DATA AUXILIARY SETS 801C1 AND 801C2

FOR AUTOMATIC CALLING

INSTALLATION

1. GENERAL

1.01 This section covers Data Auxiliary Sets 801C1 and 801C2. Each is referred to as an automatic calling unit (ACU).

1.02 This section is reissued to provide an option table for all interchangeable ACUs and to provide procedures for cover removal and cord replacement. It also includes minor text changes.

1.03 This section covers installation and option connections for the ACU.

Before starting installation, verify that telephone (data) line is arranged for TOUCH-TONE® service. If a ground-start line is required (Option V), verify that the line has been arranged for ground-start operation.

1.04 When a ground-start telephone line is used and a power failure occurs, it is required that a momentary ground be applied to the telephone (data) line when initiating a call. When this is the case, consult the applicable data set practice to verify that the necessary momentary ground is provided. The data set button that is used to supply this ground should be labeled DIAL TONE.

1.05 Verify that the overall facilities have been tested and meet the transmission requirements specified in the section entitled Private Line Data Circuits — Voice Bandwidth Circuits for Miscellaneous Data — Over-All Tests and Requirements (314-410-500).

1.06 This section does not include specific installation methods, information on associated data sets, or control telephone sets. Refer to the applicable section for information on installation of associated equipment.

2. OPTION CONNECTIONS

To eliminate possible damage to electronic components in the data set or ACU, do not make power connection until all other connections have been completed.

2.01 Set abandon call retry timer (ACR) for desired time interval (Table A and Fig. 1). Where no ACR time interval is specified, set timer to 40-second position.

TABLE A

ACR TIMER ADJUSTMENT

INTERNAL SELECTED SECONDS	ACR TIMER ADJUSTMENT
7	Rotate adjustment screw to extreme counterclockwise position.
10	Rotate adjustment screw one position clockwise from extreme counterclockwise position.
15	Rotate adjustment screw two positions clockwise from extreme counterclockwise position.
25	Rotate adjustment screw three positions clockwise from extreme counterclockwise position.
40	Rotate adjustment screw to extreme clockwise position.

2.02 ACU options must be specified on the service order. Connect options as shown in Table B. The location of TB1 is shown in Fig. 2.

TABLE B

OPTION CONNECTIONS

FEATURE	OPTION	DESIGNATION	DATA AUXILIARY SET CODE		TB1 CONNECTIONS	
			801C1	801C2	FROM TERM.	TO TERM.
Detects answer tone	End of tone	W	*	†	2	3
	Beginning of tone	X	*		Remove W option from 801C2 before making X option connections.	
					1	2
	2025 Hz	S	*	†	47	48
	2225 Hz	T	*		Remove S option from 801C2 before making T option connections.	
					46	47
Ground-Start	With	V	†	†	7 18 20 31 33 44	8 19 21 32 34 45
	Without	Y	*		Remove V option connection before making Y option connections.	
					4 17 56	5 18 57
Mounting cord	D10P-61‡	M	†	†	None required	
	M14C-61§	N			None required	
Data set to data mode by contact to DT		Q	†	†	9	10
Terminates call via CRQ when DSS goes on		Z	†	†	11	12
Terminates call via data set when DSS goes on					Remove Z option.	
Stops ACR timer when DSS goes on		R	†	†	24	25
Does not stop ACR timer when DSS goes on					Remove R option.	

* Not available in Data Auxiliary Set 801C1.

† Factory installed option.

‡ D10H-61, option P in early sets.

§ M14C-61 cord must be ordered separately.

2.03 Since it is possible to interchange two ACUs that contain the same options with different designations, Table C is provided to identify the options for all interchangeable ACUs. This should aid in correlating the options of the replacing ACU with the options of the ACU being replaced.

Note: Data Auxiliary Set 801A-type and 801C-type ACUs are not interchangeable without making the necessary modifications to the telephone line, since the A-type ACU is designed for use with dial pulse equipment and the C-type ACU requires a line arranged for TOUCH-TONE service.

Before attempting option modifications, verify that the power cord has been disconnected.

TABLE C

OPTIONS OF ALL AVAILABLE AUTOMATIC CALLING UNITS

DESCRIPTION	DATA AUXILIARY SETS			
	801C1 & 2	801C3 & 4	801A1, 2, 3, & 4	801A5 & 6
Ground-start (4-wire)	Not avail.	ZK	Not avail.	Not avail.
Ground-start (2-wire)	V	V	Fac wired	Fac wired
Without ground-start (loop-start)	Y (Note 1)	Y (Note 2)	Not avail.	Not avail.
Detects end of answer tone	W	W	W	W
Detects beginning of answer tone	X (Note 1)	X (Note 2)	X (Note 3)	X (Note 5)
Detects 2025-Hz answer tone	S	S	S	S
Detects 2225-Hz answer tone	T (Note 1)	T (Note 2)	T (Note 3)	T (Note 5)
Mounting cord — 10-conductor	M	M	K	M
Mounting cord — 14-conductor	N (Note 4)	N	M	N
Data set to data mode by contact to DT	Q	Q	Q	Q
Data set to data mode by isolated contact	Remove Q	F	Remove Q	F
Data set to data mode by grounded contact	Not avail.	ZG	Not avail.	ZG
Stops ACR timer when DSS goes on	R	R	Y	R
Does not stop ACR timer when DSS goes on	Remove R	H	Remove Y	H
Data set answer detection without end of number	Not avail.	E	Not avail.	E
ACU answer detection or end of number	Fac wired	B	Fac wired	B
Isolated TK contact	Fac wired	ZA	Fac wired	ZA
Isolated CL contact	Not avail.	ZC	Not avail.	ZC
Grounded TK and CL contacts	Not avail.	ZB	Not avail.	ZB

