

REFRIGERATOR MANUFACTURER  
**Turbo air**

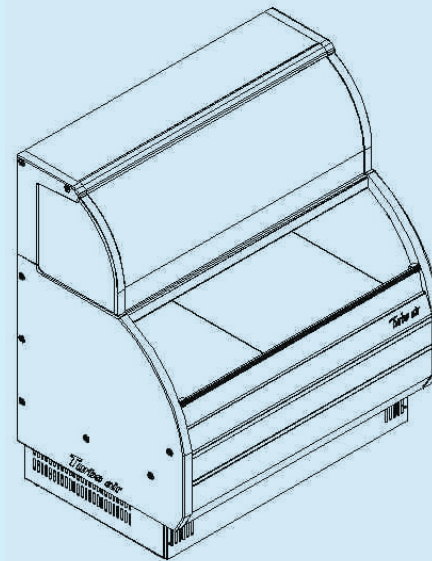
*Turbo Air Speed up the Pace of Innovation*

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



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# MAIN COMPONENTS

## 1. Compressor

	TOM-W-30S	TOM-W-40S TOM-W-50S	TOM-W-60S TOM-W-75S*
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. Run Capacitor

Rating, uF, V	20uF, 350 V	250uF, 160 V	250uF, 160V
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## 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, (TOM-W-60S, TOM-W-75S)

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

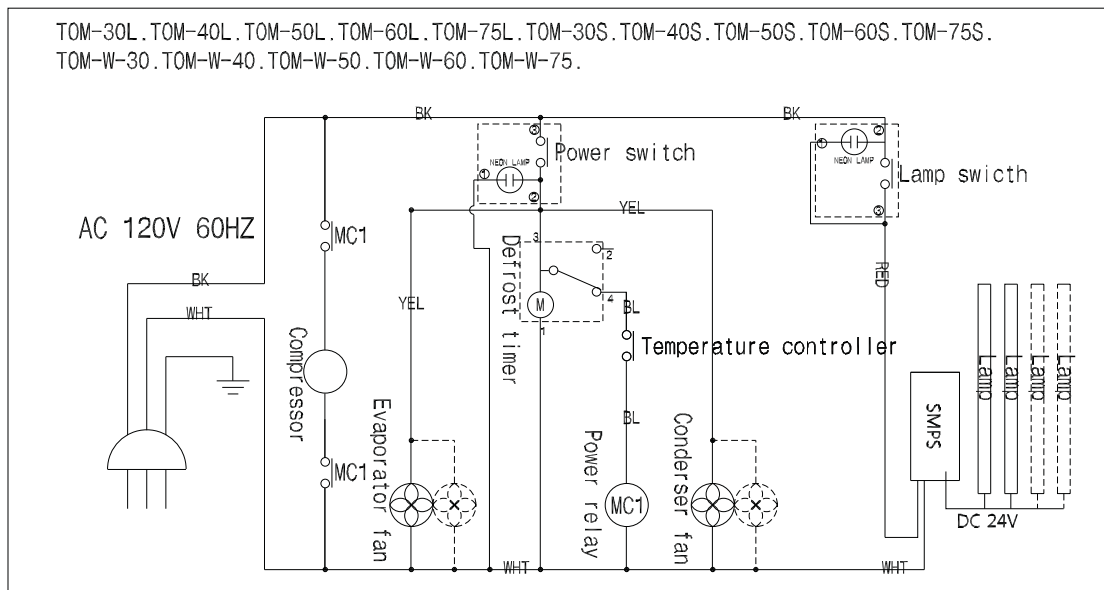
## 6. Thermostat (Refrigeration Controller)

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

## 7. LED LAMP, POWER SUPPLY

	LED LAMP			POWER SUPPLY SMPS
	LENGTH	WATT	EACH	
TOM-W-30S	500 mm	6.0 W	3 EA	NES-35-24, LS35-24
TOM-W-40S	800 mm	9.6 W	3 EA	NES-50-24, LS50-24
TOM-W-50S	1,100 mm	13.2 W	3 EA	NES-75-24, LS75-24
TOM-W-60S	1,400 mm	16.8 W	3 EA	NES-75-24, LS75-24
TOM-W-75S	1,700 mm	20.4 W	3.EA	NES-100-24, LS100-24

