



Electrolux

SERVICE MANUAL

Food Preservation

Document Revisions

Rev.	Date	Description	Author
00	01/2020	Document publication	Marcin Kobialka

FOR INTERNAL AND PARTNERS USE ONLY

© ELECTROLUX HOME PRODUCTS
Technical Support

4-DOOR REFRIGERATORS

FQE6807SDE

HQE6807SDE

EN

Publication number

599 83 48 - 79

Edition: 01/2020 - Rev. 00

CHAPTER 1. SPECIFICATION

		FQE6807SDE / HQE6807SDE
Type		4-Door
Outer dimensions	Height	1830(72.0")
	Width	890(35.0")
	Depth	805(31.7")
Rated gross volume		676 liter (23.9 cu.ft)
Rated storage volume		605 liter (21.4 cu.ft)
Defrosting	System	Heater system
	Start	Automatic
	Finish	Automatic
Temperature control		Automatic (Adjustable)
No-frost freezer		Yes
Interior lamp (LED)		48
Caster		4
Evaporating pan		1 (unremovable)
Refrigerator Compartment	R-shelf ass'y	2
	V-shelf ass'y	1
	Fruit case ass'y	1
	Fresh case ass'y	1
	V-case ass'y	1
	Door pocket ass'y	3
	Btl-pok L ass'y	1
	Btl-pok R ass'y	1
	U-pok door	1
	Utility pok ass'y	1
	Egg pocket ass'y	1
	Egg tray	1
	Freezer Compartment	Ice cube maker
Ice storage ass'y		2
F-case S ass'y		3
F-case L ass'y		2
Control panel	Express Freezing	Yes
	Holiday mode	Yes
	Door alarm	Yes
	Timer	Yes
	Temp. control	Yes
	Child lock	Yes
Stainless panel		Yes
Deodorizing unit		Yes(Honeycomb type)

RATING

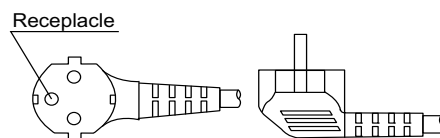
		FQE6807SDE / HQE6807SDE
Items		
Rated voltage	(V~)	220-240
Rated frequency	(Hz)	50
Climate class		T
Rated current	(A)	1.3-1.4
Rated input of heating systems	(W)	180-210
Refrigerant (Charging quantity) [Flammable]		R600a (77g)
Insulation blowing gas [Flammable]		Cyclo pentane (HC)
Net Weight	(kg)	112

PLUG TYPE

Plug cord	2 pin + Earth
Plug type	CS

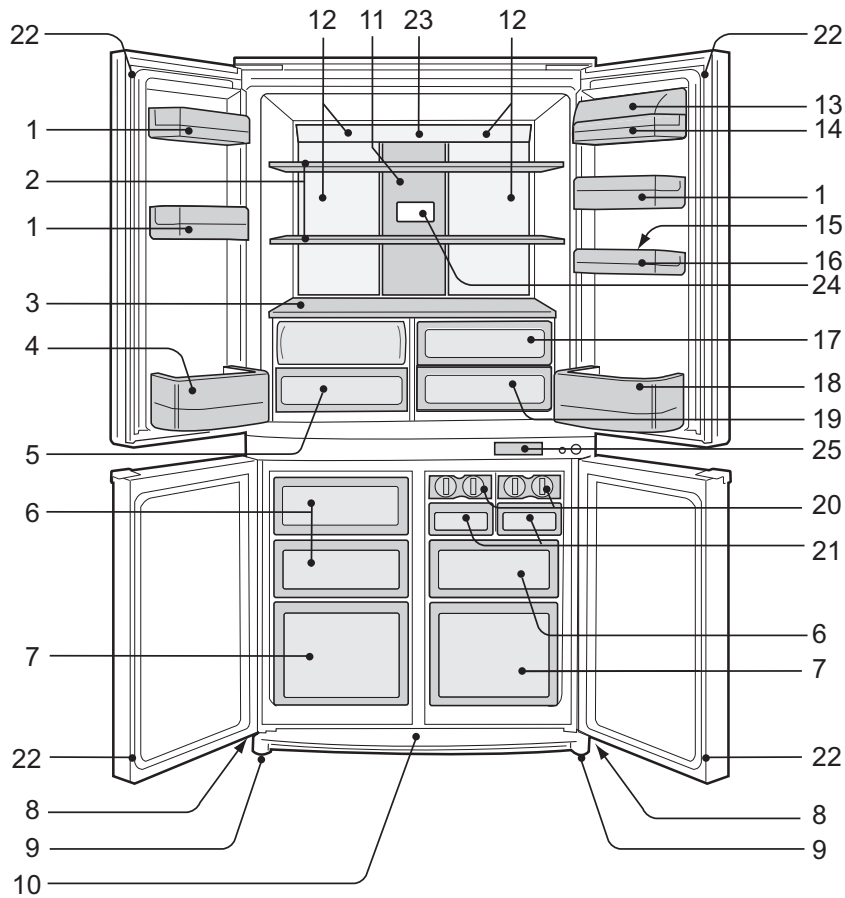
COLOR

Outside color	Silver
Inside color	white



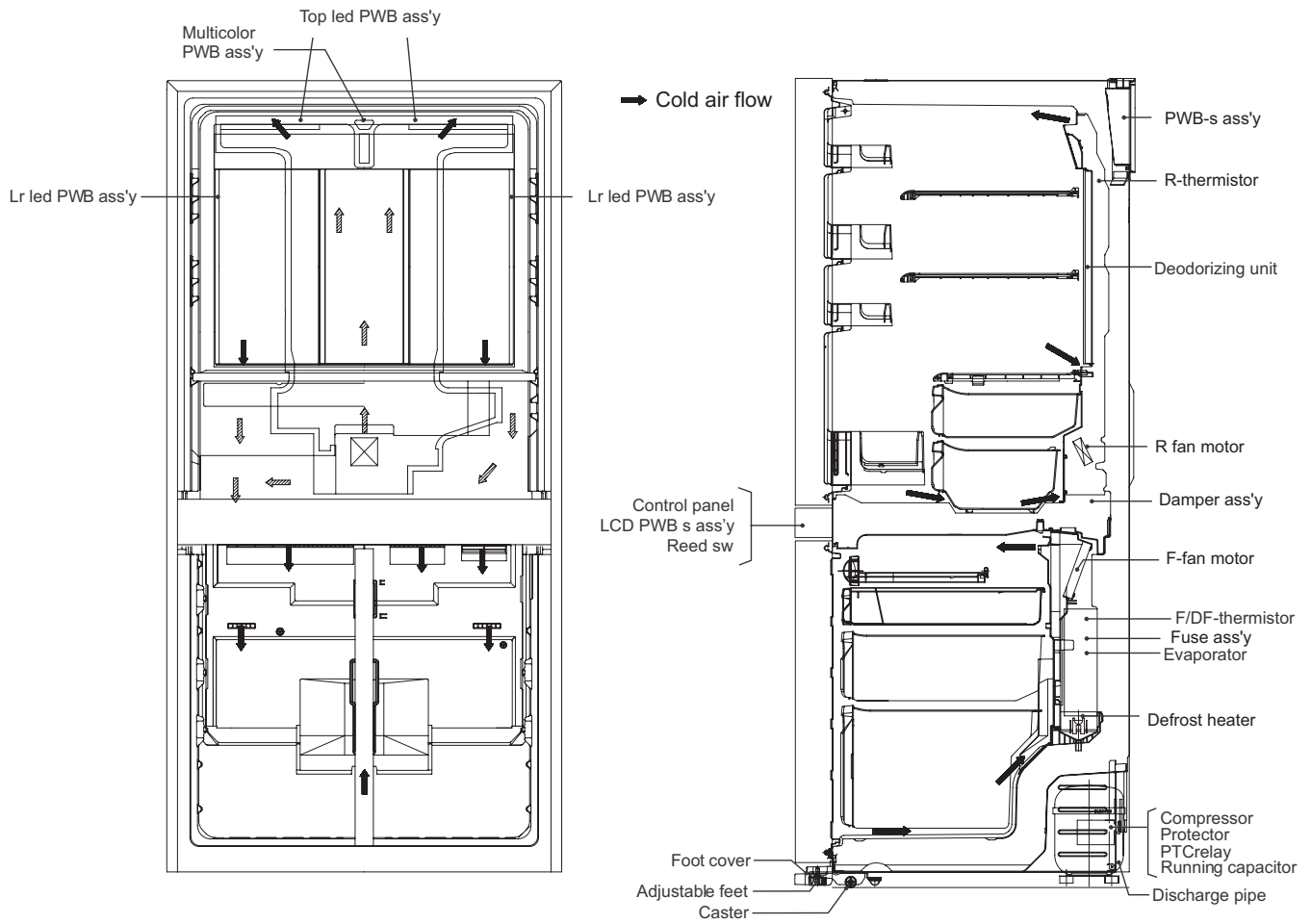
CHAPTER 2. DESIGNATION OF VARIOUS PARTS

[1] EXTERNAL DESCRIPTION



- | | |
|---------------------------|--|
| 1. Door bins | 14. Dairy bin |
| 2. Adjustable glass shelf | 15. Egg tray |
| 3. Fixed glass shelf | 16. Egg pocket |
| 4. Bottle bin(left) | 17. Deli compartment |
| 5. Crisper | 18. Bottle bin(right) |
| 6. Freezer drawer(small) | 19. Crisper |
| 7. Freezer drawer(large) | 20. Twist ice and serve |
| 8. Rollers | 21. Ice cube box |
| 9. Adjustable feet | 22. Magnetic door seals |
| 10. Kickplate | 23. Eco sign |
| 11. Stainless steel panel | 24. Deodorising unit |
| 12. Light | 25. Control panel and electronic display |
| 13. Dairy bin lid | |

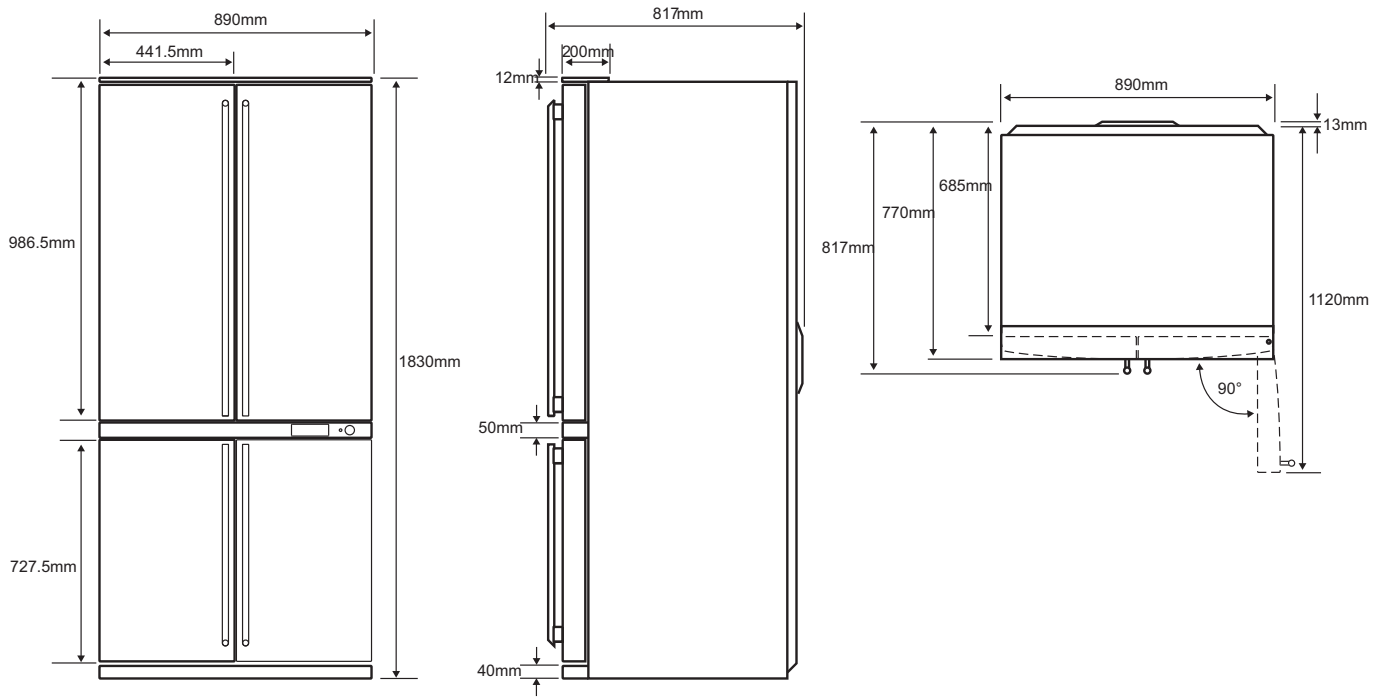
[2] CONSTRUCTIONS



CHAPTER 3. DIMENSIONS

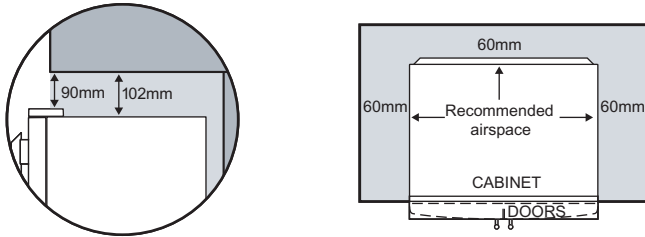
[1] OUTER DIMENSIONS AND CLEARANCE

1. OUTER DIMENSIONS



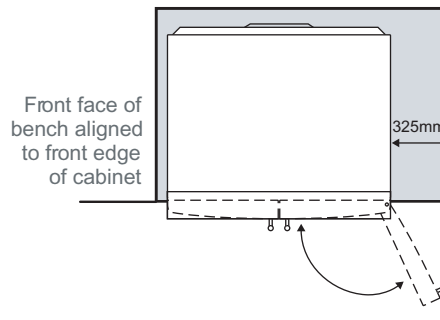
2. RECOMMENDED CLEARANCES

These are the recommended minimum clearances.



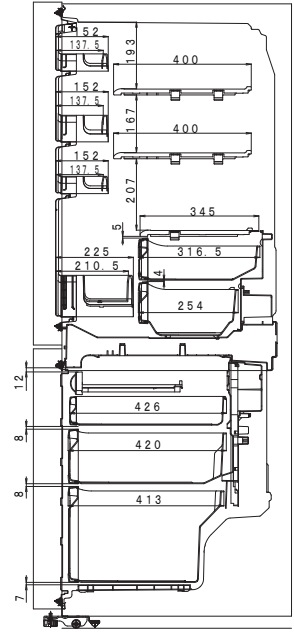
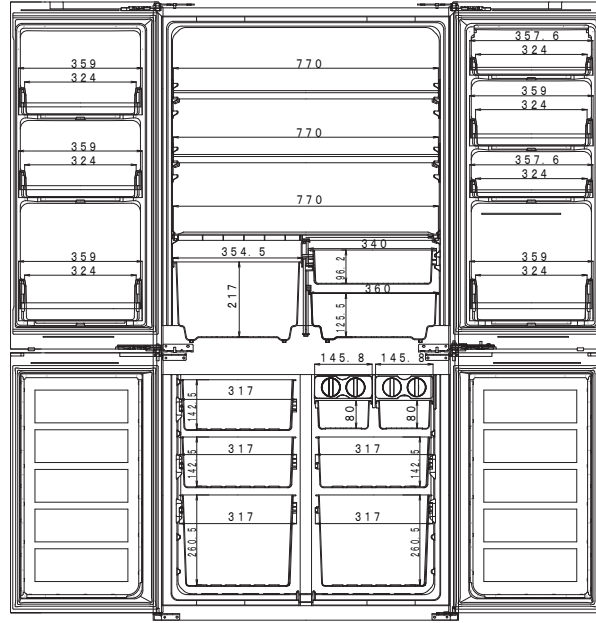
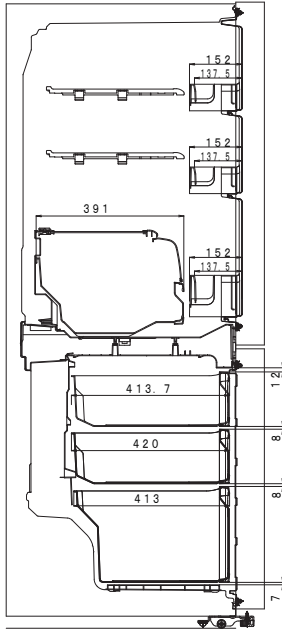
NOTE: Doors are designed to sit proud of cabinetry (not flush).

