

**120" LONG,
SKC MODEL
#PRR120VPSW**

INSTALLATION, SERVICE & PARTS MANUAL FOR PIZZA HUT "E" MAKETABLE



Stanley Knight refrigerated base units have blower-type, finned coil evaporators to insure uniform temperatures throughout.

The base unit blower includes a housing, finned evaporator, expansion valve, fan motor assembly, and defrost heater.

Liquid refrigerant feeds from the condensing unit through an expansion valve into a coil to be evaporated. A suction line returns the liquid refrigerant to the condensing unit. A fan circulates air to be chilled across the evaporator coil fins. (The expansion valve is located within the blower housing with the thermal bulb clamped to a section of the suction line.)

This case has an air-cooled condensing unit. The condenser (like a car radiator) has a fan which pulls air through the condenser to effect refrigerant cooling. Condenser fins will catch and accumulate dust which impedes air flow and prevents proper cooling.

NOTE: A regular cleaning program should be initiated to keep the condenser clean.

Proper installation and a regular maintenance program will lower your electric bills and improve maketable performance.

Neglect leads to less than optimum performance, repair problems and needless expense. Only an experienced service person should make repairs or adjustments to your refrigeration system. Do not allow general personnel to change any refrigeration controls unless they are thoroughly familiar with the operations. Many service calls are caused by uninformed "tampering and tinkering."



**STANLEY
KNIGHT**
FOODSERVICE EQUIPMENT

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INSTALLATION INSTRUCTIONS

⚠ WARNING



Electrical shock hazard

Plug into a grounded 3-prong outlet.

Do not remove ground prong.

Do not use an adapter.

Failure to follow these instructions can result in death, fire or electric shock.

This product is equipped with a 3-prong grounded plug. If a properly grounded, fused outlet is not available, it is the personal responsibility of the customer to have a properly grounded, 3-prong outlet installed by a qualified electrician.

Important:

HFC-404a and POE testing has shown this refrigeration/lubricant system exhibits a tendency to introduce oil into the compressor cylinder during flooded start conditions. If allowed to continue, this condition will cause mechanical failure of the compressor.

Important:

If this equipment has been stored or shipped in an ambient colder than room temperature, **YOU MUST LET THE SYSTEM WARM TO ROOM AMBIENT FOR SEVERAL HOURS BEFORE CONNECTING POWER.** This time allows the compressor to warm up and permits any refrigerant in the crankcase to evaporate.

START-UP PROCEDURE:

1. Make sure the master switch located at the left behind the louver panel is in the OFF position.
2. Connect the power supply cord to the proper fused receptacle in accordance with state and local codes. Use the following information as a guide.

Volts	115
Frequency, Hz	60
Phase	1
Minimum Circuit Amps	16
Maximum Fuse	20 AMP
Light Circuit Amps	0.8
Evaporator Motor	1.3 FLA

Programming Steps/Display for Temperature Control

Use the LCD display and the three keys on the face of the control.

- Step 1- Press the SET key once to access the Fahrenheit/Celsius mode. Display will show the current status (F or C). Press either the up ↑ or down ↓ key to toggle between F or C.
- Step 2- Press the SET key again to access the setpoint. The LCD will display the current setpoint; S 1 will blink to indicate control is in the setpoint mode. Press up ↑ key to increase or down ↓ key to decrease the setpoint temperature.
- Step 3- Press SET key again to access differential. LCD will display differential and DIF 1 will blink to indicate control is in the differential mode. Press up ↑ key to increase or down ↓ key to decrease differential setting.
- Step 4- Press SET key again to access cooling/heating mode. LCD will display C1 for cooling or H1 for heating. Press up ↑ or down ↓ key to toggle between C1 or H1. Press SET key once more and programming is complete.

Step	Annunciator	Description	Display
1	F or C	Fahrenheit or Celsius Scale	
2	S1 (blinking)	Setpoint Temperature	
3	DIF 1 (blinking)	Differential Temperature	
4	C1/H1	Cooling or Heating Mode	

NOTE: The ETC will automatically end programming if no keys are depressed for a period of thirty seconds. Any settings that have been input to the control will be accepted at that point.

Defrost Heaters	10.4 FLA
Compressor	12.1 RLA, 68.0 LRA
Refrigerant Type	R-404a
Amount, lb.	2.5
Design Pressure, psig	450 High 181 Low

The condensing unit is cycled by a low-pressure control set at approximately 52 lb. cut-in, 18 lb. cut-out.

3. All condensing unit valves are OPEN when shipped. BEFORE STARTING UNIT, use an electronic detector to check ALL connections for leaks.

4. Turn the master switch to ON.

5. Check the temperature of the refrigerated unit to insure cooling has started.

6. Add refrigerant, if needed, until bubbles in the sight glass no longer appear.

7. Check the sight glass from time to time and add refrigerant, if necessary.

8. Check the refrigerated unit temperature and adjust temperature at the Temp Control. (Temp Control settings: F, set point 35°, diff 3°, C1.) See steps above. Temp Control is set at factory.

9. Recheck operation after several hours of operation and again after two or three days.

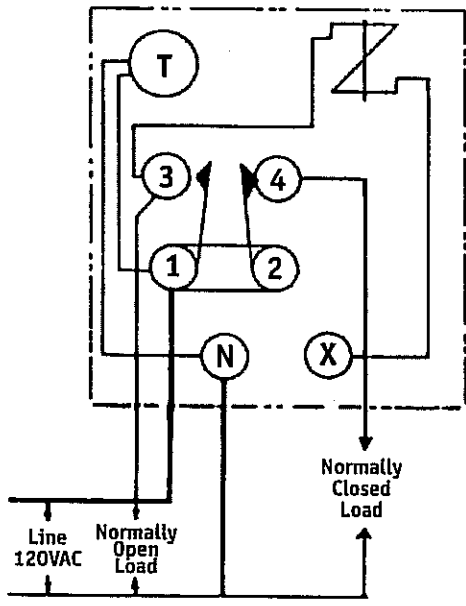
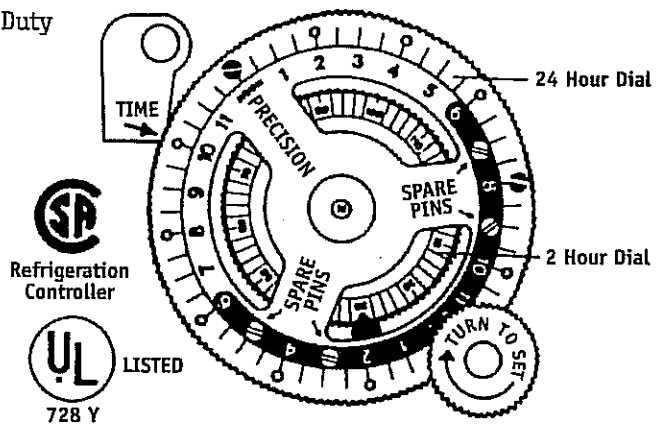
10. Remove paper film from LCD thermometer battery contacts by opening louver door and reaching behind thermometer (AA batteries included).

REFRIGERATION DEFROST CONTROL — MODEL 6145-0

CONTACT RATING
 40 Amps Res.
 2Hp
 690 VA Pilot Duty
 120 VAC

TIMING MOTOR
 120V 60Hz - 15VA Input

Note: Set defrost timer to correct time of day. Set pins at 2 am, 6 am, 10 am, 2 pm and 8 pm. 30 MINUTE TERMINATION. See diagram at right.



TO SET: Screw pins into dial at time defrost is desired. (Four hours minimum time between pins.)

