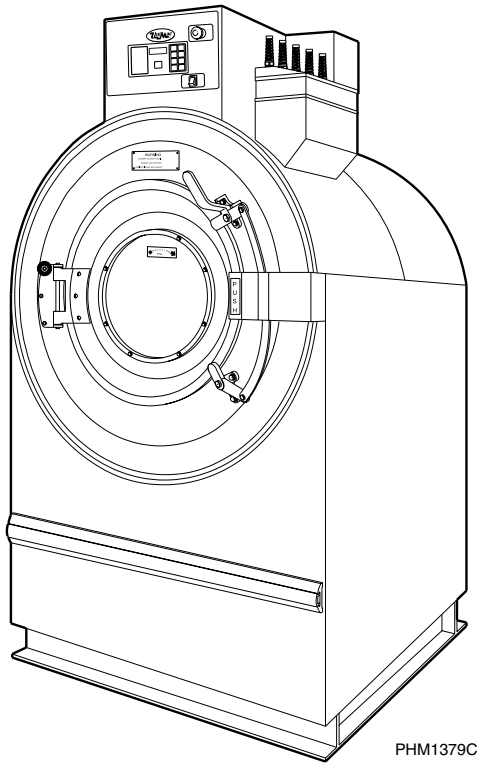
Washer-Extractors

Pocket Hardmount

Variable Speed

UW35AV
UW60AV
UW80AV
UW100AV
UW125AV

Installation



PHM1379C

Para bajar una copia de estas instrucciones
en español, visite www.comlaundry.com

Keep These Instructions for Future Reference.
(If this machine changes ownership, this manual must accompany machine.)

Alliance Laundry Systems

www.comlaundry.com

Part No. F232228R2
June 2008

Table of Contents

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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.

DANGER

DANGER indicates the presence of a hazard that will cause severe personal injury, death, or substantial property damage if the danger is ignored.

WARNING

WARNING indicates the presence of a hazard that can cause severe personal injury, death, or substantial property damage if the warning is ignored.

CAUTION

CAUTION indicates the presence of a hazard that will or can cause minor personal injury or property damage if the caution is ignored.

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

WARNING

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

W023

1. Read all instructions before using the washer.
2. Refer to the GROUNDING INSTRUCTIONS in the INSTALLATION manual for the proper grounding of the washer.
3. Do not wash textiles that have been previously cleaned in, washed in, soaked in, or spotted with gasoline, kerosene, waxes, cooking oils, dry-cleaning solvents, or other flammable or explosive substances as they give off vapors that could ignite or explode.
4. Do not add gasoline, dry-cleaning solvents, or other flammable or explosive substances to the wash water. These substances give off vapors that could ignite or explode.
5. 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.
6. 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 is a safety rule for all appliances.
7. Before the washer is removed from service or discarded, remove the door to the washing compartment.
8. Do not reach into the washer if the wash drum is moving.

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9. Do not install or store the washer where it will be exposed to water and/or weather.
10. Do not tamper with the controls.
11. 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.
12. 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.
13. Use washer only for its intended purpose, washing textiles.
14. Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket.
15. ALWAYS disconnect the washer from electrical supply before attempting any service. Disconnect the power cord by grasping the plug, not the cord.
16. Install the washer according to the INSTALLATION INSTRUCTIONS. All connections for water, drain, electrical power and grounding must comply with local codes and be made by licensed personnel when required.
17. To reduce the risk of fire, textiles which have traces of any flammable substances such as vegetable oil, cooking oil, machine oil, flammable chemicals, thinner, etc., or anything containing wax or chemicals such as in mops and cleaning cloths, must not be put into the washer. These flammable substances may cause the fabric to catch on fire by itself.
18. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
19. 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.
20. If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
21. 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.
22. 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.
23. 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).
24. Always follow the fabric care instructions supplied by the textile manufacturer.
25. Never operate the washer with any guards and/or panels removed.
26. DO NOT operate the washer with missing or broken parts.
27. DO NOT bypass any safety devices.
28. 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.

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WARNING

This machine must be installed, adjusted, and serviced by qualified electrical maintenance personnel familiar with 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 and/or equipment damage, and may void the warranty.

SW004

IMPORTANT: Ensure that the recommended clearances for inspection and maintenance are provided. Never allow the inspection and maintenance space to be blocked.

WARNING

Install the machine on a level floor of sufficient strength. Failure to do so may result in conditions which can produce serious injury, death and/or property damage.

W703

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

WARNING

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.

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.

To provide personal safety and keep the machine in proper working order, follow all maintenance and safety procedures presented in this manual. If questions regarding safety arise, contact the manufacturer immediately.

Use manufacturer-authorized spare parts to avoid safety hazards.

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Operator Safety

WARNING

NEVER insert hands or objects into basket until it has completely stopped. Doing so could result in serious injury.

SW012

To ensure the safety of machine operators, the following maintenance checks must be performed daily:

1. Prior to operating the machine, verify that all warning signs are present and legible. Missing or illegible signs must be replaced immediately. Make certain that spares are available.
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 with the door open.
   b. Close the door without locking it and attempt to start the machine. The machine should not start with the door unlocked.
   c. Close and lock the door and start a cycle. 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, 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.

WARNING

Never operate the machine with a bypassed or disconnected balance system. Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.

SW039

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Installation

This manual is designed as a guide to the installation of the Pocket Hardmount washer-extractor equipped with the AC inverter drive.

NOTE: All information, illustrations, and specifications contained in this manual are based on the latest product information available at the time of printing. We reserve the right to make changes at any time without notice.

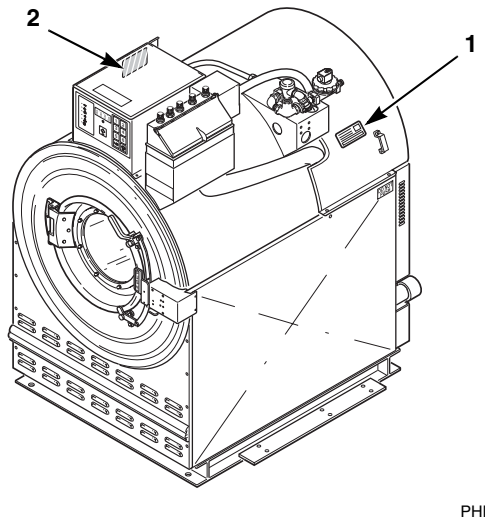
Delivery Inspection

Upon delivery, visually inspect crate protective cover, and unit for any visible shipping damage. If the crate, protective cover, or unit is damaged or 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.

Remove the crate and protective cover as soon after delivery as possible. If any damage is discovered upon removal of the crate and/or protective cover, advise the carrier and file a written claim immediately.

Nameplate Location

The nameplate is located at the rear of the machine and near supply valves. Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance. Refer to *Figure 1*.



1 Near Supply Valves
2 Top of Module

Figure 1

Customer Service

If literature or replacement parts are required, contact the source from whom the washer-extractor was purchased or contact Alliance Laundry Systems LLC at (920) 748-3950 for the name of the nearest authorized parts distributor.

For technical assistance, call:

(920) 748-3121
Ripon, Wisconsin

A record of each washer-extractor is on file with the manufacturer. The serial number decal is located on the left side of the control module at the rear of the machine. *Figure 1* shows an example of the serial number on the nameplate. Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance.

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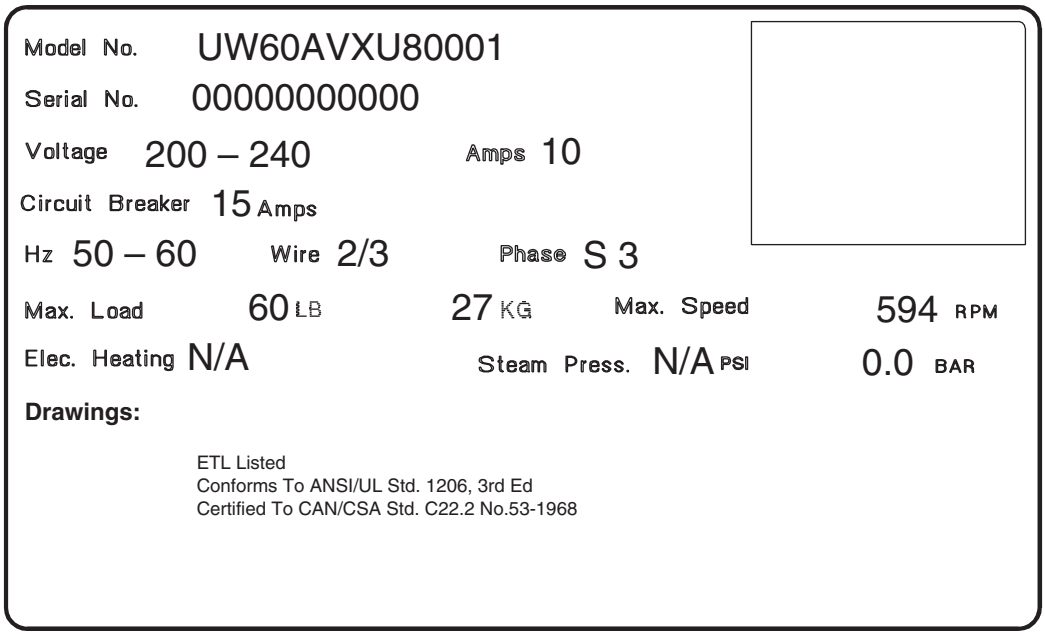
Model Number Familiarization Guide		
Sample Model Number: **UW60AVXU80001**		
UW	Model Number Prefix	
60	Washer-Extractor Capacity (pounds dry weight of laundry)	
A	Type of Electrical Control	A = A-Control
V	Washer-Extractor Speed Capabilities	V = Variable Speed
X	Electrical Characteristics	See Electrical Specifications Chart in this section.
U8	Design Series	
0001	Option Identification (varies from machine to machine)	



