CE

Installation/Operation Supplement

Washer-Extractors

Cabinet Hardmount Operating Instructions

This manual is only a Supplement. Refer to Installation Manual and Operation/Maintenance Manual for full instructions.

Keep These Instructions for Future Reference.

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



Part No. F232145R6EN November 2005

CHM166C

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Notes

Safety Information

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.
- 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 clothes.
- 14. ALWAYS disconnect the washer from electrical supply before attempting any service. Disconnect the power cord by grasping the plug, not the cord.
- 15. 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.
- 16. 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.
- 17. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- 18. 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.

- 19. Replace worn power cords and/or loose plugs.
- 20. 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.
- 21. 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.
- 22. 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).
- 23. Always follow the fabric care instructions supplied by the textile manufacturer.
- 24. Never operate the washer with any guards and/or panels removed.
- 25. DO NOT operate the washer with missing or broken parts.
- 26. DO NOT bypass any safety devices.
- 27. 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: Underloading can cause out-of-balance conditions that can shorten life of machine.

NOTE: The WARNING 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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Specifications and Dimensions

	2 Speed Models											
Specification	18, 20	25	27, 30	35	40	50						
Overall Dimensions		1	1	•	•	1						
Overall width, in. (mm)	26	26	29	30-1/8	30-5/8	34-1/16						
	(660)	(660)	(737)	(765)	(778)	(865)						
Overall height, in. (mm)	42-7/8	45	45-7/8	47-1/4	47-7/8	50-13/16						
	(1089)	(1143)	(1165)	(1200)	(1216)	(1291)						
Overall depth, in. (mm)	29-13/16	33-7/8	34-13/16	38-1/2	40-3/16	41-13/16						
	(757)	(860)	(884)	(978)	(1021)	(1087)						
Weight and Shipping Informa	tion	1	1	•	•	1						
Net weight, lbs. (kg)	390	435	498	650	706	820						
	(177)	(198)	(226)	(295)	(321)	(373)						
Domestic shipping weight, lbs. (kg)	428	470	545	680	744	875						
	(194)	(214)	(245)	(309)	(338)	(398)						
Domestic shipping volume, ft ³ (m ³)	28	33	35	39	42.6	53						
	(0.8)	(0.9)	(1.0)	(1.09)	(1.19)	(1.5)						
Export shipping weight lbs., (kg)	480	530	588	760	846	1020						
	(218)	(241)	(267)	(345)	(385)	(464)						
Export shipping volume, ft ³ (m ³)	30.1	36.7	39.6	47.1	54.1	58.7						
	(0.86)	(1.03)	(1.11)	(1.32)	(1.51)	(1.67)						
Wash Cylinder Information			1			•						
Cylinder diameter, in. (mm)	21	21	24	26-1/4	26-1/4	30						
	(533)	(533)	(610)	(667)	(667)	(762)						
Cylinder depth, in. (mm)	13-3/4	18-3/4	16	18-3/8	20-1/4	20						
	(349)	(476)	(406)	(467)	(514)	(508)						
Cylinder volume, ft ³ (l)	2.76	3.76	4.19	5.76	6.34	8.18						
	(78.1)	(106.5)	(118.6)	(163.1)	(180)	(231.6)						
Perforation size, in. (mm)	0.188	0.188	0.188	0.188	0.188	0.188						
	(4.76)	(4.76)	(4.76)	(4.76)	(4.76)	(4.76)						
Perforation open area, %	17	17	23	17	17.5	18						

Table 1 (Continued)

Table 1 (Continued)

	2 Speed Models (Continued)											
Specification	18, 20	25	27, 30	35	40	50						
Door Opening Information			1			1						
Door opening diameter, in. (mm)	12 (305)	12 (305)	14-11/32 (364)	14-11/32 (364)	16-1/4 (413)	16-1/4 (413)						
Height of door bottom above floor, in. (mm)	14-3/8 (365)	14-3/8 (365)	14 (356)	16 (406)	14-1/2 (368)	13-1/2 (343)						
Power Consumption												
Average power used per cycle, kW-hr	0.20	0.25	0.25	0.30	0.34	0.42						
Average HVAC load, Btu/hr	425	400	400	510	510	700						
Drive Train Information												
Number of motors in drive train	1	1	1	1	1	1						
Wash/reverse power, HP (kW)	0.18 (0.13)	0.25 (0.19)	0.25 (0.19)	0.40 (0.30)	0.40 (0.30)	0.55 (0.41)						
High extract power, HP (kW)	1.0 (0.746)	1.4 (1.04)	1.4 (1.04)	1.8 (1.3)	1.8 (1.3)	2.7 (2.01)						
Cylinder Speeds			1			1						
Wash/reverse speed, RPM	53	55	47	47	47	44						
High extract speed, RPM	525	540	480	470	470	450						
Centrifugal Force Data			•			•						
Wash/reverse centrifugal force, Gs	0.85	0.90	0.75	0.82	0.82	0.825						
High extract centrifugal force, Gs	82.1	86.8	78.4	82.3	82.3	86.3						

Table 1 (Continued)

Table 1 (Continued)

		2	Speed Mod	dels (Contir	nued)			
Specification)	18, 20	25	27, 30	35	40	50	60
Balance Detection			1	1		1		
Vibration switch installe	ed	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Direct Steam Heatin	g (Optio	nal)						
Steam inlet connection s in. (mm)	size,	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)
Number of steam inlets		1	1	1	1	1	1	1
Steam required to raise	LOW	1.05 (0.75)	1.4 (1.01)	1.44 (1.03)	2.06 (1.48)	2.09 (1.51)	2.76 (1.99)	2.76 (1.99)
bath water temperature $10^{\circ}F$ ($6^{\circ}C$)	HIGH	1.4 (1.01)	1.59 (1.15)	1.91 (1.37)	2.69 (1.94)	2.84 (2.04)	3.59 (2.59)	3.59 (2.59)
Average steam use per c bhp (kg)	ycle,	0.71 (11.1)	0.87 (13.6)	0.97 (15.2)	1.4 (21.6)	1.43 (22.4)	1.84 (28.9)	1.84 (28.9)
Electrical Heating (C	ptional)							
Total electrical heating o	capacity,	7.8	7.8	7.8	15.6	15.6	23.4	23.4
Electrical heating eleme	ents	3	3	3	6	3	9	9
Electrical heat element	size, kW	2.6	2.6	2.6	2.6	5.2	2.6	2.6

Gap Setting for Vibration Switch (Variable-Speed and Fixed-Speed Models)

	18, 20	27, 30	35	40	50	60	80	125
Switch gap	0.015-	0.025-	0.030-	0.020-	0.025-	0.013-	0.009-	0.006-
setting*	0.025 in.	0.035 in.	0.040 in.	0.030 in.	0.035 in.	0.015 in.	0.011 in.	0.008 in.
	(0.38-	(0.64-	(0.76-	(0.51-	(0.64-	(0.20-	(0.23-	(0.15-
	0.64 mm)	0.89 mm)	1.02 mm)	0.64 mm)	0.89 mm)	0.25 mm)	0.28 mm)	0.20 mm)

^{*} Gap setting should be made with "GO-NO-GO" type feeler gauge. Lower value must not trip switch. Upper value must trip switch.

