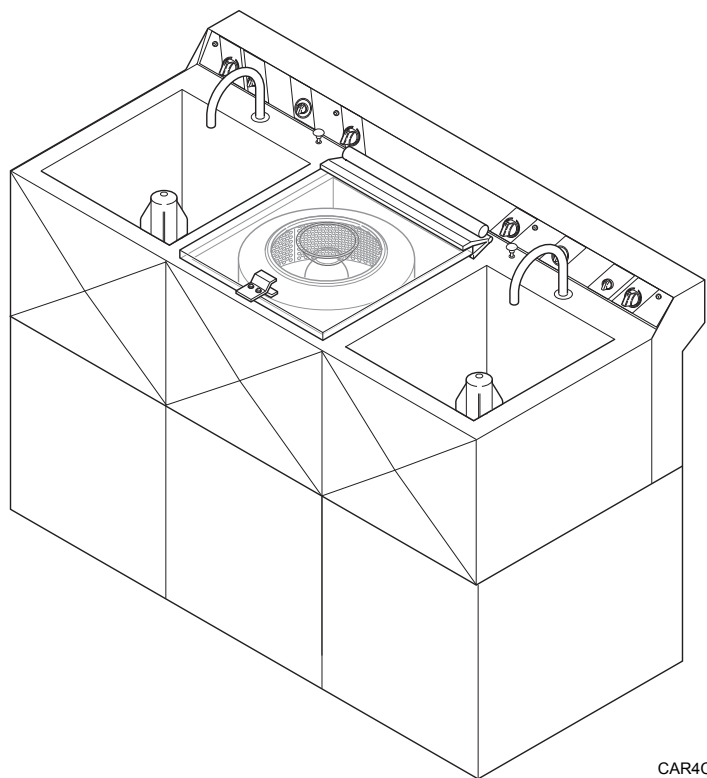


# Washer-Extractor

Twin Tub  
UM202  
Design 3 Models



CAR4C

Installation/Operation/Maintenance

**Keep These Instructions for Future Reference.**

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



[www.comlaundry.com](http://www.comlaundry.com)

Part No. F8221501R1  
January 2012



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# Introduction

## Model Identification

Information in this manual is applicable to this model:

UM202\*

\* This manual applies to models with U3 in the 9th and 10th positions in the model number (e.g. UM202M1OU30001).

## Nameplate Location

The nameplate decal is located at the rear of the machine. Always provide the machine's serial number and model number when ordering parts or when seeking technical assistance.

## Replacement Parts

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

## Customer Service

For technical assistance, call (920) 748-3121.

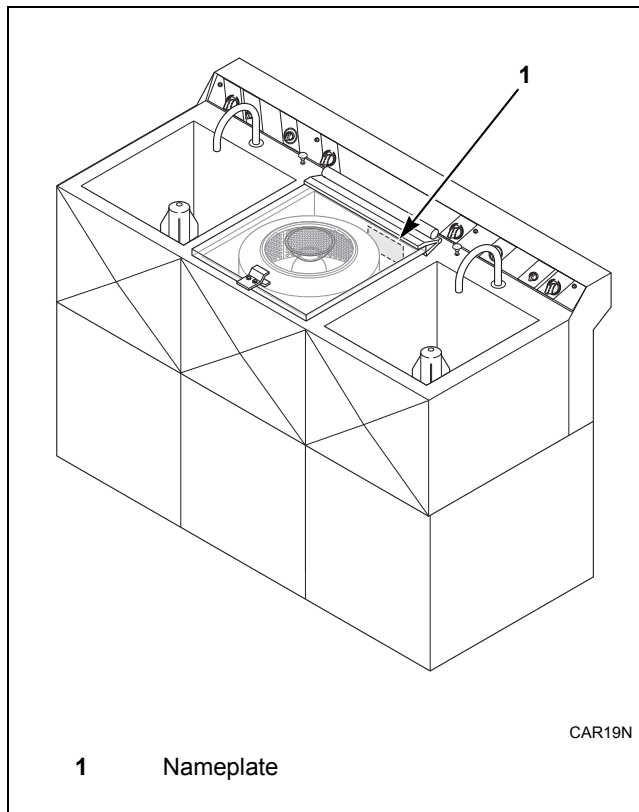


Figure 1

Model Number Familiarization Guide	
Sample Model Number: <b>UM202M1OU30001</b>	
<b>UM</b>	Model Number Prefix
<b>202</b>	Washer-Extractor
<b>M</b>	Type of Electrical Control
<b>1</b>	Washer-Extractor Speed Capability (1 = 1 speed)
<b>O</b>	Electrical Characteristics
<b>U3</b>	Design Series
<b>0001</b>	Option Identification (varies from machine to machine)

