



Service Manual

Refrigerator

MODEL : FR-146
FR-146R
FR-146RV
FR-147
FR-147R
FR-147RV

✓ **Caution :**

In this Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information, please refer to PPL(Parts Price List) in Service Information Center (<http://svc.dwe.co.kr>).

DAEWOO ELECTRONICS Corp.

[http : //svc.dwe.co.kr](http://svc.dwe.co.kr)

Mar. 2004

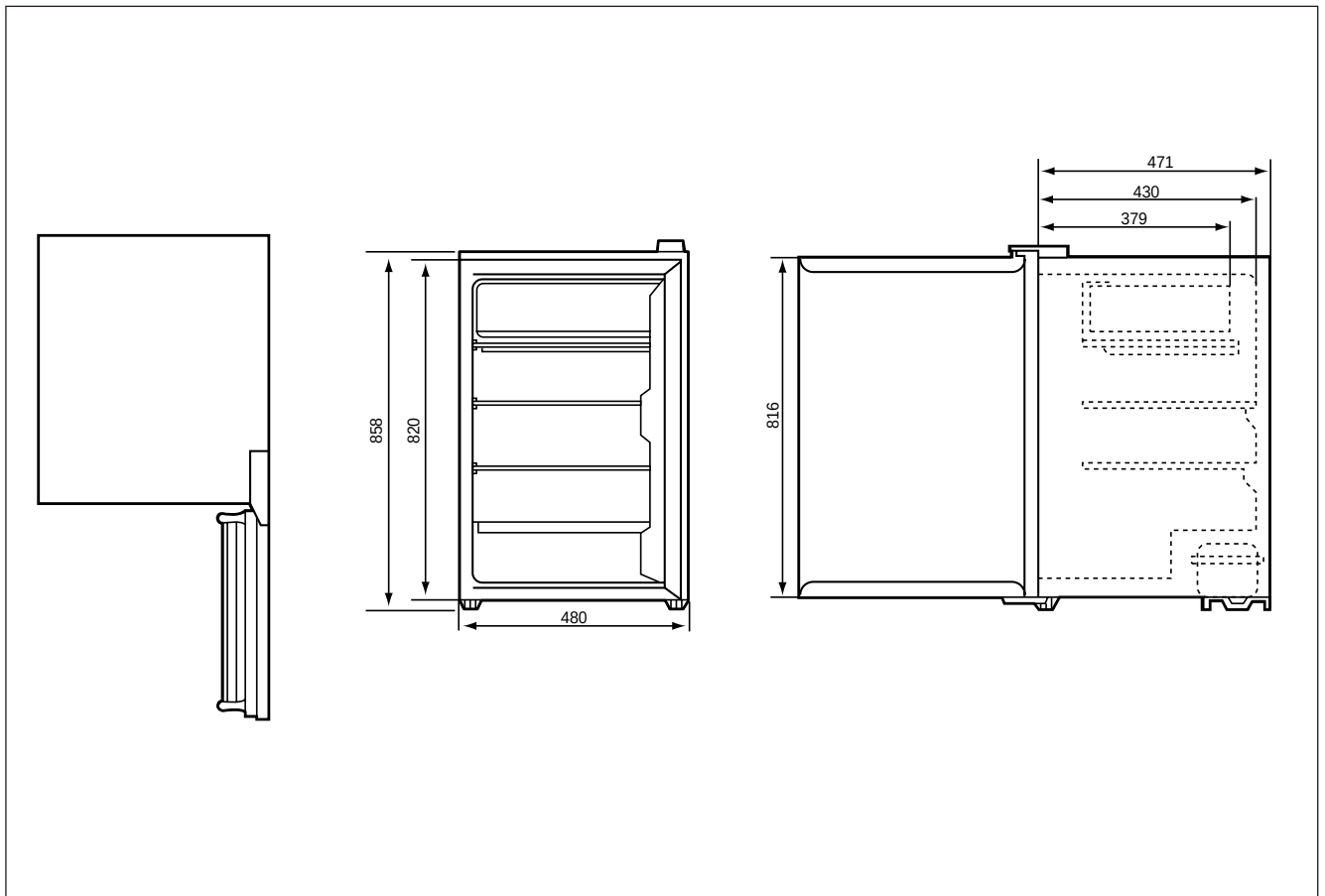
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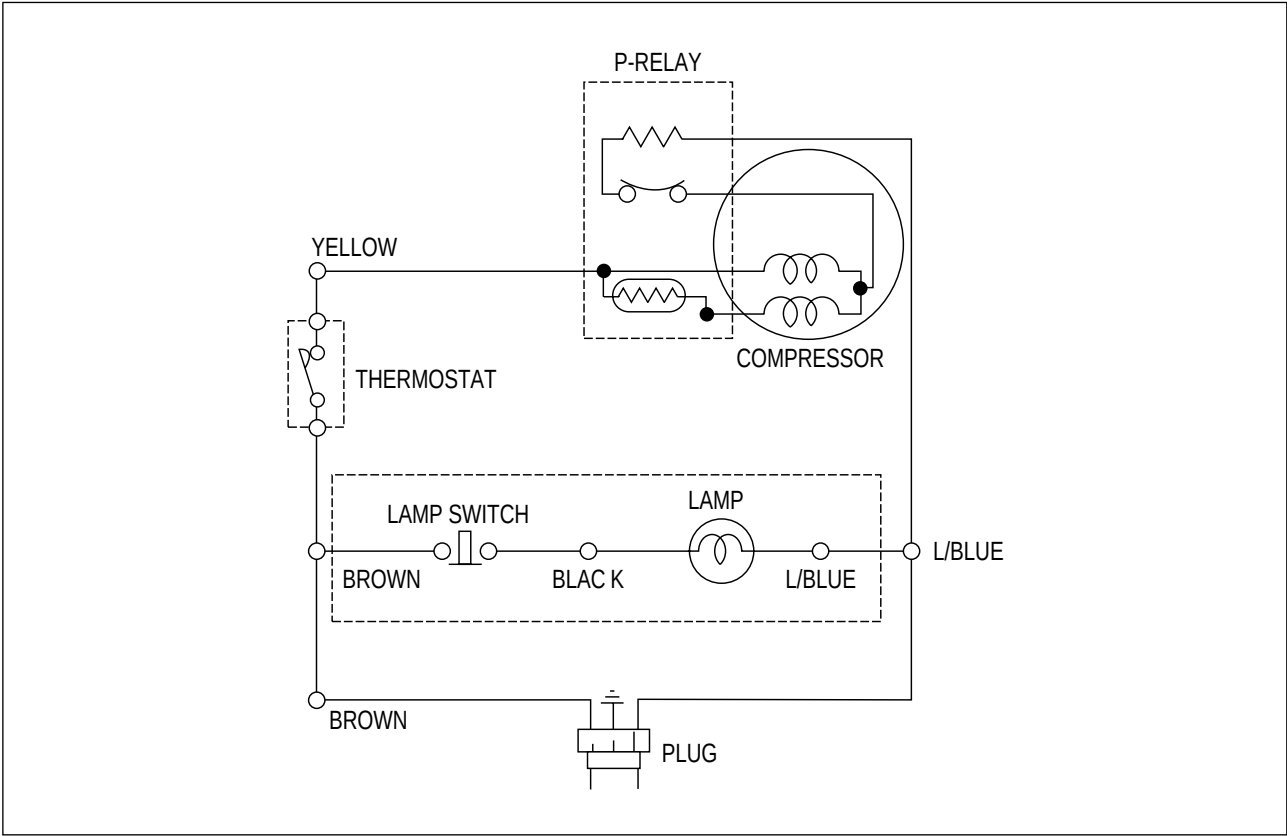
SPECIFICATION

