

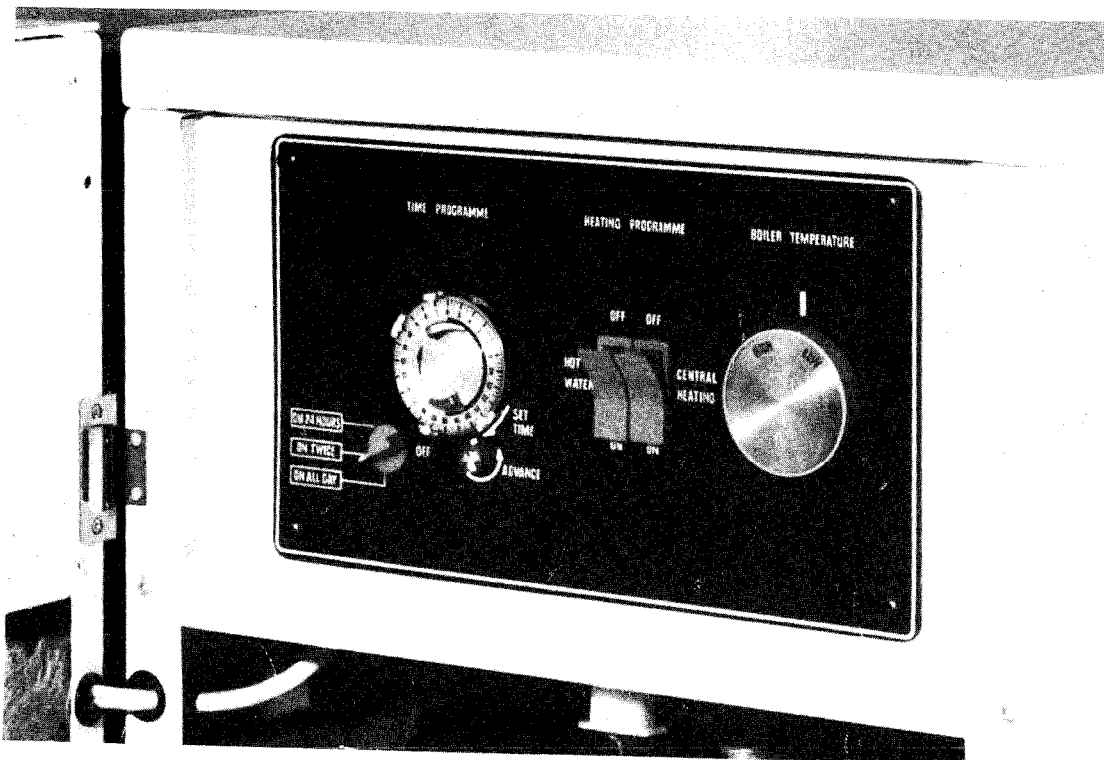


Trianco PROGRAMMER



By appointment to H.M. Queen Elizabeth
The Queen Mother
Manufacturers of Domestic Boilers

Installation and Operating Instructions



TRO 12/14

*TRO 28/32

*TRO 15/19

TRO 37/45

*TRO 20/25

TRO 50/73

*Mk. II Models.

FITTING OF PROGRAMMER UNIT

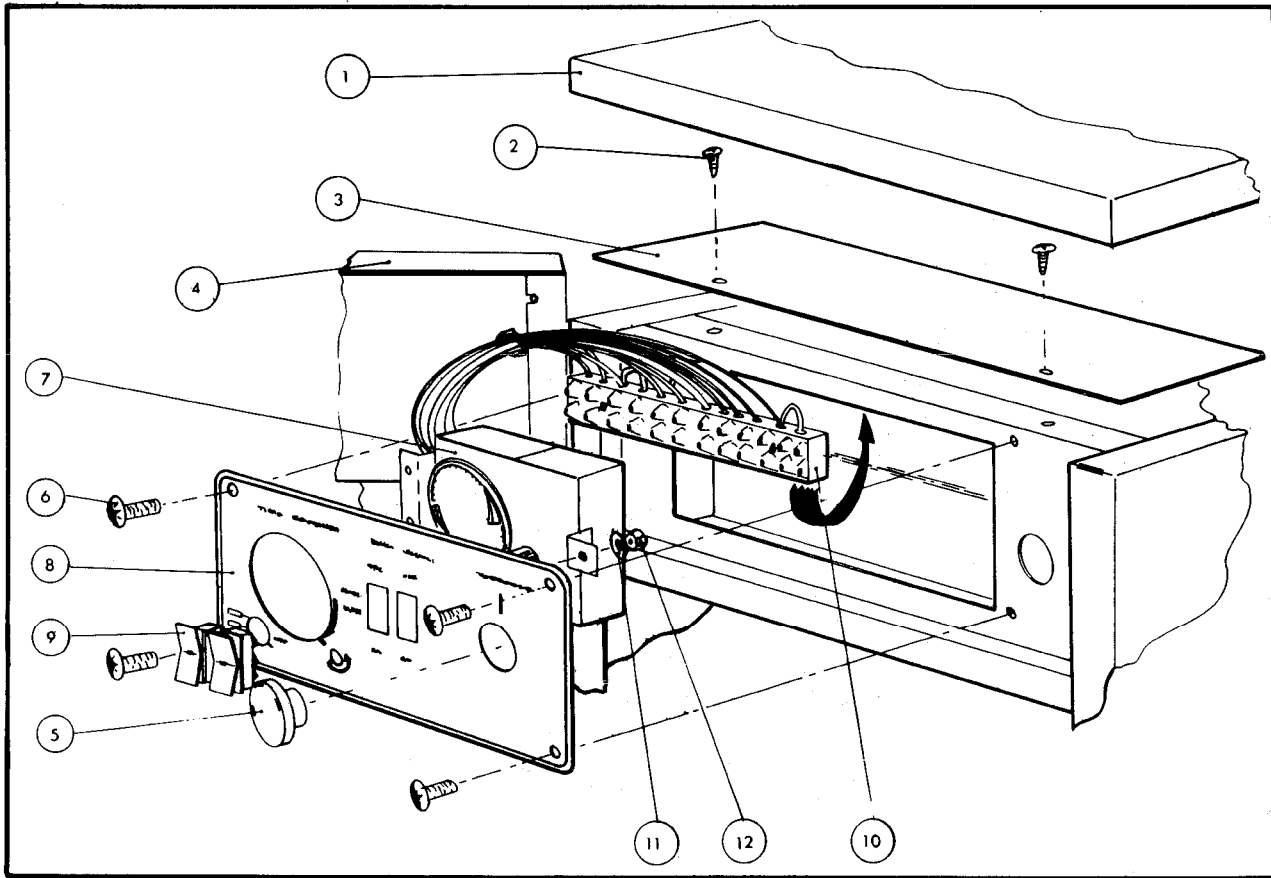
The numbers in the text in brackets () refer to the numbers on the isometric drawing.

