

**BELL SYSTEM PRACTICES — PLANT SERIES**

**GENERAL PLAN**

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**1. GENERAL**

**1.01** This section outlines the general plan for the "Bell System Practices — Plant Series" and describes the general features of the plan for combining, grouping and consolidating information presently contained in all lettered and unlettered series of Bell System Practices. This series employs a uniform numbering plan and will ultimately include all lettered series and the 950 series of practices.

**1.02** This section is reissued to delete the information on ordering Bell System Practices and to make minor revisions in the text for clarification. Ordering information is now covered in Section 000-010-011.

**2. SCOPE AND ARRANGEMENT**

**2.01** A 9-digit numbering plan (XXX-YYY-ZZZ) is used. The 9-digit arrangement is required for future growth, flexibility and re-organization of present practices and to maintain uniformity. It also provides a convenient means for the ordering and distribution of practices.

**2.02** In this numbering plan the first three digits (XXX) are referred to as division numbers and are used to designate major categories of information. The second three digits (YYY) are referred to as subdivision numbers and provide a means of breaking down a division into subdivisions of information. The last three digits (ZZZ) are referred to as key numbers and are used to indicate the class of material contained in the particular practice. The over-all plan is shown in Fig. 1.

**3. INDEXES**

**3.01** The following indexes will be provided:

- (a) Section 000-000-000 provides a Division Numerical Index of sections in Division 000 with their issue numbers and subjects. It also provides a Master Numerical Index of all division numbers and the subjects covered by each division.
- (b) Section 000-000-001 provides a Master Alphabetical Index of all division subjects and their associated division numbers.
- (c) A Division Numerical Index (Section XXX-000-000) is provided for each division and lists all sections in the division with their issue numbers and subjects.
- (d) A Division Alphabetical Index (Section XXX-000-001) will be provided where justified by the number of sections within a division.

(e) An alphabetical index (Section XXX-000-005) will be provided, where justified, for a group of divisions which cover related material. Examples of these are Section 460-000-005 — Alphabetical Index — Sections for Installation and Maintenance — Private Branch Exchange, and Section 620-000-005 — Alphabetical Index — Outside Plant — Construction and Maintenance.

(f) A Cross Reference List is provided for each lettered series or portion of a series which has been converted. These lists show the old section numbers numerically and the corresponding Plant Series numbers. When a lettered series is converted in one step, the Cross Reference List is numbered Section 000-020-ZZZ. If a series is converted in steps, the Cross Reference List will be numbered temporarily XXX-020-ZZZ in an appropriate division of the group of divisions involved. The list will be reissued for each step of the conversion. When the conversion of that series is completed, the list will then be numbered 000-020-ZZZ.

#### 4. ISSUE NUMBERS AND RATINGS

4.01 Each new section is assigned an issue number starting with 1. Each reissue will carry the next consecutive number. In some instances the issue number may be followed by the letters A, AC, AR, B, or D to indicate the change classifications which are the same as for drawings as described in Section 005-100-101.

4.02 Each section is given a rating as follows:

(a) *AT&TCo Standard* is used on sections approved for general use. These sections are forwarded to all Operating Companies and will be included in Bell System Practices Memoranda (B.S.P.M.), numerical indexes, and alphabetical indexes where provided.

(b) *AT&TCo Special* is used on sections intended for use only under special conditions and not applying generally throughout the Bell System. These sections are distributed on a limited basis according to the use of the information and will not be included in B.S.P.M., or in numerical or alphabetical indexes.

4.03 In some cases, usually occurring during the early development of a new system, a practice cannot be copyrighted because of patent reasons. In these cases only the section number and issue number are shown and the rating and date are omitted. The copyright notice is omitted, and in its place is a restrictive notice stating that the practice is not a publication. These sections are forwarded to all Operating Companies and will be included in B.S.P.M. and in numerical and alphabetical indexes. If the patent situation has been cleared when the practice is reissued, it will be rated AT&TCo Standard or Special. In such cases a statement will be made in the text regarding the removal of the restriction and the application of the rating.

4.04 In the past, some sections have been issued bearing the rating Provisional or Provisional Standard. These ratings will not be changed unless the practice is to be reissued for other reasons, in which case the rating will be changed to Standard.

