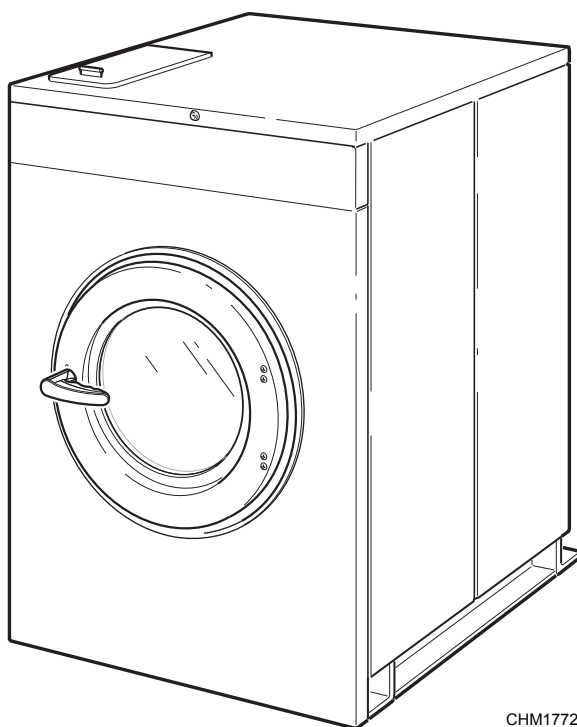


Washer-Extractors

Cabinet Hardmount

Refer to Page 6 for Model Identification

Installation



CHM1772C

Keep These Instructions for Future Reference.

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



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Part No. F8208301R5
February 2011


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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.
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 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.

	WARNING
<p>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.</p>	
<p style="text-align: right;">SW004</p>	

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

	WARNING
<p>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.</p>	
<p style="text-align: right;">W703</p>	

	CAUTION
<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>	
<p style="text-align: right;">SW025</p>	

	WARNING
<p>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.</p>	
<p style="text-align: right;">SW014</p>	

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.

Operator Safety

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


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 and start the machine. The machine should not start with the door unlocked.
 - 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.

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

Introduction

Model Identification

Information in this manual is applicable to these models:

Model						
20 POUND	HCD020GD2	HCN020KCF	HCU020KL2	SCN020JC2	SCN020WDV	SCU020JLF
	HCD020JD2	HCN020KCV	HCU020KY2	SCN020JCF	SCN020WY2	SCU020JLV
	HCD020LD2	HCN020KD2	HCU020KYF	SCN020JCV	SCN020WYF	SCU020JX2
	HCL020GD2	HCN020KDV	HCU020KYV	SCN020JD2	SCN020WYV	SCU020JXF
	HCL020GN2	HCN020KEF	HCZ020GN2	SCN020JEF	SCU020GC2	SCU020JXV
	HCL020HDF	HCN020KEV	HCZ020HN2	SCN020JXF	SCU020GD2	SCU020JY2
	HCL020HN2	HCN020KY2	SCL020GC2	SCN020JY2	SCU020GE2	SCU020JYF
	HCL020KD2	HCN020KYF	SCL020GN2	SCN020JYF	SCU020GL2	SCU020JYV
	HCL020LD2	HCN020KYV	SCL020HN2	SCN020JYV	SCU020GN2	SCU020KN2
	HCN020GC2	HCU020GC2	SCL020HNF	SCN020KN2	SCU020GX2	SCU020KNF
	HCN020GD2	HCU020GD2	SCL020JC2	SCN020KNF	SCU020GY2	SCU020WEV
	HCN020GE2	HCU020GE2	SCL020JD2	SCN020LC2	SCU020HN2	UCL020GN2
	HCN020GN2	HCU020GL2	SCL020JE2	SCN020LCF	SCU020HNF	UCL020HN2
	HCN020GX2	HCU020GN2	SCL020JEF	SCN020LCV	SCU020JC2	UCL020KN2
	HCN020GY2	HCU020GX2	SCL020JX2	SCN020LD2	SCU020JCF	UCN020GN2
	HCN020HC2	HCU020GY2	SCN020GC2	SCN020LX2	SCU020JCV	UCN020HN2
	HCN020HCF	HCU020HC2	SCN020GD2	SCN020LY2	SCU020JD2	UCN020HNF
	HCN020HD2	HCU020HN2	SCN020GE2	SCN020LYF	SCU020JDF	UCN020KN2
	HCN020HN2	HCU020HNF	SCN020GN2	SCN020LYV	SCU020JDV	UCU020GN2
	HCN020HNF	HCU020HX2	SCN020GX2	SCN020WC2	SCU020JE2	UCU020HN2
	HCN020HY2	HCU020KCF	SCN020GY2	SCN020WCF	SCU020JEF	UCU020HNF
	HCN020HYF	HCU020KCV	SCN020HN2	SCN020WCV	SCU020JEV	UCU020KN2
	HCN020KC2	HCU020KE2	SCN020HNF	SCN020WD2	SCU020JL2	UCZ020GN2

(Continued)

(Continued)

30 POUND	HCD030LD2	HCN030KYF	SCL030HNF	SCN030JCV	SCN030WYV	SCU030JY2
	HCL030GN2	HCN030KYV	SCL030JC2	SCN030JD2	SCU030GC2	SCU030JYF
	HCL030HDF	HCU030GC2	SCL030JCF	SCN030JE2	SCU030GD2	SCU030JYV
	HCL030HN2	HCU030GD2	SCL030JD2	SCN030JEF	SCU030GE2	SCU030KN2
	HCL030HNF	HCU030GE2	SCL030JDF	SCN030JX2	SCU030GL2	SCU030KNF
	HCN030GC2	HCU030GL2	SCL030JE2	SCN030JY2	SCU030GN2	SCU030WCV
	HCN030GD2	HCU030GN2	SCL030JEF	SCN030JYF	SCU030GX2	SCU030WE2
	HCN030GE2	HCU030GX2	SCL030JX2	SCN030JYV	SCU030GY2	UCL030GN2
	HCN030GN2	HCU030GY2	SCL030JXF	SCN030KN2	SCU030HN2	UCL030HN2
	HCN030GX2	HCU030HC2	SCL030JY2	SCN030KNF	SCU030HNF	UCL030HNF
	HCN030GY2	HCU030HN2	SCL030KN2	SCN030LC2	SCU030JC2	UCL030KN2
	HCN030HC2	HCU030HNF	SCL030KNF	SCN030LCF	SCU030JCF	UCN030GN2
	HCN030HCF	HCU030HX2	SCL030KNV	SCN030LCV	SCU030JCV	UCN030HN2
	HCN030HD2	HCU030KCF	SCL030LD2	SCN030LD2	SCU030JD2	UCN030HNF
	HCN030HN2	HCU030KCV	SCL030LEV	SCN030LE2	SCU030JDF	UCN030KN2
	HCN030HNF	HCU030KE2	SCN030GC2	SCN030LY2	SCU030JDV	UCN030KNF
	HCN030HY2	HCU030KY2	SCN030GD2	SCN030LYF	SCU030JE2	UCU030GN2
	HCN030HYF	HCU030KYF	SCN030GE2	SCN030LYV	SCU030JEF	UCU030HN2
	HCN030KC2	HCU030KYV	SCN030GN2	SCN030WC2	SCU030JEV	UCU030HNF
	HCN030KCF	HCU030GN2	SCN030GX2	SCN030WCF	SCU030JL2	UCU030KN2
	HCN030KCV	SCD030GD2	SCN030GY2	SCN030WCV	SCU030JLF	UCZ030GN2
	HCN030KD2	SCD030LD2	SCN030HN2	SCN030WD2	SCU030JLV	VCU030GN2
	HCN030KDV	SCL030GC2	SCN030HNF	SCN030WDV	SCU030JX2	
	HCN030KEF	SCL030GN2	SCN030JC2	SCN030WY2	SCU030JXF	
	HCN030KY2	SCL030HN2	SCN030JCF	SCN030WYF	SCU030JXV	
40 POUND	HCD040LD2	HCN040KEV	SCL040HN2	SCN040JD2	SCU040GC2	SCU040JYF
	HCL040GN2	HCN040KY2	SCL040HNF	SCN040JE2	SCU040GD2	SCU040JYV
	HCL040HC2	HCN040KYF	SCL040JC2	SCN040JEF	SCU040GE2	SCU040KN2
	HCL040HDF	HCN040KYV	SCL040JD2	SCN040JY2	SCU040GL2	SCU040KNF
	HCL040HE2	HCU040GC2	SCL040JDF	SCN040JYF	SCU040GN2	SCU040KNV
	HCL040HN2	HCU040GD2	SCL040JE2	SCN040JYV	SCU040GX2	SCU040WEV
	HCN040GC2	HCU040GE2	SCL040JEF	SCN040KN2	SCU040GY2	UCL040GN2
	HCN040GD2	HCU040GL2	SCL040JX2	SCN040KNF	SCU040HN2	UCL040HN2
	HCN040GE2	HCU040GN2	SCL040JXF	SCN040KNV	SCU040HNF	UCL040HNF
	HCN040GN2	HCU040GX2	SCL040JXV	SCN040LC2	SCU040JC2	UCL040KN2
	HCN040GX2	HCU040GY2	SCL040KN2	SCN040LCF	SCU040JCF	UCL040KNF
	HCN040GY2	HCU040HC2	SCL040KNF	SCN040LCV	SCU040JCV	UCL040KNV
	HCN040HC2	HCU040HN2	SCL040KNV	SCN040LD2	SCU040JD2	UCN040GN2
	HCN040HCF	HCU040HNF	SCL040LE2	SCN040LDV	SCU040JDF	UCN040HN2
	HCN040HN2	HCU040HX2	SCN040GC2	SCN040LE2	SCU040JDV	UCN040HNF
	HCN040HNF	HCU040KCF	SCN040GD2	SCN040LY2	SCU040JE2	UCN040KN2
	HCN040HY2	HCU040KCV	SCN040GE2	SCN040LYF	SCU040JEF	UCN040KNF
	HCN040HYF	HCU040KE2	SCN040GN2	SCN040LYV	SCU040JEV	UCN040KNV
	HCN040KC2	HCU040KY2	SCN040GX2	SCN040WC2	SCU040JL2	UCU040GN2
	HCN040KCF	HCU040KYF	SCN040GY2	SCN040WCF	SCU040JLF	UCU040HN2
	HCN040KCV	HCU040KYV	SCN040HN2	SCN040WCV	SCU040JLV	UCU040HNF
	HCN040KD2	SCD040GD2	SCN040HNF	SCN040WDV	SCU040JX2	UCU040KN2
	HCN040KDF	SCD040LD2	SCN040JC2	SCN040WY2	SCU040JXF	UCU040KNV
	HCN040KDV	SCL040GC2	SCN040JCF	SCN040WYF	SCU040JXV	VCU040GN2
	HCN040KEF	SCL040GN2	SCN040JCV	SCN040WYV	SCU040JY2	

(Continued)

Introduction

(Continued)

60 POUND	HCD060LD2	HCN060KY2	SCL060HN2	SCN060JY2	SCU060GD2	SCU060JYF
	HCL060GN2	HCN060KYF	SCL060HNF	SCN060JYF	SCU060GE2	SCU060JYV
	HCL060HCF	HCN060KYV	SCL060JC2	SCN00JYV	SCU060GL2	SCU060KN2
	HCL060HN2	HCU060GC2	SCL060JCF	SCN060KN2	SCU060GN2	SCU060KNF
	HCN060GC2	HCU060GD2	SCL060JD2	SCN060KNF	SCU060GX2	SCU060KNV
	HCN060GD2	HCU060GE2	SCL060JE2	SCN060KNV	SCU060GY2	SCU060WEV
	HCN060GE2	HCU060GL2	SCL060KN2	SCN060LC2	SCU060HN2	UCL060GN2
	HCN060GN2	HCU060GN2	SCL060KNV	SCN060LCF	SCU060HNF	UCL060HN2
	HCN060GX2	HCU060GX2	SCL060LE2	SCN060LCV	SCU060JC2	UCL060HNF
	HCN060GY2	HCU060GY2	SCN060GC2	SCN060LD2	SCU060JCF	UCL060KN2
	HCN060HC2	HCU060HC2	SCN060GD2	SCN060LDV	SCU060JCV	UCL060KNF
	HCN060HCF	HCU060HN2	SCN060GE2	SCN060LE2	SCU060JD2	UCL060KNV
	HCN060HN2	HCU060HNF	SCN060GN2	SCN060LY2	SCU060JDF	UCN060GN2
	HCN060HNF	HCU060HX2	SCN060GNF	SCN060LYF	SCU060JDV	UCN060HN2
	HCN060HY2	HCU060KCF	SCN060GX2	SCN060LYV	SCU060JE2	UCN060HNF
	HCN060HYF	HCU060KCV	SCN060GY2	SCN060WC2	SCU060JEF	UCN060KN2
	HCN060KC2	HCU060KEV	SCN060HN2	SCN060WCF	SCU060JEV	UCN060KNF
	HCN060KCF	HCU060KY2	SCN060HNF	SCN060WCV	SCU060JL2	UCN060KNV
	HCN060KCV	HCU060KYF	SCN060JC2	SCN060WD2	SCU060JLF	UCU060GN2
	HCN060KD2	HCU060KYV	SCN060JCF	SCN060WDV	SCU060JLV	UCU060HN2
	HCN060KDF	SCD060GD2	SCN060JCV	SCN060WY2	SCU060JX2	UCU060HNF
	HCN060KDV	SCD060LD2	SCN060JD2	SCN060WYF	SCU060JXF	UCU060KN2
	HCN060KEV	SCL060GC2	SCN060JDF	SCN060WYV	SCU060JXV	UCU060KNV
	HCN060KEF	SCL060GN2	SCN060JX2	SCU060GC2	SCU060JY2	VCU060GN2
80 POUND	HCD080LDV	HCN080KCV	HCU080HXF	SCN080JCF	SCU080GLF	SCU080JXF
	HCL080HNF	HCN080KDF	HCU080KCF	SCN080JCV	SCU080GNF	SCU080JXV
	HCN080GCF	HCN080KDV	HCU080KCV	SCN080JDF	SCU080GXF	SCU080KNV
	HCN080GDF	HCN080KEV	HCU080KYF	SCN080JYF	SCU080GYF	UCL080GNF
	HCN080GEF	HCN080KYF	HCU080KYV	SCN080JYV	SCU080HNF	UCL080HNF
	HCN080GNF	HCN080KYV	SCL080GNF	SCN080KNV	SCU080JCF	UCL080KNV
	HCN080GXF	HCU080GCF	SCL080HNF	SCN080LCV	SCU080JCV	UCN080GNF
	HCN080GYF	HCU080GDF	SCL080KNV	SCN080LDV	SCU080JDF	UCN080HNF
	HCN080HCF	HCU080GEF	SCN080GCF	SCN080LYV	SCU080JDV	UCN080KNV
	HCN080HCV	HCU080GLF	SCN080GDF	SCN080WCV	SCU080JEF	UCU080GNF
	HCN080HDF	HCU080GNF	SCN080GEF	SCN080WDV	SCU080JEV	UCU080HNF
	HCN080HNF	HCU080GXF	SCN080GNF	SCN080WYV	SCU080JLF	UCU080KNV
	HCN080HYF	HCU080GYF	SCN080GXF	SCU080GCF	SCU080JLV	VCU080GNF
	HCN080HYV	HCU080HCF	SCN080GYF	SCU080GDF	SCU080JYF	
	HCN080KCF	HCU080HNF	SCN080HNF	SCU080GEF	SCU080JYV	
125 POUND	SCL125KNV	UCU125KNV				
	SCN125KNV					
	SCN125LYV					
	SCU125KNV					
	UCL125KNV					

This manual is designed as a guide to the installation of the Cabinet Hardmount Washer-Extractor.

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 inside door. Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance. Refer to *Figure 1*.

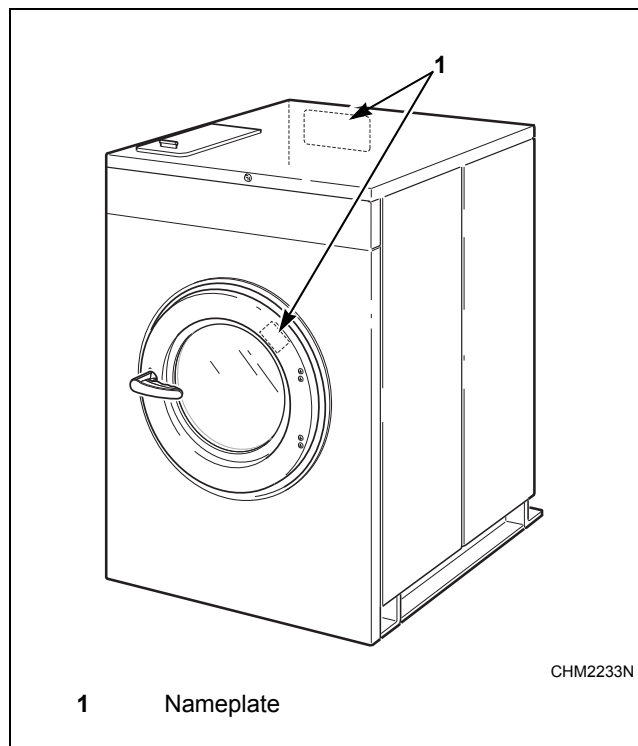


Figure 1

Introduction

Model Number Familiarization Guide	
Sample Model Number: *CN040GC2OU1D01	
*C	Product Family
N	Agency Approval
040	Washer-Extractor Capacity (pounds dry weight of laundry)
G	Type of Electrical Control
C	Actuation (C = Coin drop)
2	Washer-Extractor Speed Capability (2 = 2 speed)
O	Electrical Characteristics
U	Panel Type
1	Design Series
D	Heat Feature (D = Direct Steam)
01	Option Identification (varies from machine to machine)

* Denotes Brand

Model No. ***CN040GC2OU1D01**

Serial No. **000000000000**

Voltage **208 – 240** Hz **60** Phase **3**


Number of wires : **3** FLA : amps


Circuit Breaker Size : **3** amps

Max. Load : **40** LB **18.2** KG

Schematic :

Supply Water: **30 - 85 psi, 2 - 5.7 BAR**





EXAMPLE OF NAMEPLATE

CHM2286N

Figure 2

Replacement Parts

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

Customer Service

For technical assistance, contact your local distributor or call:

Alliance Laundry Systems
(920) 748-3121
Ripon, Wisconsin U.S.A.

