

**CALL OFFICES AND SUBSCRIBERS' COIN-BOX INSTALLATION
(PRE-PAY-ON-ANSWER WORKING)**

Installation of Wallboards and Associated Equipment

★[NOTE: As this Instruction has been completely revised individual paragraphs have not been 'starred']

1. Scope of Instruction.—This Instruction describes the installation of wallboards and associated equipment in Kiosks Nos. 1, 2, 3, 4 and 6, cabinets, recessed call offices, and subscribers' premises. The equipment used is described in D 3001.

2. Types of wallboard.—Table 1 lists the wallboards described in this Instruction and the circumstances in which they are used. Typical wallboards are illustrated in Figs. 1-3.

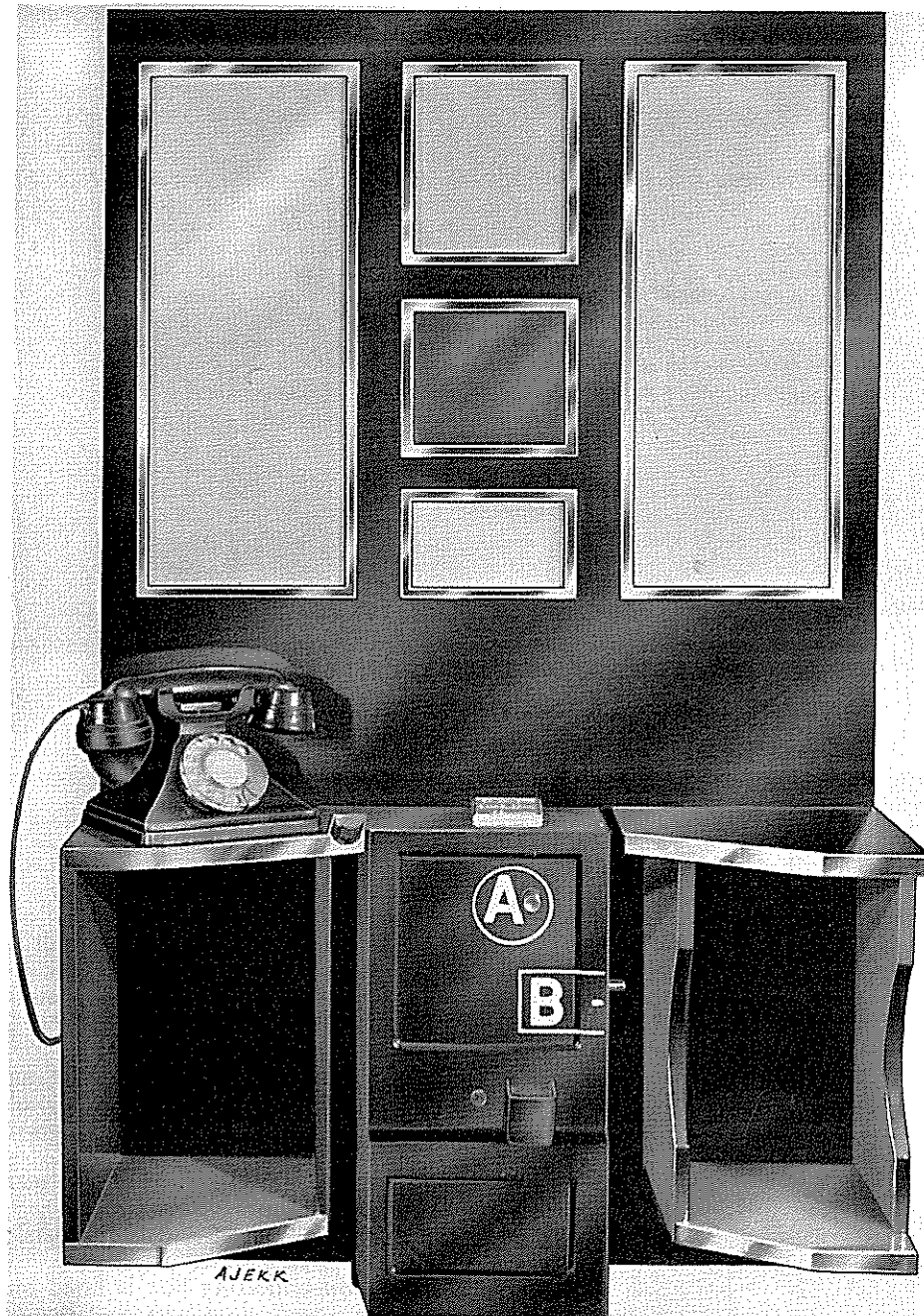


FIG. 1

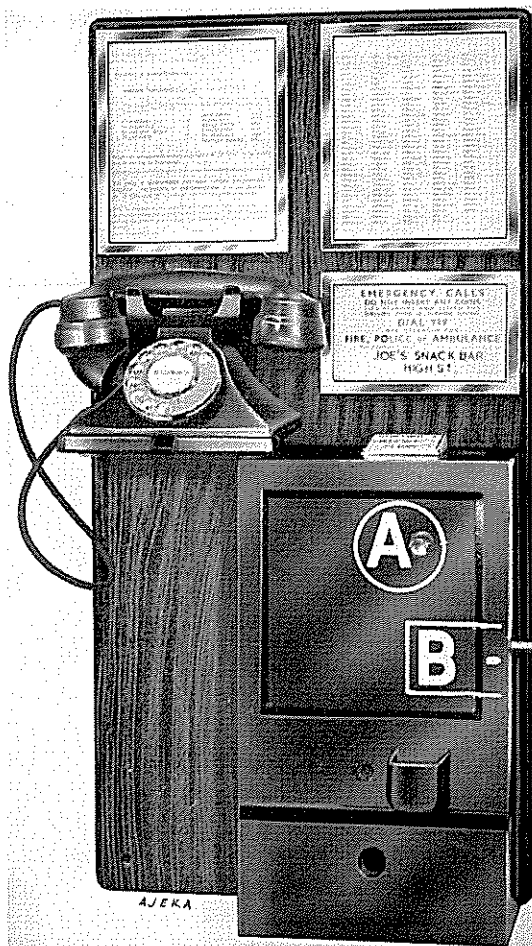


FIG. 2



FIG. 3

TABLE 1

Wallboard	Described in pars.	Illustrated by Fig. No.	Use of wallboard
D 1/60577	3-11	1	Upper wallboard for public call offices in all areas
D 2/60577	12-22	1	
	30		Lower wallboard for auto., C.B. and C.B.S. areas; also used in Plan 2G installations in magneto areas
D 1/63747 and D 2/63747	23	—	
D 90650	24-27	2	Generally similar to D 1 and D 2/60577 but 2 ft. 2 in. wide
D 90651	28	3	Used in narrow cabinets in all areas except magneto
Wallboard ...in. x ...in.	29 and 31	—	For use in subscribers' premises in the London director area and its fringe charging group where three notice frames are required
