


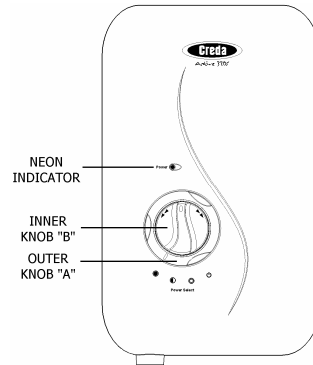


HOW TO USE YOUR ACTIVE 320S SHOWER (SUMMARY)

1. Ensure the electricity and water are turned on to the unit.
2. Turn outer knob "A" clockwise to the "Power Select" position of your choice.
The water will flow, and the neon indicator light will glow.

-  = High Power
-  = Medium Power
-  = Cold Shower

3. Turn inner knob "B" a small amount until you reach the desired showering temperature.
Turn anti-clockwise (follow blue arrows) for cooler.
Turn clockwise (follow red arrows) for warmer.
4. When you have finished showering, turn outer knob "A" anti-clockwise to the "0" position. (You have no need to adjust inner knob "B").
5. Water will continue to flow for up to 3 seconds before switching off.
This reduces the temperature of the water in the tank for the next user.
The neon indicator light will go out.



6. Switch off the electricity supply at the ceiling switch or local isolator.

Notes

- Wait 20 seconds for the temperature to stabilise after each adjustment.
- The neon indicates when the heaters are on and, if the shower has been recently used, can take up to 20 seconds to come on.
During this time the water may go from very hot to cold before stabilising.
Also, please note that the neon indicator does not light when the shower is set to the "0" cold power setting.
- The position of inner knob "B" will be approximately the same each time the shower is used, varying only with incoming water temperature or pressure changes (e.g. you will only need to change from summer to winter).
- During normal operation, if an overheated water temperature is sensed then the heater will switch off and the neon indicator will go out.
The water will continue to flow and cool down before the heater switches back on again.

IMPORTANT WARNINGS!

DO NOT SWITCH THE APPLIANCE ON IF YOU SUSPECT IT OF BEING FROZEN.
WAIT UNTIL YOU ARE SURE IT HAS THAWED OUT.

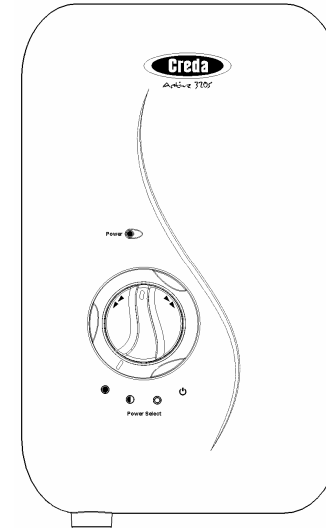
DO NOT OPERATE THE APPLIANCE IF WATER LEAKS FROM THE PRESSURE RELIEF VALVE. MAINTENANCE IS REQUIRED BEFORE THE APPLIANCE CAN BE SAFELY USED.

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.

Creda

Active 320S



CREDA ACTIVE 320S

**SMART TECHNOLOGY
ELECTRIC SHOWER**

Installation and User Guide

IMPORTANT:
This booklet should be left with the user after installation and demonstration

CONTENTS

Section	Page
Introduction	2
Important Safety Information	2
How to use your <i>Active 320S</i> Shower (Detailed)	3
How your <i>Active 320S</i> Shower Works	4
How to maintain your <i>Active 320S</i> Shower	5
What to do if things go wrong (1) Self Help	5
What to do if things go wrong (2) Professional Service	6
Creda After Sales Service	6
How to install your <i>Active 320S</i> Shower	7
Additional Accessories and Common Spare Parts	10
Guarantee and Contact Details	11
How to use your <i>Active 320S</i> Shower (Summary)	12

INTRODUCTION

Thank you for purchasing a quality *Creda Active 320S Electric Shower* manufactured in England. To enjoy your new shower at its best, please take time to read this manual thoroughly, and having done so, keep it handy for future reference.

The *Creda Active 320S* is an electric shower incorporating our "Smart Technology" and a unique dual control combining on/off, power select and flow/temperature control.

