



Warewashing Systems

INSTALLATION, OPERATION, AND SERVICE MANUAL



RACKSTAR®

RACKSTAR® SERIES CONVEYOR DISHMACHINES

RackStar Manual • 07610-004-33-05-E

**MANUFACTURER'S LIMITED WARRANTY
(APPLICABLE ONLY IN THE UNITED STATES AND CANADA)**

WARRANTY REGISTRATION:

To register your Jackson Dishmachine's warranty go to www.jacksonwws-warranty.com or call 1-888-800-5672. Failure to register the Dishmachine will void the warranty.

ONE YEAR LIMITED PARTS AND LABOR WARRANTY

For a period of one (1) year from date of original installation of a new Jackson Dishmachine (but in no event to exceed eighteen (18) months from date of shipment from Jackson's factory), Jackson WWS, Inc. (Jackson) will repair or replace, at its discretion, any original part that proves defective in materials or workmanship at the time the Dishmachine was purchased; provided that (i) the Dishmachine has not been altered, (ii) the Dishmachine has been properly installed, maintained, and operated under normal use conditions and in accordance with the applicable installation, operation and service manual available on the Jackson website, and (iii) a warranty claim is reported to a Jackson Authorized Service Agency within the warranty period. This warranty includes replacement with Jackson specified genuine replacement parts, purchased directly from a Jackson Authorized Parts Distributor or Service Agency. Use of generic replacement parts may create a hazard and shall void this warranty.

THIS WARRANTY DOES NOT APPLY OUTSIDE THE UNITED STATES AND CANADA.

Jackson will pay the labor to repair or replace a defective original part as a part of the warranty, provided that a Jackson Authorized Service Agency performs the labor. Any repair or replacement work by anyone other than a Jackson Authorized Service Agency is the sole responsibility of the purchaser. Labor coverage is limited to regular hourly rates; Jackson will not pay overtime premiums or emergency service charges.

Accessory components (such as table limit switches, pressure regulators, and drain water tempering kits) that are not installed by Jackson at the factory and are shipped with the Dishmachine carry only a (1) one-year parts warranty. Labor to repair or replace these components is not included in the warranty or covered by Jackson. Booster heaters not manufactured by Jackson are not covered by this warranty but are warranted by their respective manufacturers. This warranty is void if any defect or failure is a direct result from shipping, handling, fire, water, accident, alteration, modification, misuse, abuse, flood, acts of God, burglary, casualty, attempted repair by unauthorized persons, use of replacement parts not authorized by Jackson, improper installation, installation not in accordance with local electrical and plumbing codes, if the serial number has been removed or altered, if the Dishmachine is used for any purpose other than originally intended, or if the equipment is installed for residential use.

Jackson does not authorize any other entity or person, including, without limitation, any entity or person who deals in Jackson Dishmachines, to change this warranty or create any other obligation in connection with Jackson Dishmachines.

TRAVEL LIMITATIONS:

Jackson limits warranty travel time to the customer site within 50 miles of the Jackson authorized service agent's office and during regular business hours. Jackson will not pay for travel time and mileage that exceeds these limits, or any fees such as those for air or boat travel without prior authorization.

REPLACEMENT PARTS WARRANTY:

For a period of (90) ninety days from the date of installation by a Jackson Authorized Service Agency (but in no event to exceed (180) one-hundred-eighty days from the date of purchase from a Jackson Authorized Parts Distributor or Service Agency), Jackson will repair or replace, at its discretion, any Jackson genuine replacement parts that prove defective in materials or workmanship at the time the replacement parts were installed. This warranty does not include paying the labor to repair or replace the replacement part. This warranty is subject to all conditions, exclusions and limitations applicable to the Dishmachine.

MANUFACTURER'S LIMITED WARRANTY (CONT.)
(APPLICABLE ONLY IN THE UNITED STATES AND CANADA)

PRODUCT CHANGES:

Jackson reserves the right to make changes in design and specification of any component of the Dishmachine as engineering or necessity requires.

DISCLAIMER OF WARRANTIES:

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, THAT ARE NOT SET FORTH HEREIN, OR THAT EXTEND BEYOND THE DURATION HEREOF.

LIMITATION OF REMEDIES AND LIABILITIES:

YOUR SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY SHALL BE PRODUCT REPAIR OR REPLACEMENT AS PROVIDED HEREIN.

UNDER NO CIRCUMSTANCES WILL JACKSON BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THE NATURE OF PENALTIES. JACKSON'S LIABILITY ON ANY CLAIM OF ANY KIND WITH RESPECT TO THE GOODS OR SERVICES COVERED HEREUNDER SHALL IN NO CASE EXCEED THE PRICE OF THE GOODS OR SERVICES OR PART THEREOF WHICH GIVES RISE TO THE CLAIM.

ITEMS NOT COVERED:

THIS WARRANTY DOES NOT COVER (1) ADJUSTMENTS INCLUDING, BUT NOT LIMITED TO, TIMER CAMS, THERMOSTATS, DOORS, TANK HEATER ADJUSTMENTS OR CLUTCHES; (2) AIR FREIGHT OR OVERNIGHT FREIGHT; (3) ANY AMOUNT EXCEEDING ORIGINAL PURCHASE PRICE; (4) CLEANING OF DRAIN VALVES, GAS LINES, RINSE/WASH NOZZLES, STRAINERS, SCREENS, OR SPRAY PIPES; (5) CLEANING OR DELIMING OF THE DISHACHINE OR ANY COMPONENT INCLUDING, BUT NOT LIMITED TO, WASH ARMS, RINSE ARMS AND STRAINERS; (6) CONDITIONS CAUSED BY THE USE OF INCORRECT (NON-COMMERCIAL) GRADE DETERGENTS; (7) CORROSION FROM CHEMICALS DISPENSED IN EXCESS OF RECOMMENDED CONCENTRATIONS; (8) COSMETIC DAMAGE, INCLUDING BUT NOT LIMITED TO, SCRATCHES, DENTS, CHIPS, AND OTHER DAMAGE TO THE DISHACHINE FINISHES, UNLESS SUCH DAMAGE RESULTS FROM DEFECTS IN MATERIALS AND WORKMANSHIP AND IS REPORTED TO JACKSON WITHIN (30) THIRTY DAYS FROM THE DATE OF INSTALLATION; (9) DAMAGE CAUSED BY LABOR DISPUTE; (10) DAMAGES RESULTING FROM IMPROPER CONNECTION TO UTILITY SERVICE; (11) DAMAGES RESULTING FROM WATER CONDITIONS, INADEQUATE OR EXCESSIVE WATER PRESSURE, ACCIDENTS, ALTERATIONS, IMPROPER USE, ABUSE, HANDLING, OVERLOADS, TAMPERING, IMPROPER INSTALLATION OR FAILURE TO FOLLOW MAINTENANCE AND OPERATING PROCEDURES; (12) DISCOLORATION, RUST OR OXIDATION OF SURFACES RESULTING FROM CAUSTIC OR CORROSIVE ENVIRONMENTS, INCLUDING, BUT NOT LIMITED TO, HIGH SALT CONCENTRATIONS, HIGH MOISTURE OR HUMIDITY, OR EXPOSURE TO CHEMICALS; (13) ELECTRIC BOOSTERS, FEED LINES, FLEX HOSE, FUSES, GARBAGE DISPOSALS, OR GAS PILOTS; (14) EXCESSIVE LIME, MINERAL, OR ALKALINE BUILDUP; (15) EXPENSES DUE TO DISCONNECTION, DELIVERY, RETURN AND REINSTALLATION; (16) FAILURE OF ELECTRICAL COMPONENTS DUE TO CONNECTION OF CHEMICAL DISPENSING EQUIPMENT INSTALLED BY OTHERS; (17) FAILURE OF FACILITY WATER HEATER TO MAKE TEMPERATURE; (18) FAILURE TO MAINTAIN WATER HARDNESS LOWER THAN 3.0 GRAINS, PH BETWEEN 7.0 AND 8.5 AND TOTAL DISSOLVED SOLIDS BELOW 250 PPM; (19) FAILURE TO COMPLY WITH LOCAL ELECTRICAL BUILDING CODES; (20) LEAKS OR DAMAGE RESULTING FROM SUCH LEAKS CAUSED BY THE INSTALLER, INCLUDING THOSE AT MACHINE TABLE CONNECTIONS, OR BY CONNECTION OF CHEMICAL DISPENSING EQUIPMENT INSTALLED BY OTHERS; (21) OPENING OR CLOSING OF UTILITY SUPPLY VALVES OR SWITCHING OF ELECTRICAL SUPPLY CURRENT; (22) PERFORMANCE OF REGULAR MAINTENANCE AND CLEANING AS OUTLINED IN THE OPERATOR'S GUIDE; (23) REMOVAL OR REINSTALLATION OF INACCESSIBLE DISHACHINES OR BUILT-IN FIXTURES THAT INTERFERE WITH SERVICING, REMOVAL OR REPLACEMENT OF THE DISHACHINE; (24) REPLACEMENT WEAR ITEMS INCLUDING, BUT NOT LIMITED TO, CURTAINS, DRAIN BALLS, DOOR GUIDES, GASKETS, O-RINGS, SEALS, SQUEEZE TUBES, AND BEARINGS; (25) RESIDENTIAL USE; (26) USE WITH UTILITY SERVICE OTHER THAN THAT DESIGNATED ON THE RATING PLATE.

REVISION HISTORY

Revision Letter	Revision Date	Made by	Applicable ECNs	Details
A	9-21-16	JH	N/A	Initial release of manual.
B	10-25-16	JH	N/A	Corrected delime instructions. Corrected P/Ns for item #6 on pg. 42. Updated pg. 13 to change the pressure regulator from standard to optional. Updated Miscellaneous Electrical Components page. Added a Door Assemblies page. Added a Frame Assembly page. Added Display Fault Codes.
C	1-19-18	JH	8438 8504 8524 8526 8546 8547 8569 8570 8578 8579	Added the Energy Recovery unit to the manual. Changed maximum water hardness to 3 GPG. Added a Connection Points section to pg. 24. Changed detergent connection point location on pg. 24. Added links to external device and exhaust fan timer instructions to pg. 25. Added Steam unit dimensional drawings. Changed inlet steam flow pressure to 10-30 PSI. Changed plumbing throughout to single-point connection. Added dispenser connection fuses and P/Ns to pg. 41. Updated Pawl Bar Assembly, pg. 57. Corrected Rack Paddle Assembly, pg. 58. Replaced item #12 on pgs. 59 and 60 with new part. Added Drive Plate components to pg. 60. Added communication cable to Display Assembly page. Added a Frame Assembly page. Replaced item #7 on pg. 66 with new part. Changed P/N of Drive Link on pg. 67. Added Booster Heater Add-on Kit to pg. 70. Updated schematics.
D	3-13-18	JH	N/A	Updated dimensional drawings with depiction of drain air-gap and associated specifications. Updated Drain Line Connection section to be more descriptive and added depiction of drain air-gap and associated specifications.
E	9-10-20	JH	8553 8586 8609 8615 8623 8626 8627 8629 8654 8735 8736	Added 600 V unit to the manual. Added HH unit to the manual. Updated Electrical Requirements pgs. Added instructions hyperlink icon and linked to applicable documents throughout. Added section on adjusting doors. Added section on motor rotation. Added section on table limit switch option. Revised connection points section. Updated curtain sizes. Corrected delime instructions. Added high-limit thermostat. Updated inlet plumbing assemblies. Updated Wash and Pre-wash Arm sections. Updated pre-wash plumbing assembly. Created Rack Rails section and added all rails and components. Updated schematics.



RackStar® 44

RackStar® 66

**Electrically-heated rack conveyor machine,
available in chemical-sanitizing and
hot-water-sanitizing models.**

RackStar® 44ER

RackStar® 66ER

**Electrically-heated, hot-water-sanitizing
rack conveyor machine
with Energy Recovery System.**

RackStar® 44S

RackStar® 66S

**Steam-heated, hot-water-sanitizing
rack conveyor machine.**

**Models also available with Higher Hood
(25-inch Dish Clearance)**

The manufacturer provides technical support for all of the dishmachines detailed in this manual. We strongly recommend that you refer to this manual before making a call to our technical support staff. Please have this manual open when you call so that our staff can refer you, if necessary, to the proper page. Technical support is not available on holidays.

Contact technical support toll free at 1-888-800-5672.

Technical support is available for service personnel only.

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SYMBOLS



- Risk of Injury to Personnel



- Risk of Damage to Equipment



- Risk of Electrical Shock



- Caustic Chemicals



- Reference Data Plate



- Lockout Electrical Power

NOTICE

- Important Note



- Instructions Hyperlink

ABBREVIATIONS & ACRONYMS

ANSI - American National Standards Institute

CFM - Cubic Feet per Minute

ER - Energy Recovery

GHT - Garden Hose Thread

GPM - Gallons per Minute

GPG - Grains per Gallon

HP - Horse Power

Hz - Hertz

ID - Inside Diameter

kW - Kilowatts

MIN - Minimum

NFPA - National Fire Protection Association

NPT - National Pipe Thread

ppm - Parts per Million

PSI - Pounds per Square Inch

V - Volts

40°↑ - 40-degree Rise

70° - 70-degree Rise

44" LEFT-TO-RIGHT

LEGEND

A - Electrical Connection
 B - Main Water Inlet
 (1/2" NPT, 110 °F MIN (18 kW Booster),
 140 °F MIN (12 kW Booster), or 180 °F MIN
 (No Booster or Supplied from Steam Booster))
 C - Drain Connection
 (1 1/2" NPT)
 D - Vent Connections
 (Including Dampers)
 E - Steam Connection
 (3/4" NPT)

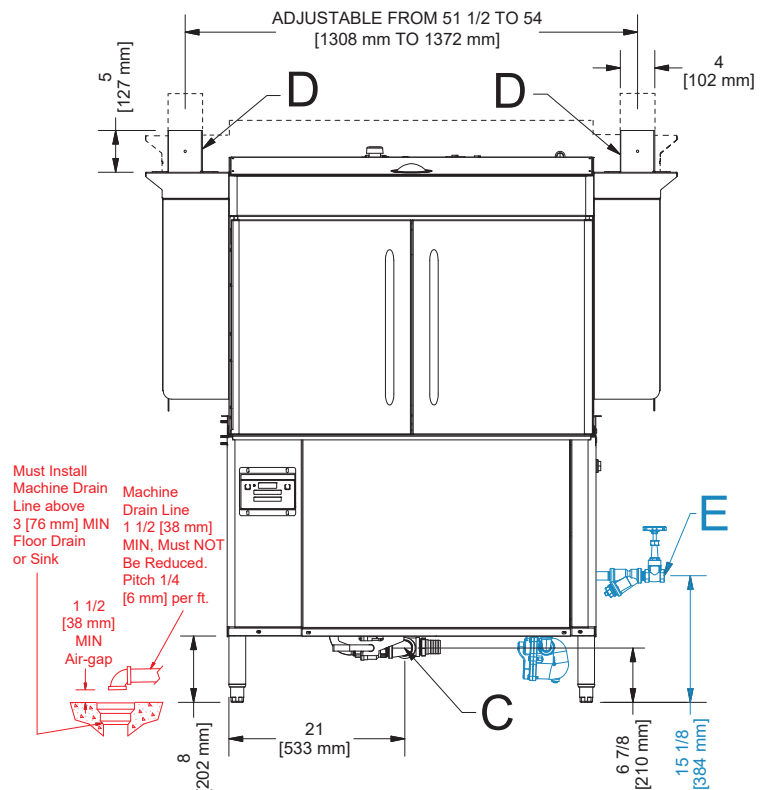
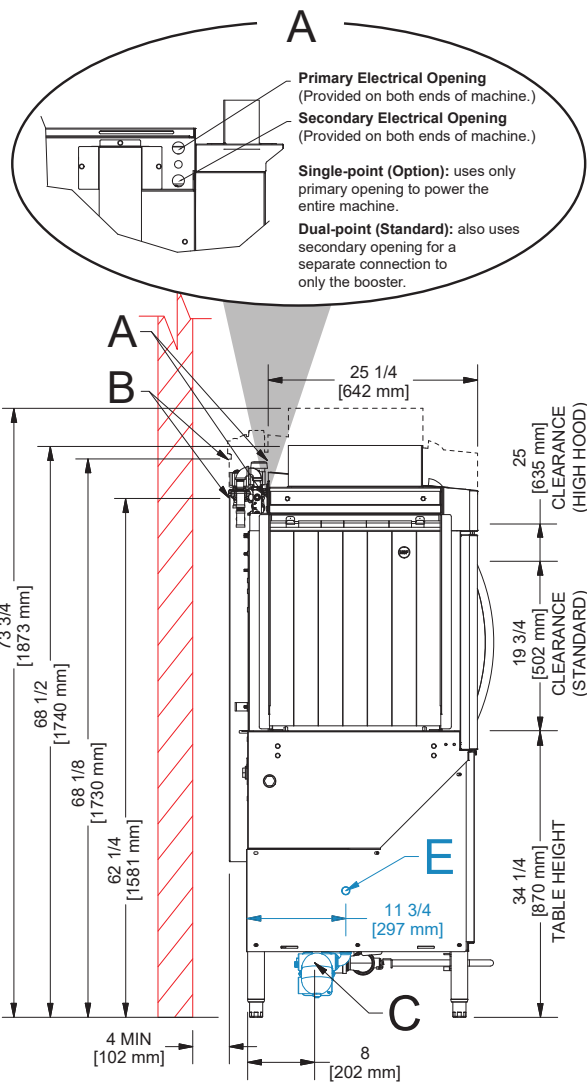
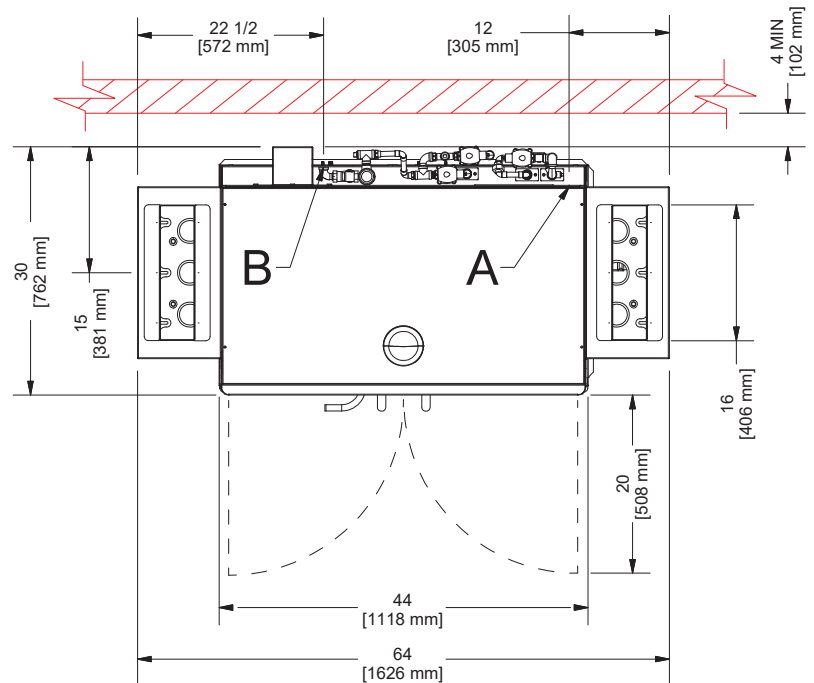
— — — — — Open Door

- - - - - High Hood Option

All dimensions from the floor can be increased
 1 3/4" using the machine's adjustable feet.

Items in red are not supplied with the machine.

Items in blue are for the Steam option.



Must Install
 Machine Drain
 Line above
 3 [76 mm] MIN
 Floor Drain
 or Sink

Machine
 Drain Line
 1 1/2 [38 mm]
 MIN, Must NOT
 Be Reduced.
 Pitch 1/4
 [6 mm] per ft.

1 1/2
 [38 mm]
 MIN
 Air-gap

SPECIFICATIONS

44" ELECTRIC/STEAM DIMENSIONS

44" RIGHT-TO-LEFT

LEGEND

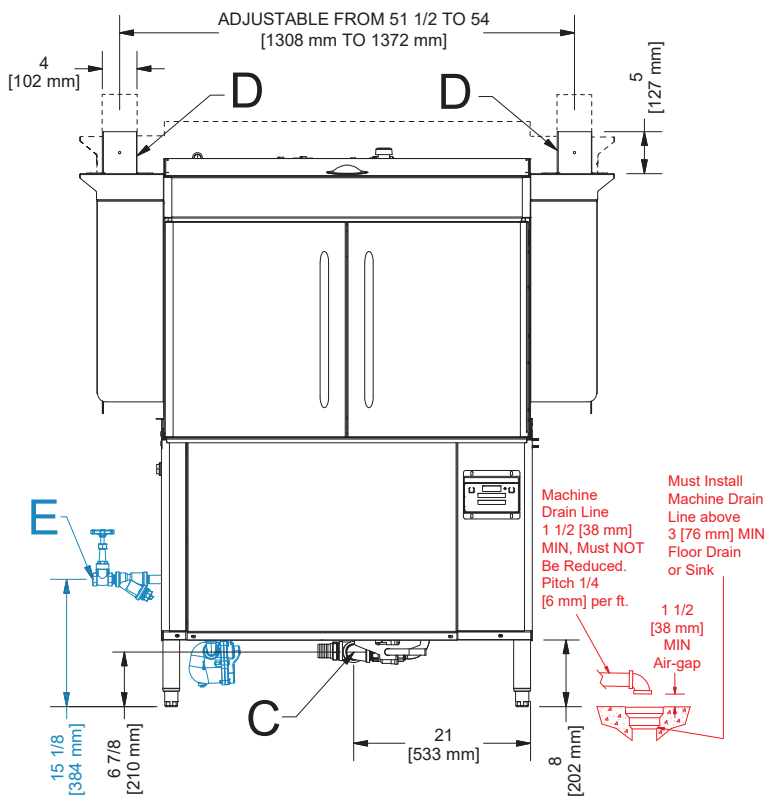
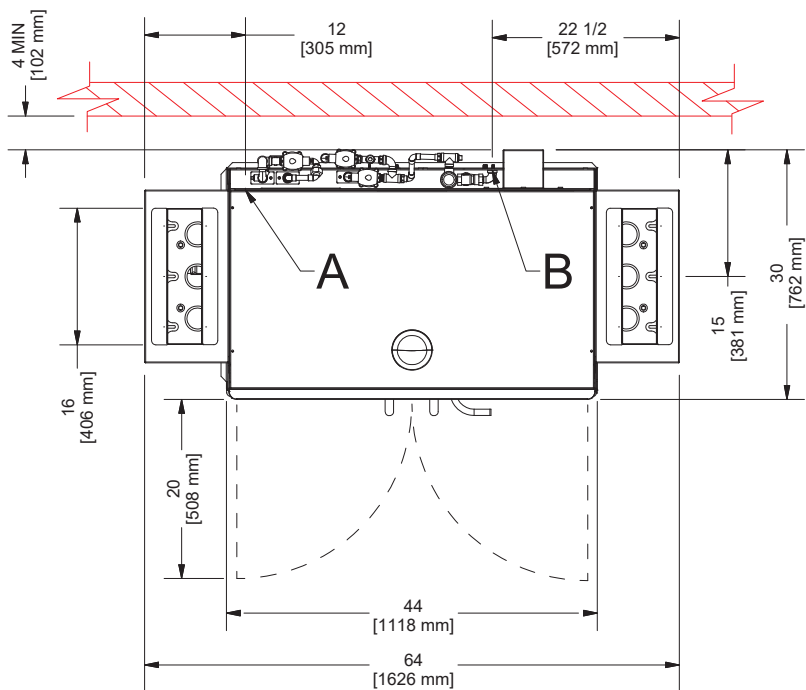
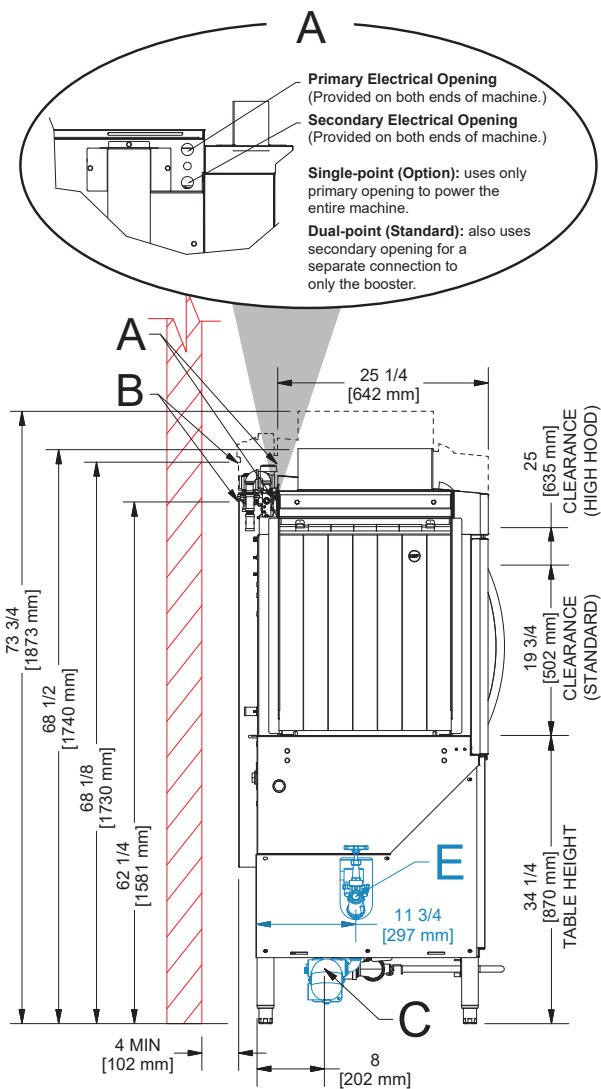
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D - Vent Connections
(Including Dampers)
E - Steam Connection
(3/4" NPT)

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- - - - - - - High Hood Option

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Items in blue are for the Steam option.



66" LEFT-TO-RIGHT

LEGEND

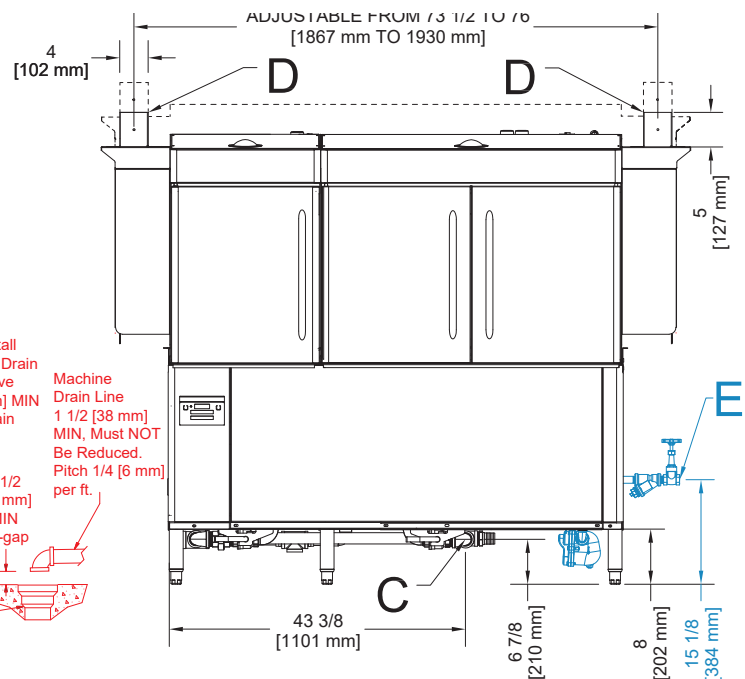
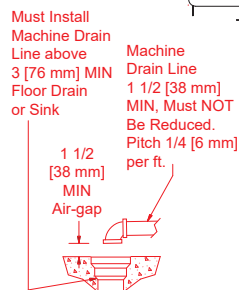
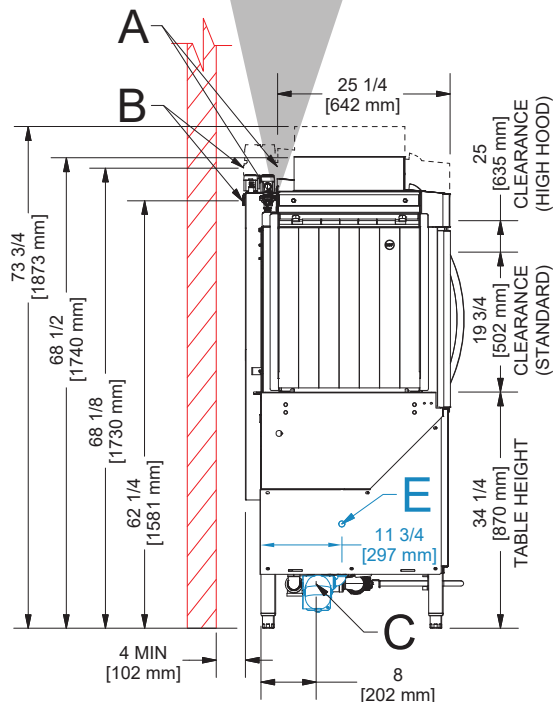
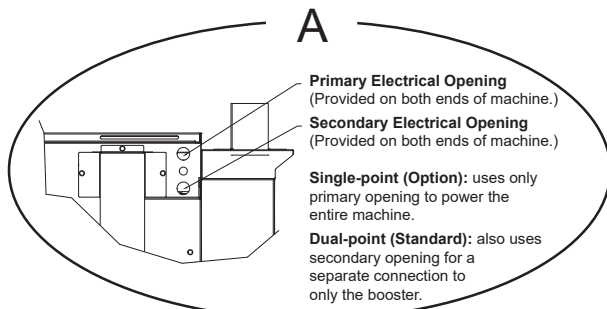
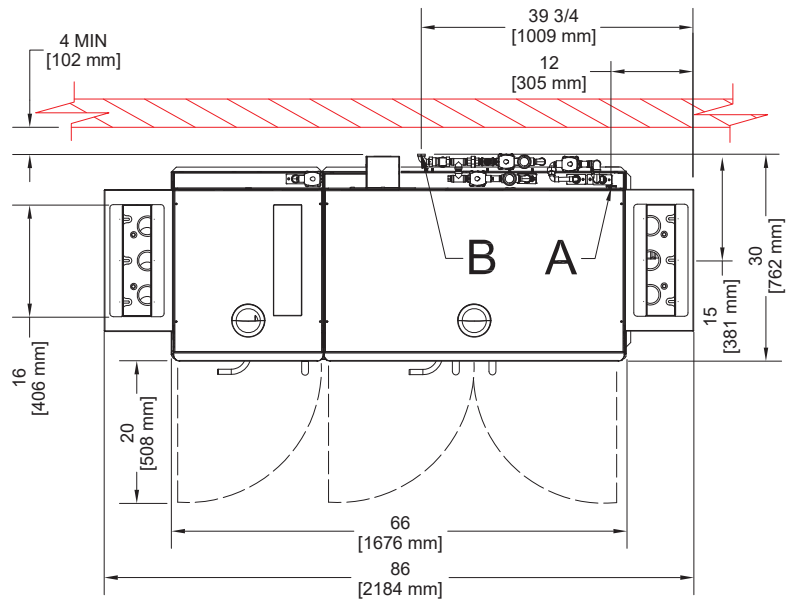
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(Including Dampers)
- E - Steam Connection
(3/4" NPT)

- — — — — Open Door
- - - - - High Hood Option

All dimensions from the floor can be increased
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Items in blue are for the Steam option.



