

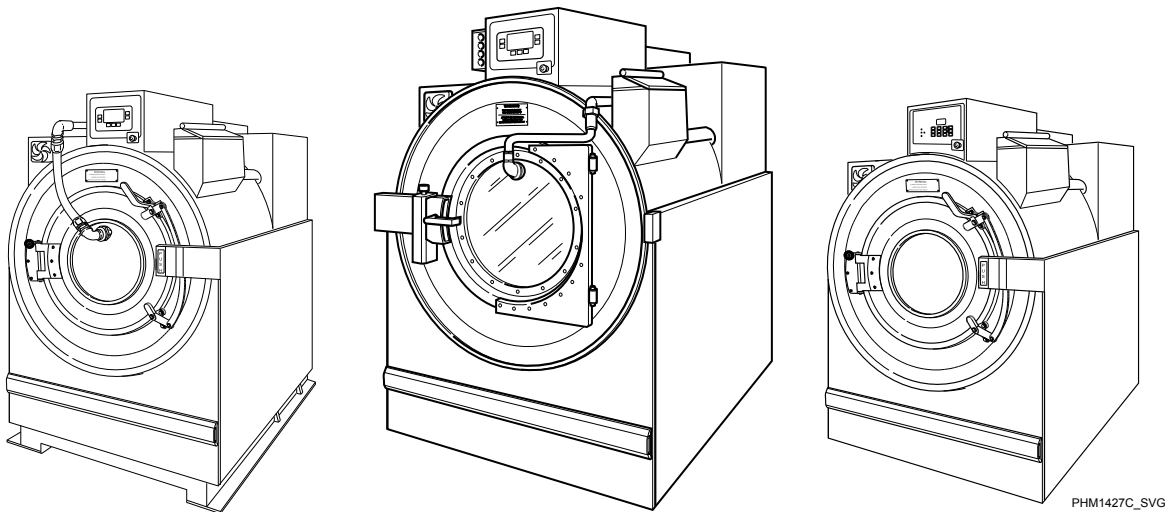
# Washer-Extractors

Pocket Hardmount

Refer to Page 8 for Model Identification



Installation/Operation/Maintenance



## Original Instructions

**Keep These Instructions for Future Reference.**

(If this machine changes ownership, this manual must accompany machine.)



[www.alliancelandry.com](http://www.alliancelandry.com)

F8423301ENR3  
August 2014



# Table of Contents


<b>Safety Information</b> .....	<b>5</b>
Explanation of Safety Messages.....	5
Important Safety Instructions.....	5
Safety Decals.....	6
Operator Safety.....	6
<b>Introduction</b> .....	<b>8</b>
Model Identification.....	8
Delivery Inspection.....	8
Serial Plate Location.....	8
Serial Plate Information - UniLinc Models.....	8
Replacement Parts .....	8
Customer Service.....	8
<b>Specifications and Dimensions</b> .....	<b>9</b>
Specifications and Dimensions.....	9
Machine Dimensions .....	13
Machine Foundation Requirements.....	17
Concrete Foundation Pad Installation.....	17
Floor Load Data.....	19
Mounting Bolt Installation Requirements [Approved Foundations Only].....	20
Machine Mounting and Grouting.....	21
Grout Placement.....	21
Mounting Bolt Hole Locations.....	23
Gap Setting for Vibration Switch.....	35
Drain Connection Requirements.....	37
Water Connection.....	39
Electrical Installation Requirements.....	41
Electrical Specifications.....	43
Steam Requirements (Steam Heat Option Only).....	53
Chemical Injection Supply System.....	54
Connecting External Liquid Supplies.....	55
Connecting External Liquid Supplies to the Machine with Optional Five Com- partment Supply Dispenser.....	56
External Supplies.....	58
Chemical Injection Using Internal 24VAC Control Transformer.....	59
Chemical Injection Using External AC Power Source.....	59
External Supply Signals.....	60
<b>Startup</b> .....	<b>62</b>
Basket Rotation.....	62


<b>Operation.....</b>	<b>63</b>
Operating Instructions for UniLine Control.....	63
Shakeout Routine.....	64
Basket Jog Feature [150 Pound Model Only].....	64
Operating Instructions for M30 Control.....	65
Shakeout Routine.....	67
Models Equipped with Both Steam and Electric Heating.....	67
<b>Maintenance.....</b>	<b>68</b>
Maintenance.....	68
Daily.....	68
Beginning of Day.....	68
End of Day.....	69
Weekly.....	69
Monthly.....	69
Quarterly.....	70
Care of Stainless Steel.....	70
<b>Disposal of Unit.....</b>	<b>71</b>
Disposal of Unit.....	71


# Safety Information

## Explanation of Safety Messages

Precautionary statements [“DANGER,” “WARNING,” and “CAUTION”], followed by specific instructions, are found in this manual and on machine decals. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.

	<b>DANGER</b>
Indicates an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.	

	<b>WARNING</b>
Indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.	


	<b>CAUTION</b>
Indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.	

Additional precautionary statements [“IMPORTANT” and “NOTE”] are followed by specific instructions.

**IMPORTANT:** The word “IMPORTANT” is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

**NOTE:** The word “NOTE” is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

## Important Safety Instructions

	<b>WARNING</b>
To reduce the risk of fire, electric shock, serious injury or death to persons when using your washer, follow these basic precautions:	
W023	

- Read all instructions before using the washer.


- Install the washer according the INSTALLATION instructions. Refer to the GROUNDING instructions in the INSTALLATION manual for the proper grounding of the washer. All connections for water, drain, electrical power and grounding must comply with local codes and be made by licensed personnel when required. It is recommended that the machine be installed by qualified technicians.
- Do not install or store the washer where it will be exposed to water and/or weather.
- To prevent fire and explosion, keep the area around machine free from flammable and combustible products. Do not add the following substances or textiles containing traces of the following substances to the wash water: gasoline, kerosene, waxes, cooking oils, vegetable oils, machine oils, dry-cleaning solvents, flammable chemicals, thinners, or other flammable or explosive substances. These substances give off vapors that could ignite, explode or cause the fabric to catch fire by itself.
- Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, before using a washing machine or combination washer-dryer, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. The gas is flammable, do not smoke or use an open flame during this time.
- To reduce the risk of an electric shock or fire, DO NOT use an extension cord or an adapter to connect the washer to the electrical power source.
- Do not allow children to play on or in the washer. Close supervision of children is necessary when the washer is used near children. This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance. This is a safety rule for all appliances.
- DO NOT reach and/or climb into the tub or onto the washer, ESPECIALLY if the wash drum is moving. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
- Never operate the washer with any guards, panels and/or parts removed or broken. DO NOT bypass any safety devices or tamper with the controls.
- Use washer only for its intended purpose, washing textiles. Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket or tub.
- Use only low-sudsing, no-foaming types of commercial detergent. Be aware that hazardous chemicals may be present. Wear hand and eye protection when adding detergents and chemicals. Always read and follow manufacturer’s instructions on packages of laundry and cleaning aids. Heed all

warnings or precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times [preferably in a locked cabinet].


- Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- Always follow the fabric care instructions supplied by the textile manufacturer.
- Loading door **MUST BE CLOSED** any time the washer is to fill, tumble or spin. **DO NOT** bypass the loading door switch by permitting the washer to operate with the loading door open. Do not attempt to open the door until the washer has drained and all moving parts have stopped.
- Be aware that hot water is used to flush the supply dispenser. Avoid opening the dispenser lid while the machine is running.
- Do not attach anything to the supply dispenser’s nozzles, if applicable. The air gap must be maintained.
- Do not operate the machine without the water reuse plug or water reuse system in place, if applicable.
- Be sure water connections have a shut-off valve and that fill hose connections are tight. **CLOSE** the shut-off valves at the end of each wash day.
- Keep washer in good condition. Bumping or dropping the washer can damage safety features. If this occurs, have washer checked by a qualified service person.
- **DANGER:** Before inspecting or servicing machine, power supply must be turned **OFF**. The servicer needs to wait for at least 5 minutes after turning the power **OFF** and needs to check for residual voltage with a voltage meter. The inverter capacitor or EMC filter remains charged with high voltage for some time after powering **OFF**. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
- Do not repair or replace any part of the washer, or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out. **ALWAYS** disconnect the washer from electrical, power and water supplies before attempting any service.
- Disconnect the power by turning off the circuit breaker or by unplugging the machine. Replace worn power cords.
- Before the washer is removed from service or discarded, remove the door to the washing compartment.
- Failure to install, maintain, and/or operate this washer according to the manufacturer’s instructions may result in conditions which can produce bodily injury and/or property damage.

**NOTE: The WARNINGS and IMPORTANT SAFETY INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when installing, maintaining, or operating the washer.**

Any problems or conditions not understood should be reported to the dealer, distributor, service agent or the manufacturer.

	<b>WARNING</b>
<p><b>Machine installations must comply with minimum specifications and requirements stated in the applicable Installation Manual, any applicable municipal building codes, water supply requirements, electrical wiring regulations and any other relevant statutory regulations. Due to varied requirements and applicable local codes, this machine must be installed, adjusted, and serviced by qualified maintenance personnel familiar with applicable local codes and the construction and operation of this type of machinery. They must also be familiar with the potential hazards involved. Failure to observe this warning may result in personal injury, property damage, and/or equipment damage, and will void the warranty.</b></p>	
W820	

**IMPORTANT: Ensure that the machine is installed on a level floor of sufficient strength. Ensure that the recommended clearances for inspection and maintenance are provided. Never allow the inspection and maintenance space to be blocked.**


	<b>WARNING</b>
<p><b>Never touch internal or external steam pipes, connections, or components. These surfaces can be extremely hot and will cause severe burns. The steam must be turned off and the pipe, connections, and components allowed to cool before the pipe can be touched.</b></p>	
SW014	

## Safety Decals

Safety decals appear at crucial locations on the machine. Failure to maintain legible safety decals could result in injury to the operator or service technician.

Use manufacturer-authorized spare parts to avoid safety hazards.

## Operator Safety

	<b>WARNING</b>
<p><b>NEVER insert hands or objects into basket until it has completely stopped. Doing so could result in serious injury.</b></p>	
SW012	


The following maintenance checks must be performed daily:

1. Verify that all warning labels are present and legible, replace as necessary.
2. Check door interlock before starting operation of the machine:
  - a. Attempt to start the machine with the door open. The machine should not start.
  - b. Close the door without locking it and start the machine. The machine should not start.
  - c. Attempt to open the door while a cycle is in progress. The door should not open.

If the door lock and interlock are not functioning properly, disconnect power and call a service technician.

3. Do not attempt to operate the machine if any of the following conditions are present:
  - a. The door does not remain securely locked during the entire cycle.
  - b. Excessively high water level is evident.
  - c. Machine is not connected to a properly grounded circuit.

Do not bypass any safety devices in the machine.








	<b>WARNING</b>
<p><b>Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.</b></p>	
W728	

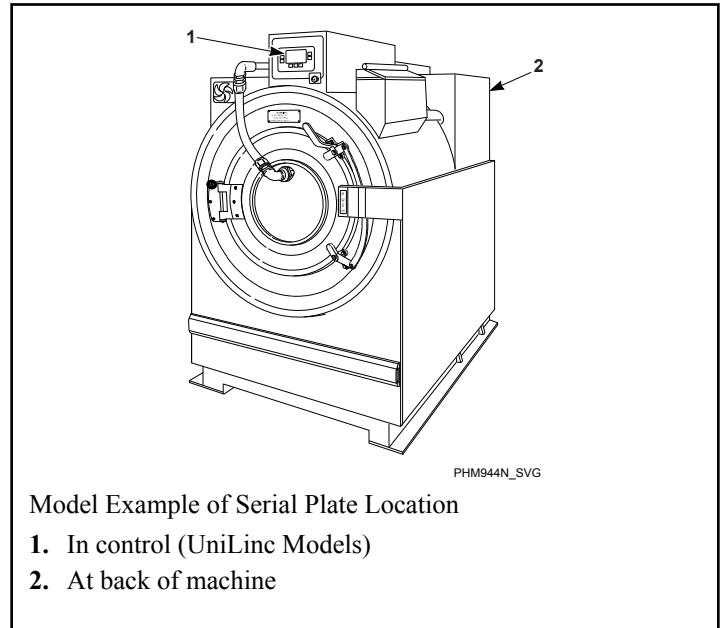
# Introduction

## Model Identification

Information in this manual is applicable to these models:

Models		
UWL035K12	UWU060K1L	UWL125K1M
UWN035K12	UWL060T3L	UWN080T3V
UWU035K12	UWL060K1M	UWU080T3V
UWL035K1L	UWN060K1M	UWL100K1M
UWN035K1L	UWU060K1M	UWN100K1M
UWU035K1L	UWN060T3L	UWU100K1M
UWL035K1M	UWU060T3L	UWL100T3V
UWN035K1M	UWL060T3M	UWN100T3V
UWU035K1M	UWN060T3M	UWU100T3V
UWL035T3V	UWU060T3M	UWN125K1M
UWN035T3V	UWL060T3V	UWU125K1M
UWU035T3V	UWN060T3V	UWL125T3V
UWL060K12	UWU060T3V	UWN125T3V
UWN060K12	UWL080K1M	UWU125T3V
UWU060K12	UWN080K1M	UWL150T3V
UWL060K1L	UWU080K1M	UWN150T3V
UWN060K1L	UWL080T3V	UWU150T3V

1. Press and hold , then , then  keypads at the same time.
2. Press the  keypad until Diagnostic is highlighted.
3. Press the  keypad.
4. Press the  keypad until machine ID is highlighted.
5. Press the  keypad.



**Figure 1**

## Replacement Parts

If literature or replacement parts are required, contact the source from which the machine was purchased or contact Alliance Laundry Systems at +1 (920) 748-3950 for the name and address of the nearest authorized parts distributor.

## Customer Service

For technical assistance, contact your local distributor or contact:

Alliance Laundry Systems

Shepard Street

P.O. Box 990

Ripon, WI 54971-0990

U.S.A.

[www.alliancelandry.com](http://www.alliancelandry.com)

Phone: +1 (920) 748-3121 Ripon, Wisconsin

Alliance International: +32 56 41 20 54 Wevelgem, Belgium

## Delivery Inspection

Upon delivery, visually inspect crate, protective cover, and unit for any visible shipping damage. If signs of possible damage are evident, have the carrier note the condition on the shipping papers before the shipping receipt is signed, or advise the carrier of the condition as soon as it is discovered.

## Serial Plate Location

The serial plate is located on the valve panel of the machine. Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance.

Refer to *Figure 1*.

### Serial Plate Information - UniLinc Models

On UniLinc models, serial plate information is also programmed into the control. To access machine ID through the control:



# Specifications and Dimensions

## Specifications and Dimensions

UW Models						
Specifications	35	60	80	100	125	150
<b>Overall Dimensions</b>						
Overall width, in. [mm]	33.4 [848]	36.6 [930]	41.5 [1054]	41.5 [1054]	48 [1219]	50.3 [1277]
Overall height, in. [mm]	55.5 [1410]	64.5 [1638]	68.5 [1740]	68.5 [1740]	72 [1829]	79 [2007]
Overall depth, in. [mm]	43.6 [1108]	45 [1143]	51.5 [1308]	54.5 [1384]	58 [1473]	63 [1600]
<b>Weight And Shipping Information</b>						
Net weight, lbs. [kg]	1030 [468] [V-speed] 750 [341] [2- speed]	1300 [590] [V-speed] 1136 [515] [2-speed]	1730 [785]	1770 [805]	2420 [1100]	2970 [1347]
Basket Weight, lbs. [kg]	150 [68] [V- speed] 74 [34] [2- speed]	200 [92]	330 [150]	360 [163]	550 [250]	572 [260]*
Domestic shipping weight, lbs. [kg]	1085 [493] [V-speed] 810 [367] [2- speed]	1340 [608] [V-speed] 1175 [533] [2-speed]	1795 [814]	1835 [832]	2525 [1148]	3022 [1371]
Domestic shipping volume, ft <sup>3</sup> [m <sup>3</sup> ]	66 [1.9]	84 [2.4]	119 [3.4]	119 [3.4]	166 [4.7]	172 [4.9]
Domestic shipping dimensions, WxDxH, in. [mm]	38 x 47 x 64 [970 x 1200 x 1630]	40 x 49 x 74.5 [1016 x 1245 x 1892]	44 x 60.5 x 77.25 [1118 x 1537 x 1962]	44 x 60.5 x 77.25 [1118 x 1537 x 1962]	61.5 x 60 x 77.75 [1560 x 1520 x 1980]	54.5 x 69 x79 [139 x 176 x 201]
Export shipping weight, lbs. [kg]	1150 [522] [V-speed] 910 [413] [2- speed]	1464 [664] [V-speed] 1300 [590] [2-speed]	1990 [903]	2030 [921]	2800 [1270]	3350 [1520]

<b>UW Models</b>						
<b>Specifications</b>	<b>35</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>125</b>	<b>150</b>
Export shipping volume, ft <sup>3</sup> [m <sup>3</sup> ]	78 [2.2]	96 [2.7]	134 [3.8]	134 [3.80]	184 [5.3]	220 [6.3]
Export shipping dimensions, WxDxH, in. [mm]	41 x 50 x 65.5 [1050 x 1280 x 1670]	43 x 52.125 x 74.5 [1092 x 1324 x 1892]	47 x 63.5 x 77.25 [1194 x 1613 x 1962]	47 x 63.5 x 77.25 [1194 x 1613 x 1962]	63.5 x 63 x 80 [1620 x 1610 x 2030]	61.5 x 71 x 87 [1562 x 1804 x 2210]
<b>Wash Cylinder Information</b>						
Cylinder diameter, in. [mm]	26.3 [667]	32 [813]	36 [914]	36 [914]	42 [1067]	43 [1093]
Cylinder depth, in. [mm]	18.4 [467]	20 [508]	21 [533]	27 [686]	24 [610]	27.8 [706]
Cylinder volume, ft <sup>3</sup> [l]	5.8 [163]	9.3 [264]	12.4 [350]	15.9 [450]	19.2 [544]	23.4 [662]
Perforation size, in. [mm]	0.2 [4.8]	0.2 [4.8]	0.2 [4.8]	0.2 [4.8]	0.2 [4.8]	0.2 [4.8]
Perforation open area, %	18	22	23	23	24	21.5
* Basket Only						
<b>Door Opening Information</b>						
Door opening size, in. [mm]	14.4 [365]	17.5 [445]	17.5 [445]	17.5 [445]	20 [508]	24.8 [629]
Height of door bottom above floor, in. [mm]	23.8 [603]	28.3 [718]	29 [737]	29 [737]	29 [737]	32 [813]
<b>Drive Train Information</b>						
Number of motors in drive train	1	1	1	1	1	1
Drive motor power, hp [kW]	2.0 [1.3] [2-speed] 5.0 [3.7] [V-speed]	3.0 [2.2] [2-speed] 5.0 [3.7] [V-speed]	7.5 [5.6]	7.5 [5.6]	10 [7.5]	10 [7.5]
<b>Cylinder Speeds / Centrifugal Force Data</b>						

UW Models						
Specifications	35	60	80	100	125	150
1/2 Wash/reverse, RPM [G] [V-speed only]	26 [.25]	26 [.31]	26 [.35]	26 [.35]	26 [.40]	23 [.32]
Wash/reverse, RPM [G] [UniLinc models] 44 [0.73] [M30 V-speed models] 50 [0.95] [2-speed]	42 [0.66] [UniLinc models] 44 [0.73] [M30 V-speed models] 50 [0.95] [2-speed]	40 [0.73] [V-speed] 44 [0.88] [2-speed]	40 [0.8]	40 [0.8]	37 [0.8]	36 [0.8]
Distribution, RPM [G] [V-speed only]	83 [2.57]	71 [2.3]	73 [2.57] [UniLinc models] 70 [2.5] [M30 models]	70 [2.5]	62 [2.29]	61 [2.29]
Very Low extract, RPM [G] [V-speed only]	401 [60]	364 [60]	343 [60]	343 [60]	317 [60]	314 [60]
Low extract, RPM [G] [V-speed only]	568 [120]	514 [120]	485 [120]	485 [120]	449 [120]	444 [120]
Medium extract, RPM [G] [V-speed only]	695 [180]	630 [180]	594 [180]	594 [180]	550 [180]	543 [180]
High extract, RPM [G] [V-speed] 504 [95] [2-speed]	803 [240] [V-speed] 504 [95] [2-speed]	727 [240] [V-speed] 465 [98] [2-speed]	686 [240]	686 [240]	565 [190]	627 [240]
Very High extract, RPM [G] [V-speed only]	898 [300]	813 [300]	766 [300]	766 [300]	579 [200]	701 [300]
<b>Balance Detection</b>						

UW Models							
Specifications		35	60	80	100	125	150
Vibration switch installed		STD [V-speed] N/A [2-speed]	STD [V-speed] N/A [2-speed]	STD	STD	STD	STD
<b>Direct Steam Heating [Optional]</b>							
Steam inlet connection size, in. [mm]		0.5 [13]	0.5 [13]	0.5 [13]	0.5 [13]	0.75 [19]	0.75 [19]
Number of steam inlets		1	1	1	1	1	1
Steam required to raise bath temperature 10°F, lbs. [10°C, kg]	LOW	2.1 [1.7]	3.3 [2.7]	4.6 [3.7]	5.7 [4.6]	6.7 [5.4]	8.3 [6.7]
	MED	2.3 [1.8]	3.7 [3.0]	5.2 [4.2]	6.5 [5.2]	7.8 [6.3]	9.5 [7.6]
	HIGH	2.7 [2.2]	4.1 [3.3]	6.1 [4.9]	7.6 [6.1]	9.1 [7.3]	11.1 [8.9]
<b>Electrical Heating [Optional]</b>							
Total electrical heating capacity, kW [N/A for 2-speed models]		15.6	27.4	41.2 [Q-Volt] 27.4 [N-Volt]	41.2 [Q-Volt] 27.4 [N-Volt]	41.0 [P-Volt] 54.9 [N-Volt]	N/A
Number of electrical heating elements		6	6	9	9	12	N/A
Electrical heating element size, kW		2.6	4.2	4.2	4.2	4.2	N/A
Time required to raise bath temperature, min per 10°F [5.5°C]	LOW	2.4	2.4	2.2	2.8	N/A	N/A
	MED	2.7	2.7	2.5	3.2	N/A	N/A
	HIGH	3.1	3.0	3.0	3.7	N/A	N/A
<b>Noise Emission</b>		N/A	N/A	N/A	N/A	N/A	N/A

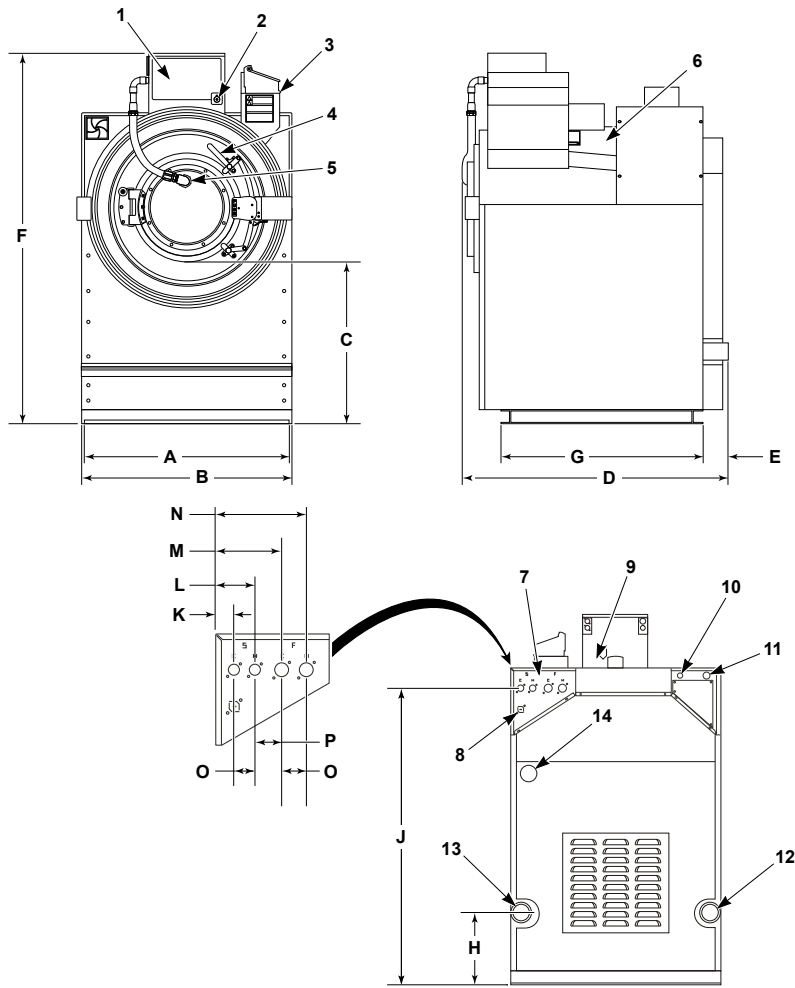
UW Models						
Specifications	35	60	80	100	125	150
N/A = Not Applicable						

**Table 1**

## Machine Dimensions

ment. Allow at least 6 inches [152 mm] between machines in multiple installations.