Your shower is designed to stabilise temperature changes caused by water pressure fluctuations.

These can result from toilets being flushed or taps being turned on and off.

When this happens your showering temperature will be held within a controlled band, provided that the minimum pressure required by the shower is maintained (see "Effect of Other Water Devices").

If you experience any difficulty with the installation or operation of your new shower, then please refer to the "What to do if things go wrong" section in this manual before contacting us.

IMPORTANT SAFETY INFORMATION

1. Your shower has been designed for convenience, economy and safety of use, provided that it is installed, used and maintained in good working order and in accordance with our instructions and recommendations.
2. **All wiring and installation must be supervised by a suitably qualified person.**
3. **THIS APPLIANCE MUST BE EARTHED.**
4. The installation must be in accordance with the current edition of BS.7671 (*the "IEE Wiring Regulations"*) and "Part P" of the "*Building Regulations*" in force at the time of installation. Installations outside the United Kingdom must also conform to any local regulations in effect. This appliance is intended to be permanently connected to the fixed electrical wiring of the mains supply with its own dedicated supply.
5. This appliance must **NOT** be fitted where it may be subjected to freezing conditions
6. **DO NOT** switch the appliance on if you suspect it of being frozen. Wait until you are sure it has thawed out.
7. **DO NOT** fit any sort of tap or control on the appliance outlet. The appliance is designed to have an open outlet and should only be used with "Creda" recommended fittings.
8. Take care to avoid restricting the outlet of the pressure relief device. If water leaks from the pressure relief device, maintenance will be required before the appliance can be safely used.
9. Isolate the mains electrical and water supply before removing the front cover of the appliance.

GUARANTEE AND CONTACT DETAILS

GUARANTEE

Terms and Conditions for UK & ROI (outside UK & ROI contact your local distributor)

We, Applied Energy Products Limited, guarantee this product for domestic use only, for the period of 24 months from the date of purchase.

Within the guarantee period we will resolve, free of charge, any manufacturing defects in the product resulting from faulty workmanship or material on condition that:-

- a) The appliance has been correctly installed in accordance with our instructions and is being used on the supply circuit or voltage printed on the rating plate.
- b) The appliance has been used in accordance with these instructions and has not been tampered with or otherwise subject to misuse, neglect or accident.
- c) The appliance has not been taken apart, modified or repaired except by a person authorised by us.
- d) Evidence of the date of purchase in the form of an invoice or receipt will be required in order to qualify for an in-guarantee repair.
- e) The guarantee period for the products used in commercial applications will be limited to 12 months.
- f) For the service work to be undertaken free of charge, the work must be only undertaken by Applied Energy Products Limited, or our approved agents.
- g) Service under guarantee has no effect on the expiry date. The guarantee on any exchanged parts or product ends when the original guarantee period ends.

EXCLUSIONS

This guarantee **DOES NOT** cover damage or defects arising from poor or incorrect installation, improper use or lack of maintenance, including build-up of limescale. It is the responsibility of the installer to check that the installation parameters meet the requirements of the product, and any relevant regulations.

If we are called out to a fault, which is subsequently identified as being an installation fault, we will make a charge. It is important that the routine checks are completed before calling us out, as many issues can be simply diagnosed and resolved.

We make no guarantees as to response times for repairs. We will endeavour to achieve the most timely response possible but while we indicate an average response time, this should not be taken as a guarantee.

The guarantee applies to a repair or replacement (at our discretion) of the product subject to the conditions above, and **DOES NOT** cover compensation for the loss of the product or consequential loss of any kind.

The guarantee does not apply to the repair or replacement of pressure relief devices, sprayheads, hoses, accessories, isolating switches, electrical cable, fuses and/or circuit breakers.

This guarantee does not affect your statutory rights.