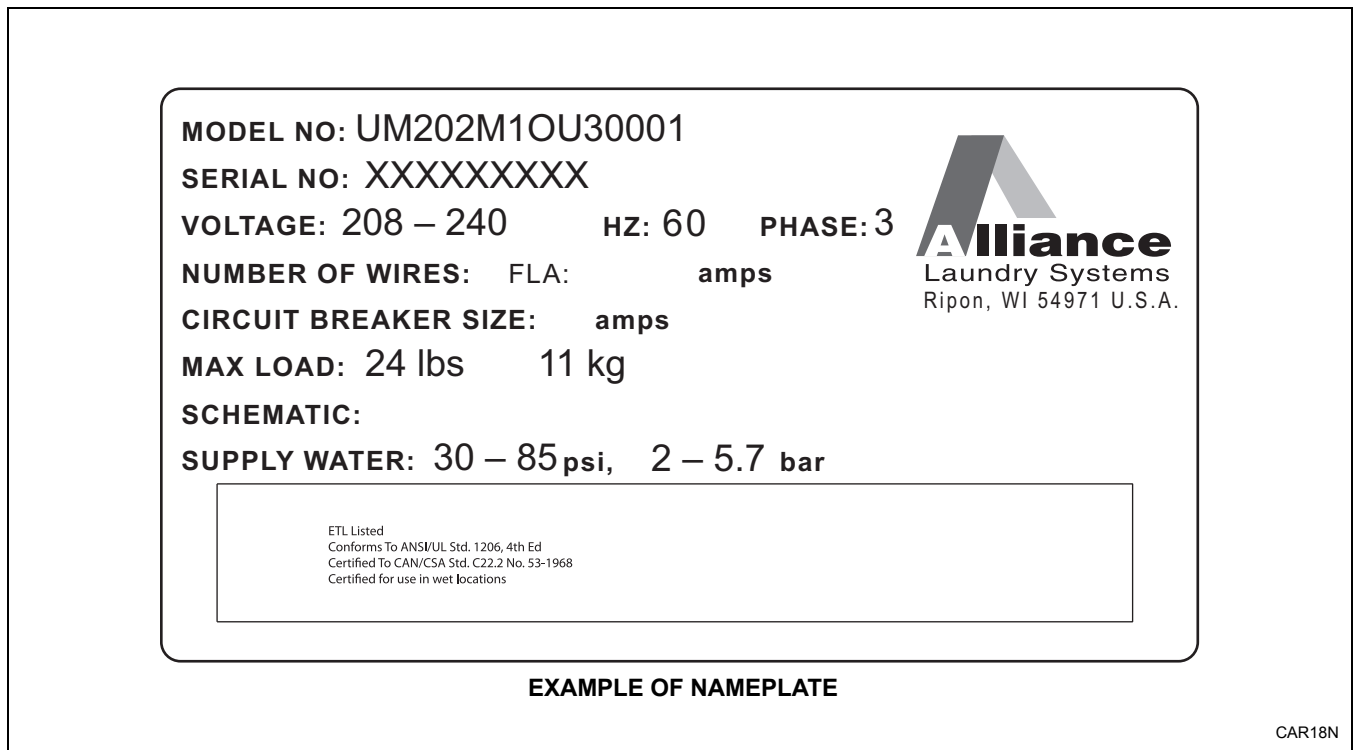




Figure 2


# 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.

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

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

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


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

### Save These Instructions


	<b>WARNING</b>
<b>To reduce the risk of fire, electric shock, serious injury or death to persons when using your washer, follow these basic precautions:</b>	
W023	

1. Read all instructions before using the washer.
2. Install the washer according to the INSTALLATION instructions. Refer to the GROUNDING instructions in the INSTALLATION manual for the proper grounding of the washer. All connections for water, drain, electrical power and grounding must comply with local codes and be made by licensed personnel when required. It is recommended that the machine be installed by qualified technicians.
3. Do not install or store the washer where it will be exposed to weather.
4. To prevent fire and explosion, keep the area around machine free from flammable and combustible products. Do not add the following substances or textiles containing traces of the following substances to the wash water: gasoline, kerosene, waxes, cooking oils, vegetable oils, machine oils, dry-cleaning solvents, flammable chemicals, thinners, or other flammable or explosive substances. These substances give off vapors that could ignite, explode or cause the fabric to catch fire by itself.
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. 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.


7. 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 appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance. This is a safety rule for all appliances.
8. DO NOT reach and/or climb into the tub or onto the washer, ESPECIALLY if the wash drum is moving. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
9. Never operate the washer with any guards, panels and/or parts removed or broken. DO NOT bypass any safety devices or tamper with the controls.
10. Use washer only for its intended purpose, washing textiles. Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket or tub.
11. Use only low-sudsing, no-foaming types of commercial detergent. Be aware that hazardous chemicals may be present. Wear hand and eye protection when adding detergents and chemicals. 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).
12. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
13. Always follow the fabric care instructions supplied by the textile manufacturer.
14. The lid MUST BE CLOSED any time the washer is to spin. DO NOT bypass the lid release button by permitting the washer to operate with the lid open. Do not attempt to open the lid until the extract compartment has drained and all moving parts have stopped.
15. Be aware that hot water is used to flush the supply dispenser, if applicable. Avoid opening the dispenser lid while the machine is running.
16. Do not attach anything to the supply dispenser's nozzles, if applicable. The air gap must be maintained.
17. Do not operate the machine without the water reuse plug or water reuse system in place, if applicable.
18. 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.
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. DANGER: Before inspecting or servicing machine, power supply must be turned OFF. The servicer needs to wait for at least 3 minutes after turning the power OFF and needs to check for residual voltage with a voltage meter. The inverter capacitor or EMC filter remains charged with high voltage for some time after powering OFF. This is an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.
21. 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. ALWAYS disconnect the washer from electrical, power and water supplies before attempting any service.
22. Disconnect the power cord by grasping the plug, not the cord. Replace worn power cords and/or loose plugs. If the supply cord is damaged, it must be replaced by a special cord or assembly available from the service agent.
23. Before the washer is removed from service or discarded, remove the door to the washing compartment.
24. 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 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.

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

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

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

## Safety Decals

Safety decals appear at crucial locations on the machine. Failure to maintain legible safety decals could result in injury to the operator or service technician.

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

Use manufacturer-authorized spare parts to avoid safety hazards.



## Operator Safety

	<b>WARNING</b>
<p><b>NEVER insert hands or objects into the wash or extract compartments until it has completely stopped. Doing so could result in serious injury.</b></p>	
<small>SW725</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 lid lock and interlock before starting operation of the machine:
  - a. Attempt to start the machine with the lid open. The machine should not start with the lid open.
  - b. Close the lid without locking it and attempt to start the machine. The machine should not start with the lid unlocked.
  - c. Close and lock the lid and start a cycle. Attempt to open the lid while the cycle is in progress. The lid should not open.

If the lid 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 lid 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.

# Specifications and Dimensions

Specification		
<b>Overall Dimensions</b>		
Overall width, in. (mm)		60 (1524)
Overall depth, in. (mm)		29.5 (749)
Overall height, in. (mm)		40 (1016)
<b>Weight &amp; Shipping Information</b>		
Net weight, lb. (kg)		475 (215)
<b>Wash Compartment Information</b>		
Width, in. (mm)		20.25 (514)
Length, in. (mm)		22.25 (565)
Depth, in. (mm)		11.75 (298)
Volume, cu. ft. (liter)		2.74 (77.6)
Dry weight capacity, lb. (kg)		12 (5.45)
<b>Extractor Basket Information</b>		
Basket volume, cu. ft. (liter)		1.09 (30.9)
Basket diameter, in. (mm)		16.06 (409)
Basket depth, in. (mm)		9.25 (235)
Basket dry weight capacity, lb. (kg)		12 (5.45)
Perforation open area, %		1.5
<b>Drive Train Information</b>		
Number of motors in drive train		3
Wash motor power, hp (kW)		2 x 0.50 (0.38)
Extract motor power, hp (kW)		1 x 1.0 (0.75)
<b>Water Consumption</b>		
Average water consumption per agitation cycle, gallons (liters)	Low	14 (53)
	Medium	17 (64)
	High	21 (80)
<b>Drain Information</b>		
Drain connection size, in. (mm)		2 (50)
Number of drain outlets		1
Drain flow capacity, gallons (liters) per min.		27 (101)
Recommended drain pit size, cu. ft. (liters)		7.7 (219)
<b>Water Supply Information</b>		
Water inlet connection size, in. (mm)		.75NH (G.75)
Number of water inlets (1 hot, 1 cold)		2
Inlet flow capacity, gallons (liters) per min.		21 (79)

Table 1 (continued)

Table 1 (continued)

Specification		
<b>Operating Speeds</b>		
Wash agitator speed, reversals per minute (Input frequency: 60 Hz/50 Hz)		60/50
<b>Power Consumption</b>		
Average power consumption per cycle, kW-hr		0.25
Average HVAC load, Btu/hr (kcal/hr)		200 (51)
<b>Centrifugal Force Data</b>		
Extract centrifugal force, G's	208-240 V, 60 Hz	690
	220-240 V, 50 Hz	496

