

REFRIGERATOR MANUFACTURER
Turbo air

Turbo Air Speed up the Pace of Innovation

CAUTION!
PLEASE KEEP POWER
SWITCH ON BEFORE
OPERATING THIS EQUIPMENT

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

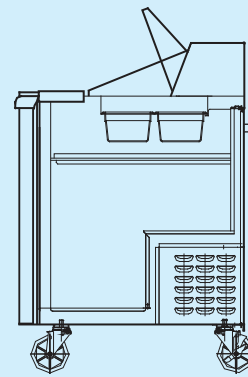
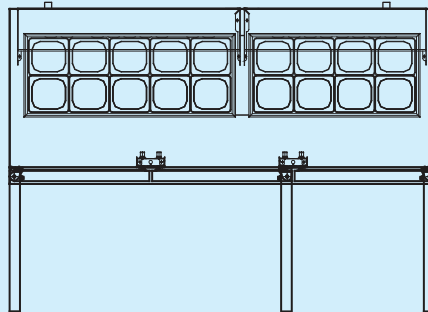


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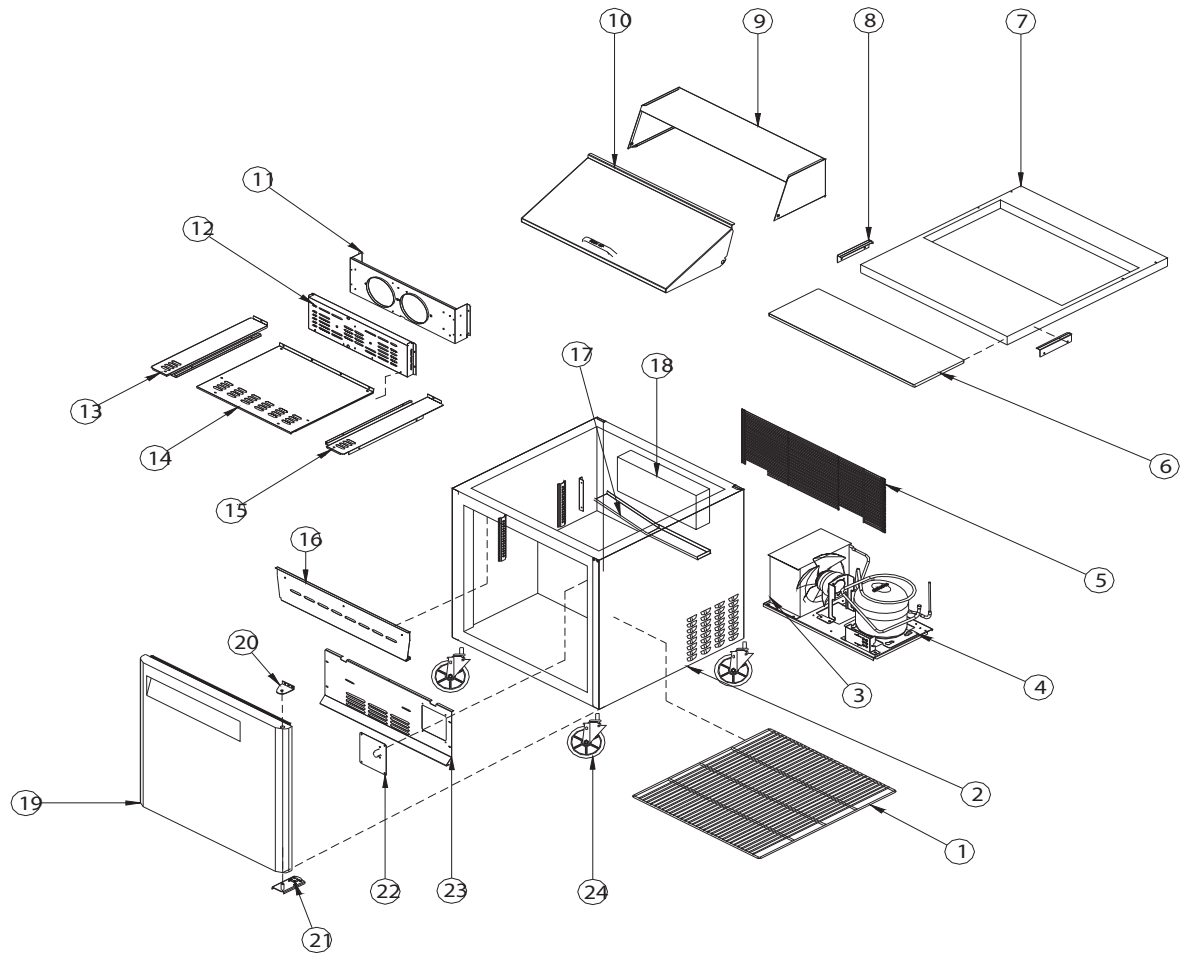
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1. EXPLODED VIEW

