

Commercial Refrigerator & Freezer Service Manual

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

Sandwich Salad Unit M3 Series

**MST-28
MST-48
MST-60
MST-72**

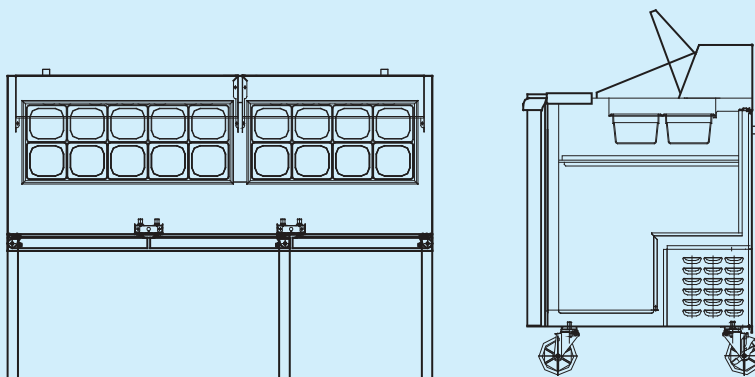


TABLE OF CONTENTS

1. EXPLODED VIEW

1-1.MST-28 EXPLODED VIEW

1-1.MST-48 EXPLODED VIEW

1-1.MST-60 EXPLODED VIEW

1-1.MST-72 EXPLODED VIEW

2. WIRING DIAGRAMS

2-1. MST-28 / MST-48

2-2. MST-60

2-3. MST-72

3. MAIN COMPONENTS

4. TEMPERATURE CONTROL INSTRUCTION

5. PARTS LIST

6. REPLACEMENT OF MAIN COMPONENTS

6-1. REPLACING DOOR

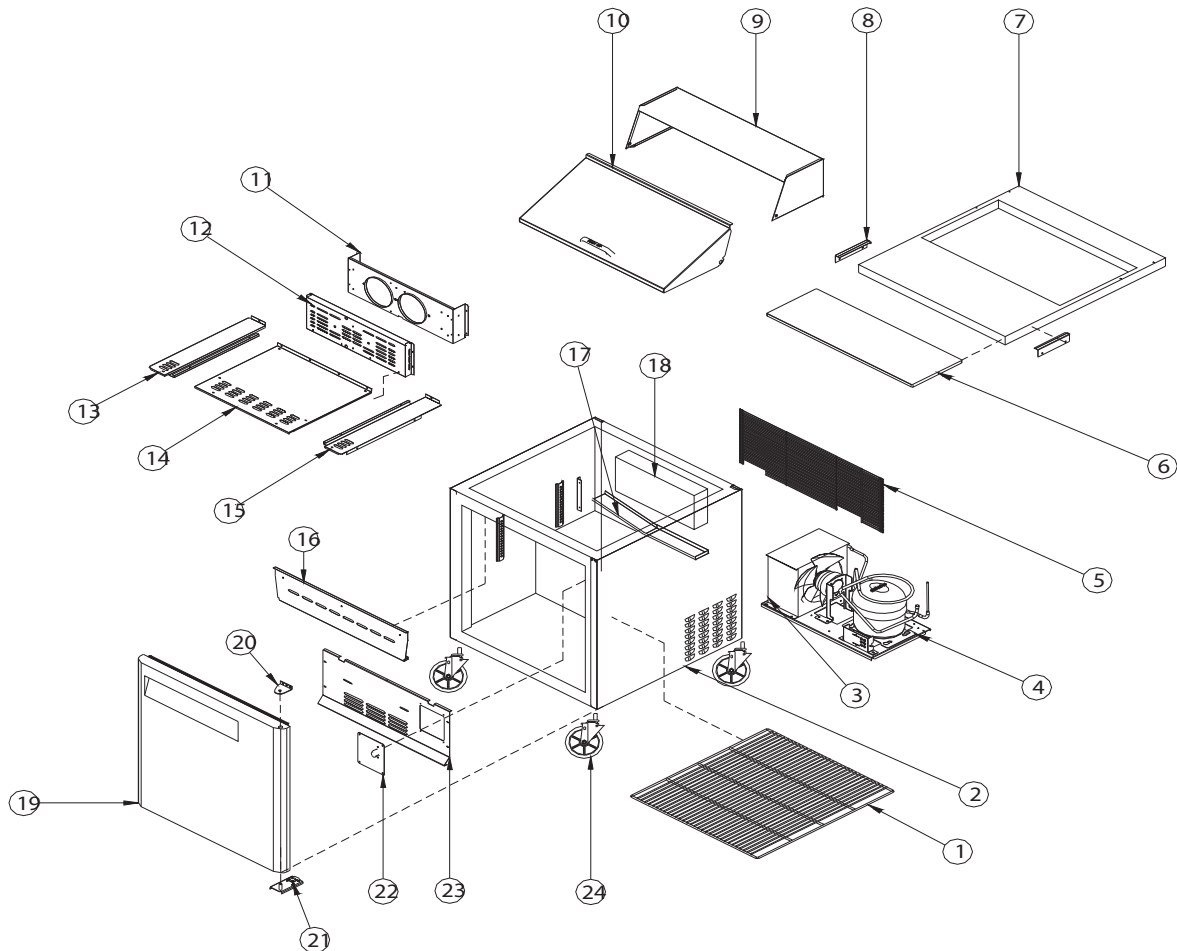
6-2. REFRIGERATION COMPARTMENT PARTS

