

HOUSE EXCHANGE SYSTEM No. 4

Maintenance of Telephone, Intercom., No. 4/1 and Relay-unit Q 516

1. General.—This Instruction deals with the maintenance of those parts of the Telephone, Intercom., No. 4/1 which are additional to or differ from those of Telephones Nos. 706 and 710. Maintenance of Telephones Nos. 706 and 710 are dealt with in A 5253 and A 5255 respectively and should be read in conjunction with this Instruction.

This Instruction also gives details of maintenance information for the Relay-unit Q 516.

2. Circuit and wiring diagram numbers for the House Exchange System No. 4 are given in the Q(L) 5... series of diagrams.

3. The following items should be held on Normal Stock in addition to those listed in A 5253 and A 5255:—

Telephone, Intercom., No. 4/1L (Colour)
Telephone, Intercom., No. 4/1CB (Colour)
(when required)
Lamp No. 41E
Buzzer No. 2B-3
Regulator No. 4A
Connector No. 1046A (Colour)
Strip, Flexible, No. 38A Clear

TELEPHONE, INTERCOM., No. 4/1

4. Cover.

(a) *Removal.* Withdraw the key cover by pulling up the top edge which is chamfered and then pulling up at the sides. Loosen the two captive screws on the cradle and the screw at the front of the base. Lift the rear of the cover away from the base so that the top of the plungers is level with the surface of the cradle, then lift the front of the cover making sure that it does not foul the dial finger stop or finger plate.

(b) *Replacement.* Position the cover over the apparatus locating the plungers in holes in the cradle so that they are flush with the surface. Press the cover down over the dial and then at the rear. Fasten the two captive screws on the cradle and the screw at the front of the base. Replace the key cover.

5. Lamps.—To change the lamps remove the key cover (see par. 4). The lamps can now be unscrewed and replaced.

6. Buzzer.—To adjust the buzzer, adjust the screw on top of the buzzer so that the volume is satisfactory, consistent with reliable operation.

To remove the buzzer unit complete with tag-ended leads release the two screws which support the insulated mounting board and disconnect the terminations from the connexion strip.

To replace the buzzer unit terminate the connexions on the connexion strip and offer the unit with the resistors on top to the upright of the bracket provided adjacent to the bell capacitor, secure the two screws.

7. Labels.—Remove the transparent strip in front of the labels by pressing it down at one end so that it forms an arch which can be gripped.

Remove the labels in a similar manner.

To fit a label bend it into a curve so that the ends can be tucked underneath the lenses, then press flat.

Use the same method to fit the transparent strips.

8. Key unit, gravity spring-set, auxiliary spring-sets and lamp holders.—If trouble is experienced with any of these items, change the telephone.

9. Cords.

(a) *Base termination.* The cords are secured in slots in the turned-up edge of the base and can be removed by lifting upwards after withdrawing the cover. Access to the terminations of the cords is obtained by releasing the two captive screws in the cover plate on the underside of the base.

(b) *Plug-end (line cord).* To remove the plug-end of the line cord release the two diagonally displaced screws from the termination cover, take off cover, release plug retaining clips and unplug cord. Where the plug is a tight fit it can be eased off by gently levering with a screwdriver under the lugs at each end of the plug case.

10. Disconnexion of a telephone.—When a telephone is disconnected it is necessary to provide continuity of the multiple. For this purpose a Connector No. 203C 55C, normally held in a clip above the terminal block in the Relay-unit Q 516, should be inserted in place of the cord plug in the Box, Connexion, No. 6A.

RELAY-UNIT Q 516

11. Access to equipment and wiring.

(a) Obtain access to equipment by pulling off the cover.

(b) Obtain access to the wiring side of the apparatus by releasing the screw located centrally on the right-hand side of the relay panel. The panel can now be hinged about the left-hand side.

12. Relays.—Adjust in accordance with TELEPHONES, Automatic, B 5144.

supply, if disconnected, must be carefully checked before reconnexion.

13. Regulator No. 4A.—The regulator is secured to the relay panel and is connected in circuit by spade-tags on flexible leads terminating on a 6-way connexion strip (SCC). To remove the regulator loosen the screws on the connexion strip, remove the spade-tags and release the two screws securing the heat sinks to the relay panel. To prevent damage to the regulator, the polarity of the 50V power

MISCELLANEOUS

14. Tools.—The tools listed in TOOLS & TRANSPORT, Hand Tools, A 0040 for use by subscribers' apparatus maintenance officers are required for the maintenance of the equipment.

References:—A 5253, A 5255
(TPM2/2) Automatic, B 5144
TOOLS & TRANSPORT, Hand Tools, A 0040

END