

Champion®

The Dishwashing Machine Specialists

Project _____
Item No. _____
Quantity _____

MODEL 86 PW RACK CONVEYOR

STANDARD FEATURES

- **ENERGY STAR® Qualified**
- One-piece cast stainless steel upper & lower spray arm assemblies for ease of cleaning
- Internal removable scrap baskets with two-piece scrap screens
- Standard vertical opening accommodates 18" x 26" sheet pans
- Wide 15-1/2" and 26" leakproof doors, internally-fitted for ease of cleaning
- Anti-jam conveyor drive system
- Energy Sentinel (Idle pump shut-off)
- Convenient top-mounted controls
- Automatic tank fill
- Common utility connections
- Door safety switch
- Door activated drain closures
- Enclosure panels (front and sides)
- Splash shields
- Low-water tank heat protection
- Rinse-saver device
- Stainless steel heavy-gauge construction, including base and feet
- Electric tank heat
- Prewash pump 1 Hp motor
- External prewash scrap basket
- Wash/rinse pump 2 Hp motors
- Stainless steel pump and impellers

MODEL 86 PW

64" Two Tank with
22" Prewash High-Temperature
Rack Conveyor Dishwashing Machine



Shown with Vent Cowl
and Damper Option

SPECIFIER STATEMENT

Specified unit will be Champion Model 86 PW, high temperature rack conveyor dishwashing machine with 22" prewash. Constructed of Type 304 stainless steel and measuring 86" long with 20-3/4" vertical opening. Features top mounted control cabinet; upper and lower one-piece stainless steel spray arm assemblies, removable internal scrap baskets with two-piece scrap screens, external prewash scrap basket. Large 15-1/2" prewash and 26" wash/rinse access doors with double-hook safety latches. Anti-jam conveyor drive system. 1 year parts and labor warranty.



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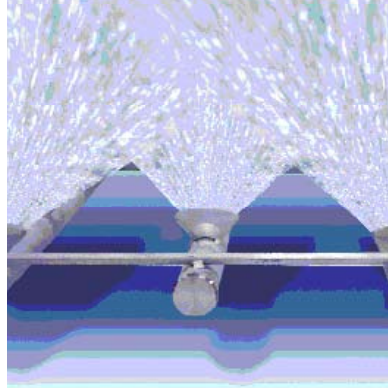
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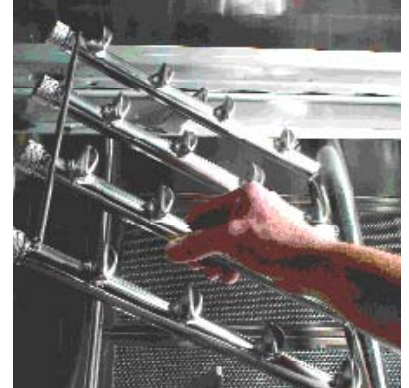
EFFICIENT NEW SPRAY SYSTEM DESIGN

To make the E-Series more efficient and more forgiving we designed a new spray arm system that includes:

- Wall-of-water spray pattern via stainless steel fluted directional spray jets for quick and efficient washing
- Easily removable spray arm assembly for ease of cleaning
- Stainless steel pump housing and impeller
- Larger tanks hold more water for better washing results



Wall-of-Water Spray Pattern

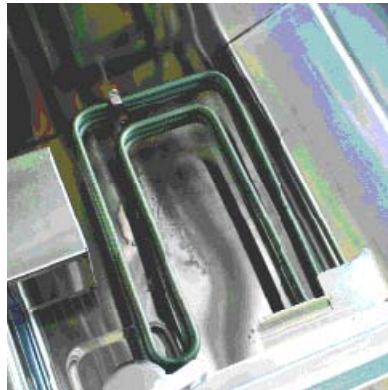


One-Piece Cast Stainless Steel Spray Assembly

INTEGRATED BOOSTER HEATER

As well as the E-Series performs, we created a way to make it perform even better. The electric booster heater may be optional, but it is an exceptional value — engineered within the E-Series footprint to offer a variety of advantages over other booster designs, such as:

- Inter-plumbed and inter-wired
- One control shuts off washer and booster
- 15 kW for 40°F rise
- 24 kW for 70°F rise
- Conductive heat transfer to wash tank
- Stainless steel booster heater lasts the life of the machine
- Integrated design saves floor space



