



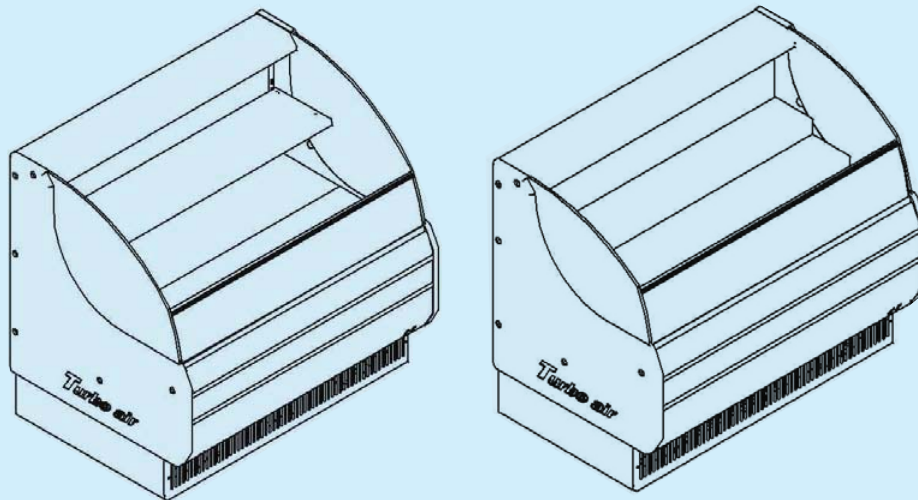
*Turbo Air Speed up the Pace of Innovation*

**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-30L	TOM-30S
TOM-40L	TOM-40S
TOM-50L	TOM-50S
TOM-60L	TOM-60S
TOM-75L	TOM-75S



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# MAIN COMPONENTS

## 1. Compressor

	TOM-30*	TOM-40*. TOM-50*	TOM-60*. TOM-75*
Manufacturer	SAMSUNG.	Tecumseh.	Tecumseh.
Designation	HK6A1C2U	CAJ4476Y	CAJ4492Y
Electrical Rating			
V, Hz, Phase	115 V, 60 Hz, 1 Ph	115 V, 60 Hz, 1 Ph	115 V, 60 Hz, 1 Ph
RLA(+)	5.6 A	11 A	13.7 A
LRA	28 A	54 A	59 A

## 2. Overload Protector

Manufacturer		Texas Instruments	
Model	4TM801SFBZZ-53	CRA38014	GA3PJU0016

## 3. Starting Capacitor

Rating, uF, V			
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## 4. Run Capacitor

Rating, uF, V	20uF, 350 V	250uF, 160 V	250uF, 160V
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## 5. 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

## 6. Water condensing Fan Motor, (TOM-60\*, TOM-75\*)

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

## 7. Thermostat (Refrigeration Controller)

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

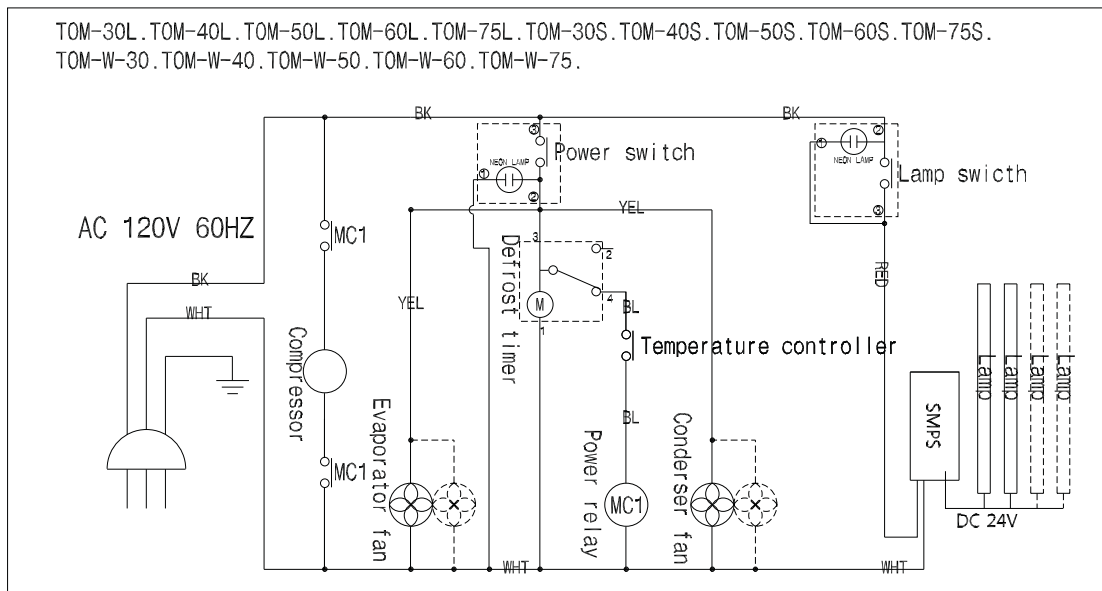
## 8. Ballast

Manufacturer	HENGDIAN GROUP TOSPO LIGHTING CO., Ltd	FOSHAN TEYUAN ELECTRONIC SCIENCE & TECHNOLOGY CO., Ltd
Model	TP120-3/32ISPC	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-30S	600 mm	7.2 W	1 EA	NES-35-24, LS35-24
TOM-40S	900 mm	10.8 W	1 EA	NES-35-24, LS35-24
TOM-50S	1,200 mm	14.4 W	1 EA	NES-35-24, LS35-24
TOM-60S	1,500 mm	18.0 W	1 EA	NES-35-24, LS35-24
TOM-75S	1,800 mm	21.6 W	1 EA	NES-35-24, LS35-24
TOM-30L	600 mm	7.2 W	2 EA	NES-35-24, LS35-24
TOM-40L	900 mm	10.8 W	2 EA	NES-35-24, LS35-24
TOM-50L	1,200 mm	14.4 W	2 EA	NES-50-24, LS50-24
TOM-60L	1,500 mm	18.0 W	2 EA	NES-75-24, LS75-24
TOM-75L	900 mm	10.8 W	2 EA	NES-75-24, LS75-24
	1,800mm	21.6 W	1 EA	

