

DATA SET 103E-TYPE IDENTIFICATION

1. GENERAL

1.01 This section identifies Data Set 103E-type, used to provide data communications at speeds up to 300 bauds.

1.02 This section is reissued to add information for Data Set 103E6. Although Data Set 103E5 has been rated manufacture discontinued (MD) and Data Sets 103E2 and 103E4 are rated additions and maintenance only (A&M), information for these data sets has been retained for those data sets still in operation.

1.03 Data Set 103E-type (Fig. 1, 2, 3, and 4) is an electronic package that is dependent upon additional components for power and control functions. The power requirements are two 18.0-volt 0.25-ampere dc inputs connected to provide positive and negative 18-volt potentials. Power consumption for one data set from the customer-provided receptacle is approximately 15 watts. Control function requirements must provide the keys, lamps, loudspeaker with its monitor amplifier for "hands free" calling (if provided), and a telephone set for DATA-PHONE® service.

1.04 Data Set 103E-type is a full-duplex, frequency-shift-keyed, serial data set which operates asynchronously. The data set accepts voltage signals from the terminal equipment that conform to the Electronic Industries Association (EIA) Standard RS-232-B and converts these signals into voice-frequency tones. These tones are transmitted over the telephone connection to the distant station. At the distant station, a data set restores the voice-frequency tones into voltage signals acceptable to the distant station terminal equipment.

1.05 Data Set 103E-type contains a relay board assembly of miniature relays and four or five circuit packs (CPs). The CPs and their designations are shown in Fig. 1, 2, 3, and 4 for Data Set 103E2, 103E4, 103E5, and 103E6, respectively.

Note: Data Set 103E4 is identical to Data Set 103E2 except it is not provided with a P47M664 housing assembly.

1.06 Optional selection of normal or inverted frequency operation is provided by screw switch settings for Data Sets 103E2 and 103E4. At present, only normal frequency operation is available for Data Set 103E5 and 103E6. The frequency band (F1 or F2) is automatically selected by the method of establishing the telephone connection (ie, originating or answering the call). Table A summarizes the line frequencies by mode of operation.

1.07 Detailed information for Data Set 103E-type will be covered in the following Plant Series Bell System Practices.

SECTION	TITLE
591-801-ZZ1	Model 37 Teletypewriter Keyboard Send and Receive (KSR) Data Station Arrangements—DATA-PHONE®
591-025-ZZ1	Data Set 103E-Type Data Station Using KS-20093 Cabinets
1.08	Refer to SD- and CD-1D095-01 for detailed information on Data Set 103E2 and E4. Data Sets 103E5 and 103E6 are covered by SD- and CD-1D147-01.