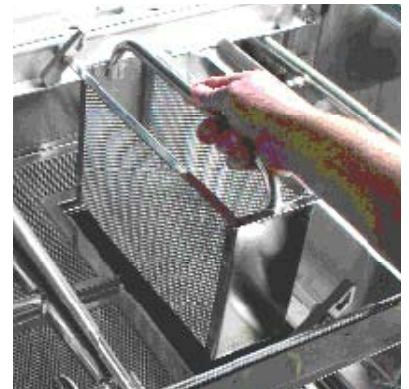
Large Heating Element



Stainless Steel Built-in Nested Booster



Two-Piece Scrap Screen



Built-in Scrap Basket

E-SERIES

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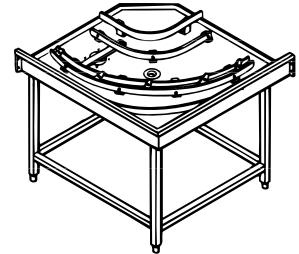
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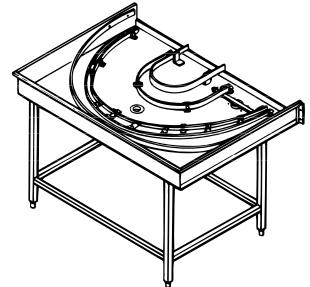
OPTIONS & ACCESSORIES

- Tank heat: choice of steam coil, steam injector, hot water coil
- Blower-dryer with 60" hood, table, legs and pawl bar assembly
- Booster Heaters - stainless steel
(completely interplumbed, controls are interwired)
 - Electric: 15 kW booster (40°F rise only)
(built-in 3 phase only)
 - Electric: 24 kW booster (70°F max. rise)
(3 phase only)
 - Steam: 40°F - 70°F rise
- Cantilever sideloader (with or without hood) for 90° load operation
- Extended pawl bar (extended drive unit) for use with load tabling
- 90° Motorized rack advance conveyor (unload)
- 180° Motorized rack advance conveyor (unload)
- Racks: peg or flat racks (specify type)
- Roller conveyor table (mobile or stationary)
- Steam pressure regulating valve (unmounted)
- Table limit switch, unmounted (recommended on all rack conveyor installations)
- Vent cowl, stainless steel with 7" stack and locking damper
- Extended Vent hood, stainless steel with 7" stack and locking damper
- Water pressure regulating valve (unmounted)
(standard with booster)
- Vent fan control

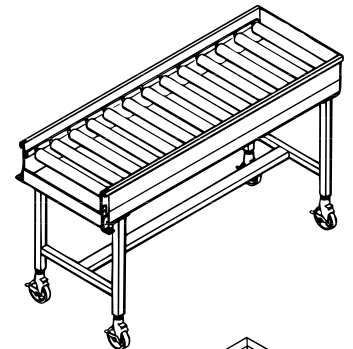
- Model MRA 90**
90° Motorized Rack Advance Curve
(Must be ordered with Roller Conveyor Table)



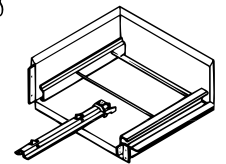
- Model MRA 180**
180° Motorized Rack Advance Curve
(Must be ordered with Roller Conveyor Table)



- Model RCT 64 or RCT 84**
Roller Conveyor Table



- Cantilever Sideloader**
(no hood)

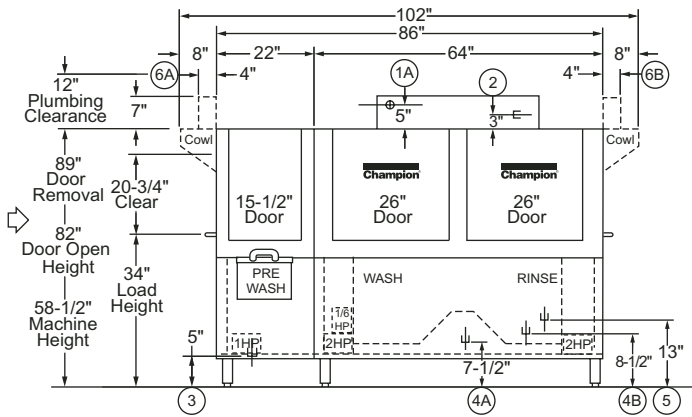


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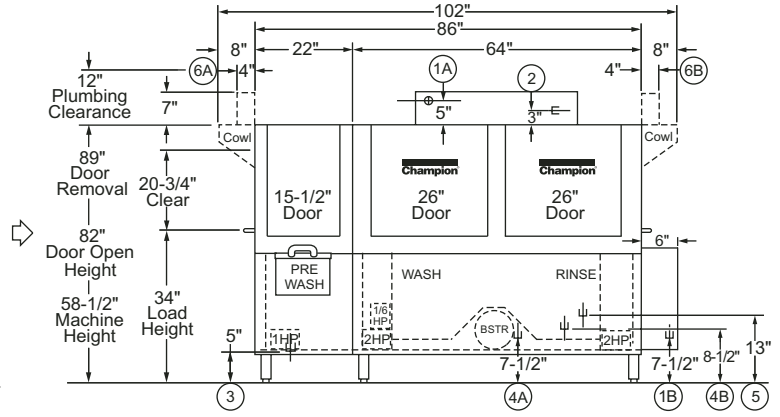
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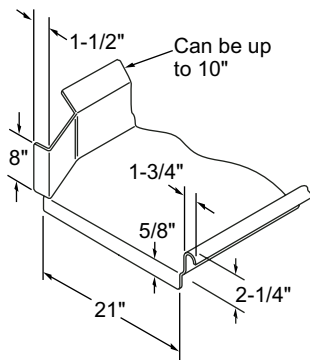