MODEL NAME		FR-13
Refrigerant	R12	120g
	R134a	105g
Cooling System		Aluminum-embossed Plat à Roll Bond type
Refrigeration System		Natural Cold-air Convention
Defrost System		Natural
Defrost Operation		Manual start & Stop
Cold Control		Adjustable Dial
Capacity	Freezer	-
	Refrigerator	-
	Total	122 l
External Dimension	Height	858mm
	Width	480mm
	depth	531mm
Net Weight		31 kg

EXTERNAL VIEW

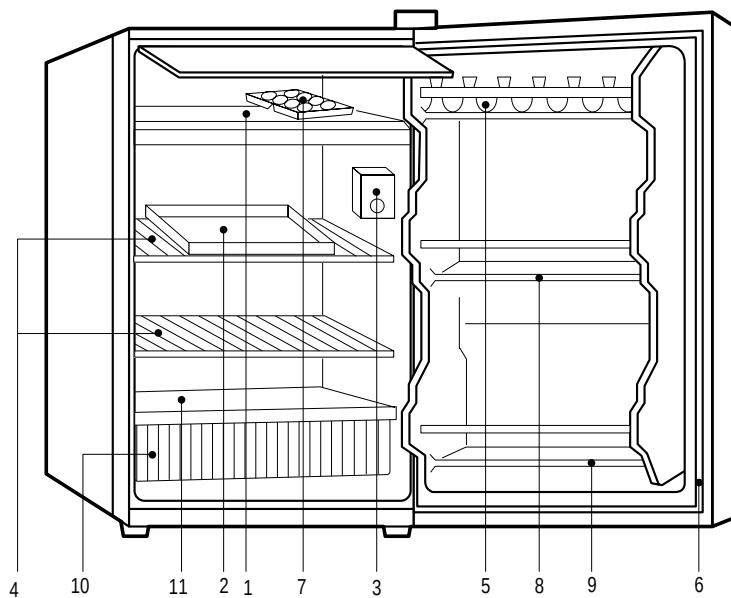


WIRE DIAGRAM



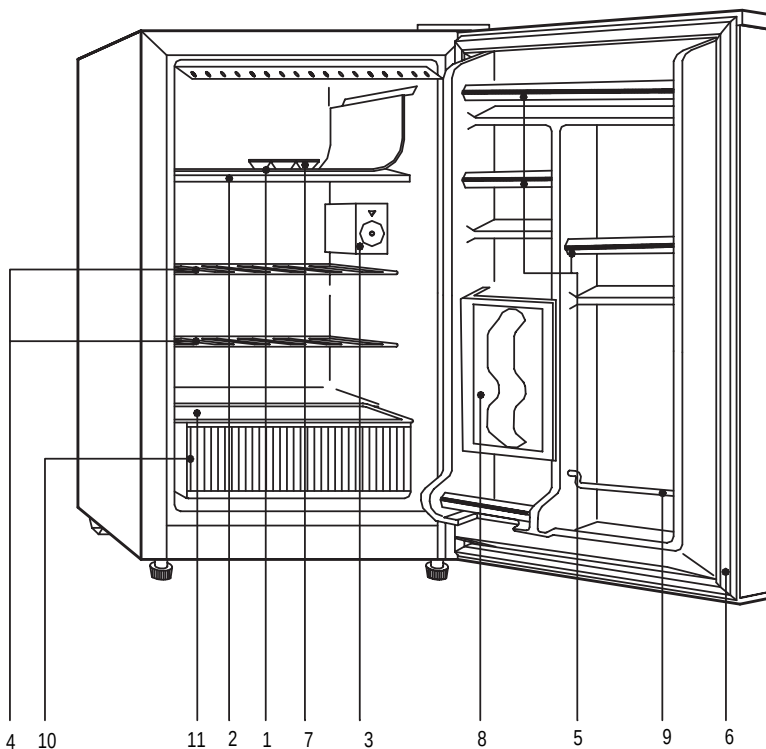
NAME OF PARTS

FR-146, 146R, 147, 147R



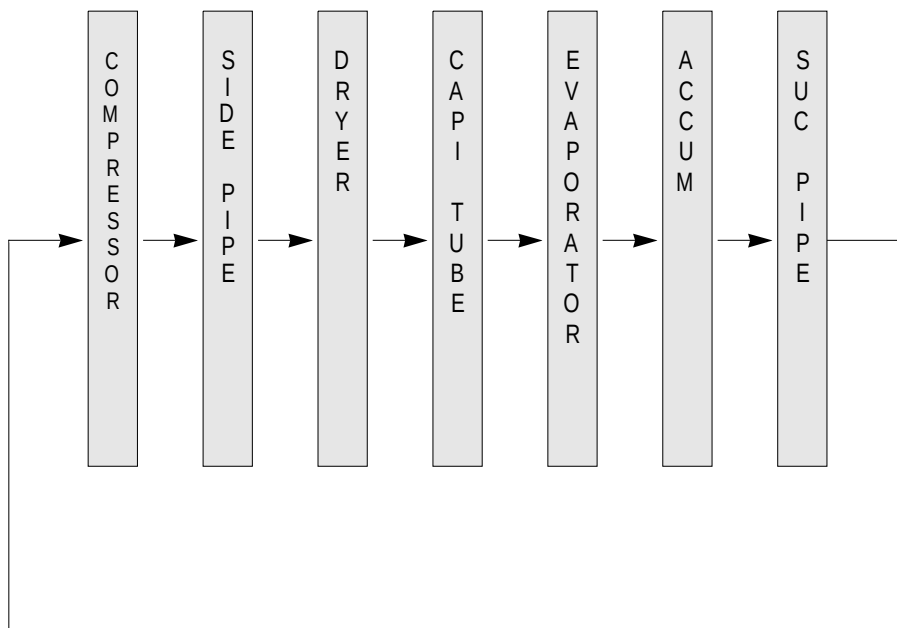
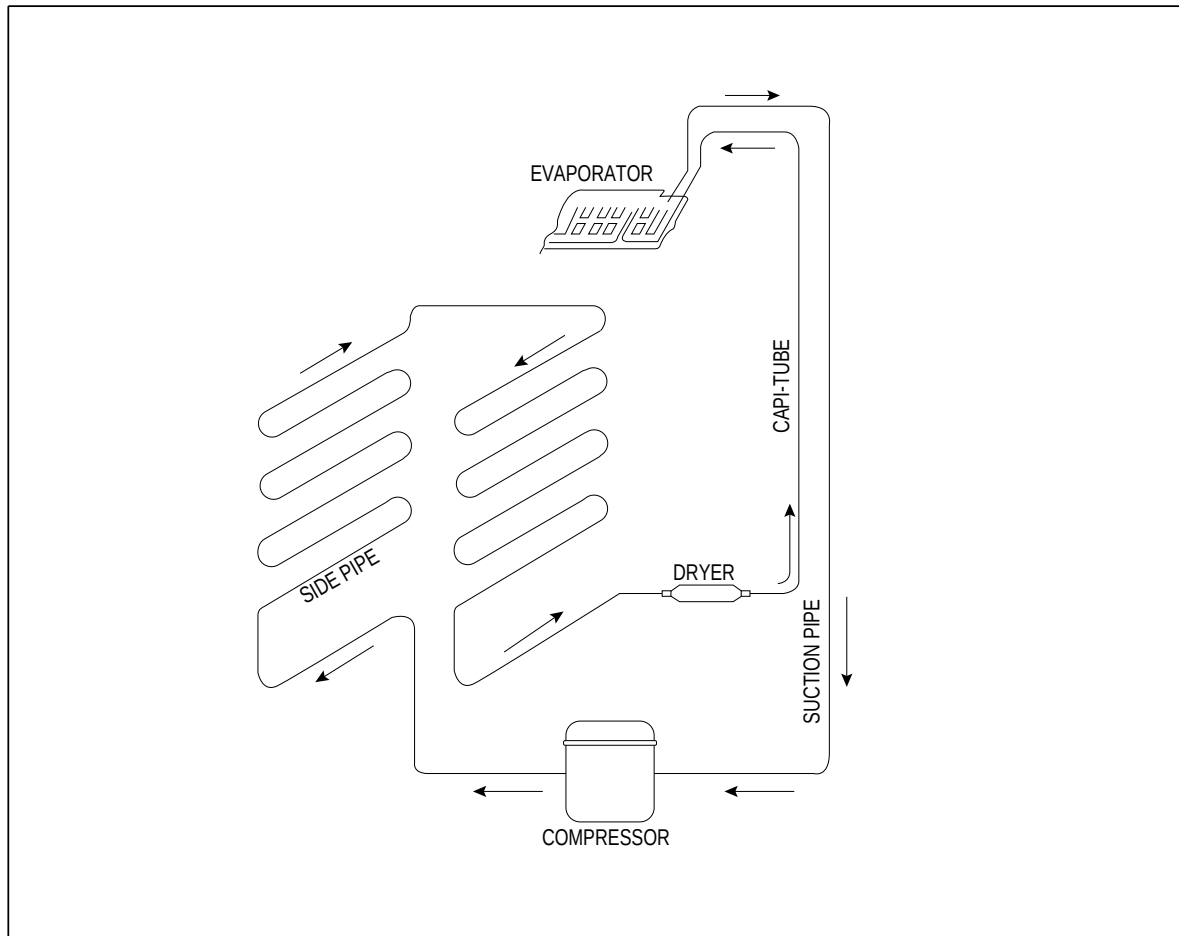
- 1 Evaporator
- 2 Drain Pan
- 3 Control Box
- 4 Plastic Coated Shelf
- 5 Rack
- 6 Magnetic Door Seals
- 7 Ice Tray
- 8 Usable Rack
- 9 Bottle Rack
- 10 Crisper
- 11 Slide Out Crisper Cover

