

**BELL SYSTEM PRACTICES**  
**Station Installation and Maintenance**

**SECTION C32.509**  
**Issue 3, March, 1953**  
**AT&T Co Standard**

## **TELEPHONE SETS**

### **354, 356 AND 357 TYPES**

### **DESCRIPTION AND INSTALLATION**

#### **1. GENERAL**

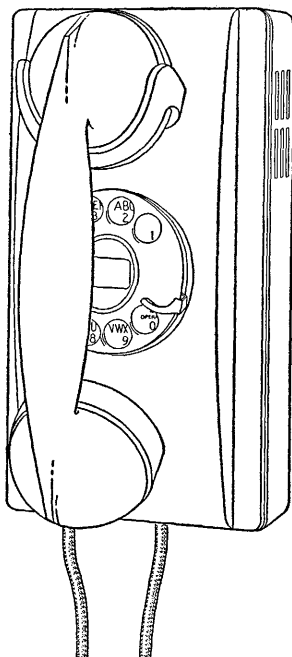
1.01 This section gives general information relating to the description and installation of the 354, 356 and 357-type telephone sets. It is reissued to include information regarding the 6-type dial, to make minor changes in Fig. 2 and include revision of the 172A-type backboard.

1.02 These telephone sets are anti-sidetone sets arranged for wall mounting consisting of an F-type hand set and a telephone set mounting which in addition to a dial or apparatus blank houses a ringer, condenser, induction coil and the necessary terminals for making line connection to the sets. In addition, a vacuum tube is included in the 356-type set and a retardation coil in the 357-type set. The line is terminated on the terminals provided in the sets. The housing is made of thermoplastic material which is fragile and should therefore be handled carefully. These sets are available in either black or ivory finish.

#### **2. DESCRIPTION**

2.01 The 354-type telephone set shown in Figs. 1 and 2 is used at common battery anti-sidetone stations on non-polarized ringing lines in the following classes of service.

Individual Lines (Manual and Dial)  
Two-Party Selective Flat Rate (Manual and Dial)  
Two-Party Selective Message Rate (Manual and Dial)  
Four-Party Semiselective (Manual and Dial)  
Divided Code Ringing (Manual and Dial)  
Non-Selective Party Lines (Manual and Dial)  
Regular P.B.X. Stations (Manual and Dial)  
755A and 750A P.B.X. Keyless Stations

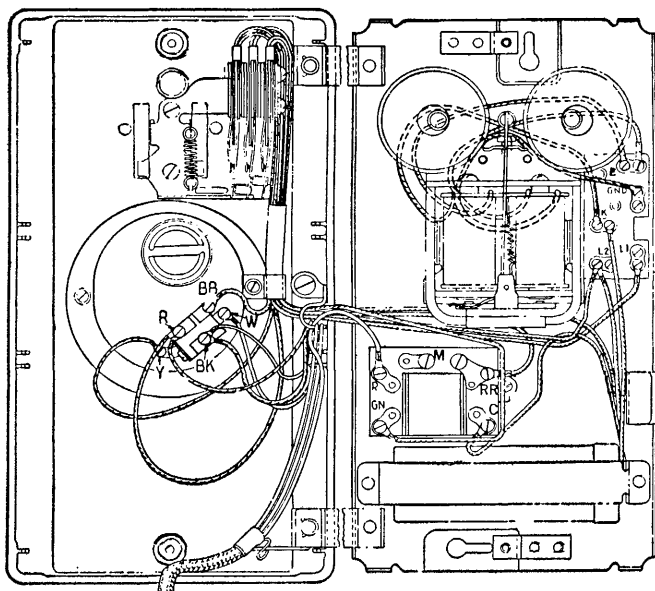


**Fig. 1—354-Type Telephone Set—External View**

2.02 The manual black set is coded 354A-3 and the dial-  
black set is coded 354C-3. ←

2.03 A cord slot is provided in the bottom of the plastic housing for the hand set cord and an opening is provided in the metal base for bringing in concealed station wiring to the terminal strip. Where wires are run exposed they may be brought into the set through the cord slot which is large enough to accommodate both the cord and the station wires.

Note: At certain locations the use of a retractile hand set cord with this set may have advantages. The retractile cord should, however, be installed only upon proper authorization.



**Fig. 2—354-Type Telephone Set—Internal View**

2.04 The 356-type telephone set in external appearance is the same as the 354-type shown in Fig. 1 but is arranged for use at common battery anti-sidetone stations in four-party selective and eight-party semiselective services. The manual black set is coded 356A-3 and the dial black set 356C-3.