## WIRING DIAGRAM



## TEMPERATURE CONTROL INSTRUCITON

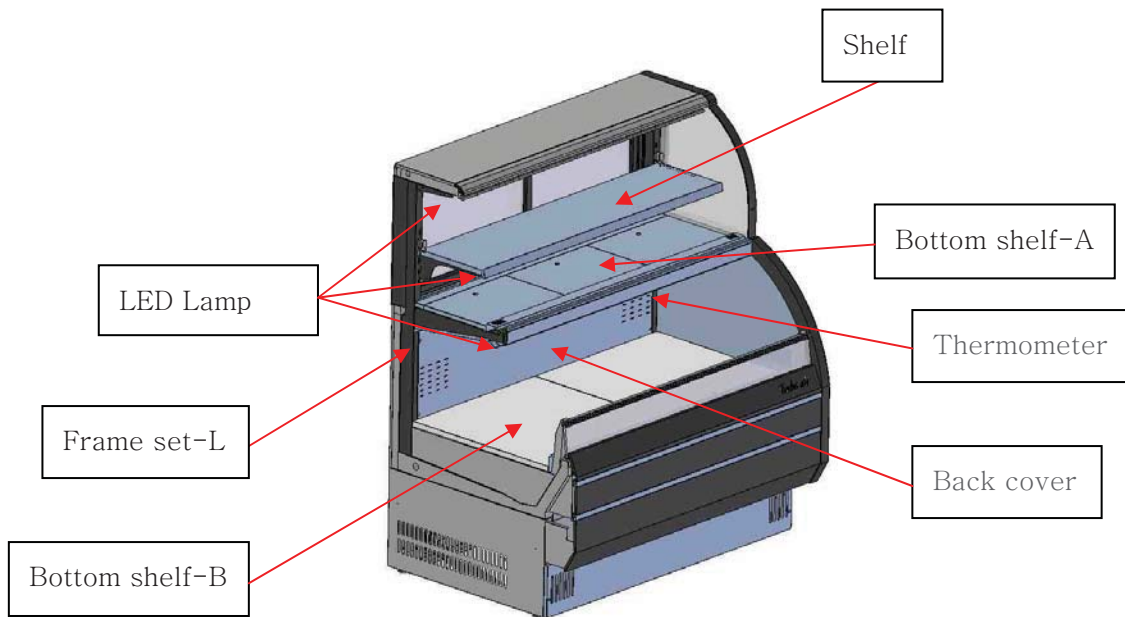
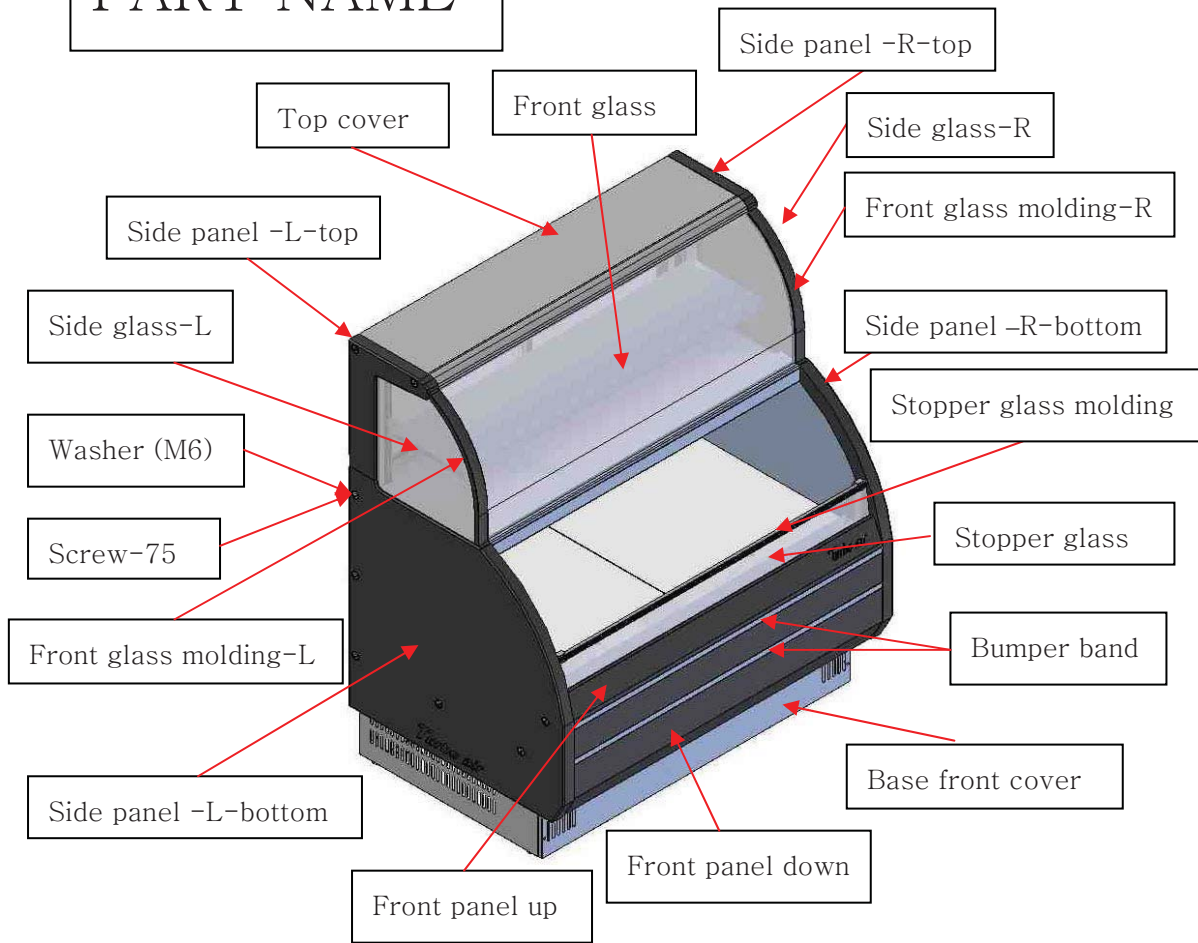


