CL-SERIES DISHWASHERS LAVE-VAISSELLE DE LA GAMME CL LAVAVAJILLAS SERIE CL

MODEL MODÈLE MODELO

CL44-BAS / CL44-DWR / CL44-ADV CL66-BAS / CL66-DWR / CL66-ADV CL66C-BAS/CL66C-DWR

CL54-BAS / CL54-DWR / CL54-ADV CL76-BAS/CL76-DWR/CL76-ADV CL76C-BAS/CL76C-DWR

CL64-BAS / CL64-DWR / CL64-ADV CL86-BAS / CL86-DWR / CL86-ADV CL86C-BAS/CL86C-DWR

CL44-VL CL66-VL





TROY, OHIO 45374-0001 937 332-3000 www.hobartcorp.com

IMPORTANT FOR YOUR SAFETY

THIS MANUAL HAS BEEN PREPARED FOR PERSONNEL QUALIFIED TO INSTALL GAS EQUIPMENT, WHO SHOULD PERFORM THE INITIAL FIELD START-UP AND ADJUSTMENTS OF THE EQUIPMENT COVERED BY THIS MANUAL.

POST IN A PROMINENT LOCATION THE INSTRUCTIONS TO BE FOLLOWED IN THE EVENT THE SMELL OF GAS IS DETECTED. THIS INFORMATION CAN BE OBTAINED FROM THE LOCAL GAS SUPPLIER.

IMPORTANT

IN THE EVENT A GAS ODOR IS DETECTED, SHUT DOWN UNITS AT MAIN SHUTOFF VALVE AND CONTACT THE LOCAL GAS COMPANY OR GAS SUPPLIER FOR SERVICE.

FOR YOUR SAFETY

DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

FOR YOUR SAFETY READ BEFORE OPERATING

DO NOT USE THIS APPLIANCE IF ANY PART HAS BEEN UNDER WATER. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE APPLIANCE AND TO REPLACE ANY PART OF THE CONTROL SYSTEM AND ANY GAS CONTROL WHICH HAS BEEN UNDER WATER.

IN THE EVENT OF A POWER FAILURE, DO NOT ATTEMPT TO OPERATE THIS DEVICE.

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Installation, Operation and Care Of CL-SERIES DISHWASHERS SAVE THESE INSTRUCTIONS

GENERAL

CL machines are rack-type warewashers that move the racks from one end of the machine to the other, exposing the ware to progressive wash and rinse zones. Pumps and final rinse are activated by the inserted rack to energize the specific wash or rinse action needed. The CL-series machines are offered in optional lengths, sections, features, and provide different speeds to meet productivity and performance requirements. All CL-Series Dishwashers have electronic controls with digital temperature displays.

The CL-DWR models have a drain water energy recovery system which includes drain water tempering and all of the standard features of the CL. They use a heat exchanger to capture the energy from the drain water and preheat incoming cold water for the final rinse. The CL-DWR units are only available in hot water sanitizing mode, three phase, and come standard with a built-in electric booster heater, which is designed to maintain final rinse temperature of 180°F with a minimum incoming cold water temperature of 55 °F.

The CL-ADV models have an Automatic Soil Removal (ASR) system and include all of the standard features of the CL-DWR. The ASR system automatically redirects food soil left over after pre-scrapping to an external scrap basket located at the load end of the machine. This helps to keep the wash water cleaner, reducing the frequency of water changes. This saves the customer money on chemicals and water/energy. The CL-ADV-Series machines are only available in hot water sanitizing mode, electric heat, three phase voltage supply, and come standard with a built-in electric booster heater. The CL-ADV models are not available with a corner scrapper unit.

The CL-VL models have a ventless system and include all the standard features of the CL Base models. The ventless system uses energy efficient heat-pump technology combined with energy recovery to remove the need for direct venting while providing auxiliary heat to the wash tank. The CL-VL machines require only a single cold-water supply and are only available in hot water sanitizing mode, electric heat, three phase voltage supply, and come standard with a built-in electric booster heater.

Tanks, chambers, frames, legs and adjustable feet are made of welded stainless steel construction. Hinged inspection doors provide access to the interior wash and rinse zones. The CL66, CL76, and CL86 models provide a 22-inch power scrapper section and hinged access door. The power scrapper removes the heavy soil before the rack enters the wash zone.

Machines can be ordered as left-to-right or right-to-left operation and standard height or higher than standard. Either electric, gas, or steam tank heat is specified at time of order. Machines come standard ready to operate with high-temperature sanitizing mode.

Hobart offers three right-angle possibilities to put your machine in a corner installation (not available on CL-VL models):

- The Side Loader moves the rack at a right angle into the machine from the scrapping area.
- The Direct Drive Unloader moves the rack at a right angle coming out of the machine to tabling where the clean ware can be unracked.
- The Corner Scrapper puts a Power Scrapper in the corner location at the load end of your machine, combining right angle entry with a scrapper section.

For more information, including training videos, visit www.HobartCorp.com/CLtraining.

CHEMICAL SANITIZING

CL machines can be converted to operate with chemical sanitizing mode (with the use of chemical sanitizers). Refer to Manager Menu programming instructions on page 30. **NOTE:** Chemical sanitization is not available on the CL-DWR, CL-ADV, or CL-VL models.

CL models that operate with chemical sanitization use incoming water and final rinse water at 120°F minimum.

INSTALLATION

UNPACKING

Immediately after unpacking the dishwasher, check for possible shipping damage. If the machine is found to be damaged, save the packaging material and contact the carrier within 5 days of delivery.

NOTE: For CL-VL models, ventless heat pump assembly ships separate on its own skid.

Prior to installation, verify that the electrical service agrees with the specifications on the machine data plate, which is located on the left-hand side of the control box.

After unpacking the dishwasher, remove the items shipped loose (standpipe, splash shields, curtains, literature envelope with instructions and chamber hole plug kit) from inside the dishwasher. For CL-ADV models only, remove the external ASR basket from inside the dishwasher and install in the ASR housing located at the load end of the machine.

VENTLESS HEAT PUMP ASSEMBLY INSTALLATION

Refer to Hobart Service CL Ventless Installation manual, F-41299.

INSTALLATION CODES

Installation must be in accordance with state and local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (latest edition), if applicable, and the National Electrical Code ANSI/NFPA 70 (latest edition). In Canada, the installation standards are: CAN/CSA B149.1 and CSA C22.1 (latest editions).

ADJUST MACHINE HEIGHT AND LEVEL MACHINE

Set the dishwasher in its proper location. Adjust the height and level the machine by turning the adjustable feet in or out as necessary.

DISH TABLE ASSEMBLY

Dish tables should be fitted into the dishwasher (Figs. 1, 2 & 3). Use silicone sealant between table and lip of tank to prevent leakage. Dish tables should be sloped so that any water carried from the dishwasher will drain back into the machine, but not from the scrapping area.

NOTE: The dishwasher must be in its final position, adjusted for proper height and properly leveled before table assembly and plumbing connections are made.



For CL-VL installations, the extended hoods can be adjusted to accomodate variances in dish tables by loosening the three screws.

SPLASH SHIELDS

On all CL models (except CL-VL models), two splash shields are shipped with machine for installation on the front side of the load and unload ends of the machine. Mount splash shields to chamber ends using hardware provided. Splash shields should be installed inside table rim to prevent water from dripping onto floor (Fig. 4).



SPLASH SHIELD (INSTALLED INSIDE ROLLED RIM)

Fig. 4

A WARNING Plumbing connections must comply with applicable sanitary, safety and plumbing codes.

Water Requirements

Proper water quality can improve ware washing performance by reducing spotting, enhancing effectiveness of labor and extending equipment life. 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 conditions prior to installation.

Recommended water hardness is 3 grains of hardness per gallon or less. Higher hardness may cause excessive formation of lime scale. Water hardness above 3 grains per gallon requires water treatment. Water treatment has been shown to reduce costs associated with machine cleaning, reduce deliming of the dishwasher and reduce detergent usage in the dishwasher. Chlorides must not exceed 50 ppm.

NOTICE High iron levels in the water supply can cause staining and may require an iron filter. High chloride levels in the water supply can cause pitting and may require a chloride removal system. Contact you local water treatment professional for proper water treatment.

Sediment may require a particulate filter. Dissolved solids may require water treatment such as a water softener, reverse osmosis system, etc. Contact your local water treatment professional for proper water treatment.

If an inspection of the dishwasher or booster heater reveals lime build-up after the equipment has been in service, water treatment is recommended. If a water softener is already in place, ensure there is a sufficient level of salt. Contact your Hobart Service office for specific recommendations.

