

Kenco[®]



Kenco Singles Brewer

O P E R A T O R ' S H A N D B O O K

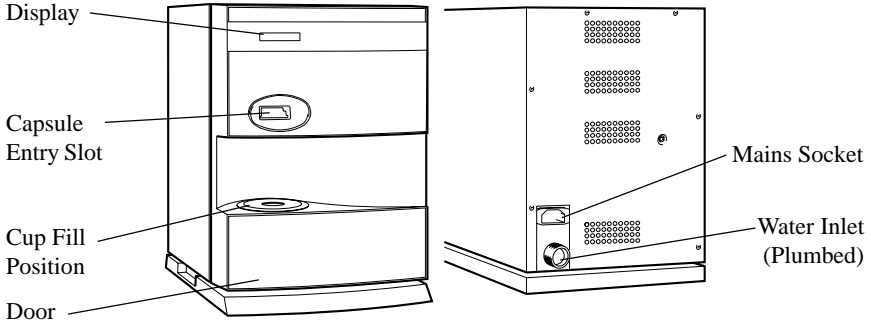


This handbook contains instructions for the Kenco Singles Brewer.
Please read the handbook before using the machine.

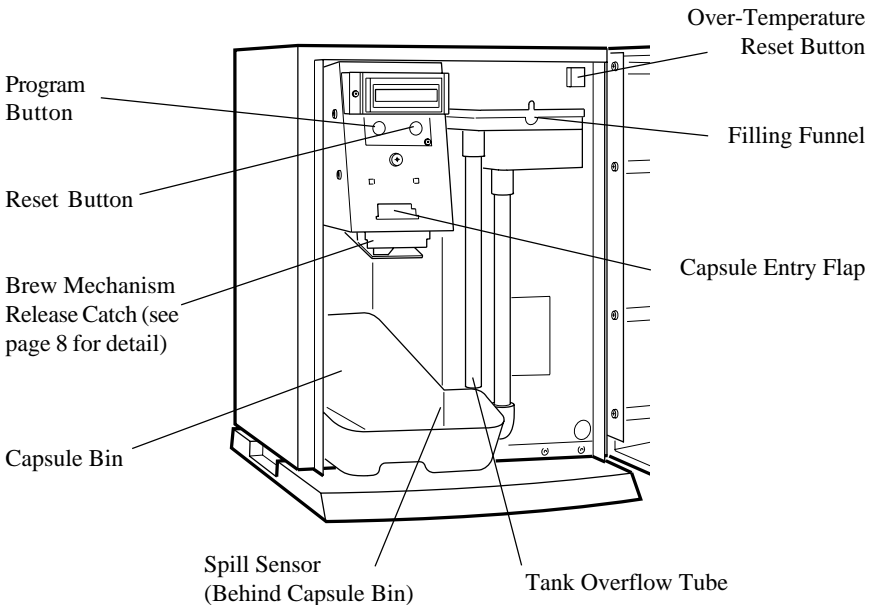
Keep this fold out page open while reading the Operator's
Handbook.

Machine Layout

External Features

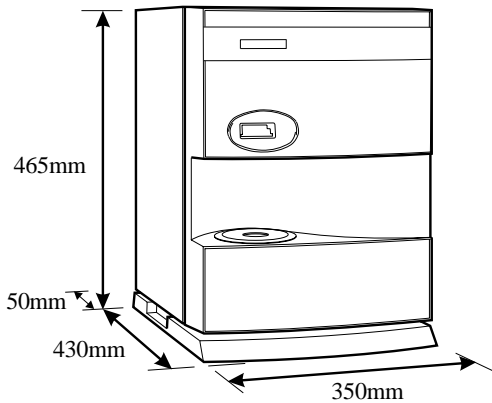


Internal Features With Door Open



Technical Details

Dimensions



ELECTRICAL POWER SUPPLY

The machine operates from a 230V 50Hz single-phase A.C. supply and is fitted with a 2m power cable terminated with a BS1363 plug fused at 13A. This should be connected to a switched socket outlet installed according to the latest edition of the IEE Wiring Regulations.