#### 5. ADDENDA

5.01 An addendum is used to supplement a section and is issued when there is an urgent need in the field for information normally covered in Bell System Practices.

5.02 An addendum is used when the section it modifies is sufficiently up to date or of such size that a revision is not warranted at that time. Such information will be included in the section when it is reissued.

5.03 When the information is to be further changed in a section having an addendum, the addendum may be reissued. The information contained in the earlier issue is included in the new issue so that the section will have only one System-issued addendum at a time.

5.04 Each addendum carries its own issue number starting with Issue 1. Each Addendum indicates in the text the issue of the section with which it is associated. When a section is reissued the material from the addendum, when appropriate, will be included in the new issue and the first addendum to the new issue should be Issue 1. Each addendum is dated, with one exception. If a section carries a restrictive notice and the patent situation has not been cleared, the addendum will not be dated.

**5.05** The ratings used for addenda are the same as those for Sections discussed in 4.02 and 4.03.

- (a) The addendum to a Standard section may be rated Standard or Special, or carry a restrictive notice.
- (b) The addendum to a Special section may be rated Special or carry a restrictive notice.
- (c) The addendum to a section carrying a restrictive notice would ordinarily carry a restrictive notice. However, if the patent situation has been cleared when the addendum is issued or reissued it would be rated Standard or Special. In such cases a statement will be made in the text regarding the removal of the restriction and the application of the rating.

**5.06** Standard addenda and addenda carrying restrictive notices are forwarded to all Operating Companies and will be included in B.S.P.M., and numerical indexes. Special addenda are forwarded only to the Operating Companies concerned and will not be included in B.S.P.M. or numerical indexes.

**5.07** Addenda may be prepared in two forms, one containing the new information in the addendum itself and the other having replacing pages attached to a pink addendum sheet. In the first case the entire addendum is filed ahead of the section. In the second case *the attached pages are to be inserted in their proper places in the section and the replaced pages removed; the pink addendum sheet is to be filed ahead of the section.*

#### REPLACING PAGE ADDENDA

**5.08** Replacing page addenda eliminate the inconvenience of referring back and forth from the section to the addendum and will be used wherever appropriate. They will not be used with sections carrying restrictive notices, unless the patent situation has been cleared.

**5.09** The pink addendum sheet will contain general information such as reasons for issue or reissue and the nature of the changes, together with a listing and the issue date of the new pages which are to be substituted or inserted in the section. Filing instructions will be

prominently displayed at the top of the pink sheet. See Fig. 2.

**5.10** When an addendum is reissued it will contain all of the information of the preceding addendum including the previously issued replacing sheets. In this way, it will be unnecessary for more than the latest addendum to be kept in W.E. Co. stock.

**5.11** Each replacing sheet will bear in the upper right-hand corner of the odd-numbered page, the number and issue of the section involved. If the back of the sheet, the even-numbered page, contains printed matter, the section number only will appear on this page.

**5.12** At the bottom of each replacing page will appear the page number of the original page. Under this will appear the word "Revised" or "Reissued" followed by the date. "Revised" will be used when the subject matter has been modified and "Reissued" will be employed for unmodified pages occurring on the opposite side of a sheet from a modified page.

**5.13** In cases where the modified material occupies more space than the original and it becomes necessary to provide an interleaving page or pages, the additional sheets will be set up, in general, like a substitution sheet. The page number will be that of the preceding page plus a decimal fraction as, for example, Page 6.1 for a new page between Pages 6 and 7. The back of this sheet would be Page 6.2 if it contains any subject matter. Below the page number will appear "Added" followed by the date, instead of "Revised" or "Reissued" as for substitution pages. If the back of the sheet has no subject matter, it will be left entirely blank, that is, the section number, page number, etc, will be omitted.

**5.14** If the new material requires more paragraphs than the old, the new paragraphs will be added in one of the following manners:

- (a) The new material may be added to the old on a subparagraph basis.
- (b) Unnumbered paragraphs may be used.
- (c) The new paragraphs may have an additional point and digit, such as 3.21.1 for a paragraph to be inserted between 3.21 and 3.22.