Alliance International
+32 56 41 20 54
Wevelgem, Belgium

Specifications and Dimensions

2 Speed Models				
Specification	20	30	40	60
Weight and Shipping Information				
Net weight, lbs. (kg)	387 (176)	489 (222)	692 (314)	812 (368)
Domestic shipping weight, lbs. (kg)	420 (191)	530 (240)	734 (333)	854 (387)
Domestic shipping volume, ft. ³ (m ³)	30.5 (.86)	40.75 (1.15)	50 (1.42)	64 (1.81)
Export shipping weight, lbs. (kg)	475 (215)	593 (269)	816 (370)	948 (430)
Export shipping volume, ft. ³ (m ³)	36.2 (1.03)	49.9 (1.41)	60 (1.70)	75.8 (2.15)
Wash Cylinder Information				
Cylinder diameter, in. (mm)	21 (533)	24 (610)	26.25 (667)	30 (762)
Cylinder depth, in. (mm)	13.75 (349)	16 (406)	20.25 (514)	22 (559)
Cylinder volume, ft. ³ (l)	2.76 (78.1)	4.19 (118.6)	6.34 (180)	9.00 (255)
Perforation size, in. (mm)	0.188 (4.76)	0.188 (4.76)	0.188 (4.76)	0.188 (4.76)
Perforation open area, %	17	23	17.5	18

2 Speed Models (Continued)					
Specification		20	30	40	60
Door Opening Information					
Door opening diameter, in. (mm)		11.63 (295)	14.34 (364)	16.25 (413)	16.25 (413)
Height of door bottom above floor, in. (mm)		14.38 (365)	14 (356)	14.5 (368)	15 (381)
Height of door opening above floor, in. (mm)		17.19 (437)	17 (431)	19 (483)	18.5 (470)
Estimated Building Heat Load					
HVAC load, BTU/hr. (Kcal./hr.)		400 (101)	450 (113)	510 (129)	750 (189)
Power Consumption					
Average power used per cycle, kW-hr.	No load	.06	.13	.196	.25
	Sheets	.10	.14	.195	.26
	Towels	.11	.16	.213	.33
Drive Train Information					
Number of motors in drive train		1	1	1	1
Wash/reverse power, HP (kW)		0.15 (0.11)	0.24 (0.18)	0.40 (0.30)	0.55 (0.41)
High extract power, HP (kW)		0.74 (0.55)	1.34 (1.00)	1.8 (1.3)	2.7 (2.01)
Cylinder Speeds					
Wash/reverse speed, RPM		57	49	51	44
High extract speed, RPM		528	464	491	469
Centrifugal Force Data					
Wash/reverse centrifugal force, G		0.9	0.8	0.8	0.9
High extract centrifugal force, G		80.3	72.1	78.1	85.4

Specifications and Dimensions

2 Speed Models (Continued)					
Specification		20	30	40	60
Direct Steam Heating (Optional)					
Steam inlet connection size, NPT		N/A	N/A	1/2	1/2
Number of steam inlets		N/A	N/A	1	1
Steam required to raise bath water temperature, 10°F (10°C), lbs. (kg)	LOW	N/A	N/A	2.09 (0.84)	3.6 (0.895)
	MED	N/A	N/A	2.40 (1.15)	4.4 (1.384)
	HIGH	N/A	N/A	2.84 (1.48)	5.5 (1.916)
Average steam use per cycle, bhp (kg)		N/A	0.73 (6.9)	1.43 (12.2)	2.32 (15.4)
Electrical Heating (Optional)					
Total electrical heating capacity, kW	Input Voltage				
	200V	5.4	5.4	10.8	10.8
	240V	7.8	7.8	15.6	15.6
	380V	6.5	6.5	13.0	13.0
	415V	7.8	7.8	15.5	15.5
	480V	10.4	10.4	15.6	15.6
Electrical heating elements		3	3	6	6
Electrical heat element size, kW		2.6	2.6	2.6	2.6

V-Speed and F-Speed Models							
Specification	20	30	40	60	80	125	
Weight and Shipping Information							
Net weight, lbs. (kg)	386 (175)	498 (226)	706 (321)	773 (350)	1374 (623)	2301 (1044)	
Domestic shipping weight, lbs. (kg)	424 (191)	545 (245)	744 (338)	824 (373)	1461 (663)	2384 (1081)	
Domestic shipping volume, ft. ³ (m ³)	27 (0.76)	34.4 (.98)	43.6 (1.24)	52.2 (1.48)	102.2 (2.89)	163 (4.3)	
Export shipping weight, lbs. (kg)	476 (215)	588 (267)	846 (385)	1020 (463)	1573 (714)	2492 (1130)	
Export shipping volume, ft. ³ (m ³)	36.7 (1.04)	49.5 (1.40)	65.6 (1.86)	74.7 (3.35)	118.3 (3.35)	173 (4.8)	
Wash Cylinder Information							
Cylinder diameter, in. (mm)	21 (533)	24 (610)	26.25 (667)	30 (762)	36 (914)	42 (1067)	
Cylinder depth, in. (mm)	13.75 (349)	16 (406)	20.25 (514)	22 (559)	22 (559)	24 (610)	
Cylinder volume, ft. ³ (l)	2.76 (78.1)	4.19 (118)	6.34 (180)	9.00 (255)	12.4 (354)	19.2 (544)	
Perforation size, in. (mm)	0.188 (4.76)	0.188 (4.76)	0.188 (4.76)	0.188 (4.76)	0.188 (4.76)	0.188 (4.76)	
Perforation open area, %	17	23	17.5	18	18	24	
Door Opening Information							
Door opening size, in. (mm)	11.63 (295)	14.34 (364)	16.25 (413)	16.25 (413)	18.5 (470)	20 (508)	
Height of door bottom above floor, in. (mm)	14.38 (365)	14 (356)	14.5 (368)	18.25 (445)	17.75 (451)	29 (737)	
Height of door opening above floor, in. (mm)	17.19 (437)	17 (431)	18 (457)	18.5 (470)	21.63 (549)	30.25 (768)	
Power Consumption							
Average power used per cycle, kW-hr.	No load	.06	.13	.196	.25	.30	.63
	Sheets	.10	.14	.195	.26	.28	.64
	Towels	.11	.16	.213	.33	.34	.83
Estimated Building Heat Load							
HVAC load, BTU/hr. (Kcal./hr.)	400 (101)	450 (113)	510 (129)	750 (189)	950 (239)	1200 (302)	
Drive Train Information							
Number of motors in drive train	1	1	1	1	1	1	
Drive motor power, hp (kW)	1 (.75)	1 (.75)	2 (1.7)	3 (2.2)	5 (3.7)	7.5 (5.6)	

Specifications and Dimensions

V-Speed and F-Speed Models (Continued)							
Specification		20	30	40	60	80	125
Cylinder Speeds							
Gentle wash/reverse speed, RPM		29	27	26	26	22	26
Wash/reverse speed, RPM		52	52	46	43	40	37
Distribution speed, RPM		92	92	82	77	70	65
Low extract speed, RPM		366	366	328	307	280	260
Medium extract speed, RPM (Not available on Electronic Control models)		534	534	478	447	408	378
High extract speed, RPM		686	686	613	574	524	485
Centrifugal Force Data							
Gentle wash centrifugal force, G		0.25	0.25	0.25	0.25	0.25	0.43
Wash/reverse centrifugal force, G		0.8	0.8	0.8	0.8	0.8	0.8
Distribution centrifugal force, G		2.5	2.5	2.5	2.5	2.5	2.6
Extract Speed 1		60	60	60	60	60	60
Extract Speed 2		80	80	80	80	80	80
Extract Speed 3		100	100	100	100	100	100
Extract Speed 4 (V-Speed only), G		120	120	120	120	120	120
Extract Speed 5 (V-Speed only), G		140	140	140	140	140	140
Direct Steam Heating (Optional)							
Steam inlet connection size, NPT		N/A	N/A	1/2	1/2	1/2	3/4
Number of steam inlets		N/A	N/A	1	1	1	1
Steam required to raise bath water temperature 10°F (10°C), lbs. (kg)	LOW	N/A	N/A	2.09 (0.94)	3.6 (1.63)	2.58 (1.17)	3.64 (1.65)
	MED	N/A	N/A	2.40 (1.09)	4.4 (2.00)	4.65 (2.11)	5.17 (2.35)
	HIGH	N/A	N/A	2.84 (1.29)	5.5 (2.50)	5.79 (2.63)	7.78 (3.52)
Average steam use per cycle, bhp (kg)		N/A	0.73 (6.9)	1.43 (12.2)	2.32 (15.4)	1.34 (20.9)	1.14 (31.45)
Electrical Heating							
Total electrical heating capacity, kW	Input Voltage						
	200V	5.4	5.4	10.8	10.8	21.7	N/A
	240V	7.8	7.8	15.6	15.6	31.2	N/A
	380V	6.5	6.5	13.0	13.0	19.6	34.4
	415V	7.8	7.8	15.5	15.5	23.3	41
	480V	10.4	10.4	15.6	15.6	31.2	54.8
Electrical heating elements		3	3	3	9	12	12
Electrical heat element size, kW		2.6	2.6	5.2	2.6	2.6	4.2

NOTE: The dimensions shown 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 manufacturer. We reserve the right to make changes at any time without notice.

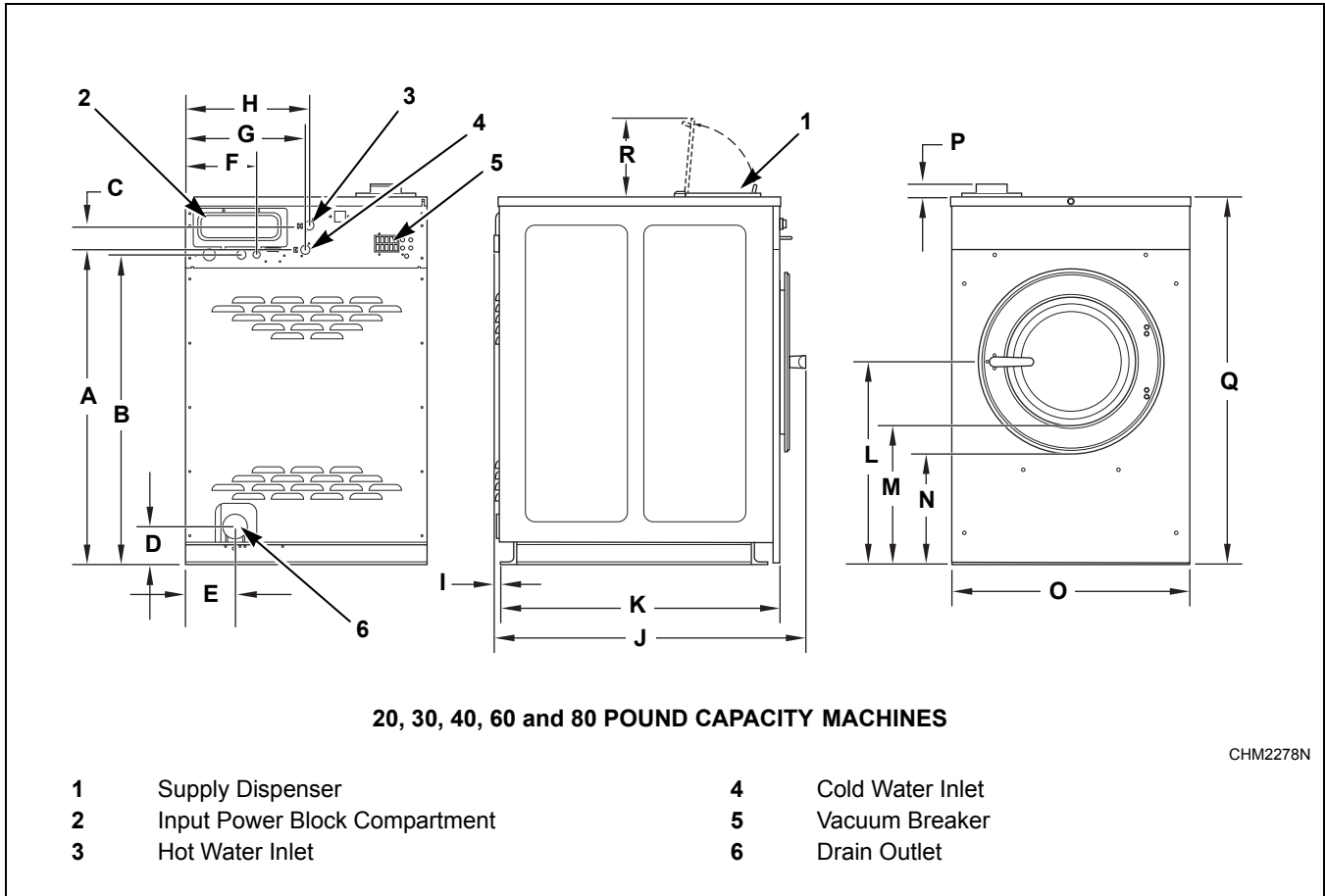


Figure 3

Specifications and Dimensions

Machine Capacity Dimensions						
Dimensions		20	30	40	60	80
A		35.15 in. (893 mm)	38.03 in. (966 mm)	40.31 in. (1024 mm)	43.31 in. (1100 mm)	51.87 in. (1317 mm)
B		34.52 in. (877 mm)	37.46 in. (951 mm)	39.71 in. (1009 mm)	42.4 in. (1077 mm)	48.68 in. (1236 mm)
C		1.81 in. (46 mm)	1.73 in. (44 mm)	2.97 in. (75 mm)	2.42 in. (61 mm)	2.71 in. (69 mm)
D		4.5 in. (114 mm)	4.5 in. (114 mm)	4.81 in. (122 mm)	4.69 in. (119 mm)	5.71 in. (145 mm)
E	Standard	5.88 in. (149 mm)	5.88 in. (149 mm)	6.35 in. (161 mm)	5.5 in. (140 mm)	6.38 in. (162 mm)
	Electric Heat	5.88 in. (149 mm)	5.88 in. (149 mm)	6.03 in. (153 mm)	6.27 in. (159 mm)	7.15 in. (182 mm)
F		8.82 in. (224 mm)	8.82 in. (224 mm)	8.82 in. (224 mm)	8.82 in. (224 mm)	8.82 in. (224 mm)
G		15.10 in. (384 mm)	15.19 in. (386 mm)	15.15 in. (385 mm)	19.85 in. (504 mm)	21.62 in. (549 mm)
H		15.6 in. (396 mm)	15.6 in. (396 mm)	15.65 in. (398 mm)	20.35 in. (517 mm)	26.12 in. (663 mm)
I		1.58 in. (40 mm)	1.18 in. (30 mm)	1.47 in. (37 mm)	1.34 in. (34 mm)	0.97 in. (25 mm)
J		30.21 in. (767 mm)	34.57 in. (878 mm)	39.72 in. (1009 mm)	42.54 in. (1081 mm)	51.5 in. (1308 mm)
K		25.5 in. (648 mm)	30.42 in. (773 mm)	35.28 in. (896 mm)	38.23 in. (971 mm)	47.52 in. (1207 mm)
L		23.01 in. (584 mm)	24 in. (610 mm)	26 in. (660 mm)	26.38 in. (670 mm)	30.91 in. (785 mm)
M		17 in. (432 mm)	17 in. (432 mm)	17.74 in. (451 mm)	18.12 in. (460 mm)	20.77 in. (528 mm)
N		14.38 in. (365 mm)	14 in. (356 mm)	14.56 in. (370 mm)	14.94 in. (379 mm)	17.91 in. (455 mm)
O		26 in. (660 mm)	29 in. (737 mm)	30.63 in. (778 mm)	34.06 in. (865 mm)	41.5 in. (1054 mm)
P		1.5 in. (38 mm)	1.5 in. (38 mm)	1.5 in. (38 mm)	1.5 in. (38 mm)	1.5 in. (38 mm)
Q		42 in. (1067 mm)	44.95 in. (1142 mm)	47.20 in. (1199 mm)	49.89 in. (1267 mm)	56.16 in. (1426 mm)
R		9 in. (229 mm)	9 in. (229 mm)	9 in. (229 mm)	9 in. (229 mm)	9 in. (229 mm)