Backboards No. 1	32	—	For use in subscribers' premises (except in magneto areas) where two notice frames are required
			For use in public call offices and subscribers' premises in magneto areas
			Used where a coin-collecting box is fitted on a table or desk

WALLBOARD D 1/60577 AND ASSOCIATED ITEMS

3. This wallboard comprising the upper half of a complete wallboard assembly includes two Frames, Notice, No. 29, a Frame, Notice, No. 30 and a Frame, Notice, No. 31. Glasses No. 49 for use with the Frames, Notice, No. 29 must be requisitioned separately but the other glasses are supplied with the wallboard. The wallboard should be fitted after the lower wallboard is in position, care being taken to ensure that the tongue and groove is clean so that a close fit is obtained.

4. **Fitting in Kiosk No. 6.**—The wallboard is secured to four bosses on the back panel by screws supplied with the kiosk.

5. **Fitting in Kiosks Nos. 1, 2, 3 and 4.**—The wallboard is screwed to wooden battens on the back panel by Screws for Wood, Iron Blued Rd. Hd., $1\frac{1}{4}$ in., Size 14. In Kiosk Nos. 1 and 3 the battens are supplied with the kiosk. In Kiosks Nos. 2 and 4 Battens, Wallboard, D 60577, which include the necessary fixing screws, should be secured to bosses on the back panel.

