

BELL SYSTEM PRACTICES
Station Installation and Maintenance

SECTION C55.602
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AT&T Co Standard

KS-14580 TELEPHONE ANSWERING DEVICE (PEATROPHONE) DESCRIPTION AND INSTALLATION

1. GENERAL

- 1.01 This section covers the installation of the KS-14580 Telephone Answering Device.
- 1.02 The KS-14580 Telephone Answering Device is a machine used to furnish automatic telephone answering and recording service on central office and P.B.X. extension lines. The machine consists of recording and reproducing equipment encased in a metal cabinet about 10" x 14" x 8" in size and weighing about 40 lbs. The machine can be used on individual lines and 2 and 4-party lines with full selective ringing. It is necessary to use a modified 531C subscriber set when the machine is used on party lines.
- 1.03 The machine is arranged to respond to an incoming ring with an announcement message up to 30 seconds in length. At the end of this message, the caller may record an incoming message of about 25 seconds maximum length. The recording and reproducing is done on vinylite records. The larger record (KS-14583 List 1) which is 8" in diameter is used for recording incoming messages and will accommodate a maximum of 130 25-second messages on each side. The smaller record (KS-14583 List 2) 4" in diameter, is used for the announcement message and can accommodate one message on each side. The announcement message is recorded by the subscriber, using the associated telephone set transmitter as a recording microphone.
- 1.04 In response to an incoming ringing signal, the small turntable which carries the announcement record starts to turn and the pickup arm is lowered to the announcement record. The announcement message is transmitted to the telephone line. At the end of the announcement message, the pickup arm is restored, the small turntable stops and the large turntable starts to turn. About 1 second later, a tone signal is transmitted

over the telephone line indicating to the calling party that the machine is ready to record his message. About 23 seconds later, the tone is again transmitted indicating that the recording period is about over. About 2 seconds later, the machine releases the line and is ready to respond to the next call.

1.05 The machine may also be used for answering incoming calls only, as described in 6.13.

1.06 The subscriber may play back the messages recorded in his absence by placing the pickup arm at the proper location on the large record and operating the PLAYBACK button. The recorded messages are reproduced in the telephone receiver.

1.07 When the machine is not in use, the telephone line should be switched to the regular telephone set by depressing the button marked OFF. When this button is depressed, the line is connected directly to the telephone set in the normal manner without any bridged equipment in the machine.

1.08 When any button except the OFF button is depressed, the ringer in the telephone set is disconnected. However, an incoming ring causes the ringing relay in the machine to produce an audible signal as an indication of an incoming call. If required, connections can be made so that the bell in the telephone set will also ring.

1.09 The KS-14580 Telephone Answering Device is installed only upon issuance of a service order or other proper authorization.

