





3. Remove the side cover by the same way. (1 screw)
4. Remove the exhaust cover. (8 screws)
5. Remove the cabinet. (2 screws)



⚠ Warning

 Pull out the power plug from the socket before repair or disassembly. (Possibility of electric shock)

 Do not get your hand pinched. (Possibility of injury)

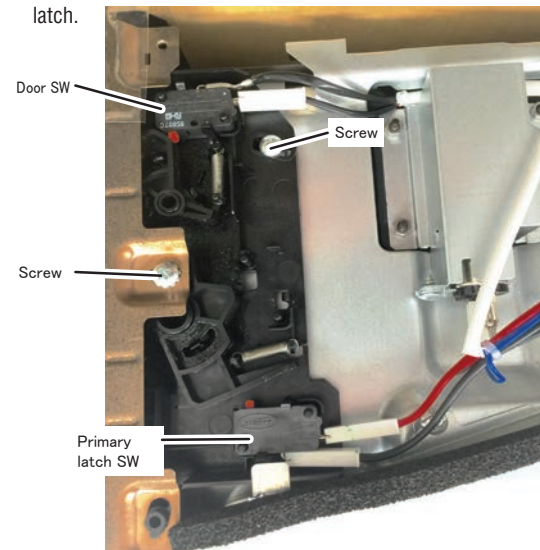
 Do not allow the harness to be pinched in the cabinet. (Possibility of electric shock)

[4] Oven lamp

1. Remove the cabinet. [3] Reference
2. Remove the harness from the oven lamp.
3. Remove the side duct AG bottom. (1 screw)
4. Remove the oven lamp. (1 screw)

[5] Switch SWK

1. Remove the cabinet. [3] Reference
2. Remove the reinforcing AG (right side) (3 screws)
3. Remove the harness from each switch.
4. Remove the 2 screws which fasten the latch SWK and lift up the latch.



Note: Be sure to adjust the latch after replacement of the latch base AG or after a door adjustment.

[Latch adjustment method]

After finishing the door adjustment, move the latch base AG and fasten the screws (2 screws) while the door is closed to firmly press the plunger of the primary switch. . At this time, because the latch base AG is going to rotate clockwise under the force of the driver, stop rotation with your hand and make adjustment so as not to press the primary switch with too much force.

[6] Door SW

1. Remove the latch SWK. [5] Reference
2. Pull out the door SW while expanding the two claws that retain the door SW outward at the same time.

[7] Motor SW and primary switch SW

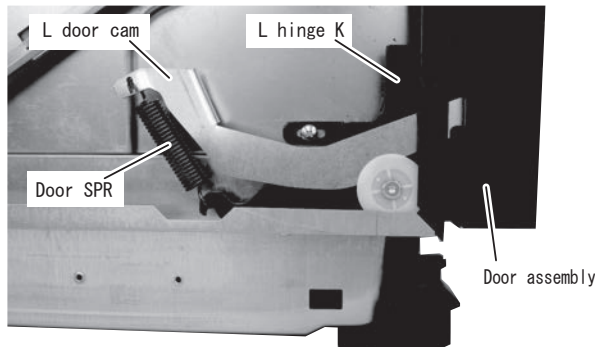
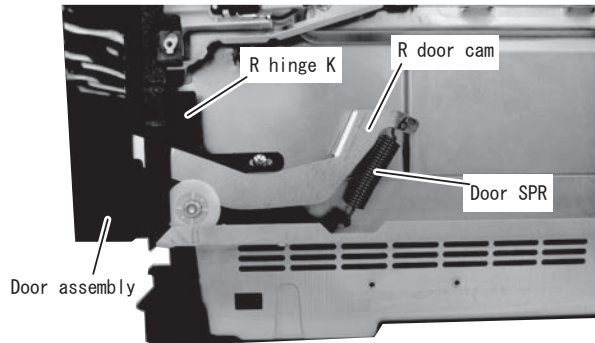
1. Remove the cabinet. [3] Reference
2. Remove the harness from the motor SW or the primary latch SW
3. Pull out the motor SW or the primary latch SW while expanding the two claws that retain the motor SW or the primary SW outward at the same time.

Reference: When removing the motor SW or the primary latch SW, it is unnecessary to remove the latch SWK.

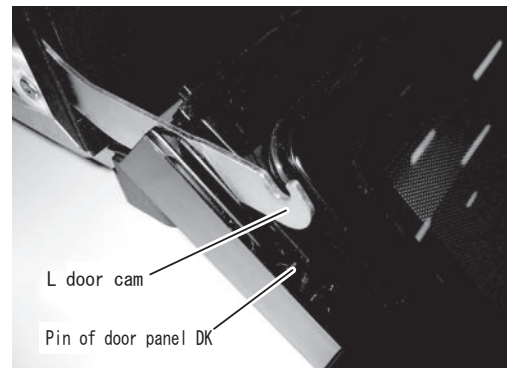
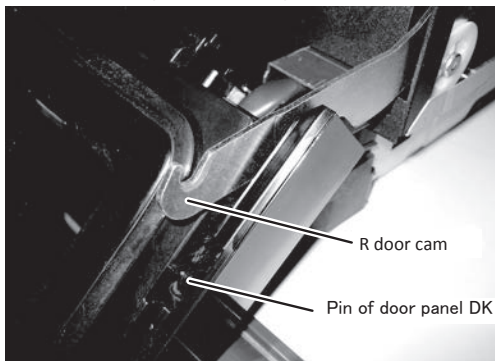
[8] Door assembly

Removal method

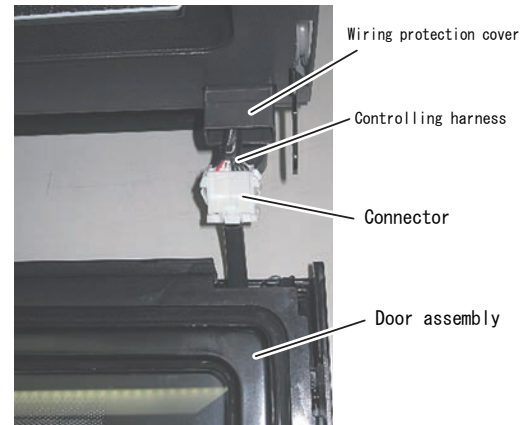
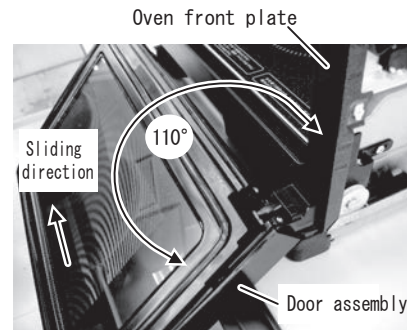
1. Remove the cabinet. [3] Reference
2. Close the door.
3. Remove the left and the right door SPRs.
When removing the door SRR, please remove the downside of the door SRR from the R hinge K or the L hinge K.



4. While slowly opening the door, remove the R door cam and the L door cam from the pin of the door panel DK.



5. Remove the R door cam and the L door cam from the oven DK.
6. With the door opened at over 110°, slide the door leftward and pull the hinge pin of the door panel DK from the R hinge K and the L hinge K and remove the door.



7. Pull the door assembly toward you and pull out the harness until the connector hidden in the wiring protecting cover appears.
8. Remove the connector.

Note: After removing the connector, pull out the controlling harness so that it would not be brought into the wiring protecting cover. If it is brought in, please turn the main body over, open the bottom plate and pull out the harness again.

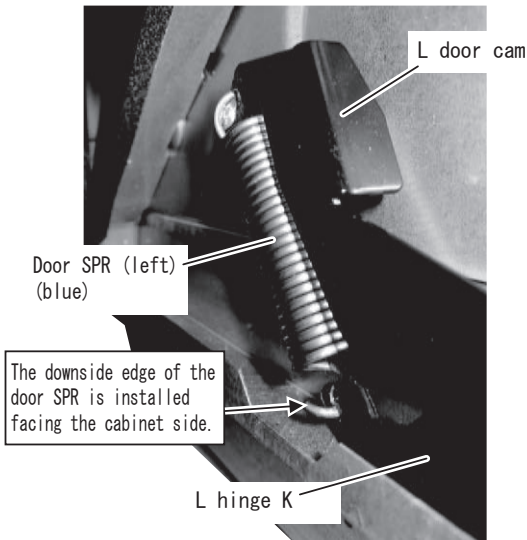
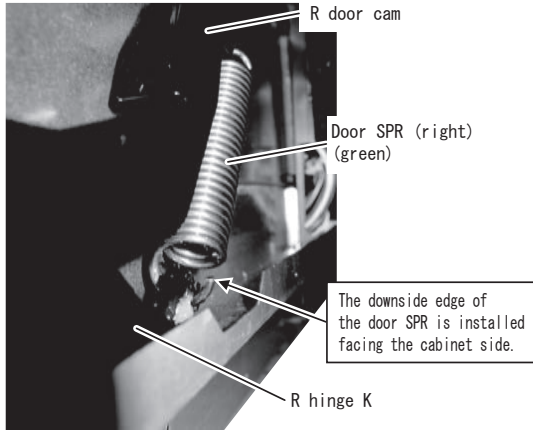
Installation method

1. Connect the harness of the door to the controlling harness and insert the connector into the wiring protecting cover.
- Note: Do not reversely insert the connector of the controlling harness and the connector of the display board harness when connecting them.
2. With the door opened at over 110°, firstly insert the hinge pin on the right side of the door panel DK into the R hinge K and then slide the door rightward and insert the hinge pin on the left side.
3. With the door opened at about 45°, hook the R door cam and the L door cam onto the left/right pin of the door panel DK.

Note: When hooking the R door cam and the L door cam onto the pin of the door panel DK, twist the pin to check whether the tip hook part is properly inserted.

1. With the door closed, fit the door SPR to the R door cam and the R hinge K as well as the L door cam and the L hinge K respectively.

Note: Please fit the green door SPR to the right side and fit the blue door SPR to the left side. Then, attach the downside ends of the door SPR facing the cabinet side respectively. Sometimes the door SPR might be broken and damaged if the left side and the right side are mixed up or the installation direction is mistaken.

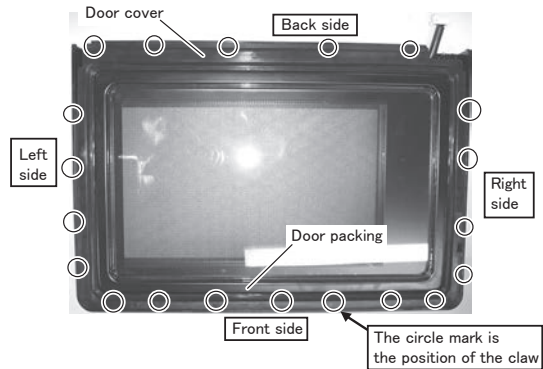
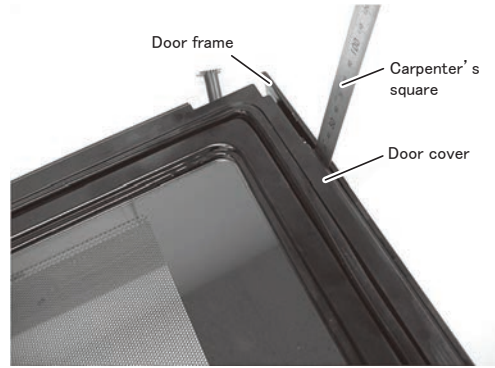


Note:
 Be sure to conduct latch adjustment. (Possibility of malfunction)

[9] Door cover and door packing

1. How to remove door cover

- 1) Insert a carpenter's square between the door cover and the door frame. While remove the claws in the sequence of the right side (4 claws), the front side (7 claws) and the left side (4 claws), slightly lift up the door cover where the claws are removed.



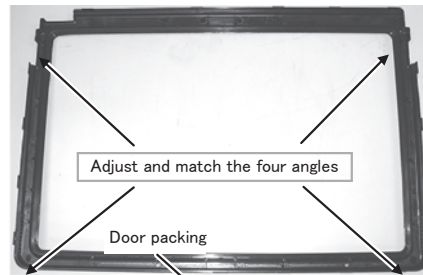
- 2) Lift the door cover up while pulling it toward you and remove the claws (5x) on the back side.

Reference: If it is difficult to remove the claws on the back side, please first remove the door packing.

- 3) Remove the door packing from the door cover.

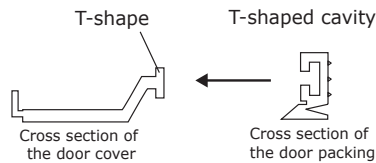
2. How to install the door packing

- 1) Align the four corners of the door packing with the four corners of the door cover.



A photograph taken from the back of the door cover

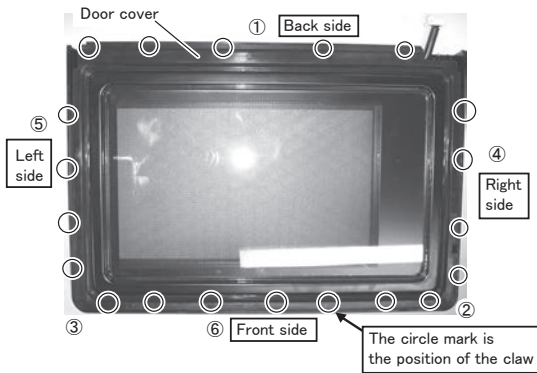
- 2) Fit the four corners of the door packing into the four corners of the door cover. The cross-section shape where the door packing is fit into the door cover becomes T-shape, cover the part with the door packing.



- 3) Next, install the straight line part and then the whole periphery firmly.
- 4) Check both the outside and the inside of the door cover to see whether any part of the door packing is loosened, whether the four corners of the door packing are aligned to the four corners of the door cover and whether the door packing is uniformly filled into the whole periphery of the door cover without loosening or stretching.

3. How to install the door cover

- 1) Secure the door packing to the door cover. (Refer to 2 stated above)
- 2) Press the door cover into the door frame in the sequence of the back side, the front left/right corners, the right side, the left side and the front side and then fit it into the claws of the door frame.



- 3) Press the whole periphery of the door cover again to confirm that it is firmly secured.
- 4) Check whether the door packing comes off and whether the four corners of the door packing are misplaced to ensure that it is uniformly fit without loosening or pricking.
- 5) If any abnormality occurs to the door packing, remove the door cover again and install the door packing again.

Note: 1) Assemble the door packing with the door frame after filling the door packing into the whole periphery of the door cover.

- 2) After the assembly, press the whole periphery so that the door packing is fit uniformly without any projection.
- 3) Take care not to damage the surface.
- 4) After the assembly, confirm that there is no electric wave leakage or steam leakage from the door.
- 5) When using a new door cover, apply soapy water onto the whole internal periphery of the door packing and then insert it into the door frame. If the soapy water is not applied, the door cover may crack sometimes.

[10]Door panel DK, handle, F finder glass

1. How to remove the door panel DK

- 1) Remove the door assembly from the main body of the product. [8] Reference
- 2) Remove the door cover from the door frame. [9] Reference
- 3) Remove the door panel DK from the door frame. (6 screws)

Note: Take care not to leave fingerprint or dirt on the punching area inside the door panel DK or on the inside of the F finder glass.

2. How to remove the handle

- 1) Remove the door panel from the door frame. (Refer to "1. How to remove the door panel DK")
- 2) Remove the door reinforcing AG from the door frame. (10 screws)
- 3) Remove the handle (glass stopper attached) from the door frame.
- 4) Remove the glass stopper from the handle. (4 screws)

3. How to remove the F finder glass

- 1) Remove the handle (glass stopper attached) from the door frame. (Refer to "2. How to remove the handle")
- 2) Remove the glass bottom AG. (6 screws)

- 3) Remove the F finder glass from the frame.

Note: Be careful because the F finder glass is fixed into the door frame on the lower right with double sided adhesive tape in front view.

