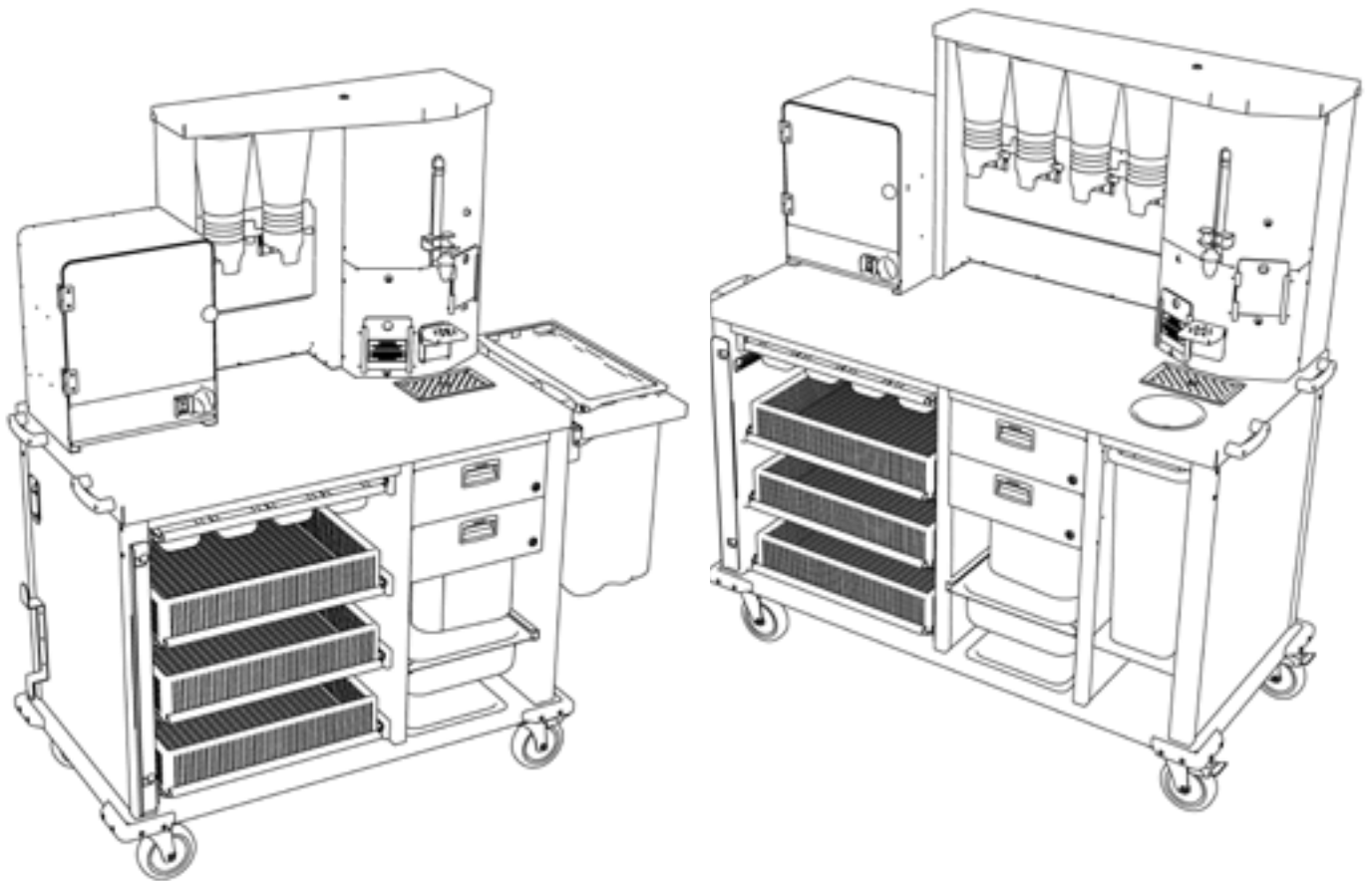




Beverage Trolley with water-boiler. Models BTX & BTC



Operating & Service Manual



To ensure the best results from this unit please take the time to read and follow all safety, installation and maintenance guidelines carefully before proceeding to install. Keep this manual in a safe place for future consultation.



Prior to ANY service calls please: Consult manual for basic fault-finding advice and information required to place the call. Check warranty/maintenance terms and conditions.



These appliances are marked in compliance with the relevant regulations.
Voltage stated on unit data plate.



Warning! Please pay attention to sections of the manual displaying this symbol.

The appliance must only be used for the purpose it was designed for and may become unsafe if used for any other purpose. Operators should be trained. The room where this trolley is used must be dry, clean with temperatures between 16°C and 25°C and with a maximum relative humidity of 60%. This unit is for indoor use only and has an IPX4 rating.