Allow a minimum of 24 inches [610 mm] at the rear and 6 inches [152 mm] at the sides for maintenance, inspection, and adjust-

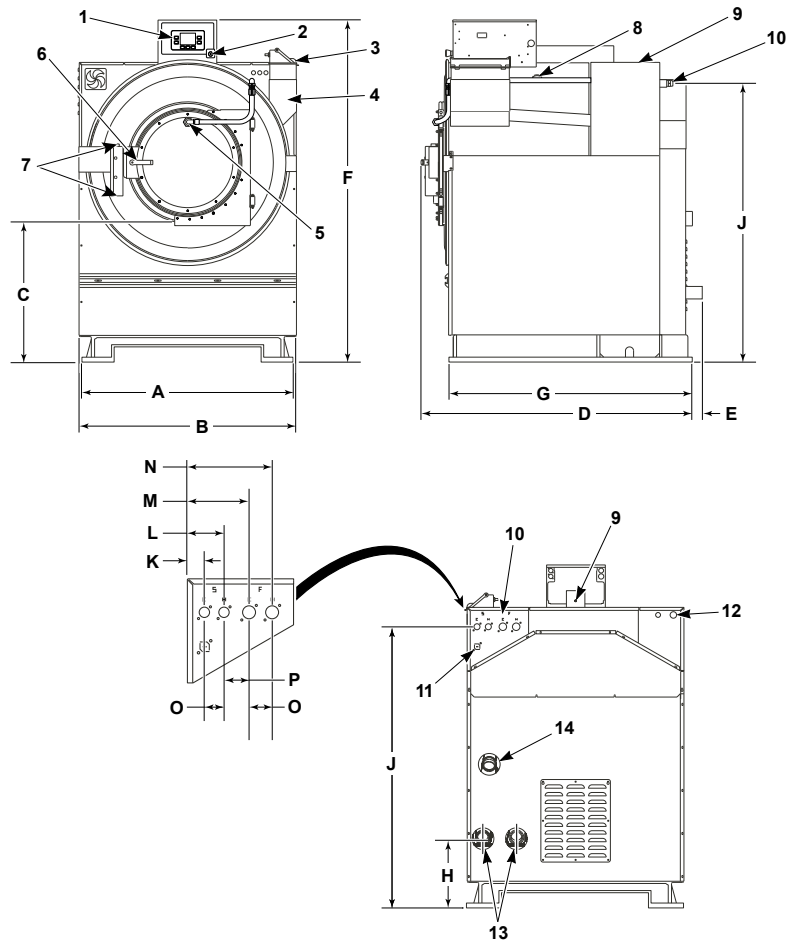


PHM858N\_SVG

35-125 Pound Models

- 1. Door Unlock Button
- 2. Emergency Stop Button
- 3. Supply Dispenser
- 4. Door Handle
- 5. Spray Rinse Nozzle [Optional]
- 6. Recirculation Inlet
- 7. Water Inlet Valves
- 8. Steam Connection [Optional]
- 9. Shell Vent
- 10. Power Input [Electric Heat Models]
- 11. Power Input [Non-Electric Heat Models]
- 12. Drain [80, 100 and 125 models only]
- 13. Drain
- 14. Overflow Vent

Figure 2



PHM837N\_SVG

150 Pound Model

- 1. Door Unlock Button
- 2. Emergency Stop Button
- 3. Supply Valve Box
- 4. Supply Dispenser
- 5. Spray Rinse Nozzle
- 6. Door Handle
- 7. Basket Jog Buttons
- 8. Recirculation Inlet
- 9. Shell Vent
- 10. Water Inlet Valves
- 11. Steam Connection [Optional]
- 12. Power Input
- 13. Drain
- 14. Overflow Vent

Figure 3

<b>Machine Dimensions [Refer <i>Figure 2</i> and <i>Figure 3</i> ]</b>						
	<b>35</b>	<b>60</b>	<b>80</b>	<b>100</b>	<b>125</b>	<b>150</b>
<b>A</b>	30.1 in. [765 mm]	35.6 in. [905 mm]	41.1 in. [1045 mm]	41.1 in. [1045 mm]	48 in. [1219 mm]	50.3 in. [1277 mm]
<b>B</b>	33.4 in. [848 mm]	36.6 in. [930 mm]	41.5 in. [1054 mm]	41.5 in. [1054 mm]	48 in. [1219 mm]	50.3 in. [1277 mm]
<b>C</b>	23.8 in. [603 mm]	28.3 in. [718 mm]	29 in. [737 mm]	29 in. [737 mm]	29 in. [737 mm]	32 in. [813 mm]
<b>D</b>	43.6 in. [1108 mm]	45 in. [1143 mm]	51.5 in. [1308 mm]	54.5 in. [1384 mm]	58 in. [1473 mm]	63 in. [1600 mm]
<b>E</b>	3.27 in. [83 mm]	3.8 in. [97 mm]	.36 in. [9 mm]	3.48 in. [88 mm]	2.53 in. [64 mm]	2.9 in. [73 mm]
<b>F</b>	55.5 in. [1410 mm]	64.5 in. [1638 mm]	68.5 in. [1740 mm]	68.5 in. [1740 mm]	72 in. [1829 mm]	79 in. [2007 mm]
<b>G</b>	36 in. [914 mm]	36 in. [914 mm]	43.8 in. [1111 mm]	43.8 in. [1111 mm]	48 in. [1219 mm]	56 in. [1422 mm]
<b>H</b>	8 in. [203 mm]	15.5 in. [394 mm]	16.9 in. [429 mm]	16.9 in. [429 mm]	11.4 in. [289 mm]	15.8 in. [400 mm]
<b>J</b>	47.1 in. [1195 mm]	53.7 in. [1364 mm]	56.4 in. [1433 mm]	56.4 in. [1433 mm]	57.9 in. [1471 mm]	64.4 in. [1635 mm]
<b>K</b>	2.3 in. [58 mm]	2.3 in. [58 mm]	2.3 in. [58 mm]	2.3 in. [58 mm]	2.3 in. [58 mm]	2.3 in. [58 mm]
<b>L</b>	4.9 in. [124 mm]	4.9 in. [124 mm]	4.9 in. [124 mm]	4.9 in. [124 mm]	4.9 in. [124 mm]	4.9 in. [124 mm]
<b>M</b>	7.8 in. [198 mm]	7.8 in. [198 mm]	7.8 in. [198 mm]	7.8 in. [198 mm]	7.8 in. [198 mm]	7.8 in. [198 mm]
<b>N</b>	10.4 in. [264 mm]	10.4 in. [264 mm]	10.4 in. [264 mm]	10.4 in. [264 mm]	10.4 in. [264 mm]	10.4 in. [264 mm]
<b>O</b>	2.6 in. [66 mm]	2.6 in. [66 mm]	2.6 in. [66 mm]	2.6 in. [66 mm]	2.6 in. [66 mm]	2.6 in. [66 mm]



Machine Dimensions [Refer <i>Figure 2</i> and <i>Figure 3</i> ]						
	35	60	80	100	125	150
<b>P</b>	2.9 in. [72 mm]	2.9 in. [72 mm]	2.9 in. [72 mm]	2.9 in. [72 mm]	2.9 in. [72 mm]	2.9 in. [72 mm]


Table 2

## Machine Foundation Requirements

A 6 inch [153 mm] [for 35 and 60 2-speed, L-speed and M-speed models] or a 12 inch [305 mm] [for all other models] thickness of 4,000 psi reinforced concrete foundation is absolutely necessary because of the high extract speed and the G-forces exerted.

When designing floors or foundations, refer to *Table 4* for Floor Load Data for all model sizes. If the foundation requirements have been met, proceed to Mounting Bolt Installation Requirements section.

**NOTE: Do not mount on wooden floors, tile floors, above ground level, or over basements or crawl spaces because of the high extract speed and the G-forces exerted.**

	<b>WARNING</b>
<p><b>To reduce the risk of fire, serious injury, property damage and/or death, install the machine on a level (within 3/8 inch), uncovered concrete floor of sufficient strength at grade.</b></p>	
W787	

For new foundations a mounting bolt template is available at extra cost. For new foundations a bolt-locator fixture or rebar frame is also available and a preferred option. This rigid welded assembly made of reinforcing rod and mounting bolts is designed to be embedded in concrete. Refer to *Figure 5*.

The machine must be anchored to a smooth level surface so that the entire base of the machine is supported and rests on the mounting surface.

**IMPORTANT: Do not permanently support the machine on only four points with spacers. Grouting is required and spacers must be removed.**

**IMPORTANT: The above instructions and recommendations are conservative specifications for a typical installation based on consultations with a structural engineer. Alliance Laundry Systems stands behind all installations meeting these specifications. For alternate installation specifications based on your soil type, location, building structure, unique floor geometry, machine types, and utilities, consult a structural engineer in your local area.**

## Concrete Foundation Pad Installation

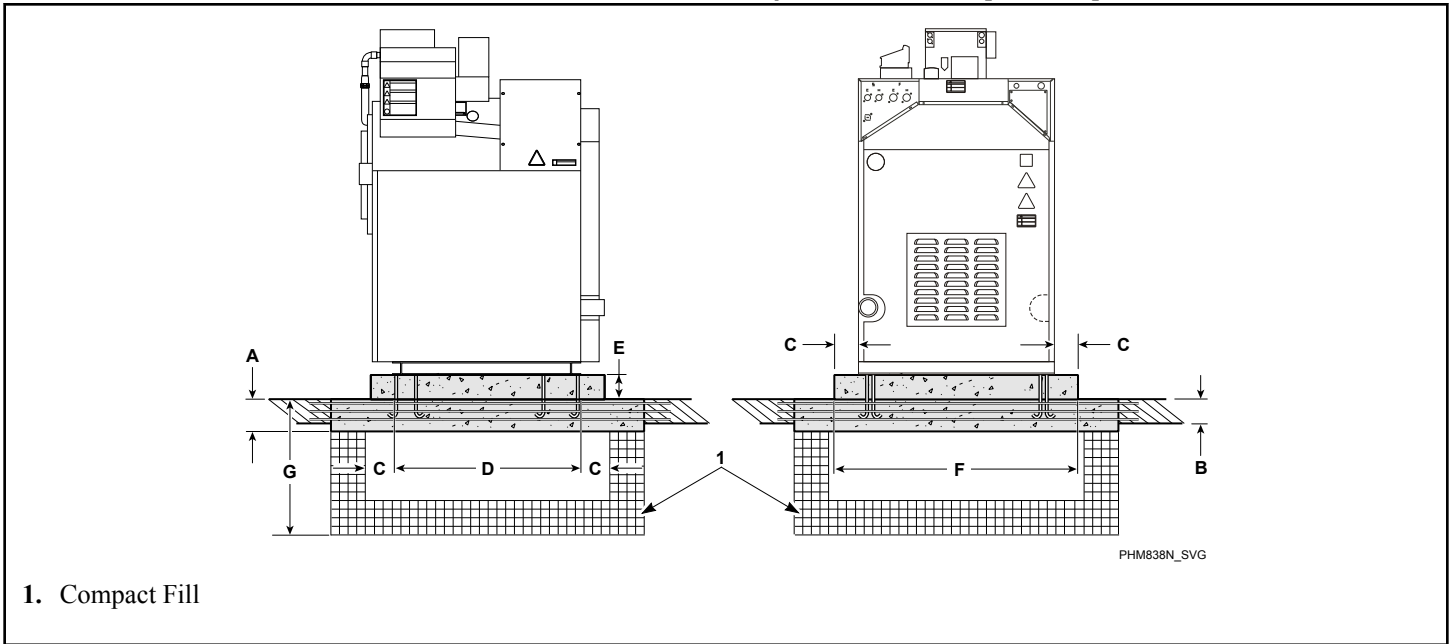
A concrete foundation and pad may be constructed to elevate the machines. This concrete base [recommended not to exceed 8 inches [203 mm] above existing floor] must be placed, reinforced with rebar and tied to the existing 6 inch [153 mm] [for 35 and 60 2-speed, L-speed and M-speed models] or 12 inch [305 mm] [for all other models] minimum floor. Refer to *Figure 4* and *Table 4*. If the existing floor does not meet these requirements or an elevated pad is desired, the following steps **MUST** be performed.

**IMPORTANT: Do NOT install a pad on top of the existing floor. The foundation and pad must be constructed and tied together as one piece.**

1. Cut a hole larger on all sides than the machine base through the existing floor. The foundation should extend a minimum of 9 inches [229 mm] for 35 models or 12 inches [305 mm] for 60-150 models out from the machine on all sides.
2. Excavate to a depth of 18 inches [457 mm] from the top of the existing floor.
3. If installing a foundation and elevated pad, prepare a form for the above-existing floor portion of the foundation. Verify that the top of the foundation is level. The height of the foundation pad must not exceed 8 inches [203 mm] above the existing floor.
4. Backfill and compact fill with gravel or smaller stone, making sure to allow for correct concrete thickness.
5. Add reinforcing bar to tie existing floor with new floor.
6. Completely fill with a minimum of 6 inch [153 mm] [for 35 and 60 2-speed, L-speed and M-speed models] or 12 inches [305 mm] [for all other models] with 4,000 psi concrete up to the existing foundation level. Refer to *Figure 4*. The concrete must be poured so that the entire foundation and optional elevated pad cures as one piece.

- 7. Allow concrete to cure.
- 8. Proceed to *Machine Mounting and Grouting* section.

**NOTE: If the washer-extractor installation will include the Premium Wet Clean Module, the elevated base must be designed to accommodate the additional depth of 24 inches [610 mm].**



1. Compact Fill

**Figure 4**

	35	60	80	100	125	150
<b>A</b>	2-Speed, L-Speed and M-Speed 6 in. [152 mm]		12 in. [305 mm]	12 in. [305 mm]	12 in. [305 mm]	12 in. [305 mm]
	V-Speed 12 in. [305 mm]					
<b>B [minimum]</b>	6 in. [152 mm]	6 in. [152 mm]	6 in. [152 mm]	6 in. [152 mm]	6 in. [152 mm]	6 in. [152 mm]
<b>C</b>	9 in. [229 mm]	12 in. [305 mm]	12 in. [305 mm]	12 in. [305 mm]	12 in. [305 mm]	12 in. [305 mm]
<b>D</b>	36 in. [914 mm]	36 in. [914 mm]	43.75 in. [1111 mm]	43.75 in. [1111 mm]	48 in. [1219 mm]	56 in. [1422 mm]
<b>E [maximum]</b>	0-8 in. [0-203 mm]	0-8 in. [0-203 mm]	0-8 in. [0-203 mm]	0-8 in. [0-203 mm]	0-8 in. [0-203 mm]	0-8 in. [0-203 mm]
<b>F</b>	48.125 in. [1222 mm]	59.625 in. [1514 mm]	65.125 in. [1654 mm]	65.125 in. [1654 mm]	72 in. [1829 mm]	74.25 in. [1886 mm]

	35	60	80	100	125	150
<b>G</b>	18 in. [457 mm]	18 in. [457 mm]	18 in. [457 mm]	18 in. [457 mm]	18 in. [457 mm]	18 in. [457 mm]

**Table 3****Floor Load Data**

Floor Load Data							
Specifica-tions	Speed	35	60	80	100	125	150
Static floor load, lbs. [kN]	V-speed	1,272 [5.66]	1,442 [6.42]	2,292 [10.2]	2,490 [11.1]	3,283 [14.6]	3,936 [17.5]
	2-speed	1,272 [5.66]	1,442 [6.42]	N/A	N/A	N/A	N/A
	L-speed	1,272 [5.7]	1,442 [6.4]	N/A	N/A	N/A	N/A
	M-speed	1,272 [5.7]	1,442 [6.4]	2,292 [10.2]	2,490 [11.1]	3,283 [14.6]	N/A
Static pres-sure, lbs.-ft2 [kN-m2]	V-speed	169 [8.08]	162 [7.7]	184 [8.79]	199 [9.6]	205 [9.8]	202 [9.7]
	2-speed	169 [8.08]	162 [7.7]	N/A	N/A	N/A	N/A
	L-speed	169 [8]	162 [7.7]	N/A	N/A	N/A	N/A
	M-speed	169 [8]	162 [7.7]	184 [8.8]	199 [9.5]	205 [9.8]	N/A
Dynamic floor load, lbs. [kN]	V-speed	1,576 [7]	2,704 [12]	3,603 [16.36]	4,504 [16.41]	3,746 [22.29]	4,501 [19.4]
	2-speed	473 [2.1]	950 [4.23]	N/A	N/A	N/A	N/A
	L-speed	525 [2.3]	900 [4]	N/A	N/A	N/A	N/A
	M-speed	944 [4.2]	1,624 [7.2]	2,167 [9.6]	2,708 [12]	3,380 [15]	N/A
Dynamic pressure, lbs.-ft2 [kN-m2]	V-speed	380 [18.2]	466 [22.34]	472 [22.63]	559 [26.8]	439 [21]	433 [20.8]
	2-speed	233 [11.2]	269 [6.3]	N/A	N/A	N/A	N/A
	L-speed	240 [11.5]	263 [12.59]	N/A	N/A	N/A	N/A
	M-speed	295 [14.1]	344 [16.5]	357 [17]	416	416	N/A

Floor Load Data							
Specifications	Speed	35	60	80	100	125	150
Dynamic load frequency, Hz	V-speed	15	13.6	12.8	12.8	9.7	11.7
	2-speed	8.2	8.0	N/A	N/A	N/A	N/A
	L-speed	8.63	7.82	N/A	N/A	N/A	N/A
	M-speed	11.58	10.5	9.9	9.9	9.2	N/A
<sup>1</sup> Maximum vertical load,	V-speed	2,848 [12.7]	4,146 [18.4]	5,895 [26.2]	6,994 [31.1]	7,028 [31.3]	8,437 [37.52]
	2-speed	1,745 [7.8]	2,392 [10.6]	N/A	N/A	N/A	N/A
	L-speed	1,797 [8]	2,342 [10.4]	N/A	N/A	N/A	N/A
	M-speed	2,216 [9.9]	3,066 [13.6]	4,459 [19.8]	5,198 [23]	6,663 [29.6]	N/A
Base moment, lbs.-ft [kN-m]	V-speed	4,076 [5.54]	8,492 [11.5]	11,688 [15.9]	14,611 [19.9]	12,488 [17]	17,231 [23.4]
	2-speed	1,224 [1.7]	2,985 [4]	N/A	N/A	N/A	N/A
	L-speed	1,356 [1.8]	2,826 [3.8]	N/A	N/A	N/A	N/A
	M-speed	2,442 [3.3]	5,099 [6.9]	7,029 [9.6]	8,786 [11.9]	11,268 [15.3]	N/A
N/A = Not Applicable							
<sup>1</sup> Acting in the downward direction against the floor.							

Table 4

## Mounting Bolt Installation Requirements [Approved Foundations Only]

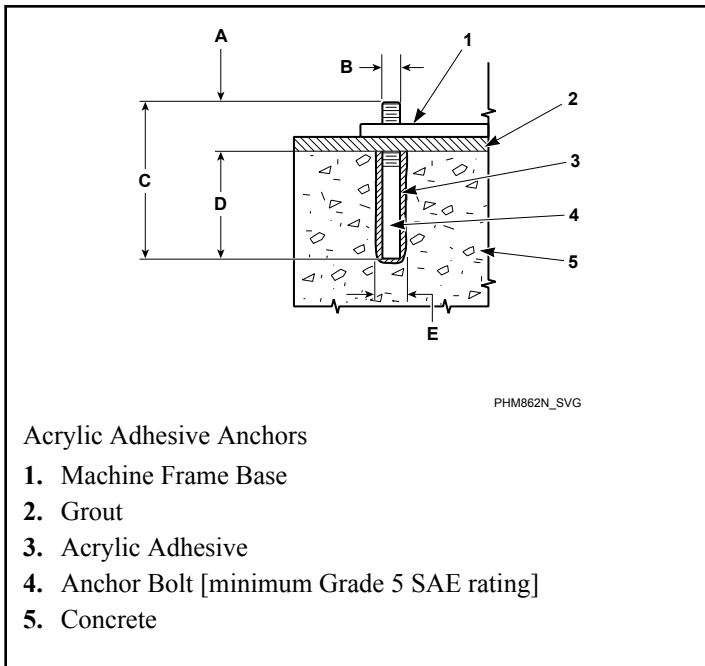
**NOTE: If installing epoxy bolts into an elevated concrete foundation pad, the concrete foundation pad should extend a minimum of 9 inches [229 mm] (for 35 pound machines or 12 inches [305 mm] for 60-150 pound machines out from the machine base on all sides. Refer to *Figure 4* .)**

A bolt kit consisting of eight bolts is available as an option. 35 machines use 5/8-11 x 8 inch bolts. 60-125 machines use 3/4-10 x 8 inch bolts. 150 machines use 3/4-10 x 10 inch grade 5 bolts. The bolts should be embedded in a 4,000 psi [241 bar] minimum reinforced concrete floor that is a minimum of 6 inches [152 mm] [for 35 and 60 2-speed, L-speed, and M-speed models] or a 12 inches [305 mm] [for all other models] thick. Use the mounting bolt layouts in *Mounting Bolt Hole Locations* section.