Full details of terms and conditions are available on request from:-

Creda

APPLIED ENERGY PRODUCTS LIMITED
MORLEY WAY, PETERBOROUGH PE2 9JJ

TEL: +44 (0) 1733 456789

FAX: +44 (0) 1733 310606

Website: www.applied-energy.com

5. Re-Fit the front cover (see diagram 9)
 - a. Ensure outer knob "A" is aligned fully anti-clockwise to the "⏻ (stop)" position.
 - b. Ensure inner knob "B" is aligned to the "● (high)" position.
 - c. In the main body of the shower, turn the "Drive Spider" fully anti-clockwise until it stops.
 - d. In the main body of the shower, turn the "Drive Gite" anti-clockwise until it is at "12 o'clock".
 - e. Fit the front cover of the shower to the main body ensuring that the 3 x "Drive Spider Legs" engage with the slots in outer knob "A".
 - f. Check that outer knob "A" has been correctly aligned by ensuring that all 3 power settings can be selected, and returns to the "⏻ (stop)" position.
 - g. Check that inner knob "B" has been correctly aligned by turning clockwise and ensuring that knob turns approximately 3/4 of a turn (270°) and when turned back fully anti-clockwise, returns to the "● (high)" position.

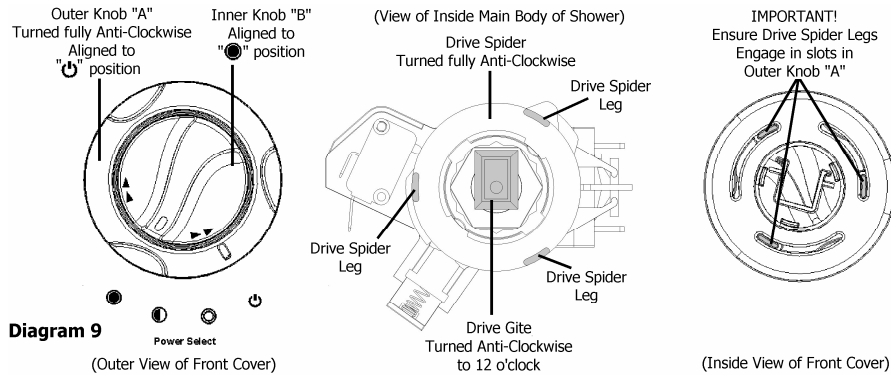


Diagram 9

6. Replace the top and bottom fastening screws.
7. Fit the shower hose, and operate the shower first without the handset to flush out particles, fit the handset and then operate the shower as on page 3 or 12 and check:
 - a. That the water gets to a satisfactory temperature.
 - b. Water flow can be adjusted by inner control knob "B".
 - c. Power selection operates in all 3 positions, giving a change in water temperature and that the neon light functions correctly.
 - d. Check again for leaks
 - e. That the holes in the shower handset are not blocked
8. DEMONSTRATE OPERATION TO USER

ADDITIONAL ACCESSORIES

COMMON SPARE PARTS

Please Note:- The fitting of Spare Parts must be supervised by a suitably qualified person.

White 2 metre Shower Hose	Cat No. 83792578	Front Cover (Creda)	Cat No. 93590345
WRAS Water Isolating Valve	Cat No. 93792452	Tank-Base Assy (7.2kW)	Cat No. 93597858
Chrome Multi-Mode Accessories	Cat No. 83595318	Tank-Base Assy (8.5kW)	Cat No. 93597859
Chrome Premium Accessories	Cat No. 83595319	Solenoid Valve	Cat No. 93597868
Chrome Curved Accessories	Cat No. 83595320	Neon Cable Assy	Cat No. 93593576
Curtain and Rail Pack	Cat No. 83792812	Tank Clip	Cat No. 93768309
Curtain and Rail Pack with		PRV Washer	Cat No. 93795817
Non-Slip Mat	Cat No. 83792811	Cylinder "O"-Ring	Cat No. 93795809
		Thermal Cut-Out 50/88°C	Cat No. 93597871
		Handset	Cat No. 93590738
		Height Adjuster	Cat No. 93593523

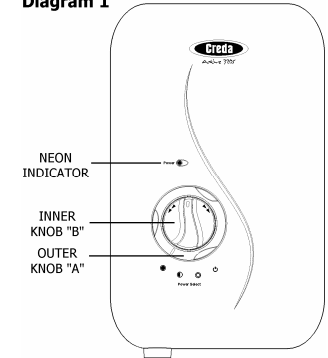
Additional accessories and spare parts can be supplied against any Credit or Debit cards from our Sales Hotline 0870 9000 420

HOW TO USE YOUR ACTIVE 320S SHOWER (DETAILED)

1. Ensure the electricity and water are turned on to the unit.
2. Your shower has 3 power settings selected by turning outer knob "A".
The most popular is "● (high)".
There are also options for a "● (medium)" or "● (cold)" shower (see notes 8 and 9).

