LANCER | BEER SYSTEMS

Mini Lady

240V / 50Hz

Installation, Operation & Service Manual

GLOBAL & GREEN
THINK THE EARTH

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1. Introduction

Thank you for purchasing this quality Lancer product. All Lancer products are constructed using the highest quality materials and components. They are designed to the highest possible standards, therefore offering our customers endless hours of optimum performance.

2. The Company

Lancer is a wholly owned subsidiary of Lancer Corporation, a world leader in the supply of Beverage Dispensing Equipment based in San Antonio, Texas. Lancer has manufacturing bases and distribution networks in 97 countries. Lancer is in turn ultimately owned by Hoshizaki Electric Co Ltd of Nagoya, Japan. Hoshizaki is a global leader in food service equipment.

Lancer's head office and manufacturing base is located in Adelaide (SA), with branch offices and warehousing facilities in Sydney (NSW), Melbourne (VIC), Brisbane (QLD), Perth (WA) and Auckland (New Zealand).

3. Our Products

Lancer specialises in the design, engineering, manufacture, and marketing of beverage dispensing and Heat Recovery equipment in three core categories:

Soft Drink Equipment

Mechanically cooled and ice cooled soft drink dispensers, frozen beverage dispensers, dispensing valves, carbonators and an extensive line of beverage dispensing parts and accessories.

Beer Equipment

Lancer manufactures and markets beer dispensing and chilling equipment, and related accessories. Products include founts, chillers, Chillerplates, drip trays, taps, handles, beer line cleaning equipment and an extensive line of beverage dispensing parts and accessories.

Heat Recovery Equipment

Lancer manufactures a range of Heat Recovery systems designed to provide our customers with free hot water.

4. Product Details

4.1 Product Features

The Mini Lady Chiller is a refrigerated bench top unit designed to refrigerate and distribute pre-mix drinks.

4.2 Specifications

Voltage	230/240 Volts
Frequency	50 Hz
Current Draw	1.85 Amps
Watts	253 W
Ambient Temperature	2 - 40°C
Max Pressure Rating	1000 kpa
Dimensions	
Width	407 mm
Depth	407 mm
Height	290 mm
Net Weight	23kg
Refrigerant	R134a
Ice bank Weight	4 kg
Water Bank Capacity	12 litres
Housing	Stainless Steel
Coils	Stainless Steel
Ice bank Control	Electronic
Cooling Capacity	25 Lt/hr

5. Safety Information

5.1 Safety Instructions

For your personal safety, and that of others working around you please read, understand, and follow thoroughly all safety instructions included in this manual and on the Chiller.

- Review all applicable OSH (Occupational Safety & Health) regulations.
- Learn how to operate the chiller and use the controls properly.
- Do not allow untrained personnel to operate the machine.
- Ensure that the chiller is maintained according to service manual instructions.
- Do not allow any unauthorised modifications to the machine.

5.2 Recognise Safety Alert Symbols

The safety alert symbol precedes Warning and Caution notes throughout this manual. To prevent personal injury or damage to the machine these alerts must be strictly adhered too.

Warning	Alerts to a potentially hazardous situation that if not avoided **CAN** result in death, serious injury.

Caution	Alerts to a potentially hazardous situation that if not avoided **MAY** result in injury or equipment damage.

5.3 Operating

Warning	Chillers are intended for indoor operation only; do not operate outside unless suitably protected by a weatherproof enclosure. This appliance is not suitable for installation in an area where a water jet could be used.

Caution	This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

5.4 Service & Maintenance

Caution	Installation of Chiller and service work should only be performed by fully trained & certified Electrical, Plumbing, & Refrigeration Technicians.

Warning	**ALL WIRING AND PLUMBING MUST CONFORM TO LOCAL AND NATIONAL CODES.**

Warning	Always disconnect the machine's electrical plug from the socket outlet before accessing any part of the machine. Do not remove protective covers or safety grids during machine operation. Always keep hands and fingers away from moving parts.

6. Recommendations

6.1 Advices

Before using this machine, carefully read this entire instruction manual.

The operator must fully comprehend the information and prescriptions contained herein, which are essential for a correct use of the machine. The interventions carried out by the operator on the machine are allowed only within the limits of his competence and the scope of previous training.