6-3. COMPRESSOR COMPARTMENT PARTS

6-4. REPLACING THE EVAPORATOR & EVAPORATOR FAN MOTOR

1. EXPLODED VIEW

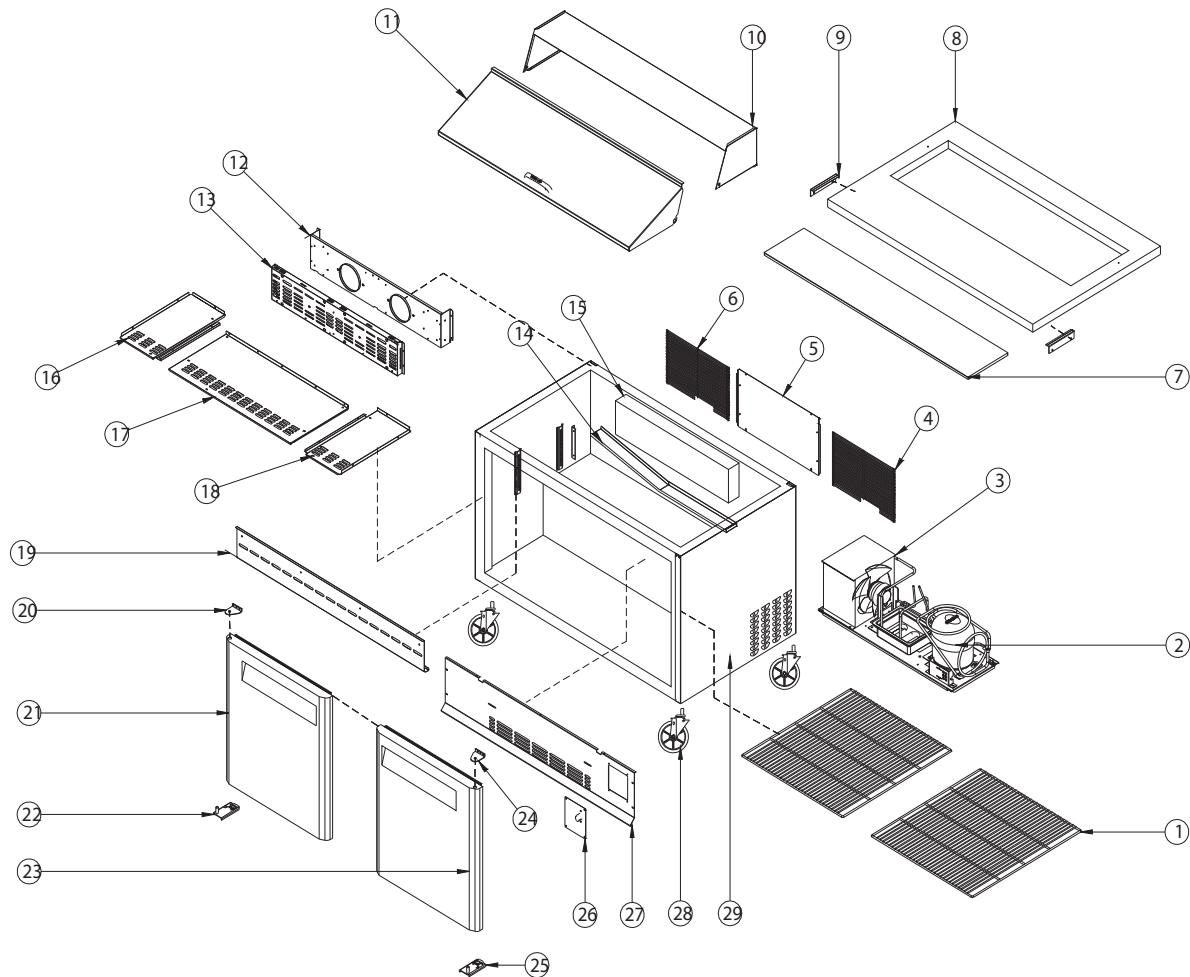
1-1. MST-28 EXPLODED VIEW



◎ Part Name

1	SHELF	11	EVAPORATOR FAN DUCT	21	BOTTOM HINGE
2	CABINET ASSEMBLY	12	LOUVE	22	TAMPERATURE CONTROL COVER
3	CONDENSER ASSEMBLY	13	PAN DUCT SIDE(LF)	23	EVAPORATOR DUCT
4	COMPRESSOR	14	PAN DUCT MID	24	CASTER
5	MECH COVER	15	PAN DUCT SIDE(RH)		
6	BRACKET BOARD	16	PAN DUCT FRONT		
7	COUNTER TOP	17	EVA DRAIN GUIDE		
8	BRACKET BOARD KITCHEN	18	EVAPORATOR ASSEMBLY		
9	HOOD	19	DOOR ASSEMBLY		
10	HOOD LID	20	TOP HINGE		