When positioned in a corner area, spacing of at least 325mm on the sides will allow the doors to open enough to enable removal of the crisper bins and shelves.

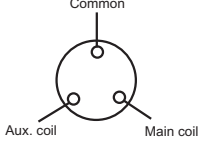


[2] INNER DIMENSIONS

The dimensions between shelves can be changed by setting the shelves on the other rails.



CHAPTER 4. LIST OF ELECTRICAL PARTS

ITEMS	TYPE NAME	RATING	SPECIFICATIONS
R Thermistor	—	DC 5V	R0 = 6.4 kΩ ,B(0) = 3811
F/DF Thermistor	(F)	DC 5V	R0 = 6.4 kΩ ,B(0) = 3811
	(Def)	DC 5V	R0 = 15 kΩ ,B(0) = 3811
•RD Heater	—	220-240V 5290Ω	10 W at 230 V
Thermo. fuse	SF70E	250V 10A	Working temp. : 73°C
Defrost heater	—	220-240V 286Ω	185W at 230V
R-Fan motor	D08A-12PM.05(K)	DC 12V 0.07A	—
F-Fan motor	FBA12J15VXD	DC 15V 0.28A	—
Damper	—	DC 12V	—
Reed SW	MS-3321651	DC5V	Magnetic Switch
SW Magnet	FM10.9X7X25.4(SR-3)	—	Magnet Switch
LR LED PWB ass'y	—	DC 25mA	White LED Lamp 18pcs x 2lines
TOP LED PWB ass'y	—	DC 50mA	White LED Lamp 6pcs x 2lines
Multicolor PWB ass'y	—	Blue LED: DC15mA Orange LED: DC20mA	Blue LED: 1pcs Orange LED: 1pcs
Compressor	NX1120Y	220-240V/50Hz	Cooling capacity : 232W Main coil : 13.9Ω Aux. coil : 17.9Ω (at 25 °C)
			
Starting Relay	PTH7M150MD2	—	15Ω (at 25 °C)
Overload Relay(Protector)	4TM222NFBYY-53	—	Open/ Close : 120 / 61°C
Running Capacitor	RC-EZA250CBZZ	230V(220-240V)	400V 4μF

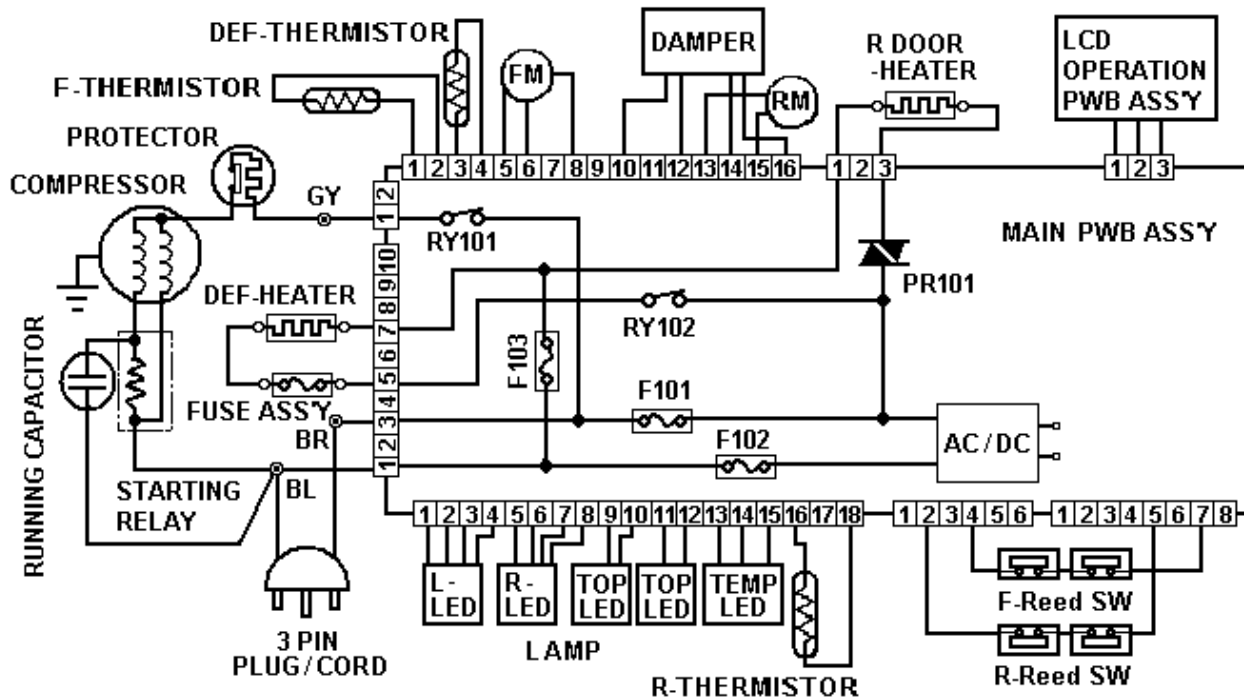
" • " denotes parts that cannot be replaced or parts that cannot be replaced as an individual unit.

CHAPTER 5. WIRING DIAGRAM

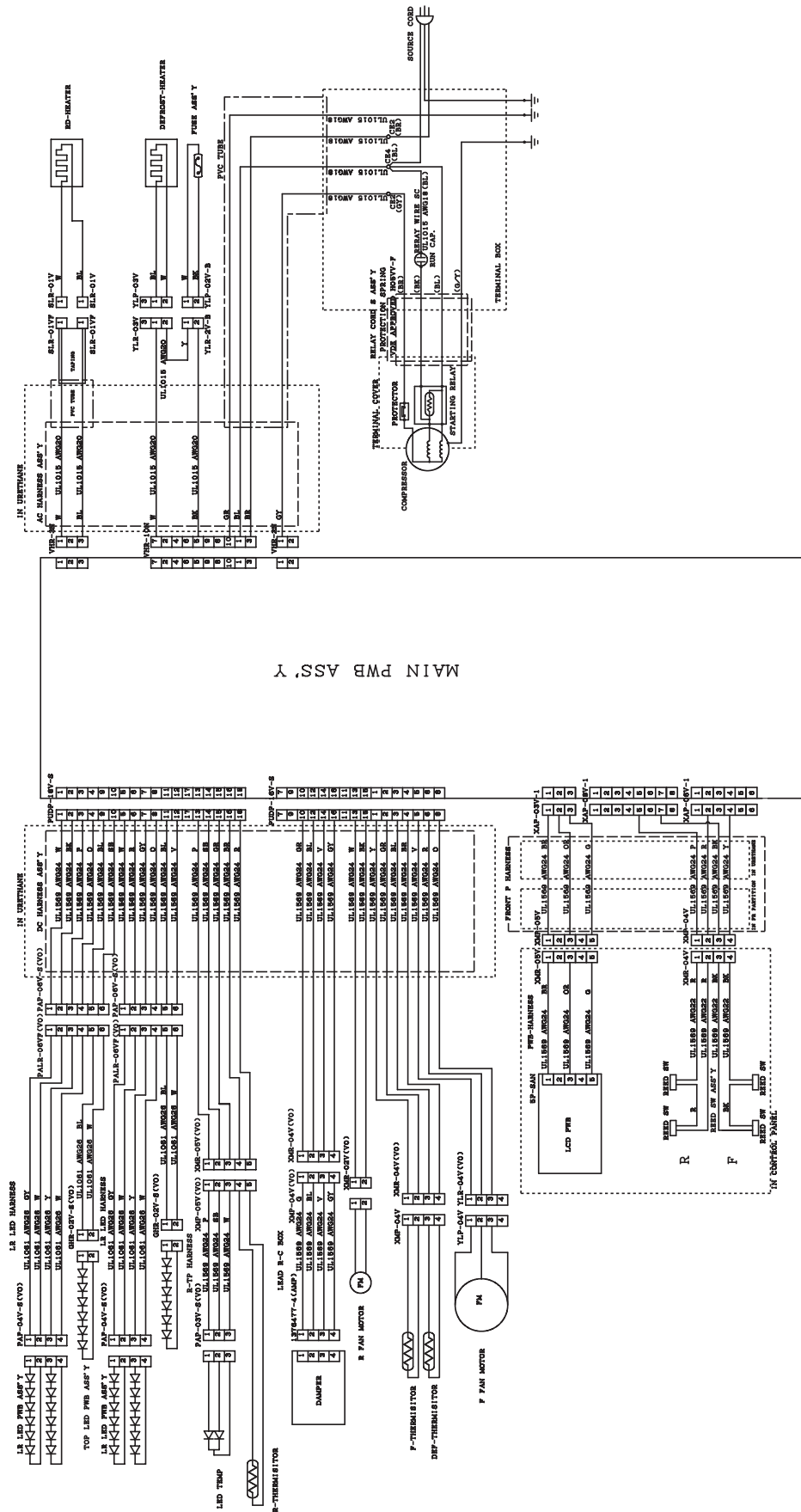
[1] WIRING DIAGRAM

Be sure to replace the electrical parts with specified ones for maintaining the safety and performance of the set.

- CONNECTOR
- ⊙ (CONNECTED IN TERMINAL BOX)



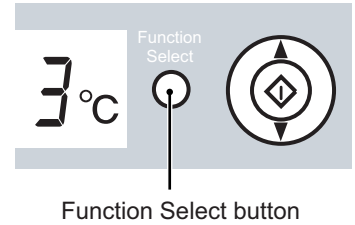
[2] ELECTRIC ACCESSORIES LAYOUT



CHAPTER 6. SELF-DIAGNOSIS MODE

1. Entering method of the mode

- 1) Press the [Function Select] button on the LCD panel over 5 seconds at the opening condition of the freezer and refrigerating room doors.
- 2) With a beep sound of buzzer, the self-diagnosis mode is entered. When the self-diagnosis mode is not entered by the above operation, defect of REED SW system can be considered.

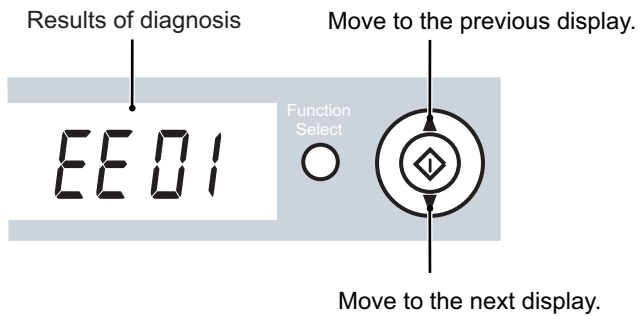


2. When the self-diagnosis mode is entered, the following movements will be made. Forced release operation is not prepared for the self-diagnosis mode. It returns to the normal movement after a lapse of 2 minutes.

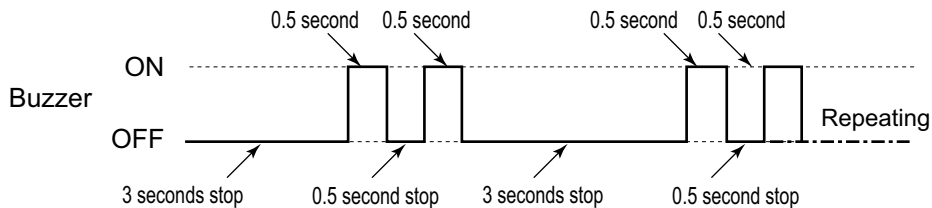
- During the express freezing or timer, the mode is released.
- When the self-diagnosis mode is entered, beep sound for reminding of closing the door must not be sounded for 20 minutes.
- Defect and various conditions are displayed by [ON/OFF of buzzer].
- Defect and various conditions are displayed on the LCD panel. In case of plural defects and various conditions, these are displayed one after another by button operation and all contents are notified.

3. Display of self-diagnosis

- Display example of LCD panel (at the defect of F-thermistor system)

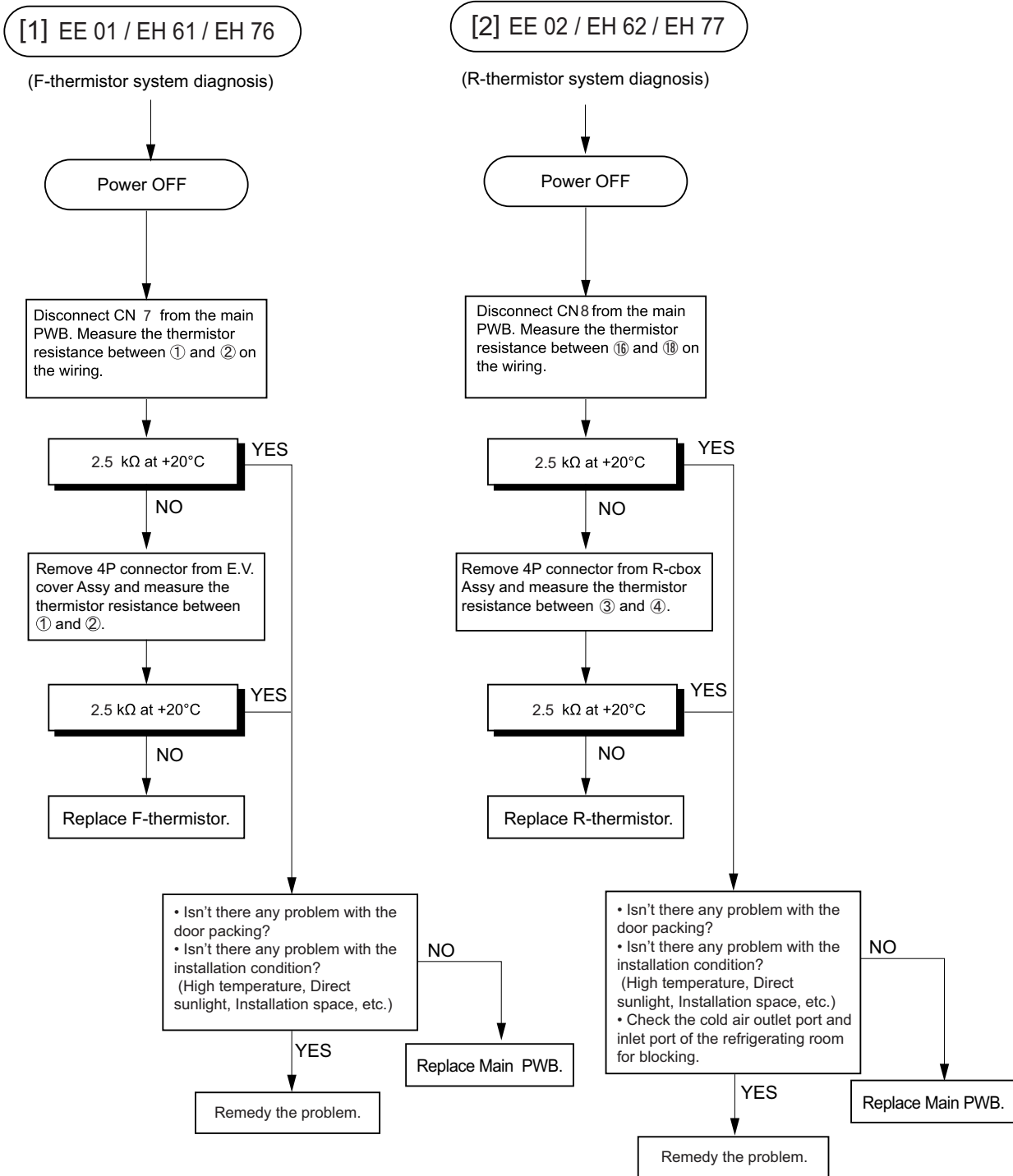


- Buzzer notice example; (at defrost defect, 2 times of 0.5 second ON)