NOTE: For CL-VL models, damage to heat pump system due to improper water quality may not be covered under Hobart warranty.

Water Supply Connections

The plumber who connects this machine is responsible for making certain that both water and steam 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 dishwasher's plumbing components and render them inoperative. Manual valves or solenoid valves found defective by foreign matter and any expenses resulting from this debris are NOT the responsibility of the manufacturer and associated repair costs are not covered under warranty.

CL-BAS models require a single incoming hot water supply. CL-DWR and CL-ADV models require a hot and a cold water supply. CL-VL models require a single cold-water supply. Use ¹/₂" minimum I.D. pipe size for the incoming water supply line(s) to the machine (Fig. 5).

NOTE: If a drain water tempering kit is field installed on a BAS model, an additional cold-water supply will be required.



Fig. 5

Required flowing water pressure to the dishmachine is 20 to 65 PSIG. If flowing pressures higher than 65 PSIG are present, a pressure-regulating valve must be installed in the water line to the dishmachine (by others). If flowing pressure is less than 20 psi, improper machine operation may result. All CL models are equipped with a pumped rinse system; therefore, a water pressure gauge is not required and is not supplied with the machine.

NOTICE 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.

For temperature requirements, refer to the Required Incoming Water Temperature table below.

Water Supply				Supply
Model	Sanitizing Mode	Connection	vvaler	Supply
model	ounnizing mode	Connection	Minimum	Maximum
CL-BAS without Built-in Booster	Hot Water Sanitizing	Hot Water	180°F (82°C)	194°F (82°C)
CL-BAS without Built-in Booster	Chemical Sanitizing	Hot Water	120°F (49°C)	N/A
CL-BAS with 12kW Built-in Booster	Hot Water Sanitizing	Hot Water	140°F (60°C)	N/A
CL-BAS with 18kW (44/66) 24kW (54/76/64/86) Built-in Booster	Hot Water Sanitizing	Hot Water	110°F (43°C)	N/A
CL-DWR and CL-ADV	Hot Water Sanitizing	Cold Water	55°F (13°C)	80°F (27°C)
with 18kW (44/66) 24kW (54/76/64/86) Built-in Booster		Hot Water	110°F (43°C)	N/A
CL-VL with 18kW Built-in Booster	Hot Water Sanitizing	Cold Water	55°F (13°C)	80°F (27°C)

REQUIRED INCOMING WATER TEMPERATURE

Drain Connection

The common drain for the tank(s) requires only one connection to the floor drain. The drain can be connected at either end. A pipe plug is provided for the opposite end. **NOTE:** For CL-DWR and CL-ADV models, the factory drain plumbing may need to be relocated to opposite side of drain body (Fig. 6). Connect the drain (Fig. 7) through a trap to the sewer using 2" NPT pipe. If a grease trap is required by code, it should have a minimum flow capacity of 38 gallons per minute.



Fig. 6

Fig. 7

Drain Water Tempering Kit

A drain water tempering kit is factory installed on all CL-DWR and CL-ADV models and is available as an accessory for all CL-BAS and CL-VL models. Refer to F-46015 CL Drain Water Tempering Kit Installation Instructions supplied with the kit for proper installation.

NOTE: Drain Water Tempering must be Enabled in the Manager Menu when installed. Refer to Programming, page 30.

CHEMICAL FEEDER INSTALLATIONS

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 systems. Chemical feeders are supplied by others. For electrical connection, refer to Optional Equipment Control Connections, page 15. For questions about chemicals, dosing, or chemical feeders, contact your chemical supplier.



Detergent Feeder

Your chemical supplier will install a detergent feeder port similar to the one shown in Fig. 8, that provides for discharge of detergent into the wash tank.

NOTE: A factory plugged hole is provided at rear of machine in tank wall. Do not install detergent port above chamber/tank seam or damage to the machine may occur. For CL66-VL models, for ease of installation, an extended detergent port is provided at the rear side of the prewash tank.



Fig. 10

An electric monitoring device, similar to the one shown in Fig. 9, will be installed on the side of the wash tank to signal the feeder to maintain the proper concentration of detergent.

Rinse Agent Feeder

Rinse agent is typically fed into the final rinse water at one of the ports on the incoming water line located at the top of the machine (Fig. 10).

Chemical Sanitizer Feeder

Chemical sanitizer (on CL-BAS machines using low-temperature sanitizing) is fed into the final rinse water line at the other port on the incoming water line located at the top of the machine (Fig.10).

STEAM CONNECTION (When Machine is Equipped with Steam Tank Heat)

NOTICE Steam supply pressure must agree with the steam trap (supplied) which is rated for 10 to 50 psig differential pressure. If flowing pressure exceeds 50 psig, a pressure regulator (by others) must be installed in the steam supply line. Steam flow is controlled by solenoid valves.

For single-tank steam coil installations, two connections are required, one for supply and one for return. For two-tank steam coil installations, one common supply connection and two return connections are required.

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GAS CONNECTION (When Machine is Equipped with Gas Tank Heat)

Check the gas data plate attached to the dishwasher on the side of the control box or refer to the tag attached to the gas burner tubing for the type of gas to be used. All machines are shipped configured for natural gas. If conversion to LP gas (propane) is required, a conversion kit with instructions is supplied and must be installed before the machine is operated.

The burner is not adjustable. If flowing gas pressure is above 7" W.C. (natural gas) or 11" W.C. (propane gas), an additional regulator valve (by others) must be installed in the supply line. Static incoming line pressure should not exceed 14.0" W.C. for either propane or natural gas.

A WARNING The gas supply line to the dishwasher must be provided with a shutoff valve per code. The appliance and its gas connections must be leak tested before placing the appliance in operation. Use soapy water for leak tests. DO NOT use an open flame.

The installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (latest edition), available from the American Gas Association, Inc., 1515 Wilson Blvd., Arlington, VA 22209. In Canada, comply with CAN/CSA B149.1 and CSA C22.1 (latest editions).

NOTE: For gas line pipe connections, use Loctite 565, Hobart part number 546292, or a flexible sealant suitable for use with Natural and Propane Gases.

- The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ¹/₂ psig (3.45 kPa).
- The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.45 kPa).

	Type of		Connection	-	s Pressure - V.C. (Water C	
Models	Gas	BTU/Hr	Line Size	Incoming Li	ne Pressure	Manifold
				Minimum	Maximum	Pressure
CL44, CL66 CL54, CL76	Natural Propane	78,000 78,000	1/2" NPT 1/2" NPT	3.5" W.C. 9.0" W.C.	7.0" W.C. 11.0" W.C.	3.2" W.C. 8.2" W.C.
CL64, CL86	Natural Propane	156,000 156,000	3/4" NPT 3/4" NPT	3.5" W.C. 9.0" W.C.	7.0" W.C. 11.0" W.C.	3.2" W.C. 8.2" W.C.

GAS SPECIFICATIONS

Dissipate test pressure from the gas supply line before reconnecting the appliance and its manual shutoff valve to the gas supply line.

NOTICE Failure to follow this procedure may damage the gas valve.

A WARNING Gas heat machines must be provided with a means to exhaust the flue gases to the exterior of the building.

Refer to Venting Requirements on pages 11 - 14.

The dishwasher must be installed so that the flow of combustion and ventilation air will not be obstructed. Ensure that no electrical cables or plumbing are routed over the gas flue area. Adequate clearances for air openings into the combustion chamber must be provided. Make sure there is an adequate supply of make-up air in the room to allow for combustion of the gas at the burner(s). Keep the appliance area free and clear from all combustible substances. Do not obstruct the flow of combustion and ventilation air. The dishwasher must have a minimum clearance from combustible construction of 3" at the rear and 0" at the sides. A clearance of 23" must be provided at the front and 20" at each end of the dishwasher for servicing and proper operation.

The burner is ignited automatically by solid-state electronic circuitry. There is no pilot light. Gas flow is regulated by the temperature control circuit.

VENTING REQUIREMENTS

For CL-VL models, no pant leg duct or canopy hood venting is required. Ensure dish room HVAC system is adequately sized to handle dish machine heat dissipation (latent and sensible heat). No HVAC supply or return grills to be installed within 24" of heat pump assembly.

NOTE: For machines equipped with gas tank heat, a connection point (APS1 and APS2) is provided for a vent fan interlock switch to prevent the flow of gas if air flow is not detected in the vent system. Normally closed switch to be provided and installed by others.

Type II Canopy Hood

Most commercial dishwashers must be provided with external venting per local codes. The exception is electric or steam heat machines operating in the chemical or low temperature sanitizing mode where the existing room ventilation will compensate for the vapors produced. The local authority has final jurisdiction over this matter.

