

## TELEPHONE SETS

### 325-TYPE

### IDENTIFICATION, INSTALLATION, AND MAINTENANCE

#### 1. GENERAL

1.01 The 325-type (MD) telephone set (Fig. 1) is intended for outdoor mounting on buildings, fences, poles, etc. These sets are replaced by the 525-type telephone sets which are similar. Connection information on the 325-type telephone sets will be found in Section 502-410-400.

1.02 Information contained in this section was formerly found in Section 502-560-100 and Section 502-560-201.

1.03 These sets are equipped with a gray finished metal housing and inner and outer hinged doors. The outer door of the 325J and L (MD) sets is not self-closing, while the 325M and N (MD) sets are self-closing and self-locking.

#### 2. IDENTIFICATION

##### ORDERING GUIDE

Set, Telephone, 325J, M (MD) Manual

Set, Telephone, 325L, N (MD) Rotary Dial

##### (a) *Replaceable Components*

- Adapter, Dial, 56B and 58A (325L and N)
- Blank, Apparatus, 80B (325J and M)
- Capacitor, 195A
- Coil, Induction, 101A
- Cord, Handset, H3AS-3 (15 inches)
- Dial, 6C-3
- Lock, KS-8028 (includes key)
- P-240414 Door Assembly (outer)

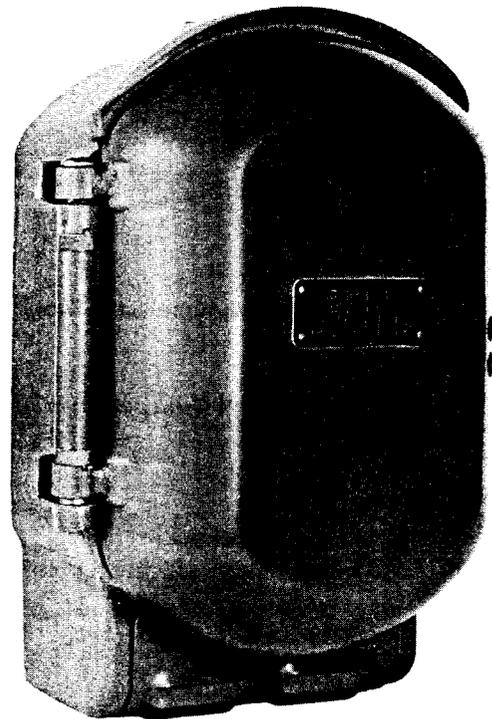


Fig. 1—325-Type Telephone Set (Outdoor)

- P-241765 Cover Assembly (lower)
- P-335621 Cable
- P-337066 Door (inner)
- P-483218 Case (housing)
- Ringer, B1AL
- Set, Hand, F1C-3

##### (b) *Associated Apparatus or Equipment (ordered separately)*

- Bracket, 29D (mounts 325-type telephone set, gray color)

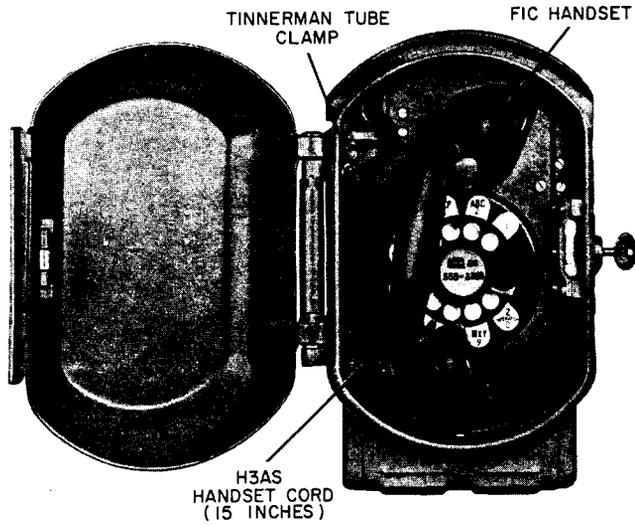


Fig. 2—325-Type Telephone Set (Dial)