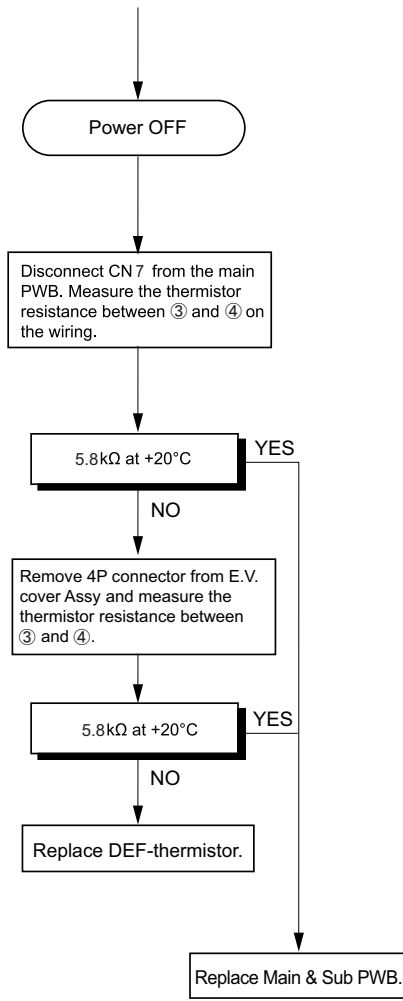
No	Status	Buzzer	LCD Display	Content	Correspondence method
-	No defects	None	- - - -		
1	F-thermistor system defect	●	EE 01	Defect of each thermistor, short circuit/wire breakage of thermistor wiring and defect of main PWB	→[1]
2	R-thermistor system defect	●	EE 02		→[2]
3	DEF-thermistor system defect	●	EE 03		→[3]
4	Outside temperature-thermistor system defect	●	EE 04		→[4]
5	Defrost defect	● ●	EE 07	Wire breakage of fuse-defrost heater, defect of main PWB (120-minute defrosting has been occurred continuously 2 times within the past 48 hours.)	→[5]
6	F fan motor system defect	● ● ●	EE 08	Defect of each fan motor, fan-lock and defect of wiring/main PWB (When fan motor is ON, over current or no current is detected.)	→[6]
7	R fan motor system defect	● ● ●	EE 10		→[7]
8	LCD Display communication defect	● ● ● ● ●	EE 12	Short circuit/wire breakage of wiring and defect of LCD or main PWB (Communication with LCD PWB has been abnormal over 3 times within the past 48 hours.)	→[8]
9	F-thermistor system defect history	◎ ● ●	EH 61	Defect of thermistor system has been occurred over 1 minute continuously within the past 48 hours.	→[1]
10	R-thermistor system defect history	◎ ● ●	EH 62		→[2]
11	DEF-thermistor system defect history	◎ ● ●	EH 63		→[3]
12	Outside temperature-thermistor system defect history	◎ ● ●	EH 64		→[4]
13	F fan motor system defect history	◎ ● ●	EH 66	Defect of fan motor has been occurred over 3 times continuously within the past 48 hours.	→[6]
14	R fan motor system defect history	◎ ● ●	EH 68		→[7]
15	F-room high temperature history	◎ ● ●	EH 76	Temperature of F-thermistor has been reached over -10°C continuously for 6 hours or more within the past 48 hours. (except right after the installation)	→[1]
16	R-room high temperature history	◎ ● ●	EH 77	Temperature of R-thermistor has been reached over +10°C continuously for 6 hours or more within the past 48 hours. (except right after the installation)	→[2]

• Buzzer: ● =0.5 sec ON/0.5 sec OFF, ◎ =2 sec ON/0.5 sec OFF



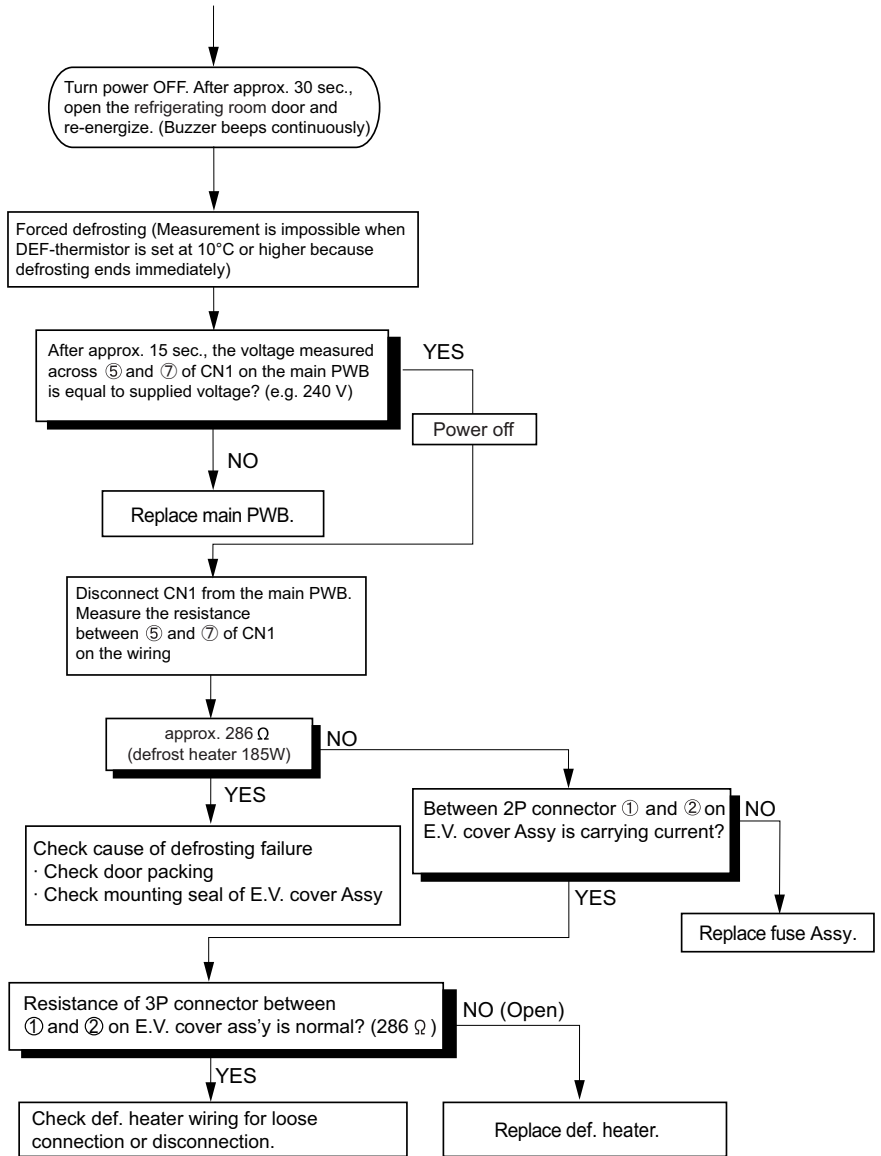
[3] EE 03 / EH 63

(DEF-thermistor system diagnosis)



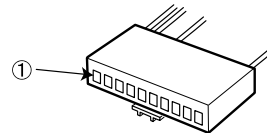
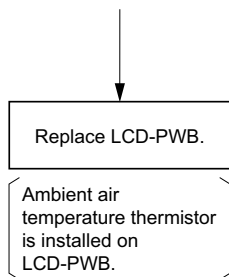
[5] EE 07

(Defrosting diagnosis)



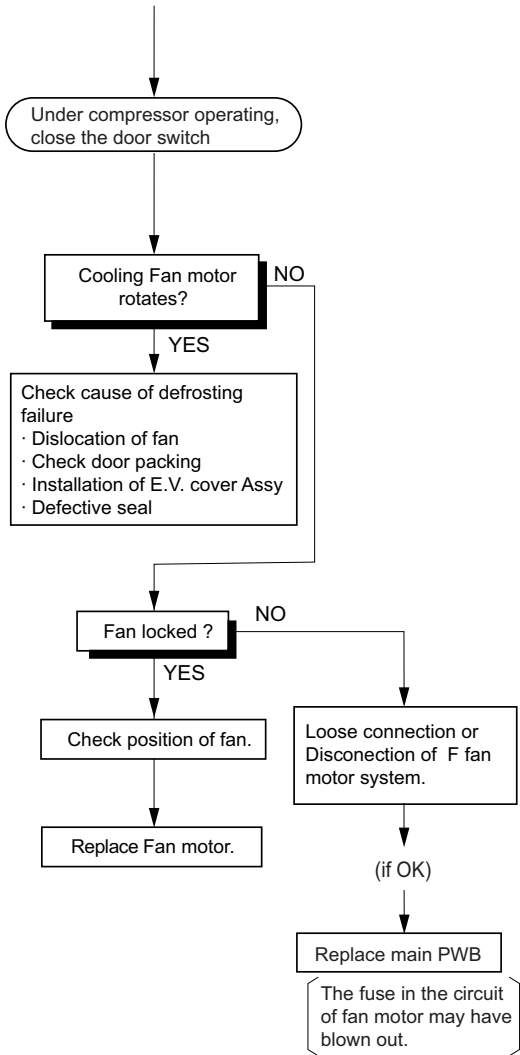
[4] EE 04 / EH 64

(Ambient air temperature - thermistor system diagnosis)



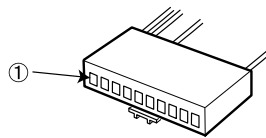
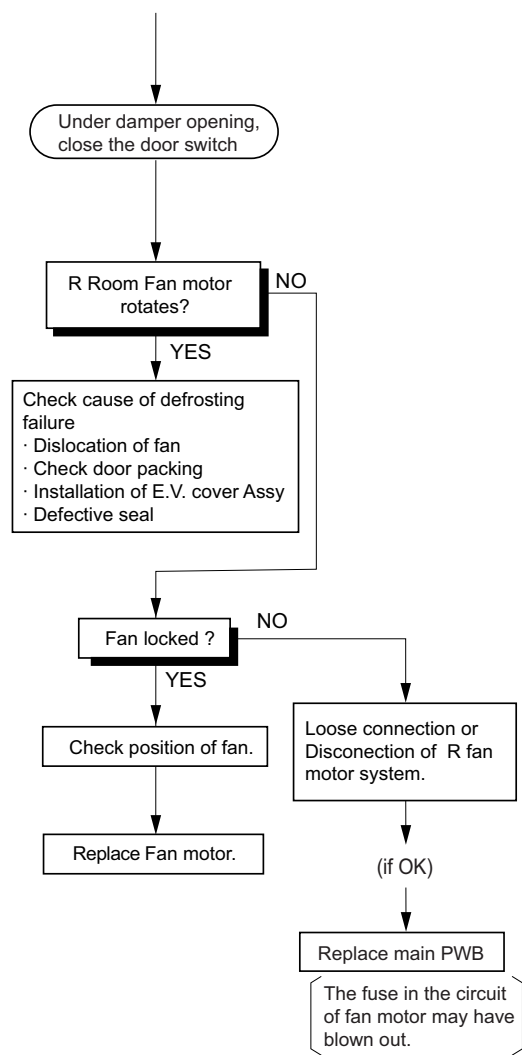
[6] EE 08 / EH 66

(F fan motor system diagnosis)



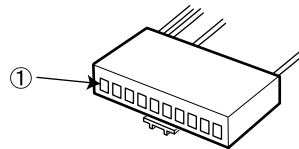
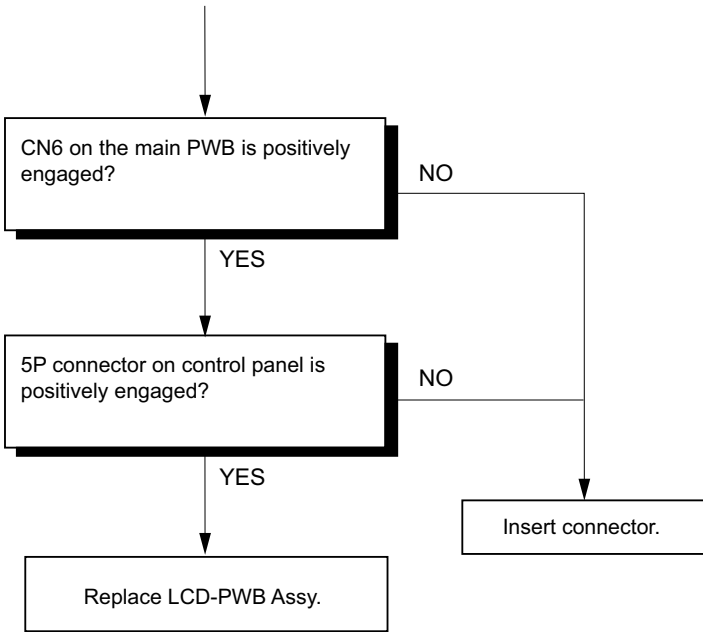
[7] EE 10 / EH 68

(R fan motor system diagnosis)

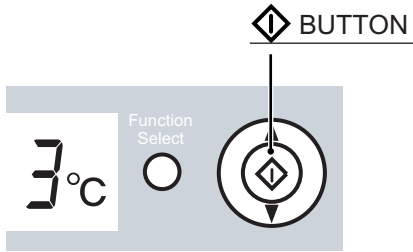


[8] EE 12


(LCD system diagnosis)



CHAPTER 7. MODE FOR DISPLAY




1. Entering method of the mode

Within 2 minutes after main power input, press the [] button over 3 seconds at the opening condition of the refrigerating room door.

NOTE: This cannot be made at the ON condition of CHILD LOCK.

2. Release of the mode

Press the [] button over 3 seconds at the opening condition of the refrigerating room door.

(Even without the above operation, release can be made by main power OFF.)

3. Movement in the mode

- 1) Compressor, each fan motor and heater are stopped.
- 2) Damper is always made [OPEN] condition.
- 3) Indoor lamp is lit when refrigerating room door is open.
- 4) LCD display
 - Icon will be lit at random.
 - In case of starting the timer or express freezing, forced termination is made in 20 seconds.

CHAPTER 8. DISASSEMBLING/ASSEMBLING PROCEDURES

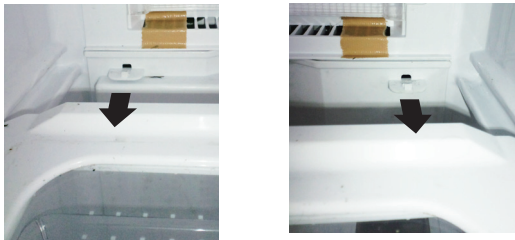
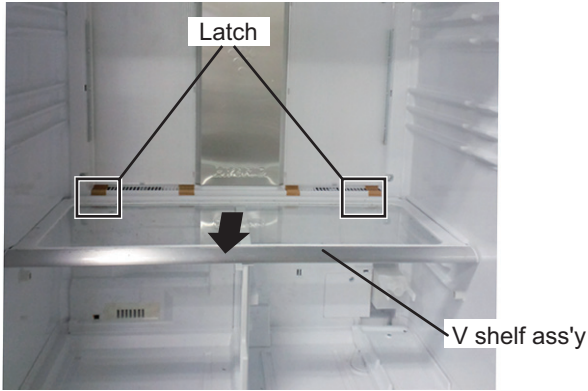
CAUTION: DISCONNECT THE UNIT FROM THE POWER SUPPLY BEFORE ANY REPAIRING.