PREPARATION

1. Switch off electricity at the socket and remove plug to isolate the unit.
2. Lift off the top panel (1) remove 4 self tapping screws from the Electrics Cover Plate (3).
3. Open door casing (4) pull off thermostat knob, (5) unscrew the 4 M.5. setscrews (6) discard Mounting Facia Plate Assembly.
4. Lift off and discard the top half of the terminal.

FITTING PROGRAMMER

6. Pass the terminal block plug (10) and wires attached to the programmer through the opening in the control panel. Fit the terminal block plug firmly into the terminal block socket.
7. Fasten the Programmer Facia Plate to the control panel (8) with the 4 M.5. setscrews (6).
8. Replace the thermostat knob (5) Electrics Cover Plate (3), and top panel (1).



PROGRAMMER KIT ASSEMBLY (CONTENTS).

Part No.	Description	No. Off
27390	PROGRAMMER MOUNTING FACIA ASSEMBLY	1
27391	MOUNTING PLATE W.U.	1
27141	DECORATIVE FACIA PANEL	1
27142	PROGRAMMER HORSTMANN 424 GEM	1
96355	SWITCH ARCO-ELECTRIC and DOWEL	2
96363	TERMINAL PLUG 12 WAY	1
94295	M3 HEX. NUT	3
92191	M3 WASHER	3
91317	M5 x 10 PAN. HD. POZI. SETSCREW	4
27074	PROGRAMMER WIRING DIAGRAM	1

The Wiring Diagram enclosed with the Assembly Kit has an adhesive back and should be fixed in position on the Wiring Diagram on the inside of the unit door.

HOW TO USE THE PROGRAMMER

The 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.

The time indicator is the inclined line between the dial aperture and the Advance Control button.

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) are 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 on the Advance Control button, adjacent to the time indicator. When the boiler is off, BLUE will be adjacent to the indicator. When the boiler is on RED will be adjacent to the indicator.

ADVANCE CONTROL

This is a simple way of bringing on the next operation without moving the dial. Press the Advance Control button and turn it anti-clockwise, as far as it will go.

PROGRAMMING

Select the programme required by turning the

programmer knob, situated to the left of the Advance Control, to the programme required. i.e.

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.

ON 24 HOURS

The unit will operate continuously.

HEATING PROGRAMME

Two switches are situated to the right of the programmer dial. The left hand switch is for domestic hot water i.e. Summer Running. When the central heating switch is pressed to ON position it will automatically switch on the hot water at the same time.

NOTE

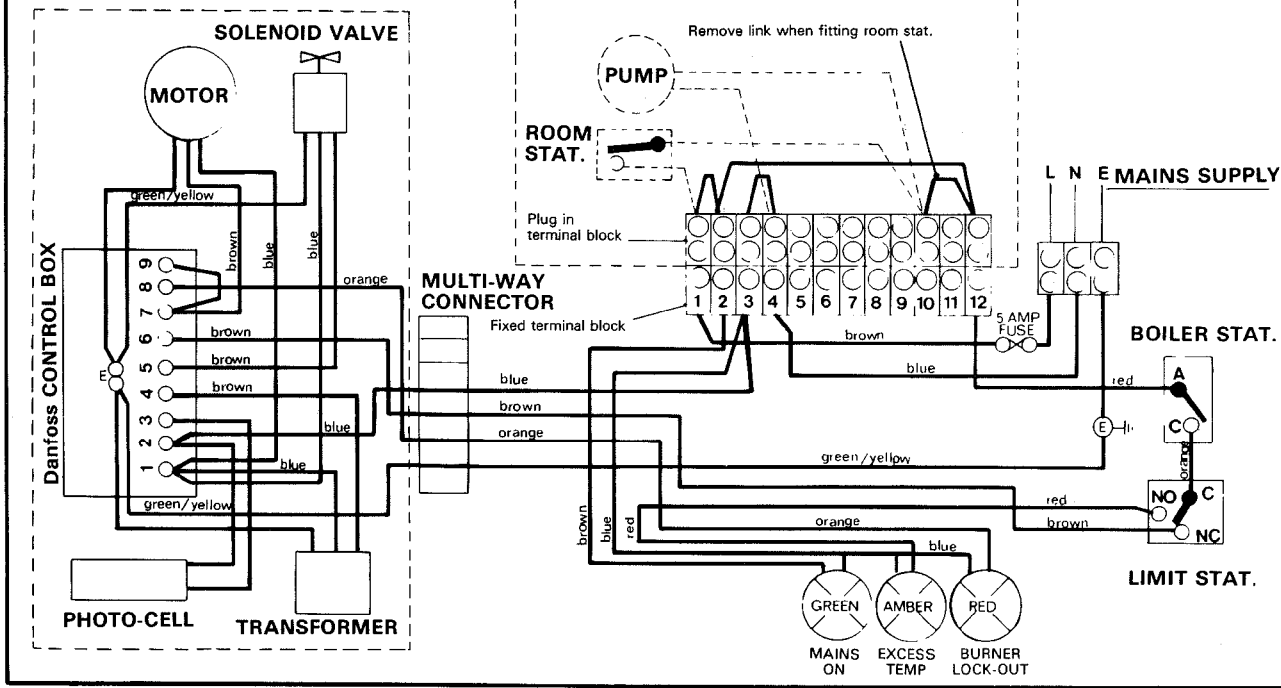
When changing from a twice a day to a once a day programme or vice-versa, between tappets 2 and 3 it will be necessary to use Advance Control, to put the switch in sequence with the programme.