66" RIGHT-TO-LEFT

LEGEND

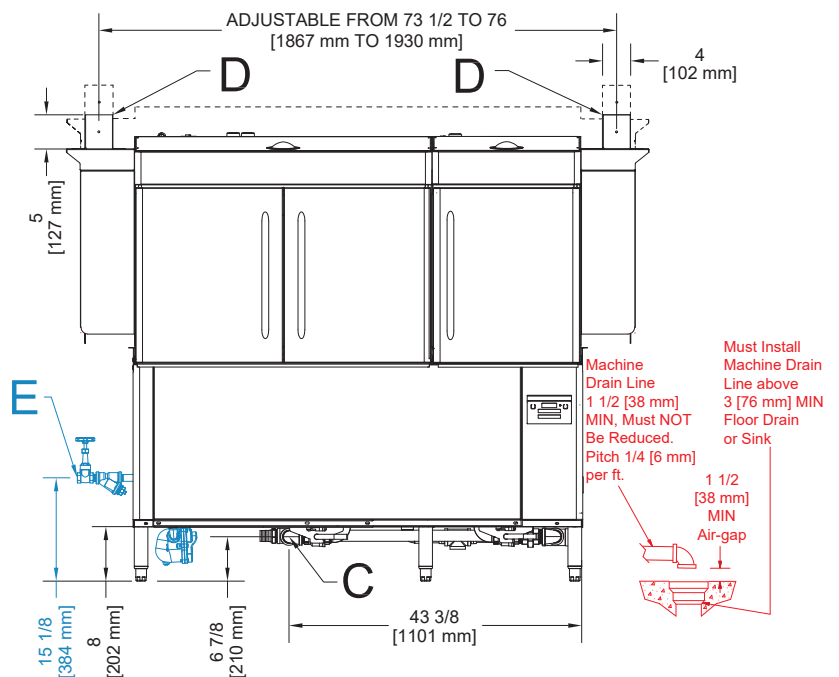
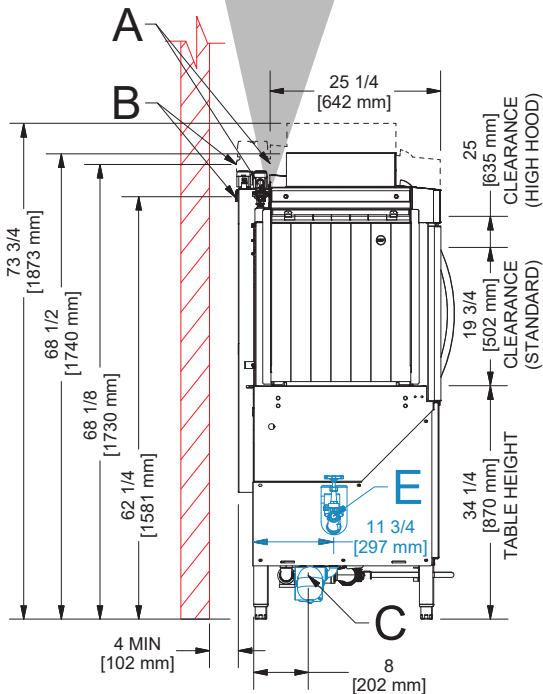
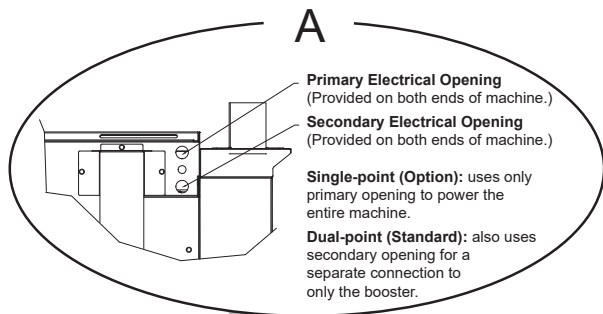
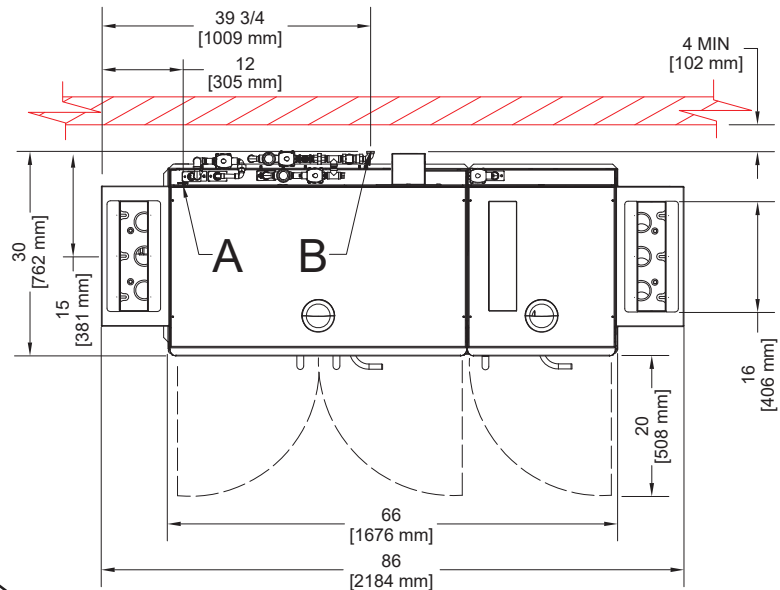
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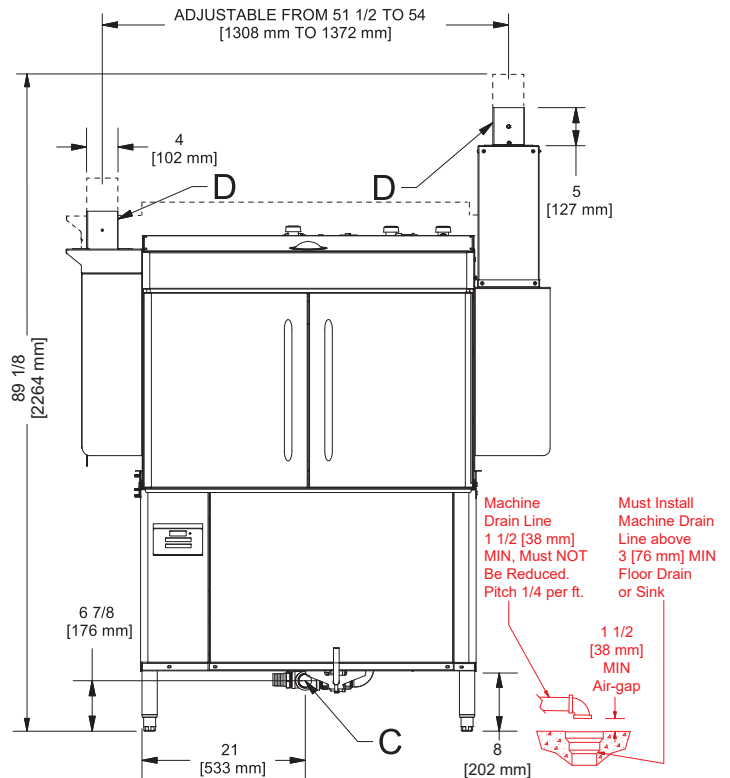
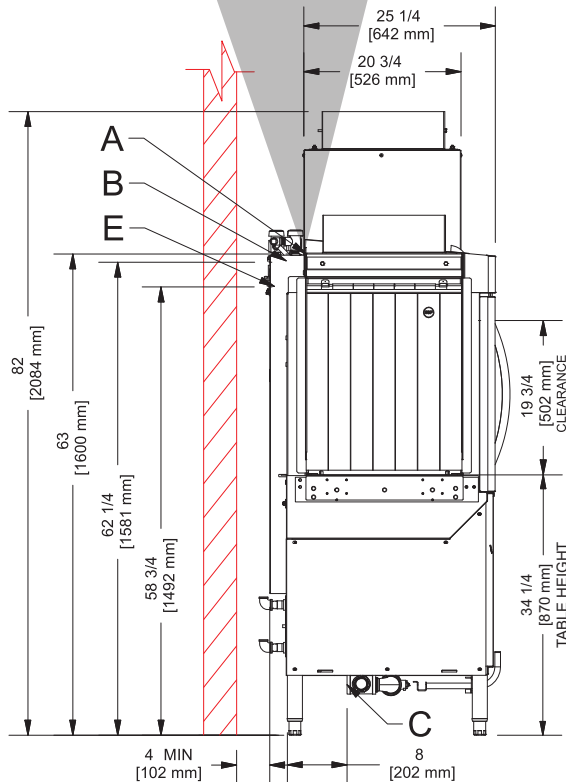
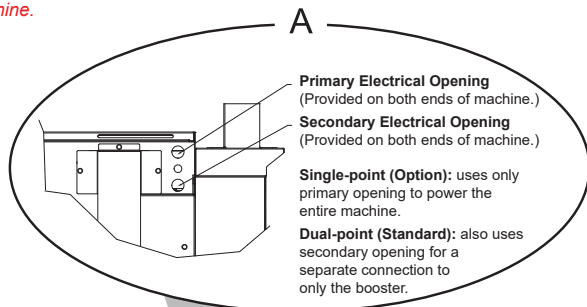
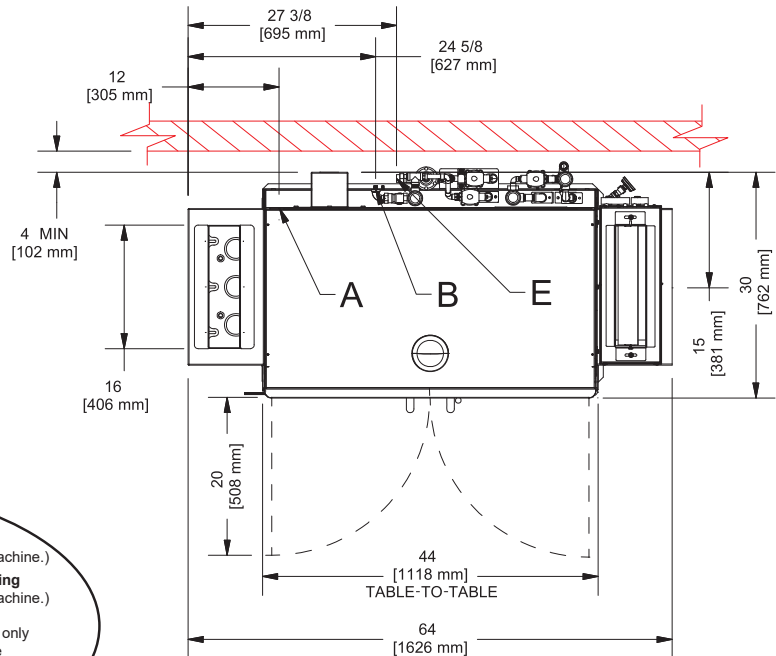
44" LEFT-TO-RIGHT

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- D - Vent Connections
(Including Dampers)
- E - Energy Recovery Water Inlet
(1/2" NPT, 55 °F MIN)
- — — — — Open Door
- - - - - High Hood Option

All dimensions from the floor can be increased 1 3/4" using the machine's adjustable feet.

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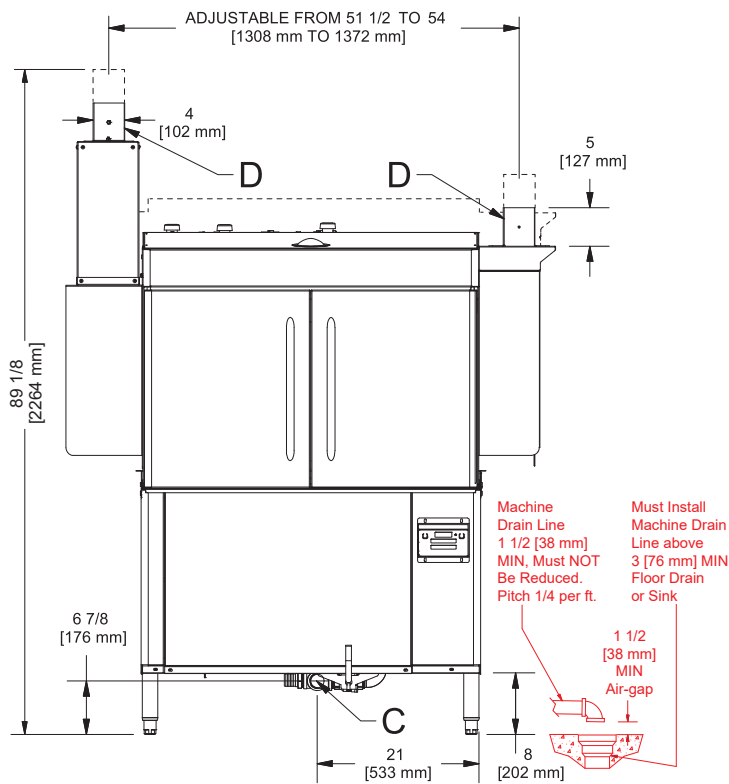
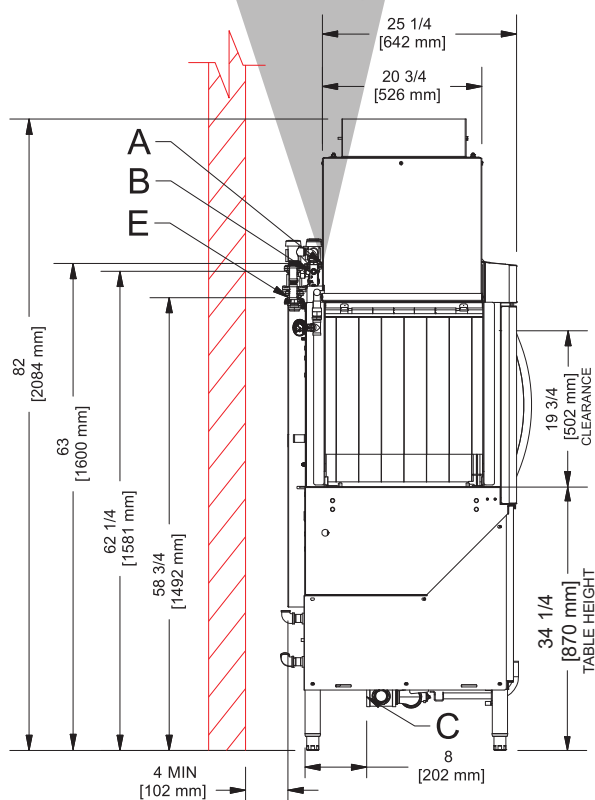
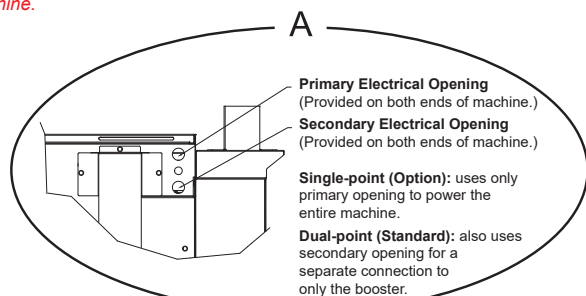
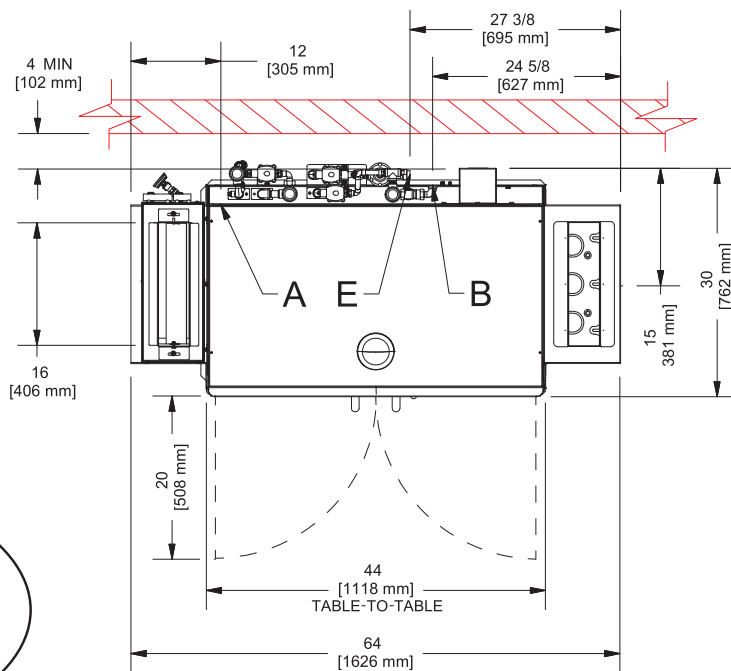
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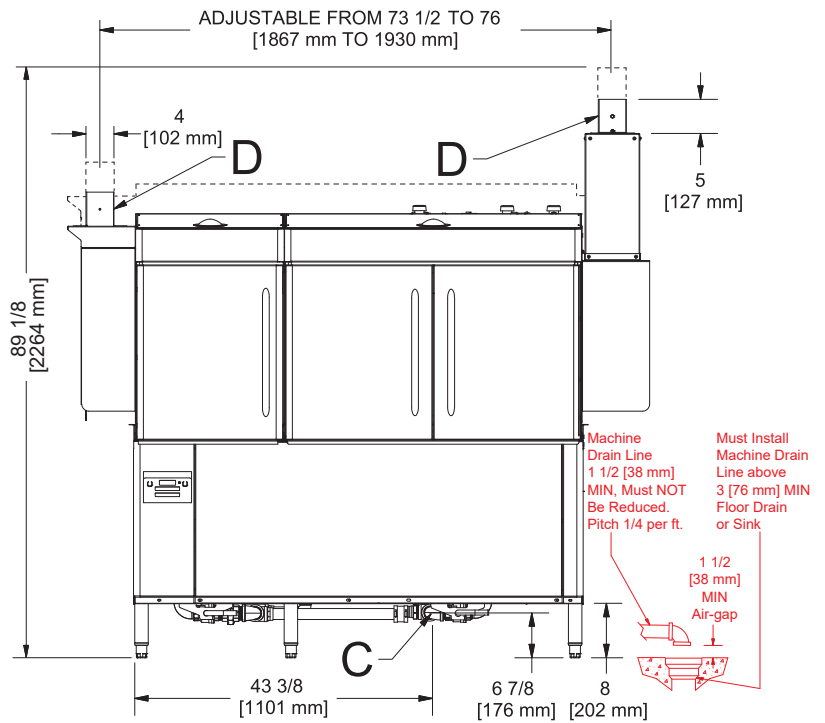
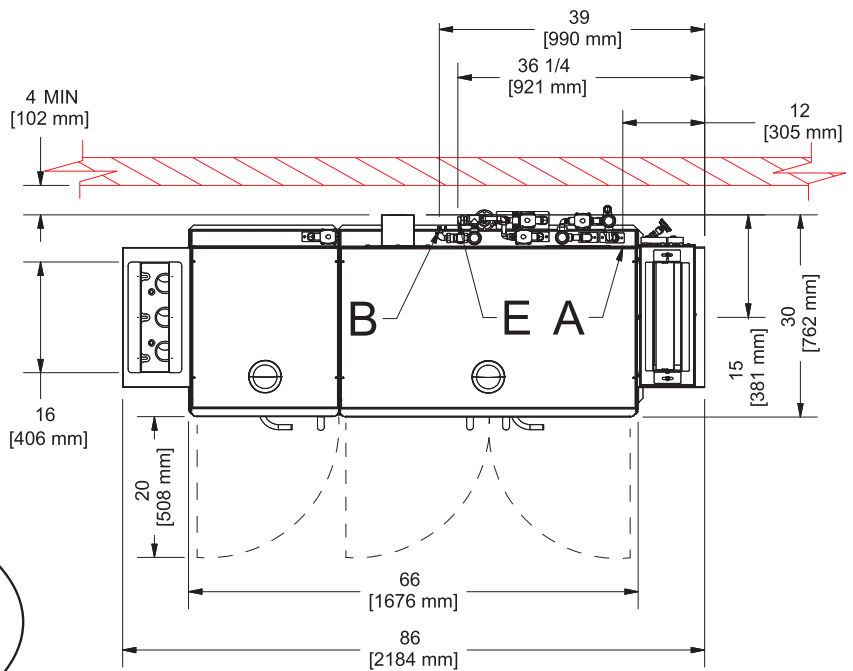
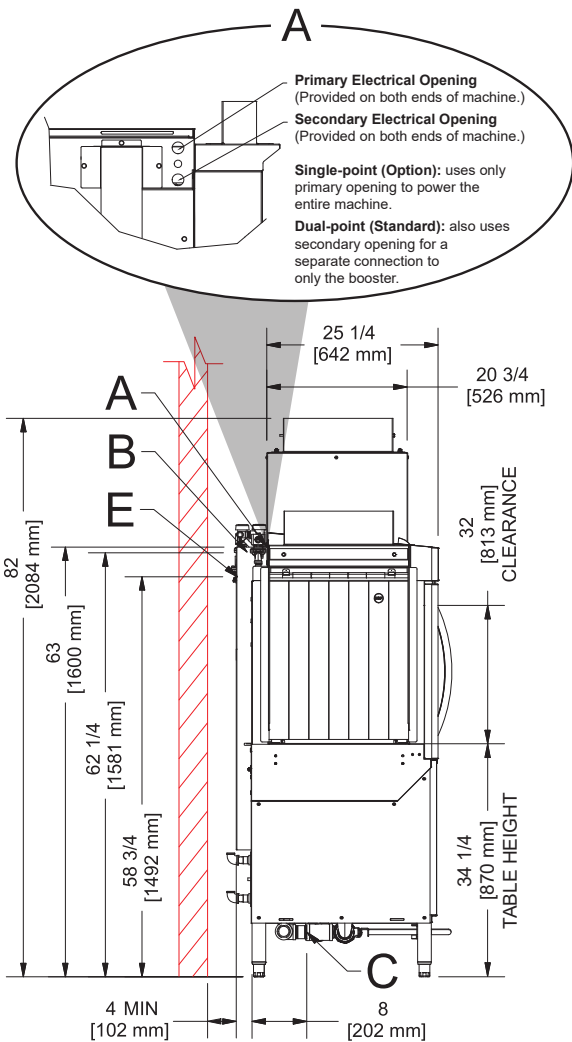
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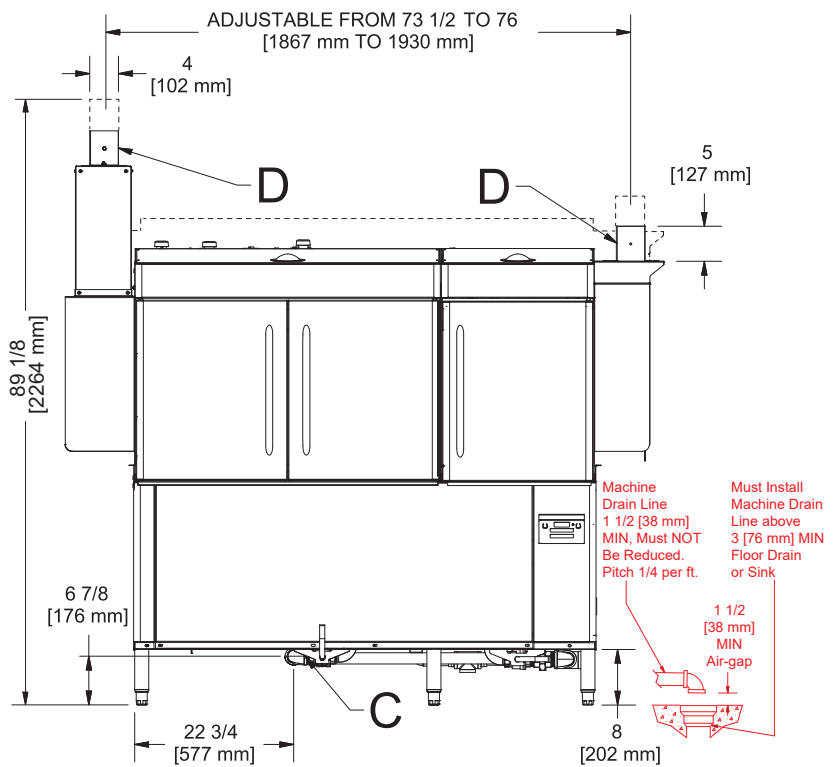
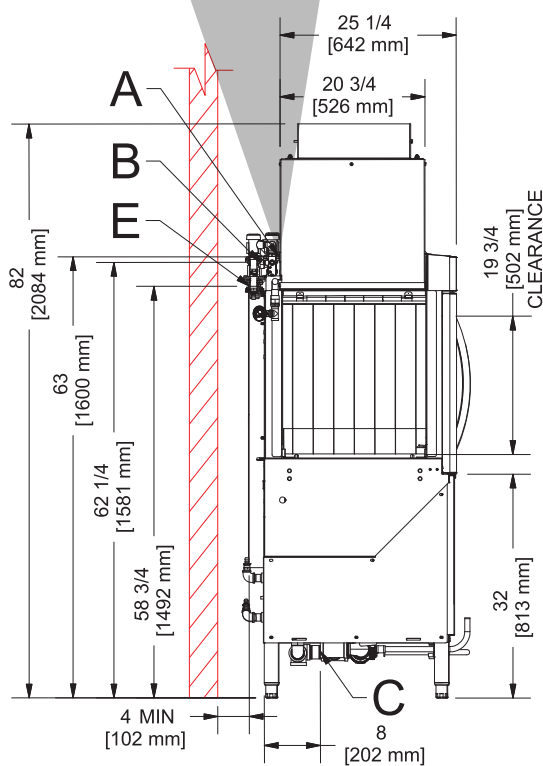
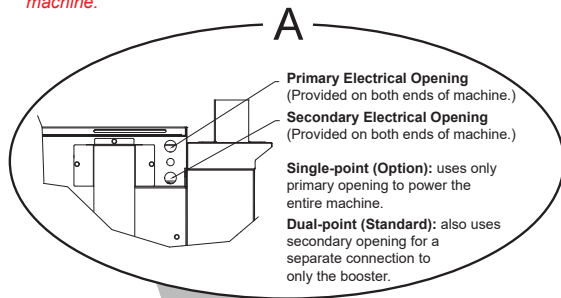
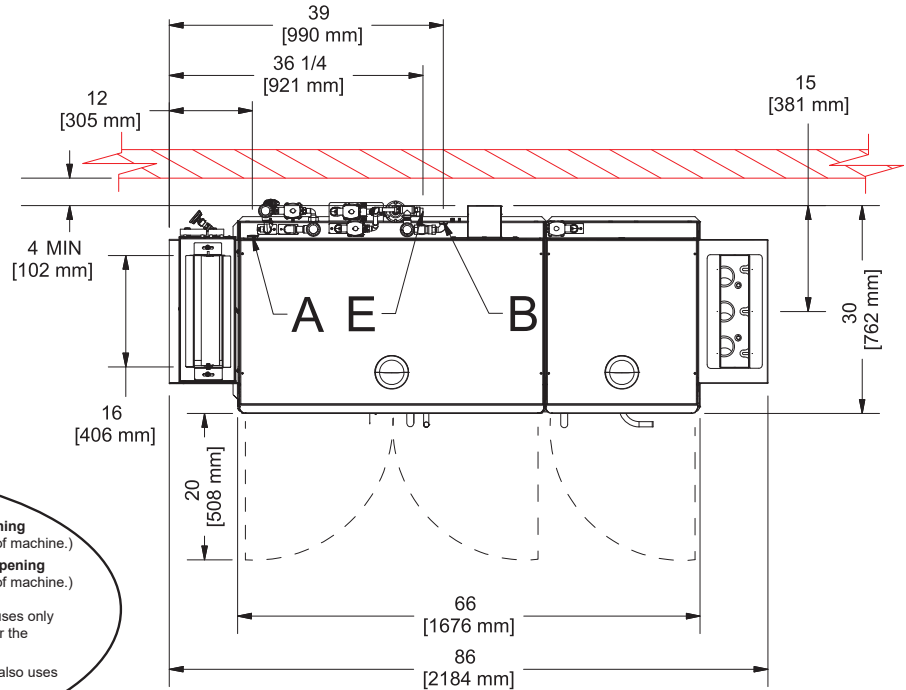
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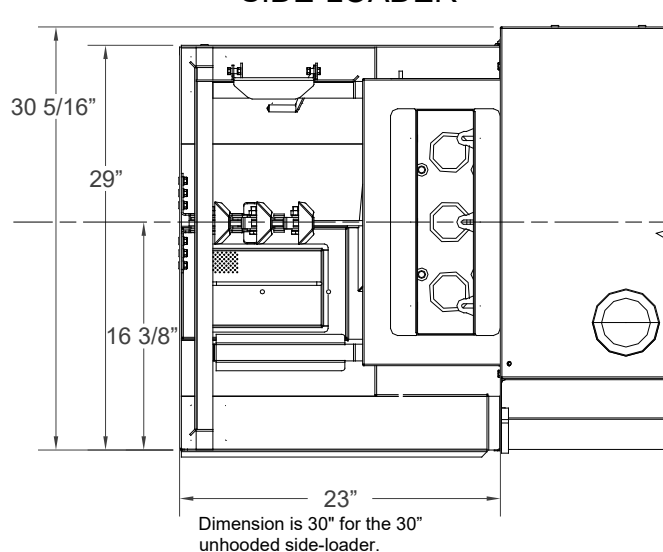
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- - High Hood Option

All dimensions from the floor can be increased 1 3/4" using the machine's adjustable feet.

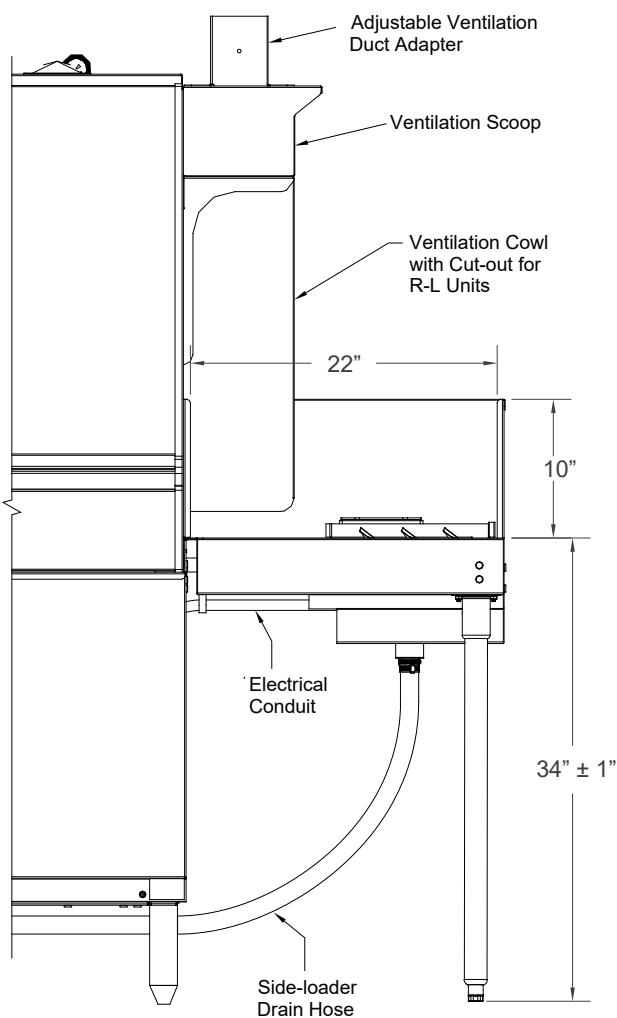
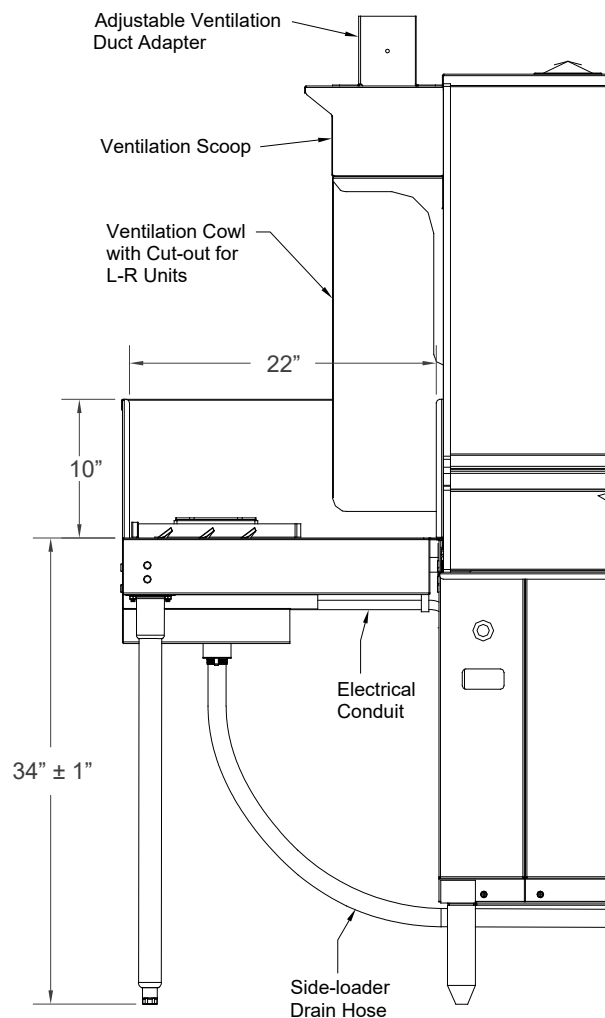
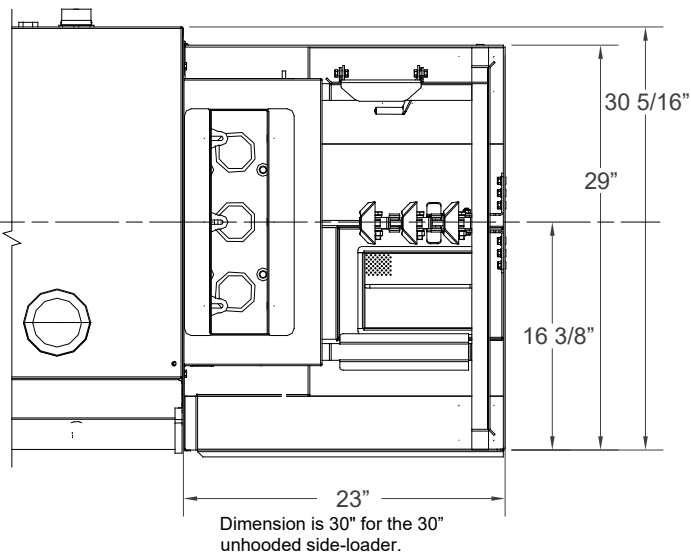
Items in red are not supplied with the machine.

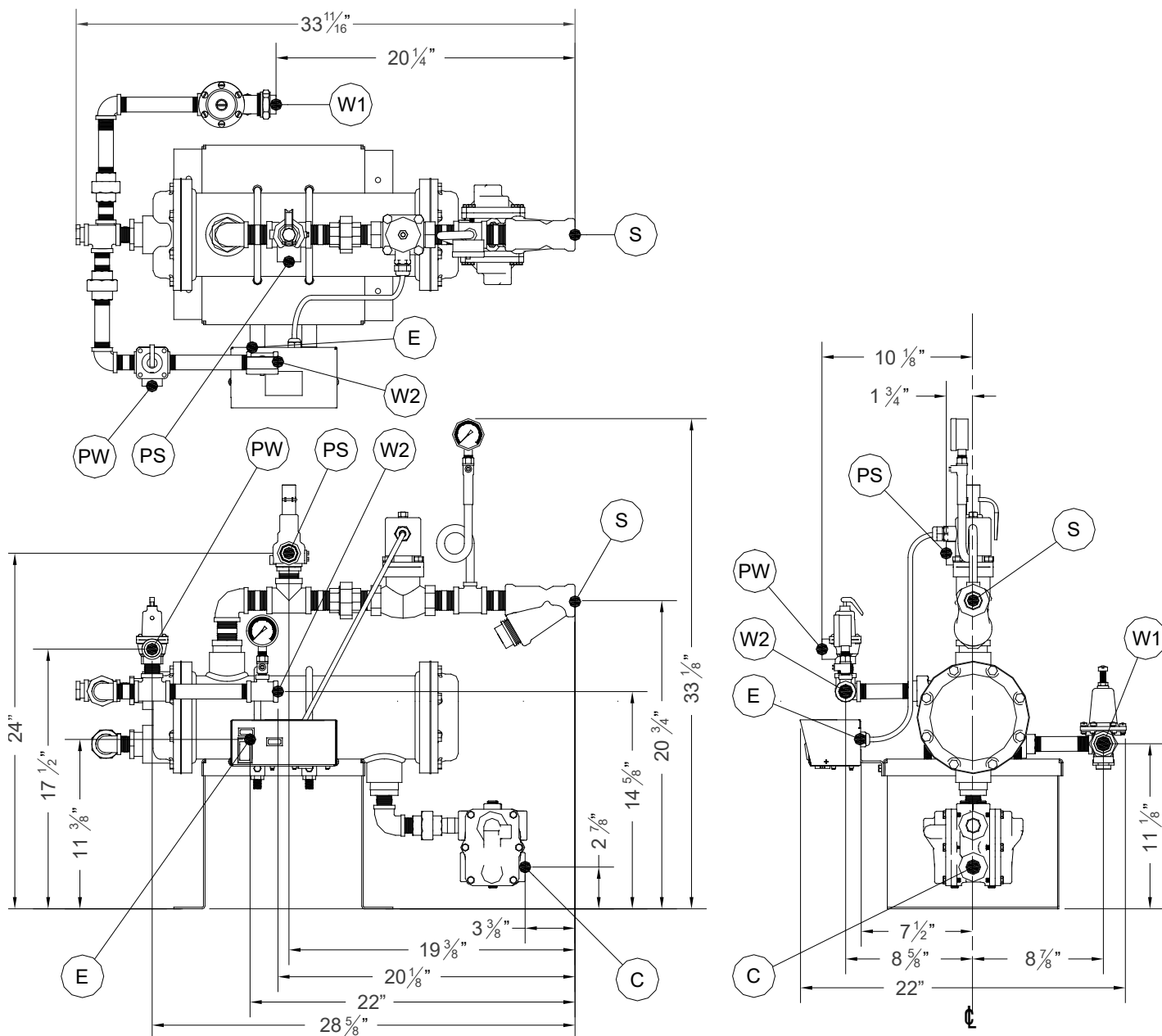


23" L-R UNHOODED
SIDE-LOADER



23" R-L UNHOODED
SIDE-LOADER





Click [here](#) for the Steam Booster manual.



E	Main Electrical Connection (7/8" Hole)
W1	Main Inlet Water Connection (3/4" NPT, 110 °F MIN, 20 ± 5 PSI)
W2	Water Outlet Connection (3/4" NPT)
PW	Water Pressure Relief Outlet (3/4" NPT)

PS	Steam Pressure Relief Outlet (1" NPT)
S	Steam Supply to Booster (1" NPT)
C	Steam Condensate Connection (3/4" NPT)

Operating Capacity:	RackStar 44	RackStar 66	RackStar 44S	RackStar 66S	RackStar 44ER	RackStar 66ER
Racks per Hour	223	223	223	223	223	223
Dishes per Hour	5,575	5,575	5,575	5,575	5,575	5,575
Glasses per Hour	8,028	8,028	8,028	8,028	8,028	8,028

Tank Capacity (Gallons):	RackStar 44	RackStar 66	RackStar 44S	RackStar 66S	RackStar 44ER	RackStar 66ER
Wash Tank	25	25	25	25	25	25
Pre-wash Tank	N/A	15.8	N/A	15.8	N/A	15.8

Electrical Loads:	RackStar 44	RackStar 66	RackStar 44S	RackStar 66S	RackStar 44ER	RackStar 66ER
Wash Motor HP	3	3	3	3	3	3
Drive Motor HP	1/4	1/4	1/4	1/4	1/4	1/4
Pre-wash Motor HP	N/A	2	N/A	2	N/A	2
Wash Heater kW	15	15	N/A	N/A	15	15
Booster Heater kW	40°↑ 12	70°↑ 18*	40°↑ 12	70°↑ 18*	N/A	N/A

*On 208/60/3 machines, the booster heater is rated at 17.2 kW.

NOTICE

Always refer to the machine data plate for specific electrical and water requirements.

The material provided on this page is for reference only and may change without notice.

