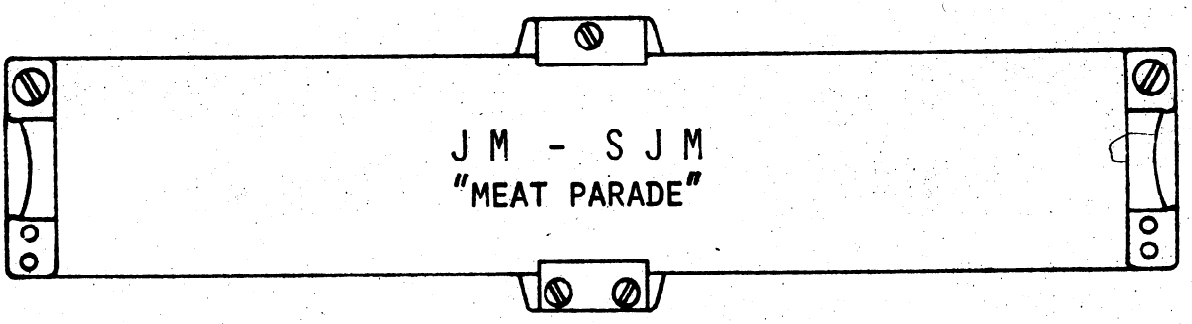
INSTALLATION & SERVICE INSTRUCTIONS

FOR MODEL(S)



please retain for future use

engineering dept. bulletin # 72-154-10

WARREN KYSOR SHERER

905 Memorial Drive, S.E.
Post Office Box 1436
Atlanta, Georgia 30301
404 688-1601

DIVISIONS OF KYSOR INDUSTRIAL CORPORATION

West Industrial Road
Marshall, Michigan 49068
616 781-3911

MODELS
JM - SJM

WARREN/SHERER MEAT PARADE

I PLANNING

A. Store Layout

B. Compressor Requirements

C. Defrost Types

II INSTALLATION

A. Setting

B. Joint Trim/End Trim

C. Hookup - Refrigeration, Electric, Waste Drip

D. Start-up - Control Settings

III MAINTENANCE

A. Routine Weekly Cleaning

B. Semiannual

IV FOR THE SERVICEMAN/ENGINEER

V APPENDIX

A. Case Cross Section/Parts List

B. Floor Plan - Electric, Refrigeration, Waste Location

C. Joint Trim

D. Wiring Diagram

E. Compressor Chart

A New Record For Fresh-Meat Merchandisers

TECHNICAL DATA

JM—Solid Mirrored Back
SJM—Sliding Rear Glass Doors

	8-Ft. Models	12-Ft. Models
Length: less ends	8′0″	12′0″
with ends	8′4″	12′4″
Cubical content	53.6 cu. ft.	80.4 cu. ft.
Product-facing area	28.7 sq. ft.	43 sq. ft.

CAPACITIES:

	8-Ft.	12-Ft.
Main deck (wire rack)	19.7 sq. ft.	29.5 sq. ft.
Optional shelves - 14″	9.3 sq. ft.	14.0 sq. ft.
16″	10.7 sq. ft.	16.0 sq. ft.
20″	13.3 sq. ft.	20.0 sq. ft.

EXTERIOR: Baked enamel front, ends, and top in standard COLORAMICS® shades at no extra charge. Stainless-steel trim in exclusive Warren patterns. Bumper rail on front of display area—stainless steel. Closure plate of black baked enamel to conceal pedestal area—prevents debris accumulating beneath case.

INTERIOR: One-piece shell of fiberglass allows the unit to be hosed. Rear baffle is white baked enamel on rust-resistant steel. White fiberglass ends.

ELECTRIC DEFROSTING is standard.

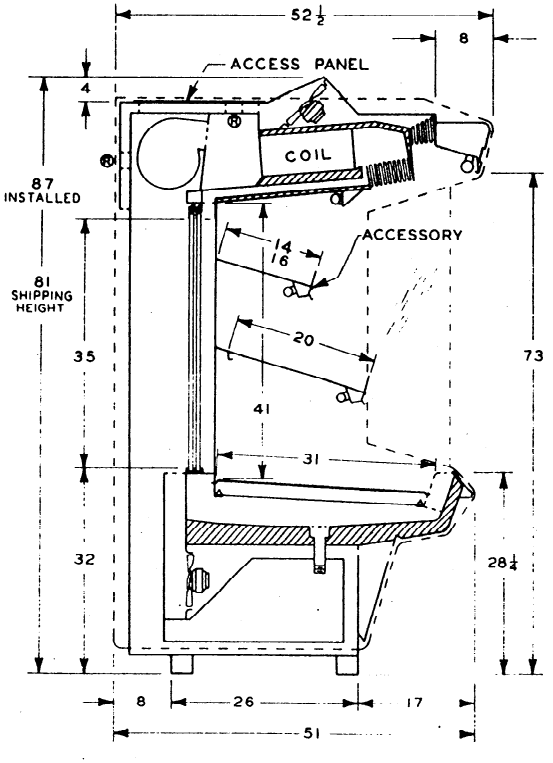
TEMPERATURE-REGULATING VALVE included in each case.

HIGH-OUTPUT FLUORESCENT LIGHTING in top reflector.

REFRIGERATION: This unique WARREN/SHERER® principle features extra-heavy-duty top coiling with multiple fans.

MULTI-CASE CONSTRUCTION allows a continuous lineup of both models without interruption in the displays, using one pair of ends.

MAIN-LEVEL TELESCOPING WIRE RACKS —straight with round wire bright-electro-zinc plated with protective coating of clear lacquer baked on.



MODEL-SJM

®-REFRIGERATION CONNECTION

ACCESSORIES AVAILABLE AT EXTRA CHARGE

HOT-GAS DEFROSTING in lieu of electric.