## WIRING DIAGRAM



# TEMPERATURE CONTROL INSTRUCTION

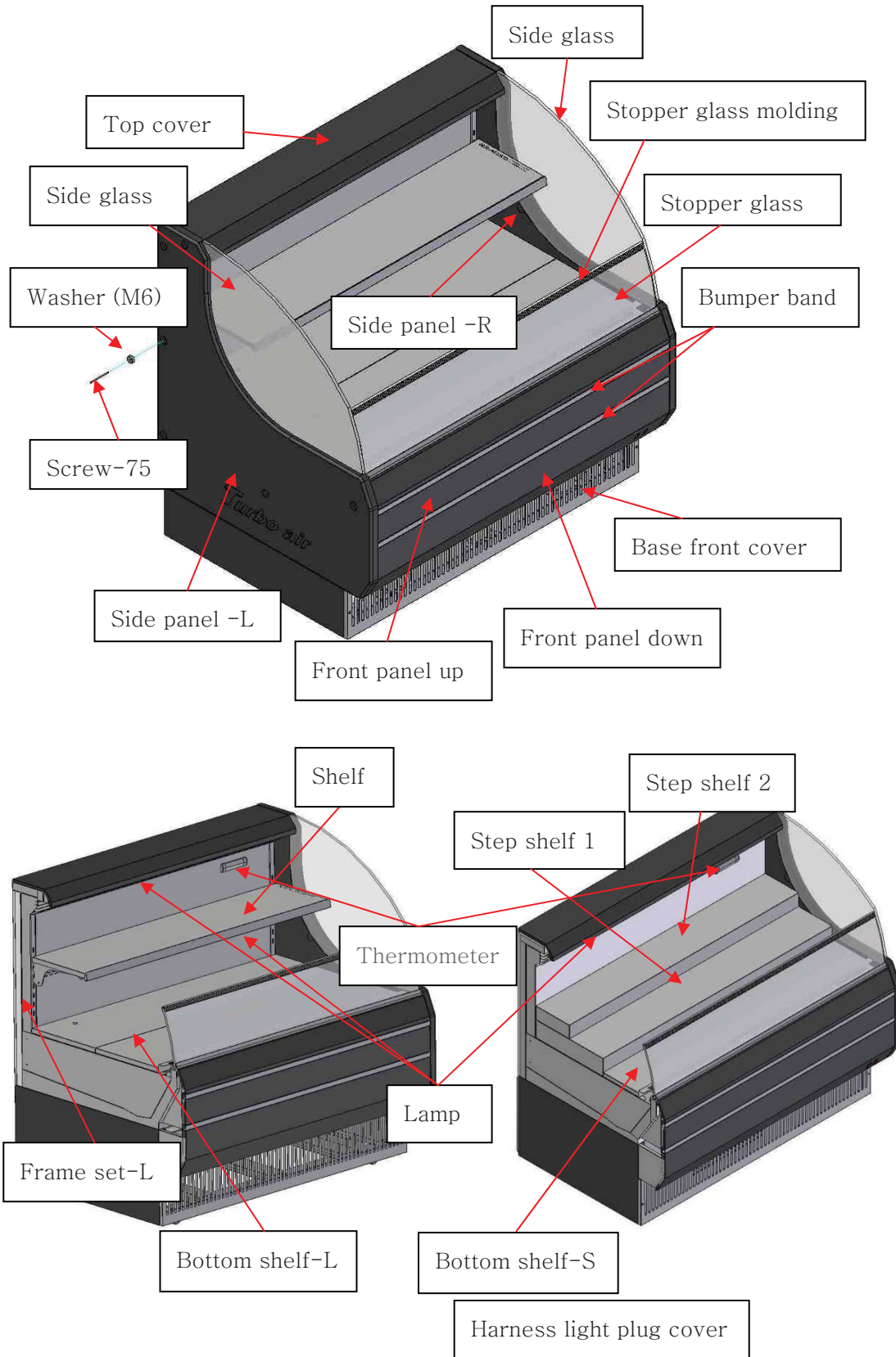


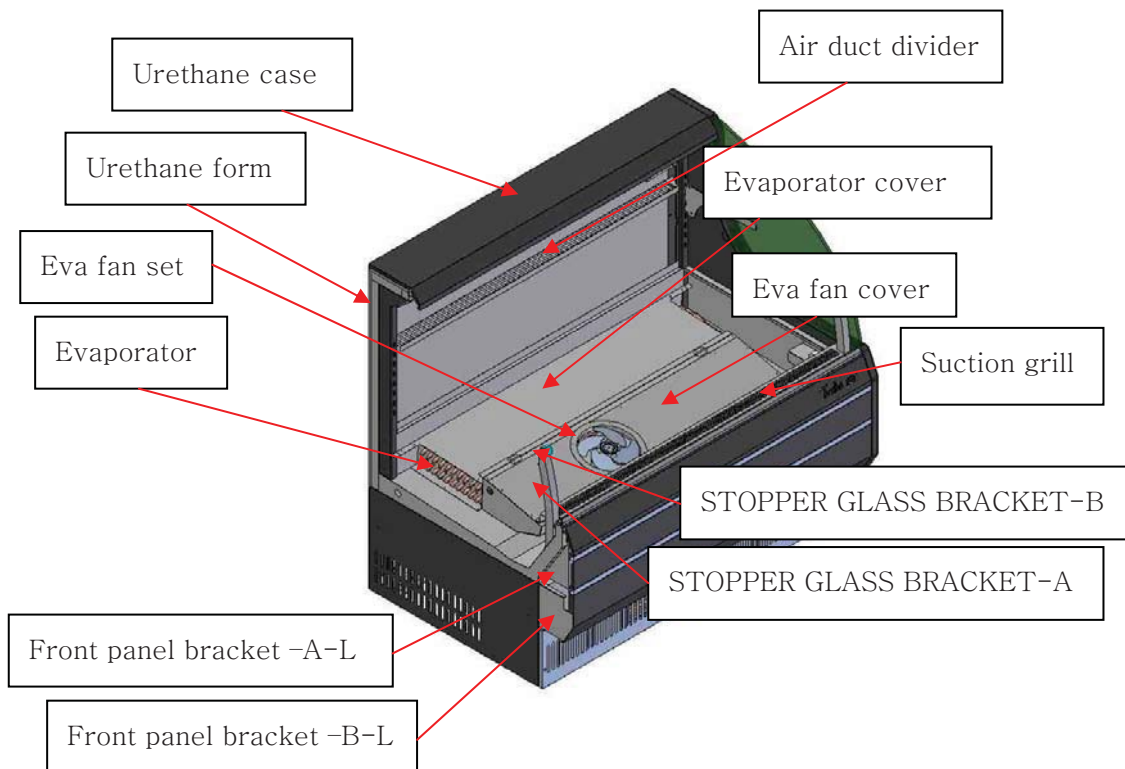
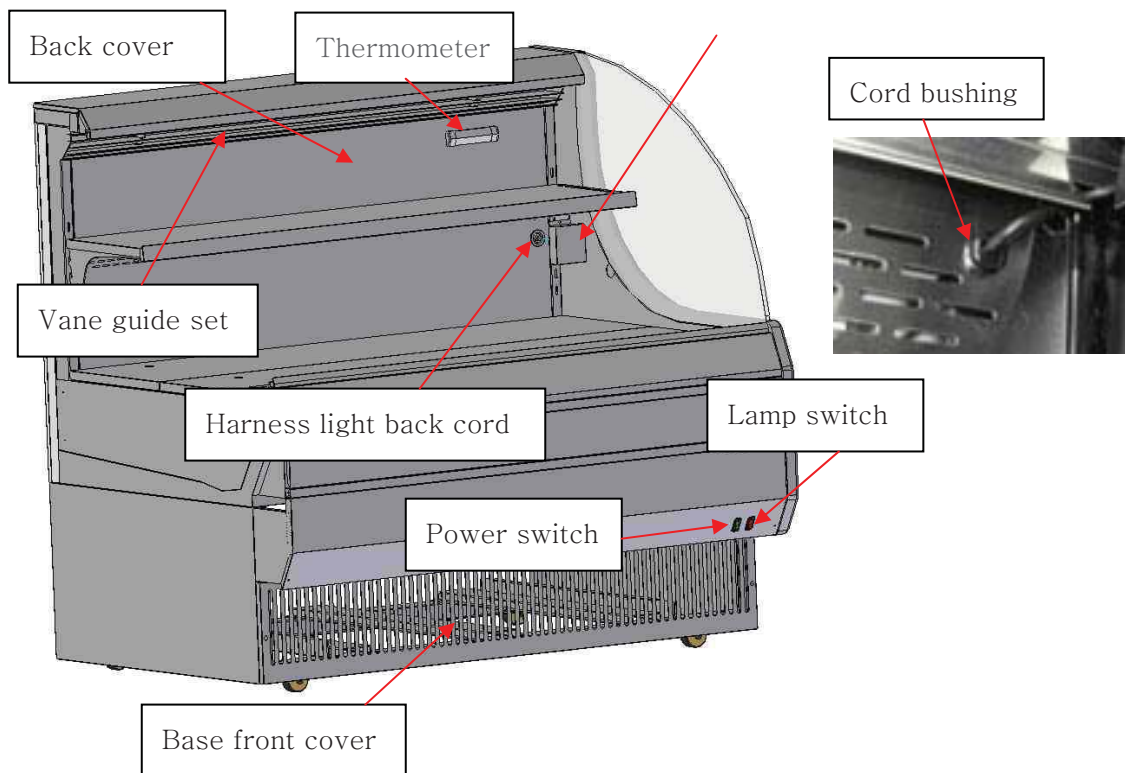
The temperature control is located near the front right hand side underneath the bottom shelf.

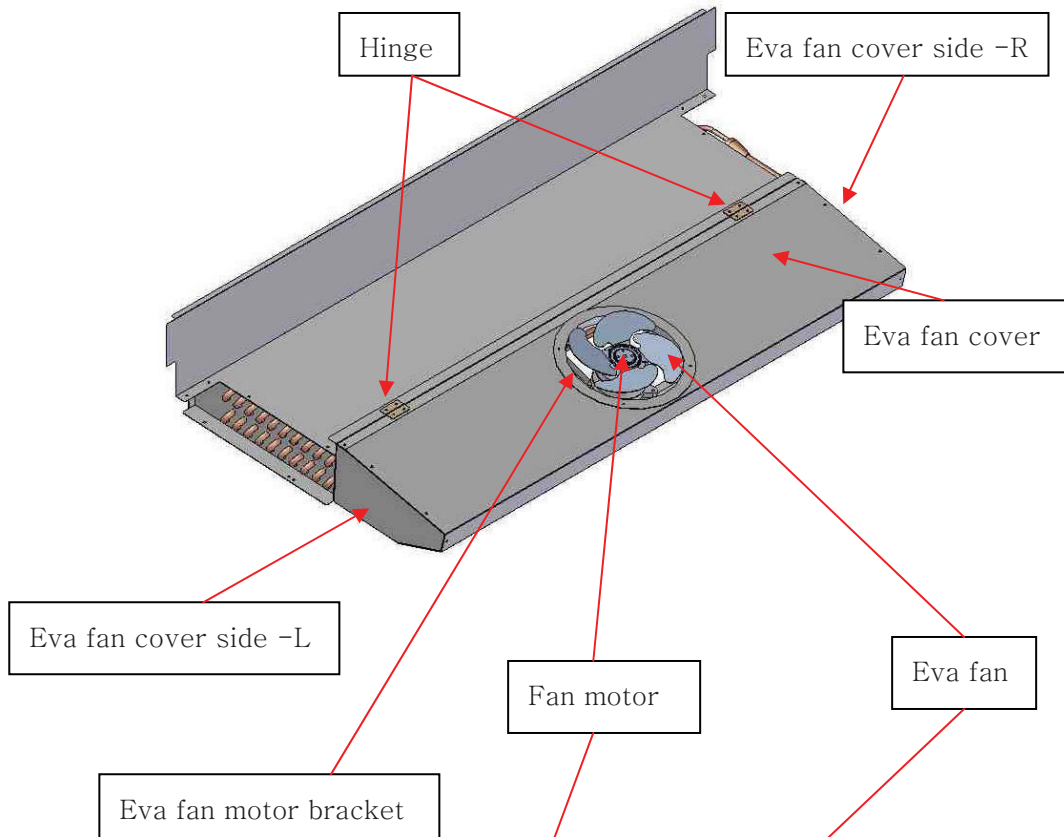
1. The original setting for the control is Normal.
2. The working temperature is from 37°F to 40°F.
3. To lower the temperature, turn the knob slightly to “COLD”. To raise the temperature, turn the knob to “WARM”.
4. In case of icing due to the hike of ambient temperature or humidity, turn the knob slightly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



