# HANDSETS

## **KS-16504 TYPE**

## IDENTIFICATION, CONNECTIONS, AND MAINTENANCE

#### 1. GENERAL

1.01 Information contained in this section was formally included in Sections 501-210-100 and 501-210-300.

#### 2. IDENTIFICATION

2.01 The KS-16504 type handset (Fig. 1) consists of a special transmitter unit, special transmitter cap, standard U1 receiver and receiver cap, and an H5U or H5W handset cord mounted to a B-186704 molded plastic handle. Table A lists the handsets with component parts and intended uses.

2.02 The KS-16504, List 10 transmitter unit used with these handsets is a dynamic (moving coil) microphone. The dynamic microphone is used because of its extended frequency range, low distortion, and low inherent noise level.

- 2.03 The H5U and H5W handset cords are five conductor cords, of which two conductors are a shielded pair for use with the transmitter circuit. A single conductor connects between the shield and the telephone set ground circuit.
- 2.04 The KS-16504, List 1 is a black handset equipped with a spade-tipped cord for use with the 8A Announcement systems.
- 2.05 The KS-16504, List 2 is a black handset equipped with an H5W cord having a Cannon No. 35324 plug for use as a plug-in handset for the 9A Announcement systems.



Fig. 1 — KS-16504 Handset

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#### TABLE A

HANDSET	CORD	HANDLE	TRMTR UNIT	TRMTR CAP	RCVR UNIT	RCVR CAP	CORD EQUIPPED WITH	USED WITH
KS-16504, L1	H5U-3	B-186704-1	KS-16504, L10	B-186744	U1	P-80A203	No. 134 and No. 144 cord tips	8A Announce- ment system
KS-16504, L2	H5W-3	B-186704-2					Cannon plug No. 35324	9A Announce- ment system
KS-16504, L3	H5U-3	B-186704-3		B-186744-2		P-80A260	No. 134 and No. 144 cord tips	KS-19134, L1 con- ference set

### KS-16504-TYPE HANDSETS

2.06 The KS-16504, List 3 is a beige-colored handset equipped with a spade-tipped cord initially intended for use with a modified 701B-60 telephone set as a component of the KS-19134, List 1 conference set.

### 3. CONNECTIONS

- **3.01** Internal connections for the KS-16504 type handset are shown in Fig. 2.
- **3.02** See sections covering systems with which these handsets are used for external connections of the KS-16504 type handsets.





### 4. MAINTENANCE

**4.01** Replace cracked transmitter or receiver caps. Caps or grids may be cleaned by wiping with a clean cloth moistened with water.



Do not use cleaning fluids or antirust compounds on transmitter or receiver units or on other components of the handset. Discoloration or tarnish on the silver plated contact surfaces is not objectionable and no attempt should be made to remove it.

**4.02** Use care to avoid marring the finish when cleaning colored handsets. Replace handset if cleaning does not result in a satisfactory appearance.

**4.03** Replace cut, cracked, worn, or badly frayed cords. Connections should be checked for tightness.

**4.04** KS-16504 handsets have a cotton ball in each end of the handle which acts as an acoustical barrier. These balls should not extend into the receiver or transmitter bowls.

- **4.05** To replace cord of KS-16504 type hand-set:
  - (1) Remove receiver and transmitter caps.
  - (2) Disconnect receiver and transmitter leads and remove receiver and transmitter units.
  - (3) Remove acoustical barrier (cotton balls) from each end of handle.
  - (4) Tie a pull-wire (or suitable string) to the receiver leads. Pull the defective cord from the handle, pulling the pull-wire through the handle to the transmitter cavity.
  - (5) Pass free conductors of handset end of new cord through hole in handle.
  - (6) Advance cord through hole by turning it with a threading motion until grommet is in proper position. Because of an occasional snug fit it may be necessary, after advancing cord through hole, to grasp it firmly by the groove on the grommet with a pair of longnose pliers and use the pliers as a lever inside the transmitter bowl to pull the grommet into position.

- (7) Tie pull wire to the receiver leads inside the transmitter bowl and pull leads into receiver bowl.
- (8) Make connections to receiver unit, placing excess receiver lead length into bowl so that seat is clear.
- (9) Replace acoustical barrier (cotton balls) in each end of handle, then replace receiver unit and receiver cap.
- (10) Make connections to the transmitter unit and place transmitter in bowl. The cord retainer (U-shaped projection) on the bottom of the transmitter should fit into the groove of the cord grommet. This acts to anchor the handset cord.
- (11) Replace transmitter cap.
- 4.06 To replace handset handle, remove component parts and assemble them on a new handle of same type (see Table A); otherwise, replace complete handset.