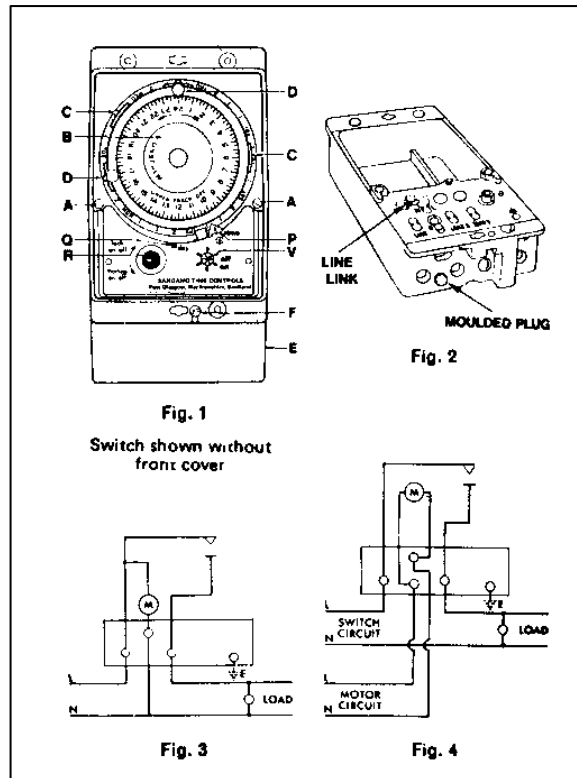


**SANGAMO 24-HOUR DIAL  
SYNCHRONOUS  
TIME SWITCHES WITH OMITTING DEVICE  
MODEL S611**



**SPECIFICATION**

Current, voltage frequency:	As shown on identification label of switch
Ambient temperature:	0-50C
Live parts:	Enclosed
Dirt protection:	Normal situations
Moisture protection:	Ordinary
Shock protection:	Class 1

**TO INSTALL**

- 1 Remove front cover by releasing the two locking keys and lift clear.
- 2 Loosen captive screws A (Fig 1) and withdraw mechanism from base.
- 3 Remove extended terminal cover E by unscrewing captive screw F and lift clear.
- 4 Secure base with three No. 6 countersunk wood screws or three No. 4 BA countersunk screws.
- 5 Connect switch to supply (See relevant wiring diagram above). Switches are supplied suitable for common motor connections (Fig 3). For independent motor connections (Fig 4), remove line link and moulded plug (Fig 2). Ensure that switch is earthed.

**NOTE:** The maximum lengths for which the cables may be bared are 0.85 in. (21.6 mm) for line and load and 0.6 in. (15.2 mm) for neutral.

- 6 Fit mechanism to base and tighten screws A.
- 7 Replace and secure extended terminal cover E.

**NOTE: On completion of installation and/or setting of switch, replace and secure front cover**

**WARNING**

**This control must be earthed.  
Terminals for fixed wiring only.**

**Provision for class A disconnection of supply to the control must be made in the fixed wiring.**

## SETTING INSTRUCTIONS

Loosen broad-headed, central screw B (Fig 1) and remove dial assembly, thus revealing the omit disc.

The omitting device permits 'on' operations or 'off' operations to be omitted as required and for part or all of any day or days of the week.

The omit disc has 14 index positions, 2 for each day of the week. The time at which the disc is indexed, is relative to the target positions C and D (Fig 1). The position of the index pins I (Fig 5) on the underside of the dial must be such that the omit disc is moved before the next target is due to operate.

To move index pins, slacken screws S (Fig 5), move pins to required position and tighten screws.

With 4 targets in use (2 'on' and 2 'off') adjust index pins so that one 'on' and one 'off' target are between them.

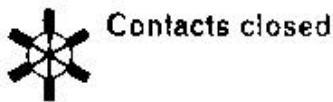
Slacken locating screws securing targets C and D (Fig 1). Move targets to required operating times, targets C against engraved scale on underside of dial and targets D against upper scale. Tighten locating screws so that targets are held firmly in position. In cases where an odd number of targets are used such as for 'early on' and early off' switches etc. the unwanted target should either be removed from the dial or parked *immediately* following a target of like nature in the same period. Replace dial assembly and tighten screw B. Turn dial in direction of arrow until the red mark 'DAY' (Q, Fig 1) indicates the correct day and period and pointer P indicates time of day at moment of setting. Allow for backlash by lightly turning dial in opposite direction to arrow.

