Jerry, 6-28-84
Please look over.
Thanks,
Janet

FORM NUMBER: 84-195-7
DATE: 7/13/81
REVISED: 10/31/83, 2/17/84, 7/1/84

WARREN//SHERER

INSTALLATION & OPERATION MANUAL

MODEL:

D5 D6 D6L
D6R D6RL
DAIRY-DELI

THIS REFRIGERATOR CONFORMS TO THE COMMERCIAL REFRIGERATOR MANUFACTURERS ASSOCIATION HEALTH AND SANITATION STANDARD.
CRS-SI-78

WARREN//SHERER
DIVISION OF KYSOR INDUSTRIAL CORPORATION
1600 ROCKDALE INDUSTRIAL BLVD., CONYERS, GEORGIA 30207/404•483•5600

INSTALLATION AND OPERATING INSTRUCTIONS

FOR

D5, D6, D6L, D6R, D6RL MODELS

SELF SERVICE DAIRY CASES

APPLICATION:

The Warren/Sherer multi-shelf self-service dairy cases are designed to merchandise packaged dairy products. These cases should be installed and operated according to the instructions contained in the manual to insure proper performance. They are designed for display of products in an air-conditioned store where temperature and humidity are maintained at a maximum of 75°F dry bulb temperature, 55% relative humidity.

MODEL	DESCRIPTION	SERIAL CODE DESIGNATION
*D5	Front Load Dairy - Low Front Height Usually (3) adjustable shelves - 18",20",22"	745-A
*D6	Front Load Dairy - High Front Height Usually (4) adjustable shelves - 18",20",22"	735-E
D6R	Rear Load Dairy (sliding door) High Front Height Must be backed up & sealed to a walk-in cooler - Usually (4) adjustable shelves - 20",22"	759-D
D6L	Front Load Dairy - Low Front Height Usually (4) adjustable shelves - 18",20",22"	762-D
D6RL	Rear Load Dairy (sliding door) Low Front Height Must be backed up to a walk-in cooler Usually (4) adjustable shelves - 20",22"	760-D

*These models may be used for deli (processed meats) with proper BTU capacity and Warren/Sherer special hook-a-pak systems are used or a 18" and 20" shelves are used above a hook-a-pak system supplied by others.

Rev. 10/31/83

GENERAL

These display refrigerators may be installed individually or in a continuous line-up consisting of several 8-foot and 12-foot sections by using a joint trim kit. A plexiglass divider kit must be used between cases operating on different refrigeration systems. Divider will be factory installed if specified on order.

SHIPPING DAMAGE

All equipment should be examined for shipping damage before and during unloading. If there is any damage, the carrier should be notified immediately and an inspection requested. The delivery receipt "must" be noted that the equipment was received damaged. If damage is of a concealed nature you must contact the carrier immediately or no later than three (3) days following delivery. A claim must be filed with the carrier by the consignee for all damages.

LOCATION

This refrigerator must be located on a firmly based floor and leveled within plus or minus 1/16". Use shims provided to level your refrigerator.

JOINING

Two or more fixtures of like models can be joined together to form a continuous line-up. Instructions for joining fixtures are included in the joint kit. Before lining up refrigerator, inspect refrigeration lines, electrical connections and controls to insure refrigerators are in proper line-up and are in the proper sequence.

Note: THESE REFRIGERATORS ARE LINED UP AT THE FACTORY AND ARE NUMBERED. INSURE THEY ARE LINED UP IN THE FIELD IN THE SAME SEQUENCE NUMBER.

WASTE OUTLET

The D6 & D6R cases are equipped with a 1-1/2" M-NPT waste outlet connection which terminates in the center of the refrigerator below the insulated bottom. The water seal is installed on the cases. The D5 cases are equipped with a 1" F-NPT waste outlet. The water seal is shipped loose.

INSTALLING DRIP PIPE

Improperly installed drip pipes can seriously effect the operation of this equipment and result in increased maintenance costs.
Listed below are some general rules for drip pipe installation.

1. Never use a double water seal.

2. Never use a pipe smaller than the size pipe or water seal supplied with the equipment.

3. Always provide as much as fall as possible in drip pipe. (1" fall for each 4' of drip pipe).

4. Avoid long runs in drip pipe which make it impossible to provide maximum fall in pipe.

5. Provide a drip space between drip pipe and floor drain or sewer connection.

6. Do not allow drip pipe to come in contact with uninsulated suction lines, which will cause the condensation from your refrigerator to freeze.

Rev. 7/1/84

CLEANING

To insure minimum maintenance cost, cabinet should be thoroughly emptied and washed out every three (3) months. The exterior should be washed weekly. A mild soap and water solution is recommended for painted surfaces of the cabinet. Do not use cleaners containing abrasive materials which will scratch or dull finish. The waste outlet should be flushed with a bucket of water following each cleaning.

Caution: Never introduce water into the fixture faster than the waste outlet can carry it away.

When cleaning lighted shelves, wipe down with a wet sponge or cloth so that water does not enter the light rails. DO NOT USE A HOSE OR SUBMERGE SHELVES IN WATER. BE SURE REFRIGERATION IS SHUT-OFF AND ALL ELECTRICAL IS OFF BEFORE WASHING YOUR REFRIGERATOR.

LOADING

Merchandise should not be placed in the fixture until all controls have been adjusted and the refrigerator is at proper temperature.

At no time should the fixture be stocked beyond the load line or over the front edge of adjustable shelves. In doing so, you will seriously affect the performance which will result in higher product temperatures and increase operating costs.

ELECTRICAL

All field installed wiring must comply with the NATIONAL ELECTRICAL CODE AND LOCAL CODES.

ELECTRICAL RACEWAY

An electrical raceway is provided with each refrigerator for running your fan, anti-sweat heaters, and defrost circuits from case to case without using conduit. This applies, of course, when the front panel is properly secured into position. This is an approved method by the Underwriters' Laboratories; however, wiring must be run in accordance with local and national electrical codes.

ELECTRICAL CONNECTIONS

All field connections are made in the electrical raceway.

Make sure that proper voltage is supplied to your refrigerator. Check refrigerator nameplate for the required voltage for fans, anti-sweat heaters, lights and defrost heaters. ALL REFRIGERATORS MUST BE GROUNDED.

Fan motors must operate continuously and panel must be marked sufficiently to prevent the fan motors and anti-sweat heaters from being turned off accidentally. When refrigerators are multiplexed, add the total of these amperage values to determine wire size and circuit protection. Anti-condensate controllers can be used to control the anti-condensate heater.

On electric defrost models, the defrost heater amperages of all cases on defrost circuit should be added together, and if their rating exceeds the defrost time clock or condensing unit breaker capacity, a defrost relay and circuit breaker must be employed and furnished by others. Make sure that proper wire size and branch circuit protection are employed for safe operation.

Chart #1 shows the electrical ratings for your refrigerator. This is the same information that appears on your refrigeration nameplate.

REFRIGERATION FAN MOTORS

The fan motors employed are permanently oiled for the life of the motor and requires no periodic maintenance. They are wired according to the enclosed wiring diagram and MUST RUN CONTINUOUSLY.

ANTI-SWEAT HEATERS

These heaters are placed in the fixture to eliminate sweat forming on certain areas of fixture. (D6R(L) only)

EXPANSION VALVE

The expansion valve furnished with your refrigerator has been sized for maximum coil efficiency. To adjust superheat, place a thermocouple under the expansion valve bulb. Read the suction line pressure as near coil as possible. (If at the condensing unit, estimate suction line loss at 2PSIG). Convert coil suction pressure to temperature. The difference between coil temperature and the thermocouple temperature is superheat. (Use average superheat when expansion valve is hunting). Do not set superheat until cases have pulled down to operating temperature and never open or close valve over 1/2 turn between adjustments and allow 10 minutes or more between adjustments. Superheat should be set to 6-8°F.

REFRIGERATION LINES

The refrigeration lines are located under the deck pans on the 8' and 12' cases. A refrigeration outlet is provided in the front RH end of the D5 & D6 cases and rear LH end of D6R. Make sure all refrigeration lines lie as close to the refrigerator bottom so as not to obstruct the air pattern or block the deck pans. See the section on "Recommended Piping Practices" for additional details on piping practices.

These 8' and 12' refrigerators have polyurethane foamed-in-place insulation. In opening a ferrule hole, simply heat a piece of copper tubing of the same size as the tubing to be employed and force it through the ferrule hole.

IMPORTANT - SEAL AROUND LINES AFTER CONNECTIONS ARE MADE. KEEP DIRECT FLAME FROM BOTTOM OF REFRIGERATOR, AS HEAT WILL DISINTEGRATE THE BOTTOM AND INSULATION. USE A HEAT SHIELD WHEN WELDING NEAR THE BOTTOM OF THE CASES.

REFRIGERANT

R-12 expansion valves are standard. If other refrigerant is used, the order must specify the expansion valve to be supplied.

HEAT EXCHANGER

Heat exchangers are standard in these refrigerators. They aid to increase operating efficiency and reduce frosting and flood-back to compressor.

OPERATION

On single condensing unit systems a thermostat should be used to control temperatures. The thermostat bulb should be mounted in the discharge air. On parallel units, temperature control can be provided by EPR valve, thermostat and liquid line solenoid or solid state low pressure controls on compressor unit. Chart #2 shows approximate settings for merchandisers. Since many variables are present in each installation, such as store temperature, length of tubing runs, temperature desired in refrigerator, etc., Chart #2 is only a guide for the installer.

DEHYDRATION OF REFRIGERATION SYSTEMS

Please read carefully before placing system into operation. After laying refrigerant lines, they should be blown out before making final connection at fixture or condensing unit. Use dry nitrogen to prevent any foreign matter being left in the lines. Keep pressure below 250 pounds. To prevent scaling due to brazing, dry nitrogen should be allowed to flow through lines while brazing operations are taking place.

After the refrigeration system has been pressure-tested and proven leak-free, it is recommended that the system be dehydrated with a vacuum pump to 1000 microns for the first two evacuations and 500 microns on the third. The triple evacuation method requires evacuating the system three successive times and breaking each vacuum with dry refrigerant. Allow the pressure to rise above atmospheric pressure.

CONTROL DESCRIPTION

OFF-TIME DEFROST

Off-time defrost is standard on these models. The fans run continuously and defrost termination is by pressure or time (fail safe). See Chart #2 for defrost settings.

ELECTRIC DEFROST MODELS

For optional electric defrost, electric heaters are utilized to melt the frost and ice on the coil. The heaters are located in the air stream under the coil. The defrost cycle is time initiated and should be temperature terminated. Case fans operate continuously in defrost and refrigeration.

HOT GAS DEFROST MODELS

On hot gas defrost models, (optional for parallel compressors operation only) hot gas is routed through the suction line and evaporator coil. It exits the coil through a by-pass around the expansion valve and heat exchanger to return to the liquid line where the "condensed" liquid is used to feed the other cases on the same parallel unit. The case fans continue to operate during defrost to warm up the drain pan and air ducts. The defrost cycle is time initiated and should be temperature terminated.

SPECIAL REQUIREMENTS FOR REAR LOAD MODELS - Rear load models must be installed and sealed to a walk-in cooler. The cooler BTU load should be sized as a free standing cooler and for approximately 36° temperature.

The base rail below the case must be insulated and sealed to prevent any air leakage out of the cooler. Make sure refrigeration access holes are sealed. The rear sliding doors must be closed at all times except when stocking from the rear for proper case operation.

THERMOSTAT LOCATION

For convenience, the thermostat (if utilized) is located at the left end of the case in the canopy light rail. Adjustment access is between the light tubes. If the case is equipped with a defrost terminator, it will be located in the same area. Should the thermostat have to be replaced, remove the canopy lights for access.

Chart #1

Model	Evaporator Fans (Amps)	Anti-Cond Heater (Amps)	Lights (Amps)	
D5 8	1.6	---	1.6	(2)
D5 12	2.5	---	2.1	(2)
D6, D6L 8	1.0	---	2.1	(3)
D6, D6L 12	1.5	---	4.2	(3)
D6R, D6RL 8	1.5	1.0	2.1	(3)
D6R, D6RL 12	2.0	1.5	4.2	(3)

Notes

1) For each lighted shelf, add 0.7 amps per shelf

2) Values shown are for one row canopy lights - standard

3) Values shown are for two rows of canopy lights - standard

4) Add to above if front nose light is utilized
   8' .8 amps
   12' 1.3 amps

   Nose light cannot be added to D6L or D6RL.

Rev. 7/1/84

Chart #2

Recommended Control Settings

Model	Refrigerant & Applicant	LP Control Cut-out	LP Control Cut-in	EPR Valve	Thermostat (Disc. Air Temp) Cut-out	Thermostat (Disc. Air Temp) Cut-in
D6, D6L	R-12 - Dairy	15 PSIG	28 PSIG	19#	28	32
D5	R-12 - Dairy	12 PSIG	25 PSIG	17#	28	32
D6, D6L	R-502 - Dairy	46 PSIG	60 PSIG	50#	28	32
D5	R-502 - Dairy	37 PSIG	58 PSIG	45#	28	32
D6	R-12 - Deli	12 PSIG	28 PSIG	15#	24	28
D5	R-12 - Deli	10 PSIG	22 PSIG	14#	24	28
D6	R-502 - Deli	40 PSIG	60 PSIG	43#	24	28
D5	R-502 - Deli	33 PSIG	54 PSIG	42#	24	28
D6R, D6RL	R-12 - Dairy	12 PSIG	28 PSIG	15#	28	32
D6R, D6RL	R-502	40 PSIG	60 PSIG	43#	28	32

Model	*Defrost Periods Frequency	Pressure Termination R-12	Pressure Termination R-502	Fail Safe Setting Time Off
D5,D6,D6L	4	45#	90#	40 min.
D6R, D6RL	6	45#	90#	40 min.

Model	*Defrost Periods Frequency	Temperature Termination (1)	Fail Safe Setting Hot Gas	Fail Safe Setting Electric
D5,D6,D6L	4	60°F	20 min.	30 min.
D6R, D6RL	6	60°F	20 min.	30 min.

(1) Temperature measured in discharge air

* Defrost frequency is at design conditions. Higher temperature or humidity may require more frequent defrost setting.

