V TELEPHONE REPEATER AND ASSOCIATED EQUIPMENT

1. GENERAL

1.01 This section is issued to standardize and describe the use of Form SW-6225, 173 Type Repeating Coil Hybrid Problem Sheet, and number it in the Plant Series. It replaces Section E43.120.9.

1.02 Form SW-6225 is an 8½" x 11" form designed to facilitate the determination of the proper connections of the components required for repeatered and non-repeatered circuits using 173 type repeating coils. It may be used at plant training centers to systematize the training of toll test room forces in the proper interconnection of V-type telephone repeaters, or may be used as a graphic work sheet to indicate the connections required to establish a proposed circuit.

1.03 Section 332-102-100 describes in considerable detail many of the wiring options of line, drop, signaling, and telegraph arrangements which are possible where 173 type repeating coils are to be used. Section AA263.022 (J68651) is based on SD-95144-01 and further amplifies the number of wiring options available for V-repeaters and voice frequency line equipment.

2. PREPARATION OF FORM SW-6225

2.01 Form SW-6225 is for use on an optional basis by toll test room forces to simplify the determination of proper wiring of 173 type coils to provide the functions designated by the circuit order. Basic data from the circuit layout card is used as the starting point.

2.02 One copy of Form SW-6225 should be prepared for each circuit to be used within a circuit group. The circuit designation, toll circuit order number, and the item number of the circuit on the TCO should be entered in the designated blocks at the top of the form. If the circuit is assigned to a 4-wire group, the circuit assignment and type of signaling on each side circuit and phantom (if used) shall be entered in the proper spaces, above the drawing detail.

2.03 Fundamental data concerning the proposed circuit shall be transcribed from the circuit layout card to lines 1 to 4 inclusive of the form. If the proposed circuit is a conventional type, lines 5 to 14 inclusive may be filled out from the information on standard wiring options described in 332-102-100, and the wiring drawing on Form SW-6225 may be sketched in without complications.

2.04 Complicated layouts of line equipment using the 173 type coils will require extensive reference to AA263.022. If copies of SD95144-01 are available they may be used instead of AA263.022 since all references on Form SW-6225 are to the SD-sheets and not to the page numbers of AA263.022. The section number and page number of SD95144-01 is indicated in AA263.022 directly above the practice page number on each exhibit sheet.

2.05 Lines 5 to 13 inclusive of Form SW-6225 shall be filled in sequence by information obtained from the tables of SD95144-01 (designated on the form) for the circuit conditions indicated on the layout card, as transcribed to lines 1 to 4 of the form. In general the higher numbered entries are dependent on data tabulated in the lower numbered entries so all information should be determined in numerical order.

2.06 Information for line 14, Build Out BO Capacitor, shall be secured from B.S.P. 332-015-500, Section 6, and explained in detail on separate sheets if necessary.

2.07 Upon completion of the tabulation on the side of the form as described in preceding paragraphs, a sketch should be made in the space provided, which will show the interconnections of the 173 type coils and associated equipment.

2.08 Where it is deemed desirable the sketch may show the coil windings extended to the terminal strip of the J68651A panel and numbered in accordance with Figure 51 of SD-95144-01 (Page 75 of AA263.022). This will be helpful to toll testboard forces who may wire the equipment from the sketch on Form SW-6225.

3. ORDERING FORMS

3.01 Form SW-6225 will be stocked at Western Electric branch houses in pads of 25 forms. They may be ordered on stationery requisition in the usual manner.

Attached: Exhibit 1 (Form SW-6225)

SOUTHWESTERN BELL TELEPHONE COMPANY

SW-6225
(1-57)
(332-102-900 SW)

173 TYPE REPEATING COIL HYBRID PROBLEM SHEET

DETAILS FOR ONE CIRCUIT ONLY:

From circuit layout card:

1. Type facility_____
2. " CXR line filter_____
3. " CX set_____
4. " signaling *_____

From Table 1.0, pages 1.01, 02, 03:

5. Type Coils_____
6. Phantom ckt. resistance_____
7. Type network_____
8. " filter_____
9. Equalizer option_____

From Table 1.1, page 1.1

10. Signaling option_____

11. Equalizer strapping, Table 51C, page 20.1 or Table 7.0B & Fig. 7.03. See 9 above:

_____ _____

_____ _____

12. Line and Balance strapping, Table 51B, page 20.1. See 10, above:

Ltr. options_____

Strapping_____

_____ _____

_____ _____

13. Network strapping, Table 6.0 or 6.1 page 6.0. Compensate for abnormal end section and convert constants per loop mile to load section.

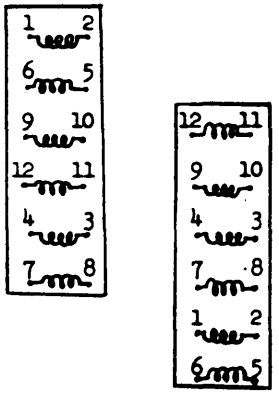
_____ _____

14. Build out BO capacitor per BSP E 36.150, Section 6.

CIRCUIT_____ **TCO**_____ **ITEM**_____

Circuit side 1_____ **Type sig.**_____
Circuit side 2_____ **Type sig.**_____
Circuit phan._____ **Type sig.**_____

COMPLETE THE DRAWING BELOW
Indicate LINE, NET, HYB IN, HYB OUT, etc.



References: SD 95144-01, J 68651-A, and BSP AA 263.022
***Use 1000 cycle options when using SF signaling**
See pages 20.0 or 20.3 for terminal block strapping.

EXHIBIT 1
(Form SW-6225)