

## DATA AUXILIARY SET 803E1

### IDENTIFICATION

#### 1. GENERAL

**1.01** This section contains a physical and functional description of the Data Auxiliary Set 803E1 and also of its associated apparatus.

**1.02** The Data Auxiliary Set (DAS) 803E1 (Fig. 1) along with the AR464 manual test circuit pack (Fig. 2) is used to establish any desired line-to-trunk connection in the 10A Data Line Concentrator. Establishing this particular line-to-trunk connection allows installation or maintenance personnel to bridge tip and ring at the concentrator or check tip and ring continuity through the concentrator by using the binding post terminals on the DAS 803E1.

**1.03** The DAS 803E1 consists of a housing containing switching circuitry, lamps, and binding posts necessary to perform the concentrator line to trunk continuity test as well as providing bridging points for other tests. A 2-foot cord from the set connects to test points on the AR365 circuit pack (line circuit) located in the 18A1, 19A1, or 20A1 Data Mounting (line and switch module) to be tested. A plug (P5) on the side of the housing connects to the cord coming from the AR464 circuit pack (manual test) which is located in slot 11 of the right nest in the 23A1 Data Mounting (control module) of the concentrator.

**1.04** The DAS 803E1 overall dimensions are approximately 5.9 inches high, 2.0 inches wide, by 3.4 inches deep, and it weighs approximately 2 pounds.

#### 2. FUNCTIONAL DESCRIPTION

**2.01** The DAS 803E1, in conjunction with the AR464 circuit pack in the concentrator, is used to force a connection from any desired line to any desired trunk in the 10A Data Line Concentrator.

**2.02** A functional block diagram of the manual test equipment is shown in Fig. 3.

**2.03** To test continuity through the concentrator, the trunk cord from the AR464 manual test circuit pack is connected to the AR368 circuit pack corresponding to the trunk to be tested, and the line cord from the DAS 803E1 is connected to the AR365 circuit pack corresponding to the line to be tested.

**2.04** After the test cords have been connected, the switch on the DAS 803E1 is put in the TRK HOLD position. If either the LB or TB lamp is lighted, it will be necessary to wait until the associated line or trunk becomes free before continuing with the test procedure. When the trunk becomes free, it will be seized automatically by the DAS 803E1. There is no provision for preventing a station on the line from going off hook while a test is being performed.

**2.05** When both the line and trunk become free, the switch is moved from TRK HOLD to LINE CONN. The manual test circuit then simulates a request for service in the line circuit. This causes the concentrator to connect the line and trunk under test through the switching matrix.

**2.06** By placing the switch in either the TIP or RING/LINE position, concentrator continuity may be measured at the binding posts on DAS 803E1 (Fig. 4). In the TIP position, the tip-to-tip continuity can be measured between the COM and RES binding posts. In the RING/LINE position, the ring-to-ring continuity may be measured between the COM and RES binding posts. Also in the RING/LINE position, the COM and BRDG binding posts bridge tip and ring on the line side of the concentrator. In the TRK position, the COM and BRDG binding posts bridge tip and ring on the trunk side of the concentrator.

#### REPEAT LINE TEST

**2.07** After the tests have been completed on the previous line and trunk circuits, a new trunk (same line) may be selected by performing the following procedure.

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- (1) Move switch to OFF. TB lamp extinguishes.
- (2) Disconnect trunk cord from last trunk tested.
- (3) Connect trunk cord to next trunk to be tested.
- (4) Procedures outlined in 2.04 through 2.06 remain the same for testing this new line-trunk combination.

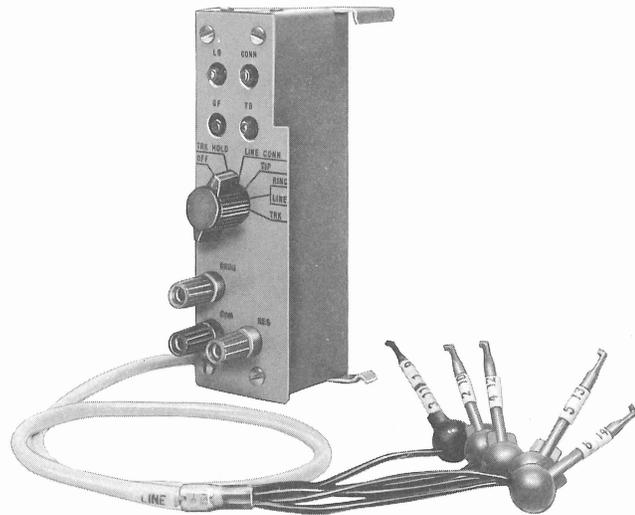
### REPEAT TRUNK TEST

**2.08** After tests have been completed on the previous line and trunk connection, a new line (same trunk) may be selected by performing the following procedure.