Rev. 10/31/83
7/1/84

Parts List D6, D6L, D6R, D6RL – 8'

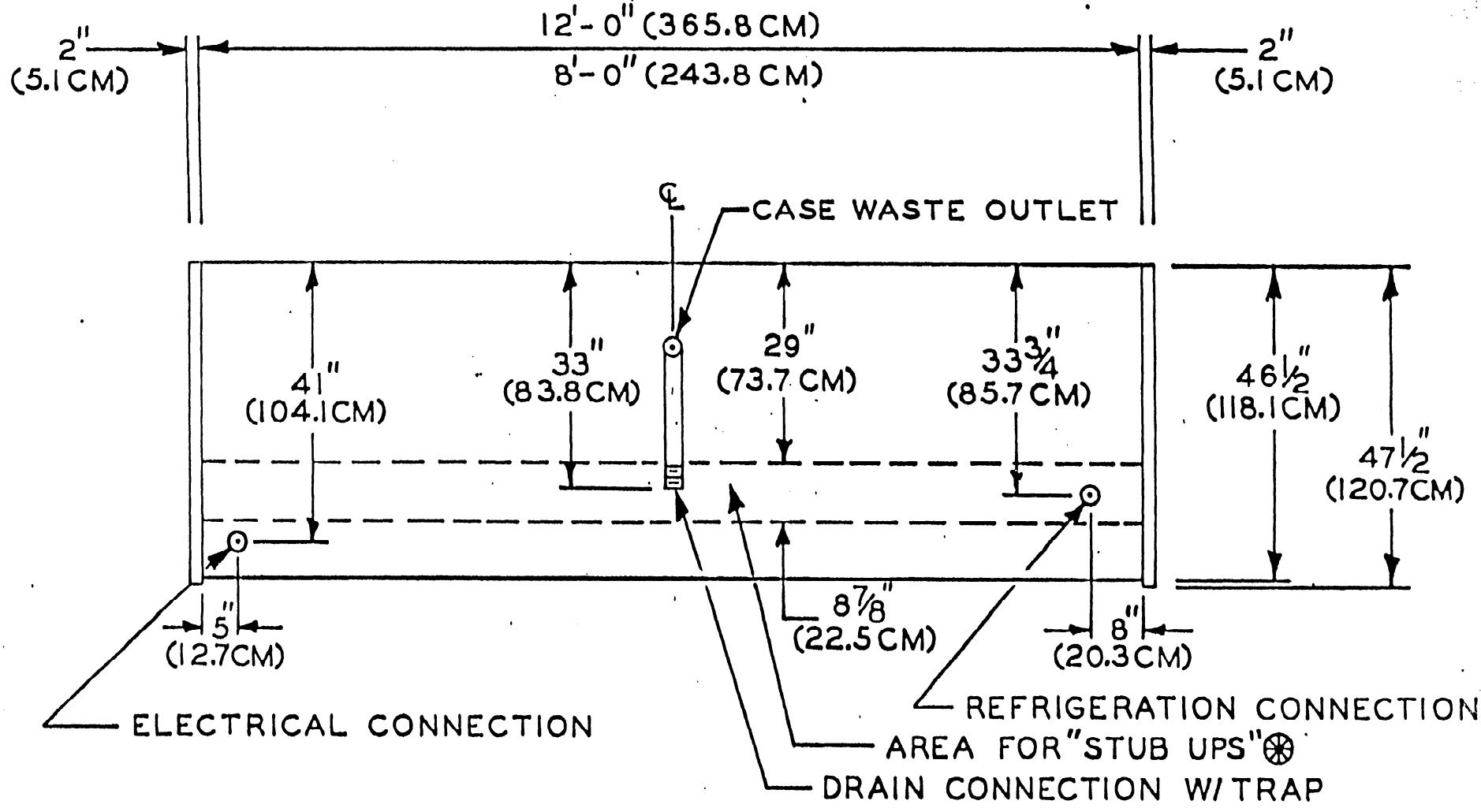
Description		Part No.	D6	D6L	D6R	D6RL
EXPANSION VALVE		3A11-23	1	1	1	1
EVAP FAN MOTOR		9A10-17	2	2	3	3
EVAP FAN BLADE		9B10-21	2	2	--	--
		9B10-27	--	--	3	3
LAMP (CANOPY)	DOUBLE ROW	10A10-58	2	2	2	2
	SINGLE ROW		1	1	1	1
LAMPHOLDER (PLUNG) (CANOPY)	DOUBLE ROW	10B11-19	2	2	2	2
	SINGLE ROW		1	1	1	1
LAMPHOLDER (STAT) (CANOPY)	DOUBLE ROW	10B11-20	2	2	2	2
	SINGLE ROW		1	1	1	1
BALLAST (CANOPY)	DOUBLE ROW	10D10-36	1	1	1	1
	SINGLE ROW	10D10-27	1	1	1	1
LAMP (SHELF)	PER (1) LIGHTED SHELF	10A10-55	1	1	1	1
LAMPHOLDER (SHELF)		10B11-17	1	1	1	1
LAMPHOLDER (SHELF)		10B11-18	1	1	1	1
BALLAST (SHELF)		10D10-12	1	1	1	1
FAN WIRING HARNESS		10M10-100	1	1	--	--
		10M10-81	--	--	1	1
WIRE RACK		28G19-130	4	4	--	--
WIRE RACK RH		28G19-158	1	1	--	--
WIRE RACK CENTER		28G19-160	--	--	2	2
FRONT PANEL	PAINTED	51A12-122	1	--	1	--
	DANISH	53E11-197				
	HERITAGE	53E11-198				
FRONT PANEL (LOW)	PAINTED	51A12-125	--	1	--	1
	DANISH	53E11-221				
	HERITAGE	53E11-222				
CANOPY PANEL	PAINTED	51C12-59	1	1	1	1
	DANISH	53E14-74				
	HERITAGE	53E14-73				
KICKPLATE	PAINTED	51A12-127	1	1	1	1
	SS BRUSHED	55A32-224				
	SS BRIGHT	55A32-225				
COLORBAND	SS BRUSHED	55F12-83	1	1	1	1
	SS BRIGHT	55F12-84				
RACEWAY BUMPER TRIM	SS BRUSHED	55A12-29	1	1	1	1
	SS BRIGHT	55A12-30				
DECK PAN		54N18-179	4	4	--	--
DECK PAN LH		54N18-153	--	--	1	1
DECK PAN RH		54N18-154	--	--	1	1
RETURN AIR GRILLE		54P16-218	1	1	1	1
HONEYCOMB REFRIG. JET ASSY		62G15-30	2	2	2	2
HONEYCOMB GUARD JET ASSY		62G15-31	2	2	--	--
HEATER RAIL ASSY		81C10-79	--	--	1	1

Parts List D6, D6L, D6R, D6RL – 12'

Description		Part No.	D6	D6L	D6R	D6RL
EXPANSION VALVE		3A12-21	1	1	1	1
EVAP FAN MOTOR		9A10-17	3	3	4	4
EVAP FAN BLADE		9B10-21	3	3	--	--
		9B10-27	--	--	4	4
LAMP (CANOPY)	DOUBLE ROW	10A10-57	4	4	4	4
	SINGLE ROW		2	2	2	2
LAMPHOLDER (PLUNG) (CANOPY)	DOUBLE ROW	10B11-19	4	4	4	4
	SINGLE ROW		2	2	2	2
LAMPHOLDER (STAT) (CANOPY)	DOUBLE ROW	10B11-20	4	4	4	4
	SINGLE ROW		2	2	2	2
BALLAST (CANOPY)	DOUBLE ROW	10D10-36	2	2	2	2
	SINGLE ROW		1	1	1	1
LAMP (SHELF)	PER (1) LIGHTED SHELF	10A10-55	1	1	1	1
LAMPHOLDER (SHELF)		10B11-17	1	1	1	1
LAMPHOLDER (SHELF)		10B11-18	1	1	1	1
BALLAST (SHELF)		10D10-12	1	1	1	1
FAN WIRING HARNESS		10M10-101	1	1	--	--
		10M10-82	--	--	1	1
WIRE RACK		28G19-130	6	6	--	--
WIRE RACK RH		28G19-158	1	1	--	--
WIRE RACK CENTER		28G19-160	--	--	4	4
FRONT PANEL	PAINTED	51A14-103	1	--	1	--
	DANISH	53E11-199				
	HERITAGE	53E11-200				
FRONT PANEL (LOW)	PAINTED	51A14-107	--	1	--	1
	DANISH	53E11-223				
	HERITAGE	53E11-224				
CANOPY PANEL	PAINTED	51C14-55	1	1	1	1
	DANISH	53E14-76				
	HERITAGE	53E14-75				
KICKPLATE	PAINTED	51A14-109	1	1	1	1
	SS BRUSHED	55A32-226				
	SS BRIGHT	55A32-227				
COLORBAND	SS BRUSHED	55F14-75	1	1	1	1
	SS BRIGHT	55F14-76				
RACEWAY BUMPER TRIM	SS BRUSHED	55A14-24	1	1	1	1
	SS BRIGHT	55A14-25				
DECK PAN		54N18-179	6	6	--	--
DECK PAN LH		54N18-153	--	--	1	1
DECK PAN RH		54N18-154	--	--	1	1
DECK PAN CENTER		54N18-155	--	--	1	1
RETURN AIR GRILLE		54P16-219	1	1	1	1
H'COMB REFRIG. JET ASSY		62G15-30	3	3	3	3
H'COMB GUARD JET ASSY		62G15-31	3	3	--	--
HEATER RAIL ASSY		81C11-79	--	--	1	1

D5
Parts List

Description	D5 8'	D5 12'	Part Number
Evap Fan Mtr	2	3	3-015-01-2505
Evap Fan Blade	2	3	3-015-01-1053
Exp Valve	1		3A11-23
		1	3A12-21
Hcomb Ref Jet	2	3	3-019-05-0206
Return Air Grille	1		2-240-00-1939
		1	2-240-00-1947
Fan Wiring Harness	1		2-368-00-0119
		1	2-368-00-0127
Deck Pan	4	6	2-295-00-0364
Wire Rack	4	6	28G19-164
Lamp (canopy)	1		10A10-58
		2	10A10-57
Ballast (canopy)	1		10D10-27
		1	10D10-36
Lampholders (cnpy)	1	2	10B11-19,20
Lamp (shelf)	1	1	10A10-55
Ballast (shelf)	1	1	10D10-12
Lampholders (shelf)	1	1	10B11-17,18
Cband Bumper Trim	2		15J11-49
		2	15J11-50
Cband (ptd)	1		2-270-00-0751
		1	2-270-00-0769
Cband (vinyl)	1		2-270-xx-5370
		1	2-270-xx-5390
Cband (gold)	1		2-270-00-0694
		1	2-270-00-0702
Canopy Panel (ptd)	1		2-270-00-3573
		1	2-270-00-3581
Canopy Panel (vinyl)	1		2-270-xx-5530
		1	2-270-xx-5550
Front Panel (ptd)	1		2-270-00-4449
		1	2-270-00-4456
Front Panel (vinyl)	1		2-270-xx-5570
		1	2-270-xx-5590
Kplate (ptd)	1		2-155-00-0041
		1	2-155-00-0033
Kplate (stainless steel)	1		2-155-00-1106
		1	2-155-00-1098



⊛ FLOOR DRAINS, REFRIG. AND ELEC. "STUB-UPS" MUST BE IN THIS AREA.

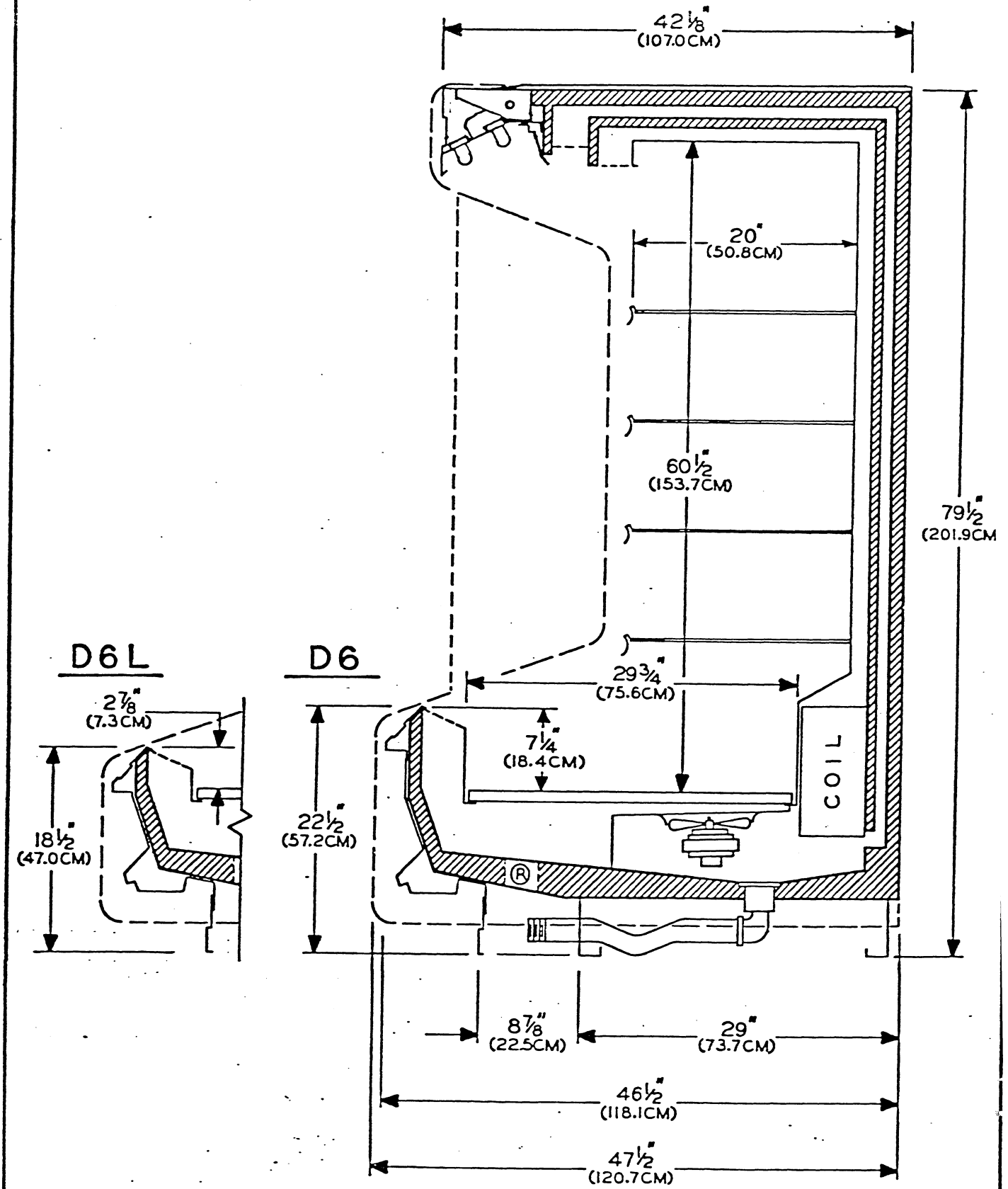
LETTER	REVISED	DATE	BY

DATE 7FEB83
SCALE 1/2" = 1'-0"
DRAWN JP
APPD.

