

LP2 Superchiller

230V / 50Hz

Installation, Operation & Service Manual



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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

Hoshizaki 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.

Hoshizaki 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 equipment in two 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.

4. Product Details

4.1 Product Features

The Lancer Superchiller is an Australian design and manufactured remote refrigerated unit designed to refrigerate and distribute post-mix (soft drinks) as well as maintaining the product temperature through the python and dispenser.

4.2 Specifications

Dimensions

Width	710 mm
Depth	380 mm
Height	550 mm

Weight

Shipping	65 kg
Empty	59 kg
Operating	85 kg

Refrigerant 345 Grams R134a

Ice bank Weight 6 kg

Water Bath Capacity 27 litres

Compressor Electrolux GP12BB

Capacity (@ -5°C SST) 650 watts (2219 Btu/hr)

Agitator Motor 15W, 240Vac, 1 Phase

Condenser Motor 20W, 240 Vac

Icebank Control Ranco Electronic

Max Current Draw 3.7 Amps

4.3 Drink Capacity

44 x 12 oz (355 mL) drinks below 4.4°C at 2 drinks per minute with 40°C ambient, syrup inlet temperature and 32°C water inlet temperature.

CRITICAL INSTALLATION FACTORS



Caution

1. Install unit on a level surface, ensuring adequate ventilation (see section preparing the location).
2. Fill waterbath until water runs out of the overflow drain tube.
3. Water supply (flowing pressures) regulated to 210kPa (30psi)
4. CO₂ gas:
 - 4.1 supply pressure regulated to: 480 kPa (70psi) – carbonator
 - 4.2 exhaust plumbed to an outside safe area

5. Superchiller 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 Superchiller.

- Review all applicable OSH (Occupational Safety & Health) regulations.
- Review all applicable Beverage Dispensing Gas Standards
- Learn how to operate the Superchiller and use the controls properly.
- Do not allow untrained personnel to operate the machine.
- Ensure that the Superchiller 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

Superchillers 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 Superchiller and service work should only be performed by fully trained & certified Electrical, Plumbing, & Refrigeration Technicians.

**Warning**

Carbonator contains CO2 gas and water under pressure. Depressurise before performing any work on the system.

**Warning**

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

**Warning**

SUPERCHILLER MUST BE ISOLATED FROM ELECTRICAL SUPPLY BEFORE COMMENCING ANY SERVICE OR MAINTENANCE WORK.

5.5 Carbon Dioxide (CO2)

**Warning**

The Superchiller 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.

6. Installation

**Warning**

To avoid personal injury or damage, do not attempt to lift a Superchiller without help. Use of a mechanical lift is recommended. (NOTE: Empty LP2 Superchiller weight: 59kg)

6.1 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.

6.2 Unpacking



Caution

The use of gloves is recommended to protect hands from potential injury from sharp edges. The Superchiller must always be handled in a vertical position.

Carefully unpack the Lancer LP2 Superchiller from the shipping carton, remove the wooden base.

If appropriate, assemble legs to unit by carefully tilting (tilt should not be more than 45°).

Inspect unit for concealed damage and if evident, notify delivering carrier and file a claim against the carrier.

6.3 Selecting a Location



Warning

Superchillers 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.
Superchillers are not intended to be placed on a kitchen floor.



Caution

The Superchiller is not suitable for use in subfreezing temperatures.
To prevent damage to the water supply line, turn off and drain unit when air temperature is below zero.

- The LP2 Superchiller should be located in a well-ventilated, firm, level location close to dispenser, water and electrical supplies, with easy access for servicing
- Ensure sufficient clearance around Superchiller to allow good fresh air circulation through the condenser – allow at least 100mm on all sides.
- Installation should only be performed by a qualified and competent technician.

6.4 Mounting Superchiller

- Install on a flat, level surface using adjustable legs.



Caution

Superchiller operational weight is 85kg; ensure that all supporting structures are certified for this loading by a registered Mechanical Engineer.
Supporting structure must be securely fixed to floors or walls.

6.5 Connecting Python

Connect Python to Chiller and Dispenser.



Caution

NOTE: The LP2 Superchiller is rated to operate with a maximum of 5m of python connected.
Exceeding manufacturer's ratings may cause damage to the Superchiller and void warranty.

6.6 Connecting to water supply

- Using appropriate tubing and fittings connect a 10mm water supply line from Superchiller inlet to a filtered, regulated water supply. (See Postmix circuit diagram page 13). Installation in accordance with AS/NZS 3500.1 and AS/NZS 3500.2.
- Turn on water supply, check for leaks, adjust water regulator to 210kpa.
- Open the carbonator relief valve until water flows from CO2 exhaust tube; then close the relief valve.

**Warning**

The water inlet has to be supplied through a water tap that is installed in accordance with plumbing rules and regulations.

**Caution**

Maximum water supply pressure to be 210 kpa.
Normal operating water temperature should be within 7°C to 32°C.

6.7 Connecting to CO2 supply

**Warning**

As carbon dioxide (CO₂) displaces oxygen; prevention of CO₂ leaks is paramount. If a leak is suspected, immediately ventilate the contaminated area, before attempting repairs.

- Connect CO₂ supply line from regulator to gas inlet on carbonator. (See Postmix circuit diagram page 13 for details)
- Turn on CO₂ supply.
- Adjust CO₂ Regulator supplying carbonator to 480 kpa.

6.8 Filling unit with water

Remove Superchiller lid and fill water bath until water flows out overflow tube.

NOTE: Do not use water supplied from newly installed carbon filter as ice bank control operation will be adversely affected.

6.9 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.

**Warning**

To avoid possible fatal electric shock or serious injury the Superchiller must be electrically grounded. Electrical Connection Must Be Made In Accordance With The Appropriate Local Codes And Regulations. Use of an RCD is recommended.

6.10 Plumbing the drain and CO₂ exhaust

The 13mm overflow drain tube exiting from the front panel of the unit should be plumbed to a suitable drain, installation in accordance with AS/NZS 3500.1 and AS/NZS 3500.2.

