DATA AUXILIARY SETS 801C1 AND 801C2 FOR AUTOMATIC CALLING IDENTIFICATION AND OPERATION

1. GENERAL

1.01 This section covers Data Auxiliary Sets 801C1 and 801C2 only. Other types of Data Auxiliary Set 801C will be covered by other sections.

1.02 This section is reissued to make a change in Table A and also to delete information on cover and cord removal and replacement procedures. Cover and cord replacement procedures are covered in the section entitled Data Auxiliary Sets 801C1 and 801C2—For Automatic Calling—Installation (598-012-200).

1.03 Each of the Data Auxiliary Sets 801C1 and 801C2 (Fig. 1) will be referred to in this section as an automatic calling unit (ACU).

1.04 The ACU furnishes a means for business machines to automatically originate DATA-PHONE® service calls on facilities equipped for TOUCH-TONE® dialing.

1.05 The ACU is capable of calling any telephone number using information furnished by the business machine.

1.06 The ACU is compatible with most data sets. Compatibility may be verified by consulting the appropriate BSP for the data set.

1.07 Business machine and data set operations are not described in this section.

1.08 Data Auxiliary Set 801C1 provides for automatic calling without answer or dial tone detection and requires a ground-start line.

1.09 Data Auxiliary Set 801C2 provides an answer and dial tone (350 to 440 Hz) detector and does not require a ground-start line, although ground-start operation may be used if desired.

2. IDENTIFICATION

2.01 The front panel and the physical dimensions of the ACU are shown in Fig. 1.

2.02 A block diagram of the connections made to the ACU is shown in Fig. 2.

2.03 Two cords are supplied for the ACU:

(a) D10P-61 mounting cord (spade tipped)

Note: On some installations it is necessary to replace the mounting cord with an M14C-61. The cord replacement procedure is described in the section entitled Data Auxiliary Sets 801C1 and 801C2—For Automatic Calling—Installation (598-012-200).

(b) KS-14532 L16 power cord

2.04 The cord and connector required for connecting the business machine to the ACU interface are supplied by the customer. This cord should not exceed 50 feet in length and should be equipped with a Cinch DB 19604-432, or equivalent, plug that mates with the KS-19087 L6 connector on the ACU. For the location of this connector, refer to Fig. 3.

2.05 The ACU is designed to operate properly within the range of the environmental conditions given below:

(a) Ambient temperature range, +40 to 120°F

(b) Relative humidity range, 20 to 95 percent

2.06 The ACU requires approximately 15 watts of 117-volt, 60 ±0.1 Hz ac power. The customer must provide a standard 3-wire grounding-type power receptacle. This receptacle must be on a circuit that is not controlled by a switch in order to avoid service interruption.

TABLE A

FACTORY-WIRED FEATURES AND AVAILABLE OPTIONS

OPTION OR FEATURE	DESIG	801C1	801C2
Answer detection		*	†
Detects end of answer tone	W	*	†
Detects beginning of answer tone	X	*	‡
Detects 2025-Hz answer tone	S	*	†
Detects 2225-Hz answer tone	T	*	‡
Ground start	V	†	†
Without ground start	Y	*	‡
D10P-61 cord (§)	M	†	†
M14C cord	N	¶	¶
Data set to data mode by contact to DT	Q	†	†
One lead control	Z	†	†
Data mode reset for ACR timer	R	†	†

* Answer and dial tone detection are not available in 801C1.

† Supplied as standard equipment on this data set.

‡ Installation option not factory wired.

§ D10H-61, option P on early sets.

¶ Must be ordered separately.

2.07 The ACU test circuit provides a means of testing independent of business machine control signals.

2.08 The test buttons (Fig. 1) are used to simulate control signals usually furnished by the business machine.

Note: In the test mode, all call progress tones (dial tone, ringing tone, etc) can be monitored on the test call speaker (Fig. 4).

