PLANTRONICS TELEPHONE HEADSET TESTER

MODEL TS-0133

Contents Page

1. GENERAL

1.01 This section provides information about the Plantronics Telephone Headset Tester (Model TS-0133). The headset tester is designed to (electronically) measure the performance of KS-20778 and KS-19796 type operator headsets.

1.02 It is reissued to:

- Make minor text changes.
- Include the appropriate legend on Page 1 in accordance with AT&T's "Guidelines and Procedures for Safeguarding Information" and Pacific Company's System Instruction (SI) 178.

Note: Marginal arrows used to denote changes are omitted.

1.03 It also covers the Plantronics Calibration Standard (Model TS-0139). The calibration standard is used in the maintenance of the headset tester to determine whether recalibration or repair is required. (See Fig. 9.)

2. DESCRIPTION

2.01 The telephone headset tester (Fig. 1) allows performance testing and troubleshooting of the complete operator headset, as well as its subassemblies. The various test modes include:

(a) ***Complete Headset***

- Transmitter output level in either polarity. (1 kHz)
- Receiver output level. (1 kHz)
- Transmitter switch [Supervisor and Federal Aviation Administration (FAA) models].
- Cordage wire continuity.
- Acoustic tube performance.

(b) ***Headset Subassemblies***

(1) Amplifier:

- Output level. (1 kHz)
- Operation in either polarity. (1 kHz)

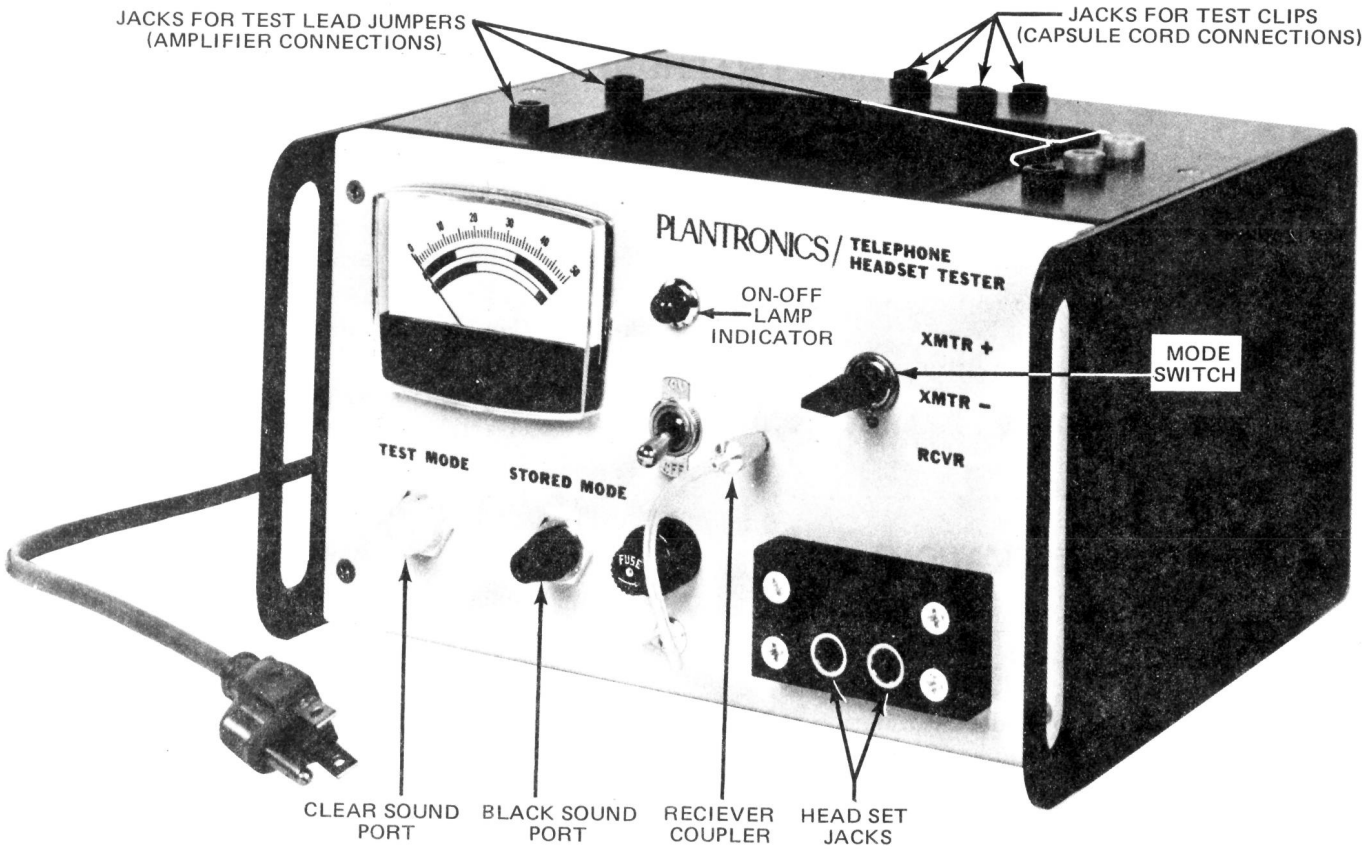
(2) Capsule:

- Receiver output level. (1 kHz)
- Transmitter output level. (1 kHz)

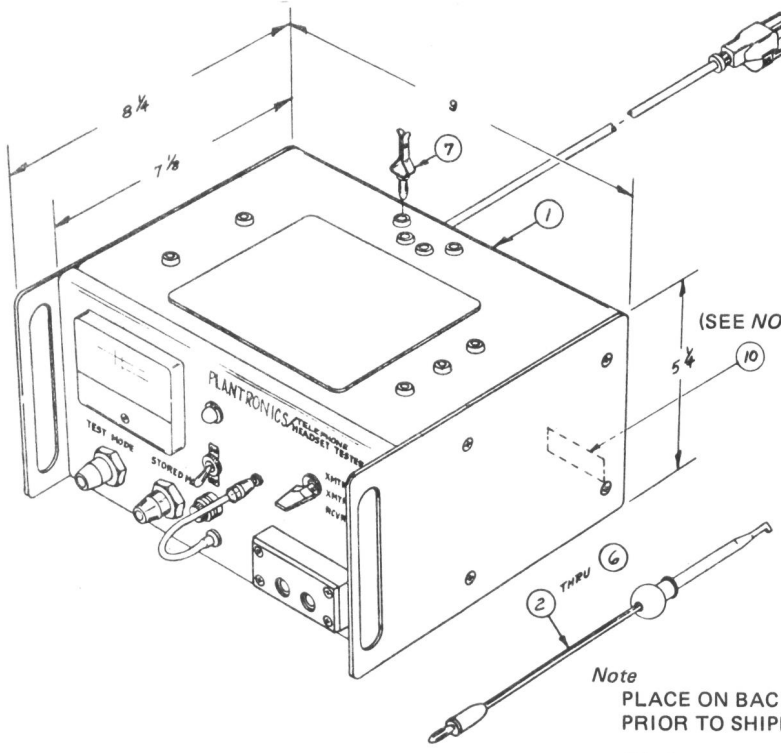
2.02 The headset tester weighs 5-1/2 pounds and is 5-5/8 inches high, 9 inches wide, and 8-1/4 inches deep.

2.03 Each tester is furnished with test leads and test plug clips. An insulation pad is provided on top of the unit for placing subassemblies undergoing test. (See Fig. 2.)

2.04 A 117 V AC power supply is required to operate the unit.



Plantronics Telephone Headset Tester
Model TS-0133
Fig. 1



QTY.	PART NUMBER	DESCRIPTION	ITEM
1	07871-00	MFG. DATE CODE	10
REF	06916-00	SCHEMATIC	9
1	06921-00	OPERATING INSTRUCTIONS	8
4	07426-00	TEST CLIP	7
1	06919-05	TEST LEAD JUMPER (BLK)	6
1	06919-04	TEST LEAD JUMPER (YEL)	5
1	06919-03	TEST LEAD JUMPER (BLU)	4
1	06919-02	TEST LEAD JUMPER (GRN)	3
1	06919-01	TEST LEAD JUMPER (RED)	2
1	06918-00	TESTER ASSY, HEADSET	1

Note
PLACE ON BACK PANEL BELOW PLANTRONICS LABEL
PRIOR TO SHIPPING.

Headset Tester with Component Parts
Fig. 2

3. TEST PROCEDURE

Complete Headsets

3.01 Fig. 3 illustrates the typical setup used to test headsets.

3.02 When the exception of Step 1a, all other setup procedures and test readings are the same for both KS-20778 and KS-19796 headsets. To test the complete headset:

1. Test Setup

   a. For ***KS-20778*** headsets, install the clear sound port at the TEST MODE position (black sound port in STORED MODE).

      For ***KS-19796*** headsets, install the black sound port at the TEST MODE position (clear sound port in STORED MODE).

   b. Insert acoustic tube into TEST MODE port.

      Important: Ensure acoustic tube hits bottom of port.

   c. Remove ear piece (if any) from headset.

   d. Connect the receiver coupler (mounted on flexible tubing) to the capsule.

      Note: When not in use, the receiver coupler is stored on the stud right of the ON-OFF switch.