**Front View
Without Booster**

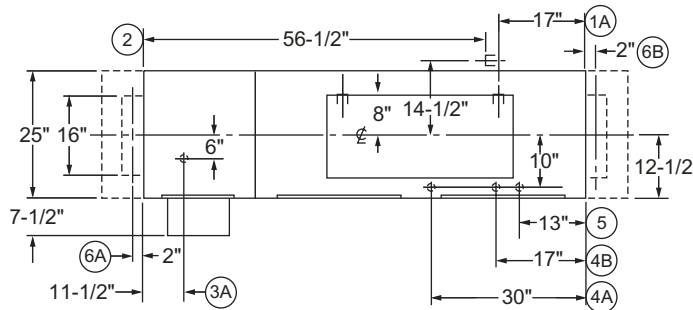


**Front View
With Booster**

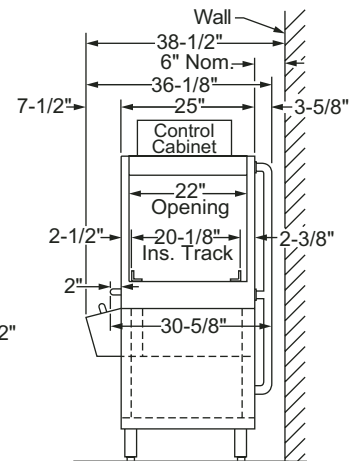
Left-to-Right Operation



**Suggested Table
Construction**



Plan View



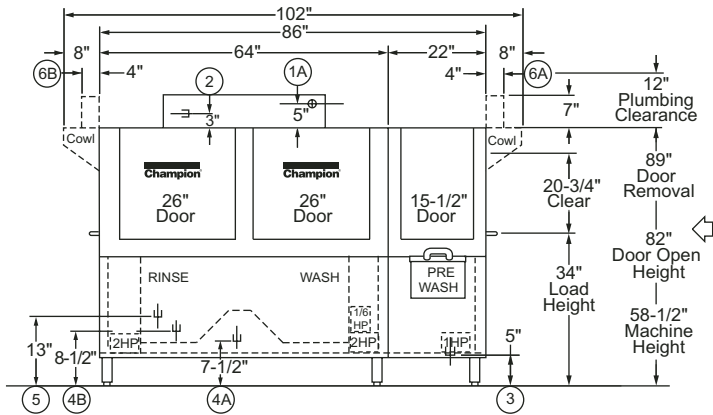
End View

MODEL 86 PW

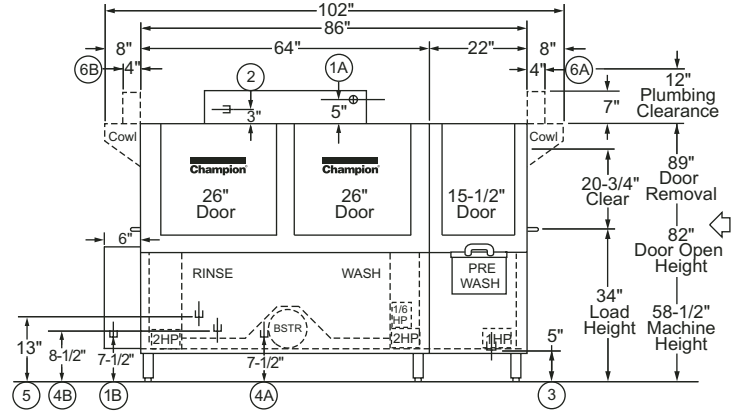
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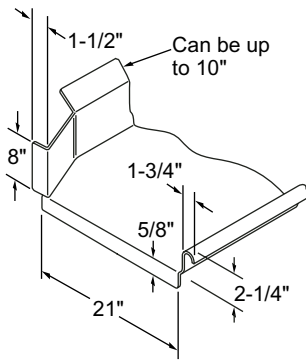