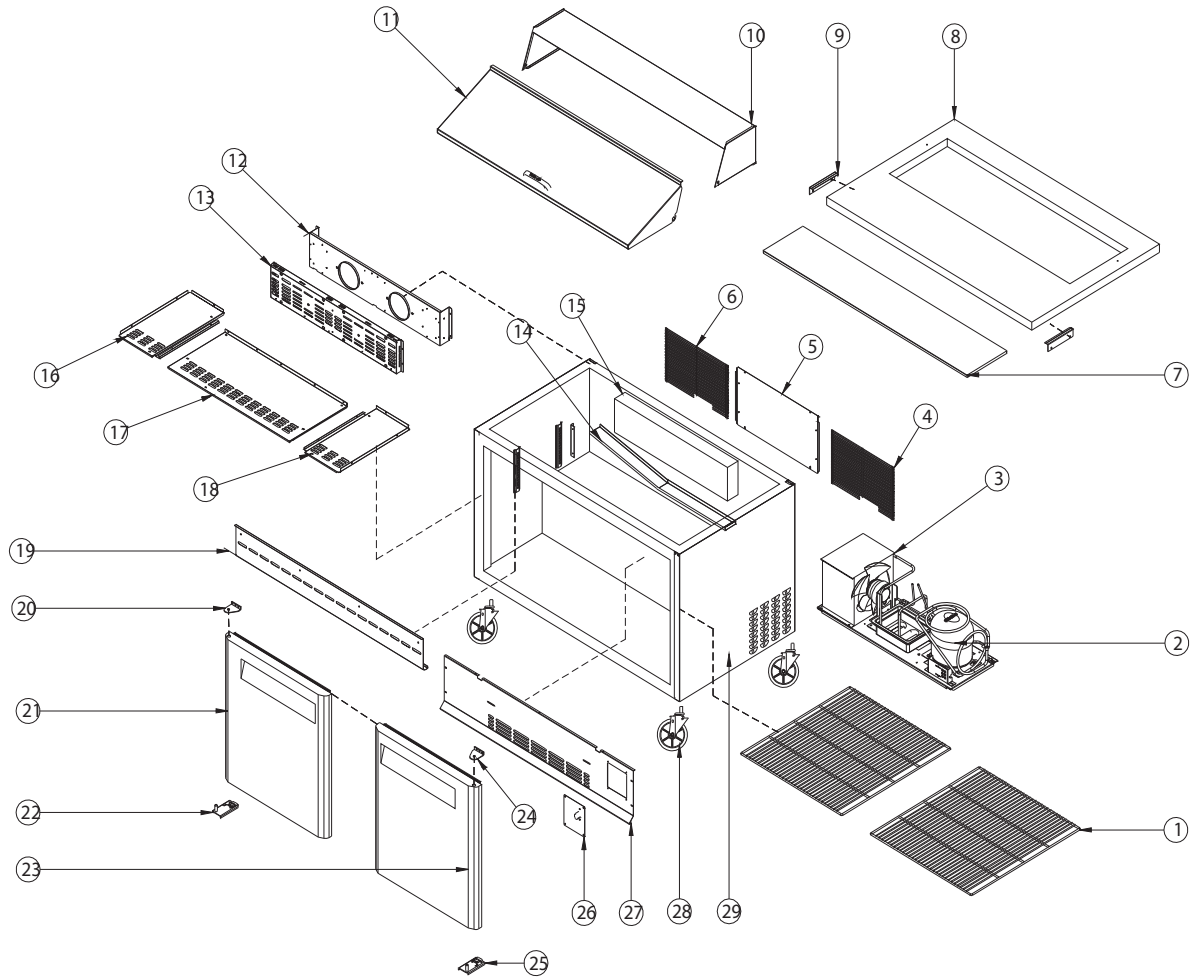
1-1. MST-28 EXPLODED VIEW



◎ 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		

