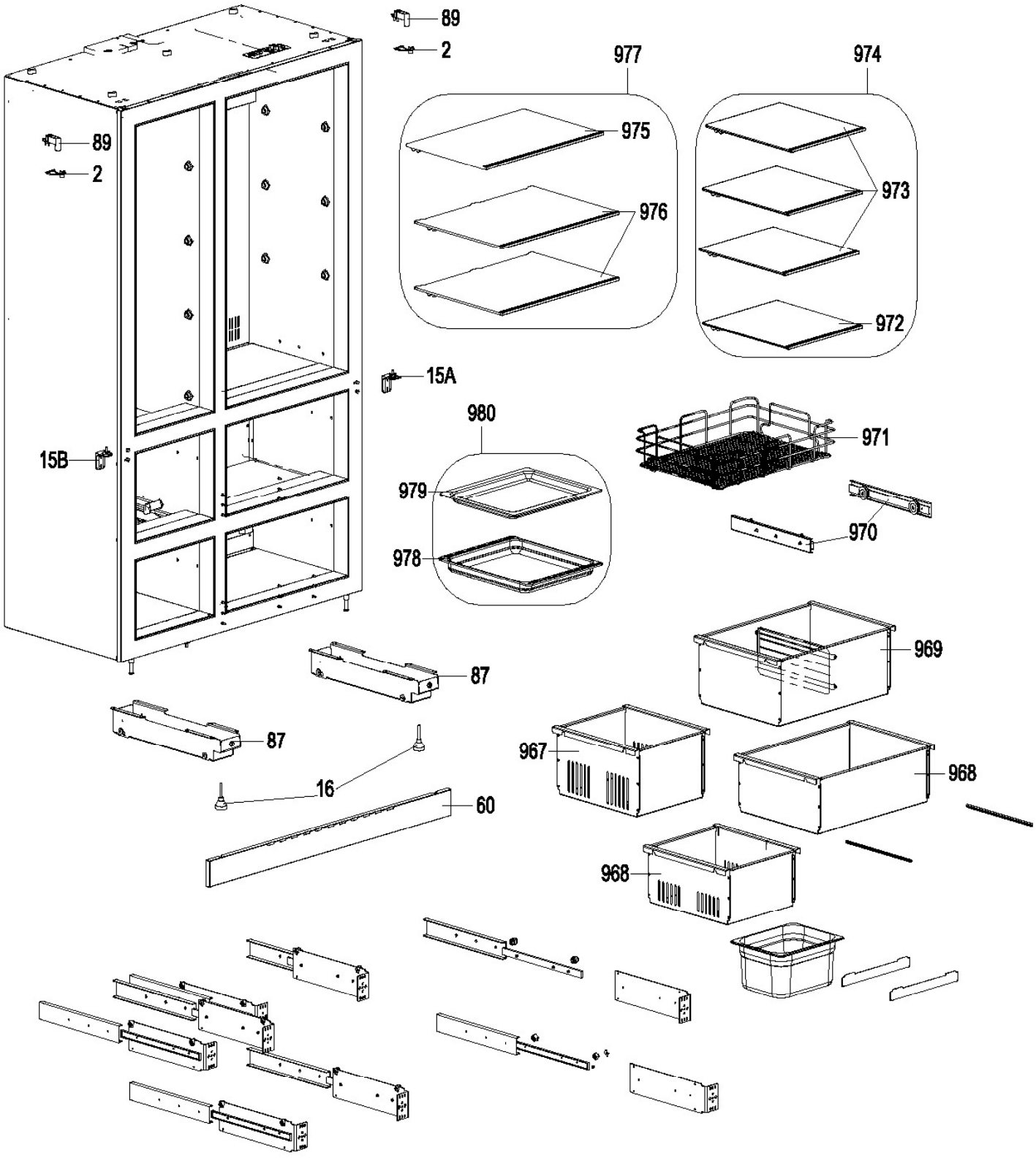
CAFF60

Caple 121cm wide Fridge Freezer

Technical information

CAFF60

Caple 121cm wide Fridge Freezer



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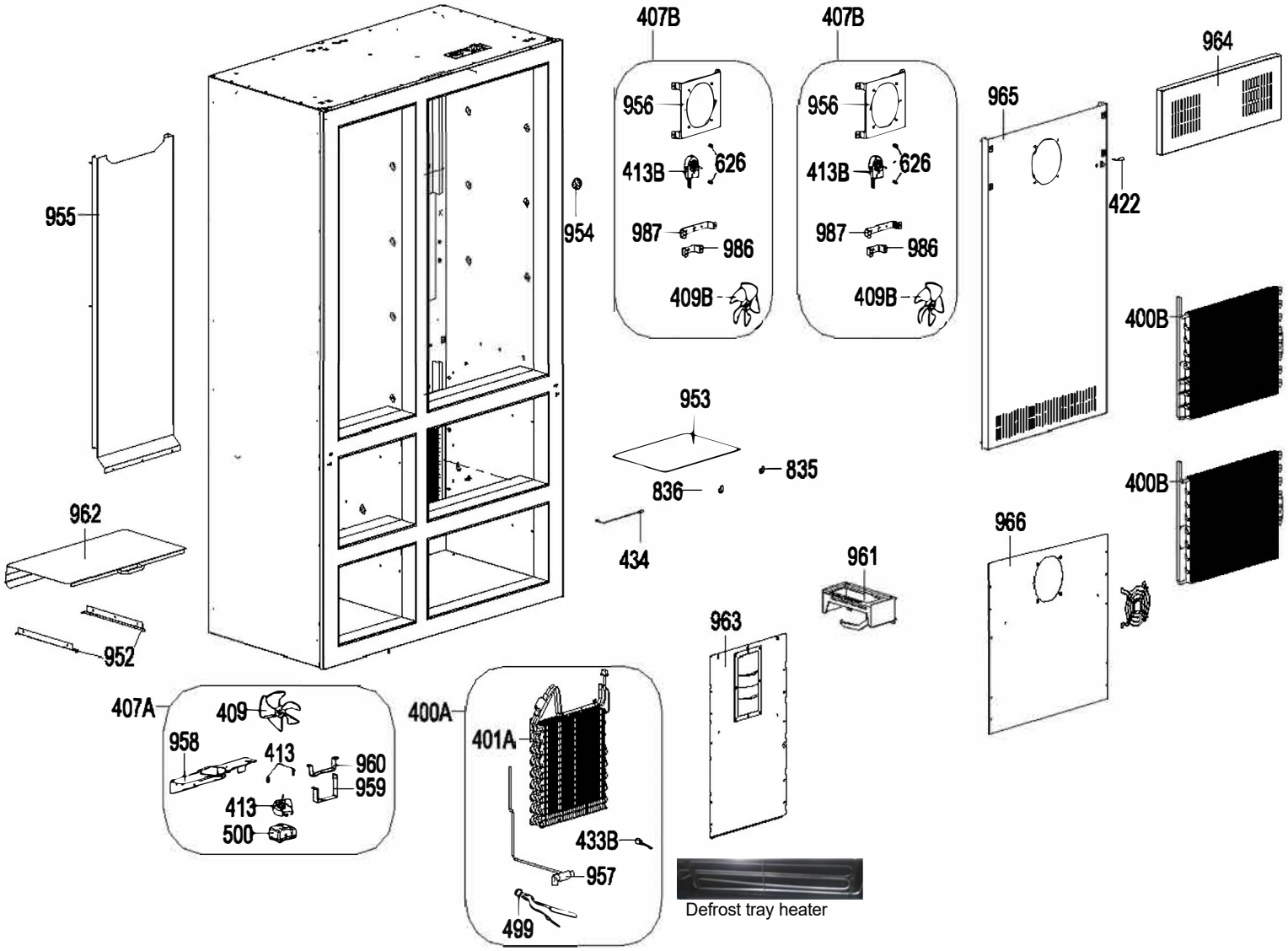

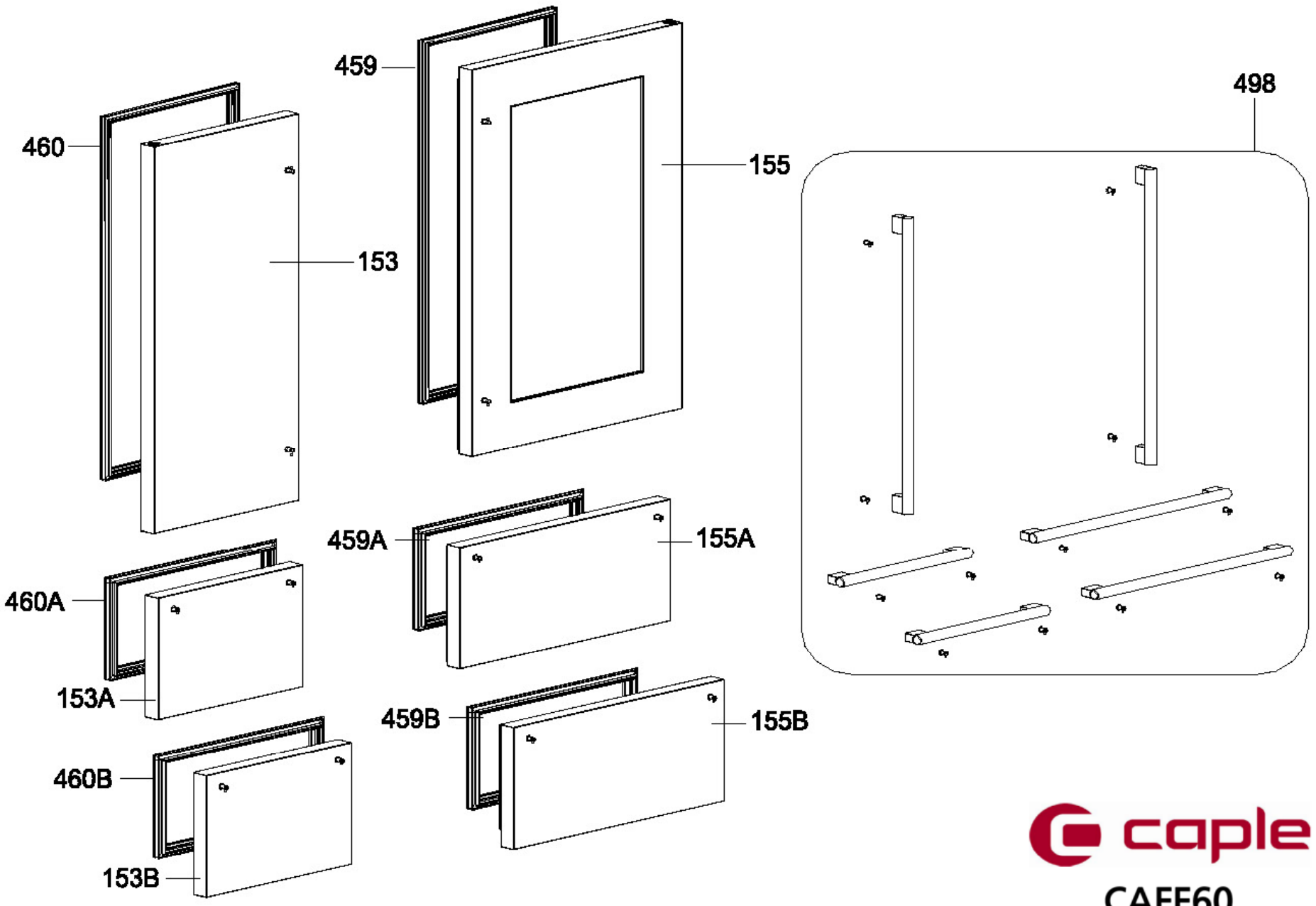

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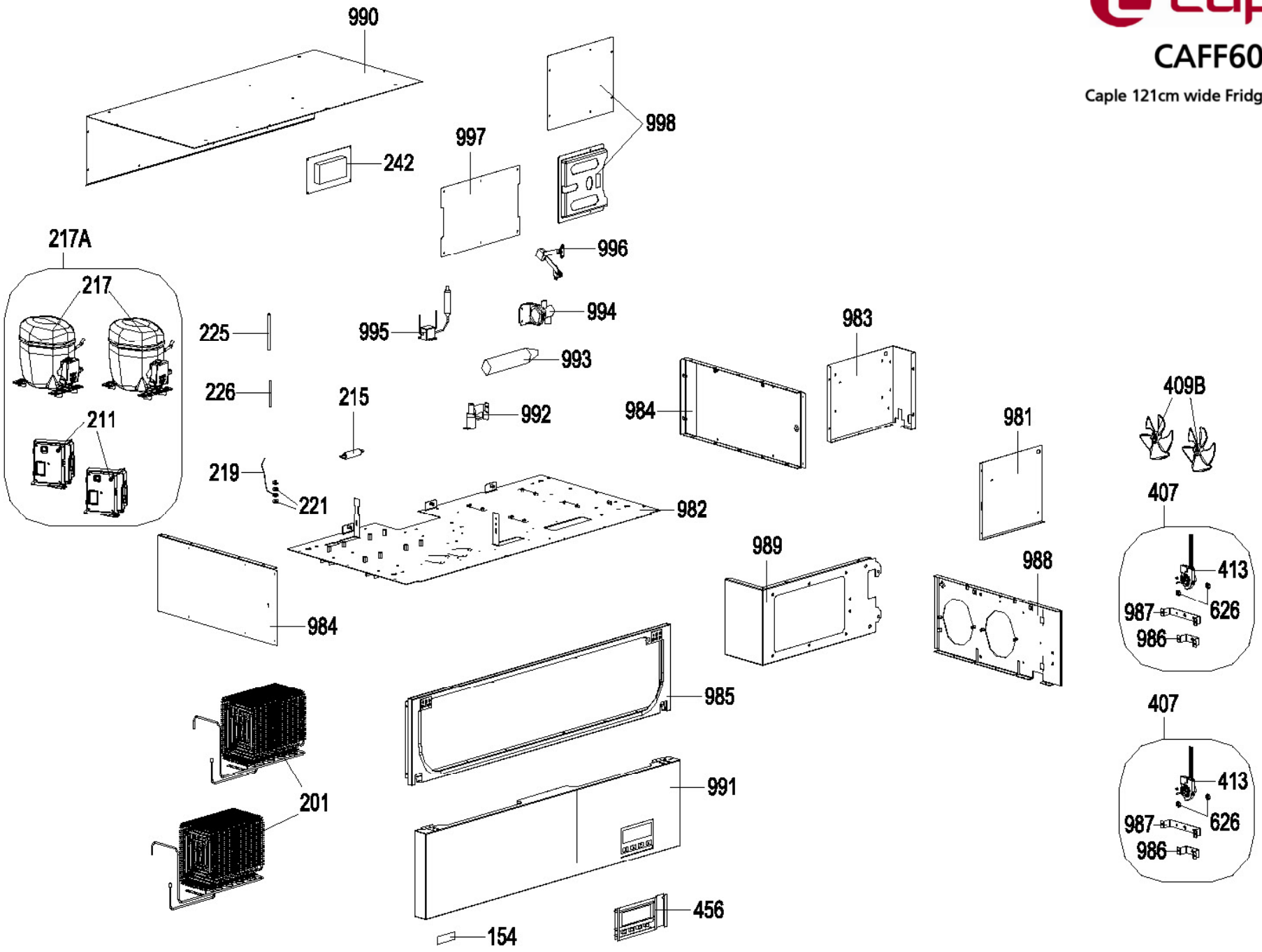