Depress and rotate bronze pointer on inner dial to the length of defrost desired.

Rotate small knob clockwise until time of day on large dial is opposite time pointer.

TO WIRE : Wire according to wiring diagram and conform to wiring codes.

This PRECISION defrost control is directly interchangeable with equivalent Paragon defrost control models that were manufactured prior to January 1993. Our 6000 Series defrost controls can be installed easily into these Paragon enclosures.

SETUP & OPERATION

For optimal operating results with Stanley Knight VPS Refrigerated Maketable:

1. Set defrost timer to time of day. (If unit is shut down, the clock must be reset.)
2. Position rail inserts.
3. Load pans.

FOR BEST RESULTS...Use only stainless steel pans and maintain a full complement of pans (empty or full) in the rail area AT ALL TIMES — even after operating hours if the unit stays operational overnight.
4. Load product.

ALWAYS load product at 35°F to 36°F MINIMUM. Unit is not designed to pull down product.

DO NOT block base refrigerator doors open when loading or unloading stored product.
5. Maintain room temperature at 86°F (30°C) or less.
6. Close rail covers at night and whenever slow production times permit.
7. Do not allow air drafts (heat or A/C) to blow on or over the rail area. (It disrupts the cooling air blanket over your product.)
8. DO NOT block blower fans located in the lower base storage area.

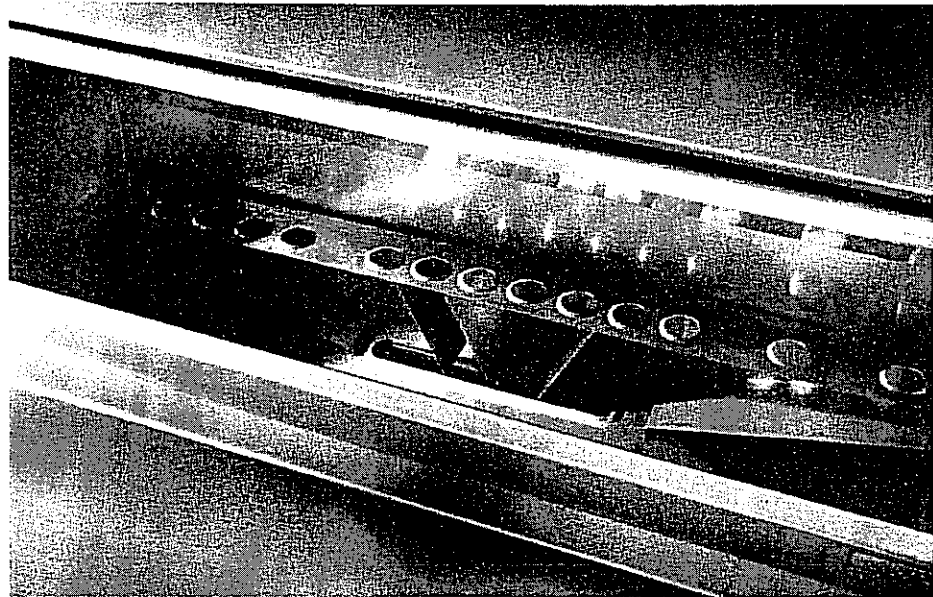
Cleaning rail area

1. Remove pans.
2. Remove and clean air deflectors and air diffuser assembly.
3. Wipe out rail area.
4. **IMPORTANT!!** — DO NOT wipe debris on or into raised openings in the bottom of the rail area. These are VPS discharge/air return outlets and **MUST BE KEPT OPEN, CLEAR, AND CLEAN** for proper operation of the VPS system.

Cleaning condenser

NOTE: Condenser should be cleaned **ONCE A MONTH** for average conditions, more often in extremely dusty locations. Use a whisk broom and/or a tank-type vacuum cleaner to remove all dust from the fins. The importance of keeping the condenser clean cannot be overstated.

DO NOT STORE MATERIALS WITHIN 31 INCHES OF THE CONDENSING UNIT LOUVERS. If airflow is obstructed, inadequate air flow circulation will cause the unit to overheat.

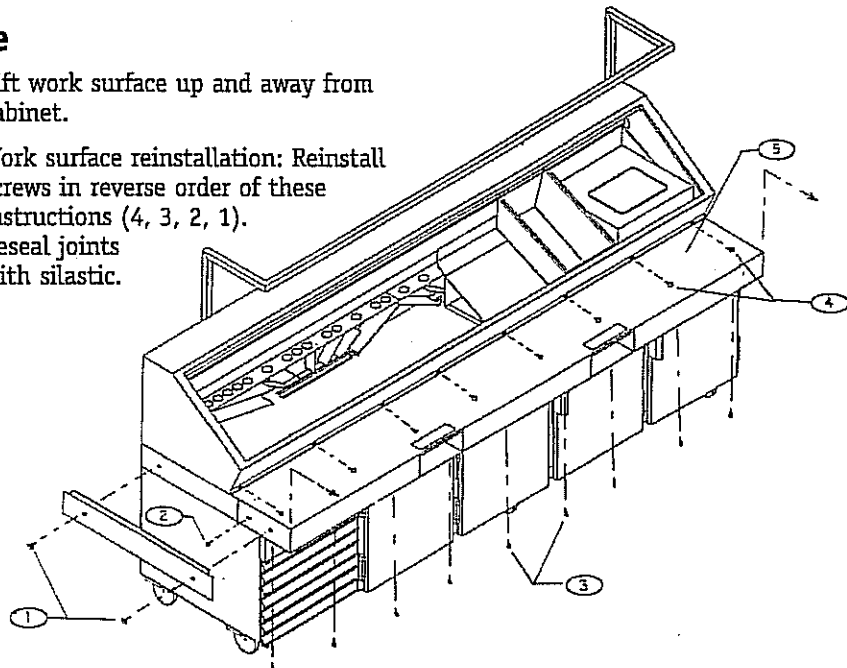


Air Diffuser Assembly

Air diffuser assembly distributes cold air evenly across back of unit. (Pans and air deflector removed for photo.)

Work Surface Removal Procedure

1. Remove screws in top support cover and remove top support cover. Typical both sides of unit.
2. Remove screw behind top support cover. Typical both sides.
3. Remove screws under top apron above louver and hinged doors.
4. Remove screws at rear turn up of work surface. Work surface is now completely unsecured.
5. Lift work surface up and away from cabinet.
6. Work surface reinstallation: Reinstall screws in reverse order of these instructions (4, 3, 2, 1). Reseal joints with silastic.



⚠ WARNING

Excessive Weight Hazard

Use two or more people to move and reinstall. Failure to do so can result in back or other injury.

ETC SINGLE STAGE ELECTRONIC TEMPERATURE CONTROL

All control settings are retained in non-volatile memory if power to ETC is interrupted for any reason. Re-programming is not necessary after power outages or disconnects unless different control settings are required.

Lockout Switch

The ETC is provided with a lockout switch to prevent tampering by unauthorized personnel. When placed in the LOCK position, the keypad is disabled and no changes to the settings can be made. When placed in the UNLOCK position, the keypad will function normally.

To access the lockout switch, disconnect the power supply and open the control. The switch is located on the inside cover about 2 inches above the bottom. (See Figure 1). To disable the keypad, slide the switch to the left LOCK position. To enable the keypad, slide the switch to the right UNLOCK position. All ETC controls are shipped with this switch in the UNLOCK position.

