

INSTRUCTIONS



LXG SERIES GLASSWASHER

LXG SERIES GLASSWASHERS

MODELS

LXGC	ML-110380
LXGH	ML-110381

Previous models covered by this manual:

LXGC	ML-110889	(with 2" dia. casters)
LXGH	ML-110890	(with 2" dia. casters)



701 S. RIDGE AVENUE
TROY, OHIO 45374-0001

937 332-3000

www.hobartcorp.com

FORM 19469 Rev. C (Nov. 2000)

Installation, Operation and Care of LXG SERIES GLASSWASHERS

SAVE THESE INSTRUCTIONS

GENERAL

The LXG Series Glasswashers are fully automatic, front-loading warewashers specially suited to undercounter use in close-quarters where a short door is advantageous. LXG models are equipped with a $\frac{3}{4}$ HP electric motor. To conserve energy, the glasswashers automatically shut down 4 hours after last use. Standard equipment includes (2) 20" x 20" racks, electronic controls, pumped drain, fill hose, drain hose, and pumps for dispensing liquid detergent, rinse agent, and chemical sanitizing (on model LXGC only). A 2" diameter caster base is an available accessory.

Model LXGH has a fresh water rinse with a built-in booster heater. The 140°F incoming water supply is heated in the booster to 180°F.

Model LXGC has a fresh water rinse and uses the 140°F incoming water supply and chemical sanitizing. Household bleach with either 5.25% or 8.4% sodium hypochlorite solution is the sanitizing agent.

The LXG models use 1.2 gallons of water per rack.

**LXG SERIES
GLASSWASHER**



INSTALLATION

UNPACKING

Immediately after unpacking, check for possible shipping damage. If this machine is found to be damaged, save the packaging material and contact the carrier within 15 days of delivery.

Prior to installation, verify that the electrical service agrees with the specifications on the machine data plate located on the front of the glasswasher.

LEVELING

The machine **MUST** be level. Place the dishwasher in its operating location. Level the machine before making connections. Using a carpenter's level placed on the rack guides, level the machine front-to-back and side-to-side by threading the adjustable feet in or out. After leveling the machine, cover the exposed threads of the adjustable feet with black rubber tubing supplied (see separate instructions furnished with machine).

LOCATION

Steam generated from normal operation may escape from the door. Wood, laminates, veneers, etc. are unsuitable materials for use in areas exposed to glasswasher steam and detergents.

Stainless steel or other moisture resistant shields are recommended for surfaces adjacent to LX sides and top.

WATER REQUIREMENTS

Proper water quality can improve ware washing performance by reducing spotting, lowering chemical supply costs, enhancing effectiveness of labor, and extending equipment life. Local water conditions vary from one location to another. The recommended proper water treatment for effective and efficient use of this equipment will also vary depending on the local water conditions. Ask your municipal water supplier for details about local water specifics prior to installation.

Recommended water hardness is 4 – 6 grains of hardness per gallon. Chlorides must not exceed 50 parts per million. Water hardness above 6 grains per gallon should be treated by a water conditioner (water softener or in-line treatment). Water hardness below 4 grains per gallon also requires a water treatment to reduce potential corrosion. Water treatment has been shown to reduce costs associated with machine cleaning, reduce deliming of the dishwasher, reduce detergent usage, and reduce corrosion of metallic surfaces in the booster water heater and dishwasher.

Sediment, silica, chlorides, or other dissolved solids may lead to a recommendation for particulate filtration or reverse osmosis treatment.

If an inspection of the dishwasher or booster heater reveals lime build-up after the equipment has been in service, in-line water treatment should be considered, and, if recommended, should be installed and used as directed. Contact your Hobart Service office for specific recommendations.

NOTE: Iron in the water supply can cause staining. An iron filter is recommended for iron concentration greater than 0.1 part per million. High chloride levels in the water supply can cause pitting. A chloride removal system is required if levels exceed 50 parts per million.

PLUMBING CONNECTIONS

WARNING: PLUMBING CONNECTIONS MUST COMPLY WITH APPLICABLE SANITARY, SAFETY AND PLUMBING CODES.

Incoming Water Supply Connection

A water hammer arrestor (meeting ASSE-1010 Standard or equivalent) should be installed (not supplied) in the water supply line.

Water must be proper hardness. Recommended hardness range is 4 – 6 grains per gallon. Lower hardness can promote corrosion, higher hardness may cause excessive formation of lime scale.

The plumber who connects this machine is responsible for making certain that water lines are THOROUGHLY FLUSHED OUT BEFORE connecting to the dishwasher. This "flush-out" is necessary to remove all foreign matter, such as chips (resulting from cutting or threading of pipes), pipe joint compound from the lines, or, if soldered fittings are used, bits of solder or cuttings from the tubing. Debris, if not removed, may lodge in the glasswasher's plumbing components and render them inoperative. Manual valves or solenoid valves fouled by foreign matter and any expenses resulting from this fouling are NOT the responsibility of the manufacturer.