TABLE C (Cont)

OPTIONS OF ALL AVAILABLE AUTOMATIC CALLING UNITS

DESCRIPTION	DATA AUXILIARY SETS			
	801C1 & 2	801C3 & 4	801A1, 2, 3, & 4	801A5 & 6
Terminates call via data set after DSS is on (line transfer in test)	Remove Z	G	Z	G
Terminates call via data set after DSS is on (CL contact in test)	Not avail.	ZD	Not avail.	ZD
Terminates call via CRQ after DSS is on (line transfer)	Z	Z	Remove Z	Z
Terminates call via CRQ after DSS is on (CL contact)	Not avail.	A	Not avail.	A
2-wire	Fac wired	ZH	Fac wired	Fac wired
4-wire	Not avail.	ZJ	Not avail.	Not avail.
DLO controlled by ACU	Fac wired	ZM	Fac wired	Fac wired
DLO controlled by ACU and data set	Not avail.	ZL	Not avail.	Not avail.
Contact interface	Not avail.	Not avail.	U (Note 6)	ZE
Voltage interface	Fac wired	Fac wired	V (Note 7)	ZF

Notes:

1. Available only in 801C2
2. Available only in 801C4
3. Available only in 801A1 and 2
4. D10H-61, option P in early production sets
5. Available only in 801A6
6. Available only in 801A2 and 3
7. Available only in 801A1 and 4

3. INSTALLATION PROCEDURES

3.01 The ACU shall be installed in conformance with existing practices covering installation of station sets. See the section entitled Data Sets — General Installation And Connection Information (590-010-200).

3.02 The main components of a typical installation layout are shown in Fig. 3.

3.03 The customer must furnish a standard 3-wire, grounding-type power receptacle (Fig. 4). This receptacle must be on a circuit that is not controlled by a switch.

3.04 Locate the ACU within range of the business machine interface connecting cord. This cord, supplied by the customer, should not exceed 50 feet in length.

3.05 The mounting cord interconnecting arrangement for the ACU and the associated data set is shown in the connecting section covering the data set. Select the interconnecting figure that is applicable and wire accordingly.

3.06 Connect the power cord between the ACU power cord connector and the 3-wire power outlet furnished by the customer. Secure the power outlet end of the power cord with an approved type of clamp.

3.07 The interconnections of the ACU with a 58-type control unit and a 3A-type data unit are shown in Fig. 5 and 6 respectively.

4. COVER REMOVAL AND REPLACEMENT PROCEDURE

Before attempting cover removal or replacement, verify that power cord has been disconnected.

4.01 For the removal of the cover, perform the following operations:

(a) Loosen but do not remove the four captive rear cover screws located around the basepan (Fig. 7).

(b) Remove the rear cover by pulling it straight up. The cover must be spread apart as it is pulled up.

(c) Loosen but do not remove the two front cover retaining screws (Fig. 7).

(d) Tilt front cover slightly forward at the top as it is pulled up and away from the basepan and test buttons.

4.02 For the replacement of the cover, perform the following operations:

(a) Tilt front cover slightly forward at the top as it is lowered over the basepan and test buttons.

(b) Check that the two front cover retaining screws engage the front cover retaining brackets properly (Fig. 2).

(c) Tighten the two front cover retaining screws (Fig. 7).

(d) Position rear cover retaining wedges so they will easily engage the cover lugs.

(e) Spread the rear cover to clear the key assembly and lower the cover into place over the captive wedges.

