

## SUBSCRIBER SETS—689 AND 691 TYPES

### IDENTIFICATION AND ASSEMBLY OF PARTS

#### 1. GENERAL

1.01 This section is reissued to:

- Clarify installation information for P-15E173 insulator.
- Add information on second key.

1.02 The 689- and 691-type subscriber sets are used with 101A DATA-PHONE units at dial TWX stations.

#### 2. IDENTIFICATION

2.01 Table A shows components used in subscriber sets covered in this section.

##### 689A Subscriber Set

2.02 This is a 6-button key subscriber set (Fig. 1 and 2) mounted in a gray plastic housing with sloping front surface. A clear plastic housing and gray paper mat are assembled in a stainless steel bezel. The bezel snaps into place on the sloping front surface. Two brackets, equipped with 10-32 PEM nuts, are located underneath the chassis for mounting on top of 101A DATA-PHONE units. (See 2.08 for ringer modification.)

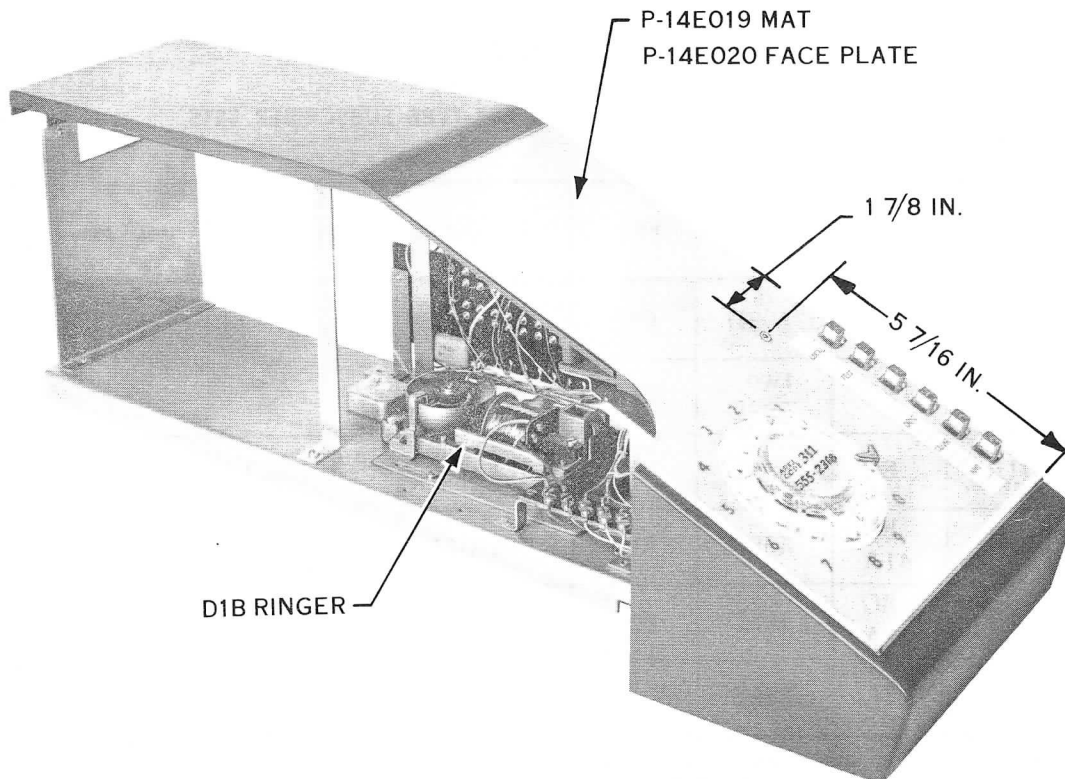


Fig. 1 — 689A Subscriber Set, Left View

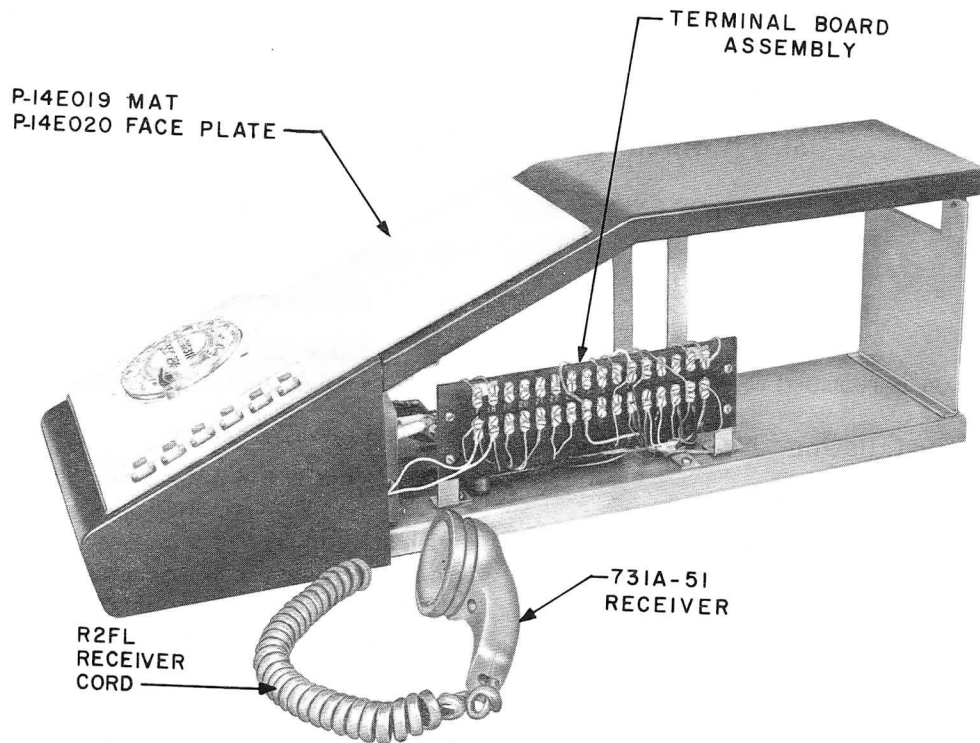


Fig. 2 — 689A Subscriber Set, Right View

TABLE A

COMPONENTS OF 689- AND 691-TYPE SUBSCRIBER SETS

Type Set	Ringer	Dial	Key (Note)	Filter	Receiver	Amplifier	Transformer	Loudspeaker
689A	D1B	8C	598D	61A	731A-51			
689B	D1B	8C	two 598D	61A	731A-51			
689C	D1B	8C	598D	61A	731A-51	KS-16728, L1	2545A 2536H	P-14E375
689D*	D1B	8C 41A	598D	61A	731A-51			
689E*	D1B	8C 41A	598D	61A	731A-51	KS-16728, L1	2545A 2536H	P-14E375
691A	C4A	7L	589S		732A			

*Note:* The 689-type subscriber sets manufactured prior to January 13, 1964 have 598D keys with a P-15E173 U-shaped plastic contact spring insulator installed upside down on the No. 2 key. This insulator is free to slide and must be turned over to prevent it from working between contacts and causing an open circuit. Properly installed, the straight edge of the insulator butts against the ears of the spreader springs of the pile-up.

\* 689D and E subscriber sets are factory equipped with a P-24E238 card set and P-13E817 card index.

