

AMSCO Maintenance Manual



UTENSIL WASHER-SANITIZER
Models WSE-61 AND WSS-61
(7/84) P-790513-001

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CHAPTER I

INTRODUCTION

ILLUSTRATIONS

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The Amsco Washer-Sanitizer, WSE-61 (electric heat) and WSS-61 (steam heat), are designed to wash and sanitize three full sets of patient's utensils, automatically, in two loads. One complete cycle requires approximately 22-1/2 minutes. A load consists of either of the following groups of utensils:

- 3 wash basins, 3 emesis or crescent (any size) and 3 mouth cups.
- 3 bedpans and 3 urinals or 3 enema cans.

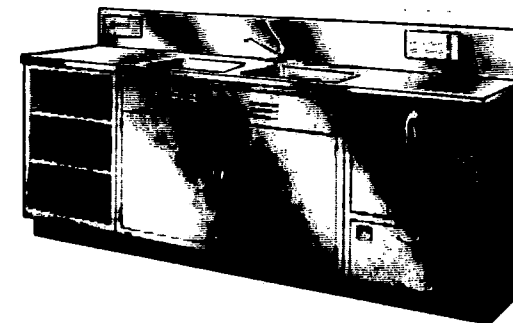
The Washer-Sanitizer is available in either the cabinet or the free standing models. The free standing unit is enclosed in stainless steel and is provided with an integral backsplash which houses

the air gap fixture, the indicating lights and the pushbutton switch.

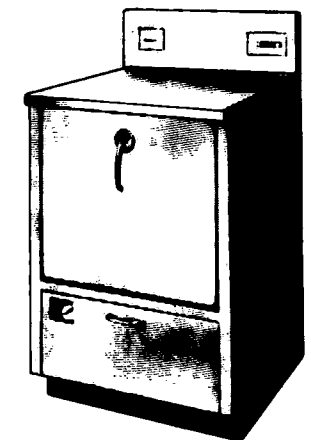
The walls of the washing chamber are of stainless steel. A powered rotating wash arm sprays hot water on the utensils which are placed on a rack of "Plastisol" coated steel with nylon rollers.

The controls are located behind the front panel at the bottom of the unit. The operating instructions are printed on the control panel. A fuse holder is located on the control panel.

Either unit can be supplied with a standard wash and rinse period and a special 30-minute sanitizing period. A complete cycle will then take approximately 45 minutes. The sanitizing phase can be increased from 8 minutes 15 seconds to 68 minutes 15 seconds maximum by adding a second timer.



Under-counter Model



Freestanding Model

Figure 1-1. Mounting Configurations.

CHAPTER 2 WASHER-SANITIZER DATA

Roughing-in plans are provided to the contractors who will do the plumbing and electrical wiring for this unit.

The following table presents typical data. Refer to the specific model number and roughing-in sheets for precise figures.

	Free Standing	Cabinet
Length	24"	24"
Width	24"	24"
Height	44"	42-3/8" (to top of air gap) 34-1/2" (to counter top)
Weight	195 lbs.	170 lbs.
Electrical Requirements:		
Steam Unit	120 Volts — A.C. — 60 Hz — 4.5 Amps Single Phase - 500 Watts	
Electric Unit	208 Volts (4-wire) - A.C. - 60 Hz 20.2 Amps - Single Phase — 4200 Watts	
	220 Volts (3-wire) - A.C. - 60 Hz 19.1 Amps — Single Phase — 4200 Watts	
Steam Requirements	3/8" NPT - 10 to 80 PSIG 3-1/2 lbs. per cycle.	
Hot Water	20 to 50 PSIG, 120-140 F 4-1/4 Gallons per Cycle of 22-1/2 Minutes	
Cold Water	20 to 50 PSIG 21 Gallons Per Cycle	
Plumbing Fittings	3/8" NPT Cold Water Line 3/8" NPT Hot Water Line 3/8" NPT Steam Supply Line	

CHAPTER 3 UNCRATING INSTRUCTIONS

1. If possible, leave the unit in the shipping crate if it must be laid on its side and turned to clear tight doorways. At the installation location, remove the four sides and the top of the crate. Use a nail-puller to open the crate. The use of bars to pry off the sides may cause damage.

2. Keep the unit on the skid until it is near its final location. Guard the unit against rough handling.

3. Remove all packing material and clean the area. Do not remove the protective paper from and panels.

Be sure to check all wrapping materials so that no parts are lost. Check the unit for damage and make the proper reports if any is found.

4. Check the location of the utility lines making certain that all required utilities are available. Be sure that all lines, especially steam, are clear before making any connections to them. This may require a "wash out" or a "blow down" of the lines.

CHAPTER 4 INSTALLATION INSTRUCTIONS

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Free Standing Model

1. Remove the front panel by: A) Opening the panel door and removing the two screws at the bottom of the panel and B) opening the tub door and removing the two screws on the sides of the panel.

2. Remove the valve panel and the kick plate. To do this it will be necessary to remove the valve handwheels by holding the handwheel rigid and turning the handwheel nut clockwise until the handwheel is free to slip off.

3. To make the water and steam connections, remove the valves by loosening the union nut holding the valve to the bracket. Now connect the valves to the appropriate service lines.

4. Remove the air gap by:

- Disconnecting the cold water line and pushing it aside. Secure it with a cord to keep it from falling behind the unit.
- Pulling the vent tube up and removing it.
- Removing the six air gap support screws.
- Disconnecting the tank drain.

5. Slide the top forward by:

- Removing the air gap cover by applying an upward pressure at the bottom corners.
- Removing the two screws that hold the top at the front. Lift the top at the front to clear the side panel flange.

6. Assemble the air gap and waste trap to the roughing. Slide the unit into place and reassemble the air gap, support screws, air vent tube and the top. Connect the tub drain and the cold water tube.

7. Reassemble the valves by tightening the union nuts. Replace the kick plate and front panel.

8. Connect electrically by following wiring diagram on inside of lower access door.

9. Make certain unit is level.

10. Remove the protective paper from the panels and clean them with Stoddard cleaning solution or any other suitable cleaner. Check the general appearance of the unit; leave it clean and shining. Demonstrate proper operation of the unit to the users; caution them about good maintenance schedules.

Counter Mounted Model

1. Remove the front panel by: A) Opening the panel door and removing the two screws at the bottom of the panel and B) opening the tub door and removing the two screws on the side of the panel.

2. Remove the valve panel and the kick plate. To do this it will be necessary to remove the valve handwheels by holding the handwheel rigid and turning the handwheel nut clockwise until the handwheel is free to slip off.

3. To make the water and steam connections, remove the valves by loosening the union nut holding the valve to the bracket. Now connect the valves to the appropriate service lines.

4. Remove the air gap by:

- Disconnecting the cold water line and pushing it aside. Secure it with a cord to keep it from falling behind the unit.
- Pulling the vent tube up and removing it.
- Removing the six air gap support screws.
- Disconnecting the tank drain.
- Disconnecting the cold water line at the bottom of the unit.

5. Assemble the air gap and the waste trap to the roughing. Remove the protective paper from the panels and clean them with Stoddard cleaning solution or other suitable cleaner. Slide the unit with the finishing jacket into place.

6. Fasten the air gap to the backsplash and assemble the vent tube and the cold water line.

7. Reassemble the valves by tightening union nuts. Replace the kick plate and front panel.

8. Connect electrically by following wiring diagram on inside of lower access door.

9. Remove the light panel from the box and attach the box to the backsplash. Replace the light panel.

10. Make certain unit is level.

11. Check the general appearance of the unit; leave it clean and shining. Demonstrate proper operation of the unit to the users; caution them about good maintenance schedules.

Installation of WSS-61 in Old Counters

Kit Q-50402-91 is required when a WSS-61 sanitizer is installed in place of a WS-58 sanitizer or into an "old" style counter. Install the sanitizer as follows:

1. Remove both side panels from sanitizer.

2. Install the three $\frac{3}{8}$ inch brass nipples (M-29075-91) into the valves from the rear of the sanitizer. The valves are located in the lower front of the sanitizer. (See Fig. 4-1.)

3. Cut out a 4x4 inch hole in the inner side sink panel to pass tubing through. (See Section AA on Fig. 4-1.)

4. Install sanitizer in counter and secure with screws provided with the counter.

5. Cut off, form and assemble tube fittings (P-13659-91 and P-44723-91) and copper tubing to agree with the roughing-in drawing furnished with the counter. (See Fig. 4-4.)

6. Install splashback cover (M-54505-61) to vent fitting and conduit box; then assemble cover to counter with screws from old style splashback cover removed from counter.

7. Install vent tube assembly (M-50405-91) in vent fitting. **Do not solder.**

8. Connect wiring of switch and pilot lights to wiring in conduit box. See Wiring Diagram on front lower door. Assemble switch cover assembly (M-50403-61) to the counter using screws (M-29811-41 and M-22419-11).

NOTE: Use nuts (M-3088-41) to position switch cover with $\frac{1}{4}$ inch clearance from splashback cover to allow air and vapor to escape.

9. Install counter end panel which is part of the counter.

The sanitizer unit is ready for installation.

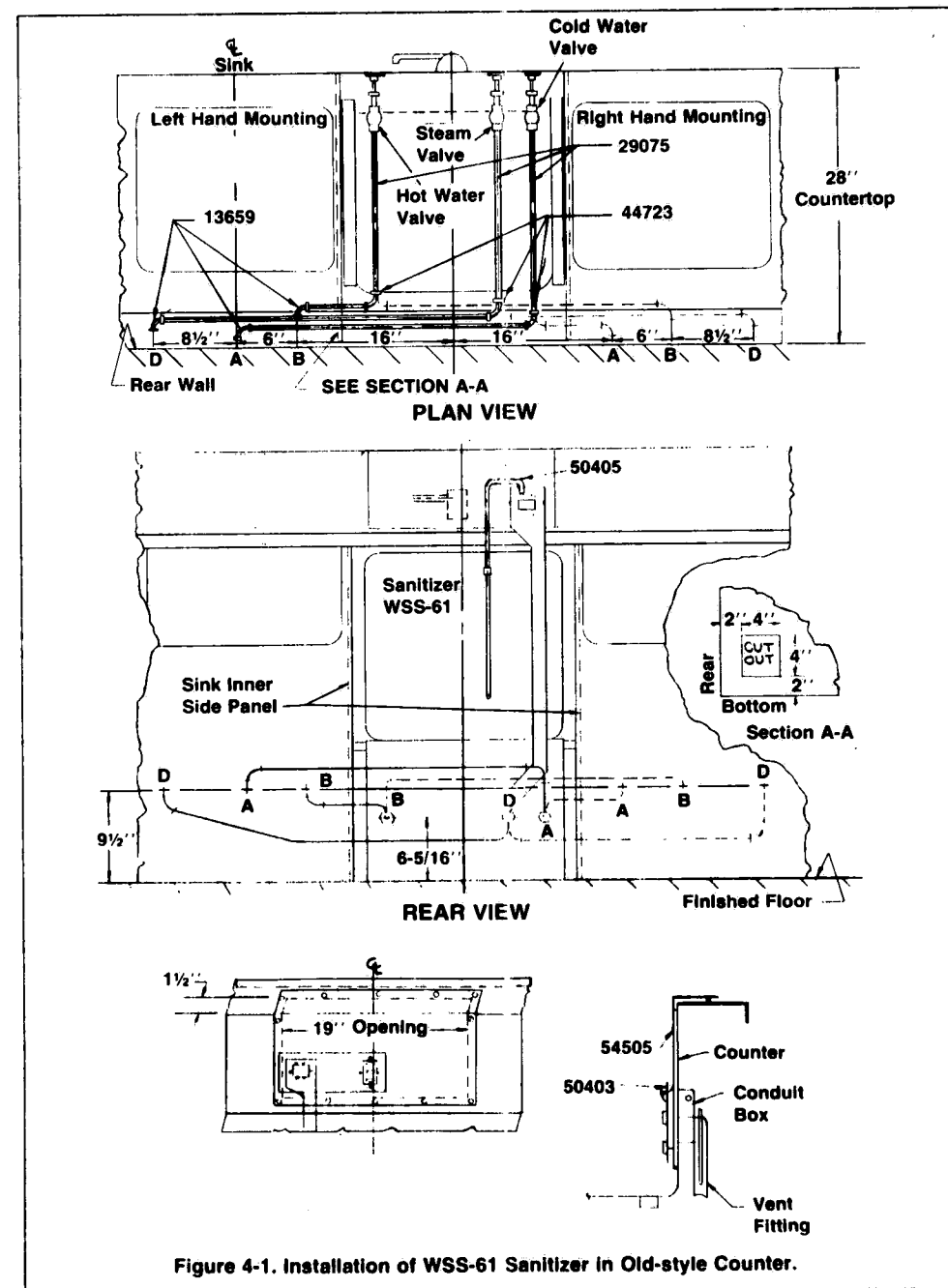
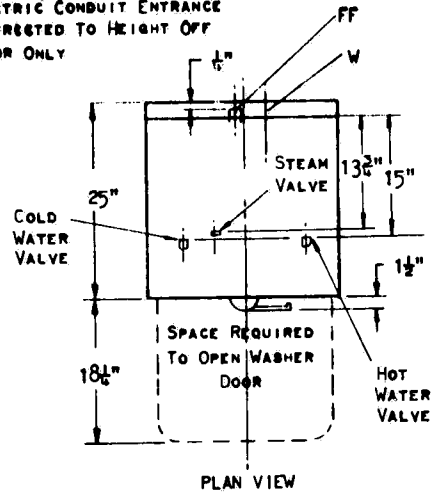


Figure 4-1. Installation of WSS-61 Sanitizer in Old-style Counter.

