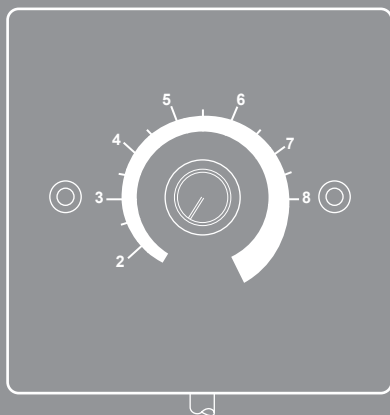


Caspian[®] - EC Variants

Installation, commissioning
and user manual



External Control Harness
(EXTCH)

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User information

Installation of this product must be carried out by a qualified electrician.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance. Cleaning and user maintenance shall not be made by children without supervision. (Refer EN 60335-1 clause 7.12).

Introduction

This harness is for use with Smith's Caspian EC range of products (note: not suitable for Caspian Smart range). The wall mounted control enables the fan speed to be adjusted and controlled remotely from the heater. This accessory can also be used in addition with Smith's Adjustable low temperature cut-out.

Note: To facilitate remote wall mounting of the speed controller the user will need to prepare a suitable single gang pattress box (not supplied) for the wall plate to attach to.

The harness can be used to link up to 4 Caspians together, in a master and slave configuration.

Warning: Isolate the power supply to the Caspian unit. Do not reconnect the power supply until the installation has been completed.

ALL ELECTRICAL INSTALLATIONS CONNECTIONS MUST COMPLY WITH THE LATEST EDITION OF THE IEE WIRING REGULATIONS (BS7671), AND ANY RELEVANT LOCAL AUTHORITY BYE-LAWS. CHECK THE VOLTAGE ON THE HEATER IS CORRECT FOR YOUR SUPPLY. IF IN DOUBT, CONSULT A QUALIFIED ELECTRICIAN.

Please note the guarantee may be invalidated if this product is not installed and used in accordance with these instructions.

Before commencing with the installation please check box contents:

- 1 x 12 metre harness in two parts (connected) with connection plugs fitted.
- 1 x Single pattress wall plate to accommodate the controller.
- 6 x Cable ties.

Items required that are not supplied (when using the harness to facilitate remote wall mounting)

- 1 x Single gang pattress. Suitable for the type of wall where the controller is to be installed.

Installation

ENSURE THAT THE ELECTRICAL SUPPLY TO THE PRODUCT HAS BEEN ISOLATED.

NOTE. THE USER WILL NEED TO IDENTIFY A SITE AND INSTALL A SUITABLE SINGLE GANG PATRESS BOX

Follow these instructions when using the harness to mount the controller externally from the heater:

1. Identify the front panel and the electrical panel (shown in red on Fig. 1 for Caspin UVC).

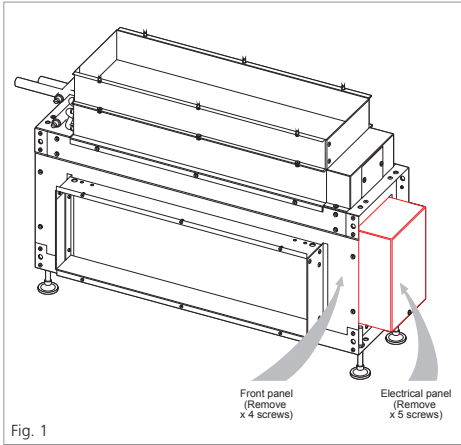


Fig. 1

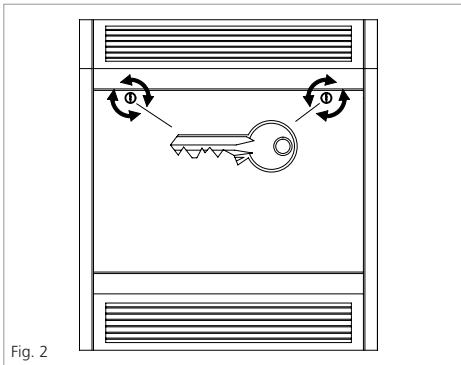


Fig. 2

2. Remove the screws attaching the front panel (retain this panel for later), then remove the electrical panel to the chassis so that it becomes free (See Fig. 1 and 2).