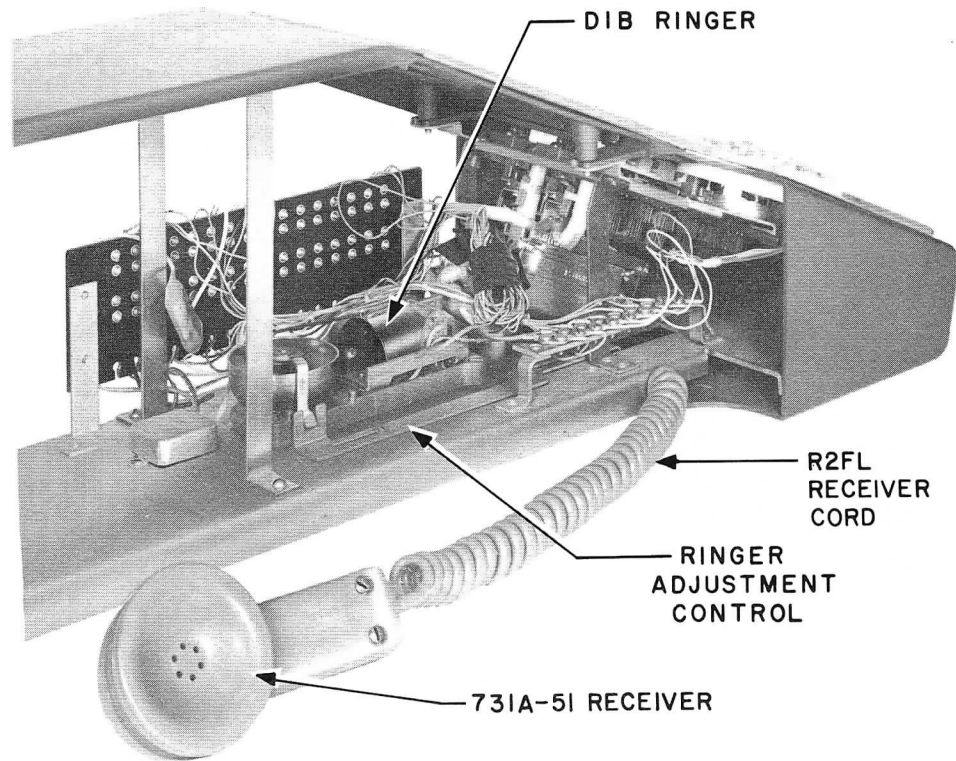


Fig. 3 - 689B Subscriber Set, Side View

**689B Subscriber Set**

**2.03** This set has the same general appearance as the 689A but is equipped with two 598D keys (Fig. 3 and 4).

**2.04** Before second key is installed, the P-10E836 latchbar spring must be removed.

**689C Subscriber Set**

**2.05** This set has the same general appearance as the 689A but is equipped with a loud-speaker and amplifier (Fig. 5).

**689D Subscriber Set**

**2.06** This set (Fig. 6) is the same as the 689A except it is equipped with an automatic card dialer and card set holder. (See 2.08 for ringer modification.)