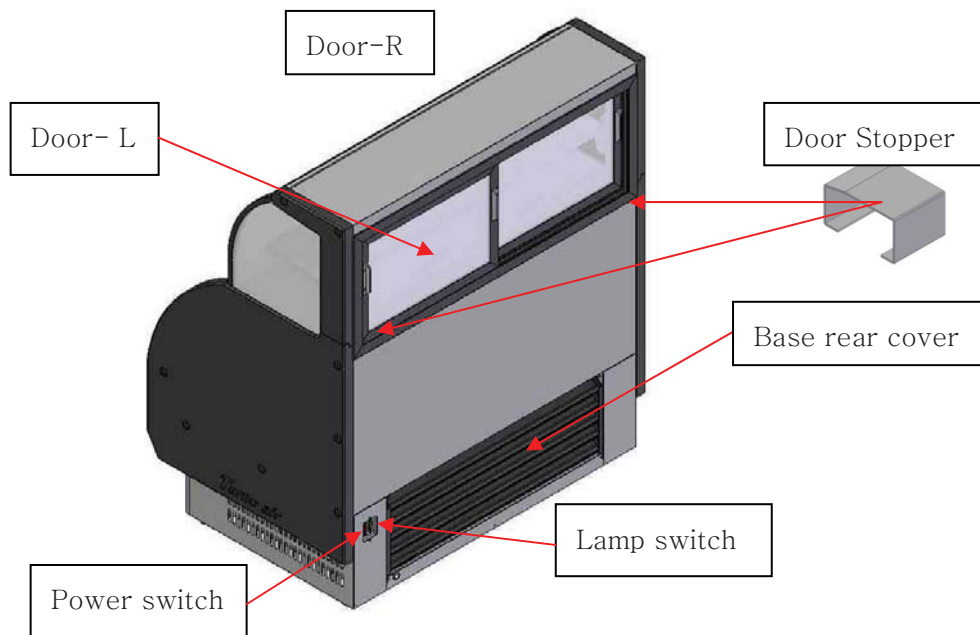
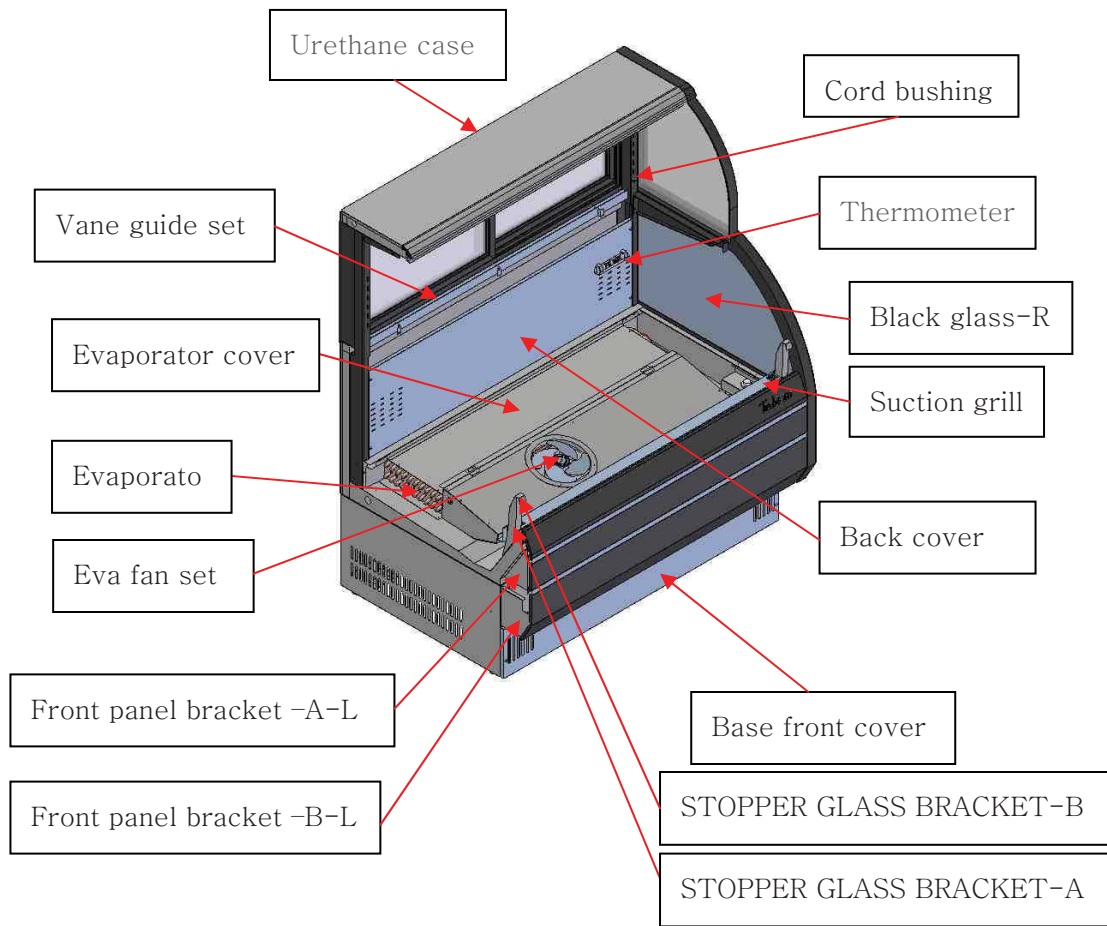
The temperature control is located near the front right hand side underneath the bottom shelf.

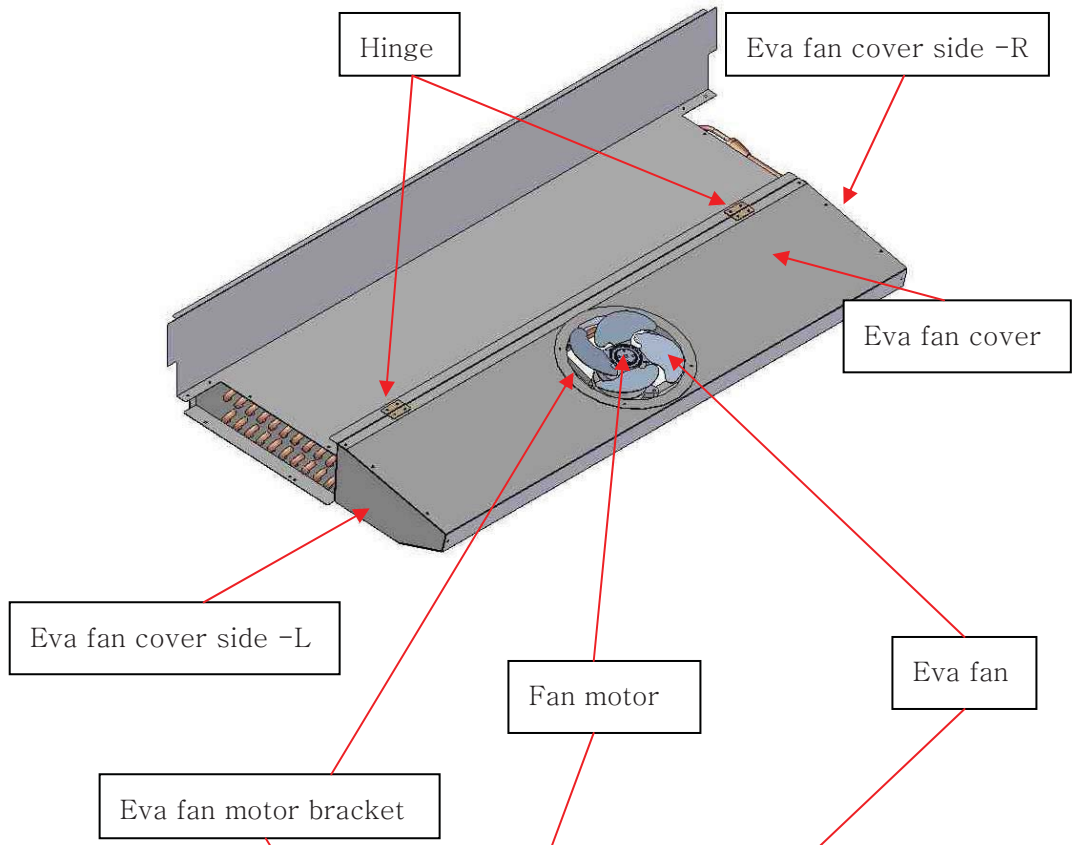
1. The original setting for the control is Normal.
2. The working temperature is from 37°F to 40°F.
3. To lower the temperature, turn the knob slightly to “COLD”. To raise the temperature, turn the knob to “WARM”.
4. In case of icing due to the hike of ambient temperature or humidity, turn the knob slightly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