CAFF60 - Caple 121cm wide Fridge Freezer

Item	Part Code	Description
978	20757233	TRAY (65L, DEEP, BLACK)
985	20796960	BASEMENT FRONT FRAME GR/
400B	20797138	FIN EVAP GR
	40004104	BUTYL RUBBER(120*60*2MM)
407B	20797139	REF FAN GR/BOTTOM
413B	32018581	REF FAN MOTOR
987	37018625	BRACKET FRONT
986	37018627	BRACKET BACK
956	37018856	FAN BRACKET REF
626	42030205	FREEZER FAN MOTOR RUBBER/590UHS
409B	42082081	PROPELLER
407A	20797145	FREEZER FAN MOTOR GR
413	32006707	EVAP FAN MOTOR/391-321-590
958	37018635	FAN BRACKET
960	37018654	FAN BRACKET BACK
959	37018655	FAN BRACKET FRONT
626	42030205	FREEZER FAN MOTOR RUBBER/590UHS
409	42030263	PROPELLER/590(F.FAN MOTOR)BLACK
500	42031850	F FAN MOTOR BOX
963	20797148	FREEZER MULTIFLOW BOTTOM GR
966	20797150	REF MULTIFLOW BOTTOM GR
965	20797158	REF MULTIFLOW TOP GR
964	20797159	MULTIFLOW TOP COVER GR
955	20797160	MULTIFLOW TOP GR
962	20797161	HUMIDITY COVER GR
954	20797279	LED ON TUT GR./
407	20798884	FAN MOTOR GROUP/
987	37018625	BRACKET FRONT
986	37018627	BRACKET BACK
626	42030205	FREEZER FAN MOTOR RUBBER/590UHS
995	20798888	3 VALF GR
	32022942	VALVE BI-STABLE I.C.=2,15(R600A)
217A	20799363	COMPRESSOR-INV GR/
217	32010230	COMP.VEGZ11C(VCC EMRACO)
211	32012807	VEGZ11C/VCC INVERTER
1026	40007341	COMP.RUBBER-DANFOSS
999	20799364	SASE-FONKSIYONEL BAGLANTI GR/
998	20799592	MAIN BOARD COVER GR/
993	32018602	WATER FILTER
226	35000752	DRYER VACUUM TUBE
997	37020580	KORUMA SACI KAPAK
215	37021426	DRYER(XH9,0,40MM,10GR,I.C.=2.1)
	40004104	BUTYL RUBBER(120*60*2MM)
409B	42082081	PROPELLER

CAFF60 - Caple 121cm wide Fridge Freezer

Item	Part Code	Description
998	20799592	MAIN BOARD COVER GR/
980	20799610	GLASS TRAY KIT/
978	20757233	TRAY (65L, DEEP, BLACK)
979	47002225	GLASS TRAY (60*60)
	20799901	SABITLEME KITI/
2	20827952	TOP HINGE/
15A	20827953	GOV MEN ALT SOG BOYALI
	20868262	REFRIGERATOR DOOR/ GR.
459	42094478	GASKET/REF DOOR/ GR. (GRAY)
	20868265	REF BOTTOM BASKET DOOR/ GR
459B	42094481	GASKET/REF BOTTOM BASKET/ GR. (GRAY)
	20868267	REF TOP BASKET DOOR/ GR
459A	42094480	GASKET/REF TOP BASKET/ GR. (GRAY)
	20868269	FREEZER DOOR/ GR/SRGF-D01-SYH
460	42094479	GASKET/FREEZER DOOR/ GR. (GRAY)
	20868281	FREEZER TOP BASKET DOOR/ GR
460A	42094482	GASKET/FREEZER TOP BASKET/ GR. (GRAY)
	20868283	FREEZER BOTTOM BASKET DOOR/ GR
	42094483	GASKET/FREEZER BOTTOM BASKET/ GR. (GR
	20868285	BASEMENT COVER GR./
456	32024398	DB/BDD23-R3//R09/V21-23060793
	37025187	BASEMENT COVER GR
	37025188	BASEMENT COVER
	42094461	DISPLAY COVER GR./
	20885315	PACK. LABEL/850 CAPLE-ING(CAFF60)
	20885326	NAME PLATE/850 CAPLE-ING(CAFF60)
	20885345	ENERGY LBL/850-CAPLE(CAFF60)
434	30014912	SENSOR/STANDARD/R6K/200MM/SINGLE
422	30014933	SENSOR/STANDARD/R6K/350MM/SINGLE
413	32006707	EVAP FAN MOTOR/391-321-590
217	32010230	COMP.VEGZ11C(VCC EMRACO)
433B	32010909	SENSOR/STANDARD/R6K/70MM/SINGLE
211	32012807	VEGZ11C/VCC INVERTER
499	32013735	TERMAL FUSE(EPOXY)
961	32018536	ICEMAKER
413B	32018581	REF FAN MOTOR
957	32018584	FREEZER ESANJOR
992	32018600	SELENOID VALF INVENSYS
994	32018601	WATER FILTER HOUSING
993	32018602	WATER FILTER
	32022942	VALVE BI-STABLE I.C.=2,15(R600A)
456	32024398	DB/BDD23-R3//R09/V21-23060793
201	32024925	CONDANSER
242	32025729	MB/BDA10-6//R900/V24-23078690
219	32027294	EARTH WIRE/WASHER
	32029696	POWER CABLE/1.6M//UK
226	35000752	DRYER VACUUM TUBE
225	35002664	SERVICE TUBE(105*6*0,7)TYPE B

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Item	Part Code	Description
971	37018539	WIRE BASKET/
953	37018583	REF AIR CHANNEL SHEET
89	37018613	TOP HINGE COVER/
987	37018625	BRACKET FRONT
986	37018627	BRACKET BACK
958	37018635	FAN BRACKET
960	37018654	FAN BRACKET BACK
959	37018655	FAN BRACKET FRONT
954	37018682	ZONE 1 CHANNEL SHEET
956	37018856	FAN BRACKET REF
4	37019570	TOP HINGE/260V(WITHOUT PIN)
87	37019710	FOOT GR/
498	37020189	DOOR HANDLE GR/
982	37020278	CABINET BASEMENT BOTTOM SHEET GR/
952	37020319	HUMIDITY COVER BRACKET
	37020326	SOMUN PERCIN M4 SS
984	37020354	CABINET BASEMENT SIDE SHEET GR/
996	37020363	CLIPPERS
968	37020364	REF BOTTOM BASKET GR./
969	37020369	REF TOP BASKET GR./
967	37020373	FREEZER TOP BASKET GR./
981	37020459	CONDANSER SHEET SEPARATOR GR/
221	37020460	TIRTILLI RONDELA M5
16	37020531	STATIONARY FOOT/
997	37020580	KORUMA SACI KAPAK
990	37020582	BASEMENT TOP GR/
988	37020740	SUPPORT SHEET GR/
989	37020741	SUPPORT SHEET GR/2
983	37020742	CABINET BASEMENT FRAMEGR/
	37020743	DISPLAY CASE GR./
215	37021426	DRYER(XH9,0,40MM,10GR,I.C.=2.1)
	37025175	KICK PLATE GR/
	37025176	KICK PLATE MODIFICATION
	37025187	BASEMENT COVER GR
	37025188	BASEMENT COVER
	40004104	BUTYL RUBBER(120*60*2MM)
1026	40007341	COMP.RUBBER-DANFOSS
626	42030205	FREEZER FAN MOTOR RUBBER/590UHS
409	42030263	PROPELLER/590(F.FAN MOTOR)BLACK
500	42031850	F FAN MOTOR BOX
409B	42082081	PROPELLER
	42084891	E SEPET TEKERLEK
	42094461	DISPLAY COVER GR./
835	42137248	F GLASS SHELF STOPPER RV1/910
	45000562	PP TAPE(50MM*R)TRANS. TESA 4287/60
979	47002225	GLASS TRAY (60*60)
977	47010186	REF GLASS SHELF KIT
974	47010190	FREEZER GLASS SHELF KIT

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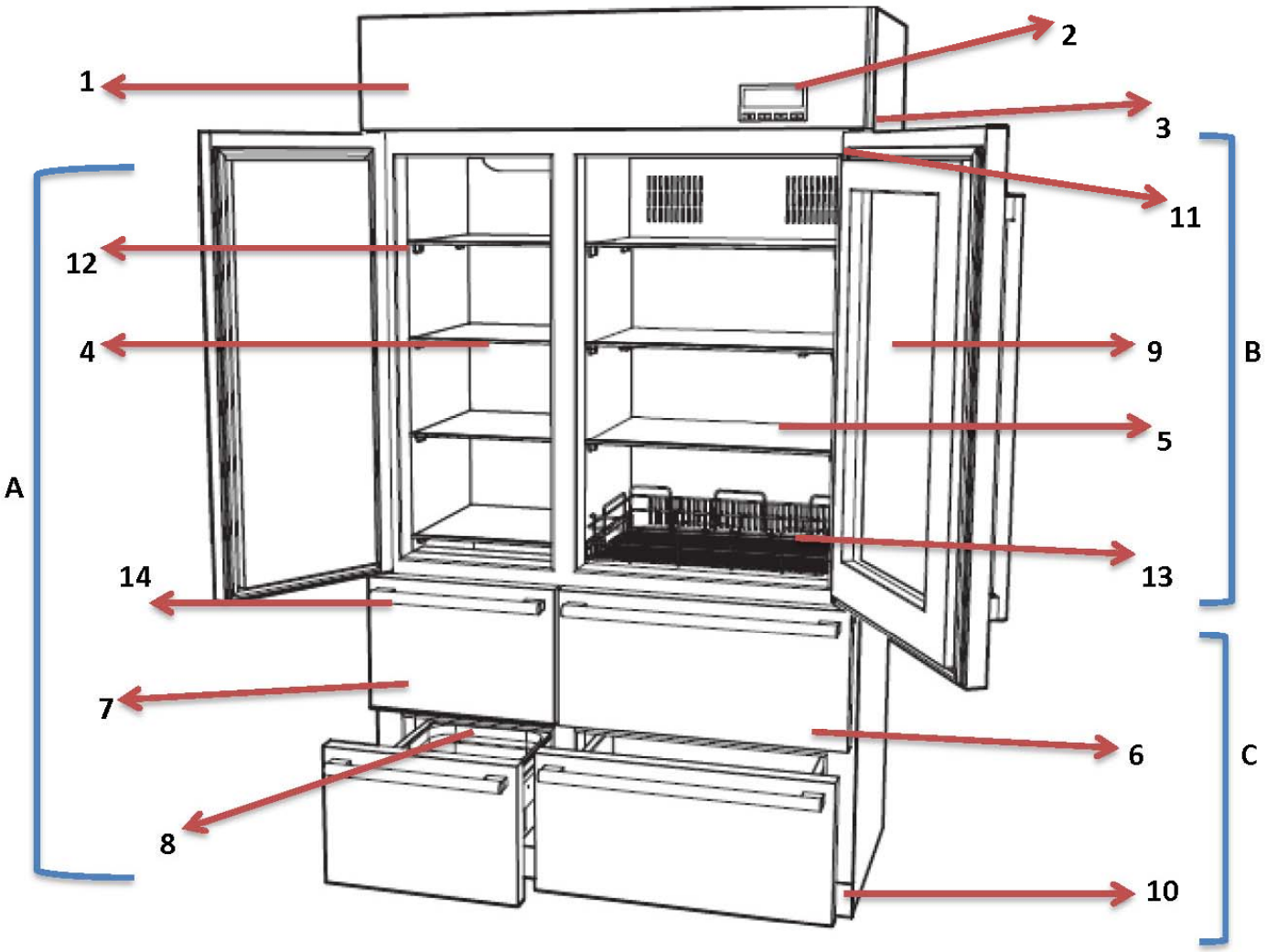
Item	Part Code	Description
154	47013813	LOGO CAPLE YENI TIP-4
P101	50007464	PACKAGE STRIP(0,8MM*11,5MM)
	52077622	PAD UPPER/590 RV1
	52113234	CYCLO-ISO/ PENTANE LABEL
	52151918	CORNERS CARDBOARD(COMMON-UP)
	52187563	*WARRANTY LABEL/CAPLE
	52189822	USER'S MANUAL/GT850.CAPLE(CAFF60)
	52197228	CARTON/CAPLE/(1300X780)X2200 MM/
	52197957	PACKAGING BAG WARNING LABEL/ENG/NEW
	52200654	GUARANTEE LABEL/CAPLE
	32021475	Defrost tray heater

CAFF60

Caple 121cm wide Fridge Freezer

Service manual

Side-by-Side Refrigerator / Freezer Model Features

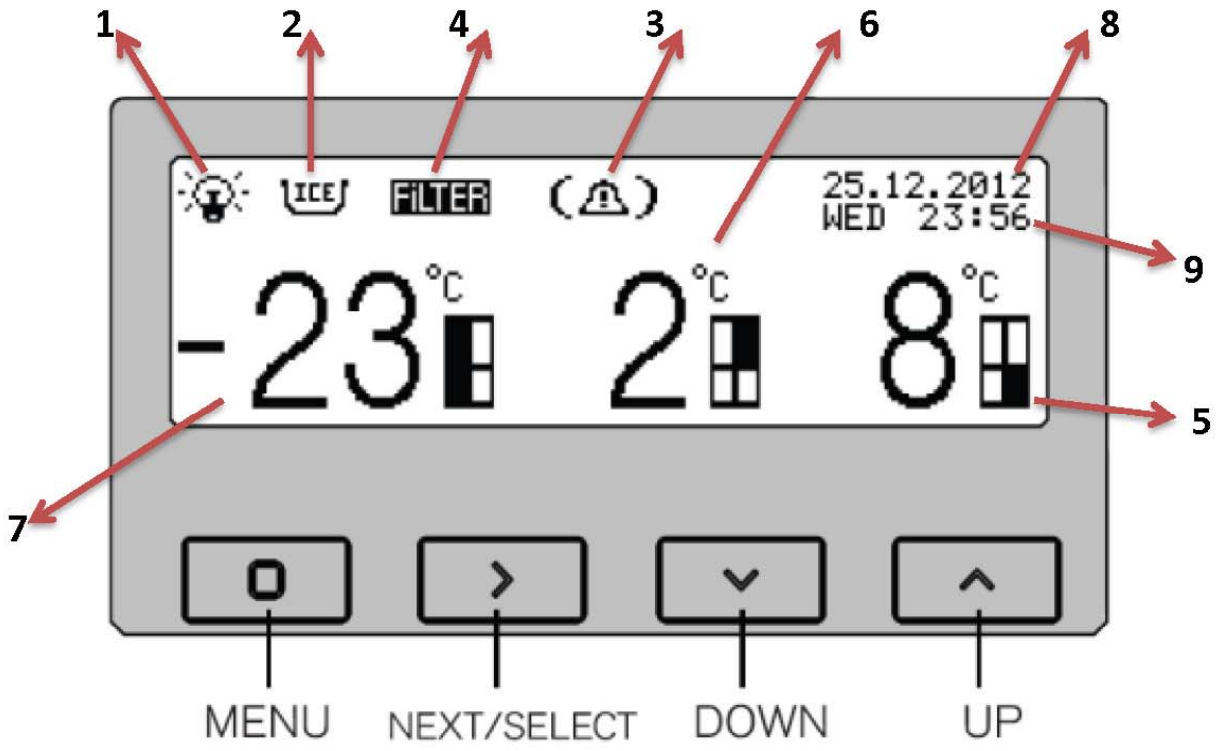


A : Zone 1 - Freezer Zone **B : Zone 3 - Fridge Zone** **C: Zone 4 - Vegetable Zone**

1. Engine compartment
2. Dot matrix multi information display
3. Luminated touch sensitive controls
4. Freezer with glass shelves
5. Refrigerator with glass shelves
6. Crisper drawer with fresh control compartment
7. Freezer drawer
8. Ice compartment with ice cube tray
9. Heat insulated triple low-e glass window
10. Detachable trim
11. LED lighting with magnetic door sensor
12. Shelf holder with LED lighting
13. Bottle drawer
14. Robust handle

Display and Control Panel

By using GT/SN 850 control panel, the temperature values of the each compartment and useful modes can be adjusted easily . Control panel is placed on the right side of the upper cover.