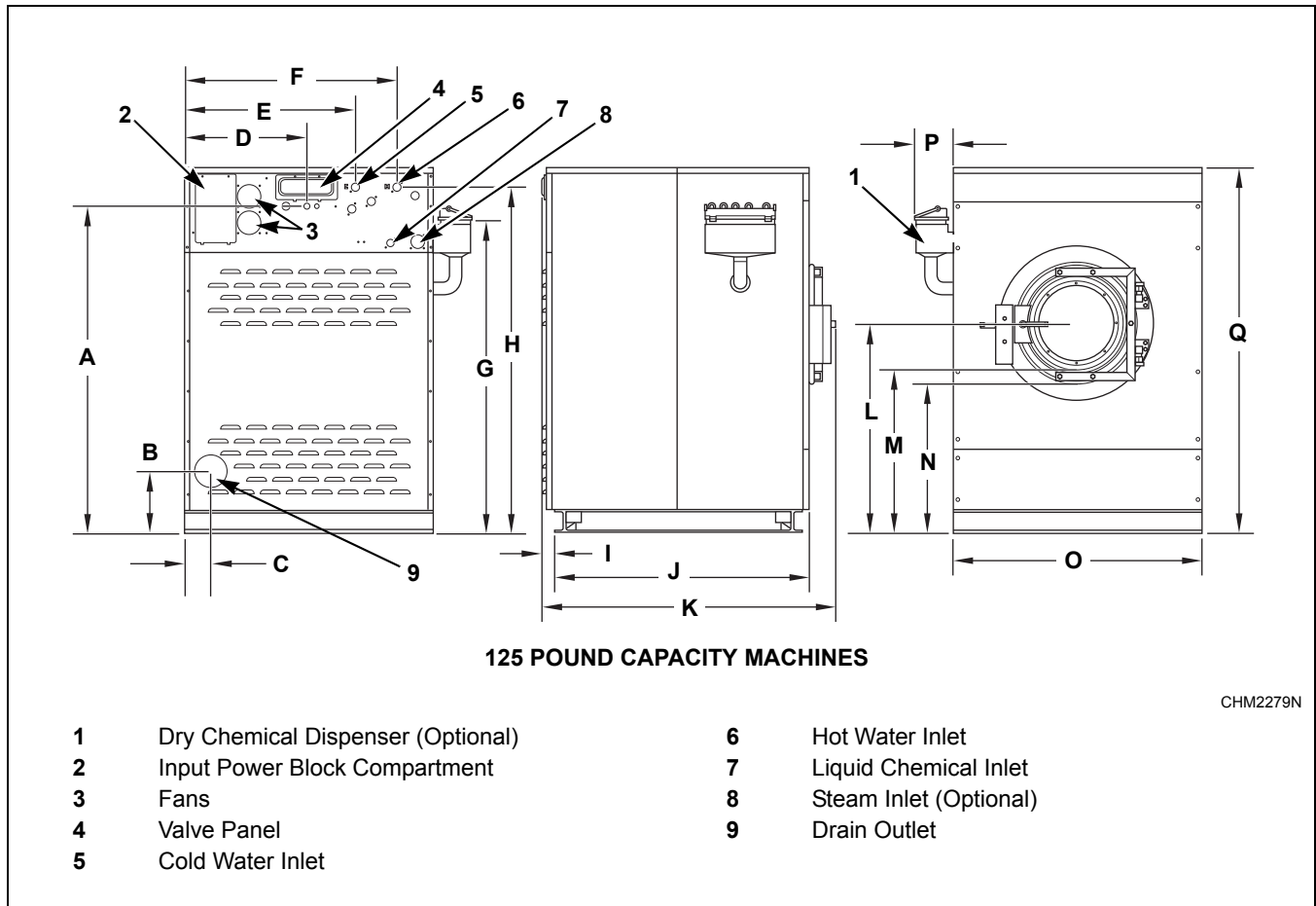


Figure 4

Machine Capacity Dimensions for 125 Pound Models through 1/31/11			
A	78.8 in. (2002 mm)	J	61.28 in. (1557 mm)
B	14.62 in. (371 mm)	K	70.81 in. (1799 mm)
C	6.27 in. (159 mm)	L	50.2 in. (1275 mm)
D	29.56 in. (751 mm)	M	38.96 in. (990 mm)
E	41.28 in. (1049 mm)	N	35.74 in. (908 mm)
F	51.26 in. (1302 mm)	O	60 in. (1524 mm)
G	75.15 in. (1909 mm)	P	9.92 in (252 mm)
H	83.4 in. (2118 mm)	Q	88.09 in. (2237 mm)
I	2.86 in. (73 mm)		

Specifications and Dimensions

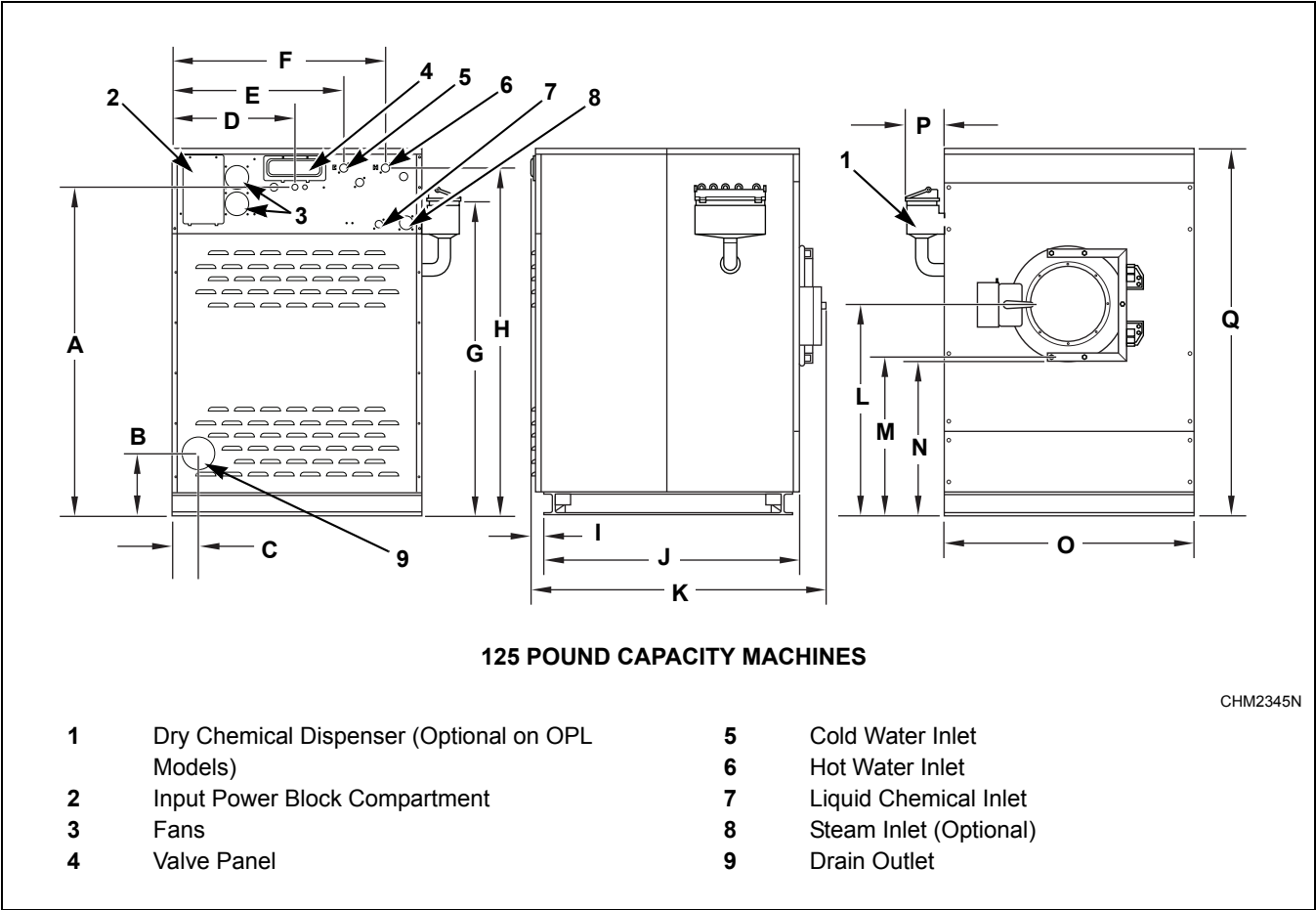
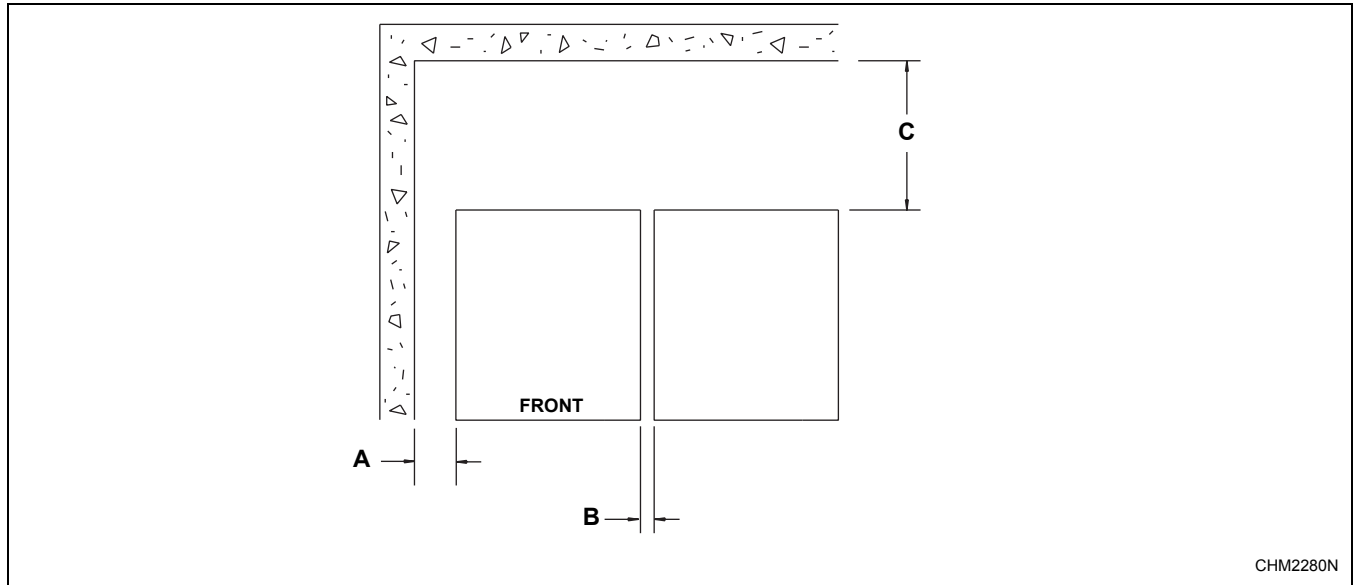


Figure 5

Machine Capacity Dimensions for 125 Pound Models starting 2/1/11			
A	63.04 in. (1601 mm)	J	49.02 in. (1245 mm)
B	11.69 in. (297 mm)	K	56.06 in. (1424 mm)
C	5.01 in. (127 mm)	L	40.16 in. (1020 mm)
D	23.65 in. (601 mm)	M	30.16 in. (766 mm)
E	33.03 in. (839 mm)	N	28.28 in. (718 mm)
F	39.28 in. (998 mm)	O	48 in. (1219 mm)
G	60.21 in. (1529 mm)	P	7.94 in (202 mm)
H	65.77 in. (1671 mm)	Q	70.47 in. (1790 mm)
I	2.29 in. (58 mm)		

Dimensional Clearances



Machine Capacity Dimensional Clearances							
Dimensions		20	30	40	60	80	125
A		2 in. (51 mm)	2 in. (51 mm)	2 in. (51 mm)	2 in. (51 mm)	6 in. (152 mm)	24 in. (600 mm)
B		.5 in. (12.5 mm)	.5 in. (12.5 mm)	.5 in. (12.5 mm)	.5 in. (12.5 mm)	.5 in. (12.5 mm)	.5 in. (12.5 mm)
C	Recommended	24 in. (610 mm)	24 in. (610 mm)	24 in. (610 mm)	24 in. (610 mm)	24 in. (610 mm)	36 in. (914 mm)
	Minimum	12 in. (305 mm)	12 in. (305 mm)	12 in. (305 mm)	12 in. (305 mm)	18 in. (457 mm)	24 in. (610 mm)

Installation

Machine Foundation

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.

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

The floor and foundation must be minimum 4000 psi reinforced concrete set firmly in clean, compacted fill dirt.

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. **(Do not support the machine on only four points.)**

Grouting is required.


An elevated foundation must not exceed 8 inches (203 mm).

Refer to *Table 1* for foundation and anchoring requirements.

Machine Foundation Requirements					
Models		Foundation Thickness (minimum)	Mounting Bolt depth	Installation Foundation Method(s)	Anchoring Method(s) Requirement*
2 Speed and F-Speed (20-60 Models)		4 in. (102 mm)	2.75 in. (70 mm)	Direct-to-floor, elevated base frame, or concrete foundation	Expansion bolt or Epoxy bolt
Variable-Speed (20-60 Models)		6 in. (152 mm)	2.75 in. (70 mm)	Direct-to-floor, elevated base frame or concrete foundation	Epoxy bolt
Variable-Speed	80 Models	9 in. (229 mm)	3.25 in. (83 mm)	Direct-to-floor or concrete foundation	Epoxy bolt or rebar frame
	125 Models	12 in. (304 mm)	3.25 in. (83 mm)		

* Recommend SAE 495 Grade 5 or higher strength bolts.

Table 1

	WARNING
To reduce the risk of fire, this appliance must be bolted to an uncovered concrete floor.	
W731	

Refer to *Table 2* and *Table 3* for static and dynamic loads on the floor or foundation.

Floor Load Data, 2 Speed Models				
Specification	20	30	40	60
Static floor load, lbs. (kN)	449 (1.99)	622 (2.76)	903 (4.0)	1099 (4.9)
Static pressure, lbs.-ft. ² (kN-m ²)	97.8 (4.68)	101 (4.84)	118 (5.65)	120 (5.75)
Dynamic load, lbs. (kN)	374 (1.66)	495 (2.2)	898 (3.99)	1404 (6.3)
Dynamic pressure, lbs.-ft. ² (kN-m ²)	165.3 (7.91)	169 (8.09)	216 (10.3)	253 (12.11)
Dynamic load frequency, Hz	8.8	7.7	8.2	7.8
Maximum moment about machine base, lbs.-ft. (kN-m)	714 (0.97)	989 (1.34)	1926 (2.61)	3086 (4.2)
Maximum vertical load, lbs. (kN)	759 (3.37)	1038 (4.62)	1653 (7.4)	2322 (10.3)

Table 2


Floor Load Data, Variable-Speed Models						
Specification	20	30	40	60	80	125
Static floor load, lbs. (kN)	482 (2.14)	624 (2.78)	923 (4.11)	1061 (4.22)	1738 (7.73)	2839 (12.6)
Static pressure, lbs.-ft. ² (kN-m ²)	105 (5.02)	102 (4.87)	121 (5.78)	116 (5.54)	126.9 (6.07)	177.5 (8.5)
Dynamic load, lbs. (kN)	532 (2.37)	767 (3.41)	1049 (4.67)	1514 (6.73)	3310 (14.72)	4364 (19.4)
Dynamic pressure, lbs.-ft. ² (kN-m ²)	207 (9.98)	214 (10.22)	238 (11.37)	261 (12.47)	350.5 (16.78)	431.5 (20.6)
Dynamic load frequency, Hz	11.5	10.7	10.2	9.6	8.95	8.1
Maximum moment about machine base, lbs.-ft. (kN-m)	1016 (1.38)	1535 (2.08)	2252 (3.05)	3328 (4.51)	8482 (11.5)	14547 (19.7)
Maximum vertical load, lbs. (kN)	950 (4.23)	1313 (5.84)	1824 (8.11)	2394 (10.65)	4799 (21.35)	6904 (30.7)

Table 3

Installation

Concrete Foundation Installation

A concrete foundation pad may be constructed to elevate the machines. The concrete foundation pad must be poured, reinforced with rebar and tied to the existing floor with reinforcing bars. Refer to *Figure 6*, *Figure 7* or *Figure 8* for a typical concrete foundation pad installation.



WARNING

To reduce the risk of fire, this appliance must be bolted to an uncovered concrete floor.

W731

1. Verify that the floor meets the requirements given in the ***Machine Foundation*** section.
2. Excavate the floor to a depth of approximately 9 inches (230 mm) below the floor surface, making certain that the sides of the hole slope outwards from top to bottom. The bottom of the hole should be 6 inches (152 mm) larger all around than the top.
3. Wet the hole well and brush the bottom and sides with cement grout.

