ideal HEATING

CREDIT CONTROL VALVE INSTALLATION INSTRUCTIONS

POD HIU
i305 i405 i505 i605 i705
D30 D40 D50 D60

When replacing any part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by Ideal Heating.

For the very latest copy of literature for specification and maintenance practices visit our website idealheating.com where you can download the relevant information in PDF format.

November 2020
UIN 224672 A01

This kit is suitable only for the Heat Interface Units listed below:

First Fix Kit POD HIU Indirect:
- POD i305
- POD i405
- POD i505
- POD i605
- POD i705

First Fix Kit POD HIU Direct:
- POD D30
- POD D40
- POD D50
- POD D60

1 INTRODUCTION

The Credit Control Valve kit is a separately supplied pack to facilitate remote isolation of heat input to individual HIUs. This can be used alongside metering & billing services to enable lockout of individual units or to restrict heat supply to the primary unit, should this be necessary.

Note: Credit Control functions must only be used if they are in compliance with local regulatory requirements such as with respect to vulnerable persons.

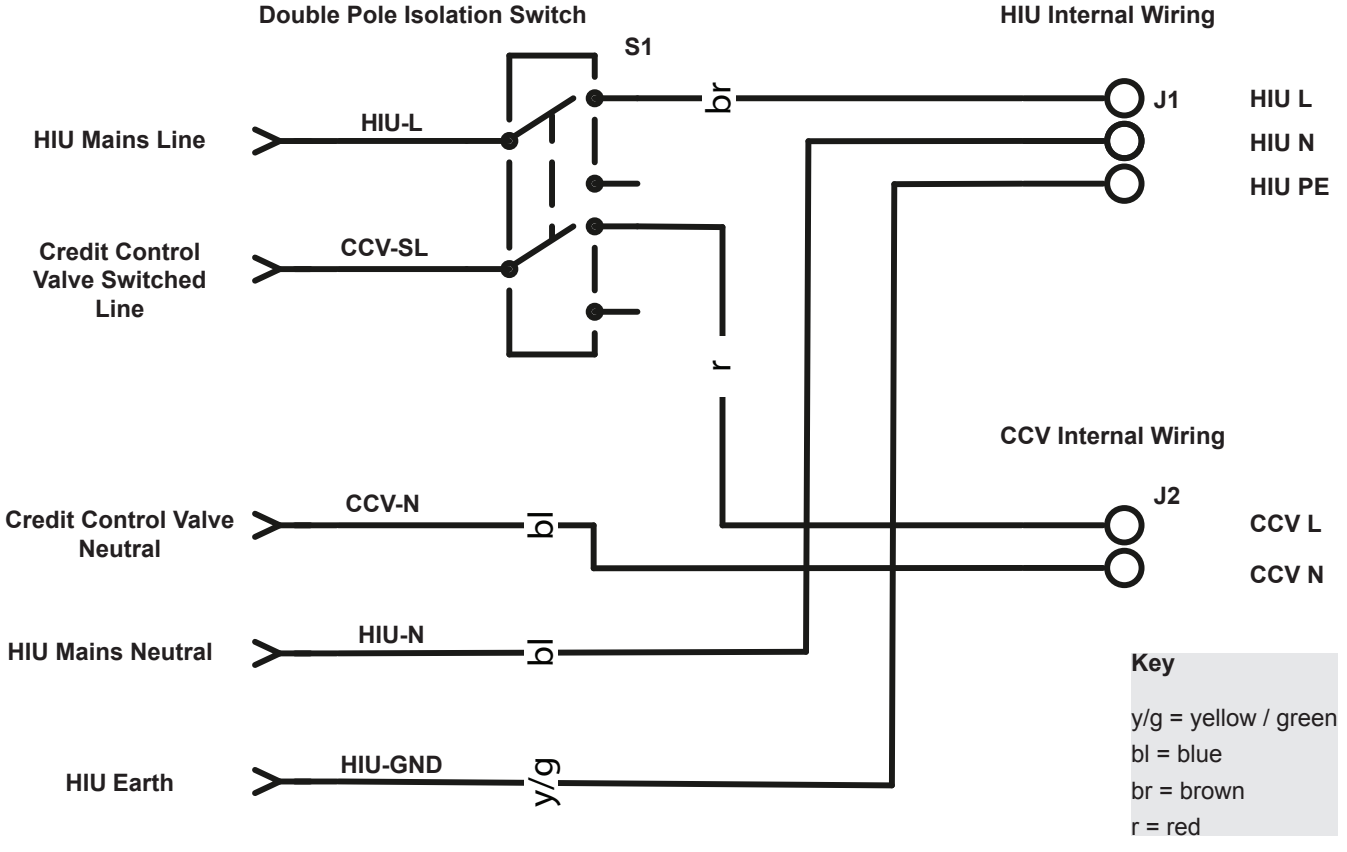
The kit consists of a secondary valve and associated pipework for installation within individual HIUs. This valve is supplied with an electrical signal from the external building management system control centre. Removal of this signal causes the valve to close, preventing flow within the HIUs primary circuit and no heat energy to be supplied to the unit. This operates independently of the HIUs individual control unit. As such any DHW or heating demand will result in cold flow being supplied from the secondary outlets.

