

**DATA SET 401J-TYPE
RECEIVER
MAINTENANCE**

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2. Data Set 401J2, 401J3, 401J6 and 401J7—Key and Telephone Circuit	5	1.01 This section is reissued to provide information on Data Sets 401J6, 401J7, 401J8 and 401J9.	
3. Data Set 401J4, 401J5, 401J8 and 401J9—Key and Telephone Circuit	7	1.02 Illustrations in this section show the shop model Data Set 401J-type. Production models may vary slightly.	
4. 58A Control Unit	9	1.03 No routine maintenance of the data set is required.	
5. 3A3 Data Unit	9	1.04 For a detailed description of Data Set J1D401J and 401J1, refer to CD- and SD-1D022-01. For a detailed description of Data Sets 401J2, 401J3, 401J4, 401J5, 401J6, 401J7, 401J8, and 401J9, refer to CD- and SD-1D064-01.	
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SECTION 594-018-300

Manufacture Discontinued (MD), but are covered in this section to provide information for those units already in the field.◆

1.05 Figure 1 shows the telephone circuits of Data Sets J1D401J and 401J1. Figure 2 shows the telephone circuit for Data Sets 401J2, 401J3, ◆401J6, and 401J7.◆ Figure 3 shows the telephone circuit for Data Sets 401J4, 401J5, ◆401J8, and 401J9.◆

1.06 Maintenance of the data set on the customer premises should be limited to checking with the data test center or replacing a defective data set; however, the following information is provided so that the data set can be repaired if desired.

1.07 See the appropriate sections for the maintenance of the telephone set components such as ringers, dials, handsets, etc.

1.08 Maintenance of the 58A control unit (Fig. 4) and ◆3A3 data unit◆ (Fig. 5) are limited to complete unit replacement.

1.09 Printed board assembly repair is limited to complete assembly replacement (Fig. 6).

Note: Do not attempt individual component repair or replacement on the data set.

1.10 When test or demonstration calls are made, refer to the section entitled Crediting Charges on Test Calls (010-250-001) for the proper procedure for crediting charges.

2. TESTING

2.01 Before proceeding with data set repair, perform the following.

- (1) Refer to the data test center for a loop-back test. Check frequencies and levels from the transmitting station, central office trouble, etc.
- (2) Confirm, if possible, that customer equipment is operating properly.
- (3) Check for cord and connector defects (Fig. 7, 8, and 9).
- (4) Check for intermittent trouble in the inside wiring, drop wire, protector, etc.

2.02 When trouble is suspected at the transmitting station, test the set as described in the section entitled Data Set 401J-Type Receiver—Test Procedures (594-018-500).

3. COVER REMOVAL AND REPLACEMENT

3.01 To remove the covers, perform the following.

- (1) Loosen but do not remove the four captive rear cover screws located around the base pan (Fig. 7).
- (2) Remove the rear cover by pulling it straight up.
- (3) Loosen but do not remove the two front cover retaining screws (Fig. 6).
- (4) Tilt the front cover slightly forward at the top while pulling it up and away from the base pan and pushbuttons.

3.02 To replace the covers, perform the following.

- (1) Tilt the front cover slightly forward at the top while lowering it over the base pan and pushbuttons.
- (2) Check that the two front cover retaining screws properly engage the front cover retaining brackets (Fig. 7).
- (3) Tighten the two front cover retaining screws (Fig. 7).
- (4) Position the rear cover retaining wedges so they may easily engage the cover lugs.
- (5) Lower the rear cover and the cover lugs over the captive wedges.
- (6) Check that rear cover lugs are engaged with cover wedges.
- (7) Check that cover catch brackets are properly engaged with the rear cover at the front of the unit.
- (8) Tighten the rear cover screws.