6. **Fitting in cabinets and recessed call offices.**—The wallboard is fitted to wooden battens (4 ft. 0 in. \times 3 in. \times 1 in.) which must first be secured to the back panel by four Screws for Wood, Iron Blued Rd. Hd., $1\frac{1}{4}$ in., Size 14. The battens should be mounted vertically at $23\frac{1}{2}$ in. centres with their lower ends 2 ft. 4 in. from the floor level. (For alternative positions in recessed call offices see Drg. ES 5686.)

7. **Instruction cards and notices.**—The various instruction cards and notices are described in A 3006.

8. **Frames, Notice, Nos. 29, 30 and 31.**—The notice frames are mounted on Brackets, Mounting, DQ... and DH..., which are secured horizontally to the wallboard by screws, one at the top and the other at the bottom level of the frame. The frame, the notice, covering glass and backing of pasteboard sheet are supported by the brackets. The top of the frame engages with the Bracket, Mounting, DQ... by means of two dowels, and is secured at the bottom by two tongues which engage with a spring clip in the Bracket, Mounting, DH... Removal and replacement of the frame is affected with a Key, Frame, Notice, No. 29 the use of which is described in D 5901.

9. **Replacement of mirror.**—For security against theft, the Frame, Mirror, No. 1 is provided with four mild-steel screws, welded to it, one at each corner. These screws pass through holes in the wallboard and are secured at the back by nuts and washers. To replace a broken mirror, it is necessary to remove these nuts and washers, withdraw the frame, fit the new mirror and then replace and secure the frame.

10. **Emergency button.**—[C.B. (manual) areas only]. A Label No. 231 and Press-button G, Brass, with Watertight Barrel will be provided in the Frame,

Notice, No. 31, on the upper part of the wallboard. A suitable hole to take the barrel of the press-button and two $\frac{1}{8}$ in. starting holes for the fixing screws are already drilled in the correct position in the wallboard. To conform to the general colour scheme of the layout, a cap with the Rate Book title Part No. 1/SCA/1 is fitted over the press-button to cover up the brass flange. Part No. 1/SCA/1 includes two Screws for Wood, Brass, Rd. Hd., $\frac{3}{8}$ in., Size 4.

11. **Method of securing the press-button, cap and emergency label.**—Remove the Frame, Notice, No. 31 and recover the glass completely (the glass is not required where the emergency button is fitted). Label No. 231 should then be placed in position, and the press-button passed through the hole in the label and the corresponding hole in the wallboard. The cap should then be placed over the flange on the press-button and the whole secured by means of the two screws supplied with the cap. The frame should then be replaced.

WALLBOARD D 2/60577 AND ASSOCIATED ITEMS

12. This wallboard comprising the lower half of a complete assembly includes a Container No. 1 and a Container No. 2 for housing directories and parcels. It carries a coin-box container mounted centrally between them and a telephone on the top shelf of the left-hand container. Before the wallboard is secured the telephone should be fitted (see par. 15) and the telephone cord, line wires, and earth wire threaded through the hole provided. In Kiosks Nos. 2, 4 and 6 (Mk. 1) the precautions described in C 5905 should be taken where it is considered that damage may be caused by attempts at forcible removal of the coin box.

13. **Fitting in Kiosks No. 6.**—The wallboard is secured to four bosses on the kiosk back panel by screws supplied with the kiosk. In Kiosks No. 6 (Mk. 2) the coin box is secured to a further four bosses (see par. 16). An earth wire should already be bolted to the central boss (see C 3001).

14. **Fitting in Kiosks Nos. 1, 2, 3, 4, cabinets and recessed call offices.**—The wallboard should be secured to battens on the back panel by four Screws for Wood, Iron Blued Rd. Hd., $1\frac{1}{4}$ in., Size 14. When fitted, the top faces of the containers should be 3 ft. 8 in. from the floor. Pars. 5 and 6 describe the fitting of the battens.

