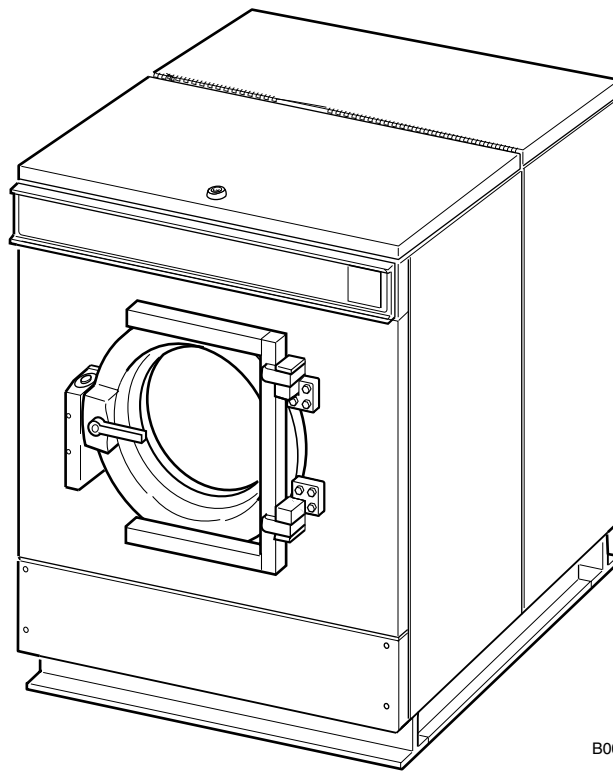


Washer-Extractor

Cabinet Hardmount
B-Series Microcomputer
Variable-Speed
HC125BYV and SC125BYV



B004C

— Operation/Maintenance —

Keep These Instructions for Future Reference.

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



www.comlaundry.com

Part No. F232215R1
September 2008

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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 supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
21. Be sure water connections have a shut-off valve and that fill hose connections are tight. CLOSE the shut-off valves at the end of each wash day.
22. Loading door MUST BE CLOSED any time the washer is to fill, tumble or spin. DO NOT bypass the loading door switch by permitting the washer to operate with the loading door open.
23. Always read and follow manufacturer's instructions on packages of laundry and cleaning aids. Heed all warnings or precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times (preferably in a locked cabinet).
24. Always follow the fabric care instructions supplied by the textile manufacturer.
25. Never operate the washer with any guards and/or panels removed.
26. DO NOT operate the washer with missing or broken parts.
27. DO NOT bypass any safety devices.
28. Failure to install, maintain, and/or operate this washer according to the manufacturer's instructions may result in conditions which can produce bodily injury and/or property damage.


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


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

	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>	
<small>SW004</small>	

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>	
<small>W703</small>	

	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>	
<small>SW025</small>	

	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>	
<small>SW014</small>	

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 without locking it and attempt to start the machine. The machine should not start with the door unlocked.
 - c. Close and lock the door and start a cycle. Attempt to open the door while the cycle is in progress. The door should not open.

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

Do not bypass any safety devices in the machine.

	WARNING
<p>Never operate the machine with a bypassed or disconnected balance system. Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.</p>	
<small>SW039</small>	

Introduction

Introduction

The “B” electronic control is composed of the electronic control unit and the control fuse board with wiring harness. Only an authorized person should look inside the machine. First TURN OFF POWER, open lid and remove any cover present. The components are described below.

Electronic Control Unit

This portion of the control contains the “intelligence” – the micro-controller and the miscellaneous components on the printed circuit (PC) board. The board has a metal cover, which MUST be in place at all times during machine operation. Operation of the machine without this cover installed will void the warranty.

The control unit monitors and responds to input, gives information about the status of the washer and monitors and responds to inputs from the user interface (keypad). The control provides signals to the control output unit, which in turn operates the components that control the machine functions. This is located behind the machine control panel.

Control Output Fuse Board

This portion of the control contains the power supply for the control unit, and also the switching devices which power the components in the machine, all of which are on the output PC board. The switching devices are controlled by the control unit, and are solid state.