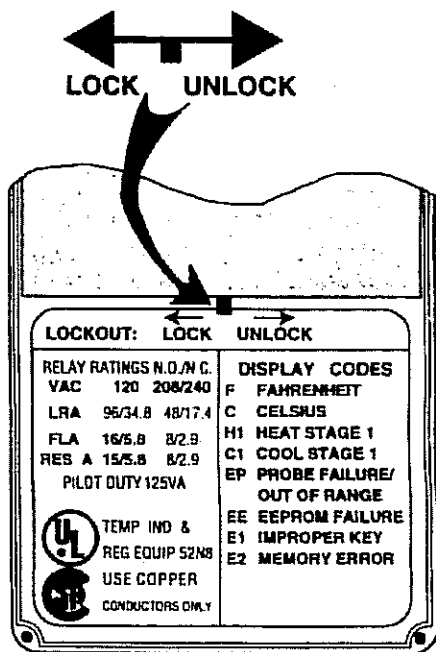


Fig. 1 Lockout Switch

SENSOR WIRING

WARNING

Electrical shock hazard

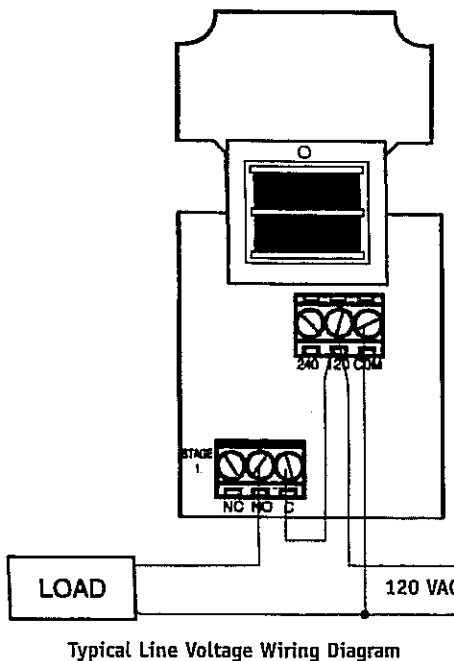
Disconnect power before servicing.

Replace all panels before operating.

Failure to do so can result in death or electrical shock.

The temperature sensor leads are soldered to the circuit board so no additional connections are necessary. However, splicing is required when extending the sensor cable length beyond the standard 8-foot length supplied with the ETC. The sensor cable can be extended up to 400 feet.

A damaged sensor can be replaced by splicing a new Ranco sensor into the sensor leads from the circuit board. The sensor is not polarity sensitive.



EVACUATION AND LEAK DETECTION

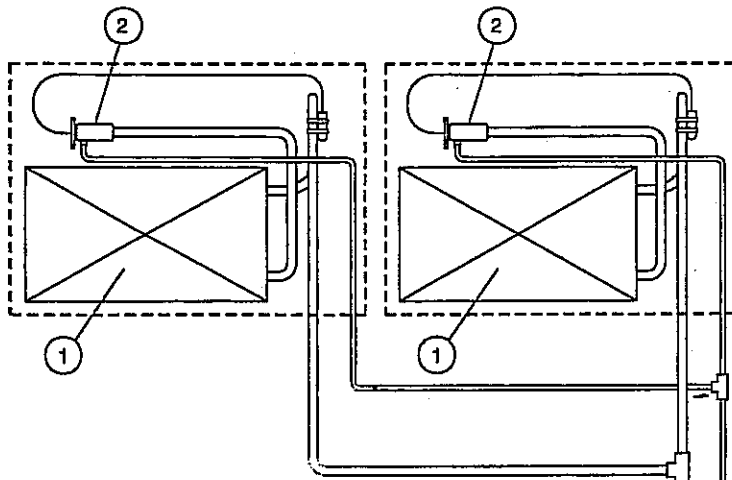
HFC-404A refrigerants have a smaller molecule size than CFC-12. This means extra care should be taken to use proper system evacuation and leak detection procedures. Liquid line filter driers should be specified for HFC-404A. Ester lubricants quickly absorb moisture from the ambient surroundings. Work on systems and compressors must be carried out with the open time as short as possible. AVOID LEAVING THE SYSTEM OR COMPRESSOR OPEN during breaks or overnight!

TROUBLESHOOTING ERROR MESSAGES ON THE TEMPERATURE CONTROL

Display/Message

- E1 - Appears when either the up ↑ or down ↓ key is pressed when not in the programming mode.
To correct: If the E1 message appears even when no keys are being pressed, replace the control.
- E2 - Appears if the control settings are not properly stored in memory.
To correct: Check all settings and correct if necessary.
- EP - Appears when the probe is open, shorted or sensing a temperature that is out of range.
To correct: Check to see if the sensed temperature is out of range. If not, check for probe damage by comparing it to a known ambient temperature between -30°F and 220°F. Replace the probe if necessary.
- EE - Appears if the EEPROM data has been corrupted.
To correct: This condition cannot be field repaired. Replace the control.
- CL - Appears if calibration mode has been entered.
To correct: Remove power to the control for at least five seconds. Reapply power. If the CIL message still appears, replace the control.

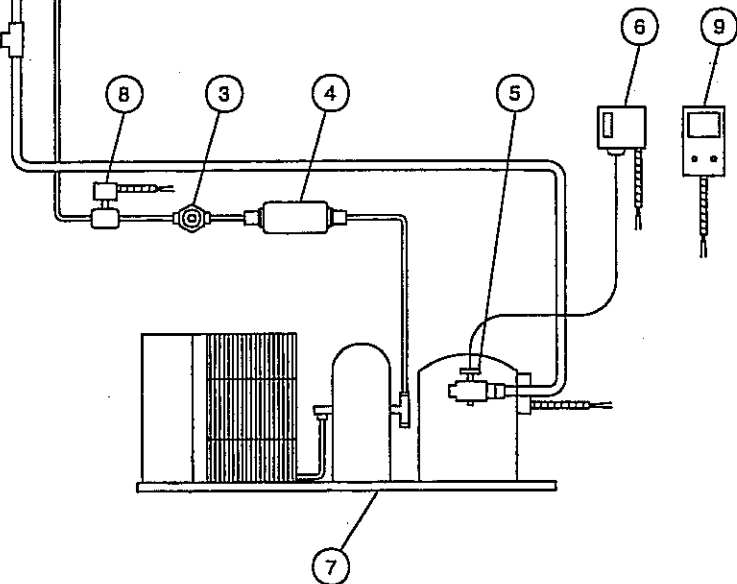
REFRIGERATION SCHEMATIC



DESCRIPTION

PART

1. BLOWER COIL	403-130-084-300
2. EXPANSION VALVE	403-130-103-000
3. SIGHT GLASS	403-130-093-910
4. FILTER DRIER	403-130-093-870
5. ACCESS TEE	403-102-560-000
6. LOW PRESSURE CONTROL	403-130-102-900
7. CONDENSING UNIT	414-130-103-200
8. SOLENOID	403-130-103-300
9. TEMPERATURE CONTROL	403-130-103-100



All valves are open when shipped.

Check ALL connections for leaks with electronic leak detector before starting unit.

Low Pressure Control is set at approximately 52 lb. cut-in, 18 lb. cut-out.

Temp Control settings F, set point 35°, diff. -3°, C1 (Refer to Page 3.)

Defrost Timer (5 Pins) set at 2 am, 6 am, 10 am, 2 pm and 8 pm.

Set timer to correct time of day after unit is plugged in and/or when power was interrupted.