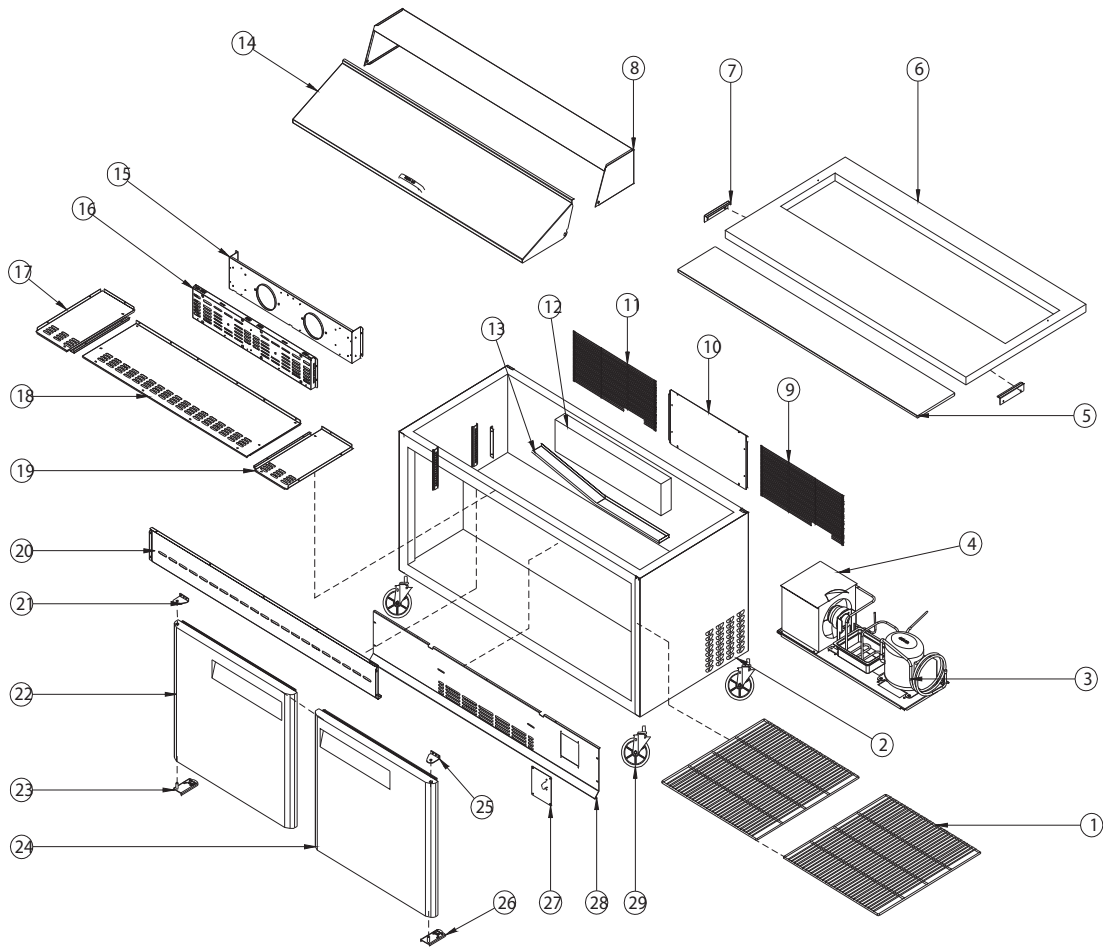
1-2.MST-48 EXPLODED VIEW



© 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)		