Table 2

After the machine has been properly installed, the vibration switch gap must be measured before conducting the Control Function Test. Locate the gap found between the vibration switch and the machine structure. Refer to *Figures 1*, 2, 3, 4 and 5. To check the gap setting of the switch, proceed as follows:

- 1. Remove the front panel on 18-50 models. Remove the rear panel on 60-80 models. Remove the top cover on the 125 model. The switch can be seen inside the bottom right corner of the Aframe, mounted on a bracket. Refer to *Figures 1*, 2, 3, 4 and 5.
- 2. Measure the gap distance when the switch is in both the open and closed positions. The specifications should be at the minimum switch gap setting when the switch is open and at the maximum switch gap setting when the switch is closed. If these distances are not correct, adjust the balance switch to these specifications.

NOTE: The standard position of the switch is open, or non-tripped.

3. Tighten nuts on switch extension after adjusting the gap. Measure the gap distance to verify accurate setting.

,	/ariable-Sp	peed and F	Fixed-Spec	ed Models	S			
Specification	20	30	35	40	50	60	80	125
Overall Dimensions	•							
Overall width, in. (mm)	26	29	30-1/8	30-5/8	34-1/16	34-1/16	41-1/2	48
	(660)	(737)	(765)	(778)	(865)	(865)	(1054)	(1219)
Overall height, in. (mm)	42-7/8	45-7/8	47-1/4	47-7/8	50-13/16	50-13/16	56	70-1/2
	(1089)	(1165)	(1200)	(1216)	(1291)	(1291)	(1422)	(1791)
Overall depth, in. (mm)	29-13/16	34-13/16	38-1/2	40-3/16	42-13/16	42-13/16	51-5/8	56-3/4
	(757)	(884)	(978)	(1021)	(1087)	(1087)	(1311)	(1441)
Weight and Shipping Information	•	•	•		•			
Net weight, lbs. (kg)	386	498	621	706	767	773	1406	2346
	(175)	(226)	(282)	(321)	(348)	(350)	(633)	(1066)
Domestic shipping weight, lbs. (kg)	424	545	670	744	818	824	1456	2421
	(191)	(245)	(301)	(338)	(371)	(373)	(655)	(1098)
Domestic shipping volume, ft ³ (m ³)	28	35	39	42.6	53	53	97	153
	(0.8)	(1.0)	(1.09)	(1.19)	(1.5)	(1.5)	(2.7)	(4.3)
Export shipping weight, lbs. (kg)	476	588	731	846	967	1020	1506	2701
	(215)	(267)	(332)	(385)	(439)	(463)	(678)	(1225)
Export shipping volume, ft ³ (m ³)	30.1	39.6	47.1	54.1	58.7	58.7	109.5	173
	(0.86)	(1.11)	(1.32)	(1.51)	(1.67)	(1.67)	(3.1)	(4.8)
Wash Cylinder Information								l .
Cylinder diameter, in. (mm)	21	24	26-1/4	26-1/4	30	30	36	42
	(533)	(610)	(667)	(667)	(762)	(762)	(914)	(1060)
Cylinder depth, in. (mm)	13-3/4	16	18-3/8	20-1/4	20	22	22	24
	(349)	(406)	(467)	(514)	(508)	(559)	(559)	(609)
Cylinder volume, ft ³ (l)	2.76	4.19	5.76	6.34	8.18	9.00	12.96	19.24
	(78.1)	(118)	(163.1)	(180)	(232)	(255)	(367)	(545)
Perforation size, in. (mm)	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188
	(4.76)	(4.76)	(4.76)	(4.76)	(4.76)	(4.76)	(4.76)	(4.76)
Perforation open area, %	17	23	17	17.5	18	18	27	17
Door Opening Information	•				•			
Door opening size, in. (mm)	12	14-11/32	14-11/32	16-1/4	16-1/4	16-1/4	18-1/2	20
	(305)	(364)	(364)	(413)	(413)	(413)	(470)	(508)
Height of door bottom above floor, in. (mm)	14-3/8	14	16	14-1/2	13-1/2	13-1/2	17-3/4	29
	(365)	(356)	(406)	(368)	(343)	(343)	(451)	(737)
Power Consumption	ı	ı	ı					
Average power used per cycle, kW-hr	0.05	0.07	0.20	0.34	0.37	0.21	0.40	0.60
Average HVAC load, Btu/hr	400	450	510	510	750	750	950	1200

Table 3 (Continued)

Table 3 (Continued)

Drive Train Information									
Number of motors in drive train		1	1	1	1	1	1	1	1
Drive motor power, HP (kW)		2 (1.5)	2 (1.5)	2 (1.5)	2 (1.5)	2 (1.5)	3 (2.2)	5 (3.7)	7.5 (5.6)
Cylinder Speeds							I	I	
Gentle wash/reverse speed, RPM		29	27	26	26	24	24	22	27
Wash/reverse speed, RPM		52	48	46	47	43	43	40	37
Distribution speed, RPM		82	86	73	73	68	77	63	62
Low extract speed, RPM		366	343	328	328	307	307	280	260
Medium extract speed, RPM (Not available on Electronic Control	models.)	534	500	478	478	447	447	408	380
High extract speed, RPM		685	641	613	614	573	574	524	485
Centrifugal Force Data									
Gentle wash centrifugal force, Gs		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.43
Wash/reverse centrifugal force, Gs	Wash/reverse centrifugal force, Gs				0.8	0.8	0.8	0.8	0.8
Distribution centrifugal force, Gs		2	2	2	2	2	2	2	2
Low extract centrifugal force, Gs		40	40	40	40	40	40	40	40
Medium extract centrifugal force, G	S	85	85	85	85	85	85	85	85
High extract centrifugal force, Gs		140	140	140	140	140	140	140	140
Balance Detection									
Vibration switch installed*		Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard
Direct Steam Heating (Optiona	l)	•							
Steam inlet connection size, in. (mm)		1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	1/2 (13)	3/4 (19)
Number of steam inlets		1	1	1	1	1	1	1	1
Steam required to raise bath water temperature 10°F (6°C), lbs. (kg)	LOW	0.62 (0.28)	0.92 (0.42)	2.1 (1.51)	2.09 (1.51)	2.8 (2.0)	3.6 (1.63)	4.1 (2.93)	6.8 (4.9)
	HIGH	0.88 (0.4)	1.31 (0.6)	2.69 (1.96)	2.84 (2.04)	3.6 (2.59)	5.5 (2.49)	6.0 (4.34)	8.9 (6.4)
Average steam use per cycle, bhp (kg)		0.54 (8.3)	0.73 (11.3)	1.4 (21.6)	1.43 (22.4)	1.8 (28.9)	2.32 (36.4)	2.93 (45.9)	4.5 (71)
Electrical Heating (Optional)									
Total electrical heating capacity, kW		7.8	7.8	15.6	15.6	23.4	23.4	31.2	N/A
Electrical heating elements		3	3	6	3	9	9	12	N/A
		1							i

