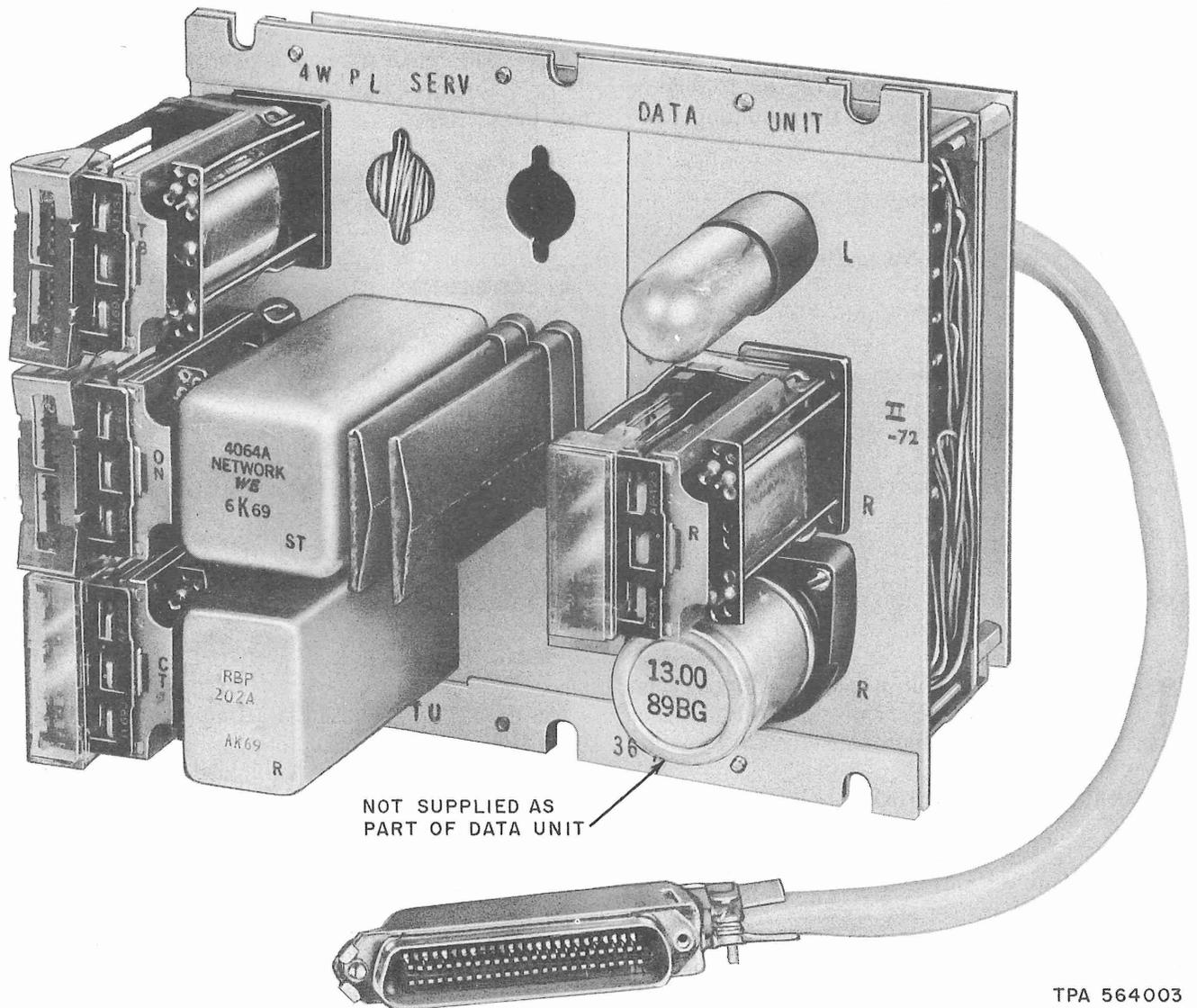


37A1 DATA UNIT IDENTIFICATION

1. GENERAL

1.01 This section covers the identification and operation of the 37A1 Data Unit. This data unit provides a separate transmission interface for a 4-wire service.

1.02 The 37A1 Data Unit, shown in Fig. 1, is initially used with Data Auxiliary Set (DAS) 828A to provide alternate voice capability and 20-Hz manual ringdown signaling for 4-wire private line data service with alternate voice capability.



TPA 564003

Fig. 1—37A1 Data Unit

SECTION 590-100-128

2. PHYSICAL DESCRIPTION

2.01 The 37A1 Data Unit is arranged to mount in relay racks or in a 16C or 31B apparatus mounting, or equipment cabinet.

2.02 The 37A1 Data Unit consists of a 248B key telephone unit (KTU) and a 36A1 Data Unit assembled on hanger bars. A connecting block mounting plate equipped with a 66E7-25 connecting block, an A25D connector cable, and KS-16672-L3 connector is mounted on the rear of the package. Connections to the 828A-L1 Data Service Unit (DSU) and the associated 568HAA-3 telephone set are made on a plug-in basis.

2.03 The 248B KTU consists of the following apparatus assembled on the mounting plate and wired to a terminal panel:

1—AJ134 relay (Talk Battery—TB)

1—AF86 relay (OFF—Normal—ON)

1—AF123 relay (Cut Through—CT)

1—4064A network (sidetone)

1—202A repeat coil

2—600-ohm terminating resistors

2—542G capacitors

2.04 The apparatus contained in the 36A1 Data Unit is described in Section 590-100-127.

2.05 The 37A1 data unit measures 6-15/16 inches high, 7-3/4 inches wide, and 8-1/4 inches deep. The unit weighs approximately 7-3/4 pounds.

3. FUNCTIONAL DESCRIPTION

3.01 Operation of the CT relay contacts provides 24 volts dc power to a 4-wire relay in the associated telephone set and switches the telephone set to its 4-wire mode. In addition, the CT relay provides a transmission path on the receive side

of the telephone set, cuts in sidetone, and partially completes the circuit to the RING (R) relay.

3.02 The TB relay provides a transmission path for the transmit signals between the telephone and the input of the 24V4B repeater associated with DAS 828A-L1. The TB relay provides a 24-volt talk battery to the telephone transmitter and together with the CT relay contacts, applies 24 volts to one side of the ring relay.

Note: The ring relay operates only when the RING button on the telephone set is depressed.

3.03 The 4064A sidetone network provides sidetone for the 4-wire telephone set through contacts of the CT relay.

3.04 The relay designated as ON is not used in this application of the 248B KTU.

4. REFERENCES

4.01 The schematic drawing and circuit description covering the 37A1 Data Unit are SD- and CD-1D225-01.

4.02 The schematic drawing and circuit description covering the 248B KTU are SD- and CD-69288.

4.03 More descriptive information on the 37A1 Data Unit associated with DAS 828A-L1 or L1A is covered in the following Bell System Practices.

SECTION	TITLE
590-100-127	36A1 Data Unit—Identification
598-080-100	Data Auxiliary Set 828A—Data Service Unit—Description and Operation
598-080-180	Data Auxiliary Set 828A—Data Service Units—Summarizing Specification—4-Wire Private Line Data Stations