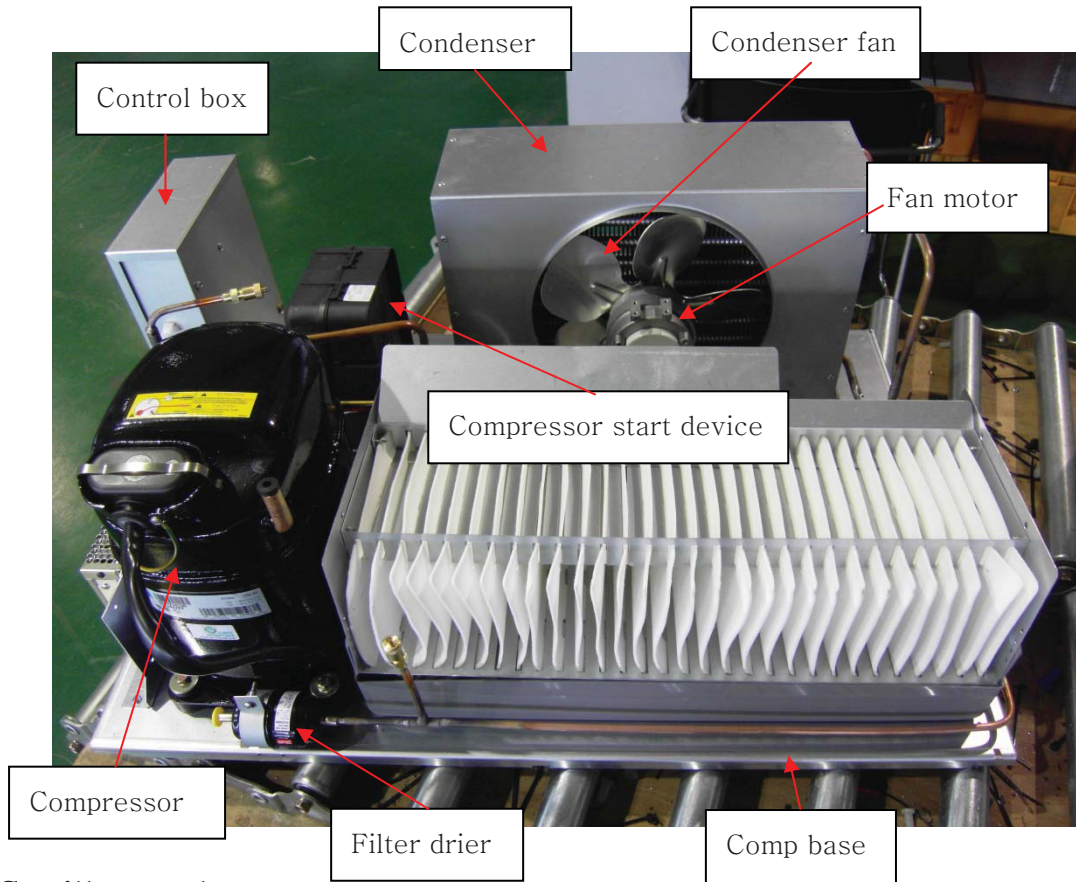
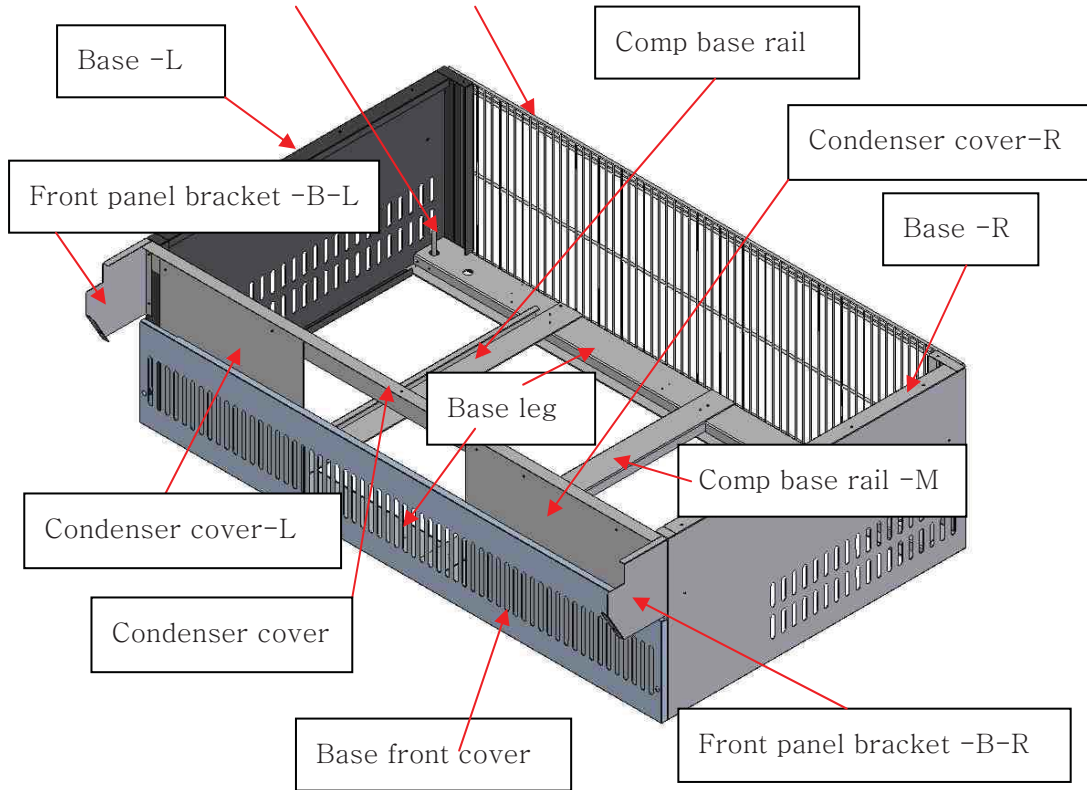