For this example turn outer knob "A" to "● (high)" and set inner knob "B" to "12 o'clock".
3. The water will flow and the neon light will glow brightly.
4. Allow about 20 seconds for the temperature of the water to stabilise.

Diagram 1



IF WATER IS TOO COLD

Turn inner knob "B" clockwise in the direction of the "red arrows" to "1 o'clock" and continue turning clockwise until you get the water temperature of your liking.

Wait 20 seconds after each adjustment for the water temperature to stabilise.

IF WATER IS TOO HOT

Turn inner knob "B" anti-clockwise in the direction of the "blue arrows" to "11 o'clock" and continue turning anti-clockwise until you get the water temperature of your liking.

Wait 20 seconds after each adjustment for the water temperature to stabilise.

If after turning fully anti-clockwise, water is still too hot, adjust outer knob "A" to "● (medium)" setting and re-adjust as above. Water flow will be reduced on this setting.

5. Once a temperature setting to your liking has been achieved, inner knob "B" will rarely need adjusting. You must however take into account required adjustments for variations of incoming mains water temperature between summer and winter (see "Effect of Seasonal Incoming Water Temperature Changes").
6. When you have finished showering, turn outer knob "A" anti-clockwise to the "⏻ (stop)" position. Water will continue to flow for up to 3 seconds before switching off. This reduces the temperature of the water in the tank for the next user. Switch off the electricity at the ceiling switch or local isolator.
7. The "● (medium)" setting of outer knob "A" reduces the power used by the shower giving a cooler shower or the option of reduced water flow. This option is mainly used for summer usage and if this is used then inner knob "B" must be re-adjusted.
8. The "● (cold)" setting of outer knob "A" will supply water without any heating, and the neon light will go out.
9. Your shower is designed to stabilise temperature changes caused by water pressure fluctuations (see "Effect of Other Water Devices on Incoming Water Supply").
10. Note that inner knob "B" IS NOT A TAP and does not turn the water off.

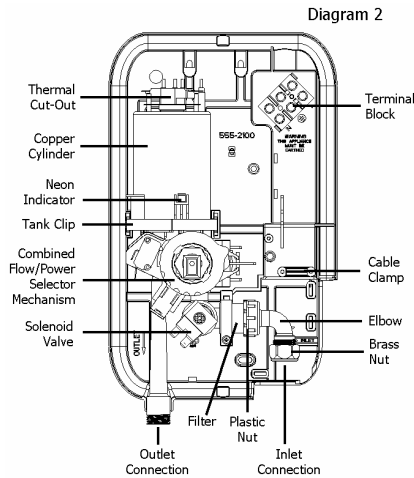
WARNING: DO NOT SWITCH THE SHOWER ON IF YOU SUSPECT IT OF BEING FROZEN. WAIT UNTIL YOU ARE SURE IT HAS THAWED OUT.

WARNING: DO NOT OPERATE THE SHOWER IF WATER LEAKS FROM THE PRESSURE RELIEF VALVE. MAINTENANCE IS REQUIRED BEFORE THE SHOWER CAN BE SAFELY USED.