**689E Subscriber Set**

**2.07** This set (Fig. 7) combines the features of the 689A, 689C, and 689D subscriber sets.

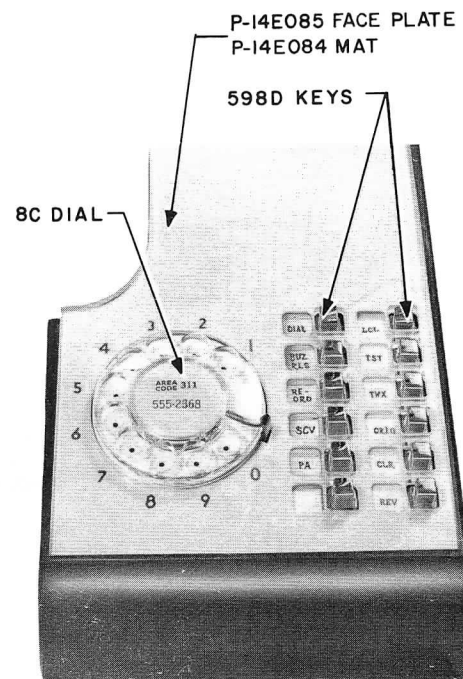


Fig. 4 - 689B Subscriber Set, Front View

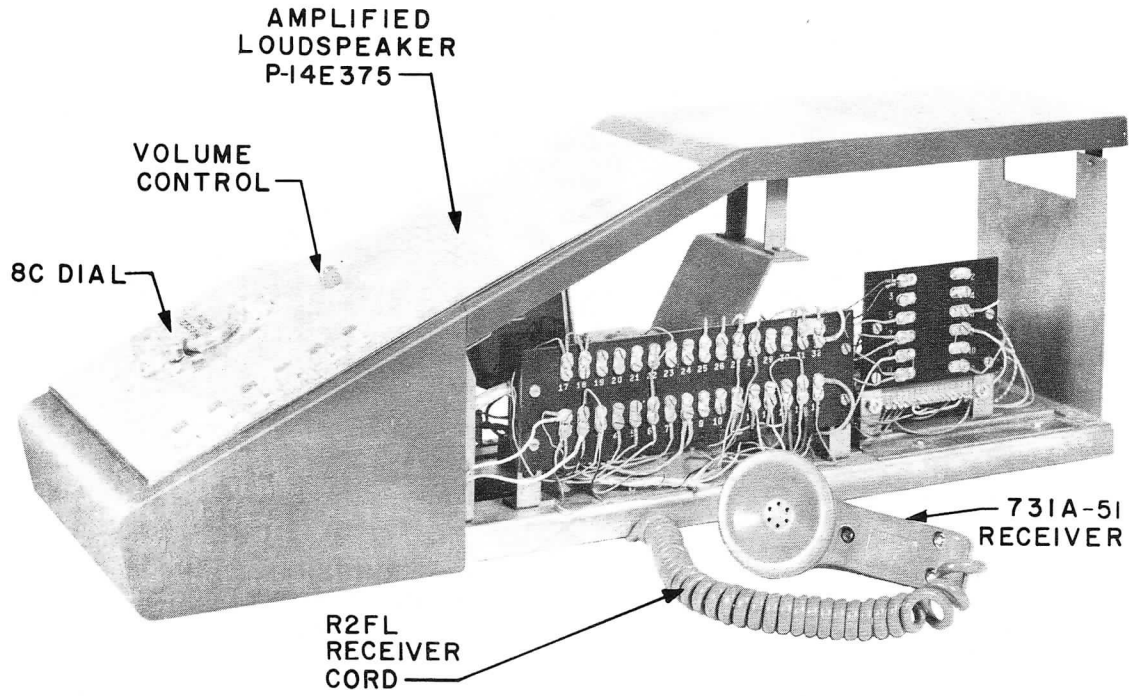


Fig. 5 — 689C Subscriber Set

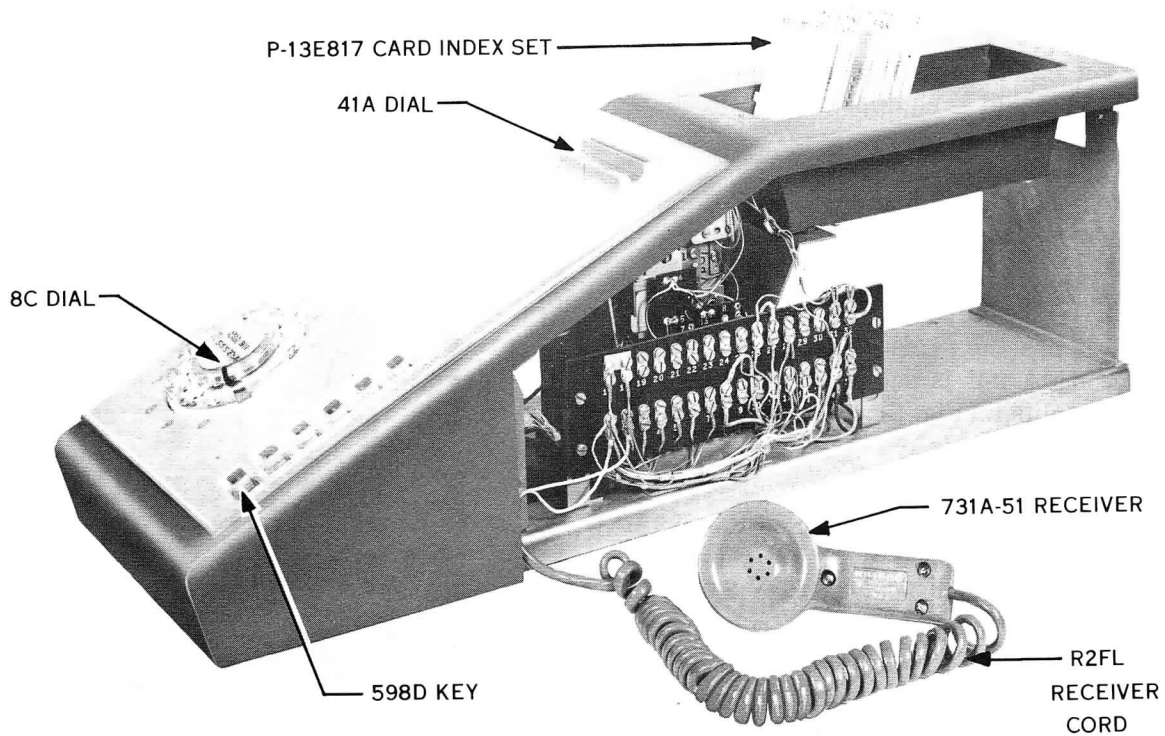


Fig. 6 — 689D Subscriber Set

