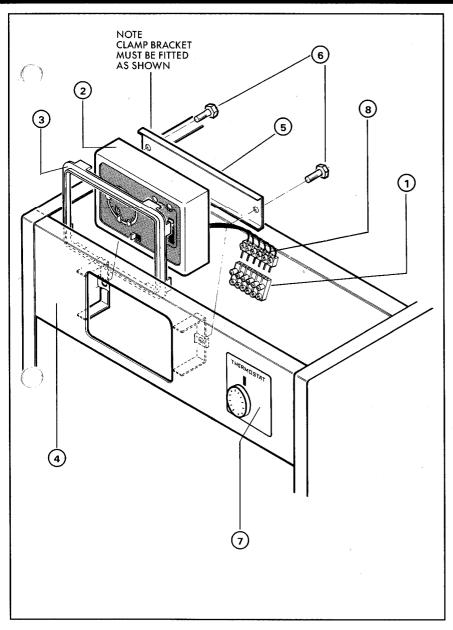
# Tianco

### OIL

#### TRO OIL FIRED BOILERS

## PROGRAMMER INSTALLATION AND OPERATING INSTRUCTIONS



Part No.	Contents	No. off	
204841	Programmer Assembly	1	
204636	Wiring Diagram	1	
204226	Programmer Clamp	1	
204222	Thermostat Fascia Label	1	
91186	Fixing Screws	2	
92188	Washer	2	

#### **Preparation**

- 1. Switch off electricity to the boiler at fused plug and socket.
- 2. Lift off the top panel. Remove the electrics cover plate located by 4 self tapping screws.
- 3. Open door casing. Pull off the thermostat knob and remove the internal trim.
- 4. Remove and discard the top half of the terminal block on the 6-way terminal block (1).

#### **Fitting Programmer**

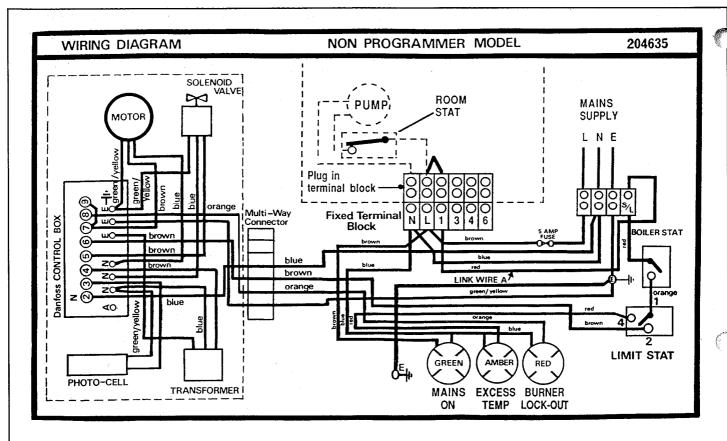
Programmer—Horstmann 425 Tiara.

Remove the programmer assembly (2) from the pack. Locate the trim (3) against the front of the programmer. Locate the assembly behind the control panel (4) sandwiching the trim. Locate the support bracket (5) behind the programmer. Fix in position with the hexagon head screws (6) provided, ensuring the trim is located evenly against the edge of the opening.

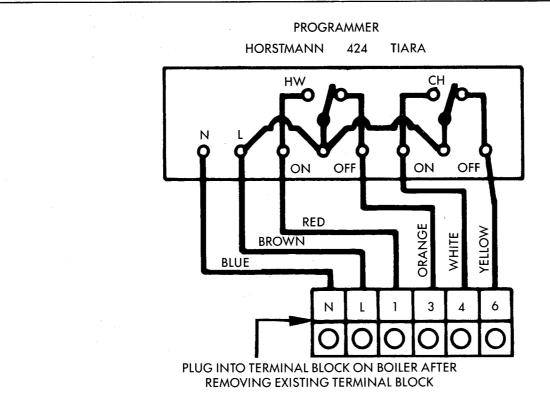
Stick the thermostat facia (7) centrally about the thermostat spindle and replace the thermostat knob. Locate the 6-way programmer plug (8) into the terminal block on the chassis panel. See note on Link 'A' on wiring diagram on Page 2. An additional wiring diagram is supplied in the pack, this is adhesive backed and should be fixed to existing wiring diagram on the electrical cover plate.