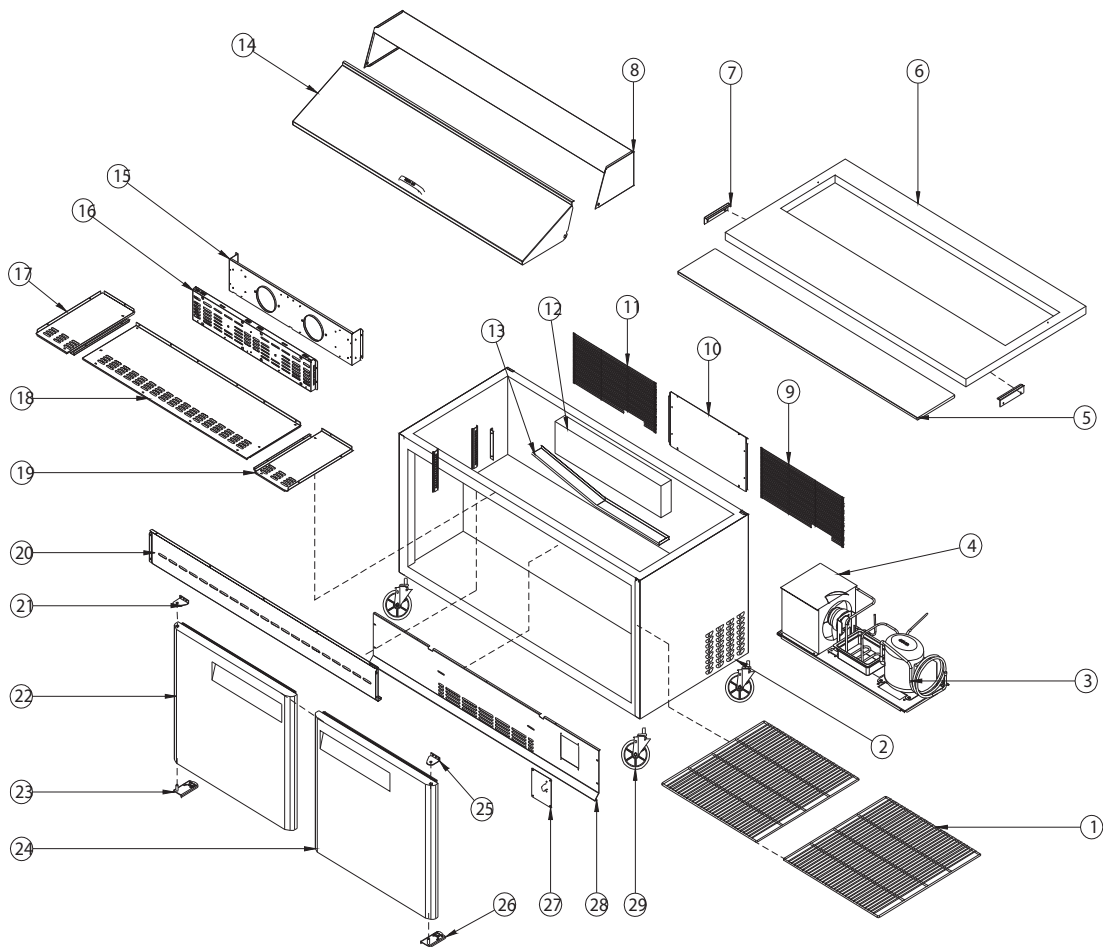
1-2.MST-48 EXPLODED VIEW



© Part Name

1	SHELF	13	LOUVER	25	BOTTOM HINGE(RH)
2	COMPRESSOR	14	EVAPORATOR DRAIN GUI	26	TAMPERATURE CONTROL COVER
3	CONDENSER ASSEMBLY	15	EVAPORATOR ASSEMB	27	EVAPORATOR DUCT
4	MECH COVER(RH)	16	PAN DUCT SIDE(LF)	28	CASTER
5	UNIT COVER	17	PAN DUCT MID	29	CABINET ASSEMBLY
6	MECH COVER(LF)	18	PAN DUCT SIDE(RH)		
7	BOARD KITCHEN	19	PAN DUCT FRONT		
8	COUNTER TOP ASSEMBLY	20	TOP HINGE(LF)		
9	BRACKET BOARD KITCHEN	21	DOOR ASSEMBLY(LF)		
10	HOOD	22	BOTTOM HINGE(LF)		
11	HOOD LID	23	DOOR ASSEMBLY(RH)		
12	EVAPORATOR FAN DUCT	24	TOP HINGE(RH)		

