BELL SYSTEM PRACTICES Plant Series SECTION 800-613-157 Issue 3-D, November 1958 AT&TCo Standard

SPECIFIC REQUIREMENTS FOR APPARATUS AND EQUIPMENT FRAMES AND RACKS NUMBERING AND LETTERING GENERAL EQUIPMENT REQUIREMENTS

PAGE CONTENTS 1 1. GENERAL 2. SPECIFIC REQUIREMENTS 2 2 A. General Mounting Plate Designations . . . 2 PBX Mounting Plate Designations . 2 4 Mounting Plate Space Designations . B. Frames With Bulb-angle Uprights . . 5 5 SD Drawing Numbers Equipment Code Designations . . . 5 5 Frame Designation 5 Bay Stamping **Primary and Secondary Switches** Located on Same Frame 5 5 Office Code Designation Appliance Outlets 5 Frames Equipped With Casing Doors 5 Removable Rear Frame Cover Assemblies 5 Column of Lines Designation . . . 5 C. Frames and Relay Racks With 9 Box-type Uprights 9 SD Drawing Numbers 9 Equipment Code Designations . . Frame Name and Number . . . 9 11 Bay Equipment Name and Number . Other Bay Stamping 12 Lamp Mounting Block Designations . 17 17 D. Panel System Frames **Frames Without Casing-enclosed** Equipment 17 Frames With Casing-enclosed 20 Equipment

	CONTENTS			PAGE
E.	Step-by-Step System Frames .	•	•	20
	Bay and Frame Designations .			20
	Central Office Unit (Office Code)			
	Designation		•	21
	Selector Group Designations .	•	•	21
	Shelf Letters		•	22
	Thousand Group Designations .		•	23
	Shelf or Shelf-unit Designations	•	•	23
F.	PBX System Frames	•	•	28
	Frame Designations			28
	Designations for Shelf Units .	•	•	28
G.	Relay Rack Bays	•	•	29
	Bulb-angle-type Bays			
	(Sheet Metal Base)			29
	Channel-type Bays	•	•	29
Н.	Fuse Bays	•	•	31
	Bulb-angle-type Fuse Bays .	•	•	31
I.	End Guards	•	•	32
	Cabinet-type End Guards			32
	End Guards for Box-type Frames	•		32
	Open-type End Guards	•	•	32
REASO	NS FOR REISSUE	•	•	35
1. GEN	VERAL			

1.01 This section covers the specific requirements for numbering and lettering frames and racks and supplements the common requirements covered in Section 800-613-150.

1.02 This section is reissued to make changes which are listed under reasons for reissue at the end of this section. 1.03 This section is supplemented by Sections 800-613-156 covering toll transmission equipment on duct-type frames and 800-613-158 covering distributing frames.

1.04 All dimensions shown in this section for locating designations shall be considered approximate unless otherwise indicated by Ltolerances.

2. SPECIFIC REQUIREMENTS

A. General

2.01 Mounting plate designations (letters A, B, C, etc, circuit numbers, or selector numbers on panel selector frames), when specified on the associated equipment drawings to be stamped, shall be stamped front and rear as rollows and apply to all systems except PBX and to mounting plates enclosed and not enclosed in casings.

 (a) Apparatus Side: On the right side of unit framework or frame upright for paneltype selector frames and on the left end of mounting plates for other type equipment. (See Fig. 1.) (b) Wiring Side: On right or left side of the unit framework or frame upright whichever side is away from the main form of the local cabling, that is, at the tips of local cable arms. For equipment with both unit and frame local cables, the location of the stamping shall be determined by the unit cable. (See Fig. 1.)

2.02 *PBX Mounting plate designations* shall be numbered consecutively from top down in numerical order on both apparatus and wiring sides for all usable space, as follows:

(a) Apparatus Side: Stamp the number of the first, last, and each intermediate mounting plate space whose number is a multiple of five on the left edge of the bulb-angleor channel-type frame in line with the center of two mounting plate screws with 3/8-inch characters.

(b) *Wiring Side:* Stamp on the upright of each bay on the side of the equipment away from the cabling with 3/16-inch characters.



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Fig. 1 – Mounting Plate Designations



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Fig. 2 – Mounting Plate Space Designations

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SECTION 800-613-157

2.03 Mounting plate space designations, when specified, except on sender and register frames, shall be numbered consecutively from bottom up on both apparatus and wiring sides for all usable spaces, as follows:

 (a) Apparatus Side: Stamp the span of all mounting plate spaces enclosed in casings outside on the right side of the left-hand casing door. Stamp the number of the first, last, and each intermediate mounting plate space whose number is a multiple of five on the inside of the left casing door (hinge side) in line with the associated spaces. Equipped spaces not enclosed in casings, whose number is a multiple of five, shall be stamped on left end of mounting plate between the mounting screws. Unequipped spaces not enclosed in casings shall be stamped on the flange of lefthand upright between mounting holes. Numbers shall not be stamped for spaces occupied by terminal strips, but the numbers of those spaces shall be accounted for in the stamping continuity. (See Fig. 2.)



SECT. A-A



FRONT VIEW

Fig. 3 – SD Drawing Number and Equipment Code Designation for Frames With Bulb-angle Uprights and Sheet Metal Base — Single Bay or Left Bay of 2-bay Frame (b) *Wiring Side:* Stamp on the upright of each bay on the side of the equipment away from the cabling with 3/16-inch characters.

(c) Sender and register frame stamping follows the general rules in (a) and (b) above, except that the mounting plate spaces are not numbered consecutively from bottom to top of the frame. Each sender or register unit is numbered the same from bottom up.