2 ELECTRICAL REQUIREMENTS

The kit includes a 230V actuator. This should be supplied by a switched live from an external source such as a metering and billing system. The switched live supply for the Credit Control Valve **MUST** be taken from the same phase and from the same spur as used for the electrical supply to the HIU, to ensure that when the HIU is electrically isolated for servicing and maintenance operations the isolation is complete and does not leave any live supply with the appliance. To safely achieve this we recommend wiring the HIU power supply with a DPST switch, with one pole switching the power to the appliance and the second pole providing a means to isolate the Credit Control Valve.

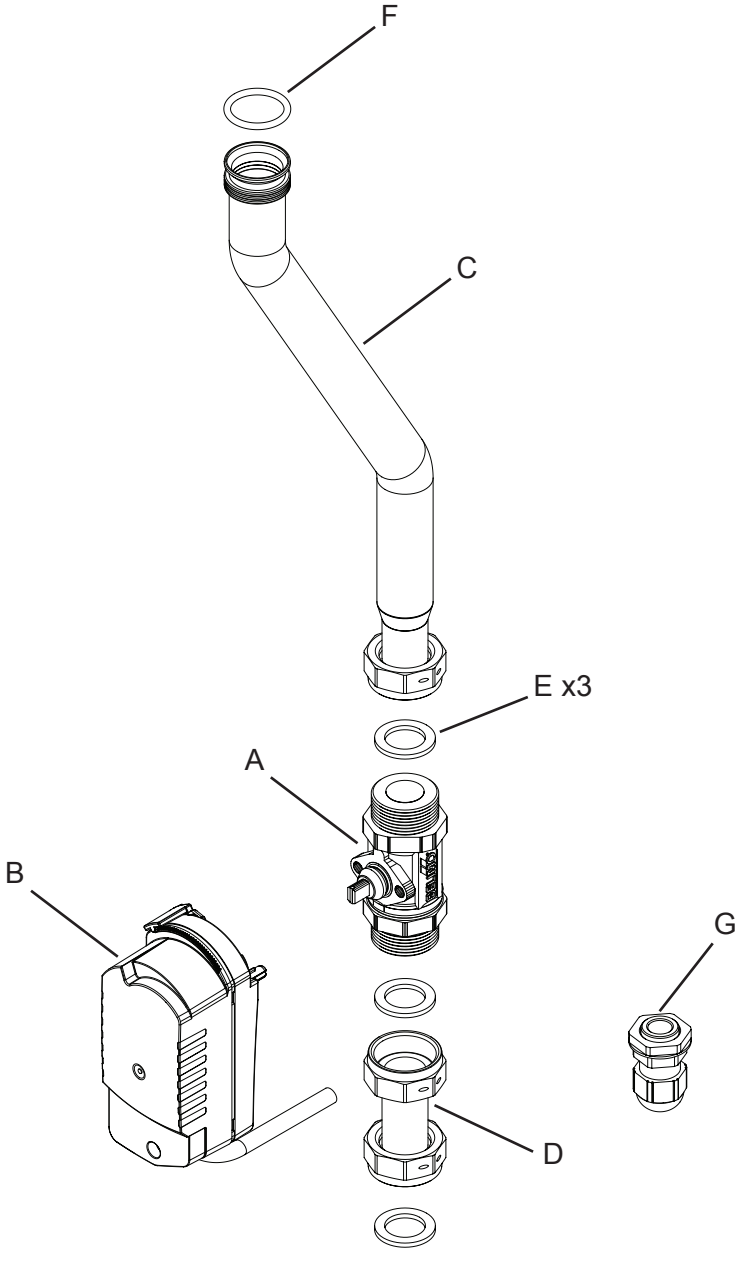
All cabling must conform to BS 7671.

