EXCHANGE WIRE RECORD
GENERAL

CONTENTS PAGE

RELATED SECTIONS

EXCHANGE WIRE RECORD — PREPARATION	680-220-011
EXCHANGE WIRE RECORD — WORK SHEETS	680-220-012
EXCHANGE WIRE RECORD — PROTECTION	680-220-013
EXCHANGE WIRE RECORD — LEAD AND POLE NUMBERING	680-220-014
EXCHANGE WIRE RECORD — M1 CARRIER	680-220-015
EXCHANGE WIRE RECORD — PLACING, REMOVING AND REARRANGING WIRE	680-220-016

1. GENERAL

1.01 This section covers the forms used for charting exchange wire and multiple line wire. See Exhibits 1 through 13.

1.02 It is reissued to include forms to be used in posting multiple line wire (MLW) to Exchange Wire Records. Since this is a general revision, marginal arrows have been omitted.

1.03 Terms used throughout this section and related sections are defined in Part 2.

1.04 The essential function of the Exchange Wire Record is to show in diagrammatic form the circuits on each wire route. It also shows the stations on each circuit and the location of each station.

1.05 Records must be accurate, neat and legible. Inaccuracies will result in lost time and wasted effort by other groups and may cause serious inconvenience to our customers and the general public. Accuracy, neatness and legibility are important factors in the efficient functioning of an assignment force. All three are essential for worth-while record reproductions.

1.06 These records when prepared in accordance with this section and related sections provide information as follows:

(a) A diagrammatic record of working and non-working exchange wire and multiple line wire, with jumper connections and pin information. This includes drop wire appearing in an open wire lead and drop wire leads.

(b) The locations of wire leads and the pole numbers of each lead.

(c) The pin capacity of crossarms.

(d) The type of wire.

(e) The locations of working stations.

(f) The wire route measurements and type of wire for inventory use.

(g) The changes occurring along the lead, i.e., transmission, rate, tax districts, etc.

1.07 The record helps the assignment forces to effect many economies. For example:

(a) It makes available to the outside plant forces pin information which expedites the field operation and minimizes annoyances to customers from unnecessary testing procedures.

(b) It reduces lost time in determining vacant circuits or party line openings on exchange wire leads.

(c) It permits better utilization of exchange wire.

(d) It furnishes information on vacant pin positions when wire is to be placed.

1.08 It is important that the record include all main leads and spur leads, regardless of the locality (urban or rural), or kind of wire (open, multiple line, drop or buried). This will provide maximum benefit to the plant and accounting forces.

1.09 When multiple line wire only is used to extend or parallel cable it may be recorded on Exchange Customer Cable Record, Form E-4009 series or Form E-4010 series. (See Section 680-201-010.)

1.10 The wire route measurement on the record serves the following purposes:

(a) To control wire disbursement and recovery.

(b) To accomplish a wire inventory.

(c) To compute resistance.

(d) To furnish engineering data.

2. DEFINITIONS

2.01 The following terms are used in this and related sections:

(a) Isolated Cable — A length of cable which is served by a wire lead.

(b) Wire Route Measurement — The measurement that is entered on the accounting records for each transaction that places or removes exchange wire.

(c) Record — This is the Exchange Wire Record.

3. FORMS E-4011 THROUGH E-4018, E-4529, E-4585, E-1098, E-1099 AND E-2632

3.01 The number of each wire record form follows:

RURAL WIRE AND URBAN WIRE RECORD FORMS

E4529 Left Tab	E4585 Left Tab
E4529 Right Tab	E4585 Right Tab

EXCHANGE WIRE RECORD FORMS

E4011 Left Tab	E4015 Left Tab
E4011 Right Tab	E4015 Right Tab
E4012 Left Tab	E4016 Left Tab
E4012 Right Tab	E4016 Right Tab
E4013 Left Tab	E4017 Left Tab
E4013 Right Tab	E4017 Right Tab
E4014 Left Tab	E4018 Left Tab
E4014 Right Tab	E4018 Right Tab

3.02 The record is composed of a series of forms, printed on 13" x 9" card stock. All cards come with two metal hinges for attaching to wire hangers. Each hanger will accommodate two forms, one with a left index tab and the other with a right index tab. The hangers are spaced so that 1/4" of index tabs are visible when the cards are filed.

For Use With Exchange Open Wire — Forms E-4011 Through E-4018

3.03 There are two types of forms, each available in 15 and 50 pole capacity. A description of each type of form follows:

(a) The 1 column type permits the charting of wire for a lead having two 10-pin crossarms, or one 16-pin crossarm. The circuit positions remaining are available for charting wire placed on brackets or for drop wire.

(b) The 2 column type permits the charting of one 10-pin crossarm of wire for two different leads.

3.04 A series of interchange forms are provided to conserve filing space. This allows the interchanging of the two sizes of forms, e.g., a 1 column 50 pole capacity form may be converted into a 1 column 15 pole capacity or vice versa, without loss of filing space.

3.05 The use of each type of form follows:

BASIC FORMS:

FORM NO.	TYPE	CAPACITY
E-4011	1 Column	15 Poles
E-4012	" "	*50 "
E-4015	2 Columns	15 "
E-4016	" "	*50 "

*Two forms required

INTERCHANGE FORMS:

	FROM		TO	
FORM NO.	TYPE	CAPACITY	TYPE	CAPACITY
E-4013	1 Column	15 Poles	1 Column	50 Poles
E-4014	" "	50 "	" "	15 "
E-4017	2 Columns	15 "	2 Columns	50 "
E-4018	" "	50 "	" "	15 "

For Use with Multiple Line Wire — Forms E-4529 and E-4585

3.06 These forms are used chiefly for charting multiple line wire. Form E-4529 is a 1 column type and has a capacity of 19 poles. Form E-4585 is a 1 column type with a capacity of 25 poles on front side and 30 poles on back side. (For recording of MLW on Exchange Customer Cable Record see Section 680-201-010.)

For Use with Old Type Wire Record — Forms E-1098 and E-1099

3.07 The old type 9-5/16" x 17" record Forms E-1098 and E-1099 printed on buff paper are still available for use where required

Station Detail Record

3.08 The Station Detail Record, Form E-2632, is an optional record and may be used as a supplement to the Diagrammatic Wire Records, Forms E-1098 and E-1099.

4. METHODS USED TO IDENTIFY LOCATIONS SERVED BY EXCHANGE WIRE

4.01 It is important that the assignment forces have a means of determining which wire lead serves a given address or locality. There are two methods available.

(a) ***Terminal Assignment Record*** — The terminal assignment record is the most efficient method of identifying locations served by exchange wire. (See Section 680-100-010.)

(b) ***Rural Key Maps*** — Use only in areas where it is impossible to develop a workable terminal assignment record. (See Section 680-100-014.)

5. PREPARATION AND MAINTENANCE OF THE RECORD

5.01 The record will be prepared and maintained in the assignment office. Accuracy, neatness, and legibility are important.

5.02 The functions in the preparation and maintenance of the record include:

(a) Obtaining construction prints required for initial preparation of the record.

(b) Preparing the record.

(c) Posting all service order or construction activity that affects the record.

(d) Reflecting on the record all wire route measurements shown on construction prints.

6. INFORMATION TO BE OBTAINED FROM CONSTRUCTION PRINTS

6.01 The construction prints will provide the assignment forces with adequate information for the preparation and maintenance of the record. Some of these requirements are as follows:

(a) Establish and maintain an adequate lead and pole numbering plan.

(b) Provide maps or drawings suitable for use in charting the wire.

(c) Specify the type of wire required. This is needed to compute resistance and for use of the assignment forces when authorizing wire additions.

(d) The assignment forces should receive a copy of all construction drawings which require placing, removing or rearranging poles, crossarms and wire.

6.02 In companies where the record is used to reconcile accounting records, the construction prints and other suitable information from the engineering department will serve as the source of the Wire Route Measurement. This measurement data will be furnished the assignment forces under the following conditions:

(a) When a record is to be established.

(b) When a partial or complete record is in service, but the Wire Route Measurement is not indicated.

6.03 The Wire Route Measurement will be computed in units of one hundred feet and will be cumulative, starting with zero (0) at the terminal or junction pole and ending with the last pole in the wire lead. These measurements shall be entered on the record to the nearest one hundred feet at the following points:

(a) Every third pole along the lead. (Does not apply to MLW.)

(b) The end of each circuit. (Does not apply to MLW.)

(c) The junction with isolated cable or buried wire. (Does not apply to MLW.)

(d) The end of each lead.

(e) Where a change in type of wire occurs.

Note: The measurement for sections of isolated cable and buried wire appearing within the wire lead will not be included in the cumulative measurement.

6.04 Construction drawings will include measurement data for each new pole line or pole line extension in accordance with 6.03.