POWER RATING

The machine is rated at 2 kW. The maximum current drawn is 9A.

WATER SUPPLY OPTIONS PLUMBED

Mains Fill - the machine should be situated within 1m of a drinking water supply from a rising main terminated at a W.R.C. approved 15mm compression stoptap.

This water supply should comply with both:

- Statutory Instrument No.1147 - "Water, England & Wales".
- The Water Supply (Water Quality) Regulations 1989.

Water pressure at the stoptap must be within the limits of 0.2 - 10 bar.

Pump Fill - if your machine is fitted with a special water pump, it can be connected to an external drinking water container. Phone KENCO Service (see inside rear cover) for advice on alternative water supply.

MANUAL FILL

Jug Fill - the machine may be filled manually by opening the front cover to expose the filling funnel. The tank has an average working capacity of 30 cups between refills.

CAPSULE BIN CAPACITY

The capsule bin will hold up to thirty capsules. Capacity can be increased by mounting the machine on a KENCO base cabinet.

WEIGHT

Filled with water: 24kg.
Empty: 18kg.

CAUTION: This machine should not be used with artificially softened water.

Contents

Machine Layout	Inside Front Cover
Technical Details	Inside Front Cover
Important Safeguards	3
Setting Up	4
How to Get a Drink	6
Daily Maintenance	7
Weekly Maintenance	8
Adjusting Drinks Volume	10
Drinks Counter	10
What To Do If Things Go Wrong	11
Display Messages	12
Health and Safety at Work and Electricity at Work Regulations 1989	16
Mains Electrical Power Supply	18
Kenco Customer Service	Inside Rear Cover

© Copyright 1999 Kenco Coffee Company.

The information in this Operator's Handbook was correct at the time of going to print. Kenco Coffee Company reserves the right to change the specification without notice.

Important Safeguards

When using your KENCO Brewer, always follow these basic safety precautions:

1. Read **all** instructions **before** using the machine, and ensure that anyone who will be involved with the cleaning or refilling of the machine also reads the instructions.
2. This machine may contain up to 5 litres of very hot water (up to 96°C). Therefore, supervision should always be available when the machine is being used near young children, the aged, or the infirm.
3. The machine should be situated on a KENCO custom designed base cabinet or on a strong horizontal surface, at a convenient height, in a position where it is not likely to be knocked off.
4. The mains lead should never trail from the machine, and should always be kept away from hot surfaces and sharp edges.
5. The machine should be located so that the 13A. plug is accessible for disconnection.
6. Do not operate the machine if any part is damaged, e.g. mains lead, until it has been checked by a qualified Service Engineer.
7. Allow the machine to cool before handling or moving.
8. Never immerse the machine in water, or any other liquid, and never clean with a water jet.
9. If the machine should accidentally freeze up, call a Service Engineer to check it before switching on.
10. The 3-pin plug at the end of the machine's flexible mains electrical power supply cord is **NOT WATERPROOF**. Therefore, it must be kept dry.
If the moulded plug fitted to the power supply cord is not suitable for connection to your socket outlet, see the instructions on page 18.
11. Ensure you are conversant with the 'Health and Safety at Work and Electricity at Work Regulations 1989', on page 16.
12. Warning: This machine could increase the ambient temperature in the immediate vicinity of it's installation.

ALWAYS DISCONNECT THE MACHINE FROM THE MAINS ELECTRICITY SUPPLY BEFORE CLEANING AND SERVICING.

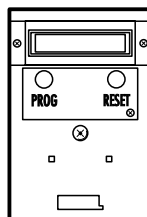
It is recommended that this equipment is serviced by a Kenco trained Service Engineer.

Setting Up

Mains & Pump Fill Option

Ensure water connection is made and water tap is turned on, or feed tube is immersed in water bottle.

Press and hold the Program button, and at the same time plug in and switch on mains electricity at the wall socket.



Machine will display

→ WATER SUPPLY ?