Do not disconnect any wires at this point.

3. Loosen the allen screw (2mm) securing the control dial and remove dial. Unscrew the nut securing the controller to electrical panel and remove the speed controller circuit board. Retain all parts for future use. (See Fig. 3)

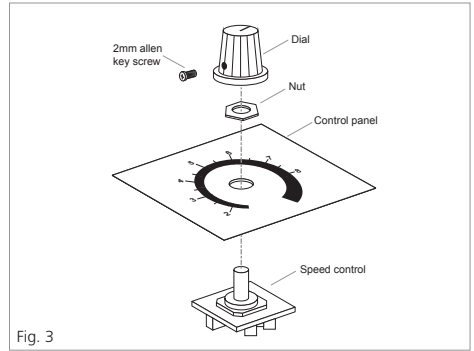


Fig. 3

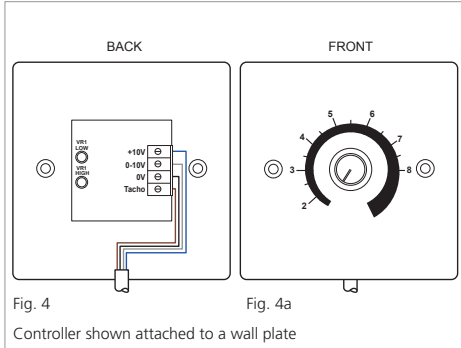
Note:

If your heater was built before 20/09/14 or the colours shown in Fig. 4 (page 4) do not match those on your unit please refer to the below table:

	Pre 2014	Current
+10V	Red	Blue
Control	Yellow	Grey
Ground	Blue	Black
Tacho	White	Brown

4. Turn the electrical panel over to reveal the circuit board of the speed controller. Remove the four wires connected to the speed controller and trace the lead back to the 4 way plugs which connect to the fans (This lead will be referred to as a "Control Harness"). Separate this harness from the rest of the heaters wiring and remove it.
5. Connect the 4 way plugs of the 12m harness to the fans situated within the heater. (There are three plugs on this end and you can use any of these. Depending on the model one or two of these will not be used)
6. Refit the electrical panel. Ensure wiring is clear from fan inlet using provided cable ties if necessary.

7. Fit the speed controller to the wall plate supplied and ensure that when the dial is turned fully anti clockwise it aligns with the 2 marked on the fascia plate. Fig. 4.
8. Route the control cable (harness) that has been attached to the previous heater to the pre fitted pattress box and connect the wires as shown in Fig. 4.



9. Attach the controller and wall plate to the pattress box and secure with the screws provided.
10. Refit front panel to the unit.
11. Turn on electrical supply and any other external controls (room stat / timer etc.) and check that the unit is working correctly by adjusting speed controller.

Note: For standard EC Caspian wiring diagram please see Caspian installation user guide at www.SmithsEP.co.uk



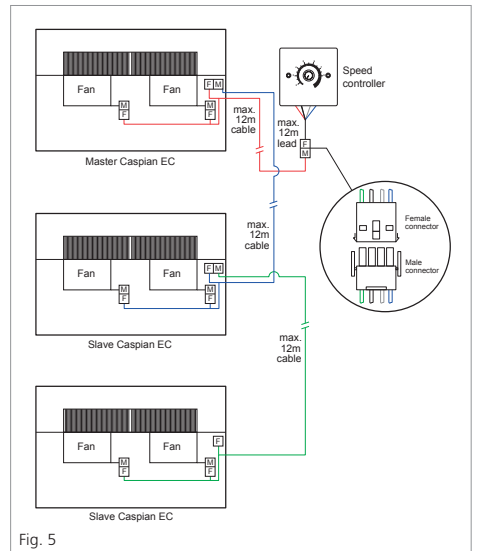
Commissioning

Turn on electrical supply and external control and ensure heat source is providing hot water to a temperature of at least 38°C to operate. This may take a little while.

Linking multiple units (alternative method)

Preferred method is to order master and slave units as factory built.

Diagram showing three Caspian units being linked with three separate External Control Harnesses (shown in different colours).



Installing the harness or harnesses to link a maximum of four machines together.

