

S/M No. : FR09100010

**DAEWOO**

# Service Manual

## Refrigerator

Model: FR-091



**DAEWOO ELECTRONICS CO., LTD.**

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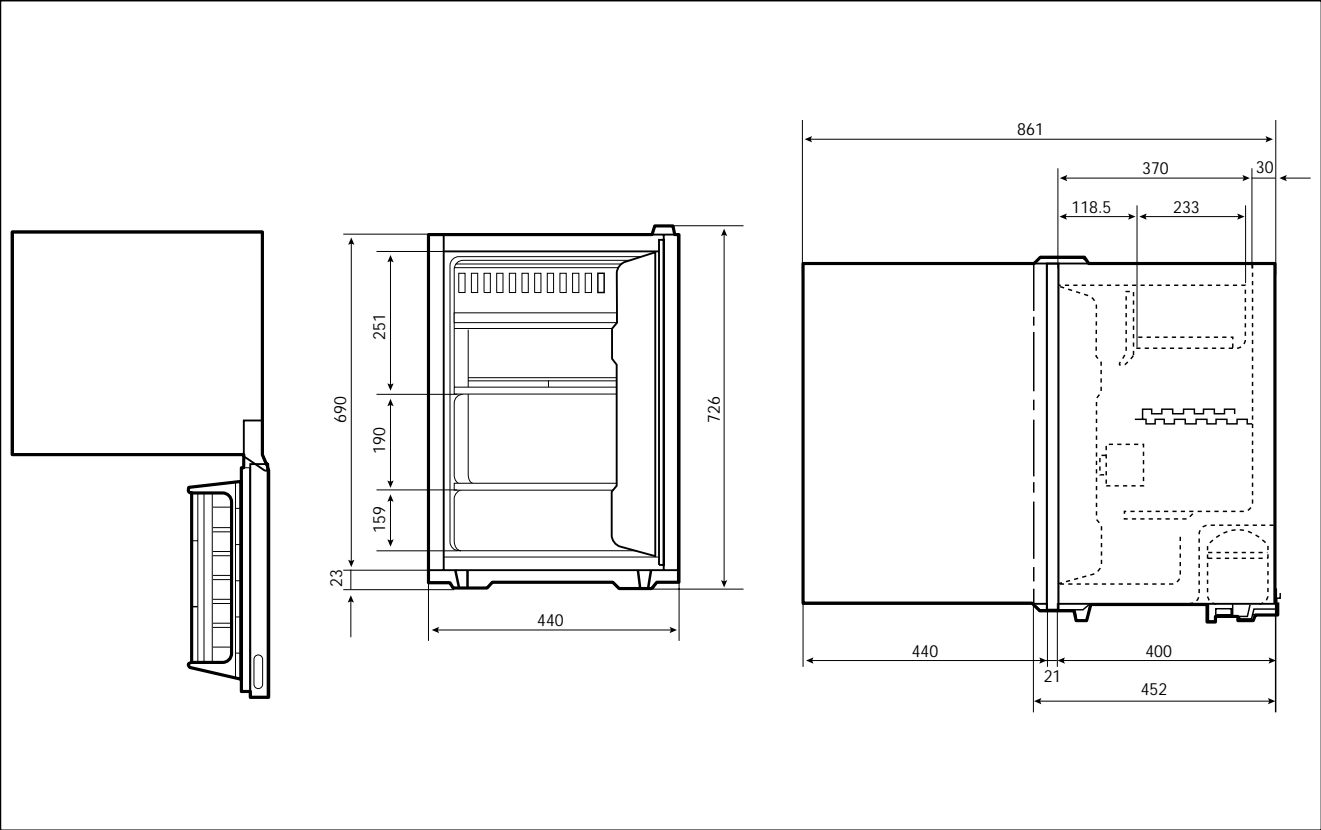
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# 1. SPECIFICATION