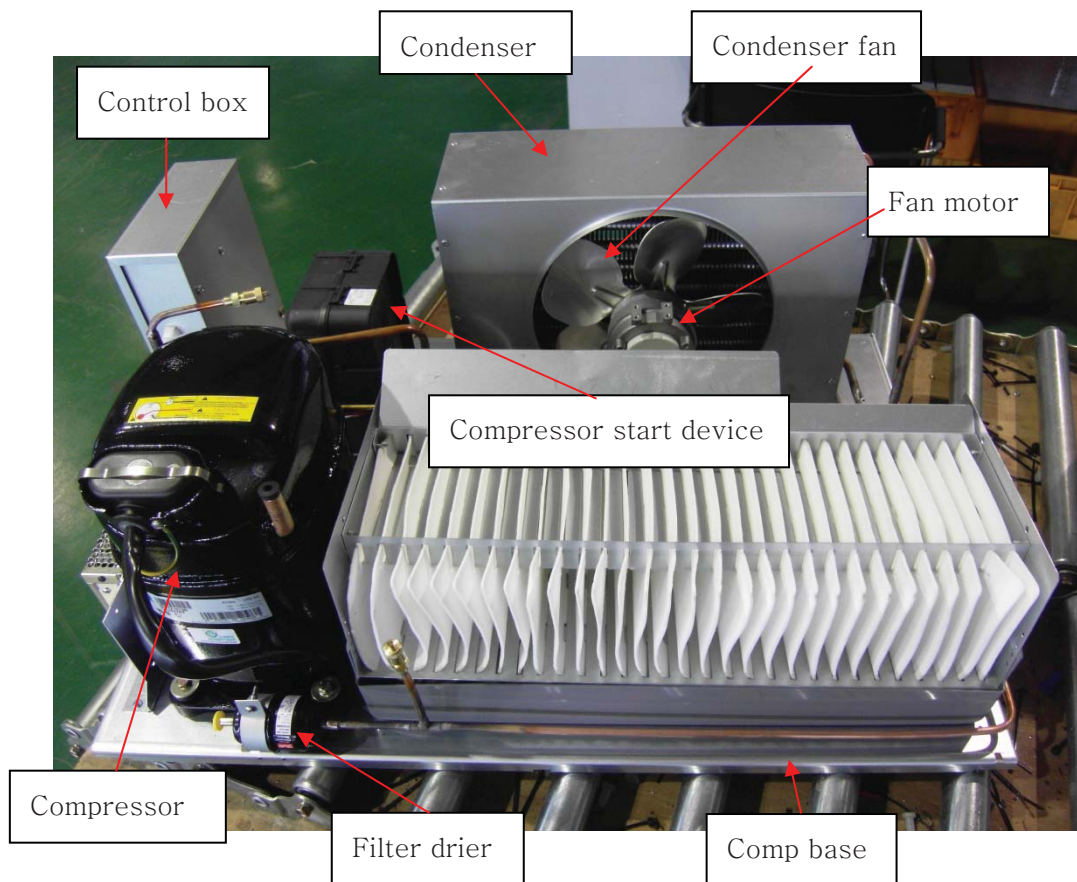
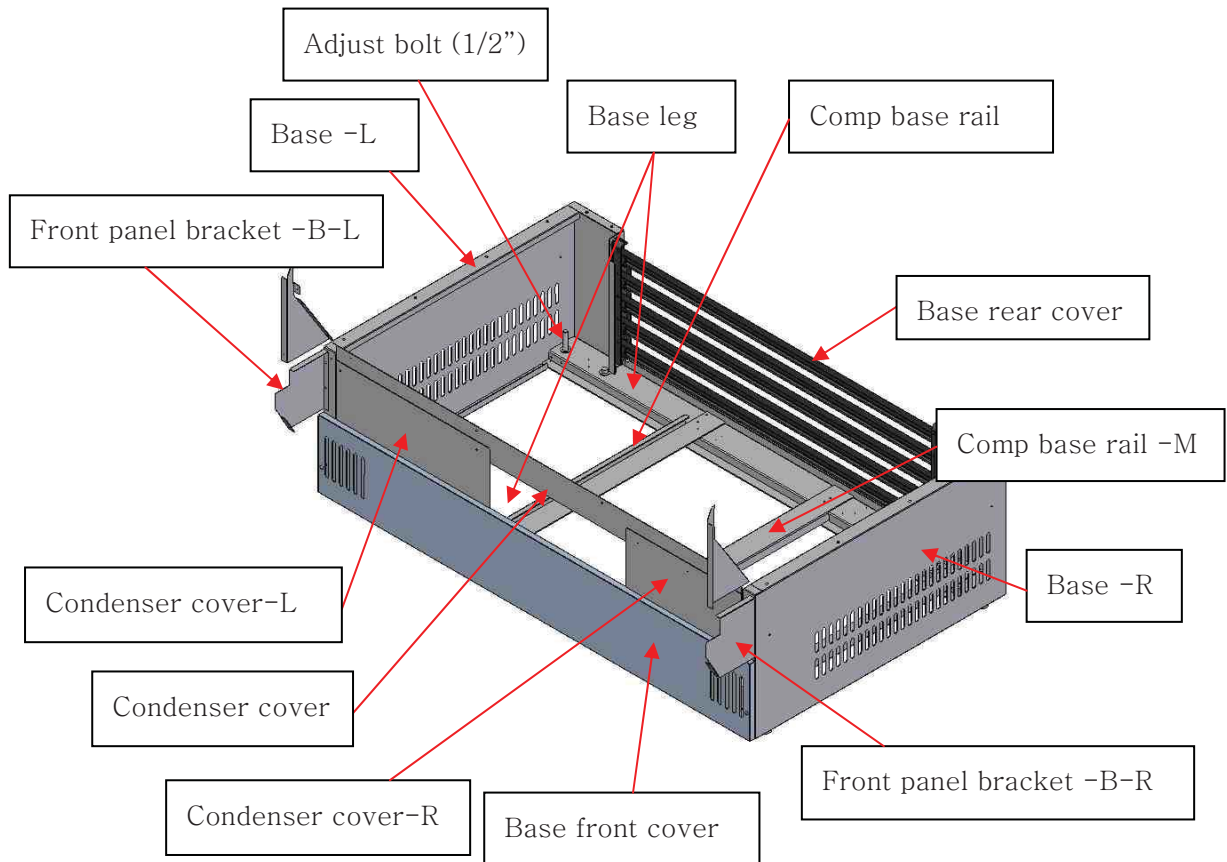
[Display is designed to be in an area that is ambient 75 degrees Fahrenheit (dry bulb) or colder and 55 percent relative humidity.]