UPPER-LEVEL LIGHTED SHELVES — 14″, 16″, or 20″, sloped or flat, white baked enamel; lighted or unlighted. Adjustable on 1½″ centers. Recommended shelves are 16″ and 20″ sloped.

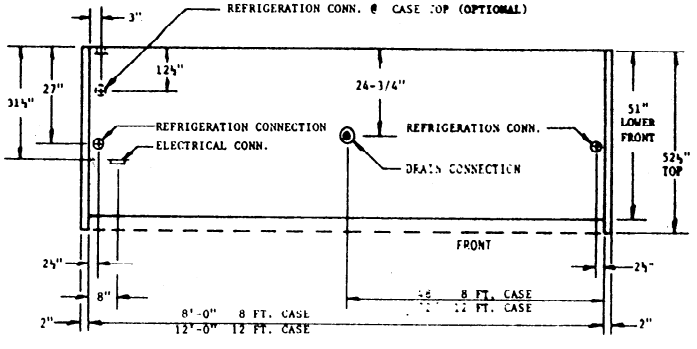
2½″ and 4½″ FENCING for sloped shelving.

TURNTABLE with two wire shelves; top, 14″ diameter; bottom, 20″. Rotates electrically—115 volt.

RING-FOR-SERVICE BUTTON.

DECOR TRIM for recessed channel in front of top.

STANDARD OR TRANSPARENT SLIDING MIRRORS in lieu of glass doors in SJM.



IN THE CONSTANT EFFORT TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO CHANGE AT ANY TIME SPECIFICATIONS, DESIGN, OR PRICES WITHOUT INCURRING OBLIGATION.

WARREN // SHERER
DIVISION OF KYSOR INDUSTRIAL CORPORATION
P. O. Box 1436, Atlanta, Georgia 30301

FORM NO. [illegible] PRINTED IN U.S.A.

I. Planning for your Warren/Sherer Meat Parade

A. The SJM was designed as a rear loaded fixture with sliding doors and to be backed up to a meat prep room or open aisle between prep room and fixture. The JM is for front loading only.

When used with an aisle space behind the fixture, it is not necessary to refrigerate this area if conditions can be maintained at 70°F db/ 55% RH or below. Generally, unless there is externally forced circulation in this area, the recirculated guard jet of air will keep this area at or below these conditions in addition to keeping the glass doors condensate-free.

Options to be considered in planning include glass doors (if you want your customer to see your butchers at work), one-way conventional mirror and two-way "see-thru" mirror (for a quick visual check of stock labels). When using the two-way mirrors, the area behind the fixture must be a lower level of light intensity than the case itself - 50 footcandles is recommended.

With a fixture of this size, store air conditioning must be considered. For best merchandising and most comfortable shopping conditions, the Meat Parade should face a wide open aisle, preferably with the gondolas across the aisle perpendicular, not parallel. To avoid excessive cold aisle problems, air circulation must be assured by proper air conditioning design. If in doubt, contact your nearest Warren/Sherer Application Engineering Department.

Refrigeration, electrical and waste drip connections must be planned early. There is provision in the top coil compartment and under the deck pans for interconnection of the fixtures. The waste drips may be interconnected under the foam shell. Best practice is to connect no more than three fixtures together on waste piping. The waste drip should be an "indirect" open type where the condensate free falls into an open floor drain. In the Appendix there is a floor plan layout of the JM-SJM Meat Parade giving location of waste drip, electrical and refrigeration connections.

B. Compressor Requirements are listed in the Appendix for various length lineups. The condensing unit may be either a single compressor - Mastermetic - for a lineup of 1 thru 4 fixtures, or a parallel rack of 2 or 4 compressors - Minimetic or Multimetic - serving the entire medium temp requirements of the store. The ratings shown are based on a +5°F evaporator, 105°F condensing temperature and store ambients of 80°F and 55% RH. Higher humidities will induce sweating and excessive coil frosting.

C. Defrost can be either conventional electric defrost or reverse cycle hot gas (Minimetic and Multimetic systems only). Usual requirements in well air-conditioned stores are four defrosts per day at 14 minutes each on electric defrost and four per day at 10 minutes each on hot gas.

The defrost is temperature terminated to assure the shortest defrost possible.

II. Installation

A. Setting the cases requires the following:

1. "Johnson bar" or "dog"
2. 3 - 2" pipe rollers
3. Set of socket and box-end wrenches
4. Crowbars
5. Shims
6. 4' Carpenter's Level

These fixtures are 52-1/2 inches wide and 87 inches high complete. If requested, they can be shipped with canopy panel, top fan plenum and cover and rear air duct separately for dimensions of 49 inches wide, 81 inches high. Measure your doors before arrival.

The Meat Parade is aligned at the factory prior to shipment on an absolutely level roller bed and cases intended to be joined together are marked "case ____ of lineup _____" on each end. It is imperative that these markings be observed.

Start at the left end and set case 1 in place, on shims if required. It is often helpful to sight the floor to make sure that there is not a pitch to the entire floor. Minor variations in height can be shimmed as you go along. Make sure that gasketing is in place for a good air seal. Replace gasketing if destroyed in transit.

Case 2 should be placed adjacent to case 1, and the T-nuts and bolts (marked ① on Joint Kit List in Appendix) used to draw the cases together. DO NOT USE JUST ONE OR TWO BOLTS TO DRAW CASES TOGETHER! Tighten all bolts approximately the same amount at a time. When the fixtures are still 1/2" apart, caulk, with silicone sealant, the entire portion of the fixture in the foam shell area (drain pan) so that when final tightening is accomplished the silicone is squeezed out along the entire metal end frame adjacent to the foam shell.

Next, both cases now joined together should be re-checked for level and shimmed where necessary. Now proceed to case 3.