Release Program button and press Reset button to scroll through options (which alternate between Plumbed and Manual) until the display reads

→ Plumbed

Press and release Program button to return to normal operation. Water will fill into machine until display reads

→ WATER HEATING

or

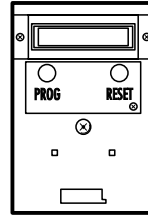
→ PLEASE WAIT

After a delay of approximately 15 minutes, the display will show 'Ready' and the machine can be used.

→ READY

Manual Fill Option

Press and hold Program button and, at the same time, plug in and switch on mains electricity at the wall socket.



Machine will display

→ WATER SUPPLY ?

Release Program button and press Reset button to scroll through options (which alternate between Plumbed and Manual) until the display reads (i.e. filled by hand into the fill funnel)

→ Manual

Press and release the Program button to return to normal operation.
When display shows

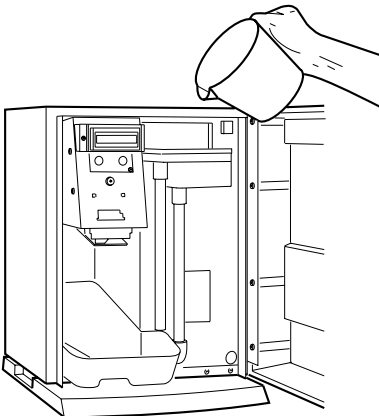
→ ADD WATER

Pour water into funnel, as shown, until water is level with the 'full' mark on the side of the fill funnel.
Display will then show

→ WATER HEATING

or

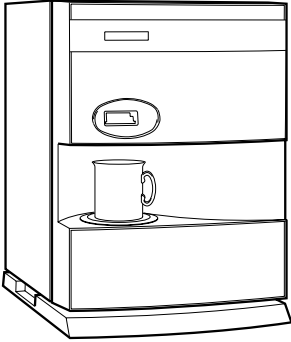
→ PLEASE WAIT



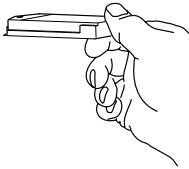
After a delay of approximately 15 minutes, the display will show 'Ready' and the machine can be used.

→ READY

How To Get A Drink



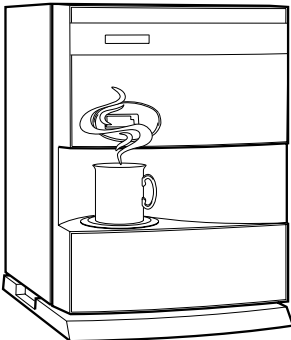
1. Place a cup in the correct position on the cup grille.



2. Hold capsule as shown, label side up.



3. Insert capsule, pointed end first, fully into the slot above the cup station.
The capsule will be automatically drawn into the machine, and will commence brewing.



4. The drink will now be delivered into the cup. The capsule will be disposed of automatically.

Add milk and sugar as required.

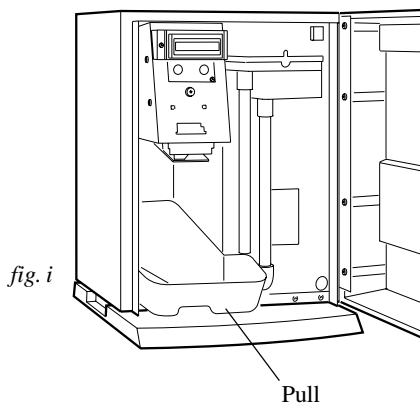
Emptying The Capsule Bin

The capsule bin holds thirty capsules, and should, therefore, be emptied and cleaned daily. If the bin becomes full, the machine's display will read:

CHECK BIN!

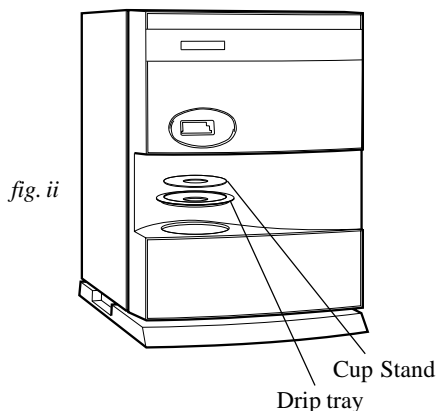
The capsule bin is full. Open the front door, remove the bin (*fig i*), and dispose of the contents. Replace bin, after washing in warm water. If 'Check Bin' message persists, switch off the machine and check underneath the brew mechanism to ensure a capsule is not still trapped. Remove the offending capsule, close the front door, switch on the machine and it will reset automatically.

