

## DATA AUXILIARY SET 824B-TYPE 18.75 KILOBIT DATA RECOGNIZER INSTALLATION AND CONNECTION

### 1. GENERAL

1.01 This section contains installation and connection information for Data Auxiliary Sets (DAS) 824B1 and 824B2. Refer to Fig. 1 for an illustration of DAS 824B1.

1.02 For general information concerning installation and connection of data auxiliary sets, refer to the section entitled Data Sets, General Installation and Connection Information (590-010-200).

1.03 Information pertaining to associated customer-owned equipment or other external equipment is not included in this section.

### 2. OPTIONS

2.01 There are no options associated with the 824B-type Data Recognizer. However, the service arrangement provided for the 824B requires strapping in accordance with option T of SD-1D134-01. These straps will be made at installation per Table B.

### 3. INSTALLATION

#### GENERAL

3.01 DAS 824B1 must obtain its operating power from some external source. When installed in a 303-type Data Station, the 824B1 obtains operating power from the associated DAS 806.

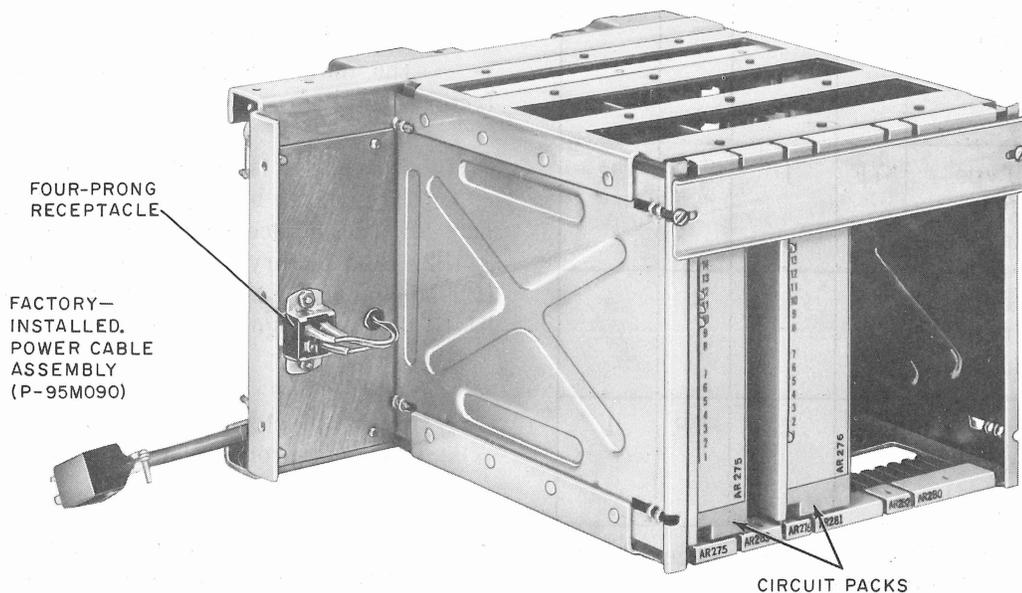


Fig. 1—Data Auxiliary Set 824B1, Front View (Data Auxiliary Set 824B2 is Identical With a 26A Power Unit Attached)

**SECTION 598-060-201**

**3.02** When the 824B-type Data Recognizer is to be used as an independent unit, DAS 824B2 is used. A power supply (26A Power Unit) is included in DAS 824B2. When two 824B-type sets are used independently but are installed together, one must be an 824B1 and the other must be an 824B2. The 824B2 supplies operating power to both data recognizers.

**3.03** The DAS 824B-type may be either cabinet- or rack-mounted. Refer to Table A for mounting bracket information.

**TABLE A  
DAS 824B-TYPE MOUNTING**

| TYPE OF MOUNTING                                    | MOUNTING BRACKETS REQUIRED |                 |                                      |                 |
|---|----------------------------|-----------------|--------------------------------------|-----------------|
|   | SINGLE 824                 |                 | TWO 824 SETS OR ONE 824 AND ONE 806* |                 |
|   | CODE                       | NUMBER REQUIRED | CODE                                 | NUMBER REQUIRED |
| No. 5 Crossbar Type Frame (23-Inch Mounting Plates) | 87B                        | 1               | 87D                                  | 1               |
| KS-20018 Type Cabinet (23-Inch Mounting Plates)     | 87B                        | 1               | 87D                                  | 1               |
| KS-20018 Type Cabinet (11-3/4 Inch Mounting Plates) | 87S                        | 1               | -                                    | -               |
| Bulb Angle Type Frame (23-Inch Mounting Plates)     | 87F                        | 1               | 87H                                  | 1               |
| Bulb Angle Type Frame (19-Inch Mounting Plates)     | 87K                        | 1               | -                                    | -               |
| KS-20093 Type Cabinet (25-Inch Mounting Plates)     | 87N                        | 1               | 87R                                  | 1               |