On 35–125 machines, the threaded end of the bolts should extend 2 inches [51 mm] above the mounting surface. On 150 machines,

the threaded end of the bolts should extend 3 inches [76 mm] above the mounting surface.

Refer to *Figure 5* for a typical installation of individual mounting bolts.



**Figure 5**

Acrylic Adhesive Anchors	
A	2 in. [64 mm] [minimum thread extension]
B	3/4 in. [19 mm]
C	6 in. [165 mm]
D	4 in. [102 mm] [minimum embedment]
E	Drill hole size per manufacturer requirements

**Table 5**

### Machine Mounting and Grouting

After the concrete has cured, proceed as follows:

### Grout Placement

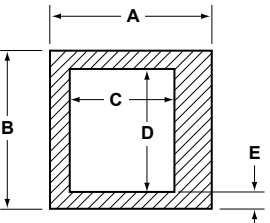
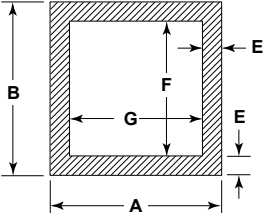
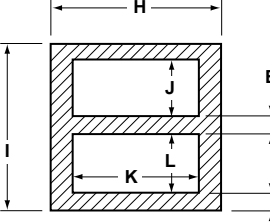
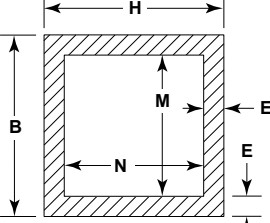
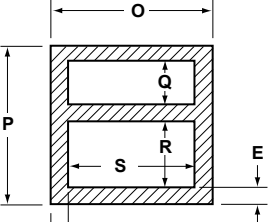
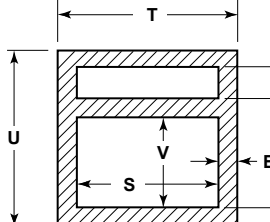
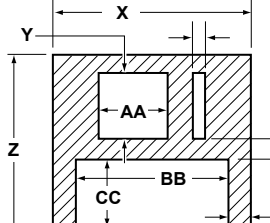
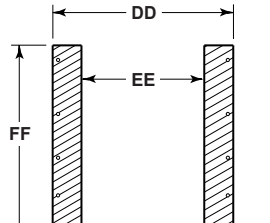

**IMPORTANT: Grouting is required.**

1. Place the machine adjacent to the foundation. Do not attempt to move the machine by pushing on the sides. Always insert a pry bar or other device under the bottom frame of the machine to move it into place.
2. Remove the wood skid by unscrewing the carriage bolts holding the skid to the bottom frame of the machine.
3. Place the machine carefully over the anchor bolts. Never attempt to lift the machine by the door handle or by pushing on the cover panels.
4. Raise and level the machine 0.5 inch [12.7 mm] off the floor on four points, using spacers such as nut fasteners.

	<b>WARNING</b>
<b>Crush hazard. To avoid personal injury and/or property damage, do not tip the machine more than 25 degrees in any direction.</b>	
<b>W793</b>	

5. Fill the space between the machine base and the floor with a good quality **non-shrinking machinery precision grout** to ensure a stable installation. Grout completely under all frame members [remove front panel and back panel to gain access to all frame members]. Refer to *Table 6*. Force grout under machine base until all voids are filled.
6. Before grout sets completely, make a drain opening in the rear of the machine grouting with a stiff piece of wire; this opening should be approximately 0.5 inch [12.7 mm] wide to allow any surface water build-up under the base of the machine to drain away. Do not omit this step.
7. Position the mounting bolt lockwashers and locknuts on the anchor bolts and finger-tighten locknuts to machine base.
8. Allow machine grout to set, but not cure.
9. **Remove the spacers carefully, allowing the machine to settle into the wet grout.**
10. After the grout is completely cured, tighten the locknuts by even increments – one after the other – until all are tightened evenly and the machine is fastened securely to the floor.
11. Torque 5/8 inch bolts [35 model] to 90 ft.-lbs. and torque 3/4 inch bolts [60-150 models] to 160 ft.-lbs.

**NOTE: Check and retighten the locknuts after five to ten days of operation and every month thereafter. Refer to *Maintenance* section.**

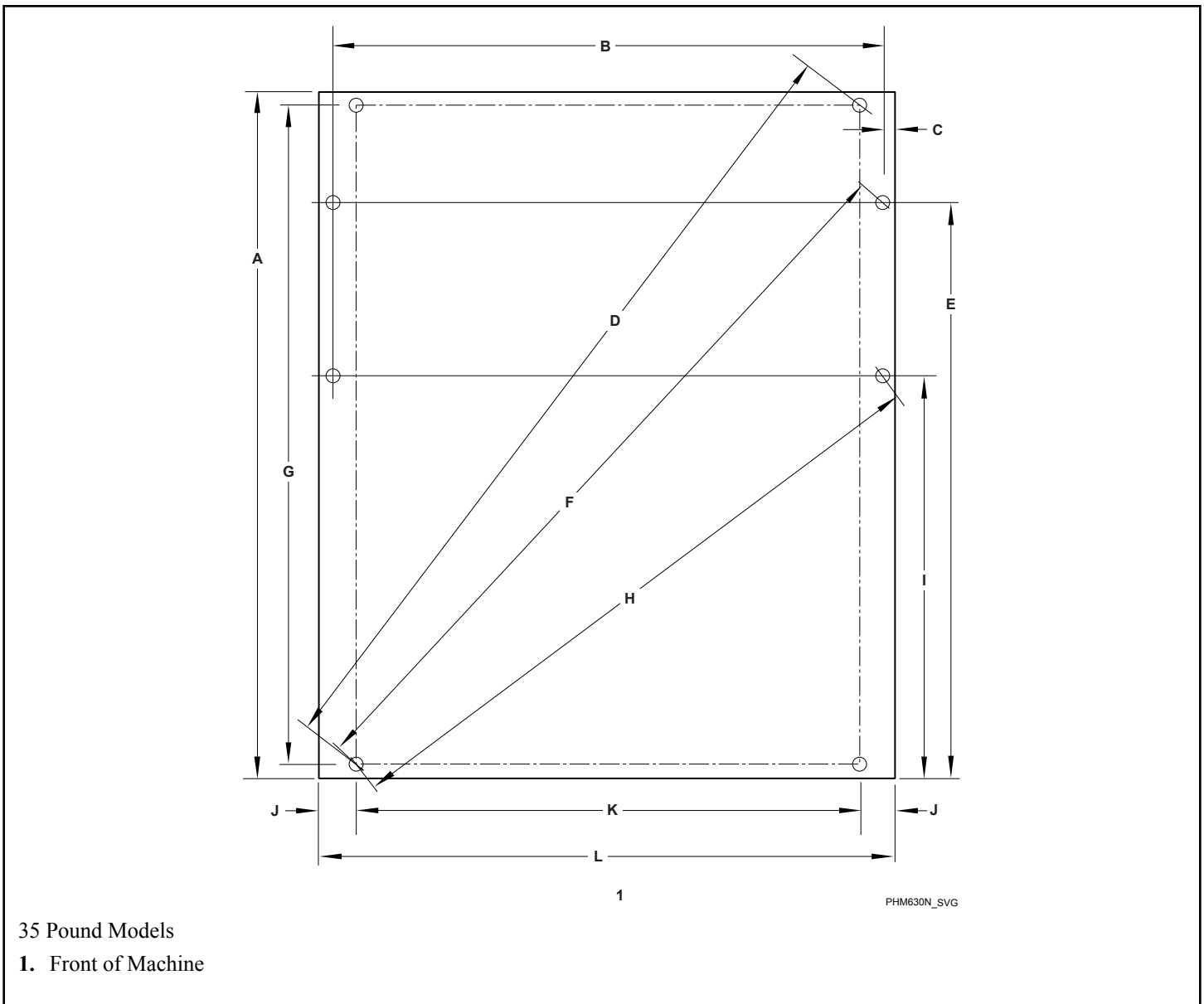
 <p style="text-align: center;">PHM574N_SVG</p> <p><b>35 Pound V-Speed Models</b></p>	 <p style="text-align: center;">PHM547N_SVG</p> <p><b>35 Pound 2-Speed Models</b></p>
 <p style="text-align: center;">PHM575N_SVG</p> <p><b>60 Pound V-Speed Models</b></p>	 <p style="text-align: center;">PHM548N_SVG</p> <p><b>60 Pound 2-Speed Models</b></p>
 <p style="text-align: center;">PHM576N_SVG</p> <p><b>80 Pound Models</b></p>	 <p style="text-align: center;">PHM192N_SVG</p> <p><b>100 Pound Models</b></p>
 <p style="text-align: center;">PHM180N_SVG</p> <p><b>125 Pound Models</b></p>	 <p style="text-align: center;">PHM605N_SVG</p> <p><b>150 Pound Models</b></p>
<p> = GROUT</p> <p style="text-align: center;">PHM943N_SVG</p>	

<b>A</b>	30.13 in. [765 mm]	<b>R</b>	17.5 in. [445 mm]
<b>B</b>	36 in. [914 mm]	<b>S</b>	33 in. [838 mm]
<b>C</b>	17.88 in. [454 mm]	<b>T</b>	41.13 in. [1044 mm]
<b>D</b>	20 in. [508 mm]	<b>U</b>	43.81 in. [1113 mm]
<b>E</b>	4.06 in. [103 mm] typical	<b>V</b>	20.69 in. [526 mm]
<b>F</b>	27.88 in. [708 mm]	<b>W</b>	10.88 in. [276 mm]
<b>G</b>	22 in. [559 mm]	<b>X</b>	48 in. [1219 mm]
<b>H</b>	35.63 in. [905 mm]	<b>Y</b>	3.25 in. [83 mm]
<b>I</b>	35.94 in. [913 mm]	<b>Z</b>	48 in. [1219 mm]
<b>J</b>	11.94 in. [303 mm]	<b>AA</b>	24.31 in. [617 mm]
<b>K</b>	27.5 in. [699 mm]	<b>BB</b>	39.88 in. [1013 mm]
<b>L</b>	12 in. [305 mm]	<b>CC</b>	22 in. [559 mm]
<b>M</b>	27.88 in. [708 mm]	<b>DD</b>	50 in. [1270 mm]
<b>N</b>	27.5 in. [699 mm]	<b>EE</b>	34 in. [863.6 mm]
<b>O</b>	41.13 in. [1044 mm]	<b>FF</b>	56 in. [1422 mm]
<b>P</b>	43.75 in. [1111 mm]	<b>GG</b>	8 in. [203.2 mm] typical
<b>Q</b>	14 in. [356 mm]		

Table 6

## Mounting Bolt Hole Locations

**IMPORTANT: All drawings are not to scale.**



**Figure 6**

<b>Mounting Bolt Hole Locations – 35 Pound Models</b>	
<b>A</b>	36 in. [914 mm]
<b>B</b>	28.63 in. [727 mm]
<b>C</b>	0.75 in. [19 mm]
<b>D</b>	43.28 in. [1089 mm]
<b>E</b>	30.19 in. [767 mm]



<b>Mounting Bolt Hole Locations – 35 Pound Models</b>	
<b>F</b>	40.19 in. [1022 mm]
<b>G</b>	34.5 in. [876 mm]
<b>H</b>	34.16 in. [868 mm]
<b>I</b>	21.19 in. [538 mm]
<b>J</b>	2 in. [51 mm]
<b>K</b>	26.13 in. [664 mm]
<b>L</b>	30.13 in. [765 mm]

**Table 7**

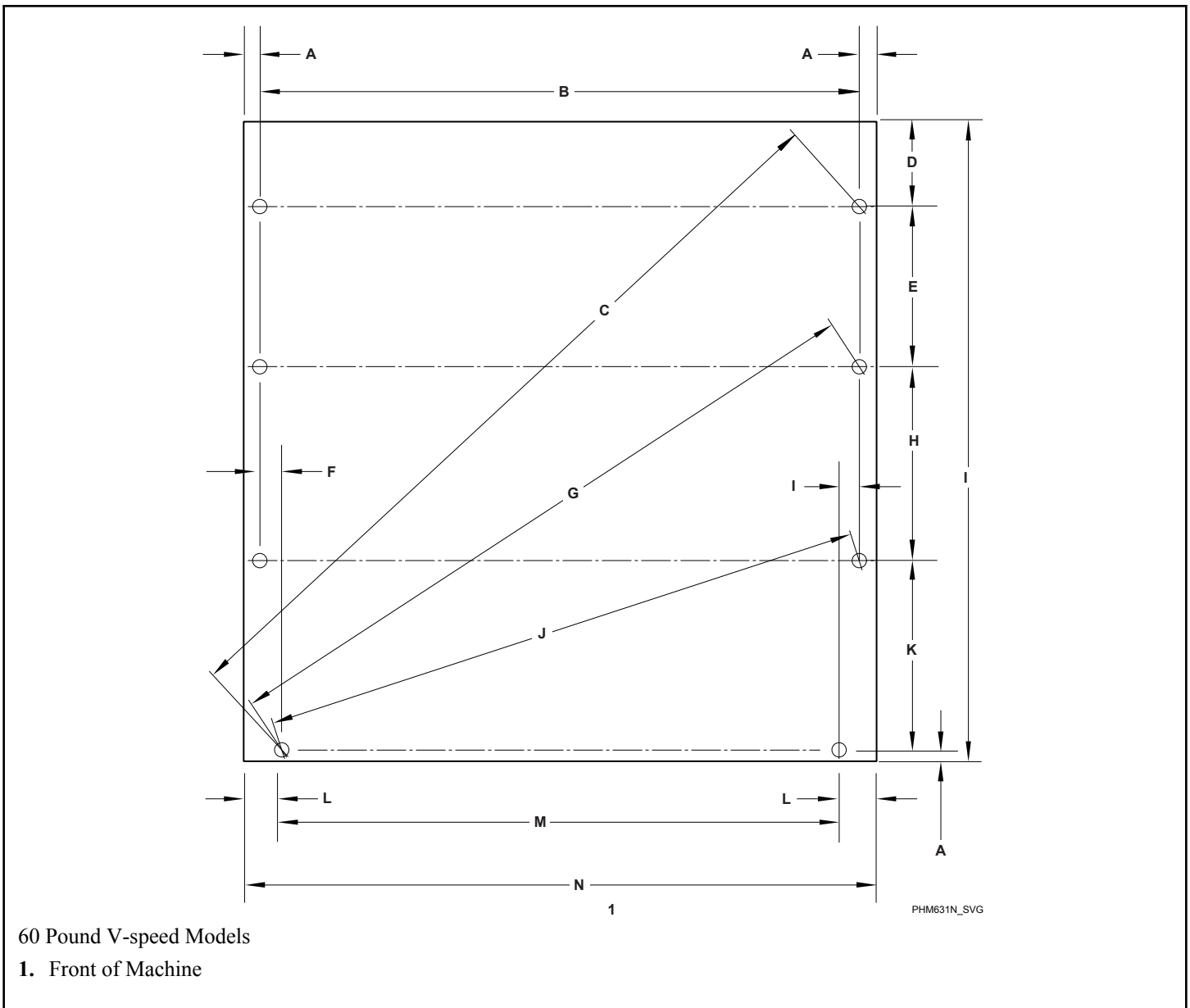


Figure 7

Mounting Bolt Hole Locations – 60 Pound Models [V-speed]	
A	0.75 in. [19 mm]
B	34.13 in. [867 mm]
C	44.81 in. [1138 mm]
D	4.81 in. [122 mm]
E	9 in. [229 mm]

<b>Mounting Bolt Hole Locations – 60 Pound Models [V-speed]</b>	
<b>F</b>	1.25 in. [32 mm]
<b>G</b>	39.25 in. [997 mm]
<b>H</b>	10.75 in. [273 mm]
<b>I</b>	36 in. [914 mm]
<b>J</b>	34.56 in. [878 mm]
<b>K</b>	10.69 in. [271 mm]
<b>L</b>	2 in. [51 mm]
<b>M</b>	31.63 in. [803 mm]
<b>N</b>	35.63 in. [905 mm]

**Table 8**

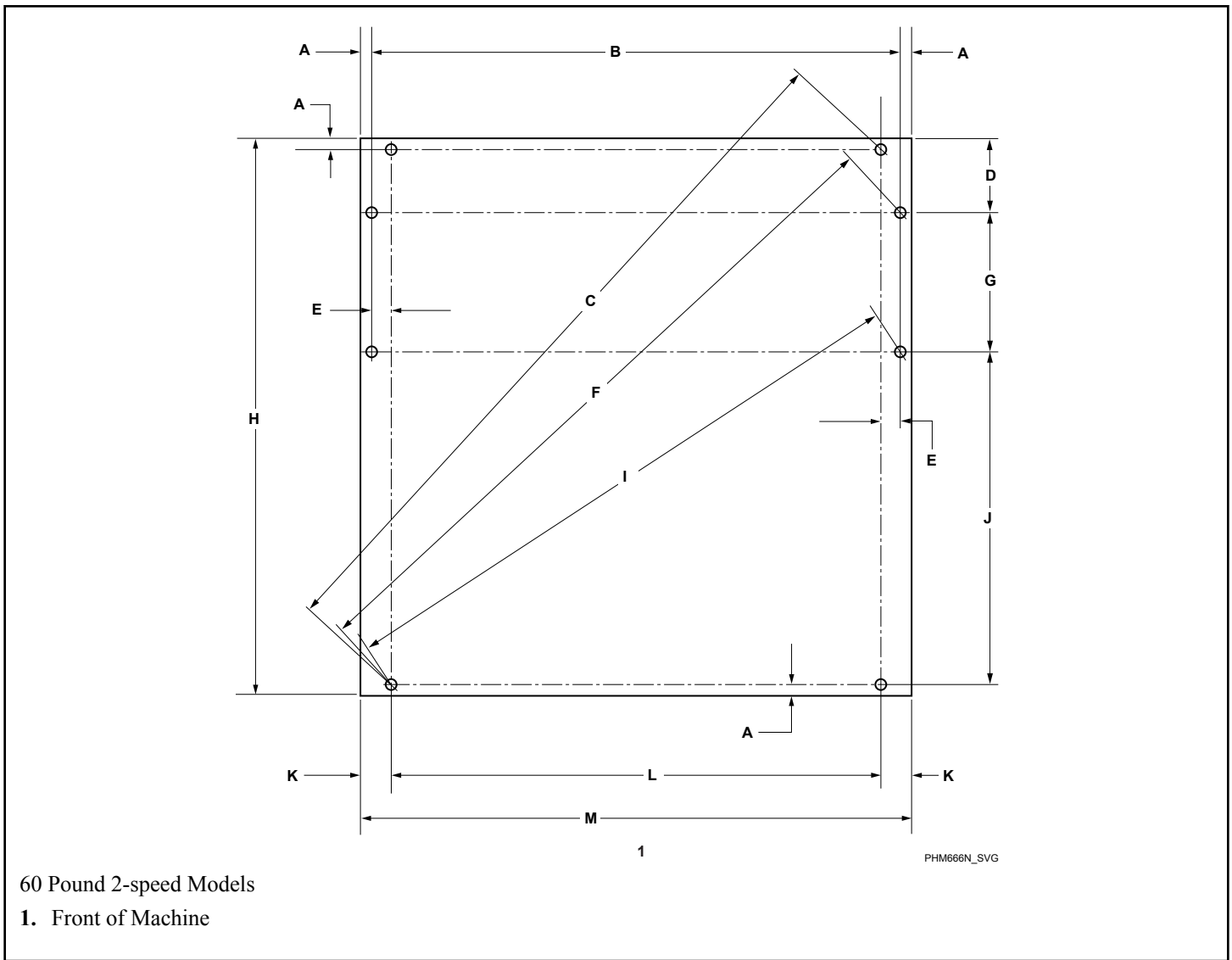


Figure 8

Mounting Bolt Hole Locations – 60 Pound Models [2-speed]	
A	0.75 in. [19 mm]
B	34.13 in. [867 mm]
C	46.81 in. [1189 mm]
D	4.19 in. [122 mm]
E	1.25 in. [32 mm]
F	44.81 in. [1138 mm]

<b>Mounting Bolt Hole Locations – 60 Pound Models [2-speed]</b>	
<b>G</b>	9 in. [229 mm]
<b>H</b>	36 in. [914 mm]
<b>I</b>	39.25 in. [997 mm]
<b>J</b>	21.44 in. [554 mm]
<b>K</b>	2 in. [51 mm]
<b>L</b>	31.75 in. [803 mm]
<b>M</b>	35.63 in. [905 mm]

**Table 9**

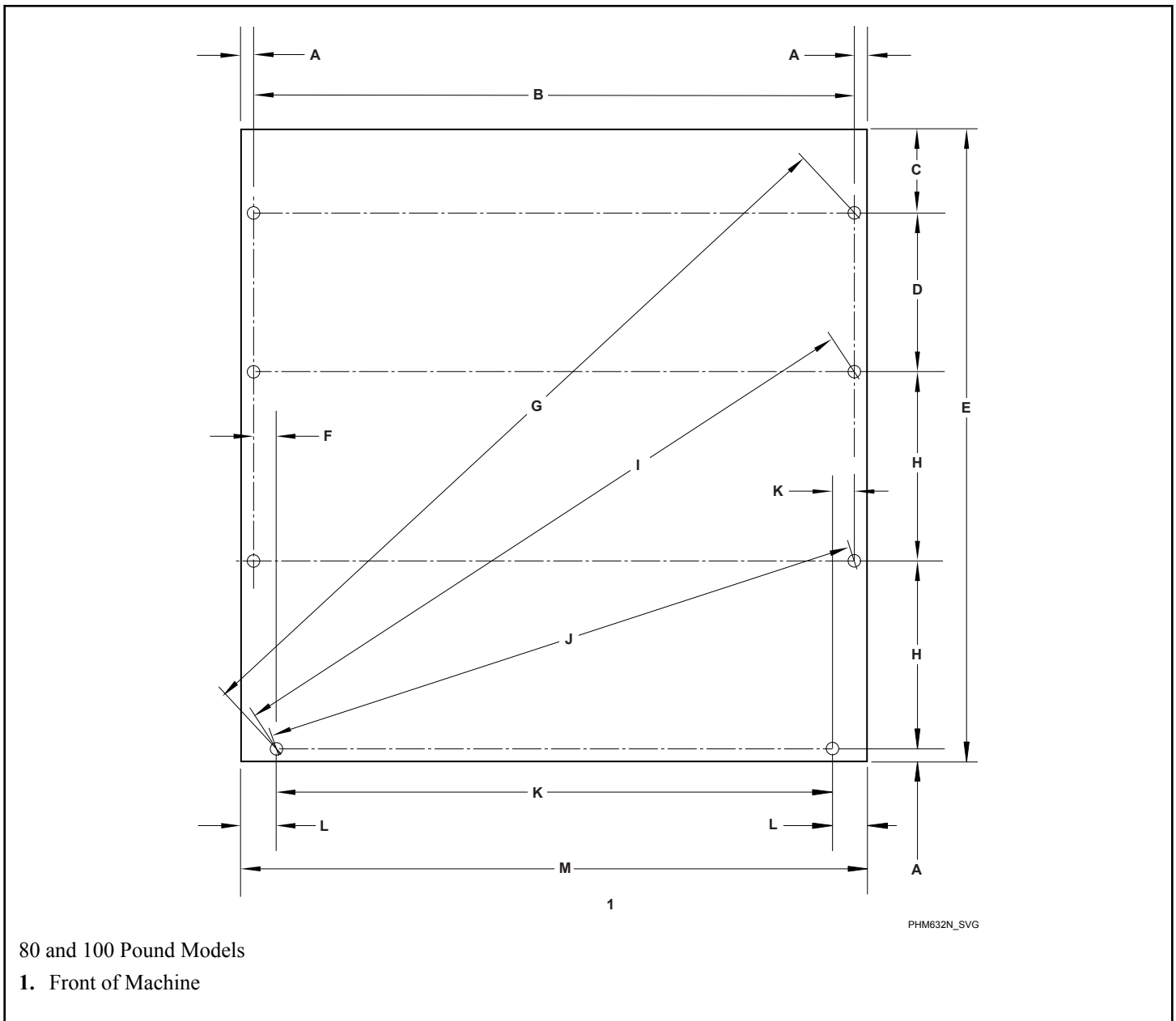


Figure 9

Mounting Bolt Hole Locations – 80 and 100 Pound Models	
A	0.75 in. [19 mm]
B	39.63 in. [1008 mm]
C	6.75 in. [171 mm]
D	9 in. [229 mm]

