



DOUGLAS
WASHING AND SANITIZING SYSTEMS

OPERATION & MAINTENANCE MANUAL

RACK WASHER

HMI Controls



Parts & Service 800-331-6870

DougMac.com

We congratulate you on the purchase of your new Rack Washer.

To understand the proper operation and maintenance of your new machine, please read this manual carefully. A Reference Guide is mounted on the side of the machine for your convenience.

You have also received a Recommended Installation Guide. Please review this guide and confirm that the machine has been installed correctly.

If you have any questions or need any further information, now or in the future, please do not hesitate to contact us.



DOUGLAS
WASHING AND SANITIZING SYSTEMS

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Please Note: Specifications are subject to change without notice

This book is a publication of Douglas Machines Corp. Service Department.
Future editions will reflect changes in procedures or technical details

Use and duplication of this document is encouraged.

For technical assistance, please call
1-800-331-6870.

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SAFETY

Qualified installation personnel, individuals, firms, corporations, and companies are responsible for:

- Wear appropriate P.P.E., ie... hearing protection, thermal resistant gloves, and eye wear.
- Know where the **exits** are located.
- Always turn off and drain the machine before entering. Allow a cool-down period. Follow facility's L.O.T.O. procedures.
- **Never** enter a machine where the flooring has been removed.
- Fall Hazard.
- Use non-permit required confined space guidelines for entering.
- When loading a rack into the washer keep hands away from the door edges. Keep hands on the horizontal bars inside of the rack. **Do Not** hold racks on the vertical support bars or outside edges. Push the rack with both hands. **Never** strain yourself to move a rack. If the racks are too heavy, unload some product.
- **Always use caution.** - Use mats to reduce slip hazards.
- Ensure that the float switches and level probes are well maintained and cleaned daily. Failure to do so can result in unintended heater start up and potential fire.
- **Never** leave your machine idle (not in use) for more than four hours. This can cause water to evaporate from the machine resulting in damage.
Do not touch the rinse tank without a cool-down period.

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DELIVERY

- Inspect the machine for any external damage. Any evidence of damage should be noted on the delivery receipt and signed by you and the driver.
- Remove packaging from the washer and check for any concealed damage. Carrier must be notified of damage immediately. Please retain packaging for inspection if claim is filed.
- Douglas Machines Corp. cannot accept responsibility for lost or damaged merchandise suffered in transit. The carrier assumes full responsibility for delivery in good order, however; we are prepared to assist you in any action needed regarding shipping damage.

ELECTRICAL CONNECTIONS: Upon receiving your machine, all wire connections in the electric panel, pump motor and electric heaters should be checked, including the wire nuts and lugs. Check connections monthly for the first six months and every 90 days after the first six months of operation.

PRE-INSTALLATION

Qualified installation personnel, individuals, firms, corporations, and companies are responsible for:

- The installation or replacement of the gas piping and connection, installation, repair, or servicing of the equipment. Qualified installation personnel must be experienced in such work, familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction. Reference National Fuel Gas Code, NFPA 54 or latest edition or ANSI Z223.1 or latest edition, Section 1.4.
- The installation of electrical wiring from the electric meter, main control box, or service outlet to the appliance. Qualified installation personnel must be experienced in such work, familiar with all precautions required, and have complied with all requirements of state or local authorities having jurisdiction. Reference National Electrical Code, ANSI/NFPA 70 or latest edition. In Canada, Canadian Electrical Code Part I (Std. 22.1 or latest).
- The installation of gas heated units in Canada. Qualified installation personnel should comply with the Installation Codes for Gas Burning Appliances and Equipment, (CAN-I-B 149.1 and B-149.2) and any local codes or approvals.
- The installation of washers equipped with casters. These washers shall be made with a connector that complies with the Standard for Connectors for Movable Gas Appliances, ANSI Z2 1.69 or latest, and a quick-connect device that complies with the Standard for Quick-Disconnect Devices for use with gas fuel, ANSI Z2 1.41 or latest.

- Water and waste piping and connections shall comply with the International Plumbing Code, International Code Council (ICC) or the Uniform Plumbing Code, International Association of Plumbing and Mechanical Officials (IAPMO). NSF/ANSI 3-2009
- Douglas Machines Corp. highly discourages the use of tank-less or demand water heating units as a hot water supply for our machines. They typically are not properly sized nor can they meet the demand required by our machines.

Note: A fixed restraint must be provided if casters are used in conjunction with a flexible connector for movable appliances. This restraint must secure the washer to a non-movable surface to eliminate stress on the connector. If the washer is moved, the restraint must be reconnected after the washer is returned to its normal position.

SAFETY PRECAUTIONS

Important: All safety precautions must be adhered to as to avoid personal injury.

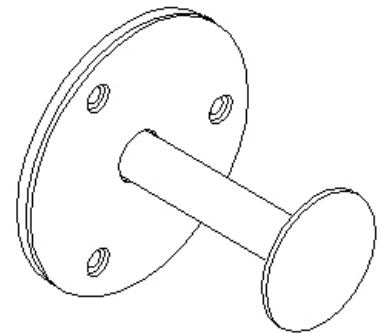
Please Be Cautious!

- Minimum P.P.E. equipment to be used when operating or maintaining this equipment is safety glasses, hearing protection, and heat resistant gloves.
- When using the spray off gun, please be cautious of potential hot water hazard. Do not spray in the direction of yourself or any other personnel. Only use for maintenance of the machine.
- If machine is in “Wash” mode and stopped, allow 3 second ramp down time for spray arms before opening machine door.
- Machine must be installed keeping in mind clearance for maintenance and in accordance with facility high foot traffic areas, railings, and any areas where a hazard could be created.
- Visibility should also be considered eliminating any blind corners, stairways, or drop offs in the general area.
- When removing the filters of the machine for maintenance of any kind, the machine **MUST** be turn off, drained, and lock out and tag out procedures followed. Proper fall hazard procedures must also be followed.

Emergency Egress

All machines are equipped with an interior door release to enable the opening of the door should it close while someone is inside the machine. The release is pressed which releases the latch and allows the door to open.

Note: Figure to the right shows the internal door release latch. All operators should be aware of this feature and how it works.