The 6mm barb labelled as CO₂ EXHAUST should be plumbed to an outside safe area.

6.11 Commissioning

- Unplug recirculation pump power supply lead from wiring harness located under lid.
- Connect Superchiller power supply lead to an appropriate 3 pin socket 10 Amp outlet and switch on. Compressors, condenser fans and agitator motors should all operate.
- When Superchiller ice bank is fully formed (approx. 3 hours) the compressors and condenser fans will cycle off, but agitator will run continuously (unit has cycled off).

Note: The agitator will run at high speed initially (approx. 1500rpm) but will change to a slow speed (approx. 300rpm) 3 minutes after carbonator pump de-energises.

- After Superchiller has cycled off, reconnect recirculation pumps.

6.12 Purge System

Progressively activate each dispensing valve or Bargun connected to the Superchiller systems until an uninterrupted flow of soda, water (where applicable), and syrup pours from each dispenser.

7. Scheduled Maintenance



Warning The Chillers must not be cleaned by a water jet.

The following Superchiller routine maintenance should be performed at the intervals listed.

Daily

Cleaning/Sanitising

The Superchiller supplies soda water to the dispensing valves/barguns. To ensure optimum drink quality and system performance at all times please follow cleaning and sanitising procedures for the dispensing valves/barguns recommended by the valve/bargun manufacturer.

Checking CO₂ Supply

Ensure that the contents gauge on the CO₂ Regulator reads higher than 1400kpa on the dial. If it does not, then the CO₂ cylinder is empty and must be changed using safe working practices.



Warning

To avoid personal injury and/or property damage, always secure the CO₂ cylinder with a safety chain to prevent it from falling over; and use appropriate protective equipment (as defined in Clause 3.3.2 of AS 5034) to handle cylinders. Should the valve become accidentally damaged or broken off, a CO₂ cylinder can cause serious personnel injury.

Quarterly

The Superchiller should be connected to a filtered water supply. To ensure optimum drink quality and system performance, water filters should be replaced every 3 months.

Half Yearly

- Remove & Clean condenser filters on the Superchiller. Clean condenser with low pressure compressed air. When using compressed air always direct air from the fan side through condenser. Remove all dust and foreign particles from refrigeration deck.



Caution

When using compressed air always wear safety glasses.

- Check that the water is level with the top of the overflow tube. Add water if necessary.
- Open carbonator relief valve to purge CO₂ and check leakage, close relief valve after checking.

Yearly

Water bath and recirculation pump inspection.

- Isolate Superchiller from power supply by switching off at socket.

- Thaw the bank of ice formed in the tank. Empty the water from the tank with a suction pump or drainage pipe.
- Inspect coils and agitator in water bath for algae or slime accumulation. Clean as necessary using a soft brush, rinse with clean water.
- Check recirculation pump strainers for accumulation, replace if necessary.
- Fill tank with clean water until water flows out the overflow tube.
- Switch on power supply and check ball position in flow indicator section of strainer. If ball indicates flow is less than 5 litres per minute, replace pump.
- Commission and purge system as per clause 6.11 and 6.12.

Sanitisation of Beverage System

To maintain optimum quality of dispensed product each Superchiller and its associated beverage system components must be thoroughly cleaned and sanitised annually.

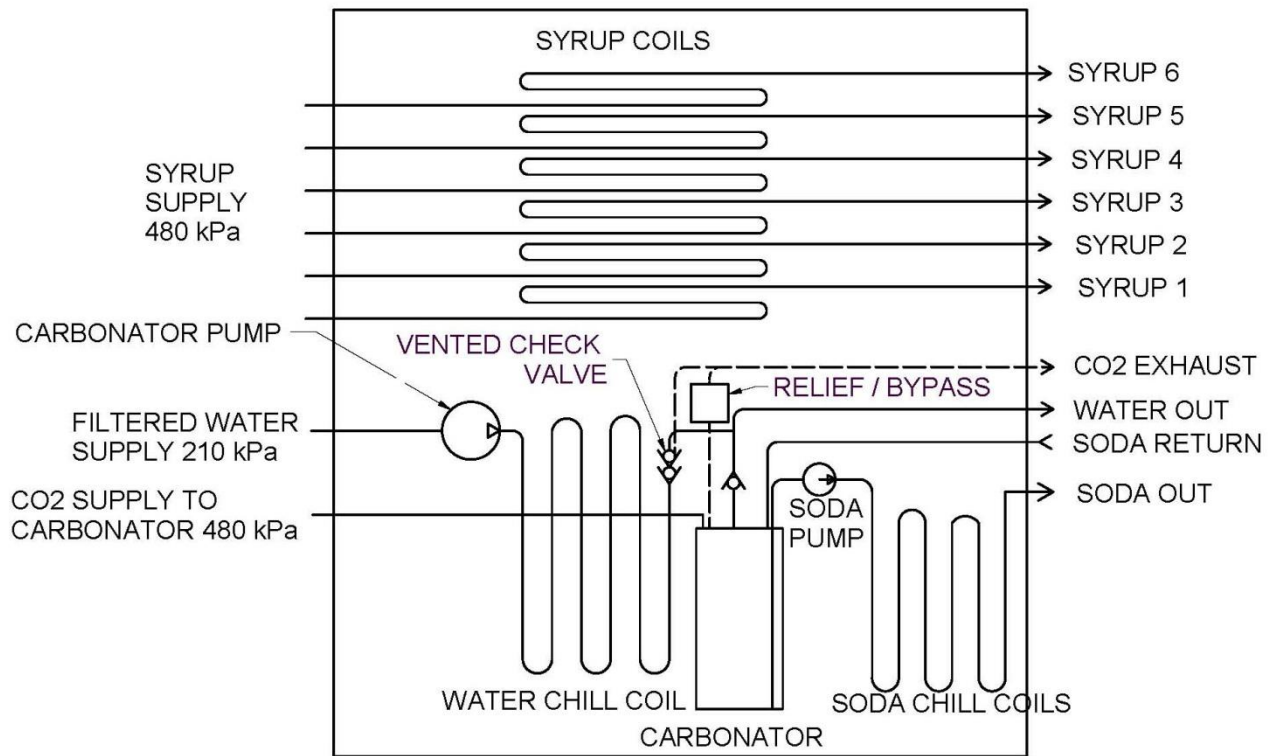
Prepare sanitising solution

Prepare sanitising solution in accordance with the manufacturer's written recommendations and safety guidelines.