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

WIRING DIAGRAM

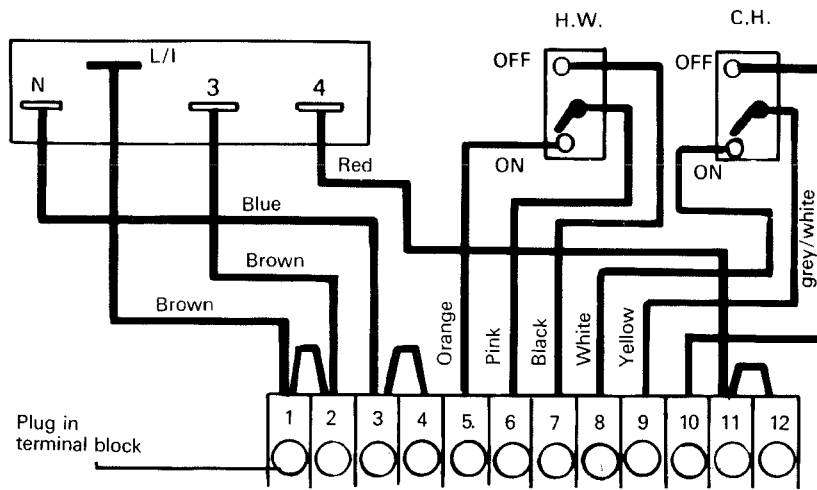
NON PROGRAMMER MODEL

27078

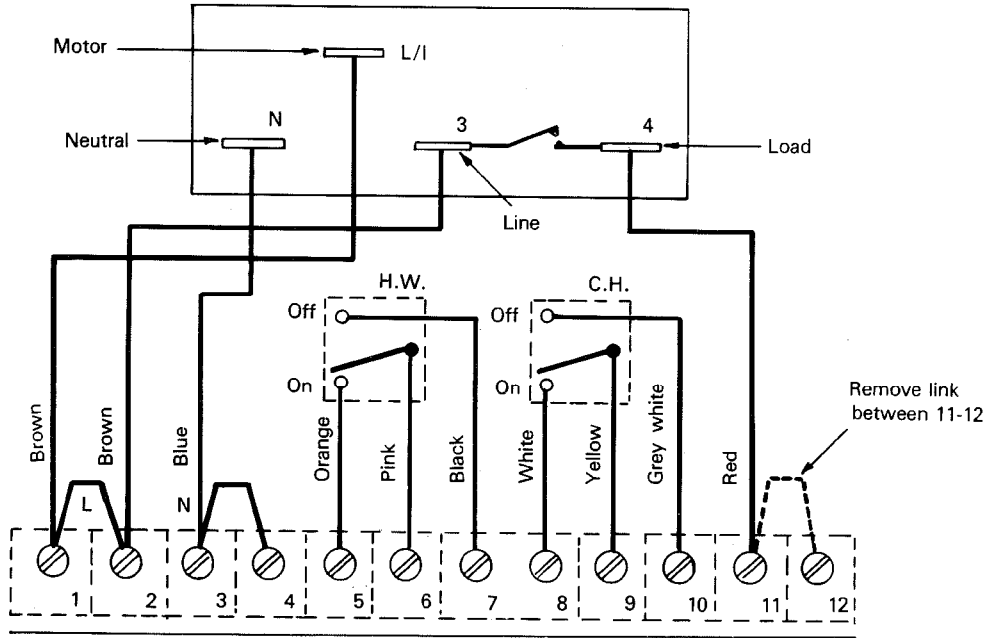


PROGRAMMER MODEL

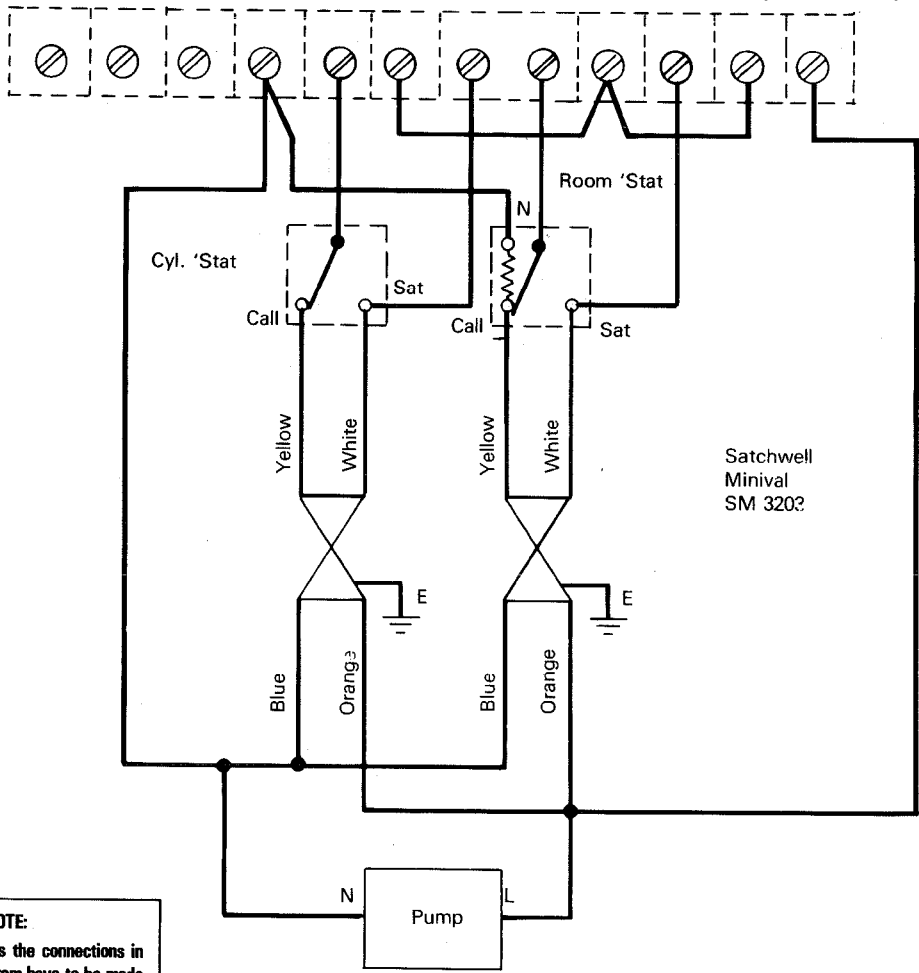
27074



PROGRAMMER INTERNAL WIRING DIAGRAM SUPPLIED



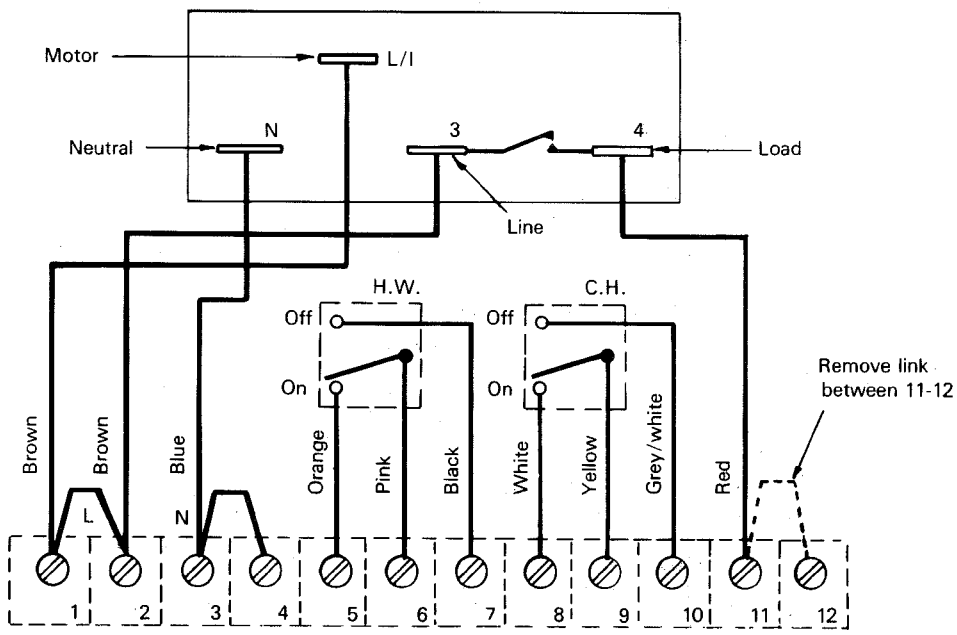
INSTALLER WIRING DIAGRAM For controlling:- Two Satchwell SM 3203 Minival with Auxiliary switches (or equivalent).



