



Turbo Air Speed up the Pace of Innovation

CAUTION!
PLEASE KEEP POWER
SWITCH ON BEFORE
OPERATING THIS EQUIPMENT

Open Display Merchandiser Service Manual

Please read this manual completely before attempting to install or operate this equipment!

TOM-40
TOM-50
TOM-40M
TOM-50M

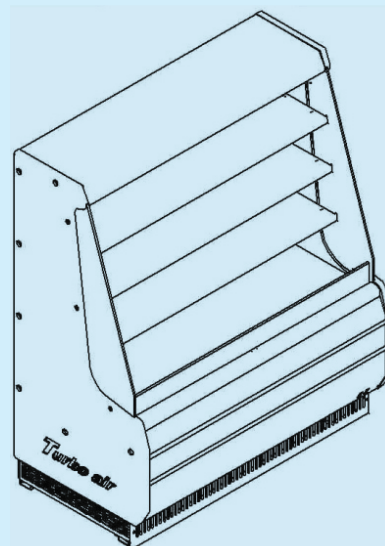
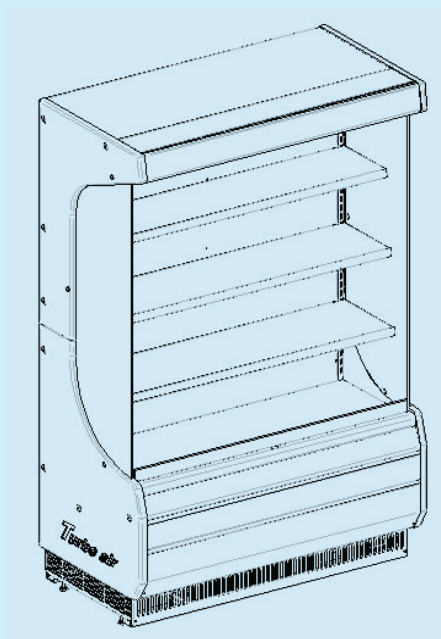


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MAIN COMPONENTS

1. Compressor

Manufacturer	Tecumseh.	Embraco
Designation	CAJ9513Z	NT6226GK
Electrical Rating		
V, Hz, Phase	115 V, 60 Hz, 1 Ph	
RLA(+)	15.66	
LRA	75A	77A

2. Overload Protector

Manufacturer	Texas Instruments	
Model or Designation	CRA38012	

3. Starting Capacitor, Run Capacitor

Rating, uF, V	315uF, 160 V	243~292uF, 250V
Rating, uF, V	30uF, 400 V	40uF, 440V

4. Condenser Fan Motor, Evaporator Fan Motor

Manufacturer	Geenam Electric
Model	SE-043
Rating V, Hz, Phase, A or W	115 V, 60 Hz, 1 Ph, 0.8 A, 9 W

5. Water condensing Fan Motor,

Manufacturer	Geenam Electric
Model	SE-083
Rating V, Hz, Phase, A or W	115 V, 60 Hz, 1 Ph, 1.1 A, 16 W

6. Thermostat (Refrigeration Controller)

Manufacturer	Q-MAX INC
Designation	QGTN-24HJ
Electrical Rating, Minimum V, FLA, LRA	Output: 250 V ac, 1 A

7. Condensate Heaters

Model	Length, mm	W/M	Temp. Rating, °C	
ZKTB-1943	2400	7	105	
ZKTB-1933	1800	7	105	

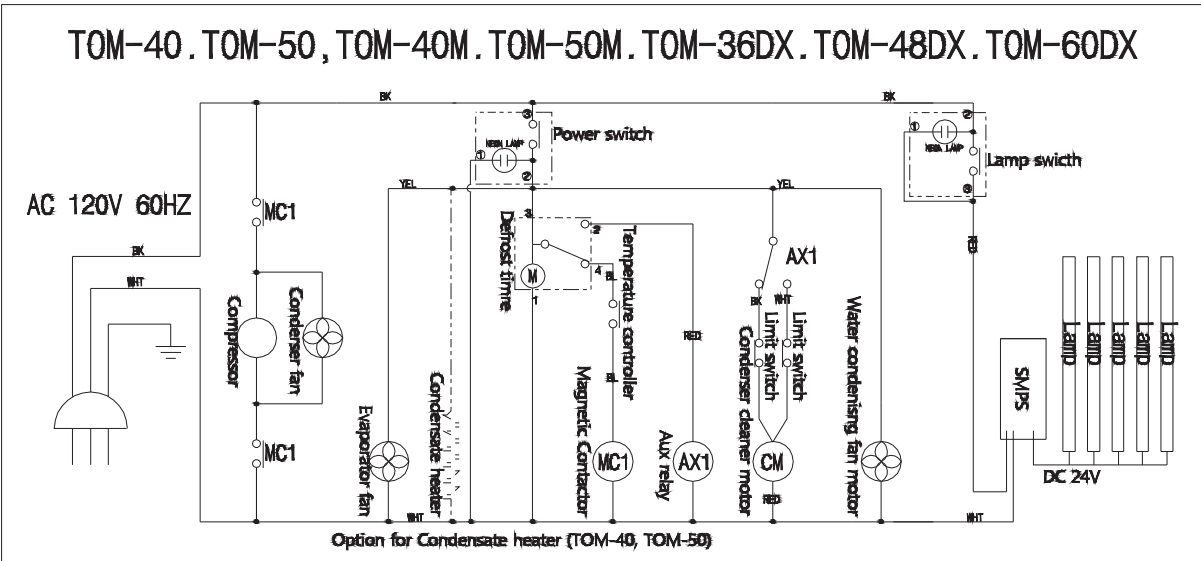
8. Ballast

Manufacturer	HENGDIAN GROUP TOSPO LIGHTING CO., Ltd	FOSHAN TEYUAN ELECTRONIC SCIENCE & TECHNOLOGY CO., Ltd
Model	TP120-3/32ISPFC	TBE-34CFW
Rating V, A	120 V~, 60Hz, 1 A,	120 V~, 60Hz, 1 A,

9. LED LAMP, POWER SUPPLY

	LED LAMP			POWER SUPPLY SMPS
	LENGTH	WATT	EACH	
TOM-40	900 mm	10.8 W	5 EA	NES-100-24, LS100-24
TOM-50	1200 mm	14.4 W	5 EA	NES-150-24, LS150-24
TOM-40M	900 mm	10.8 W	4 EA	NES-75-24, LS75-24
TOM-50M	1,400 mm	14.4 W	4 EA	NES-100-24, LS100-24

