INSTALLATION, OPERATION, AND SERVICE MANUAL

NOBLE C SERIES

C-44
C-54
C-66
C-76
C-80
C-90

REVISION HISTORY

Revision Letter	Revision Date	Made by	Applicable ECNs	Details
A	10-25-16	JH	N/A	Initial release of manual.
B	8-18-17	JH	8509	Updated manual to new format. Audited manual and made corrections throughout. Changed C-44/54 Drain Plumbing Assembly.

NOMENCLATURE

NOBLE WAREWASHING

C-44CE[1], C-54CE, C-66CE, C-76CE, C-80CE, C-90CE

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

C-44CS, C-54CS, C-66CS, C-76CS, C-80CS, C-90CS

Steam-heated, hot-water-sanitizing rack conveyor machines.

SIDE-LOADER OPTION

Conveys a dish rack from the scrapping table to the dishmachine. No additional installation is required and no additional connections must be made.

[1]The number in the model designation is the width of the machine in inches.

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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SCHEMATICS

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.

ABBREVIATIONS & ACRONYMS

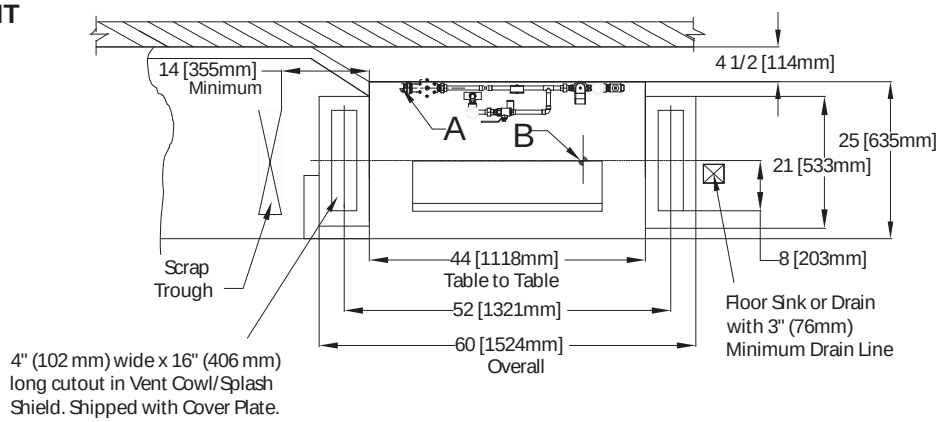
ANSI - American National Standards Institute
CFM - Cubic Feet per Minute
FPM - Feet per Minute
GHT - Garden Hose Thread
GPM - Gallons per Minute
GPG - Grains per Gallon
HP - Horse Power
Hz - Hertz
ID - Inside Diameter
in/lbs - Inch Pounds
kW - Kilowatts
NFPA - National Fire Protection Association
NPT - National Pipe Thread
PSI - Pounds per Square Inch
V - Volts

MACHINE DIMENSIONS

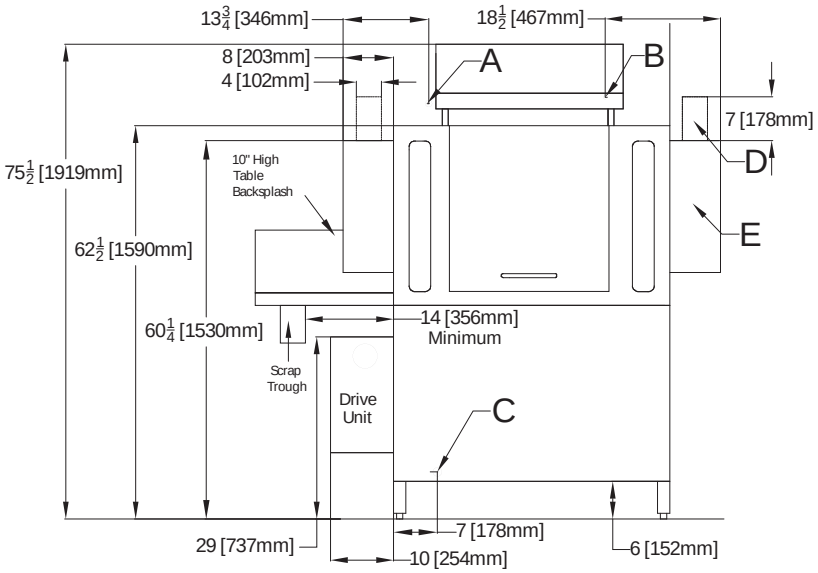
C-44CE LEFT-TO-RIGHT

A - Water Inlet
(1/2" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
D - Vent Collar
(Optional)
E - Vent Cowl
(Standard)

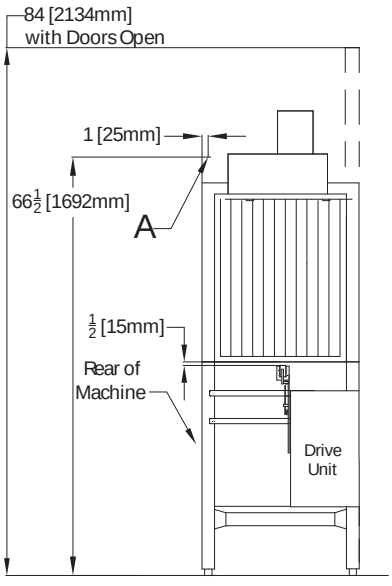
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



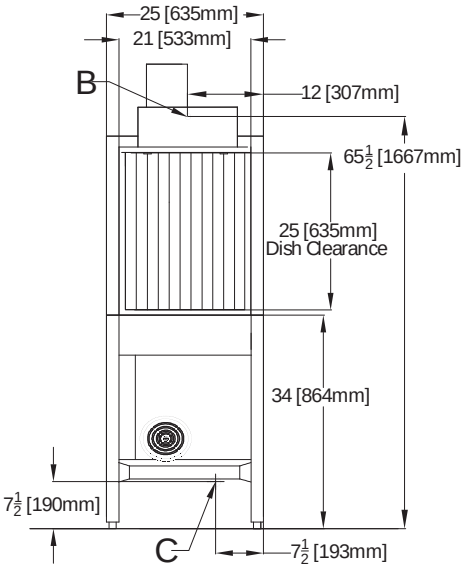
Top View



Front View



Left Side



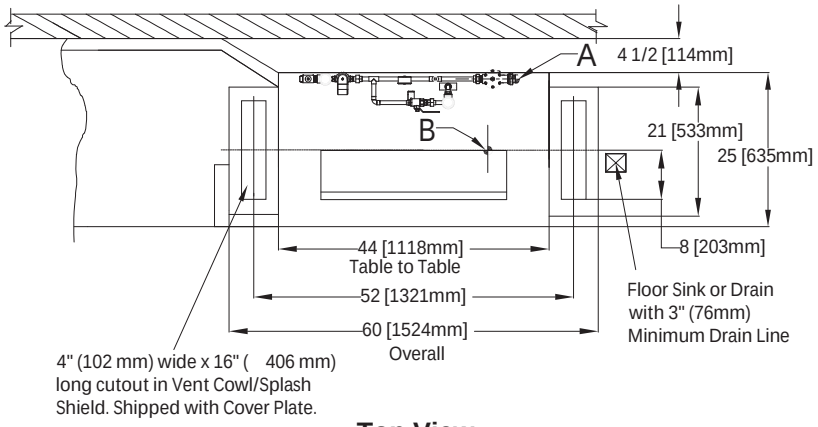
Right Side

MACHINE DIMENSIONS

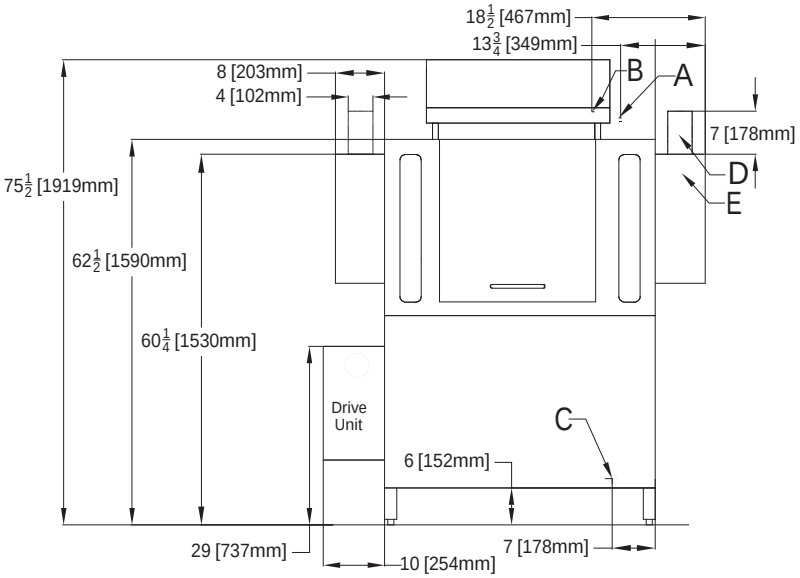
C-44CE RIGHT-TO-LEFT

A - Water Inlet
(1/2" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
D - Vent Collar
(Optional)
E - Vent Cowl
(Standard)

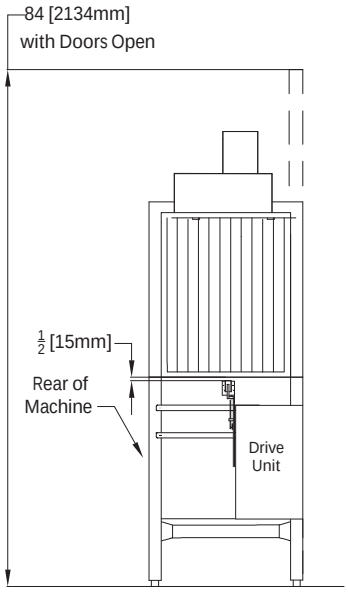
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



Top View



Front View



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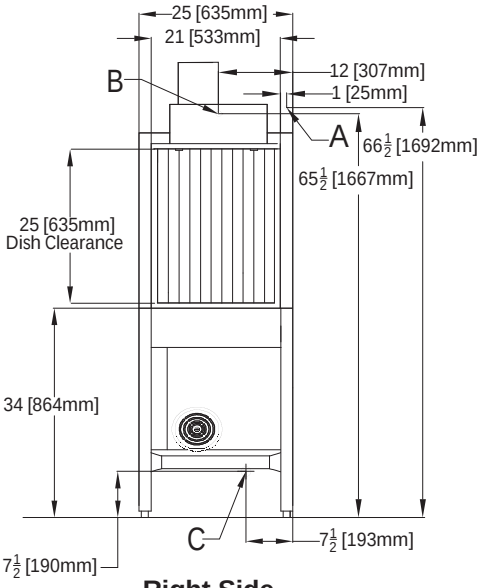
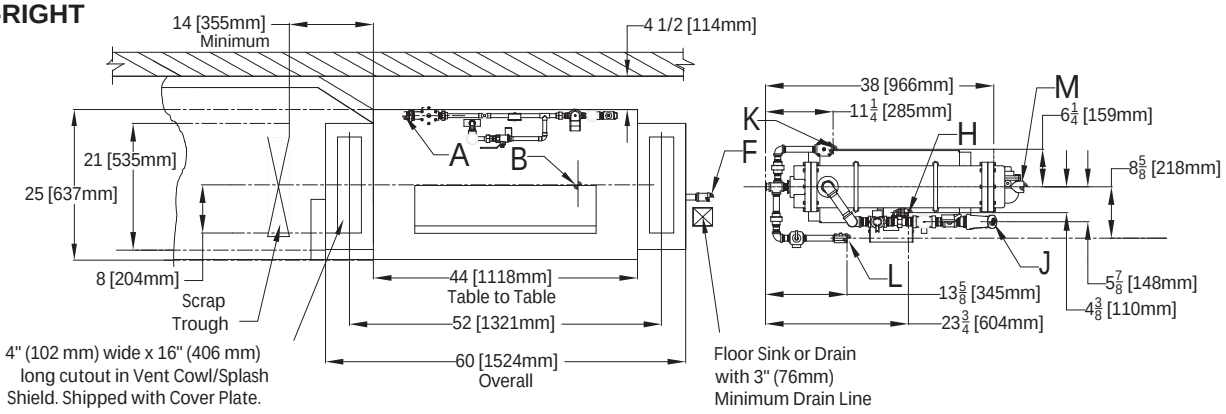


Right Side

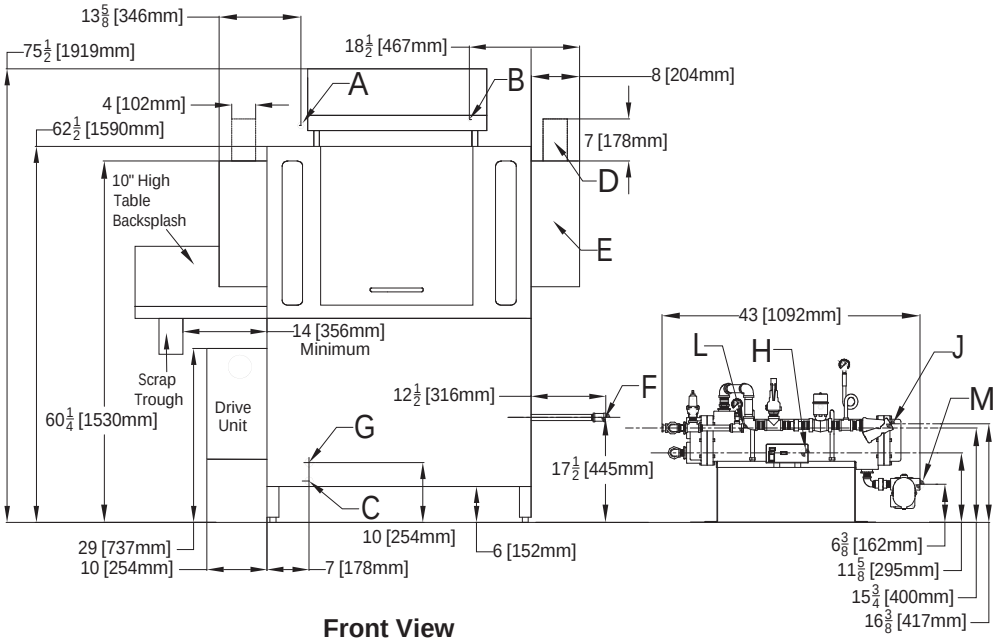
C-44CS LEFT-TO-RIGHT



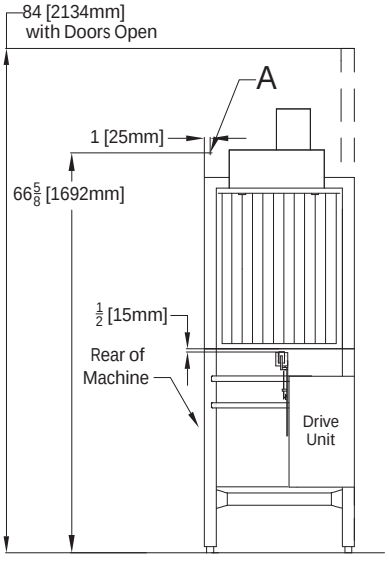
Top View

A - Water Inlet
(3/4" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
D - Vent Collar
(Optional)
E - Vent Cowl
(Standard)
F - Steam Connection
(3/4" NPT)
G - Condensate Return
(3/4" NPT)
H - Steam Electrical Connection
J - Steam Connection
(1" NPT)
K - Condensate Connection
(3/4" NPT)
L - Water Inlet
(3/4" NPT),
(110 °F)
M - Water to Machine
(3/4" NPT),
(180 °F)

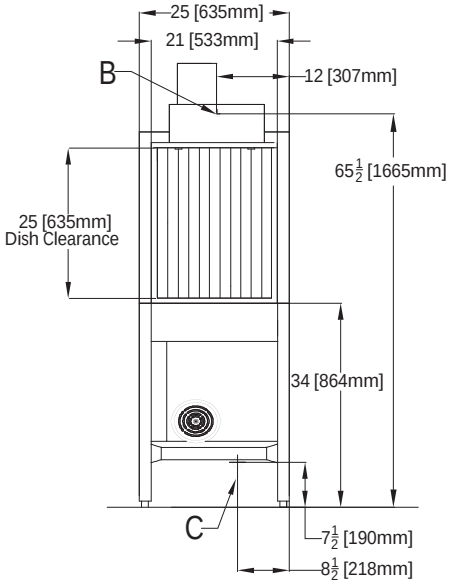
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



Front View



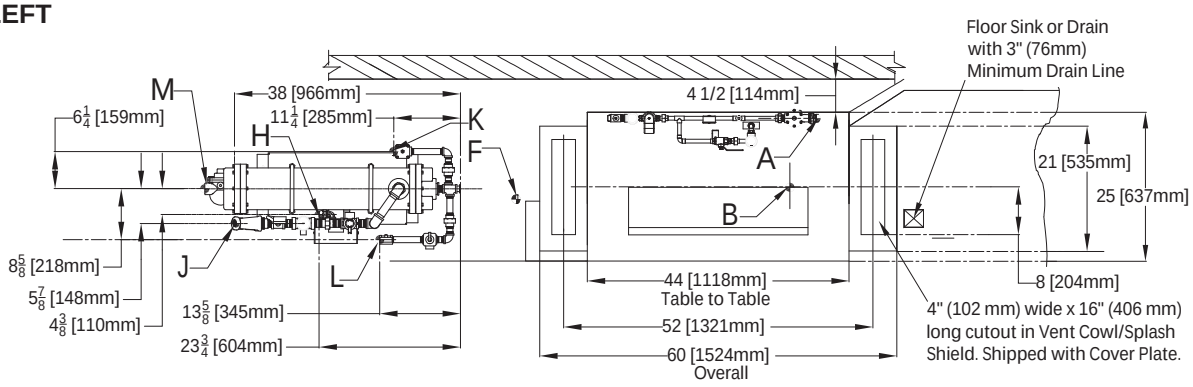
Left Side



Right Side

MACHINE DIMENSIONS

C-44CS RIGHT-TO-LEFT



Top View

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(3/4" NPT),
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(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
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(Optional)
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(Standard)
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(3/4" NPT)
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(3/4" NPT)
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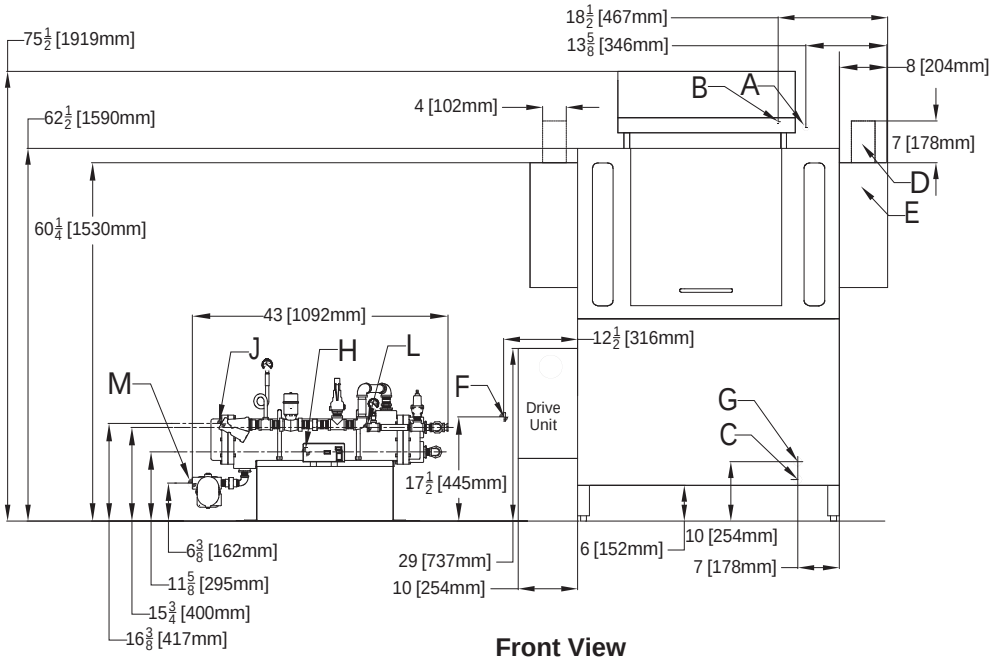
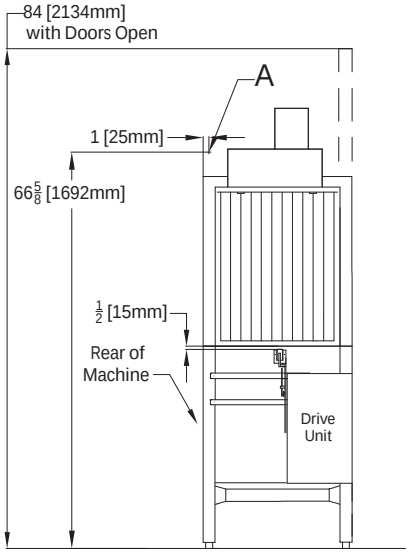
(3/4" NPT),
(110 °F)
M - Water to Machine
(3/4" NPT),
(180 °F)

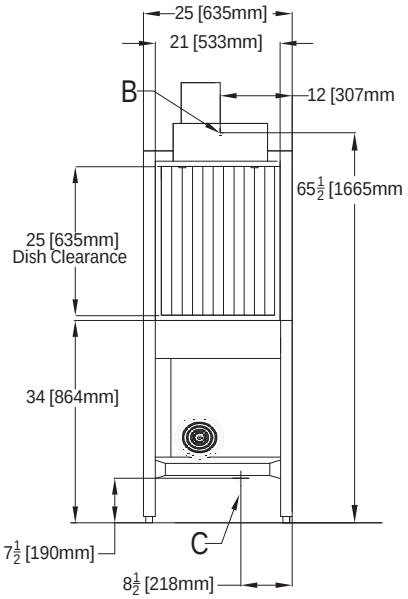
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



Front View

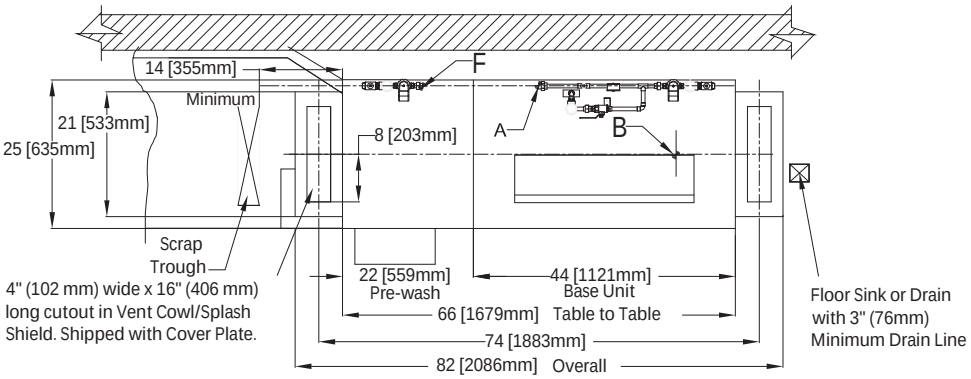


Left Side



Right Side

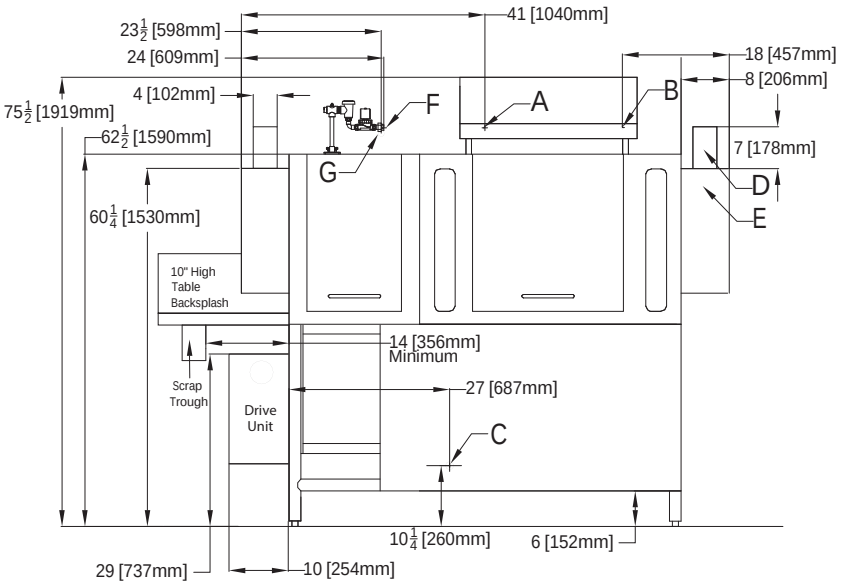
C-66CE LEFT-TO-RIGHT



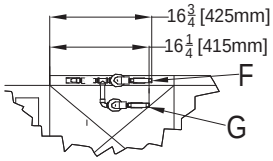
Top View

A - Water Inlet
(1/2" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
D - Vent Collar
(Optional)
E - Vent Cowl
(Standard)
F - Pre-wash Water Inlet
(1/2" NPT),
(110-140 °F)
G - Cold Water Thermostat Plumbing
(1/2" NPT),
(Optional)

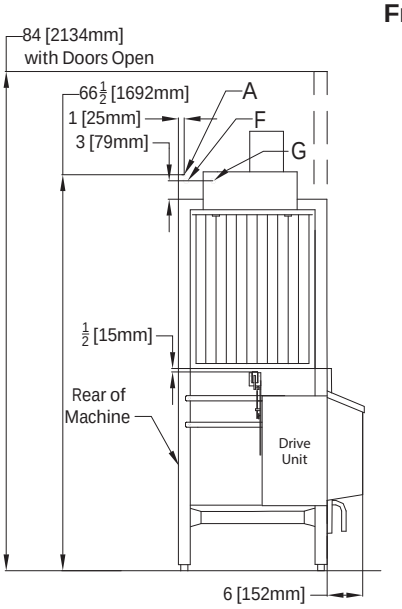
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



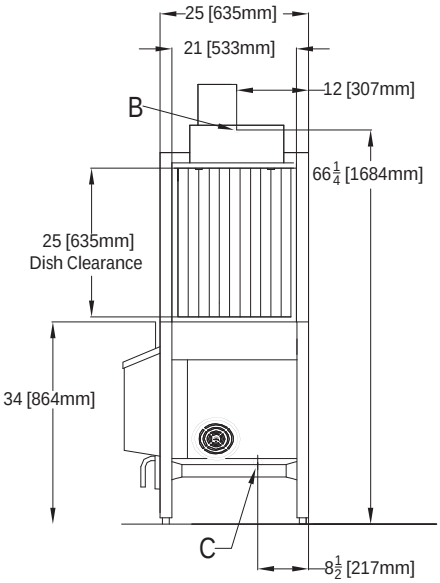
Front View



Pre-wash Section
with Cold Water Thermostat

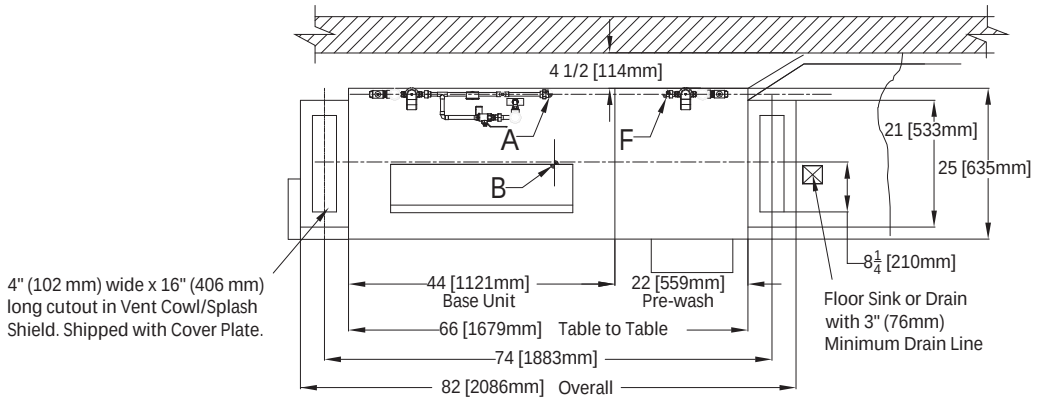


Left Side



Right Side

C-66CE RIGHT-TO-LEFT



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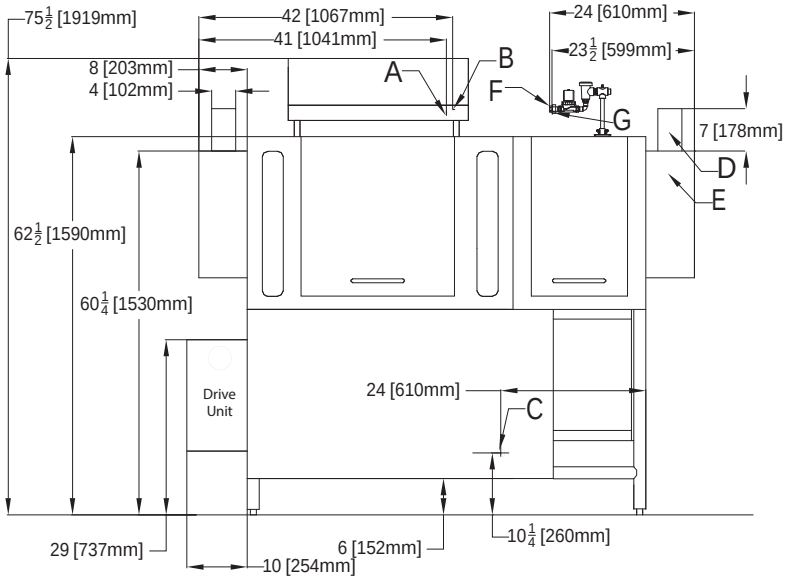
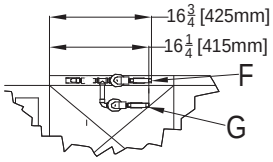
(Optional)
E - Vent Cowl
(Standard)
F - Pre-wash Water Inlet
(1/2" NPT),
(110-140 °F)
G - Cold Water Thermostat Plumbing
(1/2" NPT),
(Optional)

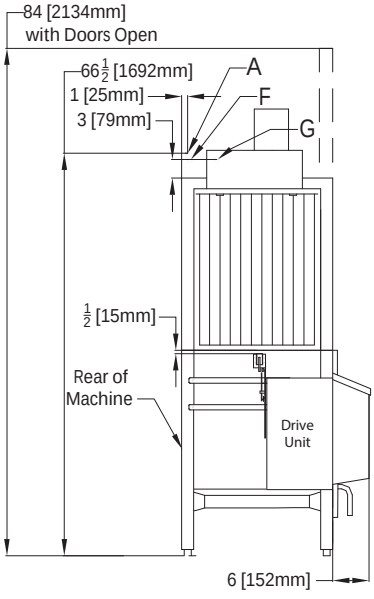
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



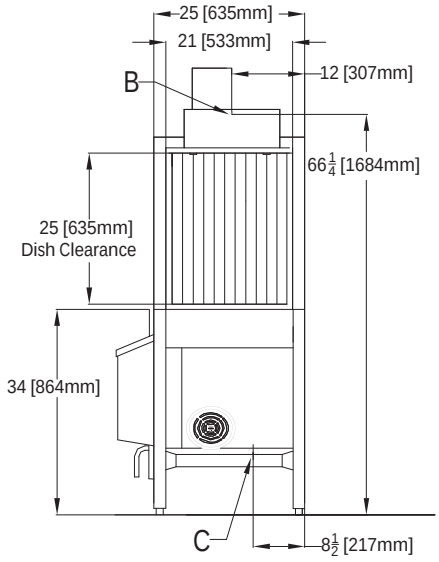
Front View



Pre-wash Section
with Cold Water Thermostat

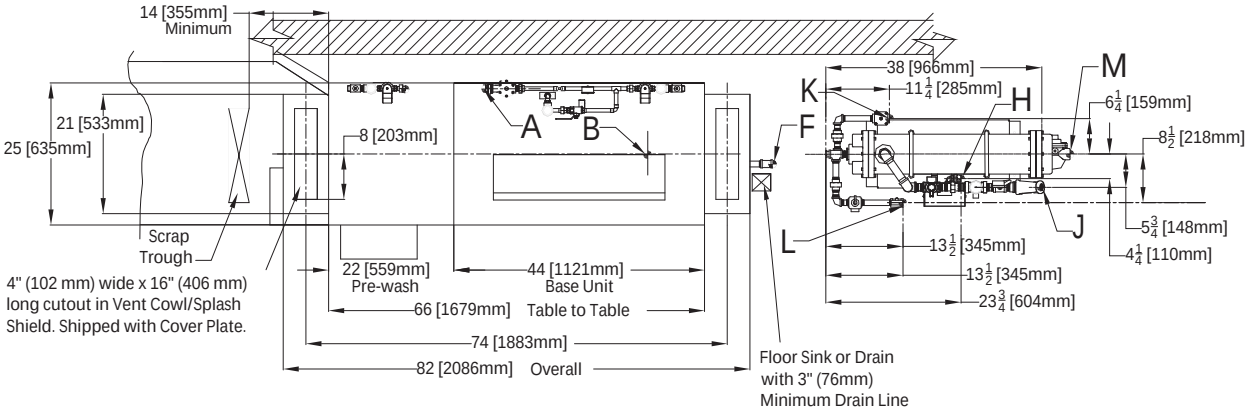


Left Side



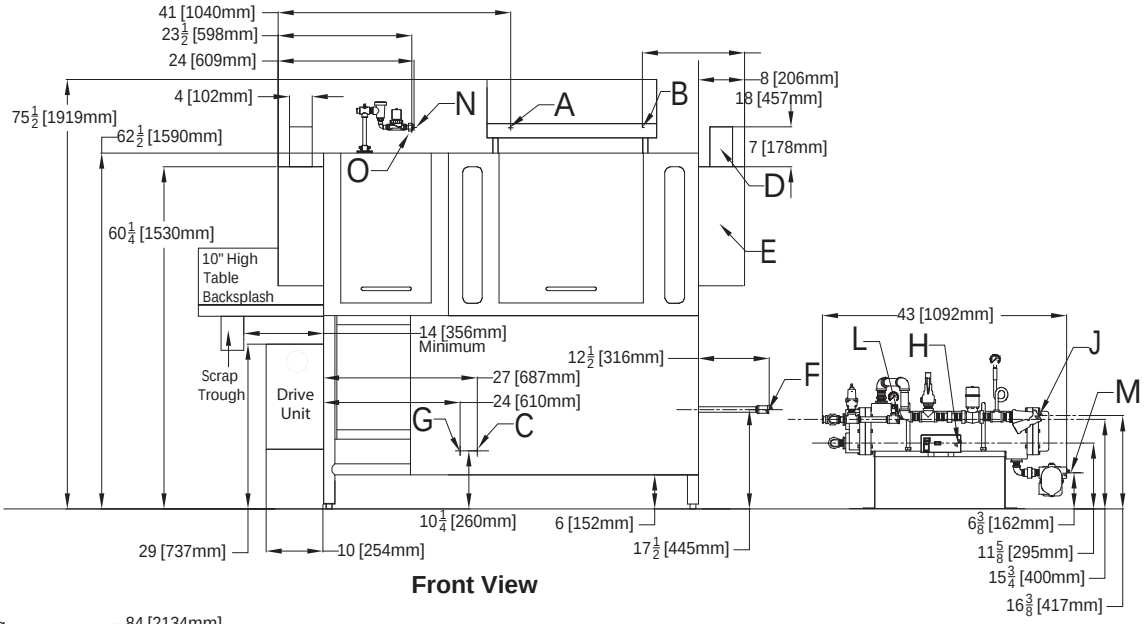
Right Side

C-66CS LEFT-TO-RIGHT



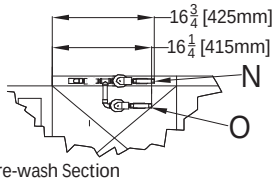
Top View

A - Water Inlet
(3/4" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
D - Vent Collar
(Optional)
E - Vent Cowl
(Standard)
F - Steam Connection
(3/4" NPT)
G - Condensate Return
(3/4" NPT)
H - Steam Electrical Connection
J - Steam Connection
(1" NPT)
K - Condensate Connection
(3/4" NPT)
L - Water Inlet
(3/4" NPT),
(110 °F)
M - Water to Machine
(3/4" NPT),
(180 °F)
N - Pre-wash Water Inlet
(3/4" NPT),
(110-140 °F)
O - Cold Water Thermostat Plumbing
(3/4" NPT),
(Optional)

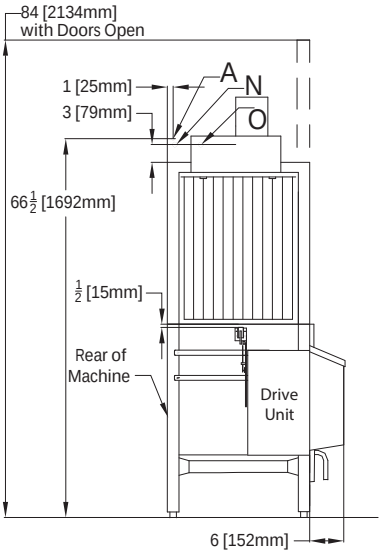


Front View

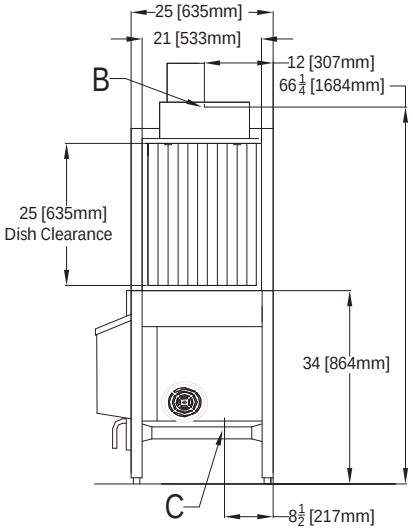
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