The machine has been designed and built with mechanical and electrical safety devices, suitable for protection against possible physical injuries. The operator must be fully aware of the operation mechanisms of the machine as far as within his competence. Although the machine is equipped with these safety devices, the operator must be aware of the potential risks that exist while operating the machine.

It is the buyer's responsibility to ensure that the users are trained and fully aware of all the information and prescriptions contained in the documentation supplied.

Only original spare parts guarantee the functional reliability and optimisation of the machine's performance. Any modifications to the machine carried out by the operator shall be considered as his total responsibility.

The operator is responsible for all the operations necessary to maintain the machine in good working order, before and during its use.

7. General Information

7.1 Description of the Machine

The machine is composed of a refrigerator housed in a metal casing, which protects the moving parts. All the machine's openings are fitted with plastic or metal grids fastened with clamping screws or joints.

7.2 Proper uses

The machine is used to refrigerate premix beverages (beer, wine and soft drink) and to their distribution by means of suitable connections with steel or food plastic pipes.

7.3 Improper uses

The machine is not intended for any use other than that specified in point 7.2. Do not use the machine for non-food liquids. The machine has not been designed to operate in excessive humidity, outside or in an explosive atmosphere; it is therefore strictly forbidden to install or use the machine in such conditions.

8. Transportation

8.1 Packaging

All the machine's metal parts are covered in a protective film and the entire machine is enclosed in a propylene bag.

It is contained in a cardboard box and held tightly by means of ecological foam cushions to protect it from possible accidental crashes.

Printed on the outside of the box are the words "FRAGILE", "ALTO" (THIS WAY UP), as well as the trade name of the Manufacturing Company VIN SERVICE srl.

8.2 Transport and handling with packaging

The machine must always be handled in a vertical position (ref. "ALTO" – THIS WAY UP) using forklifts and observing both the "ALTO" (THIS WAY UP) and "FRAGILE" warnings.

8.3 Storage of the machine with packaging

The machine must be stored in a humidity-free room and the machine must not be exposed to bad weather. Never stack more than two machines on top of another.

8.4 Receiving

Each unit is completely tested under operating conditions and thoroughly inspected before shipment. At time of shipment, the carrier accepts the unit and any claim for damage(s) must be made with the carrier. Upon receiving units from the delivering carrier, carefully inspect shipping crate for visible indication(s) of damage. If damage exists, have carrier note damage on bill of landing and file a claim with the carrier.

8.5 Unpacking

Open the cardboard box, remove the ecological foam cushions and extract the machine. Remove the propylene bag and the protective film from the machine body. Inspect unit for concealed damage and if evident, notify delivering carrier and file a claim against the carrier.

8.6 Transport and handling the machine without packaging

The machine must always be handled in a vertical position using forklifts or by manually lifting the machine.

8.7 Storage of the machine without packaging

Do not store the machine without its special packaging. Should, however, this not be possible the machine must be stored in a humidity-free room and not be exposed to bad weather. Do not stack other machines on top of the machine without its special packaging.

9. Machine Not in Use

To deactivate the machine, proceed as follows:

A. Disconnect the electrical plug from the socket outlet.

B. Remove all the water contained in the cooling tray using the appropriate draining pipe or a suitable transfer pump.

C. Clean the interior and exterior of the machine's stainless steel coils and taps using a suitable liquid detergent.

D. Repack the machine in its original packaging.

10. Installation and Adjustment

⚠	**Warning**	**To avoid personal injury or damage, do not attempt to lift a Chiller without help.**

10.1 Installation

After having removed the machine from its packaging as described in point 8.5 make sure that:

A. The supporting surface on which the machine will be installed is solid and perfectly level.

B. Position the machine away from sources of heat and humidity.

C. The condenser must always be free and in good working order, leave a gap of at least 20-30cm from the wall to allow good air circulation in the condenser.

10.2 Filling the tank

After the machine has been installed as per point 10.1, proceed to fill the tank. Remove the upper cover of the machine, pour clean water in the tank, and avoid adding brine and/or various other additives until the evaporator is covered. Connect the outlets of the overflow pipe, with the plastic pipe, to the nearest drain. Replace the cover.

10.3 Regulating the Thermostat

The machine's standard configurations foresee an electronic thermostat positioned inside the machine.

The ice bank formation begins when the machine is switched on. The probe, which is positioned in the water tank, read the ice bank formation and regulates the cooler turning on/off to maintain a continuous ice bank.

Digital thermostat – the thermostat is regulated through a display and its 4 buttons. See the instruction manual included in the packaging.

