

Cabinet Hardmount

Models Through 3/31/09



Models Starting 4/1/09



— Preventative Maintenance —

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

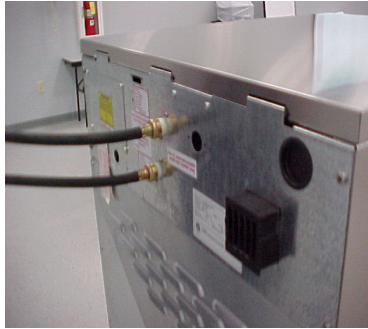
Daily

IMPORTANT: The 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 and/or instruction stickers should be replaced immediately.

Beginning of the Day

1. Inspect the water inlet valve hose connections on the back of the machine for leaks.

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2. Inspect the steam hose connections for leaks (where applicable).

3. Check the door interlock before starting operation:

- a. Attempt to start the machine with the door open. The machine should not start with the door open.

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- b. Close the door without locking it and attempt to start the machine. The machine should not start with the door unlocked.

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- 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.

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

End of the Day

- 1. Clean the door gasket of residual detergent and all foreign matter.

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- 2. Clean between the door gasket and the door glass with a damp cloth.

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Daily

3. Clean the automatic supply dispenser lid and general area. Flush the dispenser with clean water.



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4. Clean the machine's top, front and side panels with mild detergent. Thoroughly rinse and dry all surfaces after cleaning them.



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5. Leave the loading door open at the end of each day to allow moisture to evaporate.



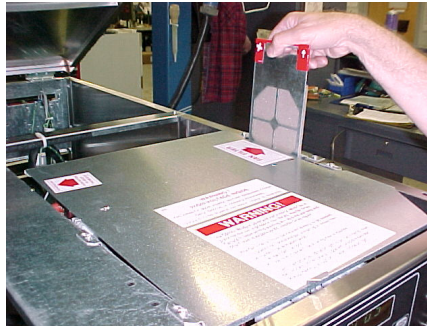
NOTE: Unload the machine promptly after each completed cycle to prevent moisture buildup. Leave the loading door open after each completed cycle to allow moisture to evaporate.

Weekly

1. For variable-speed models only, clean the AC drive box filter(s) weekly or more frequently as needed:

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

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



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

IMPORTANT: On 80-pound and larger models, the control module cover and fan filter must be in place for the fan to properly cool the AC drive. Failure to observe this warning will void the warranty and could lead to expensive AC drive repair.

2. On models manufactured with a custom drive, inspect and vacuum clean the heat sink.



3. Check the machine for leaks:
 - a. Start an unloaded cycle to fill the machine.
 - b. Verify that the door and door gasket do not leak.

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Weekly

- 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

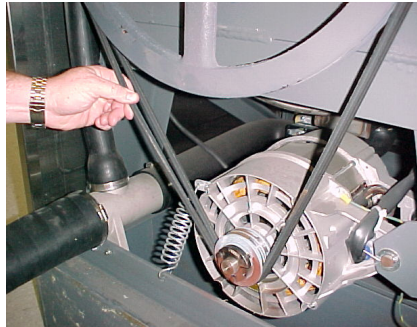
NOTE: Disconnect power to the machine at its source before performing the monthly maintenance procedures.

1. Use the following procedures to determine if the V-belt(s) require replacement or adjustment. Call a qualified service technician in either case.

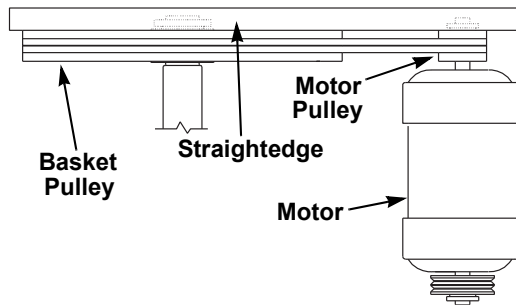
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- a. Check the V-belt(s) for uneven wear and frayed edges.



- 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.

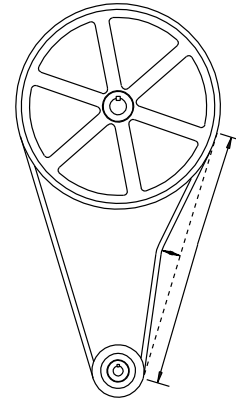


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- c. For flat-pulley drive systems, verify the allowable distance of the belt from the edge of the pulley. Refer to the *Operation/Maintenance Manual* for pulley alignment specifications.

