

S/M No. : FR510TM010

Service Manual

Refrigerator

Model: FR-540T

DAEWOO



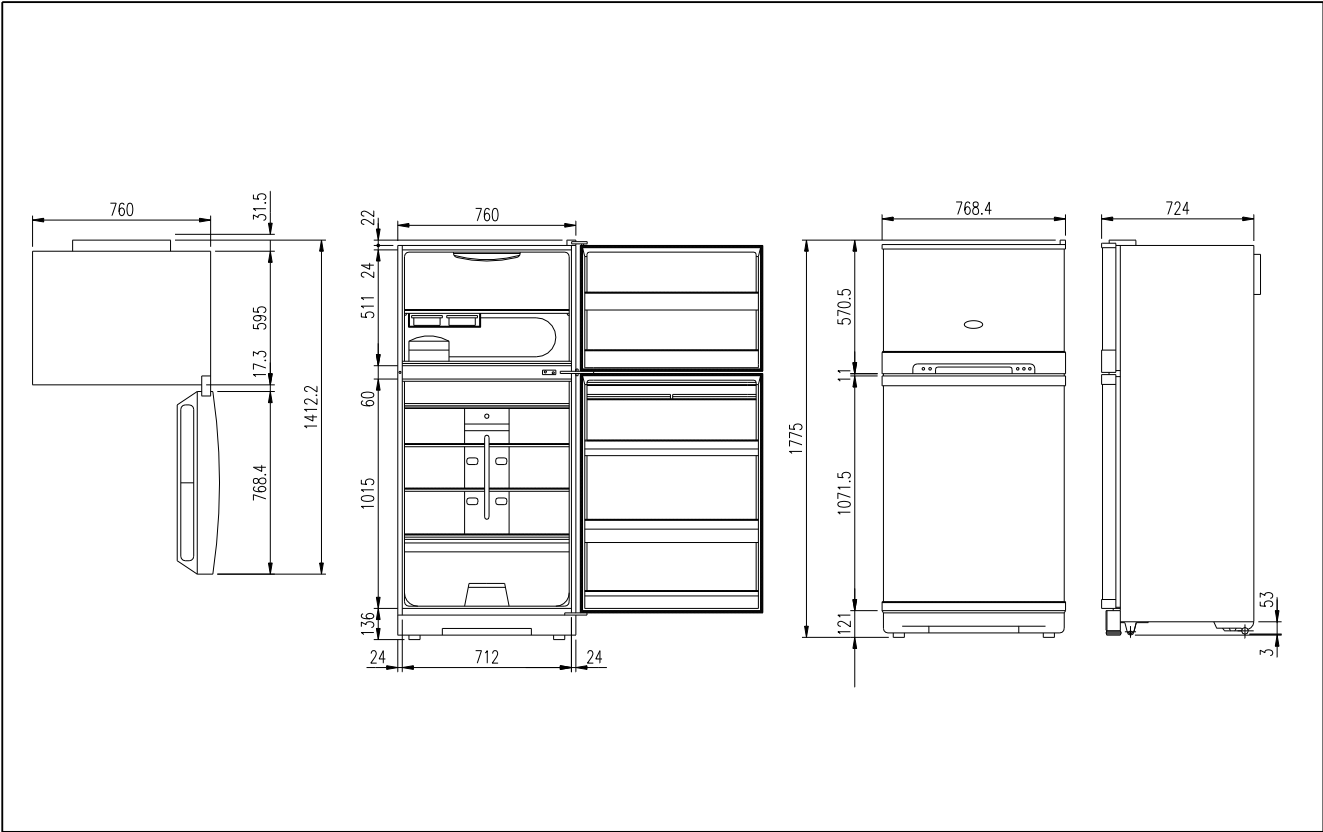
DAEWOO ELECTRONICS CO., LTD.

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1. SPECIFICATION

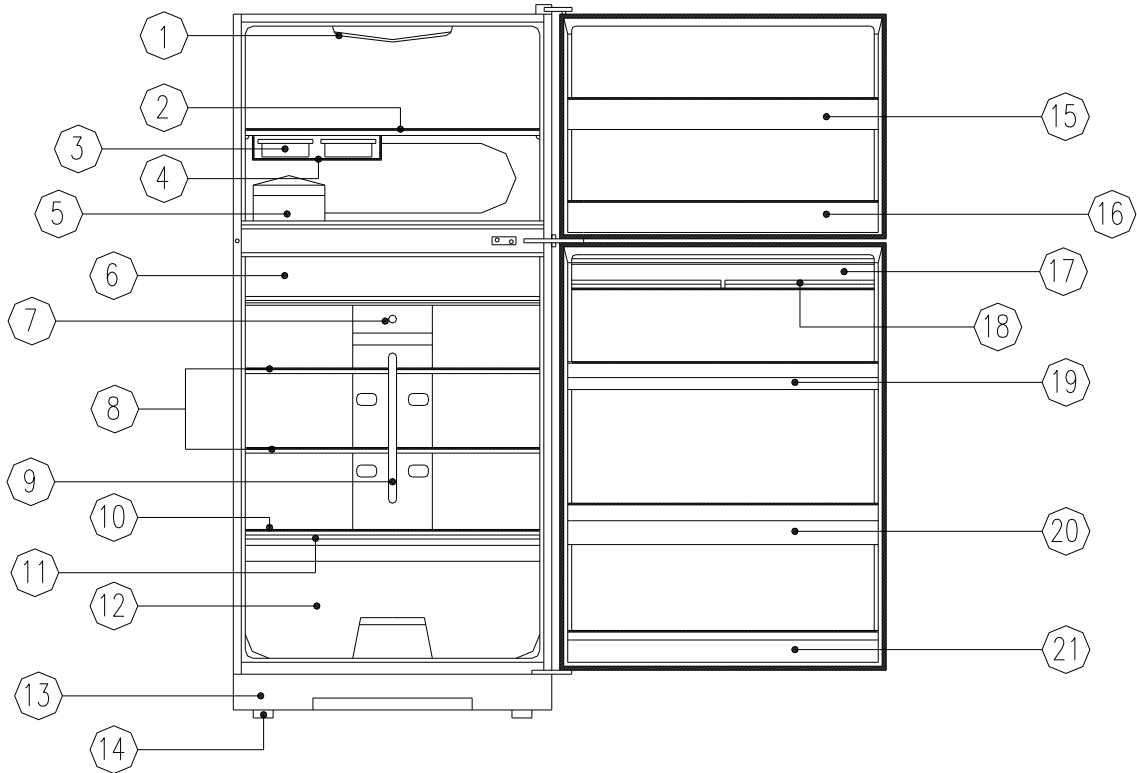
MODEL NAME		FR-540T		
Refrigerant	R-12	170g		
	R-134a			
Cooling System		Fan Cooling Convection		
Refrigeration System		Air Forced Convection		
Defrost System		Fin Evaporator Forced		
Defrost Operation		Automatic Start & Stop		
Cold Control		Adjustable Button		
Capacity	Freezer	118		
	Refrigerator	306		
	Total	424		
External Dimension	Height	1775		
	Width	768		
	Depth	724		
Net Weight		85Kg		

