

SN : RN5316N001

DAEWOO
ELECTRONICS



Service Manual

RN-531N



RN-532N



RN-533N



RN-534N



RN-535N



RN-536N



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|---|----|
| 1. SPECIFICATION | |
| 1-1. Model Information | 2 |
| 1-2. Interior Parts | 3 |
| 1-3. Machine Compartment View | 5 |
| 1-4. Refrigerant Cycle | 6 |
| 1-5. Temperature Diagram | 7 |
| 1-6. Wire Diagram | 8 |
| 1-7. Main PCB Circuit Diagram | 9 |
| | |
| 2. FUNCTIONS | |
| 2-1. 'PCB VOLUME' Control | 10 |
| 2-2. Temperature Control of Refrigerator compartment | 11 |
| 2-3. Defrost Mode | 12 |
| 2-4. Function of Low Ambient Temperature | 14 |
| 2-5. Time Saving Function | 15 |
| 2-6. Control of R Sensor OFF Point | 16 |
| 2-7. Error Display | 17 |
| | |
| 3. DISASSEMBLY | |
| 3-1. Door Switch | 18 |
| 3-2. Cover Multi-Flow Duct As (in Fresh food Compartment) | 19 |
| 3-3. Louver F As (in Frozen Food Compartment) | 20 |
| 3-4. Door F/R | 21 |
| | |
| 4. How to Change Door Position | 23 |
| | |
| 5. How to Charge R-600a Refrigerant | 24 |
| | |
| 6. Part List | |
| 6-1. Cabinet/ Evaporator/ Compressor Compartment | 29 |
| 6-2. Frozen Food Compartment | 30 |
| 6-3. Fresh Food Compartment | 31 |
| 6-4. Door Compartment | 32 |

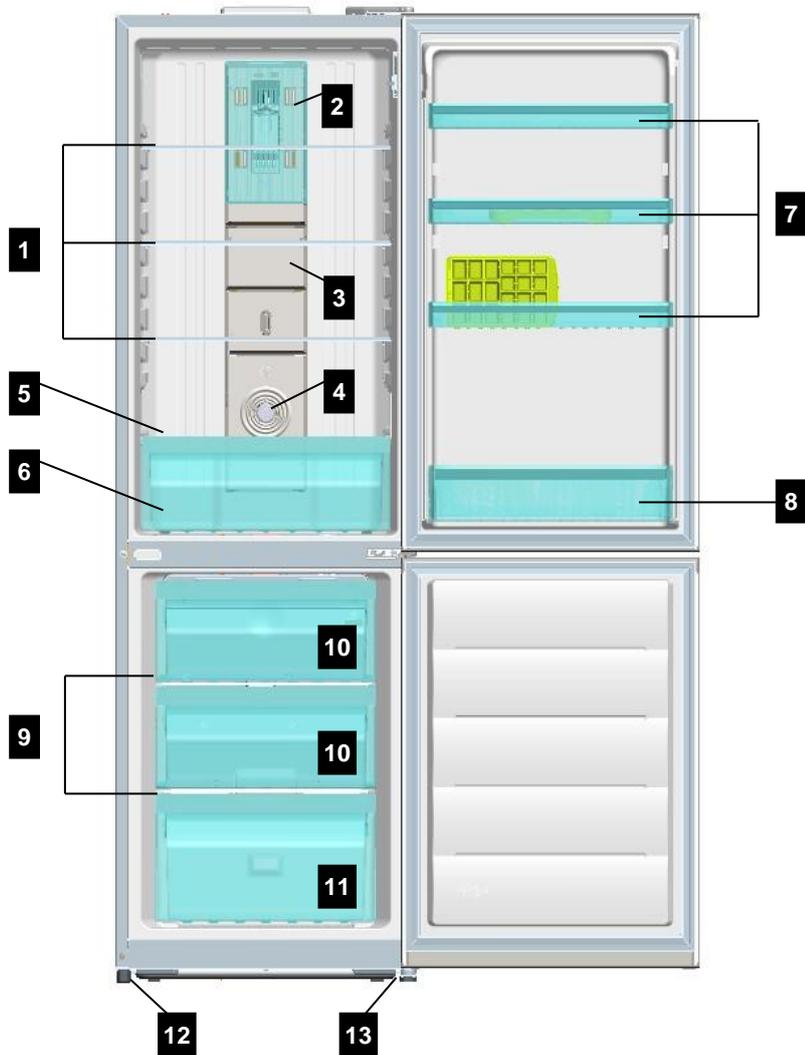
1. SPECIFICATIONS

1-1. Model Information

* is the Door Type

| | | |
|--|---------------------------|-----------------------------------|
| Buyer No. | | RN-53*N |
| Factory No. | | RFP-30***Q** |
| Control Type | | KNOB & Digital Smart Control |
| Gross Vol. ISO 15502 (unit: L) | Total | 337 |
| | Freezer | 111 |
| | Refrigerator | 226 |
| Storage Vol. ISO 15502 (unit: L) | Total | 305 |
| | Freezer | 84 |
| | Refrigerator | 221 |
| Dimension (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 | DC12V, 2300RPM |
| | Refrigerator Lighting | Bulb 15W x 1EA |
| Net Weight (Packing) | | 67(73)kg |
| Blowing Agent | | C-Pentane |

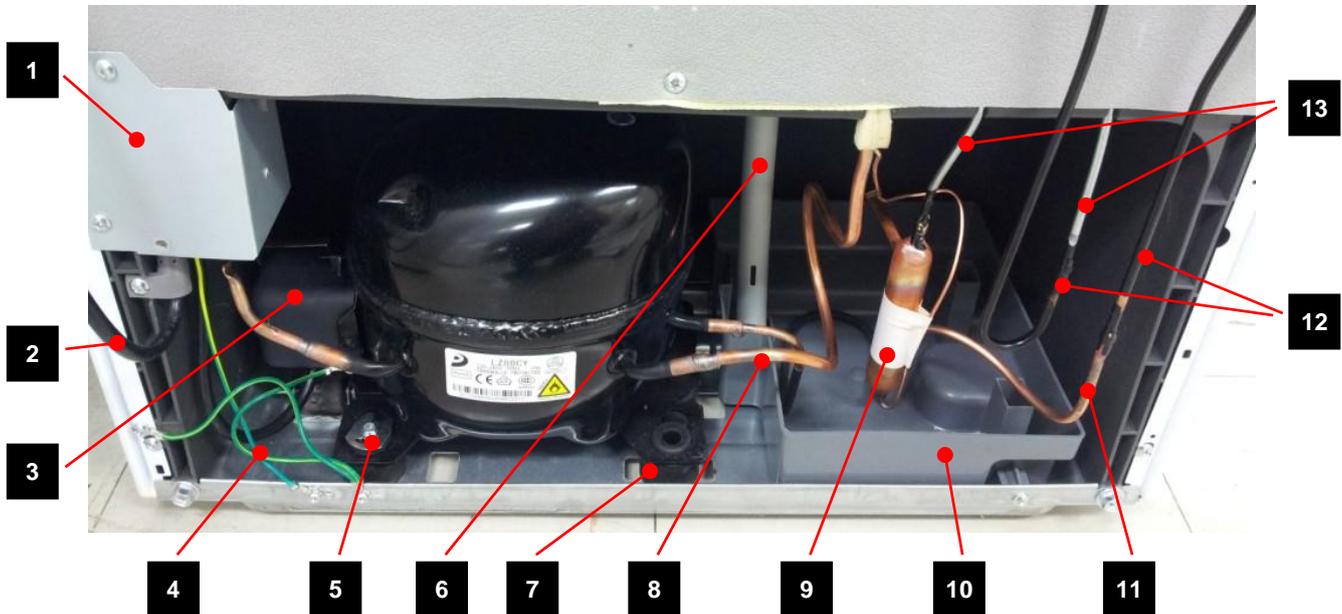
1-2. Interior Parts



- 1. Refrigerator Shelves
- 2. Lamp Window
- 3. Multi Duct
- 4. Knob R Control
- 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)