Do not install units in draughty conditions where the air movement is greater than 0.2mtr/sec. (e.g. near doors, windows, air conditioning units or fans]

Should conditions exceed the above, the units may not maintain food temperatures at the required levels. E & R Moffat cannot accept responsibility for the performance of the units being used in extreme conditions.



Warning! Do not attempt to use a hose or water jet to clean this unit.
or cleaning instructions, refer to section 9.



Warning! Always switch the unit off when not in use, before moving
and before cleaning or maintenance procedures.



Warning! Pay particular attention to the method of operation and care required for the proper
use of electrical power connections, plugs, and sockets.

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1: General Electrical Safety

Electrical Requirements

Supply Configuration

- All units are configured for either single-phase or three phase supply operation.
- Exceptions to standard specification must be specified or requested before placing an order.

Purchaser Responsibilities

It is the purchaser responsibility to outline any particular site requirements such as alternative.

- Electrical supply type or Phase requirements
- Cable type and length
- Control requirements Failure to provide this information may result in delays or incorrect configuration.

Factory Fitted Cables

- Units rated 2.9 kW or less: Supplied with a 2-metre, 13 amp supply cable and plug as standard.
- Units rated above 2.9 kW: Fitted with a suitable commando plug and cable, specified at the time of order.

Cable Type

- H07RN-F cable is supplied as standard across all units.

Electrical Load Considerations

- Electrical diversity does not apply. As this is a non-domestic installation, the electrical system must support all appliances and socket-outlets operating simultaneously at full load.

RCD Protection

These trolleys are supplied with an RCD 13A plug.

A UK-standard safety plug that adds crucial electric shock protection to appliances by monitoring current and cutting power (within 40ms) if a fault like an earth leak is detected, featuring test/reset buttons, a 13A max load, and double-pole protection.

Why Use an RCD?

- An RCD is designed to reduce the risk of electric shock. While it can greatly reduce the likelihood of injury, it does not eliminate the danger completely. A severe or even fatal electric shock can still occur.
- Therefore, an RCD should be considered a supplementary safety measure, not a substitute for safe installation and use of electrical equipment.

Where Should the RCD Be Installed?

- Within the main switchboard, providing continuous protection to the entire electrical supply.
- Alternative Options (if installation in the switchboard is not feasible):
Use an RCD-protected socket outlet. Or use a plug-in RCD adaptor.

Recommended RCD Settings

- To minimize the risk of electric shock, the RCD should have a tripping current not exceeding 30mA.
- RCDs with higher tripping currents are generally used for fire protection, not personal safety.

1: General Electrical Safety

UK 13 Amp ~230V Plugs – Safety Guideline

Electric plugs may appear simple in structure and wiring, but incorrect use can lead to serious electrical hazards. Occupational accidents caused by improper use of plugs — such as electric shock, burns, fire, or explosions — are not uncommon. These can result in:

- Equipment damage
- Property loss
- Production downtime
- Most seriously, injury or death



To ensure safety, follow these essential guidelines:

General Safety

- Ensure all plugs meet British Standard BS 1363.
- If in doubt, consult a qualified electrical engineer, technician, or registered electrical worker.

Usage and Handling

- Do not overload sockets.
- Always switch off power before inserting or removing a plug.
- Do not use plugs that are a loose or slack fit in the socket — this can cause overheating and fire risk.
- Do not splash sockets or plugs with water or other liquids.
- Always handle plugs with care, never pull the plug out by the cable.
- Avoid placing strain on the cable or allowing it to hang unsupported.

Inspection and Maintenance - Regularly inspect the plug, cable, and socket for:

- Cracks or physical damage.
- Signs of overheating (e.g., burn marks or discolouration)
- Loose or damaged connection pins must be straight and firmly attached.
- Plugs and sockets should be clean, free from dirt, oil, or grease and kept dry at all times.

Best Practice

- Check cables and plugs regularly as part of routine maintenance.
- Ensure that the cable is securely fastened within the plug and that there are no visible wires exposed.
- Inspect the cable for any cuts, or damaged.
- Cables must not be temporarily repaired or re-joined if damaged.
- Replace any damaged plug or cable immediately.
- If the cord is damaged, it must be replaced by the manufacturer, service agent or suitably qualified person.
- Ensure the electrical system is protected by a Residual Current Device (RCD) where appropriate.