The supply to the unit must be isolated prior to removing the access panel to install the Credit Control Valve.



3 KIT CONTENTS

A. Valve Body ..... 1 off
B. Actuator ..... 1 off
C. Return Pipe ..... 1 off
D. Link Pipe ..... 1 off
E. Gasket Fibre G3/4 ..... 3 off
F. O-Ring ..... 1 off
G. Cable Gland ..... 1 off
H. Installation Instructions ..... 1 off



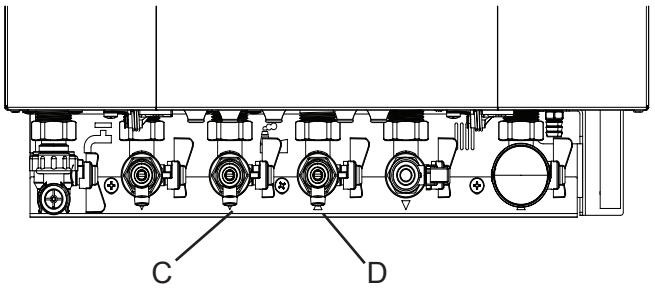
4 INSTALLATION

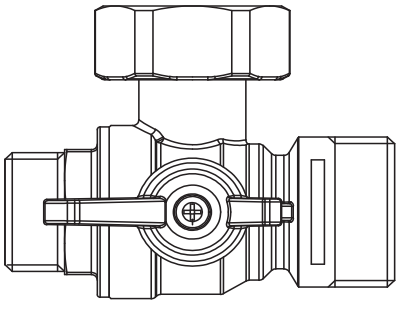
Installation of the Credit Control Valve must only be undertaken by a competent and suitably qualified engineer.

The below steps assume the HIU has previously been installed & commissioned. If the kit is to be fitted prior to this, skip to step 10.

1. Turn off and isolate the appliance from mains.
2. Isolate the primary circuit using valves C & D.

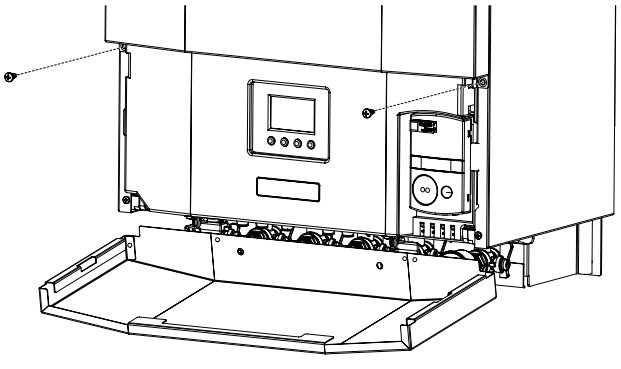
DO NOT proceed without the unit isolated from the primary circuit.