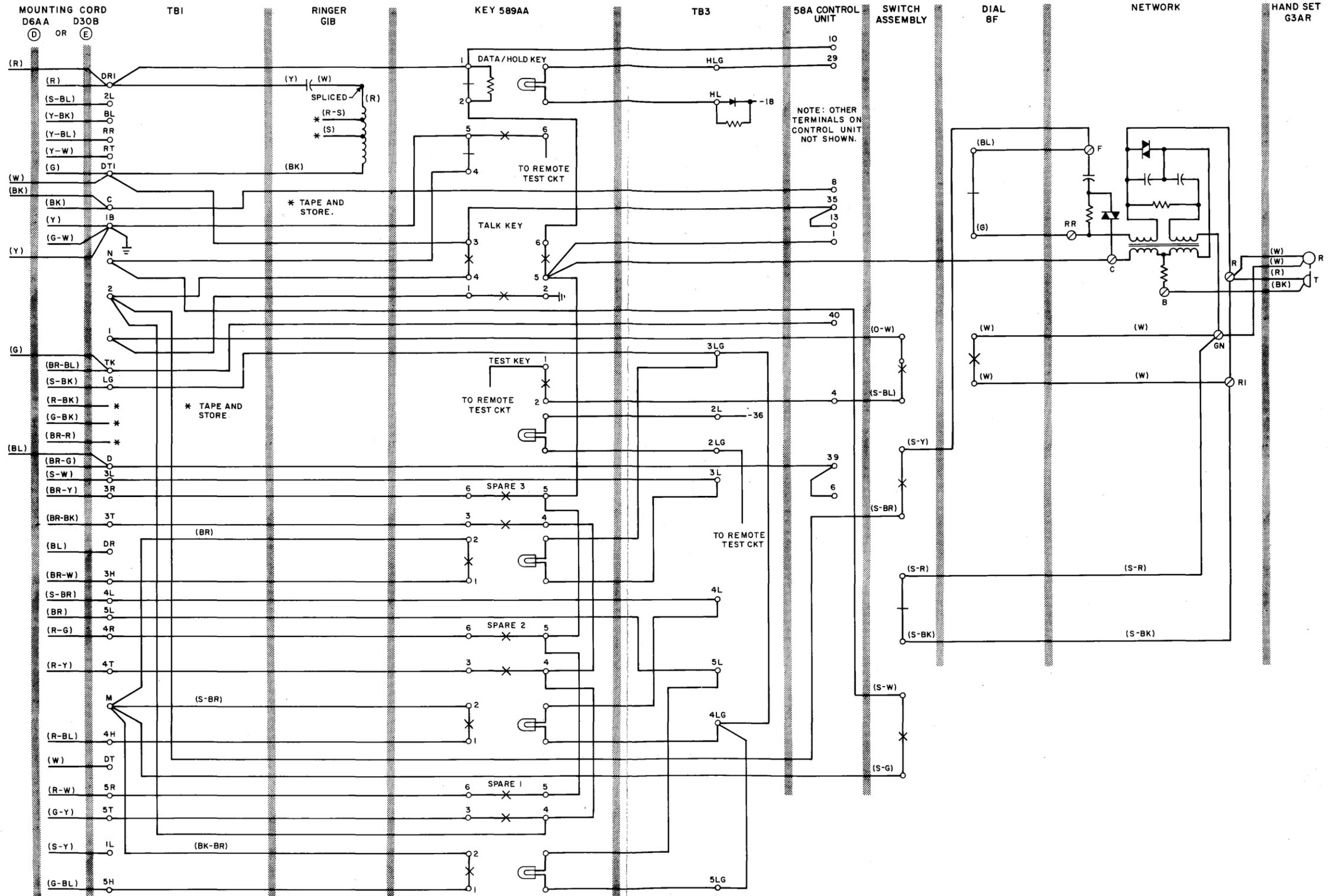


Fig. 1—Data Set 401J and 401J1—Key and Telephone Circuit

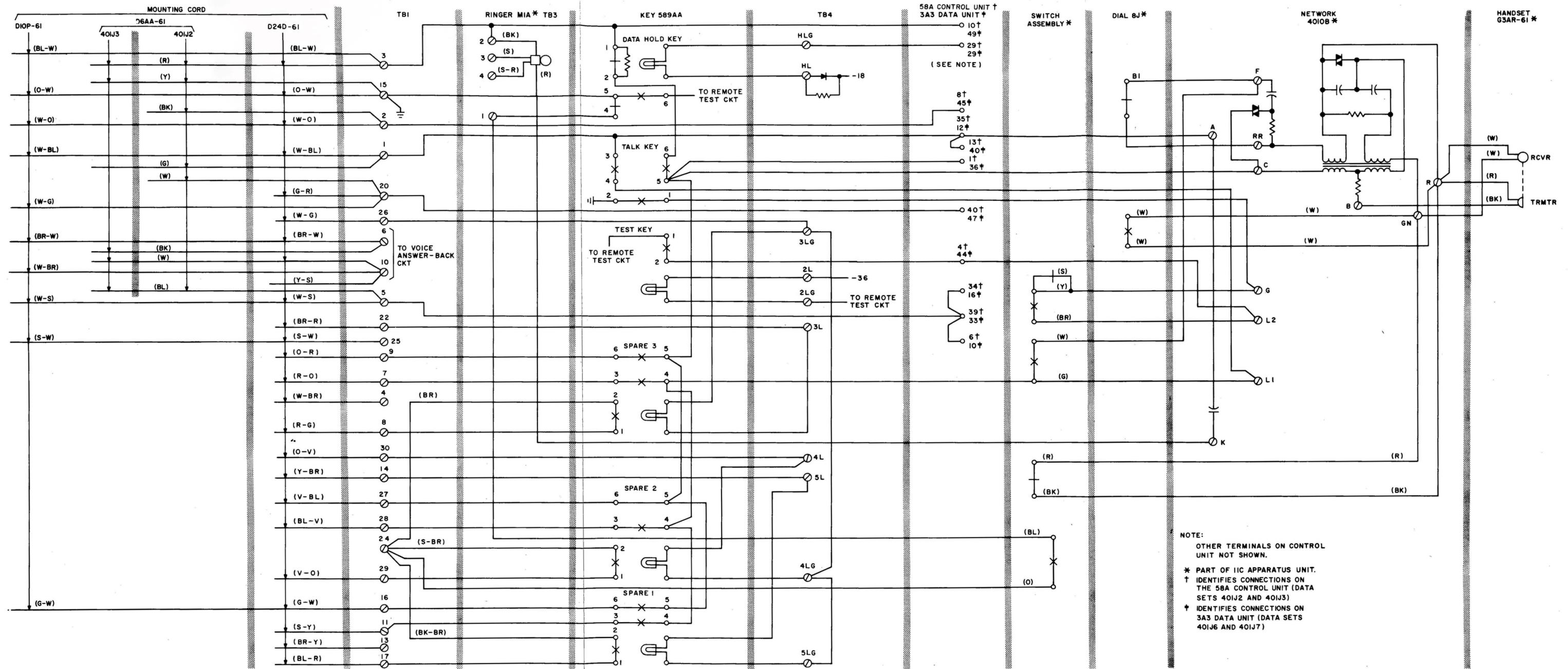


Fig. 2—Data Set 401J2, 401J3, 401J6, and 401J7—Key and Telephone Circuit

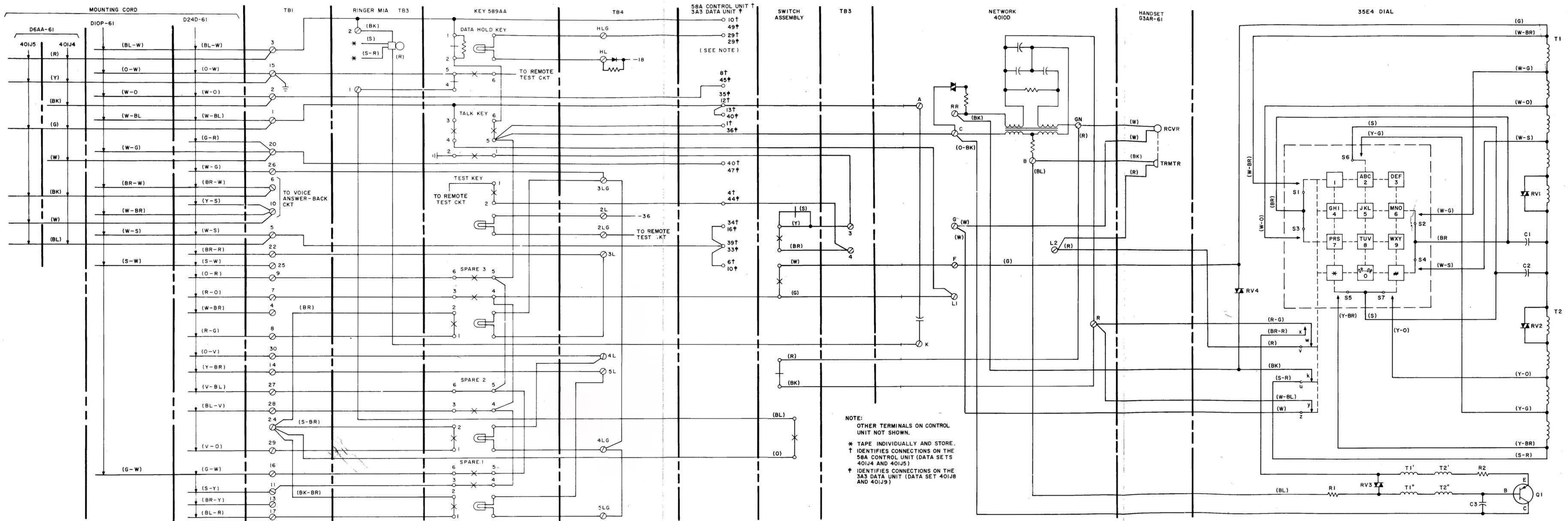