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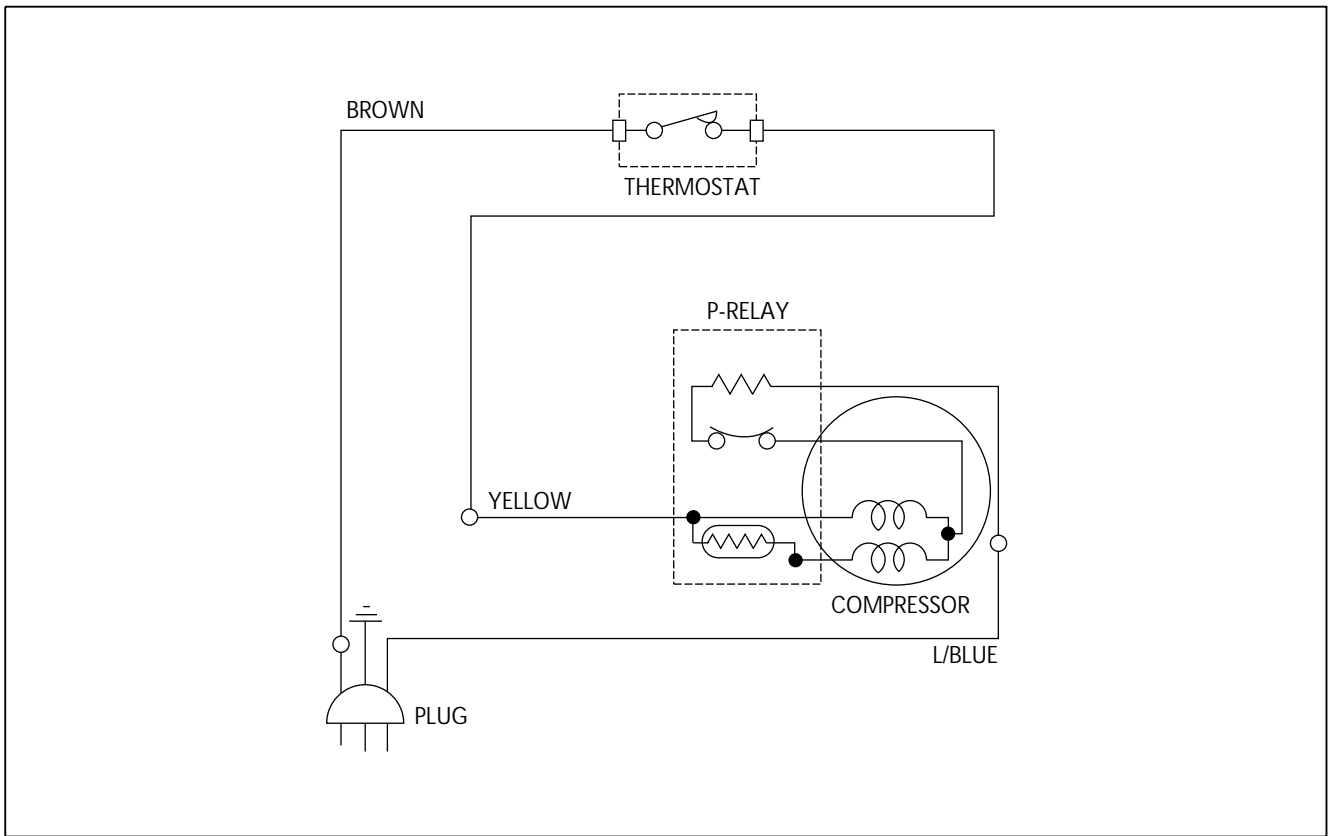
| MODEL NAME           |              | FR-091                                 |
|----------------------|--------------|--|
| Refrigerant          | R12          | 95g                                    |
|                      | R134a        | 90g                                    |
| Cooling System       |              | Aluminumembossed Plat "Roll Bond" Type |
| Refrigeration System |              | Natural Cold-air Convection            |
| Defrost System       |              | Natural                                |
| Defrost Operation    |              | Manual Start & Stop                    |
| Cold Control         |              | Adjustable Dial                        |
| Capacity             | Freezer      | -                                      |
|                      | Refrigerator | -                                      |
|                      | Total        | 75 ℓ                                   |
| External Dimension   | Height       | 726mm                                  |
|                      | Width        | 440mm                                  |
|                      | Depth        | 452mm                                  |
| Net Weight           |              | 21Kg                                   |