2. FR-540T



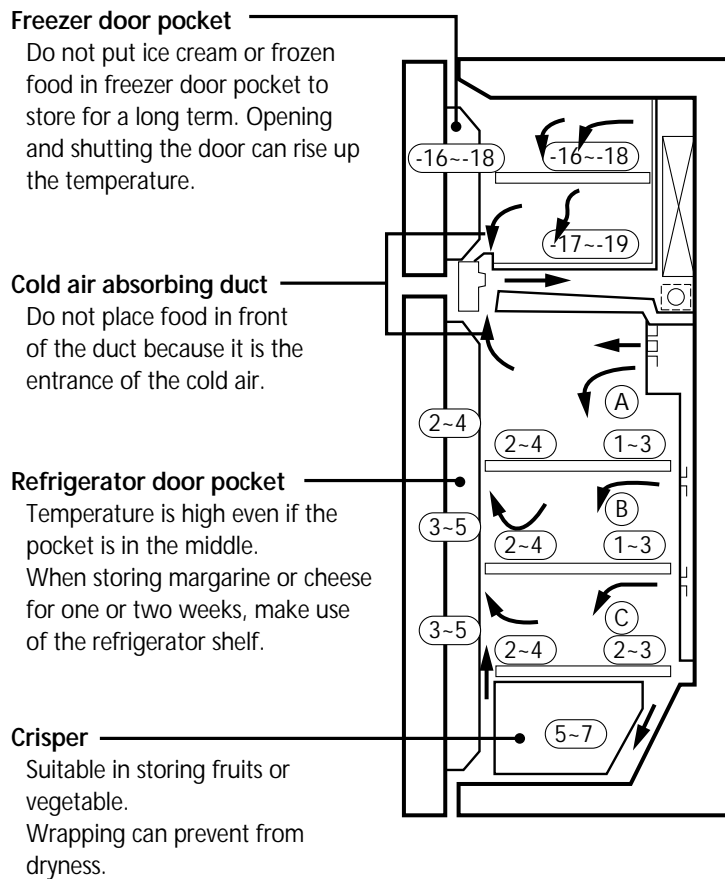
3. NAME OF PARTS

1. FR-540T



- | | |
|--|----------------------|
| ① Freezer Compartment lamp | ⑪ Cover Vegetable |
| ② Shelf Freezer & Ice Tray | ⑫ Case Vegetable |
| ③ Ice Tray | ⑬ Front Grille |
| ④ Case Icing | ⑭ Adjustable Foot |
| ⑤ Case Ice | ⑮ Pocket Freezer (T) |
| ⑥ Case Child | ⑯ Pocket Freezer (U) |
| ⑦ Temperature Controller
(Refrigerator Compartment) | ⑰ Egg Pocket |
| ⑧ Shelf Refrigerator | ⑱ Case Egg |
| ⑨ Window Refrigerator | ⑲ Pocket Multi |
| ⑩ Lever Moisture Controller | ⑳ Pocket Bottle(A) |
| | ㉑ Pocket Bottle(B) |

4. AIR FLOW DIAGRAM



Freezer door pocket
Do not put ice cream or frozen food in freezer door pocket to store for a long term. Opening and shutting the door can rise up the temperature.

Cold air absorbing duct
Do not place food in front of the duct because it is the entrance of the cold air.

Refrigerator door pocket
Temperature is high even if the pocket is in the middle. When storing margarine or cheese for one or two weeks, make use of the refrigerator shelf.

Crisper
Suitable in storing fruits or vegetable. Wrapping can prevent from dryness.