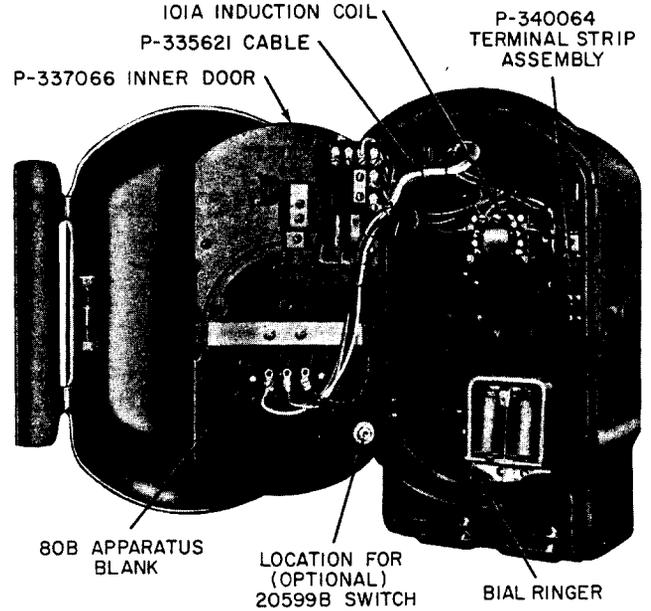


Fig. 3—325-Type Telephone Set (Manual) Inner Door Open

(c) *Replaceable Optional Components (ordered separately)*

- Filter, 61L
- Switch, 20599B (Hart and Hegeman)
- Tube, Electron, 426A

**DESIGN FEATURES**

- Transmission characteristics equivalent to other 300-type sets
- Arranged for outdoor mounting on buildings, fences, poles, etc.
- Self-locking outer door (Fig. 2)
- Inner door to seal off set components from customer (Fig. 3 and 4)
- Filter to suppress RF induction in radio receiving sets (optional)
- Switch to disconnect ringer or external signals (optional)
- 4-party semiselective ringing service (optional)

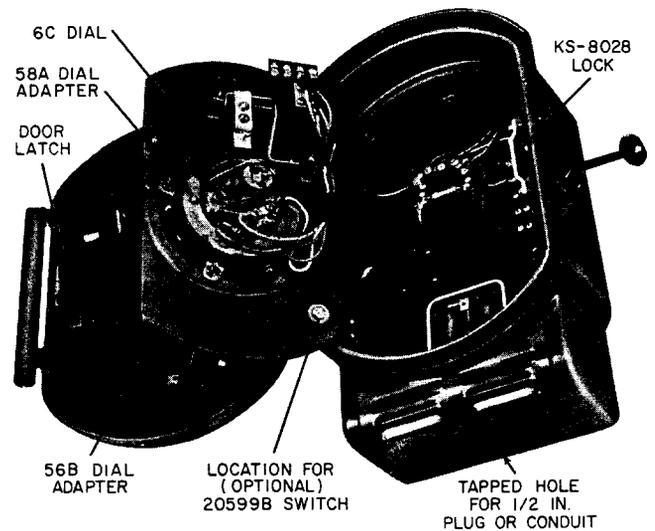


Fig. 4—325-Type Telephone Set (Dial) Inner Door Open

**APPLICATION**

- Individual central office or PBX lines

- Can be modified for use on 2-party selective flat or message rate central office lines and 4-party semiselective service

- General appearance of installation

**3. INSTALLATION**

(a) **Planning**—Consider the following:

- Safety for yourself, customer, and maintenance personnel
- Convenience to the user
- Obstruction to pedestrian and vehicular traffic
- Distance between associated equipment or apparatus
- Space requirements

(b) **Installing:**

(1) The 325-type telephone set should be mounted on a 29D bracket (ordered separately) and fastened to various surfaces shown in Fig. 5 and Table A.

(2) Fasten the 29D bracket in a suitable location using hardware furnished locally. Consider the following:

(a) Fasten the bracket to any flat surface using one fastener in each bracket arm as far from center as possible.

(b) On flat surface, bracket arms should be flush with surface.