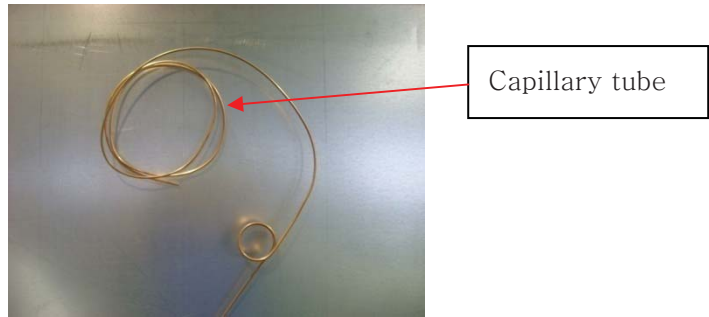
Adjust bolt (1/2")

Safety cover

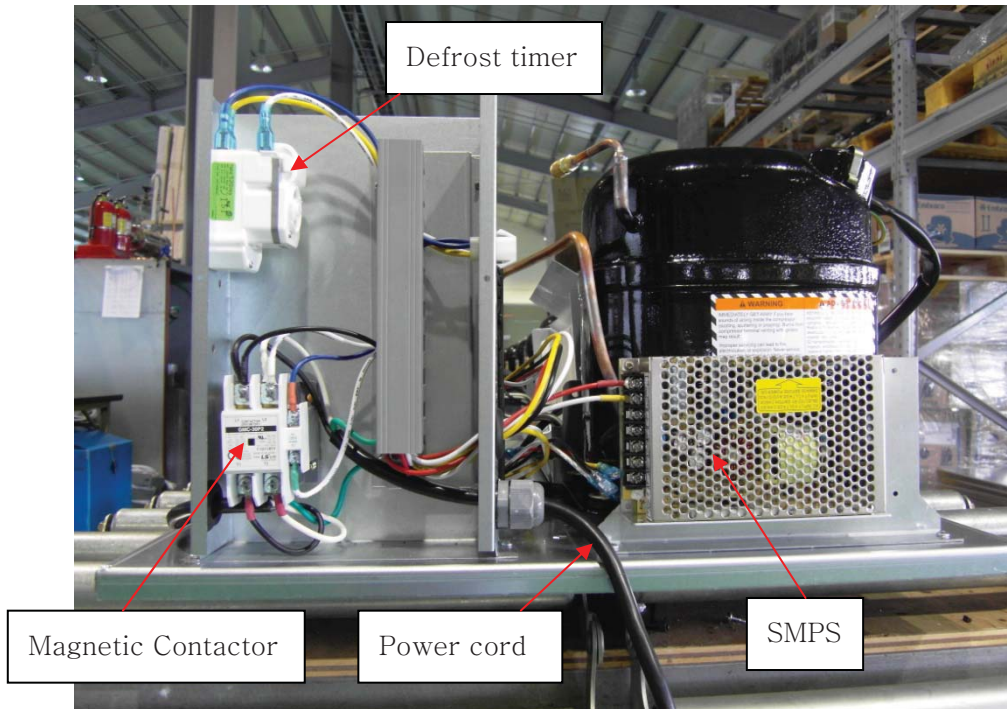




Capillary tube



	Capillary tube		Refrigerant		Compressor
	(inside diameter)	Length			
TOM-30L/S	2.8 mm, (1.48 mm)	2.5 m	R134a	450g	HK1C2U
TOM-40L/S	3.0 mm, (1.6 mm)	3.5 m	R134a	700g	CAJ4476Y
TOM-50L/S	3.0 mm, (1.6 mm)	3.2 m	R134a	800g	CAJ4476Y
TOM-60L/S	3.2 mm, (1.8 mm)	3.2 m	R134a	1000g	CAJ4492Y
TOM-75L/S	3.2 mm, (1.8 mm)	2.9 m	R134a	1100g	CAJ4492Y