# 2. EXTERNAL VIEW



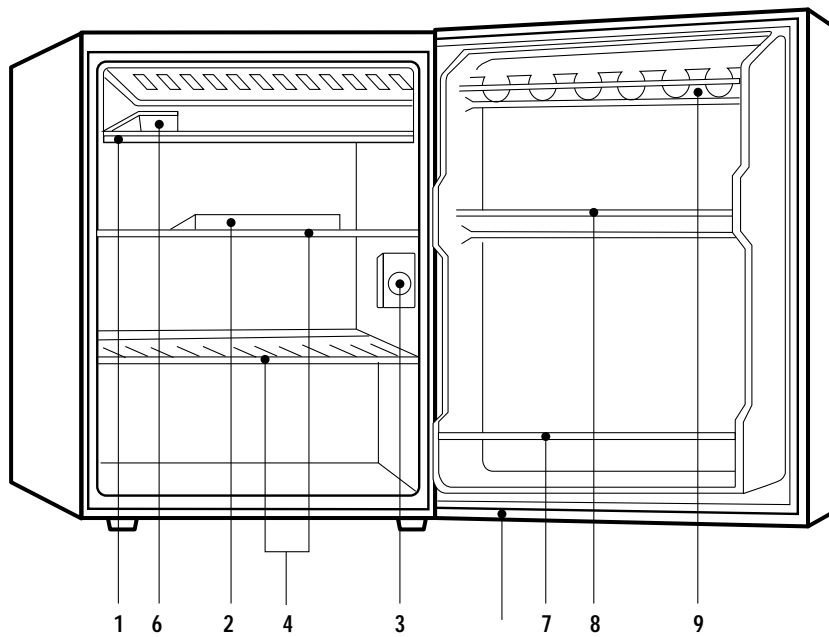
### 3. WIRE DIAGRAM

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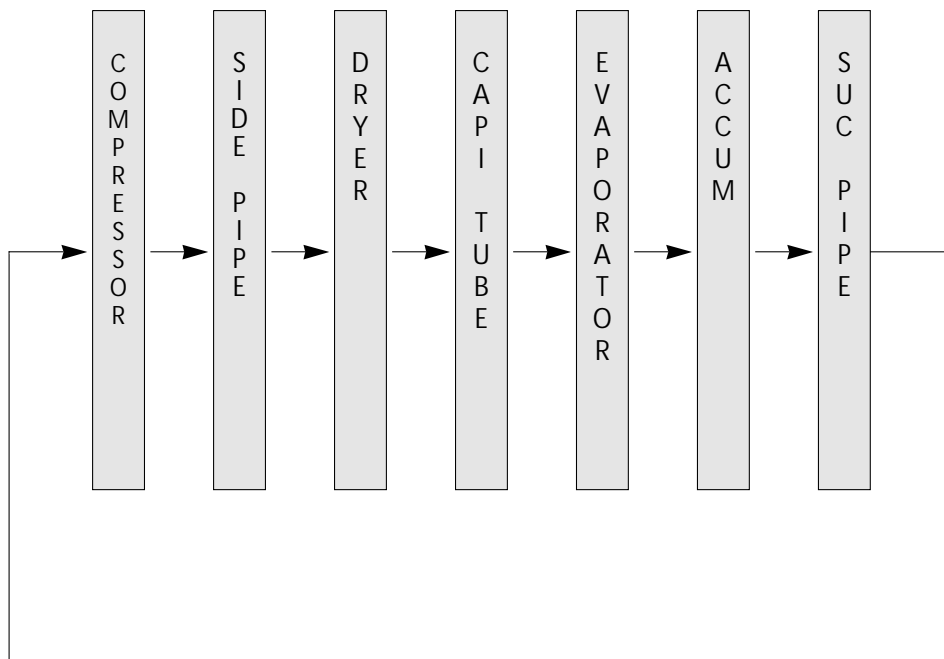
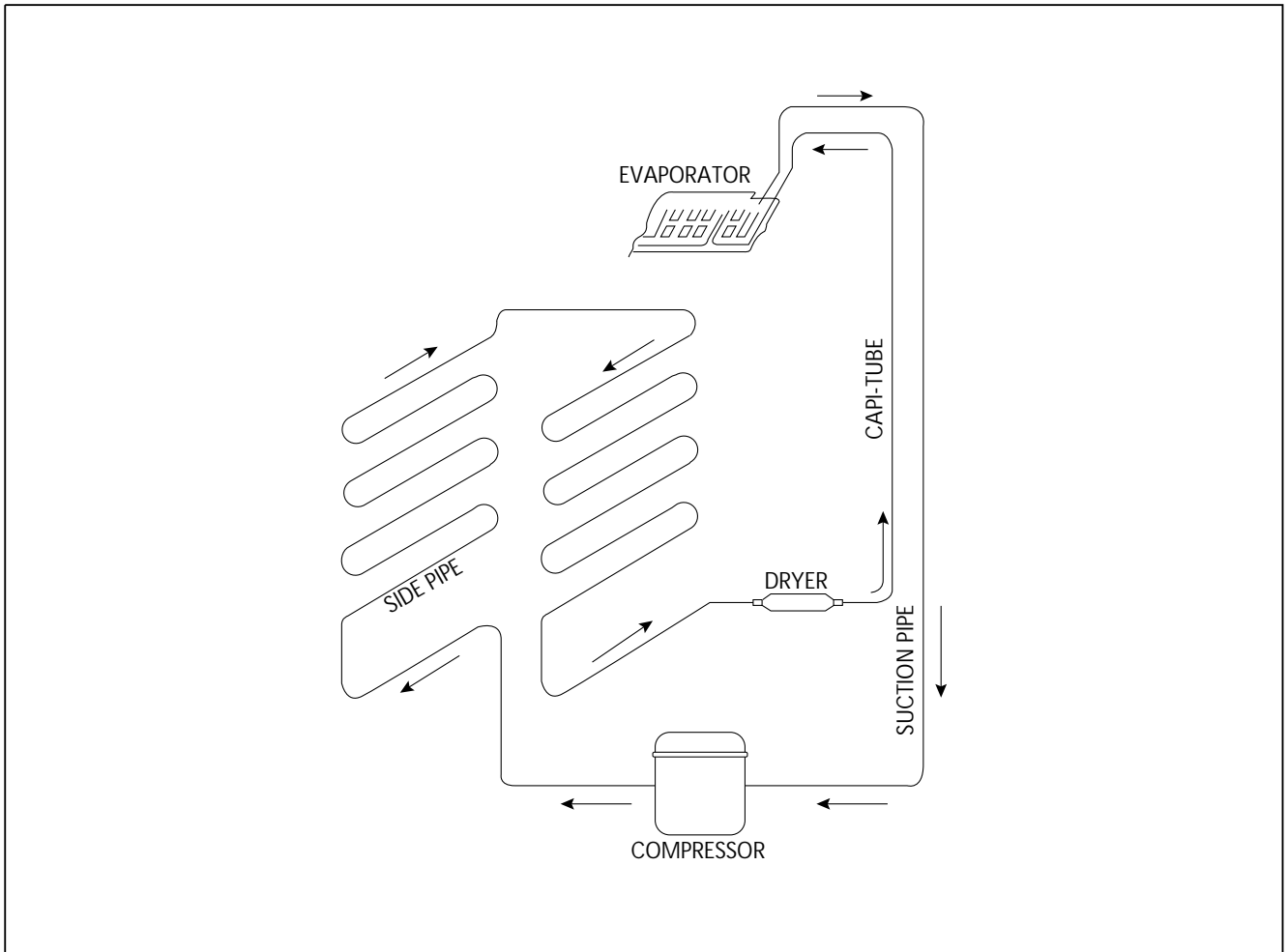
## 4. NAME OF PARTS