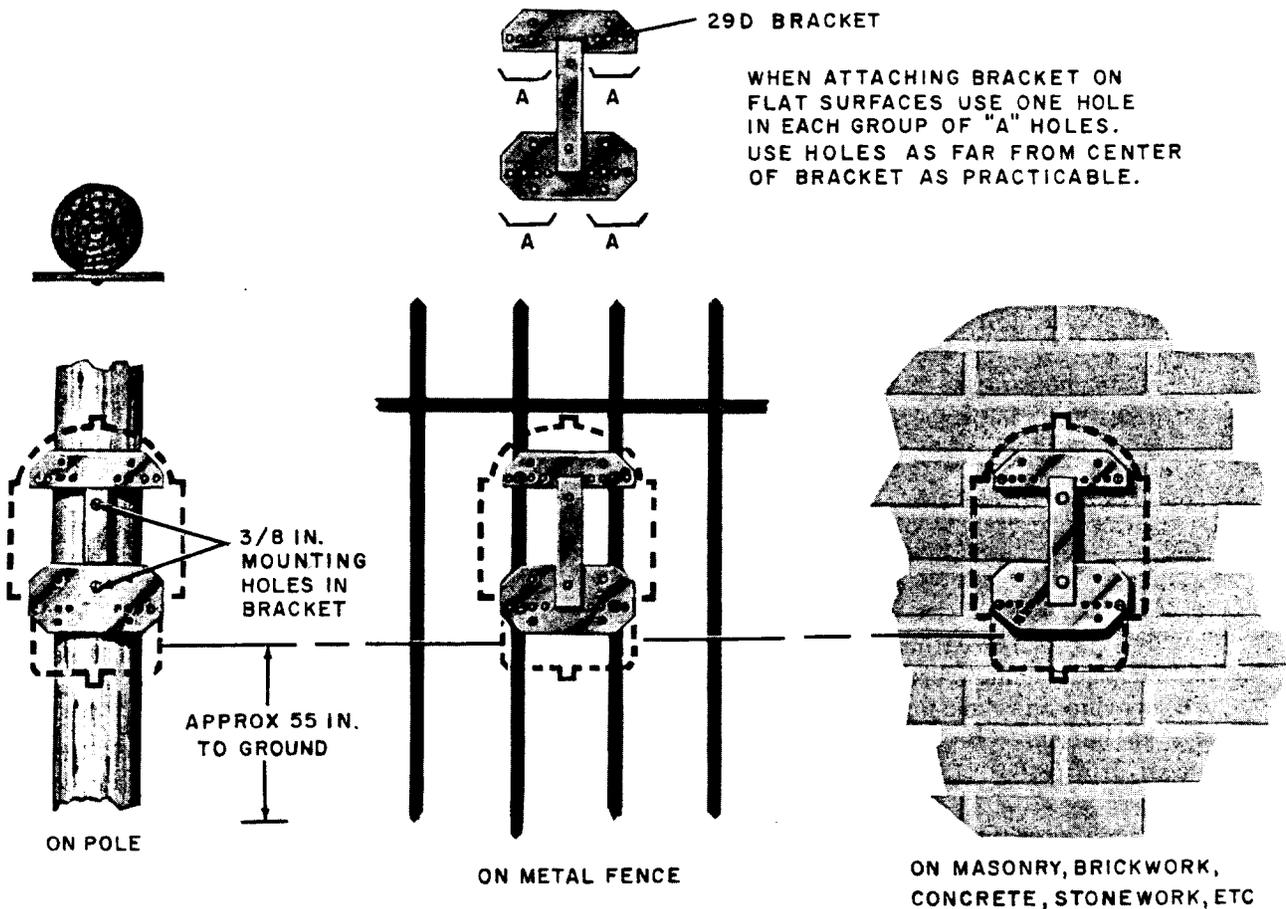


Fig. 5—29D Bracket Mounted on Various Surfaces

**TABLE A**  
**FASTENERS FOR 29D BRACKET**

SURFACE	QTY	FASTENERS
Wood	4	1-1/2 in. No. 14 RH galvanized wood screws
Wood poles	4	2-1/2 in. or longer No. 14 RH galvanized wood screws
Wood poles (where diameter of pole is 8 inches or less)	2	5/16 x 3 in. coach screws or 2-1/2 in. or longer No. 14 RH galvanized wood screws
Finished masonry, brickwork, concrete, etc	4	5/16 x 2-1/4 in. hammer drive anchors, or approved equivalent
Solid metal - metal fences, columns, etc*	4	1 x 5/16 in. No. 18 RH brass machine screws. Drill and tap holes using 17/24 in. drill and 5/16 in. No. 18 tap
Hollow tile, corrugated metal, plaster board, etc	4	1/4 x 4 in. RH toggle bolts

\*Iron straps, bolts, etc may be used where local instructions permit. Attach telephone set securely.

(c) On narrow or rounded surfaces place bracket so that metal strap, if required, will be flush.

(3) Mount 325-type telephone set as follows:

(a) Open outer and inner doors to gain access to interior of set.

(b) Mount housing on 29-type bracket using screws and washers furnished with bracket.

**Note:** If bracket is not used, secure housing directly to surface using appropriate hardware.

(c) Line and ground wires should be protected by 1/2-inch weatherproof conduit or metallic equivalent. Threaded entrance holes are provided in housing, one at top and one at bottom. A typical installation is shown in Fig. 6.

(d) Make necessary connections in accordance with appropriate connection figure in Section 502-410-400.