Venting can be provided by either a canopy hood over the whole machine (Fig. 11) or by the pant-leg duct connection (Fig. 12).

A Hobart CL-Series dishwasher equipped with gas tank heat is not provided with a flue collar connection and is not intended to have the flue directly connected to a ventilation system. However, the products of combustion must be vented to the outside air. Exhaust air must not be vented into a wall, a ceiling, or a concealed space of a building. A vent hood over the entire dishwasher (Fig. 11) can be employed to vent both the moist air from the dishwashing chamber and the flue gases from the gas heater. The volume of flue exhaust required for venting moist air and flue gases using a single vent hood over the entire dishwasher must be calculated using the Exhaust Flow Requirements on page 14.

A Type II canopy hood is recommended. A factory-built commercial exhaust hood may be listed as conforming to Underwriters Laboratory's Standard 710 titled, *Exhaust Hoods for Commercial Cooking Equipment*. Hoods must be installed according to the manufacturer's instructions. Makeup air must be provided so that the exhaust flow rate results in a positive building pressure in the room where the unit is located (more outside air than exhaust air). Factory-built hoods not tested to UL Standard 710 and custom built hoods must comply with the following specifications: They must be built from stainless steel, 0.022" [No. 24 Gage] minimum thickness, or copper sheet weighing at least 24 ounces per square foot; the hood must be secured in place by noncombustible supports and the hood must meet the Exhaust Flow Requirements on page 14.

EXHAUST DUCT SHOULD BE CENTERED IN HOOD



Pant-Leg Vent Connections

WARNING Gas heat machines must be provided with a means to exhaust the flue gases to the exterior of the building.

Pant-Leg duct connectors (Fig. 12) alone DO NOT provide ventilation for the gas flue at the rear of the machine. A mini-vent hood (Fig. 13) must be used or a canopy type hood may be used (Fig. 11).

Moist air escapes from each end of the conveyor type dishwasher. The recommended exhaust requirement is 200 CFM at the entrance end of the dishwasher and 400 CFM at the discharge end. Optional vent hoods or extended hoods may be provided at each end of the machine. Sufficient make-up air must be provided so the exhaust flow results in a positive building pressure in the room in which the unit is located (more outside air than exhaust air). Hoods are provided with 4"x16" vent connectors with vent dampers which allow adjustment during installation. Typical construction is for 'Pant-Leg' hood connections to the 4" x 16" vent connectors (Fig. 12). Vent stacks must be watertight and fit inside the vent connector openings.

If using the 'Pant-Leg' duct, a mini-vent hood (Fig. 13) must be used to vent the flue gases on machines using gas heat. The mini-vent hood must be positioned a minimum of 18" above the flue exit at the rear of the dishwasher and connected to existing duct work. The volume of flue exhaust in the mini-vent hood should not exceed 200 CFM.

In either case, if a powered means of exhaust is used, an electrical interlock must be provided (supplied and installed by others) to allow the flow of gas to the dishwasher burner only when the exhaust system is in operation.

For more information, refer to the National Fuel Gas Code, ANSI Z223.1, NFPA54. In all cases, local codes will prevail.





Exhaust Flow Requirements

The following is based on the 2018 International Mechanical Code (IMC):

The flow of air required for a vent hood is based on the linear length of the face of the hood, measured along the front side, parallel with the front of the appliance (refer to LENGTH in Fig. 14). The minimum net air flow for Type II hoods used with dishwashers is 100 CFM per linear foot of hood length. Simply multiply the hood's length, in feet, times 100 CFM to obtain the required flow rate.

Subtract make-up air flow supplied directly to a hood cavity, from the total exhaust flow rate of the hood, if applicable.

For hood designs not covered by these calculations consult the latest edition of the IMC or other local codes.



ELECTRICAL CONNECTIONS — DISHWASHER

A WARNING Electrical and grounding connections must comply with the applicable portions of the National Electrical Code, ANSI/NFPA 70, latest edition, and/or other local electrical codes.

A WARNING Disconnect the electrical power to the machine and follow lockout/tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected.

Connect a permanent electrical power supply(s) to the terminal block(s) in the control box on top of the machine. Refer to the machine data plate for proper connection information and the electrical diagram located inside the control box cover.

NOTE: CL dish machines are not provided with internal GFCI protection.

All CL dish machines (electric, gas or steam tank heat) ship from the factory wired for a Single Point Electric Connection which includes motors & controls, tank heat and electric booster heat (if equipped). Electric tank heat models can be field converted to dual or multiple point electric configurations depending on machine confuguration. Refer to machine's data plate for available options. Conversion instructions (F-46019) are located in the dish machine's control box located on top of the unit.

Motor Rotation — Three-Phase Only

NOTICE Before placing a three-phase machine into service, check to verify that the pump motor(s) rotates in the correct direction. Incorrect rotation will result in unacceptable performance.

To check the pump motor's rotation:

Close the machine doors, press POWER on the controls and allow the machine to fill. When the machine is completely filled, press POWER to turn the machine off.

A WARNING Disconnect the electrical power to the machine and follow lockout/tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected.

Remove the lower front panel below the doors. Reconnect the electrical power to the machine, being careful not to touch any uninsulated electrical parts exposed by removing the front panel. Press START/ENTER on the controls and verify the pump motor rotation by observing the fan located at the top of the motor and ensure it matches the direction of the arrow located on the front of the motor.

If the rotation of the pump motor is correct, press POWER to turn the machine off. **DISCONNECT ELECTRICAL POWER SUPPLY** to the machine, and replace the front panel.

If the pump motor(s) does not rotate in the proper direction, **DISCONNECT ELECTRICAL POWER SUPPLY** to the machine. Reverse any two of the incoming power supply leads to the TB1 terminal block located in the control box on top of the machine. If the machine was converted to a dual or multiple point electric connection configuration, also reverse any two of the incoming power supply leads to the other service connection(s).

Reconnect the electrical power to the machine. Re-check the pump motor's rotation.

If the rotation of the pump motor is correct, press POWER to turn the machine off. **DISCONNECT ELECTRICAL POWER SUPPLY** to the machine. Replace the lower front panel.

Optional Equipment Control Connections

A WARNING Electrical and grounding connections must comply with the applicable portions of the National Electrical Code, NFPA 70 (latest edition) and/or other local electrical codes.

A WARNING Disconnect the electrical power to the machine and follow lockout/ tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected.

Detergent Feeder

The maximum rating for a detergent dispenser connected to DPS1 and DPS2 (located on TB5) is 1.5 amps at line voltage. Refer to Chemical Feeder Installations, page 9.

Rinse Aid Feeder and/or Chemical Sanitizer Feeder

The maximum rating for a rinse aid dispenser and/or chemical sanitizer feeder connected to RPS1 and RPS2 (located on TB5) is 1.5 amps at line voltage. Refer to Chemical Feeder Installations, page 9.

Vent Fan Control

The maximum rating for a vent fan connected to VFC1 and VFC2 (located on TB5) is 1HP @ 120VAC, 2.5HP @ 240VAC.

For machines equipped with electric or steam tank heat, the vent fan control circuit will turn the roof exhaust fan on when the pump motor(s) starts and off after a pre-set time once the final rinse turns off, eliminating the need for a separate switch on the wall. The factory setting for the vent fan control time delay is 5 minutes. This time can be adjusted from 0 minutes to 999 minutes in the Manager Menu. Refer to Programming, page 30, to adjust the vent fan control time delay parameter.

For machines equipped with gas tank heat, the vent fan control circuit will turn the roof exhaust fan on and off with the power on the dish machine, eliminating the need for a separate switch on the wall. When this circuit is utilized, the exhaust fan on the roof will turn on when the power button on the CL dish machine is pressed turning the dish machine on and the fan will turn off when the power button is pressed turning the dish machine off.

The dish machine does not supply any voltage thru this circuit. It is a controlling circuit utilizing a dry contact. A hot wire from the roof fan control connects to one of the VFC terminals located on the TB5 terminal block in the CL control box located on top of the unit and a second wire connects to the second VFC terminal and wires to the roof fan control completing the circuit. The dish machine will then close and open this circuit as it is powered on and off, which will turn the roof exhaust fan on and off with the dish machine.

External Booster Connection

BSTR1 and BSTR2 contacts (located on TB5) are provided to control (on/off) an external booster heater. 120VAC @ 0.15 amps is provided when the dish machine is powered on to control the external booster switching circuit. Refer to the Non-Booster Conversion Instructions (F-46016).