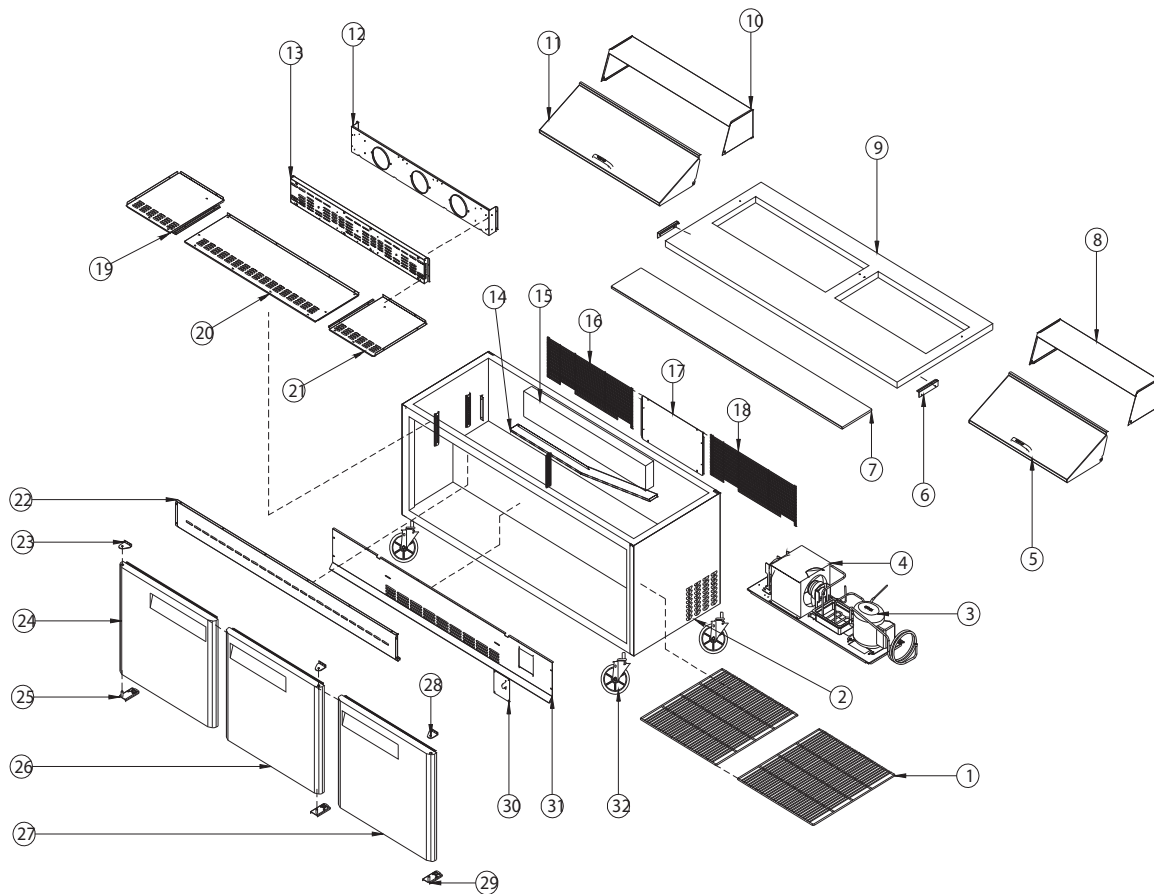
1-3. MST-60 EXPLODED VIEW



◎ Part Name

1	SHELF	14	HOOD LID	27	TAMPERATURE CONTROL COVER
2	CABINET ASSEMBLY	15	EVAP FAN DUCT	28	EVAPORATOR DUCT
3	COMPRESSOR	16	LOUVER	29	CASTER
4	CONDENSER ASSEMBLY	17	PAN DUCT SIDE(LF)		
5	BOARD KITCHEN	18	PAN DUCT MID		
6	COUNTER TOP ASSEMBLY	19	PAN DUCT SIDE(RH)		
7	BRACKET BOARD KITCHEN	20	PAN DUCT FRONT		
8	HOOD	21	TOP HINGE(LF)		
9	MECH COVER(RH)	22	DOOR ASSEMBLY(LF)		
10	UNIT COVER	23	BOTTOM HINGE(LF)		
11	MECH COVER(LF)	24	DOOR ASSEMBLY(RH)		
12	EVAPORATOR ASSEMBLY	25	TOP HINGE(RH)		
13	EVAPORATOR DRAIN GUID	26	BOTTOM HINGE(RH)		