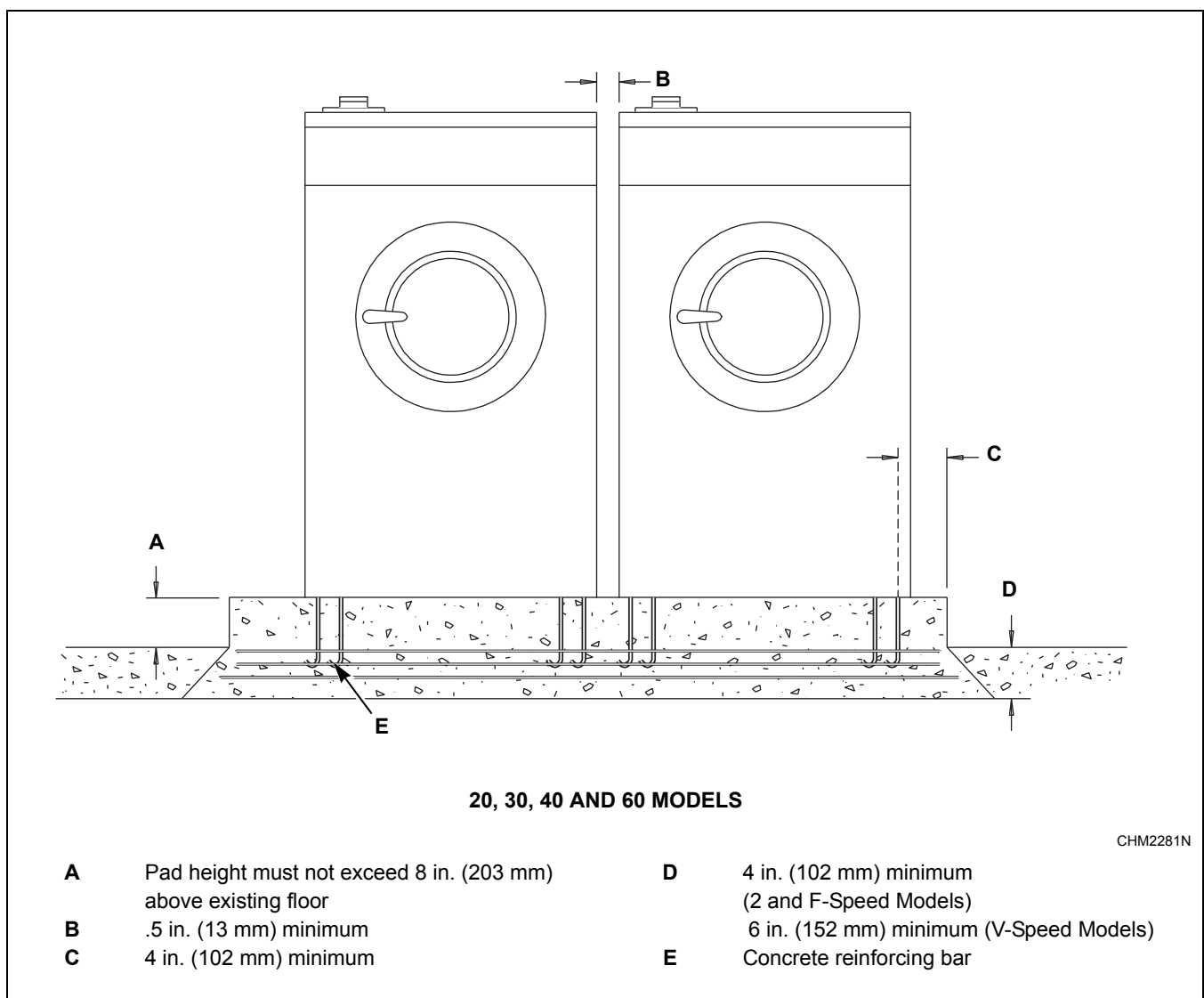


Figure 6

4. Use rebar or other appropriate material to ensure that the concrete foundation will be sufficiently connected to the existing floor.
5. If desired, prepare a form for the above-ground portion of the foundation and fill form and excavation with concrete to join the foundation. Verify that top of foundation is level. The height of the foundation must not exceed 8 inches (203 mm).
6. Use the mounting bolt layout to properly position the mounting bolts in the wet concrete.

NOTE: When using any anchoring bolts, allow 1.5 inches (38 mm) to extend above the surface of the concrete. Refer to the *Machine Anchoring* section.

7. Allow concrete to dry and cure before machine is placed into service.

Installation

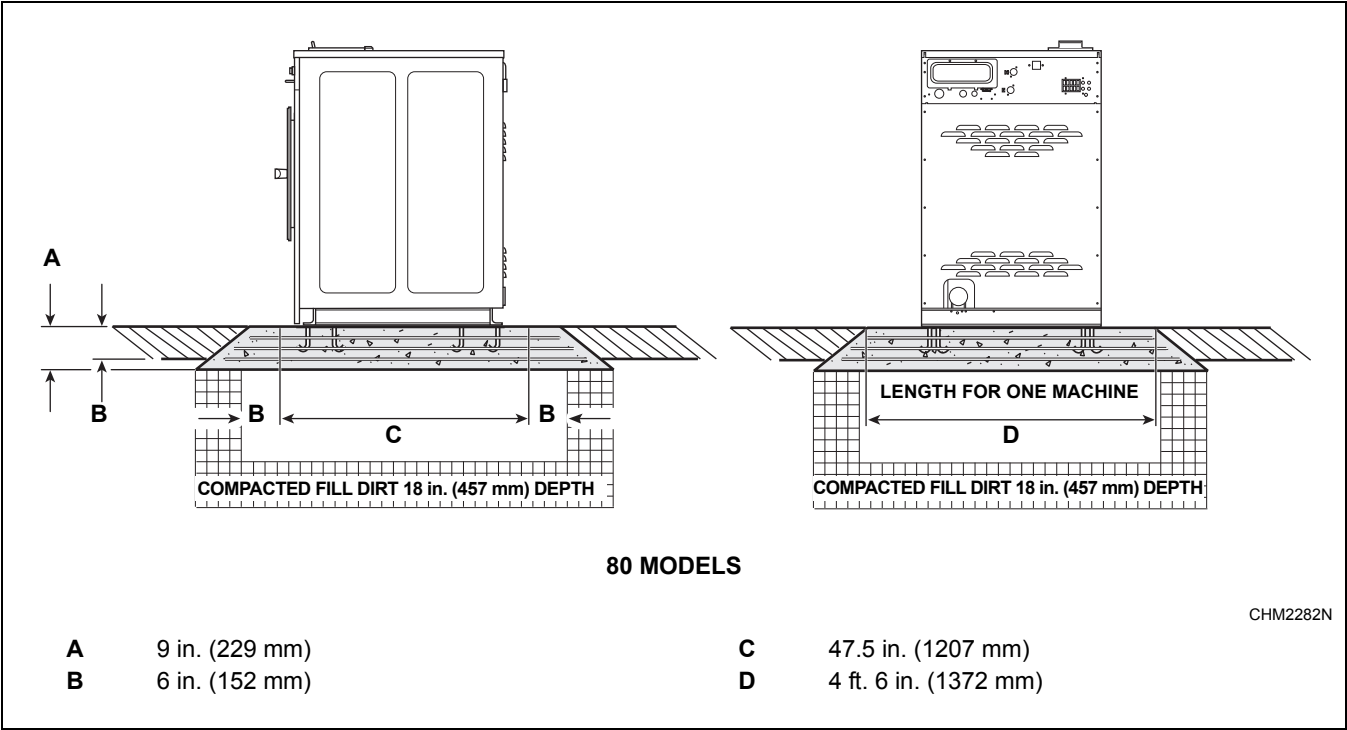


Figure 7

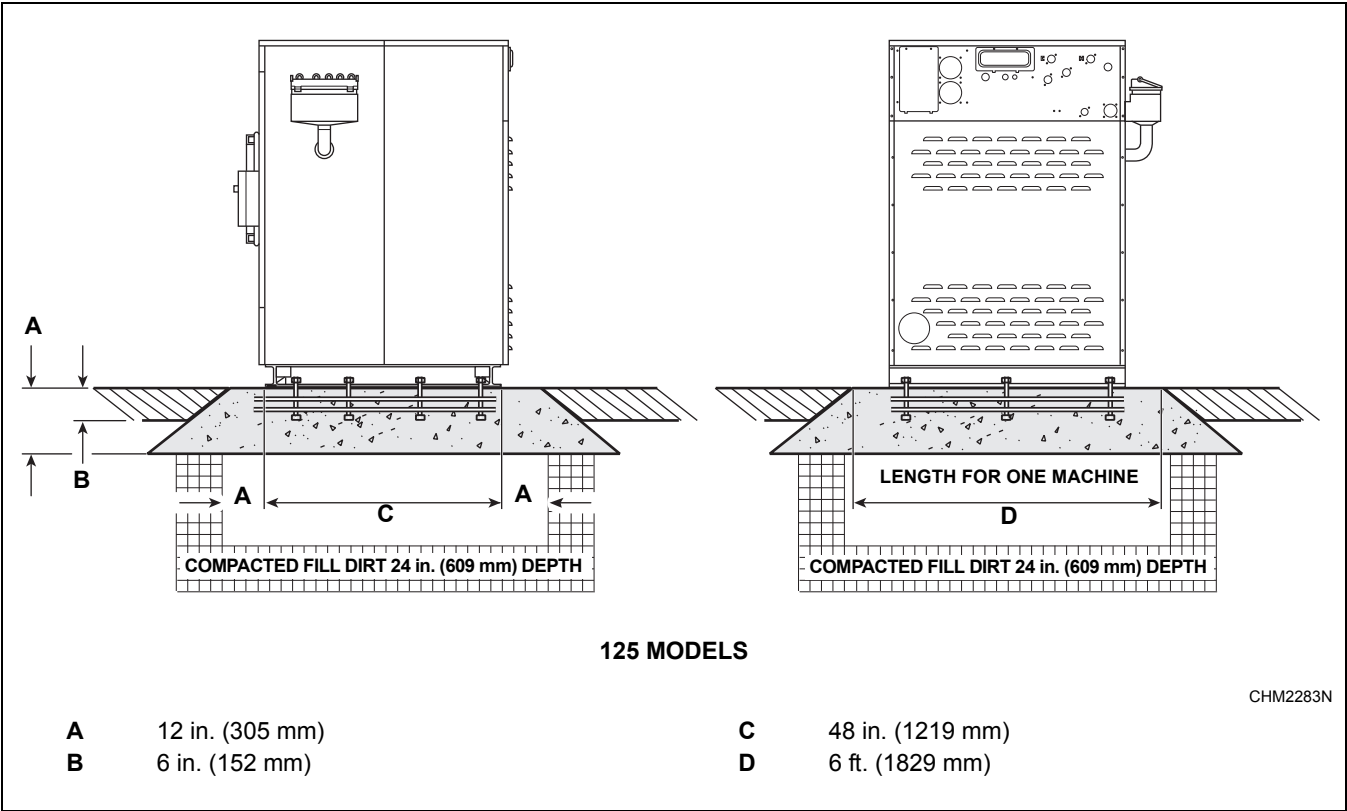


Figure 8

Machine Anchoring

Before anchoring the machine, refer to *Table 1* to determine the appropriate method of anchoring for the machine.

NOTE: Improper installation may void the warranty. Consult the manufacturer or distributor before varying from a procedure.

Direct-to-Finished-Floor Installation

Installing With Expansion Bolts for 2 Speed Models

NOTE: Expansion bolts are not suitable for variable-speed machine installations.

1. Verify the floor meets the requirements given in the ***Machine Foundation*** section.
2. Mounting surface should be level and machine must be properly grouted.
3. Use the base of the machine as a template by positioning the machine in the desired location and marking the pre-drilled mounting holes on the floor. Mounting Bolt templates are available through Alliance Laundry Systems.
4. Refer to *Figure 9* and *Table 4* to set the drill depth gauge.
5. Drill the holes to the set depth. Refer to *Table 4*.
6. Use compressed air or a squeeze bulb to clean out debris from each hole.
7. Fill half the hole depth with an industry-accepted adhesive anchoring system.
8. Insert expansion bolt until it reaches the bottom of the hole and 1.5 inches (38 mm) of the bolt extends above the surface.
9. Allow adhesive around bolt to cure properly.
10. Position machine over anchoring bolts.
11. Raise and level the machine .5 inch (13 mm) off the floor on three points, using spacers such as nut fasteners.
12. Fill the space between the machine base and the floor with a good quality non-shrinking machinery grout to ensure a stable installation. Grout completely under all frame members.
13. Position washers and nuts on bolts and finger tighten nuts to machine base.
14. Before grout sets completely, make a drain opening in the grouting at the rear center of the machine with a stiff piece of wire. This opening should be approximately .5 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.**
15. Allow machine grout to set, but not cure.
16. Remove the spacers carefully, allowing the machine to settle into the grout.
17. Tighten the nuts by even increments – one after the other using the specified torque – until all are tightened evenly and the machine is fastened securely to the floor. Refer to *Table 4*.

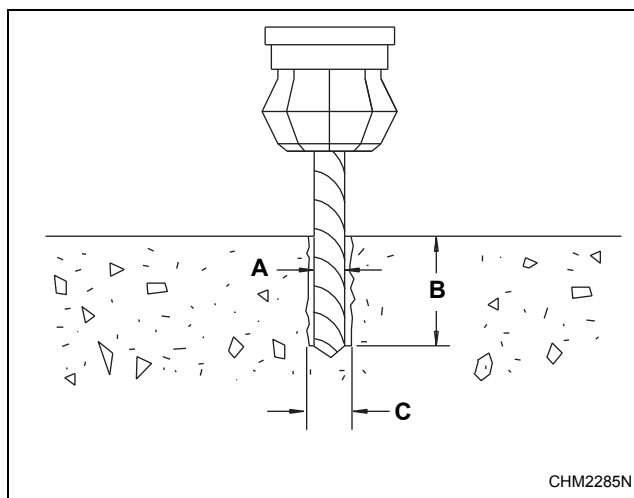


Figure 9

Anchor Specifications (refer to <i>Figure 9</i>)				Torque (ft.-lbs.)
Models	A	B (minimum)	C	
20-60	5/8 in.	2.75 in. (69.9 mm)	.625 in. (15.9 mm)	90 (ft.-lbs.)
80-125	3/4 in.	3.25 in. (82.6 mm)	.75 in. (19 mm)	175 (ft.-lbs.)

Table 4

Installation

The completed expansion bolt installation is shown in *Figure 10*.

NOTE: Check and retighten the nuts after five to ten days of operation and every three months thereafter.

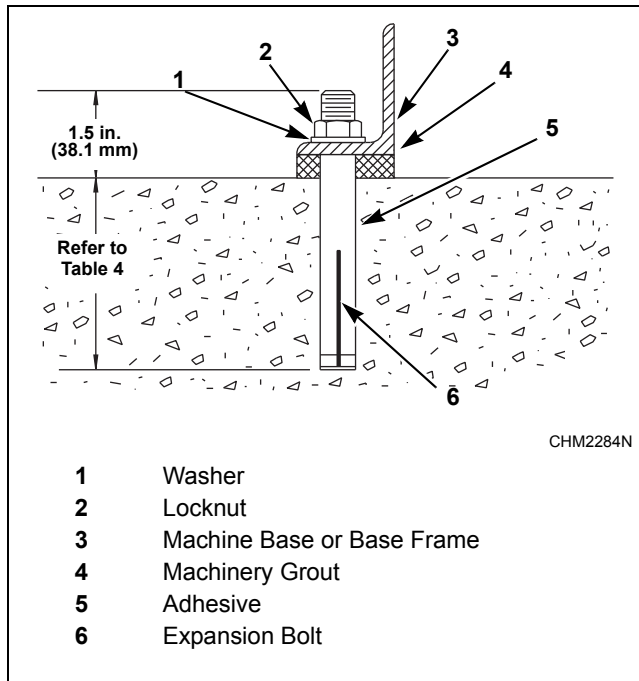


Figure 10

Elevated Base Frame Installation

Factory-built elevated steel base frames are designed to meet the specifications of the 20-60 2 speed, F-speed and V-speed model washer-extractors only. Refer to *Figure 11*. The spacing between two machines provided by an elevated base is .38 inch (9.5 mm) in 20, 30 and 60 pound models and .25 inch (6.3 mm) in 40 pound models.

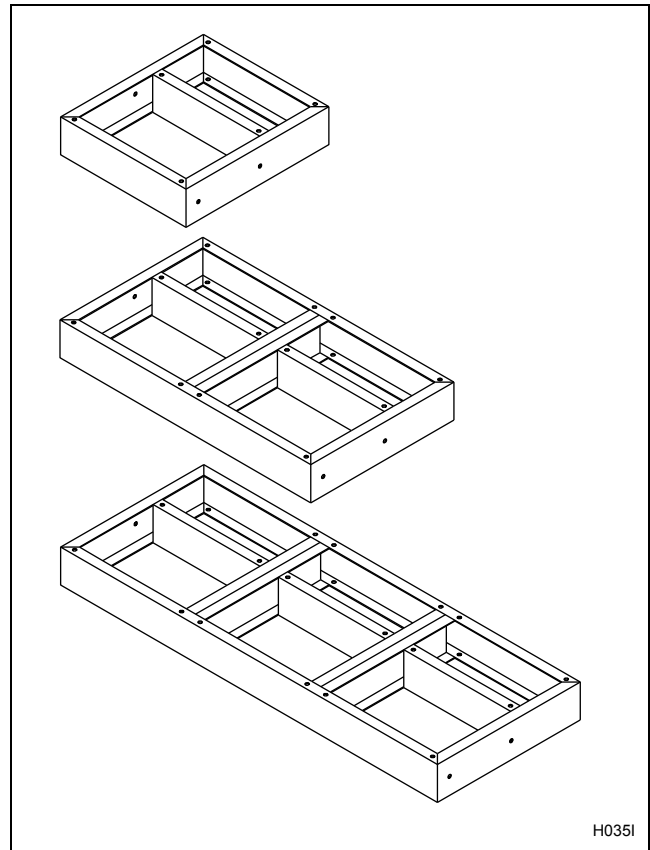


Figure 11

Installing With Elevated Base Frame

1. Verify the floor meets the requirements given in the ***Machine Foundation*** section.
2. Use the elevated base frame as a template by positioning the frame in the desired location and marking the pre-drilled mounting holes on the floor.

3. Refer to *Figure 9* and *Table 4* to set the drill depth gauge.
4. Drill the holes to the set depth. Refer to *Table 4*.
5. Use compressed air or a squeeze bulb to remove debris from each hole.
6. Fill half the hole depth with an industry accepted adhesive anchoring system.
7. Insert bolt until it reaches the bottom of the hole and 1.5 inches (38 mm) of the bolt extends above the base frame. Refer to *Figure 10*.
8. Allow adhesive around the bolt to cure properly.
9. Position base frame over anchoring bolts.
10. Raise and level the base frame .5 inch (13 mm) off the floor on three points, using spacers such as nut fasteners.
11. Fill the space between the base frame and the floor with a good quality non-shrinking machinery grout to ensure a stable installation. Grout completely under all frame members.
12. Position washers and locknuts on bolts and finger tighten nuts to base frame.
13. Before grout sets completely, make a drain opening in the grouting at the rear of the base frame with a stiff piece of wire. This opening should be approximately .5 inch (13 mm) wide to allow any surface water build-up under the base of the machine to drain away. This drain opening must not be near frame mounting bolts. **Do not omit this step.**
14. Allow machine grout to set, but not cure.
15. Remove the spacers carefully, allowing the base frame to settle into the wet grout.
16. Tighten nuts by even increments – one after the other using the specified torque – until all are tightened evenly and the base frame is fastened securely to the floor. Refer to *Table 4*.