Sanitising BIB System

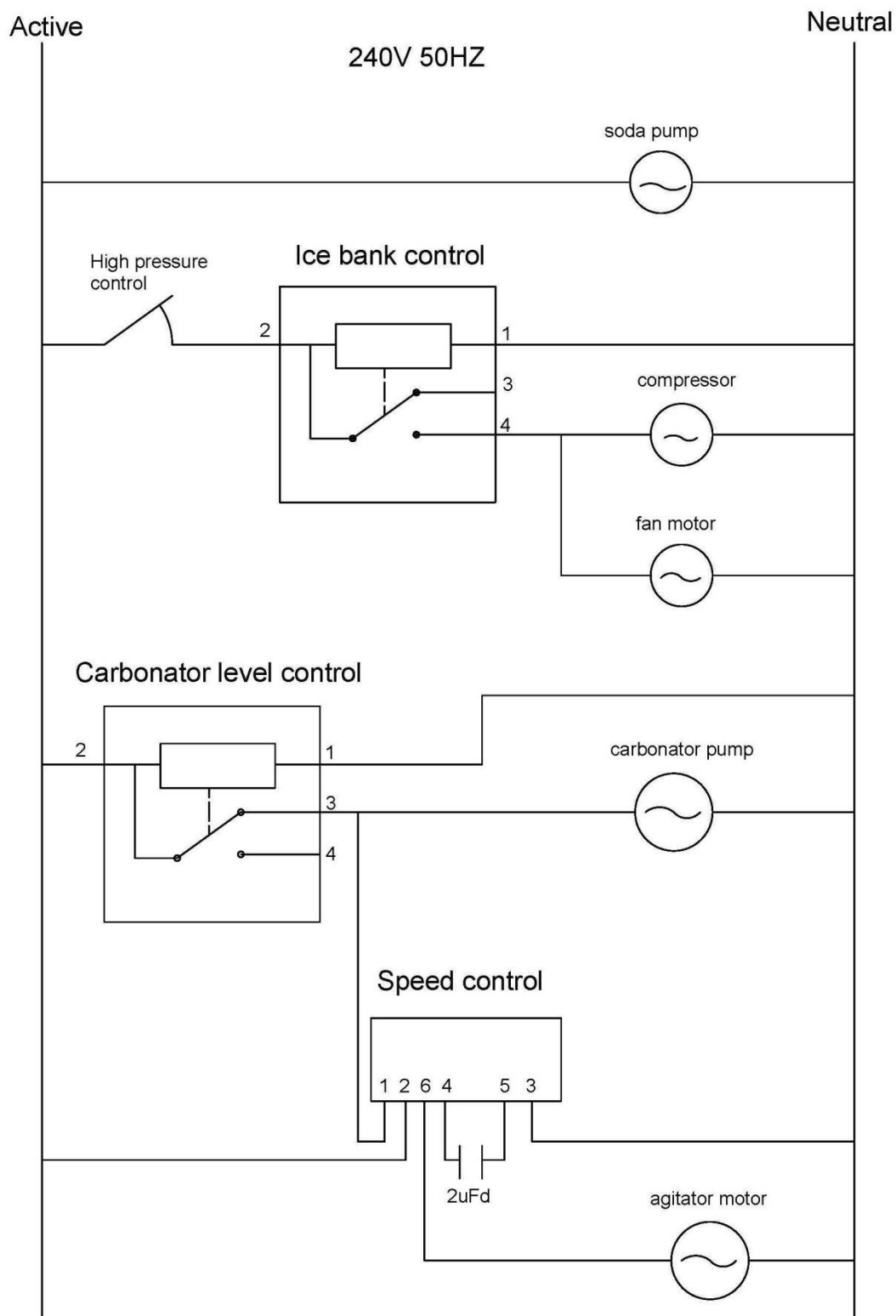
- Remove all disconnects from BIB containers.
- Immerse all disconnects in warm water and clean using a nylon bristle brush. Rinse with clean water.
- Prepare sanitising solution according to manufacturer's instructions.
- Attach sanitising fittings to BIB disconnects, if sanitising fittings are not available cut fittings from empty BIB bags.
- Immerse all sanitising fittings with attached BIB disconnects in bucket of sanitising solution. Operate all dispensing valves until the sanitising solution flows from the valve. Allow sanitiser to remain in lines for fifteen (15) minutes.
- Immerse all sanitising fittings with attached BIB disconnects in bucket of clean water. Operate all dispensing valves until all sanitiser has been flushed from the system.
- Remove sanitising fittings from BIB disconnects and re-connect disconnects to appropriate BIB's. Operate dispensing valves until syrup flows freely.