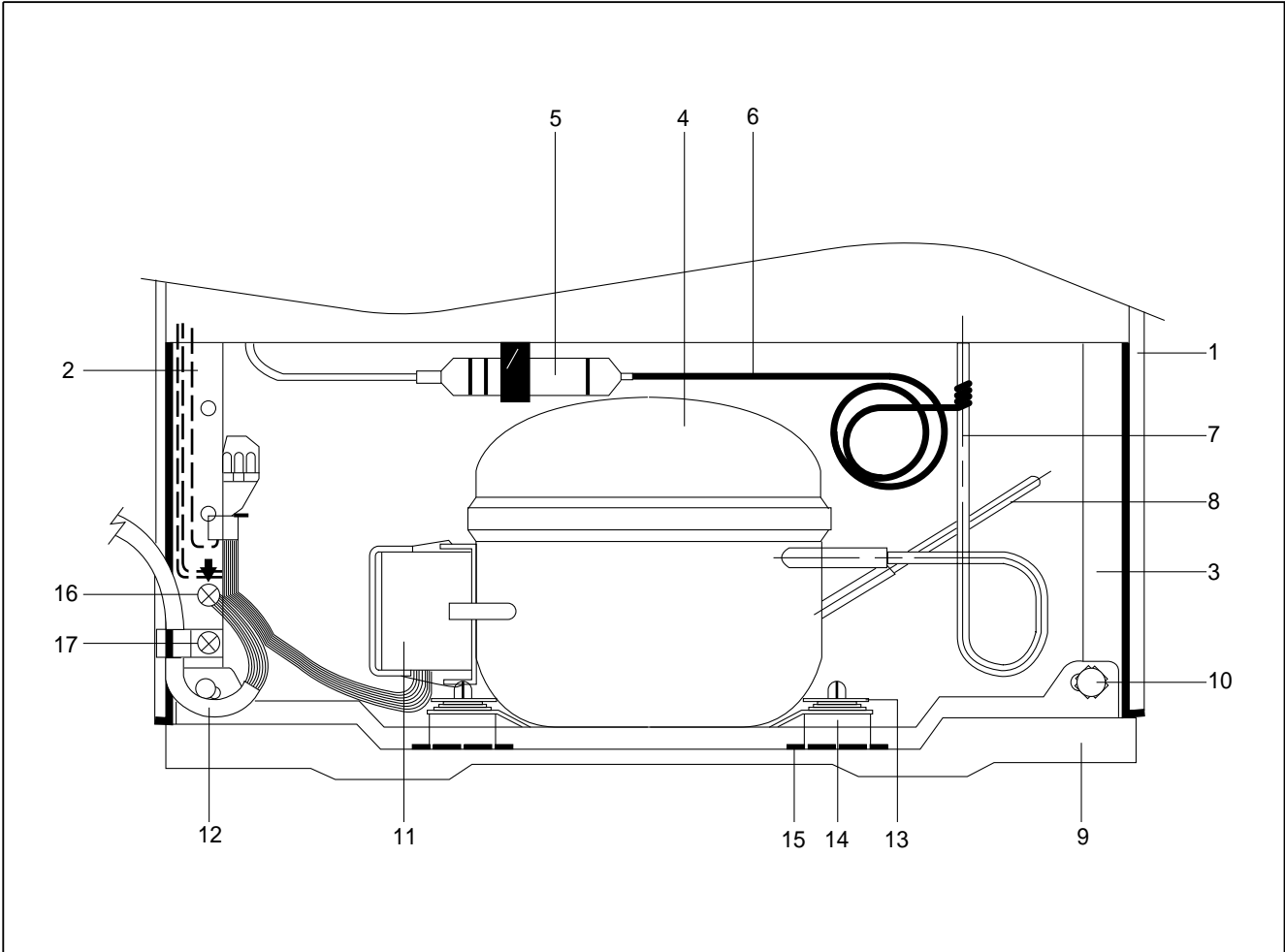
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- 1 Evaporator
- 2 Drain Pan
- 3 Control Box
- 4 Plastic Coated Shelf
- 5 Magnetic Door Seals
- 6 Ice Tray
- 7 Bottle Rack
- 8 Usable Rack
- 9 Egg Shelf