4. Installation steps of the F finder glass

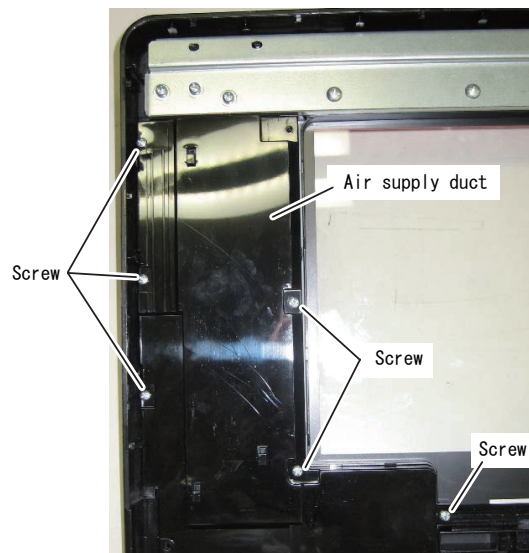
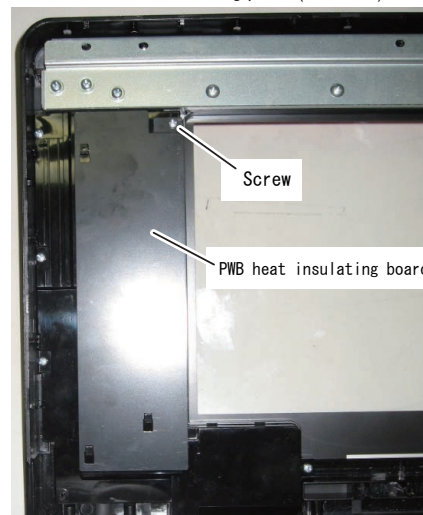
Fit the F finder glass while the door decoration, the door sheet and the panel DEC ASSY are adhered to the door frame.

- 1) Align the lower edge of the F finder glass to the rib of the door frame and align the right edge to the left edge of the panel DEC ASSY. Attach it onto the door frame. (Fixed with double sided adhesive tape).
- 2) Install the glass bottom AG into the door frame. (6 screws)
- 3) Fit the handle (glass stopper attached) into the door frame. Turn the door frame over while supporting the handle and the F finder glass so that they would not fall.
- 4) Install the door reinforcing AG. Tighten the screws from the center (10 screws).

[11] DC fan motor (door)

[FOR REFERENCE ONLY NON-REPLACABLE]

1. Remove the door assembly. [8] Reference
2. Remove the door cover. [9] Reference
3. Remove the door panel DK. [10] Reference
4. Remove the PWB heat insulating plate. (1 screws)



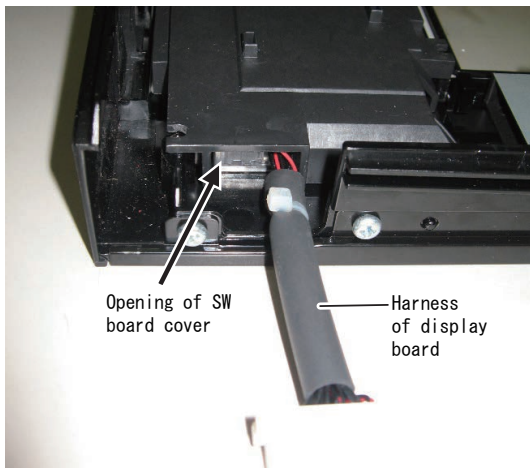
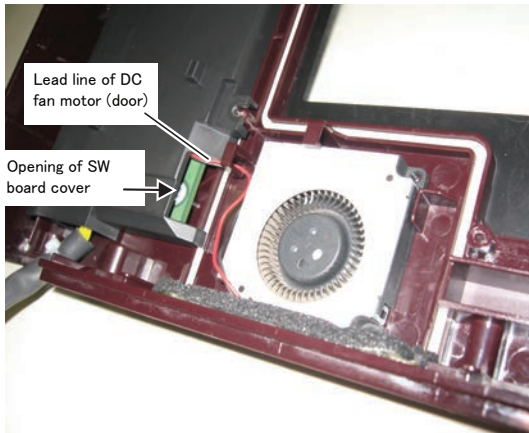
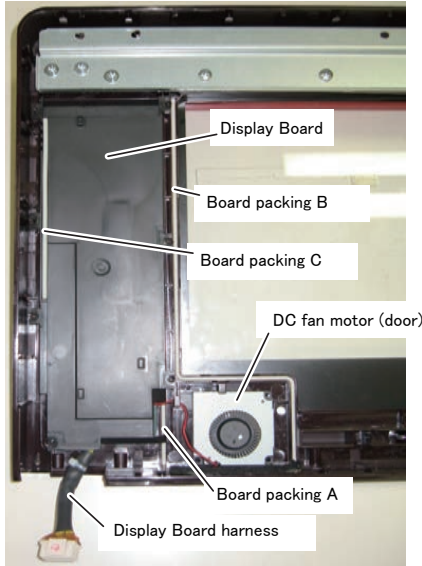
1. Remove the air supply duct. (6 screws)
2. Remove the display board cover.

Note: When installing the display board cover, please pay attention to the following three points.

The board packings A, B and C are installed.

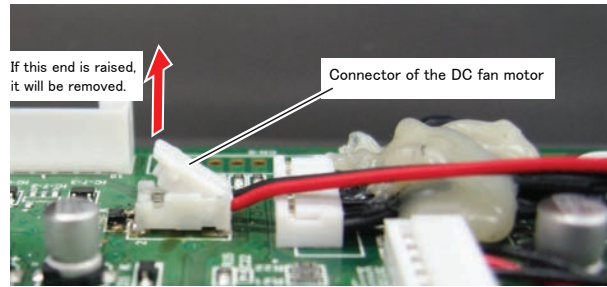
The lead wire of the DC fan motor (door) goes through the opening of the display board cover.

The harness of the display board goes through the opening of the v board cover.



3. Remove the connector of the DC fan motor (door) from the display board.

Note: It will be removed once the end of the connector is lifted up.



4. Remove the DC fan motor (door) from the door frame.

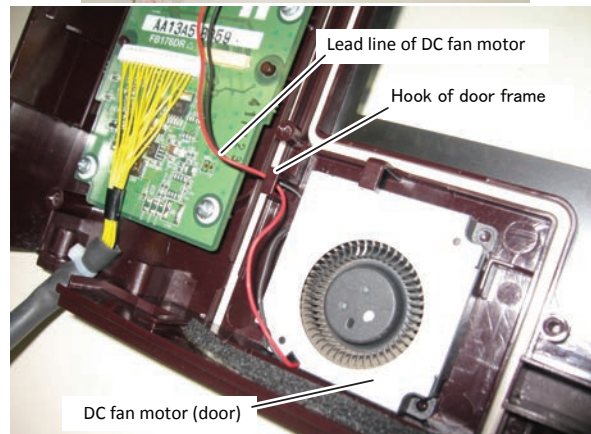
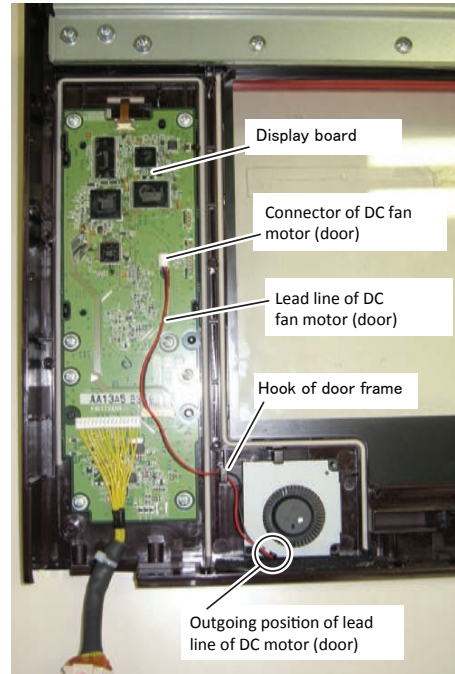
Precautions on installation of DC fan motor (door)

When installing the DC fan motor, please pay attention to the following three points.

Install it in the direction where the outgoing position of the lead wire of the DC fan motor (door) faces the lower left.

Pass the lead wire of the DC fan motor (door) through the hooks of the frame.

When installing the SW board cover, avoid clamping the lead wire of the DC fan motor (door).



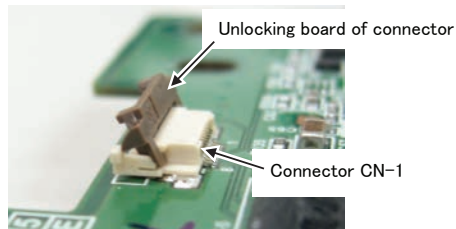
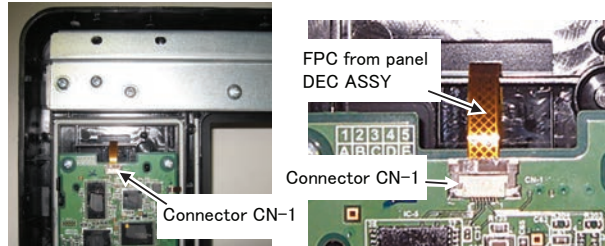
[12] Display board

1. Remove the door assembly. [8] Reference
2. Remove the door cover. [9] Reference

1. Remove the door panel DK. [10] Reference
2. Remove the DC fan motor (door) [11] Reference
3. Remove the FPC (flexible printed circuit) coming from the panel DEC ASSY off the connector CN-1 of the display board.

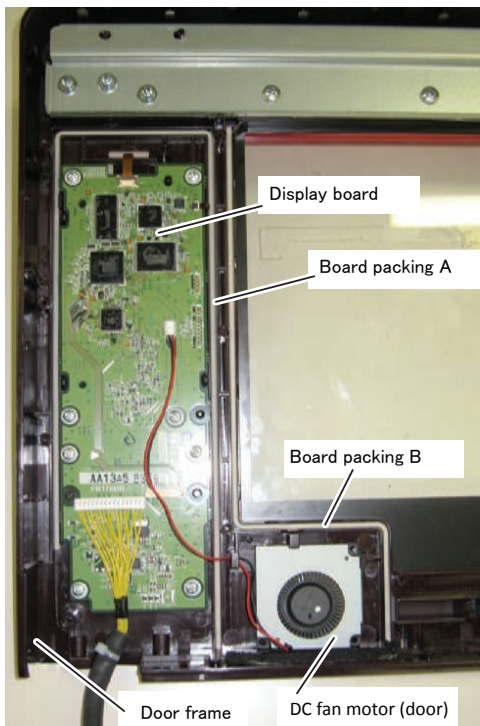
Note: Before removing FPC from the connector, please unlock the connector.

Flip up the thin long plate attached to the connector to unlock.



4. Remove the display board. (8 screws)

Note: When installing the display board and the DC fan motor (door), please confirm that the board packing A and the board packing B have been installed into the door frame. Additionally, when installing the SW board cover, please confirm that the board packing C has been installed.

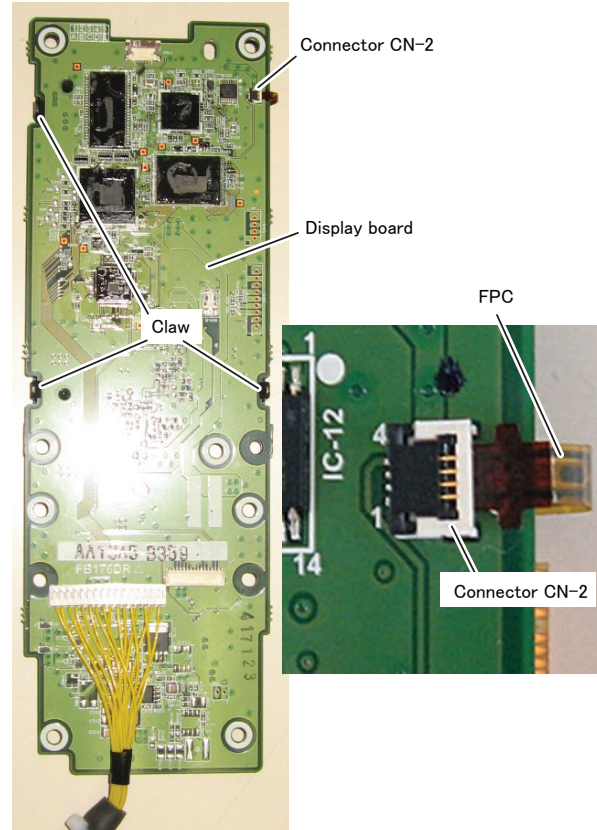


[13] LCD unit

[FOR REFERENCE ONLY NON-REPLACABLE]

1. Remove the door assembly. [8] Reference
2. Remove the door cover. [9] Reference
3. Remove the door panel DK. [10] Reference

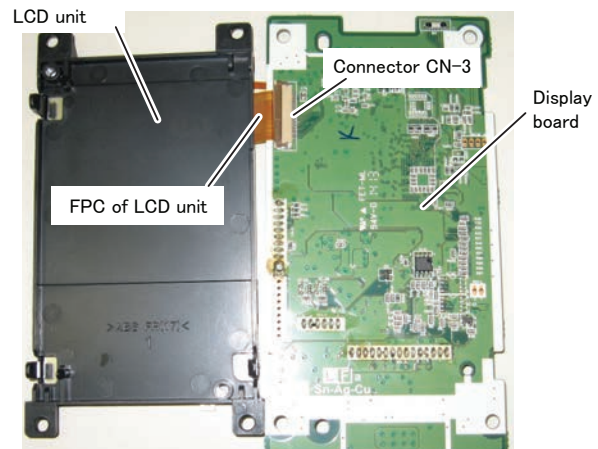
4. Remove the DC fan motor (door) [11] Reference
5. Remove the display board. [12] Reference
6. Release the lock of the connector CN-2 of the display board and remove the FPC which is inserted into the connector CN-2.



7. Remove the claws (3x) of the LCD unit from the display board and turn over the display board.

Note: At this time, do not pull FPC which connects the LCD unit with the display board.

8. Release the lock of the connector CN-3 and remove the FPC which is inserted.



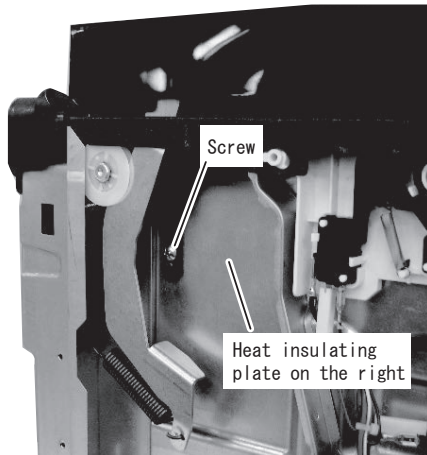
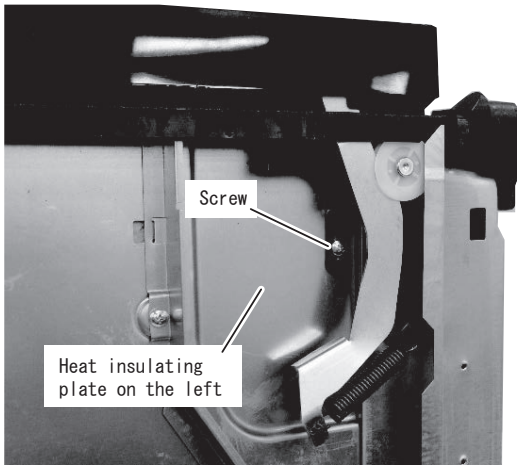
[14] Door adjustment

1. After installing the door, loosen the screw of the latch base AG and rotate the main body so the door faces upward.

Note: Underlay it with something soft before rotating it to prevent

parts from deforming.