WIRING DIAGRAM



TEMPERATURE CONTROL INSTRUCITON

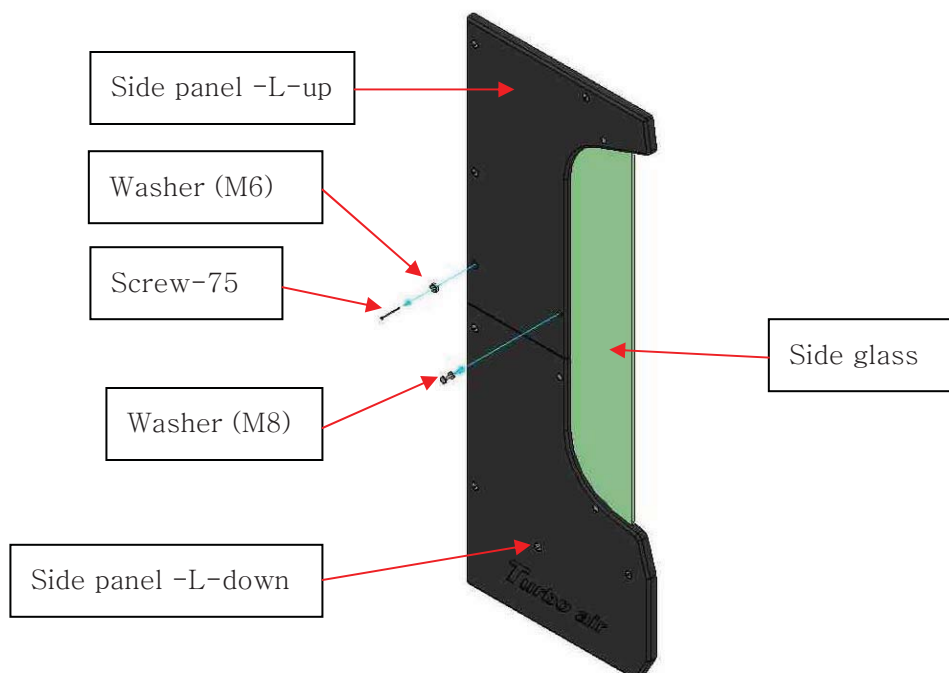
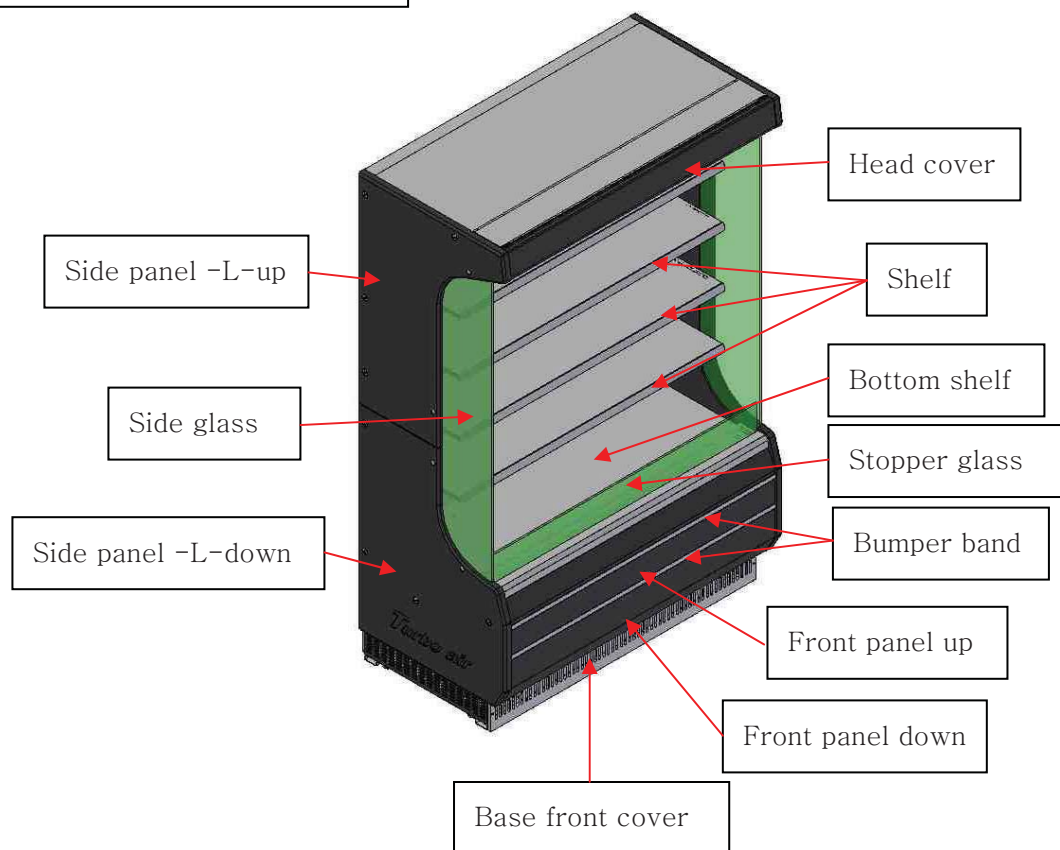


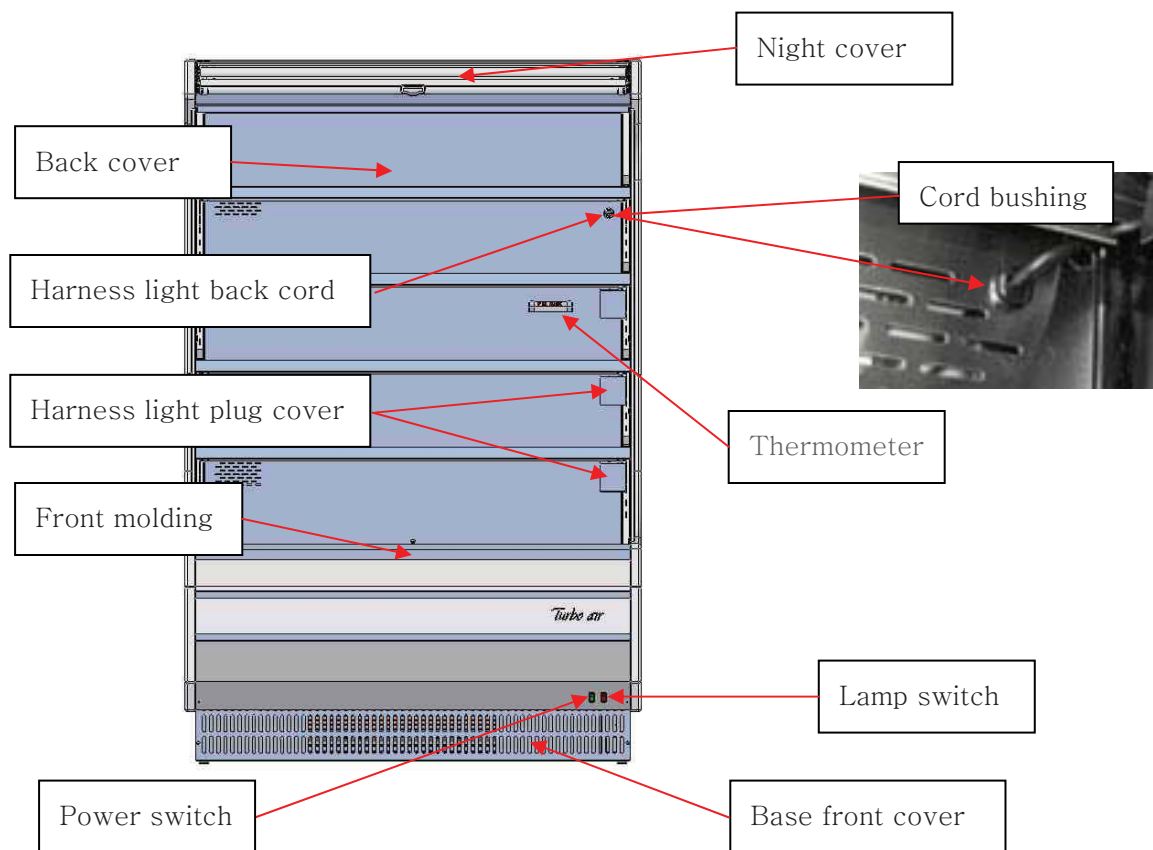
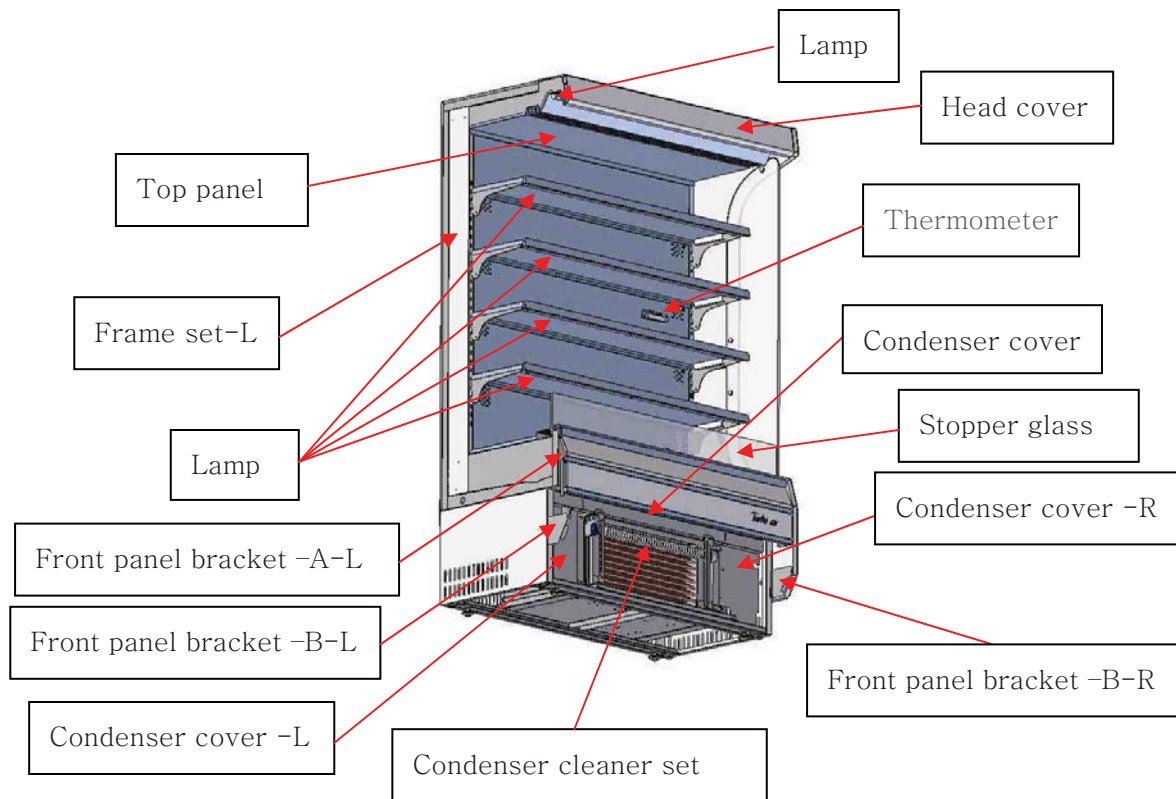
The temperature control is located near the front right hand side underneath the bottom shelf.