EXAMPLE OF NAMEPLATE

PHM625N

Figure 2

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UWAV Pocket Hardmount General Specifications						
Specifications		**35**	**60**	**80**	**100**	**125**
Overall Dimensions						
Overall width, in (mm)		32.5 (826)	36.625 (930)	41.5 (1054)	41.5 (1054)	48 (1219)
Overall height, in (mm)		55.5 (1410)	64.5 (1638)	68.5 (1740)	68.5 (1740)	72 (1829)
Overall depth, in (mm)		43.625 (1108)	45 (1143)	51.5 (1308)	54.5 (1384)	58 (1473)
Weight and Shipping Information						
Net weight, lb (kg)		750 (341)	1229 (559)	1640 (744)	1680 (762)	2211 (1005)
Domestic shipping weight, lb (kg)		800 (361)	1268 (575)	1705 (773)	1745 (792)	2525 (1148)
Domestic shipping volume, ft^3 (m^3)		66 (1.9)	84 (2.4)	119 (3.4)	119 (3.4)	166 (4.7)
Domestic shipping dimensions, WxDxH, in (mm)		38x47x64 (970x1200x1630)	40x49x74.5 (1016x1245x1892)	44x60.5x77.25 (1118x1537x1962)	44x60.5x77.25 (1118x1537x1962)	61.5x60x77.75 (1560x1520x1980)
Export shipping weight, lb (kg)		910 (413)	1392 (631)	1900 (863)	1940 (881)	2591 (1178)
Export shipping volume, ft^3 (m^3)		78 (2.2)	96 (2.7)	134 (3.8)	134 (3.8)	184 (5.3)
Export shipping dimensions, WxDxH, in (mm)		41x50x65.5 (1050x1280x1670)	43x52x72.5 (1092x1324x1892)	47x63.5x76 (1194x1613x1962)	47x63.5x76 (1194x1613x1962)	59x63x80 (1620x1610x2030)
Wash Cylinder Information						
Cylinder diameter, in (mm)		26.25 (667)	32 (813)	36 (914)	36 (914)	42 (1067)
Cylinder depth, in (mm)		18.375 (467)	20 (508)	21 (533)	27 (686)	24 (610)
Cylinder volume, ft^3 (l)		5.76 (163)	9.31 (264)	12.4 (350)	15.9 (450)	19.2 (544)
Perforation size, in (mm)		.1875 (4.8)	.1875 (4.8)	.1875 (4.8)	.1875 (4.8)	.1875 (4.8)
Perforation open area, %		18	22	23	23	24
Door Opening Information						
Door opening size, in (mm)		14.375 (365)	17.5 (445)	17.5 (445)	17.5 (445)	20 (508)
Height of door bottom above floor, in (mm)		23.75 (603)	28.25 (718)	29 (737)	29 (737)	29 (737)
Water Consumption						
Average water consumption per cycle, gal (l)	HOT	45 (170)	61 (231)	90 (341)	106 (401)	114 (431)
	COLD	24 (91)	29 (110)	41 (155)	47 (178)	52 (197)
Average hot water used per hour, gal (l)		78 (295)	102 (386)	139 (526)	161 (609)	168 (636)
Power Consumption						
Average power used per cycle, kW/hr		0.18	0.28	0.40	0.40	0.48
Average HVAC load, BTU/hr (kcal/hr)		800 (202)	950 (240)	1050 (265)	1150 (290)	1200 (302)

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UWAV Pocket Hardmount General Specifications (Continued)						
Specifications		**35**	**60**	**80**	**100**	**125**
Drive Train Information						
Number of motors in drive train		1	1	1	1	1
Drive motor power, hp (kW)		2.3 (1.7)	2.9 (2.2)	5.0 (3.7)	5.0 (3.7)	7.5 (5.6)
Cylinder Speeds / Centrifugal Force Data						
1/2 Wash/reverse, rpm (g)		26 (.25)	26 (.31)	26 (.35)	26 (.35)	26 (.40)
Wash/reverse, rpm (g)		42 (.66)	40 (.73)	40 (.82)	40 (.82)	37 (.82)
Distribution, rpm (g)		83 (2.57)	71 (2.29)	73 (2.57)	70 (2.50)	62 (2.29)
High extract 1, rpm (g)		328 (40)	297 (40)	280 (40)	280 (40)	260 (40)
High extract 2, rpm (g)		534 (106)	483 (106)	456 (106)	456 (106)	422 (106)
High extract 3, rpm (g)		656 (160)	594 (160)	560 (160)	560 (160)	518 (160)
Balance Detection						
Vibration safety switch installed		N/A	STD	STD	STD	STD
Safety switch gap setting, in (mm)*		N/A	.008 (.20) GO .010 (.25) NO-GO	.008 (.20) GO .010 (.25) NO-GO	.008 (.20) GO .010 (.25) NO-GO	.006 (.15) GO .008 (.20) NO-GO
Direct Steam Heating (Optional)						
Steam inlet connection size, in		.5	.5	.5	.5	.75
Number of steam inlets		1	1	1	1	1
Steam required to raise bath temperature 10°F, lb (10°C, kg)	LOW	2.1 (1.5)	3.3 (2.4)	4.6 (3.3)	5.7 (4.1)	6.7 (4.9)
	MED	2.3 (1.7)	3.7 (2.6)	5.2 (3.8)	6.5 (4.7)	7.8 (5.6)
	HIGH	2.7 (1.9)	4.1 (2.9)	6.1 (4.4)	7.6 (5.5)	9.1 (6.6)
Average consumption per cycle, bhp (kg)		1.4 (21.4)	2.1 (33.4)	3.1 (48.4)	3.8 (60.4)	4.6 (72.0)
Electrical Heating (Optional)						
Total electrical heating capacity, kW		15.6	25.2	37.8	37.8	50.4
Number of electrical heating elements		6	6	9	9	12
Electrical heating element size, kW		2.6	4.2	4.2	4.2	4.2
Time required to raise bath temperature 10°F, min (10°C, min)	LOW	2.4 (3.6)	2.4 (3.7)	2.2 (3.4)	2.8 (4.2)	2.5 (3.8)
	MED	2.7 (4.1)	2.7 (4.1)	2.5 (3.9)	3.2 (4.8)	2.9 (4.4)
	HIGH	3.1 (4.7)	3.0 (4.6)	3.0 (4.5)	3.7 (5.6)	3.4 (5.1)
* Gap setting should be made with “GO-NO-GO” type feeler gauge.						

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Machine Dimensions Requirements

Dimensional Clearances

Allow a minimum of 24 inches (60 cm) at the rear and 18 inches (45 cm) at the sides for maintenance, inspection, and adjustment. Allow at least 18 inches (45 cm) between machines in multiple installations. Machine dimensions are indicated in *Figure 3* and specified in *Table 1*.

NOTE: The dimensions shown here are for planning purposes only. They are approximate and subject to normal manufacturing tolerances. If exact dimensions are required for construction purposes, contact the distributor or the manufacturer. We reserve the right to make changes at any time without notice.

UWAV Pocket Hardmount Machine Dimensions (Refer to *Figure 3.*)										
Dimension	35		60		80		100		125	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
A	30.125	765	35.625	905	41.125	1045	41.125	1045	48	1219
B	32.5	826	36.625	930	41.5	1054	41.5	1054	48	1219
C	23.75	603	28.25	718	29	737	29	737	29	737
D	43.625	972	45	1143	51.5	1308	54.5	1384	58	1473
E	1	25	1	25	3	76	3	76	1.5	38
F	55.5	1410	64.5	1638	68.5	1740	68.5	1740	72	1829
G	30.5	775	36	914	43.75	1111	43.75	1111	48	1219
H	7.625	194	15.5	394	16.875	429	16.875	429	11.375	289
I	43.875	1114	55	1397	58.5	1486	58.5	1486	63.375	1610