Monthly

- d. **For variable-speed models equipped with a V-belt system,** verify the v-belts are properly tensioned by applying a set force to the belt and measuring the deflection to determine the belt tension. Belt tension measurements should be taken as close to the center of the belt span as possible. Refer to the *Operation/Maintenance Manual* for belt tensioning specifications.
2. Check all hoses for any visible signs of deterioration. Any hose showing signs of deterioration listed above should be replaced immediately.



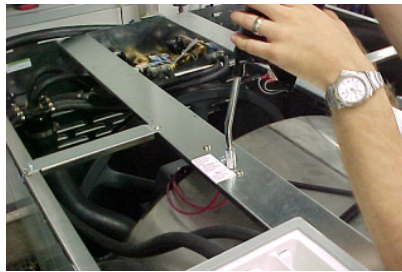
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NOTE: Hoses and other natural rubber parts deteriorate after extended use. Hoses may develop cracks, blisters or material wear from the temperature and constant high pressure they are subjected to.

NOTE: All hoses should be replaced every five years.

3. **For 80-pound and larger models only,** lubricate the bearings and seals each month OR after every 200 hours of operation.

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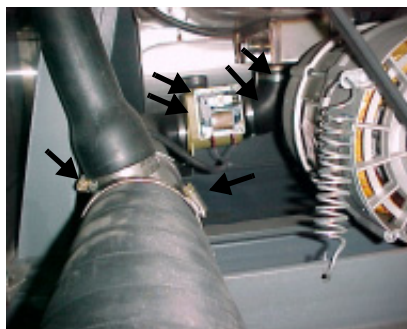
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- a. Use a premium-grade lithium-based #2 grease. Never mix two types of grease, such as petroleum and silicone.
- b. Pump the grease gun slowly, permitting only the following number of strokes:
- 2 strokes for bearing grease fittings
 - 2 stroke for seal grease fittings

Do not pump the grease gun until grease comes out of the bearing housing. This can result in over-lubrication and can cause damage to the bearings and seals.

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4. Remove the back panel and check the overflow hose and drain hose for leaks.

5. Unlock the top cover and check the supply dispenser hoses and hose connections.

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6. Use the following procedure to clean the inlet hose filter screens:

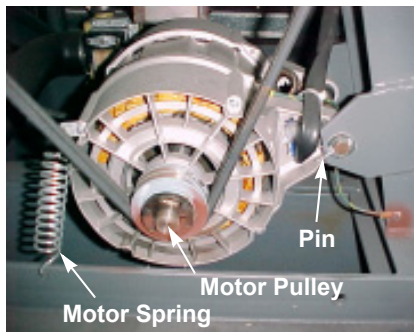
- a. Turn the water off and, if necessary, allow the valve to cool.
- b. Unscrew the inlet hose and remove the filter screen.
- c. Clean the filter screen with soapy water and reinstall it. Replace the filter screen if it is worn or damaged.



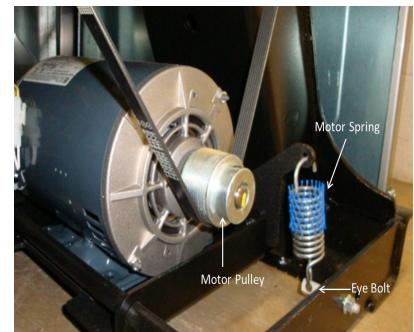
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7. Tighten motor mounting bolt locknuts and bearing bolt locknuts. Check for tightness of the motor spring and motor pulley. Also, in certain models, check to see that the pin is in place or check if the eye bolt is tightened properly

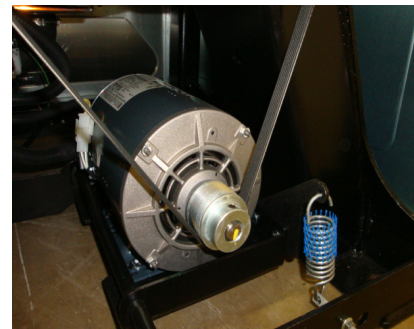


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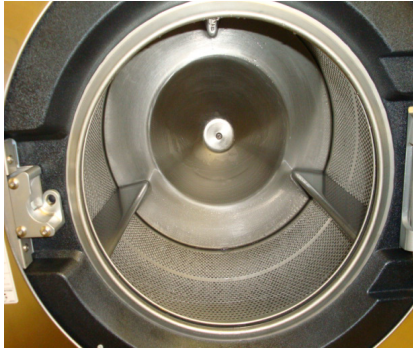
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8. Clean the lint from the motor with a vacuum.