8. Postmix Circuit Diagram

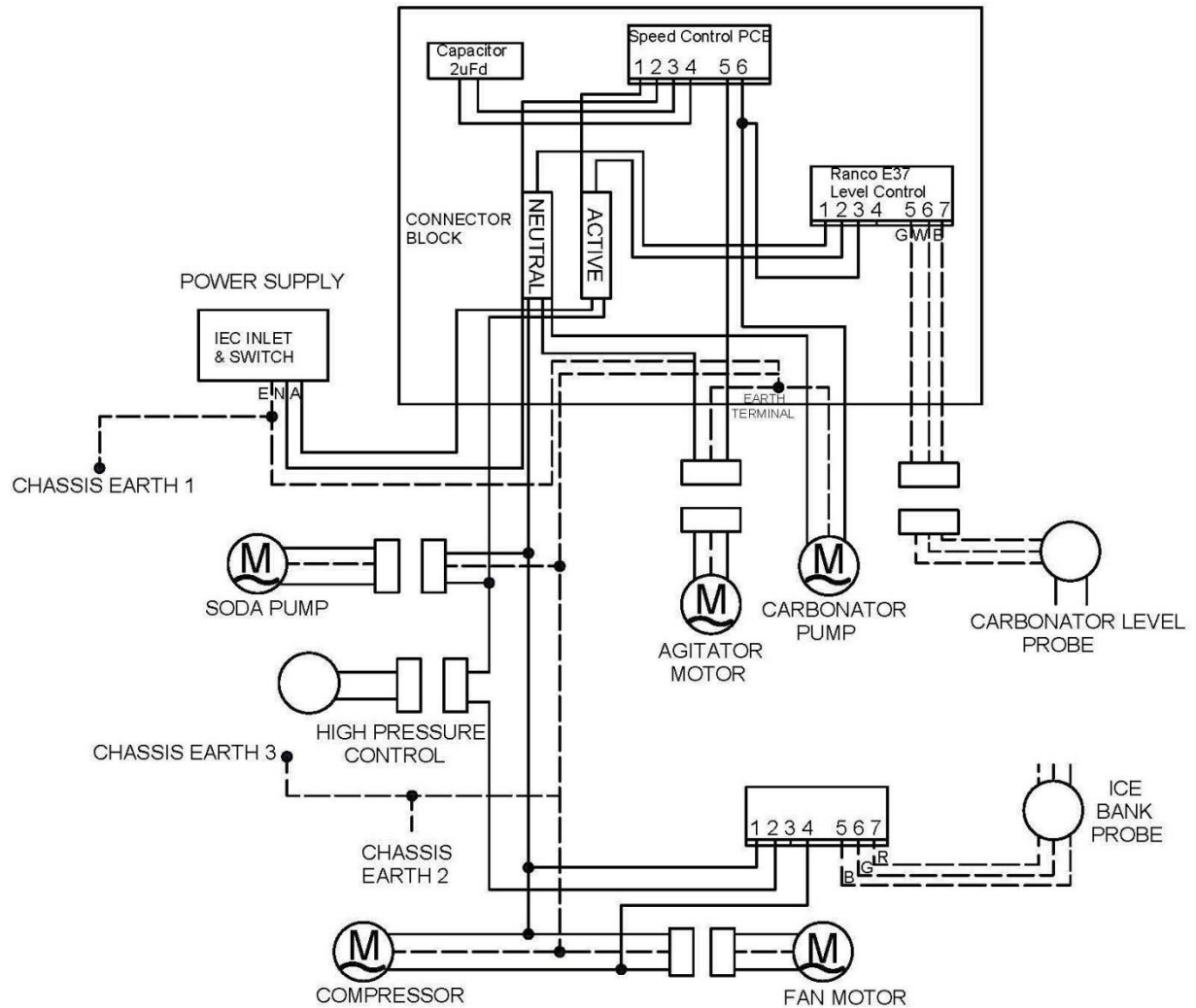


9. Electrical Circuit Diagram

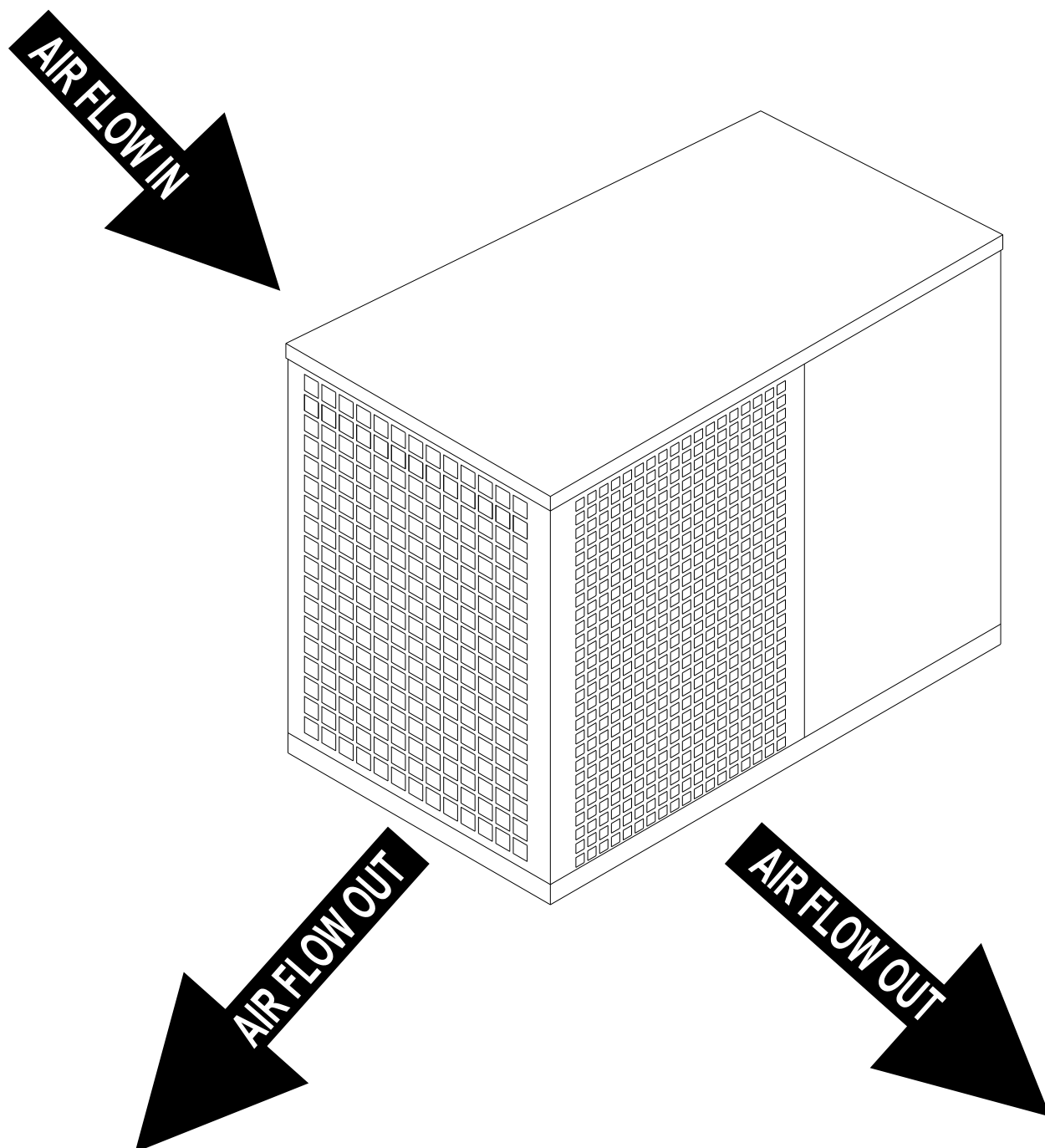
9.1. Electrical Circuit Schematic



9.2. Wiring Diagram



10. Airflow Diagram



11. Trouble Shooting

11.1 Refrigeration

TROUBLE	CAUSE	REMEDY
Compressor will not start.	Power Failure. High Pressure switch activated. Ice bank control faulty contacts not closing. Check start mechanism components. Thermal overload faulty, open, circuit compressor seized.	Check for blown fuse, supply cord pulled out or supply outlet turned off. Reset high pressure switch. Check Ice bank control using Procedure on page 20. Replace control or probe if defective. If faulty, replace e.g. capacitors, start relays. Replace compressor, check condenser, check power supply, evacuate system and if necessary fit burnout drier to industry standards.
Compressor short cycling on thermal overload (frequent starting and stopping of the compressor while ice bank control contacts remain closed).	Dirty condenser. Restricted air flow over unit. Low supply voltage. Defective thermal overload. Check wiring connections. Fan motor bearings tight or seized.	Clean condenser of all lint and dirt. Check for air restriction to condenser. Check with voltmeter. Replace compressor. Tighten if loose. Replace motor(s)
Product too warm	Ice bank control defective (permanently open circuit). Low refrigerant charge. Check agitator motor, seized or fused. Check speed control capacitor	Check Ice bank control using procedure on page 20. Replace control or probe if defective. Leak check, repair leak, charge with correct amount of refrigerant. Replace if not working. Replace if defective.
Compressor runs too long or doesn't cycle.	Location too hot. Superchiller overloaded. Loss of refrigerant. Condenser clogged. Fan not operating.	Relocate or improve ventilation. Use larger model, or reduce python length. Leak check and repair. Clean off dust, line, grease, etc. Remove obstruction or replace motor.

11.2 Troubleshooting – Postmix

TROUBLE	CAUSE	REMEDY
Rusty appearance and/or metallic taste to water.	Poor water supply - contaminated.	Carbon filter required.
CO₂ gas or water escapes from pressure relief valve. (Observed from CO ₂ exhaust)	CO ₂ pressure too high. Pump motor will not stop. Inadequate water supply. Lines too small or restricted. Icebank frozen into water coil Misaligned or damaged motor and pump facings.	Check CO ₂ pressure relief valve. Bleed gas by opening and closing the relief valve - set to 480 kpa. Check carbonator control using procedure on page 21. Replace control or probe if defective. If strainer and filter are clear and line valves are fully open, noisy pump operation indicates insufficient water supply. Minimum water supply is 172 kpa flowing pressure. Check if water is available at dispenser Realign or file flat.