For 18, 20, 25, 27, 30 and 35 Pound Capacity Machines

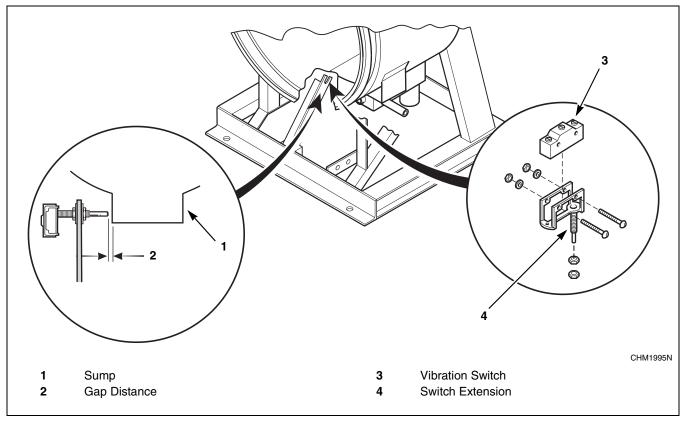


Figure 1

For 40 and 50 Pound Capacity Variable-Speed and Fixed-Speed Machines

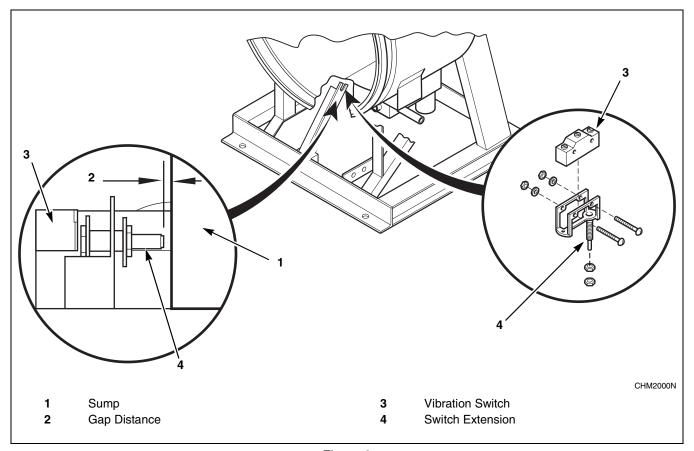


Figure 2

For 60 Pound Capacity Variable-Speed and Fixed-Speed Machines

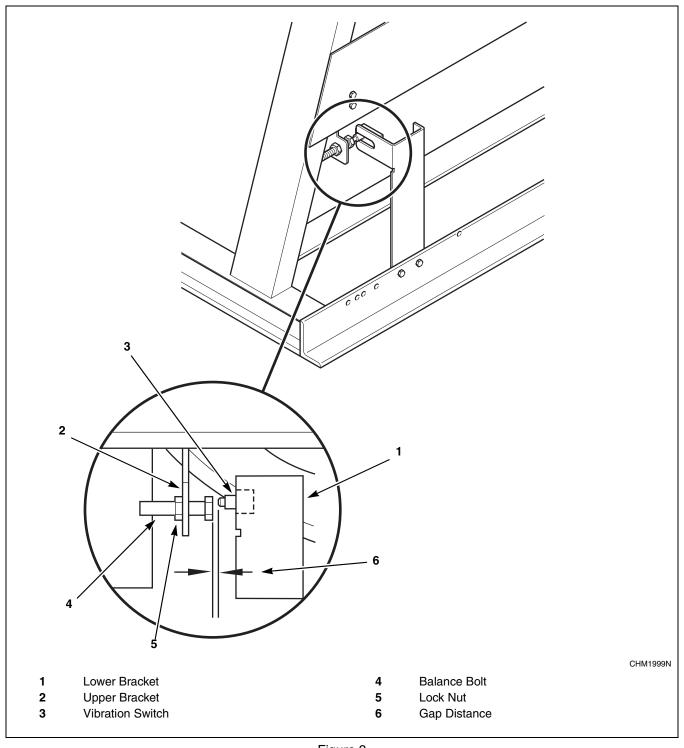


Figure 3

For 80 Pound Capacity Machines

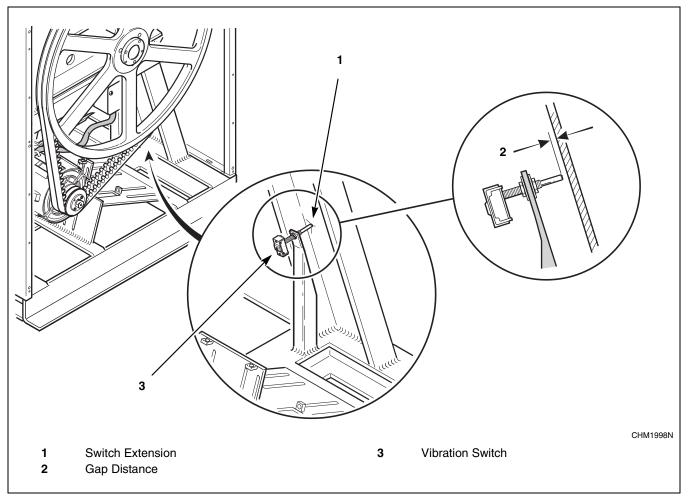


Figure 4

For 125 Pound Capacity Machines

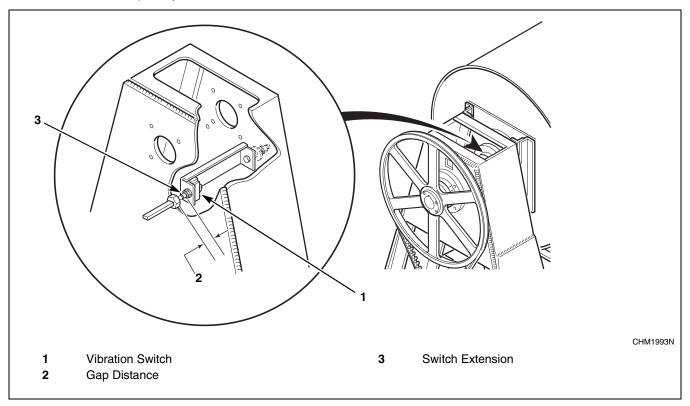


Figure 5

Dimensional Clearances

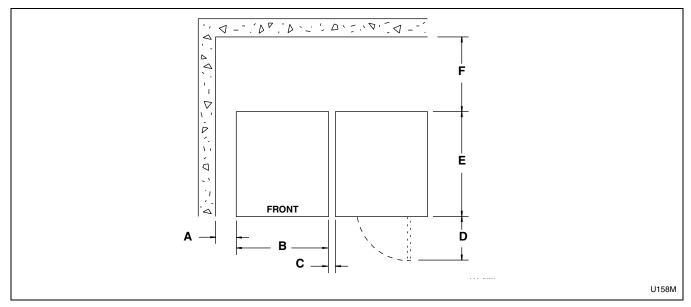


Figure 6

			Machine Ca	pacity Dime	ensional Cle	earances					
Dimensions	18, 20 25 27, 30 35 40 50 60 80 1										
Α	2 in.	2 in.	2 in.	2 in.	2 in.	2 in.	2 in.	2 in.	24 in.		
	(50 mm)	(50 mm)	(50 mm)	(50 mm)	(50 mm)	(50 mm)	(50 mm)	(50 mm)	(600 mm)		
В	26 in.	26 in.	29 in.	30-1/8 in.	30-5/8 in.	34-1/16 in.	34-1/16 in.	41-1/2 in.	48 in.		
	(660 mm)	(660 mm)	(737 mm)	(765 mm)	(778 mm)	(865 mm)	(865 mm)	(1054 mm)	(1219 mm)		
С	1 in.	1 in.	1 in.	1 in.	1 in.	1 in.	1 in.	1 in.*	12 in.		
	(25 mm)	(25 mm)	(25 mm)	(25 mm)	(25 mm)	(25 mm)	(25 mm)	(25 mm)	(300 mm)		
D	16-3/8 in.	16-3/8 in.	19-1/4 in.	19-1/4 in.	22 in.	22 in.	22 in.	25 in.	26-1/4 in.		
	(416 mm)	(416 mm)	(490 mm)	(490 mm)	(560 mm)	(560 mm)	(560 mm)	(635 mm)	(667 mm)		
E	25-5/8 in.	29-7/16 in.	30-1/2 in.	34 in.	36 in.	37-1/2 in.	38-3/4 in.	51-5/8 in.	56-3/4 in.		
	(650 mm)	(705 mm)	(775 mm)	(864 mm)	(914 mm)	(953 mm)	(984 mm)	(1311 mm)	(1441 mm)		
F	12 in.	12 in.	12 in.	18 in.	12 in.	12 in.	12 in.	24 in.	24 in.		
	(305 mm)	(305 mm)	(305 mm)	(457 mm)	(305 mm)	(305 mm)	(305 mm)	(610 mm)	(610 mm)		
*For 80 pound n	nodels intende	ed for standard	l mounting, cl	earance shoul	d be 6 in. (15	0 mm).		•			