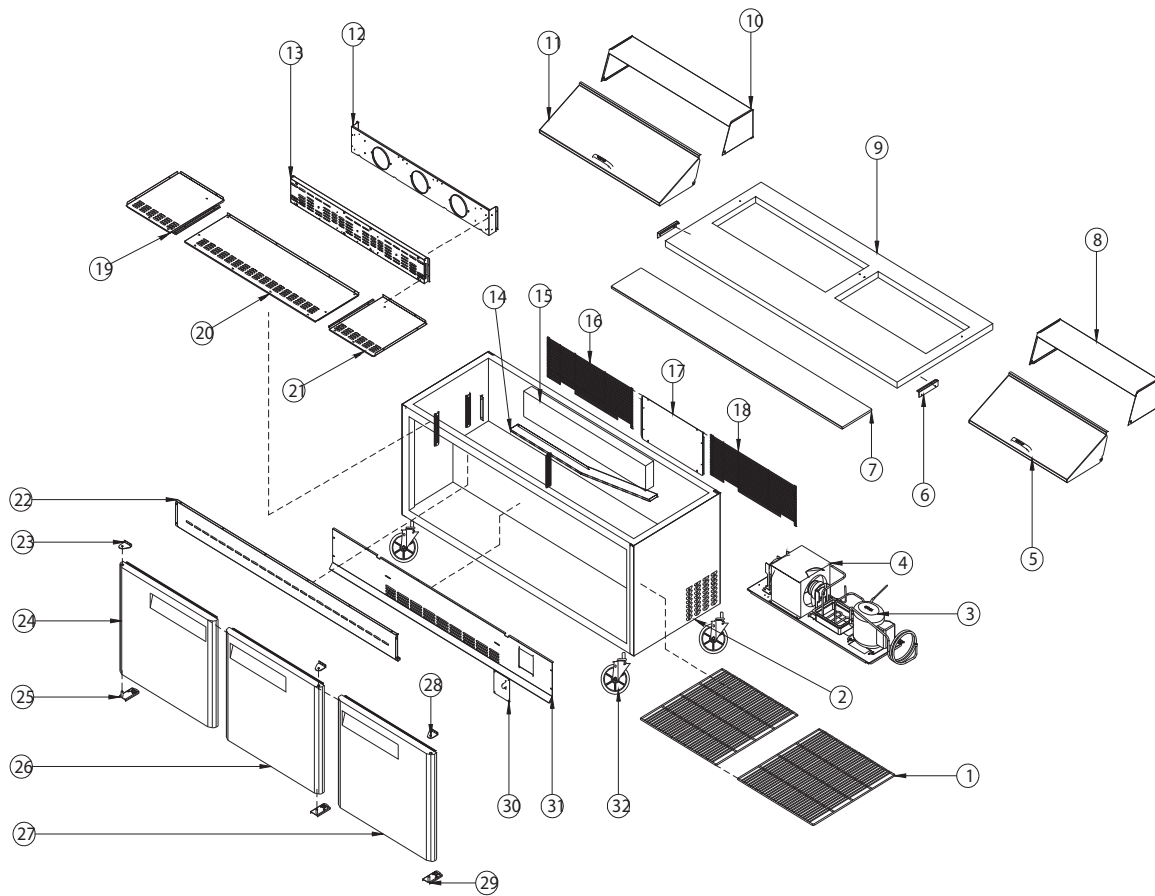
1-3. MST-60 EXPLODED VIEW



◎ 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

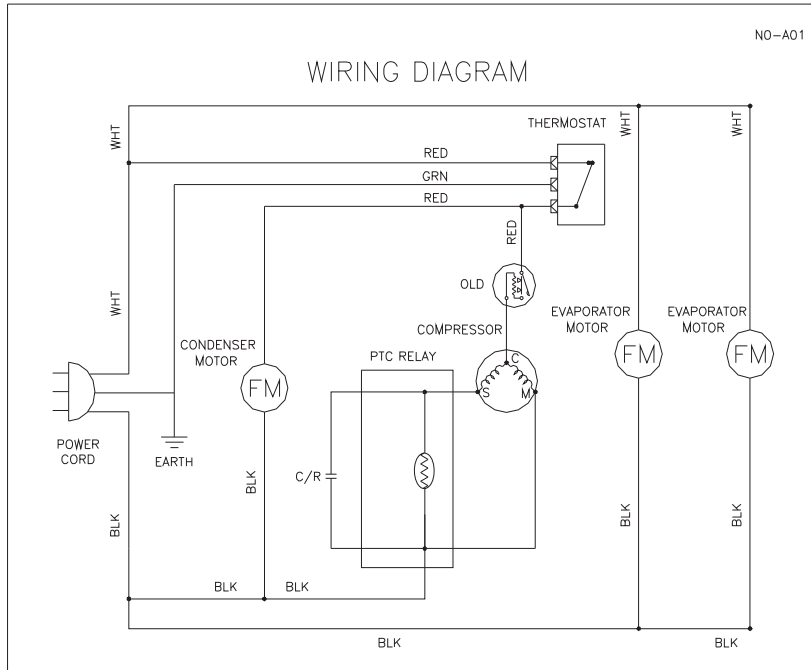


© Part Name

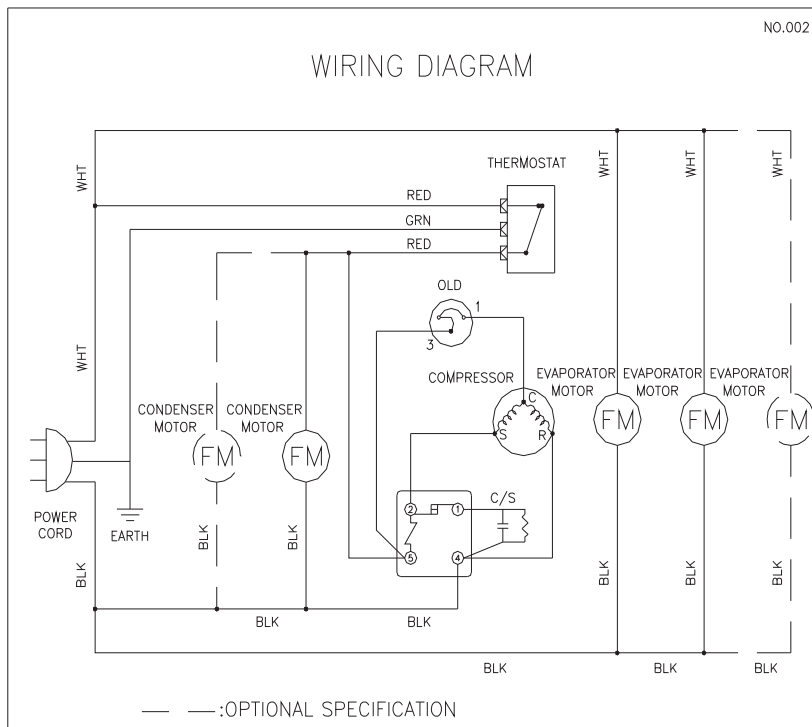
1	SHELF	14	EVAP DRIAN GUIDE	27	DOOR ASSEMBLY(RH)
2	CABINET ASSEMBLY	15	EVAPORATOR	28	TOP HINGE(RH)
3	COMPRESSOR	16	MECH COVER(LF)	29	BOTTOM HINGE(RH)
4	CONDENSER ASSEMBLY	17	UNIT COVER	30	TAMPERATURE CONTROL COVER
5	HOOD LID(RH)	18	MECH COVER(RH)	31	EVAPORATOR DUCT
6	BRACKET BOARD KITCHEN	19	PAN DUCT 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. WIRING DIAGRAMS