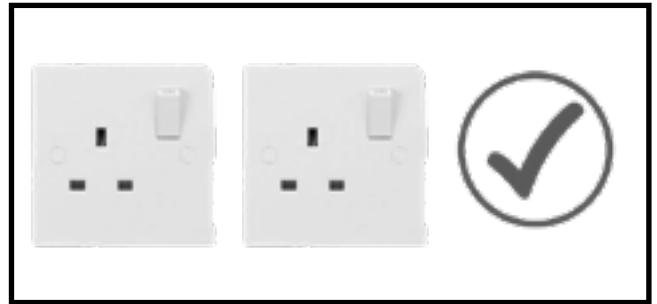
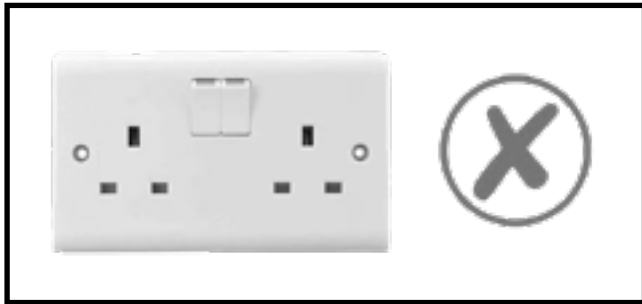


Warning! Power cables and plugs on mobile units are frequently damaged when the plugs are left connected to wall sockets while the mobile unit is being moved. This accidental practice poses a significant safety risk and should be emphasized by the duty holder as a potential safety concern.

1: General Electrical Safety



Warning! Multiple units must not be connected to a double 13amp power socket, each unit should be connected to a separate 13amp power socket. Additionally any Moffat appliances fitted with 2 x 13amp plugs must also be connected to two separate 13amp power sockets. Do not connect two 13amp plugs to a 13amp double socket.



Power Extensions and Cables – Safety Guidelines

Power extension leads are not recommended.

If they must be used, extreme care should be taken to ensure safe operation.

General Warnings

- Avoid using power extensions whenever possible.
- Never plug more than one appliance into a multi-way adapter or multi-way extension.
- Only use extension leads that were bought ready-assembled by a reputable manufacturer.

What NOT to Do

- Do not cross walkways or pathways with extension leads — cables may become damaged if stepped on.
- Do not allow the cable to become: Over-taut Over-stretched or Continuously bent.
- Do not allow cables to become tangled.
- Do not use any extension lead longer than 15 metres.
- Do not use leads or connectors that are damaged or improperly insulated.

Safe Use Guidelines

- Position cables carefully to prevent tripping hazards, cable strain or damage.
- Only use extension leads fitted with properly insulated plugs, and a correctly rated fuse in the plug.
- When using a cable drum extension, always fully unwind the cable to prevent heat build-up and overheating.
- Regular check and Inspect extension leads before each use for cuts, wear, or exposed wires.
- Regular check for signs of overheating.

2: Electrical Specification



This appliance must be earthed and damaged cables must be replaced by a suitably qualified person!

	1 Phase Cable	3 Phase Cable
Live (L1)	Brown	Brown
L2	X	Black
L3	X	Grey
Neutral	Blue	Blue
Earth	Yellow & Green (Striped)	Yellow & Green (Striped)



A mains cable, type H07RN-F, conforming to code designation 60245 IEC 57, is supplied.



“If the supply cord is damaged, it must be replaced by the manufacturer, service agent or suitably qualified person”

Model	Weight (kg)	Dimensions L X W X H (mm)	Electrical Supply	Rating (kw)	With Optional Toast Warmer
BTC	50	1111 x 620 x 1501	13amp	2.3	2.6
BTX	115	1344 x 620 x 1501	13amp	2.3	2.6



This equipment is designed to be operated by suitably qualified persons. It is the responsibility of the Supervisor or equivalent to instruct users, provide suitable P.P.E., Show the mains isolating switch location, and inform users that parts may become hot, causing injury if touched.

3: General Installation



Commissioning

- Carefully remove all packaging and plastic coatings from the appliance and dispose in a responsible manner.
- Check for damage. Please note that in compliance with E&R Moffat warrant conditions, any defects must be reported within 3 days of delivery.
- Assemble all parts, shelves and shelf hangers etc.
- Place the appliance in its intended location - on a flat, level surface and apply trolley brakes.
- Always ensure unit is clean before operation.
- Ensure all switches are in the OFF position.
- Connect the mains input plug to the socket outlet.
- Turn on and check the unit is functioning correctly.

Positioning and Securing the Equipment

- To ensure optimal performance and prevent damage, always maintain the equipment in a vertical orientation.
- When placing in position ensure there is adequate access.
- Ensure that the unit is installed on a flat even surface.
- Before installing, it is recommended that the area is swept clean.
- Once positioned, engage the brakes on mobile units to prevent any unintentional movement.



Warning! Using the Wheel Brakes on Mobile Appliances

To keep the unit stable after placing it in the desired location, use the brakes.

The brakes are located as part of the wheel arrangement normally two brakes are fitted.

Simply press down on the foot pedal with your foot to simultaneously lock both the wheel and the caster's swivel mechanism. This action prevents the unit from moving in any direction. To release the lock, flip the same pedal up again with your foot, which disengages the brake and allows the caster to rotate freely

Using the wheel brakes helps secure the unit, reducing the risk of accidents or damage.