# 5. REFRIGERANT CYCLE DIAGRAM





| NO | PART NAME    | NO | PART NAME    | NO | PART NAME     |
|----|--------------|----|--------------|----|---------------|
| 1  | CABINET      | 7  | SUCTION PIPE | 13 | WASHER *T     |
| 2  | REINFORCE *L | 8  | PIPE CON     | 14 | ABSORBER      |
| 3  | REINFORCE *R | 9  | BASE COMP    | 15 | WASHER *U     |
| 4  | COMPRESSOR   | 10 | BOLT HEX     | 16 | MACHINE SCREW |
| 5  | DRYER        | 11 | P RELAY AS   | 17 | TAPPING SCREW |
| 6  | CAPI TUBE    | 12 | POWER CORD   |    |               |



# 7. MAIN COMPONENTS

## 1. COMPRESSOR

| Refrigerant   | R12          |            |                |           |            |           |           |           |
|---------------|--------------|------------|----------------|-----------|------------|-----------|-----------|-----------|
| Voltage       | 100V/50,60Hz | 110V/60Hz  | 115, 120V/60Hz | 127V/60Hz | 220V/50Hz  | 220V/60Hz | 230V/50Hz | 240V/50Hz |
| Comp. model   | FL7Y-1       | FL5Y-1U    | ←              | ←         | SL7Y-5     | ←         | ←         | ←         |
| Part code     | 3951105400   | 39511054U0 | ←              | ←         | 3954105470 | ←         | ←         | ←         |
| Strating type | RSIR         | ←          | ←              | ←         | RSIR       | ←         | ←         | ←         |

| Refrigerant   | R134a        |            |                |           |            |           |            |           |
|---------------|--------------|------------|----------------|-----------|------------|-----------|------------|-----------|
| Voltage       | 100V/50,60Hz | 110V/60Hz  | 115, 120V/60Hz | 127V/60Hz | 220V/50Hz  | 220V/60Hz | 230V/50Hz  | 240V/50Hz |
| Comp. model   | HFL7Y        | HFL5Y-1H   | ←              | X         | HSL7Y-5    | X         | HSL7Y-5    | ←         |
| Part code     | 3951107F00   | 3951105F10 | ←              | X         | 3954107F50 | X         | 3954107F50 | ←         |
| Strating type | RSIR         | ←          | ←              | X         | RSIR       | X         | RSIR       | ←         |

