



DOUGLAS
WASHING AND SANITIZING SYSTEMS

COP

OPERATION GUIDE

Parts & Service 800-331-6870

DougMac.com



Second Edition (April 2021)

*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 eyewear.
- 🔥 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. procedure.
- 🔥 **Never** enter a machine where 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 racks if racks are too heavy unload some product.
- 🔥 Always use Caution. – Use mats to help reduce slip hazards.
- 🔥 Ensure that float switches and level probes are well maintained and cleaned daily. Failure to do so can result in unintended heater startup and potential fire.
- 🔥 **Never** leave your machine idle (not in use) for more than 4 hours. This can result in water evaporating out of the rinse tank causing damaging. Do not touch Rinse tank without a cool-down period.

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IMPORTANT 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 tankless 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.

DELIVERY

Upon delivery of your Douglas washer:

- ◆ 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.

SAFETY PRECAUTIONS

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

Please Be Cautious!

BEFORE ATTEMPTING TO PERFORM ANY SERVICE TO THE UNIT ENSURE THAT THE ELECTRICAL DISCONNECT HAS BEEN TURNED TO THE OFF POSITION AND LOCKED OUT WITH A PHYSICAL LOCKING MECHANISM.

“THIS MACHINE MUST BE OPERATED WITH AN AUTOMATIC DETERGENT FEEDER AND, IF APPLICABLE AN AUTOMATIC CHEMICAL SANITIZER FEEDER, INCLUDING A VISUAL MEANS TO VERIFY THAT DETERGENTS AND SANITIZERS ARE DELIVERED OR A VISUAL OR AUDIBLE ALARM TO SIGNAL IF DETERGENTS AND SANITIZERS ARE NOT AVAILABLE FOR DELIVERY TO THE RESPECTIVE WASHING AND SANITIZING SYSTEM.”

This manual will help with troubleshooting and the replacement of parts.

For parts or technical assistance please call Douglas Machines Corporation at **800-331-6870** and ask for the Service Department. Please have your **Serial Number** available to assist with the call. If the call is an emergency and after normal working hours (Monday – Friday 8 AM - 4:30 PM) you can call your warranty provider direct and follow it up with a call during normal hours of operations. Douglas Machines Corporation will provide you with your local warranty provider contact information during the Factory Start up and Demonstration.

DO'S AND DO NOT'S

DO'S

- Before attempting any maintenance or repairs, ensure that electrical supply to the
- unit has been turned off and locked out. Wear safety glasses.
- Check inside the unit before starting the cycle to ensure nothing is inside.
- Keep hands and clothing clear of moving parts.
- Ensure safety rules are followed at all times.
- Ensure all electrical panel enclosures are closed before using the match

DO NOT'S

- Attempt to perform any maintenance, repairs or adjustments unless the
- supply power has been shut off and locked out first.
- Open door during machine cycle. There may be a delay between cycle steps so ensure cycle is complete by visually checking that the Run light is not illuminated.
- Hose down any electrical components.
- Remove any access panels or pit grids while unit is in use. Touch outside of cabinet without wearing gloves.
- Attempt to do any service or make any adjustments to this unit unless you
- are qualified service person.

SET-UP

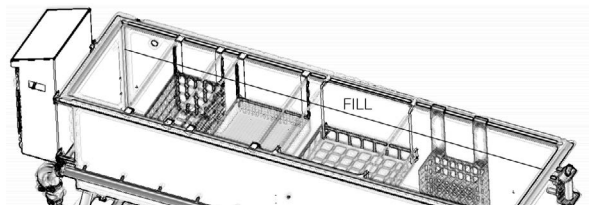
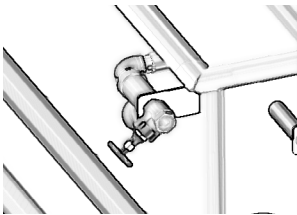
Before attempting to use your equipment, ensure that the following guidelines are used for positioning of the equipment each time the unit is moved.