4: Manoeuvring Mobile Units

Moving the Unit

- **Disconnect power:** Unplug the power cord from the wall socket before moving the unit. This is essential to avoid electrical hazards.
- **Secure the Power Cord:** Properly store or secure the power cord to prevent it from being damaged or becoming a tripping hazard during transport.
- **Avoid Obstacles:** The unit is not designed to be moved over ledges, steps, or other obstacles. Always move the unit over flat, even surfaces.
- **Protect the Power Cord:** Ensure that the wheels do not roll over or come into contact with the power cord. This could damage the cord and create a safety risk.

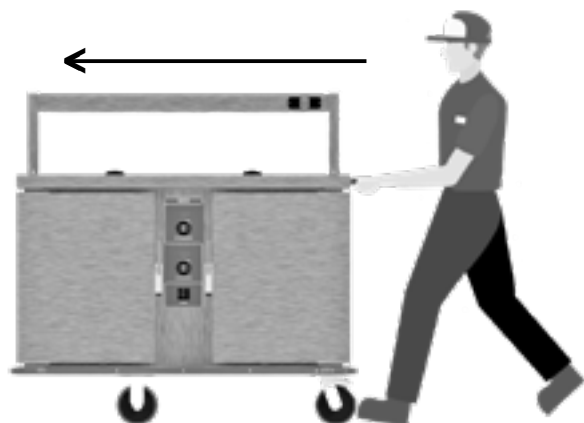
By following these instructions, you can safely and easily move the unit without causing harm to yourself or the equipment.

Manoeuvring Trolley



**Warning ! Always ensure appliance has been unplugged and cable coiled safely.
Push the trolley where possible, avoid pulling.
Avoid collisions, and be vigilant when negotiating lifts and doorways.**

- Higher push forces and neutral body postures are assumed when pushing, as opposed to pulling. Pulling can limit the direction of travel vision, can twist the back and neck and require high forces at the shoulder.
- Pulling increases the risk of foot and ankle injury from the trolley riding up during transfers.
- Proper footwear should be worn.
- To ensure a good grip stand with the legs at shoulder width. Stagger legs to get the trolley in motion.



Model	Push (N) on hard carpet	Maintain (N) on hard carpet	Turning Circle (M)
BTC	15	7	1.11
BTX	20	10	1.34

5: Trolley Features

The breakfast / beverage trolley is designed for easy serving of breakfast, tea and coffee, specifically in a care home or hospital ward location.

The trolley is supplied with drawers for cutlery and condiments also there is pull out dish-wash type crockery baskets and an additional pull out drawer holding cereal containers. These are all container under the work top, Up on top there are dispensers for coffee and sugar or hot chocolate, and an integrated water boiler. On the operators left hand side there is a space where the optional toast warmer can be fitted. The BTX model has an integrated waste bin, and the BTC model has a space saving flip up waste bag holder.

Breakaway Power Cable



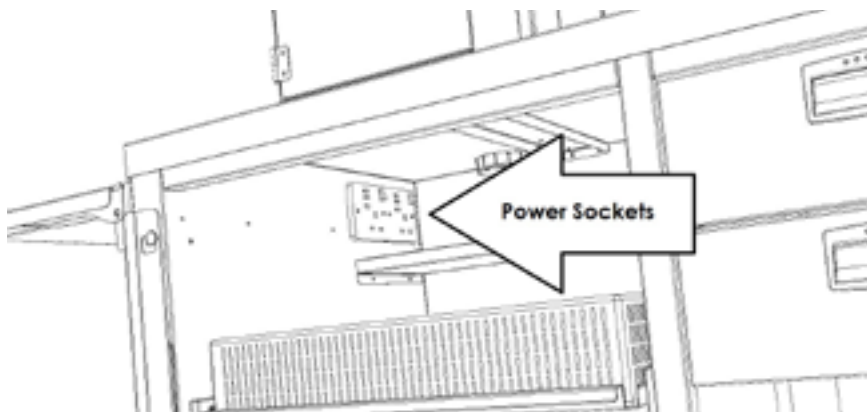
Breakaway power cable is a safety power lead designed to intentionally and safely disconnect if the trolley is moved while still plugged into a wall socket, preventing damage to the cable, the trolley, or the wall outlet. The connector mechanism is designed to release with a specific amount of pull force, unlike standard, securely locked power cords.

Onboard Power Sockets



In behind where the crockery baskets are fitted there is an on-board double 13amp socket, this is where the water boiler and optional Toast warmer are plugged in.

The double socket is connected internally to the external 13amp power cable and plug. This allows easy operation using one plug to power everything fitted to the trolley.

