

CIRCULATION	GENERAL
	Suffix
PAPER	13-5-48 B
	21. 1. 43 A
SUPERSESSION NOTE ADDED REDRAWN. NOTES: TABLE 2, FIGS 3 & 4. ADDED.	
Amend.	

UNITS, AUXILIARY APPARATUS, N998¹ & N998²

FOR PROVIDING RING-OFF FACILITIES, WHEN AUTHORISED, ON PRIVATE CIRCUITS AND INTERSWITCHBOARD PRIVATE CIRCUITS, WITH GENERATOR-SIGNALLING, CONNECTED TO SWITCHBOARDS AT 3796

N998

3 PANELS-1
5-11-40

SUPERSEDED FOR NEW
WORK BY N 981

NOTES:-

- THIS DIAGRAM IS FOR USE ONLY WHEN RING-OFF FACILITIES ARE AUTHORISED (E.I. TELES. P.B.X.'s B3103 REFERS) OR ON INSTRUCTIONS OF E-IN-C (SI)
- UNLESS AUTHORITY HAS BEEN GIVEN FOR OMISSION OF EXCHANGE PROHIBITION, FIT PROHIBITION RELAY P, FIG. 2, AS FOLLOWS:-
(a) WHERE CORD-CIRCUIT RELAYS ARE No. 22, OR No. 23, USE "RELAY No. 23B" FITTED ON CORD-CIRCUIT RELAY-MOUNTING IF SPARE, OR ON A "MOUNTING No. 5B/1A"
(b) WHERE CORD-CIRCUIT RELAYS ARE No. 501, OR No. 502, USE "RELAY No. 501A" FITTED ON CORD-CIRCUIT RELAY-MOUNTING. RELAY P DISCONNECTS PRIVATE CIRCUIT BY OPERATING TO EARTH ON BUSH OF EXCHANGE JACK.
- IF AUTHORITY HAS BEEN GIVEN FOR OMISSION OF EXCHANGE PROHIBITION, OMIT RELAY P AND WIRING SHOWN - - - -, CONNECT AS SHOWN - o - o -
- ONE FUSE No. 35/1 PER 10 CIRCUITS TO BE FITTED ON SPARE FUSE-MOUNTING IN SWITCHBOARD.
- BLOCK TERMINAL No. 20/... OF SUITABLE SIZE TO BE FITTED IN SWITCHBOARD.
- BATTERY VOLTAGE TO BE NOT LESS THAN 16V.
- TERMINALS 1, 2, BATT. ETC. REFER TO U.A.A. N998¹ & ²
" (11), (12) " " " U.A.A. N998² ONLY.
- BEFORE INSTALLATION, MODIFY MARK 1 UNITS AS FOLLOWS, SEE FIG. 3:-
RECOVER CONN. FROM SPRING LL22 AT SPRING R1 (RED-SL)
" " " TAG QC2 TO SPRING LLI (BLU-BRN)
" " " SPRING LL2 TO SPRING S21 (BLU-GRN)
" " " TAG 1e TO TAG QA2 (UNITS ¹ & ² CCT 2)
OR TO TAG T1 (UNITS ² CCT 1) (SL)
CONNECT SPRING LL22 TO SPRING R2 (USE EXISTING RED-SL)
" TAG QC2 TO TAG T2
" T1 TO SPRING LL2 & TERMINAL 9 OR (19) } NOTE
" 1e " " LLI " " 8 OR (18) } IO
- MARK 2 UNITS WILL BE MODIFIED BEFORE ISSUE, BUT CANNOT BE REQUISITIONED SPECIALLY.
- 9 THICK LINES SHOW CONNEXIONS TO BE MADE OR ALTERED LOCALLY
- TERMINALS 8 & 9 DO NOT EXIST ON UNIT A.A. N998¹ MARK 1.
WHEN REQUIRED THE CONNEXIONS SO NUMBERED IN FIG. 3 SHOULD BE MADE VIA TWO "CONNECTORS, PORCELAIN."
- TO PROVIDE RING-OFF FACILITIES:-
(a) STRAP TERMINALS 6-7 AND (16)-(17) TO ALLOW RELAY LL TO LOCK.
(b) FOR SUPERVISORY-FLASHING FACILITIES ON RING-OFF, PROVIDE ONE "RECTIFIER-ELEMENT, No. 1/12A" PER "UNIT A.A. N998¹" AND TWO PER "UNIT A.A. N998²" PROVIDE ONE "UNIT, A.A. N990" PER INSTALLATION AND ONE RELAY No. 7B7B PER B.C.T'S AND CONNECT AS SHOWN IN FIG. 4 & IN DGM. N990. (E.I. P.B.X.'S. B3210)
(c) IF AUDIBLE ALARM OF RING-OFF IS REQUIRED, CONNECT TERMINAL 5 OF "UNIT A.A. N990" TO BATTERY VIA BELL, WITHOUT SWITCH.
- WHERE SUPERVISORY-FLASHING FACILITIES ARE NOT PROVIDED:-
(a) IF RE-RING FACILITIES ARE REQUIRED INSTEAD OF RING-OFF LEAVE TERMINALS 6-7 AND (16)-(17) DISCONNECTED TO PREVENT RELAY LL LOCKING.
(b) IF AUDIBLE ALARM OF RE-RING IS REQUIRED, CONNECT TERMINAL 7 OR (17) TO BATTERY VIA BELL, WITHOUT SWITCH.
- UNITS A.A. N998... CANNOT BE USED ON CIRCUITS WHICH ARE WORKED BY VOICE-CALLING, i.e. BY MEANS OF "UNITS, SIGNALLING, No. 5..." (WHETHER WITH OR WITHOUT "PANELS, SIGNALLING, No. 7")
- IF RELAY L IS OPERATED BY BATTERY AND EARTH FROM DISTANT APPARATUS, INSERT A 4 W.F. CONDENSER IN THE 'B' LINE.