The water supplied to the glasswasher must have 15 – 25 psig flowing pressure with a minimum temperature of 140°F. If flowing pressure exceeds 25 psig, a pressure reducing valve (not supplied) must be installed in the supply line. **CAUTION: The water pressure regulator must have a relief bypass. Failure to use the proper type of pressure regulator may result in damage to the unit.** If flowing pressure is less than 15 psig, improper machine operation may result.

A manual shutoff valve (not supplied) should be installed upstream of the fill hose to accommodate servicing the machine. It is recommended that a line strainer (not supplied) be installed in the supply line between the manual shutoff valve and the connection point on the machine. Make plumbing connections with 1/2" minimum OD copper piping (3/4" OD recommended); terminate with a 3/4" male garden hose fitting (not supplied).

Drain Connection

The drain hose is provided with a 3/4" pipe connection adapter. This should be securely plumbed into the sink drain. Use care not to kink the hose. The drain must have a minimum flow capacity of 10 gallons per minute.

ELECTRICAL CONNECTIONS

WARNING: ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY AND PLACE A TAG AT THE DISCONNECT SWITCH TO INDICATE THAT YOU ARE WORKING ON THE CIRCUIT.

Refer to the machine data plate and the label inside the controls drawer for power connection information. Use stranded copper wire rated 90°C and proper wire size.

ELECTRICAL DATA ◊

Model	Volts / Hertz / Phase	Minimum Circuit Ampacity Maximum Protective Device AMPS	90°C Stranded Copper Wire Size
LXGC	120 / 60 / 1	20	12
	208 / 60 / 1		
	120 / 208 (3W) / 60 / 1 *		
	240 / 60 / 1		
	120 / 240 (3W) / 60 / 1 *		
LXGH (with booster)	208 / 60 / 1	50	8
	120 / 208 (3W) / 60 / 1 *		
	240 / 60 / 1		
	120 / 240 (3W) / 60 / 1 *		
	208 / 60 / 3	40	8
	240 / 60 / 3	35	8
	380 - 400 / 60 / 3 480 / 60 / 3	20	12

* The (3W) systems require three power wires which include a current carrying neutral. An additional fourth wire must be provided for machine ground.

◊ Compiled in accordance with the National Electrical Code, NFPA 70, latest edition.

1. Remove the cover plate at the upper right rear of the machine (Fig. 1). A hole for 1" trade size conduit is provided (Fig. 1).

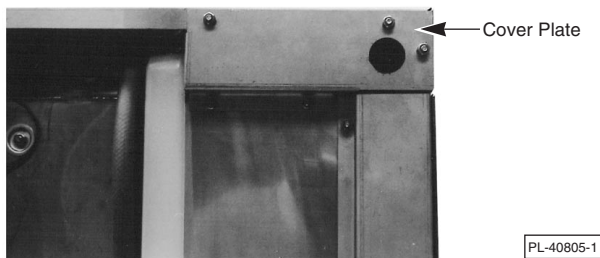


Fig. 1

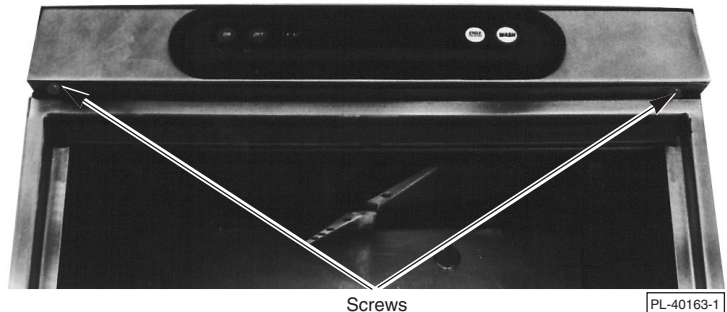


Fig. 2

2. Open the dishwasher door and remove the 2 screws (Fig. 2) securing the controls drawer. Close the dishwasher door and open the controls drawer fully.
3. Install 1" trade size conduit and fitting to the cover plate (Fig. 1). A 90° fitting is recommended.
4. Feed wires over the top of the wash tank to the strain relief(s) at the rear of the component drawer. Provide 32 to 36 inches of wire from the conduit fitting through the strain relief to the terminal block.
5. Reinstall cover plate (3 screws, Fig. 1).
6. Connect wires to terminal block and ground per wiring diagram. Keep excess wire in drawer to a minimum.
7. Tighten set screw on the strain relief(s).
8. Close controls drawer and replace screws.

DETERGENT AND RINSE AID

Use only commercial grade detergents recommended by your chemical professional. Do not use detergents formulated for residential dishwashers.

Detergent and rinse aid pump ON times are factory set. If adjustments are required, contact Service.