2. Power Cord

3. Switch P Relay As

4. Earth Comp Wire

5. Fixture Compressor (Washer)

6. Drain Hose

7. Compressor Absorber

8. Suction Pipe As

9. Dryer As

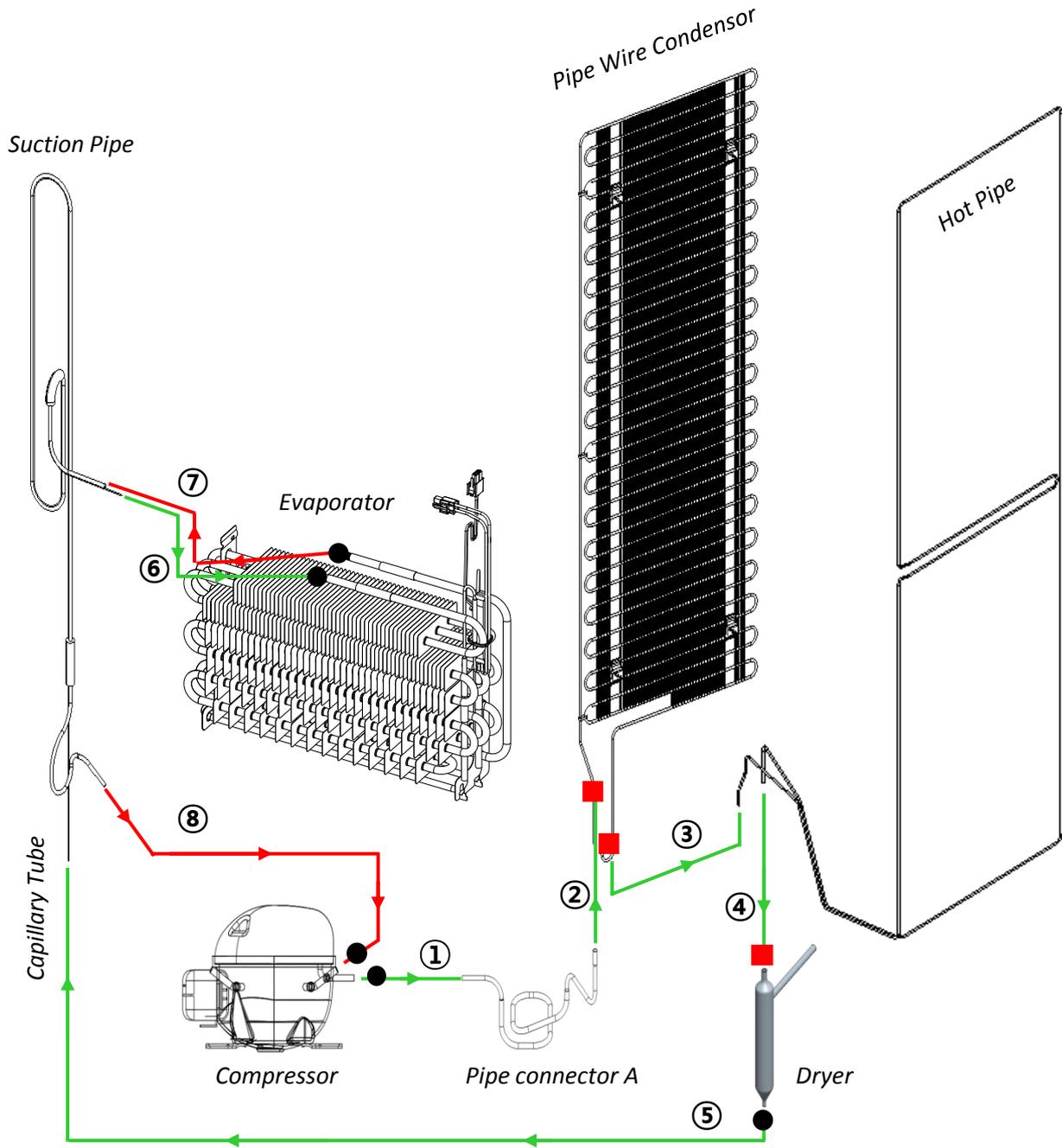
10. Case vaporization As

11.Pipe connector A

12. Pipe Wire Condensor As

13. Pipe Hot

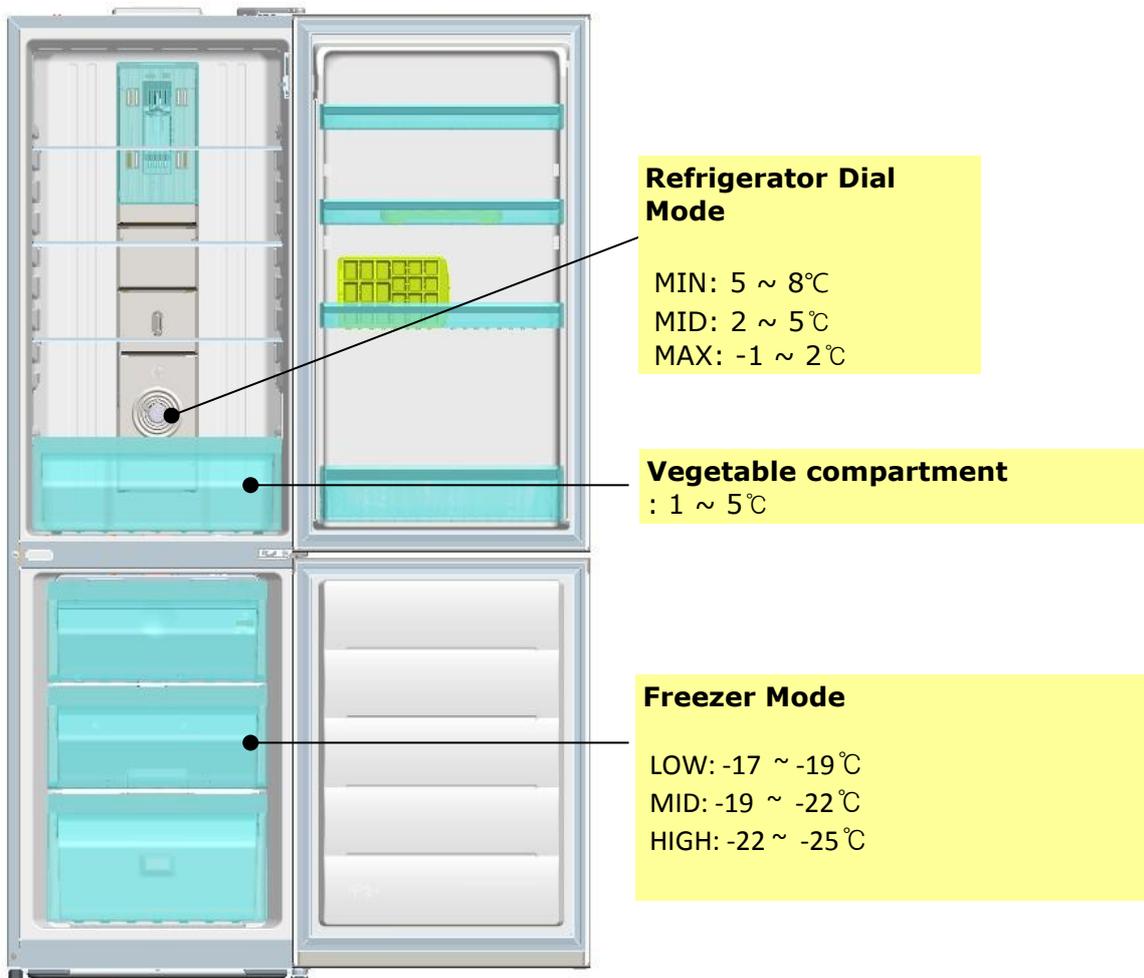
1-4. Refrigerant Cycle



- Welding Point

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

1-5. Temperature Diagram

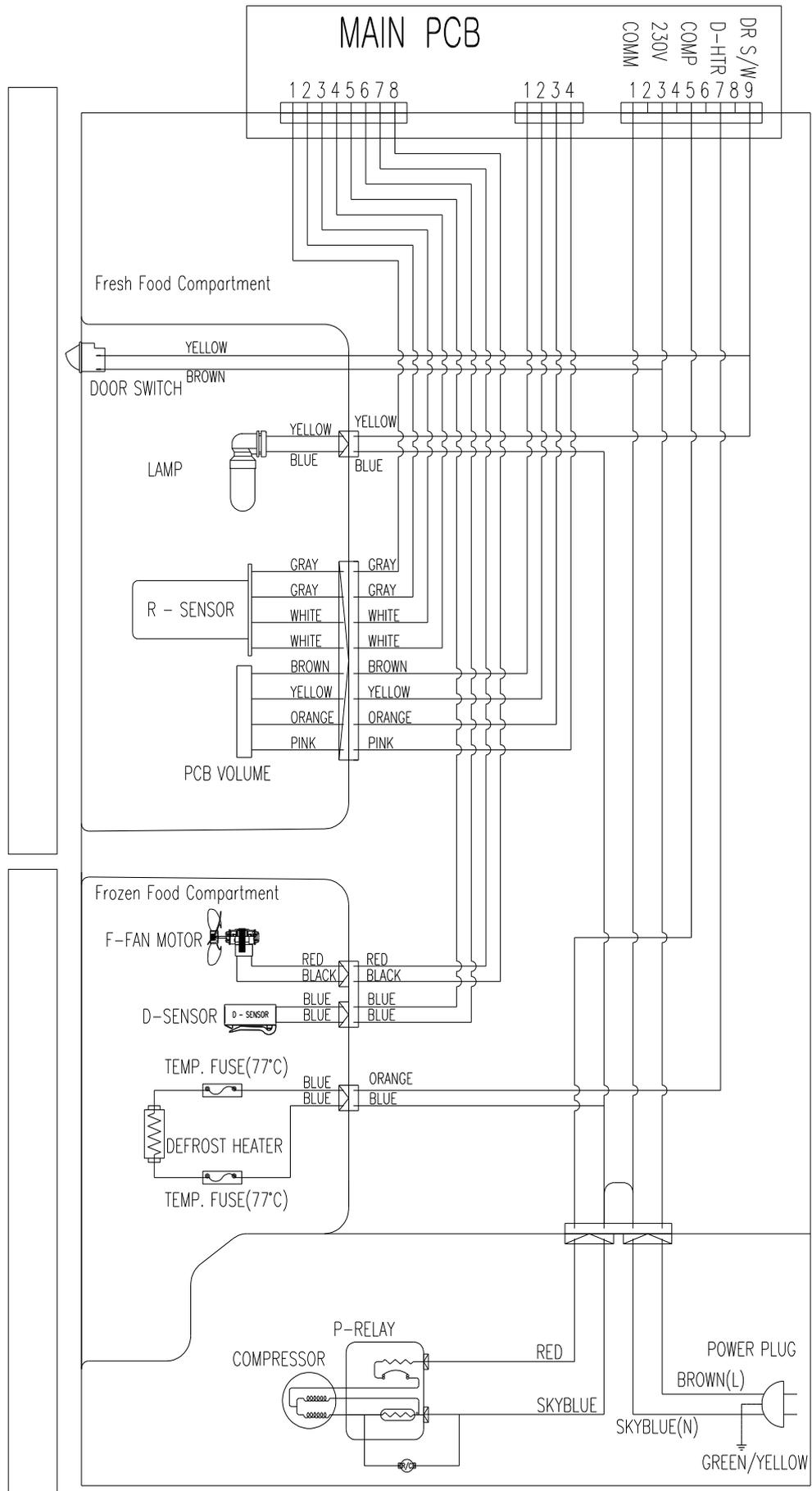


; The actual inner temperature varies depending on the food status, as the indicated setting temperature is a target temperature, not actual temperature within refrigerator.

; 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



| 2-1. "PCB VOLUME" Control | |
|--|----------------|
| INPUT | CONTROL OBJECT |
| - Turn 'DIAL KNOB' on the 'COVER M/FLOW DUCT'. | -PCB Volume |
| <p>- Temperature is controlled by "PCB Volume" assembled with "Dial Knob".</p> <p>- 11step mode of successive temperature mode</p> | |
| <p><'COVER M/FLOW DUCT AS': Air Duct Device in the Refrigerating Compartment></p> | |

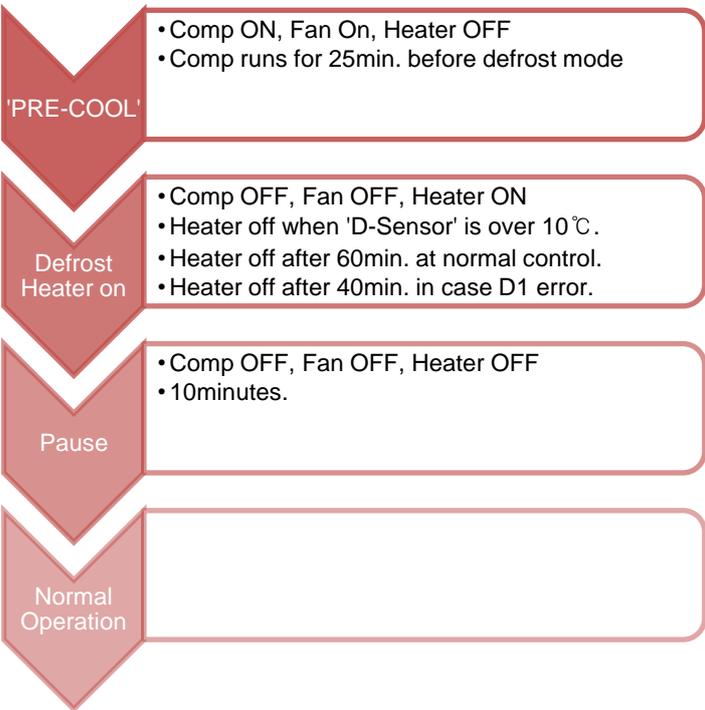
| 2-2. Temperature Control of Refrigerator Compartment | | | | | | | | | | | |
|--|-------|-------|-------|-------|-------|-----------------------|------|-------|-------|-------|-------|
| INPUT | | | | | | CONTROL OBJECT | | | | | |
| - Turn 'DIAL KNOB' - R sensor | | | | | | - COMPRESSOR - FAN | | | | | |
| A. COMP and FAN will be controlled by the on/off condition of each mode. | | | | | | | | | | | |
| B. Temperature Difference of Refrigerator each step : | | | | | | | | | | | |
| STEP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| ON(°C) | 7.52 | 6.85 | 6.18 | 5.51 | 4.84 | 4.17 | 3.5 | 2.83 | 2.16 | 1.49 | 0.82 |
| OFF(°C) | -0.48 | -1.15 | -1.82 | -2.49 | -3.16 | -3.83 | -4.5 | -5.17 | -5.84 | -6.51 | -7.18 |