Harnessing

Wiring harnesses are modular – harnesses common to various configurations are similar, while those specific to a certain configuration can be added. There are harnesses for inputs to the control unit, for outputs from the control power/output unit to the machine components, and for the main incoming power to the control power/output unit.

Communications

The control will accept communications with a Card Reader in order to perform vending transactions when a card is inserted to pay for cycles. The Card Reader can also allow the owner to program and collect audit information.

For detailed information on the Card Reader Communications, refer to the third party Card Reader manufacturer.

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.

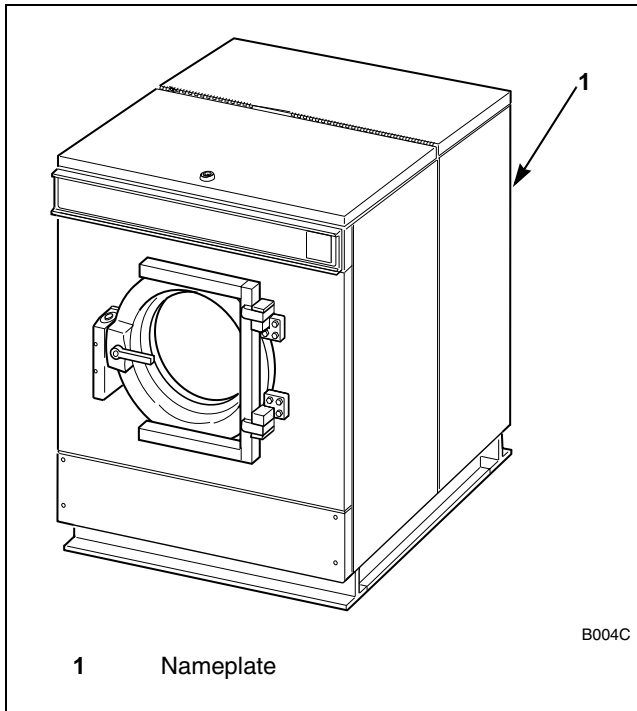


Figure 1

Replacement Parts

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

Customer Service

For technical assistance, call: (920) 748-3121, Ripon, Wisconsin U.S.A.

Introduction

Model Number Familiarization Guide	
Sample Model Number: *C125BYVQU60001	
*C	Model Number Prefix
125	Washer-Extractor Capacity (pounds dry weight of laundry)
B	Type of Electrical Control
Y	Actuation (Y = Prep for Card Reader)
V	Washer-Extractor Speed Capability (V = Variable-Speed)
Q	Electrical Characteristics
U6	Design Series
001	Option Identification (varies from machine to machine)

* Denotes Brand

Model No. *C125BYVQU6001	
Serial No. 00000000000	
Voltage 200 – 240	Amps 7
Required Circuit Breaker Amps 3	
Hz 50 - 60	Wire 3 Phase 3
Max. Load 125 LB	KG 18 Max. Speed 470 RPM
Elec. Heating N/A	KW Steam Press. N/A PSI 0 BAR
<div style="border: 1px solid black; padding: 5px; text-align: center; font-size: small;"> ETL LISTED CONFORMS TO ANSI/UL STD. 1555 ANSI/UL STD. 1206 ETL TESTING LABORATORIES INC. CORTLAND, NEW YORK 13045 </div>	
Product No. 500000	Date Code