Table 1

Specifications and Dimensions

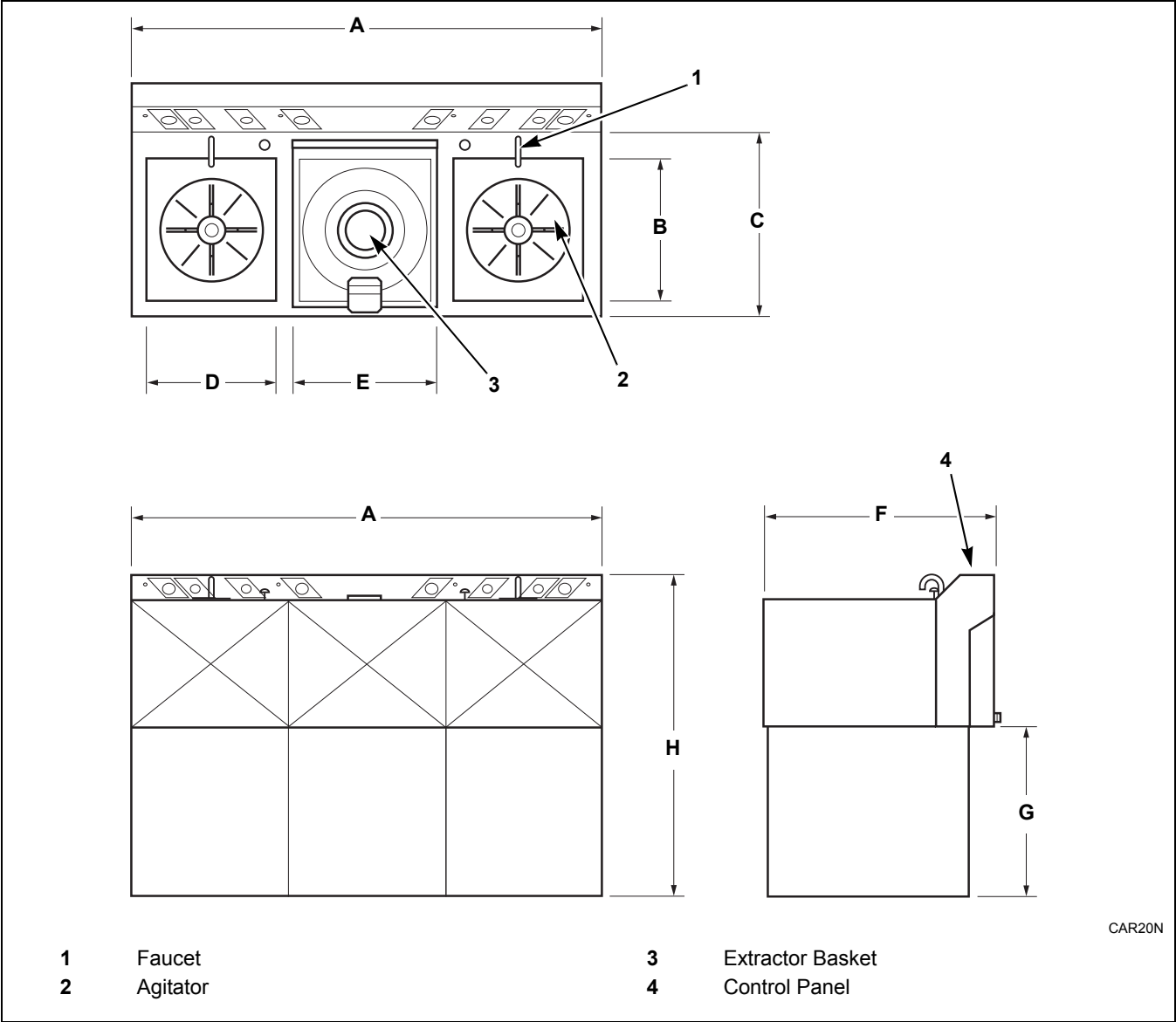


Figure 3

Machine Capacity Dimensions Refer to <i>Figure 3</i>	
<b>A</b>	60 in. (1524 mm)
<b>B</b>	11.75 in. (298 mm)
<b>C</b>	18.38 in. (467 mm)
<b>D</b>	22.25 in. (565 mm)
<b>E</b>	16.5 in. (419 mm)
<b>F</b>	29.5 in. (749 mm)
<b>G</b>	21.5 in. (546 mm)
<b>H</b>	40.5 in. (1029 mm)

Table 2

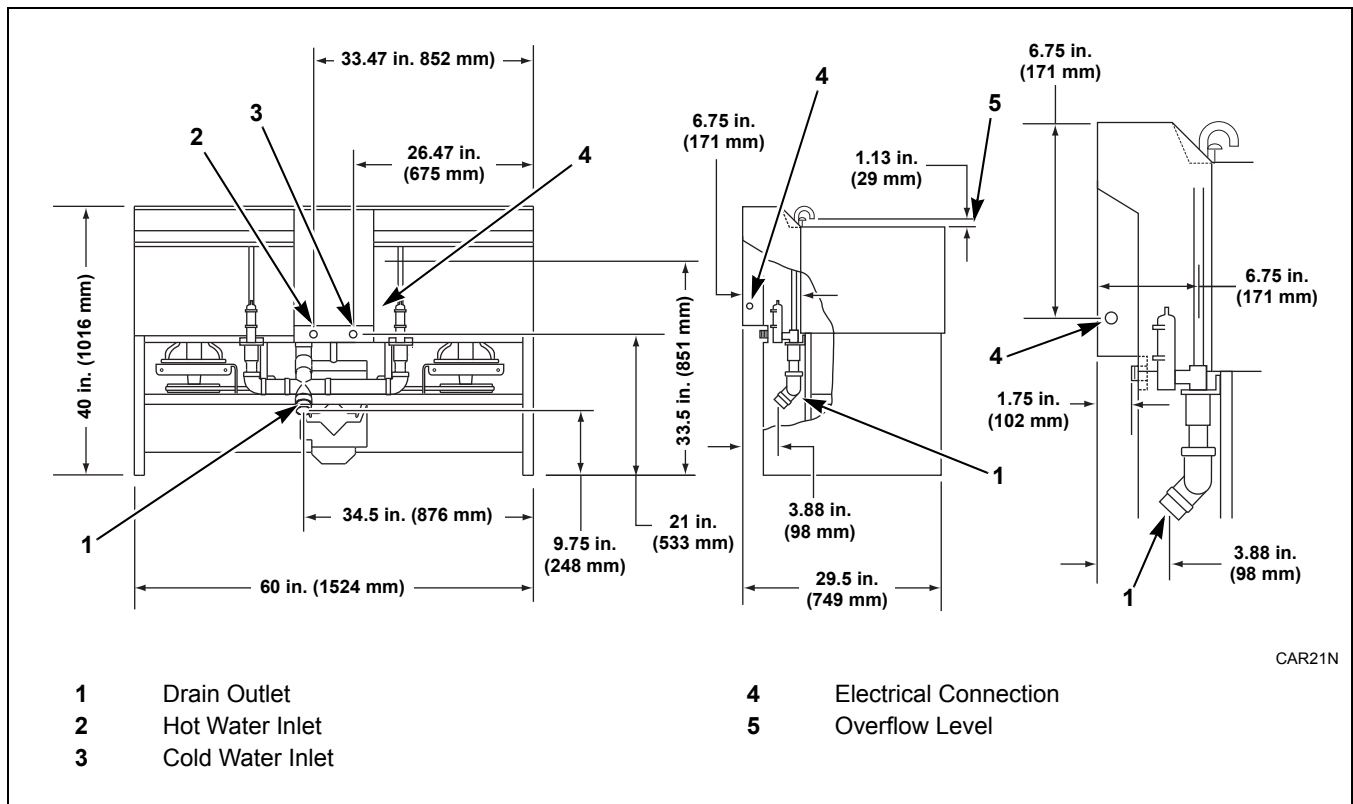


Figure 4

# Installation

## Dimensional Clearances

Refer to *Figure 5* for recommended dimensional clearances.