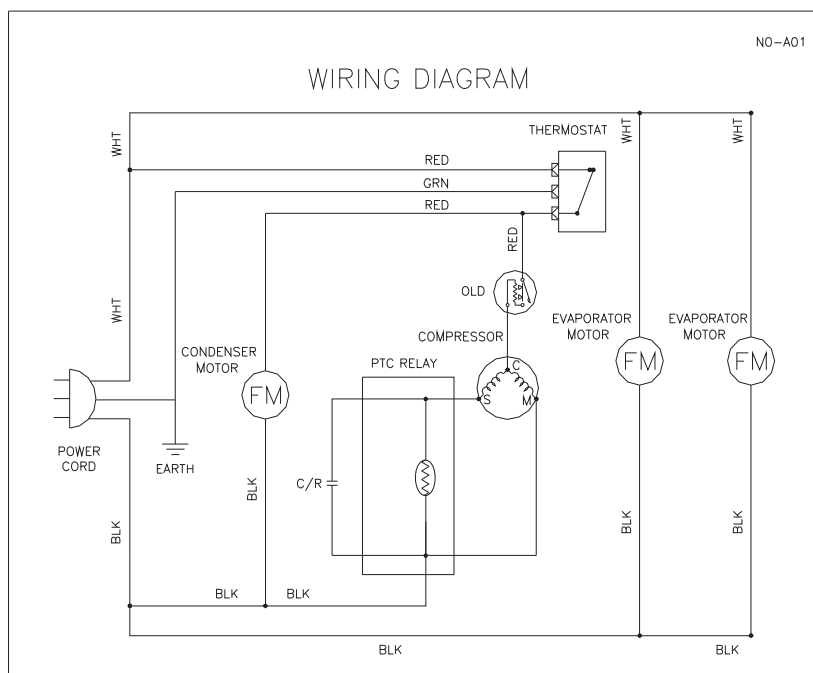
1-5. MST-72 EXPLODED VIEW



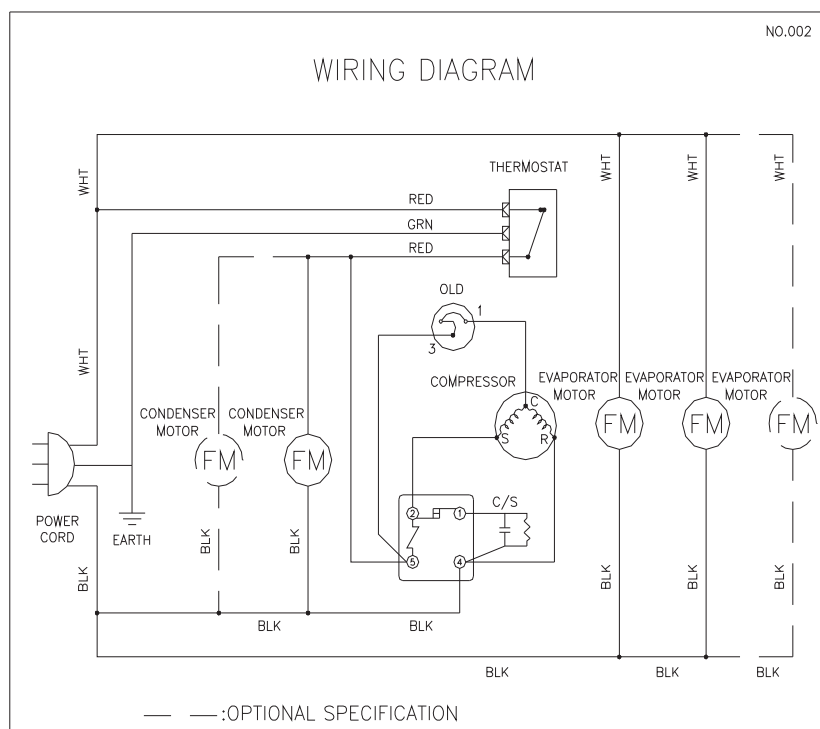
© Part Name

1	SHELF	14	EVAP DRIAN GUIDE	27	DOOR ASSEMBLY(RH)
2	CABINET ASSEMBLY	15	EVAPORATOR	28	TOP HINGE(RH)
3	COMPRESSOR	16	MECH COVER(LF)	29	BOTTOM HINGE(RH)
4	CONDENSER ASSEMBLY	17	UNIT COVER	30	TAMPERATURE CONTROL COVER
5	HOOD LID(RH)	18	MECH COVER(RH)	31	EVAPORATOR DUCT
6	BRACKET BOARD KITCHEN	19	PAN DUCT SIDE(LF)	32	CASTER
7	BRACKET BOARD	20	PAN DUCT MID		
8	HOOD(RH)	21	PAN DUCT SIDE(RH)		
9	COUNTER TOP ASSEMBLY	22	PAN DUCT FRONT		
10	HOOD(LF)	23	TOP HINGE(LF)		
11	HOOD LID(LF)	24	DOOR ASSEMBLY(LF)		
12	EVAPORATOR FAN DUCT	25	BOTTOM HINGE(LF)		
13	LOUVER	26	DOOR ASSEMBLY(MID)		

2-1. MST-28 / MST-48



2-2. MST-60 / MST-72



3.MAIN COMPONENTS

1.COMPRESSOR

MODEL	PART NAME	PART NO.	HORSE	CAPACITY	TYPE OF	INPUT	MAKER
MST-28	HBL-27YE-1	M369700100	1/4HP	~	CSIR	115V 60Hz	DAEWOO
MST-48	SK1A1C-L2W	M609700100	1/3HP	~	CSIR	115V 60Hz	SAMSUNG
MST-60	CAE4456Y	M729700100	1/2HP	~	CSIR	115V 60Hz	TECUMSHE
MST-72	CAE4456Y	M729700100	1/2HP	~	CSIR	115V 60Hz	TECUMSHE

2.COMPRESSOR RELAY ,OVERLOAD

MODEL	RELAY	OVERLOAD	MAKER	NOTE
MST-28	GSR SO68 E03 03	783RHBZZ-52	DAEWOO	~
MST-48	J531Q34E220M3503	795TFBZZ-53	SAMSUNG	~