2.09 Coordination and control signals between the ACU and the data set are sent over the apparatus mounting cord.

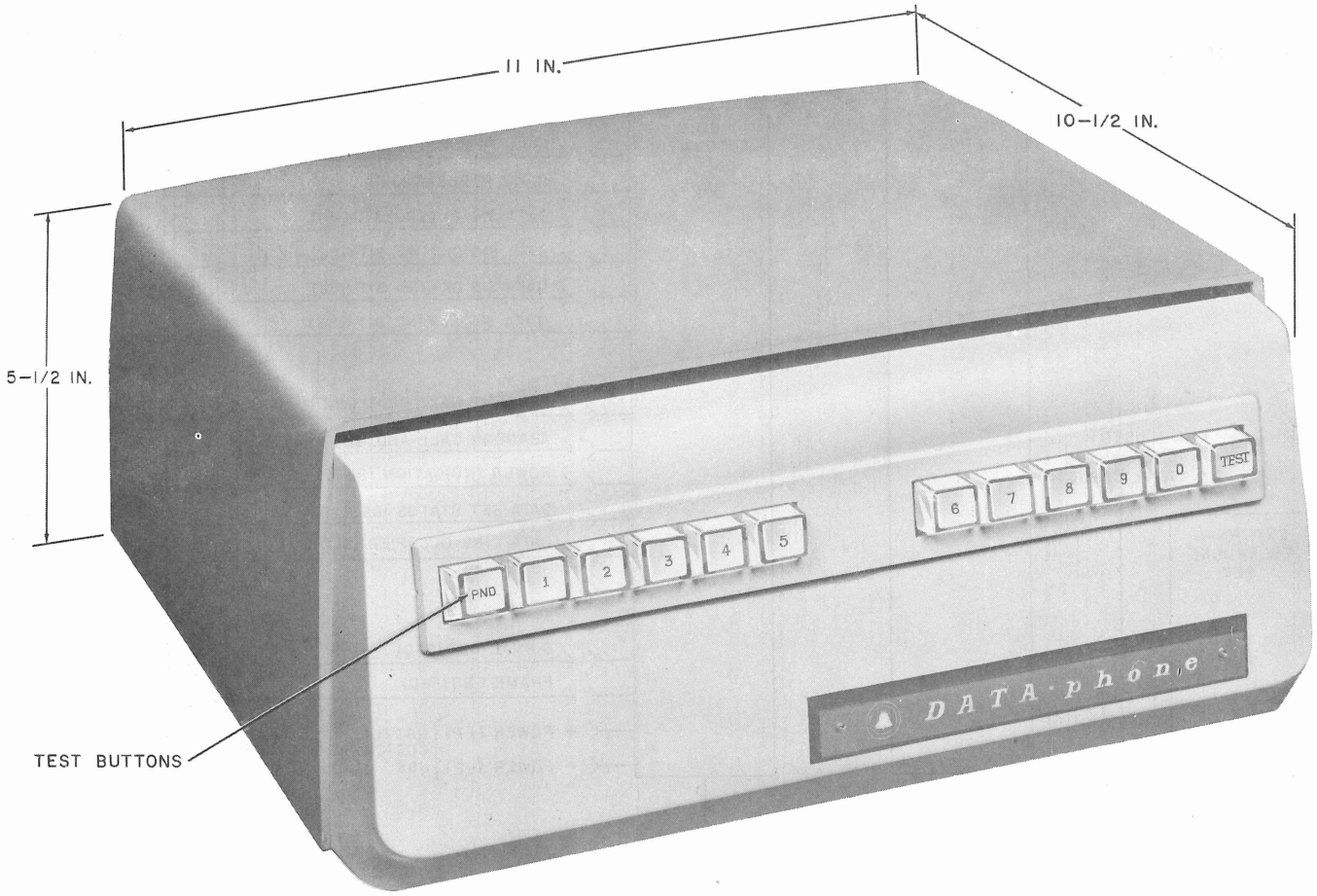


Fig. 1—Data Auxiliary Sets 801C1 and 801C2—Front View

2.10 The ACU is equipped with two timing circuits:

(a) ***Intercall Timer:*** This timer imposes a 1-second delay between calls to ensure that all previous connections have been released. When a ground start line is used, the timer is disabled and the tip monitor circuit prevents call origination until the line is idle.