15. **Telephone.**—The telephone is fitted to the top shelf of the left-hand container of the wallboard, in which seven holes are provided for the purpose. The type of telephone to be fitted is shown in D 3001. The telephone is supplied without the base and it is necessary to requisition one Part No. 1/SBA/1. This base should first be secured, by means of the four screws which are supplied with it. The body of the telephone should then be placed on the base and

secured by means of the two trapped screws in the base; access to these screws is gained through the two holes provided in the shelf. The telephone cord should be passed down through the remaining hole in the shelf, thence through the back panel of the wallboard inside the receptacle, along the back of the wallboard, and into the coin box through the hole in the back of the box.

* 15.1.
2w para.
2 page.
..1.
B-1.
5.2.66.

16. **The coin-box container.**—In a Kiosk No. 6 (Mk. 2) the coin box is mounted on the wallboard in the following manner:—The $\frac{5}{16}$ in. \times 2 in. grub-screw supplied with the kiosk should be screwed through the top left-hand coin-box fixing hole in the wallboard into the boss on the back panel and tightened, using a screwdriver (this grub-screw should have been left in position by the kiosk erection party). The container is then hung on the grub-screw while three $\frac{5}{16}$ in. bolts (Boxes C.C., Parts: Bolts No. 2A which are requisitioned separately) are screwed through the wallboard and tightened with a Spanner, Box, No. 5. The nuts and washers supplied with the bolts should be discarded, except for one nut and washer, which are used on the grub-screw, to complete the fixing of the container. An entry hole in the back of the coin box aligns with the hole in the wallboard through which the line and earth wires have been run. In other installations, except where precautions against forcible removal have been taken (see par. 12), the coin box should be bolted to the wallboard using the bolts requisitioned with the coin box before the wallboard is fitted. The bolts should be fitted with their heads on the coin-box side of the wallboard and tightened with a Spanner, Box, No. 5 and a Spanner, Box, No. 5A.

17. **Box C.C., Parts: Lock No. 39.**—A Lock No. 39 should be fitted to the mechanism compartment front. The position of the bolt-retaining bar should be carefully adjusted so that the lock operates smoothly. On early type boxes the bar is held by two screws, the heads of which are in the cash compartment; by slackening these screws the position of the bar can be adjusted, after which the screws should be fully tightened. On the later type coin boxes the bar is held by two screws having heads countersunk into the bar, and these should be slackened sufficiently to allow the bar to be adjusted and then be retightened. Excessive slackening should be avoided as this may cause the securing bar in the cash compartment to drop off. Before leaving an installation the fitter should satisfy himself that the cash compartment is secured by the lock provided. D 3005 describes the provision of locks and keys.

18. **Bell-set and mechanism.**—The appropriate bell-set (see D 3001) is mounted in the coin-box container as follows:—

The three fixing screws provided with each bell-set are temporarily secured by a few turns only into the holes provided in the back of the coin-box container. The three keyhole slots in the bell-set base plate are fitted over the screws, so that the slots are behind the

heads of the screws and the weight of the bell-set is taken by the bottom of the mechanism compartments. The screws are then tightened. The telephone cord, line wires, and an earth wire should pass through the hooded hole provided in the centre of the bell-set base plate, and be connected in accordance with the appropriate diagram. *NOTE:*—The line wires must run directly to the bell-set, with no intermediate connecting point, except when a protector is necessary (see par. 21).

The mechanism is fitted by placing its hinge pins in the holes in the lugs on the right-hand side of the coin-box container. In prepayment types the plugs on the mechanism must be aligned with the jack on the bell-set. This is done by slackening the two screws securing the plug-mounting bracket to the mechanism, and by mating the plug points with the correct jacks as the mechanism is swung into the container. When the mechanism is fully home, the bracket-fixing screws are retightened; after this the plug should engage correctly whenever the mechanism is swung in.