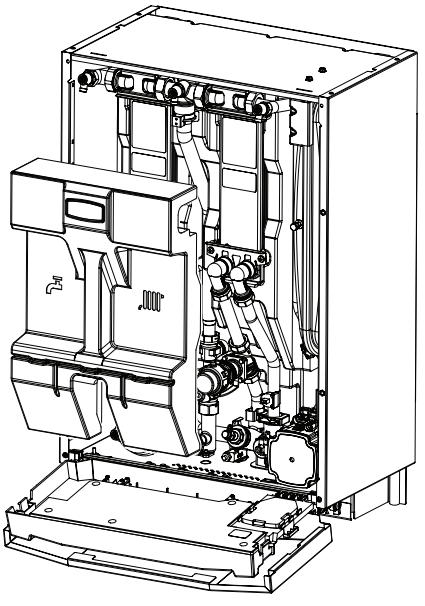


Valve shown isolated

3. Open door and remove 2X cover screws.

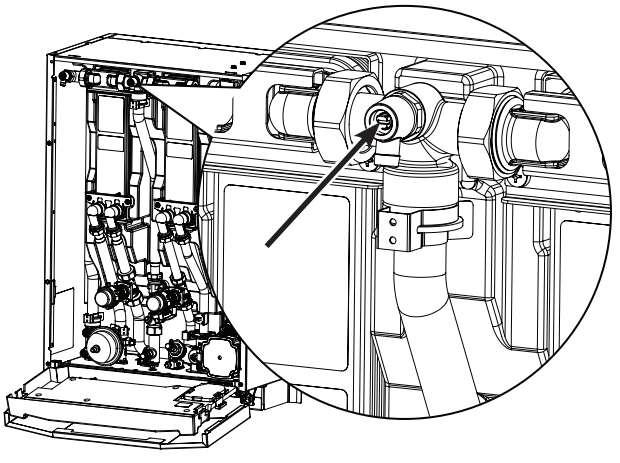


4. Lift off the front cover and put to one side. Retain screws.
5. Fold down the control box.
6. Remove the upper portion of the harness from the front of the insulation.
7. Remove the front piece of insulation and put to one side.



8. Slowly open the air vent within the tee at the top of the appliance to relieve the pressure in that circuit. Have a cloth or container to hand to catch any fluid which may be vented.

If the unit has been in operation the primary supply may be hot. Appropriate precautions should be taken to ensure that no risks are present when venting the unit. Preferably it should be isolated from the primary supply, and allowed to cool.

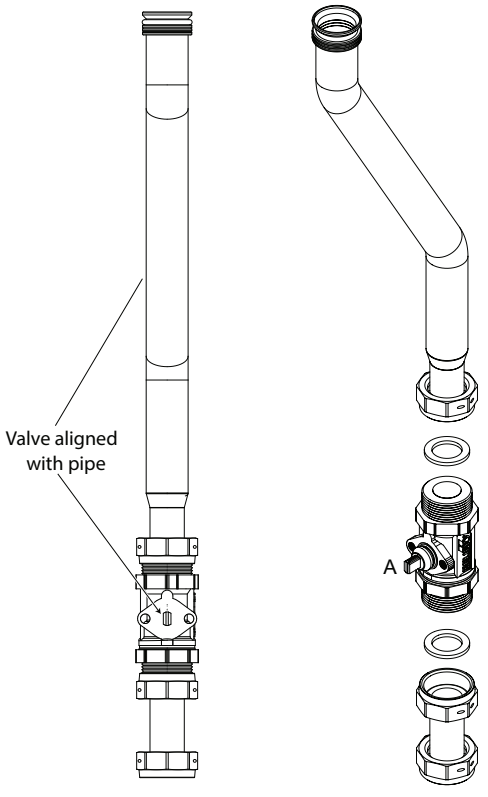


9. One at a time, connect a hose to the drain points located on the front of valves C & D. Route the hose to a drain or container to collect the fluid within the unit. Open the drain points to drain the primary circuit within the appliance.

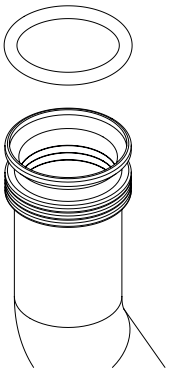
Continued.....

10. Disconnect the joint between the top of the Heat Meter or spool piece (depending on model variant) and the primary return pipe. If a security seal is installed on the joint, this will need to be removed. Contact the metering/billing provider before doing so as removal may be considered tampering.
11. Remove the primary return pipe clip from the tee and then remove the primary return pipe by sliding downwards.
12. Using the components in the kit, assemble the valve body (A) to the 2 pieces of pipe as shown, ensuring fibre gaskets are installed on both ends:

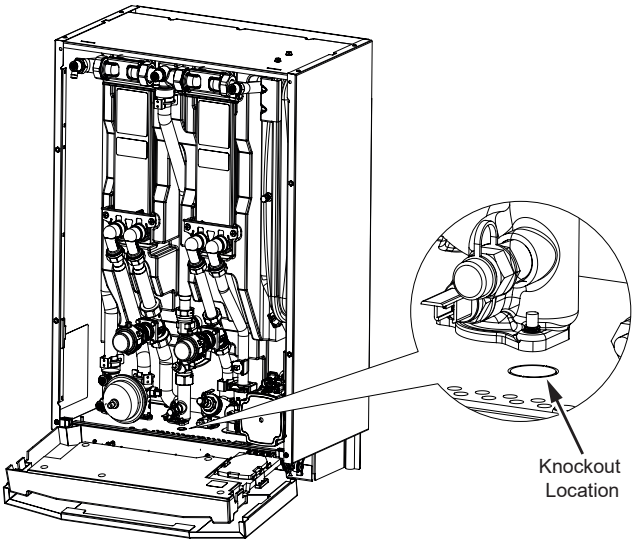
Note the orientation of the valve body against the bends in the upper section of pipe.