Table 4

Dimensions

18, 20, 25, 27, 30, 35, 40, 50, 60 and 80 Models

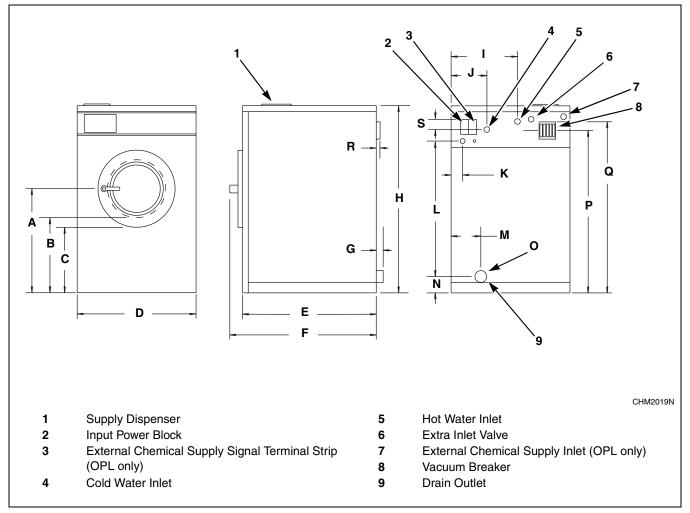


Figure 7

	Machine Capacity Dimensions												
Dimensions	18, 20	25	27, 30	35	40	50	60	80					
Α	22-15/16 in. (583 mm)	23 in. (584 mm)	24 in. (610 mm)	26 in. (660 mm)	25-3/4 in. (654 mm)	26-3/8 in. (670 mm)	26-3/8 in. (670 mm)	30-5/8 in. (777 mm)					
В	17-1/4 in. (438 mm)	17-1/4 in. (438 mm)	17 in. (432 mm)	19 in. (483 mm)	18 in. (457 mm)	18-1/4 in. (464 mm)	18-1/4 in. (464 mm)	21-5/8 in. (549 mm)					
С	14-3/8 in. (365 mm)	14-3/8 in. (365 mm)	14 in. (356 mm)	16 in. (406 mm)	14-1/2 in. (368 mm)	13-1/2 in. (343 mm)	15 in. (381 mm)	17-3/4 in. (451 mm)					
D	26 in. (660 mm)	26 in. (660 mm)	29 in. (737 mm)	30-1/8 in. (765 mm)	30-5/8 in. (778 mm)	34-1/16 in. (865 mm)	34-1/16 in. (865 mm)	41-1/2 in. (1054 mm)					
E	25-5/8 in. (650 mm)	30 in. (762 mm)	30-5/8 in. (775 mm)	34 in. (864 mm)	36 in. (914 mm)	37-3/4 in. (959 mm)	38-3/4 in. (984 mm)	48 in. (1219 mm)					
F	29-13/16 in. (757 mm)	34-3/16 in. (868 mm)	34-13/16 in. (884 mm)	38-1/8 in. (968 mm)	40-3/16 in. (1021 mm)	41-13/16 in. (1062 mm)	42-13/16 in. (1087 mm)	51 in. (1295 mm)					
G	0	0	0	1-1/8 in. (29 mm)	1/2 in. (13 mm)	1/2 in. (13 mm)	1/2 in. (13 mm)	1/2 in. (13 mm)					
н	42 in. (1062 mm)	45 in. (1143 mm)	45 in. (1143 mm)	47 in. (1194 mm)	47 in. (1194 mm)	49-15/16 in. (1268 mm)	49-15/16 in. (1268 mm)	56 in. (1422 mm)					
ı	12-1/2 in. (318 mm)	12-1/2 in. (318 mm)	15-1/4 in. (387 mm)	14-1/4 in. (362 mm)	15-7/16 in. (392 mm)	20-3/4 in. (527 mm)	20-3/4 in. (527 mm)	22-1/4 in. (572 mm)					
J	11-1/2 in. (292 mm)	11-1/2 in. (292 mm)	14-3/4 in. (375 mm)	10-13/16 in. (275 mm)	14-7/16 in. (367 mm)	19-3/4 in. (502 mm)	19-3/4 in. (502 mm)	14-7/16 in. (378 mm)					
К	3-1/2 in. (89 mm)	3-1/2 in. (89 mm)	3-3/4 in. (95 mm)	2-3/4 in. (70 mm)	3-13/16 in. (97 mm)	3-1/2 in. (89 mm)	3-1/2 in. (89 mm)	3-7/16 in. (87 mm)					
L	34-1/2 in. (876 mm)	37-1/2 in. (952 mm)	37-11/16 in. (957 mm)	40-1/8 in. (1020 mm)	39 in. (990 mm)	41-1/2 in. (1054 mm)	41-1/2 in. (1054 mm)	44-1/2 in. (1130 mm)					
М	5-3/4 in. (146 mm)	5-3/4 in. (146 mm)	5-7/8 in. (149 mm)	7-5/16 in. (186 mm)	5-1/2 in. (140 mm)	6-7/16 in. (163 mm)	6-7/16 in. (163 mm)	6-3/8 in. (162 mm)					
N	4-1/2 in. (114 mm)	4-1/2 in. (114 mm)	4 in. (102 mm)	4-3/4 in. (121 mm)	4-3/4 in. (121 mm)	5 in. (127 mm)	5 in. (127 mm)	5-3/4 in. (146 mm)					
0	2 in. (51 mm)	2 in. (51 mm)	2 in. (51 mm)	2 in. (51 mm)	3 in. (76 mm)	3 in. (76 mm)	3 in. (76 mm)	3 in. (76 mm)					
Р	36-3/16 in. (919 mm)	39-3/16 in. (995 mm)	38-15/16 in. (989 mm)	41-15/16 in. (1064 mm)	42-1/8 in. (1070 mm)	43-3/16 in. (1097 mm)	43-3/8 in. (1102 mm)	42-3/4 in. (1086 mm)					
Q	38-1/2 in. (978 m)	41-1/2 in. (1054 mm)	41 in. (1041 mm)	41-15/16 in. (1064 mm)	43-3/16 in. (1097 mm)	45-1/2 in. (1156 mm)	45-1/2 in. (1156 mm)	50 in. (1270 mm)					
R	1-3/16 in. (30 mm)	1-3/16 in. (30 mm)	1-3/16 in. (30 mm)	1-3/16 in. (30 mm)	1-3/16 in. (30 mm)	1-3/16 in. (30 mm)	1-3/16 in. (30 mm)	1-3/16 in. (30 mm)					
S	3 in. (76 mm)	3 in. (76 mm)	3 in. (76 mm)	3 in. (76 mm)	3 in. (76 mm)	3 in. (76 mm)	3 in. (76 mm)	3 in. (76 mm)					