It is necessary to connect an earth to the mechanism frame by running a wire between the earth tag on the spring-set assembly block to spring No. 8 or No. 11 of the spring-set. See the appropriate wiring diagram.*

* 18.1.
19. **Batteries.**—When a local battery telephone is to be provided, Cells, Leclanché, R40 should be fitted at the back of the left-hand container; the space available is insufficient to accommodate cells larger than type R40. The cells should be protected and hidden from view by a Partition D 60967 (see par. 20) which is secured to the container in front of the cells. Where only two cells are provided, they should stand vertically; where three cells are necessary, however, they should be placed on their sides one above the other. The cells should rest on the rubber mat supplied with Partition D 60967. A hole for leading-in the battery wires should be drilled in a suitable position in the back of the wallboard. (For this purpose, and whenever small holes need to be drilled in the wallboard locally, a twist drill will be found to be more satisfactory than a carpenter's bit.)

20. **Partition D 60967.**—This is a sheet of plywood 1 ft. $0\frac{7}{8}$ in. \times $7\frac{3}{8}$ in. provided with clips, a black leather tab and a locking screw. Two metal angle strips (one of which has a tapped hole to engage the partition locking screw), the necessary fixing screws and a small rubber mat are also included.

The two metal angle strips should be screwed vertically one to each side of the container, the front edges of the strips each being $2\frac{3}{4}$ in. from the back edge of the side; the strip carrying the tapped hole which engages the locking screw should be fixed on the right, and the other strip on the left. The partition can then be placed in position with the clips engaging the left-hand metal strip, and secured by means of the locking screw. The black leather tab is provided to assist in the removal of the partition.

* new para.
see page 4.1.

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CALL OFFICES AND SUBSCRIBERS' COIN-BOX INSTALLATIONS
(PRE-PAY-ON-ANSWER WORKING)

Installation of Wallboards and Associated Equipment
(Additional pars. 15.1 and 18.1)

15.1. Provide acoustic shock suppression by wiring two Rectifier-elements No. 101, in parallel but in reverse directions, across the receiver terminals in the transmitter compartment of the Telephone No. 164. The rectifiers should be suitably insulated to prevent contact with the transmitter.

18.1. Where a Bell-set No. 45 is used, disconnect and insulate the wires from the two Rectifier-elements No. 101 mounted on the bell-set.

[The main Instruction should be suitably annotated pending reissue]

21. Protector.—When a protector is necessary, a Protector and Fuse No. 1½ should be provided. It should be screwed to the wallboard inside the left-hand container with its length horizontal, touching the right-hand side of the container and with its uppermost edges as near as possible to, but not obscuring, the leading-in hole for the telephone cord. After the base of the protector has been screwed in position, three ¼ in. holes should be drilled through the wallboard for the entry of the two leads and earth wire, the respective holes in the base of the protector being used as a template (Dgm. EC 1851 refers). The protector should be hidden from view by a Partition, D 60967, fitted as described in par. 20.

NOTE:—A terminal block must *not* be inserted at the lead-in point, since this would facilitate those methods of fraud which require access to the line wires.

22. Directories.—The directories will normally be placed in the right-hand container. In London both containers may be used.

WALLBOARDS D 1/63747 AND D 2/63747

23. These wallboards are similar in layout to the D 1 and D 2/60577, including the same notice frames and Containers No. 3 and 4 but are 2 ft. 2 in. wide. Two 3 ft. 10 in. × 3 in. × 1 in. wooden battens should be fitted to the back panel of the cabinet. The wallboards should be fitted to the battens in the manner described in pars. 6 and 14. When securing the battens to the back panel care must be taken to ensure that when the wallboard is secured in its correct position the battens are completely hidden so as not to spoil the general appearance of the layout.

WALLBOARD D 90650
AND ASSOCIATED ITEMS

24. This wallboard for use in subscribers' premises is 15 in. wide and 30 in. high and includes two Frames, Notice, No. 30 for instruction cards and one Frame, Notice, No. 31 for the emergency notice.