2. ***Test Reading*** —All tests should indicate in the white area of Scale A.

   a. Place mode switch in XMTR +. This checks the complete transmit circuit level at 1 kHz.

   b. Move switch to XMTR − to test reverse polarity.

   c. Move switch to RCVR to check receiver output level.

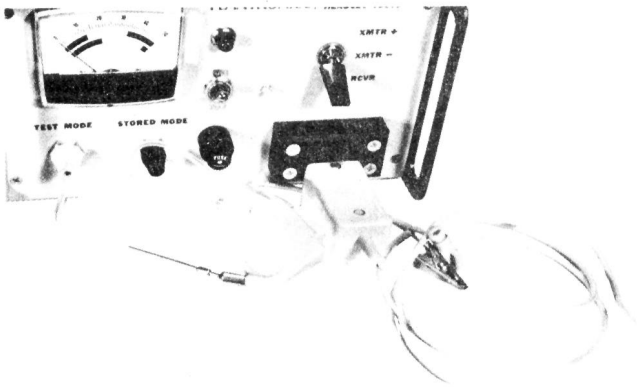
   d. The next headset can be tested by moving the mode switch from RCVR back through to XMTR +. (There is no need to reset the switch each time.)

Notes:

1. Intermittent continuity in the cordage can be identified by gently twisting, bending, and pulling the cords during XMTR and RCVR tests. Sudden changes in the meter reading indicate intermittent connections.

Caution: Bumping the capsule during XMTR testing will cause the meter to jump and should not be confused with intermittent cordage.

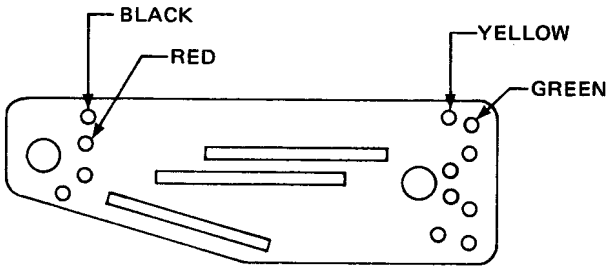
2. Headsets reading low in both XMTR + and XMTR − may have a plugged acoustic tube. Install a known good acoustic tube and repeat reading.

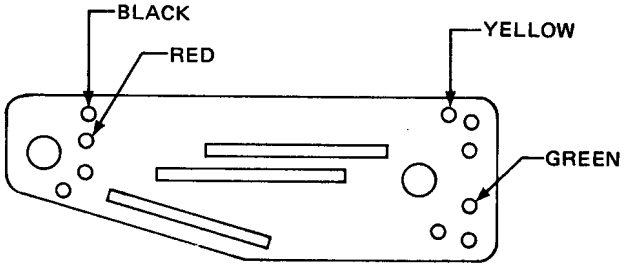


Typical Headset Setup for Testing
Fig. 3

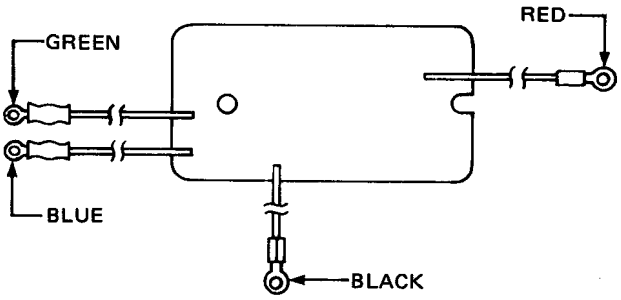
Amplifiers

3.03 To test an amplifier, four clip lead connections to the amplifier must be made. See Fig. 4 for KS-20778 and Fig. 5 for KS-19796 for identification of amplifier terminals to which the colored clip leads on top of the tester must be connected. (See Fig. 6 for typical test setup.)



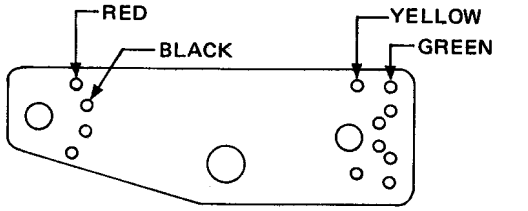


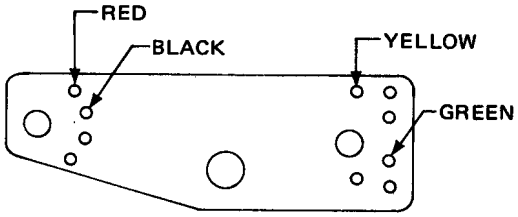
CONNECT CLIP LEAD OF
COLOR SPECIFIED TO
TERMINAL INDICATED



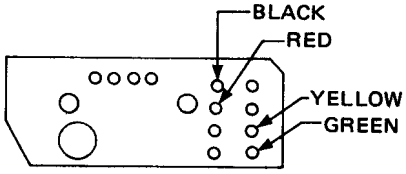
CAUTION: Use KS-20778 capsules only with these amplifiers.