B. Do not install any joint trim until entire lineup is in place and level.

Joint trim can now be installed as shown on Appendix drawing.

C. Hookup of refrigeration lines can now be started. Sil-fos, silver solder or soft solder can be used. Be sure that all ferrule openings are sealed with urethane foam which can be dispensed from the throw-away cans. Electrical interconnection can be made through the top ferrule along with refrigeration lines, but it is easier and less expensive to use the raceways provided in the lower front. Some areas require that 220-volt and 115-volt wires be segregated. This can be done by using both raceways provided. The circuits that must be pulled to the Meat Parade lineup are:

1. 208-230-volt for defrost (if electric)
2. 115-volt for fans and antisweats
3. 115-volt for lights
4. 208-230-volt rated conductors for temperature termination.

Wire sizes can be selected from the application sheet in the Appendix. Local codes should be observed. In most applications, circuits 1 and 4 listed above go back to the condensing unit control panel, while 2 and 3 can be pulled to any convenient separate power source.

The waste drip, discussed earlier, can be run using ABS, PVC or galvanized iron pipe, local codes permitting.

D. Startup, after proper evacuation, consists mainly of determining correct control settings. Following are recommended initial settings:

1. Defrost Terminating Thermostat - about 50°F
2. Time Clock - 4 per day at 14 minutes each (electric)
   (for humid stores, increase frequency/length as required)
3. Pressure Control on Condensing Unit - cut out 5 psig
   cut in 15 psig - either R-12 or R-502.

Since a temperature/pressure regulator (TEPR) is standard with the fixture, the pressure [redacted] not critical and a thermostat need not be used.

Before adjusting the TEPR, the expansion valve must be adjusted. To make this faster, it is desirable to make sure the TEPR is not throttling. This can be checked with gages connected upstream and downstream. If the pressure drop is less than 2 psi, then it can be assumed the TEPR is open and you can proceed to adjust the expansion valve. Normal superheat setting is about 10-12°F, and the valves, as installed and shipped, should be fairly close to that range already.

After adjusting the expansion valve, the TEPR (shipped with a +10°F factory setting) will have to be adjusted. Remove the small knurled cap and use a medium size straight screwdriver. Most installations require raising the setting by rotating the slot screw inside clockwise. Make sure the bulb of the TEPR and terminating thermostat are located in the airstream just above the 6" honeycomb. Discharge air temperature should be adjusted to 24°F $\pm$ 1°F.

III. Maintenance

A. Weekly maintenance should consist of removal of shelves, deck pans and wire racks, and thorough in-place cleaning of racks, deck pans, shelves, and drain pan area and return air grill, using one of the many high-pressure low-water-volume sprayers now on the market at costs of less than $200. A detergent such as Tide may be used, although a bactericidal commercial cleaning solution is preferred. Practically any water-based cleaning solution may be used PROVIDED it is rinsed off immediately. After cleaning, the above should be wiped dry and replaced.

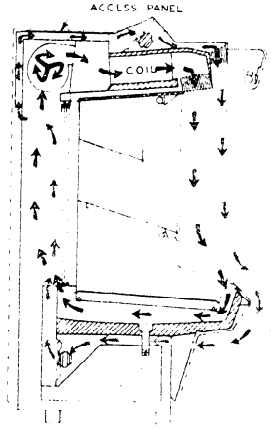
Next, all interior surfaces should be wiped down with a solution of 1/2 cup Lysol (or equal) to one gallon of warm water. Don't use detergents on mirrors - use only Windex (or equal).

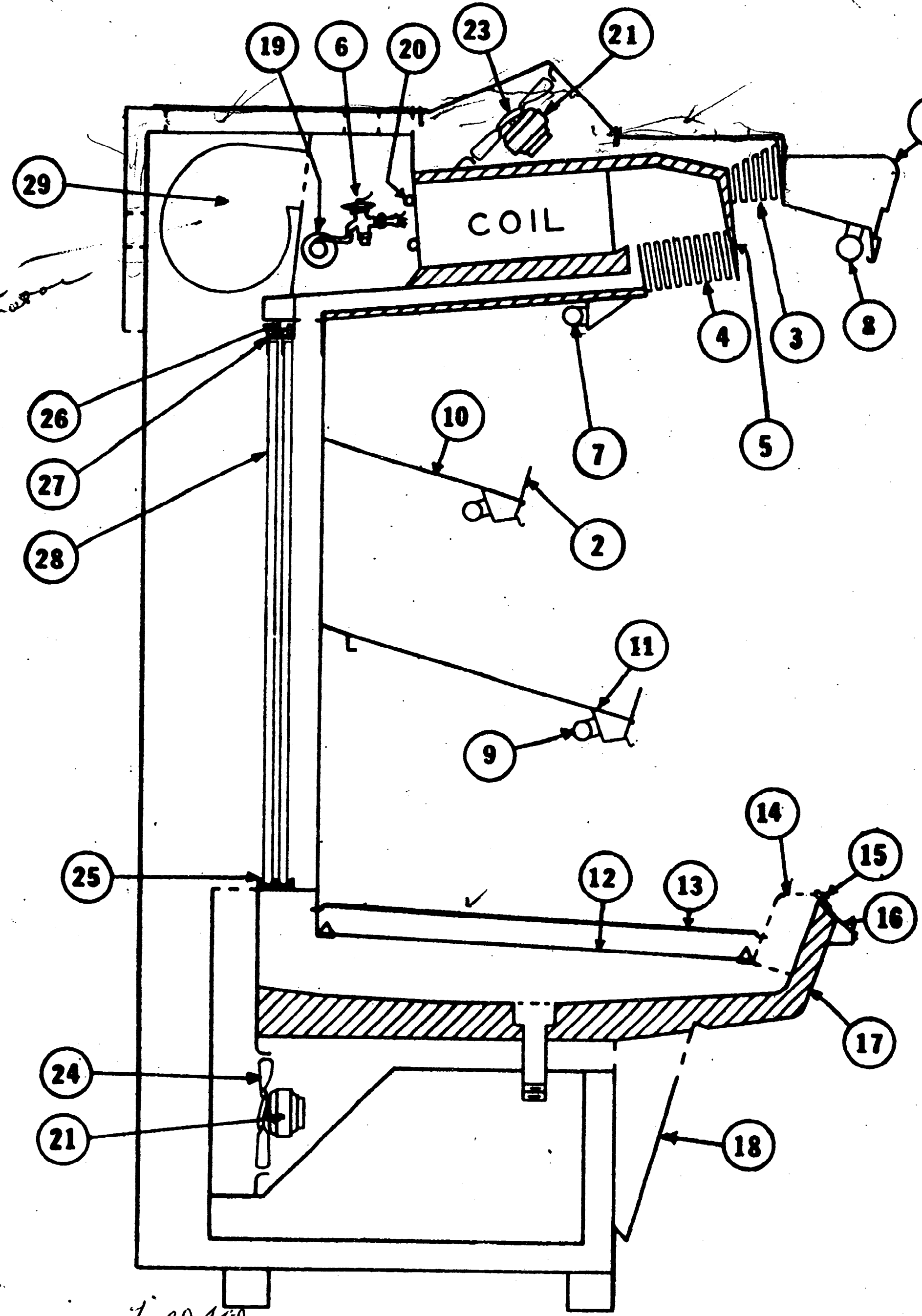
B. Semiannual maintenance requires removal of honeycombs and thorough cleaning of them with a hose. Handle carefully since they are fragile. Details for honeycomb removal are shown in the Appendix. The upper coil drain pan should be cleaned thoroughly with a high-pressure cleaner. The base area should be vacuumed to remove debris and dust.