Monthly

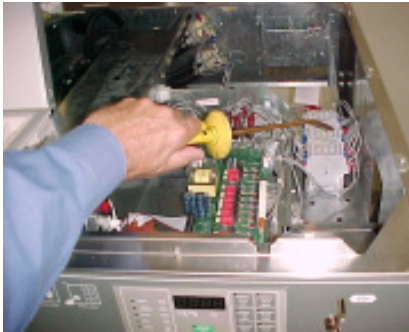
9. Clean interior of machine, both basket and shell, by wiping with a water-soaked sponge or cloth.



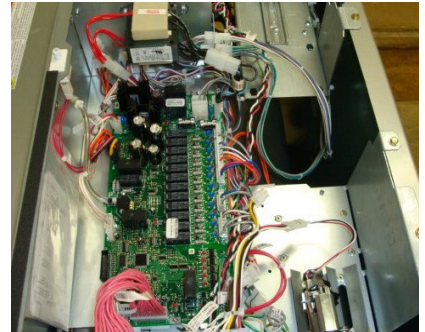
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10. Remove any moisture and dust from all electrical components with compressed air.

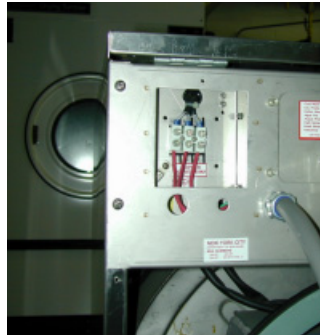


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11. Verify that the insulation is intact on all external wires and that all connections are secure. If bare wire is evident, call a service technician.



12. **For variable-speed models only**, clean AC Drive cooling fan blades (more often if required by the condition of the air).
- Open the top cover and remove the control module cover.
 - Gently wipe the fan blades clean with a dry cloth.

Quarterly

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

1. If necessary, tighten the door hinges and fasteners. Tighten anchor bolts, if necessary.

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2. For models prior to April 2009, using a Teflon-based spray lube, lubricate the door lock by applying the spray to the door lock pin while turning the door handle.

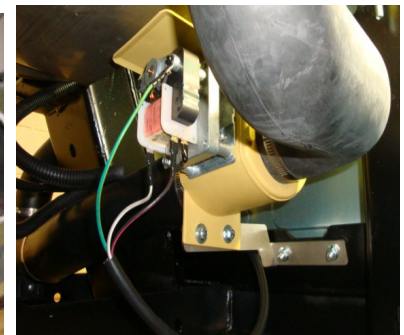


3. Verify that the drain motor shield is in place and is secure, if so equipped.

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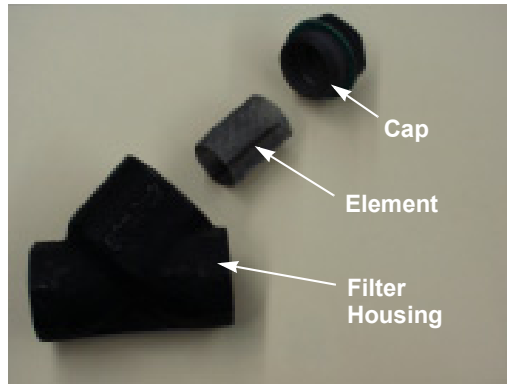
4. Check all painted surfaces for exposed metal. (Matching paint is available from the manufacturer.)

- If bare metal is showing, paint it with primer or solvent-based paint.
- If rust appears, remove it with sandpaper or by chemical means and then paint the affected area with primer or solvent-based paint.



Quarterly

5. When applicable, clean the customer-supplied steam filter.
 - a. Turn off the steam supply and allow time for the valve to cool.
 - b. Unscrew the cap.
 - c. Remove the element and clean it.
 - d. Replace the element and the cap.



6. **For applicable variable speed models only,** measure the out-of-balance switch gap setting and adjust it as needed. Refer to the *Installation Manual* for gap setting specifications.



7. For applicable 80 and 100 pound models, verify the safety out-of-balance switch operation.
 - a. Locate the green colored switch on the rear, left-side of the frame.
 - b. Place a large magnet above the normally closed ball switch to verify switch operation.