At below , you can find how to use control panel and the symbols of the parts what they mean .

1- Corona Light Mode
2- Ice Maker Mode
3- Door Alarm Sound Mode
4- Reset Filter
5- Vegetable Zone
6- Fridge Zone
7- Freezer Zone
8- Date Set Mode
9- Time Set Mode

Using of Control Panel

Temperature Control

There are three different sets on the control panel which are Freezer , Fridge and Vegetable Compartments. To arrange the temperature values, the below route can be followed.

Temperature Settings:
Press “MENU” button, (less than 3 seconds) then temperature set screen will be seen.
Press “UP”or “DOWN” button to change compartment’s temperature values.
To select to next column press “NEXT/SELECT” button to change.
To return the Main Screen you can wait 6 seconds.
For Freezer compartment, temperature range is between -24°C to -16°C, for Fridge and Vegetable compartment, range is between +2°C to +8°C. Slightly fluctuations for these values are normal, which depends on external influences such as an open door, the degree of humidity and the room temperature.

IMPORTANT NOTE: Always allow 12 hours for compartments to reach the temperature you set.

Corona Light Mode

This mode is used for arranging the interior refrigerator lighting “ON / OFF“ while the door is closed. While the corona light is “ON”; despite of the door is close, it provides visibility and easy access to the compartment.

Settings:
Press “MENU” button (minimum 3 seconds) until the Menu Function screen is seen .
Choose Corona Light by using “UP” or “DOWN” button.
Press “NEXT/SELECT” button then choose “ON / OFF”. Settings are saved automatically after pressing buttons.
To return the Main Screen press (less than 1,5 seconds) the “MENU” button.

Ice Maker Mode

This mode is used for controlling ice maker function.

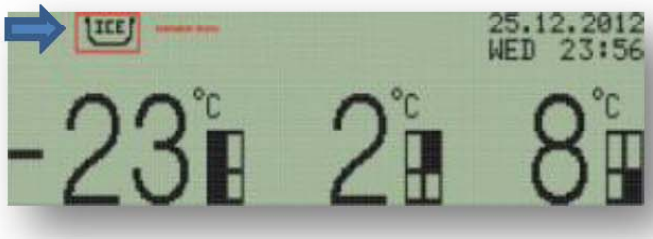
Settings:

Press “MENU” button (minimum 3 seconds) until the Menu Function screen is seen .

Choose Ice Maker by using “UP” or “DOWN” button.

Press “NEXT/SELECT” button then choose “ON / OFF”. Settings are saved automatically after pressing buttons.

To return the Main Screen press (less than 1,5 seconds) the “MENU” button.



IMPORTANT NOTE: Please discard a few batches of ice after the first installation.

Door Alarm Sound Mode

This mode is used for controlling the door alarm function. If the mode is active, it alerts while the door is open for more than 60 seconds.

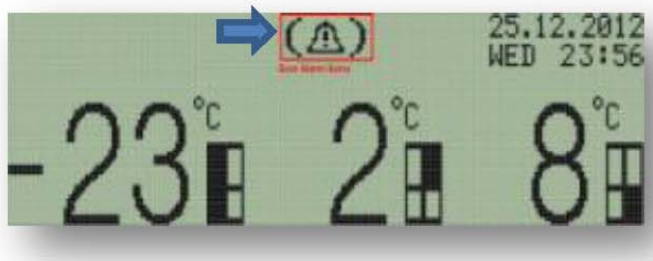
Settings:

Press “MENU” button (minimum 3 seconds) until the Menu Function screen is seen .

Choose Door Alarm Sound by using “UP” or “DOWN” button.

Press “NEXT/SELECT” button then choose “ON / OFF”. Settings are saved automatically after pressing buttons.

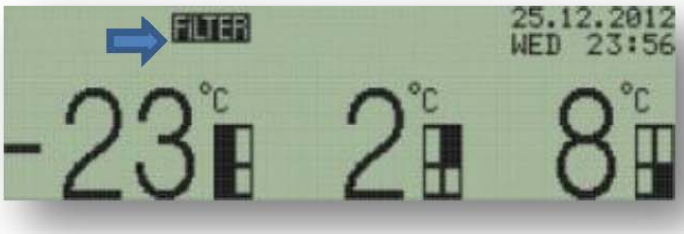
To return the Main Screen press (less than 1,5 seconds) the “MENU” button.



Reset Filter

Used in refrigerator water filter life period is 6 months. After 6 months, the filter will alert the main screen of the display. Reset Filter will be the bottom line of the display sub-menu at the same time.

Press “UP” and “DOWN” keys to this function selects 5 seconds reset filter screen will appear on. If these two keys does not press ,passed the bottom of the menu screen after 5 seconds. If the user presses the 3 and 4 buttons for 5 seconds there will appear on the screen Filter reseted and passed the bottom of the Menu screen after 5 seconds.



Vegetable Zone Mode

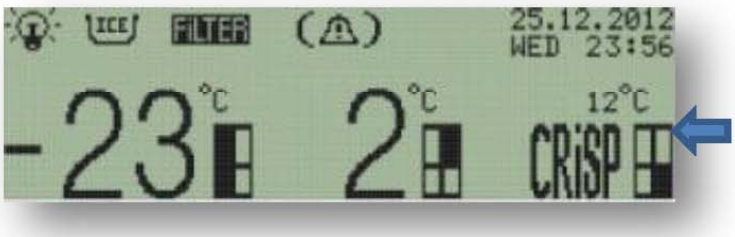
This mode helps to operate Vegetable zone. When the Vegetable Zone Mode is set as Crisper, the temperature of the vegetable compartment will be set 12°C and the vegetables in that compartment will be kept fresh longer.

Settings:

Press “MENU” button (minimum 3 seconds) until the Menu Function screen is seen. Choose Vegetable Zone by using “UP” or “DOWN” button.

Press “NEXT/SELECT” button then choose “ON/OFF/CRISP”. Settings are saved automatically after pressing buttons.

To return the Main Screen press (less than 1,5 seconds) the “MENU” button.



IMPORTANT NOTE: If Vegetable Zone Mode is set as crisper mode , on Vegetable Zone surface due to high humidity may be occur condensation.

WARNING :

After the entered and exited the service menu, Zone 4 (Vegetable Zone) compartment automatically appear in Crisper mode. In this case, for return to the value that the user has set , the user can be set again any value or plug of the refrigerator removed and re-installed after one minute.

Fridge Zone Mode

This mode helps to operate fridge zone . When Fridge zone mode is set as “OFF”, this compartment will not be cooled.

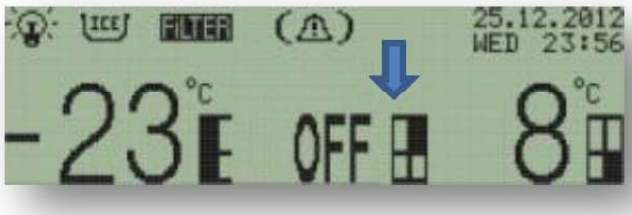
Settings:

Press “MENU” button (minimum 3 seconds) until the Menu Function screen is seen .

Choose Fridge Zone by using “UP” or “DOWN” button.

Press “NEXT/SELECT” button then choose “ON / OFF”. Settings are saved automatically after pressing buttons.

To return the Main Screen press (less than 1,5 seconds) the “MENU” button.



Date Set Mode

This mode is used for setting the date up.

Settings:

Press “MENU” button (minimum 3 seconds) until the Menu Function screen is seen .

Choose Date Set by using “UP” or “DOWN” button.

Press “NEXT/SELECT” button and then date set screen will be seen.

Press “NEXT/SELECT” button to change the selected column.

Press “UP” or “DOWN” button to change “DAY / MONTH / YEAR” values.

To return the Main Screen press (less than 1,5 seconds) the “MENU” button.

Keypad Sound Mode

This mode is used for activate or passivate the keypad sound.

Settings:

Press “MENU” button (minimum 3 seconds) until the Menu Function screen is seen .

Choose Keypad Sound by using “UP” or “DOWN” button.

Press “NEXT/SELECT” button then choose “ON / OFF”. Settings are saved automatically after pressing buttons.

To return the Main Screen press (less than 1,5 seconds) the “MENU” button.

Time Set Mode

This mode is used for setting the time up.

Settings:
Press “MENU” button (minimum 1,5 seconds) until the Menu Function screen is seen .
Choose Time Set by using “UP” or “DOWN” button.
Press “NEXT/SELECT” button and then time set screen will be seen.
Press “NEXT/SELECT” button to change the selected column.
Press “UP” or “DOWN” button to change “Hour / Minute” values.
To return the Main Screen press (less than 1,5 seconds) the “MENU” button.

Showroom Mode

Showroom Mode was incorporated into the electronic control system so that these appliances could be displayed in a showroom setting. When in Showroom Mode all cooling, defrosting, and ice making functions are disabled, but the lighting system, displays and door alarm are functional. From display to switch to this mode, the keys 2 and 4 must be pressed at the same time for 5 seconds.

Display Backlight Mode

This mode is used for activate or passivate the display backlight.

Settings:
Press “MENU” button (minimum 3 seconds) until the Menu Function screen is seen .
Choose Display Backlight by using “UP” or “DOWN” button.
Press “NEXT/SELECT” button then choose “ON / OFF”. Settings are saved automatically after pressing buttons.
To return the Main Screen press (less than 1,5 seconds) the “MENU” button.

Sabbath Mode

This mode is used for deactivating all functions but basic refrigeration.
Settings:
Press “MENU” button (minimum 3 seconds) until the Menu Function screen is seen .
Choose Sabbath by using “UP” or “DOWN” button.
Press “NEXT/SELECT” button then choose “ON/OFF/AUTO”. Settings are saved automatically after pressing buttons.
To return the Main Screen press (less than 1,5 seconds) the “MENU” button.

Warnings About Temperature Adjustments

 Your temperature adjustments will not be deleted when an energy breakdown occurs. It is not recommended that you operate your fridge in environments colder than 10°C in terms of its efficiency.

 Temperature adjustments should be made according to the frequency of door openings, the quantity of food kept inside the fridge and ambient temperature of the place of your fridge.

 Your fridge should be operated up to 24 hours according to the ambient temperature without interruption after being plugged in to be completely cooled. Do not open doors of your fridge frequently and do not place much food inside it in this period.

 A 8 minute delaying function is applied to prevent damage to the compressor of your fridge. When you take the plug off and then plug it on again to operate it or when an energy breakdown occurs. Your fridge will start to operate normally after 8 minutes.

 Your fridge is designed to operate in the ambient temperature intervals stated in the standards, according to the climate class stated in the information label. We do not recommend operating your fridge out of stated temperatures value limits in terms of cooling effectiveness.

Climatic Class	Amb. T. (°C)	Amb. T. (°F)
SN	From 10 to 32	From 50 to 90
N	From 16 to 32	From 61 to 90
ST	From 18 to 38	From 64 to 100
T	From 18 to 43	From 64 to 110

Water Filtration System

For producing clean ice ; a water fitration system is used which supplies filtered water to ice maker. The location of the filtration system is in the upper compartment and can be easily reached.

Note : If the Unit has been turned off or the ice maker disabled for one month or longer, the water filter cartridge should be replaced once the unit and ice maker are back in operation.

Note : Do not use with that is microbiological unsafe or unknown water quality without adequate disinfection before or after the system.Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

Note : Filter cartridges should be changed every 6 months.Date and next changing date should be written on the cartridge. There will be warming on the display. 

For replacing , the below procedure can be followed.

- Slowly rotate the cartridge one-quarter turn counter clockwise until it is free from the base. Do not pull. While seperating the cartridge, it is normal to see a small amount of water to spill out.
- Remove the cap from new water filter cartridge.
- Position it as the locking tabs can be inserted into filter head.
- Rotate the filter slowly approximately one-quarter turn to clockwise until it stops. Do not overtighten.
- To clean the water system and the air from the line, the first full bucked of ice produced should be discarded after the new cartridge is installed.

Bypass Mode

If you choose not to use the water filtration system, by removing the water filter cartridge, the system started to work as Bypass mode.In this mode,the water gets to ice maker without filtration. When the cartrdige is removed,the filtration system automatically goes into By-pass mode.For using the filtration system again only put the cartridge into filter head.

Note : If a reverse osmosis system is used, the water filter cartridge must be removed to put the water filtration system into bypass mode.

Warning : The water filter is recommended to change every six months.

COMPONENTS USED

Component Name	Power Value (Watt)	Working Voltage	Ohm Value
Defrost Heater	380 W	230 V	139.2
Hotgas Heater	30 W	230 V	1763.3
Ice Maker	5 W	12 V	28.8
Tray Heater	20 W	230 V	2645
Pipe Heater	7.5 W	230 V	7053
Glassdoor Heater	10 W	DC 12 V	14.4
Zone1 Fan Motor	1.8 W	230 V	-
Zone3 Fan Motor	2 W	DC 12 V	-
Zone4 Fan Motor	2 W	DC 12 V	-
Freezer Condenser Fan	2 W	DC 12 V	-
Fridge Condenser Fan	2 W	DC 12 V	-
Main Board	0.8 W	220 V	-
Display	1.1 W	DC 12 V	-

Sensor NTC °C / Ohm Ratios

45 °C / 1 kΩ	-1 °C / 6.27 kΩ
35 °C / 1.52 kΩ	-3 °C / 6.84 kΩ
30 °C / 1.82 kΩ	-5 °C / 7.48 kΩ
25 °C / 2.18 kΩ	-7 °C / 8.18 kΩ
19 °C / 2.75 kΩ	-12 °C / 10.3 kΩ
14 °C / 3.35 kΩ	-15 °C / 11.87 kΩ
10 °C / 3.93 kΩ	-20 °C / 15.11 kΩ
5.5 °C / 4.74 kΩ	-24 °C / 18.43 kΩ
1.5 °C / 5.62 kΩ	-31.5 °C / 27.1 kΩ
0 °C / 6 kΩ	-35.5 °C / 33.6 kΩ

The product has a total of 7 sensors. These ones; Zone1 ambient and Zone1 defrost sensors , Zone3 ambient and Zone3 defrost sensors , Zone4 ambient and Zone4 defrost sensors , RH module-ambient sensor on the chassis cover.