IV. For the Serviceman/Engineer

The JM-SJM Meat Parade is a combination of two air curtains. The inside jet, discharged through a 6" honeycomb at approximately 550 fpm is recirculated under the deck pans, up the back through the 9" square combination structural supports and return air ducts through the squirrel cage blowers at the top back and then through the 32-tube coil to the 6" honeycomb. The outer jet is a semi-recirculated jet and discharges through the 3" honeycomb at about 400 fpm and goes over the front color band. Just under the projected front is a grille which picks up this air, and it goes through a bottom set of fans and is discharged upward against the back of the sliding doors. This has the dual advantage of keeping the doors condensate free and helping to relieve a potential cold aisle problem. This same air is then picked up at the top of the doors and pulled through another set of fans and discharged again through the 3" honeycomb.

A sketch showing air flow as described above follows.





Air Diversion field kit
8' 96H26-113
12' 96H26-114

JM-SJM MODELS

New doors ~~90D17-11 CH~~ ~~90D18-12 RH~~ ~~90D19-11 Ctr~~
9/17
no need for CH, RH, & Ctr
Specify GMK - 1 door fits all

PARTS LIST

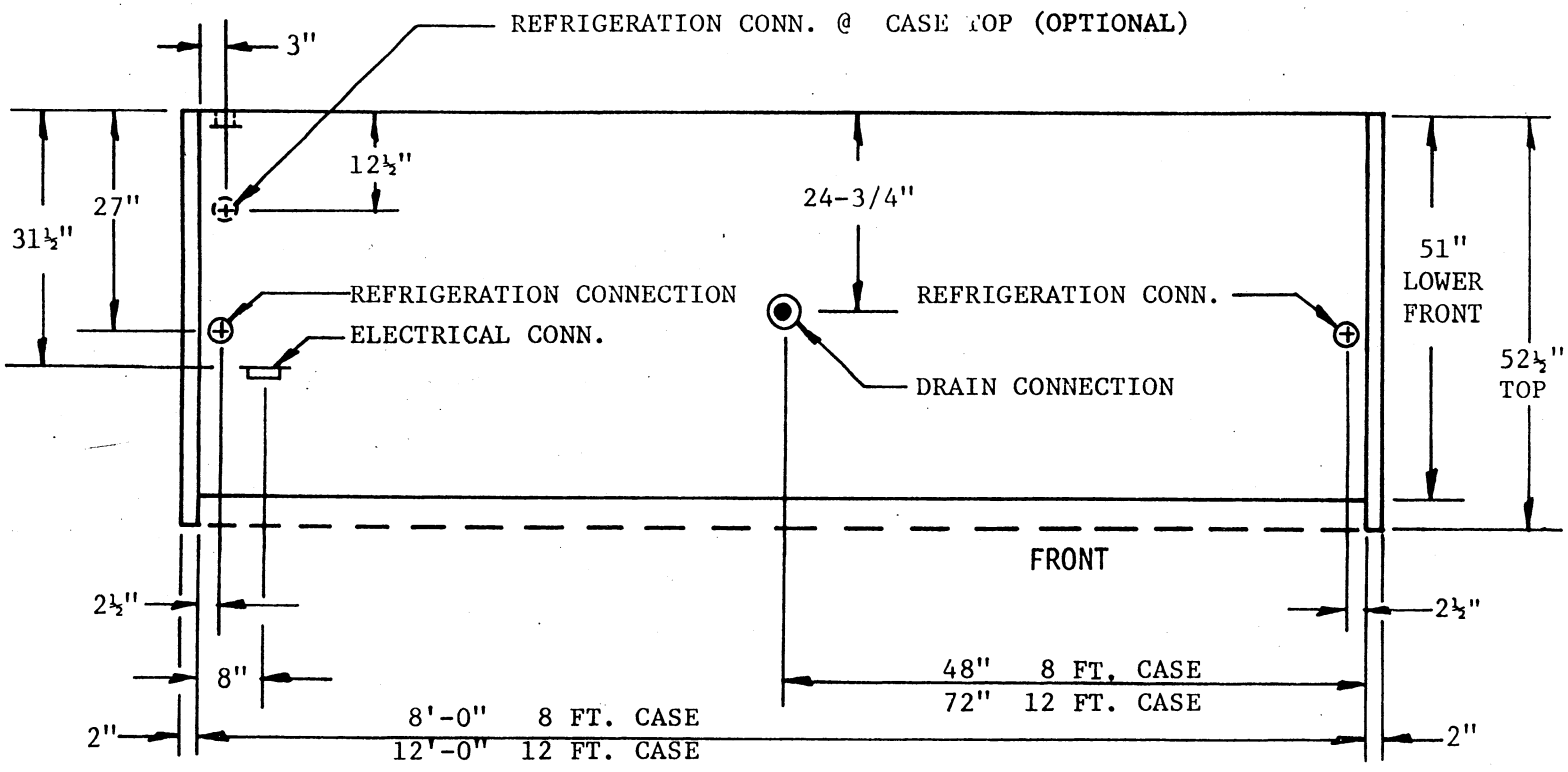
Shelf light receptacle 10C-12-14

Key #	Description	8' Case	12' Case
1	Canopy	1-51C12-45	1-51C14-42
2	2-1/2" Wire Fence	28G13-12	28G13-12
2	4" Wire Fence	28G13-16	28G13-16
3	3"-wide Honeycomb	2-16A16-11	3-16A16-11
4	6"-wide Honeycomb	2-16A16-20	3-16A16-20
5	Honeycomb Divider w/A-S Htr.	1-81C10-73	1-81C11-73
6	Expansion Valve CRE-1-C	1-3A11-25	
6	Expansion Valve CRE-1-1/2C		1-3A12-22
7	I.S. Light Assembly	1-80C12-46	1-80C14-42