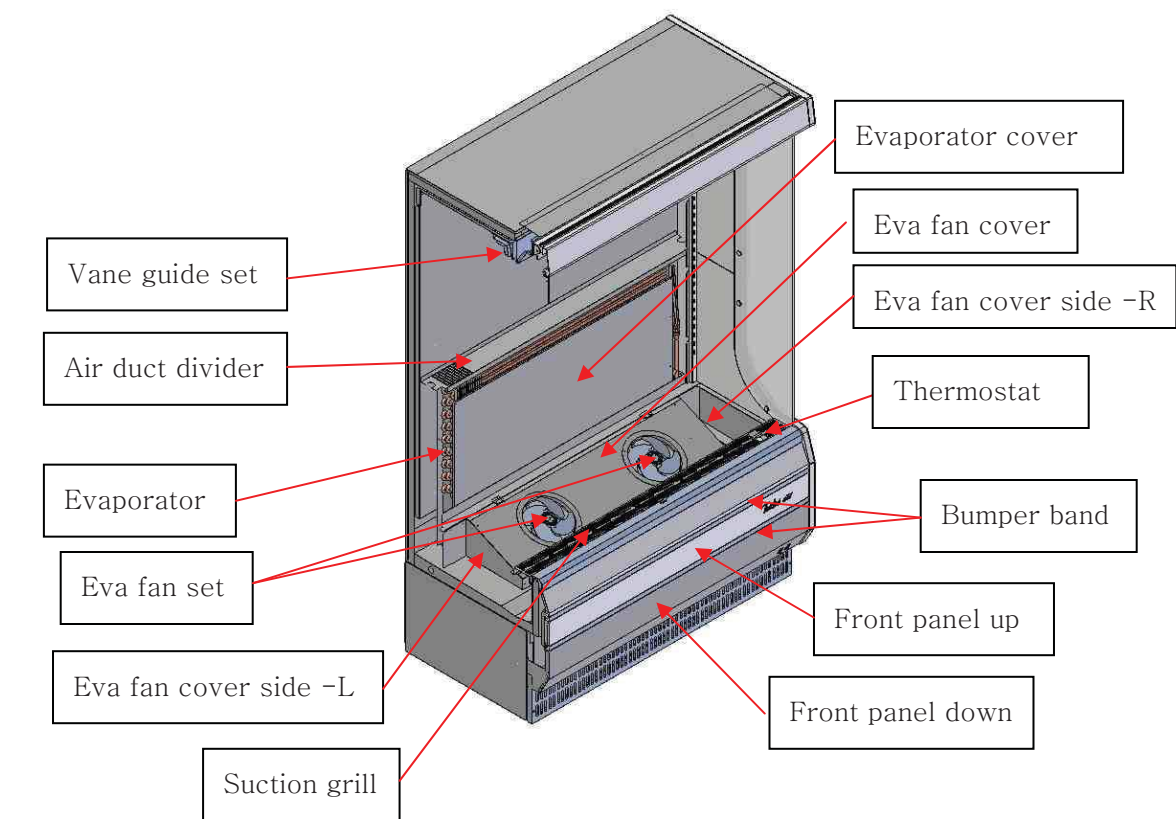
1. The original setting for the control is Normal.
2. The working temperature is from 37°F to 40°F.
3. To lower the temperature, turn the knob slightly to “COLD”. To raise the temperature, turn the knob to “WARM”.
4. In case of icing due to the hike of ambient temperature or humidity, turn the knob slightly to “WARM”.

[Display is designed to be in an area that is ambient 75 degrees Fahrenheit (dry bulb) or colder and 55 percent relative humidity.]