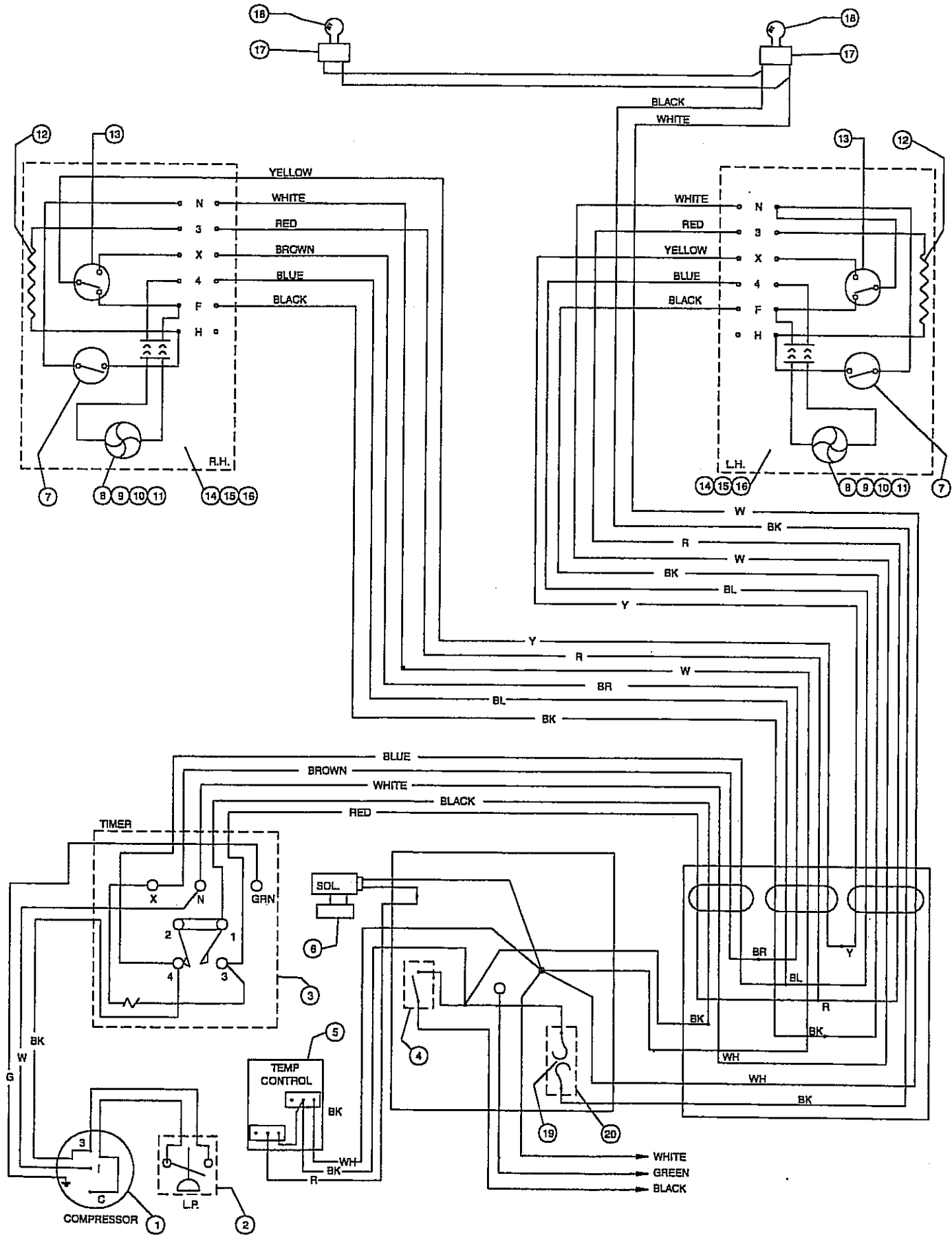
30 minute termination (Refer to page 3.)

ELECTRICAL SCHEMATIC

KEY	DESCRIPTION	PART NUMBER
1.	R-404A Condensing Unit	414-130-103-200
2.	Low Pressure Control	403-130-102-900
3.	Defrost Timer	403-009-767-000
4.	20 Amp Switch	401-010-301-000
5.	Temp. Control (Electronic)	403-130-103-100
6.	Solenoid	403-130-103-300
7.	Heater Defrost Safety Switch	403-130-056-900
8.	Fan Guard	403-130-051-900
9.	Fan Motor	403-130-051-800
10.	Fan Blade	403-130-051-700
11.	Fan Mounting Brackets	403-130-055-000
12.	Defrost Heater	403-130-090-700
13.	Fan Delay Switch	403-130-057-000
14.	Fan Panel	403-130-051-500
15.	Evaporator Coil	403-130-106-600
16.	Evaporator Assembly Complete	403-130-084-300
17.	Lamp Socket	409-010-019-000
18.	40 Watt Coated Bulb	401-130-079-700
19.	1 Amp Class "G" Fuse	401-130-085-500
20.	Fuse Holder	401-130-043-700

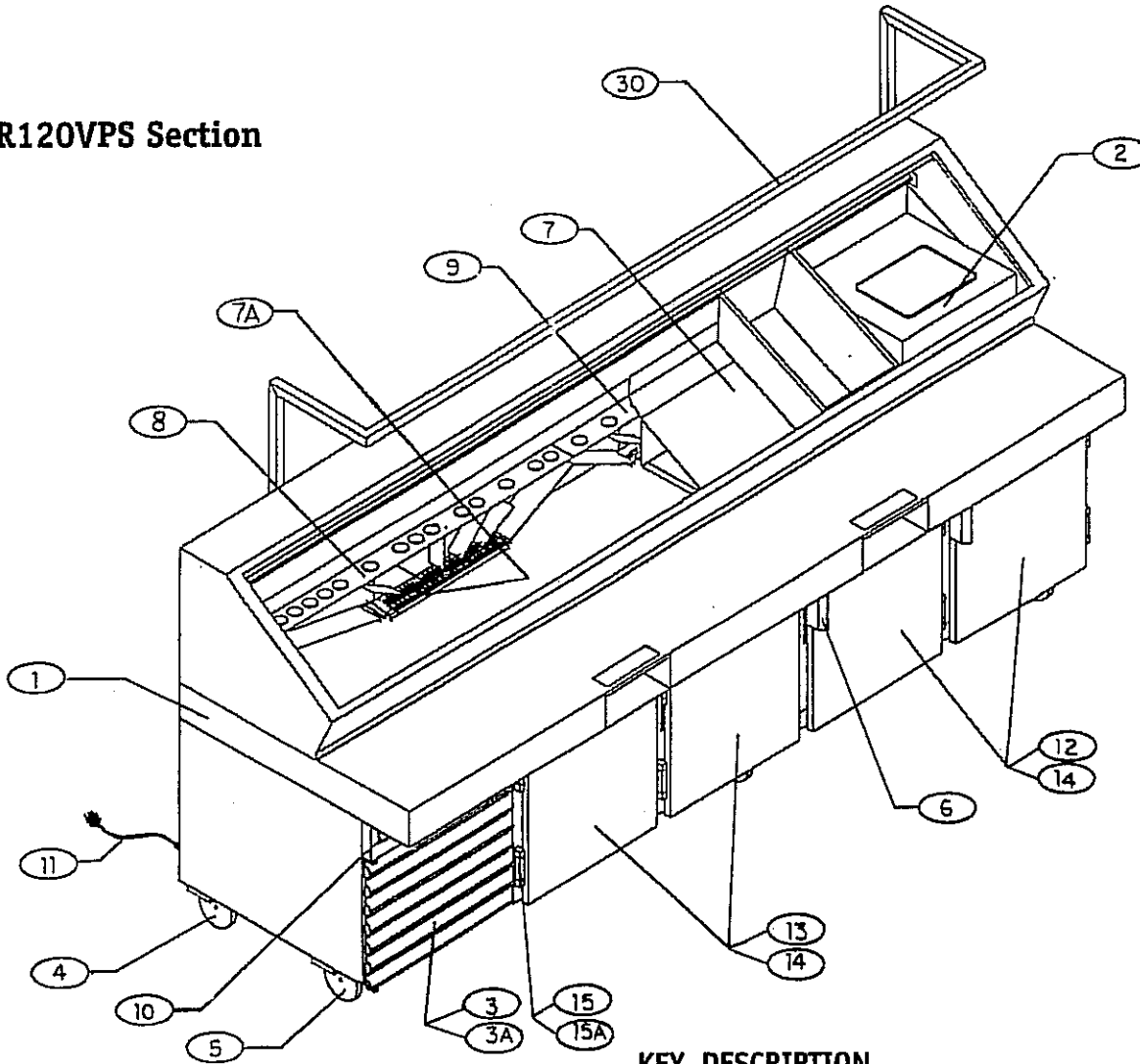
*Refer to page 7.

