LANCER
WORLDWIDE
A HOSHIZAKI Company

TIPTAP BEER CHILLER 240V / 50Hz

Installation, Operation & Service Manual

GLOBAL & GREEN
THINK THE EARTH

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1. Product Details

1.1. Model

31000164 TIPTAP BEER CHILLER

1.2. Description of the Machine

The Tip-Tap Beer Chiller is a bench top unit designed to chill premix beverages (beer, wine and soft drink) and to dispense the beverage by means of suitable connections with stainless steel or food grade plastic pipes.

Do not use the machine for non-food liquids. The machine has not been designed to operate in excessive humidity, outdoors or in an explosive atmosphere; it is therefore strictly forbidden to install or use the machine in such conditions.

The Tip-Tap Beer Chiller consists of a metal enclosure, polyurethane foam insulated tank that is filled with water, a stainless steel cooling coil, a refrigeration system, and a tap to dispense beverage, supplied by a 10AMP electrical power cord.

The tank water/ice bank is used for cooling the stainless steel coil, filled with the beverage, immersed in the water tank. The beverage is dispensed via a tap mounted on a fount on top of the dispenser.

1.3. Specifications

Voltage	240 Volts
Frequency	50 Hz
Current Draw	1.95 Amps
Watts	550 W
Ambient Temperature	4 - 40°C
Max Pressure Rating	1000 kpa
Dimensions	
Width	630 mm
Depth	450 mm
Height	290 mm
Net Weight	23kg
Refrigerant	R134a
Ice bank Weight	6 kg
Water Bath Capacity	23 litres
Ice bank Control	Thermostat

2. Safety Information

2.1. 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.

2.2. 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.

2.3. 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**	The Tip Tap Chiller is not suitable for use in subfreezing temperatures. To prevent damage to the Tip Tap Chiller, turn off the unit when air temperature is below zero.
	**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.

2.4. 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.

3. Recommendations

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 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 their total responsibility and will void the warranty.

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

4. Installation

4.1. Receiving

Each unit is tested 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.

4.2. Unpacking

	**Caution**	The use of gloves is recommended to protect hands from potential injury from sharp edges. The chiller must always be handle in a vertical position.

Carefully unpack the Chiller from its shipping carton. Inspect the unit for concealed damage and if evident, notify the delivering carrier and file a claim against the carrier

4.3. Selecting a Location

⚠	Warning	The Chiller is 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. The Chiller is not intended to be placed on a kitchen floor.
⚠	Caution	The Chiller is only to be installed in locations where its use and maintenance is restricted to trained personnel.

- The Chiller should be located in a dry and clean, well-ventilated, horizontal position, close to electrical supply and with easy access for servicing. Position the chiller away from sources of heat and humidity.
- Ensure sufficient clearance (no less then 10cm from the wall) around the Chiller to allow good fresh air circulation in the condenser.
- Installation should only be performed by a qualified and competent technician.

4.4. Electrical Connection

- It is recommended that the Chiller is connected to a separate 240VAC 50Hz electrical supply, protected by an appropriate circuit breaker and Residual Current Device. Check the nameplate on the Chiller for the electrical supply requirements.
- The service of a licensed electrician may be required to ensure the installation is in accordance with the local codes and regulations.