Mid-Dial Knob: RN_531N Model

C. Temperature of Refrigerator at Mid-'Dial Knob' OFF point : -3.83 °C

D. Refrigerator ON/OFF Temp. Difference: 8.0C

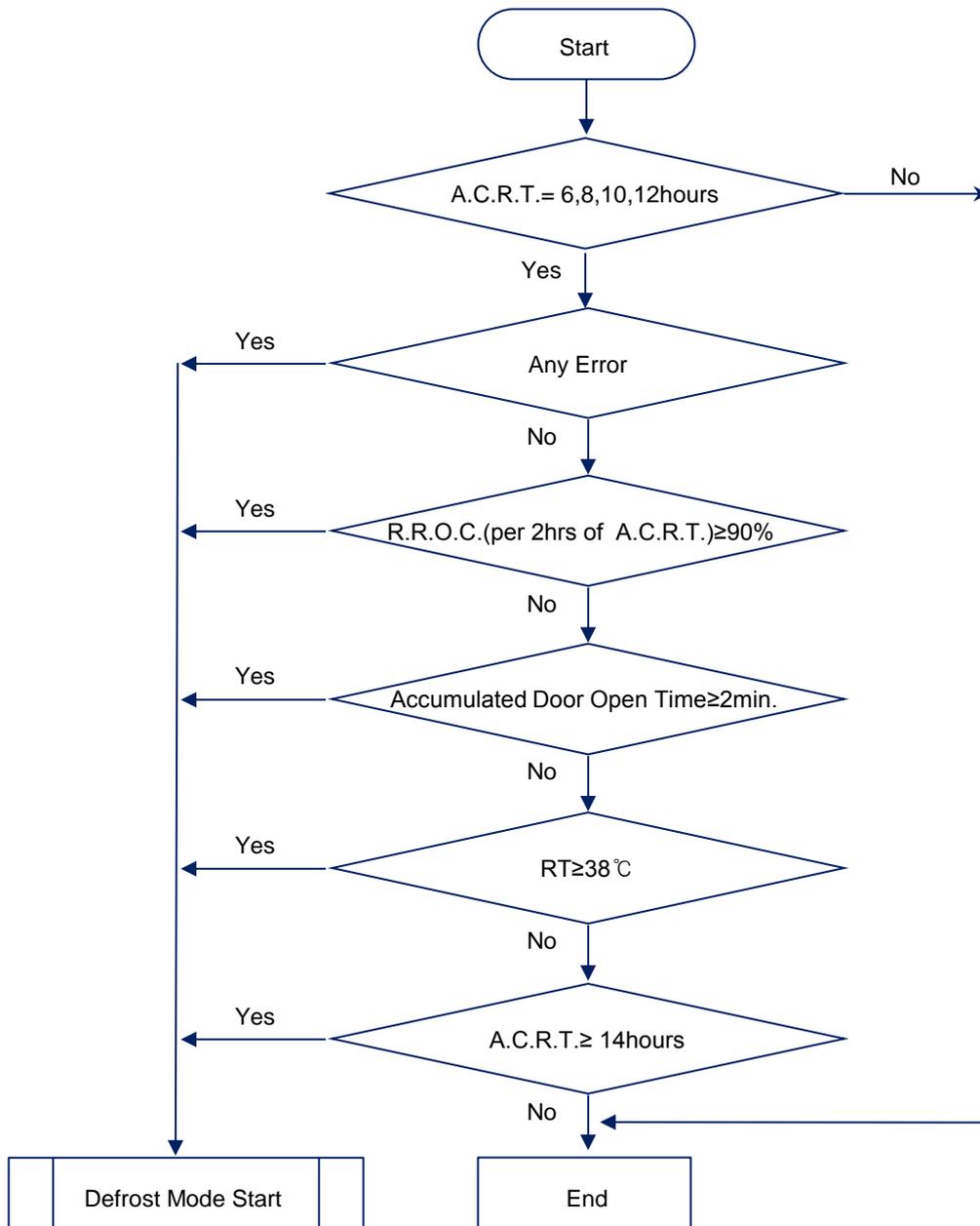
E. Temperature of Freezer Control
-It will be only controlled by using "KNOB F LOUVER" in the Freezer Comaprtment.

| 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 • Comp ON, Fan On, Heater OFF • Comp runs for 25min. before defrost mode"] --> B["Defrost Heater on • Comp OFF, Fan OFF, Heater ON • Heater off when 'D-Sensor' is over 10 °C. • Heater off after 60min. at normal control. • Heater off after 40min. in case D1 error."] B --> C["Pause • Comp OFF, Fan OFF, Heater OFF • 10minutes."] C --> D["Normal Operation"] </pre> <p>C. Forced Defrost Mode</p> <ul style="list-style-type: none"> - How to start: <ol style="list-style-type: none"> (1) by press Door S/W for continuously and Control 'Dial Knob'(MIN -> MAX) 1 times. (2) or, by press 'Test Key' 3 times on Main PCB - 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: If Force Defrost Mode start, you can buzzer sound | |

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



| 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 | |

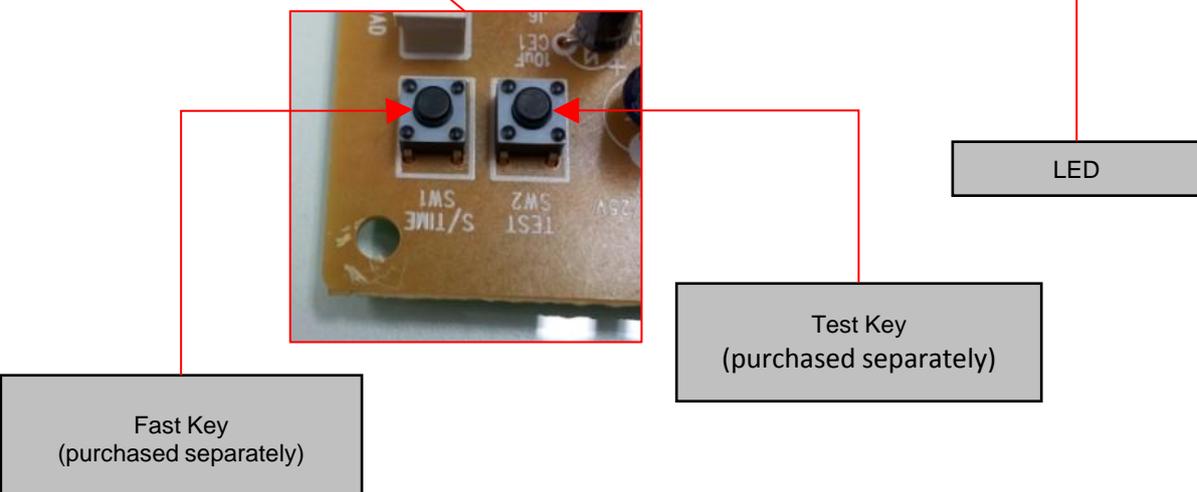
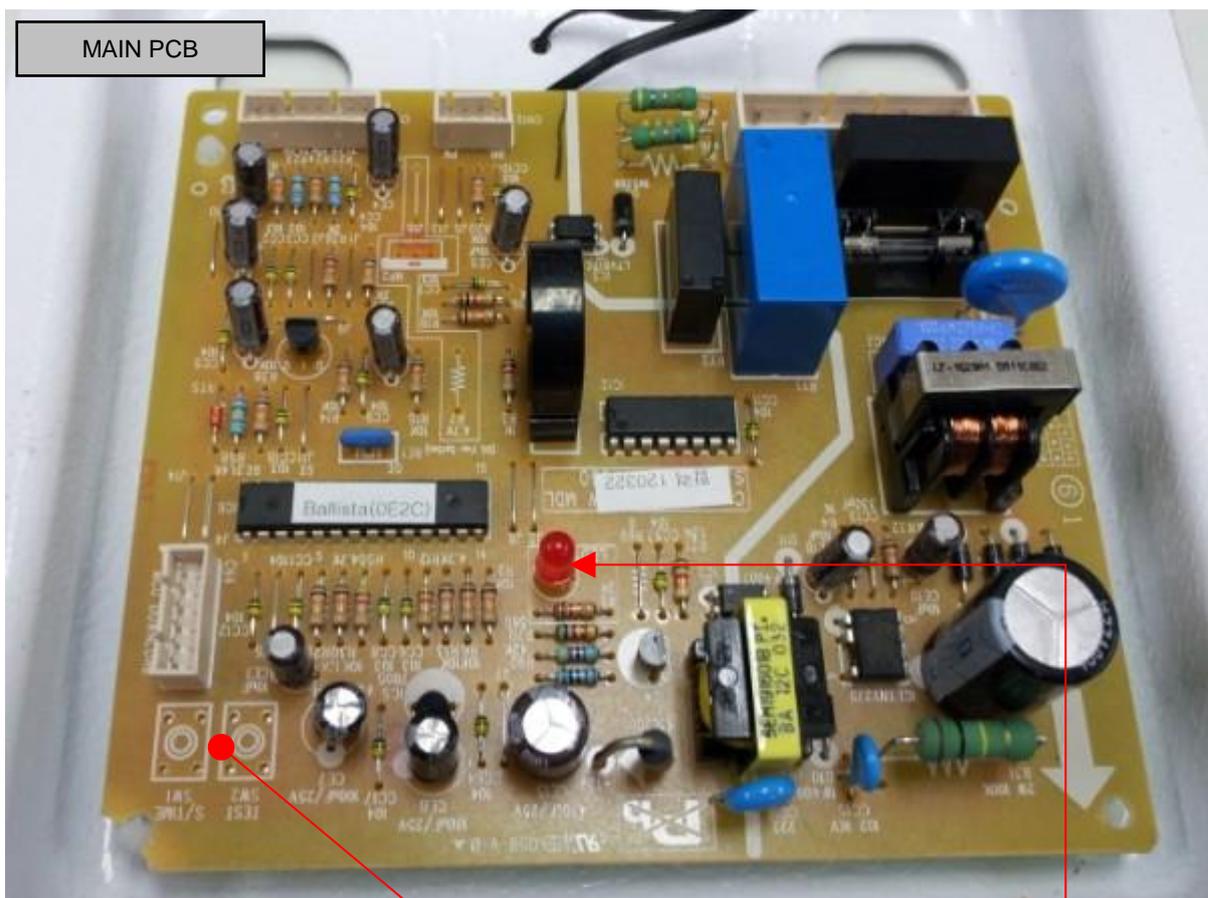
| 2-6. Buzzer Sound | |
|---|----------------|
| INPUT | CONTROL OBJECT |
| <ul style="list-style-type: none"> - Forced Defrost Mode start - Door Switch - Initial Power Input | Buzzer |
| <p>A. When Forced Defrost Mode start, the buzzer rings 3times. B. After 2 minutes power's on, the buzzer rings 3 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. Time Saving Function

| INPUT | CONTROL OBJECT |
|------------|----------------|
| "FAST KEY" | Buzzer |

A. How to Save
 - 1 min : Click FAST KEY one time on MAIN PCB.
 - 30 min : If you press FAST KEY continuously, you can reduce 30 minutes on each 2.5 seconds with buzzer.