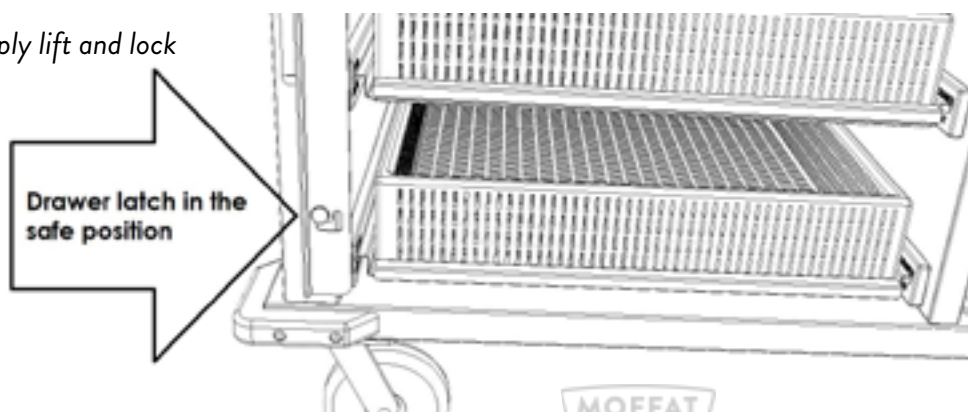


Drawers Safety Latch

Drawers runners can be unhooked for deep cleaning and maintenance.

On the right hand side of the trolley a safety latch mechanism can be applied, this secures the drawers from slipping out of position when the trolley is being wheeled round corners.

Simply lift and lock



5: Trolley Features

Condiment Drawer

Pull out top drawer on left hand with six removable 1/9th size GN containers.

Crockery Baskets

Pull out heavy duty slides holding three 500mm square dish wash type crockery baskets.

Cutlery Drawer

Pull out top drawer on right hand with a removable segmented cutlery containers.

Cereal Containers

Pull out drawer on right hand holding four cereal containers.

Cake Tray

Low level GN1/1 size gastronorm type 100mm deep slide out pan.

Cleaning cloth holder

Low level lift out GN 2/3rd size gastronorm type pan, 65mm deep.

Waste bin

BTX has plastic bin and work top funnel, the BTC model has a fold down waste bag holder.

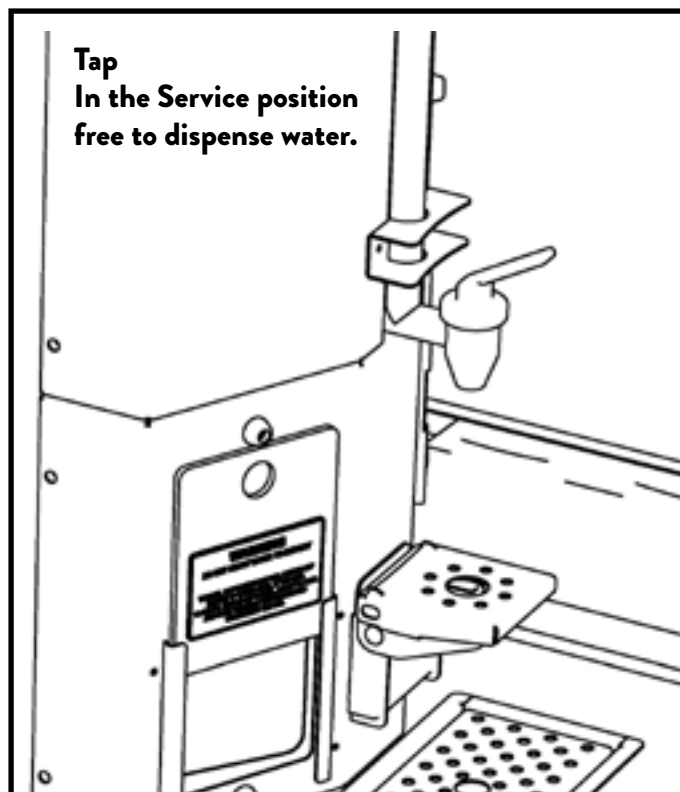
Water Boiler Tap Safe Position



The water boiler tap can be swivelled round left or right for flexibility of use.

When not in use or when travelling the tap can be turned round and left facing the boiler resting within the safety channel. In this position the tap cannot be operated up or down.

This protects against accidentally bumping or operating the tap.



5: Trolley Features

Powder & Sugar dispensers

Wall mounted coffee & sugar dispensers, each with a 1.5 litre capacity. The “Click Dispenser” mechanism is set to dispense 1 x teaspoon per click and is great for dispensing sugar, coffee, creamer, sweetener and many more powders! One unit is set to dispense 1 x sugar, and one is set to dispense 1 x powders. Suitable for coffee, sugar, creamer, sweetener, and cocoa powder.