B. Frames With Bulb-angle Uprights

2.04 SD Drawing Numbers: Locate the SD drawing number for the bay or frame per
Fig. 3. Only the base and suffix number shall be stamped. On relay rack bays equipped with relay equipment units and step-by-step switch frames equipped with shelf-mounted equipment, SD numbers are not required.

2.05 Equipment Code Designations: Stamp as shown in Fig. 3.

2.06 Each frame shall be designated with its frame designation suffixed by the number of the frame, such as DJ 0, DJ 1, L 15, etc.

2.07 The frame designation, including the primary and secondary bay designations, when required, shall be stamped on the top surface of the frame base, both front and rear, as shown in Fig. 4 and 5. In the case of line link frames which may consist of a basic 2-bay unit and one or more single-bay units, the frame designation (L 0, L 1, etc) shall be stamped on the basic unit and on the last (right, left, or both) associated supplementary unit in the same line-up.

2.08 Bay Stamping: When the left and right bays of double-bay frames are to be arbitrarily identified, they shall be "0" and "1", respectively, as viewed from the front. Show stamping on frame base in the center of each bay, both front and rear. (See Fig. 5.) Sender units made up of two horizontally adjacent mounting plate groups shall be considered as 2-bay frameworks.

2.09 Where primary and secondary switches are located on the same frame, the method

of linkage between the horizontal and vertical

levels on the respective switches shall be indicated by associating an H and V with the P and S bay designations on the frame base, as shown in Fig. 4.

2.10 The office code designation, when specified on the equipment drawings, shall be stamped on the frame base adjacent to the frame designation, as shown in Fig. 4.

2.11 Where an appliance outlet on a 2-bay frame interferes with the frame name and number in their normal location, such designations need not be removed but shall be restamped on the slanted face of the appliance outlet assembly below the outlet.

2.12 On frames equipped with casing doors, the unit number shall be centered on the left casing door on both the front and rear of each unit. The unit name shall also be stamped on the left casing door on both front and rear of the unit only when all units in a bay do not have the same name as the bay. (See Fig. 6.)

2.13 When the frame is equipped on the wiring side with *removable rear frame covers*, the unit name and number, when required, shall be stamped with 3/4-inch characters on the left upright cover assembly (facing rear of frame) on a single-bay frame and on the center upright cover on a double-bay frame. These designations shall be located at the approximate vertical center of each unit.

The column of lines (00, 01, 02, etc) is 2.14 indicated for each group of 100 lines in a primary bay and supplementary bays of the line link frame. These designations shall be stamped on the common covers of the line relays located nearest the 5-foot 6-inch level in each bay. On the rear, these designations shall be stamped in the center of the top member of the crossbar switch nearest the 5-foot 6-inch level. The functional and numerical designations for the line relays on all plates on each bay shall be stamped in accordance with the standard requirements for the designation of strip-mounted relays, except that all designations shall be omitted from the can cover. (See Fig. 7.)



Fig. 4 – Bulb-angle Frame Designations

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PLAN VIEW OF GUARD RAIL

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Fig. 5 – Numerical Bay Stamping for Double-bay Frames With Bulb-angle Uprights and Sheet Metal Base





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Page 7

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REAR

Fig. 7 – Column of Lines Designation for Line Link Frames With Bulb-angle Uprights

C. Frames and Relay Racks With Box-type Uprights

SD Drawing Numbers

- 2.15 These drawing numbers shall be stamped as follows:
 - (a) On single-bay frames stamp, when required, on the face of the right upright, as shown in Fig. 8.
 - (b) On double-bay frames stamp, when required, on the face of the center uprights of the frame, as shown in Fig. 11.
- 2.16 In the No. 5 crossbar system, the SD-drawing number for the "miscellaneous circuit

for all frames" shall not be shown. Only the basic circuit SD numbers shall be shown.

Equipment Code Designations

2.17 The J-code numbers on single-bay and double-bay frames shall be stamped on the face of the left upright, as shown in Fig. 8 and 11.

Frame Name and Number

2.18 On single-bay frames or relay racks, the frame name and number, when required, shall be stamped as follows:

(a) Centered on the front slanted face of the frame base, as shown in Fig. 8.



Fig. 8 – Front View of Single-bay, Box-type Frame Base

(b) On the rear, centered on the top surface of the frame base and on the fixed rear cover (when furnished) of the left upright in one, two, or three lines, as shown in Fig. 9 and 10.



Fig. 9 – Plan View of Rear of Single-bay, Box-type Frame Base

- 2.19 On double-bay frames, when both bays are identified by a single name and number, the frame name and number shall be stamped as follows:
 - (a) On the front slanted face of the frame base, located to the left and right, respectively, of the center uprights, as shown in Fig. 11.
 - (b) On the rear, centered on the top surface of the frame base and on the fixed rear cover (when furnished) of the center uprights. (See Fig. 12 and 13.)
- 2.20 On double-bay relay racks, each bay is identified by RR and its respective number which shall be stamped as follows:
 - (a) On the front slanted face of the frame base, centered in each bay, as shown in Fig. 11.

(b) On the rear on the top surface of the frame base centered in each bay and on the fixed rear cover (when furnished) of the left upright of each bay. (See Fig. 12 and 14.) .



