



Service Manual

RN-341N



RN-342N



RN-343N



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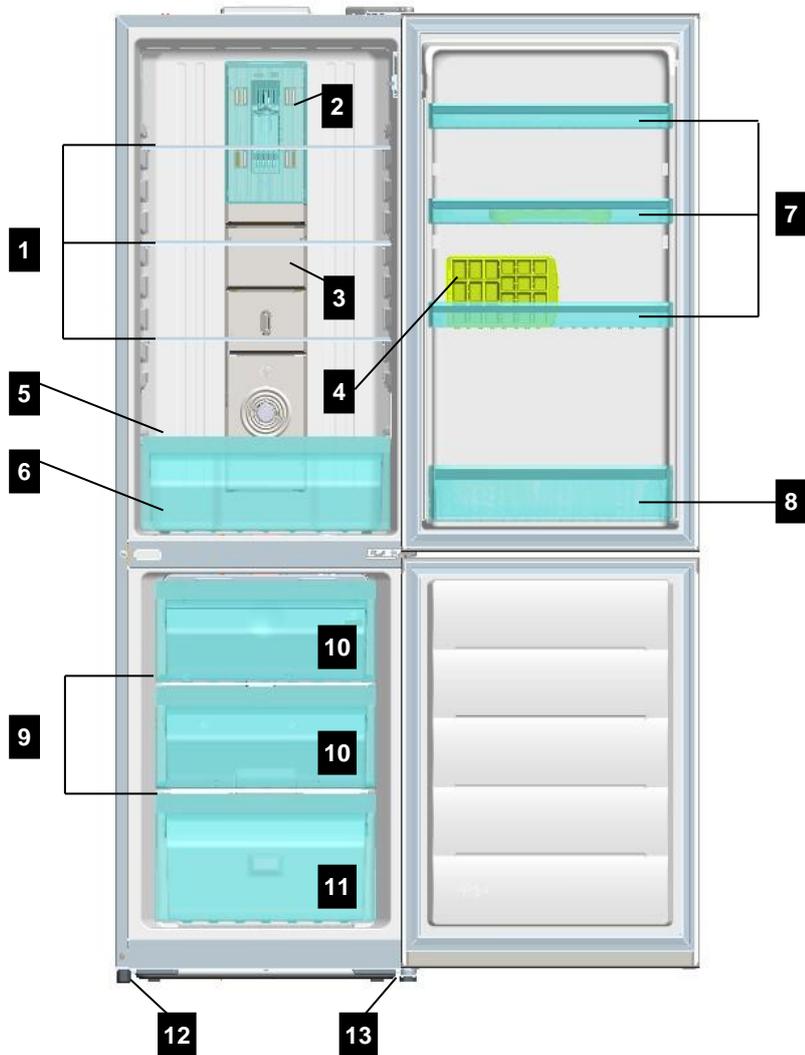
1. SPECIFICATIONS

1-1. Model Information

* is the Door Type

Buyer No.		RN-34*N	
Factory No.		RFP-31*N*Q8N	
Control Type		Front Control Panel Button	
Gross Vol. IEC 62552 (unit: L)	Total	337	
	Freezer	111	
	Refrigerator	226	
Storage Vol. IEC 62552 (unit: L)	Total	305	
	Freezer	84	
	Refrigerator	221	
Diemension (unit: mm)	Net Width (Packing)	595(634)	
	Net Depth (Packing)	650(685)	
	Net Height (Packing)	1870(1970)	
Cooling Cycle	Refrigerant Type	R-600a	
	Refrigerant Charge	0.044kg	
	Evaporator Type	Fin Type	
	Condenser Type	Natural Convection Cooling System	
	Dryer	Desiccant: Molecular Sieve xH-9	
	Capillary Tube (unit: mm)	ID0.7 x T0.55 x L2290	
Heater	Defrost Type	Automatic Start & Stop	
	Defrost Heater	AC230V, 130W	
	Defrost Shape	Sheath Type	
Electric Part	Freezer Fan Motor	DC 12V, 2300RPM	
	Refrigerator Lighting	Bulb LAMP 15W / Bulb LED 1.2W (1EA) *Option	
Net Weight (Packing)		67(73)kg	
Blowing Agent		C-Pentane	

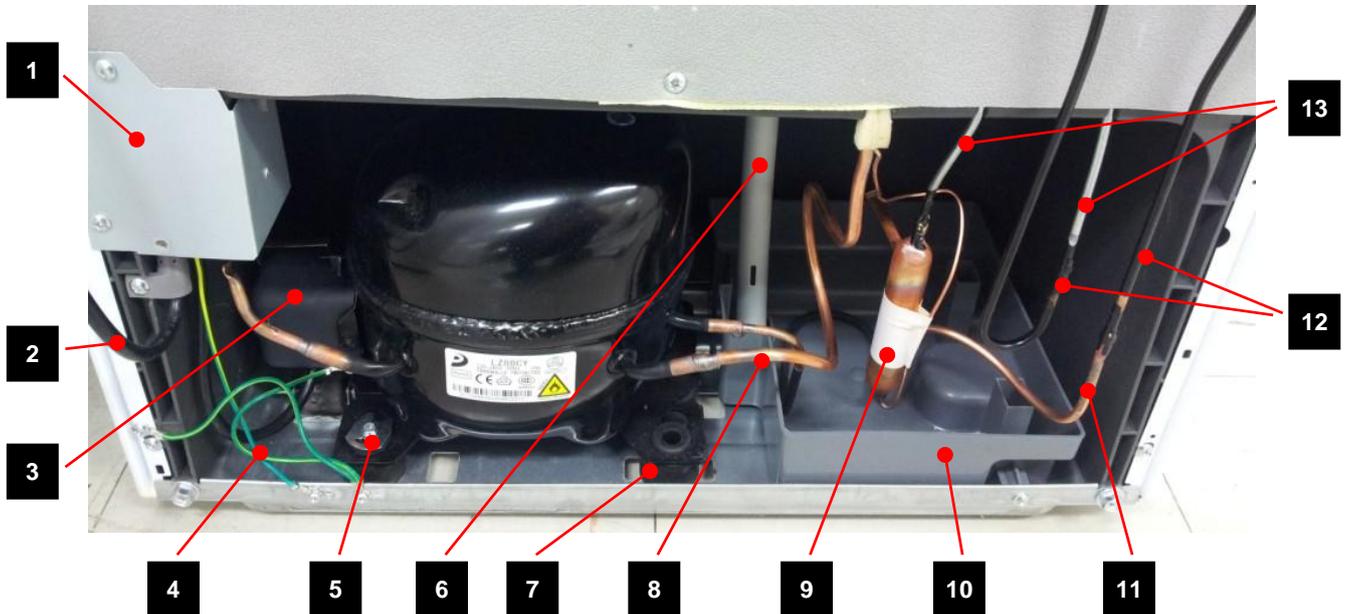
1-2. Interior Parts



- 1. Refrigerator Shelves
- 2. Lamp Window
- 3. Multi Duct
- 4. Tray Ice Cube
- 5. Cover Vegetable Case
- 6. Vegetable Case

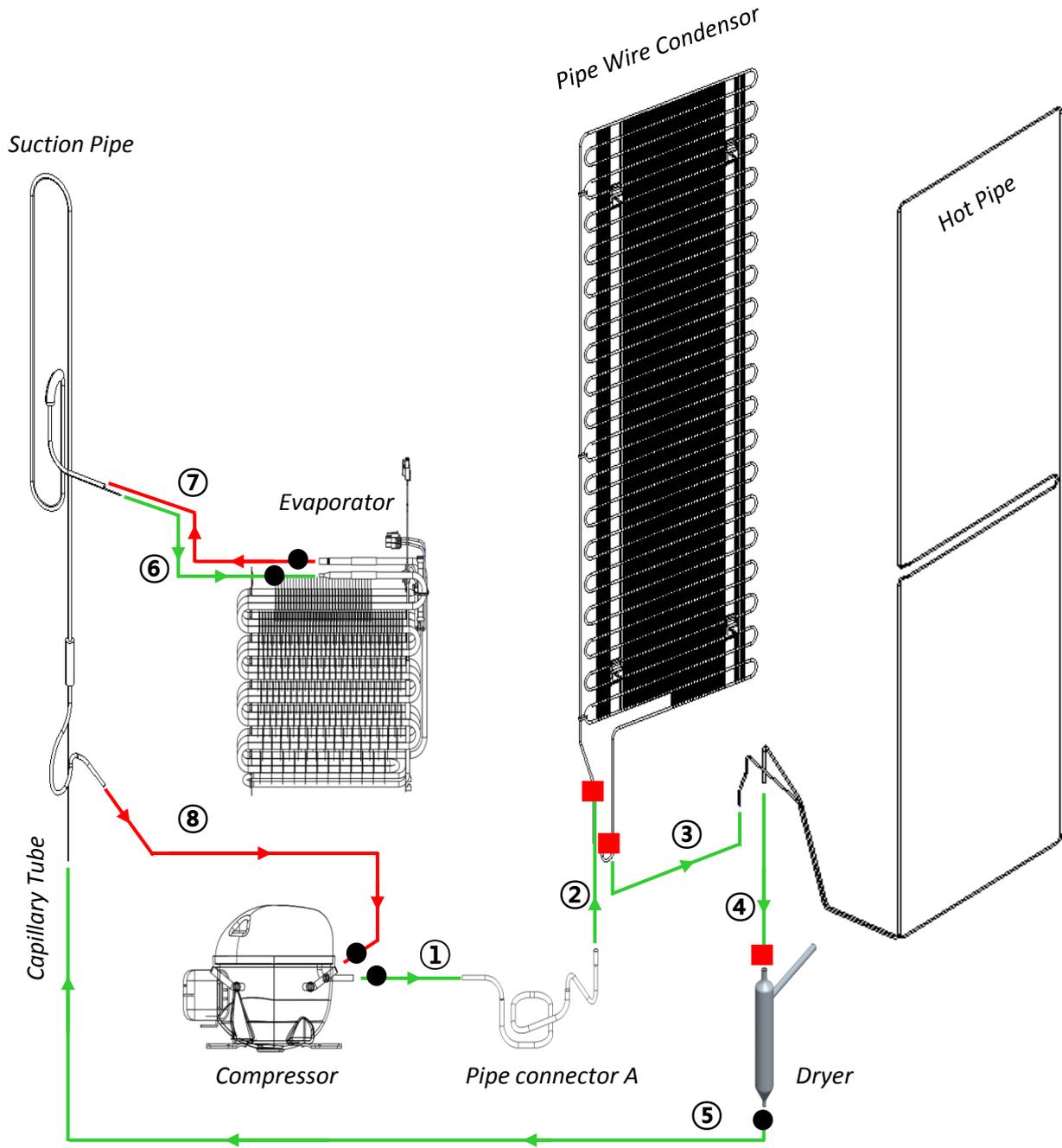
- 7. Refrigerator Pocket "R"
- 8. Refrigerator Pocket "J"
- 9. Freezer Shelves
- 10. Freezer Case "A"
- 11. Freezer Case "B"
- 12. Adjusting Leg (Left)
- 13. Adjusting Leg (Right)

1-3. Machine (Compressor) Compartment View



- | | |
|--------------------------------|----------------------------|
| 1.Box Power As (Capacitor Run) | 8. Suction Pipe As |
| 2. Power Cord | 9. Dryer As |
| 3. Switch P Relay As | 10. Case vaporization As |
| 4. Earth Comp Wire | 11.Pipe connector A |
| 5. Fixture Compressor (Washer) | 12. Pipe Wire Condensor As |
| 6. Drain Hose | 13. Pipe Hot |
| 7. Compressor Absorber | |