6.05 A successful reconciliation of plant and accounting records depends on the record being accurate. This may be determined by field verification of a sample selected at random. If the verification reveals inconsistencies that are not acceptable, a field verification of the entire record will be required. Discrepancies will be corrected by the assignment forces in accordance with Section 680-220-012. When the record is accepted as satisfactory for inventory use, reproduction prints of the record will be prepared and forwarded to the Accounting Department.

7. RECONCILIATION OF RECORDS

7.01 The reconciliation of records will be done in the Accounting Department. They will determine the frequency of reconciliation and establish the effective dates. They will compile the inventory data from reproduction prints of the record.

8. FILING EQUIPMENT AND ARRANGEMENTS

8.01 The various filing equipments for the record forms, and the arrangements within the filing equipments, are described and shown in Section 680-000-100.

9. ORDERING INFORMATION

9.01 The record forms are packaged in units of twenty-five (25). Order in multiples of the package unit as follows:

(Quantity) Form E- (Right or Left) Tab

Plant Assignment Symbol Guide

9.02 The plant assignment symbol guide shown in Fig. 1 is provided to simplify the diagramming of wire, and for general use in the plant assignment center. The guide may be used with either a pencil or the Wrico lettering pen.

Order as follows:

(Quantity) Guide, Symbol, Assignment, Plant, 38-Y-3835

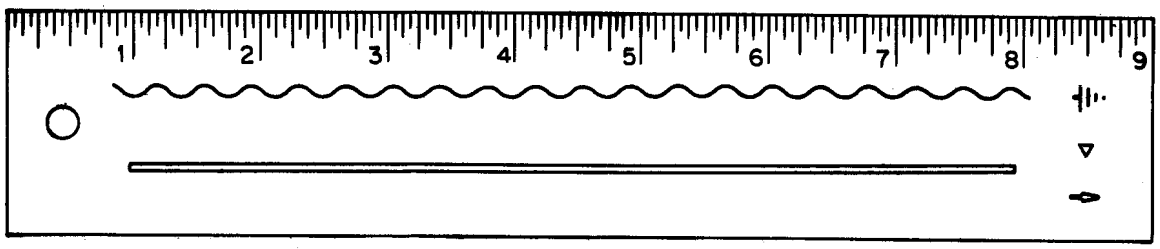

Fig. 1 – Plant Assignment Symbol Guide

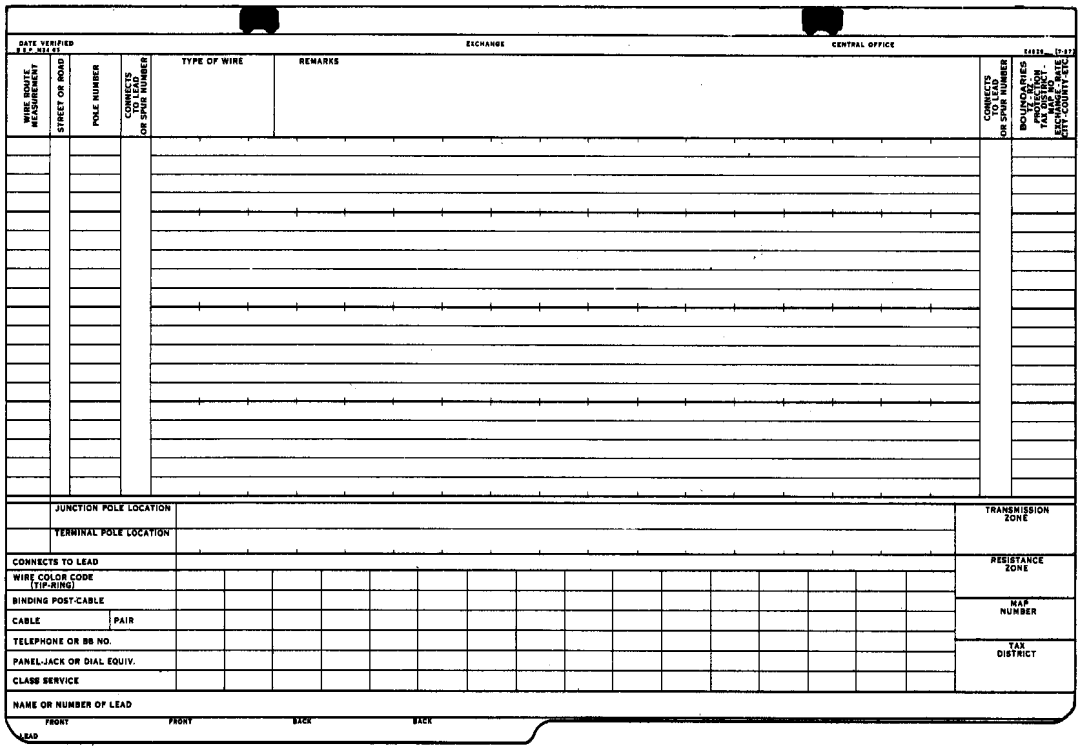

EXHIBIT 1
FORM E-4529, FRONT OR BACK — 1 COLUMN TYPE, 19 POLE CAPACITY

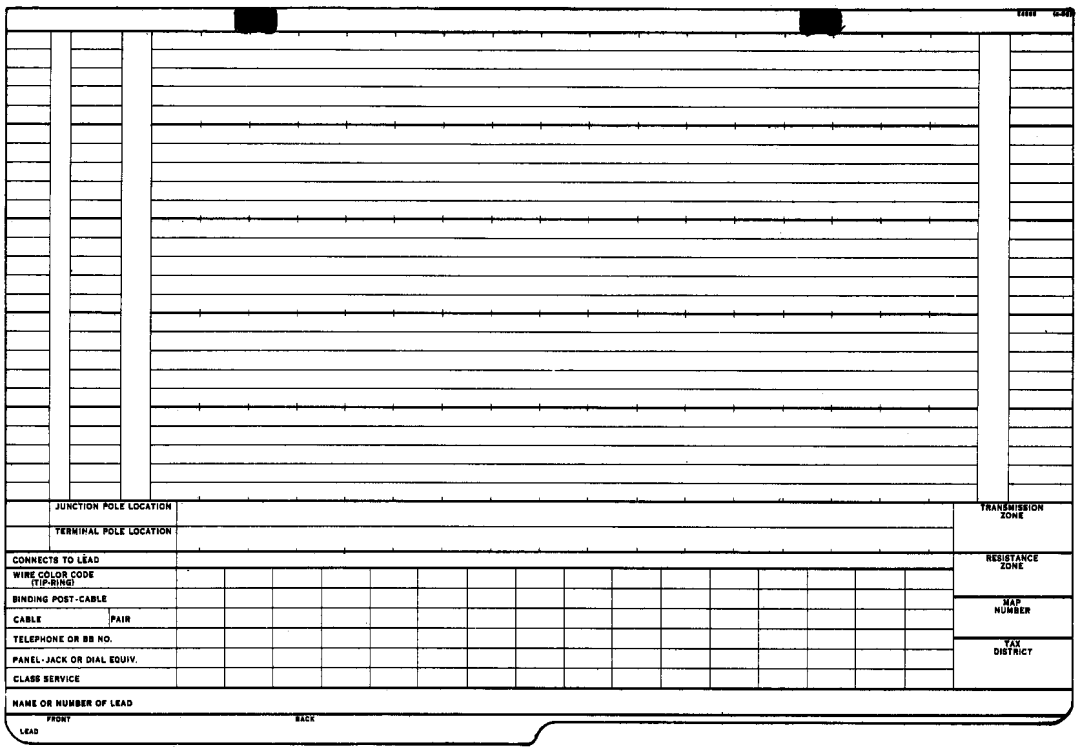

EXHIBIT 2A