ELECTRICAL SCHEMATIC

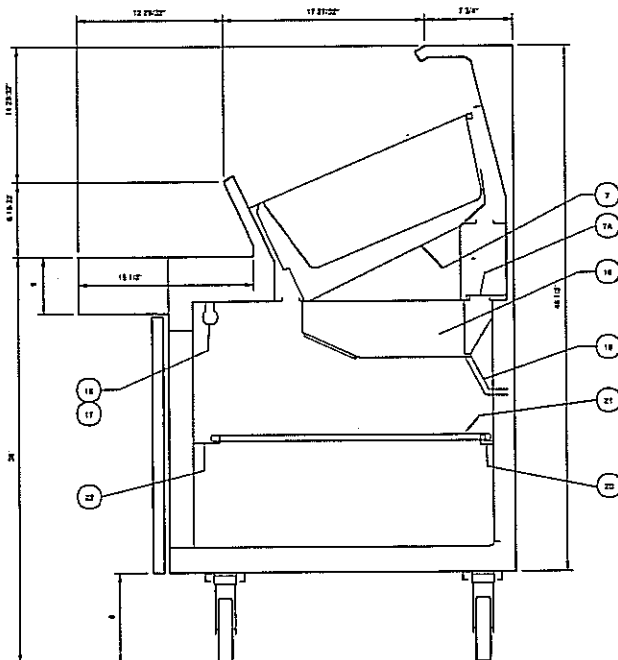


PRR120VPSW parts

PRR120VPS Section



PRR120VPS Side View



KEY DESCRIPTION

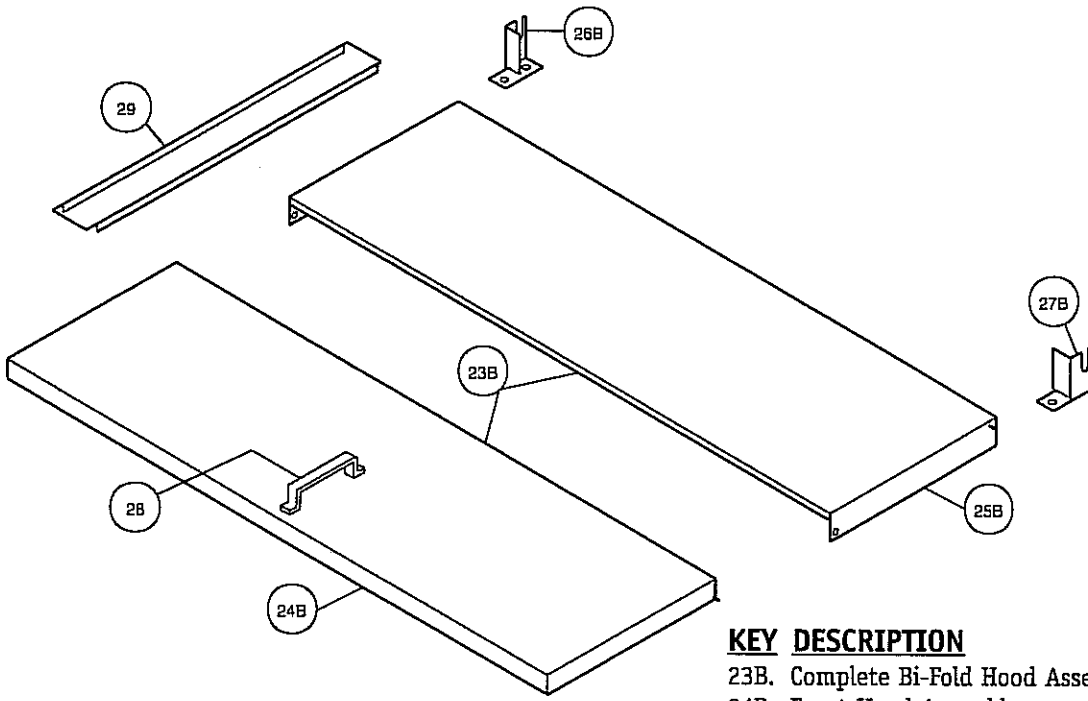
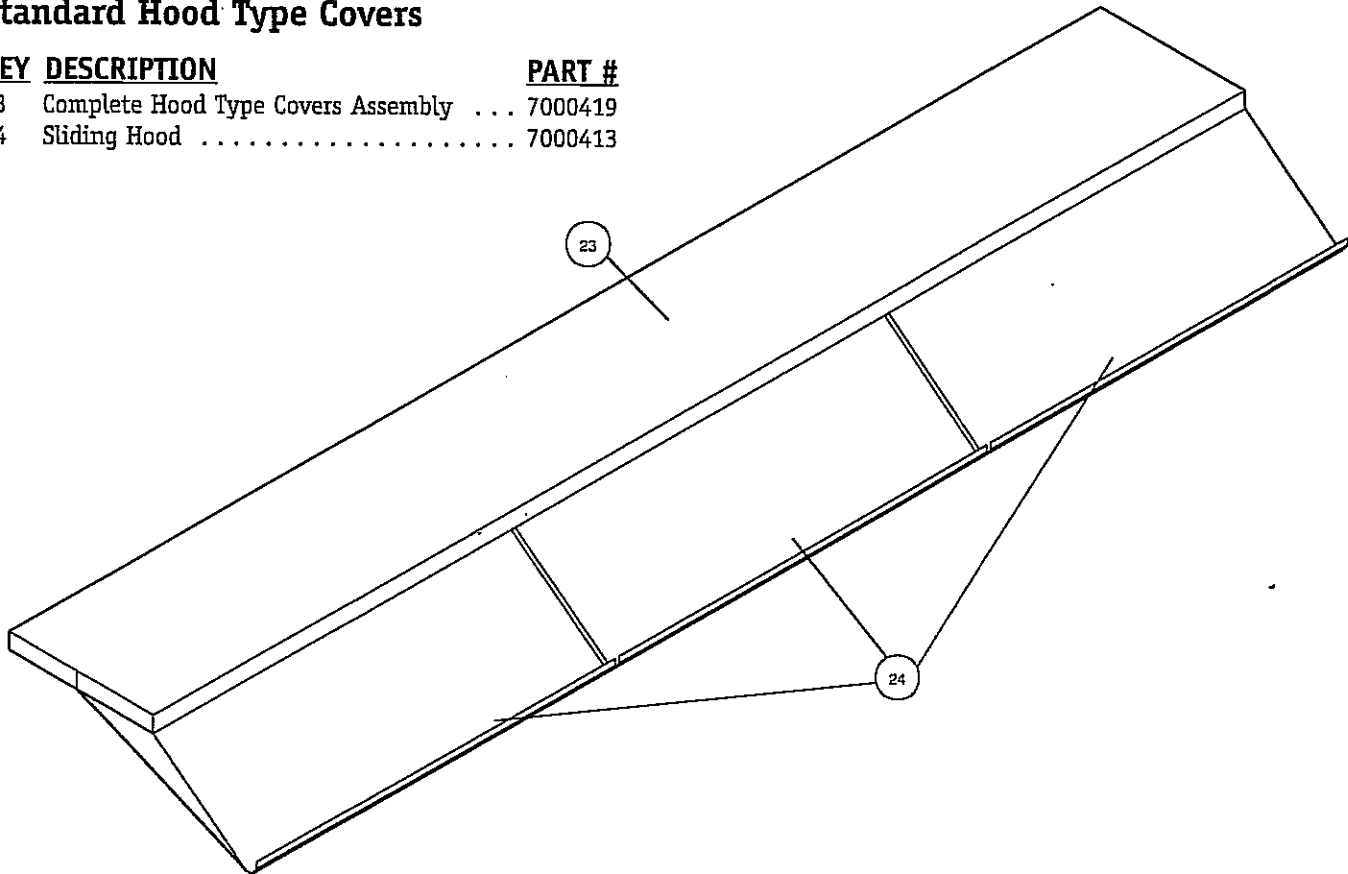
PART NUMBER