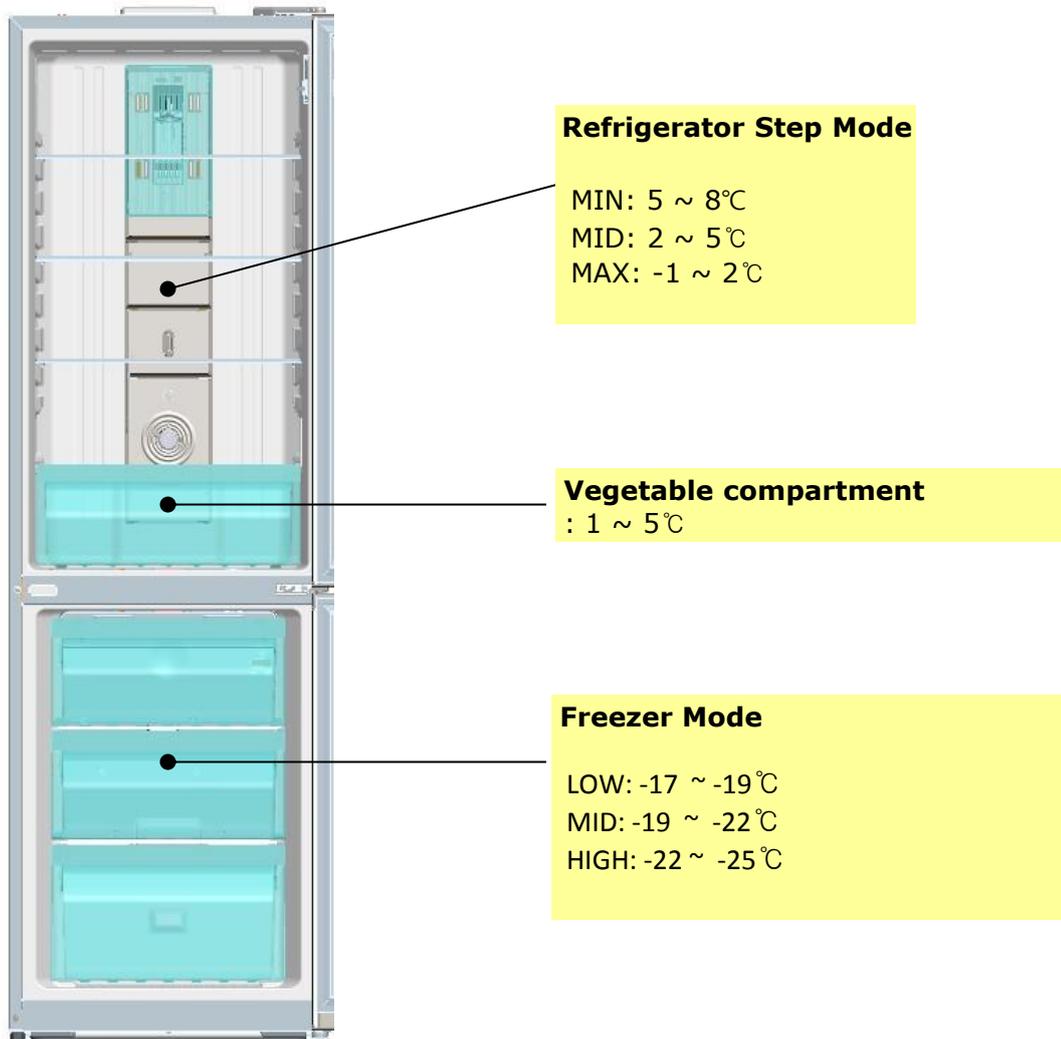
1-4. Refrigerant Cycle



- Welding Point

●	Copper Welding (Ag 5%)	5 Point
■	Silver Welding (Ag 30%)	3 Point

1-5. Temperature Diagram

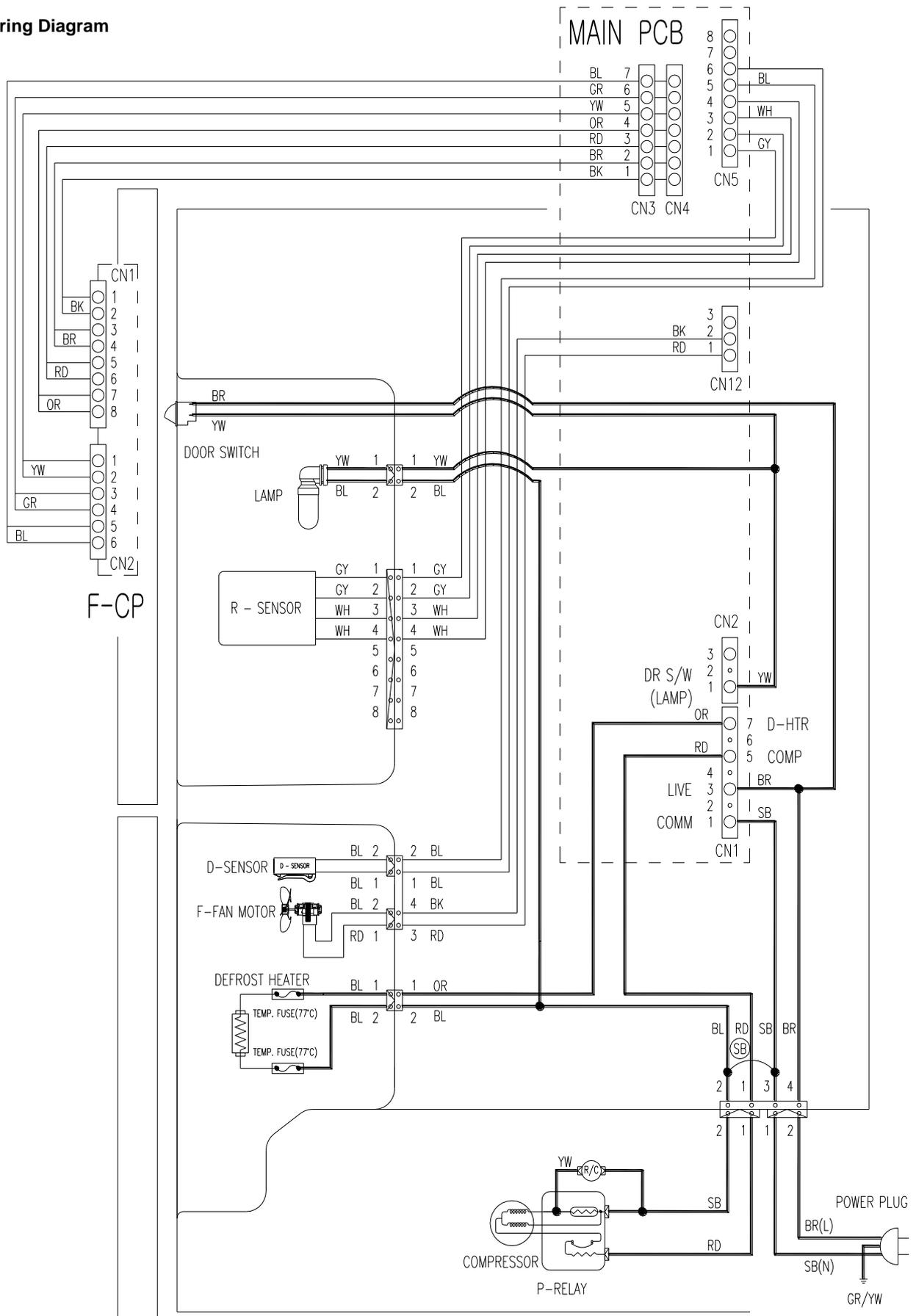


; The actual inner temperature varies depending on the food status, as the indicated setting temperature is a target temperature, not actual temperature within refrigerator.

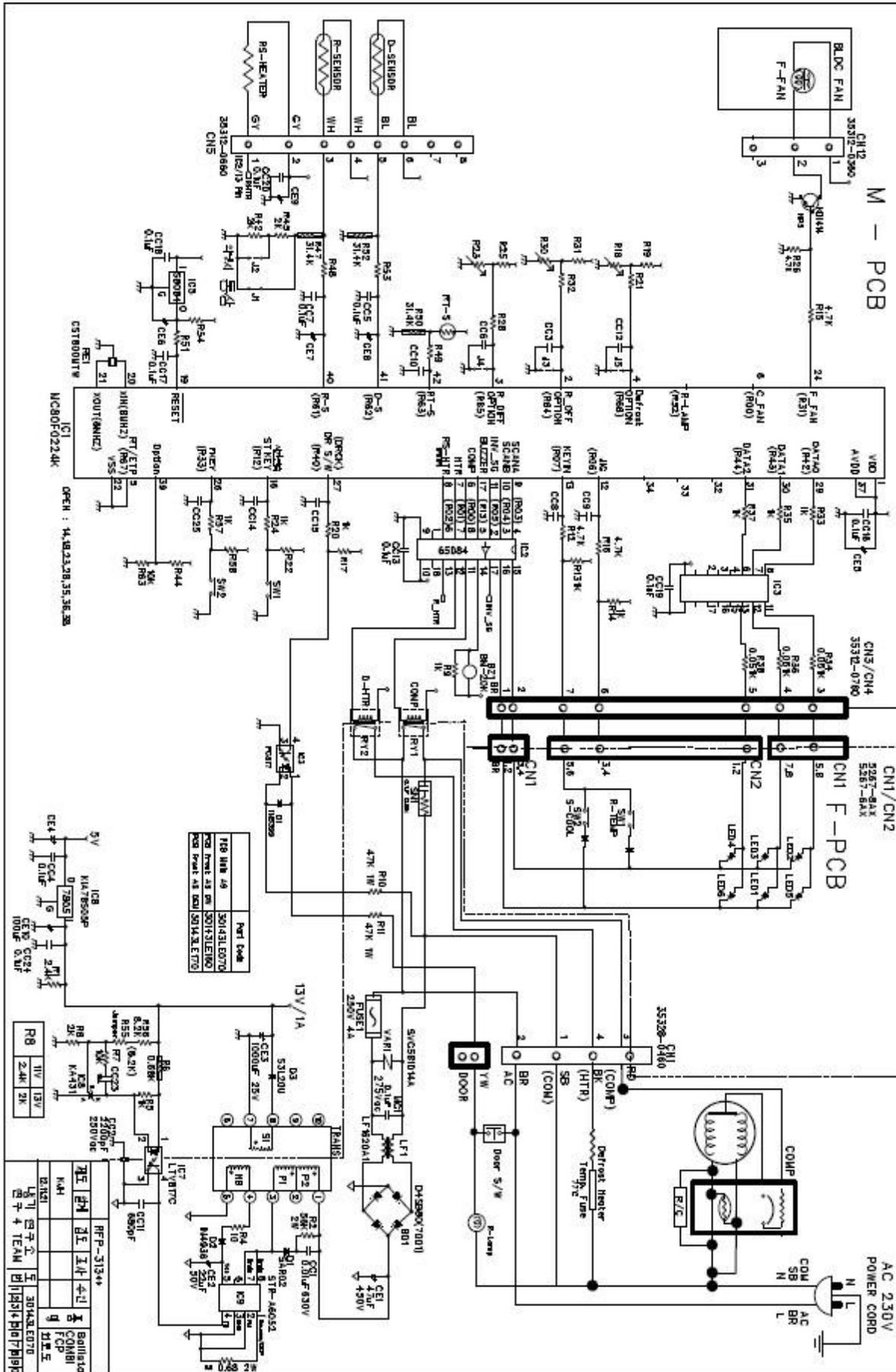
; Refrigeration function is weak in the initial time.

Please adjust temperature as above after using refrigerator for minimum 1 ~ 2 days.