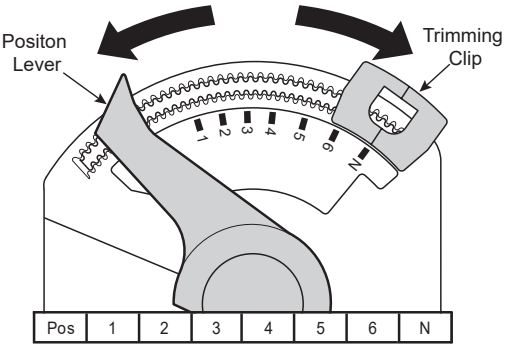
13. Install the O-Ring onto the end of the pipe as shown.



14. Slide the pipe and O-Ring into the tee, taking care not to nip or damage the seal. Replace pipe clip.
15. Install a fibre gasket between the lower section of pipe and the Heat Meter (or spool piece) and tighten the nut to 26 Nm.
16. Create a hole in the bottom panel using the knockout feature.



17. Insert cable gland into hole and secure with nut.
18. Route cable (≥0.5mm^2 diameter) through the gland and into the appliance. This should be routed vertically to the actuator. Do not secure to other parts of the harness.
19. Expose the terminals on the actuator by removing the plastic cover.
20. Terminate the cable within the actuator and replace cover.
21. Clip the actuator to the front of the valve body.



Note: The trimming clip should remain in the 'N' position or be removed. Moving this to another position will prevent the valve opening fully and lead to a reduction in performance. The valve position can be identified by the black lever on the edge of the actuator.

22. Terminate the supply cable as required.
23. Tighten cable gland to secure the cable.
24. Check all drain points & air vents are closed.
25. Slowly open valves C & D to reflood the primary circuit of the HIU.
26. Using extreme caution, vent the circuit as required using the vent within the tee.
27. Check pipework and joints for leaks.

Continued.....

28. Reinstall the insulation, harness, control box and cover.

29. Dose and top up the primary system as required.

30. Test operation of the HIU and the accessory.

Note: The actuator requires charging on initial startup (approx. 25 seconds). No operation may occur in this period.

5 OPERATION MODES

MODE	SUPPLY STATUS	VALVE POSITION
Normal Operation / On	Live	Open
Isolation / Off	Off	Closed

Should the electrical supply to the Credit Control Valve be damaged or interrupted, such as through tampering, the unit will default to the off state.

6 FAULT FINDING & DIAGNOSTICS

Refer to HIU Installation & Servicing manual for initial diagnostics. If credit control valve is installed please refer to additional diagnostics below.

FAULT	CAUSE	SOLUTION
No hot water / heating - unit off	Electrical supply to valve not on	Check switch / control system
		Check supply cable & connections
	Insufficient Voltage	Check supply & cable connections
	Valve stuck closed	Check power to actuator - replace if necessary Remove actuator and check rotation of ball within valve
	Actuator not secured to valve	Check actuator body - replace if necessary
	HIU turned off	Turn on HIU
Unit does not turn off	Electrical supply to valve still live	Check supply cable & connections
	Valve stuck open	Check supply cable - replace if necessary Remove actuator and check rotation of ball within valve, ensure the valve position lever can freely move over the full range
	Actuator not secured to valve	Check actuator body - replace if necessary
	Actuator not charged	Faulty actuator - replace
Limited heat to DHW or CH	Valve stuck in mid position	Replace valve
	Limited actuator movement	Remove limit clip

7 SERVICING

Ball valves and rotary actuator is maintenance-free.

Before any service work on the final controlling device is carried out, it is essential to isolate the rotary actuator from the power supply (by unplugging the electrical cable if necessary). Any pumps in the part of the HIU system concerned must also be switched off and the appropriate isolation valves closed (allow all components to cool down first if necessary and always reduce the system pressure to ambient pressure level).

The system must not be returned to service until the ball valve and the rotary actuator have been correctly reassembled in accordance with the instructions and the HIU has been refilled by professionally trained personnel.

FM 59915
Manufactured under an ISO 9001 registered quality management system

Technical Training

Our Expert Academy offer a range of training options designed and delivered by our experts in heating.
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