B. Example for usage: when reduce test time



2-8. Control of R-sensor OFF Point

| INPUT | CONTROL OBJECT |
|------------------------|--|
| "J1", "J2" On Main PCB | Control Resistance of R sensor OFF Point |

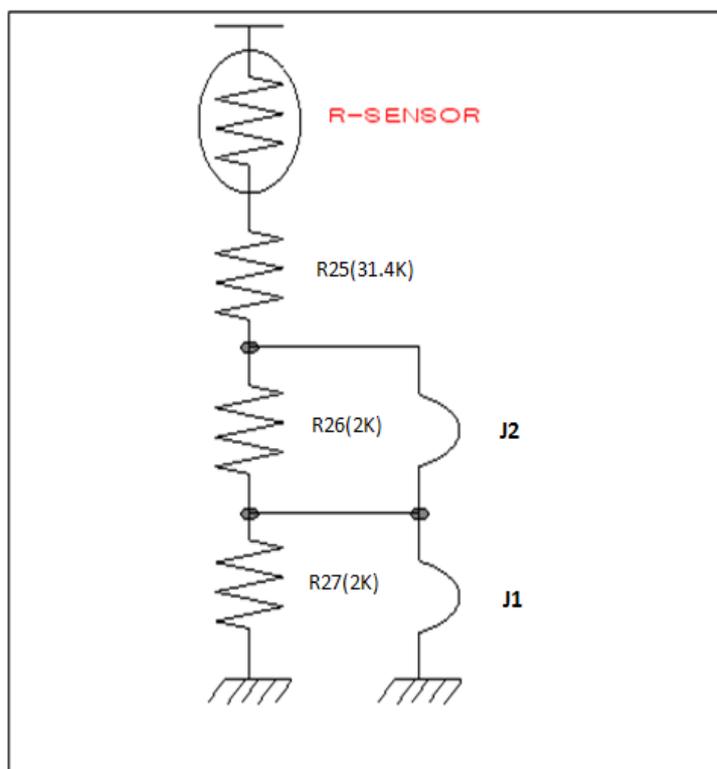
- When the refrigeration of refrigerator is poor or weak though Fan and COMP are working continuously, the following actions are recommended for service.

- (1) Resistance (R25) : Default resistance (31.4Kohms)
- (2) Resistance (R26) : Cut the "J1" off to reduce basic resistance by 1.5°C. (2Kohms up)
- (3) Resistance (R27) : Cut the "J2" off additionally to reduce basic resistance by 1.5°C. (total 4Kohms up)

※ R25 = R-SENSOR OFF point

R25 + R26 = R-SENSOR OFF point - 1.5°C

R25 + R26 + R27 = R-SENSOR OFF point - 3°C

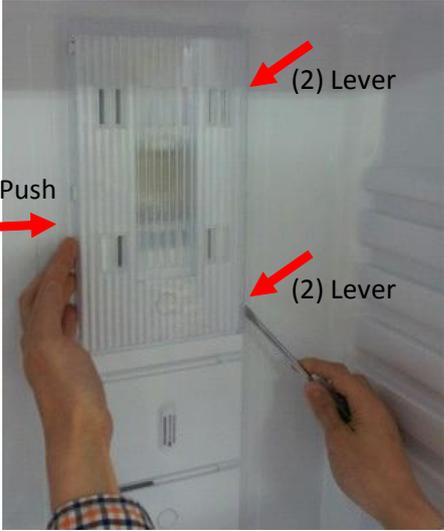
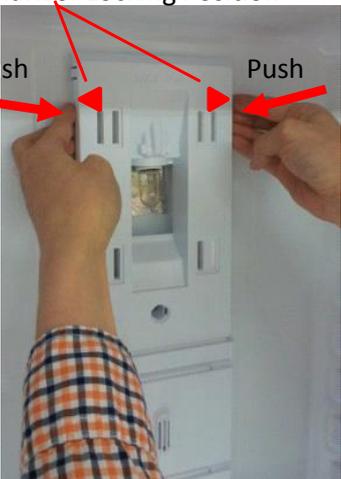
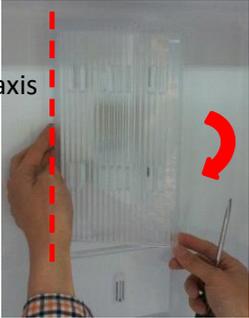
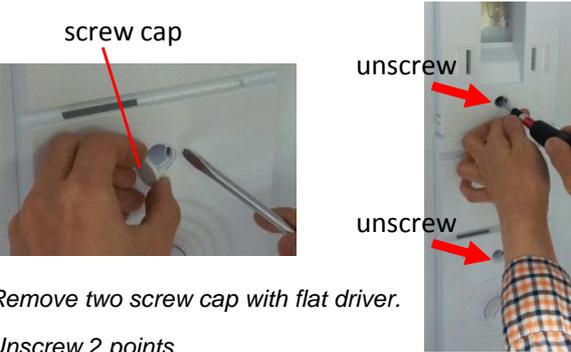


| 2-9. Error Display | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------------|--------------------------|-------|-------|-----|-----|---|------|-------|-------|-------|------|-----|-------|----|-------|----------|----|--------|-----------|----|--------|----------|----|--------|-----------|
| INPUT | CONTROL OBJECT | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sensor Error | LED Lamp | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>- ERROR DISPLAY</p> <ul style="list-style-type: none"> - If appliance has any errors, LED on the Main PCB is flickering. - If the appliance is normal (no error), LED IS off. <p>A. 'R1' ERROR</p> <p>: It happens when R-Sensor is OPEN or SHORT.</p> <p>(1) LED DISPLAY: Shortly flickering(0.3sec.) 1 times.</p> <p>(2) CONTROL:</p> <p>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. ON/OFF Operating 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: Shortly flickering(0.3sec.) 2 times.</p> <p>(2) CONTROL: 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: Shortly flickering(0.3sec.) 3 times.</p> <p>(2) CONTROL: 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: Shortly flickering(0.3sec.) 4 times.</p> <p>(2) CONTROL: Delete function relating to door switch sensing</p> <p>(3) RELEASE: When sensing close from door S/W.</p> <p>※ When pusing 'TEST KEY' on the main PCB, LED is long(1.0sec.) flickering several times. ex. 'Forced Defrost Mode:' long flickering 2 times</p> <div style="text-align: right; margin-right: 20px;">  </div> <table border="1"> <thead> <tr> <th>CODE</th> <th>LED</th> <th>ERROR</th> </tr> </thead> <tbody> <tr> <td>R1</td> <td>1time</td> <td>R sensor</td> </tr> <tr> <td>RT</td> <td>2times</td> <td>RT sensor</td> </tr> <tr> <td>d1</td> <td>3times</td> <td>D sensor</td> </tr> <tr> <td>DR</td> <td>4times</td> <td>DR Switch</td> </tr> </tbody> </table> <p>- To Confirm Errors: Check LED on the main PCB</p> <p>- The Priorities of Error : R1→RT→D1→DR</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 | CODE | LED | ERROR | R1 | 1time | R sensor | RT | 2times | RT sensor | d1 | 3times | D sensor | DR | 4times | DR Switch |
| RT sensor TEMP (unit:°C) | ~13 | ~19 | ~29 | 29~ | | | | | | | | | | | | | | | | | | | | | | |
| COMP. Operating ON/OFF TIME (unit:min.) | 6/34 | 10/30 | 16/24 | 20/20 | | | | | | | | | | | | | | | | | | | | | | |
| CODE | LED | ERROR | | | | | | | | | | | | | | | | | | | | | | | | |
| R1 | 1time | R sensor | | | | | | | | | | | | | | | | | | | | | | | | |
| RT | 2times | RT sensor | | | | | | | | | | | | | | | | | | | | | | | | |
| d1 | 3times | D sensor | | | | | | | | | | | | | | | | | | | | | | | | |
| DR | 4times | DR Switch | | | | | | | | | | | | | | | | | | | | | | | | |

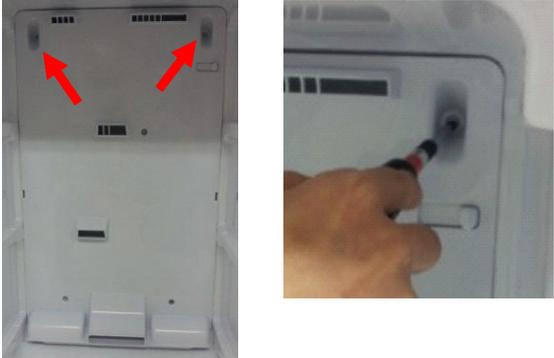
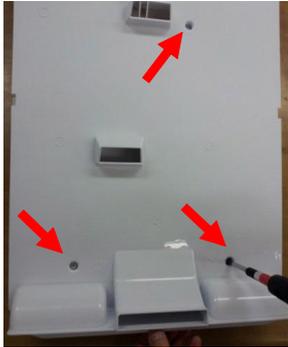
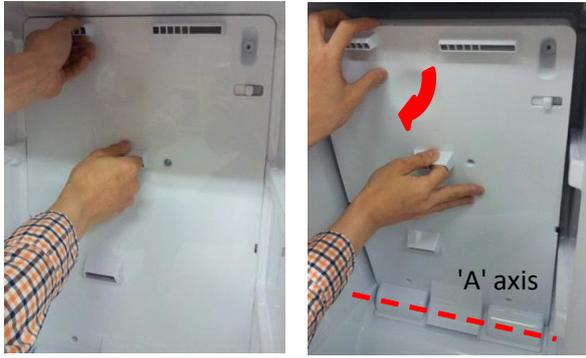
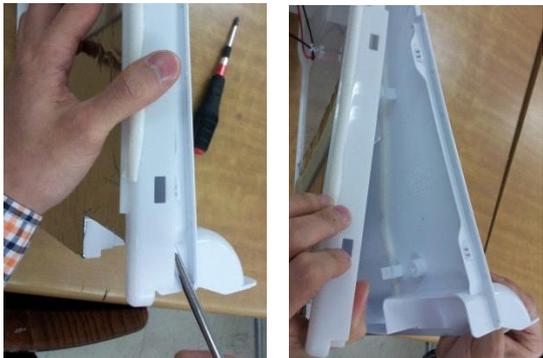
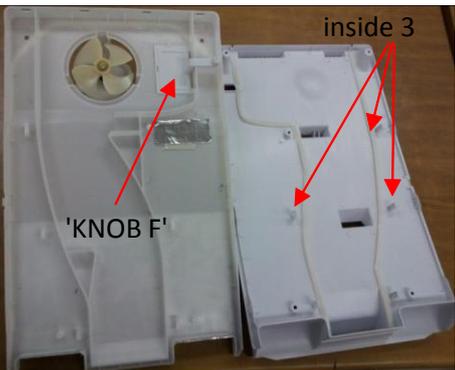
3-1. Door Switch