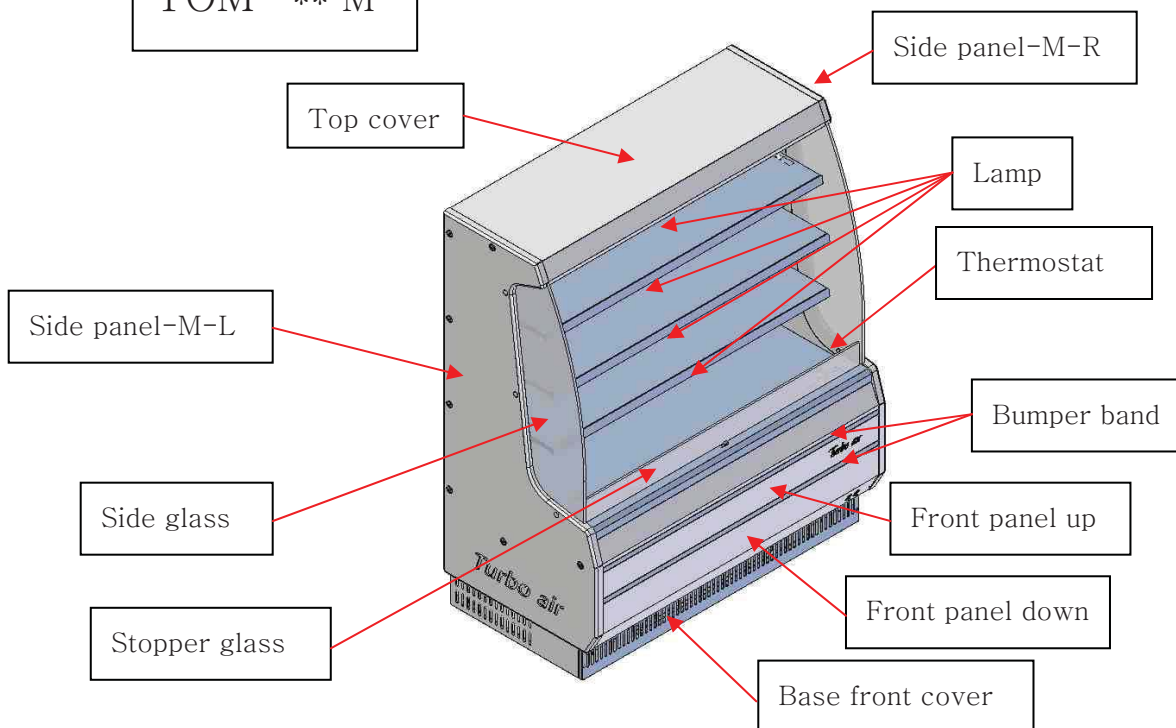
PART NAME

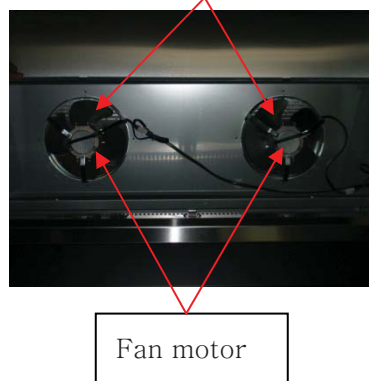
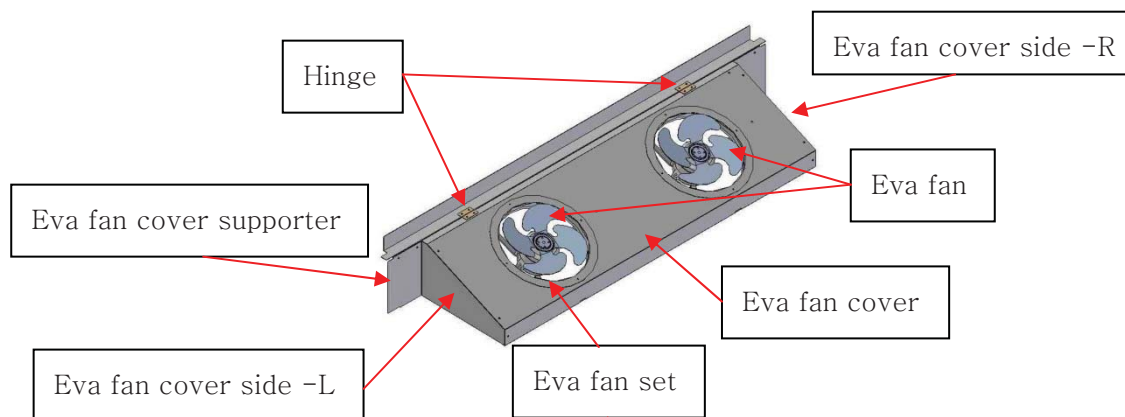
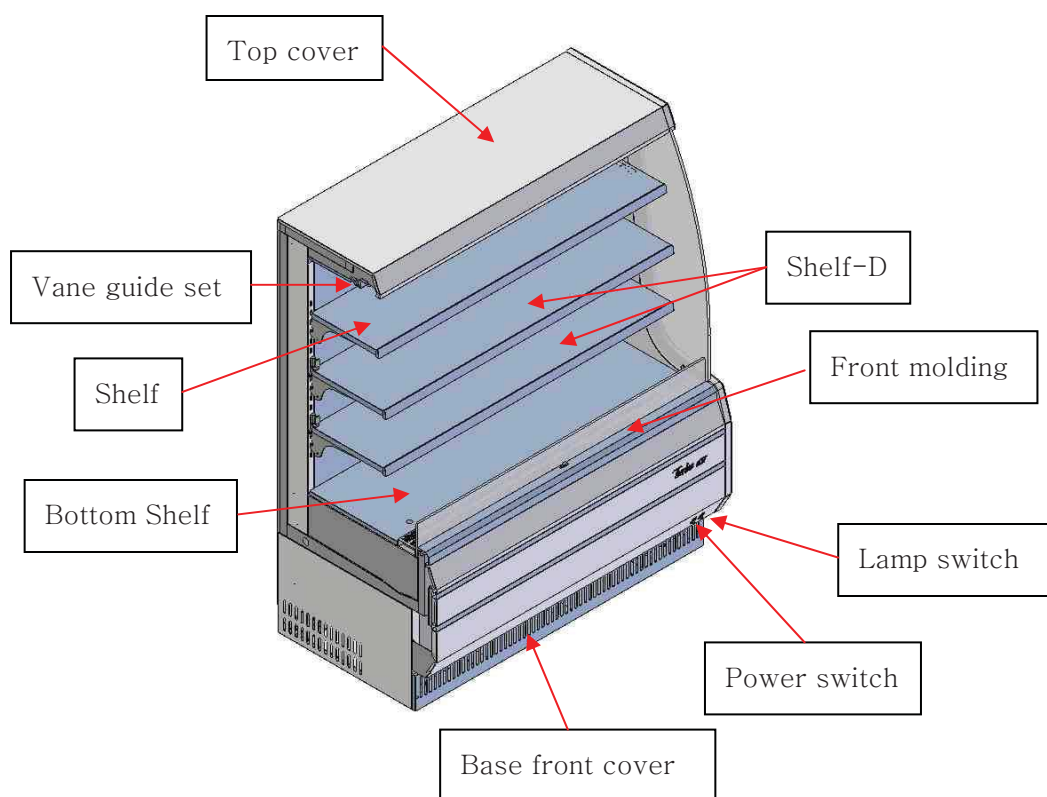


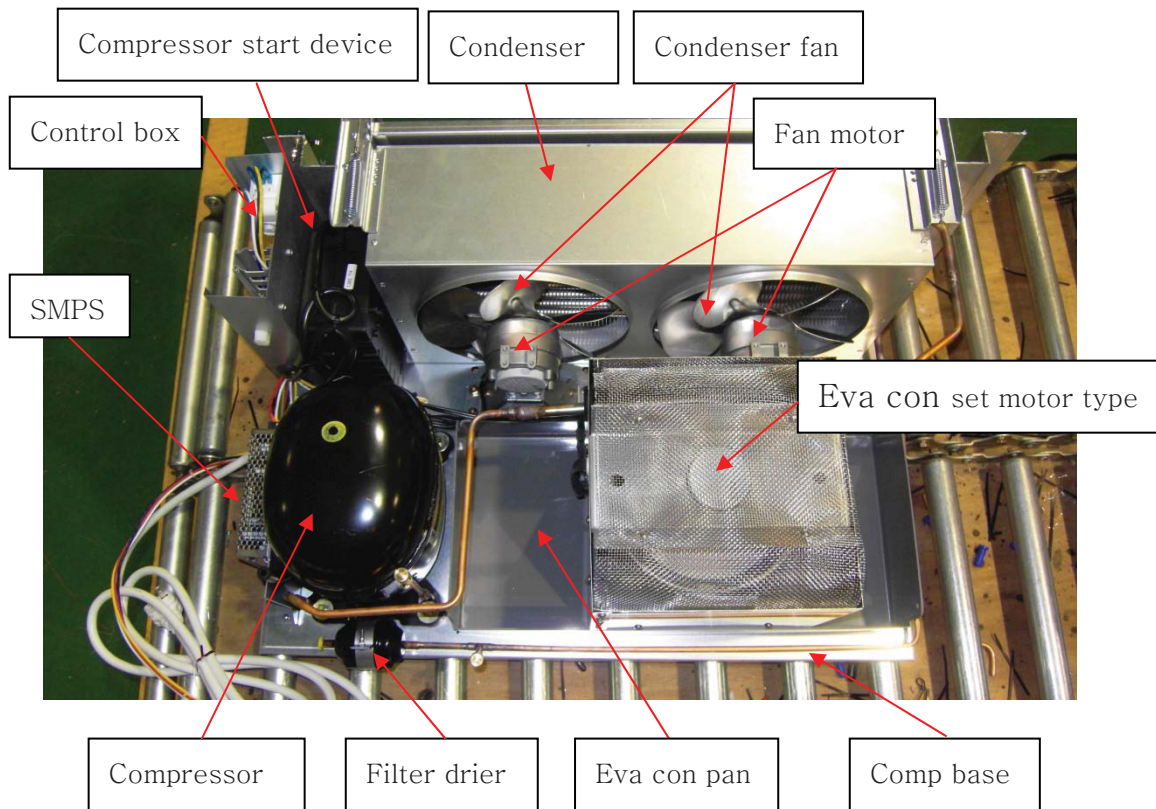
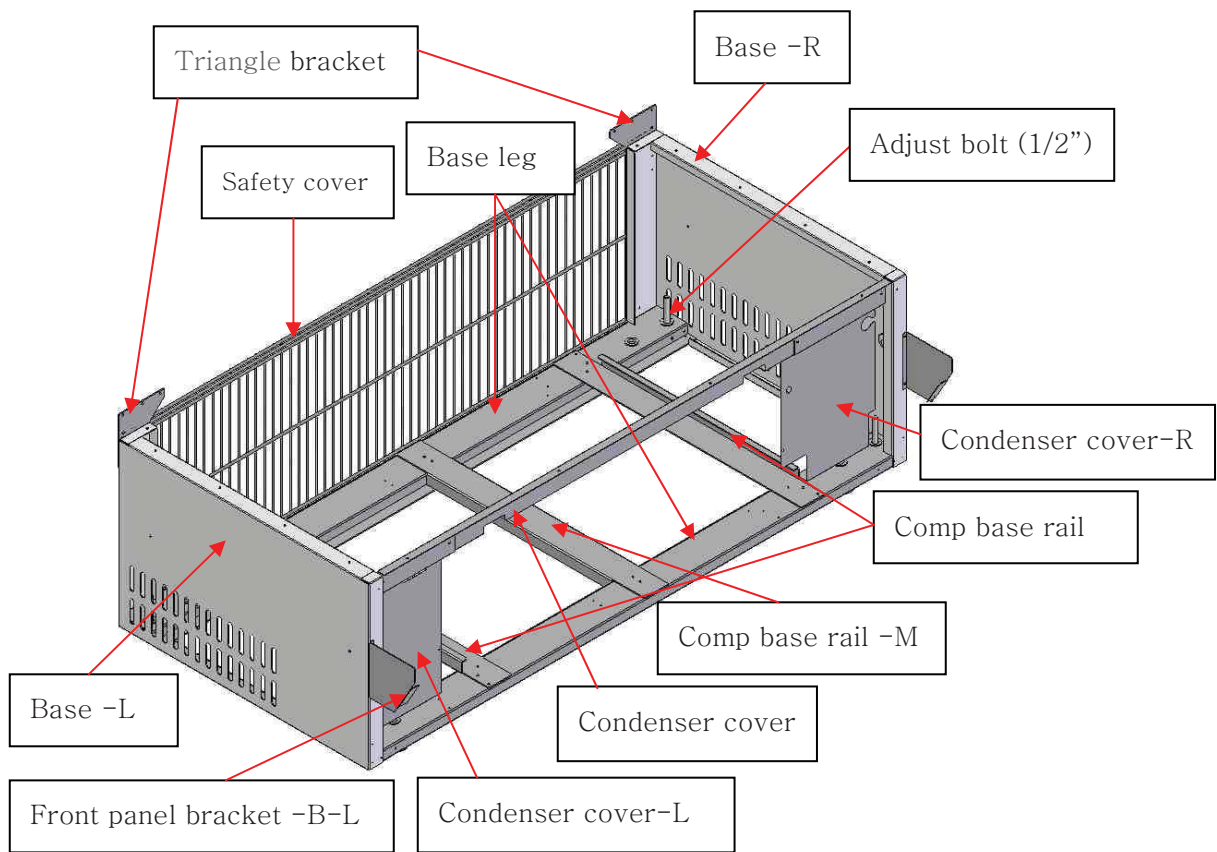