(4) When the self-locking feature of the outer door is not desirable, remove the KS-8028

lock by removing the two 8/32- by 7/16-inch RH machine screws and lock washers. Be guided by local instructions in disposing of lock and covering opening in housing where lock was removed.

(c) **Installing—Optional Components:**

(1) Install **No. 20599B** (Hart and Hegeman) switch at opening provided in inner door (Fig. 3 and 4) when set ringer or external signals are to be disconnected.

(2) Refer to appropriate connection figure in Section 502-410-400 for connections to switch.

(3) A **426A electron tube** must be installed when connecting for 4-party semiselective service. Install tube in accordance with (Fig. 7) using a P-348079 bracket (ordered separately) and mounting screws furnished with telephone set.

(4) Connect tube leads, refer to appropriate connection figure in Section 502-410-400.

(5) To eliminate dialing clicks in radio receiving sets, install a **61L filter**. Fasten filter

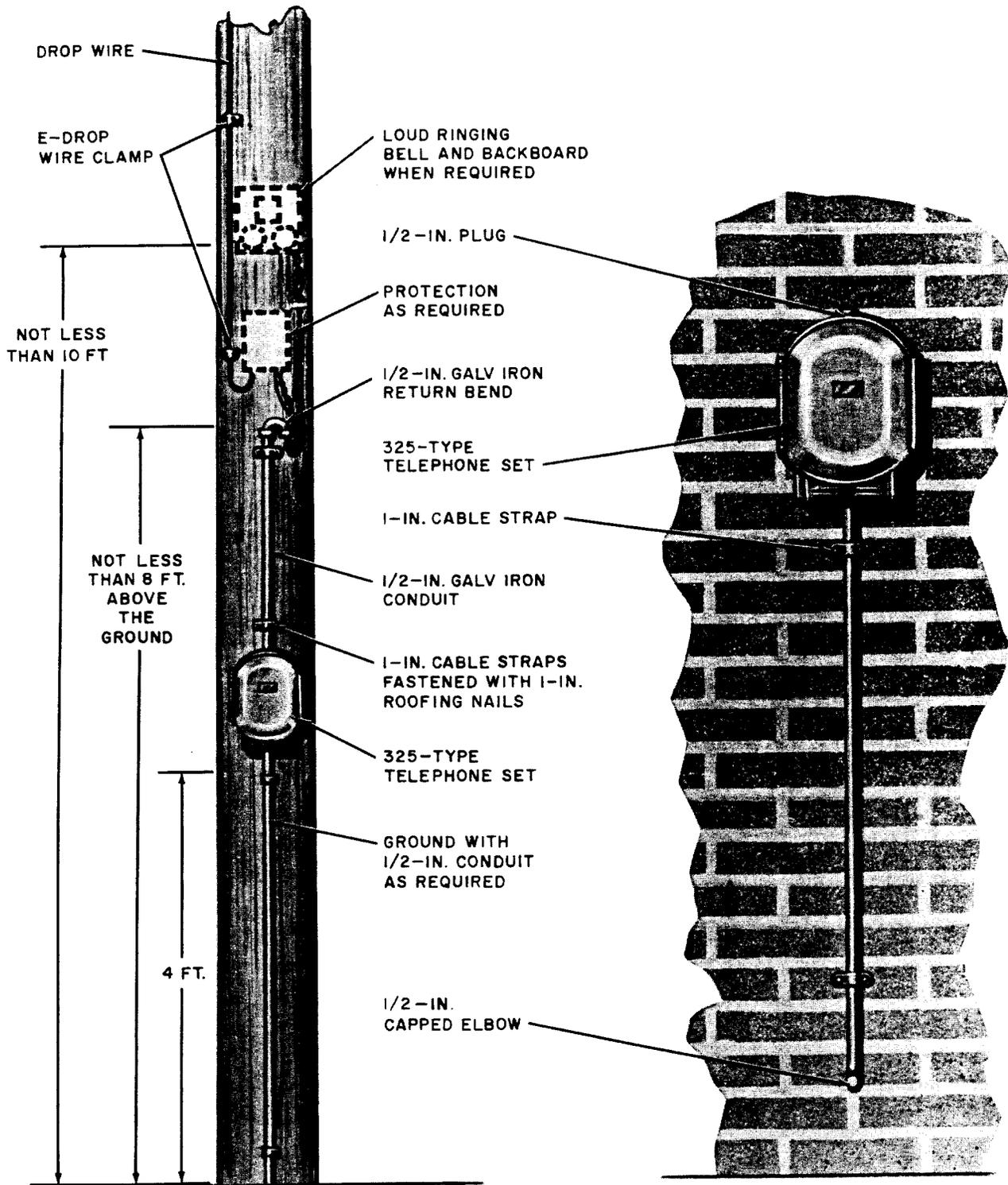


Fig. 6—325-Type Telephone Set, Typical Installations

bracket to back side of dial using screws which fasten dial to 58A dial adapter.