## 2. RELAY ASSEMBLY

| Refrigerant | R12          |              |                |            |              |              |              |           |
|-------------|--------------|--------------|----------------|------------|--------------|--------------|--------------|-----------|
| Voltage     | 100V/50,60Hz | 110V/60Hz    | 115, 120V/60Hz | 127V/60Hz  | 220V/50Hz    | 220V/60Hz    | 230V/50Hz    | 240V/50Hz |
| Relay model | 213THB, S068 | 197SHB, S068 | ←              | ←          | 129SHB, S220 | 104NHB, S220 | 129SHB, S220 | ←         |
| Part code   | 3018101910   | 3018102010   | 3018102110     | 3018101410 | 3018100110   | 3018106810   | 3018101710   | ←         |

| Refrigerant | R134a        |              |                |           |              |           |              |           |
|-------------|--------------|--------------|----------------|-----------|--------------|-----------|--------------|-----------|
| Voltage     | 100V/50,60Hz | 110V/60Hz    | 115, 120V/60Hz | 127V/60Hz | 220V/50Hz    | 220V/60Hz | 230V/50Hz    | 240V/50Hz |
| Relay model | 265THB, S068 | 174SHB, S068 | 174SHB, S068   | X         | 129SHB, S220 | X         | 129SHB, S220 | ←         |
| Part code   | 3018101920   | 3018108020   | 3018102120     | X         | 3018101940   | X         | 3018101940   | ←         |

## 3. CONTROL SWITCH

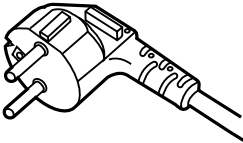
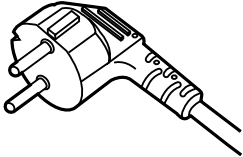
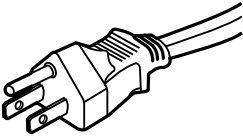
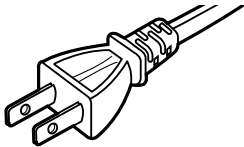
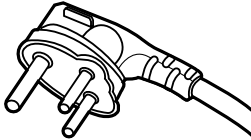
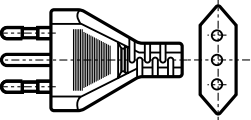
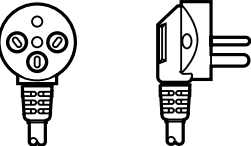
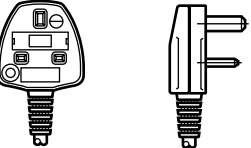

| Refrigerant | R12          |           |                |           |              |           |           |           |
|-------------|--------------|-----------|----------------|-----------|--------------|-----------|-----------|-----------|
| Voltage     | 100V/50,60Hz | 110V/60Hz | 115, 120V/60Hz | 127V/60Hz | 220V/50Hz    | 220V/60Hz | 230V/50Hz | 240V/50Hz |
| Spec.       | PFN-110U-02A | ←         | ←              | ←         | PFN-110U-02A | ←         | ←         | ←         |
| Part code   | 4004V70142   | ←         | ←              | ←         | 4004V70142   | ←         | ←         | ←         |

| Refrigerant | R134a        |              |                |              |              |           |              |           |
|-------------|--------------|--------------|----------------|--------------|--------------|-----------|--------------|-----------|
| Voltage     | 100V/50,60Hz | 110V/60Hz    | 115, 120V/60Hz | 127V/60Hz    | 220V/50Hz    | 220V/60Hz | 230V/50Hz    | 240V/50Hz |
| Spec.       | PFN-110U-02A | PFN-110U-02D | ←              | PFN-110U-02D | PFN-110U-02A | ←         | PFN-110U-02A | ←         |
| Part code   | 4004V70142   | 3018301000   | ←              | 4004V70142   | 4004V70142   | ←         | 4004V70142   | ←         |

## 4. DRYER

| Refrigerant | R12        | R134a      |
|-------------|------------|------------|
| Spec.       | 5 g        | 10 g       |
| Part code   | 4019L04000 | 3016801300 |

## POWER CORD SPECIFICATION

| NO | SHAPE OF POWER CODE   | PART CODE  | DESCRIPTION | REMARK                                       |
|----|---|------------|-------------|--|
| 1  |    | 3011315000 | CP-2PIN     | FOR EUROPEAN COUNTRY                         |
| 2  |    | 401RA17200 | CP-2PIN     | FOR OTHER COUNTRY                            |
| 3  |    | 4006D17101 | KP-30       | FOR AMERICA                                  |
| 4  |   | 401PD17101 | KP-211      | FOR JAPAN & TAIWAN                           |
| 5  |  | 3011300801 | BP-3PIN     |  |
| 6  |  | 3011303010 | #267        | FOR CHILE                                    |
| 7  |  | 3011315310 |             | FOR ISRAEL                                   |
| 8  |  | 3011303050 | BS-1363A    | FOR U.K, MIDDLE ASIA<br>SINGAPORE & MALAYSIA |
| 9  |  | 3011301200 | KP-551/550  | FOR CHINA & AUSTRALIA                        |

\* Upper power cord's part code is only for lead wire, without any kinds of terminal or housing.

