

INSTALLATION AND OPERATIONAL INSTRUCTIONS



*HOTSPA*  
*460W*



**DITCHBURN**

VENDING  
MACHINES  
LIMITED

A MEMBER OF THE DITCHBURN ORGANISATION

Head Office and Factory: LYTHAM, LANCASHIRE.

Telephone: Lytham 7421 (4 lines)

LONDON

BIRMINGHAM

CARDIFF

BRISTOL

GLASGOW

HAMBURG

CHICAGO



*HOTSPA*  
*460W*

**IMPORTANT**

After installing this machine  
**PLEASE WASH YOUR HANDS**  
Before handling ingredients and cups

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## INTRODUCTION

The instructions for the installation and operation of this machine have been prepared by the Engineering Department of Ditchburn Vending Machines Ltd. to assist the user in obtaining satisfactory performance and a high quality beverage.

Customers are advised to notify the appropriate water supply authority prior to connecting this machine to the mains supply.

It is important to remember that this machine is dispensing food and the importance of sanitation and scrupulous cleanliness in the interest of hygiene must never be overlooked. Apart from these obvious considerations the successful and continued operation of the machine depends upon regular cleaning both inside and out. The filling and routine attention we advocate will ensure consistency of service and satisfaction.

UNPACKING AND INSTALLATION

PLEASE READ CAREFULLY

Unpacking.

Remove all cardboard and transit ties from the machine.

Unpack the coin box containing the levelling feet and ball float with chain.

Fit the levelling feet and adjust until the machine stands level and firmly in position.

Installation.

The back of the Hotspa should be installed three to six inches away from any wall to allow air to circulate.

Water Supply.

The Hotspa is designed to operate irrespective of fluctuating water pressures.

Electricity.

The Hotspa is designed to operate on a supply of 220-240 volts, 50 cycles A.C. Should the voltage be below this figure the discrepancy can be corrected by means of a Ditchburn booster unit which has been specially designed as a simple plug in attachment.

A flexible cable is provided with the machine which can be connected to the mains supply via a 13 amp. plug and socket or through a junction box.

Connect the water supply using  $\frac{1}{2}$ " or  $\frac{3}{8}$ " diameter copper tubing (nothing smaller) and flush out before connection to the machine. It is suggested that a shut-off valve be incorporated in the supply line, a convenient position being behind the rear left hand foot of the Hotspa.

Your Hotspa has been thoroughly tested before leaving the factory. Because of transit vibration it is advisable to tighten all joints and make minor adjustments when necessary.

Do not overtighten.

- 1). Turn on water supply.
- 2). Switch on electricity supply.
- 3). Attach the float chain to micro-switch on the main control box situated on the lower left-hand side of the cabinet interior. Water will now enter the air break tank behind the boiler.
- 4). Prime Booster Pump by removing round headed screw from pump body. DO NOT replace screw till water has flowed freely from screw hole. Care must be taken not to lose or damage the small fibre sealing washer, which exists between the pump body and screw head.
- 5). Turn the front indicator dial to COFFEE selection and operate the bowl flush switch (on rear of front door) in order to clear air locks in the water system. Wait until water flows and repeat on SOUP selection. Due to the efficiency of the pump unit, especially in those areas where poor water supply pressure is experienced, water may be pumped into the boiler more rapidly than it enters the water storage tank. It is thus possible to drain this tank and "pump air". This condition can be recognised by

a change in noise level of the pump unit since this runs considerable faster when dry and damage can ensue if this condition is allowed to persist. In practice, therefore, the boiler should be filled in three or four stages, thus allowing the water storage tank time to "top up". The pump unit is normally self priming but (a) if it has been allowed to "pump air", then it will be necessary to re-prime the pump by repeating "4" above. (b) Should an "air lock" be experienced when first filling the system, all that is required is to slacken off one of the joints between the pump unit and the boiler unit water flows freely from the joint which should then be re-tightened.

Several pints of water should be "run off" by operating the flush switch to ensure that all entrained air is driven out of the system.