TITLE
PLAN VIEW
MODEL D6-D6L

KYSOR | WARREN / SHERER
DIVISION OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER
SA-83-60(



LETTER	REVISED	DATE	BY

DATE 7FEB83

SCALE 1/8 = 1"

DRAWN JP

APPD.

TITLE

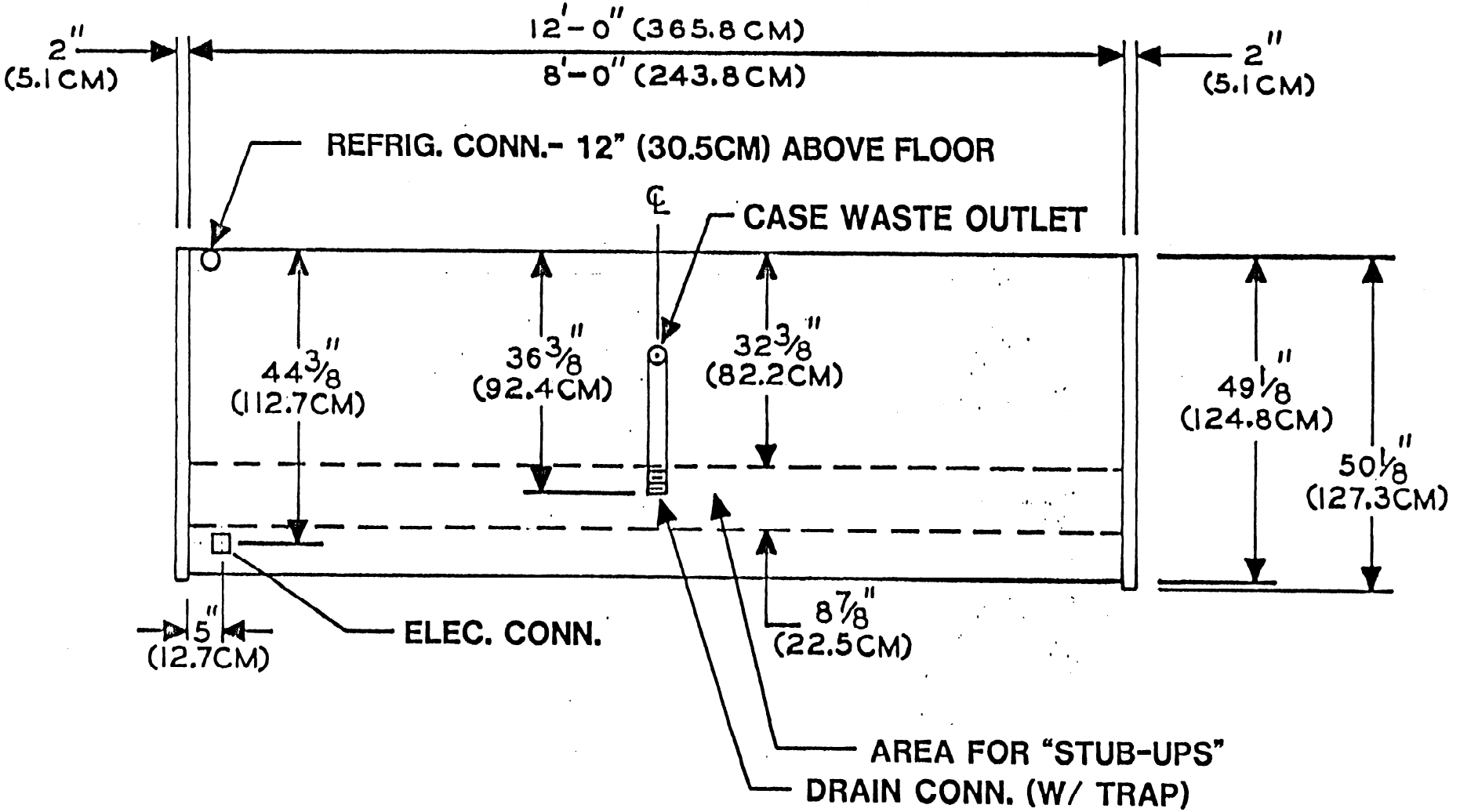
CROSS SECTION

MODEL D6-D6L

KYSOR | WARREN/SHERER

A DIV. OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER SB-83-601



LETTER	REVISED	DATE	BY

DATE 12MAY83

SCALE 1/2" = 1'-0"

DRAWN JP

APPD.

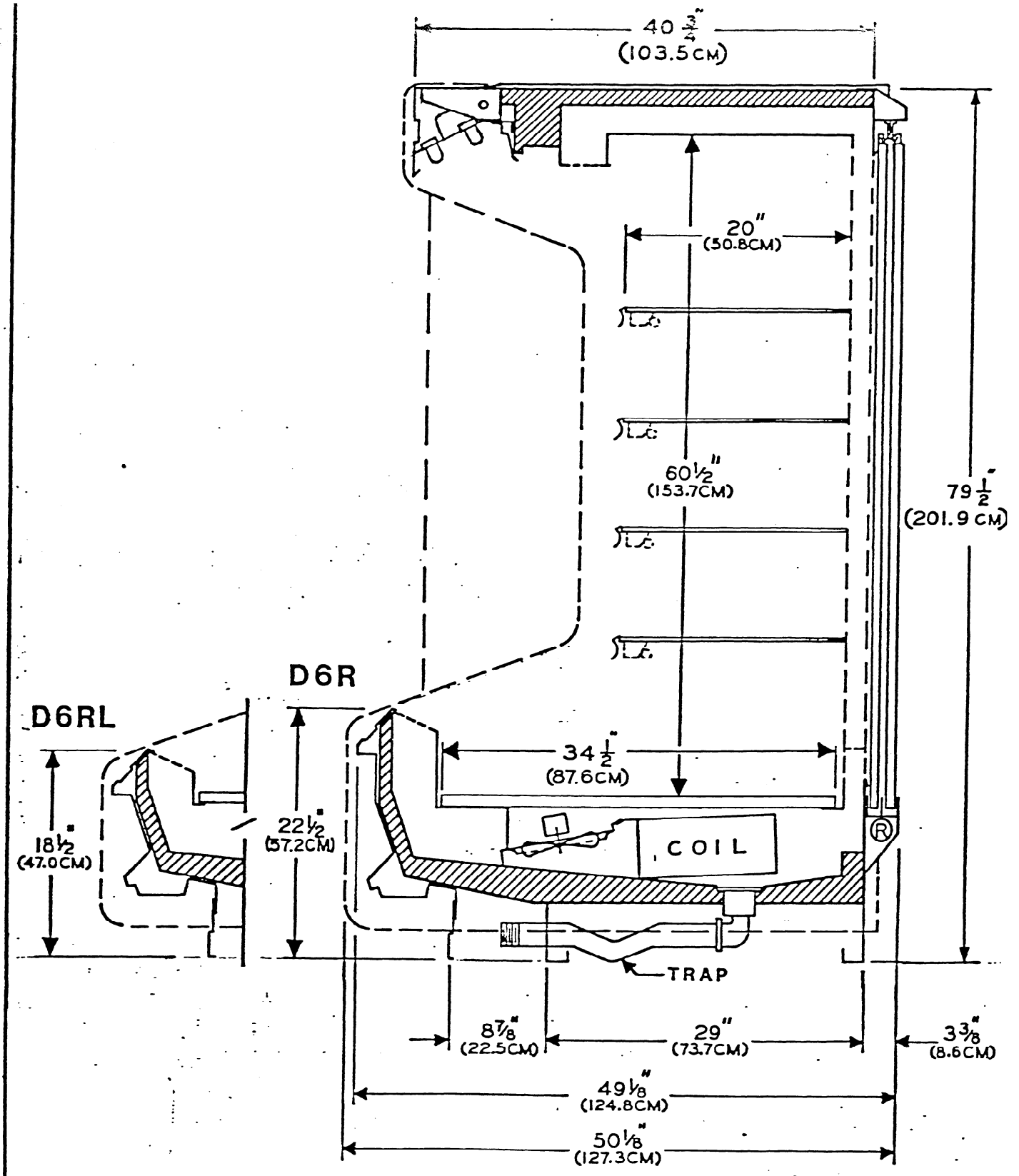
TITLE

PLAN VIEW

MODEL D6R-D6RL

KYSOR | WARREN / SHERER
DIVISION OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER SA-83-60?



LETTER	REVISED	DATE	BY

DATE

SCALE" 1/8 = 1'-0"

DRAWN RRM

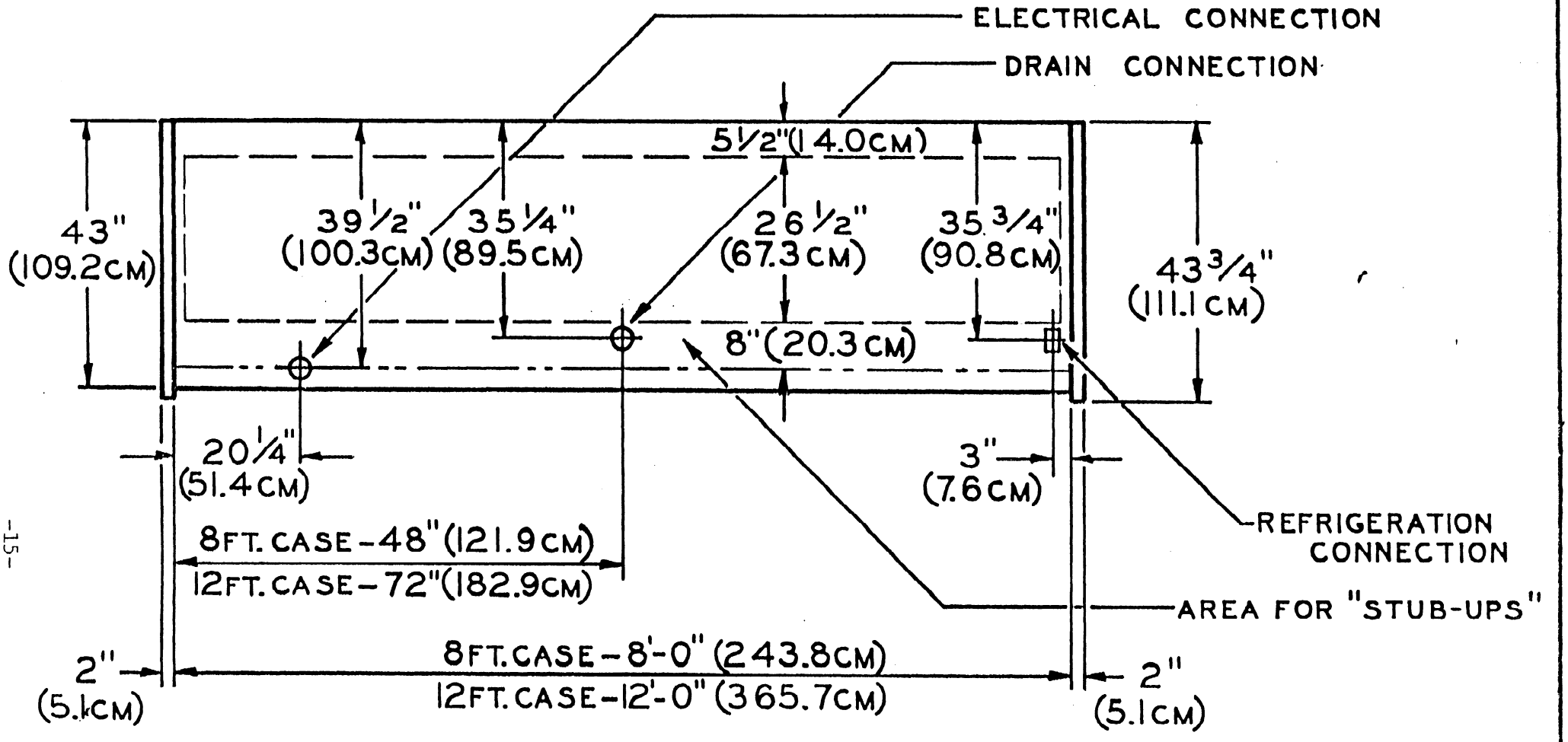
APPD.

TITLE

CROSS SECTION
MODEL D6R-D6RL

KYSOR | WARREN / SHERER
A DIVISION OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER
SB-83-603



LETTER	REVISED	DATE	BY

DATE 10-2-80

SCALE 1/2" = 1'-0"

DRAWN RRM

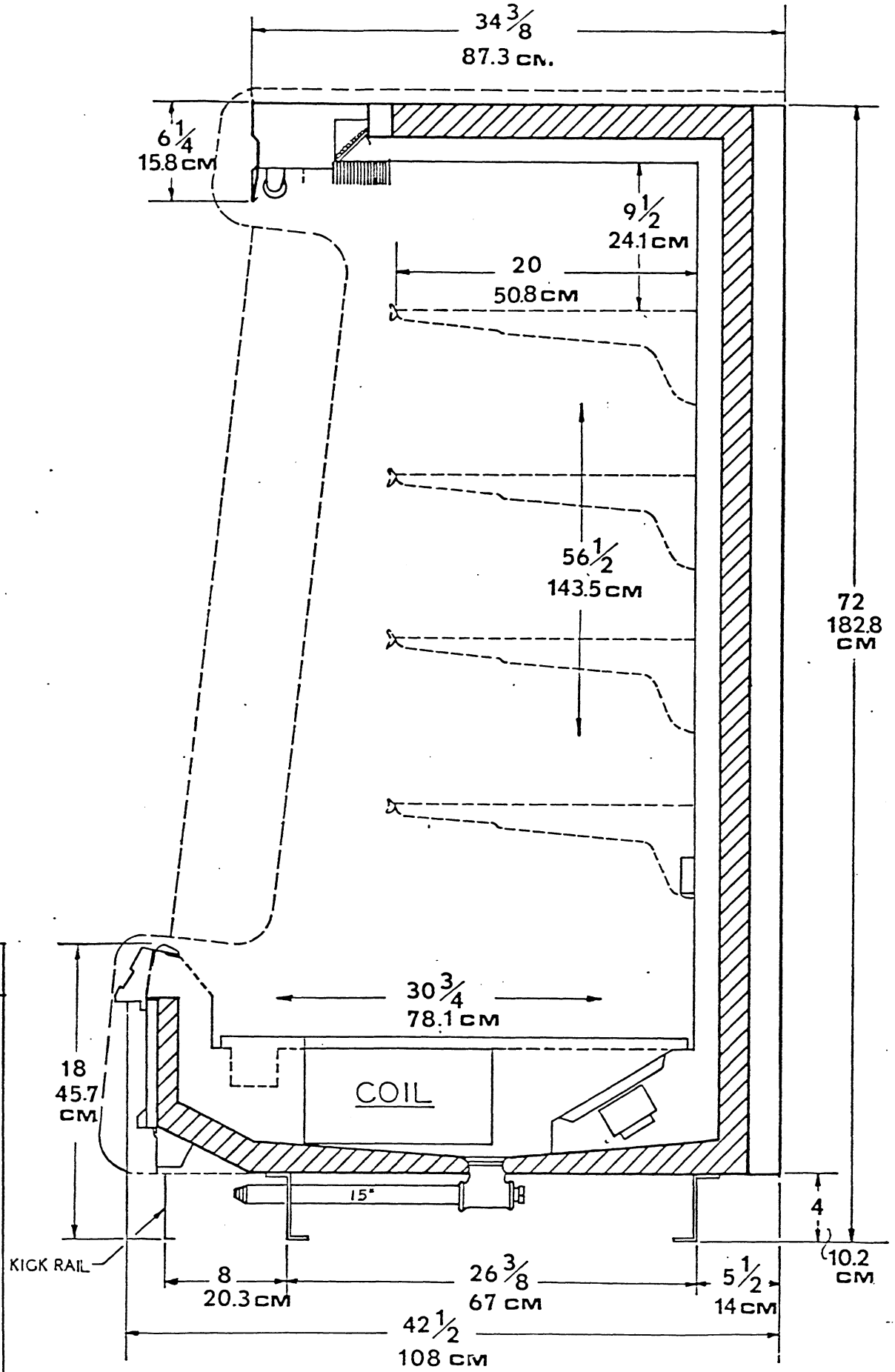
APPD.

