

# INSTALLATION INSTRUCTIONS

**Optional central heating time clocks for Vaillant Combination boilers:**

**TURBOmax VUW 242/1 E, VUW 282/1 E**

**ECOmax VUW 236 E, VUW 286 E**

**ECOmax 824 E, 828 E**

24 hour time clock      Art. No. 300 880

7 day time clock      Art. No. 300 881

**NOTE:**

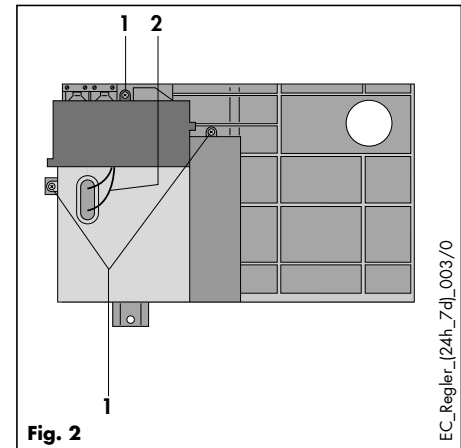
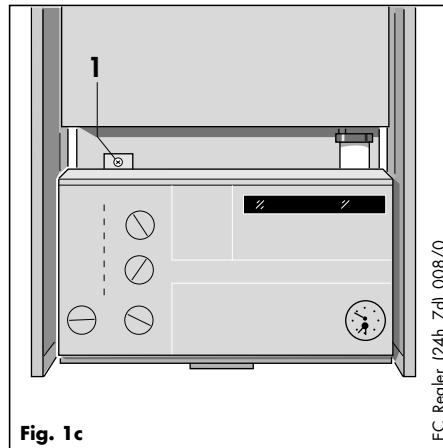
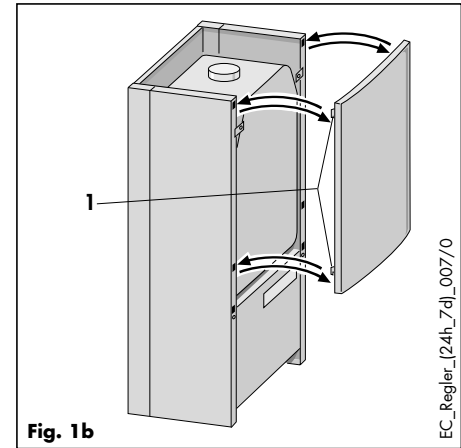
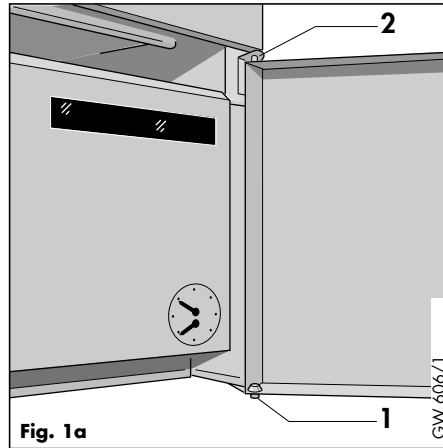
This time clock must only be installed by a competent person.

All above listed boilers have a built in frost thermostat. This time clock is not suitable for use with an external frost thermostat.



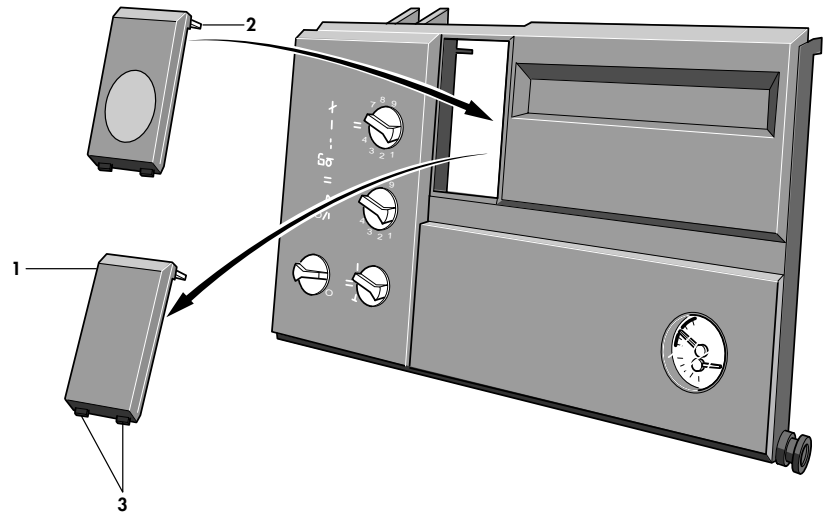
# 1. Plug in time clock installation with a TURBOmax VUW 242/1 E VUW 282/1 E