Where central heating system controls are fitted, refer to the system control diagrams and note referring to interlocking—double circuit time controls only.

Finally refit electrical cover plate and top panel. Switch on the electricity.



NOTE: REMOVE LINK 'A'
WHEN FITTING PROGRAMMER
(EXCEPT WHEN USING BASIC
CIRCUIT ie ROOM STAT &
CIRCULATING PUMP ONLY
(GRAVITY D.H.W.))



#### How to use the programmer

pe programmer will start automatically as soon as the electricity is switched on. The 24 hour dial should be turned in a clockwise direction to set the clock to the correct time. The dial is divided into quarter hour divisions.

#### **Setting the Programmer**

The programmer is set by moving the tappets, which are numbered in sequence of daily operations.

ON tappets (1 and 3) are coloured RED.OFF tappets (2 and 4) and coloured BLUE. The tappets can be set to required times by pressing the arrow heads, and sliding them around the dial clockwise, until they are opposite the appropriate times.

#### **On-off Indications**

This is indicated below the time indicator. When the boiler is off, BLUE will be displayed on the indicator. When the boiler is on, RED will be displayed on the dicator.

#### **Advance Control**

This is a simple way of bringing on the next operation without moving the dial. Push the Advance Control lever in the direction of the arrow.

#### **Programming**

Select the programme required by setting the levers on the right hand side to the programme required.

#### On all day

Unit will operate between time set on tappets 1 to 4.

#### On Twice

The unit will operate between time set on tappets 1 to 2 and 3 to 4. The unit will be off between tappets 4 to 1 and 2 to 3.

#### n 24 hours

The unit will operate continuously.

#### **Heating Programme**

Two levers are situated to the right of the programmer dial. The left hand lever is for domestic hot water ie. Summer Running. The right hand lever is for central heating. When the central heating is switched on, domestic hot water is automatically switched on.

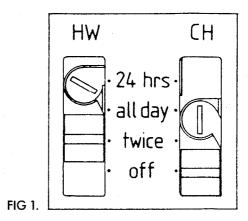
#### Note

When changing from a twice a day to a once a day programme or vice-versa, between tappets 2 and 3 it will be necessary to use Advance Control, to put the switch in sequence with the programme.

Both switches must be in the ON position whenever central heating is required.

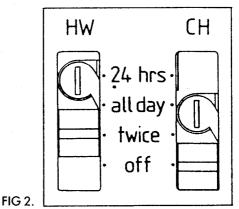
#### Gravity hot water/pumped central heating

On this type of system it is possible to have hot water without central heating but **not** central heating without hot water. In this case the selector switches will have been interlocked by your installer and the screwdriver slots will appear as in Figure 1.



#### Fully pumped hot water and central heating

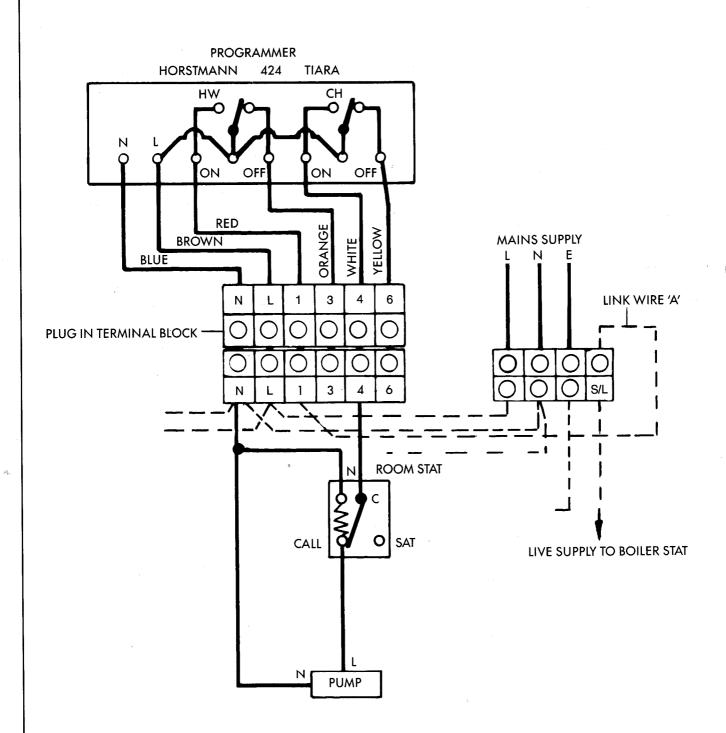
On this type of system the selectors are not interlocked and hot water and central heating programmes can be set independently of each other. Your installer will have set the interlock with the screwdriver slots as shown in Figure 2.