17. Position the machine over the base frame, aligning the mounting holes on the machine with the corresponding holes on the frame.
18. Install a bolt, lockwasher, and nut in each mounting hole. Use 5/8 inch – 18 x 2.00 grade 5 mounting bolts with 5/8 inch – 18 grade B nuts and 5/8 inch lockwashers.
19. Hand tighten each nut.
20. Tighten the two rear nuts two turns.
21. Tighten the two front nuts two turns.
22. On 30, 40 and 60 models, tighten the two middle nuts firmly.
23. Tighten the two front nuts firmly; tighten the two rear nuts firmly.

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

NOTE: For 80 and 125 pound models, a bolt-locator fixture or rebar frame is available as an option. This is designed to be embedded in concrete. Refer to *Figure 12*.

IMPORTANT: Do not install any 80 or 125 machines on an elevated base frame.

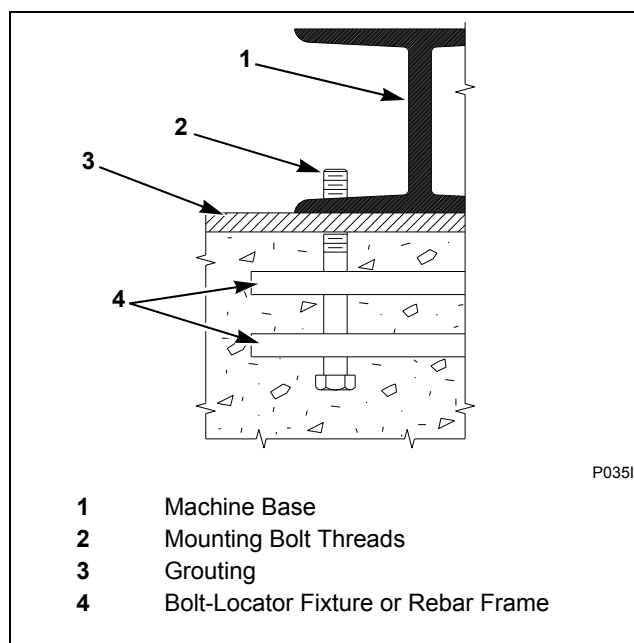


Figure 12

Mounting Bolt Hole Locations (Without Elevated Base Frames)

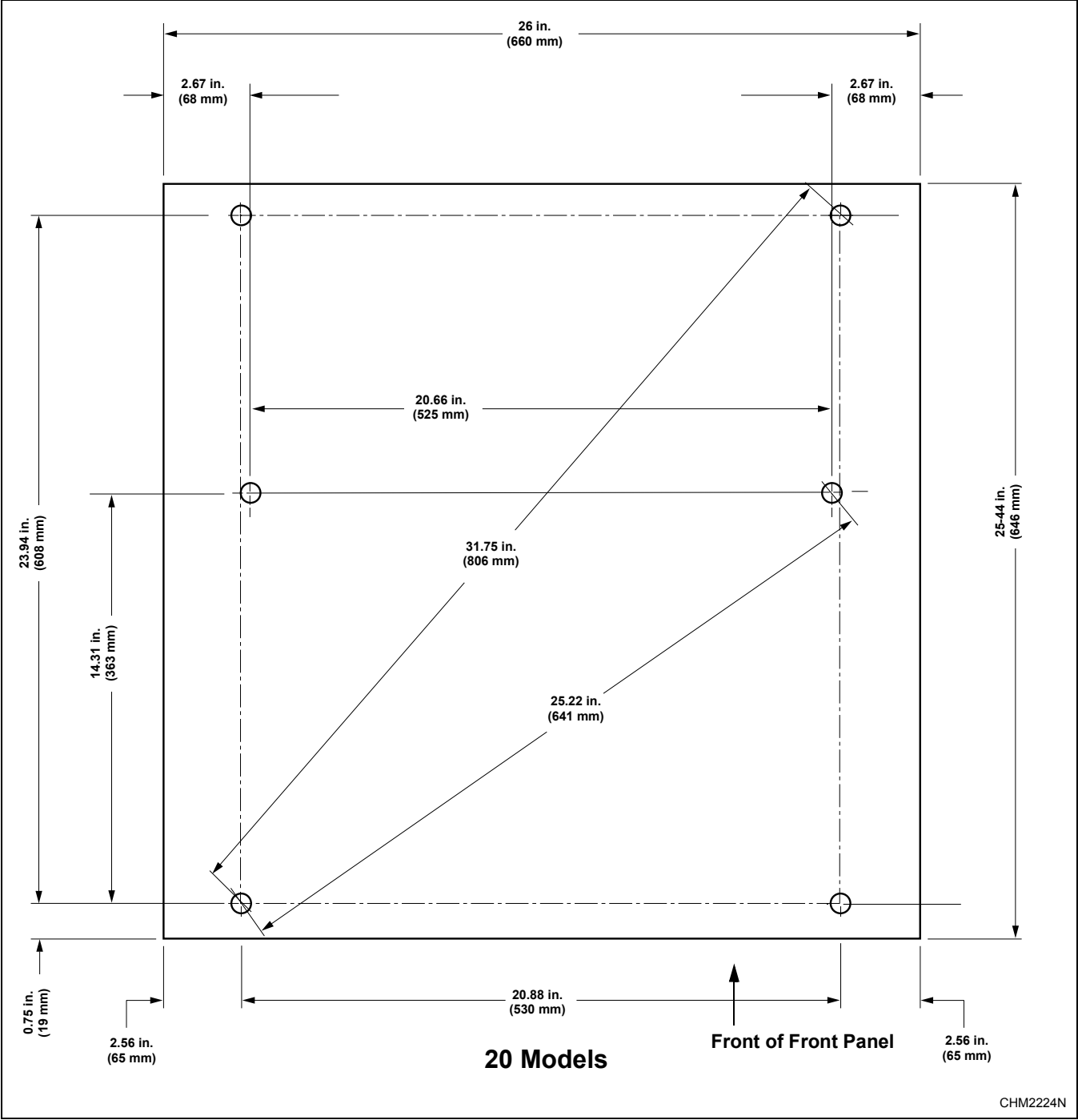


Figure 13

IMPORTANT: Drawing is not to scale.

Mounting Bolt Hole Locations (Without Elevated Base Frames)

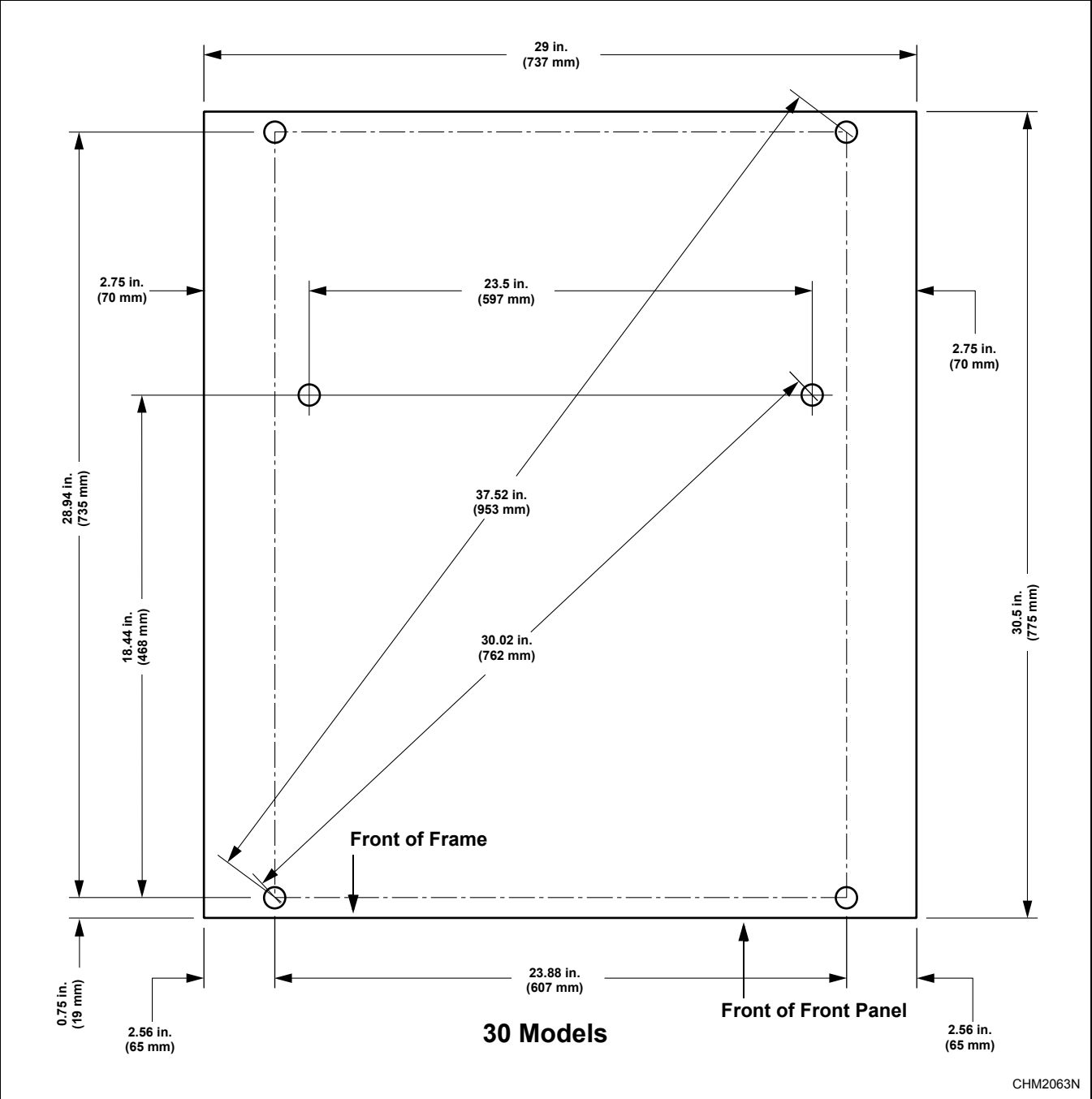


Figure 14

IMPORTANT: Drawing is not to scale.

Mounting Bolt Hole Locations (Without Elevated Base Frames)

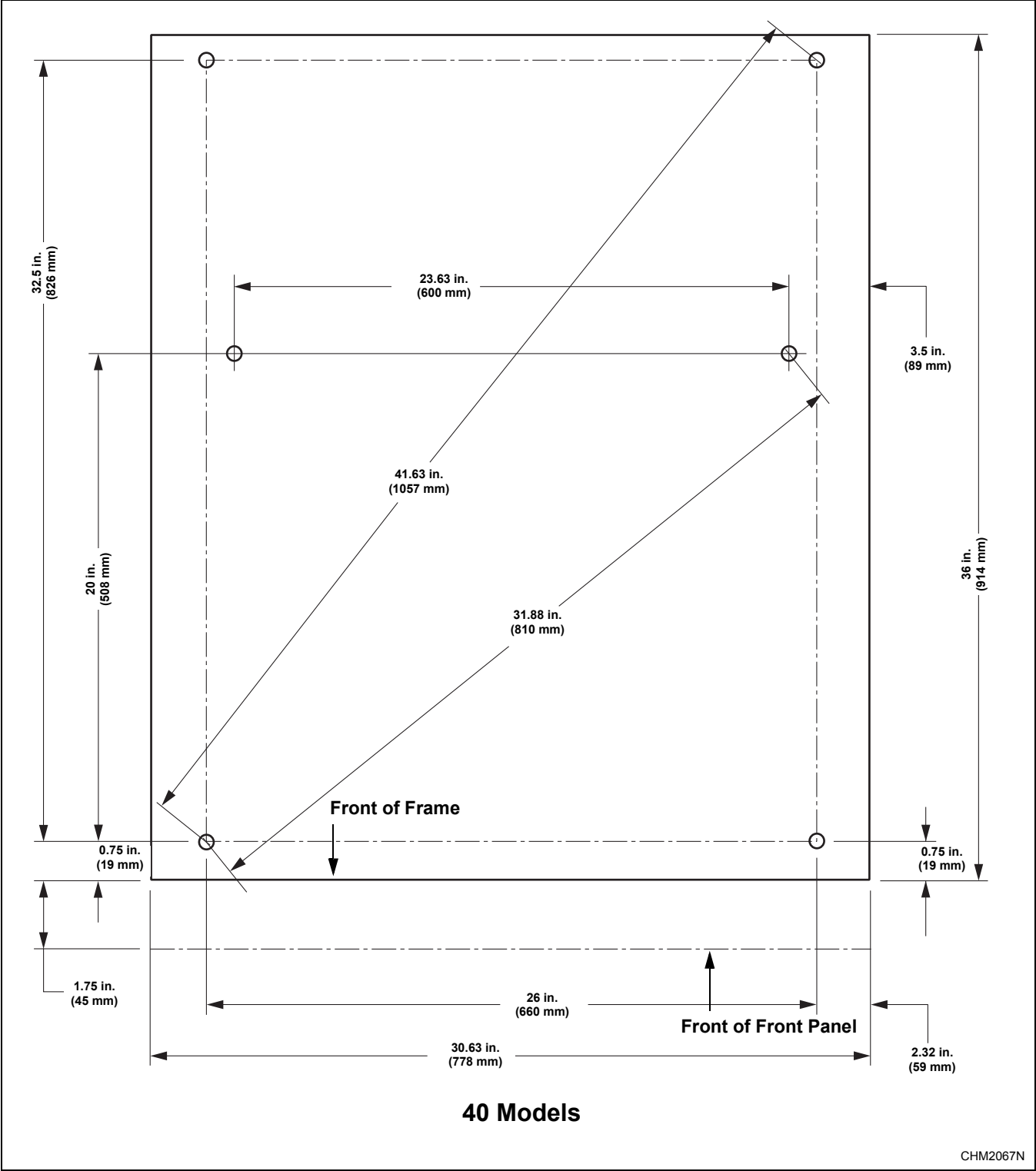
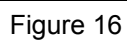


Figure 15

IMPORTANT: Drawing is not to scale.



IMPORTANT: Drawing is not to scale.

Mounting Bolt Hole Locations (Without Elevated Base Frames)

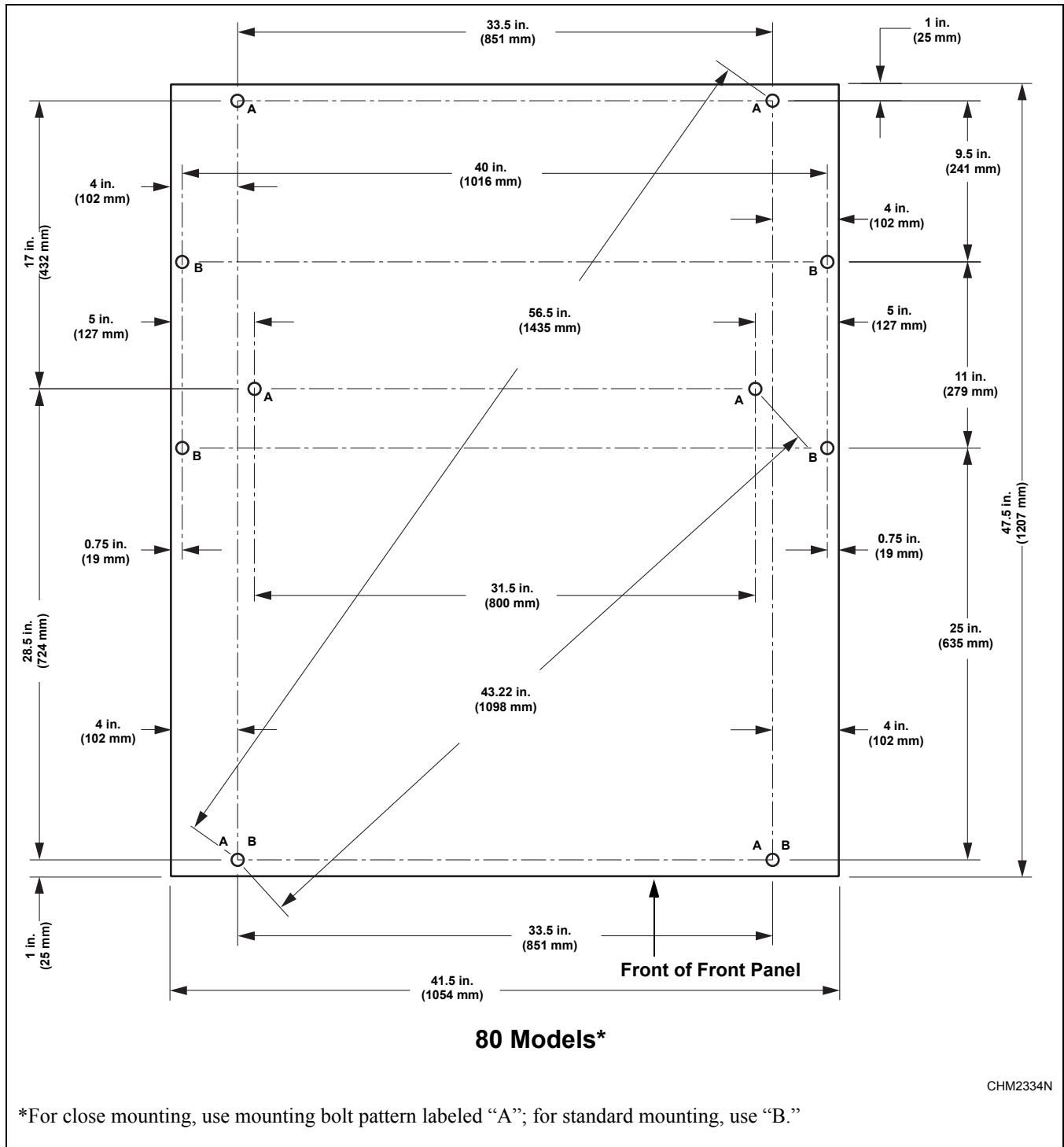


Figure 17

IMPORTANT: Drawing is not to scale.