2.05 The 357-type telephone set is a local battery talking, common battery signaling anti-sidetone set similar in appearance to the 354-type set. It is for use on non-polarized ringing lines in the same classes of service listed in 2.01 for the 354-type set except tip-party message rate dial stations. The manual black set is coded 357A-3 and the dial 357C-3.

### 3. APPARATUS

#### COMBINATION OF APPARATUS

| Telephone Set Code | Telephone Set Mounting | Apparatus Blank | †Dial | *Hand Set |
|--------------------|------------------------|-----------------|-------|-----------|
| 354A-3             | M3-3                   | 94A-3           | —     | F1G-3     |
| 354C-3             | M3-3                   | —               | 6A    | F1G-3     |
| 356A-3             | M5-3                   | 94A-3           | —     | F1G-3     |
| 356C-3             | M5-3                   | —               | 6A    | F1G-3     |
| 357A-3             | M7-3                   | 94A-3           | —     | F1G-3     |
| 357C-3             | M7-3                   | —               | 6A    | F1G-3     |

\*E1E-3, F1A-3 or F1A-4 hand set may be used in place of the F1G-3.

†4 or 5-type twin contact dials may be used in place of the 6-type. The 5JB-type dial is used on ivory sets.

The 59A dial adapter is required with the dial on all sets listed above. This adapter is designed for use with either the 4, 5 or 6-type dials.

Note: A dash number, following the code number of the apparatus indicates the color of the apparatus. Example: -3 (black) or -4 (ivory).

Note: Dial sets are arranged to mount a 61-type filter. Either the 61E or 61G filter is used with the 4 and 5-type dials and the 61E filter with the 6-type dial. Filters shall be ordered separately. The mounting screw and washer furnished with filter are not used.

3.01 The telephone set mountings that form a part of the foregoing telephone sets include the following coded apparatus:

| Mounting | Ringer | Con- denser | Induction Coil | Retard Coil | Vacuum Tube |
|----------|--------|-------------|----------------|-------------|-------------|
| M3-3     | B2A    | 195A        | 101B           | —           | —           |
| M5-3     | B3A    | 195C        | 101A           |             | *426A ←     |
| M7-3     | B1A    | 387A        | 104A           | 266A        |             |

\*Pending manufacturing change some sets may still be←  
equipped with the 333A vacuum tube. ←

3.02 The M3 and M7 mountings are equipped with a switch assembly having three pairs of make contact springs. The M5 mounting is equipped with a switch assembly having two pairs of make contact springs.

3.03 Numbers of piece parts of the telephone set mountings which may be required for replacement purposes are as follows:

| Piece Part Number | Description                                                     |   |
|-------------------|-----------------------------------------------------------------|---|
| P-478967          | Plastic Housing Assembly                                        |   |
| P-340314          | Plastic Housing Assembly—ivory                                  | ← |
| P-372129          | Hook (hand set support)                                         |   |
| P-340319          | Hook (hand set support)—chromium for ivory set                  | ← |
| P-339175          | Set Screw for Switchhook Pin                                    |   |
| P-478961          | Coiled Hook Spring                                              |   |
| P-349058          | Spring Pile-up and Bracket Assembly (for 354 and 357-type sets) |   |
| P-349065          | Spring Pile-up and Bracket Assembly (for 356-type sets)         |   |
| P-478962          | Pin (for switchhook)                                            |   |
| P-467742          | B.H. Lockscrew for Housing                                      |   |
| P-478966          | Base Plate                                                      | ← |

#### 4. INSTALLATION

4.01 In general install these wall sets in accordance with instructions included in sections in Division C30 covering the locating and mounting of subscriber (wall) sets and hand telephone sets. Consideration should be given to adapting the ringing signal to the subscriber's needs as outlined in the section entitled "Service Orders and Repair Work—Ringers and Loud Ringing Bells."

4.02 On wall surfaces of other than wood or plaster on wood lath or other wood backing, use the 172A-3 (black) or 172A-4 (ivory) type backboard to mount the set. Where a writing shelf is required, the 146A backboard may be mounted separately below or adjacent to the set. ←

4.03 Where exposed wire run is such that entrance at the top instead of the bottom of the set is desirable from an appearance standpoint, the set may be mounted on the backboard and the wire brought down the wiring channel in the backboard and into the set through the hole in the rear.