	Detergent	Rinse Aid
Factory Setting Delivers	7 Milliliters	4 Milliliters
Range of Possible Settings	1 - 30 Milliliters	1 - 10 Milliliters

Place the detergent and rinse aid containers (provided by your chemical supplier) in a location where the delivery tubes will reach them.

Remove the detergent bottle cap and put the **RED** delivery tube in the detergent container.

Remove the rinse aid bottle cap and place the **BLUE** delivery tube in the rinse aid container.

Be sure to push the delivery tube standpipes completely to the bottom of each container. Make sure there are no obstructions or kinks in the delivery tubes.

CHEMICAL SANITIZER (Model LXGC Only)

CAUTION: Items such as pewter, aluminum, and silver will be attacked by sodium hypochlorite (bleach). Therefore, chemical sanitizing dishwashers should not be used to wash such items.

On model LXGC only, the chemical sanitizer pump is factory set for use with 5.25% sodium hypochlorite solution. If 8.4% sodium hypochlorite solution is to be used, contact Service to have the pump's ON time reset.

Place a one-gallon bottle of 5.25% or 8.40% sodium hypochlorite solution (bleach) in a desired location no higher than 10 inches off the floor. Do not premix sanitizing solution with water or any other liquid.

WARNING: NEVER PREMIX A WETTING AGENT WITH THE SANITIZING SOLUTION. MIXING MAY CAUSE HAZARDOUS GAS TO FORM.

Remove the sanitizer bottle cap and place the **WHITE** delivery tube in the sanitizer container. Push the delivery tube standpipe completely to the bottom of the container and make sure there are no obstructions or kinks in the delivery tube.

Model LXGC must be operated through four complete cycles (without dishes) to initially charge the sanitizer delivery system.

Frequently check the clear portion of the chemical feed standpipe (at the sanitizer bottle) to make sure that there is a sufficient chemical supply.

Refer to the Installation Diagrams on the next two pages for additional details.

BEFORE FIRST USE

The glasswasher must be cleaned after installation and before being used. Refer to Cleaning, page 12.

WARNING:

REQUIRED FLOWING WATER PRESSURE TO THE GLASSWASHER IS 20 ± 5 PSIG. IF PRESSURES HIGHER THAN 25 PSIG ARE PRESENT, A PRESSURE REGULATING VALVE WITH RELIEF BY-PASS MUST BE INSTALLED IN THE WATER LINE TO THE GLASSWASHER (BY OTHERS).

IMPORTANT: THE SODIUM HYPOCHLORITE (LIQUID BLEACH) CONTAINER SHOULD BE PLACED NO HIGHER THAN 10" ABOVE FLOOR.

IF BLEACH CONTAINER IS TO BE PLACED IN CABINET ADJACENT TO GLASSWASHER, A 1/2" DIA HOLE IS REQUIRED IN THE CABINET TO RUN BLEACH SUPPLY LINE.

USE ONLY 5.25 OR 8.4% SODIUM HYPOCHLORITE (LIQUID BLEACH) AS SANITIZING CHEMICAL TO INSURE PROPER OPERATION OF DISHWASHER.

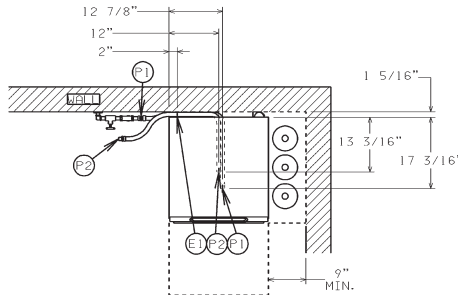
DO NOT PRE-MIX WETTING AGENT AND SODIUM HYPOCHLORITE (LIQUID BLEACH). CERTAIN MATERIALS INCLUDING SILVER PLATE, ALUMINUM AND PEWTER ARE ATTACKED BY SODIUM HYPOCHLORITE (LIQUID BLEACH). SEE INSTRUCTION MANUAL.

NOTES:

1. ALL VERTICAL MACHINE DIMENSIONS TAKEN FROM FLOOR MAY BE INCREASED BY 1".
2. MOIST AIR ESCAPES FROM THE DOOR. USE ONLY MOISTURE RESISTANT MATERIALS ADJACENT TO LX SIDES AND TOP.

PLUMBING NOTES:

1. WATER HAMMER ARRESTOR (MEETING ASSE-1010 STANDARD OR EQUIVALENT) TO BE SUPPLIED (BY OTHERS) IN COMMON WATER SUPPLY LINE AT SERVICE CONNECTION.
 2. RECOMMENDED WATER HARDNESS TO BE 4-6 GRAINS FOR BEST RESULTS.
 3. MINIMUM WATER CONDUCTIVITY REQUIRED - 30 MICRO-MHOS/CM.
4. IF DRAIN HOSE IS LOOPED ABOVE A SINK, THE LOOP MUST NOT EXCEED 38" AFF.