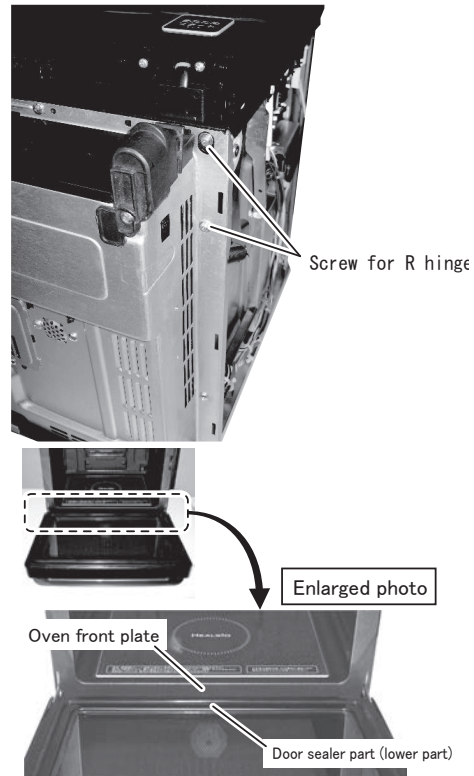
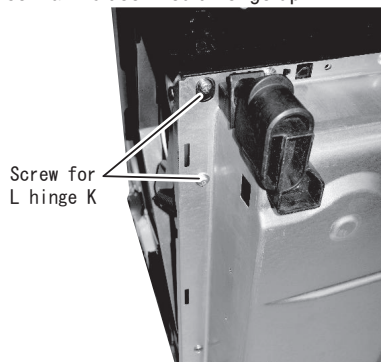
1. Remove the screws which fix the R hinge K and the L hinge K onto the right heat insulating plate and the left heat insulating plate respectively (1 screw each).



2. Once the four screws at the R hinge K/the L hinge K are loosened, open the door and insert a 0.8 mm spacer (preferably a magnet sheet type) between the door sealer part (lower part) and the oven front plate. Then, close the door and tighten the four screws at the hinges.

Note: If the screws are tightened while putting the hinges fully backward without clamping the spacer, there will be a gap on the upper side of the door. Therefore, please be sure to use the spacer.

When tightening the screws, please gently press the handle so that the door would not go up.



3. Attach the R hinge K and the L hinge K to the right and the left of the heat insulating plate with screws (one screw each) respectively.
4. Adjust the latch. [5] Reference

[15] AC cord

1. Remove the screw (1x) which fastens the AC cord to the bottom plate.
2. Remove the AC cord from the angle hole of the bottom plate.
3. Remove the harness which is connected to the AC cord.

Note: Do not damage the cover of the harness at the angular hole of the bottom plate.

[16] The D motor (intake) and the damper SW (intake)

1. How to remove the D motor (intake)

- 1) Remove the cabinet. [3] Reference
- 2) Remove the cabinet. (3 screws)
- 3) Remove the harness from the D motor (intake).
- 4) Remove the screws (2x) which fix the D motor (intake) to the intake duct cover.
- 5) Pull out the D motor (intake) only while pressing the intake damper cam with your hand so that the intake damper cam would not come off the shutter shaft.

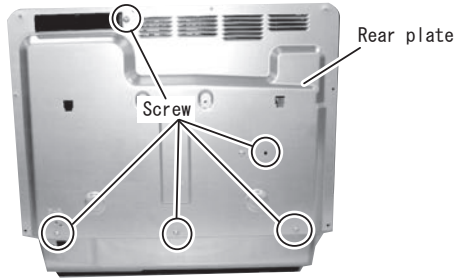
Note: Because it is difficult to insert the intake damper cam into the shutter shaft again, please take care not to pull the intake damper cam out from the shutter shaft. If it is pulled out, please remove the intake duct top and insert it again.

2. Damper SW (intake)

- 1) Remove the D motor (intake) (Refer to "1. How to remove the D motor (intake) in the above)
- 2) Remove the harness from the damper SW (intake).
- 3) Pull out the damper SW (intake) from the intake duct cover.

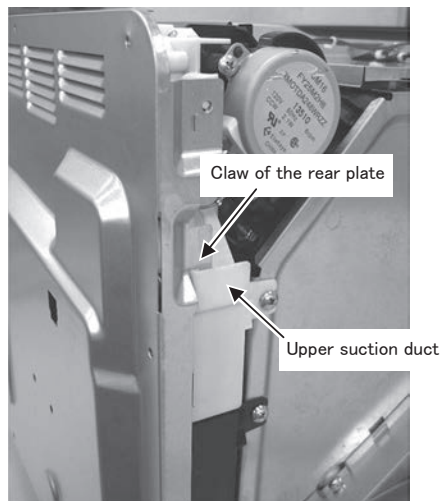
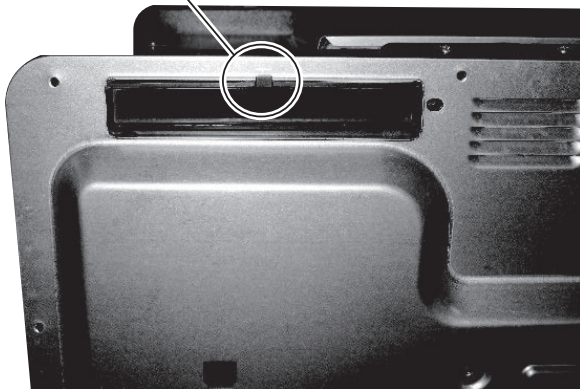
[17] Rear plate

1. Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
2. Remove the earth wire. (1 screw)
3. Remove the left/right reinforcing AG. (3 screws each)
4. Remove the screws (5x) which fasten the rear plate to the bottom plate, the engine unit and the steam duct.



5. Lift up the upside of the rear plate while pulling its lower end out a few millimeters, remove the claw of the rear plate from the intake duct top and remove the rear plate from the claw of the steam duct cover.

Claw of the steam duct cover

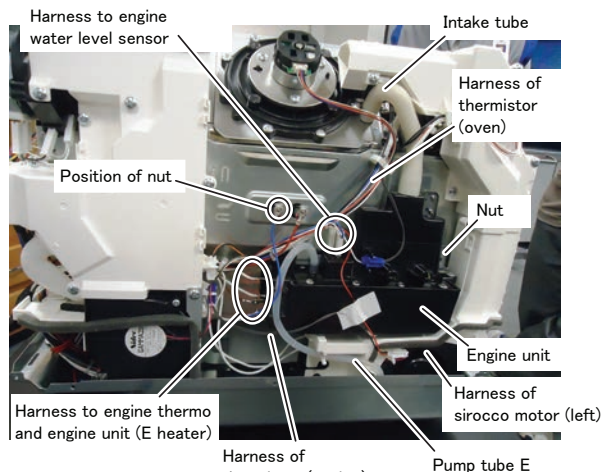


[18] Engine unit, engine thermo, thermistor (engine)

1. How to remove the engine unit

- 1) Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference

- 2) Remove the left/right reinforcing AG and the rear plate. [17] Reference
- 3) Remove the steam tube and the pump tube E from the engine unit.
- 4) Remove the controlling harness from the following parts.
Thermistor (oven)
Sirocco motor (left)
Engine unit (engine liquid level sensor)
Thermistor (engine)
- 5) Remove the main harness from the following parts.
Engine thermo
Engine unit (E heater)
- 6) Remove the nuts (2x) which fix the engine unit to the oven DK.



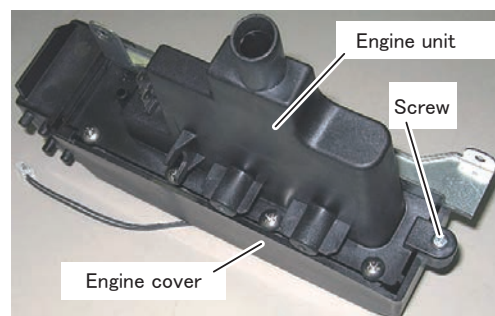
2. How to remove the engine thermo

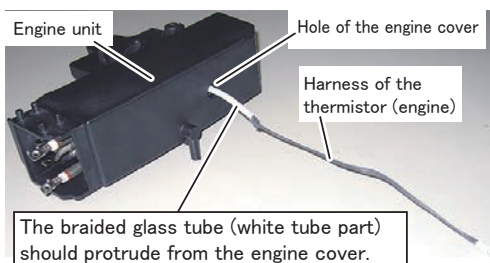
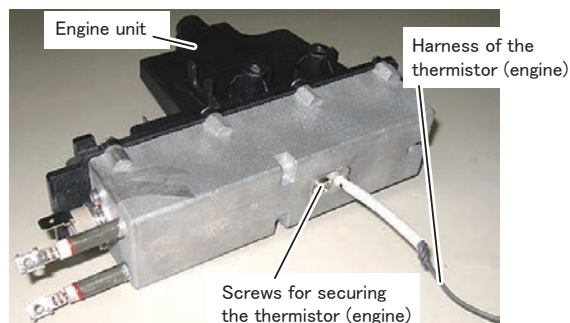
- 1) Remove the engine unit. (Refer to "1. How to remove the engine unit")
- 2) Remove the screws (2x) which fix the engine thermo to the engine unit.

3. How to remove the thermistor (engine)

- 1) Remove the engine unit. (Refer to "1. How to remove the engine unit")
- 2) Remove the engine cover. (1 screw)
- 3) Remove the thermistor (engine) from the engine unit. (1 screw)

Note: When installing the engine cover after attaching the thermistor (engine), lead the harness of the thermistor (engine) through the hole of the engine cover. At this time, make sure the harness of the thermistor (engine) is not nipped by the engine cover. Additionally, after screwing the engine cover onto the engine unit, confirm that the braided glass tube (white tube part) of the harness of the thermistor (engine) is protruding.





4. What to do after replacement of the engine unit

After installing a new engine unit, 1. Please perform the steamed food operation. When a new engine unit is installed, if the steamed food operation is not carried out, the engine unit will not work normally.

1. Steamed food operation

- 1) Inject water into the water tank until it reaches water level 2.
- 2) Press the key "Manual setting"
- 3) Select "Steamed food".
- 4) Set the operation time to 15 minutes.
- 5) Press the key "Warm-up start".
- 6) After the operation comes to an end, repeat the procedure from step 1) to step 5). (Repeat the 15-minute steamed food operation two times.)

Note: Do not stop operation halfway. If it is stopped, water will be left in the tube pump K. So, please conduct forced drainage in test mode 6.

After installing the engine unit, please confirm that the pump tube E is not obstructed where the tube of the engine unit is installed.

[Reason for steamed food operation]

Although the interior of the engine unit has a special coating to protect its surface, it has a water-repelling property. Therefore, in case of a new engine unit, water will not attach to the internal surface of the engine unit and it is hard to transmit the heat on the engine unit surface to the water even if the engine unit is heated. Water vapor cannot be generated and the engine unit is overheated. The thermistor (engine) detects abnormal temperature and the operation of the engine unit is stopped.

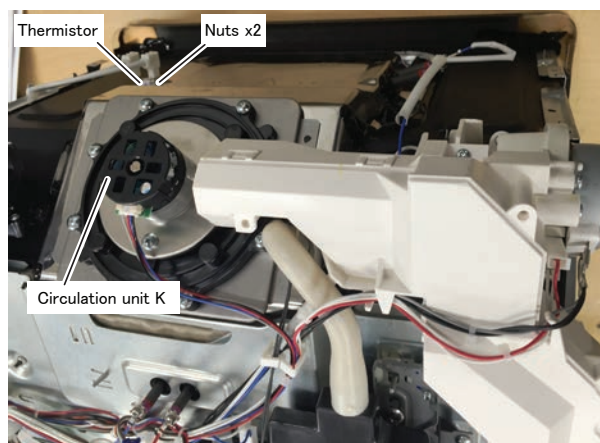
Hydrophilia of the internal surface of the engine unit can be improved by performing the steamed food operation and the thermal transmission will become normal.

[19] Circulation the unit K and thermistor (oven)

1. How to remove the thermistor (oven)

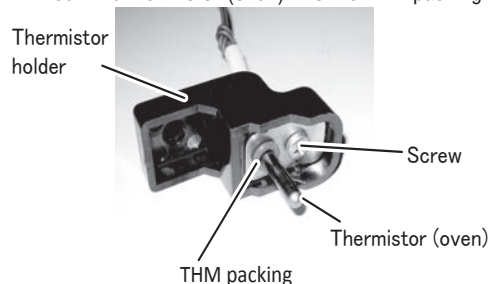
- 1) Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference

- 2) Remove the left/right reinforcing AG and the rear plate. [17] Reference
- 3) Remove the harness from the D motor (intake) and the damper SW (intake).
- 4) Remove the harness from the intake duct cover top and the hook of the intake duct top.
- 5) Remove the screws (5x) which fasten the intake duct top to the rear of the heat insulating plate, the bottom of the intake duct, the left of the heat insulating plate and the intake duct cover and remove the intake duct top.
- 6) Remove the thermistor holder from the circulation unit K. (1 screw)



- 7) Remove the thermistor (oven) from the thermistor holder. (1 screw)
- 8) Remove the thermistor (oven) from the THM packing.

Note: When fitting the thermistor (oven) to the thermistor holder, insert the thermistor (oven) into the THM packing.



2. How to remove the circulation unit K

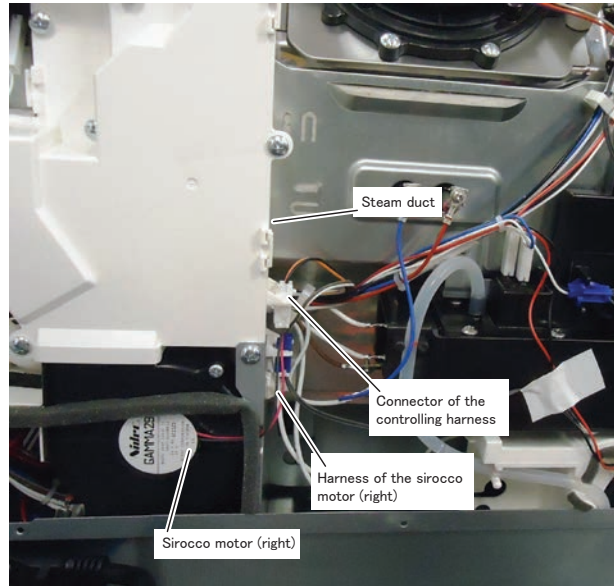
- 1) Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
- 2) Remove the left/right reinforcing AG and the rear plate. [17] Reference
- 3) Remove the thermistor holder. (Refer to 1. How to remove the thermistor (oven))
- 4) Remove the controlling harness from the circulation unit K.
- 5) Remove the screws (8x) which fasten the circulation unit to the oven DK.
- 6) Remove the circulation unit K from the oven DK.

Note: Install the circulation unit K while placing the connector on the rear plate.

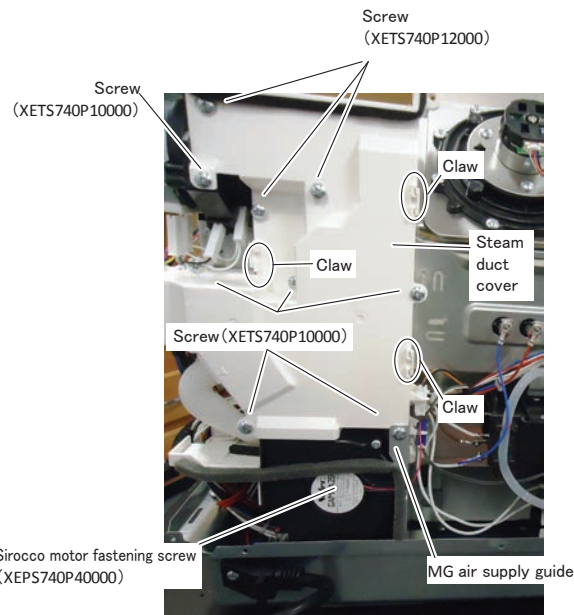
[20] Sirocco motor (right)

1. Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
2. Remove the left/right reinforcing AG and the rear plate. [17] Refer-

1. Remove the connector of the controlling harness from the steam duct side and remove the harness of the sirocco motor (right) from the controlling harness.