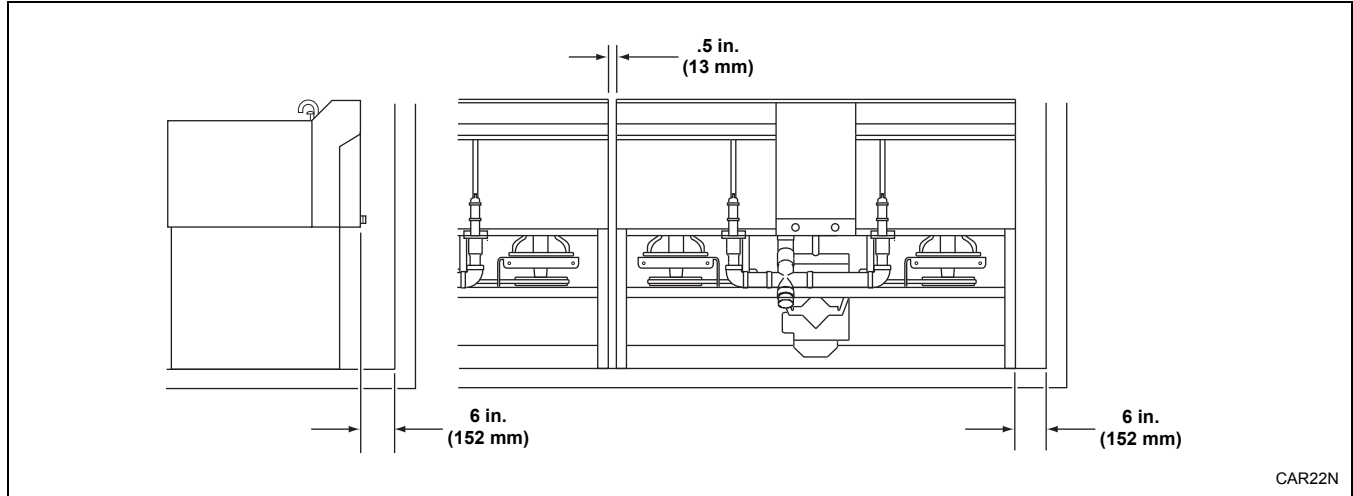


Figure 5

## Machine Foundation

The machine may be placed on any level floor as long as floor will hold the weight of the machine.

Position the machine and level with shims or grout under the corners.

Refer to *Table 3* for static loads on the floor.

Floor Load Data	
Specification	
Static floor load	840 lbs. (3.7 kN)
Static pressure	68 lbs-ft <sup>2</sup> (3.3 kN-m <sup>2</sup> )

Table 3

## Machine Anchoring

Bolting to floor is optional. To bolt down the machine, use .38 inch bolt holes located on the frame at the bottom of each corner. One quarter inch machine anchors should be used.

## Shipping Block and String Removal

	<b>WARNING</b>
<b>To avoid severe personal injury and machine damage, remove the shipping block and shipping string before connecting power to the machine.</b>	
W754	


The shipping string is provided to open lid before power is connected to machine. Operating machine with shipping string installed will prevent the wash basket from stopping when lid is open.

To open lid before power is connected, pull the shipping string to the left and hold, then lift lid open.

**IMPORTANT: If machine is operated with shipping block in place, damage to machine, tub and drive motor may result. To avoid damage to machine, remove shipping block before operation.**

## Electrical Installation

### Input Voltage Requirements

	<b>WARNING</b>
<p>Turn off power and water before attempting any maintenance, repairs, or service, or before opening any service panel or door.</p>	
W532	

Electrical Specifications			
Voltage	Cycle	Phase	Wire
208-240	60 Hz	3	3
220-240	50 Hz	3	3
<b>NOTE: The control voltage is 24 V for all systems.</b>			

Table 4

If a delta supply system is used, the high leg must be connected to the L3 lead at the J-box.


**NOTE: Rotation of the extractor basket should be clockwise in the extract step. If rotation is not clockwise in extract step, disconnect power and have a qualified electrician reverse lines L1 and L2 at power input block.**


### Connection Specifications

**IMPORTANT: Connection must be made by a qualified electrician using wiring diagram provided with machine. Use liquid-tight conduit and copper connectors.**

**NOTE: Machine has passed rain test and is certified for use in wet locations.**

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

	<b>WARNING</b>
<p>Dangerous voltages are present inside the machine. Only qualified personnel should attempt adjustments and troubleshooting. Disconnect power from the machine before removing any cover and guards, and before attempting any service procedures.</p>	
W736	

	<b>WARNING</b>
<p><b>Hazardous Voltage. Can cause shock, burn or death. Verify that a ground wire from a proven earth ground is connected to the lug near the input power block on this machine.</b></p>	
W360	

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

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

Make sure the correct transformer jumper (208 Volt or 240 Volt) is in place. Refer to the “optional” Electrical Service Connection label located on the back of the machine near the electrical service input for machine electrical requirements.

## Installation

### Grounding

For personal safety and proper operation, the machine must be grounded in accordance with state and local codes. If such codes are not available, grounding must conform with the National Electric Code. The ground connection must be to a proven earth ground at the location service panel and/or to a grounded metal cold water pipe.

Use wire size indicated in Electrical Specifications table for runs up to 50 feet. Use next larger size for runs of 50 – 100 feet. Use TWO sizes larger for runs greater than 100 feet. This protects against voltage drop which would result in a reduction of starting torque.

### Phase Adder

If three-phase service is not available and a Roto-Phase or other phase adder is used, the artificial leg must be connected to the L3A lead.

### Thermal Overload Protector

Machine has thermal overload protectors in each drive motor windings and a separate fuse for control circuit.


### Circuit Breakers

Three-phase machines require a separate, three-phase inverse-time circuit breaker to prevent damage to the motors by disconnecting all legs if one should be lost accidentally. Check the nameplate decal on the back of the machine. Refer to *Table 5* in this section for model-specific circuit breaker requirements.