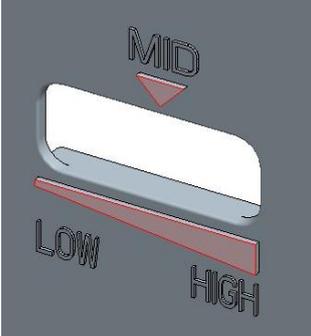
1-6. Wiring Diagram

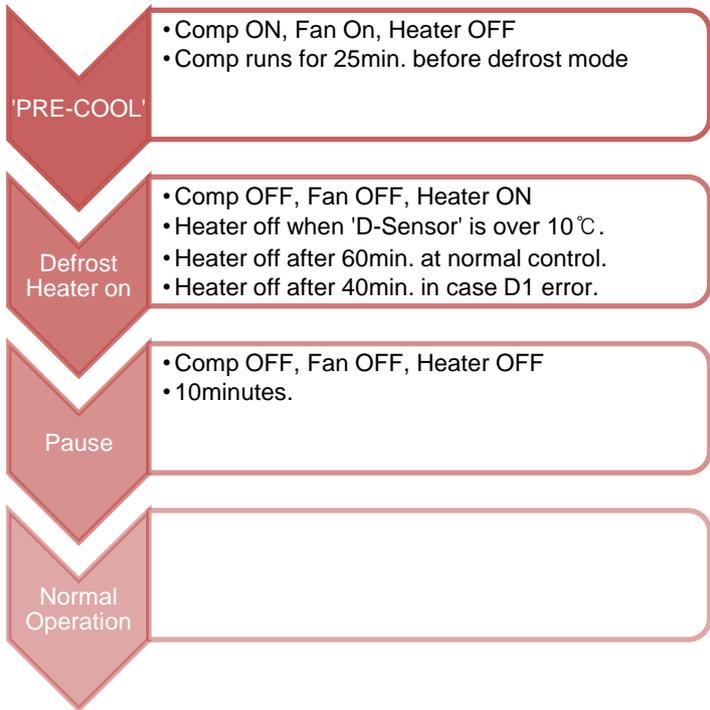


1.7. Main PCB Circuit Diagram



2-1. DISPLAY				
INPUT		CONTROL OBJECT		
- PCB Control Panel Button		-PCB Control Panel LED		
<p>- Temperature is controlled by "PCB Control Panel Button" assembled on the refrigerator door. - Features are model dependent.</p>				
<p>The diagram shows two views of the control panel. On the left, a vertical panel with five LED steps labeled 'LED step "5" (MAX)', 'LED step "4"', 'LED step "3"', 'LED step "2"', 'LED step "1" (MIN)', and 'LED step "S" (S-COOL)'. Below these is a 'TEMP' button and a 'Super Cool' button. On the right, a 'Digital Control System' panel with a temperature scale from 'Min.' to 'Max.' and a 'Temp.' button. A 'Temperature adjustment button for refrigerator compartment' is indicated. A 'MIN' and 'MAX' range is shown with a double-headed arrow. A 'Reference Chapter No.' box points to the table below.</p>				
	LED DISPLAY		What's the Meaning	How to Push Buttons for the LED Display
	ON	Flicker		
2-2	3	-	TEMP STEP "NOR"	Initial mode by power input
	4	-	TEMP STEP "MAX-NOR"	"TEMP" 1 time
	5	-	TEMP STEP "MAX"	"TEMP" 2 times
	1	-	TEMP STEP "MIN"	"TEMP" 3 times
	2	-	TEMP STEP "MIN-NOR"	"TEMP" 4 times
	S	-	TEMP S-COOL	"S-COOL" 1 time
2-8	3	4,5	ERROR "R SENSOR" (R1)	"S-COOL" continuously + "TEMP" 5 times ※ The Priorities of Error Display : R1 > RT > D1 > C1 > F3
	2	4,5	ERROR "RT SENSOR" (RT)	
	1	4,5	ERROR "D SENSOR" (D1)	
	2,3	4,5	ERROR "DOOR S/W" (DR)	
	1,3	4,5	ERROR "CYCLE" (C1)	
	1,2	4,5	ERROR "DEFROST" (F3)	
2-3	3,S	4,5	Forced Defrost Mode in Progress	<ul style="list-style-type: none"> How to start the mode: "TEMP" continuously + "S-COOL" 5 times => All LED ON for initial 3 seconds. How to confirm the mode after 3sec.: "S-COOL" continuously + "TEMP" 5 times

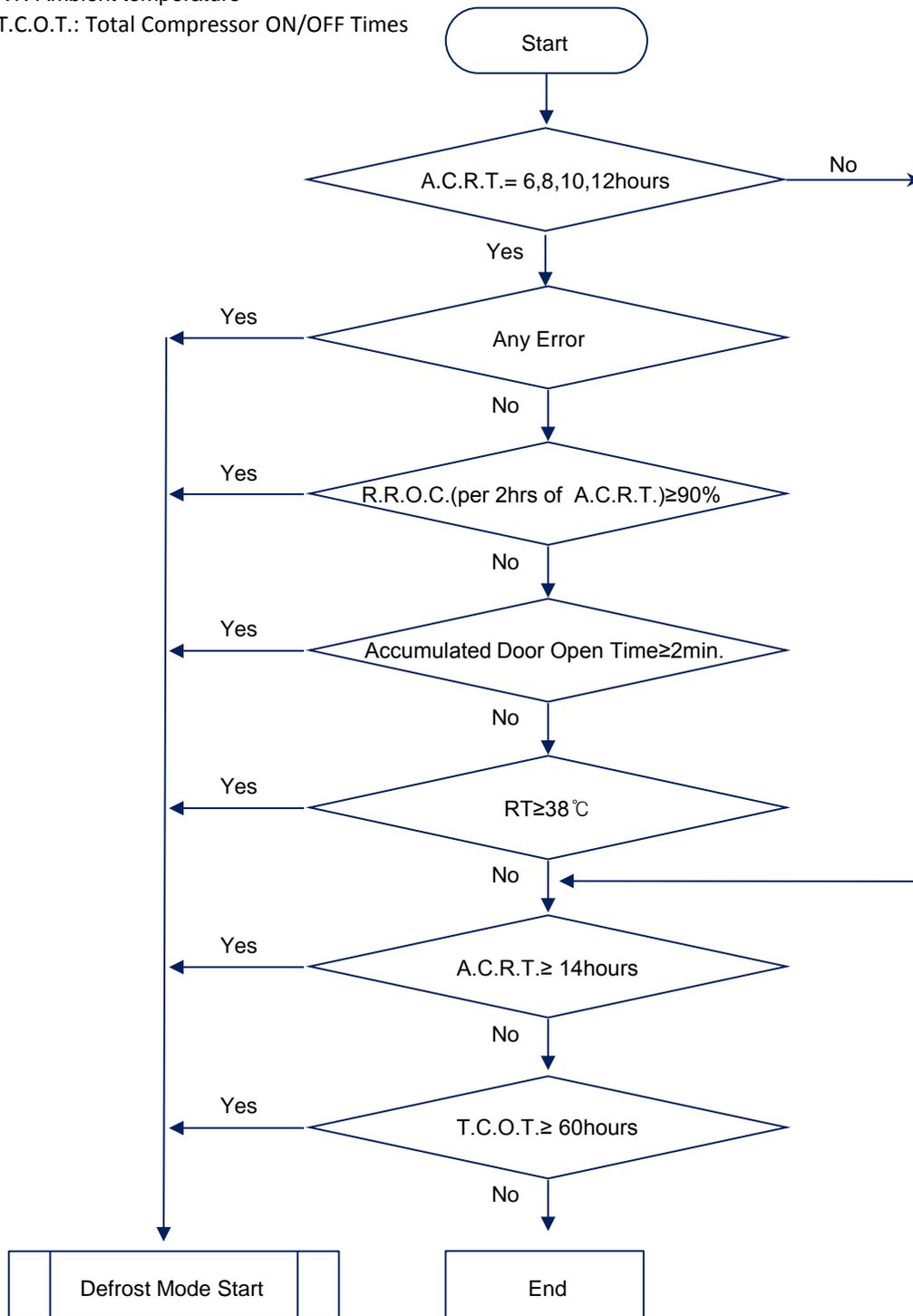
2-2. Temperature Control of Refrigerator Compartment																							
INPUT			CONTROL OBJECT																				
- PCB Control Panel "TEMP" and "S-Cool" Buttons - R sensor			- COMPRESSOR - FAN																				
<p>A. "TEMP" Button of the Panel</p> <ul style="list-style-type: none"> - Temperature control of Refrigerator compartment - 5 step mode of successive temperature mode - Initial mode by power input: step 3 (NOR) - Temperature will be set if the button doesn't get pressed again within 5 sec. - Whenever pressing "TEMP" button, setting is repeated in the order of "NOR" → "MAX-NOR" → "MAX" → "MIN" → "MIN-NOR" (LED DISPLAY ON) <p>B. Temperature of Refrigerator Control</p> <ul style="list-style-type: none"> - COMP and FAN will be controlled by the on/off condition of each mode - Temperature Difference of Refrigerator each step : <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>STEP</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> </thead> <tbody> <tr> <td>ON(°C)</td> <td>9.4</td> <td>6.6</td> <td>3.9</td> <td>2.9</td> <td>1.2</td> </tr> <tr> <td>OFF(°C)</td> <td>-0.5</td> <td>-2.1</td> <td>-4.7</td> <td>-5.7</td> <td>-7.2</td> </tr> </tbody> </table> <p>C. Temperature of Refrigerator at "NOR" OFF point: -4.7°C</p> <p>D. S-Cool (Quick REfrigeration) Mode</p> <ul style="list-style-type: none"> - Press "S-Cool" Button of the Panel and make "S-Cool" LED on. - Comp & Fan are on until R-sensor reaches to "Over Refrigeration OFF Point", -9.5°C - After the reach of -9.5°C, Step 5(MAX) mode continues. - When "S-Cool" mode lasts for about 40 minutes, it returns to general operation mode. <p>E. Temperature of Freezer Control</p> <ul style="list-style-type: none"> -It will be only controlled by using "KNOB F LOUVER" in the Freezer Comaprtnent. 						STEP	1	2	3	4	5	ON(°C)	9.4	6.6	3.9	2.9	1.2	OFF(°C)	-0.5	-2.1	-4.7	-5.7	-7.2
STEP	1	2	3	4	5																		
ON(°C)	9.4	6.6	3.9	2.9	1.2																		
OFF(°C)	-0.5	-2.1	-4.7	-5.7	-7.2																		
																							

2-3. Defrost Mode	
INPUT	CONTROL OBJECT
<ul style="list-style-type: none"> - Accumulated Compressor Run Time - Running Time Ratio of Compressor - Accumulated Door Open Time - Ambient temperature (RT) 	<ul style="list-style-type: none"> - Compressor - F Fan - Defrost Heater
<p>A. Defrost Mode Operation condition</p> <p>(1) In case accumulated compressor run times: 6, 8, 10, 12 hours,</p> <ul style="list-style-type: none"> - when there occur any errors: R1, D1, C1, RT, Door SW error etc. (Check "2-9. ERROR DISPLAY") - or, running rate of COMP (per 2hrs of accumulated operation time) is more than 90% - or, accumulated door open time is over 2 minutes - or, ambient temperature (RT) is more than 38 °C <p>(2) Even if the above condition is not satisfied, defrost mode starts immediately when accumulated compressor run time is 14hrs.</p> <p>B. Normal Defrost Mode</p>  <pre> graph TD A[PRE-COOL] --> B[Defrost Heater on] B --> C[Pause] C --> D[Normal Operation] </pre> <p>The flowchart illustrates the sequence of events during a normal defrost cycle. It begins with a 'PRE-COOL' stage where the compressor and fan are on, and the heater is off. This is followed by the 'Defrost Heater on' stage, where the compressor and fan are off, and the heater is on. The heater is then turned off after 60 minutes of normal control or 40 minutes in the case of a D1 error. The cycle then enters a 'Pause' stage where the compressor, fan, and heater are all off for 10 minutes. Finally, the system returns to 'Normal Operation'.</p> <p>C. Forced Defrost Mode</p> <ul style="list-style-type: none"> - How to start: by press "TEMP" button for continuously and "S-COOL" button 5 times. - If appliance has any error, Forces Defrost Mode don't start. - Process: same as Normal Defrost Mode except 'PRE-COOL' ※ Heater is supposed to be on Initial 30sec. even though the temp. at "D SENSOR" is over 13 °C. (for TEST) - How to confirm: <ol style="list-style-type: none"> 1) buzzer sound 3times and all LED on for 3 sec., when Forced Defrost Mode start. 2) LED "3", "S-COOL" on and "4", "5" flickering by pushing "S-COOL" button for continuously and "TEMP" button 5 times after Forced Defrost Mode start. 	