**HOT-WATER SANITIZING
Water Temperatures (°F):**

	RackStar 44	RackStar 66	RackStar 44S	RackStar 66S	RackStar 44ER	RackStar 66ER
Pre-wash Temperature	N/A	110-140	N/A	110-140	N/A	110-140
Minimum Wash Temperature	160	160	160	160	160	160
Incoming Rinse Temperature	180	180	180	180	180	180
Minimum Incoming Water Temperature						
12 kW Booster (40° Rise)	140	140	N/A	N/A	N/A	N/A
18 kW Booster (70° Rise)	110	110	N/A	N/A	N/A	N/A
27 kW Booster (ER Only)	N/A	N/A	N/A	N/A	110	110
No Booster	180	180	180 (from Steam Booster)	180 (from Steam Booster)	N/A	N/A
Minimum Incoming Cold Water Temperature (ER Units Only)	N/A	N/A	N/A	N/A	55	55

**CHEMICAL SANITIZING
Water Temperatures (°F):**

	RackStar 44	RackStar 66	RackStar 44S	RackStar 66S	RackStar 44ER	RackStar 66ER
Pre-wash Temperature	N/A	110-140	N/A	N/A	N/A	N/A
Minimum Wash Temperature	120	120	N/A	N/A	N/A	N/A
Incoming Rinse Temperature	120	120	N/A	N/A	N/A	N/A
Minimum Incoming Water Temperature	110	110	N/A	N/A	N/A	N/A

Other Water Requirements:

	RackStar 44	RackStar 66	RackStar 44S	RackStar 66S	RackStar 44ER	RackStar 66ER
Water Flow Pressure (PSI)	15	15	15	15	15	15
Flow Rate Minimum (GPM)	1.3	1.3	1.3	1.3	1.3	1.3
Water Line Size (NPT)	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Drain Line Size (NPT)	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"

Steam Requirements:

	RackStar 44	RackStar 66	RackStar 44S	RackStar 66S	RackStar 44ER	RackStar 66ER
Steam Line for Wash Tank (NPT)	N/A	N/A	3/4"	3/4"	N/A	N/A
Steam Flow Pressure (PSI)	N/A	N/A	10-30	10-30	N/A	N/A
Consumption @ 15 PSI (lbs/hr)	N/A	N/A	60	60	N/A	N/A

NOTICE

Always refer to the machine data plate for specific electrical and water requirements.
The material provided on this page is for reference only and may change without notice.

ELECTRICAL
REQUIREMENTS

All electrical ratings provided in this manual are for reference only. Always refer to the machine data plate to get the exact electrical information for this machine. **All electrical work performed on machines should be done in accordance with applicable local, state, territorial, and national codes.** Work should only be performed by qualified electricians and authorized service agents.

NOTICE *All electrical wiring used in the dish machine must be rated, at a minimum, for 212 °F (100 °C), and only copper conductors must be used.*

Where applicable, heating element amperage draws have been adjusted for the assumed input voltage. The manufacturer assumes incoming voltages will be either 208, 230, or 460 Volts. Some of the heating elements used in our machines are actually rated for other voltages, such as 240 or 480 Volts. Always verify the amperage draw of the machine in operation when sizing circuit protection.



If the machine is equipped with a booster heater, note the heater has its own electrical connection and therefore requires a separate service (single-point connection is available as an option on three-phase machines only). Amperage loads for motors and heaters are listed on the machine data plate for the installation/service technician.

The electrical configurations of the machines are as follows:

Available Electrical Characteristics:

- 208 V, 60 Hz, Three-phase
- 230 V, 60 Hz, Three-phase
- 460 V, 60 Hz, Three-phase
- 600 V, 60 Hz, Three-phase

Available Wash Tank Heaters:

- 15 kW

Available Booster Tank Heaters:

- None (standard)
- 12 kW (40 °F rise in temperature)
- 18 kW* (70 °F rise in temperature)
- 27 kW (ER unit only)

Booster heaters require a separate electrical connection unless the single-point option is selected.

**On 208/60/3 machines, the booster heater is rated at 17.2 kW.*



Local codes may require more stringent protection than what is displayed here and on the data plate. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. Numbers in this manual are for reference and may change without notice. If using a third-party external booster, consult booster manufacturer for booster information. With dual-point connection (standard), Booster Heater has its own connection. Imbalanced wild leg goes to L3. Also see the Motor Rotation section.

RackStar 44 Dual-point Connection (Standard)

RackStar 44 - 70°↑

Machine Terminal Block

Volts	Phase	Freq	Wash Motor	Drive Motor	Wash Heater	Total Load	MCA	MOP
208	3	60 Hz	9.2 A	1.1 A	41.6 A	51.9 A	54.2 A	60 A
230	3	60 Hz	8.6 A	1.1 A	34.6 A	44.3 A	46.4 A	50 A
460	3	60 Hz	4.3 A	0.7 A	17.3 A	22.3 A	23.4 A	25 A

Booster Terminal Block

Booster Heater	MCA	MOP
47.9 A	49.2 A	50 A
43.3 A	44.6 A	45 A
21.7 A	23.0 A	25 A

RackStar 44 - 40°↑

Machine Terminal Block

Volts	Phase	Freq	Wash Motor	Drive Motor	Wash Heater	Total Load	MCA	MOP
208	3	60 Hz	9.2 A	1.1 A	41.6 A	51.9 A	54.2 A	60 A
230	3	60 Hz	8.6 A	1.1 A	34.6 A	44.3 A	46.4 A	50 A
460	3	60 Hz	4.3 A	0.7 A	17.3 A	22.3 A	23.4 A	25 A

Booster Terminal Block

Booster Heater	MCA	MOP
33.3 A	34.6 A	35 A
28.9 A	30.2 A	35 A
14.4 A	15.7 A	20 A

RackStar 44 - ER

Machine Terminal Block

Volts	Phase	Freq	Wash Motor	Drive Motor	Wash Heater	Total Load	MCA	MOP
208	3	60 Hz	9.2 A	1.1 A	41.6 A	51.9 A	54.2 A	60 A
230	3	60 Hz	8.6 A	1.1 A	34.6 A	44.3 A	46.4 A	50 A
460	3	60 Hz	4.3 A	0.7 A	17.3 A	22.3 A	23.4 A	25 A

Booster Terminal Block

Booster Heater	MCA	MOP
74.9 A	76.2 A	80 A
65.0 A	66.3 A	70 A
32.5 A	33.8 A	35 A

SPECIFICATIONS



ELECTRICAL REQUIREMENTS

Local codes may require more stringent protection than what is displayed here and on the data plate. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. Numbers in this manual are for reference and may change without notice. If using a third-party external booster, consult booster manufacturer for booster information. With dual-point connection (standard), Booster Heater has its own connection. Imbalanced wild leg goes to L3. Also see the Motor Rotation section.

RackStar 66 Dual-point Connection (Standard)

RackStar 66 - 70°†

Volts	Phase	Freq	PW Motor	Wash Motor	Drive Motor	Wash Heater	Total Load	MCA	MOP
208	3	60 Hz	6.2 A	9.2 A	1.1 A	41.6 A	58.1 A	60.4 A	65 A
230	3	60 Hz	6.2 A	8.6 A	1.1 A	34.6 A	50.5 A	52.6 A	60 A
460	3	60 Hz	3.1 A	4.3 A	0.7 A	17.3 A	25.4 A	26.5 A	30 A

Booster Heater	MCA	MOP
47.9 A	49.2 A	50 A
43.3 A	44.6 A	45 A
21.7 A	23.0 A	25 A

RackStar 66 - 40°†

Volts	Phase	Freq	PW Motor	Wash Motor	Drive Motor	Wash Heater	Total Load	MCA	MOP
208	3	60 Hz	6.2 A	9.2 A	1.1 A	41.6 A	58.1 A	60.4 A	65 A
230	3	60 Hz	6.2 A	8.6 A	1.1 A	34.6 A	50.5 A	52.6 A	60 A
460	3	60 Hz	3.1 A	4.3 A	0.7 A	17.3 A	25.4 A	26.5 A	30 A

Booster Heater	MCA	MOP
33.3 A	34.6 A	35 A
28.9 A	30.2 A	35 A
14.4 A	15.7 A	20 A

RackStar 66 - ER

Volts	Phase	Freq	PW Motor	Wash Motor	Drive Motor	Wash Heater	Total Load	MCA	MOP
208	3	60 Hz	6.2 A	9.2 A	1.1 A	41.6 A	58.1 A	60.4 A	65 A
230	3	60 Hz	6.2 A	8.6 A	1.1 A	34.6 A	50.5 A	52.6 A	60 A
460	3	60 Hz	3.1 A	4.3 A	0.7 A	17.3 A	25.4 A	26.5 A	30 A

Booster Heater	MCA	MOP
74.9 A	76.2 A	80 A
65.0 A	66.3 A	70 A
32.5 A	33.8 A	35 A



Local codes may require more stringent protection than what is displayed here and on the data plate. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. Numbers in this manual are for reference and may change without notice. With single-point connection (option), Booster Heater shares a connection with machine. Imbalanced wild leg goes to L3. Also see the Motor Rotation section.

RackStar 44 Single-point Connection (Option)

RackStar 44 - 70°↑

Volts	Phase	Freq	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	9.2 A	1.1 A	41.6 A	47.9 A	99.8 A	102.1 A	110 A
230	3	60 Hz	8.6 A	1.1 A	34.6 A	43.3 A	87.6 A	89.7 A	95 A
460	3	60 Hz	4.3 A	0.7 A	17.3 A	21.7 A	44.0 A	45.1 A	50 A

RackStar 44 - 40°↑

Volts	Phase	Freq	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	9.2 A	1.1 A	41.6 A	33.3 A	85.2 A	87.5 A	95 A
230	3	60 Hz	8.6 A	1.1 A	34.6 A	28.9 A	73.2 A	75.3 A	80 A
460	3	60 Hz	4.3 A	0.7 A	17.3 A	14.4 A	36.7 A	37.8 A	40 A

RackStar 44 - ER

Volts	Phase	Freq	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	9.2 A	1.1 A	41.6 A	74.9 A	126.8 A	129.1 A	140 A
230	3	60 Hz	8.6 A	1.1 A	34.6 A	65.0 A	109.3 A	111.4 A	120 A
460	3	60 Hz	4.3 A	0.7 A	17.3 A	32.5 A	54.8 A	55.9 A	60 A

RackStar 44 - NB

Volts	Phase	Freq	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	9.2 A	1.1 A	41.6 A	N/A	51.9 A	54.2 A	60 A
230	3	60 Hz	8.6 A	1.1 A	34.6 A	N/A	44.3 A	46.4 A	55 A
460	3	60 Hz	4.3 A	0.7 A	17.3 A	N/A	22.3 A	23.4 A	25 A

RackStar 44 - S

Volts	Phase	Freq	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	9.2 A	1.1 A	N/A	N/A	10.3 A	12.6 A	20 A
230	3	60 Hz	8.6 A	1.1 A	N/A	N/A	9.7 A	11.9 A	20 A
460	3	60 Hz	4.3 A	0.7 A	N/A	N/A	5.0 A	6.1 A	15 A



Local codes may require more stringent protection than what is displayed here and on the data plate. Always verify with your electrical service contractor that your circuit protection is adequate and meets all applicable national and local codes. Numbers in this manual are for reference and may change without notice. With single-point connection (option), Booster Heater shares a connection with machine. Imbalanced wild leg goes to L3. Also see the Motor Rotation section.

RackStar 66 Single-point Connection (Option)

RackStar 66 - 70°↑

Volts	Phase	Freq	PW Motor	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	6.2 A	9.2 A	1.1 A	41.6 A	47.9 A	106.0 A	108.3 A	115 A
230	3	60 Hz	6.2 A	8.6 A	1.1 A	34.6 A	43.3 A	93.8 A	95.9 A	100 A
460	3	60 Hz	3.1 A	4.3 A	0.7 A	17.3 A	21.7 A	47.1 A	48.2 A	50 A

RackStar 66 - 40°↑

Volts	Phase	Freq	PW Motor	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	6.2 A	9.2 A	1.1 A	41.6 A	33.3 A	91.4 A	93.7 A	100 A
230	3	60 Hz	6.2 A	8.6 A	1.1 A	34.6 A	28.9 A	79.4 A	81.5 A	90 A
460	3	60 Hz	3.1 A	4.3 A	0.7 A	17.3 A	14.4 A	39.8 A	40.9 A	45 A

RackStar 66 - ER

Volts	Phase	Freq	PW Motor	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	6.2 A	9.2 A	1.1 A	41.6 A	74.9 A	133.0 A	135.3 A	140 A
230	3	60 Hz	6.2 A	8.6 A	1.1 A	34.6 A	65.0 A	115.5 A	117.6 A	125 A
460	3	60 Hz	3.1 A	4.3 A	0.7 A	17.3 A	32.5 A	57.9 A	59.0 A	60 A

RackStar 66 - NB

Volts	Phase	Freq	PW Motor	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	6.2 A	9.2 A	1.1 A	41.6 A	N/A	58.1 A	60.4 A	65 A
230	3	60 Hz	6.2 A	8.6 A	1.1 A	34.6 A	N/A	50.5 A	52.6 A	60 A
460	3	60 Hz	3.1 A	4.3 A	0.7 A	17.3 A	N/A	25.4 A	26.5 A	30 A

RackStar 66 - S

Volts	Phase	Freq	PW Motor	Wash Motor	Drive Motor	Wash Heater	Booster Heater	Total Load	MCA	MOP
208	3	60 Hz	6.2 A	9.2 A	1.1 A	N/A	N/A	16.5 A	18.8 A	25 A
230	3	60 Hz	6.2 A	8.6 A	1.1 A	N/A	N/A	15.9 A	18.1 A	25 A
460	3	60 Hz	3.1 A	4.3 A	0.7 A	N/A	N/A	8.1 A	9.2 A	15 A

INSPECTION

Do not throw away the packaging if damage is evident!

Before installing the machine, check packaging and machine for damage. Damaged packaging is an indication there is possible damage to the product. If there is any type of damage to both the packaging and the machine, **DO NOT THROW AWAY THE PACKAGING**. The machine has been previously inspected at the factory and is expected to arrive in new, undamaged condition. However, rough handling by carriers or others might result in damage to the machine while in transit. If this occurs, **DO NOT RETURN THE MACHINE TO THE MANUFACTURER**. Instead, contact the carrier and ask them to send a representative to the site to inspect the damage and request that an inspection report be completed. Contact the carrier and dealer that sold you the unit within 48 hours of receiving the machine and report possible freight damage.

UNPACKING

The machine should be unpacked and removed from the pallet before installing. Remove the wooden lift beams and their associated brackets after the unit has been positioned. Open the front door and remove all materials from inside. Once unpacked, verify there are no missing parts. If a part is missing, contact the manufacturer immediately.

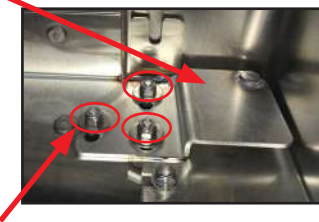
LEVELING

The machine is designed to operate while level. This is important to prevent any damage to the machine during operation and to ensure the best results. The machine comes equipped with adjustable bullet feet, which can be turned using a pair of pliers. Verify the machine is level from front-to-back and side-to-side before making any electrical or plumbing connections.

ADJUSTING DOORS

A level machine is important for proper door function as well. If the machine is level and doors are still not functioning properly:

1. Identify the top door hinges, located in the top-front of the machine.



2. Loosen the three nuts on each hinge, which allow the doors to be adjusted.
3. Adjust the doors to their proper position.
4. Tighten-down the three nuts on each hinge.

PLUMBING

*The plumber **MUST** flush the incoming water line!*

All plumbing connections must adhere to local, state, territorial, and national codes. The installing plumber is responsible for ensuring the incoming water lines are flushed of debris before connecting the machine. Note that chips and materials from cutting processes can become lodged in the solenoid valves and prevent them from opening or closing. Any valves that are found to be fouled or defective because of foreign matter left in the water line and any subsequent water damage are not the responsibility of the manufacturer.

PLUMBING

**A water hardness test
MUST be performed.**

If water hardness tests at greater than 3 GPG, install the Scaltrol Water Treatment system (see the Plumbing Options page) into the water line before the machine's incoming water connection point. If water hardness tests at lower than 3 GPG, install the water supply line directly to the machine's incoming water connection point. Iron in the water line can cause staining. A filter designed to remove iron from the water supply is highly recommended for supplies in excess of 0.1 ppm.

The manufacturer has an optional water pressure regulator (**supplied on ER units only**) to accommodate areas where water pressure fluctuates or is higher than the recommended pressure (see the Plumbing Options page). The machine uses a flow pressure of 15 PSI for the incoming water line. Do not confuse static pressure with flow pressure. Static pressure occurs when there is no flow and the valves are closed. Flow pressure occurs when water is running into the machine. The pressure regulator should be adjusted to the proper flow pressure indicated on the data plate.

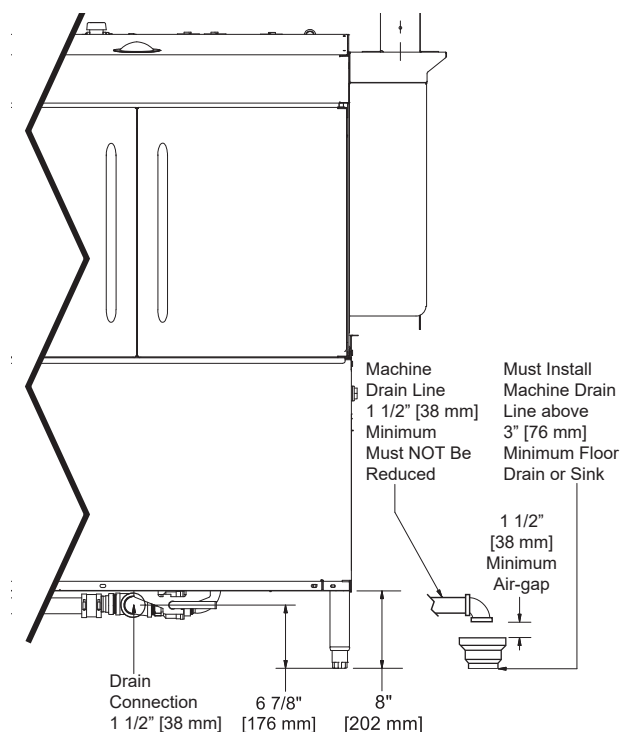


The water supply line must be 1/2" NPT minimum and must be able to provide water at the minimum temperature indicated on the machine data plate.

A shut-off valve (**not supplied**) should be installed to isolate the machine from the water system in the event service is required. An optional shock absorber (**not supplied**) should also be installed on the incoming water line (see the Plumbing Options page). This prevents water hammer (hydraulic shock) from causing damage to the equipment.

DRAIN LINE CONNECTION

The drain for the machine is a gravity-discharge drain. All piping to the machine drain must be a minimum 1 1/2" NPT and must not be reduced. There must be a minimum 1 1/2" air-gap between the machine drain line and the floor drain or sink. The floor drain or sink must be a minimum 3" NPT. If a grease trap is required by code, it should have a flow capacity of 5 GPM. 44" units have one drain connection point and 66" units have two (connected and drained into one facility floor drain or sink).



STEAM LINE CONNECTION



The steam machines come with lines to connect the source steam. Connect all steam lines to the machine as all applicable codes provide. See machine data plate for information concerning steam flow pressure.

Click [here](#) for the Steam Booster manual.

ELECTRICAL POWER CONNECTIONS

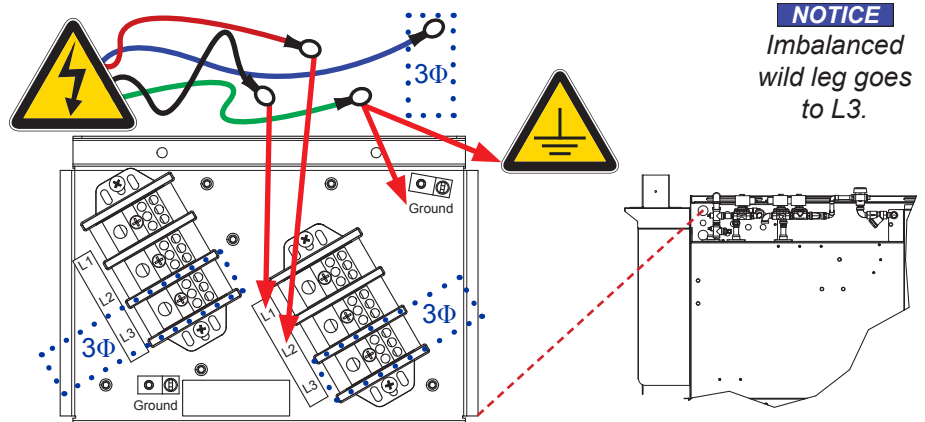


Disconnect electrical power at the breaker or disconnect switch and tag-out in accordance with procedures and codes.

All electrical connections must be made in accordance with applicable portions of local, state, territorial, and national codes.

Refer to the data plate for machine operating requirements, machine voltage, total amperage and serial number.

1. Locate main power terminal blocks (for the machine and for the rinse booster heater, for dual-point, one block for single-point) at the top of the machine.
2. Remove top cover to access terminal blocks.
3. Route incoming power lines within conduit that will connect via fittings to the pre-punched holes in the back of the control box.
4. Install power and ground wires to lugs as indicated by the appropriate decals in the control box. Use copper conductors only. Use of an anti-oxidation agent is permissible on the power connections.



5. Tighten all connections.
6. Verify incoming voltage matches the voltage indicated on the decal next to the incoming power pre-punched hole.

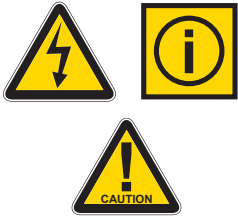


NOTICE For dual-point connection, machine has a separate power connection from the rinse booster heater and the circuit protection requirements are different for each. Refer to the machine data plate for information on minimum circuit protection.



CAUTION! Improperly connecting external devices can cause damage to the machine and/or electrical infrastructure! See the External Device Wiring section.

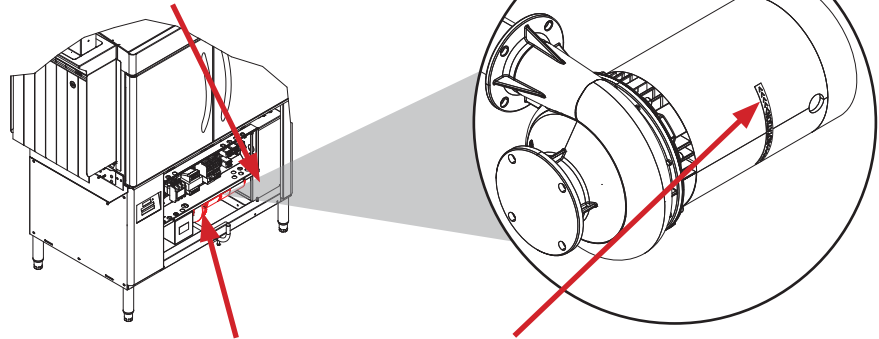
MOTOR ROTATION



CAUTION! On 3-Phase machines only, correct pump motor rotation must be verified before operation!

On 3-Phase machines only, correct pump motor rotation must be verified before the machine is operated. Failure to do so can result in damage to the machine and components.

1. Follow the "Power Up" section.
2. Remove the front panel of the machine.



3. Locate the wash pump motor and identify the arrow decal which shows the correct motor rotation (if no decal is present, correct rotation is toward back of machine).
4. Push the Delime Button on the display.
5. Observe rotation of the motor and quickly push the Delime Button again.
6. If rotation is incorrect, disconnect electrical power and reverse the L1 and L2 connections at terminal block shown in the previous section.

VENTILATION

The machine should be located with an adequate exhaust hood or ventilation system with provisions for venting. This is essential to permit efficient removal of the condensation exhaust. Ensure the exhaust system is acceptable in accordance with applicable codes and standards.

NOTICE Any damage caused by steam and/or moisture due to improper ventilation is NOT covered under the warranty.

Dishmachine ventilation requirements:

- **Load End: 200 CFM**
- **Unload End: 200 CFM**

The exhaust system must be sized to handle this volume for the machine to operate properly.

THERMOSTATS

The thermostats on this machine have been set at the factory for the wash tank and should only be adjusted by an authorized service agent.

TABLE LIMIT SWITCH OPTION

There are two Table Limit Switch options available. See the "Miscellaneous/Options" page for ordering information. Click on the instruction icons below for install guides.

Striker Switch



Whisker Switch



INSTALLATION

INSTRUCTIONS

CHEMICAL FEEDER EQUIPMENT



WARNING! *Some chemicals used in dishwashing can cause chemical burns if they come in contact with skin. Wear protective gear when handling these chemicals. If any skin comes in contact with these chemicals, immediately follow the instructions provided with the chemicals for treatment.*

This machine does not come with an integral chemical supply/feeder system. For the machine to operate correctly, connect it to a third-party chemical dispenser (see Connection Points section) that meets the requirements of NSF Standard 29. Contact a chemical supplier about connecting a dispenser to the machine. Chemical dispensers must be set for the type and concentration of chemicals being used.

Detergent usage and water hardness are two factors that contribute greatly to how efficiently the machine will operate. Using the proper amount of detergent can be a source of substantial savings. A qualified water treatment specialist can explain what is needed to gain the maximum efficiency from detergent.

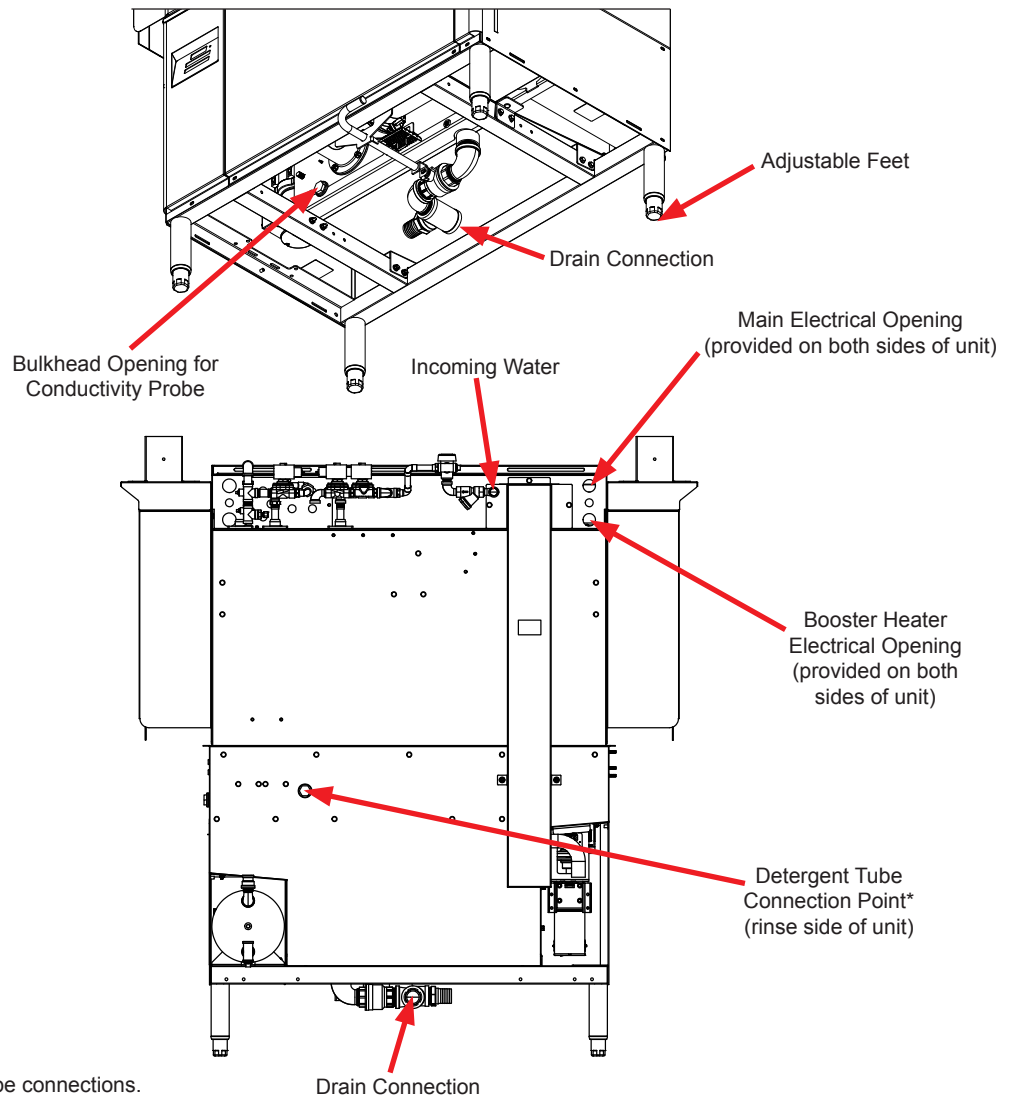
The machine can operate in either hot-water-sanitizing mode or chemical-sanitizing mode and comes configured for one or the other. The mode of the machine is marked above the machine's data plate.

If the machine is operated in chemical-sanitizing mode, ensure an appropriate chlorine-based sanitizer is used in the final rinse line.

CONNECTION POINTS

L-R unit shown.

L-R unit shown.



*See next page for rinse-aid and sanitizer tube connections.

07610-004-33-05-E

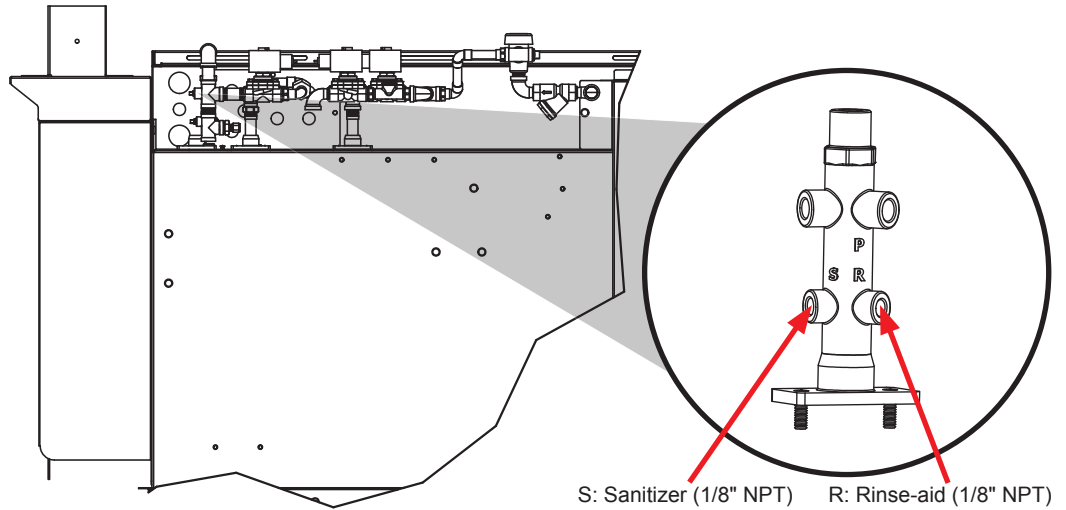
INSTALLATION

INSTRUCTIONS

CONNECTION POINTS

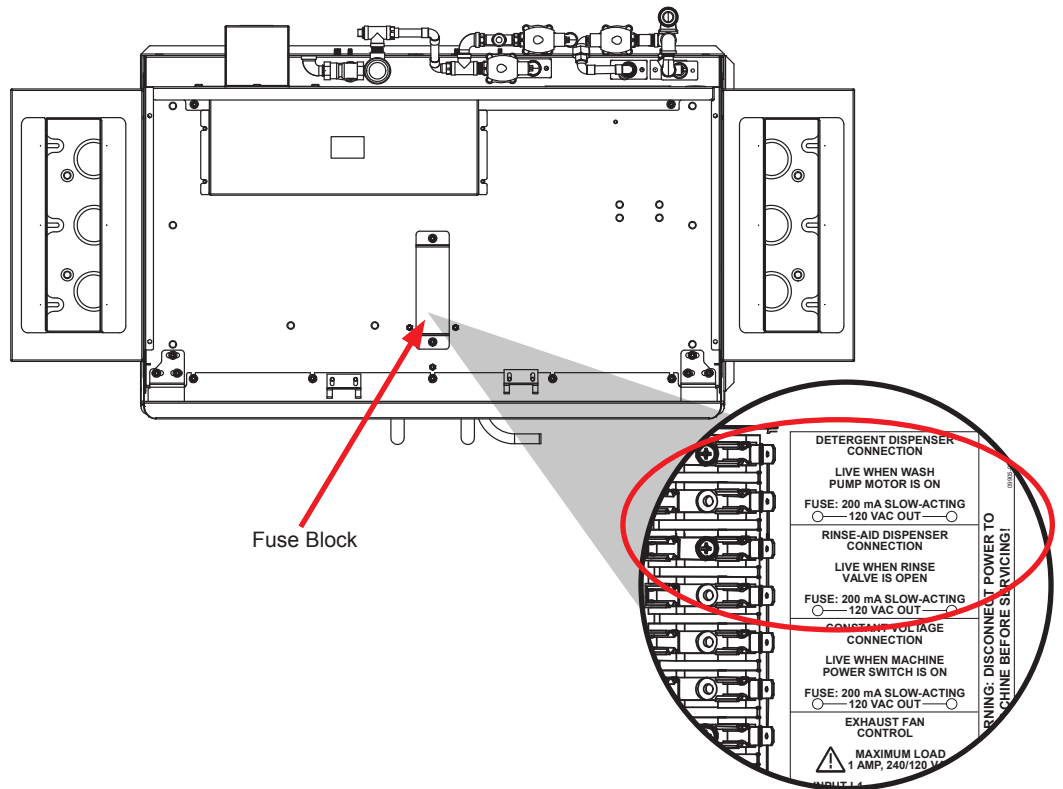
L-R unit shown.

Rinse-aid and sanitizer tube connections shown to the right.



L-R unit shown.

View of machine to the right is a top view with the panel removed.



Rinse-aid and detergent dispenser connections shown to the right.

EXTERNAL DEVICE WIRING



Click [here](#) for an external device (exhaust fan, etc.) wiring instruction sheet. The sheet can also be accessed by navigating to it on our website. Follow the instruction sheet carefully when wiring any external device.

EXHAUST FAN TIMER



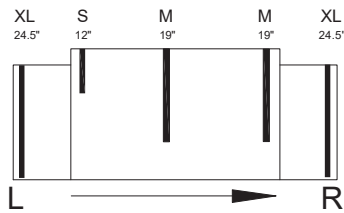
Click [here](#) for instructions on programming the exhaust fan timer. The instructions can also be accessed by navigating to them on our website.

The machine has decals marking the curtain locations inside the machine, starting at the load end and ending at the unload end. The illustrations below indicate the curtain size to be placed on the curtain hooks provided. If any curtain components are missing, they must be obtained and installed before operation.

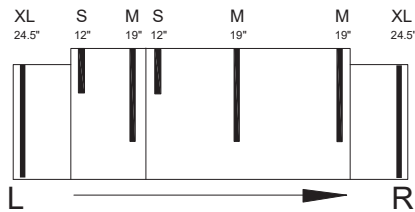
DETERMINING CONVEYER DIRECTION: The machine will be configured for either Left-to-Right or Right-to-Left operation. Direction is from the load end to the unload end, as shown below.

RackStar Low Hood

44

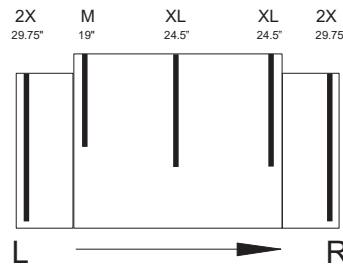


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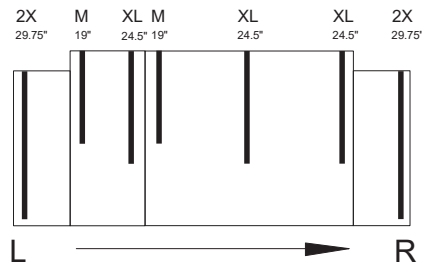


RackStar High Hood

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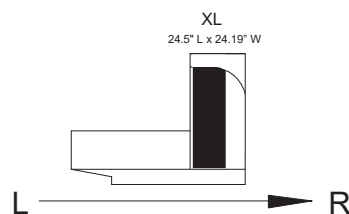


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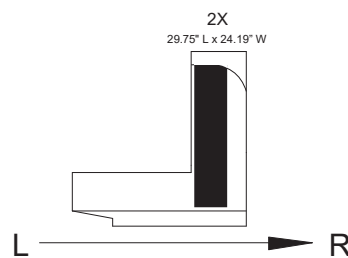


RackStar Sideloader

Low Hood



High Hood



IMPORTANCE OF PROPER CURTAIN PLACEMENT: The curtains inside the machine must be installed properly for the machine to operate correctly. Curtains are used to control air currents inside the machine and assist in maintaining the heat necessary to keep energy costs down. Note the approximate locations for each type of curtain in the above illustrations. See the chart below for actual curtain lengths and part numbers. Note the different part numbers for the curtain and curtain rod for the load end when a side-loader option is present.

Legend	Length	Part #
S	12"	08415-131-73-44
M	19"	08415-002-14-41
XL	24.25"	08415-002-47-37
2X	29.75"	08415-004-49-64
Curtain Rod	20.50"	05700-003-77-52

Side-loader Option	Part #
XL (Load End Only)	08415-003-84-88
2X (Load End Only)	08415-004-69-54
Curtain Rod (Load End Only)	05700-003-84-57

PREPARATION

Before operating the machine, verify the following:

- Strainers are installed.