All notice frames are complete with glass, paste-board sheet and mounting brackets. The Frames, Notice, No. 30 are secured by a Bracket, Mounting, DH, 6½ in. at the top and by a Bracket, Mounting, FC at the bottom. The lower bracket provides a 'snap off/on' action for the frame, to enable the subscriber to replace the instruction card as necessary. The frame may be removed by pulling the lower end clear of the bracket and then lifting the frame so that the lugs at the upper end are removed from the top bracket. Frames No. 30 which have this method of removal can be identified by the two holes which are visible in the top edge of the frame. The Frames, Notice, No. 31 are held by a Bracket, Mounting, DQ, 6½ in. and Bracket, Mounting, DH, 6½ in. They require a Key, Frame, Notice, No. 29 for the removal of the frame (see D 5901). The wallboards have an ebonized finish and are drilled for the cable holes, an emergency button (fitted in the manner described in par. 10), the fixing screws of a Bracket, Telephone, No. 12 (Screws for Wood, Steel Japanned Rd. Hd., ½ in., Size 8) and three of the bolts for the coin-box container. The 4th bolt hole of the coin-box container coincides with one of the four holes provided for securing the wallboard to the wall. The top two fixing points are concealed behind the notice frames. Directory holders are not included in the wallboard.

25. Associated items.—The type of telephone and coin box to be used is given in D 3001. The remainder of the associated items are listed in Table 2.

TABLE 2

Item	When required
1 Bracket, Telephone, No. 12	Except when the telephone is to stand on a table
1 Part No. 1/SBA/2	When the telephone is fitted to a Bracket, Telephone, No. 12
1 Base, Telephone, No. 1/162, Black	When the telephone stands on a table
1 Box, Battery, No. 3 2 Cells, Leclanché, R40	In local battery installations
1 Press-button G, Brass with Waterproof Barrel 1 Labels No. 231 1 Part No. 1/SCA/1	In C.B. areas when emergency calling facilities are required

26. **Fitting.**—The wallboard should be secured to the wall by four Screws for Wood, Iron, $2\frac{1}{2}$ in., Size 12 so that the top of the coin-box container is 3 ft. 8 in. from the floor level.

27. **Protectors.**—The protector must be fitted in the usual position near the point of entry of the lead-in, but it should be as inaccessible as possible to a user of the coin box, and it may be desirable, therefore, to select the point of entry with this requirement in mind.

WALLBOARD D 90651 AND ASSOCIATED ITEMS

28. This wallboard is 15 in. wide and $25\frac{3}{4}$ in. high and includes one Frame, Notice, No. 30 and one Frame, Notice, No. 31. It is otherwise similar to the Wallboard D 90650 and the instructions given in pars. 24–27 apply.

MISCELLANEOUS

29. **Public call offices in magneto areas.**—Apparatus wired to Dgm. N 2409 is standard for all public call offices in magneto areas. The layout should conform to the following diagrams:—

Kiosks Nos. 1 and 3	EC 1588
Kiosks Nos. 2 and 4	EC 1587
Kiosk No. 6	EC 1852
Cabinets	EC 1586

In a Kiosk No. 6 (Mk. 2) it will first be necessary to obtain locally two 3 ft. 10 in. \times 3 in. \times 1 in. planed wooden battens and secure them to the tapped bosses on the back panel of the kiosk. The bottom of both battens should be about 2 ft. from the floor; suitable screws for fixing the battens are supplied with the kiosk. The equipment should be mounted on a Wallboard, 48 in. \times $29\frac{3}{4}$ in. as shown on Dgm. EC 1852. The completed wallboard equipment should be secured to the battens with six Screws for Wood of suitable size, in such a position that the bottom edge of the Bracket, Telephone, No. 12 is 4 ft. from the floor. The battery of two or three Cells Leclanché, R40 (according to requirements) should be housed in a Box, Battery, Leclanché, WK4, 2-cell, C.O. mounted on a Wallboard, 12 in. \times 7 in. and secured to the back panel of the kiosk, as shown in Dgm. EC 1852. The four holes for securing the wallboard should be drilled and tapped $\frac{1}{4}$ in. Whitworth locally. The conduit carrying the telephone leads should be fitted with a tee piece behind this wallboard to accommodate the battery lead. If considered desirable, the method described in C 5905 for fitting the coin box should be adopted.