OPERATION

PREPARATION

Make sure the dishwasher is clean and all parts are in place.

If Equipped with Scrapper

Install the standpipe in the scrapper tank (Fig. 15). Standpipe with strainer (Fig. 15) goes in the first tank where the rack enters the machine.

Install the rear and side strainer pans and lower the scrap basket (Fig. 17).

Install the upper wash arm (Fig. 16) and the lower wash arm (Fig. 17) in the scrapper with sliders in the closed position. Push arm onto the connector pipe so the opposite end is held by the guide; then lift or lower into position.



Fig. 15





Wash/Rinse Tanks

Install the standpipe(s) in the tank(s) (Figs. 15 and/or 18). Standpipe without strainer (Fig. 18) goes in second/third tank.

Install the strainer pan and the scrap basket (Fig. 20).

Install the upper wash arm (Fig. 19) and the lower wash arm (Fig. 20) with sliders in the closed position. Push arm onto the connector pipe so the opposite end is held by the guide (Figs. 19, 20); then lift or lower into position.



CL-ADV Models



Install the external ASR basket (Fig. 21) in the ASR housing located at the entrance end of the machine.

Fig. 21

Install the internal ASR basket (Fig. 22) in the first tank where the rack enters the machine.



Fig. 22

CL-VL Models

Ensure air channel cover is in place (Fig. 23).



Fig. 23

Curtains

Hang all curtains according to the appropriate curtain diagram (pages 19 - 21).

CURTAIN INSTALLATION

Curtains are keyed for proper installation.



L	919758 Long STD
L	919975 Long HTS
S	919509 Short
CO	936922 Carry Over
М	936428 Middle STD
М	936429 Middle HTS
CS	936520 CS
CSS	936931 CS Side

Single-Tank Machines with Scrapper



Two-Tank Machines with Scrapper

CL86-BAS, CL86-DWR, CL86-ADV



Two-Tank Machines with Corner Scrapper



CL86C-BAS, CL86C-DWR

Single-Tank Ventless Machines

CL44-VL

CL66-VL



HMI AND DISPLAY



The controls are mounted on top of the dishwasher. The HMI is mounted on the front of the control box (Fig. 24).

FILLING THE DISHWASHER

All water supply valves must be opened and the electric supply(s) must be turned on before the machine will function. Make sure Preparation and Curtain Installation are completed, pages 18 - 21.

Close all doors. When the doors are closed, this will automatically close the drain. To begin filling after the machine is ready, press the POWER button (Fig. 24).

If the machine is equipped with a scrapper section, the scrapper tank will fill with overflow water from the wash tank.

STARTING THE GAS HEAT DISHWASHER (When Equipped with Gas Heat)

- 1. **A** WARNING Read the Safety Information on page 2 before operating this dishwasher.
- 2. Turn main gas supply to the dishwasher ON.
- 3. Wait for 5 minutes to clear out any gas. If you then smell gas, **STOP!** Follow all safety information covered on page 2 in IMPORTANT FOR YOUR SAFETY.
- 4. If you don't smell gas, turn the manual gas valve On.

- 5. Press the POWER button (Fig. 24). Dishwasher will fill automatically (refer to Filling the Dishwasher, page 22). After the tank has filled, the burner will ignite if heat is required. The ignition system includes a 15-second pre-purge period before ignition occurs.
- 6. If the dishwasher will not operate, press the POWER button and turn the manual gas valve Off. Call your local Hobart service office or gas supplier.

MINIMUM TEMPERATURES

The water temperatures in the tanks and rinse arms are regulated by the controls. The control is preset at the factory and no adjustment should be required. If an adjustment is necessary or if the machine is to operate at low temperature using chemical sanitizer, contact your local Hobart service office or refer to instructions for conversion to chemical sanitizing. The digital display verifies proper water temperature during operation.

Minimum Temperatures Using High-Temperature Sanitizing

Single-Tank Models CL44-BAS, CL66-BAS, CL66C-BAS CL54-BAS, CL76-BAS, CL76C-BAS, CL44-DWR, CL66-DWR, CL66C-DWR CL54-DWR, CL76-DWR, CL76C-DWR CL44-ADV, CL66-ADV, CL54-ADV, CL76-ADV CL44-VL, CL66-VL	Wash Tank 160°F	Rinse Tank 	Final Rinse 180°F
Two-Tank Models CL64-BAS, CL86-BAS, CL86C-BAS CL64-DWR, CL86-DWR, CL86C-DWR CL64-ADV, CL86-ADV	150°F	160°F	180°F

Minimum Temperatures Using Low-Temperature, Chemical Sanitizing

Single-Tank Models CL44-BAS, CL66-BAS, CL66C-BAS, CL54-BAS, CL76-BAS, CL76C-BAS	Wash Tank 130°F	Rinse Tank ——	Final Rinse 120°F
Two-Tank Models			
CL64-BAS, CL86-BAS, CL86C-BAS	130°F	130°F	120°F

If the tank is accidentally drained before turning off the power switch, the low-water protection circuit will automatically disable the tank heat. When the proper water level is returned, the tank heat will automatically resume heating.

Low FR Temp. Alert

Displays a message to indicate that the final rinse temperature was below the minimum requirement for a short time. This feature can be enabled in the Manager Menu. Refer to Programming, page 30.

Tank Temperature Alert

Displays a message if any tank goes below the minimum for a certain amount of time. This feature can be enabled in the Manager Menu. Refer to Programming, page 30.

DISHWASHING

After the machine has filled, start the pumps by pressing the WASH button on the HMI (Fig. 24) or by inserting a rack into the machine.

The machine will operate only if the tanks have filled to the proper level and all doors are closed. Press the STOP button on the HMI to stop the conveyor motor and pumps.

Pre-scrap the dishes thoroughly to remove large food particles and debris. DO NOT use steel wool on ware that is to be loaded into the dishwasher.

Stack dishes in the racks. Do not stack dishes one on top of another, as water must have free access to both sides of every dish. Stand plates and dishes up edgewise (Fig. 25). Cups, glasses and bowls should be inverted in an open-type rack (Fig. 25) or a compartmented rack. Silverware and other small pieces may be scattered loosely over the bottom of an open-type, flat-bottom rack. To minimize splash, position trays in the rack in the same direction as the motion of the conveyor (Fig. 25).

DO NOT attempt to wash large items (pots, pans, trays, etc.) without first checking to make sure they will fit through the machine opening. Such large items must not be washed in this dishwasher unless they will easily pass through it.

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



Fig. 25

When one rack has been loaded, slide it part way into the machine until the conveyor dogs catch the rack. Start inserting another rack when the previous rack has completely passed the curtain at the load end. The operation of the dishwasher is automatic. When a rack enters the machine, the pumps and conveyor automatically start. Each rack moves through the scrapper (if equipped), the wash and the rinse zones, and then out onto the clean dish table. The final rinse will activate after a set period of time after a rack enters the machine.

Allow dishes to drain and air-dry before removing the ware from the rack.

The conveyor dwell feature, standard, allows the operator to stop the conveyor in order to wash heavily soiled dishes for a longer period of time. To enter the dwell mode, press the menu button on the HMI to access the menus. Using the arrows, scroll down to LOGIN and enter code 1001 to access the manager menu. Use the arrows to scroll until DWELL is highlighted and then press the enter button. Select ENABLE to start the DWELL cycle. To stop the DWELL cycle, reenter the menu and select DISABLE or press the STOP button.

If a rack jams or if the load becomes excessive, an overload mechanism shuts off the conveyor drive motor and displays 'Conveyor jam. Unload rack and check for jam.'. Open the doors and remove the jam. After the jam is cleared, close the doors and press the Enter button. Press the WASH button to restart the dishwasher.

Tank temperatures are shown on the display (Fig. 24) when the machine is in operation. The final rinse temperature displays --- until a rack is in the rinse zone; then, the final rinse water temperature displays. After the ware exits the rinse zone, the final rinse temperature display returns to ---.

Pot and Pan Mode

The pot and pan feature, standard on all CL models, allows the operator to wash heavily soiled pots and pans by indexing the racks thru two pre-set wash zones for a specified amount of time. Press the POT & PAN button located on the HMI (Fig. 24) to enter the pot and pan mode. Insert a rack into the machine. Each rack will index twice thru the wash zone by the pre-set time. The machine will return to normal operation by pressing the POT & PAN button or the STOP button, or if the Auto Timer times out.