CONNECTION INFORMATION
(AFF - ABOVE FINISHED FLOOR)

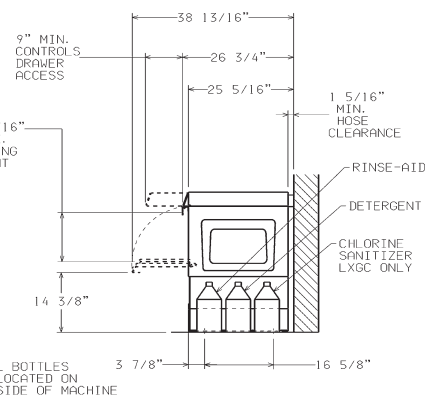
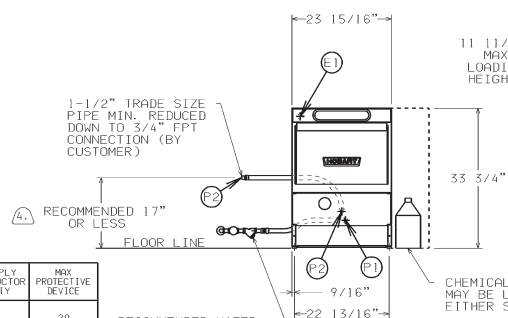
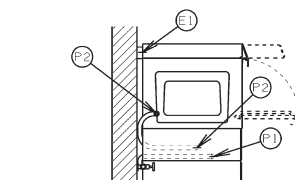
LEGEND

- E1 ELECTRICAL CONNECTION: 1-3/8" DIA. HOLE FOR 1" TRADE SIZE CONDUIT: 31-3/4" AFF.
- P1 SINGLE FILL AND RINSE CONNECTION: 3/4" FEMALE GARDEN HOSE FITTING ON 6' LONG HOSE SUPPLIED WITH MACHINE; 140°F WATER MIN. FOR LXGC & LXGH; 1-1/2" AFF.
- P2 DRAIN CONNECTION: 3/4" MPT FITTING WITH 6' LONG HOSE SUPPLIED WITH MACHINE; 5-9/16" AFF.

WARNING

ELECTRICAL AND GROUNDING CONNECTIONS MUST COMPLY WITH THE APPLICABLE PORTIONS OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER LOCAL ELECTRICAL CODES.

PLUMBING CONNECTIONS MUST COMPLY WITH APPLICABLE SANITARY, SAFETY AND PLUMBING CODES. DRAIN AND FILL LINE CONFIGURATIONS VARY, SOME METHODS ARE SHOWN ON THIS DRAWING.



MACHINE TYPE & SPECIFICATION	RATED AMPS	MIN SUPPLY CKT CONDUCTOR CAPACITY	MAX PROTECTIVE DEVICE
LXGC (120/60/1) USE 90°C 12 AWG (MIN), STRANDED COPPER WIRE ONLY.	15.3	20	20
LXGC (208/60/1); (120/208(5W)/60/1X) USE 90°C 12 AWG (MIN), STRANDED COPPER WIRE ONLY.	14.8	20	20
LXGC (240/60/1); (120/240(5W)/60/1X) USE 90°C 12 AWG (MIN), STRANDED COPPER WIRE ONLY.	15.9	20	20
LXGH (208/60/1); (120/208(5W)/60/1X) USE 90°C 8 AWG (MIN), STRANDED COPPER WIRE ONLY.	43.6	50	50
LXGH (240/60/1); (120/240(5W)/60/1X) USE 90°C 8 AWG (MIN), STRANDED COPPER WIRE ONLY.	38.9	50	50
LXGH (208/60/2) USE 90°C 8 AWG (MIN), STRANDED COPPER WIRE ONLY.	51.2	40	40
LXGH (240/60/2) USE 90°C 8 AWG (MIN), STRANDED COPPER WIRE ONLY.	27.6	35	35
LXGH (480/60/3) USE 90°C 12 AWG (MIN), STRANDED COPPER WIRE ONLY.	15.8	20	20
LXGH (380-400/60/3) USE 90°C 12 AWG (MIN), STRANDED COPPER WIRE ONLY.	15.4-16.0	20	20