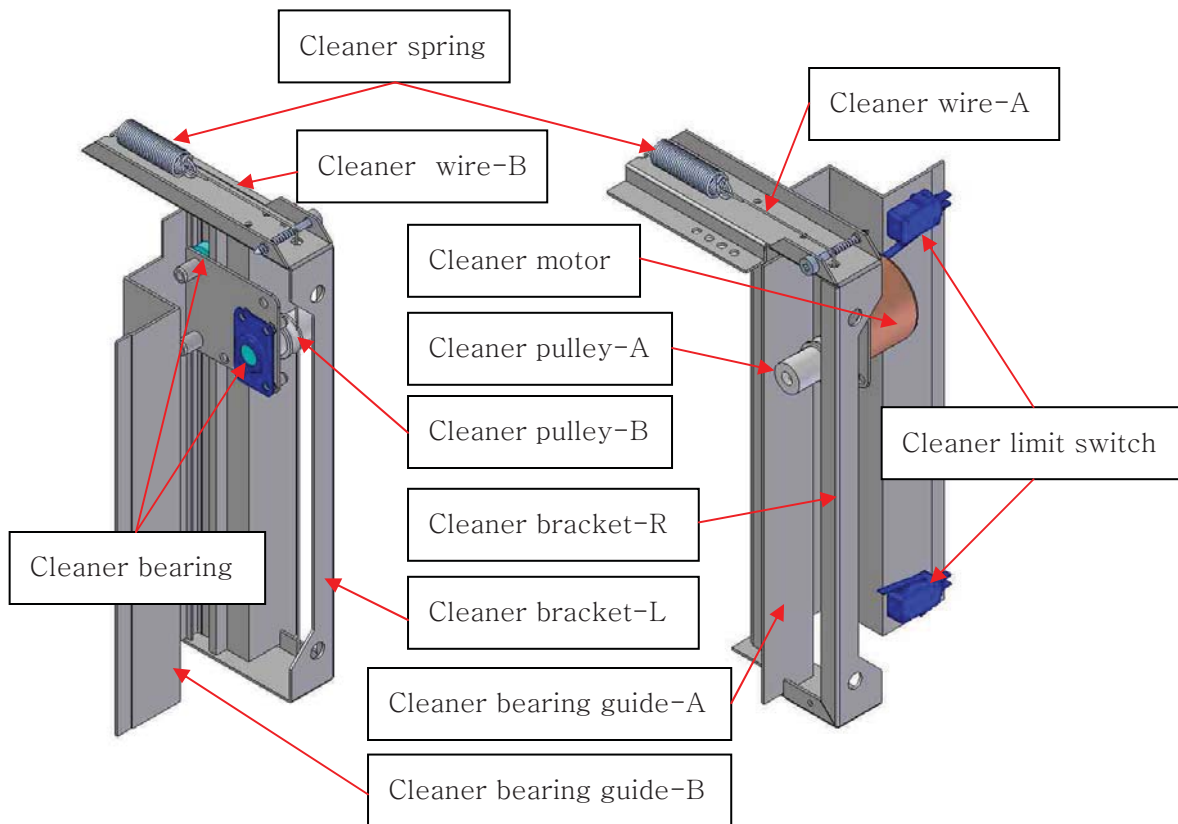
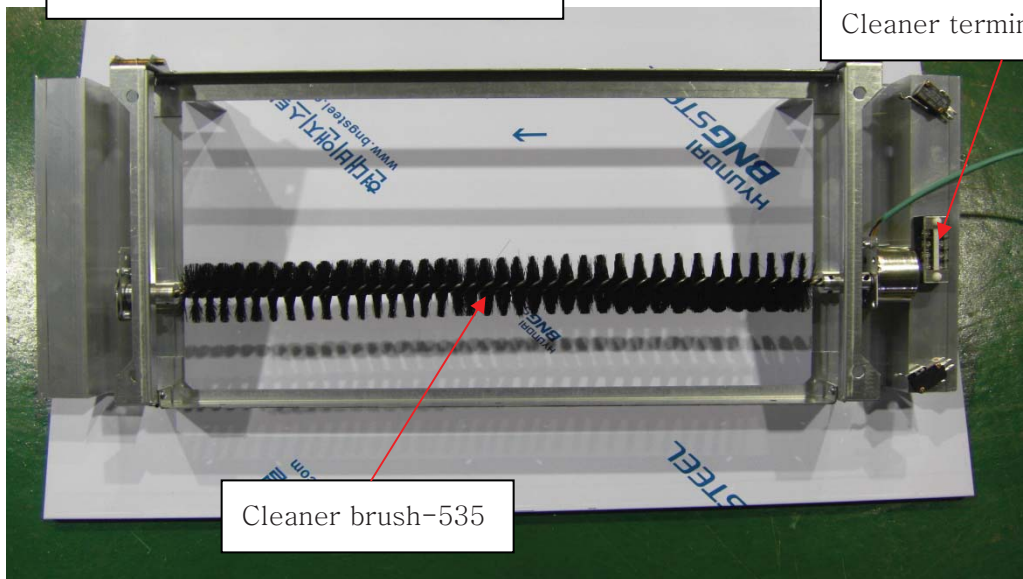
TOM -** M