**IMPORTANT: The machine should be connected to an individual branch circuit not shared with lighting or other equipment.**

Electrical Specifications								
Voltage Designation					Standard			
Code	Voltage	Cycle	Phase	Wire	Full Load Amps	Breaker	AWG	mm <sup>2</sup>
D	220-240	50	3	3	7	15	14	2.5
O	208-240	60	3	3	7	15	14	2.5
<b>NOTE: Wire sizes shown are for copper, THHN, 90° conductor per National Electric Code, article 310.</b>								

Table 5

	<h2>WARNING</h2> <p>Ensure that a ground wire from a proven earth ground is connected to the ground lug near the input power block on this machine. Without proper grounding, personal injury from electric shock could occur and machine malfunctions may be evident.</p> <p>SW008</p>
---	---

**IMPORTANT: Installation shall conform with local codes or, in absence of local codes, with the National Electric Code ANSI/NFPA No. 70. Overloaded or undersized lines, or any low voltage condition will burn out motors and solenoid windings.**



## Drain Connection

Figure 6 shows plumbing for UM machines.

A flexible connection must be made to a vented drain system to prevent damage to rigid drain pipes. Drain should be vented to ensure proper flow and prevent siphoning. If proper drain size is not available or

practical, a surge tank is required. A surge tank along with a sump pump should be used when gravity drainage is not possible, such as in below-ground-level installations.

Refer to General Specifications and *Table 6* for drain information.

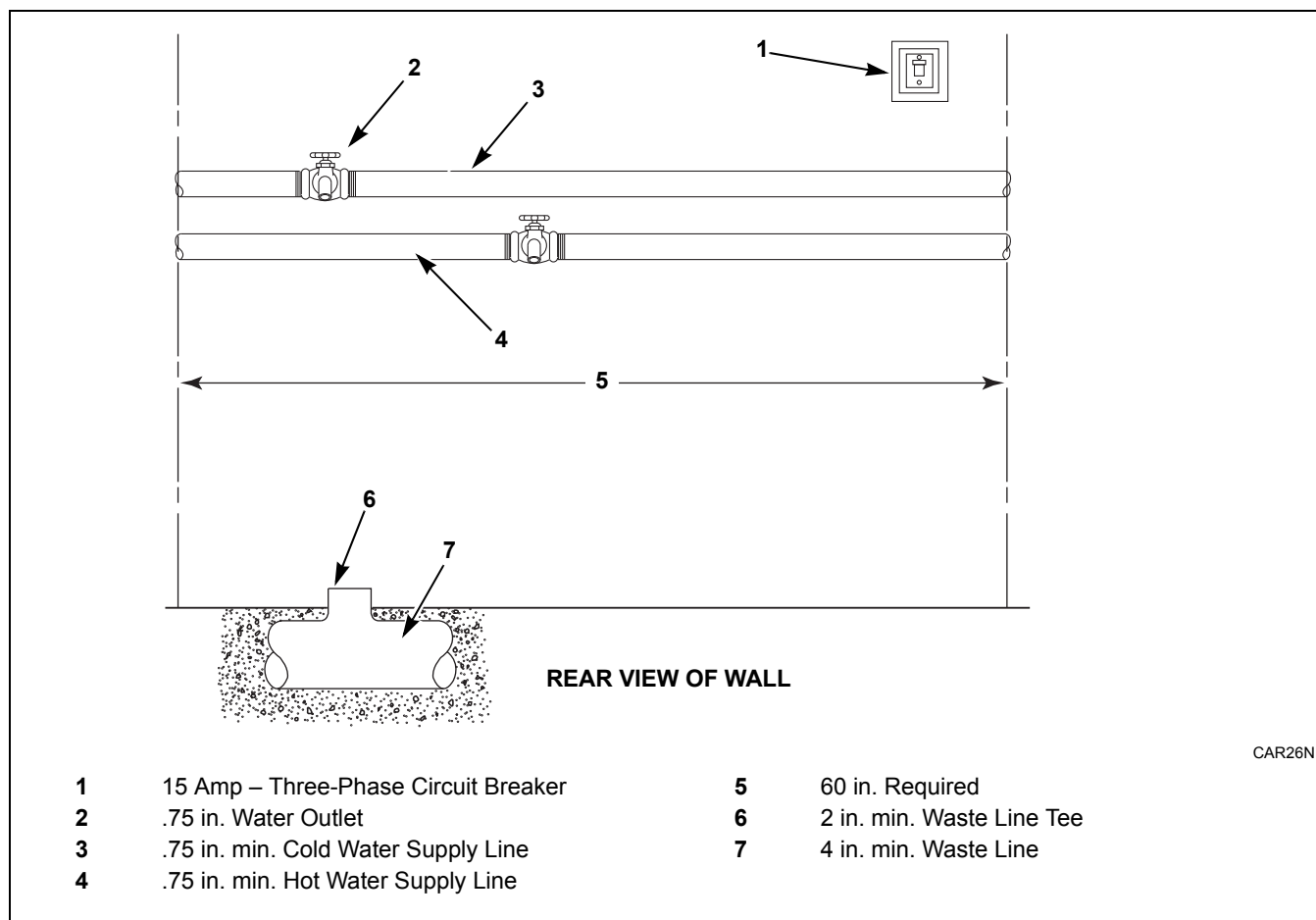


Figure 6

Drain Line Sizing Minimum Drain ID	
Number of Machines	
1	2 in. (51 mm)
2	3 in. (76 mm)
3	4 in. (102 mm)
4	4 in. (102 mm)
5	4 in. (102 mm)
6	4 in. (102 mm)
7 – 10	6 in. (152 mm)

Table 6

## Installation

### Water Connection

Refer to General Specifications for water supply information.

Rigid pipe connections are not recommended.

Connections should be supplied by a hot and a cold water line of at least the sizes shown in the Water Supply Line Sizing table. Installation of additional machines will require proportionately larger water lines. Refer to *Table 7*.

Water Supply Line Sizing	
Number of Machines	Supply Line Size
1	.75 in. (19 mm)
2	1 in. (25 mm)
3	1.25 in. (32 mm)
4	1.5 in. (38 mm)
5	1.5 in. (38 mm)
6 – 10	2 in. (50 mm)


Table 7

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

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

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

Each hose is connected to a hot or cold water faucet with a .75 inch hose bib. Recommended maximum water temperature is 190° Fahrenheit (88° Celcius).

	<b>WARNING</b>
<b>To prevent personal injury, avoid contact with inlet water temperatures higher than 125° Fahrenheit (51° Celsius) and hot surfaces.</b>	
W748	

Install vacuum breakers and check valves when required by local codes.