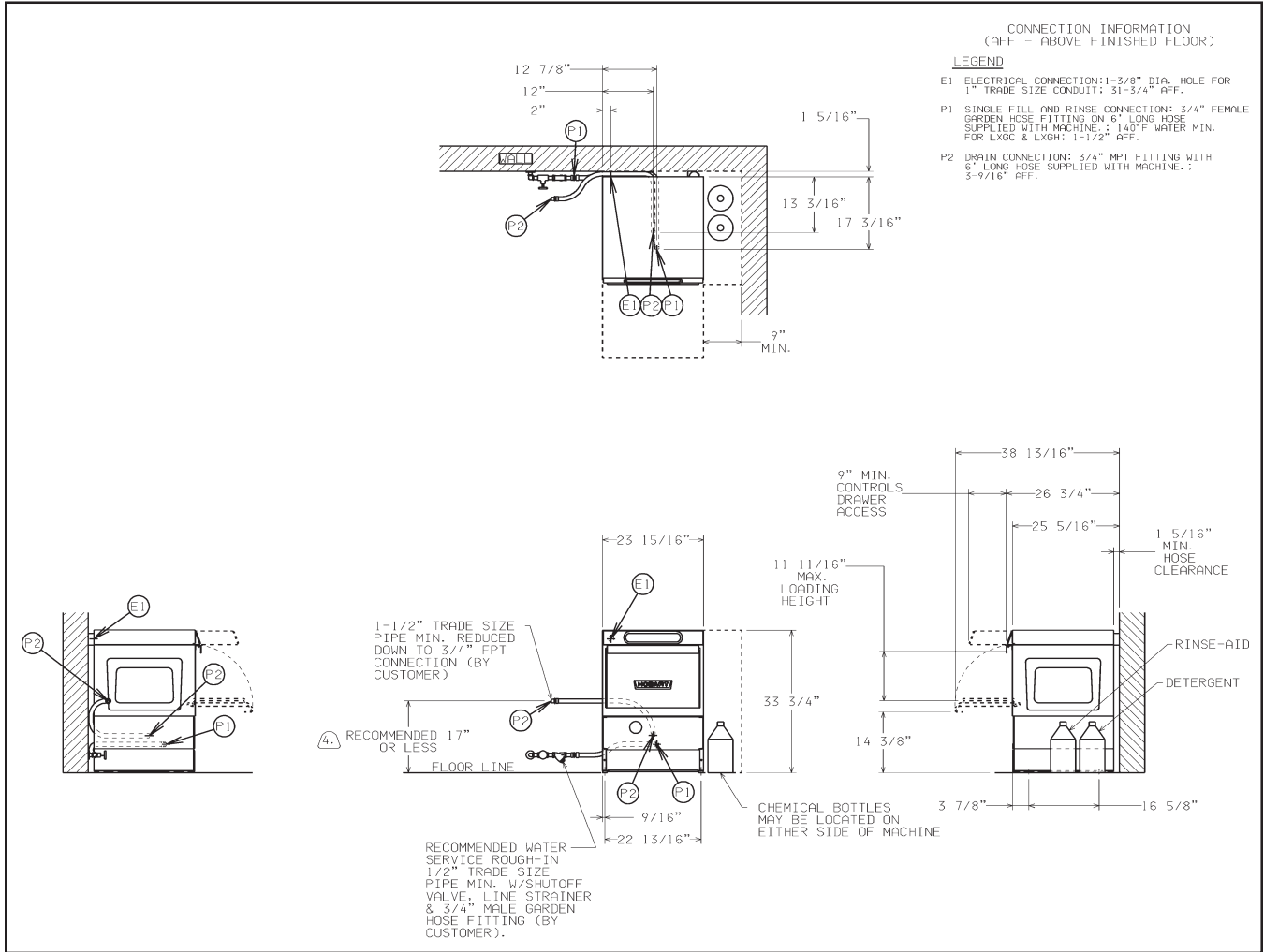
RECOMMENDED WATER SERVICE ROUGH-IN 1/2" TRADE SIZE PIPE MIN. W/SHUTOFF VALVE, LINE STRAINER & 3/4" MALE GARDEN HOSE FITTING (BY CUSTOMER).

* THIS SYSTEM REQUIRES THREE POWER WIRES WHICH INCLUDES A CURRENT CARRYING NEUTRAL, AN ADDITIONAL FOURTH WIRE MUST BE PROVIDED FOR MACHINE GROUND. POWER CORD ACCESSORY KIT IS REQUIRED ON MACHINES. WITH CASTERS

MODELS:
LXGC, LXGH
474173, REV F

SHIPPING WEIGHTS	LXGC	LXGH
NET WEIGHT OF MACHINE	194 LBS	214 LBS
DOMESTIC SHIPPING WEIGHT	239 LBS	259 LBS

Installation Diagram (LXG Series Glasswashers) — Dwg 474173



Installation Diagram (LXG Series Glasswashers) — Dwg 474173

OPERATION

CONTROLS (Fig. 3)



PL-52058

Fig. 3

To start, close the door, open the manual water supply valve, make sure the electric power is connected and on. Liquid detergent, rinse agent (and bleach if model LXGC) should have their supply tubes inserted in the appropriate properly supplied chemical containers.

Press **ON**.

Warm up and self check takes 5 – 10 seconds. If the door is closed, FILL displays while the sump fills with water. Water temperature (in sump) displays while filling. Wash pump comes on for 10 seconds after fill is complete.

If the door is opened during the fill cycle, the machine stops filling. When the door closes, the fill cycle resumes.