TABLE I. APPARATUS SCHEDULE

ITEM	RATE BOOK DESCRIPTION
P x	RELAY No. 2311 OR No. 501A (NOTE 2)
D	" " 4431 (INCLUDED IN U. A. A. N990)
L	" " 3237
LL	" " 4477
R	" " 6779 (SEE TABLE 2)
S	" " 7187
I	COIL, RETARDATION No. 3416
BT x	BLOCK, TERMINAL No. 201.... (NOTE 5)
F x	FUSE No. 3511 (NOTE 4)
MRA, MRB	RECTIFIER-ELEMENT No. 4/6 A
MRC	" " " 1/12 A (NOTE 11(b))
QA, QB	CONDENSER, M.C. No. 101
QC	" M.C. No. 102
QD x	" M.C. No. 103 (NOTE 14)
T	TRANSFORMER, No. 48A OR 3/48A

x: TO BE REQUISITIONED SEPARATELY WHEN REQUIRED

TABLE 2. ADJUSTMENT OF SPECIAL (RED LABEL) 3000-TYPE RELAY No. 6779 MARK No. 1

SPECIAL MECHANICAL ADJUSTMENTS	CURRENT VALUES		
	CONDITION	TEST VALUES (mA)	READJUST VALUES (mA)
RESIDUAL :	20 ± 2 MILS	SATURATE	20.4
TRAVEL :	20 ± 2 MILS	HOLD	—
SPRING THICKNESS :	14 MILS	RELEASE	2.0
ADJUST SPRING 2 TO MEET CURRENT TESTS		NON-OP.	—
		OPERATE	6.0
OTHER ADJUSTMENTS TO E. I. TELES. AUTO. B 544			5.7

TEST POINTS — RELAY COIL TAGS, DISCONNECT RELAY FROM MRA (RECTIFIER-ELEMENT No. 4/6A)

FIG. 1. CONNEXIONS OF MARK I UNITS AS ISSUED (NOTE 8)