[1] REFRIGERATOR COMPARTMENT

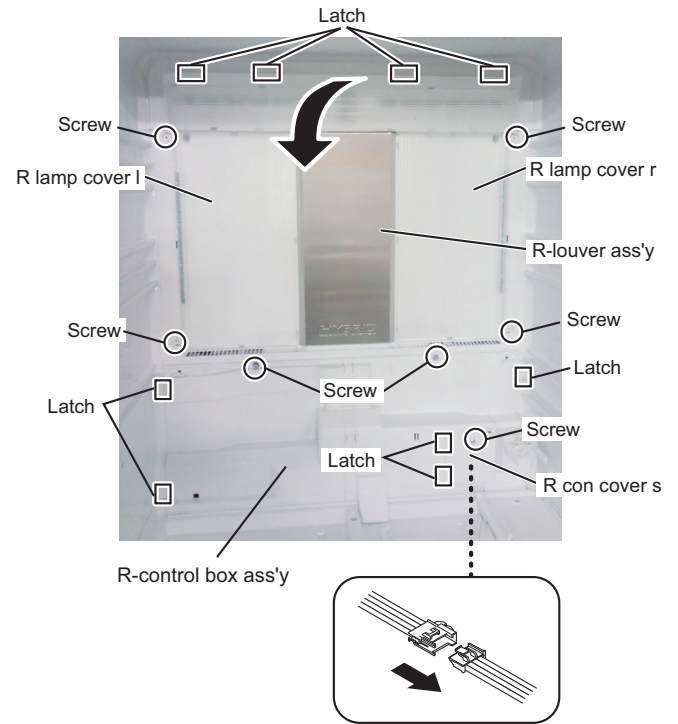
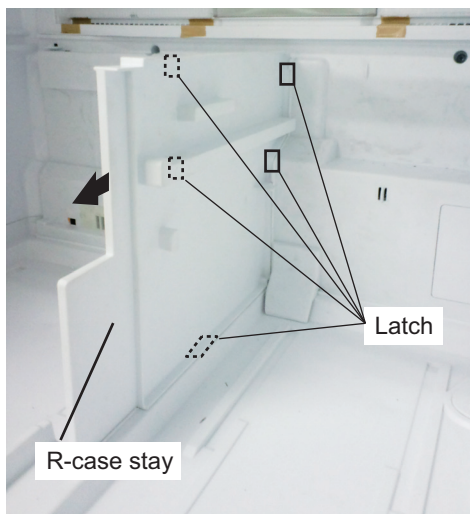
Parents parts name	Included electrical parts
R-louver ass'y	Lr led pwb ass'y, Top led pwb ass'y, Lr led harness, R-thermistor
R control box ass'y	Damper ass'y, Lead r-c box, R fan motor

1. Disassembling procedures

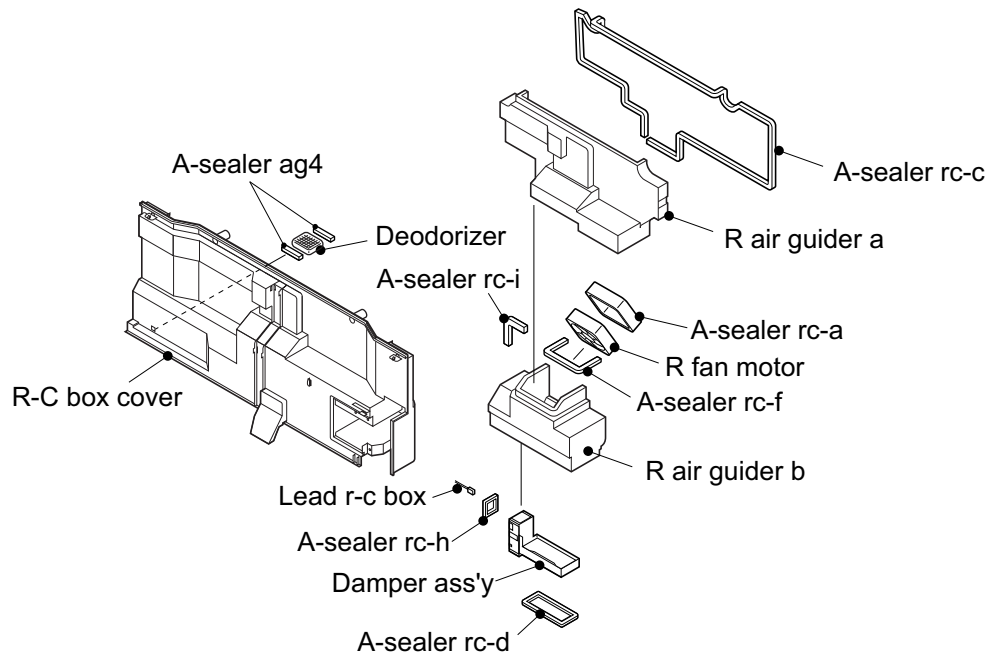
1. Remove the accessories(shelves, fresh case, etc.).
2. Remove the v shelf ass'y.
3. Remove the r-case stay
4. Remove the r lamp cover and the r-louver ass'y.
5. Remove the r con cover s, and disconnect the connector.
6. Remove the r control box ass'y.



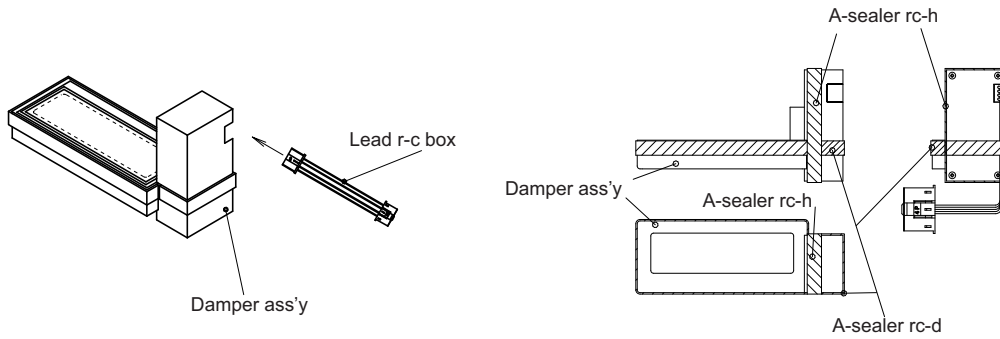
3. Remove the r-case stay



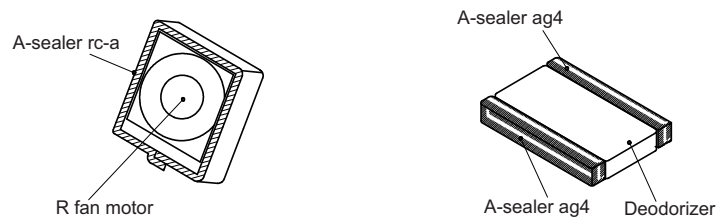
2. Assembling procedures of R CONTROL BOX ASS'Y.



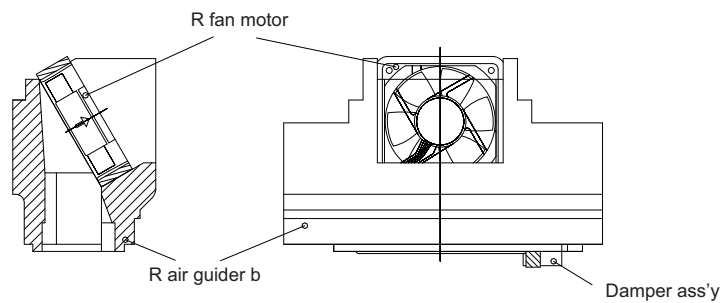
1. Insert Lead r-c box to Damper ass'y.
2. Stick A-sealer rc-d and A-sealer rc-h to Damper ass'y.



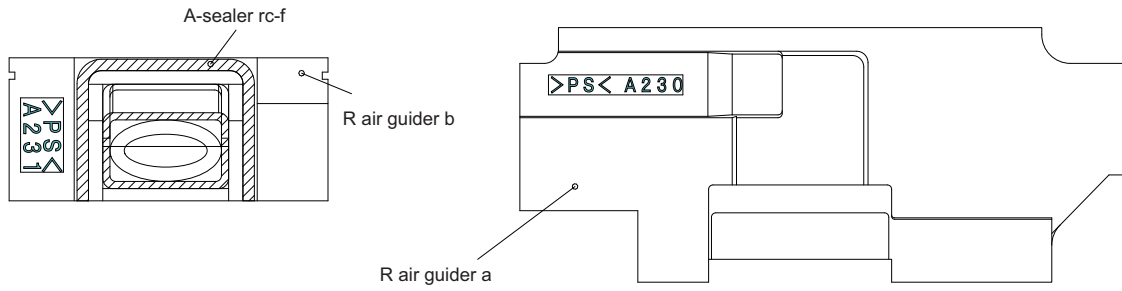
3. Stick A-sealer rc-a to R fan motor.
4. Stick A-sealer ag4 to deodorizer.



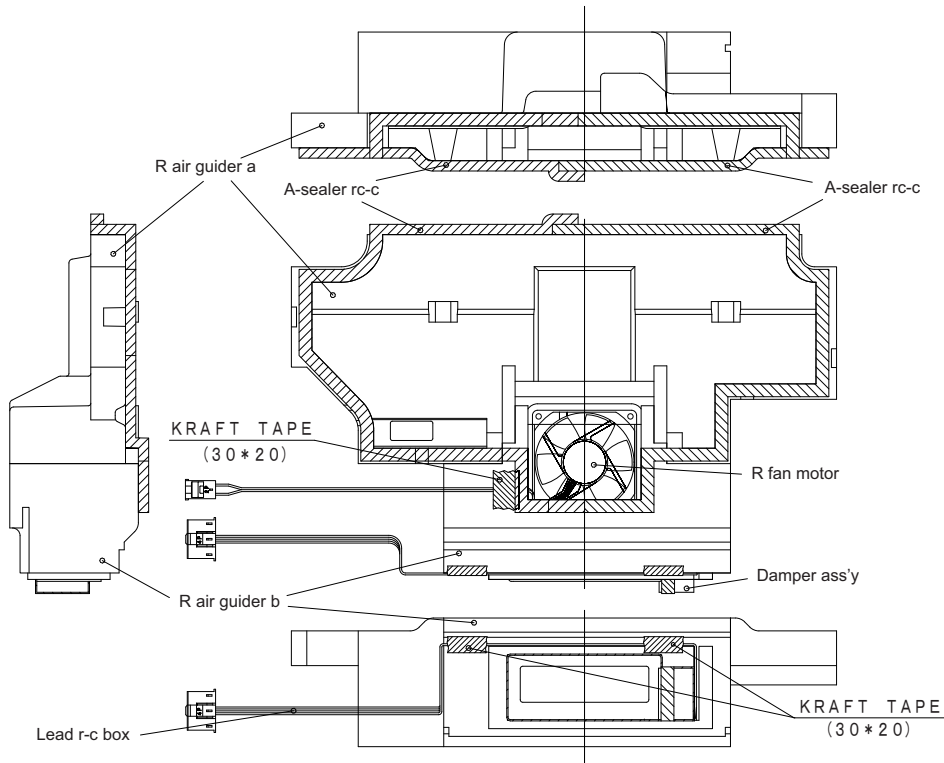
5. Insert R fan motor and damper ass'y to R air guider b.



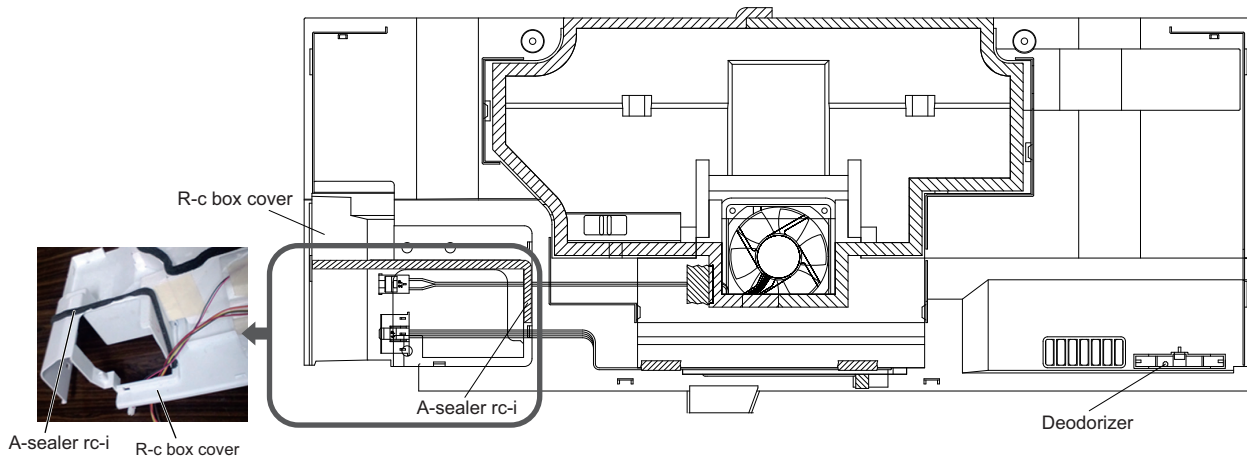
6. Stick A-sealer rc-f to R air guider b.
7. Stick A-sealer rc-g to R air guider a.