1 .	Top Support Cover	7000210
2 .	Sauce Pan Platform Assembly	7000405
3 .	Hinged Louver Assembly	7000371
3A .	Louver Magnetic Catch	401-130-050-500
4 .	6" Caster Assembly without Brakes	0101505
5 .	6" Caster Assembly with Brakes	0101506
6 .	Door Handle	6051000
7 .	Air Deflector	7000404
7A .	Cheese Deflector	7000396
8 .	LH Air Diffuser Assembly	7000336LH
9 .	RH Air Diffuser Assembly	7000336RH
10 .	LCD Thermometer	403-130-079-600
11 .	Power Supply Cord	401-010-304-000
12 .	RH Door Assembly (Including Gasket & Hardware)	7000381RH
13 .	LH Door Assembly (Including Gasket & Hardware)	7000381LH
14 .	Door Gasket	418-993-300-100
15 .	Door Hinge	409-130-056-200
15A .	Door Hinge Spring Kit	409-130-056-300
16 .	40 Watt Coated Bulb	401-130-079-700
17 .	Lamp Socket	409-010-019-000
18 .	Blower Coil (Evaporator)	403-130-084-300
19 .	Clear Drain Tube (12" Lg.)	944075
20 .	Plastic Shelf Support	409-009-515-000
21 .	Wire Shelf	410-006-039-043
22 .	Wire Shelf Bracket	7000380

Standard Hood Type Covers

KEY DESCRIPTION

		PART #
23	Complete Hood Type Covers Assembly . . .	7000419
24	Sliding Hood	7000413



KEY DESCRIPTION

		PART #
23B.	Complete Bi-Fold Hood Assembly (No Brackets) .	7000382
24B.	Front Hood Assembly	7000353
25B.	Rear Hood Assembly	7000355
26B.	LH Hood Bracket	7000231LH
27B.	RH Hood Bracket	7000231RH
28.	Hood Handle	7000302
29.	Hood Spacer	7000369

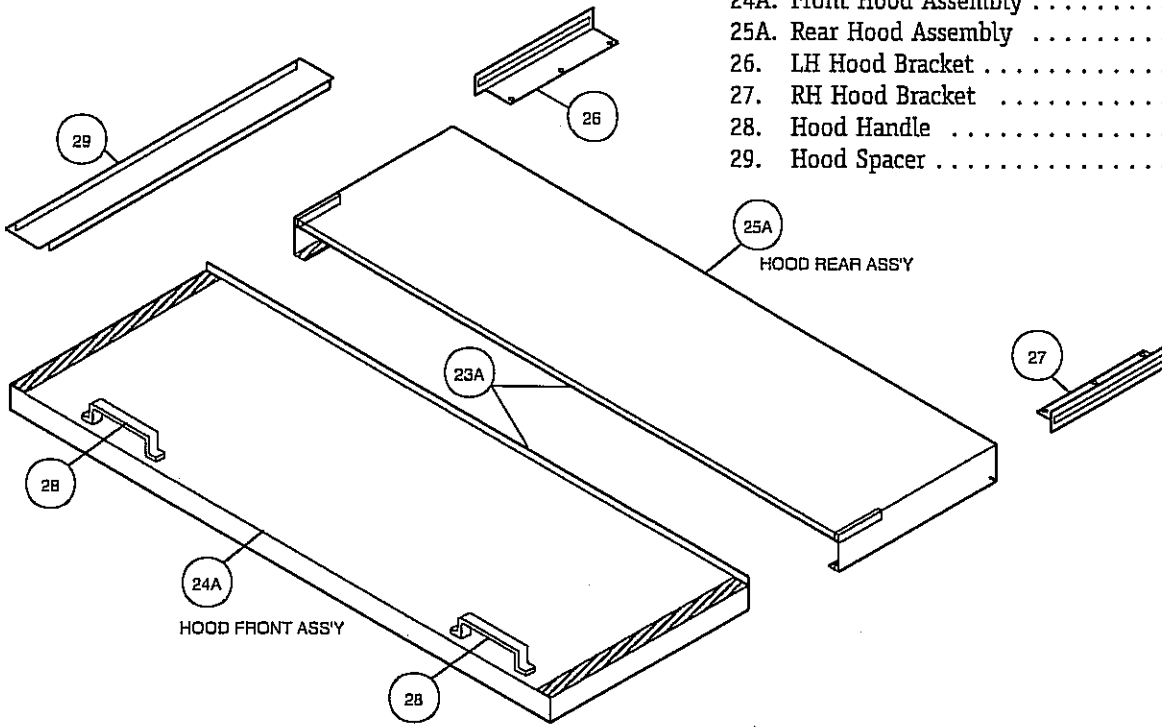
Standard Bi-Fold Hood Assembly

Optional Sliding Hood Assembly

KEY DESCRIPTION

PART #

- 23A. Complete Sliding Hood Assembly (No Brackets) . 7000383
- 24A. Front Hood Assembly 7000387
- 25A. Rear Hood Assembly 7000388
- 26. LH Hood Bracket 7000386LH
- 27. RH Hood Bracket 7000386RH
- 28. Hood Handle 7000302
- 29. Hood Spacer 7000369