NOTE: This automatic warning feature will not normally work on the optional base cabinet with the bin inside the cabinet; this must be checked daily by the key operator.



Cleaning The Cup Station

Remove the cup stand and drip tray (*fig. ii*), and wash in warm, soapy water before replacing. Ensure it is correctly located.



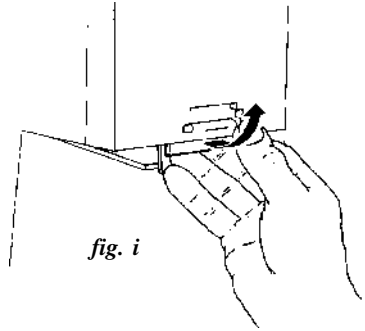
Weekly Maintenance

Cleaning The Clamp Assembly

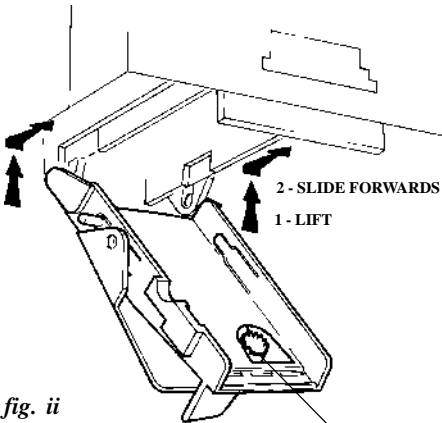
WARNING: ALWAYS DISCONNECT THE MACHINE FROM THE MAINS ELECTRICITY SUPPLY BEFORE CARRYING OUT THIS OPERATION.

For weekly cleaning, or in the unlikely event of a capsule jamming, switch off the machine, open the door and remove the capsule bin, and lower the clamp assembly as follows:-

Place your thumb on the front cover of the brew mechanism and your forefinger behind the plastic latch. Unclip the latch by closing your thumb and forefinger. Gently lower the clamp plate assembly (*fig. i*).



CAUTION!! When the clamp plate assembly is lowered, or removed, sharp cutting teeth are exposed - handle with care!



CAUTION!!
Sharp Edges

With the clamp plate assembly lowered, if you are clearing a jammed capsule, you will now see whether a capsule is jammed inside. Carefully remove any jammed capsules with your fingers - do not use sharp instruments or tools in the mechanism!

To unhook the clamp plate assembly, firmly grasp it by the sides (*fig. ii*), taking care not to touch the cutting edges. Swing the clamp plate towards you, to an angle of approximately 45°, then lift and slide it towards you, keeping it at the same angle.

With the clamp plate assembly removed, the clamp plate should be thoroughly cleaned, paying particular attention to ensure that the cutting teeth are clean.

If necessary the lower clamp plate can be split to allow more thorough cleaning; simply push in the two plastic lugs (fig. iii A) and the clamp plate should unclip.

To re-assemble, push in the two plastic lugs and snap the clamp plate back into position.

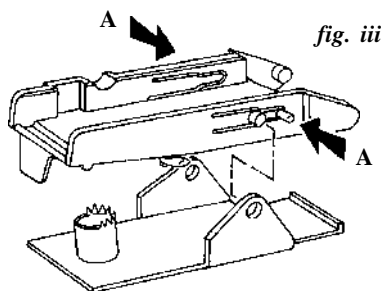


fig. iii

Whilst the clamp plate assembly is removed from the machine, look underneath the brewing mechanism on the machine, and clean the underside of the brewing mechanism.

To replace the clamp plate assembly after cleaning, look underneath the machine to locate the hinge grooves (fig. iv A) either side of the brewing mechanism. Holding the clamp plate assembly in the palm of your hand, at an angle of 45°, align the clamp plate hinges (fig. iv B) with the hinge grooves and slide the assembly backwards, whilst still holding the clamp plate assembly at 45°, until it drops on the hooks (fig. iv C). The clamp assembly will swing freely if it is correctly located.