<b>Mounting Bolt Hole Locations – 80 and 100 Pound Models</b>	
<b>E</b>	43.75 in. [1111 mm]
<b>F</b>	2.25 in. [57 mm]
<b>G</b>	52.19 in. [1326 mm]
<b>H</b>	13.63 in. [346 mm]
<b>I</b>	46.31 in. [1176 mm]
<b>J</b>	39.75 in. [1010 mm]
<b>K</b>	35.13 in. [892 mm]
<b>L</b>	3 in. [76 mm]
<b>M</b>	41.13 in. [1045 mm]

**Table 10**

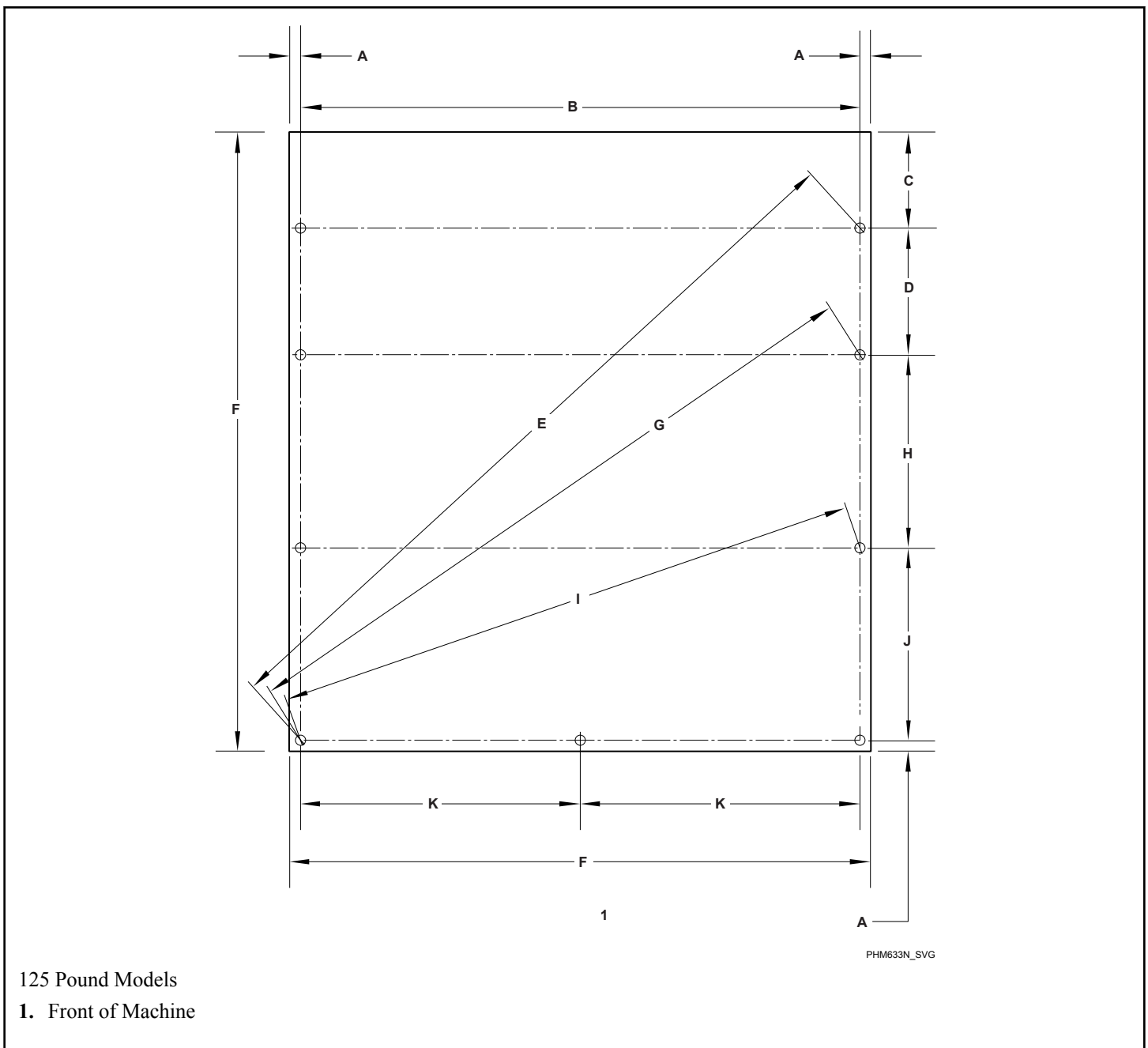


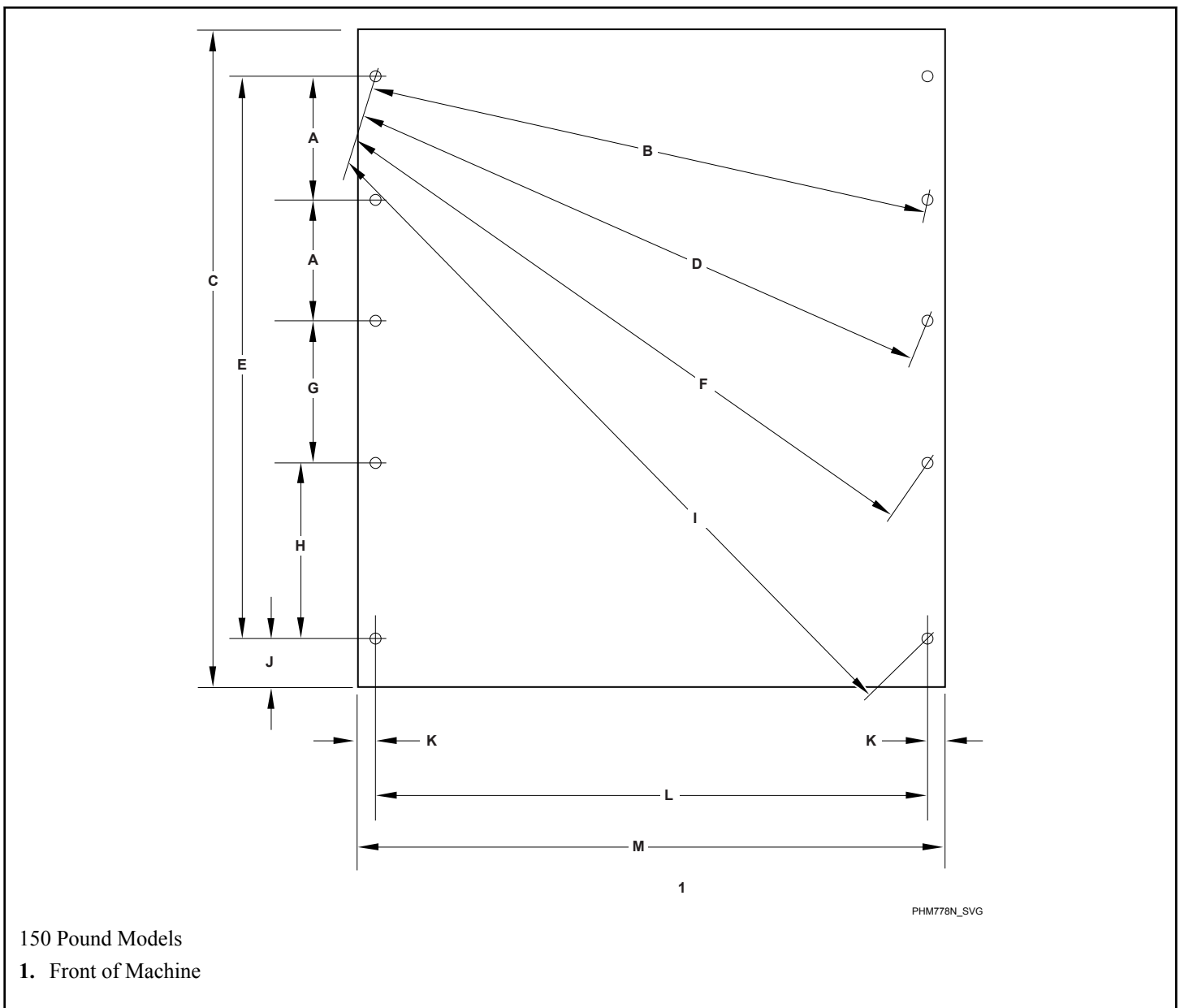
Figure 10

Mounting Bolt Hole Locations – 125 Pound Models	
A	0.75 in. [19 mm]
B	46.5 in. [1181 mm]
C	7 in. [178 mm]



<b>Mounting Bolt Hole Locations – 125 Pound Models</b>	
<b>D</b>	10 in. [254 mm]
<b>E</b>	61.5 in. [1562 mm]
<b>F</b>	48 in. [1219 mm]
<b>G</b>	55.47 in. [1409 mm]
<b>H</b>	15 in. [381 mm]
<b>I</b>	48.94 in. [1243 mm]
<b>J</b>	15.25 in. [387 mm]
<b>K</b>	23.25 in. [591 mm]

**Table 11**



**Figure 11**




Mounting Bolt Hole Locations – 150 Pound Models	
<b>A</b>	10.38 in. [264 mm]
<b>B</b>	48.13 in. [1223 mm]
<b>C</b>	56 in. [1422 mm]
<b>D</b>	51.38 in. [1305 mm]

Mounting Bolt Hole Locations – 150 Pound Models	
<b>E</b>	47.88 in. [1216 mm]
<b>F</b>	57.4 in. [1457 mm]
<b>G</b>	12.13 in. [308 mm]
<b>H</b>	15 in. [381 mm]
<b>I</b>	67.1 in. [1704 mm]
<b>J</b>	4 in. [102 mm]
<b>K</b>	1.5 in. [38.1 mm]
<b>L</b>	47 in. [1193 mm]
<b>M</b>	50 in. [1270 mm]

**Table 12**


**Gap Setting for Vibration Switch**

After the machine has been properly installed, the vibration switch gap must be verified. To locate the vibration switch refer to *Figure 12*, *Figure 13* and *Figure 14*. For UniLinc models, while the control is displaying the Inputs Outputs Menu the alarm will sound when the frame switch is activated. To verify and set the vibration switch gap use the following procedures:




2. Press the arrow keys to highlight the Diagnostic box.
3. Press the  key to enter the Diagnostic Menu.
4. Press the  key to enter the Test Menu.
5. Press the arrow keys to highlight the Inputs Outputs box.
6. Press the  key to enter the Inputs Outputs Menu.

**Verify Vibration Switch Gap [35-125 Pound Models]:**

1. Insert 0.009 inch feeler gauge between the adjustment bolt and the vibration switch; the alarm must not activate.
2. Remove the feeler gauge.
3. Insert 0.010 inch feeler gauge [supplied with machine] between the adjustment bolt and the vibration switch; the alarm must activate.
4. Remove the feeler gauge.
5. Adjust the vibration switch adjustment bolt if necessary. Refer to *Figure 12* and *Figure 13*.

	<b>WARNING</b>
<b>Only trained personnel should perform this procedure. Use caution while servicing machines with covers removed and power applied.</b>	
<b>W700</b>	

**For UniLinc Models, Navigate to the Inputs Outputs Menu:**

1. From the Cycle Menu press and hold the , ,  keys to enter the System Menu.

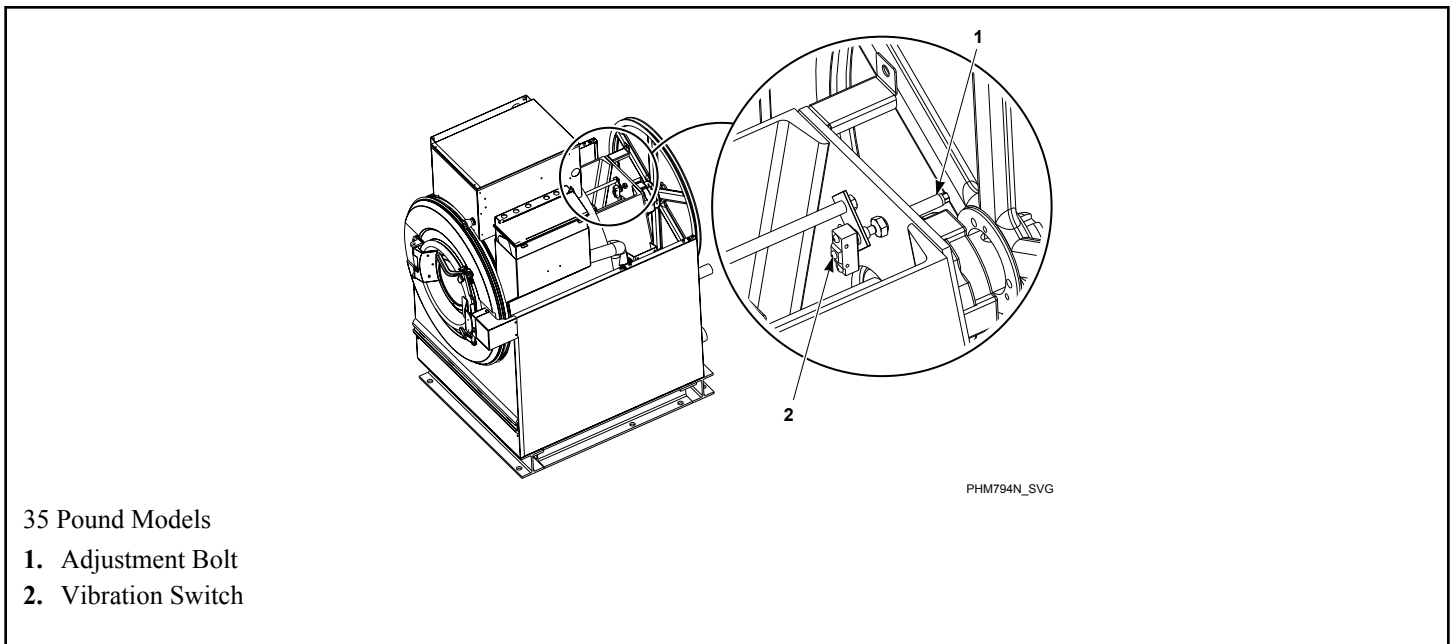


Figure 12

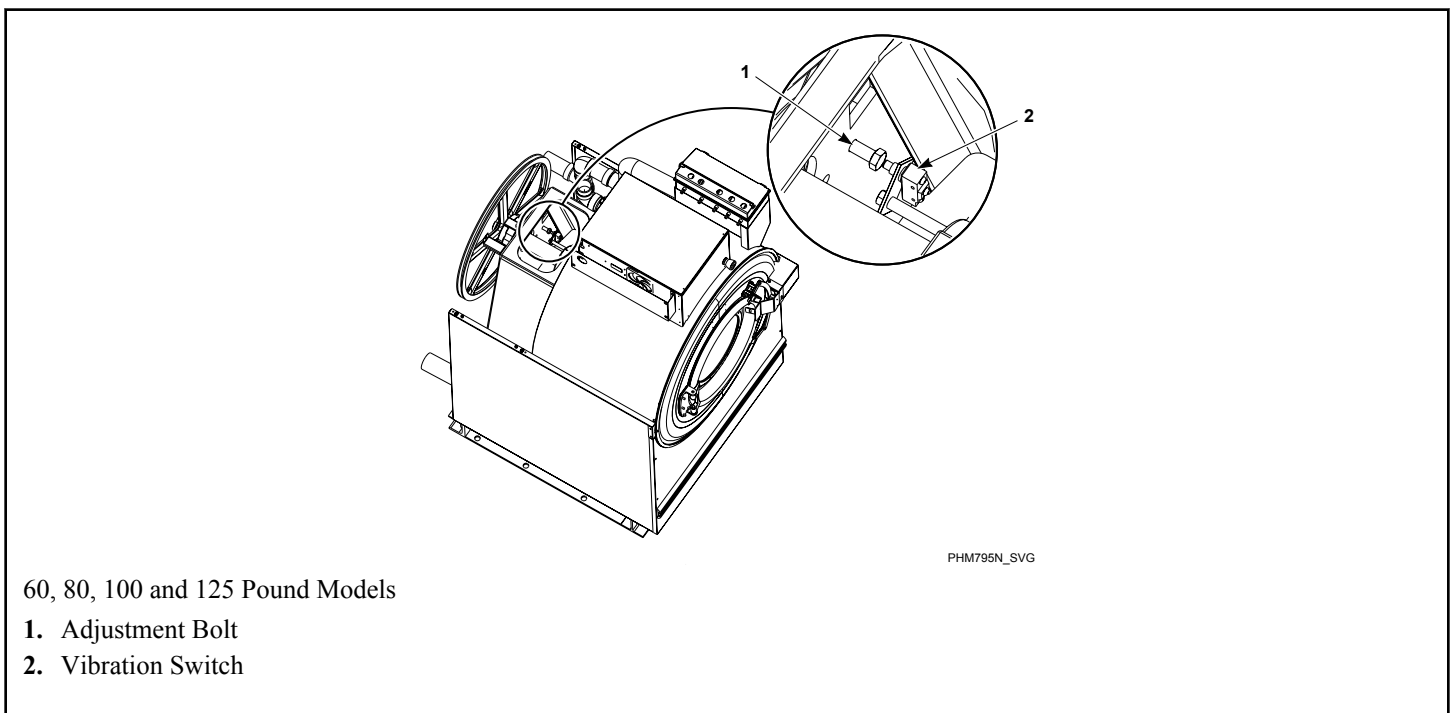
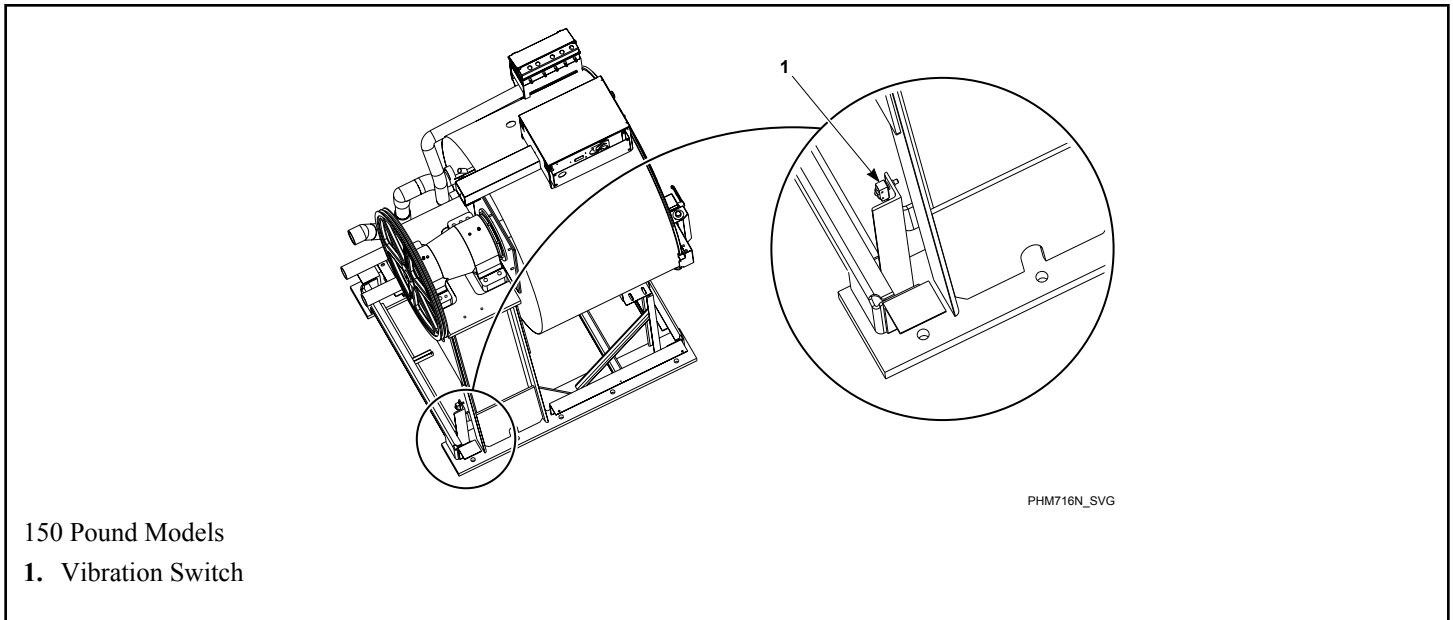


Figure 13

**Verify Safety Switch Operation [150 Pound Design 2 Models]:**

Place a large magnet above the normally-closed ball switch to verify switch operation. Refer to *Figure 14*.