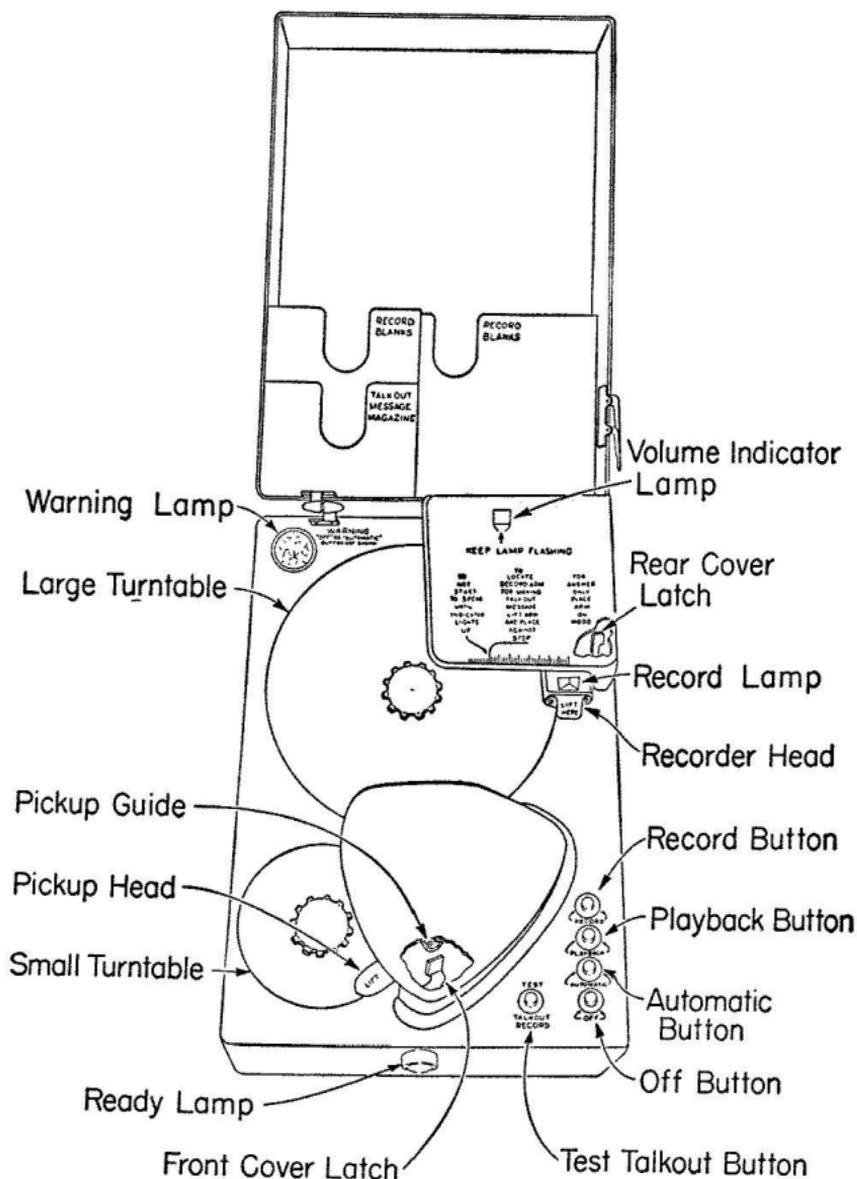


Fig. 1

2. TRANSPORTING THE MACHINE

2.01 The machine shall be handled carefully at all times to avoid damage.

2.02 Before transporting the machine always:

- (a) Secure the pickup arm by means of the spring lock provided (see Fig. 2).
- (b) Secure the recording arm against its left stop by means of the slide lock (see Fig. 3).
- (c) Tighten the knurled nut on the motor clamping detail until the two motors are clamped securely against the panel (see Fig. 4). Care should be taken to position fan blade properly.