TITLE

PLAN VIEW
MODEL D5

KYSOR | WARREN / SHERER
DIVISION OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER
SA-80508



LETTER	
DATE	10-19-78
SCALE	
DRAWN	MAV
APPD.	

REVISED

DATE	BY

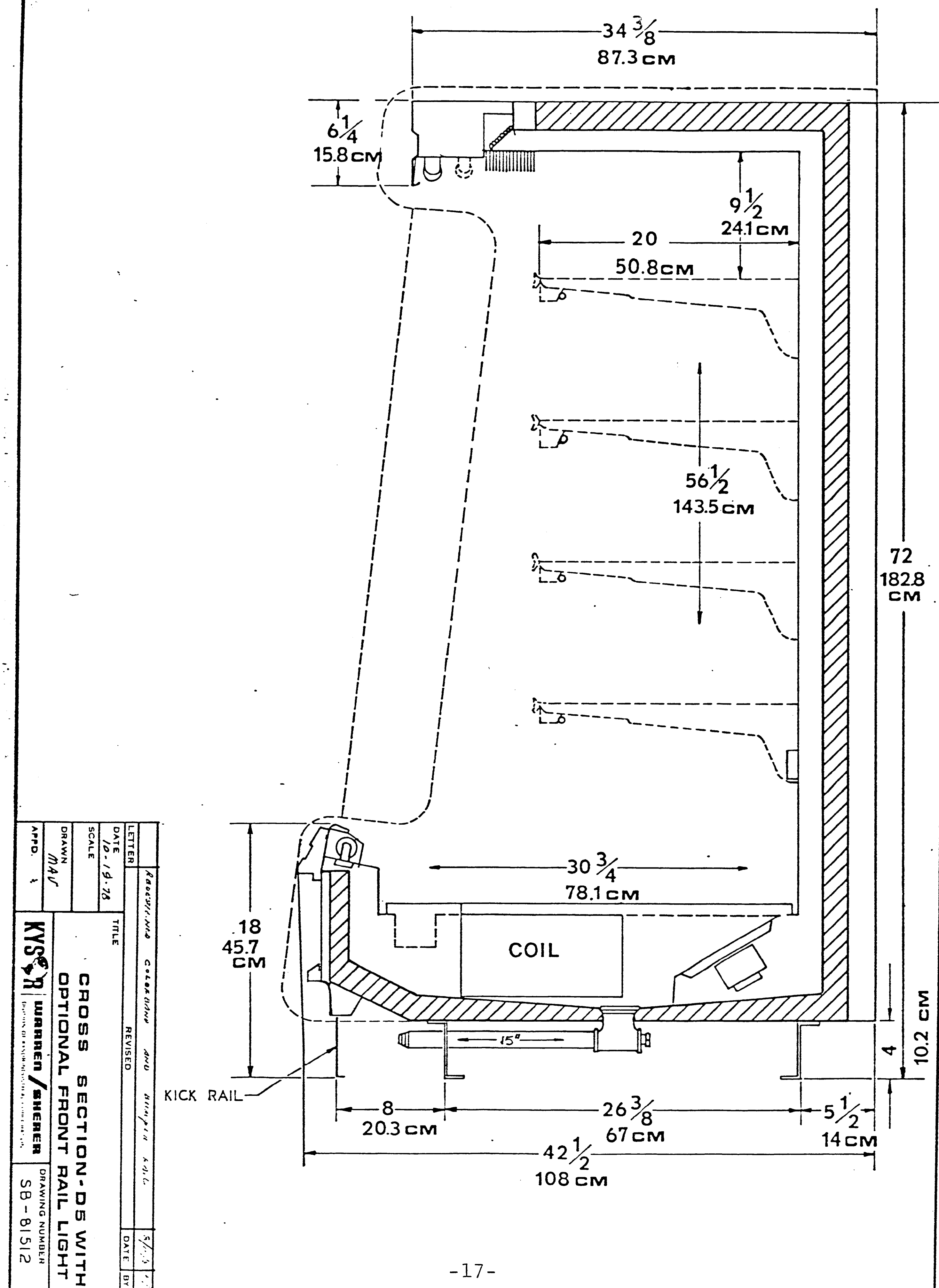
TITLE

CROSS SECTION - D5

KYSOR | WARREN / SHERER

DRAWING NUMBER

58-78536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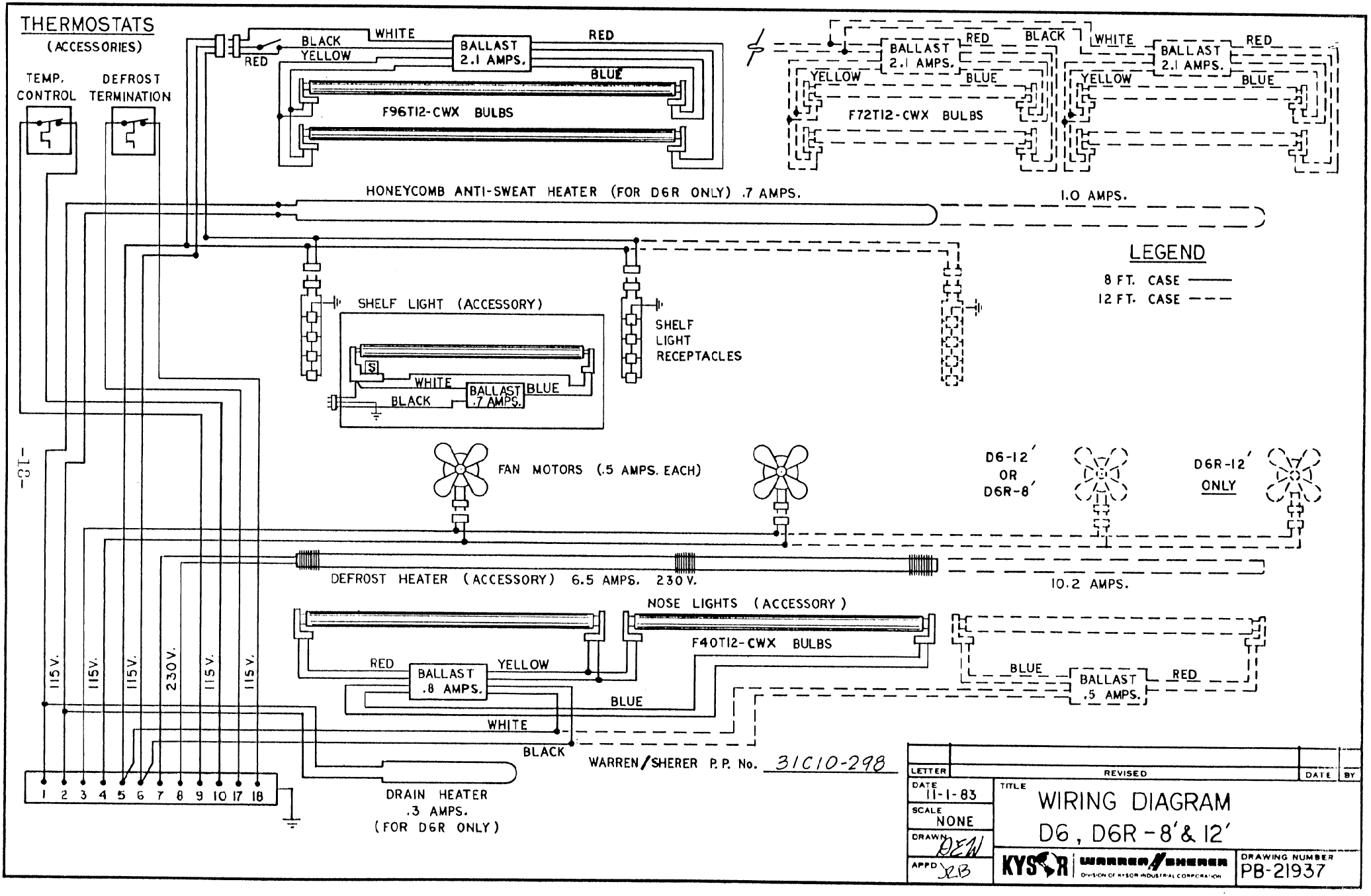
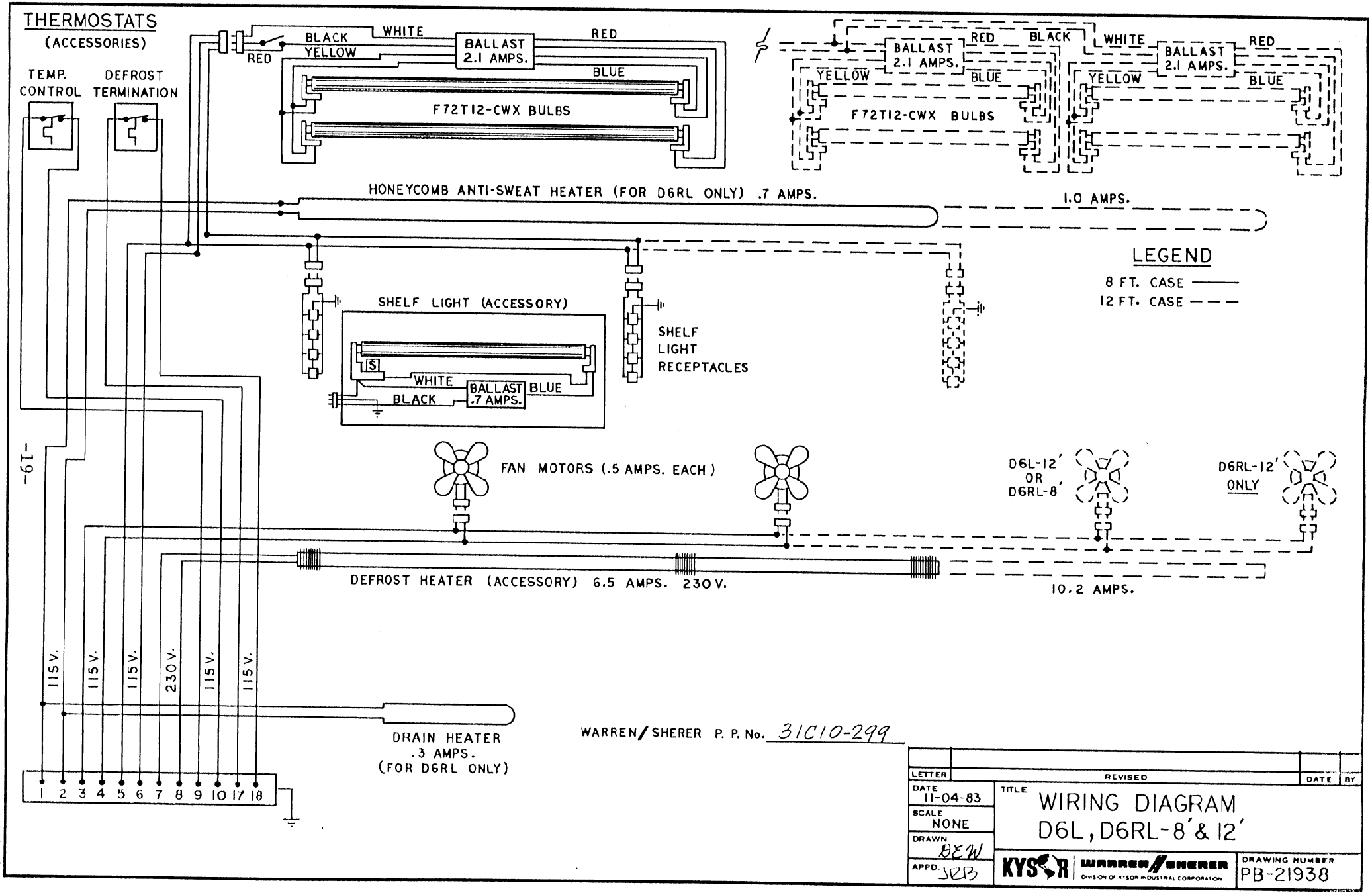
87.3 CM
6 1/4
15.8 CM
9 1/2
24.1 CM
20
50.8 CM
56 1/2
143.5 CM
72
182.8 CM
30 3/4
78.1 CM
COIL
18
45.7 CM
15"
4
10.2 CM
KICK RAIL
8
20.3 CM
26 3/8
67 CM
5 1/2
14 CM
42 1/2
108 CM
LETTER
REVISED
DATE
BY
DATE 10-19-78
SCALE
DRAWN MAV
APPD.
TITLE
CROSS SECTION-D5 WITH OPTIONAL FRONT RAIL LIGHT
KYSOR
WARREN / SHERER
DRAWING NUMBER
SB-81512