Mounting Bolt Hole Locations (Without Elevated Base Frames)

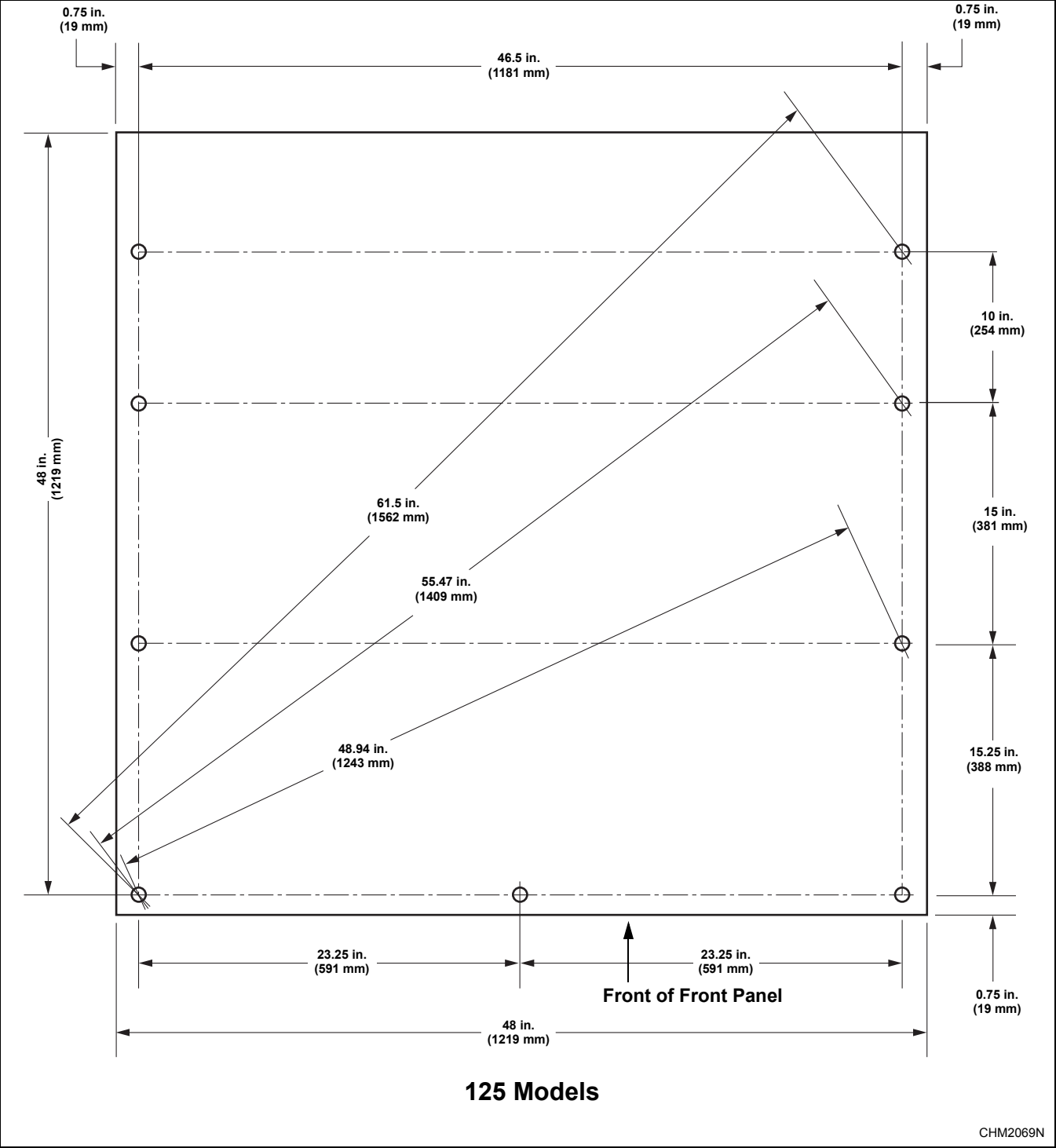


Figure 18

IMPORTANT: Drawing is not to scale.

Mounting Bolt Hole Locations (With Elevated Base Frames)

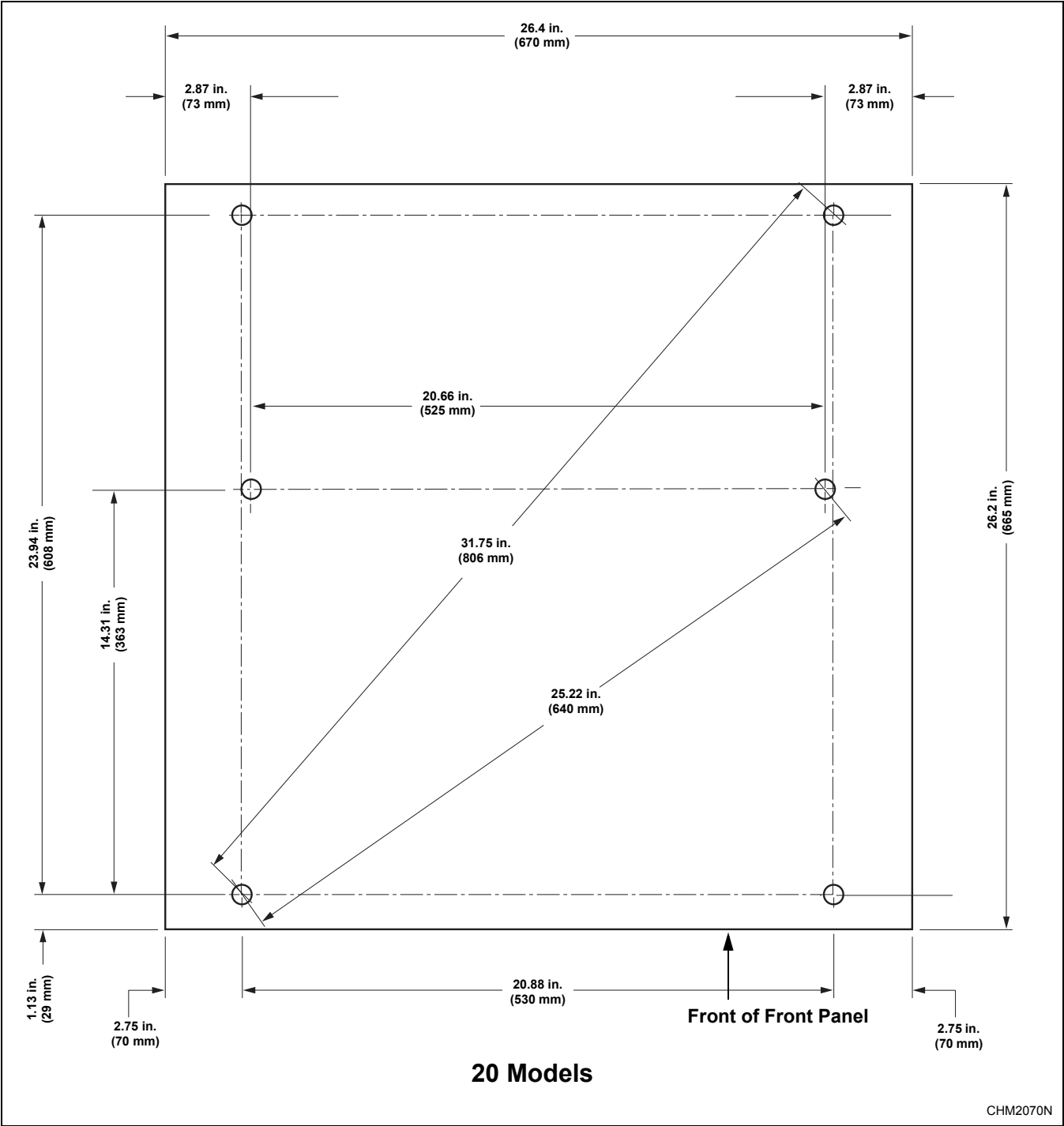


Figure 19

IMPORTANT: Drawing is not to scale.

Mounting Bolt Hole Locations (With Elevated Base Frames)

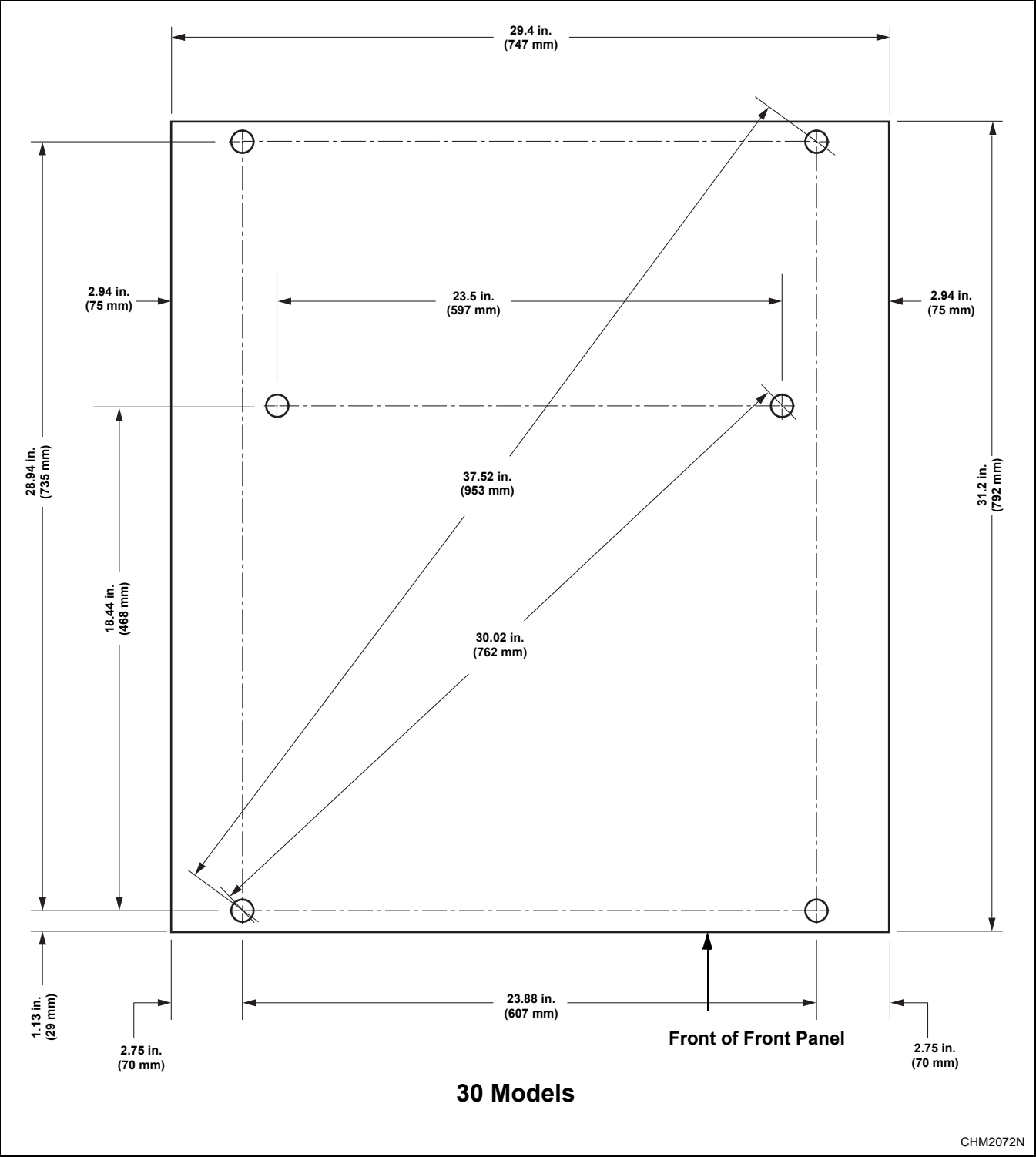


Figure 20

IMPORTANT: Drawing is not to scale.

Mounting Bolt Hole Locations (With Elevated Base Frames)

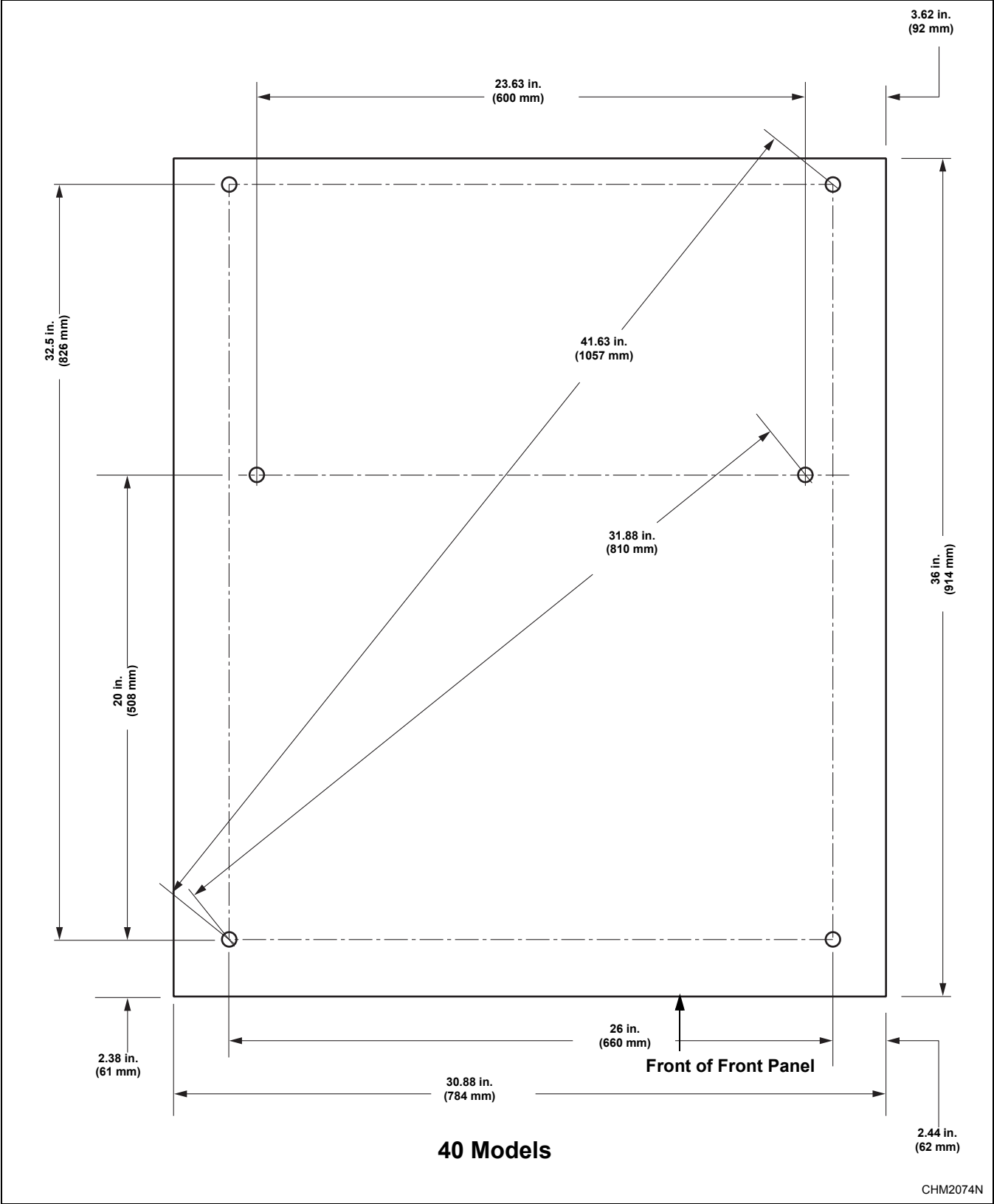


Figure 21

IMPORTANT: Drawing is not to scale.