Table 5

125 Model

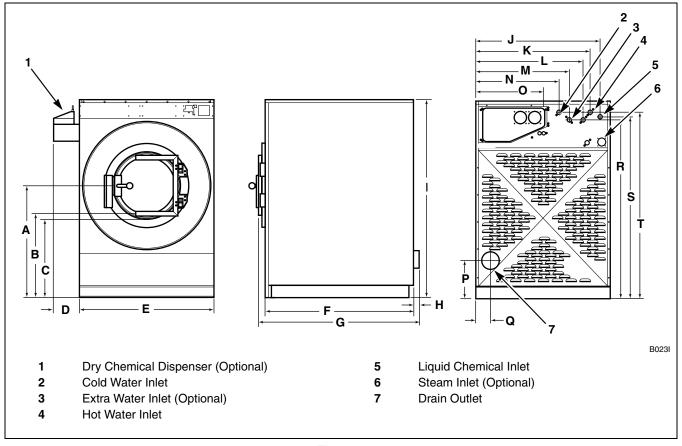


Figure 8

	Machine Capa	acity Dimensions	3
Α	1016 mm (40 in.)	К	1041 mm (41 in.)
В	768 mm (30.12 in.)	L	978 mm (38.5 in.)
С	737 mm (29 in.)	М	851 mm (33.5 in.)
D	203 mm (8 in.)	N	756 mm (29.75 in.)
E	1219 mm (48 in.)	0	610 mm (24 in.)
F	1283 mm (50.5 in.)	Р	330 mm (13 in.)
G	1422 mm (56.75 in.)	Q	124 mm (4.88 in.)
Н	25 mm (1 in.)	R	1622 mm (63.88 in.)
I	1791 mm (70.5 in.)	S	1648 mm (64.88 in.)
J	1130 mm (44.5 in.)	Т	1692 mm (66.63 in.)

Table 6

Electrical Specifications

				18 a	Electric	cal Spec							
	Voltage D	Designati	ion			Stan	dard			Electri	ic 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												
В	B 110 – 120 60 1 2 15 20 12 4 N/A												
С	380 – 415	50	3	4	4	15	14	2.5	14	15	14	2.5	
D	220 – 240	50	3	3	5	15	14	2.5	24	25	10	6	
Е	220 – 240	50	1	2	10	20	12	4	42	45	6	16	
F	440 – 480	60	3	3	4	15	14	2.5	16	20	12	4	
Н	380	60	3	3	4	15	14	2.5	13	15	14	2.5	
J	200	50	3	3	5	15	14	2.5	24	25	10	6	
О	208 – 240	60	3	3	5	15	14	2.5	24	25	10	6	
Y	208 – 240	60	1	2	10	20	12	4	42	45	6	16	
				•	Variab	le-Speed	Models					•	
Q	200 – 240	50/60	3	3.8	3.8	15	14	2.5	N/A	N/A	N/A	N/A	
NOTE	: Wire sizes	shown a	re for	coppe	r, THHN,	90° cond	ductor po	er NEC a	rticle 31) .	•	•	

Table 7

	Electrical Specifications 25, 27 and 30 Pound Capacity Models											
	Voltage D	Designati	ion		Standard				Electric Heat			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm ²	Full Load Amps	Circuit Breaker	AWG	mm²
					2 S	Speed Mo	odels					
С	380 – 415	50	3	4	4	15	14	2.5	15	20	12	4
D	220 – 240	50	3	3	6	15	14	2.5	24	25	10	6
E	220 – 240	50	1	2	10	20	12	4	42	45	6	16
F	440 – 480	60	3	3	4	15	14	2.5	16	20	12	4
Н	380	60	3	3	4	15	14	2.5	14	15	14	2.5
J	200	50	3	3	6	15	14	2.5	20	25	10	6
О	208 – 240	60	3	3	7	15	14	2.5	25	30	10	6
Y	208 – 240	60	1	2	10	20	12	4	43	45	6	16
	Variable-Speed Models											
Q	200 – 240	50/60	3	3	4.8	15	14	2.5	N/A	N/A	N/A	N/A
NOTE	NOTE: Wire sizes shown are for copper, THHN, 90° conductor per NEC article 310.											

Table 8

					Electric 35 Poun	cal Spec d Capac						
	Voltage D	Designati	ion		Standard					Electri	c Heat	
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm ²	Full Load Amps	Circuit Breaker	AWG	mm ²
	I.		I		2 9	Speed Mo	odels	•				l .
С	380 – 415	50	3	4	5	15	14	2.5	26	30	10	6
D	220 – 240	50	3	3	7	20	12	4	43	50	6	16
F	440 – 480	60	3	3	5	15	14	2.5	26	30	10	6
О	200 – 240	60	3	3	7	20	12	4	43	50	6	16
Y	208 – 240	60	1	2	12	25	10	6		N	'A	
			•		Variab	le-Speed	Models	;				
N	440 – 480	50/60	3	3	2.3	15	14	2.5	27.3	30	10	6
P	380 – 415	50/60	3	3	2.3	15	14	2.5	24	25	10	6
Q	208 – 240	50/60	3	3	5.9	15	14	2.5	43.4	45	6	16
Т	200 – 240	50/60	1	2	5.9	15	14	2.5		N	'A	
X	X 200 – 240 50/60 1 or 3 2 or 3 5.9/5.9 15 14 2x2.5 N/A											
NOTE	NOTE: Wire sizes shown are for copper, THHN, 90° conductor per NEC article 310.											

Table 9

	Electrical Specifications 40 Pound Capacity Models											
	Voltage D	Designati	ion		Standard					Electri	c Heat	
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm ²	Full Load Amps	Circuit Breaker	AWG	mm²
	2 Speed Models											
С	380 – 415	50	3	4	5	15	14	2.5	26	30	10	6
D	220 – 240	50	3	3	7	20	12	4	45	50	6	16
F	440 – 480	60	3	3	5	15	14	2.5	29	30	10	6
Н	380	60	3	3	3	15	14	2.5	25	30	10	6
J	200	50	3	3	7	20	12	4	38	40	6	16
О	208 – 240	60	3	3	7	20	12	4	45	50	6	16
Y	208 – 240	60	1	2	13.5	30	10	6		N/	/A	
					Variab	le-Speed	Models	,				
N	440 – 480	50/60	3	3	6	15	14	2.5	30	30	10	6
P	380 – 415	50/60	3	3	6	15	14	2.5	29	30	10	6
Q	200 – 240	50/60	3	3	5	15	14	2.5	48	60	6	16
X	200 – 240	50/60	1 or 3	2 or 3	11/11	15	14	2.5		N/	/A	•
NOTE	NOTE: Wire sizes shown are for copper, THHN, 90° conductor per NEC article 310.											

Table 10

					Electric 50 Poun	cal Speci d Capac	fications ity Mode	s els				
Voltage Designation						Standard				Electri	c Heat	
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Circuit Breaker	AWG	mm²	Full Load Amps	Circuit Breaker	AWG	mm ²
	2 Speed Models											
С	380 – 415	50	3	4	6	15	14	2.5	39	50	6	16
D	220 – 240	50	3	3	12	20	12	4	64	70	4	25
Е	220 – 240	50	1	2	15	30	10	6	37	40	8	10
F	440 – 480	60	3	3	6	15	14	2.5	39	50	6	16
J	200	50	3	3	10	20	12	3 x 4		N/	'A	
О	208 – 240	60	3	3	10	20	12	4	64	70	4	25
Y*	208 – 240	60	1	2	15	30	10	6	37	40	8	10
					Variab	le-Speed	Models	1				
N	440 – 480	50/60	3	3	4	15	14	2.5	41.6	45	8	10
P	380 – 415	50/60	3	3	4	15	14	2.5	36.5	40	8	10
Q	200 – 240	50/60	3	3	6.3	15	14	2.5	62.6	70	4	25
Т	200 – 240	50/60	1	2	6.3	15	14	2.5		N/	'A	
X	200 – 240 : Wire sizes	50/60	1 or 3		6.3/6.3	15	14	2x2.5 3x2.5		N/	'A	

NOTE: Wire sizes shown are for copper, THHN, 90° conductor per NEC article 310. *Coin models only.