WARREN/SHERER P. P. No. 31C10-299

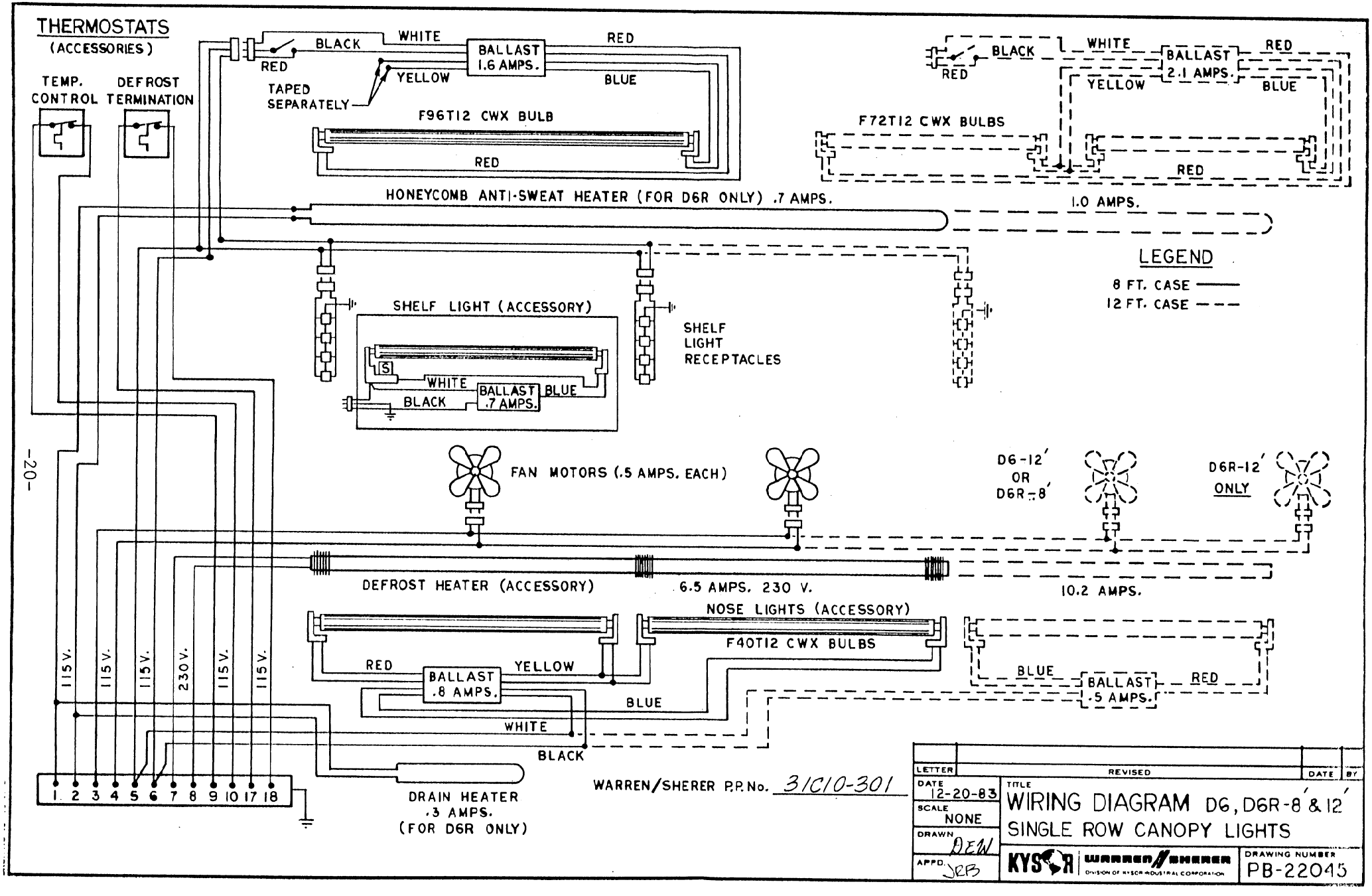
LETTER	REVISED	DATE	BY

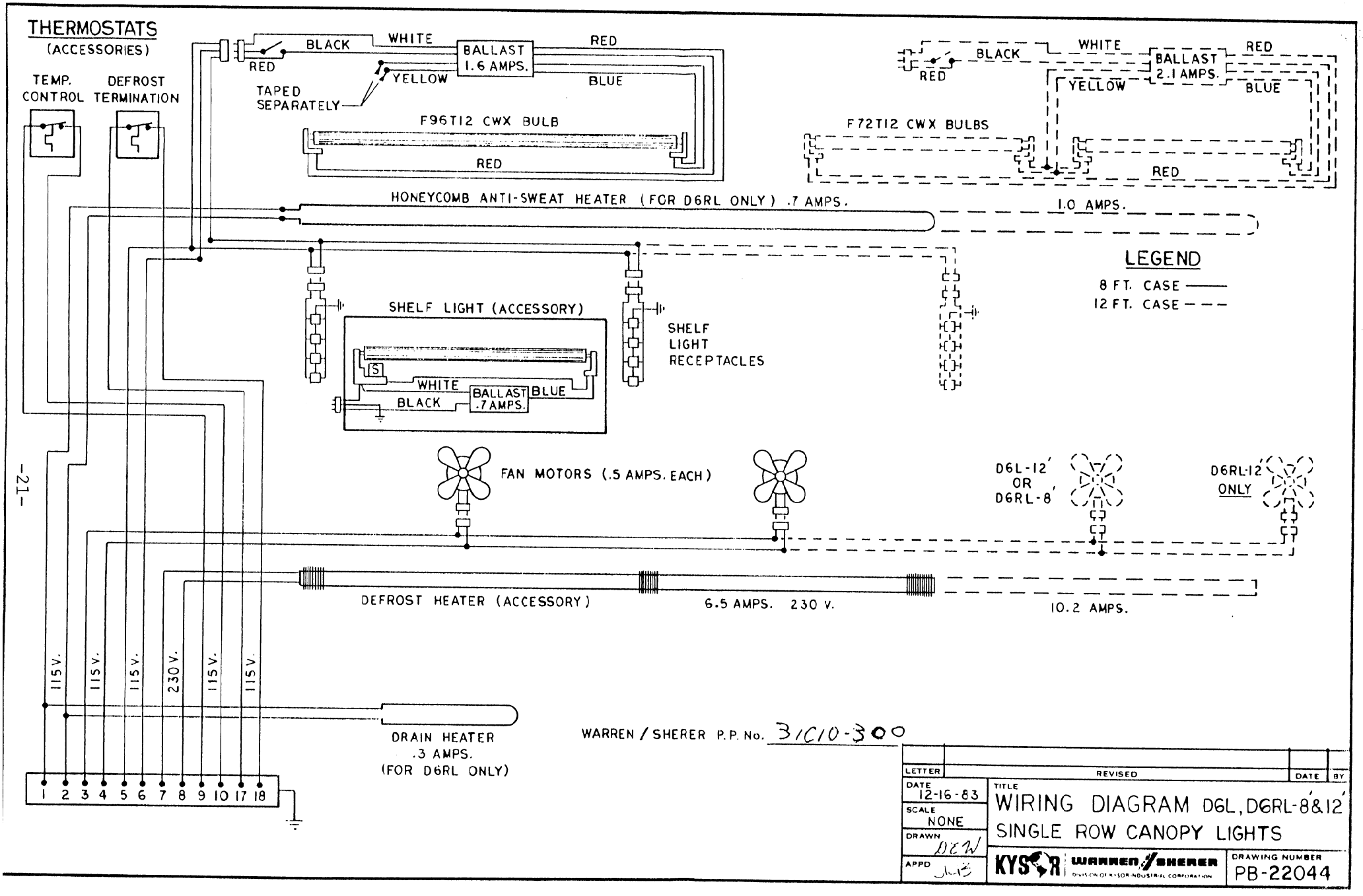
DATE 11-04-83
SCALE NONE
DRAWN DEW
APPD. SEB

TITLE
WIRING DIAGRAM D6L, D6RL-8' & 12'

KYSOR | WARREN/SHERER DIVISION OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER PB-21938


THERMOSTATS
(ACCESSORIES)
TEMP. CONTROL
DEFROST TERMINATION
BLACK
WHITE
RED
BALLAST 1.6 AMPS.
RED
TAPED SEPARATELY
YELLOW
BLUE
F96T12 CWX BULB
RED
BLACK
WHITE
BALLAST 2.1 AMPS.
RED
YELLOW
BLUE
F72T12 CWX BULBS
RED
HONEYCOMB ANTI-SWEAT HEATER (FOR D6R ONLY) .7 AMPS.
1.0 AMPS.
LEGEND
8 FT. CASE
12 FT. CASE
SHELF LIGHT (ACCESSORY)
SHELF LIGHT RECEPTACLES
S
WHITE
BALLAST .7 AMPS.
BLUE
BLACK
FAN MOTORS (.5 AMPS. EACH)
D6-12' OR D6R-8'
D6R-12' ONLY
DEFROST HEATER (ACCESSORY)
6.5 AMPS. 230 V.
10.2 AMPS.
NOSE LIGHTS (ACCESSORY)
F40T12 CWX BULBS
RED
BALLAST .8 AMPS.
YELLOW
BLUE
WHITE
BLACK
BLUE
BALLAST .5 AMPS.
RED
115 V.
115 V.
115 V.
230 V.
115 V.
115 V.
1 2 3 4 5 6 7 8 9 10 17 18
DRAIN HEATER .3 AMPS. (FOR D6R ONLY)
WARREN/SHERER P.P. No. 31C10-301
LETTER
REVISED
DATE
BY
DATE 12-20-83
SCALE NONE
DRAWN DEW
APPD. JEB
TITLE
WIRING DIAGRAM D6, D6R-8' & 12'
SINGLE ROW CANOPY LIGHTS
KYSOR
WARREN SHERER
DIVISION OF KYSOR INDUSTRIAL CORPORATION
DRAWING NUMBER
PB-22045