MST-60	3ARR12	MST16AGZ-3240D5AP	TECUMSHE	~
MST-72	3ARR12	MST16AGZ-3240D5AP	TECUMSHE	~

3.COMPRESSOR CAPACITOR

MODEL	STARTING	PART NO.	RUNNING	PART NO.	MAKER	NOTE
MST-28	200V/100uF	~	230V/10uF	~	~	~
MST-48	125V/125uF	~	250V/12uF	~	~	~
MST-60	160V/315uF	~	~	~	~	~
MST-72	160V/315uF	~	~	~	~	~

4.CONDENSER FAN MOTOR

MODEL	PART NAME	PART NO.	INPUT	TYPE	BLADE	MAKER
MST-28	IS-4420DWSN-2A	3963328120	115V 60Hz	SHADED POLE INDUCTION	AL 5	SUNGSHIN
MST-48	IS-4420DWSN-2A	3963328120				
MST-60	IS-4420DWSN-2A	3963328120				
MST-72	IS-4420DWSN-2A	3963328120				

5.EVAPORATOR FAN MOTOR

MODEL	PART NAME	PART NO.	POLE	INPUT	TYPE	BLADE	NO
						(NUMBER)	
MST-28	DAI-6202DEUA	M729900200	2P	115v60Hz	SHADED POLE INDUCTION	ZYTEL 4	SUNGSHIN
MST-48	DAI-6202DEUA		2P	115v60Hz			
MST-60	DAI-6202DEUA		2P	115v60Hz			
MST-72	DAI-6202DEUA		2P	115v60Hz			

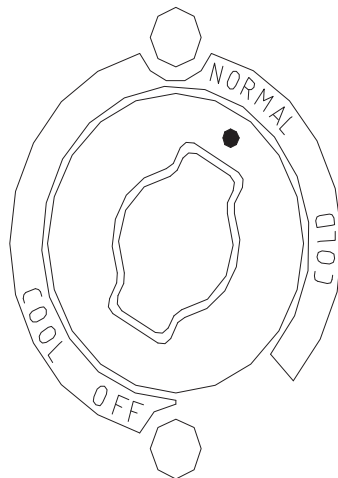
6.THERMOSTAT

PART NAME	PART NO.	RATING	MAKER
THERMOSTAT	30283L0100	K55Q-5607,16A	RANCO
		MST-28	
		MST-48, MST-60 ,MST-72	

4.TEMPERATURE CONTROL INSTRUCTION

- Temperature can be controlled by the user.
- Factory setting is at "NORMAL" Settings can be changed by Dial Knob.

⦿ Indicates temperature level setting.