WARNING: CONSIDERATION SHOULD BE GIVEN TO SUPERVISING THE YOUNG, ELDERLY AND THE INFIRM WHILST THEY USE THIS SHOWER

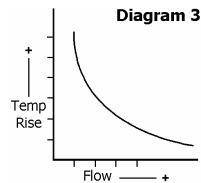
HOW YOUR ACTIVE 320S SHOWER WORKS

- Water is heated instantaneously as it flows over the heating elements in the copper cylinder (diagram 2).
- The heaters are only switched on when sufficient water is flowing.
This is done automatically with a switch which works on water pressure and is indicated by the neon light illuminating depending on the power selected by outer knob "A".
- The water is turned on and off by the solenoid valve built into the shower.
This is switched on when outer knob "A" is clicked clockwise.
- The flow of water is automatically held at the level set by the user even though the supply pressure may vary (see "Effect of Other Water Devices on Incoming Water Supply").
- If the water supply falls below a set limit, the pressure switch will operate and switch off the power to the elements. This is indicated by the neon light going out (see "Effect of Other Water Devices on Incoming Water Supply").
- As a further safeguard, a thermal cut-out switches the power off if the water temperature climbs above the set limit. This cut-out, which gives an audible click, may also operate due to residual heat when the shower is switched off.
It will reset itself if water is run through the shower for 10 to 20 seconds.
- The pressure relief device is to safeguard against abnormal pressure conditions.



Effect of Seasonal Incoming Water Temperature Changes

The required water temperature is achieved by adjusting the rate of water flow. Diagram 3 shows the principle involved in relating temperature rise to flow rate. The higher the water rate the lower the temperature and vice versa. The temperature of the water supplied from the mains can vary considerably throughout the year from 5 to 20°C. This means that in the winter, flow rate will be less than in the summer to achieve the same outlet temperature. In summer the "M" (medium) power setting may give adequate hot water.



Effect of Other Water Devices on Incoming Water Supply

Your shower is designed to stabilise temperature changes caused by water pressure fluctuations. These can result from toilets being flushed or taps being turned on and off. When this happens your showering temperature will be held within a controlled band, provided that the minimum pressure required by the shower is maintained.

Your shower requires a minimum operating pressure of 69kPa (0.7 bar, 10 psi).

At pressures above 69kPa (0.7 bar, 10 psi) it will minimise temperature fluctuations as detailed above. If the water pressure falls below 69kPa (0.7 bar, 10 psi) it is likely that the pressure switch will turn off the power to the heating elements, resulting in a cold shower. This will be indicated by the neon light going out.

c) ELECTRICAL

WARNING: THIS SHOWER MUST BE EARTHED.

The electrical installation must be in accordance with the current BS.7671 (IEE Wiring Regulations) and "Part P" of the Building Regulations and/or local regulations

- The SHOWER is designed for a single phase AC electrical supply.
Please check the rating plate on the unit to see what details apply to your unit.
AS A GUIDE ONLY (Only applies if external earth impedance is less than 0.35 Ohms)*

Rating	Cable Sizes	Fuse / MCB	Cable Length
7.2 / 6.6kW 240 / 230V	4.0mm ² 6.0mm ²	32A Type B MCB	21m Max. 35m Max.
	6.0mm ² 10.0mm ²	40A Type B MCB	27m Max. 45m Max.
8.5 / 7.8kW 240 / 230V	6.0mm ² 10.0mm ²	40A Type B MCB	27m Max. 45m Max.
	6.0mm ² 10.0mm ²	45A BS.1361 fuse	12m Max.* 21m Max.*
9.5 / 8.7kW 240 / 230V	6.0mm ² 10.0mm ²	40A Type B MCB	27m Max. 45m Max.
	6.0mm ² 10.0mm ²	45A BS.1361 fuse	12m Max.* 21m Max.*

Remember to upgrade the cable if it runs in thermal insulation in a loft, or for a longer distance.

- A means for disconnection in all poles must be incorporated in the fixed wiring in accordance with the wiring rules.
We recommend a ceiling switch mounted in a convenient position.
- Cut back cable as in diagram 7. Connect cable to terminal block making sure that all the retaining screws are **VERY TIGHT** and that no cable insulation is trapped under the screws.

WARNING: FAILURE TO COMPLY WITH THESE INSTRUCTIONS COULD RESULT IN FAILURE OF THE TERMINAL BLOCK

- Re-Fit the corner section back into the backplate.