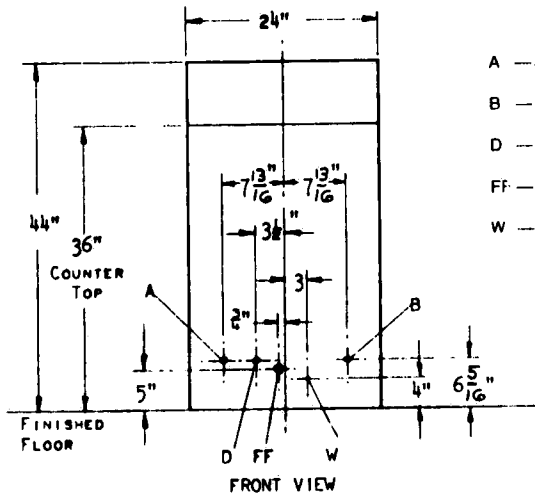
ELECTRIC CONDUIT ENTRANCE
RESTRICTED TO HEIGHT
OFF FLOOR ONLY



NOTES:

1. ROUGHING-IN, AS INDICATED, SHOULD BE STUBBED THRU FLOOR, WALL OR CEILING (AS REQUIRED) FAR ENOUGH TO ALLOW FOR PIPE COUPLING.
2. PIPE SIZES INDICATE THE TERMINAL OUTLETS ONLY. AMSCO RECOMMENDS PIPING BACK OF OUTLETS BE INCREASED IN SIZE TO ONE PIPE SIZE LARGER TO INSURE ADEQUATE SERVICE.
3. PIPING BETWEEN EQUIPMENT TERMINALS AND WALL OR FLOOR OUTLETS IS NOT FURNISHED BY AMSCO, EXCEPT BY WRITTEN AGREEMENT.
4. AMSCO RECOMMENDS SHUTOFF VALVES ON SUPPLY LINES. VALVES NOT BY AMSCO.
5. STEAM OR WATER PRESSURE WHERE INDICATED ARE DYNAMIC PRESSURES AS DELIVERED TO APPARATUS.
6. AMSCO ASSUMES NO RESPONSIBILITY FOR CHANGES MADE NECESSARY THROUGH FAILURE TO OBSERVE THESE INSTRUCTIONS.
7. NOMINAL CONSUMPTION REQUIREMENTS FOR THE UTENSIL WASHER SANITIZER ARE AS FOLLOWS - COLD WATER 21 GALS PER CYCLE. HOT WATER 4 1/2 GALS. PER CYCLE. STEAM 3 1/2 LBS. PER CYCLE.
8. APPROXIMATE WEIGHT OF SANITIZER - DRY 170 LBS. WET 225 LBS.

- A — 3/8" N.P.T. COLD WATER — 20 to 50 P.S.I.
B — 3/8" N.P.T. HOT WATER — 20 to 50 P.S.I., 120-140 F
D — 3/8" N.P.T. STEAM — 10 to 80 P.S.I.
FF — 1-1/2" O.D.T. WASTE TERMINAL
W — 3/4" DIA. CONDUIT ENTRANCE. (SERVICE AND CONNECTION BY OTHERS)



WATTS	VOLTS	CYCLE	PHASE	AMPS
500	110-120	60	1	4.5

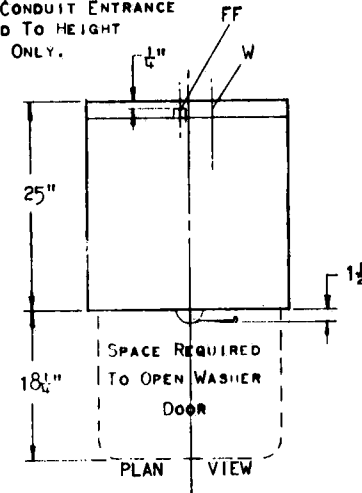
REV. 1

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Figure 4-2. Utensil Washer-Sanitizer, Steam Heat, Free Standing.

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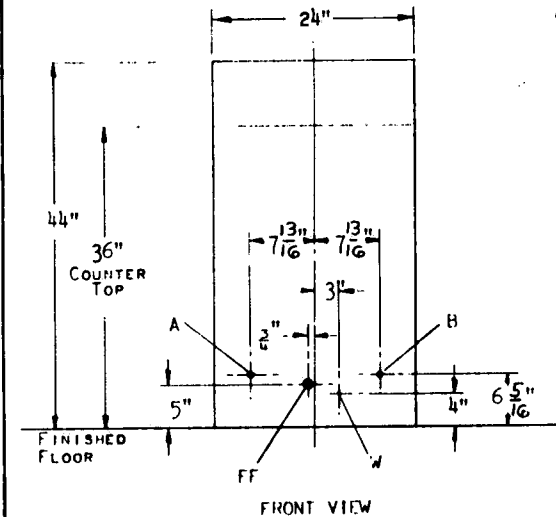
ELECTRIC CONDUIT ENTRANCE
RESTRICTED TO HEIGHT
OFF FLOOR ONLY.



NOTES:

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4. AMSCO RECOMMENDS SHUTOFF VALVES ON SUPPLY LINES. VALVES NOT BY AMSCO.
5. WATER PRESSURES WHERE INDICATED ARE DYNAMIC PRESSURES AS DELIVERED TO APPARATUS.
6. AMSCO ASSUMES NO RESPONSIBILITY FOR CHANGES MADE NECESSARY THROUGH FAILURE TO OBSERVE THESE INSTRUCTIONS.
7. NOMINAL CONSUMPTION REQUIREMENTS FOR THE UTENSIL-WASHER SANITIZER ARE AS FOLLOWS - COLD WATER 21 GALS PER CYCLE. HOT WATER 4 1/2 GAL. PER CYCLE.
8. APPROXIMATE WEIGHT OF SANITIZER - DRY 170 LBS. APPROXIMATE WEIGHT OF SANITIZER - WET 225 LBS.

- A — 3/8" N.P.T. COLD WATER — 20 to 50 P.S.I.
B — 3/8" N.P.T. HOT WATER — 20 to 50 P.S.I., 120-140 F
FF — 1-1/2" O.D.T. WASTE TERMINAL
W — 3/4" DIA. CONDUIT ENTRANCE. (SERVICE AND CONNECTION BY OTHERS)



WATTS	VOLTS	CYCLE	PHASE	AMPS
4200	208	60	3	25
4200	220-240	60	1	25

REV. 3

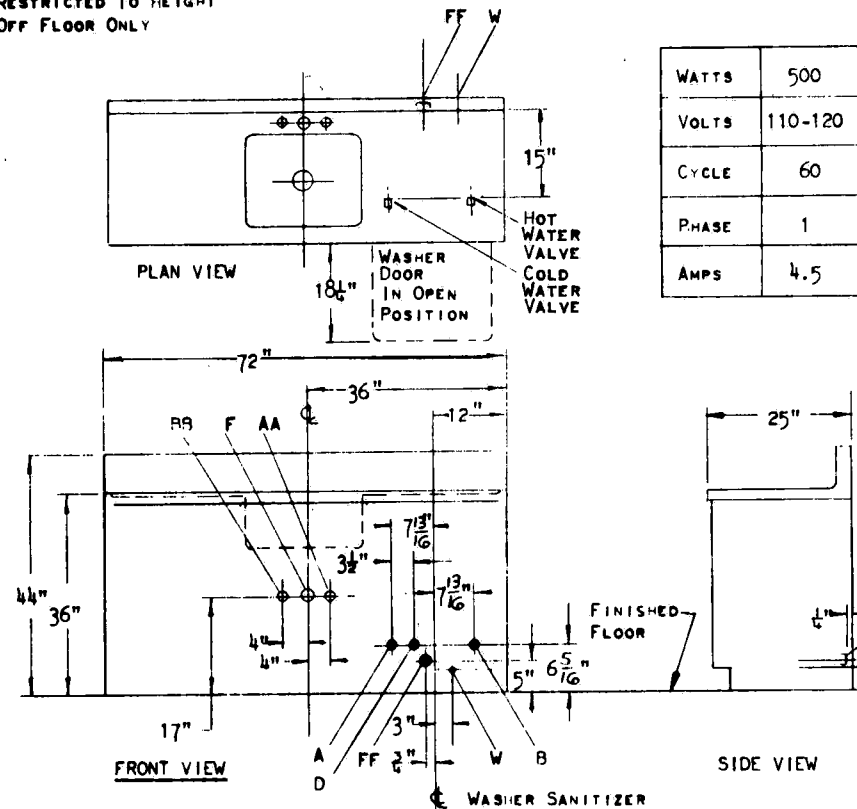
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Figure 4-3. Utensil Washer-Sanitizer, Electric Heat, Free Standing.

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4-5

ELECTRIC CONDUIT ENTRANCE
RESTRICTED TO HEIGHT
OFF FLOOR ONLY



NOTES:

1. ROUGHING-IN, AS INDICATED, SHOULD BE STUBBED THRU FLOOR, WALL OR CEILING (AS REQUIRED) FAR ENOUGH TO ALLOW FOR PIPE COUPLING.
2. PIPE SIZES INDICATE THE TERMINAL OUTLETS ONLY. AMSCO RECOMMENDS PIPING BACK OF OUTLETS BE INCREASED IN SIZE TO ONE PIPE SIZE LARGER TO INSURE ADEQUATE SERVICE.
3. PIPING BETWEEN EQUIPMENT TERMINALS AND WALL OR FLOOR OUTLETS IS NOT FURNISHED BY AMSCO, EXCEPT BY WRITTEN AGREEMENT.
4. AMSCO RECOMMENDS SHUT-OFF VALVES ON SUPPLY LINES. VALVES NOT BY AMSCO.
5. STEAM OR WATER PRESSURES WHERE INDICATED ARE DYNAMIC PRESSURES AS DELIVERED TO APPARATUS.
6. AMSCO ASSUMES NO RESPONSIBILITY FOR CHANGES MADE NECESSARY THROUGH FAILURE TO OBSERVE THESE INSTRUCTIONS.
7. NOMINAL CONSUMPTION REQUIREMENTS FOR THE UTENSIL-WASHER SANITIZER ARE AS FOLLOWS - COLD WATER 21 GALS PER CYCLE. HOT WATER $4\frac{1}{2}$ GALS. PER CYCLE. STEAM $3\frac{1}{2}$ LBS. PER CYCLE.
8. APPROXIMATE WEIGHT OF SANITIZER - DRY 190 LBS.
APPROXIMATE WEIGHT OF SANITIZER - WET 250 LBS.

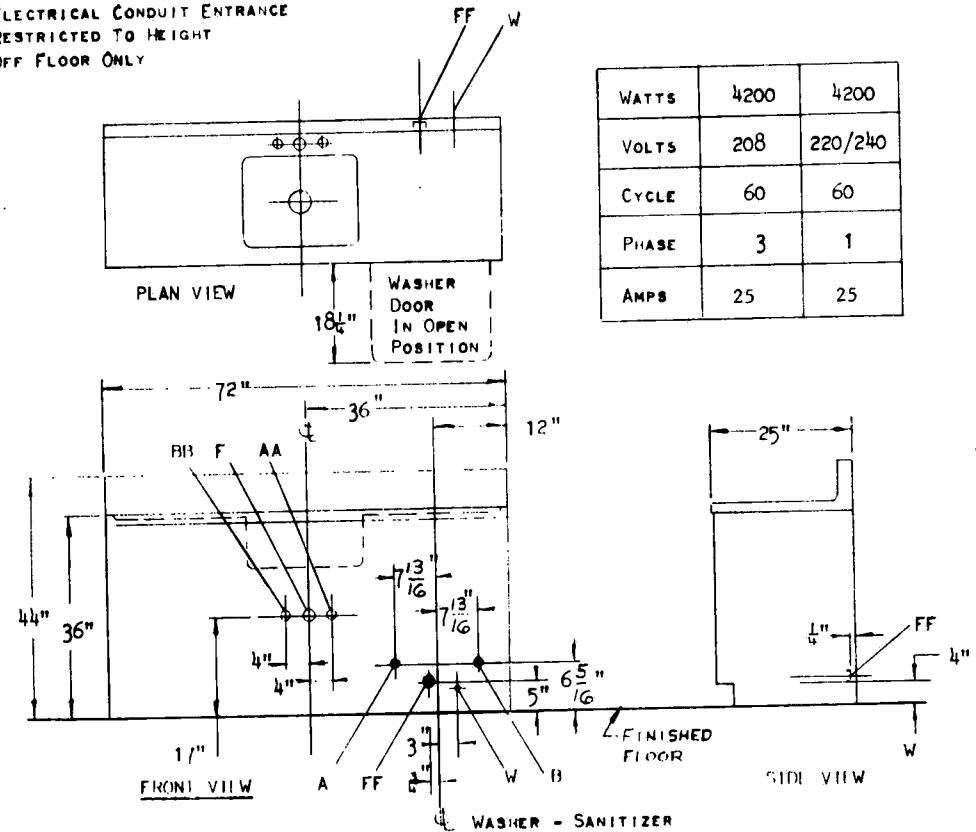
A — 3/8" N.P.T. COLD WATER — 20 TO 50 P.S.I.
AA — 1/2" N.P.T. COLD WATER — 20 TO 50 P.S.I.
B — 3/8" N.P.T. HOT WATER — 20 TO 50 P.S.I., 120-140 F
BB — 1/2" N.P.T. HOT WATER — 20 TO 50 P.S.I., 120-140 F
D — 3/8" N.P.T. STEAM — 10 TO 80 P.S.I.
F — 1-1/2" N.P.T. WASTE
FF — 1-1/2" O.D.T. WASTE TERMINAL
W — 3/4" DIA. CONDUIT ENTRANCE (SERVICE & CONN. BY OTHERS)

REV. 1

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Figure 4-4. Utensil Washer-Sanitizer, Under-Counter Type, Right Hand Mounted, Steam Heat.