-21-

WARREN / SHERER P.P. No. 31C10-300

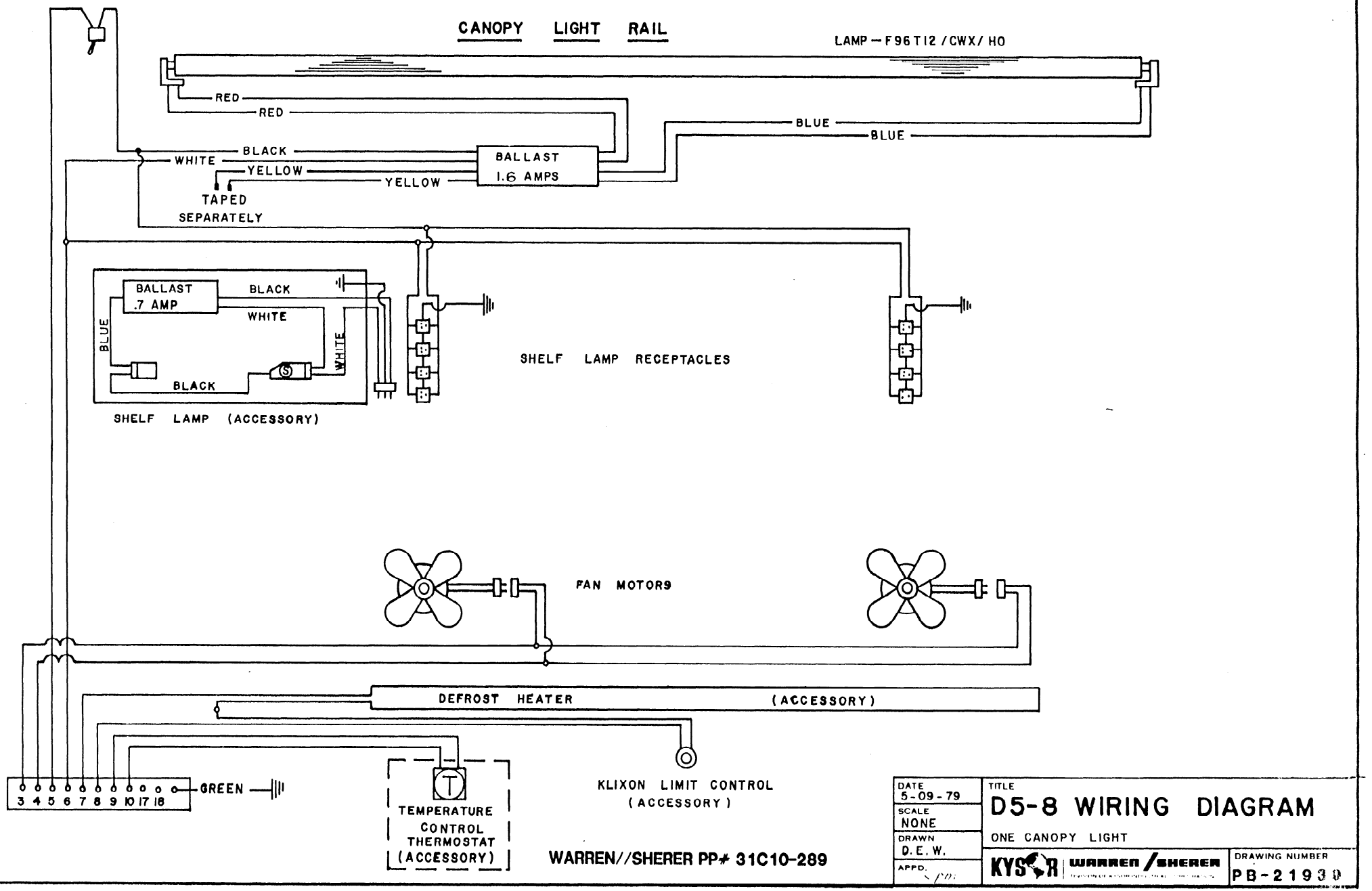
LETTER	REVISED	DATE	BY

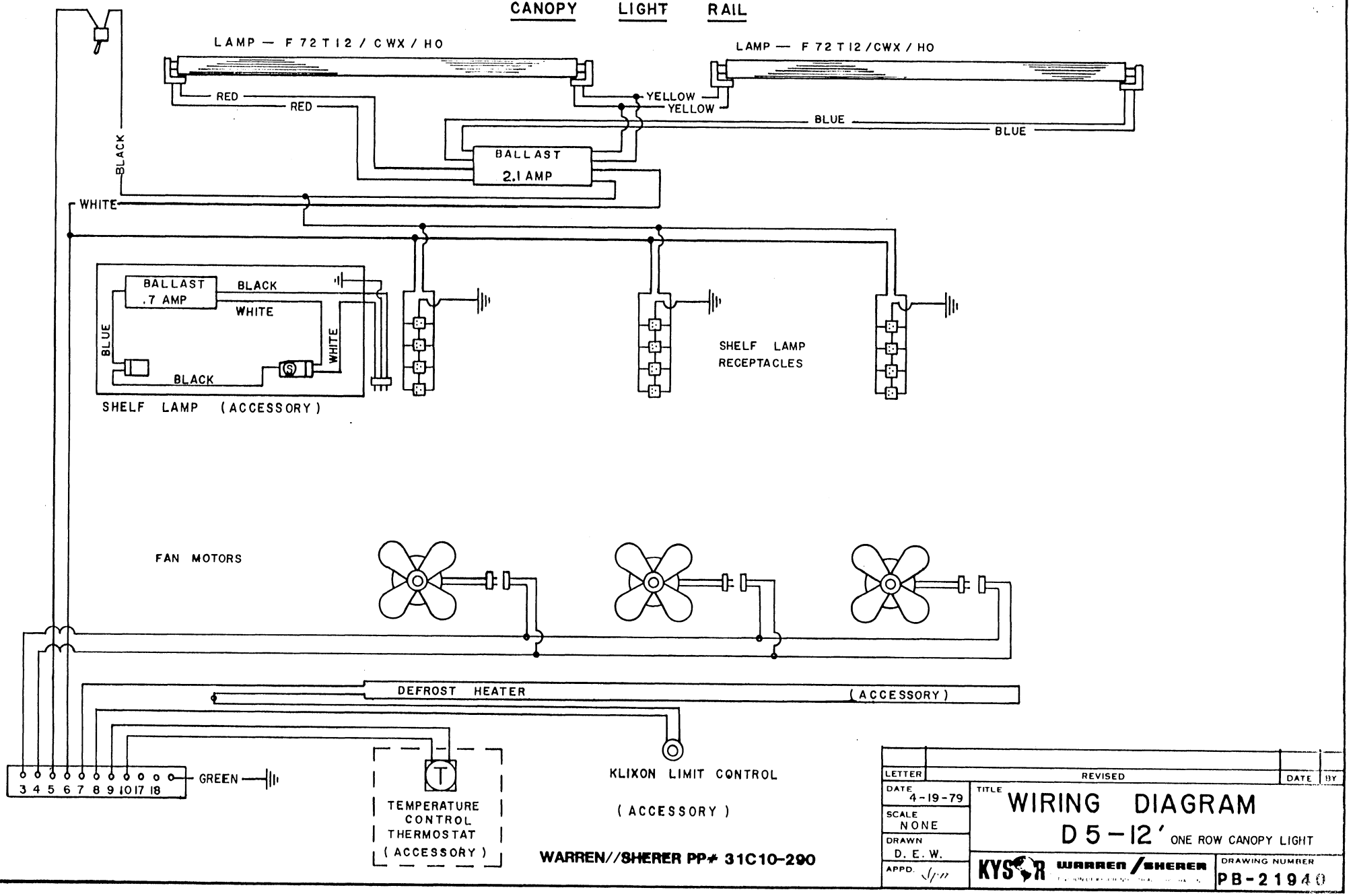
DATE 12-16-83
SCALE NONE
DRAWN DEW
APPD

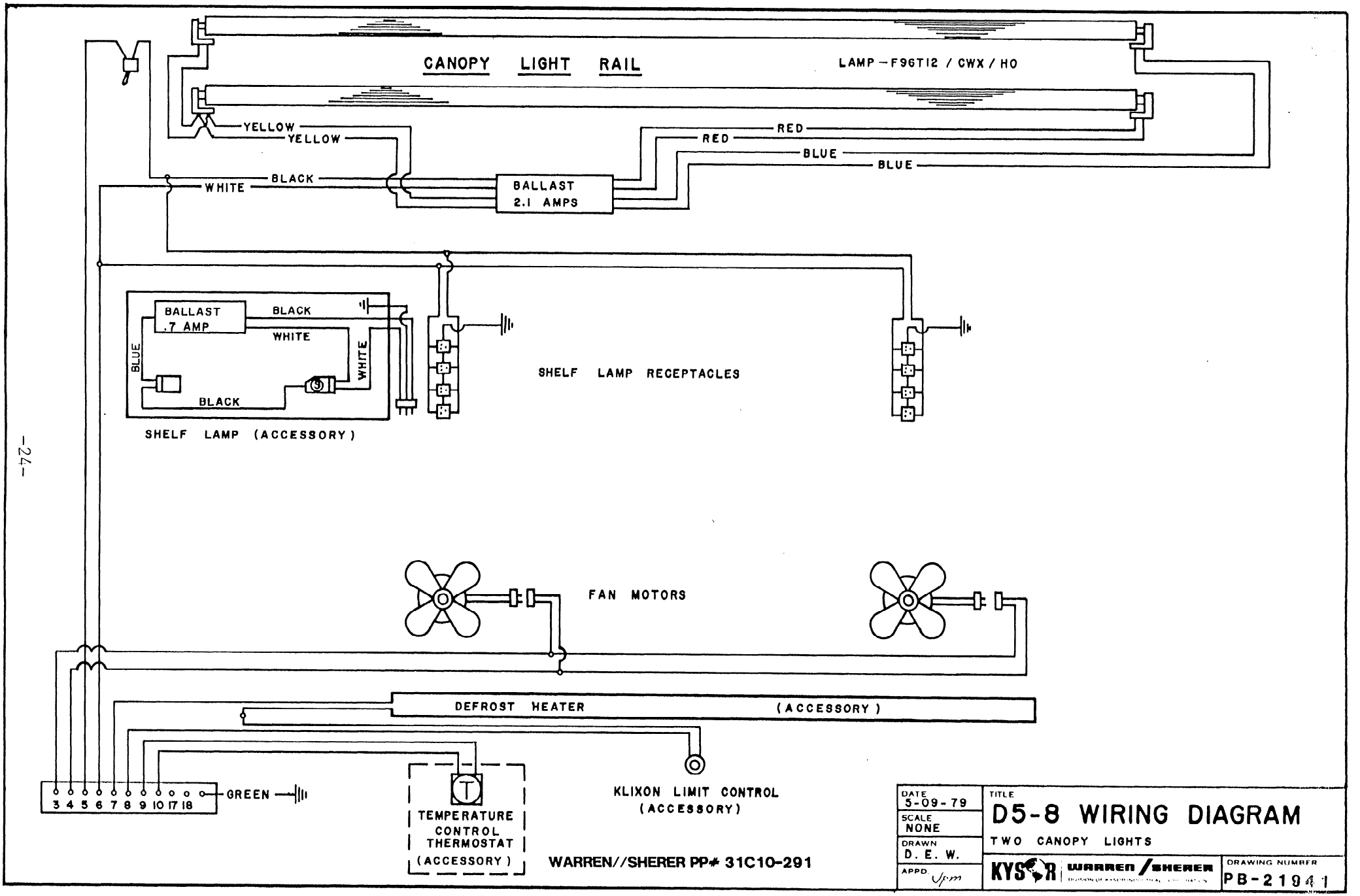
TITLE
WIRING DIAGRAM D6L, D6RL-8&12'
SINGLE ROW CANOPY LIGHTS

KYSOR | WARREN / SHERER
DIVISION OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER
PB-22044


CANOPY LIGHT RAIL
LAMP – F96T12/CWX/HO
RED
RED
BLUE
BLUE
WHITE
BLACK
YELLOW
YELLOW
BALLAST
1.6 AMPS
TAPED
SEPARATELY
BALLAST
.7 AMP
BLACK
WHITE
BLUE
WHITE
BLACK
SHELF LAMP (ACCESSORY)
SHELF LAMP RECEPTACLES
FAN MOTORS
DEFROST HEATER (ACCESSORY)
3 4 5 6 7 8 9 10 17 18
GREEN
TEMPERATURE CONTROL THERMOSTAT (ACCESSORY)
KLIXON LIMIT CONTROL (ACCESSORY)
WARREN//SHERER PP# 31C10-289
DATE 5-09-79
SCALE NONE
DRAWN D.E.W.
APPD.
TITLE
D5-8 WIRING DIAGRAM
ONE CANOPY LIGHT
KYSOR WARREN/SHERER
DRAWING NUMBER
PB-21930


CANOPY LIGHT RAIL
LAMP — F 72 T 12 / CWX / HO
LAMP — F 72 T 12 / CWX / HO
RED
RED
YELLOW
YELLOW
BLUE
BLUE
BLACK
BALLAST
2.1 AMP
WHITE
BALLAST
.7 AMP
BLACK
WHITE
BLUE
WHITE
BLACK
SHELF LAMP (ACCESSORY)
SHELF LAMP
RECEPTACLES
FAN MOTORS
DEFROST HEATER
(ACCESSORY)
3 4 5 6 7 8 9 10 17 18
GREEN
T
TEMPERATURE
CONTROL
THERMOSTAT
(ACCESSORY)
KLIXON LIMIT CONTROL
(ACCESSORY)
WARREN//SHERER PP# 31C10-290
LETTER
REVISED
DATE
BY
DATE 4-19-79
SCALE NONE
DRAWN D. E. W.
APPD.
TITLE
WIRING DIAGRAM
D 5 – 12' ONE ROW CANOPY LIGHT
KYSOR
WARREN / SHERER
DRAWING NUMBER
PB-21940



WARREN//SHERER PP# 31C10-291

DATE	5-09-79
SCALE	NONE
DRAWN	D. E. W.
APPD.	