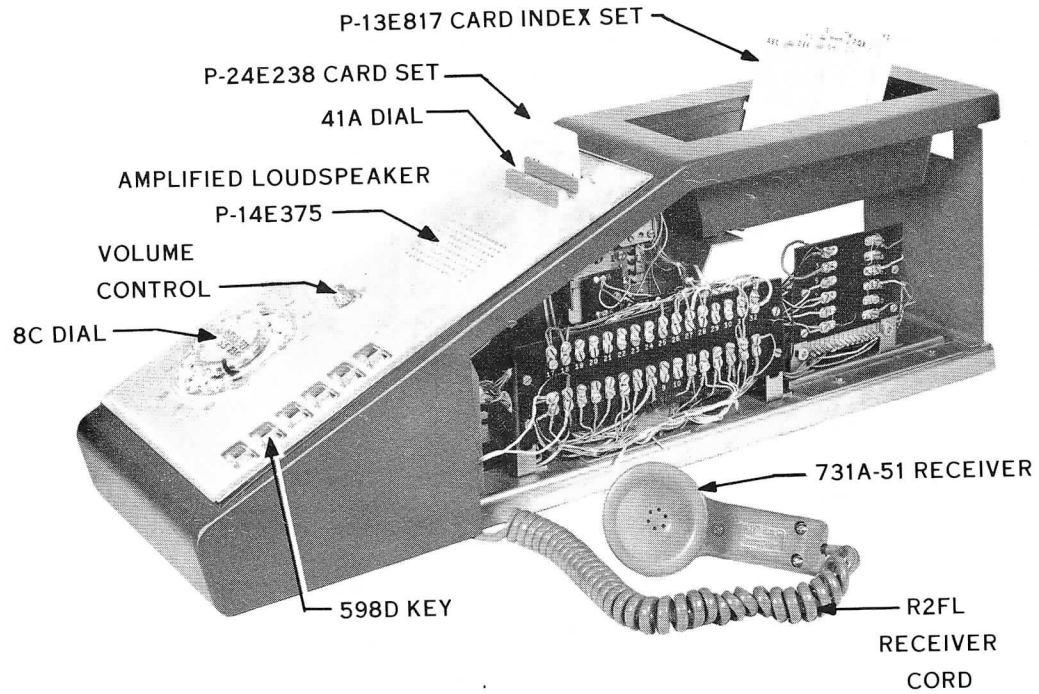


Fig. 7 - 689E Subscriber Set

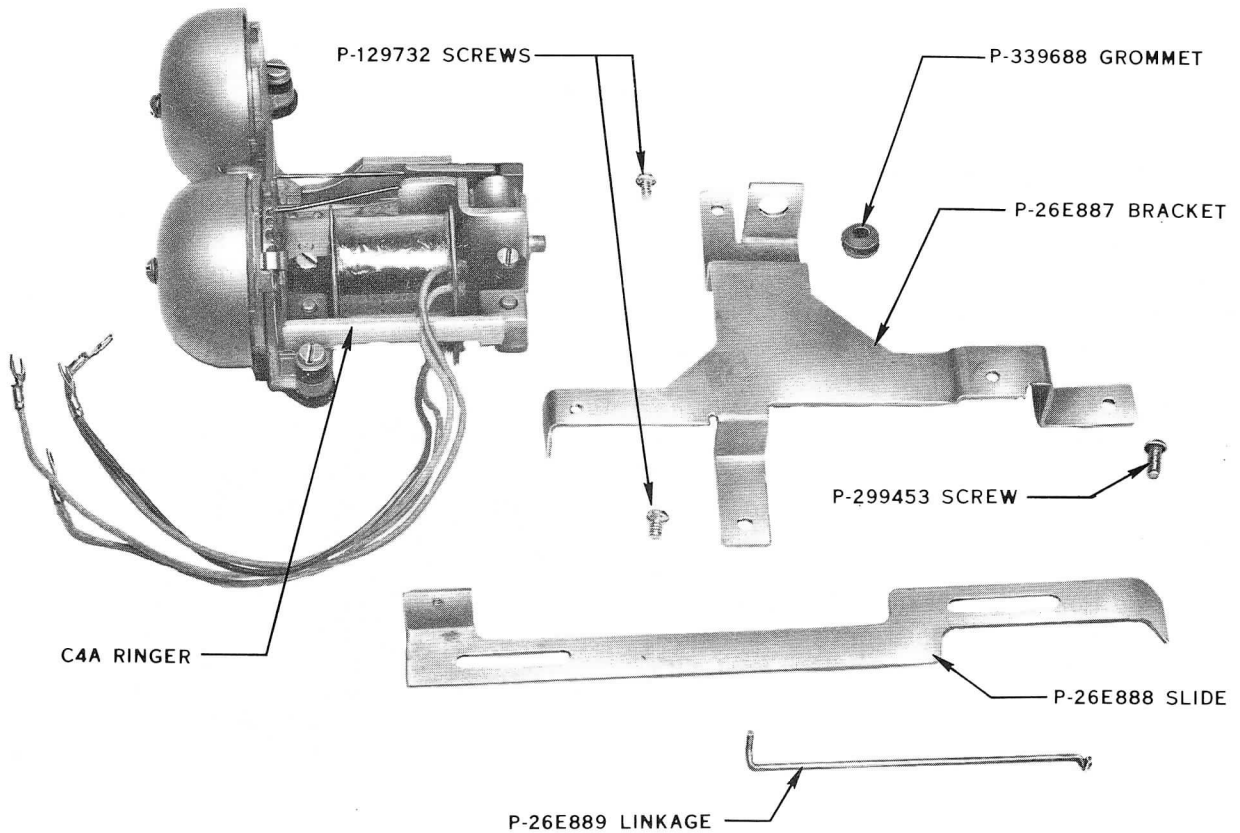
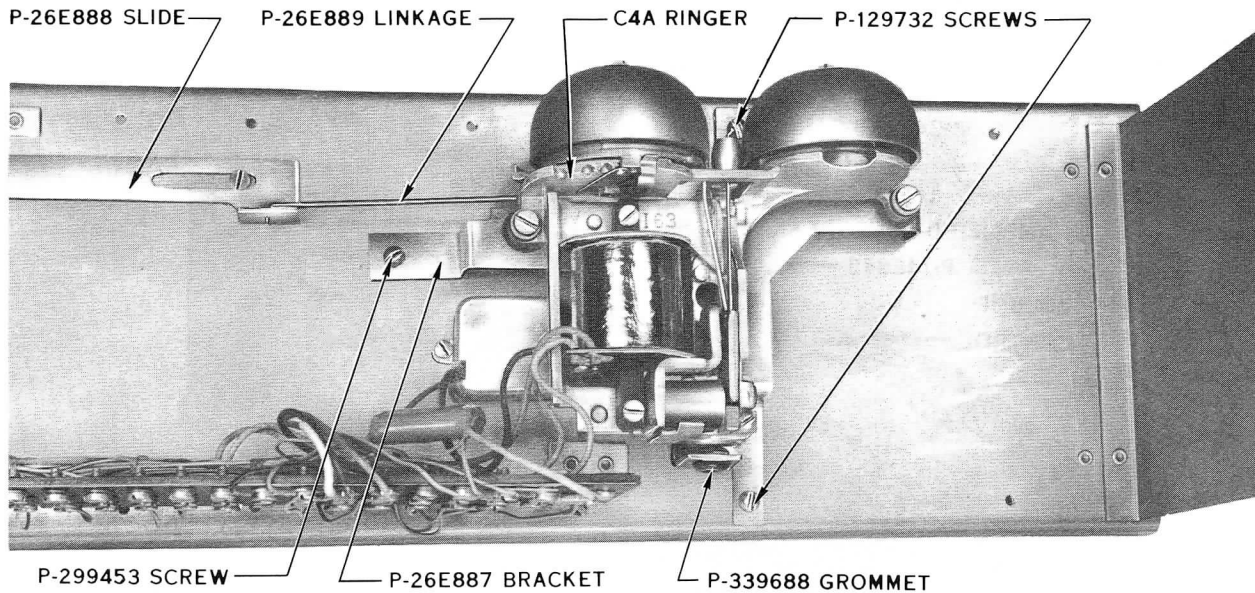