(b) ***Abandon Call and Retry Timer (ACR):*** This timer signals the business machine when dial tone, interdigital, or call completion (answer signal received) time has exceeded a preset interval.

Note: The ACR timer is adjustable to 7-, 10-, 15-, 25-, or 40-second intervals with a tolerance of +20, -0 percent (see Fig. 5).

2.11 Table A indicates the options that are available for the ACU.

3. OPERATION

3.01 Operation of the ACU is dependent on control signals furnished by the business machine. The test buttons are used only when a test is being performed. Figure 6 shows lamp and key assignments and briefly describes their functions.

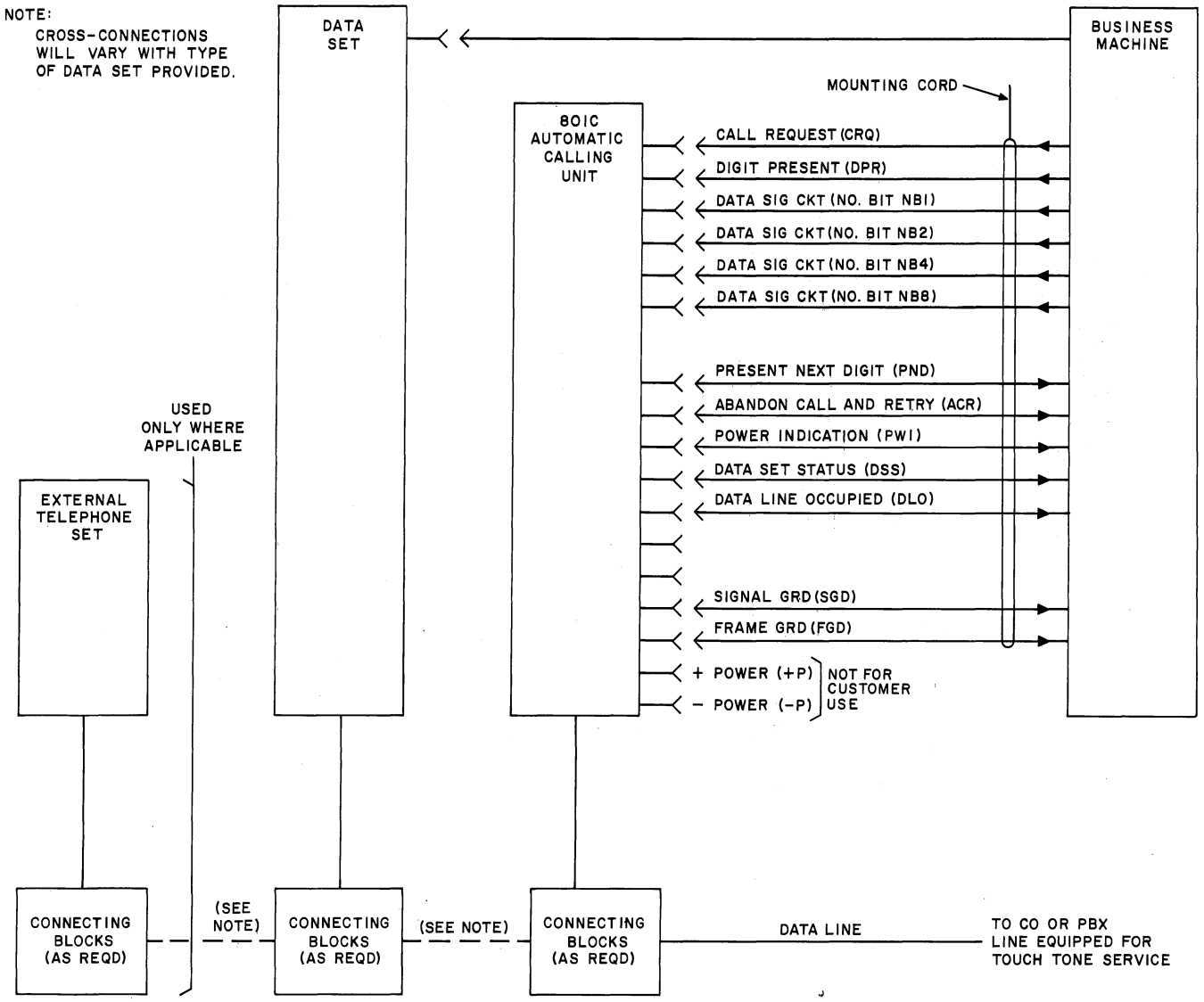


Fig. 2—Data Auxiliary Sets 801C1 and 801C2—Block Diagram

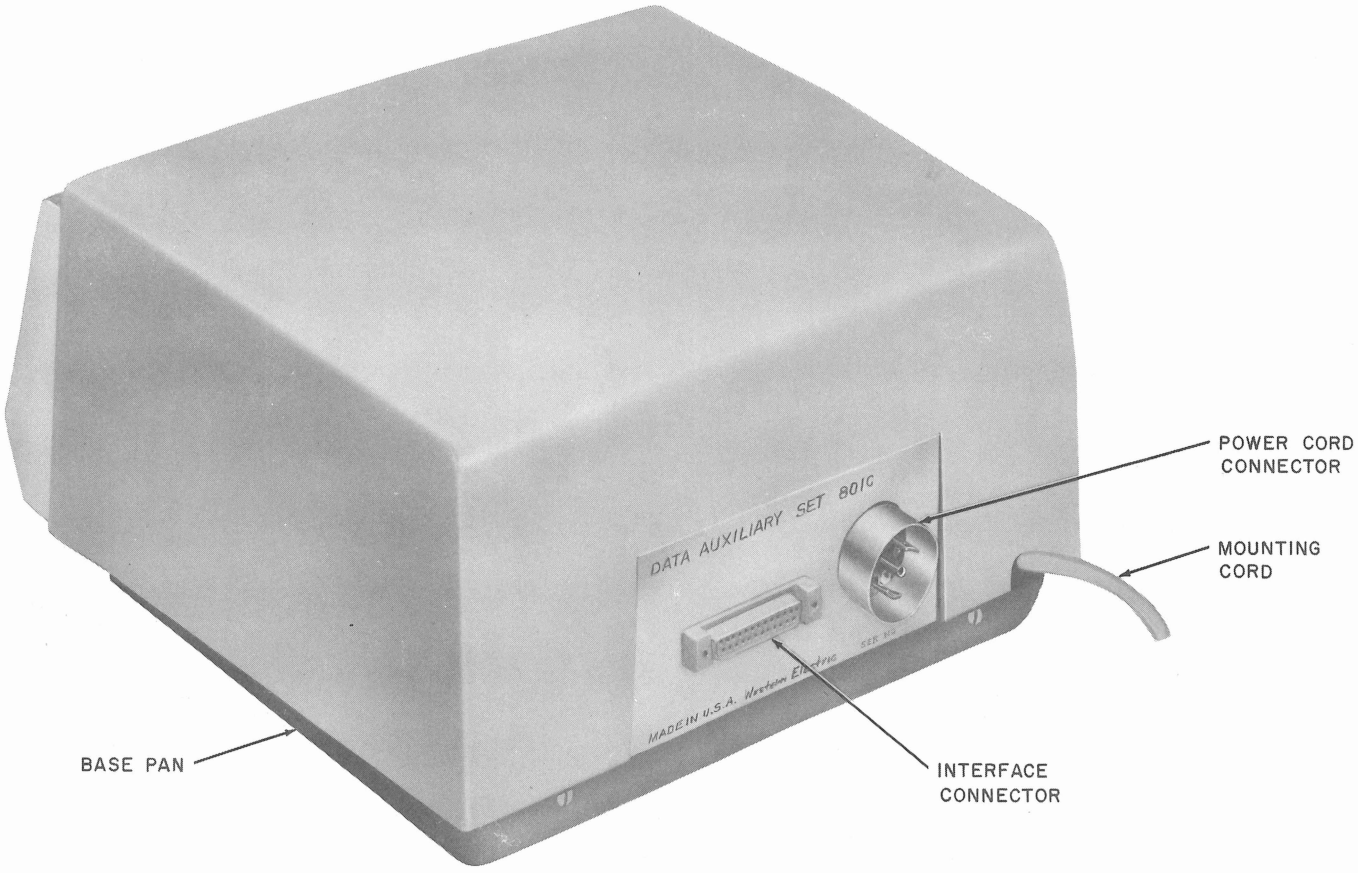


Fig. 3—Data Auxiliary Sets 801C1 and 801C2—Rear View

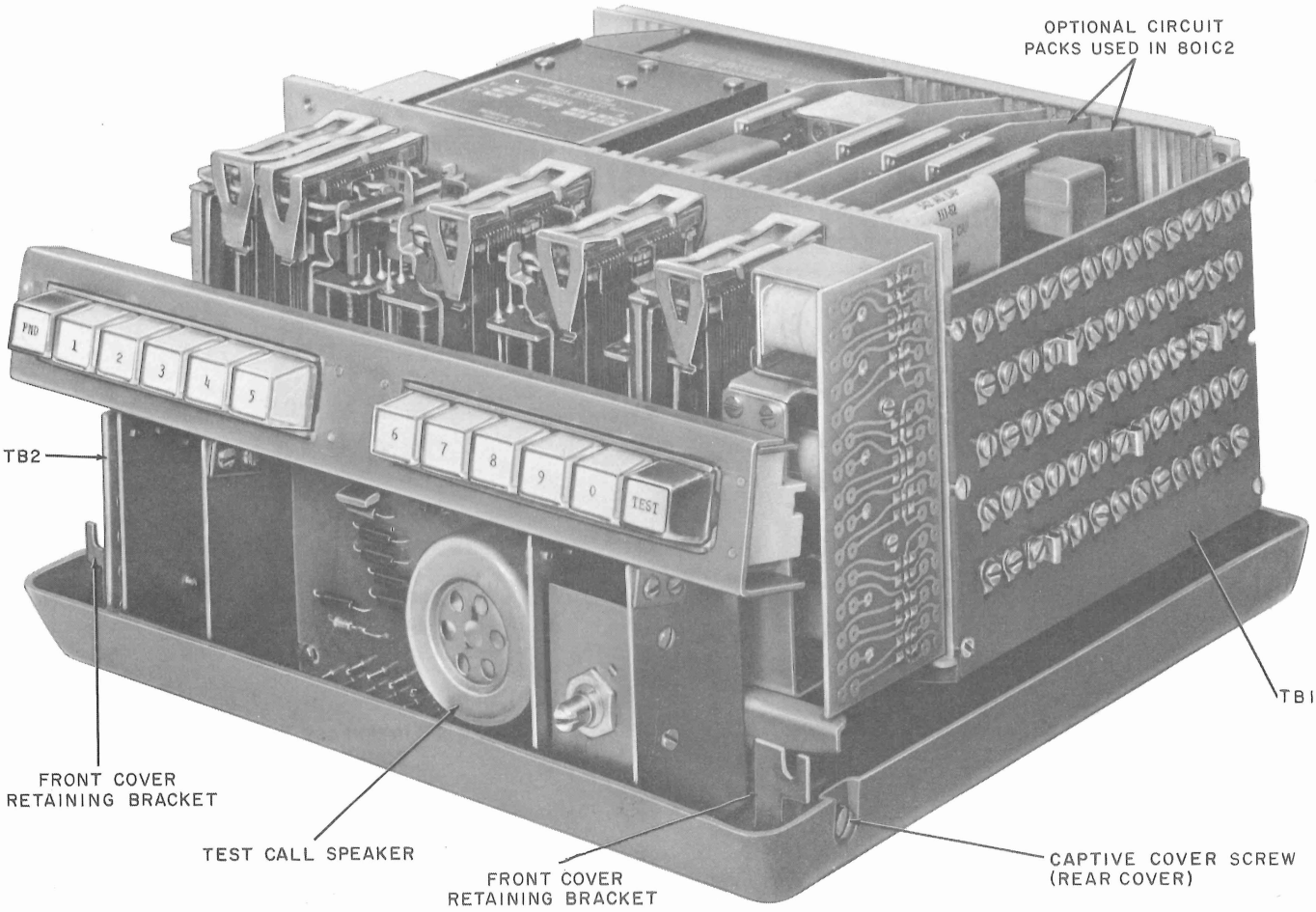


Fig. 4—Data Auxiliary Sets 801C1 and 801C2—Cover Removed

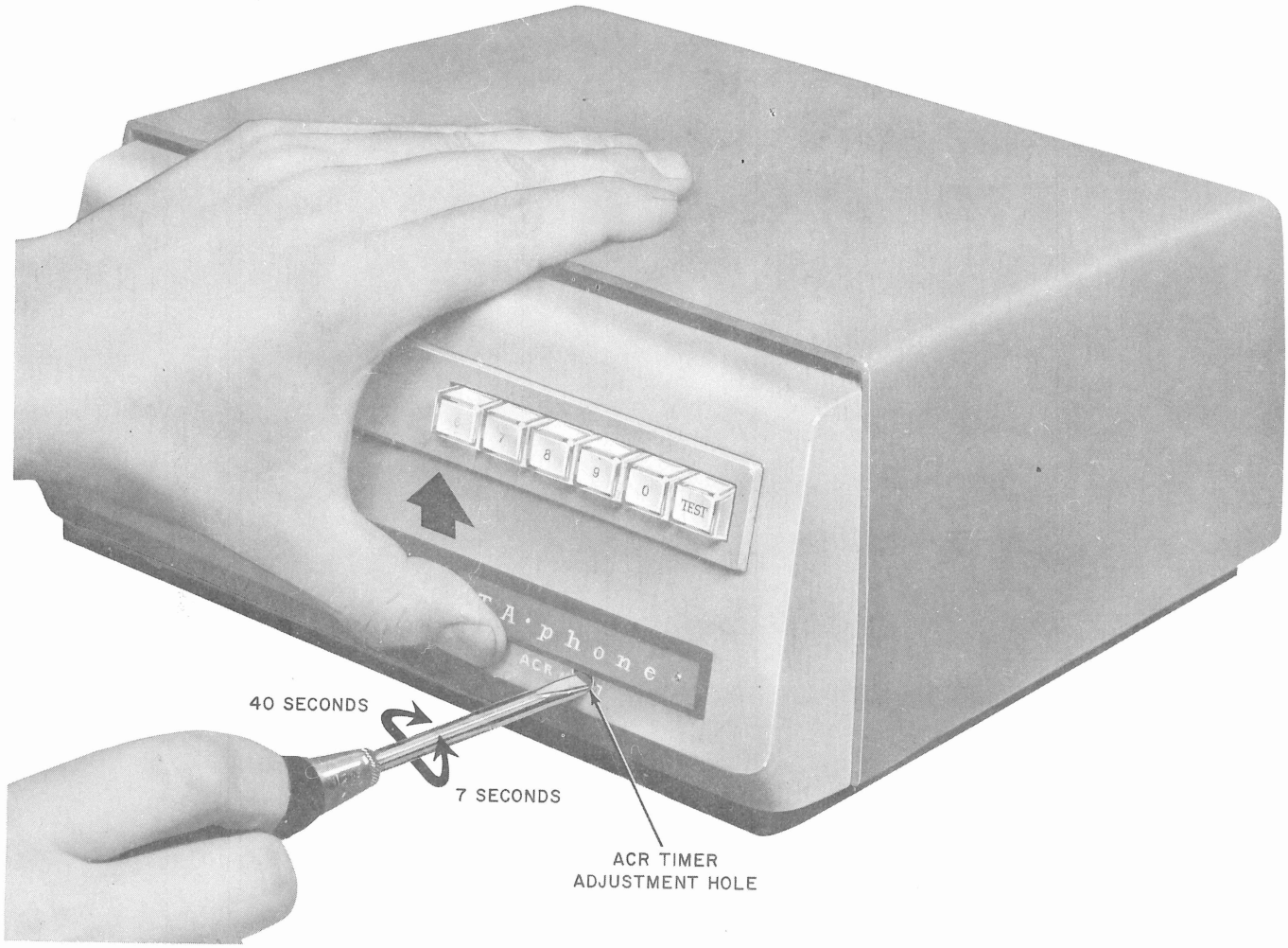


Fig. 5—ACR Timer Adjustment