- Isolate the boiler from the mains electricity supply by disconnecting the plug at the socket outlet (if there is an isolating switch only, remove the fuse from the switch).
- Remove bottom hinge screw (1, fig. 1a) and pull lower door panel forward and down to release it from the top hinge pin (2, fig. 1a).
- Slide the top panel up to release the retaining clips (1, fig. 1b).
- Undo screw (1, fig. 1c) and lower front control panel.
- Disconnect ignition leads (2, fig. 2) from rear of control box, and remove terminal strip cover and back of control box by undoing three screws (1, fig. 2).



- Release the time clock blanking plate (1, fig. 3) from the control box by pushing the retaining clips (2, fig. 3) down. The time clock blanking plate can now be pivoted forwards on locating lugs (3, fig. 3) and removed.
- Fit the time clock by first passing the connecting lead through the hole left by the time clock blanking plate. Insert locating lugs (3, fig. 3) into control box and pivot upwards to locate onto retaining clips.

(Note: The ribbon cable is supplied with two plug in connectors. Always utilise the connector nearest to the timer. The plug at the end of the cable is required when the timer is used as a spare part replacement for earlier TURBOmax/ECOMax boilers).



**Fig. 3**

- Connect the time clock lead to the control board at the purpose provided connection point (1, fig. 4). The clock lead should be connected to the pins marked X14.

(Note: The time clock operates on low voltage DC).

- Connect the room thermostat (if required). The boiler is supplied with a link wire fitted between terminals 3 and 4 of the boiler terminal strip. If a room thermostat is used, this link wire should be removed and the room thermostat connected as shown in fig. 13.
- Unless already carried out, complete the electrical installation by connecting a 230 V~ 50 Hz electrical supply, fused at 3A, to the boiler as detailed in the boiler installation instructions.
- Refit the back of the control box and terminal strip cover and secure with screws (1, fig. 2).
- Reconnect ignition leads (2, fig. 2).
- Raise the control box and secure in position with screw (1, fig. 1c).
- Carry out the commissioning and testing as detailed in the Instructions for Installation and Servicing supplied with the boiler.
- Refer to users instructions for details on setting and operating the time clock.

