Product Manual

Booth

NEW xxx

Products covered by this manual

NEW001
NEW002
NEW003
NEW005
NEW006

Part Number 3B1690 Issue **01 [03/03]**

Contents

Safety

The unit should be isolated from the electricity supply before removal of the covers.

Great care must be employed when working with high pressure carbon dioxide, and in no cases should the normal operating pressure of 2.3 bar be exceeded.

Description

The NEWXXX is a range of chillers providing either still only or still and carbonated water outputs. These can include two syrups, and the still water units can include up to three individual still water dispense nozzles.

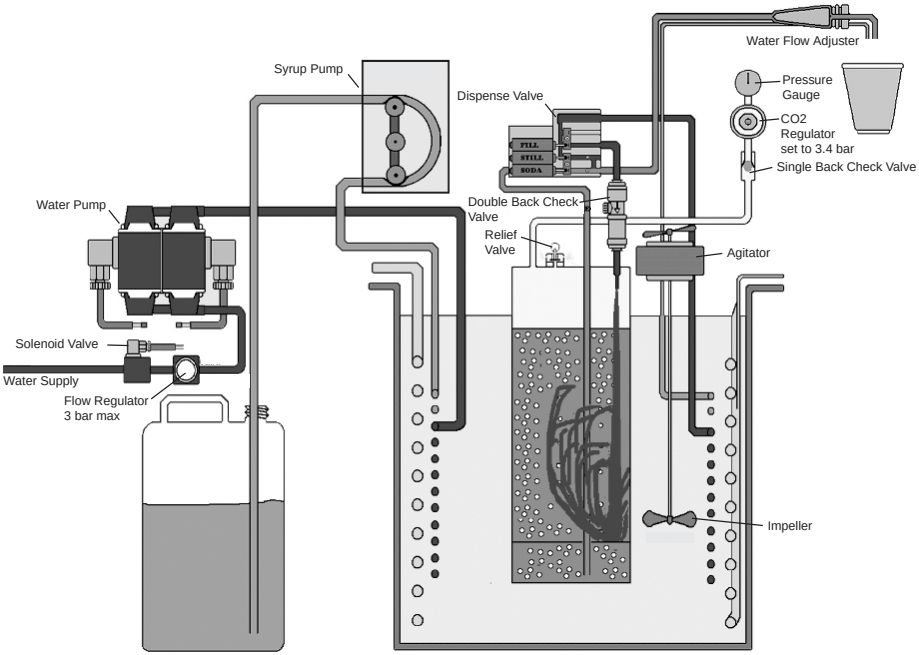
The units all incorporate an ice bath to provide the capacity for extended drinks performance, and share the same fridge, bath and control components.

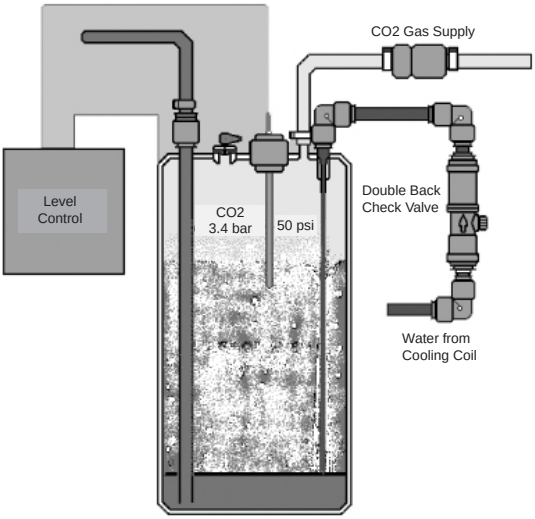
The schematic on Page 4 shows the layout of the two carbonator models, NEW001 and NEW003.