# PART NAME

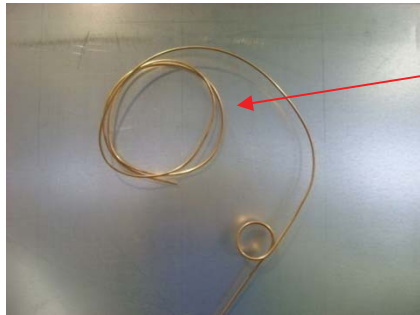






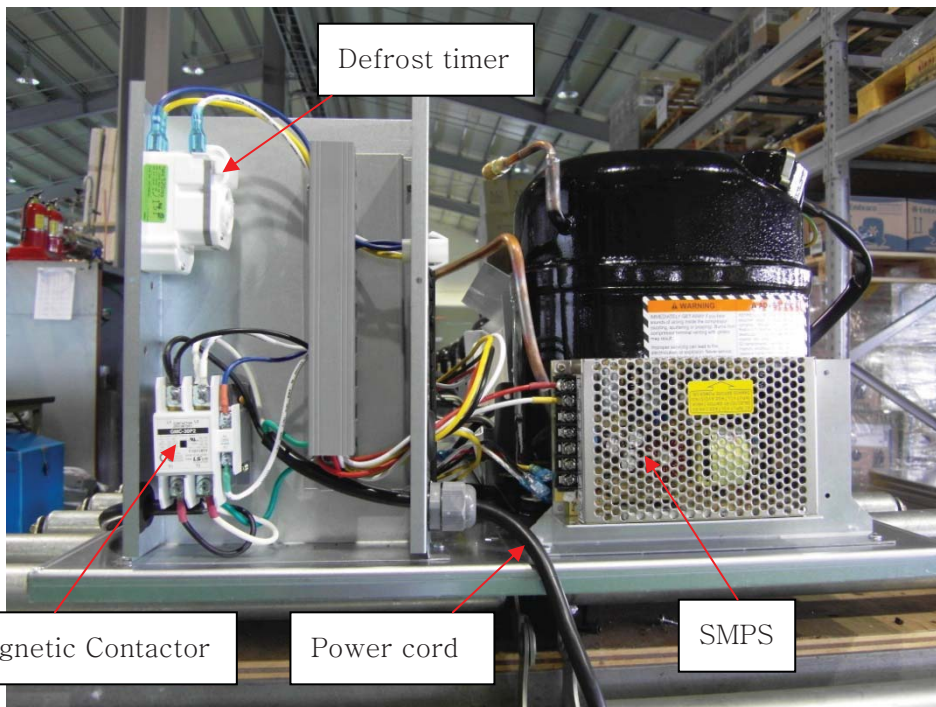


## Capillary tube



Capillary tube

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



Defrost timer

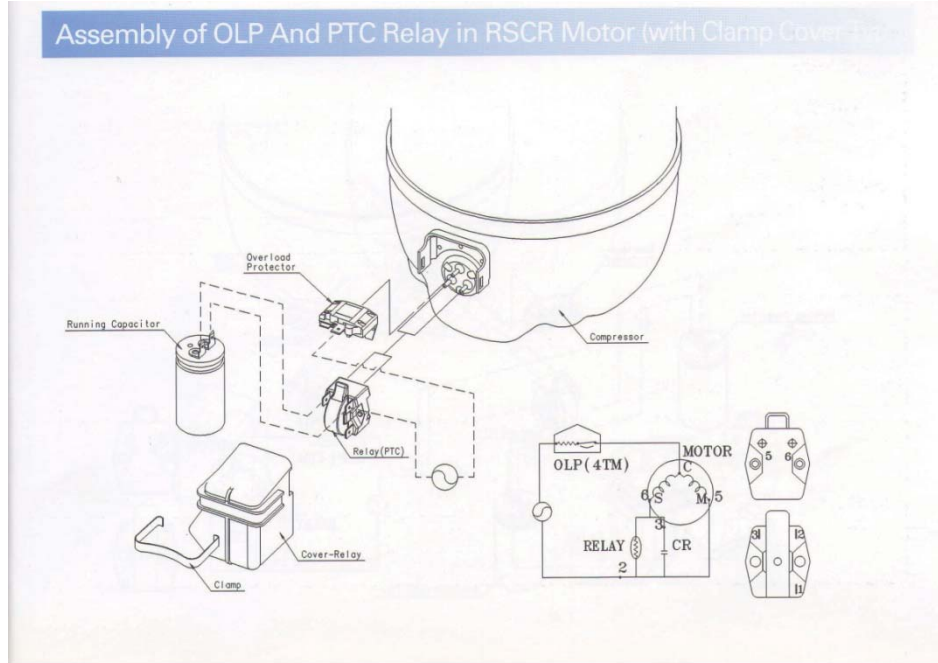
Magnetic Contactor

Power cord

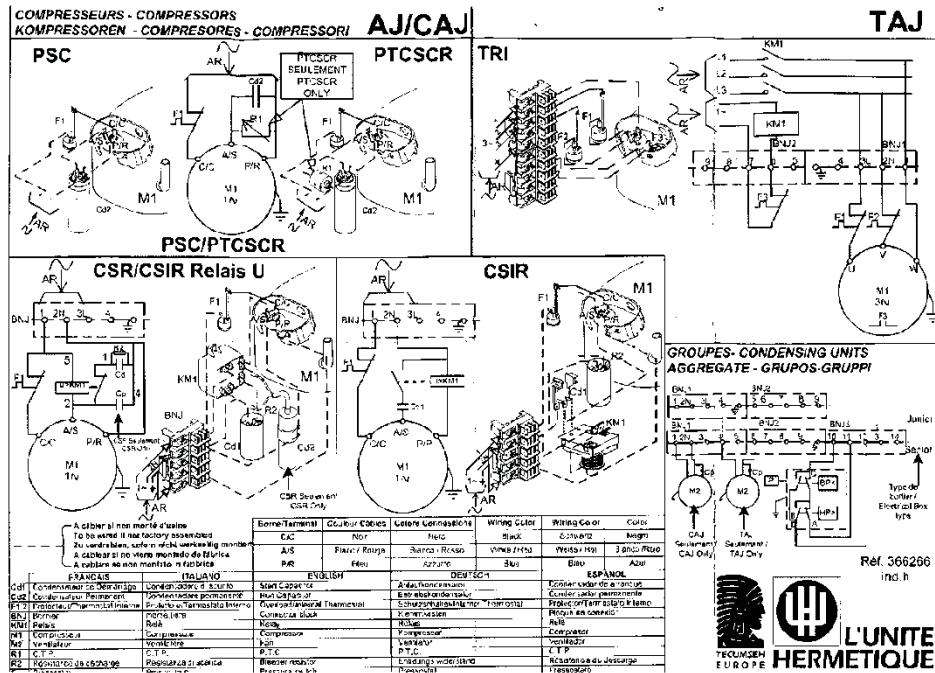
SMPS