Poor carbonation (low CO₂ volume).	Flooded carbonator. Dirty water supply. CO ₂ pressure too low. Poor quality paper cups. Dirty or greasy glasses. Improperly drawn drink.	Check carbonator control using procedure on page 21. Replace control or probe if defective. Check filters. Check CO ₂ pressure at carb regulator. Should be set between 480 kpa. CO ₂ inlet check valve stuck, shut or blocked, repair or replace. Purchase better quality cups. Wash all glasses. Open faucet all the way and draw against side of glass or cup.
Pump leaks from shaft seal.	Worn pump seals.	Replace pump.
Pump will not run.	Power failure or low voltage. Pump water supply restricted. Defective motor. Locked up pump. Motor has cut out on overload. Faulty low pressure switch (if fitted). Carbonator flooded – filled	Check fuses. Check power supply. Check for icebank growth into product coils, defrost and turn off chiller supply socket and on again to reset Replace motor. Replace pump. Ensure of adequate water supply. Switch should close above 172 kpa. Replace if defective. Check mains water pressure - must be

	<p>completely with water.</p> <p>Carbonator empty - faulty Carbonator probe or control.</p> <p>Low water supply pressure.</p> <p>Excessive CO₂ Pressure.</p>	<p>at least 135 kpa lower than CO₂ (install water pressure regulator if necessary) Check CO₂ regulator. Check carbonator control using procedure on page 21. Replace control or probe if defective.</p> <p>Check carbonator control Using procedure on page 21. Replace control or probe if defective.</p> <p>A minimum of 172 kpa water supply pressure is required</p> <p>Check function & setting of CO₂ regulator.</p>
Faucet delivers CO₂ gas continuously.	<p>Carbonator pump will not run due to power failure or low voltage.</p> <p>Pump water supply restricted.</p> <p>Carbonator pump will not run due to excessive carbonator CO₂ pressure.</p> <p>Faulty low pressure switch.</p> <p>Defective Carbonator motor.</p> <p>Locked up pump. Motor has cut out on overload.</p> <p>Carbonator empty – faulty control board or level probe.</p>	<p>Check fuses. Check power supply.</p> <p>Ensure clean mains water supply tap is open, or replace filters.</p> <p>Check Carbonator CO₂ pressure regulator for creeping. It should be set at 480 kpa.</p> <p>Ensure adequate water supply (minimum pressure 172 kpa flowing pressure). Pressure switch is set to open below 35 kpa and reset at 172 kpa.</p> <p>Check operation by disconnecting carbonator probe from wiring harness at in line plug – pump should operate.</p> <p>Replace pump.</p> <p>Check carbonator control using procedure on page 21. Replace control or probe if defective.</p>