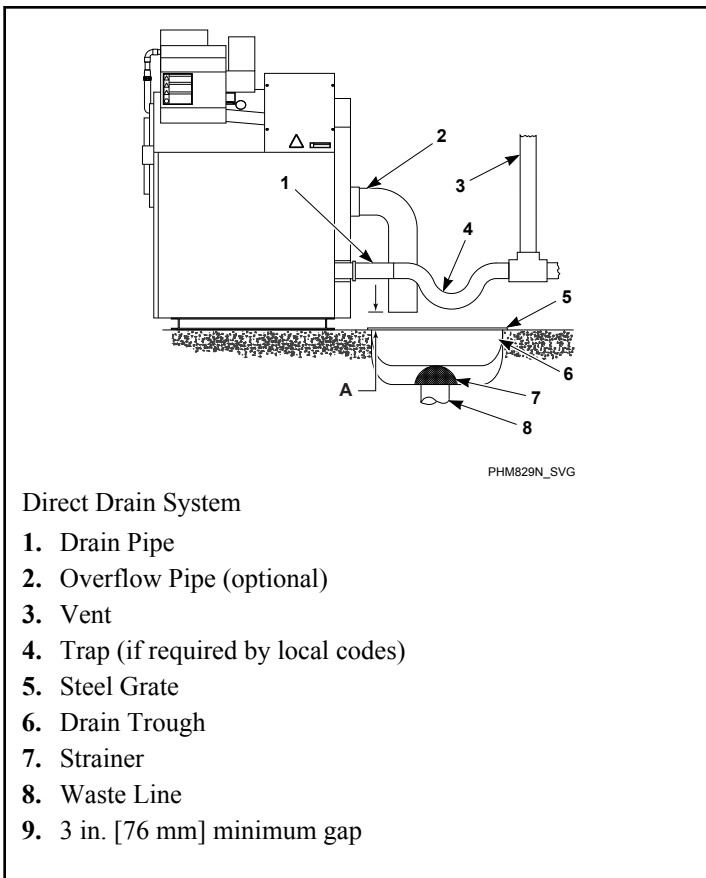
**IMPORTANT:** UW150 Design 2 machines are manufactured with a normally-closed ball switch and should not require any adjustment. To avoid nuisance tripping, machine must be level with a summed value of 3/8 inch [ 9.5 mm] front to back and right to left to the earth. If switch is tripped, check if machine is level and then for poor grouting and broken anchor bolts. **DO NOT BYPASS SAFETY SWITCH.** Contact a qualified service technician for further assistance.



**Figure 14**

## Drain Connection Requirements

*Figure 15* and *Figure 16* show typical direct drain and drain trough installations.



Direct Drain System

1. Drain Pipe
2. Overflow Pipe (optional)
3. Vent
4. Trap (if required by local codes)
5. Steel Grate
6. Drain Trough
7. Strainer
8. Waste Line
9. 3 in. [76 mm] minimum gap

**Figure 15**

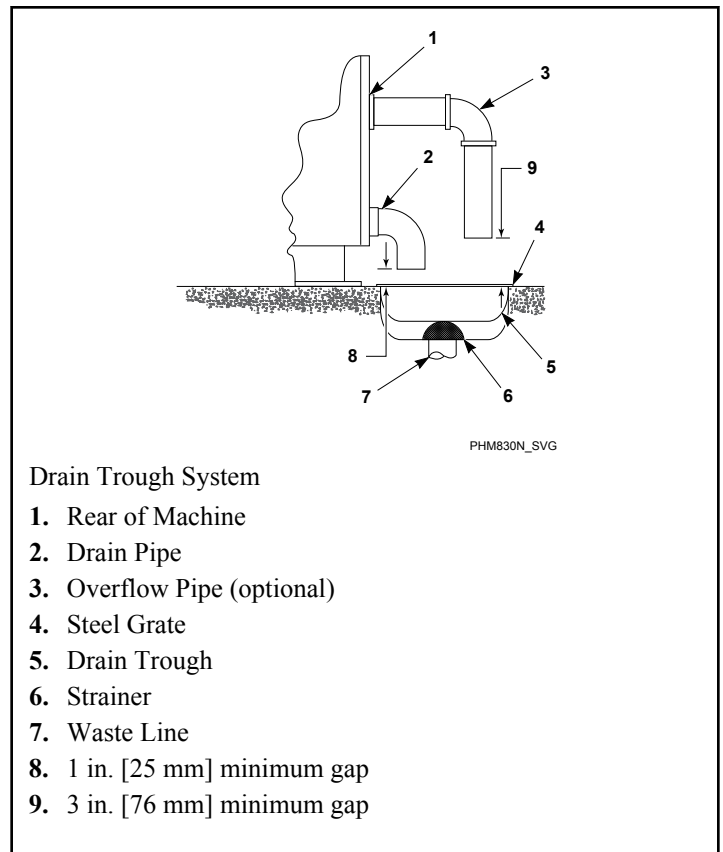
All drain systems must be vented to prevent an air lock and to prevent siphoning.

Refer to *Figure 15* .

**IMPORTANT: Machines must be installed in accordance with all local codes and ordinances.**

If proper drain size is not available or practical, a surge tank is required. A surge tank along with a sump pump should be used when gravity drainage is not possible.

Increasing the drain hose length, installing elbows, or causing bends will decrease drain flow rate and increase drain times, impairing machine performance.



Drain Trough System

1. Rear of Machine
2. Drain Pipe
3. Overflow Pipe (optional)
4. Steel Grate
5. Drain Trough
6. Strainer
7. Waste Line
8. 1 in. [25 mm] minimum gap
9. 3 in. [76 mm] minimum gap

**Figure 16**

Refer to *Table 13* for capacity-specific drain information.

**NOTE: Installation of additional machines will require proportionately larger drain connections. Refer to *Table 14* .**

**IMPORTANT: Do not block the machine overflow opening.**

If water or suds flow from the machine overflow vent and the machine has been verified to be operating properly with proper water levels and correct amount of laundry chemicals, a drain line may be added to the machine overflow vent and routed to a drain trough.

1. Route a drain pipe from the machine overflow to a drain trough. Drain pipe should be routed straight across or down and be suspended above drain trough by at least 3 inches [76 mm].

**IMPORTANT: Do not route the machine overflow to a direct drain system.**

Drain Information						
Specifications	35	60	80	100	125	150
Drain connection size, I.D., in. [mm] with second drain:	2.375 [60]	3 [76]	3 [76]	3 [76]	3 [76]	3 [76]
Number of drain outlets	1	1	2 [Uni-Linc] 1 [M30]	2 [Uni-Linc] 1 [M30]	2 [UniLinc] 1 [M30]	2
Drain flow capacity, gal/min. [l/min.]	35 [132]	64 [242]	120 [454]	120 [454]	140 [530]	140 [530]
Recommended drain pit size, ft <sup>3</sup> [l]	5 [142]	6 [170]	9 [255]	11 [311]	13 [368]	13 [368]
†Sized for one machine using overflow level.						

Table 13


Drain Line Sizing/Minimum Drain I.D., in. [mm]				
Model	Number of Machines			
	1	2	3	4
35	3 [76]	3 [76]	3.5 [89]	4 [102]
60	3 [76]	4 [102]	6 [152]	6 [152]
80	4 [102]	6 [152]	6 [152]	8 [203]
100	4 [102]	6 [152]	6 [152]	8 [203]
125	4 [102]	6 [152]	6 [152]	8 [203]
150	4 [102]	6 [152]	6 [152]	8 [203]

Table 14

## Water Connection

stallation of additional machines will require proportionately larger water lines. Refer to *Table 16*.

Connections should be supplied by hot and cold water lines of at least the sizes shown in the Water Supply Line Sizing table. In-

	<b>WARNING</b>
<p><b>To prevent personal injury, avoid contact with inlet water temperatures higher than 125° Fahrenheit [51° Celsius] and hot surfaces.</b></p>	
W748	

Maximum water inlet temperature is 190 °Fahrenheit [ 88 °Celsius].

<b>Water Supply Information</b>					
<b>Specifications</b>		<b>35</b>	<b>60</b>	<b>80/100</b>	<b>125/150</b>
Number of main fill water inlets		2	2	2	2
Main fill water inlet size at machine, in. [mm]		3/4	3/4	3/4	1
Factory supplied hose	Size	19	19	19	25.4
	Thread	11.5	11.5	11.5	56
Number of spray rinse water inlets		2	2	2	2
Spray rinse water inlet size, in. [mm]		3/4 [19]	3/4 [19]	3/4 [19]	3/4 [19]
Recommended pressure psi [bar]		30–8 [52–5.7 ]			
Inlet flow capacity, gal/min [l/min] at 80 psi		28 [106]	39 [148]	50 [189]	75 [284]

**Table 15**

To connect water service to machine with rubber hoses, use the following procedure:

1. Before installing hoses, flush the water system for at least two minutes.
2. Check filters in the machine’s inlet hoses for proper fit and cleanliness before connecting.
3. Hang the hoses in a large loop; do not allow them to kink.

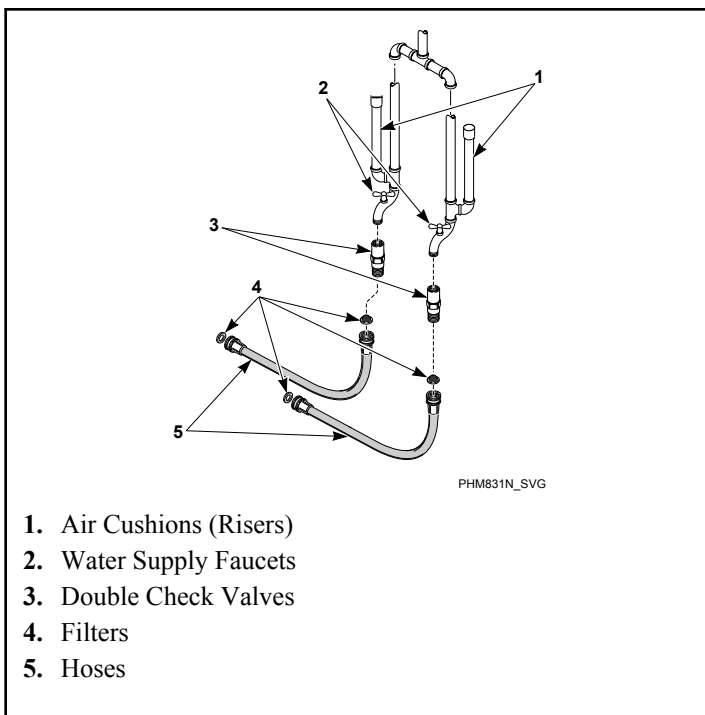
If additional hose lengths are needed or using hoses other than those supplied by manufacturer, flexible hoses with screen filters are required.

Lower pressures will increase fill times.

Suitable air cushions [risers] should be installed in supply lines to prevent “hammering.” Refer to *Figure 17*.

Connect machine to a backflow preventer (vacuum breaker) before connecting to the public water main in all countries where local regulations require specific water approval certificates.





**Figure 17**

Water Supply Line Sizing			
Model	Number of Machines	Supply Line Size, in. [mm]	
		Main	Hot/Cold
35	1	1 [25]	0.75 [19]
	2	1.5 [38]	1 [25]
	3	2 [51]	1.25 [32]
	4	2 [51]	1.5 [38]
60	1	1.25 [32]	1 [25]
	2	2 [51]	1.25 [32]
	3	2 [51]	1.5 [38]
	4	2.5 [64]	2 [51]
80	1	1.25 [32]	1 [25]
	2	2 [51]	1.25 [32]

Water Supply Line Sizing			
Model	Number of Machines	Supply Line Size, in. [mm]	
		Main	Hot/Cold
	3	2 [51]	1.5 [38]
	4	2.5 [64]	2 [51]
100	1	1.5 [38]	1 [25]
	2	2 [51]	1.5 [38]
	3	2 [51]	1.5 [38]
	4	2.5 [64]	2 [51]
125	1	2 [51]	1.25 [32]
	2	2.5 [64]	2 [51]
	3	2.5 [64]	2 [51]
	4	2.5 [64]	2.5 [64]
150	1	2 [51]	1.25 [32]
	2	2.5 [64]	2 [51]
	3	2.5 [64]	2 [51]
	4	2.5 [64]	2.5 [64]

**Table 16**

## Electrical Installation Requirements

**IMPORTANT:** Electrical ratings are subject to change. Refer to serial decal for electrical ratings information specific to your machine.

	<b>WARNING</b>
<p><b>Electrical shock hazard will result in death or serious injury. Disconnect electric power and wait three (3) minutes before servicing.</b></p>	
W784	

	<b>WARNING</b>
<p><b>Dangerous voltages are present inside the machine. Only qualified personnel should attempt adjustments and troubleshooting. Disconnect power from the machine before removing any cover and guards, and before attempting any service procedures.</b></p>	
W736	

	<b>WARNING</b>
<p><b>Hazardous Voltage. Can cause shock, burn or death. Verify that a ground wire from a proven earth ground is connected to the lug near the input power block on this machine.</b></p>	
W360	

Electrical connections are made at the rear of the machine. The machine must be connected to the proper electrical supply shown on the identification plate attached to the rear of the machine, using copper conductors only.

**IMPORTANT: Alliance Laundry Systems warranty does not cover components that fail as a result of improper input voltage.**

Make sure the correct transformer jumper [208 Volt or 240 Volt] is in place. Refer to the “optional” Electrical Service Conversion label located on the back of the machine near the electrical service input for machine electrical requirements. Refer to *Figure 18* and *Figure 19*.

	<b>WARNING</b>	
<p><b>Electrical shock hazard will result in death or serious injury. Disconnect electric power and wait three (3) minutes before servicing.</b></p>		
W784		

<p><b>OPTIONAL ELECTRICAL SERVICE CONNECTION BASED ON AVAILABILITY</b></p> <p>This unit may be field converted by a QUALIFIED Electrician to the following 200-208 Volts and/or 50 Hertz.</p> <p><b>PRIOR TO CONNECTING ELECTRICAL SERVICE, COMPLETE THE FOLLOWING:</b></p>	<p><b>200-208 VAC CONVERSION</b></p> <p>Wires &amp; Ground RECD BREAKER* *As indicated on original serial plate</p> <p>Refer to the Control Transformer area on the Control Option Diagram.</p> <p>Remove the 208V Transformer Jumper in the control box.</p> <p>Replace with 208V Transformer Jumper. Refer to the diagram pack.</p> <p>Sign off below.</p>	<p><b>50Hz CONVERSION</b></p> <p>1. Refer to the Control Option Diagram.</p> <p>2. Remove the wire from the 50Hz tap on main switch.</p> <p>3. Connect the wire to the 50Hz Tap on all main wires.</p> <p>4. Sign off below.</p>
PHM740N_SVG		

O, Q, X and Y–voltage Models

**Figure 18**

<p><b>OPTIONAL ELECTRICAL SERVICE CONNECTION BASED ON AVAILABILITY</b></p> <p>This unit may be field converted by a QUALIFIED Electrician to the following 380-415 Volts and/or 50 Hertz.</p> <p><b>PRIOR TO CONNECTING ELECTRICAL SERVICE, COMPLETE THE FOLLOWING:</b></p>	<p><b>380-415 VAC CONVERSION</b></p> <p>Wires &amp; Ground RECD BREAKER*</p> <p>Refer to the Control Transformer area on the Control Option Diagram.</p> <p>Remove the 380V Transformer Jumper in the control box.</p> <p>Replace with 380V Transformer Jumper. Refer to the diagram pack.</p> <p>Sign off below.</p>	<p><b>50Hz CONVERSION</b></p> <p>1. Refer to the Control Option Diagram.</p> <p>2. Remove the wire from the 50Hz tap on main switch.</p> <p>3. Connect the wire to the 50Hz Tap on all main wires.</p> <p>4. Sign off below.</p>
PHM756N_SVG		

N, P and R–voltage Models

**Figure 19**

On V-speed models, the AC inverter drive requires a clean power supply free from voltage spikes and surges. Use a voltage monitor to check incoming power.

The following conditions require corrective action, contact the local utility to adjust the voltage.

- If the local utility cannot adjust the input voltage, install a buckboost transformer to lower the input voltage.
- Input voltage is above 240V or 480V, phase to ground voltage exceeds 125% of normal line to line voltage, or 240V open delta configuration (stinger leg).

Contact a qualified electrical maintenance person for assistance.

On V-speed models, the AC drive provides thermal overload protection for the drive motor. However, a separate three-phase circuit breaker must be installed for complete electrical overload protection. This prevents damage to the motor by disconnecting all legs if one should be lost accidentally. Check the nameplate on the back of the machine for recommended circuit breaker requirements size.

**IMPORTANT: Do NOT use fuses in place of a circuit breaker.**

	<b>CAUTION</b>
<p><b>Do not use a phase adder on any variable-speed machine.</b></p>	
SW037	

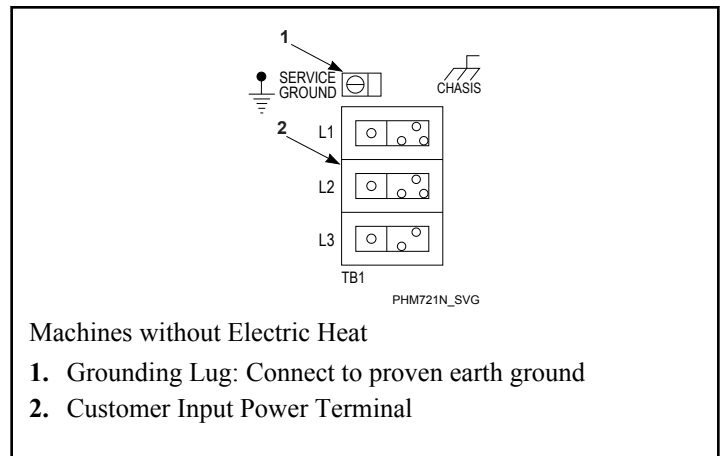
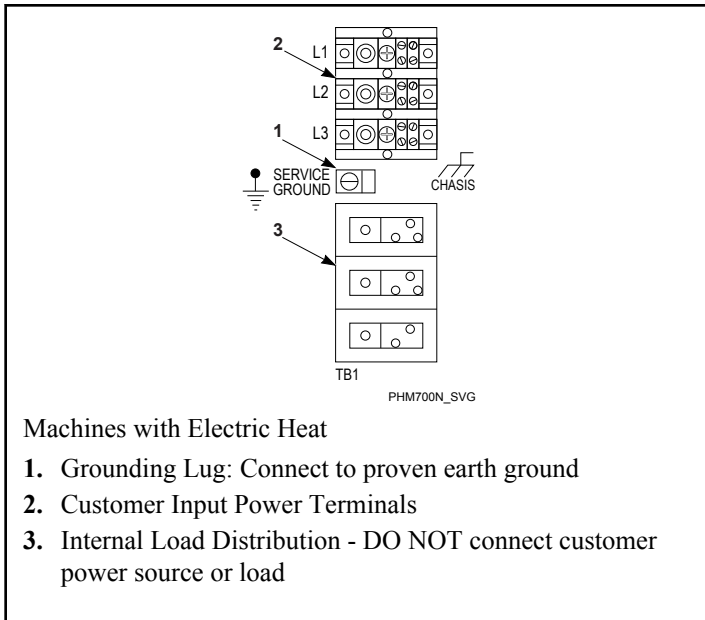
The machine should be connected to an individual branch circuit not shared with lighting or other equipment.

The connection should be shielded in a liquid-tight or approved flexible conduit with proper conductors of correct size installed in accordance with applicable codes. The connection must be made by a qualified electrician using the wiring diagram provided with the machine, or according to accepted European standards.

Refer to nameplate for recommended circuit breaker size and determine wire size based on local code requirements.

Refer to nameplate for recommended wire sizes for runs up to 50 feet [15.24 meters]. Use next larger size for runs of 50 to 100 feet [15.24 to 30.48 meters]. Use 2 sizes larger for runs greater than 100 feet [30.48 meters].

For personal safety and for proper operation, the machine must be grounded in accordance with state and local codes or accepted European standards. The ground connection must be made to a proven earth ground, not to conduit or water pipes. Refer to *Figure 20* and *Figure 21*.



**Figure 21**

Machines can be converted for lower voltage operation and/or 50 Hz operation. Refer to conversion label by nameplate for details.

**Electrical Specifications**

North American Approval

**Figure 20**

35 Pound Capacity Models									
Voltage Designation					Specifications				
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm2
X		200–240	50/60	1/3	2/3	15/8	20/15	12/14	4/2.5
Q	Standard	200–240	50/60	3	3	8	15	14	2.5
	Electric Heat					42	50	6	16
O**	Standard	208–240	60	3	3	7	20	12	4
	Electric Heat					38	50	6	16
R (Through 7/6/10)	Standard	380–480	50/60	3	3	6	15	14	2.5
	Electric Heat					23	30	10	6

35 Pound Capacity Models									
Voltage Designation						Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm2
N (Starting 7/7/10)	Standard	440-480	50/60	3	3	6	15	14	2.5
	Electric Heat					23	30	10	6
P (Starting 7/7/10)	Standard	380-415	50/60	3	3	6	15	14	2.5
	Electric Heat					23	30	10	6

**NOTE: Wire sizing listed in these tables is based on Article 310, Table 310.16 of the NEC; at 104°F [40°C] ambient temperature. Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.**

\*\*M30 Control Models Only.

Table 17

60 Pound Capacity Models									
Voltage Designation						Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm2
X		200-240	50/60	1/3	2/3	15/9	20/15	12/14	4/2.5
Q	Standard	200-240	50/60	3	3	9	15	14	2.5
	Electric Heat					71	80	3	25
O**	Standard	208-240	60	3	3	11	30	10	6
	Electric Heat					66	80	3	30

60 Pound Capacity Models									
Voltage Designation						Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm <sup>2</sup>
R (Through 7/6/10)	Standard	380-480	50/60	3	3	7	15	14	2.5
	Electric Heat					37	40	8	10
N (Starting 7/7/10)	Standard	440-480	50/60	3	3	7	15	14	2.5
	Electric Heat					37	40	8	10
P (Starting 7/7/10)	Standard	380-415	50/60	3	3	7	15	14	2.5
	Electric Heat					37	40	8	10

**NOTE: Wire sizing listed in these tables is based on Article 310, Table 310.16 of the NEC; at 104°F [40°C] ambient temperature. Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.**

\*\*M30 Control Models Only.