Table 1

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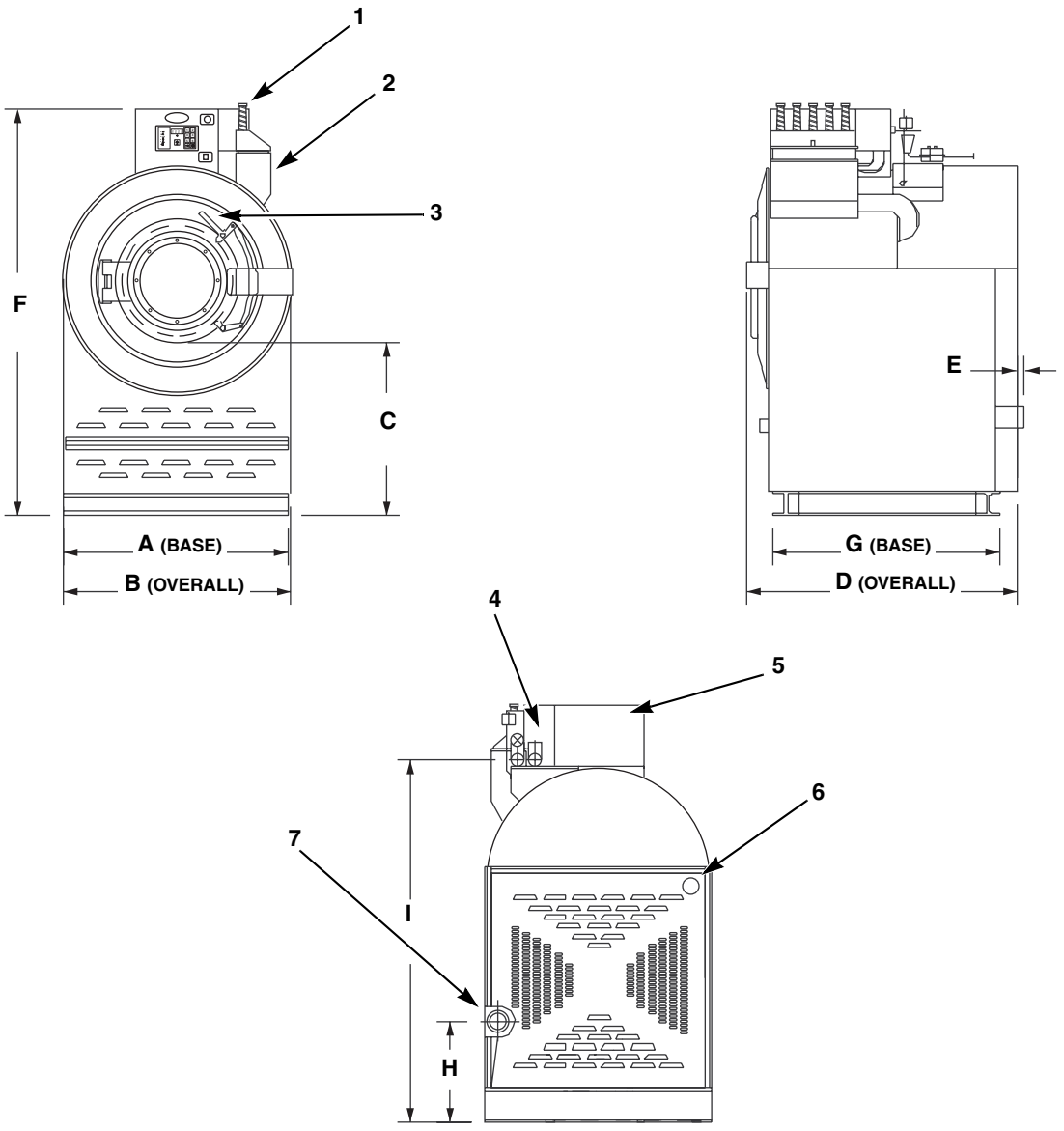

1	Supply Valve Box	**5**	Power Input Area (Inside)
2	Supply Dispenser	**6**	Steam Connector (Optional)
3	Door Handle	**7**	Drain
4	Water Inlet Valve		

Figure 3

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Machine Foundation Requirements

A proper foundation is absolutely necessary for the washer-extractor because of the high extract speed and the G-forces exerted.

NOTE: Do not mount on wooden floors, above ground level, or over basements. Installation must be "slab on grade" or equal.

Thoroughness of detail must be stressed with all foundation work to ensure a stable unit installation, eliminating possibilities of excessive vibration during extract.

CAUTION

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

SW020

The washer-extractor must be anchored to a smooth level surface so that the entire base of the machine is supported and rests on the mounting surface. (Do not support the washer-extractor on only four points.)

A concrete base designed to elevate the washer-extractor to a comfortable and more accessible height for loading and unloading laundry may be used. Care must be exercised in the design of such a base due to the force exerted by the machine during extract. This base must be adequately tied in to the existing floor.

Static and dynamic loads on the floor or foundation are shown in *Table 2*. This table can be used as a reference when designing floors and foundations.

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Floor Load Data

UW A-Control, Variable Speed Pocket Hardmount					
Specifications	**UW35AV 160g**	**UW60AV 160g**	**UW80AV 160g**	**UW100AV 160g**	**UW125AV 160g**
Static Load Pressure, kN/sq m	6.33	7.77	8.46	9.18	9.16
Static Load Pressure, lbs/sq ft	132	162	177	192	191
Total Dynamic Load, kN*	5.0	8.6	11.4	14.2	17.8
Total Dynamic Load, lbs*	1122	1922	2562	3203	3996
Dynamic Load Pressure, kN/sq m	7.1	10.3	9.8	12.3	11.9
Dynamic Load Pressure, lbs/sq ft	149	216	205	256	249
Dynamic Load Freq, Hz	10.9	9.9	9.3	9.3	8.6
Maximum Vertical Load, kN†	8.5	13.7	19.1	22.3	28.3
Maximum Vertical Load, lbs†	1917	3073	3073	5002	6358
Minimum Vertical Load, kN††	1.45	3.43	3.43	6.24	7.27
Minimum Vertical Load, lbs††	326.62	770.90	823.07	1403.64	1634.52
Maximum Moment about Machine Base, kN-m	3.9	8.2	11.3	14.1	18.0
Maximum Moment about Machine Base, lb-ft	2893	6053	8322	10,403	13,243

Table 2

† Acting in the downward direction against the floor.

†† Acting in the upward direction against the floor.

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Specifications and Dimensions

Mounting Bolt Hole Locations

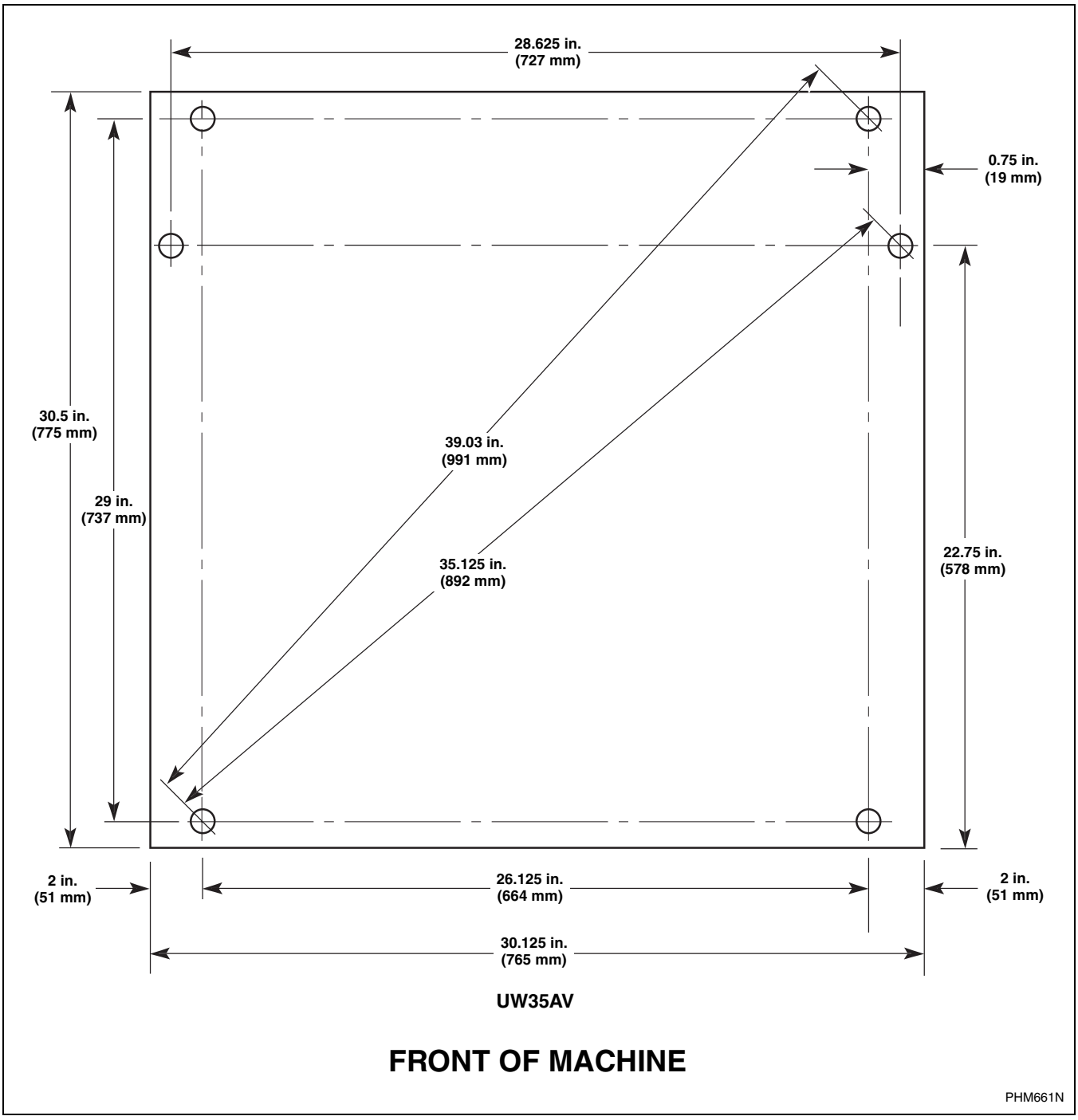

Figure 4

IMPORTANT: Drawing is not to scale.