# Compressor Assembly Diagrams

TOM-W-30S

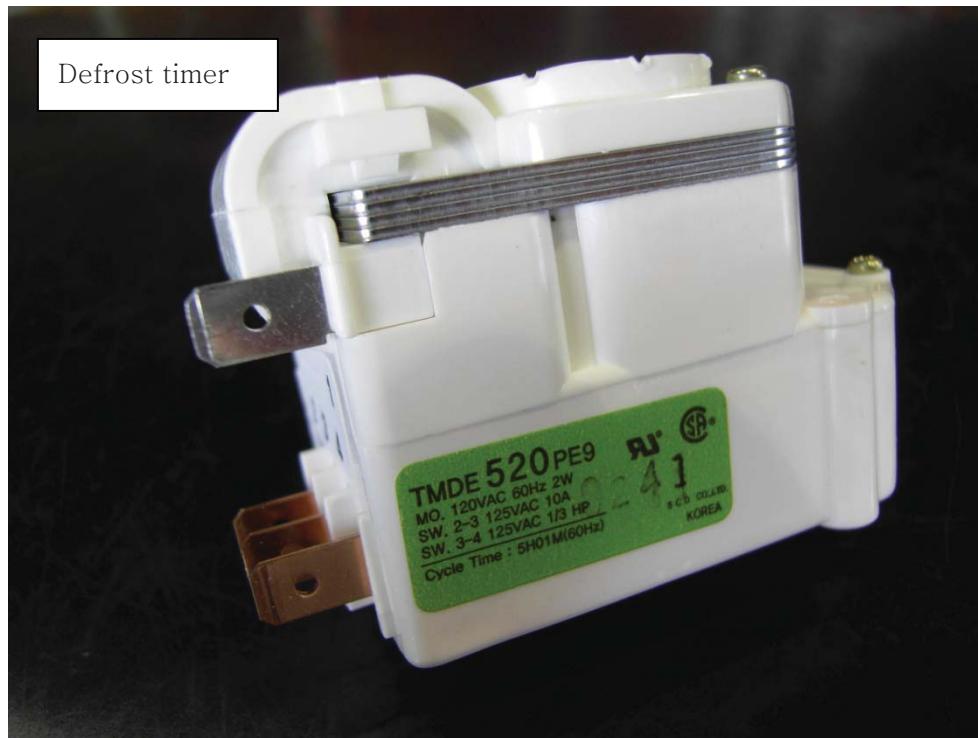


TOM-W-40S, TOM-W-50S, TOM-W-60S, TOM-W-75S





Thermostat

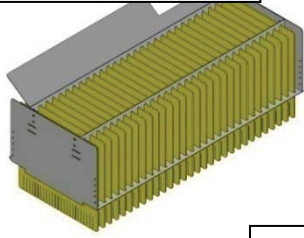


Defrost timer

Run time: 5 hours

Defrost time: 20 min

Eva con wick pad set



Eva con coil



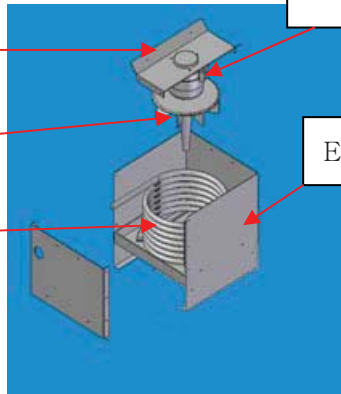
EVA CON SET MOTOR TYPE

Eva con motor