- Ensure unit is on a flat and level surface.
- Ensure wheel locks are engaged.
- Ensure Water Supply Hose does not create a trip hazard.
- Ensure Water Supply does not exceed 115° F.
- Ensure Power Supply Cable does not create a trip hazard.

OPERATION

After ensuring that the unit has been set up to the proper guidelines you are ready to fill the unit and begin washing. Just follow the steps below and you will be on your way in no time.

- Check to ensure drain valve is closed.
- Turn on main disconnect switch.
- Turn on Fill Valve until water level is above the top of the parts baskets.



- Add detergent, when putting in powered detergent wait until the pump motor is running before dumping it into the sink.
- Place items to be washed into the sink. Use the baskets for smaller items. When placing items in the sink try and point open end towards the jetting to allow for a better wash.
- Turn the Main Power and Control Power Switches to the ON position.
- Select the desired amount of time on the timer and push the green start button.
- When unit shuts off remove items from sink. Rinse with Fresh Water before allowing parts to dry.



- Repeat steps 3, 4, 6, and 7.
- If at any time you feel it necessary to stop the wash cycle you can simply push the STOP Button.

SHUT DOWN

- Turn the Main Power and Control Power Switches to the OFF position.
- Open Drain Valve and allow unit to completely drain.
- Rinse and clean out debris from inside sink.

MAINTENANCE

Daily Maintenance

Note: As a precaution please disconnect, or turn off all incoming power to 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 listed are a minimum requirement; frequency of maintenance is dependent on the number of hours the machine is in use and amount and type of soil being removed.

- ◆ **With the Power Coming To The Machine Turned Off**, start draining the machine. After the machine has drained. Clean the inside of the sink. Direct all debris toward and into the filter screen. Remove and clean the filter screen, leaving it out for the following steps.
- ◆ With the filter screen removed. Finish cleaning the wash tank reservoir. Direct all remaining debris into the open drain located in the bottom of the reservoir tank.
- ◆ Now that the wash tank reservoir has been cleaned. You can now put the filter screen back in place. Inspect all the spray jets, look for any that are obstructed. 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'll need to remove the jet pipe end cap in order to remove the obstruction from the pipe.
- ◆ Clean the outside of the machine. Using a stainless steel cleaner or soft cloth with a mild detergent wipe down the outside of the machine.



Periodical Maintenance

- ◆ Wash pump motor lubrication. You'll find two- (2) grease fitting on the top of the wash pump motor, one- (1) at each end. You'll need to grease these under normal conditions every 90 days. Use an electric motor bearing grease similar to Shell Dolum or Chevron SRI.
- ◆ 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're finding lime and scale building up on the interior walls of the machine chances are they're also building up in the piping. This could impair washing ability. You'll need to use some sort of lime and scale removal chemical. Whatever you decide to use please make sure it's 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.

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: Machine will not turn on.

Things to check:

- 💧 Is there incoming power?
- 💧 Machines circuit breakers and or fuses in place and turned on.

Problem: Machine will not heat up.

Things to check:

- 💧 Machine is filled to correct level.
- 💧 Thermostat set to desired temperature.

Problem: Wash pump will not start.

Things to check:

- 💧 Machine is filled to correct level.
- 💧 Circuit breakers and or fuses marked wash pump motor.

Problem: Not cleaning.

Things to check:

- 💧 Detergent level.
- 💧 Wash temperature.
- 💧 Wash jets (clogged or missing).
- 💧 Water Level.
- 💧 Filter Screen clear.



DOUGLAS
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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 TECHINCAL SUPPORT, PLEASE CALL
DOUGLAS MACHINES CORP. AT 800-331-6870

Thank You!

For Partnering with
Douglas Washing & Sanitizing Systems.

REDUCE DOWNTIME

Save money and reduce down time by having the parts on hand with our Platinum, Gold, Silver kits.

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