12. Ranco E37-1201 Icebank Control Go/No Go Test

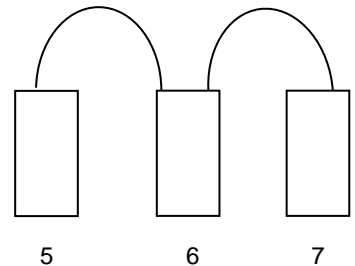
This is a test to simulate the building and erosion of the icebank; to determine if the icebank control is operating correctly. The test assumes that all other components in the refrigeration system (e.g. high pressure cut-out reset) are in an operational condition.



Warning 240VAC is present on terminals 1, 2, 3, 4.

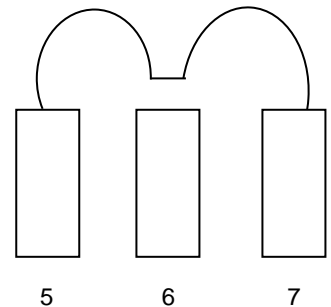
1. Remove the icebank probe connections from terminals 5, 6, 7.
2. Connect alligator jumper to terminals 5, 6, 7. Icebank control relay should close and refrigeration system start.

(Simulates water covering all probes – resistance between probes 6, 7 < 45KΩ)



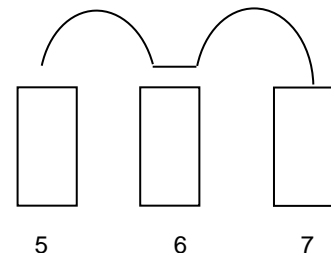
3. With refrigeration system operating (icebank control relay energised) remove alligator jumper from terminal 6. Refrigeration system should continue to operate.

(Simulates ice growth over green probe. Water still contacting red and black probes)



4. With refrigeration system operating, remove alligator lead from terminal 5. Refrigeration system should stop.

(Simulates ice growth over black probe and conductivity between probes 5 & 7 > 85KΩ)



13. Ranco E37-1201 Carbonator Level Control Test

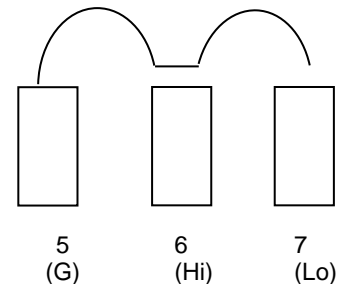
This is a test to simulate water filling/emptying in the carbonator to determine if the carbonator control is operating correctly. The test assumes that all other components in the water/soda system (e.g. low water pressure control) are in an operational condition.



Warning 240VAC is present on terminals 1, 2, 3 and 4.

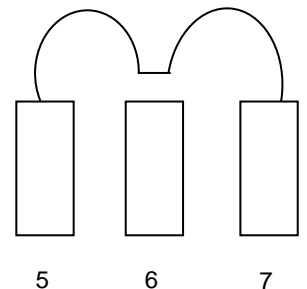
1. Remove the carbonator probe connections from terminals 5, 6 & 7. The carbonator pump should operate.

(Simulates no water between ground (carbonator tank) and low level probe ie. resistance between probes 5 & 7 $>85K\Omega$)



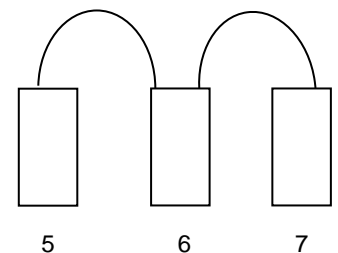
2. With carbonator pump operating (carbonator control relay energised) connect alligator jumper from terminal 5 to terminal 7. Carbonator pump should continue to operate.

(Simulates water covering low level probe.)



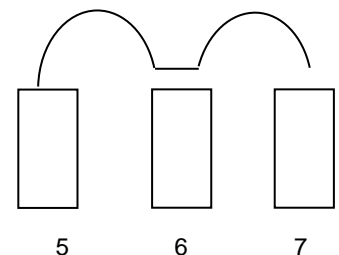
3. With carbonator pump operating, connect alligator lead to terminal 6. Carbonator pump should stop.

(Simulates water over high level probe i.e. conductivity between probes 6 & 7 $<45K\Omega$)



4. Carbonator pump will not restart until alligator clips are removed from 6 & 7.

(i.e. Water level drops below low level probe & resistance between 5 & 7 $>85 K\Omega$)