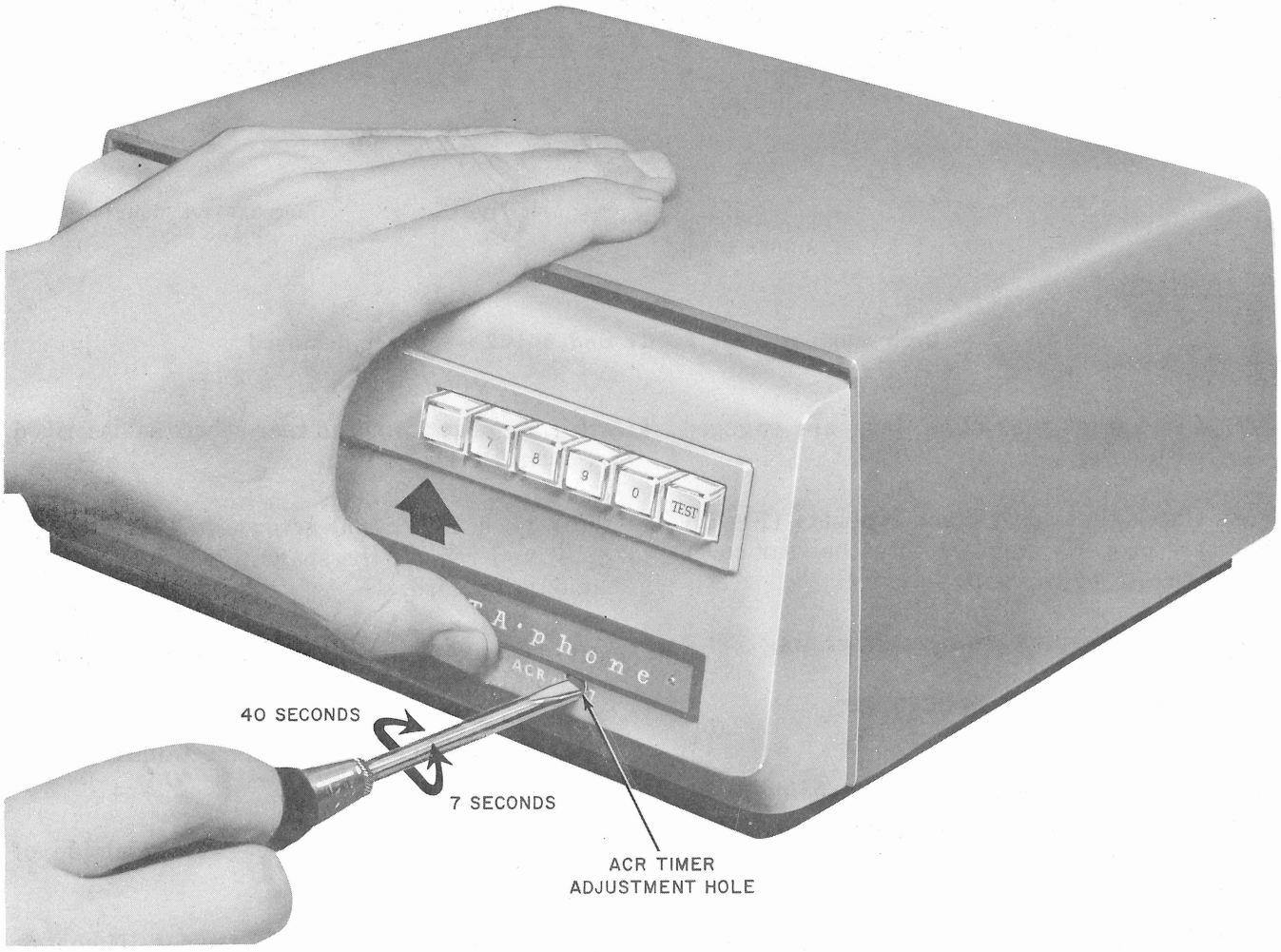

Fig. 1 — ACR Timer Adjustment

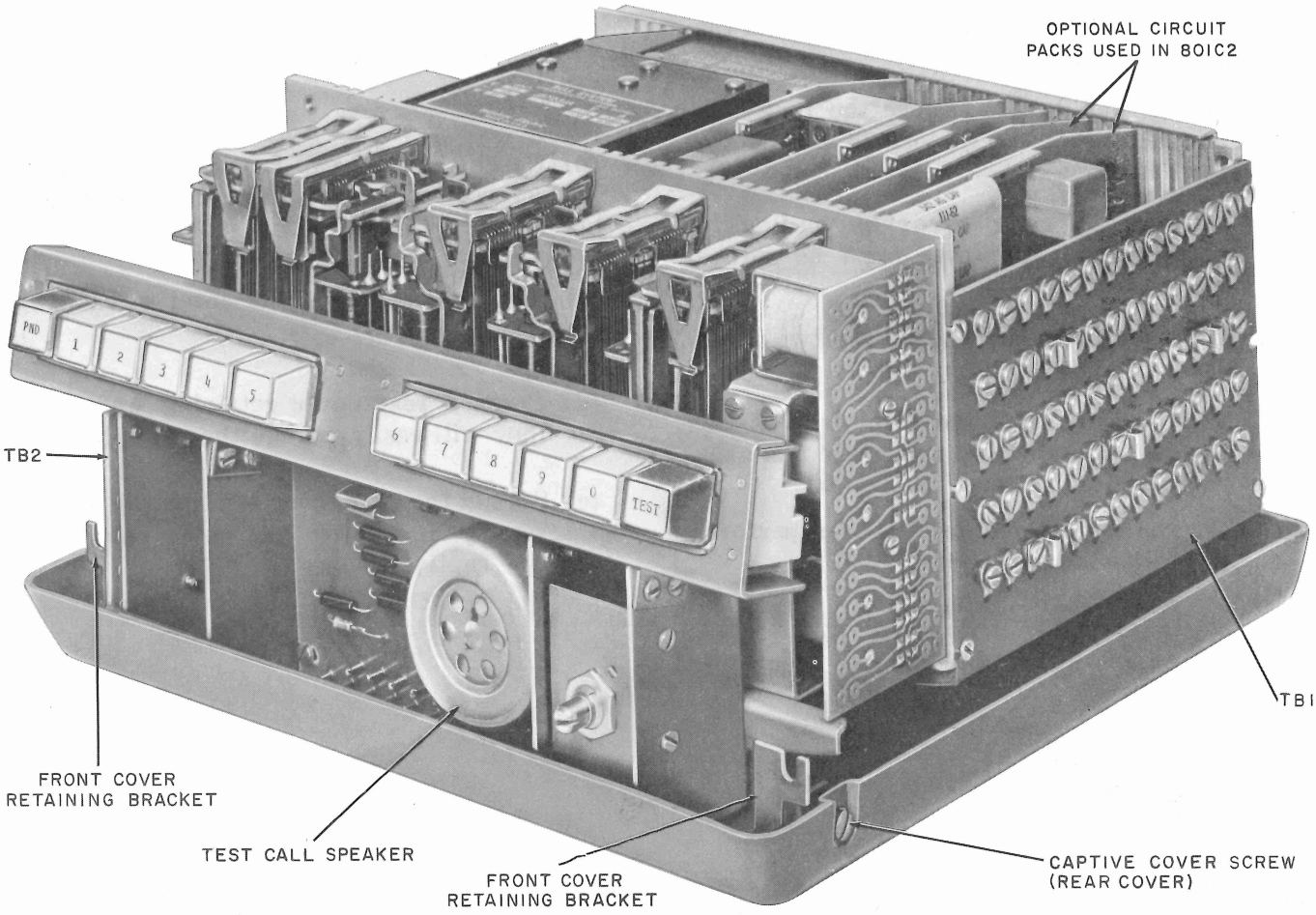

Fig. 2 — Data Auxiliary Sets 801C1 and 801C2 — Cover Removed

(f) Check that rear cover lugs are engaged with cover wedges.

(g) Check that cover catch brackets (Fig. 2) are properly engaged with the rear cover at the front of the unit.

(h) Tighten captive rear cover screws.

5. CORD REPLACEMENT PROCEDURE

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

5.01 For the replacement of the cord, perform the following operations:

(a) Remove front and rear covers as described in Part 4.

(b) Loosen terminal screws at TB2 (Fig. 8) and remove the spade-tipped leads of the mounting cord.

(c) Turn ACU upside down to expose underside of basepan (Fig. 9).

(d) Remove the four basepan retaining screws (Fig. 9).

(e) Lift off basepan to expose underside of ACU.

(f) Remove cord stay hook from ACU chassis and remove cord.