FORM E-4585, FRONT — 1 COLUMN TYPE, 25 POLE CAPACITY

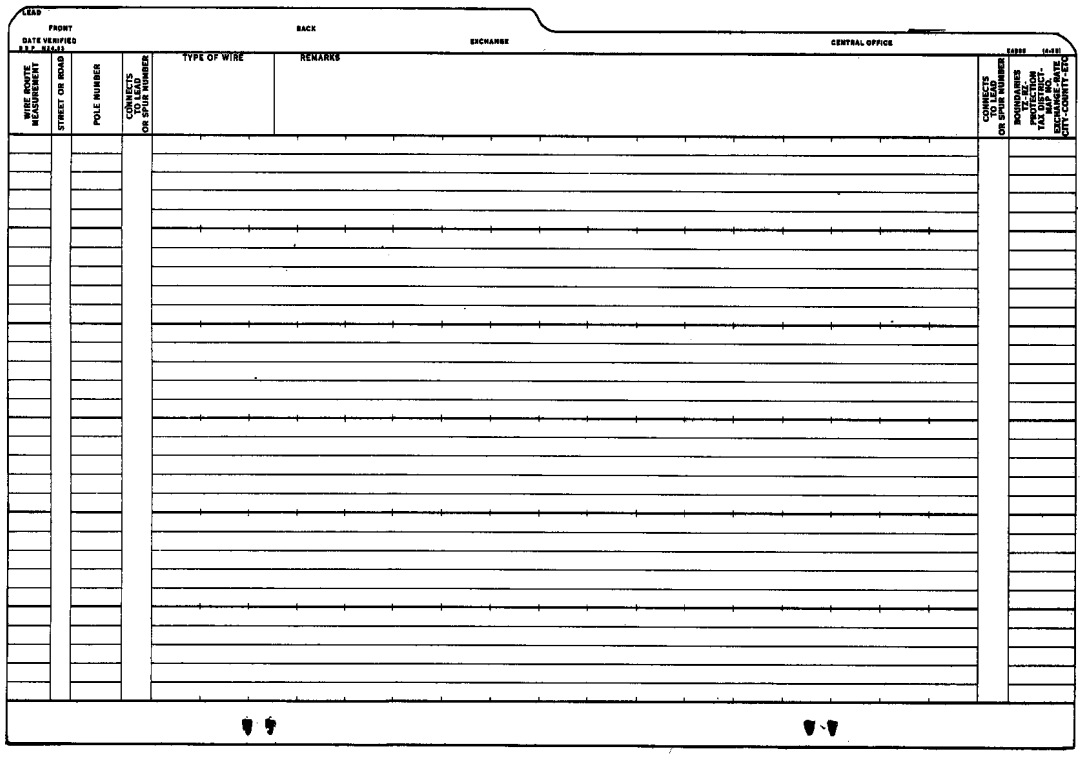

EXHIBIT 2B
FORM E-4585, BACK — 1 COLUMN TYPE, 30 POLE CAPACITY

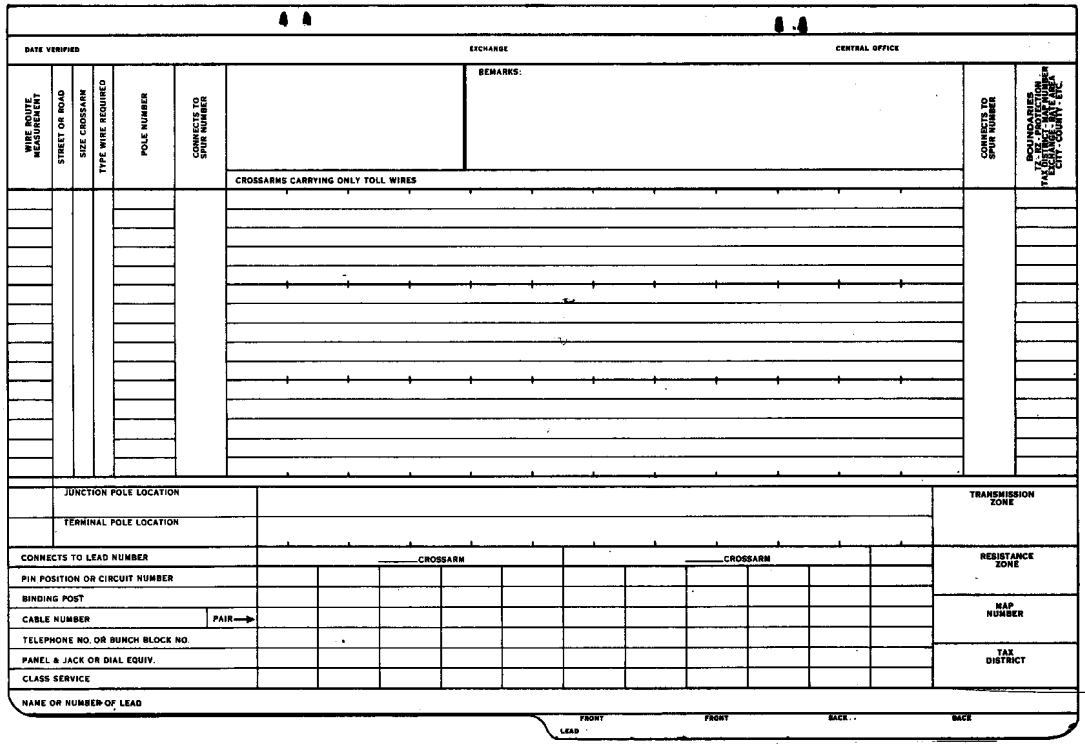

EXHIBIT 3
FORM E-4011, FRONT OR BACK — 1 COLUMN TYPE, 15 POLE CAPACITY

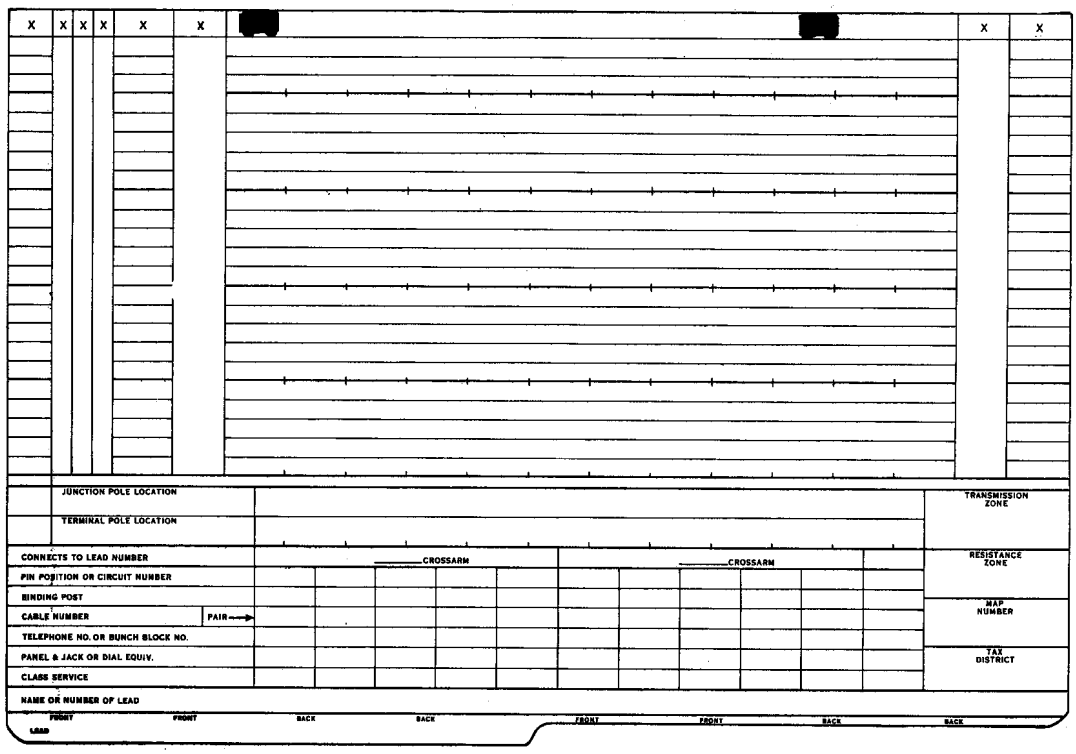

EXHIBIT 4A
FORM E-4012, FRONT — 1 COLUMN TYPE, 23 POLE CAPACITY

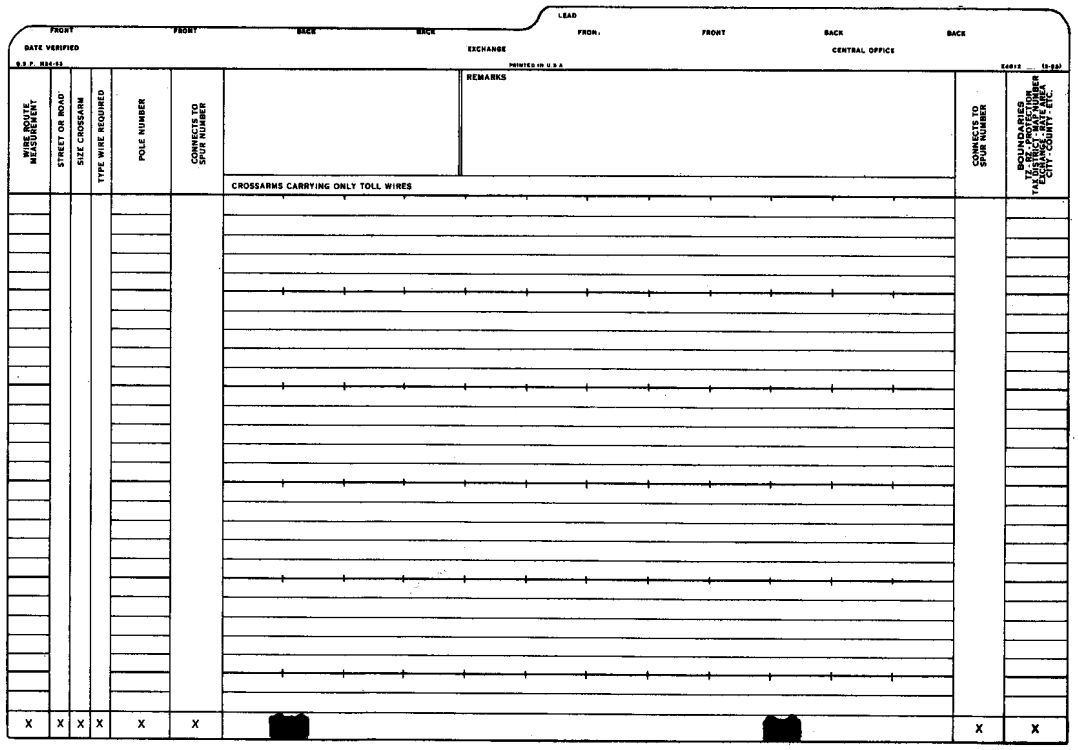

EXHIBIT 4B
FORM E-4012, BACK — 1 COLUMN TYPE, 27 POLE CAPACITY

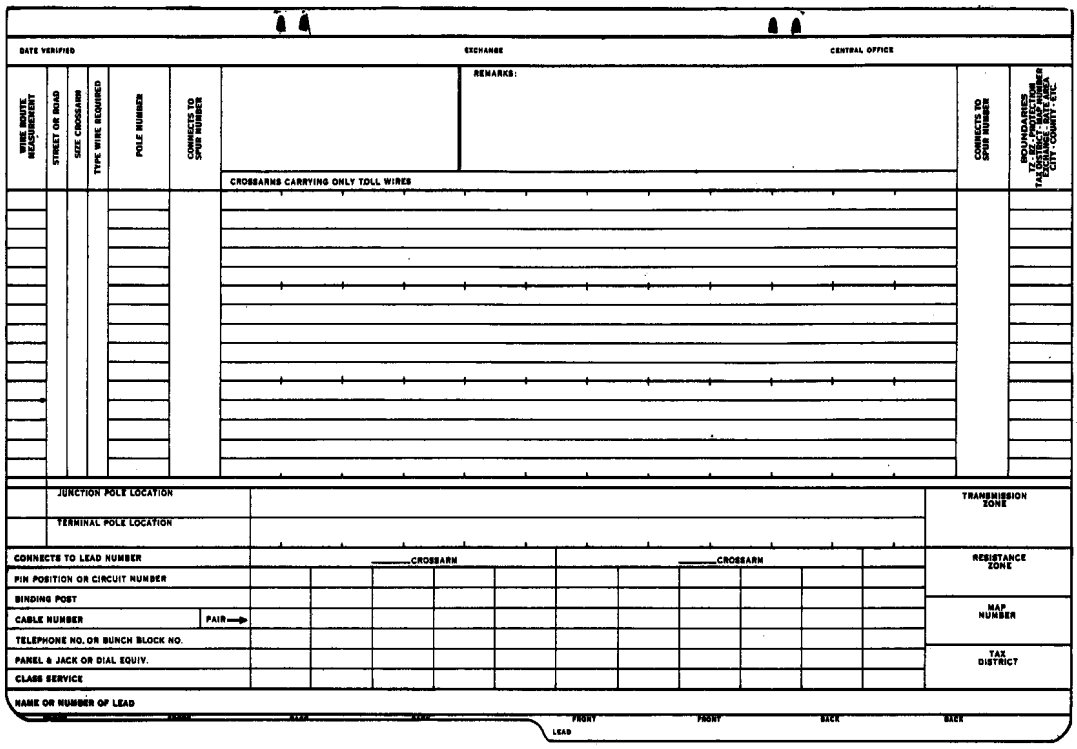

EXHIBIT 5A
FORM E-4013, FRONT — 1 COLUMN TYPE, 15 POLE CAPACITY

