

## DATA AUXILIARY SET 816 TYPE MAINTENANCE

### 1. GENERAL

1.01 This section contains information necessary to permit maintenance of Data Auxiliary Set 816A1 and Data Auxiliary Set 816B1.

1.02 Information concerning the maintenance of the customers' associated equipment is not included in this practice.

1.03 Data Auxiliary Set 816A1 and Data Auxiliary Set 816B1 will be referred to in this section as DAS 816A1 and DAS 816B1, respectively.

### 2. MAINTENANCE

2.01 No routine maintenance is required for DAS 816A1.

2.02 If DAS is suspected of being in trouble, it should be tested as outlined in section entitled Data Auxiliary Set 816 Type Test Procedures (598-041-500).

2.03 DAS 816A1 cover removal and replacement procedures:

(1) Remove cover as follows:

(a) Loosen, but do not remove the four captive cover screws located around the base.

(b) Remove cover.

(2) Replace cover as follows:

(a) Position retaining wedges so that they may easily receive the cover lugs.

(b) Position the cover lugs over the captive wedges and gently move the cover down into position.

(c) Tighten the cover screws.

2.04 DAS 816B1, as previously described, has an external monitoring jack (MON) provided. A monitoring amplifier is provided and can be used by any one of the 10 data coupling units within each group assembly. The monitoring amplifier is provided with a SEND-RCV switch to enable the monitoring machine to gain access to the input and output circuits facing the customer's business machine.

2.05 Associated with the input to the monitoring amplifier is a MON selector switch for determining which of the 10 channels, the monitoring machine will monitor. Also associated with the monitor amplifier is a SEND-RCV switch. This enables the selecting of either the send leg or receive leg for monitoring.

2.06 In order to avoid overloading or damage to the monitor amplifier unit the input circuit to any monitoring maintenance machine connected to the TTY jack shall conform to the following specifications:

(1) The input dc resistance shall be 750 ohms or greater.

(2) The inductive component of the input impedance shall be less than approximately 50 ohms at the frequency of operation. Typical monitoring machine would be a 33- or 35-type teletypewriter with a 750 ohm dc selector magnet driver.

*Note:* The monitor amplifier is not capable of driving a 60 ma select magnet without suitable buffering such as a mercury relay.

2.07 DAS not meeting requirements should be replaced, in order to restore customer's service as quickly as possible.

*Note:* The entire DAS 816A1 should be replaced and just the data coupling unit for DAS 816B1 should be replaced.

**SECTION 598-041-300**

**2.08** Verify that the customer is receiving satisfactory service before leaving his premises.

**2.09** When replacing a DAS, provision must be made to keep the neutral loop of the 130-type TTY subscriber set closed.

*Note:* This termination may be in the form of a short placed at the 130-type TTY subscriber set, between terminals 5 and 20.

**2.10** If DAS meets requirements of section entitled Data Auxiliary Set 816 Type Test Procedures (598-041-500) and trouble persists:

- (1) Confirm, if possible, that business machine and associated control circuitry are operating properly.
- (2) Check for cord and connector defects.
- (3) Check for trouble in inside wiring, connecting blocks, etc.

**2.11** For detailed operation, refer to CD- and SD-3D023-01.

**2.12** DAS 816A1 is equipped with two fuses SL and RL. DAS 816B1 is equipped with 20

fuses, two fuses per circuit. These fuses are Bussman GMW 0.10 ampere.

**2.13** Sets to be returned to the Distributing House should be packed carefully (in original cartons, if available), to protect sets in transit. Properly tag defective sets, describing nature of trouble as completely as possible.

***130-Type TTY Subscriber Set***

**2.14** Table A is for information purposes only. It pertains to the adjustments required for relay SU.

**TEST NOTES:**

1. Make contact pressure — Test 4 grams, readjust 6 grams.
2. Remove (V2) tube from 43A1 carrier terminal associated with 130B2 or 130C1 Subscriber Set.

***Data Coupling Units***

**2.15** The data coupling unit printed wiring board component layout is shown in Fig. 1. The printed wiring board is coded CP AR 30.

**TABLE A**

APPARATUS				MECH REQ				TEST SET PREPARATION DC CURRENT REQ					
DESIG.	CODE	OPTION	FIG.	RATING	BSP FIG.	CONT PRESS.	ARM. TRVL	TEST CLIP DATA CONN GRD	TEST SET PREP	SEE TEST NOTE	TEST FOR	TEST MA.	READJ MA.
<b>RELAYS</b>													
SU	UA125	V	1.2	M.D.	101/136	SP1	23	T(SU)	GRD	1.2	0	1.7	1.6
SU	UA15	T	1.2	STD	110/101		35	T(SU)	GRD	1.2	0	5.3	5.0