Pre-wash Section with Cold Water Thermostat

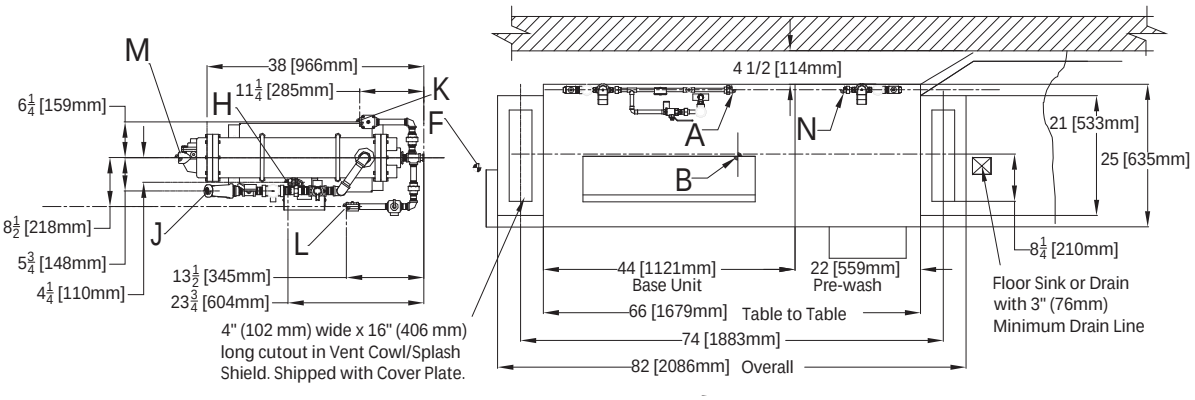


Left Side



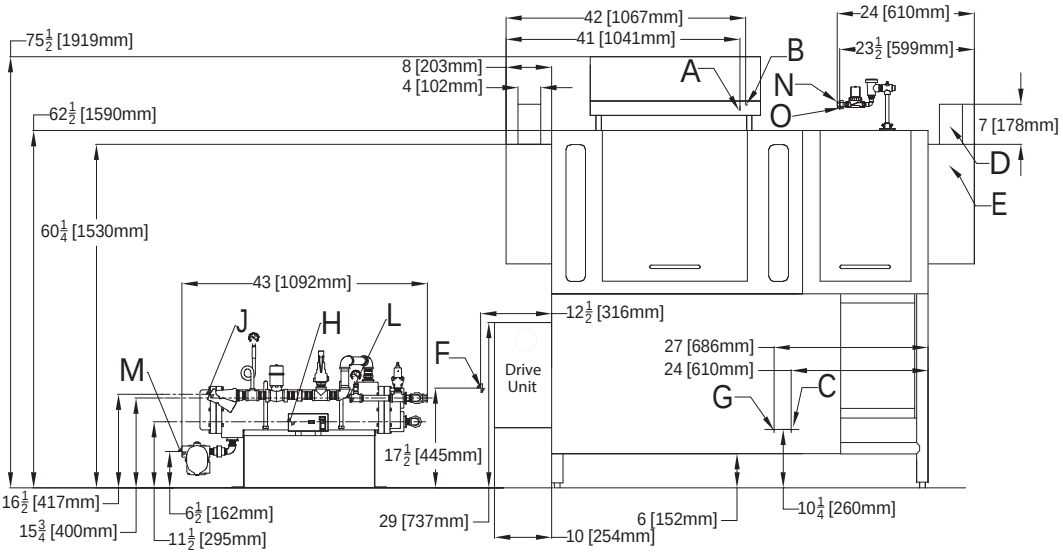
Right Side

C-66CS RIGHT-TO-LEFT



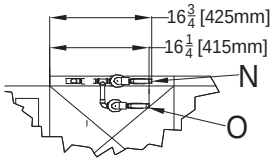
Top View

A - Water Inlet
(3/4" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
D - Vent Collar
(Optional)
E - Vent Cowl
(Standard)
F - Steam Connection
(3/4" NPT)
G - Condensate Return
(3/4" NPT)
H - Steam Electrical Connection
J - Steam Connection
(1" NPT)
K - Condensate Connection
(3/4" NPT)
L - Water Inlet
(3/4" NPT),
(110 °F)
M - Water to Machine
(3/4" NPT),
(180 °F)
N - Pre-wash Water Inlet
(3/4" NPT),
(110-140 °F)
O - Cold Water Thermostat Plumbing
(3/4" NPT),
(Optional)

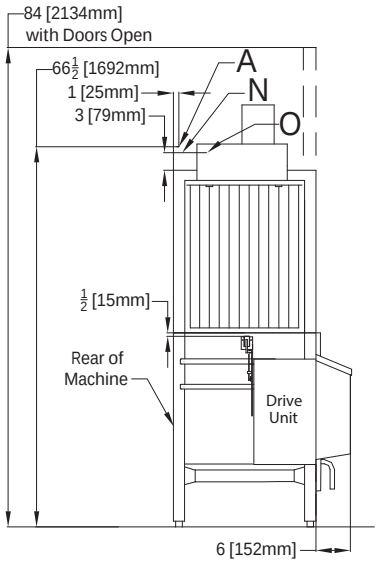


Front View

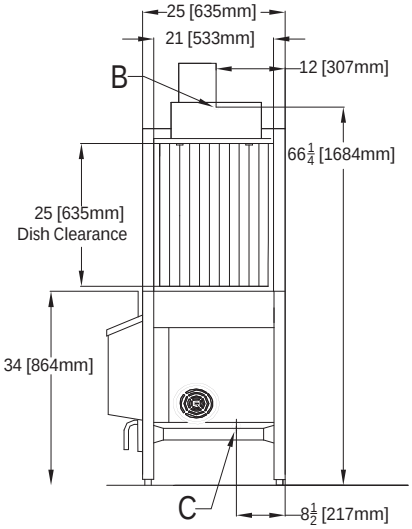
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



Pre-wash Section
with Cold Water Thermostat

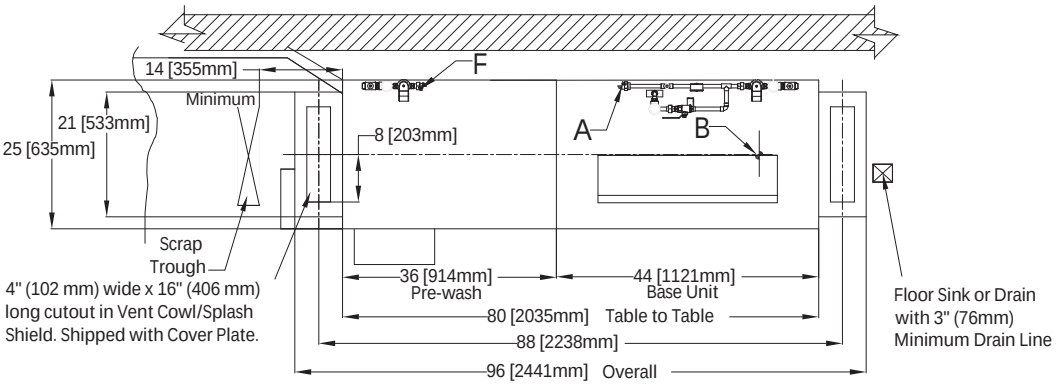


Left Side



Right Side

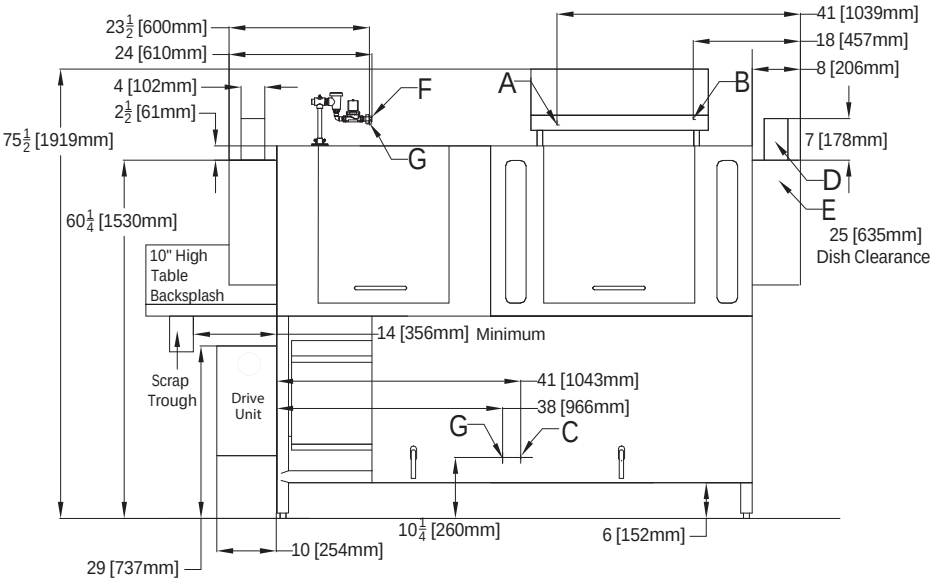
C-80CE LEFT-TO-RIGHT



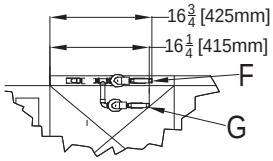
Top View

A - Water Inlet
(1/2" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
D - Vent Collar
(Optional)
E - Vent Cowl
(Standard)
F - Pre-wash Water Inlet
(1/2" NPT),
(110-140 °F)
G - Cold Water Thermostat Plumbing
(1/2" NPT),
(Optional)

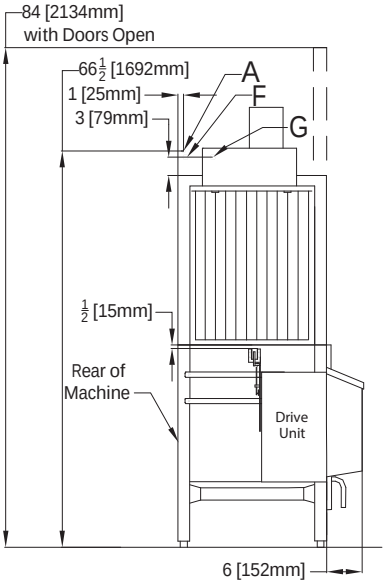
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



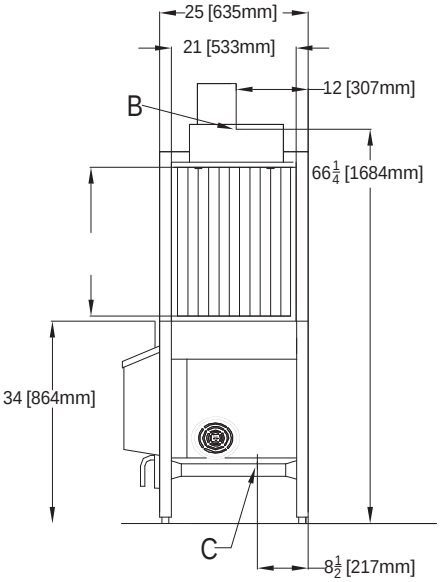
Front View



Pre-wash Section
with Cold Water Thermostat

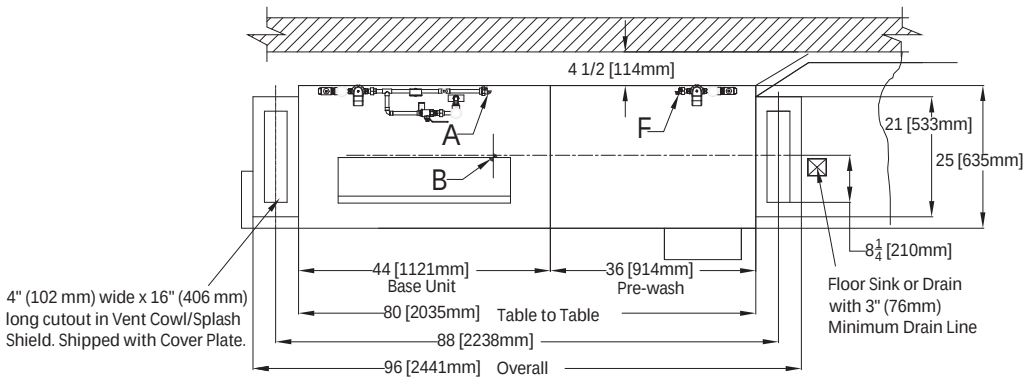


Left Side



Right Side

C-80CE RIGHT-TO-LEFT



Top View

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(1/2" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
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C - Drain Connection
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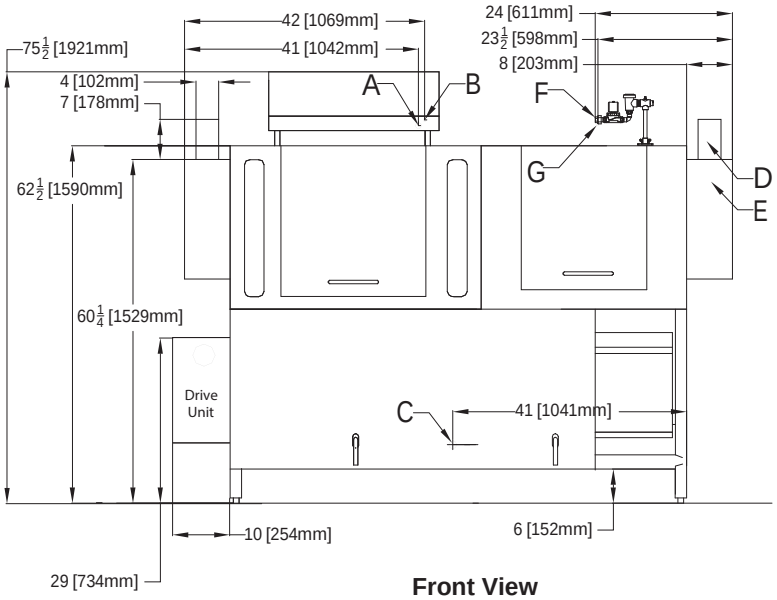
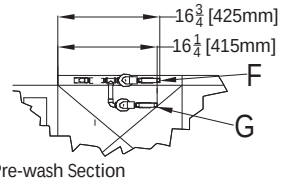
(Optional)
E - Vent Cowl
(Standard)
F - Pre-wash Water Inlet
(1/2" NPT),
(110-140 °F)
G - Cold Water Thermostat Plumbing
(1/2" NPT),
(Optional)

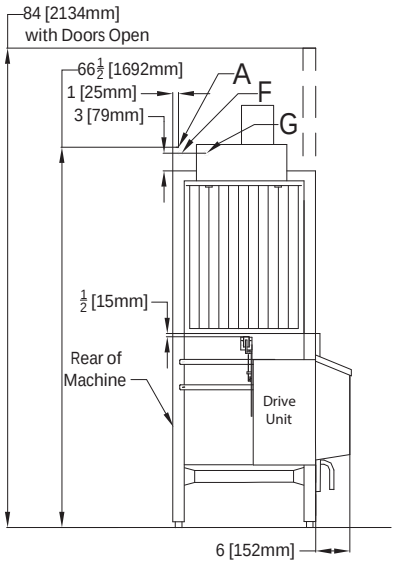
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



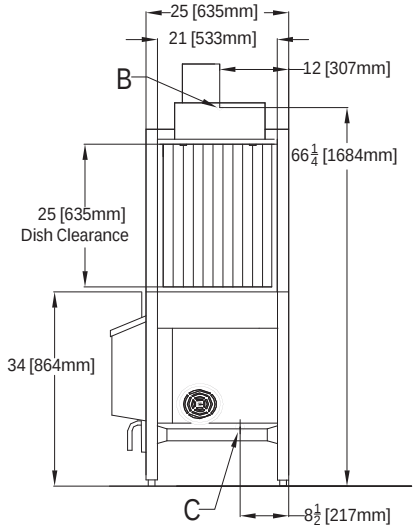
Front View



Pre-wash Section
with Cold Water Thermostat

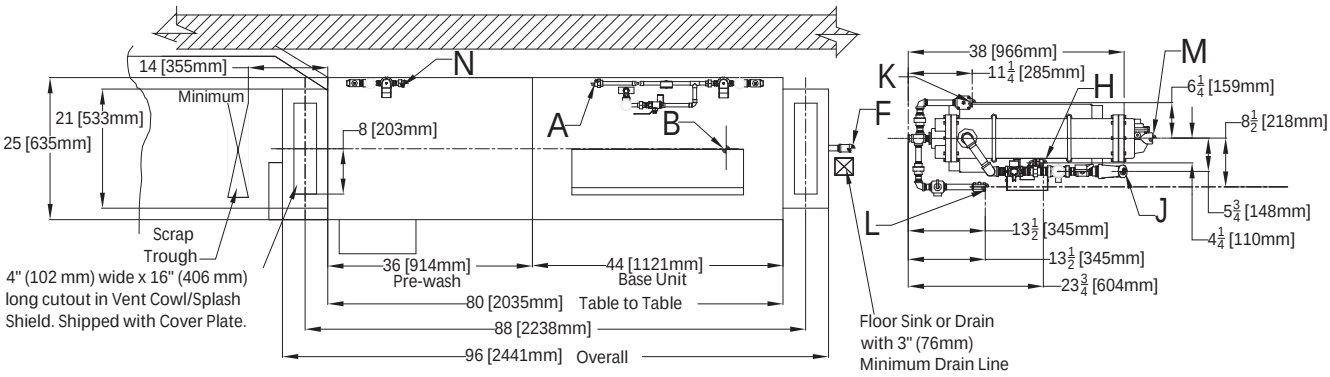


Left Side



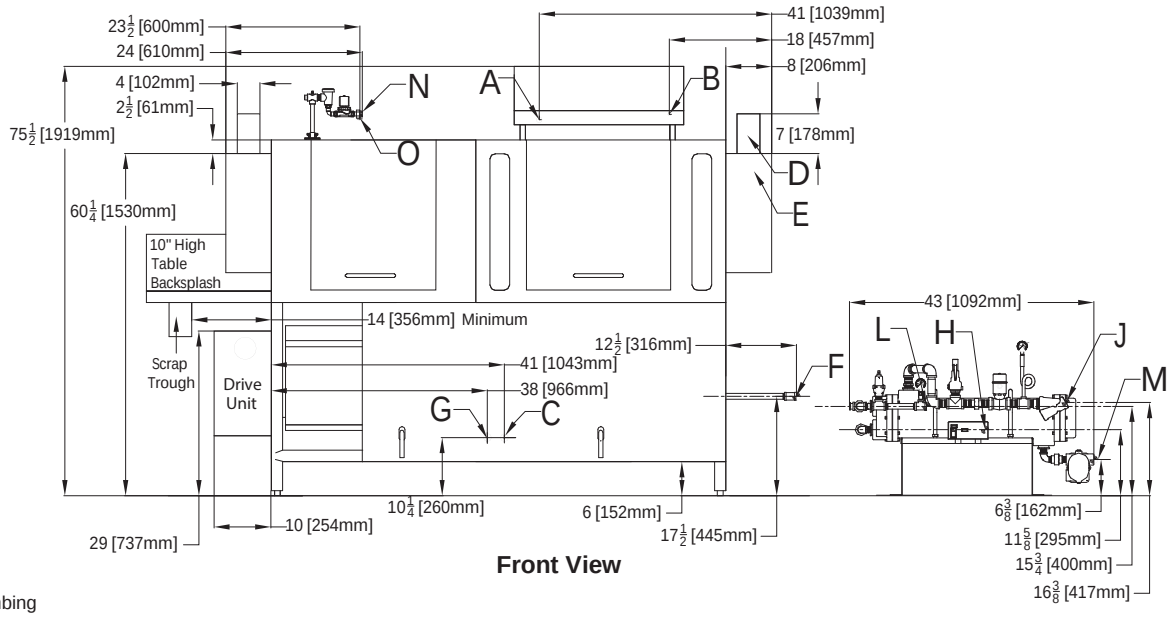
Right Side

C-80CS LEFT-TO-RIGHT



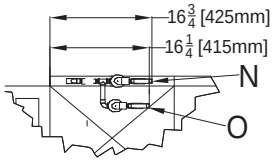
Top View

A - Water Inlet
(3/4" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
D - Vent Collar
(Optional)
E - Vent Cowl
(Standard)
F - Steam Connection
(3/4" NPT)
G - Condensate Return
(3/4" NPT)
H - Steam Electrical Connection
J - Steam Connection
(1" NPT)
K - Condensate Connection
(3/4" NPT)
L - Water Inlet
(3/4" NPT),
(110 °F)
M - Water to Machine
(3/4" NPT),
(180 °F)
N - Pre-wash Water Inlet
(3/4" NPT),
(110-140 °F)
O - Cold Water Thermostat Plumbing
(3/4" NPT),
(Optional)

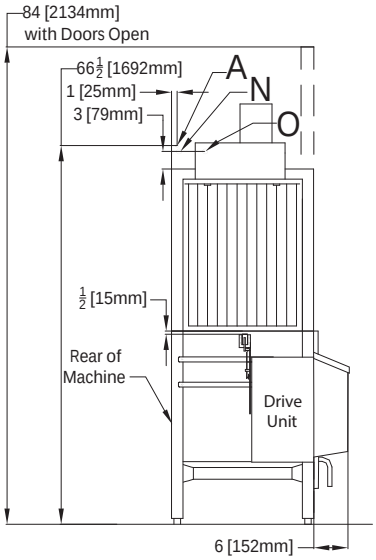


Front View

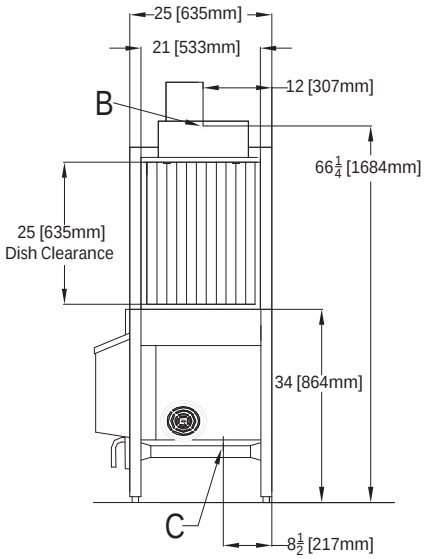
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



Pre-wash Section with Cold Water Thermostat

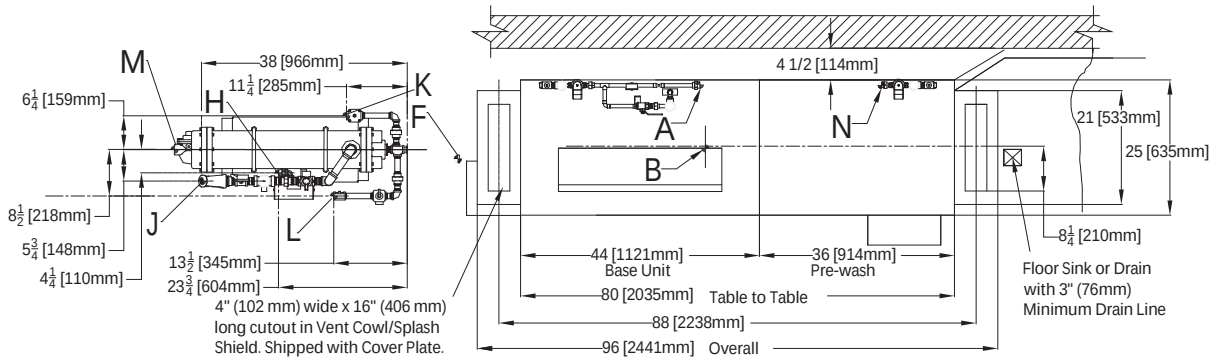


Left Side



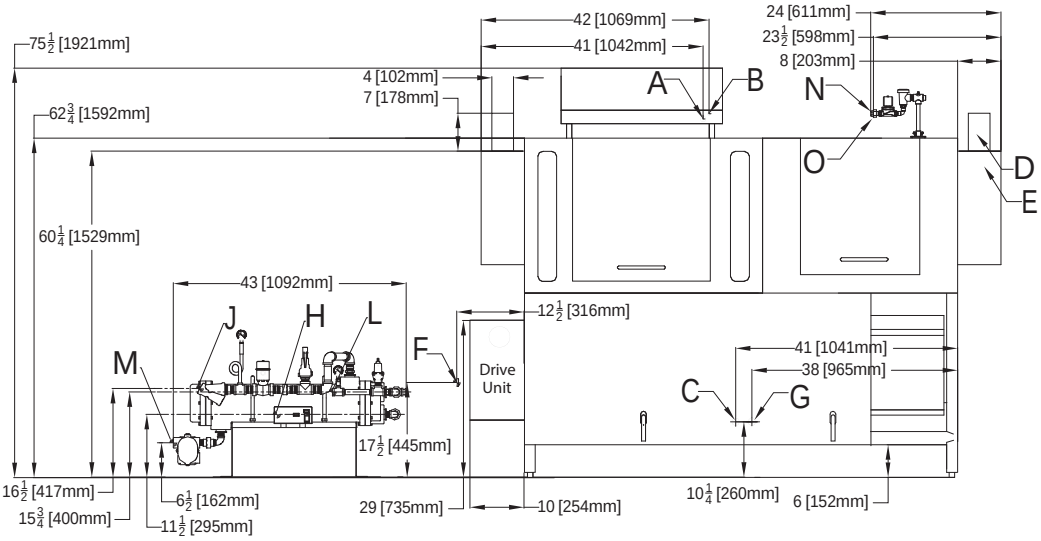
Right Side

C-80CS RIGHT-TO-LEFT



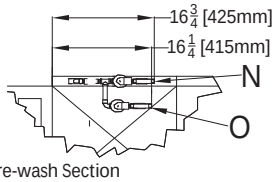
Top View

A - Water Inlet
(3/4" NPT),
(160 °F minimum for high-temp),
(140 °F minimum for low-temp)
B - Electrical Connection
C - Drain Connection
(1 1/2" NPT)
D - Vent Collar
(Optional)
E - Vent Cowl
(Standard)
F - Steam Connection
(3/4" NPT)
G - Condensate Return
(3/4" NPT)
H - Steam Electrical Connection
J - Steam Connection
(1" NPT)
K - Condensate Connection
(3/4" NPT)
L - Water Inlet
(3/4" NPT),
(110 °F)
M - Water to Machine
(3/4" NPT),
(180 °F)
N - Pre-wash Water Inlet
(3/4" NPT),
(110-140 °F)
O - Cold Water Thermostat Plumbing
(3/4" NPT),
(Optional)

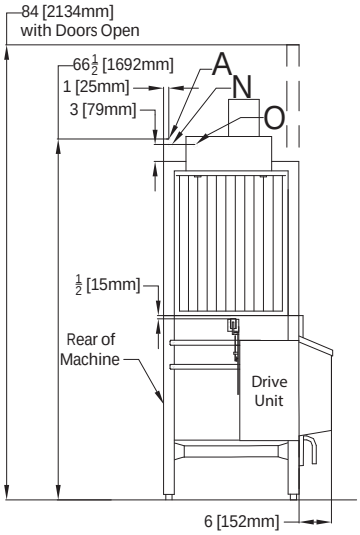


Front View

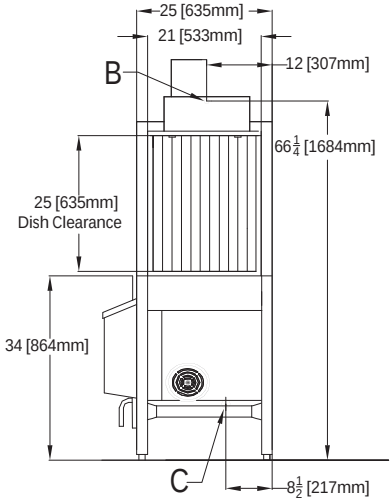
All dimensions from the floor can be increased 1" using the machine's adjustable feet.



Pre-wash Section
with Cold Water Thermostat

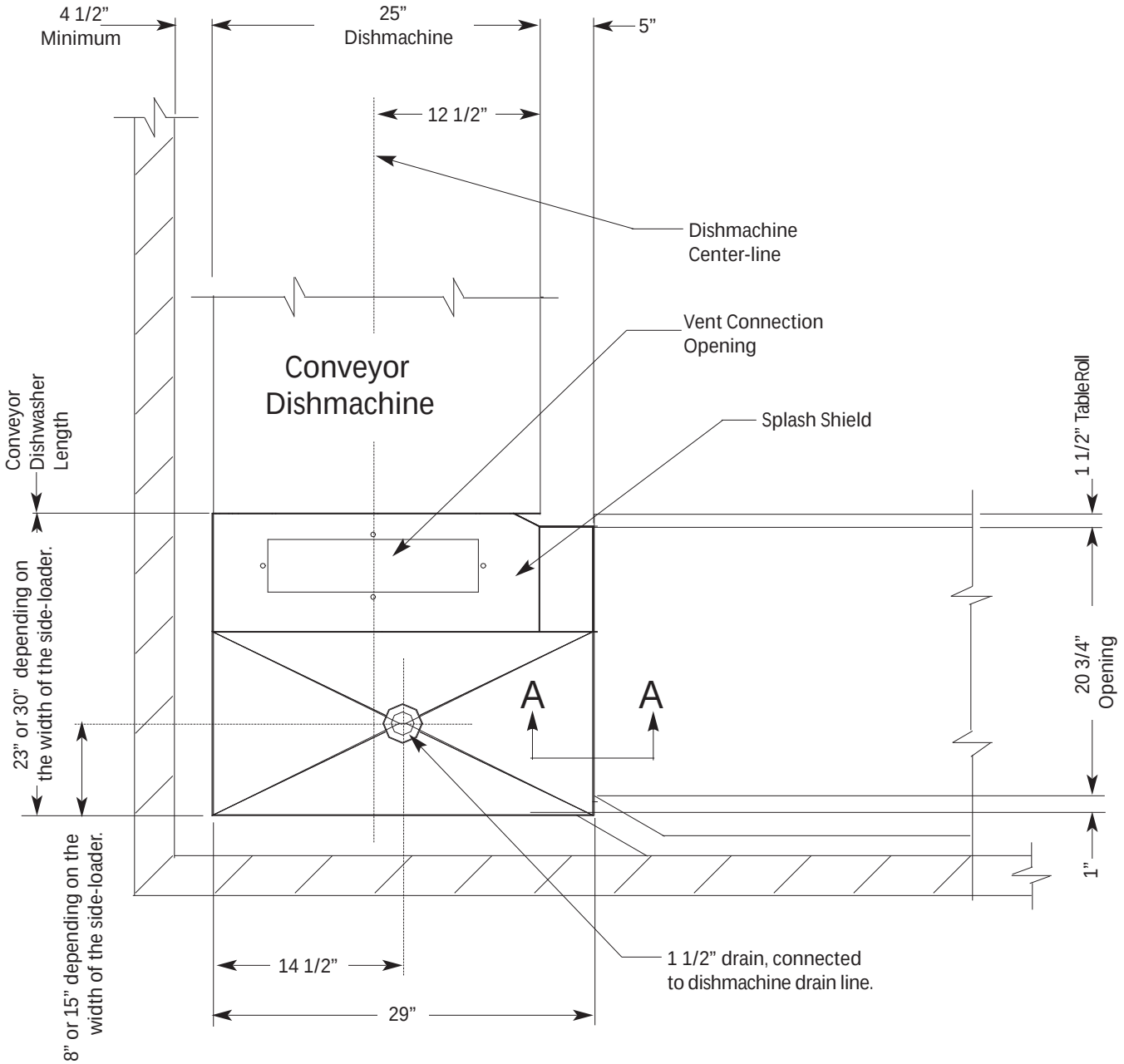


Left Side

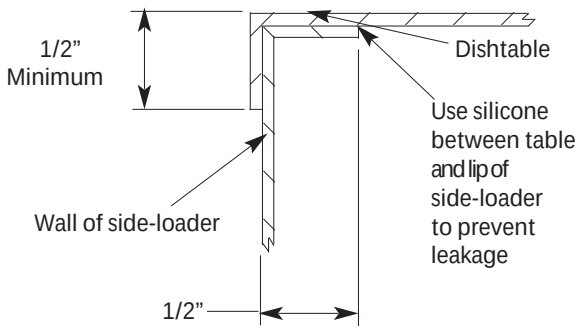


Right Side

SIDE-LOADER LEFT-TO-RIGHT

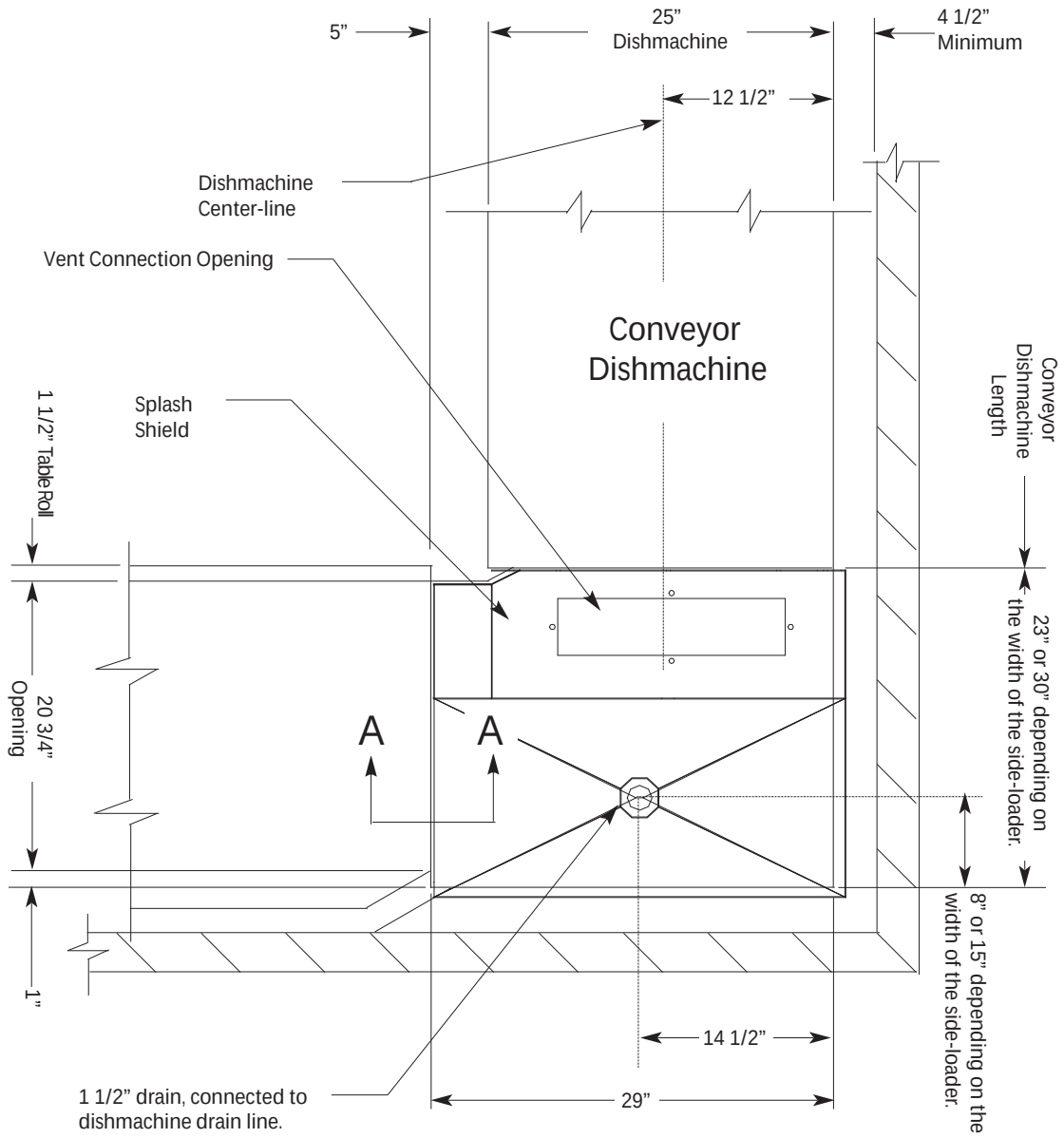


Section A-A

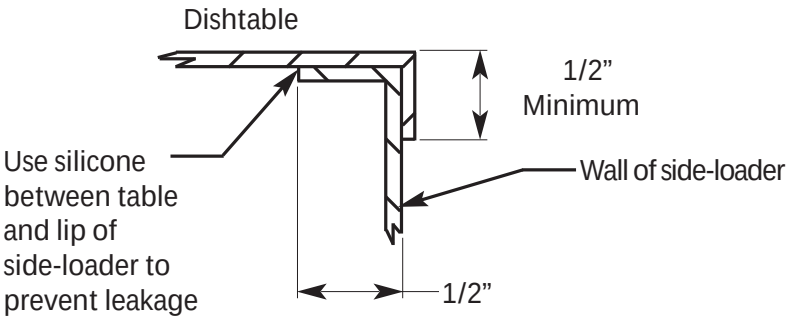


SIDE-LOADER DIMENSIONS

SIDE-LOADER RIGHT-TO-LEFT



Section A-A



SIDE-LOADER

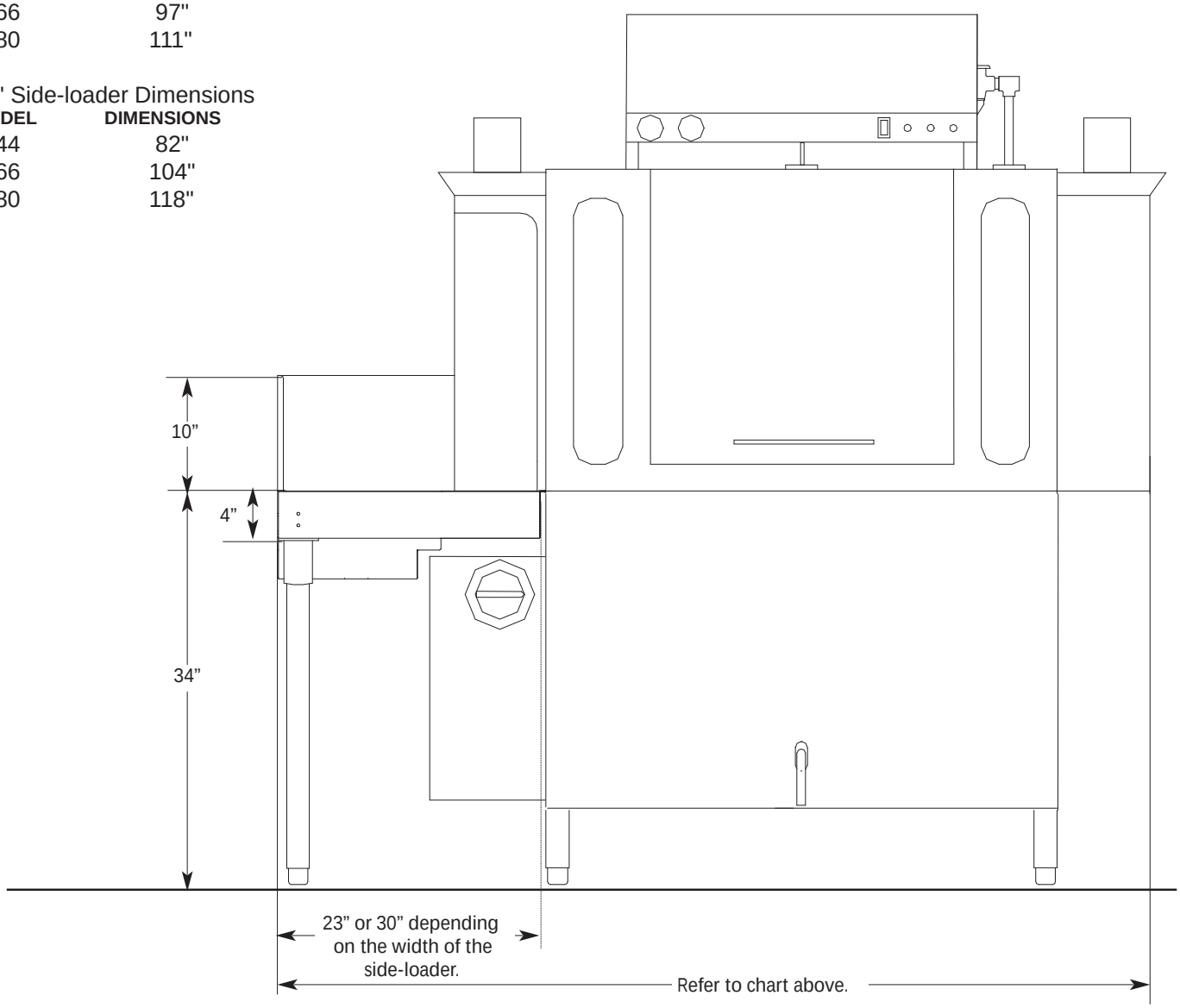
23" Side-loader Dimensions

MODEL	DIMENSIONS
C-44	75"
C-66	97"
C-80	111"

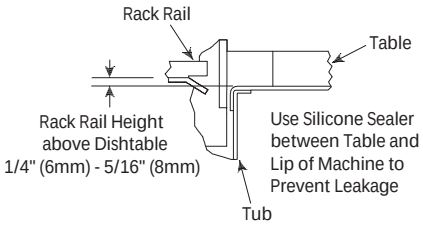
30" Side-loader Dimensions

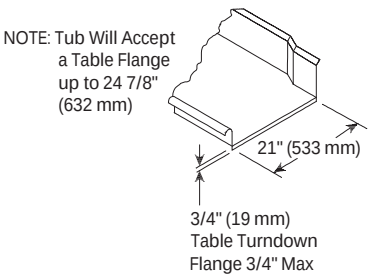
MODEL	DIMENSIONS
C-44	82"
C-66	104"
C-80	118"

(Left-to-Right installation shown.)