Fig. 10 – Fixed Rear Covers (When Furnished) of Left Upright, When Facing Rear of Frame of Single-bay, Box-type Frames

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Fig. 11 - Front View of Double-bay, Box-type Frame Base



Fig. 12 - Plan View of Rear of Double-bay, Box-type Frame Base

Bay Equipment Name and Number

2.21 On single-bay frames, the bay equipment name and number shall be stamped as follows:

- (a) Centered on the front slanted face of the frame base below the frame name and number, as shown in Fig. 8.
- (b) On the rear, centered on the top surface of the frame base below the frame name and number and on the fixed rear cover (when furnished) of the left upright, as shown in Fig. 9 and 10.
- 2.22 On double-bay frames, the bay equipment name and number shall be stamped as follows:
 - (a) **On the front** slanted face of the frame base, located below the center of each bay, as shown in Fig. 11.
 - (b) On the rear, centered on the top surface of the frame base, as shown in Fig. 12, and on the fixed rear covers (when furnished) of the center uprights or left upright of each bay, as shown in Fig. 13 and 14, respectively.



Fig. 13 – Fixed Rear Covers (When Furnished) of Center Uprights, When Facing Rear of Frame, of Double-bay, Box-type Frames (Except Relay Rack)



Fig. 14 – Fixed Rear Covers (When Furnished) of Left Uprights, When Facing Rear of Frame, of Both Bays of Double-bay Relay Rack — Box-type Frames

2.23 When bay equipment is subdivided into two or more groups, each of which extends vertically over the bay and requires designations, stamping shall be provided as follows: :

 (a) On the front slanted face of the frame base with brackets, as required, to embrace the physical limits of equipment, as shown in Fig. 15.

(b) On the rear, on the top surface of the frame base with brackets, as required, to embrace the physical limits of equipment and on the fixed rear cover (when furnished), as shown in Fig. 16 and 13, respectively.

Other Bay Stamping

2.24 An arrow on single-bay frames shall be stamped on the fixed rear cover (when furnished) of the left upright to indicate the bay to which the designation applies. (See Fig. 10.)

2.25 Arrows.on double-bay frames shall be stamped on the right and left sections of the fixed rear cover (when furnished) of the center uprights to indicate the bay to which the designation applies. (See Fig. 13.)



Fig. 15 — Front View of Double-bay, Box-type Basic Frame Base, Two or More Vertical Groups



Fig. 16 - Plan View, Rear of Double-bay, Box-type Basic Frame Base

2.26 The name and number of an associated frame on single-bay frames, when required, shall be stamped on the right side of the front slanted face of the frame base, as shown in Fig. 8.

2.27 The name and number of an associated frame and trunk link pair number on double-bay frames, when required, shall be stamped on the front slanted face of the frame base directly beneath the frame name and number, as shown in Fig. 11. 2.28 Designations R and L on double-bay frames, are stamped to indicate right and left bays when both bays have the same bay name as follows:

(a) On the front slanted face of the frame base, located above the name of the bay equipment on the center of each bay, as shown in Fig. 17.

(b) On the rear, centered on the top surface of the frame base for each bay and on the fixed rear cover (when furnished) of the



Fig. 17 – Front View of Double-bay, Box-type Frame Base



Fig. 18 - Plan View of Rear of Box-type Frame Base

center uprights directly above the arrows, as shown in Fig. 18 and 13, respectively.

2.29 The linkage designations on double-bay frames, when required, to show linkage between bays, shall be stamped as follows:

- (a) On the front, located on the face of the center uprights near the bottom, as shown in Fig. 11.
- (b) On the rear, located on the top surface of the frame base to the left and right of the junction of the two bays, as shown in Fig. 12.

2.30 A hinge-locating symbol, indicating the position of each front cover hinge, shall be stamped on the inside of the left upright of every bay. The period of the 3/4-inch characters shall be used and located adjacent to and in line with the top of the respective F slots which receive the hinge, as specified on the equipment drawing. (See Fig. 19.)

2.31 Group limit lines, when specified on the associated equipment drawing, shall be stamped at the junction of multiplate units or of a multiplate and a single-plate unit as follows. (See Fig. 19, 20, and 23.)



Fig. 19 – Frame Uprights on Box-type Frames ----Hinge-locating Symbol and Bay (Mounting Plate) Position Numbers

- (a) On the front, on the inside face of one (generally the left) or both uprights.
- (b) On the rear, on one upright (generally right facing rear) or both uprights.

They should not be stamped on upright covered by wiring. When both group and subgroup designations are required, group limit lines shall not be used for the subgroups.

2.32 Bay position numbers (mounting plate position numbers) 2, 5, 10, etc, when specified on the associated equipment drawing, shall be stamped for the lowest mounting plate position (approximately 1 foot 0 inch from the floor) and those positions whose numbers are a multiple of five, as follows. (See Fig. 19 and 22.)

- (a) On the front, on the inside face of the left upright above the respective F slots.
- (b) **On the rear**, on the right upright facing the rear below the lower mounting screw hole for the respective mounting plates. When mounting bars are used on the rear of the uprights, the bars are furnished with bay position numbers stamped on the edge and additional stamping on the rear is not required.
- 2.33 Circuit numbers (single number or span of numbers) shall be stamped for groups of equipment when specified on the applicable equipment drawing. These numbers may be bay circuit numbers when circuits are numbered serially in the bay or, in the case of common or control equipment, numbers corresponding to those of other equipment with which the common or control equipment is associated.

(a) On the front, stamp on inside face of the left upright opposite each unit to which they apply. For a span of numbers, the numbers shall be stamped one above the other with the higher on top when they are bay circuit numbers and in the same line for common or control equipment when the numbers apply to associated equipment. (See Fig. 20.)

(b) **On the rear**, stamp on the relay unit in any available space, but preferably under the group designation as shown in Fig. 21. For a span of numbers, stamp in one or two lines as covered in (a) above.