ELECTRICAL CONDUIT ENTRANCE
RESTRICTED TO HEIGHT
OFF FLOOR ONLY



NOTES:

1. ROUGHING-IN, AS INDICATED, SHOULD BE STUBBED THRU FLOOR, WALL OR CEILING (AS REQUIRED) FAR ENOUGH TO ALLOW FOR PIPE COUPLING.
2. PIPE SIZES INDICATE THE TERMINAL OUTLETS ONLY. AMSCO RECOMMENDS PIPING BACK OF OUTLETS BE INCREASED IN SIZE TO ONE PIPE SIZE LARGER TO INSURE ADEQUATE SERVICE.
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4. AMSCO RECOMMENDS SHUT-OFF VALVES ON SUPPLY LINES. VALVES NOT BY AMSCO.
5. WATER PRESSURES WHERE INDICATED ARE DYNAMIC PRESSURES AS DELIVERED TO APPARATUS.
6. AMSCO ASSUMES NO RESPONSIBILITY FOR CHANGES MADE NECESSARY THROUGH FAILURE TO OBSERVE THESE INSTRUCTIONS.
7. NOMINAL CONSUMPTION REQUIREMENTS FOR THE UTENSIL-WASHER SANITIZER ARE AS FOLLOWS - COLD WATER 21 GALS PER CYCLE. HOT WATER $4\frac{1}{2}$ GALS. PER CYCLE.
8. APPROXIMATE WEIGHT OF SANITIZER - DRY 190 LBS.
APPROXIMATE WEIGHT OF SANITIZER - WET 250 LBS.

A — 3/8" N.P.T. COLD WATER — 20 TO 50 P.S.I.
AA — 1/2" N.P.T. COLD WATER — 20 TO 50 P.S.I.
B — 3/8" N.P.T. HOT WATER — 20 TO 50 P.S.I., 120-140 F
BB — 1/2" N.P.T. HOT WATER — 20 TO 50 P.S.I., 120-140 F
D — 3/8" N.P.T. STEAM — 10 TO 80 P.S.I.
F — 1-1/2" N.P.T. WASTE
FF — 1-1/2" O.D.T. WASTE TERMINAL
W — 3/4" DIA. CONDUIT ENTRANCE (SERVICE & CONNECTION BY OTHERS)

REV. 3

AMERICAN STERILIZER CO., ERIE, PA.

Figure 4-5. Utensil Washer-Sanitizer, Under-Counter Type, Right Hand Mounted, Electric Heat.

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CHAPTER 5 OPERATING INSTRUCTIONS

LOADING THE WASHER RACK

Wash Basins - bottoms to the outside.

Drinking Cups - on the small supports in the three corners.

Emesis Basins - inside of basin facing center of rack.

Bedpans - same as emesis basins with narrow ends down.

Urinals & Enema Cans - upside down on the upright sections.

The alternate methods of loading are:

1. 3 wash basins, 3 drinking cups and 3 emesis or crescent basins (any size). See Fig. 5-1.
2. 3 bedpans and 3 urinals or enema cans. See Fig. 5-2.

DETERGENT

Pour one ounce of AMSCO Sonic Detergent around the outer edges of the tub bottom. Calgonite is a satisfactory substitute.

WASHING AND SANITIZING

1. Close and lock the door.
2. Push start button.
 - a. The red light comes on indicating that the wash cycle has started.
 - b. The red light goes out and the white light comes on when the unit begins the sanitizing phase.

- c. The Washer-Sanitizer operates automatically through the entire cycle.
- d. The white light goes out at the end of the sanitizing period.

NOTE: The cycle knob at the bottom of the unit inside the panel door serves two purposes:

1. Indicates the approximate cycle phase.
2. Enables the operator to restart a cycle, if necessary.

One complete revolution of the knob indicates two complete cycles.

3. Upon completion of the entire cycle, aerate the load by opening the door.

SUGGESTIONS FOR TROUBLE FREE OPERATION

1. Remove all solid and heavy soil from the utensils before placing them in the racks.
2. Place the articles to be cleaned in the proper racks.
3. Follow the recommended loading procedure. Do not overload the unit.
4. Do not leave small articles on the impeller. They will jam the impeller and possibly cause it to break.

CAUTION

DO NOT OPEN TUB DOOR WHILE UNIT IS IN OPERATION

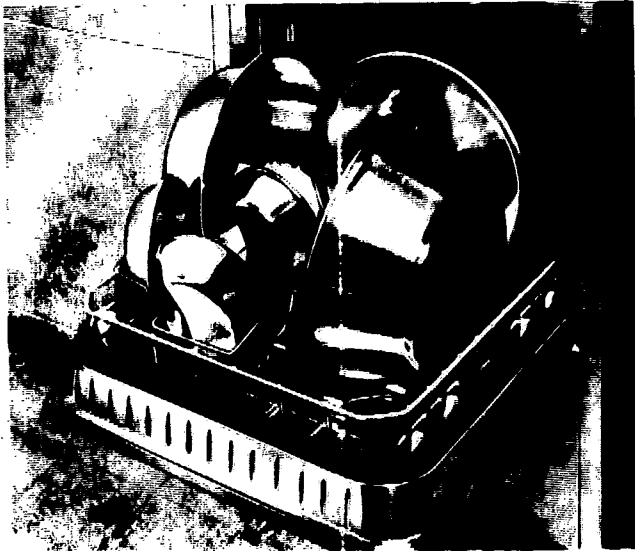


Figure 5-1. First Method of Loading

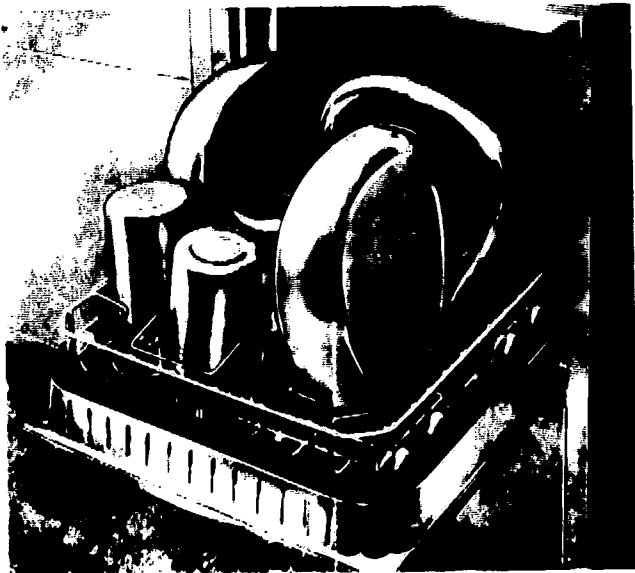


Figure 5-2. Second Method of Loading.

CHAPTER 6 MAINTENANCE INSTRUCTIONS

Steam Pressure Control. This unit is equipped with an adjustable pressure regulator and an angle type needle valve. The regulator is pre-set at the factory for approximately 3 P.S.I. This setting is adequate for most installations. Turning the regulator adjustment screw clockwise increases the pressure. If readjustment is necessary, open the steam valve and turn the adjusting screw until steam begins to escape from around the door. When this occurs, turn the adjusting screw out (counterclockwise) in $\frac{1}{2}$ of a turn.

Steam Supply Line. Check the strainer in the steam supply line periodically to make sure that the steam flow is not restricted.

Water Supply Lines. Frequent inspection of this system is recommended to keep it clear and operating properly. If the screen on the inside of the tub is kept clean, there will be little, if any, clogging. Clean the screens in the solenoid valves occasionally.

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CHAPTER 7 CONTROL SYSTEMS

Timer. The timer controls the washing and sanitizing phases of the cycle by allowing current to pass to the appropriate solenoid valves. On electric models, the timer permits a flow of current to the heaters.

The timer control knob serves two purposes:

1. It indicates the cycle phase (approximately).

2. Permits restarting of a cycle.

Temperature Control. An adjustable temperature control keeps the temperature inside the chamber from rising above 202 F. In addition, the electrically heated units have a safety cutoff device. This device cuts off current to the heaters if the temperature rises above 214° F.

CYCLE SEQUENCE

1. Starting Intervals - 45 seconds

During this interval, the timer is readjusting for the cycle. The wash light comes on, indicating that the unit is in operation. The drain valve closes.

2. Fill - 1 minute 30 seconds

Hot water enters the tub and mixes with the detergent. The impeller is rotating. When the proper amount of water has entered the tub, the solenoid valve will shut off the water. The cold water comes on.

3. Detergent Wash - 5 minutes 15 seconds

During this interval, the impeller rotates and sprays the utensils with hot wash water. The electric heaters or the steam supply is on.

4. Drain - 45 seconds

During this interval, the hot wash water is pumped out of the Washer-Sanitizer through the drain in the tub bottom. The cold water solenoid is open and allows cold water to mix with hot water in the air gap. The electricity or steam is off.

5. Fill - 1 minute 30 seconds

During this interval, the hot water solenoid permits hot water to fill the tub. The impeller is rotating.

6. Rinse - 45 seconds

The impeller rotates, spraying the utensils with hot rinse water.

7. Drain - 45 seconds

Same as Step 4.

8. Intermediate Intervals - 45 seconds

During this interval, the timer is readjusting for sanitizing. The drain valve is open. The impeller and drain unit is off. The indicating lights change from "wash" to "sanitize."

9. Fill - 1 minute 30 seconds

Same as Step 5.

10. Sanitize — 8 minutes 15 seconds. (If unit is equipped with extended cycle, sanitizing period may be increased up to an additional 60 minutes.) During this interval, the impeller is rotating, spraying the utensils with hot water. The electric heaters or the steam is on. This will raise the temperature in the chamber to 202 ± 5 F. The cold water is on to condense the vapor.

11. Drain - 45 seconds

Same as Step 4. At the end of this interval, the sanitize light will go off. This indicates that the wash and sanitize cycle is completed.

12. At the conclusion of the sanitize cycle, the door may be cracked to permit air drying. The utensils may be removed.

13. The water consumption is 4-1/2 gallons of hot water and 21 gallons of cold water for each 22-1/2 minute cycle. The steam unit consumes 3-1/2 pounds of steam per cycle.

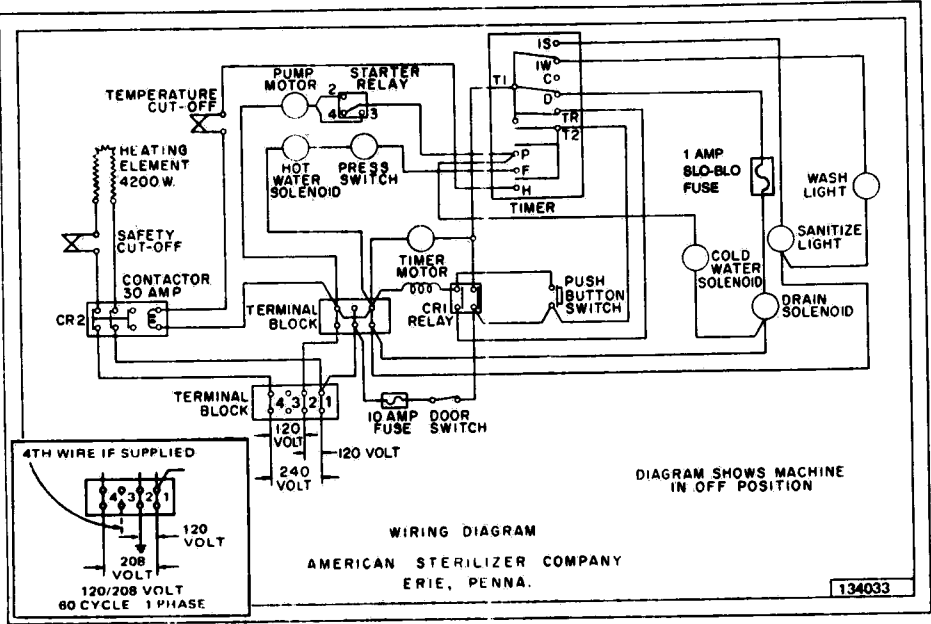


Figure 7-1. Wiring Diagram — Electric Model — 22½ Minute Cycle.