Optional Table Limit Switch

If a rack reaches the end of the unload table and trips the table limit switch, the conveyor shuts off. The display alternates between the tank names and 'Unload rack'. After the rack is removed and the table limit switch resets, normal operation of the dishwasher resumes. **NOTE**: Table limit switch must be Enabled in the Manager Menu when installed. Refer to the Manager Menu programming, page 30.

Auto-Timer

To conserve energy, if no rack enters the machine for a preset amount of time, the auto timer counts down and the pumps and conveyor shut off. The tanks continue to heat, and tank temperatures display. To resume operation, insert a rack or press the WASH button.

NOTE: The auto timer shut off setting is preset from the factory at 1 minute. You can adjust the setting from 1 to 360 minutes (1-minute increments). Refer to the Manager Menu programming, page 30.

Energy Saver Mode

After a period of machine inactivity, the control initiates Energy Saver Mode (ESM). The dish machine temperature setpoints will lower and 'Energy Saver Mode' will display. To exit Energy Saver Mode, press the WASH button. The factory setting for the Energy Saver Mode is 30 minutes. (For the 54 and 76 series machines, the factory setting is 90 minutes.) The period of machine inactivity prior to ESM can be set from 10 to 120 minutes (5-minute increments). Refer to the Manager Menu programming, page 30.

Dirty Water Alert

Three settings are provided; refer to the Manager Menu programming, page 30.

Disabled – No alarm displays. This is the factory setting.

Warning – After a period of operation, 'Dirty water reminder. Change wash water.' displays until the water is changed; however, the control allows machine operation. Drain water and refill to clear message.

Error Message – After a period of operation, 'Dirty water alert. Change wash water.' displays and further machine operation is prevented until tanks are drained and refilled.

CLEANING

The machine must be thoroughly cleaned at the end of each working shift, or at least twice a day. Use only products formulated to be safe on stainless steel. Use a damp cloth and mild soapy water.

1. Press the POWER button on the keypad to turn the machine off (Fig. 24).

A WARNING Disconnect the electrical power to the machine and follow lockout/ tagout procedures before you begin cleaning. There may be multiple circuits. Be sure all circuits are disconnected.

- 2. Open the doors. Standard door interlock switches prevent machine operation with inspection doors open.
- 3. Visually inspect the upper and lower final rinse nozzles to make sure they are free of debris.
- 4. Open drain(s) by pulling drain lever(s) up (Fig. 26).
- 5. Remove the wash arms. Open the wash arm sliders (Fig. 27) and push any nozzle obstructions into the wash arms. Thoroughly flush the wash arms in a sink. Close the wash arm sliders.





Fig. 27

- Before removing scrap basket(s) and pan(s), clean off any debris from machine walls using a hose with spray nozzle. Flush all debris toward the strainers.
- Clean debris from back side of doors, in between the doors and chamber, and around door seal of chamber. Avoid direct spray of controls on top of unit.
- 8. Clean dish tables by flushing any debris into the dishwasher.
- Remove all strainer pan(s) and scrap basket(s). Empty contents into garbage can or disposer and thoroughly clean pan(s) and basket(s) in a sink. DO NOT strike strainer pan(s) or scrap basket(s) on solid objects to dislodge debris. Refer to Figs. 17 & 20 on page 17.
- 10. When tanks are empty, remove the standpipe and clean the pump intake strainer(s) on the bottom of the standpipe or at the bottom of the tank (Figs. 15 & 28) and ensure oring at bottom of standpipe is free of debris.
- 11. Remove curtains. Thoroughly scrub, rinse and allow curtains to dry at the end of each day's operation.
- 12. Thoroughly wash out the interior of the machine with a hose fitted with a spray nozzle. Remove remaining soil with a cloth or soft brush and mild cleanser. Flush out again with spray hose. Do not allow food soil to accumulate on the bottom and/or sides of the tank. **NOTE:** For CL-VL models only, thoroughly spray coil inside tank removing all debris.



Fig. 28

 On CL-ADV models, spray the ASR basket receiver removing any food soils (Fig. 29). Thoroughly wash out interior of ASR housing located at entrance end of machine (Fig. 30) with a hose fitted with a spray nozzle. Remove remaining soil with a cloth or soft brush and mild cleanser. Flush out again with spray hose. Do not allow food soil to accumulate on the bottom and/or sides of the ASR housing.







Fig. 30

14. For CL-VL models only, remove air channel cover by lifting up on the handles (Fig. 31) and clean debris from air channel using a long-handled nylon brush (Fig. 32) and replace cover. **NOTE:** Do not use a metal brush and do not use a hose to spray the channel.



Fig. 31

Fig. 32

- 15. Return all standpipe(s), strainer pan(s) and scrap basket(s) to their proper locations (Figs. 15, 17, 18 & 20) on page 17.
- Insert the upper wash arm(s) straight onto the connector pipe. Rest the extension on the guide. Rotate the arm upward to latch it. Ensure wash arm slider is in the closed position.
- 17. Insert the lower wash arm(s) straight onto the connector pipe. Rest the extension on the guide. Swing the front of the arm down until level to fully position it. Ensure wash arm slider is in the closed position.
- 18. Leave doors open and curtains removed while machine is not in use to allow the interior to air out and dry. Install curtains after machine has dried out.

DELIMING

Delime Notification Setup

All CL models have the ability to notify the operator when to delime based on the dish machine operating hours. The factory default is 100 hours. Refer to the 'PROGRAMMING' section of this manual to set the delime notification operating hours.

Deliming Procedure

All CL dish machines are equipped with the Complete Delime[™] and Booster Guard[™] feature. The machine will notify the operator when to delime based on the machine operating hours. When prompted, the display will read 'Delime recommended. Run delime cycle.'. If ready to delime, press either arrow button to highlight 'Yes' and press the Enter button. Press the Enter button on 'No' to delime the machine later. If 'Yes' is selected, proceed to step 3 below. Start the process at step 1 if initiating the delime process manually without the notification. If initiating the delime process without the notification, the delime cycle can be initiated with the power in the off position or from the idle mode. Once the delime cycle has been completed, the delime notification reminder will be reset.

The machine will continue to display the delime notification reminder until a delime cycle has been completed. If the delime lockout has been enabled, the machine will automatically force a delime cycle after 30 notifications have been declined.

NOTE: The machine will automatically pump delime solution into the dish machine during the delime cycle. Ensure sufficient chemical is present in the bottle and that the standpipe is fully inserted into the bottle (Fig. 33).





- 1. Press the Delime button.
- 2. The display will prompt 'Start Delime Cycle?'. Press either arrow button to highlight Yes and press the Enter button.
- 3. The display will prompt 'Please clean strainers.'. Open the doors and remove the scrap basket(s) and strainer pan(s). Clean the basket(s) and pan(s) in a sink and ensure all food soil is removed. Replace the strainer pan(s) and scrap basket(s) in the machine, close the doors, and press the Enter button.
- 4. The display will prompt 'Please drain the machine.'. Open the doors and pull the drain lever(s) to drain the machine and then press the Enter button. The display will show 'Draining for Delime' and a progress bar.
- 5. After the machine has drained, the display will prompt 'Please close drain and doors.'. Once the doors are closed, press the Enter button.
- 6. The machine will display 'Filling for Delime' and a progress bar. The machine will begin to fill and add the required amount of delime chemical while filling. Once the machine is full, 'Delime Ongoing' will be displayed and the wash pump(s) will run for 20 minutes followed by a 10-minute rinse cycle where the display will show 'Rinse Cycle In Progress'. The rinse cycle will flush the delime chemical from the machine.
- 7. After the rinse cycle has completed, 'Please drain the machine' will be displayed. Open the doors and pull the drain lever to drain the machine and then press the Enter button. 'Draining after delime' will be displayed and the machine will power off after draining is complete.

NOTE: If there is no user interaction after 5 minutes after the rinse cycle has completed, the unit will power off. Once the unit is powered back on, 'Please drain the machine' will be displayed. Open the doors and pull the drain lever to drain the machine and then press the Enter button. 'Draining after delime' will be displayed and the machine will power off after draining is complete.

DOS AND DON'TS FOR YOUR NEW HOBART WAREWASHER

DO assure proper water hardness of 3 grains per gallon or less.

DO pre-scrap dishes thoroughly.

DO use only detergents recommended by your chemical supplier.

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

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

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

DO NOT use detergents formulated for residential dishwashers.

DO NOT allow food soil to accumulate on the tank bottom, tank sides, or door seal.

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 surfaces.

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.

PROGRAMMING

MANAGER MENU

The CL dish machines allow customization options for machine operation. To activate or change these features, enter the Manager Menu using the following procedure.