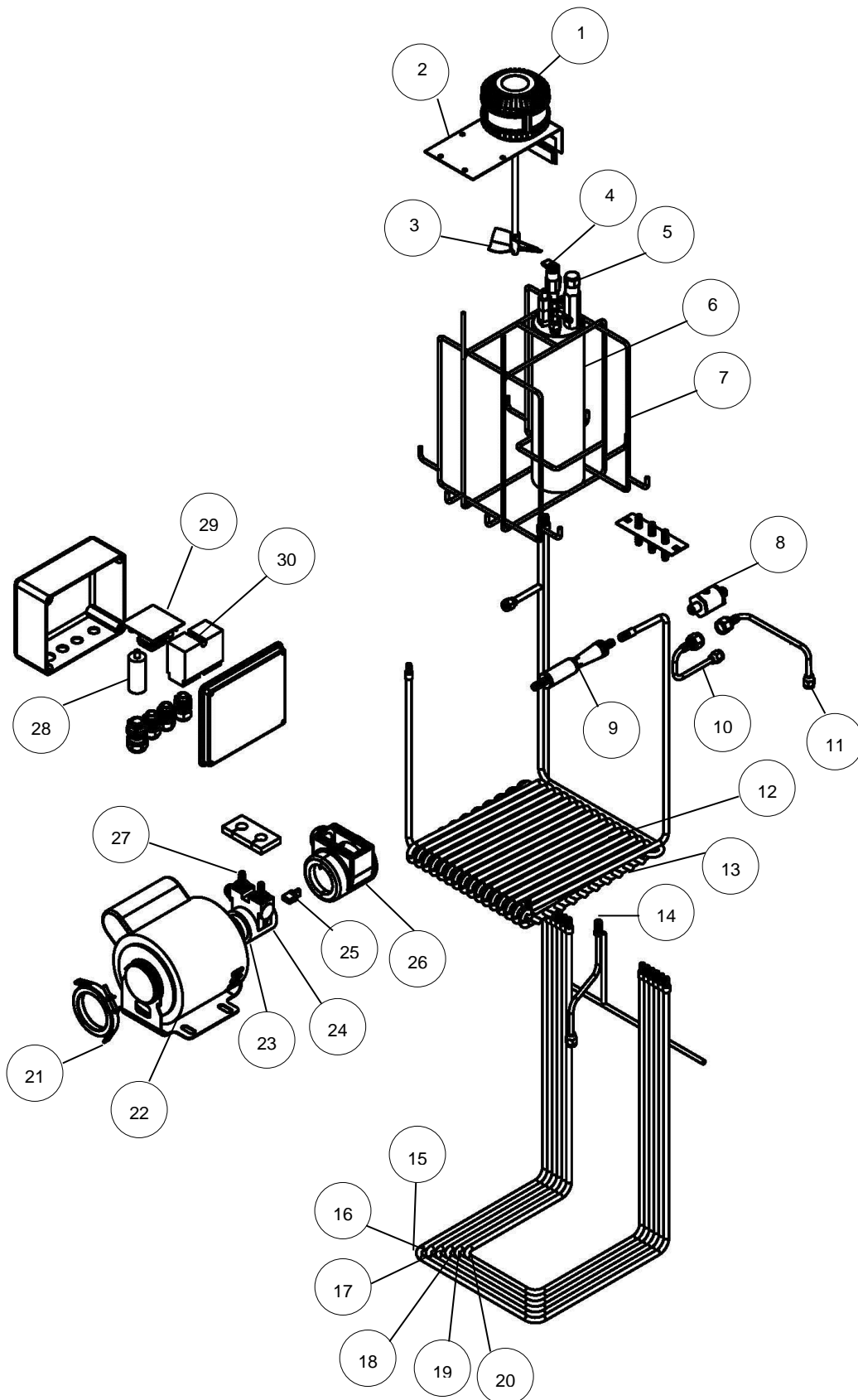


14. Assembly Diagrams & Parts List

14.1. Postmix Parts List

Ref.	Parts No.	Description
1	80281406	AGITATOR MOTOR
2	62611825	AGITATOR MOTOR BRACKET
3	87000004	AGITATOR BLADE
4	08000002	CARBONATOR RELIEF VALVE
5a	63611114	CARBONATOR PROBE
5b	23000022	PROBE WASHER
6	23604298	CARBONATOR 3"
7	88604067	CRADLE
8	79000683	BACKFLOW PREVENTOR WATTS 9DB (AUST)
9	87000052	STRAINER FLOW INDICATOR
10	63613391	WATER IN LINE TO WATTS TUBE
11	63620808	WATTS TO SOLENOID TUBE
12	63604183	SODA COIL
13	63604171	PRECHILL AND WATER COIL
14	63604213	COIL RETAINER AND SODA RETURN TUBE
15	63604104	SYRUP COIL #1
16	63604110	SYRUP COIL #2
17	63604122	SYRUP COIL #3
18	63604134	SYRUP COIL #4
19	63604146	SYRUP COIL #5
20	63604158	SYRUP COIL #6
21	80000016	POSTMIX MOTOR CLAMP
22	83610997	POSTMIX MOTOR 200W
23	78000018	PUMP V BAND CLAMP
24	78000335	SODA PUMP PROCON STAINLESS STEEL
25	79118301	PUMP DRIVE KEY BRASS
26	87000034	PUMP INSULATOR
27	79608024	PUMP FITTING 1/4" BARB
28	83612258	CAPACITOR 2.0 UF
29	83607986	AGITATOR SPEED CONTROLLER
30	82356958	CARBONATOR CONTROL (RANCO E37-1201)