2-3. Defrost Mode

D. Flow chart of How to Start Defrost Mode

- ※ A.C.R.T. : Accumulated Compressor Run Times
- ※ R.R.O.C. : Running Rate of Compressor
- ※ RT: Ambient temperature
- ※ T.C.O.T.: Total Compressor ON/OFF Times



2-4. Function of Low Ambient Temperature (RT)	
INPUT	CONTROL OBJECT
RT	- R HTR - COMP
<p>A. Condition of LOW RT</p> <ul style="list-style-type: none"> - RT sensor below 19°C - When the RT sensor is over 20°C, the system comes to be "General Operation Mode". - When the RT sensor is between 19°C to 20°C, the system keeps the previous mode. <p>B. Control</p> <ul style="list-style-type: none"> - When the temp of RT sensor is between 14°C to 19°C, COMP on/off temp is 3°C UP - When the temp of RT sensor is below 14°C, COMP ON/OFF temp is 4°C UP 	

2-5. Prevention of Compressor Restart	
INPUT	CONTROL OBJECT
N/A	COMP
<p>It takes several minutes to protect Compressor:</p> <ul style="list-style-type: none"> (1) 6 minutes after Comp off (2) 30 minutes at operation of Low RT, but 6 minutes when the doors open more than 20 seconds 	

2-6. Buzzer Sound	
INPUT	CONTROL OBJECT
<ul style="list-style-type: none"> - Forced Defrost Mode start - Door Switch - Initial Power Input 	Buzzer
<p>A. When Forced Defrost Mode start, the buzzer rings 3times. B. After 2 minutes power's on, the buzzer rings 3 times. C. At Short Circuit Test, the buzzer rings 1 times. D. When door opens, the buzzer rings every 1 minute for 5 minutes.</p>	

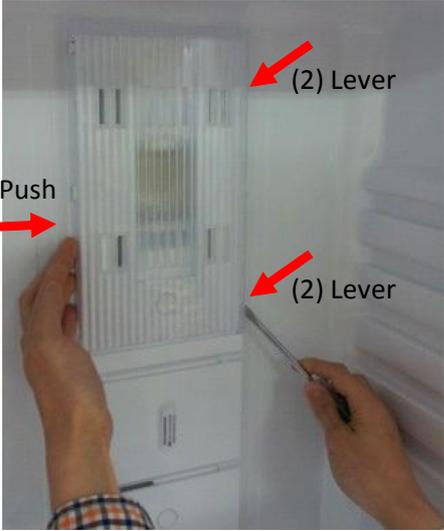
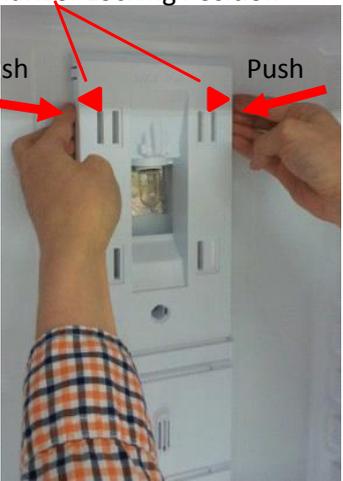
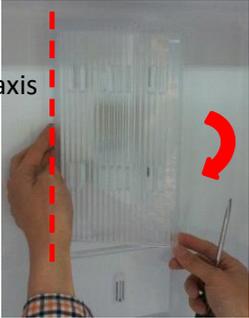
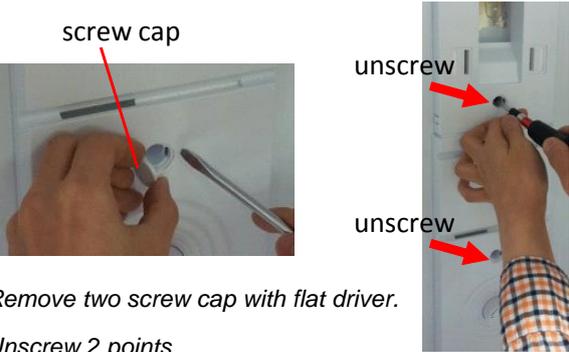
2-7. Control of R-sensor OFF Point	
INPUT	CONTROL OBJECT
"J1", "J2" On Main PCB	Control Resistance of R sensor OFF Point
<p>- When the refrigeration of refrigerator is poor or weak though Fan and COMP are working continuously, the following actions are recommended for service.</p> <p>(1) Resistance (R25) : Default resistance (31.4Kohms)</p> <p>(2) Resistance (R26) : Cut the "J1" off to reduce basic resistance by 1.5°C. (2Kohms up)</p> <p>(3) Resistance (R27) : Cut the "J2" off additionally to reduce basic resistance by 1.5°C. (total 4Kohms up)</p> <p>※ R25 = R-SENSOR OFF point R25 + R26 = R-SENSOR OFF point - 1.5°C R25 + R26 + R27 = R-SENSOR OFF point - 3°C</p>	

2-8. Error Display											
INPUT	CONTROL OBJECT										
PCB Control Panel Buttons on Door	LED DISPLAY										
<p>- Error Check Mode</p> <p>(1) How to start: Push "S-COOL" button for continuously and "TEMP" button 5 times .</p> <p>(2) What happen: LED "4 & 5" flickering, and if any errors occur, the related LEDs on.</p> <p>(3) CANCEL: Push "TEMP" button 1 time, or wait 4 minutes.</p> <p>※ After operations back to normal, the displays come to be reset.</p> <p>A. "R1" ERROR</p> <p>: It happens when R-Sensor is OPEN or SHORT.</p> <p>(1) LED DISPLAY: LED "3" on, "4 & 5" flickering</p> <p>(2) REACTION: Controlled by the following condition of RT</p> <table border="1"> <thead> <tr> <th>RT sensor TEMP (unit:°C)</th> <th>~13</th> <th>~19</th> <th>~29</th> <th>29~</th> </tr> </thead> <tbody> <tr> <td>COMP. Operating ON/OFF TIME (unit:min.)</td> <td>6/34</td> <td>10/30</td> <td>16/24</td> <td>20/20</td> </tr> </tbody> </table> <p>※ If "RT" ERROR happens at the same time, COMP. Operating ON/OFF Time is 16min/24min.</p> <p>(3) RELEASE: When R-Sensor is working normally.</p> <p>B. "RT" ERROR</p> <p>: It happens when RT-Sensor is OPEN or SHORT.</p> <p>(1) LED DISPLAY: LED "2" on, "4 & 5" flickering</p> <p>(2) REACTION: Delete the conditions of RT-sensor Control and operate normally.</p> <p>(3) RELEASE: When RT-Sensor is working normally.</p> <p>C. "d1" ERROR</p> <p>: It happens when D-Sensor is OPEN or SHORT.</p> <p>(1) LED DISPLAY: LED "1" on, "4 & 5" flickering</p> <p>(2) REACTION: Return to next limit Defrost Time (40 min)</p> <p>(3) RELEASE: When D-Sensor is working normally.</p> <p>D. "DR" ERROR</p> <p>: It happens when the system senses door opens more than 1 hour.</p> <p>(1) LED DISPLAY: LED "2 & 3" on, "4 & 5" flickering</p> <p>(2) REACTION: Delete function relating to door switch sensing</p> <p>(3) RELEASE: When sensing close from door S/W.</p>		RT sensor TEMP (unit:°C)	~13	~19	~29	29~	COMP. Operating ON/OFF TIME (unit:min.)	6/34	10/30	16/24	20/20
RT sensor TEMP (unit:°C)	~13	~19	~29	29~							
COMP. Operating ON/OFF TIME (unit:min.)	6/34	10/30	16/24	20/20							

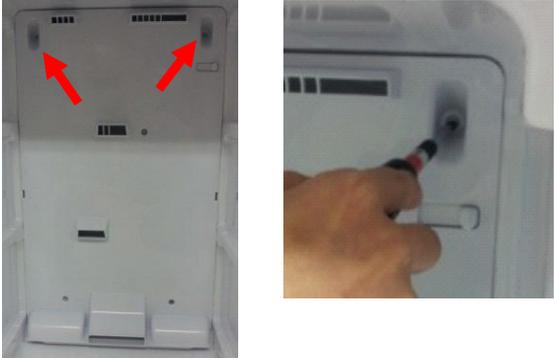
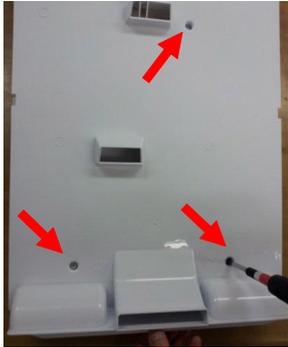
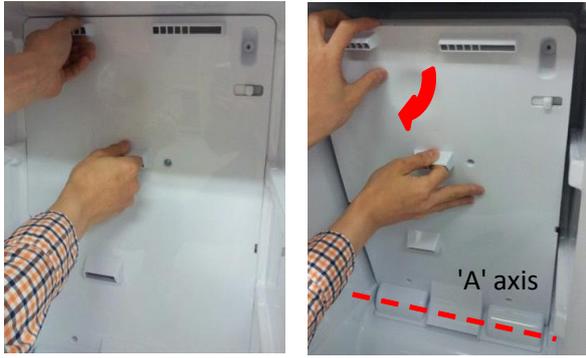
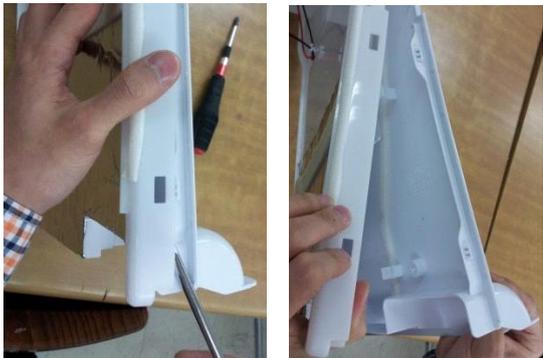
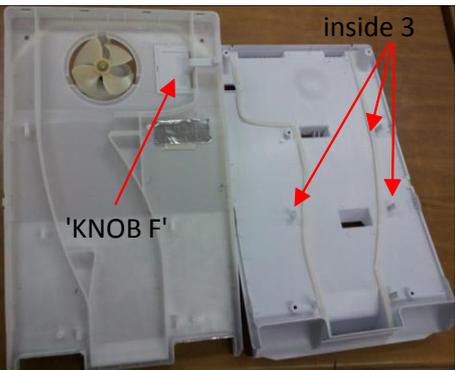
3-1. Door Switch

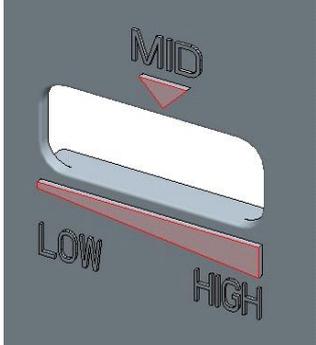
No	Procedure	No	Procedure
1	 <p data-bbox="193 741 767 815"><i>Inuput a thin driver in the upper part as above picture. And lift up 'Door Switch' carefully.</i></p>	3	  <p data-bbox="863 1220 1174 1249"><i>Disconnect the wire housing.</i></p>
2	 <p data-bbox="193 1171 767 1245"><i>Inuput a thin driver in the lower part as above picture. And lift up 'Door Switch' carefully.</i></p>		

3-2. Cover Multi-Flow Duct As (in Fresh food Compartment)

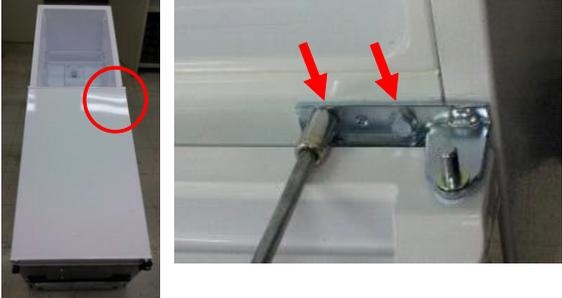
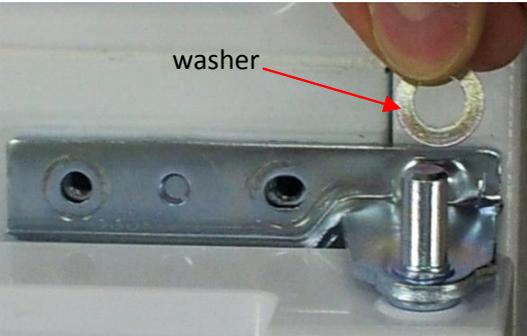
No	Procedure	No	Procedure
1	 <p>Unlock the lamp window (1) Push the window right side (2) Lever two window lock with flat driver</p>	4	 <p>Unlock the 'COVER M/FLOW DUCT' (1) Check the marks of locking position on 'Cover'. (Number of the marks are model dependent) (2) Push the 'cover' inside and Unlock.</p>
2	 <p>Open window turning on the axis 'A'</p>	5	
3	 <p>Remove two screw cap with flat driver. Unscrew 2 points</p>		 <p>Disconnect the Lamp & Sensor wire housing.</p>