Table 11

	Electrical Specifications 60 Pound Capacity Models											
	Voltage D	Designati	ion			Stan	dard			Electri	c 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											
С	380-415	50	3	4	4	15	14	2.5	37	50	8	10.0
D	220-240	50	3	3	7	20	12	4.0	64	70	4	25.0
F	440-480	60	3	3	4	15	14	2.5	41	50	8	10.0
Н	380	60	3	3	3	20	12	4.0	33	50	8	10.0
J	200	50	3	3	8	20	12	4.0	55	60	6	16.0
О	208-240	60	3	3	7	20	12	4.0	64	70	4	25.0
X	200-240	50/60	1/3	2/3	9	20	12	4.0	N/A	N/A	N/A	N/A
					Variab	le-Speed	Models					
N	440-480	50/60	3	3	4	15	14	2.5	42	50	8	10.0
P	380-415	50/60	3	3	5	15	14	2.5	37	40	8	10.0
Q	200-240	50/60	3	3	6	15	14	2.5	65	60	6	16.0
X	200-240	50/60	1/3	2/3	10	20	12	4.0	N/A	N/A	N/A	N/A
NOTE	NOTE: Wire sizes shown are for copper, THHN, 90° conductor per NEC article 310.											

Table 12

	Electrical Specifications 80 Pound Capacity Models											
Voltage Designation Standard Electric Heat												
Wire Phase Cycle Voltage Code					Full Load Amps	Circuit Breaker	AWG	mm ²	Full Load Amps	Circuit Breaker	AWG	mm²
					Variab	le-Speed	Models	,				
N	440 – 480	50/60	3	3	4.5	15	14	2.5	42	45	8	10
P	380 – 415	50/60	3	3	4.5	15	14	2.5	37	40	8	10
Q	Q 200 - 240 50/60 3 3 12.4 20 12 4 87.4 90 2 35											
NOTE	NOTE: Wire sizes shown are for copper, THHN, 90° conductor per NEC article 310.											

Table 13

	Electrical Specifications 125 Pound Capacity Models											
	Voltage Designation Standard Electric Heat											
AWG Circuit Breaker Full Load Amps Circuit Breaker Full Load Amps Voltage Code									mm²			
					Variab	le-Speed	Models					
N	440 – 480	50/60	3	3	5.1	15	14	2.5		N/	'A	
P	P 380 - 415 50/60 3 3 5.1 15 14 2.5 N/A											
Q	Q 200 – 240 50/60 3 3 7.9 25 10 6 N/A											
NOTE	NOTE: Wire sizes shown are for copper, THHN, 90° conductor per NEC article 310.											

Table 14

Operation

Table 15 (Continued)

Symbol		Description
START	CHM493N	Start
*SPECIAL WASH	CHM494N	Special Wash (Owner programming required – See Cycle Charts in programming manual)
NORMAL	CHM495N	Normal Cycle
DELICATES	CHM496N	Delicate Cycle
PERM	CHM497N	Permanent Press Cycle
(COLD)	CHM498N	Cold Wash
WARM	CHM499N	Warm Wash
Пот	CHM500N	Hot Wash
	CHM501N	Stop
•	CHM502N	Start
1	CHM503N	Edit Up

Table 15 (Continued)

Table 15 (Continued)
Symbol	Description
CHM504N	Edit Down
# CHM505N	Start
★ CHM506N	Select Mode
CHM507N	Wash
€ CHM508N	Add Bleach
СНМ509N	Rinse
CHM510N	Spin
CHM511N	Door Open
CHM512N	Clean Filter
CHM2003N	Reduced Spin (v) keypad
CHM2004N	Extra Wash (^) keypad

Table 15 (Continued)

Table 15 (Continued)

Symb	ool	Description
(95C)	CHM1980N	Normal Wash Hot
<u>95C</u>	CHM1981N	Permanent Press Hot
(60C)	CHM1982N	Normal Wash Warm
<u>60C</u>	CHM1983N	Permanent Press Warm
₹40C/ 4	CHM1984N	Normal Wash Cold
<u>40℃</u> *	CHM1985N	Permanent Press/Exit Cold
Ž Š	CHM1986N	Hand Wash/Edit Up
¥30€/ Û	CHM1987N	Gentle Wash/Edit Down Cold
(CHM1988N	Time
→	CHM1989N	Start/Enter/ Wash Temperature Display
	CHM1990N	Vend Price/Actuation

Instructions for EDC Control

- 1. Turn on the main power source (circuit breaker).
- 2. Push button and turn handle clockwise to open. Refer to *Figure 9*.

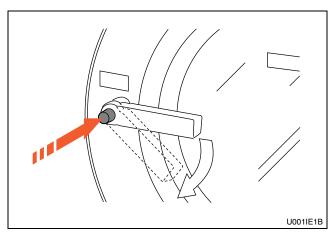


Figure 9

3. Load to capacity whenever possible. DO NOT OVERLOAD. Refer to *Figure 10*.

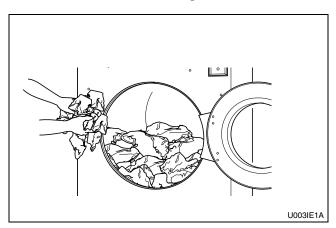


Figure 10

4. Close door and turn handle counterclockwise until button pops out. Refer to *Figure 11*.

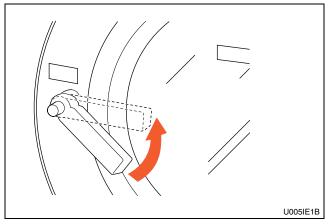


Figure 11

- 5. Select cycle and temperature. Refer to Figure 12.
- 6. *For machines equipped with a coin meter:* Insert coins. Refer to *Figure 12*.

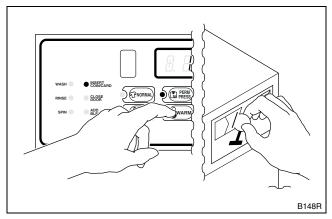


Figure 12

7. For machines equipped with a cardreader: Insert card into cardreader and follow the instructions. Refer to Figure 13. DO NOT REMOVE CARD UNTIL DISPLAY ON CARDREADER READS "Remove Card".

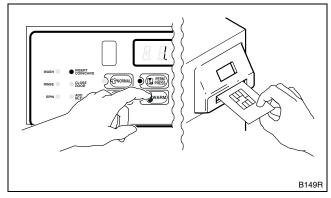


Figure 13

8. Add detergent to container 1 and softener to container 3. Press the START key. Refer to *Figure 14*.

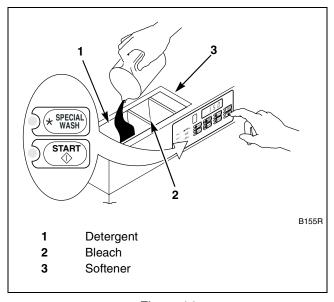


Figure 14

NOTE: If a higher-priced cycle is selected, after the full price has been satisfied for current cycle, display will show additional price required and the INSERT COIN/CARD light will flash. Insert coins/card to satisfy price for special cycle. If price is not satisfied, the previous cycle selected will begin after one minute.