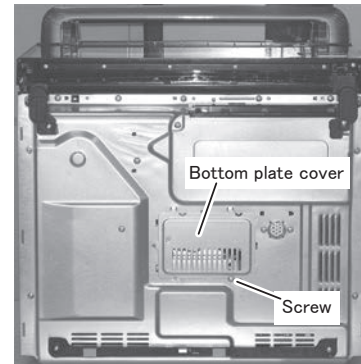
2. Remove the steam duct cover from the steam duct and the MG air supply guide. (9 screws and 3 claws)



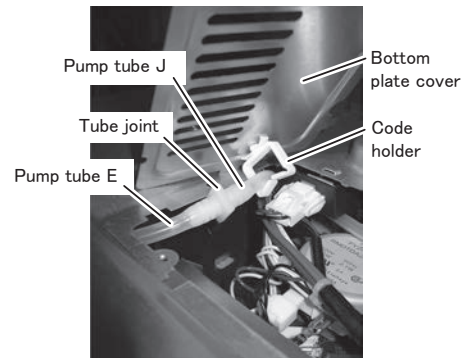
3. Remove the screw (1x) which fixes the sirocco motor (right) to the steam duct.
4. Remove the sirocco (right) from the steam duct.

[21] Bottom plate cover

1. Rotate the main body so that the bottom plate faces upward.
2. Remove the screw which fastens the bottom plate cover to the bottom plate.



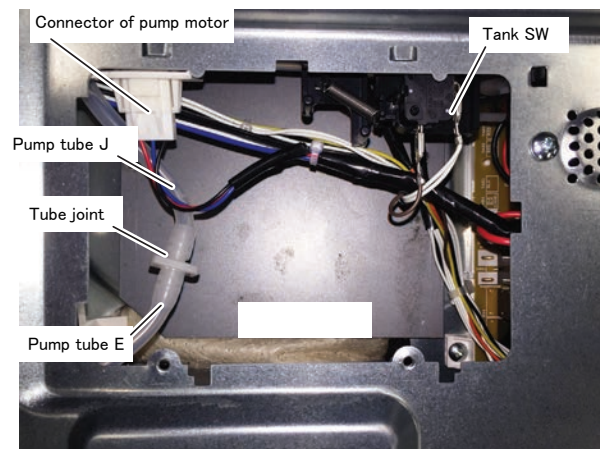
3. Remove the pump tube from the cord holder which is fitted on the bottom plate cover.



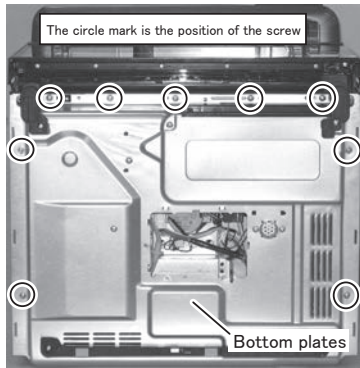
4. Remove the cord holder from the bottom plate cover.

[22] bottom plate

1. Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
2. Remove the left/right reinforcing AG and the rear plate. [17] Reference
3. Remove the AC cord. [15] Reference
4. Remove the bottom plate cover. [21] Reference
5. Remove the pump tube J or the pump tube E from the tube joint.
6. Remove the harness from the tank SW.
7. Remove the harness from the pump motor connector.



8. Remove the screw (1x) which fixes the R hinge K and the L hinge K onto the bottom plate.
9. Remove the screws (5x) which fasten the bottom plate to the front plate of the oven DK.
10. Remove the screws (one each for the left and the right respectively) which fix the bottom plate onto the heat insulating plate bottom..



Reference

When removing the bottom plate to replace the following parts, it is necessary to remove the reinforcing AG and the rear plate.

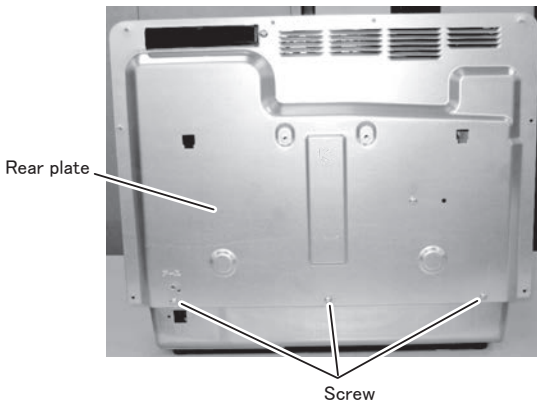
Relay board

Fan motor Tube pump K or pump motor

Drip pan SW Tank SW

In order to remove the bottom plate, first remove the screws (3 screws) which fix the rear plate to the bottom plate. Then, remove the bottom plate cover and remove the screw which fixes the bottom plate in the above-stated sequence. Then, move the part where the end of the rear plate covers the bottom plate to the rear of the product by about 2 mm and you can remove the bottom plate.

Note: When moving the rear plate, take care not to deform the rear plate.

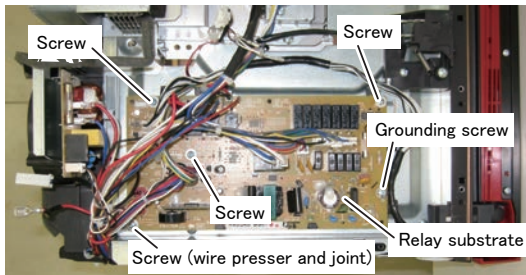


[23] Drip pan SW

1. Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
2. Remove the left/right reinforcing AG and the rear plate. [17] Reference
3. Remove the AC cord. [15] Reference
4. Remove the bottom plate cover. [21] Reference
5. Remove the bottom plate. [22] Reference
6. Remove the harness from the drip pan SW.
7. Remove the screws (2x) which fix the SW holder onto the heat insulating plate bottom..
8. Remove the claws (3x) of the SW holder from the heat insulating plate bottom and take out the SW holder.
9. Expand the 2 claws which retain the drip pan SW and remove the drip pan SW.

[24] Relay board

1. Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
2. Remove the left/right reinforcing AG and the rear plate. [17] Reference
3. Remove the AC cord. [15] Reference
4. Remove the bottom plate cover. [21] Reference
5. Remove the bottom plate. [22] Reference
6. Remove the harness from the relay board.
7. Remove the screw (1x) which fixes the relay board onto the heat insulating plate bottom..
8. Remove the screws (6x) which fix the relay board onto the board holder.
9. Remove the relay board from the board holder. (2 claws)



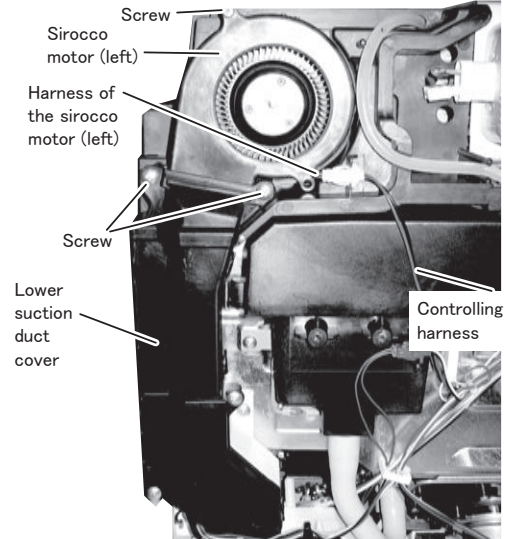
[25] Filter board

1. Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
2. Remove the left/right reinforcing AG and the rear plate. [17] Reference
3. Remove the AC cord. [15] Reference
4. Remove the bottom plate cover. [21] Reference
5. Remove the bottom plate. [22] Reference
6. Remove the harness from the filter board.
7. Remove the screw (1x) which fixes the filter board onto the filter TOAG.
8. Remove the filter board from the filter TOAG.

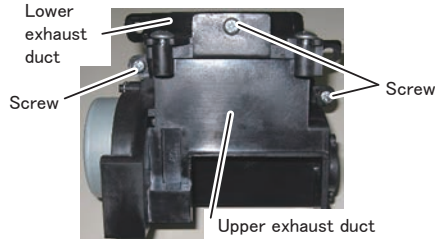
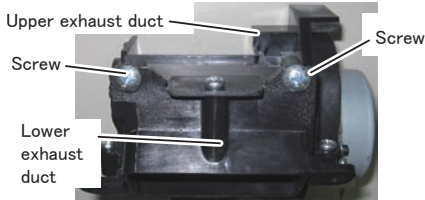
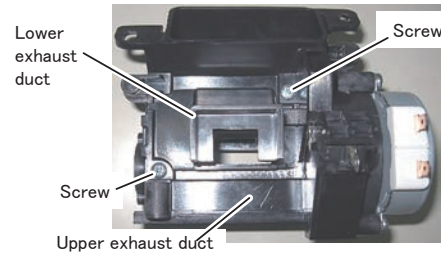
[26] Sirocco motor (left)

1. Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
2. Remove the left/right reinforcing AG and the rear plate. [17] Reference

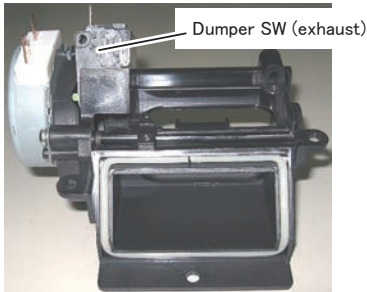
3. Remove the AC cord. [15] Reference
4. Remove the bottom plate cover. [21] Reference
5. Remove the bottom plate. [22] Reference
6. Remove the controlling harness from the harness of the sirocco motor (left).
7. Remove the intake duct cover. (2 screws)
8. Remove the screw (1 screw) which fixes the sirocco motor (left) to the bottom of the intake duct.
9. Remove the sirocco motor (left) from the bottom of the intake duct.



- 1) Remove the exhaust duct from the oven DK and remove the humidity sensor. (Refer to 1. How to remove the humidity sensor)
- 2) Remove the screws (7x) which fix the exhaust duct top to the exhaust duct bottom.

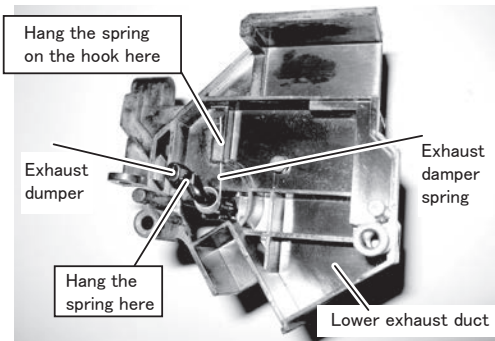


- 3) Remove the exhaust duct top from the exhaust duct bottom. (1 claw)
- 4) Remove the damper SW from the exhaust duct top.



3. Installation direction of the exhaust damper spring.

- 1) Please install the exhaust damper spring in the direction as shown in the following picture.



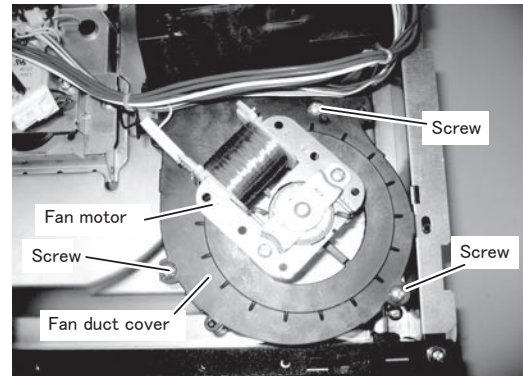
[27] D motor (exhaust)

1. Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference

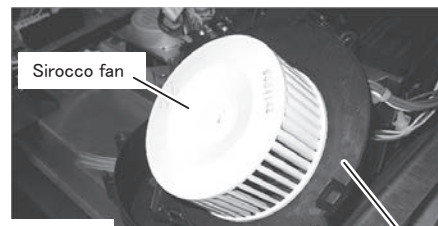
2. Remove the left/right reinforcing AG and the rear plate. [17] Reference
3. Remove the AC cord. [15] Reference
4. Remove the bottom plate cover. [21] Reference
5. Remove the bottom plate. [22] Reference
6. Remove the harness from the D motor (exhaust).
7. Remove the screws (2x) which fix the D motor (exhaust) to the exhaust duct top.

[28] Fan motor

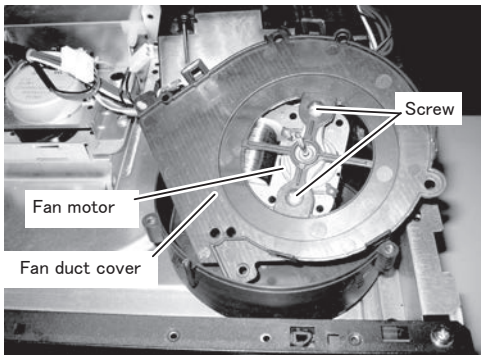
1. Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
2. Remove the left/right reinforcing AG and the rear plate. [17] Reference
3. Remove the AC cord. [15] Reference
4. Remove the bottom plate cover. [21] Reference
5. Remove the bottom plate. [22] Reference
6. Remove the harness from the fan motor.
7. Remove the screws (3x) which fix the fan duct cover to the fan duct.



8. Remove the fan duct cover from the fan duct. (5 claws)
9. Pull out the sirocco fan from the fan motor shaft.



10. Remove the screws (2x) which fix the fan motor to the fan duct cover.

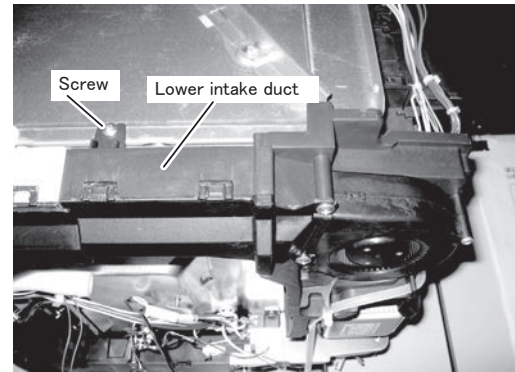
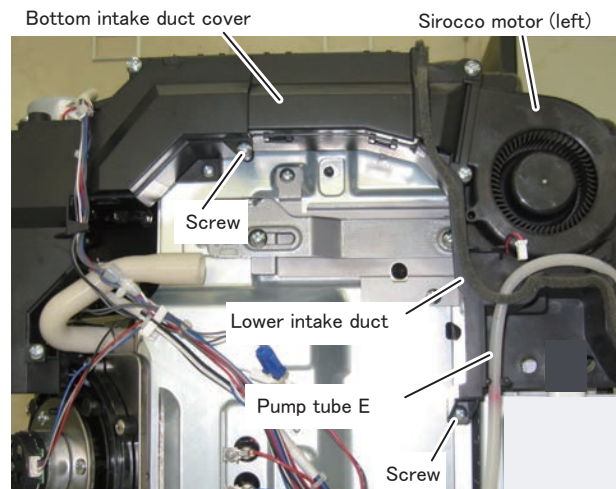


When fitting the sirocco fan to the fan motor, please apply bond (Cemedine Super-X) to the sirocco fan axle hole. Then, align the D cut part of the fan motor axle with the D cut part of the sirocco fan and then insert it.

[29] D motor (SH), damper SW(SH)

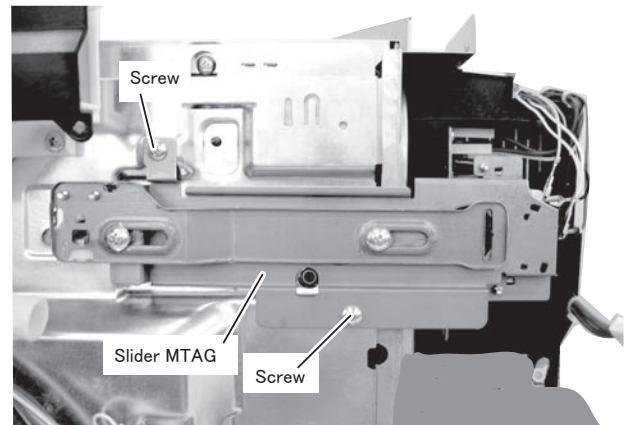
1. How to remove the D motor (SH)

- 1) Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
- 2) Remove the left/right reinforcing AG and the rear plate. [17] Reference
- 3) Remove the AC cord. [15] Reference
- 4) Remove the bottom plate cover. [21] Reference
- 5) Remove the bottom plate. [22] Reference
- 6) Turn the left side of the main body upward.
- 7) Remove the engine unit. 18 Reference
- 8) Remove the pump tube E from the hole of the intake duct bottom.
- 9) Remove the intake duct bottom while the sirocco motor (left and the intake duct cover bottom are attached. (3 screws)

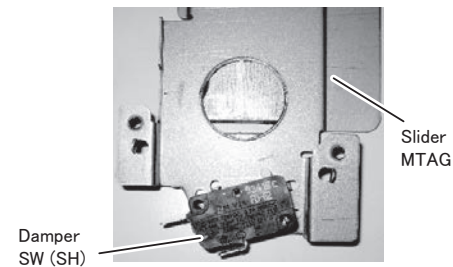
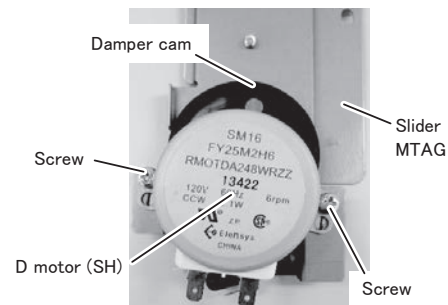


10) Remove the harness from the D motor (SH) and the damper SW (SH).