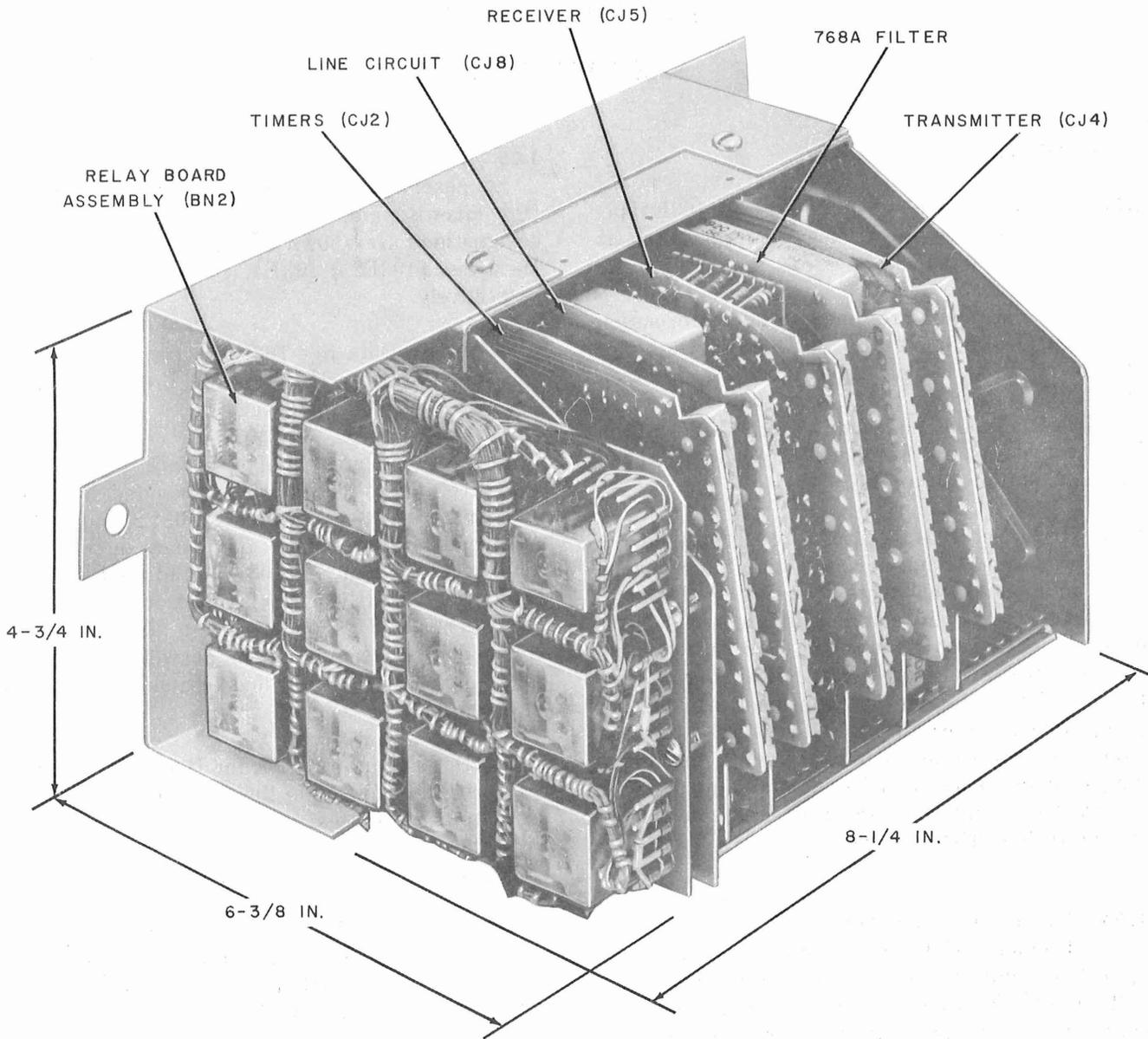


Fig. 1—Data Set 103E2

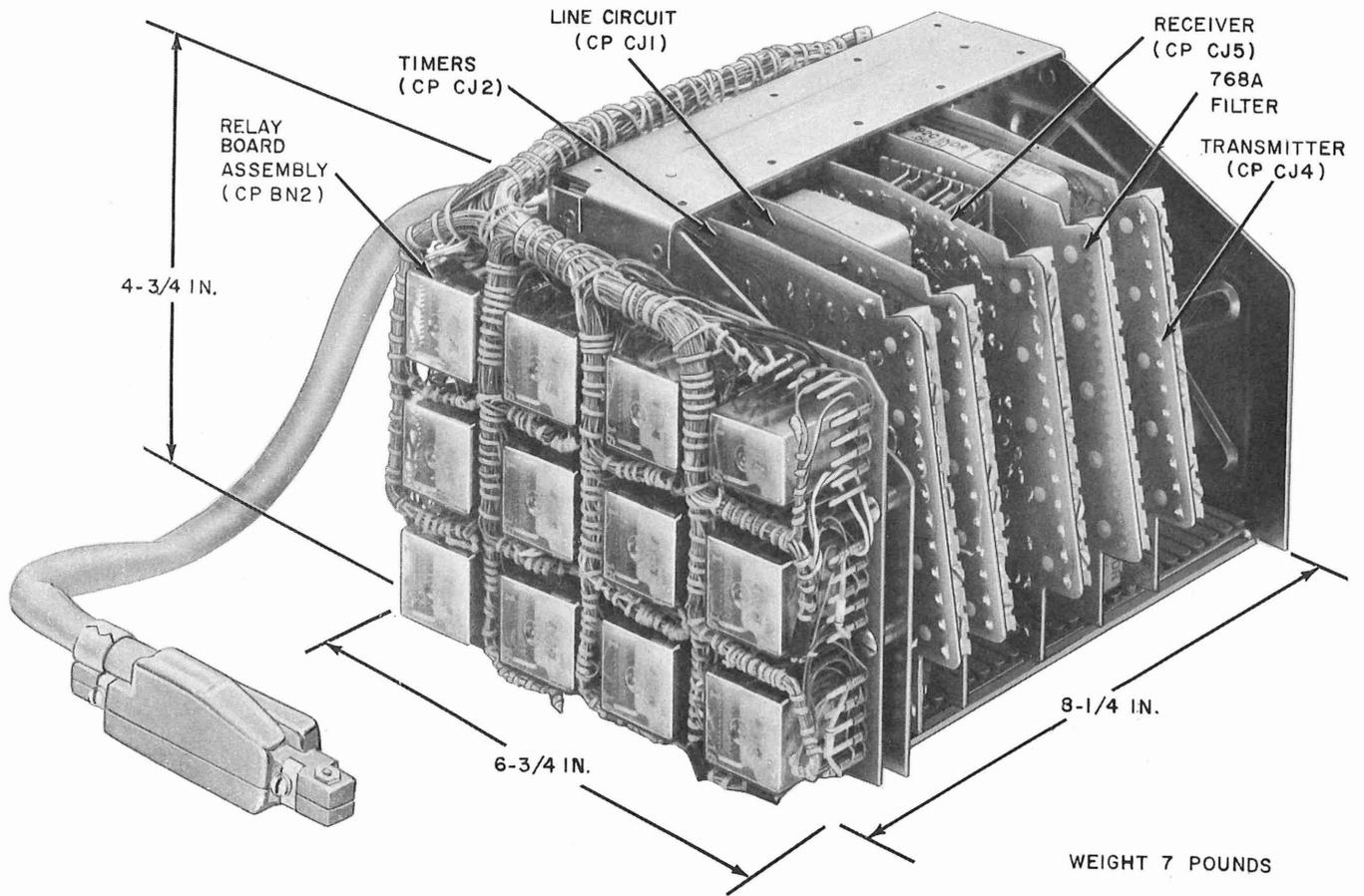


Fig. 2—Data Set 103E4

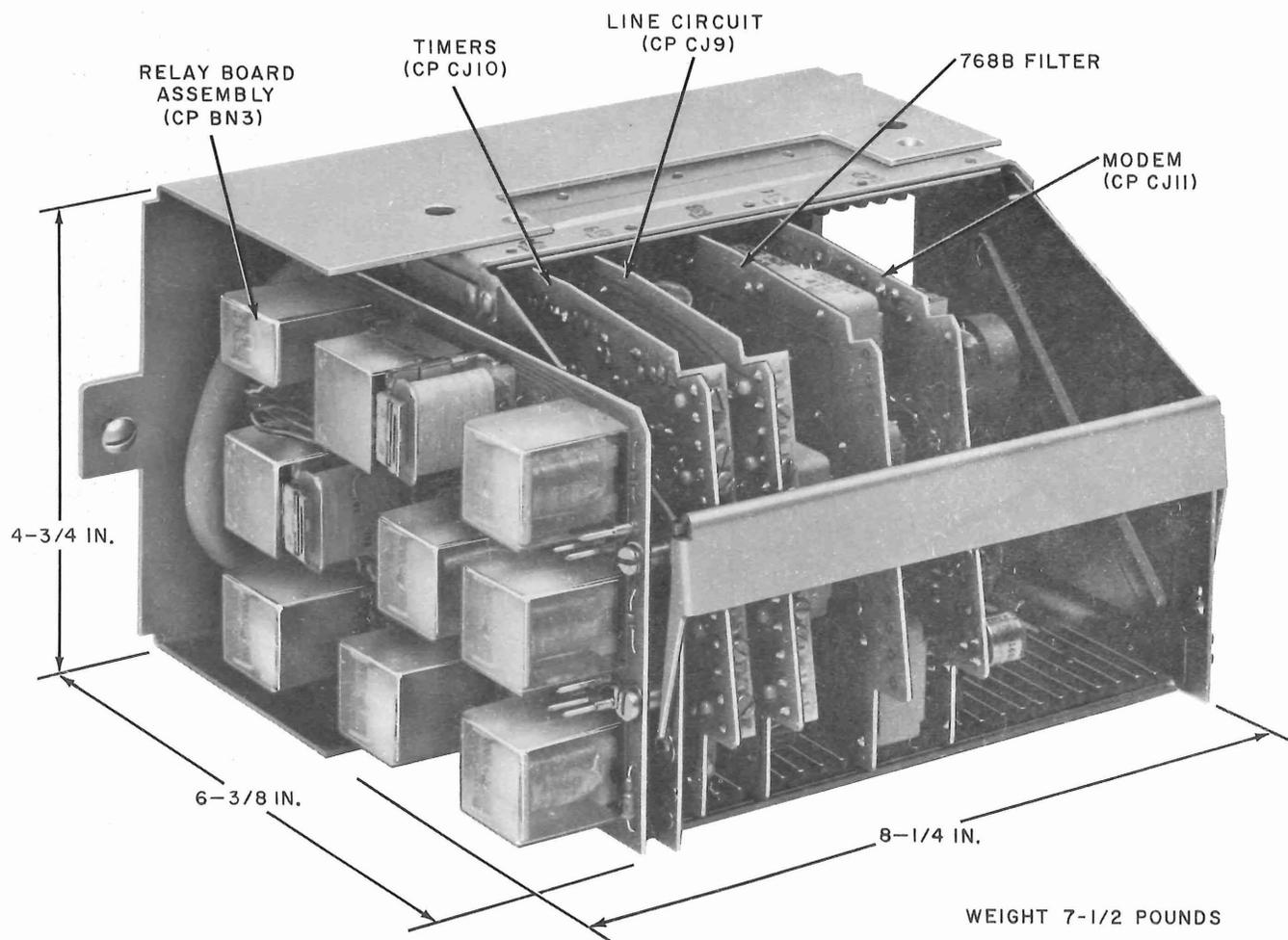


