

DETAILED INSPECTION PROCEDURES
CENTRAL OFFICE EQUIPMENT
GENERAL EQUIPMENT REQUIREMENTS
LOCAL MANUAL SYSTEM

1. GENERAL

1.01 This section supplements the General Procedure Section 800-668-150 covering the inspection of Central Office Equipment and specifies the detailed procedures applying to local manual type central office and manual multiple position PBX installations.

1.02 The provisions of Section 800-668-150 and of this section shall be applied:

(a) To all initial central office installations and central office additions comprising more than 1000 subscriber lines (including rural lines) or 8 equipped positions of No. 1 or No. 11 local manual equipment and to manual multiple position PBX installations comprising more than 1000 station lines or 8 equipped positions.

(b) To the following apparatus or equipment appearing in any initial installation or addition regardless of size:

(1) Line Message Registers.

(2) All apparatus to the extent to which special provisions for complete inspection are specified in notes in the Detailed Information sections.

(3) Toll Equipment.

(c) To specific installations designated from time to time by the Bell Telephone Laboratories.

Note: For those installations of local manual central office equipment other than those defined in (a) and (c) above, and for apparatus and equipment other than that defined in (b) above, and for installations of other types of local manual equipment (exclusive of No. 1D and 9, 10, 12, 109 and 1800 types switchboard installations), a

simplified inspection procedure suitable to the character and amount of equipment in each installation may be used unless otherwise agreed upon between the Operating Company and the supplier prior to the start of installation.

1.03 The provisions of Section 800-668-150 and of this section do not apply to toll switchboard positions and associated intertoll trunk equipment included in installations of No. 1 or No. 11 local manual equipment.

2. EQUIPMENT GROUPS AND DETERMINATION OF LOTS

2.01 Equipment groups into which the equipment of an installation will be divided for use in determining lots for inspection purposes are indicated in Table A.

2.02 *Inspection Lots — Apparatus Adjustments:* There shall be a separate inspection lot for each general type of apparatus occurring in each equipment group listed in Table A.

2.03 *Inspection Lots — Connecting and Soldering:* The inspection of connecting and soldering will, in general, be limited to accessible wiring except as noted below. The following will be considered as "inaccessible wiring"; multiple bank wiring on 200 and similar type selectors, wiring on keys in keyshelves and on jacks and keys in desks, and other wiring which is not directly visible without the dismounting or removal of apparatus parts. Except for those equipment groups for which complete inspection is indicated in all cases in the General Procedure section, the soldered connections of an installation will be considered as comprising a minimum of four lots as follows:

Lot 1 — Inaccessible wiring.

TABLE A

EQUIPMENT GROUPS
1. Subscribers Board (Including Combination board such as No. 11, No. 600 PBX, etc)
2. Trunk Board
3. Key Indicator Equipment
4. Relay Rack (Line Circuit Relays Only)
5. Relay Rack (Exclusive of Groups 3 and 4), Job Wired
6. Relay Rack (Exclusive of Groups 3 and 4), Shop Wired
7. Message Register Rack
8. Traffic Register Rack and Apparatus in Cable Turning Section
9. Coil Rack and Associated Fuse Board
10. Fuse Board (Subscribers Line and Miscellaneous)
11. Desks (Sectional) — Separately
12. Desks (Nonsectional) — Separately
13. Emergency Alarm Equipment
14. Main Distributing Frame
15. Intermediate Distributing Frame
16. Combination Distributing Frame
17. Portable Test Sets
18. Miscellaneous Circuit Equipment not Included in any of Above Groups
19. Cable Racks and Cabling (Including Cable Racks and Cabling in Turning Section)
20. Ladders and Ladder Tracks
21. Superstructure Ironwork
22. Power Plant

Lot 2 — Connections completed prior to the installation period exclusive of inaccessible wiring.

Lot 3 — Connections completed during the installation period exclusive of inaccessible wiring and switchboard multiple.

Lot 4 — Switchboard multiple — connections completed during installation period.

Unless testing results or other evidence indicate an unsatisfactory condition, Lots 1 and 2 noted above will not be included with those to which the inspection procedure of this section applies.

2.04 Inspection Lots — General Equipment Requirements: Except for those equipment groups for which complete inspection is indicated in all cases in the General Procedure Section the entire equipment of the installation may be considered as a single lot.

2.05 Subdivision of Lots: Where advantageous, any individual lot selected in accordance with the above procedure may be subdivided prior to the start of the inspection and the resulting subdivisions treated as independent lots.

