KEYPHONES FOR PABXs WITH DC CODE C SIGNALLING

Maintenance

(This is a NEW Instruction)

1 GENERAL

1.1 This instruction deals with the maintenance of those Keyphones which have been developed to meet the telephone requirements of PABXs with DC Code C signalling. The instrument is based on the Telephone 746.

1.2 A brief description of the Keyphones and installation instructions are contained in C3 B3000.

2 DIAGRAMS Telephones SA4252, 1/SA4252, 2/SA4252 and 3/SA4252 are shown in Diagram SA(L)4252. Diagram SA(L)4252 also shows the use of these telephones for providing extension plans. Cabling of the ready-mounted push-button units, when used in conjunction with Telephone 713 and Bell Set 48A is shown in Diagram SA(L)4259. The Loudspeaking Telephone SA4255 is shown in Diagram SA(L)4255.

These diagrams are available through normal channels and may be requisitioned from THQ/AS1.1.4.

3 NORMAL STOCK Spare telephones and a stock of the relevant items listed in Table 1 of B2676 should be held at the PABX for replacement purposes. Initial quantities held should be sufficient to meet the estimated requirements of the PABX.

4 MAINTENANCE

4.1 It is essential that the A and B lines are connected to the telephone in accordance with the appropriate diagram. Reversal of the A and B connexions will result in false operation of the push-button unit.

4.2 Where items other than those detailed in Table 1 of B2676 are found faulty the telephone must be changed.

4.3 Attempts must not be made to repair or adjust faulty push-button units. In particular, the adjustment of the common microswitches MS1 and MS2 is critical and must not be interfered with.

4.4 Faulty instruments, with a completed fault label attached indicating the nature of the fault, should be returned for repair via Supplies Department in the normal way.

4.5 Faulty LSTs SA4255 should be returned for factory repair using the procedure detailed in A0015.

4.6 Maintenance queries should be directed to RHQ who will if necessary consult THQ/SvD/Sv5.3.2 (Tel 01-432 5535).

5 DISMANTLING AND REASSEMBLY

5.1 Each telephone should be maintained as a normal Telephone 746 in accordance with B2676.

5.1.1 To remove the push button unit, loosen the screw securing it to the gravity switch gantry and swing the unit in an arc towards the front of the instrument. It may then be lifted out of the slots in the bell gong plate.

6 TESTING The push-button unit may be tested using the Tester described in Para 7 or by using a meter multi-range set on the ohms scale connected between T8 and T15 for the A leg conditions and T19 and T15 for the B leg conditions. The depression of a button presents to the A and B lines the d.c. condition shown in Fig 1. On 1/SA4252 Telephones the Exchange button must be operated before testing.

NOTE: The instrument *must* be disconnected from the line before testing the push button unit, this includes removing the earth connexion.

When checking the d.c. conditions with a meter the diodes associated with the PBU may be reverse biassed (depending on the polarity of the meter leads) and it thus will be necessary to reverse the meter leads to check that some diodes are not faulty.

7 PBU TESTER Fig 2 shows the circuit diagram of a tester which has been developed for testing the PBU. If considered advantageous, the tester should be constructed locally from the following stores:-

4 - Valves Electronic, CV8805 (D1-D4)
4 - Lamps No. 41E (LP1-LP4)
4 - Batteries, Dry No. 11
1 - Key No. 68 (KC0)

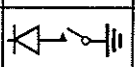
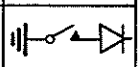
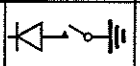
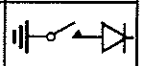
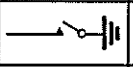
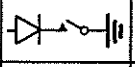
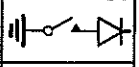
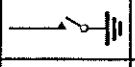
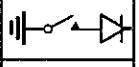
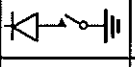
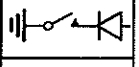
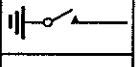
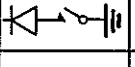
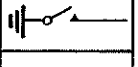
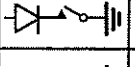
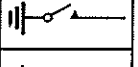
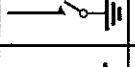
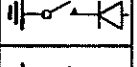
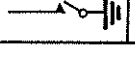
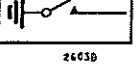
KEY	D.C. LEG	
	B LEG	A LEG
1		DIS
2	DIS	
3		
4		DIS
5		
6		
7		
8	DIS	
9		
0		
*		
#		

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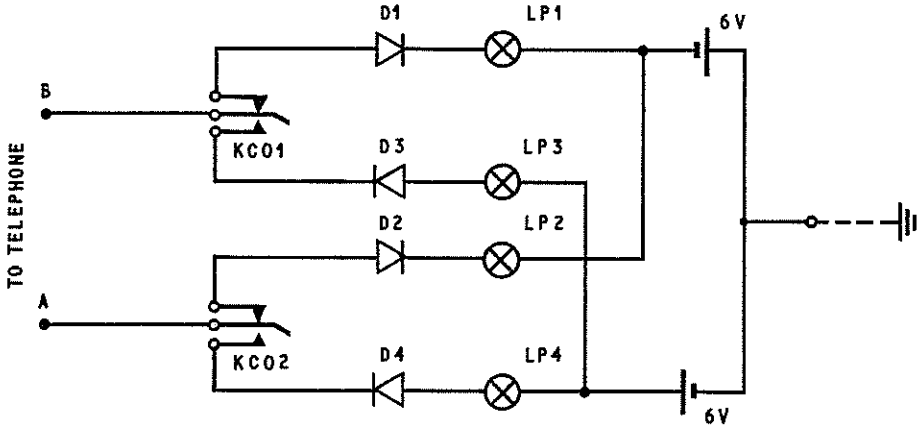
FIG 1 DC CONDITIONS FOR EACH PRESS-BUTTON



WITH BUTTON No.....DEPRESSED	WITH KEY KCD NORMAL LP.....GLOWS	WITH KEY KCD OPERATED LP.....GLOWS
1	1	–
2	2	–
3	1 AND 2	–
4	1	3
5	2	3
6	1 AND 2	3
7	1	4
8	2	4
9	1 AND 2	4
0	2	3 AND 4
*	1	3 AND 4
#	1 AND 2	3 AND 4

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FIG 2 TESTER FOR DC CODE 'C' KEYPHONES

Sv5.3.2

E N D