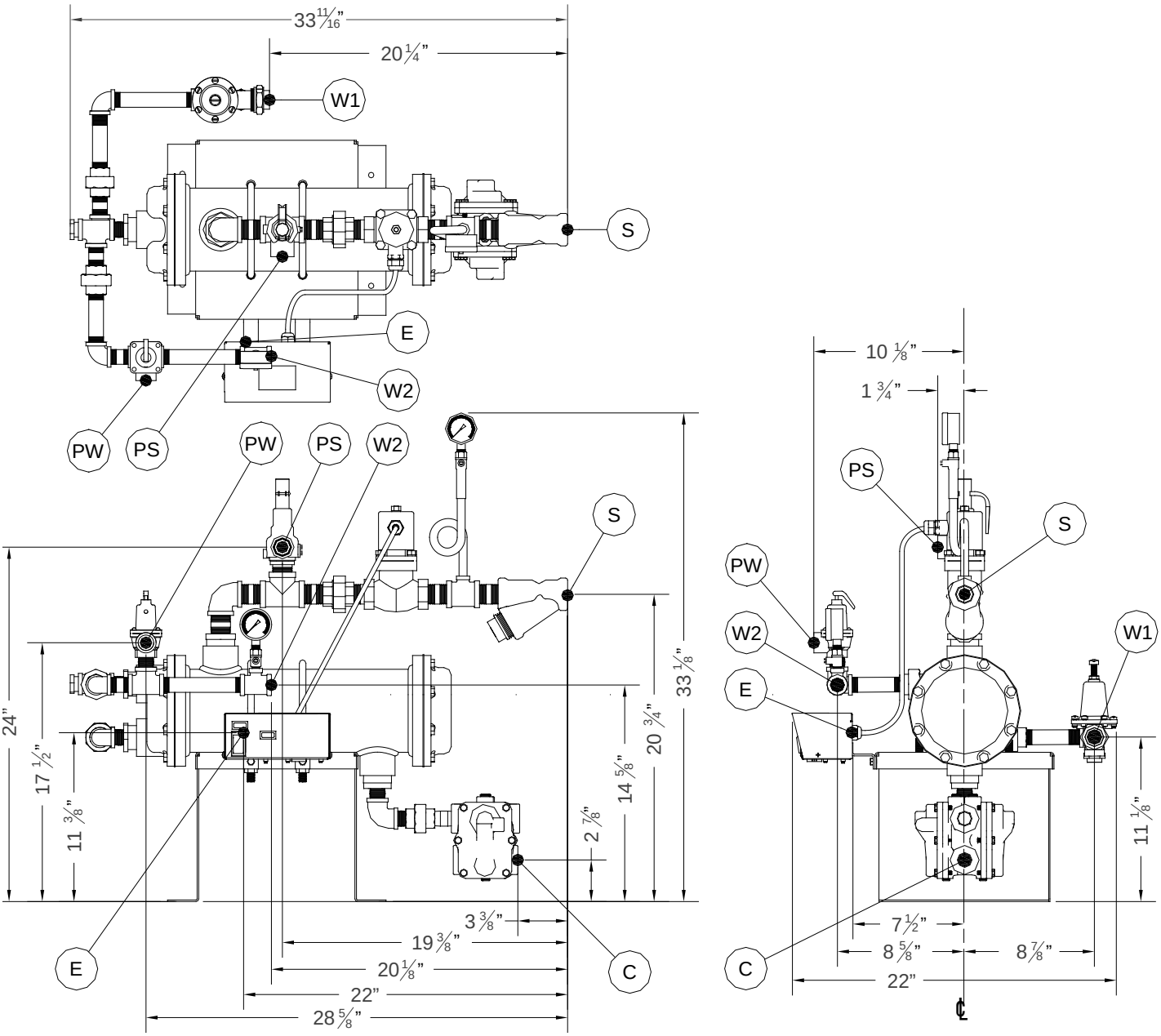


TABLE





STEAM BOOSTER DIMENSIONS



E	Main Electrical Connection (7/8" Hole)
W1	Main Inlet Water Connection (3/4" NPT)
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)

NOTICE *For best performance, the steam booster should be installed no more than 20 feet from the dishmachine.*

OPERATING SPECIFICATIONS

High-temp	
Racks per Hour	225
Dishes per Hour	5625
Glasses per Hour	8100
Low-temp	
Racks per Hour	209
Dishes per Hour	5225
Glasses per Hour	7524
Pre-wash	
Tank Capacity (Gallons)	17.25
Pump Capacity, C-66/76 (GPM)	120
Pump Capacity, C-80/90 (GPM)	270
Wash	
Tank Capacity (Gallons)	20.4
Pump Capacity, All Models (GPM)	270
Ventilation Requirements (CFM)	
Input End	200
Output End	400
Total	600
Steam Requirements	
Steam Connection (NPT)	3/4"
Steam Flow Pressure (PSI)	10-30
Consumption at 15 PSI (lbs/hr)	60
Conveyor Speed (FPM)	
High-temp	6.2
Low-temp	5.75
Gallons per Rack	
High-temp	0.68
Low-temp	0.78
Motor Characteristics	
Drive Motor (HP)	1/4
Wash Motor (HP)	2
Pre-wash Motor, C-66/76 (HP)	1
Pre-wash Motor, C-80/90 (HP)	2

WATER REQUIREMENTS

High-temp	
Minimum Wash Temperature (°F/°C)	160/71
Minimum Rinse Temperature (°F/°C)	180/82
Pre-wash Temperature (°F/°C)	110-140/43-60
Flow Pressure (PSI)	15
Flow Rate (GPM)	2.57
Water Line Size (NPT)	1/2”
Drain Line Size (NPT)	1 1/2”
Low-temp	
Minimum Wash Temperature (°F/°C)	140/60
Minimum Rinse Temperature (°F/°C)	140/60
Pre-wash Temperature (°F/°C)	110-140/43-60
Flow Pressure (PSI)	15
Flow Rate (GPM)	2.74
Water Line Size (NPT)	1/2”
Drain Line Size (NPT)	1 1/2”
Minimum Chlorine Required (PPM)	50

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 is subject to 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. A list of authorized Service Agencies is located in the back of this manual.

Note that all electrical wiring used in the dishmachine must be rated, at a minimum, for 212 °F (100 °C), and that 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 the optional rinse heater, note the rinse heater has its own electrical connection and therefore requires a separate service. Amperage loads for motors and heaters are called out 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, Single-phase
- 230 V, 60 Hz, Single-phase
- 208 V, 60 Hz, Three-phase
- 230 V, 60 Hz, Three-phase
- 460 V, 60 Hz, Three-phase

Available Wash Tank Heaters:

- 15 kW
- 18 kW

Available Booster Tank Heaters:

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

ELECTRICAL REQUIREMENTS

C-44/54CE			with 15 kW Wash Heater		with 18 kW Wash Heater	
Volts	**Phase**	**Hz**	**Amps**	**Circuit (Amps)**	**Amps**	**Circuit (Amps)**
208	1	60	82.4	125	96.8	125
230	1	60	75.5	100	88.6	125
208	3	60	48.4	60	56.7	80
230	3	60	44.4	60	51.9	70
380	3	50	28.5	40	33.0	50
460	3	60	22.3	30	26.0	35

C-44/54CS			with 15 kW Wash Heater		with 18 kW Wash Heater	
Volts	**Phase**	**Hz**	**Amps**	**Circuit (Amps)**	**Amps**	**Circuit (Amps)**
208	1	60	10.3	15	10.3	15
230	1	60	10.3	15	10.3	15
208	3	60	6.7	15	6.7	15
230	3	60	6.7	15	6.7	15
460	3	60	3.4	15	3.4	15

ELECTRICAL REQUIREMENTS

C-66/76CE			with 15 kW Wash Heater		with 18 kW Wash Heater	
Volts	**Phase**	**Hz**	**Amps**	**Circuit (Amps)**	**Amps**	**Circuit (Amps)**
208	1	60	88.4	125	102.8	150
230	1	60	81.5	125	94.6	125
208	3	60	51.8	70	60.1	80
230	3	60	47.8	60	55.3	70
460	3	60	24.0	30	27.7	35

C-66/76CS			with 15 kW Wash Heater		with 18 kW Wash Heater	
Volts	**Phase**	**Hz**	**Amps**	**Circuit (Amps)**	**Amps**	**Circuit (Amps)**
208	1	60	16.3	25	16.3	25
230	1	60	16.3	25	16.3	25
208	3	60	10.1	15	10.1	15
230	3	60	10.1	15	10.1	15
460	3	60	5.1	15	5.1	15

ELECTRICAL REQUIREMENTS

C-80/90CE			with 15 kW Wash Heater		with 18 kW Wash Heater	
Volts	**Phase**	**Hz**	**Amps**	**Circuit (Amps)**	**Amps**	**Circuit (Amps)**
208	1	60	90.9	125	105.3	150
230	1	60	84.0	125	97.1	125
208	3	60	54.0	70	62.3	80
230	3	60	50.0	70	57.5	80
460	3	60	25.0	30	28.8	40

C-80/90CS			with 15 kW Wash Heater		with 18 kW Wash Heater	
Volts	**Phase**	**Hz**	**Amps**	**Circuit (Amps)**	**Amps**	**Circuit (Amps)**
208	1	60	18.8	25	18.8	25
230	1	60	18.8	25	18.8	25
208	3	60	12.3	20	12.3	20
230	3	60	12.3	20	12.3	20
460	3	60	6.2	15	6.2	15

INSPECTION

Do not throw away the packaging if damage is evident!

Before installing the unit, check the packaging and the machine for damage. Damaged packaging might be an indication there is possible damage to the product. If there is any type of damage to both the packaging and the unit, DO NOT THROW AWAY THE PACKAGING. The dishmachine 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 unit while it is in transit. If this occurs, DO NOT RETURN THE UNIT 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 in order to report possible freight damage.

UNPACKING

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

PLUMBING

The plumber MUST flush the incoming water line!

All plumbing connections must be made to 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 to 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.

Water hardness should be a maximum of 6 GPG. Hard water should be treated before being used by the machine. 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 (see Miscellaneous Parts section) to accommodate areas where water pressure fluctuates or is higher than the recommended pressure. The unit utilizes 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 should be installed to allow isolating the dishmachine from the water system in the event service is required. The optional shock absorber (see Miscellaneous Parts section) should also be installed on the incoming water line. This prevents water hammer (hydraulic shock)—induced by the solenoid valve as it operates—from causing damage to the equipment.

DRAIN LINE

The drain for the unit 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 also be an air-gap between the machine drain line and the floor sink or drain. If a grease trap is required by code, it should have a flow capacity of 30 GPM. C-44/54 units have one drain connection point and C-66/76/80/90 units have two.

STEAM LINE CONNECTIONS

Some machines covered in this manual are designed to use low-pressure steam as a source of heat for the wash tank. Those machines come with lines by which an outside source of steam (e.g. steam booster) is connected. Connect all steam lines from the booster to the machine in accordance with the booster manufacturer's instructions. Ensure that all applicable codes and regulations are adhered to. See the machine data plate for information related to steam flow requirements.

PLUMBING CHECK

Slowly turn on the water supply to the machine after the incoming fill line and drain line have been installed. Check for any leaks and repair as required. All leaks must be repaired before placing the machine in operation.

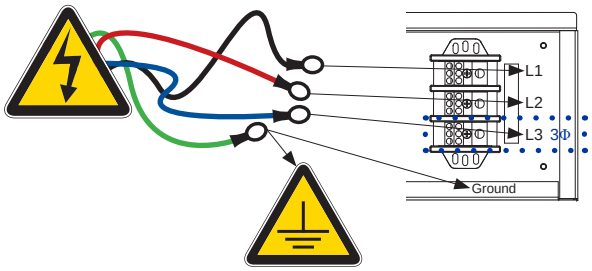
ELECTRICAL POWER CONNECTIONS

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

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

This manual provides reference information regarding electrical requirements and loads, but that information may change without notice. Always refer to the machine data plate for voltage requirements, machine voltage, total amperage load, and serial number. If a data plate has been damaged and cannot be read, contact the manufacturer. The data plate is located on the right side and to the front of the machine.

To install the incoming power lines, open the control box. Install conduit into the pre-punched holes in the back of the control box. Route power wires and connect to power block and grounding lug. Install the service wires (L1, L2, and L3 (L3 for 3-phase only)) to the appropriate terminals as they are marked on the terminal block. Install the grounding wire into the lug provided. Tighten the connections. It is recommended that "DE-OX" or another similar anti-oxidation agent be used on all power connections. Verify the incoming voltage matches the voltage indicated on the decal next to the incoming power pre-punched hole.



NOTICE
Imbalanced wild leg goes to L3.

NOTICE *The dishmachine 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!*

VENTILATION

The dishmachine 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 that is 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: 400 CFM**

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

THERMOSTATS

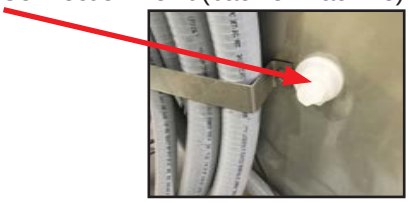
The thermostats on this unit have been set at the factory and should only be adjusted by an authorized service agent.

CHEMICAL FEEDER EQUIPMENT

Contact the chemical supplier to discuss chemical concentrations, water hardness, third-party feeders, and operator training.

Detergent can be introduced into the unit by removing the bulkhead plug in the rear of the tub and replacing it with the third-party detergent injection fitting. Remove the bulkhead plug in the side of the tub to install the detergent concentration probe.

- Detergent Connection Point (back of machine)



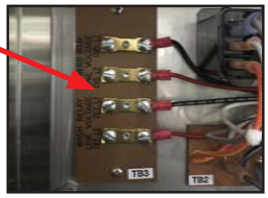
- Rinse-aid and Sanitizer Connection Points (top of machine)

The 1/8" brass plugs on the incoming plumbing rinse injector can be removed to install rinse-aid and sanitizer injection fittings.

- Chemical Injector Wiring (back of control box)

All wires for the chemical injectors should be routed through one of the extra openings in the back of the control box.

- Terminal Wiring (inside of control box)



Terminals marked "CVS" provide a voltage signal when the drive motor is operating.
Terminals marked "DET" provide a voltage signal when the wash motor is operating.

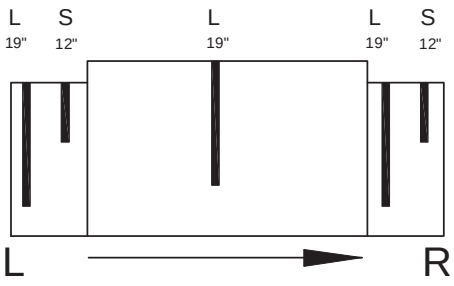
CURTAINS

The unit 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 size of the curtain to be placed on the curtain hooks provided. If any curtain components are missing, these must be obtained and installed before operation. See the Miscellaneous Parts section for part numbers.

DETERMINING CONVEYER DIRECTION: The dishmachine 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. Left-to-Right is shown, Right-to-Left is mirrored.

Low Hood Machines

C-44/54



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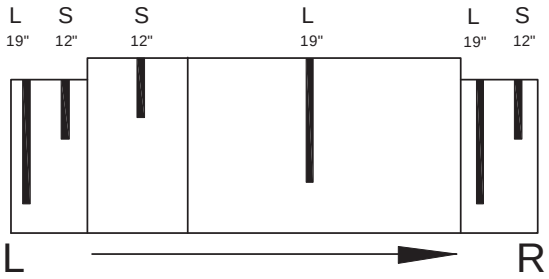
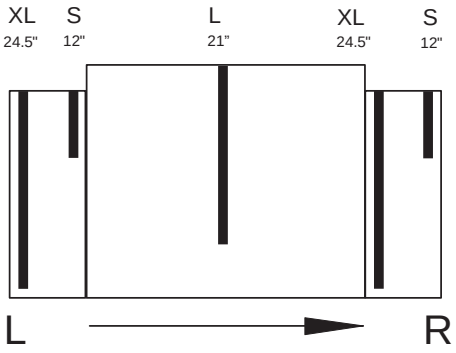


High Hood Machines

C-44/54



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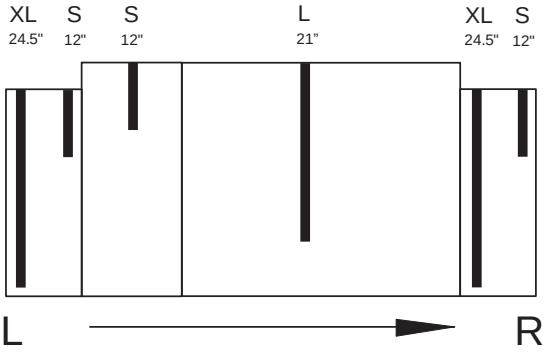


IMPORTANCE OF PROPER CURTAIN PLACEMENT: The curtains inside the dishmachine must be installed properly for the machine to operate correctly. Curtains are used to control air currents inside the unit and assist in maintaining the heat necessary to keep energy costs down. Note the approximate locations for each type of curtain in the above illustrations. **S = Short, L = Long, and XL = Extra Long.** See the Miscellaneous Parts section for part numbers.

PREPARATION

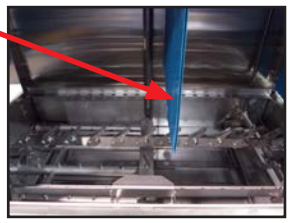
Before operating the unit, verify the following:

1. The drain handle is turned to “CLOSED.”

2. The strainers and pawl bar are installed and secure.

3. The actuator switches move with relative freedom and do not bind.

4. The curtains are installed correctly.



POWER UP

1. Turn the power on at the service breaker.

2. Press the “ON” button on the front of the machine to fill the machine and heat the water.

For machines with pre-wash sections, ensure water is present in the pre-wash section before operating.

3. Allow wash tub to fill completely and wash water to reach operating temperature before continuing. (An accurate rinse temperature will not display until unit is rinsing.)

4. For Steam machines, ensure the steam service is connected and steam is flowing to the machine.

FIRST RACK

The first rack of ware that is placed in the unit will typically reduce the temperature of the wash tank, and the first rack might need to run through the unit again. This process might be necessary any time the unit 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 unit.

WARE PREPARATION

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

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

Place cups and glasses upside-down in racks so they do not hold water during the cycle. Presoak flatware in warm water to assist in removing 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 dishmachine 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 unit on the load end. Once the wash actuator has moved sufficiently, the unit will automatically begin to convey the dish rack through the unit. 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 in an efficient manner.

- Review wash and rinse temperatures and compare to the minimums on the data plate.
- Verify the strainers are not becoming clogged. Keeping these free of soil and debris allows for much better flow of water through the machine and prevents any sort of redeposit issues.
- Water pressure: The dishmachine is designed to run at 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.

For machines with pre-wash sections, also inspect the pre-wash strainer and wash arm nozzles.

SHUTDOWN

To shut the unit down, press the "OFF" button on the front of the machine. To drain the machine, move the drain handle to the "OPEN" position. If the machine is equipped with a steam booster, shut it down in accordance with its manufacturer's instructions.

CLEANING

Clean the unit at least once every 24 hours or at the end of the day. Cleaning assists in maintaining the efficient operation of the unit by removing soil and debris that might otherwise become trapped in nozzles or deposited onto ware.

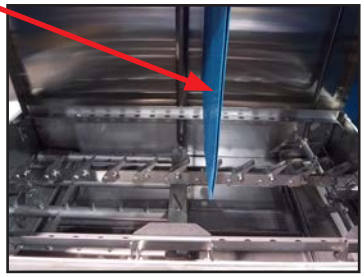
1. Remove all strainers and use a hand-scraper to scrape foodsoil into trash.

For machines with pre-wash sections, also remove and clean the pre-wash strainer.

2. Remove the float switch cover and clean it and strainers with the pre-rinse hose.

3. Rinse the float switch off and rinse the tank out; inspect tank for debris.

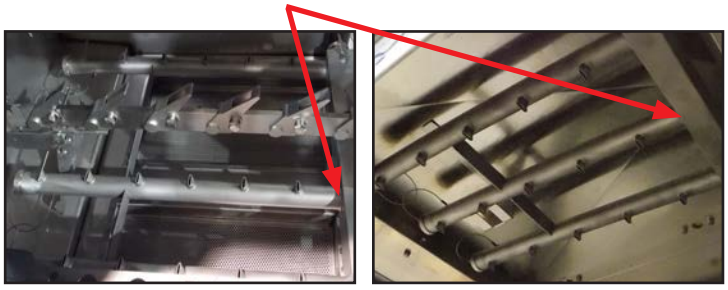
4. Remove curtains, scrub with mild detergent and brush, and allow to air-dry.



For machines with pre-wash sections, also remove and clean the pre-wash curtains.

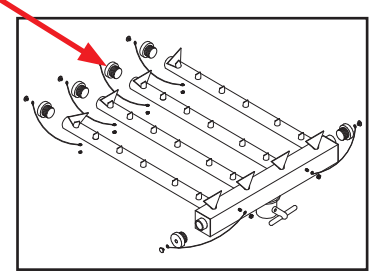
CLEANING

5. As needed, clean the wash and rinse arms:
   a. Remove the wash arm manifolds.



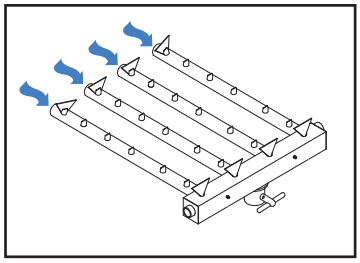
For machines with pre-wash sections, also remove and clean the pre-wash arm.

   b. Remove the end-caps from the arms and manifolds.



   c. Clean nozzles with a brush. Also clean the rinse assembly nozzles.

   d. Use a small wire or toothpick to remove remaining debris or lime deposits from the nozzles.
   e. Flush the arms with water.



   f. Replace end-caps and ensure they have been tightened.
   g. Replace the wash arm manifolds.

Do NOT clean the unit with any type of metallic scrubbing sponge!

The outside of the unit should be cleaned with a standard countertop or general cleaner. Do not attempt to clean inside any compartments, boxes, or chambers that are secured with a cover. These normally contain live electrical components.

DELIMING

1. Disconnect/turn off chemical feeder equipment.
2. Turn machine on.

3. Add deliming solution per chemical supplier's instructions.
4. Close the door.
5. Flip the AUTOMATIC/DELIME switch to DELIME.
6. Run machine the period of time recommended by chemical supplier.
7. Wait five minutes, then inspect the inside of the machine. If the machine is not delimed, run again.
8. Flip the AUTOMATIC/DELIME switch to AUTOMATIC.

9. Run an empty rack through the machine twice.
10. Drain and re-fill the machine.
11. Reconnect/turn on chemical feeder equipment.

CAUTION! *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.*

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 your machine. As a reminder, here are some steps to ensure the dishmachine is being used the way it was designed to work:

1. Ensure that the water temperatures match those listed on the machine data plate. There can be a variety of reasons why the water temperature could be too low.
2. Ensure that 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 that all wash and rinse arms are secure in the machine before operating.
4. Ensure that drains are closed before operating.
5. Remove as much soil from dishes by hand as possible before loading into racks.
6. Do not overfill racks.
7. Ensure that glasses are placed upside-down in the rack.
8. Ensure that all chemicals being injected into machine have been verified at the correct concentrations.
9. Clean the unit 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.

TORQUE SETTINGS

When replacing components in the control box or heater box, refer to the table below for the torque specs:

ITEM	TORQUE SPEC
Relays	16 in/lbs
Heater Contactor	35 in/lbs
Heater Nuts	16 in/lbs
Terminal Block	50 in/lbs

DRIVE GEAR REDUCER LUBRICATION

The maintenance procedures detailed here are manufacturer's instructions for the brand of gear reducer that is installed on the machines covered in this manual.

Ambient Temperature	-30 to 15°F	16 to 50°F	51 to 95°F	51 to 95°F	96 to 131°F	96 to 131°F
Final Stage Worm Speed*	up to 2000 FPM	up to 2000 FPM	up to 450 FPM	above 450 FPM	up to 450 FPM	above 450 FPM
ISO Viscosity Grade	220	460	680	460	680	460*
AGMA Lubricant No.	5S**	#7 Compounded***	#8 Compounded***	#7 Compounded***	8 S**	7S**

Mobil	SHC 630	600W Super Cylinder	Extra Hecla Super	600W Super Cylinder	SHC 636	SHC 634
American Lubricants	SHC-90W	AGMA #7 Gear Oil	AGMA #8 Gear Oil	AGMA #7 Gear Oil	N/A	N/A
Castrol	Tribol 800/220	Tribol 1105-7C	Tribol 1105-8C	Tribol 1105-7C	Tribol 800/680	Tribol 800/460
Chevron	Tegra 220	Cylinder Oil W460	Cylinder Oil W680	Cylinder Oil W460	Tregra 680	Tegra 460
Conoco	Syncon R & O 220	Inca Oil 460	Inca Oil 680	Inca Oil 460	N/A	Syncon R & O 460
Exxon (Esso)	Teresstic SHP 220	Spartan EP 460	Spartan EP 680	Spartan EP 460	Teresstic SHP 680	Teresstic SHP 460
Fiske Brothers	SPO-MG	SPO-277	SPO-288	SPO-277	N/A	N/A
Shell	Omala RL 220	Valvata J 460	Valvata J 680	Valvata J 460	Omala RL 680	Omala RL 460
Texaco	Pinnacle 220	Vanguard 460	Vanguard 680	Vanguard 460	Pinnacle 680	Pinnacle 460

*The sliding velocity in feet per minute (FPM) for standard ratios is determined by multiplying the speed of the worm in RPM by the factor from the following table. For selecting the proper lubricant, use the speed of the worm in the final stage (input RPM divided by the first stage ratio).
**Synthetic oil.
***3% to 10% fatty or synthetic oils or mild EP additives.

Lubricant selections are provided by the lubricant manufacturer based on AGMA recommended viscosity grades.
Viscosity grades are based on Lubrication Standard ANSI/AGMA 9005-D94.

Nominal Ratio

Size	5	7.5	10	15	20	25	30	40	50	60	80	100
920	0.347	0.263	0.225	0.216	0.202	0.191	0.215	0.200	0.188	0.182	0.164	0.161

Factory filling - Speed reducers are filled with oil at the factory to the proper level for the standard mounting position it will be found on the unit. The oil level should be checked and adjusted (if necessary) before operation, using the oil level plug provided and while the unit is oriented in its operating position.

Ambient temperature - If the operating ambient temperature is other than 51 - 95°F, refer to the lubrication chart and refill the unit with the correct grade based on actual ambient temperature and operating speed. See "Oil changing" below for additional information.

Oil changing - When changing the oil for any reason, it should be remembered that oils of various types might not be compatible. Therefore, when changing to a different oil, it is recommended that the housing be completely drained and thoroughly flushed with a light flushing oil before refilling with the appropriate lubricant. The oil level should be rechecked

DRIVE GEAR REDUCER LUBRICATION

after a short period of operation and adjusted, if necessary. When changing double-reduction models, each housing should be drained and filled independently, even though there could be a common level.

Initial oil change - The new oil in a speed reducer should be changed at the end of 250 hours of operation. This is equivalent to 30 days of operation for eight hours per day; 15 days of operation for 16 hours per day, or 10 days of operation for 24 hours per day.

Subsequent oil changes - Under normal conditions, after the initial oil change, the oil should be changed after every 2500 hours of operation, or every six months, whichever comes first. Under severe conditions (rapid temperature changes, moist, dirty, or corrosive environment) it could be necessary to change the oil at intervals of one to three months. Periodic examination of oil samples taken from the unit will help establish the appropriate interval.

Synthetic oils - Synthetic lubricants can be advantageous over mineral oils in that they generally are more stable, have a much longer life, and operate over a wider temperature range. These oils are appropriate for any application but are especially useful when units are subjected to low start-up temperatures or high operating temperatures. However, continuous operation above 225°F may cause damage to seals or other components. It is recommended that the initial oil be changed or filtered after the first 1500 hours of operation to remove metal particles that accumulate during break-in. Subsequent oil changes should be made after 5000 hours operation if units are operating in a clean environment. This can be extended to 10,000 hours if using new reformulated Mobil SHC lubricants (orange in color) and the lubricant remains free of contamination over this period. See comments under “Subsequent oil changes” for discussion of severe ambient conditions.

Long-term storage or infrequent operation - If a speed reducer is to stand idle for an extended period of time, either before installation or during use, it is recommended that the unit be filled completely with oil to protect interior parts from rust and corrosion due to internal condensation. Be sure to drain the oil to the proper level before placing the speed reducer in service.

Grease fittings - Some units are equipped with grease fittings to lubricate bearings not adequately lubricated by the oil splash. These fittings must be lubricated every three to six months depending on operating conditions. Bearing greases must be compatible with the type of gear lubricant being used (e.g. mineral, synthetic, food grade, etc.). For mineral oils, use a high-quality lithium base NLGOI #2 bearing grease. For synthetic oils, use a synthetic bearing grease such as Mobil Synthetic Universal grease, Mobilith SHC 100 or a suitable equivalent. For food-grade lubricants, use Chevron FM grease, NGLI 2, or equivalent.

Low input speeds (under 1600 RPM) - When input speeds are less than 1600 RPM, grease fittings will be required to lubricate any bearings not partially covered by the normal oil level.

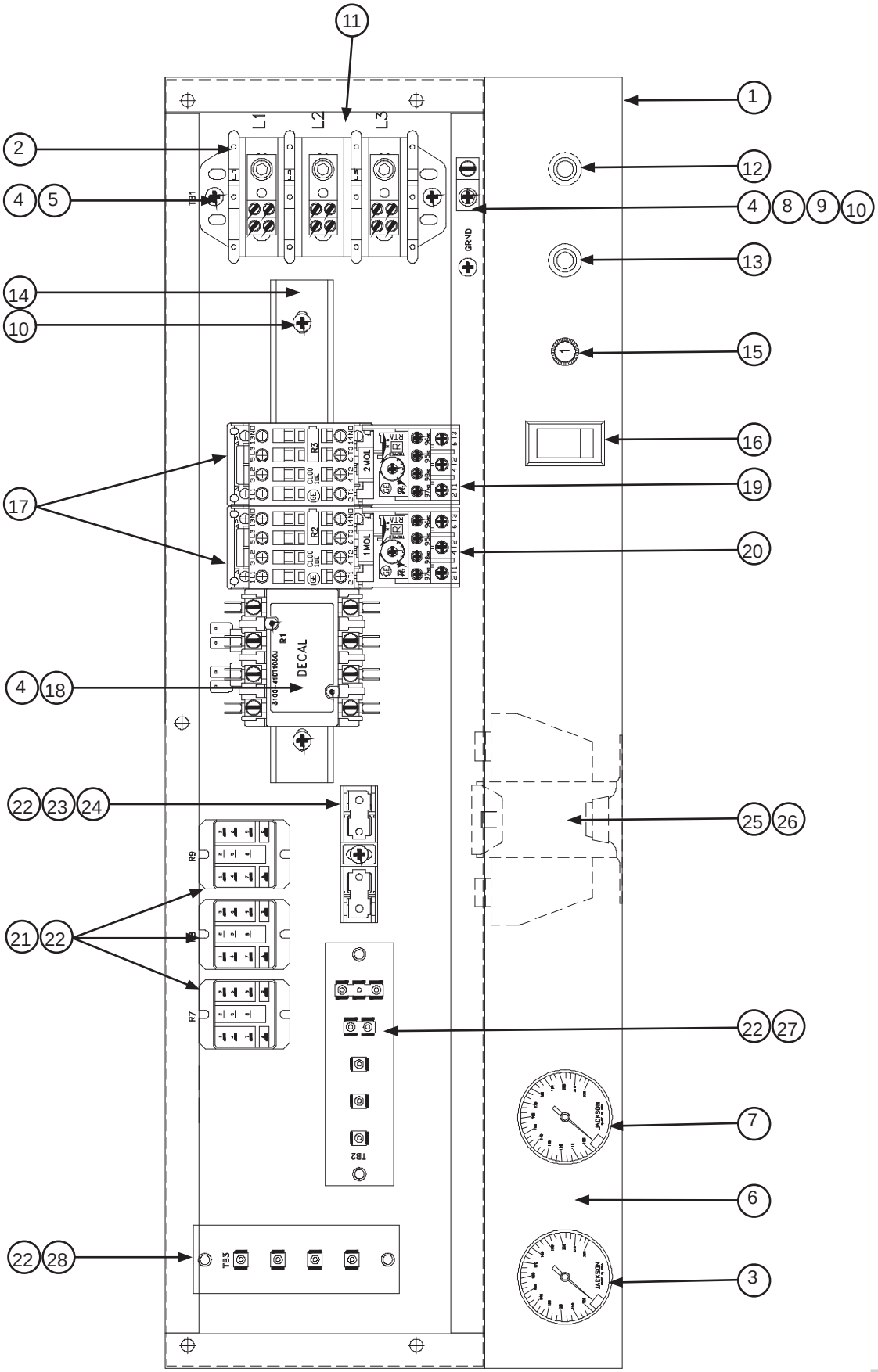
Oil temperature - Speed reducers in normal operation can generate temperatures up to 200°F depending on the type of reducer and the severity of the application (loading, duration of service, ambient temperatures). Excessive oil temperatures could be the result of several factors including overloading, overfilling, underfilling, or inadequate cooling.

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.**

PROBLEM	POSSIBLE CAUSE	REMEDY
Nothing on machine operates. The power switch is ON and the power indicator light is OFF.	1. Machine is not wired correctly to incoming power source. 2. Machine circuit breaker is tripped. 3. Service breaker is tripped.	1. Have an electrician verify wiring. 2. Reset the circuit breaker. If it trips again, contact an electrician to verify the machine amp draw. 3. Reset the service breaker. If it trips again, contact an electrician to verify the machine amp draw.
Machine will not fill. The power switch is ON and the power indicator light is ON.	1. No water supplied to machine. 2. Dishmachine doors are not closed. 3. Incoming water solenoid valve damaged/faulty. 4. Tank floats faulty.	1. Verify that water lines have been connected to the machine. 2. Close doors completely. 3. Verify that the valve is operating. If not, replace. 4. Verify the wiring of the floats. Verify that no debris is jamming the floats. Replace if necessary.
Machine fills, but fill is weak.	1. Low incoming water pressure. 2. Incoming water solenoid is clogged.	1. Verify that incoming water pressure during fill is 15 PSI. 2. Verify that debris is not trapped in valve. If so, remove debris.
Low wash tank temperature.	1. Low incoming water temperature. 2. Heater not energizing. 3. Low incoming voltage.	1. Verify that the incoming water temperature matches the data plate. 2. Verify that the wash tank heater is operating. If not, replace. 3. Have an electrician verify that incoming power is the same as indicated on the data plate.
Low wash arm pressure, poor spray pattern.	1. Clogged wash arm nozzles. 2. Clogged wash tank or wash pump strainers. 3. Worn wash pump impeller.	1. Verify that nozzles are not clogged with debris. If so, remove debris. 2. Clean out strainers if necessary. 3. Verify status of impeller and replace if necessary.
Inadequate rinse.	1. Low incoming water pressure. 2. Incoming water solenoid is clogged.	1. Verify that incoming water pressure during fill is 15 PSI. 2. Verify that debris is not trapped in valve. If so, remove debris.
Pawl bar moves with no load, but does not move when loaded.	1. Clutch on drive assembly is out of adjustment.	1. Adjust as required.