Fig. 3—Data Set 401J4, 401J5, 401J8, and 401J9—Key and Telephone Circuit

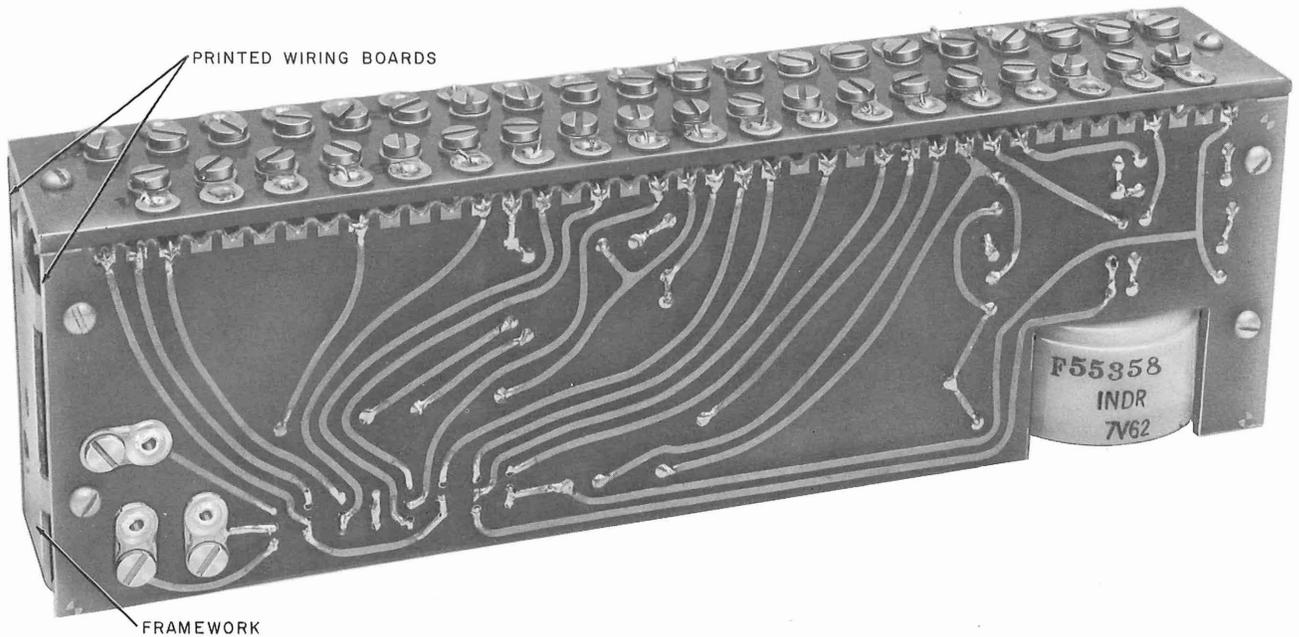


Fig. 4—58A Control Unit

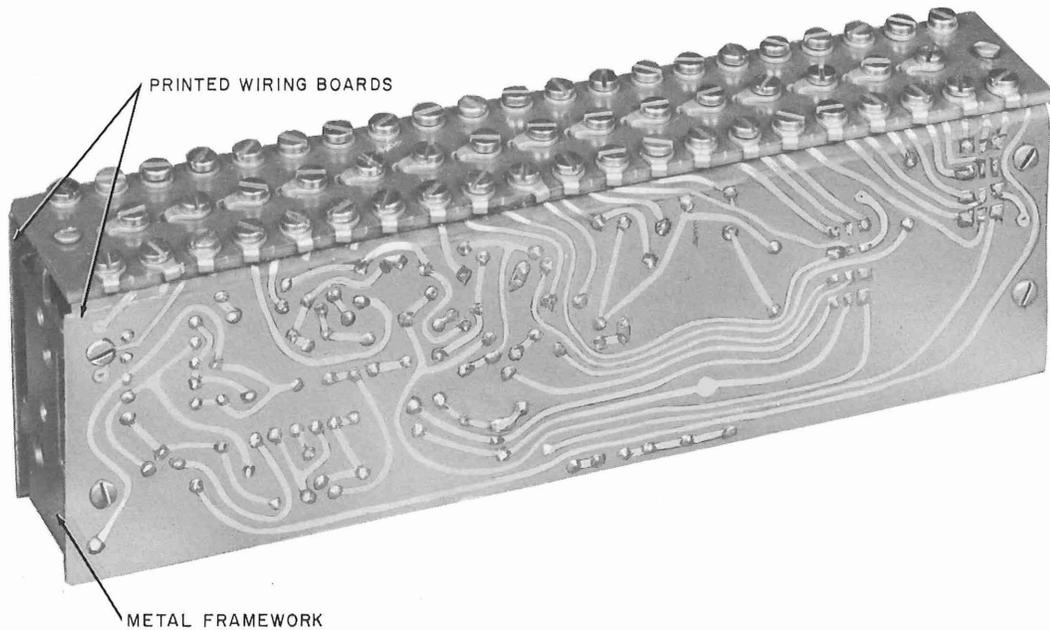


Fig. 5—3A3 Data Unit

4. PRINTED BOARD ASSEMBLY REPLACEMENT

Note: Verify that the requirements in 2.01 have been fulfilled.