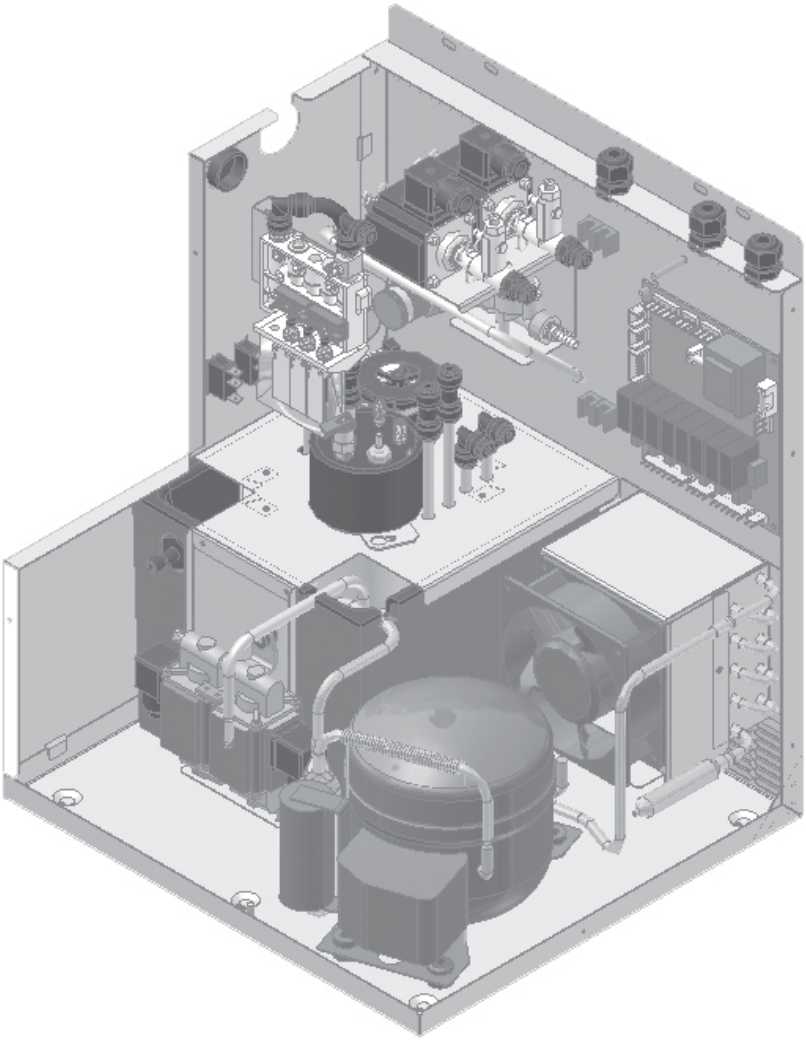
Carbonated water is generated in the carbonator can and is dispensed directly via the valve block to the outlet harness, under the pressure generated within the can. The can is replenished by a water pump which is controlled by the pcb and level probe within the can.
For a still drink, water is pumped through the stainless steel water coil in the ice bath to the dispense harness via the valve block. Both carbonator models include two syrups which are chilled via stainless steel coils in the bath, and dispensed via individual syrup pumps, with incorporated flow adjusters.

The still only models do not include a water pump, and water is chilled via the same water coil within the ice bath as the carbonators, but is dispensed via one, two or three way solenoid valves. No syrup cooling is provided on the still only models, the syrup merely being dispensed via the syrup pumps.

Flow Schematic







1. Secure the unit through the side and top tabs to the host machine.
2. Connect the grey water inlet pipe to the host machine.
3. *If syrup pumps are fitted:* Connect the syrup tubes (marked 1 & 2) to the syrup either by inserting dip tubes in containers or connecting via bag in box connectors.
4. Place the overflow pipe into suitable container.
5. Connect the dispense python to the dispense nozzle on the host machine.
6. Connect the data harness and mains plug to the host machine.

Commissioning

1. Remove the top and front covers.
2. Slide back the plastic cover and fill bath with cold water up to the slot in the coil support bracket. Ensure that any overflow will not exceed the capacity of the overflow container.
3. *Carbonator Only:* Ensure the gas bottle regulator it is set at 35 p.s.i. and connect the braided CO^2 pipe to it.
4. *Carbonator Only:* Using the pressure relief valve, vent the CO^2 for approximately 5 seconds.
5. Turn on mains water supply to unit.
6. Turn on mains electrical supply to unit by overriding the door interlock on the host machine (refer to the host machine instructions for this procedure).
7. With mains power and water on the following will happen.
   The agitator will start to turn.
   The compressor and fan will start.
   Carbonator Only: The water pump will start and fill the carbonator can. After a short period of time the pump will stop when the carbonator can is full.
8. *If Syrup pumps are fitted:* Prime the syrup pumps using the switches (marked 1 & 2) on the side of the unit. Operate them until all air is purged from tubes and clean syrup is being dispensed.
9. *If Syrup pumps are fitted:* Set the syrup flow rates, refer to the host machine instructions.