11) Remove the slider MTAG from the rear of the heat insulating plate. (2 screws)



12) Remove the slider MTAG from the D motor (SH). (2 screws)

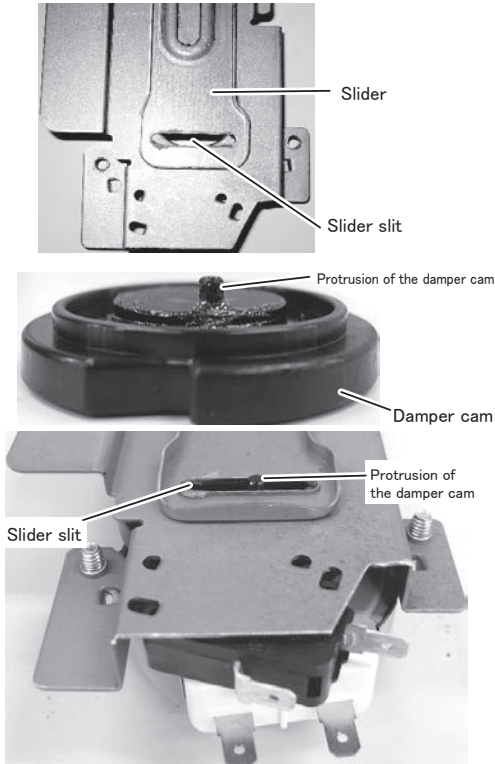


2. How to remove the damper SW (SH)

- 1) Remove the D motor (SH) (Refer to 1. How to remove the D motor (SH))
- 2) Remove the slider MTAG from the damper SW (SH).

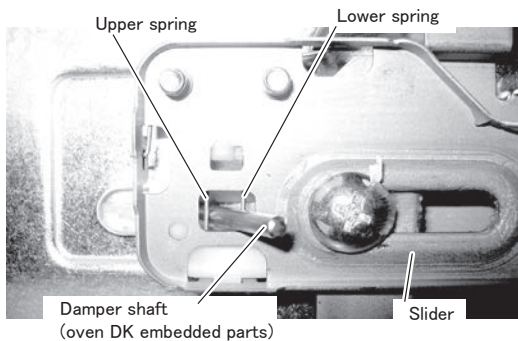
3. Precautions on installation of damper cam

When installing the damper cam, please insert the protruding part of the damper cam into the slit of the slider. If it is not inserted firmly, the SH damper embedded in the oven DK will not open/close normally.



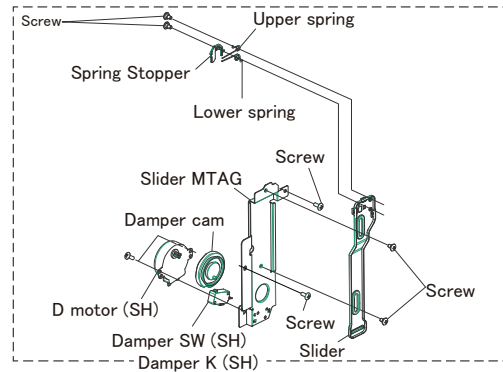
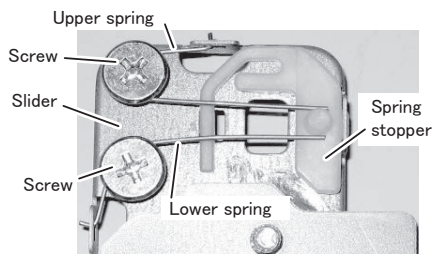
4. Precautions on installation of the slider

When installing the slider, please insert the damper shaft between the upper spring and the lower spring firmly. If it is not inserted firmly, the SH damper embedded in the oven DK will not open/close normally.



[30] Installation of the spring stopper, upper spring and lower spring

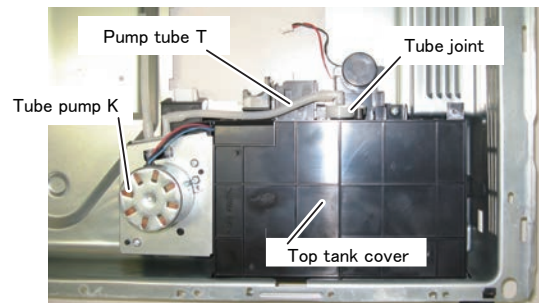
1. Please install the spring stopper, the upper spring, the lower spring and the slider as shown in the following picture.



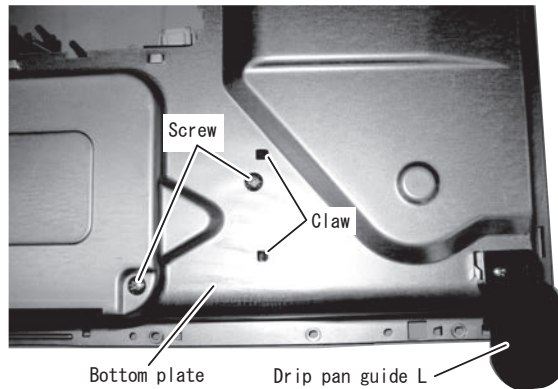
[31] Tube pump K, pump motor

1. How to remove the tube pump K

- 1) Remove the side cover R, the side cover L, the exhaust cover and the cabinet. [3] Reference
- 2) Remove the left/right reinforcing AG and the rear plate. [17] Reference
- 3) Remove the AC cord. [15] Reference
- 4) Remove the bottom plate cover. [21] Reference
- 5) Remove the bottom plate. [22] Reference
- 6) Remove the pump tube T from the tube joint.



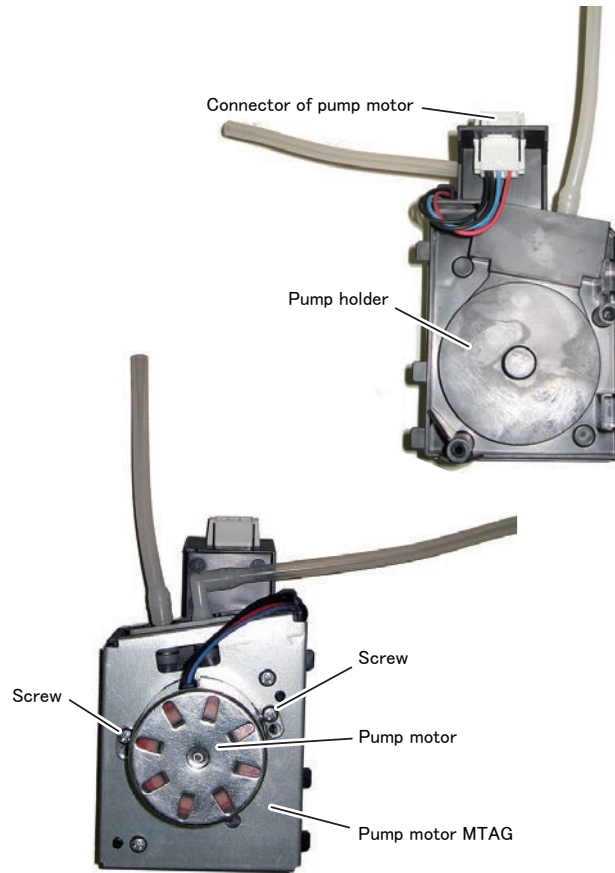
- 7) Remove the screws (2x) which fasten the tube pump K to the bottom plate.



- 8) Remove the claws (2x) of the tube pump K from the bottom plate.
- 9) Remove the tube pump K from the bottom plate.

2. How to remove the pump motor

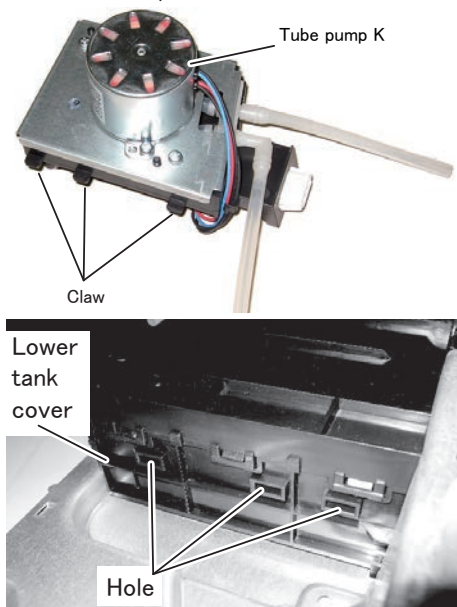
- 1) Remove the tube pump K from the bottom plate. (Refer to 1. How to remove tube pump K)
- 2) Remove the connector of the pump motor from the hole of the pump holder.
- 3) Remove the pump motor from the pump motor MTAG. (2 screws)



Note: When installing the pump motor, be sure to insert the connector of the pump motor into the hole of the pump holder. Otherwise, it cannot be connected to the main harness.

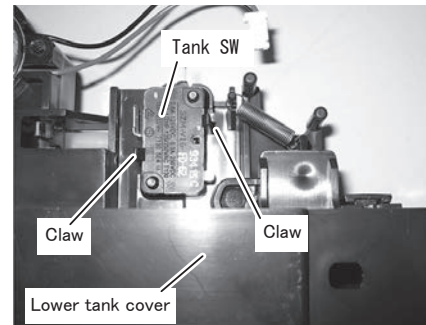
3. Precautions on installation of the tube pump K

- 1) When installing the tube pump K to the bottom plate, please first install the tank cover top, the tank cover bottom to the bottom plate.
- 2) While inserting the claws (3x) of the tube pump K into the holes (3x) on the tank cover bottom side, please install the tube pump K onto the bottom plate.



2. How to remove the tank SW

- 1) Pull out the tank cover bottom (attached to the tank cover top) from the opening of the bottom plate.
- 2) While expanding the claws (2x) which retain the tank SW, remove the tank SW from the tank cover bottom.