Note: When bay circuit numbers are used, the circuits of each unit are numbered 1 and 2 on 2-circuit units, 1, 2, and 3 on 3-circuit units, etc, from bottom up or left to right, and numerical designations provided accordingly to identify the apparatus for the respective circuits. Single-circuit units

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Fig. 20 - Frame Uprights on Box-type Frames - Circuit Numbers

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- Fig. 21 Bay Circuit Numbers on Rear of Equipment
- on Box-type or on Bulb-angle-type Relay Rack When in Offices With Box-type Framework

require no numerical designations as part of the unit stamping, numerical designations being provided, where required, as covered in (a) and (b) above.

2.34 Span of fuse numbers associated with circuit numbers shall be stamped in accordance with Fig. 22.

2.35 When bay equipment is subdivided into two or more groups arranged one above the other, the various groups shall be identified by means of group or subgroup designations, or both, when specified on the associated equipment drawing. (See Fig. 23.)

(a) On the front, with 3/16-inch characters for subgroup designations (unless otherwise specified on the equipment drawing) and 3/8-inch characters for group designations on the inside face of the left upright, centered approximately with the applicable equipment, when such equipment extends the full width of the bay or is at the left side of the bay. Stamp on the inside face of the right upright, when specified, to designate applicable equipment at right of bay (in this case designations on left and right upright at a given level will be different).

(b) **On the rear**, designations similar to those provided on the front shall be stamped with 3/16-inch characters, except group designations which shall be stamped with 3/8-inch characters when subgroup designations are required. Stamping shall be on one (generally right, facing rear) or both uprights, as prescribed on the equipment drawing. The stamping on the rear generally corresponds to that on the front of the same upright except where bay cable would interfere, in which case, the stamping is placed on the other upright or, if both uprights are designated on the front, combined designations placed on one upright. When mounting plates mount on the rear of the uprights, this stamping should be similarly located on the mounting plates.

Lamp Mounting Block Designations

2.36 Double and single lamp mounting blocks, located in the front slanted face of the frame base, shall have the functional designations stamped, as shown in Fig. 24.

D. Panel System Frames

Frames Without Casing-enclosed Equipment

2.37 On single-sided frames, the frame designations shall be stamped on the upright to the right regardless of the number of bays, as shown in Fig. 25. On the wiring side, when the upright to the right is covered by cabling, the left upright shall be stamped with the frame designations. Where equipment unit common can covers interfere, the frame designations shall be similarly stamped on the center of the can cover.



INSIDE OF RIGHT UPRIGHT

Fig. 22 – Span of Fuse Numbers on Frame Uprights of Box-type Frames

REAR OF RIGHT UPRIGHT





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LOCATION OF GROUP (SUB-GROUP WHEN GROUP AND SUB-GROUP ARE REQUIRED) DESIGNATIONS FOR EQUIPMENT WITH ODD NUMBER OF 2 INCH MOUNTING PLATE SPACES (CENTER BETWEEN "F" SLOTS)

Fig. 23 - (Continued)

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SECTION 800-613-157

2.38 On double-side frames, the frame designations shall be stamped on the upright to the right of the selector bay, as shown in Fig. 25, unless otherwise specified.

Frames With Casing-enclosed Equipment

2.39 At bays having casing-enclosed equipment, when there is a casing at, or immediately below or above the vertical center of the frame,

E. Step-by-Step System Frames

stamp the frame designation on the left door (both front and rear) of one casing, in that order of preference, as shown in Fig. 26. When there are no casings at any of these locations, the frame designation shall be stamped on the right upright in accordance with the requirements for frames without casings.

	TYPE OF FRAME							
DESIGNATION	LINE FINDER	TRUNK FINDER	CONNECTOR	REPEATER	SELECTOR	SUPPLE- MENTARY	MISCEL- LANEOUS	C.D.O.
Bay & Frame	0.40	0.40	0.40	0.40		9.40(-)	0.40	9.40
Name Number	$\begin{array}{c} 2.40\\ 2.40\end{array}$	$\begin{array}{c} 2.40 \\ 2.40 \end{array}$	2.40 2.40	2.40 2.40	2.40	2.40(c) 2.39(c)	$\begin{array}{c} 2.40 \\ 2.40 \end{array}$	2.40 2.40
Unit (Off. Code)					2.41			
Selector Group					2.42			
Shelf Letter				2.43	2.43, 2.44			
				2.10	2.45			
Thousand Group			(2.40			
Shelf or Shelf Unit	2.46(b)	2.46(c)	2.46(a)				2.46(d)	2.46(e) (1

Bay and Frame Designations

2.40 Bay and frame designations consist of numbers having functional significance (101 for a bay or frame of first selectors, 201 for second selectors, etc, and 601 for toll selectors) for selector frames, and name and number (C 1, R 1, M 1, LF 1, TF 1, etc) for other step-by-step frames except in 355A community dial offices, where frames are designated SW 1, SW 2, etc, regardless of type. The frame designation for step-by-step equipment frames shall be stamped on the front of the left upright, as shown in Fig. 27, except as follows:

(a) On selector frames with distributing terminal assembly the bay designation for the left bay shall be stamped on the front of the right channel-upright and the bay designation for the right bay shall be stamped on the front of the left channel-upright. When hulb angle uprights are used the bay designa-

L bulb-angle uprights are used the bay designa-

 \rightarrow tions shall be stamped on designation plates. \rightarrow (See Fig. 28.)

(b) In addition, on the rear of selector frames with distributing terminal assemblies, the bay number only shall be stamped for each bay. This stamping shall be placed on the shelf end bar adjacent to the distributing terminal assembly bay on the fourth single-shelf position from the floor as shown in Fig. 29. If this shelf is not equipped, the designation shall be stamped on the bay upright in the same location.

(c) On supplementary frames, the frame des-

ignation (same as that for initial frame) shall be stamped on the front of the right upright.

(d) In 356A community dial offices, stamp the frame designation (L 1, 20 PTY CONN, etc) with 3/4-inch characters on the side stringer member of the overframe cable rack at the horizontal center of the frame, both front and rear. On each line frame, stamp the applicable hundred number (2, 3, etc) with 3/4-inch characters on the right upright, facing front, approximately 5 feet above the floor.



Fig. 24 – Double or Single Lamp Mounting Blocks



Fig. 25 – Frame Designations on Panel System Frame Uprights



Fig. 26 – Designations on Panel System Casingenclosed Equipment

Central Office Unit (Office Code) Designations

2.41 Office unit (office code) designations consist of letters or numbers or both and shall agree in all cases with the listed office designation. On connector frames the office code designation shall be stamped as covered in 2.46(a). Office code (unit) designations shall be stamped on selector frames in multiunit areas only and then only on each selector frame containing selectors individual to one central office unit. The stamping of office code designations on selector frames also applies to single unit offices in multiunit areas. The office code designation in single unit areas is considered to be superfluous and, hence, is not required in such offices even though the office may be assigned an office code. The word "unit" shall be used only with numerical office codes. When used, it shall precede the office code designation and shall be stamped on selector frames only. The office code designation shall, when required, be stamped on the front of the same upright as the selector bay or frame designations. (See 2.40.)

(a) When the unit designation applies to all of the shelves in a bay, it shall be stamped below the bay or frame designation, as shown in Fig. 27, except that on selector frames with distributing terminal assemblies where all selectors serve the same office, the unit designation is required below the bay number of the left bay only.

(b) When the unit designation does not apply to all of the shelves in the bay, it shall be stamped opposite the middle of the group of shelves to which it applies and the units indicated by brackets. When applicable to only one shelf, brackets are not required. (See Fig. 28.)

Selector Group Designations

2.42 Selector group designations (SEL REP, 2ND SEL, IT SEL, etc) shall be stamped for each group of selectors on each bay on the same upright as bay or frame designations. (See 2.40.)

(a) When the selector group designation applies to all selectors in the bay, stamp below the bay or frame designation, except that on bays having unit designations, stamp below each unit designation.



Fig. 27 - Various Designations for Step-by-Step Frames and Bays

(b) When the selector group designation does not apply to all selectors in the bay, stamp opposite the middle of the group of shelves to which it applies and use brackets to indicate the extent of the group. When applicable to only one shelf, brackets are not required. (See Fig. 28.)

Shelf Letters

2.43 Shelf or half-shelf letters (A, B, C, etc) shall be used to identify each shelf (half shelf at selector frame with distributing terminal assembly) of selectors and repeaters. They shall be designated on the basis of single-shelf location regardless of whether the frame is used for single or double shelves. On repeater frames and selector frames without distributing terminal assembly, the shelf positions shall be designated from top down alphabetically beginning with "A" for the top shelf position on the frame. On selector frames with distributing terminal assembly, the half-shelf positions on each selector bay shall be designated by letters A to P, inclusive, one letter to each half shelf beginning at the top and proceeding left to right on a left selector bay and right to left on a right selector bay facing the front of the frame. Shelf letters shall be stamped on the front of the right frame upright at each shelf position on repeater frames, while on selector frames without distributing terminal assembly, they shall be stamped on the front of the left frame upright at each shelf position. (See Fig. 30.) On selector frames with distributing terminal assembly, half-shelf letters shall be stamped on the front of the frame upright at the left of each half-shelf position in the left selector bay and on the front of the frame upright at the right of each half-shelf position in the right selector bay. (See Fig. 28.)

- (a) Double shelf units shall be referred to by only the shelf letter (or half-shelf letters) applying to the lower shelf of the doubleshelf unit, that is, the shelf on which the alarm equipment, switch jacks, and banks are located.
- 2.44 On the distributing terminal assembly bay, stamp associated half-shelf letters applying to the bank terminal strips on the fronts of the left and right uprights, as shown in Fig. 28. On the rear of the bay, stamp the halfshelf letter on each distributing ring (whether corresponding bank terminal strip is furnished or not), as shown in Fig. 29. This applies, whether the bay is equipped with single- or double-shelf equipment.

Thousand Group Designations

2.45 Thousand group designations (1000, 2000, etc) shall be stamped on selector frames preceding connectors, as follows:

- (a) On selector frames without a distributing terminal assembly, stamp on the front of the left-channel or bulb-angle upright opposite← the first shelf in each group on each bay, as shown in Fig. 31.
- (b) On selector frames with a distributing terminal assembly, stamp on the front of the left upright on bays at the left of the distributing terminal assembly and on the front of the right upright on bays at the right of the distributing terminal assembly, opposite the first half shelf in each group on each bay, as shown in Fig. 28.