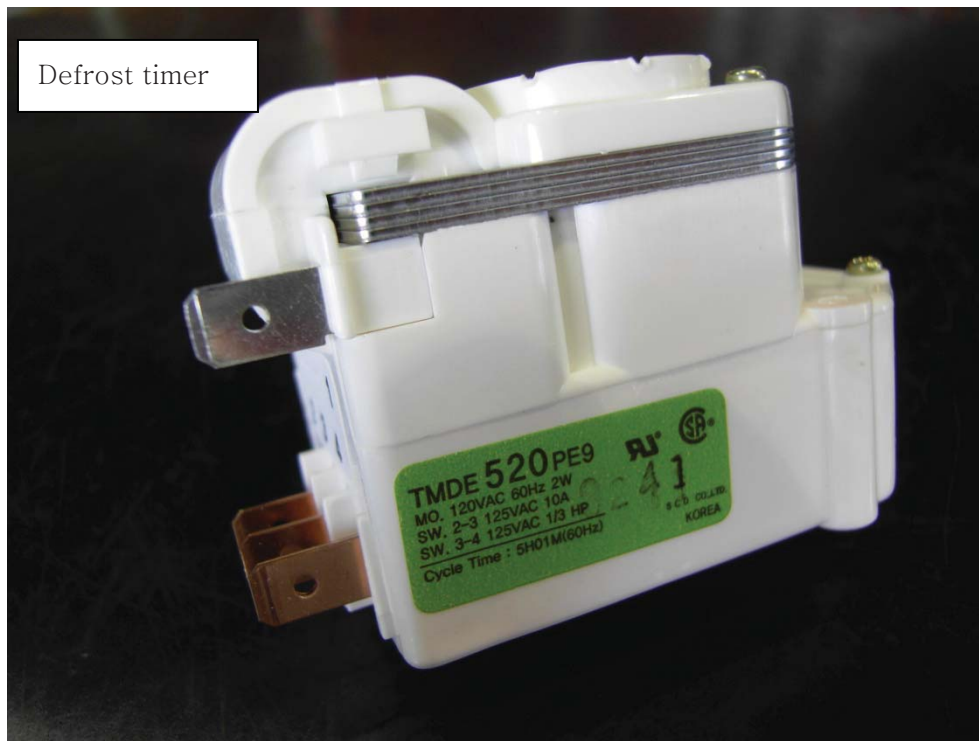


Compressor Assembly Diagrams





Thermostat

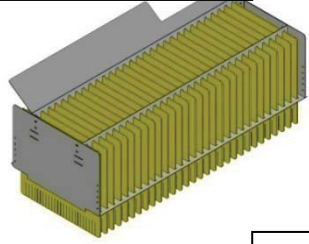


Defrost timer

Run time: 5 hours

Defrost time: 20 min

Eva con wick pad set



Eva con coil



EVA CON SET MOTOR TYPE

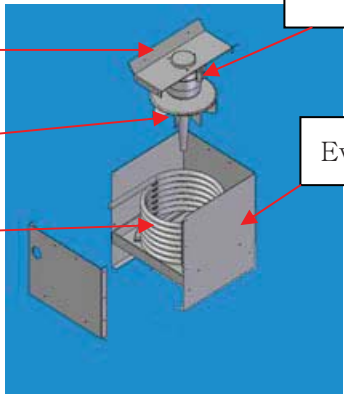
Eva con motor bracket

Eva con pump set

Eva con coil motor type

Eva con motor

Eva con case



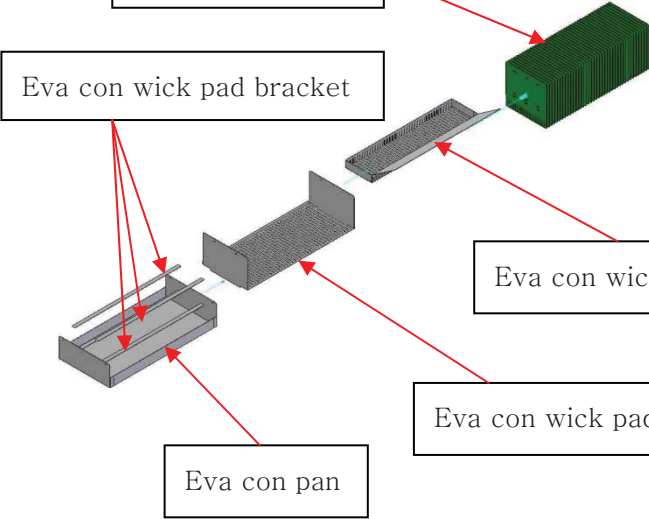
Eva con wick pad

Eva con wick pad bracket

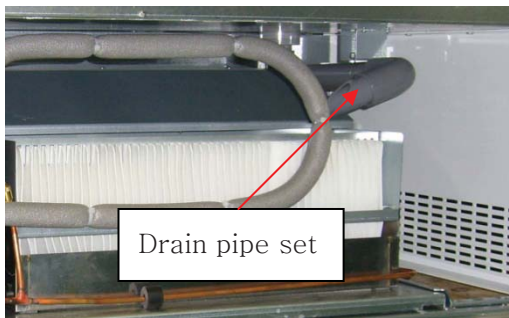
Eva con wick pad bracket up

Eva con wick pad bracket down

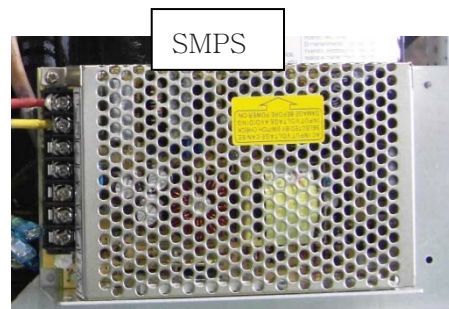
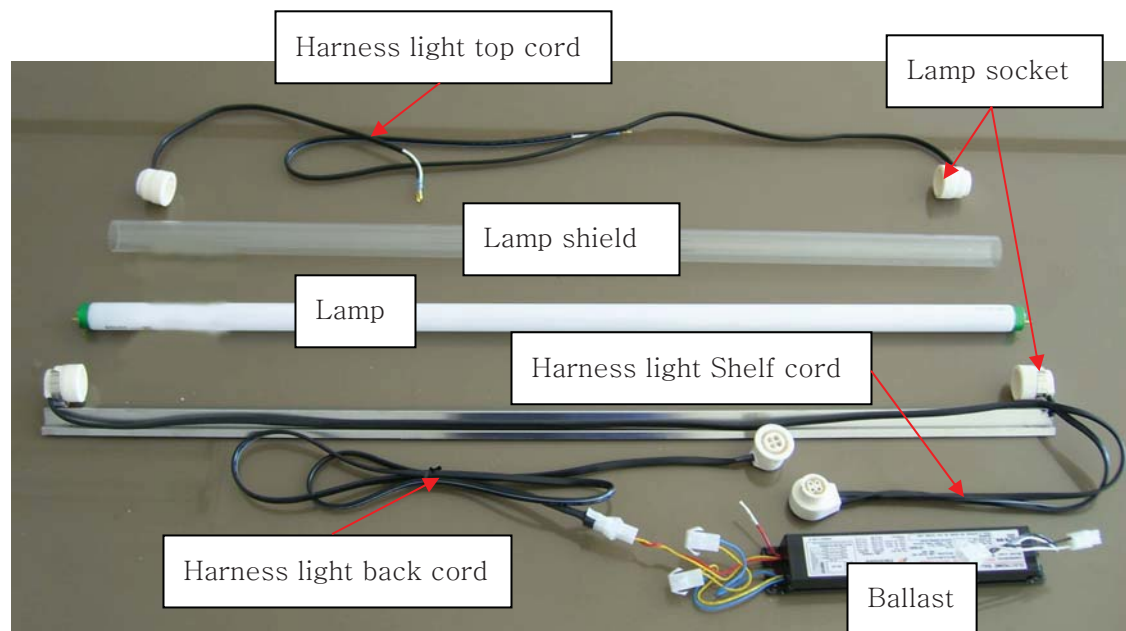
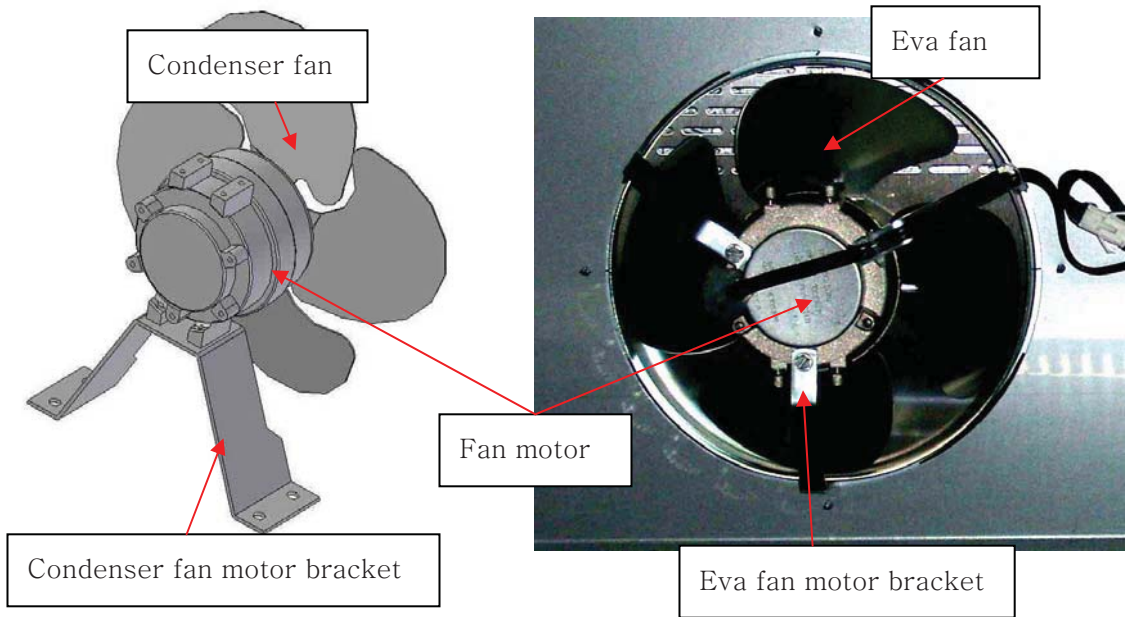
Eva con pan

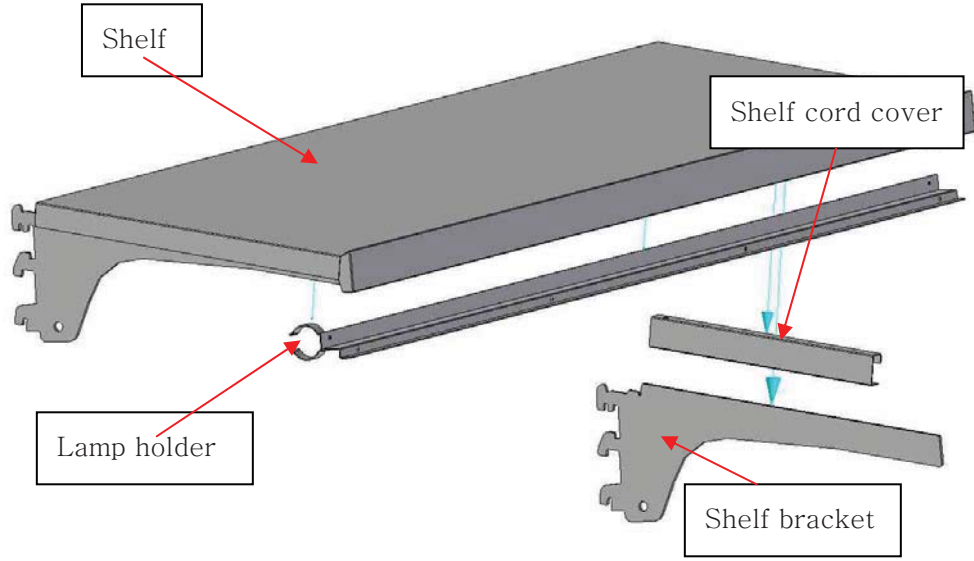


Drain filter



Drain pipe set





## PART LIST

	PART NAME	TOM-30*	TOM-40*	TOM-50*	TOM-60*	TOM-75*	NOTE
1	ADJUST BOLT (1/2")	4	4	4	4	4	