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.**

PROBLEM	POSSIBLE CAUSE	REMEDY
Pawl bar does not move.	1. Failed or broken overload spring. 2. No power to the drive motor or failed drive motor. 3. Pawl bar not properly installed.	1. Replace spring if necessary. 2. Verify power and wiring connections to the motor. If necessary, replace the motor. 3. Verify that the pawl bar is installed correctly.
Racks go through the machine, but results are poor.	1. Incorrect quantity of detergent for the water volume. 2. Clogged strainers/scrap basket. 3. Ware not being properly pre-scrapped. 4. Wash or rinse arms missing end-caps. 5. Low tank heat. 6. Inadequate rinse. 7. Incorrect voltage coming to the machine. 8. Wash pump cavitation due to low water level.	1. Adjust detergent to appropriate level. 2. Clean out strainers and scrap basket. 3. Review “Ware Preparation” section. 4. Verify and replace as required. 5. See previous page. 6. See previous page. 7. Verify that the voltage matches that on the machine data plate. 8. Verify that the drains are shut and that the water level is correct.
Spotting of silverware, glasses, and dishes.	1. Incorrect final rinse temperature. 2. Clogged wash and/or rinse nozzles and arms. 3. Excessively hard water. 4. Loss of water pressure due to clogged/obstructed wash pump. 5. Ware not being properly pre-scrapped. 6. Incorrect detergent/chemical concentrations.	1. Verify that the rinse water temperature matches the data plate. 2. Remove the arms and verify that they and their nozzles are free of debris. 3. Install a water softener. 4. Turn the power off to the machine at the source. Drain the wash tank of water and verify that the pump intake is free of debris. 5. Review the “Ware Preparation” section. 6. Verify that the detergent/chemical concentrations are correct for the associated water volume.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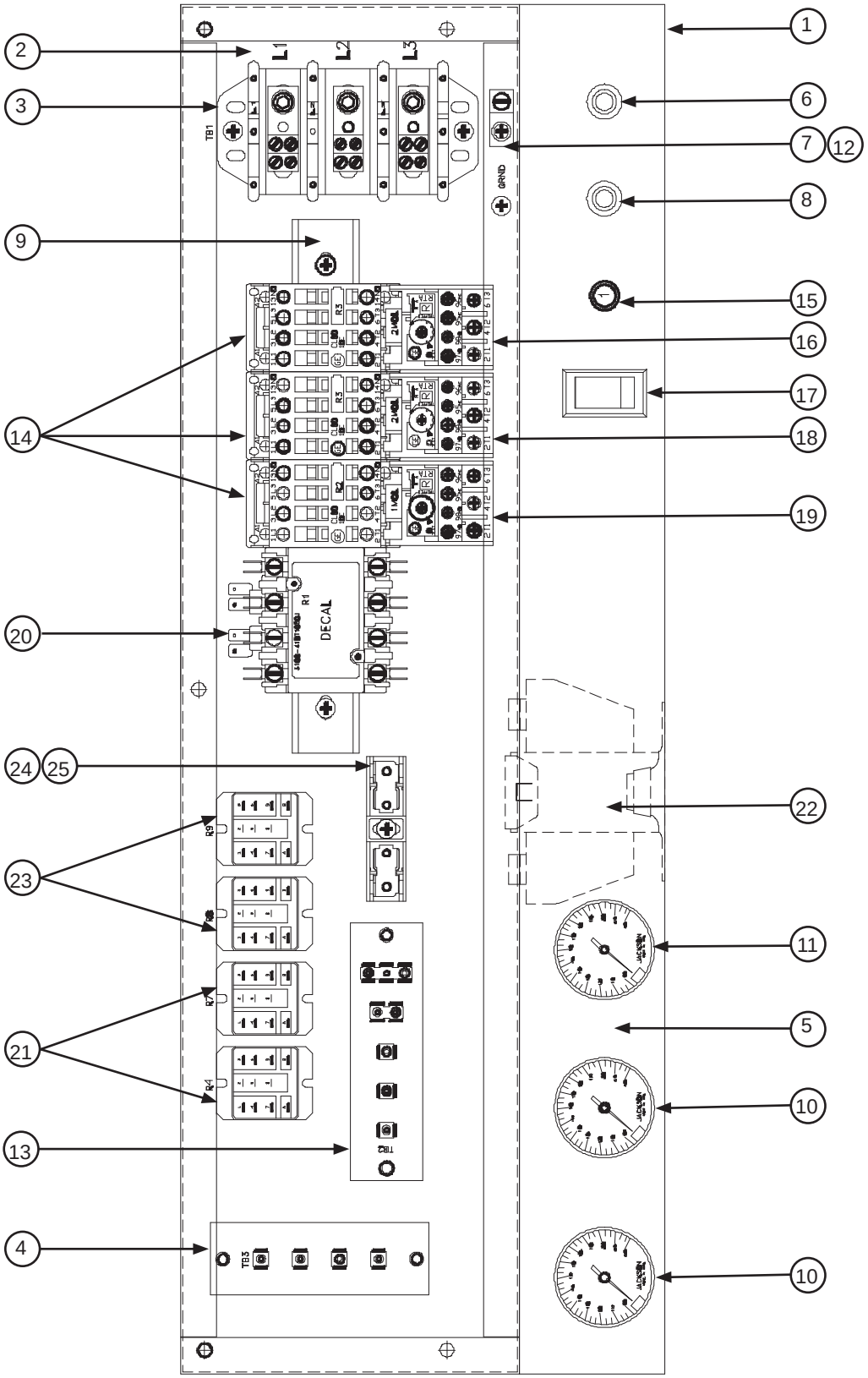
JACKSON

C-44/54 CONTROL BOX

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Electrical Box	05700-041-88-43
2	1	Terminal Block	05940-011-48-27
3	1 1	Rinse Thermometer, 96” Lead Rinse Decal, 180 °F	06685-111-68-48 09905-002-97-62
4	6	Star Washer, External Tooth, 10-24	05311-273-02-00
5	6	Screw, 10-32 x 3/4” Long Phillips Trusshead	05305-011-62-17
6	1	Decal, Gauge	09905-021-72-29
7	1 1	Wash, Thermometer, 48” Lead Wash Decal, 160 °F	06685-111-68-49 09905-003-00-69
8	1	Wire Lug, 2 AWG to 14 AWG	05940-200-76-00
9	1	Decal, Ground	09905-011-86-86
10	2	Screw, 10-32 x 1/2” Long Phillips Trusshead	05305-011-39-36
11	1	Decal, L1, L2, L3	09905-101-12-66
12	1	Light, Amber	05945-111-44-44
13	1	Light, Red	05945-111-44-45
14	1	Din Rail	05700-021-72-75
15	1	Circuit Breaker (208-230 Volt, 60 Hz Models Only)	05925-011-68-34
16	1	Switch, ON/FILL - OFF/DRAIN	05930-301-46-00
17	2	Motor Contactor	05945-111-68-38
18	1	Heater Contactor (Non-steam Units Only)	05945-002-24-70
19	1	Overload	See "Motor Overloads" page.
20	1	Overload	See "Motor Overloads" page.
21	1	Control Relay	05945-111-35-19
22	2	Control Relay	05945-111-72-51
23	10	Screw, 6-32 x 3/8” Long Round Phillipshead	05305-002-25-91
24	1	Fuse (460 Volt Models Only)	05920-011-72-88
25	1	Fuse Holder (460 Volt Models Only)	05920-011-72-89
26	1	Transformer	05950-011-68-35
27	4	Locknut, 10-24 with Nylon Insert	05310-373-01-00
28	1	Terminal Board	05940-002-78-97
29	1	Terminal Board	05940-021-89-41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GRND
DECAL
TB2
TB3

C-66/76/80/90 CONTROL BOX

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Electrical Box	05700-041-88-50
2	1	Decal, L1, L2, L3	09905-101-12-66
3	1	Terminal Block	05940-011-48-27
4	1	Terminal Board	05940-021-89-41
5	1	Decal, Gauge	09905-021-72-30
6	1	Light, Amber	05945-111-44-44
7	1	Wire Lug, 2 AWG to 14 AWG	05940-200-76-00
8	1	Light, Red	05945-111-44-45
9	1	Din Rail	05700-021-72-75
10	2	Rinse Thermometer, 96” Lead Rinse Decal, 180 °F	06685-111-68-48 09905-002-97-62
11	1	Wash, Thermometer, 48” Lead Wash Decal, 160 °F	06685-111-68-49 09905-003-00-69
12	1	Decal, Ground	09905-011-86-86
13	1	Terminal Board	05940-002-78-97
14	3	Motor Contactor	05945-111-68-38
15	1	Circuit Breaker (208-230 Volt, 60 Hz Models Only)	05925-011-68-34
16	1	Overload	See "Motor Overloads" page.
17	1	Switch, ON/FILL - OFF/DRAIN	05930-301-46-00
18	1	Overload	See "Motor Overloads" page.
19	1	Overload	See "Motor Overloads" page.
20	1	Heater Contactor (Non-steam Units Only)	05700-002-24-70
21	2	Control Relay	05945-111-72-51
22	1	Transformer	05950-011-68-35
23	2	Control Relay	05945-111-35-19
24	1	Fuse Holder (460 Volt Models Only)	05920-011-72-89
25	1	Fuse (460 Volt Models Only)	05920-011-72-88

C-44/54

VOLTS	Hz	PHASE	DRIVE MOTOR	PRE-WASH MOTOR	WASH MOTOR
208	50	3	05945-011-84-59	N/A	05945-111-68-40
220	50	3	05945-011-84-59	N/A	05945-111-68-40
230	50	3	05945-011-84-59	N/A	05945-111-68-40
380	50	3	05945-002-71-09	N/A	05945-111-68-40
415	50	3	05945-111-69-12	N/A	05945-111-81-33
440	50	3	05945-111-69-12	N/A	05945-111-81-33
208	60	1	N/A	N/A	N/A
230	60	1	N/A	N/A	N/A
200	60	3	05945-002-66-00	N/A	05945-002-65-99
208	60	3	05945-111-68-39	N/A	05945-111-68-40
230	60	3	05945-111-68-39	N/A	05945-111-68-40
380	60	3	05945-111-69-12	N/A	05945-111-81-33
460	60	3	05945-111-68-39	N/A	05945-111-68-40
600	60	3	05945-111-69-12	N/A	05945-111-81-33

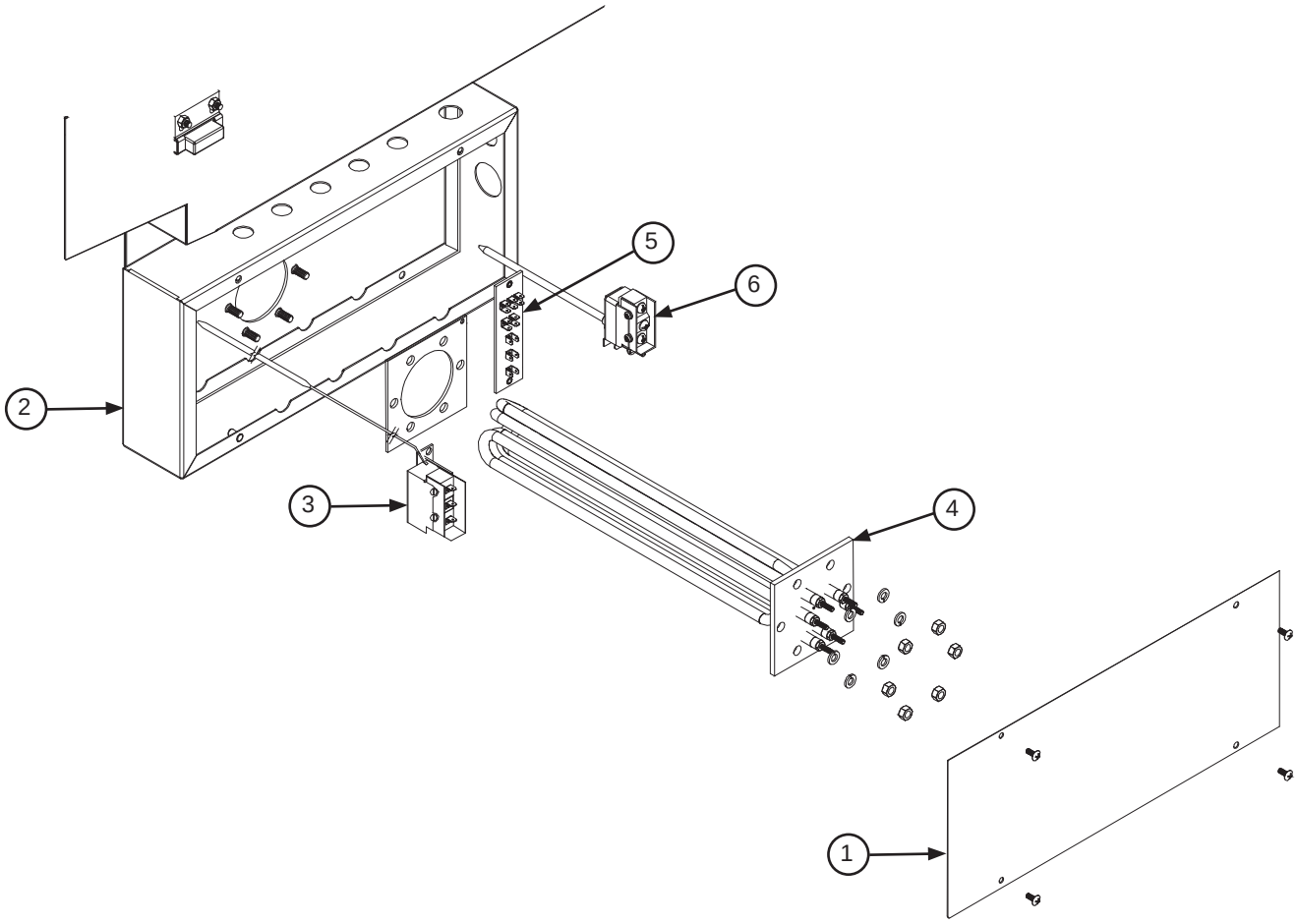
C-66/76

VOLTS	Hz	PHASE	DRIVE MOTOR	PRE-WASH MOTOR	WASH MOTOR
208	50	3	05945-011-84-59	N/A	05945-111-68-40
220	50	3	05945-011-84-59	N/A	05945-111-68-40
230	50	3	05945-011-84-59	N/A	05945-111-68-40
380	50	3	05945-002-71-09	N/A	05945-111-68-40
415	50	3	05945-111-69-12	N/A	05945-111-81-33
440	50	3	05945-111-69-12	N/A	05945-111-81-33
208	60	1	N/A	N/A	N/A
230	60	1	N/A	N/A	N/A
200	60	3	05945-002-66-00	N/A	05945-002-65-99
208	60	3	05945-111-68-39	N/A	05945-111-68-40
230	60	3	05945-111-68-39	N/A	05945-111-68-40
380	60	3	05945-111-69-12	N/A	05945-111-81-33
460	60	3	05945-111-68-39	N/A	05945-111-68-40
600	60	3	05945-111-69-12	N/A	05945-111-81-33

C-80/90

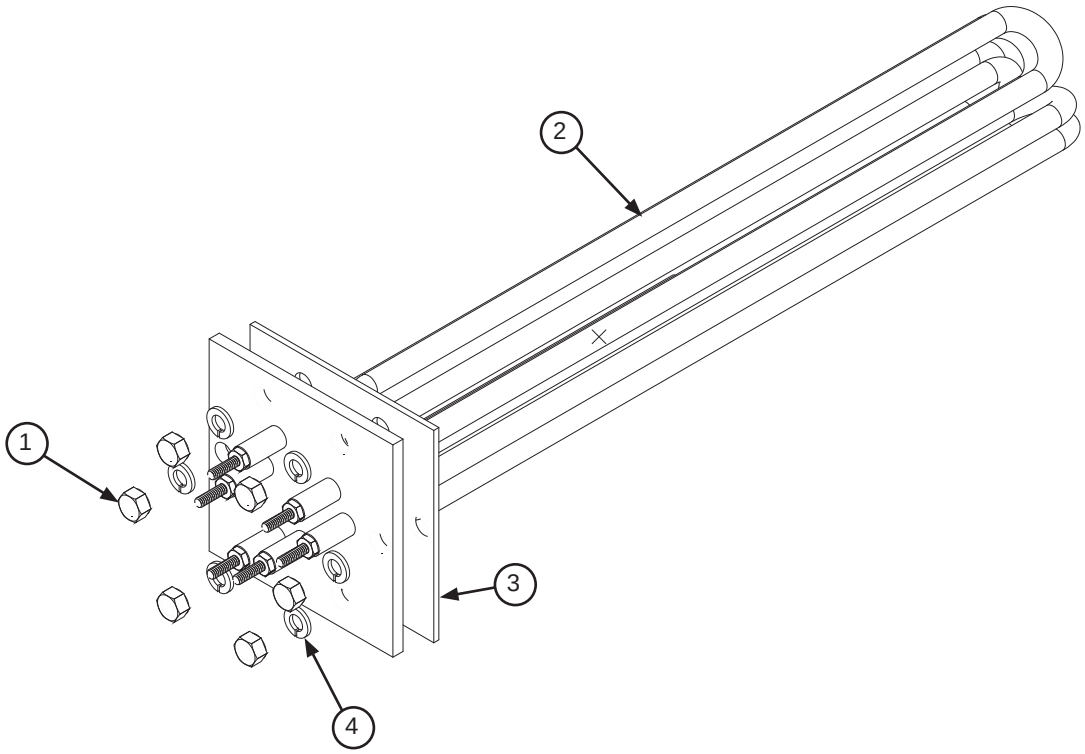
VOLTS	Hz	PHASE	DRIVE MOTOR	PRE-WASH MOTOR	WASH MOTOR
208	50	3	05945-011-84-59	N/A	05945-111-68-40
220	50	3	05945-011-84-59	N/A	05945-111-68-40
230	50	3	05945-011-84-59	N/A	05945-111-68-40
380	50	3	05945-002-71-09	N/A	05945-111-68-40
415	50	3	05945-111-69-12	N/A	05945-111-81-33
440	50	3	05945-111-69-12	N/A	05945-111-81-33
208	60	1	N/A	N/A	N/A
230	60	1	N/A	N/A	N/A
200	60	3	05945-002-66-00	N/A	05945-002-65-99
208	60	3	05945-111-68-39	N/A	05945-111-68-40
230	60	3	05945-111-68-39	N/A	05945-111-68-40
380	60	3	05945-111-69-12	N/A	05945-111-81-33
460	60	3	05945-111-68-39	N/A	05945-111-68-40
600	60	3	05945-111-69-12	N/A	05945-111-81-33

HEATER BOX



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Heater Box Cover	05700-002-02-04
2	1	Heater Box	05700-002-98-38
3	1 1	Thermostat, High Limit Fitting, 1/4”, Imperial Brass	05930-011-49-43 05310-924-02-05
4	1	Heater	See next page.
5	1	Terminal Board	05940-002-78-97
6	1 1	Kit, Wash Regulating Thermostat (CE Series) Kit, Wash Regulating Thermostat (CS Series)	06401-003-18-20 06401-003-18-21

HEATER BOX



ITEM	QTY	DESCRIPTION	PART NUMBER
1	5	5/16-18 Hex Nut	05310-275-01-00
2	1	Heater	See tables below.
3	1	Heater Gasket	05330-200-02-70
4	2	5/16" Lockwasher	05311-275-01-00

HEATERS

HIGH HOOD MODELS*

VOLTS	kW	PHASE	PART NUMBER
208	18	1	04540-121-79-30
230	18	1	04540-121-79-31
208	18	3	04540-121-79-30
230	18	3	04540-121-79-31
460	18	3	04540-121-79-32

LOW HOOD MODELS*

VOLTS	kW	PHASE	PART NUMBER
208	15	1	04540-121-68-45
230	15	1	04540-121-68-46
208	15	3	04540-121-68-45
230	15	3	04540-121-68-46
460	15	3	04540-121-68-47

*Steam models do not use electric heaters.

NOTICE *When replacing a heater, it is HIGHLY recommended that the heater gasket be changed as well. Once installed, gaskets become compressed and are subjected to extreme temperature changes. Replacing the gasket when replacing the heater can prevent future leaks.*

NOTICE *The nuts used to secure the heater to the tub should be torqued to 16 in-lbs. After tightening, the unit 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 ensure that they are torqued to 16 in-lbs.*

HEATER SYSTEM TROUBLESHOOTING

The wash tank heater system is electrically-connected in the circuit and is dependent upon the machine being properly filled with water and maintaining a safe water level. The system consists of two thermostats (mounted in the heater box behind the dress panel), a float switch (mounted in the wash tank), the heater relay (mounted in control box), and the heater which is activated by the thermostats.

Once the dishmachine has filled to the correct level, the heater should operate automatically. Should the tank heat be too high or too low or if there is no indication of temperatures at all, the following checks should be made by an authorized service agent or electrician:

Heater System Check

1. If the temperature is too high, adjust thermostat using instructions on the next page.
2. If temperature is too low, adjust thermostat as above, then:
3. Turn off power to machine by placing customer's circuit breaker in the "OFF" position. Turn off machine circuit breaker located on right side of control box.
4. Remove cover from control box on top of machine.
5. Make sure water temperature is below 140°F (preferably about 130°F).
6. Turn on both circuit breakers. Observe heater relay (R1) while the power switch is turned "ON" and "OFF." If relay contacts move in and out, the heater relay is operating correctly. Based on results, follow the appropriate section below (Relay Closes if contacts move in and out, Relay Does Not Close if contacts do not move in and out).

Relay Closes

1. Check power supply at incoming terminal board (L1, L2, L3). It should be the same voltage as indicated on the machine data plate.
2. Check power at connections on heater relay (R1). The voltage should agree with the voltage on the machine data plate. If not, check wires for breaks or bad connections.
3. Check power at terminals of heater, which should agree with the data plate. If not, check wires for breaks or bad connections.
4. Temperatures should rise as explained in Step 1 of the Relay Does Not Close section below, and amperage can be checked according to those instructions. Replace any defective elements.

Relay Does Not Close

1. There is an insulated movable bar on the relay across the top. With an insulated probe, depress this bar and observe the thermometer: the temperature should rise noticeably in a minute or two. If it moves slowly, the element is probably faulty. If it moves constantly higher at a good rate, the element should be good.

NOTICE *A check with an amp-probe at heater relay (R1) terminals should be made to verify the amp draw on each leg. This should be appropriate for the voltage and phase indicated on the data plate.*

HEATER PROTECTION AND AUTOMATIC FILL (FOR UNITS EQUIPPED WITH AUTOMATIC FILL)

This control is activated when the power switch is turned “ON.” The primary function is to automatically energize the wash tank heating circuit. It will also cut-off the wash tank heating circuit should the water be accidentally drained from the machine with the power switch still “ON.” The power switch should always be turned-off before draining the unit.

This water level control consists of two floats that operate when the power switch is turned "ON" and works in conjunction with the thermostats and heater relays.

When the power switch is turned “ON,” water starts to enter the dishmachine. When it reaches the proper level, the normally-open contacts in the water level float switch close, activating the heating circuit for tank heat.

If the water level falls below the correct level while power is still on, the float switch will sense the lack of water and deactivate the heater.

THERMOSTATS

The thermostat range is from 140°F to 240°F with a maximum bulb-exposure temperature of 300°F.

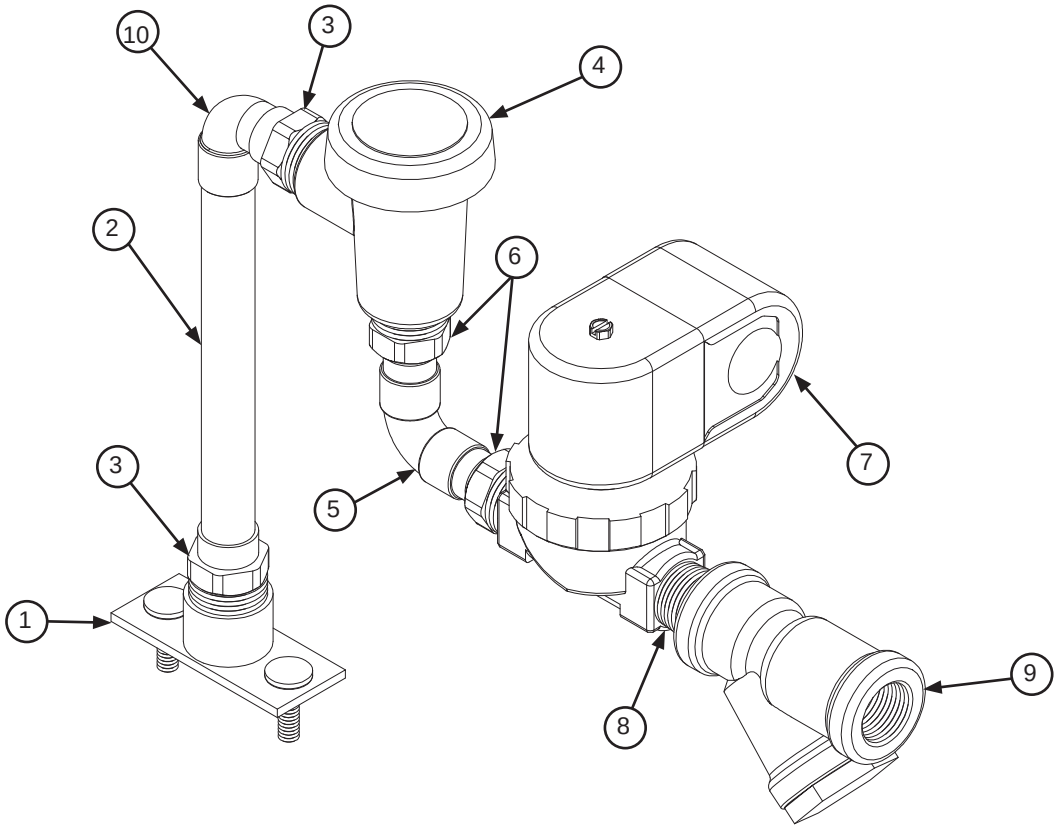
Calibration:

Wash Thermostat: Setpoint: 165°F (Adjustable range)
High-Limit Thermostat: Fixed setpoint: 210°F (Non-adjustable)

The high-limit thermostat is used to protect the heater element in the event of a run-away regulating thermostat or a dry-fire situation. It is set for 210°F +0°F or -10°F with a fixed setpoint. This part is not adjustable.

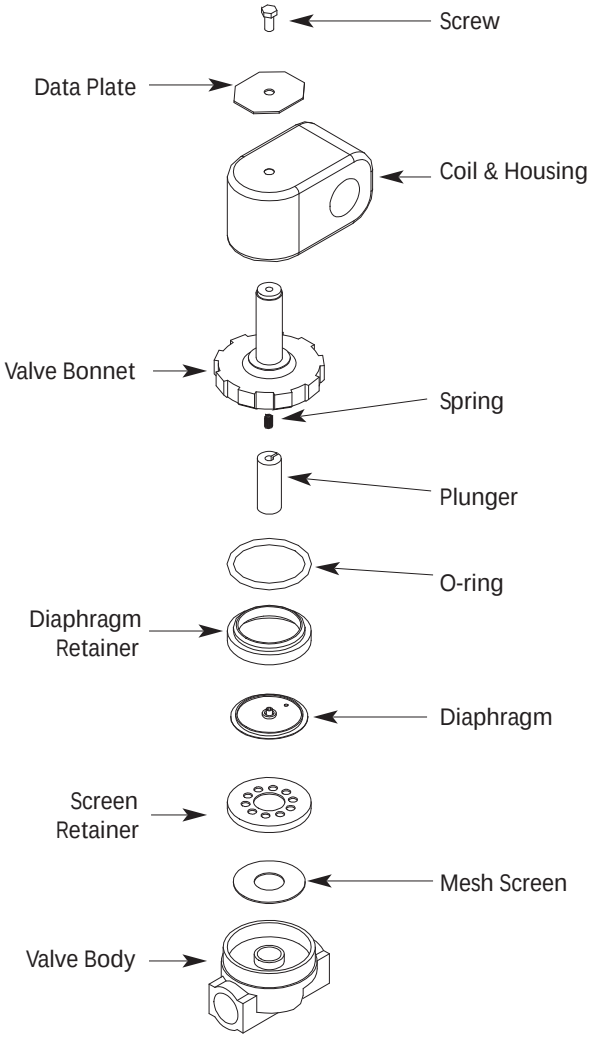
The wash tank regulating thermostat will maintain the correct wash water temperature to meet regulatory requirements. These specify that the wash be no lower than 140°F on chemical-sanitizing machines and no lower than 160°F on hot-water-sanitizing machines.

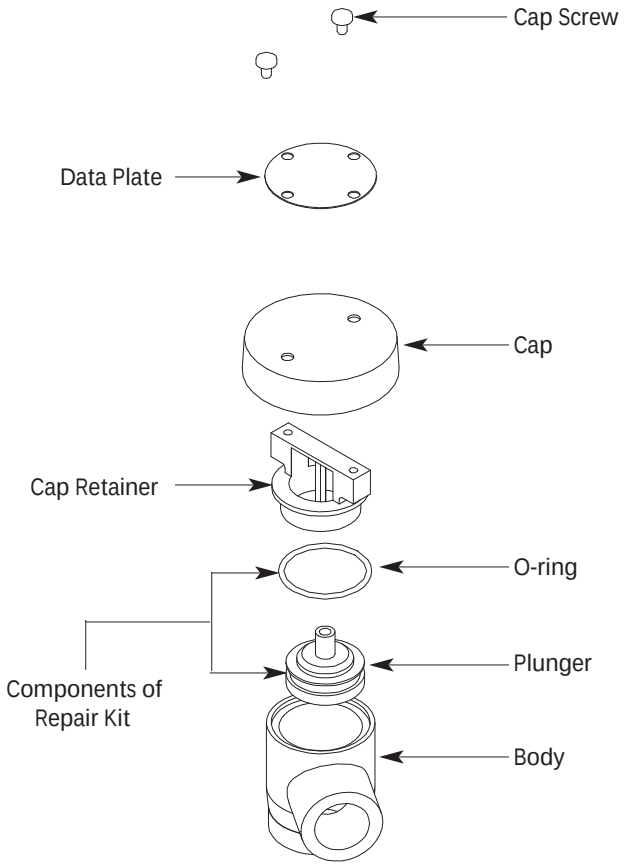
PRE-WASH INLET PLUMBING



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1 1	Fill Line Injector Gasket, Fill Line Injector	05700-002-04-71 05330-111-42-81
2	1	Tube, Copper, 1/2”	05700-002-04-93
3	2	Adapter, Male	04730-401-03-01
4	1	Vacuum Breaker	04820-003-06-13
5	1	Elbow, 1/2”	04730-406-01-01
6	2	Adapter, 1/2”	04730-011-59-53
7	1	Valve, Solenoid, 1/2”, 110 V	04810-100-12-18
8	1	Nipple, 1/2”, Close, Brass	04730-207-15-00
9	1	Y-strainer, 1/2”	04730-217-01-10
10	1	Elbow, 1/2”	04730-406-31-01

SOLENOID VALVE & VACUUM BREAKER





Solenoid Valve Plunger Kit
Includes plunger and spring
06401-003-07-40

Solenoid Valve Diaphragm Kit
Includes diaphragm and o-ring
06401-003-07-41

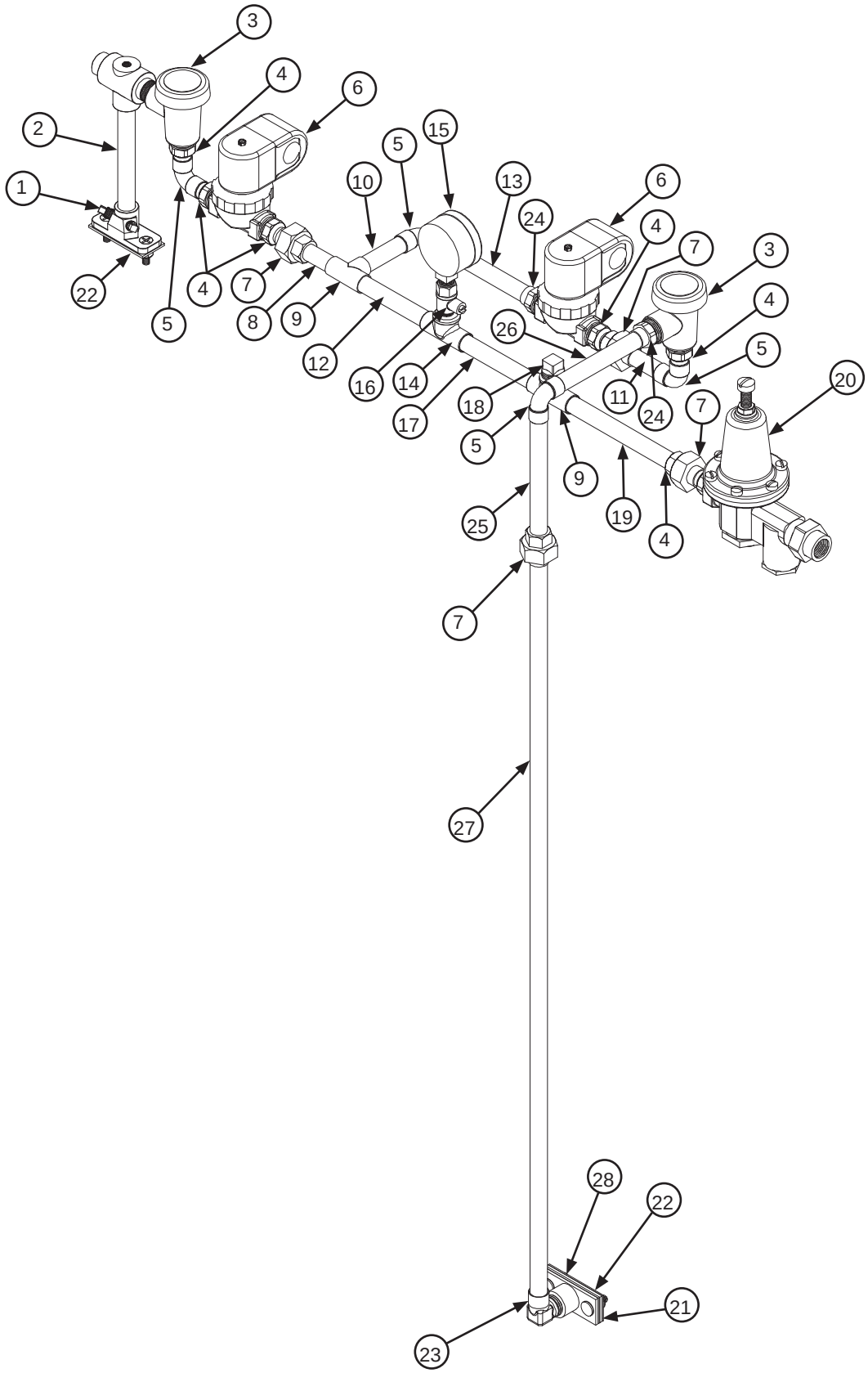
Solenoid Valve 110 V Coil and Housing Kit
06401-003-07-43

Complete Solenoid Valve
04810-100-12-18

Vacuum Breaker Repair Kit
06401-003-06-23

Complete Vacuum Breaker Assembly
04820-003-06-13

RINSE INLET PLUMBING

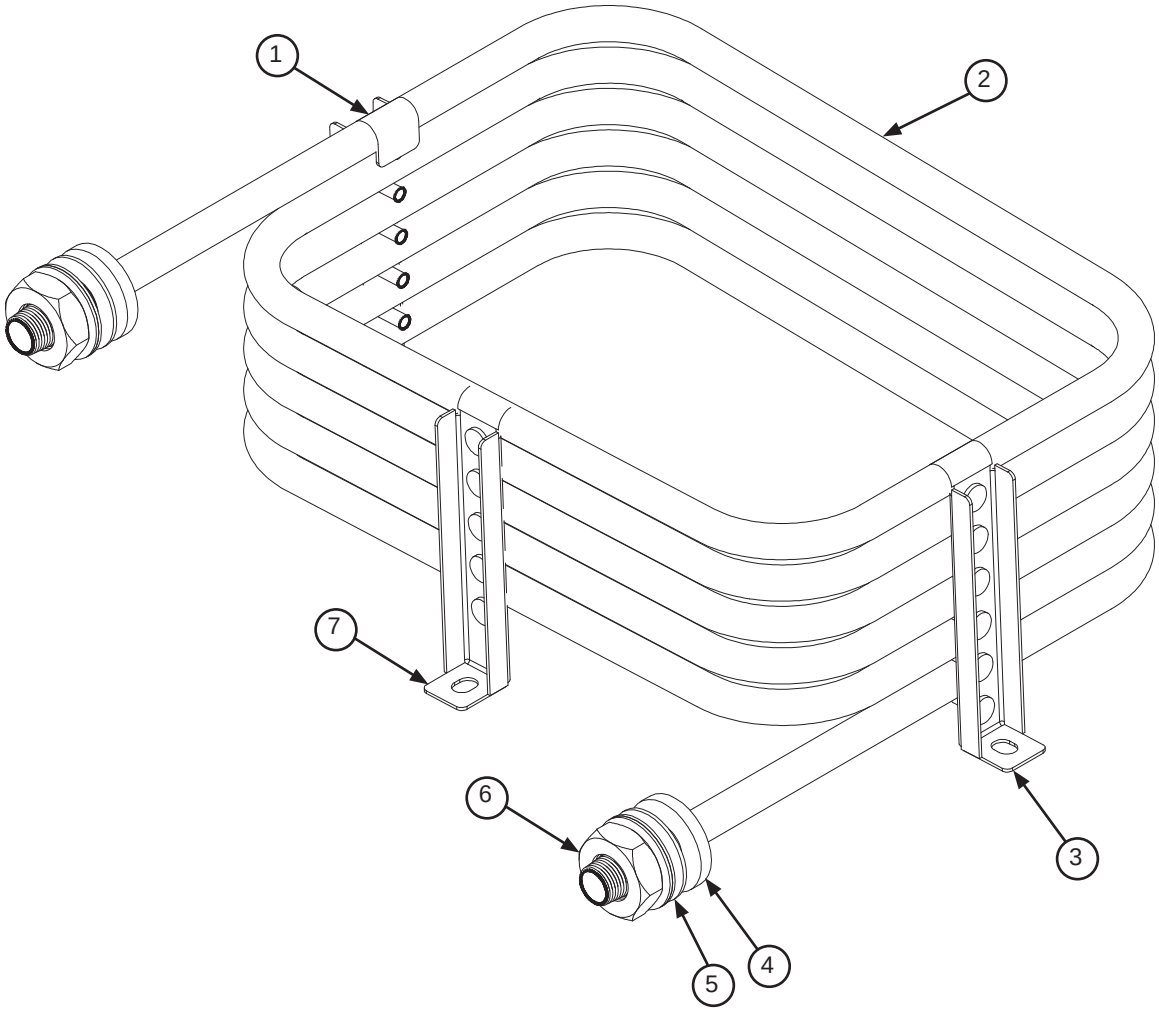


RINSE INLET PLUMBING

ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	Plug, 1/8”, Brass	04730-209-07-37
2	1 1	Rinse Injector Gasket, Rinse Injector	05700-002-03-42 05330-111-42-81
3	2	Vacuum Breaker, 1/2”	04820-003-06-13
4	6	Adapter, 1/2”	04730-011-59-53
5	3	Elbow, 1/2”	04730-406-01-01
6	2	Valve, Solenoid, 1/2”	04810-100-12-18
7	4	Union, 1/2”	04730-412-05-01
8	1	Tube, Copper, 1/2” x 2”	See note below.
9	1	Tee, Copper, 1/2”	04730-411-01-01
10	1	Tube, Copper, 1/2” x 3.06”	See note below.
11	1	Tube, Copper, 1/2” x 2.08”	See note below.
12	1	Tube, Copper, 1/2” x 4”	See note below.
13	1	Tube, Copper, 1/2” x 5.27”	See note below.
14	2	Tee, 1/2” x 1/2” x 1/4”	04730-411-25-01
15	1 1	Gauge, Pressure, 0-100 PSI Decal, 15-25 PSI	06685-111-88-34 09905-002-97-74
16	1	Valve, Ball, 1/4”	04810-011-72-67
17	1	Tube, Copper, 1/2” x 4.185”	See note below.
18	1	Plug, 1/4”, Brass	04730-209-01-00
19	1	Tube, Copper, 1/2” x 5.92”	See note below.
20	1 1	Pressure Regulator, 1/2” (Not Used on GP Units) Elbow, 90-degree, 1/2” Brass (GP Units Only, Not Shown)	04820-100-04-07 04730-206-08-00
21	1	Plate, Rinse Plumbing	05700-011-82-86
22	2	Gasket	05330-111-42-81
23	1	Elbow, 90-degree, 1/2”	04730-406-32-01
24	2	Adapter, Male	04730-401-03-01
25	1	Tube, Copper, 1/2” x 5.75”	See note below.
26	1	Tube, Copper, 1/2” x 4.75”	See note below.
27	1	Tube, Copper, 1/2” x 40” (High Hood), 1/2” x 33” (Low Hood)	See note below.
28	1	Plate, Deflector	05700-002-62-49