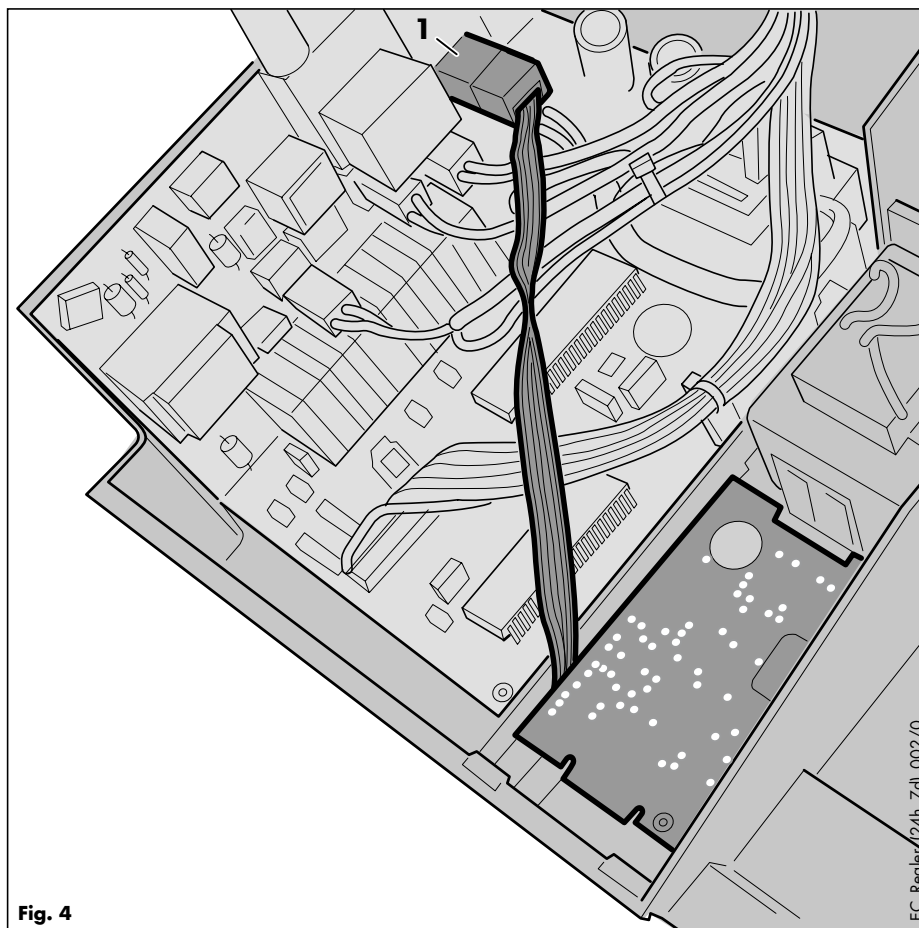


Fig. 4

## 2. Plug in time clock installation with an ECOmax VUW 236 E, VUW 286 E

- Isolate the boiler from the mains electricity supply by disconnecting the plug at the socket outlet (if there is an isolating switch only, remove the fuse from the switch).
- Remove bottom hinge screw (1, fig. 1a) and pull lower door panel forward and down to release it from the top hinge pin (2, fig. 1b).
- Slide the top panel up to release the retaining clips (1, fig. 1b).
- Undo screw (1, fig. 5) and lower front control panel.

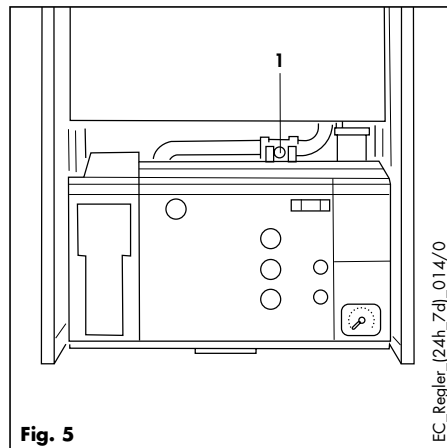


Fig. 5

- Remove back of control box by undoing two screws (1, fig. 6).

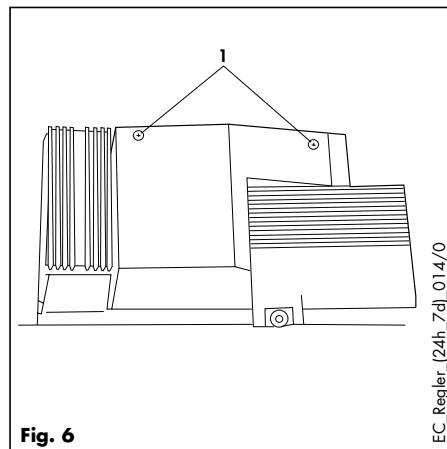


Fig. 6

- Release time clock blanking plate (1, fig. 7) from the control box by pushing the retaining clips (2, fig. 7) down. The time clock blanking plate can now be pivoted forwards on locating lugs (3, fig. 7) and removed.
- Fit the time clock by first passing the connecting lead through the hole left by the time clock blanking plate. Insert time clock locating lugs (3, fig. 7) into control box and pivot upwards to locate onto retaining clips.

(Note: The ribbon cable is supplied with two plug in connectors. Always utilise the connector nearest to the timer. The plug at the end of the cable is required when the timer is used as a spare part replacement for earlier TURBOmax/ECOmax boilers).