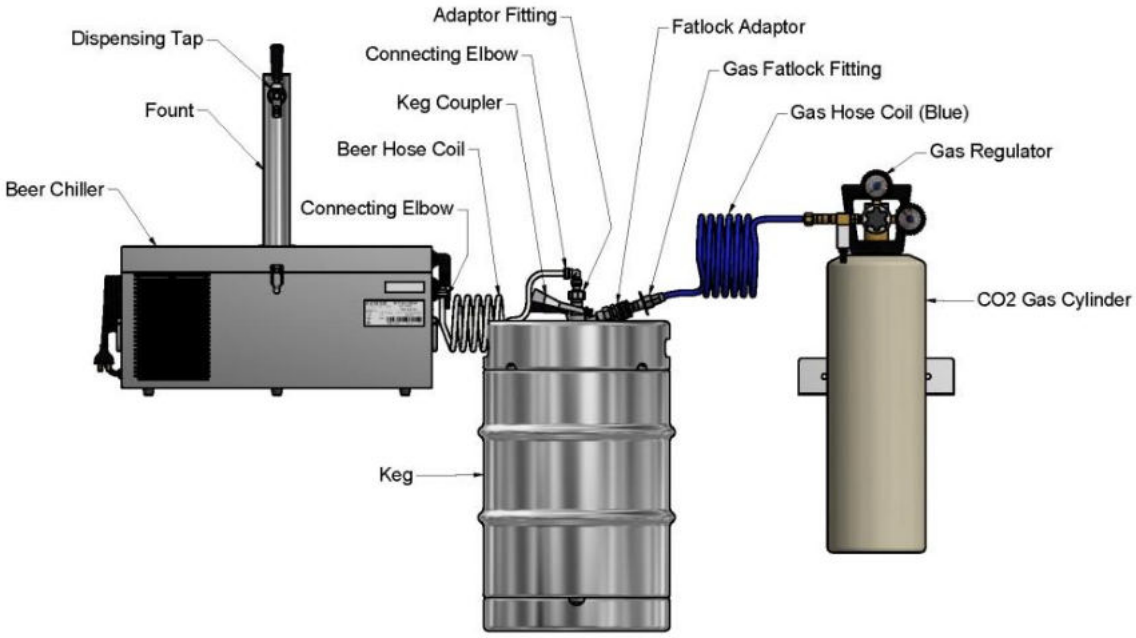
⚠	**Warning**	To prevent possible electrical shock or extensive damage to the unit, the appliance must be connected with the flexible cord supplied with the appliance to an appropriate electrical outlet socket installed in accordance with local codes and regulations i.e. AS/NZS 3000.
⚠	**Warning**	If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons with a replacement cord available from Hoshizaki Parts/Service Centres.

4.5. Prepare the Chiller

- After the machine has been installed proceed to fill the tank. Lift the upper cover of the machine; fill the tank with cold, clean water up to the water level mark.
- Connect the water bath tank overflow pipe and drip tray outlets, with a plastic pipe, to the nearest drain. Close the cover.

- Connect the Chiller via the 10 amp flexible cord and 3 pin plug supplied with the unit by connecting directly to an electrical socket.

- Connect the Chiller to the beverage via the tube and keg coupler supplied and the CO2 cylinder to the keg coupler via the tube and gas regulator supplied.



Warning	The TipTap Beer Chiller uses a CO2 (Carbon Dioxide) supply. CO2 is a heavier than air, colourless, non-combustible gas with a faintly pungent odour. Personnel exposed to high concentrations of CO2 gas will experience tremors, which are followed rapidly by loss of consciousness and suffocation. If a CO2 gas leak is suspected, immediately ventilate the contaminated area before attempting to repair the leak. An Onsite CO2 Risk Assessment must be completed at the time of installation to ensure compliance with AS 5034.
Caution	Free standing CO2 cylinders may be used but they MUST be restrained from falling over with a suitable restraining device as defined in AS 4332. Should the valve become accidentally damaged or broken off, a CO2 cylinder can cause serious personnel injury or even death.

4.6. Operation Commissioning

- Turn on the machine and the components (compressor, condenser fan motor, and agitator/pump) will start up. After approximately 3 – 4 hours the ice bank will have completely formed and the compressor and condenser fan motor will stop.
- The agitator/pump motor will operate continuously to maintain the temperature exchange between the water and ice, and the fount.

4.7. Dispensing

- To dispense beverage, pull the beer tap lever fully open towards you until its stops. Moving the lever slowly or stopping it part way will cause excessive foaming.
- To stop the beverage, move the beer lever back to its original closed position.

5. Maintenance

Regular cleaning of the whole beer system is extremely important, if this is not performed bacteria, yeast, mould, etc. will build up and quickly degrade the quality and taste of the beer.

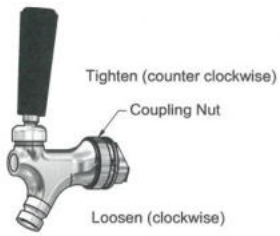
5.1. Daily Cleaning

Good food hygiene practices should be a part of the daily routine – spills wiped up, empty containers disposed of, and equipment kept neat and orderly.