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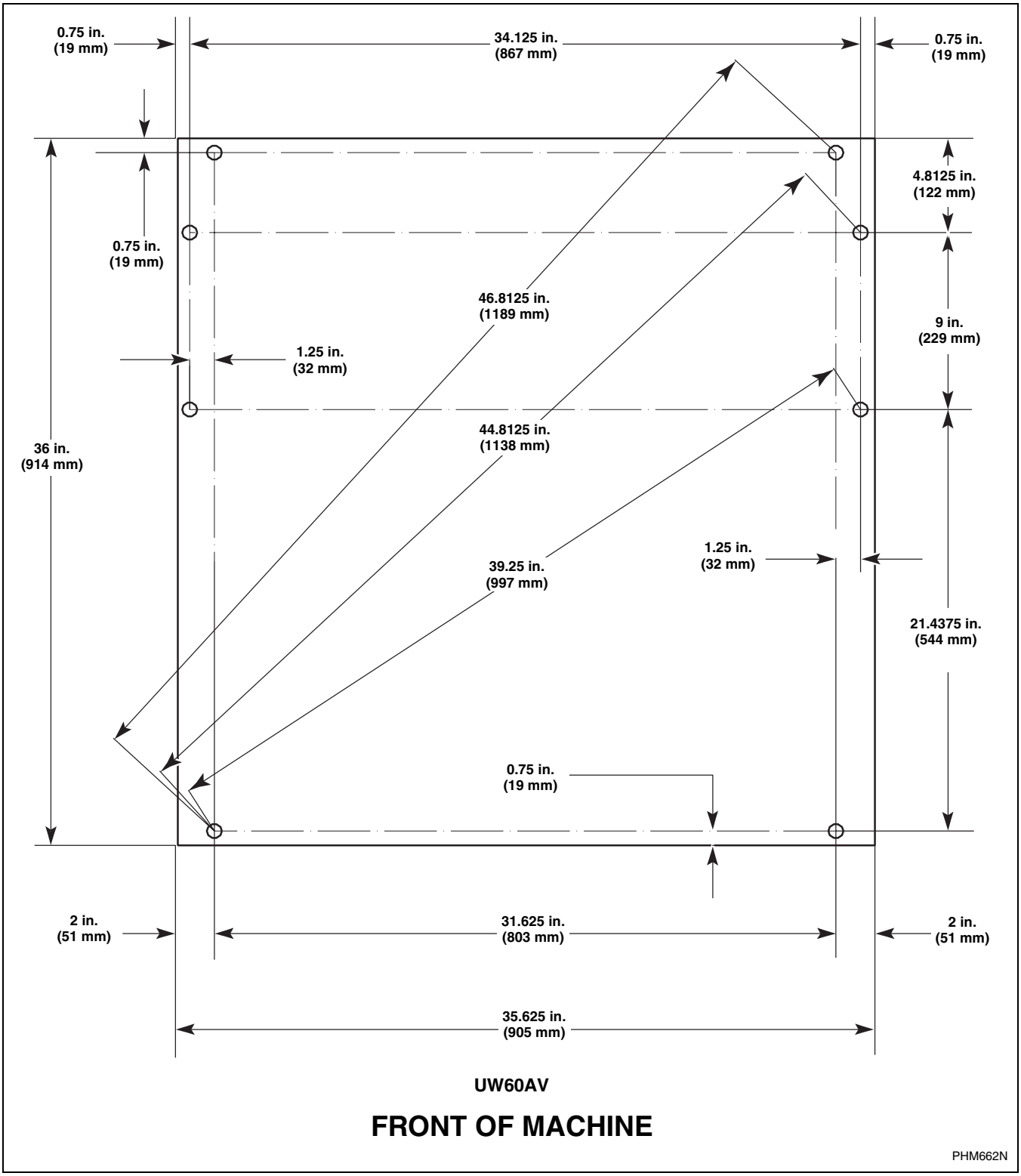

Figure 5

IMPORTANT: Drawing is not to scale.

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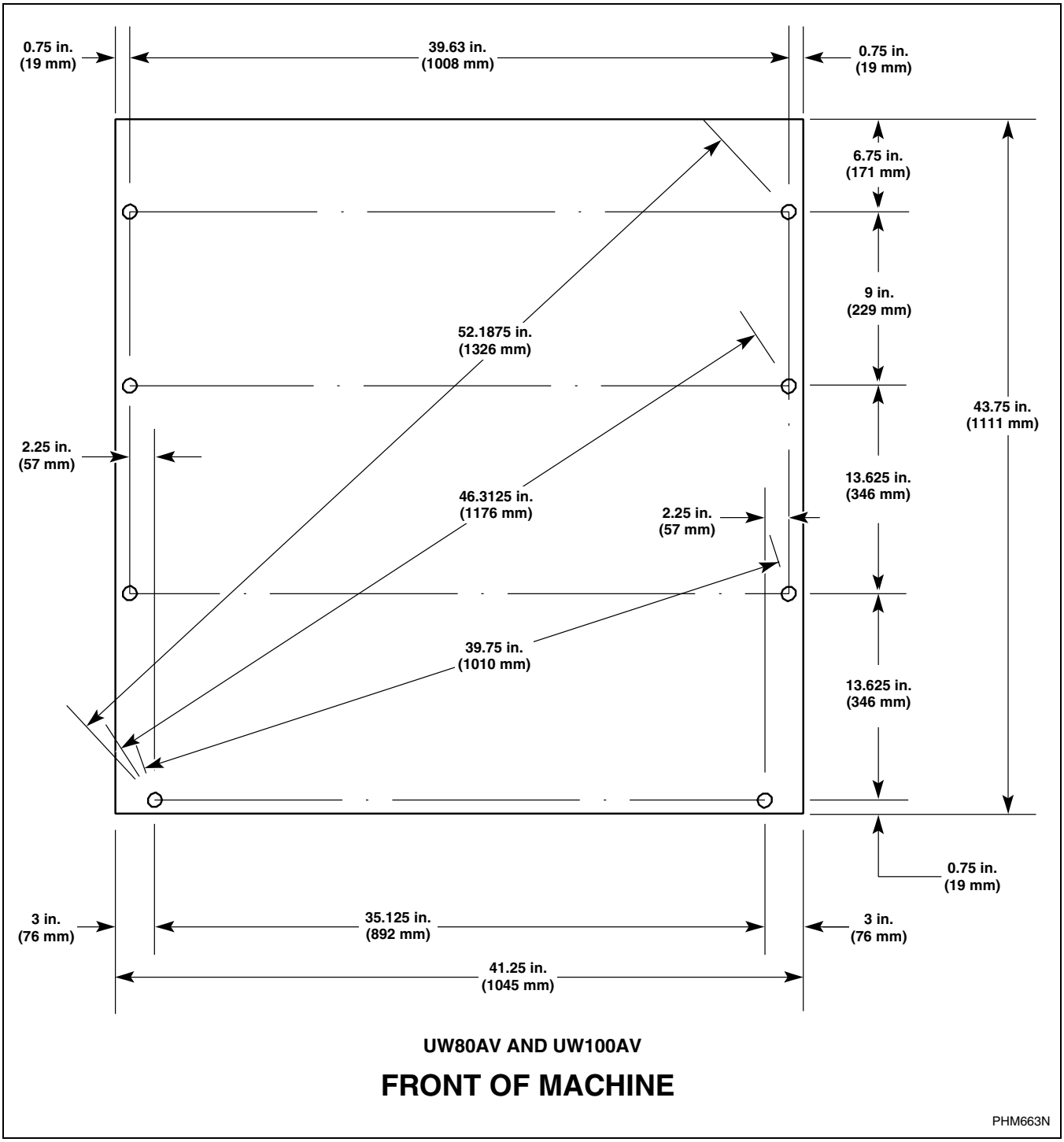

Figure 6

IMPORTANT: Drawing is not to scale.