SELF TEST

After The Product Was Firstly Connected;

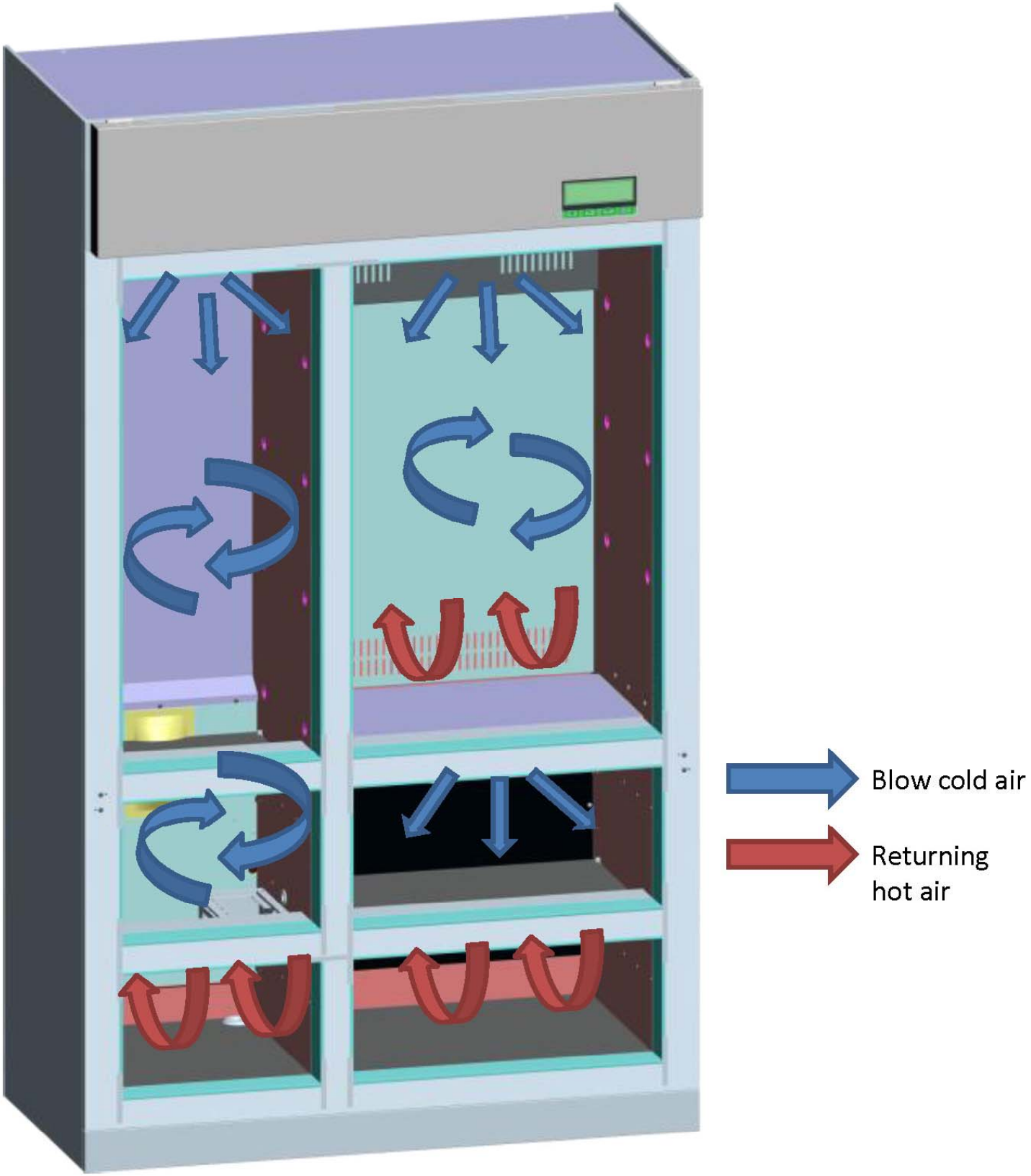
If Defrost Sensor > -5 °C

Freezer Compressor for 5 seconds “ON” after that “OFF”.
Freezer Condenser Fan for 5 seconds “ON” after that “OFF”.
Zone1 Evaporator Fan for 5 seconds “ON” after that “OFF”.
Refrigerator Compressor for 5 seconds “ON” after that “OFF”.
Refrigerator Condenser Fan for 5 seconds “ON” after that “OFF”.
Zone3 Evaporator Fan for 5 seconds “ON” after that “OFF”.
Zone4 Evaporator Fan for 5 seconds “ON” after that “OFF”.
Defrost Heater for 5 seconds “ON” after that “OFF”.
Hot gas Heater for 5 seconds “ON” after that “OFF”.
Tray Heater for 5 seconds “ON” after that “OFF”.
Pipe Heater for 5 seconds “ON” after that “OFF”.
Glassdoor Heater for 5 seconds “ON” after that “OFF”.
Ice Maker for 16 seconds “ON” after that “OFF”.

If Zone1 Ambient Temperature Sensor > -8 °C ;

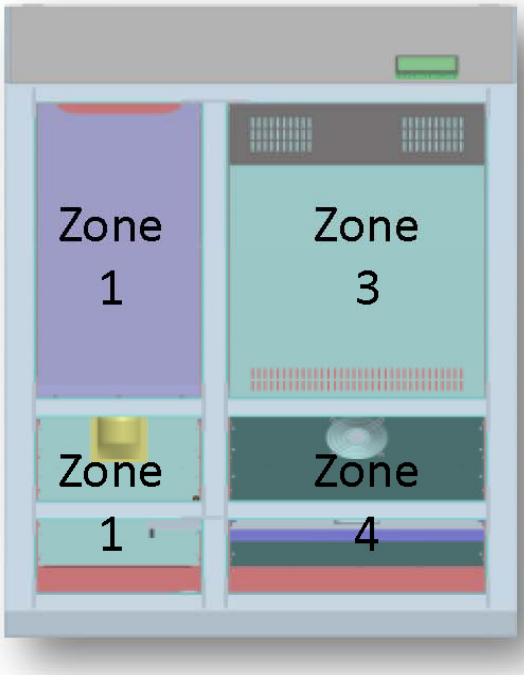
“Attention: Foods might be rotten due to power off ” description of the display will be shown. The display menu key is pressed, this alert will be deleted.

AIRFLOW DIAGRAMS



NORMAL DEFROST FUNCTION

Calculating Defrost Starting Time



Zone 1 Defrost

AT : Ambition Temperature

- If AT < 22 °C and AT > 28 °C

Fix the defrost cycle to 18 hours (running + stopping)

- If 22 °C <= AT <= 28 °C

If door is not opened ;

First defrost cycle time will be fixed to 20 hours.
Second defrost cycle time will be fixed to 26 hours.
Third and following defrost cycle times will be fixed to 55 hours.

If door is opened at first defrost cycle ;

Complete the defrost cycle time to 20 hours and next defrost cycle time will start from 20 hours again (from the beginning).

If door is opened at second or following defrost cycle time, two case can be happen ;

If door opened **BEFORE** 20 hours in this cycle;
Complete the defrost cycle time to 20 hours and next defrost cycle time will start from 20 hours again (from the beginning).
If door opened **AFTER** 20 hours in this cycle;
Immediately start defrost and next defrost cycle time will start from 20 hours again (from the beginning).

NORMAL DEFROST FUNCTION

Calculating Defrost Starting Time

Zone 3 Defrost

During off cycle defrost, if Zone3 temperature reaches high offset (calling for cooling) before Zone3 evaporator temperature rises to 3°C, no power will be supplied the compressor. However, the Zone3 evaporator fan will switch “ON”. If the Zone3 evaporator temperature reaches 3°C, normal cooling functions begin.

Zone 4 Defrost

During off cycle defrost, if Zone4 temperature reaches high offset (calling for cooling) before Zone4 evaporator temperature rises to 3°C, no power will be supplied the compressor. However, the Zone4 evaporator fan will switch “ON”. If the Zone4 evaporator temperature reaches 3°C, normal cooling functions begin.

SERVICE MODE

For entering the service menu of the refrigerator while the holding down key on display  any door and drawer is opened and closed three times.

The order will be service sub-menu with the following functions:
1-Error Log
2-Starting Program
3-Manual Defrost
4-Valve Test
5-Temperatures
6-ID Reviewer
For moving and selecting in the function list , keys on the display are used.

1-Error Log

This option selects, which formed the fridge with all ERRORS be able to see the date and time of occurrence. Error codes will be in the following order;

ERRORS : E01,E02 E11,E12,E13,E14,E15,E16,E17 E31,E32,E33,E34 E41,E42,E43,E44 E50
The codes explained user and service mode error messages section.

To exit this sub-menu,  key must be pressed.

2-Starting Program

This option selects, these loads will become active for a period of 5 seconds, respectively. The load as the number of active will write on Service mode screen , near the manual diagnostic option.

1-Freezer Compresor
2-Freezer Condanser Fan
3-Freezer Evaporator Fan
4-Refrigerator Compressor
5-Refrigerator Condanser Fan
6-Fridge Zone Evaporator Fan
7-Vegetable Zone Evaporator Fan
8-Defrost Heater
9-Hotgas Heater
10-Tray Heater
11-Pipe Heater
12-Glassdoor Heater
13-Ice Maker

3-Manual Defrost

If this option selects , Refrigerator Zone1 will begin defrost process and this process will continue until evap temperature reaches 13°C.
Manual Freezer Defrost “ON”.
Switching to the other option , Defrost process will terminate.

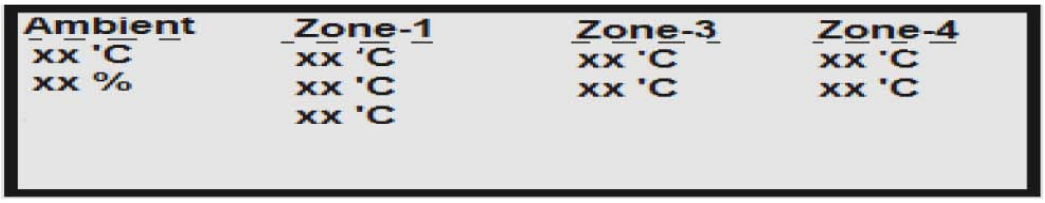
4-Valve Test

If this option selects, Valve Fridge zone will set firstly. The next selection button is pressed, valve vegetable zone will set.

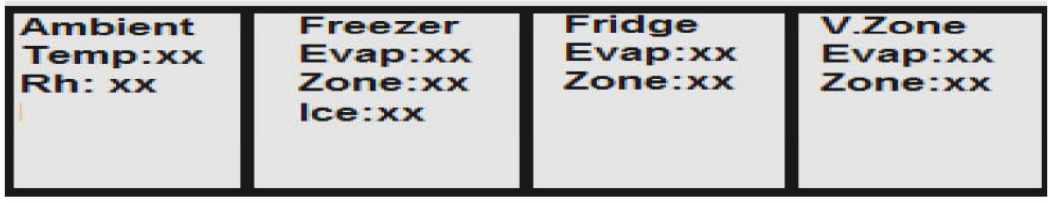
Whichever option you ,Refrigerant valve will set that gas flow will allow to selected partition. Refrigerator compressor will start for operation and then 5 minutes the compressor shuts down and valve test will end.

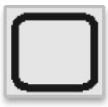
5-Temperatures

If this option selects, it will show measured values of sensors in the refrigerator, the status of the fans and compressor on the screen.Status Monitor screen will be as follows.



Status information from the sensors that monitor screen which temperatures are as follows.



To exit this sub-menu,  key must be pressed.

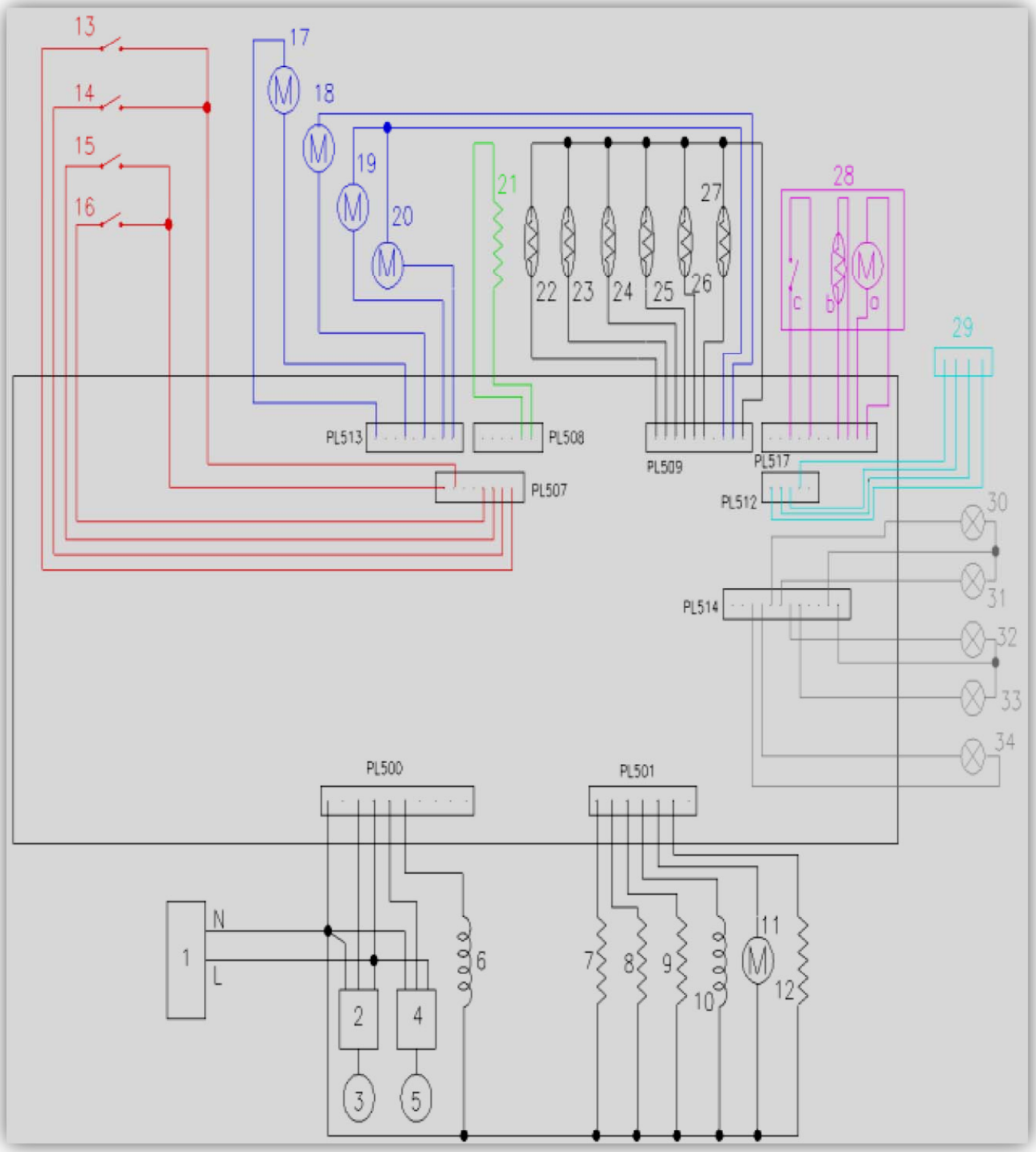
6-ID Rewiewer

If this option selects, The following information will be displayed on the display ;

- Main Board Software Version Number : standart software ver no
- Display Software Version Number : standart software ver no

To exit this sub-menu,  key must be pressed.