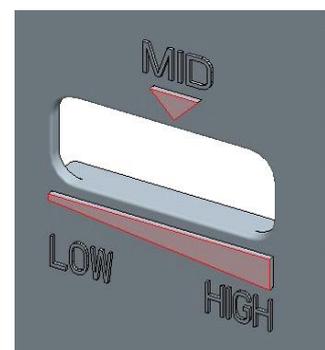
| No | Procedure | No | Procedure |
|----|--|----|---|
| 1 |  <p data-bbox="193 741 767 815"><i>Inuput a thin driver in the upper part as above picture. And lift up 'Door Switch' carefully.</i></p> | 3 |  |
| 2 |  <p data-bbox="193 1171 767 1245"><i>Inuput a thin driver in the lower part as above picture. And lift up 'Door Switch' carefully.</i></p> | |  <p data-bbox="863 1218 1174 1245"><i>Disconnect the wire housing.</i></p> |

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

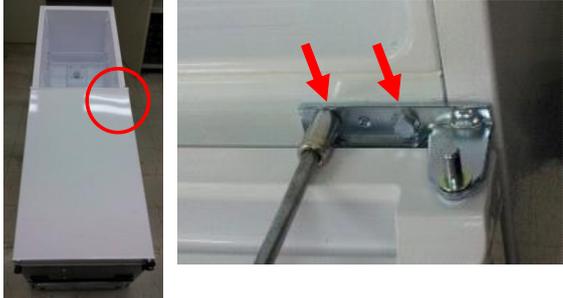
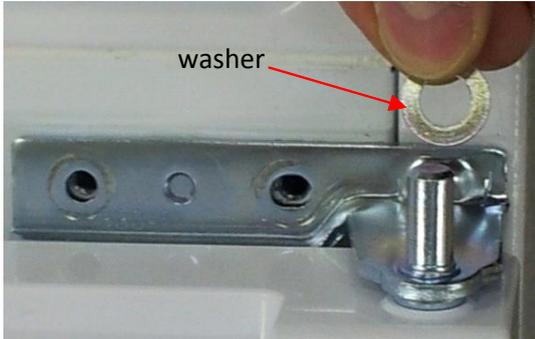
| No | Procedure | No | Procedure |
|----|--|----|--|
| 1 |  <p>(1) Push</p> <p>(2) Lever</p> <p>Unlock the lamp window (1) Push the window right side (2) Lever two window lock with flat driver</p> | 4 |  <p>the Mark of Locking Position</p> <p>Push</p> <p>Push</p> <p>Unlock the 'COVER M/FLOW DUCT' (1) 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>'A' axis</p> <p>Open window turning on the axis 'A'</p> | 5 |  <p>Disconnect the Lamp & Sensor wire housing.</p> |
| 3 |  <p>screw cap</p> <p>unscrew</p> <p>unscrew</p> <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

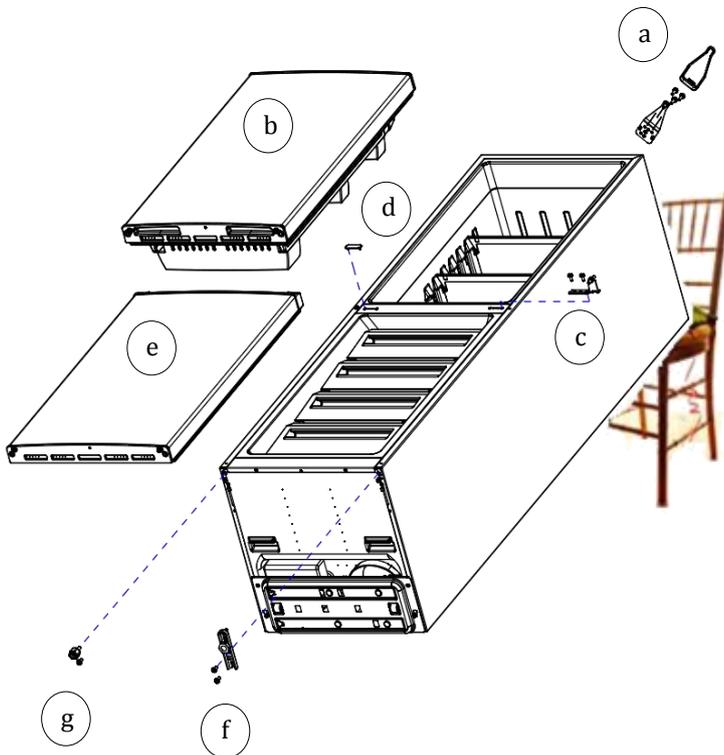
| No | Procedure | No | Procedure |
|----|---|----|--|
| 1 |  <p>Tilt down the appliance to the rear.</p> | 4 |  <p>Remove door in fresh food compartment. And unscrew middle hinge.</p> |
| 2 |  <p>Lift up top cover hinge to remove.</p> | 5 |  <p>※ Don't forget the washer for middle hinge.</p> |
| 3 |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

4. How To Change Door Position

Features are model dependent



1-1> Tilt down the appliance to the rear.
(Watch out for "Pipe Wire Condensor" damage.)

1-2> Disassemble following parts in order.

- 'Top Cover Hinge' and 'Top Hinge'(a)
- 'Refrigerator Door'(b)
- 'Middle Hinge'(c)
- 'Middle Cover Hinge'(d)
- 'Freezer Door'(e)
- 'Under Hinge'(f)
- 'Adjusting Leg '(g)

1-3> Move following 'Door Accessories' in the opposite position:

- 'Cover Bushings'(i)
- 'Door Stoppers'(j)

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

'Adjusting Leg '(g) & 'Under Hinge'(f)

1-5> Level and assemble the 'Freezer Door'(e)

1-6> Change the position of following parts each other and assemble them:

'Middle Cover Hinge'(d) & 'Middle Hinge'(c)

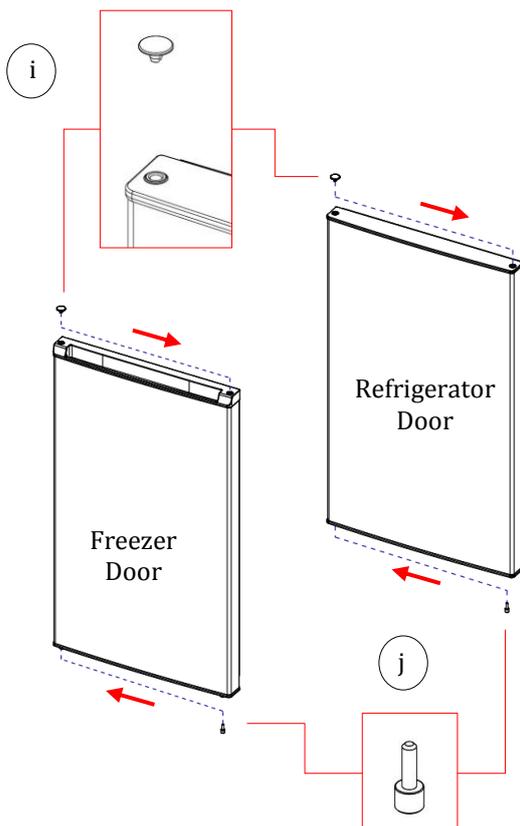
1-7>

Level and assemble the 'Refrigerator Door'(b).

1-8>

Assemble following parts on the opposite side:

'Top Cover Hinge' and 'Top Hinge'(a)



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.

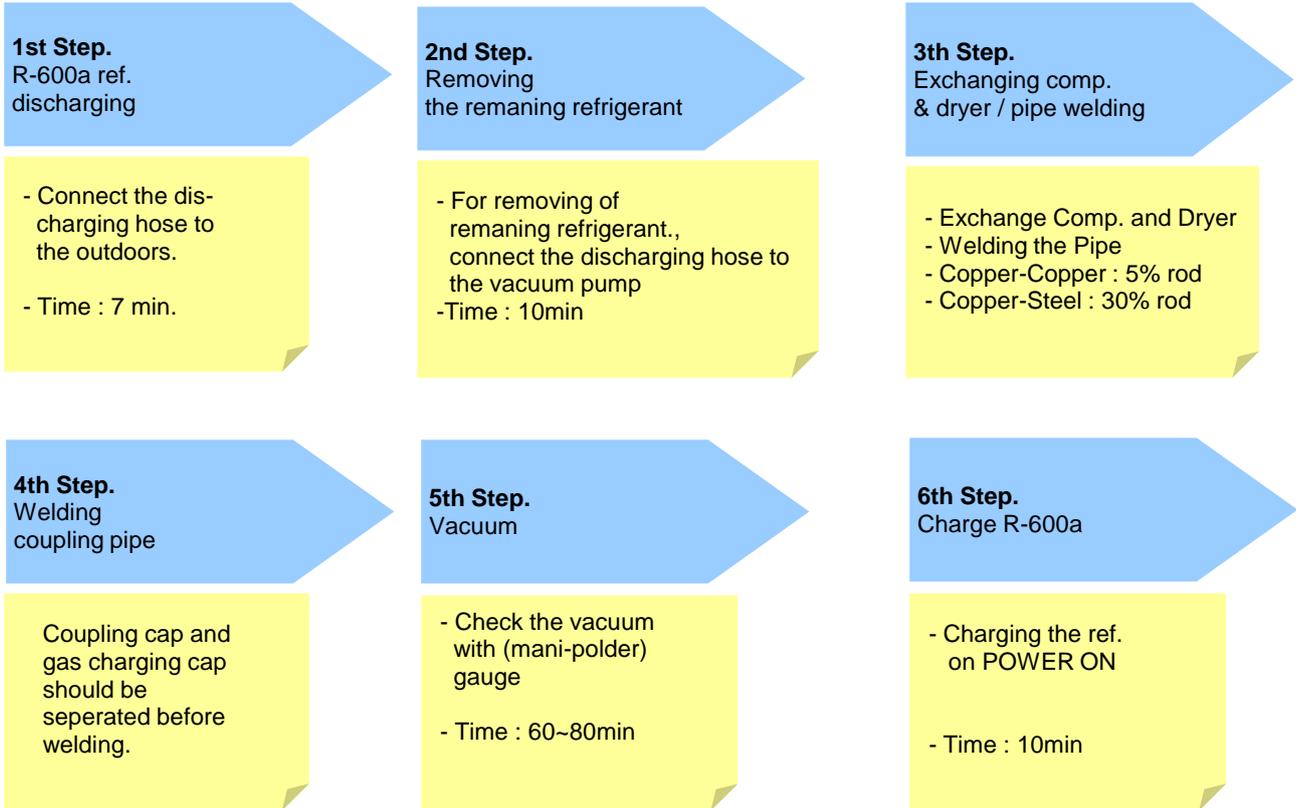
Refrigerant squirting out of the pipes could ignite or cause an eye injury. If a leak is detected, avoid any naked flames or potential sources of ignition and air the room in which appliance is standing for several minutes.