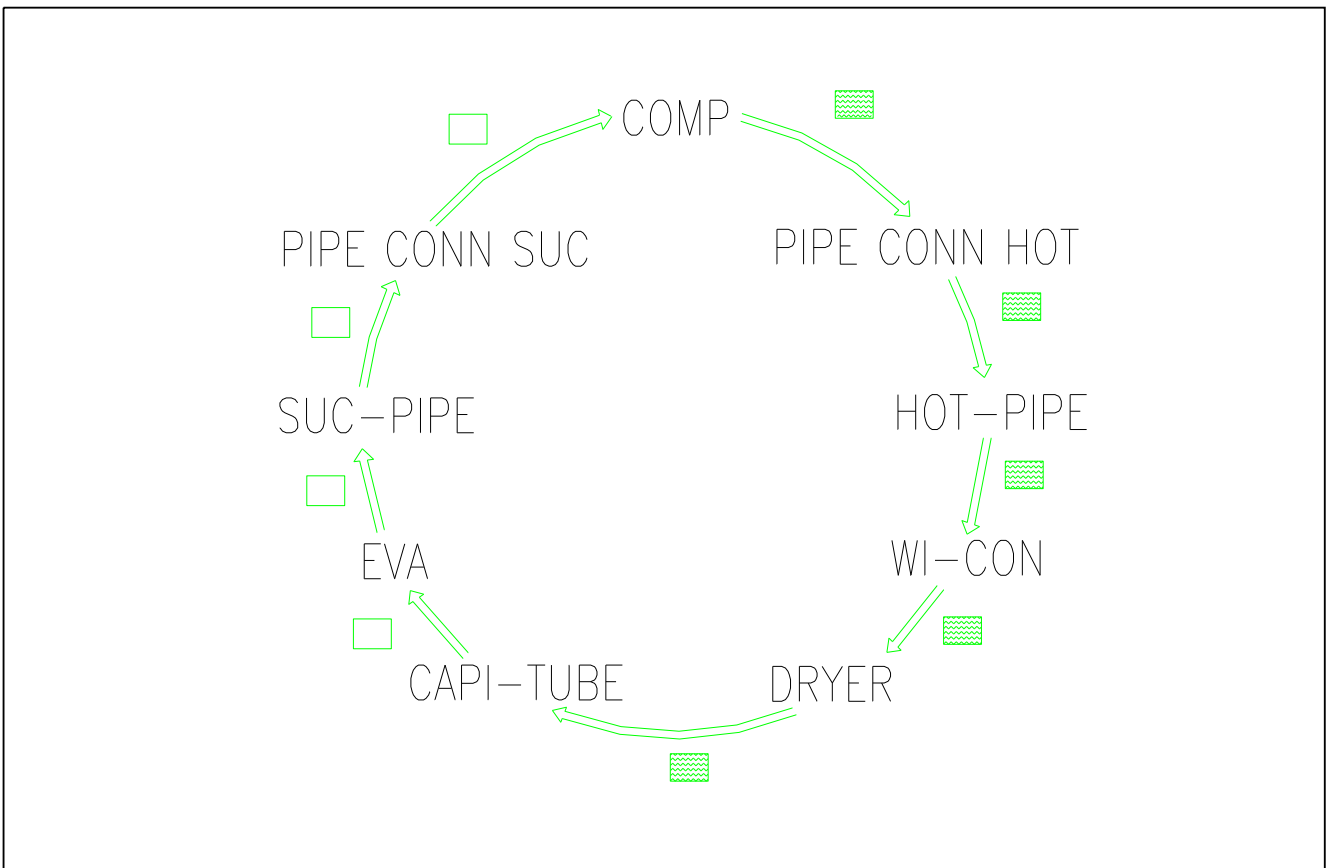
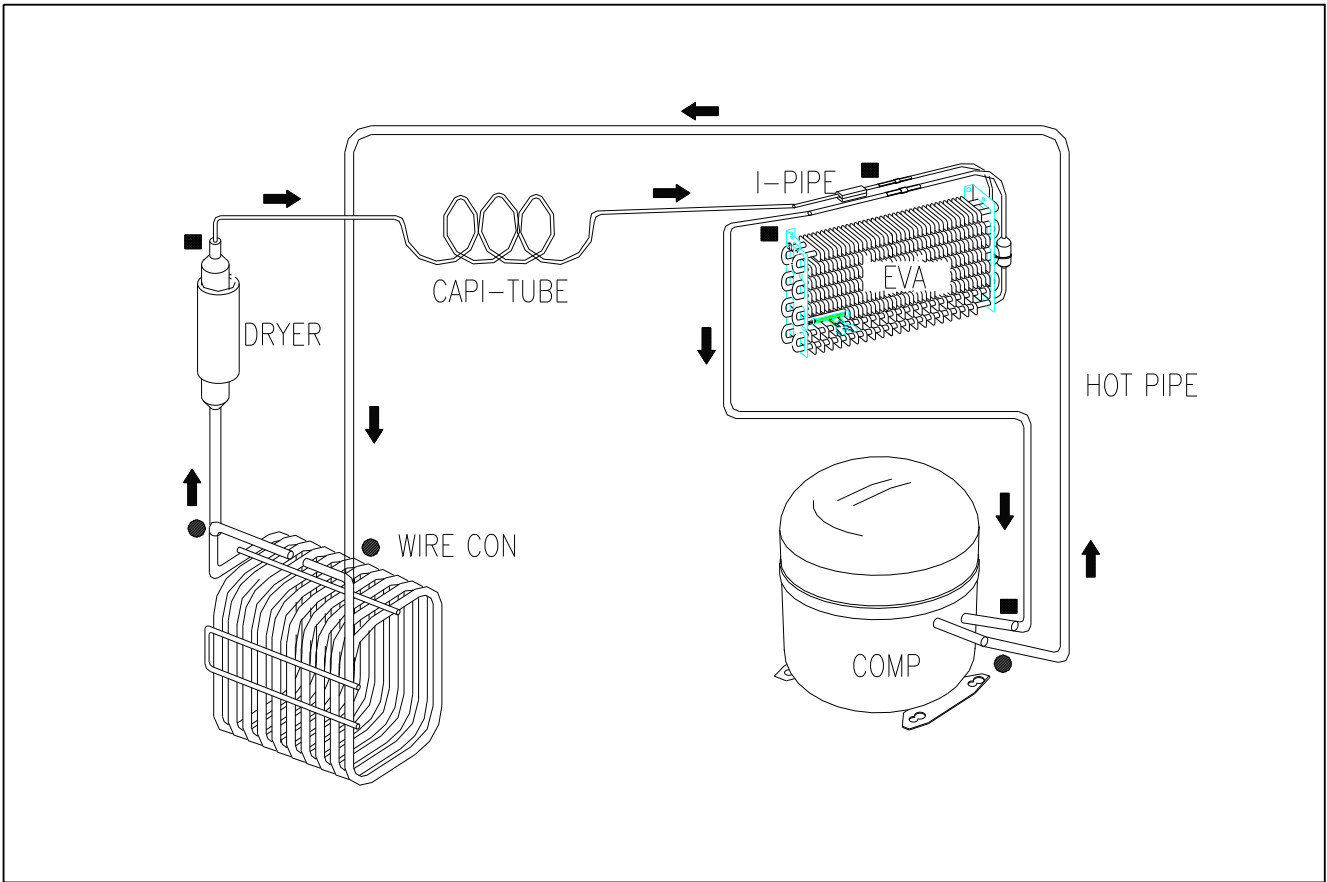
Freezer room
Do not put any bottle such as beer or beverage because it can be frozen and broken.

Refrigerating room
This model is multi-flow type which flows out cold air from each shelf space. The hot air after making the refrigerator cold, flows into cooling system through the front upper part.

Do not put food having much moisture at the middle part of each shelf space ("A", "B" and "C" part). It can be frozen owing to the low temperature.