FR-146RV, 147RV

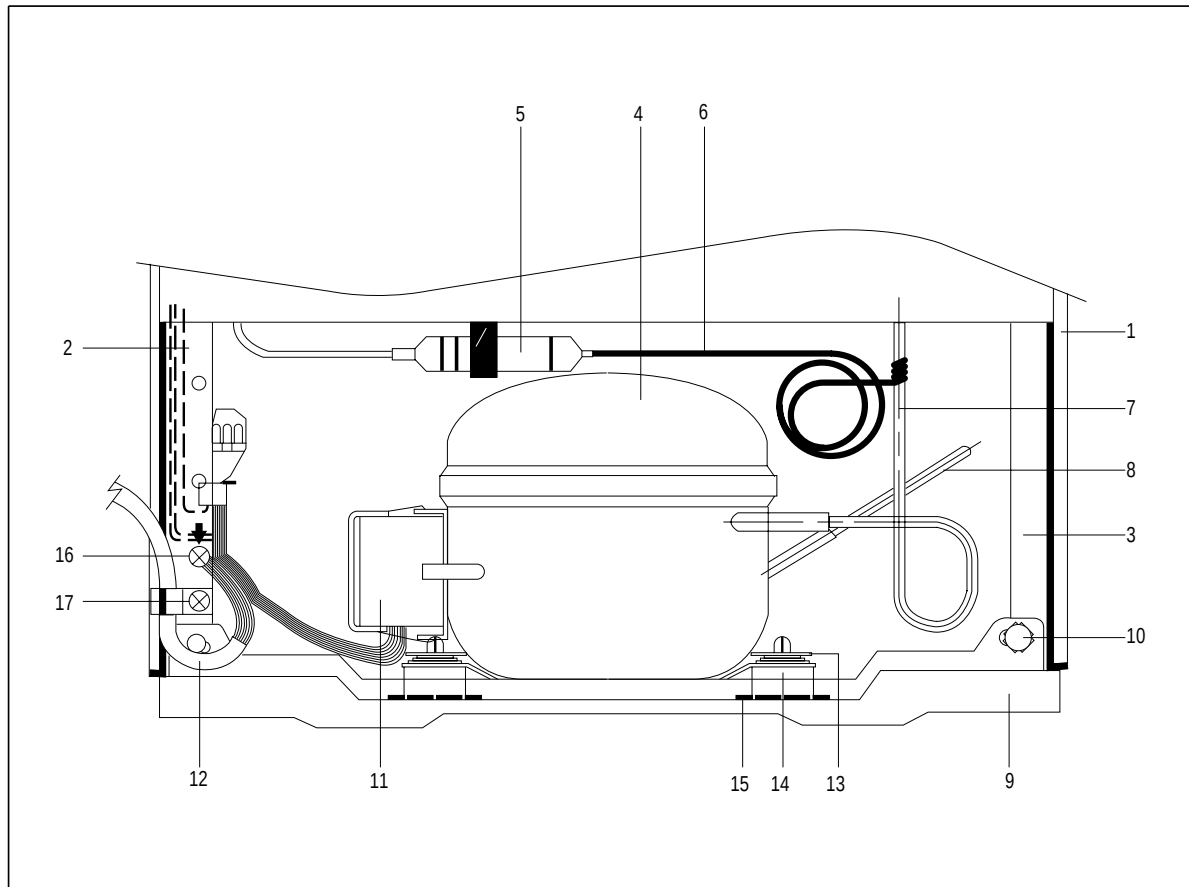


- 1 Evaporator
- 2 Drain Pan
- 3 Control Box
- 4 Plastic Coated Shelf
- 5 Rack
- 6 Magnetic Door Seals
- 7 Ice Tray
- 8 Can cover
- 9 Bottle Rack
- 10 Crisper
- 11 Slide Out Crisper Cover

REFRIGERANT CYCLE DIAGRAM



MACHINE ROOM VIEW AND PART LIST



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		

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	DS22LCF1	DS22LCF1	DS22LCF1	DS22LCF1	DS22LCS8	DS22LCS8	DS22LCS8	DS22LCS8
Part Code	3951122X10	3951122X10	3951122X10	3951122X10	3954122X80	3954122X80	3954122X80	3954122X80
Start type	RSIR	RSIR	RSIR	RSIR	RSIR	RSIR	RSIR	RSIR

Refrigerant	R134a							
Voltage	100V/50,60Hz	110V/60Hz	115,120V/60Hz	127V/60Hz	220V/50 Hz	220V/60Hz	230V/50 Hz	240V/50Hz
Comp model	DS25LHF0	DS22LHF1	DS22LHF1	DS25LHF2	DS22LCS8	DS22LCS8	DS22LCS8	DS22LCS8
Part Code	3951125Y00	3951125Y10	3951125Y10		3954107F50	3954107F50	3954107F50	3954107F50
Start type	RSIR	RSIR	RSIR	RSIR	RSIR	RSIR	RSIR	RSIR

2. RELAY ASSEMBLY

Refrigerant	R12							
Voltage	100V/50,60Hz	110V/60Hz	115,120V/60Hz	127V/60 Hz	220V/50Hz	220V/60Hz	230V/50Hz	240V/50 Hz
Relay model	197SHB,S068	197SHB,S068	197SHB,S068	197SHB,S068	129RFB,S220	129RFB,S220	129RFB,S220	129RFB,S220
Part Code	3018101411	3018101411	3018101411	3018101411	3018123030	3018123030	3018123030	3018123030

Refrigerant	R134a							
Voltage	100V/50,60Hz	110V/60Hz	115,120V/60Hz	127V/60Hz	220V/50Hz	220V/60Hz	230V/50Hz	240V/50Hz
Relay model	734RFB,S068	174SHB,S068	174SHB,S068	213THB,S068	129SHB,S220	129SHB,S220	129SHB,S220	129SHB,S220
Part Code	3018122250	3018108140	3018116175	3018123121	3018123080	3018123151	3018116310	3018122201

3.CONTROL SWITCH

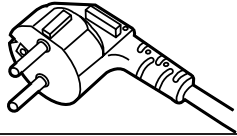
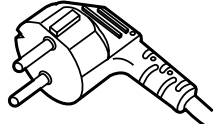
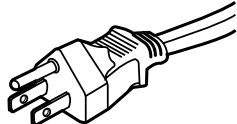
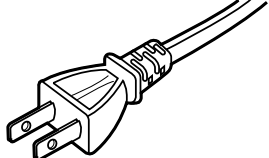
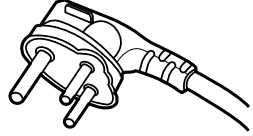
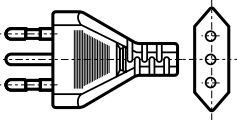
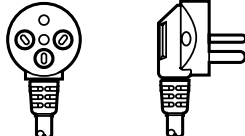
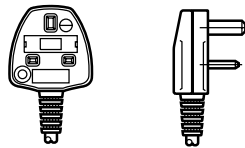
Refrigerant	R12							
Voltage	100V/50,60Hz	110V/60Hz	115,120V/60Hz	127V/60Hz	220V/50Hz	220V/60Hz	230V/50Hz	240V/50Hz
Relay model	PFN-110U-02D	PFN-110U-02D	PFN-110U-02D	PFN-110U-02D	PFN-110U-02D	PFN-110U-02D	PFN-110U-02D	PFN-110U-02D
Part Code	3018303100	3018303100	3018303100	3018303100	3018303100	3018303100	3018303100	3018303100