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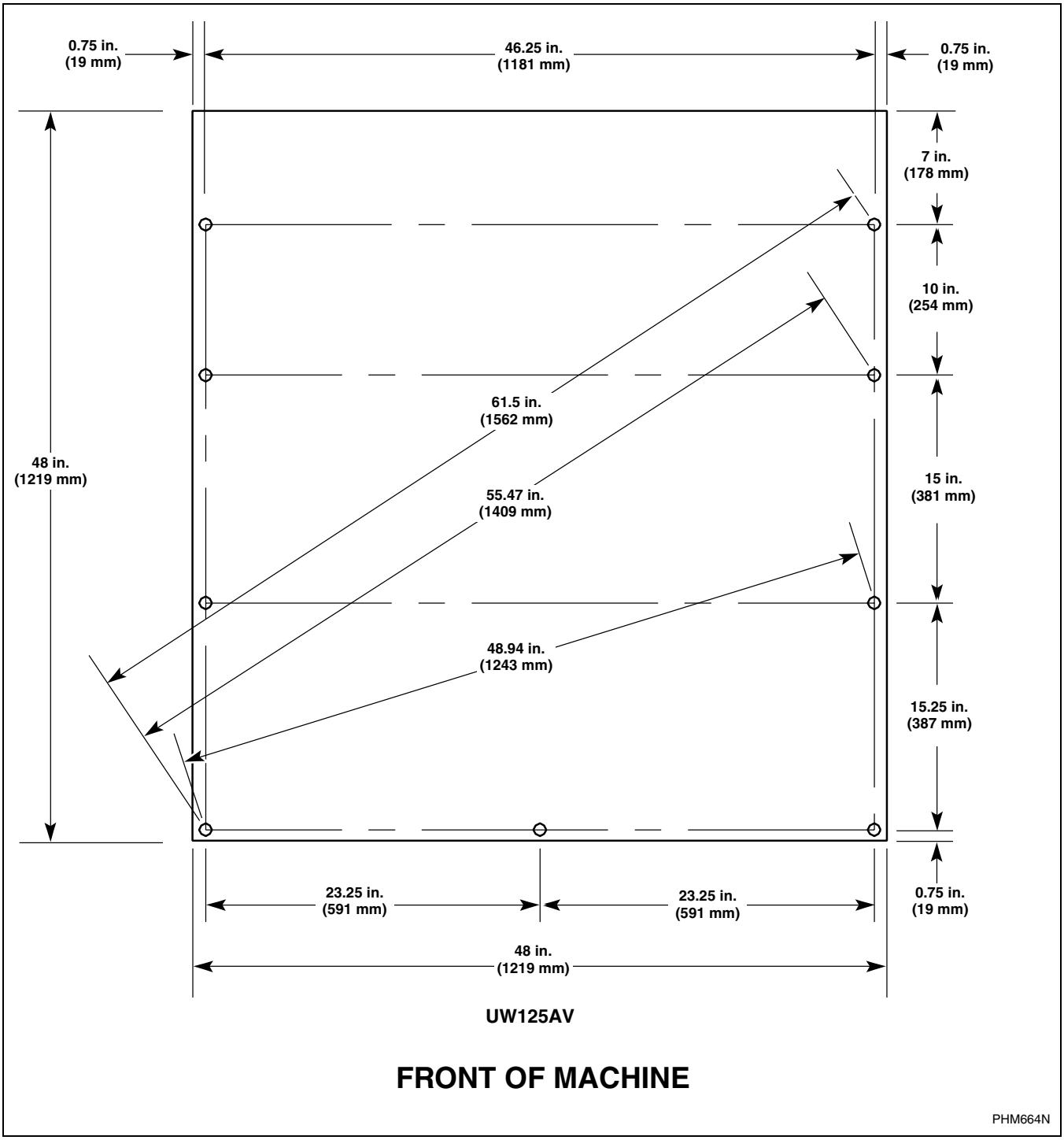

Figure 7

IMPORTANT: Drawing is not to scale.

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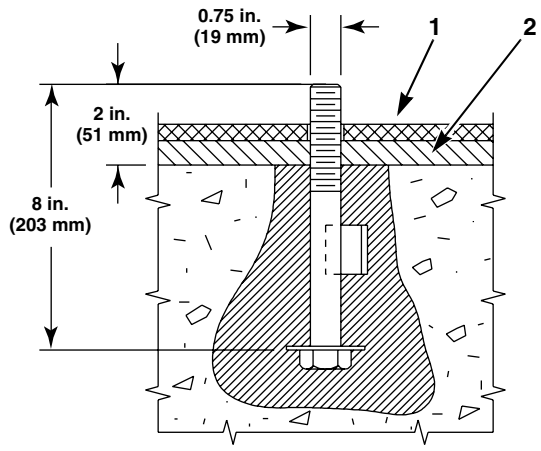
Mounting Bolt Installation Requirements

A bolt kit consisting of eight bolts is available as an option. The UW35AV uses 5/8-11 x 8 inch bolts. The UW60AV, UW80AV, UW100AV and UW125AV use 3/4-10 x 8 inch bolts. The bolts should be embedded in a 3500 psi minimum reinforced concrete floor that is a minimum of 12 inches thick. Use the mounting bolt layouts in *Figure 8* and *Figure 9*. (The front of the washer-extractor is the bottom of each diagram.)

The threaded end of the bolts should extend 2 inches above the surface of the floor.

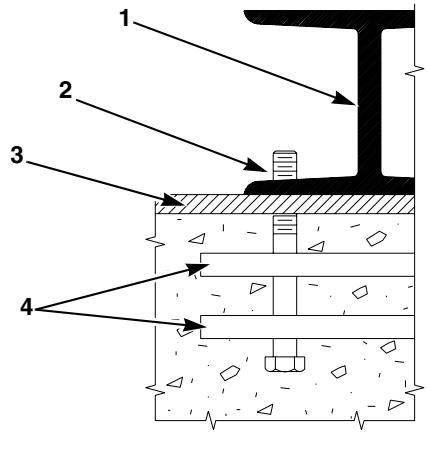
Refer to *Figure 8* for a typical installation of individual mounting bolts.



1 Frame
2 Grout

Figure 8

A bolt-locator fixture or rebar frame is available as an option. This rigid welded assembly made of reinforcing rod and mounting bolts is designed to be embedded in concrete. Refer to *Figure 9*.



1 Machine Base
2 Mounting Bolt Threads
3 Grouting
4 Reinforcing Rod

Figure 9

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If the existing floor is not reinforced concrete at least 6 inches (153 mm) thick over a solid foundation, cut a hole approximately 5 feet (1.52 m) square through the existing floor. Excavate to a depth of 6 inches (153 mm) from the top of the existing floor. Produce a pyramid-shaped hole by excavating the bottom of the hole to a width 6 inches (153 mm) wider on each side than the width of the top of the hole. Fill with 6 inches (153 mm) of reinforced concrete. Embed the mounting bolts or base frame as the concrete is poured. Ensure that the bolt threads extend 2 inches (51 mm) above floor level.

After the concrete has cured, proceed as follows:

1. Place the washer-extractor 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.
2. Remove the wood skid by unscrewing the carriage bolts holding the skid to the bottom frame of the washer-extractor.
3. Place the washer-extractor 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 washer-extractor 1/2 inch (13 mm) off the floor on three points, using spacers such as nut fasteners.
5. Fill the space between the washer-extractor base and the floor with a good quality non-shrinking machinery grout to ensure a stable installation. Grout completely under all frame members. (Remove front panel and metal back panel to gain access to **all** frame members.) Refer to *Figures 10* through *13*. Force grout under machine base until all voids are filled.
6. Remove the spacers carefully, allowing the machine to settle into the wet grout.
7. Before grout sets completely, make a drain opening in the rear of the washer-extractor grouting with a stiff piece of wire; this opening should be approximately 1/2 inch (13 mm) wide to allow any surface water build-up under the base of the machine to drain away. **Do not omit this step.**
8. Position the mounting bolt washers and locknuts on the anchor bolts and fingertighten locknuts to machine base.
9. After the grout is completely dry, tighten the locknuts by even increments – one after the other – until all are tightened evenly and the washer-extractor is fastened securely to the floor.