THINK *Before attempting assembly replacement, verify that the power cord has been disconnected.*

4.01 Data sets equipped with retaining pins (Fig. 10) are replaced as follows.

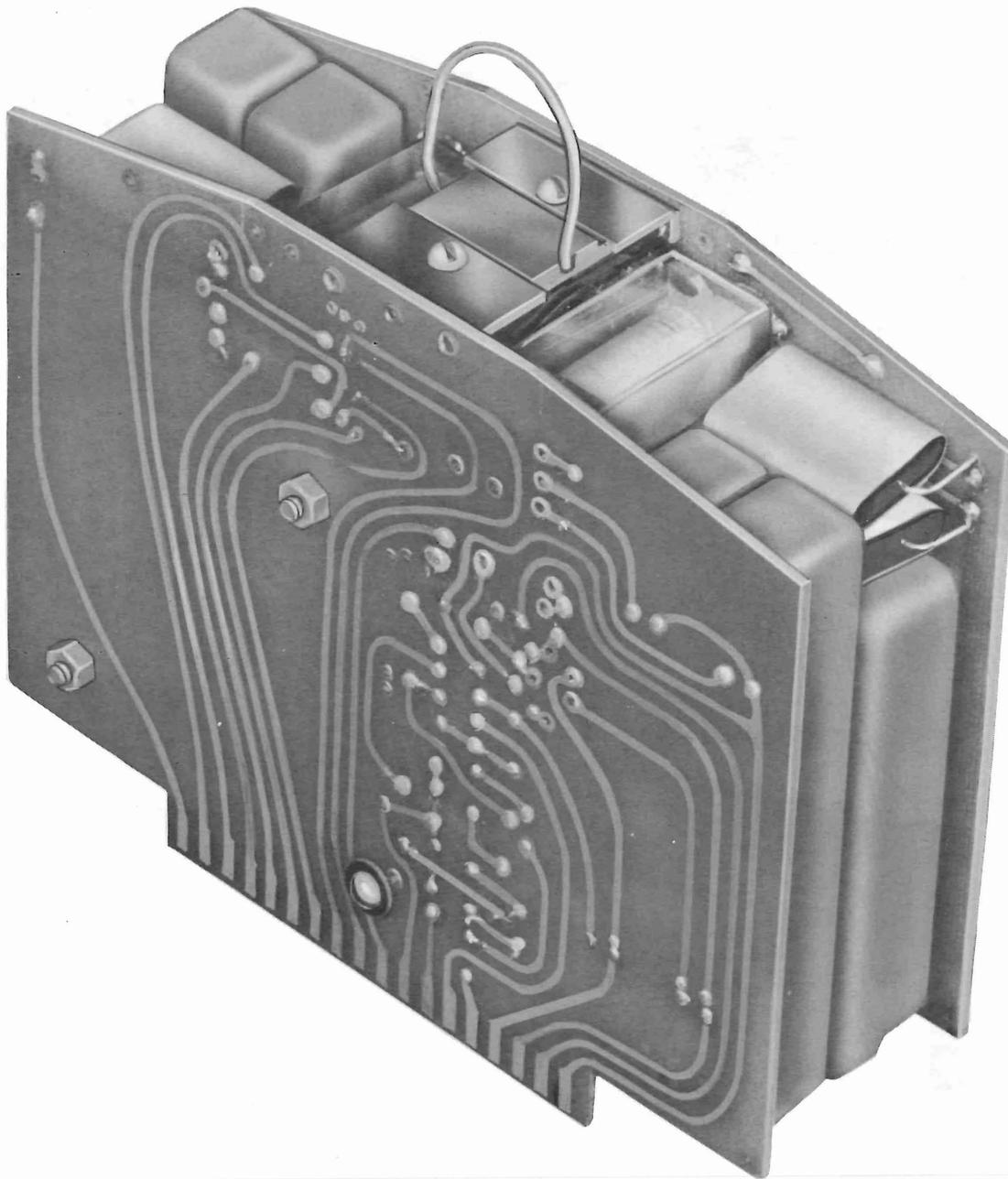


Fig. 6—Printed Board Assembly

- (1) Remove the assembly retaining pin.
- (2) Grasp the handle and carefully extract the printed board assembly.
- (3) Fit the new assembly into positioning grooves and lower the assembly until it is seated in the connector socket.

Note: Do not force assembly into position. Recheck position of assembly and grooves.

- (4) Replace the assembly retaining pin.
- (5) Retest the data set as outlined in the section entitled Data Set 401J-Type—Receiver—Test Procedures (594-018-500).