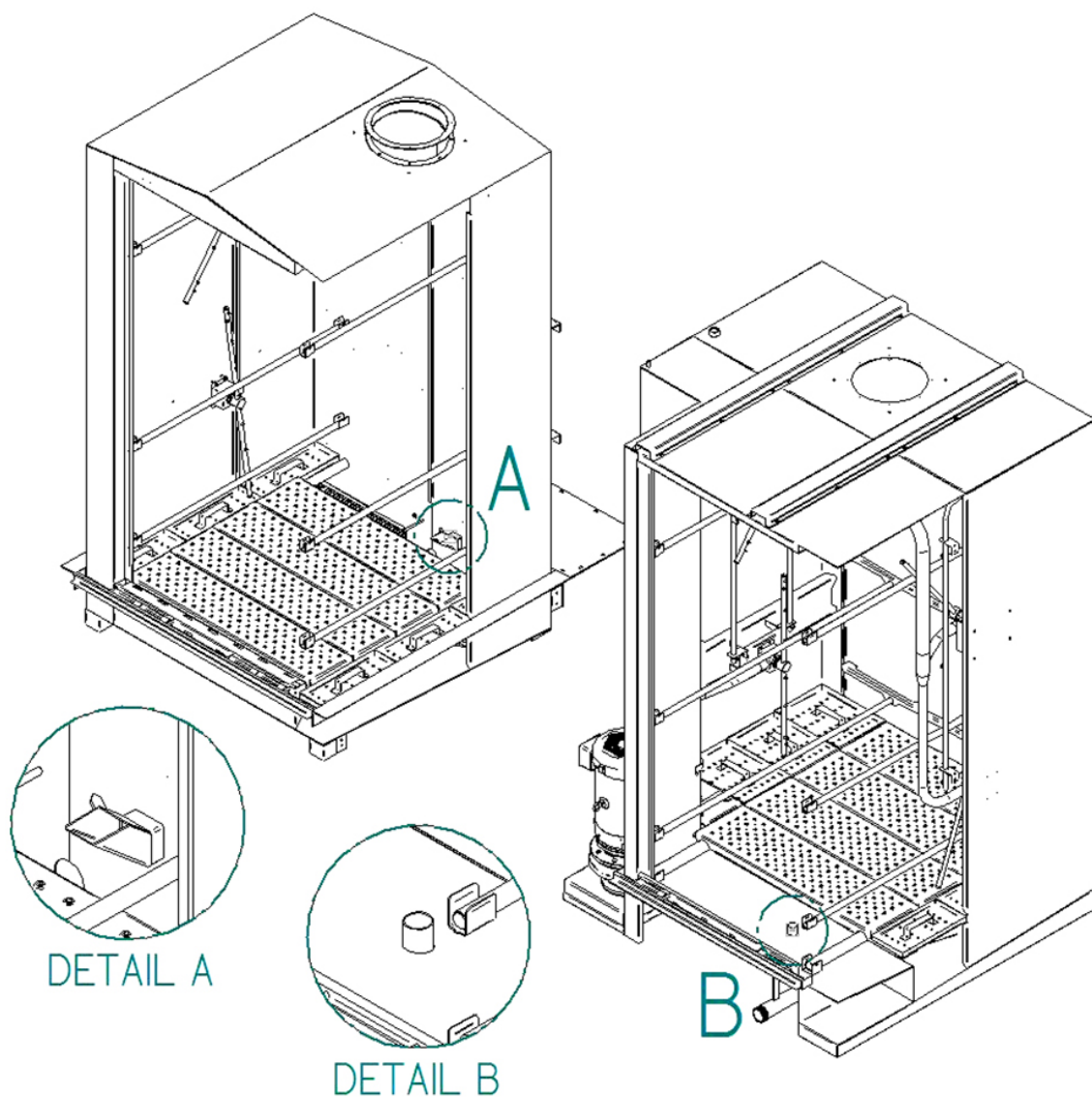
Internal Door Release - Push to release

START UP

Important: Remember where your electrical disconnects are located.

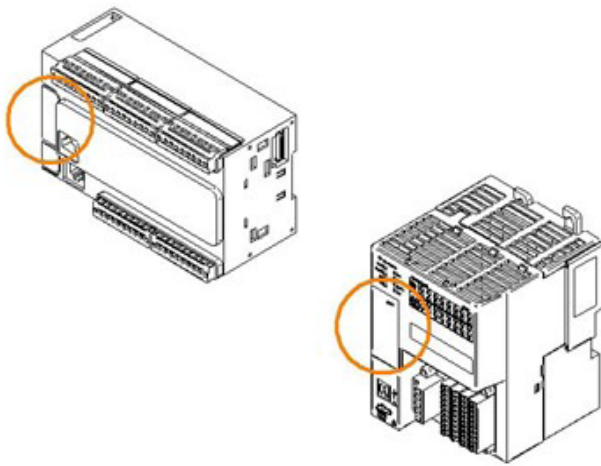
Some of the following steps will be performed in the electrical panel enclosure. We recommend disconnection of all incoming power before doing any service in the electrical enclosure. **Please Be Cautious!**

Disconnect the incoming electrical power, open the electrical panel enclosure.

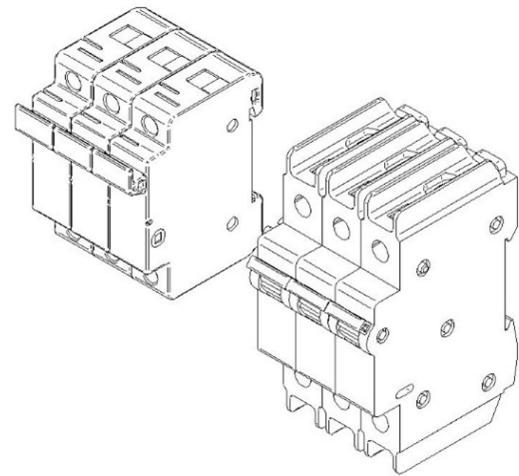


General Overflow Location – “DETAIL A” shows typical location for models ending in “B” or “SPW” – “DETAIL B” shows typical location for all other rack washers

- Locate and make sure the drain valve and pump petcock are in the closed position. The pump petcock will remain in the closed position unless service is needed on the pump.



Typical Run Switch Locations



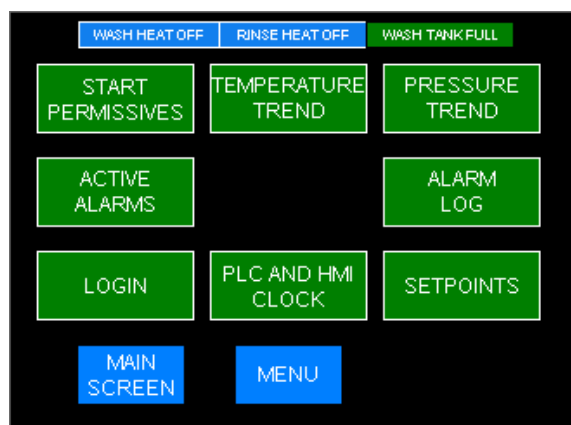
Left: Fuse Holder Right: Circuit Breaker

- Shut off all breakers going to the heaters, if electrically heated. Breakers will be marked WASH HEATER and RINSE HEATER. If machine is fitted with fuses and fuse holders, use appropriate disconnecting means to safely de-energize the Wash and Rinse heating circuits. See above to help identify what has been fitted in your machine.
- Check for all 120 V breakers / fuse holders to be in the on or energized position. Make sure the breaker / fuse holder for the wash pump is in the on or energized position. With the electrical enclosure panel cover still open, turn the incoming power back on. **(BE VERY CAUTIOUS - THIS IS NOW AN ELECTRICALLY LIVE PANEL)**. The PLC will boot up, verify the PLC is communicating with the I/O by checking the status lights on the PLC.
- Once the HMI screen has booted up, you should see a black screen with one button labeled “MAIN SCREEN”, press the button and the machine will automatically start to fill.