Mounting Bolt Hole Locations (With Elevated Base Frames)

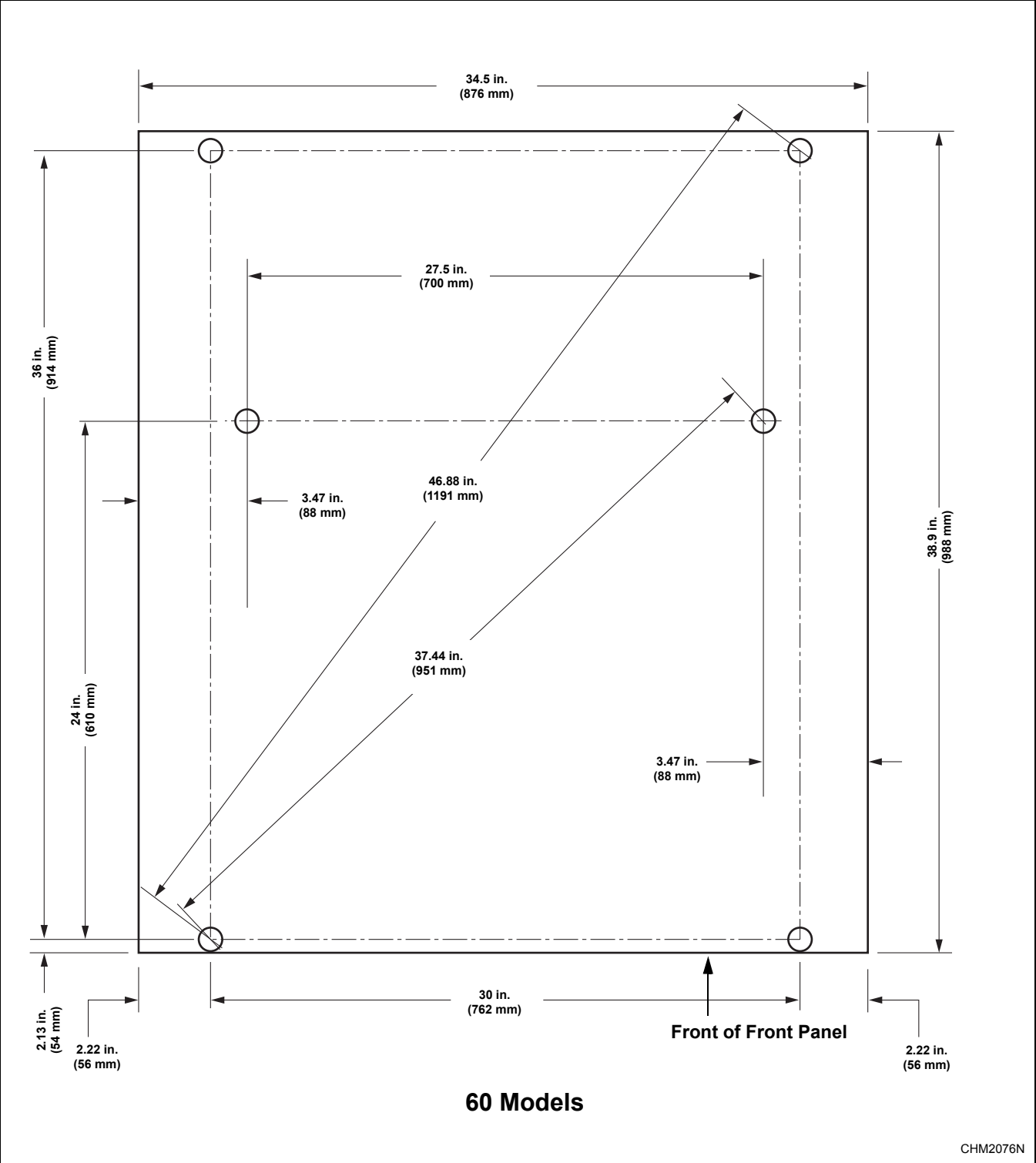


Figure 22

IMPORTANT: Drawing is not to scale.

Drain Connection

Figure 23 and Figure 24 show typical drain trough and drain line installations.

Connect the drain outlet to a vented drain system using only a flexible connection. The drain system must be vented to prevent an air lock or siphoning.

Use the supplied black rubber adapter and clamps to transition from the machine drain outlet to the 2 inches schedule 40 PVC plumbing (20 and 30 models) and the 3 inches schedule 40 PVC plumbing (40, 60, 80 and 125 models).

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, such as in below-ground-level installations.

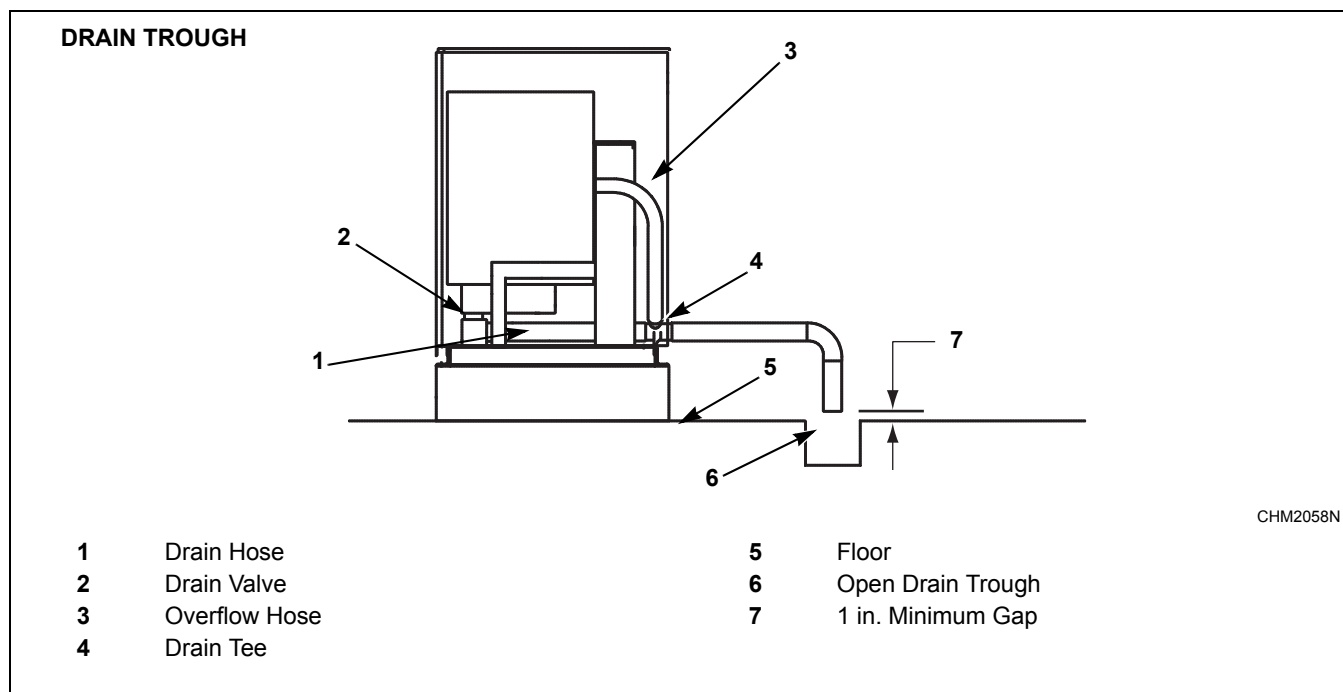


Figure 23

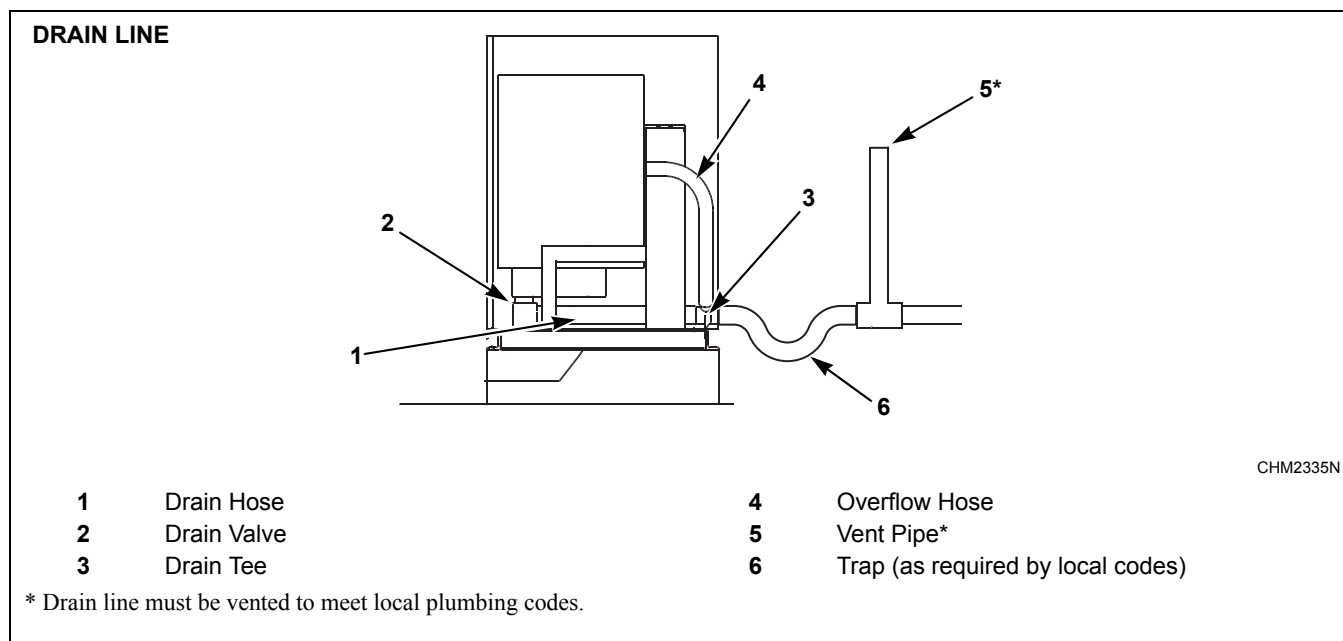


Figure 24

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

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

Refer to *Table 5* for capacity-specific drain information.

NOTE: Installation of additional machines will require larger drain connections. Refer to *Table 6*.

Drain Information						
	20	30	40	60	80	125
Drain connection size, OD	2 in. (51 mm)	2 in. (51 mm)	3 in.* (76 mm)	3 in.* (76 mm)	3 in.* (76 mm)	3.5 in.* (89 mm)
Number of drain outlets	1	1	1	1	1	1
Drain flow capacity	20 gal/min (76 l/min)	25 gal/min (95 l/min)	45 gal/min (170 l/min)	55 gal/min (208 l/min)	50 gal/min (189 l/min)	70 gal/min (265 l/min)
Recommended drain pit size	1.8 ft. ³ (51 l)	2.5 ft. ³ (71 l)	4.52 ft. ³ (128 l)	4.52 ft. ³ (128 l)	5.9 ft. ³ (167 l)	13 ft. ³ (368 l)

* Also works with 3 in. OD PVC pipe if connected to inside of drain tee connector.

Table 5

Drain Line Sizing Minimum Drain ID					
Model	Number of Machines				
	1	2	3	4	5
20	2 in. (51 mm)	3 in. (76 mm)	3 in. (76 mm)	4 in. (102 mm)	4 in. (102 mm)
30	2 in. (51 mm)	3 in. (76 mm)	3 in. (76 mm)	4 in. (102 mm)	4 in. (102 mm)
40	3 in. (76 mm)	4 in. (102 mm)	4 in. (102 mm)	4 in. (102 mm)	6 in. (152 mm)
60	3 in. (76 mm)	4 in. (102 mm)	4 in. (102 mm)	4 in. (102 mm)	6 in. (152 mm)
80, 125	4 in. (102 mm)	6 in. (152 mm)	6 in. (152 mm)	8 in. (203 mm)	8 in. (203 mm)

Table 6

Installation

Water Connection Requirements

Connections should be supplied by a hot and a cold water line of at least the sizes shown in *Table 8*. Installation of additional machines will require proportionately larger water lines.

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

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

If additional hose lengths are needed, use flexible hoses with screen filters.

Cabinet Hardmount Water Supply Information	
Water Inlet Connection size, in. (mm)	3/4 (19)
Thread Size	11.5
Number of water inlets	2
Recommended pressure, psi (bar)	30-85 (2-5.7)
Inlet flow capacity, gal-min (l-min) (80 psi)	C20-C80: 12 (45) C125: 50 (189)

Table 7

Water Supply Line Sizing			
Model	Number of Machines	Supply Line Size	
		Main	Hot/Cold
20 – 80	1	.75 in. (19 mm)	.75 in. (19 mm)
	2	1 in. (25 mm)	.75 in. (19 mm)
	3	1.25 in. (32 mm)	1 in. (25 mm)
	4	1.5 in. (38 mm)	1 in. (25 mm)
125	1	1.5 in. (38 mm)	1 in. (25 mm)
	2	2 in. (50 mm)	1.5 in. (38 mm)
	3	2 in. (50 mm)	2 in. (50 mm)
	4	2.5 in. (70 mm)	2 in. (50 mm)

Table 8

Suitable air cushions should be installed in supply lines to prevent “hammering.” Refer to *Figure 25*.

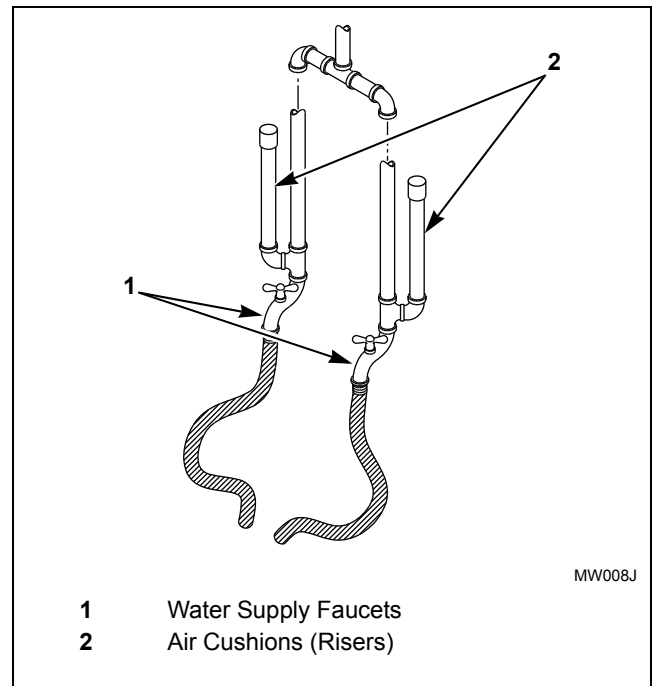


Figure 25

WARNING

To prevent personal injury, avoid contact with inlet water temperatures higher than 125° Fahrenheit (51° Celsius) and hot surfaces.


W748


Alliance Laundry Systems, LLC ranges of front loading commercial clothes washing machines have solenoid valves at the inlets. The water supply to the washing machines is supplied with an AB air gap between the soap tray and the drum. The soap tray is certified to meet ASSE 1055 requirements for a chemical dispenser. Minimum and maximum working pressure 1.4 bar and 8.3 bar. The machines are supplied with approved inlet hoses with a maximum inlet dimension of 12.6 mm (ID).


NOTE: This machine has a fluid category 5 backflow prevention device built in between the soap tray and drum.

Electrical Installation Requirements

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

	DANGER
<p>Hazardous Voltage. Will cause shock, burn or death. Allow machine power to remain off for three minutes prior to working in and around AC inverter drive.</p> <p style="text-align: right;">W735</p>	

	WARNING
<p>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.</p> <p style="text-align: right;">W736</p>	

	WARNING
<p>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.</p> <p style="text-align: right;">W360</p>	

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 Connection label located on the back of the machine near the electrical service input for machine electrical requirements. Refer to *Figure 26*.

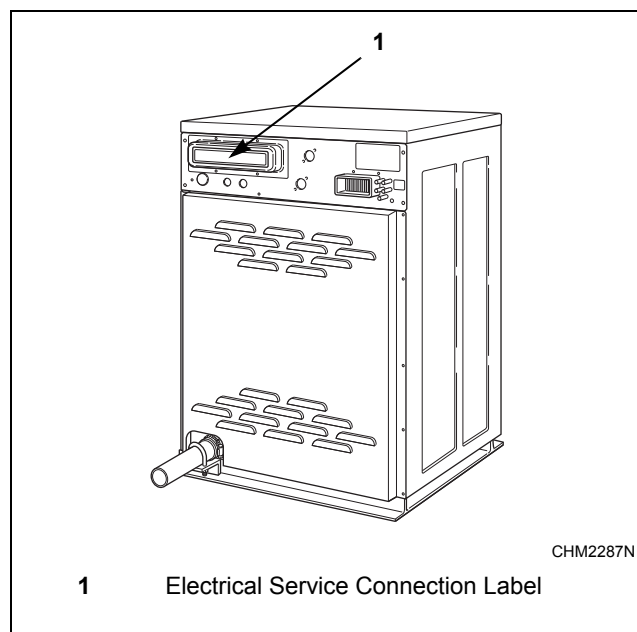


Figure 26

Machines equipped with an AC inverter drive require a clean power supply, free from voltage spikes and surges. Use voltage monitor to check incoming power. The customer's local power company may provide such a monitor.

Input Power Conditioning

The drive is suitable for direct connection to input power within the rated voltage of the drive. Listed in *Table 9* are certain input power conditions which may cause component damage or reduction in product life. If any of the conditions exist, as described in *Table 9*, install one of the devices listed under the heading *Corrective Action* on the line side of the drive.

IMPORTANT: Only one device per branch circuit is required. It should be mounted closest to the branch and sized to handle the total current of the branch circuit.

Input Power Condition	Corrective Action
Low Line impedance (less than 1% line reactance)	<ul style="list-style-type: none"> • Install Line Reactor • or Isolation Transformer
Greater than 120 kVA supply transformer	
Line has power factor correction capacitors	<ul style="list-style-type: none"> • Install Line Reactor • or Isolation Transformer
Line has frequent power interruptions	
Line has intermittent noise spikes in excess of 6000V (lightning)	
Phase to ground voltage exceeds 125% of normal line to line voltage	<ul style="list-style-type: none"> • Remove MOV jumper to ground. • or Install Isolation Transformer with grounded secondary if necessary
Ungrounded distribution system	
240V open delta configuration (stinger leg)*	<ul style="list-style-type: none"> • Install Line Reactor
<p>* For drives applied on an open delta with a middle phase grounded neutral system, the phase opposite the phase that is tapped in the middle to the neutral or earth is referred to as the “stinger leg,” “high leg,” “red leg,” etc. This leg should be identified throughout the system with red or orange tape on the wire at each connection point. The stinger leg should be connected to the center Phase B on the reactor.</p>	

Table 9


Input Voltage Requirements


For voltages above or below listed specifications, contact your power company or local electrician.

If machine is intended for four-wire service, a neutral leg must be provided by power company.

If a delta supply system is used on a four-wire model, connect high leg to L3.

IMPORTANT: Improper connections will result in equipment damage and will void warranty.

	DANGER
<p>Never touch terminals or components of the AC inverter drive unless power is disconnected for three minutes.</p>	
W737	

	DANGER
<p>Hazardous Rotation Speed. Will cause serious injury when controlling AC inverter drive with a parameter unit, safety features are bypassed allowing basket to rotate at high speeds with the door open. Place large sign on front of machine to warn people of imminent danger.</p>	
W361	

Circuit Breakers and Quick Disconnects

Single-phase machines require a single-phase inverse-time circuit breaker. Three-phase machines and variable-speed machines require a separate, three-phase inverse-time circuit breaker to prevent damage to the motor by disconnecting all legs if one should be lost accidentally. Check the nameplate decal on the back of the machine. Refer to *Table 10* through *Table 15* in this section for model-specific circuit breaker requirements.