EXAMPLE OF NAMEPLATE

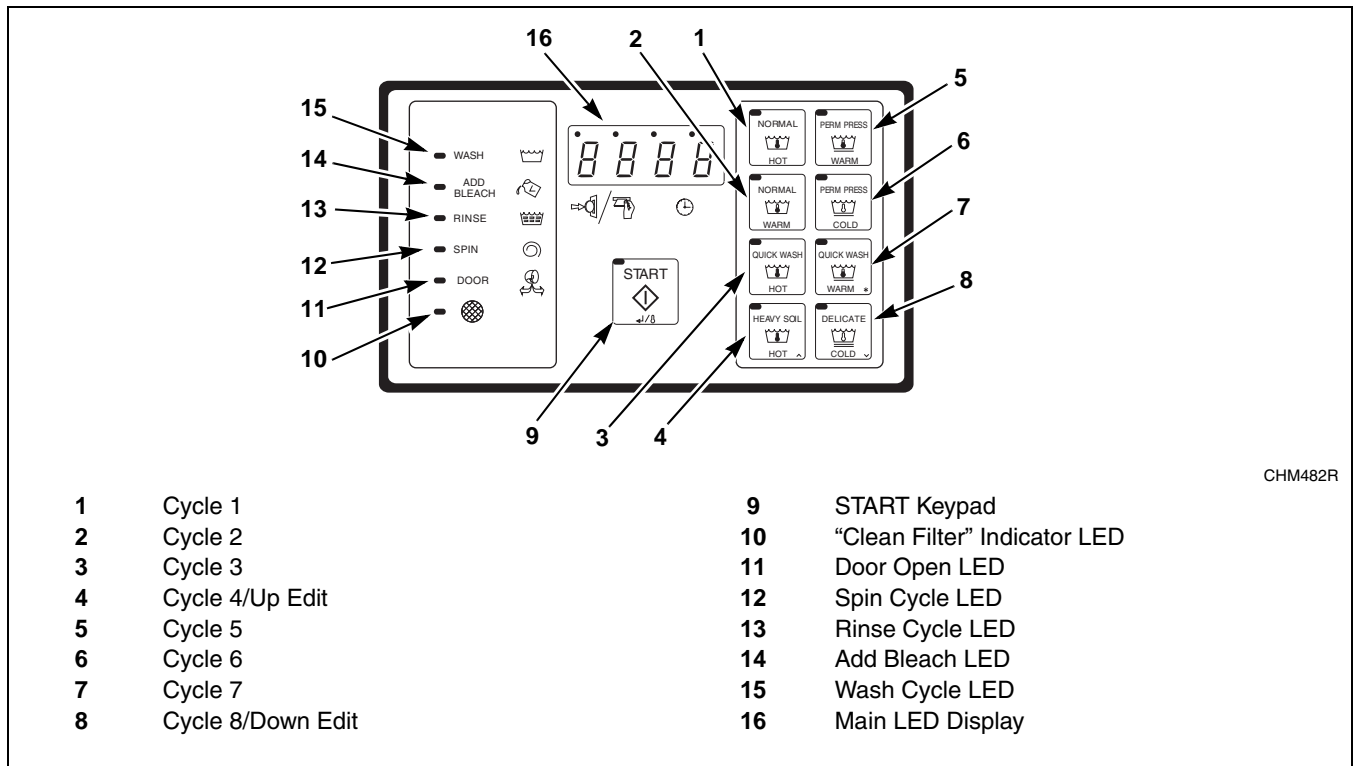
CHM2012N

Figure 2

Operation

Control Panel

Figure 3 shows the control panel.



CHM482R

Figure 3

Operation

Display Indicators

Table 1 lists the various displays and what they mean. The operator should become familiar with these machine displays.

Display	Meaning
tES _t	Diagnostic test cycle selected or enabled
SP _{In}	Spin (extract) step
SUP1	Supply signal 1 (“S1” output), normally detergent
SUP2	Supply signal 2 (“S2” output), normally bleach
SUP3	Supply signal 3 (“S3” output), normally softener
SUP4	Supply signal 4 (“S4” output)
SUP5	Supply signal 5 (“S5” output)
SdLY	Spin coast (motor coasts after high speed extract)
CFIL	Cold Fill
HFIL	Hot Fill
bFIL	Warm Fill (cold + hot)
bLCH	Control will also light “add bleach” indicator
PASS	Variable-speed ONLY – balance “PASS” condition; shows in “test” cycle only
FAIL	Variable-speed ONLY – balance “FAIL” condition; shows in “test” cycle only
bAL?	Variable-speed ONLY – meaning: “Do you wish to enter balance detection test routine?”
CY__	Cycle number (followed by a space and number 1 through highest cycle number)
nor _n	Normal agitation selected
gEnt	Gentle (reduced) agitation selected
SP _n 1	Variable-speed ONLY – low spin speed (the lower of 2 spin speeds)
SP _n 2	Variable-speed ONLY – high spin speed (the higher of 2 spin speeds)
For	Wash speed forward (during test cycle)
rEv	Wash speed reverse (during test cycle)
dIS _t	Variable-speed ONLY – distribution speed (during test cycle)
LO	Low water level
nEd	Medium water level
HI	High water level
CEL	Display all temperatures in degrees Celsius
FAR	Display all temperatures in degrees Fahrenheit
__C	The first 3 digits are reserved for temperature reading, C indicates “degrees Celsius”