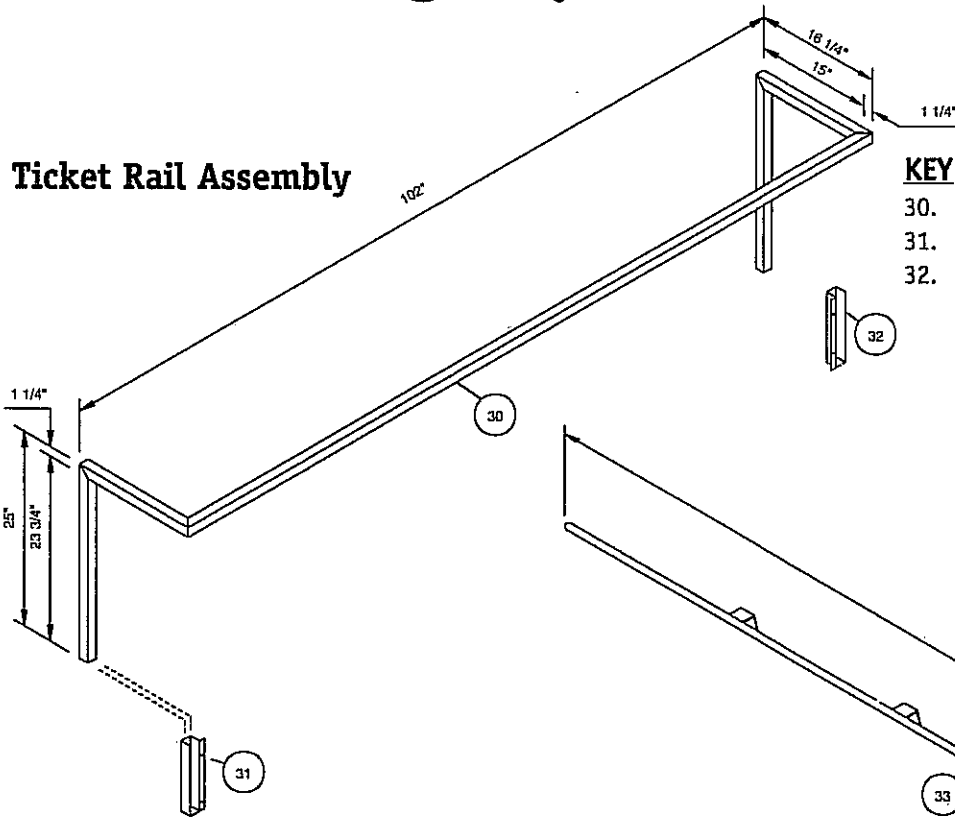


Ticket Rail Assembly

KEY DESCRIPTION

PART #

- 30. Ticket Rail Assembly 7000240A
- 31. LH Ticket Rail Support . . . 7000244LH
- 32. RH Ticket Rail Support . . . 7000244RH