10.4 Hydraulic Connection

The machine is delivered preset for the hydraulic connection, this appliance is equipped with outgoing stainless steel pipes for easy installation. Connect the product inlet and outlet pipes to the steel coils on the exterior of the machine body using quick couplings or clamps.

10.5 Electrical Connection

- This unit is connected to the supply via a 10 amp flexible cord fitted with a 3 pin plug.
- Check the name plate on the machine for electrical supply requirements. Use only the power supply specified on the name plate.

	Warning	If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard. Electrical Connection Must Be Made In Accordance With The Appropriate Local Codes and Regulations. Use of an RCD is recommended.

10.6 Start up

Connect the machine's electrical plug to the mains outlet. The machine components (compressor – motor fan – stirrer) will start up. After approximately 3 – 5 hours (based on the model and power) in the ICE BANK position, the compressor and motor fan should stop, since the ice bank will have completely formed.

The motor stirrer should operate continuously to maintain the exchange between water and ice.

11. Routine Maintenance

11.1 Cleaning the condenser

Disconnect the machine's electrical plug from the mains outlet before cleaning the condenser. Use a brush to remove any dust or foreign matter, which may prevent air from circulating around the condenser fins.

Caution: always wear protective gloves for this operation.

Washing and sterilization

Using the special liquid detergent diluted in cold water, proceed to clean the coil lines where the liquid passes, in the following way:

A. Disconnect the premix beverage and discharge all the beverage in the circuit.
B. Prepare the liquid detergent by diluting it in water, carefully paying attention to the recommended doses.
C. Fill the circuit with the prepared liquid, leave for approx 15-20 .
D. Thoroughly rinse all the circuit lines with water.
E. Reset the machine to its original condition by reconnecting the premix beverage.

11.2 Overflow

Periodically check that the hole and the overflow pipe are not blocked with dirt or ice. Restore the correct down flow of water.

11.3 Checking efficiency

Make sure that the motor fan is free from any filaments and dust. Make sure that the motor stirrer has no scaling due to the water limestone. Remove any scaling.

12. Maintenance

12.1 Cleaning the tank

Clean the water tank every 12 months.

Procedure:

A. Disconnect the machine's electrical plug from the mains outlet.
B. Thaw the bank of ice formed in the tank. Do not transport the machine with the formed ice bank to avoid breaking the capillaries.
C. Never use sharp or cutting objects to remove ice from the evaporator; use only warm water so as not to damage the evaporator and the tank; empty the water tray with a suction pump or draining pipe.
D. Clean the stainless steel coils and the evaporator using a soft brush, rinse the tray and coils with clean water.
E. Fill the tank with sufficient clean water to cover the evaporator.
F. Check that the overflow pipe and the piping are free from any obstructions.

12.2 Resetting the machine

After placing the machine covers, insert the machine's electrical plug in the mains outlet

13. Trouble Shooting

SYMPTOMS	POSSIBLE CAUSES	CHECKS AND SOLUTIONS
The machine does not work.	No power	Check the electrical system Check that the electrical plug is inserted in the socket outlet That the electrical socket outlet is turned on
	No water in the tank	Add water to the tank
The refrigerator does not cool (the fan, compressor and agitator motor work).	No refrigerating gas	Check refrigerator circuit pressure and possible leaks Recharge with gas
The refrigerator works, the agitator/pump motor is stopped.	No power to agitator/pump motor	Check the electrical system Check the motor plug is plugged in
	Agitator/pump motor failure	Replace agitator/pump motor
The refrigerator does not cool (the fan and compressor and agitator/pump motor work).	Thermostat or thermostat probe do not work.	Check thermostat electrical connections Check the motor plug is plugged in
	No water in the tank	Add water to the tank
The refrigerator does not cool; the compressor is stopped (the fan and agitator/pump motor work).	No power to compressor	Check terminal board connection Check the clixon overload and relay
	Compressor failure	Replace the compressor
The refrigerator never stops and freezes the beverage	Thermostat or probe failure	Replace the thermostat or probe
The refrigerator does not cool (the fan is stopped, the compressor and agitator/pump motor work)	No power to the fan motor	Check the electrical system Check terminal board connection
	Motor fan failure	Replace motor fan
The agitator motor is noisy	Ball bearing fault	Replace agitator motor pump
	Worn bushings	Replace agitator motor pump