

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C55.701
Issue 1, 1-30-32
Standard

1-A VOICE SILENCER

1. GENERAL

1.01 This section gives information pertaining to the 1-A voice silencer such as use, description, installation and maintenance.



Fig. 1.

2. USE

2.01 The 1-A voice silencer is mounted on a desk stand in place of the transmitter. It may be used where telephone conversations of a confidential nature are carried on and the telephone user wishes to prevent others in the room from overhearing his part of the conversation. It also has value in places where it is desirable to maintain quiet and avoid disturbing others nearby.

3. DESCRIPTION

3.01 Fig. 1 shows the 1-A voice silencer mounted on a desk stand having an apparatus blank.

3.02 The silencer is essentially a transmitter with a special kind of mouthpiece. The mouthpiece is of such shape and size as to permit the speaker to rest his face against its rim and thus entirely enclose his mouth.

3.03 Fig. 2 shows a cross section of the 1-A voice silencer including its associated transmitter unit. The mouthpiece leads to an inner mouthpiece chamber, the other end of which is closed by the transmitter unit. In order to talk under these conditions it is necessary to have an outlet for the breath expelled in talking. For this purpose, two vent holes are provided leading from the mouthpiece chamber to the outside. An enclosed outer chamber is connected to the vent holes by means of two small openings. This arrangement acts as an acoustic filter and prevents the sound path through the vent holes from conveying intelligible sounds.

3.04 Since the silencer is larger and heavier than the ordinary desk stand transmitter unit, the housing is provided with stronger rim screws. A moisture-proof membrane and protective wire gauze screen are built into the transmitter unit.

3.05 With the bulk and added weight required and the necessity for having both the mouth and ear come in contact with the transmitter and receiver, respectively, application of a voice silencer to the hand set type of instrument tends to make an arrangement which would be cumbersome and not convenient to use. Accordingly, the voice silencer can be installed only on desk stands.

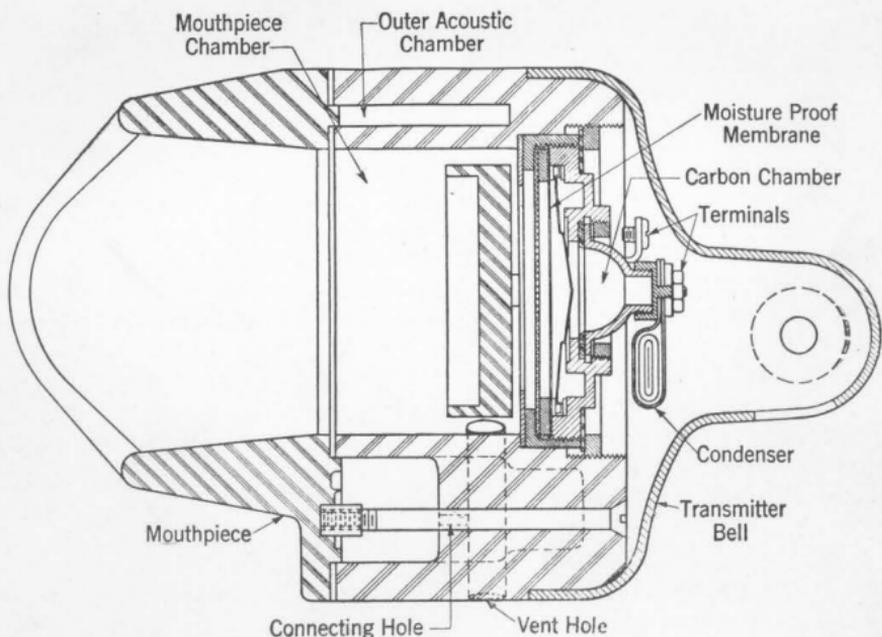


Fig. 2.

4. INSTALLATION

4.01 The 1-A voice silencer should be mounted on a desk stand having either a dial or an apparatus blank. If another type of desk stand is found at the station, it should be replaced.

4.02 Loosen the rim screws of the transmitter on the desk stand and then remove and disconnect the transmitter unit.

4.03 Remove the rim screws provided with the voice silencer, and then remove its transmitter bell.

Note: Since the silencer is larger and heavier than the ordinary desk stand transmitter, the silencer housing is provided with stronger rim screws. The thread diameter has been increased so that the screws will fit the holes in the bell, but will not pass through the slots associated with these holes.

4.04 Connect one of the transmitter cords to the center terminal of the 1-A voice silencer and the other transmitter cord to the other terminal.

4.05 Using the rim screws provided with the voice silencer, mount it securely in the transmitter bell of the desk stand.

4.06 In order that the subscriber may get the best results from the voice silencer, it is essential that he be properly advised relative to its use.

4.07 Advise the subscriber that for secrecy the best results are secured when the instrument is held lightly in contact with the face in such a position that a good seal is obtained between the face and the mouthpiece. Too much pressure on the mouthpiece is undesirable, as it tends to restrict the motion of the lips.

4.08 The voice silencer can also be used as an ordinary telephone with the lips almost touching the mouthpiece. With the lips farther away the transmission becomes materially poorer and if as much as an inch or more away will be unsatisfactory.

4.09 Make the usual final tests of the station with the test desk, using a hand test set at the subscriber set rather than the voice silencer. Then request the subscriber to talk with the deskman. The subscriber should use the voice silencer in the close talking position as described in paragraph 4.07. In this way the deskman can verify that the subscriber knows the proper method of using the instrument.

5. MAINTENANCE

5.01 When talking close into the voice silencer, breath moisture condenses inside the mouthpiece chamber. To clean the mouthpiece chamber, wipe it out with a clean moist cloth.

5.02 The only piece part for voice silencers which should be replaced in the field is the rim screw—P-239,462.

5.03 If the bakelite parts are broken or if the instrument is otherwise defective, the entire voice silencer should be replaced.