If WASH is pressed during the fill cycle, a wash / rinse cycle will begin after the fill cycle has been completed.

If the beeper sounds and the machine will not fill, turn the circuit breaker Off and then On. Start again. If problem persists, contact Service.

On model LXGH only, FILL flashes while the booster preheats — this may take up to 8 minutes.

After the fill cycle has been completed, the water temperature in the sump displays. Heaters cycle on and off to maintain temperature in the sump (and the booster tank on model LXGH).

Open the door. Load glasses or other ware in rack. Close the door. Press **WASH**.

Liquid detergent is automatically injected. 'WASH' and the water temperature in the sump display on the control panel as the Wash and Rinse cycles begin. When Wash is complete, there is a pause before the Rinse cycle automatically begins. 'RINSE' and the Rinse temperature display on the control panel. Rinse agent is injected.

When Rinse is complete, there is a 6 second pause; then only the water temperature in the sump is displayed.

Open the door. Remove the clean glasses or ware. Reload. Close the door. Press **WASH** to repeat cycle.

If the door is opened during Rinse or Drain, the cycle resumes after the door is closed.

Press **OFF** anytime and the machine will drain and shut down.

Machine shuts down automatically if the programmed idle shutdown time is reached.

PREPARATION

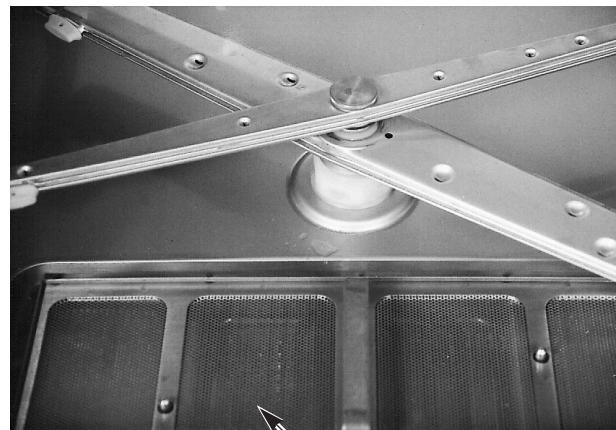
Make sure the coarse (Fig. 4) and fine (Fig. 5) strainers are in place and free of debris. Check both wash arms and rinse arms to make sure they spin freely and are not clogged.



Coarse Strainer

PL-40091-1

Fig. 4



Fine Strainer

PL-40092-1

Fig. 5

Place glasses and mugs upside down in a flat-bottom or compartment-type rack (Fig. 6). Never use steel wool on ware to be loaded into the glasswasher. Do not stack glasses on top of each other; allow water to freely circulate around the items being washed. Silverware and other small pieces should lay loosely on the bottom of a flat-bottom rack. Do not allow foreign objects to enter the unit, especially metallic contaminants such as staples, paper clips, etc.

Check to see if any detergent, rinse aid, or sanitizer chemicals need to be replenished. Use only commercial type detergents, as prescribed by your chemical professional.

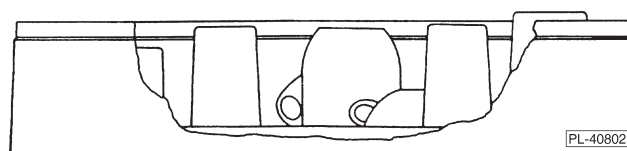


Fig. 6

WASH / RINSE CYCLE TIMES

Wash	55 Seconds
Drain*	10 Seconds (Max.)
Dwell	4 Seconds
Rinse	10 Seconds
Dwell	6 Seconds

* Drains off about 1 gallon of water.

DIAGNOSTIC MESSAGES

In the event of a problem with a temperature probe, the display will flash P1, P2, or P3 every ten seconds. The respective heaters will shut down. Other functions will continue to operate normally. Contact Service.

Drain and fill error messages are displayed as E0, E2, E3, E4, E5, E6, or E7. The controller terminates current cycle operations, turns off all heaters, and will display the error message until OFF is pressed. The machine will not drain when turned off. Refer to Troubleshooting, pages 14 – 16. If problem persists, contact Service.

DOs AND DON'Ts FOR YOUR NEW HOBART WAREWASHER

DO assure proper water hardness.

DO pre-scrap thoroughly.

DO use only detergents recommended by your chemical professional.

DO at the end of the day, thoroughly cleanse the machine, rinse, and dry (leave door open).

DO closely follow your chemical professional's prescribed deliming schedule.

DO use only products formulated to be safe on stainless steel.

DO NOT over soften water (recommended water hardness is no less than 4 grains per gallon).

DO NOT use detergents formulated for residential dishwashers.

DO NOT allow food soil to accumulate on the tank bottom.

DO NOT exceed chemical manufacturer's recommended concentrations for detergent, sanitizer, rinse aid, or lime scale remover.