- 9. If display flashes "SPEC" then "CYCL", extra options such as high-speed extract or extra rinse are available. If desired, insert coins/card to meet additional price shown on display. If not desired, wait 30 seconds for earlier cycle selection to continue.
- 10. Add bleach to container 2 when ADD BLEACH light is lit. Refer to *Figure 15*.

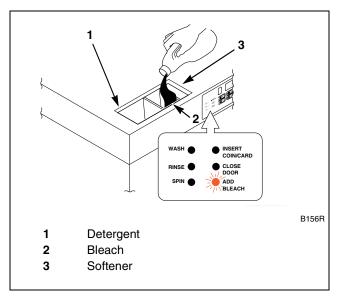


Figure 15

11. Cycle is complete when display reads ":00".

Instructions for Mechanical Timer

- 1. Turn on the main power source (circuit breaker). *For non-coin models:* Turn on the On/Off switch on the front panel to the On position.
- 2. Push button and turn handle clockwise to open. Refer to *Figure 16*.

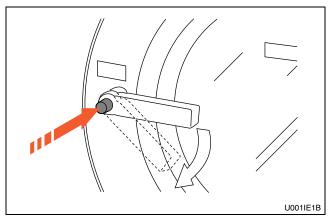


Figure 16

For non-coin models: Press and hold the DOOR UNLOCK button on the left side of the control panel while performing the above step. Refer to *Figure 17*.

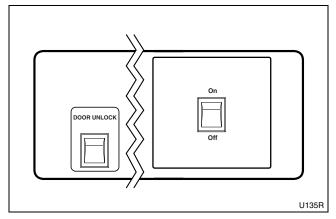


Figure 17

3. Load to capacity whenever possible. DO NOT OVERLOAD. Refer to *Figure 18*.

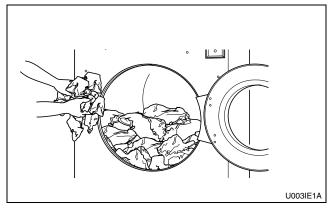


Figure 18

4. Close door and turn handle counterclockwise until button pops out. Refer to *Figure 19*.

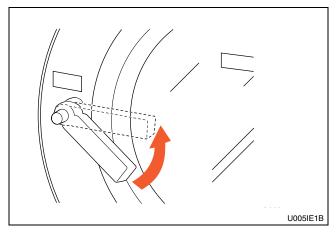


Figure 19

5. Select wash cycle. Refer to Figure 20.

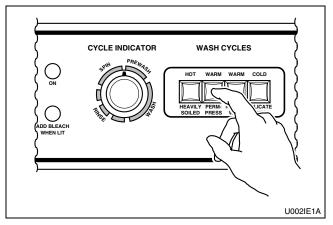


Figure 20

- 6. At start of cycle, add liquid and/or powder supplies to supply dispenser. Refer to *Figure 21*.
 - a. Add detergent to container 1.
 - b. Add softener to container 3.

For non-coin models: Liquid supplies may be injected directly into the supply dispenser by an external chemical supply dispenser. Refer to Installation and Programming Manuals.

7. *For coin models:* Insert required number of coins to start machine. Refer to *Figure 21*.

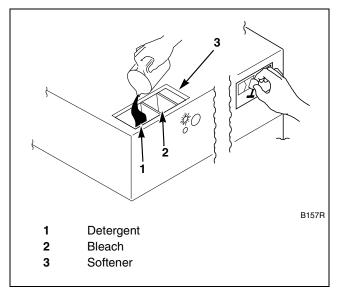


Figure 21

For non-coin models: Press the Start button. Refer to *Figure 22*.

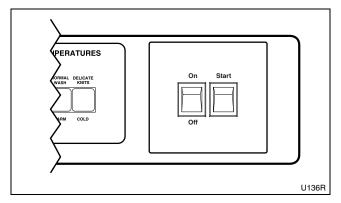


Figure 22

8. Add bleach to container 2 when ADD BLEACH light is lit. Refer to *Figure 23*.

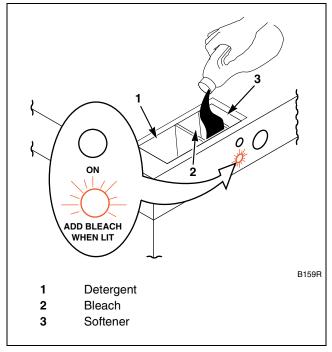


Figure 23

Instructions for S, P and V Series Microcomputers

- Turn on main power source (circuit breaker).
 For non-coin models: Turn the On/Off switch on the front panel to the On position.
- 2. Push button and turn handle clockwise to open. Refer to *Figure 24*.

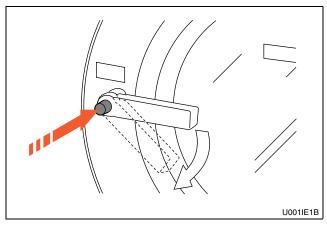


Figure 24

For non-coin models: Press and hold the DOOR UNLOCK button on the left side of the control panel while performing the above step. Refer to *Figure 25*.

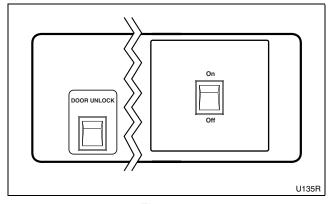


Figure 25

3. Load to capacity whenever possible. DO NOT OVERLOAD. Refer to *Figure 26*.

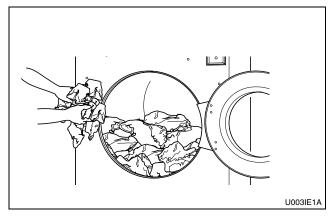


Figure 26

4. Close door and turn handle counterclockwise until button pops out. Refer to *Figure 27*.

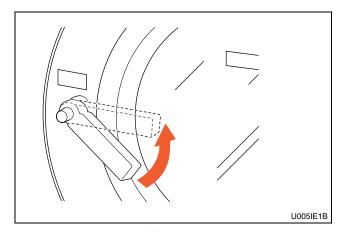


Figure 27

- 5. Add liquid and/or powder supplies to supply dispenser. Refer to *Figure 28*.
 - a. Add detergent to container 1.
 - b. Add softener to container 3.

For non-coin models: Liquid supplies may be injected directly into the supply dispenser by an external chemical supply dispenser. Refer to Installation and Programming Manuals.

- 6. Press the Up and Down keys to select wash cycle. Refer to *Figure 29*.
- 7. *For coin models:* Insert required number of coins to start machine. Refer to *Figure 28*.

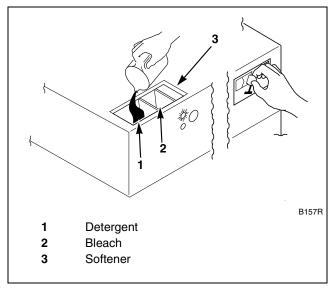


Figure 28

8. *For non-coin models:* Press the Start key. Refer to *Figure 29*.

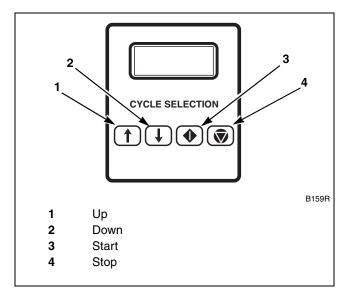


Figure 29

9. **When applicable**, add beach to container 2 when the display reads "bLCH". Refer to *Figure 30*.