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8. Check the bearing mounting bolts to make sure they are torqued properly. Refer to the *Operation/Maintenance Manual* for torque specifications.



Care of Stainless Steel

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

Daily Preventative Maintenance Checklist

Machine:	Week of:						
Operator:	Days						
Checks	1	2	3	4	5	6	7
Observe All Safety Warnings!							
Beginning of the Day:							
1. Inspect the water inlet valve hose connections on the back of the machine for leaks.							
2. Inspect the steam hose connections for leaks (where applicable).							
3. Check the 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.							
End of the Day:							
1. Clean the door gasket of residual detergent and all foreign matter.							
2. Clean the automatic supply dispenser lid and general area. Flush the dispenser with clean water.							
3. Clean the machine's top, front and side panels with mild detergent. Thoroughly rinse and dry all surfaces after cleaning them.							
4. Leave the loading door open at the end of each day to allow moisture to evaporate.							

Laminate this checklist so that it can be re-used.

Weekly Preventative Maintenance Checklist

Machine:	Week of:						
Operator:	Week Ending:						
Checks	/	/	/	/	/	/	/
Observe All Safety Warnings!							
1. For variable-speed models only , clean the AC drive box filter(s) weekly or as needed:							
a. Open the top cover.							
b. Grasp the filter handle and pull straight up to remove the filter.							
c. Wash the filter with warm water and allow it to air dry. As an alternative, the filter may be vacuumed clean.							
2. On models manufactured with a custom drive, inspect and vacuum clean the heat sink.							
3. Check the machine for leaks:							
a. Start an unloaded cycle to fill the machine.							
b. Verify that the 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 is closed and functioning properly.							

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Monthly Preventative Maintenance Checklist

Machine:	Month:						
Operator:							
Checks							
Observe All Safety Warnings!							
1. Use the following procedures to determine if the V-belts require replacement or adjustment.							
a. Check the V-belt(s) for uneven wear and frayed edges.							
b. For groove-pulley drive systems, verify alignment.							
c. For flat-pulley drive systems, verify the allowable distance of the belt from the edge of the pulley.							
d. For variable-speed models equipped with a V-belt system , verify that the V-belts are properly tensioned.							
2. Check all hoses for any visible signs of deterioration. Any showing signs should be replaced immediately.							
3. For 80-pound and larger models only , lubricate the bearings and seals each month or after every 200 hours of operation.							
4. Remove the back panel and check the overflow hose and drain hose for leaks.							
5. Unlock the top cover and check the supply dispenser hoses and hose connections.							
6. Use the following procedure to clean the inlet hose filter screens:							
a. Turn the water off and, if necessary, allow the valve to cool.							
b. Unscrew the inlet hose and remove the filter screen.							
c. Clean the filter with soapy water and reinstall it. Replace the filter screen if it is worn or damaged.							
7. Tighten motor mounting bolt locknuts and bearing bolt locknuts. Check for tightness of the motor spring and motor pulley. Also, check to see that the pin is in place.							
8. Clean the lint from the motor with a vacuum.							
9. Clean interior of machine, both basket and shell, by wiping with a water-soaked sponge or cloth.							
10. Remove any moisture and dust from all electrical components with compressed air.							
11. Verify that the insulation is intact on all external wires and that all connections are secure. If bare wire is evident, contact a service technician.							
12. For variable-speed models only , clean AC Drive cooling fan blades.							
a. Open top cover and remove control module cover.							
b. Gently wipe the fan blades clean with a dry cloth.							

Laminate this checklist so that it can be re-used.

Quarterly Preventative Maintenance Checklist

Machine:	Quarter:			
Operator:				
Checks				
Observe All Safety Warnings!				
1. If necessary, tighten the door hinges and fasteners. Tighten anchor bolts, if necessary.				
2. For models prior to April 2009, 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 is secure, if so equipped.				
4. Check all painted surfaces for exposed metal.				
5. When applicable, clean the customer-supplied steam filter:				
a. Turn off the steam supply and allow the valve to cool.				
b. Unscrew the cap.				
c. Remove the element and clean it.				
d. Replace the element and the cap.				
6. For applicable variable speed models only , measure the out-of-balance switch gap setting and adjust it as needed.				
7. For applicable 80 and 100-pound models, verify the safety out-of-balance switch operation.				
8. Check the bearing mounting bolts to make sure they are torqued properly.				

Laminate this checklist so that it can be re-used.