THE ELECTRIC SCHEME



THE ELECTRIC SCHEME

Component Number	Component Description
1	Power Cord Connector
2	Freezer VCC Box
3	Freezer Compressor
4	Cooler VCC Box
5	Cooler Compressor
6	Water Valve
7	Defrost Heater
8	Tray Heater
9	Refrigerant Valve
10	Pipe Heater
11	Zone 1Evaporator Fan
12	Hot Gas Heater
13	Zone 3 Reed Switch
14	Zone 4 Reed Switch
15	Zone 1Reed Switch
16	Zone 1Drawer Reed Switch
17	Cooler Condenser Fan
18	Freezer Condenser Fan
19	Zone 4 Evaporator Fan
20	Zone 3 Evaporator Fan
21	Glass Door Heater
22	Zone 1Ambient Temperature Sensor
23	Zone 1Evaporator Temperature Sensor
24	Zone 3 Ambient Temperature Sensor
25	Zone 3 Evaporator Temperature Sensor
26	Zone 4 Ambient Temperature Sensor
27	Zone 4 Evaporator Temperature Sensor
28	Icemaker
28-a	icemaker Motor
28-b	Icemaker Temperature Sensor
28-c	icemaker Level Switch
29	Humidity Sensor Module
30	Zone 1Drawer Led
31	Zone 1Led
32	Zone 3 Led
33	Zone 4 Led
34	Corona Light Led

USER AND SERVICE MODE ERROR MESSAGES

Error Codes

E01 : Temperature Module of Humidity Sensor Damaged or Short Circuit Condition
E02 : Humidity Module of Humidity Sensor Damaged or Short Circuit Condition

Zone1:
E11 : Zone1 Ambient Temperature Damaged or Short Circuit Condition
E12 : Zone1 Defrost Sensor Damaged or Short Circuit Condition
E13 : Freezer Cooling System Failure Condition
E14 : Freezer Insufficient Cooling Condition
E15 : Defrost Heater Damaged Condition
E16 : Ice Maker Sensor Damaged or Short Circuit Condition
E17 : Water Valve , Pipe Heater or Water Hose Freeze Failure

Zone3:
E31 : Zone3 Ambient Temperature Damaged or Short Circuit Condition
E32 : Zone3 Evaporator Temperature Damaged or Short Circuit Condition
E33 : Zone3 Cooling System Failure Condition
E34 : Zone3 Insufficient Cooling

Zone4:
E41 : Zone4 Ambient Temperature Damaged or Short Circuit Condition
E42 : Zone4 Evaporator Temperature Damaged or Short Circuit Condition
E43 : Zone4 Cooling System Failure Condition
E44 : Zone4 Insufficient Cooling

E50 : Low Voltage Warning

SERVİCE MODE

Low Voltage Function ;

If Power supply < 160 V at 5 seconds ;

" E50 ERROR! CALL SERVICE! " description of the display will be shown.
All electrical component will be OFF;

- Freezer Compressor: "OFF"
- Freezer Condenser Fan: "OFF"
- Zone1 Evaporator Fan : "OFF"
- Refrigerator Compressor: "OFF"
- Refrigerator Condenser Fan: "OFF"
- Zone3 Evaporator Fan: "OFF"
- Zone4 Evaporator Fan: "OFF"
- Defrost Heater: "OFF"
- Hotgas Heater: "OFF"
- Glassdoor Heater : "OFF"
- Tray Heater: "OFF"
- Pipe Heater: "OFF"
- Ice Maker: "OFF"

If Power supply > 160 V after 5 minutes respectively ;

The product will be checked whether it is in defrost before the low power supply.
If the product is in defrost before the power supply, the defrost will start again and after the defrost,standard cooling algorithm will be commissioned. If the product is not in defrost before the power supply standard cooling algorithm will be commissioned.

Temperature Module of Humidity Sensor Damaged or Short Circuit Condition

" E01 ERROR! CALL SERVICE! " will be shown at display.
Ambient Temperature NTC = 32°C and %50 Rh be fixed.
If the fault will be corrected standard cooling algorithm will be commissioned.

Humidity Module of Humidity Sensor Damaged or Short Circuit Condition

" E02 ERROR! CALL SERVICE! " will be shown at display.
Ambient Temperature NTC = 32°C and %50 Rh be fixed.
If the fault will be corrected standard cooling algorithm will be commissioned.

Zone1 Ambient Temperature Sensor Damaged or Short Circuit Condition

" E11 ERROR! CALL SERVICE! " will be shown at display.
Freezer Compressor to be work "ON" 90 minutes and "OFF" 20 minutes.
If the fault will be corrected standard cooling algorithm will be commissioned.

Zone3 Ambient Temperature Sensor Damaged or Short Circuit Condition

" E31 ERROR! CALL SERVICE! " will be shown at display.
While refrigerant valve is on outlet-1 ; Refrigerator compressor will not be worked by Zone3 ambient sensor , will be worked by Zone3 evaporator sensor.
Zone3 evaporator fan will be worked simultaneously with refrigerator compressor.
If Zone3 evaporator temperature sensor reaches -9°C, the refrigerator compressor is "OFF".
If Zone3 evaporator temperature sensor reaches +3°C, the refrigerator compressor is "ON".
If the fault will be corrected standard cooling algorithm will be commissioned.

Zone4 Ambient Temperature Sensor Damaged or Short Circuit Condition

“ E41 ERROR! CALL SERVICE! “ will be shown at display.
While refrigerant valve is on outlet-2 ;
Refrigerator compressor will not be worked by Zone4 ambient sensor, will be worked by Zone4 evaporator sensor.
Zone4 Evaporator fan will be worked simultaneously with refrigerator compressor.
If Zone4 Evaporator temperature sensor reaches -9°C, the refrigerator compressor is “OFF”.
If Zone4 Evaporator temperature sensor reaches +3°C, the refrigerator compressor is “ON”.
If the fault will be corrected standard cooling algorithm will be commissioned.

Zone3 Evap Temperature Sensor Damaged or Short Circuit Condition

“ E32 ERROR! CALL SERVICE! “ will be shown at display.
Zone3 Evaporator fan is always be “ON”.
Refrigerator compressor will continue to operate between low-high offset by Zone3 ambient sensor temperature.
If the fault will be corrected standard cooling algorithm will be commissioned.

Zone4 Evap Temperature Sensor Damaged or Short Circuit Condition

“ E42 ERROR! CALL SERVICE! “ will be shown at display.
Zone4 Evaporator fan is always be “ON”.
Refrigerator compressor will continue to operate between low-high offset by Zone4 ambient temperature.
If the fault will be corrected standard cooling algorithm will be commissioned.

Zone3 Ambient Temperature Sensor ve Zone3 Evap Temperature Sensor Damaged or Short Circuit Condition At The Same Time

" E32 ERROR! CALL SERVICE! " will be shown at display.
Zone3 Evaporator fan is always be "ON".
Refrigerator compressor will be worked "ON" 15 minutes and "OFF" 60 minutes.
If the fault will be corrected standard cooling algorithm will be commissioned.

Zone4 Ambient Temperature Sensor ve Zone4 Evap Temperature Sensor Damaged or Short Circuit Condition At The Same Time

" E42 ERROR! CALL SERVICE! " will be shown at display.
Zone4 Evaporator fan is always be "ON".
Refrigerator compressor will be worked "ON" 15 minutes and "OFF" 60 minutes.
If the fault will be corrected standard cooling algorithm will be commissioned.

Zone1 Defrost Sensor Damaged or Short Circuit Condition

" E12 ERROR! CALL SERVICE! " will be shown at display.
Defrost Heater works for 20 minutes at defrost periods and then shut down.
If the fault will be corrected standard cooling algorithm will be commissioned.

Freezer Cooling System Failure Condition

Note: Obstruction of capillary, gas leaks, insufficient gas or compressor failure will result from shows the error.

" E13 ERROR! CALL SERVICE! " will be shown at display.
If Evaporator sensor temperature < -8°C , E13 error code will be deleted at display.

- Measure the temperature value in the freezer compartment. If it is colder than -8°C, sensor might be failed. You need to change sensor.
- If insufficient cooling in compartment (temperature is hotter than -8 °C), should check whether freezer compressor (when opened the cover, it is located on left side) is working properly. If it is not operating, please control inverter socket-connections also electricity.
- Although compressor is work working properly, we think of gas leakage possibility if there is no cooling. You should check whole cooling system; pipes, evaporator, capillary tube, hot gas pipe, condenser unit, especially welding points are potential location. To find leakage points if there is, you are able to use electronic gas detector or gas leak detector spray.

Freezer Insufficient Cooling Condition

Alert will be disabled in the following cases because of the avoid false alarms;

- During the first 6 hours after the product was firstly connected.
- During the defrost period.
- During the first 3 hours after a defrost.
- During the first 3 hours that Zone1 door and drawers were opened.

If Zone1 ambient temperature sensor > -5°C (except above cases);
" E14 ERROR! CALL SERVICE! " will be shown at display.
If Zone1 ambient temperature sensor < -5°C , E14 error code will be deleted at display.

Defrost Heater Damaged Condition

" E15 ERROR! CALL SERVICE! " will be shown at display.

Zone3 Cooling System Failure Condition

Note: Obstruction of capillary , gas leaks, insufficient gas or compressor failure will result from shows the error.

" E33 ERROR! CALL SERVICE! " will be shown at display.

Zone4 Cooling System Failure Condition

Note: Obstruction of capillary , gas leaks, insufficient gas or compressor failure will result from shows the error.

" E43 ERROR! CALL SERVICE! " will be shown at display.

If Vegetable zone was setted as crisper mode, on vegetable zone surface due to high humidity may be occur condensation.

Zone3 Insufficient Cooling

Alarm will be disabled in the following cases because of the avoid false alarms;

- During the first 3 hours after the product was firstly connected.
- During the first 3 hours that the Zone3 door was opened.
- During the first 3 hours that Zone3 compartment was setted “OFF” to “ON”.
- During the first 3 hours that after exiting the service menu.

If Zone3 ambient sensor temperature > 25°C (except above cases);

“ E34 ERROR! CALL SERVICE! “ will be shown at display.

Zone4 Insufficient Cooling

Alarm will be disabled in the following cases because of the avoid false alarms;

- During the first 3 hours after the product was firstly connected.
- During the first 3 hours that Zone4 drawer was opened.
- During the first 3 hours that Zone4 compartment was setted “OFF” to “ON”.
- During the first 3 hours that after exiting the service menu.

If Zone4 ambient sensor temperature > 25°C (except above cases);

“ E44 ERROR! CALL SERVICE! “ will be shown at display.

Ice Maker Sensor Damaged or Short Circuit Condition

“ E44 ERROR! CALL SERVICE! “ will be shown at display.

Water Valve , Pipe Heater or Water Pipe Freeze Failure

“ E17 ERROR! CALL SERVICE! “ will be shown at display.

COMPONENT REMOVAL

REPLACEMENT OF KICKPLATE

The kickplate is located on the bottom of unit, between the base assemblies.

1-To remove the kickplate, start from the right side an gently release the holder tab , then again gently release the middle tab . (Fig.1-2)

Fig.1

Fig.2

2- Finally gently release the left tab and to remove the kickplate pull it towards to yourself. (Fig.3)

Fig.3

3- After removing the kickplate , check the plastic holders . If they are damaged replace them with the new ones.

4-Start mounting the kickplate from the left side and make sure the tabs on the kickplate are matching with the holders .

REPLACEMENT OF DOORS

1.Before the remove to upper doors , you must be open the drawer and the door must be hold in while the screwing from hinge cover. Open the door (about 90) and unscrew the screws from the hinge covers . (Fig.1-2)

Fig.1

Fig.2

2.Then fixing the top hinge and remove it. (Fig.3-4)

Fig.3

Fig.4

3. Because of the disconnect the socket connections , you have to be replace the mainboard cover

Fig.5

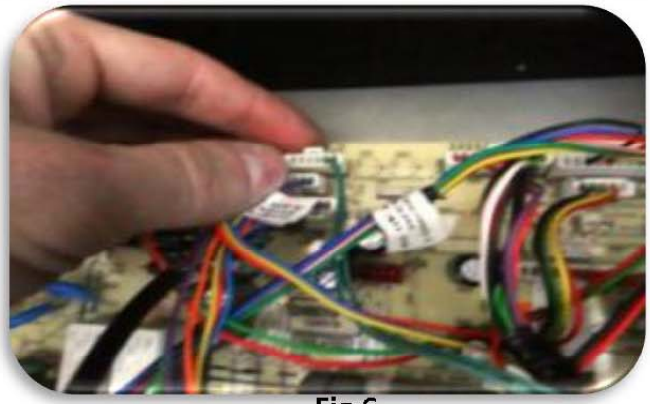


Fig.6

REPLACEMENT OF DOORS

4. Disconnect the door resistance cable (the green one) from the mainboard and take off the cable into the hinge .(Fig.7-8)

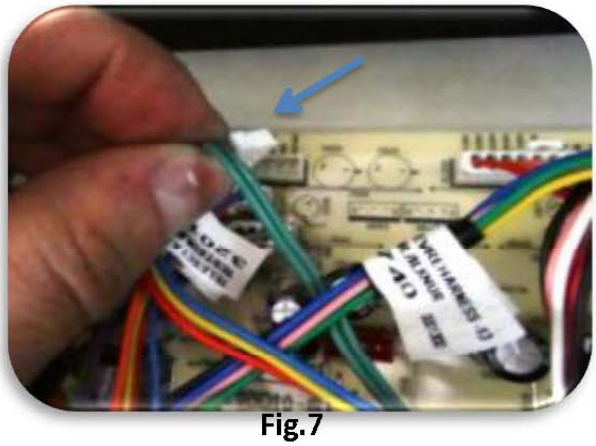


Fig.7

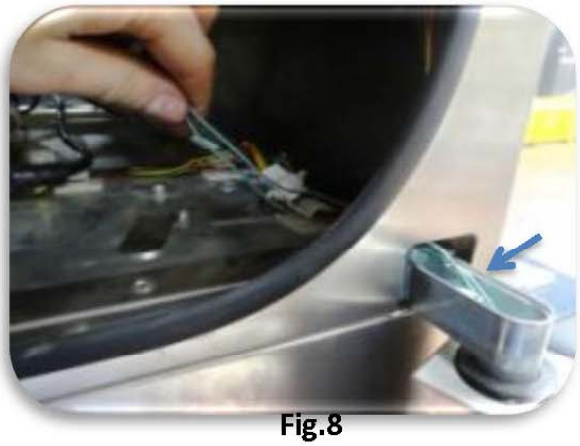


Fig.8

5. Remove the refrigerators doors by lifting them up. (Fig.9)

Fig.9

Note 1 : To Re-assembly the doors basically repeat the previous steps backwards.
Note 2 : After installing the upper doors , carefully connect the sockets around hinge area.

Important Note : For replace to Freezer upper door , the same steps to be applied respectively.

REPLACEMENT OF MAINBOARD

Warning : Make sure the Unit is unplugged !

The main control board is located on top of the unit, behind the chassis cover and is covered by a control cover.