Refrigerant	R134a							
Voltage	100V/50,60Hz	110V/60Hz	115,120V/60Hz	127V/60Hz	220V/50Hz	220V/60Hz	230V/50Hz	240V/50Hz
Relay model	PFN-110U-02SS	PFN-110U-02SS	PFN-110U-02SS	PFN-110U-02SS	PFN-110U-02D	PFN-110U-02D	PFN-110U-02SS	PFN-110U-02SS
Part Code	3018303110	3018303110	3018303110	3018303110	3018303100	3018303100	3018303110	3018303110

4. DRYER

Refrigerant	R12	R134a
Spec.	10g	10g
Part code	3016801301	3016801301

POWER CORD SPECIFICATION

NO	SHAPE OF POWER CODE	PART CODE	DESCRIPTION	REMARK
1		3011300321	CP-2PIN	
2		4017J17101	CP-2PIN	
3		4006D17101	KP-30	
		3011304520	DKP-301U	
4		401PD17101	KP-211	
5		3011316201	BP-3PIN	
6		3011300971	#267	FOR SWISS
		3011303020		FOR OTHER CONURTY
7		3011316101		FOR ISRAEL
8		3011303901	BS-1363A	FOR EUROPEAN&SAUDI
		3011303921		FOR SINGAPORE
		3011303040		FOR OTHER COUNTRY
9		3011301171		

DOOR COLOR SPECIFICATION

1. ASSEMBLY URETHAN DOOR

Refrigerant		R12, R134a							
TPYE		Key type				Non Key type			
Color Type		Dull lamina sheet	High flossy Lamina sheet	Normal PCM	High glossy bright PCM	Dull lamina sheet	High flossy Lamina sheet	Normal PCM	High glossy bright PCM
Part Code	Normal	-	-	PFTT00D215	-	-	PFTT00D210	-	-
	Deco	-	-	PFTT00D220	-	-	PFTT00D200	-	-

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)