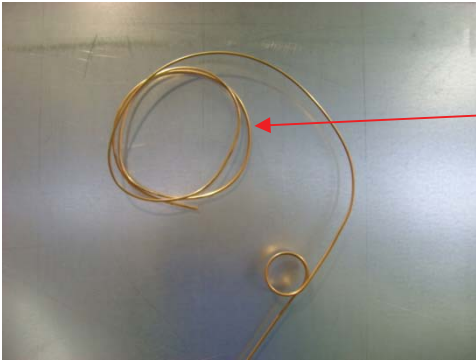






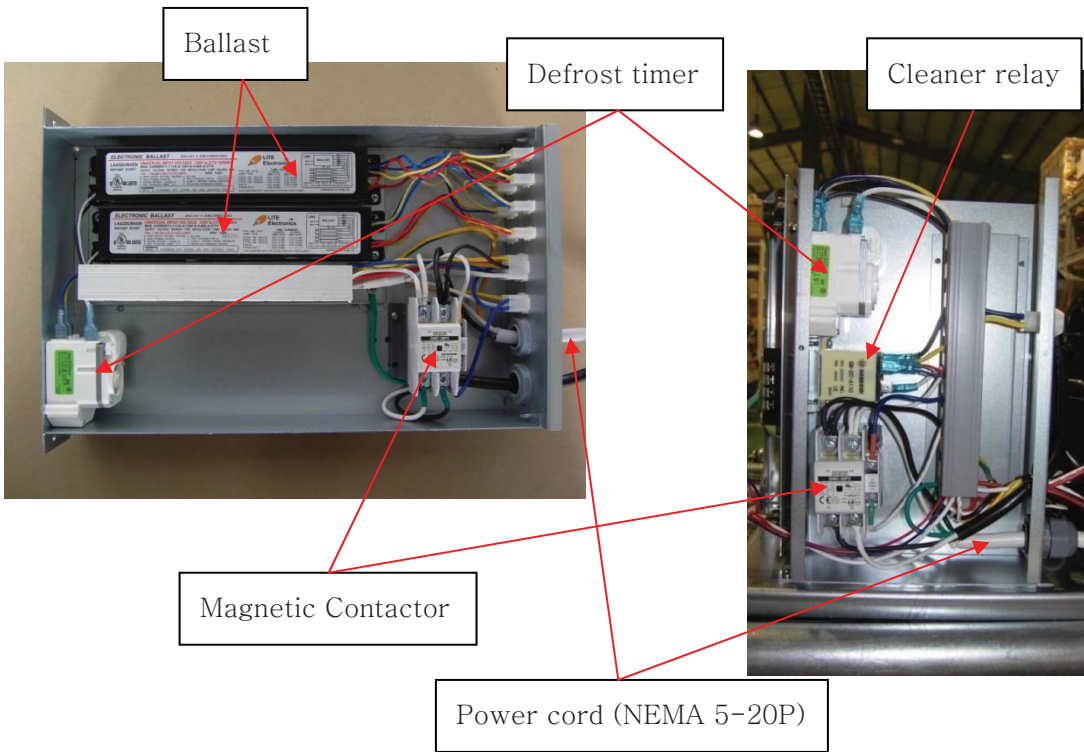
Condenser cleaner set



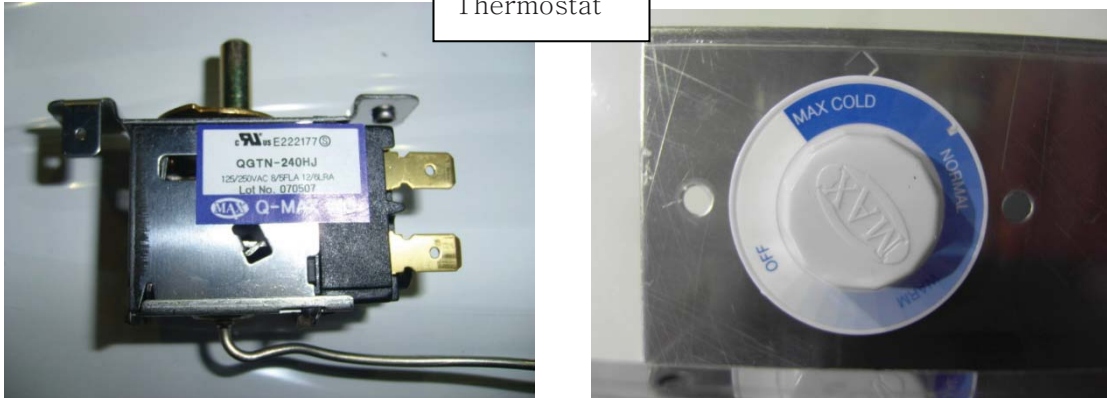


Capillary tube

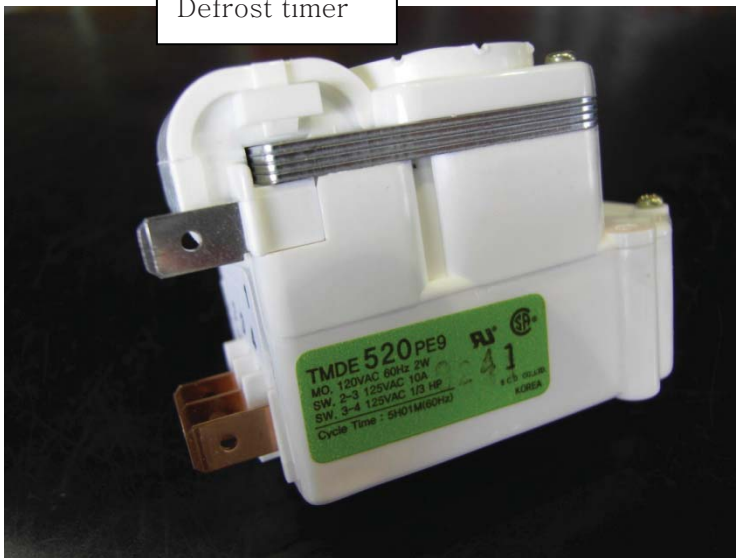
	Capillary tube		Refrigerant		Compressor
	(inside diameter)	Length			
TOM-40	3.4 mm, (2.0 mm)	2.5 m	R-404A	950g	NT6226GK, CAJ9513Z
TOM-50	3.4 mm, (2.0 mm)	2.5 m	R-404A	1100g	NT6226GK, CAJ9513Z
TOM-40M	3.4 mm, (2.0 mm)	3.0 m	R-404A	950g	NT6226GK, CAJ9513Z
TOM-50M	3.4 mm, (2.0 mm)	2.7 m	R-404A	1000g	NT6226GK, CAJ9513Z



Thermostat

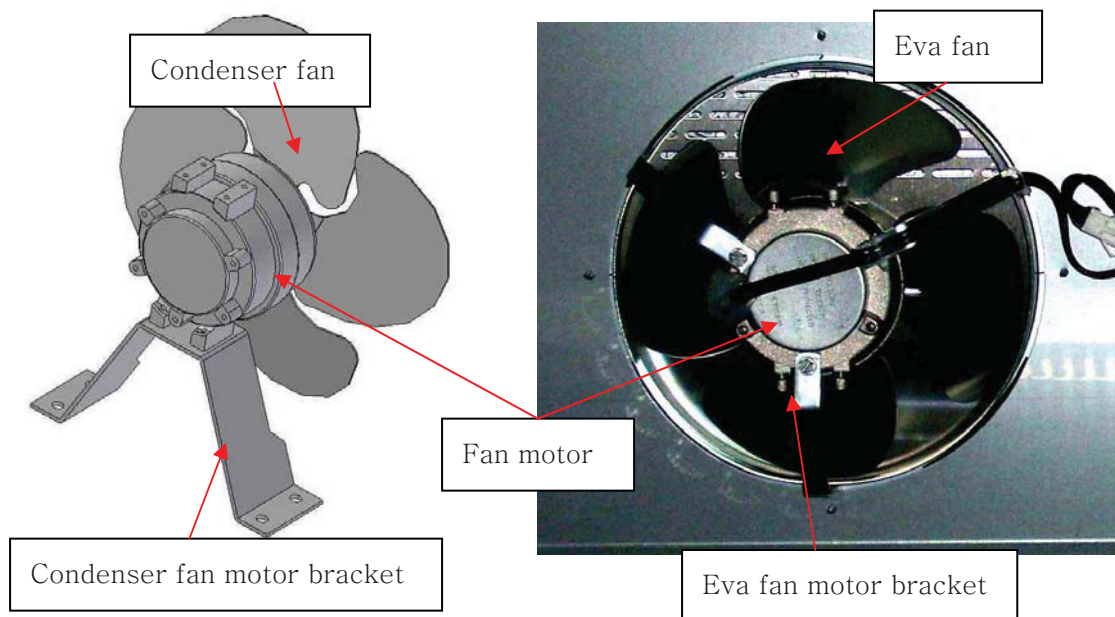
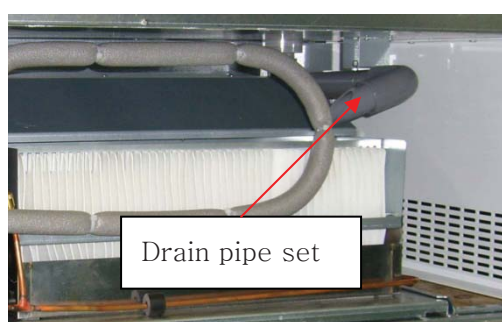
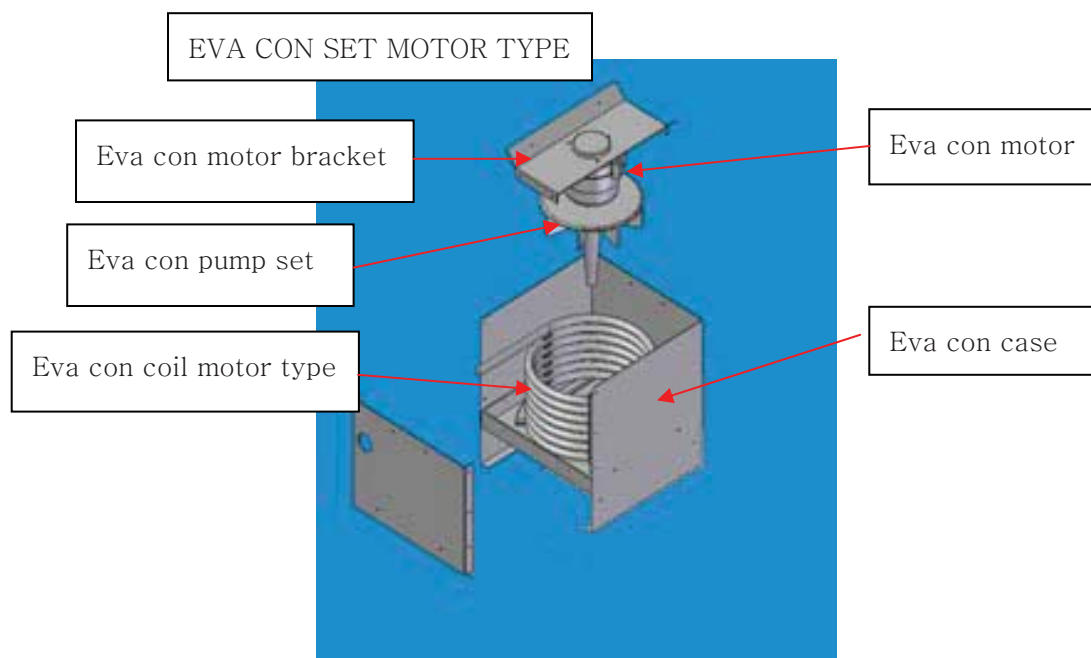