- 6). Switch OFF main electricity supply. Only when mains supply is OFF, PLUG IN the water heater to its socket which is situated at rear of Drip Can Micro Switch - and replace box cover.
- 7). SWITCH ON and allow half an hour for the water tank to reach the correct temperature then check for temperature and volume.

OPERATIONAL PROCEDURE

- 1). Use only high quality ingredients supplied or approved by D.V.M. Limited. (The quality of the drink can never be any better than the quality of the ingredients).
- 2). Fill the ingredient containers which are marked appropriately noting carefully that if these canisters are not removed for loading, special care must be taken to avoid spillage.
- 3). Swing out the cup dispenser by removing the retaining pin and remove the turret lid. Remove the cups from the packing cartons and examine carefully for damage or other defects, which would prevent their satisfactory use. Load each section in the turret, except the one over the cup delivery position, by putting the cups in individually and then operate machine till turret rotates one section. Fill the remaining section. This is done to prevent damaging the cup release mechanism.
- 4). Check by inserting coins that the coin selector assembly is correctly positioned on its mounting studs and that coins are entering the machine correctly. Test each drink selection for taste, quality and quantity by inserting coins through the coin mechanism. Clean the cabinet thoroughly and always keep clean.
- 5). Finally lock machine and operate by inserting a coin.



FROST PRECAUTIONS

When a machine is sited where the possibility of damage from frost could occur, it is important to see:-

1. That all incoming supply pipes are adequately lagged.
2. That the inlet water system inside the machine to the boiler be lagged or fitted with a 75 watt heating tape.
3. Any machine fitted with a break tank should have the tank protected by additional heating sources up to 250 watts.

Heating tapes can be obtained from D.V.M. Limited.

Should a machine be placed out of service for an appreciable time then the entire system should be drained.

## LUBRICATION

### FAN MOTORS

At approximately 4 to 6 weekly intervals the extract fan should be checked for freedom and cleanliness, and a few drops of oil added to "oilite brushes".

### CUP DISPENSERS

At 4 to 6 weekly intervals the Dail-a-size cup dispensing unit should be lubricated in accordance with the instructions included with the dispensing unit.

### INGREDIENT MOTOR GEAR BOXES

These gear boxes embody "oilite brushes", and require little attention beyond ensuring that they are maintained in a clean and lubricated condition.

A few drops of oil should be applied to the gear pivots and final drive shaft and the gears cleaned with an oily brush at approximately four weekly intervals.

The following Ditchburn lubricants must be used.

Oil Type DLI	To lubricate oilite brushes, pivots etc.
Grease Type DLII	To lubricate all gears.
Oil Type DLIII	To lubricate cup dispenser Gear box.

NOTE: AS MUCH DAMAGE CAN BE CAUSED BY EXCESSIVE LUBRICATION AS BY FAILURE TO LUBRICATE A MACHINE AT ALL.

GENERAL CLEANING AND FILLING ROUTINE

FOR DITCHBURN MACHINES

Ditchburn machines are designed to be easy to clean, fill and maintain, but, as with all electrical and mechanical equipment, require regular cleaning and servicing to give of their best performance.

These notes are to help you and give simple instructions on cleaning and filling, together with suggested forms (see section 8) for recording the usage of ingredients and cups.

We strongly recommend that the following items of equipment are purchased and kept either in the base of the machine or in a nearby store and used on each cleaning operation:-

Ditchburn Special Machine Cleaning Kit

This has been specially prepared to facilitate both the speed and the hygiene of the cleansing process. It consists of -

- 1 Sponge.
- 1 Bottle of D.V.M. Sanicide.
- 1 Nylon Bowl Brush.
- 2 Special Plastic Feed-pipe Brushes.

In addition, you should have a clean cloth and a standard liquid detergent, of the type used for washing-up, for general outside cleaning, and a small pocket mirror for easy ingredient checking.