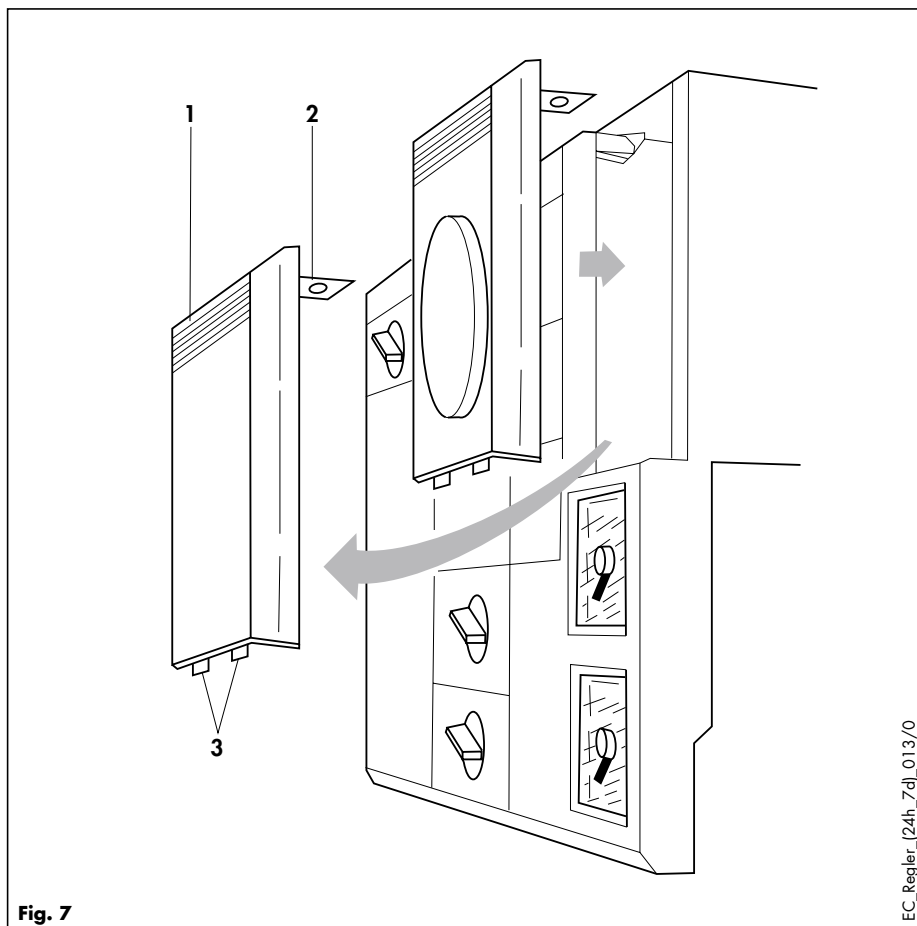
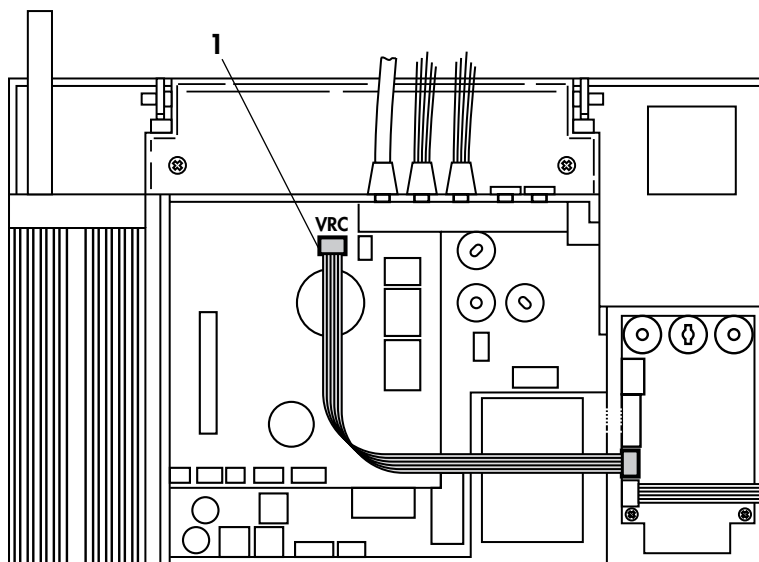


Fig. 7

- Connect the time clock lead plug to the control board at the purpose provided connection point (1, fig. 8). The clock lead should be connected to the pins marked VRC.

(Note: This time clock operates on low voltage DC).