Fig. 3—Data Set 103E5

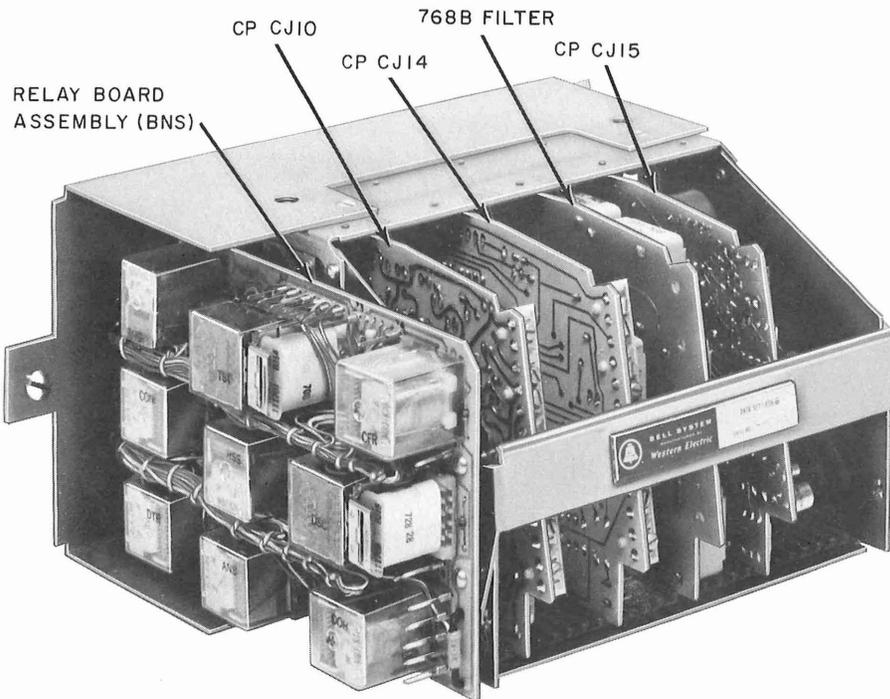


Fig. 4—Data Set 103E6

TABLE A

MODE	FREQ BAND	NORMAL FREQ (Hz)		INVERTED FREQ (Hz)	
		MARK	SPACE	MARK	SPACE
Originate	TRMT f_1	1270	1070	1070	1270
	RCV f_2	2225	2025	2025	2225
Answer	TRMT f_2	2225	2025	2025	2225
	RCV f_1	1270	1070	1070	1270