3-3. Louver F As (in Frozen Food Compartment)

No	Procedure	No	Procedure
1	 <p>Unscrew to disassemble the 'Louver F As' from Freezer.</p>	4	 <p>Unscrew to disassemble as each component part.</p>
2	 <p>Remove the 'Louver F As' pulling the top side.</p>	5	 <p>Unlock carefully. (especially, inside 3 locks)</p>
3	 <p>Disconnect Fan motor wire housing.</p>		 <p>※Default position of 'KNOB F' is 'MID'</p>



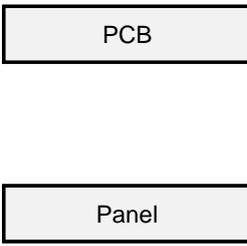
3-4. DOOR F/R

No	Procedure	No	Procedure
1	 <p>Tilt down the appliance to the rear.</p>		 <p>Remove door in fresh food compartment. And unscrew middle hinge.</p>
2	 <p>Unscrew and lift up top cover hinge to remove.</p>	4	 <p>※ Don't forget the washer for middle hinge.</p>
3	 <p>Unscrew and remove top hinge.</p>	5	 <p>Lift up 'middle cover hinge' & 'cap door' to remove.</p>

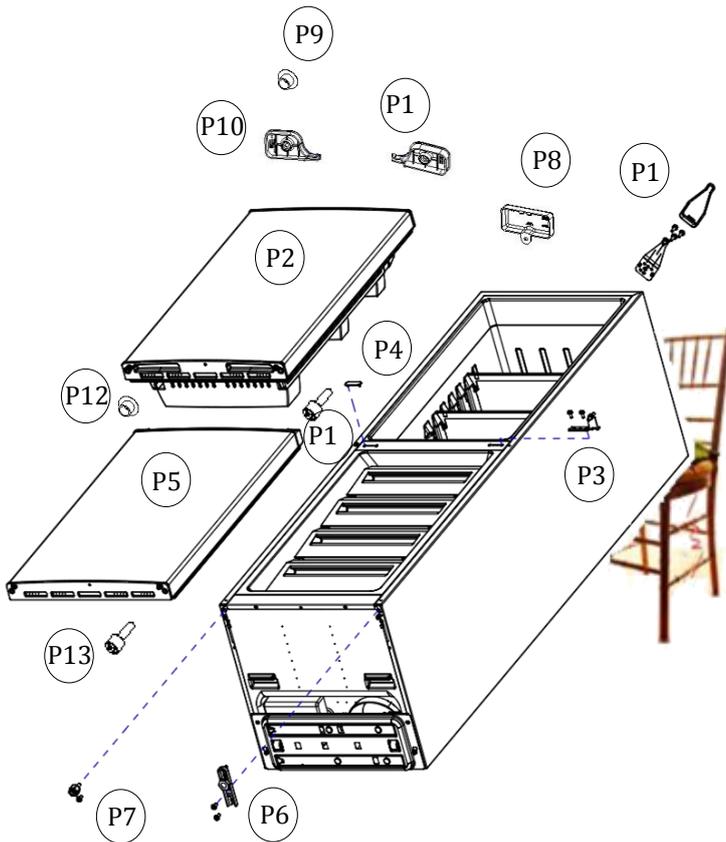
3-4. DOOR F/R

No	Procedure	No	Procedure
6	  <p>Unscrew and remove under hinge.</p>	7	   <p>Turn the 'Adjusting Leg (Left)' CCW and Remove.</p>
	 <p>washer</p> <p>※ Don't forget the washer for under hinge. ※ The washer for under hinge's bigger than middle one.</p>	8	 <p>Remove door in frozen food compartment.</p>

3-5. Front Control Panel PCB

No	Procedure	No	Procedure
1	 <p data-bbox="193 1176 710 1263"><i>Inuput a cutter sleeve between Panel and Door. Be careful not to scratch the Door surface.</i></p>	2	 <p data-bbox="866 1220 1404 1263"><i>Lift up the Panel and disconnect the wire housing.</i></p>
3		 <p data-bbox="193 1646 662 1693"><i>Unscrew and separate the panel and PCB.</i></p>	

4. How To Change Door Position



1-1>
Tilt down the appliance to the rear.
(Be careful not to damage the Pipe Wire
Condensor assembled in the rear of
refrigerator.)

1-2>
Remove following parts in order.

- P1) 'Top Cover Hinge' and 'Top Hinge'
- P2) 'Refrigerator Door'
- P3) 'Middle Hinge'
- P4) 'Middle Cover Hinge'
- P5) 'Freezer Door'
- P6) 'Under Hinge'
- P7) 'Adjusting Leg'
- P8) 'Cover Cabinet Harness'
- P9) 'Cap Refrigerator Door'
- P10) 'Cover Door Harness Left'
- P11) 'Cover Door Harness Right'
- P12) 'Cap Freezer Door'
- P13) 'Stopper Refrigerator/Freezer Door'

1-3>
Move following parts in the opposite position:

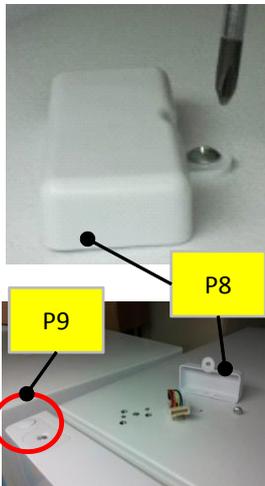
P9, P12, P13

1-4>
Switch the position of following parts each
other and assemble them:

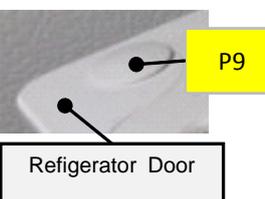
P6 & P7, P3 & P4, P1 & P8

<Reference>

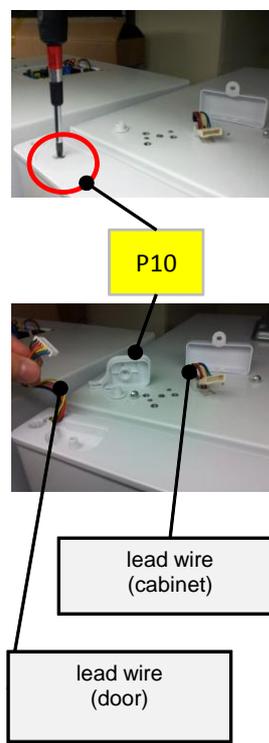
Disassemble "P8"



Disassemble "P9"



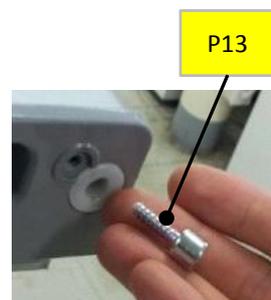
Disassemble "P10"



Disassemble "P12"



Disassemble "P13"



1-5>
Assemble following parts:
P5, P2, P10, P11

5-1. Safety Warning (R-600a Refrigerant Models Only)



This appliance contains a certain amount of isobutane refrigerant (R600a) a natural gas with high environmental compatibility that is, however, also combustible.

When transporting and installing the appliance, care should be taken to ensure that no parts of the refrigerating circuit are damaged.

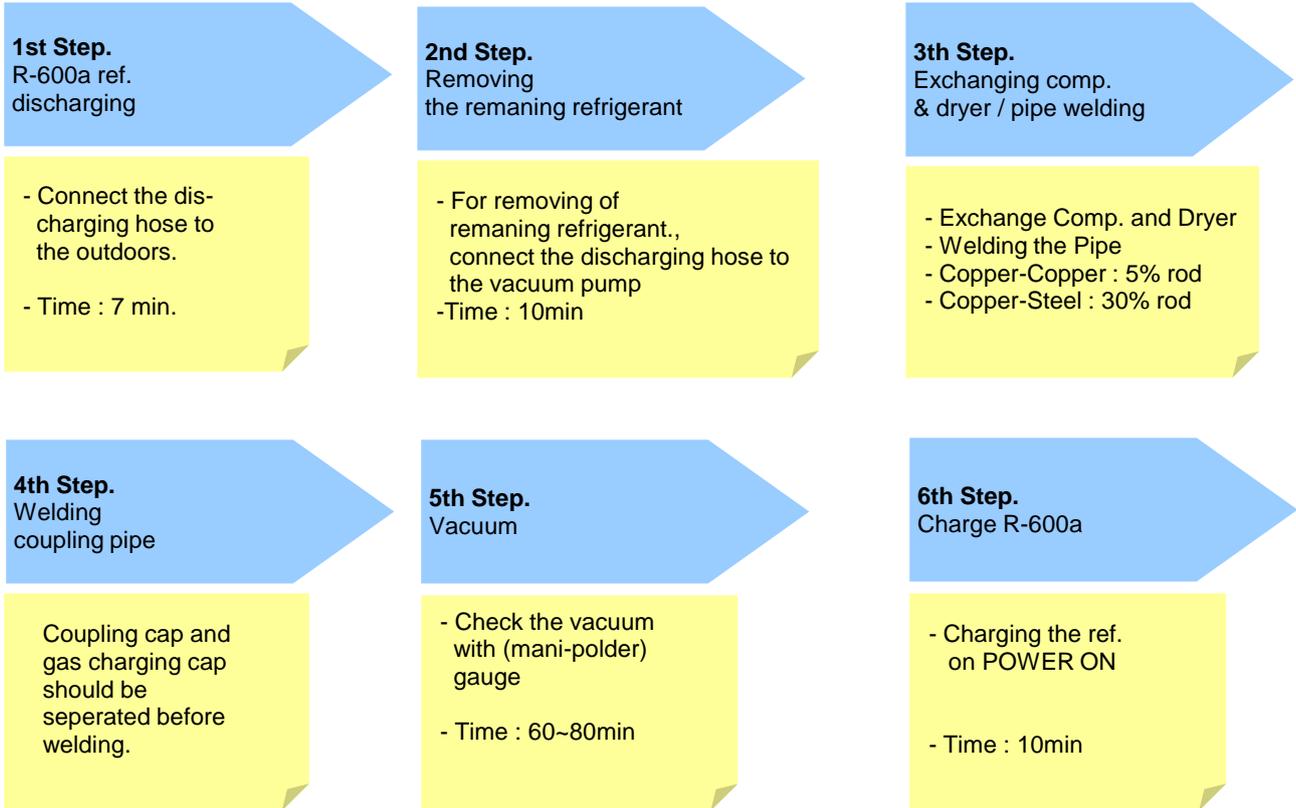
Refrigerant squirting out of the pipes could ignite or cause an eye injury. If a leak is detected, avoid any naked flames or potential sources of ignition and air the room in which appliance is standing for several minutes.

- In order to avoid the creation of a flammable gas-air mixture if a leak in the refrigerating circuit occurs, the size of the room in which the appliance may be sited depends on the amount of refrigerant used. The room must be 1m³ in size for every 8g of R600a refrigerant inside the appliance. The amount of refrigerant is shown on the identification plate inside the appliance.
- Never start up an appliance showing any signs of damage. If in doubt, consult your dealer.