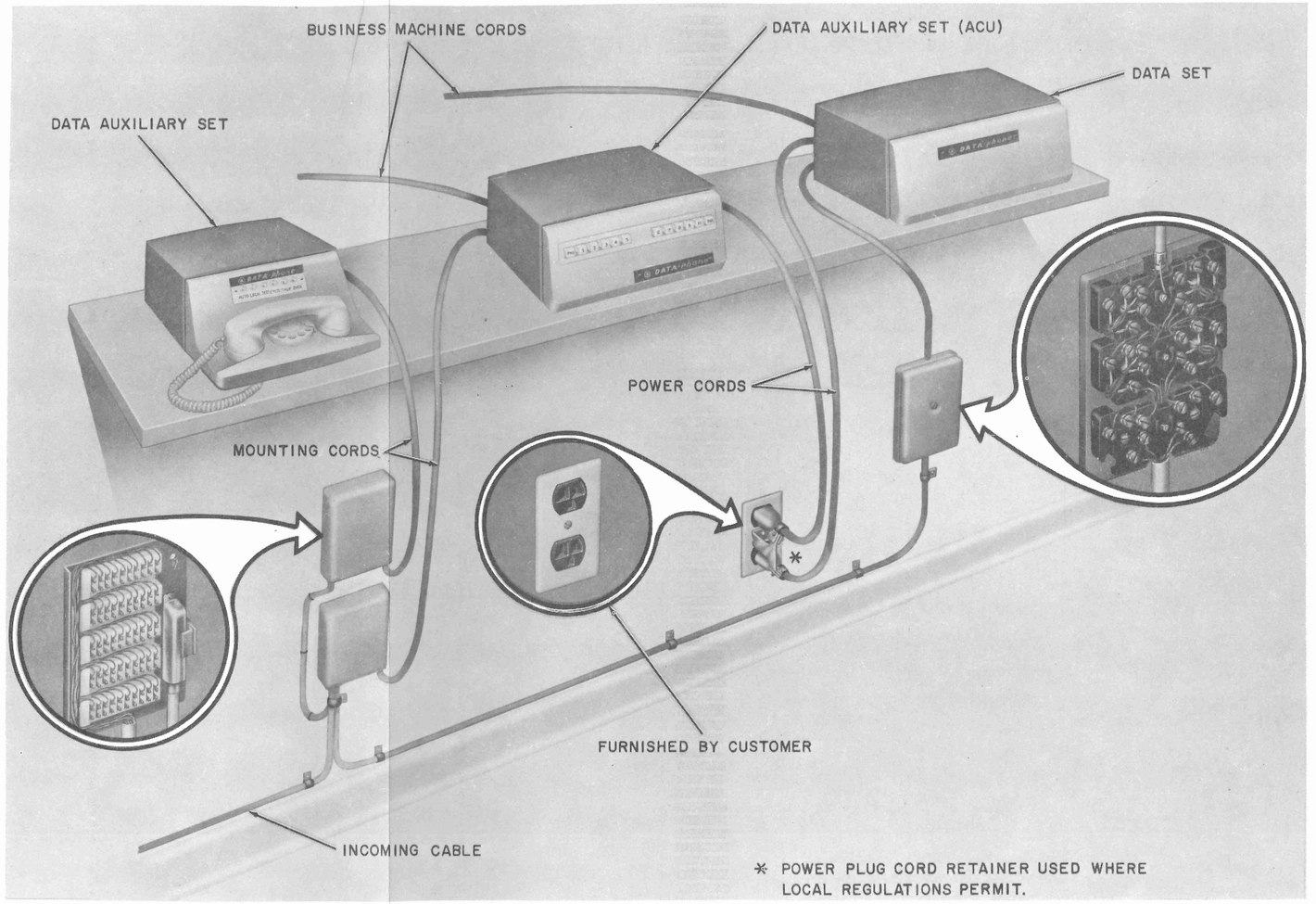

Fig. 3 — Main Components of a Typical Installation Layout

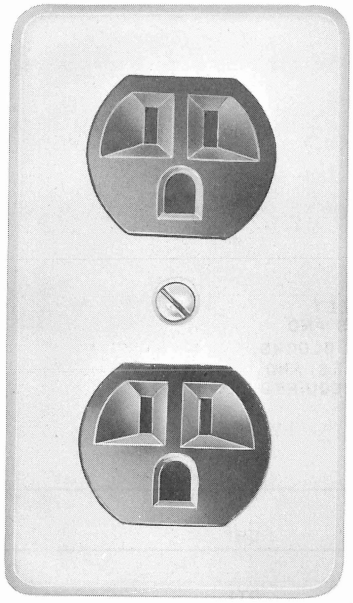

Fig. 4 — Standard 3-Wire Grounding-Type Receptacle

(g) Attach cord stay hook of new cord to ACU chassis.

(h) Connect spade-tipped leads of new cord to terminals of TB2 as indicated in Table D. (Refer to Fig. 8).

(i) Replace basepan and four retaining screws (Fig. 9).

(j) Turn over ACU and replace cover.

6. TESTING

6.01 Refer to the section entitled Data Auxiliary Sets 801C1 and 801C2 for Automatic Calling — Test Procedures (598-012-500) for information on testing the ACU.