Lift the keg coupler handle to disengage, but do not remove, to prevent over carbonation at the end of the trading day.

Beer Tap

Fig. 1



- With keg coupler disengaged move the beer tap handle towards you to dispense any beer remaining in the circuit.
- Loosen the coupling nut of the beer tap by turning it clockwise and remove the beer tap.
- Tilt the beer tap lever towards you and run tap water through the beer tap.
- Refit the beer tap by turning the coupling nut counter clockwise.

Exterior Cleaning

- Wipe the stainless steel lid, drip tray, and the fount with a soft damp cloth containing a neutral dishwashing detergent to wipe off any dirt build-up, and remove any remaining detergent with a clean soft cloth.
- Clean the exterior of the chiller whenever necessary.

At the start of the next trading day, push down on the keg coupler handle to re-tap the keg. Move the beer tap lever towards you and dispense product until you have clean product i.e. no froth.

5.2. Weekly Cleaning

As per brewery instructions, ensure weekly sanitisation of the whole beer system is carried out, including keg coupler, beer line, chiller coils and tap.

The following instructions are for general applications, breweries may offer alternative cleaners and procedures.

Lift the keg coupler handle to disengage.

Beer lines Cleaning

	**Warning**	Only trained personnel should undertake the cleaning process for this equipment.
	**Warning**	Most commercial beer line chemicals are classified as hazardous if ingested or when in contact with skin or the eyes. **Take proper precautions when handling and wear protective clothing and goggles.** Read and understand the handling procedures for the chemicals used.

- Thoroughly rinse a washout canister and fill with potable water.
- A 5L washout canister is available from Hoshizaki Lancer. Before opening, vent the canister by pulling the relief valve ring.

- Turn the keg coupler counter clockwise and remove it from the keg.
- Check the tap is closed. Connect the keg coupler to the wash out canister and push down on the keg coupler handle to engage.
- Place a bucket under the tap, pull the tap handle towards you and allow water to run though the beer line until the water runs clear at the tap.
- Disconnect the keg coupler from the washout canister and depressurise the canister.
- Prepare the sanitising solution according to the manufacturer's directions and fill the washout canister with 3 to 4 litres of the sanitiser.
- Connect the keg coupler to the washout canister and push down on the keg coupler handle to engage.
- Place a bucket under the tap, pull the tap handle towards you and allow sanitiser to run though the beer line, check for sanitizer at the tap with indicator strip.
- If using Hoshizaki Beer line cleaner, the pink Hoshizaki Indicator strip will turn blue if sanitiser has reached the tap.
- Leave the sanitising solution in the beer line as per the manufacturer's recommendations.
- For Hoshizaki Beer line cleaner, leave for 2hrs, preferably overnight.
- After the recommended time has elapsed, disconnect the keg coupler from the washout canister and depressurise.
- Thoroughly rinse and refill the washout canister with clean water.
- Reconnect the keg coupler and run sufficient water through the beer line to ensure that all the sanitiser has been removed from the lines. Toggle the tap on and off while flushing. Check that there is no sanitizer at the tap with indicator strip.
- If using Hoshizaki Beer line cleaner, the Hoshizaki Indicator strip should remain pink. If the indicator strip colour is blue, repeat water flush and re-test.
- Disconnect the keg coupler from the washout canister and depressurise the canister.
- Connect the keg coupler to the beer keg and push down on the keg coupler handle to engage.
- Open the tap and draw through beer. Allow the system to settle for 10 minutes then open the tap again and pour off until beer is clear.
- The system is now ready for trading.

Beer Tap

- With keg coupler disengaged move the beer tap handle towards you to dispense any beer remaining in the circuit.
- Loosen the coupling nut of the beer tap by turning it clockwise and remove the beer tap (Fig. 1).
- Loosen the cap nut of the beer tap and remove the handle (Fig. 2).
- Remove the valve shaft from the beer tap (Fig. 3).
- Clean the beer tap and valve by using a neutral dishwashing detergent and the accessory cleaning brush.
- Rinse the beer tap thoroughly with clean water.
- Assemble the beer tap properly by positioning the hole in the valve shaft with the handle.