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

10. Check vibration safety switch and gap setting and switch function.

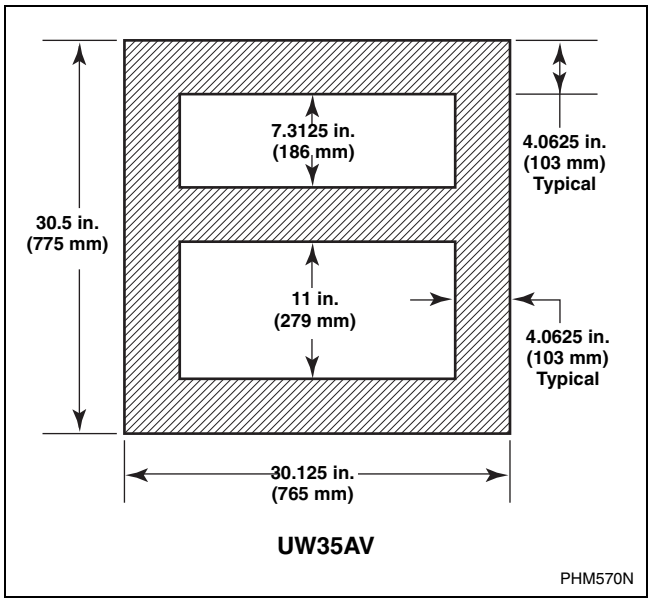

Figure 10

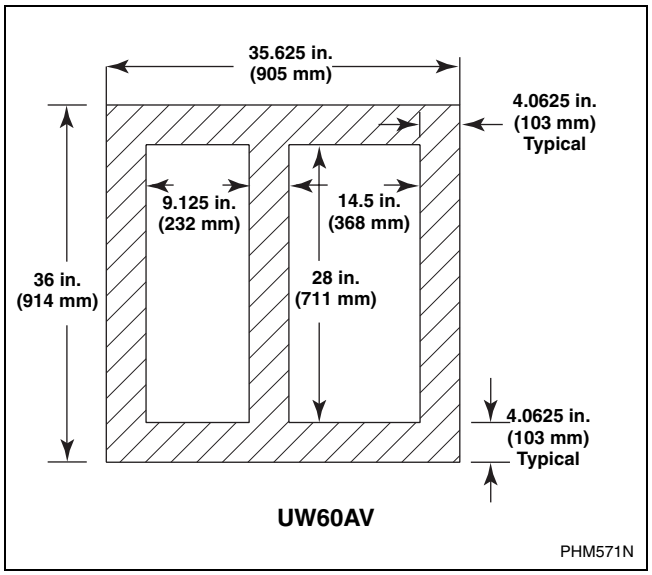

Figure 11

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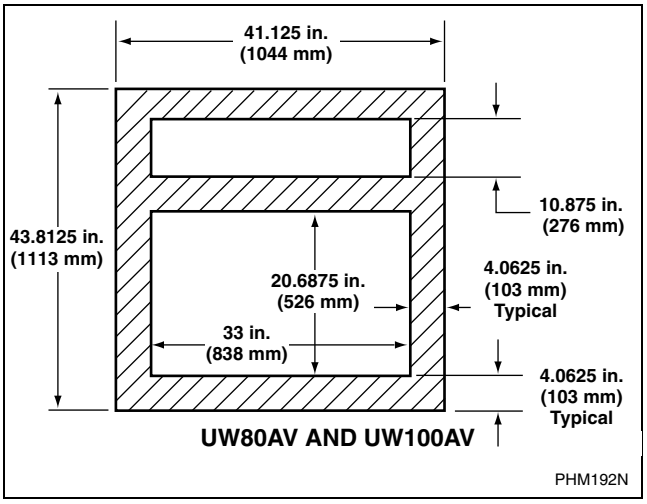

Figure 12

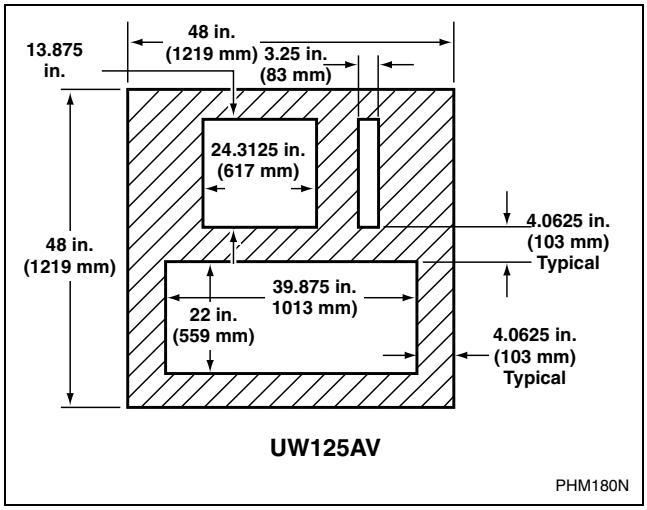

Figure 13

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Drain Connection Requirements

A drain system of adequate capacity is essential to washer-extractor performance. Ideally, the water should empty through a vented pipe directly into a sump or floor drain. *Figure 14* and *Figure 15* show drain line and drain trough configurations.

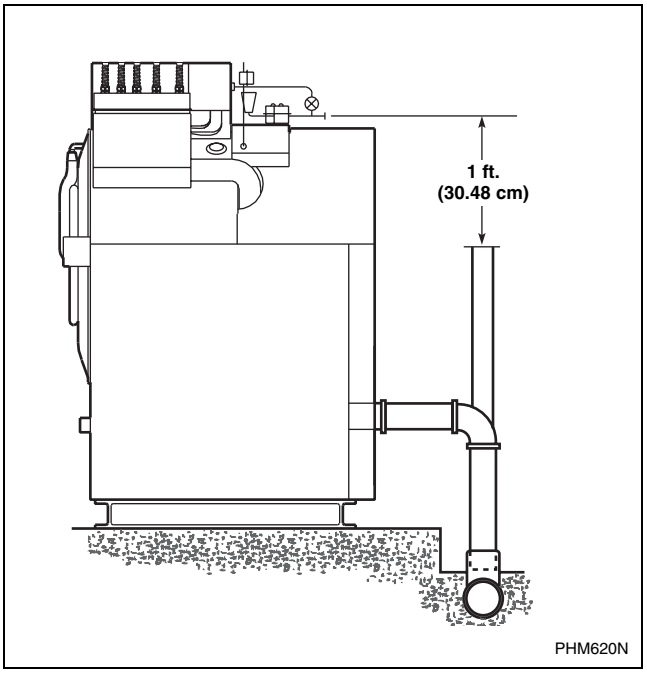


Figure 14

A flexible connection must be made to a vented drain system to prevent an air lock and to prevent siphoning.

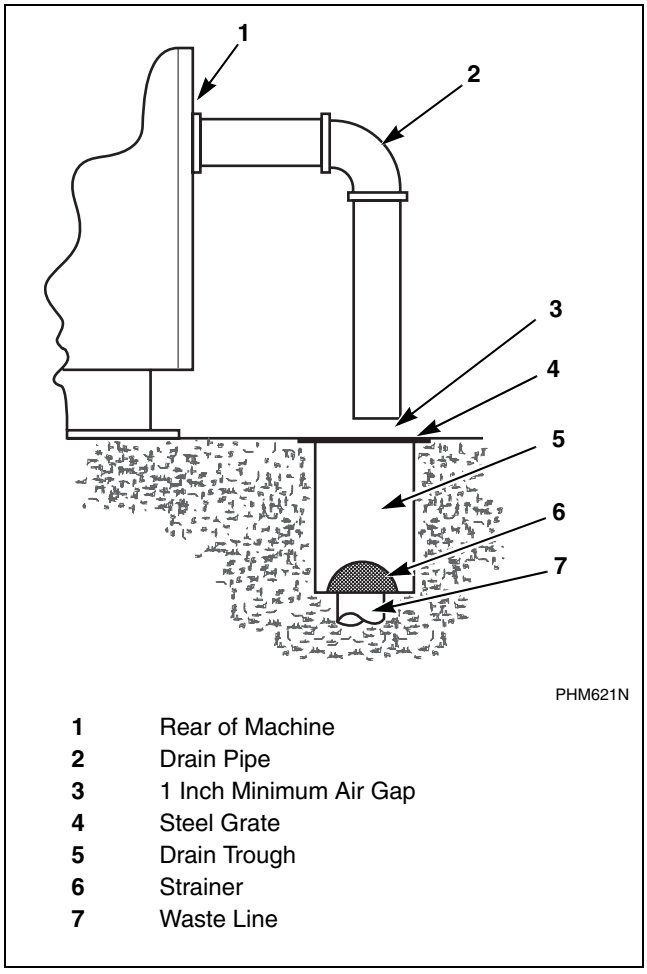
IMPORTANT: Washer-extractor must be installed in accordance with all local codes and ordinances.

IMPORTANT: The top of the vent must be 1 foot (30 cm) lower than the bottom of the dispenser.

If proper drain size is not available or practical, a surge tank is required. A surge tank in conjunction with a sump pump should be used when gravity drainage is not possible, such as in below-ground-level installations.

Before any deviation from specified installation procedures is attempted, the customer or installer should contact the distributor.

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



1	Rear of Machine
2	Drain Pipe
3	1 Inch Minimum Air Gap
4	Steel Grate
5	Drain Trough
6	Strainer
7	Waste Line

Figure 15

Refer to *Table 3* for capacity-specific drain information.

Installation of additional washer-extractors will require proportionately larger drain connections. Refer to *Table 4*.

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Refer to *Table 3* for capacity-specific drain information.

Installation of additional washer-extractors will require proportionately larger drain connections. Refer to *Table 4*.

UWAV Pocket Hardmount Drain Information					
Specifications	**35**	**60**	**80**	**100**	**125**
Drain connection size, I.D., in (mm) With second drain:	2.375 (60)	3 (76)	3 (76)	3 (76)	3 (76)
Number of drain outlets	1	1	1	1	1
Drain flow capacity, gal/min (l/min)	35 (132)	64 (242)	64 (242)	64 (242)	70 (265)
Recommended drain pit size, ft^3 (l) †	5 (142)	6 (170)	9 (255)	11 (311)	13 (368)
†Sized for one machine using overflow level.					

Table 3

UWAV Pocket Hardmount Drain Line Sizing Minimum Drain I.D., in (mm)				
Model	**Number of Machines**			
	1	**2**	**3**	**4**
35	3 (76.2)	3 (76.2)	3.5 (88.9)	4 (102)
60	3 (76.2)	4 (102)	6 (152)	6 (152)
80	4 (102)	4 (102)	4 (102)	6 (152)
100	4 (102)	4 (102)	4 (102)	6 (152)
125	4 (102)	4 (102)	4 (102)	6 (152)

Table 4

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Water Connection Requirements

WARNING

To avoid personal injury, recommended inlet water temperature should be no higher than 125° Fahrenheit (51° Celsius).

W709

UWAV Pocket Hardmount Water Supply Information				
Specifications	**35**	**60**	**80/100**	**125**
Number of main fill water inlets	2	2	2	2
Main fill water inlet size, in (mm)	0.5 (12.7)	0.75 (19)	0.75 (19)	1 (25.4)
Recommended pressure psi (bar)	30-85 (2-5.7)			
Inlet flow capacity (80 psi), gal/min (l/min)	14 (53)	25 (95)	25 (95)	50 (189)

Table 5

Connections should be supplied by hot and cold water lines of at least the sizes shown in *Table 6*. Installation of additional machines will require proportionately larger water lines.