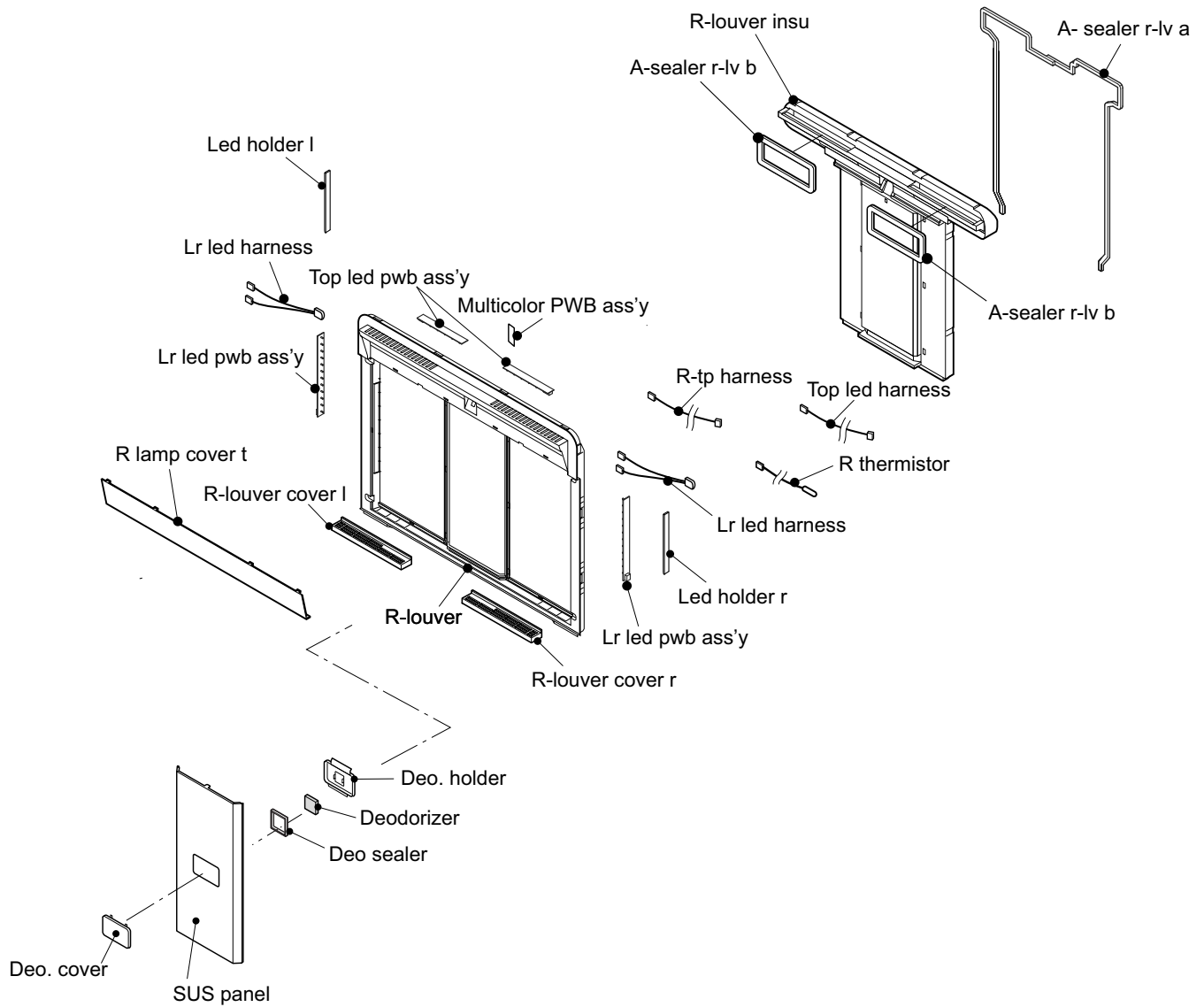
8. Assemble R air guider b to R air guider a.
Wire harness are fixed with kraft tape.
Stick A-selar rc-c to R air gider a/b.



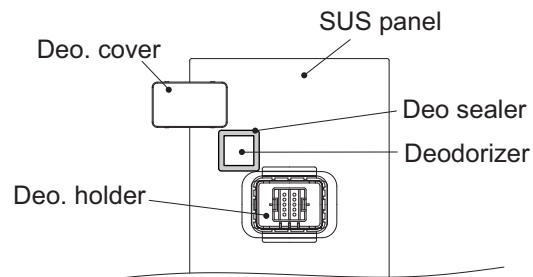
9. Stick A-sealer rc-i to R-c box cover.
Insert Deodorizer to R-c box cover.
Assemble these sets and R-c box cover.



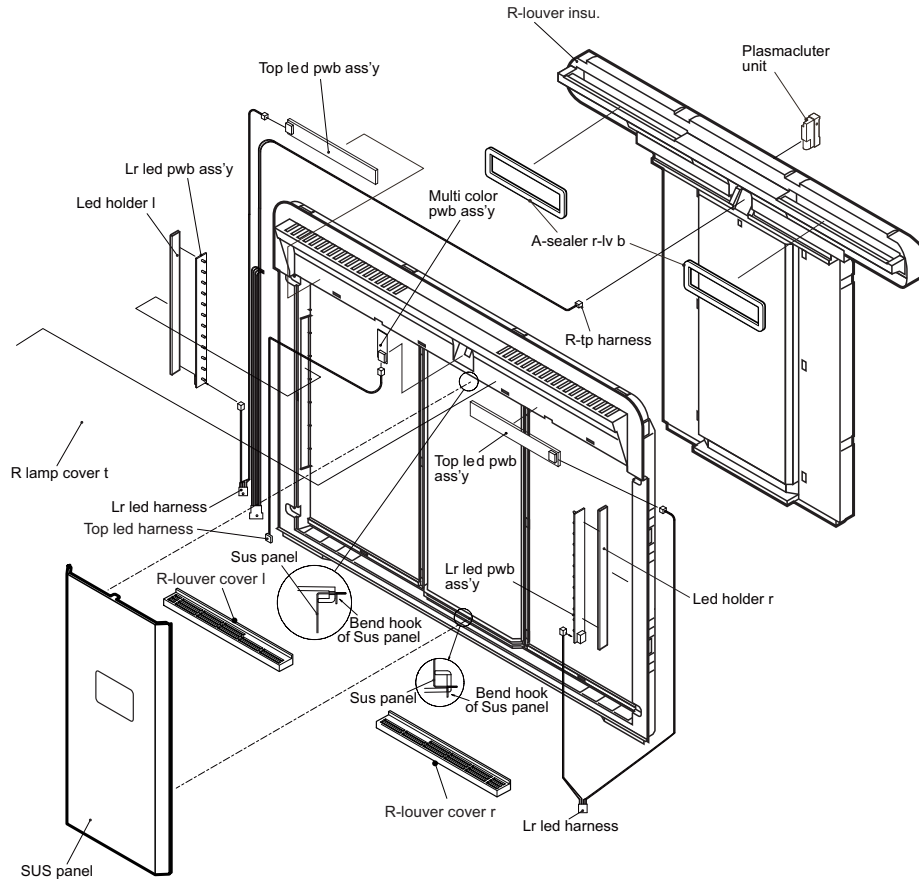
3. Assembling procedures of R-louver ass'y.



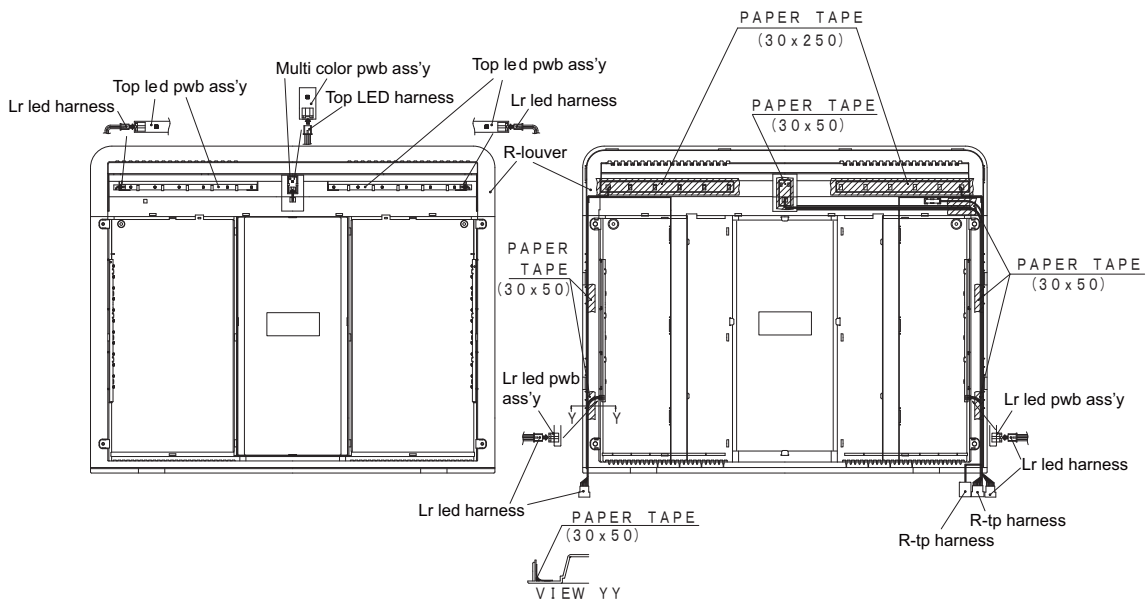
1. Fix Deo. holder to SUS panel.
(Bend hook 2 positions)
2. Fix Deodorizer with Deo sealer and Deo.cover to 1) ass'y.



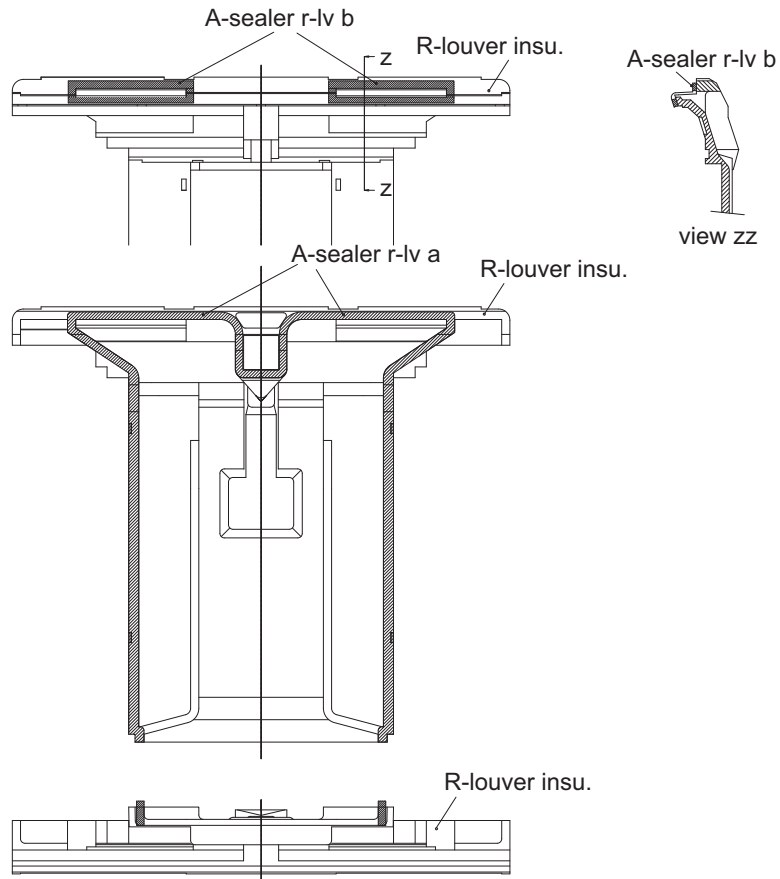
3. Fix 2) aass'y to r-louwer.
4. Fix R-louwer cover l and R-louwer cover r to R-louwer.
5. Connect Top led harness ass'y to multicolor pwb ass'y.
6. Fix 5) ass'y to r-louwer.
7. Fix Lr led pwb ass'y to led holder l & r.
8. Fix 7) ass'y to r-louwer. Connect lr led harness to lr led pwb ass'y.
9. Fix top led pwb ass'y to r-louwer. Connect lr led harness to top led pwb ass'y.



10. Fix each harness by paper tape to R-louwer.



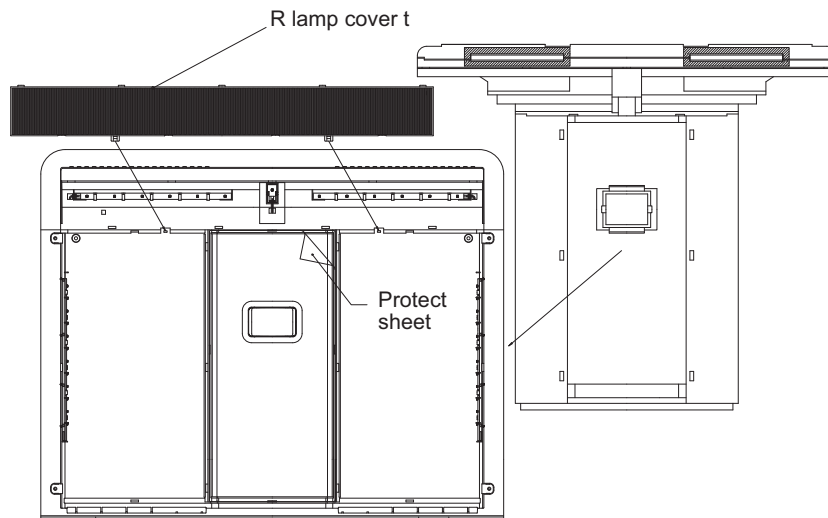
11. Stick A-sealer r-louver a & b to r-louver insu.



12. Fix 11) ass'y to r-louver.

13. Fix r lamp cover t to r-louver.

Note. After removing *Protect sheet pf sus panel, check LED turn on.

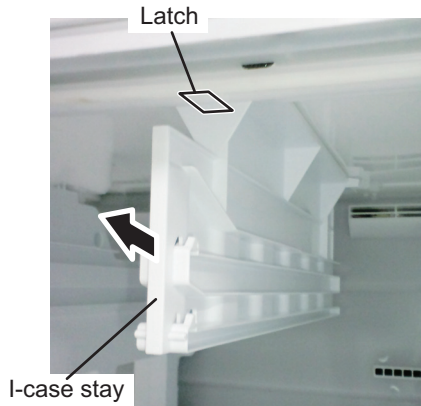


[2] FREEZER COMPARTMENT

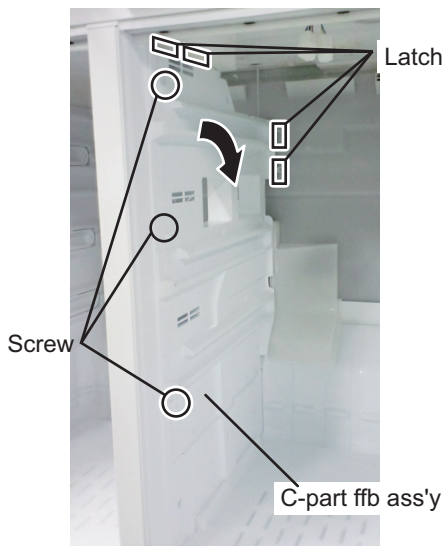
Parents parts name	Included electrical parts
Ev cover ass'y	F/df-thermistor, F fan motor
Evaporator ass'y	Fuse ass'y
Def-heater ass'y	Defrost heater

1. Disassembling procedures

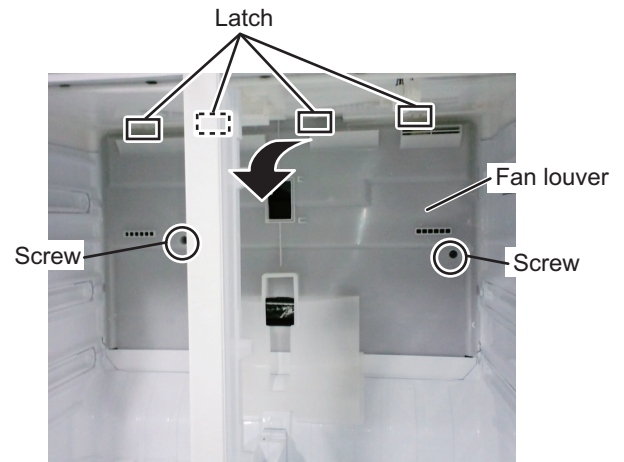
1. Remove the accessories (shelves, case, etc.).
2. Remove the i-case stay.