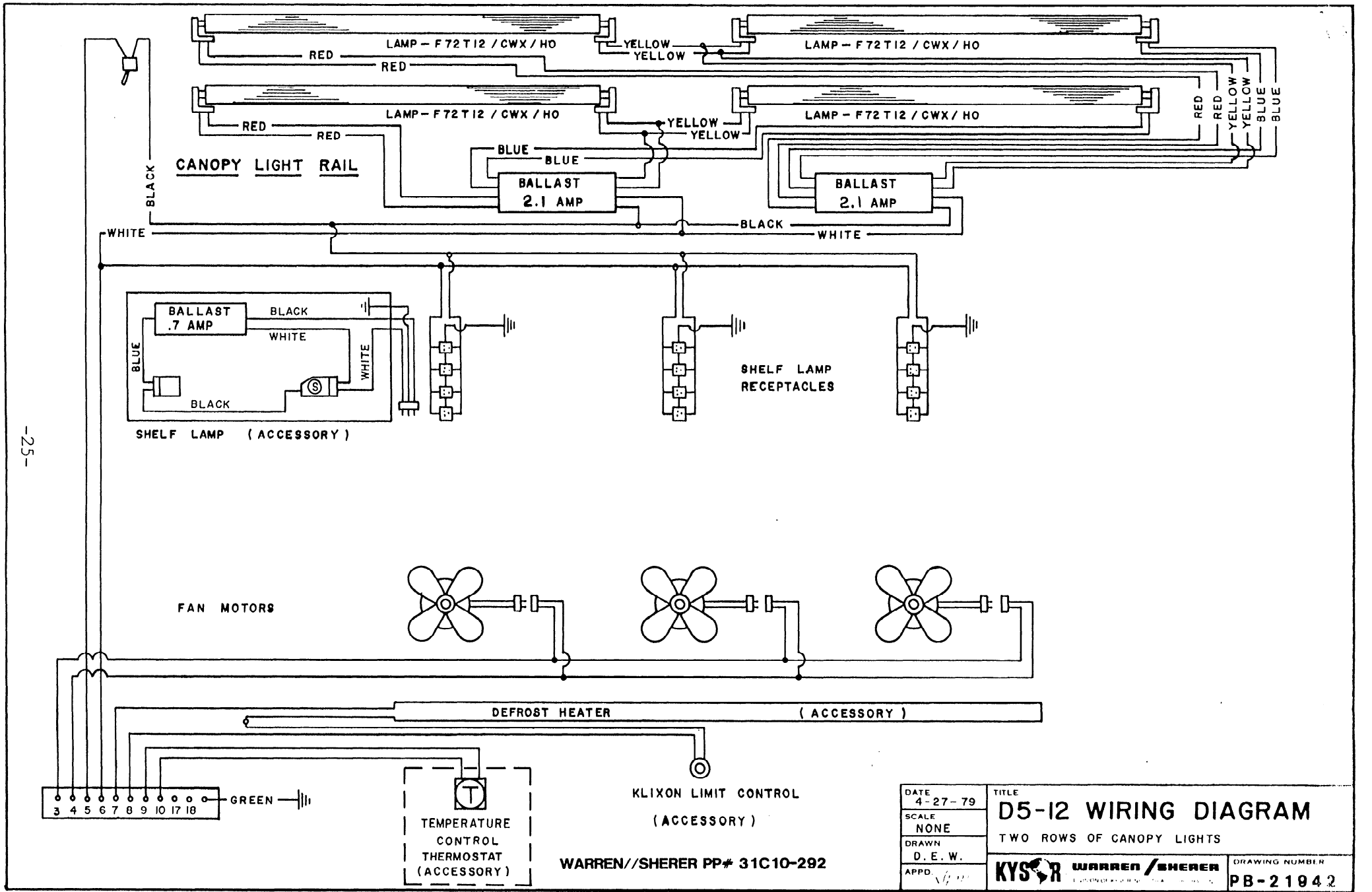
TITLE

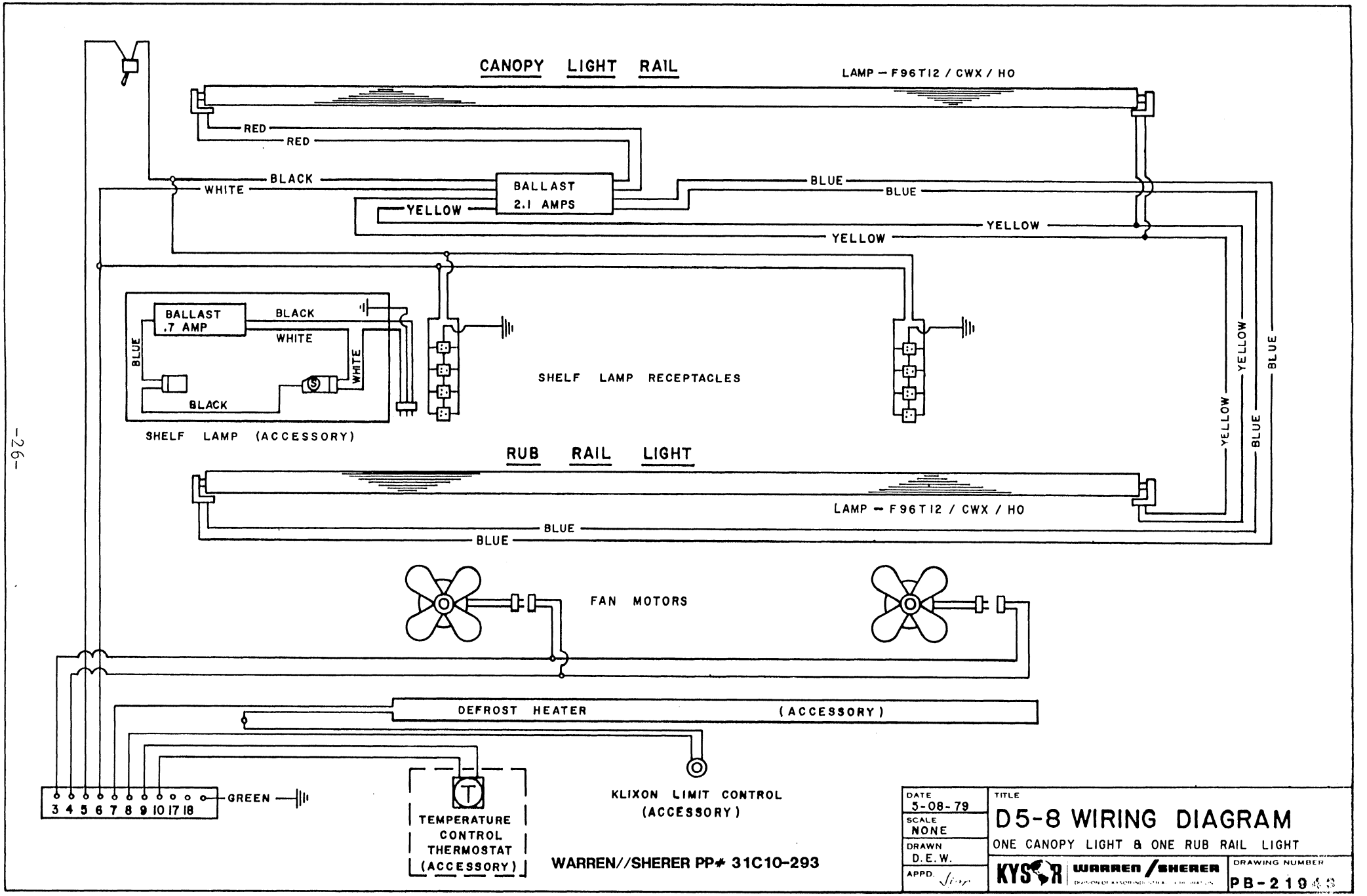
D5-8 WIRING DIAGRAM

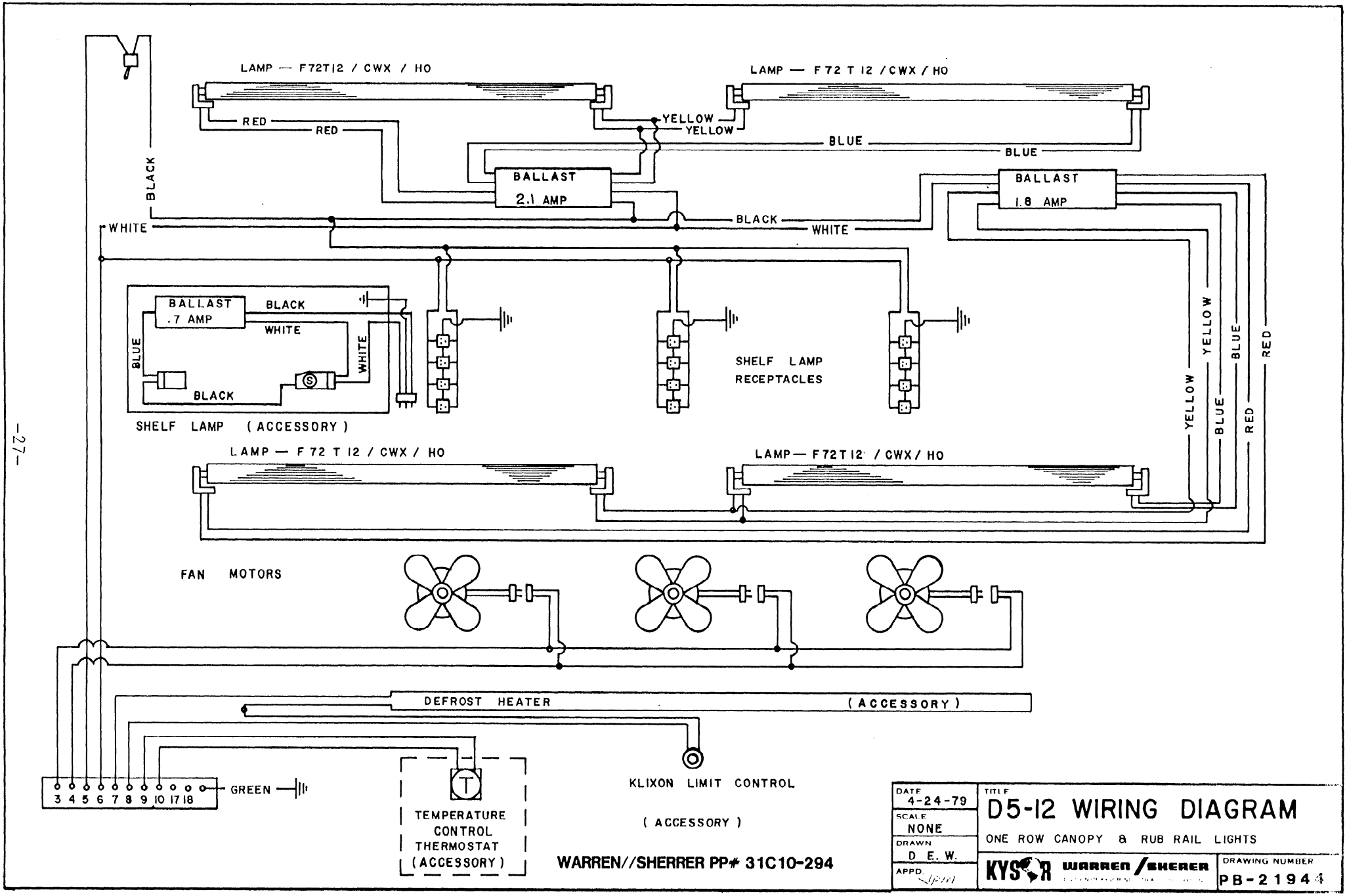
TWO CANOPY LIGHTS

KYSOR | WARREN / SHERER

DRAWING NUMBER PB-21941


LAMP – F72T12 / CWX / HO
LAMP – F72T12 / CWX / HO
LAMP – F72T12 / CWX / HO
LAMP – F72T12 / CWX / HO
RED
RED
YELLOW
YELLOW
BLUE
BLUE
CANOPY LIGHT RAIL
BLACK
BALLAST 2.1 AMP
BALLAST 2.1 AMP
WHITE
BLACK
WHITE
BALLAST .7 AMP
BLACK
WHITE
BLUE
SHELF LAMP (ACCESSORY)
SHELF LAMP RECEPTACLES
FAN MOTORS
DEFROST HEATER (ACCESSORY)
3 4 5 6 7 8 9 10 17 18
GREEN
TEMPERATURE CONTROL THERMOSTAT (ACCESSORY)
KLIXON LIMIT CONTROL (ACCESSORY)
WARREN//SHERER PP# 31C10-292
DATE 4-27-79
SCALE NONE
DRAWN D.E.W.
APPD.
TITLE
D5-12 WIRING DIAGRAM
TWO ROWS OF CANOPY LIGHTS
KYSOR WARREN/SHERER
DRAWING NUMBER
PB-21942


CANOPY LIGHT RAIL
LAMP – F96T12 / CWX / HO
RED
RED
BLACK
WHITE
BALLAST
2.1 AMPS
YELLOW
BLUE
BLUE
YELLOW
YELLOW
BALLAST
.7 AMP
BLACK
WHITE
BLUE
WHITE
BLACK
SHELF LAMP (ACCESSORY)
SHELF LAMP RECEPTACLES
YELLOW
YELLOW
BLUE
BLUE
RUB RAIL LIGHT
LAMP – F96T12 / CWX / HO
BLUE
BLUE
FAN MOTORS
DEFROST HEATER (ACCESSORY)
3 4 5 6 7 8 9 10 17 18
GREEN
TEMPERATURE CONTROL THERMOSTAT (ACCESSORY)
KLIXON LIMIT CONTROL (ACCESSORY)
WARREN//SHERER PP# 31C10-293
DATE 5-08-79
SCALE NONE
DRAWN D.E.W.
APPD.
TITLE
D5-8 WIRING DIAGRAM
ONE CANOPY LIGHT & ONE RUB RAIL LIGHT
KYSOR WARREN/SHERER
DRAWING NUMBER
PB-219



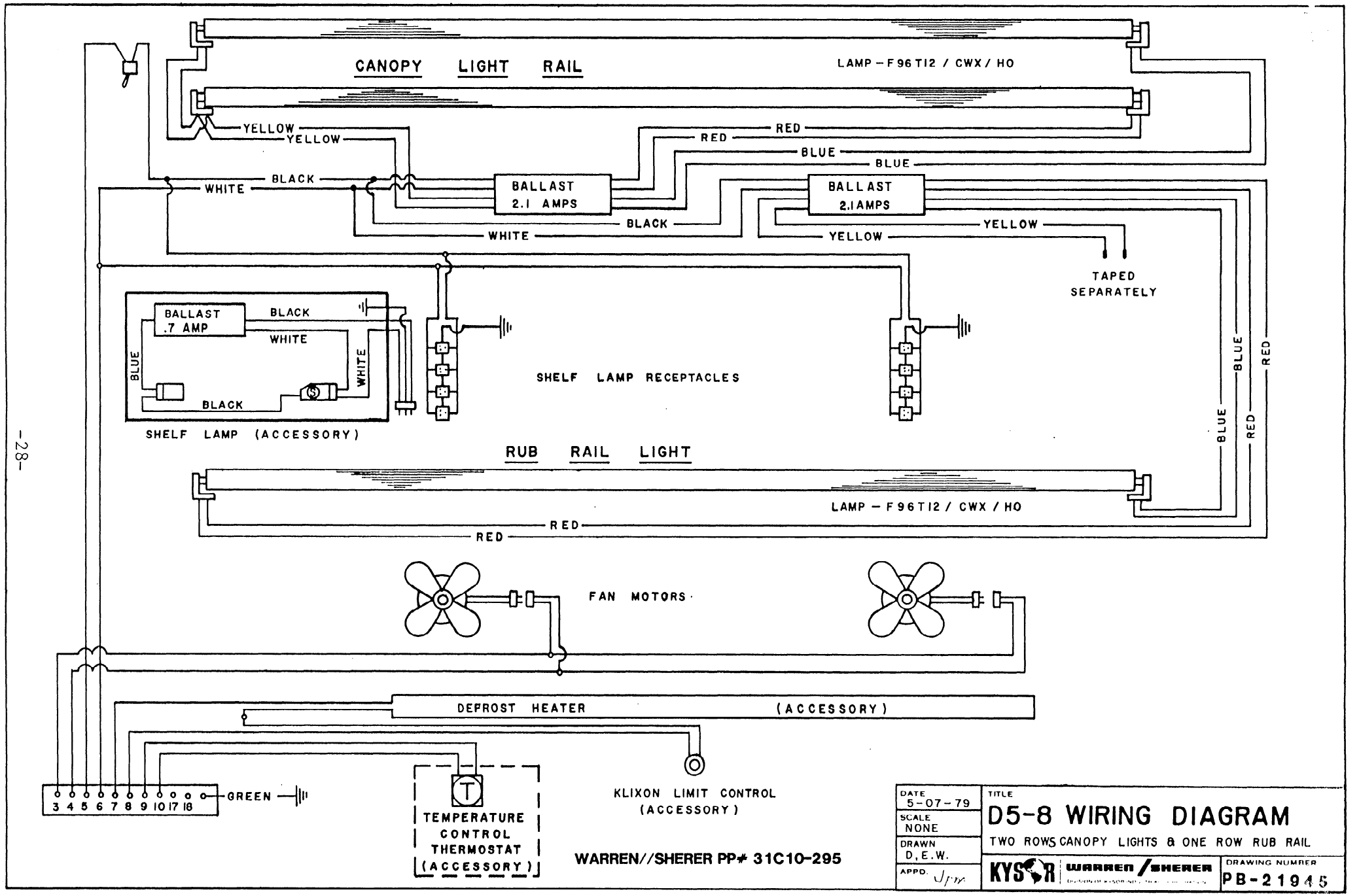
WARREN//SHERRER PP# 31C10-294

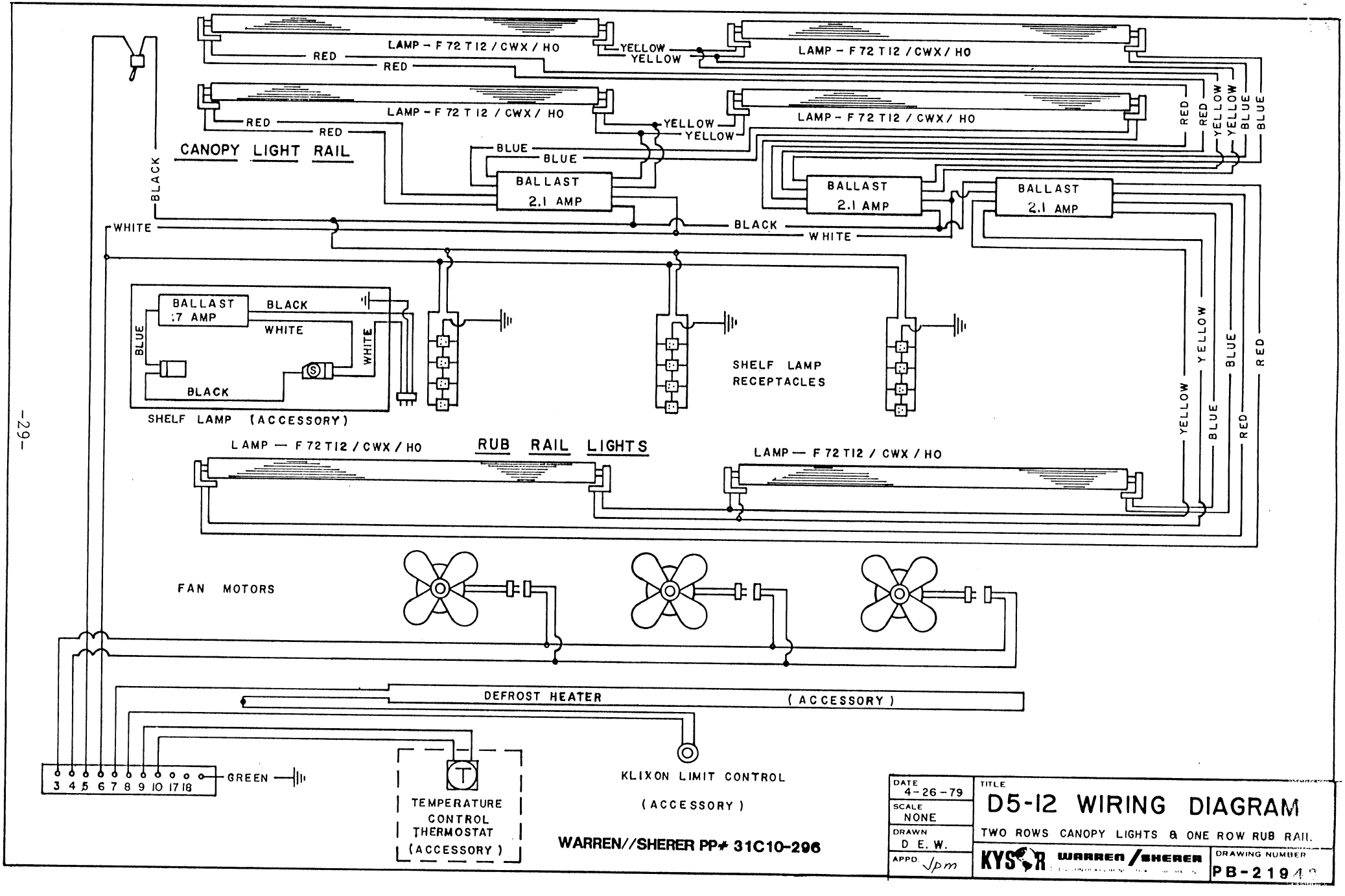
DATE	4-24-79
SCALE	NONE
DRAWN	D E. W.
APPD.	