Table 1 (Continued)

Table 1 (Continued)

Display	Meaning
___F	The first 3 digits are reserved for temperature reading, F indicates “degrees Fahrenheit”
FILL	“Fill error” – machine did not fill to programmed water level within 10 minutes
dOOr	“Door” opened during cycle
SHUt/door	Machine user must “shut door” of the washer to allow the cycle to begin
CAnt/OPEn	Control cannot unlock the door
CArd	Control will interpret the coin 2 input as a START signal from a Card Reader with no timing max restriction, meaning the signal can last any amount of time once recognized
USH1	“Wash 1” segment
USH2	“Wash 2” segment
USH3	“Wash 3” segment
USH4	“Wash 4” segment
rIn1	“Rinse 1” segment
rIn2	“Rinse 2” segment
rIn3	“Rinse 3” segment
rIn4	“Rinse 4” segment (final rinse)
dOnE	Cycle has concluded
drAI	Drain selected for segment; also indicates in drain step during 2 speed version test cycle
----	Flashes for a period of time (for safety) after power up while keeping outputs OFF
dEn1	Denomination assigned for coin 1 input (example: .25 would mean a US quarter)
dEn2	Denomination assigned for coin 2 input (example: 100 would mean a US dollar)

Table 1

Operation

Operating Instructions

1. Turn on main power at its source (circuit breaker).
2. Use left hand to press and hold door unlock button located on top left of door lock box. Refer to *Figure 4*.
3. Turn handle counterclockwise to open. Refer to *Figure 4*.

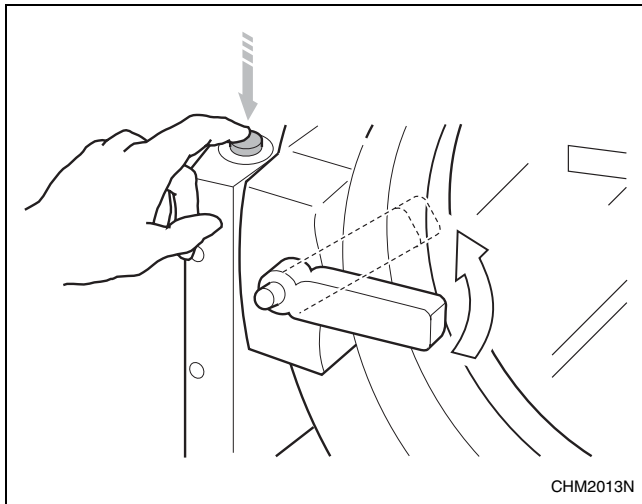


Figure 4

4. Load to capacity whenever possible. **DO NOT OVERLOAD.** Refer to *Figure 5*.

NOTE: Underloading can cause out-of-balance conditions that can shorten machine life.