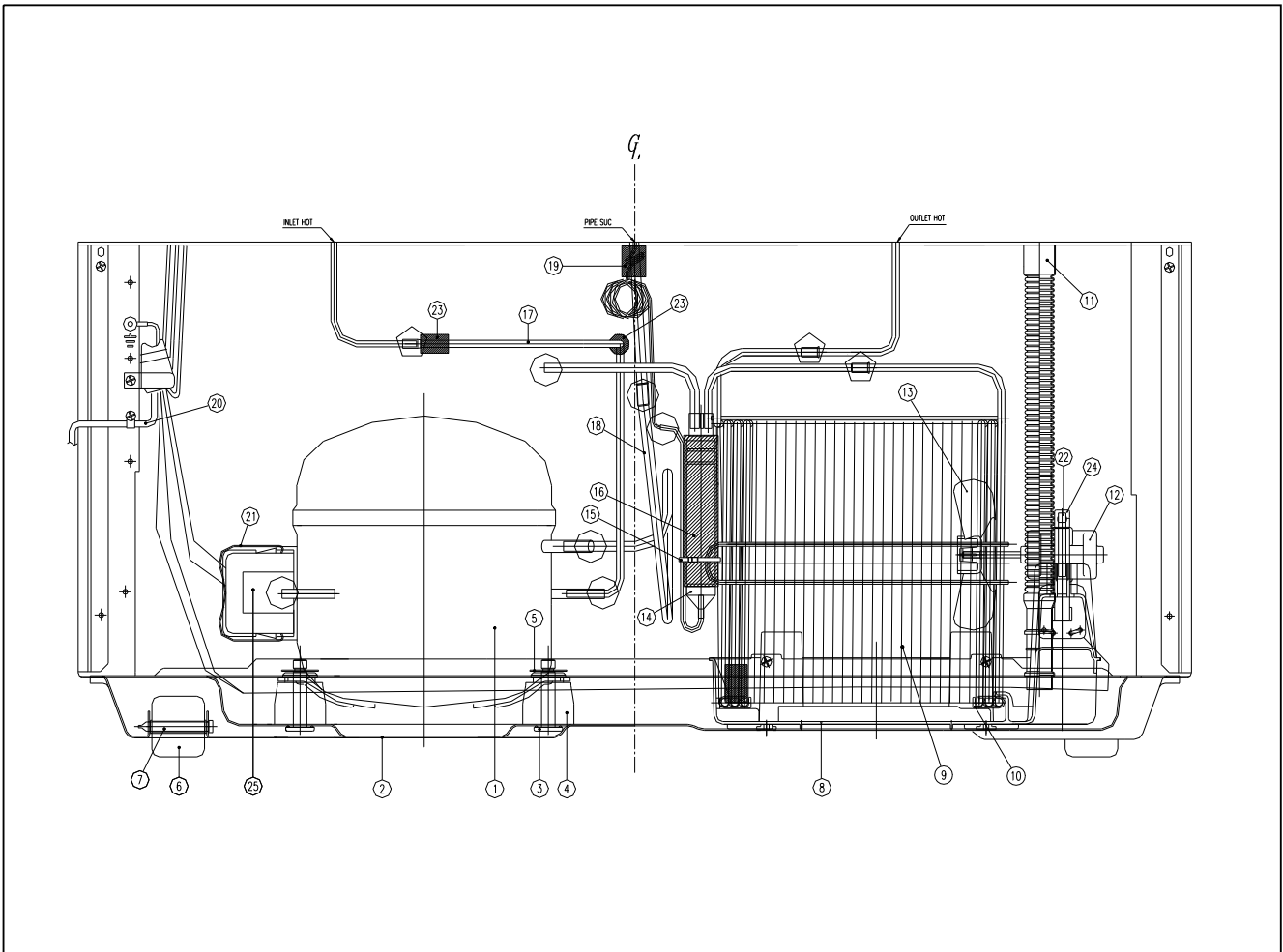
5. REFRIGERANT CYCLE DIAGRAM

1. FR-540T



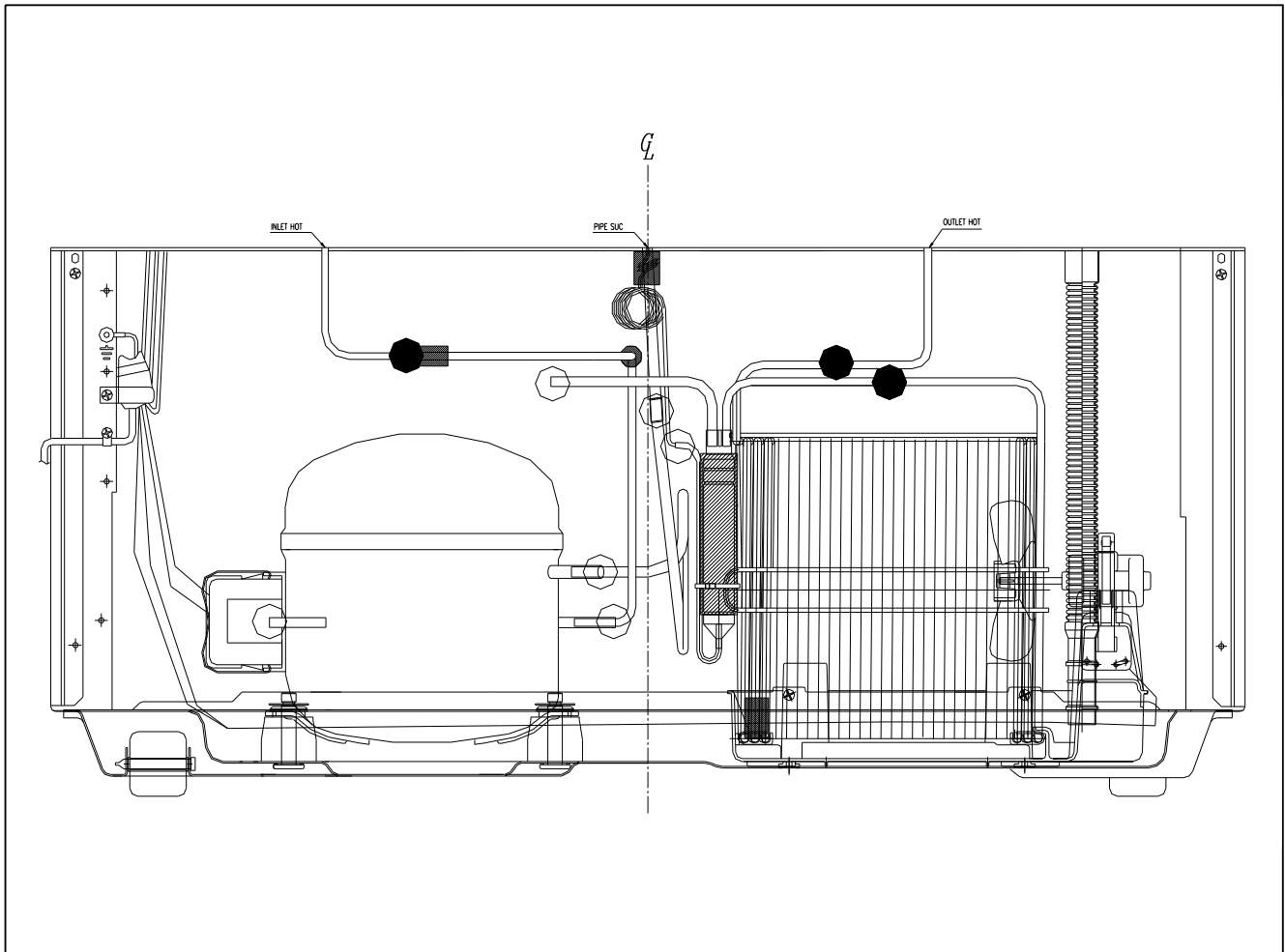
6. MACHINE ROOM VIEW AND PART LIST

1. FR-540T



NO	PART NAME	NO	PART NAME
1	COMPRESSOR	14	DRYER AS
2	BASE COMP	15	CABLE TIE
3	BOLT COMP FIX	16	SEALING DRYER
4	ABSORBER COMP	17	PIPE CONN HOT
5	FIX COMP WASH	18	PIPE CONN SUC
6	CASTER *B	19	ABSORBER PIPE
7	SHAFT CASTER	20	CORD POWER AS
8	CASE VAPORI	21	BAND RELAY
9	PIPE WICON	22	FIXTURE C MOTOR
10	ABSORBER WICON FIXTURE	23	ABSORBER PIPE (B)
11	HOSE DRAIN	24	ABSORBER C MOTOR
12	MOTOR C AS	25	SWITCH P-RELAY AS
13	FAN C		