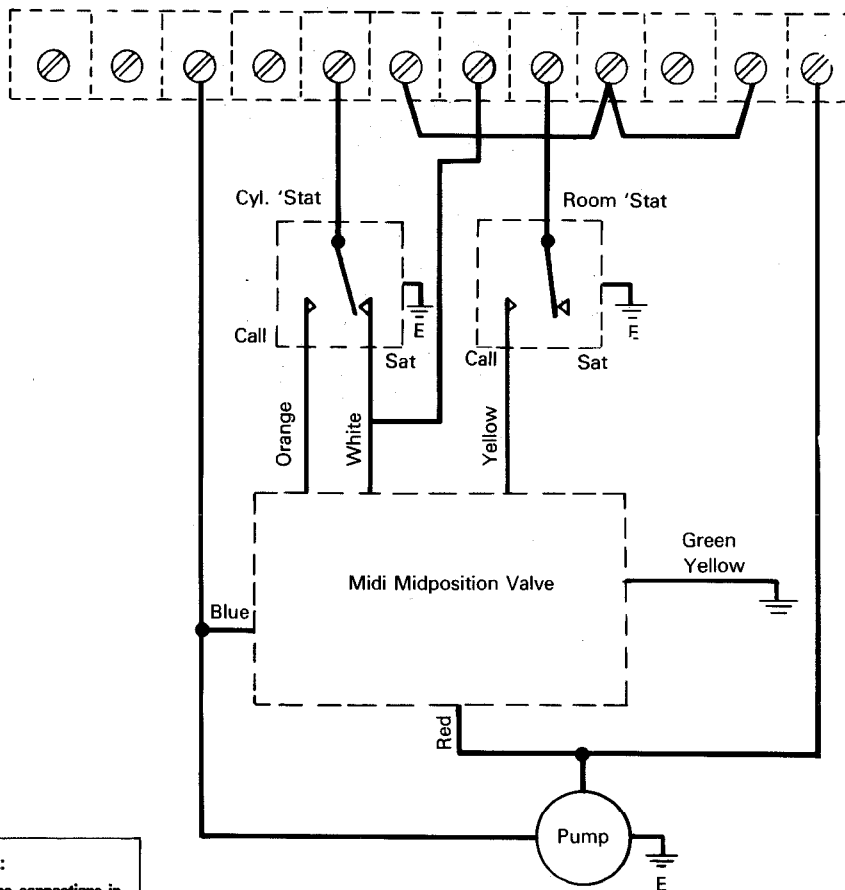
INSTALLER PLEASE NOTE:
 On Programmer Models the connections in this section of the diagram have to be made **IN ADDITION** to existing wiring supplied on the boiler.

Note: The Wiring Diagrams on pages 5 to 11 should only be used with the controls specified.

PROGRAMMER INTERNAL WIRING DIAGRAM SUPPLIED



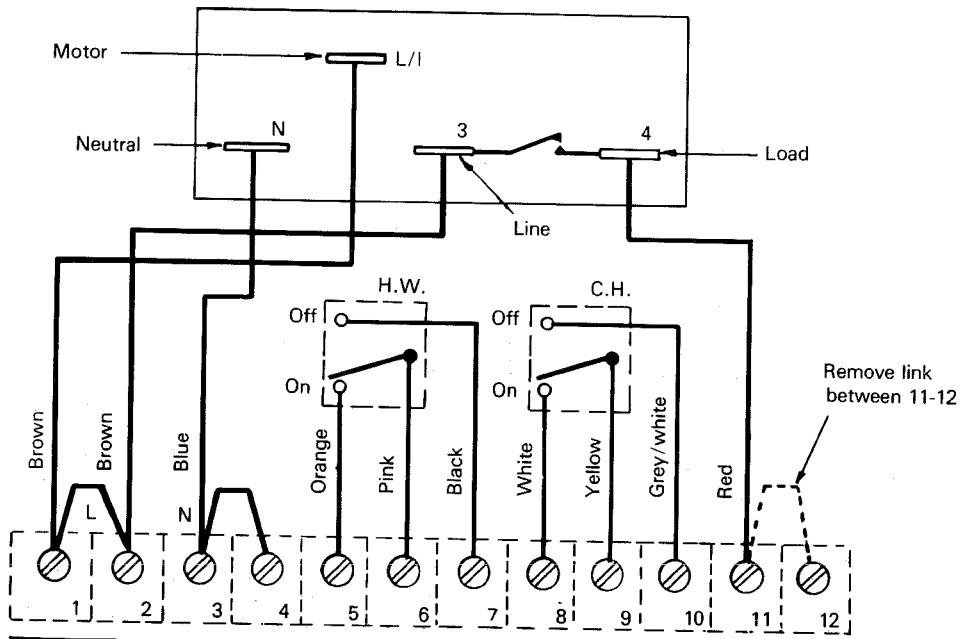
INSTALLER WIRING DIAGRAM For controlling:- Switchmaster Midi Midposition valve.