Programme settings can be checked by rotating the dial by hand in the direction of arrow and checking the switching functions for every day of the week, by observing the 'ON/OFF' indicator (Fig 1).

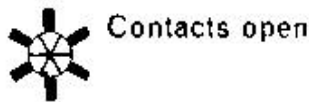
## MINIMUM PERIOD BETWEEN OPERATIONS

The minimum setting period between 'on' and 'off' targets is 15 minutes. Where additional targets are fitted, there must be at least 90 minutes between consecutive 'on' or 'off' targets.

## ON/OFF INDICATOR V (Fig 1)



Contacts closed



Contacts open

## MANUAL OPERATION

Moving knob R (Fig 1) in an anti-clockwise direction opens or closes the switch contacts, anticipating the next operation: the knob will immediately return to its neutral position.

For continuous 'ON' or continuous 'OFF' operations of the switch, set as required and as indicated on Indicator V (Fig 1) turn knob R (Fig 1) clockwise to lock: it will remain locked until the next manual operation is performed.

Note: Minimum distance of index pin from target is 45 minutes.  
If only one 'on' and one 'off' targets are used, adjust index pins to be opposite and positioned centrally between targets.

## SETTING OF OMIT DISC TAPPETS

Each tappet has 3 positions: black dot for omitting 'off' operation, red dot for omitting 'on' operation, N for neutral, operations unaffected.

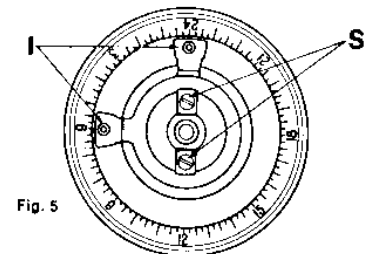
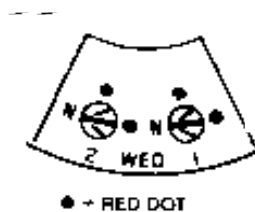


Fig. 5

## Examples of typical programmes

**PROGRAMME A**  
 1 'ON/OFF' 5 days per week  
 Omit 2 days per week  
 Monday—Friday:  
 'ON' at 05.00;  
 'OFF' at 17.30  
 Saturday and Sunday:  
 'OFF' all day

Note: Four tappets have been turned to Red on this illustration to cover the contingency of the switch being fitted with additional pins, i.e. giving 2 'ON' and 2 'OFF' operations per day.

SETTINGS FOR OMIT DISC TAPPETS		
Day	1st Period	2nd Period
Sun	Red	Red
Mon	N	N
Tues	N	N
Wed	N	N
Thurs	N	N
Fri	N	N
Sat	Red	Red

**PROGRAMME B**  
 Early 'ON' on one day per week  
 Monday: 'ON' at 5.00;  
 'OFF' at 17.30  
 Tuesday—Friday:  
 'ON' at 07.00;  
 'OFF' at 17.30  
 Saturday and Sunday:  
 'OFF' all day

SETTINGS FOR OMIT DISC TAPPETS		
Day	1st Period	2nd Period
Sun	Red	Red
Mon	N	N
Tues	Red	N
Wed	Red	N
Thurs	Red	N
Fri	Red	N
Sat	Red	Red

**PROGRAMME C**  
 Early 'OFF' on one day per week  
 Monday—Friday:  
 'ON' at 07.00;  
 'OFF' at 17.30  
 Saturday:  
 'ON' at 07.00;  
 'OFF' at 12.00  
 Sunday: 'OFF' all day

SETTINGS FOR OMIT DISC TAPPETS		
Day	1st Period	2nd Period
Sun	Red	Red
Mon	Black	N
Tues	Black	N
Wed	Black	N
Thurs	Black	N
Fri	Black	N
Sat	N	N

**PROGRAMME D**  
 Early 'ON'; Early 'OFF'  
 Monday:  
 'ON' at 05.00;  
 'OFF' at 17.30  
 Tuesday—Friday:  
 'ON' at 07.00;  
 'OFF' at 17.30  
 Saturday:  
 'ON' at 07.00;  
 'OFF' at 12.00  
 Sunday: 'OFF' all day