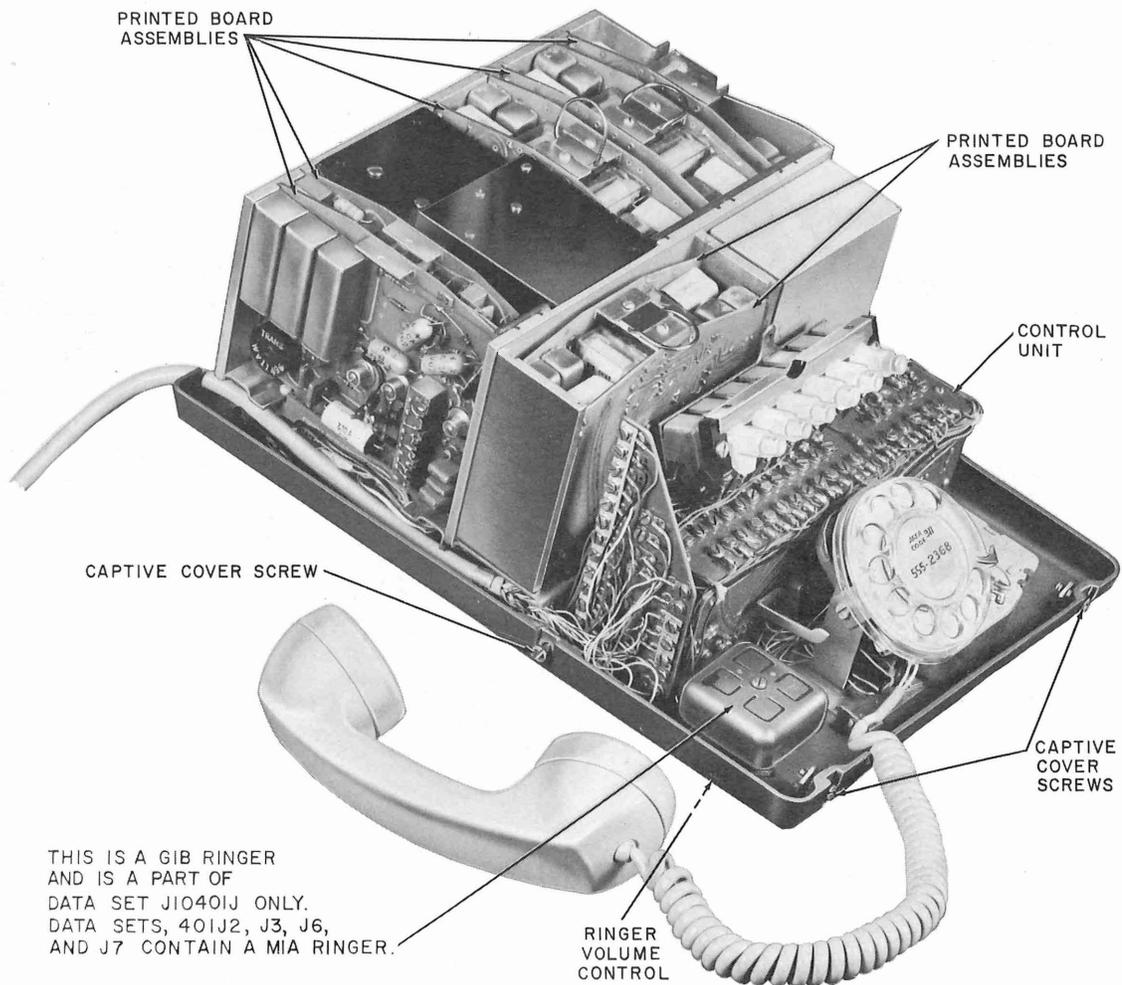


Fig. 7—Data Set J1D401J and 401J1—Inside View

4.02 For data sets equipped with the pivoted retaining bracket (Fig. 11), follow the procedure in 4.01 and substitute the pivoted retaining bracket for the retaining pin.

4.03 For data sets equipped with the angle retaining bracket (Fig. 12), follow the procedure in 4.01 and substitute the angle retaining bracket for the retaining pin.

5. 58A CONTROL UNIT OR 3A3 DATA UNIT REPLACEMENT

THINK *Before attempting unit replacement, verify that the power cord has been disconnected.*

Note: Verify that the requirements in 2.01 have been fulfilled.

5.01 To replace the control unit, perform the following.

- (1) Remove the dial.
- (2) Remove the unit retaining screws (Fig. 10 and 13).
- (3) Turn back the terminal board (TB1) and remove the two hexagonal retaining studs (Fig. 13).
- (4) Disconnect all wiring to the 58A terminal block or to the 3A3 terminal block. Note the color code on each terminal lug. Use Table