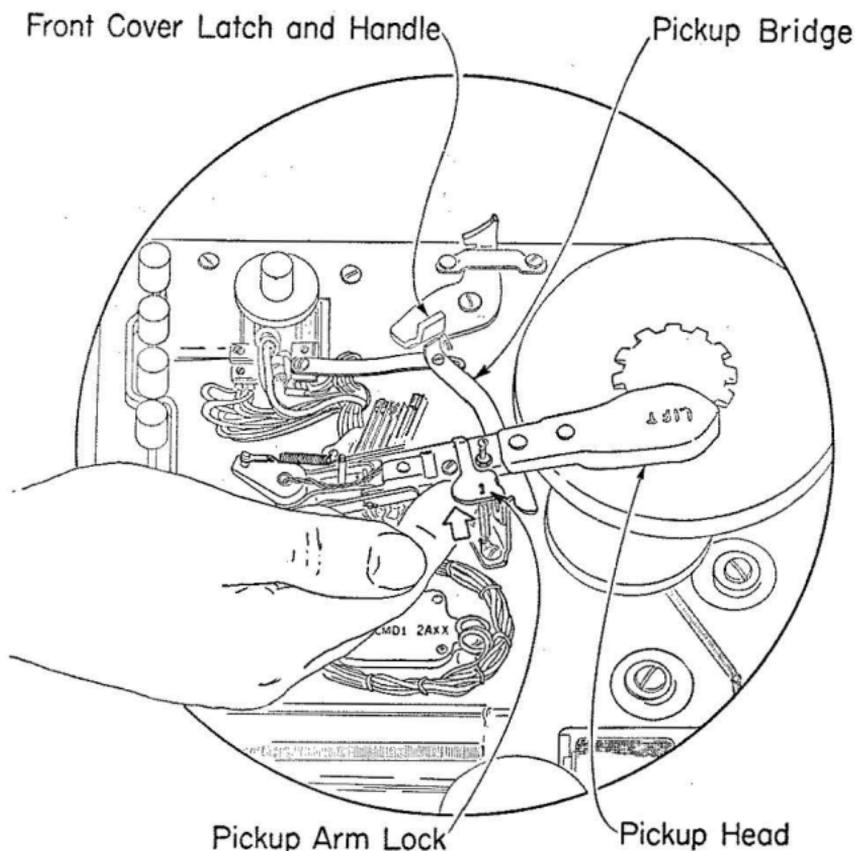


Fig. 2

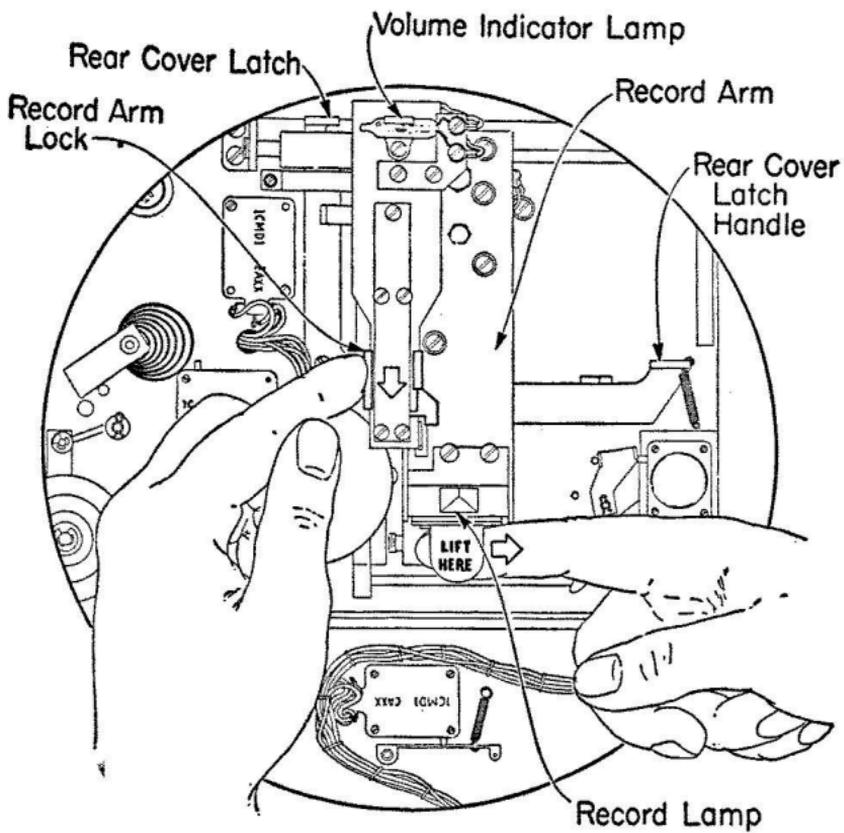


Fig. 3

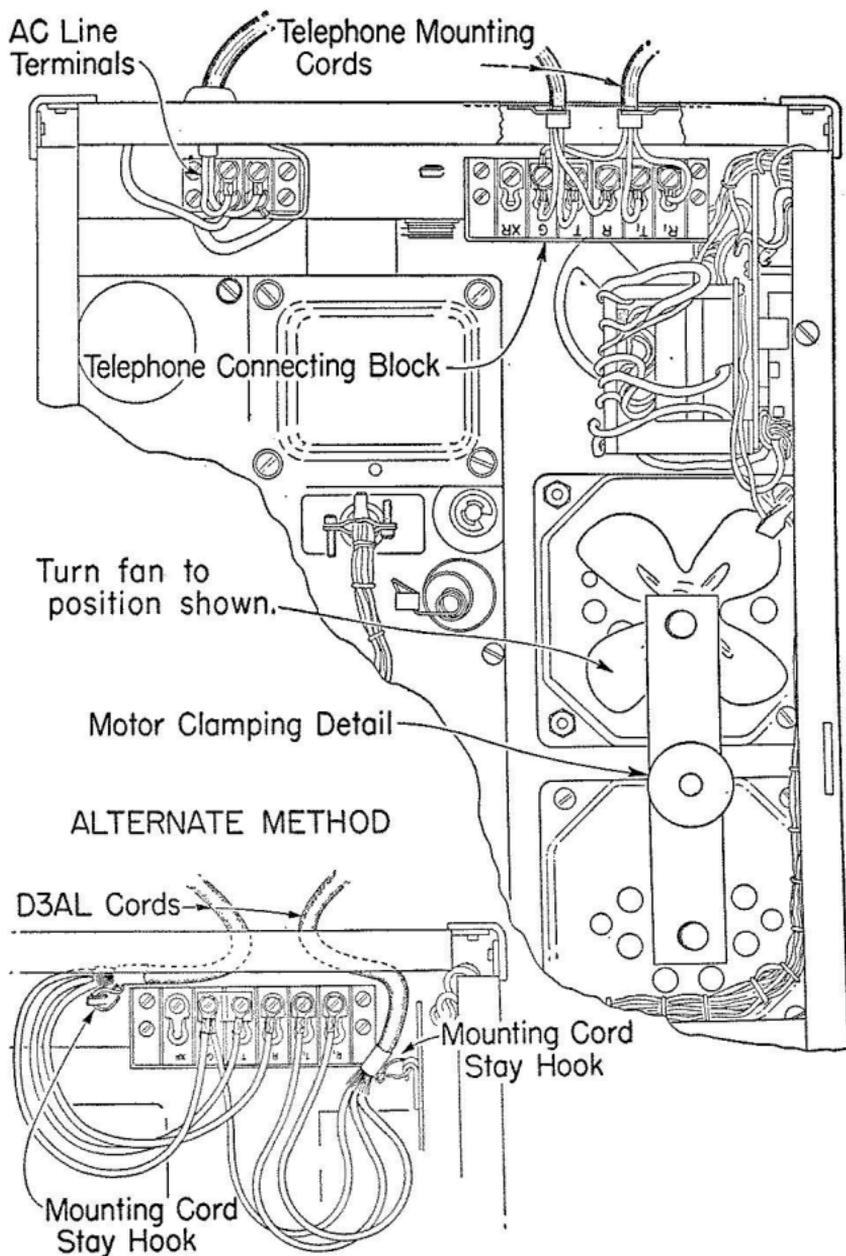


Fig. 4

3. POWER SUPPLY

3.01 The KS-14580 telephone answering device is designed to operate on 115-volt, 60-cycle a-c power supply. **In no case should the machine be directly connected to direct current since serious damage will result.** With the use of a suitable inverter, however, the machine will operate on direct current. If d-c is encountered, refer the matter through regular organization channels to the Engineering Department for advice before proceeding with the work.

3.02 The machine is protected by means of a 2-ampere fuse which is located under the case at the left rear of the chassis next to the warning light. Should the machine fail to operate, this fuse should be checked. The fuse is an S-310-CCT Littelfuse, 2a.

4. LOCATING

4.01 Locate the machine in accordance with the considerations outlined below. If the customer's wishes cannot be followed, explain the reason therefor.

- (a) The machine must be located within easy reach of the subscriber's telephone set.
- (b) A desk or table sufficiently strong and stable (approximate weight of KS-14580 Peatrophone is 40 lbs.) and where ventilation is not restricted is a satisfactory location.
- (c) The machine is arranged for desk or table installation and need not be fastened.
- (d) Avoid locations that subject the apparatus to excessive moisture or heat.
- (e) The bottom cover of the machine is provided with vents or openings for ventilation. The subscriber should be advised to avoid piling papers, books or other objects around the machine since this will reduce ventilation and cause the machine to overheat.
- (f) The machine is equipped with a 10' power cord and plug for connection to a standard power supply outlet.

Note: In view of the above, it may be necessary to relocate the subscriber's telephone set, so that the power supply outlet may be convenient, and at the same time, a suitable support for the machine obtained.

5. INSTALLATION