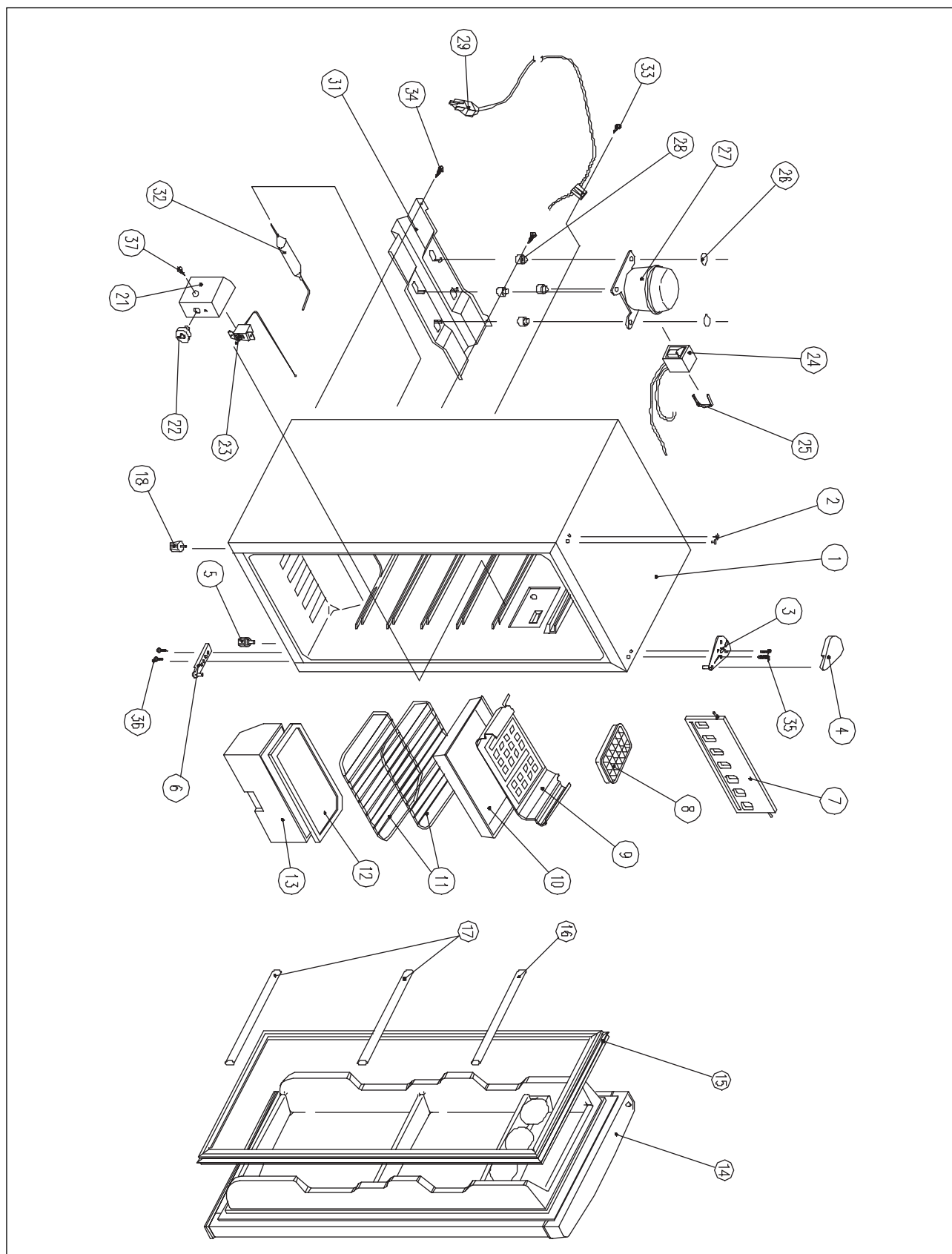
DOOR COLOR SPECIFICATION

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/BUE (BL718)
9		MINT GREEN (GN206)
10		S/GOLD
11		G/GREEN