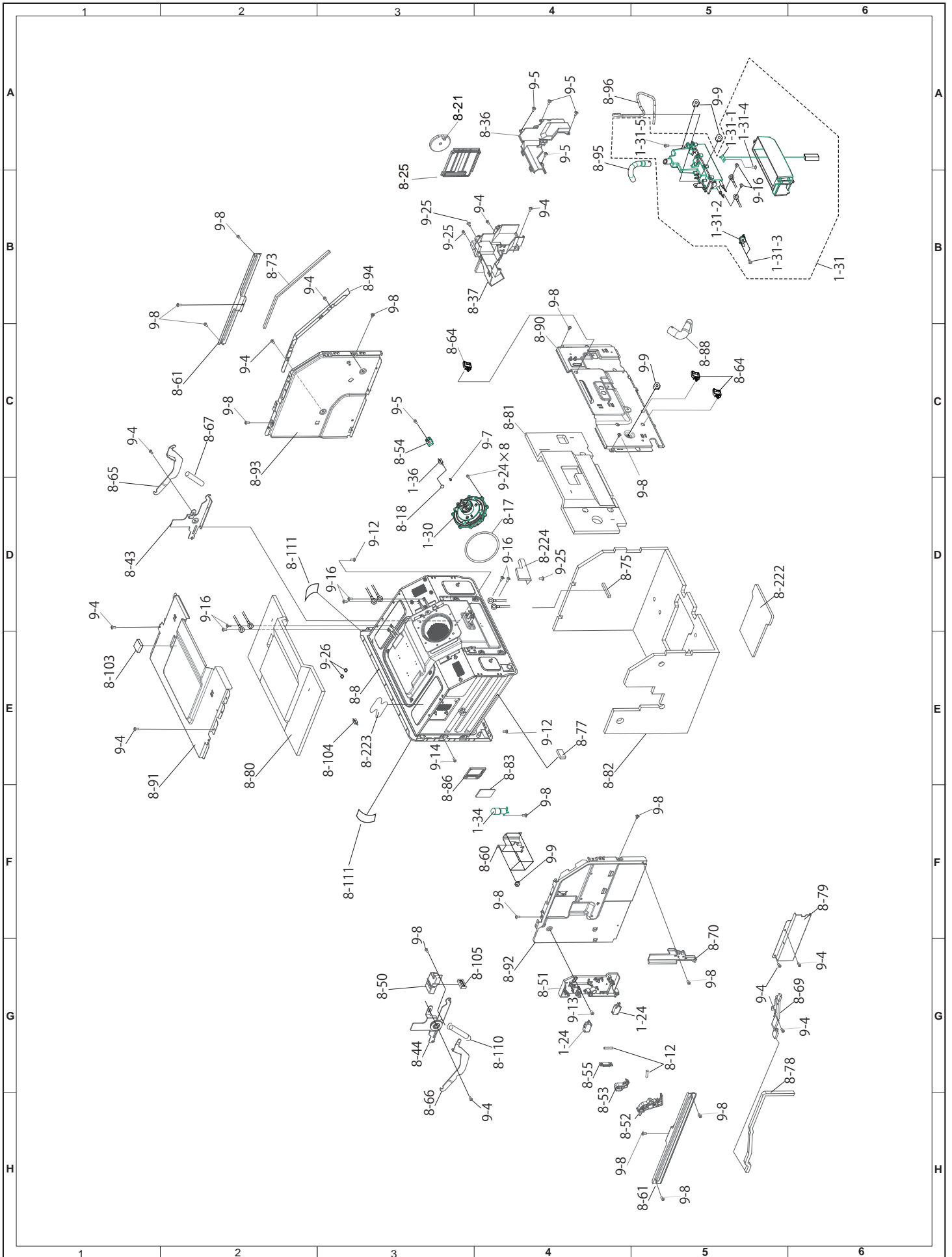


PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
1-24	QSW-MA168WRZZ	SWITCH	2	AD
1-30	FUNT-A178WRKZ	CYCLE UNIT ASSY	1	BF
1-31	FUNT-A185WRKZ	ENGINE UNIT	1	BL
1-31-1	FH-HZA100WREZ	THERMISTOR	1	AK
1-31-2	RTHM-A149WRZZ	SH THERMOSTAT	1	AG
1-31-3	LX-BZA144WREZ	SPECAIL SCREW	2	AD
1-31-4	XHTWW40P08000	SCREW	1	AA
1-31-5	XETS740P10000	SCREW	1	AA
1-34	RLMPTA087WRZZ	OVEN LAMP	1	AD
1-36	FH-HZA099WREZ	THERMISTOR	1	AK
8-8	DOVN-A836WRKZ	OVEN ASSY	1	BZ
8-12	MSPRTA228WREZ	LATCH SPRING	5	AA
8-17	PPAC-A201WREZ	CYCLE PACKING	1	AE
8-18	PPAC-A090WREZ	THERMISTOR PACKING	1	AD
8-21	NSFTPA052WRFZ	SHUTTER SHAFT	1	AE
8-25	PSHT-A035WRFZ	SHUTTER	1	AD
8-36	PCOVPA697WRFZ	INTAKE DUCT COVER UPPER	1	AF
8-37	PDUC-B355WRFZ	INTAKE DUCT UPPER	1	AH
8-43	FHNG-A429WRYZ	LEFT HINGE ASSY	1	AL
8-44	FHNG-A430WRYZ	RIGHT HINGE ASSY	1	AH
8-50	PCOVPA699WRFZ	WIRE PROTECT COVER	1	AE
8-51	LANGKB609WRFZ	LATCH BASE AG	1	AH
8-52	MLEVPA309WRFZ	SWITCH LEVER	1	AF
8-53	MLEVPA310WRFZ	DOOR SWITCH LEVER	1	AF
8-54	LHLD-A381WRFZ	THERMISTOR HOLDER	1	AE
8-55	PSHT-A034WRFZ	SHUTTER	1	AC
8-60	LANGQA792WRPZ	LAMP TO ANGLE	1	AE
8-61	LANGTA578WRPZ	CHASSIS SUPPORT	2	AG
8-64	LHOLDA004WRE0	CORD HOLDER	4	AN
8-65	MCAMPA207WRMZ	LEFT DOOR CAM	1	AG
8-66	MCAMPA209WRMZ	RIGHT DOOR CAM	1	AG
8-67	MSPRTA284WREZ	DOOR SPRING	1	AE
8-69	PCOVPA664WRPZ	SIDE DUCT ANGLE LOWER	1	AE
8-70	PCOVPA700WRFZ	HARNES COVER	1	AE
8-73	PCUS-A348WREZ	CUSHION	1	AC
8-75	PCUS-A350WREZ	CUSHION	2	AC
8-77	PCUS-A352WREZ	CUSHION	2	AC
8-78	PCUS-A353WREZ	CUSHION	1	AC
8-79	PDUC-B310WRWZ	SIDE DUCT	1	AF
8-80	PFPF-A359WREZ	HEAT INSULATION UPPER	1	AF
8-81	PFPF-A349WREZ	HEAT INSULATION REAR	1	AG
8-82	PFPF-A350WREZ	HEAT INSULATION LOW	1	AN
8-83	PGLSPA743WREZ	LAMP GLASS	1	AE
8-86	PPAC-A119WREZ	LAMP PACKING	1	AD
8-88	PPIPFA053WREZ	EXHAUST PIPE	1	AH
8-90	PSLDHA364WRPZ	HEAT COVER REAR	1	AR
8-91	PSLDHA413WRPZ	HEAT COVER UPPER	1	AK
8-92	PSLDHA368WRPZ	HEAT COVER RIGHT	1	AL
8-93	PSLDHA370WRPZ	HEAT COVER LEFT	1	AL
8-94	PSLDHA376WRPZ	SEPARATE AG	1	AG
8-95	PTUBXA097WREZ	STEAM TUBE	1	AH
8-96	PTUBXA098WREZ	PUMP TUBE	1	AE
8-103	PCUS-A362WREZ	CUSHION	1	AC
8-104	RTHM-A191WRZZ	THERMAL CUTOUT OPEN-230/CLOSE-150	1	AP

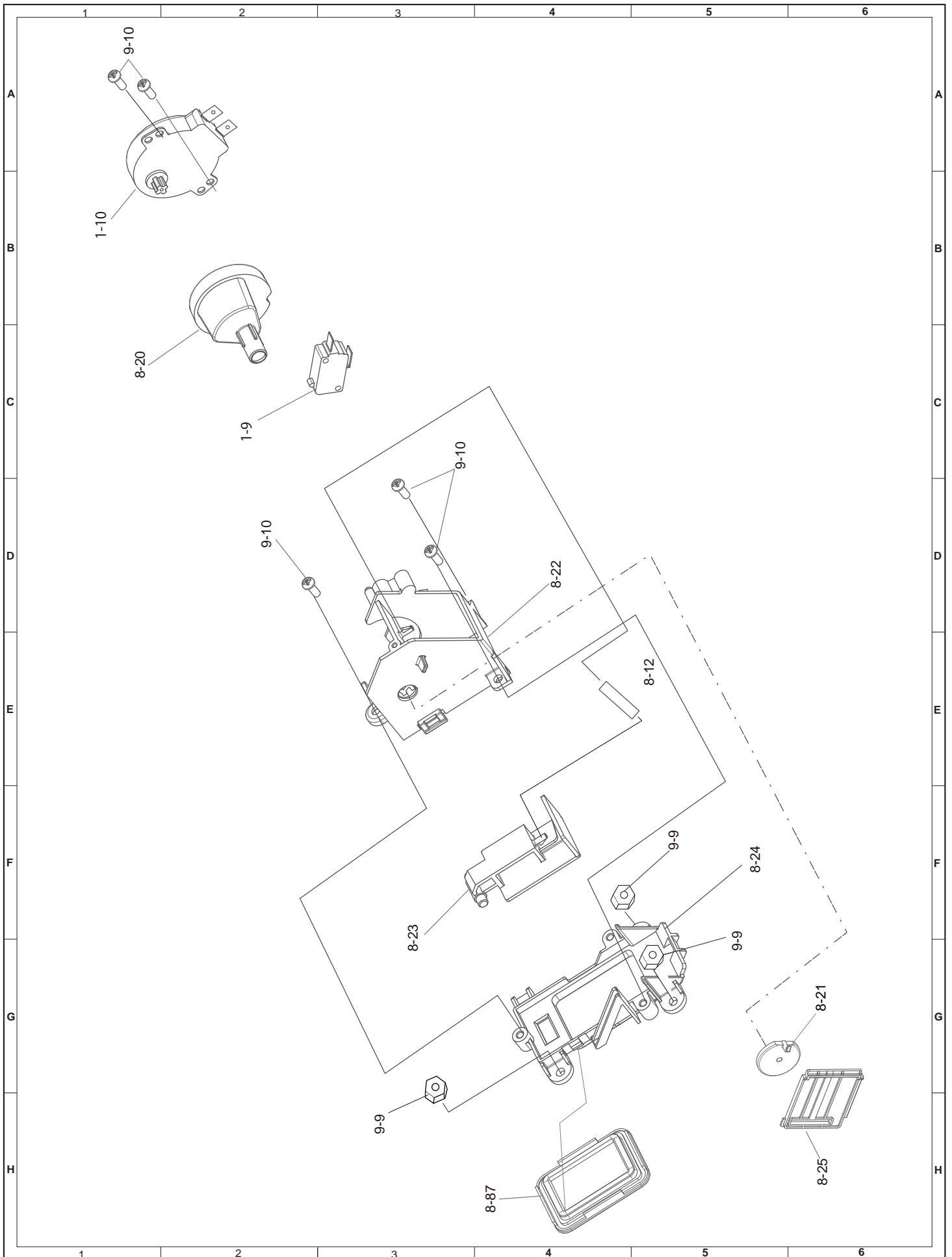
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
8-105	PCUS-A360WREZ	CUSHION	1	AC
8-110	MSPRTA285WREZ	DOOR SPRING	1	AE
8-111	PSHEPB778WREZ	SHEET	2	AA
8-222	PFFP-A360WREZ	HEAT INSULATION LOWER	1	AC
8-223	LANGTB388MRP0	THERMO PLATE	1	AL
8-224	LANGTB371MRP0	INSULATION PLATE	1	AE
9-4	LX-BZA148WREZ	SPECIAL SCREW	32	AA
9-5	XETS740P10000	SCREW	25	AB
9-7	XEBS730P08000	SCREW	5	AA
9-8	XOTS740P08000	SCREW	24	AA
9-9	XNEUW40-32000	NUT	14	AA
9-12	XHPS740P10XS0	SCREW	4	AA
9-13	LX-CZA113WREZ	SPECIAL SCREW	1	AE
9-14	LX-CZ0052WRE0	SPECIAL SCREW	1	AA
9-16	LX-BZA144WREZ	SCREW	8	AD
9-24	XBTS740P12000	SCREW	8	AA
9-25	XEBS730P10000	SCREW	12	AA
9-26	LX-NZA059WREZ	SPECIAL NUT	2	AF



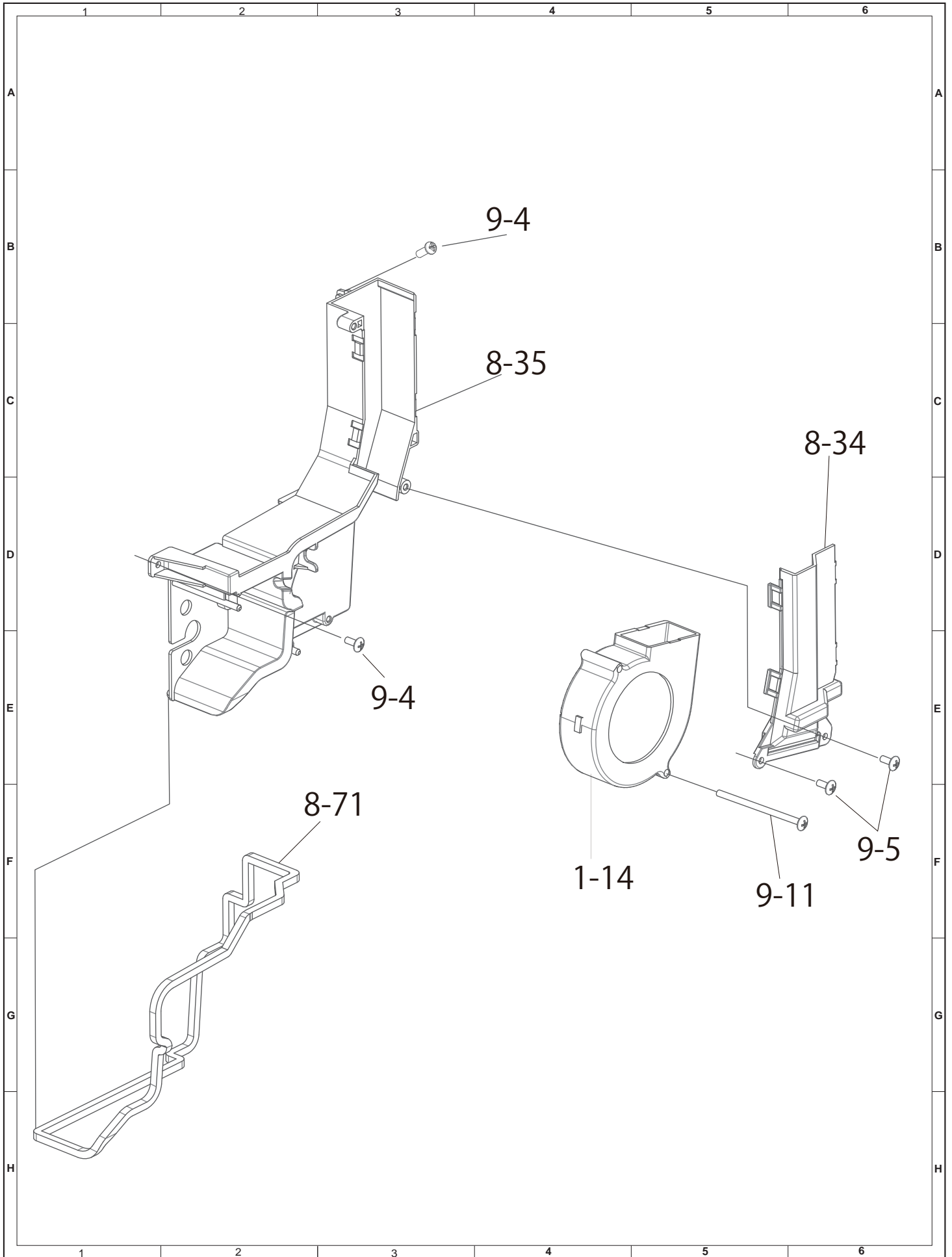
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
1-9	QSW-MA169WRZZ	SWITCH	1	AD
1-10	RMOTDA248WRZZ	TT MOTOR	1	AF
8-12	MSPRTA228WREZ	LATCH SPRING	5	AA
8-20	NSFTPA050WRFZ	INTAKE DAMPER CAM	1	AE
8-21	NSFTPA052WRFZ	SHUTTER SHAFT	1	AE
8-22	PCOVPA694WRFZ	INTAKE DUCT COVER	1	AE
8-23	PDMP-A011WRFZ	INTAKE DAMPER	1	AE
8-24	PDUC-B304WRFZ	INTAKE DUCT	1	AE
8-25	PSHT-A035WRFZ	SHUTTER	1	AD
8-87	PPAC-A202WREZ	INTAKE DUCT PACKING	1	AE
9-9	XNEUW40-32000	SCREW	14	AA
9-10	XEPS740P10000	SCREW	10	AA



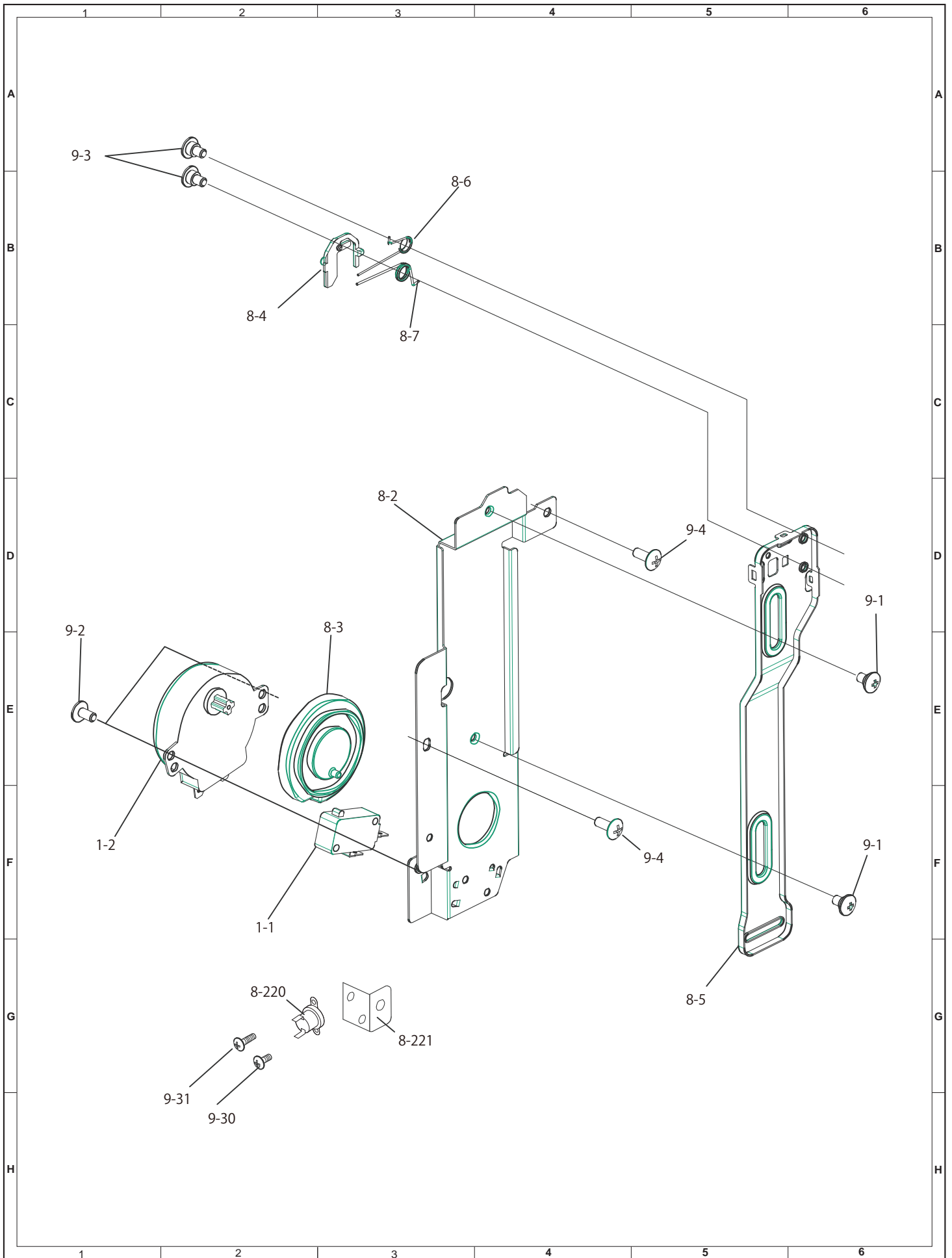
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
1-14	RMOT-A029WRZZ	SIROCCO MOTOR	1	AQ
8-34	PCOVPA696WRFZ	INTAKE DUCT COVER LOWER	1	AF
8-35	PDUC-B354WRFZ	INTAKE DUCT LOWER	1	AN
8-71	PCUS-A346WREZ	CUSHION	1	AC
9-4	LX-BZA148WREZ	SCREW	32	AA
9-5	XETS740P10000	SCREW	25	AB
9-11	XEPS740P40000	SCREW	2	AA