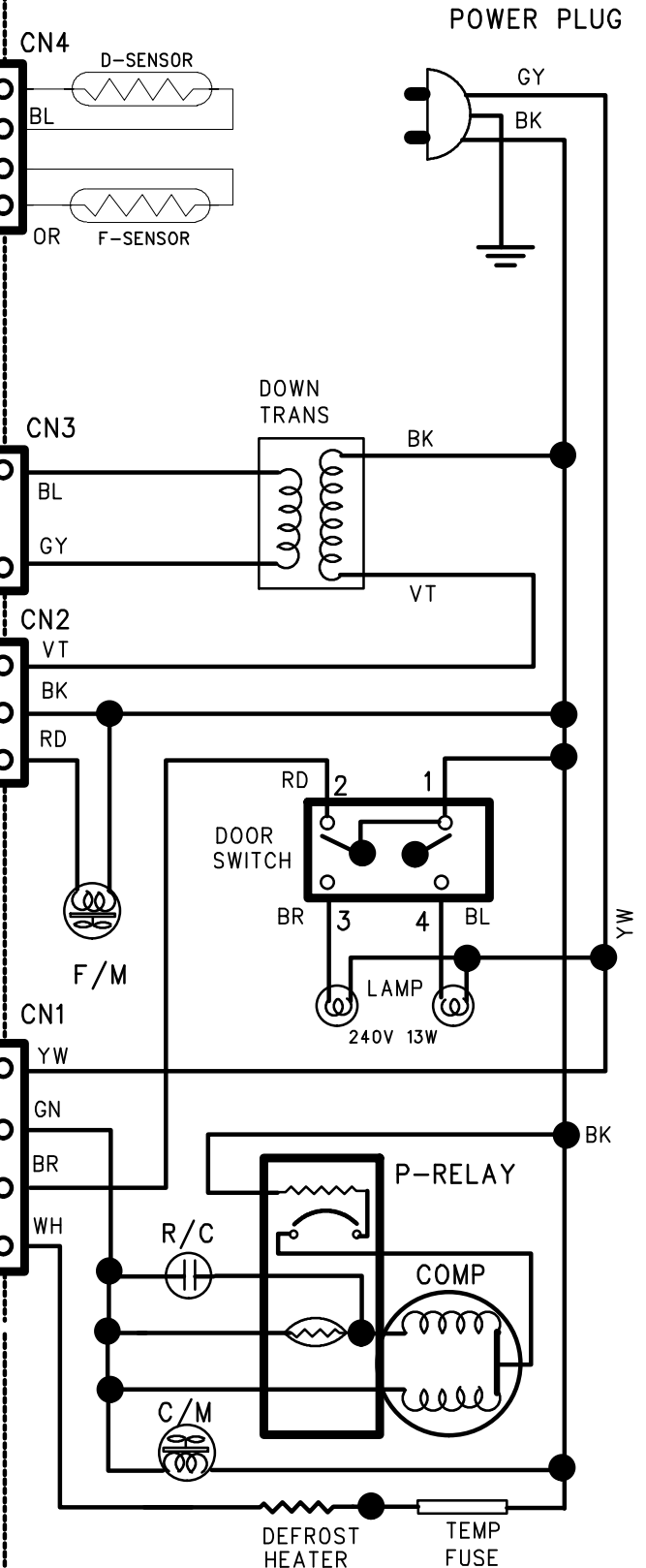
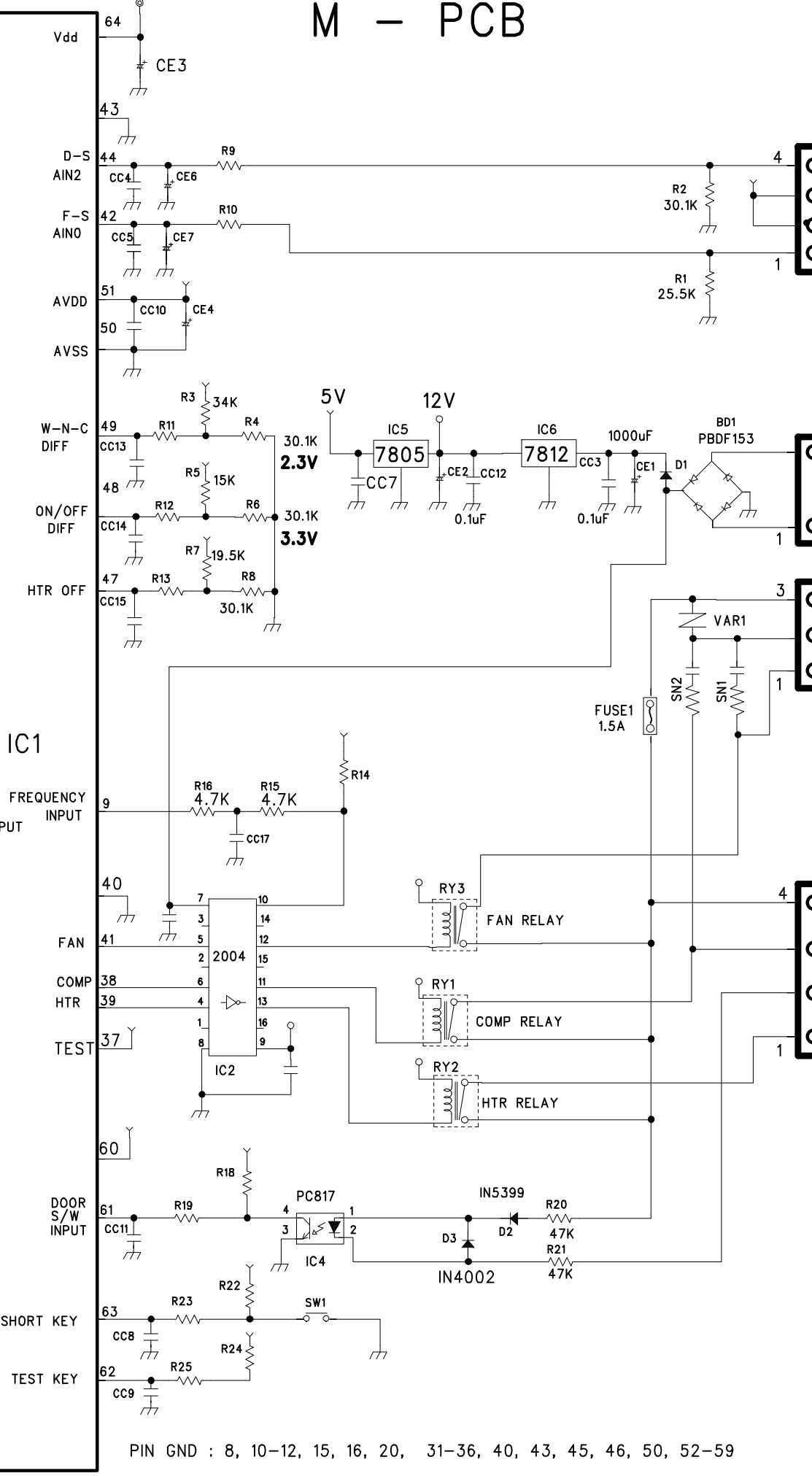
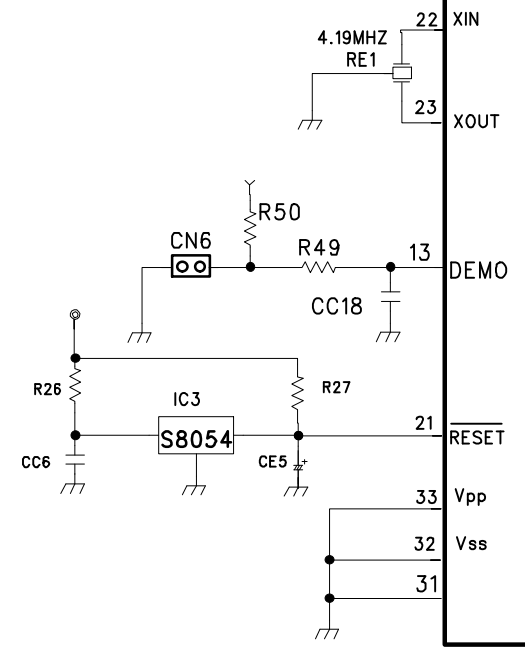