2	AIR DUCT DIVIDER-(L)	1	1	1	1	1	L, Model
3	BACK COVER-(L)	1	1	1	1	1	L, Model
4	BACK COVER-(S)	1	1	1	1	1	S, Model
5	BALLAST	1	1	1	1	1	1
6	BASE FRONT COVER	1	1	1	1	1	
7	BASE LEG	2	2	2	2	2	
8	BASE-L	1	1	1	1	1	
9	BASE-R	1	1	1	1	1	
10	BOTTOM SHELF-(L)	2	2	2	2	3	L, Model
11	BOTTOM SHELF-(S)	1	1	1	1	1	S, Model
12	BUMPER BAND	2	2	2	2	2	
13	CAPILLARY TUBE	1	1	1	1	1	
14	COMP BASE	1	1	1	1	1	
15	COMP BASE RAIL	2	2	2	2	2	
16	COMP BASE RAIL-M	1	1	1	1	1	
17	COMPRESSOR	1	1	1	1	1	
18	COMPRESSOR START DEVICE	1	1	1	1	1	
19	CONDENSER	1	1	1	1	1	
20	CONDENSER COVER	1	1	1	1	1	
21	CONDENSER COVER-L	1	1	1	1	1	
22	CONDENSER COVER-R	1	1	1	1	1	
23	CONDENSER FAN	1	1	1	2	2	230mm
24	CONDENSER FAN MOTOR BRACKET	1	1	1	2	2	
25	CONTROL BOX	1	1	1	1	1	
26	CORD BUSHING	1	1	1	1	2	L, Model
27	DEFROST TIMER	1	1	1	1	1	
28	DRAIN FILTER	1	1	1	1	1	
29	DRAIN PIPE SET	1	1	1	1	1	
30	EVA CON CASE				1	1	
31	EVA CON COIL	1	1	1			
32	EVA CON COIL MOTOR TYPE				1	1	