3. Remove the c-part ffb ass'y.

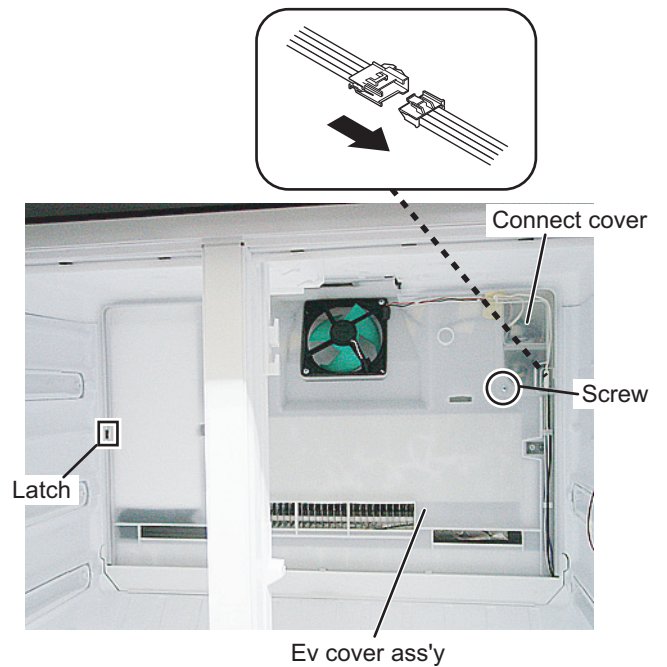


4. Remove the fan louver.

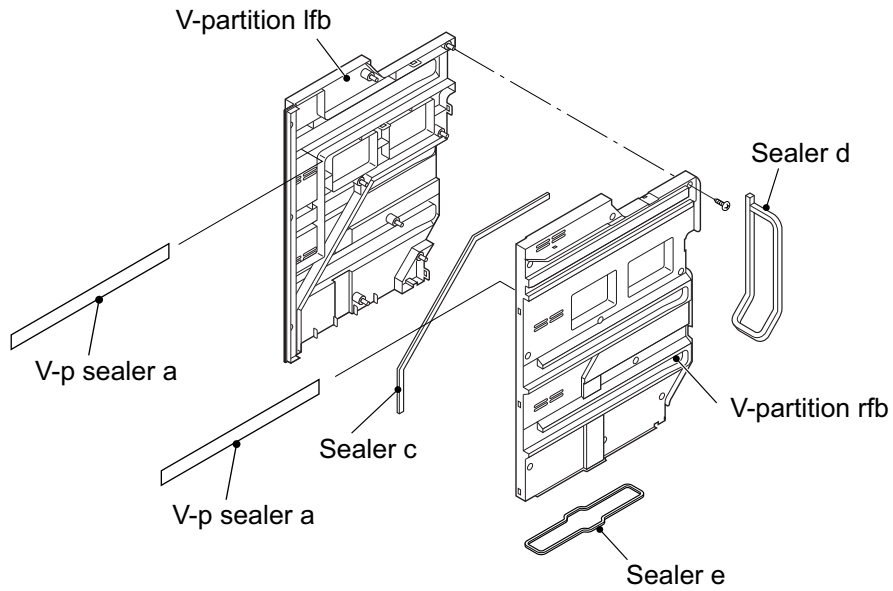


5. Remove the connect cover, and disconnect the connector.

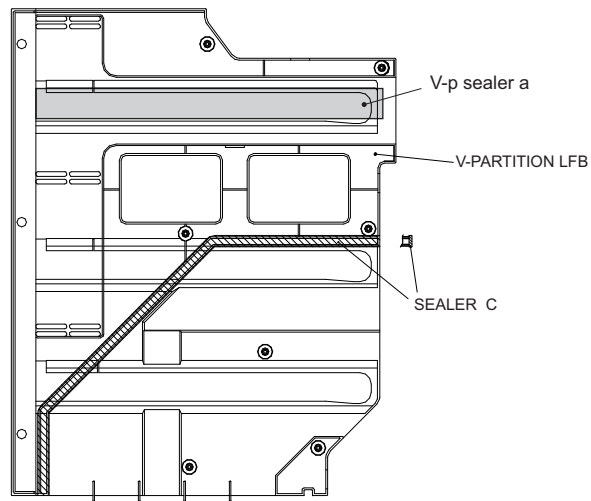
6. Remove the ev cover ass'y.



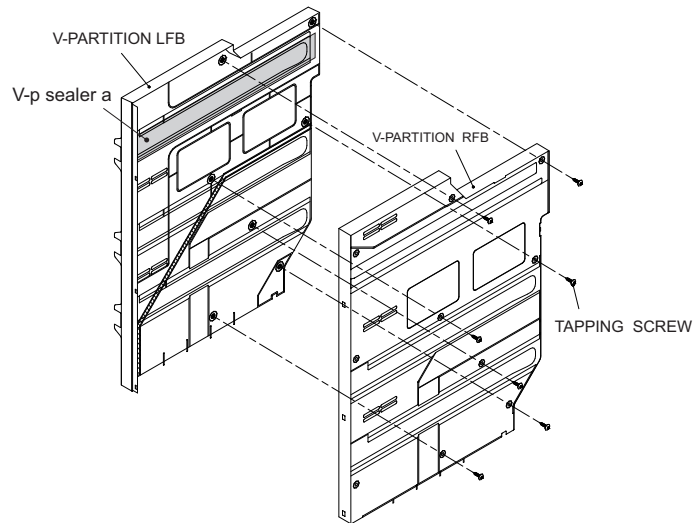
2. Assembling procedures of C PARTITION FFB ASS'Y.



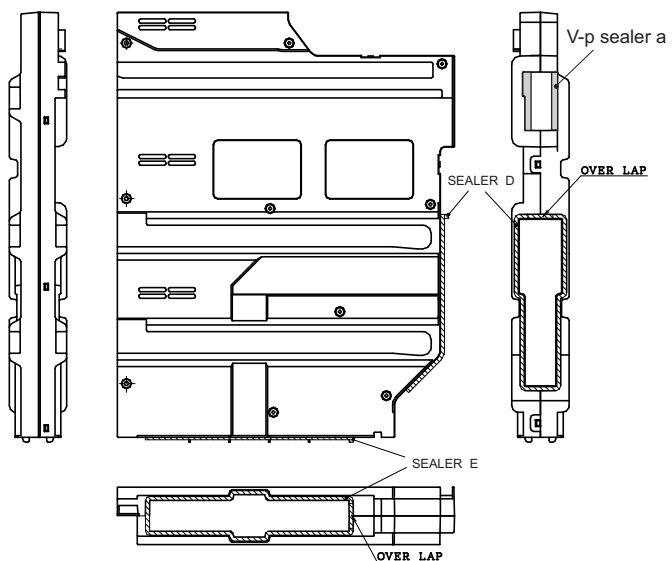
1. Stick Sealer c to V-Partition lfb.



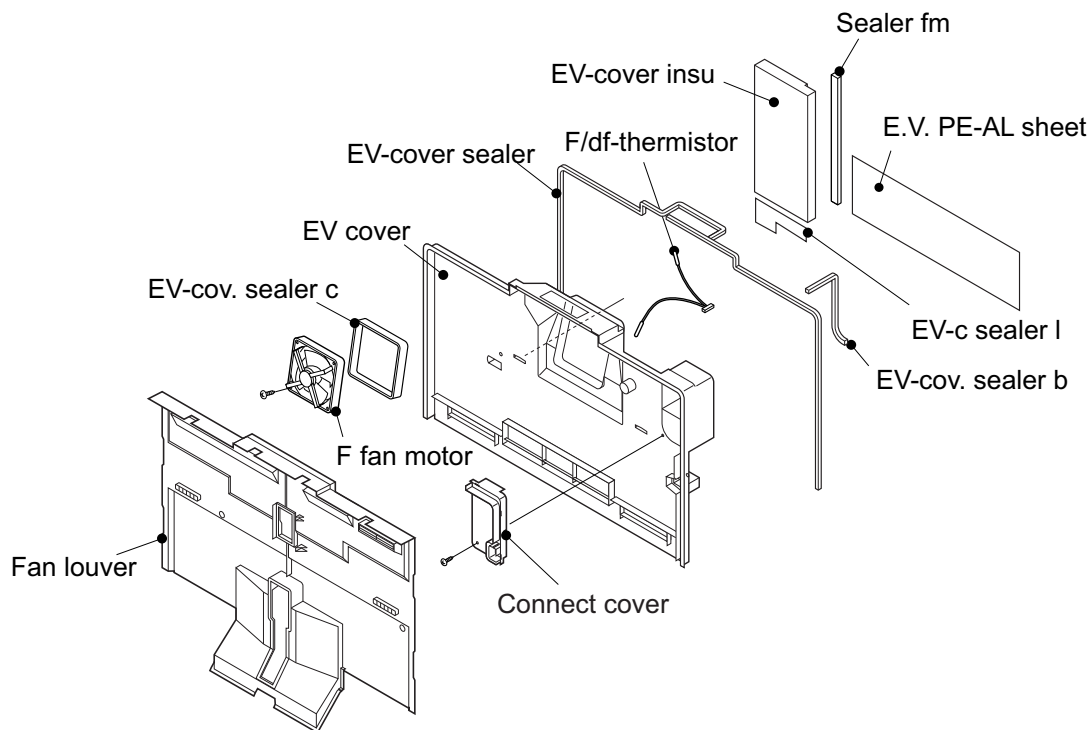
2. Fix V-partition lfb and V-Partition rfb with the tapping screw.



- Stick Sealer d to the back side.
Stick Sealer e to the bottom side.

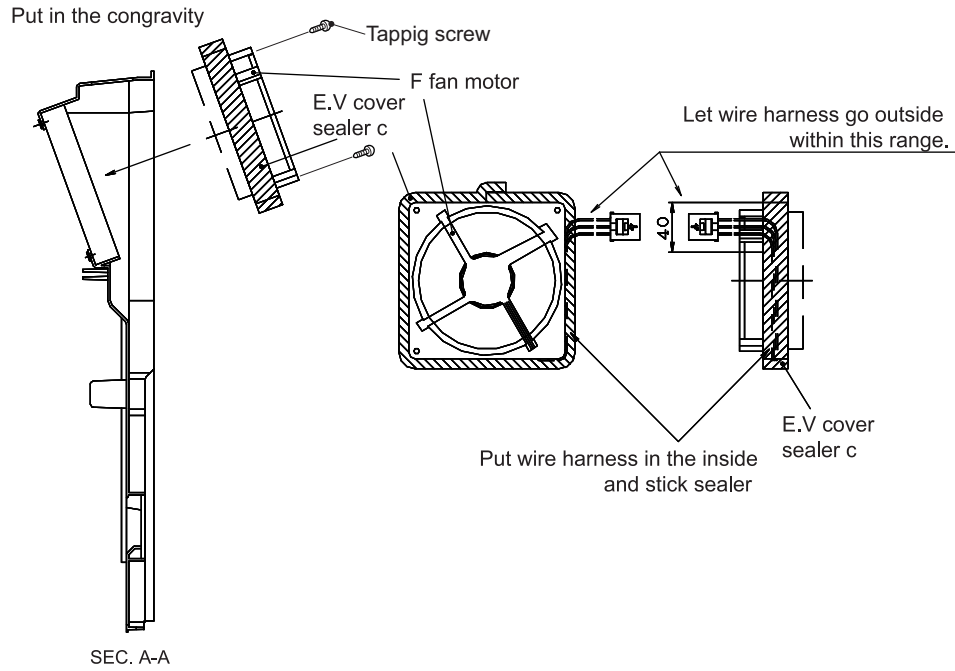


3. Assembling procedures of E.V. COVER ASS'Y.



1. Assembly F fan motor

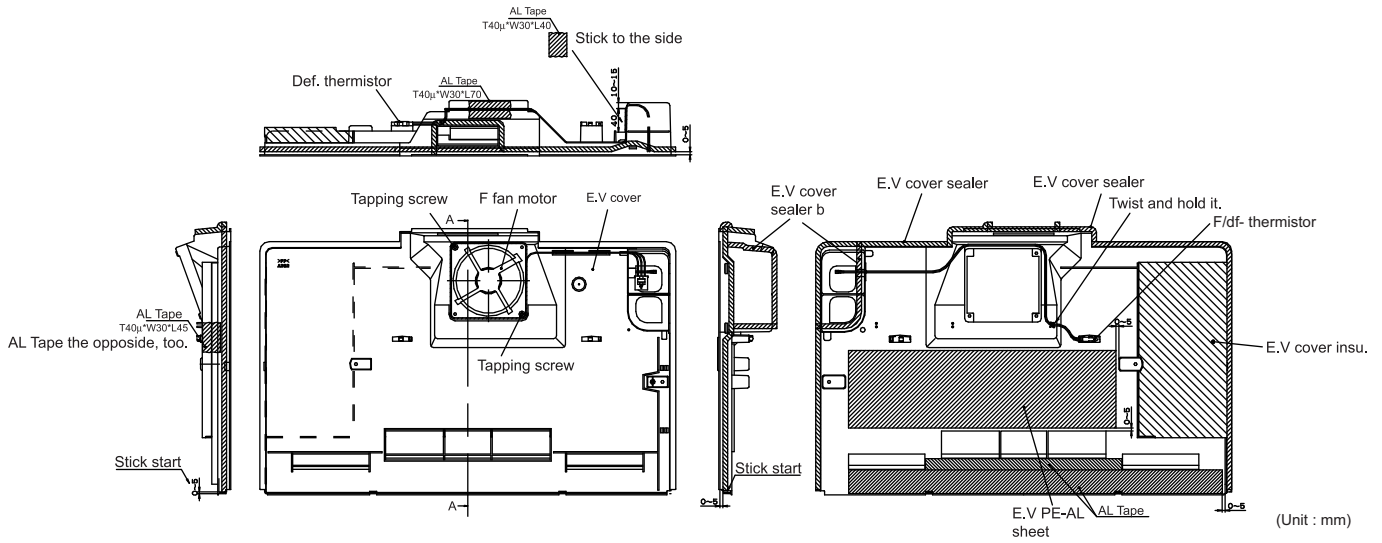
- Sticking of sealer to F fan motor.
- Insert F fan motor to E.V cover. Then fix with tapping screw.