- 1. Power on dishwasher. Display shows ready screen when fill cycle has completed.
- 2. Press the Menu button in the upper-right hand corner of the display.
- 3. With 'Login' highlighted, press the Enter button. The 'Enter PIN' screen will be displayed.
- 4. The default manager code is 1001. Use the arrow buttons to change the value and then press the Enter button to select the value and toggle to the next digit until the code is entered.
- 5. Use the Up and Down Arrows to toggle thru the Manager Menu.
 - a. Once the desired selection is outlined, press the Enter button.
 - b. For selections that are editable, use the Up and Down arrows to change the value.
 - c. Once the required value is displayed, press the Enter button to save the selection.
- 6. To exit the programming, use the Up and Down arrows to scroll thru the parameters until 'back' is outlined and press the Enter button. Repeat this procedure until the Ready screen is displayed.

Parameter Name	Description	Possible Values	Default Value		
	MACHINE SETTINGS				
Language	Sets the language for machine display.	English, French, Spanish, etc.	English		
Date	Sets the current day, month, year. Date format can be updated.				
Time	Selects the current time (hours & minutes). Time can also be updated to 24h format.				
Temperature Units	Sets the temperature displays to Fahrenheit or Celsius.	Fahrenheit or Celsius	Fahrenheit		
	MACHINE	EALARM			
Machine Alarm	Enables or disables audible alarm.	Enable or Disable	Enable		
	CHEMICA	AL MENU			
Delime Concentration	Sets the delime chemical concentration level based on % of delime solution in water.	Low (1.25%) Medium (1.89%) High (3.77%)	Medium (1.89%)		
Sanitization Options	Sets the tank temperatures for either high temperature machine or chemical sani- tation machine.	High Temperature or Chemical Sanitation	High Temperature		

Parameter Name	Description	Possible Values	Default Value		
	DIRTY WATER ALERT				
Dirty Water Alert	Sets the water supply water hardness.	Error message, Disable, or Warning	Disable		
	AUTOMAT	C START *			
Enable/Disable	Allows the automatic start feature to be disabled or enabled.	Enable or Disable	Disable		
Settings	Sets the automatic start day of week and time. If feature is enabled, machine will automatically power on and fill at day and time set.				
	W	iFi			
Enable/Disable	Enables or disables WiFi connectivity.	Enable or Disable	Disable		
Status	Displays the current WiFi connection status of the machine.				
Connection Assistant	Guided connection to WiFi network.	 Search Network WPS Add Network 			
Access Code	Generates an access code that can be used to pair the machine to the SmartCon- nect App.				
Connection Test	Tests the WiFi connection with the machine to confirm WiFi connectivity.				
Manual Installation	Manual connection to WiFi network.	 Search Network WPS Add Network 			
Mobile Connection Assistant	Pairs machine to Wifi through SmartConnect app.	No or Yes	No		
DELIME REMINDER					
Cycles Until Delime Notification	Displays remaining operat- ing hours delime reminder notification is displayed.				
Set Counter	Sets the number of operat- ing hours until the delime reminder notification is displayed.	0-999999	100		

Parameter Name	Description	Possible Values	Default Value	
	TEMPERAT	URE ALERT		
Rinse Temperature Alert	Enables or disables rinse temperature warning or error. Rinse temperature is monitored during wash cycle and error or warning is triggered if not reached.	Disabled, Notification, or Lockout Machine	Disabled	
Wash Temperature Alert	Enables or disables wash tank temperature warning or error. Wash tank temper- ature is monitored during wash cycle and error or warning is triggered if not reached.	Disabled, Notification, or Lockout Machine	Disabled	
	DRAIN WATER	R TEMPERING		
Drain Water Tempering	Enables or disables drain water tempering. Drain water tempering should only be enabled if the drain water tempering kit has been installed.	Enable or Disable	Disable	
	ENERGY SA	VER TIMER		
Energy Saver Timer	Time in Ready before ma- chine enters Energy Saver Mode.	10-120 min	30 min (90 minutes for 54 & 76 series)	
	TABLE LIM	IT SWITCH		
Table Limit Switch	Enables or disables the table limit switch which stops the conveyer and notifies user to "Unload racks." when the conveyer is full.	Enable or Disable	Disable	
	AUTOTIME	R TIMEOUT		
Autotimer Timeout	Time after wash pumps turn off or the last rack leaves the machine and be- fore the conveyer turns off.	1-360 min	1 min	
	EXTERNAL F	AN TIMEOUT		
External Fan Timeout	Time after wash pumps turn off or the last rack leaves the machine and before the external vent fan turns off. Not available and should not be changed for gas machines as the fan remains on.	0-999 min	5 min	
	DWELL			
Dwell	Enables or disables DWELL mode which tem- porarily stops the conveyer as soon as enabled.	Enable or Disable	Disable	

* **NOTE:** When enabling Automatic Start feature, the machine will power on and fill while unattended. Prior to using this feature, ensure all machine panels are in place and that all facility connections to the machine (i.e.: water, drain, electric) are in working order.

HOBART SMARTCONNECT APP

Thanks to built-in WiFi, you can connect your CL commercial dishwasher to our easyto-use smart phone app. With the free Hobart SmartConnect app, you can create better procedures and enhance performance in the dishroom by monitoring sanitization and analyzing usage, consumption and costs. **NOTE:** For 240-volt, 380-volt and 440-volt supplies, contact Hobart Service to adjust the power value in the service settings for accurate energy consumption values.

Getting Connected

Registering an Account

- 1. Open the app and tap on **Register**.
- 2. Enter your email and tap **Send Verification Code**. Then enter the code you receive to your email.
- 3. Provide the remaining information, including a password.
- 4. Tap Create.
- 5. Read and agree to the End User License Agreement and Privacy Policy. Tap **Confirm** when you are done.

You can now use the app to connect to WiFi and pair your machine.

Connecting the CL to WiFi from the SmartConnect App

- 1. Tap on the "**Menu**" button, then tap on the "**WiFi**" button.
- 2. Select the Dishwashing option.
- 3. Select CL Screen for U.S.
- 4. Follow the guide in the app to prepare the machine for connection, then tap on "**Confirm Instructions**" and tap "**Yes**" if the machine is ready for connection.
- 5. The machine will generate a code; enter this into the app and it will connect with the machine.
- 6. A list of available networks will be displayed. Select the network you want to connect with and enter the network password if necessary.
- 7. When the WiFi connection is successful, the machine will indicate success and display an access code to pair with the app.
- 8. From the main screen of the app, tap on the "**Menu**" button, then tap on the "+" button and enter the access code to pair with the machine.

Connecting the CL to WiFi from the Machine

- 1. Tap on the "Menu" button, select "Manager Menu" and enter pin 1001.
- 2. Scroll to "WiFi" and press Enter.
- 3. Scroll and select "**Connection Assistant**". If prompted to Enable WiFi, select Enable and press Enter.
- 4. Scroll and select "Search Network".
- 5. Scroll and select the available network you wish to connect to.
- 6. Enter the password for your network, then tap "OK".

7. The machine will connect to your network. Press Enter and scroll thru the Terms and Conditions and press Enter. Wait for the machine to transfer data to the SmartConnect Cloud and display a connection code for the app.

If your machine won't connect to the WiFi, go to our FAQs at **www.itwfoodequipment**. **com/smartconnect365/help** to troubleshoot your connection.

To Pair and Add your CL to the App

Before pairing, make sure your machine is connected to WiFi using the previous steps. To pair your Hobart CL to the SmartConnect App:

From the Dishmachine

- 1. Tap on the "**Menu**" button to enter the manager menu on your dishmachine.
- 2. Select "Manager Menu" and enter pin 1001.
- 3. Scroll and select "WiFi".
- 4. Scroll and select "Access Code".
- 5. An activation code will be generated and displayed. This code is valid for 48 hours.

From the App

- 1. Tap on the "Menu" button and then tap on the "+" button at the bottom of the screen.
- 2. Enter the activation code found in the manager menu of the machine's touchscreen, then tap **Submit**.
- 3. Enter your machine name and location (optional).
- 4. Select your service provider from the drop-down menu.
- 5. Tap Finish.

Your machine will now appear in the machine list on the home screen of the app.

For more information about SmartConnect, including usage instructions, troubleshooting for your WiFi connection and other general questions, visit the SmartConnect Help and FAQ guide at **www.itwfoodequipment.com/smartconnect365/help**.