Table 18

80 Pound Capacity Models									
Voltage Designation						Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm <sup>2</sup>
Q (Through 4/13/10)	Standard	200-240	50/60	3	3	14	15	14	2.5
	Electric Heat					105	110	1	50

80 Pound Capacity Models									
Voltage Designation						Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm2
Q (Starting 4/14/10)	Standard	208–240	50/60	3	3	14	20	12	4
	Electric Heat					105	110	1	50
R (Through 7/6/10)	Standard	380–480	50/60	3	3	10	15	14	2.5
	Electric Heat					39	40	8	10
N (Starting 7/7/10)	Standard	440-480	50/60	3	3	10	15	14	2.5
	Electric Heat					39	40	8	10
P (Starting 7/7/10)	Standard	380-415	50/60	3	3	10	15	14	2.5
	Electric Heat					39	40	8	10

**NOTE: Wire sizing listed in these tables is based on Article 310, Table 310.16 of the NEC; at 104°F [40°C] ambient temperature. Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.**

Table 19

100 Pound Capacity Models									
Voltage Designation						Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm2
Q (Through 4/13/10)	Standard	200–240	50/60	3	3	10	15	14	2.5
	Electric Heat					108	110	1	50
Q (Starting 4/14/10)	Standard	208–240	50/60	3	3	14	20	12	2.5
	Electric Heat					108	110	1	50
R (Through 7/6/10)	Standard	380–480	50/60	3	3	10	15	14	2.5
	Electric Heat					40	50	6	16
N (Starting 7/7/10)	Standard	440-480	50/60	3	3	10	15	14	2.5
	Electric Heat					40	50	6	16
P (Starting 7/7/10)	Standard	380-415	50/60	3	3	10	15	14	2.5
	Electric Heat					40	50	6	16

**NOTE: Wire sizing listed in these tables is based on Article 310, Table 310.16 of the NEC; at 104°F [40°C] ambient temperature. Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.**

Table 20

125 Pound Capacity Models									
Voltage Designation					Specifications				
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm2	
Q	200–240	50/60	3	3	12	15	14	2.5	
R (Through 7/6/10)	380–480	50/60	3	3	8	15	14	2.5	
N (Starting 7/7/10)	Standard	440-480	50/60	3	3	8	15	14	2.5
	Electric Heat					74	80	4	25
P (Starting 7/7/10)	Standard	380-415	50/60	3	3	8	15	14	2.5
	Electric Heat					65	70	4	25

**NOTE: Wire sizing listed in these tables is based on Article 310, Table 310.16 of the NEC; at 104°F [40°C] ambient temperature. Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.**

Table 21

150 Pound Capacity Models								
Voltage Designation					Specifications			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm2
Q	200–240	50/60	3	3	16	20	12	4
R (Through 7/6/10)	380–480	50/60	3	3	11	15	14	2.5
N (Starting 7/7/10)	440-480	50/60	3	3	11	15	14	2.5
P (Starting 7/7/10)	380-415	50/60	3	3	11	15	14	2.5



150 Pound Capacity Models								
Voltage Designation				Specifications				
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm2
<p><b>NOTE: Wire sizing listed in these tables is based on Article 310, Table 310.16 of the NEC; at 104°F [40°C] ambient temperature. Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.</b></p>								

**Table 22**

CE Approval

35 Pound Capacity Models								
Voltage Designation					Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	mm2
X		200–240	50/60	1/3	2/3	12/8	16/10	2.5
Q	Standard	200–240	50/60	3	3	8	10	2.5
	Electric Heat					42	50	10
O**		208–240	60	3	3	17	20	4
N		440-480	50/60	3	3	23	25	2.5
P	Standard	380-415	50/60	3	3	7	10	2.5
	Electric Heat					23	25	2.5
<p><b>NOTE: Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.</b></p>								
<p>**M30 Control Models Only.</p>								

**Table 23**

60 Pound Capacity Models								
Voltage Designation					Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	mm2
X		200–240	50/60	1/3	2/3	17/11	20/16	2.5
Q	Standard	200–240	50/60	3	3	11	16	2.5
	Electric Heat					71	80	16
O**		208–240	60	3	3	26	32	2.5
N		440–480	50/60	3	3	37	40	4
P	Standard	380-415	50/60	3	3	7	10	2.5
	Electric Heat					37	40	4
<p><b>NOTE: Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.</b></p> <p>**M30 Control Models Only.</p>								

**Table 24**

80 Pound Capacity Models								
Voltage Designation					Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	mm2
Q	Standard	208–240	50/60	3	3	17	20	2.5
	Electric Heat					105	125	50

80 Pound Capacity Models								
Voltage Designation						Specifications		
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	mm2
N	Standard	440-480	50/60	3	3	11	16	2.5
	Electric Heat					39	40	4
P	Standard	380-415	50/60	3	3	11	16	2.5
	Electric Heat					39	40	4

**NOTE: Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.**

Table 25

100 Pound Capacity Models								
Voltage Designation						Specifications		
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	mm2
Q	Standard	208-240	50/60	3	3	17	20	2.5
	Electric Heat					108	125	50
N	Standard	440-480	50/60	3	3	11	16	2.5
	Electric Heat					41	50	10
P	Standard	380-415	50/60	3	3	11	16	2.5
	Electric Heat					41	50	10

100 Pound Capacity Models							
Voltage Designation					Specifications		
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	mm2
<p><b>NOTE: Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.</b></p>							

**Table 26**

125 Pound Capacity Models								
Voltage Designation					Specifications			
Code		Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	mm2
Q		200-240	50/60	3	3	12	16	2.5
N	Standard	440-480	50/60	3	3	11	16	2.5
	Electric Heat					74	80	16
P	Standard	380-415	50/60	3	3	11	16	2.5
	Electric Heat					65	80	16
<p><b>NOTE: Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.</b></p>								

**Table 27**


150 Pound Capacity Models							
Voltage Designation				Specifications			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	mm <sup>2</sup>
Q	200–240	50/60	3	3	17	20	2.5
N	440–480	50/60	3	3	11	16	2.5
P	380–415	50/60	3	3	11	16	2.5

**NOTE: Follow your local electrical codes. Use only copper conductors, rated for 194°F [90°C] or higher, type THHN or better. No more than three current carrying conductors per raceway. Contact your local Authority having jurisdiction if you have questions. Circuit breakers should be UL 489 listed or better. Single phase circuit breakers for single phase machines only; three phase circuit breakers for all others.**

Table 28

### Steam Requirements (Steam Heat Option Only)

For machines equipped with optional steam heat, install piping in accordance with approved commercial steam practices. Steam requirements are shown in *Table 29*.

	<b>WARNING</b>
<p><b>Hot Surfaces. Will cause severe burns. Turn steam off and allow steam pipes, connections and components to cool before touching.</b></p>	
W505	

Steam Supply Information					
Capacities	35	60	80	100	125/150
Steam inlet connection, in. [mm]	1/2 [DN13]	1/2 [DN13]	1/2 [DN13]	1/2 [DN13]	3/4 [DN19]
Number of steam inlets	1	1	1	1	1
Recommended pressure, psi [bar]	30–80 [2.0–5.5]	30–80 [2.0–5.5]	30–80 [2.0–5.5]	30–80 [2.0–5.5]	30–80 [2.0–5.5]


Steam Supply Information					
Capacities	35	60	80	100	125/150
Maximum pressure, psi [bar]	80 [5.5]	80 [5.5]	80 [5.5]	80 [5.5]	80 [5.5]

Table 29

**IMPORTANT:** Failure to install the customer supplied steam filter may void the warranty.

**IMPORTANT:** Undiluted chemical dripping can damage the machine. All chemical injection supply dispenser pumps and dispenser tubing should be mounted below the machine's injection point. Loops do not prevent drips if these instructions are not followed. *Figure 22* shows a typical Chemical Injection Supply System.

### Chemical Injection Supply System

	<b>WARNING</b>
<p><b>Dangerous Chemicals. May damage eyes and skin. Wear eye and hand protection when handling chemicals; always avoid direct contact with raw chemicals. Read the manufacturer's directions for accidental contact before handling chemicals. Ensure an eye-rinse facility and an emergency shower are within easy reach. Check at regular intervals for chemical leaks.</b></p>	
W363	

**IMPORTANT:** Failure to follow these instructions could damage the machine and void the warranty.

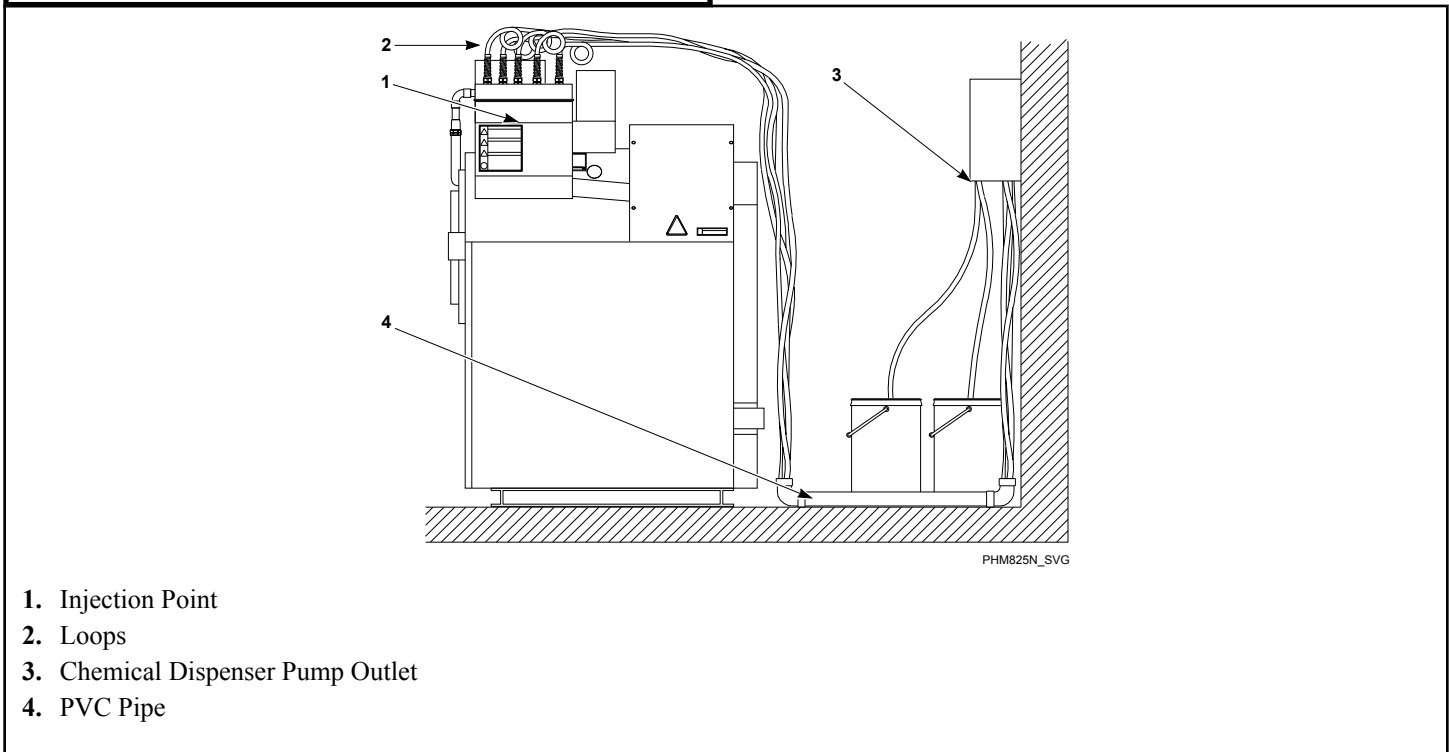


Figure 22

**Connecting External Liquid Supplies**

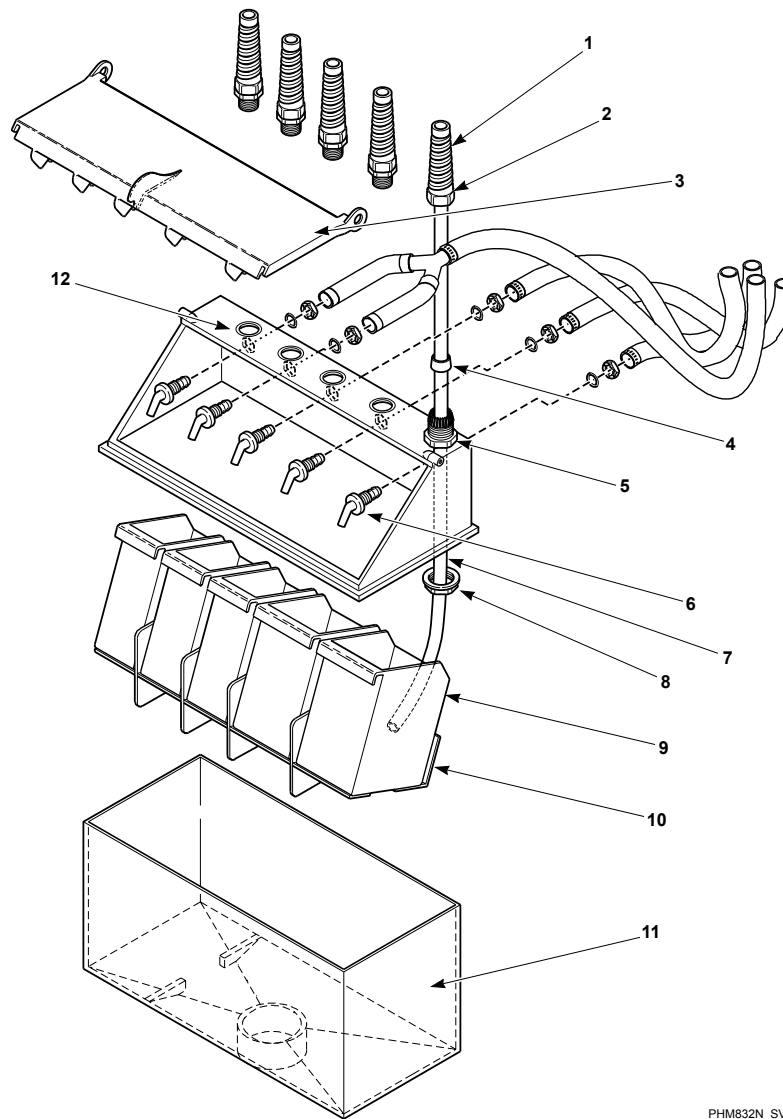
1. Remove knockout from supply dispenser. Refer to *Figure 23*. Plugs are assembled inside the tubing ring.
2. Install strain relief connector in hole with strain reliefs, included in the seal nut.
3. Insert tubes through base. Do not remove cups. Tube should extend into the plastic cup, with the exception of the softener tube, which should be routed to the outside of the cup.
4. Tighten the seal nut to prevent tubing from escaping the assembly.
5. Before operating machine, confirm lid is completely closed.

Do not attempt to make chemical injection electrical connections to points other than those provided specifically for that purpose by the factory.

<b>Chemical Injection Supply System</b>	
Number of external liquid supply connections	8
Liquid supply connection size, in. [mm]	0.625 [15.9 ]

**Table 30**

<b>Chemical Injection Supply System</b>	
Number of dry supply compartments	5



PHM832N\_SVG

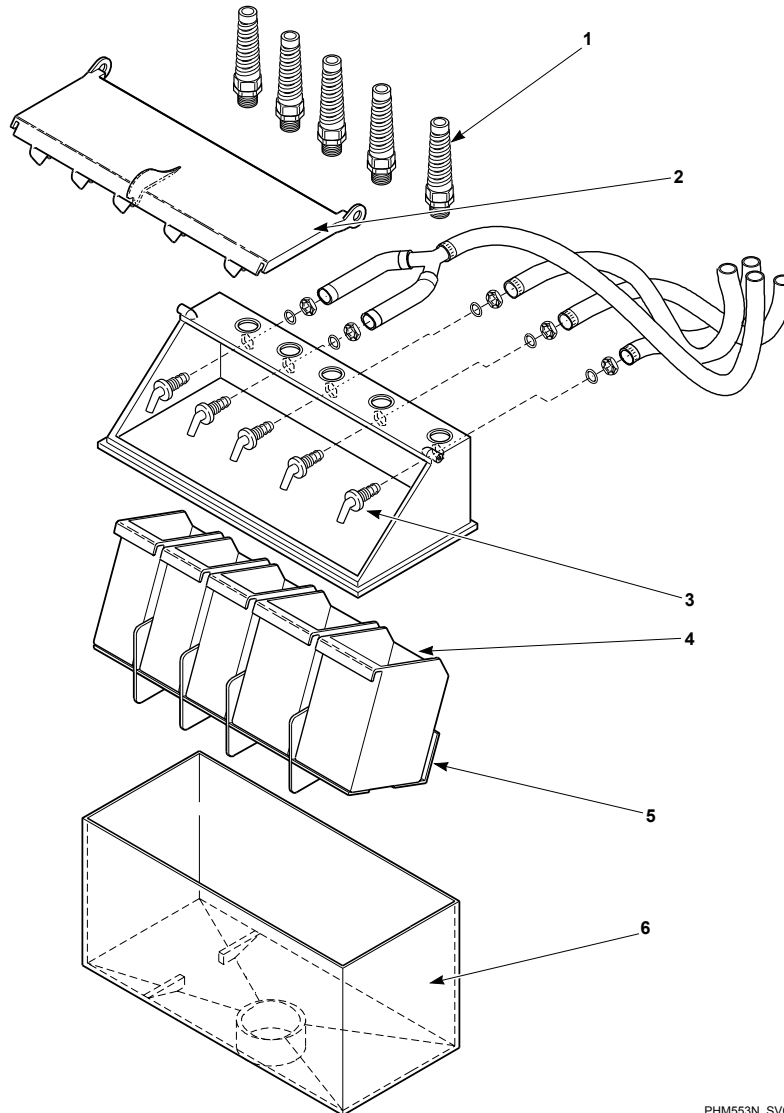
1. Strain Relief for Liquid Chemical Supply Lines
2. Seal Nut
3. Supply Dispenser Lid
4. Tubing Ring
5. Base
6. Nozzles
7. Tubing
8. Nut
9. Dry Supply Cups
10. Dry Supply Insert
11. Polypropylene Supply Dispenser
12. Knockout

**IMPORTANT: Do not attach anything to nozzles. Air gap must be maintained.**

**Figure 23**

**Connecting External Liquid Supplies to the Machine  
with Optional Five Compartment Supply Dispenser**





PHM553N\_SVG

**IMPORTANT: Do not attach anything to nozzles. Air gap must be maintained.**

#### Five Compartment Supply Dispenser (Optional)

1. Strain Relief for Liquid Chemical Supply Lines
2. Supply Dispenser Lid
3. Nozzles
4. Dry Supply Cups
5. Dry Supply Insert
6. Polypropylene Supply Dispenser

**Figure 24**

1. Remove knockout from supply dispenser. Refer to *Figure 24* . Plugs are assembled inside the tubing ring.
2. Install PG connector in hole with strain reliefs, included in the seal nut.
3. Insert tubes through PG base. Do not remove cups. Tube should extend into the plastic cup, with the exception of the softener tube, which should be routed to the outside of the cup.
4. Tighten the seal nut to prevent tubing from escaping the assembly.
5. Before operating machine, confirm lid is completely closed.

Do not attempt to make chemical injection electrical connections to points other than those provided specifically for that purpose by the factory.

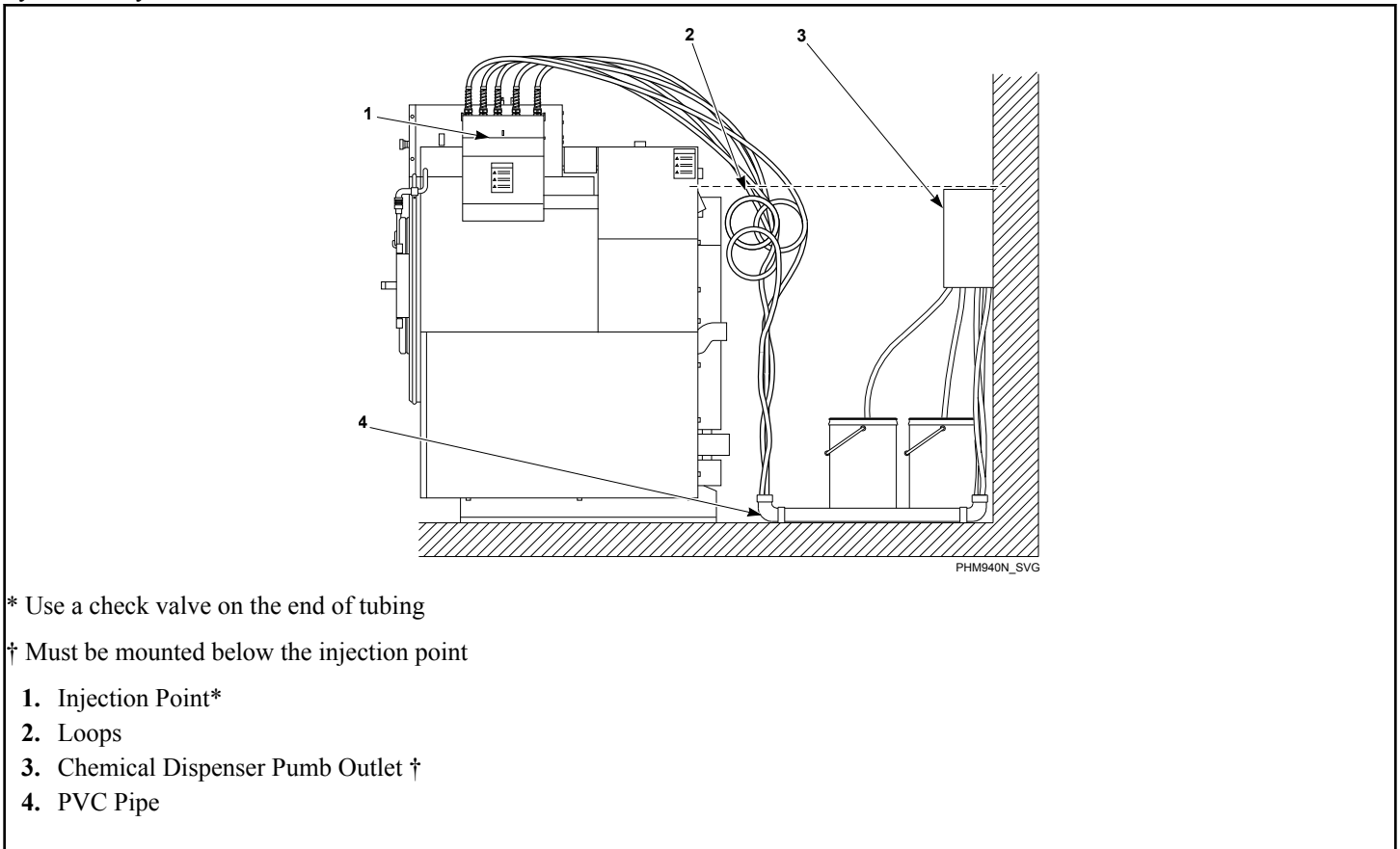


Figure 25

## External Supplies

For proper communication between the machine and an external chemical supply system, it is important for the low-voltage signal power to be connected properly. The included wiring diagram shows several different options for safe and correct wiring of this interface.

The preferred method for connecting the wiring from the external chemical supply system to the machine is to use the 300mA power of the machine's 24VAC control transformer, which is intended strictly for this purpose. Other voltage and current options are available, but require some wiring changes and must be provided with an external power source. Under no circumstances should the high-voltage machine supply connections or source be used for the communication wiring.

Communication wiring connections, which include a single row of identified terminal blocks, can be found under a service panel at the upper back of the machine.