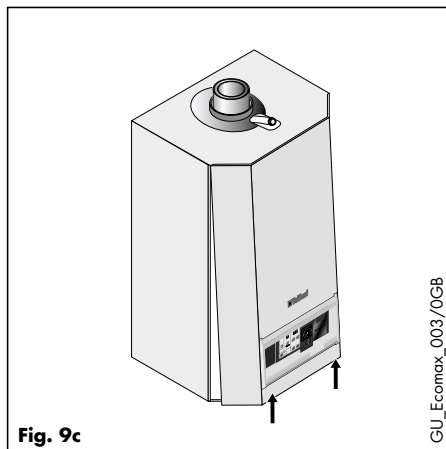
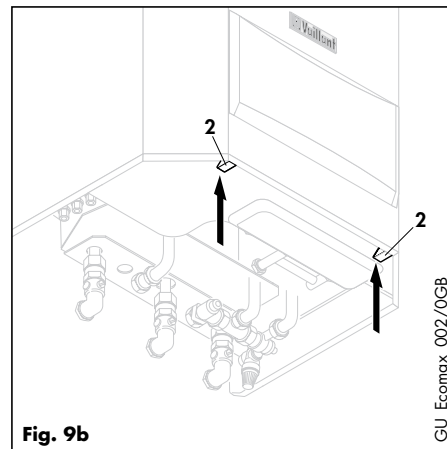
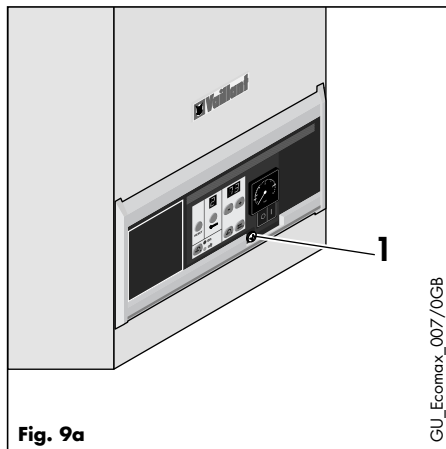
- Connect the room thermostat (if required). The boiler is supplied with a link wire fitted between terminals 3 and 4 of the boiler terminal strip. If a room thermostat is used, this link wire should be removed and the room thermostat connected as shown in fig. 13.
- Unless already carried out, complete the electrical installation by connecting a 230 V~ 50 Hz electrical supply, fused at 3A, to the boiler as detailed in the boiler installation instructions.
- Refit the control box back cover.
- Raise the control box and secure in position.
- Carry out the commissioning and testing as detailed in the Instructions for Installation and Servicing supplied with the boiler.
- Refer to users instructions for details on setting and operating the time clock.



**Fig. 8**

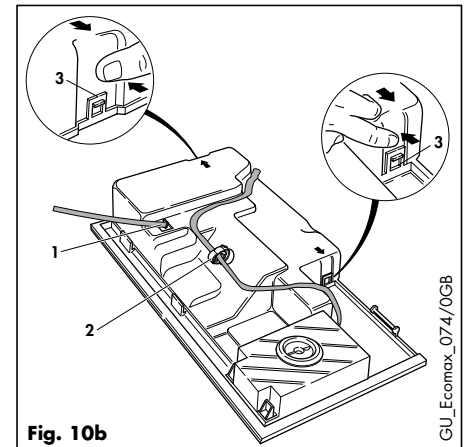
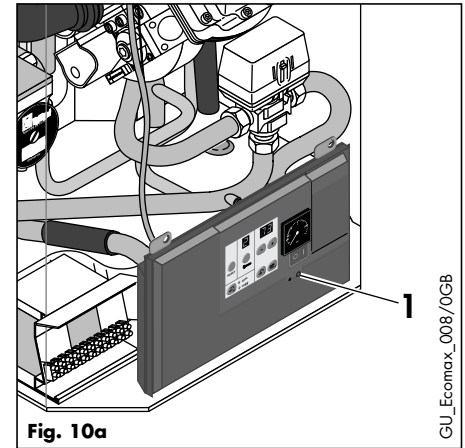
### 3. Plug in time clock installation with an ECOMax 824 E, 828 E

- Isolate the boiler from the mains electricity supply by disconnecting the plug at the socket outlet (if there is an isolating switch only, remove the fuse from the switch).
- Lower control panel cover.
- Remove screw (1, fig. 9a).
- Release the front case spring retaining clips located beneath the front edge of the appliance (2, fig. 9b).
- Remove the front casing by easing forward the bottom edge and gently lifting (fig. 9c).