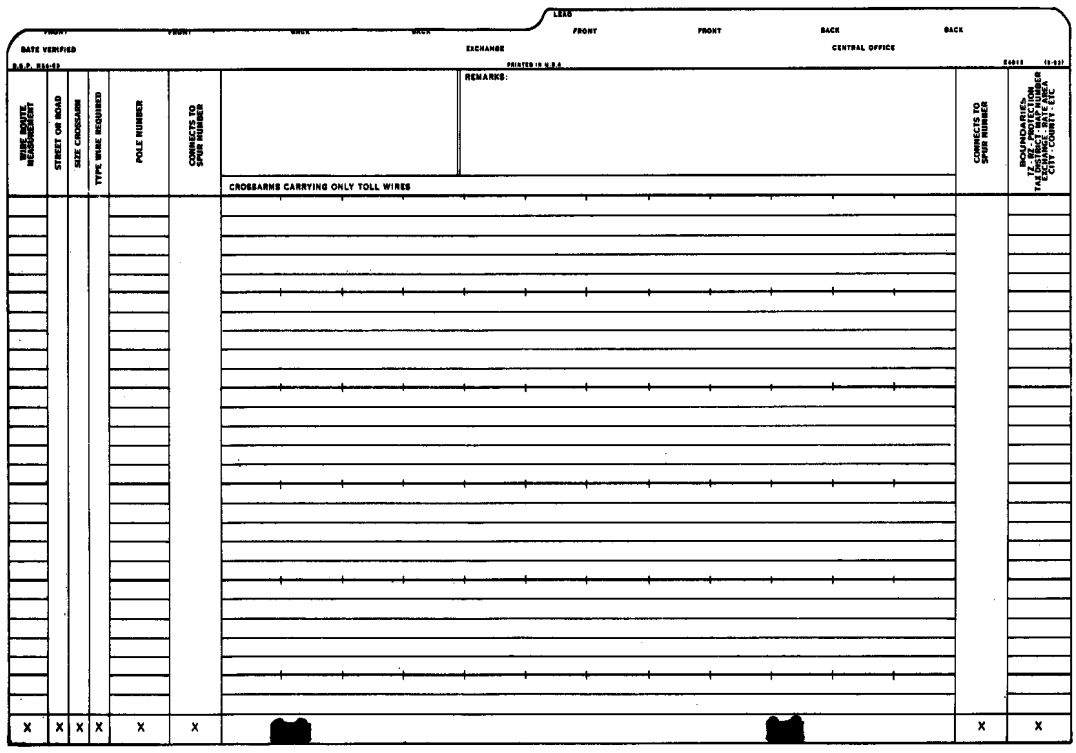

EXHIBIT 5B
FORM E-4013, BACK — 1 COLUMN TYPE, 25 POLE CAPACITY

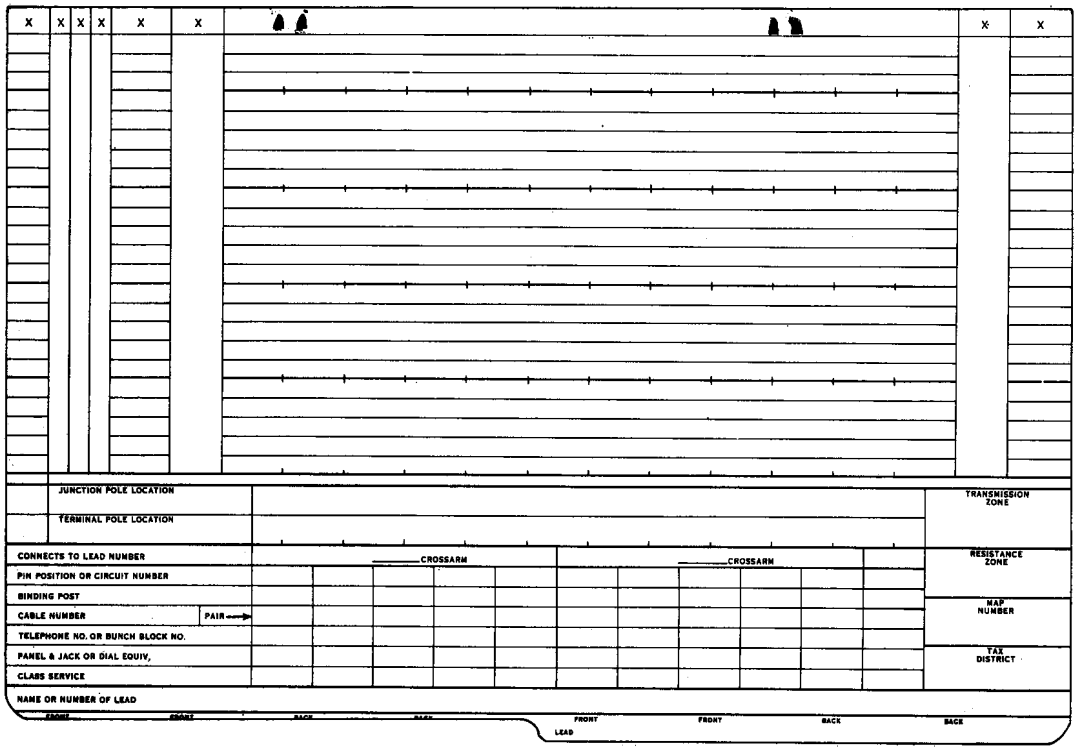

EXHIBIT 6A
FORM E-4014, FRONT — 1 COLUMN TYPE, 23 POLE CAPACITY

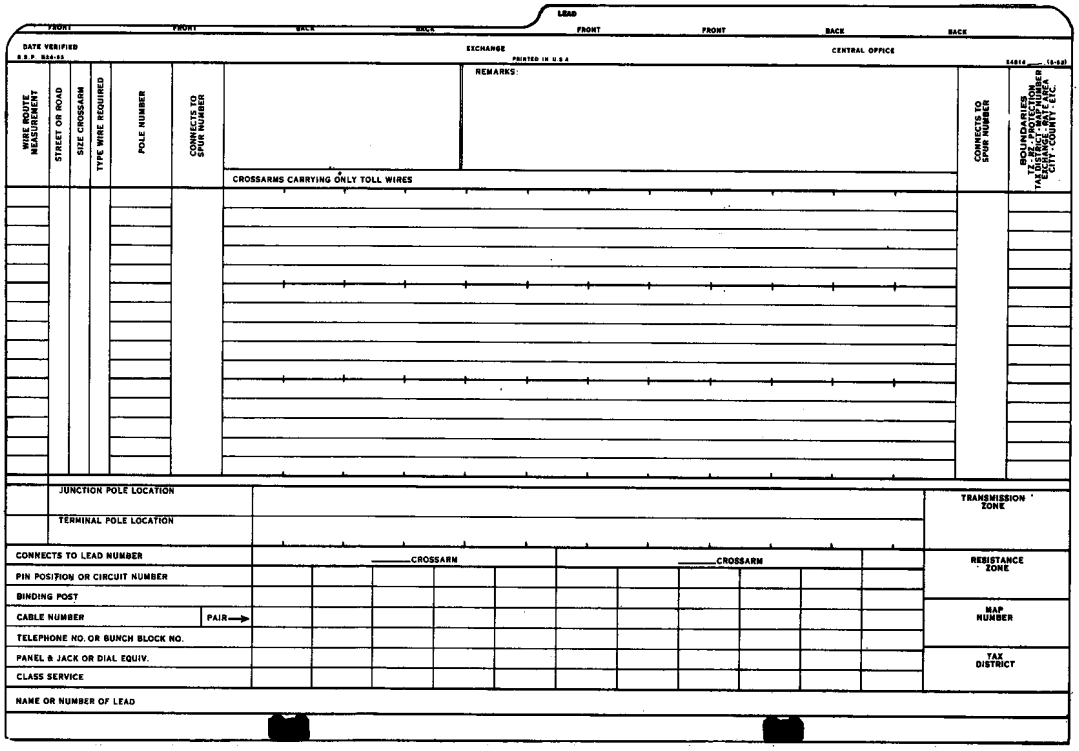

EXHIBIT 6B
FORM E-4014, BACK — 1 COLUMN TYPE, 15 POLE CAPACITY

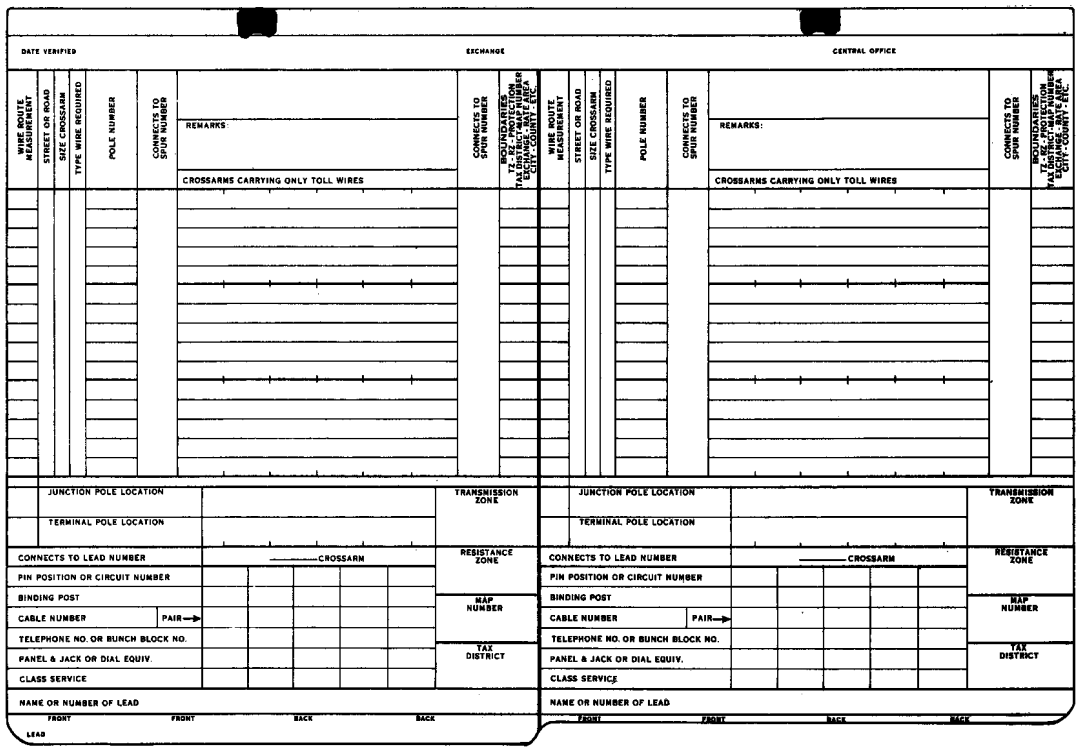

EXHIBIT 7
FORM E-4015, FRONT OR BACK — 2 COLUMN TYPE, 2-15 POLE CAPACITY

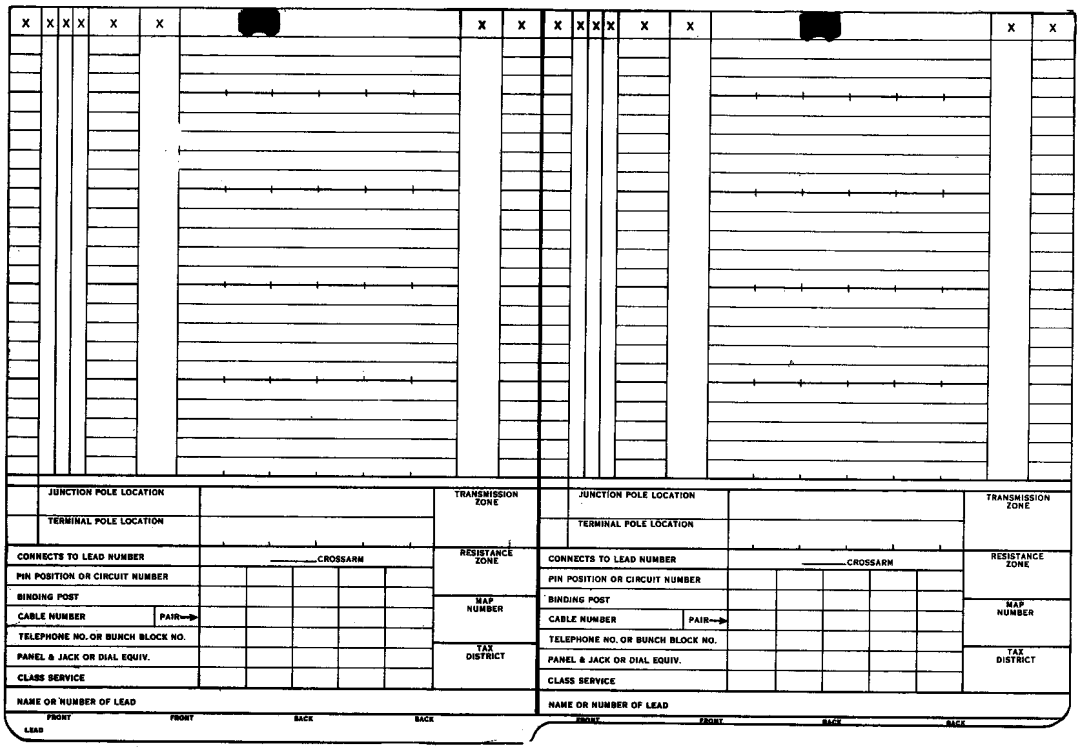

EXHIBIT 8A
FORM E-4016, FRONT — 2 COLUMN TYPE, 2-23 POLE CAPACITY

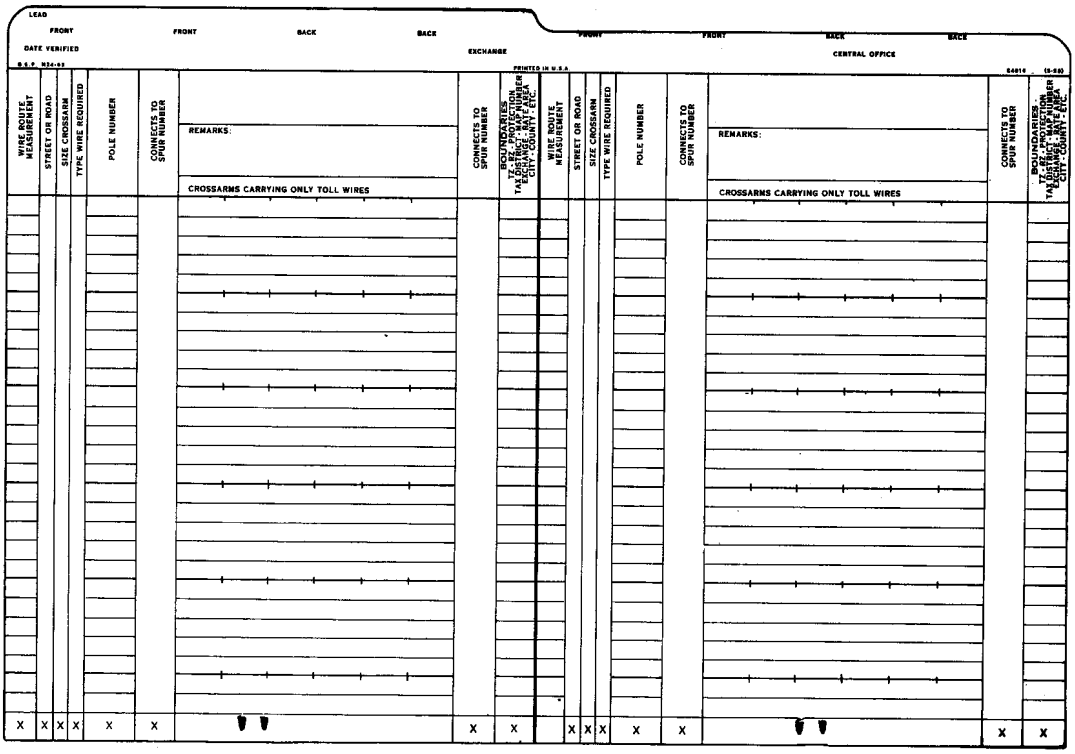

EXHIBIT 8B