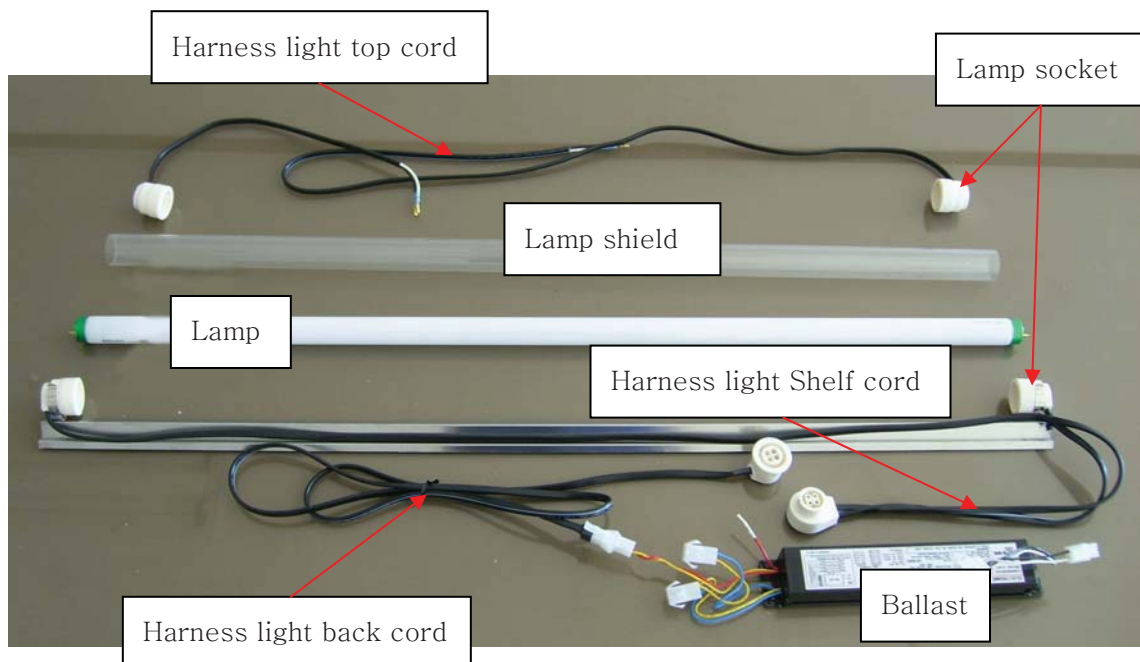
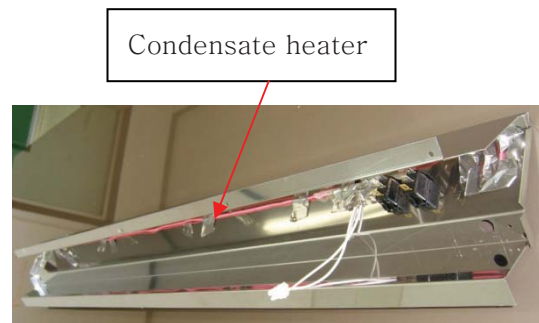
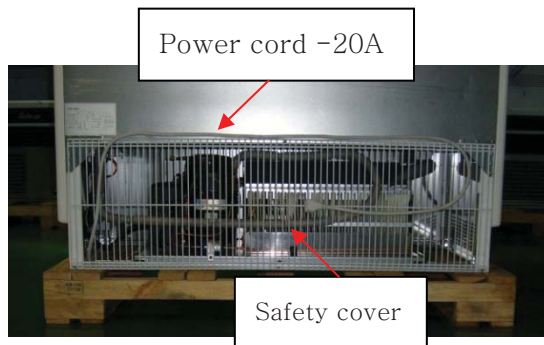
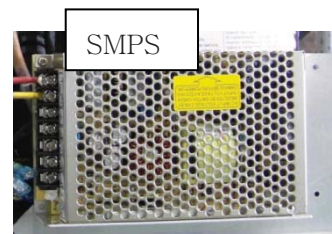
Defrost timer