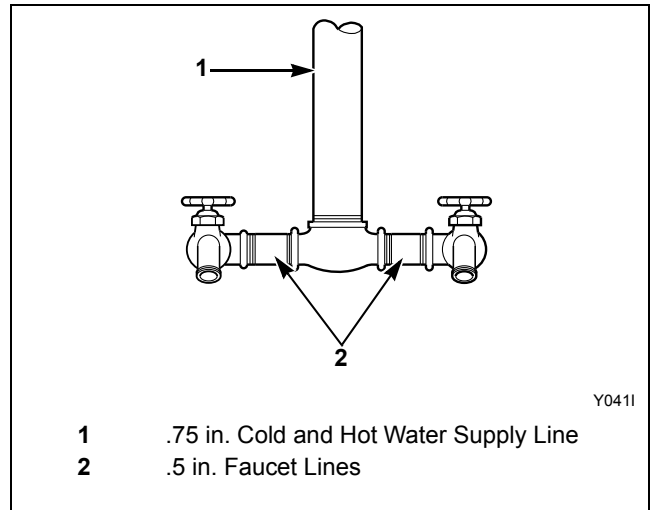


Figure 7

Install a screen filter in each hose to keep rust and other foreign particles out of the solenoid valves.

Suitable air cushions should be installed in supply lines to prevent “hammering” (*Figure 8*).

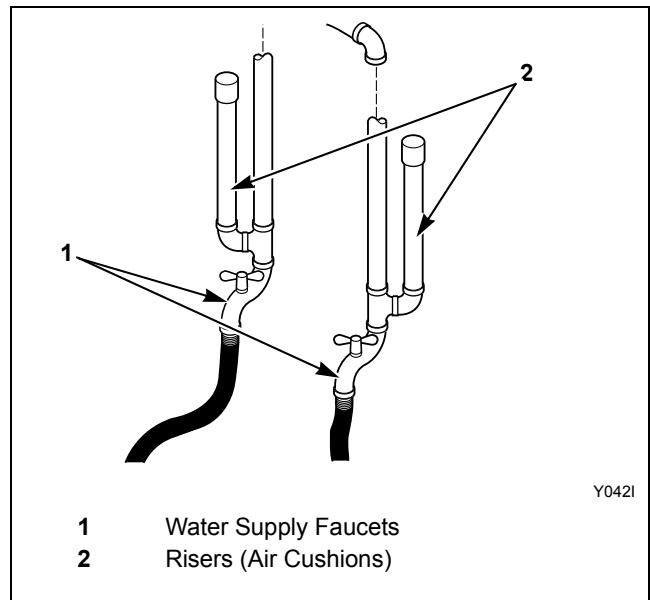


Figure 8

## Control Function Test

The machine should be cleaned after the installation is complete. A function test should then be executed on the unloaded machine:

1. Check the power supply for correct voltage, phase, and cycles to be sure they are correct for the machine.
2. Open manual shut-off valves to the machine.
3. Turn on electric power.
4. Check the lid interlock before starting operation:
  - a. Turn extract timer dial clockwise to the two minute mark, remain for five seconds, and return dial to “off” position.
  - b. Once rotation has stopped press the lid release button and open the lid to the extract-rinse compartment.
  - c. Attempt to start the machine with the lid open. The machine should not start with the lid open.
  - d. Close the lid without locking it and attempt to start the machine. The machine should not start with the lid unlocked.
  - e. Close and lock the lid and start a cycle. Attempt to open the lid while the cycle is in progress. The lid should not open.

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

5. Run a complete cycle, checking operation of water inlet valves, drain, and extract functions.
6. Check that basket rotation is clockwise in the extract step. If rotation is not clockwise in the extract step, disconnect power and have a qualified electrician reverse lines L1 and L2 at power input block.

# Operation

## Control Panel

Figure 9 shows the control panel for both standard and car wash top-loading machines.

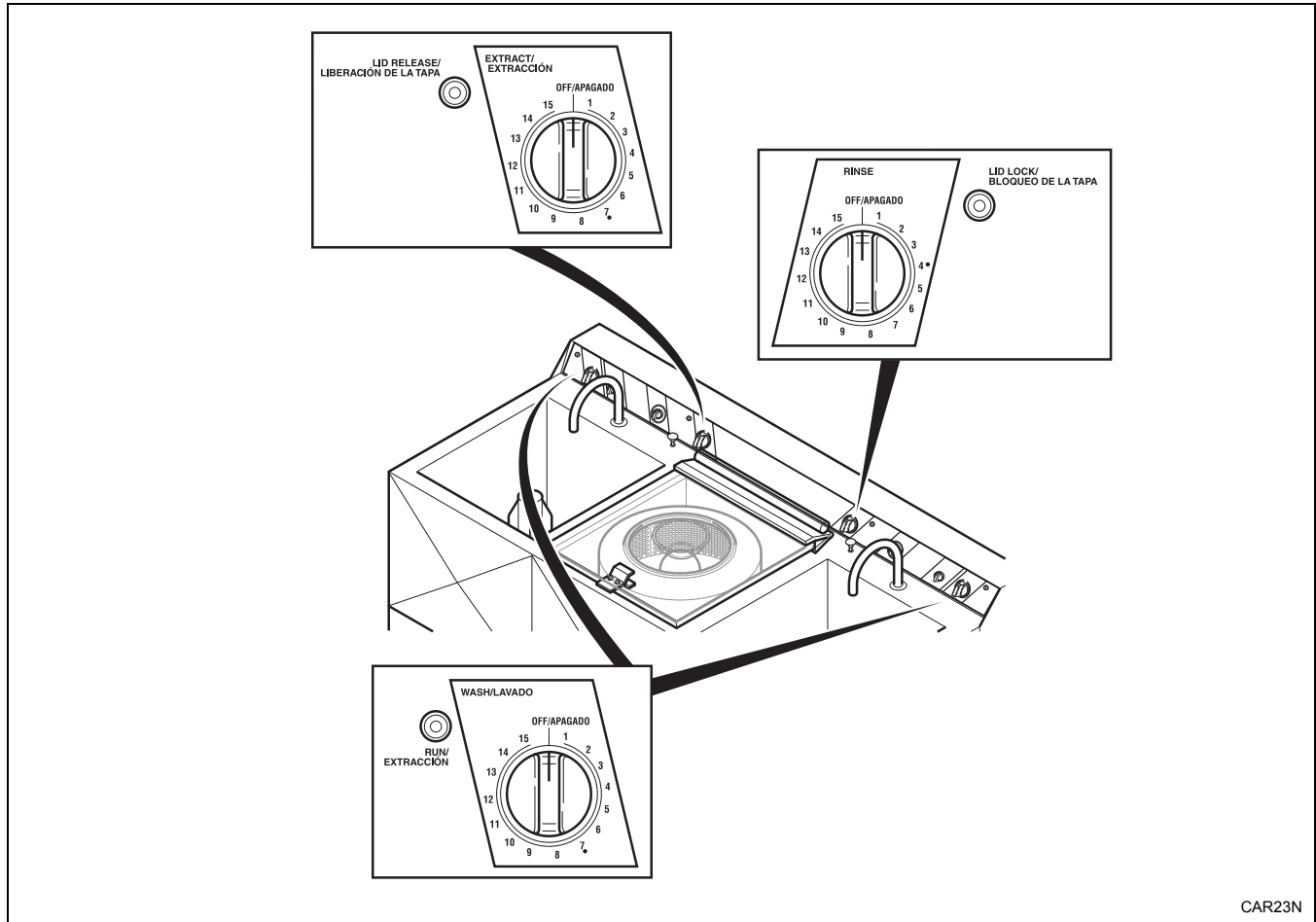


Figure 9

The **RUN indicator light** indicates a wash cycle is in progress.