3. DISTRIBUTION OF THE SAMPLE SELECTED FROM LOTS

A. Apparatus Adjustments

3.01 In addition to the general distribution requirements covered in Section 800-668-150, General Procedure — Local Systems, the following specific requirements shall apply.

3.02 Switchboard Positions: In general, the samples for the relay equipment, required by the lot sizes for the different types, in switchboard positions shall be distributed equally among the positions and all relays of a given type shall be included from a circuit when any of that type are selected from the circuit. The portion of the sample from each position shall be selected in such a manner as to include the relays of the particular type from at least one of each type of circuit in the position containing them. In addition, all relays of an inspection lot occurring in circuits appearing singly in a section shall be included in the sample. When the sample size requirement is not satisfied when relays from one of each type of circuit per position (or section) are selected, additional relays shall in general be obtained by selecting the relays from one or more of the remaining circuits from each position.

3.03 In a similar manner the sample for cord circuit keys will be distributed on a position basis. The position apparatus other than relays and cord circuit keys will be considered in the inspection of wiring, framework construction, and cabling (paragraph 3.09).

3.04 *Relay Racks:* In general a satisfactory distribution will result when the proportions for the different types of circuits are approximately the same in both the sample and the lot. All relays of the given type in an individual circuit shall be included in the sample when any of that type are selected from that circuit.

3.05 For the portion of the relay rack equipment comprising unit-type mountings the sample will be distributed on a basis of the "Wired Units." In such case the distribution shall include relays from a sufficient number of units to be representative of the lot and shall be uniformly distributed among the units. For the portion of the relay rack equipment comprising miscellaneous circuits, the sample will be distributed on a "bay" basis. A satisfactory distribution will result when the general distribution requirements of Paragraph 3.04 are applied and relays from each type of circuit present in the lot or portion of the lot are included in so far as possible in this sample. In the case of line circuit relay equipment, the sample shall in general be distributed equally among the relay bays.

B. Connecting and Soldering

3.06 Soldered connections on switchboard multiple are relatively inaccessible when the multiple is completely installed. The inspection of multiple soldering when completed during the installation period and of soldered connections on the multiple tap will consequently be made as the layers are being installed. Individual multiple layers and the associated multiple tap, when selected, shall be inspected completely, and a sufficient number of layers shall be selected to satisfy the sample size requirements. The distribution of the layers and taps shall be such as to insure that the sample is representative of the lot.

3.07 For soldered connections on other equipment the sample shall be distributed uniformly through the lot and shall include

connections on each type of apparatus (including connecting blocks) and equipment included in the lot.

C. General Equipment Requirements

3.08 A general inspection only is specified for those requirements applying to Wiring, Framework Construction, Cabling, and Numbering and Lettering. This inspection will not involve a determination of lots based on equipment groups. Where informal sampling is used in this type of inspection the portion of the equipment treated as a sample should be so selected as to be representative of the lot both with respect to type of features and to the extent of the equipment involved.

3.09 Switchboard position apparatus such as plugs, jacks, miscellaneous keys, etc., not included in the inspection of apparatus adjustments shall be included in the inspection of Wiring, Framework Construction, and Cabling for the respective equipment groups (paragraph 3.03). The inspection of this apparatus shall consist of a general examination for conditions that will adversely affect operation, appearance, and maintenance.

4. EQUIPMENT GROUPS AND TYPES OF APPARATUS REQUIRING COMPLETE INSPECTION

4.01 Complete inspection is required in all cases for those types of apparatus or equipment indicated in Section 800-668-150, General Procedure — Local Systems.

5. SUBLOTS FOR APPLICATION OF SPOTTINESS PROCEDURE

5.01 *General:* The following paragraphs indicate the particular equipments to which tests for spottiness will be applied together with the basis for determining the subplot.

5.02 *Relay Equipment:* For each general type of relay, such as the B and G type, etc, selected from equipment groups indicated below, tests for spottiness may be made for subsamples selected on one of the bases under which the respective equipment group is listed:

SECTION 800-651-180

(a) *Code Basis*

Switchboards
Relay Racks
Desks (Sectional)

(b) *Circuit Basis*

Switchboards

Relay Racks
Desks (Sectional)

(c) *Equipment Unit Basis*

Relay Racks—Shop Wired (Wired Unit
Basis)

Relay Racks—Job Wired (Bay Basis)
Switchboard (Position Basis)

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