2. Sticking of sealers and PE-AL sheet to E.V cover.

3. Insert F/df-thermistor (wire color : Blue) to E.V cover.

4. Insert E.V cover insulation to E.V cover.

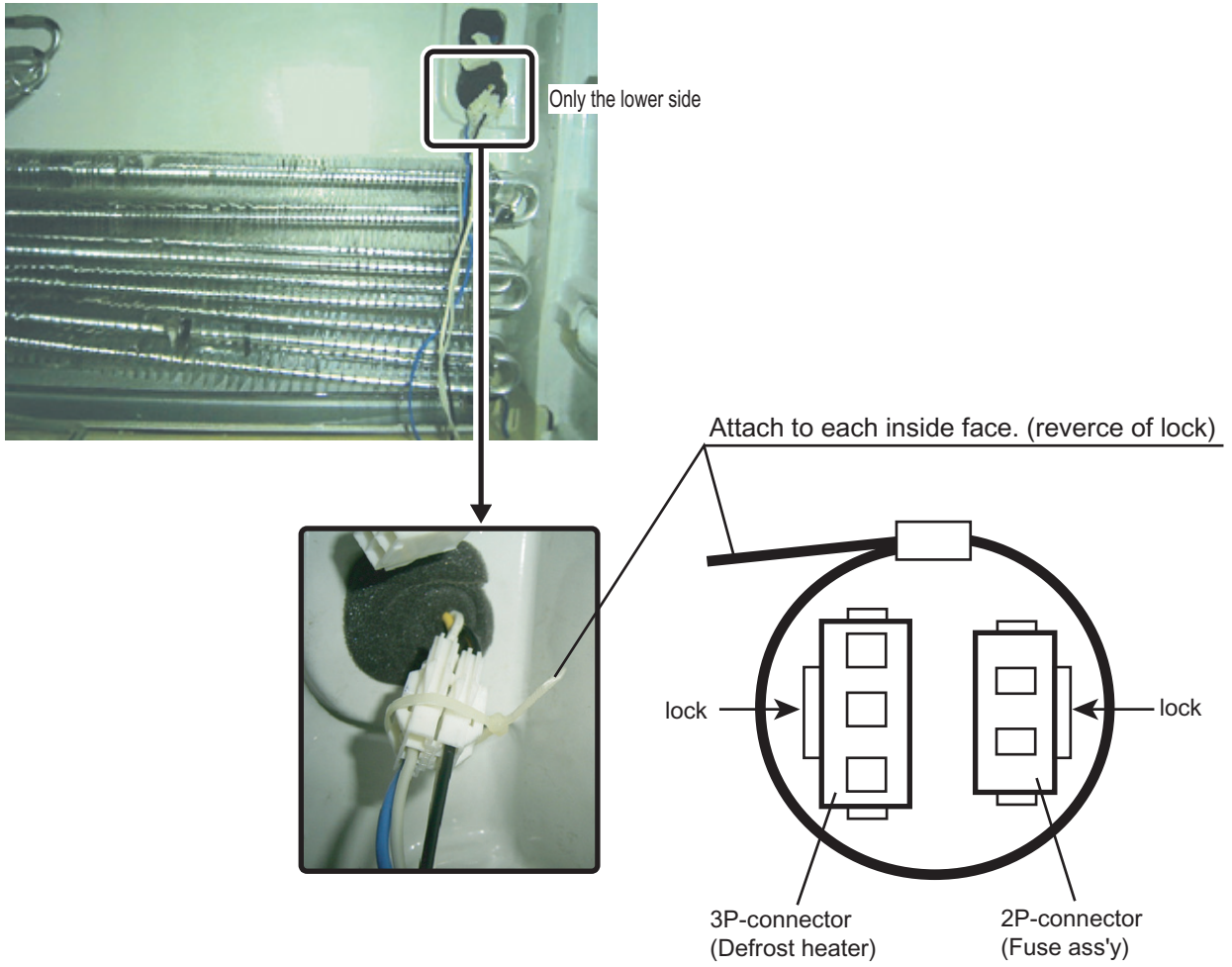


5. Insert F/df-thermistor (wire color : White) to E.V cover.

6. Fix 5) ass'y to E.v cover with tapping screw.

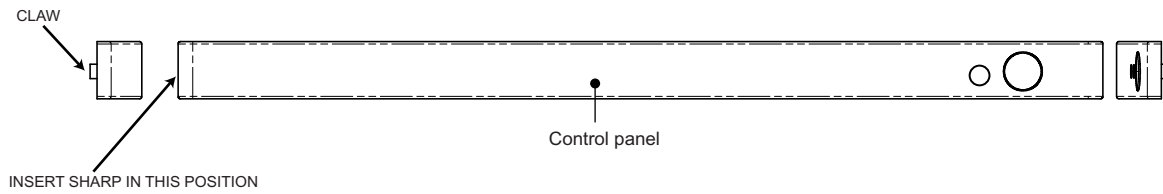
4. Banding the connectors

1. It is necessary to bind the connector joint of the Defrost heater and fuse ass'y in the band.



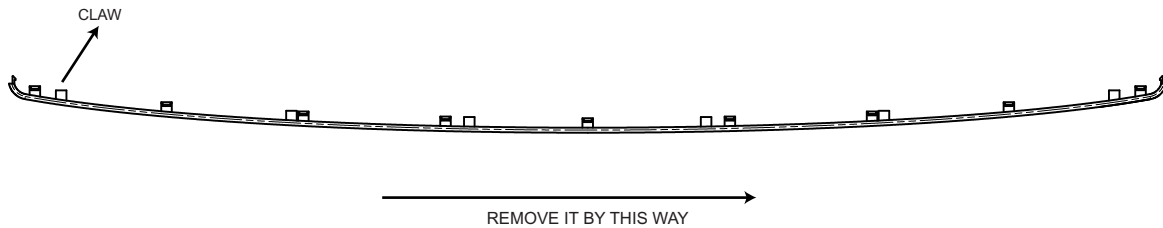
[3] HOW TO REMOVE THE CONTROL BASE

1. Insert the sharp tool into gap between control panel and control base, and then push it for take out the claw from control base.

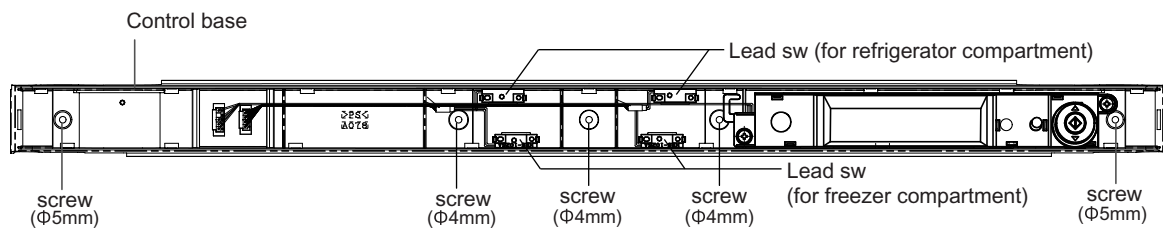


2. Remove the control panel carefully by hand.

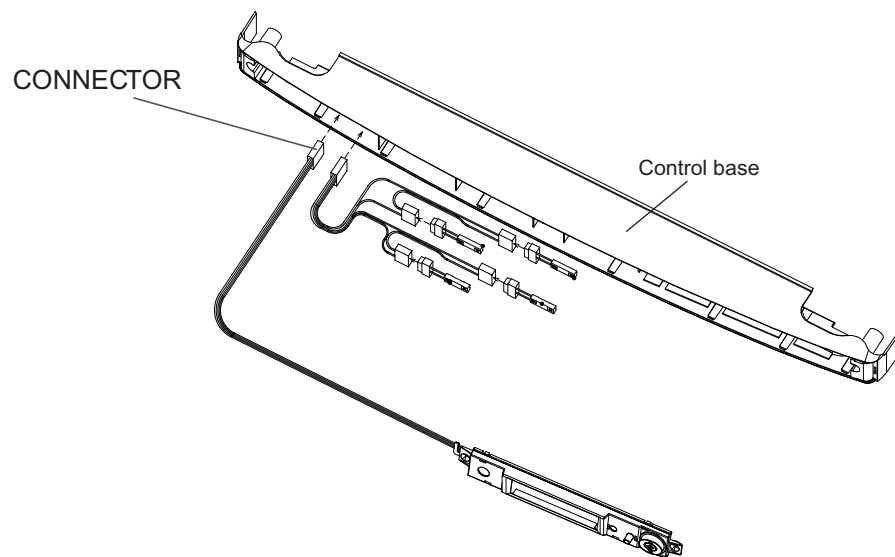
(Take out the claw of control panel from control base)



3. Insert the screw driver for take out 5 screws in the position as see the picture.



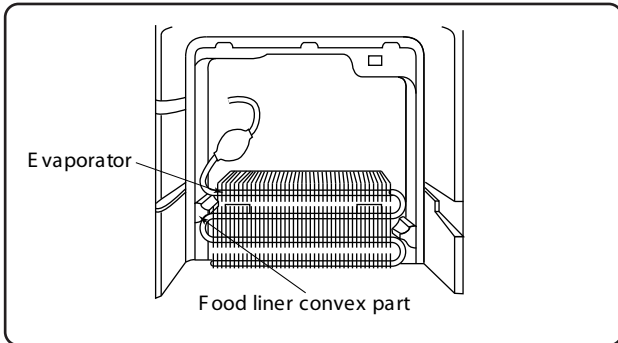
4. Take off the connector (2 connectors) and then remove the control base.



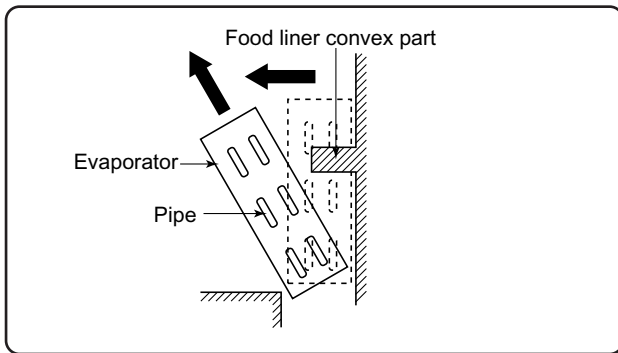
[4] DEFROST HEATER

1. Taking-out Evaporator

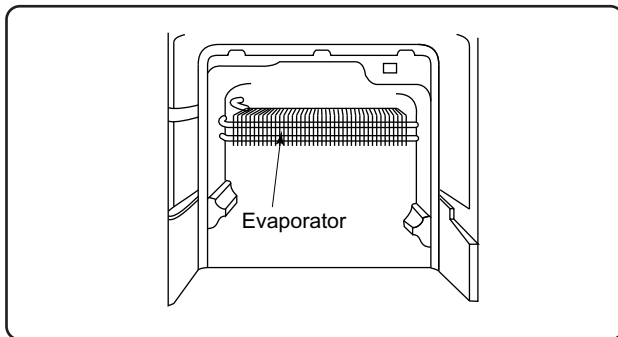
1. Take-out C Partition ffb ass'y.
2. Take-out Fan louver.
3. Take-out E.V cover ass'y.



4. As shown in the above figure, pull the upper part of Evaporator toward you, pull it diagonally so that the pipe of Evaporator does not contact the convex part of food liner.



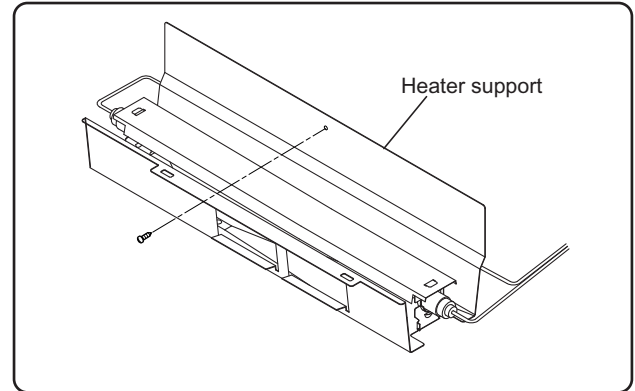
5. Pull the Evaporator for remove as shown in the above figure.



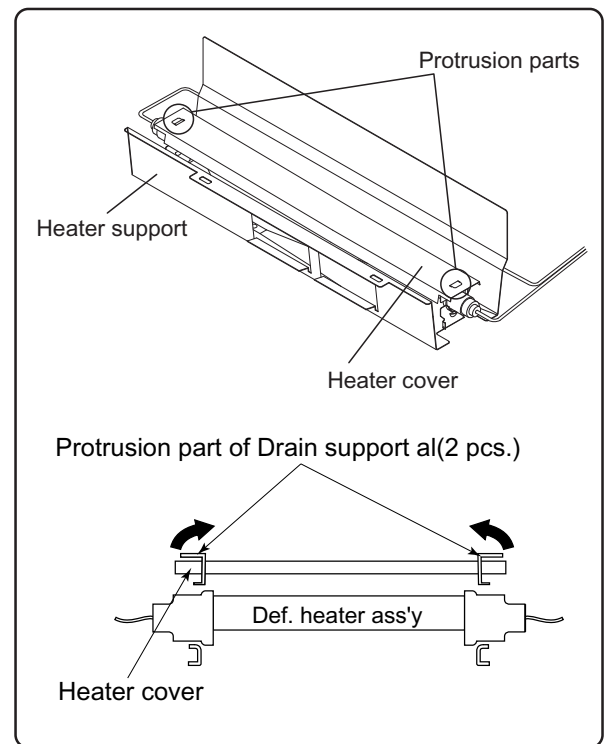
NOTE: When pulling Evaporator and bending the pipes, pay attention so as not to break and deform the pipes. Still, take care not to hurt yourself by fin of Evaporator.

2. Replacement of Def. heater.

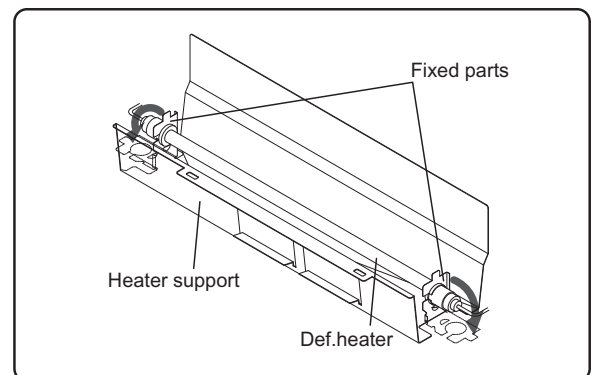
1. Remove the center screw of Heater support to take it off from the food liner.



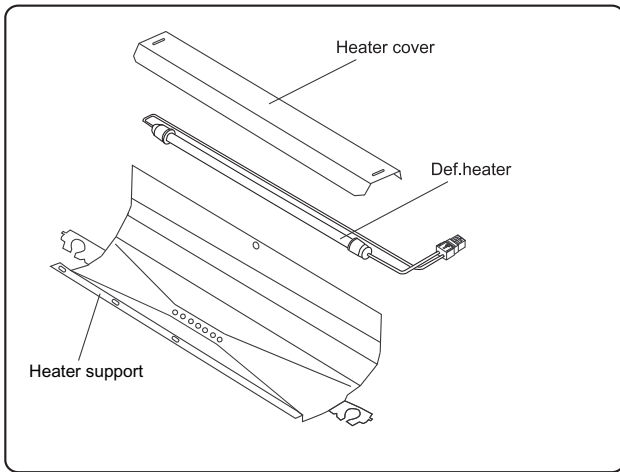
2. Raise the protrusion part of Heater support. Then remove Heater cover.



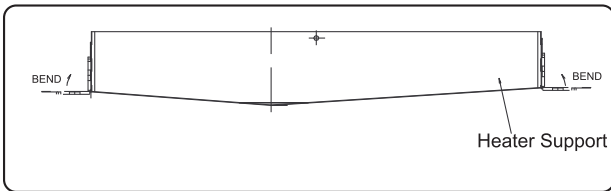
3. Open Def.heater fixed part of Heater support to the right and left, then remove Def.heater.



4. Replace Def. heater with new one.

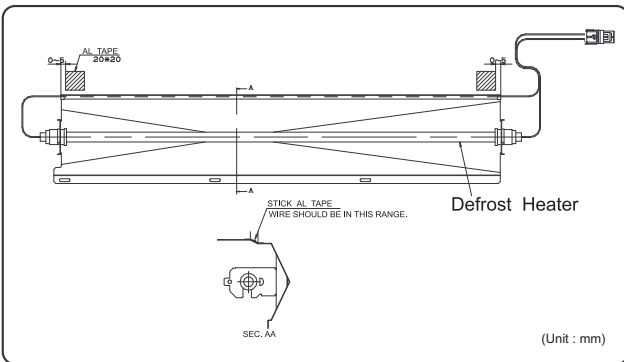


5. Bend end of heater support.

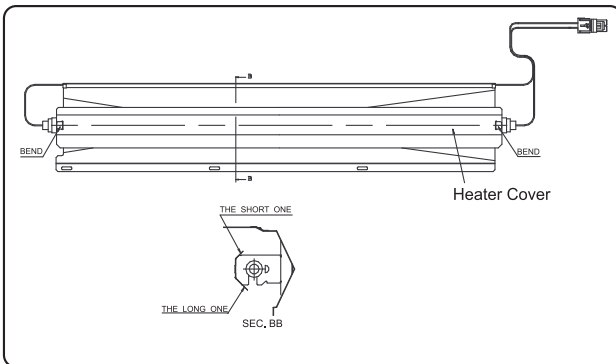


6. Assemble Defrost heater to Heater Support.

7. Assemble Heater cover to Heater Support. Bend top edge to outside.



8. Roll the leading wire Sealer to Lead wire Defrost Heater.



3. Installing of Evaporator

1. Install Evaporator as shown in 1-3 in the reverse order of 1-4.

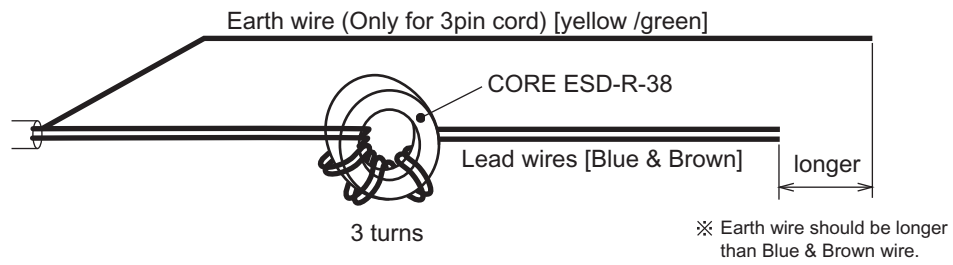
2. Correct the deformed fin.