5.01 Do not connect the machine to the power supply until all of the installation work described in the following paragraphs is completed.

5.02 When the machine is installed at a station having associated key equipment, connect the machine on the line side of the key equipment apparatus.

5.03 The following order of operations is suggested:

Note: Use suitable protection to avoid marring furniture.

(a) **Remove the case**—The case is locked in place with two latches. One under the front edge of the shield which protects the pickup arm, and the other under the shield which protects the recording arm (Fig. 1). Slide the forefinger of the left hand in between the pickup head and its cover until the latch lever is found. Care should be taken to avoid disturbing the position of the pickup bridge (Fig. 2) while removing the case. Insert the thumb of the right hand along the right side of the recorder arm shield until the other latch is located. Press the front latch **forward** and the rear latch **backward** until both are released. Remove case by lifting vertically. Place the case to one side.

(b) Tilt the machine until it rests securely on its left side.

Three screwdriver operated controls marked PLAY-BACK, MASTER, and GAIN are located on the right side of the machine. These controls are adjusted at the factory. **The positions of these controls should not be altered except at the direction of the Engineering Department.**

(c) Remove the screws that hold the bottom cover plate to the chassis. Slide the plate toward the rear of the machine until it is released from the slots that hold it in place. Place the bottom cover plate to one side.

(d) The connecting block is located at bottom rear of the chassis (Fig. 4). Insert the telephone set mounting cord through the slot provided in the chassis. Fasten the cord to the stay hook. Bring the cord conductors forward and loop them so that the spade tips of the cords can be connected to the terminals from the front end of the block.

(e) Use a suitable mounting cord between the 42A connecting block or 531C subscriber set and the connecting block in the machine. Connect this cord as described in (d) above.

