

LINE JUNCTOR REDISTRIBUTION - BASIC INFORMATION

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1. GENERAL

1.1 This section describes in a general way the procedure that should be followed in making additions of incoming link (I) and line link and line choice connector (LCC) equipment in No. 1 crossbar offices. Aside from the installation of the new frame equipment and associated cabling, and the extension of marker and sender service to the new equipment, the primary installation work consists of changing the line junctor distribution to conform with the pattern for the number of incoming link frames and line choice connectors after the addition and making accompanying changes in the terminating marker and LCC circuits.

1.2 The line junctor distribution has been revised by the Bell Telephone Laboratories from ED-25079-01 and ED-25080-01 to ED-25713-01 and ED-25714-01 respectively to reduce the installation effort required when redistributing line junctors, and thereby permit the transition to be accomplished over a single weekend period.

1.3 The major portions of the work, viz. the preliminary work, the preparation for routine testing of added incoming trunks, the transition work and the clean-up work are described generally in Paragraphs 2, 3 and 4 of this section and detailed procedures are contained in Sections 95 to 115 of this handbook.

1.4 The procedures cover the addition of 1, 2 and 3 frames in offices consisting of 2I-2LCC to 7I-7LCC, 1 and 2 frames in offices consisting of 8I-8LCC, and 1 frame in offices consisting of 9I-9LCC.

1.5 Procedures for the addition of more than 3 frames to any office have not been written and it is felt that when this condition occurs, the procedure having similar characteristics will be used as a guide to determine the proper method to follow.

2. PRELIMINARY WORK

2.1 Install new frames as required: The incoming link, incoming trunk, terminating sender link, terminating senders, terminating markers, line links, line choice connectors, line junctor connectors, and terminating marker connectors shall be cabled, wired connected and tested as far as possible.

2.2 Extend Multiple: The terminating sender multiple should be extended to the new terminating sender link frames and any required rearrangement of terminating sender multiple should be completed. The terminating marker multiple should be extended to the new incoming link and line choice connector frames and new marker equipment installed in those frames if required.

2.3 At the Line Junctor Grouping Frame: The added terminal strips should be mounted and additional cables from the line link and incoming link frames run and connected wherever possible. Wherever possible, the cross-connections for the new pattern should be run and connected and the cross-connections to be removed should be prepared for disconnection.

2.4 At the Terminating Marker and the Terminating Trouble Indicator: The additional equipment required for the added frames should be installed. This includes the transition circuit per T25511-11 in the terminating marker.

3. PREPARATION FOR ROUTINE TEST

3.1 The addition of one frame to 4I-4LCC, 7I-7LCC, 8I-8LCC, 9I-9LCC (Sections 101, 110, 113, 115) does not require the immediate loading of incoming trunks and therefore the routine testing of incoming trunks may be performed after the line junctor transition using the newly established junctors.

3.2 All other additions of incoming link and line link frames require that the incoming trunks be loaded immediately after transition and therefore must be routine tested before the line junctor redistribution can start.

3.3 In order to test the incoming trunks, one or more junctors must be established between the incoming trunks to be tested and the line choice in which the last test line is located.

3.4 Temporary cross-connections are installed in the terminating marker to include the new frame or frames in the marker line junctor test. (JR and JG cross-connections).

3.5 Busy out all the channels except one on the new incoming link frames.

3.51 Marker channel selection cross-connections should be reviewed to determine the last channel selected by normal marker operation.

3.52 In order that normal office traffic is not disturbed, this channel should be selected and all other channels on the new frame should be made busy.

3.6 Set up the test line number on the terminating trouble indicator with the frame indication key of the new incoming frame operated.

3.61 With a remote control cord plugged into the F jack of the line link frame in which the test line appears, observe which line junctor hold magnet operates when a test call is attempted. Make this junctor busy with a 325C tool.

3.7 At the grouping frame, disconnect the incoming link side of the line junctor made busy in Paragraph 3.61.

3.71 Temporarily connect the cabled junctor associated with the new incoming link to the terminals that were disconnected in Paragraph 3.7.

3.72 The cabled junctor in Paragraph 3.71 should be the same switch and vertical on the incoming side as the one disconnected.

3.8 Remove 325C tool from the line link and place a test call which should now complete to the new incoming frame. Replace the 325C, make busy tool, on the new junctor on the incoming link. Trunks appearing on the new incoming link may now be routined using this junctor.

No arrows are shown
due to extensive changes.

3.9 Whenever this channel is not in use for test it must be made busy as channel failures will occur whenever the marker attempts to use this channel for regular calls.

4. TRANSITION WORK

4.1 The actual transition involved in line junctor redistribution is generally the same for all sizes of additions and is accomplished in five steps which are as follows:

- (1) Remove from service and block each marker to use first subgroup.
- (2) Modify markers from old to new pattern.
- (3) Modify M and J cross-connections at the line choice connector frame.
- (4) Rearrange the cross-connections, and connect remaining unconnected cable ends at the line junctor grouping frame.

5. CLEAN-UP WORK

5.1 The clean-up work consists of removing abandoned junctor cross-connection wire from the line junctor grouping frame, and removing transition and regular equipment from the markers.

5.2 Each of Sections 95 to 115 indicate what equipment is to remain in the markers and what is to be removed.

5.3 Where equipment is to remain in the markers it is not necessary to disconnect battery from the relay windings since the terminals of this apparatus are all wired to unassigned cross-connection punchings.

Engineer of Installation