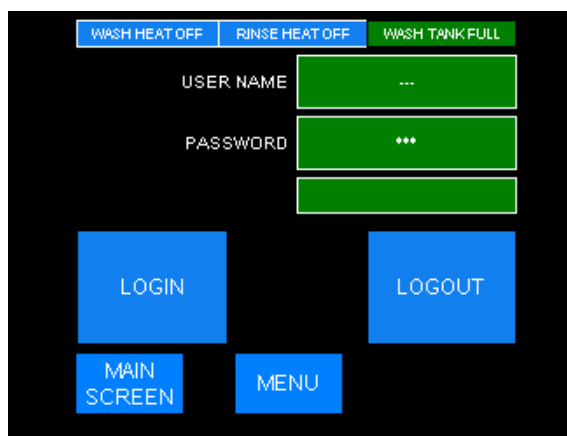
Note: Incoming water pressure exceeding 30psi (207 kPa) flow will void warranty on related items.

If the machine does not start to fill and the HMI has an error on the screen, the machine setpoints will need to be adjusted. To modify the set-points navigate to the “LOGIN” screen through the “MENU” screen. **When at the “LOGIN” screen use the following credentials: Username is C and the Password is DOUGMA2101.** The serial number can be found on the machine’s label located on the front door. If the log in credentials are not working, please contact Douglas Machines Corp.

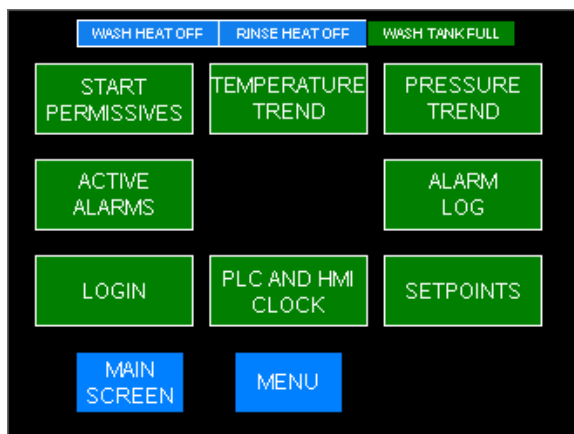
- While “Logged In” the setpoint options will be available on the “MENU” screen. Here we will have the ability to modify various operating parameters: If the error banner on the HMI says “CONFIGURATION MISMATCH” the “Set-points Options” menu can change option functionalities to match the purchased options on your machine. If you need help determining which options are on your machine, contact Douglas Machines Corp. for help.
- In the “Setpoints Options” screen make sure the “Flow Temp Monitoring” is enabled and that your drain and rinse options match your machine.



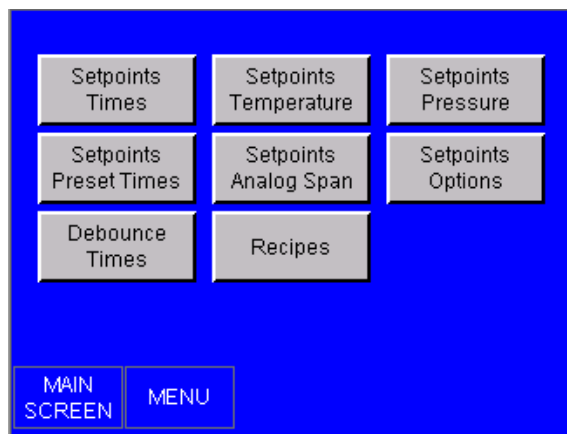
Menu Screen

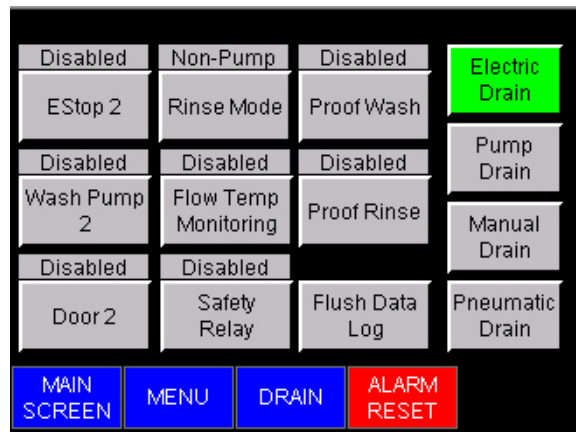


Log In Screen

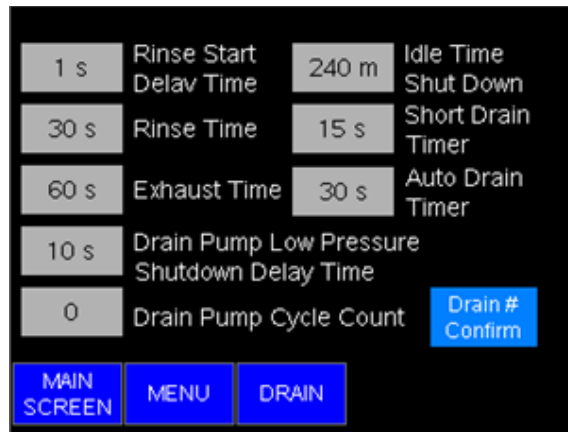


Menu Screen





Log In Screen

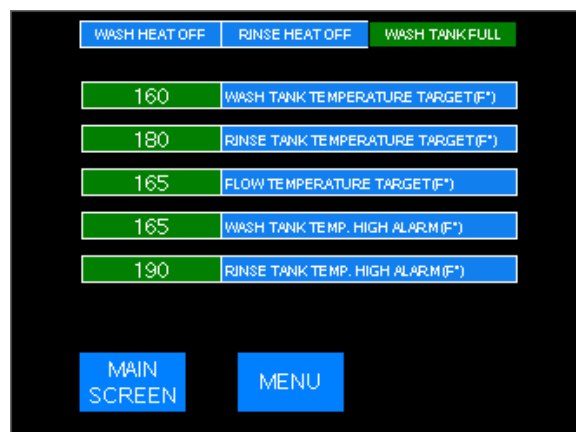


Set-Point Times

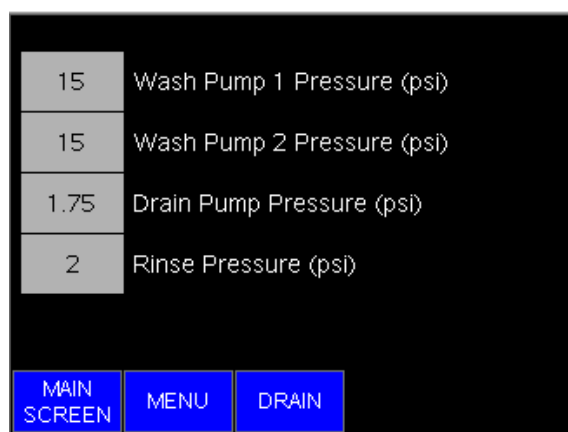
- To the right are the rest of the factory Set-Point Options presets that your machine should replicate upon arrival and start up. These can be navigated through the “Setpoints Menu”.

