



#### NOTES:-

The mechanical features of the Box Coin Collecting N°14 are shown on Diag. EC.1415 (N.1185) which should be perused in conjunction with this explanatory diagram.

All contacts on the explanatory diagram are shown in the normal condition.

Normal Conditions. The Coin Box Transmitter (Transmitter N°21) and the polarised relay (Relay N°134A) are shortcircuited by contacts 6 & 7.

The Call Office Telephone is available for incoming calls.

Originating Calls. The First penny inserted engages the Coin Slot Crank Arm which actuates spring assembly N°1 thereby,

(a) circuit is prepared for shortcircuiting Transmitter N°1 (upon the operation of the polarised relay) at contacts 4 & 5.

(b) Shortcircuit is removed from Coin Box Transmitter and polarised relay (this relay operates only with negative battery on the A line and will not operate at this stage) at contacts 6 & 7.

(c) 26  $\Omega$  winding of induction coil is transferred to centre point of bell at contacts 1, 2 & 3.

When the second penny is inserted, the combined weight of the two coins operates the Balance Arm, which actuates spring assembly

N°2; contacts 8 & 9 are closed thereby earthing the B line and operating the exchange calling signal (see Diag. CB.1427 (N.1186).

If additional coins are necessary, the telephonist is able to check the correct denomination

of the coins by the bell and wire gong signals transmitted via the Transmitter N°21.

When the telephonist completes the connection by inserting the calling plug into a subscribers or junction jack (or "Hold" jack if

additional coins are necessary) the battery and earth connections to line are reversed (see Diag. CB.1427 (N.1186) and the

negative battery, now on the A line, operates the polarised relay and shortcircuits the Transmitter N°1. The caller is however

able to hear that correct connection has been made but cannot speak until the A button has been depressed.

The caller in depressing the A button operates the A Button lever which restores spring assemblies 1 & 2;

the coins are deposited in the cash box and the circuit restored to normal.

If the call is ineffective the caller depresses the B button. The B button operates the escapement mechanism and restores

spring assemblies 1 & 2. The escapement mechanism actuates spring assembly N°3 for 7 seconds; the B line is disconnected

at contacts 13 & 14 and the 2000  $\Omega$  relay is actuated over an earth via contacts 11 & 12 thereby disconnecting the A line.

This relay locks up over its own contacts and remains locked until the exchange connection is cleared.

Emergency Calls. Where Emergency Calling facilities are provided a resistance (for 22V systems, 350  $\Omega$  or for 40V systems, 1000  $\Omega$ )

is inserted in the earth lead connected to contact N°8 and an earth, via 50  $\Omega$  and a press button, is connected to the B line.

When the Emergency Call Button is depressed the marginal relay "X" (which is in series with the Line Relay see Diag:

CB.1427 (N.1186) is operated and connects an interrupted earth to the Line Lamp thereby giving the telephonist a flashing

signal. The marginal relay will not operate through the high resistance earth at contact 8, in the case of normal calls.