   Important: Correct carbonation will not occur until ice has started to form in the bath and the water temperature has fallen below 5 °C.

   Note: If the bath has been filled to the point of overflow, approximately half a litre of water will be displaced as ice forms in the bath.

10. Refit outer front and top panels.
11. Test both still and carbonated drinks for correct operation.

Important: Warm water should be no higher than 45 °C

Important: After any cleaning dispense 3 drinks from each flavour to ensure all cleaning fluid residue is flushed out.

Daily Clean - Use the appropriate methods below for parts in contact with food products

Multi Purpose Disposable Cloth.
Use the cloth to apply the cleaning agent. Submerge a clean cloth into the cleaning agent (concentration recommended by manufacturer's instructions). Remove the cloth and remove excess water. Clean the dispense components wiping the cloth over the entire area resubmerging the cloth as necessary. Rinse the cloth in clean warm water and wipe off excess cleaning agent residue and soil. Dry using disposable paper towels, replace dispense components.

Spraying on Cleaning Agent.
Remove all dispense components. Liberally spray the cleaning agent at the concentration recommended by the manufacturer onto the dispense component ensuring that the whole area has been covered. Finish the clean by exchanging the cleaning agent for warm water, remove the soil with a multi purpose disposable cleaning cloth and dry the component with disposable paper towels.

Food Grade Antibacterial Wipe.
Remove the dispense components, wipe the dispense component with the food grade antibacterial wipe, remove all visible soil. Replace dispense component.

Soaking Post Mix Dispense Nozzle & Diffuser.
If removable, remove and submerge the dispense components into the cleaning agent solution. Leave the dispense components submerged for the desired contact time (2 to 10 minutes). After the contact time is over remove the dispense components, rinse in warm water and dry using disposable paper towels.

If not removable, clean using cleaning agent solution and brush.

Cleaning

Deep Clean - Parts in contact with food products

Important: This is to be carried out monthly or more frequently if host machine is heavily used.

Remove dispense components, pre clean using a damp multi purpose disposable cleaning cloth soaked in warm water.

Soak cloth in cleaning agent solution, remove excess water and clean dispense components. Using a brush, brush dispense head to dislodge any dried on soil. Remove soil with the cloth.

Rinse dispense head with a new multi purpose disposable cleaning cloth soaked in warm water until all soil and cleaning agent residues have been removed.

Soak multi purpose disposable cleaning cloth in disinfectant solution, apply to dispense component, ensure that the whole area is wiped. Leave for 10 minutes. Rinse off disinfectant using multi purpose disposable cleaning cloth that has been soaked in clean warm water. Dry dispense component with disposable paper towels.

Refit all dispense components.

General Cleaning - Parts not in contact with food products

Condenser. Thoroughly clean at least once a month with a small stiff brush and /or vacuum cleaner. Do not use screwdrivers or other sharp implements which may puncture the fins.

Warning: Failure to clean the condenser can shorten the life of the compressor causing premature failure of the unit.

Outer Panels. Clean the outside panels, pay particular attention to the edges of the panels where spillage from ingredients could have ingressed and the area around the base of the unit. If necessary, remove the unit and thoroughly clean around the base and floor.

Important: If ingredients are present inside the unit, the cause must be found and rectified.

3 Month Sanitization

Prepare the Unit

1. Remove the top and front panels.
2. Ensure that the waste bucket is in place .
3. Lift syrup dip tubes above liquid level in product container & press primer switches to empty lines, then place in a container of clean water and prime through to dispense nozzle then lift out of water & continue until empty.
4. Disconnect the electrical power to the unit & open the carbonated water dispense valve manually until gas comes from the dispense nozzle.
5. Drain bath by siphoning the water into a bucket. Flush out with warm (max. 45 °C) water ensuring all ice is melted and drained.
6. Carefully follow the manufacturers instructions and prepare a solution of proprietary sanitizing fluid such as DIVERSAL BX4A. A 5 litre syrup container is ideal for this operation.