Note: “Idle Time Shut Down” does not completely shut down machine – only induces an “IDLE” state that disables, pumps, heating elements and filling of machine. “Rinse Time” should be set to at least 30 seconds to achieve NSF sanitization.

For Machine and Operator Safety Set-Point Times DO NOT set Wash or Rinse water temperatures above 190 °F (88 °C) . Rinse should not be set below 180 °F (82 °C) to achieve NSF Sanitization.



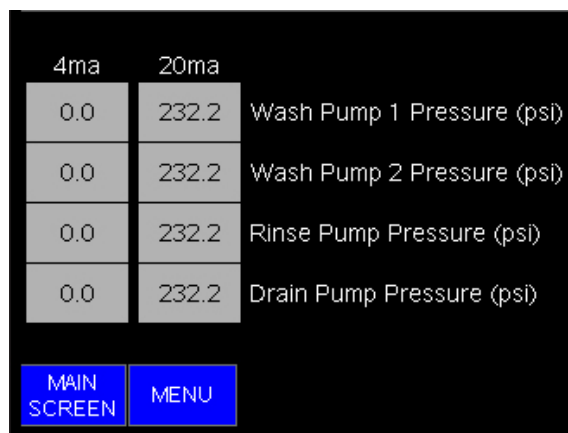
Set-Point Temperature



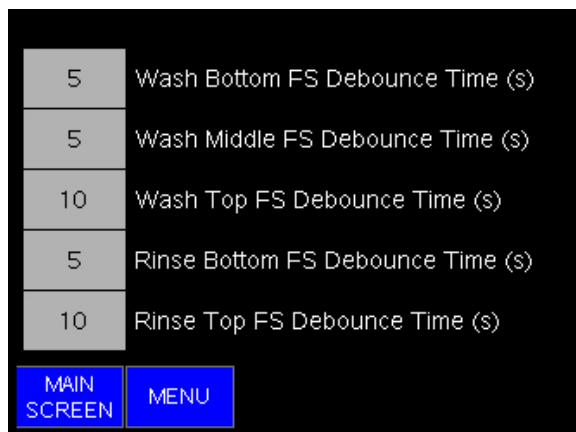
Set-Point Pressure



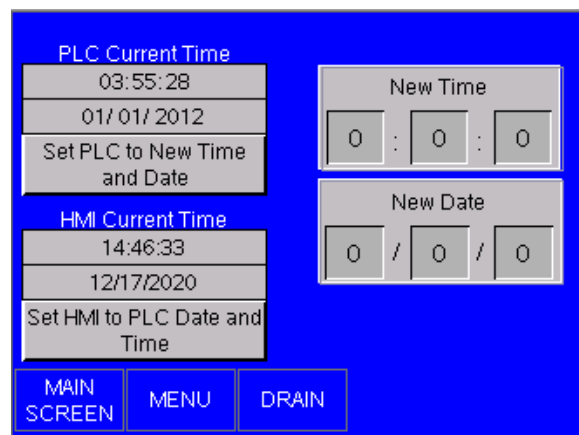
Set-Point Preset Times



Set-Point Analog Span



Debounce Times



PLC and HMI Clock

Going back to the MENU” screen, the “PLC & HMI Clock screen can be accessed while “Logged In”.

- Select the Short Wash Cycle and push the Start Button; the wash pump should start running at this point. If the pump does not start running, check that all fuses, if applicable and all breakers marked PUMP and 120v are in the on position. With the pump running, check the pump rotation looking at the rear of the pump motor PLC and HMI Clock and observing the cooling fan to see if it is rotating clockwise. Another indication that the pump is rotating backwards is the wash pump pressure gauge reading under 35psi (241 kPa). If the pump is not rotating in the correct direction, reversal of electrical phases will be necessary. (Contact your electrician or Douglas Machines for details.)
- Fill the rinse tank. Push the Start Button; the machine will now run through a complete cycle. A complete cycle entails a four, six, or eight-minute wash time depending on the cycle selected. During this time, the wash pump will be active. Followed by a 30 second rinse time in which the pump will be inactive and the rinse solenoid valve open. And finally, a one-minute dwell and steam extraction time in which the machine cannot be restarted until this time as expired. Repeat the cycle two more times to ensure the rinse tank is full.

Note: that while the machine is in the rinse and dwell period you will not see any readings on the jet pressure gauge, as the rinse cycle operates strictly off the incoming water pressure to the machine, not the wash pump. The pressure readout for the supply water is located above the machine in the incoming water supply circuit.

Failure to ensure the rinse tank is full of water may result in damage to the tank and heating components and may void the warranty of related items. Double check to ensure all heating circuits are off!

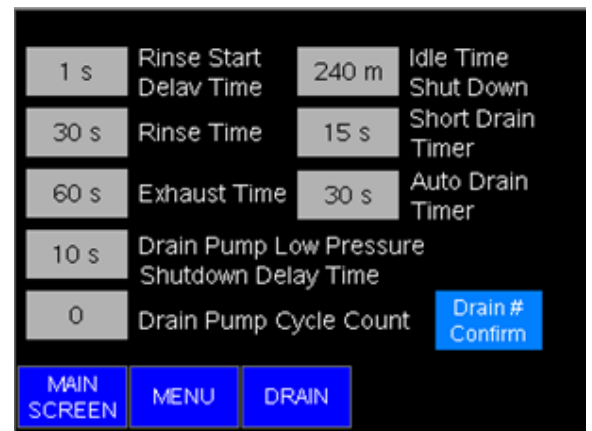
To ensure the rinse tank is filled, you need to hear water spraying inside the wash cabinet after the wash pump has stopped running. You may need to run more than one cycle to accomplish this.

CAUTION: Before proceeding to the next step, make sure you can hear water spraying in the cabinet after the wash pump stops running and the HMI displays “RINSING”. If not, heater damage may occur, and the warranty will become void for related items.