The **WASH timer** can be set to up to 15 minutes for wash cycle times. Machine will start automatically after timer is set. Agitation will begin when selected water level is reached.

The **LID LOCK indicator light** indicates when the lid is properly closed when the extract-rinse compartment is rotating.

After extract-rinse basket stops spinning, pressing the **LID RELEASE button** unlocks the extract-rinse compartment's lid.

The **EXTRACT** and **RINSE timers** allow operator to set the amount of time for extract and rinse cycles. Machine will start automatically after timers are set. The rinse will begin 30 seconds after basket begins to spin

## Operating Instructions

1. Turn on the main power source (circuit breaker).
2. Close drain of wash compartment to be used.  
Refer to *Figure 10*.

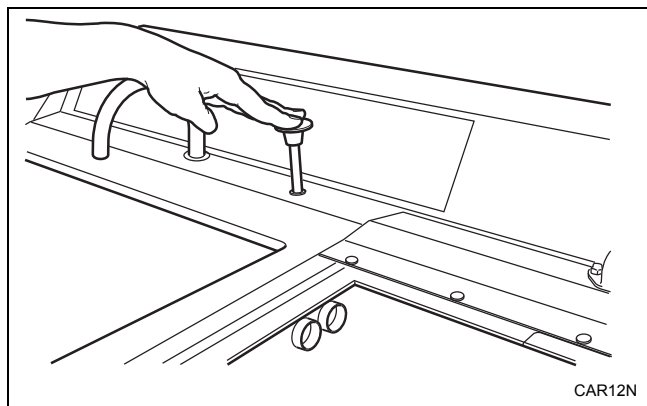


Figure 10

3. Select desired temperature and water level.

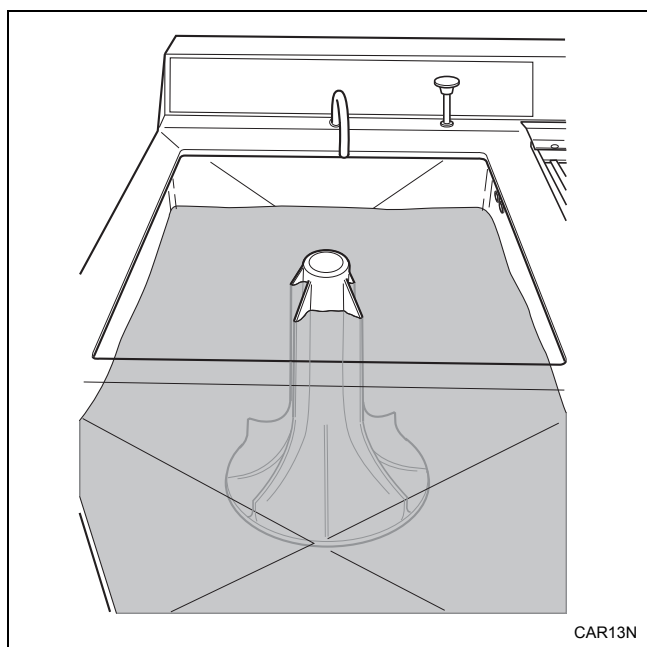


Figure 11

4. Add detergent and bleach, if desired, to water.  
Use **ONLY** liquid bleach.
5. Set wash timer for 30 seconds to begin filling tub and allow detergent/bleach to mix.

6. Place washables in compartment. Distribute evenly around agitator. Refer to *Figure 12*.

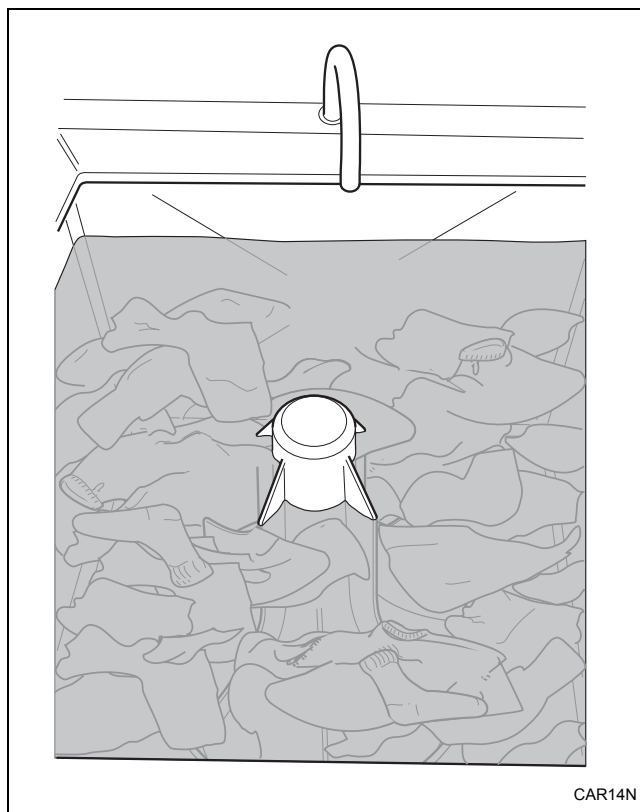


Figure 12

**NOTE:** Place stringy items such as mop heads in a laundry net to prevent blockage of drains.

## Operation

- Set wash timer to desired time. Agitation will begin when selected water level is reached.

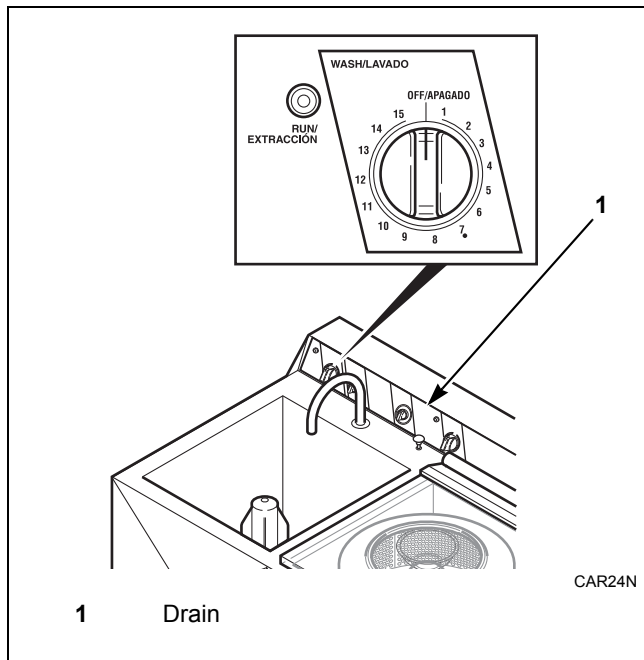


Figure 13

Recommended Cycle Times			
	Wash	Extract	Rinse
Fluff-Dry Washables			
Bath mats, towels, face cloths, spreads, mop heads, rugs, athletic and camp washables	6 min.	5 min.	3 min.
No-Iron Washables			
Sheets	4 min.	4 min.	2 min.
Pillow slips	8 min.	4 min.	2 min.
Tablecloths/napkins	8 min.	4 min.	2 min.
Specialties			
Blankets	5 min.	4 min.	3 min.
Drapes	5 min.	5 min.	3 min.
Uniforms	8 min.	4 min.	2 min.
<b>NOTE: Each compartment has a 12 pound dry weight capacity.</b>			

Table 8

- When cycle is finished, place washables in extract-rinse compartment. Distribute evenly around agitator. Refer to *Figure 14*.