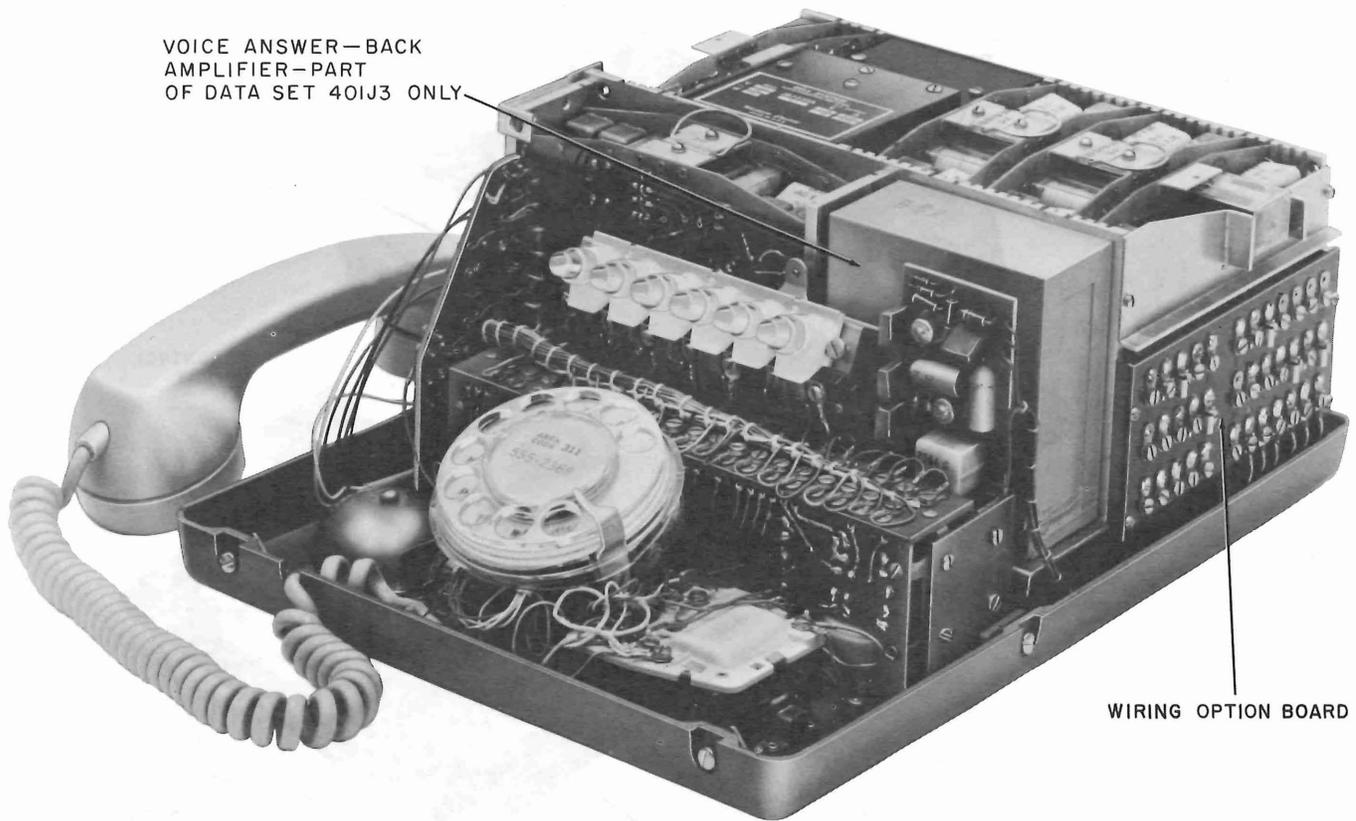


Fig. 8—Data Set 401J2, 401J3, 401J6, and 401J7—Inside View

A as a worksheet and checklist for Data Set 401J. Use Table B as a worksheet and checklist for Data Sets 401J2, 401J3, 401J4, and 401J5. Use Table C as a worksheet and checklist for Data Sets 401J6, 401J7, 401J8, and 401J9.

(5) Remove the 58A control unit or 3A3 data unit and replace it with the new unit.

(6) Reconnect the wiring. Make certain that the wiring color code agrees with that shown in Table A, Table B, or Table C, as applicable.

(7) Replace all retaining screws and studs.

(8) Retest the data set as outlined in the section entitled Data Set 401J-Type Receiver—Test Procedures (594-018-500).

6. DATA SET REPLACEMENT

6.01 If unit or assembly replacement fails to correct the trouble, replace the data set in accordance with the section entitled Data Set 401J-Type—Receiver—Installation and Connections (594-018-200).