5-2. Tools

<p>1. R-600a ref. Can</p> 	<p>2. Can adapter</p> 	<p>3. Pinch Plier</p> 
<p>4. Ref. discharging hose</p> 	<p>5. Vacuum pump</p> 	<p>6. Welder</p> 
<p>7. Coupling Pipe</p> 	<p>8. Leakage Tester</p> 	<p>9. Electronic-scale</p> 

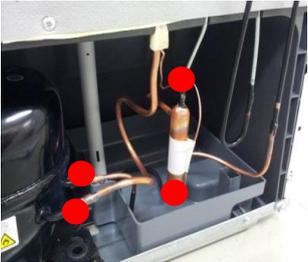
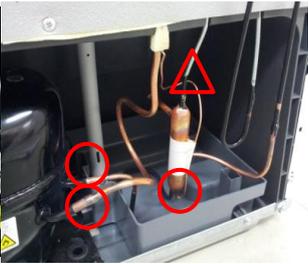
5-3. Process Summary



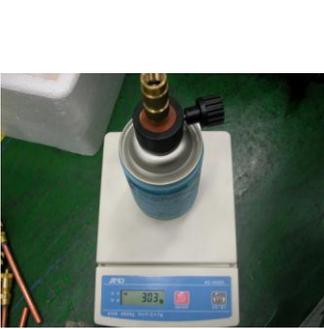
5-4. In Detail Precess

NO.	SVC process	Image	Details
1	Connecting the pinch-plier & discharging hose		<ol style="list-style-type: none"> 1. Connect the discharging hose to the pinch-plier 2. The outlet of discharging hose should be placed to the outdoor(window)
2	Fixing the pinch-plier & charging pipe		<ol style="list-style-type: none"> 1. Fix the pinch-plier to the compressor charging pipe. 2. Pinch-plier should not be moving freely. ※ If that is moving freely, it would cause fire/explosion as leakage gas in the room.
3	Discharging the R-600a ref.		<ol style="list-style-type: none"> 1. Discharge the R-600a ref. to outdoor. [Befor connecting the vacuum pump] ※ It should have enough time more than 7 minutes to discharge.

5. How To Charge R-600a Refrigerant

NO.	SVC process	Image	Details
4	Removing the remaining ref.		<p>1. And then, connect the vacuum pump to the outlet of discharging hose</p> <p>※ Vacuum pump should be placed at the outdoor where is able to clear air easily.</p> <p>※ It should have enough time more than 10 minutes to discharge.</p>
5	Removing the pinch-plier & pipe		<p>1. Disassemble the each pipe (Del-pipe, Suc-pipe, Capi-pipe, Dryer & Hot-pipe)</p> <p>※ Caution ; A part is easily damaged by flame so that disassembly should be done carefully.</p>
6	Exchanging comp & dryer		<p>1. Change the comp. & dryer.</p> <p>※ You should check the comp. spec. and assemble correctly.</p>
7	Welding	 	<p>1. Weld the each pipe.</p> <p>※ ○ Copper-Copper welding - 5% rod △ Copper-Steel welding - 35% rod</p>
8	Disassembly of charging valve (Coupling pipe)		<p>1. Decap the coupling pipe cap and disassemble the valve ass'y.</p> <p>※ If you don't disassemble, the coupling rubber would be melted.</p>

5. How To Charge R-600a Refrigerant

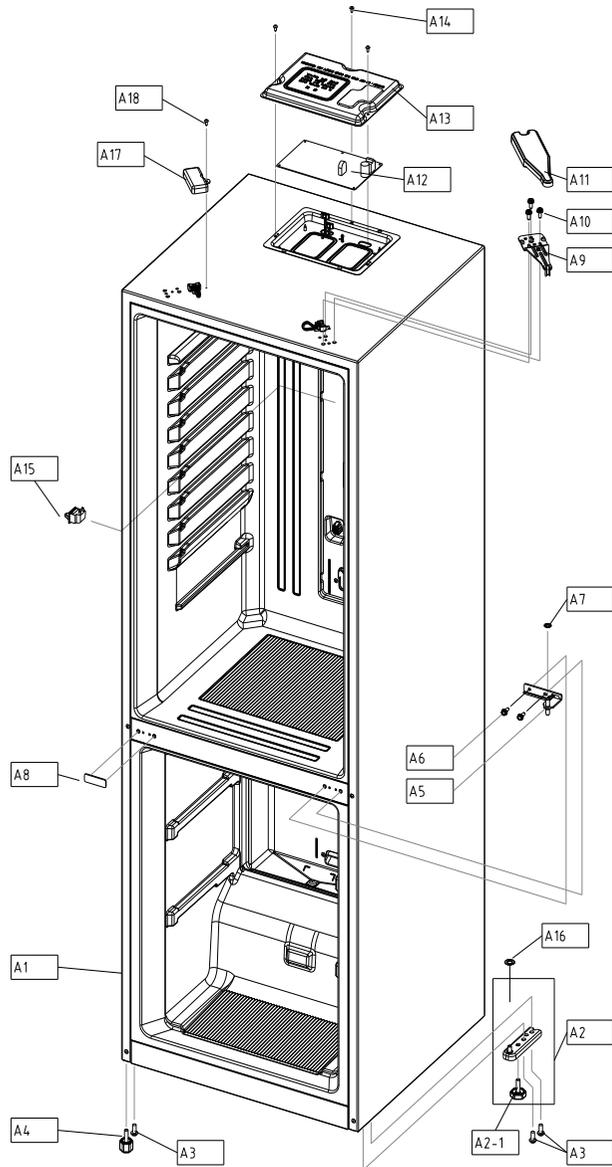
NO.	SVC process	Image	Details
9	Coupling pipe welding		1. Weld after inserting the coupling pipe to the compressor. ※ Use the wet cloth for preventing the other part of machinery-room from damage.
10	Valve reass'y & guage connecting		1. Reassemble the valve ass'y with coupling pipe to clockwise. 2. Connect the blue hose of the guage to the coupling pipe and the yellow hose to the vacuum pump. 3. Open the blue guage lever and start the vacuum pump
11	Vacuum		1. Be vacuumed the cycle with pump. ※ Time : 60~80min => If the vacuum time is less than 60min, ref. COP & air coolong would be weak.
12	Check		1. Check the guage : -76 _{cm} Hg ※ If the cycle is not vacuumed, it would be leak.
13	Adjusting the amounts of refrigerants (R-600a can)		1. Check the amounts of R-600a can with scale and discharge the surplus ref. ※ Discharging is surely done at the outdoor where is able to clear air. <Tip> ■ If the amouts of charging: 44g ▪ Total Weight of Can [A] =Can(75g)+Ref.(85g)=160g ▪ Adapter Weight [B]=145g ▪ Total Weight([])=A+B=305g ■ After discharging 41g, C=264g

5. How To Charge R-600a Refrigerant

NO.	SVC process	Image	Details
14	Connecting of coupling pipe & adapta		<ol style="list-style-type: none"> 1. Conect can adapter to the coupling pipe. 2. Charge the ref. with open lever slowly. <p>※ Refrigerant should never leak in the room.</p>
15	Charging		<ol style="list-style-type: none"> 1. On the power of refrigerator and then start to charge the ref. (10min) <p>※ Charge the ref. until going out the water vapour condensing on the can outlet.</p>
16	Leakage Test		<ol style="list-style-type: none"> 1. Check the leakage. <p>※ You must rework from Step.1 when the leakage is detected.</p>
17	Finish		<ol style="list-style-type: none"> 1. Clean and clear around the machinery room when the service is finished. 2. Assemble the machinery room cover.

6. PART LIST

6-1. Cabinet Compartment

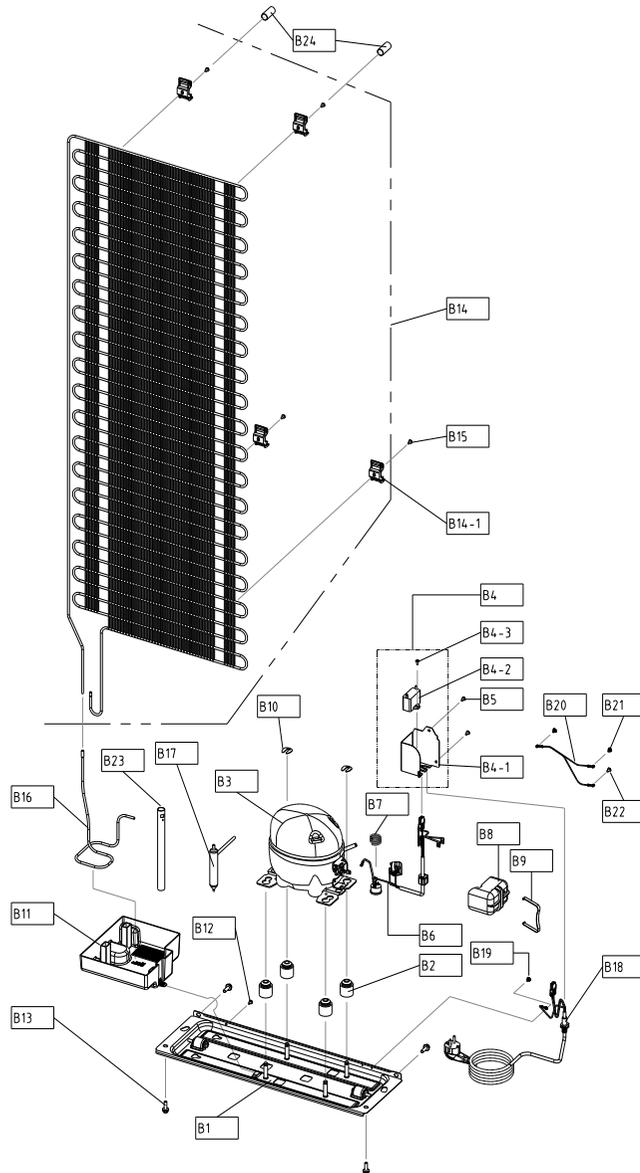


NO	PART-CODE	PART NAME	SPEC.	Q'ty	
				RN-34*N	
A1	-	ASY CAB URT	RFP-311	1EA	
A2	3012938100	HINGE *U AS	PO T3.2	1EA	
A2-1	3012105300	FOOT ADJ AS	PP+INSERT	1EA	
A3	30160A1700	SPECIAL BOLT	SWCH10A M8*L18	3EA	
A4	3012106500	FOOT ADJ *L AS	PP+INSERT	1EA	
A5	3012938000	HINGE *M AS	PO T3.2	1EA	
A6	3016001250	SPECIAL BOLT *M	6*15 SWCH22A(WH)	2EA	
A7	3016044400	SPECIAL WASHER *M HI	SGCC, T1.0*ID8.5*OD15	1EA	
A8	3010937710	CAP DV HI HOLE *M	HIPS	1EA	
A9	3012938900	HINGE *T AS	PO, T2.6, RFP-311	1EA	
A10	3016001250	SPECIAL BOLT *M	6*15 SWCH22A(WH)	3EA	
A11	301149DX00 301149DX10 301149DX20	COVER HI *T	PP(WHITE), RFP-311 PP(GRAY), RFP-311 PP(BLACK), RFP-311	1EA	
A12	30143LE70	PCB MAIN AS	RFP-311(DC F FAN MOTOR)	1EA	
A13	300141600 300141610 3001416620 3001416630 3001416640	COVER M/PCB BOX AS	SPCC(WHITE) SPCC(SILVER) SPCC(T/SILVER) SPCC(BLACK) PCM BACK COATING	1EA	
A14	7112401211	SCREW TAPPING	T1 TRS 4*12 MFZN	3EA	
A15	301179DP00	DOOR S/W AS	HC-050K4 250V 2.5A	1EA	
A16	381600200	SPECIAL WASHER	SPCC T1.0*OD21*ID8 MFZN	1EA	
A17	3001412200 3001412220 3001412230	COVER CAB HRNS	PP(WHITE) PP(T/SILVER) PP(BLACK)	1EA	
A18	7112401211	SCREW TAPPING	T1 TRS 4*12 MFZN	1EA	

* Please check the color, some parts code color dependent.