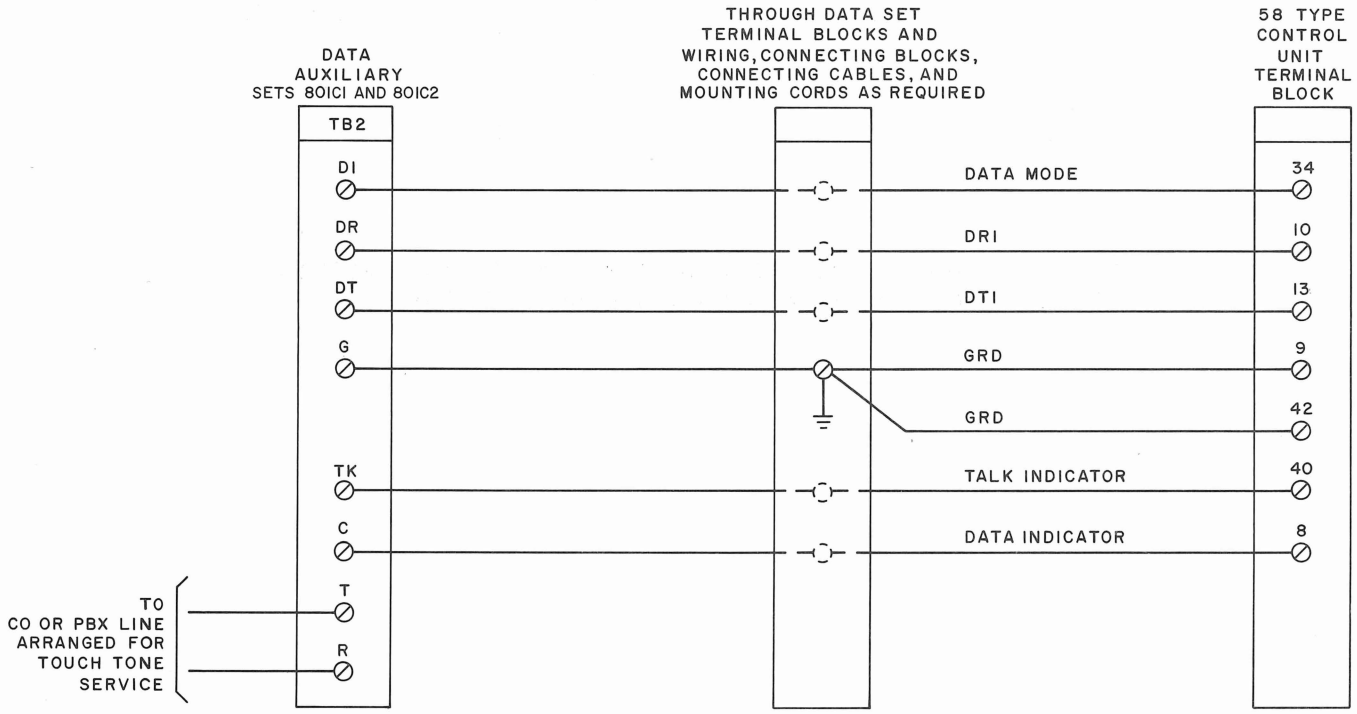

Fig. 5 — Interconnections — Data Auxiliary Sets 801C1 and 801C2 — Data Set Equipped With 58-Type Control Unit (Typical)

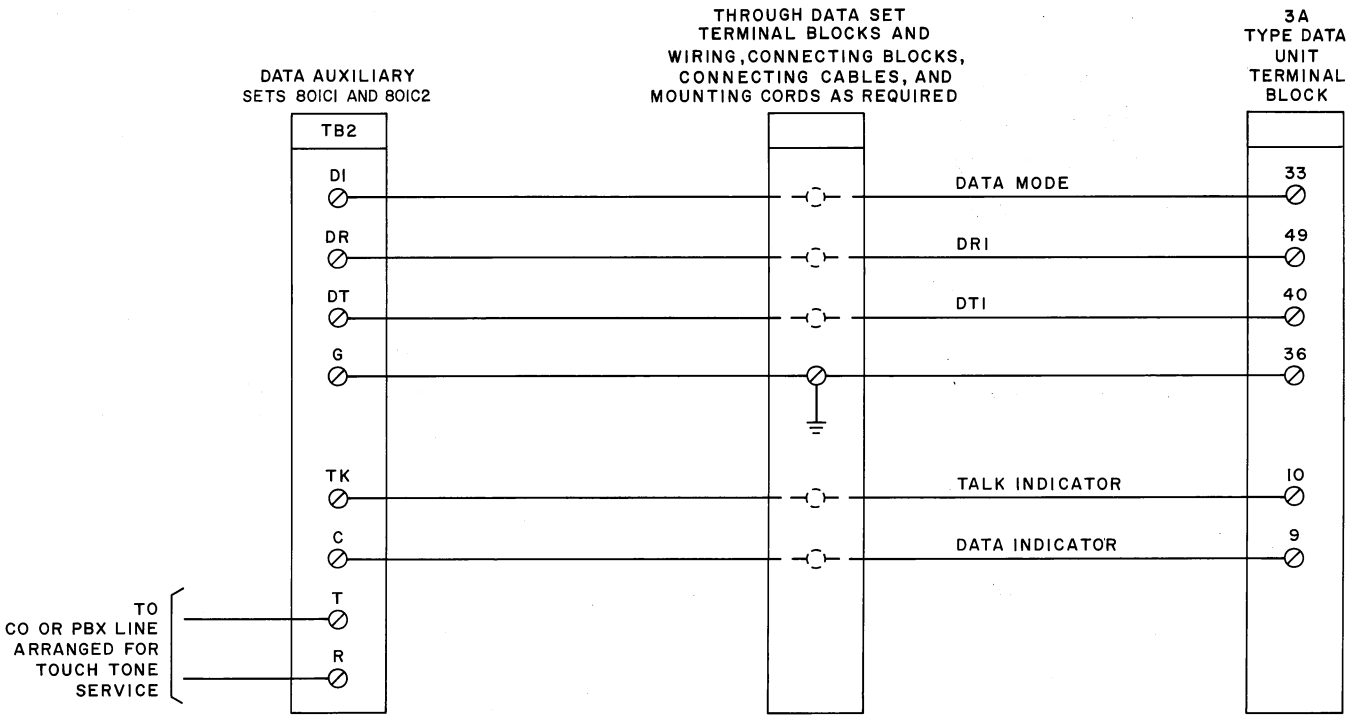

Fig. 6 — Interconnections — Data Auxiliary Sets 801C1 and 801C2 — Data Set Equipped With 3A-Type Data Unit (Typical)