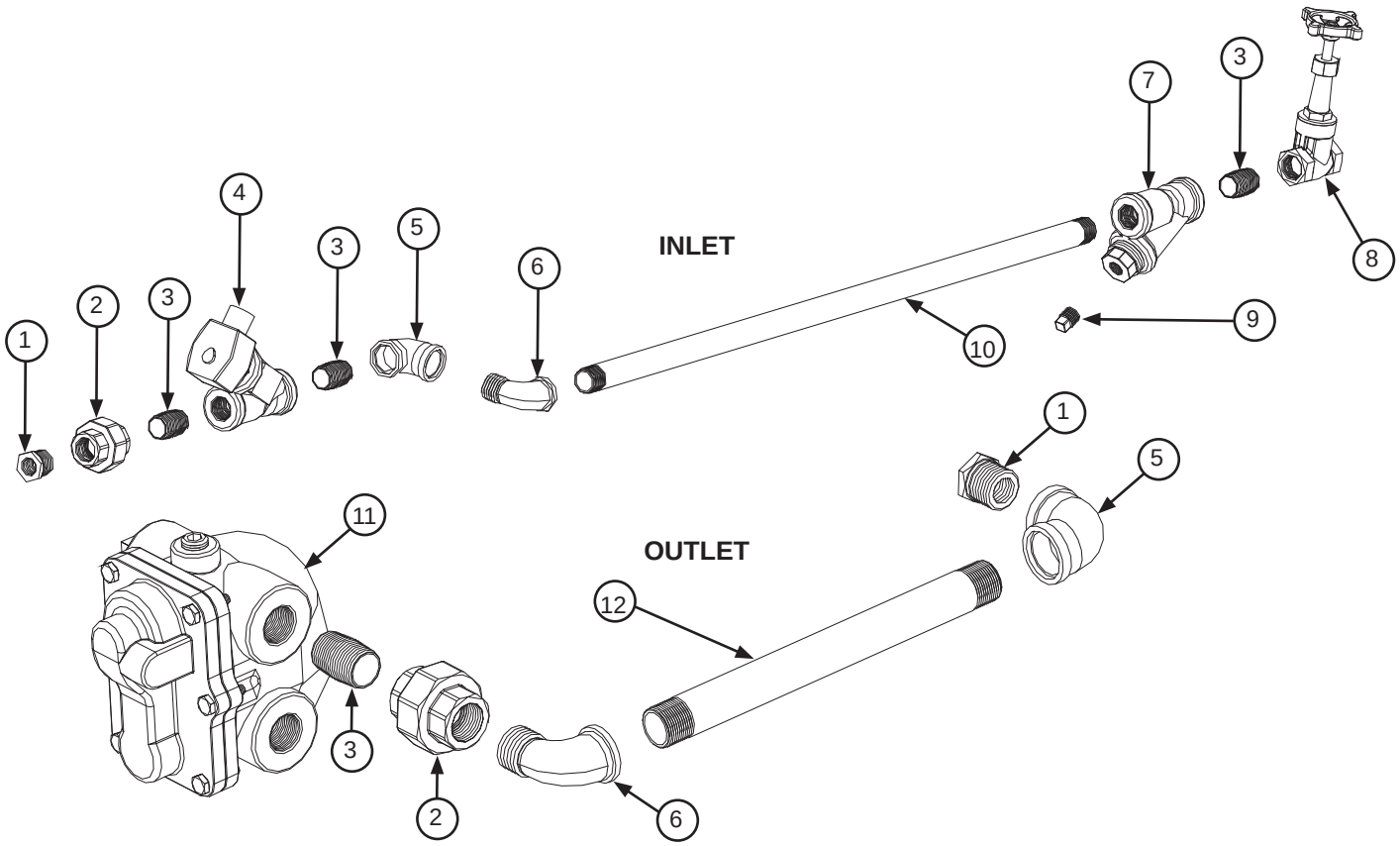
NOTICE *Copper tubing should be purchased locally and cut to the length shown in the part description.*

Complete Steam Coil Assembly
05700-002-11-78

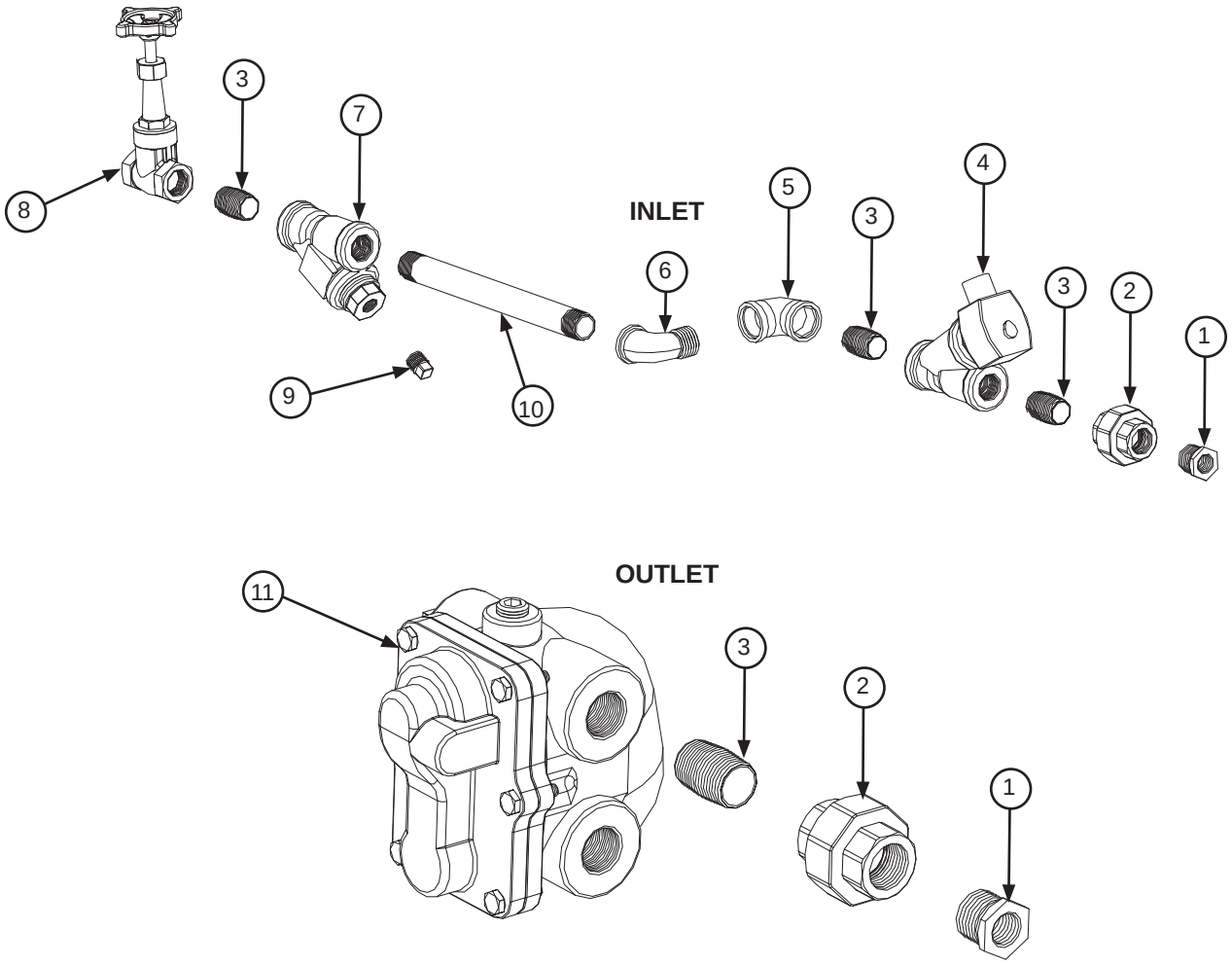


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Stand "D"	05700-002-74-85
2	1	Steam Coil	05700-002-84-03
3	1	Stand "C"	05700-002-74-84
4	1	Coil Gasket	05700-001-17-86
5	1	Flat Washer	05700-001-17-87
6	1	Coil Nut	05310-011-17-85
7	1	Stand "B"	05700-002-74-83

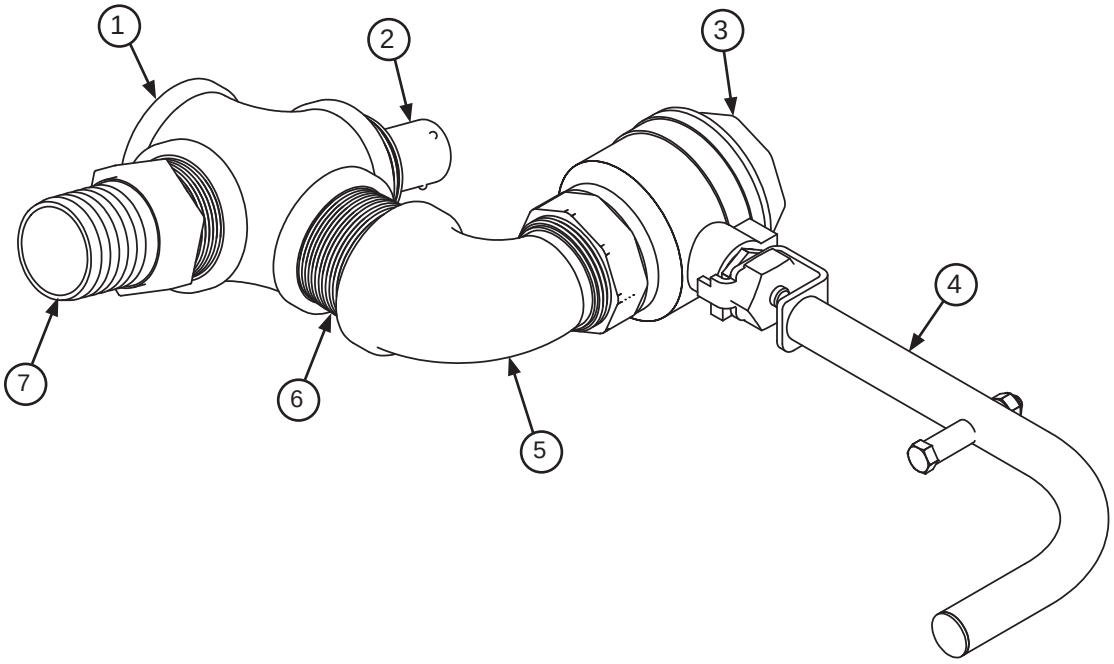
NOTICE *The Coil Gasket should be replaced any time the Steam Coil is replaced or removed for an extended period of time.*



ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	Reducer, 3/4” to 1/2”, Black Iron	04730-911-02-34
2	2	Union, 3/4”, Black Iron	04730-912-01-00
3	4	Nipple, Close, 3/4”, Black Iron	04730-907-01-00
4	1	Valve, Steam Solenoid, 3/4”, 120 V	04820-011-87-39
5	2	Elbow, 90-degree, 3/4”, Black Iron	04730-906-10-34
6	2	Elbow, Street, 90-degree, 3/4”, Black Iron	04730-011-87-37
7	1	Y-strainer, 3/4”, Black Iron	04730-217-01-32
8	1	Valve, Gate, Steam, 3/4”	04820-100-19-00
9	1	Plug, 3/8”, Black Iron	04730-909-02-34
10	1	Pipe, 3/4” x 32” Long, Black Iron	04730-002-21-27
11	1	Steam Trap, 3/4”	06680-500-02-77
12	1	Pipe, 3/4” x 10” Long, Black Iron	04730-907-06-34

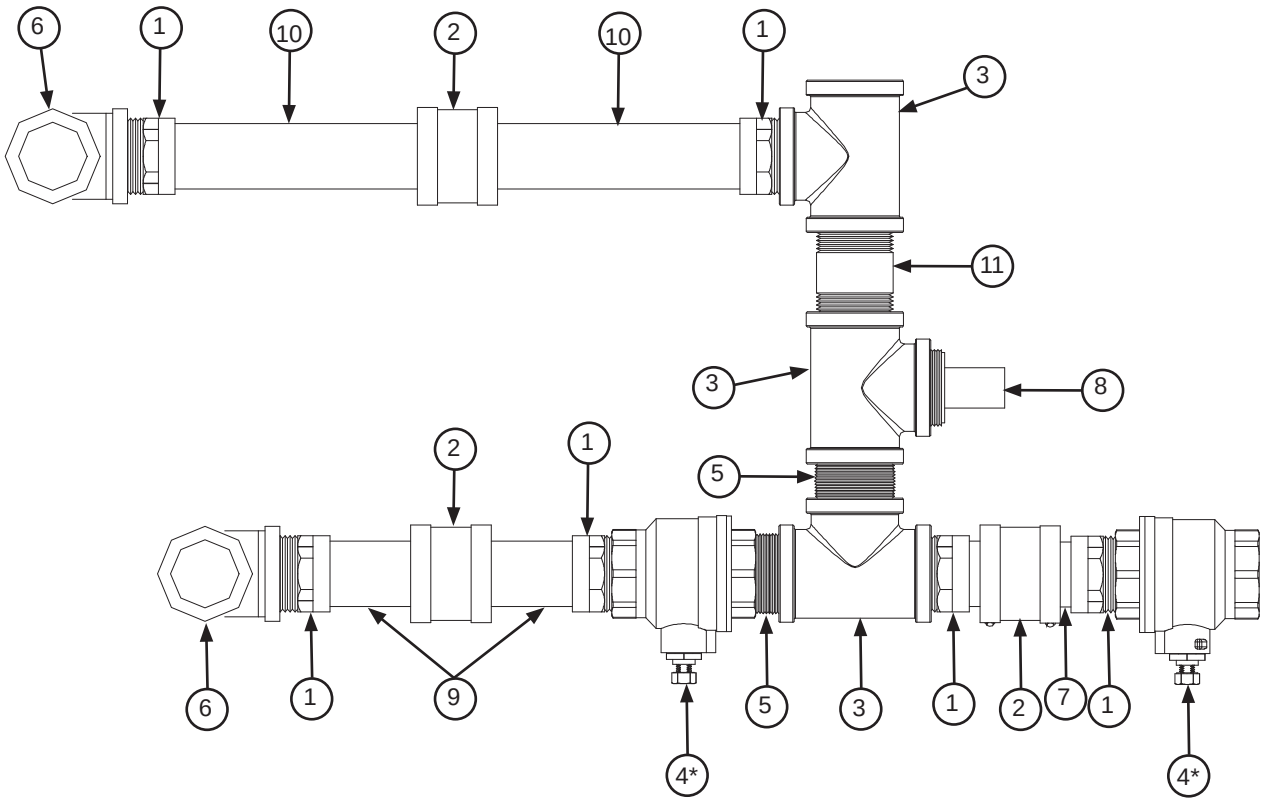


ITEM	QTY	DESCRIPTION	PART NUMBER
1	2	Reducer, 3/4” to 1/2”, Black Iron	04730-911-02-34
2	2	Union, 3/4”, Black Iron	04730-912-01-00
3	4	Nipple, Close, 3/4”, Black Iron	04730-907-01-00
4	1	Valve, Steam Solenoid, 3/4”, 120 V	04820-011-87-39
5	1	Elbow, 90-degree, 3/4”, Black Iron	04730-906-10-34
6	1	Elbow, Street, 90-degree, 3/4”, Black Iron	04730-011-87-37
7	1	Y-strainer, 3/4”, Black Iron	04730-217-01-32
8	1	Valve, Gate, Steam, 3/4”	04820-100-19-00
9	1	Plug, 3/8”, Black Iron	04730-909-02-34
10	1	Pipe, 3/4” x 32” Long, Black Iron	04730-002-21-27
11	1	Steam Trap, 3/4”	06680-500-02-77



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Cross Connector, 1 1/2"	04710-004-43-65
2	1	Nipple, Rinse	05700-021-84-61
3	1	Ball Valve, 1 1/2”	04820-111-71-46
4	1	C-44 Ball Valve Handle Assembly	05700-021-84-74
5	1	Elbow, 1 1/2”, 90-degree, Street Brass	04730-206-32-00
6	1	Nipple, 1 1/2”, Close Brass	04730-207-40-00
7	1	Fitting, Barbed, 1 1/2" x 1 1/2"	04730-011-69-92

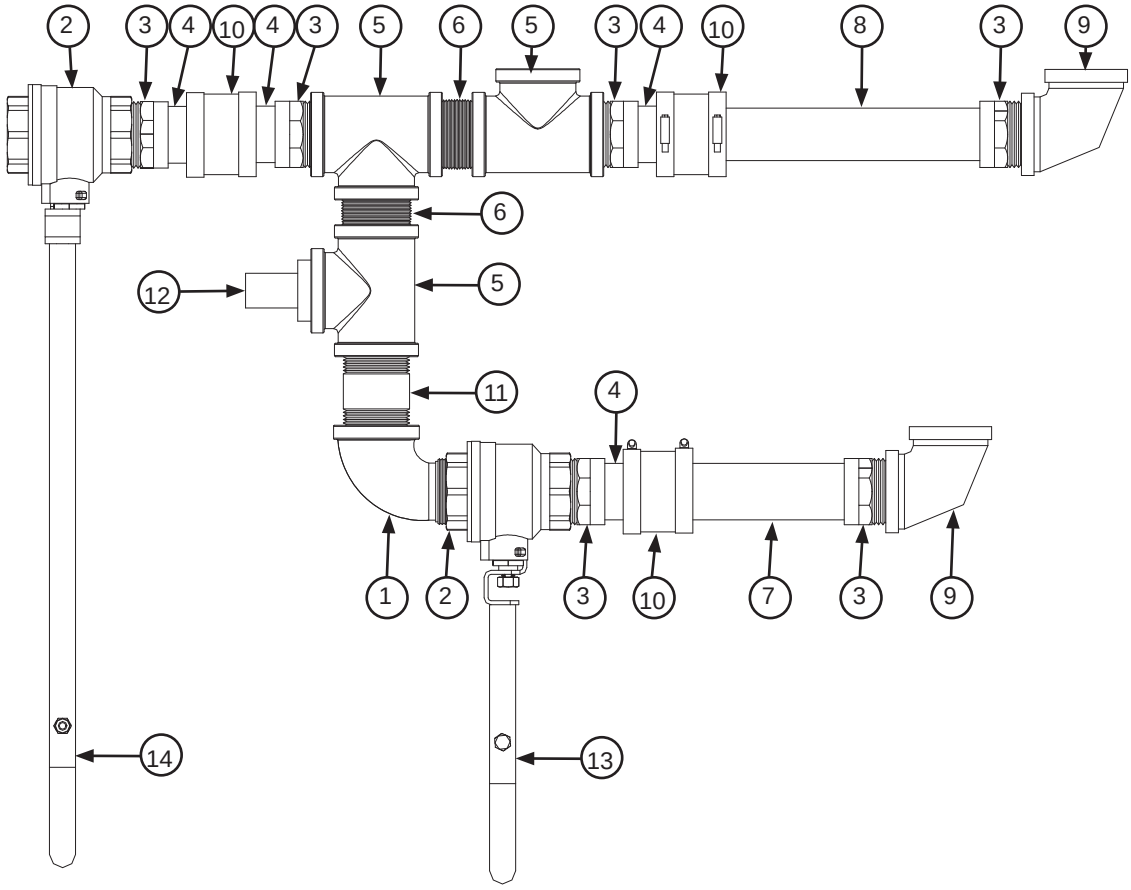
C-66/76/80/90 DRAIN PLUMBING, L-R



ITEM	QTY	DESCRIPTION	PART NUMBER
1	6	Adapter, Male to Female, 1 1/2”	04730-401-25-01
2	3	No-hub Connector	04720-604-06-00
3	3	Tee, Brass, 1 1/2”	04730-011-69-93
4	2 2	Ball Valve, 1 1/2” Valve Handle Assembly (Not Shown)	04820-011-71-46 06401-021-84-74
5	2	Nipple, Close Brass, 1 1/2”	04730-207-40-00
6	2	Elbow, Brass, 90-degree, 1 1/2”	04730-011-73-77
7	2	Tube, Copper, 1 1/2” x 1 3/4” (All Models)	See note below.
8	1	Nipple, Rinse	05700-021-84-61
9	2	Tube, Copper, 1 1/2” x 3 1/2” (C-66), 1 1/2” x 6 1/2” (C-76) 1 1/2" x 10 1/4" (C-80), 1 1/2” x 11 1/2” (C-90)	See note below.
10	2	Tube, Copper, 1 1/2” x 7 1/2” (C-66), 1 1/2” x 10 1/4” (C-76) 1 1/2" x 14" (C-80), 1 1/2” x 15 1/4” (C-90)	See note below.
11	1	Nipple, Brass, 1 1/2” x 3”	04730-011-87-04

NOTICE *Copper tubing should be purchased locally and cut to the length shown in the part description.*

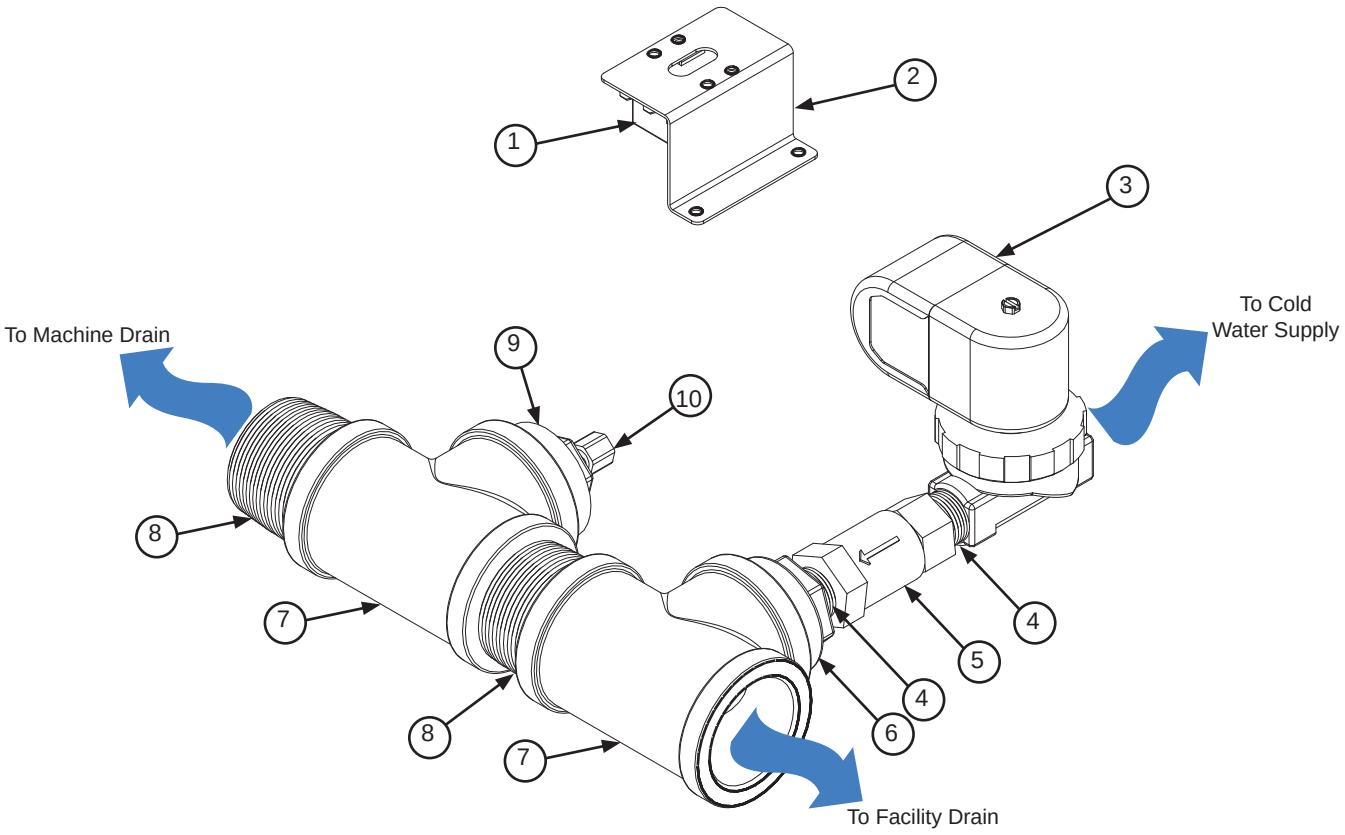
C-66/76/80/90 DRAIN PLUMBING, R-L



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Elbow, 1 1/2”, Street Brass	04730-206-32-00
2	2	Ball Valve, 1 1/2”	04820-011-71-46
3	6	Adapter, Male to Female, 1 1/2”	04730-401-25-01
4	4	Tube, Copper, 1 1/2” x 1 7/8” (All Models)	See note below.
5	3	Tee, Brass, 1 1/2”	04730-011-69-93
6	2	Nipple, Close Brass, 1 1/2”	04730-207-40-00
7	2	Tube, Copper, 1 1/2” x 5 3/16” (C-66), 1 1/2” x 10 3/16” (C-76) 1 1/2" x 14 3/16" (C-80), 1 1/2” x 19 3/16” (C-90)	See note below.
8	2	Tube, Copper, 1 1/2” x 8 1/8” (C-66), 1 1/2” x 13 1/8” (C-76) 1 1/2" x 17 1/8" (C-80), 1 1/2” x 22 1/8” (C-90)	See note below.
9	2	Elbow, Brass, 90-degree, 1 1/2”	04730-011-73-77
10	3	No-hub Connector	04720-604-06-00
11	1	Nipple, Brass, 1 1/2” x 3”	04730-011-87-04
12	1	Nipple, Rinse	05700-021-84-61
13	1	Valve Handle Assembly	05700-021-84-74
14	1	Valve Handle Assembly	05700-002-57-82

NOTICE *Copper tubing should be purchased locally and cut to the length shown in the part description.*

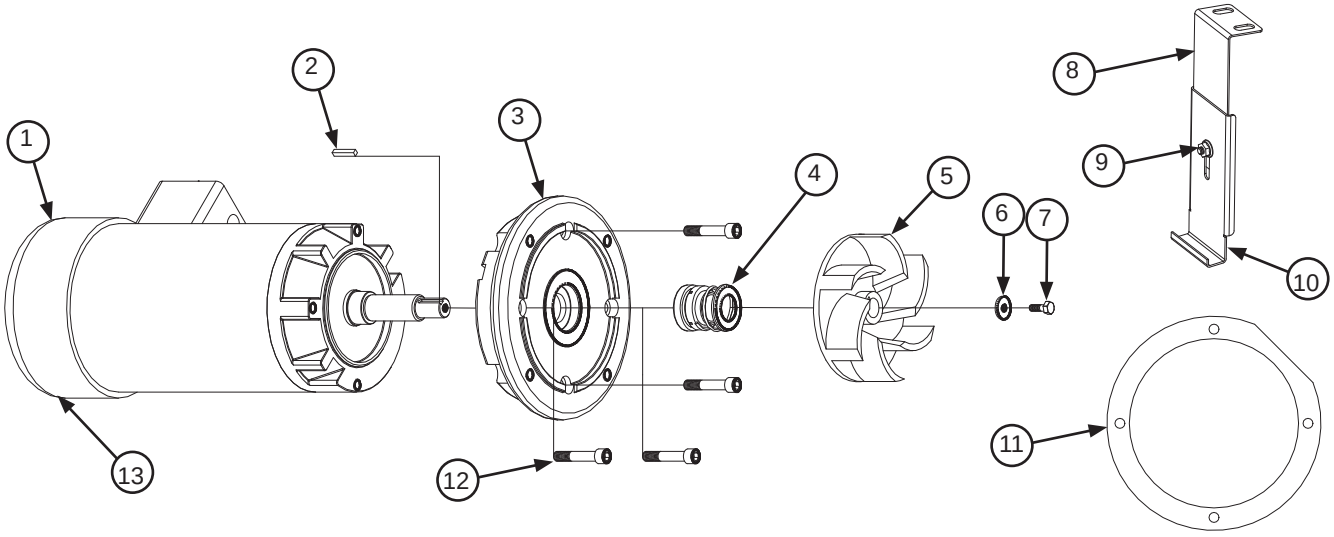
Complete Drain Quench System
05700-002-44-07



From the existing drain, attach the two additional Tees (Item 7) using the 1 1/2” Close Brass Nipples (Item 8). Tighten the Reducers (Items 6 and 9) into the Tees as shown above. Attach the Modified Compression Fitting (Item 10) into the 1 1/2” to 1/4” Reducer (Item 9). Position the bulb of the thermostat (Item 1) so that it rests approximately 1/4” from the bottom of the Tee (Item 7). Tighten the Modified Compression Fitting (Item 10) as required.

Mount the Thermostat (Item 1) to the tub using the Thermostat Bracket (Item 2) and set it for 120°F - 140°F. Install the Solenoid Valve (Item 3) to the second Tee (Item 7) and then attach to the incoming cold water line. Use thread tape as required to prevent any leaks.

ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Thermostat	05930-121-67-72
2	1	Thermostat Bracket	05700-011-81-64
3	1	Solenoid Valve	04810-100-12-18
4	2	Nipple, Close Brass, 1/2”	04730-207-15-00
5	1	Valve, Check, 1/2”	04820-002-55-77
6	1	Reducer, 1 1/2” to 1/2”	04730-002-55-75
7	2	Tee, 1 1/2” x 1 1/2” x 1 1/2”	04730-011-69-93
8	2	Nipple, Close Brass, 1 1/2”	04730-207-40-00
9	1	Reducer, 1 1/2” to 1/4”	04730-002-55-76
10	1	Modified Compression Fitting	05700-001-16-52



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Motor	See table on the next page.
2	1	Key, 3/16” x 1”	05700-011-89-17
3	1	Pump Plate	05700-021-71-83
4	1	Pump Seal	05330-011-71-98
5	1 1	Impeller (C-44/54) Impeller (C-66/76/80/90)	05700-031-67-45 05700-031-71-78
6	1	Impeller Washer	05700-011-71-95
7	1	Bolt, Hex Head 1/4-20 x 3/4”	05305-004-42-64
8	1	Upper Support Bracket	05700-021-73-68
9	1	Nut, 1/4-20 Serrated	05310-011-66-49
10	1	Lower Support Bracket	05700-021-73-71
11	1	Motor Mounting Gasket	05330-011-71-62
12	1	Cap Screw, 3/8-16 x 2”	05305-011-74-98
13	1	Motor Mounting Clamp, 4 1/8” - 7” (Not Shown)	04730-002-32-15

Complete Motor Bracket Assembly
Items 8,9, and 10
05700-021-73-42

WASH MOTORS

Volts	Phase	Hz	Motor Part Number	Complete Kit Part Number
200-440	3	50	06105-121-81-34	06401-003-09-96
208-230	1	60	06105-021-70-57	06401-003-09-97
200-230	3	60	06105-121-70-58	06401-003-09-98
380	3	60	06105-121-81-34	06401-003-09-96
460	3	60	06105-121-70-58	06401-003-09-97
600	3	60	06105-002-48-31	06401-003-09-98

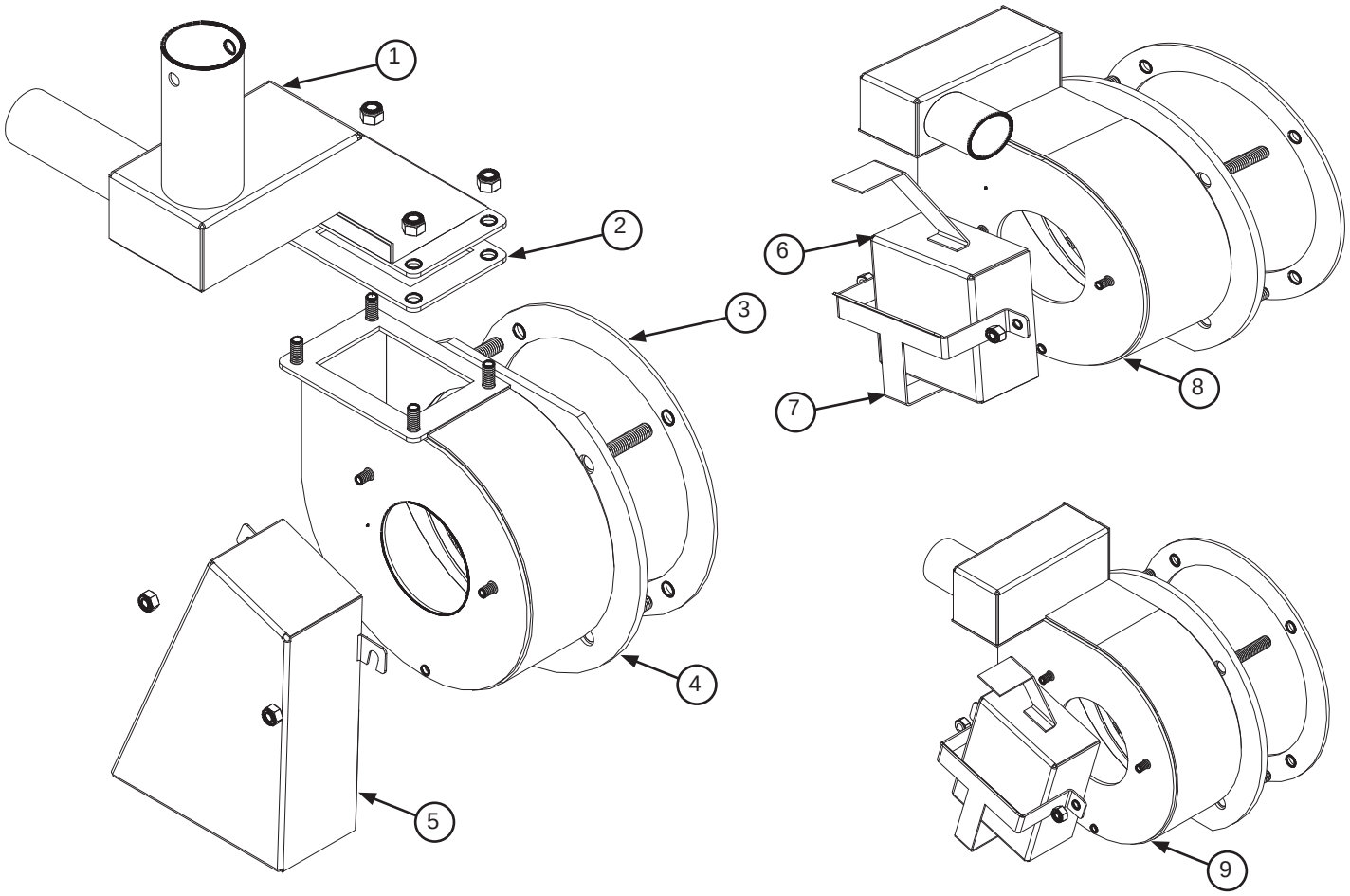
PRE-WASH MOTORS

C-66/76

Volts	Phase	Hz	Motor Part Number	Complete Kit Part Number
208-230	3	50	06105-121-70-56	06401-003-10-38
380	3	50	06105-121-81-34	06401-003-10-39
415	3	50	06105-121-81-34	06401-003-10-39
440	3	50	06105-121-70-56	06401-003-10-38
208-230	1	60	06105-121-70-55	06401-003-10-40
200-230	3	60	06105-121-70-56	06401-003-10-38
380	3	60	06105-121-70-56	06401-003-10-38
460	3	60	06105-121-70-56	06401-003-10-38
600	3	60	06105-002-48-31	06401-003-10-41

C-80/90

Volts	Phase	Hz	Motor Part Number	Complete Kit Part Number
208-230	3	50	06105-121-81-34	06401-003-10-39
380	3	50	06105-121-81-34	06401-003-10-39
415	3	50	06105-121-81-34	06401-003-10-39
440	3	50	06105-121-81-34	06401-003-10-39
208-230	1	60	06105-021-70-57	06401-003-10-42
200-230	3	60	06105-121-70-58	06401-003-10-43
380	3	60	06105-121-81-34	06401-003-10-39
460	3	60	06105-121-70-58	06401-003-10-43
600	3	60	06105-002-48-31	06401-003-10-41

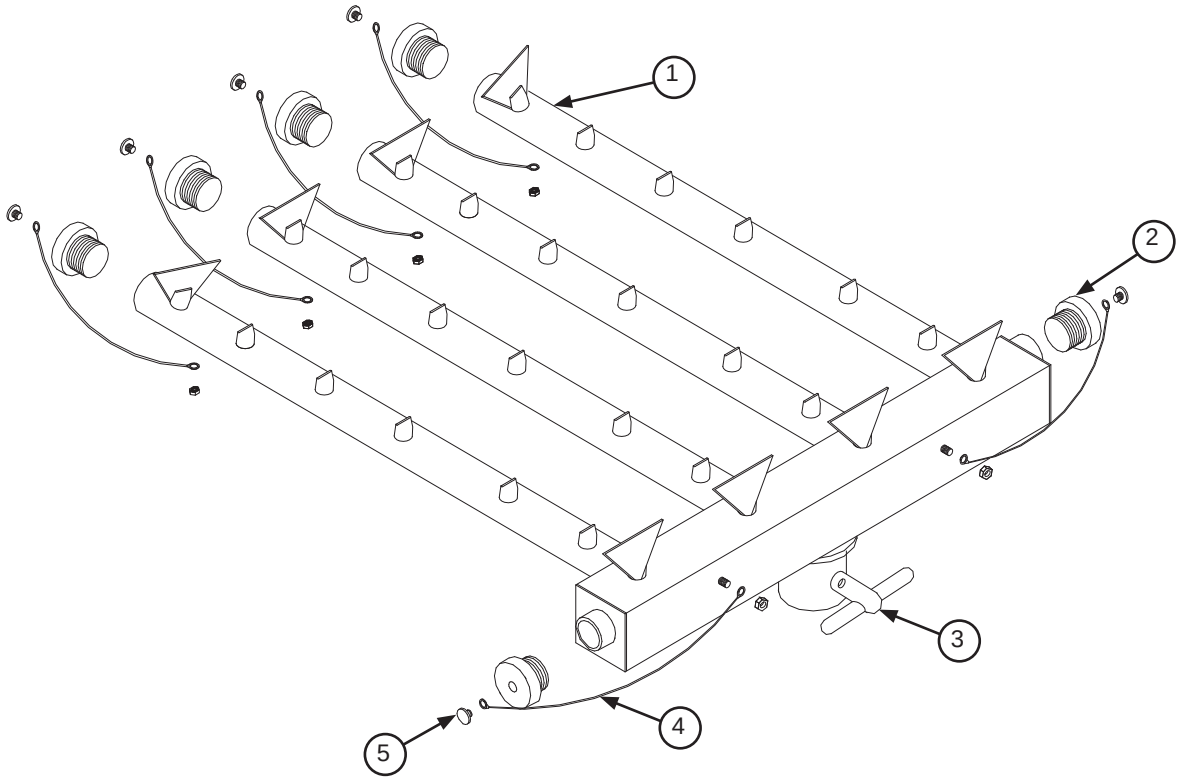


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Pump Discharge	05700-002-50-90
2	1	Gasket	05330-002-54-55
3	1	Motor Mounting Gasket	05330-011-71-62
4	1	Wash Pump	05700-002-50-92
5	1	Intake Suction Scoop	05700-002-51-20
6	1	Pre-wash Intake Strainer	05700-021-74-96
7	1	Pre-wash Strainer Bracket	05700-021-74-94
8	1	Pre-wash Pump, C-66/76/80/90, L-R	05700-002-43-56
9	1	Pre-wash Pump, C-66/76/80/90, R-L	05700-002-42-69

LOWER WASH ARM

Complete Lower Wash Arm Assembly, 50 Hz Machines
05700-002-24-86

Complete Lower Wash Arm Assembly, 60 Hz Machines
05700-031-74-66



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1 1	Lower Wash Arm Manifold, 50 Hz Machines Lower Wash Arm Manifold, 60 Hz Machines	05700-002-24-87 05700-031-67-29
2	6 6	End-cap End-cap Replacement Kit*	05700-011-67-11 06401-003-10-19*
3	1	Manifold Quick-Release Key	05700-011-94-45
4	6	Lanyard	05340-011-72-46
5	6	Mounting Screw, End-cap, 10-32 x 3/8"	05305-173-12-00

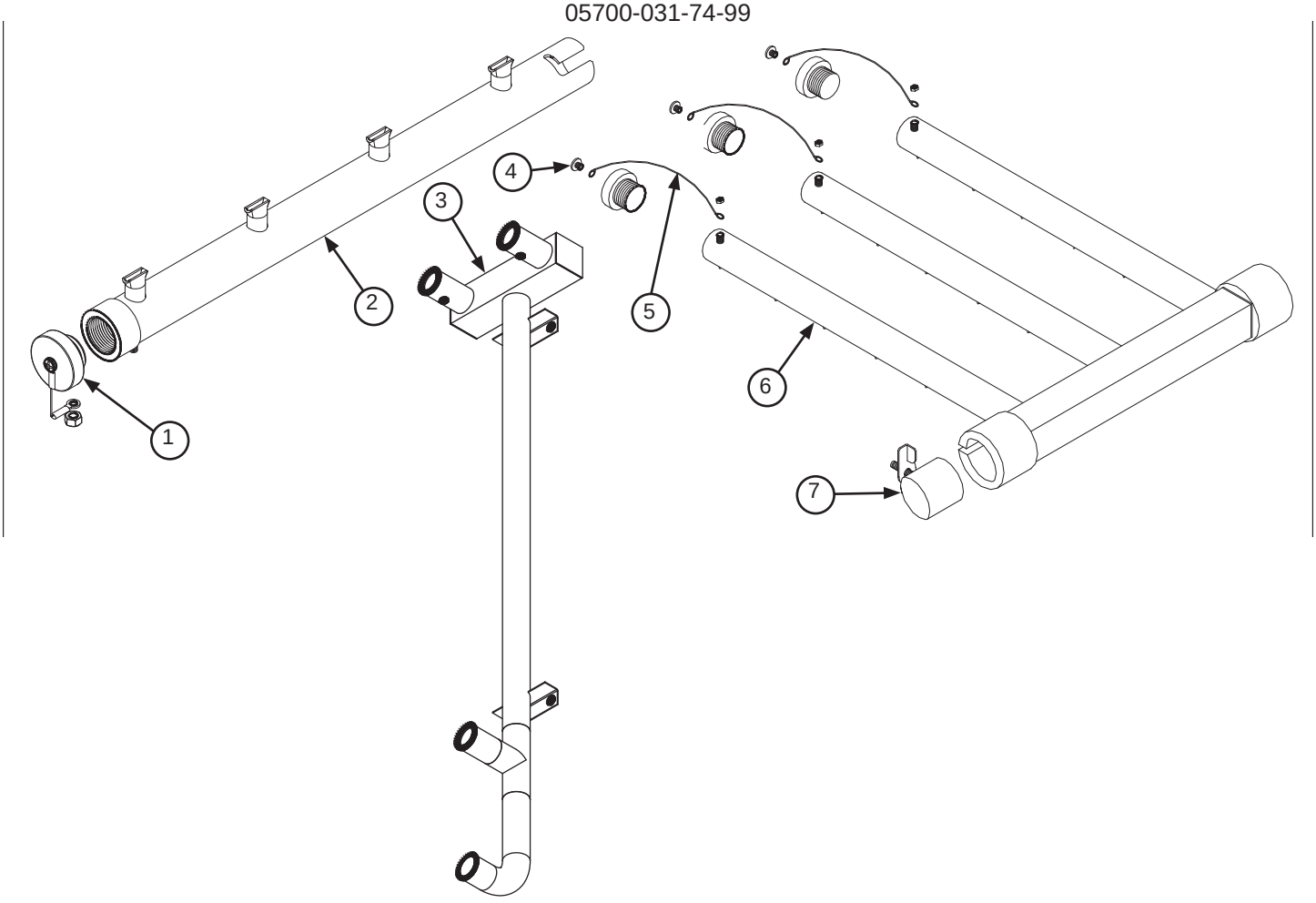
*The replacement kit for the end-cap includes the end-cap, lanyard, and mounting screw.