1-Remove the Installation & User guide which was mounted over the mainboard cover. (Fig.1-2)

Fig.1

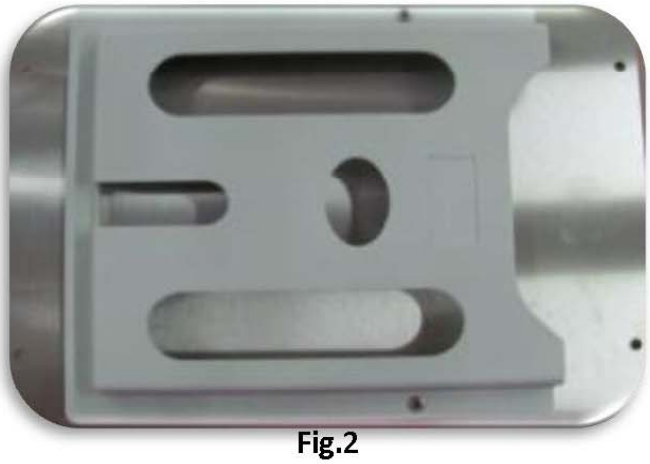


Fig.2

2-Remove the four screws that secure the mainboard cover and remove the cover. (Fig.3-4)

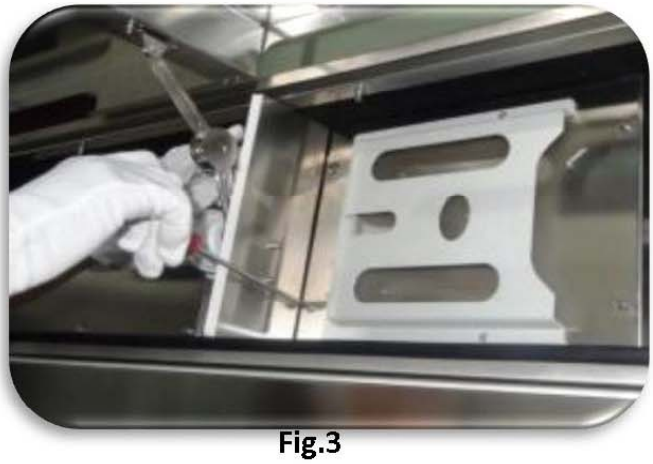


Fig.3

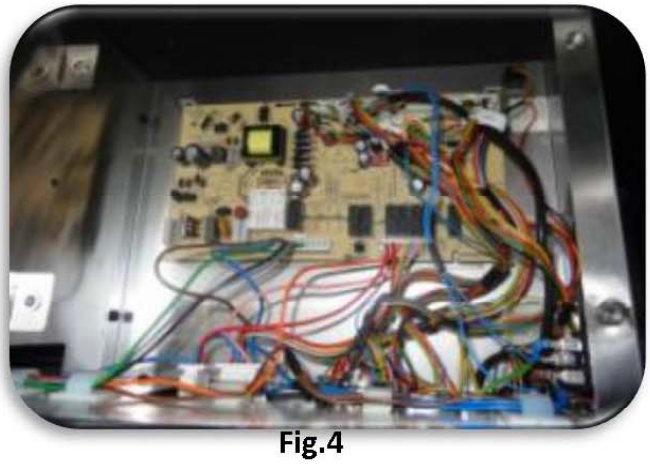


Fig.4

REPLACEMENT OF MAINBOARD

3-Remove the connection sockets carefully and remove the mainboard. (Fig.5)

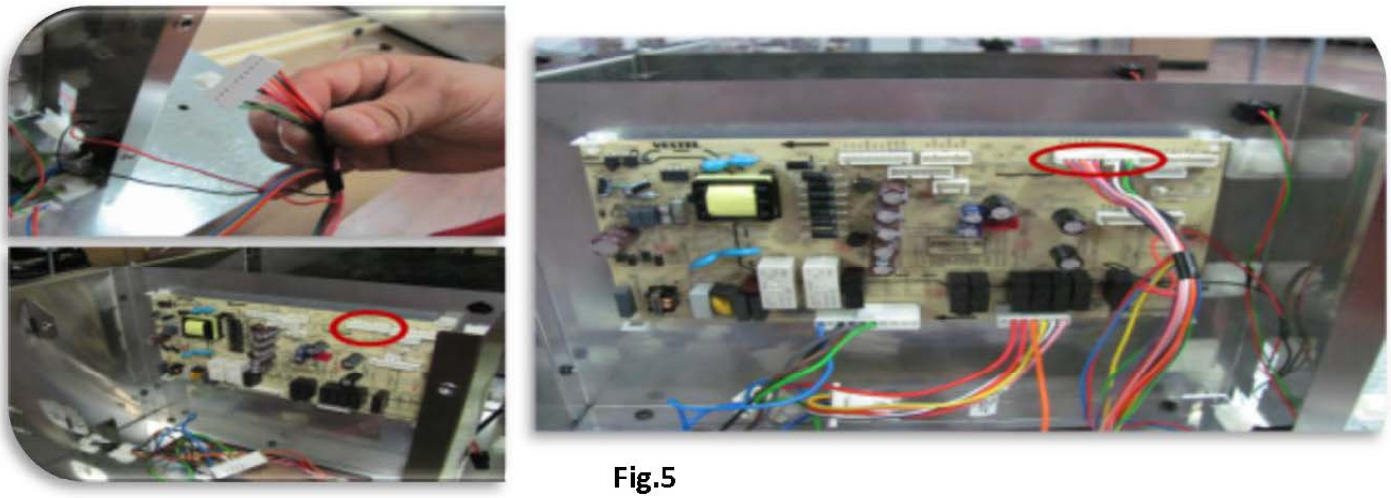


Fig.5

4- After the remove the mainboard ,For picking up connect the sockets. Tidy up the cables, place the cover and fix the screws. (Fig. 6-7)

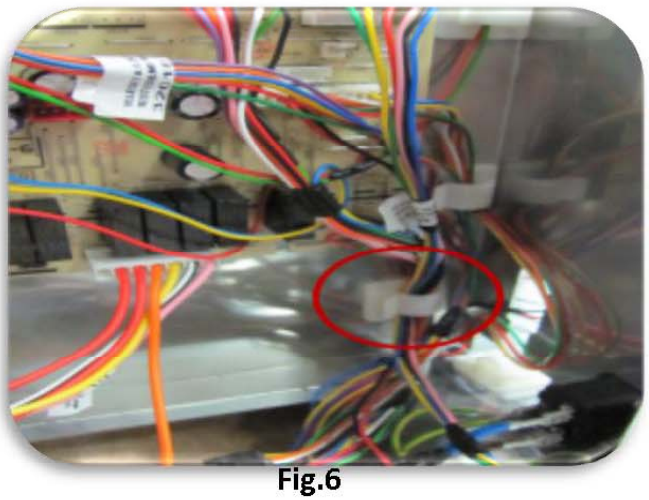


Fig.6

Fig.7

Note 1 : All sockets are different on the mainboard. They are not interchangeable.
Note 2 : Components description are showned the Electric Scheme part.

REPLACEMENT OF DRAWERS

To remove a drawer assembly :

1- Open drawer until the slides are fully extended

Fig.1

2- To lift sides from nails of drawer up, then continue pulling drawer towards yourself.

Fig.2

Note : For all drawers , the same steps to be applied respectively.

3- To remove a drawer closer assembly extract screws that secure the drawer closer to side wall.

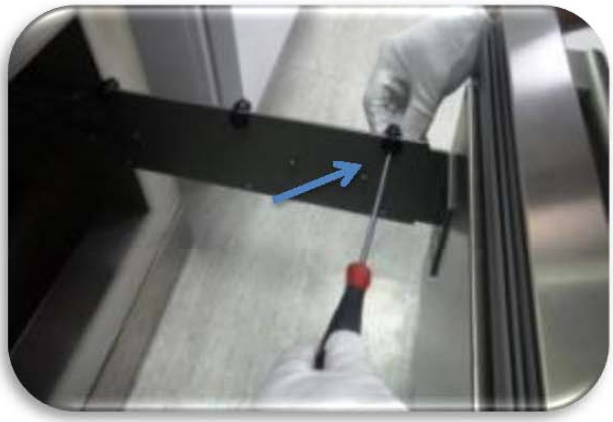


Fig.3

Fig.4

Drawer closer assemblies are located at the front right side wall of the drawer compartments, Screws secure each drawer closer to the wall.

REPLACEMENT OF DISPLAY CARD

The Display Panel is located on the top front of the fridge compartment.Display cover seem to be lifted the chassis cover.

1-Display card assembly with the velcro band to display cover. Remove the display cover from the velcro band.

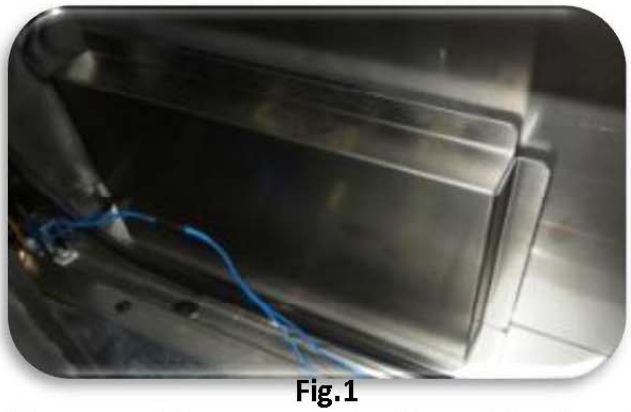


Fig.1

Fig.2

2-Disconnect the communication cables from the left rear side of the control panel.

Fig.3

Fig.4

3-Unscrew on the display card and take off the display card carefully . For assembly, basically repeat the previous steps backwards.Then check the velcro band durability

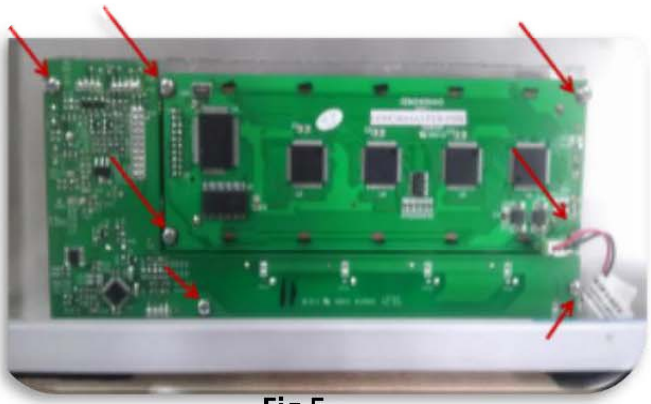


Fig.5

Fig.6

REPLACEMENT OF DOOR/DRAWER HANDLE

The removal then slides over a threaded door nail that is attached to the door shell. A socket head set-screw inserted through the removal secures the stand off to the door nail.

1-To remove the door handle , Use a 2" Allen-wrench to unfasten the set-screw in each handle removal.

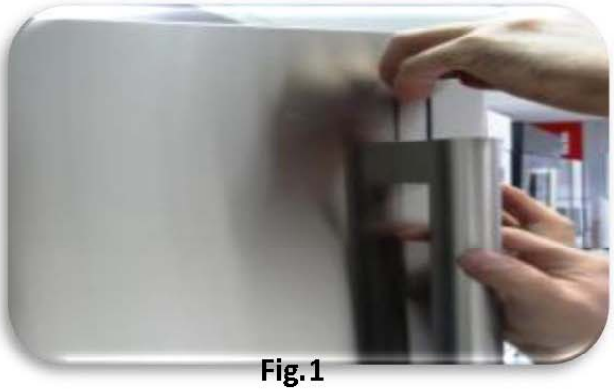


Fig.1

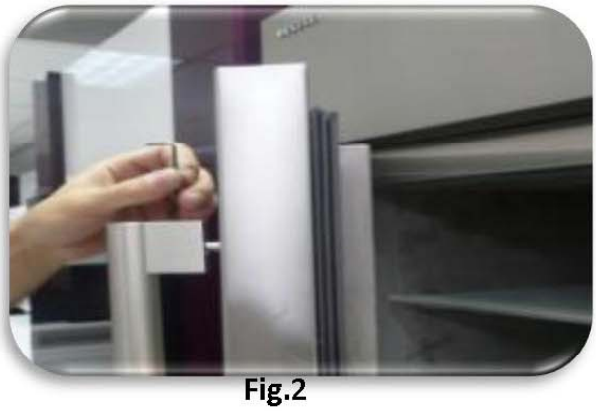


Fig.2

2- Threaded studs pull the lever assembly.

Fig.3

Fig.4

3- To remove the drawer handle , Use a 2" Allen-wrench to unfasten the set-screw in each handle removal again.

Fig.5

Fig.6

Exterior Cosmetic and Mechanical Components

Door Gasket Removal

A dart at the back of the door gasket fit into channels built into the door and drawer liners.

NOTE: To remove a door gasket, pull the gasket dart from the channel in the door.

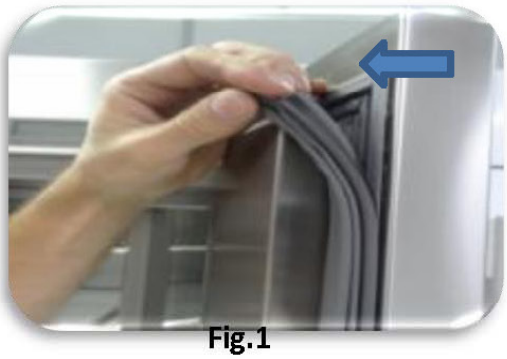


Fig.1

Refrigerator Slide Bin Removal

Slide bins fit into tracks under either side of any of the refrigerator shelves.To remove a slide bin, pull it forward, out of the tracks.

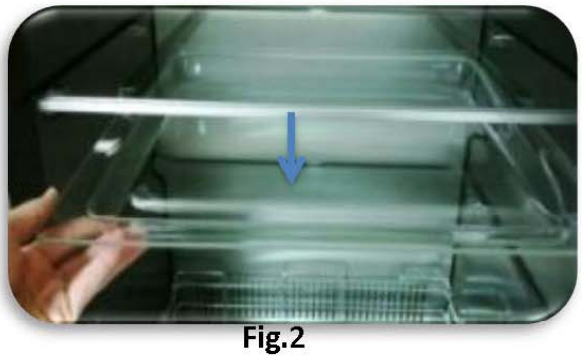


Fig.2

Refrigerator Shelf Removal

To adjust remove a refrigerator shelf, lift up at front slightly, then lift back up and out of shelf ladders.

Fig.3

Upper Refrigerator Light Diffuser Removal

The refrigerator light diffuser is located at the top of the compartment. The light diffuser is held in place by piston ring fitting over pegs protruding from the side walls.

To remove the light diffuser, push diffuser toward rear of unit to get away piston ring from the pegs in the side wall, then lower the diffuser down and pull from the compartment.Then take off the cable socket.

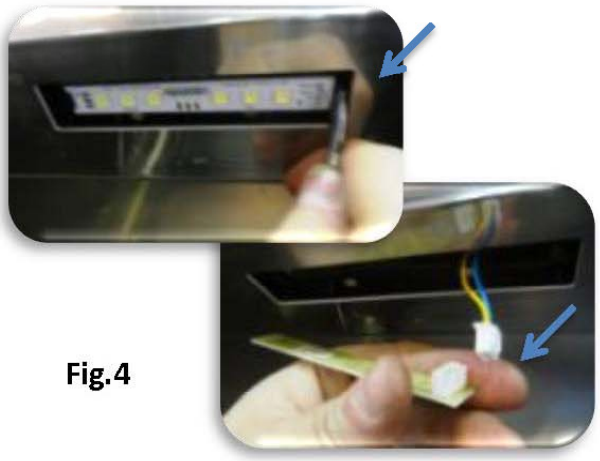


Fig.4

Exterior Cosmetic and Mechanical Components

Chassis Cover Assembly Removal

The chassis cover assembly is located at top front of the unit.