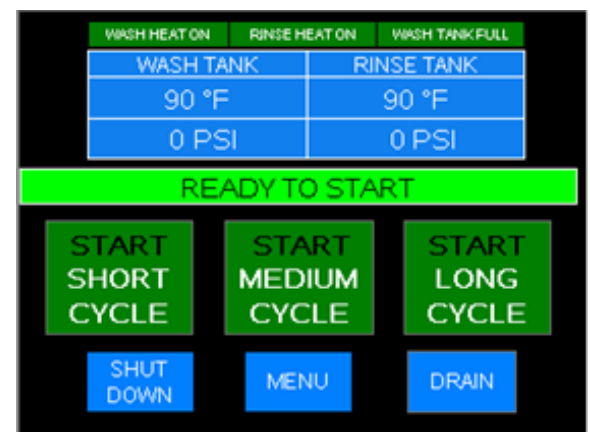
- Switch the WASH HEATER and RINSE HEATER breakers (or fuse holders) to the energized position. Allow 30 to 60 minutes for the machine to reach operating temperatures. At this point your heat source should be engaged. If electrically heated, the wash and rinse heater contactors will be engaged. If gas heated, the burner or burners will fire. If steam heated, the steam solenoids will open. If you are not sure, or if the specific heat source is not on and the unit is not heating up, please refer to the Trouble Shooting Guide or contact Douglas Machines for assistance.
- When everything is working fine, it is time to close and lock the electrical enclosure panel and start washing.

For Machines equipped with a “Pumped Drain” additional setup will be required after completing the steps above.

- On the “Setpoints Times” screen, set the “Drain Pump Cycle Count” to 2
- Run a “SHORT” cycle. Upon completion of the cycle the HMI status will notify the operator to “UNLOAD”. Open the door and inspect that the water level is not above the rinse jets. (The rinse jets are stationary and do not rotate like the wash spray arms.)
- If the water level is above the rinse jets, the “Short Drain Timer” will need to be increased on the “Setpoints Times” screen. Increasing the “Drain Pump Cycle Count” could also require additional time be added to the “Short Drain Timer”.
- Run a second “SHORT” cycle. After the machine has finished “EXHAUSTING”, the drain pump should continuously run until the wash tank is completely drained. When the HMI prompts the operator to “UNLOAD”, open and close the door. The “STOP CYCLE” button on the bottom right of the “MAIN” screen should now say “DRAIN”.
- Once on the “DRAIN” screen pay attention to the pump pressure readout towards the end of the drain cycle. This number needs to drop below the “Drain Pump Pressure” setpoint (1.75 PSI) on the “Setpoints Pressure” screen for the duration of the “Drain Pump Low Pressure Shutdown Delay Time” (10s) on the “Setpoints Times” screen for the drain pump to know when to stop pumping.

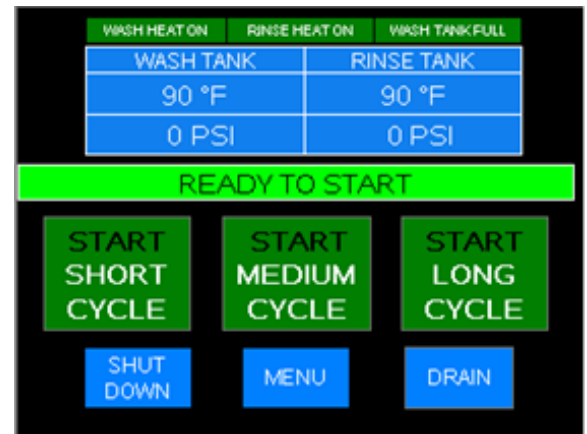


Set-Points Times



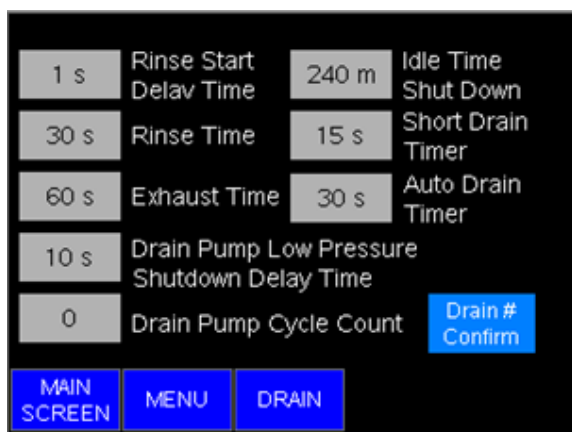
Set-Points Times

- If the drain pump does not stop pumping because the pressure does not drop below the “Drain Pump Pressure” setpoint press the “Press to Stop” button and increase the “Drain Pump Pressure” setpoint on the “Setpoints Pressure” screen just above the pressure readout on the “DRAIN” screen.
- Run the cycles again to ensure the “Drain Pump Pressure” setpoint has been calibrated correctly.
- If draining between cycle counts is not required set the “Drain Pump Cycle Count” to 0.

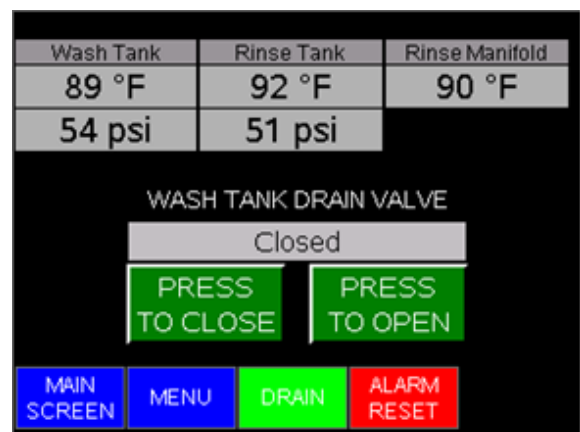


Set-Points Times

- For machines equipped with a “Motorized Drain Valve” the “Auto Drain Timer” Setpoint may need to be calibrated on the “Setpoint Times” screen.
- On the “Setpoints Times” screen set the “Drain Pump Cycle Count” to 2
- Run a “SHORT” cycle two times, When the HMI status is “DRAINING” watch the water level in the wash tank. (You may need to remove the filters to see the actual water level).
- If the wash tank still has water in it after the machine has finished draining the “Auto Drain Timer” setpoint will need to be increased.



Set-Points Times



Drain-Motorized Valve Option Enabled

OPERATION

General Operation

- With the machine turned on, filled to the overflow, and heated up to the correct operating temperatures, we will now be able to add detergent.

A non-foaming, non-caustic, aluminum safe type of soap must be used (unless the machine has been specifically manufactured for caustic use). Machines without a caustic upgrade package are designed to work with a chemical solution within a PH range of 5 - 9.5. Use of chlorine or bleach will void warranty, please contact Douglas Machines Corp. to determine what chemistry your machine is capable of running.