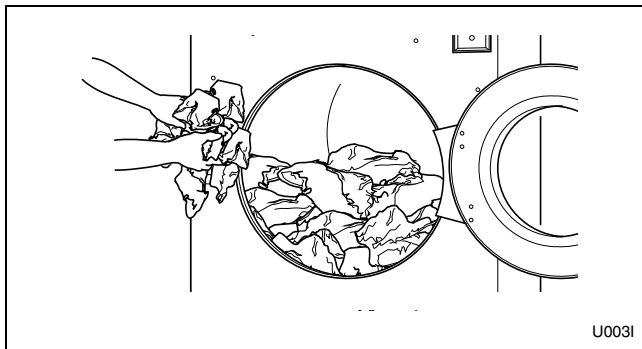


Figure 5

5. Close door and turn handle clockwise to horizontal position. Refer to *Figure 6*.

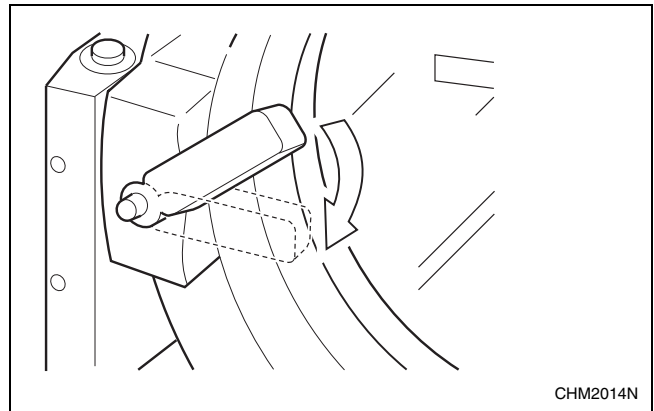


Figure 6

6. The default wash cycle will display. Refer to *Figure 7*.

NOTE: Perm Press Cold is the default cycle if none is selected.

	WARNING
To avoid personal injury, recommended inlet water temperature should be no higher than 125° Fahrenheit (51° Celsius).	
W709	

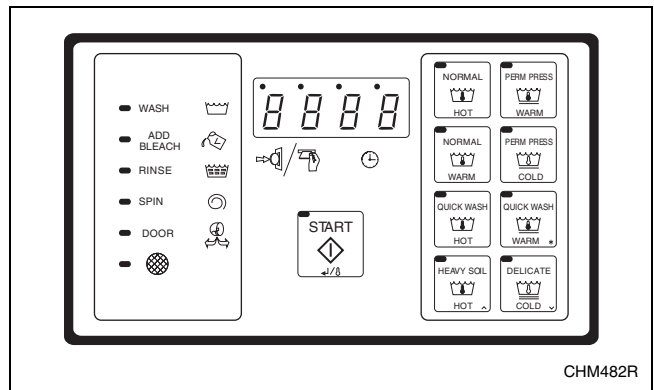


Figure 7

7. If desired, select a different cycle at this point or after satisfying vend. The LED indicator for that cycle will light.

8. Add liquid and/or powder supplies to supply dispenser.
9. Insert and remove card. Contact the third party Card Reader manufacturer for details.

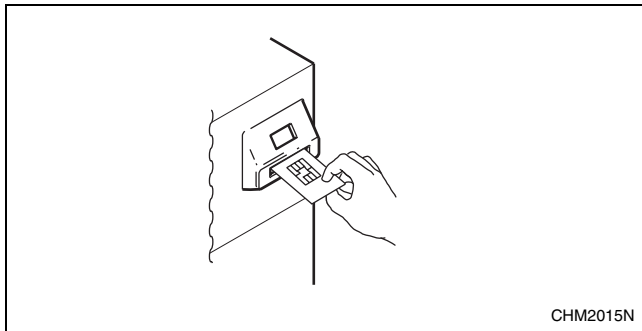



Figure 8

10. **When applicable**, add bleach when the ADD BLEACH LED is lit.
11. Press the desired wash cycle keypad. Refer to *Figure 7*.
12. Press the START keypad.
13. 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.
14. When cycle is complete, display shows “dOnE”.

Maintenance

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

IMPORTANT: Replace all panels that are removed to perform service and maintenance procedures. Do not operate the machine with missing guards or with broken or missing parts. Do not bypass any safety devices.

Daily

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

Beginning of Day

1. Inspect water inlet valve hose connections on the back of the machine for leaks.
2. Inspect steam hose connections for leaks (where applicable).

3. Check door interlock before starting operation:

- a. Attempt to start the machine with the door open. The machine should not start with the door open.
- b. Close the door without locking it and attempt to start the machine. The machine should not start with the door unlocked.
- c. Close and lock the door, and start a cycle. Attempt to open the door while the cycle is in progress. The door should not open.

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

End of Day

1. Clean the door gasket of residual detergent and all foreign matter.
2. Clean between the door gasket and the door glass with a damp cloth.
3. Clean automatic supply dispenser lid and general area. Flush dispenser with clean water.
4. Clean the machine's top, front and side panels with mild detergent. Thoroughly rinse and dry all surfaces after cleaning them.
5. Leave loading door open at the end of each day to allow moisture to evaporate.