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 washer-extractor'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, use flexible hoses with screen filters. Each hose should have a screen filter installed to keep rust and other foreign particles out of the water inlet valves.

Pressure of 30 – 85 psi (2 – 5.7 bar) provides best performance. Although the washer-extractor will function properly at lower pressures, increased fill times will occur.

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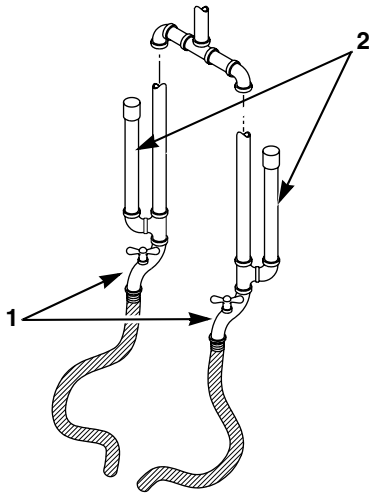
Suitable air cushions should be installed in supply lines to prevent “hammering.” Refer to *Figure 16*.

UWAV Pocket Hardmount 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 (50)	1.25 (32)
	4	2 (50)	1.5 (38)
60	1	1.25 (32)	1 (25)
	2	2 (50)	1.25 (32)
	3	2 (50)	1.5 (38)
	4	2.5 (64)	2 (50)
80	1	1 (25)	0.75 (20)
	2	1.5 (38)	1 (25)
	3	1.5 (38)	1.25 (32)
	4	2 (50)	1.5 (38)
100	1	1 (25)	0.75 (20)
	2	1.5 (38)	1 (25)
	3	1.5 (38)	1.25 (32)
	4	2 (50)	1.5 (38)
125	1	1.5 (38)	1 (25)
	2	2 (50)	1.5 (38)
	3	2.5 (64)	2 (50)
	4	2.5 (64)	2 (50)

Table 6



1 Water Supply Faucets
2 Air Cushions (Risers)

Figure 16

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Electrical Installation Requirements

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

WARNING

This machine must be installed, adjusted, and serviced by qualified electrical maintenance personnel familiar with 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 and/or equipment damage, and may void the warranty.

SW004

WARNING

Dangerous voltages are present in the electrical control box(es) and at the motor terminals. Only qualified personnel familiar with electrical test procedures, test equipment, and safety precautions should attempt adjustments and troubleshooting. Disconnect power from the machine before removing the control box cover, and before attempting any service procedures.

SW005

WARNING

Ensure that a ground wire from a proven earth ground is connected to the ground lug near the input power block on this machine. Without proper grounding, personal injury from electric shock could occur and machine malfunctions may be evident.

SW008

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

The AC inverter drive requires a clean power supply free from voltage spikes and surges. A voltage monitor should be used to check incoming power. The customer's local power company may provide such a monitor.

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

If input voltage measures above 240 Volt for a 200 Volt drive or above 480 Volt for a 400 Volt drive, ask the power company to lower the voltage. As an alternative, a step-down transformer kit is available from the distributor. Voltages above 250 Volt and 490 Volt require additional measures. Contact the distributor or the manufacturer for assistance.

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WARNING

Never touch terminals or components of the AC inverter drive unless power is disconnected and the "CHARGE" indicator LED is off. The AC inverter drive retains potentially deadly voltage for some time after the power is disconnected. There are no user-serviceable parts inside the AC inverter drive. Tampering with the drive will void the warranty.

SW009

DANGER

When controlling the AC inverter drive with a parameter unit, the machine's computer and its safety features are bypassed. This would allow the basket to rotate at high speeds with the door open. When using a parameter unit to control the AC inverter drive, a large sign should be placed on the front of the machine warning people of the imminent danger.

SW003

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 data plate on the side of the washer-extractor or refer to *Table 7* for circuit breaker requirements.

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

CAUTION

Do not use a phase adder on any variable-speed machine.

SW037

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

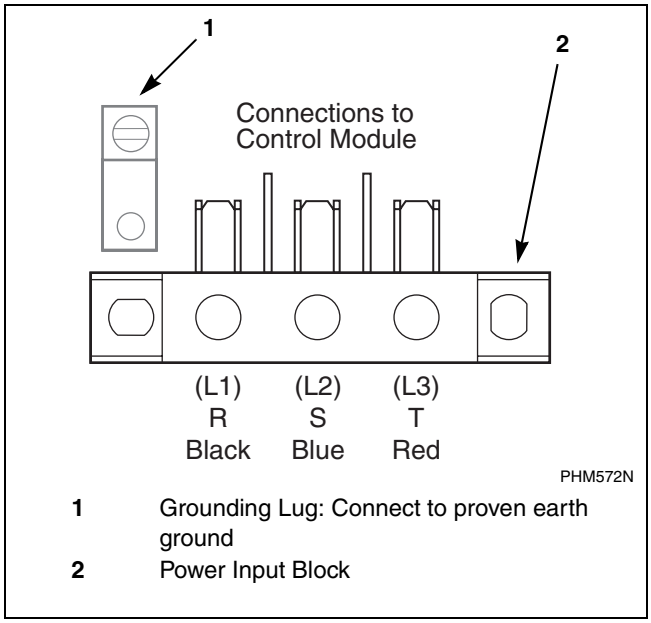
The connection should be shielded in a liquid-tight or approved flexible conduit with proper conductors of correct size installed in accordance with the National Electric Code or other applicable codes. The connection must be made by a qualified electrician using the wiring diagram provided with the washer-extractor.

Use wire sizes indicated in the Electrical Specifications chart for runs up to 50 feet (15 m). Use next larger size for runs of 50 to 100 feet (15 to 30 m). Use two sizes larger for runs greater than 100 feet (30 m).

For personal safety and for proper operation, the washer-extractor must be grounded in accordance with state and local codes. If such codes are not available, grounding must conform with the National Electric Code, article 250-95. The ground connection must be made to a proven earth ground, not to conduit or water pipes.

If a delta supply system is used, the high leg should be connected to L3.

After electrical installation is complete, run the machine through a test cycle and check for a clockwise basket rotation during the extract step. If rotation is not clockwise, disconnect the power from the machine and have a qualified electrician reverse any 2 motor leads at the AC drive terminal block.



1 Grounding Lug: Connect to proven earth ground

2 Power Input Block

Figure 17

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UWAV Pocket Hardmount Electrical Specifications									
Voltage Designation						Standard			
Model	Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm^2
35	N	440-480	50-60	3	3	4	15	14	3x2.5
	P	380-415	50-60	3	3	4	15	14	3x2.5
	X	200-240	50-60	1/3	2/3	9	15	14	2/3x2.5
60	N	440-480	50-60	3	3	4	15	14	3x2.5
	P	380-415	50-60	3	3	4	15	14	3x2.5
	X	200-240	50-60	1/3	2/3	10	15	14	2/3x2.5
80	N	440-480	50-60	3	3	6	15	14	3x2.5
	P	380-415	50-60	3	3	6	15	14	3x2.5
	Q	200-240	50-60	3	3	9	25	14	3x6
100	N	440-480	50-60	3	3	6	15	14	3x2.5
	P	380-415	50-60	3	3	6	15	14	3x2.5
	Q	200-240	50-60	3	3	10	25	10	3x6
125	N	440-480	50-60	3	3	7	15	14	3x6
	P	380-415	50-60	3	3	7	15	14	3x6
	Q	200-240	50-60	3	3	13	25	10	3x6

Note: Wire sizes shown are for copper, THHN, 90° conductor per NEC article 310.

Table 7

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Steam Requirements (Steam Heat Option Only)

WARNING

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.

SW014

For washer-extractors equipped with optional steam heat, install piping in accordance with approved commercial steam practices. Steam requirements are shown in *Table 8*.

NOTE: Failure to install the supplied steam filter may void the warranty.

UWAV Pocket Hardmount Steam Supply Information					
Specifications	**35**	**60**	**80**	**100**	**125**
Steam inlet connection, in (mm)	0.5 (DN13)	0.5 (DN13)	0.5 (DN13)	0.5 (DN13)	0.75 (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)
Maximum pressure, psi (bar)	80 (5.5)	80 (5.5)	80 (5.5)	80 (5.5)	80 (5.5)

Table 8

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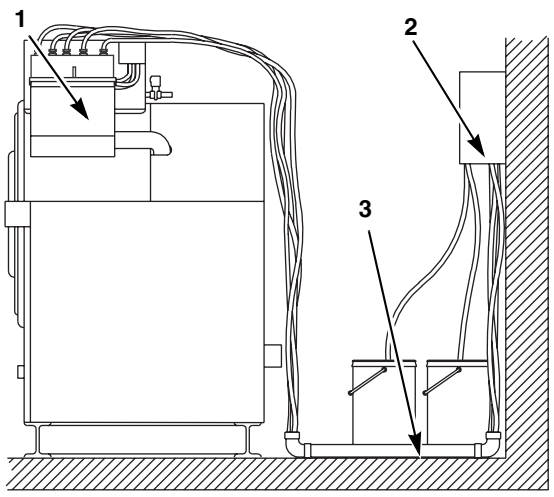
Chemical Injection Supply System

WARNING

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.