7A	Ballast for above	10D10-27	10D10-27
7B	Bulbs for above	10A10-48	10A10-47
8	Canopy Light Rail Assy.	1-80B22-14	1-80B23-14
8A	Ballast for above	10D10-27	10D10-27
8B	Bulbs for above	10A10-48	10A10-47
9	Shelf Light Assy.	80C19-59	80C19-59
9A	Ballast for above	10D10-12	10D10-12
9B	Bulb for above	10A10-38	10A10-38
10	14" Shelf w/Light	96F17-336	96F17-336
10A	14" Shelf w/o Light	54X15-265	54X15-265
11	20" Shelf w/Light	96F17-338	96F17-338
11A	20" Shelf w/o Light	54x15-286	54X15-286
12	Deck Pan	4-54N18-115	6-54N18-115
13	Wire Rack (adjustable)	4-28G19-130	6-28G19-130
14	Return Air Grill	1-54P16-129	1-54P16-130
15	Thermopane Trim	1-15J11-10	1-15J11-12
16	Colorband	1-51A17-33	1-51A19-33
17	Upper Front Panel	1-51A12-43	1-51A14-36
18	Lower Front Panel	1-51A12-54	1-54A14-39
19	Temp. Regulator (CPT-28)	1-3B10-64	
19	Temp. Regulator (CPT-35)		1-3B10-65
20	Electric Defrost Heater	1-10K10-26	1-10K10-27
21	Aisle Fan Motor 115/60/1	2-9A10-17	3-9A10-17
	Door Stops	73G10-23	
23	Canopy Fan Blade OU-731-5	2-9B10-22	3-9B10-22
24	Aisle Fan Blade OU-740-5	2-9B10-27	3-9B10-27
25	Bottom Door Track	2-62J15-23	2-62J15-24
26	Top Track	1-51X16-40	1-51X16-41
27	Door Roller Assy., Straight	2-18J10-12	3-18J10-12
27	Door Roller Assy.,w/Offset	2-18J10-13	3-18J10-13
28	Sliding Clear Glass Door	2-90D21-10*	3-90D21-10*
28A	Sliding Mirror Door	2-90D20-10*	3-90D20-10*
28B	Sliding See-Thru-Mirror Door	2-90D20-11*	3-90D20-11*
29	Squirrel Cage Blower	3-28D12-12	4-28D12-12

Include 10B11-19 & 20 lamp holders

*SJM Only.

Plastic honeycomb retainer 13A12-32
Adhesive - glass to metal 27A10-27
Primer glass to metal 27A10-28



LETTER	REVISED	DATE	BY

DATE 10/3/72

SCALE NONE

DRAWN

APPD.