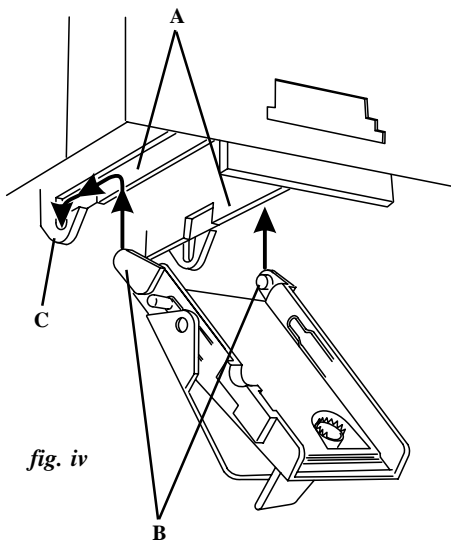


fig. iv

Close the mechanism by placing your forefinger behind the tab on the clamp plate assembly and raising it upwards, towards you. With the clamp plate in the 'up' position, place your thumb on the latch and, whilst keeping your forefinger behind the tab on the clamp plate assembly, snap the latch shut (fig. v). Close the door and switch on the machine.

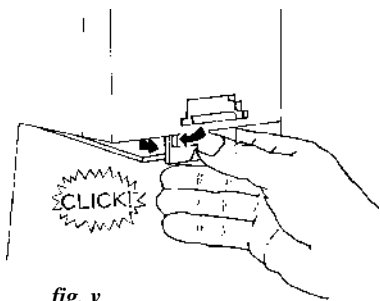


fig. v

Adjusting Drinks Volume

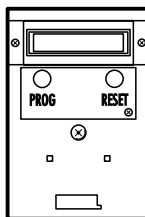
If, for any reason, you wish to adjust the drinks level, open the front door to gain access to the program button:

Press and hold the program button for five seconds.

Release the program button and the display will show:



Press the reset button to increase the drinks level. On reaching maximum, the levels will automatically decrease in stages back to minimum. Select the desired level, then press the program button to return to operating mode.



**Water Temperature
Up To 96°C**

Drinks Counter

Press the program and reset buttons together. The display will remain for as long as you press both buttons.



Release both buttons to return to normal operation.

Note: The counter cannot be reset.

What To Do If Things Go Wrong

In the unlikely event of a problem occurring, your machine will attempt to diagnose the fault and display the appropriate message.

Try to identify the fault shown on the display with one of those illustrated on the following pages, and follow the remedial course of action. Most of these problems can be solved by clearing the cause of the fault, and pressing the reset button, or switching the machine off at the mains and then back on again after five seconds delay.

If, however, you require the assistance of a Service Engineer, please help us to help you by noting the cause of the problem and the circumstances under which it occurred. This will help our engineer assess the situation more clearly.

Please refer to KENCO Service details on the inside back cover of this Handbook.

PLEASE WAIT

or

WATER HEATING

The machine is heating or filling the water tank. This should take no more than 15 minutes.

ADD WATER

(manual fill machine only)

The capsule entry flap has locked due to lack of water in the tank.

Refill the tank with water and the machine will operate normally after heating up the water.

CHECK BIN!

The capsule bin is full.

NOTE: This automatic warning feature will not work on machines mounted on the optional base cabinet. The bin inside the cabinet must be checked daily by the key operator.

Open the door, remove the capsule bin, dispose of the contents, and replace capsule bin.

If 'CHECK BIN' message persists, **switch off the machine** and check underneath the brew mechanism to ensure a capsule is not still trapped (see 'Cleaning the Clamp Assembly' on page 8). Remove the offending capsule, switch on the machine and it will reset automatically.

CHECK SPILL!

PRESS RESET

Water or coffee has leaked into the base tray of the machine, either from the capsule bin area or from the workings of the machine itself.

Switch off the machine.