TEMPERATURE
CONTROLLER

- *If thermostat knob is pointing at OFF, compressor and condenser fan motor would not run.*
- *Keep unit unplugged, if not in use for a long period of time.*

5. PARTS LIST

Part Name	Part Code	Description	Model				Remark
			28	48	60	72	
1. DOOR							
DOOR ASSEMBLY (L)	WM61700200				1		
DOOR ASSEMBLY (L)	WM71700200			1		1	
DOOR ASSEMBLY (M)	WM71700300					1	
DOOR ASSEMBLY (R)	WM20000900		1				
DOOR ASSEMBLY (R)	WM61700100				1		
DOOR ASSEMBLY (R)	WM71700100			1		1	
DOOR BUSHING	M720700100	PA-66	2	4	4	6	
DOOR GASKET	M272300100	PVC	1				
DOOR BUSHING	M720700100	PA-66	2	4	4	6	
DOOR GASKET	M272300100	PVC	1				
DOOR GASKET	M602300100				2		
DOOR GASKET	M722300100			2		3	
TOP HINGE (R)	M722900100		1	1	1	2	
TOP HINGE (L)	M722900200			1	1	1	
TOP HINGE SPACER	M725000100		1	2	2	3	
BOTTOM HINGE (U)(R)	30229M0400		1	1	1	2	
BOTTOM HINGE (U)(L)	30229M0300			1	1	1	
SPRING BAR			1	2	2	3	
2. COUNTER TOP							
COUNTER TOP ASSEMBLY	S279500100		1				
COUNTER TOP ASSEMBLY	S489500100			1			
COUNTER TOP ASSEMBLY	S609500100				1		
COUNTER TOP ASSEMBLY	S729500100					1	
CASTER	M726500100		2	2	2	2	
CASTER	M726500200		2	2	2	2	
3. COMPRESSOR COMPARTMENT							
COMPRESSOR	M369700100		1				
COMPRESSOR	M369700101			1			
COMPRESSOR	M369700102				1	1	
SUCTION PIPE(B)	M369700103		1				
SUCTION PIPE(B)	M369700104			1			
SUCTION PIPE(B)	M369700105				1		
SUCTION PIPE(B)	M724400200	CU				1	
SUCTION PIPE(A)	M274400100	CU	1				
SUCTION PIPE(A)	M604400400	CU		1			
SUCTION PIPE(A)	M724400100	CU			1	1	
COMP BASE	M270300100	GI	1				
COMP BASE	M600300100	GI		1			
COMP BASE	M600300300	GI			1		
COMP BASE	M720300100	GI				1	

Part Name	Part Code	Description	Model				Remark
			28	48	60	72	
CONDENSER FAN MOTOR	3963328120	S-4420DWSN-2A	1	1	1	2	
POWER CORD	M721300100	KKP-30(9.85FT)	1	1	1	1	
CONDENSER FAN AIR GUIDE	M722500900	GI				1	
DRAIN PAN	30211A0200	PP	1				
DRAIN PAN	M729300100	PP		1	1	1	
DRAIN PIPE	M484400100			1			
DRAIN PIPE	M724400800				1	1	
CONDENSER MOTOR BRACK	3020602200		1	1	1	2	
CONDENSER FAN BLADE	M729800100	AL	1	1	1	2	

Part Name	Part Code	Description	Model				Remark
			28	48	60	72	
4. REFRIGERATION COMPARTMENT							
PAN SUPPORT ASS'Y	S270001200	SUS304-2B	1				
PAN SUPPORT ASS'Y	S480001100			1			
PAN SUPPORT ASS'Y	S600001300				1		
PAN SUPPORT ASS'Y	S720002500					1	
PAN SUPPORT ASS'Y	S720002600					1	
EVAP FAN MOTOR	M729900200	IS-3220QTBD	2	2	2	3	
KITCHEN BOARD	M279400100	MIPS	1				
KITCHEN BOARD	M489400100			1			
KITCHEN BOARD	M609400100				1		
KITCHEN BOARD	M729400100					1	
PAN DUCT MID	E276900500		1				
PAN DUCT MID	S606900500			1	1		
PAN DUCT MID	S726900500	SUS304-2B				1	
PAN DUCT SIDE(L)	E276900100	SUS304-2B	1				
PAN DUCT SIDE(L)	S486900100	SUS304-2B		1			
PAN DUCT SIDE(L)	S726900100	SUS304-2B			1	1	
PAN DUCT SIDE(R)	E276900400	SUS304-2B	1				
PAN DUCT SIDE(R)	S486900400			1			
PAN DUCT SIDE(R)	S726900400				1	1	
PAN DUCT FRONT	S276900600		1				
PAN DUCT FRONT	S486900600			1			
PAN DUCT FRONT	S606900600				1		
PAN DUCT FRONT	S726900600					1	
PAN GUIDE	S272500300		3				
PAN GUIDE	S722500100	SUS304-2B		5	7	8	