CLICK DISPENSER - POWDER & SUGAR - assembling and cleaning instructions

Assembling instructions

1. Carefully remove all parts from the packaging.
2. Place the container (PD121) and cap (PDIOB) into the main body (PD101). Please note to insert pin **b** into slot **B** in main body. Tighten clockwise as shown in Figure A 1.
3. See Figure A2: Place the dispenser on the stand and secure screw as shown in Figure I.
4. Optional: the stand can be mounted on the wall as described in Figure H.
5. Optional: for sugar dispensing use (PDIIIO) instead of (PD109) as shown in Figure K.

Disassembling for cleaning

1. Lift the dispenser out of the stand - as in Figure I by unscrewing screw A.
2. Release the container from the main body (PD101) by loosening counter-clockwise and gentle pull as shown in Figure C.
3. Release part PD113 and afterwards remove the other parts: PD122 (spring), PD112, PD107, PD109, PDIOS - as shown in Figure D & Figure K.
4. Carefully disconnect funnel PD129 as shown in Figure E.
5. Release part PD113A and then remove part PD103 as described in Figure E.
6. Sugar Dispenser: Follow instructions for sugar dispenser as shown in Figure K.

Cleaning Instructions

Clean with mild soap and lukewarm water, using a soft doth or sponge. Before reassembling, please make sure all parts are dry! Recommended for cleaning once a month.

NOT RECOMMENDED FOR DISHWASHER USE.

Reassembling Notes

For reassembling put all parts together by reversed order.

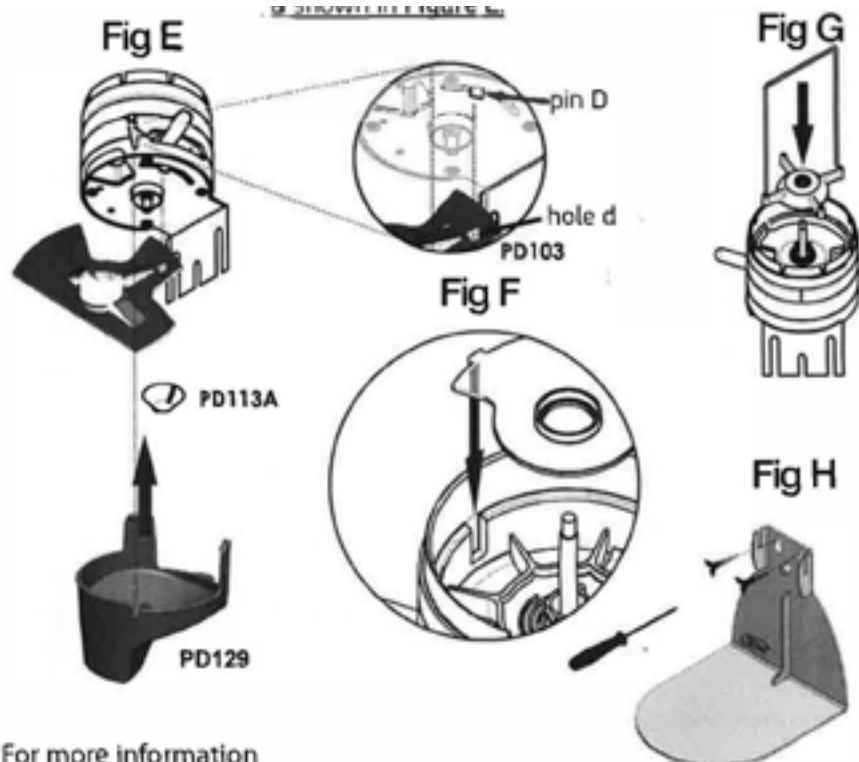
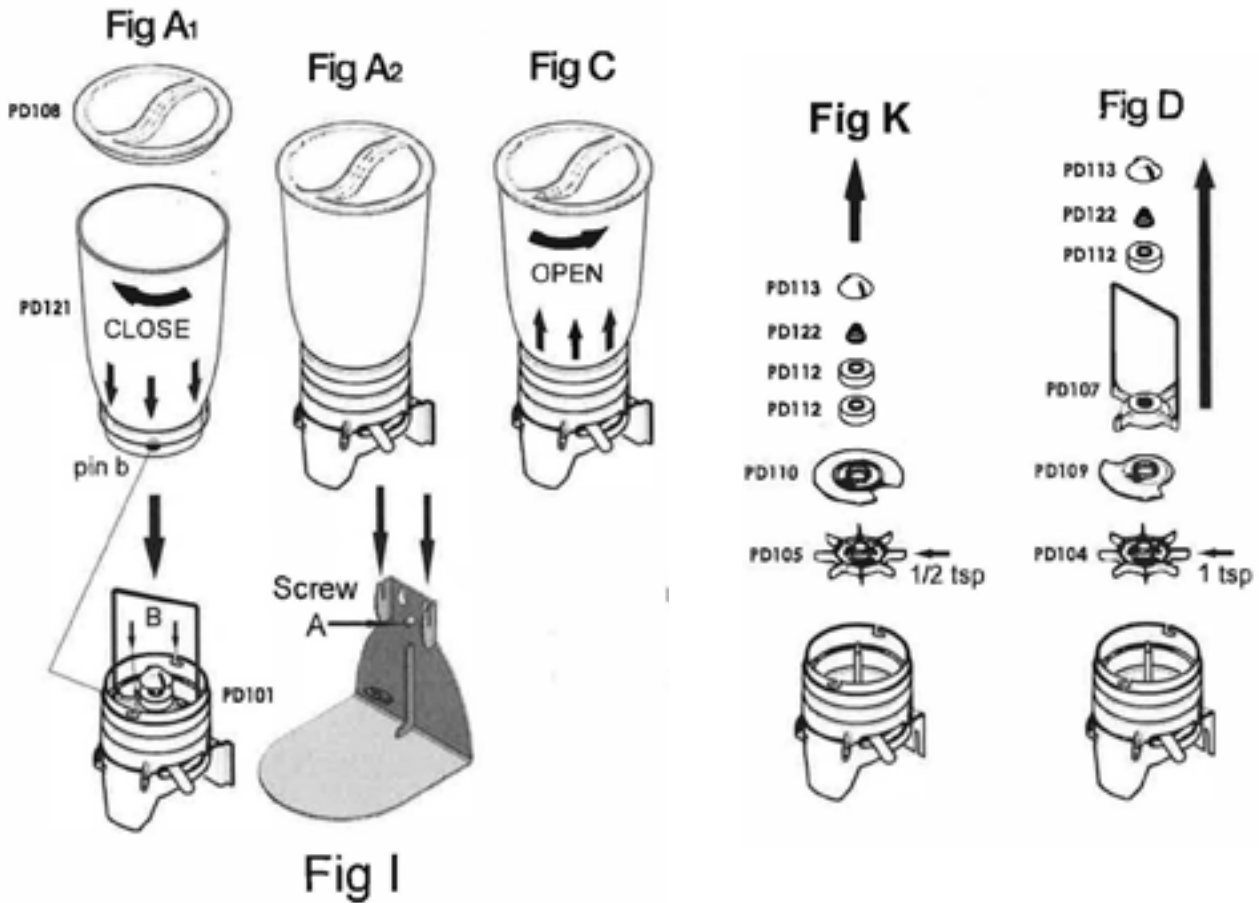
Attention: Please follow detailed instructions for reassembling:

1. Insert PD109 according to the direction which is specified in Figure F and rotate until the protrusion matches its corresponding place in PD101.
2. Insert PD107 and rotate until it is secure as described in Figure G.
3. Reconnect PD103. Attention: connect hole. **d** into pin **D**. Shown in Fig E.

5: Trolley Features



Warning! The dispensers are for powder and sugar use only



*For more information

6: Operation (water-boiler)

First Use :- Before first use, rinse out the urn with warm water.

Switching On

1. Ensure the water boiler switch is in the off position.
2. Plug the trolley into a 13amp power outlet and switch it on.
3. Unlock with keys supplied and flip up top cover.
4. Twist and remove water-boiler lid.
5. Ensure the tap is in the off position.
6. Fill with fresh cool water to the desired amount taking care not to fill past the maximum level. Avoid under filling the urn as this will cause the overheat protection system to operate.
7. Replace the boiler lid and switch on, the green light will illuminate indicating power is on.
The amber light will be lit when heating the water. When the amber light has switched off the water has reach the controlled temperature, The amber light will cycle on and off and maintain the water at the controlled temperature.
8. The boiler is automatically set to heat water up to 95C the optimum temperature for tea.
9. Leave for 30min to boil up or until the amber light switches off.



Hot water and steam may cause scalding injury, be careful when operating the Tap.

- **Push the tap lever down to allow water to pour out and release to stop.**
- **The tap lever can also be pulled up and set in a locked open position.**
- **Do not remove the lid while the water is boiling.**



The capacity is 10 litres. Do not leave the urn operating unattended for long periods. Regularly check the water level to ensure that this unit does not boil dry.

Switch off the Urn when not in use. It is not necessary to empty the Urn of clean water if it is to be used the next day, but check whether cleaning is required.



When moving the trolley to another location always switch power off at the socket disconnect and carefully wrap the power cord on the cable holder located on the end of the trolley.