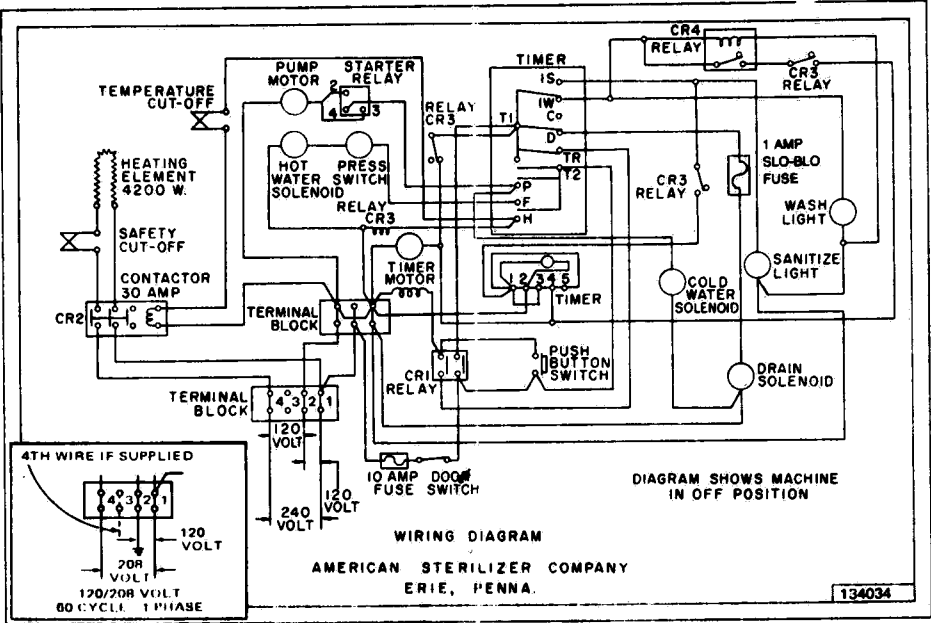


Figure 7-2. Wiring Diagram — Electric Model — Extended Cycle (approx. 45 minutes).

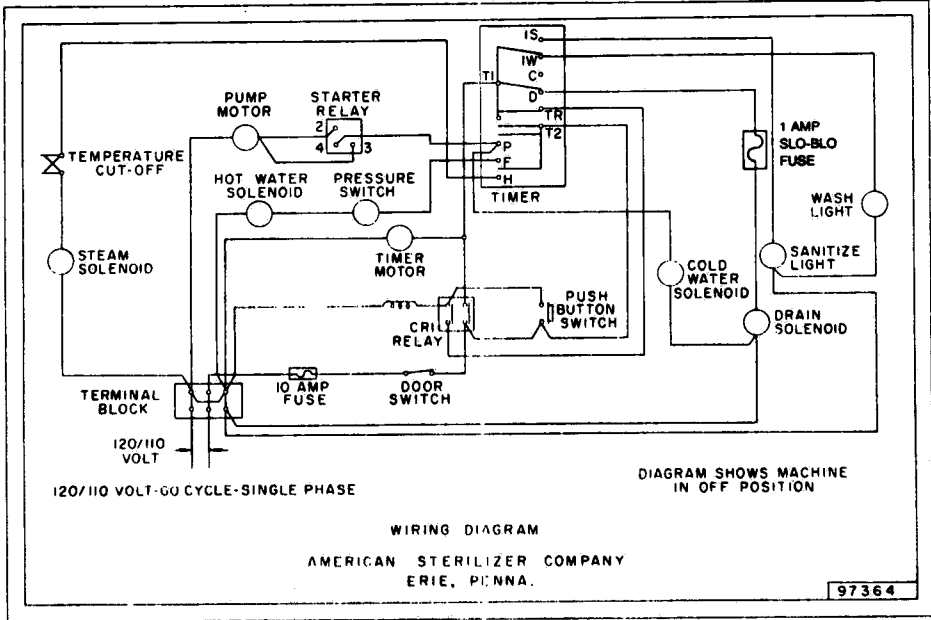


Figure 7-3. Wiring Diagram — Steam Model — 22½ Minute Cycle.

CHAPTER 8 TROUBLESHOOTING

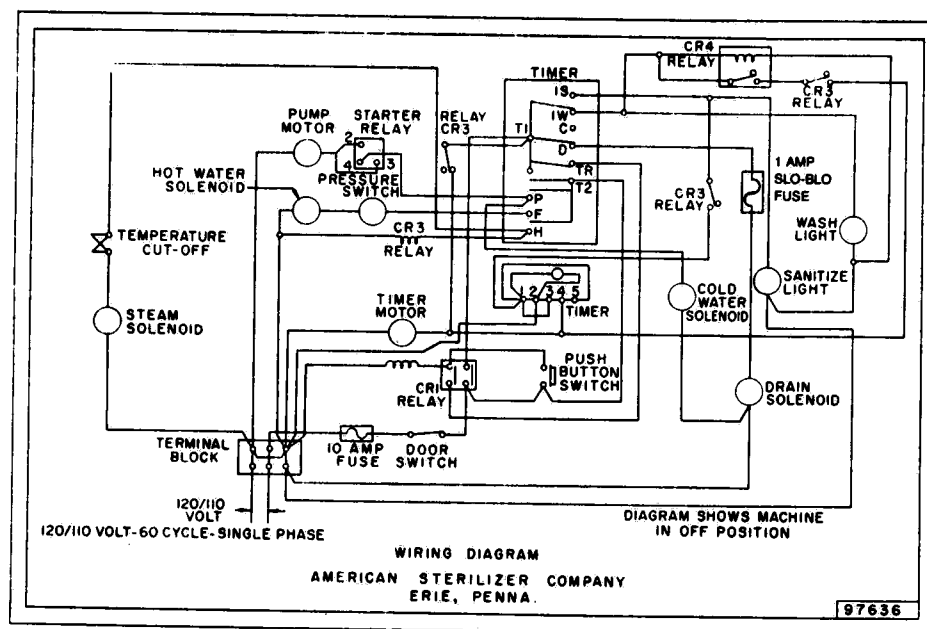


Figure 7-4. Wiring Diagram — Steam Model — Extended Cycle (approx. 45 minutes)

Trouble	Probable Cause	Possible Remedy
Electric heat does not come on.	Inoperative timer.	Replace timer.
	Inoperative contactor.	Replace contactor.
	Open circuit in heating element.	Replace heating element
	Inoperative temp. safety cut-out device.	Adjust or replace safety control.
	Inoperative temperature regulator.	Replace temperature regulator.
Water does not come up to sanitize temperature (202° F.)	Temperature regulator faulty or set too low.	Adjust (counterclockwise to raise) or replace temperature regulator.
	Temp. safety cut-out device faulty or set too low. (NOTE: Elevation Differences)	Adjust or replace safety control.
Water temperature exceeds 202° F.	Temperature regulator faulty or set too high.	Adjust or replace temperature regulator.
Too much water or water does not shut off.	Faulty timer control.	Replace timer control.
	Faulty solenoid.	Replace solenoid.
	Clogged drain line.	Check for obstruction in drain hose and correct. Replace drain line.
	Faulty flood control.	Replace flood control.
	Solenoid plunger sticking in hot water valve guide.	Free plunger and clean out plunger guide or replace valve.
	Faulty drain pump.	Repair or replace.
Machine turns off during cycle.	Blown fuse.	Replace fuse.
	Faulty door switch.	Replace door switch.
Steam does not come on.	Solenoid plunger sticking in closed position.	Free plunger and clean out guide.
	Open circuit in steam valve coil or leads to coil.	Replace coil or repair leads.
	Steam supply valve closed.	Open valve.
	Faulty temperature regulator.	Replace temperature regulator.
Water leaks from machine.	Leaking pipe connection.	Check and repair.
	Gasket positioned improperly.	Check and correct.
	Door gasket split.	Replace.
	Excessive water in tub.	Check and correct. Check pressure switch.
	Leaking hose connections.	Check and replace if necessary.
	Washing chamber not level.	Shim unit.

Trouble	Probable Cause	Possible Remedy
Main drive motor runs hot	Too much water in tub.	See remedy for excessive water in tub.
Motor runs but impeller does not turn.	Impeller drive pin sheared.	Replace pin.
Too little or no water in tub.	Hand shut-off valve in hot water line is closed.	Open valve.
	Hot water inlet valve does not open.	Clean pilot hole or replace diaphragm. Check for corrosion at valve seat. Clean guide opening in valve body or replace valve.
	Drain valve open.	Check solenoid valve and 1 amp fuse.
	Open circuit in hot water solenoid valve.	Replace solenoid coil.
	Faulty timer.	Replace timer.
	Clogged valve strainer or water supply piping.	Clean or replace strainer. Clean water line.
	Water pressure too low.	Check for clogging or restriction in hot water supply line.
Main drive motor runs hot.	Improper voltage.	Check voltage at motor. It should be between 105-125 volts.
	Partially shorted or grounded winding.	Replace motor.
Main drive motor will not start.	No power at motor terminals.	Check fuse and other components for faulty parts.
	Inoperative motor.	Replace motor.
	Main circuit fuse blown.	Replace fuse and check for trouble.
	Impeller jammed.	Remove cause.
	Interlock switch faulty.	Replace switch.
	Faulty wiring harness.	Repair or replace harness.
Motor will not stop.	Faulty timer motor.	Replace timer control.
	Open lead to timer motor.	Replace faulty lead.
	Timer shaft binding.	Free shaft.
	Short in wire harness.	Replace complete harness.
Water or steam leaks from machine shipped before 11/66.	Back pressure.	Reduce operating temperature to 192 F.

CHAPTER 9 COMPONENT REPLACEMENT

Door Gasket

Remove the inner door panel from the door shell. Spread the metal tabs that secure the gasket to upper part of the door and remove the gasket. Remove the gasket bar which secures the lower portion of the gasket. Scrape away all traces of the old gasket and clean the grooves with solvent.

Install the new gasket, a short section at a time, without stretching it. Do not cut it if it seems too long. Instead, start over, compressing short segments as they are put inside the retaining tabs. Insert the lower segment of the gasket and tighten the gasket bar. Replace the inner door panel. Coat the face of the gasket with silicon spray to keep it from sticking to the chamber when it gets hot.

Insulated Wire

When replacing thermo-plastic insulated wire for harnesses and individual wire connections, use #16 stranded copper, thermo-plastic insulation, 105°C, 300 volts, 1/32 inch thick minimum, UL-labeled wire. Do not use type TFF, which is approved only for 60°C service.

Panel Lights

Remove the light panel by pulling it out of the backsplash. Disconnect the appropriate wire nuts and remove the Tinnerman clips which hold the lamp in the panel. Replace the entire lamp.

Electric Heating Element

Open tub door and remove the rack, also remove the screens located in the bottom of the tub. Carefully uncoil the two capillary tubes and push them aside from heating element. Open panel door at bottom of unit and remove handwheels, timer control knob and valve panel. Disconnect wiring on terminals at each side of heater. Remove the locknuts and washers from heating element. Element can then be

removed from inside of tub. Reassemble in reverse order.

CAUTION: Be certain heating element is of the right voltage.

Removal of Panels to Service Freestanding Model (See Fig. 10-1)

Open the panel door and remove the two screws (39) at the bottom of the panel. Open the tub door and remove the two screws (44) on the sides of the panel. Then remove the front panel.

Remove the air gap cover (2) by applying an upward pressure at the bottom corners. Remove the six air gap support screws (3) and the two #10-24x $\frac{1}{2}$ inch screws that hold the front of the top. Lift the top at the front to clear the side panel flange. Move top forward about $\frac{1}{4}$ inch. Remove the two screws from the kickplate on the side where the side panel is to be removed. Remove the three screws (46) from the side panel near the rear of the unit. Raise the top at the rear so the top guides are out of the side panel slots. Then remove the side panel.

Water Solenoid Valve (Fig. 10-4)

When solenoid valve (16) requires replacement, use solenoid valve (79701-001). If replacing valve on unit shipped prior to 4/71, refer to the following applicable paragraph.

For units shipped before 10/64, no other parts are required when replacing valve (P-49844-91 or P-32112-91).

For units shipped between 10/64 and 4/71, bushing (15) and nipple (14) will also be required when replacing valve (P-50521-91). Connect valve (79701-001) as follows:

1. Remove ell (P-36036-91) along with the old valve.
2. Connect new valve to nipple (M-28929-91) that is connected to street elbow (10).
3. Connect bushing (15) and nipple (14) between valve (16) and tube fitting (17).

STEAM INLET (Fig. 10-3)

Units shipped after 4/65 are equipped with a $\frac{1}{4}$ inch street elbow (37) turned down on the steam inlet side. This directs steam downward rather than allowing it to be emitted horizontally. When steam enters horizontally, wash water is splashed against the door which aggravates gasket leakage.

Units shipped before 4/65 may have this change incorporated to assist in eliminating stubborn gasket leakage problems. Proceed as follows:

1. Disconnect the steam supply tube (16) from the tub and remove the elbow (6).
2. Tap the tub bushing from the inside with a $\frac{1}{4}$ inch pipe tap deep enough to accept and hold a $\frac{1}{4}$ inch street elbow but not deep enough for the installed elbow to interfere with tight makeup of the tube fitting.
3. Reconnect the steam supply tube (16) and elbow (6).
4. Install the $\frac{1}{4}$ inch street elbow (37) with the outlet pointed downward on the inside of the tub.

STARTER RELAY (Fig. 10-10)

The Hobart relay (7) is a gravity type which must be positioned properly, otherwise it will burn out a motor. When replacing this relay, install it with the winding at the bottom (see Fig. 9-1).

STEAM EXHAUST VENT (Fig. 10-3)

Units shipped after 10/65 have a steam exhaust fitting modification. These units may be identified by the appearance of the plate (40) and gasket (39) on the inside of the tank. Some units with this modification were made with a $\frac{1}{2}$ inch diameter vent tube (36). To adapt the $\frac{1}{2}$ inch diameter vent tube (36) to the latter, a coupling (38) 91224-0911 is required with a nominal size (fitting to copper) of $\frac{3}{4}$ x $\frac{1}{2}$. This coupling must be added if it is required.

Note: The word "TOP" is stamped on the relay.

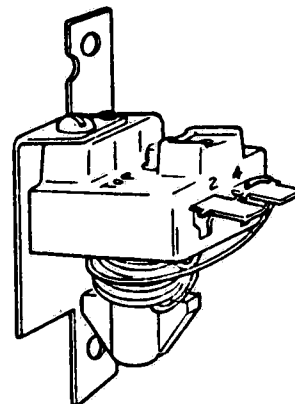


Figure 9-1. Starter Relay.

CHAMBER THERMOMETER

If chamber thermometer is to be added to a unit without a thermometer, order and install kit

- P-762351-001 — for Electric Model
- P-762351-002 — for Steam Model

SAFETY CONTROL

When safety control (23, Figure 10-1) on electric model, order and install kit P-763795-001. The kit includes safety control, reducing connector and instructions.

DRAIN PUMP ASSEMBLY

When replacing drain pump, order and install pump and restrictor replacement kit P-763835-001. Old-style pump had restrictor pressed into outlet; the new-style pump has restrictor clamped to outlet of pump.

CHAPTER 10 PARTS LIST

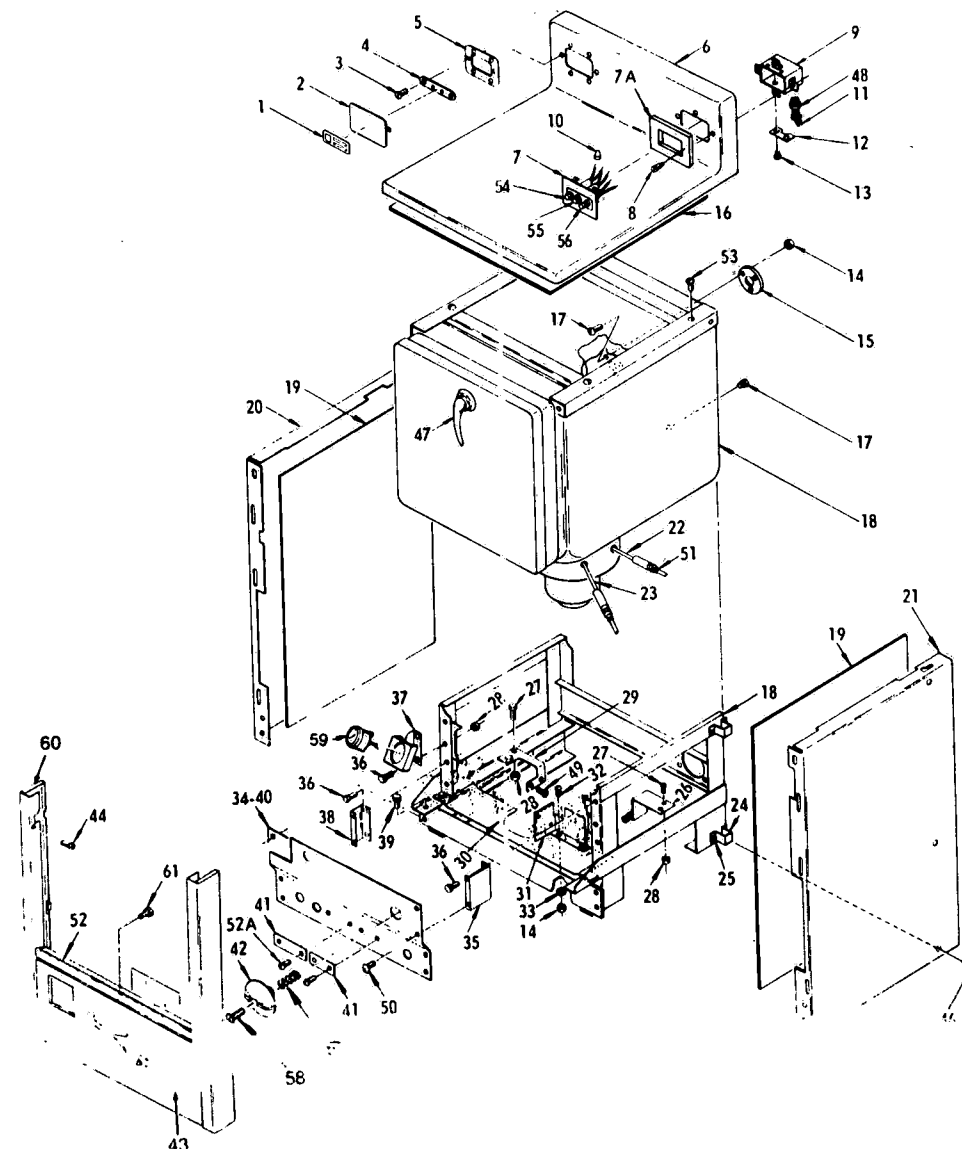


Figure 10-1. Frame and Panel Assembly.

Fig. & Index No.	Part No.	Description	No. Req'd. Per Assy.
10-1	No Number	Frame and Panel Assy.	
-1	P-31824-091	Plate, Name	1
-2	P-47566-063	Cover, Airgap	1
-3	P-47611-041	Screw, Fl. Hd.	6
-4	P-47567-061	Plate, Support	1
-5	P-47339-091	Gasket	1
-6	P-47340-063	Top Assy.	1
-7	P-454259-001	Switch Plate Assy., Freestanding Model Only (Incl. items 54, 55 and 56)	1
	P-462335-970	Plate	1
	P-50403-091	Switch Plate Assy., Under-counter Model Only	1
	P-466706-157	Plate	1
-7A	P-49835-091	GASKET	1
-8	P-44763-061	Screw, Fl. Hd.	4
-9	P-47571-045	Box, Pilot Light	1
-10	P-18538-091	Nut, Wiring	7
-11	P-53792-091	Harness, Wire	1
-12	P-47574-045	Clip	1
-13	P-17658-041	Screw, Rd. Hd.	2
-14	P-2959-041	Nut, Hex	5
-15	P-74480-091	Gasket	1
-16	P-47346-091	Insulation, Top	1
-17	P-12540-061	Screw	3
-18	P-97325-091	Dishwasher	1
-19	P-47345-091	Insulation, Side & Back	1
-20	P-53723-091	Panel, Side, L. H.	1
-21	P-53724-091	Panel, Side, R. H.	1
-22	P-47321-041	Control, Temp.	1
-23	P-733795-001	Kit, Safety Control (Elec. Models Only)	1
-24	P-36104-045	Support, Panel	4
-25	P-24910-061	Screw	8
-26	P-47557-045	Bracket (Steam Model Only)	1
-27	P-3848-051	Screw, Hex. Hd.	4
-28	P-3040-042	Nut	12
-29	P-47310-045	Support, Solenoid	1
-30	P-54164-045	Support, Valve	1
-31	P-53859-045	Bracket	1
-32	P-9374-041	Screw, Rd. Hd.	2
-33	P-19684-061	Washer	2
-34	P-97322-010	Panel, Valve (for elec. model only)	1
-35	P-47326-045	Support, Panel	1
-36	P-3846-041	Screw, Hex Hd.	8
-37	P-462183-001	Bracket, Thermometer Mounting	1
-38	P-47325-045	Support, Panel	2
-39	P-48064-045	Screw, Hex. Hd.	2
-40	P-97363-010	Panel, Valve (For Steam Model Only)	1
-41	P-14168-091	Name Plate	As Req'd.
-42	P-35929-010	Knob, Control	1

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Fig. & Index No.	Part No.	Description	No. Req'd. Per Assy.
10-1-43	P-53725-091	Panel, Front	1
-44	P-44763-061	Screw, Ph. Hd.	2
-45	P-430061-056	Handle	1
-46	P-37344-048	Screw, Soc. Hd.	6
-47	No Number	Door & Latch Assy. (see Fig. 10-2)	1
-48	P-47182-091	Bushing, Snap	1
-49	P-3969-041	Screw, Rd. Hd.	2
-50	P-23437-041	Screw, Bind Hd.	9
-51	P-47344-091	Connector	1
-52	P-35470-091	Channel, Evaporating	1
-52A	P-40357-045	Screw, Rd. Hd.	As Req'd.
-53	P-27208-042	Screw, Bind. Hd. (Counter Mounted Only)	2
-54	P-45156-091	Light - Pilot (Sanitize)	1
-55	P-45155-091	Light - Pilot (Wash)	1
-56	P-454473-001	Start Button	1
-57	P-39140-091	Spring	1
-58	P-44734-091	Screw	1
-59	P-454937-001	Thermometer, Gauge	1
	P-762351-001	Thermometer Kit, For Add on to Electric Unit (Not Shown)	As Req'd.
	P-762351-002	Thermometer Kit, For Add on to Steam Unit (Not Shown)	As Req'd.
-60	P-53720-091	Front Frame Assembly	1
-61	P-430002-045	Screw, Ph. Hd.	2

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10-3

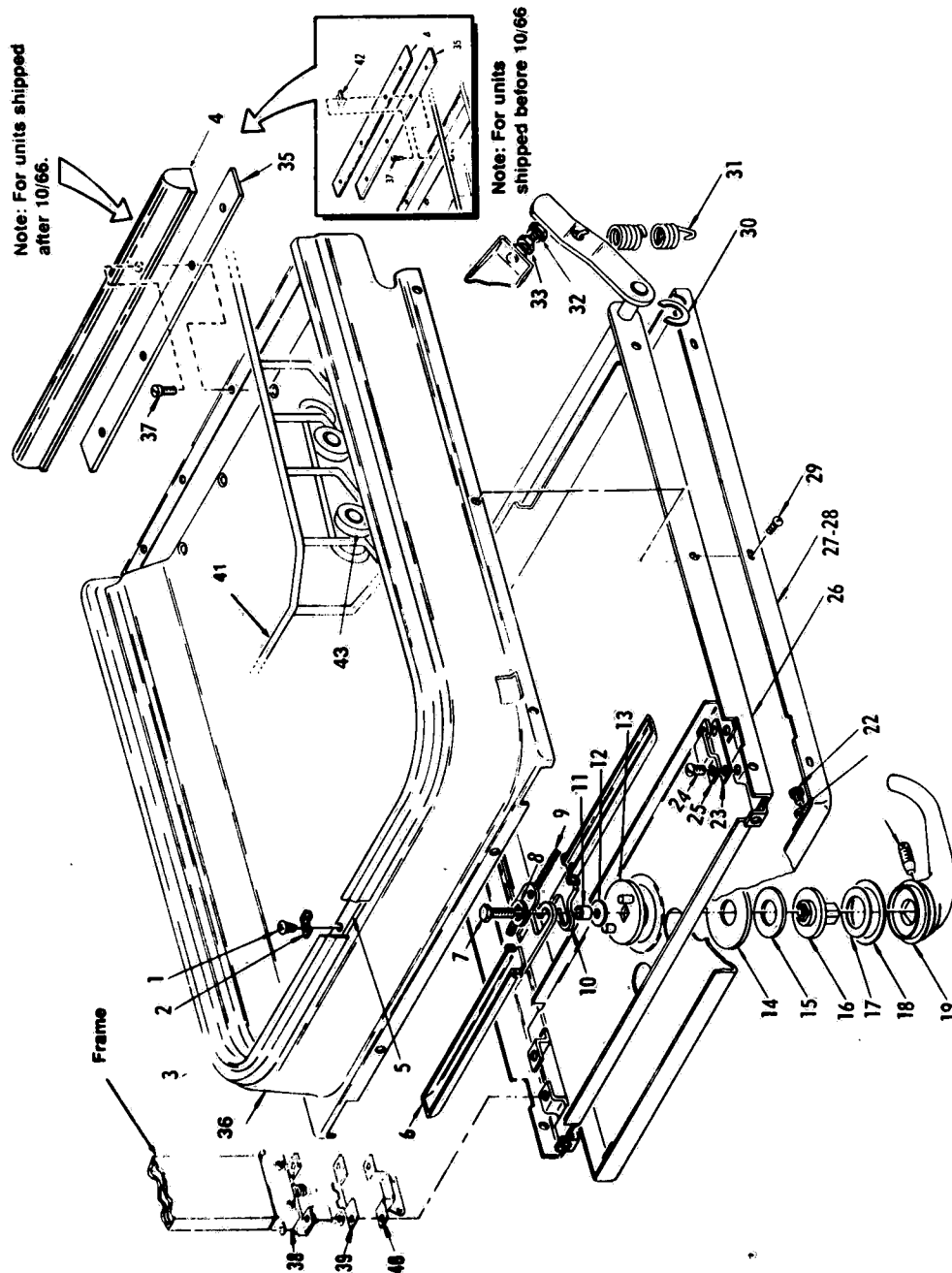


Figure 10-2. Door & Latch Unit.