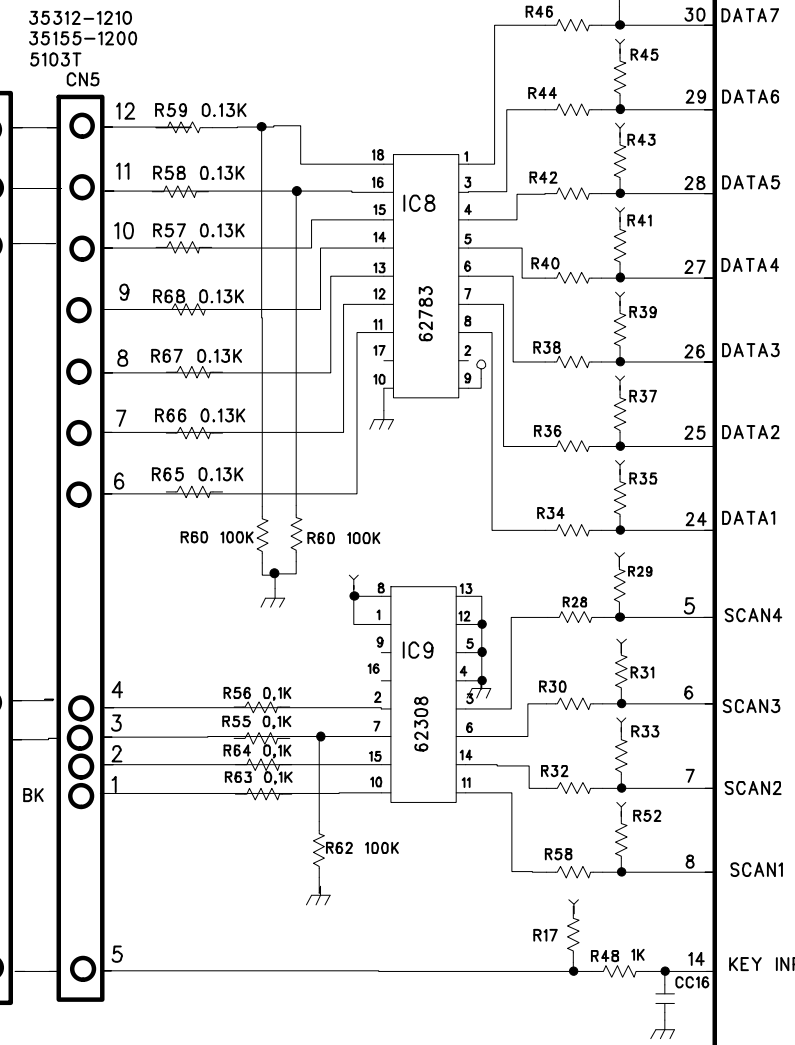
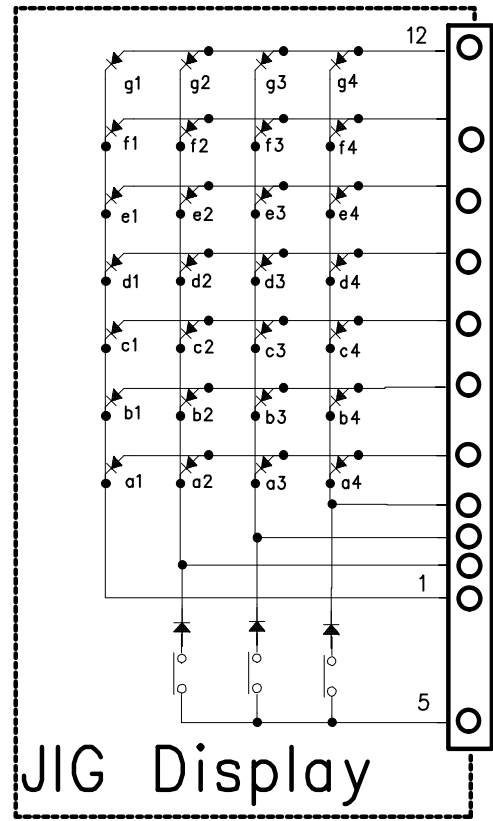
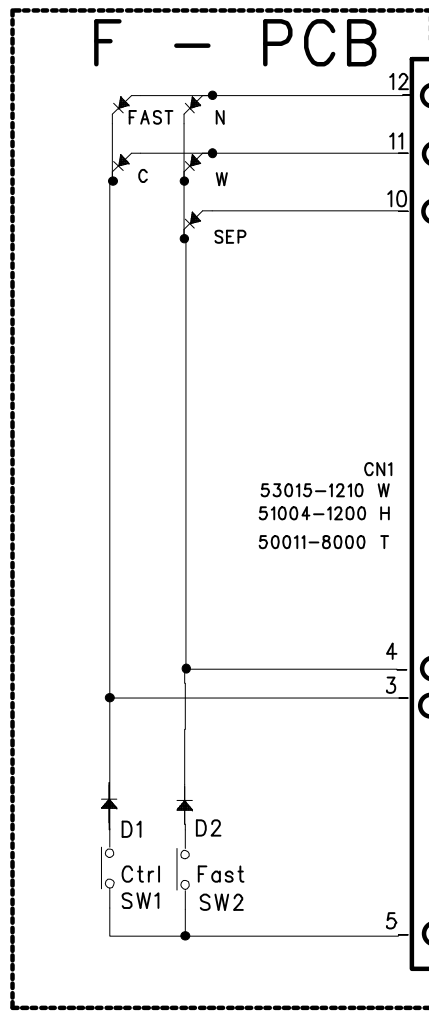
7. WELDING



