HORSTMANN

User's operating instructions
Horstmann Model 517
Electronic 7 Day Programmer

1 THE CONTROLS

**THE NORMAL WORKING POSITION
OF THE SLIDE SWITCH IS** *auto.*
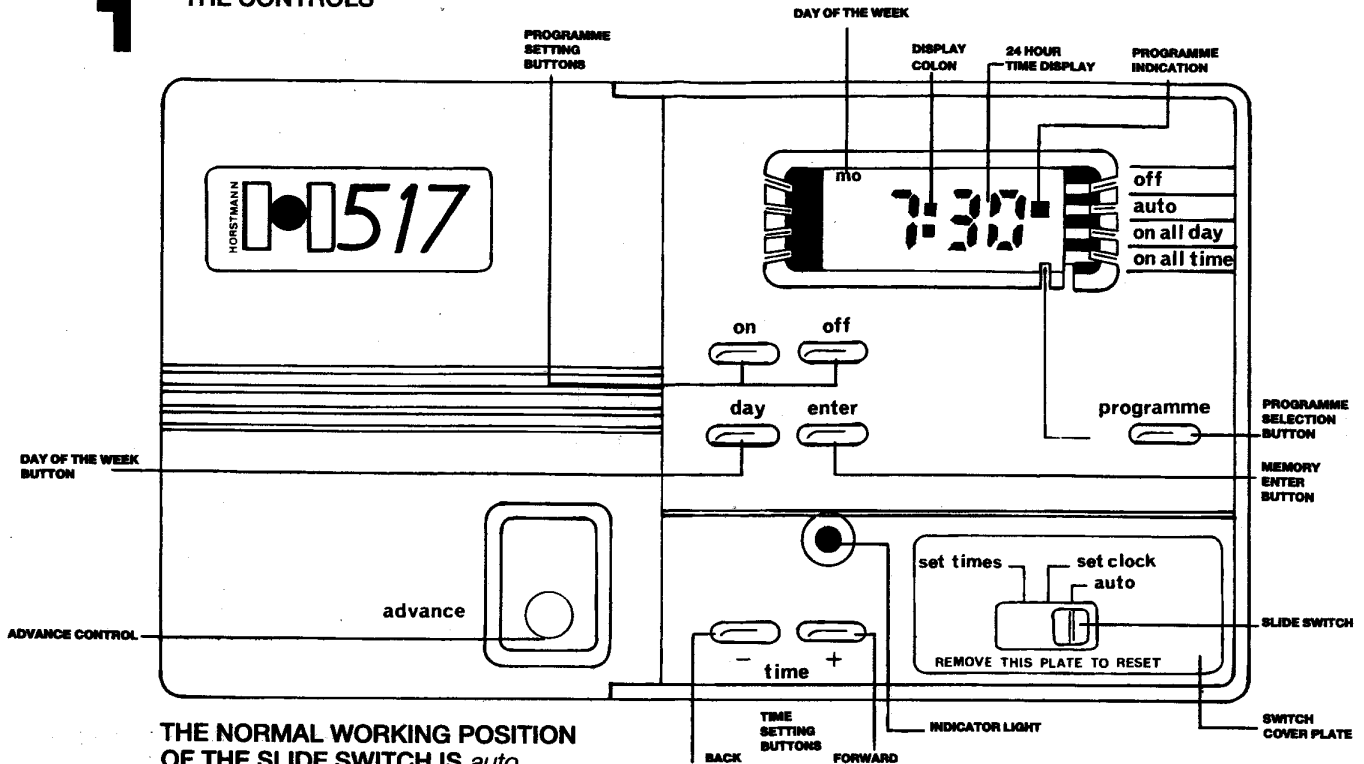
2 SETTING–DAY AND TIME OF DAY

First ensure that the switch cover plate shown below, is fitted over the slide switch.
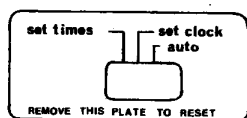

Now switch on power to the programmer.

Note: The display will flash until day and time of day have been set.

To set the time of day move the slide switch to the position marked **set clock.** Press the day button repeatedly until the current day of week appears on the display.

To set the time of day adjust the time using the **time +** and **time −** buttons. The time may be adjusted forward by pressing the **time +** button and release. This will advance the time by one minute. To fast cycle the time press the **time +** button and hold; after 2 seconds the display will move rapidly, release the button when the desired time has been reached.

To move the time backwards press the **time −** button and repeat the procedure.

Return the slide switch to the **auto** position. The display colon will now pulse and the time of day will be displayed.
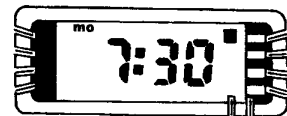
3 SWITCH TIME SETTINGS

We have already put a programme of **on** and **off** times into the memory based on the most commonly used time settings, but these can be varied as required.

The pre-set times are:-

	Mon-Fri	Sat-Sun
1st on	06:30	07:30
1st off	08:30	09:30
2nd on	12:00	12:00
2nd off	12:00	12:00
3rd on	16:00	16:00
3rd off	22:30	22:30

To adjust the switching times, move the slide switch to the position marked *set times*.

Press the *day* button until *Mo* is shown on the display.

Now the required on and off times for Monday can be set.

Press the on button. The display shows *1 ON* and the pre-set 1st on time (06:30). Adjust the 1st on time as required using the *time +* and *time −* buttons. Press the *enter* button. The display shows *In* whilst the enter button is pressed to indicate that the revised time has been entered into the memory.