- Drain valve is closed.



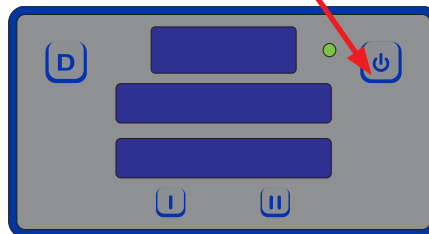
- Actuator switches move with relative freedom and do not bind.



- Curtains are installed correctly.

POWER UP

To place the machine in standby, press the Power Button on the display.



1. The machine will automatically determine if there is proper water level in the wash tank. If not, the machine will begin to fill until the appropriate level is reached.
2. If the wash tank temperature is not at the minimum level for the mode of operation, the wash heater will energize. Refer to the machine data plate for a better understanding of the minimum temperatures needed to operate the machine correctly. It might take several minutes for the wash tank to heat up, depending on the initial temperature of the water.
3. If the machine is equipped with a rinse booster option, the booster will turn on when the machine turns on.
4. If the machine is heated with a steam booster, the steam booster must be turned on in accordance with the manufacturer's instructions.
5. Do not attempt to start the machine until:
 - a. The machine stops filling.
 - b. The machine has reached the appropriate wash tank temperature.

FIRST RACK

The first rack of ware placed in the machine will typically reduce the temperature of the wash tank and might need to be run through again. This process might be necessary any time the machine has not been operated for an extended period of time, although this is dependent on the type of ware being used, its temperature, and the ambient temperature of the kitchen area. To ensure proper operation, always observe the temperatures of the wash and rinse when first starting the machine.

WARE PREPARATION

Proper preparation of ware is essential for the smooth, efficient operation of this machine.

Any ware placed in the machine should have all solid food waste and scraps removed. Ware should also be sprayed-down before entering the machine.

Place cups and glasses upside-down in racks so they don't hold water during the cycle. Pre-soak flatware in warm water to help remove food. Load plates and saucers in the same direction, with the food surface facing the unload end of the machine.

WASHING A RACK OF WARE

This machine is designed to wash ware that is placed in a rack. Materials should not be placed in the machine unless they are properly secured in a dish rack.

To start the cycle, gently push the rack into the machine on the load end. Once the wash actuator has moved sufficiently, the machine will automatically begin to convey the dish rack through the machine. The entire cycle is automatic.



OPERATIONAL INSPECTION



Operators should periodically review the following items while the machine is operating. These items are important for operating the machine efficiently.

- Review wash and rinse temperatures and compare to the minimums on the data plate.
- Verify the pan strainers are not becoming clogged. Keeping these free of soil and debris allows for better water flow through the machine and helps prevent redeposit issues.
- The machine is designed to run at a minimum of 15 PSI. If it is any lower there will not be enough rinse water to properly remove detergent from the ware.
- Wash and rinse-arm nozzles should be free of debris. Open nozzles are essential to the operation of the dishmachine.

SHUTDOWN & CLEANING



1. Turn machine off by pressing the Power Button.
2. Open access door and allow steam/heat to escape.
3. Turn drain handle to "OPEN" and allow tub to drain.

WARNING! Wash tank water will be hot.



4. Remove the strainers, hand-scrape foodsoil into trash, and spray with pre-rinse hose.



5. Rinse the float switch off, rinse the tank out, and inspect tank for debris.

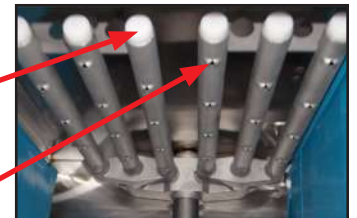


6. Remove curtains, scrub with mild detergent and brush, and allow to air-dry.



7. Wash & Rinse Arms:

- a. As needed, fill the tub with water.
- b. Remove the end-caps from the arms.
- c. Run an empty rack through the machine.
- d. If necessary:
 - i. Clean nozzles with a brush.
 - ii. Use a small wire or toothpick to remove remaining debris or lime deposits from the nozzles.
 - iii. Flush the arms with water.
 - iv. Replace end-caps and ensure they have been tightened.



Self-cleaning arms do not require daily cleaning.

SHUTDOWN & CLEANING

8. Spray or wipe out interior of machine.



9. Ensure the strainers, curtains, and wash and rinse arms are clean and securely in place.
10. Use stainless steel polish to clean and protect outside of machine.

DISPLAY INSTRUCTIONS

Rinse Modes

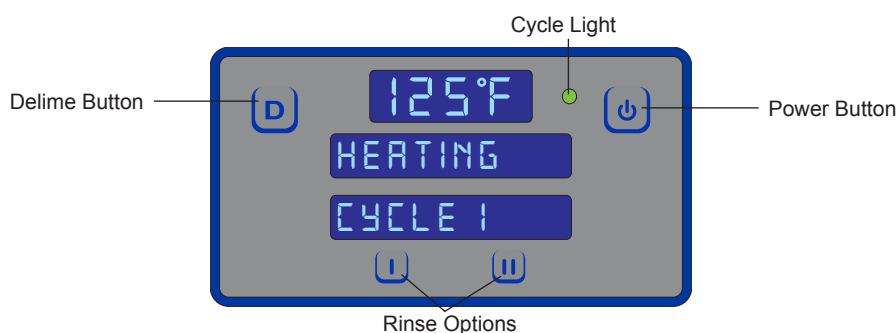
- Press the I Key for ECONO RINSE.
- Press the II Key for TURBO RINSE.

Checking Cycle Count

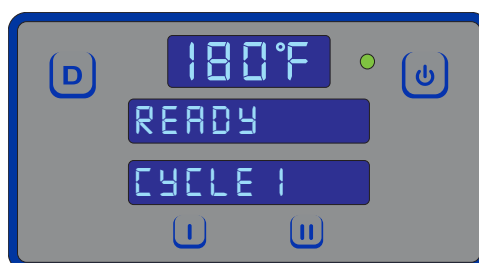
- While the machine is powered off, press and hold the Power Button. The total cycle count will display for several seconds, followed by a normal .ON state.

General

1. When main power is first connected to the machine, the digital display will sequence through its LEDs to show all are functional.
2. The machine will then go into Standby Mode (blank display).
3. Press the Power Button.
4. The display will show "Heating" until the wash tank reaches operating temperature.



5. The display will show "Ready" when the machine is ready to use.



DISPLAY INSTRUCTIONS

Operational Messages

DISPLAY	CONDITION
"Check doors"	One of the doors is not fully closed or one of the switches is not being triggered.
"Filling"	The wash tank is filling with water.
"Heating"	The machine is heating the water in the wash tank.
"Delime"	The Delime Button has been pressed.
"Ready"	The machine is ready for operation.
"Wash Temp"	A rack of dishes is progressing through the wash section.
Alternates "Wash Temp" & "Rinse Temp"	A rack of dishes is progressing through the rinse section.

DELINE INSTRUCTIONS



WARNING! Deliming solution can cause chemical burns. Follow instructions provided with deliming solution.

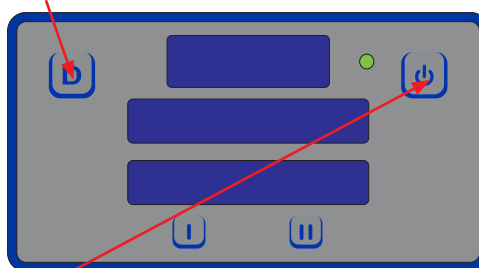
This equipment is not recommended for use with deionized water or other aggressive fluids. Use of deionized water or other aggressive fluids will result in corrosion and failure of materials and components. Use of deionized water or other aggressive fluids will void the manufacturer's warranty.

Consult chemical supplier's instructions before deliming the machine.

1. Disconnect or turn-off chemical feeder pumps.
2. Turn machine power off and drain the machine.
3. Make sure the machine is clean and all parts are in place.
4. Ensure doors are closed and then press Power Button to begin the filling process.
5. Fill machine with the correct amount of delime solution as recommended by the chemical supplier.
6. The wash tank holds 25 gallons and pre-wash tank holds 15.8 gallons of water.

After chemicals are added:

7. Make sure doors are closed.
8. Press Delime Button and run machine the length of time recommended by chemical supplier.
9. Press Delime Button again to stop the deliming process.



10. Press Power Button to shut the machine off.
11. Wait five minutes, open the doors and inspect inside of the machine. If the machine is not delimed, drain and re-fill the machine, then repeat steps 5–10.
12. When deliming is complete, drain and re-fill the machine. Then run the machine two cycles to remove residual deliming solution.
13. Drain and re-fill the machine.
14. Re-connect chemical feeder pumps.
15. The machine is ready to use.

**PREVENTATIVE
MAINTENANCE**

The manufacturer highly recommends that any maintenance and repairs not specifically discussed in this manual be performed only by **QUALIFIED SERVICE PERSONNEL**. Performing maintenance on your dishmachine may void your warranty, lead to larger problems, or even cause harm to the operator. So if you have a question or concern, do not hesitate to contact a **QUALIFIED SERVICE AGENCY**.

By following the operating and cleaning instructions in this manual, you should get the most efficient results from the machine. As a reminder, here are some steps to take to ensure the machine is being used the way it was designed to work:



1. Ensure that water temperatures match those listed on the machine data plate. There can be a variety of reasons why water temperature could be too low.
2. Ensure all strainers are clean and in place, laying flat, before operating the machine. When cleaning out strainers, do **NOT** beat them on waste cans. Wipe out strainers with a rag and rinse under a faucet if necessary. Use a toothpick to dislodge any stubborn debris.
3. Ensure all wash and rinse arms are secure in the machine before operating.
4. Ensure drains are closed before operating.
5. Remove as much soil from ware by hand as possible before loading into racks.
6. Do not overfill racks.
7. Ensure glasses are placed upside-down in the rack.
8. Ensure all chemicals being injected into machine have been verified at the correct concentrations.
9. Clean the machine every 24 hours or at the end of every workday per the instructions in this manual.
10. Follow all safety procedures, whether listed in this manual or put forth by local, state, or national codes/regulations.



WARNING! Inspection, testing, and repair of electrical equipment should only be performed by a qualified service technician. Many of the tests require that the unit have power to it and live electrical components be exposed. USE EXTREME CAUTION WHEN TESTING THE MACHINE.

OBSERVATION	POSSIBLE CAUSE	REMEDY
Dishmachine will not fill after the door is closed. Power "ON" light is illuminated.	<ol style="list-style-type: none"> 1. Faulty rinse solenoid valve. 2. Faulty door switch. 	<ol style="list-style-type: none"> 1. Repair or replace valve as required. 2. Verify the wiring of the switch; if correct, replace switch.
Dishmachine will not fill after the door is closed. Power "ON" light is NOT illuminated.	<ol style="list-style-type: none"> 1. Service breaker tripped. 2. Machine not connected to power source. 3. Faulty power source. 	<ol style="list-style-type: none"> 1. Reset; if the breaker trips again, contact an electrician to verify the amp draw of the machine. 2. Verify that the machine has been properly connected to the power source. 3. Verify working power source.
Dishmachine will not run after the door is closed. Power "ON" light is illuminated and the unit is filling.	<ol style="list-style-type: none"> 1. Wash motor faulty/damaged. 2. Wash motor contactor faulty. 	<ol style="list-style-type: none"> 1. Verify that the wash motor is getting power; if so, replace the motor. 2. Check for continuity; if contacts are open, replace the contactor.
Dishmachine runs continuously in the wash cycle.	<ol style="list-style-type: none"> 1. Machine is in Delime mode. 	<ol style="list-style-type: none"> 1. Select an automatic cycle by choosing I or II on the display.
Wash heater does not work.	<ol style="list-style-type: none"> 1. Faulty heater element. 2. Faulty heater contactor. 	<ol style="list-style-type: none"> 1. Check element for continuity; if open, replace the heater. 2. Replace the contactor.
Dishmachine fills slowly and/or the rinse is weak.	<ol style="list-style-type: none"> 1. Clogged or obstructed rinse arms. 2. Low incoming water pressure. 3. Y-strainer is clogged 	<ol style="list-style-type: none"> 1. Remove and clean the rinse arms. 2. Adjust the water pressure regulator to ensure that there is 15 PSI flow. 3. Clean out the Y-strainer.



WARNING! Inspection, testing, and repair of electrical equipment should only be performed by a qualified service technician. Many of the tests require that the unit have power to it and live electrical components be exposed. USE EXTREME CAUTION WHEN TESTING THE MACHINE.

OBSERVATION	POSSIBLE CAUSE	REMEDY
No indication of pressure.	1. Water turned off. 2. Pressure transducer disconnected. 3. Pressure transducer defective.	1. Turn water on. 2. Verify wiring. 3. Replace pressure transducer.
Wash water is not reaching required temperature.	1. Faulty wash heater. 2. Wash thermometer is defective.	1. Check element for continuity; if open, replace the heater. 2. Replace thermometer.
Doors will not close completely.	1. Obstruction in door channel. 2. Machine not level.	1. Remove the obstruction. 2. Adjust the feet to level machine.
Water leaks at the wash pump.	1. Wash pump seal defective. 2. Pump drain hose not tight. 3. Loose hoses (hose clamps) on the wash pump.	1. Replace the seal. 2. Tighten. 3. Tighten the hose clamps.
Will not rinse.	1. Defective rinse solenoid. 2. Faulty timer. 3. No water to the machine.	1. Repair or replace the rinse solenoid. 2. Replace timer. 3. Verify that there is water at 15 PSI connected to the machine.
Dishes are not coming clean.	1. Machine temperatures are not up to the minimum requirements. 2. No detergent or too much detergent.	1. Verify that incoming water, rinse water, and wash water match the required temperatures listed on the machine data plate. 2. Adjust detergent concentration as required for the amount of water in the machine.

**PROGRAM
SELECTION MODE**

To access Program Selection Mode, the machine should be on and preferably not in operation (accessing this mode during operation will interrupt the process).

The programming buttons (Up-arrow, Down-arrow, and Select) are hidden on the display and are shown below outlined with red dots.

1. Press and hold the I and II Buttons until "Program" starts flashing (2–3 seconds).



2. Press the Select Button.
3. Use the Up-arrow Button to change the program number to "5" for low-temp machines or "6" for high-temp machines.



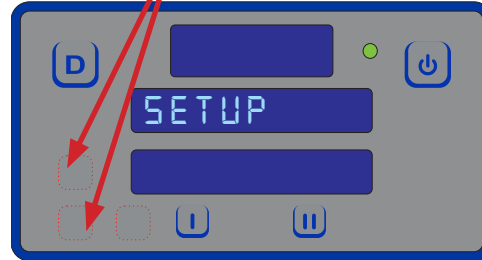
4. Press the Select Button.
5. "Program" will flash.
6. Press the Delime Button to exit.



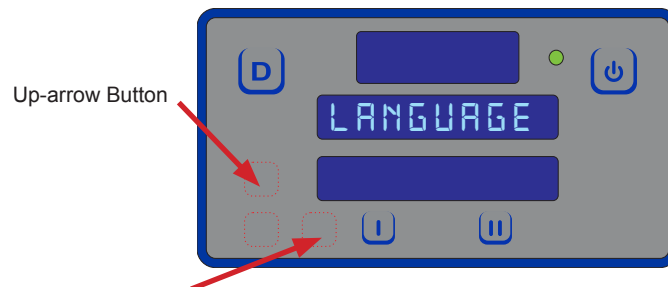
SETUP MODE

To access Setup Mode, the machine should be on and preferably not in operation (accessing this mode during operation will interrupt the process).

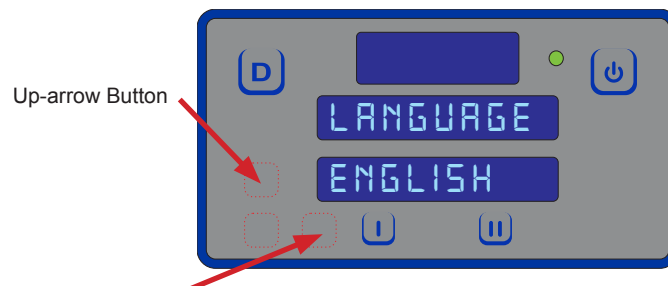
1. Press and hold the Up-arrow and Down-arrow Buttons until "Setup" starts flashing (2 - 3 seconds).



2. The display will then change to "Version" and show the firmware versions of the I/O module and UI board.
3. Use the Up-arrow Button to cycle through the categories (will be flashing).
 - Language
 - Temperature Scale
 - Wash Temperature
 - Boost Temperature
 - Wash Offset
 - Rinse Offset
 - Boost Offset
 - Spare Offset



4. Press the Select Button to choose the category you want to change.
 - Regardless of the category, Steps 5–7 remain the same.
5. Use the Up-arrow Button to change the options (will be flashing). Numerical options are shown in the top window.

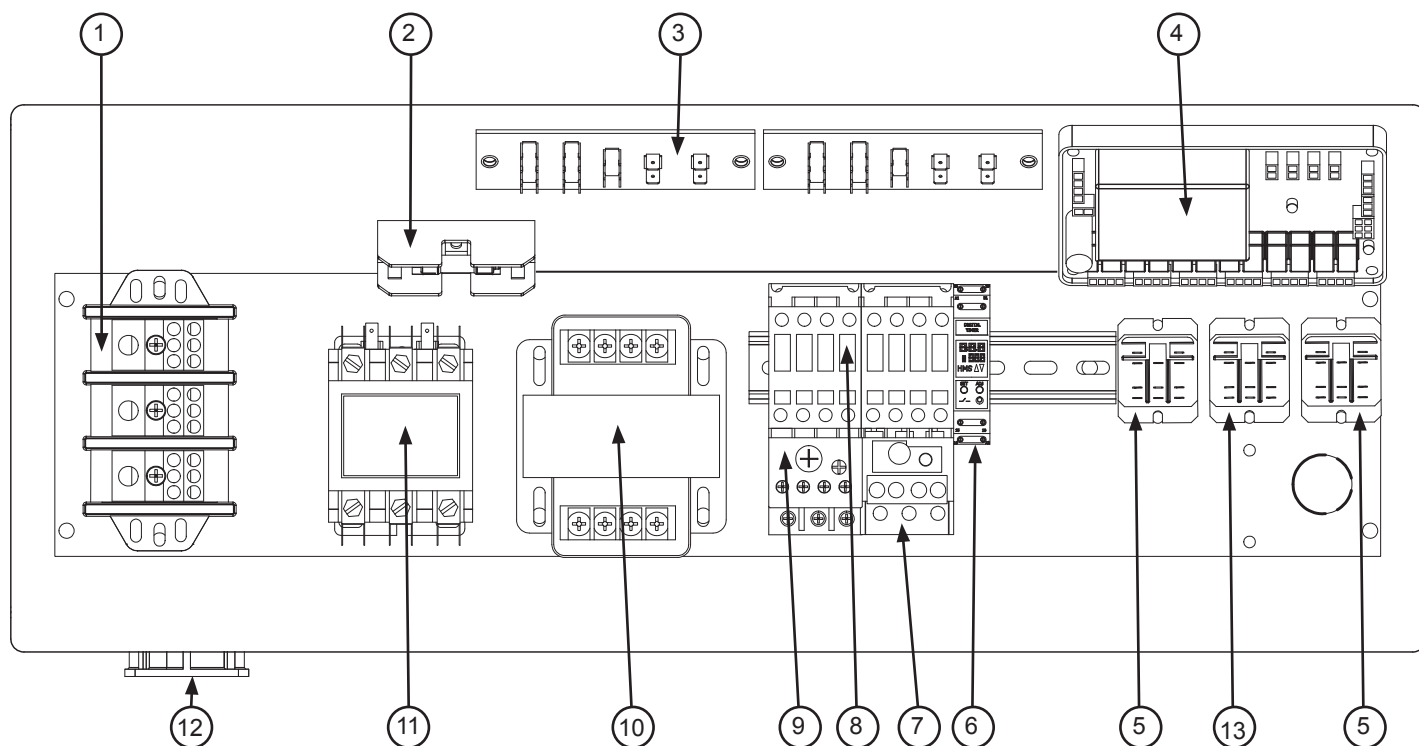


6. Press the Select Button to accept the changes.
7. Press the Delime Button to exit.

DISPLAY SHOWS	POSSIBLE CAUSES	REMEDY
"F4 Service needed," "Check incoming power"	<ol style="list-style-type: none"> 1. Incoming power not properly connected. 2. L3 is missing (3-phase units only). 	<ol style="list-style-type: none"> 1. Check connections to heater. 2. Verify that L3 is present and connected properly.
"F6 Service needed," "No water in wash tank"	<ol style="list-style-type: none"> 1. Low or no water pressure. 2. Faulty inlet valve or fill relay. 3. Contactor to wash heater not turning off. 4. Faulty temperature input (T1) on IO module. 5. Faulty temperature probe (T1). 6. Faulty float switch allows heaters to operate with no water in tub. 	<ol style="list-style-type: none"> 1. Verify incoming water pressure is 15 PSI. 2. Verify that fill relay is supplying voltage to fill solenoid. Replace faulty component. 3. Check for welded contacts. Verify that output from IO module turns off when above the set temperature. 4. Substitute a 1.2 kΩ resistor for T1, and verify that wash heater turns off. If not, replace IO module. 5. Verify that T1 resistance is correct with respect to temperature (see table on next page). If not, replace T1. 6. Replace float switch.
"F7 Service needed," "Check wash tank thermostat"	<ol style="list-style-type: none"> 1. Contactor to wash heater not turning off. 2. Faulty temperature input (P10) on IO module. 3. Faulty temperature probe (T1). 	<ol style="list-style-type: none"> 1. Check for welded contacts. Verify that output from IO module turns off when above the set temperature. 2. Substitute a 1.2 kΩ resistor for T1, and verify that wash heater turns off. If not, replace IO module. 3. Verify that T1 resistance is correct with respect to temperature (see table on next page). If not, replace T1.
"F8 No water in wash tank," "Check inlet water and door"	<ol style="list-style-type: none"> 1. Malfunction of fill solenoid or fill relay. 2. Door is open, which inhibits fill mode. 3. Faulty door switch. 	<ol style="list-style-type: none"> 1. Replace faulty solenoid or fill relay. 2. Close door to activate door switch. 3. Replace or adjust door switch.
F11 Service needed —check wash tank thermostat	<ol style="list-style-type: none"> 1. Faulty temperature probe (T1). 	<ol style="list-style-type: none"> 1. Replace probe that connects to P10.
F12 Service needed — check booster thermo- stat	<ol style="list-style-type: none"> 1. Faulty temperature probe (T3). 	<ol style="list-style-type: none"> 1. Replace probe that connects to P13.
F13 Communication error. Check 6-pin cable	<ol style="list-style-type: none"> 1. Loose connection in 6-pin cable between display board and IO module. 2. Faulty 6-pin cable between display board and IO module. 3. Faulty communication port on IO module or display board. 	<ol style="list-style-type: none"> 1. Fully disconnect 6-pin cable at each end, and reconnect each end until a click is heard. 2. Inspect for broken wire or unseated terminal by gently pulling on each wire at each end of the cable. Reseat any loose terminals by inserting it fully into the housing using long-nosed pliers. Replace cable if broken wire is found. 3. Temporarily substitute a verified good display board, and check if F13 message recurs. If so, replace with a good IO module.

RESISTANCE-TO-TEMPERATURE VALUES

R (k Ω)	°F
11.58	69.8
10.37	75.2
9.30	80.6
7.78	89.6
3.05	140.0
2.54	150.8
2.18	159.8
1.58	179.6
1.45	185.0
1.33	190.4
1.16	199.4
0.96	212.0

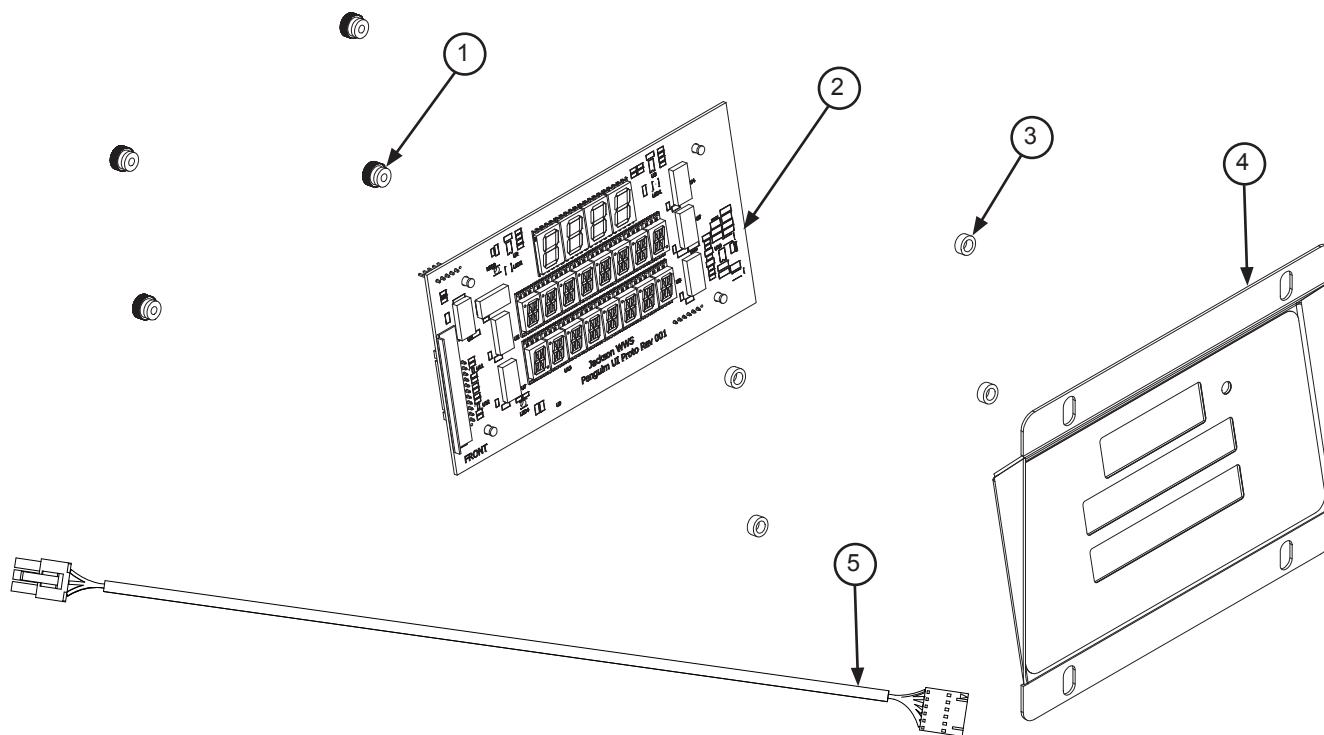


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Terminal Block, 3-pole	05940-011-48-27
2	1	Fuse Holder Fuse, 1 A (208/230 V) (Not Shown) Fuse, 1/2 A (380/460 V) (Not Shown)	05920-011-72-89 05920-002-67-23 05920-011-72-88
3	2	Terminal Board	05940-002-78-97
4	1	I/O Module	06401-004-76-12
5	2	Relay	05945-111-72-51
6	1	Timer, Universal Digital Multi-timer*	05945-004-22-78
7	1	Overload	See Motor Overloads page.
8	2	Contactor, Wash Motor	05945-111-68-38
9	1	Overload	See Motor Overloads page.
10	1	Transformer, 208 V	05950-011-75-59
		Transformer, 230/460 V	05950-011-68-35
11	1	Contactor, 3-pole, 50 A	05945-002-24-70
12	1	Fan	05999-004-30-62
13	1	Relay	05945-111-35-19

*Click [here](#) for timer programming instructions.

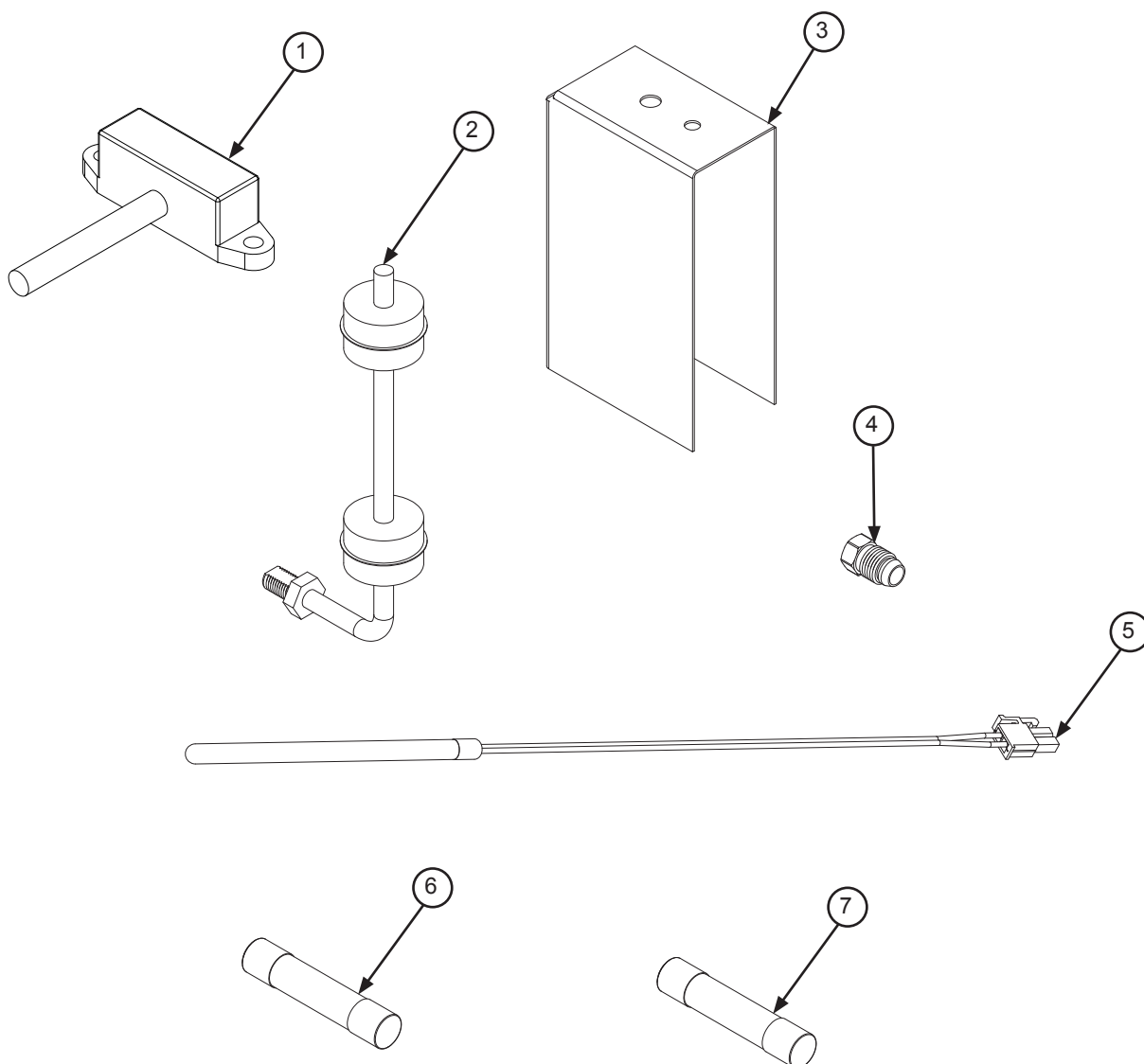


Complete Display Assembly
05700-004-31-50

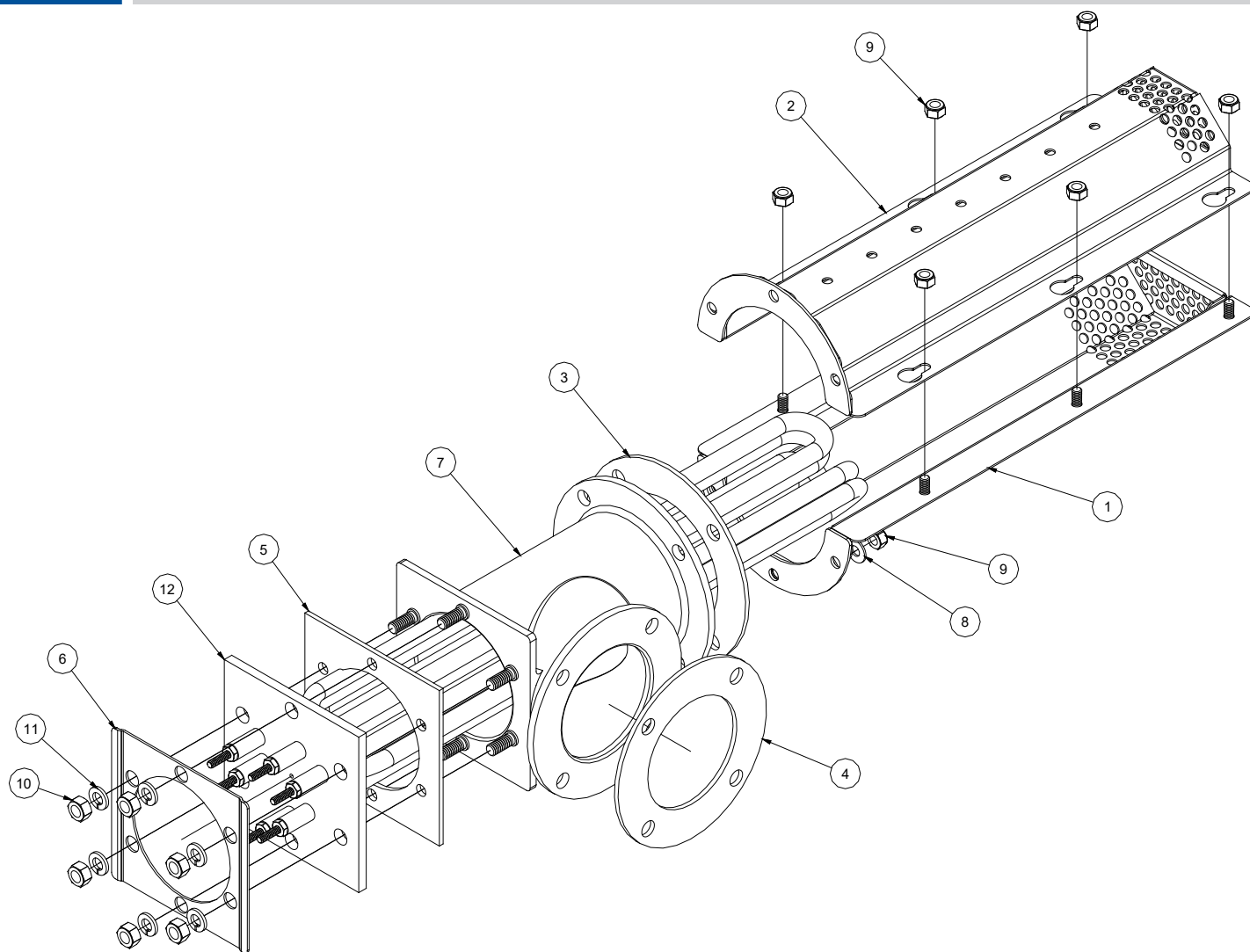


ITEM	QTY	DESCRIPTION	PART NUMBER
1	4	Nut, Thumb, 6-32 Nylon	05310-002-83-12
2	1	Board, Populated Circuit	05945-004-46-18
3	4	Spacer, Display Board	05999-004-19-75
4	1	Membrane Switch and Panel Assembly	05700-004-59-65
5	1	Communication Cable	05700-004-33-64
	1	Cover, Display Board (Not Shown)	05700-004-35-60

Parts are not shown to scale with relation to each other.



