

ORIGINATING SENDER TEST FRAME CROSS CONNECTIONS NO. 1 CROSSBAR OFFICES

1. GENERAL

1.01 This section describes the method of making changes in the originating sender test frame cross-connections as a result of changes in the arrangement of or addition of senders. Information is also included in this section regarding the functions of the various cross-connections.

2. APPARATUS

2.01 Soldering copper and materials as required.

3. DESCRIPTION AND CROSS-CONNECTIONS

3.01 General: The originating sender test circuit is connected to the senders by means of 200 point crossbar switches (connectors), one crossbar switch being required for each group of 100 or less senders. Each switch can connect to ten sender subgroups, each one having a maximum of ten subscriber senders or five key pulsing senders. The senders in a subgroup are assigned to pairs of crosspoints in the horizontal row. All senders connected to the crosspoints in the same horizontal row on the crossbar switch are of the same type and in the same sender subgroup and appear in the same order as they appear on the link switch. The subscribers senders are ordinarily assigned at the bottom and the key pulsing senders at the top. The sender test frame has a capacity of twenty sender subgroups (two 200 point switches). Where additional connector facilities are required an additional connector unit may be located on an auxiliary sender test connector frame.

3.02 Location of Terminal Strips: There are four terminal strips located immediately below the connector switches. These terminal strips are designated MISC, CROSS CONN G1, CROSS CONN G0, and C. A similar arrangement of terminal strips will be found at the auxiliary sender test connector frame.

3.03 Numbering of Terminal Strips: The terminal strips are designated at the left and right and bottom, the units digit appearing at the bottom and the tens digit appearing at the left and right.

3.04 SPT Lead: The SPT lead is connected to the (S) terminal of the crosspoints which are not connected to senders. This lead connects to punching 14 on terminal strip C. When a sender is added, remove the SPT strap from the (S) terminal of the crosspoint involved.

3.05 Class of Sender Indication: Four contacts C-, D-, E- and F-, of each of the numerical relays associated with the select magnets are wired to the punchings on the CROSS CONN terminal strip. The four contacts of the 0 relay designated C0, D0, E0 and F0 on the circuit drawing are wired to punchings 10, 11, 12, and 13, respectively, those of the 1 relay designated C1, D1, E1, F1 are wired to punchings 20, 21, 22, and 23, respectively, etc., and those of the 4 relay designated C4, D4, E4, F4 are wired to punchings 50, 51, 52, and 53, respectively. The four contacts of the 5 relays designated C5, D5, E5 and F5 are wired to punchings 15, 16, 17 and 18, respectively, those of the 6 relay designated C6, D6, E6, and F6 are wired to punchings 25, 26, 27, and 28 respectively etc., and those of 9 relay designated C9, D9, E9 and F9 are wired to punchings 55, 56, 57 and 58 respectively. The C punchings are cross-connected to the KP or CN relays or any other class of sender relays which may be provided in the future to indicate which class of sender is being tested. The D punching of the numbered relay, corresponding to the C contact to which the KP or CN leads are connected, cross-connected to punching 1 of the CROSS CONN terminal strip which is the GRD punching. The E and F punchings are spares. If a group of senders is added, it is necessary to remove the SPT strap as outlined in 3.04 and make the cross-connections as outlined above to give the proper class of sender indication.

3.06 CN Lead: The CN lead extends from the CN relay to punching 0 on the CROSS CONN terminal strip. This punching is strapped to the C punching corresponding to the horizontal row or rows of the crossbar switch to which the subscriber senders are cross-connected.

3.07 KP Lead: The KP lead extends from the KP relay to punching 2 of the CROSS CONN terminal strip. This punching is strapped to the C punchings corresponding to the horizontal row or rows of the crossbar switch to which key pulsing senders are cross-connected.

3.08 End Group Arrangement: Punchings designated A0 to A9 on the circuit drawing are provided for the horizontal rows of the connector crossbar switch to which are connected senders which provide the same routing for the same code and class of service indication. In some cases the different horizontal groups of senders do not provide the same routings for the same code and class of service indication. The punchings des-

ignated B0 to B9 on the circuit drawing are wired to correspondingly numbered selecting magnets. Where the group of senders wired to a horizontal row of the connector switch have the same routing for the same code and class of service indication as the previously tested group of senders, the associated A punching is strapped to the associated B punching. However, where the two successive rows of senders are different, the A and B punchings associated with the second row of senders are strapped to the A and B punchings respectively, associated with the specified EG key. The EG keys are used to stop the test circuit before advancing to a succeeding group wherein it is necessary to reset the route keys due to the use of a different selection for the same dialed code.

3.09 A and B Leads: The A0 to A9 leads extend from the operating springs of the CO relay to punchings 60 to 69 respectively, of the CROSS CONN terminal strip. The B0 to B9 leads extend from select magnets 0 to 9, respectively to punchings 70 to 79, respectively. The A and B leads from EGO key are wired to punchings 100 and 110 respectively of the CROSS CONN terminal strip, the A and B leads from EG1 key to 101 and 111 respectively, etc., and the A and B leads from EG4 to 104 and 114, respectively. If the senders associated with level 2 are to be wired for end group arrangement to EGO key, punchings 62 and 72 would be strapped to punchings 100 and 110, respectively.

4. REPORTS

4.01 Any required record of changes made in the cross-connections should be entered on the proper form.