Fig. 8 - D-179948 Kit of Parts for C4A Ringer



**Fig. 9 — D-179948 Kit of Parts for C4A Ringer, Assembled**

#### **D-179948 Kit of Parts for C4A Ringer**

**2.08** This kit of parts (Fig. 8 and 9) is used for ringer modification of 689A and 689D subscriber sets when customer cannot hear standard D1B ringer. Because of space limitations of 689B, 689C, and 689E subscriber sets, it is necessary to mount an external ringer if standard ringer is not loud enough.

#### **Timed Auxiliary Ringer Unit (J70144 J1, L1)**

**2.09** The timed auxiliary ringer provides an audible signal at TWX and WADS stations. It may be mounted in or on any teletypewriter machine. Included is a C4A ringer. The timing is adjustable (3 to 9 seconds) by the installer.

#### **691A Subscriber Set**

**2.10** This 6-button desk set (Fig. 10) (not arranged for talking) is used with 101A DATA-PHONE units on 14-, 15-, and 19-type teletypewriters.

**2.11** In addition to components listed in Table A, this set is equipped with 51A lamps, 425F network, and a D50H-3 mounting cord with an amphenol plug.

### **3. MAINTENANCE**

**3.01** For maintenance of the 691A subscriber set, refer to sections covering maintenance of 560-type sets.

**3.02** If the bezel of the 689A subscriber set becomes loose after having been removed several times, proceed as follows:

- (a) Drill a hole through the Lucite faceplate and stainless steel frame 5-7/10 inches up from the bottom edge and 1-7/8 inches in from right edge, using a No. 27 drill (Fig. 1).
- (b) Use a 6-40 by 1-1/4 or 1-1/2 oval or flathead nickel or stainless steel machine screw with a No. 6 nickel plated cup washer to hold bezel secure.



**Fig. 10 — 691A Subscriber Set**