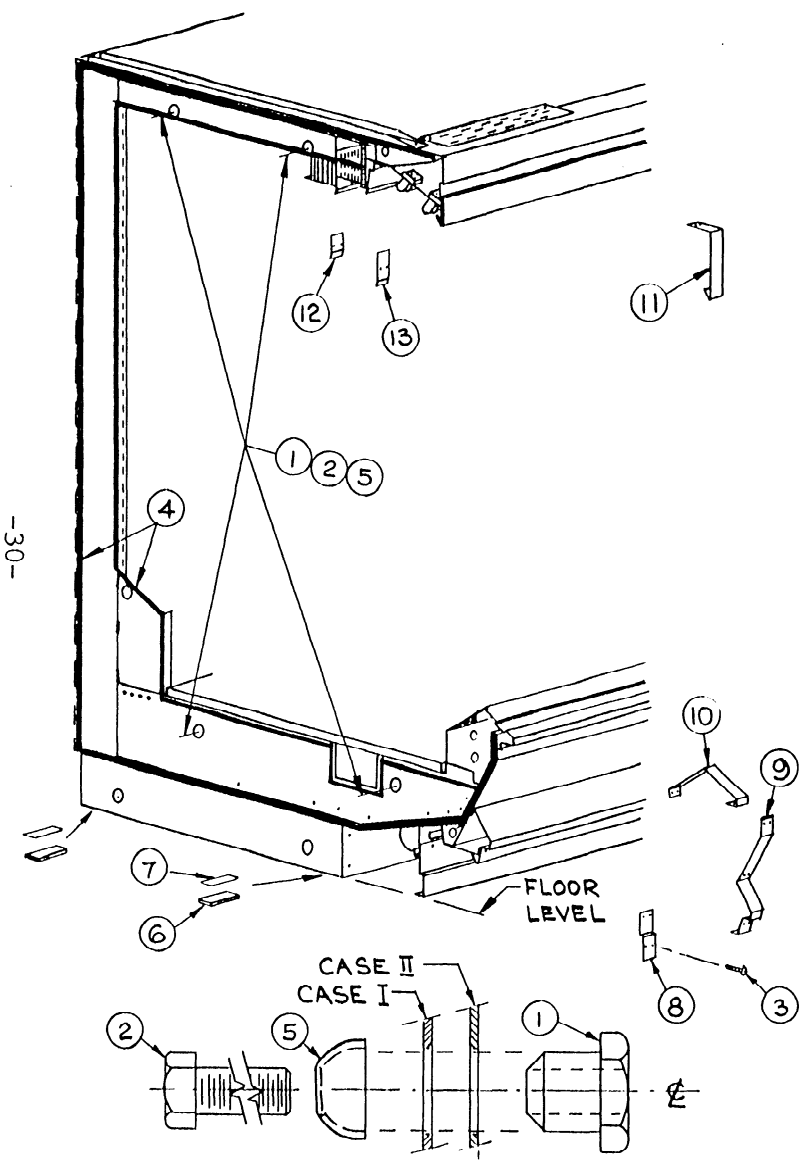
TITLE
D5-12 WIRING DIAGRAM
ONE ROW CANOPY & RUB RAIL LIGHTS

KYSOR WARREN / SHERER

DRAWING NUMBER
PB-21944


CANOPY LIGHT RAIL
LAMP – F96T12 / CWX / HO
YELLOW
YELLOW
RED
RED
BLUE
BLUE
BLACK
WHITE
BALLAST 2.1 AMPS
BALLAST 2.1 AMPS
BLACK
WHITE
YELLOW
YELLOW
TAPED SEPARATELY
BALLAST .7 AMP
BLACK
WHITE
BLUE
WHITE
BLACK
SHELF LAMP (ACCESSORY)
SHELF LAMP RECEPTACLES
BLUE
RED
RUB RAIL LIGHT
LAMP – F96T12 / CWX / HO
RED
RED
FAN MOTORS
DEFROST HEATER (ACCESSORY)
3 4 5 6 7 8 9 10 17 18
GREEN
TEMPERATURE CONTROL THERMOSTAT (ACCESSORY)
KLIXON LIMIT CONTROL (ACCESSORY)
WARREN//SHERER PP# 31C10-295
DATE 5-07-79
SCALE NONE
DRAWN D.E.W.
APPD. J/m
TITLE
D5-8 WIRING DIAGRAM
TWO ROWS CANOPY LIGHTS & ONE ROW RUB RAIL
KYSOR WARREN/SHERER
DRAWING NUMBER PB-21945


LAMP - F 72 T12 / CWX / HO
RED
RED
YELLOW
YELLOW
LAMP - F 72 T12 / CWX / HO
CANOPY LIGHT RAIL
BLACK
BLUE
BLUE
BALLAST 2.1 AMP
BALLAST 2.1 AMP
BALLAST 2.1 AMP
WHITE
BLACK
WHITE
BALLAST .7 AMP
BLACK
WHITE
BLUE
WHITE
BLACK
SHELF LAMP (ACCESSORY)
SHELF LAMP RECEPTACLES
YELLOW
YELLOW
BLUE
BLUE
RED
RED
LAMP — F 72 T12 / CWX / HO
RUB RAIL LIGHTS
LAMP — F 72 T12 / CWX / HO
FAN MOTORS
DEFROST HEATER
(ACCESSORY)
3 4 5 6 7 8 9 10 17 18
GREEN
TEMPERATURE CONTROL THERMOSTAT (ACCESSORY)
KLIXON LIMIT CONTROL
(ACCESSORY)
WARREN//SHERER PP# 31C10-296
DATE 4-26-79
SCALE NONE
DRAWN D. E. W.
APPD. JPM
TITLE
D5-12 WIRING DIAGRAM
TWO ROWS CANOPY LIGHTS & ONE ROW RUB RAIL.
KYSOR WARREN/SHERER
DRAWING NUMBER
PB-2194



COMMON CASE JOINT

ITEM	DESCRIPTION		PART NO.	QTY./KIT D6 - D6R Kit # (Bru.) 94A13-484	QTY./KIT D6 - D6R Kit # (Brt.) 94A13-529	QTY./KIT D6L - D6RL Kit # (Bru.) 94A13-492	QTY./KIT D6L - D6RL Kit # (Brt.) 94A13-532
1	NUT-TEE $\frac{3}{8}$"-16 HEX HD. $\frac{5}{8}$" LONG		19A15-13	4	4	4	4
2	BOLT-$\frac{3}{8}$"-16×2$\frac{1}{2}$" HEX HD. MACH.		20E10-12	4	4	4	4
3	SCREW-#10-16×$\frac{3}{4}$" SER PH.		21B12-15	20	20	20	20
4	GASKET-POLYURETHANE $\frac{3}{8}$"×$\frac{3}{4}$"		24C10-23	24 FT.	24FT	24 FT.	24 FT.
~	CAULKING-POLYBUTENE WAX		29B10-17	18 FT.	18FT.	18 FT.	18 FT.
~	SEALER-BUTYL RUBBER		29B10-28	2 TB.	2 TB.	2 TB.	2 TB.
5	WASHER-ROUND SLUG TEE		54V10-13	4	4	4	4
6	SHIM-SHIPPING PIECE "A"		54X17-23	8	8	8	8
7	SHIM-SHIPPING PIECE "B"		54X17-24	8	8	8	8
8	TRIM-KICKPLATE JOINT	PTD.	54E18-75	1	1	1	1
		BRU.	55P18-248	—	—	—	—
		BRT.	55P18-249	—	—	—	—
9	TRIM-FRONT JOINT	REG. BRU.	55P10-179	1	—	—	—
		REG. BRT.	55P10-180	—	1	—	—
		LOW BRU.	55P10-181	—	—	1	—
		LOW BRT.	55P10-182	—	—	—	1
10	TRIM-COLORBAND JOINT	BRU.	55P12-153	1	—	1	—
		BRT.	55P12-154	—	1	—	1
11	TRIM-CANOPY JOINT	BRU.	55P12-191	1	—	1	—
		BRT.	55P12-192	—	1	—	1
12	TRIM-HONEYCOMB REFR. JOINT		56F18-141	1	1	1	1
13	TRIM-HONEYCOMB GUARD JOINT		56F18-142	1	1	1	1

NOTE :

SEE PA-21559-A FOR INSTALLATION INSTRUCTION

LETTER	REVISED	DATE	BY
B	REDRAWN; SUBJ. D6R & D6RL ADDED	6-14-83	GH

DATE 6-14-83
SCALE NONE
DRAWN J.KRON
APP'D

TITLE
Joint Kit Installation D6,D6L,D6R,D6RL

KYSOR | WARREN / SHERER — DIVISION OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER PB-21528-B

NOTES

1. FOR SIMPLIFICATION, PLACE FIXTURES AS NEAR THEIR PERMANENT LOCATION AS POSSIBLE BEFORE REMOVING SKIDS OR ROLLERS.

2. THE LEVELING OF FIXTURES IS VERY IMPORTANT. SKILLED PERSONNEL AND AN ACCURATE LEVEL MUST BE USED. WOODEN WEDGES ARE FURNISHED TO ASSIST IN THIS OPERATION.

3. AN AMPLE SUPPLY OF 1/4" ROUND SEALING COMPOUND IS SENT WITH EACH MULTIPLE INSTALLATION FOR SEALING OFF ANY AIR LEAKAGE. IT IS ESSENTIAL THAT ALL AIR LEAKS BE SEALED IN ORDER TO PREVENT OPERATING DIFFICULTIES. REMOVE ANY EXCESS SEALING COMPOUND WITH A SOLVENT SUCH AS MINERAL SPIRITS.

4. FASTEN ALL JOINT KIT PARTS WITH #21B12-17, EXCEPT AS OTHERWISE NOTED.

NOTE: JOINT KIT ASSY - SEE PB-21528-A

LETTER	REVISED	DATE	BY
A	REVISED NOTE #4	10/10/81	TLA

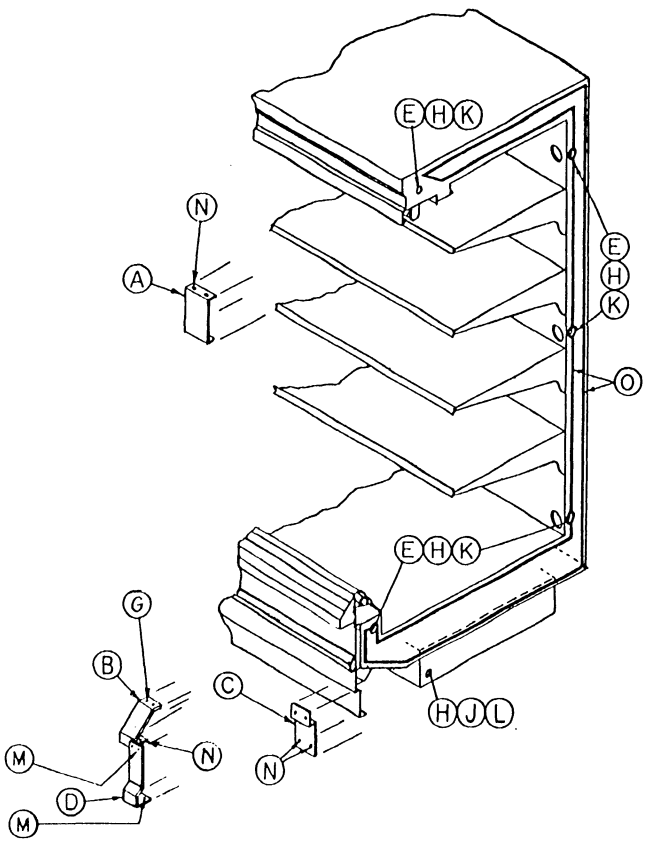
DATE 1-14-81
SCALE NONE
DRAWN TLA
APPD JPM

TITLE: JOINT KIT INSTALLATION INSTRUCTION FOR D6(2)

KYSOR | WARREN / SHERER DIVISION OF KYSOR INDUSTRIAL CORPORATION

DRAWING NUMBER PA-21552

AF 8066



ITEM	DESCRIPTION	MODEL D5 KIT NO. 94D13-122 BRUSHED PART NO.	KIT NO. 94D13-123 BRIGHT PART NO.	QTY.
A	TRIM - CANOPY CONNECTOR	55P12-173	55P12-174	1
B	TRIM - COLORBAND CONNECTOR	55P12-161	55P12-162	1
C	TRIM - BASE COVER CONNECTOR	2-355-XX-5180	2-355-XX-5180	1
D	TRIM - LOWER FRONT CONNECTOR	55P10-162	55P10-163	1
E	WASHER - FLAT PLT'D. 1/8 X 13/32 X 1 3/8	3-026-04-0802	3-026-04-0802	10
F	SCREW - #10-24 X 1/2 TRUSS HD.	3-028-05-0106	3-028-05-0106	2
G	SCREW - #10 X 3/4 SMS S.S. C.C.F.H.	29B12-19	29B12-19	2
H	NUT - 3/8-16 HEX. SCP	19A15-10	19A15-10	6
J	WASHER - 3/8 CUT SCP	19B13-11	19B13-11	2
K	BOLT - 3/8-16 X 3 HEX. HD. SCP T.F.L.	20E10-20	20E10-20	5
L	BOLT - 3/8-16 X 4 HEX. HD. SCP T.F.L.	20E10-25	20E10-25	1
M	SCREW - # 8-32 X 3/4 O.H.P.H.S.T.	21A11-12	21A11-12	8
N	SCREW - #10-16 X 3/4 P.H. P.H. TEK 2	21B12-15	21B12-15	20
O	SEALANT - BUTYL	29B10-28	29B10-28	1
	CAULKING PUTTY	29B10-17	29B10-17	1

NOTE: SEE PA-21561-B DRAWING FOR INSTALLATION INSTUCTIONS

WAS 0-355-00-0050

LETTER	REVISED	DATE
DATE 1-30-84	TITLE JOINT KIT FOR D5	
SCALE NONE		
DRAWN J.KRON		
APPD	KYSOR DIVISION OF KYSOR INDUSTRIAL CORPORATION	DRAWING NUMBER PB-22054