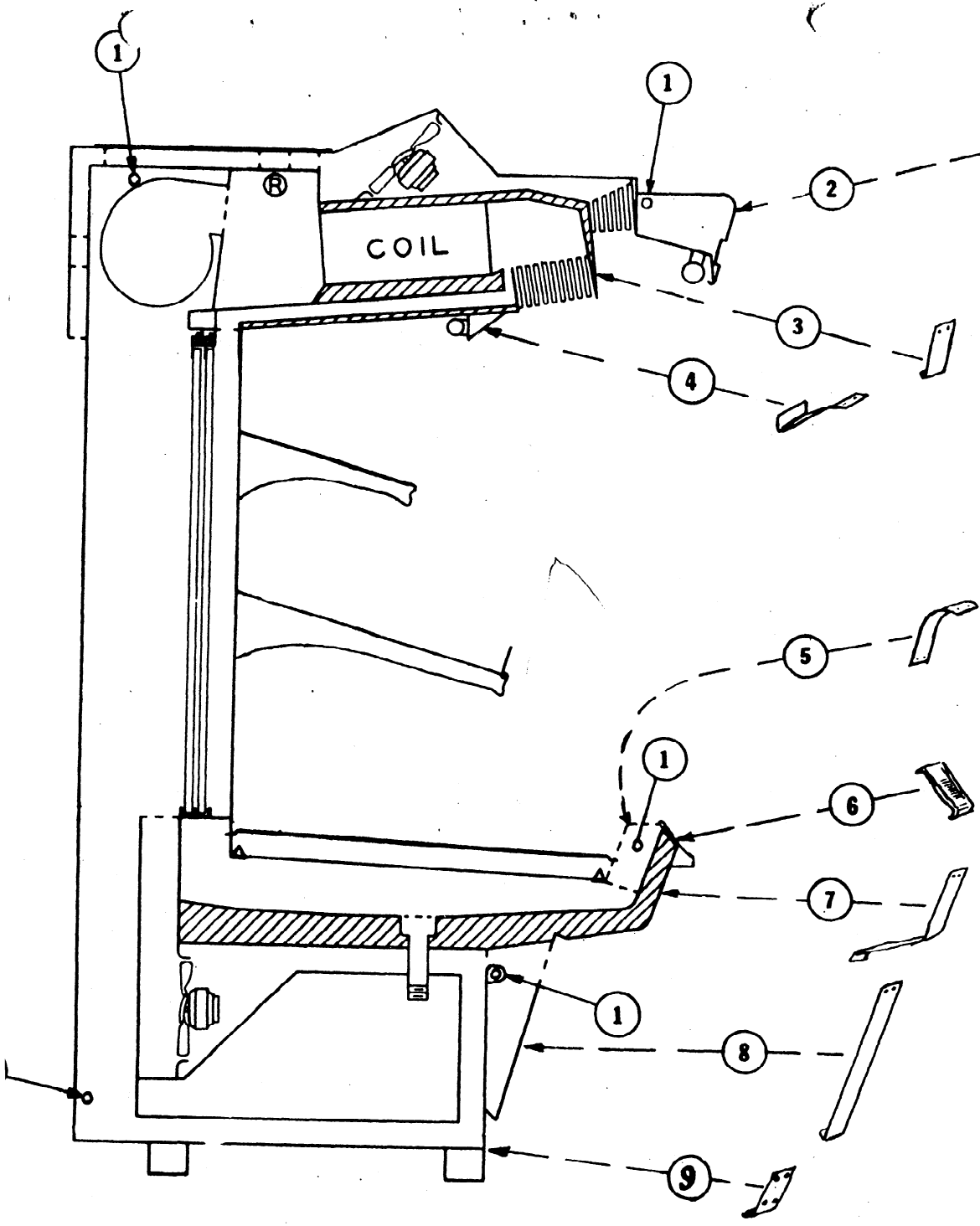
TITLE PLAN VIEW

MODEL - JM, - SJM

WARREN/SHERER, Atlanta, Georgia

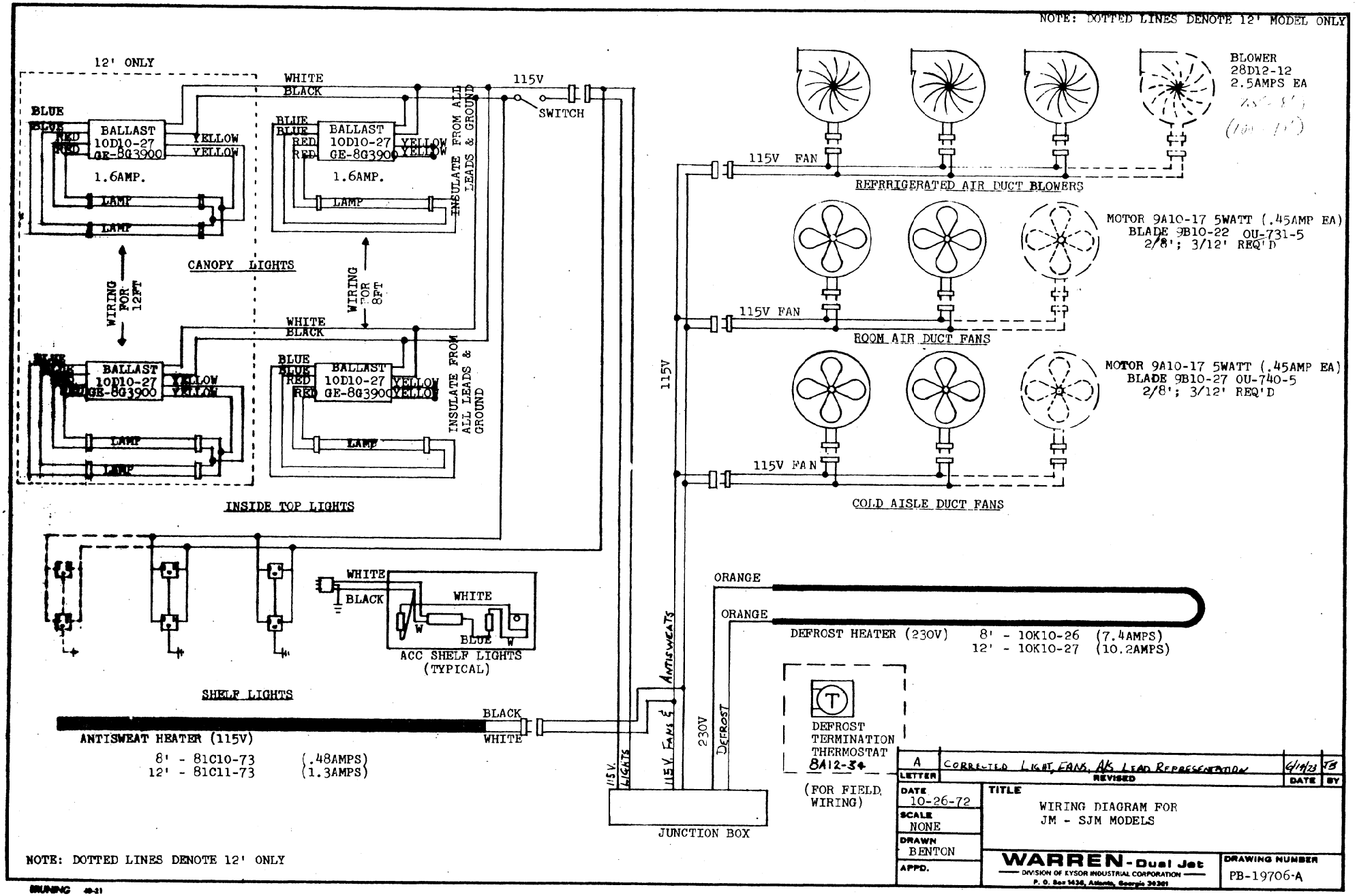
DIVISION OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER