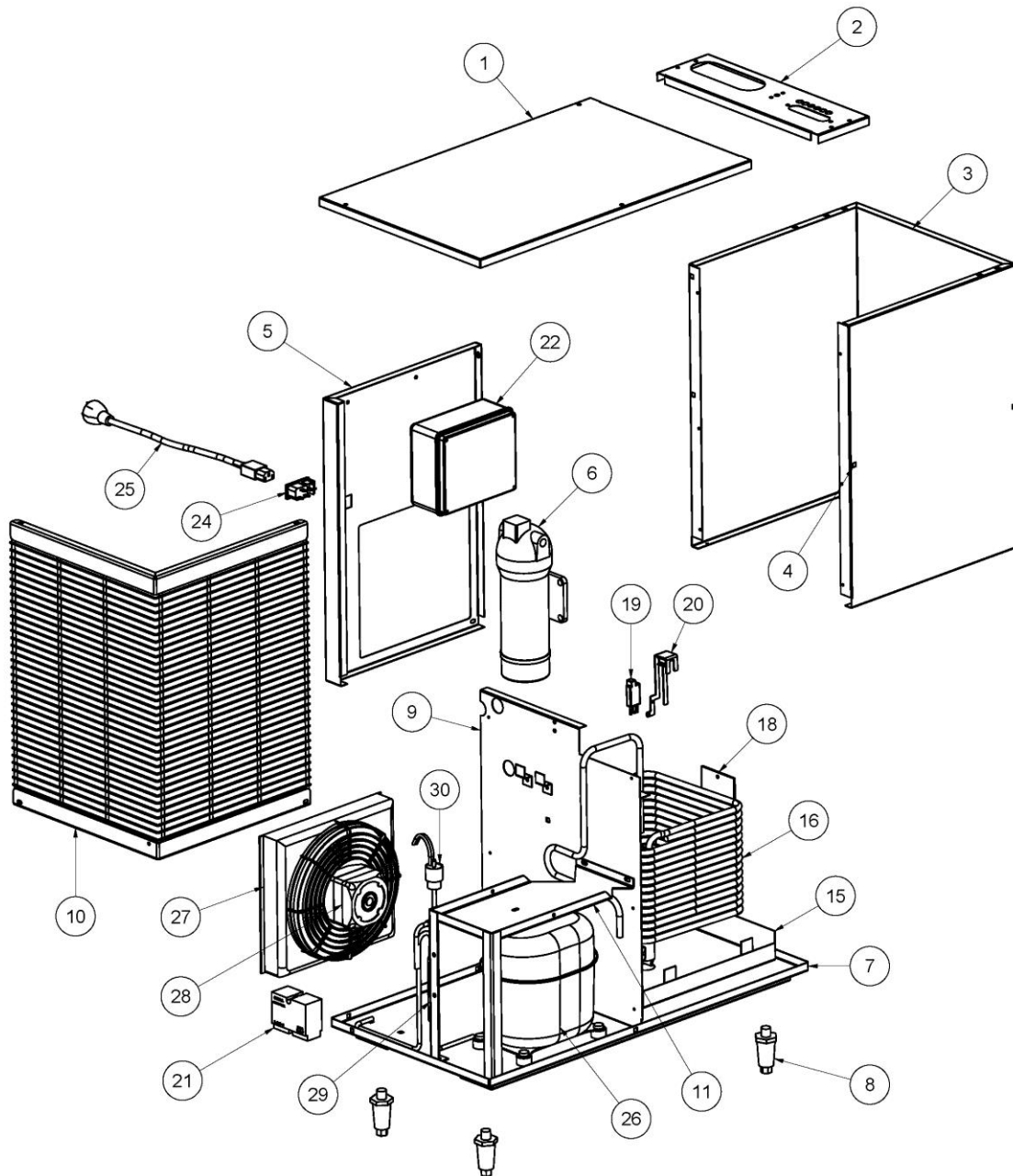
14.2. Postmix Assembly Diagram



14.3. Refrigeration Parts List

Ref.	Parts No.	Description
1	61604729	MAIN LID
2	61604742	SMALL LID
3	61603853	MAIN BODY PANEL
4	79000368	NYLON NUT INSERT
5	61604523	CONDENSER SIDE PANEL
6	24000039	CARBONATOR PUMP
7	61603865	BASE PANEL
8	79000029	ADJUSTABLE LEG 4" BLACK
9	61611266	DIVIDER PANEL
10	88604266	GRILLE
11	61611722	PUMP DECK PANEL
12	85610365	TANK ASSEMBLY FOAMED (NOT SHOWN)
13	79000251	DRAIN ELBOW – 13MM PLASTIC (NOT SHOWN)
14	81000040	DRAIN TUBE – 12.5MM ID (NOT SHOWN)
15	61611862	COIL TRAY
16	62603981	EVAPORATOR ASSEMBLY
17	81000034	CAPILLARY TUBE 1.24MM ID * 2.25M (NOT SHOWN)
18	61611461	ICE SHIELD PVC
19	16521773	ICE BANK CONTROL PROBE
20	61616586	ICE BANK PROBE BRACKET ASSEMBLY
21	83256958	ICE BANK CONTROL E37-1201 RANCO
22	83604341	ELECTRICAL BOX ASSEMBLY
23	83612605	WIRING LOOM (NOT SHOWN)
24	83000090	POWER INLET WITH IEC SWITCH
25	83623529	POWER IN LEAD 240V
26	16000046	COMPRESSOR 220/240V 50Hz R134a
27	84000009	CONDENSER COIL
28	80000024	CONDENSER FAN MOTOR
29	87623487	DRIER 032S SOLID CORE
30	83600270	HIGH PRESSURE CONTROL

14.4. Refrigeration Assembly Diagram



15. 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 and the associated labour. Repair or replace 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.

16. Manufacturer's Checklist

Checked by Date

Postmix Tested by

Gas Charged by Qtygrams

Icebank Probe fitted

Electrically tested by Refrigeration tested by

TAG No.....

- ☐ Refrigeration system final check. Ensure evaporator fully frosts.
- ☐ Check all tube work for rubbing e.g. discharge line, liquid line and capillary.
- ☐ Condenser not touching divider panel or grille.
- ☐ Agitator blade tight and not touching coils cradle.
- ☐ Overflow pipe connected and tube positioned correctly.
- ☐ Drain plug fitted.
- ☐ All motors and pumps secured and mounted correctly.
- ☐ All pumps run quietly and carbonator pump switches O.K.
- ☐ Check icebank probe position and tightness.
- ☐ Carbonator and plumbing pressure tested. Check for leaks on pumps, clamps, welds, strainers, carbonator fittings and all joints.
- ☐ Coils in, fitted correctly and spaced.
- ☐ Plumbing and wiring strapped correctly and not touching the agitator. All open tubes capped.
- ☐ Tube labels on top of small lid.
- ☐ Superchiller sticker correctly positioned and straight.
- ☐ Foam insulator fitted to soda pump.
- ☐ Clean exterior of unit including power cord.
- ☐ Grilles correctly fitted, not touching any other component. Screws tight and earth connected.
- ☐ Agitator motor screw holes capped..
- ☐ Check body for sharp edges.
- ☐ Check lid for cleanliness and rough edges. Fit and secure.
- ☐ Check carbonator relief valve & backflow components plumbed correctly.
- ☐ Copy checklist and file, put manual/checklist in plastic bag with install kit and place in condenser area.

W/O

Affix label here