6: Operation (water-boiler)

Using the Boiler

1. Place a cup, mug or pot directly under the tap.
NOTE: There is a handy flip down cup rest when using smaller cups.
2. Gently press the tap to dispense water. Water will pour from the tap. The tap will spring back when released. CAUTION, Do not press the lever too quickly or boiling water may splash.
3. Never allow the water level to drop to the level of the tap. If no water pours when operating the tap, check the water level. If the level is low, fill the boiler immediately.
4. The water level should be checked at regular intervals. Adding small quantities of water at regular intervals is more efficient than refilling the boiler when it is nearly empty.
5. To turn the boiler off, simply switch to the off position.
6. Switch power off at the socket disconnect and carefully wrap the power cord up on the cable holder located on the end of the trolley.



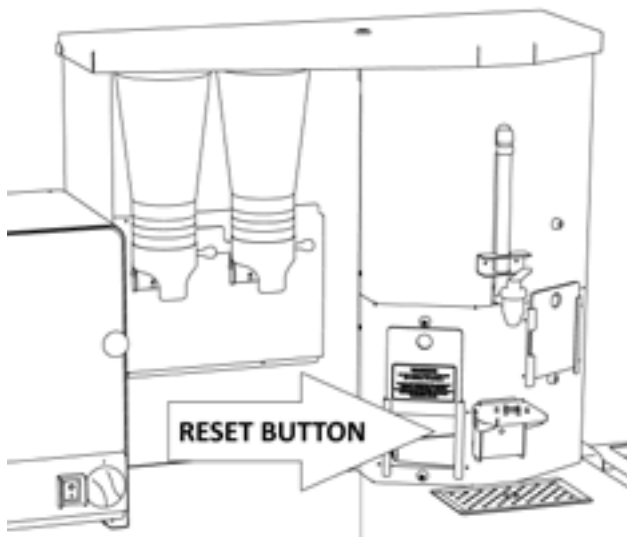
Do not allow the water to run dry.
Boil dry protection will switch of the heating element if water level is to low.

To re-set the boil dry safety cut out system.

- Switch off and allow the urn to cool down.
- Re fill with cold water.
- Press in the **RESET** button.
- Turn the knob back on at No5.
- The urn will automatically reboil.

Safety cut out RESET button is located underneath the urn.

The button can be accessed by sliding up the left hand perspex cover to gain access to underneath the boiler. The reset button is located protruding down through a hole in the boiler support.



RESET BUTTON

Located through left hand widow, underneath the boiler.

Warning ! Re fill with fresh water and allow to cool before attempting to reset the button.

7: Water-boiler De-scaling

Removing Lime and Mineral Deposits

The water boiler tank should be de-scaled regularly to maintain efficient operation and water quality. The frequency depends on the hardness of the water.

The de-scaling procedure must be performed by trained personnel.



Perform this procedure when the unit will not be used for a period of time, such as the end of the day.

Wear protective clothing.

1. Turn off the power and allow the water to cool.
2. Isolate the boiler from the electrical supply.
3. Drain the tank.
4. Fill the tank with a mixture of 75% water and 25% white vinegar. Do not use flavoured vinegar.
5. Replace tank lid and attach an 'Out of Use' notice to prevent use during de-scaling.
6. Connect the power back up and switch on and run the boiler for 30 minutes.
7. Isolate the boiler and allow the water to cool.
8. Inspect the tank and inner element for scale deposits.
If necessary repeat the de-scaling process.
9. Drain and flush the tank with clean water.
10. Wash the tank using water and a mild detergent. Rinse thoroughly and dry.



Heavy scale build up may require additional treatments.

8: Cleaning



Prior to cleaning the unit, please ensure that it is disconnected from the electric supply and allowed to cool down. Additionally, remove all food and packaging from the unit.

1. Disconnect from mains and wait until appliance has cooled.
2. Wipe clean using hot, soapy water and soft, non-abrasive cloth. Ensure that the stainless steel is wiped in straight strokes following the grain of the material.
3. After wiping the surface, make sure to dry it thoroughly using a clean cloth. Avoid using scouring pads or any abrasive cleaners. For a more thorough cleaning, remove any accessories to access the internal areas. After cleaning, ensure that all perspex panels and fixings are properly replaced.
4. Finish by carefully drying with a soft dry cloth or Kitchen Towels.



Do not use a water jet or pressure spray to clean this appliance.

Do not use scouring pads or abrasive cleaners of any type.

Do not use Solvents, bleach, Caustic Cleaners or biological powders on any surface.

It is important to prevent excess water from pooling on the glass shelf base.



Special care should be exercised when working around electrical parts, and excessive use of water should be avoided.



E&R Moffat Ltd cannot assume responsibility for any malfunctions or damages that may occur if the aforementioned cleaning procedures are not followed diligently. It is crucial to adhere to these cleaning procedures to ensure the proper functioning and longevity of the equipment.

Thank you for choosing E&R Moffat!

Scan the QR code below to visit the
E&R Moffat website for further information:

