CALL-OFFICE INSTALLATIONS

Maintenance Procedure

*[*NOTE:- *As this Instruction has been completely revised, individual paragraphs have not been "starred"]*

1. General. Call-office installations, especially those in public kiosks, are subject to considerable wear and tear. In many instances, the equipment is very heavily worked by sheer volume of traffic; in addition, the equipment and fabric of a call-office suffer at the hands of irresponsible users. In order, therefore, that a call-office may not give a bad impression to the users, it is important that a high standard of maintenance be given.

2. Instructions relating to the maintenance of all call-office installations:-

Adjustment of coin-box mechanisms and relays		(D 5001 (D ~~5902~~ 5011
Call-office circuit description - Auto. areas		A 4001
" " " " - C.B. areas		A 4002
" " " " - Postpayment areas		A 4003
Containers, Cash, No. 2: maintenance		A 5902
Crediting of test or service calls	Stations,	A 6901
Faint ringing of "Bell No. 59A" on subscribers' circuits		A 3955
Handset telephones: maintenance information	Stations,	A 5252
"Hinges Brass No. 2": arrangements for repair		C 5907
"Keys, Frame, Notice No. 29": use for removing notice frames		D 5901
Lighting equipment: maintenance information	POWER, General,	C 5501
Locks and keys for coin-boxes and Containers, Cash, No. 2		D 3005
Prevention of interference by children		C 5906
" " malicious obstruction of coin-chutes		C 5903
Preventive measures to reduce damage to glazing		C 5904
Renovation of fabric, telephone, fittings etc.		A 5901
Responsibility for maintenance		A 5001
Schedule of maintenance routines	TESTS & INSPNS., Routine,	S 5011
Sealing of unused cable-entry holes		C 3901
"Springs, Door-closing, No. 5": fitting in Kiosk No. 1		C 5902

3. Procedure for engineering officers observing the necessity for repairs to the fabric and fittings in kiosks or cabinets. An officer visiting a kiosk or cabinet and observing that some repair of the fabric is required, e.g. door fitting, should report details to the Maintenance Control. If the nature of the defect is such as to be a danger to the public (e.g. broken glass, or a door-closer without a check action), he should take any action necessary to leave the call-office in a safe condition and report the action taken.

4. Lighting. Engineering officers should make a practice of checking the lighting each time a kiosk is visited. Any trouble which cannot be corrected should be reported to the Maintenance Control.

5. Tokens for testing coin-box gong signals. "Tokens, Coin-box, No. 4" are provided for testing only the 1*d* chute and the wire-gong signal; 6*d* and 1/- tokens are not supplied and maintenance officers should, if possible, use coins to verify the correct operation of the 6*d* and 1/- gong signals by noting that a 6*d* piece strikes the gong once and that 1/- strikes it twice, the test being made with the mechanism withdrawn to prevent the coins being deposited in the cash-box. If the coin-box transmitter is found to function correctly when testing the 1*d* gong signal, it may be assumed that it will be satisfactory for transmitting the 6*d* and 1/- gong

signals also. "Tokens, Coin-box, No. 4" are numbered serially, and details of the recording procedure involved are given in STORES, Office Procedure, A 0061. Any tokens which are deposited in a cash-box at a public call office will, after recovery by the collectors, be returned promptly to the issuing officer. If a subscriber's coin-box is concerned, the subscriber should be requested by the maintenance officer, at the time of the visit, to open the cash-box and return the tokens to the officer. The maintenance officer should not ask for, nor accept, the key of the cash-box to recover the tokens himself.

6. Official telephone calls. If it is necessary to make an official call from a coin-box line in an automatic area to a number on which metering would take place (see Stations, A 6901) the call must be obtained by dialling '0' and asking for a service call. It is important to adhere to this procedure to avoid causing accounting discrepancies. Alternatively in a public call office tokens may be used.

7. Interference with coin box. Any officer who sees evidence of interference with a coin-collecting box for the possible object of fraud or theft should report the matter to the Maintenance Control who should advise the Clerical Divn. (Call-office duty) by telephone at the earliest opportunity.

Supervising officers should ensure that their staff are aware of this instruction and that a record of the telephone number of the Call-office duty to which reports should be made is held at the Maintenance Control.

8. Money found in mechanism compartment.

(a) Public Call-offices. When money is found in a mechanism compartment, the coins should be inserted in the cash container and the fact should be immediately reported to the enquiry operator, obtained by dialling '0' and asking for "Supervisor". The officer should inform the enquiry operator of the amount of money deposited. If the amount of cash already in the container is such as to prevent the insertion of further coins, the officer should state the amount not inserted and tell the enquiry operator that he will report its insertion later in another call-office. This must be done without delay, and the enquiry operator advised of the number of the call-office in which the money was found and also the number of the call-office in which it is deposited.

Full cash containers must always be reported to the enquiry operator irrespective of whether loose coins have been found.

(b) Subscribers' Coin-collecting Boxes. Any money found in the mechanism compartment should be inserted in the cash-box. If the cash-box is full, the subscriber should be advised and be given the loose cash. A receipt should be obtained from the subscriber and posted to the Clerical Divn. (Fees Group). The receipt should indicate the telephone number of the line concerned.

9. "Temporarily out of use" notices T 431 and A 3048. Notice T 431 is used to indicate that a call-office is "temporarily out of use", but Notice A 3048 is used to indicate that a call-office is "temporarily out of use *except for calls to Fire, Police or Ambulance*".

Each maintenance officer likely to attend to call-office faults should have at least one of each of the notices.

(a) Use of Notice T 431.

(i) At call-offices situated inside, or in the forecourt of, certain post offices, the notices will be exhibited by the postal (counter) staff, if requested by the Maintenance Control.

CALL OFFICE INSTALLATIONS

Maintenance Procedure

(Amendments to pars. 7 and 8)

Par. 7 *is replaced by the following:–*

7. Interference with coin-box. Any officer who sees evidence of interference with a coin-collecting box for the possible object of fraud or theft should report the matter to the Maintenance Control. The Maintenance Control should advise the Clerical Divn. (Call-office duty) by telephone at the earliest opportunity and also the supervising officer. If a prepayment or postpayment coin-box is involved and attempts have been made to force the coin-box front, consideration should be given by the supervising officer to the use of the strengthened fronts described in par. 12.

Supervising officers should ensure that their staff are aware of this instruction and that a record of the telephone number of the Call-office duty to which reports should be made is held at the Maintenance Control.

Par. 8 *sub-par. (a) is replaced by the following:–*

(a) Public call-offices. When money is found in the mechanism compartment it must be reported immediately by calling Enquiries and advising the operator. If possible the money should then be inserted via the mechanism into the cash container so that the enquiry operator can check it. If the money cannot be inserted in the cash container (e.g. if it is full), the officer should state the amount not inserted and tell the enquiry operator that he will report its insertion later in another call-office. This must be done without delay, following the same procedure of asking the enquiry operator to check the insertion of coins etc. The enquiry operator must also be advised of the number of the call-office in which the money was found and also the number of the call-office in which it is deposited.

Money found in mechanism compartments must never be retained for testing other coin boxes or to compensate for private money used in testing.

Full cash containers must always be reported to the enquiry operator irrespective of whether loose coins have been found.

[*The main Instruction should be suitably annotated pending reissue*]

(ii) At other call-office installations, if a fault cannot be remedied immediately, the visiting maintenance officer should exhibit a notice.

(b) Use of Notice A 3048. This notice should be used by a maintenance officer when a fault cannot be remedied immediately but the emergency calling facilities are still in order, e.g. when a coin-box cash-container is found to be full.

10. Withdrawal of "temporarily out of use" notices.

(a) Notice T 431. When a fault is cleared in or near the call-office, the maintenance officer who clears the fault should withdraw the notice. If the notice was exhibited by the postal staff, the notice should be handed to the counter staff during the hours of official business, or at other times it should be posted in the letter box.

If the fault is cleared at some point distant from the call-office, the clearance should be reported as early as possible to the Maintenance Control, who should then arrange for the notice to be withdrawn.

(b) Notice A 3048. If the maintenance officer attends with the collector to clear the box, the maintenance officer should remove the notice. If the maintenance officer does not attend, the notice will be removed by the collector who will return it to the Maintenance Control via the collection centre.

11. Locks. Originally all coin-box fronts were fitted with "Locks No. 31". These locks are being superseded by "Box, C.C., Parts: Locks No. 39...", each Maintenance Control being allocated suffix code letters. Faulty locks of both types should be replaced by "Box, C.C., Parts: Locks No. 39..." which may be ordered from the Supplies Dept. as a maintenance-exchange item for "Box, C.C., Parts: Locks No. 31". When ordering a "Box, C.C., Parts: Lock No. 39...", the appropriate suffix code must be quoted. Recovered locks of either type should not be returned to the Supplies Dept. but should be destroyed locally, the destruction being witnessed and the certificate signed by an Inspector or Asst. Engr.

12. Fronts. "Boxes, C.C., Parts: Front Nos. 5, 6 and 8", which are stronger types, are being introduced to replace "Boxes, C.C., Parts: Front Nos. 1, 2 and 3", respectively. The newer types of front may be identified by a continuous angle strip along the side opposite to the 'B' button.

The newer types should only be requisitioned as maintenance-exchange replacements if either:-

(a) the front to be replaced is of the newer type, or

(b) " " " " " " in a district subject to attempts at forcing coin-boxes.

References:- A 3955, A 4001, A 4002, A 4003, A 5001, A 5901, A 5902,
(Tp 2/4) C 3901, C 3902, C 5903, C 5904, C 5906, C 5907, D 3005,
D 5001, D 5901, D 5902
Stations, A 5252, A 6901
POWER, General, C 5501
STORES, Office Procedure, A 0061
TESTS & INSPNS., Routine, S 5011

E N D

PUBLIC CALL OFFICES AND CABINETS

Maintenance of Fabric and Fittings

1. Scope of Instruction.—This Instruction gives information required by officers maintaining the fabric and fittings of kiosks and cabinets used by the public. The term 'fittings' includes both fittings to the fabric and miscellaneous fittings to the wallboards, e.g. door handles, notice frames, parcels containers. Other relevant maintenance instructions are:—

Responsibilities	A 5001
Procedure	A 5002
Coin-box mechanisms	D 5001
Cash containers	A 5902
Lighting fittings	POWER, General, C 5501

2. Contents

GENERAL

3. General.—Engineering officers on call office maintenance duties are responsible for keeping public call offices in good working order and of good appearance. Defects found during a visit should be corrected at the time if possible, or the maintenance control should be informed of the defect so that it may be noted and attended to later. If the responsibility for action does not lie with the engineering staff the appropriate staff should be informed by the maintenance control.

4. The information in this Instruction is given in the form of general paragraphs followed by details particular to the various types of call office. Details of the standard kiosk, Kiosk No. 6 (Mark II), are given first, followed by that for the other kiosks beginning with Kiosk No. 1.

5. Replacement complete or in part.—Requisitioning procedure for kiosks, the names of the structural parts that may be changed, and a description of the various bolts, screws and miscellaneous items that may be required to be replaced are given in STORES, General, F 0018; reference should be made to this Instruction whenever a kiosk or part is changed.

A Kiosk No. 1, 2, 3 or 4 which has to be replaced due to damage or deterioration should be replaced with a Kiosk No. 6 (see C 1001).

GLAZING

6. General.—An officer observing a broken window or notice frame should remove the broken glass. Gloves, D.P. and Eyeshields No. 3 should be worn. Pieces should be swept into a cardboard box or similar container with a Brush, Dusting. The details should be reported to the Maintenance Control. The above items should normally be carried by officers who may be called upon to maintain call offices, but should an officer see broken glass in a dangerous condition when not so equipped he should, as an emergency measure, remove the glass whilst taking all reasonable precautions against personal injury.

7. Replacement glasses.—Replacement panes of glass may be obtained from Section Stock, where reserve stocks of glass should be maintained. Reference should be made to the Rate Book for a list of codes of the more commonly required glasses and glasses on which notices are printed.

Glasses for Kiosk No. 1 and other glasses not listed in the Rate Book should be purchased locally on local order to the required measurement; 32-oz. glass should be specified.

Glasses No. 27—STAMPS—which were in use for Kiosk No. 4 should be replaced with Glasses No. 25—TELEPHONE.

8. *Method of fixing.*—The glass is normally held in position with putty and a frame of metal or wooden beading which is secured with pins or screws. Details of the type of beading and the method of securing it varies with the type and Mark No. of the kiosk (see par. 10).

To replace a broken window:—

(*a*) Remove the beading. If it is secured with brass dowels, they may be punched out with a punch obtained locally. The punch should not be greater than $\frac{1}{8}$ in. diameter at its tip. (See par. 10 for additional information about the replacement of screws by dowels in Kiosks No. 6, Mark 1.) The paint film sealing the edges of the beading should then be cut through with a knife and the frame removed.

(*b*) Remove old glass if this has not already been done (see par. 6).

(*c*) Remove all the old putty with a pocket knife or a small cold chisel.

(*d*) Check that the new pane is of the correct size. Toughened glass cannot be trimmed and if this is attempted it will be shattered.

(*e*) Take a handful of Putty, Non-setting and knead it in the hand until it becomes pliable.

(*f*) Line the frame by pressing putty into the angle of the frame so that the glass will bed against it when in position.

(*g*) Place the glass in position and press it home by applying an even pressure with the finger tips near the edges of the pane. The pressure should be distributed along as much of the edge as possible and not concentrated at one point.

(*h*) Line the edge of the glass with putty so that the beading will bed against it.

(*j*) Press home the beading by hand until the surplus putty is squeezed out. The punch used for removing the dowels should be used to locate the beading, enabling the dowels or screws to be inserted.

(*k*) Fix the bead frame in position by inserting the dowels or screws. If dowels are used, insert a small quantity of putty into the holes, replace the dowels and lightly tap them home with a small stapling hammer.

(*l*) Trim off the surplus putty from both sides of the pane and fill in any holes or gaps around the dowels.

(*m*) Broken or missing beading should be renewed. If new beading is not available at the time, the panel may be glazed by using extra putty, smoothed to a neat bevel, in place of the beading. This must be regarded as a temporary measure only and the need for new beading should be noted for attention later. The glazing pins should be replaced to prevent the glass from being pushed out.

9. Precautions to reduce damage to glazing.—Where frequent breakages of glass results in excessive maintenance costs or a danger to the public, the following precautions should be considered.

(*a*) *Re-siting kiosks.*—Re-siting should be considered whenever any action to prevent damage to glazing is contemplated. In such cases the Traffic and Sales Divns. should be consulted jointly so that the need for the kiosk to remain on its present site for economic reasons can be considered.

(*b*) *Reglazing with toughened glass.*—In the earlier supplies of kiosks, toughened glass was not fitted in the lower panes and if frequent breakages are occurring in the lower panes only, the lower four panes in the sides and the lower five panes in the door should be reglazed with toughened glass. Only the large panes should normally be reglazed, although if the small panes are repeatedly broken they may also be replaced with toughened glass.

(*c*) *Use of steel plates.*—If toughened glass does not reduce glass breakages, mild steel plates may be used to replace the glass of the large panes in the first and/or second row. On no account must more than two rows have steel plates. The plates should be approximately 10 S.W.G., purchased locally and painted to match the kiosk both inside and out.

Because of the altered appearance of the kiosk, the approval of the Traffic Divn. should always be obtained before fitting steel plates. The Sales Divn. should be advised so that the work is not performed unnecessarily should a proposal be in hand for the re-siting or recovery of the kiosk.

(*d*) *Use of wire-mesh guards* (*Guards No. 2*).—These may be used when repeated breakages occur above the two lower rows and when the use of toughened glass does not improve matters. Guards should be used in conjunction with toughened glass as they give protection from the outside only; they are fitted by means of holes which have to be drilled and tapped into the outside of the kiosk and are hinge mounted so that they may be swung back for glass cleaning etc. Because of the altered appearance of the kiosk the approval of the Traffic and Sales Divns. should be obtained before the guards are fitted. They should be obtained on requisition from the Supplies Dept. If the door handle has been raised for the reasons given in par. 13, it must be restored to its normal position.

10. Bead frames.—Details of bead frames and the methods of fixing for the various kiosks are given below.

(*a*) *Kiosks No. 6, Marks I and II.*—All bead frames are metal. In a Mark I kiosk they are secured by brass screws and those in a Mark II by brass dowels (Pins, Glazing, No. 1A). Whenever it is necessary to remove the frames on Mark I kiosks, replace the screws with Pins, Glazing, No. 1B. The following procedure should be followed:—

(i) Withdraw the screws.

(ii) Before the frames are moved, drill out the threaded hole in the bead frame from the top with a $\frac{3}{8}\frac{3}{4}$ in. drill. Remove the side steadying handle of the Drill, Hand, 0-$\frac{1}{4}$ in. enabling the drill to be held as nearly vertical as possible.

(iii) If the Mark I glazing frame is being re-used, drill out two holes in the frame to be removed and two holes in the frame next above. If a Mark II bead frame is to replace a broken or missing Mark I frame, only two holes need be drilled out—those in the frame next above.

(iv) In top and bottom frames, removable glazing dowels cannot be used as they would run into the door rails. The screws in the Mark I kiosk should therefore be replaced with dowels which are left in position. Remove the existing screws and drill out as in (ii) to a depth such that $\frac{3}{16}$–$\frac{1}{4}$ in. of the dowel will be left projecting when it is driven home. When the correct depth has been reached, press a small quantity of putty into the hole and tap the dowel lightly home. The dowels will then act as pins on which the glazing frame may be located.

In certain Mark II kiosks brass grub screws are used. These should not be removed as they are liable to break. The bead frame can be removed and replaced without removing the screws. If the screws are broken, replace with dowels as described previously. In other Mark II kiosks, fixed dowels are now being used and should not be removed.

(v) Bead frames are not used to retain the 'Telephone' notice glasses. Glazing pins of $\frac{1}{8}$ in. diameter brass $\frac{3}{4}$ in. long are used to hold the glass in position until the putty has set. Glazing is done by inserting the pins in their holes after putting the glass in position and then using sufficient putty to make a neat bevel from the glass to the edge of the frame.

(*b*) *Kiosks No. 1.*—The sides have metal beads which are screwed on. Replacements for damaged screws should be obtained locally if necessary. The glass in the door is retained by wooden beads which are held in with panel pins.

(*c*) *Kiosks Nos. 2 and 4.*—Metal-bead frames are fitted and are secured by brass countersunk screws. If the frames are removed they may be treated as described in (*a*).

(*d*) *Kiosks No. 3.*—These have wooden beads which are secured by wood screws which pass through a hole in the kiosk frame and into the bead beneath. When removing a bead it will be necessary to partially withdraw the screws in the bead immediately above, or below, clear of the bead to be removed.

11. *Replacement of broken bead frames.*—Bead frames should be replaced when broken. Frames, Glazing for Kiosks No. 6, Mark II are available from the Supplies Dept. They should also be used to replace broken Kiosk No. 6, Mark I frames, as described in par. 10(*a*). Bead frames for Kiosks Nos. 1 and 3 must be obtained locally and the finish specified as one coat of lead based primer.

DOORS AND FITTINGS

12. Framework and joints (Kiosk No. 6).—The hinge style is held in position by the restraining straps. Any strain additional to the weight of the door tends to pull out the mortise and tenon joint at the corners, so preventing the door from closing properly.

(*a*) If the joint has only slightly opened, the shackle for the restraining strap should be replaced on a Plate, Mounting, No. 1A. This puts the strain directly on the top rail and tends to cramp home the joint. Replace the restraining straps at the same time.

(*b*) If the treatment described in (*a*) cannot be applied, change the door. A tradesman joiner should renew the style and top rail of the recovered door with new wood as necessary. The wood should be teak, but if this cannot be obtained locally, seasoned oak or ash may be used. The joint should be specified as a mortise and tenon. All wood should be primed with a lead base primer. The shackle for the restraining strap should be replaced on Plate, Mounting, No. 1A and both restraining straps changed. Minor damage to other parts of the door may also be repaired locally by a joiner. Badly damaged doors should be changed. A spare door, or doors according to local circumstances, may be held in stock to enable a faulty door to be replaced without delay.

13. Door handle.—If it is suspected that children are interfering with the apparatus, the handle may be moved to a higher position (see C 3001). If the glass is broken at handle level in the sides, it is possible that the side is being pushed in mistake for the door. To help reduce these breakages, a Glass No. 63 (PUSH/PULL notice) may be fitted. The adjacent large pane should be replaced by a Glass No. 62D.

14. Door hinges.—The door may be difficult to open or may not close properly if the hinges are in poor condition. Defective hinges should be maintenance exchanged.

15. Door closers.—When in good working order the door closer should:—

(*a*) allow the door to open with reasonable ease

(*b*) follow the door without noticeably increasing the pull required on the handle until the restraining straps take the strain. This occurs when the door is opened to approximately 65°

(*c*) close the door steadily to within 4-8 in. from the closed position, and

(*d*) close the door slowly from the check to the fully closed position.

If the door closer appears to be weak, ensure that the hinges are not worn and that the door is hanging correctly. The present standard door closer is Spring, Door-closing, No. 5 Mark 3 L.H. or R.H. (see

C 3001). Spring, Door-closing, No. 3 is obsolete and if faulty should be replaced and disposed of locally.

16. *Adjustment of Spring, Door-closing, No. 5.*

(*a*) *Return-spring tension.*—The spring tension should not normally require attention, but if this becomes necessary, adjust as follows:—

(i) Engage the ring with a Spanner, Circular Nut, No. 5 and disengage the pawl. Release the tension slowly, controlling the ring with the spanner.

(ii) Turn the ring with the spanner until sufficient tension is obtained and engage the pawl. The ring should not normally be turned more than five notches except at very exposed sites, where a maximum of six notches may be used, if necessary. Figs. 1, 2 and 3 show the use of the spanner on left-hand and right-hand closers of different manufacture.

(*b*) *Adjustment of the closing speed.*—The closing speed is adjusted by a screw on the body of the closer. It may be slotted or knurled and its position may vary according to the make. The gland in which the screw is mounted must not be disturbed. Turning the screw anti-clockwise increases the speed of closing; clockwise decreases it. If the closer is unsatisfactory after the adjustments des-

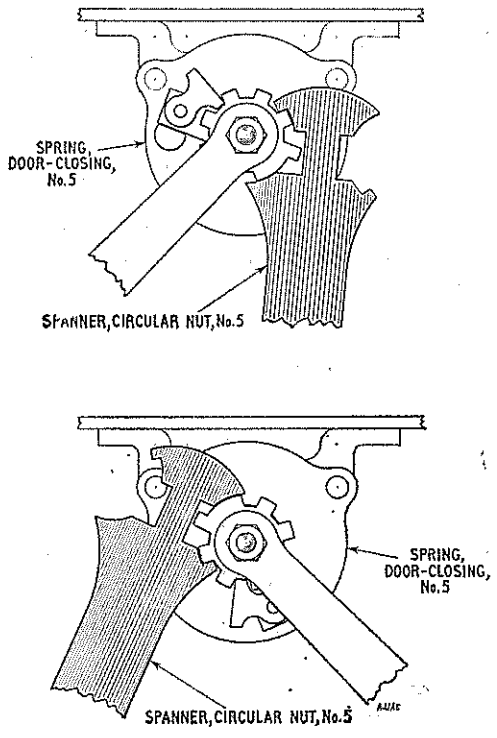

FIG. 1

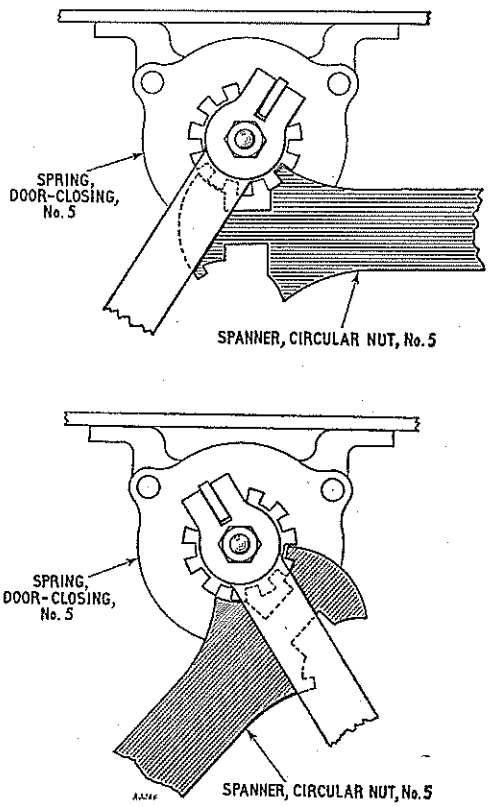

FIG. 2

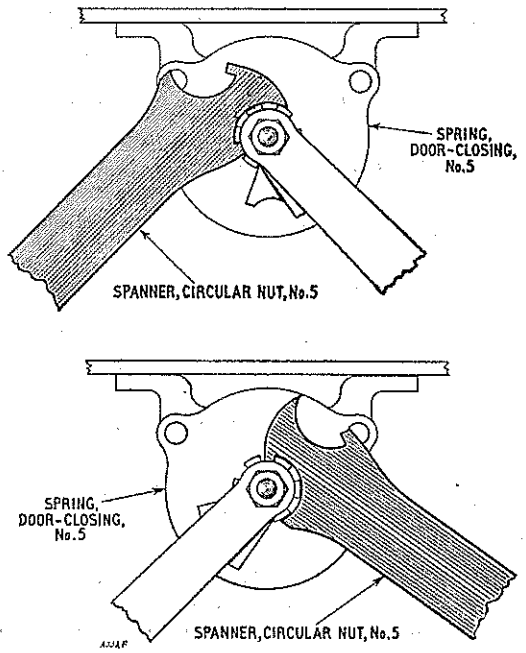

FIG. 3

cribed in (*a*) (i) and (ii) have been made, change the closer.

17. *Replacement of door closers.*—Springs, Door-closing, No. 5... are mounted on standard adapter plates which must never be removed from the closer. To remove a closer from a kiosk, remove the four screws fixing the plate to the transom rail. Screws $\frac{5}{8} \times \frac{1}{4}$ in. B.S.W., Hexagon Head, Brass are used and these are not supplied with a replacement closer. Countersunk head screws must be replaced. If new screws are required they should be obtained locally. The bolts for fixing the shackle to the door are Bolts, Black Cup, Square Neck (B.S. 325), $1\frac{3}{4}$ in. $\times \frac{1}{4}$ in., B.S.W., Mild Steel with Hexagon Nuts, and are supplied with the closer. There must not be any play between the shackle and the door. When the shackle is located correctly its centre line should be 11 in. from the edge of the door.

18. *Method of fitting Spring, Door-closer, No. 5 ... (Mark 3).*—If it is necessary to replace an earlier type with a Spring, Door-closer, No. 5 ... (Mark 3) the following procedure should be adopted.

(*a*) *Kiosk No. 1*

(i) The mounting plate as supplied with the standard closer is not suitable for Kiosks No. 1, but with some makes of closer it is possible to invert it and thereby obtain a suitable fixing. If this cannot be done, a suitable mounting plate should be made up locally. It may be necessary to use a wooden packing piece to ensure that the plate is fixed vertically.

(ii) Use the mounting plate as a template and drill two holes in the concrete transom. Plug them with Plugging Material No. 1 or Rawlplugs in readiness to receive the plate fixing screws.

(iii) Secure the spring drum to the plate with the four screws provided.

(iv) Fix the plate using four Screws for Wood, Brass, Countersunk, Flat Head, 2 in., Size 14.

(v) Secure the bracket for attachment of the hinge to the top rail of the door so that the centre of the bracket is $2\frac{7}{8}$ in. from the centre of the door towards the hinges.

(*b*) *Kiosks No. 2 and 4.* Adapter Plate D 61282 should be fitted by drilling and tapping four $\frac{1}{4}$ in. B.S.W. holes in the transom rail and securing with four Screws, $\frac{5}{8}$ in. $\times \frac{1}{4}$ in. B.S.W.

(*c*) *Kiosk No. 3 (Mark 1).*—Adapter Plate D 61284 should be fitted with four Screws, $\frac{5}{8}$ in. $\times \frac{1}{4}$ in., B.S.W., using the existing tapped holes and transom frame.

(*d*) *Kiosk No. 3 (Mark 2).*—Adapter plate D 61283 should be used. The plate should be fixed with two countersunk headed Screws, 2 in. $\times \frac{1}{4}$ in., B.S.W. through the spring base plate and the adapter plate, using the existing tapped holes in the steel door frame, and one Screw for Wood, Brass, Countersunk, Flat Head, 1 in., Size 14 which should be driven into a Rawlplug inserted into the concrete panel over the door. The holes for the Rawlplug should be drilled since the use of a jumper for this purpose may damage the panel. All fixing screws are supplied with the adapter plate.

19. *Closer arm and shackles.*—Wear occurs on the boss at the end of the arm, on the pin and shackle. If the boss is worn the whole closer must be changed. The pin and shackle (Shackle No. 6) are replaceable Rate Book items. *Care must be taken when the pin is removed that the closer arm does not fly back and cause injury.*

20. Door straps (Straps, Restraining).—During high winds a faulty strap may cause the closer and transom to be subjected to excessive strain. To ensure that the straps are efficient, check that:—

(*a*) the length of the straps is such that if a Yale-type closer is fitted the crank-shaped portion surrounding the body of the closer is clear of the body of the closer when the door is fully open, and

(*b*) on all types of closer when the door is fully open the two portions of the operating arm form an angle not greater than 160°.

Straps must not be replaced singly. If either, or both, of the straps have been painted, or are hard and brittle, or have broken stitches, both must be changed. If the straps are dry but in otherwise good condition, Dressing, Leather, Liquid should be brushed in. Too much dressing must not be used as it may contaminate the clothes of kiosk users.

INTERNAL FITTINGS

21. Wallboards.—The standard wallboard is in two parts each being separately replaceable. Badly worn wallboards, particularly if of a non-standard pattern, should be replaced by the standard Wallboard D 60577. Wallboards D 63747 should be provided in any cabinet or recessed call office where the width is insufficient for a Wallboard D 60577. If the lower part has to be replaced, the attendance of a member of the Head Postmaster's staff may be required to remove the cash container so that access can be obtained to the lower fixing bolts. If the lower part is to be changed in any kiosk except Kiosk No. 6 (Mark 2), the lower wallboard complete with telephone apparatus should be changed. The new apparatus can then be prepared at the faultsman's headquarters and transported to the kiosk and changed for the existing lower half and apparatus. This method has the advantage that the minimum time is spent on site and the cash collector's co-operation is limited to a brief visit.

The weight of a fully equipped lower section is about 65 lb. The Hoist, Kiosk, Wallboard is available for lifting the wallboard and its use will reduce the

risk of accidental injury. A method of using the hoist is shown in Fig. 4. The work may also be eased by removing the top left-hand bolt and replacing it with a $\frac{5}{16}$ in. × 2 in. grub screw and nut. The wallboard can then be supported on the grub screw whilst the other three bolts are removed or replaced.

22. *Modified fixing arrangements to counteract forcible removal.*—Some call offices have been damaged by forcible removal of the coin box, either by first removing the wallboard or by levering the coin box from the wallboard. Thefts have been confined to Kiosks No. 1, 2, 3, 4 and 6 (Mark 1). When reinstating Kiosks No. 2, 4 and 6 (Mark 1) after forcible removal the following modifications should be made:—

(*a*) Fit two wooden battens $\frac{3}{4}$ in. × $1\frac{1}{2}$ in. × 10 in. on the rear face of the Wallboard D 2/60577, in the position indicated in Fig. 5.

(*b*) Fix wallboard temporarily to the back of the kiosk and, using the four holes of the wallboard as a guide, drill four holes with a $\frac{1}{4}$ in. drill for fixing the coin box on to the back panel.

(*c*) Remove the wallboard and tap the holes to take a $\frac{5}{16}$ in. Whitworth bolt.

(*d*) Replace wallboard by bolting the coin box through the wallboard on to the back panel using four Bolts, $2\frac{1}{4}$ in. × $\frac{5}{16}$ in., Whitworth, Hex. Hd. Spanners, Box, No. 5 and 5A are suitable for this purpose.

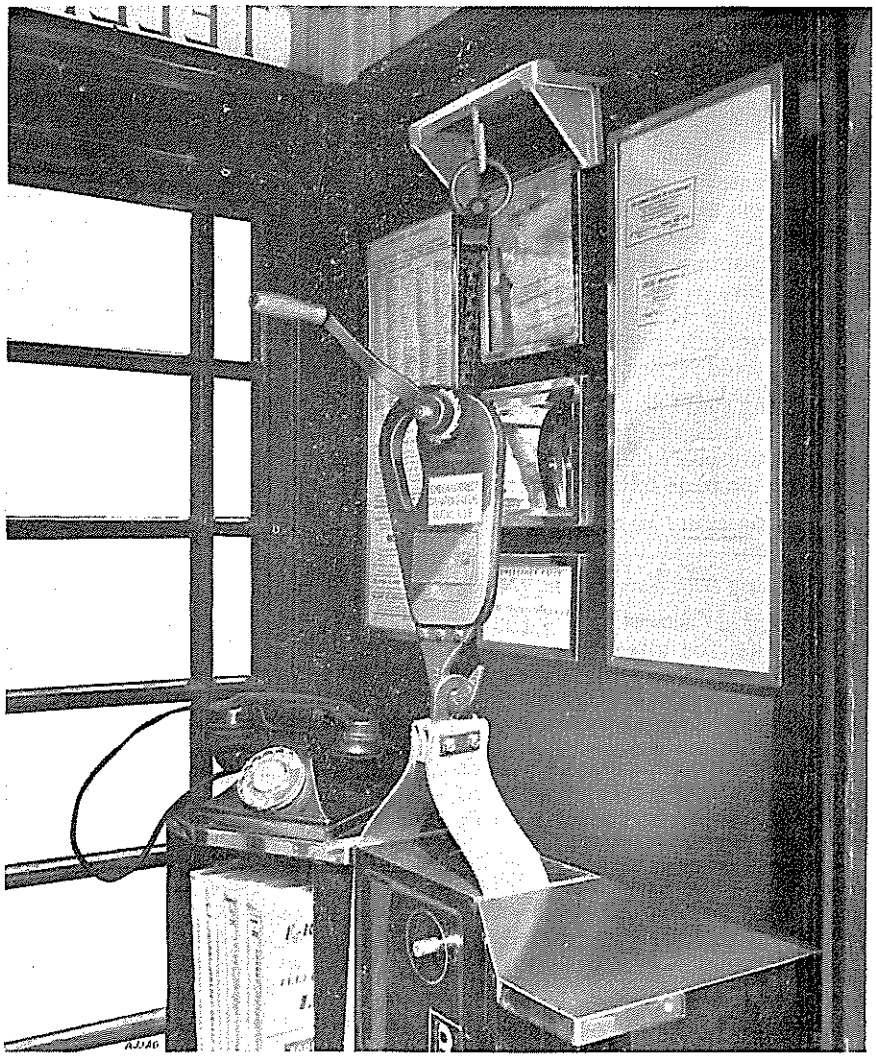

FIG. 4

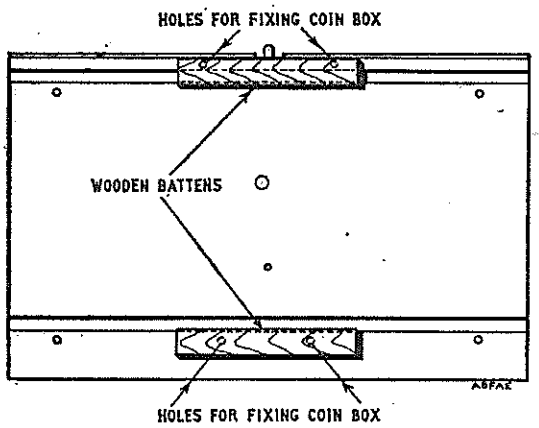

FIG. 5. REAR FACE OF WALLBOARD D 2/60577. POSITIONS IN W HICH BATTENS ARE TO BE FIXED

(*e*) Cut away the excess length of bolts to make them flush with the back panel. The end of the bolt and surface round the hole should then be primed and painted.

Kiosks No. 1 and 3 cannot be easily modified and reinstatement should be made in the standard manner. If it is found that repeated thefts are made from kiosks of these types, consideration should be given to replacing them with Kiosks No. 6 (Mark 2).

23. Attack by woodworm or furniture beetle.—Where there is evidence of attack on the woodwork of the wallboard it should be taken down and burnt locally; a replacement should be requisitioned. The directory and parcel containers should be returned to the Supplies Dept.

24. Notice frames.—Replace any notice frames which are in bad condition and cannot be renovated by cleaning. Recovered stainless steel frames should be returned to the Supplies Dept., but other types, e.g. brass or chromium plated, should be disposed of locally as scrap metal.

25. *Mounting brackets.*—Notice frames are held in position on the wallboard by two brackets. The top bracket is provided with two holes in which the two pins on the frame locate. The bottom bracket incorporates a spring, behind which the two lugs on the frame are held when the frame is in position. With the frame in position both brackets are completely hidden and a special key is needed to remove and replace the frame. The upper bracket, unless it accidently becomes damaged, should not require changing; the lower bracket can easily become damaged or distorted if the Key, Frame, Notice No. 29 is used incorrectly. This damage often leads to glass breakages when replacing a frame. Lower brackets should be inspected whenever a frame is removed and changed if damaged or distorted. The present standard bracket mounting has a phosphor-bronze spring, but the original design had a steel spring. This proved troublesome in service and if a bracket with a steel spring is even slightly stiff or rusty, change the bracket. A few spare brackets should be carried for this purpose.

The Rate Book titles are:—

For Frames, Notice,
No. 29 .... Brackets, Mounting, DH 8½ in.

For Frames, Notice,
No. 30 and 31 ..... Brackets, Mounting, DH 6½ in.

26. *Glass for notice frames.*—The glasses for Frames, Notice, No. 29, 30 and 31 are Glasses No. 49, 50 and 51 respectively and are obtainable from the Supplies Dept.

27. *Keys, Frame, Notice, No. 29.*—Keys, Frames, Notice, No. 29 are to be used for the removal of Frames, Notice, No. 29, 30 and 31, and all officers who hold a key should check that it is to the correct pattern. Attempts to remove and replace notice frames either without using this key or by using an earlier type of key will break the glass.

28. The key is used as follows:—

(*a*) *To remove a notice frame.*—Insert the pins of the key into the corresponding holes in the frame. Press the key upward and then pull forward, taking care not to twist the key. The movable pin in the key enables it to be used with certain frames which do not have the standard distance between the holes.

(*b*) *To replace a notice frame.*—Use the reverse side of the key. Place the top of the frame in position. Insert the lugs on the key (behind the lower member of the frame and under the lower mounting bracket) so that the lugs will lift the spring. Press the key upwards. Press one side of the frame into the locking position and, at the same time, lower that side of the key. Now press the other side of the frame into the locking position and remove the key clear of the mounting bracket. Finally check that the frame is held securely in position.

29. Notices.—The Traffic and Sales Divns. are responsible for the tariff and instruction cards and for controlling the advertisements. The Head Postmaster's staff normally change the notices when required.

If out of date information or mutilated advertisements are observed, the maintenance control should be informed.

30. Frames, Mirror, No. 1.—The mirror frame holds the mirror in position, and is secured by nuts on the back of the wallboard. If it is necessary to replace the mirror or frame, the upper half of the wallboard must be first taken down.

31. Parcel container, etc.—If damaged, these may be obtained separately and replaced on the wallboard without dismantling it. The Rate Book descriptions are:—

For Wallboard D 60577	Container	No. 1 (L.H. side)
,, ,, ,,	,,	No. 2 (R.H. side)
For Wallboard D 63747	,,	No. 3 (L.H. side)
,, ,, ,,	,,	No. 4 (R.H. side)

The cigarette 'grid' is not separately replaceable as it is welded in position. An umbrella 'ring' was provided on early wallboards, and was screwed under the right-hand side container. These are non-standard and any rings still in existence should be removed.

32. The screws holding the telephone to the parcel container are difficult to locate with the screwdriver blade. When the telephone is removed the existing screws should be replaced with Parts No. 1/SSC/363 which are screws having enlarged heads.

33. Security arrangements.—The locks and keys for the cash compartment are the responsibility of the Head Postmaster or in some circumstances the T.M. (Traffic Divn.). When work inside this compartment is necessary arrangements should be made for the attendance of the cash collector, who will remove the cash container.

34. The locks and keys for the mechanism compartment are the responsibility of the engineering staff. Arrangements for the provision of keys and locks are dealt with in D 3005.

35. Little maintenance is required once the lock is fitted, but to prevent damage to keys it is essential that the key always works easily in the lock. Stiff locks should be washed out with white spirit and the moving parts oiled. The locks should not be dismantled for this operation. Adjustment should be made if undue pressure has to be exerted to turn the key to unlock the front. On pay-on-answer installations the locking mechanism should be adjusted in accordance with D 5010.

On prepayment and postpayment installations, resistance to movement occurs when the bolt of the lock bears hard against the bolt retaining bar, i.e. when the latter is too far towards the back of the container. The position of the bolt-retaining bar may be adjusted by loosening the two fixing screws, access to which is obtained via the cash compartment. The bar may then be positioned so that the lock operates smoothly and there is a minimum of play when the bolt is thrown. The fixing screws should then be firmly tightened.

36. Future supplies of Boxes, C.C., Parts, Container, No. 8A will have an improved arrangement for making this adjustment. Two countersunk screws will be provided so that the adjustment may be made without gaining access to the cash compartment. The screws should be slackened just sufficiently to allow movement to the bolt retaining bar, which should then be correctly positioned. The screws must not be unscrewed completely as it will be difficult to replace them without gaining access to the cash compartment. Having made the adjustment, retighten the screws.

MISCELLANEOUS

37. Leading-in arrangements (excluding pay-on-answer installations). The normal leading-in arrangements are from underground (formerly via conduit) on the left-hand side viewed from inside the kiosk. If overhead lead-in is provided it should conform to C 3001. If a protector is necessary to comply with PROTECTION, General, B 1002 it should be fitted behind a wooden partition as shown in Dgm. EC 1851. Block terminals or protectors are sometimes fitted in kiosks having an underground lead-in; if the lead-in is renewed, the block terminals should be removed. To enable the lead-in and the multi-way cords from the bell-set to the telephone to be renewed without dismantling, they should not be stapled. Special instructions for pay-on-answer installations are given in D 3004.

38. *Capping, Steel, No. 6* has been introduced for the protection of lead-in cables and may be fitted in any Kiosk No. 6 with an unprotected lead-in cable. If the lead-in (from underground) in a Kiosk No. 6 is being renewed completely, Capping, Steel should always be fitted (see C 3001); if conduit exists it should be recovered.

39. Sealing of unused cable entry holes.—Holes are provided in the back panel of most kiosks for leading-in lighting and telephone cables. If the cables are brought in via the floor of the kiosk the holes in the back panel are not required and should be closed up. This should be done by fixing a piece of light gauge aluminium sheet over the holes. The plate may be fitted to the inside or outside as is best for the particular kiosk being dealt with and should be painted to match the kiosk.

40. Kiosk floors.—Depressions or cracks in the kiosk floor into which dropped coins may roll and be lost should be repaired using a cement mortar of one part Portland cement and three parts of sharp sand. The holes should be well brushed to remove loose particles of dust and dirt and wetted before cementing.

41. Repainting.—Complete repainting is the Head Postmaster's responsibility. Engineering staff will be required to paint new bead frames, sealing plates mentioned in par. 39 and other parts changed. Small quantities of Paint, Glossy, Red and some Brushes, Paint, Flat, 1 in. should be available for use by the engineering staff.

Paint, Retouching, Black, may be used for retouching the mechanism, parcel and directory containers. If container fronts are badly rusted or the A and B button signs are indistinct due to the enamel being worn they should be replaced. Brushes should be well cleaned as soon as possible after use by washing in white spirit, finally rinsing out in warm soapy water.

References:—A 5001, A 5002, A 5902, C 3001, D 3004, D 3005, D 5001, D 5010.
(TPM2/3) POWER, General, C 5501.
PROTECTION, General, B 1002.
STORES, General, F 0018.

Instructions cancelled:—A 5901, C 3901, C 5901, C 5902, C 5904, C 5905, C 5906, C 5907, D 5901

END

349 P8518-46/66987/157 2875 6/63 Gp430/1 EI385

PUBLIC CALL OFFICES

Special Maintenance Information

(Supervising Officers should draw the attention of Faultsmen to this Instruction and ensure that they are acting on the information contained herein.)

1 INTRODUCTION Matters frequently come to the notice of THQ(SvD) which are of interest to Supervising Officers and their staff responsible for the maintenance of call offices.

The purpose of this Instruction is to publish these reports for the information of all concerned to enable action to be taken as necessary and in advance of the publication of more detailed instructions. It is reissued as new information comes to hand or old items require to be withdrawn.

2 TI's FOR CCB OVERHAUL CENTRES It has recently come to notice that CCB Overhaul Centres have not been receiving TI's that have been issued on PCO maintenance. Investigation has shown that in a large number of cases TI files have not been set up by Areas for the Overhaul Centres.

Assistant Executive Engineers with responsibility for CCB Overhaul Centres should check that Type 2 TI files have been set up for the Overhaul Centres (see E1 A0002). If a Type 2 TI file has not been set up, this must be put in hand immediately.

3 TESTERS TRT61 These testers are being supplied still calibrated and wired for the old "4-pulse" standard using the ON1 contacts. This is being rectified, but any new testers manufactured in 1972 or before should be checked, and if necessary recalibrated (see G1518) using the Tester TRT78 and the cord rewired to the correct connection - ie PJ4 and 6.

***4 LOCKS NO. 42... AND 6M**

4.1 If difficulty is experienced in either locking and/or unlocking Covers No. 50C first check that the hole in the eyebolt is chamfered. If not change the eyebolt.

4.2 Lubrication of Call Office Locks Varying degrees of humidity may cause corrosive deposits to be formed in the two locks of the apparatus, ie Locks No. 6M and No. 42, and on the brass locking bolt of Cover No. 50C.

4.2.1 Locks No. 42 and No. 6M On each maintenance visit examine the Lock No. 42 and if necessary treat with Spray, Silicone No. 1. If a faulty Lock No. 6M is repaired or a new lock fitted, it should be treated with the spray. Care must be taken that the spray does not contaminate electrical contacts in the mechanism or bell set.

4.2.2 Cover No. 50C, brass locking bolt On each maintenance visit examine the locking bolt and if necessary treat with ROCOL AS, a dry lubricant and anti-seize compound, available as an aerosol spray on local purchase from ROCOL LTD, LONDON/LEEDS/BIRMINGHAM.

*5 MOVEMENT OF CASH CONTAINER NOS. 5, 8, 7 Where persistent coin jams are occurring due to cash container movement Retainers 2A should be obtained from SupD (Item Code No. 434837) and fitted as detailed in Works Specn S(W) 2182.

6 WORKS SPECIFICATION S(W) 2180 At the time this Works Specn was produced to convert Runways No. 4A to Runway No. 5A it was envisaged that the new standard runway would be the No. 5A.

Due to possible future changes to the POA mechanism the Runway No. 5A will not become standard. The Works Specn should only be implemented at installations (Renter or Public) which are receiving a high proportion of washers, World Cup coins, tokens, etc, in their takings. If an installation is fitted with a Runway No. 5A, care must be taken when a mechanism is changed to ensure that it is replaced with a similar modified runway.

7 COIN ENTRY PLATE (2p and 10p), 6/DPL2200 - WIDER SLOTS These plates are now available. They are recognised by the letter "M" between the top 2 screw holes. Areas should obtain a float supply from the Regional Call Office Maintenance Duty. The Call Office Overhaul Centres should change the plates on mechanisms and return the old plates to the Regional Call Office Maintenance Duty who will arrange for their return to AGI Ltd in batches of 1000 for widening. Regions should pay by Local Order and distribute repunched plates to Areas when received back from AGI Ltd Purley Way, Croydon, Surrey.

*8 DISENGAGEMENT OF CAMBANK DETENT Issue 1 of this instruction made reference to the need to disengage the cambank detent whilst the mechanism is in service. An easier method of obtaining this objective is as follows:- A Pins, Bridging, Yellow (Item code No. 070857) should be shortened so as to leave 5 mm projecting from the yellow stud. This pin can now be inserted, through the cam ratchet inspection hole, into the detent retaining spring hole whilst the detent is being held with its spring hole adjacent to the ratchet.

NOTE: The detent must of course be returned to its original position during setting up with the scale and pointer and digital timer.

IMPORTANT

Before making this modification the call office maintenance centre staff must carefully check the complete mask assembly adjustments as detailed in C2075 pars 25.4.4 to 25.4.4.12.

9 KIOSK NO. 8 DOOR CLOSERS

9.1 Spring Door Closer No. 5 Difficulty is being experienced when replacing this unit on K8's. This is due to the fixing holes from the two manufacturers being in different positions.

An interface plate made up locally will overcome the problem. The interface plate should be used when changing Messrs YALE 5... (YT/3) Spring Door Closer for a William Newman 5... (WNS/3) to save re-drilling of kiosk.

The dimensions of this plate are given on Drawing No. 300167 (Mounting Plate for Spring Door Closing Unit No. 5 for Kiosk No. 8) available by normal requisitioning procedure.

9.2 **Spring Door Closer No. 8** Early K8 fixing holes are in a different position to the later K8's. If a spring door closer No. 8 is to be mounted to the early model K8 cabinet the interface plate must *NOT* be used. The kiosk must be re-drilled to accept the spring door closer No. 8.

Later K8's have the correctly drilled holes and no re-drilling is necessary.

10 **EARPIECE AND MOUTHPIECE SECURITY** Pliers, Handset, No. 1, item code No. 132288, must be used to secure these items. Supervising officers should ensure that officers engaged on call office maintenance carry these pliers in their tool kits.

11 **CHUTES COIN NO. 3A** These Supersede Chutes Coin 2A for use with Kits No. 163A and are now available from the Supplies Division. The item code number is 43 4783. Action should be taken to replace all Chutes 2A with the 3A as soon as supplies will allow.

Coin Chutes No. 3A, although drilled, do not necessarily require rigid fixing to the base plate of the Kit 163A.

IMPORTANT

As supplied, Chutes Coin No. 3A have straight-sided flanges. These flanges must be bent inwards to give an opening of 4 mm (0.15 inch), the centre of which should be in line with the centre of the slot in the cash container lid.

*12 **CHUTES COIN NO. 4A** A new coin chute has been designed for use in all POA installations except where Kits 163A and Cash Compartments 3C are fitted. This chute, coded Chute Coin 4A, will be available in about 6 months. In the interim, the existing Coin Chute, Part No./DGU/45, may be modified as described in Works Specification S(W) 2203.

13 **BELL-SET NO. 49A, FOR USE IN COVER NO. 50 ...**

13.1 Bell-Set No. 49A supersedes Bell-Set No. 47A for use in Covers No. 50 .... It will be fitted as standard in the covers during their manufacture and issued for maintenance purposes, in lieu of Bell-Set No. 47A, as stocks become available.

13.2 Bell-Set No. 49A has a printed circuit board (Telephone Unit D93039) with a built in transmission regulator. Two micro-switches (Switches No. 19A) mounted on a plastic moulding (Part 1/DMO/157) and actuated by the flexing of a plastic blade are used to form the gravity switch. The fork of the existing cradle mechanism fits over the extended arm of the gravity switch operating blade. The Bell-Set No. 49A has identical fixing centres to those of Bell-Set No. 47A but a captive screw for the lower fixing is not provided; a screw 2BA x $\frac{3}{8}$" Ch Hd Brass must be provided locally.

* 13.3 The bell-set as issued, should have the micro-switches mounted on the gravity switch moulding with the front faces of the micro-switches approximately on a line passing through the operating blade pivot point, ie mounted radially with the blade. Following field experience with early production samples of bell-set No. 49A it has been found that a modification to the positioning of the gravity switch mounting, Part 1/DMO/157, is required.

With the mounting fitted as issued the fork of the cradle gravity switch lever is positioned over the extension of the rod at the top of the flexible blade. The leverage at this point cases the blade to twist and under adverse circumstances the inner micro-switch is not fully actuated when the handset is "on rest". To ensure that the leverage is applied between the two micro-switches and the switches operate correctly, a spacer should be fitted between the bell-set plate and the moulded gravity switch mounting. The spacer, Part No. 1/DSP/3046, Item Code 451754 is available from SupD in maximum quantities of 50 per requisition. DO NOT OVER ORDER.

Adjustment of the switch unit for cradle switch hook operation is by means of the two screws securing the moulding to the bell-set back plate. The unit should be adjusted to give cradle arm travel before and after the micro-switches have "tripped" over. The back of the arms on which the handset rests have approximately $\frac{7}{16}$" of travel. There should be at least $\frac{1}{16}$" of travel before and after the micro-switches operate during handset lift off and replacement. Generally the two micro-switches will be heard to "click" over during this test but failing this a meter must be connected to the appropriate terminals (see Diagram N805) to check that the switches have operated. It is not essential that the micro-switches operate simultaneously.

* 13.4 Diagrams N805 and N835 have been amended to show Bell-Set No. 49A in the coin box circuits. Issue H of Diagram N805 and Issue C of Diagram N835 contain an error. S and BN conductors from the micro-switches should terminate on Telephone Unit terminals 5 and 12 respectively, but are shown reversed. The bell-sets as issued will be wired correctly.

IMPORTANT

The handset is connected to terminals 3, 10, 11 and 12 of the bell-set 49A, NOT 3, 4, 5 and 6 as on the bell-set 47.

14 SCREW CORROSION ON KIOSKS Galvanic action or rusting may cause fabric screws to corrode, particularly under certain climatic conditions eg salt air or high humidity. To minimise corrosion apply antiseize grease to all types of screws and hole prior to assembly. This grease is available as an aerosol or in tubes or tins from Rocol Ltd, London/Leeds/Birmingham, and is known as ROCOL J166.

15 PULSER NO. 8, SELECTION LATCH DETENT Incorrect coin pulsing can occur if the selection latch and detent are not correctly adjusted. Pay particular attention to ensure that the detent clamping screw lockwashers are fitted and that the screws are tight. Relevant paragraphs of C2075 and S5222 will be amended accordingly.

16 KIOSKS NO. 8, GLASSES NO. 78A Glasses No. 78A, the "TELEPHONE" sign glass is secured in position with Clips No. 96A. These are available in boxes of 100 from Supplies Division, Item Code No. 211342.

17 TRANSMITTER INSET 16 MK3 This inset is a slightly modified version of the standard inset No. 16. Because of their construction MK3 insets are not considered suitable for use in Public Call Offices where they may be subjected to adverse weather conditions. The inset can be recognised by the number 3 after the year of manufacture and also be the red sealing compound.

18 MECHANISMS 20D AND 24A Reports have been received about jams caused by side play of the carriage link. Where this occurs the carriage link circlip should be refitted despite the instruction in C2074 and C2075 para 27.

E N D