Shelf or Shelf-unit Designations

2.46 Shelf or shelf-unit designations shall be stamped on the right upright of the frame and elsewhere, as required, for the following conditions:

- (a) On connector frames, each shelf shall be designated with the appropriate office code and hundred group number and, when there is an overflow appearance of the shelf, with letter "A" for the initial appearance and "B," "C," etc, for overflow appearances. When all appearances do not occur on the same frame, forward and backward tracing information shall be provided between frames by stamping the first succeeding and/or last preceding shelf" and frame designations in addition to the regular shelf designation. (See Fig. 32.)
- (b) On bulb-angle-type line finder frames, opposite the middle of each line group, stamp the designation for the class of service (CB, FR, MR, 1P, etc). (See Fig. 33.)
 - (1) On channel-type line finder frames, in addition to the designations covered in (b) above, stamp the line group number (G 1, G 2, etc) on the intermediate upright immediately to the left of the relay equipment. (See Fig. 33.)
- (c) On bulb-angle-type and channel-type frames equipped with trunk finder units only (such as three intercepting trunk units) stamp the frame designation (TF) on the left-hand upright, and the class-of-service designation (INCPT) on the right-hand upright in the middle of the group. When intercepting trunk finder units are mounted on a line finder or miscellaneous frame, the frame shall be designated (LF) or (M), respectively, and the trunk finder unit designated (TF) stamped immediately above the class-of-service designation. On channel-type frames only, the trunk finder group number shall also be stamped immediately below the class-of-service designation.
- (d) On miscellaneous frames, in addition to shelf or shelf-unit designations normally provided for the respective units on frames mounting one kind of equipment, provide the following stamping with 3/4-inch characters:



Fig. 28 – Designations on Front of Step-by-Step Selector Frames With Distributing Terminal Assembly

Page 24



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Fig. 29 – Designations on Rear of Step-by-Step Selector Frames With Distributing Terminal Assembly

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Fia. 30 – Shelf Letters on Step-by-Step Frames

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- (1) Connectors: Stamp C above the office code and hundred group number [see(a) above].
- (2) *Line Finders:* Stamp LF above the class-of-service designation [see (b) above].
- (3) *Trunk Finders:* Stamp TF above the class-of-service designation [see (c) above].
- (4) Repeaters: Stamp R and shelf number
 (R R) (1, 2 etc) on right upright midway
 between shelf angles for each shelf.

(5) Miscellaneous Selectors and Trunks:

Stamp the class of service (RC, TD, CC, TRK, etc) and the number of the shelf in each class in the office for each selector shelf mounting selectors for one class of service. Stamp M and shelf number for each shelf of selectors for two or more classes of service. These designations shall be stamped in two lines on the right-hand upright midway between the shelf angles. In the case of test distributor shelves in multioffice areas, the office code designation shall be stamped below the class-of-service designation instead of a shelf numerical designation.

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(e) On 356A community dial office doublesided line frames, stamp shelf designations with 3/4-inch characters midway between the shelf angles, in accordance with the following:

- (1) Connectors: Stamp C on the right.
- (2) Line Finders: Stamp LF on the right and the group letter (A or B) on the left and right, respectively.
- (3) Selector: Stamp LS for local, IS for incoming, and RC for reverting call selectors on the right.

(f) On 355A community dial office frames, stamp shelf designations with 3/4-inch characters midway between the shelf angles (shelf angles for upper shelf of 200-point line finders, for lower shelf or selector repeaters) in accordance with the following:

(1) Connectors:	C Number 2 -indicates 2 hundred group.
(2) Line Finders:	LG 1
(3) Trunk Finders:	TG 1 -kind 1, 2, etc, in office.
(4) Repeaters:	R 1
 (5) Selectors: (6) Selector Repeaters: 	Letter shelves alphabetically starting with A from top down on each frame using same se- ries for selectors B and selector repeaters. As- sign one letter for double-shelf units.
(7) Test Dis- tributors:	TD 1
(8) CC Selectors:	CC 1 Number each
(9) RC Selectors:	RC office.
(10) Trunks:	TK 1
(11) Miscel- laneous:	For shelves with M1 more than one kind of switch.

ISS 3-D, SECTION 800-613-157



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STAMPING ON CHANNEL TYPE FRAME UPRIGHT — FORWARD AND BACKWARD TRACING FOR OVERFLOW APPEARANCES ILLUSTRATED. SHELVES A, B AND C ON FRAMES C6 C7 AND C8 RESPECTIVELY.



STAMPING ON DESIGNATION PLATE MOUNTED ON BULB ANGLE FRAME UPRIGHT FORWARD AND BACKWARD TRACING FOR OVERFLOW APPEARANCE ILLUSTRATED. SHELVES C, D, AND E ON FRAMES CI,C2 AND C3 RESPECTIVELY.

Fig. 32 – Shelf or Unit Designations on Step-by-Step Connector Frames

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Fig. 33 – Step-by-Step Line Finder and Trunk Finder Frames — Line or Trunk Groups and Class-of-Service Designations

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F. PBX System Frames

2.47 The frame designations shall be stamped with 3/4-inch characters on the side stringer members of the overframe cable rack at the horizontal center of the frame. These designations are stamped for both the front and rear of the switch frame. For 701B and 711B PBXs, stamp SWF 1F for the front and SWF 1R for the rear of the first switch frame, etc. For the 740E PBX, stamp line frames L 1, etc and selector frames S 1, etc, for both front and rear.

2.48 The designations for shelf units on 701B, → 711B, and 740E PBX frames shall be stamped with 3/4-inch characters on the right upright of the frame midway between the top and bottom shelf angles as follows:

- (a) Selectors: Stamp S and shelf letter (S S) (A, B, etc).
- (b) Connectors: Stamp C and hundreds group number (C1, C2, etc) where one shelf unit is furnished.

 Where two shelf units are required per hundred group, they shall be stamped
 C1A, C1B, C2A, C2B, etc.

 (c) Line Finders: Stamp LF, the hundred number, and, if there is more than one shelf unit for same hundred number, the unit letter also (LF LF)

(Lr	LI	• •
(1	1	etc)
(2	2)
(A	В).