6. PART LIST

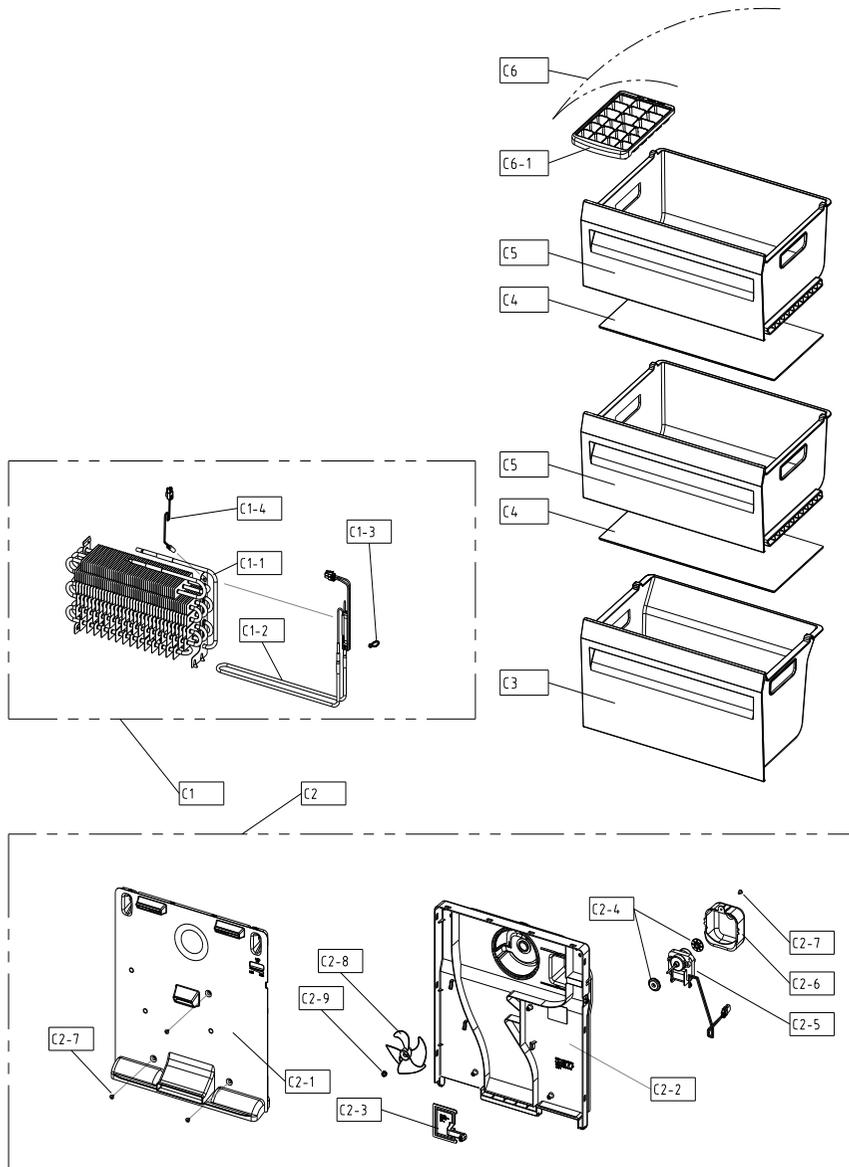
6-2. Compressor Room Compartment



NO	PART-CODE	PART NAME	SPEC.	Q'ty	
				RN-34*N	
B1	3010365500	BASE COMP AS	RFP-301	1EA	
B2	3010103400	ABSORBER COMP	RUBBER	4EA	
B3	3956182M80	COMPRESSOR	LR82CY 230V 50HZ	1EA	
B4	3010583740	BOX POWER AS	RFP-301NCQ8N	1EA	
B4-1	3010552101	BOX POWER	GI, T0.5	1EA	
B4-2	3016407000	CAPACITOR RUN	400V, 3μF	1EA	
B4-3	7122401211	SCREW TAPPING	T2S TRS 4*12 MFZN	1EA	
B5	7112401211	SCREW TAPPING	T1 TRS 4*12 MFZN	2EA	
B6	3018134640	SWITCH P RELAY AS	LR82CY(DONPER COMP)	1EA	
B7	3015103900	SPRING OVERLOAD PROTECTOR	DONPER COMP(OLP FIXING)	1EA	
B8	3811402600	COVER RELAY	DONPER COMP	1EA	
B9	3811402600	SPRING COVER RELAY	DONPER COMP	1EA	
B10	4019H09031	SPECIAL WASHER	SWRH	2EA	
B11	301119VJ00	CASE VAPORI AS	PP(301119V300)+SEAL	1EA	
B12	7112401211	SCREW TAPPING	T1 TRS 4*12 MFZN	1EA	
B13	3016003300	SPECIAL BOLT	T2*M6.5*L20	4EA	
B14	3014480010	PIPE WI-CON AS	RFP-301	1EA	
B14-1	3012041500	FIXTURE WI-CON	HIPS	4EA	
B15	7112401211	SCREW TAPPING	T1 TRS 4*12 MFZN	4EA	
B16	3014479430	PIPE CON A	LR82CY(DONPER COMP)	1EA	
B17	3016808230	DRYER AS	10G, SINGLE TUBE	1EA	
B18	3011348111	CORD POWER AS	EU,DOUBLE STOPER,250V 10/16A	1EA	
B19	7071400811	SCREW MACHINE	PAN 4*8 SW MFZN_STAR WASHER	1EA	
B20	3012763210	HARNESS EARTH COMP	FRM-241, L140	1EA	
B21	7071400811	SCREW MACHINE	PAN 4*8 SW MFZN_STAR WASHER	2EA	
B22	7112401211	SCREW TAPPING	T1 TRS 4*12 MFZN	1EA	
B23	3012513950	HOSE DRN B	PVC	1EA	
B24	3015091400	SPACER CAB	PP	2EA	

6. PART LIST

6-3. Frozen Food Compartment

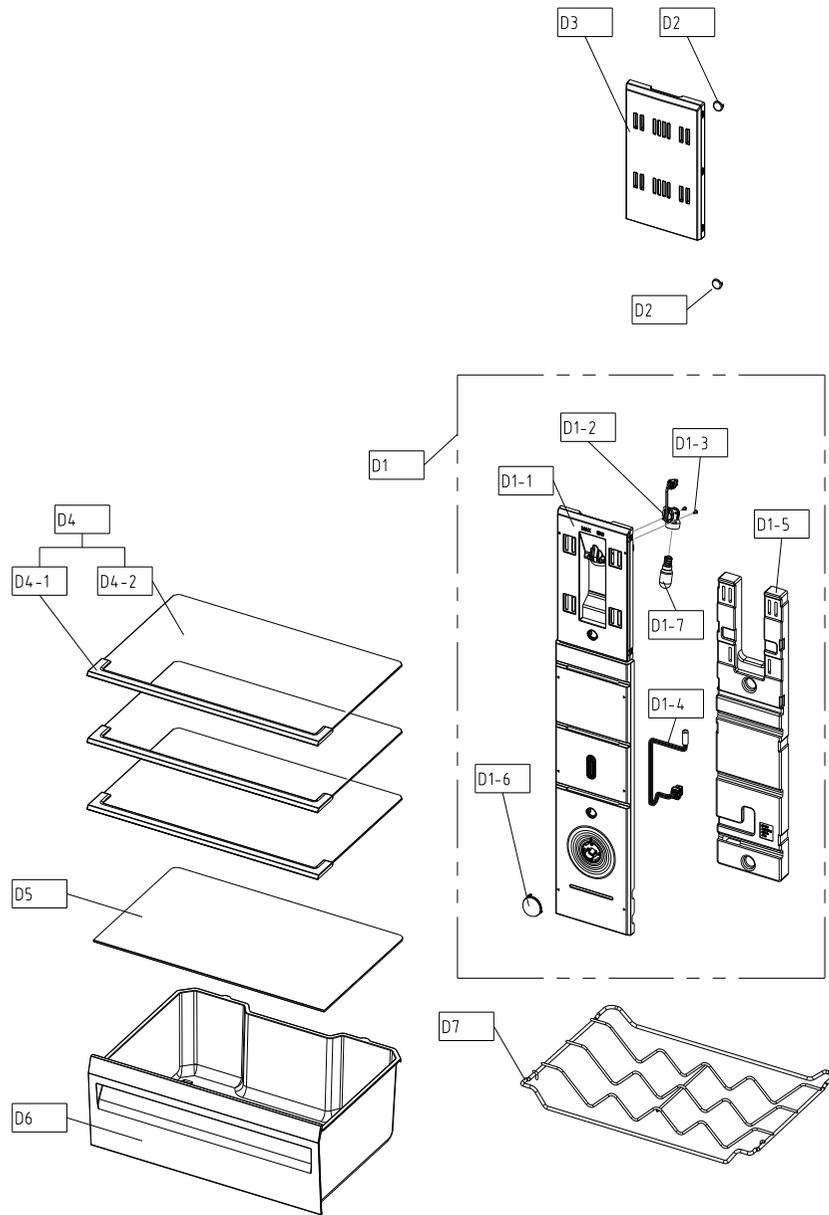


NO	PART-CODE	PART NAME	SPEC.	Q'ty	
				RN-34*N	
C1	3017070020	EVA AS	230V, 130W (DC F FAN MOTOR)	1EA	
C1-1	3017070100	EVA SAS	RFP-301	1EA	
C1-2	3012831220	HEATER SHEATH AS	230V, 130W (DC F FAN MOTOR)	1EA	
C1-3	4856813100	CABLE TIE	DA-140	1EA	
C1-4	3012764110	HARNESS D SENS	RFP-301 (DC F FAN MOTOR)	1EA	
C2	3018932540	LOVUER F AS	RFP-301 (DC F FAN MOTOR)	1EA	
C2-1	3018932300	LOUVER F A	PP	1EA	
C2-2	3018932400	LOUVER F B	PP	1EA	
C2-3	3013415800	KNOB F CONTL	PP	1EA	
C2-4	3010107100	ABSORBER MOTR	NBR	2EA	
C2-5	3015905360	MOTOR F AS	DC 12V (D4612AAA33)	1EA	
C2-6	3010664710	BRACKET FAN MOTR	PP(NATURAL), DC F FAN MOTOR	1EA	
C2-7	7112401211	SCREW TAPPING	T1 TRS 4*12 MFZN	4EA	
C2-8	3011835900	FAN	OD100, SHAFT OD3.17	1EA	
C2-9	3011200510	CLAMP FAN	SUS 304 (SPRING)	1EA	
C3	301119V200	CASE F B	GPPS(CRYSTAL)	1EA	
	301119V210		GPPS(GRAY)		
	301119V220		GPPS(BLUE)		
C4	3017861500	SHELF GLAS F	T3.2, RFP-301	2EA	
C5	301119V100	CASE F A	GPPS(CRYSTAL)	2EA	
	301119V110		GPPS(GRAY)		
	301119V120		GPPS(BLUE)		
C6	3010564910	CASE ICING AS	CASE ICING + VINYL	1EA	
C6-1	3011187300	CASE ICING	PP, FRM-21*,RFP-24*,30*	1EA	

* Please check the color, some parts code color dependent.