4.04 Attach the 172A-type backboard to the various surfaces with the same fasteners that are used to attach other subscriber set backboards. Use fasteners regularly used for other wall sets to attach the new wall set to the backboard or ←

wall surface. Where telephone set is to be located over a telephone outlet in the wall, remove the two machine screws in the outlet face plate and after pulling wires through wiring hole, attach the 172A-type backboard to the outlet with two 6-32 x 1-1/4-inch R.H. steel machine screws. Two mounting holes, spaced to correspond with the threaded mounting holes in an outlet box, are provided in the backboard.

Note: In case the outlet does not appear to be securely attached to the wall, some screws placed in studs or other suitable backing can be used in backboard to supplement the above mounting arrangement or the set placed at some other location.

4.05 Where the transmitter battery for more than one 357-type telephone set is obtained from a common source of supply such as a battery feeder from the central office, an F2B hand set should be substituted for the F1G or F1A hand set and internal connections in the 357-type set changed in accordance with instruction in the section in the Division C60 covering connections for the 357-type telephone sets. The 634BD subscriber set should also be used in the battery supply circuit as a filter.

**BELL SYSTEM PRACTICES**  
**Station Installation and Maintenance**

**ADDENDUM C32.509**  
**Issue 1, August, 1954**  
**AT&T Co Standard**

**TELEPHONE SETS**  
**354, 356, AND 357 TYPES**  
**DESCRIPTION AND INSTALLATION**

**1. GENERAL**

1.01 This addendum supplements Section C32.509, Issue 3.

It is issued to include a reference to the 6D dial and unmodified 59A dial adapters, to specify B2AL and B1AL ringers with M3 and M7 mountings, respectively, and to omit reference to 634BD subscriber sets for use as transmitter battery filters.

**3. APPARATUS**

Revise information under COMBINATION OF APPARATUS to read:

| <u>Telephone<br/>Set<br/>Code<br/>(Note 1)</u> | <u>Telephone<br/>Set<br/>Mounting</u> | <u>Apparatus<br/>Blank</u> | <u>Dial<br/>(Note 2)</u> | <u>Handset</u> |
|------------------------------------------------|---------------------------------------|----------------------------|--------------------------|----------------|
| 354A-3                                         | M3-3                                  | 94A-3                      | —                        | FIG-3          |
| 354C-3                                         | M3-3                                  | —                          | 6A                       | FIG-3          |
| 356A-3                                         | M5-3                                  | 94A-3                      | —                        | FIG-3          |
| 356C-3                                         | M5-3                                  | —                          | 6A                       | FIG-3          |
| 357A-3                                         | M7-3                                  | 94A-3                      | —                        | FIG-3          |
| 357C-3                                         | M7-3                                  | —                          | 6A                       | FIG-3          |

**Notes:**

1. All codes listed above are for black (-3) apparatus. See Section C30.011, Colored Station Sets, for listing of ivory (-4) apparatus.

2. A 4- or 5-type dial may be used in place of the 6-type. The 5JB or 6D dial is used on ivory sets.

(a) The 59A dial adapter is required with the dial on all sets listed above. The modified 59A dial adapter, covered in Section C34.301, Dial Mountings and Dial Adapters—Description and Use, is designed for use with either the 4-, 5-, or 6-type dials. The unmodified 59A dial adapter, which has a full circular shape, must have the upper segment cut out so that it has the same outline as the modified adapter before it may be used with a 6-type dial.

(b) A 61E filter may be used with 4-, 5-, or 6-type dials. A 61G may be used with 4- and 5-types only. Order filter separately if required.

3.01 Revise to read: The telephone set mountings that form a part of the foregoing telephone sets include the following coded apparatus:

| <u>Mounting</u> | <u>Ringer</u> | <u>Con-<br/>denser</u> | <u>Induction<br/>Coil</u> | <u>Retard<br/>Coil</u> | <u>Vacuum<br/>Tube</u> |
|-----------------|---------------|------------------------|---------------------------|------------------------|------------------------|
| M3-3            | B2AL          | 195A                   | 101B                      | —                      | —                      |
| M5-3            | B3A           | 195C                   | 101A                      | —                      | *426A                  |
| M7-3            | B1AL          | 387A                   | 104A                      | 226A                   | —                      |

\* Some sets may still be equipped with the 333A vacuum tube.

#### 4. INSTALLATION

4.05 Revise to read: Where the transmitter battery for more than one L.B.T., C.B.S. telephone set is obtained from a common source of supply, such as a battery feeder from the central office, an F2B handset should be substituted for the F1G or F1A in 357-type telephone sets. Also, change internal connections as covered in Section C63.435, Telephone Sets 357-Type—Connections. In addition, a battery supply filter is required as covered in Section C63.289, Balancing Network and Battery Supply—Filter Connections.