Fig. & Index No.	Part No.	Description	No. Req'd. Per Assy.
10-2	N.L.A.	Door & Latch Unit (750829)	
-1	P-44763-061	Self Tapping Screw No. 6 x 3/8 Truss Hd. Type A - SD-6-13	21
-2	P-44764-061	Clip, Door Seal	21
	P-48533-091	Gaskets, Lower and Upper Door Seal	1
-3		• Gasket, Upper Door Seal Hobart Pt. No. P 75340	1
-4*		• Gasket, Lower Door Seal Hobart Pt. No. 75299 (For Units Shipped After 10/66)	1
-5	N.L.A.	Retainer, Door Seal Hobart Pt. No. S-75966 (750140)	1
-6	P-753441-091	Latch Mech. Sub Assem (L. H.) Hobart Pt. No. P-24137	1
-7	P-36641-041	Fin Bolt 1/4-28x3/4 Hex Hd. Hobart Pt. No. SC-42-13 (Substitute 50677-045)	1
-8	P-752901-091	Plate - Screw Locking Hobart Pt. No. M-62895	1
-9	P-752902-091	Spring - Latch Mech. Hobart Pt. No. M-23090	2
-10	P-753440-091	Latch Mech. Sub Assem (R.H.) Hobart Pt. No. P-24136	1
-11	P-752903-091	Bushing, Screw Hobart Pt. No. M-22957	1
-12	P-752904-091	Washer Hobart Pt. No. M-74042	1
-13	P-75416-091	Actuator Cam Assem. Hobart Pt. No. M-73124	1
-14	P-756384-091	Washer Hobart Pt. No. WS-11-40	As Req'd.
-15	P-756385-091	Washer Hobart Pt. No. WS-11-45	1
-16	P-750906-091	Handle Insert Hobart Pt. No. P-64110	1
-17	P-750152-091	Washer, Handle Insert Hobart Pt. No. M-74041	1
-18	P-756386-091	Washer Hobart Pt. No. WS-15-36	1
-19	P-750432-091	Handle, Door Hobart Pt. No. R-64111	1
-20	P-759879-001	Screw - Handle Locking Hobart Pt. No. M-64122	1
-21		Lockwasher No. 10x.055x.040 Hobart Pt. No. WL-3-22	2
-22	P-3990-042	Mach. Screw No. 10-24x3/8 Rd. Hd.	2
-23	P-77114-091	Plate - Latch Shoe Skid Hobart Pt. No. M-22956	As Req'd.
-24	P-24840-061	Self Tapping Screw No. 10x1/2 Rd. Hd. Type B - Hobart Pt. No. SD-7-48	4
-25	P-752792-091	Guide - Latch Shoe Hobart Pt. No. M-22954	2
-26	N.L.A.	Hinge Rod and Angle Assem Hobart Pt. No. S-64004 (7551151)	1
-27		Door Front Sub Assem (SST.) Hobart Pt. No. S-64006-6	1
-28		Door Front Assem, (includes items 21 - 22 - 26 - 27) - Hobart Pt. No. S-64007-6	1
-29	P-44763-061	Self-Tapping Screw No. 6x3/8 Truss Phil Hd. Type A - Hobart Pt. No. SD-6-13	8
-30		Washer Spacing Hobart Pt. No. M-23118-1	As Req'd.
-31	P-75389-091	Spring - Counter Balance Hobart Pt. No. M-23884	2
-32		Stud Door Stop Hobart Pt. No. V-24110	2
-33		Jam Nut 5/16 - 18 Hex Fin Hobart Pt. No. NS-17-8	2
-34	Not Shown	Insulation, Door Hobart Pt. No. S-70843	1
-35	P-750139-091	Lower Door Seal Retainer Hobart Pt. No. R-75962	1
-36	P-52465-061	Panel, Inside Door Hobart Pt. No. T-78445	1
-37	P-75422-091	Mach. Screw No. 6-32x1/4 Truss Hd. Hobart Pt. No. SC-53-38	4
-38	P-36116-091	Interlock Switch	2
-39	P-36115-091	Spring, Switch Actuating	2
-40	P-750433-091	Keeper, Latch	2
-41	P-36090-091	Rack, Utensil	1
-42	P-752632-091	Retainer - Door Seal Baffle Hobart Pt. No. M-77662 (Used on Units Shipped Before 10/66)	4
-43	P-36086-091	Roller, Nylon	8

*54106-091 and item 42 used on units shipped before 10/66.

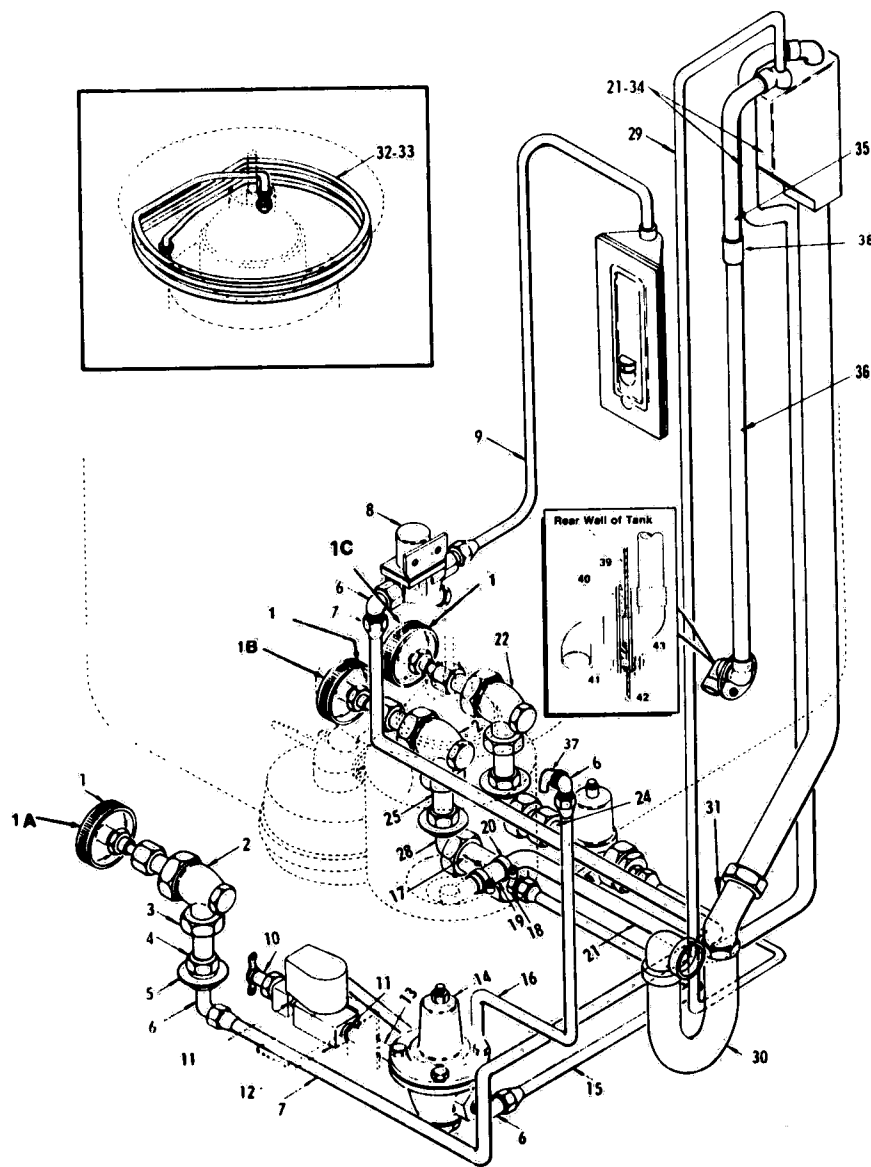


Figure 10-3. Piping Details.

Fig. & Index No.	Part No.	Description	No. Req'd. Per Assy.
10-3	No Number	Piping Details	
-1	P-44330-091	Handwheel	As Req'd.
-1A	P-44349-091	Sticker, Hot Water	1
-1B	P-44345-091	Sticker, Steam Supply	1
-1C	P-44347-091	Sticker, Cold Water Supply	1
-2	P-5654-051	Angle Valve Assy. (see Fig. 10-7)	As Req'd.
-3	P-2901-051	Nut, Union	3
-4	P-3162-042	Locknut	3
-5	P-5460-045	Washer	3
-6	P-37896-091	Elbow	4
-7	P-49678-091	Tube, Hot Water	1
-8	P-74706-091	Valve, Fill Assy. (see Fig. 10-5)	1
-9	No Number	Upper Fill Tube Assy. (see Fig. 10-5)	1
-10	P-38362-091	Valve, Angle	1
-11	P-849-042	Bushing	As Req'd.
-12	P-79701-001	Solenoid, Steam Valve	1
-13	P-47557-045	Bracket	1
-14	P-32115-091	Regulator, Pressure*	1
-15	P-49668-091	Tube, Steam	1
-16	P-49672-091	Tube, Steam	1
-17	P-47671-091	Strainer (see Fig. 10-6)	1
-18	P-35931-091	Fitting, Tube	1
-19	P-47316-091	Hose	1
-20	P-32110-091	Clamp, Hose	2
Not Shown	P-49843-091	Restrictor	1
-21	P-54165-091	Air Gap Assy. (For Elec. Model Only)	1
-22		Piping Assy., Cold Water Supply (see Fig. 10-4)	
-23		Not Used	
-24	P-4048-044	Spud	1
-25	P-28917-091	Nipple	4
-26		Not Used	
-27		Not Used	
-28	P-47306-091	Elbow	1
-29	P-47315-091	Vent Tube Assembly	1
-30	P-47347-091	Trap, Waste	1
-31	P-36077-091	Trap, Offset	1
-32	P-97361-091	Heating Element - 208 Volt - 4200 Watt	1
-33	P-97360-091	Heating Element - 230 Volt - 4200 Watt	1
-34	P-54165-091	Air Gap Assy. (For Steam Model Only)	1
35	P-74099-091	Tube Vent	1
-36	P-74100-091	Vent Tube Assembly	1
-37	P-1619-051	Elbow, Street - 90 degree, 1/4 inch	1
-38†	P-91223-091	Coupling	1
-39	P-74480-091	Gasket	1
-40	P-74481-091	Plate	1
-41	P-12589-061	Screw #10-32 x 3/8	3
-42	P-19685-061	Lockwasher	3
-43	P-2959-041	Nut	3

*Specify name of manufacturer when ordering replacement part.

†Item 38 is 91223-091 when item 36 is 3/8 inch in diameter, otherwise item 38 is part of vent tube assembly (36).

Fig. & Index No.	Part No.	Description	No. Req. Per Assy.
10-4		Piping - Cold Water Supply	
-1	P-44330-091	Handwheel	1
-2	P-44347-091	Decal - Water Supply	1
-3	P-5654-051	Angle Valve	1
-4	P-22412-091	Spud, Female	1
-5	P-2901-051	Nut - Union	1
-6	P-28917-091	Nipple	1
-7	P-32200-091	Coupling	1
-8	P-5460-045	Washer	1
-9	P-3162-042	Locknut - Conduit	1
-10	P-1619-051	90° St. Ell.	1
-11	P-4048-044	Spud, Male	1
-12	P-2900-051	Nut, Union	1
-13	P-1617-051	End, Threaded	1
-14	P-28917-091	Nipple	1
-15	P-849-042	Bushing	1
-16	P-79701-001	Valve Solenoid*	1
-17	P-36034-091	Fitting, Tube	2

*Note: See "Water Solenoid Valve" in COMPONENT REPLACEMENT Chapter when replacing this valve.