#### General

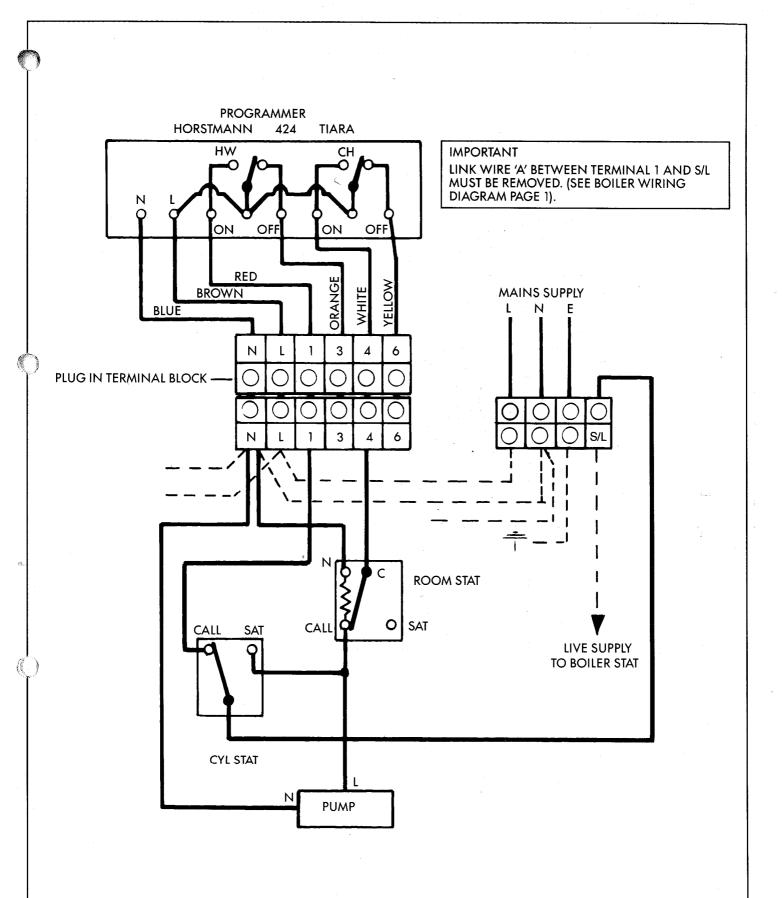
Before handing over a new installation to the user always verify that the system responds correctly on all Control Programmes and that other electrically operated equipment and controls are correctly adjusted. Explain how to operate the time control to the user and hand over this Operating Instruction leaflet. For further information on wiring and external controls contact the Technical Services Department at the address shown below.

Thorncliffe, Chapeltown, Sheffield S30 4PZ Tel: Sheffield (0742) 461221 Telex: 54476 Fax: (0742) 453021