Open the door and remove the capsule bin. Thoroughly dry the base tray using absorbent paper towels. Pay particular attention to the spill sensor, and dry it thoroughly. Switch the machine on and it will reset automatically.

If the fault recurs, and fresh clear water is seen in the base tray area, isolate the machine from the mains electricity and close the water tap.
Call a Service Engineer.

CLOSE FLAP

There is a capsule in the entry flap of the brew mechanism, or the capsule entry flap is stuck open.

Remove the capsule from the entry flap, or if the capsule entry flap is stuck open, switch off the machine, open the front door, and remove the clamp assembly (see 'Cleaning the Clamp Assembly' on page 8). Clear away any obstacle holding the capsule entry flap open and pull the entry flap forward until it is in the closed position. Reassemble the clamp and close the door.

Switch on the machine to revert to normal operation.

CAPSULE JAMMED

or

BREWED ERROR *

* may be any number from 1 - 9.

Switch off the machine, remove the clamp, clear any jammed capsules and replace the clamp.

Switch on the machine.

If the problem persists, call a Service Engineer.

CLOSE CLAMP

The lower plate of the brew mechanism has been lowered or removed.

Switch off the machine.

Open the door, replace and close the lower clamp plate.

Take care when handling the lower plate as it has sharp cutting edges!

Switch on the machine.

OUT OF SERVICE

or

WATER ERROR 1

An internal error has occurred.

Switch off the machine. After a delay of 5 seconds switch on again, this should reset the machine.

If the problem recurs, call a Service Engineer.

CHECK STEAMSTAT

or

WATER ERROR 2

The machine has been trying to heat the water for 20 minutes without success.

This suggests that the over-temperature reset button has tripped, or the element has failed.

Press the **RED** over-temperature reset button situated on the top right hand side panel, inside the main front door.

PRESS THE RESET BUTTON.

If the problem recurs after a further 20 minutes, **SWITCH OFF THE MACHINE**, and call a Service Engineer.

CHECK WATER

or

WATER ERROR 3

or

WATER ERROR 4

(mains or pump fill machine only)

Ensure water supply is turned on, or, on pump fill machines, bottle is replenished with fresh water, feed tube is not trapped, and dip tube is correctly placed in the bottle.

Press the **RESET** button to return machine to normal mode.

OVER PRESSURE!

Pressure built up within the capsule whilst brewing, the brewing cycle was stopped and the capsule was ejected into the bin. The customer may have received either a short measure or possibly no drink at all.

Switch off the machine and, after following the instructions for 'Cleaning the Clamp Assembly' (on page 8), close the main door and switch on the machine.

If the fault recurs, call a Service Engineer.

Health And Safety At Work And Electricity At Work Regulation 1989

The above regulations state that all electrical equipment should be regularly checked for safety.

It is recommended that the equipment should be regularly checked by the person, or people, responsible for daily maintenance and use, by switching off and disconnecting the plug, and checking the general condition of the equipment, paying particular attention to the mains electrical lead and plug.

Formal Checks

Similar checks to those above should be carried out in a more formal and systematic manner by a competent person appointed by the duty holder (employer). The period between checks should be decided by the duty holder and will vary considerably depending on conditions of use and the local environment.

These tests should be expanded to include the following tests, using a suitable electrical appliance tester used in accordance with the manufacturer's instructions:

For guidance: We recommend that the equipment is tested at least once a year, but more regularly if local conditions demand.

1. **Earth Bond Test:** A current of 25 amps from an a.c. source having a no-load voltage not exceeding 12 volts is passed between the earthing terminal or contact and accessible metal parts, the resistance must not be greater than 0.1 ohms, excluding the mains lead.
2. **500 volt d.c. Insulation Test:** The resistance must not be less than 2M ohms.

Should either test fail, please contact our Service Department.

Do not reconnect the machine.

Note: Flash testing at 1250 volts is not recommended on this equipment because:

- (a) The equipment is fitted with electrical filtration devices and/or electronic components.
- (b) It is not necessary to flash test to ensure safety - the earth bond and insulation tests are sufficient.
- (c) Repeated flash testing can damage electrical insulation.