**Front View
Without Booster**

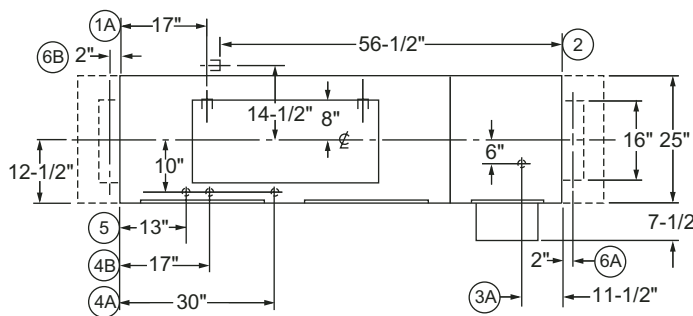


**Front View
With Booster**

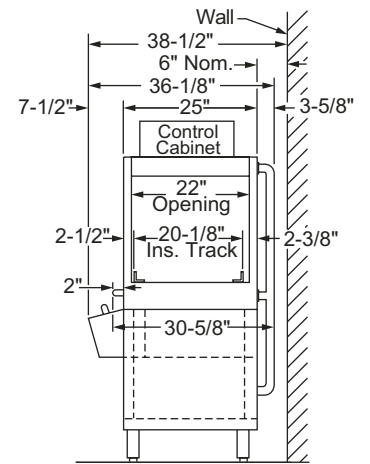
Right-to-Left Operation



**Suggested Table
Construction**



Plan View



End View

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Volume crated: **175 cu. ft.**
Shipping weight crated: **1055 lbs.**

Dimensions shown in inches

Utilities	
1 Electrical	A Machine connection (see Table A) B Booster connection (see Table B)
2 Hot Water	3/4" NPT 180°F/82°C min. hot water connection. (Machine without booster.) 3/4" NPT 140°F/60°C min. hot water connection. (40°F/22°C rise booster) 3/4" NPT 110°F/49°C min. hot water connection. (70°F/39°C rise booster) Flow pressure 20-22 psi.
3 Drain	1-1/2" NPT machine connection. Maximum flow 15 gpm.
4 Steam	A 3/4" NPT machine connection. Flow pressure 15-30 PSI. (Steam coil) B 3/4" NPT machine connection. Flow pressure 15-30 PSI. (Steam injector)
5 Condensate (no back pressure)	1/2" NPT machine return to boiler
6 Vents	A Load end: 200 CFM @ 1/4" S.P. B Unload end: 400 CFM @ 1/4" S.P. (With blower-dryer increase room ventilation by 600 CFM.)

Warning: Plumbing and electrical connections should be made by qualified personnel who will observe all the applicable plumbing, sanitary, safety codes and the National Electrical Code.

Note: Water Hammer Arrestor (meeting ASSE-1010 standard or equivalent) to be supplied (by others) in common water supply line at service connection.

Plumbing Notes: Because of the variation in house-supplied steam and water pressures, steam and water pressure regulating valves (PRVs) may be needed. (Water PRV is standard on machines with booster.) The PRVs can either be purchased from Champion or obtained locally.

Venting Notes: Fabricated duct size: 3-7/8" x 15-7/8" (Outside dimensions)

TABLE A - MACHINE CONNECTION

Machine only			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Maximum Overcurrent Protective Device
208/60/1	171	225	225
240/60/1	150	200	200
208/60/3	95	125	125
240/60/3	83	100	100
480/60/3	41	50	50
575/60/3	32	40	40

TABLE B - BOOSTER CONNECTION

40°F/22°C Rise - 15kW Electric built-in booster			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Maximum Overcurrent Protective Device
208/60/3	42	50	50
240/60/3	36	45	45
480/60/3	18	25	25
575/60/3	15	20	20

70°F/39°C Rise - 24kW Electric built-in booster			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Maximum Overcurrent Protective Device
208/60/3	67	80	80
240/60/3	58	70	70
480/60/3	29	35	35
575/60/3	24	30	30

Machine and steam built-in booster			
Elec. Specs.	Rated Amps	Minimum Supply Ckt. Conductor Ampacity	Maximum Overcurrent Protective Device
208/60/1	41	50	50
240/60/1	36	50	50
208/60/3	20	25	25
240/60/3	17	25	25
480/60/3	9	15	15

SPECIFICATIONS

Capacity

Racks per hr. (NSF rated)	277
Wash tank (US gal.)	21
Conveyor speed (ft/min.)	7.7

Motor Horsepower

Drive	1/6
Prewash	1
Wash 2	
Rinse 2	

Water Consumption

US Gal. per hr. (max. use)	124
US Gal. per rack	.45

Heating

Tank Heat, electric (kW)	25
Tank heat, steam (lbs/hr. required at 15 PSI flow pressure)	75
Electric booster (built-in) (kW supplied for 40°F rise)	15
Electric booster (kW supplied for 70°F rise)	24
Steam booster (lbs./hr. required for 40°F rise)	120
Steam booster (lbs./hr. required for 70°F rise)	205

Venting

Load end (minimum CFM)	200
Unload end (minimum CFM)	400

Standard 20" x 20" rack complement

Peg	2
Flat	1