Now press the *off* button. The display shows *1 OFF* and the pre-set 1st off time (08:30). Adjust the 1st off time as required using the *time +* and *time −* buttons. Press the *enter* button.

Now press the *on* button.

The display shows *2 ON* and pre-set *2nd on* time (12:00). The 2nd on and 2nd off pre-set times are both 12:00 thus giving no mid-day on period unless altered manually as described earlier.

Adjust 2nd on time, if required, using the *time +* and *time −* buttons and then press the enter button.

Repeat this procedure for 2nd off, 3rd on and 3rd off switching times.

Important: After each switching time has been adjusted the *enter* button must be pressed to put the switching time into the memory.

Copy Feature

More than likely the times you have set up for Monday will be suitable for other days in the week. These time settings can be repeated by simply pressing the day button to select the appropriate day, when *COP* (copy) is displayed, press the *enter* button and the switching times will be repeated for that day, and so on.

If different times are required on other days then these should be set individually as described in the instructions for Monday.

Day Omission

If you wish to omit a complete days switching operation, simply overlap the on and off times for that day.

e.g. 1st on and 1st off set both to 08:30
2nd on and 2nd off set both to 12:00
3rd on and 3rd off set both to 16:00

4 PROGRAMME SELECTION

The programmes can be selected using the programme selection button. To select the appropriate programme ensure the slide switch is in the *auto* position.

When *off* is selected, the programmer clock continues to operate but the system will **not** be switched **on**.

When *auto* is selected the system will switch *on* and *off* during the day according to the switching times in the memory. (i.e. up to three on periods per day).

When *on all day* is selected the system will switch on at the 1st on time setting and off at the 3rd off time setting. The intermediate time settings are ignored.

When *on all the time* is selected the system remains switched on continuously, ignoring all time settings.

5 OUTPUT INDICATOR

The red indicator light will be illuminated when the programmer is **on**.

NOTE: The boiler and /or pump may not be running when the indicator light is illuminated if the circuit has been temporarily overridden by other controls in the system such as thermostats.

6 ADVANCE

The *advance* button allows you to start an **on** or **off** period early without altering the time or programme settings. This facility is only available when the *auto* or *on all day* programmes have been selected.

If you wish to switch your system **on** ahead of schedule. Press the **advance** button and release, the red indicator light will be illuminated.

To switch your system **off** ahead of schedule, press the **advance** button and release, the red indicator light will go out.

7 RE-SET

Electronic equipment can in exceptional circumstances be affected by electrical interference.

If your programmer's display or switching programme becomes frozen or scrambled, or if you simply wish to revert to the factory pre-set programme, you can re-set the programmer as follows.

Carefully lift off the switch cover plate, move the slide switch to the *re-set* position for approximately 5 seconds, then return it to a mid-position. The switch cover plate must now be re-fitted as shown in Fig. 3.
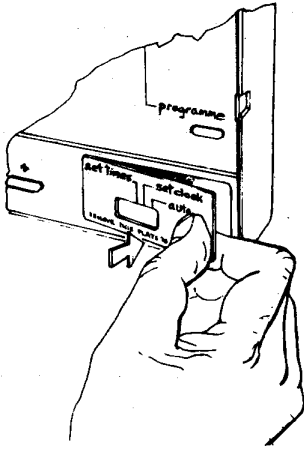

Fig. 3. Fitting Switch Cover Plate

The day, time of day and all switching times must now be set into the programmer as previously described in Sections 2 and 3.

8 BATTERY

The unit is powered through a permanent rechargeable battery which ensures that the settings and programmes are maintained during a power cut. In prolonged power cuts the display may disappear but will re-appear again when the power is restored. It may also be necessary to re-enter your own switching times, if the powercut approaches 150 hours.

9 REMOVAL OF PROGRAMMER. For your safety this must only be carried out by a qualified person.

Warning: Isolate the programmer from the mains supply before removal.

The programmer can be removed from the fixed backplate attached to the wall without disturbing the wiring. First loosen the two screws at the top of the unit (do not remove them completely) then firmly pull the control from the top and disengage it from the lugs at the bottom. To replace the programmer first engage the lugs in the flange of the backplate and then press the programmer onto the backplate until it is secure. The 2 screws at the top of the unit may now be screwed in.
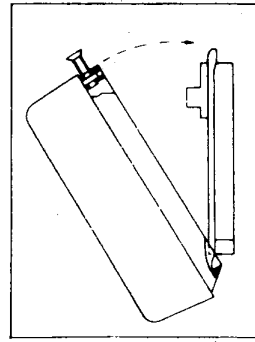
10 SERVICE AND REPAIR

Your programmer is **NOT** user serviceable.

DO NOT TRY TO DISMANTLE THE UNIT.

In the unlikely event of it developing a fault please contact a local Heating Installer or qualified Electrician, but before doing so try RE-SETTING your programmer as described in section 7 of this leaflet.

11 SPECIFICATION

Contact Rating
Single Circuit 3 (1) A 240V A.C.

Contact Type Microgap change over
Supply 240V A.C. 50 Hz only

Double insulated
Dirt Protection Normal situations
Moisture Protection Ordinary
Max. Operating Temperature 40°C continuous

To comply with the requirements of British Gas for future interchangeability the unit should not be located where the normal ambient temperature might exceed 40°C.

Battery Reserve: 150 hours, automatically charged on restoration of power supply.