G. Relay Rack Bays

Bulb-angle-type Bays (Sheet Metal Base)

2.49 The bay designation shall be centered on the top surface of the frame base, both front and rear, as shown in Fig. 34.

2.50 When relay rack line-up numbers (RR 103) are used, stamp in line with the bay designation at each end of each relay rack line-up, on both front and rear, as shown in Fig. 34.

2.51 On bulb-angle-type relay racks mounting common systems equipment in offices which normally use frames and relay racks with box-type uprights, circuit numbers (single number or span of numbers) shall be stamped with 3/16-inch characters for groups of equipment. These numbers may be bay circuit numbers identifying circuits numbered serially (00 up) in the bay or, in the case of common equipment, numbers corresponding to those of other equipment with which the common equipment is associated.

(a) On the front, stamp on the face of the left upright opposite the middle of each unit. For a span of numbers applying to a multicircuit unit, stamp in two lines with the higher number on top. For common equipment, stamp the span of numbers of associated equipment in two lines with the lower number followed by a hyphen on the top line.

(b) On the rear, stamp on the relay unit in any available space, but preferably under the group designation, as shown in Fig. 21. For multicircuit units, stamp the span of numbers in two lines with the higher number on top. For common equipment, stamp the span of numbers in one line, separated by a hyphen. 2.52 The bay designations on floor-supported bays used in 701B, 711B, and 740E PBXs+ shall be stamped with 3/4-inch characters on the

side stringer members of the overframe cable rack at the horizontal center of the bay. These designations are stamped for both the front and rear of the relay racks.

Channel-type Bays

2.53 SD Drawing Numbers: Stamp the SD drawing number for the bay or frame per Fig. 36. The base and suffix number shall be stamped (example, SD-36459-01). Figure numbers shall not be stamped. On relay rack bays equipped with relay equipment units, SD numbers are not required.

- 2.54 Equipment Code Designations: Stamp as shown in Fig. 36.
- 2.55 The bay designation on bays with a sheet metal base shall be centered on the top surface of the frame base, front and rear, as shown in Fig. 35.
- 2.56 When relay rack line-up numbers (RR 103) are used, stamp in line with the bay designation at each end of each relay rack lineup on both front and rear, as shown in Fig. 35



Fig. 34 – Bay and Relay Rack Line-up Designations for Bulb-angle Relay Rack Bays



FRONT

REAR



Fig. 35 – Bay and Relay Rack Line-up Designations for Channel-type Relay Rack Bays

2.57 The bay designations on bays with angletype guardrails or without guardrails shall be stamped on the front face of the left upright. This rule also applies when a fuse panel is mounted at the designating height. On the rear, the bay designation shall be stamped on the face of the left upright (facing the rear), except as in (b) below. (See Fig. 35.)

(a) When channel-type racks are equipped with rear-of-bay covers, the bay designation shall be stamped on the exposed surface of the left upright of the cover assembly.

2.58 The bay designation on bays with angletype guardrails and with casing-enclosed units shall be stamped on the center of the left door of the casing nearest the vertical center of the frame, front and rear, as shown in Fig. 6. When the vertical center position is not equipped with casing-enclosed units, stamp on the approximate vertical center of the front left upright,



SECT. A-A



FRONT VIEW

Fig. 36 – SD Drawing Number and Equipment Code Designation for Frames With Channel-type Uprights and Sheet Metal Base — Single Bay or Left Bay of 2-bay Frame

and on the rear, stamp on the left upright (facing the rear) with top of characters 11 inches above the floor, as shown in Fig. 35.

H. Fuse Bays

Bulb-angle-type Fuse Bays

2.59 On bays with a sheet metal base, the bay designation shall be centered on the top surface of the frame base, front and rear, as shown in Fig. 34. However, when other bays in the line-up are stamped on the upright or on number plates, stamp on the upright, as covered in 2.57.

2.60 On bays with angle-type guardrails, the bay designation shall be stamped on the face of the bulb of the left upright approximately 5 feet 6 inches above the floor. On the rear, it shall be stamped on the face of the left upright (facing the rear) approximately 11 inches above the floor, as shown for channeltype bays in Fig. 35.

I. End Guards

Cabinet-type End Guards

2.61 Frame designations and relay rack line-up

numbers (RR 302) shall be stamped on the end guard at each end of each line-up [except as indicated in (a) and (b) below], to indicate the frames and racks in the line-up. Where there is more than one frame in the line-up, the order in which the designations appear, either horizontally from left to right or vertically from top down, shall be in the same order as these frames are encountered in proceeding down the frame aisle away from the end guards. See Fig. 37. In locating the designations for partially equipped rows of frames, sufficient space shall be left for the addition of the ultimate designations in their proper locations.

- (a) In step-by-step offices only, the main crossaisle end is designated.
- (b) In types J, K, and L, carrier auxiliary stations and TD auxiliary repeater stations, end guard stamping is not required.
- (c) When a partial or full line-up is not equipped with an end guard due to a building column being too close to the end frame or when the line-up is equipped with an end guard so close to a column that stamping thereon is impracticable, the designations normally stamped on the end guard shall be stamped on a portion of the column, which has been painted with gray paint, approximately the same distance from the floor. In cases where the columns are painted gray, no background for the stamping will be necessary.

▶ 2.62 Line-up designations on cabinet-type end guards in step-by-step offices, where number plates are not employed, shall be stamped as shown in Fig. 38.