### WARNING

Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.

W726

**NOTE:** Place loosely woven washables first, then sheets, pillow slips and other closely woven articles.

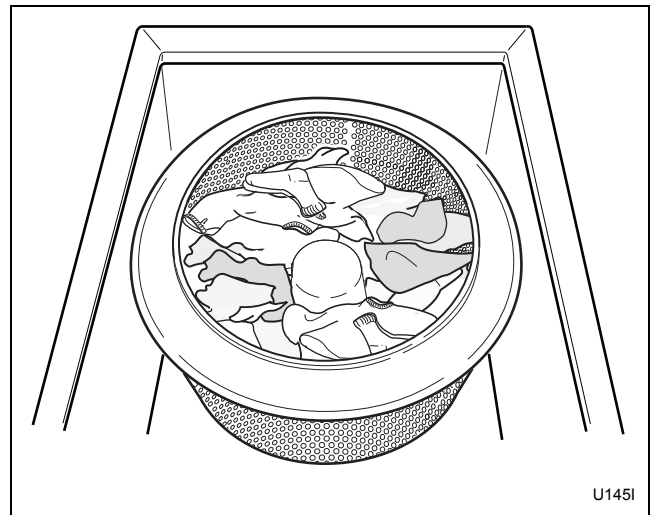


Figure 14

**IMPORTANT:** All articles must be fully inserted into extract-rinse compartment. During an extract, articles partially outside extract basket may cause machine damage.

- Close lid, making sure lid is locked.

10. Set extract timer and rinse timer to desired cycle times. Refer to *Figure 15*. Refer to *Table 8* for recommended rinse and extract times.

11. When cycle is complete, wait until basket stops, then press LID RELEASE button to open lid. Refer to *Figure 15*.
12. Remove washables.

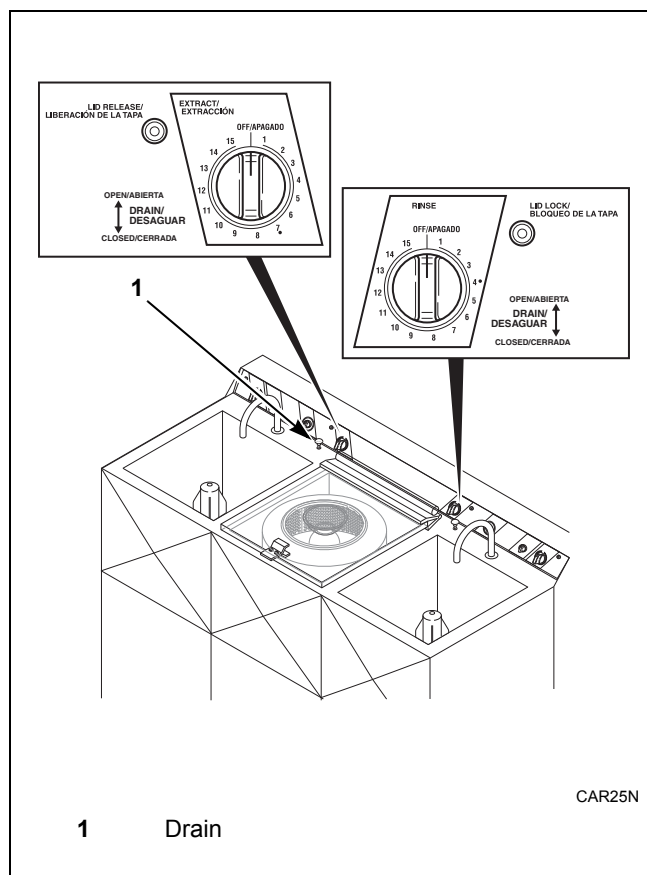



Figure 15

# Maintenance

	<b>WARNING</b> <b>Sharp edges can cause personal injury. Wear safety glasses and gloves, use proper tools and provide lighting when handling sheet metal parts.</b> <small>W366R1</small>
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**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:** Lid 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 labels should be replaced immediately.

1. Clean main body, front and side panels with mild detergent. Rinse with clean water.
2. Clean lid of all foreign matter.
3. Leave lid open to air out the machine at end of each cycle and at end of day.

## Weekly


1. Check drain for leaks and proper opening.
2. Check all water connections and hose connections for leaks. Tighten or replace as needed.

## Monthly

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

1. Clean lint from motors.
2. Clean lint and debris from extract compartment's drain.
3. Remove and clean water inlet valve and hose screen filters. Replace if worn or damaged.
4. Wipe clean inside of wash compartment and check that all electrical components are free of moisture and dust.
5. Check basket ball to see if it needs grease. If basket does not rock easily and does not return to level position when pushed down on one side, add grease to top of nylon basket ball cap.
6. Check extract motor vibration pads. Pads must be replaced if pads are worn and metal is showing.
7. Tighten transmission and extract motor mounting nuts, if necessary.
8. To clean inlet hose filter screens:
  - a. Turn water off and allow valve to cool, if necessary.
  - b. Remove hose and screen.
  - c. Clean screens with soapy water. Replace worn or damaged screens.
  - d. Reinstall screens.
9. Check hoses for any visible signs of deterioration. Any hose showing signs of cracking, blisters or material wear should be replaced immediately. All hoses should be replaced every five years.
10. Determine if belt(s) require replacement or adjustment.
  - a. Check each belt for uneven wear and frayed edges.
  - b. Verify that each belt is properly aligned.



	<h2 style="margin: 0;">CAUTION</h2>
<p><b>To help avoid personal injury, take care when doing any maintenance or making any check or repair. Follow manufacturer's instructions for all materials used during service and maintenance of this machine. If used or handled improperly, they can be hazardous. Improper or incomplete service can also affect the machine and result in personal injury, or damage to the machine and may void the warranty.</b></p>	
<small>W357</small>	

- 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.
- If the stainless steel appears to be rusting, the source of the rust may actually be a foreign piece of iron or steel part not made of stainless steel, such as a nail or screw contacting the stainless steel surface. Tip: Paint all carbon steel parts with a heavy protective coating. Stainless steel fasteners should be used whenever possible.

## 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.
- Do not leave sanitizers or sterilizing solutions on stainless steel equipment for prolonged periods of time.