1. Cut and terminate the blue wire of the 1st slave harness where it enters the master unit. This will ensure slave units will only run when the master unit operates (see Fig. 6)

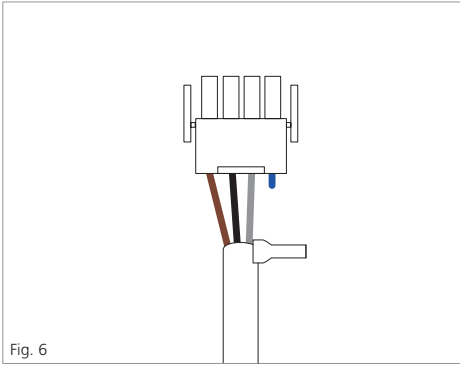


Fig. 6

2. Connect the harness to the spare plug in the heater and feed out the harness through the square aperture in the rear of the heater (see Fig. 7). Ensure the cable is then fed through one of the round slotted holes at the bottom of the aperture and secure the black plastic bush already fitted to the cable in the slotted hole.

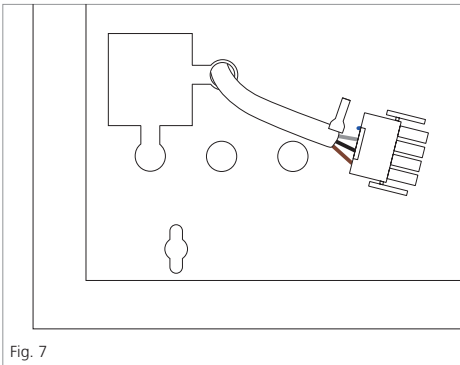


Fig. 7

3. Route the harness to the heater to be connected (slave) and feed the cable in through the square aperture at the rear of the heater and secure black plastic boss.

4. Disconnect the 4 way plug(s) connecting the fan(s) (depending on model) to the controller in the slave heater and connect the motor plugs to the harness.
5. Secure the harness to the electrical panel and wiring loom to fans with the cable ties provided.

If connecting another slave unit repeat procedure as above.

6. Secure front panels and switch on electric supply to heaters.
7. Ensure boiler is turned on and any other external controls are calling for heat.
8. Adjust master controller to desired speed and check that heaters are working correctly.

See Fig. 5 (on page 4) for a diagram of linking multiply units together.

Disposal

As part of the policy of continuous product improvement, Smith's Environmental Products LTD reserves the right to alter specification without prior notice.

Products with this symbol (crossed out wheellie bin) cannot be disposed as household waste. Old electrical and electronic equipment must be recycled at a facility capable of handling these products and their waste by-products. If you are purchasing replacement equipment your retailer may offer a 'take back' scheme, or will be able to give details of the nearest approved authorised treatment facility. Proper recycling and waste disposal will help conserve resources whilst preventing detrimental effects on our health and the environment.

WEEE Registered Code: WEE/ED0093VW



Approved CQS ISO
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After sales

If you experience any problems with the use of your product, please contact our after-sales office +44 (0) 1245 324560.

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Smith's Environmental Products Ltd is one of the leading manufacturers of heating and cooling products in the UK. We are committed to achieving the highest standards and our faith is supported by a free parts and labour guarantee with every product (see our website for more information). Our customer service is second to none and we are happy to offer any help and guidance that you might need.

Stockists

All products are available nationally from Builders' Merchants, Plumbers' Merchants, Heating Equipment Distributors and Kitchen Equipment Distributors. In the event of difficulty, please contact us or visit our website SmithsEP.co.uk for details of your nearest stockist.

Information and advice

Full technical specifications and list prices is available to download from our website or in hard copy from our office. Also available on our website are price lists, individual product data sheets, installation & user guides, where to buy, who to contact and a media centre.

Alternatively contact our office 9.00am to 5.00pm Monday to Friday.

As part our commitment to continuous improvement Smith's Environmental Products may change the specifications of its products without prior notification or public announcement. All descriptions, illustrations, drawings and specifications in this publication present only general particulars and shall not form part of any contract. All dimensions are in mm unless otherwise stated. Please visit the website for the most up to date information.

To view the full product information download the datasheet at:
www.SmithsEP.co.uk

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