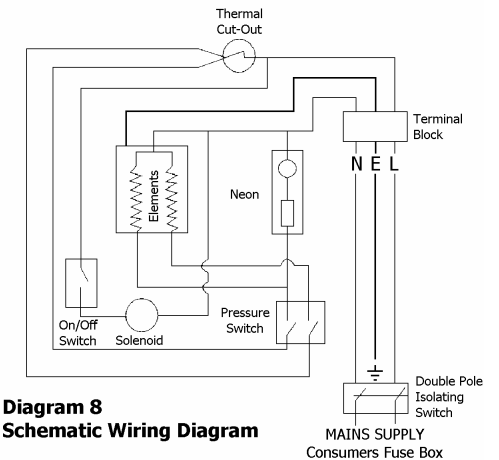
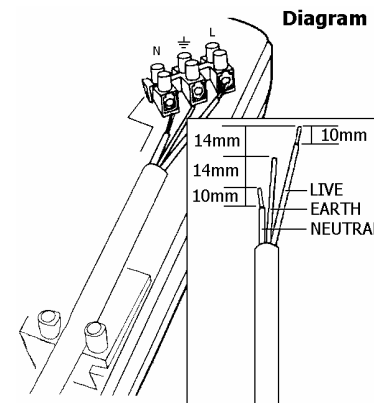


Diagram 8
Schematic Wiring Diagram

- If you have not yet done so, remove the front cover assembly by undoing the retaining screws at the top and bottom of the unit and lifting the cover off.

Your shower is provided with 2 fixing positions in the backplate (see diagram 4).

The top-fixing hole is a "key-hole" slot (another key-hole is provided for alternate fixing), and should be marked and drilled first.

Tighten top screw with head protruding about 10mm from the wall and hook the backplate over the screw head. This allows for correct and accurate alignment of your shower before marking and fixing the bottom position.

You may not wish to tighten up both screws at this stage as the holes are elongated to allow for adjustment after other connections have taken place.

b. **PLUMBING**

WARNING: ENSURE THAT THE MAINS WATER SUPPLY MEETS THE REQUIREMENTS BELOW BEFORE CONTINUING WITH INSTALLATION.

The heater must be connected to the mains cold water supply.

This must have a minimum running pressure of 69kPa (0.7 bar, 10 psi) and a maximum pressure of 690kPa (7.0 bar, 100 psi).

WARNING: BEFORE CONNECTING THE PIPE WORK TO THE SHOWER, ENSURE THAT THE PIPE WORK IS FULLY FLUSHED OUT.

- Unscrew the "Red Cap" and "Washer" from the shower outlet pipe and discard them in a suitable manner. These have been used to seal the shower during transit, and are no longer required.
- It is recommended that a WRAS (Water Regulations Advisory Scheme) listed isolating valve is fitted between the rising main and the unit.
This will allow the unit to be serviced or exchanged without having to turn off the water at the water stop valve.
- The heater can be fed from a header tank provided this has a minimum head of 7 metres (23ft).
- Ø15mm copper or stainless steel pipe should be used.
To avoid cross threading, DO NOT REMOVE the nut from the elbow when positioning the pipe.
If top entry is required, turn the elbow 180° into the required position.
If rear entry is required, treat as top entry with an additional "Yorkshire" elbow (soldered type) for fitting into the rear channel.
In multiple installations, correct pipe work sizes should be calculated to maintain adequate flow to each shower.
- It is in order to use a WRAS (Water Regulations Advisory Scheme) approved sealant sparingly whilst avoiding excess finding its way into the shower operating parts.
- With stop valve connected, **flush the pipe work through to remove any particles etc**, before making the final connection to the shower.
Blockage in the water ways (particularly the handset and solenoid valve) will prevent the heater working properly.
- The shower is designed to have an open outlet and should only be used with "Creda" recommended fittings.
Do not connect the handset until after the shower front cover and corner section are fitted.

WARNING: DO NOT FIT A TAP ON THE SHOWER OUTLET.

WARNING: TAKE CARE TO AVOID RESTRICTING THE OUTLET OF THE PRESSURE RELIEF DEVICE

HOW TO MAINTAIN YOUR *ACTIVE 320S* SHOWER

It is recommended that the shower unit and hose etc. be cleaned using a soft cloth and that the use of abrasive or solvent based cleaning fluid be avoided, especially on any plated finishes.

We recommend that before any cleaning, the isolating switch be turned off, thus avoiding accidentally switching on the shower.

WARNING: IN ORDER TO MAINTAIN THE PERFORMANCE OF YOUR SHOWER, YOU MUST CLEAN THE SHOWER HANDSET REGULARLY

All water contains particles of lime, which build up in the shower handset and unit reducing the performance.