	PART NAME	TOM-30*	TOM-40*	TOM-50*	TOM-60*	TOM-75*	NOTE
33	EVA CON MOTOR				1	1	16W
34	EVA CON MOTOR BRACKET				1	1	
35	EVA CON PAN	1	1	1	1	1	
36	EVA CON PUMP SET				1	1	
37	EVA CON WICK PAD SET	1	1	1			
38	EVA FAN	1	1	1	1	1	175mm
39	EVA FAN COVER	1	1	1	1	1	
40	EVA FAN COVER SIDE-L	1	1	1	1	1	
41	EVA FAN COVER SIDE-R	1	1	1	1	1	
42	EVA FAN MOTOR BRACKET	1	1	1	2	2	
43	EVA FAN SET	1	1	1	2	2	
44	EVAPORATOR	1	1	1	1	1	
45	EVAPORATOR COVER	1	1	1	1	1	
46	FAN MOTOR	2	2	2	4	4	9W
47	FILTER DRIER	1	1	1	1	1	
48	FLUORESCENT LAMP-(L)	18W X 2	30W X 2	32W X 2	32W X 2	30W X 4	L, Model
49	FLUORESCENT LAMP-(S)	18W X 1	30W X 1	32W X 1	32W X 1	30W X 2	S, Model
50	FRAME SET-L	1	1	1	1	1	
51	FRAME SET-R	1	1	1	1	1	
52	FRONT PANEL BRACKET-A-L	1	1	1	1	1	
53	FRONT PANEL BRACKET-A-R	1	1	1	1	1	
54	FRONT PANEL BRACKET-B-L	1	1	1	1	1	
55	FRONT PANEL BRACKET-B-R	1	1	1	1	1	
56	FRONT PANEL DOWN	1	1	1	1	1	
57	FRONT PANEL UP	1	1	1	1	1	
58	HARNESS LIGHT BACK CORD	1	1	1	1	2	L, Model
59	HARNESS LIGHT BACK CORD (LED)	1	1	1	1	1	L, Model
60	HARNESS LIGHT PLUG COVER	1	1	1	1	2	L, Model
61	HARNESS LIGHT SHELF CORD	1	1	1	1	2	L, Model
62	HARNESS LIGHT TOP CORD	1	1	1	1	2	
63	HARNESS LIGHT TOP CORD (LED)	1	1	1	1	1	
64	HINGE	2	2	2	3	3	
65	LAMP HOLDER-(L)	4	4	4	4	8	L, Model
66	LAMP HOLDER-(S)	2	2	2	2	4	S, Model

	PART NAME	TOM-30*	TOM-40*	TOM-50*	TOM-60*	TOM-75*	NOTE
67	LAMP SHIELD-(L)	2	2	2	2	4	L, Model
68	LAMP SHIELD-(S)	1	1	1	1	2	S, Model
69	LAMP SOCKET-(L)	4	4	4	4	8	L, Model
70	LAMP SOCKET-(S)	2	2	2	2	4	S, Model
71	LAMP SWITCH	1	1	1	1	1	Green
72	LED LAMP HOLDER-(L)	4	4	4	4	8	L, Model
73	LED LAMP HOLDER-(S)	2	2	2	2	4	S, Model
74	LED LAMP-(L)	600 X 2	900 X 2	1200 X 2	1500 X 2	1800 X 1 900 X 2	L, Model
75	LED LAMP-(S)	600 X 1	900 X 1	1200 X 1	1500 X 1	1800 X 1	S, Model
76	MAGNETIC CONTACTOR	1	1	1	1	1	
77	POWER CORD	5-15	5-15	5-15	5-20	5-20	
78	POWER SWITCH	1	1	1	1	1	Red
79	SAFETY COVER	1	1	1	1	1	
80	SCREW-75	12	12	12	12	12	
81	SHELF	1	1	1	1	1	L, Model
82	SHELF BRACKET	2	2	2	2	4	L, Model
83	SHELF CORD COVER	1	1	1	1	2	L, Model
84	SIDE GLASS-(L)	2	2	2	2	2	L, Model
85	SIDE GLASS-(S)	2	2	2	2	2	S, Model
86	SIDE PANEL-L-(L)	1	1	1	1	1	L, Model
87	SIDE PANEL-L-(S)	1	1	1	1	1	S, Model
88	SIDE PANEL-R-(L)	1	1	1	1	1	L, Model
89	SIDE PANEL-R-(S)	1	1	1	1	1	S, Model
90	SMPS-(L)	35W X 1	35W X 1	50W X 1	75W X 1	75W X 1	L, Model
91	SMPS-(S)	35W X 1	35W X 1	35W X 1	35W X 1	35W X 1	S, Model
92	STEP SHELF 1	1	1	1	1	1	S, Model
93	STEP SHELF 2	1	1	1	1	1	S, Model
94	STOPPER GLASS	1	1	1	1	1	
95	STOPPER GLASS BRACKET-A	2	2	2	2	2	
96	STOPPER GLASS BRACKET-B	2	2	2	2	2	
97	STOPPER GLASS MOIDING	1	1	1	1	1	
98	SUCTION GRILL	1	1	1	1	1	
99	THERMOMETER	1	1	1	1	1	

	PART NAME	TOM-30*	TOM-40*	TOM-50*	TOM-60*	TOM-75*	NOTE
100	THERMOSTAT	1	1	1	1	1	
101	TOP COVER	1	1	1	1	1	
102	VANE GUIDE SET	1	1	1	1	1	
103	WASHER (M6)	12	12	12	12	12	
104							

◇ PART ORDER EXAMPLE

Example: TOM-50S, SIDE GLASS, QTY