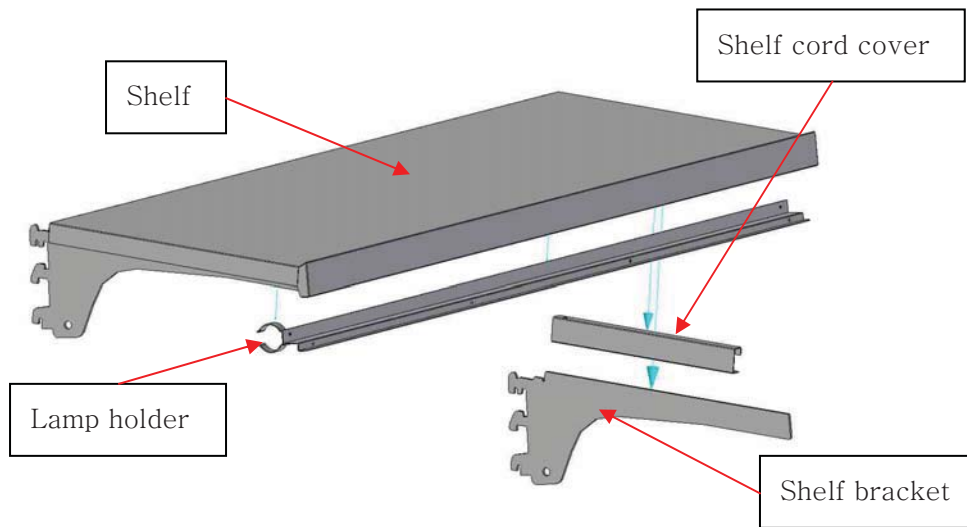


Run time: 5 hours

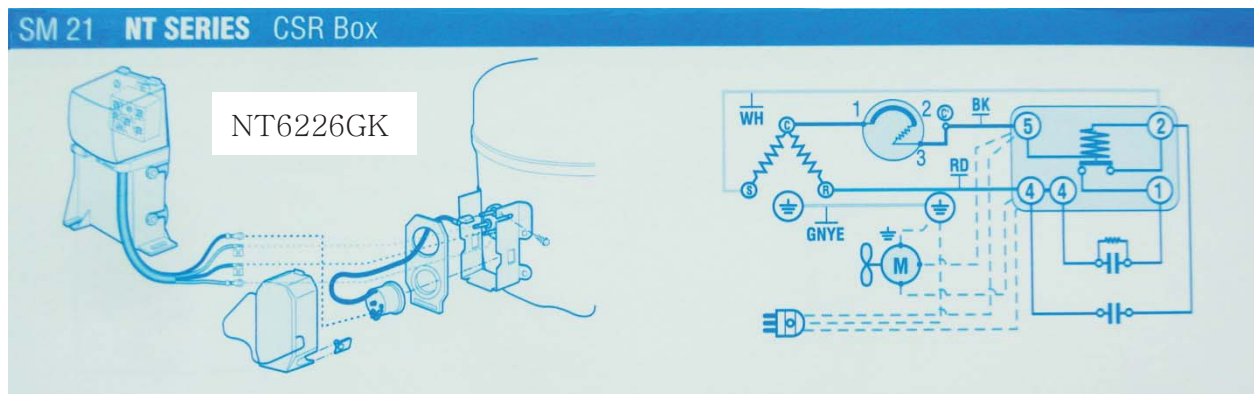
Defrost time: 20 min



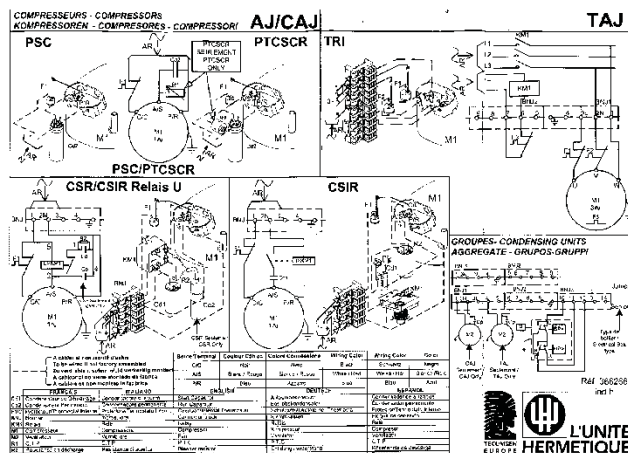




Compressor Assembly Diagrams



CAJ9513Z



PART LIST

	PART NAME	TOM-40	TOM-50	TOM-40M	TOM-50M	NOTE
1	ADJUST BOLT (1/2")	4	4	4	4	
2	AIR DUCT DIVIDER	1	1	1	1	
3	BACK COVER	1	1	1	1	
4	BALLAST	2	2	1	1	
5	BASE FRONT COVER	1	1	1	1	
6	BASE LEG	2	2	2	2	
7	BASE-L	1	1	1	1	
8	BASE-R	1	1	1	1	
9	BOTTOM SHELF	1	1	1	1	
10	BUMPER BAND	2	2	2	2	
11	CAPILLARY TUBE	1	1	1	1	
12	CLEANER BEARING	5	5	5	5	
13	CLEANER BEARING GUIDE-A	1	1	1	1	
14	CLEANER BEARING GUIDE-B	1	1	1	1	
15	CLEANER BRACKET-L	1	1	1	1	
16	CLEANER BRACKET-R	1	1	1	1	
17	CLEANER BRUSH-535	1	1	1	1	
18	CLEANER LIMIT SWITCH	2	2	2	2	
19	CLEANER MOTOR	1	1	1	1	
20	CLEANER PULLEY-A	1	1	1	1	
21	CLEANER PULLEY-B	1	1	1	1	
22	CLEANER RELAY	1	1	1	1	
23	CLEANER SPRING	2	2	2	2	
24	CLEANER TERMINAL BLOCK	1	1	1	1	
25	CLEANER WIRE-A	1	1	1	1	
26	CLEANER WIRE-B	1	1	1	1	
27	COMP BASE	1	1	1	1	
28	COMP BASE RAIL	2	2	2	2	
29	COMP BASE RAIL-M	1	1	1	1	
30	COMPRESSOR	1	1	1	1	
31	COMPRESSOR START DEVICE	1	1	1	1	
32	CONDENSATE HEATER	1	1	1	1	

	PART NAME	TOM-40	TOM-50	TOM-40M	TOM-50M	NOTE
33	CONDENSER	1	1	1	1	
34	CONDENSER CLEANER SET	1	1	1	1	
35	CONDENSER COVER	1	1	1	1	
36	CONDENSER COVER-L	1	1	1	1	
37	CONDENSER COVER-R	1	1	1	1	
38	CONDENSER FAN	2	2	2	2	230mm
39	CONDENSER FAN MOTOR BRACKET	2	2	2	2	
40	CONTROL BOX	1	1	1	1	
41	CORD BUSHING	5	5	5	5	
42	DEFROST TIMER	1	1	1	1	
43	DRAIN FILTER	1	1	1	1	
44	DRAIN PIPE SET	1	1	1	1	
45	EVA CON CASE	1	1	1	1	
46	EVA CON COIL MOTOR TYPE	1	1	1	1	
47	EVA CON MOTOR	1	1	1	1	16W
48	EVA CON MOTOR BRACKET	1	1	1	1	
49	EVA CON PAN	1	1	1	1	
50	EVA CON PUMP SET	1	1	1	1	
51	EVA FAN	1	2	1	2	200mm
52	EVA FAN COVER	1	1	1	1	
53	EVA FAN COVER SIDE-L	1	1	1	1	
54	EVA FAN COVER SIDE-R	1	1	1	1	
55	EVA FAN COVER SUPPORTER	1	1	1	1	
56	EVA FAN MOTOR BRACKET	1	2	1	2	
57	EVA FAN SET	1	2	1	2	
58	EVAPORATOR	1	1	1	1	
59	EVAPORATOR COVER	1	1	1	1	
60	FAN MOTOR	1	2	1	2	9W
61	FILTER DRIER	1	1	1	1	
62	FLUORESCENT LAMP	30W X 5	32W X 5	30W X 4	32W X 4	
63	FRAME SET-L	1	1	1	1	
64	FRAME SET-R	1	1	1	1	
65	FRONT MOLDING	1	1	1	1	
66	FRONT PANEL BRACKET-A-L	1	1	1	1	

	PART NAME	TOM-40	TOM-50	TOM-40M	TOM-50M	NOTE
67	FRONT PANEL BRACKET-A-R	1	1	1	1	
68	FRONT PANEL BRACKET-B-L	1	1	1	1	
69	FRONT PANEL BRACKET-B-R	1	1	1	1	
70	FRONT PANEL DOWN	1	1	1	1	
71	FRONT PANEL UP	1	1	1	1	
72	HARNESS LIGHT BACK CORD	4	4	3	3	
73	HARNESS LIGHT BACK CORD (LED)	1	1	1	1	
74	HARNESS LIGHT PLUG COVER	4	4	3	3	
75	HARNESS LIGHT SHELF CORD	4	4	3	3	
76	HARNESS LIGHT TOP CORD	1	1	1	1	
77	HARNESS LIGHT TOP CORD (LED)	1	1			
78	HEAD COVER	1	1			
79	HINGE	2	2	2	2	
80	LAMP HOLDER	10	10	8	8	
81	LAMP SHIELD	5	5	4	4	
82	LAMP SOCKET	10	10	8	8	
83	LAMP SWITCH	1	1	1	1	
84	LED LAMP	900 X 5	1200 X 5	900 X 4	1200 X 4	
85	LED LAMP HOLDER	15	15	12	12	
86	MAGNETIC CONTACTOR	1	1	1	1	
87	NIGHT COVER	1	1	1	1	
88	POWER CORD	5-20	5-20	5-20	5-20	NEMA5-20P
89	POWER SWITCH	1	1	1	1	
90	SAFETY COVER	1	1	1	1	
91	SCREW-75	16	16	14	14	
92	SHELF	4	4	1	1	
93	SHELF BRACKET	8	8	6	6	
94	SHELF CORD COVER	4	4	3	3	
95	SHELF-D			2	2	
96	SIDE GLASS	2	2	2	2	
97	SIDE PANEL-L-DOWN	1	1	1	1	
98	SIDE PANEL-L-UP	1	1	1	1	
99	SIDE PANEL-M-L	1	1	1	1	
100	SIDE PANEL-M-R	1	1	1	1	

	PART NAME	TOM-40	TOM-50	TOM-40M	TOM-50M	NOTE
101	SIDE PANEL-R-DOWN	1	1	1	1	
102	SIDE PANEL-R-UP	1	1	1	1	
103	SMPS	100W X 1	150W X 1	75W X 1	100W X 1	
104	STOPPER GLASS	1	1	1	1	
105	SUCTION GRILL	1	1	1	1	
106	THERMOMETER	1	1	1	1	
107	THERMOSTAT	1	1	1	1	
108	TOP COVER			1	1	
109	TOP PANEL	1	1	1	1	
110	TRIANGLE BRACKET	2	2	2	2	
111	VANE GUIDE SET	1	1	1	1	
112	WASHER (M6)	16	16	14	14	
113	WASHER (M8)	8	8	6	6	
114						
115						
116						

◇ PART ORDER EXAMPLE

Example: TOM-50W, SIDE PANEL-R-UP, QTY