Eva con motor bracket

Eva con pump set

Eva con coil motor type



Eva con wick pad

Eva con wick pad bracket

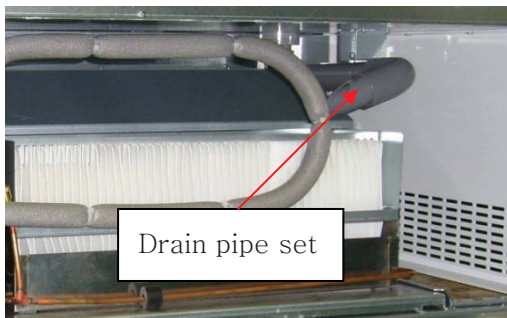
Eva con wick pad bracket up

Eva con wick pad bracket down

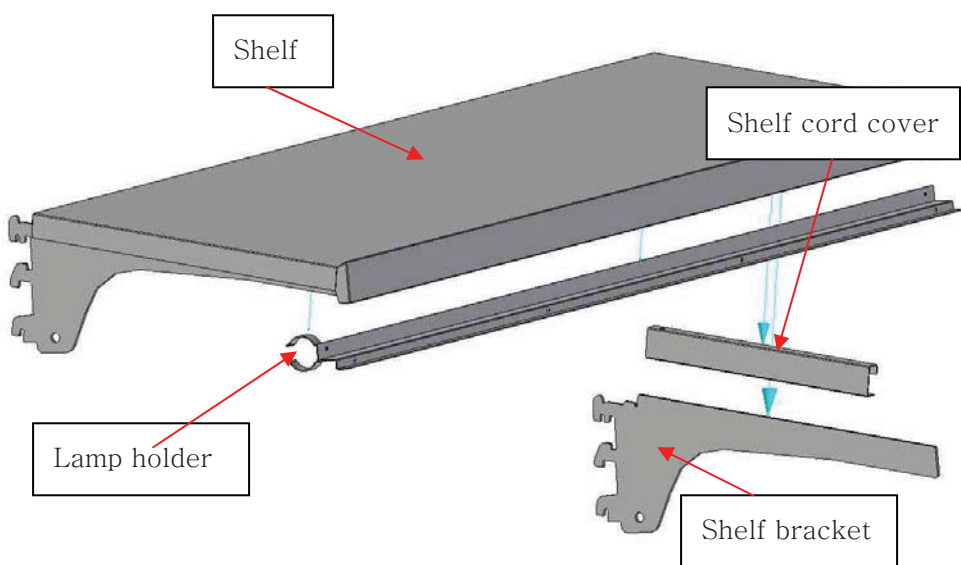
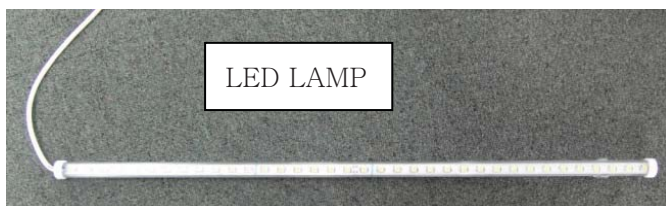
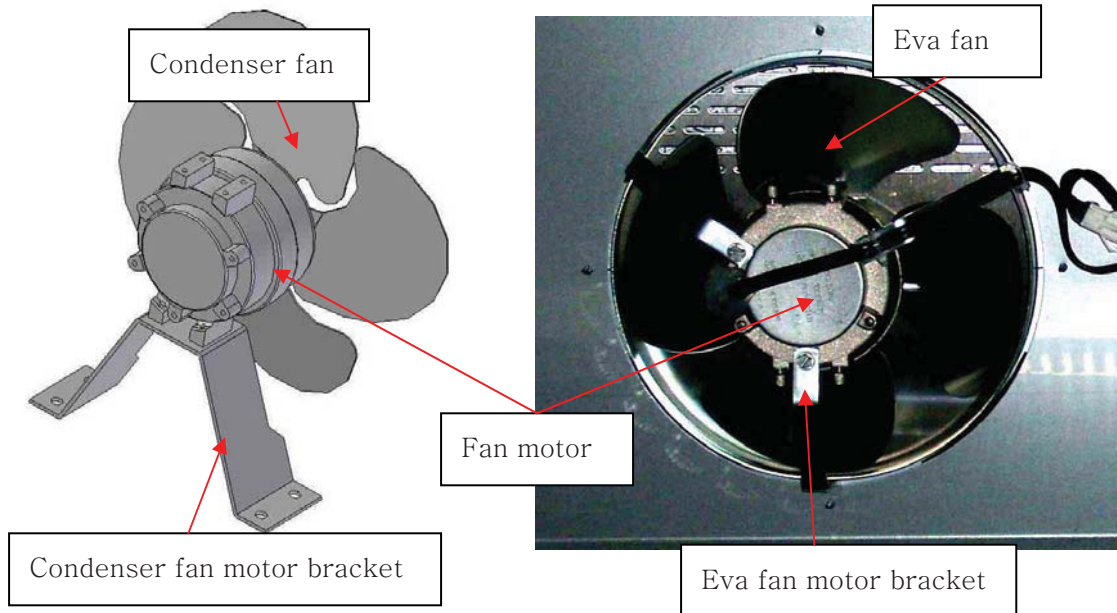
Eva con pan