NOTICE *When replacing the screws in the end-caps, use a thread-locking product to ensure the mounting screws do not come loose during operation.*

PRE-WASH ARM & UPPER WASH ARM

Complete Pre-wash Arm Assembly
05700-021-74-65

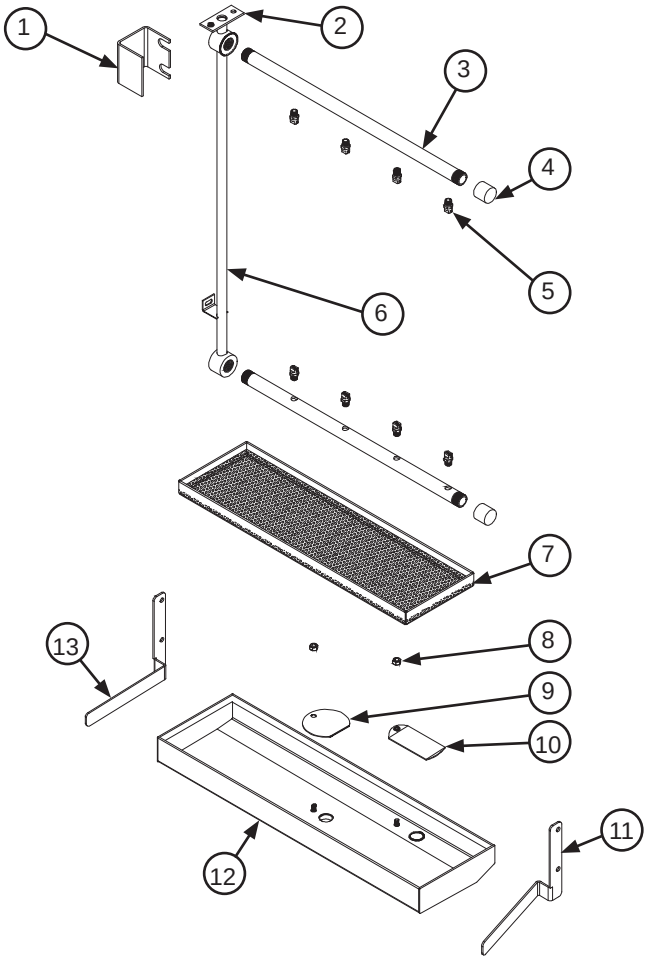
Complete Upper Arm Assembly
05700-031-74-99



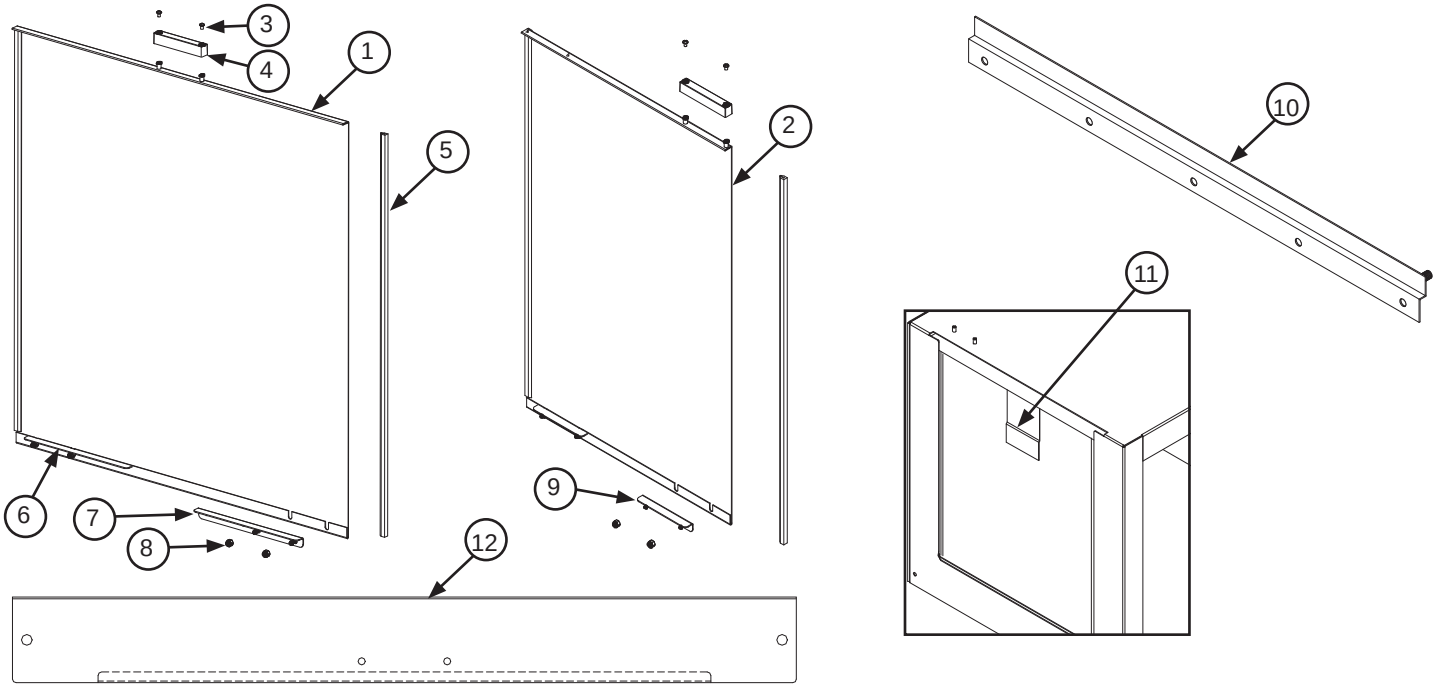
ITEM	QTY	DESCRIPTION	PART NUMBER
1	4 4	End-cap End-cap Replacement Kit*	05700-011-67-11 06401-003-10-19*
2	1	Pre-wash Tube	05700-001-16-89
3	1 1	Pre-wash Manifold, C-66/76/80/90 (High Hood) Pre-wash Manifold, C-66/76/80/90 (Low Hood)	05700-002-59-51 05700-002-42-76
4	4	Mounting Screw, End-cap, 10-32 x 3/8"	05305-173-12-00
5	4	Lanyard	05340-011-72-46
6	1	Upper Wash Arm Manifold	05700-031-67-34
7	1	Cap, Wash Tube	05700-021-69-68
8	1	Upper Wash Manifold Support Bracket (Not Shown)	05700-021-73-97

*The replacement kit for the end-cap includes the end-cap, lanyard, and mounting screw.

NOTICE *When replacing the screws in the end-caps, use a thread-locking product to ensure the mounting screws do not come loose during operation.*

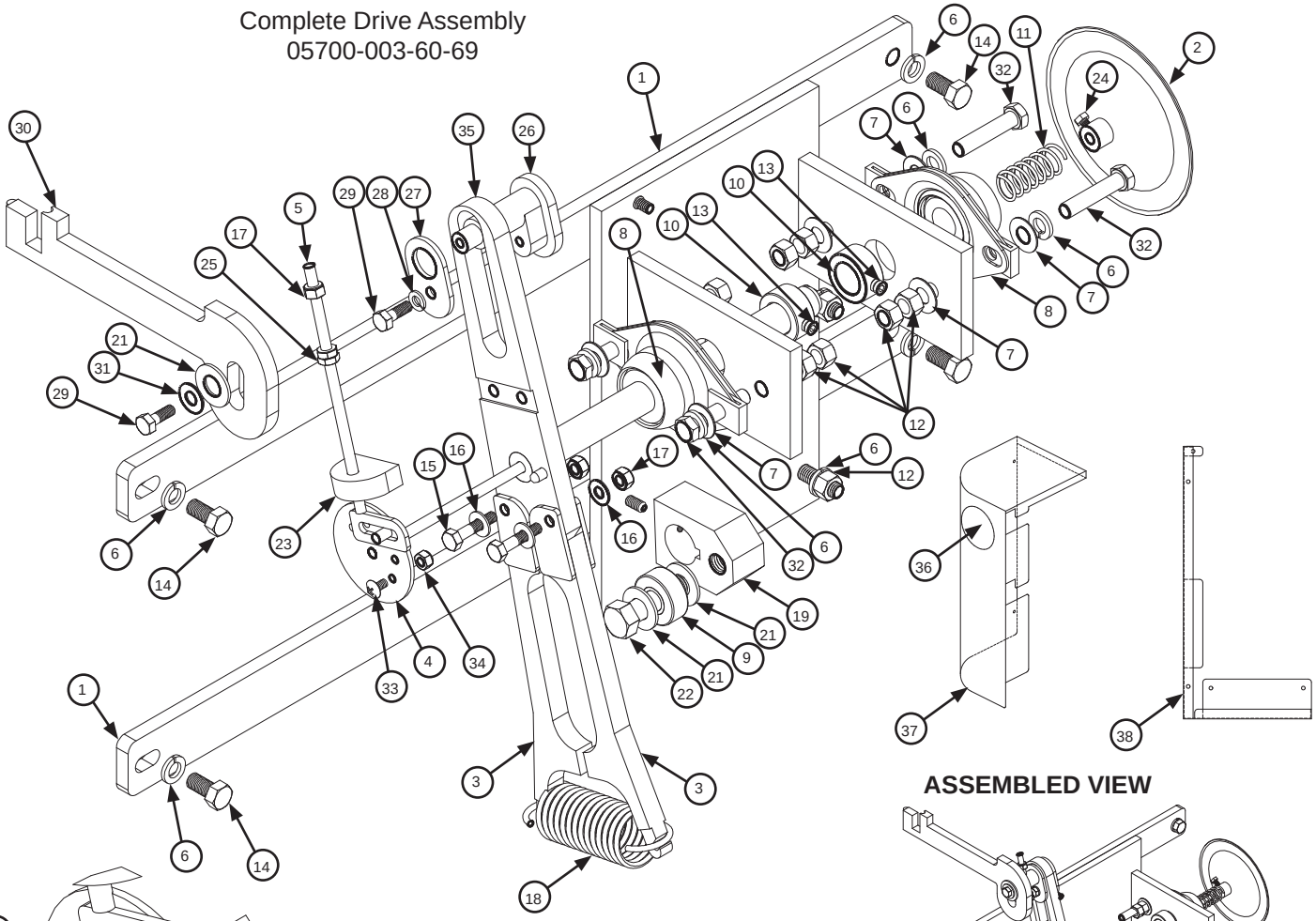


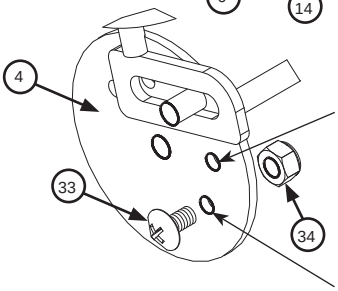
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Rinse Arm Support Bracket	05700-002-06-24
2	1	Gasket, Final Rinse Manifold	05330-111-42-81
3	2	Rinse Arm	05700-002-02-18
4	2	End-cap	05700-002-02-19
5	8	Rinse Nozzle	04730-003-59-63
6	1 1	Final Rinse Manifold (High Hood) Final Rinse Manifold (Low Hood)	05700-002-97-41 05700-002-03-08
7	1	Rinse Pan Strainer	05700-041-85-09
8	2	Locknut, 1/4-20 with Nylon Insert	05310-374-01-00
9	1	Rinse Drain Control Plate	05700-011-68-70
10	1	Rinse Drain Overflow Plate	05700-002-53-62
11	1	Left Rinse Pan Locator Bracket	05700-021-92-38
12	1	Rinse Tray	05700-002-51-18
13	1	Right Rinse Pan Locator Bracket	05700-021-92-37



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1 1	Door (High Hood) Door (Low Hood)	05700-003-13-47 05700-002-94-04
2	1 1 1 1	Pre-wash Door, Left-to-Right (High Hood) Pre-wash Door, Left-to-Right (Low Hood) Pre-wash Door, Right-to-Left (High Hood) Pre-wash Door, Right-to-Left (Low Hood)	05700-003-13-42 05700-002-43-65 05700-003-13-40 05700-002-42-88
3	1	Screw, 8-32 x 1/4”	05305-172-09-00
4	1	Door Switch Magnet	05700-111-51-68
5	2 2	Door Guide (High Hood) Door Guide (Low Hood)	05700-111-70-92 05700-002-03-28
6	1	Bracket, Right Door Stop	05700-002-96-33
7	1	Bracket, Left Door Stop	05700-002-96-32
8	4	Locknut, 10-24 Hex with Nylon Insert	05310-373-01-00
9	2	Bracket, Pre-wash Door Stop	05700-002-05-46
10	1 1	Left Door Guide (High Hood) Right Door Guide (High Hood)	05700-002-32-51 05700-031-76-44
11	1	Door Catch	05700-031-84-80
12	1 1	Door Hood Support Pre-wash Door Hood Support	05700-031-84-13 05700-031-84-14
13	1	Door Stiffener (Not Shown)	05700-031-83-43

Complete Drive Assembly
05700-003-60-69

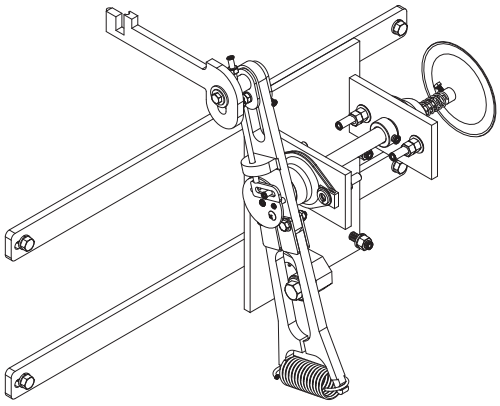




Part numbers 33 and 34 are assembled in this hole for all low-temperature (chemical-sanitizing) machines.

Part numbers 33 and 34 are assembled in this hole for all high-temperature (hot-water-sanitizing) machines.
(This is the hole in the farthest clockwise position.)

ASSEMBLED VIEW

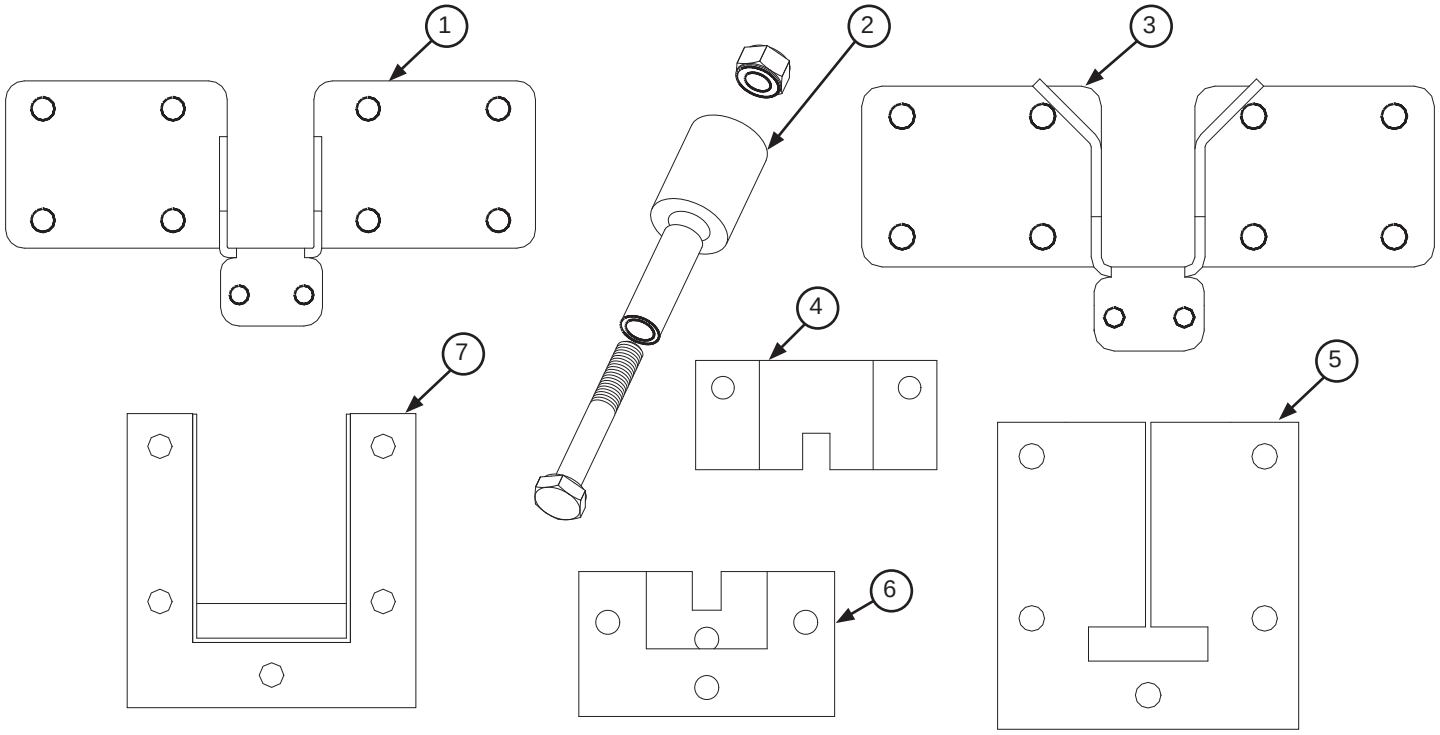


ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Mounting Bracket Drive Motor	05700-031-73-56
2	1	Adjuster, Handle	05700-021-72-28
3	2	Coupling & Expansion Legs	05700-021-67-50
4	1	Adjuster, Crank Assembly	05700-021-69-95
5	1	Adjuster, Scotch Yoke	05700-021-69-76
6	12	Lockwasher, 3/8"	05311-276-01-00
7	8	Flat Washer, 3/8”	05311-176-01-00
8	2	Block, Pillow	03120-021-71-87
9	1	Bearing, Roller	03120-011-71-81

DRIVE ASSEMBLY

ITEM	QTY	DESCRIPTION	PART NUMBER
10	2	Collar, Shaft Conveyor Drive	05700-011-89-18
11	1	Spring, Adjuster	05315-011-71-90
12	12	Nut, Hex, 3/8-16	05310-276-01-00
13	2	Set Screw, 5/16-18 x 1/4"	05305-002-98-39
14	4	Bolt, 3/8-16 x 3/4”	05306-011-71-60
15	2	Bolt, 1/4-20 x 1/4"	05305-274-22-00
16	4	Washer, 1/4-20	05311-174-01-00
17	3	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
18	1	Spring, Drive	05315-011-83-51
19	1	Hub, Drive	05700-011-67-97
20	1	Set Screw, 1/4-20 x 1/2"	05305-011-71-51
21	3	Flat Washer, 1/2”	05311-011-71-93
22	1	Bolt, 1/2-13 x 1 3/4"	05305-011-71-94
23	1	Plate, Drive Rod	05700-021-67-42
24	1	Bolt, 10-32 x 3/8" Hex Head	05306-011-62-45
25	2	Nut, Hex, 1/4-20	05310-274-01-00
26	1	Socket, Drive	05700-021-67-39
27	1	Plate, Spacer	05700-011-67-58
28	1	Lockwasher, Spring, 1/4"	05311-274-01-00
29	2	Bolt, Hex Head 1/4-20 x 3/4"	05305-004-42-64
30	1	Casting, Pawl Bar Drive Linkage	09515-021-87-73
31	1	Washer, 5/16-18	05311-175-01-00
32	4	Bolt, 3/8-16 x 1 3/4”	05306-011-36-94
33	1	Screw, 10-24 x 3/8"	05305-173-03-00
34	1	Locknut, 10-24 Hex with Nylon Insert	05310-373-01-00
35	1	Drive Plate and Rod	05700-021-67-44
36	1	Decal, Drive Adjuster	09905-003-61-01
37	1	Front Drive Motor Cover	05700-031-69-39
38	1	Rear Drive Motor Cover	05700-002-41-21
39	1	Gear Drive (Not Shown)	06105-011-71-88
Drive Motors	1	Drive Motor (50 Hz Machines)	06401-003-08-41
	1	Drive Motor (208-230 V, 60 Hz, Single-Phase Machines)	06401-003-08-42
	1	Drive Motor (208-230 V, 60 Hz, Three-Phase Machines)	06401-003-08-40
	1	Drive Motor (460 V, 60 Hz, Three-Phase Machines)	06401-003-08-43
	1	Drive Motor (600 V, 60 Hz, Three-Phase Machines)	06401-002-48-32

PAWL BAR ROLLER BRACKET



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Pawl Bar Bracket (No Tabs)	05700-031-92-36
2	1	Pawl Bar Roller Replacement Kit[1]	06401-003-11-80
3	1	Pawl Bar Bracket (Tabs)	05700-031-84-68
4	1 1	Top Guide Block Guide Block Replacement Kit[2]	05700-011-69-49 06401-003-10-15
5	1	Pawl Bar Gutter Gasket	05330-011-68-55
6	1	Bottom Guide Block	05700-011-69-50
7	1	Pawl Bar Gutter Replacement Kit[3]	05700-021-74-94

[1]The Pawl Bar Replacement Kit contains the roller, roller shaft, and hardware.

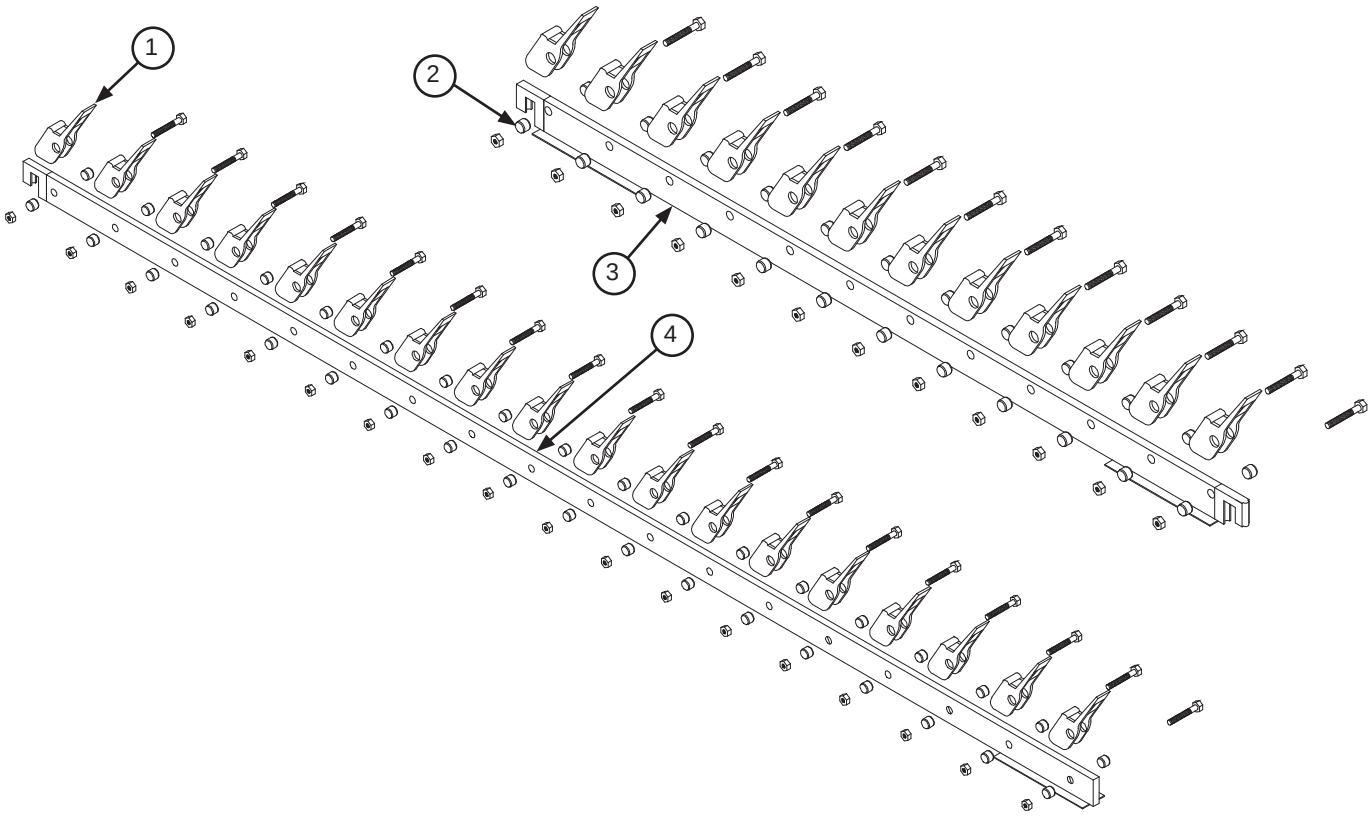
[2]The Guide Block Replacement Kit contains the top guide block, bottom guide block, and gasket.

[3]The Pawl Bar Gutter Replacement Kit contains the weldment, gasket, and hardware.

NOTICE *When replacing one guide block, the other guide block and the gasket should be replaced as well.*

Complete C-44 Pawl Bar Assembly with Hardware
06401-131-81-00

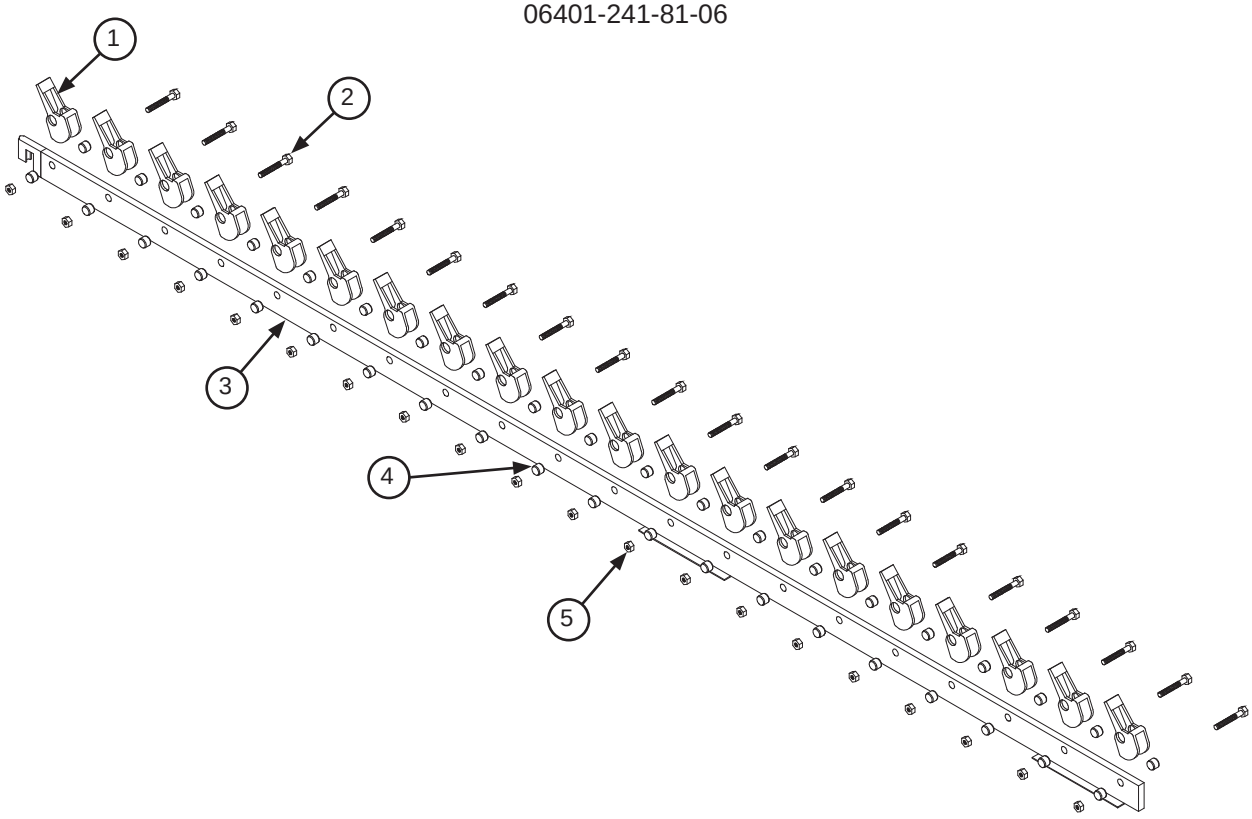
Complete C-66 Pawl Bar Assembly with Hardware
06401-141-74-64



ITEM	QTY	DESCRIPTION	PART NUMBER
1	12 on C-44 18 on C-66	Pawl Bar Dog Casting	05700-021-69-00
2	24 on C-44 36 on C-66	Pawl Bar Spacer	05700-011-71-45
3	1	Pawl Bar (C-44)	05700-031-72-77
4	1	Pawl Bar (C-66)	05700-031-72-78

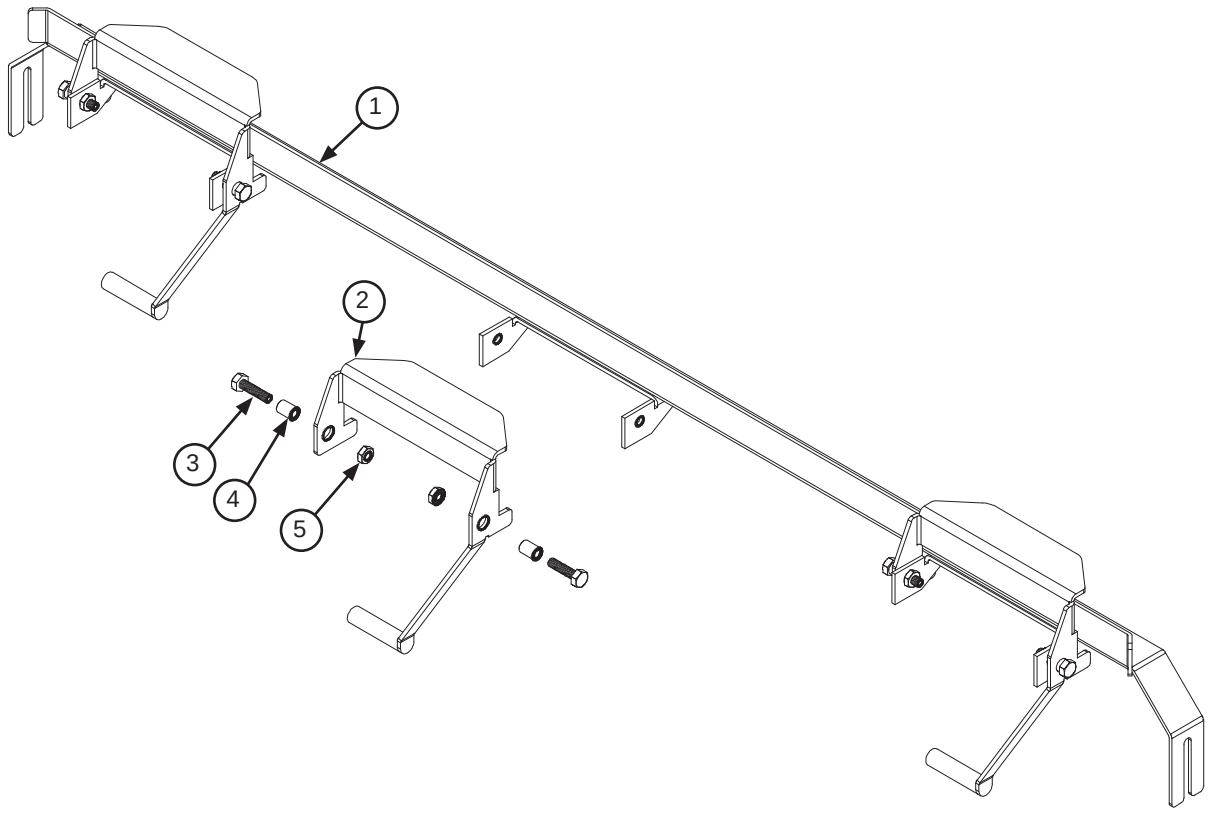
Complete C-80 Pawl Bar Assembly with Hardware, L-R
06401-131-81-06

Complete C-80 Pawl Bar Assembly with Hardware, R-L
06401-241-81-06



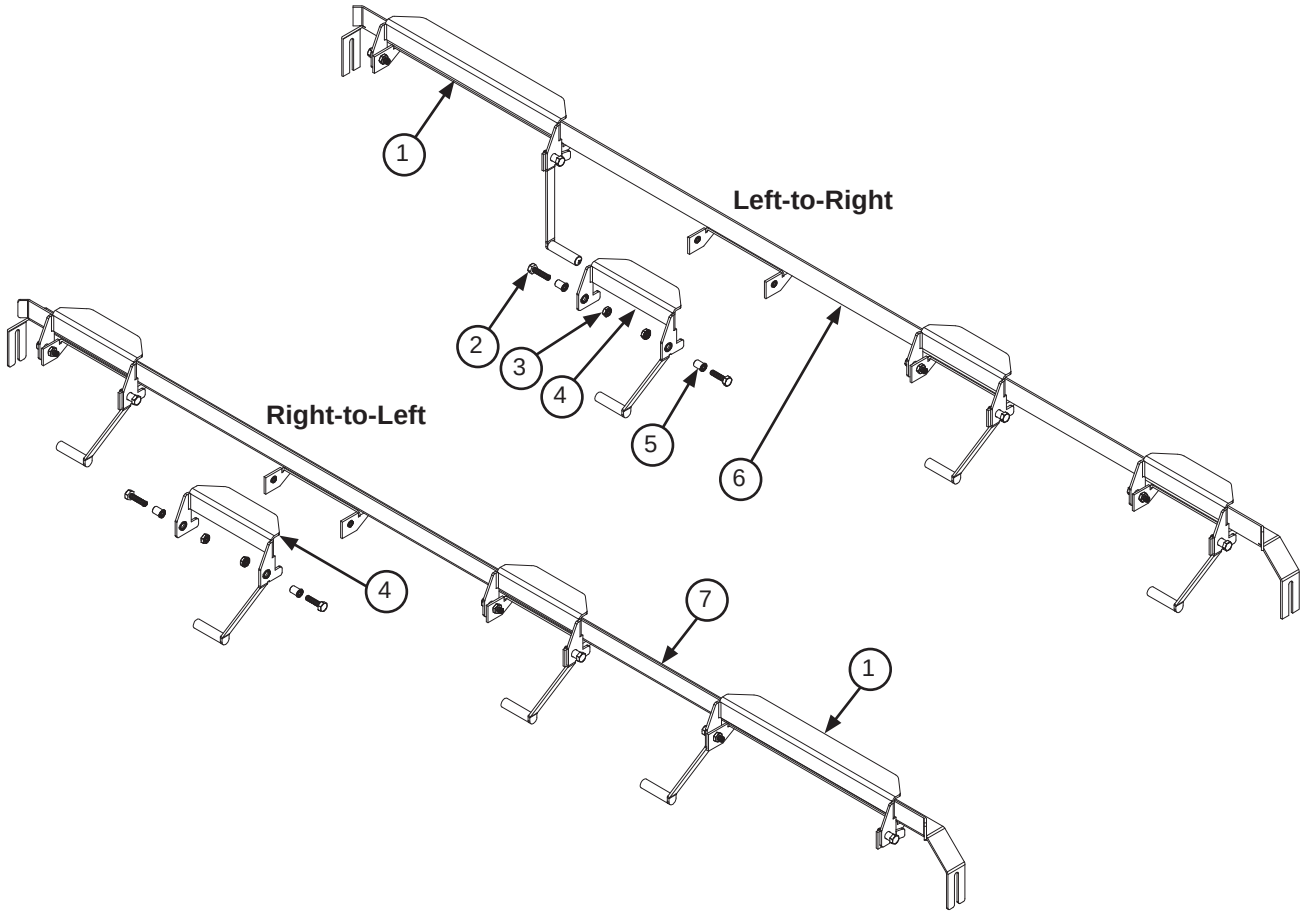
ITEM	QTY	DESCRIPTION	PART NUMBER
1	20	Pawl Bar Dog Casting[1]	05700-021-69-00
2	20	Bolt, 3/8-16 x 1-3/4” Long	05700-011-71-45
3	1 1	Pawl Bar (L-R) Pawl Bar (R-L)	05700-031-74-19 05700-041-82-01
4	40	Pawl Bar Spacer	05700-011-71-45
5	20	Locknut, 3/8-16 with Nylon Insert	05700-011-72-55

[1]When replacing pawl bar dog castings, ensure to re-install in the appropriate direction. If not, the rack will not be pulled through the machine during operation.