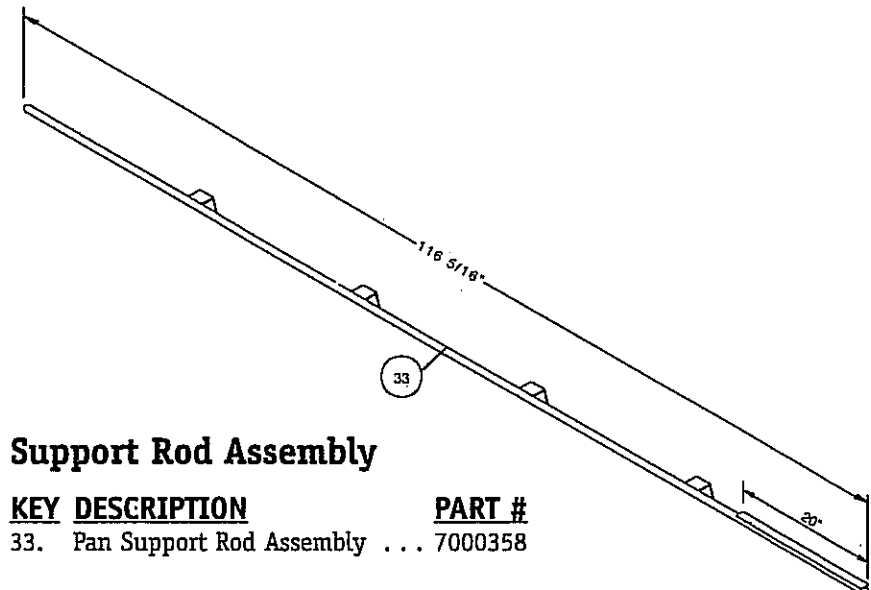


Support Rod Assembly

KEY DESCRIPTION

PART #

- 33. Pan Support Rod Assembly . . . 7000358



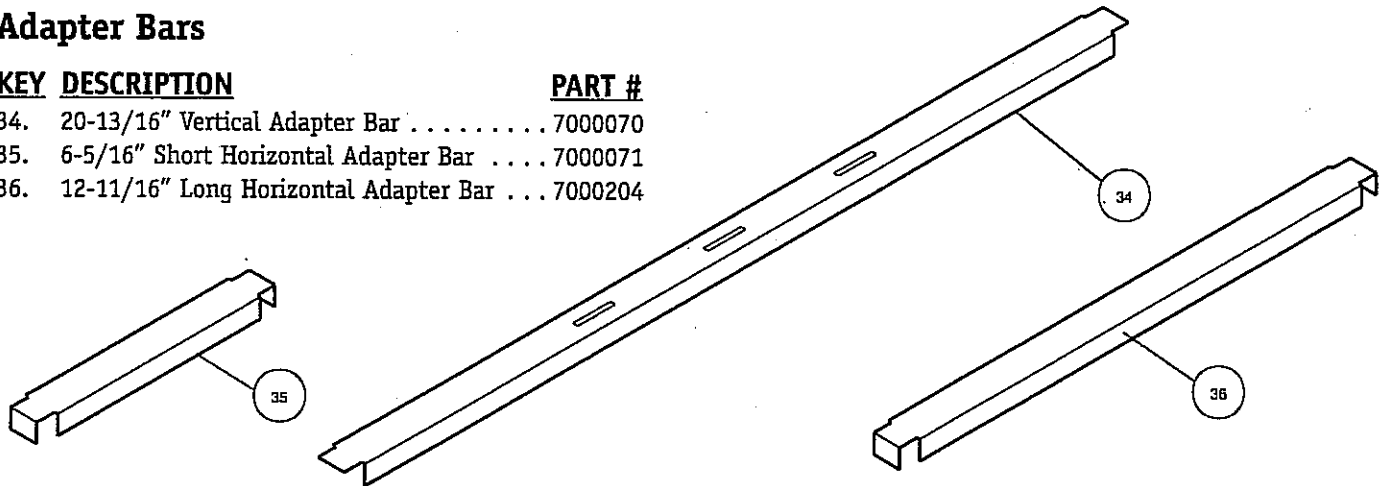
PRR120VPSW parts

Adapter Bars

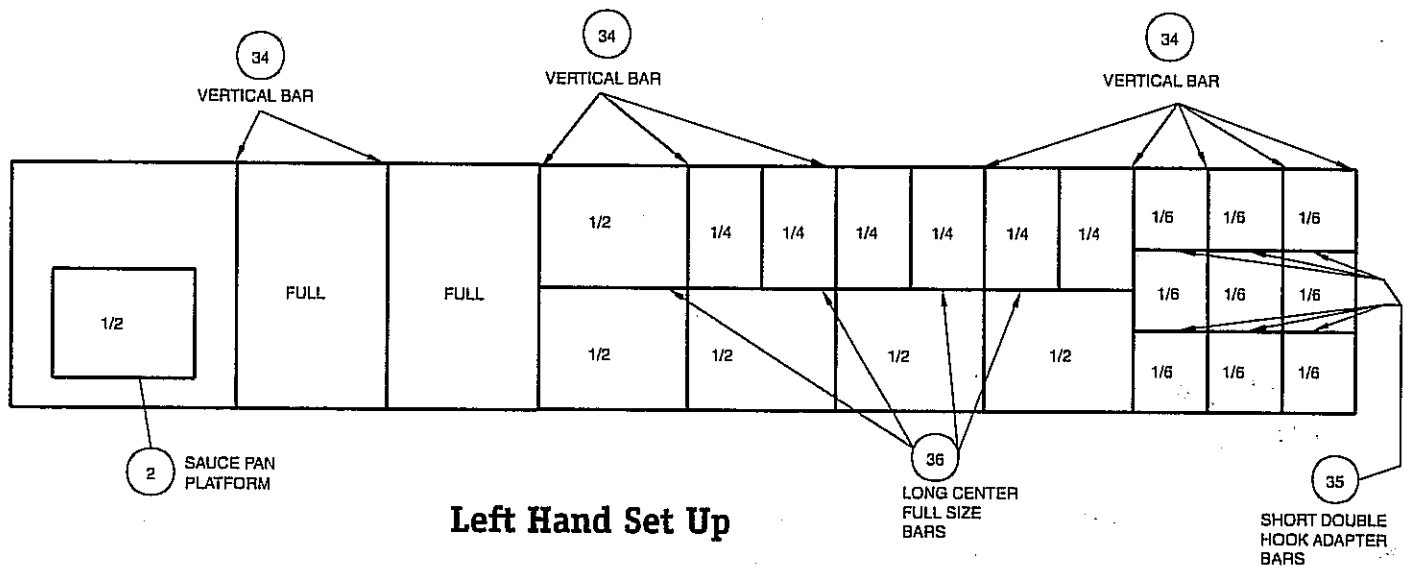
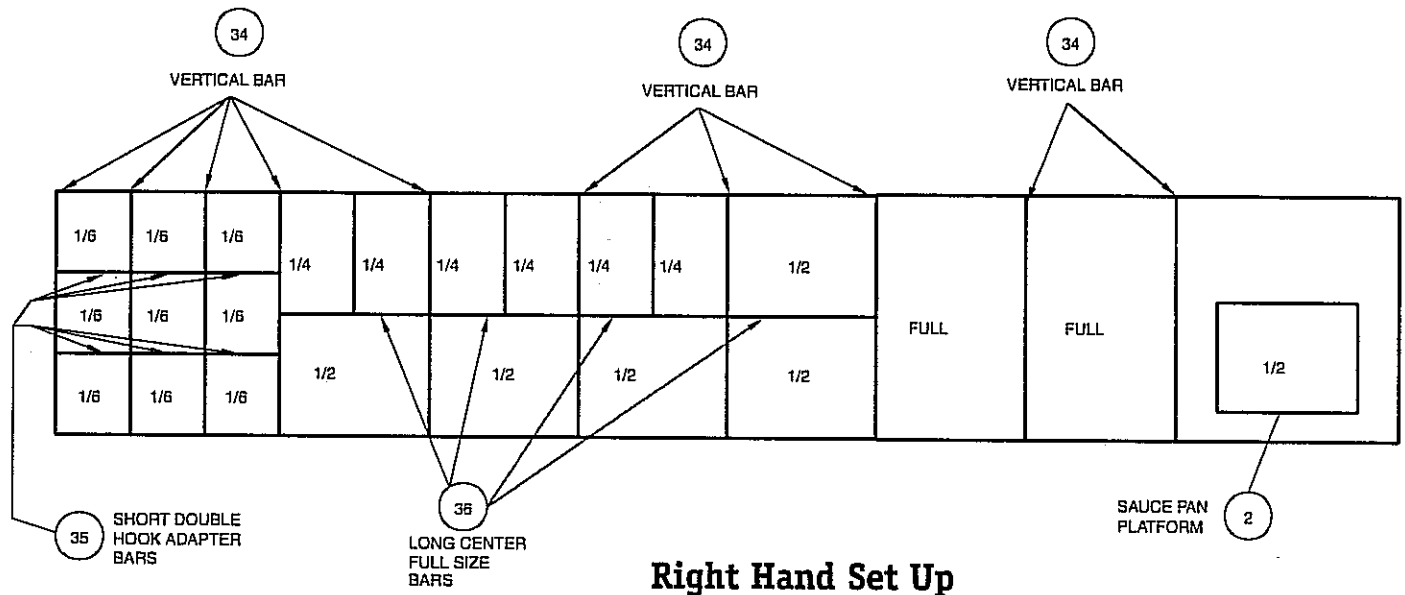
KEY DESCRIPTION

PART

- 34. 20-13/16" Vertical Adapter Bar 7000070
- 35. 6-5/16" Short Horizontal Adapter Bar 7000071
- 36. 12-11/16" Long Horizontal Adapter Bar . . . 7000204



PAN ARRANGEMENT & ADAPTER BAR LOCATIONS



CLEANING STAINLESS STEEL EFFICIENTLY

Keeping your unit clean will add years of service, help prevent expensive repairs and present a positive image to your customers. And your personal cleanliness and efficiency go hand in hand.

IMPORTANT:

Follow manufacturers' directions for safe use of chemical and cleaning solutions.

Exterior (Stainless steel and plastic laminate facings)

- Wash with soap and warm water. Wipe with a clean, damp cloth.
- If kickplate is provided, remove by simply pulling plate away from unit. Clean under unit monthly.

Dry storage compartment

- Clean with a cloth and bicarbonate of soda solution once a week.
- Clean spilled milk or cream immediately to keep compartment sanitary and odorless.

Work surfaces

- Clean and polish every day with soap, warm water and a clean cloth.
- Clean waste chutes, dipperwells and rinsers daily to avoid odors.
- Use hot water and Sal-Soda to keep all drains clear.
- Repair leaking faucets immediately by replacing worn-out washers.
- If using chemical sterilization for dishwashing, check with your local health authority for an approved type of sterilizer, strength of solution, rinse time, etc. Some sterilizers can quickly corrode stainless steel.

Sinks, refrigerator doors and trim

- Lightly clean frequently with a damp cloth and dry with a soft cloth.
- For more difficult applications, use ammonia in water, detergent in water, or special solvents such as alcohol, baking soda, vinegar or turpentine. Afterwards, wash thoroughly with detergent and hot water, rinse and then dry with a soft, clean cloth.
- For a high polish, use a mild abrasive and rub in the direction of the polish lines.
- Be careful not to rub in dirt, especially on mirror finishes with no polish lines.
- Use commercial glass cleaner or automobile wax to remove fingerprints on highly polished surfaces. Wipe future fingerprints away with a cloth containing some of the cleaner.

Refrigerated storage unit

- Clean daily, or at least weekly, with baking soda solution to remove or prevent food odors.
- Clean bread drawers once or twice a week.
- Clean waste containers daily.
- Store salad jars or contents each night.
- Cover food and place on upper shelf to prevent absorption of odors and deterioration of blower coil.
- Keep hood closed at night.
- No defrosting is necessary when controls are set according to service manual.
- Oil blower motor bearings annually with three drops of fine oil.

Back bars

- Wash and polish mirrors with mild detergent.
- Change displays frequently.

Precautions

1. When using strong bleaches, rinse stainless steel thoroughly, and don't allow bleach to come into contact with sinks or utensils for longer than 30 minutes. Strong bleaches can corrode many materials.
2. Immediately rinse off tincture of iodine or iron solutions, as they can discolor stainless steel.
3. Never store food such as mustard, mayonnaise, lemon juice, vinegar, salt or dressings containing these in stainless steel containers since these foods can cause corrosion.
4. Use ordinary steel wool sparingly to clean stainless steel since particles may lodge in the surface and rust. Do not leave steel wool on surfaces, as it may leave a rusty appearance. Use stainless steel sponges for difficult cleaning jobs such as burned-on food. When cleaning a mirrored surface, be careful not to scratch the finish.
5. Do not use gritty, hard abrasives, as they may mar the surface.
6. Do not cut with knives or choppers on stainless steel surfaces because the carbon-steel edges will leave marks.



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