Drain filter



Drain pipe set



# PART LIST

	PART NAME	TOM-W-30S	TOM-W-40S	TOM-W-50S	TOM-W-60S	TOM-W-75S	NOTE
1	ADJUST BOLT (1/2")	4	4	4	4	4	
2	BACK COVER	1	1	1	1	1	
3	BASE FRONT COVER	1	1	1	1	1	
4	BASE LEG	2	2	2	2	2	
5	BASE REAR COVER	1	1	1	1	1	
6	BASE-L	1	1	1	1	1	
7	BASE-R	1	1	1	1	1	
8	BLACK GLASS-L	1	1	1	1	1	
9	BLACK GLASS-R	1	1	1	1	1	
10	BOTTOM SHELF-A	2	2	2	2	3	
11	BOTTOM SHELF-B	1	2	2	2	3	
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	1	
27	DEFROST TIMER	1	1	1	1	1	
28	DOOR-L	1	1	1	1	2	
29	DOOR-R	1	1	1	1	2	
30	DRAIN FILTER	1	1	1	1	1	
31	DRAIN PIPE SET	1	1	1	1	1	
32	EVA CON CASE	1	1	1	1	1	

	PART NAME	TOM-W-30S	TOM-W-40S	TOM-W-50S	TOM-W-60S	TOM-W-75S	NOTE
33	EVA CON COIL	1	1	1			
34	EVA CON COIL MOTOR TYPE				1	1	
35	EVA CON MOTOR				1	1	16W
36	EVA CON MOTOR BRACKET				1	1	
37	EVA CON PAN	1	1	1	1	1	
38	EVA CON PUMP SET				1	1	
39	EVA CON WICK PAD SET	1	1	1			
40	EVA FAN	1	1	1	2	2	175mm
41	EVA FAN COVER	1	1	1	1	1	
42	EVA FAN COVER SIDE-L	1	1	1	1	1	
43	EVA FAN COVER SIDE-R	1	1	1	1	1	
44	EVA FAN MOTOR BRACKET	1	1	1	2	2	
45	EVA FAN SET	1	1	1	2	2	
46	EVAPORATOR	1	1	1	1	1	
47	EVAPORATOR COVER	1	1	1	1	1	
48	FAN MOTOR	2	2	2	4	4	
49	FILTER DRIER	1	1	1	1	1	
50	FRAME SET-L	1	1	1	1	1	
51	FRAME SET-R	1	1	1	1	1	
52	FRONT GLASS	1	1	1	1	1	
53	FRONT PANEL BRACKET-A-L	1	1	1	1	1	
54	FRONT PANEL BRACKET-A-R	1	1	1	1	1	
55	FRONT PANEL BRACKET-B-L	1	1	1	1	1	
56	FRONT PANEL BRACKET-B-R	1	1	1	1	1	
57	FRONT PANEL DOWN	1	1	1	1	1	
58	FRONT PANEL UP	1	1	1	1	1	
59	HARNESS LIGHT BACK CORD	1	1	1	1	1	
60	HARNESS LIGHT TOP CORD	1	1	1	1	1	
61	HINGE	2	2	2	3	3	
62	LAMP HOLDER(LED)	6	9	9	12	12	
63	LAMP SWITCH	1	1	1	1	1	Green
64	LED LAMP	500 X 3	800 X 3	1100 X 3	1400 X 3	800 X 2 1700 X 2	
65	MAGNETIC CONTACTOR	1	1	1	1	1	

	PART NAME	TOM-W-30S	TOM-W-40S	TOM-W-50S	TOM-W-60S	TOM-W-75S	NOTE
66	POWER CORD	5-15	5-15	5-15	5-20	5-20	
67	POWER SWITCH	1	1	1	1	1	Red
68	SCREW-75	16	16	16	16	16	
69	SHELF	1	1	1	1	2	
70	SHELF BRACKET	2	2	2	2	4	
71	SHELF CORD COVER	1	1	1	1	2	
72	SIDE GLASS-L	1	1	1	1	1	
73	SIDE GLASS-R	1	1	1	1	1	
74	SIDE PANEL-L-BOTTOM	1	1	1	1	1	
75	SIDE PANEL-L-TOP	1	1	1	1	1	
76	SIDE PANEL-R-BOTTOM	1	1	1	1	1	
77	SIDE PANEL-R-TOP	1	1	1	1	1	
78	SMPS	35W X 1	50W X 1	75W X 1	75W X 1	100W X 1	
79	STOPPER GLASS	1	1	1	1	1	
80	STOPPER GLASS BRACKET-A	2	2	2	2	2	
81	STOPPER GLASS BRACKET-B	2	2	2	2	2	
82	STOPPER GLASS MOIDING	1	1	1	1	1	
83	SUCTION GRILL	1	1	1	1	1	
84	SUCTION GRILL UP	1	1	1	1	1	
85	THERMOMETER	1	1	1	1	1	
86	THERMOSTAT	1	1	1	1	1	
87	TOP COVER	1	1	1	1	1	
88	VANE GUIDE SET	1	1	1	1	1	
89	WASHER (M6)	16	16	16	16	16	
90							
91							
92							

◇ PART ORDER EXAMPLE

Example: TOM-W-50S, FRONT GLASS, QTY