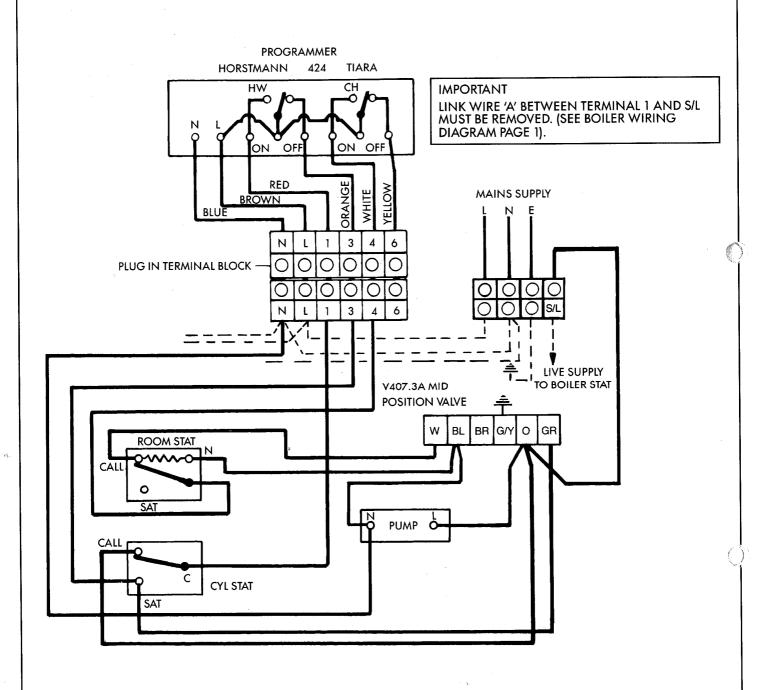
INSTALLER WIRING DIAGRAM. BASIC SYSTEM **GRAVITY HOT WATER** (NO SEPARATE CONTROL) PUMPED CENTRAL HEATING, ROOM STAT CONTROLLING PUMP (HW AND CH SWITCHES, TO BE MECHANICALLY LINKED ON PROGRAMMER).

- - - - LINES SHOW EXISTING WIRING.



INSTALLER WIRING DIAGRAM-FOR CONTROLLING **GRAVITY SYSTEM** WITH **CYLINDER STAT** AND **PUMPED CENTRAL HEATING.** (ROOM STAT CONTROLLING PUMP) (HW AND CH SWITCHES TO BE MECHANICALLY LINKED).

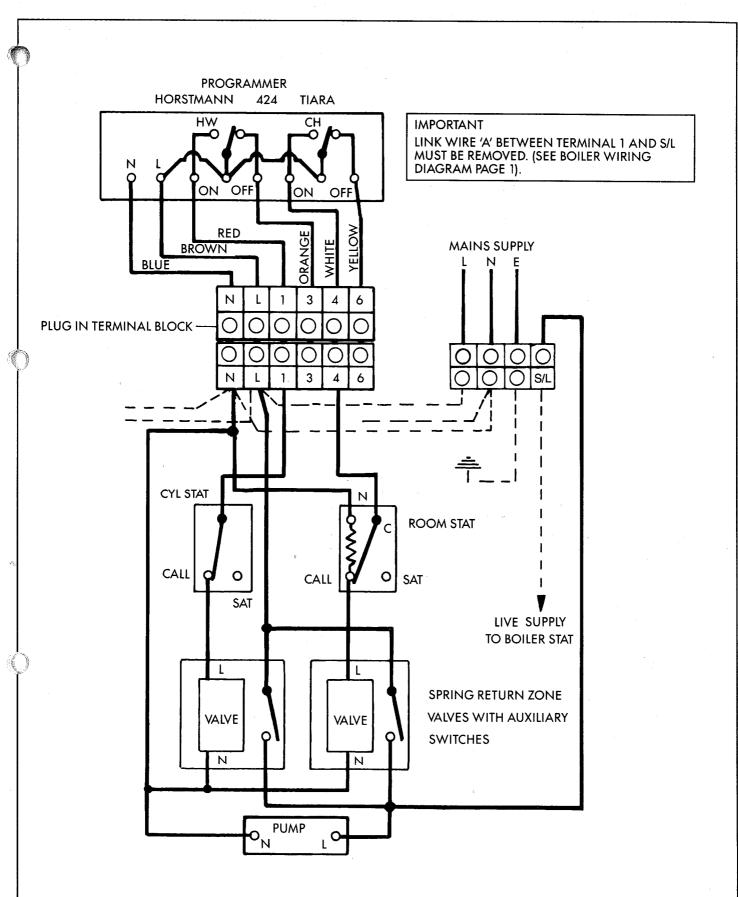
---- LINE SHOWS EXISTING WIRING.



INSTALLER WIRING DIAGRAM-FOR CONTROLLING HONEYWELL Y PLAN.