30. **Plan 2G.**—When a Plan 2G is installed in a kiosk, cabinet or recessed call office, Drg. EC 1851 should be followed, except that, due to the absence of a coin-collecting box, it will be necessary to bridge the gap between the two containers on the Wallboard D 2/60577. A Desk No. 19 is used for this purpose, and is fitted in the following manner:—

The desk is positioned with its top level with the upper face of the containers, and its back flush with the

wallboard. It should be secured (using the screws provided), first to the side of the left-hand container, and then to the underside of the top of the right-hand container.

The Block, Terminal, No. 20/4 required with this arrangement should be fitted in the back of the left-hand container; the slack of the Cord, Instrument, No. 3/99BN, 26 in. should be pulled through into this container and protected by the Partition D 60967.

31. **Subscribers' installations in magneto areas.**—The equipment should be mounted on a Wallboard ... in. \times ... in. The smallest size consistent with the necessary equipment being mounted neatly should be used. A desk should not be provided. The instructions regarding notices given in A 3006 should be followed.

32. **Backboard No. 1.**—The backboard which is bolted to the coin-collecting box is used to conceal the wiring taken into the back of the coin box.

33. **Preparation of wallboards at a central depot.**—Except in a Kiosk No. 6 (Mk. 2) it may be advantageous to mount the equipment on the wallboard and carry out wiring and testing at the local installation centre. Since a fully equipped lower wallboard for a public call office weighs approximately 65 lb. and is to be fitted in a confined space, a procedure for fixing them in position to suit local conditions which would avoid danger of injury to the staff must be specified by the responsible supervising officer.

ADJUSTMENTS AND TESTS TO BE APPLIED AFTER INSTALLATION

34. Accurate adjustment of the coin-box mechanism is essential for efficient operation and consequently the staff employed on this class of work should be familiar with this apparatus and this Instruction.

35. **Minor repairs to apparatus.**—The apparatus should normally be received in good condition and if minor adjustment or repair is necessary this may be done on site; otherwise the item should be changed for a good one and the defective item suitably labelled with a report of the fault should be returned to the Supplies Dept. or overhaul centre.

36. **Coin-box tokens.**—Tokens, Coin-box, No. 4 may be used for testing the coin-box mechanism. The serial number of each token deposited in a coin box must be recorded.

37. **Use of 'temporary out of service' notice—T 431G.**—If for any reason it is not possible to open a public call office for service immediately after the fitting work has been completed a notice T 431G should be exhibited and should be recovered when the installation is brought into service.

38. **Postpayment coin-collecting box mechanisms.**—The functional tests to be applied to confirm that the mechanism and telephone apparatus are in a satisfactory condition to put into service are detailed in

TESTS & INSPECTIONS, Routine, S 5206. Any adjustment necessary as a result of these tests should be made in accordance with D 5001.

39. Prepayment coin-collecting box mechanisms.— These mechanisms will be received from the Supplies Dept. in a partially-adjusted condition, i.e. the balance weight and the spring-set associated with the balance arm (Spring-set No. 2, Dgm. N 1167) will require to be adjusted locally. The adjustment to be made will depend upon whether the mechanism is to work in an automatic or a manual exchange area, as follows:—

(a) *Automatic area.* The lever spring is required to 'break' from the right-hand contact when the balance

arm is operated. The method of adjustment is detailed in D 5001. Functional tests which should be applied after adjustment of the spring-set are described in TESTS & INSPECTIONS, Routine, S 5207.

(b) *Manual area.* The lever spring is required to 'make' with the left-hand contact when the balance arm is operated. The method of adjustment is detailed in D 5001. Functional tests to be applied after adjustment of the spring-set are described in TESTS & INSPECTIONS, Routine, S 5206.

40. Broken glass.—Any broken glasses in public call offices should be reported to the maintenance control and changed or made safe so that injury to members of the public is not possible.

References:—A 3006, C 3001, C 5905, D 3001, D 3005, D 5001, D 5901
(S1/2) TESTS & INSPECTIONS, Routine, S 5206, S 5207

END