(6) Connect filter leads, refer to appropriate connection figure in Section 502-410-400.

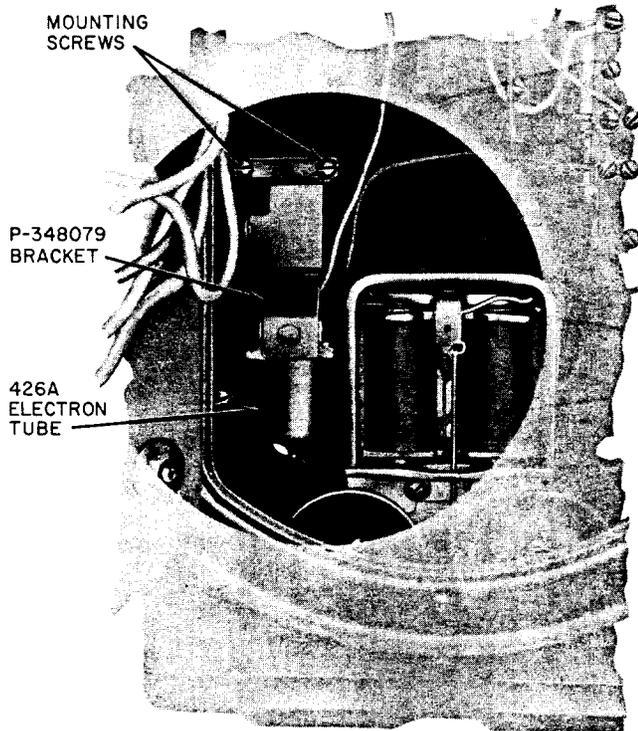


Fig. 7—325-Type Telephone Set, 426A Electron Tube Installed

**4. MAINTENANCE**

4.01 Work done on customer's premises should be limited to replacement of accessible parts which are available through supply channels, refer to Ordering Guide.

4.02 Ringers, handsets, dials, etc. used in these sets should be maintained in accordance with section covering the particular item.

4.03 If condensation is experienced in the conduit protecting the line wire, plastic duct seal should be placed in the conduit entrance hole inside the set. This prevents moisture from dripping onto apparatus.

4.04 The self-closing outer door spring tension is factory adjusted and should close the door fully when it is open not more than 3 inches.

4.05 If outer door binds at hinges, lubricate hinges with KS-14681 anti-rust compound. Apply sparingly and wipe off any excess compound.

4.06 The length of the handset cord should be adjusted at the cord cable clamp so that the cord just clears the bottom of the housing when the handset is on hook and in an upright position.

4.07 To gain access to the J1A ringer, remove lower cover mounting screw located on bottom of set housing (Fig. 8).

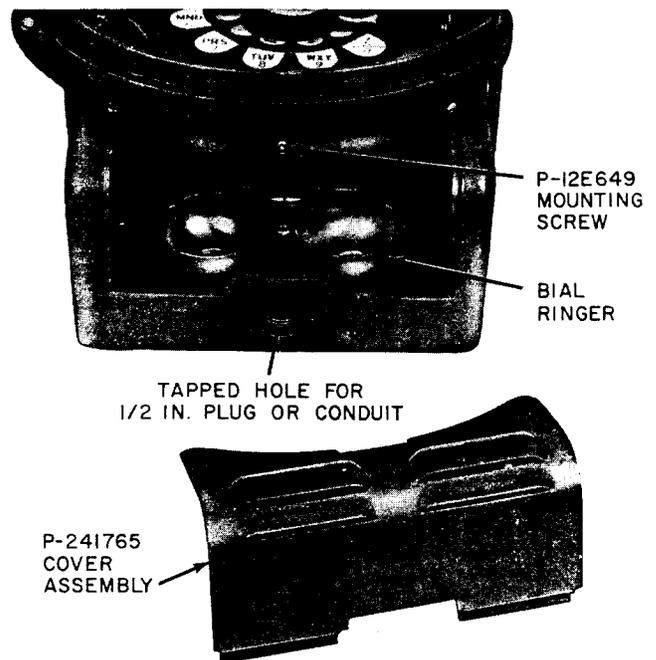


Fig. 8—325-Type Telephone Set, Cover Assembly Removed