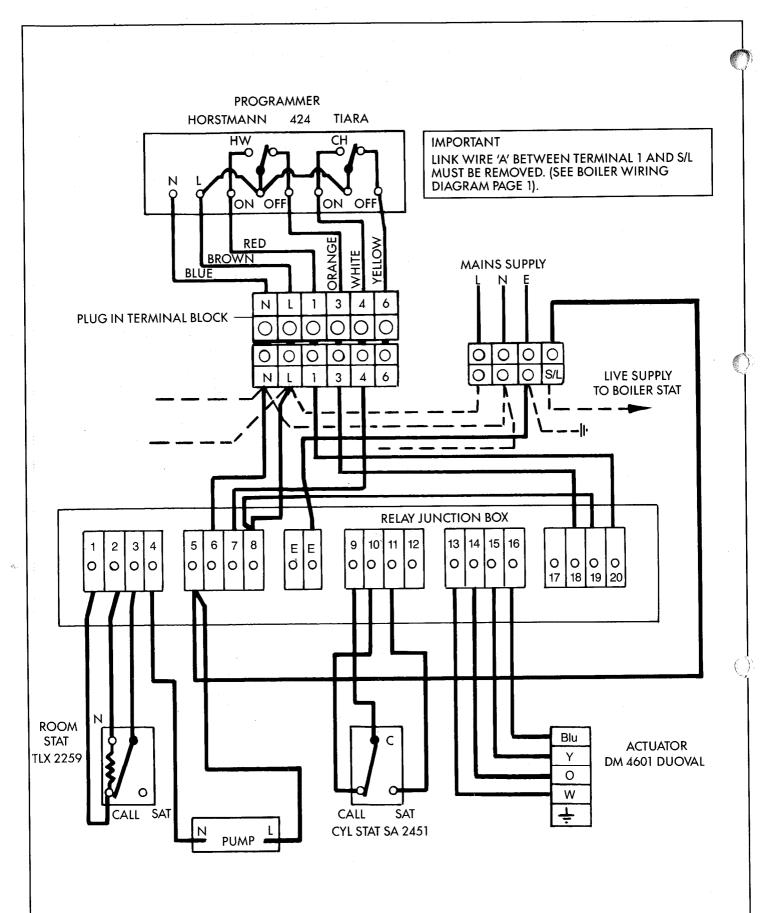
---- LINE SHOWS EXISTING WIRING.





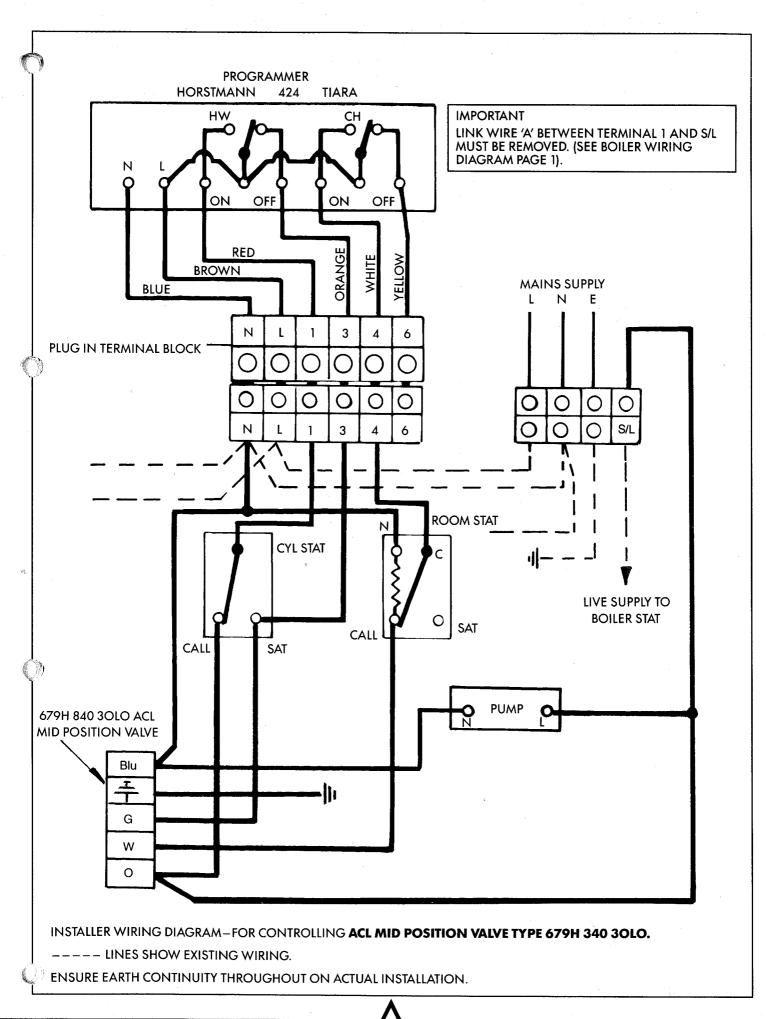
INSTALLER WIRING DIAGRAM-FOR CONTROLLING TWO NORMALLY CLOSED **SPRING RETURN ZONE VALVES** WITH AUXILIARY SWITCHES.