MAINTENANCE

	A WARNING Disconnect the electrical power to the machine and follow lockout/ tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected.
VENT	
	When cool, check the dishwasher vent every six months for obstructions.
MOTORS	
	The motors are equipped with permanently lubricated bearings and require no lubrication maintenance.
STRAINERS	
	The incoming water line(s) include factory plumbed line strainers. Remove the screen(s) and clean every 6 months or as required.
	The final rinse arms have strainers located in the ends of the arms where the water enters the arms. Remove the final rinse arms and clean the strainers every 6 months or as required.
O-RINGS	
	The wash arm connectors, standpipe(s) and final rinse arms have an o-ring seal. Inspect and replace worn or torn o-rings every 6 months or as required.
DELIME	
	Inspect the machine for lime scale build-up and ensure machine is delimed as required to prevent excessive scale build-up.

TROUBLESHOOTING

ERROR CODE CHART WITH POSSIBLE SOLUTIONS

Error No.	Text On Screen	Error Description	Troubleshooting
001	Booster temperature sen- sor failure. Contact service.	Short circuit of booster tem- perature sensor or booster temperature is greater than 239°F / 115°C.	Contact Hobart Service.
002	Booster temperature sen- sor failure. Contact service.	Open circuit of booster tem- perature sensor or booster temperature is greater than 32°F/0°C.	Contact Hobart Service.
004	Rinse temperature not reached.	During the wash cycle, the final rinse temperature did not meet the minimum setpoint temperature.	Press the ENTER button on the display to clear the error. If the error persists, contact Hobart Service.
006	Wash tank temperature sensor failure. Contact service.	Short circuit of wash tank temperature sensor or booster temperature is greater than 239°F / 115°C.	Contact Hobart Service.
007	Wash tank temperature sensor failure. Contact service.	Open circuit of wash tank temperature sensor or booster temperature is greater than 32°F/0°C.	Contact Hobart Service.
014	Booster pressure sensor failure. Contact service.	Short circuit of booster pressure sensor or the maximum booster water level has been exceeded.	Contact Hobart Service.
015	Booster pressure sensor failure. Contact service.	Open circuit of booster pressure sensor or the mini- mum booster water level has not been reached.	Contact Hobart Service.
016	Wash tank pressure sensor failure. Contact service.	Short circuit of wash tank pressure sensor or the maximum booster water level has been exceeded.	Contact Hobart Service.
017	Wash tank pressure sensor failure. Contact service.	Open circuit of wash tank pressure sensor or he mini- mum booster water level has not been reached.	Contact Hobart Service.
018	Wash tank water level is too high. Check for drain obstructions	Wash tank water level is above the upper limit.	Check drain for obstructions and drain the machine. If the error persists or unable to drain, contact Hobart Service.
020	Tank fill time exceeded. Confirm drain lever is closed. Check incoming water supply.	The wash tank did not fill within the anticipated time.	Ensure the drain is closed. Ensure incoming water supply is turned on and that fill hose is not kinked. Verify water pressure is 20 - 65 psi. Drain the machine and try filling again. If the error persists, contact Hobart Service.
023	Tank fill time exceeded. Confirm drain lever is closed. Check incoming water supply.	The wash tank water level did not increase within the set time.	Ensure the drain is closed. Ensure incoming water supply is turned on and that fill hose is not kinked. Verify water pressure is 20 - 65 psi. If the error persists, contact Hobart Service.

Error No.	Text On Screen	Error Description	Troubleshooting
029	Wash interrupted. Close door(s).	Door is opened during ma- chine operation.	Close the door and ensure door is fully closed. The machine returns to Ready state. If the error persists, contact Hobart Service.
033	Booster fill time exceeded. Confirm drain lever is closed. Check incoming water supply.	The booster did not fill within the anticipated time.	Ensure the drain is closed. Ensure incoming water supply is turned on and that fill hose is not kinked. Verify water pressure is 20 - 65 psi. Drain the machine and try filling again. If the error persists, contact Hobart Service.
039	Filling interrupted. Close door(s).	Door is opened during the fill cycle.	Close the door and ensure door is fully closed. The fill program continues. If the error persists, contact Hobart Service.
049	Communication between the controls has been inter- rupted. Contact service.	Interruption of communica- tion between control board and touchscreen display.	Communication between the controls should be automatically restored. If the problem persists, contact Hobart Service.
080	Delime required. Run de- lime cycle.	If delime lockout is enabled, machine will lock out due to delime reminder being ignored 30 times.	Press the Enter button on the display to run a delime cycle and reset the delime remind- er.
081	Final rinse temperature sensor failure. Contact service.	Short circuit of final rinse temperature sensor or final rinse temperature is greater than 239°F / 115°C.	Contact Hobart Service.
082	Final rinse temperature sensor failure. Contact service.	Open circuit of final rinse temperature sensor or final rinse temperature is greater than 32°F/0°C.	Contact Hobart Service.
083	Final rinse temperature too low.	The final rinse temperature did not reach minimum tem- perature within set time.	Press the Enter button on the display to clear the error. If the error persists, contact Hobart Service.
084	Final rinse temperature too low. Machine locked.	The final rinse temperature did not reach minimum temperature within set time. Wash cycle is stopped.	Press the Enter button on the display to clear the error. The machine will turn off. If the error persists, contact Hobart Service.
085	Wash tank 1 overtemp tripped. Contact service.	Wash tank overtemp has been tripped.	Contact Hobart Service.
086	Booster overtemp tripped. Contact service.	Booster overtemp has been tripped.	Contact Hobart Service.
088	Wash tank heater contactor error. Contact service.	Wash tank heater remains on while ignoring software command to turn off.	Contact Hobart Service.
089	Booster heater contactor error. Contact service.	Booster heater remains on while ignoring software command to turn off.	Contact Hobart Service.
094	Power rinse tank pressure sensor failure. Contact service.	Short circuit of power rinse tank pressure sensor or the maximum power rinse tank water level has been exceeded.	Contact Hobart Service.

Error No.	Text On Screen	Error Description	Troubleshooting	
095	Power rinse tank pressure sensor failure. Contact service.	Open circuit of power rinse tank pressure sensor or the minimum power rinse tank water level has not been reached.	Contact Hobart Service.	
100	Power rinse temperature sensor failure. Contact service.	Short circuit of power rinse temperature sensor or power rinse tank tempera- ture is greater than 239°F / 115°C.	Contact Hobart Service.	
101	Power rinse temperature sensor failure. Contact service.	Open circuit of power rinse temperature sensor or pow- er rinse tank temperature is greater than 32°F/0°C.	Contact Hobart Service.	
102	Drain Water Tempering (DWT) temperature sensor failure. Contact service or disable in menu if DWT as- sembly is not installed.	Short circuit of Drain Water Tempering temperature sensor or power rinse tank temperature is greater than 239°F / 115°C.	If Drain Water Tempering assembly has not been installed, disable DWT in the manager menu. Contact Hobart Service.	
103	Drain Water Tempering (DWT) temperature sensor failure. Contact service or disable in menu if DWT as- sembly is not installed.	Open circuit of Drain Water Tempering temperature sensor or power rinse tank temperature is greater than 32°F/0°C.	If Drain Water Tempering assembly has not been installed, disable DWT in the manager menu. Contact Hobart Service.	
104	Check vent hood for air flow.	The vent hood is not open.	Check building's exhaust vent system. Con- tact Hobart Service.	
111	Conveyer jam. Unload rack and check for jam.	The conveyer is jammed and unable to move.	Unload racks and check for jam. Press the Enter button on the display to clear the error. If the error persists, contact Hobart Service.	
113	Unload rack.	The conveyer is full and racks need unloaded.	Unload racks and check for ware stuck in the entrance of the machine. Press the En- ter button on the display to clear the error. If the error persists, contact Hobart Service.	
116	Pre wash tank pressure sensor failure. Contact service.	Short circuit of pre wash tank pressure sensor or the maximum pre wash tank water level has been exceeded.	Contact Hobart Service.	
117	Pre wash tank pressure sensor failure. Contact service.	Open circuit of pre wash tank pressure sensor or the minimum pre wash tank water level has not been reached.	Contact Hobart Service.	
138	Power rinse overtemp tripped. Contact service.	Power rinse heater remains on while ignoring software command to turn off.	Contact Hobart Service.	