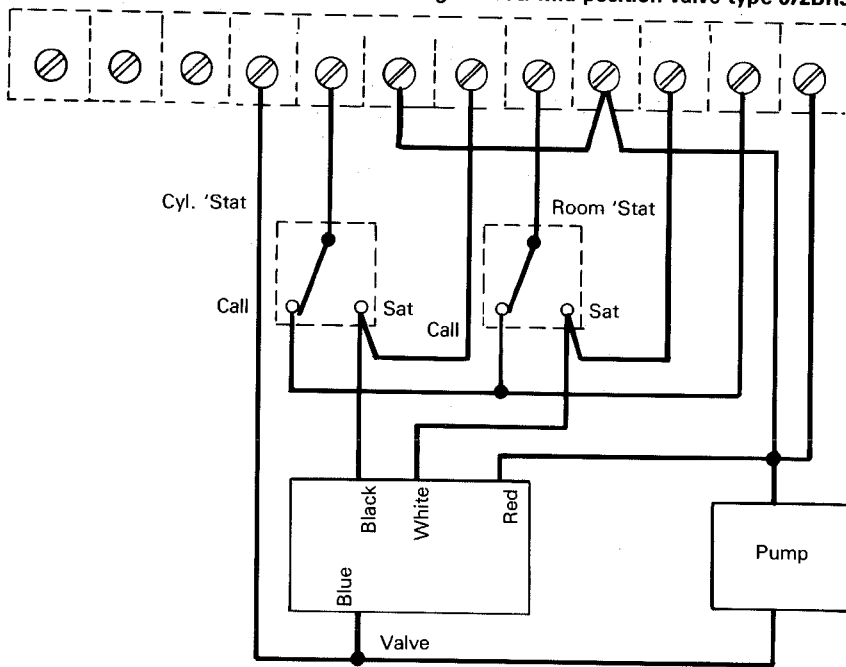
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PROGRAMMER INTERNAL WIRING DIAGRAM SUPPLIED

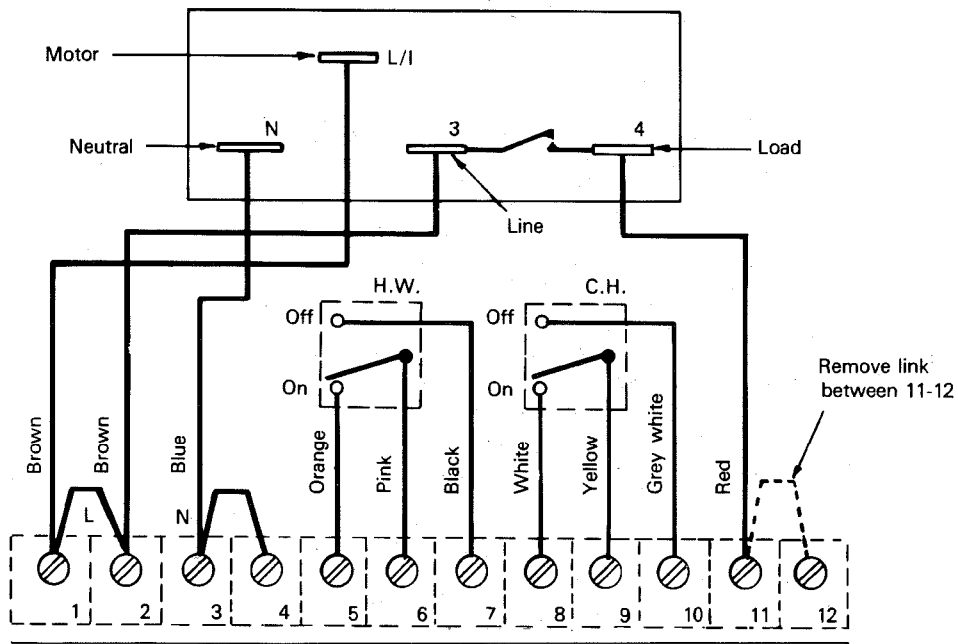


INSTALLER WIRING DIAGRAM For controlling:- A.C.L. Mid position valve type 672BR340.

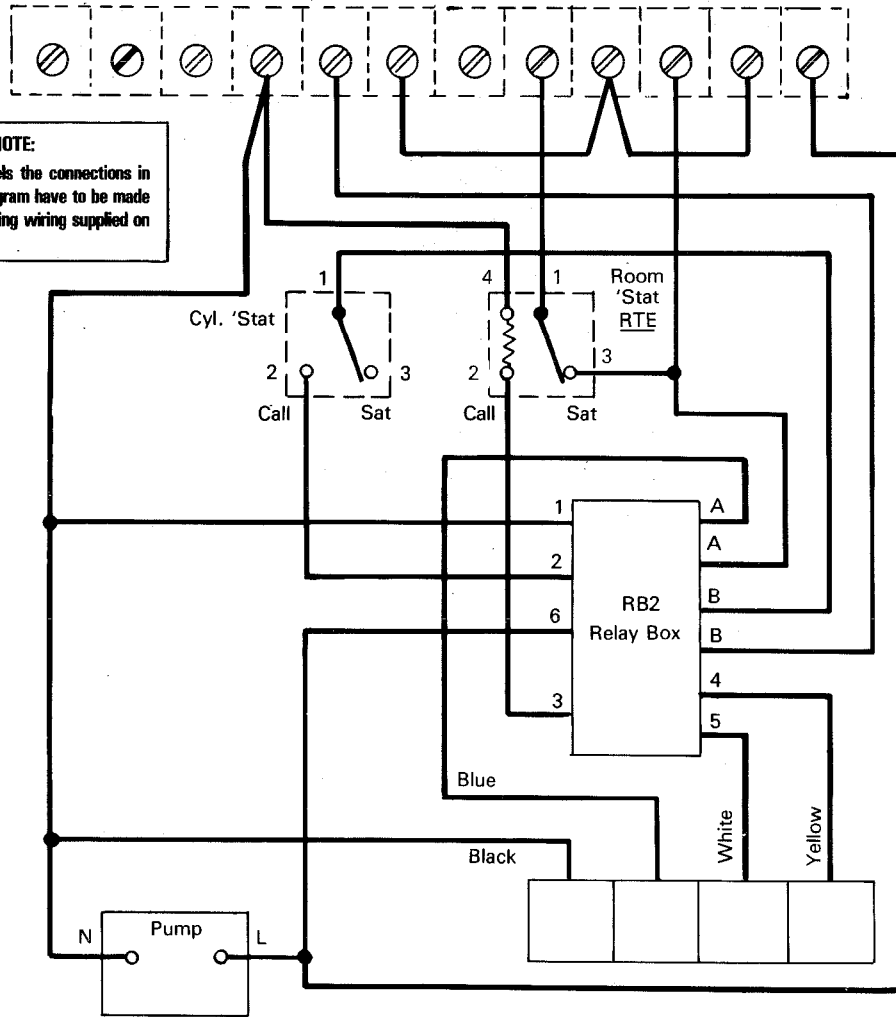


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PROGRAMMER INTERNAL WIRING DIAGRAM SUPPLIED



INSTALLER WIRING DIAGRAM For controlling:- Drayton Flow Share system.