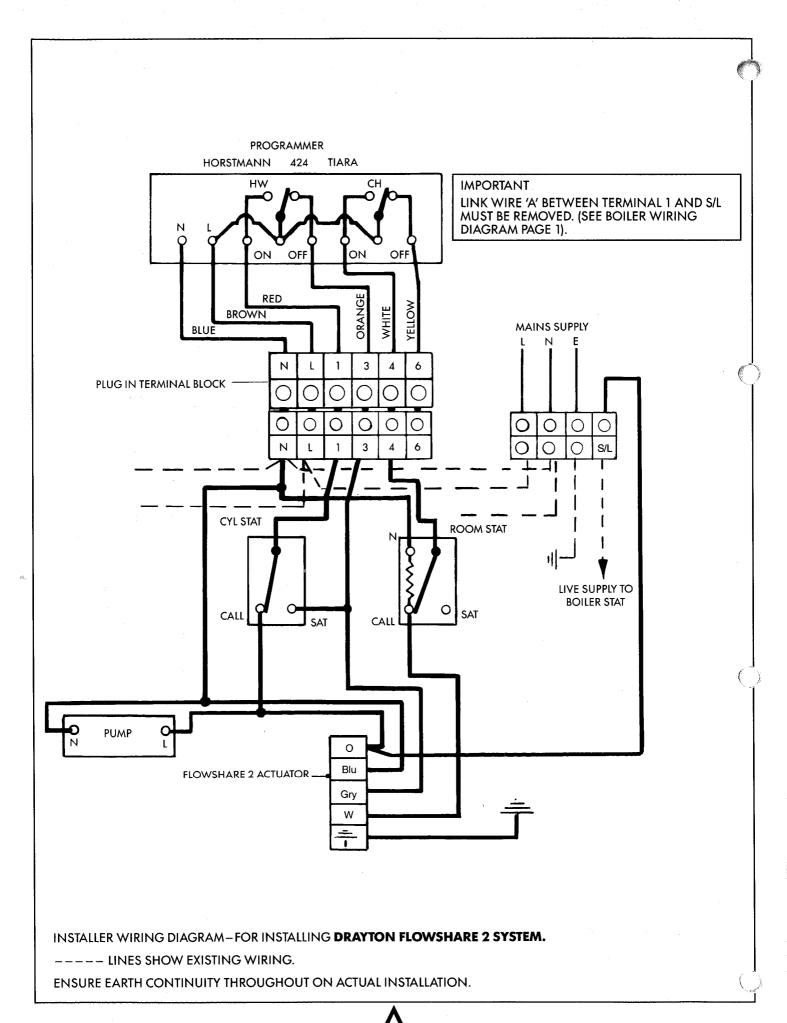
---- LINE SHOWS EXISTING WIRING.