## 8. DOOR COLOR SPECIFICATION

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### 1. ASSEMBLY URETHAN DOOR

#### 1) Key type

| Refrigerant | R12               |                          |            |                        | R134a             |                          |            |                        |
|-------------|-------------------|--------------------------|------------|------------------------|-------------------|--------------------------|------------|------------------------|
| Color type  | Dull lamina sheet | High glossy lamina sheet | Normal PCM | High glossy bright PCM | Dull lamina sheet | High glossy lamina sheet | Normal PCM | High glossy bright PCM |
| Part code   | X                 | X                        | PFUD2UB150 | X                      | X                 | X                        | PFUD2UB155 | X                      |

#### 2) Non key type

| Refrigerant | R12               |                          |            |                        | R134a             |                          |            |                        |
|-------------|-------------------|--------------------------|------------|------------------------|-------------------|--------------------------|------------|------------------------|
| Color type  | Dull lamina sheet | High glossy lamina sheet | Normal PCM | High glossy bright PCM | Dull lamina sheet | High glossy lamina sheet | Normal PCM | High glossy bright PCM |
| Part code   | X                 | PFUD2UB130               | PFUD2UB170 | X                      | X                 | PFUD2UB135               | PFUD2UB175 | X                      |

## COLOR TABLE

### 1. PCM type

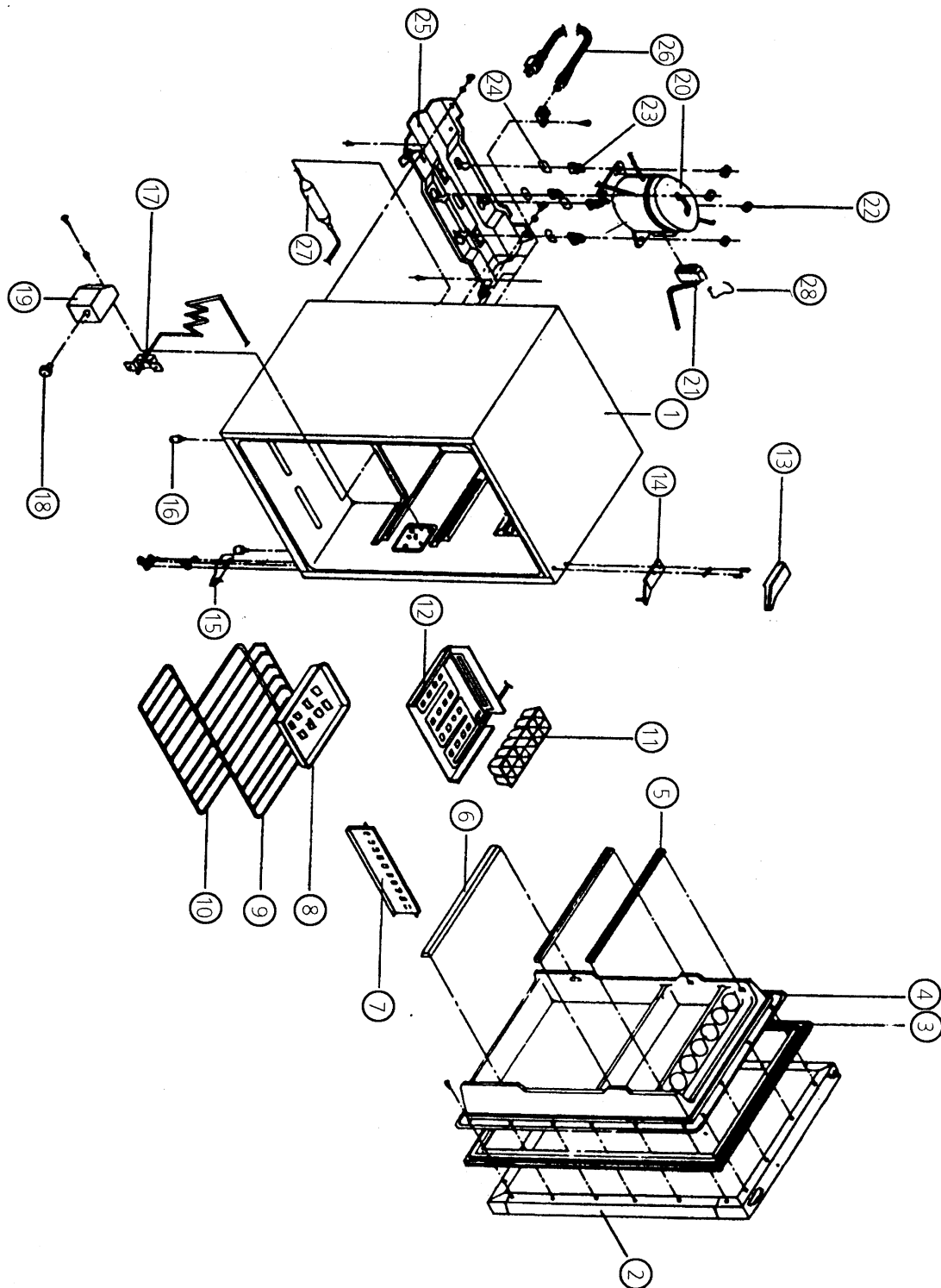
| NO | COLOR CHIP  | COLOR NAME         |
|----|---|--------------------|
| 1  |    | P/WITH (WH069)     |
| 2  |    | '94 L/GRAY (GY158) |
| 3  |    | '95 L/GRAY (GY259) |
| 4  |    | '94 M/GRAY (GY331) |
| 5  |  | '95 M/GRAY (GY335) |
| 6  |  | '97 M/GRAY (GY267) |
| 7  |  | M. D/GRAY (GY750)  |
| 8  |  | N/BLUE (BL718)     |
| 9  |  | MINT GREEN (GN206) |
| 10 |  | '97 BEIGE (BE215)  |