It is therefore important to clean the shower handset by simply rubbing the rubber nozzles.

NOTE: After use it is normal for some water to drip from the shower handset for a few moments. This inhibits scale build-up over prolonged use.

WHAT TO DO IF THINGS GO WRONG (1)

SELF HELP

If the shower is unsatisfactory, make the following checks before calling out the contractor. Any one of these adjustments could restore the performance.

The shower cycles from HOT to COLD	The shower temperature is set too hot causing the thermal cut-out (safety device) to operate. Turn inner knob "B" anti-clockwise in the direction of the "blue arrows" to increase water flow. Slowly increase the water temperature by turning inner knob "B" clockwise in the direction of the "red arrows" until a comfortable showering temperature has been reached. You MUST WAIT approximately 20 seconds for each adjustment to affect the water temperature. "● (medium)" setting may need to be selected.
Water too HOT	Increase water flow by adjusting inner knob "B" anti-clockwise (direction of the "blue arrows"). "● (medium)" setting may need to be selected. Increase pressure to water supply e.g. fully open service valve or stop cock. Check hose is not kinked restricting the water flow. Clean shower handset.
Water too COLD	Check power is on by neon being illuminated. Decrease water flow by adjusting inner knob "B" clockwise (direction of the "red arrows"). "● (high)" setting may need to be selected.
Spray pattern poor	Clean the shower handset.
Water takes longer to heat up	Thermal cut-out has operated after previous use (automatically resets when unit cools down) "● (high)" setting may need to be selected.
Water goes cold while using shower	Check neon light is on. Check water pressure has not fallen so far as to let pressure switch cut out, e.g. Another tap drawing water off. Raise position of shower handset.
Water continues to flow when "⊖ (stop)" selected	This is normal. The shower includes a shutdown feature that means the water will continue to flow for up to 3 seconds after "⊖ (stop)" has been selected.
Broken parts	Please contact our spares department on 0870 9000 420 (UK only). Fitting instructions are provided with most spares

WHAT TO DO IF THINGS GO WRONG (2)

PROFESSIONAL SERVICE

If the previous "Self Help" checks fail to restore the performance, you should seek professional help.

The person who installed the shower is probably the best one to repair it and is certainly the person to contact if you have had a problem in the guarantee period.

The following additional checklist is provided for the benefit of the qualified service person.

WARNING: SWITCH OFF THE ELECTRICITY AT THE LOCAL ISOLATOR BEFORE REMOVING THE COVER TO MAKE CHECKS

Water too HOT	Water flow restricted by blockage in filter of solenoid valve. Switch off water, loosen inlet connection to solenoid, remove filter in solenoid with long nosed pliers and flush clean.
Water too COLD	Check circuit through thermal cut-out. Check circuit through microswitches on the pressure switch. Check each element circuit. Check tightness of electrical connections.
No control over water flow	Check Drive Gite is correctly engaged into Control Knob (see diagram.9) Undo headworks of stabiliser valve. Check stabiliser is in place and remove any debris in valve.
Water leaks from burst pressure relief valve	Check for cause of high pressure and remove it. Blockage on outlet e.g. blocked shower handset. Replace the pressure relief disc (not covered by guarantee).
Water does not flow when outer knob "A" is turned.	Check circuit through solenoid coil. If defective then replace. Check circuit through microswitches. If defective then replace. Power supply not reaching shower.

CREDA AFTER SALES SERVICE

We offer a technical advisory service on the telephone to contractors and other customers with problems in the field.

RING 0870 9000 430 (UK ONLY)
RING YOUR LOCAL DEALER (Export Variants)

Some spare parts (see later section) can be supplied against Credit or Debit cards.

RING 0870 9000 420 (UK ONLY)

Remember to quote the exact type of shower, as written on the front of the shower and on this leaflet.

The model and serial number are located on the bottom face of the shower.

Make a note of those numbers here, and be sure to quote them if you call for advice.