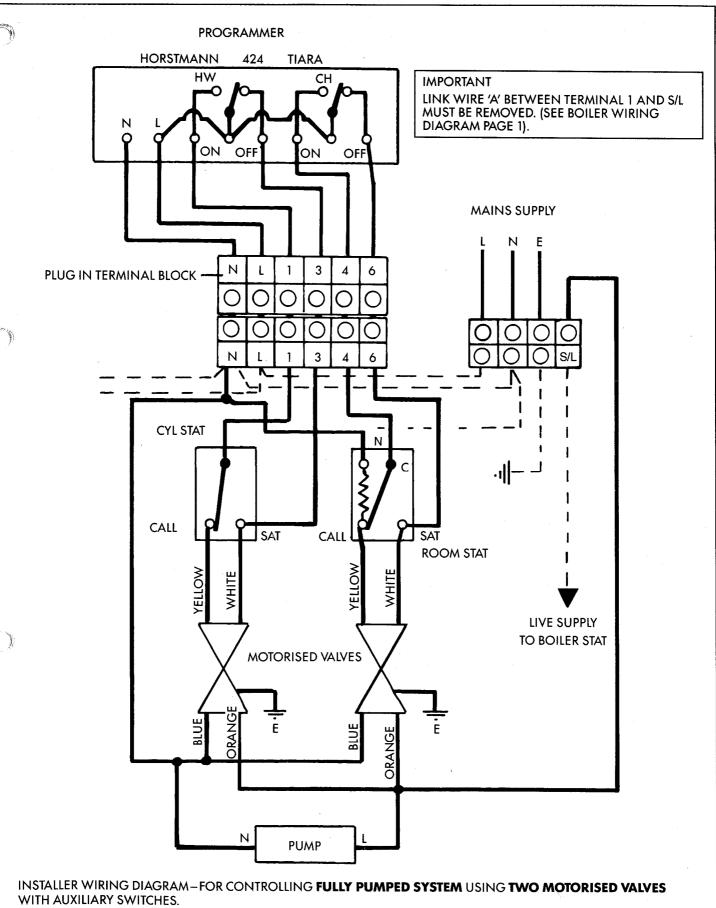


INSTALLER WIRING DIAGRAM-FOR CONTROLLING **SATCHWELL DUO FLOW** SYSTEM RELAY JUNCTION BOX RJ2802.

---- LINES SHOW EXISTING WIRING.







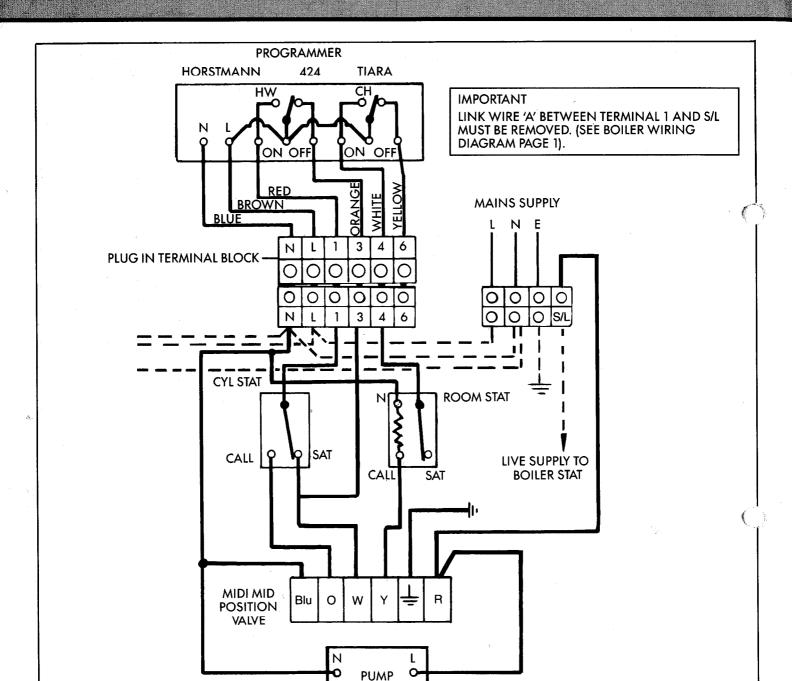
---- LINE SHOWS EXISTING WIRING.



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INSTALLER WIRING DIAGRAM-FOR CONTROLLING SWITCHMASTER MIDI MIDPOSITION VALVE.

---- LINE SHOWS EXISTING WIRING.

ENSURE EARTH CONTINUITY THROUGHOUT ON ACTUAL INSTALLATION.

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