Part Name	Part Code	Description	Model				Remark
			28	48	60	72	
LOUVER	M275800100	SUS439-2B	1				
LOUVER	M485800100	SUS439-2B		1			
LOUVER	M605800100	SUS439-2B			1		
LOUVER	M725800100	SUS439-2B				1	
SHELF	M277800100	SUS304	1				
SHELF	M607800100				2		
SHELF	M727800100			2		2	
SHELF MID	M727800300					1	
FIXTURE SHELF CLIP	30220L0900		4	8	8	12	
SHELF MID BRACKET	M720600100			1	1	2	
SHELF STANDARD	M725300200		4	8	8	12	
DRAIN PAN GUIDE(R)	M272500100		1				
DRAIN PAN GUIDE(L)	M272500200		1				
EVAPORATOR AS	M367000100		1				
EVAPORATOR AS	M487000200			1			
EVAPORATOR AS	M607000100				1		
EVAPORATOR AS	M727000100					1	
THERMOSTAT	30283L0100		1	1	1	1	
EVAPOVATOR FAN DUCT	M276900200		1				
EVAPOVATOR FAN DUCT	M486900200			1			
EVAPOVATOR FAN DUCT	M606900200				1		
EVAPOVATOR FAN DUCT	M726900200					1	
EVAPOVATOR DUCT	M276900300	SUS439-2B	1				
EVAPOVATOR DUCT	M486900300			1			
EVAPOVATOR DUCT	M606900300				1		
EVAPOVATOR DUCT	M726900300					1	
FIXTURE EVAP DUCT BRACKET	M720601000	SUS439-2B	2	2	2	2	
HOOD LID	WS28900100	SUS304-#4	1				
HOOD LID	WS48900300			1			
HOOD LID	WS68900300				1		
HOOD LID	WS78900300					1	
HOOD LID	WS78900400					1	
MULLION FRAME	M722200400			1	1	2	
MULLION BACK FRAME	M722200200			1	1	2	
MULLION FRAME INSULATION	M723300100			1	1	2	
CONDENSER AS	M365900100		1				
CONDENSER AS	M605900100			1			
CONDENSER AS	M725900100				1	1	
HOOD SHAFT SPACER	M725000400		2	2	4	4	
HOOD HINGE	M724900100		2	2	4	4	
BRACKET BOARD KITCHEN(L)	M720601301		1	1	1	1	
BRACKET BOARD KITCHEN(R)	30206P1902		1	1	1	1	
BRACKET MOTOR	30220T0300		2	2	2	3	
FAN COOLING BLADE	3011802210		1	1	1	1	
PAN	30211M0100		12	18	24	30	

6. REPLACEMENT OF MAIN COMPONENTS

6-1. REPLACING DOOR

A. Unscrew the top hinge

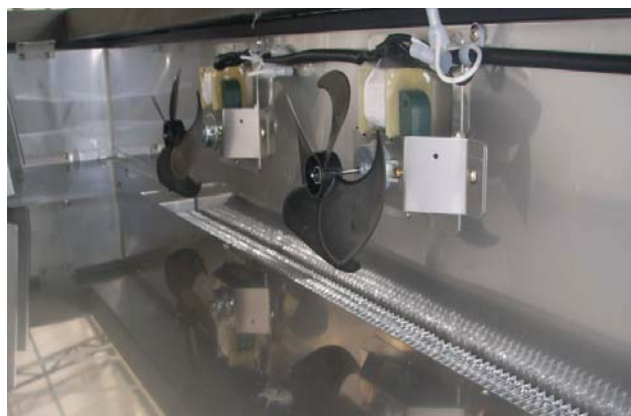


B. Lift the door



6-2. REFRIGERATION COMPARTMENT PARTS

A. Disassemble the evaporator fan duct assembly



B. Disassemble the evaporator duct

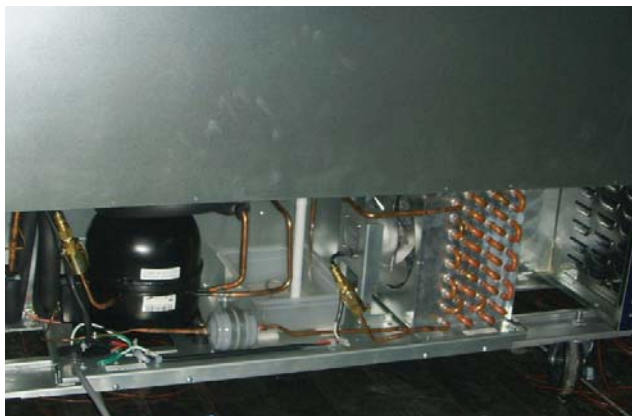


C.Remove the tamperature & sensor



6-3. COMPRESSOR COMPARTMENT PARTS

A.Disassembly the rear grill



B.Disassembly the condensing unit



6-4. REPLACING THE EVAPORATOR & EVAPORATOR FAN MOTOR

A.Remove the evaporator coil



B.Remove the evaporator fan motor