- (1) Move switch to TRK HOLD position.
- (2) Disconnect line cord from last line tested.
- (3) Connect line cord to next line circuit to be tested.
- (4) Procedures outlined in 2.05 and 2.06 remain the same for testing this new line-trunk combination.

### 3. REFERENCES

**3.01** The DAS 803E1 is used with the 10A Data Line Concentrator and is covered in the sections entitled 10A Data Line Concentrator—Installation (591-811-200) and 10A Data Line Concentrator—Tests (591-811-500).



**Fig. 1—Data Auxiliary Set 803E1**

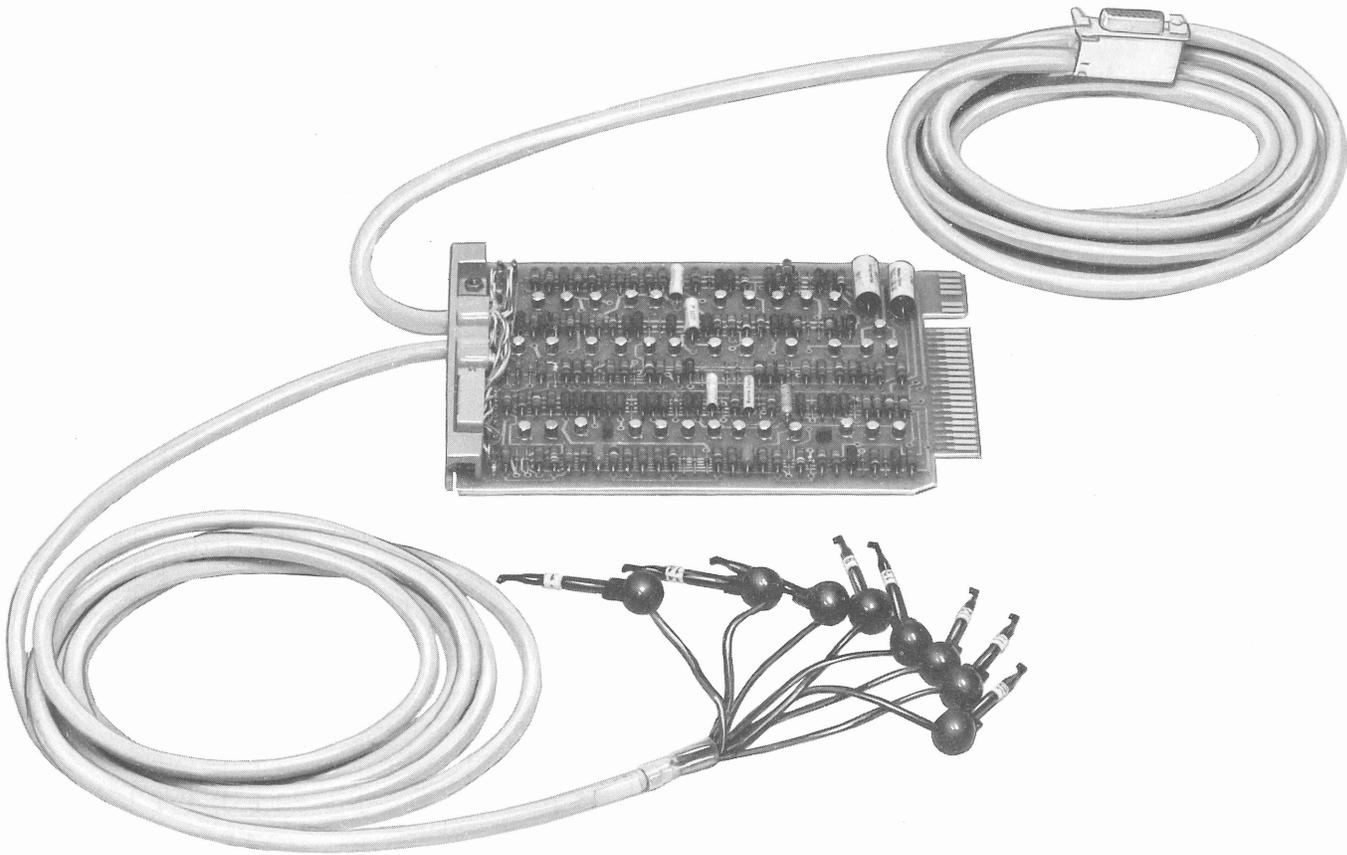


Fig. 2—AR464 Circuit Pack

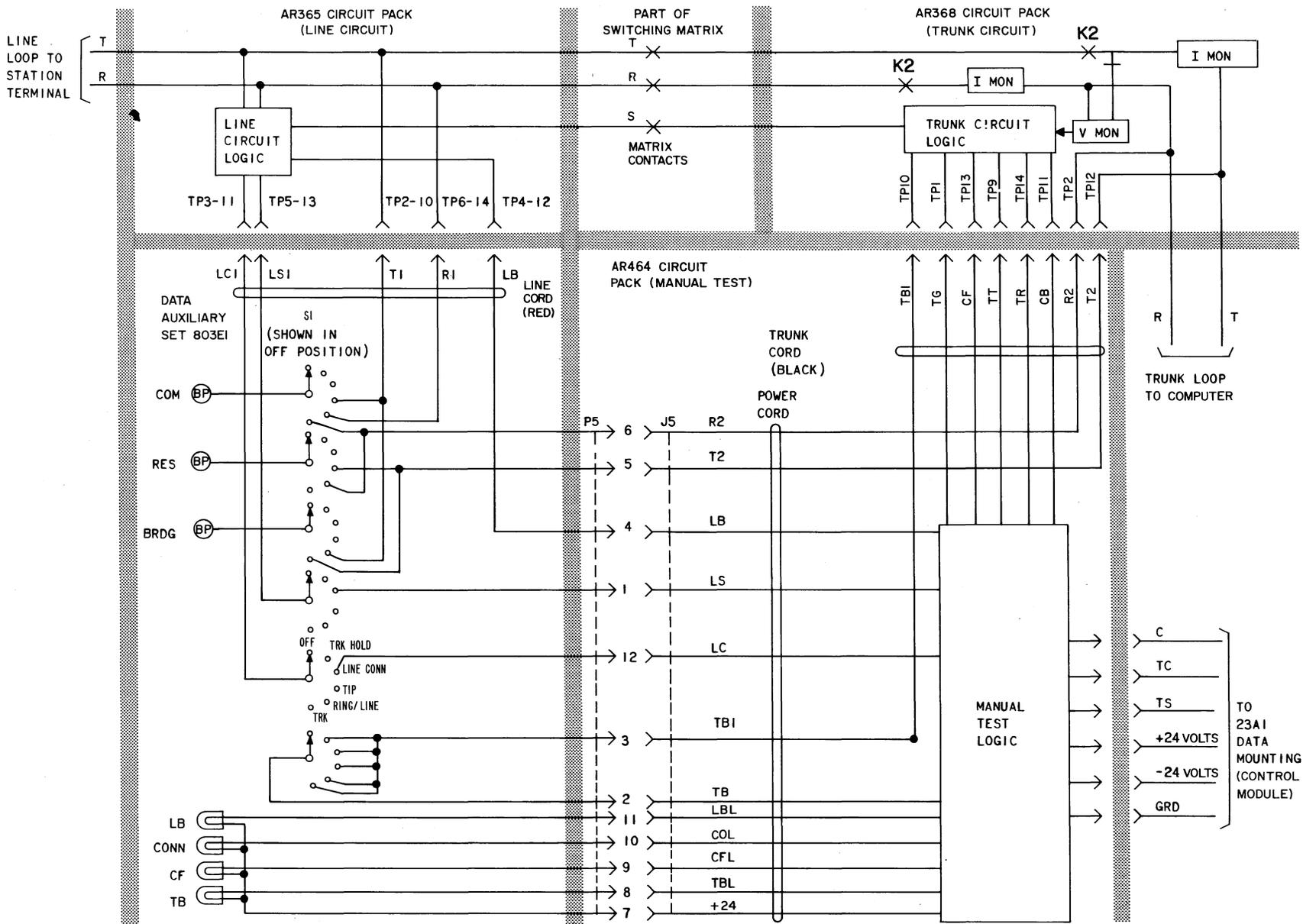


Fig. 3—Manual Test Circuit—Functional Schematic

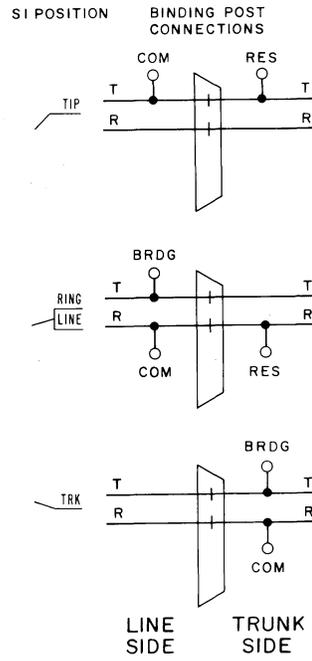


Fig. 4—Data Auxiliary Set 803E1 Binding Post Connections