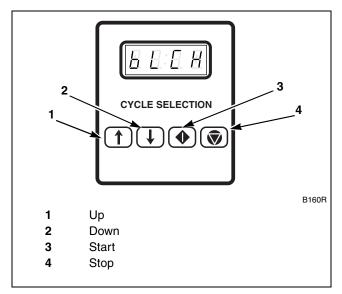


Figure 30

NOTE: To stop a cycle at any time, press the Stop key. Non-coin models only.

NOTE: To display the temperature of the water while a cycle is running, press the Up key. To display the number of the cycle in progress, press the Start key.

Instructions for B Series Microcomputer

NOTE: Opening the coin box while in Run Mode and before a cycle has started will put control into Audit Mode. Display will show "Audt". To revert back to Run Mode, close coin box and press START keypad.

- 1. Turn on main power source (circuit breaker).
- 2. Push button and turn handle clockwise to open. Refer to *Figure 31*.

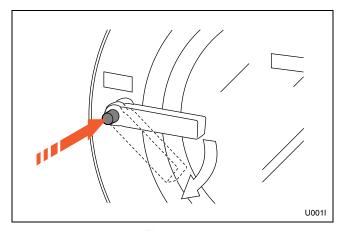


Figure 31

3. Load to capacity whenever possible. DO NOT OVERLOAD. Refer to *Figure 32*.

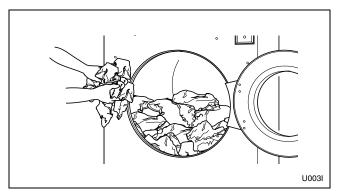


Figure 32

4. Close door and turn handle counterclockwise until button pops out. Refer to *Figure 33*.

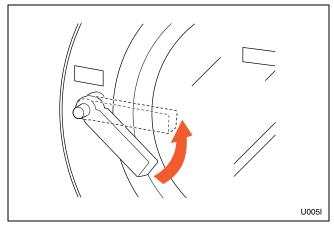


Figure 33

5. The default wash cycle will display. Refer to *Figure 34*.

NOTE: Perm Press Cold is the default cycle for coin models if none is selected. Perm Press Hot is the default cycle for OPL models.

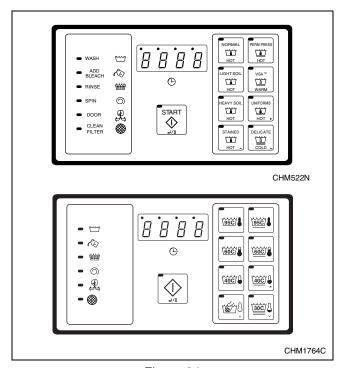


Figure 34

- 6. If desired, select a different cycle at this point or after satisfying vend. The LED indicator for that cycle will light.
- 7. Add liquid and/or powder supplies to supply dispenser. Refer to *Figure 35*.
 - a. Add detergent to compartment 1.
 - b. Add softener to compartment 3.

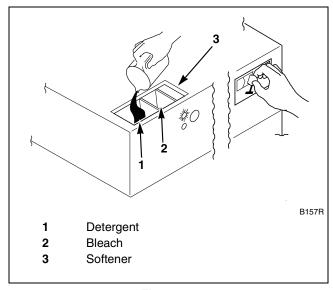


Figure 35

8. If the machine is a coin operated unit, add coins. As each coin is added, the display counts down to the amount remaining.

- 9. If the machine is a card operated unit, insert and remove card. Contact the card reader manufacturer for details.
- 10. If the unit is interfaced to a central/remote pay system, go to the central/remote pay console, make payment and select the machine. Contact the pay system manufacturer for more details.
- 11. When applicable, add bleach to compartment 2 when the ADD BLEACH LED is lit.
- 12. Press the desired wash cycle key.
- 13. Press the START keypad.
- 14. During first fill, the desired wash cycle can be changed. After first fill has ended, the wash cycle active at that moment remains the chosen wash cycle.
- 15. When cycle is complete, display shows "donE".

Instructions for A Series Microcomputer

NOTE: Opening the coin box while in Run Mode and before a cycle has started will put control into Audit Mode. Display will show "Audt". To revert back to Run Mode, close coin box and press START keypad.

- 1. Turn on main power source (circuit breaker).
- 2. Push button and turn handle clockwise to open. Refer to *Figure 36*.

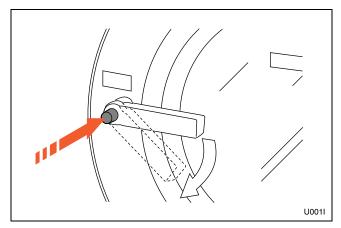


Figure 36

3. Load to capacity whenever possible. DO NOT OVERLOAD. Refer to *Figure 37*.

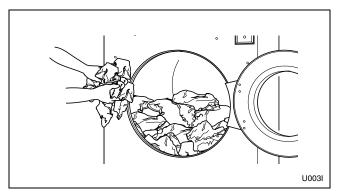


Figure 37

4. Close door and turn handle counterclockwise until button pops out. Refer to *Figure 38*.

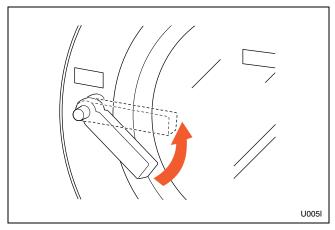


Figure 38

5. The default wash cycle will display. Refer to *Figure 39*.

NOTE: The default cycle is Perm Press 60°C for coin models if no cycle is selected.

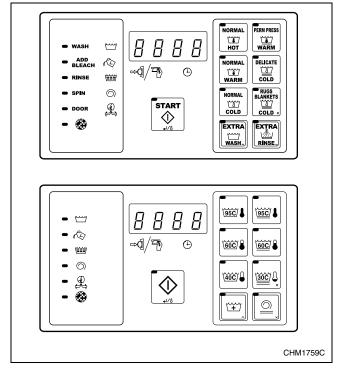


Figure 39

- 6. If desired, select a different cycle at this point or after satisfying vend. The LED indicator for that cycle will light.
- 7. Add liquid and/or powder supplies to supply dispenser. Refer to *Figure 40*.
 - a. Add detergent to compartment 1.
 - b. Add softener to compartment 3.

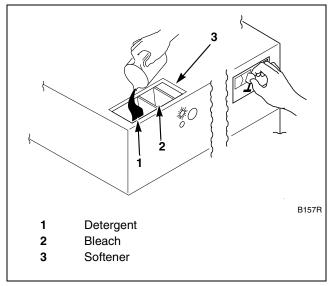


Figure 40

- 8. If the machine is a coin operated unit, add coins. As each coin is added, the display counts down to the amount remaining.
- 9. If the machine is a card operated unit, insert and remove card per card system instructions.

- 10. If the unit is interfaced to a central/remote pay system, go to the central/remote pay console, make payment, select the machine, and follow central/remote pay system instructions.
- 11. Press the desired wash cycle key if it hasn't already been selected.

NOTE: Once START keypad is pressed, the selected wash cycle is locked in and wash cycle will begin.

- 12. Press the START keypad.
- 13. Add bleach if and when prompted (display will show "bLCH", signal will sound on and off for 45 seconds and Add Bleach indicator lights).

NOTE: If the version of the control in machine is capable of reading temperature and control is not in Audit Mode, pressing the START keypad while a cycle is running will cause display to show temperature. Press START keypad again to revert to minutes remaining shown in display.

14. When cycle is complete, display shows "dOnE", the Door Open LED lights and door can be opened.