5.15 If it becomes necessary to add a new figure, the figure number will consist of the number of the next preceding figure plus a decimal fraction, such as Fig. 4.1 for a figure to be inserted between Figs. 4 and 5.

5.16 If the new arrangement omits one or more paragraphs, the paragraph numbers will be retained, followed by the word "omitted."

## 6. APPENDICES

6.01 Appendices are used to supplement the regular sections when the additional material is optional in character, such as modifications which are not necessarily applied to all of the equipment in the field.

6.02 Appendices to a section will be numbered serially from 1 up. There may be more than one appendix to an issue of a section. Each appendix will also be given a date and rating as outlined for addenda in Paragraphs 5.04 and 5.05, and shall indicate the issue of the section with which it is associated. When the section is reissued, it will include the material in the appendices.

## 7. INDICATION OF CHANGES

7.01 Changed and added portions of sections, addenda and appendices will, when advantageous, be indicated by marginal arrows or arrowed brackets.

7.02 Changes will be indicated only if the essential meaning is modified, and not for cases where wording only has been revised.

## 8. SIZE, BINDING AND COLOR

8.01 Sections, addenda and appendices of "Bell System Practices — Plant Series" are furnished in size 8-3/8 by 10-7/8 inches. The bind edge is suitably punched for approved binders.

8.02 The following colors of paper will be used:

- (a) Sections — White
- (b) Addenda — Pink

- (c) Addenda with replacing sheets —  
Addenda sheets — Pink  
Replacing sheets — White
- (d) Appendices — Pink
- (e) Special Cases — Color to be specified

## 9. DISTRIBUTION AND REPLACEMENT

9.01 It is important that the latest issues of sections be used in every case. Accordingly, numerical indexes are issued from time to time to indicate the latest issues of sections rated A.T.&T. Co Standard. Sections rated Special (see 4.02b) will not be shown in the indexes.

9.02 Addenda and appendices may be obtained in the same manner as sections. If a section is ordered which has an associated A.T.&T. Co. addendum or appendix, the addendum or appendix will be supplied with the section. The procedure for ordering practices is covered in Section 000-010-011.

## 10. FIELD COMMENTS ON BELL SYSTEM PRACTICES

10.01 Form E-3973 is available from W.E. Co. stock and should be used to transmit comments to the A.T.&T. Co. on Bell System Practices. These comments should be forwarded through lines of organization within the Operating Company. Two copies of the form should be sent to the Bell System Practice Coordinator, A.T.&T. Co., 195 Broadway, New York, New York 10007.

## 11. PLAN FOR PRACTICES PREPARED BY OPERATING COMPANIES OR OPERATING COMPANY AREAS

11.01 Parts 1, 2, Paragraphs 5.07 through 5.16 and Parts 7 and 8 of this section apply to both System-issued and Operating Company-prepared practices.

11.02 In general, sections, addenda or appendices prepared by the Operating Companies deal with local administration and routines, and special conditions or subjects not covered in System-issued practices.

### 11.03 Numbering:

- (a) If a locally prepared section is to be used in place of a System-issued section which it is not adopting, the Company should use

the System-issued section number with the proper suffix (see 11.04).

(b) If a section is prepared locally to supplement information which is covered in a System-issued section and the System-issued section is to be retained for use by the Company, the first six digits of the locally prepared section should be the same as those of the System-issued section. The Company should make its own assignment of the last three digits, using the 900-999 block, and the proper suffix (see 11.04).

(c) In all other cases the Company should contact the Bell System Practice Coordinator, A.T.&T. Co., 195 Broadway, New York, New York 10007, for the number assignment.

(d) Locally prepared addenda and appendices shall bear the same number as the sections they supplement and the proper suffix (see 11.04).