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Actuator Switch	05930-111-68-44
2	1	Float Switch	06680-121-70-71
3	1	Float Switch Cover	05700-004-71-80
4	1	Probe Fitting, Brass	05310-924-02-05
5	1	Thermistor Probe	06685-004-34-58
6	6	Fuse, 200 mA Slow-acting	05999-004-44-33
7	2	Fuse, 1 A Fast-acting	05999-004-47-87

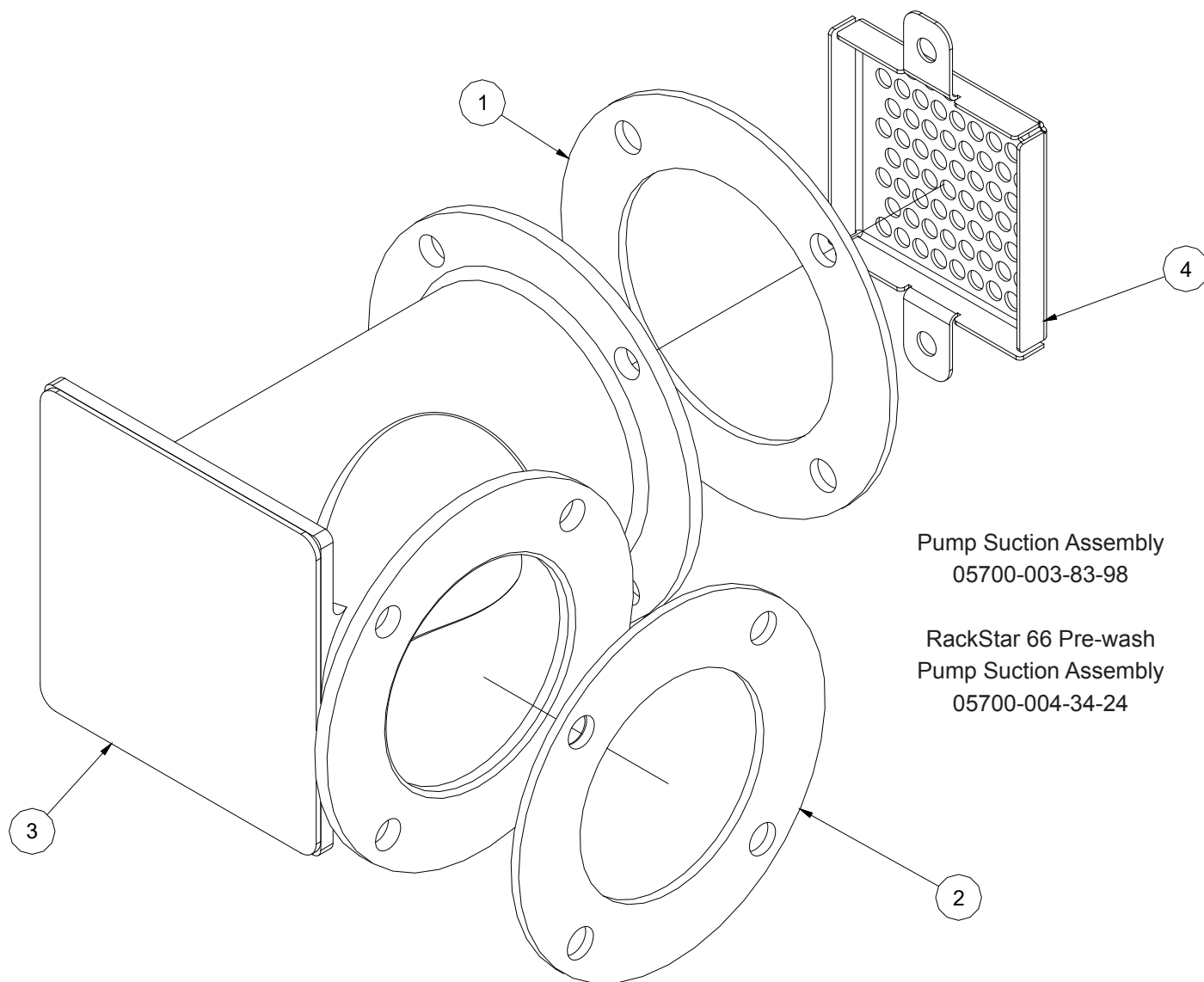


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Lower Heater Shroud	05700-003-74-21
2	1	Upper Heater Shroud	05700-003-74-24
3	1	Gasket, Suction Casting	05330-003-75-89
4	1	Gasket, Pump Suction	05330-003-75-87
5	1	Gasket, Heater	05330-200-02-70
6	1	Heater Box Rails	05700-003-74-72
7	1	Wash Pump Suction	05700-003-77-63
8	2	Washer, 1/4-20	05311-174-01-00
9	9	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
10	6	Nut, Hex 5/16-18	05310-275-01-00
11	6	Lockwasher, 5/16" Split	05311-375-01-00
12	1	Wash Heating Element, 15 kW	See Wash Heaters page.
13	1	Thermostat, High-limit (Not Shown)	05930-011-49-43

VOLTAGE	PHASE	KW	PART NUMBER	CONTACTOR
208	1	15	04540-121-68-45	05945-111-68-38
230	1	15	04540-121-68-46	05945-111-68-38
208	3	15	04540-121-68-45	05945-002-24-70
230	3	15	04540-121-68-46	05945-002-24-70
460	3	15	04540-121-68-47	05945-002-24-70
600	3	15	04540-002-39-93	05945-002-24-70

NOTICE When replacing wash heaters, it is highly recommended to change the gasket as well. Once installed, gaskets become compressed and are subject to extreme temperature changes. Replacing the gasket with the heater might prevent future leaks.

The nuts used to secure the heater to the casting should be torqued to 16 in-lbs. After tightening, the machine should be allowed to heat up and operate normally for approximately 30 minutes. Secure power to the machine and check the nuts once more to verify they are torqued to 16 in-lbs.



Pump Suction Assembly
05700-003-83-98

RackStar 66 Pre-wash
Pump Suction Assembly
05700-004-34-24

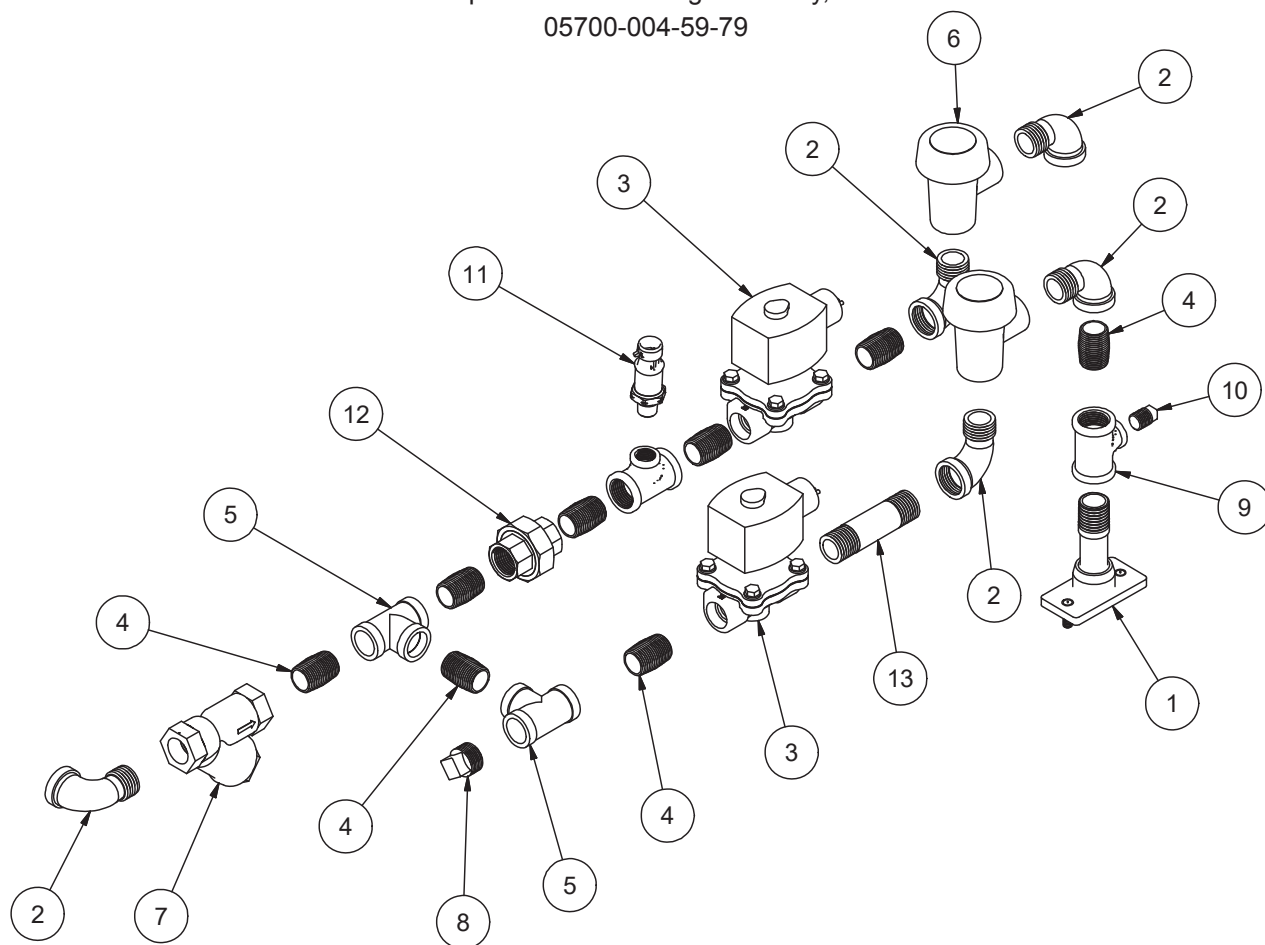
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Gasket, Suction Casting	05330-003-75-89
2	1	Gasket, Pump Suction	05330-003-75-87
3	1	Pre-wash Pump Suction Weldment	05700-003-82-27
4	1	Strainer, Pre-wash Pump	05700-003-81-28

Complete Inlet Plumbing Assembly, L-R

05700-004-59-86

Complete Inlet Plumbing Assembly, R-L

05700-004-59-79



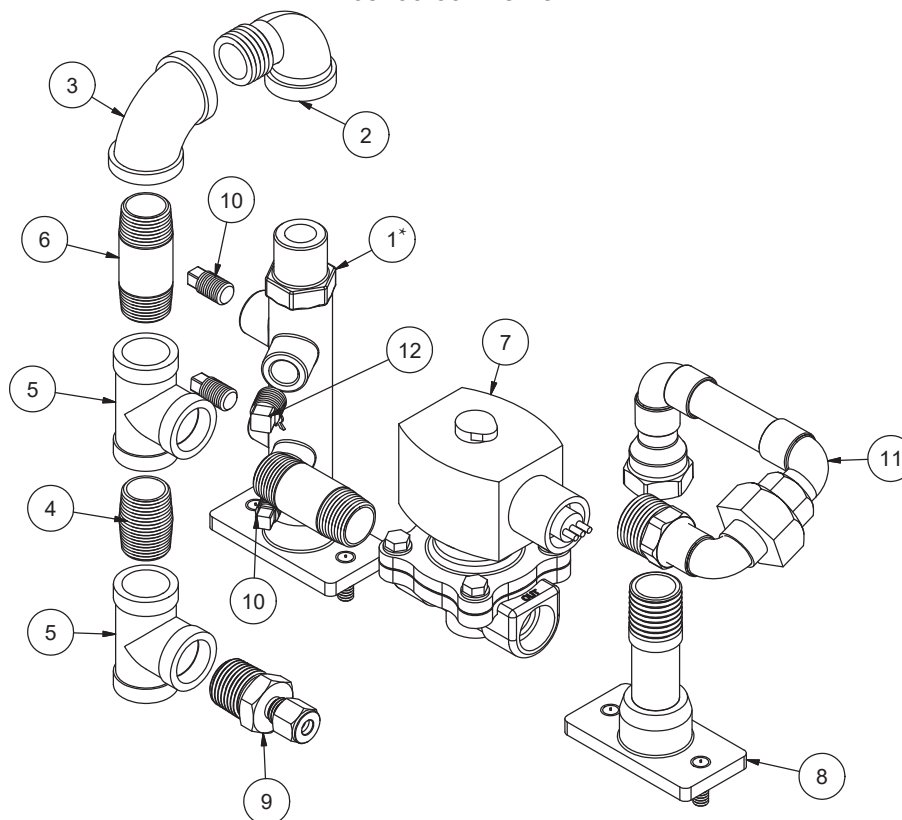
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Manifold, Tank Fill	05700-004-38-64
2	5	Elbow, 90-degree 1/2" Street Brass	04730-206-08-00
3	2	Solenoid Valve, 1/2"	04810-003-71-55
4	8	Nipple, 1/2" Close Brass	04730-207-15-00
5	2	Tee, 1/2" Brass	04730-211-27-00
6	2	Vacuum Breaker, 1/2" Brass	04820-003-06-13
7	1	Y-Strainer, 1/2"	04730-217-01-10
8	1	Plug, 1/2" Brass Pipe	04730-209-03-00
9	2	Tee, 1/2" x 1/2" x 1/4"	04730-002-22-56
10	1	Plug, 1/4" Brass	04730-209-01-00
11	1	Transducer, Pressure	05945-004-17-01
12	1	Union, 1/2" x 1/2" Brass	04730-003-62-44
13	1	Nipple, 1/2" x 3" Brass	04730-004-20-10

Complete Rinse Plumbing Assembly, L-R

05700-004-48-52

Complete Rinse Plumbing Assembly, R-L

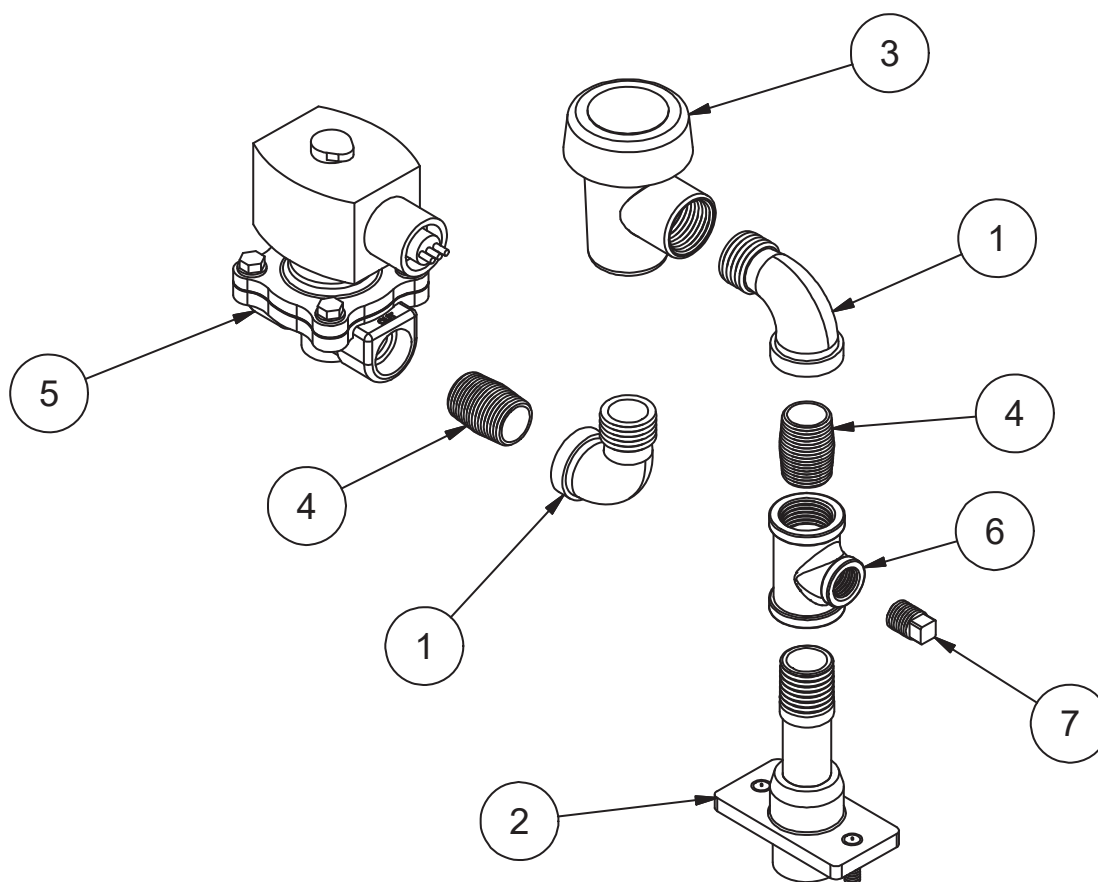
05700-004-48-45



ITEM	QTY	DESCRIPTION	PART NUMBER
1*	1	Rinse Injector, L-R Rinse Injector, R-L	05700-003-76-82 05700-003-76-83
2	1	Elbow, 90-degree 1/2" Street Brass	04730-206-08-00
3	1	Elbow, 1/2" Brass	04730-011-42-96
4	1	Nipple, 1/2" Close Brass	04730-207-15-00
5	2	Tee, 1/2" Brass	04730-211-27-00
6	2	Nipple, 1/2" Brass, 2" Long	04730-207-19-00
7	1	Solenoid Valve, 1/2"	04810-003-71-55
8	1	Manifold, Turbo Rinse, Water In	05700-004-38-67
9	1	Fitting, Comp. 1/2" x 1/4"	05700-004-36-74
10	3	Plug, 1/8" Brass	04730-209-07-37
11	1	Piping Manifold, L-R Piping Manifold, R-L	05700-004-48-42 05700-004-48-46
12	1	Plug, 1/4" Brass	04730-209-01-00
13	2	Gasket for Items 1 and 8 (Not Shown)	05330-003-75-91

*See Connection Points section for chemical connections.

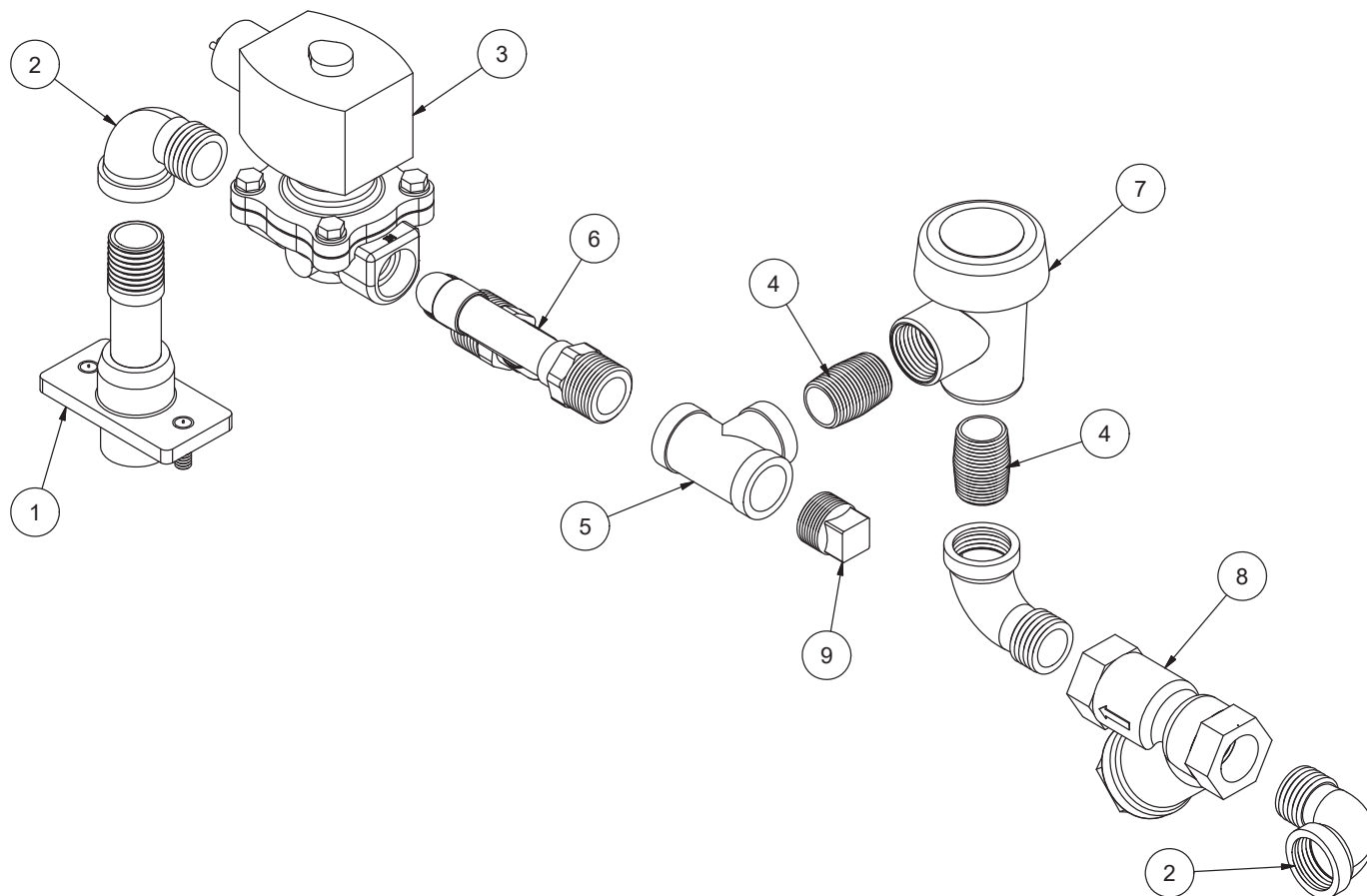
Complete Pre-wash Fill Plumbing Assembly
05700-004-59-80



ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	Elbow, 90-degree 1/2" Street Brass	04730-206-08-00
2	1	Manifold, Tank Fill	05700-004-38-64
3	1	Vacuum Breaker, 1/2" Brass	04820-003-06-13
4	2	Nipple, 1/2" Close Brass	04730-207-15-00
5	1	Solenoid Valve, 1/2"	04810-003-71-55
6	1	Tee, 1/2" x 1/2" x 1/4"	04730-002-22-56
7	1	Plug, 1/4" Brass	04730-209-01-00

Complete ER Fill Plumbing Assembly, L-R*
05700-004-41-53

Complete ER Fill Plumbing Assembly, R-L*
05700-004-41-54

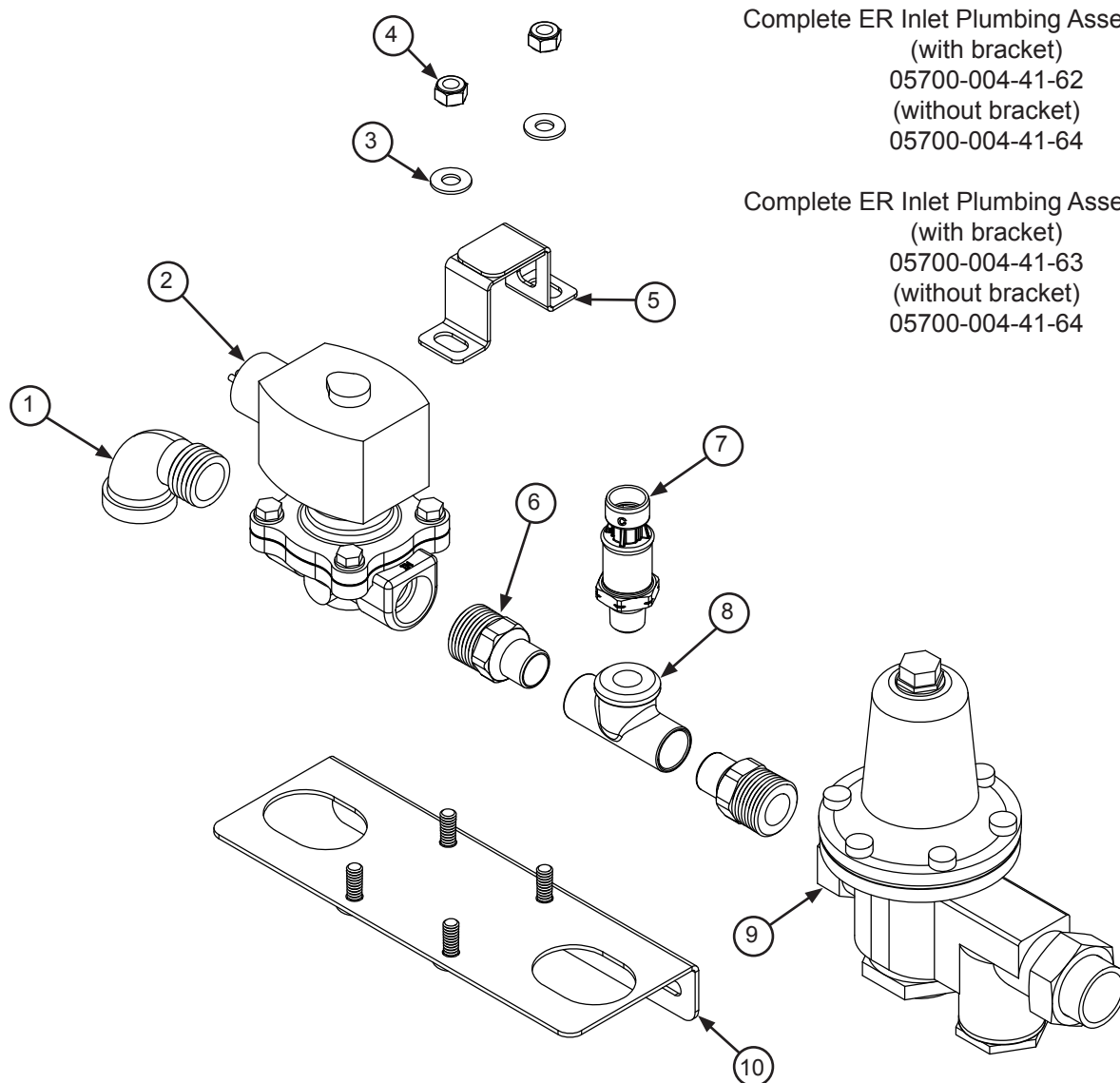


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Manifold, Tank Fill	05700-004-38-64
2	3	Elbow, 90-degree 1/2" Street Brass	04730-206-08-00
3	1	Solenoid Valve, 1/2"	04810-003-71-55
4	2	Nipple, 1/2" Close Brass	04730-207-15-00
5	1	Tee, 1/2" Brass	04730-211-27-00
6	1	Piping Manifold, Single-point Tubing	05700-004-48-43
7	1	Vacuum Breaker, 1/2" Brass	04820-003-06-13
8	1	Y-Strainer, 1/2"	04730-217-01-10
9	1	Plug, 1/2" Brass Pipe	04730-209-03-00

NOTICE *For areas with low ground-water temperature, a thermostatic mixing valve should be used:

Complete ER Fill Plumbing Assembly with Mixing Valve, L-R
05700-004-42-94

Complete ER Fill Plumbing Assembly with Mixing Valve, R-L
05700-004-42-95



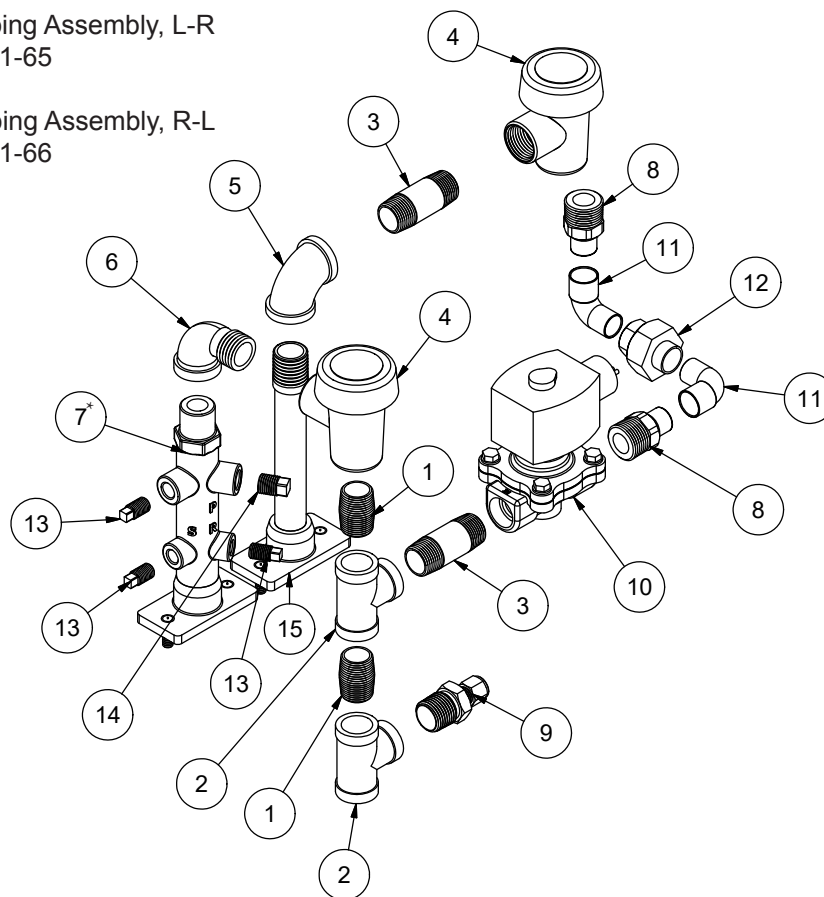
Complete ER Inlet Plumbing Assembly, L-R
(with bracket)
05700-004-41-62
(without bracket)
05700-004-41-64

Complete ER Inlet Plumbing Assembly, R-L
(with bracket)
05700-004-41-63
(without bracket)
05700-004-41-64

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Elbow, 90-degree 1/2" Street Brass	04730-206-08-00
2	1	Valve, 1/2"	04810-003-71-55
3	2	Washer, 1/4-20	05311-174-01-00
4	2	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
5	1	Clip, ER Inlet Bracket	05700-004-41-58
6	2	Adapter, 1/2"	04730-011-59-53
7	1	Pressure Transducer	05945-004-17-01
8	1	Tee, 1/2" x 1/2" x 1/4" Female	04730-411-25-01
9	1	Pressure Regulator	04820-100-04-07
10	1	Bracket, ER Inlet, L-R	05700-004-41-55
	1	Bracket, ER Inlet, R-L	05700-004-41-56

Complete ER Rinse Plumbing Assembly, L-R
05700-004-41-65

Complete ER Rinse Plumbing Assembly, R-L
05700-004-41-66

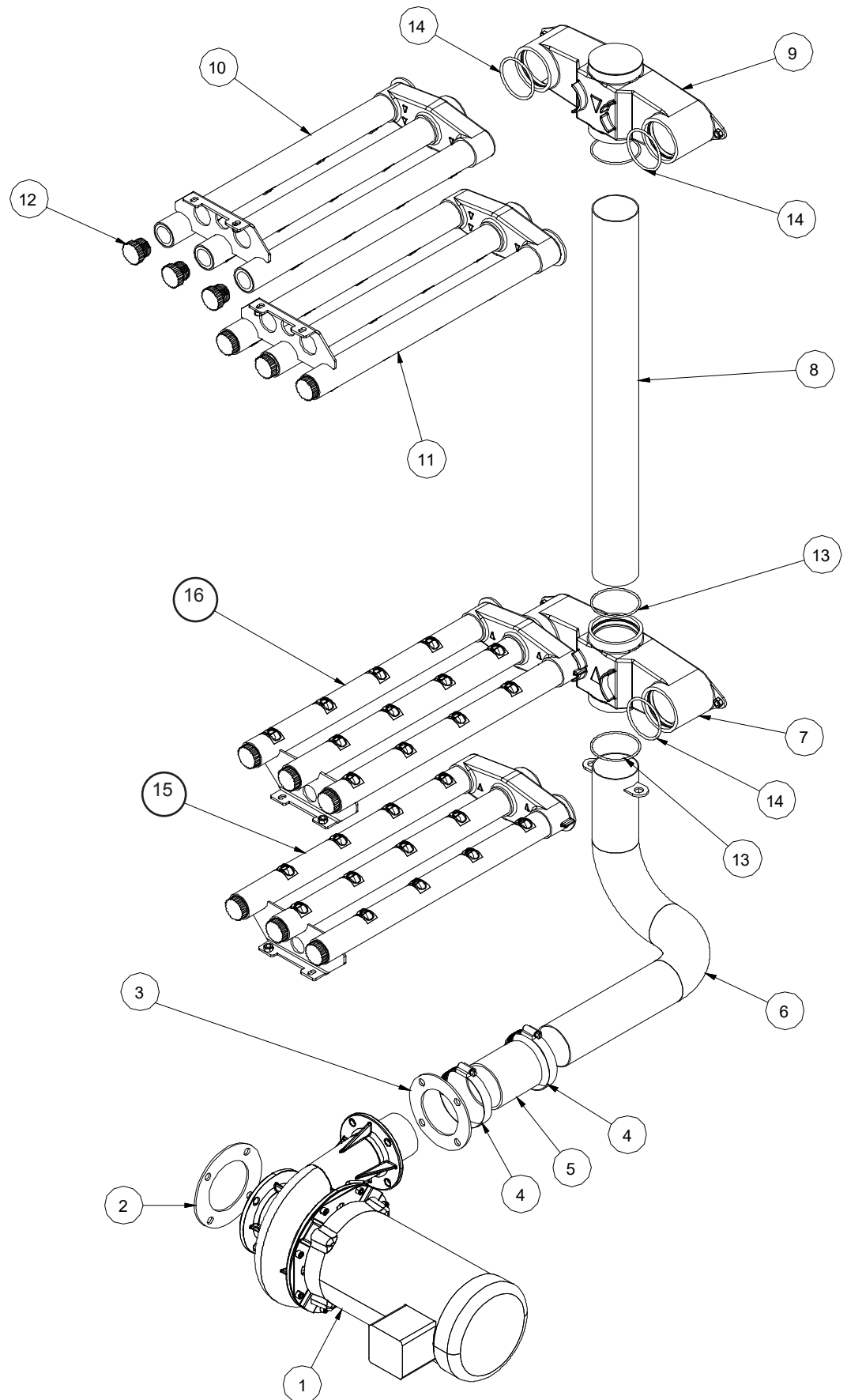


ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	Nipple, 1/2" Close Brass	04730-207-15-00
2	2	Tee, 1/2" Brass	04730-211-27-00
3	2	Nipple, 1/2 Brass, 2" Long	04730-207-19-00
4	2	Vacuum Breaker, 1/2" Brass	04820-003-06-13
5	1	Elbow, 90-degree 1/2" Brass	04730-011-42-96
6	1	Elbow, 90-degree 1/2" Street Brass	04730-206-08-00
7*	1	Rinse Injector, L-R	05700-003-76-82
	1	Rinse Injector, R-L	05700-003-76-83
8	2	Adapter, 1/2"	04730-011-59-53
9	1	Fitting, Comp. 1/2" x 1/4"	05700-004-36-74
10	1	Valve, 1/2"	04810-003-71-55
11	2	Elbow, 1/2"	04730-406-31-01
12	1	Union, 1/2"	04730-412-05-01
13	3	Plug, 1/8" Brass	04730-209-07-37
14	1	Plug, 1/4" Brass	04730-209-01-00
15	1	Turbo Rinse Injector	05700-004-32-61

*See Connection Points section for chemical connections.