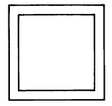
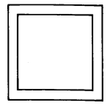
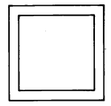
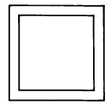
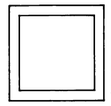
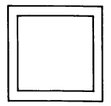
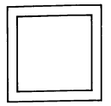
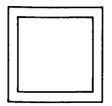
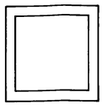
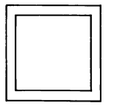
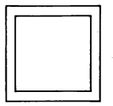
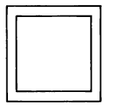
TEST BUTTONS LEFT TO RIGHT FROM FRONT OF ACU												
TEST BUTTON DESIGNATION	PND	1	2	3	4	5	6	7	8	9	0	TEST
TYPE OF LAMP FURNISHED	52A	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	52A
TEST BUTTON FUNCTIONS	LAMP ON INDICATES THAT THE NEXT DIGIT MAY BE PRESENTED. ALSO USED TO RELEASE THE ACU FROM THE TEST MODE.	USED TO SEND DIGIT 1 FREQUENCY (1209∿ AND 697∿) TO CO LINE	USED TO SEND DIGIT 2 FREQUENCY (1336∿ AND 697∿) TO CO LINE	USED TO SEND DIGIT 3 FREQUENCY (1477∿ AND 697∿) TO CO LINE	USED TO SEND DIGIT 4 FREQUENCY (1209∿ AND 770∿) TO CO LINE	USED TO SEND DIGIT 5 FREQUENCY (1336∿ AND 770∿) TO CO LINE	USED TO SEND DIGIT 6 FREQUENCY (1477∿ AND 770∿) TO CO LINE	USED TO SEND DIGIT 7 FREQUENCY (1209∿ AND 852∿) TO CO LINE	USED TO SEND DIGIT 8 FREQUENCY (1336∿ AND 852∿) TO CO LINE	USED TO SEND DIGIT 9 FREQUENCY (1477∿ AND 852∿) TO CO LINE	USED TO SEND DIGIT 0 FREQUENCY (1336∿ AND 941∿) TO CO LINE	USED TO PLACE ACU IN TEST MODE. ILLUMINATED IN THIS MODE.

Fig. 6—Test Button Assignments and Function