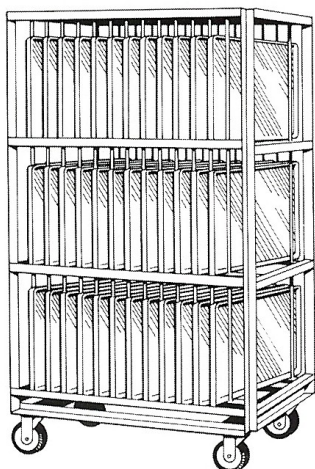
If the machine is fitted with an automatic soap dispenser, ensure the dispenser is turned on and filled up. If the machine is not equipped with an automatic soap dispenser, follow your detergent manufacturers' recommended specifications for application and concentration.

Note: Douglas Machines Corp. recommends the machine be operated with an automatic detergent dispenser equipped with a visual or audible alarm means to verify chemicals are being dispensed.

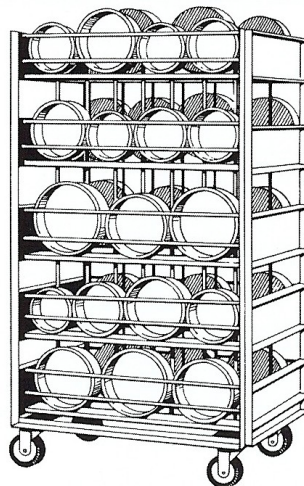
- When loading the machine with bowls, buckets, or any similar type of object, all items should be facing the wash arms. The racks are pitched so that open end of the product should be facing down. Use of the "hold down" gate may be necessary for lighter products.

When loading sheet pans into a sheet pan rack, you will notice that the sheet pan rack is built with angled pan supports. Load the rack so that the face or open side of the sheet pan is facing towards the door of the unit.

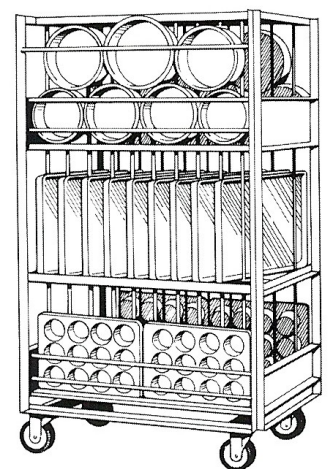
If you are planning to wash cake pans and have purchased a cake pan rack, you will need to load the cake pans into the area built on the outside of the rack. The cake pans will need to be loaded with the open side of the pan facing out towards the wash arms. Some racks are adjustable to accommodate the depth of the cake pan.



Sheet Pan Rack



Cake Pan Rack



Combination Rack

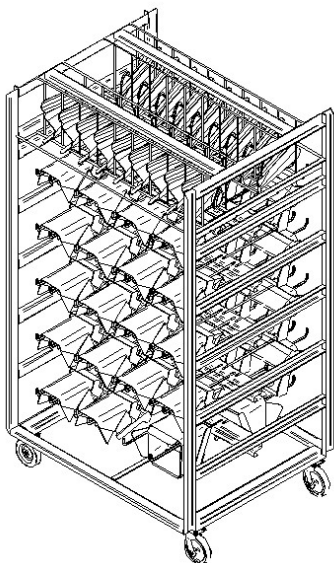
If you are planning to wash smaller utensils, such as spoons, scrappers, and whisks, you will need to purchase a model specific utensil basket (contact Douglas Machines Corp. for details).

Scale Parts can also be loaded on specific scale parts racks. These racks are commonly adjustable for various sized scale heads. “Feeder Pans” should be placed on the top of the rack at an angle on the angled feeder pan section. The “Hoppers” or “Weigh Buckets” should be placed on the holding rods with bottom of the hopper open towards the inside of the rack.

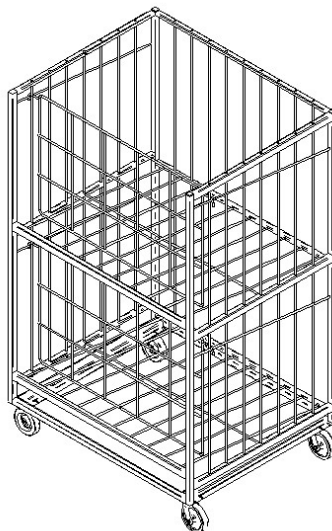
Note: Always push racks into the machine with hands placed on the inside cross members of the rack. **DO NOT PUSH RACK INTO MACHINE WITH HANDS ON OUTSIDE VERTICAL COLUMNS OF THE RACK. . DO NOT OVERLOAD THE RACK. IF THE RACK IS TOO HEAVY REMOVE SOME PRODUCT.**

- Once filled, the machine should be allowed to sit and reach operating temperatures before washing. This could take anywhere from 30-60 minutes. Add detergent and load. (See previous steps in General Operation). It is now time to start washing! Choose your desired wash cycle time by selecting the short four minute cycle, medium six minute cycle, or long eight minute cycle. Let the machine run through its entire cycle (wash, rinse, and dwell). If you open the door or hit the stop button any time during the cycle, the machine will shut off. When you restart the machine, it will not start from where it stopped, it will start from the beginning of the wash cycle. At this point you will be able to unload and then reload the machine.

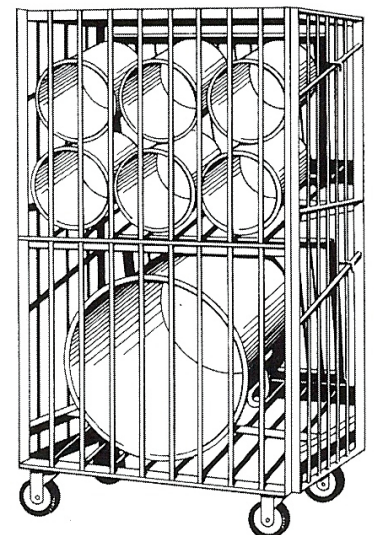
Note: If machine is in “Wash” mode and stopped, allow 3 second ramp down time for spray arms before opening machine door.