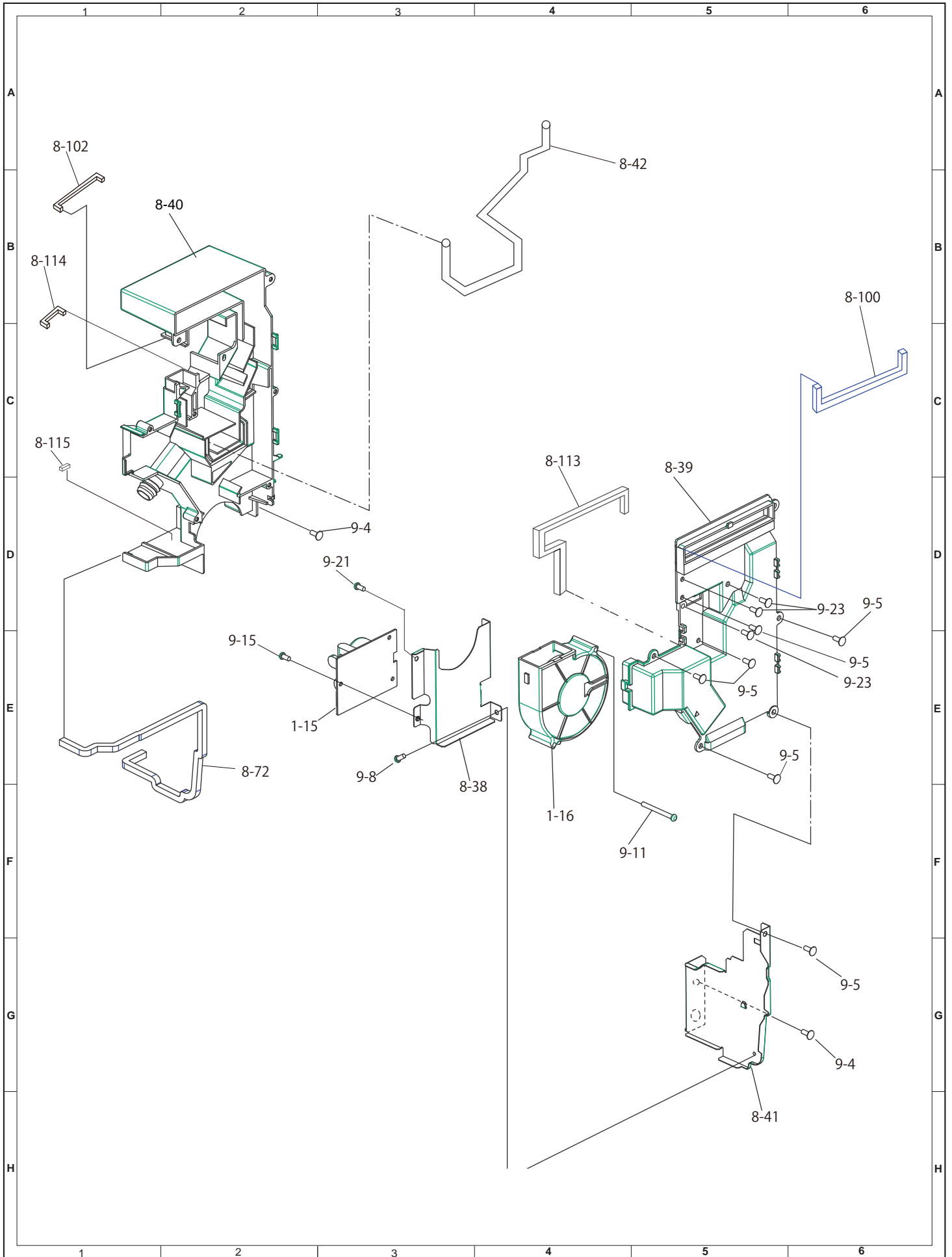
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
1-1	QSW-MA169WRZZ	SWITCH	1	AD
1-2	RMOTDA248WRZZ	TT MOTOR	1	AF
8-2	LANGKB597WRPZ	SLIDER MOUNT ANGLE	1	AF
8-3	MCAMFA002WRFZ	DAMPER CAM	1	AE
8-4	LSTPPA353WRFZ	SPRING STOPPER	1	AB
8-5	MSLIFA002WRPZ	SLIDER	1	AE
8-6	MSPRDA022WREZ	UPPER SPRING	1	AA
8-7	MSPRDA023WREZ	LOWER SPRING	1	AA
8-220	RTHM-A117WRE0	THERMO CUT OUT	1	AF
8-221	LANGTB384MRP0	THERMO CUT OUT BRACKET	2	AM
9-1	LX-BZA221WREZ	SPECIAL SCREW	2	AA
9-2	XHPS740P08K00	SCREW	2	AA
9-3	LX-BZA222WREZ	SPECIAL SCREW	2	AA
9-4	LX-BZA148WREZ	SPECIAL SCREW	32	AA
9-30	XHBS730P06000	SCREW	2	AA
9-31	XHPS740P08000	SCREW	1	AA



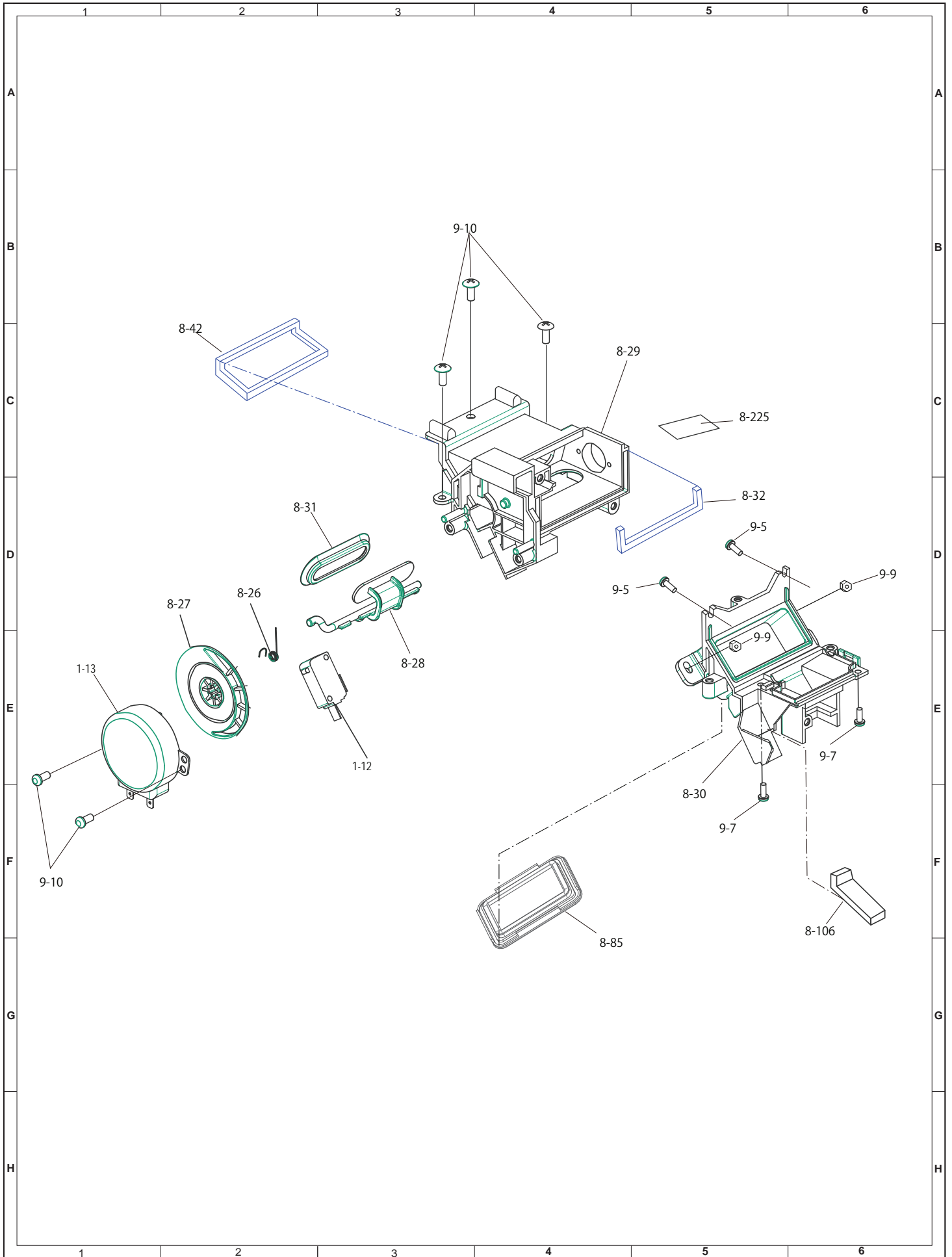
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
1-15	FPWBFA495WRKZ	NOISE FILTER	1	AU
1-16	RMOT-A029WRZZ	SIROCCO MOTOR	1	AQ
8-38	LANGQA903WRPZ	NOISE FILTER ANGLE	1	AG
8-39	PCOVPA698WRFZ	STEAM DUCT COVER	1	AK
8-40	PDUC-B356WRFZ	STEAM DUCT	1	AP
8-41	PGID-A149WRPZ	MG AIR GUIDE	1	AR
8-42	PPAC-A199WREZ	STEAM DUCT PAC	2	AD
8-72	PCUS-A347WREZ	CUSHION	1	AC
8-100	PCUS-A354WREZ	CUSHION	1	AA
8-102	PCUS-A358WREZ	CUSHION	1	AC
8-113	PCUS-A365WREZ	CUSHION	1	AB
8-114	PCUS-A366WREZ	CUSHION	1	AC
8-115	PCUS-A367WREZ	CUSHION	1	AC
9-4	LX-BZA148WREZ	SPECIAL SCREW	32	AA
9-5	XETS740P10000	SCREW	25	AB
9-8	XOTS740P08000	SCREW	24	AA
9-11	XEPS740P40000	SCREW	2	AA
9-15	LX-BZA138WREZ	SPECIAL SCREW	1	AB
9-21	XETS740P08000	SCREW	1	AA
9-23	XETS740P12000	SCREW	5	AA



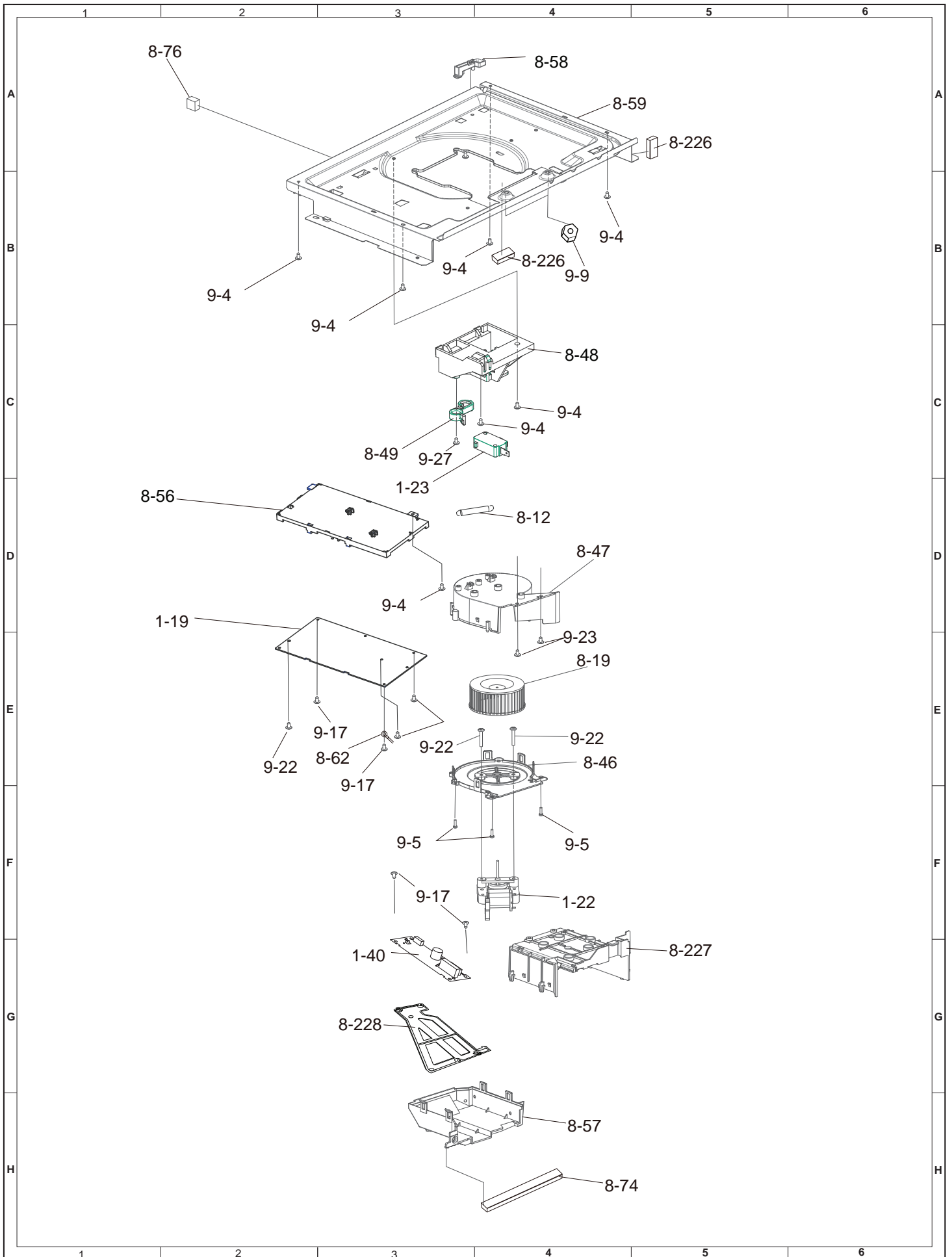
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
1-11	FDTCTA240WRKZ	SENSOR ASSY	1	AP
1-12	QSW-MA169WRZZ	SWITCH	1	AD
1-13	RMOTDA248WRZZ	TT MOTOR	1	AF
8-26	MSPRCA191WREZ	EXHAUST DAMPER SP	1	AA
8-27	NSFTPA047WRFZ	EXHAUST DAMPER CAM	1	AE
8-28	PDMP-A002WRFZ	EXHAUST DAMPER	1	AA
8-29	PDUC-B306WRFZ	EXHAUST DUCT UPPER	1	AL
8-30	PDUC-B307WRFZ	EXHAUST DUCT LOWER	1	AH
8-31	PPAC-A083WREZ	DAMPER PACKING 2	1	AA
8-32	PPAC-A197WREZ	EXHAUST DUCT PAC A	1	AD
8-42	PPAC-A199WREZ	STEAM DUCT PAC	2	AD
8-85	PPAC-A111WREZ	DAMPER DUCT PAC	1	AC
8-106	PCUS-A363WREZ	CUSHION	1	AC
8-225	PCOVPB224MRE0	SENSOR COVER PLATE	1	AE
9-5	XETS740P10000	SCREW	25	AB
9-7	XEBS730P08000	SCREW	5	AA
9-9	XNEUW40-32000	SCREW	14	AA
9-10	XEPS740P10000	SCREW	10	AA