6. PART LIST

6-4. Fresh Food Compartment



NO	PART-CODE	PART NAME	SPEC.	Q'ty	
				RN-34*N	
D1	301149C430	COVER M/FLOW DUCT AS	RFP-311(LAMP:220-240V, 15W)	1EA	*OTION
	301149C450		RFP-311(230V 1.2W LED BULB)		
D1-1	301149C300	COVER M/FLOW DUCT	HIPS	1EA	
D1-2	3017903900	SOCKET LAMP AS	AC250V	1EA	
D1-3	7121300811	SCREW TAPPING	T2S PAN 3*8 MFZN	2EA	
D1-4	3014811310	SENSOR R AS	RFP-311	1EA	
D1-5	3013387900	INSU M/FLOW DUCT	F-PS	1EA	
D1-6	3013416300	KNOB R CONTL	HIPS, RFP-311	1EA	
D1-7	3013600020	LAMP AS	240V/15W(E14,CC7A)	1EA	*OTION
	3017908400	SOCKET LED LAMP	230V 1.2W		
D2	3010924600	CAP F LOUVER	HIPS, T2.3	2EA	
D3	3015523800	WINDOW M/FLOW DUCT	GPPS	1EA	
D4	3017861100	SHELF R AS	RFP-301	3EA	
D4-1	3011664700	DECO SHELF *F	HIPS	1EA	
D4-2	3017861200	SHELF GLAS R	T3.2	1EA	
D5	301119V400	CASE GLAS VEGTB	T3.2	1EA	
D6	301119V000	CASE VEGTB	GPPS(CRYSTAL)	1EA	
	301119V010		GPPS(GRAY)		
	301119V020		GPPS(BLUE)		
D7	3017861900	SHELF WINE	SUS 204	1EA	*OPTION

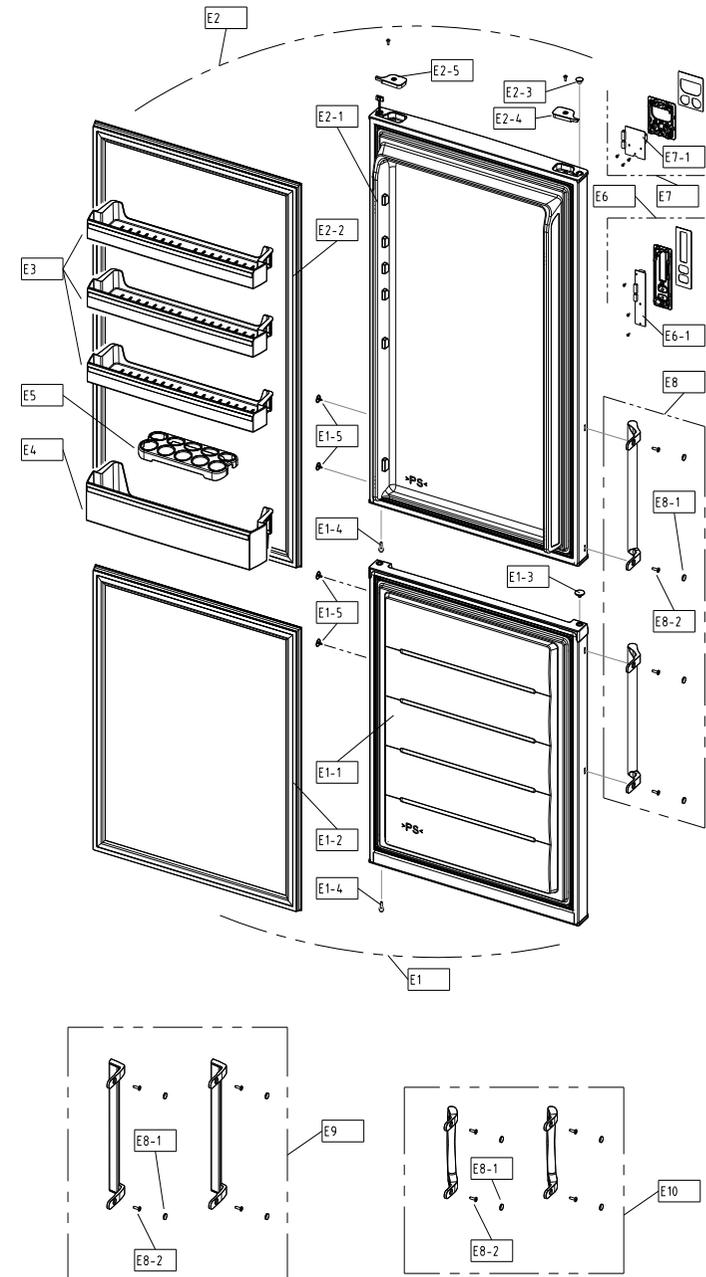
* Please check the color, some parts code color dependent.
 *Some parts can be changed for improving without notice.

6. PART LIST

6-5. Door Compartment

NO	PART-CODE	PART NAME	SPEC.		Q'ty						
			COLOR	the others	RN-341N	RN-342N	RN-343N	RN-344N	RN-345N	RN-346N	
E1	30100B9X00 30100B9X30 30100B9X40 30100B9X50	ASSY F DR	DWG1C ASG4P TSH1P BLH1C	RFP-301, WHITE RFP-301, AL SILVER RFP-301, TITANIUM SILVER RFP-301, BLACK	1	0	0	0	0	0	
	30100B9X20 30100B9Y80 30100B9Y90 30100B9YA0	ASSY F DR	DWG1C ASG4P TSH1P BLH1C	RFP-302/303	0	1	1	0	0	0	
	30100B9X10 30100B9X70 30100B9X80 30100B9X90	ASSY F DR	DWG1C ASG4P TSH1P BLH1C	RFP-304	0	0	0	1	0	0	
	30000CPN00 30000CPN10 30000CPN20 30000CPN30	ASSY F DR	DWG1C ASG4P TSH1P BLH1C	RFP-305	0	0	0	0	1	0	
	30000CPQ00 30000CPQ10 30000CPQ20 30000CPQ30	ASSY F DR	DWG1C ASG4P TSH1P BLH1C	RFP-306	0	0	0	0	0	1	
E1-1	-	ASSY F DR URT		RFP-301	1	1	1	1	1	1	
E1-2	3012330900	GASKET F DR AS	GRAY BLACK	RFP-301	1	1	1	1	1	1	
E1-3	3011450300 3011450310 3011450340	C OVER CAP HOLE A	WHITE SILVER BLACK	ABS	1	1	1	1	1	1	
E1-4	3016047410	SPECIAL STOPPER DR BO		TAP-TITE 5*16	2	2	2	2	2	2	
E1-5	3010985100 3010985110 3010985120	CAP DR	WHITE SILVER BLACK	ABS	0	4	4	4	0	0	

* Please check the color, some parts code color dependent.

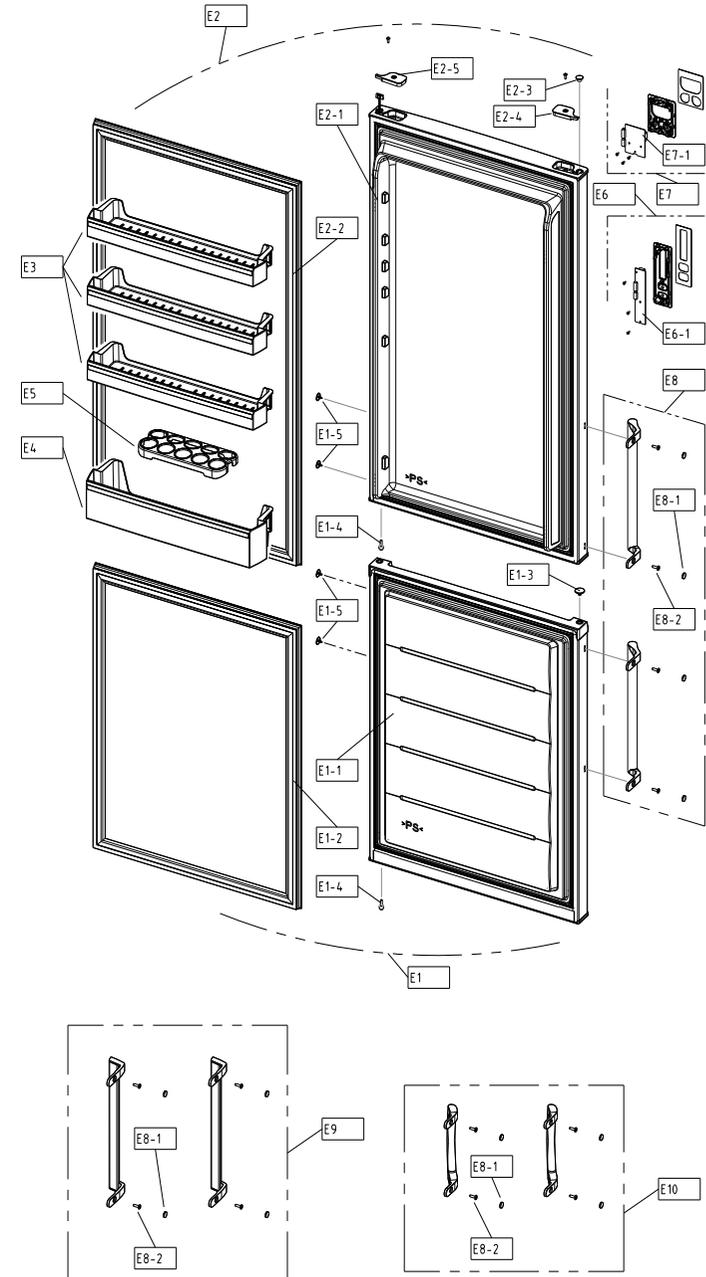


6. PART LIST

6-5. Door Compartment

NO	PART-CODE	PART NAME	SPEC.		Q'ty						
			COLOR	the others	RN-341N	RN-342N	RN-343N	RN-344N	RN-345N	RN-346N	
E2	30100C4600	ASSY R DR	DWG1C	RFP-311, WHITE	1	0	0	0	0	0	
	30100C4610		ASG4P	RFP-311, AL SILVER							
	30100C4620		TSH1P	RFP-311, TITANIUM SILVER							
	30100C4630		BLH1C	RFP-311, BLACK							
	30100C3G00		ASSY R DR	DWG1C	RFP-312/313	0	1	1	0	0	0
30100C3G10		ASG4P									
30100C3G20		TSH1P									
30100C3G30		BLH1C									
30100C4700	ASSY R DR	DWG1C	RFP-314	0	0	0	1	0	0		
		30100C4710	ASG4P								
		30100C4720	TSH1P								
		30100C4730	BLH1C								
30100C4800	ASSY R DR	DWG1C	RFP-315	0	0	0	0	1	0		
		30100C4810	ASG4P								
		30100C4820	TSH1P								
		30100C4830	BLH1C								
30100C4900	ASSY R DR	DWG1C	RFP-316	0	0	0	0	0	1		
		30100C4910	ASG4P								
		30100C4920	TSH1P								
		30100C4930	BLH1C								
E2-1	-	ASSY R DR URT		RFP-301	1	1	1	1	1	1	
E2-2	3012331000	GASKET R DR AS	GRAY	RFP-301	1	1	1	1	1	1	
	3012331010		BLACK								
E2-3	3010974100	CAP BUSH *T	WHITE	PP	1	1	1	1	1	1	
	3010974110		SILVER								
	3010974120		BLACK								
E2-4	3011450500	COVER HI HRNS *T *L	WHITE	PP	1	1	1	1	1	1	
	3011450510		SILVER BLACK								

* Please check the color, some parts code color dependent.



6. PART LIST

6-5. Door Compartment

NO	PART-CODE	PART NAME	SPEC.		Q'ty						
			COLOR	the others	RN-341N	RN-342N	RN-343N	RN-344N	RN-345N	RN-346N	
E2-5	3011450700 3011450710	COVER HI HRNS *T *R	WHITE SILVER BLACK	PP	1	1	1	1	1	1	
E3	3019068700 3019068710 3019068720	POCKET R	CRYSTAL GRAY BLUE	GPPS	1	1	1	1	1	1	
E4	3019068800 3019068810 3019068820	POCKET J	CRYSTAL GRAY BLUE	GPPS	1	1	1	1	1	1	
E5	301190800	CASE EGG TRAY	CRYSTAL	GPPS	1	1	1	1	1	1	
E6	3014257200 3014257220	PANEL *F CONTL AS	SILVER BLACK	ABS+PCB+FILM	1	1	1	1	1	1	
E6-1	30143LE160	PCB FRONT AS		RFP-311	1	1	1	1	1	1	
E7	3014257210 3014257230	PANEL *F CONTL AS	SILVER BLACK	ABS+PCB+FILM	0	0	0	0	0	0	
E7-1	30143LE170	PCB FRONT AS		RFP-311	0	0	0	0	0	0	
E8	3014011300 3014011320 3014011330 3014011310	PACKING HNDL AS	WHITE AL SILVER T/SILVER BLACK	RFP-302 (Long Bar Handle) (Section Circle)	0	1	0	0	0	0	
E9	3014011400 3014011420 3014011430 3014011410	PACKING HNDL AS	WHITE AL SILVER T/SILVER BLACK	RFP-303 (Long Bar Handle) (Section Square)	0	0	1	0	0	0	
E10	3014011100 3014011110 3014011120	PACKING HNDL AS	WHITE SILVER BLACK	RFP-304, ABS (Short Handle)	0	0	0	1	0	0	

* Please check the color, some parts code color dependent.