- 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>  |

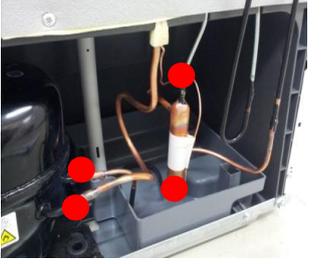
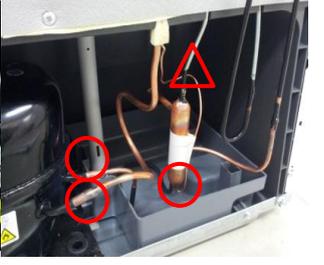
5-3. Process Summary



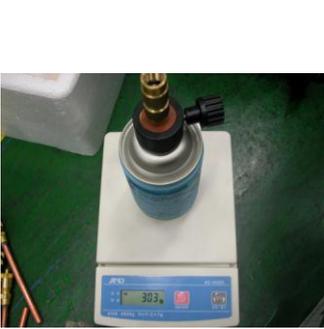
5-4. In Detail Precess

| 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

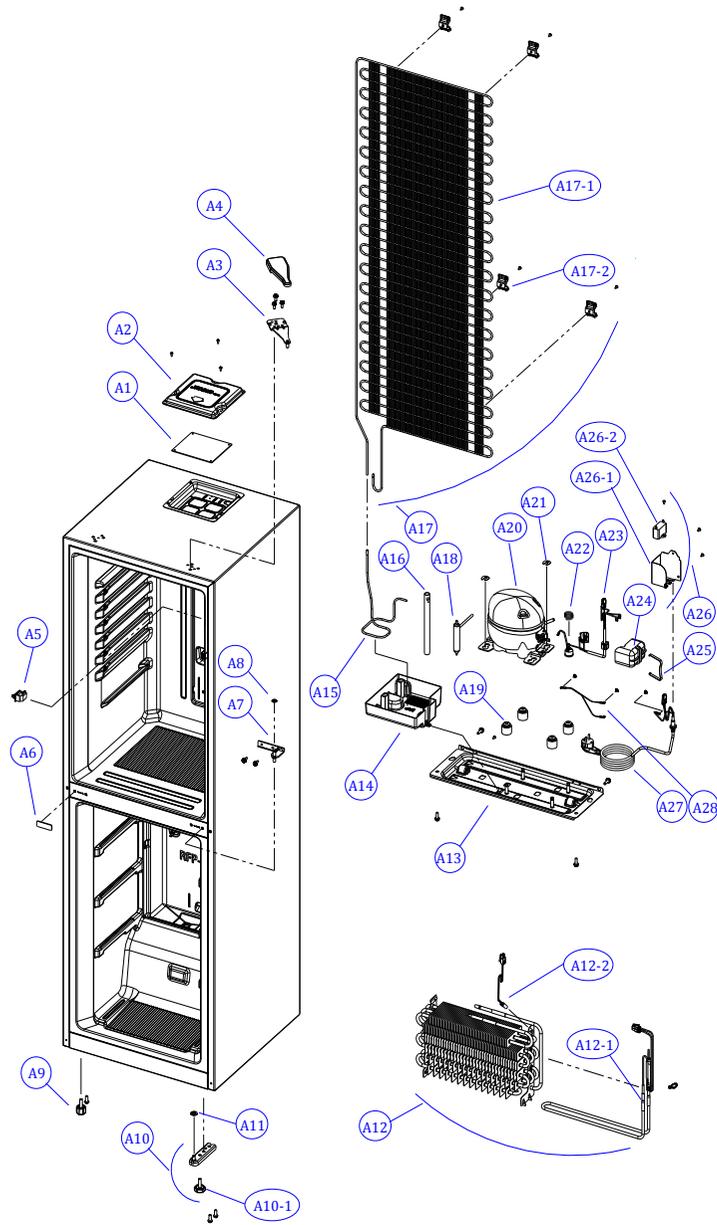
| NO. | SVC process | Image | Details |
|-----|--|---|---|
| 9 | Coupling pipe welding |  | <p>1. Weld after inserting the coupling pipe to the compressor.</p> <p>※ Use the wet cloth for preventing the other part of machinery-room from damage.</p> |
| 10 | Valve reass'y & guage connecting |  | <p>1. Reassemble the valve ass'y with coupling pipe to clockwise.</p> <p>2. Connect the blue hose of the guage to the coupling pipe and the yellow hose to the vacuum pump.</p> <p>3. Open the blue guage lever and start the vacuum pump</p> |
| 11 | Vacuum |  | <p>1. Be vacuumed the cycle with pump.</p> <p>※ Time : 60~80min</p> <p>=> If the vacuum time is less than 60min, ref. COP & air coolong would be weak.</p> |
| 12 | Check |  | <p>1. Check the guage : -76_{cm}Hg</p> <p>※ If the cycle is not vacuumed, it would be leak.</p> |
| 13 | Adjusting the amounts of refrigerants (R-600a can) |  | <p>1. Check the amounts of R-600a can with scale and discharge the surplus ref.</p> <p>※ Discharging is surely done at the outdoor where is able to clear air.</p> <p>※ Tip of adjusting.</p> <ul style="list-style-type: none"> - Can total weight :160g(Can 75g+Ref. 85g) - Adapter : 145g <p>=> Total : 305g</p> <ul style="list-style-type: none"> - The amounts of charging : 79g <p>=> Discharging : 6g => Total : 299g</p> |

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 / Evaporator / Compressor Compartment

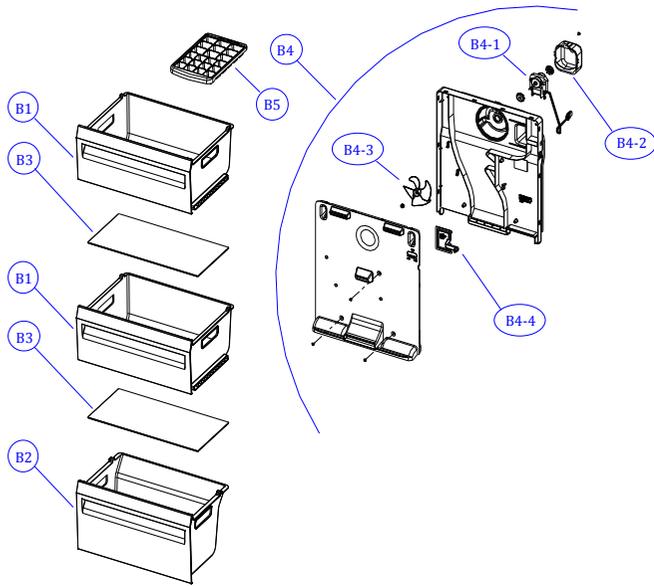


| NO | PART-CODE | PART NAME | SPEC. | Q'ty |
|-------|------------|---------------------------|-------------------------------|--------|
| | | | | RN-53* |
| A1 | 30143KW080 | PCB MAIN AS | RFP-301(A++) | 1 |
| A2 | 301149CB00 | COVER M/PCB BOX AS | SECC (WHITE) | 1 |
| | 301149CB10 | | SECC (GRAY) | |
| | 301149CB20 | | SECC (BLACK) | |
| A3 | 3012937900 | HINGE *T AS | RFP-301 | 1 |
| A4 | 3001448500 | COVER HI *T | PP (WHITE) | 1 |
| | 3001448510 | | PP (GRAY) | |
| | 3001448520 | | PP (BLACK) | |
| A5 | 301179DP00 | DOOR S/W AS | HC-050K4 250V2.5A | 1 |
| A6 | 3010937720 | CAP DV HI HOLE *M | HIPS | 1 |
| A7 | 3012938000 | HINGE *M AS | RFP-301 | 1 |
| A8 | 3016044410 | SPECIAL WASHER *M HI | SGCC, T1.0 x I.D9.0 x O.D15 | 1 |
| A9 | 3012106500 | FOOT ADJ *L AS | PP+INSERT | 1 |
| A10 | 3012938100 | HINGE *U AS | RFP-301 | 1 |
| A10-1 | 3012105300 | FOOT ADJ AS | PP+INSERT | 1 |
| A11 | 3816000200 | SPECIAL WASHER | SPCC T1.0 x O.D21 x I.D8 MFZN | 1 |
| A12 | 3017070020 | EVA AS | RFP-301(A++), 230V 130W | 1 |
| A12-1 | 3012764100 | HARNESS D SENS | RFP-340(NBC-K43-24) | 1 |
| A12-2 | 3012831200 | HEATER SHEATH AS | RFP-301(230V 130W) | 1 |
| A13 | 3010365500 | BASE COMP AS | RFP-301 | 1 |
| A14 | 301119VJ00 | CASE VAPORI AS | RFP-301 | 1 |
| A15 | 3014479400 | PIPE CONN A | DUCT1-0 OD4.76*T0.5 | 1 |
| A16 | 3012513950 | HOSE DRN B | PVC | 1 |
| A17 | 3014480010 | PIPE WI-CON AS | RFP-301 | 1 |
| A17-1 | 3014480000 | PIPE WI-CON SAS | RFP-301 | 1 |
| A17-2 | 3012041500 | FIXTURE W-ICON | HIPS | 4 |
| A18 | 3016808200 | DRYER AS | 10G, SINGLE TUBE | 1 |
| A19 | 3010103400 | ABSORBER COMP | RUBBER | 4 |
| A20 | 3956182M80 | COMPRESSOR | LR82CY 230V 50HZ | 1 |
| A21 | 4019H09031 | SPECIAL WASHER | SWRH | 2 |
| A22 | 3015103900 | SPRING OVERLOAD PROTECTOR | LZ88CY OLP FIXING | 1 |
| A23 | 3018134600 | SWITCH P RELAY AS | B60-120, QP2-15C(RSCR DONPER) | 1 |
| A24 | 3811402600 | COVER RELAY | LZ88CY | 1 |
| A25 | 3015103800 | SPRING COVER RELAY | LZ88CY COVER RELAY FIXING | 1 |
| A26 | 3010583740 | BOX POWER AS | GI+400V,3UF | 1 |
| A26-1 | 3010552101 | BOX POWER | GI/T0.5 | 1 |
| A26-2 | 3016406010 | CAPACITOR RUN | 400V,3UF,HOUSING | 1 |
| A27 | 3011348111 | CORD POWER AS | FR-290, 250V 10/16A | 1 |
| A28 | 3012763210 | HARNESS EARTH COMP | FRM-241, L140 | 1 |