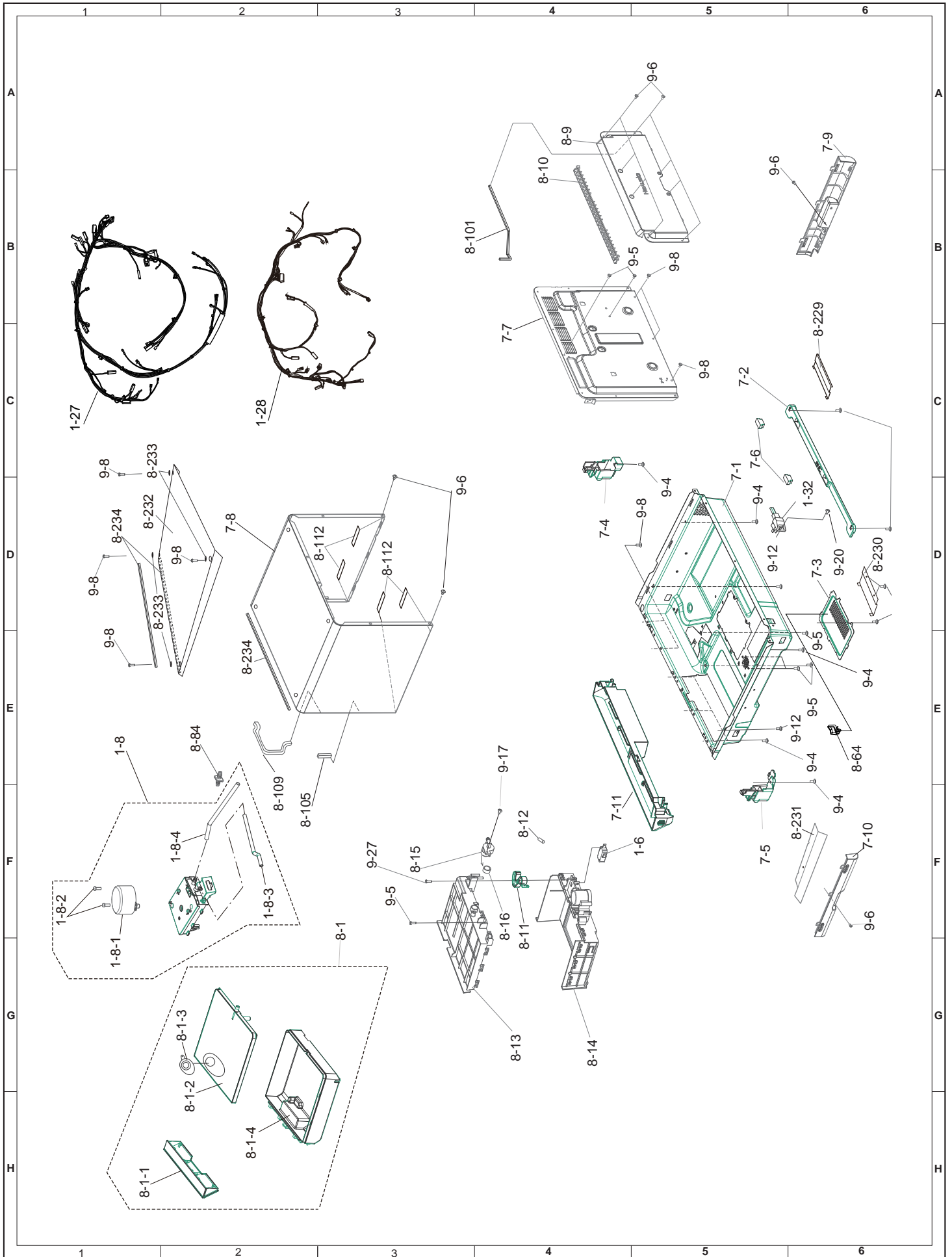
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
1-19	DPWB-B004MRU0	CONTROL UNIT	1	BG
1-22	RMOTEA513WRZZ	FAN MOTOR	1	AT
1-23	QSW-MA169WRZZ	SWITCH	1	AD
1-40	DPWB-B383DRKZ	POWER UNIT	1	BE
8-12	MSPRTA228WREZ	LATCH SPRING	5	AA
8-19	NFANSA011WRFZ	FAN	1	AG
8-46	PCOVPA695WRFZ	FAN DUCT COVER	1	AE
8-47	PDUC-B353WRFZ	FAN DUCT	1	AG
8-48	LHLD-A386WRFZ	SWITCH HOLDER	1	AE
8-49	MLEVPA308WRFZ	DEW TRAY LEVER	1	AH
8-56	LHLDPA031WRFZ	PWB HOLDER	1	AG
8-57	PCOVPA646WRFZ	INV COVER	1	AK
8-58	PGID-A172WRFZ	DRAIN	1	AE
8-59	PSLDHA414WRYZ	HEAT COVER BOTTOM ASY	1	AU
8-62	LBNDKA166WREZ	WIRE HOLDER	1	AB
8-74	PCUS-A349WREZ	CUSHION	1	AC
8-76	PCUS-A351WREZ	CUSHION	1	AC
8-75	PCUS-A350WREZ	CUSHION	2	AC
8-226	PCUS-A370WREZ	CUSHION	1	AE
8-227	PZETEA098WRFZ	INV. CASE	1	AH
8-228	LHLDPB002MRFO	PWB HOLDER	1	AE
9-4	LX-BZA148WREZ	SCREW	32	AA
9-5	XETS740P10000	SCREW	25	AB
9-9	XNEUW40-32000	SCREW	14	AA
9-17	XEBS730P10000	SCREW	12	AA
9-22	XHTS740P08RV0	SCREW	3	AA
9-23	XETS740P12000	SCREW	5	AA
9-27	XEPS730P08XS0	SCREW	2	AA



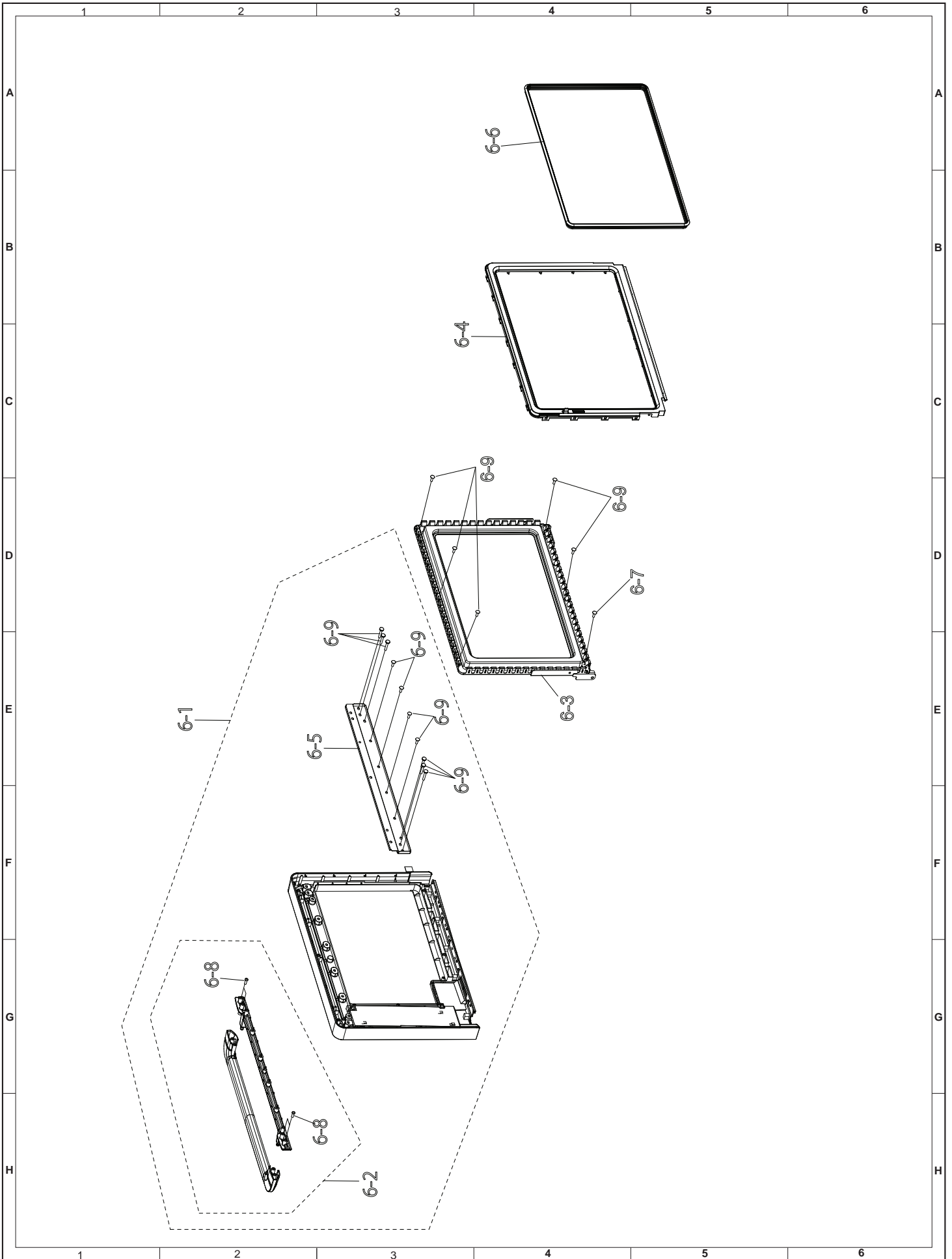
PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
1-6	QSW-MA169WRZZ	SWITCH	1	AD
1-8	FMOT-A060WRKZ	TUBE PUMP ASSY	1	BM
1-8-1	RMOTDA331WRZZ	PUMP MOTOR	1	BF
1-8-2	XHPS740P08K00	SCREW	2	AA
1-8-3	PTUBXA095WREZ	PUMP TUBE	1	AC
1-8-4	PTUBXA096WREZ	PUMP TUBE	1	AC
1-27	FW-VZB387MRE0	MAIN HARNESS	1	AZ
1-28	FW-VZB388MRE0	CONTROL HARNESS	1	AX
1-32	FACCDB015MRE0	POWER SUPPLY CORD	1	AN
7-1	GDAI-A538WRWZ	BOTTOM PLATE	1	AS
7-2	GLEGPA108WRFZ	BACK SHADE GUIDE	1	AD
7-3	PCOVPA647WRWZ	BOTTOM COVER	1	AE
7-4	PGID-A170WRFZ	DEW TRAY GUIDE L	1	AE
7-5	PGID-A171WRFZ	DEW TRAY GUIDE R	1	AE
7-6	PPAC-A069WREZ	STOPPER	2	AD
7-7	GCABDA195WRWZ	BACK PLATE	1	AP
7-8	GCABUB345WRPZ	OUTERCASE	1	AY
7-9	GCOVPA045WRFZ	SIDE COVER L	1	AK
7-10	GCOVPA046WRFZ	SIDE COVER R	1	AK
7-11	GCUPPA054WRFZ	DEW TRAY	1	AK
8-1	DTNK-A007WRKZ	TANK ASSY	1	AQ
8-1-1	HDECQA562WRFZ	TANK FRONT	1	AE
8-1-2	PCOVPA684WRFZ	TANK COVER	1	AG
8-1-3	PFTA-A044WREZ	TANK LID	1	AE
8-1-4	PTNK-A035WRFZ	TANK	1	AP
8-9	GCOVPA052WRFZ	EXHAUST COVER	1	AL
8-10	PGID-A152WRFZ	EXHAUST AIR GUIDE	1	AH
8-11	MLEVPA311WRFZ	TANK LEVER	1	AC
8-12	MSPRTA228WREZ	LATCH SPRING	5	AA
8-13	PCOVPA649WRFZ	TANK COVER UPPER	1	AK
8-14	PCOVPA688WRFZ	TANK COVER LOWER	1	AL
8-15	PJNT-A028WRFZ	TUBE JOINT	1	AC
8-16	PPAC-A195WREZ	TANK PACKING	1	AC
8-64	LHOLDA004WRE0	CORD HOLDER	4	AN
8-84	PJNT-A029WRFZ	TUBE JOINT	1	AC
8-101	PCUS-A359WREZ	CUSHION	1	AC
8-105	PCUS-A361WREZ	CUSHION	1	AC
8-109	PCUS-A334WREZ	CUSHION	1	AA
8-112	PSHT-A037WREZ	CUSHION	4	AA
8-229	LANGTB385MRP0	BOTTOM MOLTEN DISCHARGE COVER	1	AR
8-230	LANGTB386MRP0	BOTTOM MOLTEN DISCHARGE COVER	1	AR
8-231	LANGTB387MRP0	HANDLE MOLTEN DISCHARGE COVER	1	AR
8-232	PDUC-B192MRP0	TOP DUCT	1	AZ
8-233	PCOVPB227MRE0	DUCT PLUG	4	AD
8-234	PCUSUB128MRP0	CUSHION	3	AA
9-4	LX-BZA148WREZ	SCREW	32	AA
9-5	XETS740P10000	SCREW	25	AA
9-6	XOTS740P12000	SCREW	12	AA
9-8	XOTS740P08000	SCREW	24	AA
9-12	XHPS740P10XS0	SCREW	4	AA
9-17	XEBS730P10000	SCREW	12	AA
9-20	XOTS740P12RV0	SCREW	1	AA
9-27	XEPS730P08XS0	SCREW	2	AA



PARTS LIST

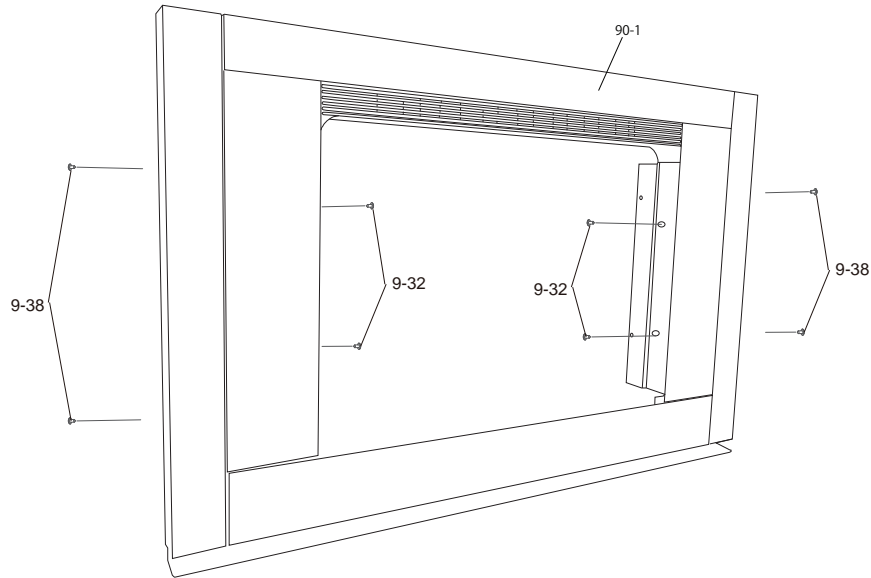
REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
6-1	FCOV-B545MRK0	DOOR ASSY	1	CN
6-2	FHNDPB025MRK0	HANDLE ASSY	1	BH
6-3	FDORFA526WREZ	DOOR PANEL ASSY	1	BB
6-4	GCOVHA572WRFZ	DOOR COVER	1	AP
6-5	LANGKB599WRWZ	DOOR SUPPORT ANGLE	1	AH
6-6	PPAC-A191WREZ	DOOR PACKING	1	AP
6-7	XEPS740P16000	SCREW	1	AA
6-8	XWHS740-05100	SCREW/WASHER	2	AA
6-9	XETS740P12000	SCREW	10	AA



PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	Q'TY	CODE
90-1	FDECAB222MRK0	BIK MOUNT	1	CD
90-6	PSRA-A089WRHZ	BASE TRAY	2	AV
90-13	TINSKB206MRR0	OPERATION MANUAL	1	AA
90-14	UAMI-A184WRTZ	RACK	2	AV
90-15	UGLV-A018WRKZ	MITTENS	1	AQ
90-16	TINSKB207MRR1	INSTALATION MANUAL	1	AA
9-32	LX-CZB069MRE0	MOUNTING BOLTS	4	AB
9-33	LANGTB372MRT0	LEFT MOUNTING BRACKET	1	AM
9-34	LANGTB378MRT0	RIGHT MOUNTING BRACKET	1	AM
9-35	XTSS740P20000	WOOD SCREWS	8	AA
9-36	LX-CZB068MRE0	SHOULDER BOLTS	2	AE
9-37	PCOVPB226MRE0	SHOULDER BOLT SLEEVES	2	AB
9-38	XOTS740P08000	SCREWS	4	AA

BIK MOUNT



MOUNTING HARDWARE