Mains Electrical Power Supply

The 3-pin plug at the end of the machine's flexible mains electrical power supply cord is NOT WATERPROOF. Therefore, it must be kept dry.

Each new KENCO machine is equipped with a plug which is moulded to the power supply cord and fitted with a 13 amp cartridge fuse.

Should there be a need to replace the fuse, an ASTA approved BS 1362 13 amp cartridge fuse should be used.

If the fuse cover is detached, it must be refitted. Never attempt to use a plug from which the fuse cover is omitted.

IF THE MOULDED PLUG FITTED IS NOT SUITABLE FOR CONNECTION WITH YOUR SOCKET OUTLET, OR IS DAMAGED, IT SHOULD BE CUT OFF AND DESTROYED.


**WARNING: A PLUG WITH BARED WIRE IS HAZARDOUS.
DO NOT PLUG INTO A LIVE SOCKET.**

The end of the cord should then be suitably prepared and its conductors connected with the terminals of a replacement 3-pin 13 amp plug, as shown in the diagram opposite, paying particular attention to the following points:

The insulation of the wire conductors in the mains cord is coloured in accordance with the following code:

Green and Yellow	-	Earth
Blue	-	Neutral
Brown	-	Live

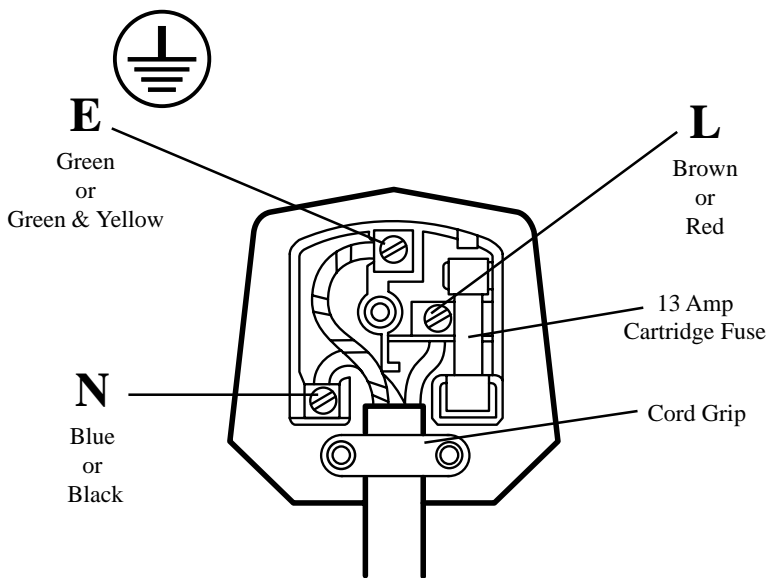
Since these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire conductor with Green and Yellow coloured insulation must be connected with the terminal which is marked with the letter 'E', or the symbol , or which is coloured Green or Green and Yellow.

The wire conductor with Blue coloured insulation must be connected with the terminal which is marked with the letter 'N', or which is coloured Blue or Black.

The wire conductor with Brown coloured insulation must be connected with the terminal which is marked with the letter 'L', or which is coloured either Brown or Red.

WARNING: THE MACHINE MUST BE EARTHED.



Notes

KENCO Supplies

Shortly after your machine is installed, you will be contacted by the **KENCO** Telesales Department to establish an agreed call frequency for supplies of products.

However, should you need to contact us with an order:

Telephone on 0870 600 6556 or

Fax on 01295 267530

Outside normal business hours, a telephone answering service is available.

Fault Rectification

Should you require the assistance of a Service Engineer, after checking the 'Display Messages' (see Contents page), please contact Kenco Customer Service:

Telephone on 0870 600 6556 or

Fax on 01295 264187

Outside normal business hours, a telephone answering service is available.

If you wish to write to us, the address is:

**CUSTOMER SERVICE DEPARTMENT
KENCO COFFEE COMPANY
AWAY FROM HOME DIVISION
BANBURY
OXON
OX16 2QU**



Kenco[®]

Kenco Singles
Brewer