Scale Parts Rack



Empty Rack



Pot and Utensil Rack

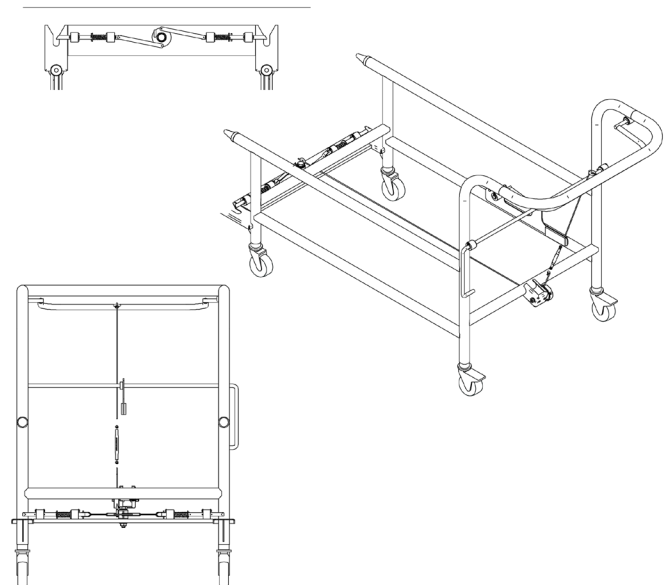
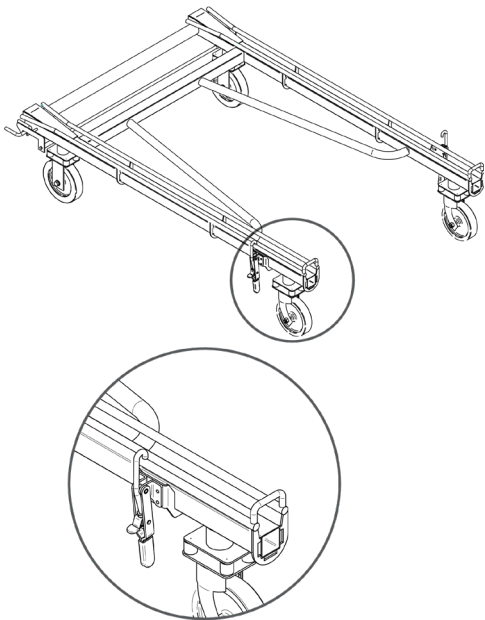
DOCKING CART (If Equipped)

General Information

The docking cart is designed to transport the machine wash racks and allow easy loading of the rack without the use of ramps or a machine pit. The docking cart docks to the front face of the machine and can be secured with a hook ring type latch.

Sequence Of Operation

- Load empty wash rack onto docking cart.
- Secure wash rack hook clamp.
- Load product in wash rack.
- Transport wash rack / cart to open ready machine.
- Dock cart to machine and secure Hook Docking Latch.
- Release wash rack "Hook Clamp".
- Roll wash rack into machine and close door. Run Cycle.
- Open the door when washing as finished.
- Roll wash rack out of machine onto Docking Cart.
- Secure wash rack Hook Clamp.
- Release Hook Docking Latch from machine.
- Remove rack / cart.
- Close machine door.



MAINTENANCE

Daily Maintenance

Note: As a precaution, you must disconnect or turn off all incoming power to the machine before proceeding with any maintenance.

Regular maintenance is essential in keeping your machine in good working order and operating at maximum efficiency. The following maintenance items are a minimum requirement. Frequency of maintenance is dependent on the number of hours the machine is in use and the amount and type of soil being removed.

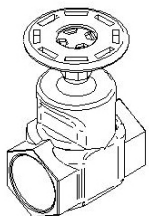
- The machine should never be drained or cleaned unless the power is in the OFF position. A cool down period should also be allowed before cleaning. If the machine is equipped with a motorized drain valve or pumped drain, ensure the machine is turned off on the front panel, then turn the drain open / close or on / off switch to the open / on position.

Note: the electric drain valve will only operate when the power on the front panel is in the off position, to ensure the valve is never opened during operation.

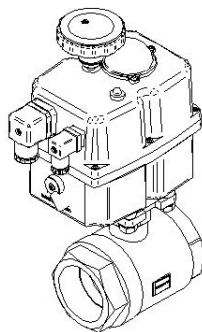
To drain the machine with the HMI Motorized Drain Valve or Pumped Drain combinations the machine will need to remain on until completely drained.

Note: After the machine has been drained, you must disconnect / turn off all incoming power to the machine before proceeding with any maintenance.

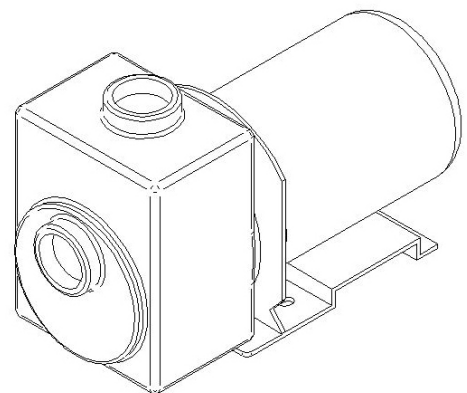
- Direct all debris toward and into the filter baskets.
- Remove and clean the filter baskets and floor panels.
- Scrub and rinse the wash tank reservoir.
- Spray the inside of the wash cabinet.
- Inspect the drain and overflow drain to ensure they are draining properly.
- Direct all remaining debris into the open drain located in the bottom of the reservoir tank. If your machine is equipped with a pumped drain you will need to remove the debris by hand. Flushing the debris down the pumped drain pump may cause clogging.



Manual Gate Valve



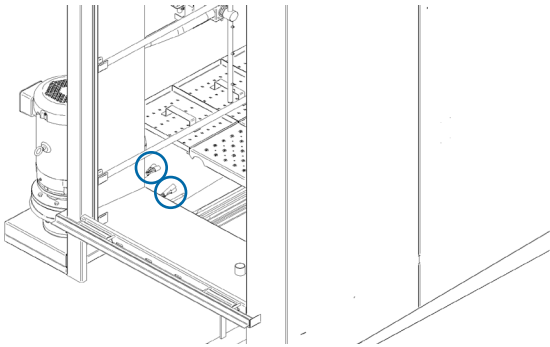
Motorized Drain Valve



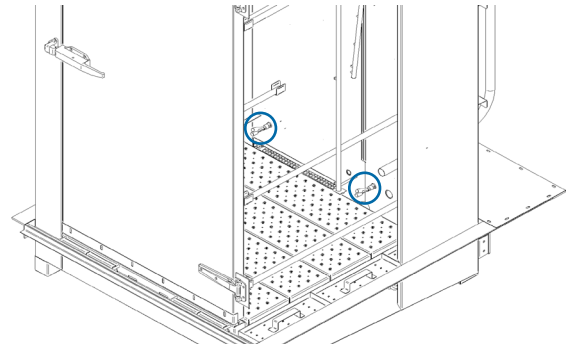
Pumped Drain

- Direct all remaining debris into the open drain located in the bottom of the reservoir tank. If your machine is equipped with a pumped drain you will need to remove the debris by hand. Flushing the debris down the pumped drain pump may cause clogging.