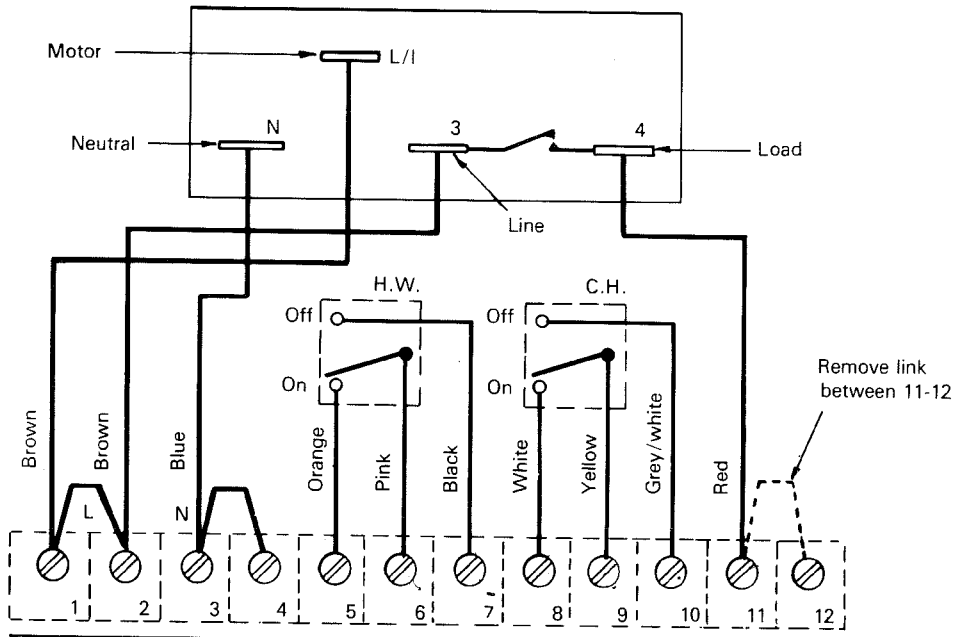


INSTALLER PLEASE NOTE:

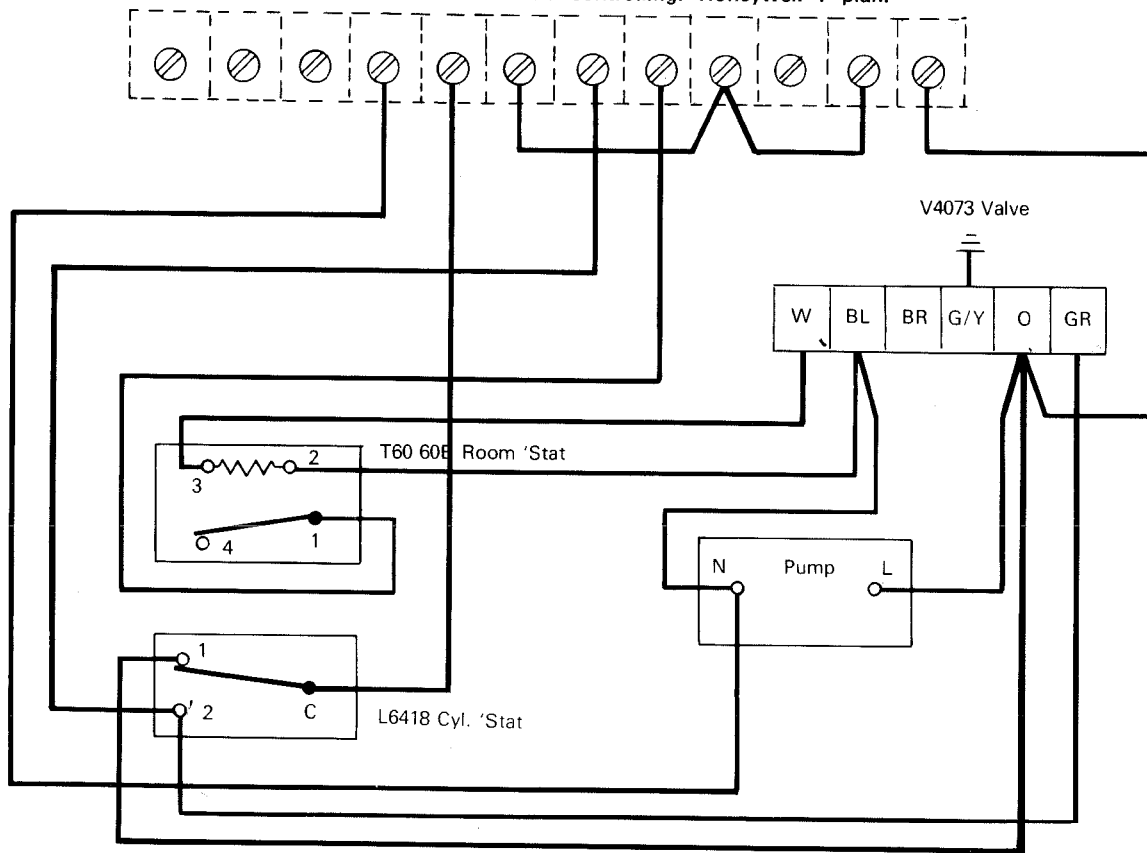
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TA/M4
Flow Share
Actuator

PROGRAMMER INTERNAL WIRING DIAGRAM SUPPLIED



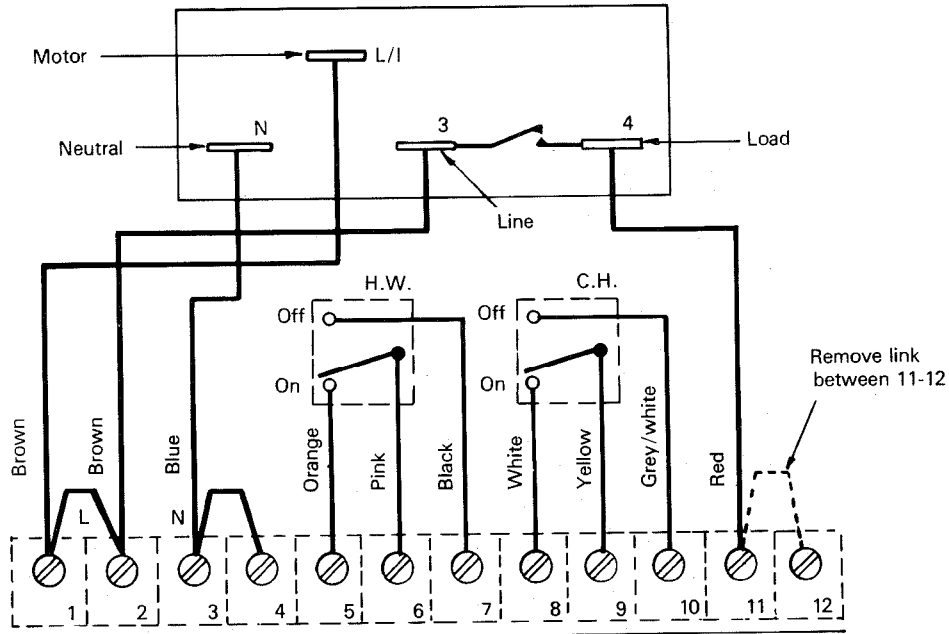
INSTALLER WIRING DIAGRAM For controlling:- Honeywell 'Y' plan.



