# BELL SYSTEM PRACTICES Station Installation and Maintenance

Issue 1, 1-15-53 AT&T Co Standard

# KS-14580 TELEPHONE ANSWERING DEVICE (PEATROPHONE) MAINTENANCE

#### 1. GENERAL

- 1.01 This section provides requirements and procedures for the maintenance of the KS-14580 Telephone Answering Device as installed at subscriber stations.
- 1.02 The maintenance of telephone sets and subscriber sets which may be used with the KS-14580 Telephone Answering Device shall be in accordance with the sections dealing with these apparatus items.
- 1.03 Access to the inside of the machine is obtained by removing the case and bottom cover plate. The case is removed by releasing two cover latches, one under the front edge of the shield which protects the pick-up arm, and the other under the shield which protects the recording arm (see Section C55.602 Fig. 1), and then lifting the case vertically. The bottom cover plate is dismounted by removing the two screws that hold the plate to the chassis and sliding the plate toward the rear of the machine until it is released from the slots that hold it in place.

Caution: Always remove the power cord plug from the receptacle before removing or replacing the case or working on the device. The cover safety switch disconnects only one side of the AC power line.

- 1.04 The KS-14580 Telephone Answering Device derives its power from a power outlet of the subscriber and, therefore, will not operate during a power supply failure.
- 1.05 Only KS-14583 List 1 records (for recording incoming messages) and KS-14583 List 2 records (for recording announcement messages) should be used with this machine.

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#### 2. REQUIREMENTS AND PROCEDURES

#### General

- 2.01 Prior to inspecting the mechanism of the telephone answering device for defects, check the power, station and set connections. With the OFF control button depressed check the normal operation of the associated telephone set. Determine, if possible, whether or not the device has been properly operated.
- 2.02 Some of the troubles of the KS-14580 Telephone Answering Device may be detected by careful visual inspection for obvious defects, such as loose or displaced parts, obstruction of moving parts, or the presence of foreign matter that may interfere with the proper operation of the device. The corrections for most troubles of this nature should be self-evident and convenient. Where such is not the case, or the trouble is repeated, the device should be replaced.
  - Note: In removing foreign matter from recording or reproducing needles, care should be taken not to dislocate or damage the needles or their respective heads.
- 2.03 Table I is a list of troubles that may occur, together with their probable cause and suggested remedy. If the trouble is not readily cleared, or if replacement parts are not available, the KS-14580 Telephone Answering Device should be replaced.

# TABLE I

	Trouble	Probable Causes	Remedy
1.	Warning lamp does not light and motors do not run.	No power from receptacle.	Check power.
		Defective fuse.	Replace fuse with 2 ampere #312002 Littelfuse or 2 ampere Bussman type AGC.
2.	Fuse blows repeatedly.	Circuit defect.	Replace machine.
3.	Warning or Ready lamp lights but motors do not run.	Defective motors.	Replace machine.
4.	Ready lamp does not light.	Defective lamp.	Replace with G. E. Co. #NE48, 1/4 watt neon lamp.
5.	Warning lamp does not light.	Defective lamp.	Replace with Herzog Minia- ture Lamp Wks., Sal-Rex, 3 watt lamp.

	Trouble	Probable Causes	Remedy
6.	No speech on test talk-out.	Amplifier tubes defective.	Replace vacuum tubes (See Par. 2.04), or replace machine.
		Amplifier defective.	Replace machine.
		Defective pick-up.	Replace machine.
7.	Does not record Incoming Message.	Defective recorder.	Replace machine.
8.	Does not transfer at mid-cycle.	Switch D3 inoperative.	Check lever operated by pick-up.
		Switch D3 defective.	Replace machine.
9.	Does not stop after talk-out with record- er on switch hook.	Switch D9 inoperative.	Check lever operated by recorder arm.
		Switch D9 defective.	Replace machine.
10.	Continues to accept calls after record is full.	Switch D2 inoperative.	Check lever on record arm.
		Switch D2 defective.	Replace machine.
11.	Distortion in talk- out message.	Turntable drive wheel defective.	Replace machine.
		Talk-out motor shaft distorted.	Replace machine.
12.	Talk out message incomplete, or poor quality.	Worn talk-out record.	Replace record.
13.	Distortion on play- back of incoming message.	Defective recording or pick-up needles.	Replace machine.
		Turntable drive wheel defective.	Replace machine.
		Motor shaft distorted.	Replace machine.
14.	Turret operates improperly.	Defective drive belt on turret assembly.	Replace machine.
		Switch D11 inoperative.	Check pressure of switch D11 against turret.
2.00		Switch D11 defective.	Replace machine.
15.	<ul> <li>Pick-up does not follow record grooves.</li> </ul>	Improper tension on bias spring.	Adjust retainer, or replace machine.
16.	Will not answer.	Defective ringing circuit.	Replace machine.
17	Recorder will not lift when OFF or PLAYBACK buttons are pressed.	Disengaged lift arm and recorder carriage.	Remove large turntable and engage arm and carriage. (The centers securing the turntables have left-hand threads.)
		Defective lift arm or recorder carriage.	Replace machine.
18	. Control buttons will not lock.	Solenoid S7 defective.	Replace machine.

#### Vacuum Tubes

2.04 The tube complement of the KS-14580 Telephone Answering Device consists of one 12AX7, one 6AU6, one 6AQ5 and one 6AL5.

## Final Test

2.05 Make a final check of the complete operating sequence of the functions performed by the KS-14580 Telephone Answering Device—Automatic, Playback, Record and Test Talkout. If the performance still is unsatisfactory, and the above maintenance procedures do not remedy the fault, replace the device.

## Handling and Transporting

2.06 Before the machine is removed, the pick-up and recording arms and the two motors should be secured against damage by means of their respective locking devices, as covered in Section C55.602.