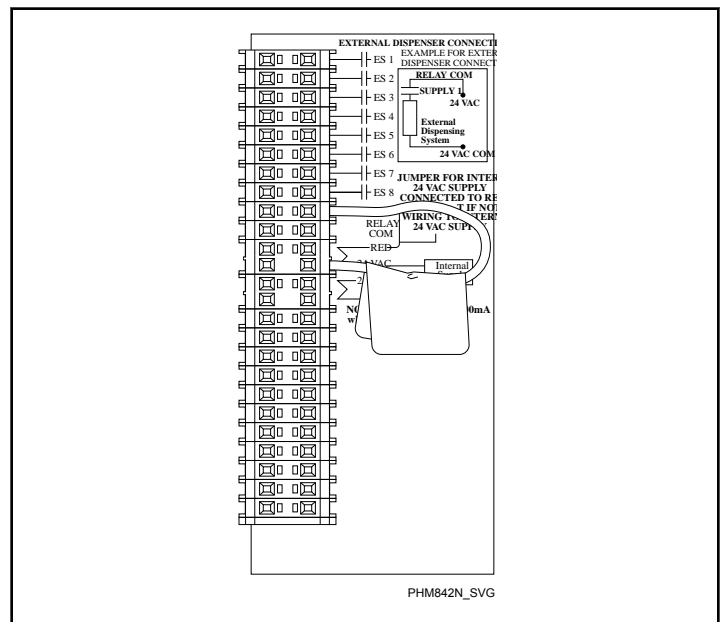


Figure 26

### Chemical Injection Using Internal 24VAC Control Transformer

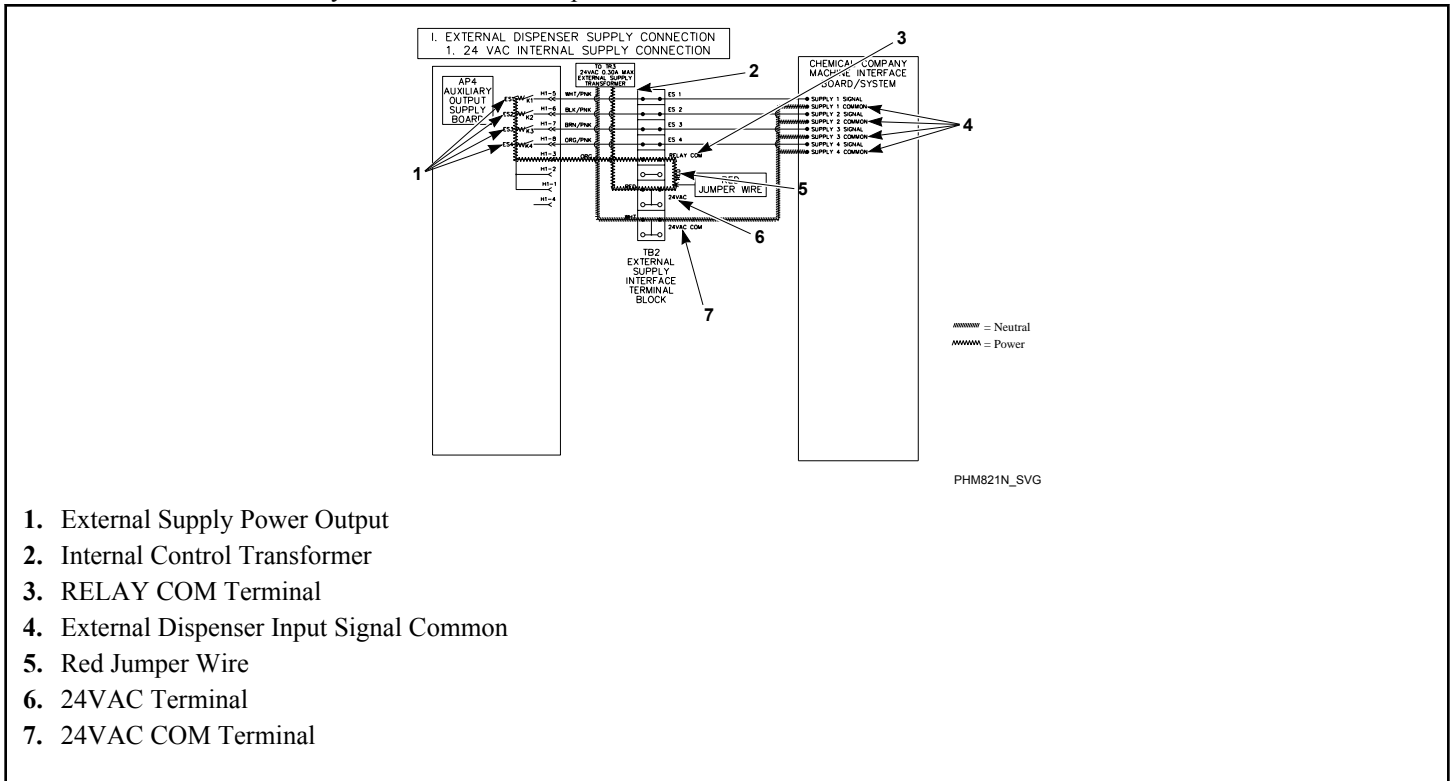
**NOTE: Using the Internal 24VAC 300 Milliamp Control Transformer is recommended by Alliance Laundry Systems.**

**IMPORTANT: DO NOT remove the red jumper wire from the terminal strip.**

There are 3 terminals necessary for this connection option.

- Terminal “24VAC COM” is used to connect one side of the internal control transformer to the external dispenser input signals common.
- The second terminal is used to connect the other side of the control transformer to the machine output signals common through a red jumper wire between “24VAC” and “RELAY COM”.

**IMPORTANT: Do not use the transformer terminals if an external power supply is used.**



**Figure 27**

### Chemical Injection Using External AC Power Source

**NOTE: An External AC Power Source is NOT provided by Alliance Laundry Systems.**

**NOTE: Power for external supplies must not be derived from the high-voltage main power connection point.**

**IMPORTANT: The external power must supply power of 240VAC or less and be protected at 3 Amps or less.**

- Remove the red jumper wire installed by the factory between “24VAC”, and “RELAY COM”.
- Connect one side of the external power to the “RELAY COM” and the other to the external dispenser input signals common. Refer to *Figure 28*.

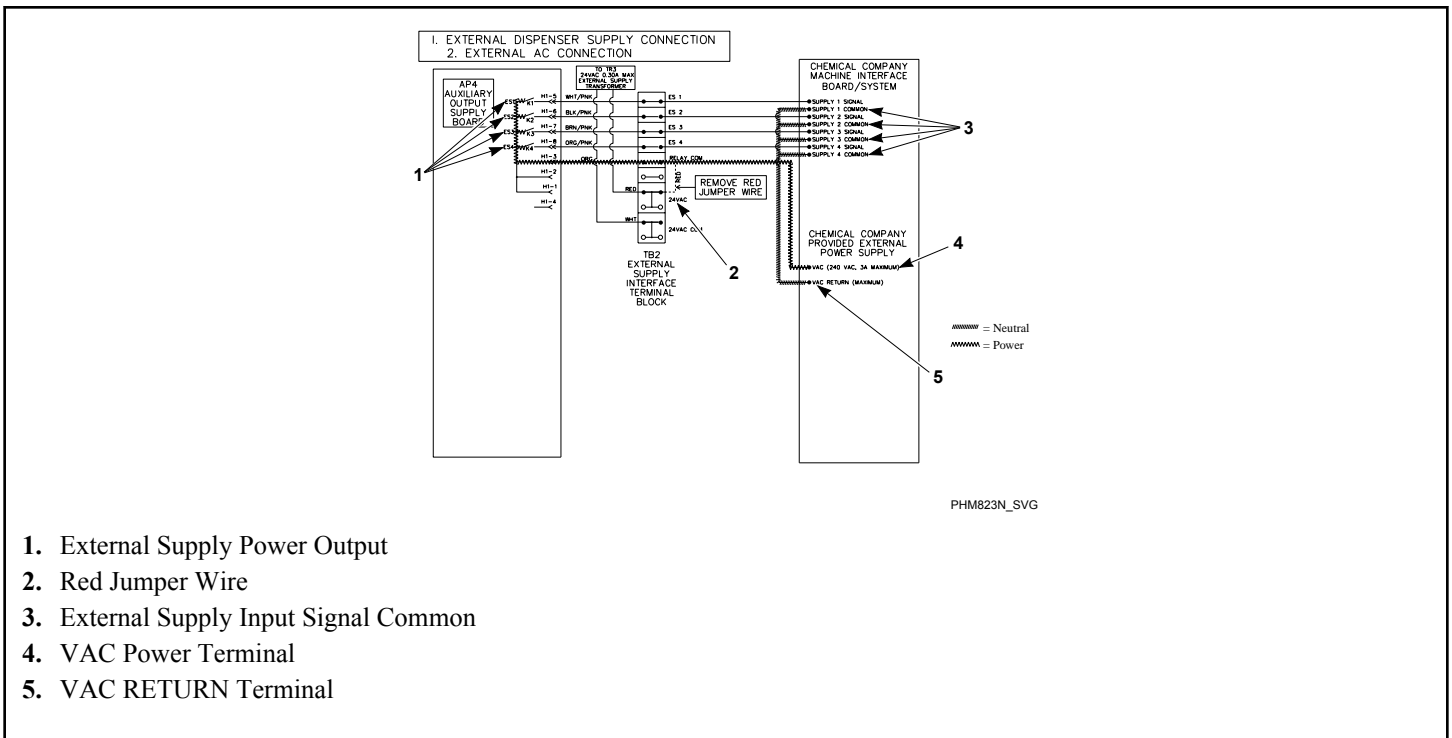


Figure 28

	CAUTION
<p><b>Do not attempt to increase fuse rating or alter wiring of external chemical supply terminal strip in such as way that may conflict with the suggested methods provided on the Optional External Supply Wiring Diagram.</b></p>	
<p><b>W699</b></p>	

### External Supply Signals

Wash-cycle signals are provided to the external chemical supply equipment and a “wait for the next step” signal can be received from the supply equipment.

For example, if ES1 is selected the K1 contact will close and power will be supplied to Supply 1 Signal. The contact will remain closed for the amount of time programmed in control. Refer to *Figure 29* for Internal Supply Connection or *Figure 30* for External AC Connection.

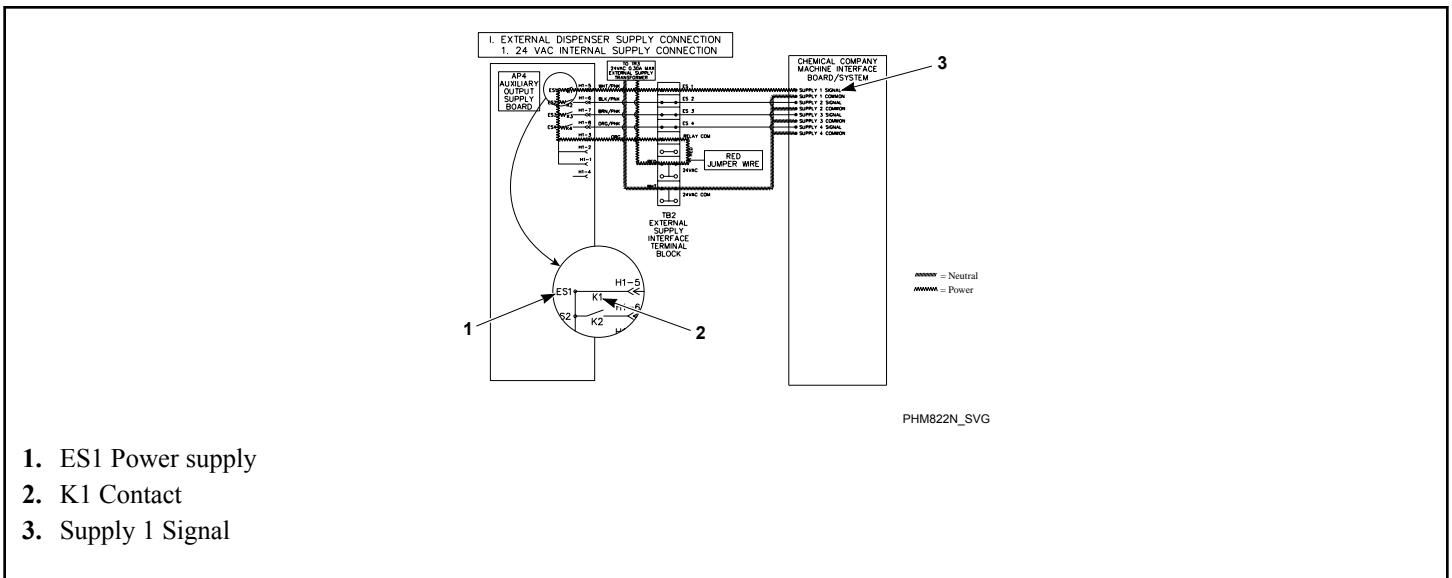


Figure 29

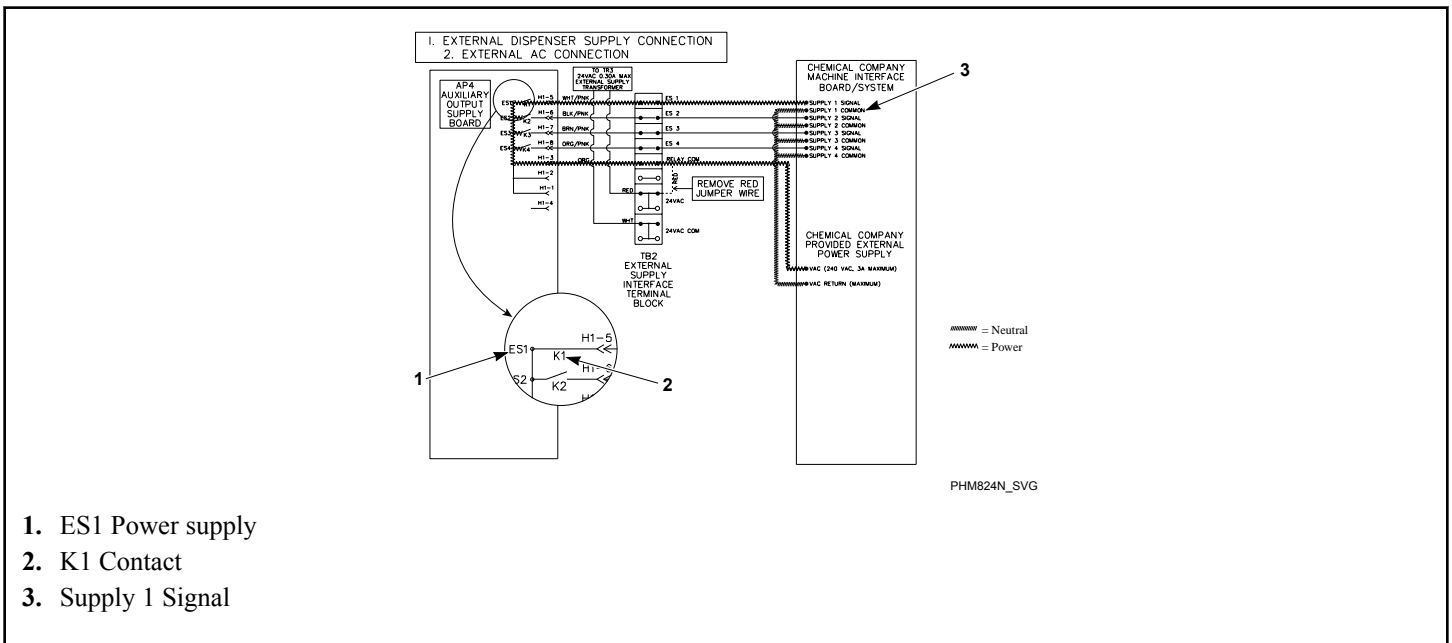


Figure 30

# Startup

## Basket Rotation

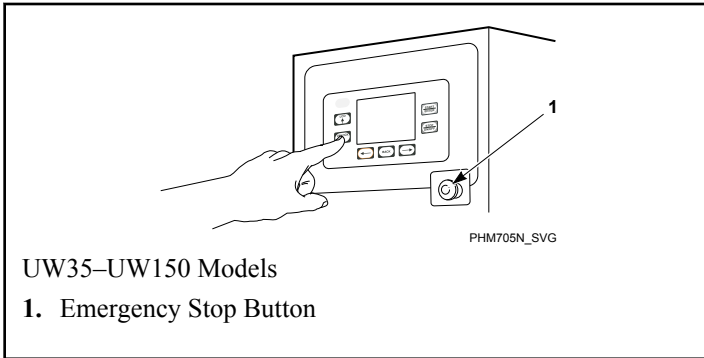
After installation is complete, run the machine through a test cycle and check for a clockwise basket rotation during the extract step.

1. If rotation is not clockwise, disconnect the power from the machine.
2. Have a qualified electrician reverse any 2 motor leads.

# Operation

## Operating Instructions for UniLinc Control

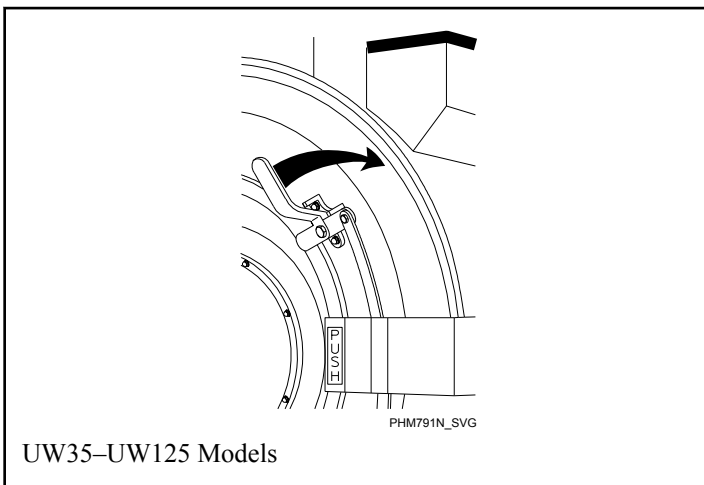
1. Verify display shows the Cycle Menu Screen.
2. Press the door unlock button located on the lower left front on the control. Refer to *Figure 31*.



**Figure 31**

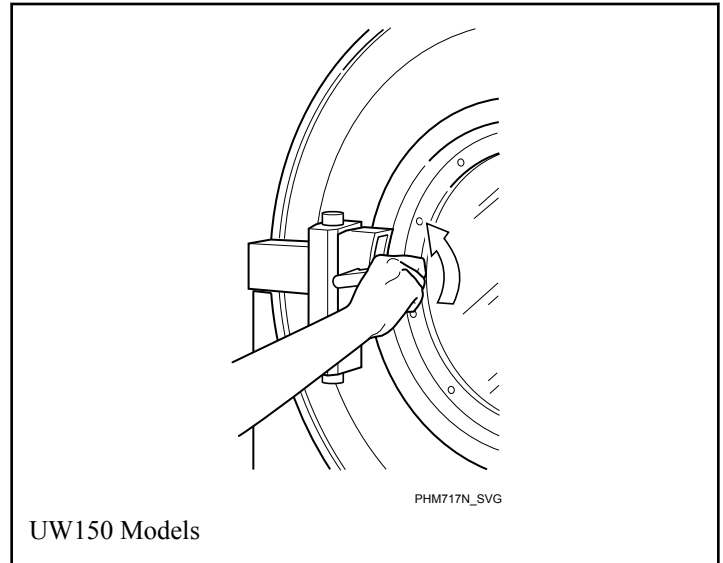
**NOTE: Door must be opened within 5 seconds of pressing the door unlock button.**

3. **35 – 125 models:** Turn door handle clockwise and swing the door left to open. Refer to *Figure 32*.



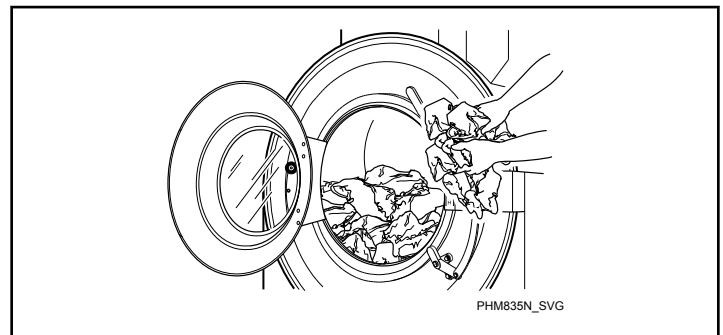
**Figure 32**

**150 models:** Turn handle counterclockwise and swing the door right to open. Refer to *Figure 33*.



**Figure 33**

4. Load to capacity whenever possible. **DO NOT OVERLOAD.** Underloading can cause out-of-balance conditions that can shorten machine life.



**Figure 34**



### CAUTION

Be careful around the open door, particularly when loading from a level below the door. Impact with door edges can cause personal injury.

SW025



**NOTE:** When washing items which may disintegrate or fragment, such as mop heads or sponges, use laundry nets to prevent drain blockage.

**IMPORTANT:** To prevent out-of-balance conditions, premature wear or damage to machine when using laundry nets, use several small nets in a load.

5. Close and lock the door.

- Add dry supplies to the supply dispenser compartment cups prior to the start of each cycle.  
Liquid supplies can be injected directly into the supply dispenser by an external chemical supply system.

**NOTE: Supply dispenser compartment cups must not be removed when an external chemical injection supply system is attached to the machine.**

- Press  and  keypads to select desired wash cycle.

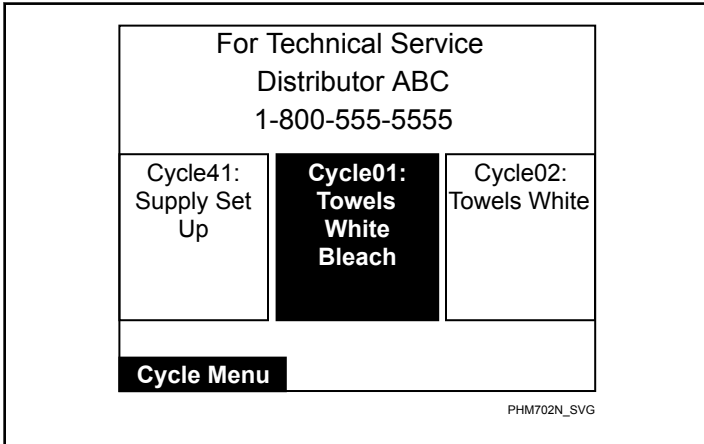




Figure 35

	<b>CAUTION</b>
<p><b>Water cannot be extracted from rubber backed items. To avoid damage to machine from out of balance conditions, do not use a spin (extract) step when washing rubber backed items. Warranty will be voided.</b></p>	
W880	

- Press  to start the selected cycle.

As the cycle proceeds, the display will show a summary of the cycle occurring.

To begin the cycle at any step other than the first step, press the  keypad to advance through the cycle to the desired starting point. Refer to Programming Manual for information to disable Rapid Advance.

If the door is open, the display will indicate that the door needs to be closed and locked. Refer to *Figure 36*.

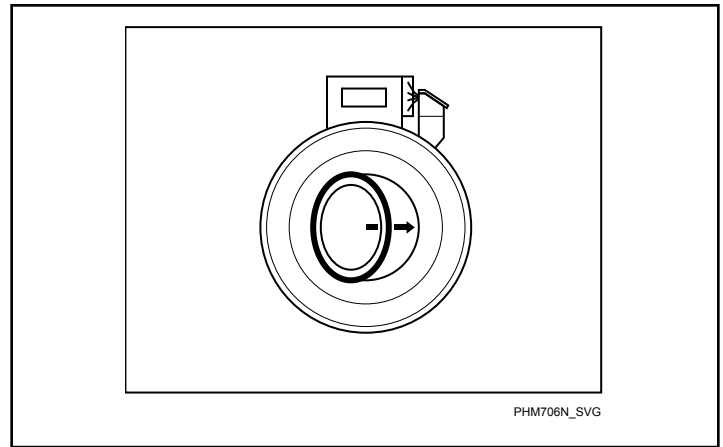




Figure 36

- Close door to start cycle or press  keypad to return to Cycle Menu.