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

Weekly

1. Clean the AC drive box filter(s) weekly or more frequently as needed:

NOTE: If fan filter service indicator light is on, fan filter must be cleaned immediately to prevent possible damage. Press the thermostat button to reset the indicator light.

IMPORTANT: If filter indicator is ignored, repeated resets might shorten life of drive. Clean filter regularly to avoid indicator prompt.

- a. Open the top cover.
- b. Grasp the filter handle and pull straight up to remove filter.
- c. Wash the filter with warm water and allow filter to air-dry. As an alternative, the filter may be vacuumed clean.

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

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

Monthly

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

1. Use the following procedures to determine if V-belt(s) require replacement or adjustment. Call a qualified service technician in either case.
 - a. Check V-belt(s) for uneven wear and frayed edges.
 - b. For groove-pulley drive systems, verify alignment by placing a straightedge across both pulley faces. The straightedge should make contact with the pulleys in four places. Refer to *Figure 9*.

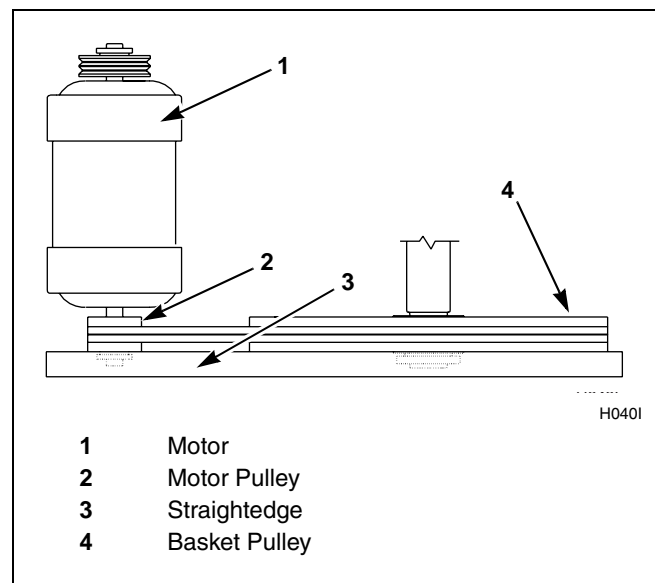


Figure 9

Maintenance

- c. Verify that V-belts are properly tensioned by applying a set force to the belt and measuring the deflection to determine the belt tension. Refer to *Table 2* for the acceptable belt tension ranges. Belt tension measurements should be taken as close to the center of the belt span as possible. Refer to *Figure 10*.

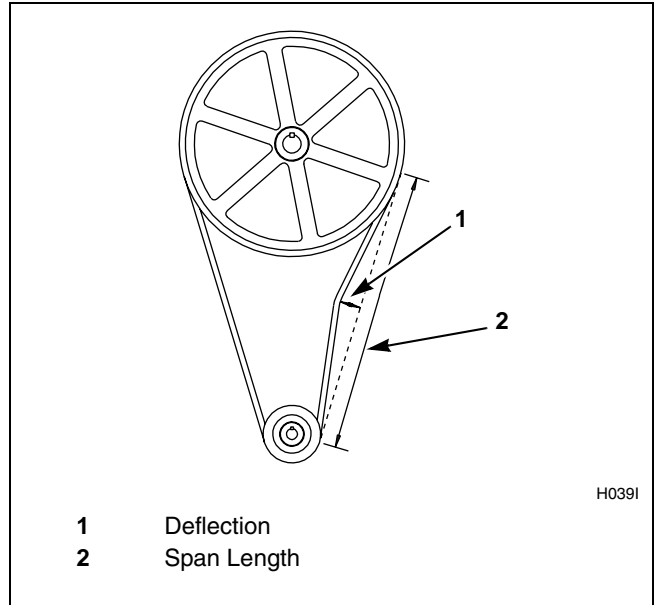


Figure 10

Belt Tension Testing				
Model	Belt	Belt Span	Deflection Range	Force Min – Max
125	Motor-Basket	50 in. (1270 mm)	.78 in. (20 mm)	5 – 7 lbs. (22 – 31 N)

Table 2

NOTE: Hoses and other natural rubber parts deteriorate after extended use. Hoses may develop cracks, blisters or material wear from the temperature and constant high pressure they are subjected to.