Sanitize the Water System

7. Where a filter is fitted remove the cartridge, put sanitizer into the chamber & and flush through. Where a complete filter is fitted, dummy filters are available for this purpose.

or alternatively

7. Disconnect flexible water inlet tube from the water supply and place the end into a container of sanitizing fluid.
8. Switch on power & manually operate the still water solenoid to clear any air locks. Release & allow the carbonator chamber to fill.
9. Draw 1 cup of carbonated water followed by 1 cup of still water to ensure all tubes are full of sanitizer.
10. Fill water bath with sanitizer solution until water appears at overflow.
11. Switch off power & leave to stand for period recommended by sanitizer manufacturer.
12. Follow Daily Clean routine to clean dispense nozzles.

Cleaning

Sanitize the Syrup Lines

13. Switch on the main power.
14. Place dip tubes into the container of sanitizing fluid & operate the syrup priming switches until the fluid pours from the dispense nozzle.
15. Leave to stand for the period recommended by the sanitizer manufacturer.
16. Switch off power.

Recommission the Unit

17. Switch on power supply.
18. Place syrup dip tubes into a 5 litre container of clean cold water and flush 1 litre through each syrup line .
19. Reconnect inlet water supply tube to machine supply & vend 3 litres of still water.
20. Vend 3 litres of carbonated water.
21. Siphon off water bath and refill with cold water.

    The ice bank is controlled by ice probes sensing resistance, any sanitizer fluid left in the water bath could cause the unit to freeze up.
    It is recommended that the bath is siphoned off a second time and refilled with cold water.

22. Re connect syrup tubes to the appropriate syrup containers and refit all covers.
23. Prime waters and syrups through to dispense nozzle & check drink strength with a brix cup.
24. Close vending machine door & test vend all cold drinks.

Prior to any fault finding, please ensure all water connections to the chiller are sound and that the incoming water supply is turned on. Also ensure that all electrical connections to the chiller are secure and that any syrup containers are not empty and the syrup pumps are primed, and that the chiller has had adequate time to build ice in the ice bath.

Symptom	Possible Cause	Corrective Action
No Still Water	Dispense solenoid not opening	Check supply to solenoid (230Vac) If voltage present, replace solenoid If voltage not present, check pcb connections If connections secure, replace pcb
	Inlet solenoid not opening	Check supply to solenoid (230Vac) If voltage present, replace solenoid If voltage not present, check pcb connections If connections secure, replace pcb
	Water pressure regulator failed	Replace
	Ice bath frozen up	Check ice probe assembly and connections and replace if necessary Check for ice bath contamination, melt ice, drain bath and refill. If contaminated, identify and cure source of contamination. If problem persists, replace pcb.

Fault Finding

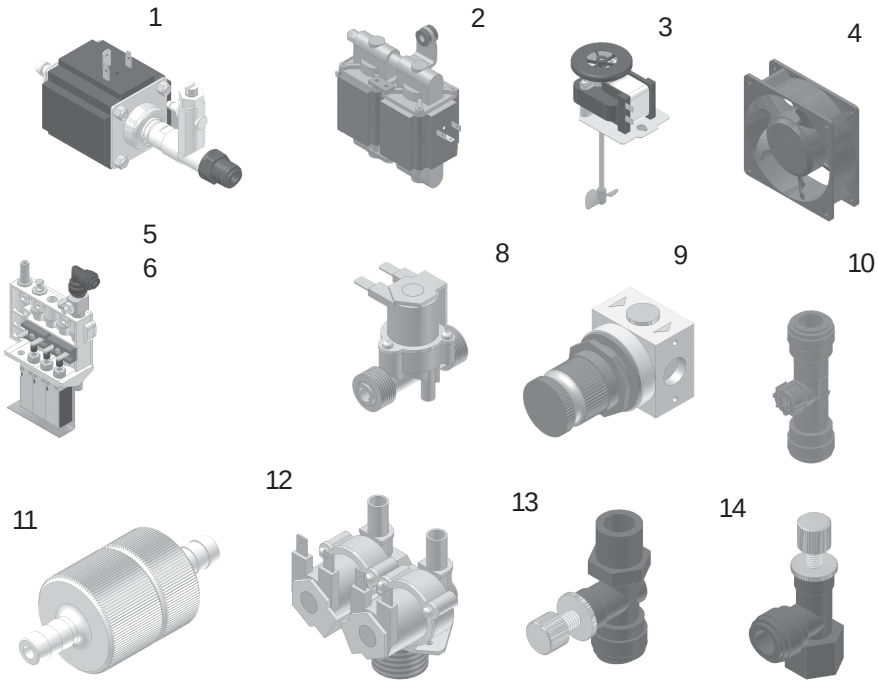
Symptom	Possible Cause	Corrective Action
No Carbonated Water	No CO2 pressure, check by operating pressure relief valve on carbonator can.	Check CO2 bottle, regulator and non-return valve. Supply pressure should be 2.3 bar, adjust or replace as necessary
	Carbonated water dispense solenoid not opening	Check supply to solenoid (230Vac0 If voltage present, replace solenoid If voltage not present, check pcb connections If connections secure, replace pcb
	Carbonator can not filling	Check probe connections Check supply to water pump, if present and pump inoperative, replace pump Check supply to can fill solenoid, if present and solenoid not opening, replace solenoid If voltage not present, check pcb connections If connections secure, replace pcb
No Syrup	Syrup pump inoperative	Check supply to pump, if present replace pump If voltage not present, check pcb connections If connections secure, replace pcb
Poor Levels of Carbonation in drinks	Wrong CO2 pressure	Check CO2 bottle, regulator and non-return valve. Supply pressure should be 2.3 bar