SETTINGS FOR OMIT DISC TAPPETS		
Day	1st Period	2nd Period
Sun	Red	N
Mon	Black	Red
Tues	Black	Red
Wed	Black	Red
Thurs	Black	Red
Fri	Black	Red
Sat	N	Red

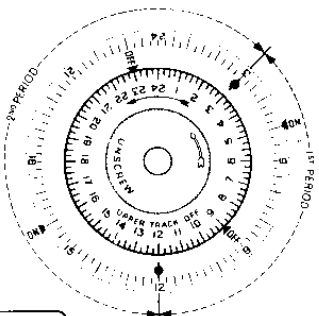
## Examples of typical programmes

**PROGRAMME E**

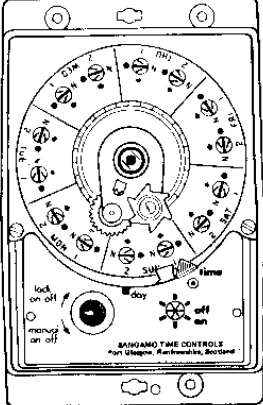
2 'ON/OFF' 5 days per week  
 1 'ON/OFF' 2 days per week

Monday—Friday:  
 'ON' at 05.00;  
 'OFF' at 09.00;  
 'ON' at 16.00;  
 'OFF' at 23.00

Saturday and Sunday:  
 'ON' at 05.00;  
 'OFF' at 23.00



◆ INDEX PINS



**SETTINGS FOR OMIT DISC TAPPETS**

Day	1st Period	2nd Period
Sun	Black	N
Mon	N	N
Tues	N	N
Wed	N	N
Thurs	N	N
Fri	N	N
Sat	Black	N

**PROGRAMME F**

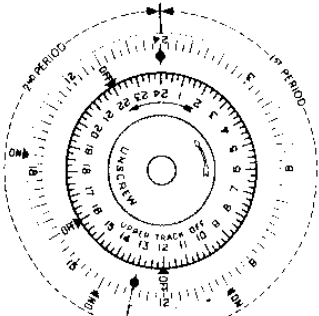
3 'ON/OFF' 1 day per week  
 2 'ON/OFF' 2 days per week  
 Omit 4 days per week

Sunday:  
 'ON' at 10.00; 'OFF' at 12.00  
 'ON' at 14.00; 'OFF' at 16.00  
 'ON' at 18.30; 'OFF' at 22.00

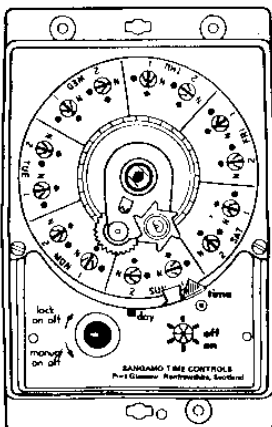
Monday and Tuesday: Omit  
 Wednesday and Thursday:  
 'ON' at 14.00; 'OFF' at 16.00  
 'ON' at 18.30; 'OFF' at 22.00

Friday and Saturday: 'OFF' all day.

Note: 6 dial targets are required for this programme



◆ INDEX PINS

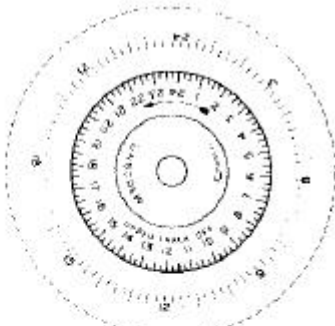


**SETTINGS FOR OMIT DISC TAPPETS**

Day	1st Period	2nd Period
Sun	N	N
Mon	Red	Red
Tues	Red	Red
Wed	Red	N
Thurs	Red	N
Fri	Red	Red
Sat	Red	Red

**SETTING YOUR PROGRAMME**

If none of the six typical programmes shown on pages 7-12 meet your exact requirements, it is recommended that the programme be worked out as follows:



Mark the accompanying illustration of the dial with the position of operation targets, and index pins. This will determine 1st and 2nd periods of each day. Complete the form for position of omit disc tappets.

Fit the dial to the switch by means of the large headed screw. Set the dial and the omit disc as described on pages 5 and 6.

Day	1st Period	2nd Period
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		

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