IMPORTANT: All quick disconnects should comply with the above specifications. DO NOT use fuses instead of circuit breakers.

Connection Specifications


IMPORTANT: Connection must be made by a qualified electrician using wiring diagram provided with machine, or according to accepted European standards for CE-approved equipment.

Connect machine to an individual branch circuit not shared with lighting or other equipment. Shield connection in a liquid-tight or approved flexible conduit. Copper conductors of correct size must be installed in accordance with National Electric Code (NEC) or other applicable codes.

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).

Grounding

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

	WARNING
<p>Electrically heated machines DO NOT require dual power sources. Do not connect customer power or customer load to the Internal Load Distribution terminal block. Refer to the machine electrical schematic for details.</p>	
W759	

Installation

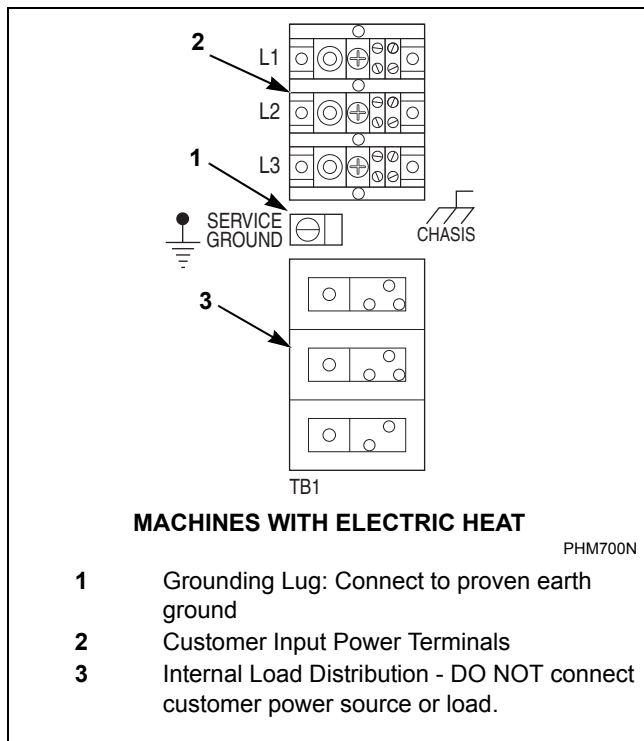


Figure 27

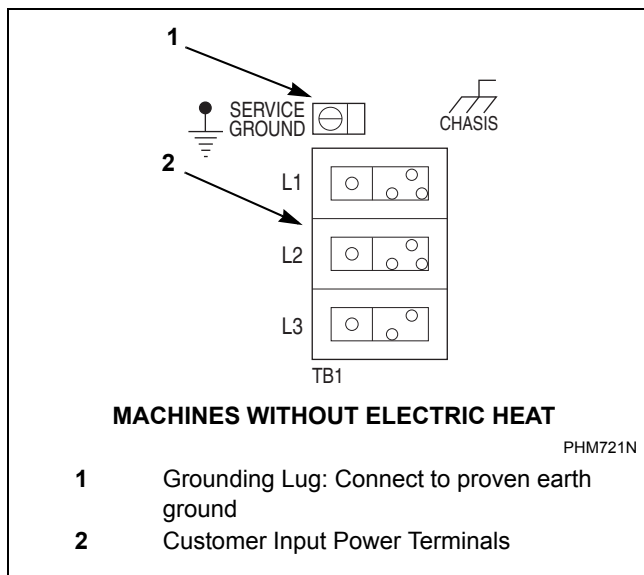


Figure 28

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

Phase Adder

IMPORTANT: Do not use a phase adder on any machine.

Thermal Overload Protector

Two speed machines have thermal overload protectors in drive motor windings. For variable-speed machines, the AC drive provides overload protection for the drive motor.

Electrical Specifications 20 Pound Capacity Models												
Voltage Designation					Standard				Electric Heat			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm²	Full Load Amps	Circuit Breaker	AWG	mm²
2 Speed Models												
B	120	60	1	2	16	20	12	4.0	N/A			
C	380 – 415	50	3	4	4	15	14	2.5	14	15	14	2.5
F	440 – 480	60	3	3	4	15	14	2.5	16	20	12	4.0
J	200	50	3	3	5	15	14	2.5	N/A			
O	208 – 240	60	3	3	5	15	14	2.5	23	30	10	6
Y	208 – 240	60	1	2	8	15	14	2.5	N/A			
Variable-Speed Models												
Q	200 – 240	50/60	3	3	4	15	14	2.5	21	30	10	6
R (through 7/6/10)	380 – 480	50/60	3	3	4	15	14	2.5	N/A			
N (starting 7/7/10)	440 – 480	60	3	3	4	15	14	2.5	N/A			
P (starting 7/7/10)	380 – 415	50	3	3	4	15	14	2.5	14	15	14	2.5
X	200 – 240	50/60	1/3	2/3	6/4	15	14	2.5	N/A			

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

Table 10

Installation

Electrical Specifications 30 Pound Capacity Models												
Voltage Designation					Standard				Electric Heat			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm ²	Full Load Amps	Circuit Breaker	AWG	mm ²
2 Speed Models												
C	380 – 415	50	3	4	4	15	14	2.5	15	20	12	4.0
F	440 – 480	60	3	3	4	15	14	2.5	16	20	12	4.0
J	200	50	3	3	7	15	14	2.5	N/A			
O	208 – 240	60	3	3	7	15	14	2.5	25	30	10	6.0
Y	208 – 240	60	1	2	10	20	12	4.0	N/A			
Variable-Speed Models												
Q	200 – 240	50/60	3	3	5	15	14	2.5	22	30	10	6.0
R (through 7/6/10)	380 – 480	50/60	3	3	4	15	14	2.5	N/A			
N (starting 7/7/10)	440 – 480	60	3	3	4	15	14	2.5	N/A			
P (starting 7/7/10)	380 – 415	50/60	3	3	4	15	14	2.5	14	15	14	2.5
X	200 – 240	50/60	1/3	2/3	7/5	15	14	2.5	N/A			

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

Table 11

Electrical Specifications 40 Pound Capacity Models												
Voltage Designation					Standard				Electric Heat			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm ²	Full Load Amps	Circuit Breaker	AWG	mm ²
2 Speed Models												
C	380 – 415	50	3	4	5	15	14	2.5	27	30	10	6.0
F	440 – 480	60	3	3	5	15	14	2.5	24	30	10	6.0
J	200	50	3	3	7	20	12	4.0	N/A			
O	208 – 240	60	3	3	7	20	12	4.0	45	50	8	10.0
Y	208 – 240	60	1	2	14	30	10	6.0	N/A			
Variable-Speed Models												
R (through 7/6/10)	380 – 480	50/60	3	3	6	15	14	2.5	23	30	10	6.0
N (starting 7/7/10)	440 – 480	60	3	3	5	15	14	2.5	22	30	10	6.0
P (starting 7/7/10)	380 – 415	50	3	3	5	15	14	2.5	22	30	10	6.0
Q	200 – 240	50/60	3	3	6	15	14	2.5	42	50	8	10.0
X	200 – 240	50/60	1/3	2/3	10/6	15	14	2.5	N/A			

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

Table 12

Installation

Electrical Specifications 60 Pound Capacity Models												
Voltage Designation					Standard				Electric Heat			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm ²	Full Load Amps	Circuit Breaker	AWG	mm ²
2 Speed and Fixed-Speed Models												
C	380-415	50	3	4	5	15	14	2.5	27	30	10	6.0
F	440-480	60	3	3	5	15	14	2.5	24	30	10	6.0
J	200	50	3	3	10	20	12	4.0	N/A			
O	208-240	60	3	3	10	20	12	4.0	48	50	8	10.0
Variable-Speed Models												
R (through 7/6/10)	380-480	50/60	3	3	6	15	14	2.5	23	30	10	6.0
N (starting 7/7/10)	440 – 480	60	3	3	6	15	14	2.5	24	30	10	6.0
P (starting 7/7/10)	380 – 415	50	3	3	6	15	14	2.5	24	30	10	6.0
Q	200-240	50/60	3	3	8	15	14	2.5	43	50	8	10.0
X	200-240	50/60	1/3	2/3	11/8	15	14	2.5	N/A			

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

Table 13

Electrical Specifications 80 Pound Capacity Models												
Voltage Designation					Standard				Electric Heat			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm ²	Full Load Amps	Circuit Breaker	AWG	mm ²
Variable-Speed Models												
R (through 7/6/10)	380 – 480	50/60	3	3	8	15	14	2.5	40	50	8	10.0
N (starting 7/7/10)	440 – 480	60	3	3	8	15	14	2.5	40	50	8	10.0
P (starting 7/7/10)	380 – 415	50	3	3	8	15	14	2.5	40	50	8	10.0
Q	200 – 240	50/60	3	3	11	15	14	2.5	82	90	3	25.0
X	200 – 240	50/60	1/3	2/3	16/11	20/15	12/14	4/2.5	N/A			

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


Table 14

Electrical Specifications 125 Pound Capacity Models												
Voltage Designation					Standard				Electric Heat			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm ²	Full Load Amps	Circuit Breaker	AWG	mm ²
Variable-Speed Models												
R (through 7/6/10)	380 – 480	50/60	3	3	10	15	14	2.5	N/A			
N (starting 7/7/10)	440 – 480	60	3	3	10	15	14	2.5	65	70	4	25.0
P (starting 7/7/10)	380 – 415	50	3	3	10	15	14	2.5	65	70	4	25.0
Q	200 – 240	50/60	3	3	11	15	14	2.5	N/A			

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

Table 15

Steam Requirements (Steam Heat Option Only)

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


For machines equipped with optional steam heat, install piping in accordance with approved commercial steam practices. Steam requirements are shown in *Table 16*.

Steam Supply Information		
Steam inlet connection size	40 – 80 pound	1/2 in. (13 mm)
	125 pound	3/4 in. (19 mm)
Number of steam inlets	1	
Recommended pressure	30 – 80 psi (2.0 – 5.4 bar)	
Maximum pressure	80 psi (5.4 bar)	

Table 16

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

Supply Dispensing

	WARNING
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.	
W363	

Supply Dispensing		
Capacities	20 – 80	125
Number of supply compartments	4	0 or 5 (optional)
Number of external liquid supply connections (OPL only)	5	5
Liquid supply connection size	3/8 in. (8 mm)	5/8 in. (15.9 mm)

Table 17

IMPORTANT: Undiluted chemical dripping can damage the machine. All chemical injection supply dispenser pumps and dispenser tubing should be mounted below the washer's injection point. Loops do not prevent drips if these instructions are not followed.

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

External Supplies

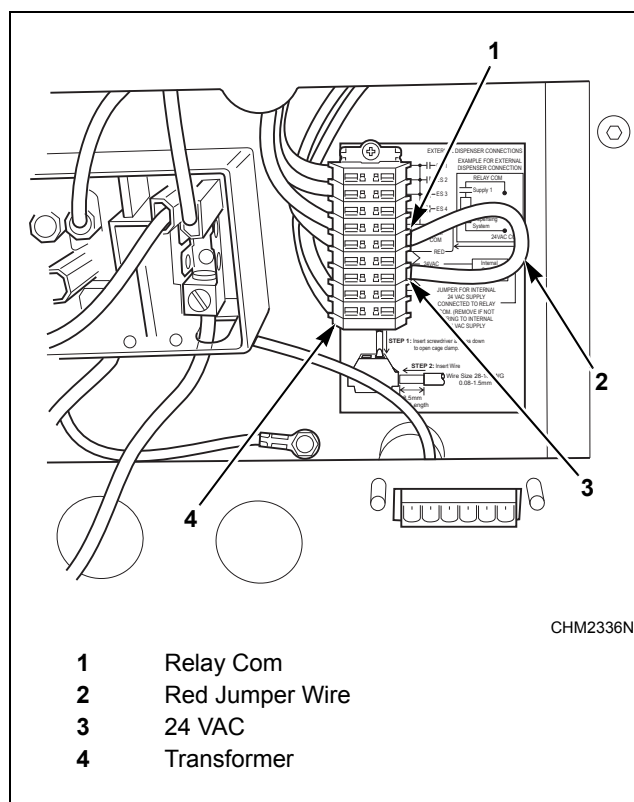
For proper communication between the washer-extractor and an external chemical supply system, it is important for the low-voltage signal power to be connected properly. The included wiring diagram (F8133502) shows several different options for safe and correct wiring of this interface.

The preferred method for connecting the wiring from the external chemical supply system to the washer-extractor is to use the 300mA power of the washer-extractor'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.

Basically, 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. 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.

1. Use the Internal 24VAC 300 Control Transformer (Recommended by Alliance Laundry Systems)


There are 3 terminals necessary for this connection option. Terminal “24VAC COM” is used to connect 1 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 washer-extractor output signals common through a red jumper wire between “24VAC” and “RELAY COM”. Do not use the transformer terminals if an external power supply is used.



2. Use an External AC Power Source (Not Provided by Alliance Laundry Systems)

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

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 1 side of the external power to the “RELAY COM” and the other to the external dispenser input signals common.



CAUTION

Do not attempt to increase fuse rating or alter wiring of external chemical supply terminal strip in such a way that may conflict with the suggested methods provided on the Optional External Supply Wiring Diagram.

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Connection of External Liquid Supplies

20 – 80 Pound OPL Models

1. Facing the rear of the machine, locate the five 3/8 inch supply hose connections found on the right-hand side of the valve panel. Refer to *Figure 29*.

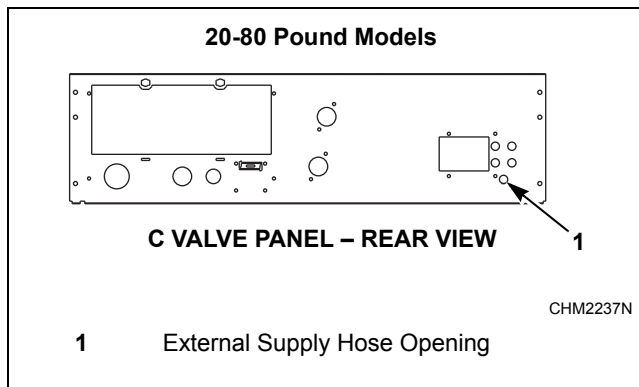


Figure 29

2. Drill through the five plastic holes on the valve panel for the external supply hoses as needed.
3. Remove plastic debris.
4. Attach the external supply hoses to the ports at each of the drilled holes.
5. Secure with proper clamps.

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

Consult the supply vendor instructions for operational details about supply injections.

125 Pound OPL Models (With Optional Dispenser)

Refer to *Figure 30*.

1. Remove plugs from base. Plugs are assembled inside tubing ring.
2. Install strain reliefs with the seal nuts.
3. Insert tubes through base. Do not remove dry supply cups. Tube should extend into plastic cup, with exception of softener tube, which should be routed to outside of cup.
4. Tighten seal nut to prevent tubing from escaping assembly.

IMPORTANT: Increasing fuse rating may cause damage to washer-extractor's circuitry.

IMPORTANT: Any injection system pump that requires anything other than 24VAC must be powered by a separate external power source.

Consult chemical injection supply system instructions for operational details.

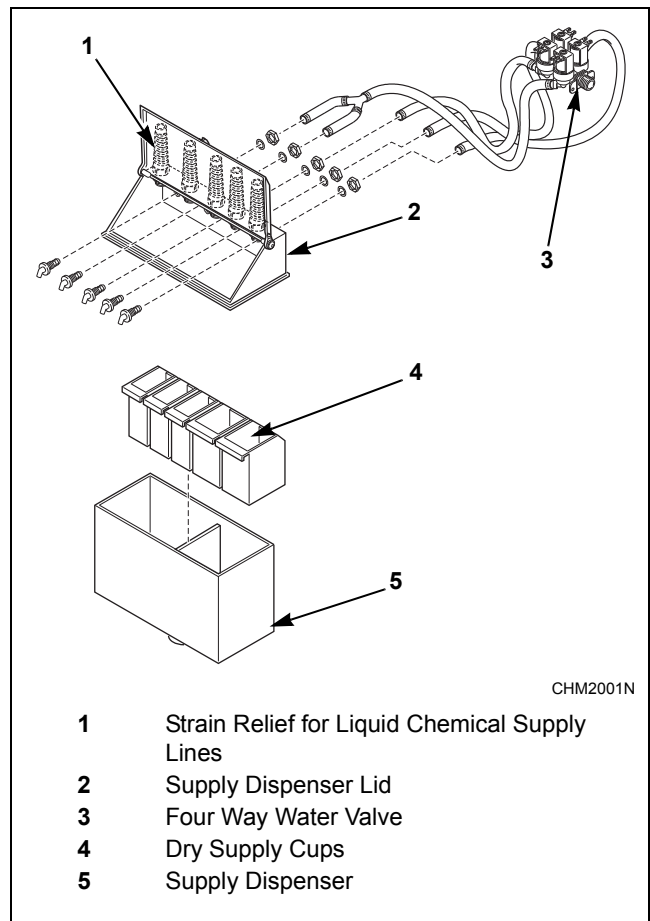


Figure 30

Start Up

Basket Rotation

Check that basket rotation is counterclockwise in the extract step.

1. If rotation is not counterclockwise, disconnect power to machine.
2. For 2 speed models, have a qualified electrician use the wiring diagram supplied with the machine to determine which input power leads should be switched.
3. For V-speed models, have a qualified electrician reverse any two motor leads at the AC terminal block.