The cycle will continue until its completion. Then the display will show the door is ready to be unlocked and opened.

**NOTE: The drain step that occurs before an extract step or a spray rinse extract step cannot be skipped using Rapid Advance. The machine MUST drain and balance during the drain step before it can extract.**

#### Shakeout Routine

	<b>WARNING</b>
<p><b>NEVER insert hands or objects into basket until it has completely stopped. Doing so could result in serious injury.</b></p>	
SW012	

A Shakeout agitation step is programmed at the end of every cycle and will help prevent tangling of the load.

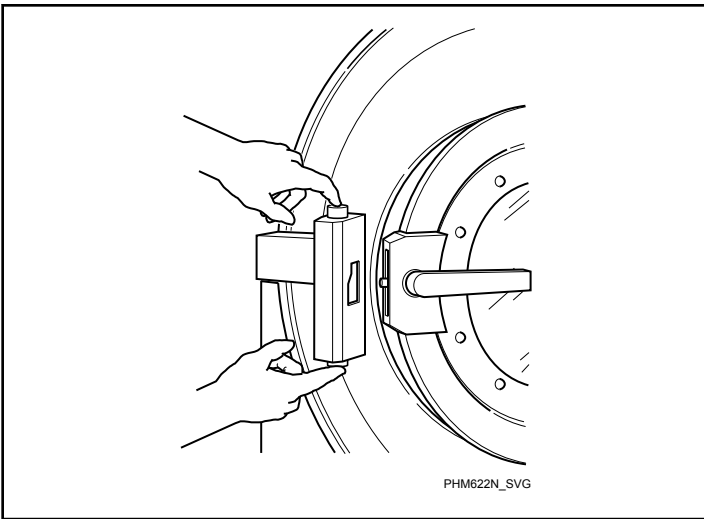
The Shakeout time is set at the factory to agitate for 40 seconds. Refer to **Programming Manual** to disable or change the time of the Shakeout.

#### Basket Jog Feature [150 Pound Model Only]

150 pound models are equipped with a basket jog feature. This feature allows the basket to rotate very slowly while the door is open for easy clothes removal. To operate the jog feature:

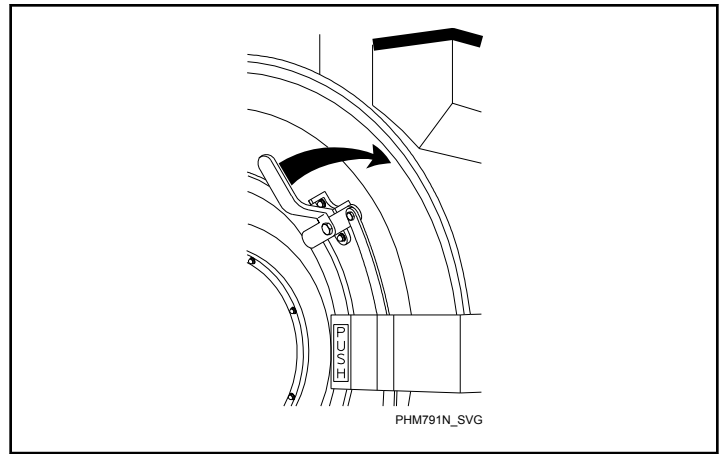
- With the door open and the control in Cycle Menu, press and HOLD both jog buttons. A series of loud beeps will occur, indicating the jog feature is about to start.





**Figure 37**

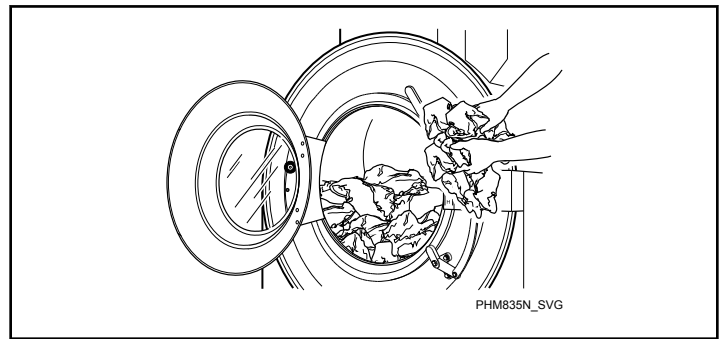
The jog feature is deactivated when the loading door is closed and the jog buttons are not pressed.



**Figure 39**

4. Load to capacity whenever possible. **DO NOT OVERLOAD.** Underloading can cause out-of-balance conditions that can shorten machine life.

	<b>WARNING</b>
<p>To avoid personal injury, do <b>NOT</b> reach into the basket while it is rotating. Keep all personnel at a safe distance from the machine while using the Basket Jog Feature.</p>	
W641	

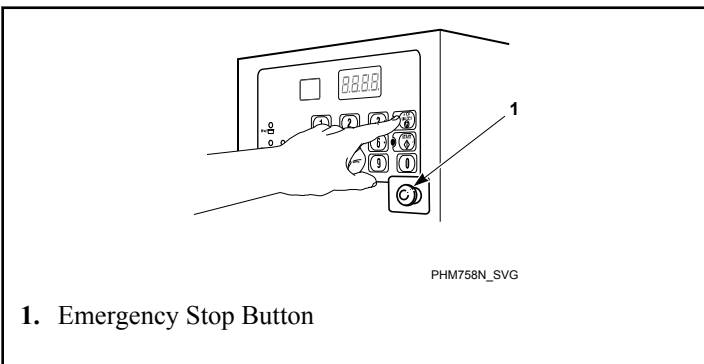


**Figure 40**

	<b>CAUTION</b>
<p>Be careful around the open door, particularly when loading from a level below the door. Impact with door edges can cause personal injury.</p>	
SW025	

**Operating Instructions for M30 Control**

1. Verify display shows a cycle number.
2. Press the STOP/UNLOCK button located on the control. Refer to *Figure 38*.



**Figure 38**

**NOTE: The door must be opened within 5 seconds of pressing the door unlock button.**

3. Turn the door handle clockwise and swing the door left to open it. Refer to *Figure 39*.

**NOTE: When washing items which may disintegrate or fragment, such as mop heads or sponges, use laundry nets to prevent drain blockage.**

**IMPORTANT: To prevent out-of-balance conditions, premature wear or damage to machine when using laundry nets, use several small nets in a load.**

5. Close and lock the door.
6. Add dry supplies into the supply dispenser compartment cups prior to the start of each cycle.

Liquid supplies can be injected directly into supply dispenser by an external chemical supply system.


**NOTE: Supply dispenser compartment cups must not be removed when an external chemical injection supply system is attached to the machine.**

7. Press the numeric keypads to select the desired wash cycle. Refer to *Cycle Number*.

Cycle Number	Cycle Name
1	Permanent Press Light Soil
2	Light Soil
3	Permanent Press Medium Soil
4	Medium Soil
5	Permanent Press Heavy Soil
6	Heavy Soil
7	Rags
8	Reclaim
9	Delicates
10	95°C
11	60°C
12	40°C
13	95°C Permanent Press
14	60°C Permanent Press
15	40°C Permanent Press
16	70°C Permanent Press
17	50°C Gentle
18	30°C Gentle
19	Custom #1
20	Custom #2
21	Custom #3

Cycle Number	Cycle Name
22	Custom #4
23	Custom #5
24	Custom #6
25	Custom #7
26	Custom #8
27	Custom #9
28	Custom #10
29	Custom #11
30	Custom #12

**Table 31**

	<b>CAUTION</b>
<p><b>Water cannot be extracted from rubber backed items. To avoid damage to machine from out of balance conditions, do not use a spin (extract) step when washing rubber backed items. Warranty will be voided.</b></p>	
<b>W880</b>	

8. Press the START keypad to start the selected cycle.

As the cycle proceeds, the display will show and count down the remaining cycle time.

To begin the cycle at any step other than the first step, press the START keypad to advance through the cycle to the desired starting point. Refer to the **Programming Manual** for information to disable Rapid Advance.


If the door is open, the display will indicate that the door needs to be closed and locked.

9. Close the door to start a cycle.

The cycle will continue until its completion. Then the display will show the door is ready to be unlocked and opened.

**NOTE: The drain step that occurs before an extract step or a spray rinse extract step cannot be skipped using Rapid Advance. The machine MUST drain and balance during the drain step before it can extract.**

## Shakeout Routine

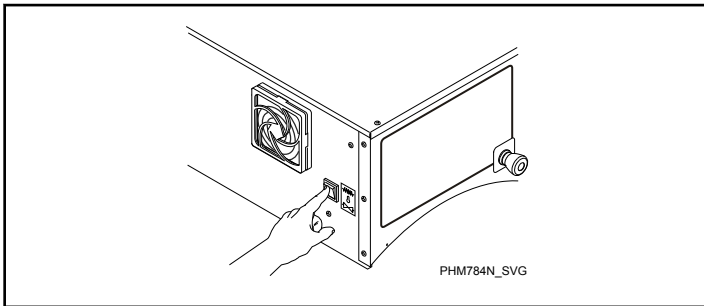
	<b>WARNING</b>
<p><b>NEVER</b> insert hands or objects into basket until it has completely stopped. Doing so could result in serious injury.</p>	
<p>SW012</p>	

A shakeout agitation step is programmed at the end of every cycle and will help prevent tangling of the load.

The shakeout time is set at the factory to agitate for 20 seconds.

## Models Equipped with Both Steam and Electric Heating

1. To switch between the heating type, locate the switch on the left side of control module. Refer to *Figure 41*.
2. To select **steam heat**, make sure the switch is in the **down** position.
3. To select **electric heat**, make sure the switch is in the **up** position.





**Figure 41**

# Maintenance


## Maintenance

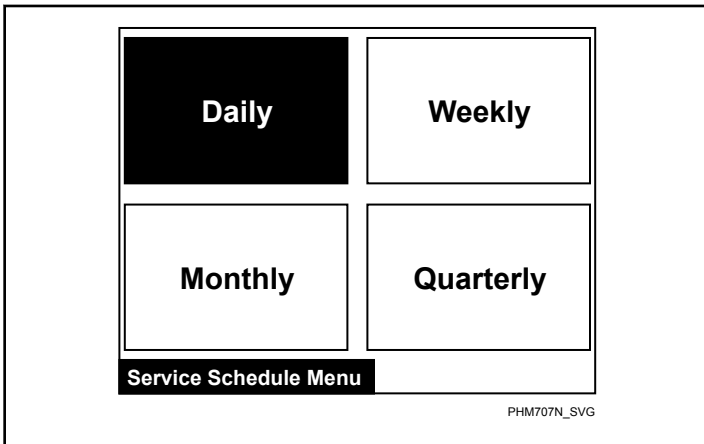
Routine maintenance maximizes operating efficiency and minimizes downtime. The maintenance procedures described below will prolong the life of the machine and help prevent accidents.

	<b>WARNING</b>
<p><b>Sharp edges can cause personal injury. Wear safety glasses and gloves, use proper tools and provide lighting when handling sheet metal parts.</b></p>	
W366R1	


	<b>CAUTION</b>
<p><b>Replace all panels that are removed to perform service and maintenance procedures. Do not operate the machine with missing guards or with broken or missing parts. Do not bypass any safety devices.</b></p>	
SW019	

Follow local codes for proper advise on laundering infected garments.

On UniLinc Control models, maintenance checklists are also displayed on the control. Press  to enter Service Schedule Menu. Refer to *Figure 42*.




**Figure 42**

Press  from Cycle Menu to enter Service Menu. The Service Menu provides a user with a time based service reminder list. The list is broken up into “DAILY”, “WEEKLY”, “MONTHLY” and “QUARTERLY”.

The following maintenance procedures must be performed regularly at the required intervals.

## Daily

	<b>WARNING</b>
<p><b>Do not spray the machine with water. Short circuiting and serious damage may result.</b></p>	
W782	

**IMPORTANT: Door lock should be checked daily to ensure proper operation. Also check that all safety and instruction stickers are on the machine. Any missing or illegible safety instructions stickers should be replaced immediately.**


### Beginning of Day

1. Check door interlock before starting operation:
  - a. Attempt to start the machine with the door open. The machine should not start.
  - b. Close the door without locking it and start the machine. The machine should not start.
  - c. Attempt to open the door while the cycle is in progress. The door should not open.

If the door lock and interlock are not functioning properly, disconnect power and call a service technician.

**IMPORTANT: Door lock should be checked daily to ensure proper operation. Also, check that all safety and instruction stickers are on the machine. Replace as necessary.**

2. Inspect water inlet valve hose connections on the back of the machine for leaks.
3. Inspect steam hose connections for leaks (where applicable).
4. Inspect all chemical inlets, lines and connections for leaks.

	<b>WARNING</b>
<p><b>To reduce the risk of electrical shock, serious injury or death, disconnect the electrical power to washer-extractor before examining the wiring.</b></p>	
W636	

5. Verify that insulation is intact on all external wires and that all connections are secure. If bare wire is evident, call a service technician.

## End of Day

1. Clean the AC drive filter (where applicable):
  - a. Remove the external plastic cover which contains the filter.
  - b. Remove the foam filter from the cover.
  - c. Wash the filter with warm water and allow to air dry. Filter can be vacuumed clean.

**IMPORTANT: The control module cover and fan filter must be in place for the fan to properly cool the AC inverter drive. Failure to observe this warning will void the warranty and could lead to expensive AC inverter drive repair.**

2. Clean the door gasket of residual detergent and all foreign matter.
3. Clean automatic supply dispenser and lid [where applicable] inside and out with mild detergent. Rinse with clean water.
4. Clean machine's top, front, and side panels with mild detergent. Rinse with clean water.

**NOTE: Unload the machine promptly after each completed cycle to prevent moisture buildup. Leave loading door open at the end of each completed cycle to allow moisture to evaporate.**

## Weekly

Check the machine for leaks.

- a. Start an unloaded cycle to fill the machine.
- b. Verify that door and door gasket do not leak.
- c. Verify that the drain valve is operating and that the drain system is free from obstruction. If water does not leak out during the prewash segment, drain valve is closed and functioning properly.

## Monthly

**NOTE: Disconnect power to the machine at its source before performing the monthly maintenance procedures.**

1. Clean the AC drive fins (where applicable).
2. Each month OR after every 200 hours of operation, lubricate bearings (locate the bearing lubrication decal at the rear of the left side of the machine, as viewed from the front).

The grease must have the following characteristics:

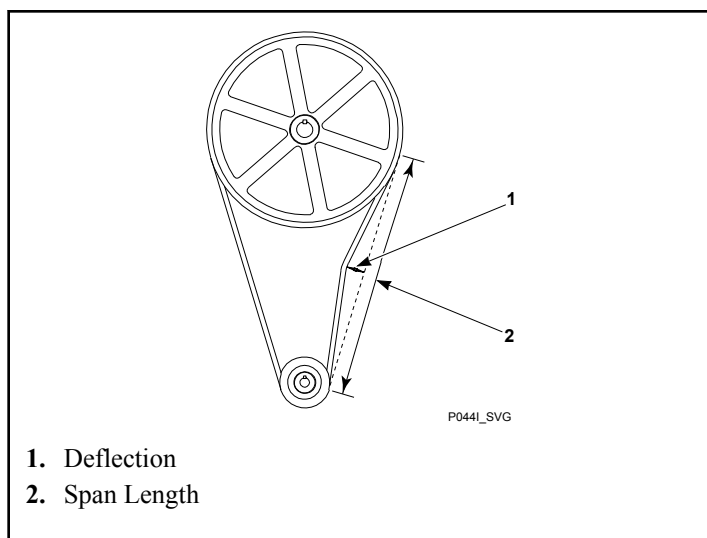
- NLGI Grade 2
- Lithium-based
- Water-insoluble
- Anti-rusting
- Anti-oxidizing
- Mechanically stable

The grease must have adequate base oil viscosity with one of the following ratings:

- ISO VG 150 ( 709–871 SUS at 100°F [135–165 cSt at 40°C])
- ISO VG 220 ( 1047–1283 SUS at 100°F [198–242 cSt at 40°C])
- An SAE 40 rating is also acceptable as long as the cSt or SUS values are within the specified ranges.

Pump the grease gun slowly, permitting only 2 strokes.

3. Use the following procedures to determine if V-belt requires replacement or adjustment. Call a qualified service technician in either case.
  - a. Check V-belt for uneven wear and frayed edges.
  - b. After disconnecting power to the machine and removing all panels necessary for access to the drive belt, use one of the following methods to verify that the V-belt is properly tensioned.
    - **Tension Gauge.** Loosen motor mounting bolts and slide motor along motor plate to change belt span length. The belt tension should be between 70 and 90 pounds [ $\pm 5$  pounds] [set initial tension toward the high end of this range].
    - **Deflection.** Refer to *Figure 43* . Loosen motor mounting bolts and slide motor along motor plate to change belt span length. Belt tension measurements should be taken as close to the center of the belt span as possible. For every inch of span length, the belt should deflect 1/64 inch [0.40 mm]. Thus, a belt with span length of 50 inches should deflect 50/64 inch [19.84 mm]. An initial [run-in] force of 5.25 pounds should be used to set the belt tension. An operating [normal] force of 3.5 pounds should be used after the machine has been operated for a few hours.



1. Deflection
2. Span Length

**Figure 43**

- c. Verify that V-belts are properly aligned by checking pulley alignment. Place a straightedge across both pulley faces. The straightedge should make contact with the pulleys in four places. Refer to *Figure 44* .

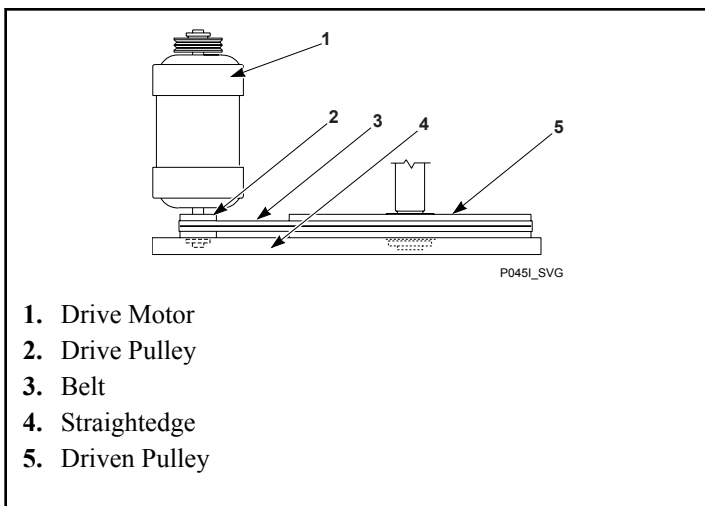


Figure 44

4. Check overflow hose and drain hose for leaks or visible signs of deterioration. Replace immediately if either are present.
5. Clean inlet hose filter screens:
  - a. Turn water off and allow valve to cool, if necessary.
  - b. Unscrew inlet hose and remove filter screen.
  - c. Clean with soapy water and reinstall. Replace if worn or damaged.
6. Tighten anchor bolts, if necessary.
7. Use a vacuum to clean lint from motor.
8. Clean interior of machine, by wiping with a water-soaked sponge or cloth. Use compressed air to clear debris between the shell and the basket by directing it through the perforations of the basket.
9. Use compressed air to ensure that all electrical components are free of moisture and dust.
10. Remove chemical supply components and check all flush hoses and connections for residual chemicals, leaks or visible signs of deterioration. Clean or replace as necessary.
11. If applicable, check the supply dispenser hoses and hose connections for leaks or visible signs of deterioration. Replace immediately if either are present.
12. Verify points of contact at terminals and quick disconnects are firm throughout the machine by gently tugging the wires. Reseat any loose contacts.

## Quarterly

**NOTE: Disconnect power to the machine before performing the quarterly maintenance procedures.**

1. Tighten door hinges and fasteners, if necessary.
2. Tighten anchor bolts, if necessary.
3. Tighten motor mounting bolt locknuts and bearing bolt locknuts, if necessary.
4. Verify that the drain motor shield is in place and secure.
5. Check all painted surfaces for bare metal.

- If bare metal is showing, paint with primer or solvent-based paint.
  - If rust appears, remove it with sandpaper or by chemical means. Then paint with primer or solvent-based paint.
6. Clean steam filter, where applicable.
    - a. Turn off steam supply and allow time for the valve to cool.
    - b. Unscrew nut.
    - c. Remove element and clean.
    - d. Replace element and nut.
  7. **150 models:** place a large magnet over the normally-closed ball switch to verify the stability switch operation. Refer to the *Verify Safety Switch Operation (For 150 Pound Design 2 Models)* section.

## Care of Stainless Steel

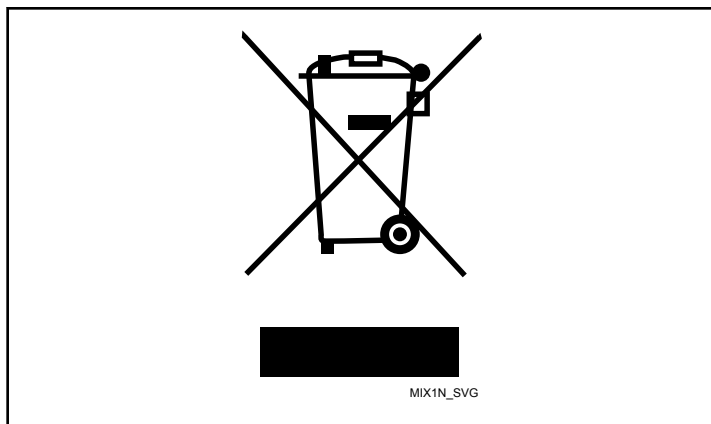
- Remove dirt and grease with detergent and water. Thoroughly rinse and dry after washing.
- Avoid contact with dissimilar metals to prevent galvanic corrosion when salty or acidic solutions are present.
- Do not allow salty or acidic solutions to evaporate and dry on stainless steel. Wipe clean of any residues.
- Rub in the direction of the polish lines or “grain” of the stainless steel to avoid scratch marks when using abrasive cleaners. Use stainless steel wool or soft, non-metal bristle brushes. Do not use ordinary steel wool or steel brushes.
- If the stainless steel appears to be rusting, the source of the rust may be an iron or steel part not made of stainless steel, such as a nail or screw.
- Remove discoloration or heat tint from overheating by scouring with a powder or by employing special chemical solutions.
- Do not leave sterilizing solutions on stainless steel equipment for prolonged periods of time.
- When an external chemical supply is used, ensure no siphoning of chemicals occurs when the machine is not in use. Highly concentrated chemicals can cause severe damage to stainless steel and other components within the machine. Damage of this kind is not covered by the manufacturer’s warranty. Locate the pump and tubing below the machine’s injection point to prevent siphoning of chemicals into the machine.

# Disposal of Unit

## Disposal of Unit

This appliance is marked according to the European directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Refer to *Figure 45*. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. Ensuring this product is disposed of correctly will help prevent potential negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact the local city office, household waste disposal service, or the source from which the product was purchased.



**Figure 45**