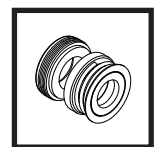
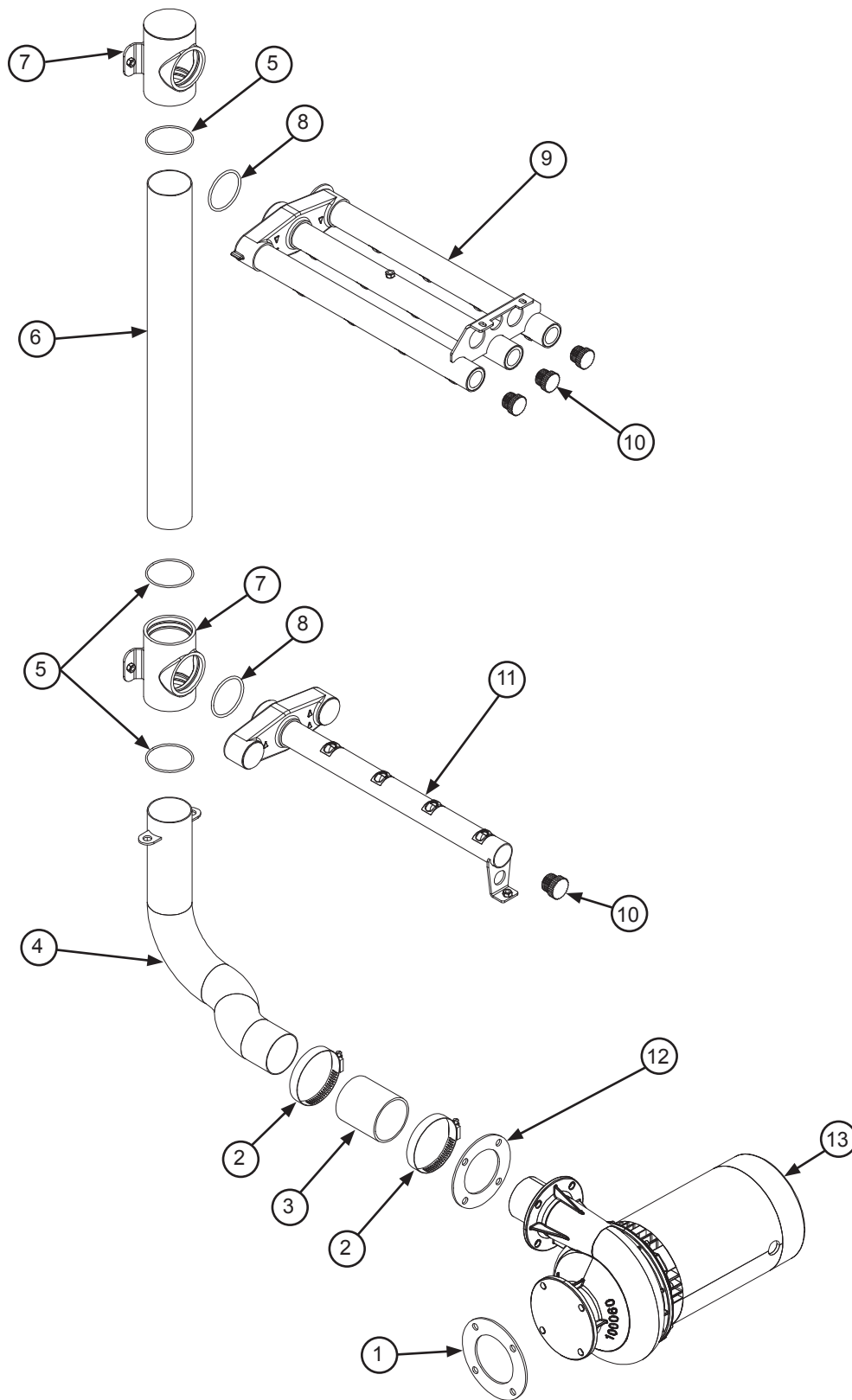


Mechanical Pump Seal
05330-002-34-22



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Pump & Motor Assembly	See Table Below
2	1	Gasket, Pump Suction	05330-003-75-87
3	1	Gasket, Pump Discharge	05330-003-75-88
4	2	Hose Clamp, Range 2 9/16" to 3 1/2"	04730-003-15-40
5	1	Hose, Wash Pump Discharge	05700-003-77-62
6	1	Lower Wash Manifold, L-R Lower Wash Manifold, R-L	05700-004-27-39 05700-004-30-27
7	1	Casting, Wash Manifold	09515-003-71-50
8	1	Tube, Manifold Riser	05700-003-72-37
9	1	Upper Wash Manifold	05700-003-73-66
10	1	Wash Arm, Top-right	05700-003-75-79
11	1	Wash Arm, Top-left	05700-003-75-80
12	12	Cap, Threaded	04730-603-12-00
13	3	O-ring, Silicone, 0.103 Dia., 2 1/2" x 2 11/16" OD	05330-003-73-71
14	4	O-ring, Silicone, 0.139 Dia., 2 1/4" ID x 2 1/2" OD	05330-003-73-72
15	1	Wash Arm, Bottom-right	05700-004-27-43
16	1	Wash Arm, Bottom-left	05700-004-27-42

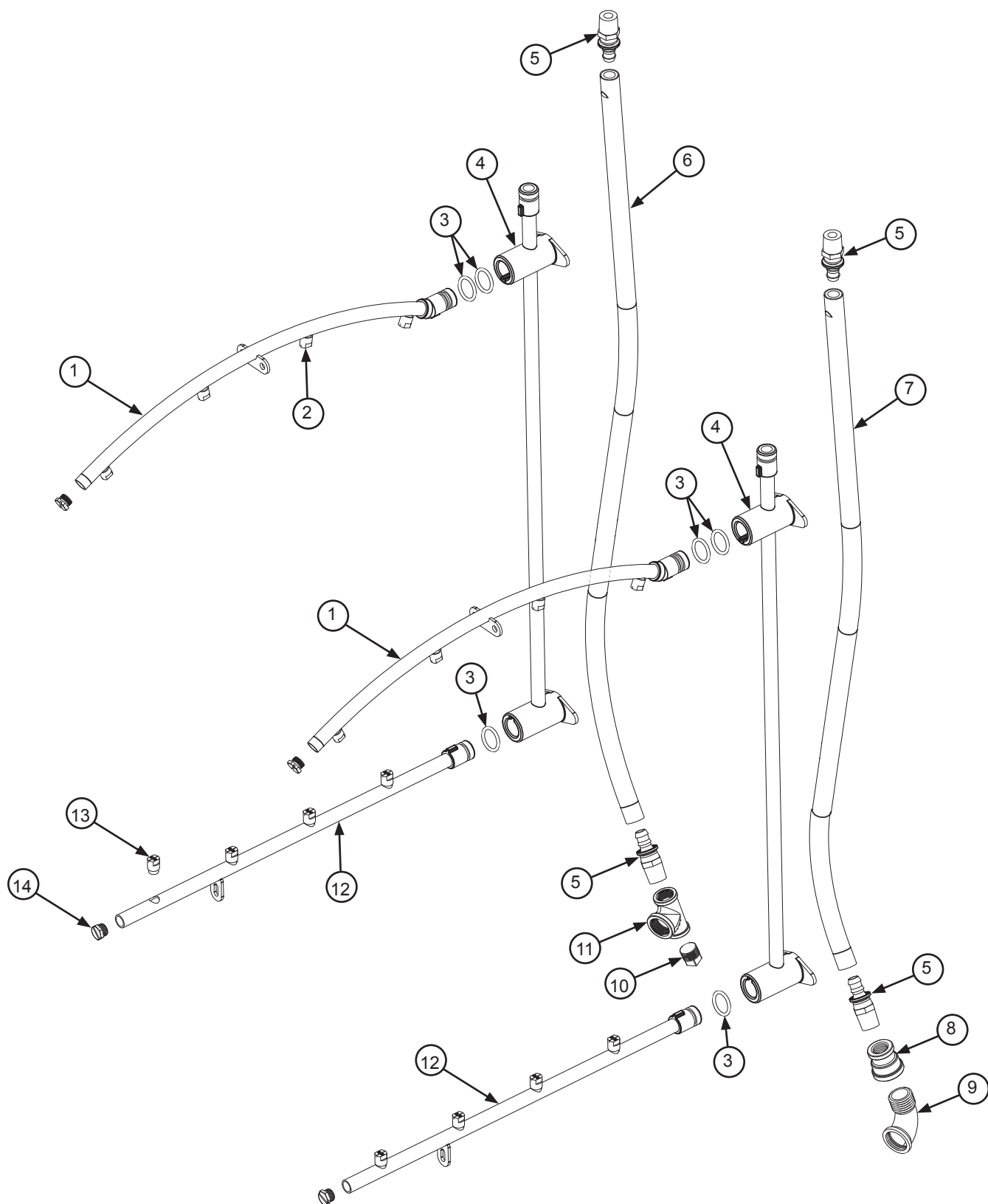
PUMP & MOTOR ASSEMBLY	PART NUMBER
Wash Pump, 3 HP, 208 V, 60 Hz, 3-Phase	06105-003-76-11
Wash Pump, 3 HP, 230 V, 60 Hz, 3-Phase	06105-003-76-11
Wash Pump, 3 HP, 460 V, 60 Hz, 3-Phase	06105-003-76-11
Wash Pump, 3 HP, 600 V, 60 Hz, 3-Phase	06105-004-53-85



Mechanical Pump Seal
05330-002-34-22

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Gasket, Pump Suction	05330-003-75-87
2	2	Hose Clamp	04730-003-15-40
3	1	Hose, Wash Pump Discharge	05700-003-77-62
4	1	Manifold, Pre-wash System	05700-004-31-60
5	3	O-ring, Silicone, 0.103 Dia., 2 1/2" x 2 11/16" OD	05330-003-73-71
6	1	Tube, Manifold Riser	05700-003-81-53
7	2	Casting, Pre-wash Manifold	09515-003-77-22
8	2	O-ring, Silicone, 0.139 Dia., 2 1/4" ID x 2 1/2" OD	05330-003-73-72
9	1	Pre-wash Arm	05700-003-75-79
10	4	Cap, Threaded	04730-603-12-00
11	1	Pre-wash Arm, Lower	05700-003-80-96
12	1	Gasket, Pump Discharge	05330-003-75-88
13	1	Pre-wash Motor	See Table Below

PUMP & MOTOR ASSEMBLY	PART NUMBER
Pre-wash Pump, 2HP, 208 V, 60 Hz, 3-Phase	06105-003-76-12
Pre-wash Pump, 2HP, 230 V, 60 Hz, 3-Phase	06105-003-76-12
Pre-wash Pump, 2HP, 460 V, 60 Hz, 3-Phase	06105-003-76-12
Pre-wash Pump, 2HP, 600 V, 60 Hz, 3-Phase	06105-004-53-84



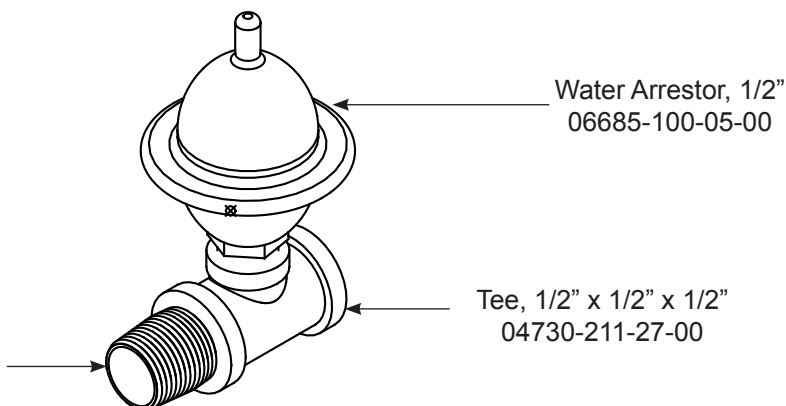
ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	Upper Rinse Arm	05700-003-76-02
2	8	Nozzle, Upper Rinse Arm	04730-003-76-07
3	6	O-ring, Silicon, 0.103 Dia., 11/16" x 7/8" OD	05330-003-77-82
4	2	Rinse Manifold Rinse Manifold, HH	05700-003-76-79 05700-004-49-62
5	2	Fitting, 1/2" Male Swivel Brass	04730-004-19-62
6	1	47" Hose (Specify Length When Ordering) 47" Hose Assembly (Hose and Fittings)	04720-004-19-81 05700-004-48-24
7	1	38" Hose (Specify Length When Ordering) 38" Hose Assembly (Hose and Fittings)	04720-004-19-81 05700-004-31-81
8	1	Coupling, 1/2" to 3/4"	04730-204-07-00
9	1	Elbow, 3/4" Street Brass	04730-206-04-34
10	1	Plug, 1/2" Brass	04730-209-03-00
11	1	Tee, Reducing, 3/4" to 1/2"	04730-004-39-00
12	2	Lower Rinse Arm	05700-004-32-95
13	8	Nozzle, Lower Rinse Arm	04730-003-76-06
14	4	End-cap, Rinse Arm	05700-004-49-88

WATER HAMMER ARRESTOR OPTION

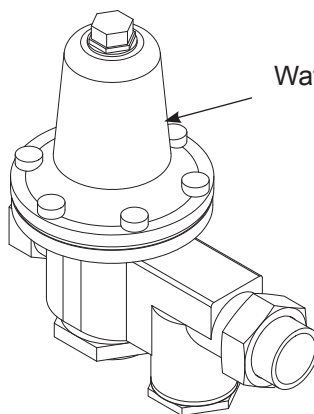
Water Hammer Arrestor
Complete Assembly
05700-002-64-67

Water Hammer Arrestor
Repair Kit
(Plunger & O-ring)
06401-003-06-23

Nipple, 1/2" NPT, Brass
04730-207-15-00



PRESSURE REGULATING VALVE OPTION*

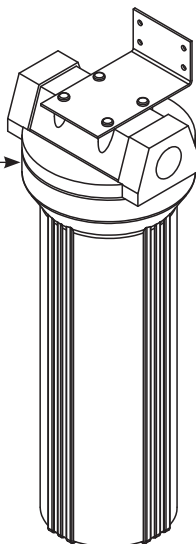


Water Pressure Regulator, 1/2"
04820-100-04-07

NOTICE *The PRV comes standard on ER units only.

WATER TREATMENT OPTION

Scaltrol System
04730-003-05-76

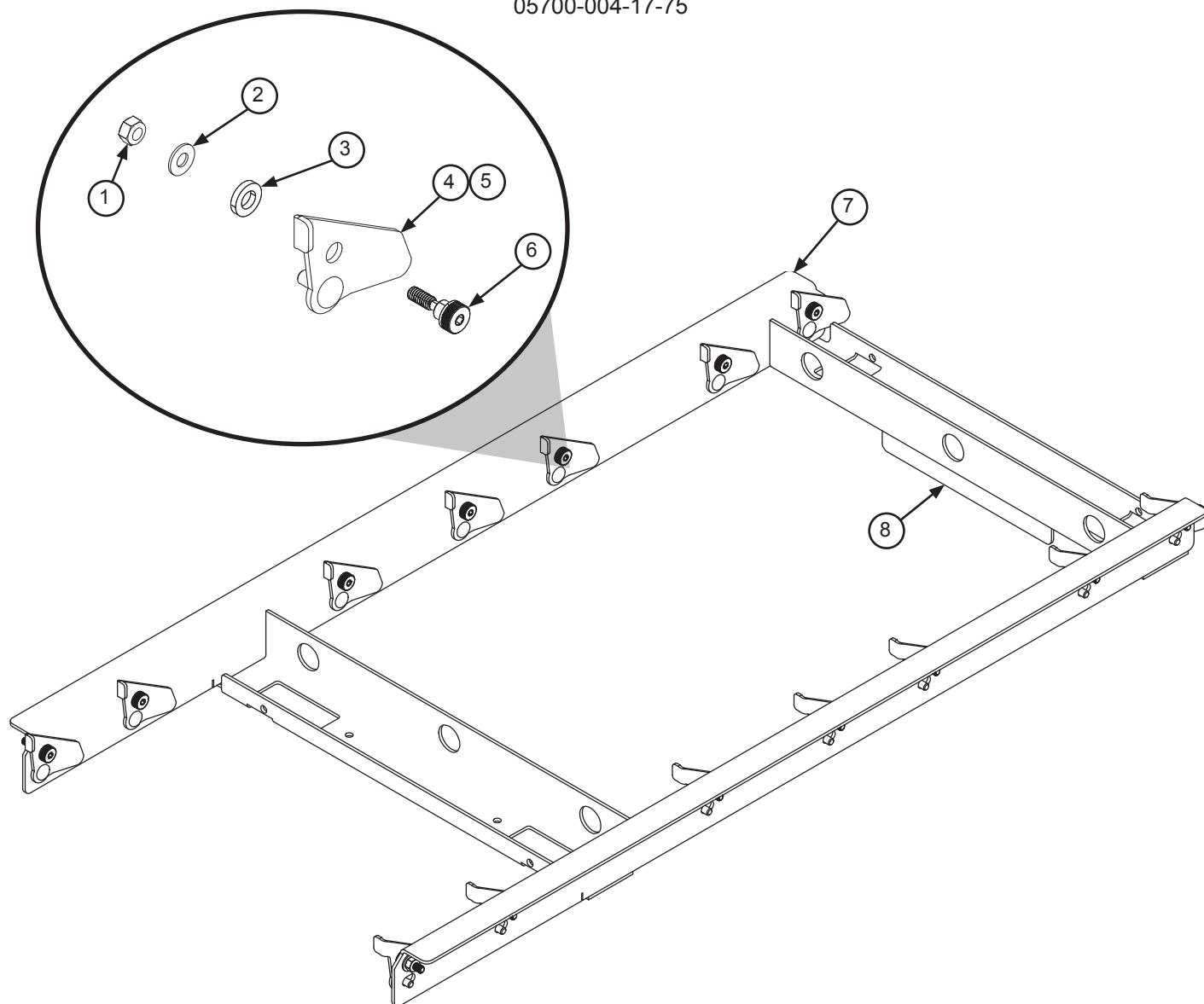


Replacement Cartridge
(inspect at least every 6 months)
RSC-100

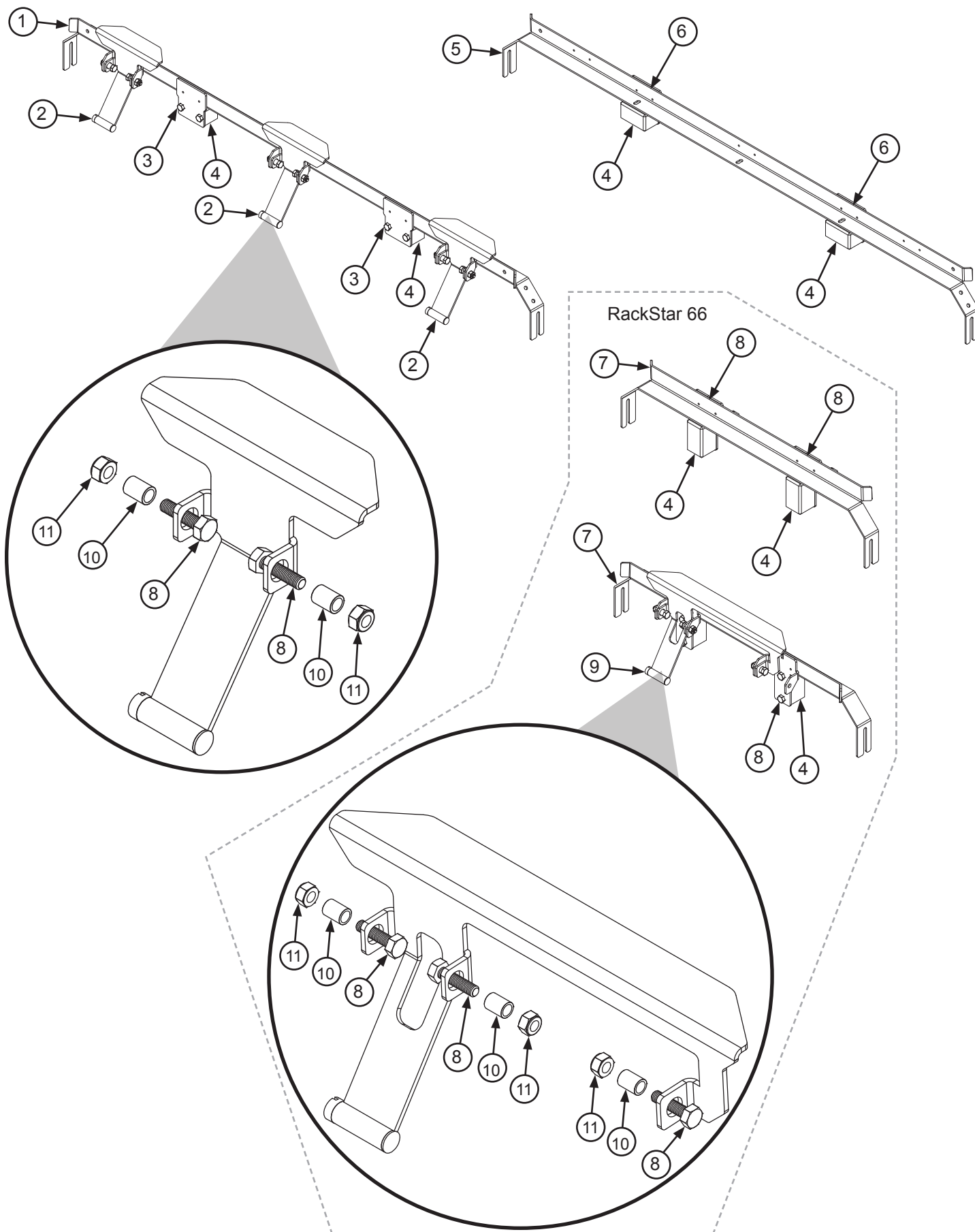
**NOTICE**

Must be installed vertically. The provided bracket is secured to the wall. Observe proper inlet/outlet water directions (flow directions are molded into the top of the head). Line pressure should be released before changing cartridges. Machine should be delimed before installation.

Complete Pawl Bar Assembly
05700-004-17-75



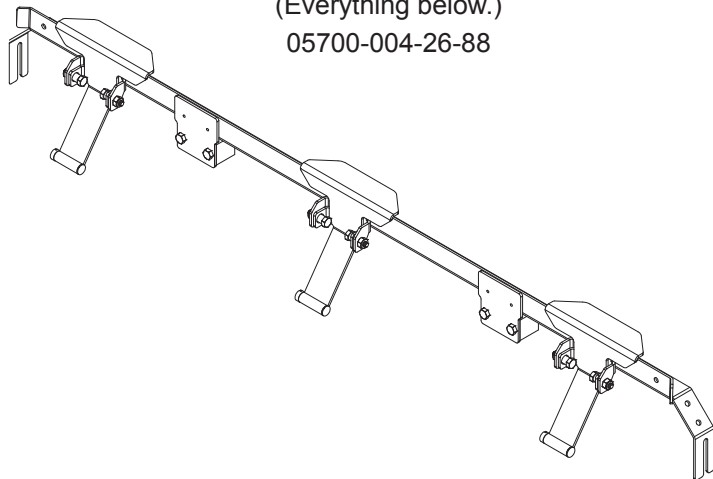
ITEM	QTY	DESCRIPTION	PART NUMBER
1	14	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
2	14	Washer, 1/4-20	05311-174-01-00
3	14	Washer, Flat, 0.406 ID x 0.750 OD	05311-004-29-35
4	7	Rack Catch, Left	05700-004-29-32
5	7	Rack Catch, Right	05700-004-29-33
6	14	Bolt, Shoulder, 3/8" x 1/4", 1/4-20	05306-004-29-34
7	1	Pawl Bar Weldment	05700-004-17-74
8	1	Rack Drive Guide	05700-004-29-36
9	2	Bolt, Rack Drive Guide, 1/4-20 x 3/4" (Not Shown)	05310-011-44-35
10	2	Lockwasher, Rack Drive Guide, Spring, 1/4" (Not Shown)	05311-274-01-00



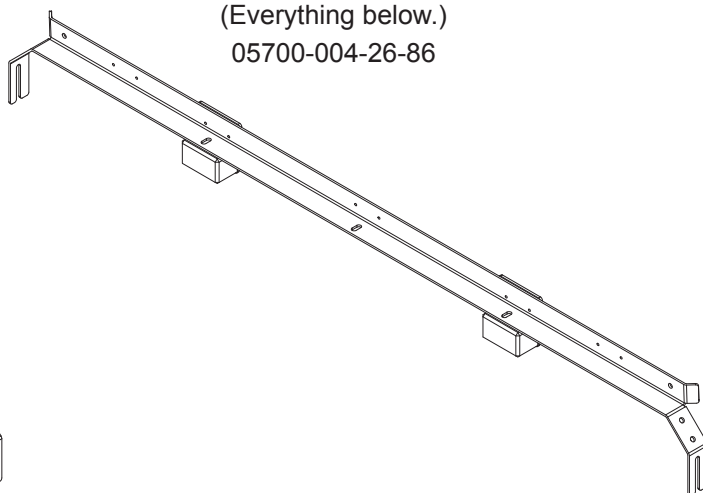
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Front Rack Rail	05700-004-26-87
2	3	Paddle Switch	05700-004-26-89
3	4	Screw, 1/4-20 x 5/8" Hex	05305-274-24-00
4	7	Glide Block	05700-004-11-75
5	1	Rear Rack Rail	05700-004-22-95
6	2	Screw, 1/4-20 x 7/8" Hex	05305-274-05-00
7	1	Rack Rail, Pre-wash	05700-004-47-04
8	17	Screw, 1/4-20 x 1" Hex	05305-274-27-00
9	1	Paddle Switch, Pre-wash, L-R Paddle Switch, Pre-wash, R-L	05700-004-34-03 05700-004-34-06
10	9	Spacer, Rack Guide	05700-011-71-44
11	9	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00

To order complete assemblies:

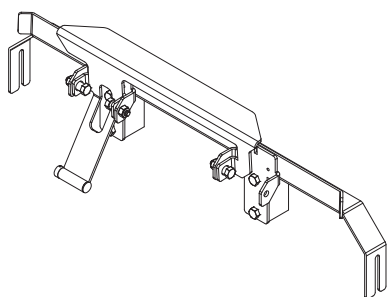
Front Rack Rail
Complete Assembly
(Everything below.)
05700-004-26-88



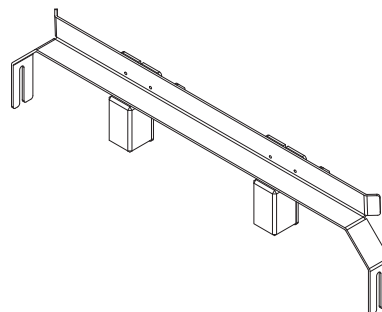
Rear Rack Rail
Complete Assembly
(Everything below.)
05700-004-26-86

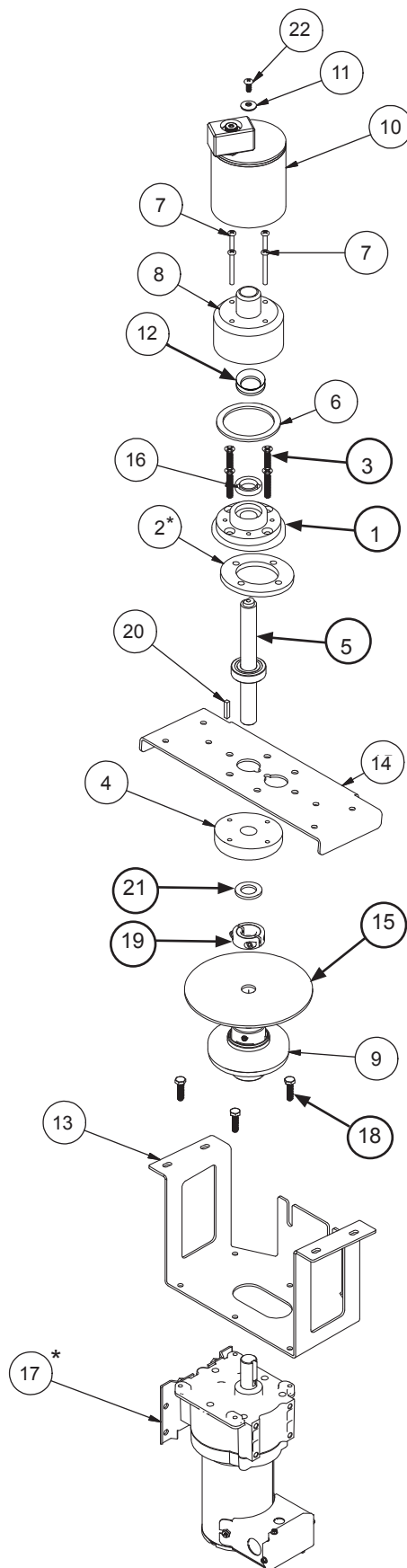


Pre-wash Front Rack Rail
Complete Assembly
(Everything below.)
Left-to-Right Right-to-Left
05700-004-47-07 05700-004-47-13



Pre-wash Rear Rack Rail
Complete Assembly
(Everything below.)
05700-004-47-06

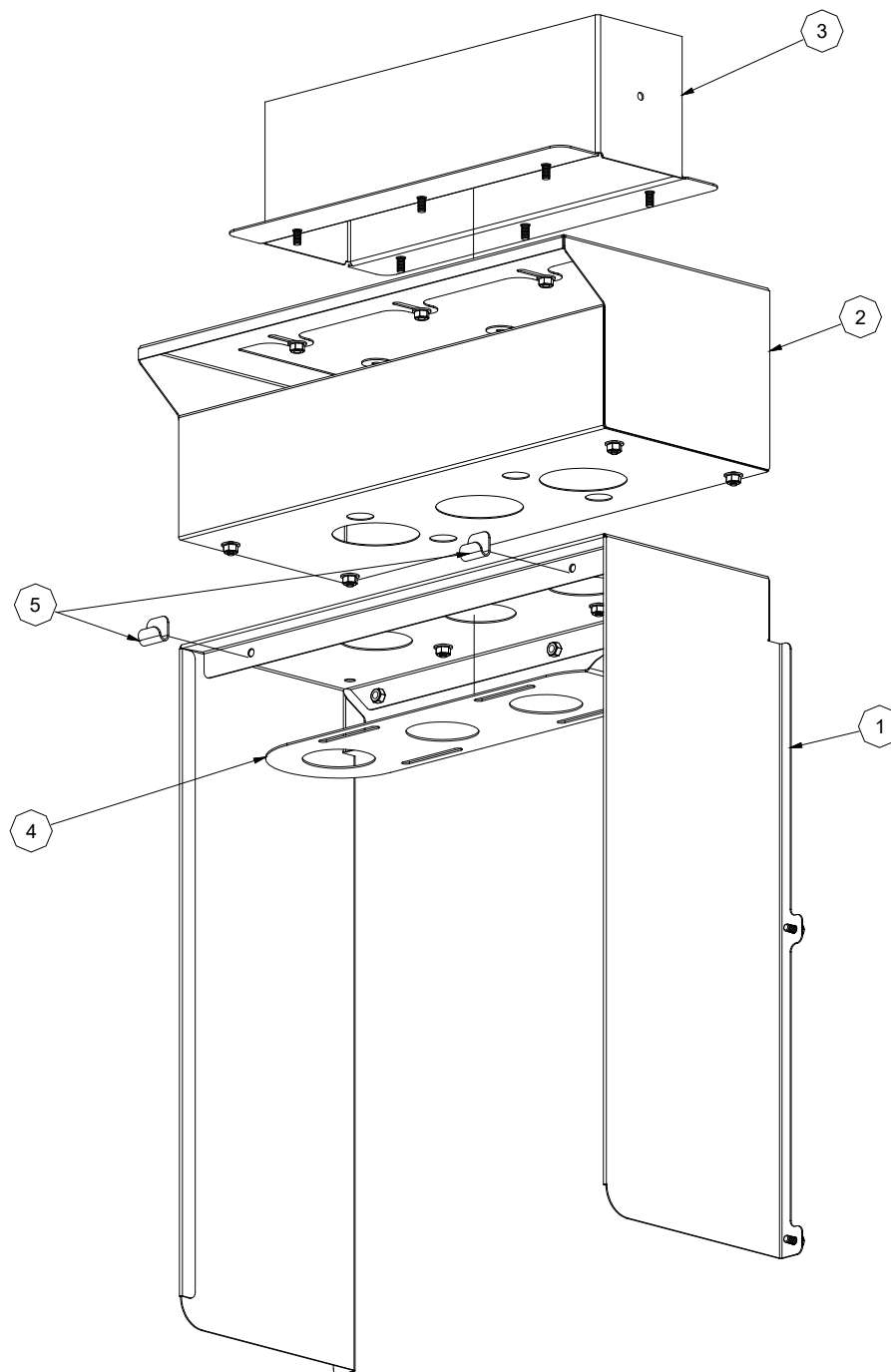




Drive Assembly
05700-004-29-95
(doesn't include Item #17)

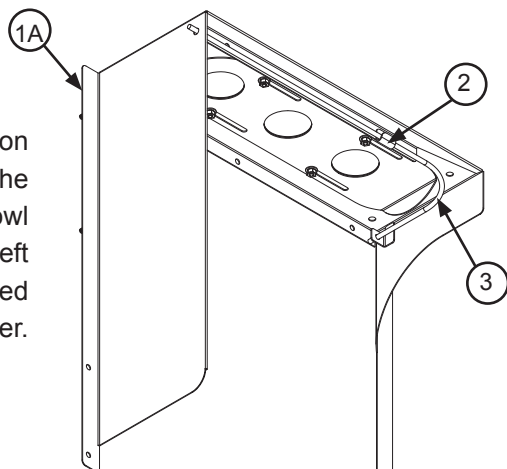
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Drive Casting, Top	09515-004-17-06
2	1	Gasket, Drive Casting	05330-004-20-31
3	4	Screw, 1/4-20 x 1 1/2" Hex	05305-004-55-76
4	1	Drive Casting, Bottom	09515-004-17-03
5	1	Drive Shaft	05700-004-29-79
6	1	Gasket, Drain Seat	05700-002-04-42
7	4	Screw, 10-32 x 1 3/4"	05306-003-92-52
8	1	Drive Shaft Cover	05700-004-29-46
9	1	Clutch-Drive, 3/4" x 3/4"	06105-004-29-41
10	1	Drive Plate Complete Assembly	05700-004-29-49
	1	Drive Block, Brass (Not Shown)	05700-004-23-01
	1	Washer, 3/8" ID (Not Shown)	05311-004-48-71
	1	Nut, Low-profile, 3/8-16 with Nylon Insert (Not Shown)	05310-004-48-72
11	1	Washer, Bonded Sealing 1/4" x 3/4"	05311-002-77-79
12	1	Seal, V-ring	05330-004-52-14
13	1	Motor Plate	05700-004-19-38
14	1	Motor Support Plate	05700-004-26-97
15	1	Gasket, Clutch	05330-004-28-88
16	1	Seal, Viton Oil Shaft, 3/4" ID	05330-004-29-06
17*	1	Drive Motor, 3-Phase	06105-004-29-53
18	4	Bolt, 1/4-28 x 1" Hex Head	05306-004-30-91
19	1	Collar, Drive Shaft	05700-011-89-18
20	1	Key, 3/16" x 9/10" Long	05700-011-89-17
21	1	Bearing, Thrust, 3/4" Shaft x 1 9/16" ID	03120-004-37-10
22	1	Screw, 10-32 x 1/2" with Sealing O-ring	05305-004-26-70

*Part not included in complete assembly and must be ordered separately.

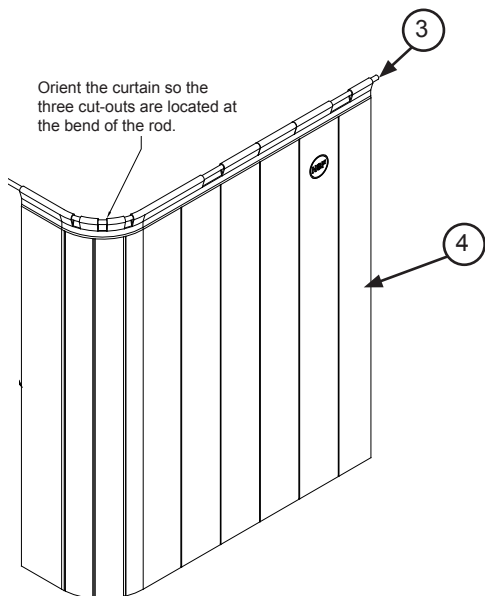


ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	Ventilation Cowl	05700-004-34-01
2	2	Ventilation Scoop	05700-004-29-68
3	2	Ventilation Duct Adapter	05700-003-75-73
4	2	Damper, Ventilation Scoop	05700-003-74-76
5	4	Curtain Hook	05700-003-17-98

This illustration depicts the Ventilation Cowl for a Left Unhooded Side-loader.



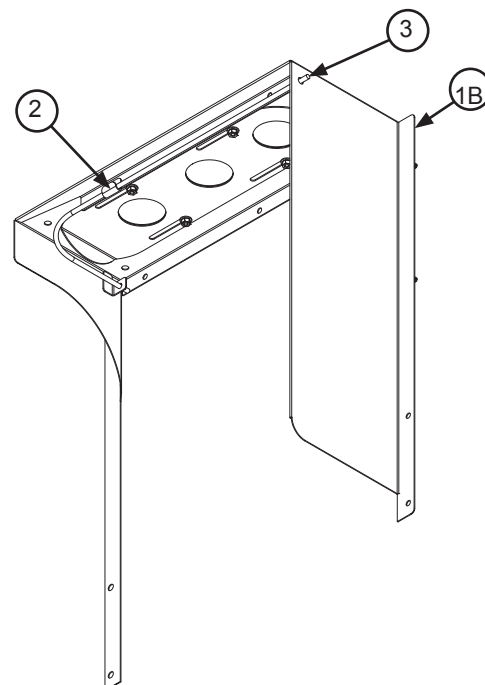
Orient the curtain so the three cut-outs are located at the bend of the rod.



To attach the curtain and rod to the Ventilation Cowl, ensure that the curtain is oriented as depicted and follow the steps below:

1. Insert the rod into the hole at the rear of the Ventilation Cowl.
2. Insert the rod into the bracket at the front of the Ventilation Cowl.
3. Gently lift the rod at the curtain cut-out over and onto the curtain hook ensuring that the ends of the rod stay inserted in the holes.

This illustration depicts the Ventilation Cowl for a Right Unhooded Side-loader.