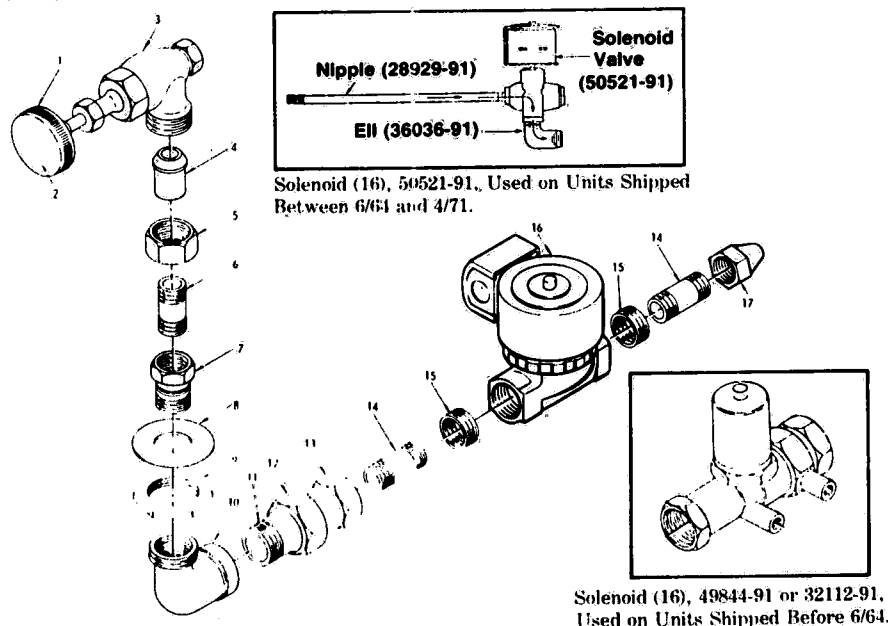


Figure 10-4. Piping -- Cold Water Supply.

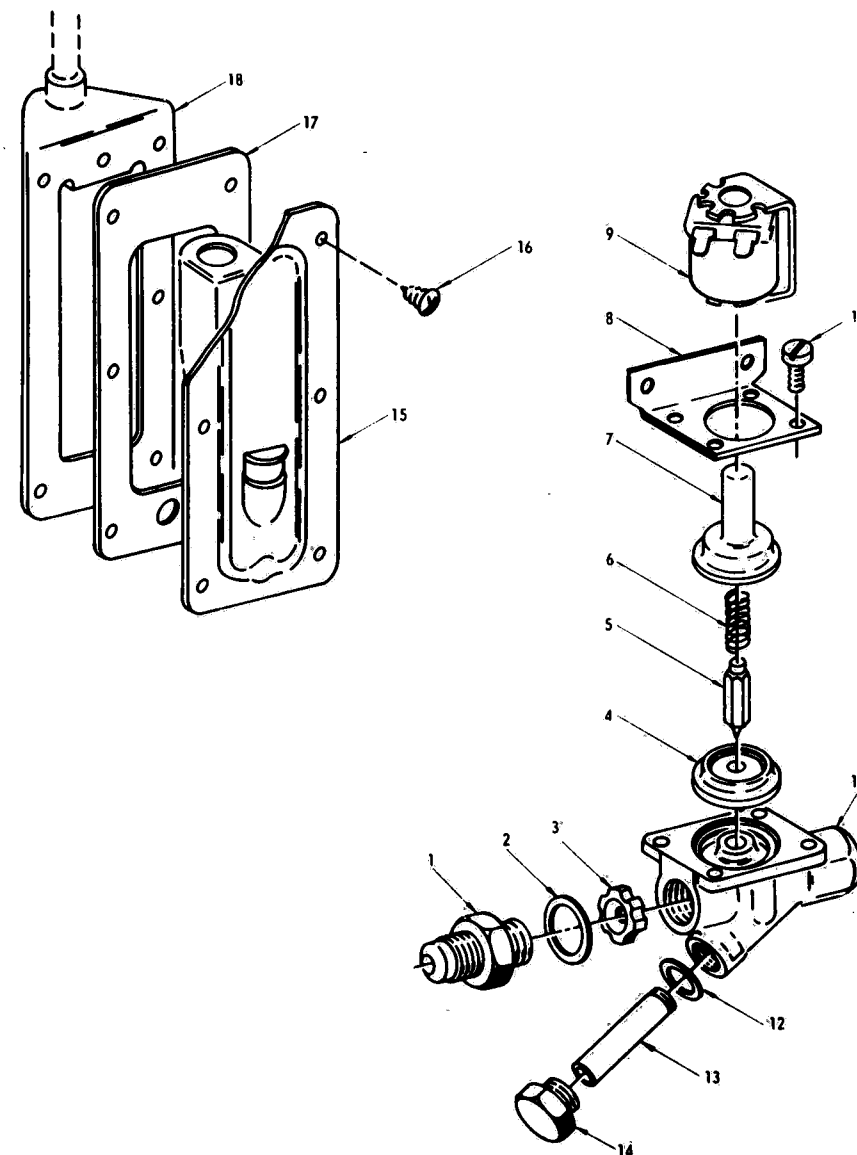


Figure 10-5. Fill Valve Assembly.

Fig. & Index No.	Part No.	Description	No. Req'd. Per Assy.
10-5	P 74706-091	Fill Valve Assembly *	1
-1		• Outlet Assem. Hobart Pt. No. P-77593-1	1
-2	NLA	• Gasket - Outlet Hobart Pt. No. P-77593-2	1
-3		• Washer - Flow Hobart Pt. No. P-77593-3	1
-4	NLA	• Diaphragm Assem Hobart Pt. No. P-77593-5	1
-5	NLA	• Armature Hobart Pt. No. P-77593-6	1
-6	NLA	• Spring Armature Hobart Pt. No. P-77593-7	1
-7	NLA	• Guide - Solenoid Hobart Pt. No. P-77593-8	1
-8		• Bracket	1
-9	NLA	• Solenoid Coil Assem. Hobart Pt. No. P-77593-10	1
-10		• Mach. Screw No. 8-32x5/16 Fil. Hd. Hobart Pt. No. P-77593-12	4
-11		• Body Valve Hobart Pt. No. P-77593-13	1
-12	NLA	• Gasket - Plug Hobart Pt. No. P-77593-14	1
-13	NLA	• Screen Hobart Pt. No. P-77593-15	1
-14		• Plug Hobart Pt. No. P-77593-16	1
-15	50112-091	Body & Mounting Plate Sub Assy. Hobart Pt. No. P-66779	1
-16	50113-091	Self Tapping Screw No. 8 x 1/2 Truss Phil HD Type A - Hobart Pt. No. SD-6-20	8
-17	50111-091	Gasket Air Gap Hobart Pt. No. P-66780	1
-18	50110-091	Upper Fill Hose Sub Assy (Air Gap) Hobart Pt. No. 72966	1
*Note: Order complete valve. Component parts are no longer available.			

Fig. & Index No.	Part No.	Description	Units Per Assy.
10-6	P-47671-091	Strainer, Steam - 3/8"	Ref.
-1	•	Plug	1
-2	•	Retainer	1
-3	P-50341-091	Screen, Monel Mesh (.005" openings)	1
-4	•	Body	1

*Order parts by name, specifying as part of 3/8" Steam Strainer, Pt. No. 47671-91.

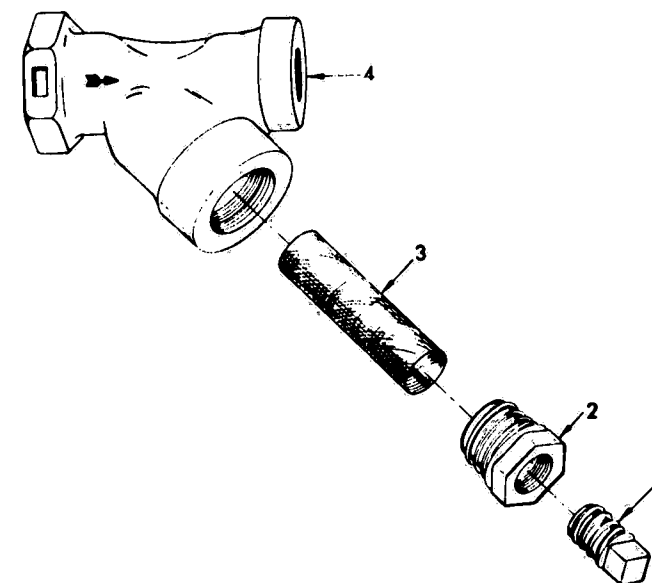


Figure 10-6. Strainer, Steam — Exploded View.

Fig. & Index No.	Part No.	Description	Units Per Assy.
10-7	••P-5654-051	Valve 3/8 Union Angle	Ref.
	••P-54364-NLA	Valve 3/8 Union Angle (Steam Supply)	1
-1	P-44330-091	Handwheel	As Req'd.
-2	P-44347-091	Decal - Water Supply	As Req'd.
-3	P-44349-091	Decal - Hot Water	As Req'd.
-4	P-44345-091	Decal - Steam Supply	1
-5	P-8605-091	Nut - Handwheel	1
-6	P-53915-091	Valve Stem & Bonnet Assem. (Hot Water & Cold Water Supply)	1
	P-54297-091	Valve Stem & Bonnet Assem. (Steam Supply)	1
-7	P-48431-091	Nut, Packing (part of item 6)	(1)
-8	P-48432-091	Gland, Packing (part of item 6)	(1)
-9	P-8784-091	Packing (part of item 6)	(1)
-10	P-5683-091	Nut, Bonnet	1
-11	P-53912-091	Valve Bonnet (part of item 6)	(1)
-12	P-53911-051	Stem, Valve (part of item 6) (Hot Water & Cold Water Supply)	(1)
	P-54296-091	Stem, Valve (part of item 6) (Steam Supply)	(1)
-13	P-25347-091	Holder Assembly, Disc	1
-14	P-11168-091	Holder, Disc (part of item 13)	(1)
-15	P-25345-091	Disc, Teflon (part of item 13)	(1)
-16	P-5680-091	Nut, Disc (part of item 13)	(1)
-17	P-5685-061	Seat, Valve	1
-18	P-5669-091	Body, Valve	1

••Order by AMSCO Part No. identifying as 3/8 Union Angle Valve

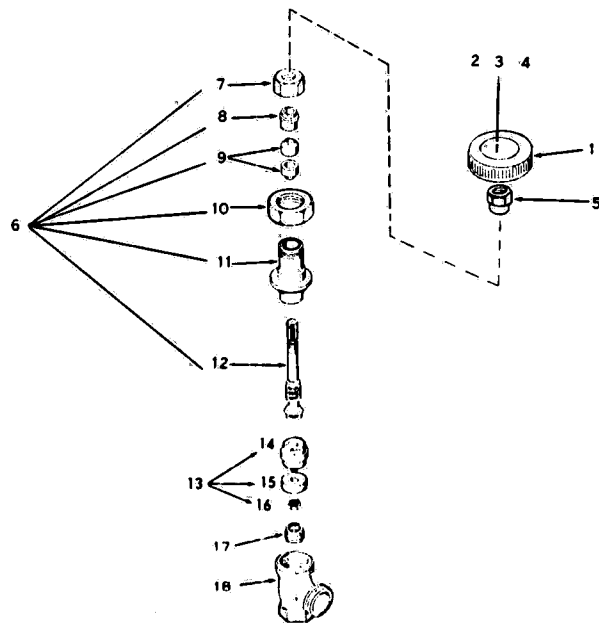


Figure 10-7. 3/8" Union Angle Valve, Exploded View.