- 2. Check all hoses for any visible signs of deterioration. Any hoses showing signs of deterioration listed above should be replaced immediately.

NOTE: All hoses should be replaced every five years.

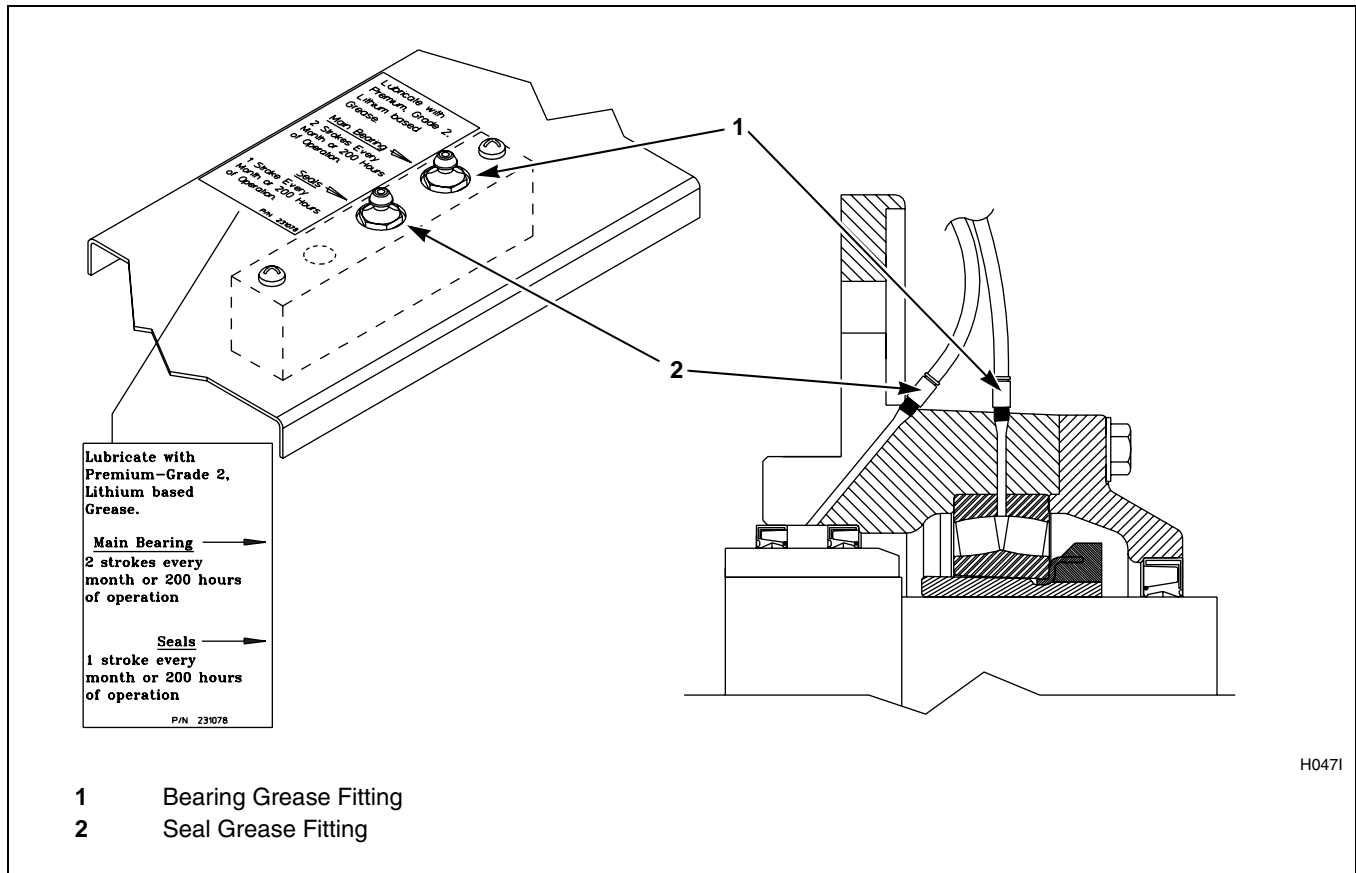


Figure 11

3. Lubricate bearings and seals each month OR after every 200 hours of operation. Refer to *Figure 11*.
 - a. Use a premium-grade lithium-based #2 grease. Never mix two types of grease, such as petroleum and silicone.