ITEM	QTY	DESCRIPTION	PART NUMBER
1A	1	Ventilation Cowl with Cut-out for Left Side-loader	05700-004-38-27
1B	1	Ventilation Cowl with Cut-out for Right Side-loader	05700-004-38-28
2	1	Curtain Hook	05700-003-17-98
3	1	Curtain Rod	05700-003-84-57
4	1	Curtain, XL for Side-loader	08415-003-84-88

WASH MOTORS: Overloads are specified for 3-phase units only.

For GE brand MT03* series overloads, the process for setting is as follows:

- Determine the Full Load Amps (FLA) for the wash motor.
- Set the overload at the closest setting without going over for the FLA of the motor.
- The overload already compensates for the FLA and will have a setpoint that is 125% of the FLA. (Example: Wash motor is rated at 10.0 FLA on the data plate. The replacement MT03* overload will be set at 10.0. It will trip at 12.5 Amps.)

WASH MOTOR VOLTAGE	PART NUMBER	GE PART NUMBER
208	05945-004-35-45	RT1N
230	05945-004-35-45	RT1N
460	05945-111-81-33	RT1L
600	05945-111-68-41	RT1K

Blue selector switch should be set to H for manual reset.

DRIVE MOTORS: Overloads are specified for 3-phase units only.

For GE brand MT03* series overloads, the process for setting is as follows:

- Determine the FLA for the drive motor.
- Set the overload at the closest setting without going over for the FLA of the motor.
- The overload already compensates for the FLA and will have a setpoint that is 125% of the FLA. (Example: Drive motor is rated at 1.0 FLA on the data plate. The replacement MT03* overload will be set at 1.0. It will trip at 1.25 Amps.)

DRIVE MOTOR VOLTAGE	PART NUMBER	GE PART NUMBER
208	05945-111-68-39	RT1G
230	05945-111-68-39	RT1G
460	05945-002-71-09	RTN1F
600	05945-111-68-39	RT1G

Blue selector switch should be set to H for manual reset.

PRE-WASH MOTORS (66 ONLY): Overloads are specified for 3-phase units only.

For GE brand MT03* series overloads, the process for setting is as follows:

- Determine the FLA for the Pre-wash motor.
- Set the overload at the closest setting without going over for the FLA of the motor.
- The overload already compensates for the FLA and will have a setpoint that is 125% of the FLA. (Example: Pre-wash motor is rated at 6.0 FLA on the data plate. The replacement MT03* overload will be set at 6.0. It will trip at 7.5 Amps.)

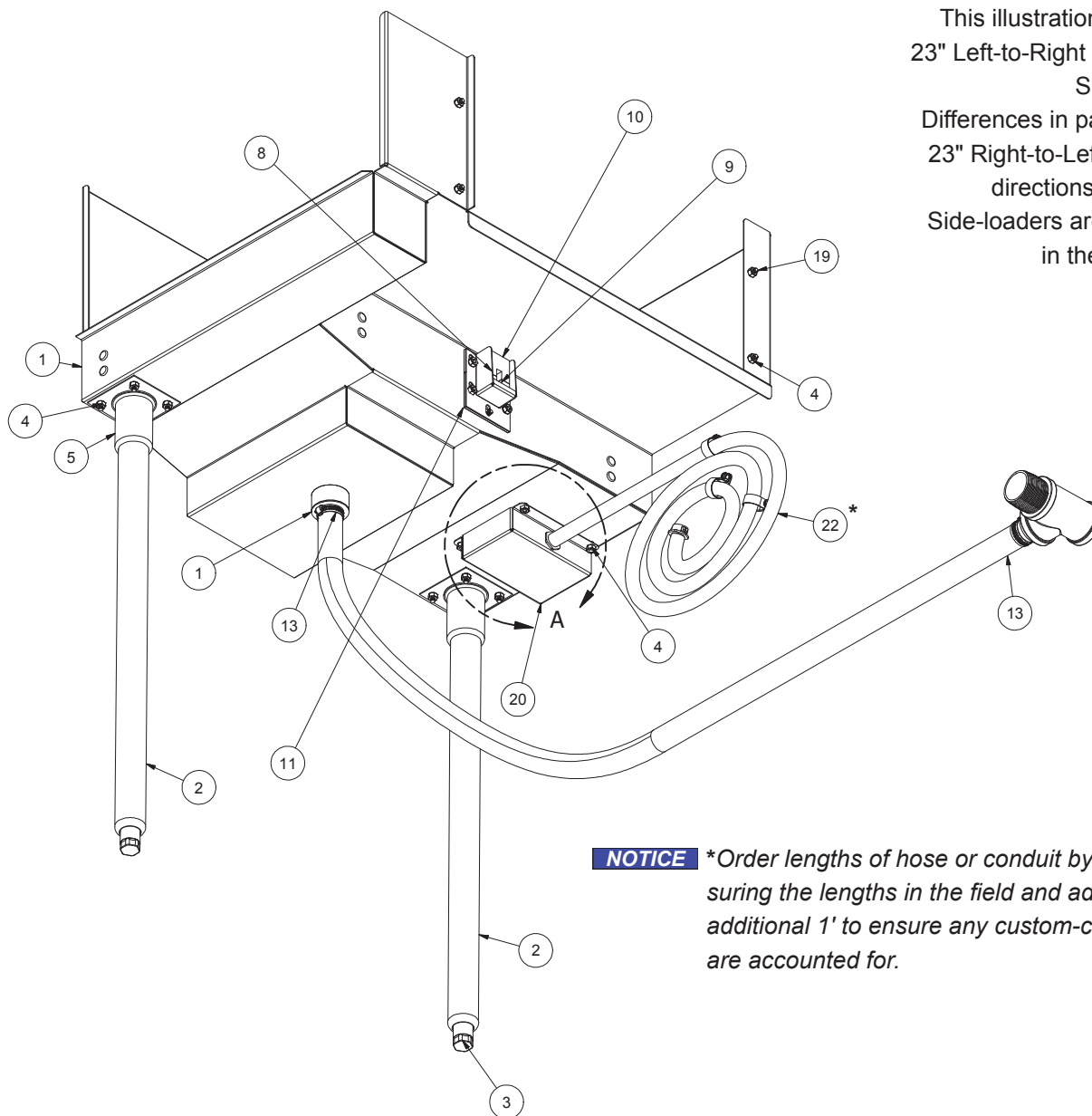
Pre-wash MOTOR VOLTAGE	PART NUMBER	GE PART NUMBER
208	05945-111-68-40	RT1M
230	05945-111-68-40	RT1M
460	05945-111-68-41	RT1K
600	05945-111-68-41	RT1K

Blue selector switch should be set to H for manual reset.

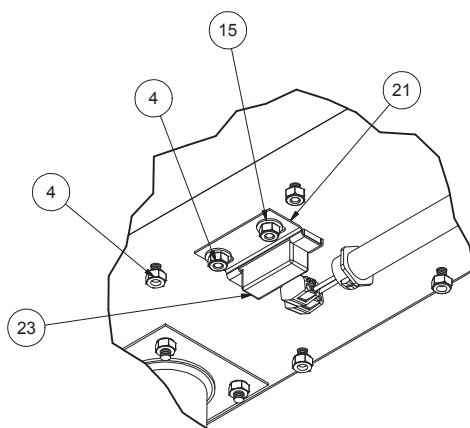
NOTICE Connections should be tightened to 7 in-lbs.

This illustration depicts a 23" Left-to-Right Unhooded Side-loader.

Differences in parts for the 23" Right-to-Left and both directions of the 30" Side-loaders are reflected in the parts list.



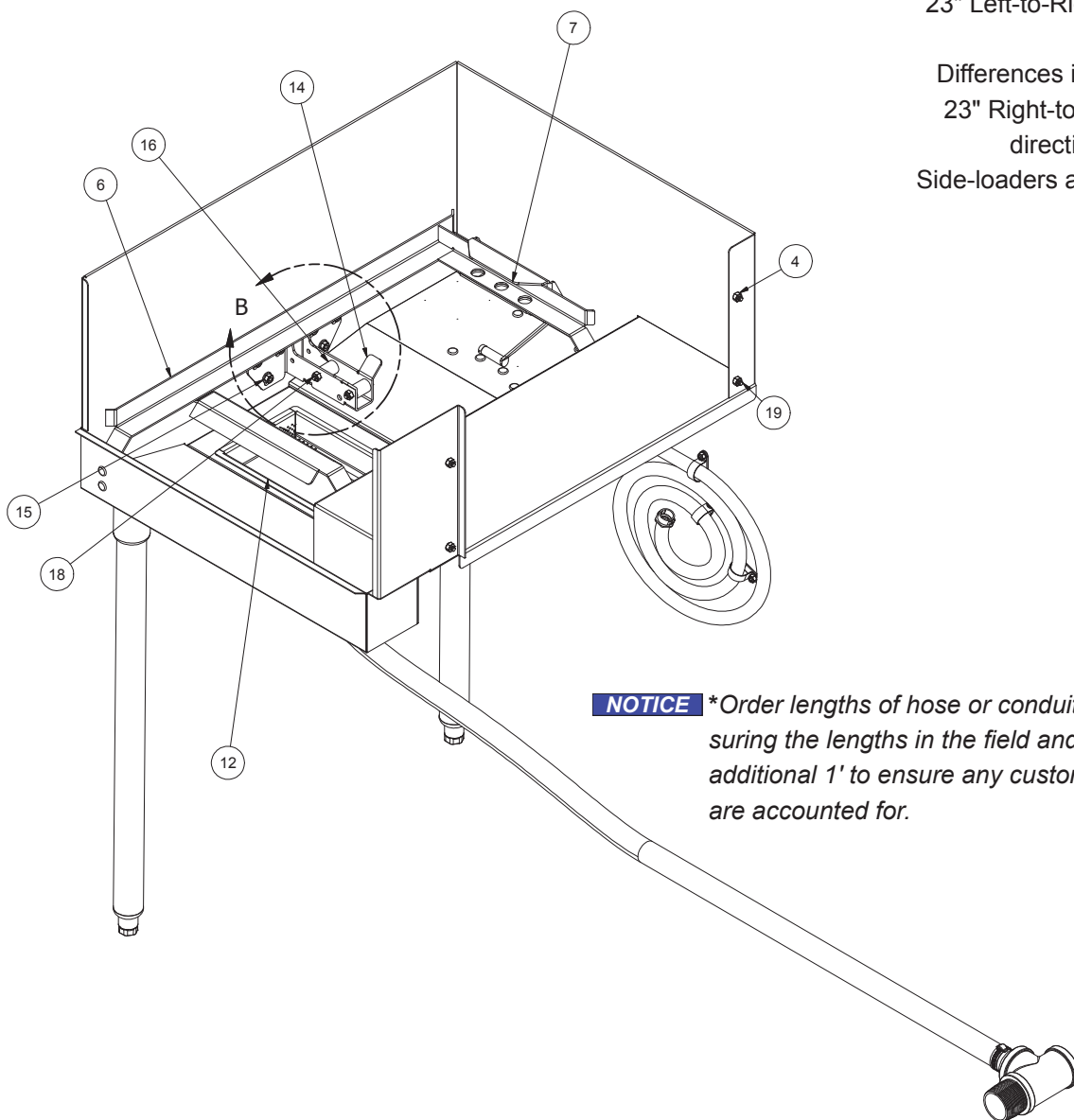
NOTICE *Order lengths of hose or conduit by measuring the lengths in the field and adding an additional 1' to ensure any custom-cut lengths are accounted for.



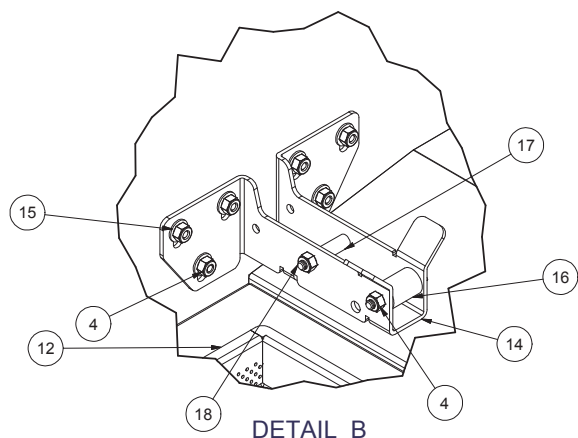
DETAIL A

This illustration depicts a
23" Left-to-Right Unhooded
Side-loader.

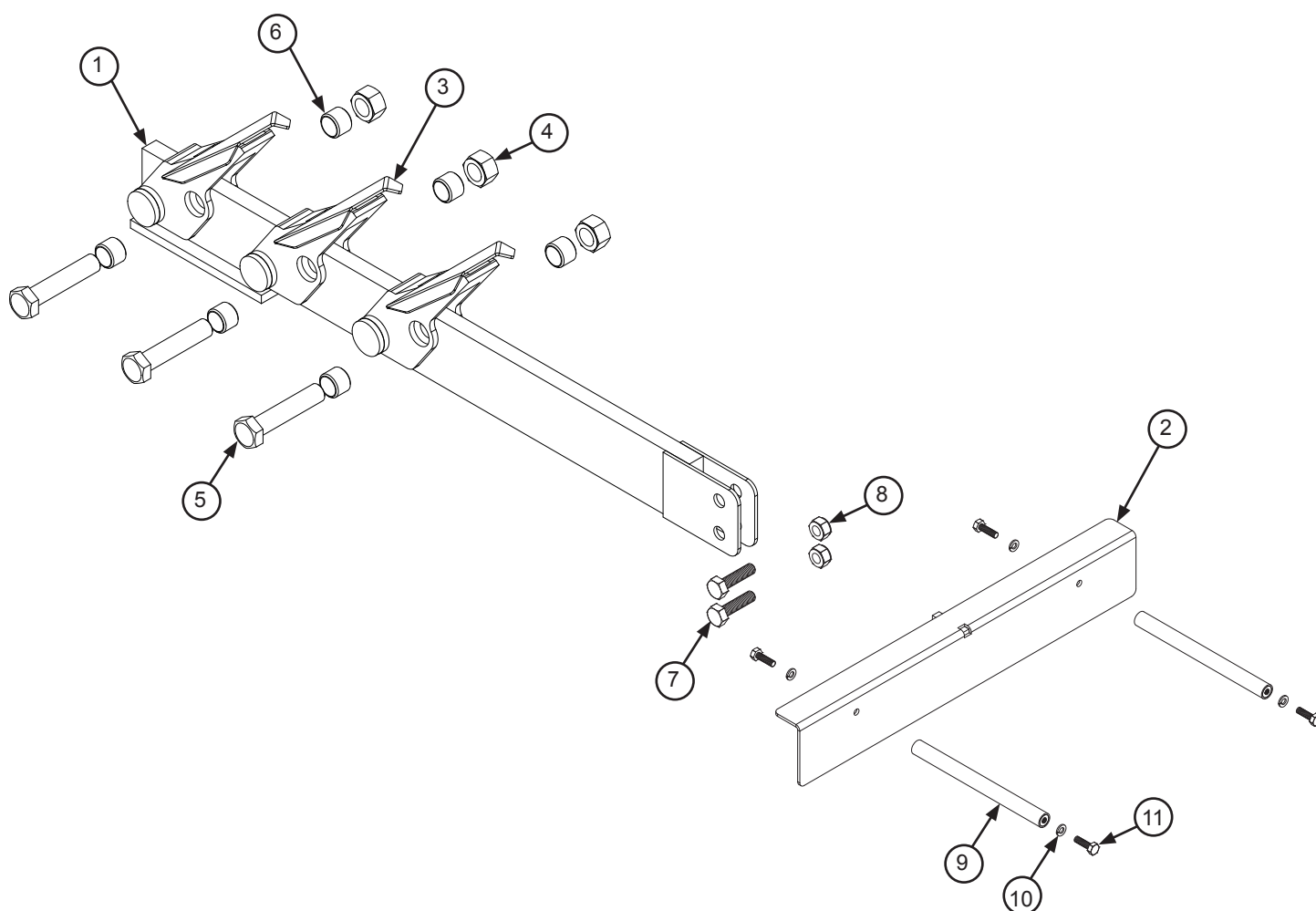
Differences in parts for the
23" Right-to-Left and both
directions of the 30"
Side-loaders are reflected in
the parts list.



NOTICE *Order lengths of hose or conduit by measuring the lengths in the field and adding an additional 1' to ensure any custom-cut lengths are accounted for.



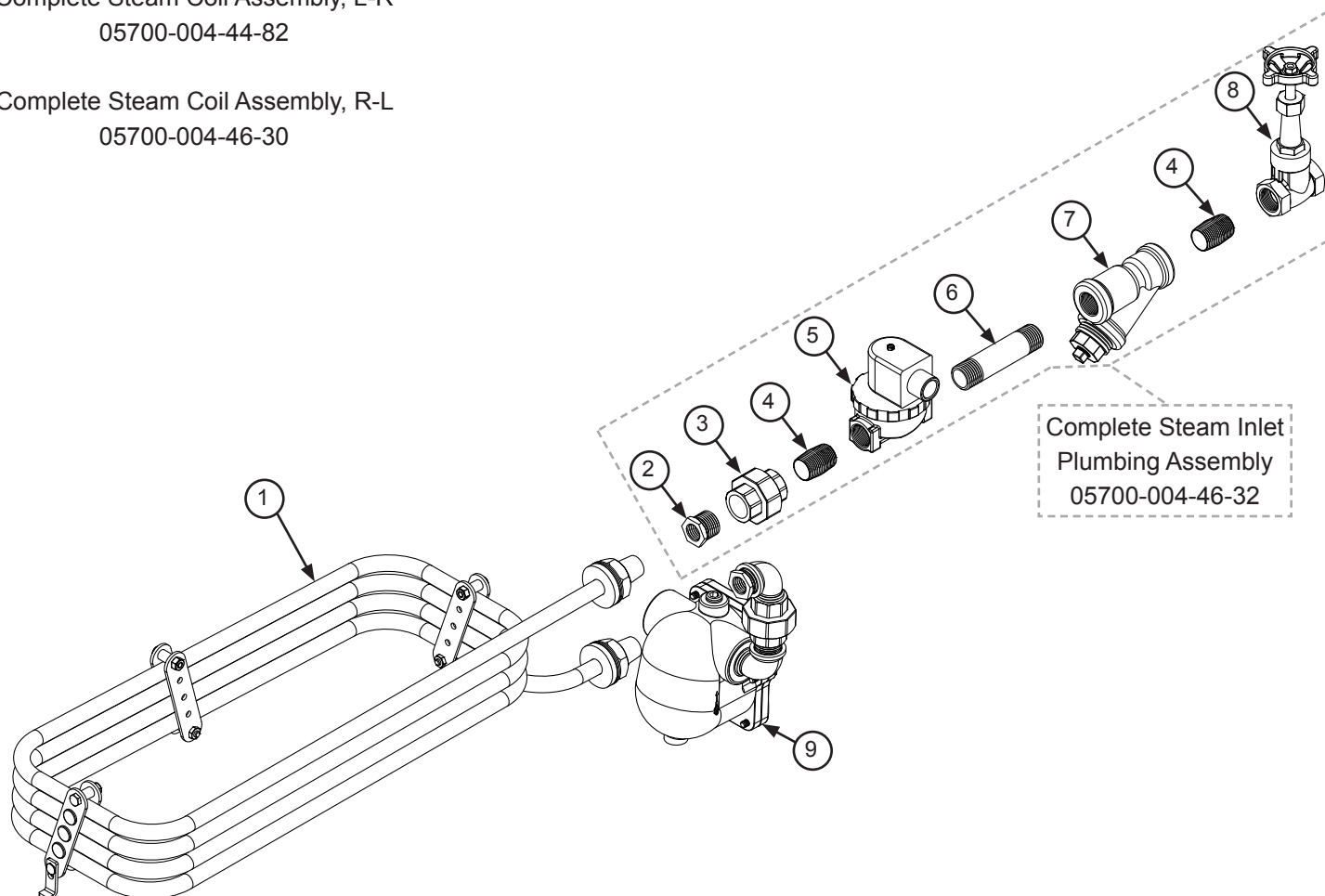
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Tub Weldment, 23" Side-loader L-R Tub Weldment, 23" Side-loader R-L Tub Weldment, 30" Side-loader L-R Tub Weldment, 30" Side-loader R-L	05700-004-37-44 05700-004-38-03 05700-003-88-46 05700-003-88-39
2	2	Support Leg	05700-021-87-59
3	2	Adjustable Foot	05340-108-01-03
4	39	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
5	2	Leg Socket	05700-002-56-14
6	1	Track, Side-loader L-R	05700-003-90-00
		Track, Side-loader R-L	05700-003-89-95
7	1	Actuator Switch Assembly	05700-004-53-51
8	1	Gutter, Pawl Bar	05700-021-66-86
9	1	Guide Block Bottom-slotted	05700-011-69-50
10	1	Guide Block Top-slotted	05700-011-69-49
11	1	Gasket, Drive Gutter	05330-011-68-55
12	1	Strainer	05700-021-85-10
13	1	Drain Assembly, Side-loader	05700-004-38-17
14	1	Bracket, Loader Pawl Bar Support	05700-003-87-39
15	16	Washer, 1/4"	05311-174-01-00
16	2	Roller	05700-011-68-16
17	2	Roller Shaft	05700-011-68-14
18	2	Screw, 1/4-20 x 1 3/4" Hex	05305-274-10-00
19	4	Bolt, 1/4-20 x 1/2"	05305-274-02-00
20	1	Cover, Side-loader Switch	05700-003-87-41
21	1	Bracket, Limit Switch	05700-021-71-18
22	1	Conduit and Wiring, Side-loader	05700-004-38-53
23	1	Magnetic Reed Switch	05930-111-68-44



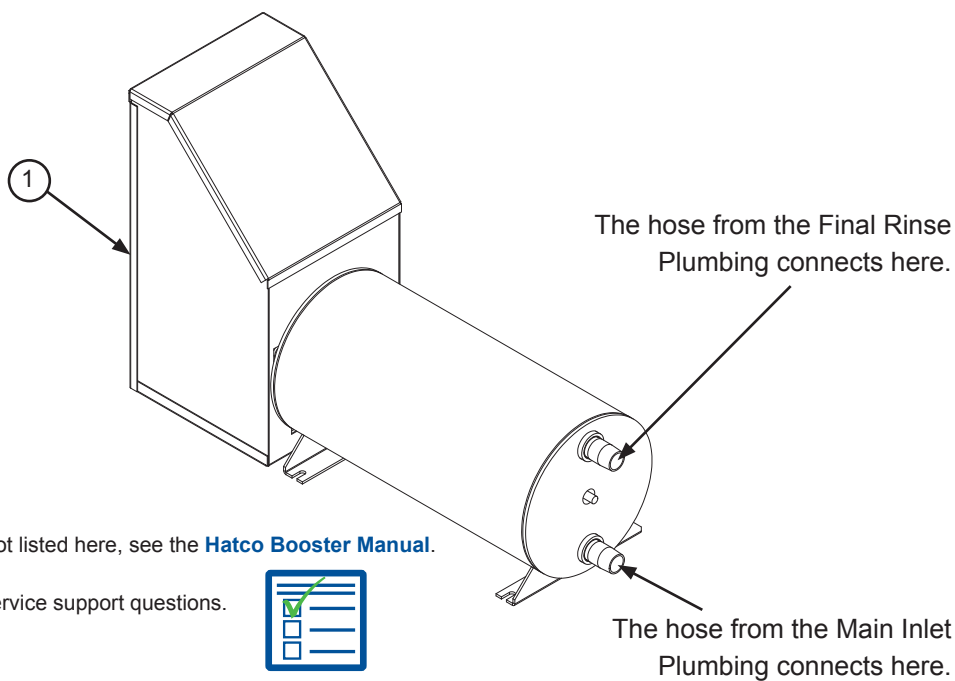
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Pawl Bar, Side-loader	05700-021-86-88
2	1	Drive Linkage, Side-loader	05700-004-37-81
3	3	Pawl Dog with Wing	05700-021-86-79
4	3	Locknut, 3/8-16 with Nylon Insert	05310-011-72-55
5	3	Bolt, 3/8-16 x 1 3/4" Hex	05306-011-36-94
6	6	Spacer, Pawl Bar Dog	05700-011-71-45
7	2	Screw, 1/4-20 x 1" Hex	05305-274-27-00
8	2	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
9	2	Drive Link	05700-004-46-82
10	4	Lockwasher, Spring	05311-274-01-00
11	4	Screw, 1/4-20 x 7/8"	05305-274-05-00

Complete Steam Coil Assembly, L-R
05700-004-44-82

Complete Steam Coil Assembly, R-L
05700-004-46-30



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Steam Coil	05700-004-36-15
2	1	Reducer, 3/4" to 1/2" Black Iron	04730-911-02-34
3	1	Union, 3/4" Black Iron	04730-912-01-00
4	2	Nipple, 3/4" Black Iron	04730-907-01-00
5	1	Valve, Steam, 3/4"	04820-011-87-39
6	1	Nipple, 3/4" Black Iron, 4" Long	04730-907-02-34
7	1	Y-strainer, Steam, 3/4"	04730-217-01-32
8	1	Gate Valve, Steam, 3/4"	04820-100-19-00
9	1	Steam Condensate Assembly, L-R	05700-004-46-56
	1	Steam Condensate Assembly, R-L	05700-004-46-33



For Booster Heater service parts not listed here, see the [Hatco Booster Manual](#).

Call Hatco at 800-558-0607 with service support questions.



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Booster Heater	See Chart Below

BOOSTER HEATER	PART NUMBER
12 kW (40 °F Rise) 208 V, 3-Phase	04540-004-30-83
12 kW (40 °F Rise) 230 V, 3-Phase	04540-004-30-82
12 kW (40 °F Rise) 460 V, 3-Phase	04540-004-30-81
12 kW (40 °F Rise) 600 V, 3-Phase	04540-004-55-86
17.2 kW (70 °F Rise) 208 V, 3-Phase	04540-004-29-75
18 kW (70 °F Rise) 230 V, 3-Phase	04540-004-29-77
18 kW (70 °F Rise) 460 V, 3-Phase	04540-004-30-77
18 kW (70 °F Rise) 600 V, 3-Phase	04540-004-55-87
27 kW (Energy Recovery) 208 V, 3-Phase	04540-004-41-68
27 kW (Energy Recovery) 230 V, 3-Phase	04540-004-41-69
27 kW (Energy Recovery) 460 V, 3-Phase	04540-004-41-70
27 kW (Energy Recovery) 600 V, 3-Phase	04540-004-55-88

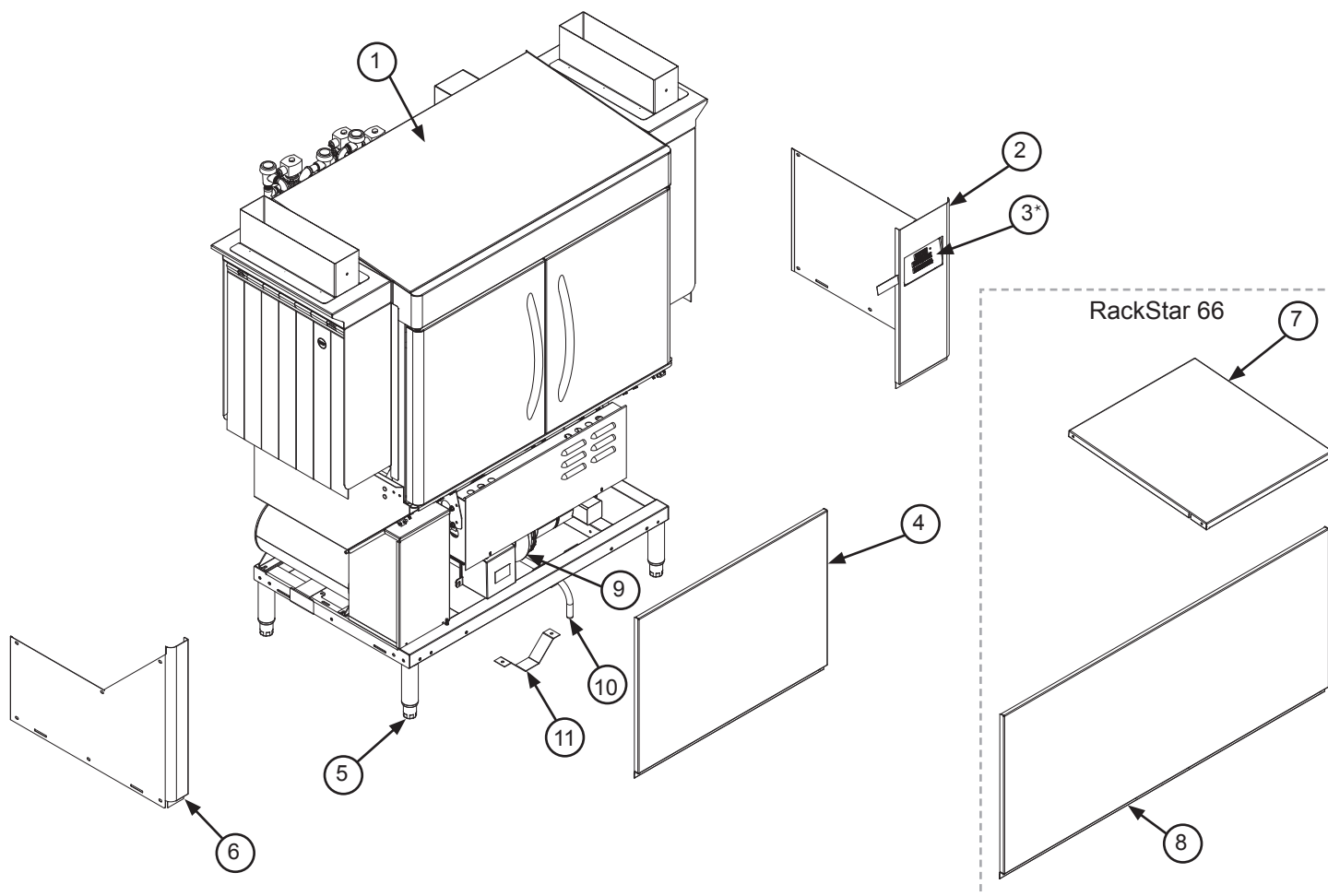
*RackStar NB does not have a booster heater.

Find the machine's applicable electrical configuration and the booster type (70-degree, 40-degree, or ER) in the table below and use the associated part number to order.

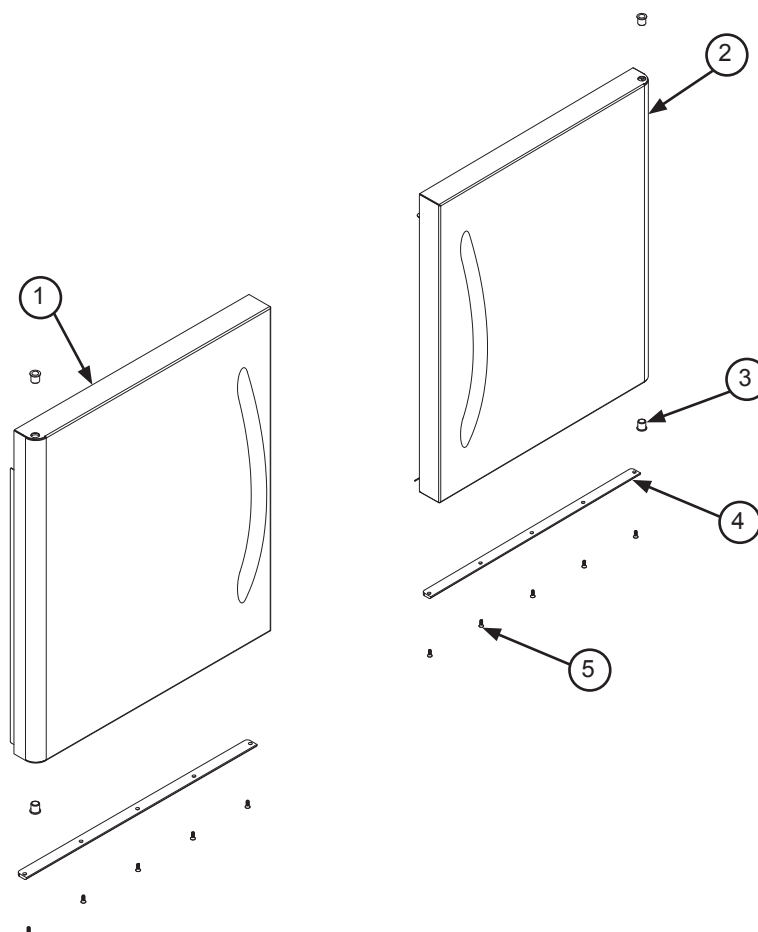
Click [here](#) for install instructions.