**11.04** All numbers used on Operating Company practices shall be suffixed with the initials of the Company writing the section, addendum or appendix as indicated below:

SUFFIX CODE	OPERATING COMPANY
CA	The Bell Telephone Company of Canada
CB	The Cincinnati and Suburban Bell Telephone Company
CD	The Chesapeake and Potomac Telephone Company (Washington, D.C.)
CM	The Chesapeake and Potomac Telephone Company of Maryland
CP	Applicable to all Chesapeake and Potomac Telephone Companies
CV	The Chesapeake and Potomac Telephone Company of Virginia
CW	The Chesapeake and Potomac Telephone Company of West Virginia
ET	Eastern Telephone and Telegraph Company
HB	The Ohio Bell Telephone Company
LB	Illinois Bell Telephone Company
LL	Long Lines Department, A.T.&T. Co.
MB	Michigan Bell Telephone Company
MS	The Mountain States Telephone and Telegraph Company

SUFFIX CODE	OPERATING COMPANY
NB	Indiana Bell Telephone Company, Incorporated
NE	New England Telephone and Telegraph Company
NJ	New Jersey Bell Telephone Company
NW	Northwestern Bell Telephone Company
NY	New York Telephone Company
PA	The Bell Telephone Company of Pennsylvania
PN	Pacific Northwest Bell Telephone Company
PT	Pacific Telephone—California-Nevada
SB	Southern Bell Telephone and Telegraph Company
SN	The Southern New England Telephone Company
SW	Southwestern Bell Telephone Company
WT	Wisconsin Telephone Company

**11.05** *Designating Section Issue:* The initial issue of a locally prepared section shall be designated by the letter A. Successive issues shall be designated B, C, etc.

**11.06** *Addenda and Appendices Prepared by Operating Companies*

(a) In the past the Operating Companies have issued addenda, supplementary addenda, supplements, appendices, etc., under various plans. Upon conversion to the Plant Series it may be necessary in some instances to retain the information in this form, at least temporarily. However, if possible, it would be desirable when converting these practices to follow a uniform plan. A suggested procedure is outlined in paragraphs (b) through (k), and it is recommended that all new or revised information be handled in this manner.

(b) *Addenda* should be used principally to correct and add information which is expected to be covered in the sections when they are next reissued. Each addendum shall refer to the issue number or issue letter of the section it addends.

(c) The first issue of an addendum to a section shall be lettered A. If necessary to further addend that issue of the section, the addendum shall be reissued as issue B, C, etc, as required. Each reissue shall automatically replace the previous issue.

↗ (d) When a locally prepared section is reissued, the material from the addendum, when appropriate, shall be included in the new issue.

(e) Addenda to the reissued section shall be designated as in (c), that is, as Issue A, B, C, etc.

(f) There shall be not more than one locally prepared addendum to either a locally prepared section or System-issued section at one time. There may, however, be both one locally prepared addendum and one System-issued addendum to the same System-issued section.

(g) *Appendices* should be used principally to cover administrative information, special instructions, and optional arrangements. Much of this information may be of a permanent nature.

(h) The first appendix to a section shall be numbered 1. If necessary to further append the section, additional appendices may be issued. They shall be numbered 2, 3, etc. They do not normally replace previously issued appendices.

(i) Appendices may or may not be assigned issue designations. If they are, they shall be given lettered designations, each one starting with A. For example, appendix 1, issue A; appendix 2, issue A, etc.

(j) Since much of the information to be covered in appendices is expected to be of a permanent nature, appendices should not nor-

mally refer to a specific issue of the corresponding section. Upon reissue of the section, the appendix or appendices may thereby be retained in good standing.

(k) There may be one or more locally prepared appendices in addition to one locally prepared addendum to either a locally prepared section or System-issued section.

11.07 The Operating Company name (or abbreviation) and Operating Area issuing the section, addendum or appendix should appear in the place ordinarily occupied by the rating of a System-issued section, as illustrated below:

**SECTION 230-000-000 NY**  
**Issue A, June, 1959**  
**N. Y. Tel. Co. LI**

**ADDENDUM 230-000-000 NW**  
**Issue A, June, 1959**  
**NW. Bell Tel. Co. Iowa**

11.08 The recommendations of Operating Company counsel should be followed concerning the copyrighting of locally prepared sections. This is particularly important where material is reproduced from publications copyrighted by A.T.&T. Co., other Bell System Company or an outside organization.

11.09 In order to coordinate practice writing effort and keep A.T.&T. Co. records up to date, 2 copies of each section, addendum or appendix prepared by the Operating Companies should be sent to the Bell System Practice Coordinator, A.T.&T. Co., 195 Broadway, New York, New York 10007. Notices of Operating Company cancellations should also be sent to Bell System Practice Coordinator.