2.63 Where distributing power terminal strips

(DPTS) are mounted in line-ups with cabinet-type end guards, the upper cover of the end guard shall be stamped with a DPTS symbol. Names of frames associated with the DPTS shall be stamped immediately below the DPTS symbol. Applicable frame numbers also shall be stamped when the DPTS in question does not serve all of the frames of the type indicated. On partially equipped line-ups where the end guard is not mounted at the location of the DPTS, designations shall be stamped on the end guard nearest the DPTS. (See Fig. 39.)

2.64 Aisle pilot lamps in cabinet-type end guards shall be stamped with the lamp colors and the aisle number, as shown in Fig. 37.

2.65 Aisle pilot lamp mountings on auxiliary suports shall have the colors stamped, as shown in Fig. 40.

2.66 The designations for the lighting switch coverplate shall be stamped on the end guard adjacent to the switch plate, as shown in Fig. 37.

End Guards for Box-type Frames

2.67 Frame designations on end guards for box-type frames are not rubber-stamped. Printed cards are furnished for insertion in the card guides on the end guards. They shall be inserted so that, from top down, the order is the same as the frames are encountered in progressing down the frame aisle away from the end guards, except that where there are more than three consecutively numbered frames of the same type, whether or not they are located adjacently, the cards shall be placed so that the total span is indicated as shown for RR00 to 06 in Fig. 41.

2.68 Aisle pilot lamps mounted on end guards shall have the colors and functional designations stamped as shown in Fig. 42.

2.69 Aisle pilot lamp mountings on auxiliary supports shall have the colors and functional designations stamped, as shown in Fig. 40.

Open-type End Guards

2.70 Row number, relay rack number, frame, unit (office code), shelf, group, etc, designations applying to the equipment in each line-up shall, as required, be stamped on number plates

furnished for one or both ends of the line-up. In step-by-step offices, designations are required only on the main cross-aisle end of the line-up.

- ✓ In small step-by-step offices, such as 350A or 355A, the end aisle from which the frames are growing is considered the main aisle, and only L this end requires a number plate. The stamping
- on the number plates shall agree with that pro-



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Fig. 37 – Line-up Designations on Cabinet-type End Guards

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STAMPING WHEN STAMPING WHEN VERTICALLY MOUNTED HORIZONTALLY MOUNTED

Fig. 40 – Aisle Pilot Lamp Mountings on Auxiliary Supports

Fig. 38 – Typical Stamping Arrangement on Cabinettype End Guards in Step-by-Step Offices



SIDE OF END GUARD COVER FACING APPARATUS AISLE





Fig. 41 – Line-up Designations on End Guards for Box-type Frames



Fig. 42 – Aisle Pilot Lamps Mounted on End Guards

vided on the respective frames in the line-up, except in the case of the line groups, which are identified as G 1, etc, on the frame and LG 1, etc, on the number plate; and trunk finder groups, which are identified as G 1, etc, on the frame and TFG 1, etc, on the number plate. Number plates suspended from a bracket shall be stamped on both sides; those fastened directly to the end guard, on one side only. (See Fig. 43.)

(a) Information pertaining to the various frames may be arranged horizontally, vertically, or a combination of both on the number plates so as to utilize best the space available. *Horizontal listings* shall be in the same order in which the frames are located in the line-up when facing the side of the number plate being stamped (suspended number plate) or from left to right in the same order in which the frames are encountered when progressing away from the number plate (number

plate fastened directly to the end guard). This will result in reversed arrangements on opposite sides of suspended number plates and on plates fastened to end guards at opposite ends of the same line-up. *Vertical listings* from top down shall be in the same order in which the frames are encountered when progressing away from the number plate. This will result in the same arrangement on opposite sides of suspended number plates. Plates at opposite ends of a line-up will be designated in reverse vertical order.

(b) If a bay with a cabinet-type end guard is added at the end of a present row, all stamping for the entire row shall be shown on the end guard.

- (c) For toll repeater bay and similar toll terminal equipment, the wiring list drawing numbers shall be stamped in addition to the bay and row numbers.
- 2.71 Aisle pilot lamp mountings shall have the lamp colors stamped, as shown in Fig. 40.

REASONS FOR REISSUE

- 1. 1.04 was added to replace the word "APPROX" previously shown in various figures to qualify dimensions.
- 2. Various figures were changed to remove the center line symbol.
- 3. 2.01 was revised to except PBXs.
- 4. 2.02 was added to provide stamping requirements for PBX mounting plate designations.
- 5. 2.40(a) was revised to include bulb-angle frames.
- 6. 2.45(a) was revised to include bulb-angle frames.
- 7. 2.46(a) was revised to refer specifically to the first succeeding and/or last preceding shelf and frame designation.
- 8. In 2.46(b), reference to Fig. 33 was added. The last sentence, shown in 2.45 of the previous issue, was removed.
- 9. The last sentence shown in 2.45(b)(1) of the previous issue and the note referring to 355A offices were removed.



Fig. 43 – Line-up Designations on Number Plates

- 10. In 2.46(d)(5), the last sentence was added.
- 11. Fig. 28 was revised to show number plates on bulb-angle frames.
- 12. In 2.46(f)(1), the hundreds group was changed to read C22.
- 13. In Fig. 31, the title was revised to remove "Without Distributing Terminal Assembly."
- 14. Fig. 32 was revised to clarify forward and backward tracing.
- 15. Fig. 33 was redrawn to present a more comprehensive picture.

- 16. 2.47 and 2.48 were revised to show 701B and 711B PBXs.
- 17. 2.48(b) was revised to more fully cover stamping of hundreds groups.
- 18. 2.52 was revised to show 701B and 711B PBXs.
- 19. 2.62 was added.
- 20. Fig. 38 was added.
- 21. In 2.70, the third sentence was added to provide the stamping requirements for small step-by-step offices.

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