The chassis cover can be lifted up to provide access to the technician display and sealed system components.

To remove the cover assembly :

1. Lift cover section of chassis cover assembly up.
2. Disconnect communication cable from behind the technician display cover, and remove any cable link.
3. Extract the bolts holding the chassis cover to the top of the refrigerator.
4. Clippers loosen half a turn.(Fig.5)

Fig.5

Humidity Sensor Removal

To remove a humidity sensor:

1. Remove the chassis cover.
2. Disconnect the communication cables from display being removed.(Fig.6)

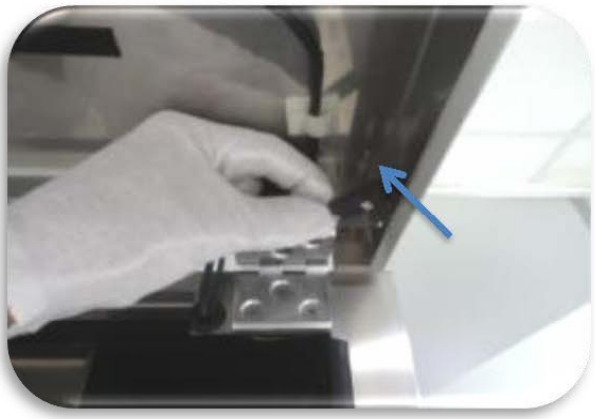


Fig.6

Unit Shroud Removal

The unit shroud houses the sealed system and technician display.

For removing the unit shroud :

1. Extract screws along left side and rear flange of unit shroud.
2. Extract screws from top of unit shroud, above mechanic area.(Fig.7)
3. Lift shroud from top of unit.

Fig.7

Exterior Cosmetic and Mechanical Components

Upper Refrigerator (Zone 3) Evaporator Cover Removal

The bottom of the evaporator cover is secured by slots in the side flanges that fit over pegs at the bottom of each shelf ladder. The top is secured by screws holding it to the evaporator fan shroud.

To remove an evaporator cover, the light diffuser must be removed first, then :

1. Extract nails from top of evaporator cover.(Fig.8)
2. Tilt cover forward and lift off of locating pegs.

Fig.8

Upper Refrigerator (Zone 3) Evaporator Fan Removal

The fan assembly is secured to the shroud with screws.

To remove an evaporator fan assembly, the light diffuser, evaporator cover and fan shroud must be removed first, then extract the fan assembly mounting screws from the shroud and pull the fan from the shroud.

1. Extract mounting screws along front flange and middle sides of shroud.(Fig.9)
2. Disconnect wire links.

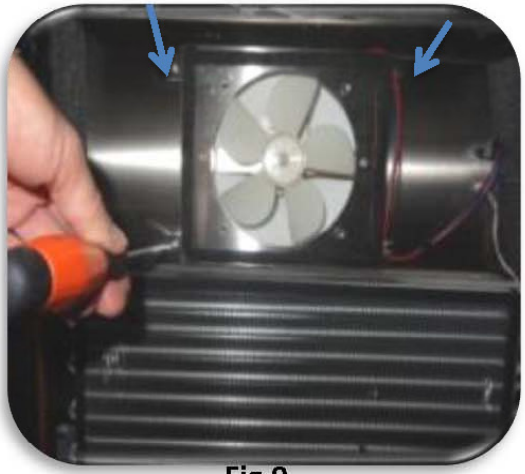


Fig.9

Upper Refrigerator (Zone 3) Compartment Thermistor

The upper refrigerator compartment thermistor is located behind the evaporator cover, and attached to the rear wall with a screw.

To remove the compartment thermistor, the light diffuser and evaporator cover must be removed first, then :

1. Extract thermistor mounting screw.(Fig.10)
2. Cut thermistor's wire leads from the back wall, then pull thermistor from compartment.

Fig.10

Exterior Cosmetic and Mechanical Components

Upper Refrigerator (Zone 3) Evaporator Thermistor

The upper refrigerator evaporator thermistor is inserted into the third opening from the top in the evaporator fins left side, and extending approximately to the center of the evaporator.

To remove the evaporator thermistor, the light diffuser and evaporator cover must be removed first, then :

1. Pull thermistor from evaporator fins.(Fig.11)
2. Cut thermistor's cables from the center of evap fins, then pull thermistor from compartment.

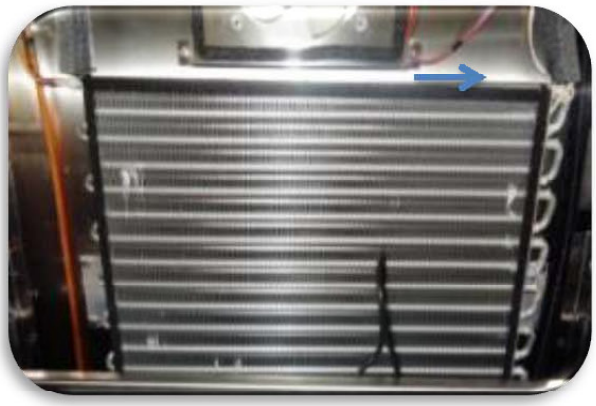


Fig.11

Lower Refrigerator (Zone 4) Evaporator Cover Assembly

The lower refrigerator evaporator cover assembly includes the evaporator fan assembly, and is attached to the back wall with screws.

To remove the evaporator cover assembly, the left drawer slide assemblies and fan shroud must be removed first, then :

1. Extract evaporator cover mounting screws.
2. Work the compartment thermistor wires through the key-hole slot in the left side of the evaporator cover.
3. Verge on evaporator cover assembly forward and disconnect evaporator fan cables, then pull assembly from the compartment.(Fig.12)

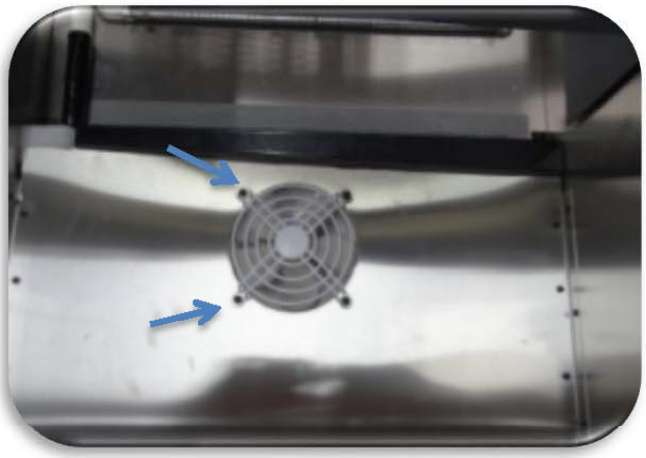


Fig.12

Exterior Cosmetic and Mechanical Components

Lower Refrigerator (Zone 4) Evaporator Fan Assembly

The lower refrigerator evaporator fan assembly is attached to the evaporator cover with screws.
To remove the evaporator fan assembly, the left drawer slide assemblies, fan shroud and evaporator cover assembly must be removed first, then extract evaporator fan assembly mounting screws and pull fan assembly from evaporator cover.(Fig.13)

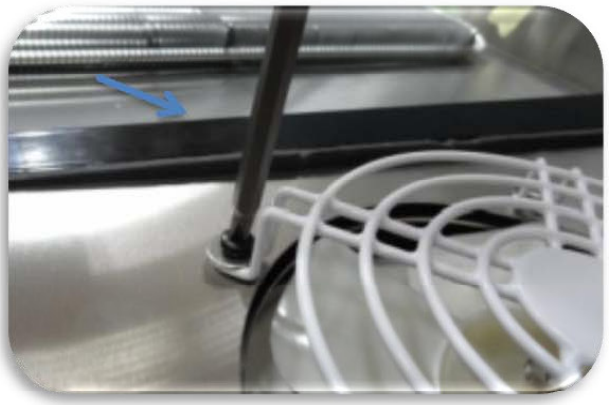


Fig.13

Lower Refrigerator (Zone 4) Compartment Thermistor

The lower refrigerator compartment thermistor is attached to the nearly center of the evaporator fins.
To remove the compartment thermistor, the left drawer slide assemblies, fan shroud and evaporator cover assembly must be removed first, then
1. Extract screws and clamps holding the evaporator.
2. Cut thermistor's cables from the center of evap fins, then pull thermistor from compartment.(Fig.14)

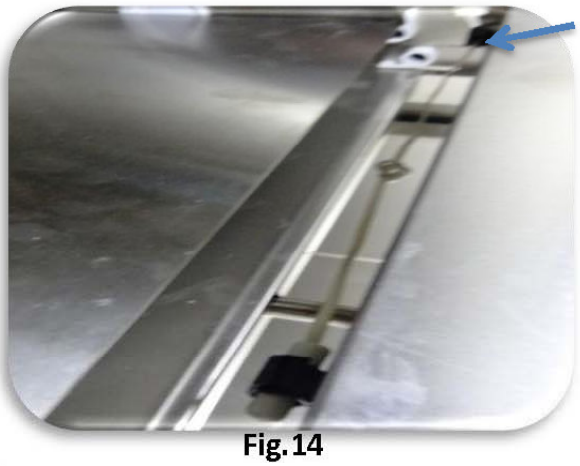


Fig.14

Lower Refrigerator (Zone 4) Evaporator Thermistor

The lower refrigerator evaporator thermistor is inserted into the third opening from the top in the evaporator fins left side, and extending nearly to the center of the evaporator.
To remove a evaporator thermistor, the left drawer slide assemblies, fan shroud and evaporator cover assembly must be removed first, then
1. Pull thermistor from evaporator fins.
2. Cut thermistor's cables from the back wall, then pull thermistor from compartment.(Fig.15)

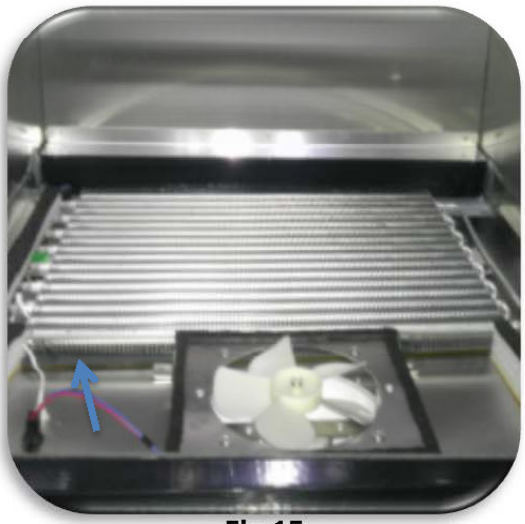


Fig.15

Freezer Interior Cosmetic and Mechanical Components

Freezer Shelf Removal

To remove a freezer shelf, lift up at front slightly, then lift back up and out of shelf ladders.(Fig.1)

Fig.1

Upper Freezer Light Assembly Removal (Reedcase)

To remove the upper freezer light assembly :

1. Remove by turning each end of the assembly.
2. Lower the light assembly down, and disconnect the wire leads.
3. Now, push the communication cable eyelet from the hole at the left end and remove the communication cables from the hole.(Fig.2)

Fig.2

Upper Freezer Evaporator Cover

The bottom of the upper freezer duct is secured by slots in the side flanges that fit over pegs at the bottom of each shelf ladder. The top is secured by nails holding it to the back wall.(Fig.3)

To remove the upper freezer cover, the light diffuser must be removed first, then :

1. Extract nails from top of cover.
2. Tilt cover forward and lift off of locating pegs.

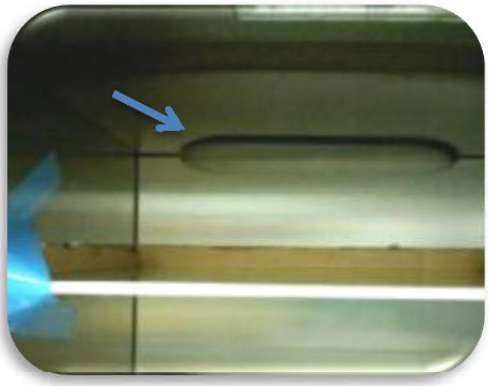


Fig.3

Freezer Bottom Shelf Assembly Removal

At the bottom of the upper freezer compartment is a shelf separating the top compartment from the drawer compartments.(Fig.4)

To remove the shelf, lift the front up, then lift the back off of the locating pegs in the rear side walls of the compartment.

Fig.4

Freezer Interior Cosmetic and Mechanical Components

Freezer (Zone 1) Compartment Thermistor Removal

The freezer thermistor is located behind the upper duct/cover and attached to the back wall with a screw and tube clamp.

To remove the freezer thermistor, the light diffuser and upper duct/cover must be removed, then:

1. Extract screw and clamp holding thermistor to back wall.
2. Cut thermistor's cables from the back wall,then pull thermistor from compartment.(Fig.5)

Fig.5

Ice Bucket Removal

The ice bucket sits in the bottom freezer drawer.

To remove the ice bucket, open bottom freezer drawer and lift bucket out of drawer. (Fig.6)

NOTE: When reinstalling the ice bucket, make sure its rear flange is not sitting up on the back edge of the drawer. If this happens, the ice level arm will be held in the up position, stopping ice production.

Fig.6

Drawer Light and Socket Removal (Reedcase)

The drawer lights are located at the top front of each drawer compartment.