DO NOT use steel wool to clean ware or warewasher surface.

DO NOT allow foreign objects to enter the unit, especially metallic contaminants.

NOTE: Failure to follow use, care, and maintenance instructions may void your Hobart warewasher warranty.

CLEANING

This machine must be cleaned after each day's use or between duty cycles.

1. Press OFF. The machine will drain. When display is no longer lit, open the door and remove any debris from the bottom of the tank.
2. Remove the lower rinse arm by unscrewing the knurled knob (Fig. 7). Remove the lower wash arm by pulling the arm off the shaft. Remove the upper rinse and wash arms in the same manner. Remove the coarse and fine strainers (Figs. 4, 5). Thoroughly clean these items in a sink.

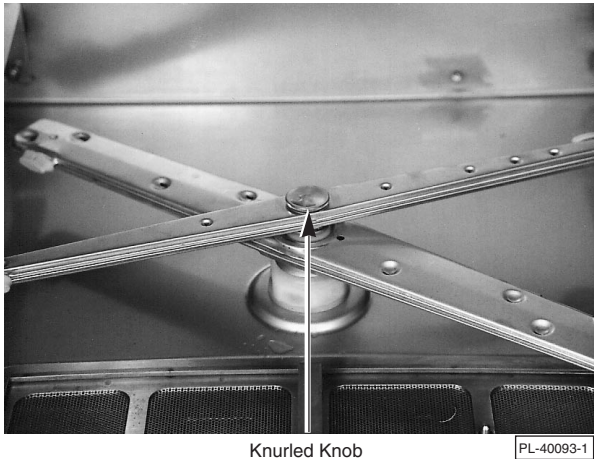


Fig. 7



Fig. 8

3. With a damp cloth, wipe the interior of the machine, the water level probes (Fig. 8), and the water level probe under the fine strainer. DO NOT use steel wool. Wipe the exterior of the machine. When cleaning inside of the door, be sure to wipe the lip at the bottom of the door. Remove any remaining debris with a mild cleanser formulated for stainless steel and a soft cloth or brush.
4. Replace the coarse and fine strainers. Reinstall the lower wash arm by pushing it down on the shaft, then place the lower rinse arm on the shaft and tighten the knurled knob. Spin arms to check that they spin freely. Repeat this procedure with the upper wash and rinse arms.
5. Use a soft damp cloth or sponge and mild cleanser to clean the control keypad and display. DO NOT use abrasive or harsh cleaners or scouring pads.
6. Leave the door ajar overnight to allow the inside to air out and dry.

MAINTENANCE

DELIMING

WARNING: DELIMING SOLUTION, RINSE AGENTS, OR ANY OTHER KIND OF ACID MUST NOT COME IN CONTACT WITH BLEACH OR RINSE SOLUTION CONTAINING BLEACH USED IN CHEMICAL SANITIZING MACHINES. MIXING MAY CAUSE HAZARDOUS GAS TO FORM. THIS ENTIRE PROCEDURE MUST BE FOLLOWED STEP-BY-STEP FOR SAFE AND SATISFACTORY RESULTS.

Delime the glasswasher on a regular basis as required. The frequency will depend on the mineral content of the water supply. Deliming should be done when you can see clear signs of lime deposits (a white chalky substance) on the inside walls and on the wash arms.

Inspect the machine interior for lime deposits. If deliming is necessary, use a deliming agent, such as Lime Away or LSR.

Carefully follow the procedure outlined below.

Deliming Procedure

1. Remove standpipe assemblies from chemical containers and place them as close to the floor as possible. Place a catch pan under them.
2. Cycle the machine four times to clear the lines of chemicals.
3. Remove plastic dish rack from machine.
4. Add deliming agent (carefully follow supplier's instructions). The sump holds approximately 3 gallons of water.
5. Close door. Press WASH and allow machine to complete the wash/rinse cycle.
6. Press OFF.
7. Inspect the interior of the machine for lime deposits. If necessary, press ON to fill machine and repeat steps 4 through 7.
8. Press ON. Run two cycles to purge the system of deliming agent. Press OFF.
9. Put standpipe assemblies back into the appropriate chemical containers (see page 6).
10. Press ON. Run four cycles to prime the chemical delivery pumps.
11. Press OFF.

CAUTION: Do not allow the deliming agent to remain in the machine longer than recommended by the deliming agent manufacturer.

LUBRICATION

The pump motor has permanently sealed bearings and requires no lubrication.

TROUBLESHOOTING

To avoid a service call, check symptoms and related possible causes. If machine still does not operate properly, contact Service.