\* Units mounted adjacent to each other in the same horizontal mounting space

**MECHANICAL ASSEMBLY**

**3.04** DAS 824B1 is mounted adjacent to DAS 806 or DAS 824B2 in the same horizontal mounting space. Two mounting bars (P46M668) and eight

screws, supplied as part of the 87-type mounting brackets, are used to fasten the two sets together (Fig. 2). After the two sets have been connected together, the mounting brackets are attached and the sets are mounted on the relay rack or in the cabinet.

**3.05** DAS 824B2 can be mounted as an independent unit. Refer to Table A for mounting brackets required.

**3.06** Additional mounting information is contained in the sections entitled Wideband Data Station Using Data Set 303-Type, Description and Operation (593-800-100), and Wideband Data Station Using Data Set 303-Type, Installation and Connections (593-800-200).

*Note:* In the sections just mentioned, DAS 824B1 is mounted adjacent to DAS 806 in place of Data Set 404B1.

**CONNECTIONS**

**3.07** Remove both rear covers by unscrewing the four corner screws on each cover.

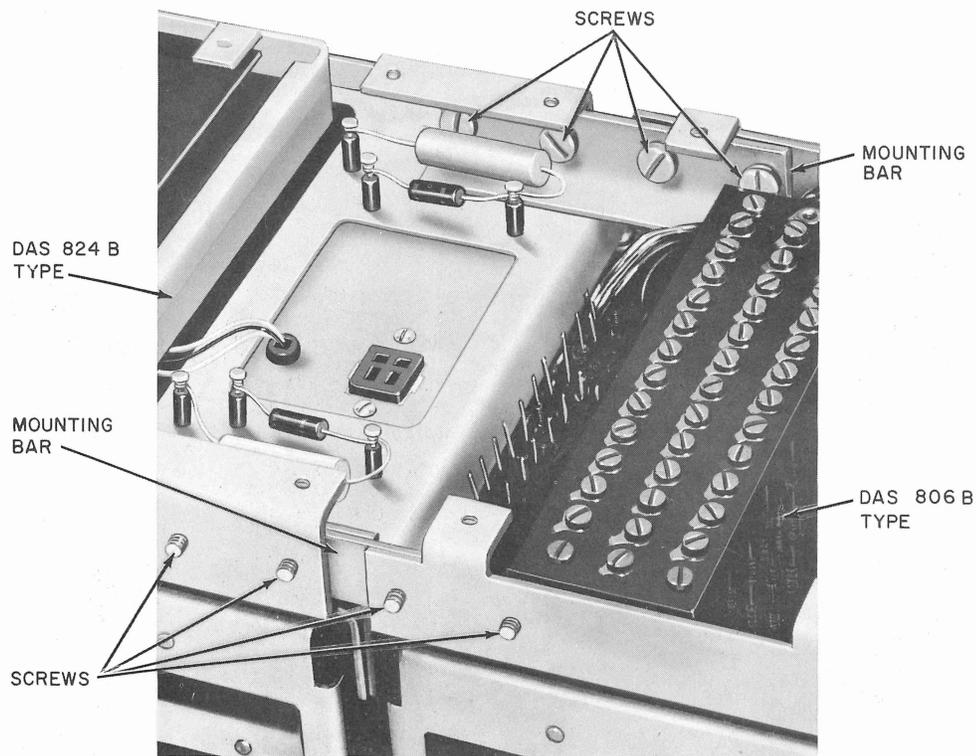
**3.08** All connections to DAS 824B-type are made at the rear of the unit (Fig. 3 and 4).

**3.09** The cable assembly (P95M090) which connects the data recognizer to its power source is factory-installed.

**3.10** Power is supplied to the 824B1 Data Recognizer by the 26A Power Unit which is part of the adjacent-mounted DAS 806 or DAS 824B2. The factory-installed power cable assembly (P95M090) provides the connection between the 824B1 Data Recognizer and the 26A Power Unit.

*Note:* The power cable assembly is a three-conductor cable with a four-prong plug. Two plug prongs share a conductor.

**3.11** Power for the attached DAS 806 or DAS 824B2 is also provided by the 26A Power Unit. Access to the power unit is gained through the four-prong receptacle (J7) mounted on the right rear apron of the 824B1 Data Recognizer. Connection to the four-prong receptacle (J7) is made with the factory-installed power cable assembly from DAS 806 or DAS 824B2. Refer to Fig. 5.



## NOTE:

TWO 824 B-TYPE DATA RECOGNIZERS  
ARE ASSEMBLED IN THE SAME MANNER.

**Fig. 2—Assembly of Data Auxiliary Set 824B-Type and Data Auxiliary Set 806 (Data Auxiliary Set 824B1 is Shown)**

**3.12** The DAS 824B2 has its own power supply (26A Power Unit). A four-prong receptacle, accessible at the rear of the unit, provides the necessary operating power (+18 vdc, -18 vdc, and ground) for the data recognizer. The factory-installed power cable assembly (P95M090) provides the connection to the power unit output jack.

**Note:** The power cable assembly is a three-conductor cable with a four-prong plug. Two plug prongs share a conductor.

**3.13** All interconnecting transmission cables connect to terminal boards TB1 and TB2. All interconnecting cables and connections are shown in the connection diagram (Fig. 6).

**3.14** In addition to the connections shown in the connection diagram (Fig. 6), the terminals (on TB1) shown in Table B must be wired together.

**3.15** After all terminal board and power cable (P95M090) connections have been made, replace the rear covers and secure with the screws supplied.

**3.16** Power must be supplied to the 26A Power Unit of the 824B2 Data Recognizer from the customer-provided, three-wire, 117-vac power outlet. Connection is made with the power cord (P95M028) supplied.

#### 4. REFERENCES

| SECTION     | TITLE  |
|-------------|--|
| 590-010-200 | Data Sets, General Installation and Connection Information |



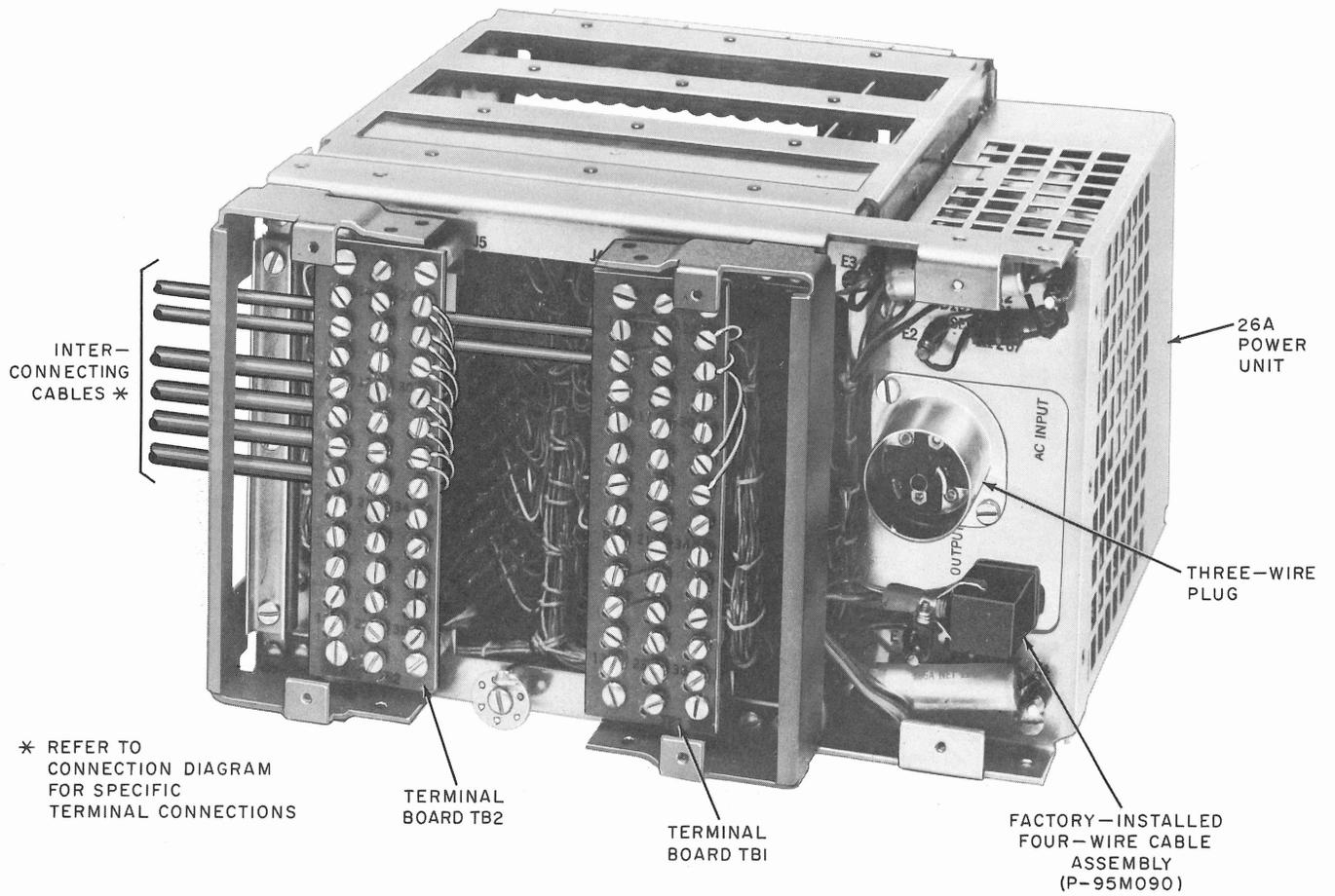


Fig. 4—Data Auxiliary Set 824B2, Rear View (Covers Removed)

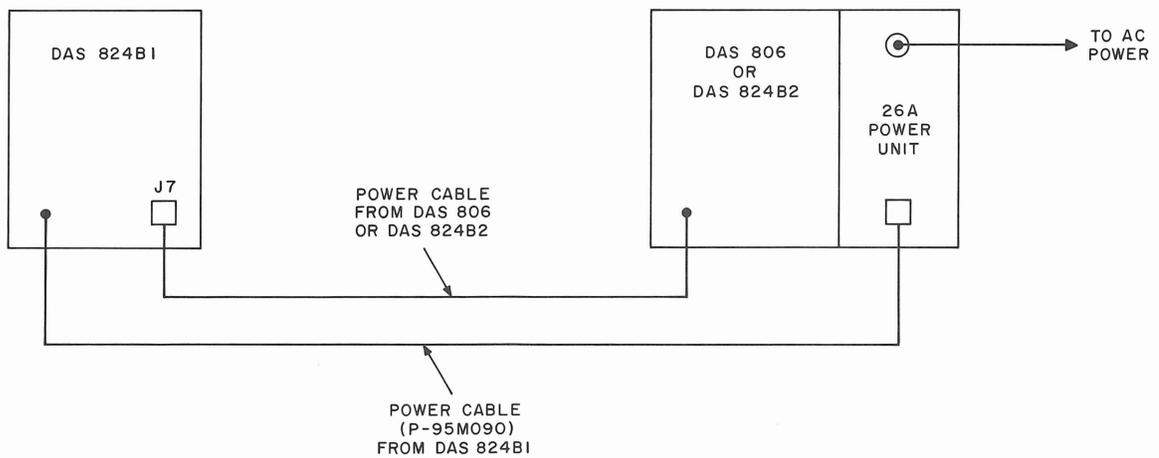
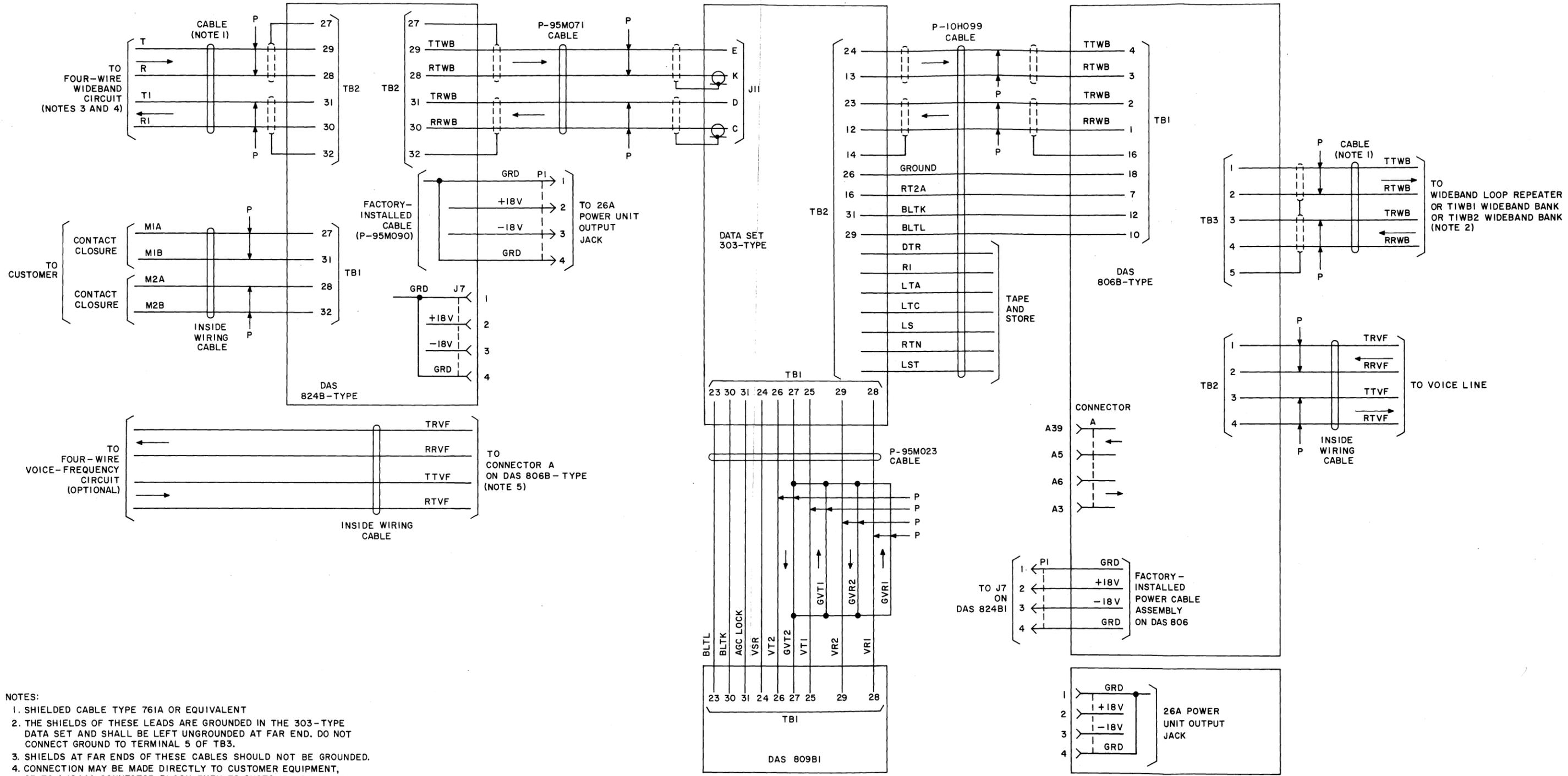


Fig. 5—Power Cable Connections Between Data Auxiliary Set 824B1 and Data Auxiliary Set 806 or Data Auxiliary Set 824B2



- NOTES:
1. SHIELDED CABLE TYPE 761A OR EQUIVALENT
  2. THE SHIELDS OF THESE LEADS ARE GROUNDED IN THE 303-TYPE DATA SET AND SHALL BE LEFT UNGROUNDED AT FAR END. DO NOT CONNECT GROUND TO TERMINAL 5 OF TB3.
  3. SHIELDS AT FAR ENDS OF THESE CABLES SHOULD NOT BE GROUNDED.
  4. CONNECTION MAY BE MADE DIRECTLY TO CUSTOMER EQUIPMENT, OR TO A 1044A CONNECTOR BLOCK THEN TO CUSTOMER EQUIPMENT (AS REQUIRED). USE CABLE P-95M072 FOR CONNECTING 824A TO CONNECTOR BLOCK.
  5. OPTIONAL CONNECTION TO THE VOICE LINE APPEARANCE ON DAS 806B-TYPE IS MADE WITH A CUSTOMER-PROVIDED CONNECTOR (KS-16689 L5).

Fig. 6—Data Auxiliary Set 824B-Type, Connection Diagram