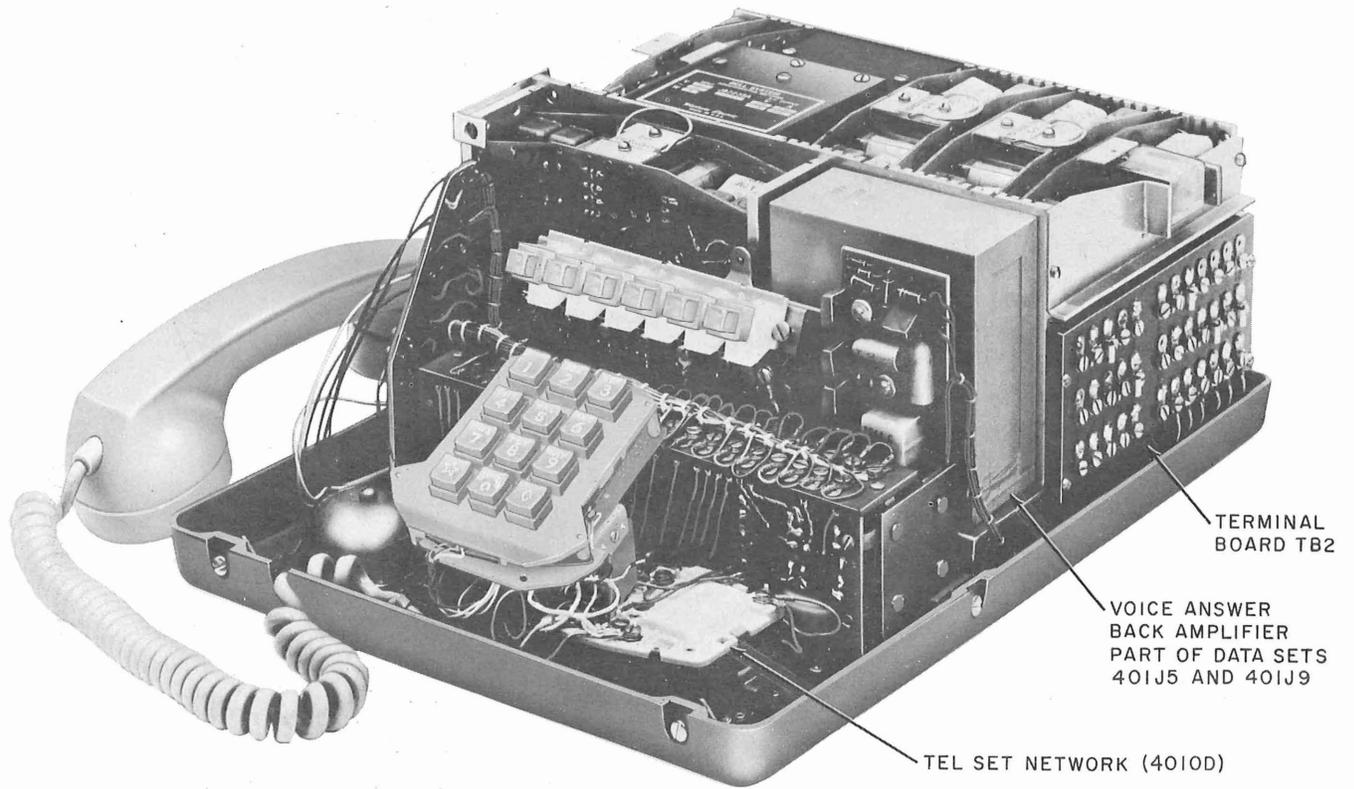


Fig. 9—Data Set 401J4, 401J5, 401J8, or 401J9—Inside View

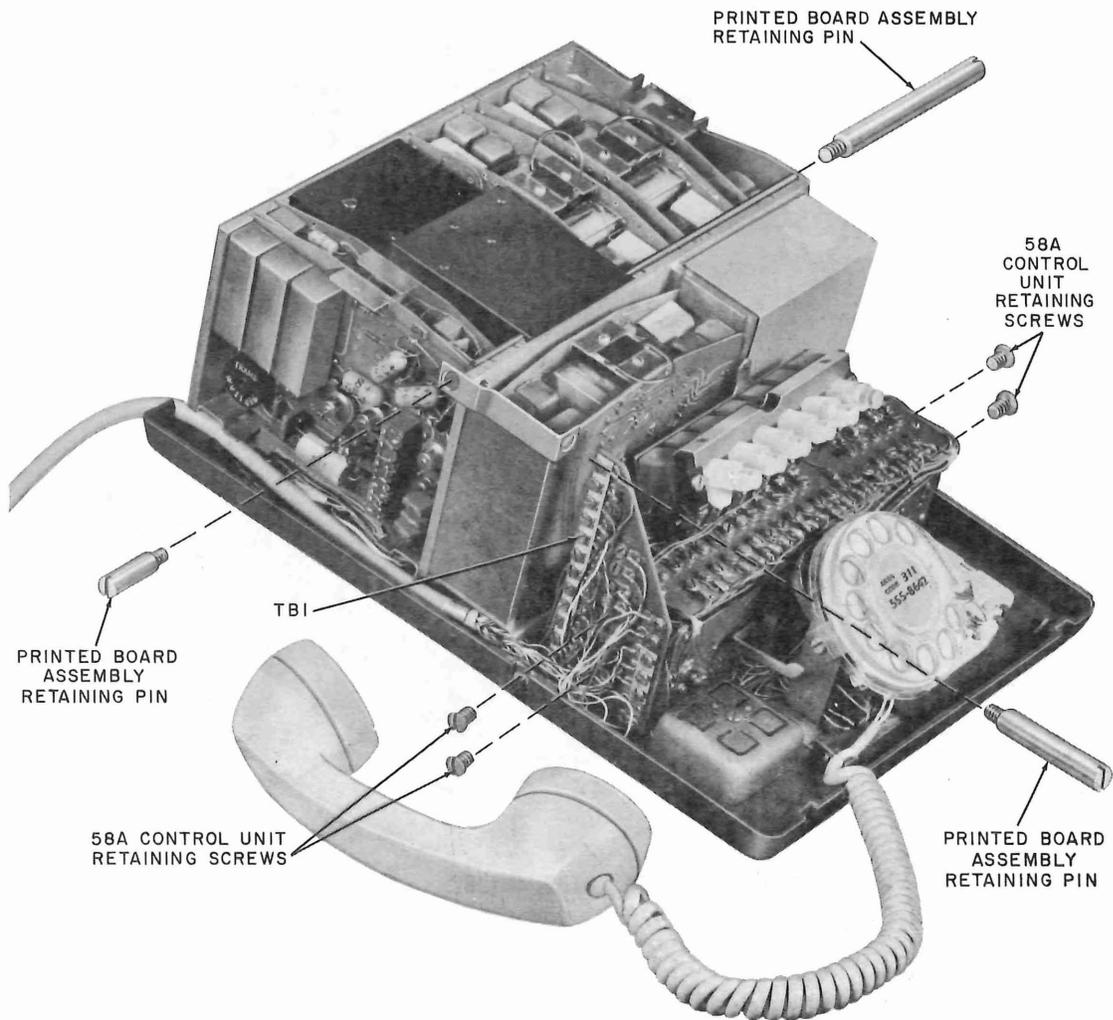


Fig. 10—Data Set J1D401J or 401J1—Inside View

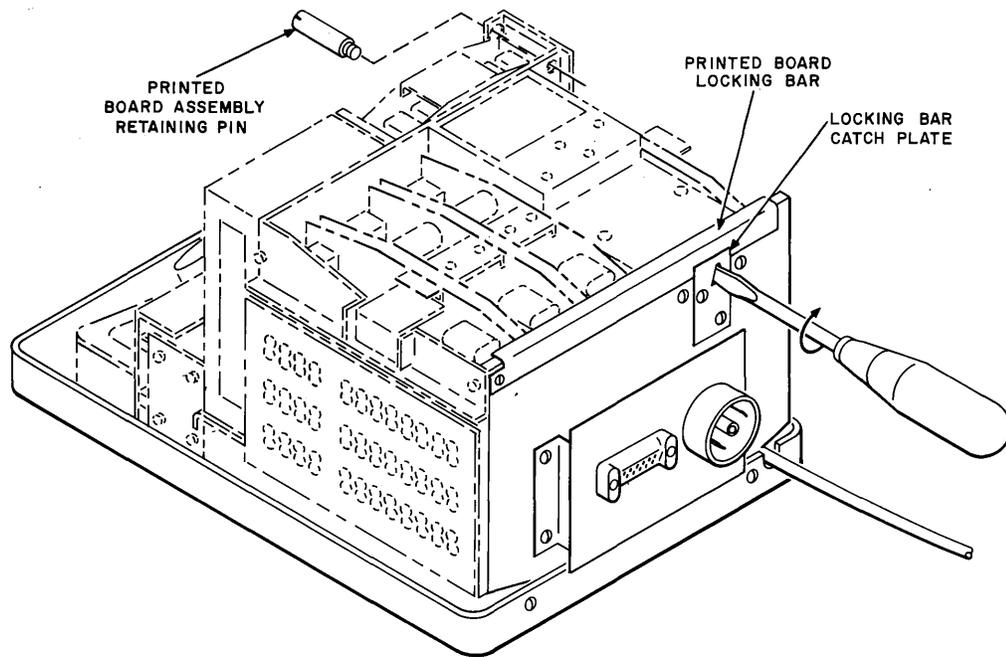


Fig. 11—Printed Board Assembly—Pivoted Retaining Bracket

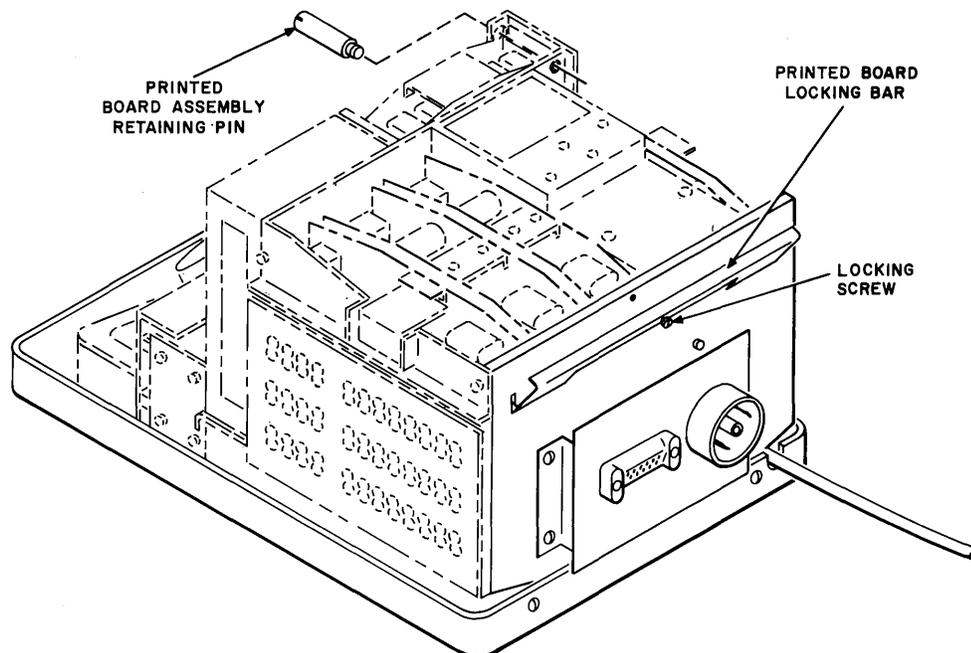


Fig. 12—Printed Board Assembly—Angle Retaining Bracket

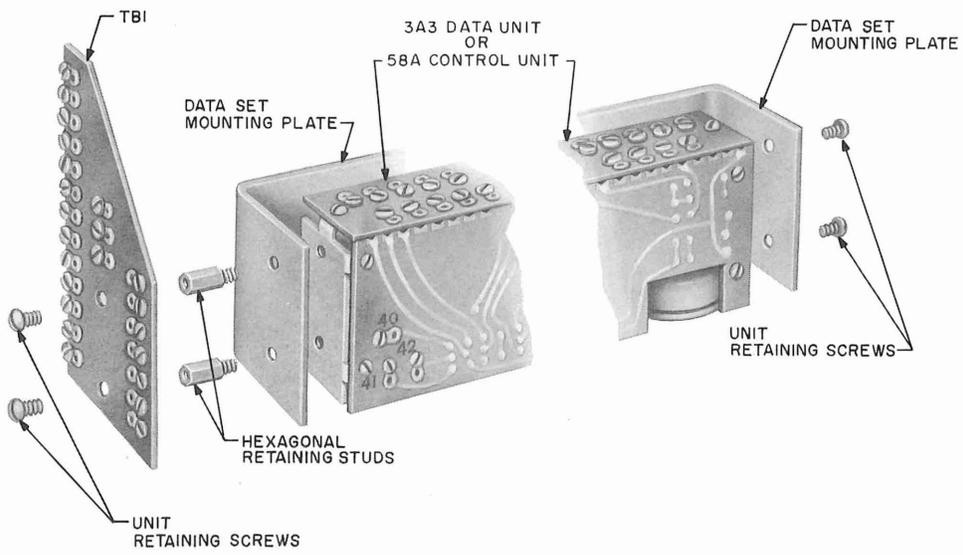


Fig. 13—58A Control Unit or 3A3 Data Unit—Typical Mounting Detail

TABLE A
WORKSHEET AND CHECKLIST
DATA SETS 401J1 AND J1D401J

58A TERMINAL BLOCK					
TERM. NO.	COLOR CODE	CHECK MARK COLUMN	TERM. NO.	COLOR CODE	CHECK MARK COLUMN
1	BL-3W		22	BR-3BK	
2	BK		23	G-3BK	
3	—		24	R-3W	
4	S-BL G		25	W S-3W S-3W	
5	G-3R		26	R-3W	
6	BL-3R		27	BK	
7	O-3BK		28	BR-3R BR-3R	
8	BR-3W		29	X S O-3W	
9	BK		30	R-3W	
10	S-3W		31	R	
11	BR		32	S-3W S-3W S	
12	O		33	—	
13	BL		34	BL-3R	
14	S-3R G BR-3R		35	BL	
15	O		36	Q BR	
16	O-3R		37	N BR	
17	R-3W		38	R	
18	BR BR		39	BL-3R	