25% Welding		3% Welding	
SOLDER SILVER	BAG - 2 (35) 1.2D	SOLDER PAG	BCUP- 3
OXYGEN	O ₂	OXYGEN	O ₂
ACETYLEN	C ₂ H ₂	ACETYLEN	C ₂ H ₂
NITROGEN	N ₂	NITROGEN	N ₂
FLUX VAPOR	COMWELD		

Welding	MARK	Welding and Leak Test	REMARK
3%	○	6 POINT	PINCH OFF 2 POINT
25%	●	3 POINT	

M - PCB



NOTE

1. RESISTOR = 10K 1/4W
2. CONDENSER CERAMIC = 0.01UF
3. CONDENSER ELECTRO = 10uF

TEMP	CONDITION
1.5 °C	W-N-C DIFF
6 °C	COMP ON/OFF DIFF
10 °C	D-HTR OFF

PIN GND : 8, 10-12, 15, 16, 20, 31-36, 40, 43, 45, 46, 50, 52-59

9. MAIN COMPONENTS

1. FR-540T

1) COMPRESSOR

Voltage	110V/60Hz	220V/50Hz		230V/50Hz(EUROP)	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part code	-	3954127G50	3954128A50	3954127G50	3954127G50	3954128A50
Comp. model	HBL25YE-3N	HSL27YE-5N	SL28YE-5N	HSL27YH-5N	HSL27YE-5N	SL28YE-5N

2) RELAY ASSEMBLY

Voltage	110V/60Hz	220V/50Hz		230V/50Hz(EUROP)	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part code	-	3018105642	←	3018104121	3.018E+09	←
OL	738SHBZZ	276THBYY	276THBYY	197NHBYY	276THBYY	276THBYY
PTC	S220	S220	S220	S330	S220	S220

3) RUNNING CAPACITOR & STARTING CAPACITOR

Voltage	110V/60Hz	220V/50Hz		230V/50Hz(EUROP)	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
RUN/CAPA	-	-	-	3018104121 400VAC/5mF	-	-
START/CAPA	401RD35050 200VAC/100mF	-	-	-	-	-

4) F-FAN MOTOR

Voltage	110V/60Hz	220V/50Hz		230V/50Hz	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part Code	3011800660	3011800670		3011800640	←	
Spec	3211DWBFBH	3211DWBFI		3211DWBFL	←	

5) C-FAN MOTOR

Voltage	110V/60Hz	220V/50Hz		230V/50Hz	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part Code	3015906210	3015906240		3015906230	←	
Spec	3211DRFD	3211DRFB		3211DRFC	←	

6) DEFROST HEATER

Voltage	110V/60Hz	220V/50Hz		230V/50Hz	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part Code	3012801300	3012801000		←	←	
Spec	148W	←		←	←	

7) LAMP ASSEMBLY

Voltage	110V/60Hz	220V/50Hz		230V/50Hz	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part Code	3013600050	3012600020		←	←	
Spec	15W	←		←	←	

8) SWITCH D TIMER AS

Voltage	110V/60Hz	220V/50Hz		230V/50Hz	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part Code	-	3018103920		←	←	
Spec	TMDEX09UA1	TMDEX09UM1		←	←	

9) TRANSFORMER

Voltage	110V/60Hz	220V/50Hz		230V/50Hz(EUROP)	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part Code	3018401400	3018401700		3018401600	3018401300	
Label Collor	Yellow	White		Violet	Red	

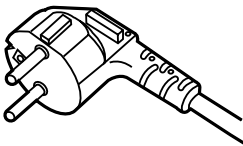
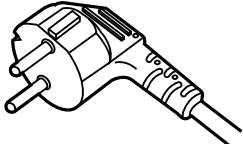
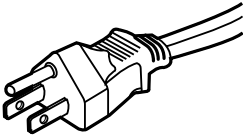
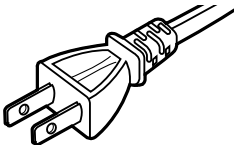
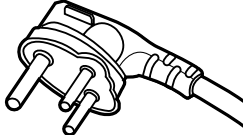
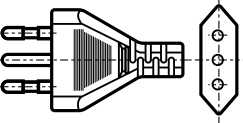
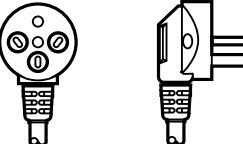
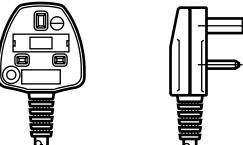
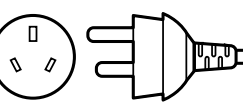
10) MAIN PCB

Voltage	110V/60Hz	220V/50Hz		230V/50Hz	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part Code	3014392060	3014383060		←	←	

11) DRYER

Voltage	110V/60Hz	220V/50Hz		230V/50Hz	240V/50Hz	
Refrigerant	R-134a	R-134a	R-12	R-134a	R-134a	R-12
Part Code	3016801100	3016800103		3016801100	←	3016800103
Spec	15g	10g		15g	←	10g