2. Lamina sheet type

| NO | COLOR CHIP  | COLOR NAME         |
|----|---|--------------------|
| 1  |    | P/WITH (WH069)     |
| 2  |    | '94 L/GRAY (GY158) |
| 3  |    | '95 L/GRAY (GY259) |
| 4  |    | '94 M/GRAY (GY331) |
| 5  |   | '95 M/GRAY (GY335) |
| 6  |  | '97 M/GRAY (GY267) |
| 7  |  | M. D/GRAY (GY750)  |
| 8  |  | N/BLUE (BL718)     |
| 9  |  | MINT GREEN (GN206) |
| 10 |  | S/GOLD             |
| 11 |  | G/GREEN            |

# 9. EXPLODED VIEW AND PARTS LIST

## 1. Exploded view



## 2. Parts list

| NO | PART CODE  | PART NAME           | DESCRIPTION          | QUANTITY | REMARK       |
|----|------------|---------------------|----------------------|----------|--------------|
| 1  |            | ASSY URT CAB        |                      | 1        |              |
| 2  |            | ASSY URT DOOR       |                      | 1        | REFER TO # 9 |
| 3  | 3012302622 | GASKET AS           | ROUND DOOR           | 1        |              |
| 4  | 3017405600 | LINER DR            | ABS 1.4 X 715 X 953  | 1        |              |
| 5  | 4016V45010 | POCKET A            | PVC                  | 2        |              |
| 6  | 4016V45020 | POCKET B            | PVC                  | 1        |              |
| 7  | 4016V53212 | DOOR F              | HIPS                 | 1        |              |
| 8  | 3011110100 | DRAIN PAN           | PE                   | 1        |              |
| 9  | 4016V55112 | SHELF *T            | SWRM-B PE-COATING    | 1        |              |
| 10 | 4016V55212 | SHELF *U            | SWRM-B PE-COATING    | 1        |              |
| 11 | 4002A30420 | CASE ICING          | PE-HD                | 1        |              |
| 12 | 4016V0310C | EVAPORATOR AS       |                      | 1        |              |
| 13 | 3011420050 | COVER *T HI         | PP                   | 1        |              |
| 14 | 3012903670 | HINGE *T AS         | SPHC T2.3            | 1        |              |
| 15 | 3012903900 | HINGE *U AS         |                      | 1        |              |
| 16 | 4017L32521 | ADJ FOOT *L         | PP (JI-360)          | 2        |              |
| 17 | 4004V70142 | CS(THERMOSTAT)      | PFN 110U-02A         | 1        |              |
| 18 | 3013400300 | KNOB AS             | ABS                  | 1        |              |
| 19 | 3010502900 | BOX CONTROL         | HIPS                 | 1        |              |
| 20 |            | COMPRESSOR          |                      | 1        | REFER TO # 7 |
| 21 |            | SWITCH P RELAY ASSY |                      | 1        | REFER TO # 7 |
| 22 | 4001E09030 | WASHER COMP         | SPG T1.0             | 4        |              |
| 23 | 4001E09013 | ABSORBER COMP       | NR-A                 | 4        |              |
| 24 | 4001E09021 | WASHER COMP         | SPG T0.6             | 4        |              |
| 25 | 3010301003 | BASE COMP           | SPG T0.8 X 216 X 434 | 1        |              |
| 26 |            | POWER CORD AS       |                      | 1        | REFER TO # 8 |
| 27 |            | DRYER               |                      | 1        | REFER TO # 7 |
| 28 | 3816100100 | RELAY BAND          | SK-5                 | 1        |              |