(S)JM-(S)JM
JOINT TRIM KIT

Key #		Part #	Quantity Required
1	Pull-in-line Lugs & Holes		
	Bolts 3/8-16 x 1-1/4	20E10-11	2
	3/8-16 x 2-1/2	20E10-12	3
	T-Nuts 3/8	19A15-13	5
2	Canopy Joint Trim 21B11-12 (2) #8x3/4 SMS	51F14-40	1
3	Honeycomb Divider Joint Trim 21B11-12 (2) #8x3/4 SMS	54L20-47	1
4	Inside Light Rail Joint Trim 21B11-12 (2) #8x3/4 SMS	51F11-88	1
5	Return Air Grille Joint Trim 21B11-12 (2) #8x3/4 SMS	51F11-91	1
6	Colorband Joint Casting 21B11-15 (3) #8x1-1/4 SMS w/#6 HD	16F10-43	1
7	Front Panel Joint Trim 21B11-15 (4) #8x1-1/4 SMS w/#6 HD	52K12-16	1
8	Lower Front Panel Joint Trim 21B11-15 (4) #8x1-1/4 SMS w/#6 HD	51F11-90	1
9	Kickplate Joint Trim 21A13-19 (4) #10-24x1/2 MS ST	51F11-58	1


NOTE: DOTTED LINES DENOTE 12' MODEL ONLY
12' ONLY
WHITE
BLACK
115V
SWITCH
BLUE
BALLAST
10D10-27
GE-8G3900
YELLOW
1.6AMP.
LAMP
INSULATE FROM ALL LEADS & GROUND
CANOPY LIGHTS
WIRING FOR 12FT
WIRING FOR 8FT
INSIDE TOP LIGHTS
SHELF LIGHTS
ANTISWEAT HEATER (115V)
8' - 81C10-73 (.48AMPS)
12' - 81C11-73 (1.3AMPS)
ACC SHELF LIGHTS (TYPICAL)
BLACK
WHITE
BLUE
JUNCTION BOX
115V LIGHTS
115V FANS
ANTISWEATS
230V
DEFROST
DEFROST TERMINATION THERMOSTAT 8A12-34
(FOR FIELD WIRING)
ORANGE
DEFROST HEATER (230V) 8' - 10K10-26 (7.4AMPS)
12' - 10K10-27 (10.2AMPS)
BLOWER 28D12-12 2.5AMPS EA
115V FAN
REFRRIGERATED AIR DUCT BLOWERS
MOTOR 9A10-17 5WATT (.45AMP EA)
BLADE 9B10-22 0U-731-5
2/8'; 3/12' REQ'D
ROOM AIR DUCT FANS
MOTOR 9A10-17 5WATT (.45AMP EA)
BLADE 9B10-27 0U-740-5
2/8'; 3/12' REQ'D
COLD AISLE DUCT FANS
NOTE: DOTTED LINES DENOTE 12' ONLY
A
CORRECTED LIGHT, FANS, AS LEAD REPRESENTATION
6/4/73 TB
LETTER REVISED DATE BY
DATE 10-26-72
SCALE NONE
DRAWN BENTON
APPD.
TITLE
WIRING DIAGRAM FOR
JM - SJM MODELS
WARREN - Dual Jet
DIVISION OF KYSOR INDUSTRIAL CORPORATION
P. O. Box 1436, Atlanta, Georgia 30301
DRAWING NUMBER
PB-19706-A
BRUNING 49-21