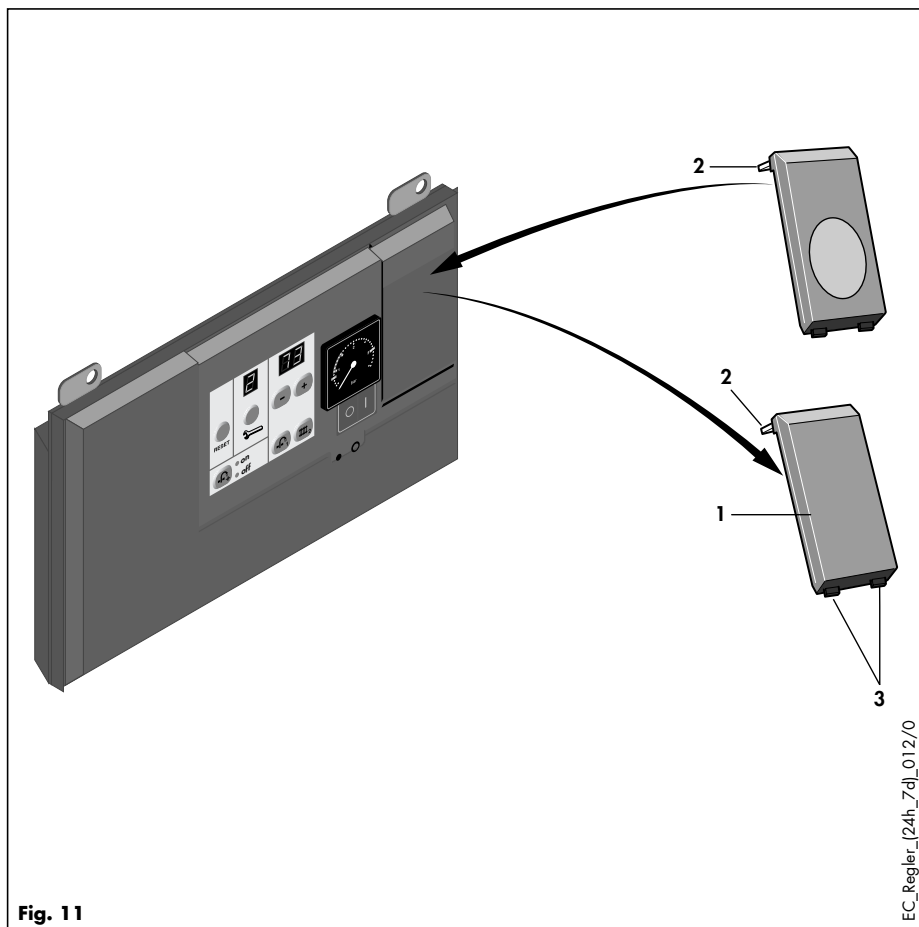


- Remove control box securing screw (1, fig. 10a) and lower control box.
- Disconnect HT lead from rear of control box (1, fig. 10b).
- Release mains electrical lead from securing clip on rear of control box (2, fig. 10b).
- Release control box rear cover retaining clips (3, fig 10b) by gently easing outwards.
- Carefully lift control box rear cover and remove from boiler.



- Release time clock blanking plate (1, fig. 11) from the control box by pushing the retaining clips (2, fig. 11) down. The time clock blanking plate can now be pivoted forwards on locating lugs (3, fig. 11) and removed.
- Using a sharp knife, carefully cut a slit in the sealing grommet at the rear of the time clock housing. Pass the connecting lead through the grommet.
- Insert time clock locating lugs (3, fig. 11) into control box and pivot upwards to locate onto retaining clips.

(Note: The ribbon cable is supplied with two plug in connectors. Always utilise the connector nearest to the timer. The plug at the end of the cable is required when the timer is used as a spare part replacement for earlier TURBOmax/ECOMax boilers).