HOTSPA DAILY AND WEEKLY CLEANING AND FILLING

DAILY

1. Open the door and take the METER reading, and enter details on Record Sheet.
2. Take out the securing pin on the Cup Dispenser, swing out the Turret and Dispenser and check on number of cups wanted. (Note: Cups are dispensed from one column at a time, so count the number of empty columns). To fill, remove lid and drop in cups from sleeve, ensuring separation of each cup by "feathering", and removing any with obviously faulty rims or other defects.
3. Remove Ingredient Canister lids and check on level of contents. To fill, remove canisters (filling can be done inside the machine, but any spillage of ingredients, particularly on the motor tray may clog the machine motors and cause an interruption in the service, if not a breakdown), open bag of appropriate ingredients insert mouth of bag in top of container and pour in. Replace canisters (see Para. 2 Weekly Schedule). Replace lids and ensure extended edge of coffee lid fits over bracket on side of cabinet.
4. Remove Bowl Cover, turn on Bowl flush switch (on door) and with bowl brush cleanse Bowl thoroughly. This procedure applied to both Coffee and Soup Bowls. REPLACE COVER.
5. With Bowl brush and hot water from coffee bowl clean out Cup Station.

6. Wipe outside of door and cup station surround with damp cloth.
7. Empty and clean drip can, add  $\frac{1}{2}$  oz. neat Sanicide.  
Replace drip can.
8. Close the door, ensuring that the INGREDIENT SWITCH is ON as you do so.
9. With door closed choose drink and insert coin to ensure machine working correctly.

#### WEEKLY

1. Proceed as for 1 and 2 above.
2. Remove the INGREDIENT CANISTERS in turn, give them a good shake (especially the soups and sugar) and wipe the chutes with a DRY cloth. It is useful to have a dry clean cup at this stage so that by turning the "U" clip at the rear of canister, ingredient is fed out into the cup to ensure a free flow. Fill and replace the canisters by turning the pins on the front of the gear box upright and the "U" on the canister so that it fits over the pins, tilting the canister back and sliding into position.  
NOTE: The rear leg of the canister fits underneath the lug on the platform.

Although all canisters and the platform are marked with ingredient name, a check can be made by noting that all ingredient chutes face towards the centre of the bowl.

3. Remove and empty drip can (clean thoroughly).

4. Remove Cup Station complete, place in drip can and half fill with hot water, leave to soak.
5. Replace ingredient canister covers.
6. Thoroughly clean Cup Station, after removing bottom grill. Replace complete assembly.
7. With a bucket of water and detergent, thoroughly clean inside of cabinet.
8. Use special brush to clean plastic delivery tubes, finally replacing tubes in Cup Station nozzles. Operate bowl flush on both bowls.
9. Close the door, ensuring that the INGREDIENT SWITCH is ON as you do so.





# DITCHBURN HOT DRINK MACHINES

## HOTSPA SERVICE RECORD

LOCATION \_\_\_\_\_  
 SERIAL NO. \_\_\_\_\_  
 MONTH OF \_\_\_\_\_

DATE	CUPS	INGREDIENTS					METER	TEST DRINKS	SERVICE	NET DRINKS	CASH COLLECTIONS	BY
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
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30												
31												

MATERIAL COST \_\_\_\_\_

LOCATION " \_\_\_\_\_ TOTAL NET \_\_\_\_\_

MISC. " \_\_\_\_\_







# DITCHBURN HOT DRINK MACHINES

BANKING STATEMENT

## MONTHLY SUMMARY & METER READINGS

LOCATION \_\_\_\_\_ FROM DATE \_\_\_\_\_

\_\_\_\_\_ TO DATE \_\_\_\_\_

### REGISTER READINGS

PRESENT \_\_\_\_\_

PREVIOUS \_\_\_\_\_

DRINKS DISPENSED \_\_\_\_\_

DATE	AMOUNT	RECONCILIATION		
		TEST DRINKS		
		SLUGS		
		NET DRINKS SOLD		
		TOTAL		
		COMMISSION		
		CERTIFIED CORRECT:    BY _____		
MONTHLY TOTAL				

MACHINE NUMBER \_\_\_\_\_





# INGREDIENT STOCK CHECK

	Minimum Stock
Hot Cups	
Tea	
Coffee	
Milk	
Sugar	
Choc	
Soup	
Soup	
Cold Cups	
Syrup	
Syrup	
Syrup	
Syrup	
Syrup	
CO <sub>2</sub>	