CASES 8	CASES 12	80° STORE BTUH FT	80° STORE BTUH REQ'D	CONDENSING UNIT SIZING R-12 SAH -AMBIENT- 90°	SAH 95°	SWH 75°	0-75' L	0-75' S	75-150' L	75-150' S	CONDENSING UNIT SIZING R-502 SAH -AMBIENT- 90°	SAH 95°	SWH 75°	0-75' L	0-75' S	75-150' L	75-150' S	DEFROST AMPS 230/1 AMPS	WI RE	208/3 AMPS	WI RE	115 VOLTS 1 PHASE FAN&A/S AMPS	WI RE	LITE AMPS	WI RE
1	0	8	18665	500	500	300	1/2	1-1/8	1/2	1-3/8	310	310	310	1/2	1-1/8	5/8	1-1/8	7.7	14	7.0	14	8.1	14	3.9	14
0	1	12	28000	550	750	550	5/8	1-3/8	5/8	1-5/8	560	560	510	5/8	1-3/8	5/8	1-3/8	10.4	14	9.5	14	9.9	14	3.9	14
2	0	16	37330	780	780	750	5/8	1-5/8	5/8	1-5/8	760	760	560	5/8	1-3/8	7/8	1-5/8	15.4	12	12.2	14	16.2	12	7.7	14
1	1	20	46665	1000	1000	780	5/8	1-5/8	7/8	1-5/8	790	790	760	7/8	1-5/8	7/8	1-5/8	18.1	12	14.4	14	18.0	12	7.7	14
0	2	24	56000	1500	1500	1000	7/8	1-5/8	7/8	2-1/8	1010	1010	1010	7/8	1-5/8	7/8	2-1/8	20.8	10	16.5	12	19.8	12	7.7	14
2	1	28	65330	1500	2000	1500	7/8	2-1/8	7/8	2-1/8	1510	1510	1010	7/8	1-5/8	7/8	2-1/8	25.8	10	14.4	14	26.1	10	11.6	14
1	2	32	74665	2000	2000	2000	7/8	2-1/8	7/8	2-1/8	2010	2010	1510	7/8	2-1/8	7/8	2-1/8	28.5	10	16.5	12	27.9	10	11.6	14
0	3	36	84000	2500	2500	2000	7/8	2-1/8	7/8	2-1/8	2010	2510	2010	7/8	2-1/8	7/8	2-1/8	31.2	8	16.5	12	29.7	10	11.6	14
2	2	40	93330	2500	2500	2500	7/8	2-1/8	7/8	****	2510	2510	2010	7/8	2-1/8	7/8	2-1/8	36.2	8	18.9	12	36.0	8	15.5	12
1	3	44	102665	0	0	2500	7/8	2-1/8	7/8	****	2510	2510	2010	7/8	2-1/8	1-1/8	2-1/8	38.9	8	22.8	10	37.8	8	15.5	12
0	4	48	112000	0	0	0	7/8	2-1/8	1-1/8	****	2510	0	2510	7/8	2-1/8	1-1/8	****	41.6	6	25.1	10	39.6	8	15.5	12
2	3	52	121330	0	0	0	7/8	****	1-1/8	****	0	0	0	1-1/8	2-1/8	1-1/8	****	46.6	6	28.7	10	45.9	6	19.3	12
1	4	56	130665	0	0	0	7/8	****	1-1/8	****	0	0	0	1-1/8	2-1/8	1-1/8	****	49.3	6	30.8	8	47.7	6	19.3	12
0	5	60	140000	0	0	0	7/8	****	1-1/8	****	0	0	0	1-1/8	2-1/8	1-1/8	****	52.0	6	32.9	8	49.5	6	19.3	12
2	4	64	149330	0	0	0	1-1/8	****	1-1/8	****	0	0	0	1-1/8	****	1-1/8	****	57.0	4	30.8	8	55.8	4	23.2	10
1	5	68	158665	0	0	0	1-1/8	****	1-1/8	****	0	0	0	1-1/8	****	1-1/8	****	59.7	4	32.9	8	57.6	4	23.2	10
0	6	72	168000	0	0	0	1-1/8	****	1-1/8	****	0	0	0	1-1/8	****	1-1/8	****	62.4	4	32.9	8	59.4	4	23.2	10
2	5	76	177330	0	0	0	1-1/8	****	1-1/8	****	0	0	0	1-1/8	****	1-1/8	****	67.4	4	37.0	8	65.7	4	27.1	10
1	6	80	186665	0	0	0	1-1/8	****	1-1/8	****	0	0	0	1-1/8	****	1-1/8	****	70.1	3	39.2	8	67.5	4	27.1	10
0	7	84	196000	0	0	0	1-1/8	****	1-1/8	****	0	0	0	1-1/8	****	****	****	72.8	3	41.4	6	69.3	4	27.1	10
2	6	88	205330	0	0	0	1-1/8	****	1-1/8	****	0	0	0	1-1/8	****	****	****	77.8	3	45.1	6	75.6	3	31.0	8
1	7	92	214665	0	0	0	1-1/8	****	1-1/8	****	0	0	0	1-1/8	****	****	****	80.5	2	47.3	6	77.4	3	31.0	8

NOTES:

1. COND. UNIT RECOMMENDATIONS BASED ON 80° F & 55% RH STORE AMBIENT.
2. SAH(AIR COOLED) UNIT SELECTION IS BASED ON AIR TEMPERATURE ENTERING CONDENSOR AS SHOWN. SWH (WATER COOLED UNIT SELECTION BASED ON 2 GPM TON-75° F WATER ENTERING.
3. COND. UNIT SUFFIX IS:
   RL-LOW TEMP R-502
   RC-MED TEMP R-502
   FC-MED TEMP R-12
4. CAUTION: THESE RECOMMENDATIONS BASED ON BEST INFORMATION AVAILABLE AND ON CONDITIONS AS LISTED FOR APPLICATIONS NOT LISTED CONSULT ENGINEERING DEPARTMENT.
5. LINE LENGTHS SHOWN ARE EQUIVALENT LENGTHS. TO DETERMINE EQUIVALENT LENGTH MEASURE ACTUAL LINEAL LENGTH FROM COMPRESSOR TO FURTHEST CASE AND ADD FOUR FEET FOR EACH ELBOW OR OTHER FITTING.
6. RISER AND P-TRAPS SHOULD BE REDUCED ONE SIZE FROM THAT SHOWN
7. WIRE SIZES ARE BASED ON 100' OF TYPE T AND TW.
8. LIGHTS: AMPS SHOWN ARE FOR STANDARD FIXTURES. FOR EACH LIGHTED SHELF ADD 0.7 AMP.
9. THREE PHASE AMPS IS MAXIMUM FOR ONE LEG.
10. WASTE OUTLET IS STANDARD 1 INCH M.P.T.

CONNECTIONS: SUCTION LINE 7/8 1 1/8 OD, LIQUID LINE 1/2 OD

(S)J M fresh meat

WARREN / SHERER CONDENSING UNIT RECOMMENDATIONS , REFRIGERANT LINE SIZING , ELECTRICAL DATA FOR : MODEL JM
UP TO 80 ° STORE , SUCTION TEMPERATURE -8°

(S)J M fresh meat