NOTE: 1. When installing Evaporator, take care not to deform significantly and break the pipes.

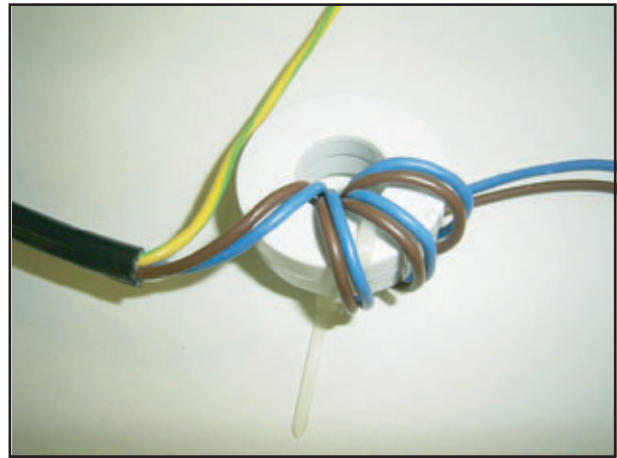
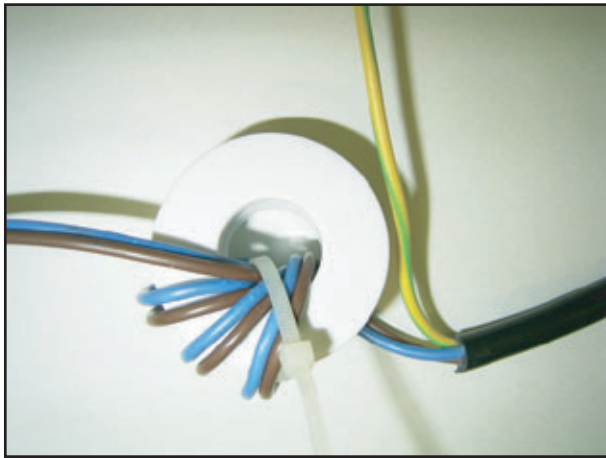
2. Take care not to damage the lead wires and hurt yourself by the fin of Evaporator.

[5] REPLACING OF SOURCE CORD

1. Compile two power supply leads. Let it go through in a CORE ESD-R-38, and wind up three times.



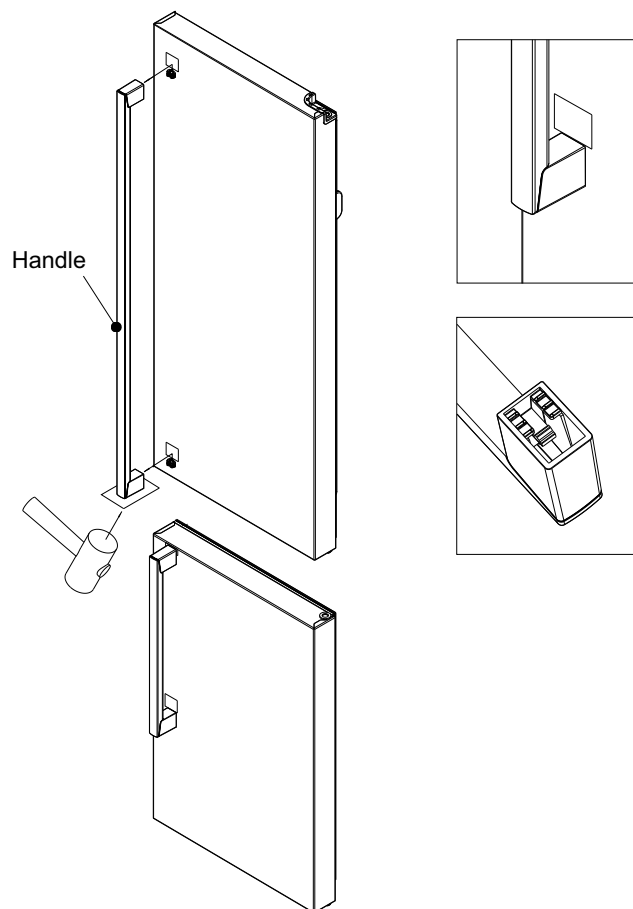
2. Fix it by Nylonband so that lead wires do not loosen. Wear Nylonband diagonally.



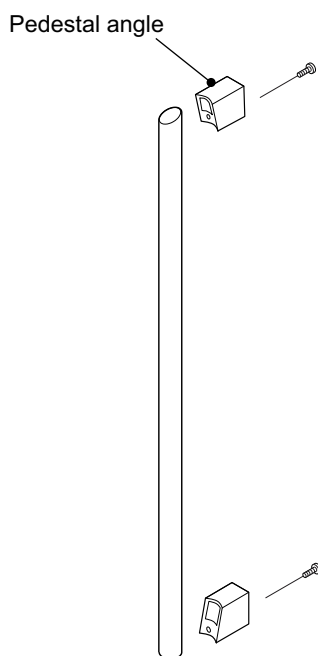
(Back side)

[6] HOW TO REMOVE THE DOOR HANDLES

1. Simply tap the handle from below being sure not to scratch the handle.
2. Handle will unclip and can be pulled up and out to remove.



3. Take out the screw, and then take out the Pedestal angles.



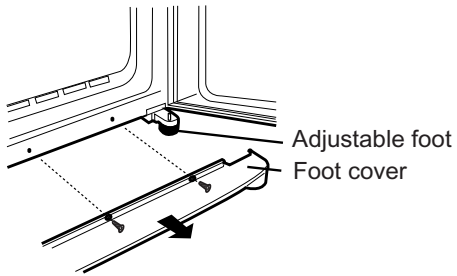
[7] WHEN LEFT AND RIGHT DOORS ARE NOT ON THE SAME LEVEL

1. Cause

The floor is not flat and refrigerator is slanting.

2. Adjustment

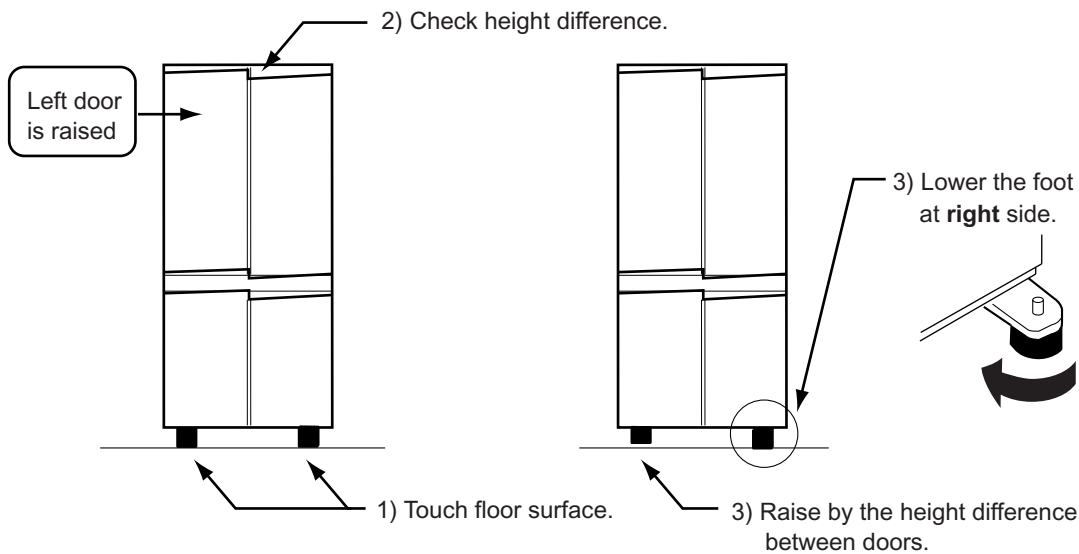
1. Unscrew 4 screws on the bottom of the cabinet, and remove the foot cover.



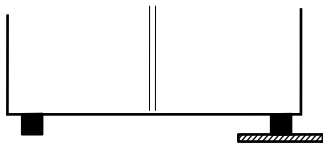
2. Adjust the adjustable feet as follows:

[When left door is raised]

- 1) Raise and then lower the both feet until they touch the floor.
- 2) Measure the height difference between right and left doors.
- 3) Extend the right door adjustable foot until the left adjustable foot floats by the distance equal to the door level difference.
- 4) Several days are required until the both feet touch the floor and refrigerator seats stably.



- 5) If the height difference is not completely compensated, place a plate of the right thickness under the adjustable foot.

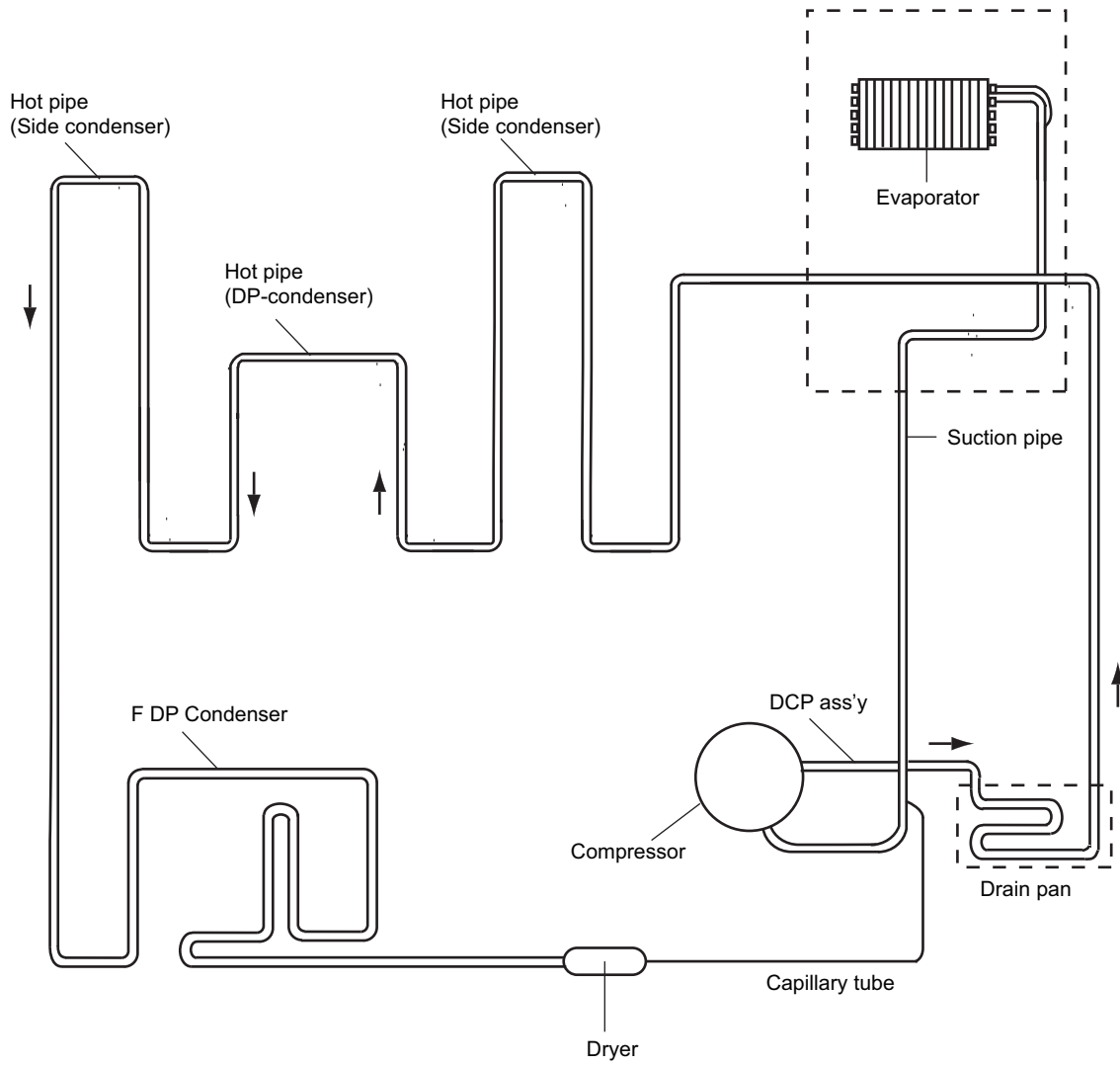


NOTE: When the right door is higher than the left door, extend the left adjustable foot.

CHAPTER 9. COOLING UNIT

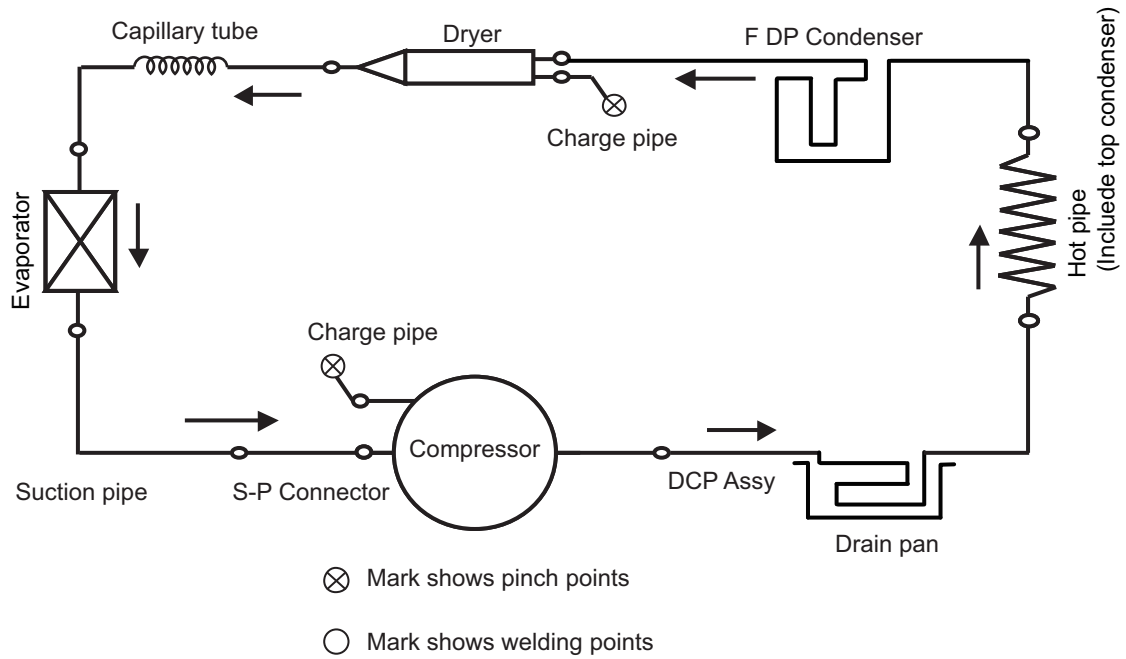
[1] COOLING UNIT

→ Mark:Refrigerant flow



[2] LOCATION

1. Location 1



2. Location 2