EXPLODED VIEW AND PARTS LIST

1. FR-146, 146R, 147, 147R

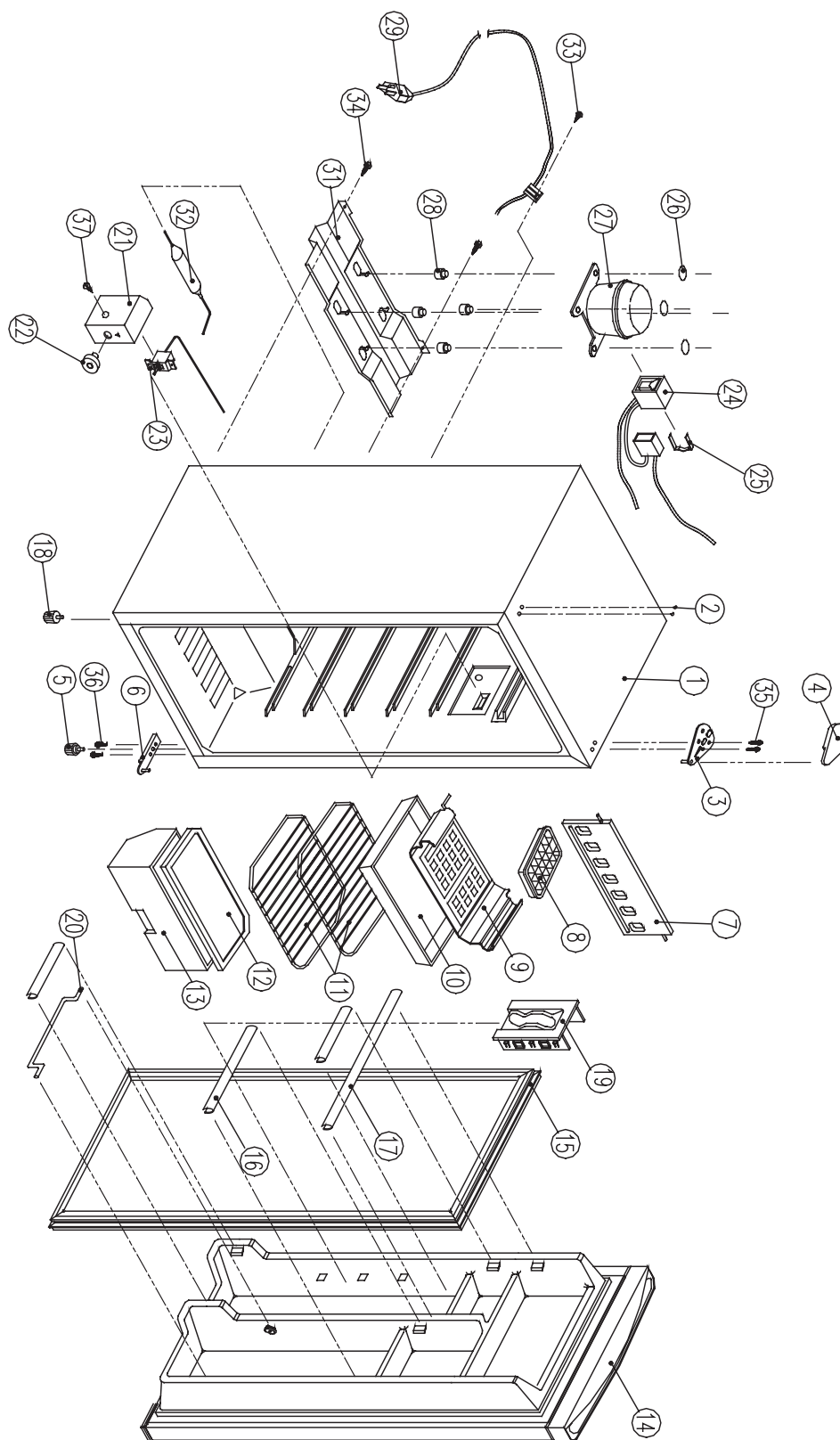


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NO	PART CODE	PART NAME	DESCRIPTION	QUANTITY	REMARK
1		ASSY CAB PRE	FRM-13	1	
2	3010927900	CAP CAB HOLE	FRM-13	2	OPTION
3	3012910600	HINGE *T AS	FRM-123	1	
4	3011409400	COVER *T HINGE	PP FRM-123	1	
5	3012103300	FOOT ADJ AS	PP INSERT	1	
6	3012910500	HINGE CAB	FR-K184BM	1	
7	4017J53213	DOOR F	FRA-12DP	1	
8	3011106021	CASE ICING	PP	1	
9	3017000202	EVAPORATOR AS	FRA-1220	1	
10	4017J54111	DRAIN PAN	PP	1	
11	4017J55226	SHELF	SWRM PE-COATING	1	
12	4018R30421	COVER V/CASE	LG25SP	2	
13	4017L30612	CASE VEGTB	LG25SP-111	1	
14		ASSY ONE DOOR TOTLA		1	Refer to #8
15	3012316800	GASKET DR AS	PVC	1	
16	3019022200	POCKET BAR	PVC	1	
17	3019024800	POCKET BAR	PVC-H T1.8 12LL	2	
18	4006D32533	FOOT *F	PP(JI-360)	1	
19					-
20					-
21	4017J70115	BOX CONTL	HIPS	1	RAMP
	3010505400				
22	4006D70027	KNOB	HIPS	1	
23	3018301000	THERMOSTAT		1	Refer to #7
24	3018123080	SWITCH P RELAY AS		1	Refer to #7
25	3816100110	RELAY BAND	SUS304 T0.7	1	
26	3016004120	SPECIAL WASR	SPG T0.8	3	
27	3954125Y80	COMPRESSOR		1	Refer to #7
28	3010102910	ABSORBER COMP	NBR	4	
29		CORD POWER AS		1	Refer to #7
31	3010309800	BASE COMP	SBHG T0.8	1	Refer to #7
32	3016801300	DRYER AS	NON CFC 10g	1	
33	7112401011	SCREW TAPPING	T1 TRS 4 X 10 MFZN	1	
34	7122501211	SCREW TAPPING	T2S TRS 5 X 12 MFZN	2	
35	3016000301	SPECIAL SCREW	M5X14 S1018C	2	
36	7147501411	SCREW TAPPING	T2.5 X 14 MFZN	2	
37	7112402011	SCREW TAPPING	T1 TRS 4X20 MFZN	1	

2. FR-146RV, 147RV