Symptom	Possible Cause	Corrective Action
Warm Drinks	Air in carbonation can	With the machine electrically isolated, empty can by manually operating the carbonated water dispense valve until gas escapes from the nozzle for 3 seconds Reconnect the power and allow can to fill
	Residue in carbonation can	After prolonged use, a surface film can develop within the can preventing good carbonation. This can be removed by flushing the system using a solution of citric acid, refer to cleaning and sanitising instructions
	Carbonation can is overfilled	If pump runs continuously, check connections to can level probe If problem persists, replace pcb.
	Insufficient water in the bath preventing the compressor from operating	Check connections to the ice probes and that the probes are submerged If problem persists, replace pcb
	Insufficient cooling air flow through the fridge	Check that the condenser is not blocked by debris Check that the fan is running, if not and supply present, replace fan
	Fridge failure	Check if compressor and fan are running, if they are and there is no cooling, replace the chiller Check supply to compressor and fan If voltage not present, check pcb connections If connections secure, replace pcb

Replacement of Parts

Item No	Description	Part No	Used on models
1	Syrup pump	1A3886	NEW001,2,3
2	Water pump	1B2471	NEW001,3
3	Agitator Assembly	1A3880	All
4	Fan	1B5514	All
5	Valve block assembly	1A3888	NEW001,3
6	Valve block solenoid	1B1014	NEW001,3
7	Control board	3B1625	All
8	Single solenoid	1A3973	All
9	Water pressure regulator	1B5965	All
10	Double back-check valve	3B1566	NEW001,3
11	C02 non-return valve	1A3176	NEW001,3
12	Double outlet solenoid valve	3B1607.	NEW005
13	Straight flow adjuster	3B1639	NEW002
14	Angled flow adjuster	3B1652	NEW005

Spare parts are available from the host machine manufacturer



Important: Ensure the unit can be transported comfortably and in a hygienic manner without leaving ingredients residue at the customers premises as well as in the vehicle used.

To Remove from Host Machine

1. Place syrup dip tubes into a container of clean water and prime through until the water is coming from the nozzle Whilst still priming, lift the dip tubes above the level of the water until all tubes are empty.

2. Switch off main power & manually open the carbonated water valve until gas only splutters from the dispense nozzle.

3. Syphon all water from the Ice bath.

4. Disconnect water supply, Co2 supply, & unplug the data harness and mains plug.

Disposal of Scrap Units

It is illegal to simply scrap a refrigeration unit. Before a unit can be scrapped it must first have the gas removed by a specialist using specialist equipment. Contact your local refrigeration repair company for advice.

Transportation

Important: This unit must be transported in an upright position

As with all refrigeration systems, irreparable damage can be caused by laying the unit on its side or even transporting upside down. Where the unit is transported by a carrier, the carton should always be marked in a conspicuous manner, the correct upright position in which it must be handled.

If a unit has been transported incorrectly it should be placed in the correct upright position and left for 24 hours before attempting to run the system.

Failure to observe the above precautions could seriously damage the system.