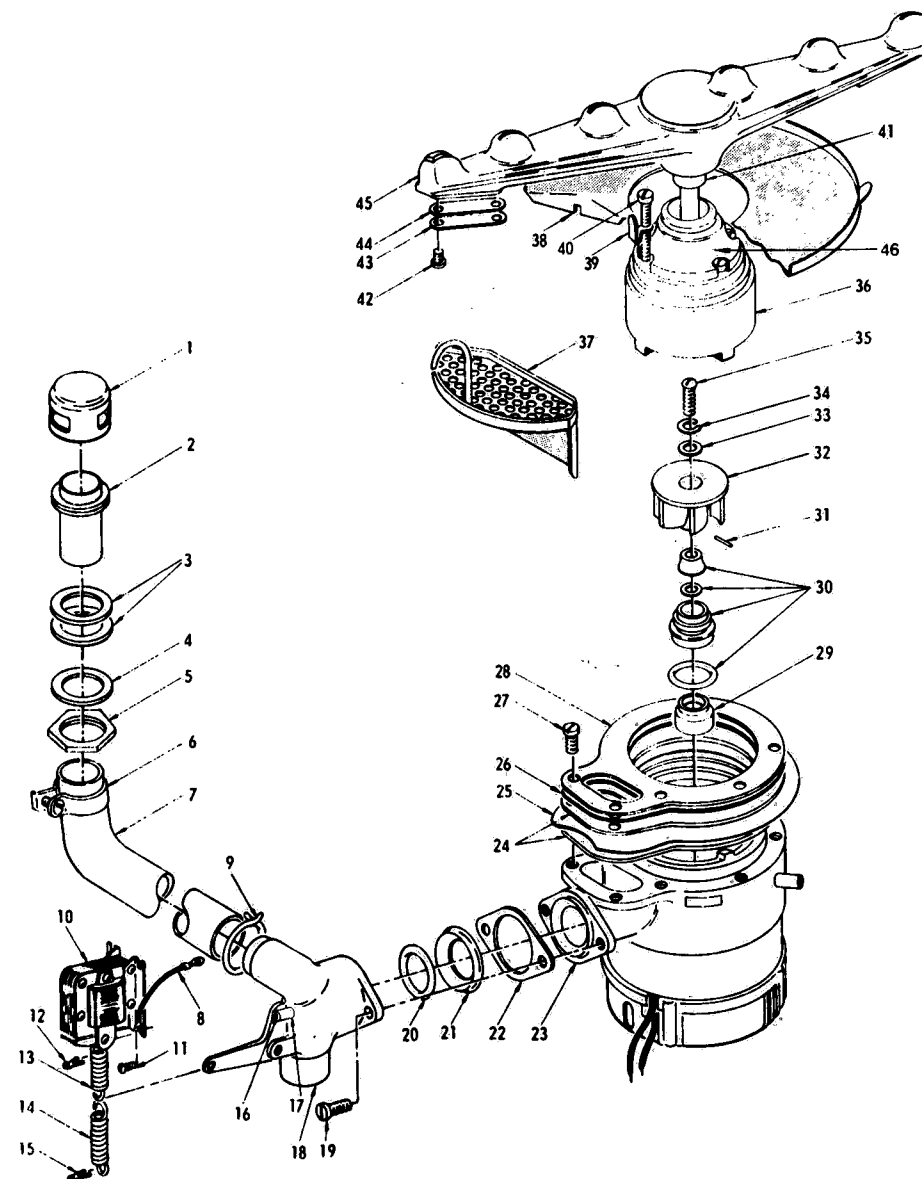


Figure 10-8. Wash and Drain Unit.

Fig. & Index No.	Part No.	Description	No. Req'd. Per Assy.
10-8			
-1	P-75153-091	Wash and Drain Unit	1
-2	P-75157-091	Cap Overflow Hobart Pt. No. P-64052	1
-3	P-50109-091	Overflow Assem. Hobart Pt. No. M-64047	2
-4	P-74708-091	Gasket - Overflow Hobart Pt. No. M-64051	1
-5	P-74709-091	Washer Hobart Pt. No. WS-14-37	1
-6	P-40345-051	Locknut - Overflow Hobart Pt. No. M-64050	1
-7	P-40346-091	Clamp - Drain Tube Hose	1
-8	P-759014-091	Tube - Overflow Drain	1
-9	P-751855-091	Ground Wire, Hobart M-64276	1
-10	P-35471-091	Clamp - Hose Hobart Pt. No. M-72262	1
-11	P-90169-045	Solenoid - Drain Valve 87714-3-1	1
		Self Tapping Screw No. 10x3/8 Rd. Hd. Type B - Hobart Pt. No. SD-7-44	4
-12	P-11852-091	Cotter Pin 1/8 x 5/8 Hobart Pt. No. PC-3-54	1
-13	P-35473-091	Spring (2 in. free length)	1
-14	P-36112-091	Spring - Return	1
-15	P-36880-091	Cotter Pin 5/64 x 1/2 Hobart Pt. No. PC-3-27	1
-16		Rivet .121 Dia. x 3/8 long Hobart Pt. No. RS-7-20	1
-17	P-762232-001	Roller - Drain Valve Operating Hobart Pt. No. M-63977	1
-18	P-35472-091	Drain Valve and Gasket Sub Assy. Hobart Pt. No. M-77818	1
		(Incls. items 16 - 17 - 20 - 21 & 22)	
-19	P-75328-061	Mach. Screw 1/4-20x5/8 Fil Hd.	2
-20	P-45773-091	"O" Ring (Drain Valve)	1
-21	P-75117-091	Seat - Drain Valve Hobart Pt. No. P-74692	1
-22	P-45034-091	Gasket - Drain Valve	1
-23	P-36124-091	Motor Seal & Impeller Unit Assy. Hobart Pt. No. M-68521-1	1
-24	P-40924-091	Gasket - Motor Support Hobart Pt. No. P-70992	2
-25	P-49174-091	Shield - Motor Drip Hobart Pt. No. P-70636	1
-26	P-40925-091	Gasket - (Between tank & plate)	1
-27	P-75328-061	Mach. Screw 1/4-20x5/8 Fil Hd. Hobart Pt. No. SC-24-29	8
-28	P-40926-091	Plate - Motor Support Flange Hobart Pt. No. P-63991	1
-29	P-35467-091	Flinger - Water	1
-30	P-35466-091	Bellows Seal Assem.	1
-31	P-45648-091	Pin Impeller Drive	1
-32	P-35465-091	Impeller Hobart Pt. No. P-70080	1
-33	P-16116-091	Washer	1
-34	P-16115-091	Lockwasher No. 10x.055x.040 Hobart Pt. No. WL-6-6	1
-35	P-46114-091	Special Screw No. 10-32x1/2	1
-36	P-35464-091	Housing - Pump	1
-37	P-47376-091	Strainer, Skirt & Handle Assy.	1
-38	P-74273-091	Strainer Pan Hobart Pt. No. R-72948	1
-39	P-751222-091	Locater, Strainer Pan Hobart Pt. No. M-72949	1
-40	P-77115-091	Mach. Screw No. 10-24x2-3/4 Fil Hd. Hobart Pt. No. SC-24-31	4
-41	P-35462-091	Bearing - Wash Arm	1
-42	P-74307-061	Mach. Screw No. 8-32x3/8 Rd. Hd. Hobart Pt. No. SC-21-14	4
-43	P-756378-091	Plate - Wash Arm Cover Hobart Pt. No. M-23192	2
-44	P-754721-091	Gasket - Cover Plate Hobart Pt. No. M-23193	2
-45	P-756009-091	Wash Arm Assy. (incl. items 41, 42, 43 & 44) Hobart Pt. No. P-73515	1
16	P-35463-091	Collar Assembly	1

Fig. & Index No.	Part No.	Description	No. Req'd. Per Assy.
10-9			
1	P-36119-091	Pump Assembly	1
2	P-753599-091	Switch Flood Control (Pressure Switch)	1
	N.L.A.	Bracket - Flood Control Switch Hobart No. M-89471	
-3	P-40345-051	Hose Clamp and Tube Assembly (50108) See 764316-699	2
-4	P-761974-001	• Hose Clamp Hobart No. M-66955	1
5	P-753696-091	• Tube Hobart No. M-66724-3 (Substitute 764316-669)	1
-6	P-36123-091	Spring, Hose Guide Hobart No. M-80708	1
7	P-36120-091	"O" Ring	1
8	P-36122-091	Trap Assembly	1
	P-752040-091	"O" Ring (Substitute 31587-091)	1
9	P-47375-091	Motor and Pump Assembly (Incl. items 9 thru 19 and Fig. 10-8, items 20 thru 29)	1
	P-763835-001	• Clip Trap Retaining	1
10		• Pump and Restrictor Assembly	1
11	P-3995-041	• Body Pump Shell	1
12		• Machine Screw No. 10-24 x 1 Slot. Hex Hd. Hobart No. SC-68-9	2
13	P-47383-091	• Impeller	1
14	P-50115-091	• Roll Pin 1/16 Dia. x 1/2 Lg.	1
15		• Washer	1
16		• Gasket, Pump Shell	1
17		• Drain Pump Shell top and seal sub assembly (includes item 17)	1
18		• Seal, Drain Pump	1
19		• Shaft, Impeller	1
20	P-45648-091	• Restrictor	1
		Pin, Impeller Drive	1

*These parts are no longer available. Must order complete Pump and Restrictor Kit, P-763835-001.

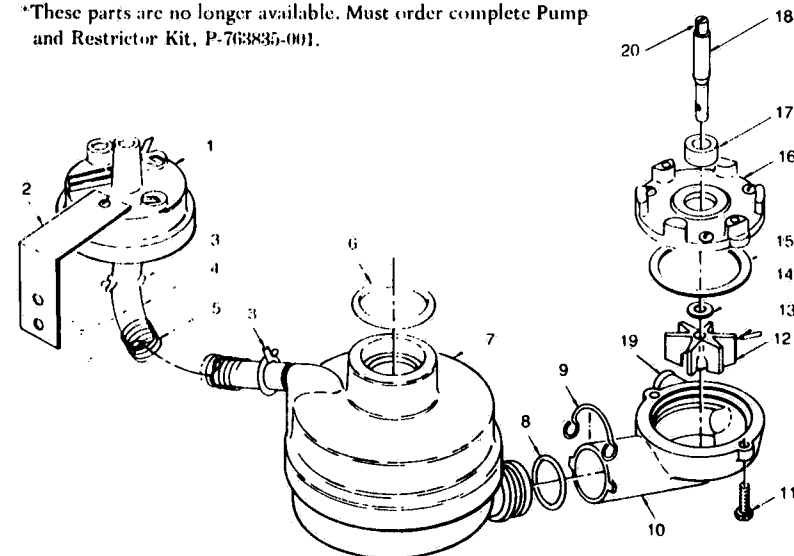


Figure 10-9. Pump Assembly.

Fig. & Index No.	Part No.	Description	No. Per Assy.
10-10		Electrical Control Components	
-1	P-48913-045	Support - Contactor	1
-2	P-20340-091	Fuse Holder	1
	P-29518-091	Fuse, 10 Amp	
-3	P-47330-091	Support, Fuse	1
-4		Mounting Plate, Drain Valve Hobart No. M-23451	1
-5	P-35471-091	Solenoid, Drain Valve	1
-6	P-47321-041	Control, Temperature	1
-7	P-40371-091	Relay Starter	
-8	P-763795-001	Kit, Safety Thermostat Control	1
Not Shown	P-752247-091	• Micro Switch (Substitute 751127-091)	1
Not Shown	P-455066-100	• Reducing Connector	1
-9	P-74094-091	Timer (Hobart) — R-80455A-1	1
-10	P-751122-091	Bracket - Timer - Hobart No. P-80542	1
-11	P-455053-001	Contactor	1
Not Shown	P-757537-091	Kit, Extended Cycle (Steam and Electric Units)	A/R
Not Shown	P-41270-091	• Timer Assembly Delay	1
Not Shown	P-41056-091	• • Timer (Cramer)	1
Not Shown	P-37606-091	• Relay (Extended Cycle)	1
Not Shown	P-41295-091	• Relay (Extended Cycle)	1
-12		Cover - Terminal Box Hobart No. M-63800	1
Not Shown -13		Box Terminal Block Hobart No. P-63796	1
Not Shown -14	P-22373-091	Terminal Block	1
-15	P-53859-091	Bracket - Temperature Control	1
-16	P-74078-091	Relay, Timer	1
Not Shown	P-764315-002	Replacement Plug Set (Male & Female)	A/R
Not Shown		Grounding Components For Solenoid Drain Valve	1
	P-453655-001	• Fuseholder	1
	P-89371-091	• Fuse, 1 Amp Slo-Blo	1
	P-454201-001	• Decal (Ground)	1
	P-92615-002	• Decal (1 Amp)	1

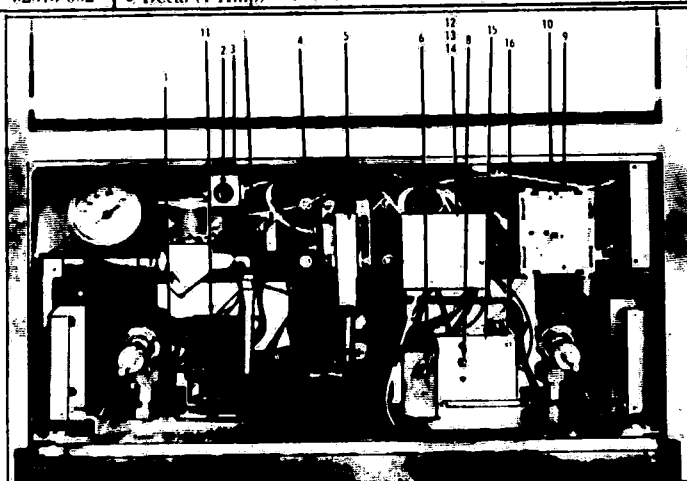


Figure 10-10. Electrical Control Components.



**AMSCO
SERVICE**

**UTENSIL WASHER - SANITIZER
MODELS WSE-61, WSS-61 & WS-58
P-750513-002**

7/84

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