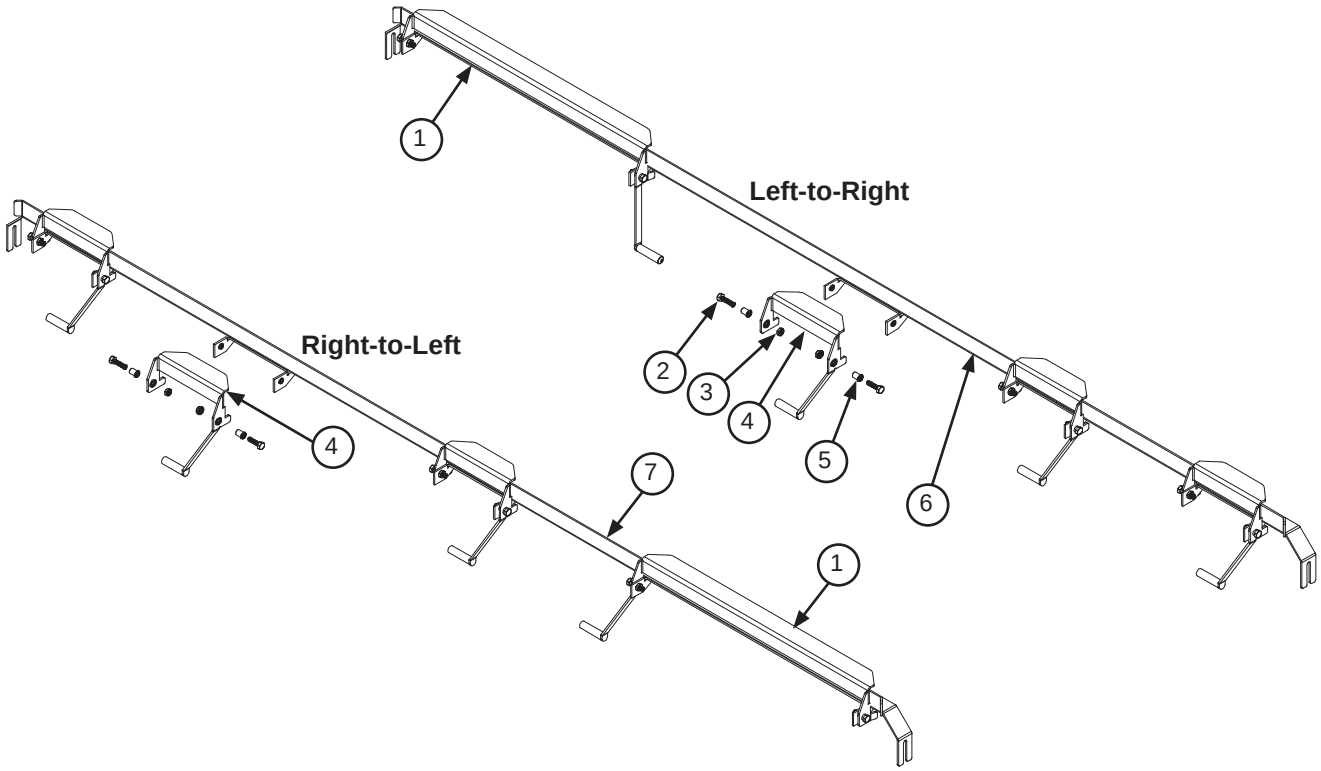
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1 1	Rack Rail Opposite Rack Rail	05700-031-67-59 05700-031-69-48
2	3	Actuator Switch Actuator Switch Replacement Kit[1]	05700-021-72-39 06401-003-10-14
3	6	Bolt, Hex Head 1/4-20 x 3/4"	05305-004-42-64
4	6	Pawl Bar Spacer	05700-011-71-44
5	6	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00

[1]The Actuator Switch Replacement Kit contains the switch, two spacers, and hardware.



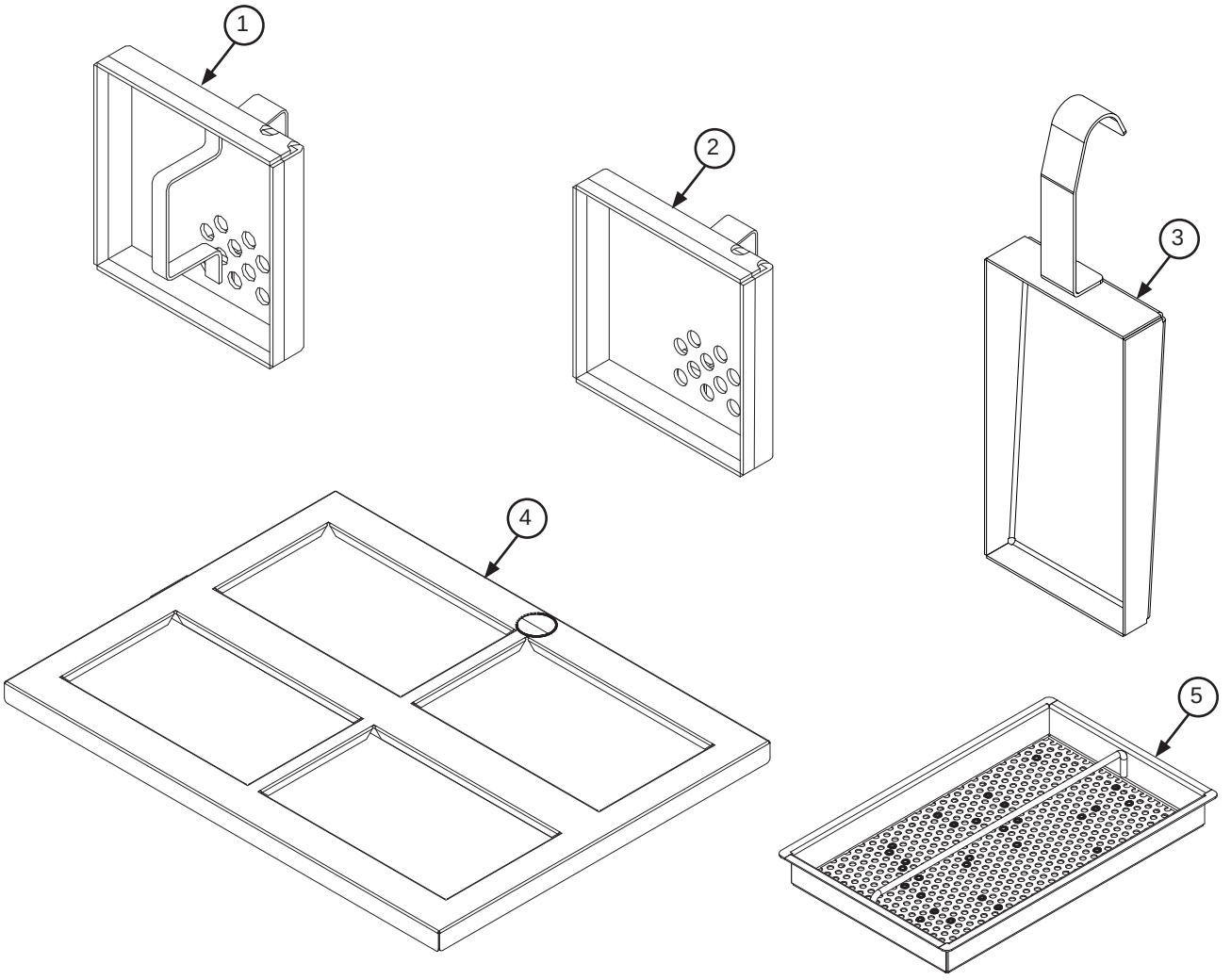
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1 1	Large Actuator Switch, L-R Large Actuator Switch Replacement Kit, L-R[1] Large Actuator Switch, R-L Large Actuator Switch Replacement Kit, R-L[1]	05700-021-76-97 06401-003-10-99 05700-002-91-09 06401-003-10-86
2	8 per rail	Bolt, Hex Head 1/4-20 x 3/4"	05305-004-42-64
3	8 per rail	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
4	3 per rail	Actuator Switch Actuator Switch Replacement Kit[1]	05700-021-72-39 06401-003-10-14
5	8 per rail	Pawl Bar Spacer	05700-011-71-44
6	1	Rack Rail, L-R Opposite Rack Rail, L-R	05700-031-76-27 05700-041-71-37
7	1	Rack Rail, R-L Opposite Rack Rail, R-L	05700-031-76-28 05700-041-69-54

[1]Actuator Switch Replacement Kits contain the switch, two spacers, and hardware.



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1 1	Large Actuator Switch, L-R Large Actuator Switch Replacement Kit, L-R[1] Large Actuator Switch, R-L Large Actuator Switch Replacement Kit, R-L[1]	05700-021-77-01 06401-003-10-83 05700-002-91-10 06401-003-10-85
2	8 per rail	Bolt, Hex Head 1/4-20 x 3/4"	05305-004-42-64
3	8 per rail	Locknut, 1/4-20 Hex with Nylon Insert	05310-374-01-00
4	3 per rail	Actuator Switch Actuator Switch Replacement Kit[1]	05700-021-72-39 06401-003-10-14
5	8 per rail	Pawl Bar Spacer	05700-011-71-44
6	1	Rack Rail, L-R Opposite Rack Rail, L-R	05700-031-81-53 05700-041-74-13
7	1	Rack Rail, R-L Opposite Rack Rail, R-L	05700-031-81-54 05700-041-74-14

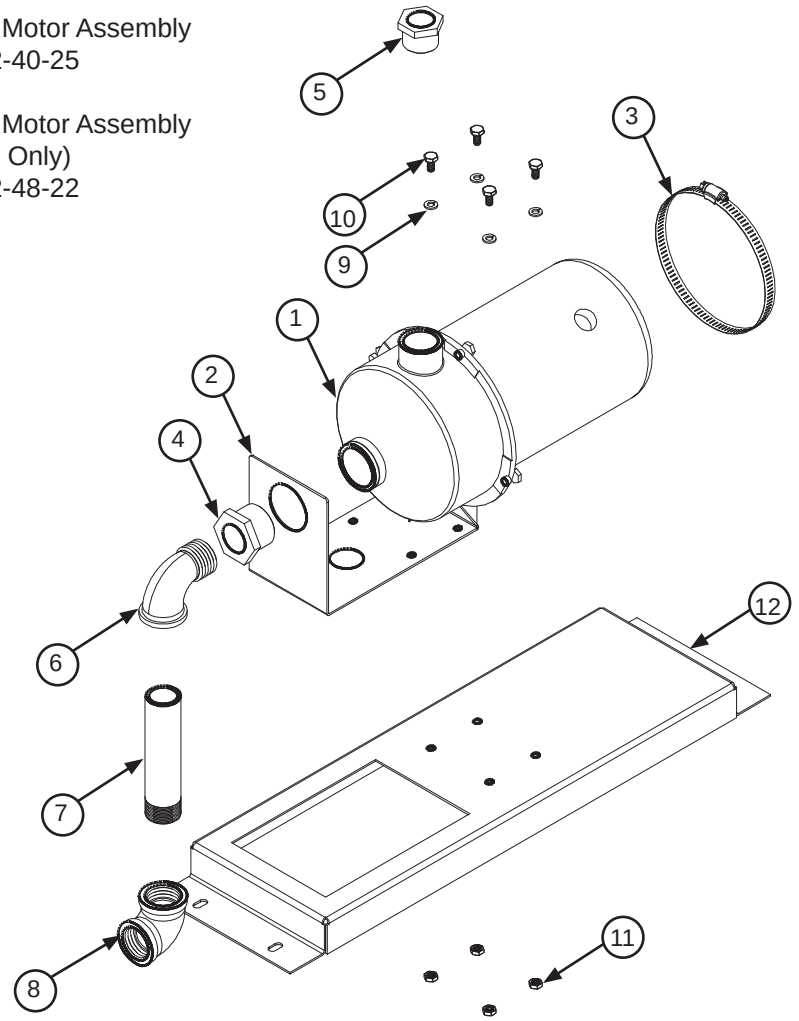
[1]Actuator Switch Replacement Kits contain the switch, two spacers, and hardware.



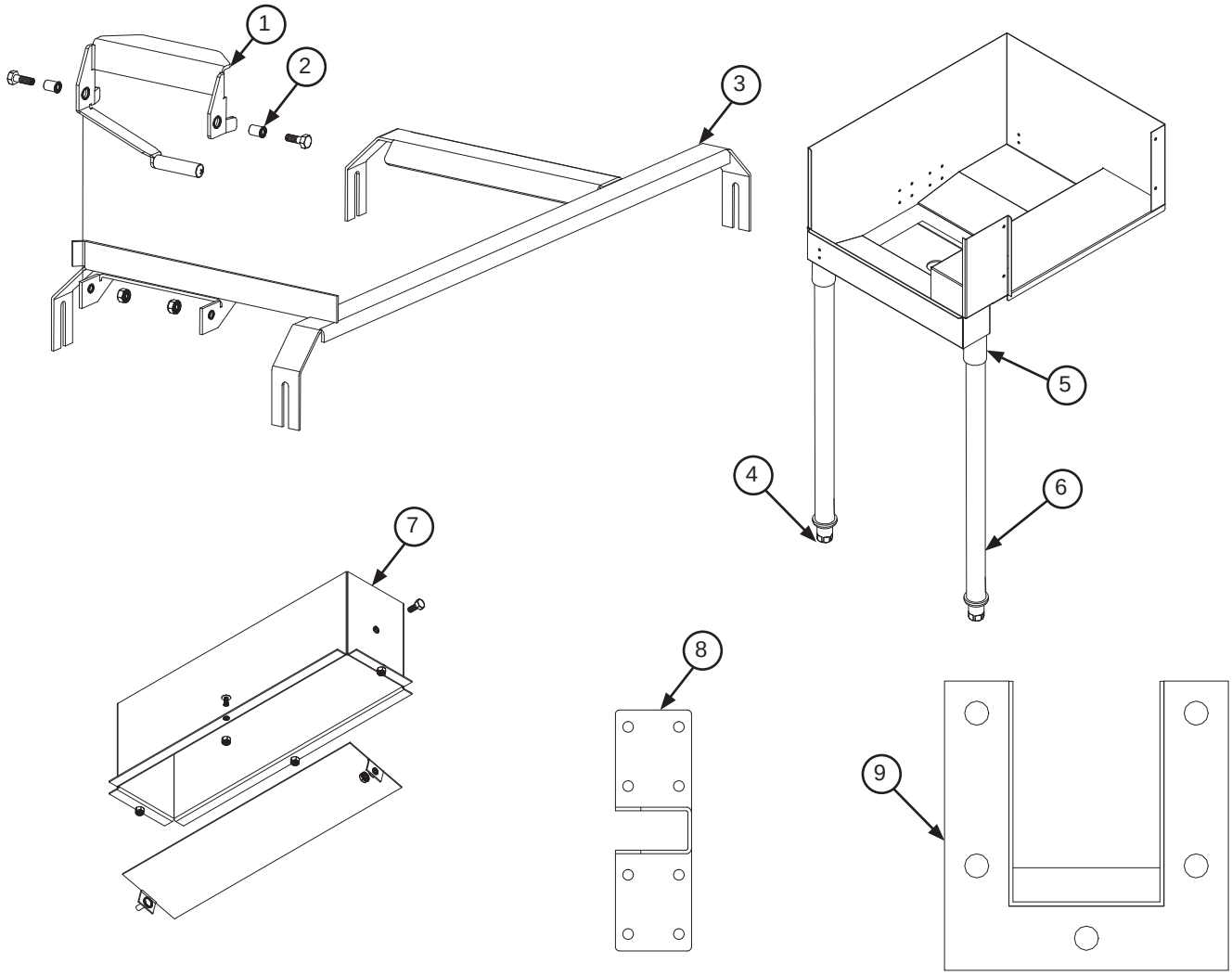
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Drain Guard Strainer	05700-002-09-15
2	1	Screen Strainer with Handle	05700-002-09-04
3	1	Wash Intake Strainer	05700-001-22-23
4	1	Wash Strainer Separator	05700-002-90-84
5	1	Tub Strainer	05700-002-03-21

Complete Rinse Fill Motor Assembly
05700-002-40-25

Complete Rinse Fill Motor Assembly
(C-66 L-R Only)
05700-002-48-22



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Motor	06105-002-72-71
2	1	Bracket, Pump Mounting	05700-003-17-56
3	1	Clamp, Hose 5 5/8” to 6”	04730-011-34-90
4	1	Reducer Bushing, 1 1/4” to 1”	04730-002-73-62
5	1	Reducer Bushing 1” to 3/4”	04730-011-65-14
6	1	Elbow, 90-Degree, 1” Street Brass	04730-002-11-99
7	1	Nipple, 1” x 6” Brass	04730-002-12-00
8	1	Elbow, 90-Degree, Brass Female	04730-002-12-55
9	4	Lockwasher, 1/4”	05311-274-01-00
10	4	Bolt, 1/4”-20 x 1/2”	05305-274-02-00
11	4	Nut, Hex 1/4-20	05310-274-01-00
12	1	Rinse Motor Mounting Bracket Rinse Motor Mounting Bracket (C-66 L-R Only)	05700-002-38-90 05700-002-39-33


1
2
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ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Actuator Switch, Side-loader Actuator Switch Replacement Kit[1]	05700-002-91-12 06401-003-10-64
2	1	Pawl Bar Spacer	05700-011-71-44
3	1	Track, Side-loader (L-R), 23” Track, Side-loader (R-L), 23” Track, Side-loader (L-R), 30” Track, Side-loader(R-L), 30”	05700-031-78-98 05700-031-95-20 05700-003-04-57 05700-003-04-58
4	1	Bullet Foot, Side-loader	05340-108-01-03
5	1	Leg Socket Replacement Kit[2]	06401-003-09-79
6	1	Leg Support Replacement Kit[3]	06401-003-09-80
7	1	Vent Cowl Assembly for Hooded Side-loader	05700-003-15-66
8	1	Pawl Bar Roller Bracket	05700-031-77-94
9	1	Pawl Bar Gutter Replacement Kit[4]	06401-003-09-95
10	1	Pawl Dog	05700-021-86-79
11	1	Front Strainer, Side-loader	05700-021-85-10
12	1	Drive Linkage Replacement Kit (L-R)[5]	06401-003-11-59
13	1	Drive Linkage Replacement Kit (R-L)[5]	06401-003-11-60

[1]The Actuator Switch Replacement Kit contains the actuator, spacers, and hardware.

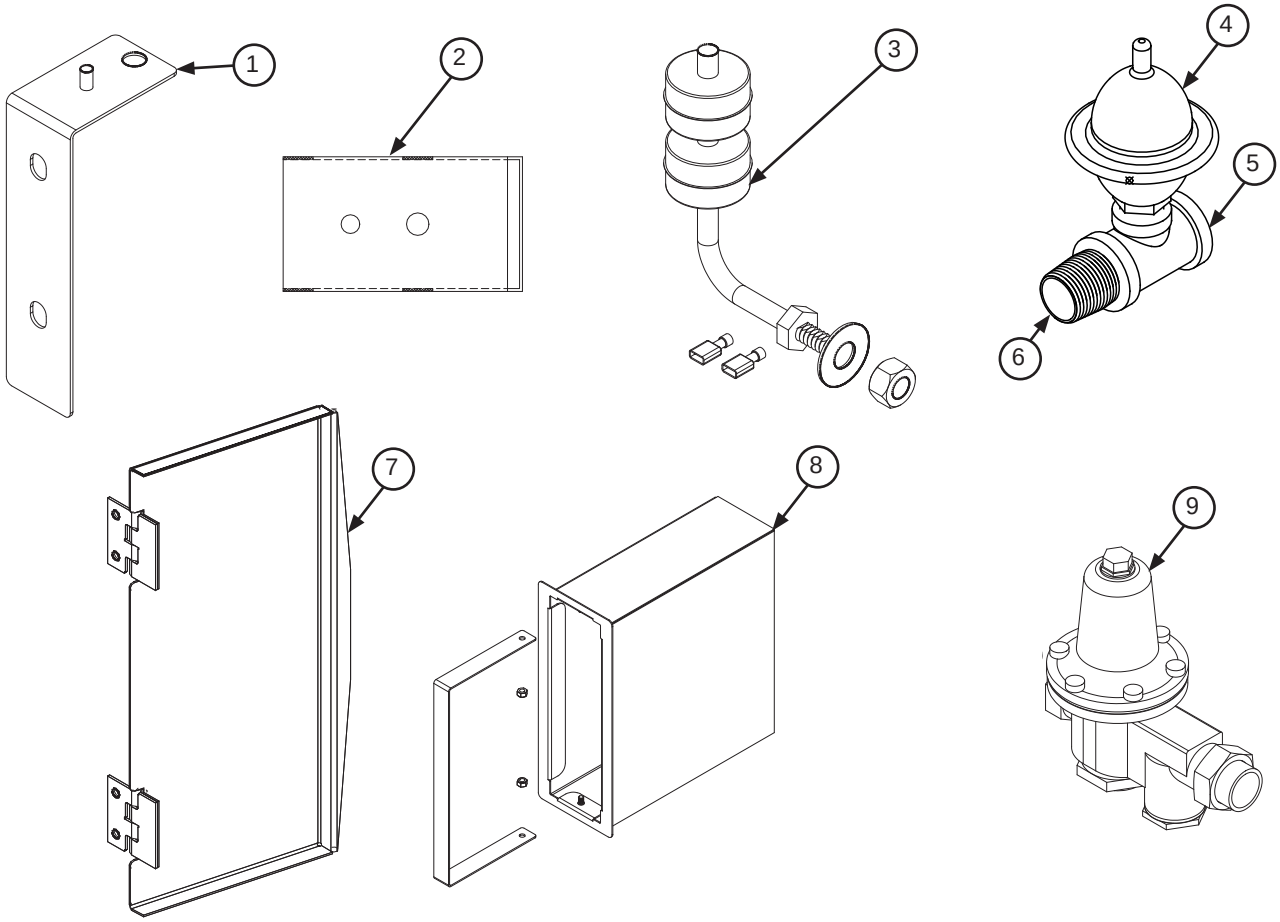
[2]The Leg Socket Replacement Kit contains the leg socket, set screw, and hardware.

[3]The Leg Support Replacement Kit contains the leg and bullet foot.

[4]The Pawl Bar Gutter Replacement Kit contains the pawl bar gutter, gasket, and hardware.

[5]The Drive Linkage Replacement Kits contain the drive linkages and hardware.

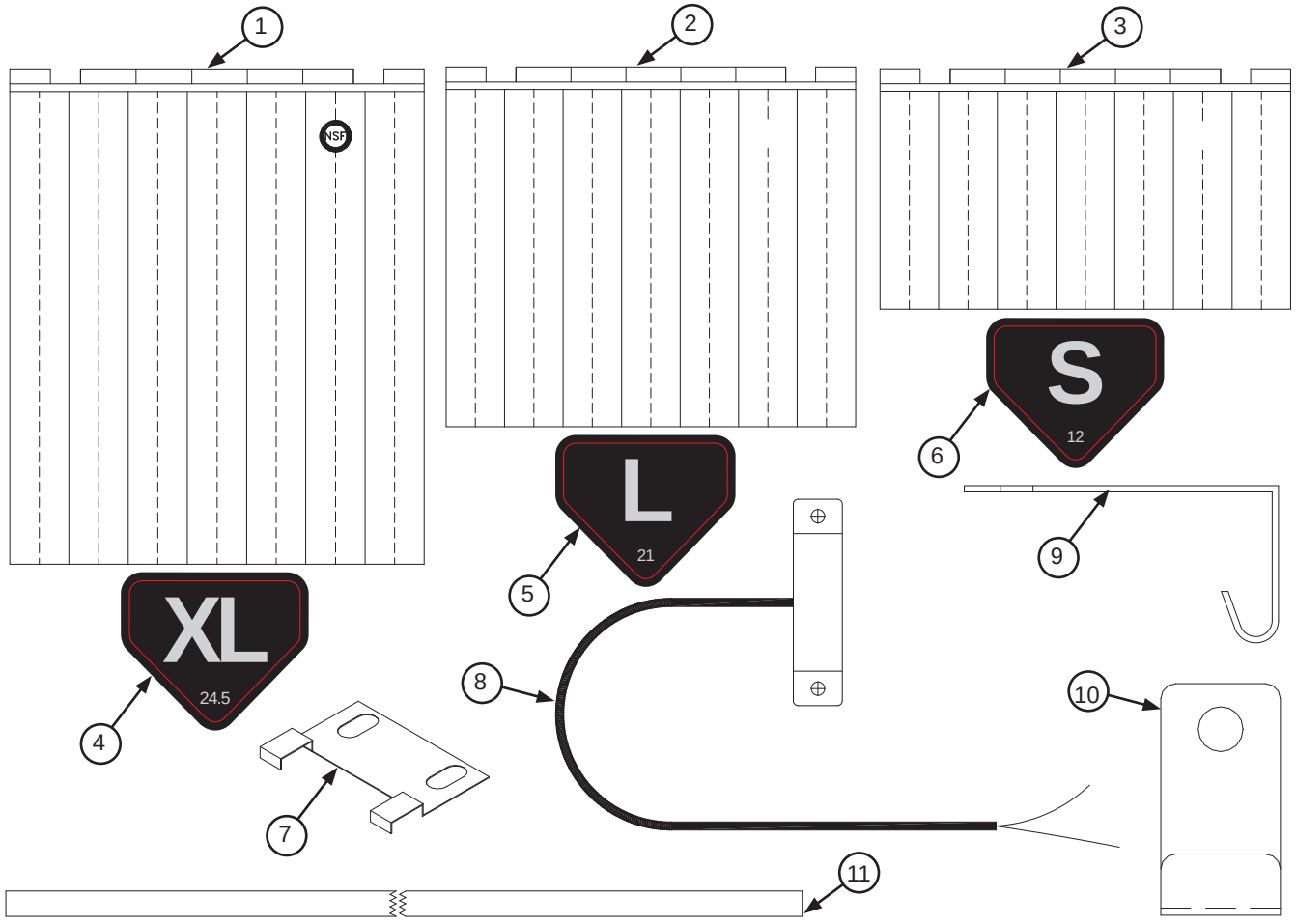
MISCELLANEOUS PARTS



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Float Switch Support Bracket Replacement Kit[1]	06401-003-11-77
2	1	Float Switch Cover	05700-021-75-71
3	1 1	Wash Tank Float Switch Pre-wash Tank Float Switch	06680-121-70-16 06680-120-70-71
4	1	Water Arrestor, 1/2” Water Arrestor Repair Kit	06685-100-05-00 06401-003-06-23
5	1	Tee, 1/2” x 1/2” x 1/2”, Water Arrestor	04730-211-27-00
6	1	Nipple, 1/2” Brass, Water Arrestor	04730-207-15-00
7	1	Scrap Basket Lid	05700-002-56-55
8	1	Scrap Basket Assembly	05700-002-11-21
9	1	Water Pressure Regulator, 1/2”	05700-100-04-07

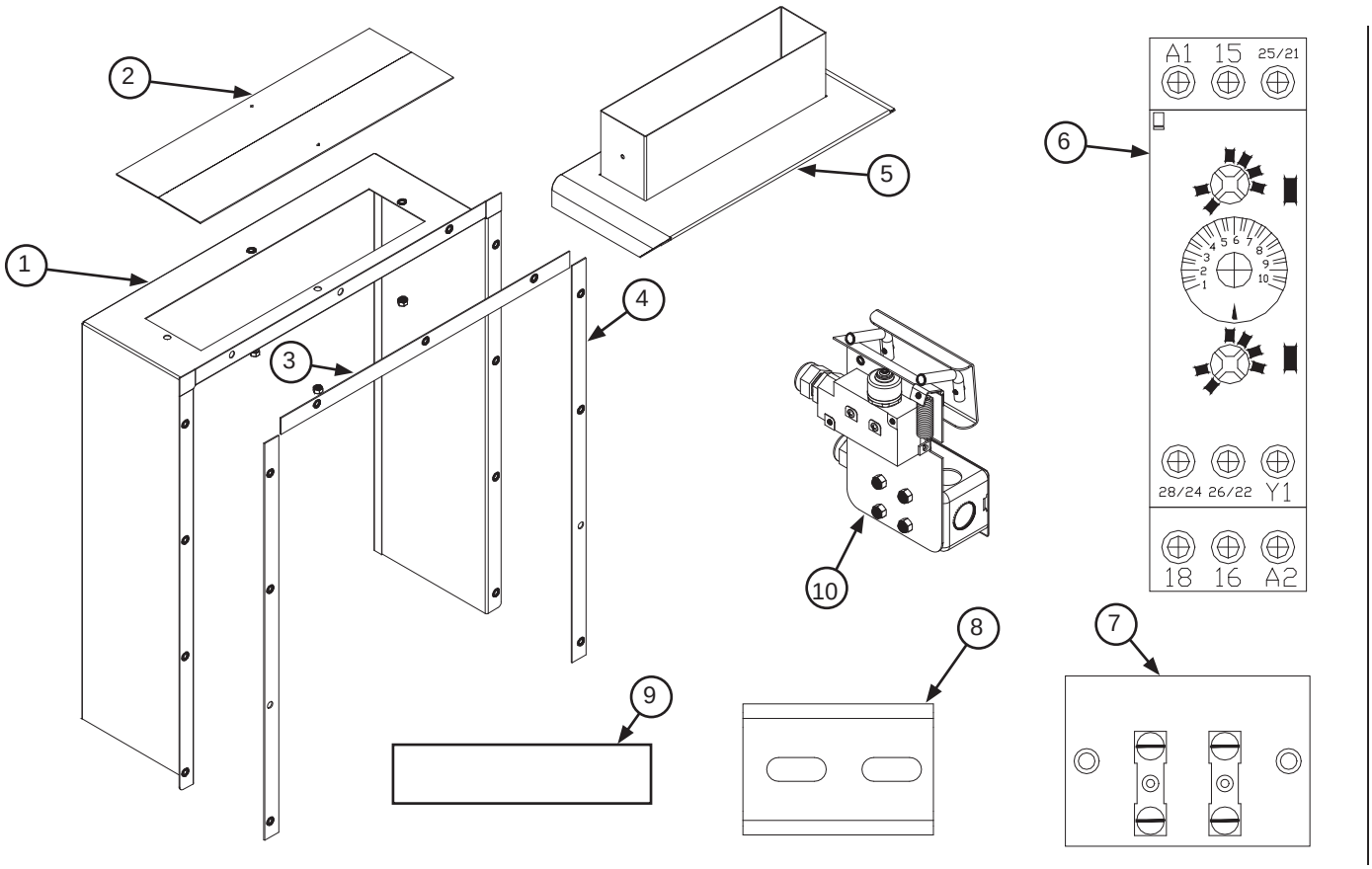
[1]The Float Switch Support Bracket Replacement Kit contains the bracket and hardware.

NOTICE *When replacing a float switch, the flat washer goes inside against the tub while the nut goes on the outside of the tub.*



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Curtain, XL, 24 1/2” x 20 1/2”	08415-002-47-37
2	1	Curtain, L, 21” x 20 1/2”	08415-131-73-45
3	1	Curtain, S, 12” x 20 1/2”	08415-131-73-44
4	1	Decal, XL Curtain	09905-004-38-49
5	1	Decal, L Curtain	09905-004-38-48
6	1	Decal, S Curtain	09905-004-38-46
7	1	Limit Switch Bracket	05700-021-71-18
8	1	Conveyor Switch Replacement Kit[1]	06401-003-11-79
9	1	Middle Curtain Hook	05700-011-72-65
10	1	Curtain Hook	05700-011-83-54
11	1	Curtain Rod	05700-021-73-43
12	1	Curtain, XL, Side-loader (Not Shown)	08415-003-84-88
13	1	Curtain Rod, Side-loader (Not Shown)	05700-003-84-57

[1]The Conveyor Switch Replacement Kit contains the switch, a terminal, and a wire nut. Cut the cord on the Conveyor Switch to length in the field and install the terminal there.



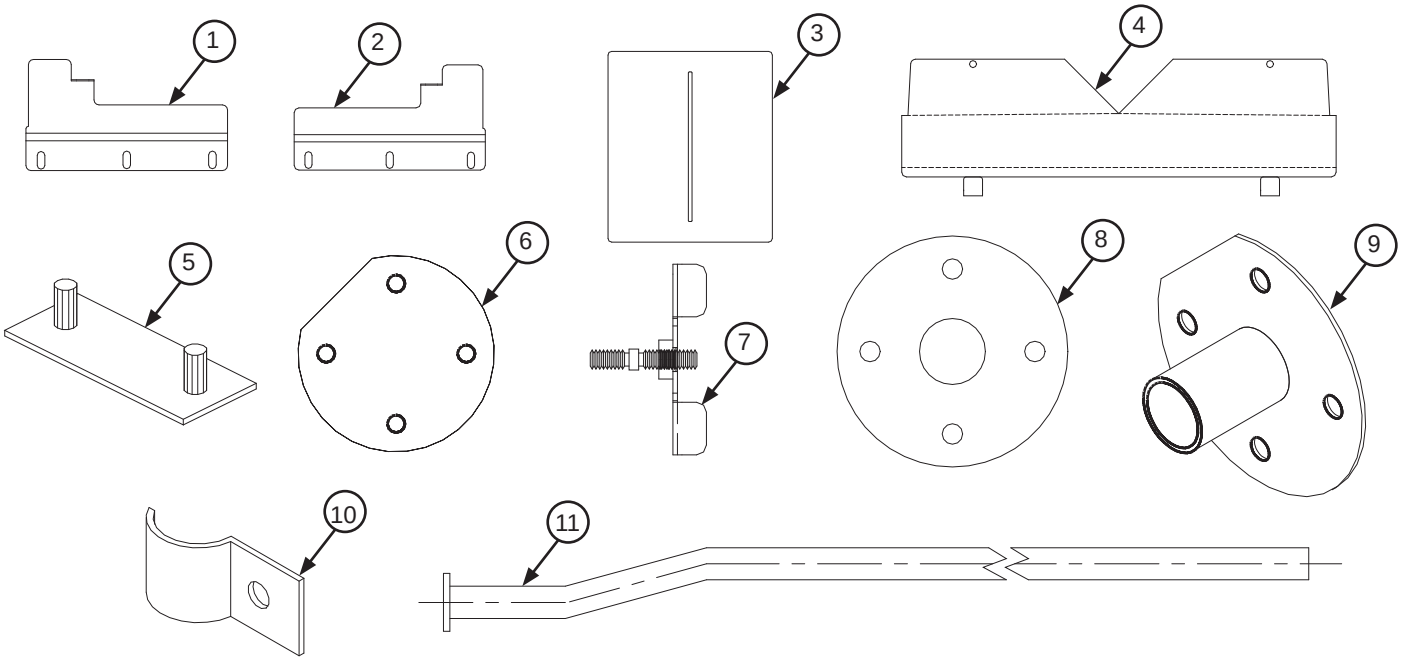
ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Vent Cowl (High Hood) Vent Cowl (Low Hood)	05700-041-86-94 05700-002-13-12
2	1	Vent Cowl Cover Vent Cowl Cover Replacement Kit[1]	05700-011-74-67 06401-003-10-16
3	1	Gasket, Top Vent Cowl	05330-031-83-47
4	1	Gasket, Side Vent Cowl	05330-031-83-48
5	1	Vent Scoop Option	05700-002-04-08
6	1	Delay Timer, Exhaust Fan	05945-011-65-44
7	1	Terminal Board, Exhaust Fan	05940-011-84-41
8	1	Din Rail, Exhaust Fan	05700-002-36-09
9	1	Decal, Exhaust Fan Load	09905-003-32-20
10	1	Striker Plate Limit Switch Striker Plate Limit Switch Complete Assembly	05930-002-62-81 05700-002-62-94

[1]The Vent Cowl Cover Replacement Kit contains the vent cowl cover and hardware.

Exhaust Fan Kit, Electric and Steam Machines
05700-031-90-53

Exhaust Fan Kit, Gas Machines
05700-003-14-59

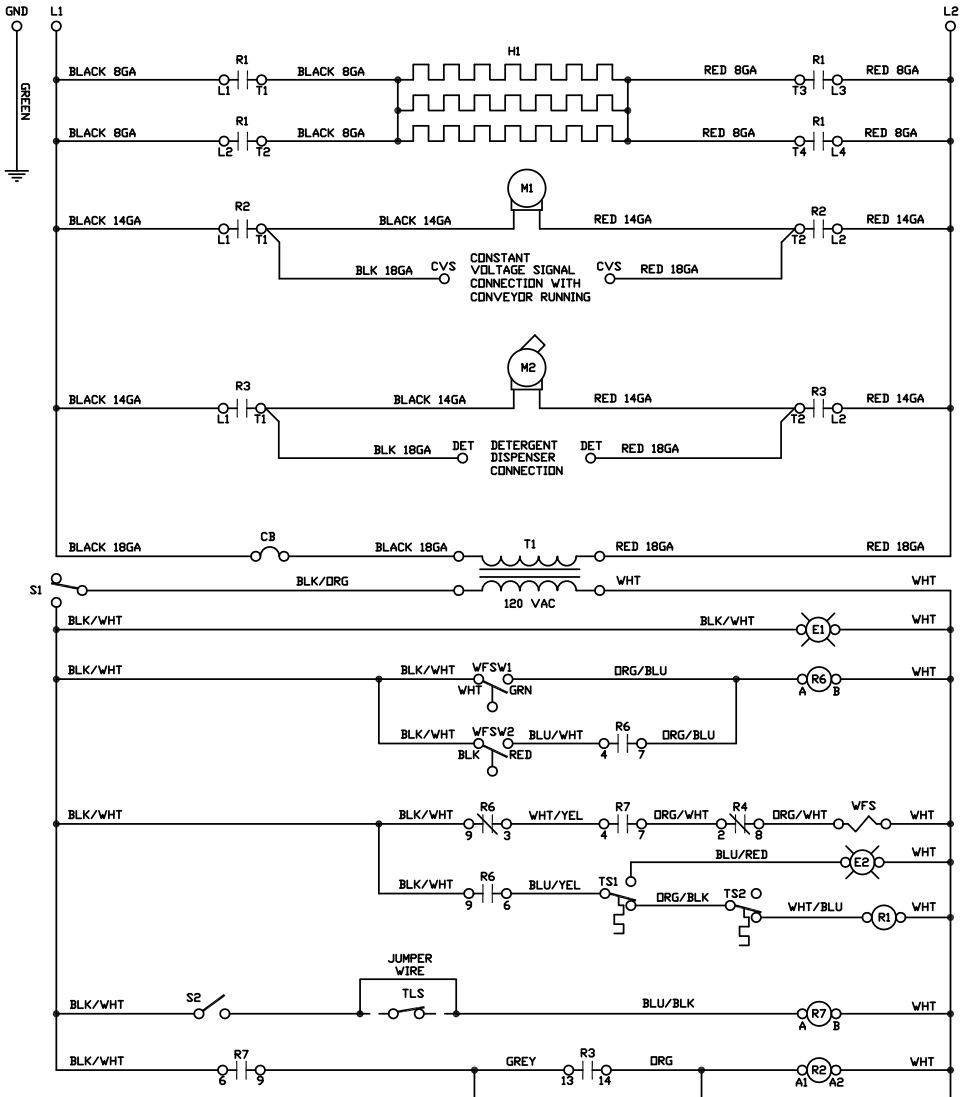
MISCELLANEOUS PARTS



ITEM	QTY	DESCRIPTION	PART NUMBER
1	1	Plate, Left Water Directional	05700-021-79-27
2	1	Plate, Right Water Directional	05700-021-79-23
3	1	Run-off Sheet	05700-021-71-39
4	1	Splash Shield	05700-031-85-16
5	1	Hole Direction Plate	05700-002-32-50
6	1	Rinse Drain Plate Replacement Kit[1]	06401-003-10-07
7	1	Shoulder Bolt Wingnut	05700-002-46-02
8	1	Rinse Drain Plate Gasket	05330-011-72-27
9	1	Rinse Drain Replacement Kit[2]	06401-003-10-05
10	1	Pipe Clamp	05700-000-35-05
11	1	Pre-wash Fill Tube (C-66/76/80/90)	05700-021-74-76
12	1	Vellumoid Gasket (Not Shown)	05330-111-42-81

[1]Drain Kits contain the parts, gaskets, and hardware.