FORM E-4016, BACK — 2 COLUMN TYPE, 2-27 POLE CAPACITY

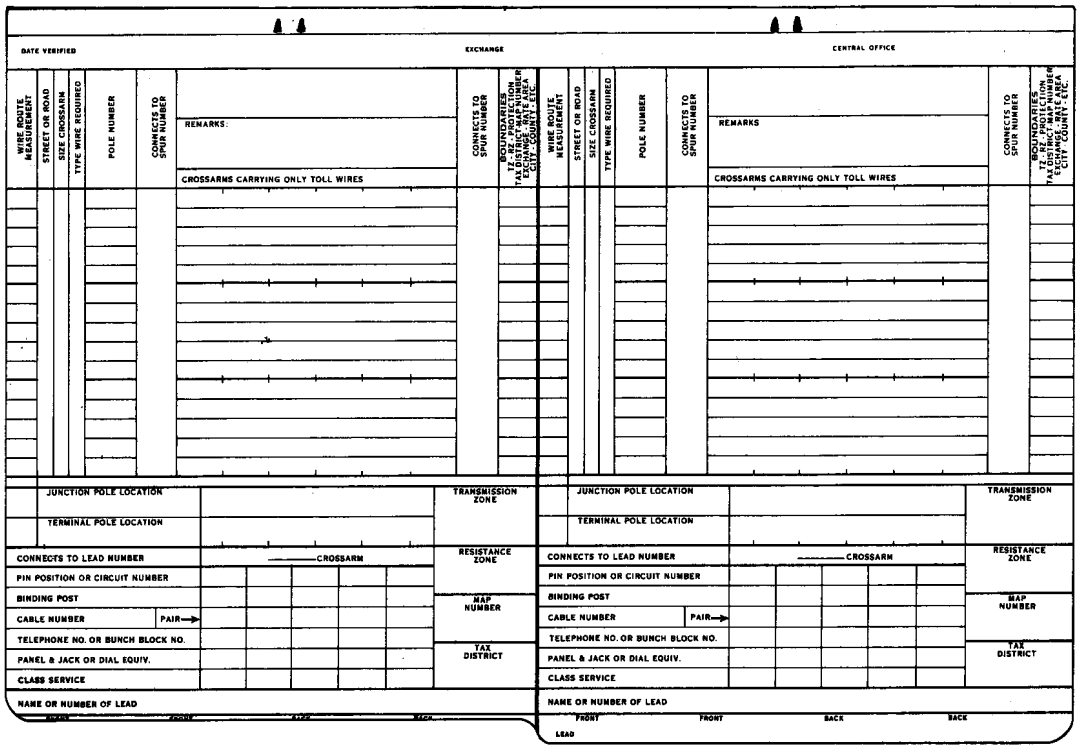

EXHIBIT 9A
FORM E-4017, FRONT — 2 COLUMN TYPE, 2-15 POLE CAPACITY

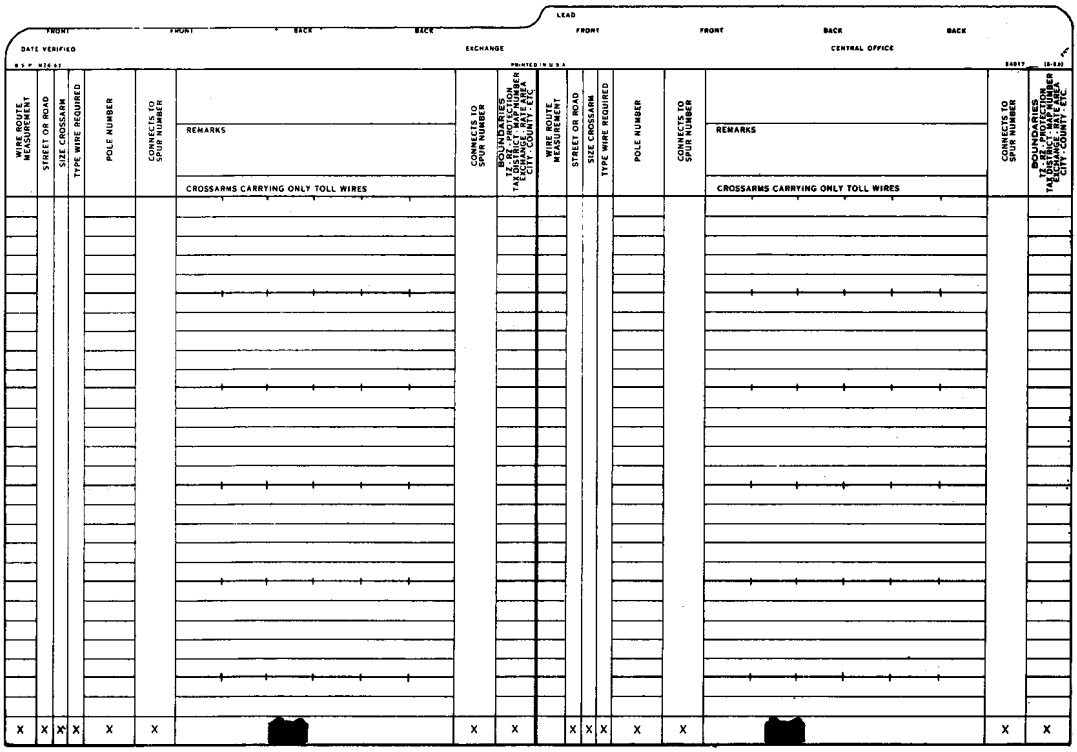

EXHIBIT 9B
FORM E-4017, BACK — 2 COLUMN TYPE, 2-25 POLE CAPACITY

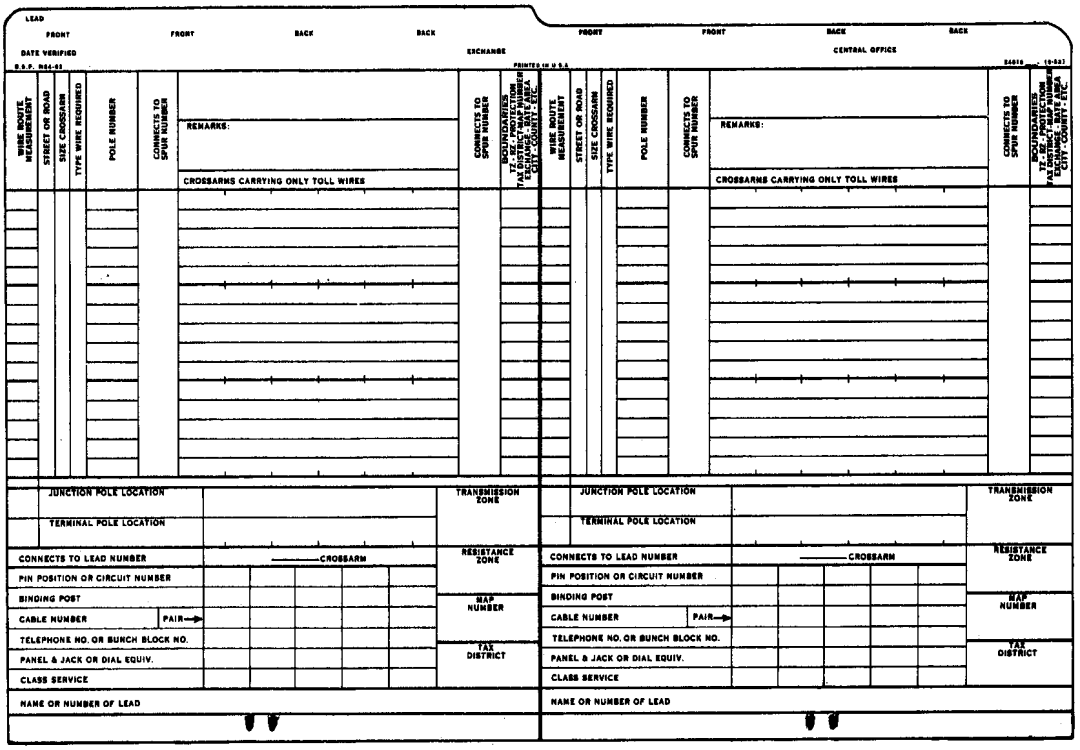

EXHIBIT 10A
FORM E-4018, FRONT — 2 COLUMN TYPE, 2-15 POLE CAPACITY

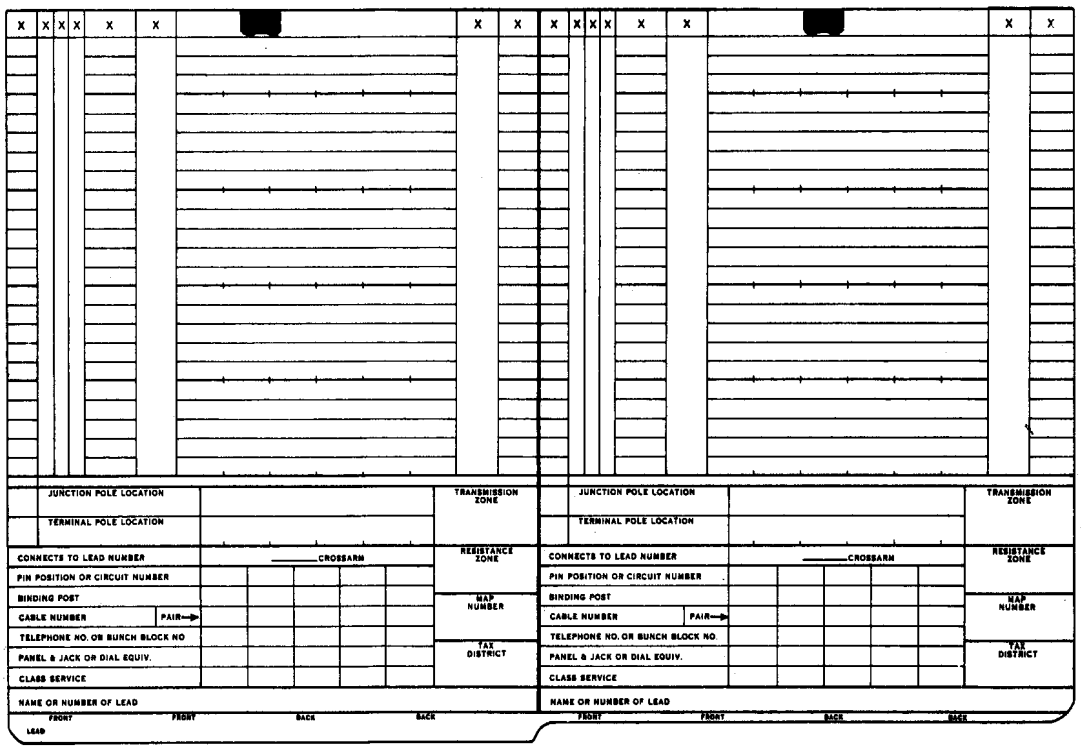

EXHIBIT 10B
FORM E-4018, BACK — 2 COLUMN TYPE, 2-23 POLE CAPACITY

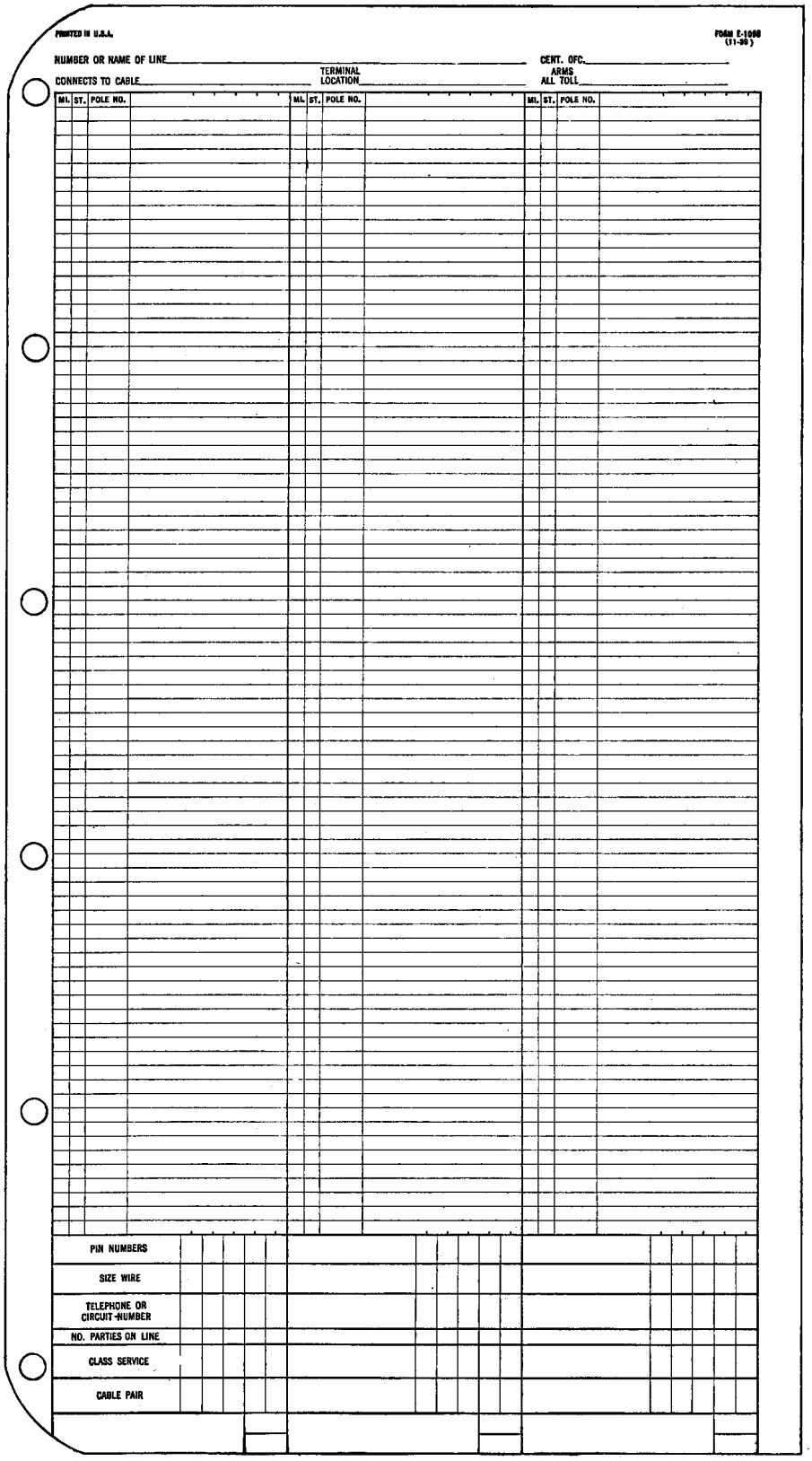

EXHIBIT 11

FORM E-1098, FRONT OR BACK — 3 COLUMN TYPE, 3-80 POLE CAPACITY (METALLIC CIRCUITS)