XXX - YYY - ZZZ

000 - 000 - 000  
999 - 999 - 999

PRESENT SERIES  
CLASSIFICATION

PLANT SERIES  
PRACTICES

NUMBER GROUP  
CLASSIFICATION

ALL SERIES - GENERAL - SCOPE AND ARRANGEMENTS	GENERAL INFORMATION	000-000-000 019-999-999
(A), (B), (E) & (R) PRIMARILY	COMMON - APPARATUS, MISC. EQUIP. TOOLS, TEST EQUIP. POWER, ETC.	020-000-000 023-999-999 024-000-000 179-999-999
(A) CENTRAL OFFICE MAINTENANCE	SWITCHING SYSTEMS	200-000-000 289-999-999
(E) TOLL TEST ROOM OPERATION	TRANSMISSION SYSTEMS AND TESTING	300-000-000 379-999-999
(R) RADIO SYSTEMS	RADIO	400-000-000 449-999-999
	CUSTOMER EQUIPMENT	
(C), (B) & (P)	COMMON	460-000-000 469-999-999
(C), (B) & (P)	SPECIAL SERVICES	470-000-000 489-999-999
(C) STATION OPERATIONS MANUAL	STATION	500-000-000 529-999-999
(B) PBX INSTALLATION AND MAINTENANCE	PBX	530-000-000 559-999-999
(P) TELETYPEWRITER	TELETYPEWRITER	570-000-000 589-999-999
(P) DATA SYSTEMS	DATA SYSTEMS	590-000-000 599-999-999
(G) OUTSIDE PLANT CONSTN. & MTGE.	OUTSIDE PLANT	620-000-000 649-999-999
(F) LOCAL TEST ROOM OPERATION	TEST CENTER OPERATION	660-000-000 669-999-999
(M) PLANT ASSIGNMENT	PLANT ASSIGNMENT	680-000-000 689-999-999
(J) MOTOR VEHICLES & CONSTN. APPARATUS	MOTOR VEHICLES	720-000-000 729-999-999
SUPPLY OPERATING PRACTICES	SUPPLIES	740-000-000 749-999-999
(H) BUILDINGS	BUILDINGS	760-000-000 779-999-999
PLANT EXTENSION ENGINEERING	PLANT EXTENSION ENGINEERING	780-000-000 789-999-999
(AA) EQUIPMENT ENGINEERING	EQUIPMENT ENGINEERING	800-000-000 839-999-999
(AB) TRANSMISSION ENGINEERING & DATA	TRANSMISSION ENGINEERING & DATA	850-000-000 889-999-999
(AG) OUTSIDE PLANT ENGINEERING	OUTSIDE PLANT ENGINEERING	900-000-000 939-999-999
(R) RADIO	RADIO ENGINEERING	940-000-000 944-999-999
(AF) FOREIGN WIRE RELATIONS	TRAINING MATERIAL	945-000-000 949-999-999
(950) GENERAL DESCRIPTIVE	GENERAL DESCRIPTIVE	950-000-000 989-999-999

The first 3-digits, are used to designate divisions, and will be referred to in this section as division numbers. A division number is provided for each type of system, major type of apparatus or equipment, or a major category of information. Divisions are assigned with the objective of providing the most useful grouping of information and to avoid duplication. In cases where information applies to a number of divisions, it will be included in a common division. Engineering practices are included in major divisions separate from the maintenance material.

The middle 3-digits, are assigned to sub-divisions to indicate major components of systems or apparatus or sub-divisions of information. For example, a division number (XXX) is assigned to each type of crossbar switching system and sub-division numbers (YYY) assigned to each major component of the system. Other examples of sub-divisions are: Carrier System Amplifiers or Repeaters, 550-type PBX's, U and UA-type Relays, and 500-type Telephone Sets.