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

6. PART LIST

6-2. Frozen Food Compartment

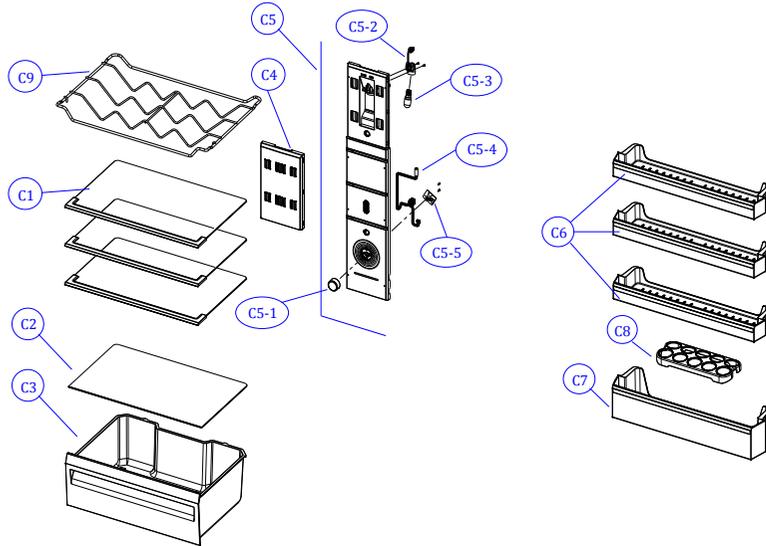


| NO | PART-CODE | PART NAME | SPEC. | Q'ty |
|------|------------|------------------|--------------------|--------|
| | | | | RN-53* |
| B1 | 301119V100 | CASE F A | GPPS(CRYSTAL) | 2 |
| | 301119V110 | | GPPS(GRAY) | |
| | 301119V120 | | GPPS(BLUE) | |
| B2 | 301119V200 | CASE F B | GPPS(CRYSTAL) | 1 |
| | 301119V210 | | GPPS(GRAY) | |
| | 301119V220 | | GPPS(BLUE) | |
| B3 | 3017861500 | SHELF GLAS F | GLASS T3.2 RFP-301 | 2 |
| B4 | 3018932540 | LOUVER F AS | RFP-301(DC 12V) | 1 |
| B4-1 | 3015905360 | MOTOR F AS | D4612AAA33 | 1 |
| B4-2 | 3010664710 | BRACKET FAN MOTR | PP NATURAL T2.0 | 1 |
| B4-3 | 3011835900 | FAN | OD100,SHAFT OD3.17 | 1 |
| B4-4 | 3013415800 | KNOB F CONTL | PP | 1 |
| B5 | 3010564910 | CASE ICEING AS | CASE ICEING+VINYL | 1 |

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

6. PART LIST

6-3. Fresh Food Compartment



| NO | PART-CODE | PART NAME | SPEC. | Q'ty |
|------|------------|-----------------------|-------------------------|-----------|
| | | | | RN-53* |
| C1 | 3017861100 | SHELF R AS | RFP-241 | 3 |
| C2 | 301119V400 | CASE GLAS VEGTB | T3.2 | 1 |
| C3 | 301119V000 | CASE VEGTB | GPPS(CRYSTAL) | 1 |
| | 301119V010 | | GPPS(GRAY) | |
| | 301119V020 | | GPPS(BLUE) | |
| C4 | 3015523800 | WINDOW M/FLOW DUCT | GPPS | 1 |
| C5 | 301149C400 | COVER M/FLOW DUCT AS | RFP-301 | 1 |
| C5-1 | 3013415700 | KNOB R CONTL | HIPS + PRINT | 1 |
| C5-2 | 3017903900 | SOCKET LAMP AS | | 1 |
| C5-3 | 3013600020 | LAMP AS | 15W (E14,CC7A) | 1 |
| C5-4 | 3012783300 | HARNESS PCB VOLUME AS | R SENSOR' + 'Wire lead' | 1 |
| C5-5 | 30143KW260 | PCB VOLUME AS | BALLISTA VOLUME | 1 |
| C6 | 3019068700 | POCKET R | GPPS(CRYSTAL) | 3 |
| | 3019068710 | | GPPS(GRAY) | |
| | 3019068720 | | GPPS(BLUE) | |
| C7 | 3019068800 | POCKET J | GPPS(CRYSTAL) | 1 |
| | 3019068810 | | GPPS(GRAY) | |
| | 3019068820 | | GPPS(BLUE) | |
| C8 | 3011190800 | CASE EGG TRAY | GPPS(CRYSTAL) | 1 |
| C9 | 3017861900 | SHELF WINE | SUS 204 | 1(OPTION) |

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

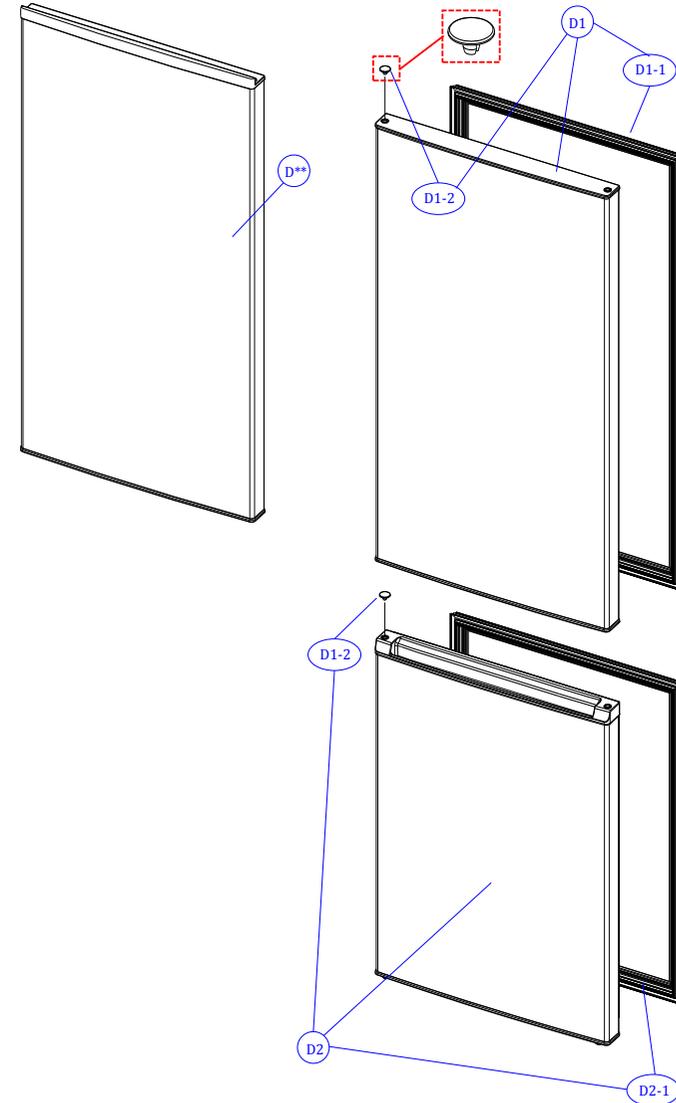
6. PART LIST

6-4. Door Compartment

6-4-1) RN-531 Model

| NO | PART-CODE | PART NAME | SPEC. | Q'ty | |
|------|------------|------------------|------------------------|--------|-----------------------|
| | | | | RN-531 | Hidden Hinge (OPTION) |
| D1 | 30100B9Y00 | ASSY R DR | WHITE(DWG1C) | 1 | 0 |
| | 30100B9Y40 | | AL SILVER(ASG4P) | | |
| | 30100B9Y50 | | TITANIUM SILVER(TSH1P) | | |
| | 30100B9Y60 | | BLACK(BLH1C) | | |
| | 30100B9Y70 | | PLATINUM SILVER(PSH1P) | | |
| D1-1 | 3012331000 | GASKET R DR AS | RFP-301(GRAY) | 1 | 1 |
| | 3012331010 | | RFP-301(BLACK) | | |
| D1-2 | 3011450300 | COVER CAP HOLE A | ABS(WHITE) | 2 | 1 |
| | 3011450310 | | ABS(SILVER) | | |
| | 3011450340 | | ABS(BLACK) | | |
| D2 | 30100B9X00 | ASSY F DR | WHITE(DWG1C) | 1 | 1 |
| | 30100B9X30 | | AL SILVER(ASG4P) | | |
| | 30100B9X40 | | TITANIUM SILVER(TSH1P) | | |
| | 30100B9X50 | | BLACK(BLH1C) | | |
| | 30100B9X60 | | PLATINUM SILVER(PSH1P) | | |
| D2-1 | 3012330900 | GASKET F DR AS | RFP-241(GRAY) | 1 | 1 |
| | 3012330910 | | RFP-241(BLACK) | | |
| D** | - | ASSY R DR | WHITE(DWG1C) | 0 | 1 |
| | - | | AL SILVER(ASG4P) | | |
| | - | | TITANIUM SILVER(TSH1P) | | |
| | - | | BLACK(BLH1C) | | |
| | - | | PLATINUM SILVER(PSH1P) | | |