Fig. 1

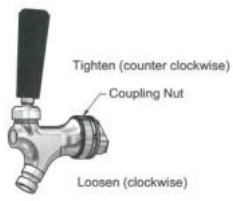
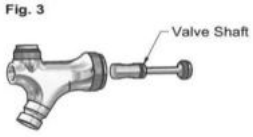


Fig. 2

Fig. 3



- Refit the beer tap by turning the union nut counter clockwise.
- At the start of the next trading day, push down on the keg coupler handle to re-tap the keg. Move the beer tap lever towards you and dispense beer until you have clean beer i.e. no froth.

Keg Coupler

Clean the keg coupler in accordance with the beer company's instruction manual.

5.3. Monthly Cleaning and Checks

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.

Overflow

Check that the hole and the overflow and drip tray outlet pipes are not blocked with dirt or ice. Restore the correct down flow of water.

Check the tank water level, fill if necessary.

Checking efficiency

Check that the condenser motor fan is free from any obstructions and dust. Check that the agitator blade has no scaling due to the limestone in the water. Remove any scaling by carefully scrubbing or use of a descaler. Check agitator and condenser fan operate without noise or obstructions.

Gas and beer Hoses

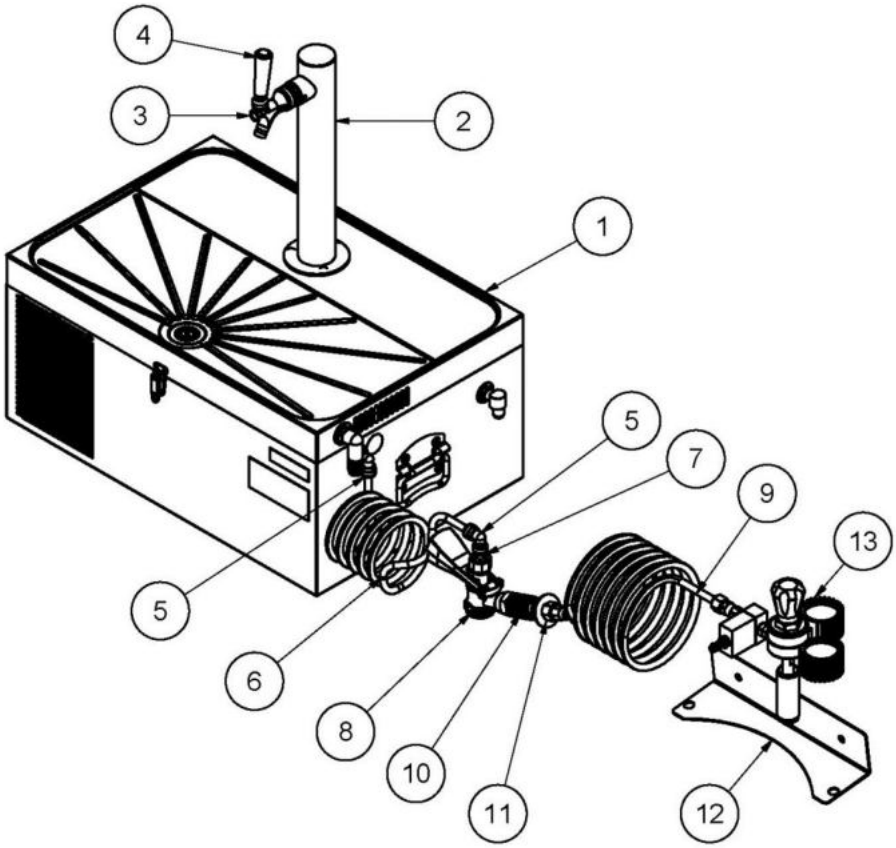
Check the gas and beer hoses for damage, deformation, and water leak marks (stains). If any problem is found, contact an authorised Hoshizaki Lancer service company.