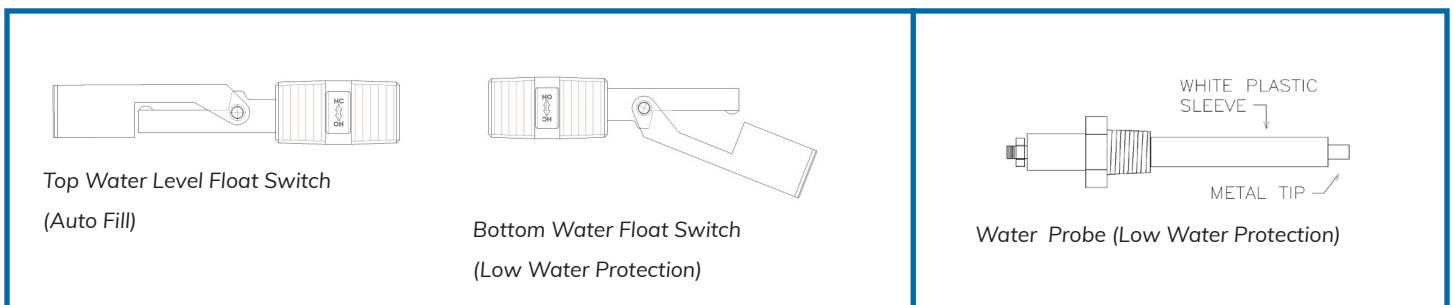
Your machine will have either be equipt with two liquid level float switches or 1 metal bottom liquid level probe.



Front Pumps Float Locations



Rear Pump Float Locations



- Clean both the Water Level Float switches or probe. Clean the entire float switch if your machine is equipped with floats. If equipt with a probe clean the metal tip of this probe with some a scouring pad.

Remove all scale and residue. Failure to do so may cause the heating source to remain on with no water in the reservoir, damaging heating components and may void warranty to related items. If your machine has an electric heater or heaters in the wash tank, it is now time to clean them. The heater coils will be located directly under or near the low water sensor. Use a wire brush or scouring pad to clean the exposed heating coils on the heater or heaters. Direct all debris into the drain.

- Clean and scrub the electric heating elements located within the wash tank (if applicable).

The heater coils will be located directly under or near the low water sensor. Use a wire brush or scouring pad to clean the exposed heating coils on the heater or heaters. Direct all debris into the drain.

When the wash cabinet, filters, wash tank reservoir, low water sensor, and electric heater or heaters (if applicable) have been cleaned, you can put the flooring and filters back in place.

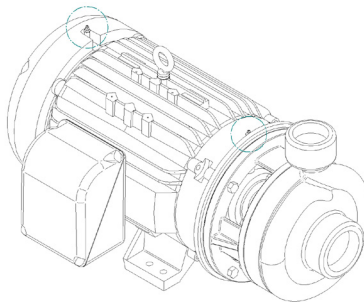
- Inspect all the spray jets. Look for any that might be missing, obstructed, or worn out. If you find any missing or worn out jets, contact Douglas Machines Corp. for a replacement. If you find any jets obstructed, try to remove the obstruction by pulling it out or by forcing it back into the jet pipe. If you need to force it back into the jet pipe, you will need to remove the jet pipe end cap to remove the obstruction from the pipe.
- Clean the outside of the machine. Use a stainless-steel cleaner or a mild detergent and a soft cloth to wipe down the outside of the machine.
- Close the drain valve and assure that the filters and floor panels are back in place.
- Reconnect the main power.
- Turn the machine back on and allow it to fill and come back to operating temperature. The machine is now ready for use.

Do not turn on the main power until you are ready to resume washing again.

Never leave the machine "On" for longer than four hours between running cycles. Damage to the rinse components and or tank could occur.

Periodic Maintenance

- Wash pump motor lubrication. You will find two grease fittings on the top of the wash pump motor and one at each end. You will need to grease these under normal conditions every 90 days. Use an electric motor bearing grease like Shell Dolum or Chevron Sill.
- If you have purchased the steam extraction option, you may need to grease the 12" steam extraction fan bearings.



Note: Some of these fans are equipped with sealed bearings and do not require greasing. You will need to determine if your fan is equipped with the sealed bearings or if the bearings will need to be greased. Refer to your parts manual to identify the steam extraction fan and the grease fitting location. If greasing is required, it should be performed every 90 days. Use high temperature food grade grease such as Sentinel Slnth #2.

- The removal of lime and or scale may be necessary at certain times. This will vary due to the condition of your water. If you are finding lime and scale building up on the interior walls of the machine, chances are; they are also building up in the piping. This could impair washing ability. You will need to use a lime and scale removal chemical. Whatever you decide to use, be sure it is safe to use on stainless steel, bronze, and brass. If you have any questions on what to use or how to use it, do not hesitate to contact Douglas Machines Corp.
- The Solenoid Valves should be checked periodically to ensure they are in good working condition, solenoids have a life span of about 1 million cycles.

TROUBLE SHOOTING

Note: Some of the following remedies may need to be performed in the electrical panel.

Before you perform any task in the electrical panel, please make sure all incoming power is disconnected or turned off.

PROBLEM	THINGS TO CHECK
Machine will not turn on	Incoming power turned ON Machine circuit breakers and/or fuses are in place & turned on
Machine will not heat up (gas heated)	Machine is filled to the correct water level Low water sensor is clean Gas supply is on Setpoints are set to desired temperature
Machine will not heat up (electric)	Machine is filled to the correct level Low water sensor is clean Circuit breakers and/or fuses marked "Heaters" are on Setpoints are set to desired temperature
Wash pump will not start	Machine is filled to the correct water level Lower water sensor is clean Door is in the closed position Circuit breakers and/or fuses marked "Wash Pump Motor" are on

PROBLEM	THINGS TO CHECK
Wash pressure is low	Machine is filled to the correct water level Filters are clear and in place All wash arms secured and end caps in place Confirm there is no excessive foam in the wash tank Pump is rotating in the correct direction Pressure gauge is functioning correctly
Not Rinsing	Incoming water pressure is low Door is closed and door sensor is functioning properly Rinse solenoid valve is operating
Rinse Temperature Is Not Hot Enough	Incoming water temperature (120° - 140° max.) Incoming water pressure (no less than 20 psi and no more than 30 psi of flow) Setpoints are set to correct temperature (180° - 190° max) Heat source is engaged
Not Cleaning	Detergent level Machine pressure (see door sticker for minimum pressure) Wash temperature Wash jets (clogged) Water level Filters clear

If you are experiencing any other problems or have any questions or concerns, please do not hesitate to contact the Service Department at 800-331-6870.



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WASHING AND SANITIZING SYSTEMS

IMPORTANT NUMBERS

FOR WARRANTY WORK YOU MUST CALL
DOUGLAS MACHINES CORP. AT 800-331-6870 AND WE WILL ISSUE A
PURCHASE ORDER TO THE LOCAL SERVICE AGENT.

FOR PART OR TECHNICAL SUPPORT,
PLEASE CALL DOUGLAS MACHINES CORP. AT 800-331-6870

Thank You!

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