To remove the drawer light or replace the light socket, the drawer assembly must first be removed, then

1. Extract nails from light socket mounting bracket.
2. Disconnect cables from light socket.

(Fig.7)

Fig.7

Freezer Interior Cosmetic and Mechanical Components

Freezer Evaporator Fan Assembly Removal

The freezer evaporator fan assembly is located behind the freezer upper and lower evap fan shrouds.They are mounted in front of the evaporator fan assembly with screws. (Fig.8)

To remove the freezer evaporator fan assembly, the freezer bottom shelf and both fan shrouds must be removed first, then :

1. Disconnect cables from fan assembly.
2. Extract fan assembly mounting screws.
3. Lift assembly from the compartment.

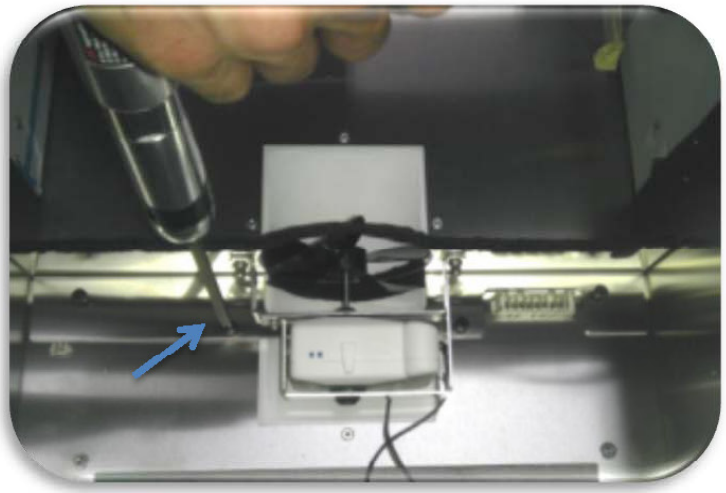


Fig.8

Icemaker Assembly Removal

The icemaker is located behind the bottom freezer drawer, mounted on a plate that is attached to the back wall.To remove ice maker the freezer drawers must be removed first, then:

1. Extract icemaker mounting screws from below and above ice maker.
2. Pull ice maker forward and disconnect icemaker electrical cables.
3. Pull ice maker forward, out of the compartment (Fig.9)

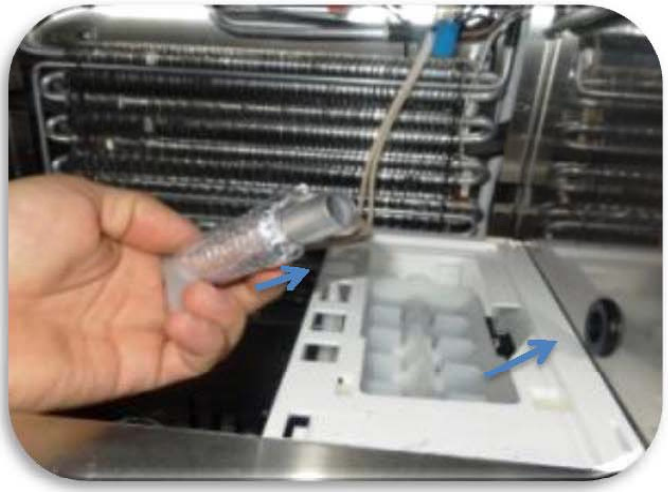


Fig.9

Compressor Area Mechanical Components

Freezer Evaporator Thermistor Removal

The freezer evaporator thermistor is inserted into the third opening from the top in the evaporator fins left side, and extending approximately to the center of the evaporator.To remove the evaporator thermistor :

1. Pull thermistor from evaporator fins.
2. Cut thermistor's cables from the back wall, then pull thermistor from compartment.(Fig.10)

Fig.10

Freezer Defrost Terminator Removal

The freezer defrost terminator sits on the tubing at the upper left hand side of the evaporator. To remove the defrost terminator :

1. Disconnect the terminator clip from the evaporator tubing.
2. Cut the cable ties at the back wall.
3. Disconnect terminator electrical cables, then pull the terminator from the freezer compartment.(Fig.10)

Freezer Defrost Heater Removal

The freezer defrost heater is located under the freezer evaporator, and is held in place by a heater bracket that is screwed to the back wall.

To remove the freezer defrost heater :

1. Cut heater electrical cables at wiring crossroad points.
2. Extract heater bracket mounting screws.
3. Lift defrost heater from freezer compartment.

(Fig.11)

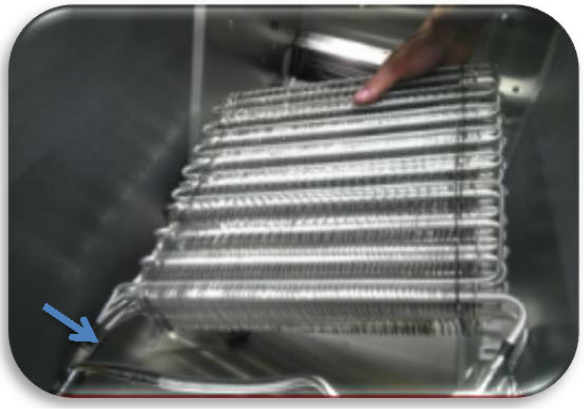


Fig.11

Freezer Drain Trough Heater Removal

The drain trough heater is located at the bottom rear of the freezer compartment, behind the lower freezer evaporator cover assembly.(Fig.12)

To remove the drain trough heater, access the drain trough heater the freezer drawers and the icemaker assembly must be removed first, then:

1. Cut the heater cables at their crossroad points.
2. Extract heater bracket mounting screws.
3. Lift drain trough heater from the freezer compartment.

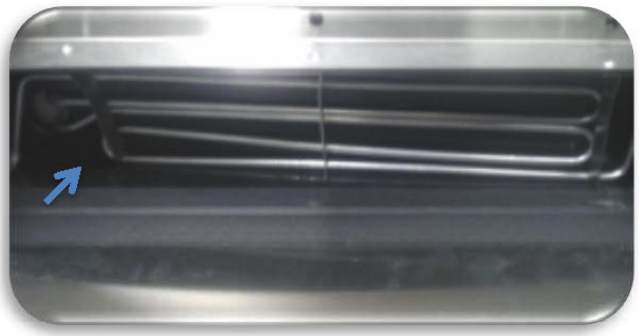


Fig.12

Compressor Area Mechanical Components

Water Valve Removal

The water valve is attached to the back side of the water valve bracket, located behind the grille assembly.

NOTE: Before continuing, disconnect or switch off water supply.

To remove the water valve :

1. Lift section of chassis cover assembly up.
2. Extract valve bracket mounting screws from top of appliance, then rotate bracket to expose the water valve.
3. Disconnect cables from valve.
4. Disconnect water lines from valve.
5. Extract water valve mounting screws from valve bracket.(Fig.13)

Fig.13

Condenser Fan Removal

The condenser fan is mounted to the condenser fan shroud with three fan brackets that hook into eyelet holes in the fan shroud. Screws passing through these brackets secure the fan motor to the brackets. To remove the condenser fan:

1. Disconnect cables from fan motor.
2. Extract screws securing motor to brackets.
3. To remove fan blade from fan motor:

- Grab blade and motor while turning nut counter clockwise.
- Pull blade from the motor shaft.

(Fig.14)

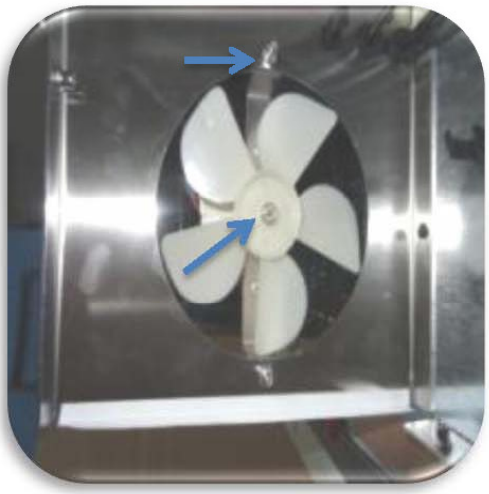


Fig.14

Sealed System Components

NOTE: When entering the sealed system, always use solder-on process valves. Do not use bolt-on process valves as they are prone to leak.

NOTE: Whenever servicing the sealed system, the high side filter-drier must be replaced.

Freezer High-Side Filter-Drier Removal

To remove the freezer high side filter-drier:

1. With a file, score a line around capillary tube 25mm or less from drier outlet, then fatigue capillary tube at this line until it separates.
2. With a tube-cutter, cut inlet tube 25mm or less from drier inlet.

NOTE: It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.

NOTE: After capillary tube separates, check tubing for internal breams. If breams exist, repeat first step above.

NOTE: When installing replacement filter-drier, insert capillary tube until it touches screen inside drier, then pull capillary tube away from screen roundly 10mm before brazing.

NOTE: Filter-drier outlet must be rotation downward in order to function properly.

(Fig.1)

Fig.1

Refrigerator High-Side Filter-Drier Assembly Removal

To remove the refrigerator drier assembly ;

1. With a file, score a line around capillary tubes 25mm or less from drier/valve outlet tubes, then fatigue capillary tubes at these lines until they separate.
2. With a tube-cutter, cut inlet tube 25mm or less from drier inlet.

NOTE: After capillary tube separates, check tubing for internal breams. If breams exist, repeat first step above.

(Fig.2)

Fig.2

Freezer Interior Cosmetic and Mechanical Components

Compressor Removal

Compressors are secured to the top of the unit with nuts over stud-bolts. The right compressor is the refrigerator compressor and the left compressor is for freezer.

NOTE: When replacing a compressor, the high-side filter-drier must also be replaced. To removal the compressor :

1. Disconnect electrics from compressor.
2. Extract nuts from stud-bolts at each corner of compressor base.
3. Lift compressor up and pull forward to gain access to suction and discharge lines.
4. Using a tube cutter, cut suction and discharge lines nearly 25mm from compressor.

Fig.3

Condenser Removal

To remove the condenser, the unit shroud will need to be removed first and when replacing the condenser, both high side filter-driers must also be replaced.

1.From control board side of condenser, extract screws which hold condenser side brackets to condenser.(Fig.4-5)
2. Cut cable-ties holding thermistors to condenser outlet tubes.
3. Using a tube cutter, cut condenser inlet and outlet tubes.
4. Lift condenser off of unit.

Fig.4

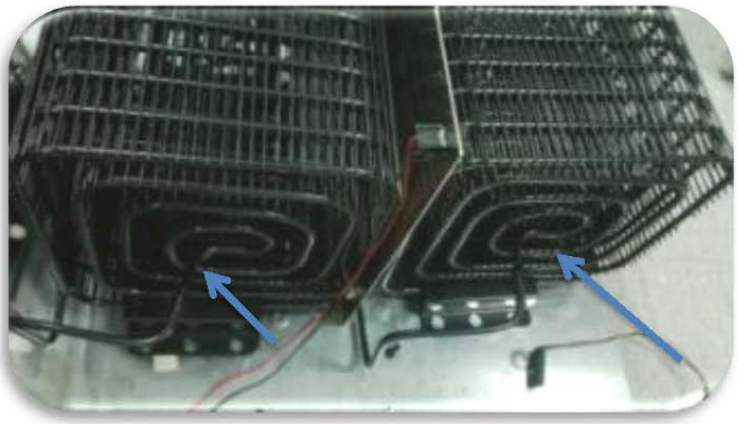


Fig.5

Freezer Interior Cosmetic and Mechanical Components

Evaporator Removal

Evaporators are attached to rear walls of the compartments with screws, behind evaporator covers which must be removed first.

NOTE: When replacing an evaporator, the high-side filter-drier must also be replaced.

NOTE: When removing a freezer evaporator, the evaporator thermistor, defrost terminator and defrost heater must also be removed and reused on new evaporator.

1.Extract screws which hold evaporator to rear wall of compartment.

2. Pull and rotate evaporator so heat exchanger is accessible.

3. With a file, score a line around capillary tube, 25mm or less from evaporator inlet, then fatigue capillary tube at this line until it separates.

4. With a tube-cutter, cut evaporator outlet 25mm or less from accumulator or less from suction line connection point.

NOTE: It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.

NOTE: After capillary tube is fatigue until it separates, check tubing for internal breams. If breams exist,repeat step 3 above.

Fig.6

Drain Gas Heater Loop Removal

The drain gas heater loop is located on the underside of the bottom panel of unit and above the drain gas.

NOTE: When replacing a condensate heater loop, the filter-drier must also be replaced.

NOTE: It is recommended that a suction line drier be added to the sealed system when replacing the condensate heater loop.

To remove the drain gas heater loop, the drain pan must be removed first,then after capturing the refrigerant from sealed system:

1. Using a tube cutter, cut condensate loop inlet and outlet.

NOTE: It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.

2. Extract tubing from heater loop brackets.

Fig.7

Freezer Interior Cosmetic and Mechanical Components

Heat Exchanger

NOTE: When replacing a heat exchanger, the high side filter-drier must also be replaced.

To remove the heat exchanger the top cover and evaporator cover must be removed, then after capturing the refrigerant from the sealed system :

1. Extract screws which hold evaporator.
2. Remove insulation from heat exchanger.
3. With a file, score a line around capillary tube, 25mm or less from evaporator inlet, then fatigue capillary tube at this line until it separates.
4. With a tube-cutter, cut evaporator outlet 25mm or less from accumulator , or 25mm or less from suction line connection point.
5. With a tin snips, or similar tool, cut heat exchanger in compartment as close as possible to wall or ceiling where heat exchanger passes through.
6. In upper compressor area, use a tube-cutter to cut drier from condenser.
7. Extract nuts from stud-bolts at each corner of compressor base.
8. Lift compressor up and pull forward to gain access to suction line.
9. Using a tube cutter, cut suction line nearly 25mm from compressor.
10. Pull remaining heat exchanger from unit.

NOTE: It is not recommended to sweat tubing apart. Doing so will induce moisture into the sealed system.

NOTE: When replacing the heat exchanger, it is recommended to attach it at the evaporator end first, then feed the heat exchanger through hole, up to compressor area.

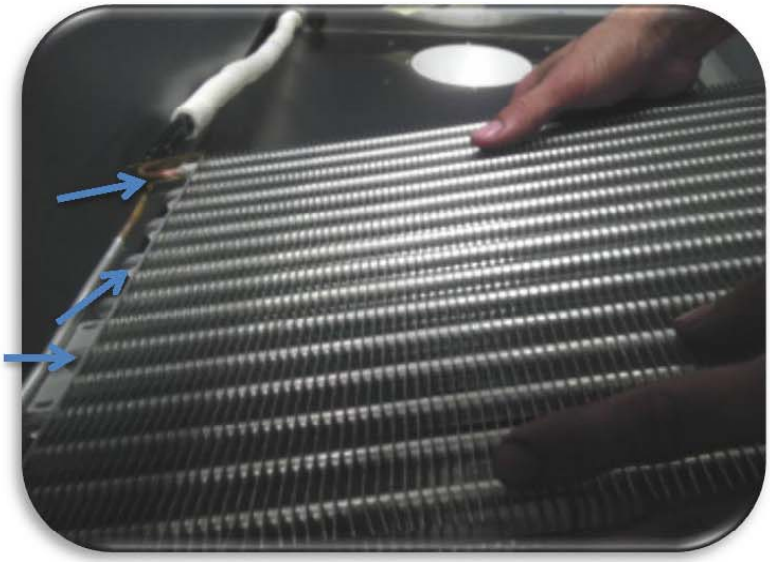


Fig.8

Freezer Interior Cosmetic and Mechanical Components

Drainage Tray Assembly

1.Remove the tray from the box placed in the bottle tray of the refrigerator.

2.Grasp the tray from one positioning side of it and push it towards to the sheet bracket and place its positioning side on the sheet bracket.

3.After being sure that one positioning side is placed on the sheet bracket lean the other positioningside to the leaf spring.

4.Raise the tray carefully without losing the adjacency of positioning side and the leaf spring.

Note : Be sure that the tray has been placed both on the sheet brackets and the leaf springs.

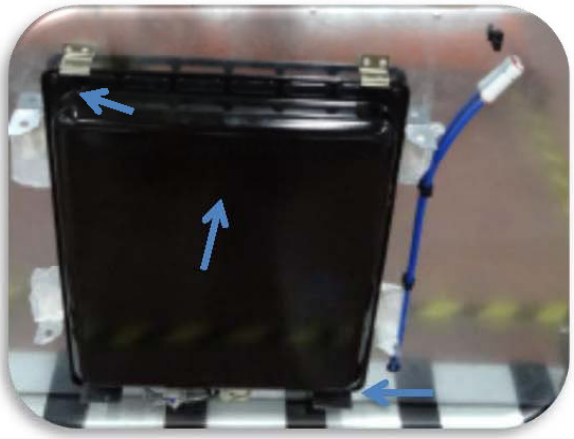


Fig.9