- b. Pump the grease gun slowly, permitting only the following number of strokes:

- Bearing grease fitting, 2 strokes
- Seal grease fitting, 1 stroke

IMPORTANT: Do not pump the grease gun until grease comes out of the bearing housing. This can result in overlubrication, causing damage to bearings and seals.

Maintenance

4. Remove back panel and check overflow hose and drain hose for leaks.
5. Unlock the hinged lid and check the supply dispenser hoses and hose connections.
6. Clean inlet hose filter screens:
 - a. Turn water off and allow valve to cool, if necessary.
 - b. Unscrew inlet hose and remove filter screen.
 - c. Clean with soapy water and reinstall. Replace if worn or damaged.
7. Tighten motor mounting bolt locknuts and bearing bolt locknuts, if necessary.
8. Use compressed air to clean lint from motor.
9. Use compressed air to ensure that all electrical components are free of moisture and dust.
10. Verify that the insulation is intact on all external wires and that all connections are secure. If bare wire is evident, call a service technician.

Quarterly

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

1. Tighten door hinges and fasteners, if necessary.
2. Using a Teflon-based spray lube, lubricate the door lock by applying the spray to the door lock pin while turning the door handle.
3. Verify that the drain motor shield is in place and secure, if so equipped.
4. Check all painted surfaces for exposed metal. (Matching paint is available from the manufacturer.)
 - If bare metal is showing, paint with primer or with a solvent-based paint.
 - If rust appears, remove it with sandpaper or by chemical means and then paint the affected area with primer or with a solvent-based paint.

5. Clean supplied steam filter, where applicable. Refer to *Figure 12*.
 - a. Turn off steam supply and allow time for the valve to cool.
 - b. Unscrew Cap.
 - c. Remove Element and clean.
 - d. Replace Element and Cap.

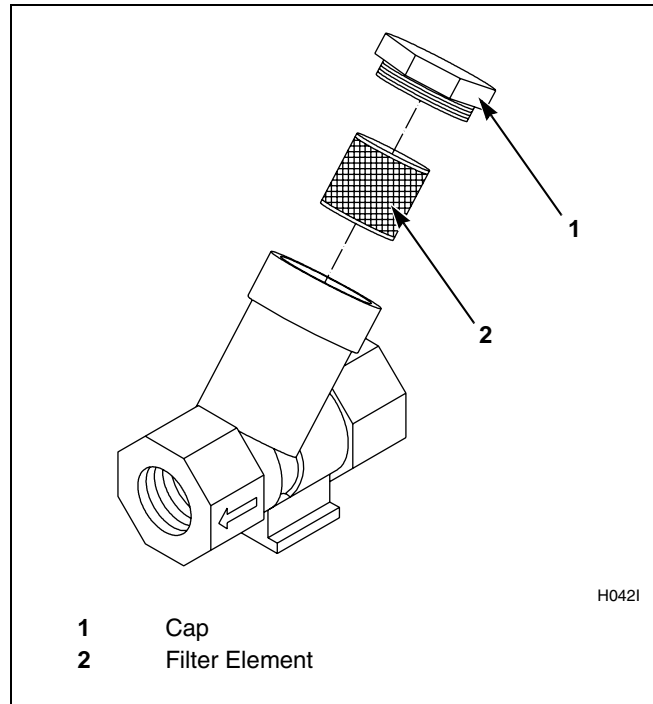


Figure 12

6. Measure the out-of-balance switch gap setting and adjust it as needed. Refer to the *Installation Manual*, which is supplied with the machine.
7. Check the bearing mounting bolts to make sure they are torqued properly. Refer to *Table 3* for specifications.

Machine Capacity	Bearing	Torque
125	Front	500 ft.-lbs.
125	Rear	140 ft.-lbs.

Table 3

Care of Stainless Steel

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