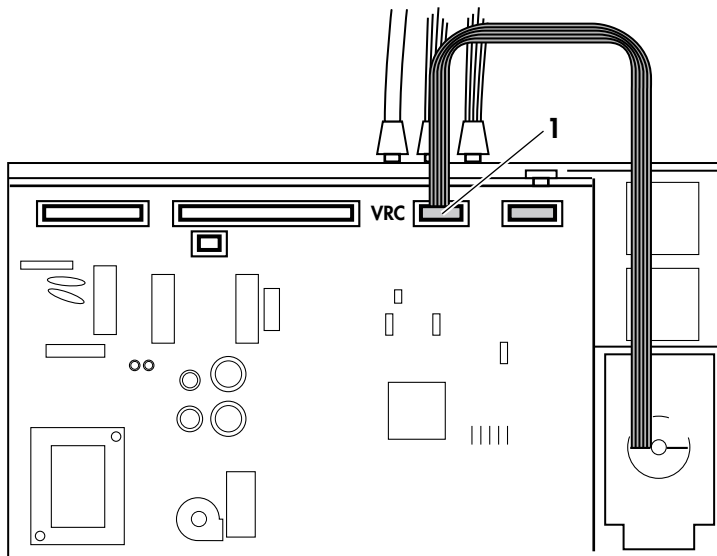
**Fig. 11**

EC\_Regler\_[24h\_7d]\_012/0

- Connect the time clock lead plug to the control board at the purpose provided connection point (1, fig. 12).

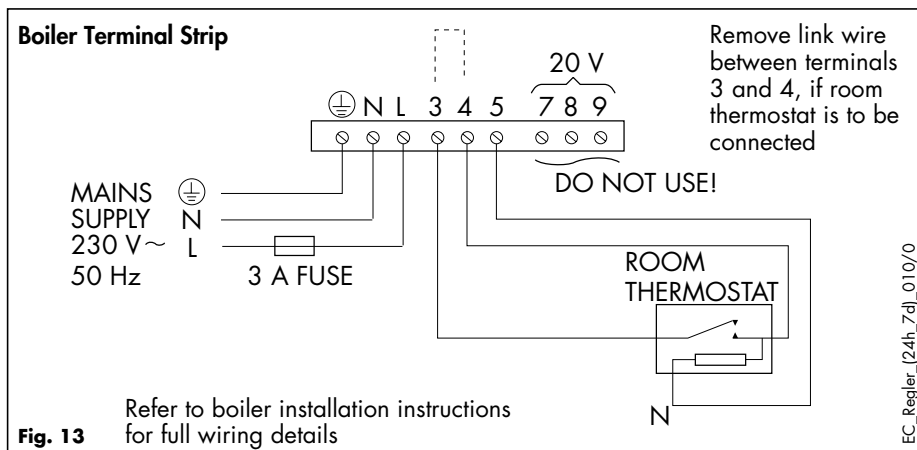
(Note: This time clock operates on low voltage DC).

- Connect the room thermostat (if required).  
The boiler is supplied with a link wire fitted between terminals 3 and 4 of the boiler terminal strip. If a room thermostat is used, this link wire should be removed and the room thermostat connected as shown in fig. 13.
- Unless already carried out, complete the electrical installation by connecting a 230 V~ 50 Hz electrical supply, fused at 3A, to the boiler as detailed in the boiler installation instructions.
- Refit the control box back cover and reconnect mains electrical lead and HT lead (fig. 10b).
- Raise the control box and secure with screw (1, fig. 10a).
- Carry out the commissioning and testing as detailed in the Instructions for Installation and Servicing supplied with the boiler.
- Refer to users instructions for details on setting and operating the time clock.



**Fig. 12**

## 4. Connecting a room thermostat



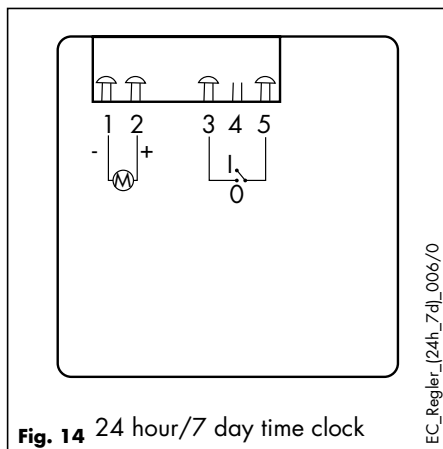
## 5. Timer operation

**Note: The timer switch contacts are:-**

**Closed** During **off** periods

**Open** During **on** periods

(see fig. 14)





83 20 85 GB02



**Head Office**  
**Vaillant Ltd.**, Vaillant House,  
Medway City Estate, Trident Close,  
Rochester, Kent ME 2 4 EZ

Sales  
Service Solutions  
Technical Advice  
Training

01634 292310  
0870 6060777  
01634 292392  
01634 292370