19	S		40	W	
20	BL-3BK		41	—	
21	O-3BK		42	BK	

TABLE B

**WORKSHEET AND CHECKLIST
DATA SETS 401J2, 401J3, 401J4, AND 401J5**

58A TERMINAL BLOCK					
TERM. NO.	COLOR CODE	CHECK MARK COLUMN	TERM. NO.	COLOR CODE	CHECK MARK COLUMN
1	BL-3W		22	BR-3BK	
2	BK		23	G-3BK	
3	—		24	R-3W	
4	S-BL		25	S-3W	
5	G-3R		26	R-3W	
6	BL-3R		27	BK	
7	O-3BK		28	BR-3R	
8	BR-3W		29	O-3W	
9	BK		30	R-3W	
10	S-3W		31	R	
11	BR		32	—	
12	G		33	—	
13	BL		34	BL-3R	
14	S-3R		35	BL	
15	G		36	BR	
16	O-3R		37	BR	
17	R-3W		38	R	
18	BR		39	BL-3R	
19	S		40	W	
20	BL-3BK		41	—	
21	O-3BK		42	BK	

TABLE C

**WORKSHEET AND CHECKLIST
DATA SETS 401J6, 401J7, 401J8, AND 401J9**

TERM. NO.	COLOR CODE	CHECK MARK COLUMN	TERM. NO.	COLOR CODE	CHECK MARK COLUMN
4	R3-W		31	S-3W	
5	BL-3BK		33	BL-3R	
6	G-3R		34	S	
10	BL-3R		35	BR	
11	—		36	BL-3W	
12	BL		37	—	
13	BR-3R		40	BL	
14	R		41	O-3BK	
15	S-3R		43	BR	
16	BL-3R		44	S-BL	
17	BK		45	BR-3W	
19	R-3W		46	R-3W	
20	O-BR		47	W	
21	BR		49	S-3W	
25	G		50	—	
27	BK		54	R	
28	R-3W		55	BR	
29	BK		56	G	