POWER CORD SPECIFICATION

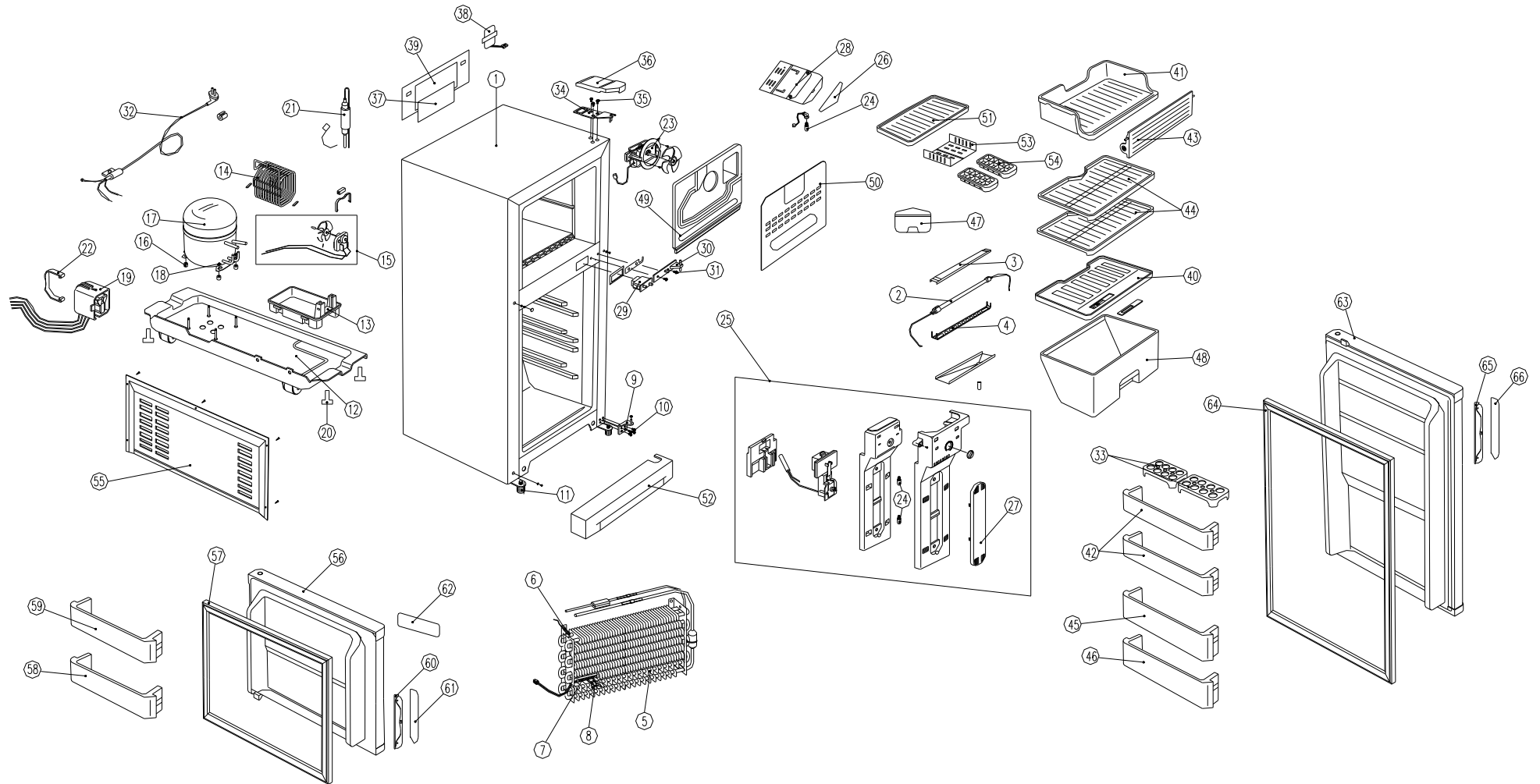
NO	SHAPE OF POWER CODE	PART CODE	DESCRIPTION	REMARK
1		3011315000	CP-2PIN	FOR EUROPEAN COUNTRY
2		401RA17200	CP-2PIN	FOR OTHER COUNTRY
3		4006D17101	KP-30	FOR AMERICA
4		401PD17101	KP-211	FOR JAPAN & TAIWAN
5		3011300801	BP-3PIN	
6		3011303010	#267	FOR CHILE
7		3011315310		FOR ISRAEL
8		3011303050	BS-1363A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

10. EXPLODED VIEWS AND PARTS LIST

1. FR-540T

1) Exploded views



2) Parts List

NO	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
1	PFCU00S020 PFCU00S025	ASS'Y CAB URT	FR-540T, R-12 FR-540T, R-134a	1	
2	3012801000 3012801300	HEATER GLAS AS	220V, 148W 110V, 148W	1	REFER TO # 9
3	3010408201	COVER DEFR HTR *T	AL T0.4	1	
4	3010408100	COVER DEFR HTR *U	AL T0.4	1	
5	3017000505	EVAPPORATOR SAS		1	
6	3014801230	SENSOR F D AS	110V,220V	1	
7	400EL21213	FUSE TEMP AS		1	
8	4017Z90590	FIXTURE FUSE TEMP	PP	1	
9	3012906100	HINGE *U AS		1	
10	3016000600	SPECIAL BOLT	M6 X 20	4	
11	4017Z40630	FOOT *F AS		2	
12	3010317510	BASE COMP SAS		1	
13	3011118600	CASE VAPORI		1	
14	3014426400	PIPE WICON AS	TSW	1	
15		C FAN MOTOR AS		1	REFER TO # 9
16	3010100201	ABSORBER COMP	NR H=40	4	
17		COMPRESSOR		1	REFER TO # 9
18	4019H09030	SPECIAL WASHER	SWRH	4	
19		SWITCH P RELAY AS		1	REFER TO # 9
20	7650601511	BOLT HEX	M6X15	4	
21		DRYER AS		1	REFER TO # 10
22	3816100100	RELAY BAND	SK-5, T0.7, ZN-3-A	1	
23		F FAN MOTOR AS		1	REFER TO # 9
24		LAMP AS		3	REFER TO # 10
25	3010008910	ASS'Y M/F DUCT		1	
26	3015500400	WINDOW F	GE PC-121R	1	
27	3015500703	WINDOW R	HC-2	1	
28	3011406601	COVER F M/F DUCT A	HIPS	1	
29	3018100010	SWITCH DR AS	2 BUTTON 4PIN	1	
30	3012906310	HINGE *M AS		1	
31	3016004000	SPECIAL BOLT	M6XL10	2	
32		POWER CORD AS		1	REFER TO # 11
33	3011103900	CASE EGG	GPPS	2	
34	3012908601	HINGE *T AS	SPHC	1	
35	3016001800	SPECIAL BOLT	M6XL16	3	
36	3011429500	COVER *T HI	PP	1	
37		PCB MAIN AS		1	REFER TO # 10
38		TRANSFORMER POWER		1	REFER TO # 10

NO	PART CODE	PART NAME	DESCRIPTION	Q'TY	REMARK
39	3011410001	COVER M/PCB BOX		1	
40	3011409000	COVER V/CASE AS	GPPS	1	
41	3011102300	CASE CHILD	GPPS	1	
42	3019002030	POCKET MULT	GPPS	2	
43	3011705620	DOOR CHILD	GPPS	1	
44	3017801920	SHELF R	GPPS	2	
45	3019004110	POCKET BOTL A	GPPS	1	
46	3019002630	POCKET BOTL B	GPPS	1	
47	4010E99102	BOX ICE AS	ABS + GPPS	1	
48	3010503720	CASE VEGTB	GPPS	1	
49	3013300022	INSULATOR F LUVR AS		1	
50	3018900900	LOUVER F M/F AS		1	
51	3017804700	SHELF F	GPPS	1	
52	3011441000	COVER CAB BRKT AS	PP	1	
53	3012500510	GUIDE ICING CASE	GPPS	1	
54	3011102100	CASE ICING	GPPS	2	
55	3011400502	GRILLE	PP	1	
56	PFFU00V015	ASSY F DR URT		1	
57	3012305701	GASKET F DR	PVC-S + MAGNET	1	
58	3019002210	POCKET F *U	GPPS T3.0	1	
59	3019002130	POCKET F *T	GPPS T3.0	1	
60	3011605710	F HANDLE	ABS + CR	1	
61	3011600800	DECO F HNDL FILM	FILM CURL FIT	1	
62	3014206800	PANEL F CONTL AS		1	
63	PFRU00V020 PFRU00V025	ASSY R DR URT		1	
			FR-540T, R-12		
			FR-540T, R-134a		
64	3012305902	GASKET R DR AS	PVC-S + MAGNET	1	FR-540T
65	3012605800	R HANDLE	ABS + CR	1	
66	3011600900	DECO R HNDL FILM	FILM CURL FIT	1	