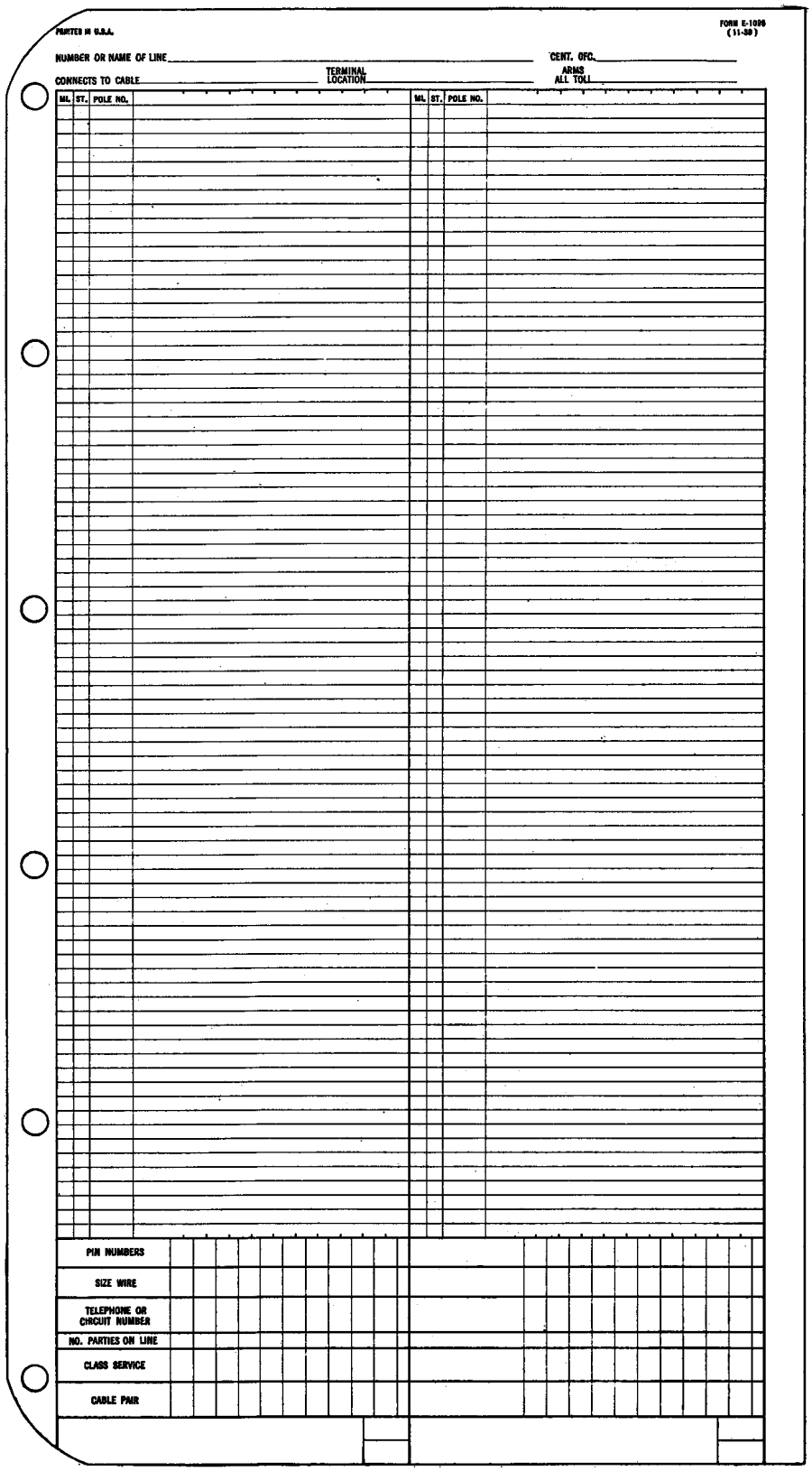

EXHIBIT 12
FORM E-1099, FRONT OR BACK — 2 COLUMN TYPE, 2-80 POLE CAPACITY (GROUNDED CIRCUITS)

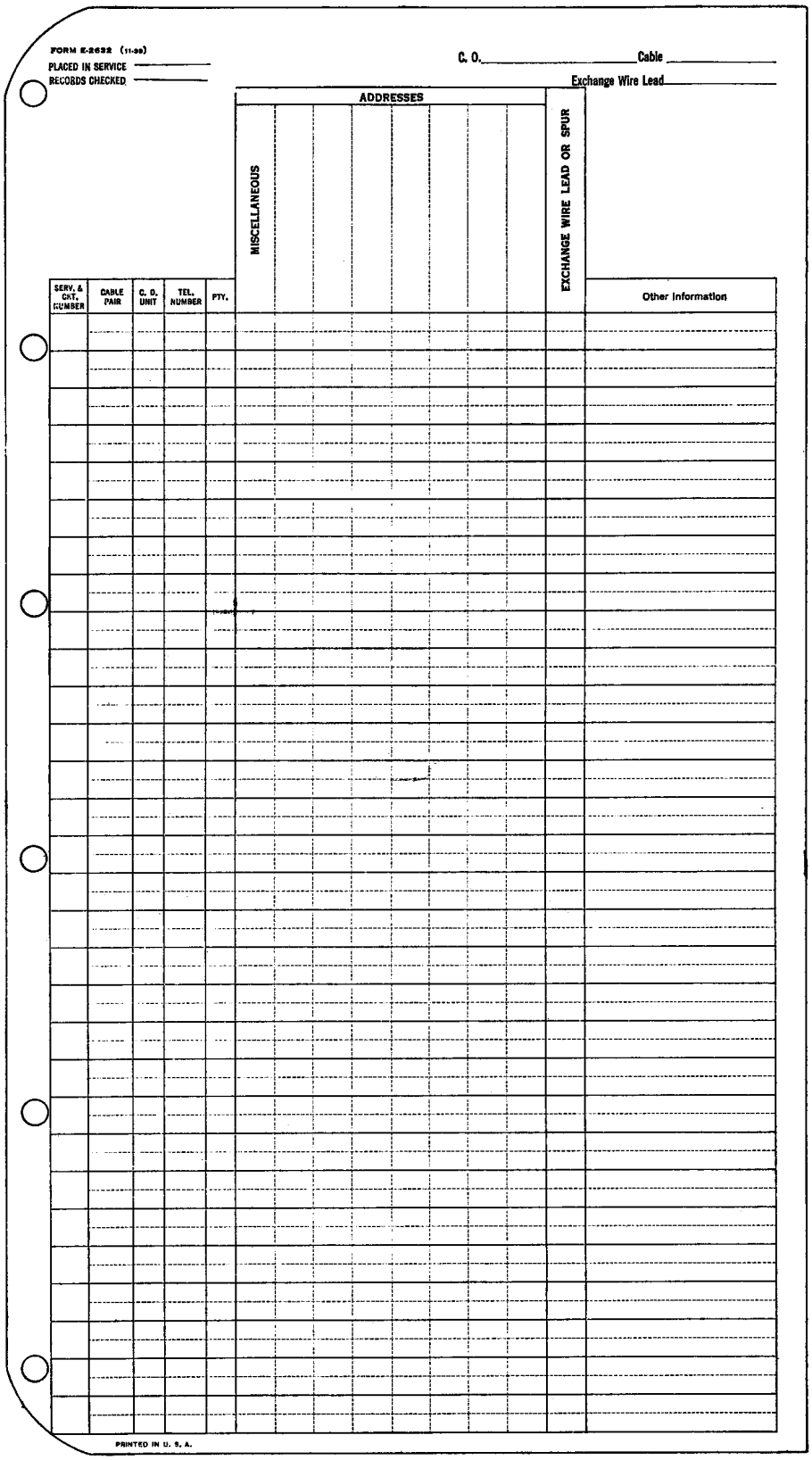
FORM E-2632 (11-58)
PLACED IN SERVICE
RECORDS CHECKED
C. O. Cable
Exchange Wire Lead
ADDRESSES
MISCELLANEOUS
EXCHANGE WIRE LEAD OR SPUR
SERV. & CKT. NUMBER
CABLE PAIR
C. O. UNIT
TEL. NUMBER
PTY.
Other Information
PRINTED IN U. S. A.

EXHIBIT 13
FORM E-2632, FRONT OR BACK — STATION DETAIL RECORD