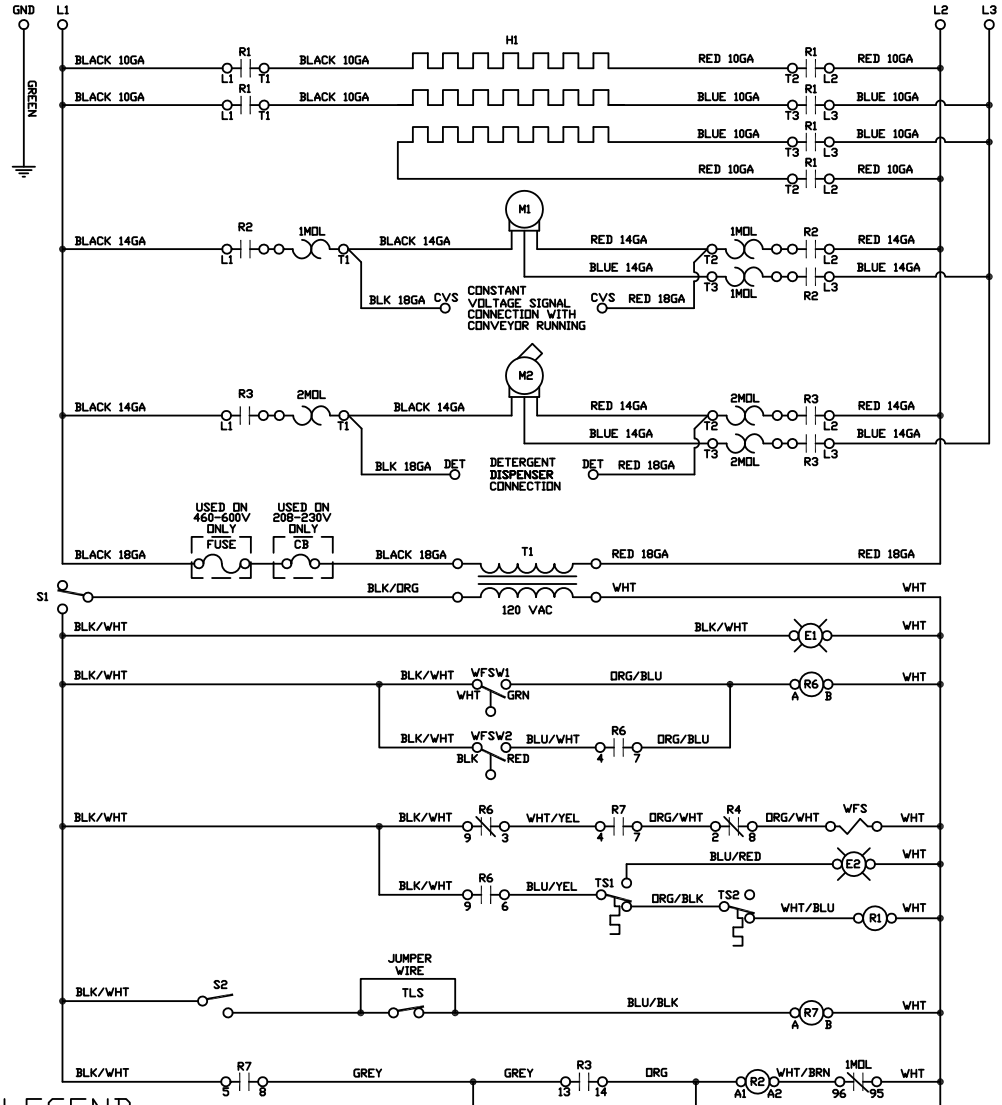
C-44/54CE 208-230 V/50-60 HZ/1-PHASE



LEGEND

L1 L2	POWER DISTRIBUTION BLOCK
GND	GROUND
R1	HEAT CONTACTOR
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
H1	WASH HEATER
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN./DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
E2	HEATER HIGH LIMIT LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
TS1	HEATER HIGH LIMIT THERMOSTAT
TS2	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

09905-003-65-05

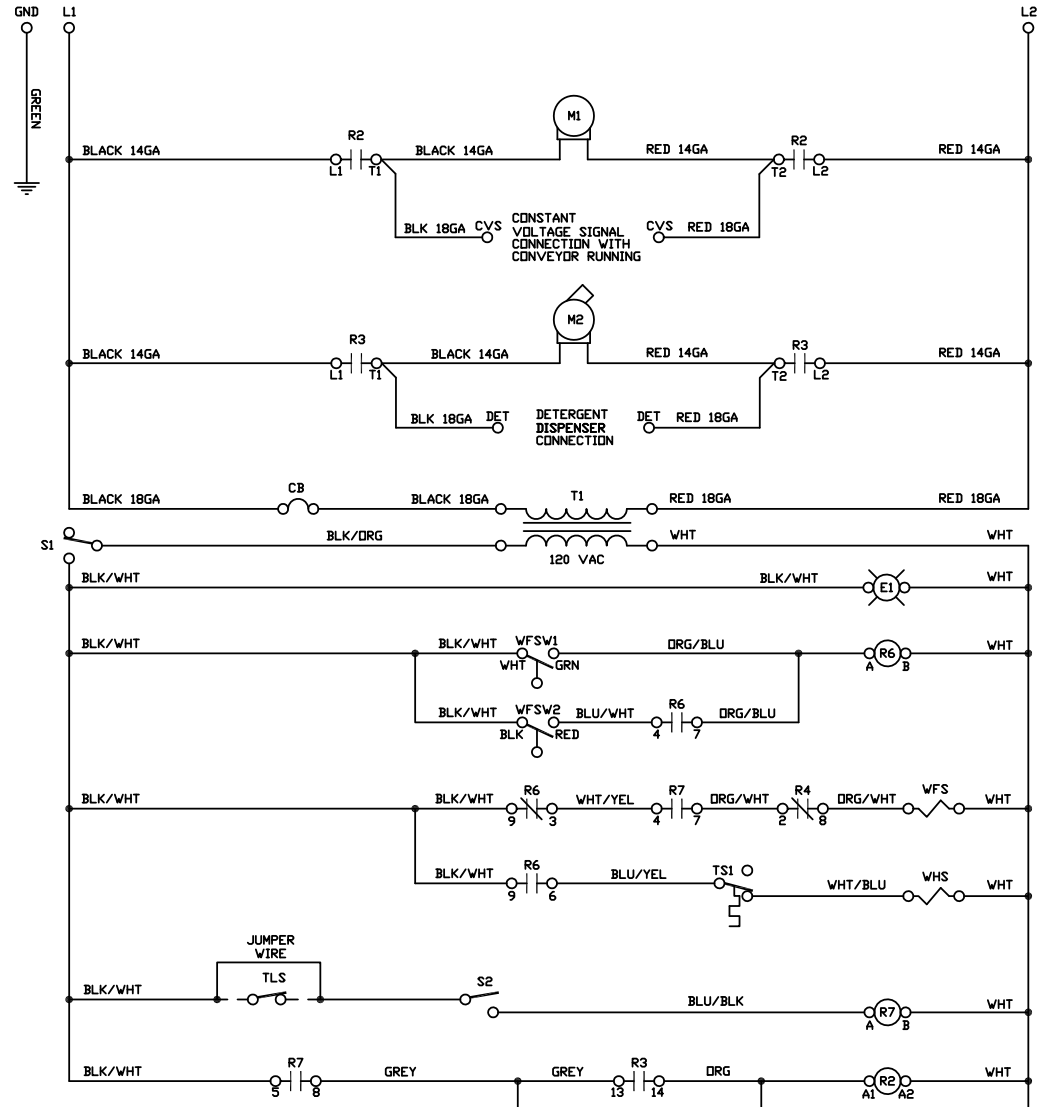


LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R1	HEAT CONTACTOR
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
H1	WASH HEATER
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
1MOL	DRIVE MOTOR OVERLOAD
2MOL	WASH PUMP MOTOR OVERLOAD
CB	CONTROL CIRCUIT BREAKER
FUSE	CONTROL CIRCUIT TRANSFORMER FUSE
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN/DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
E2	HEATER HIGH LIMIT LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
TS1	HEATER HIGH LIMIT THERMOSTAT
TS2	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

09905-003-60-99 C

C-44/54CS 208-230 V/50-60 HZ/1-PHASE

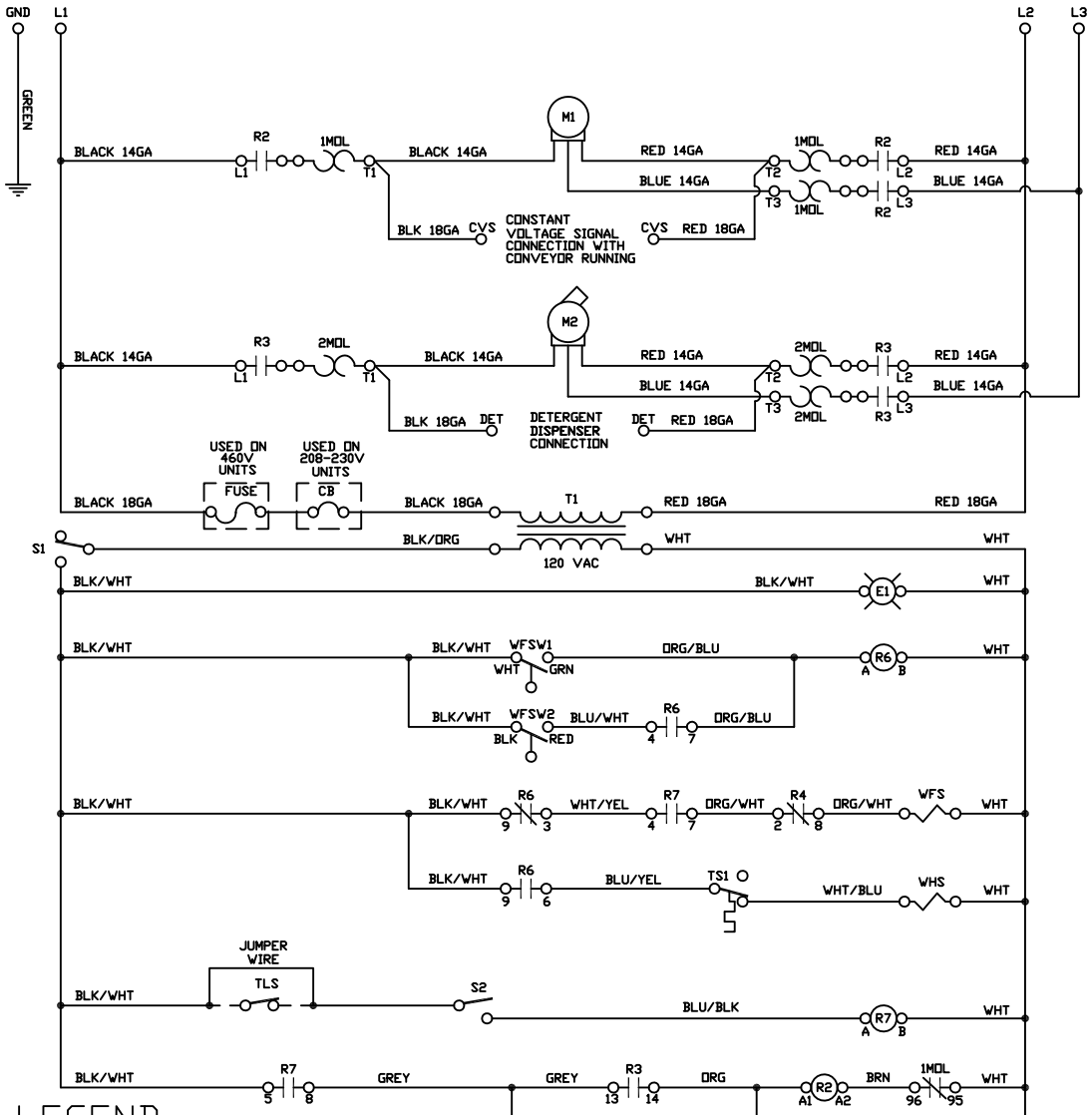


LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN/DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
TS1	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
WHS	WASH HEAT SOLENOID
RS	FINAL RINSE SOLENOID

09905-003-64-34

07610-004-40-03-B

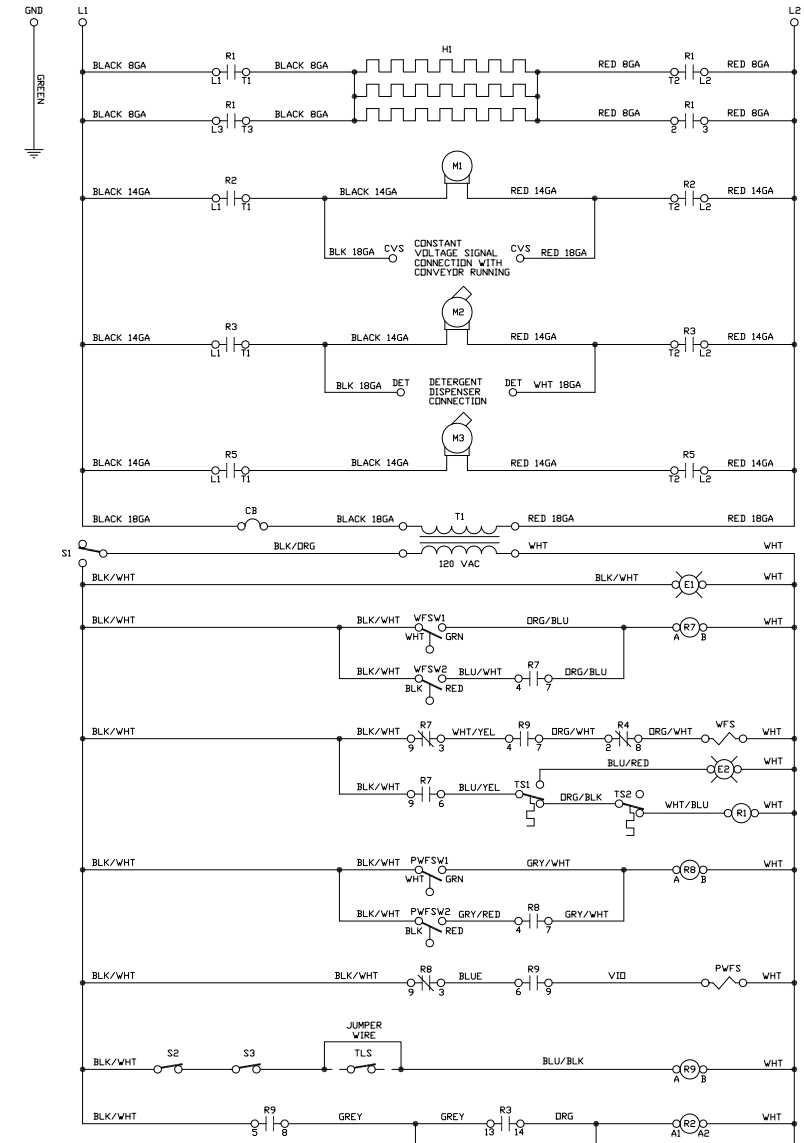


LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R6	WASH TANK FILL RELAY
R7	DOOR SAFETY SWITCH RELAY
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
1MOL	DRIVE MOTOR OVERLOAD
2MOL	WASH PUMP MOTOR OVERLOAD
CB	CONTROL CIRCUIT BREAKER
FUSE	CONTROL CIRCUIT FUSE
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH
S3	WASH PUMP SWITCH 1
S4	WASH PUMP SWITCH 2
S5	AUTO - MAN/DELIME SWITCH
S6	FINAL RINSE SWITCH
E1	POWER LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
TS1	WASH REGULATING THERMOSTAT
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
WHS	WASH HEAT SOLENOID
RS	FINAL RINSE SOLENOID

09905-003-61-78

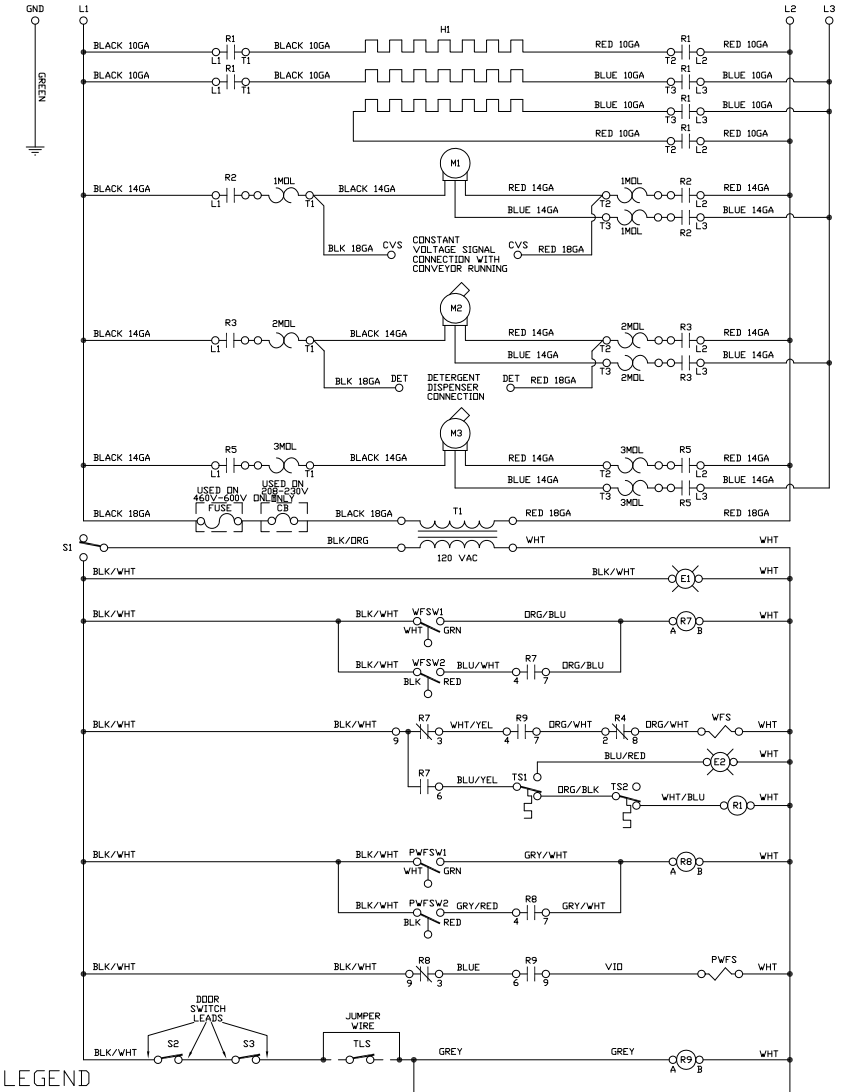
C-66/76/80/90CE 208-230 V/50-60 HZ/1-PHASE



LEGEND

L1 L2	POWER DISTRIBUTION BLOCK
GND	GROUND
R1	HEAT CONTACTOR
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R5	PRE-WASH PUMP MOTOR CONTACTOR
R7	WASH TANK FILL RELAY
R8	PRE-WASH TANK FILL RELAY
R9	DOOR SAFETY SWITCH RELAY
H1	WASH HEATER
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
M3	PRE-WASH PUMP MOTOR
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH 1
S3	DOOR SAFETY SWITCH 2
S4	WASH PUMP SWITCH 1
S5	WASH PUMP SWITCH 2
S6	AUTO - MAN/DELIME SWITCH
S7	FINAL RINSE SWITCH
S8	PRE-WASH PUMP SWITCH
E1	POWER LIGHT
E2	HEATER HIGH LIMIT LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
PWFSW1	PRE-WASH FLOAT SWITCH 1
PWFSW2	PRE-WASH FLOAT SWITCH 2
TS1	HEATER HIGH LIMIT THERMOSTAT
TS2	WASH REGULATING THERMOSTAT
CWTS	COLD WATER THERMOSTAT (OPTIONAL)
CWV	COLD WATER VALVE (OPTIONAL)
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
PWFS	PRE-WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

09905-003-65-06

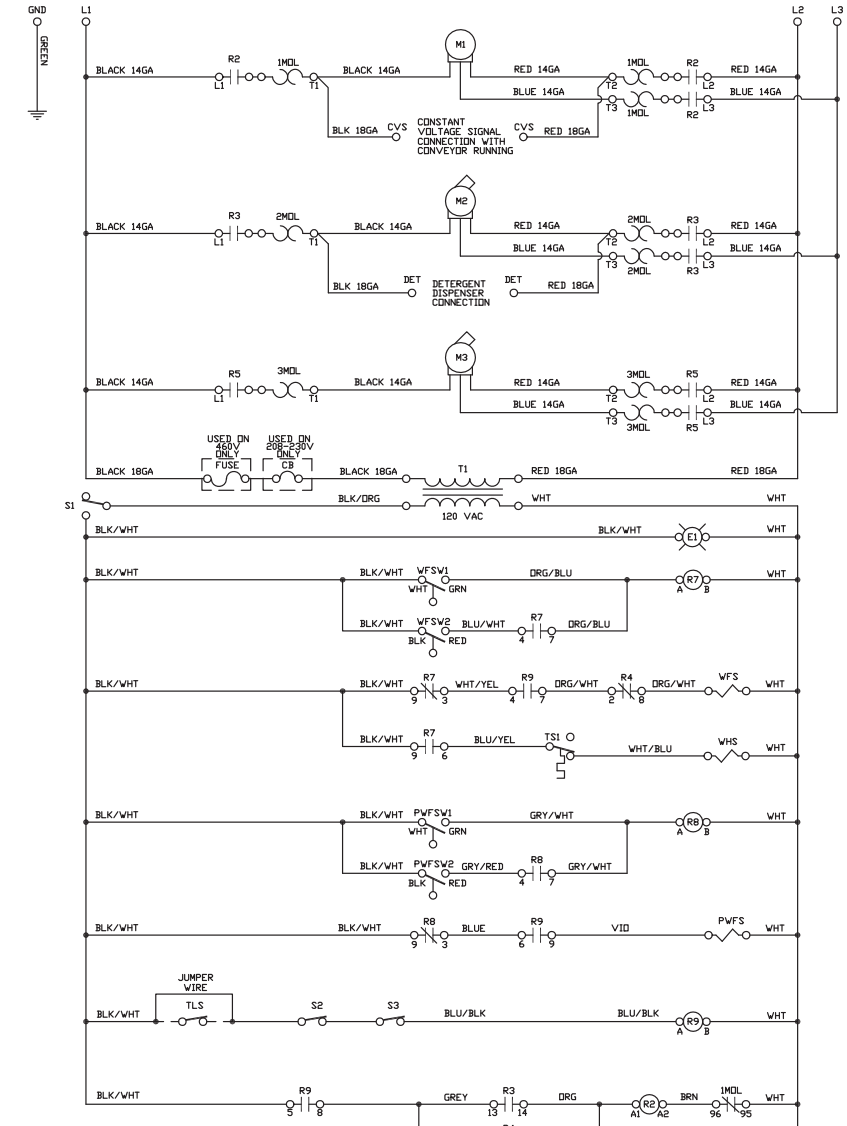


LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R1	HEAT CONTACTOR
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R5	PRE-WASH PUMP MOTOR CONTACTOR
R7	WASH TANK FILL RELAY
R8	PRE-WASH TANK FILL RELAY
R9	DOOR SAFETY SWITCH RELAY
H1	WASH HEATER
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
M3	PRE-WASH PUMP MOTOR
1MDL	DRIVE MOTOR OVERLOAD
2MDL	WASH PUMP MOTOR OVERLOAD
3MDL	PRE-WASH PUMP MOTOR OVERLOAD
CB	CONTROL CIRCUIT BREAKER
FUSE	CONTROL CIRCUIT FUSE
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH 1
S3	DOOR SAFETY SWITCH 2
S4	WASH PUMP SWITCH 1
S5	WASH PUMP SWITCH 2
S6	AUTO - MAN/DELIME SWITCH
S7	FINAL RINSE SWITCH
S8	PRE-WASH PUMP SWITCH
E1	POWER LIGHT
E2	HEATER HIGH LIMIT LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
PWFSW1	PRE-WASH FLOAT SWITCH 1
PWFSW2	PRE-WASH FLOAT SWITCH 2
TS1	HEATER HIGH LIMIT THERMOSTAT
TS2	WASH REGULATING THERMOSTAT
CWTS	COLD WATER THERMOSTAT (OPTIONAL)
CWV	COLD WATER VALVE (OPTIONAL)
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
PWFS	PRE-WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

09905-003-63-75 B

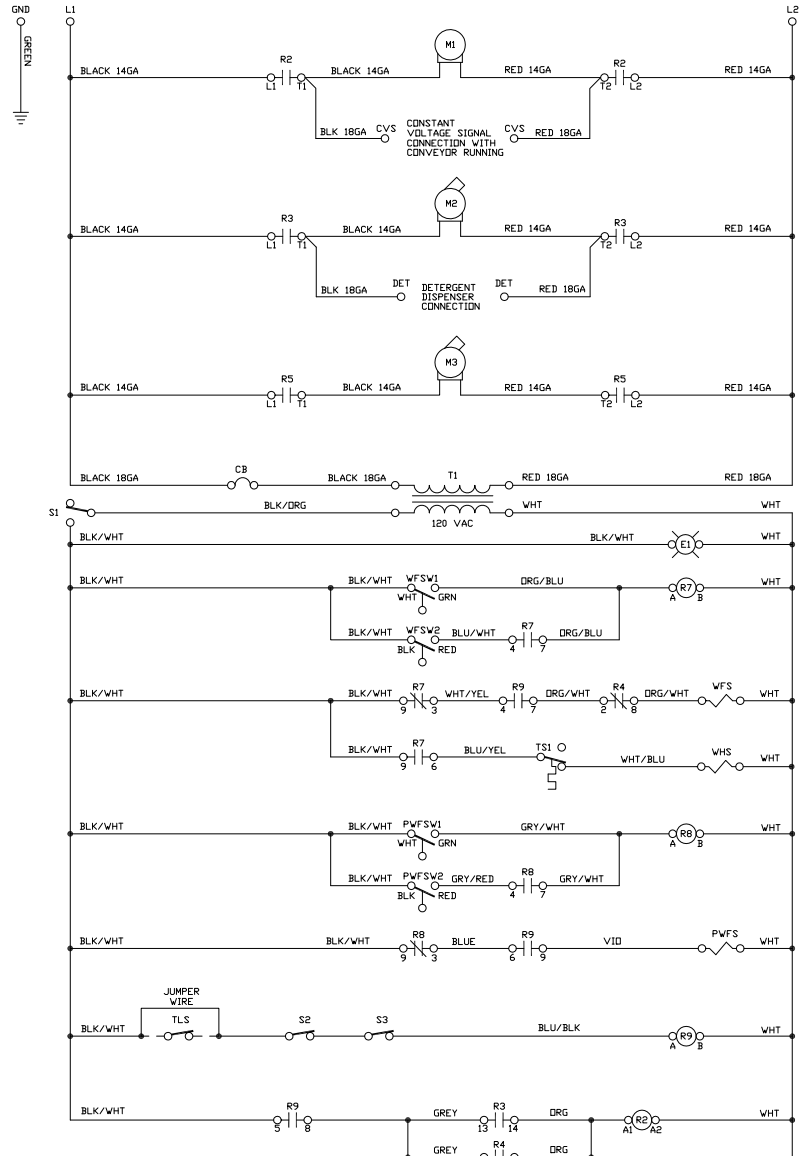
C-66/76/80/90CS 208-230 V/50-60 HZ/1-PHASE



LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R5	PRE-WASH PUMP MOTOR CONTACTOR
R7	WASH TANK FILL RELAY
R8	PRE-WASH TANK FILL RELAY
R9	DOOR SAFETY SWITCH RELAY
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
M3	PRE-WASH PUMP MOTOR
1MOL	DRIVE MOTOR OVERLOAD
2MOL	WASH PUMP MOTOR OVERLOAD
3MOL	PRE-WASH PUMP MOTOR OVERLOAD
CB	CONTROL CIRCUIT BREAKER
FUSE	CONTROL CIRCUIT FUSE
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH 1
S3	DOOR SAFETY SWITCH 2
S4	WASH PUMP SWITCH 1
S5	WASH PUMP SWITCH 2
S6	AUTO - MAN/DELIME SWITCH
S7	FINAL RINSE SWITCH
S8	PRE-WASH PUMP SWITCH
E1	POWER LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
PWFSW1	PRE-WASH FLOAT SWITCH 1
PWFSW2	PRE-WASH FLOAT SWITCH 2
TS1	WASH REGULATING THERMOSTAT
CWTS	COLD WATER THERMOSTAT (OPTIONAL)
CWV	COLD WATER VALVE (OPTIONAL)
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
WHS	WASH HEAT SOLENOID
PWFS	PRE-WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

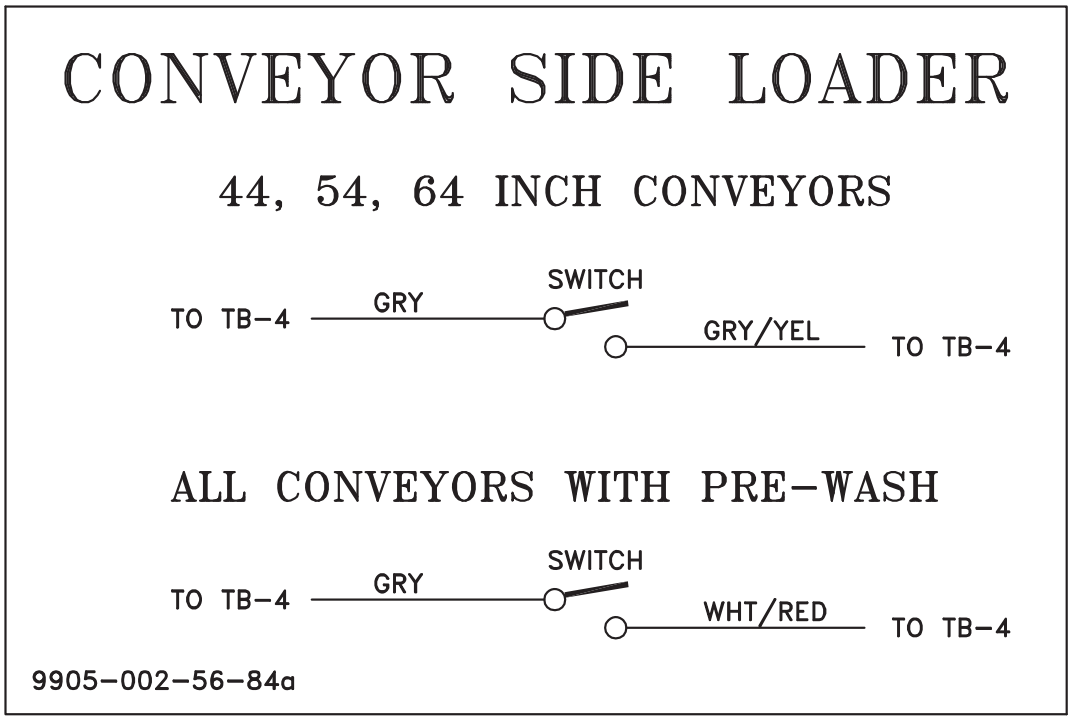
09905-003-65-07



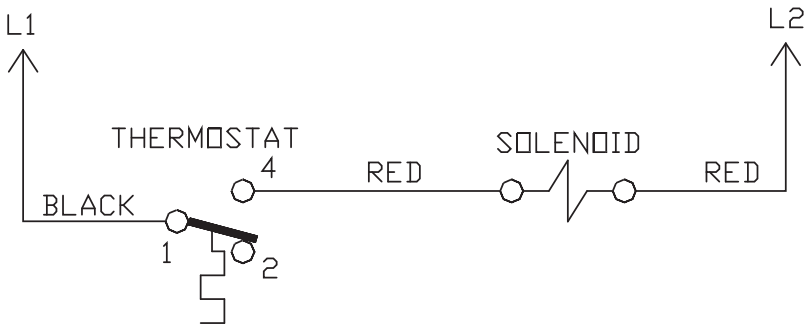
LEGEND

L1 L2 L3	POWER DISTRIBUTION BLOCK
GND	GROUND
R2	DRIVE MOTOR CONTACTOR
R3	WASH PUMP MOTOR CONTACTOR
R4	FINAL RINSE RELAY
R5	PRE-WASH PUMP MOTOR CONTACTOR
R7	WASH TANK FILL RELAY
R8	PRE-WASH TANK FILL RELAY
R9	DOOR SAFETY SWITCH RELAY
M1	DRIVE MOTOR
M2	WASH PUMP MOTOR
M3	PRE-WASH PUMP MOTOR
CB	CONTROL CIRCUIT BREAKER
T1	CONTROL TRANSFORMER
DET	DETERGENT DISPENSER CONNECTION
CVS	CONSTANT VOLTAGE SIGNAL
S1	POWER SWITCH
S2	DOOR SAFETY SWITCH 1
S3	DOOR SAFETY SWITCH 2
S4	WASH PUMP SWITCH 1
S5	WASH PUMP SWITCH 2
S6	AUTO - MAN/DELIME SWITCH
S7	FINAL RINSE SWITCH
S8	PRE-WASH PUMP SWITCH
E1	POWER LIGHT
WFSW1	WASH FLOAT SWITCH 1
WFSW2	WASH FLOAT SWITCH 2
PWFSW1	PRE-WASH FLOAT SWITCH 1
PWFSW2	PRE-WASH FLOAT SWITCH 2
TS1	WASH REGULATING THERMOSTAT
CWTS	COLD WATER THERMOSTAT (OPTIONAL)
CWV	COLD WATER VALVE (OPTIONAL)
TLS	TABLE LIMIT SWITCH (OPTIONAL)
WFS	WASH FILL SOLENOID
WHS	WASH HEAT SOLENOID
PWFS	PRE-WASH FILL SOLENOID
RS	FINAL RINSE SOLENOID

09905-003-65-08

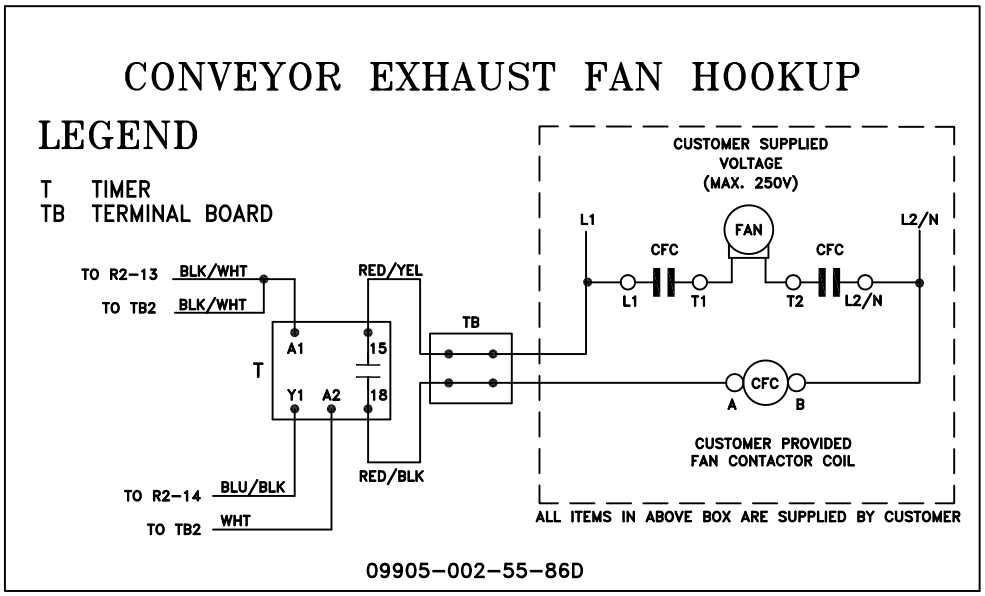


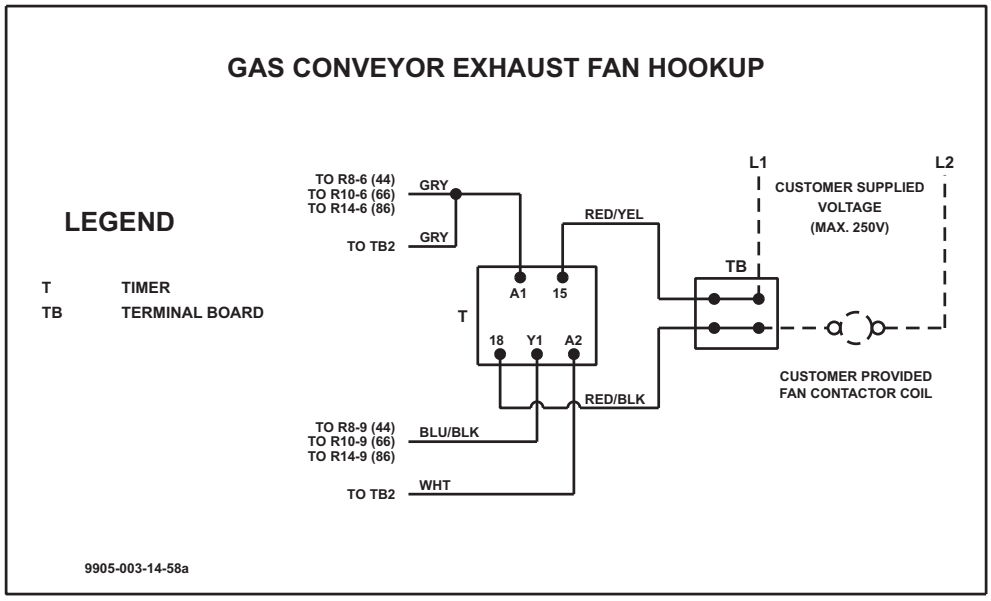
DRAIN QUENCH SCHEMATIC



CONNECT BLACK WIRE TO MOTOR CONTACTOR - L1 WITH PIGGYBACK TERMINAL PROVIDED

CONNECT WHITE WIRE TO MOTOR CONTACTOR - L2 WITH PIGGYBACK TERMINAL PROVIDED


CONVEYOR EXHAUST FAN HOOKUP
LEGEND
T TIMER
TB TERMINAL BOARD
TO R2-13
BLK/WHT
TO TB2
BLK/WHT
RED/YEL
TB
A1
15
T
Y1
A2
18
TO R2-14
BLU/BLK
TO TB2
WHT
RED/BLK
CUSTOMER SUPPLIED
VOLTAGE
(MAX. 250V)
L1
FAN
L2/N
CFC
CFC
L1
T1
T2
L2/N
CFC
A
B
CUSTOMER PROVIDED
FAN CONTACTOR COIL
ALL ITEMS IN ABOVE BOX ARE SUPPLIED BY CUSTOMER
09905-002-55-86D


GAS CONVEYOR EXHAUST FAN HOOKUP
LEGEND
T TIMER
TB TERMINAL BOARD
TO R8-6 (44)
TO R10-6 (66)
TO R14-6 (86)
GRY
TO TB2
GRY
RED/YEL
L1
L2
CUSTOMER SUPPLIED
VOLTAGE
(MAX. 250V)
TB
A1
15
T
18
Y1
A2
CUSTOMER PROVIDED
FAN CONTACTOR COIL
RED/BLK
TO R8-9 (44)
TO R10-9 (66)
TO R14-9 (86)
BLU/BLK
TO TB2
WHT
9905-003-14-58a

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