Model Number: 53-67 _____

Serial Number: _____

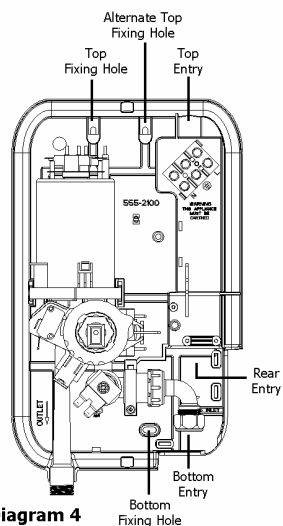


Diagram 4

HOW TO INSTALL YOUR ACTIVE 320S SHOWER

WARNING: ALL WIRING AND INSTALLATION MUST BE SUPERVISED BY A SUITABLY QUALIFIED PERSON.

WARNING: DO NOT INSTALL THIS SHOWER WHERE IT MAY BE SUBJECTED TO FREEZING CONDITIONS

We recommend that the installation is done in the following sequence.

a. Fixing the shower to the wall b. Plumbing c. Electrical connections

a. **FIXING THE SHOWER TO THE WALL**

1. Position the riser rail at the height recommended in diagram 5a and mark its position.
2. Position the heater so that the top of the unit is horizontal and level with, or a maximum of 0.6 metres (2ft) below the top of the riser rail. Choose a flat piece of wall to avoid the possibility of distorting the backplate thus making the front cover a poor fit.
3. Adjust the position to get the most convenient arrangement taking the following into account.
 - The possible need to use the handset over the sink for hair washing etc.
 - The heater must not be mounted in the handset direct spray.
 - The handset must not be able to come into contact with used water in the cubicle, bath or basin. If it can, even after the hose has been retained by the soap dish (see diagram 5b) then a vacuum breaker must be fitted.
4. Fix the riser rail with screws provided. The fixing holes at the base of the brackets will be disclosed by removing the plastic fronts. Assemble as shown in diagram 5b.

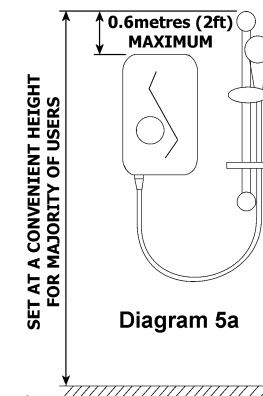


Diagram 5a

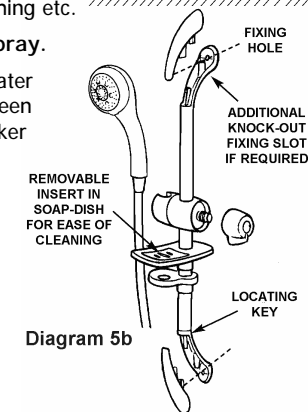


Diagram 5b

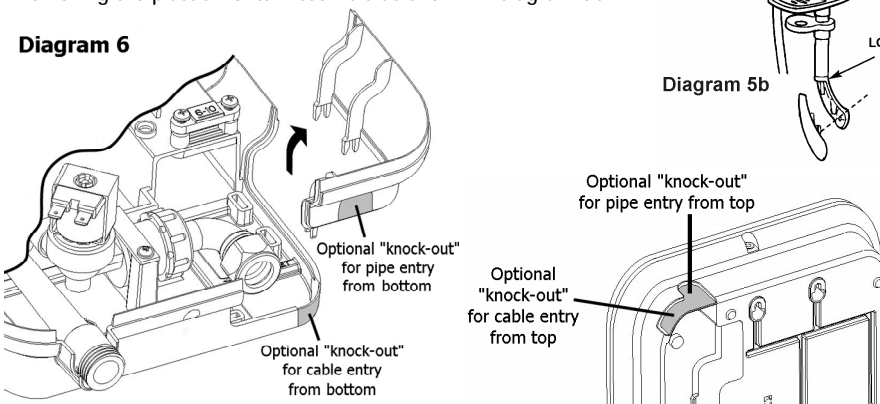


Diagram 6

5. Decide the position of the electrical cable into the unit. If top or bottom entry is chosen (according to diagram 4), cut away the walls in the backplate as shown in diagram 6.
6. Decide the position of entry of the cold water pipe into the unit. If top, cut away the backplate. If rear, please read the section on plumbing. If bottom, remove the front cover (complete with knobs) and cut away the detachable corner section as shown.