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



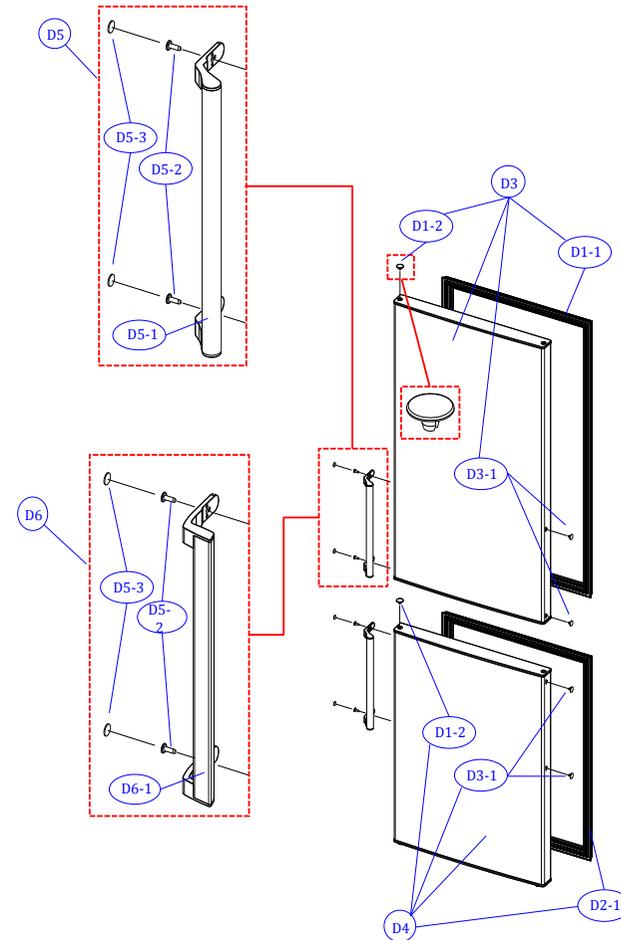
6. PART LIST

6-4. Door Compartment

6-4-2) RN-532,RN-533 Models

| NO | PART-CODE | PART NAME | SPEC. | Q'ty | |
|------|------------|------------------------------------|-------------------------------|--------|--------|
| | | | | RN-532 | RN-533 |
| D3 | 30100B9Y20 | ASSY R DR | WHITE(DWG1C) | 1 | 1 |
| | 30100B9YL0 | | WHITE(DWH1L) | | |
| | 30100B9YC0 | | AL SILVER(ASG4P) | | |
| | 30100B9YD0 | | TITANIUM SILVER(TSH1P) | | |
| | 30100B9YE0 | | BLACK(BLH1C) | | |
| | 30100B9YF0 | | PLATINUM SILVER(PSH1P) | | |
| D1-1 | 3012331000 | GASKET R DR AS | RFP-301(GRAY) | 1 | 1 |
| | 3012331010 | | RFP-301(BLACK) | | |
| D1-2 | 3011450300 | COVER CAP HOLE A | ABS(WHITE) | 2 | 2 |
| | 3011450310 | | ABS(SILVER) | | |
| | 3011450340 | | ABS(BLACK) | | |
| D3-1 | 301099BV00 | CAP DR | ABS(WHITE) | 4 | 4 |
| | 301099BV10 | | ABS(SILVER) | | |
| | 301099BV20 | | ABS(BLACK) | | |
| D4 | 30100B9X20 | ASSY F DR | WHITE(DWG1C) | 1 | 1 |
| | 30100B9XB0 | | WHITE(DWH1L) | | |
| | 30100B9Y80 | | AL SILVER(ASG4P) | | |
| | 30100B9Y90 | | TITANIUM SILVER(TSH1P) | | |
| | 30100B9YA0 | | BLACK(BLH1C) | | |
| | 30100B9YB0 | | PLATINUM SILVER(PSH1P) | | |
| D2-1 | 3012330900 | GASKET F DR AS | RFP-241(GRAY) | 1 | 1 |
| | 3012330910 | | RFP-241(BLACK) | | |
| D5 | 3014011300 | PACKING HNDL AS (*AL BAR TYPE) | DECO(WHITE)+BAR(NATURAL) | 1 | 0 |
| | 3014011310 | | DECO(BLACK)+BAR(BLACK) | | |
| | 3014011320 | | DECO(SILVER)+BAR(NATURAL) | | |
| | 3014011330 | | DECO(TITANIUM)+BAR(TITANIUM) | | |
| D5-1 | 3012659700 | HANDLE BAR AS (*AL BAR TYPE) | AL(HAIR LINE+NATURAL COLOR) | 2 | 0 |
| | 3012659710 | | AL(HAIR LINE+BLACK) | | |
| | 3012659720 | | AL(HAIR LINE+NATURAL COLOR) | | |
| | 3012659730 | | AL(HAIR LINE+TITANIUM SILVER) | | |
| D5-2 | 3016040500 | SPECIAL GRIP HNDL | M5XL16 MFZN | 4 | 4 |
| D5-3 | 3010985200 | CAP HNDL | ABS (WHITE) | 4 | 4 |
| | 3010985210 | | ABS (SILVER) | | |
| | 3010985220 | | ABS (BLACK) | | |
| D6 | 3014011400 | PACKING HNDL AS (*ABS BAR TYPE) | WHITE | 0 | 1 |
| | 3014011410 | | BLACK | | |
| | 3014011420 | | SILVER | | |
| | 3014011430 | | TITANIUM SILVER | | |
| D6-1 | 3012659800 | HANDLE BAR AS (*ABS BAR TYPE) | WHITE | 0 | 2 |
| | 3012659810 | | BLACK | | |
| | 3012659820 | | SILVER | | |
| | 3012659830 | | TITANIUM SILVER | | |

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



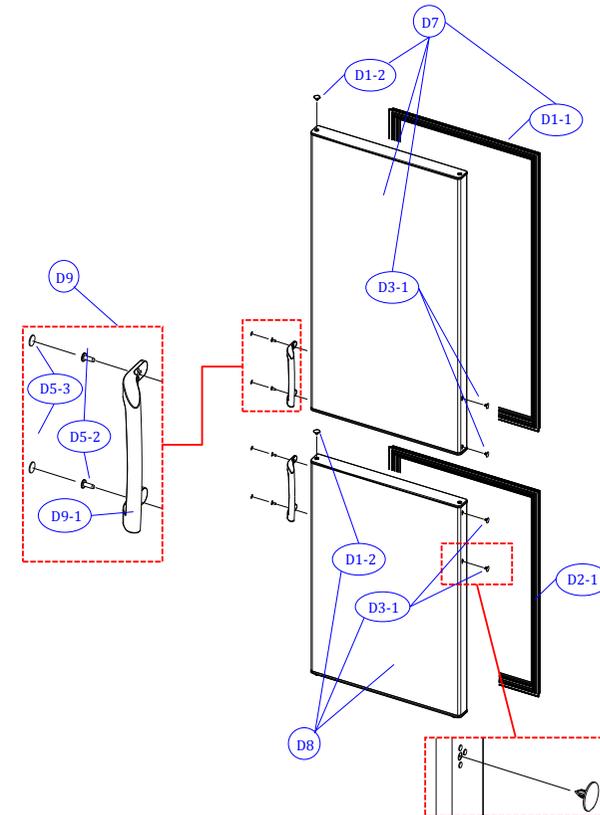
6. PART LIST

6-4. Door Compartment

6-4-3) RN-534 Model

| NO | PART-CODE | PART NAME | SPEC. | Q'ty |
|------|------------|--|------------------------|--------|
| | | | | RN-534 |
| D7 | 30100B9Y10 | ASSY R DR | WHITE(DWG1C) | 1 |
| | 30100B9YG0 | | AL SILVER(ASG4P) | |
| | 30100B9YH0 | | TITANIUM SILVER(TSH1P) | |
| | 30100B9YJ0 | | BLACK(BLH1C) | |
| | 30100B9YK0 | | PLATINUM SILVER(PSH1P) | |
| D1-1 | 3012331000 | GASKET R DR AS | RFP-301(GRAY) | 1 |
| | 3012331010 | | RFP-301(BLACK) | |
| D1-2 | 3011450300 | COVER CAP HOLE A | ABS(WHITE) | 2 |
| | 3011450310 | | ABS(SILVER) | |
| | 3011450340 | | ABS(BLACK) | |
| D3-1 | 301099BV00 | CAP DR | ABS(WHITE) | 4 |
| | 301099BV10 | | ABS(SILVER) | |
| | 301099BV20 | | ABS(BLACK) | |
| D8 | 30100B9X10 | ASSY F DR | WHITE(DWG1C) | 1 |
| | 30100B9X70 | | AL SILVER(ASG4P) | |
| | 30100B9X80 | | TITANIUM SILVER(TSH1P) | |
| | 30100B9X90 | | BLACK(BLH1C) | |
| | 30100B9XA0 | | PLATINUM SILVER(PSH1P) | |
| D2-1 | 3012330900 | GASKET F DR AS | RFP-241(GRAY) | 1 |
| | 3012330910 | | RFP-241(BLACK) | |
| D9 | 3014011100 | PACKING HNDL AS (*GAS INJECTION TYPE) | RFP-304, WHITE | 1 |
| | 3014011110 | | RFP-304, SILVER | |
| | 3014011120 | | RFP-304, BLACK | |
| D9-1 | 3012659300 | HANDLE (*GAS INJECTION TYPE) | ABS, WHITE | 2 |
| | 3012659310 | | ABS, SILVER | |
| | 3012659320 | | ABS, BLACK | |

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



6. PART LIST

6-4. Door Compartment

6-4-4) RN-535, RN-536 Models

| NO | PART-CODE | PART NAME | SPEC. | Q'ty | |
|------|------------|------------------|------------------------|--------|--------|
| | | | | RN-535 | RN-536 |
| D10 | 30000CPM00 | ASSY R DR | WHITE(DWG1C) | 1 | 0 |
| | 30000CPM10 | | AL SILVER(ASG4P) | | |
| | 30000CPM20 | | TITANIUM SILVER(TSH1P) | | |
| | 30000CPM30 | | BLACK(BLH1C) | | |
| | 30000CPM40 | | PLATINUM SILVER(PSH1P) | | |
| D1-1 | 3012331000 | GASKET R DR AS | RFP-301(GRAY) | 1 | 1 |
| | 3012331010 | | RFP-301(BLACK) | | |
| D1-2 | 3011450300 | COVER CAP HOLE A | ABS(WHITE) | 2 | 2 |
| | 3011450310 | | ABS(SILVER) | | |
| | 3011450340 | | ABS(BLACK) | | |
| D11 | 30000CPN00 | ASSY F DR | WHITE(DWG1C) | 1 | 0 |
| | 30000CPN10 | | AL SILVER(ASG4P) | | |
| | 30000CPN20 | | TITANIUM SILVER(TSH1P) | | |
| | 30000CPN30 | | BLACK(BLH1C) | | |
| | 30000CPN40 | | PLATINUM SILVER(PSH1P) | | |
| D2-1 | 3012330900 | GASKET F DR AS | RFP-241(GRAY) | 1 | 1 |
| | 3012330910 | | RFP-241(BLACK) | | |
| D12 | 30000CPP00 | ASSY R DR | WHITE(DWG1C) | 0 | 1 |
| | 30000CPP10 | | AL SILVER(ASG4P) | | |
| | 30000CPP20 | | TITANIUM SILVER(TSH1P) | | |
| | 30000CPP30 | | BLACK(BLH1C) | | |
| | 30000CPP40 | | PLATINUM SILVER(PSH1P) | | |
| D13 | 30000CPQ00 | ASSY F DR | WHITE(DWG1C) | 0 | 1 |
| | 30000CPQ10 | | AL SILVER(ASG4P) | | |
| | 30000CPQ20 | | TITANIUM SILVER(TSH1P) | | |
| | 30000CPQ30 | | BLACK(BLH1C) | | |
| | 30000CPQ40 | | PLATINUM SILVER(PSH1P) | | |

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

*Some parts can be changed for improving without notice.

| Date | Note |
|------|------|
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