5.4. Yearly Cleaning

Clean the water bath tank

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

6. Assembly Diagram & parts List



ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	31000188	CHILLER COUNTER TOP 1/4HP ANT
1.1	1	EMT6170Z	COMPRESSOR EMBRACO
1.2	1	41280B102	COMPRESSOR CAPACITOR DUCATI
1.3	1	SPC8/2	AGITATOR MOTOR FLOJET
1.4	1	RMG-005	CONDENSER FAN MOTOR FMI
1.5	1	A1 0816 E395	THERMOSTAT ROBERTSHAW
1.6	1	HY650NYS	TERMINAL BLOCK HYLEC
2	1	34000493	FOUNT COUNTERTOP 1W SF CUB V2
3	1	33000050	TAP BEER UNIVERSAL HILIGHT
4	1	33000003	HANDLE TAPERED THREADED
5	2	79152709	STEM ELBOW 3/8 STEM X 3/8 JG
6	1	81000620	TUBE FLOGUARD 6.35X9.5 100M RL
7	1	79000658	ADAPTOR FEMALE 3/8 JG X 5/8 BSP
8	1	35000038	COUPLER TYPE MFD 5/8 CUB
9	1	81774933	HOSE COIL NITTO 6X10MM X5M BLU
10	1	35700106	ADAPTOR FATLOCK 5/8 BSP/F S/S
11	1	66400005	6MM GAS FATLOCK N/R
12	1	79775032	BRACKET SINGLE CYLINDR & STRAP
13	1	87000137	REG CO2 IPRIM CYLMNT 300

7. 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 Repair leak and 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

8. Certificate of Warranty

It is the policy of Hoshizaki to provide to its current customers, warranty for all equipment supplied and installation work performed within a specified period.

Parts and Equipment

Lancer provides a warranty period of twelve (12) months from the date of original invoice for all manufactured parts. Repair or replacement of defective parts will be at the sole discretion of Lancer.

Changeover parts will be invoiced to the customer at the customers normal purchase cost and upon return of the warranty item and validation of the claim, the invoice will be credited.

Installations

Lancer provides a warranty period of twelve (12) months from the date of final invoice for workmanship after the completion of any installation work, provided the parts and labour are completed by Lancer or its subcontractor.

Labour

Lancer will not normally cover any labour costs associated with a warranty claim. Subject to the approval of the Divisional Sales Manager, Lancer may choose to reimburse the customer for some or all labour costs associated with a warranty claim. Any claim for labour costs must be authorized by Lancer prior to the work being undertaken.

Exclusions

Lancer will not accept any liability or cost associated with any consequential losses (such as loss of syrup or beer), loss of profit or damage to property as a result of faulty product.

Warranty shall not apply:

a) If in the opinion of Lancer, the equipment has been used in a situation the equipment has not been designed for;

b) If in the opinion of Lancer, the equipment has been subject to abuse, negligence or accident;

c) If connected to improper, inadequate or faulty power, water or drainage service or operated using incorrect, insufficient or contaminated lubricants, coolants, refrigerants or additives;

d) Where the product is installed, maintained or operated otherwise than in accordance with the instructions supplied by Lancer;

e) Where the product has been damaged by foreign objects;

f) Where the product has been serviced, repaired, altered or moved otherwise than by Lancer or its nominees or using other than Lancer approved replacement parts.

To obtain full details of your warranty and approved service agency, please contact your dealer/supplier, or the nearest Hoshizaki Office.

Hoshizaki Lancer TEL: +61 8 8268 1388 FAX: +61 8 8268 1978

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9. Manufacturer's Checklist

Checked by..... Date …… / …… / ……

Electrically tested and tag by …….. Date …… / …… / ……

TAG No. .....

- ☐ Coil in cradle correctly.
- ☐ Fit electrical supply cord.
- ☐ Tubing and all joints secured.
- ☐ Check plumbing – correct and secure.
- ☐ Ensure fount flood tube not kinked when lid is down
- ☐ Pressure test system – no leaks
- ☐ Fount secured.
- ☐ Pump secured and runs quietly.
- ☐ Tank area clean- no swarf.
- ☐ All panels secure; screws in place and tightened.
- ☐ Refrigeration system final check. Ensure evaporator fully frosts.
- ☐ Test and tag.
- ☐ Exterior of unit including power cord clean.
- ☐ All accessories included.
- ☐ Manual included.
- ☐ Customer asset No.

Model No: ..... Serial No: .....

W/O .....

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