The last 3-digits, are key numbers and designate the class of material contained in each section as follows:

<u>Key Numbers</u>	<u>Class of Material</u>
-000 through -009	<u>Indexes</u>
-010 through -029	<u>General, Forms, and Assignment Procedures (Administration)</u> Scope, arrangement and plan for issuing the Plant Series. Items of general interest and instructions of a general nature. Use and description of forms, instructions covering trouble summaries, analyses and measurement plans, assignment, service order and trunk order procedures.
-040 through -059	<u>Training Material</u> Material used exclusively for training purposes.
-100 through -149	<u>Descriptive Information</u> Descriptive information on systems, equipment, apparatus, materials, tools, gauges and test sets. Also abbreviations, requirement tables and symbols.
-150 through -179	<u>Specifications</u> Equipment Design Requirements (J Specifications), General Equipment Requirements, Miscellaneous Specifications, etc.
-180 through -199	<u>Engineering Application</u> Information of particular value to Operating Company personnel in selecting and ordering the proper equipment or materials to meet the needs of a particular job.
-200 through -249	<u>Installation Methods</u> Methods of installing customer equipment, radio equipment, outside plant (poles, cables, terminals, etc.) and certain types of central office equipment.
-300 through -349	<u>Service Maintenance (Operating Methods)</u> Methods of investigating trouble reports and alarms (to the point of sectionalizing the trouble); methods of placing equipment, trunks, etc., in service and removing them from service; methods for operating power equipment; methods for operating outside plant equipment; and distributing frame procedures. Requirements to be met for circuit orders or periodic tests, if these requirements are not given in the test and adjustment sections.
-350 through -399	Tables of frequencies or intervals for making periodic tests; emergency and interdepartmental routines.
-400 through -449	<u>Functional Diagrams and Connecting Information</u> Illustrations and drawings of the internal wiring arrangements and options that are used in preparing various types of communication equipment to meet the particular requirements of the customer.
-500 through -699	<u>Tests, Inspections &amp; Alignment (Procedures to Determine Need for Adjustment or Repair)</u> Methods to be followed in the performance of tests on systems, equipments, switching circuits, trunks, loops and lines, including the method of connecting test equipment and use of forms covering test results. Operation of test positions and the interpretation of lamp signals. Normally, it includes limits and adjustment values and inspections not associated with adjustable apparatus such as jacks, keys, relays, switches, etc. It also includes manhole testing, voltage testing methods and other tests applicable to outside plant.
-700 through -749	<u>Requirements and Adjusting and Lubrication Procedures</u> Mechanical requirements used in checking adjustable apparatus, prior to the time of turn-over by W.E. Co., as well as for current maintenance. Lists of tools, gauges, materials and information essential to the proper application of the requirements.
-800 through -849	<u>Repair and Modification Procedures (Including Ordering Information)</u> Ordering information for piece parts, and replacement parts, also replacement procedures, modifications, repair and refinishing information.
-900 through -999	<u>Reserved for Operating Company Practices Having Local Application Only</u>

Fig. 1 - Plant Series - Scope and Arrangement

BELL SYSTEM PRACTICES  
Plant Series

**REPLACING PAGE ADDENDUM**

*Filing Instructions:*

1. REMOVE FROM THE SECTION THE PAGES NUMBERED THE SAME AS THOSE ATTACHED TO THIS PINK SHEET.
2. INSERT THE ATTACHED PAGES INTO THE SECTION IN THEIR PLACE.
3. PLACE THIS PINK SHEET AHEAD OF PAGE 1 OF THE SECTION.

ADDENDUM 065-105-801  
Issue 1, January, 1963  
AT&TCo Standard

**LADDERS AND LADDER SEATS  
PIECE-PART DATA, REPLACEMENT PROCEDURES,  
AND MINOR REPAIRS**

**1. GENERAL**

**1.001** This addendum supplements Section 065-105-801, Issue 5. The attached pages must be inserted in the section in accordance with the filing instructions above.

**1.002** This addendum is issued to change the title of the section to include ladder seats; and to add ladder seats to the general information for returning ladders to the branch house for repair; also to show the latest ladder track plug design.

The following change applies to Part 1 of the section:

- (a) 1.06 — revised

**2. REPLACEMENT PARTS**

The following change applies to Part 2 of the section:

- (a) Fig. 9 — revised

**Attached:**

Page 1 dated January 1963, revised

Pages 2 and 9 dated January 1963, reissued

Page 10 dated January 1963, revised

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Printed in U.S.A.

Page 1  
1 Page and Attachments

Fig. 2