Error No.	Text On Screen	Error Description	Troubleshooting	
140	Booster fill time exceeded. Confirm drain lever is closed. Check incoming water supply.	The booster water level did not increase within the set time.	Ensure the drain is closed. Ensure incoming water supply is turned on and that fill hose is not kinked. Verify water pressure is 20 - 65 psi. Press the Enter button on the display to clear the error. If the error persists, contact Hobart Service.	
141	Booster fill time exceeded. Confirm drain lever is closed. Check incoming water supply.	The booster water level did not increase within the set time.	Ensure the drain is closed. Ensure incoming water supply is turned on and that fill hose is not kinked. Verify water pressure is 20 - 65 psi. Press the Enter button on the display to clear the error. If the error persists, contact Hobart Service.	
160	Wash tank temperature not reached.	During the wash cycle, the wash tank temperature did not meet the minimum setpoint temperature.	Press the Enter button on the display to clear the error. If the error persists, contact Hobart Service.	
163	Wash tank temperature not reached.	During the wash cycle, the wash tank temperature did not meet the minimum setpoint temperature. Wash cycle is stopped.	Press the Enter button on the display to clear the error. The machine will turn off. If the error persists, contact Hobart Service.	
166	Rinse temperature not reached.	During the wash cycle, the final rinse temperature did not meet the minimum setpoint temperature. Wash cycle is stopped.	Press the Enter button on the display to clear the error. The machine will turn off. If the error persists, contact Hobart Service.	
169	Power rinse temperature not reached.	During the wash cycle, the power rinse temperature did not meet the minimum setpoint temperature.	Press the Enter button on the display to clear the error. If the error persists, contact Hobart Service.	
170	Power rinse temperature not reached.	During the wash cycle, the power rinse temperature did not meet the minimum setpoint temperature. Wash cycle is stopped.	Press the Enter button on the display to clear the error. The machine will turn off. If the error persists, contact Hobart Service.	
183	Dirty water reminder. Change wash water.	The machine has been run- ning for too long without the water being changed.	Press the Enter button on the display to clear the error. If the error persists, contact Hobart Service.	
184	Dirty water alert. Change wash water.	The machine has been run- ning for too long without the water being changed.	Drain the machine. Press the Enter button on the display to clear the error. If the error persists, contact Hobart Service.	
186	Power rinse tank heater contactor error. Contact service.	Power rinse tank heater remains on while ignoring software command to turn off.	Contact Hobart Service.	

SYMPTOM	POSSIBLE CAUSE
No Machine Operation.	 Blown fuse or tripped circuit breaker at power supply. Inspection door(s) not closed. Conveyor has jammed. The Auto-Timer may have timed out. Push START or insert rack. If table limit switch is used, the switch may be tripped. The machine is in Energy Saver Mode. Press WASH on the HMI to resume.
Dishes Not Clean.	 Insufficient wash water. Drain obstruction causing an open drain condition. Worn or torn drain O-ring allowing wash water to drain. Wash arm sliders open. Wash arm nozzle obstruction. Worn or torn manifold O-ring allowing wash water to drain. Loss of water pressure due to pump obstructions. Loss of water pressure due to pump obstructions. MARNING Disconnect the electrical power to the machine and follow lockout/tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected. Drain tank(s) and check for any obstruction at the pump intake. Incorrect water temperature. Check circuit breaker to electric heat supply, or main steam valve, or gas supply valve. Make certain that valve is completely open. Incorrect detergent dispensing. Contact your detergent sales representative. Strainer pans or buckets need to be emptied and/or cleaned. Tanks may need to be drained and filled with clean water.
Leaking Valve.	1. Foreign material preventing proper valve operation. A critical period is soon after installation when pipe compound or metal shavings may lodge at the valve seat. If problem is with a solenoid valve, it is recommended that you contact your local Hobart Service office.
Spotting of Silverware, Glasses and Dishes.	 Improperly loaded racks. Incorrect final rinse water temperature (180°F or 120°F, minimum, page 23). Loss of water pressure due to pump obstruction. WARNING Disconnect the electrical power to the machine and follow lockout/tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected. Drain tank(s) and check for any obstruction at the pump intake. Clogged wash arm nozzles. Improper water hardness (3 grains per gallon or less is recommended). Incorrect detergent for water type. Contact chemical supplier. Clogged rinse nozzle(s). Problem with Rinse Aid dispenser. Contact chemical supplier.
Low Final Rinse Temperature With Built-In Booster Heater.	 Overtemp protector tripped. Contact Hobart Service. Circuit breaker to heat system tripped. Incoming water is below minimum temperature. If your temperature control needs adjustment, or if there is a booster heater failure, contact your local Hobart Service office.
Inadequate Rinse.	 Dirty line strainer (Fig. 34) causing reduced water flow. Turn off water supply, remove strainer cap and screen. Clean screen. Reassemble. Low supply line pressure or dirty in-line rinse arm strainer. Clogged rinse nozzle(s). NOTE: CL-DWR & CL-ADV models have two final rinse supply lines. Ensure incoming water line valve is open. Faulty rinse pump. Contact Hobart Service. NOTE: If symptom(s) persists after possible causes have been checked, contact your

NOTE: If symptom(s) persists after possible causes have been checked, contact your local Hobart Service office.

SYMPTOM	POSSIBLE CAUSE
Continuous Rinse.	 Start actuator (Fig. 35) not moving freely. A WARNING Disconnect the electrical power to the machine and follow lockout/tagout procedures. There may be multiple circuits. Be sure all circuits are disconnected. Check actuator for free movement. Check for foreign object in mechanism, i.e., silverware, steel wool, etc. Rinse valve failed or jammed open.
No Wash Tank Heat, Tanks Not Heating.	 The machine is equipped with low water safety devices which shut off heat if water level drops. Check for proper water level. Circuit breaker(s) to heat system tripped (electric heat). Check air trap for debris. Overtemp protector tripped or failed heating element (electric heat). Contact Hobart Service. The main gas supply valve is not open (gas heat). Make sure all standpipes are properly seated. Steam supply valve(s) are not opened completely or supply pressure is too low (steam heat). Bucket trap not functioning correctly (steam heat). Improperly operating steam solenoid valve(s) (steam heat).
No or Slow Fill.	 Door(s) are open. Main fill (water supply valve) could be closed. Check air trap for debris. Dirty line strainer (Fig. 34) causing reduced water flow. Turn off water supply, remove strainer cap and withdraw and clean screens. Reassemble. Problem with solenoid valve. Low incoming water supply pressure. Drain(s) open. Standpipe(s) not seated properly or placed in wrong tank. Drain obstruction causing an open drain condition. Worn or torn drain O-ring allowing wash water to drain.
Leaking Vacuum Breaker.	 Foreign material or corrosion could be preventing proper valve operation. Shut off all incoming water supply line(s). Unscrew and lift bonnet from valve body. Clean valve and reassemble. Corroded or bad seal. Contact Hobart Service.
Excessive Steam	 Vent stack damper not adjusted properly. Curtains missing or worn.



NOTE: If symptom(s) persists after possible causes have been checked, contact your local Hobart Service office.

SERVICE

CL EXPENDABLE PARTS

The below CL dish machine parts are expendable by nature and may not be covered by Hobart Product Warranty. To view the Hobart Product Warranty, refer to https://www.hobartservice.com/service-plans/hobart-product-warranty.

CL EXPENDABLE PARTS LIST

Part Number	Description	Qty.	Machine Type
00-443581	USB plug	1	All
00-950188	Tubing, ¼"	1	All
00-13156-00001	Clamp (spring action hose)	AR	All
00-949651-00002	Squeeze tube kit, Delime (Includes hose clamps)	1	All
00-941181	I, Kit, slider/plunger, CLE	AR	All
00-473232	Slide, slider, small	AR	All
00-936951	Slider, large	AR	All
00-919274	Slide, drive, conveyor	1	All
00-941145	I, Kit, rod/slider, CLE	1	All
00-936738	Cover, Standpipe	AR	All
00-936838-00009	Rack, 6-pan	AR	All
00-315191	Peg rack	AR	All
00-315193	Combination rack	AR	All
00-919758	Curtain, splash, 4-ply (STD)	AR	All
00-919975	Curtain, splash, 4-ply (HTS)	AR	All
00-919509	Curtain, splash, short	AR	All
00-936922	Curtain, carry over, short	1	CL64/CL86 Series
00-936428	Curtain, wash, 3-ply (STD)	1	CL64/CL86 Series
00-936429	Curtain, wash, 3-ply (HTS)	1	CL64/CL86 Series
00-936520	Curtain, splash, corner	1	CL66C, CL76C, CL86C
00-936931	Curtain, assy, side	2	CL66C, CL76C, CL86C
00-941277	Curtain, vent cowl (STD)	1	CL66, CL76, CL86
00-941278	Curtain, vent cowl (HTS)	1	CL66, CL76, CL86

Contact your local Hobart Service office for any repairs or adjustments needed on this equipment. If a gas orifice fitting is to be replaced, have it serviced by qualified Hobart Service personnel. Long-term service contracts are available on this and other Hobart products.