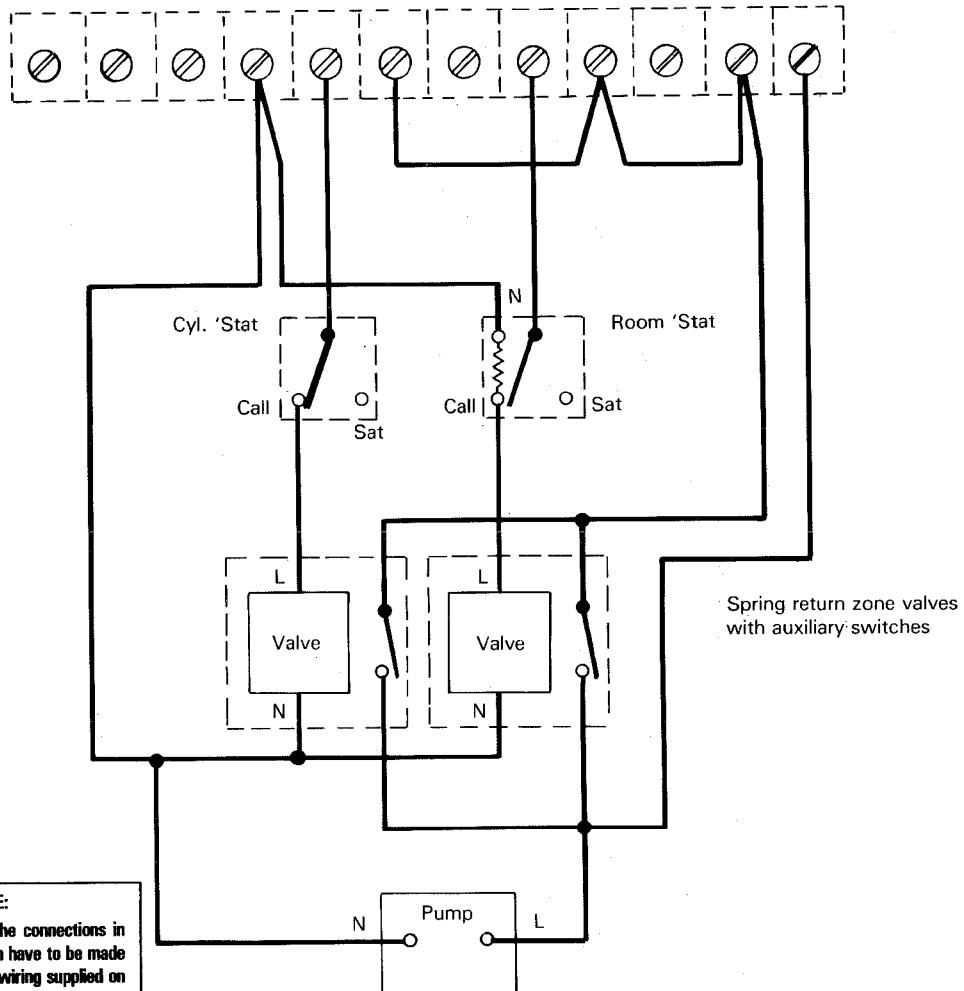
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PROGRAMMER INTERNAL WIRING DIAGRAM SUPPLIED

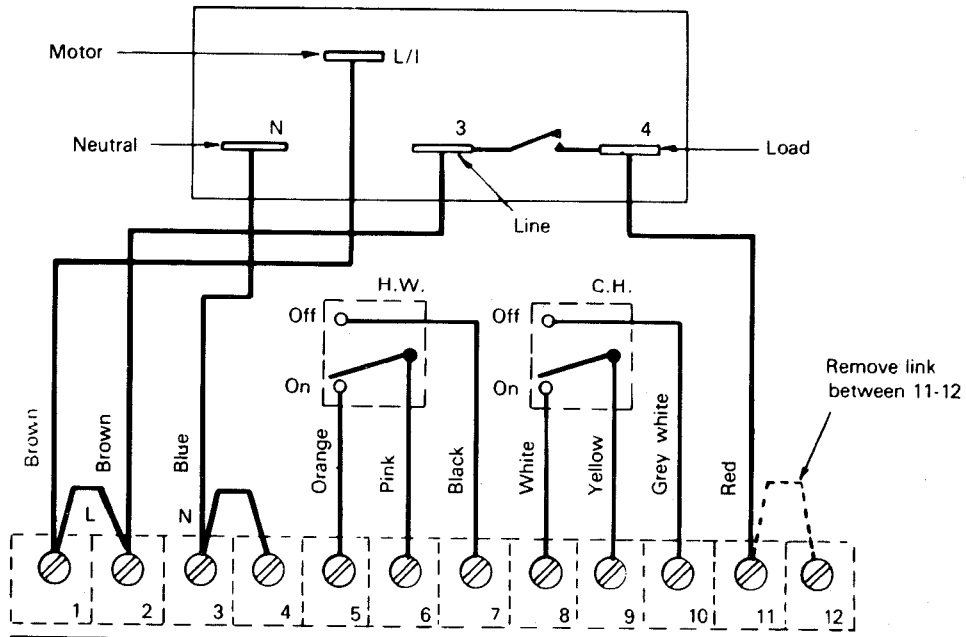


INSTALLER WIRING DIAGRAM For controlling:- Two normally closed spring return zone valves with auxilliary switches