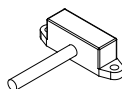
BOOSTER HEATER KIT	PART NUMBER
12 kW (40 °F Rise) 208 V, 3-Phase	05700-004-48-38
12 kW (40 °F Rise) 230 V, 3-Phase	05700-004-48-41
12 kW (40 °F Rise) 460 V, 3-Phase	05700-004-48-39
12 kW (40 °F Rise) 600 V, 3-Phase	05700-004-91-88
17.2 kW (70 °F Rise) 208 V, 3-Phase	05700-004-48-31
18 kW (70 °F Rise) 230 V, 3-Phase	05700-004-48-32
18 kW (70 °F Rise) 460 V, 3-Phase	05700-004-48-33
18 kW (70 °F Rise) 600 V, 3-Phase	05700-004-91-90
27 kW (Energy Recovery) 208 V, 3-Phase	05700-004-91-91
27 kW (Energy Recovery) 600 V, 3-Phase	05700-004-91-92



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Hood Dress Panel	05700-004-18-39
2	1	Left Dress Panel, L-R	05700-004-30-60
		Right Dress Panel, R-L	05700-004-31-93
3	1	Display	See "Display Assembly" page.
4	1	Front Dress Panel, RackStar 44	05700-004-30-44
5	1	Adjustable Foot	05340-011-71-74
6	1	Right Dress Panel, L-R	05700-004-30-59
		Left Dress Panel, R-L	05700-004-31-92
7	1	Pre-wash Hood Dress Panel	05700-004-30-08
8	1	Front Dress Panel, RackStar 66	05700-004-34-48
9	1	Drain Valve	04820-111-71-46
10	1	Drain Handle Complete Assembly	05700-004-31-89
	1	Drain Handle Only	05700-004-31-90
11	1	Support Bracket, Drain Hose	05700-004-56-71



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Left Door Assembly Left Door Assembly, HH	05700-004-79-72 05700-004-81-13
2	1	Right Door Assembly Right Door Assembly, HH	05700-004-80-04 05700-004-81-12
3	4	Bearing, Flanged Sleeve	03120-004-39-92
4	2	Door Seal	09330-004-17-41
5	10	Screw, 10-32 x 1/2"	05305-011-44-51
6	1	Door Assembly, Pre-wash, L-R Door Assembly, Pre-wash, R-L Door Assembly, Pre-wash, L-R, HH Door Assembly, Pre-wash, R-L, HH (Not Shown)	05700-004-75-90 05700-004-75-93 05700-004-79-78 05700-004-76-94



Door Switch
05930-002-36-80

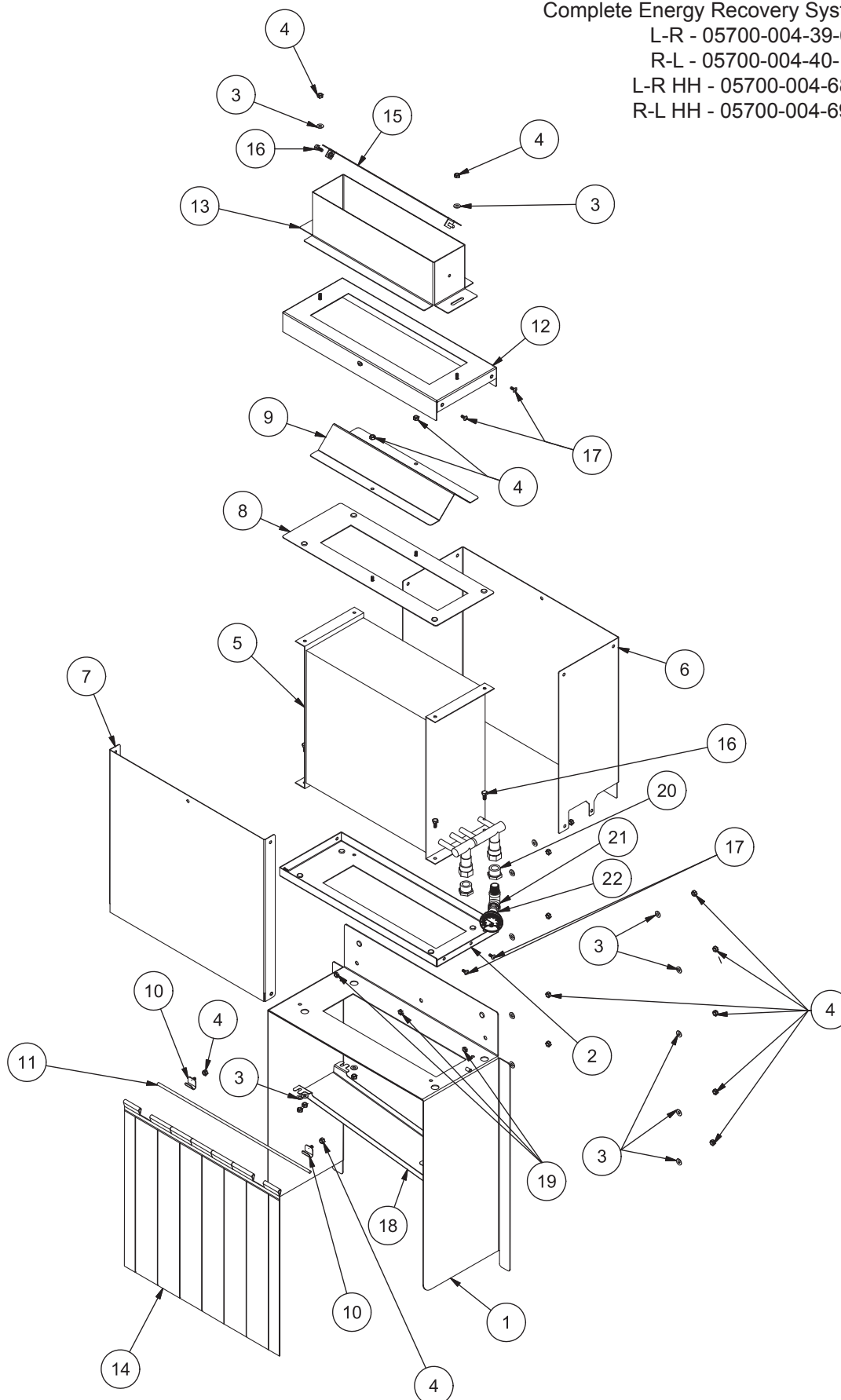
Complete Energy Recovery System Assembly

L-R - 05700-004-39-68

R-L - 05700-004-40-13

L-R HH - 05700-004-68-92

R-L HH - 05700-004-69-04

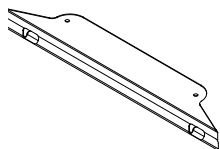


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Vent Cowl, L-R Vent Cowl, L-R HH	05700-004-36-36 05700-004-68-91
	1	Vent Cowl, R-L Vent Cowl, R-L HH	05700-004-40-16 05700-004-69-03
2	1	Mounting Plate	05700-004-36-32
3	20	Washer, 1/4-20	05311-174-01-00
4	24	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
5	1	Coil, Heat Exchanger	04420-004-40-73
6	1	Side Cover, Left	05700-004-41-17
7	1	Side Cover, Right	05700-004-41-18
8	1	Top Coil Support	05700-004-40-40
9	1	Air Baffle	05700-004-36-66
10	2	Curtain Hook	05700-003-17-98
11	1	Curtain Rod	05700-003-77-52
12	1	Coil Housing Top	05700-004-36-73
13	1	Collar, Vent Scoop	05700-004-36-71
14	1	Curtain, 20 1/2" x 19"	08415-002-14-41
		Curtain, HH 20 1/2" x 29 3/4"	08415-004-49-64
15	1	Baffle, Vent Cowl	05700-002-11-47
16	5	Screw, 1/4-20 x 5/8" Hex	05305-274-24-00
17	10	Screw, 10-32 x 1/2"	05305-011-39-36
18	1	Drip Tray	05700-004-42-09
19	3	Locknut, 1/4-20 Low Profile with Nylon Insert	05310-374-02-00
20	2	Bushing, 3/4" to 1/2" Hex, Brass	04730-002-56-27
21	1	Plumbing, Temperature Gauge, Coil	05700-004-42-88
22	1	Check Valve, 1/2"	04730-004-79-79

Hoses for Energy Recovery System (Not Shown)

DESCRIPTION	PART NUMBER
Hose, Inlet (Blue)	05700-004-42-29
Hose, Coil Outlet (Red)	05700-004-42-30
Hose, Booster Outlet (Red)	05700-004-42-31
Hose, 1/2" x 23" (Blue)	05700-004-42-32
Hose, 1/2" x 47" (Red)	05700-004-42-33
Hose, 1/2" x 38" (Red)	05700-004-42-34
Hose, 1/2" x 5" (Blue)	05700-004-42-89

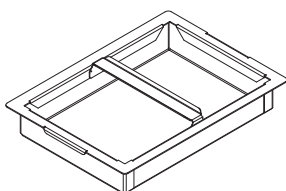
Miscellaneous Parts



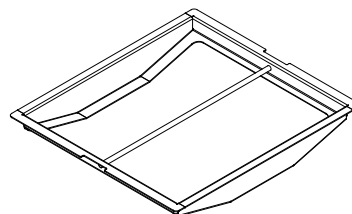
Curtain Bracket, Middle
05700-004-32-75



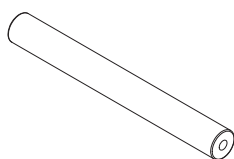
Curtain Bracket, End
05700-004-21-24



Strainer, Pre-wash
05700-004-37-61

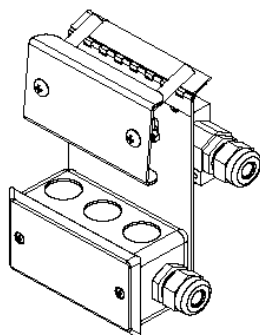


Strainer, Wash Tank
05700-004-29-02

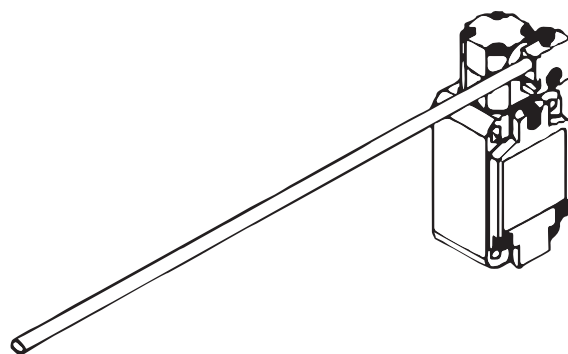


Pre-wash Connecting Rod
05700-004-56-16

Options



Striker Table Limit
Switch Option
05700-002-88-07



Whisker Table Limit
Switch Option
05700-002-06-83



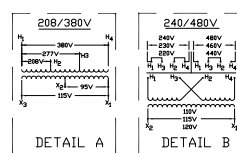
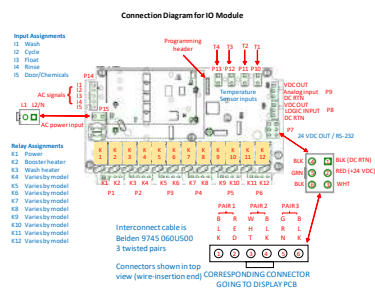
208/230 VOLTS, 50/60 Hz, 3-PHASE



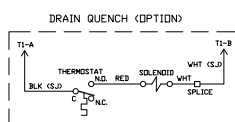
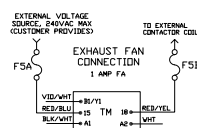
L1 L2 L3	POWER DISTRIBUTION BLOCK (MAIN)
L1A L2A L3A	PUMP DISTRIBUTION BLOCK (BOOSTER OPTION)
RND	EARTH GROUND
R1	CONTACTOR, WASH HEATER
R2	CONTACTOR, DRIVE MOTOR
R3	CONTACTOR, WASH PUMP MOTOR
R4	RELAY, RINSE
R5W	RELAY, PRE-WASH PUMP MOTOR
R6	RELAY, WASH TANK FILL
R7	RELAY, DOOR SWITCH
R9W	RELAY, PRE-WASH/FILL
H1	HEATER, WASH
H2	HEATER, BOOSTER (OPTION)
M1	MOTOR, DRIVE
M2	MOTOR, WASH PUMP
M3	MOTOR, PRE-WASH PUMP
1MDL	OVERLOAD, DRIVE MOTOR
2MDL	OVERLOAD, WASH PUMP MOTOR
3MDL	OVERLOAD, PRE-WASH PUMP MOTOR
PWFSW	PRE-WASH/FILL SOLENOID
WFS	WASH/FILL SOLENOID
R1	RINSE SOLENOID 1
R2	RINSE SOLENOID 2 (OPTION)
S1	SWITCH, DOOR SAFETY (WASH)
S2	SWITCH, DOOR SAFETY (WASH)
S3W	SWITCH, DOOR SAFETY (PRE-WASH)
S4	SWITCH, WASH PUMP
S5	SWITCH, WASH PUMP
S6	SWITCH, FINAL RINSE
S7W	SWITCH, PRE-WASH LIMIT
PWFSW1	PRE-WASH FLOAT SWITCH 1 (UPPER)
PWFSW2	PRE-WASH FLOAT SWITCH 2 (LOWER)
WFSW1	WASH FLOAT SWITCH 1 (UPPER)
WFSW2	WASH FLOAT SWITCH 2 (LOWER)
TLS	TABLE LIMIT SWITCH (OPTION)
T1	THERMOSTAT, HIGH-LIMIT
TS1	TRANSFORMER, CONTROL
F1	FUSE, CONTROL
F2	FUSE, DETERGENT DISPENSER
F3	FUSE, RINSE AID DISPENSER
F4	FUSE, CONSTANT VOLTAGE CONNECTION
F5	FUSE, EXHAUST FAN
CVS	CONSTANT VOLTAGE SIGNAL
DET	DETERGENT DISPENSER CONNECTION
RAS	RINSE AID SIGNAL
TM	TIMER, EXHAUST FAN

* DENOTES COMPONENTS SPECIFIC TO RACKSTAR 66

NOTE: BOOSTER IS OPTIONAL, AND CAN SOMETIMES OPERATE AT A DIFFERENT VOLTAGE THAN MACHINE'S RATING. THIS IS TYPICALLY INDICATED BY A STICKER ON THE BOOSTER TERMINAL BLOCK.



NOTE: THESE WIRING CONFIGURATIONS CORRESPOND TO TWO DIFFERENT TRANSFORMER TYPES.

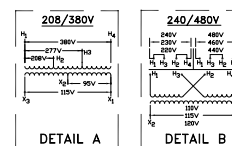
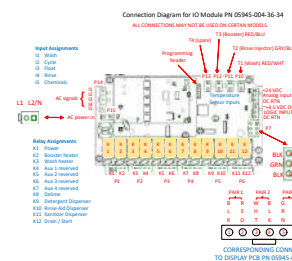


380/480 VOLTS, 50/60 Hz, 3-PHASE

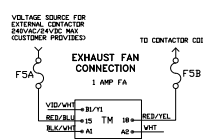


- | | |
|-------------|---|
| L1 L2 L3 | POWER DISTRIBUTION BLOCK (MAIN) |
| L1A L2A L3A | POWER DISTRIBUTION BLOCK (BOOSTER OPTION) |
| RND | EARTH GROUND |
| R1 | CONTACTOR, WASH HEATER |
| R2 | CONTACTOR, DRIVE MOTOR |
| R3 | CONTACTOR, WASH PUMP MOTOR |
| R4 | RELAY, RINSE |
| R5W | CONTACTOR, PRE-WASH PUMP MOTOR |
| R6 | RELAY, WASH TANK FILL |
| R7 | RELAY, DOOR SWITCH |
| R9W | RELAY, PRE-WASH/FILL |
| H1 | HEATER, WASH |
| M1 | HEATER, BOOSTER (OPTION) |
| M2 | MOTOR, DRIVE |
| M3 | MOTOR, WASH PUMP |
| M3W | MOTOR, PRE-WASH PUMP |
| 1MDL | OVERLOAD, DRIVE MOTOR |
| 2MDL | OVERLOAD, WASH PUMP MOTOR |
| 3MDLW | OVERLOAD, PRE-WASH PUMP MOTOR |
| PWF5W | PRE-WASH/FILL, SOLENOID |
| WFS | WASH/FILL, SOLENOID |
| R51 | RINSE SOLENOID 1 |
| R52 | RINSE SOLENOID 2 (OPTION) |
| S1 | SWITCH, DOOR SAFETY (WASH) |
| S2 | SWITCH, DOOR SAFETY (PRE-WASH) |
| S3W | SWITCH, DOOR SAFETY (PRE-WASH) |
| W14 | SWITCH, WASH PUMP |
| S5 | SWITCH, WASH PUMP |
| S6 | SWITCH, FINAL RINSE |
| W17W | SWITCH, PRE-WASH LIMIT |
| PWF5W1W | PRE-WASH FLOAT SWITCH 1 (UPPER) |
| PWF5W2W | PRE-WASH FLOAT SWITCH 2 (LOWER) |
| PWF5W1 | WASH FLOAT SWITCH 1 (UPPER) |
| PWF5W2 | WASH FLOAT SWITCH 2 (LOWER) |
| TLS | TABLE LIMIT SWITCH (OPTION) |
| T1 | THERMOSTAT, HIGH-LIMIT |
| T51 | TRANSFORMER, CONTROL |
| F1 | FUSE, CONTROL |
| F2 | FUSE, DETERGENT DISPENSER |
| F3 | FUSE, RINSE AND DISPENSER |
| F4 | FUSE, CONSTANT VOLTAGE CONNECTION |
| F5 | FUSE, EXHAUST FAN |
| CVS | CONSTANT VOLTAGE SIGNAL |
| DET | DETERGENT DISPENSER CONNECTION |
| RAS | RINSE AIR SIGNAL |
| TM | TIMER, EXHAUST FAN |

* DENOTES COMPONENTS SPECIFIC TO RACKSTAR 66



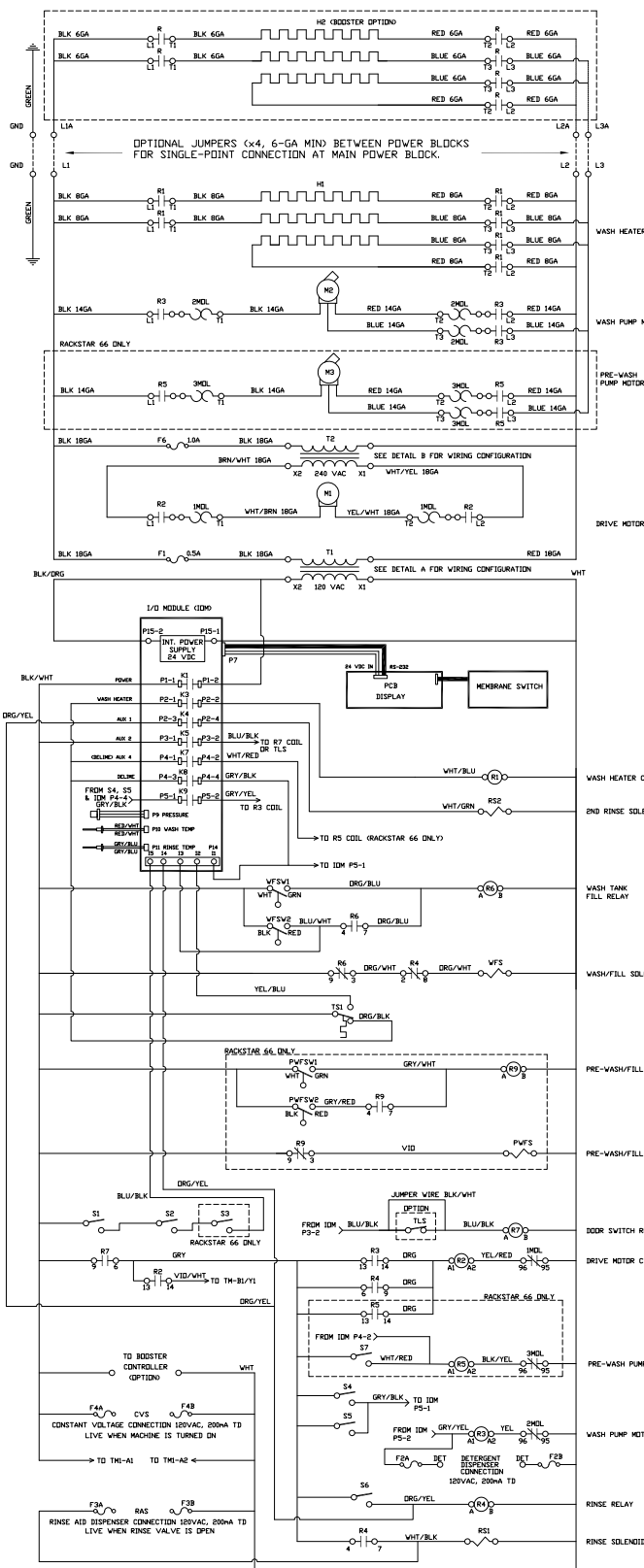
NOTE: THESE WIRING CONFIGURATIONS CORRESPOND TO TWO DIFFERENT TRANSFORMER TYPES.



PART NUMBER: 09905-004-38-57 REV. C

RACKSTAR 44/66 SCHEMATIC

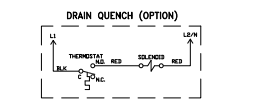
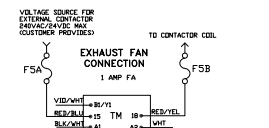
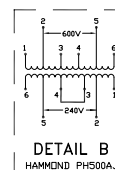
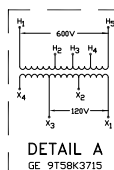
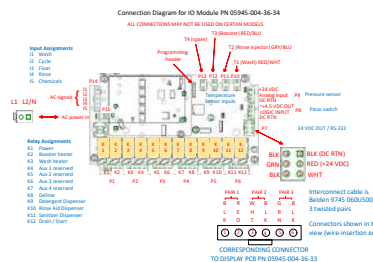
600 VOLTS, 50/60 Hz, 3-PHASE



LEGEND

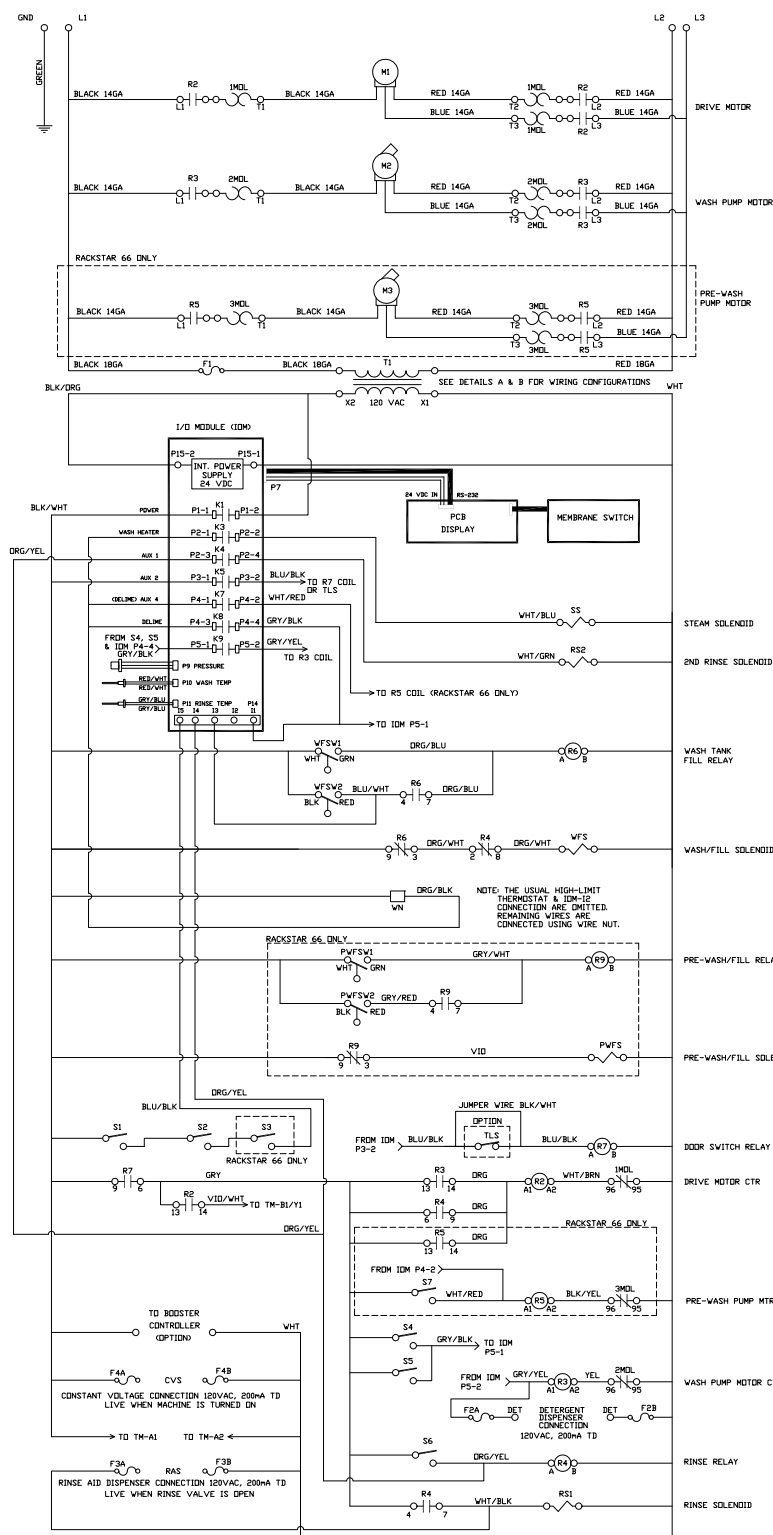
L1 L2 L3	POWER DISTRIBUTION BLOCK (MAIN)
L1A L2A L3A	POWER DISTRIBUTION BLOCK (BOOSTER OPTION)
GND	EARTH GROUND
R1	CONTACTOR, WASH HEATER
R2	CONTACTOR, DRIVE MOTOR
R3	CONTACTOR, WASH PUMP MOTOR
R4	RELAY, RINSE
R5W	CONTACTOR, PRE-WASH PUMP MOTOR
R6	RELAY, WASH TANK FILL
R7	RELAY, PRE-WASH/FILL
R9W	RELAY, WASH PUMP
H1	HEATER, WASH
H2	HEATER, BOOSTER (OPTION)
M1	MOTOR, DRIVE
M2	MOTOR, WASH PUMP
M3W	MOTOR, PRE-WASH PUMP
1MDL	OVERLOAD, DRIVE MOTOR
2MDL	OVERLOAD, WASH PUMP MOTOR
3MDLW	OVERLOAD, PRE-WASH PUMP MOTOR
PWFSW	PRE-WASH/FILL SOLENOID
RS1	WASH/FILL SOLENOID
RS2	RINSE SOLENOID 1
S1	SWITCH, DOOR SAFETY (WASH)
S2	SWITCH, DOOR SAFETY (WASH)
S3W	SWITCH, DOOR SAFETY (PRE-WASH)
S4	SWITCH, WASH PUMP
S5	SWITCH, WASH PUMP
S6	SWITCH, FINAL RINSE
S7W	SWITCH, PRE-WASH LIMIT
PWFSW1W	PRE-WASH FLOAT SWITCH 1 (UPPER)
PWFSW2W	PRE-WASH FLOAT SWITCH 2 (LOWER)
WFSW1	WASH FLOAT SWITCH 1 (UPPER)
WFSW2	WASH FLOAT SWITCH 2 (LOWER)
TLS	TABLE LIMIT SWITCH (OPTION)
TS1	THERMOSTAT, HIGH-LIMIT
T1	TRANSFORMER, CONTROL
F1	FUSE, CONTROL CIRCUIT
F2	FUSE, DETERGENT DISPENSER
F3	FUSE, RINSE AID DISPENSER
F4	FUSE, CONSTANT VOLTAGE CONNECTION
F5	FUSE, EXHAUST FAN
F6	FUSE, CONTROL DRIVE MOTOR
CVS	CONSTANT VOLTAGE SIGNAL
DET	DETERGENT DISPENSER CONNECTION
RAS	RINSE AID SIGNAL
TM	TIMER, EXHAUST FAN

* DENOTES COMPONENTS SPECIFIC TO RACKSTAR 66



RACKSTAR STEAM 44/66 SCHEMATIC

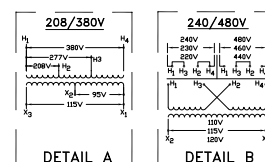
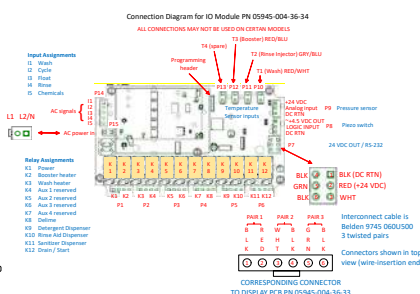
208/230 VOLTS, 50/60 Hz, 3-PHASE



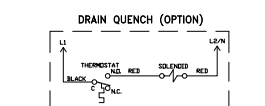
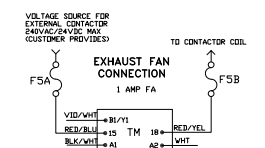
LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK (MAIN)
L1A L2A L3A	POWER DISTRIBUTION BLOCK (BOOSTER OPTION)
GND	EARTH GROUND
R2	CONTACTOR, DRIVE MOTOR
R3	CONTACTOR, WASH PUMP MOTOR
R4	RELAY, RINSE
R5	CONTACTOR, PRE-WASH PUMP MOTOR
R6	RELAY, WASH TANK FILL
R7	RELAY, DOOR SWITCH
R9	RELAY, PRE-WASH/FILL
H1	HEATER, WASH
H2	HEATER, BOOSTER (OPTION)
M1	MOTOR, DRIVE
M2	MOTOR, WASH PUMP
M3	MOTOR, PRE-WASH PUMP
1MDL	OVERLOAD, DRIVE MOTOR
2MDL	OVERLOAD, WASH PUMP MOTOR
3MDL	OVERLOAD, PRE-WASH PUMP MOTOR
PWFS*	PRE-WASH/FILL SOLENOID
WFS	WASH/FILL SOLENOID
RS1	RINSE SOLENOID 1
RS2	RINSE SOLENOID 2 (OPTION)
S1	SWITCH, DOOR SAFETY (WASH)
S2	SWITCH, DOOR SAFETY (WASH)
S3	SWITCH, DOOR SAFETY (PRE-WASH)
S4	SWITCH, WASH PUMP
S5	SWITCH, WASH PUMP
S6	SWITCH, FINAL RINSE
S7	SWITCH, PRE-WASH LIMIT
SS	SOLENOID, STEAM VALVE
PWFSW1*	PRE-WASH FLOAT SWITCH 1 (UPPER)
PWFSW2*	PRE-WASH FLOAT SWITCH 2 (LOWER)
WFSW1	WASH FLOAT SWITCH 1 (UPPER)
WFSW2	WASH FLOAT SWITCH 2 (LOWER)
TLS	TABLE LIMIT SWITCH (OPTION)
T1	TRANSFORMER, CONTROL
F1	FUSE, CONTROL
F2	FUSE, DETERGENT DISPENSER
F3	FUSE, RINSE AID DISPENSER
F4	FUSE, CONSTANT VOLTAGE CONNECTION
F5	FUSE, EXHAUST FAN
CVS	CONSTANT VOLTAGE SIGNAL
DET	DETERGENT DISPENSER CONNECTION
RAS	RINSE AID SIGNAL
TM	TIMER, EXHAUST FAN
WN	WIRE NUT

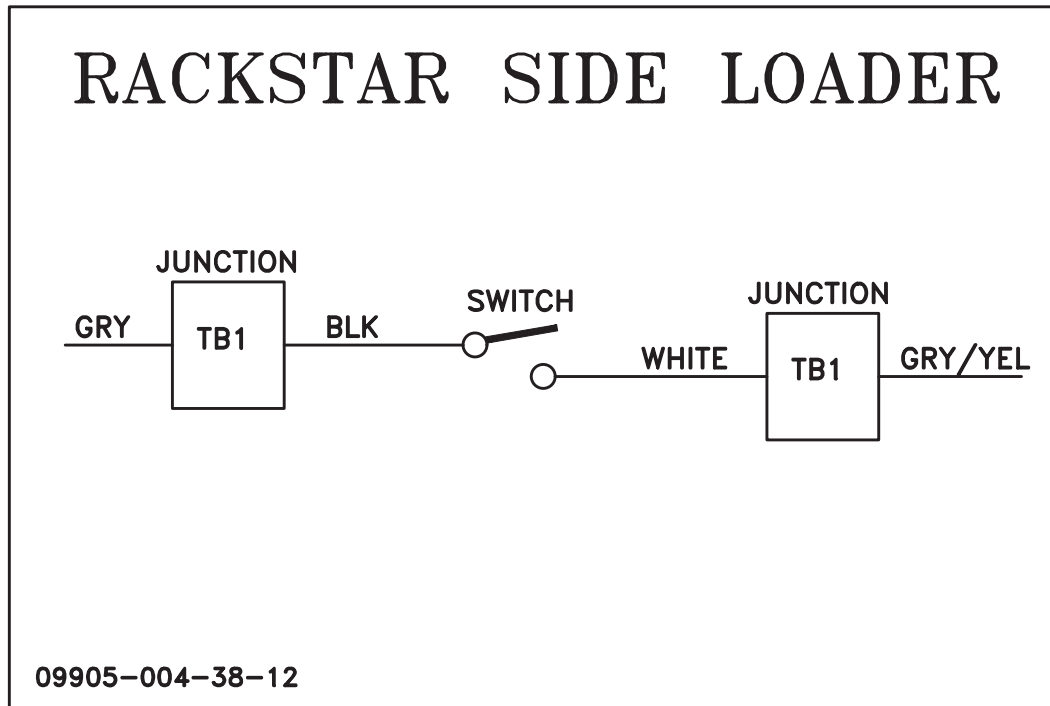
* DENOTES COMPONENTS SPECIFIC TO RACKSTAR 66



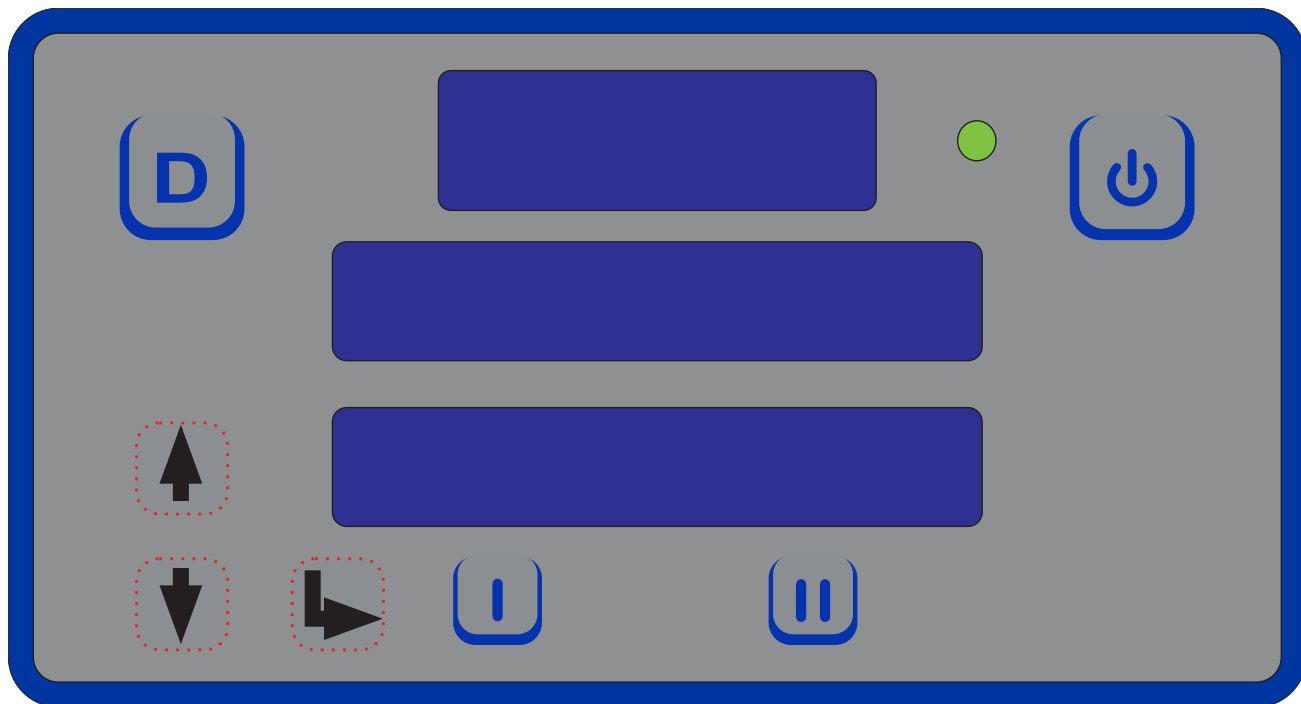
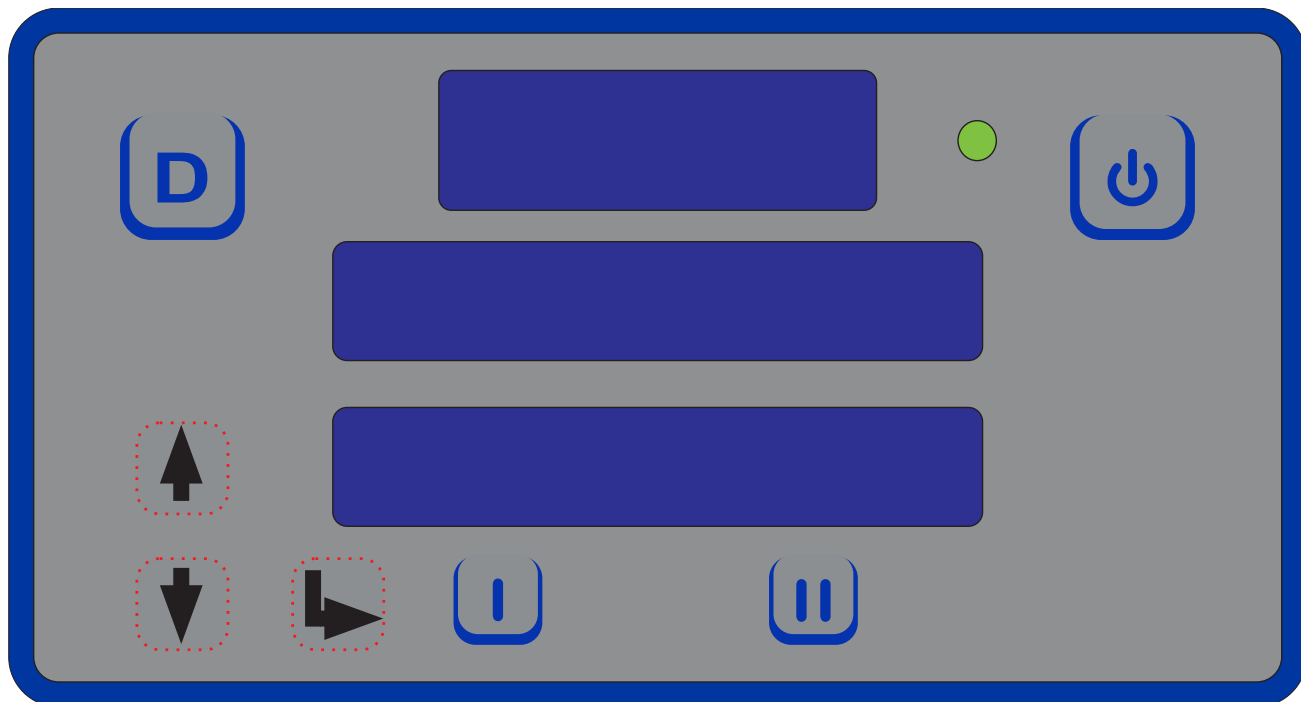
NOTE: THESE WIRING CONFIGURATIONS CORRESPOND TO TWO DIFFERENT TRANSFORMER TYPES.



PART NUMBER: 09905-004-46-60 REV C



This page can be copied and the display templates cut-out. Lay the cut-out over the display and use the Up-arrow, Down-arrow, and Select Buttons to locate the hidden programming buttons.





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