SYMPTOMS	POSSIBLE CAUSES
No machine operation (No display).	<ol style="list-style-type: none"> 1. Machine OFF — turn machine ON. 2. Blown fuse or circuit breaker off at power supply. 3. Cord not plugged in (if installed with cord and plug).
No machine operation (With display).	<ol style="list-style-type: none"> 1. Display shows dr followed by oP — open and close the door. If problem persists, contact Service. 2. See MACHINE WON'T FILL.
Glasses not clean.	<ol style="list-style-type: none"> 1. Strainers clogged causing inadequate water supply to pump — clean sump. Refer to Cleaning, page 12. 2. Obstruction in wash arm(s) or wash arms won't turn — clean wash / rinse arms. Refer to Cleaning, page 12. 3. Rinse arms won't turn — check that they spin. 4. Detergent dispenser may be clogged. 5. Soil quantity — scrape dishes before cycle. 6. Improper rack loading — see Preparation, page 10. 7. Low water — check water pressure. 8. Water temperature too low — note wash temperature on display during WASH; should be above 120°F for chemical sanitizing machines and above 150°F for other machines. 9. Incoming water supply turned off. 10. Arm plugs missing.
Spotting of glasses, mugs, or flatware.	<ol style="list-style-type: none"> 1. Improperly loaded racks. 2. Water temperature too low. 3. Improper type or concentration of detergent — contact your detergent representative. 4. Hard water. Install a water softener. Check rinse agent container. 5. Insufficient fill — check water pressure.
Chemicals not feeding.	<ol style="list-style-type: none"> 1. Low on chemicals — check containers. 2. Air leak at feeder hose connections — check for snugness. 3. Tubes kinked — check for smooth bends.
Food soils remain in dishwasher.	Follow Cleaning instructions, page 12.

SYMPTOMS	POSSIBLE CAUSES
Unexpected results on glasses.	<ol style="list-style-type: none"> 1. Etching — usually caused by any combination of high temperatures, soft water, soft glass, or high alkaline washing solutions. 2. Tarnishing — avoid washing silver, silver plate, or pewter in chemical sanitizing machines. 3. Pitting — stainless steel may pit with lengthy contact of foods containing salt, fruit juices, vinegar, etc. Wash immediately. 4. Black or gray marks — may have been rubbed with aluminum. 5. Brown stains — may be due to high iron content in water supply. 6. Chipping — improper loading or ware is too delicate. 7. Fading of china patterns — usually due to high water temperature and strong detergent. Check that china is dishwasher compatible. 8. Wooden ware damage — avoid washing in dishwasher. 9. Rust on cast iron — seasoning is lost in dishwasher. Avoid dishwasher cleaning. 10. Plastic ware distortion — high temperatures. Check plastic ware's instructions.
Low temperature readings.	<ol style="list-style-type: none"> 1. Low water supply temperature — make sure it meets the recommended limits. 2. Rapid cycle use — if incoming water temperature is low and cycle use rate is high, the hot water supply may be insufficient to meet the demand. 3. Heavy ware load cools wash water — do not overload racks. 4. Booster heater or sump heater set low — contact Service.
<p>Machine won't fill or does not fill completely.</p> <p>(Display shows E0, E2, E3, or E4. Machine will not run.)</p>	<ol style="list-style-type: none"> 1. Low water pressure — check for clogged hose strainer; check that site water pressure meets minimum flow pressures. 2. Make sure probes are clean. (Refer to Cleaning, page 12.) 3. No water pressure — main water supply valves may not be working. 4. Drain valve open — turn machine OFF to drain machine, then ON. Repeat twice (this assists in clearing any drain valve obstructions). Wait for machine to reach READY mode and press WASH. Slowly open door several seconds later and note water level. Close door; 30 seconds later, open door slowly and check that water level is the same as it was. If not, repeat the OFF-ON procedure. If problem persists, contact Service. 5. Delime machine.
Dishwasher makes noises after it has been turned off and drained.	It is normal for the drain valve to operate several times — this will attempt to clear obstructions.

SYMPTOMS	POSSIBLE CAUSES
<p>Machine over fills or leaks from door.</p> <p>Machine won't drain. (Display shows E5.)</p>	<ol style="list-style-type: none"> 1. Machine not level — refer to Leveling, page 3. 2. Fill solenoid valve leaking — turn dishwasher OFF; if water continues to flow through the rinse arms, contact Service. 3. Drain pipes restricted — check dishwasher drain line for kinks; ensure proper drain rate is allowed from plumbing. 4. Turn machine OFF. Wait several seconds, then turn back ON. Repeat this procedure twice if necessary. If problem persists, contact Service.
<p>Some water occasionally drips out of rinse arms when machine is idle (model LXGH only.)</p>	<p>This is normal due to expansion of water being heated in the booster tank.</p>
<p>Machine displays E6.</p>	<p>Contact Service.</p>
<p>The wrench displays and flashes P1, P2, or P3.</p>	<p>Contact Service.</p>
<p>Machine displays E7.</p>	<ol style="list-style-type: none"> 1. Clean water sensors inside tank. 2. Contact Service.

SERVICE

Contact your local Hobart Service Office for any repairs or adjustments needed on this equipment.