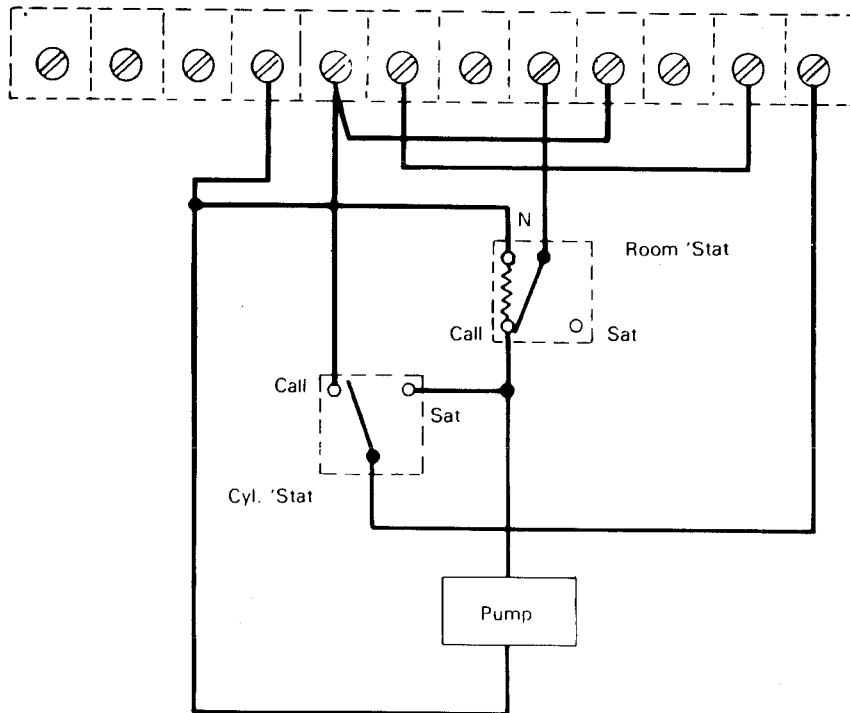


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PROGRAMMER INTERNAL WIRING DIAGRAM SUPPLIED

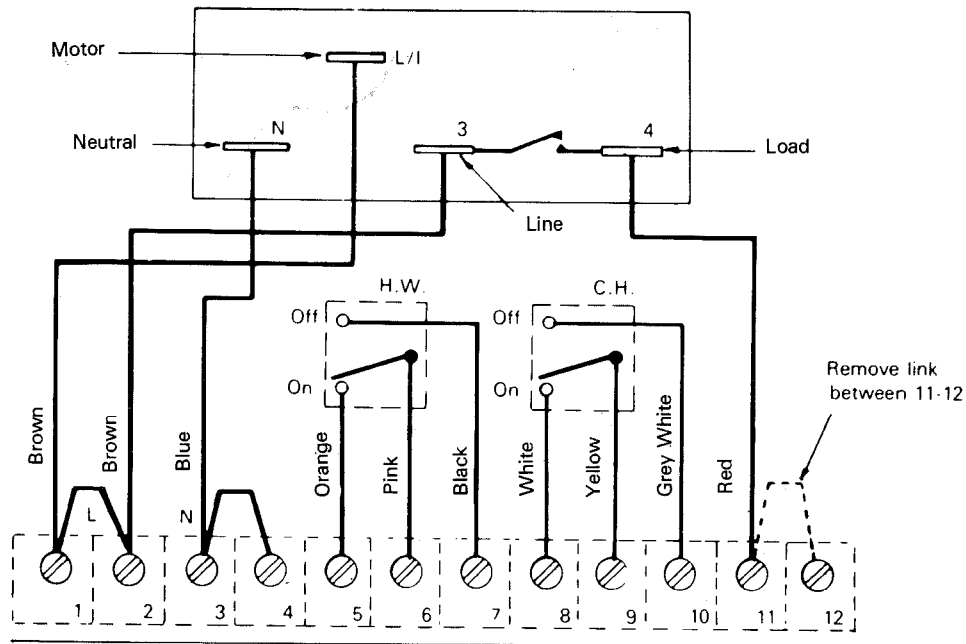


INSTALLER WIRING DIAGRAM For controlling:- Gravity system with boiler pump room 'stat and boiler 'stat (H.W. and C.H. switches are mechanically linked).

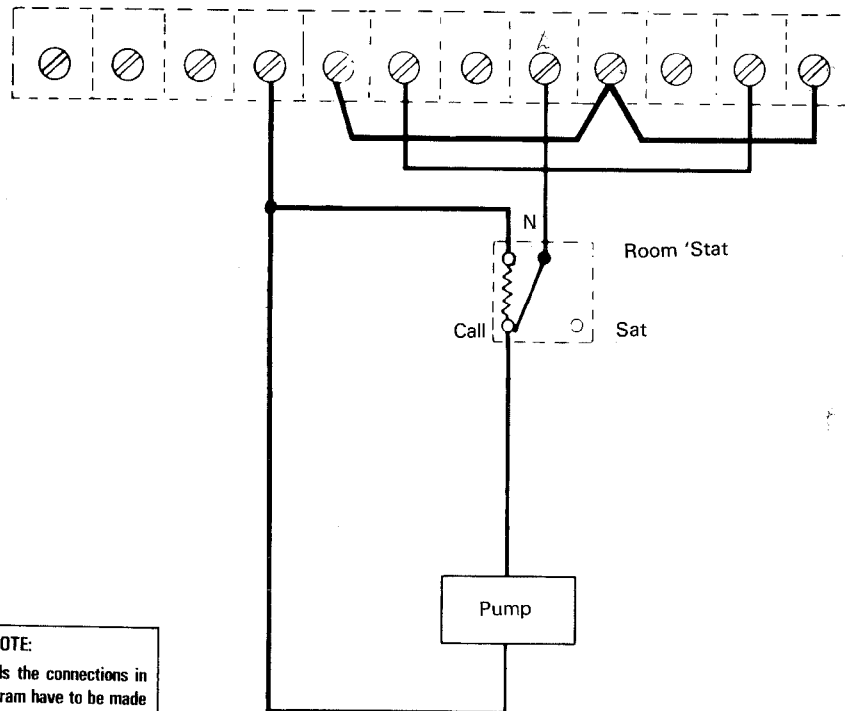


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PROGRAMMER INTERNAL WIRING DIAGRAM SUPPLIED



INSTALLER WIRING DIAGRAM Basic system. Gravity hot water (no separate control). Pumped central heating. Room 'stat controlling pump.



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IMPORTANT WHEN THE T.R.O. 12/14, 15/19, 20/25, & 28/32 BOILERS ARE FITTED WITH THE T.R. FLUE TERMINAL SILENCER ONLY KEROSENE CLASS C2 FUEL SHOULD BE USED.

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Trianco Redfyre policy is one of continuous research and development. This may necessitate alterations to this specification



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