(f) Make the connections for the type of service required as covered in Section C55.604.

(g) Loosen the knurled nut on the motor clamping detail (Fig. 4) so that the motors are free when the machine is in its normal position.

(h) Replace the bottom cover plate and secure the retaining screws, taking care not to pinch any of the cords.

(i) Return the machine to its normal position.

- (j) Release the pickup arm by raising the pickup arm lock (see Fig. 2), and moving pickup arm forward at the same time. This arm may have been tied in place for shipment.
- (k) Place the pickup arm on the center portion of the large turntable.
- (l) Release the recording arm by raising the recorder head slightly and pushing back the slide lock (Fig. 3). If necessary, untie the cord securing the recorder head and carefully remove the corrugated paper used for initial shipment.
- (m) Do not move the recording arm from its original position on the turntable.
- (n) Replace the cabinet by sliding it vertically downward on the machine until the front and back catches are engaged.
- (o) Remove the protective cover from the pickup head and move the pickup arm to the forward stop on the bridge (Fig. 1).
- (p) Depress OFF button and insert the power cord plug into the power outlet.

5.04 The machine should now be ready for operation.

5.05 Check the operation of the telephone set. Depress the OFF button on the machine and make station, dial and ringing tests. If telephone set does not operate in normal manner, check local wiring and connections to machine.

6. FINAL TESTS

6.01 Upon completion of the installation, make certain that all features of the machine function properly. Make tests as outlined below.

6.02 Place a small record on the large turntable, move the record arm over to its stop and lower it to the record as described in the instructions on the cover plate.

6.03 Depress the button marked RECORD. The WARNING lamp should light.

Note: The WARNING lamp lights when any button other than AUTOMATIC or OFF button is depressed.

Remove the telephone hand set from its mounting and be ready to talk. After the large turntable has turned through one complete revolution, the record lamp on the recording arm head will light. This indicates that the machine is ready to record an announcement message.

6.04 Record a suitable announcement message, e.g., "This is Exchange 6-9970. You are being answered by an automatic machine. This is a test record being used by the Telephone Company to check the service. When you hear the first tone signal, please leave a message commenting on the performance. Do not hang up until after you hear the second tone signal." While recording, use transmitter in the normal manner and speak loudly enough to keep the volume indicator (see Fig. 1) flashing brightly.

6.05 At the end of the message, **immediately** depress the OFF button and hang up the telephone. This order should be followed or the sound of the hangup will be recorded on the record.

6.06 Always depress the OFF button immediately after the last word of the announcement message. This results in a record on which the groove stops at the end of the message and permits the pickup arm to operate a switch that trips the machine into its incoming recording cycle. This avoids having the calling party wait for some time before hearing the first tone signal.

6.07 When recording an announcement message, the large turntable will stop automatically after 30 seconds, thus preventing a longer message from being made. If the message is incomplete when the turntable stops, it must be rerecorded on an unused side of a record.

6.08 Remove the small record from the large turntable and place it on the small turntable. Place the pickup arm at the forward end of the bridge as far as it will go (see Fig. 1). Remove the hand set from its mounting, depress the TEST TALK OUT button, and listen to the announcement message in the hand set receiver. Check to be sure that the message is complete and intelligible. When listening to the announcement message in this manner, the volume is automatically adjusted to be less than will actually be transmitted to the line when the machine responds to a call.

6.09 If the recorded announcement message is satisfactory, proceed with a test of the incoming recording.

6.10 Place a large record on the large turntable. Place the recorder head on the record so that the index mark on the head coincides with the first mark on the cover shield plate. If the test record is partially used, place the recorder head over an unused portion. Depress the AUTOMATIC button. The READY lamp will light and the WARNING lamp will go out. The machine is now ready to automatically answer a call. The large turntable will make approximately one revolu-

tion automatically each time the AUTOMATIC button is depressed so that a blank lead groove will always be provided.

6.11 Depress the OFF button and call the test desk. Request the test deskman to make a test call and leave a suitable message. Hang up, depress the AUTOMATIC button, and await the incoming call.

6.12 After the machine has responded to the call and has released the line, move the pickup head from the small turntable on to the large record so that it leads into the recorded incoming message. Pick up the telephone hand set, depress the PLAYBACK button and check the recorded incoming message to see that it is clear and intelligible. Remove the test records from the machine.

6.13 When it is desired to use the machine for answering incoming calls only, place the recording arm on the record arm hook at the extreme right as described in the instructions on the cover plate.

6.14 Make certain that the subscriber or a competent representative understands the functions and use of the machine before leaving the subscriber's premises.