SW016

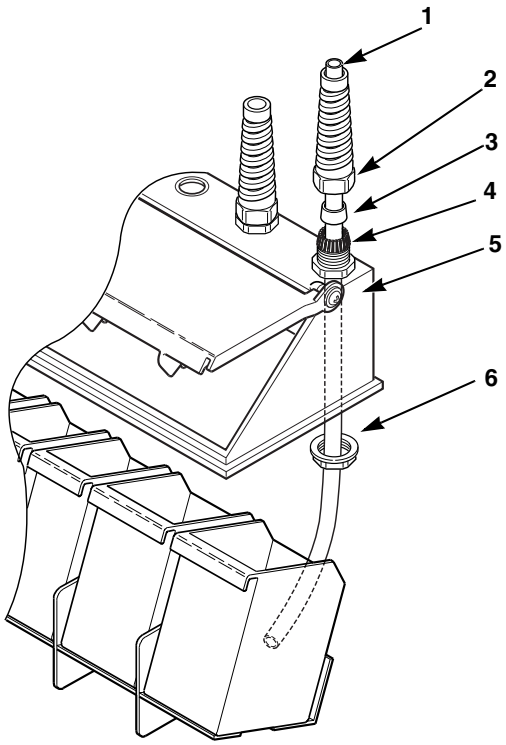
Undiluted chemical dripping can damage the washer-extractor. Therefore, all chemical supply dispenser pumps should be mounted below the washer-extractor's injection point. All dispenser tubing should also run below the injection point. Loops do not prevent drips if these instructions are not followed. Failure to follow these instructions could damage the machine and void the warranty. *Figure 18* shows a typical chemical injection supply system.



PHM578N

1	Injection Point
2	Chemical Dispenser Pump Outlet
3	PVC Pipe

Figure 18



PHM559N

1	Tubing from Pump
2	Seal Nut
3	Tubing Ring
4	Base
5	Lid
6	Nut

Figure 19

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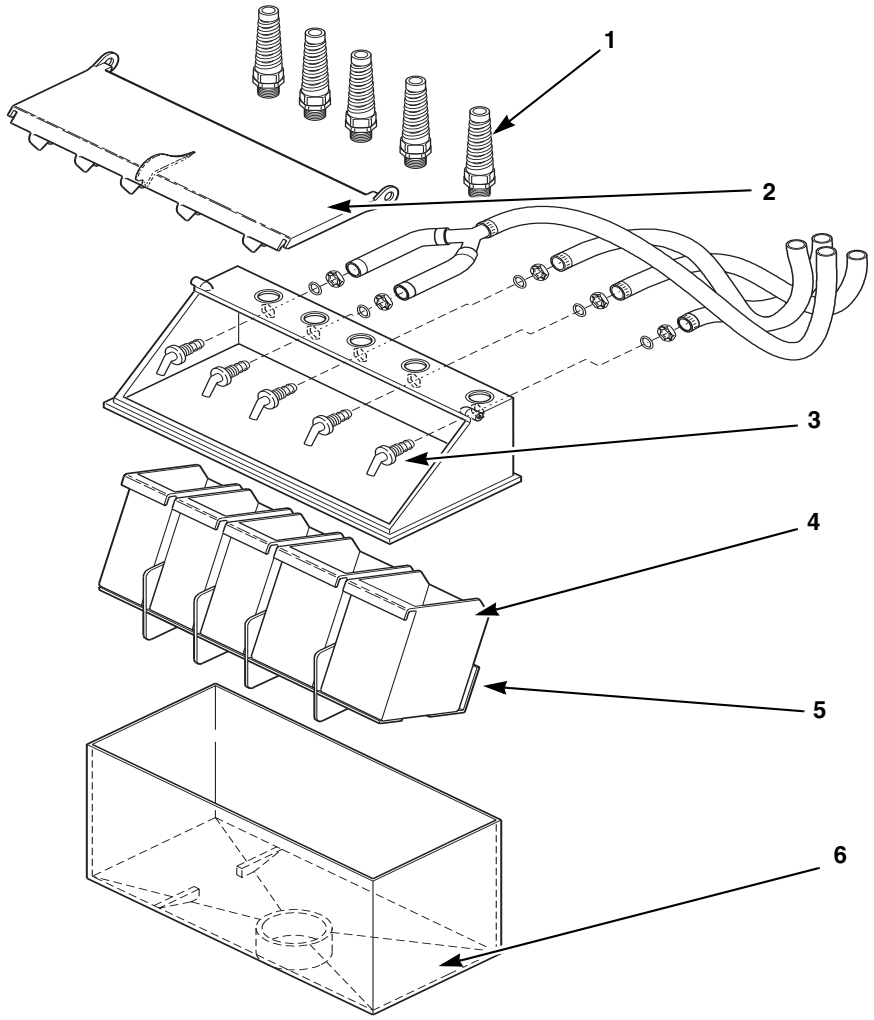
Connecting External Liquid Supplies to the Washer-Extractor

1. Remove knockout from supply dispenser. Refer to *Figure 19*. 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 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.

The UW35AV – UW125AV have a polypropylene supply dispenser. Refer to *Figure 20*.

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

Chemical Injection Supply System	
Specifications	**AV**
Number of dry supply compartments	5
Number of liquid supply connections	5
Liquid supply connection size, in (mm)	.5 (12.7)



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

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

Figure 20

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The external supply connection is located on the rear panel of the control module. It houses a terminal strip which furnishes supply output signals for the chemical injection supply pumps. Refer to *Figure 21* for examples of applicable decals.

Terminals SUPPLY 1 through SUPPLY 5 provide 200 – 240VAC fused at 500mA. These terminals may be used to provide signals to the chemical injection system but must not be used to provide power to the pump. Do not attempt to increase fuse rating as this may cause damage to the washer-extractor's circuitry.

An external chemical injection system requiring 200 – 240VAC can be powered through LINE 1 and LINE 2 on the external supply terminal strip on UWAVX and UWAVQ models. Any chemical injection system used with UWAVN or UWAVP models must be powered by a separate external power source.

Any injection system pump which requires 110VAC must be powered by a separate external power source.

CAUTION

Attempting to obtain 110VAC by using L1 or L2 with the common may damage laundry machine circuitry and/or the chemical injection system. Using a 240VAC power wire in the washer-extractor and an earth ground to obtain 110VAC could cause microprocessor problems.

SW028

Refer to ***Chemical Injection Supply System*** instructions for operational details.

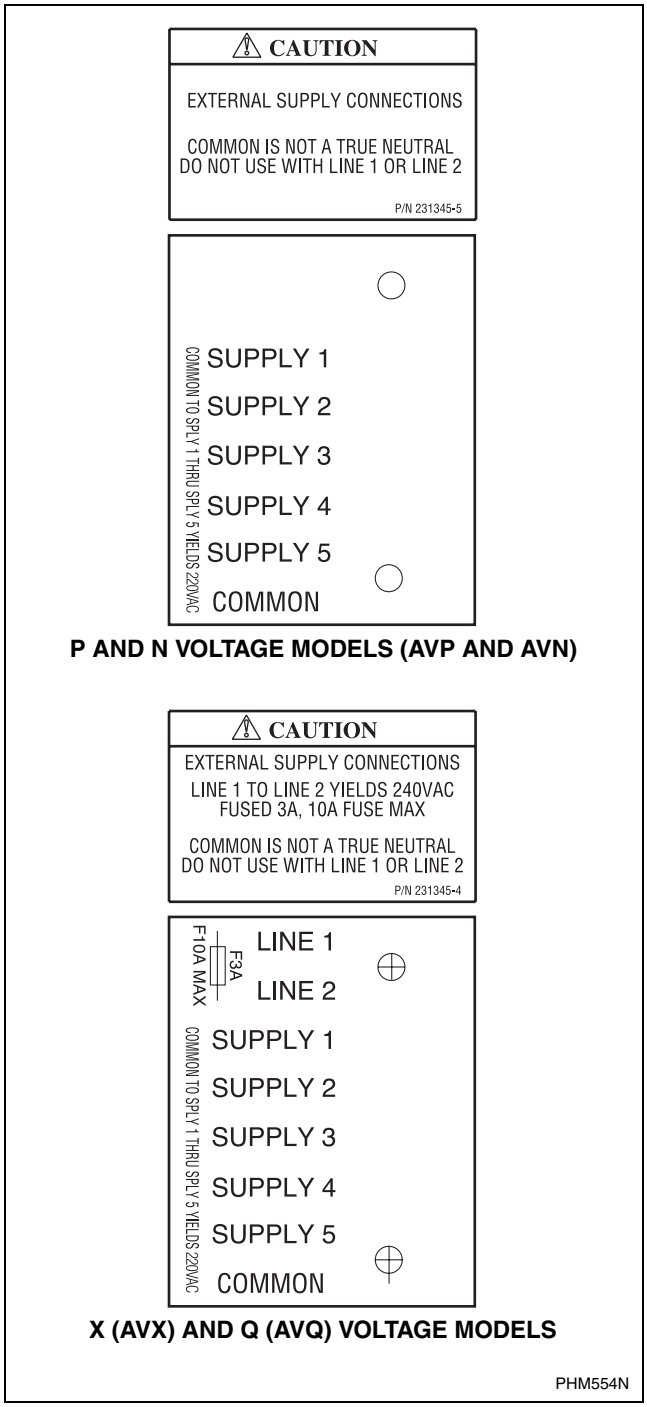

Figure 21

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