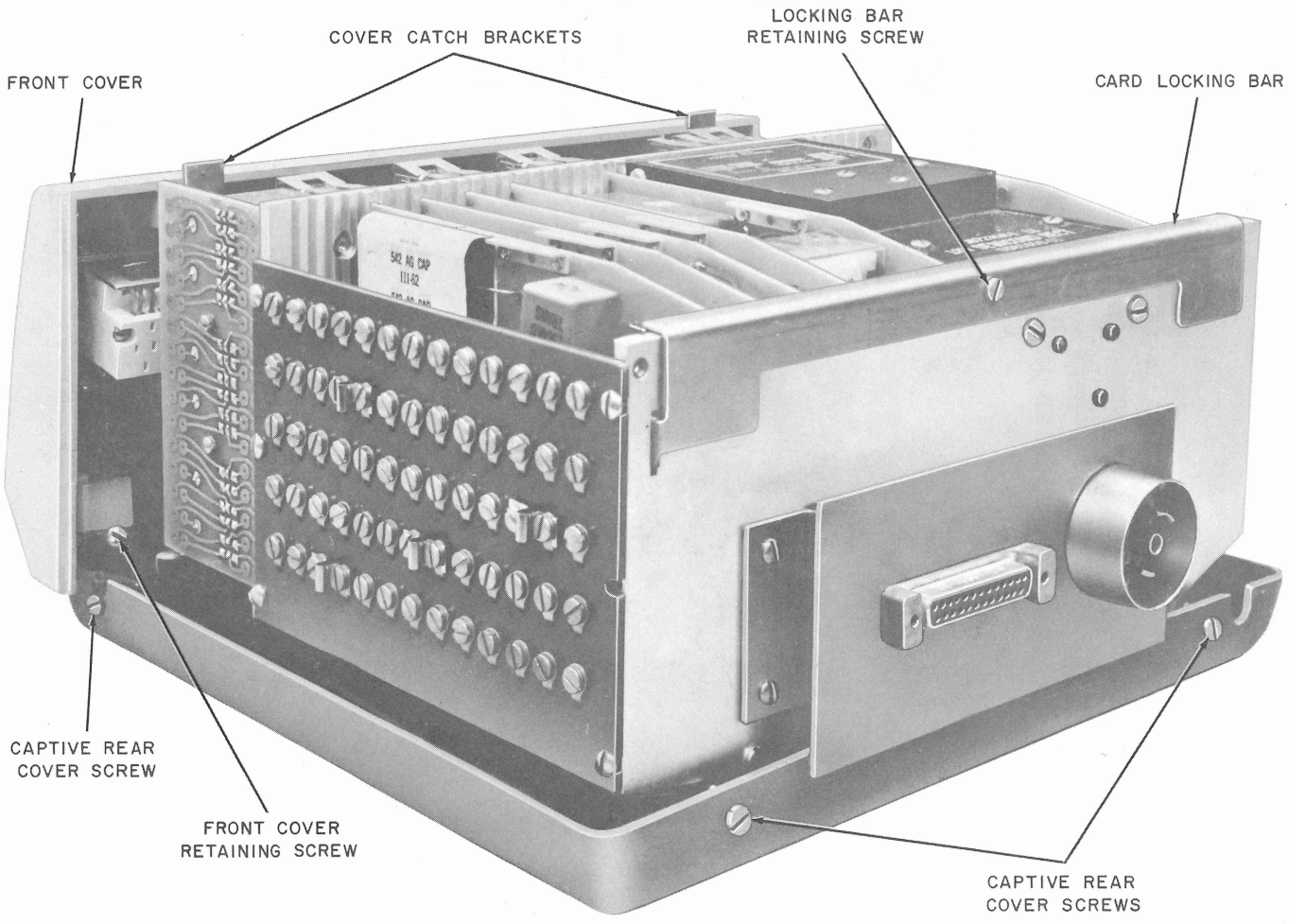

Fig. 7 — Data Auxiliary Sets 801C1 and 801C2 — Rear Cover Removed

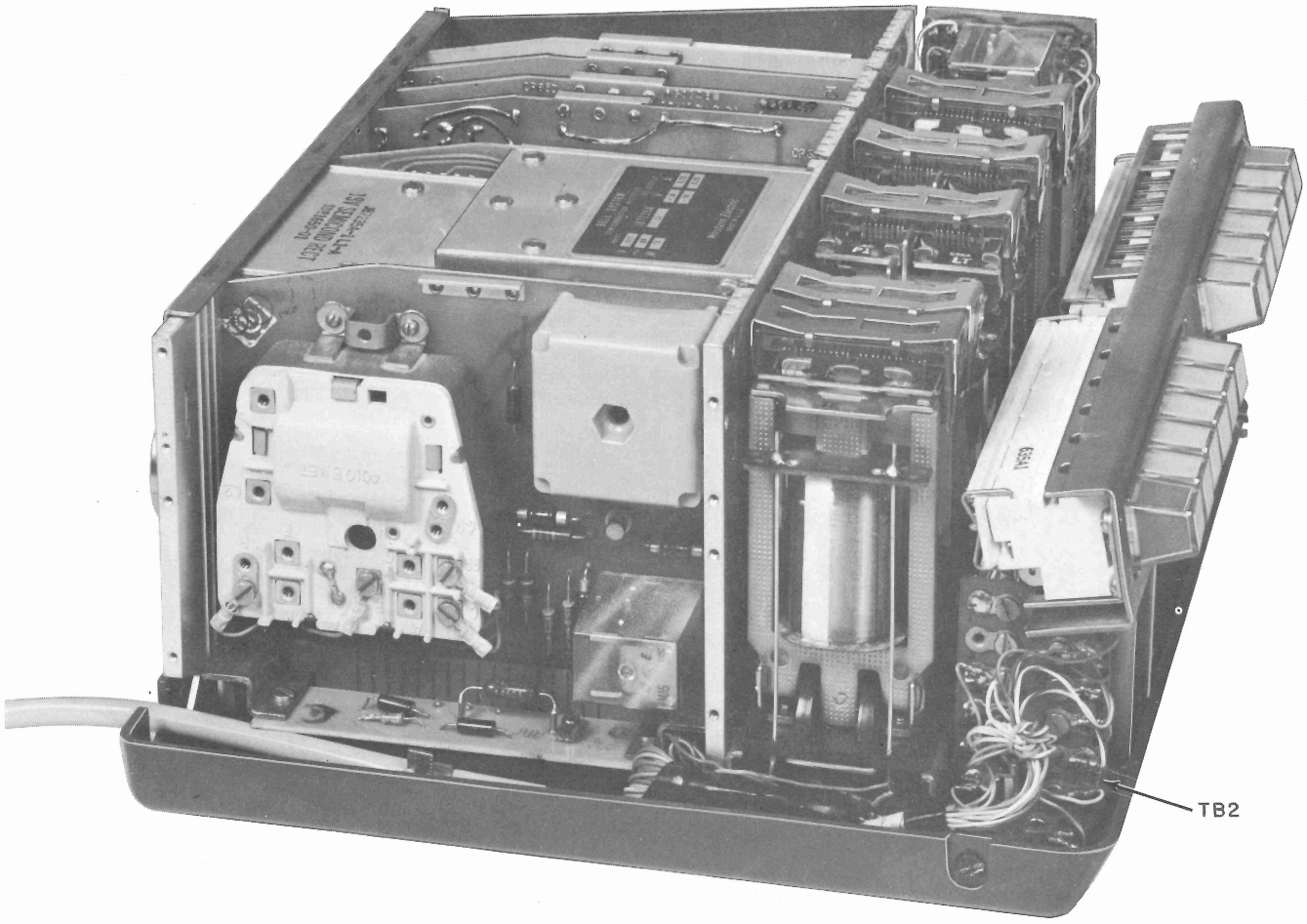

Fig. 8 — Data Auxiliary Sets 801C1 and 801C2 — Cover Removed Showing TB2 Terminal

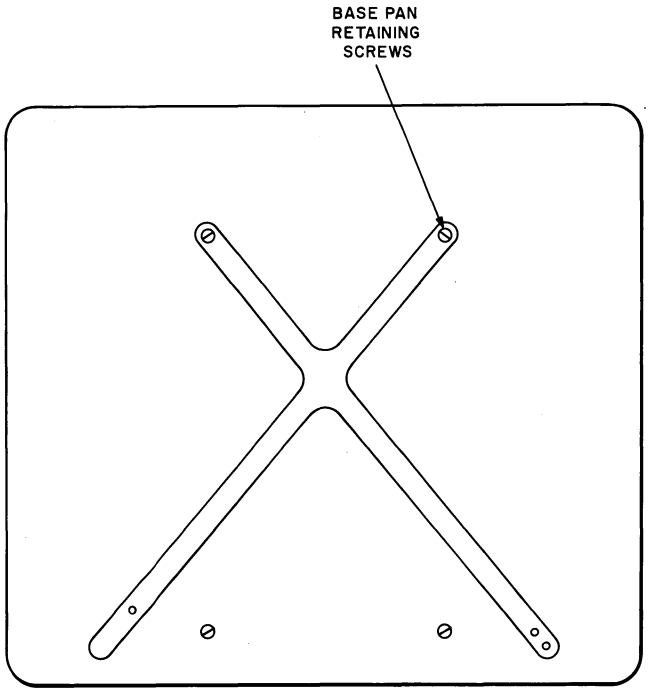

Fig. 9 — Data Auxiliary Sets 801C1 and 801C2 — Base Pan

TABLE D

TB2 LEAD ASSIGNMENT

TB2 TERMINAL	OPTION		
	N	P	M
	M14C CORD	D10H-61 CORD	D10P-61 CORD
D1	W-BR	W	W-BR
D2	BR-W	—	—
DT	W-G	BR-G	W-G
T	W-BL	G	W-BL
DR	G-W	BR-R	G-W
R	BL-W	R	BL-W
TK	BL-R	BR-BK	W-O
C	R-BL	BK	BR-W
SH1	S-W	BL	S-W
SH2	W-S	BR-Y	W-S
1	O-R	—	—
2	R-O	—	—
G	O-W	Y	O-W
3	W-O	—	—

Note: M option replaces P option. However, P option may be used if supplied initially.