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			

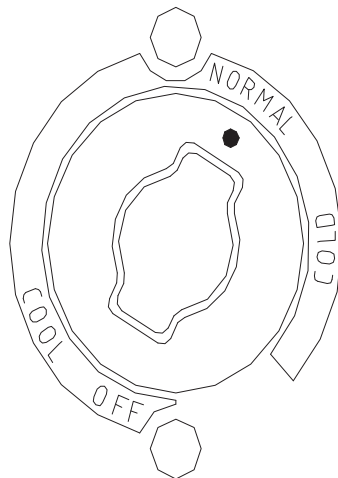
6.THERMOSTAT

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

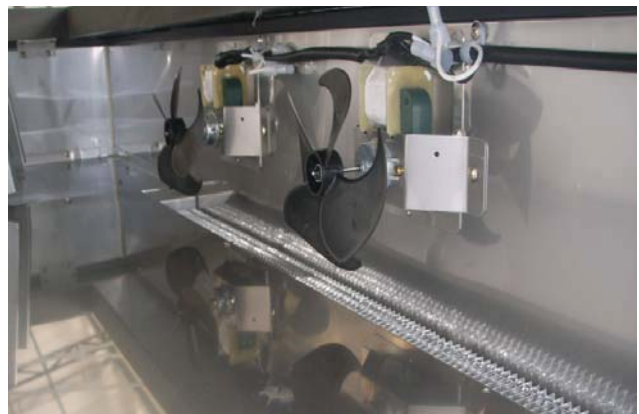


B. Lift the door



6-2. REFRIGERATION COMPARTMENT PARTS

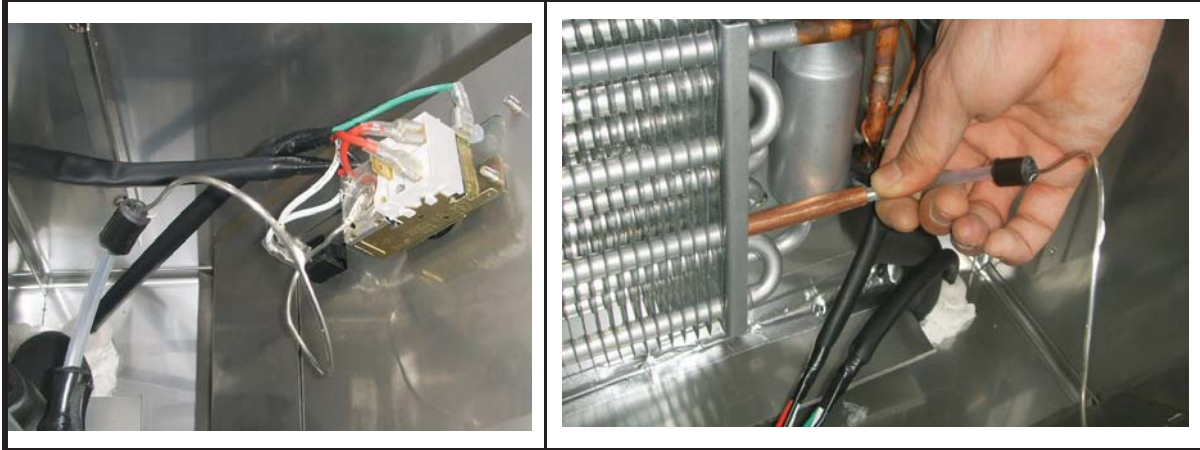
A. Disassemble the evaporator fan duct assembly



B. Disassemble the evaporator duct

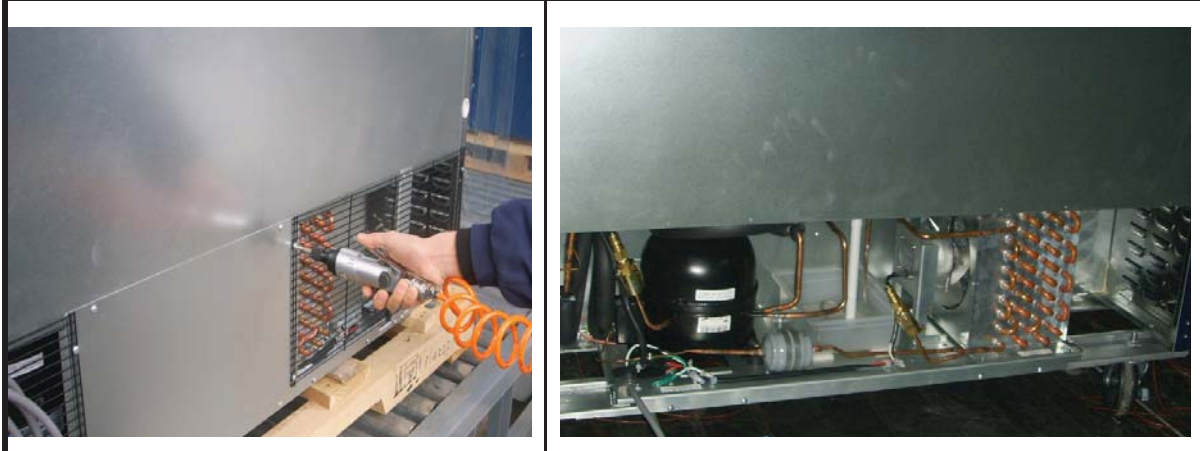


C.Remove the temperature & sensor



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