EXPLODED VIEW AND PARTS LIST

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NO	PART CODE	PART NAME	DESCRIPTION	QUANTITY	REMARK
1		ASSY CAB PRE	FRM-13	1	
2	3010927900	CAP CAB HOLE	FRM-13	2	OPTION
3	3012910600	HINGE *T AS	FRM-123	1	
4	3011409400	COVER *T HINGE	PP FRM-123	1	
5	3012103300	FOOT ADJ AS	PP INSERT	1	
6	3012910500	HINGE CAB	FR-K184BM	1	
7	4017J53213	DOOR F	FRA-12DP	1	
8	3011106021	CASE ICING	PP	1	
9	3017000202	EVAPORATOR AS	FRA-1220	1	
10	4017J54111	DRAIN PAN	PP	1	
11	4017J55226	SHELF	SWRM PE-COATING	1	
12	4018R30421	COVER V/CASE	LG25SP	2	
13	4017L30612	CASE VEGTB	LG25SP-111	1	
14		ASSY ONE DOOR TOTLA		1	Refer to #8
15	3012316800	GASKET DR AS	PVC	1	
16	3019022700	POCKET BAR	PVC-H, L195	1	
17	3019024800	POCKET BAR	PVC-H T1.8 12LL	2	
18	4006D32533	FOOT *F	PP(JI-360)	1	
19	3011452200	CAN COVER	HIPS	1	-
20	3019012130	POCKET BAR	WIRE PR-COATING	1	-
21	4017J70115	BOX CONTL	HIPS	1	RAMP
	3010505400				
22	4006D70027	KNOB	HIPS	1	
23	3018301000	THERMOSTAT		1	Refer to #7
24	3018123080	SWITCH P RELAY AS		1	Refer to #7
25	3816100110	RELAY BAND	SUS304 T0.7	1	
26	3016004120	SPECIAL WASR	SPG T0.8	3	
27	3954125Y80	COMPRESSOR		1	Refer to #7
28	3010102910	ABSORBER COMP	NBR	4	
29		CORD POWER AS		1	Refer to #7
31	3010309800	BASE COMP	SBHG T0.8	1	Refer to #7
32	3016801300	DRYER AS	NON CFC 10g	1	
33	7112401011	SCREW TAPPING	T1 TRS 4 X 10 MFZN	1	
34	7122501211	SCREW TAPPING	T2S TRS 5 X 12 MFZN	2	
35	3016000301	SPECIAL SCREW	MSX14 S1018C	2	
36	7147501411	SCREW TAPPING	T2.5 X 14 MFZN	2	
37	7112402011	SCREW TAPPING	T1 TRS 4X20 MFZN	1	

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