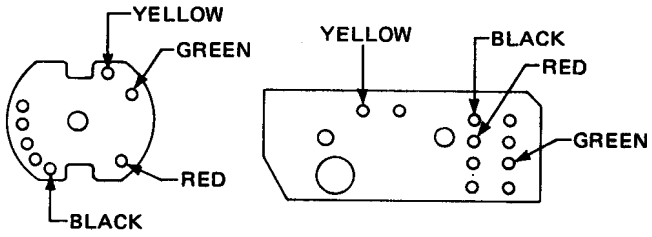
Amplifier Connections KS-20778
Fig. 4





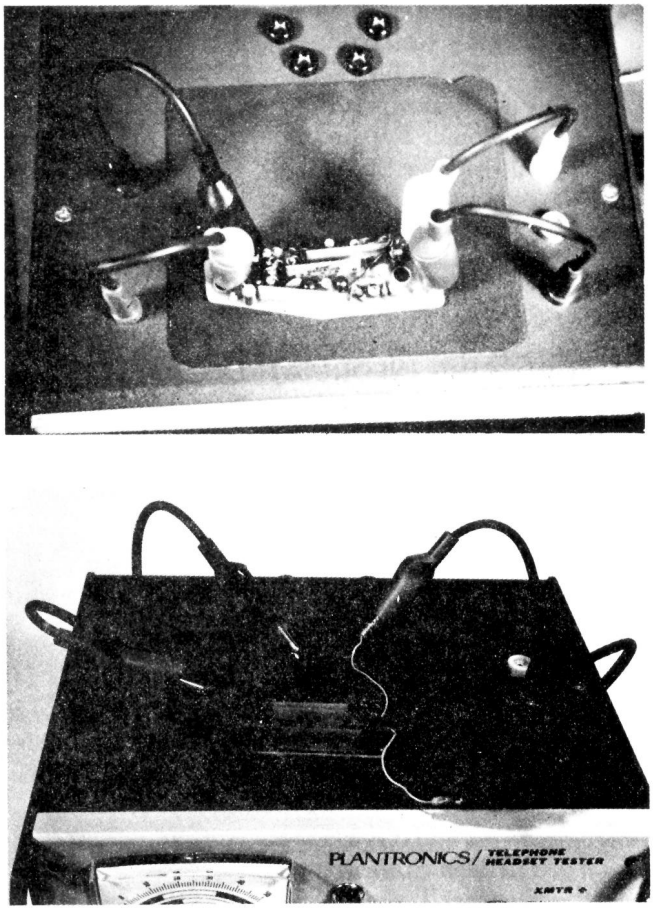
CONNECT CLIP LEAD OF
COLOR SPECIFIED TO
TERMINAL INDICATED





CAUTION: Use KS-19796 capsules only with these amplifiers.

Amplifier Connections KS-19796
Fig. 5



Typical Amplifier Test Setup
Fig. 6

3.04 The input signal to an amplifier is derived from a capsule, so it is necessary to use a known good capsule for this test.

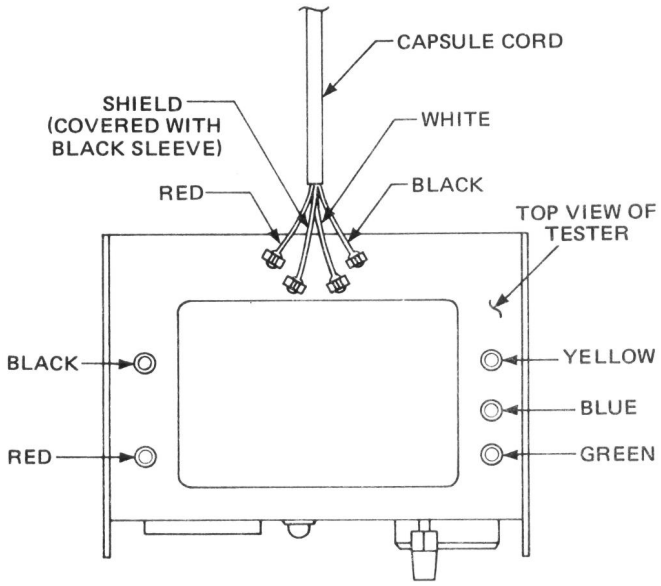
Caution: Use only the specified capsule per Figs. 4 and 5 when testing.

3.05 Connect capsule to the test unit per Fig. 7 and insert acoustic tube into appropriate sound port. Test amplifier in XMTR + and XMTR − positions of the mode switch. (See 2.01 for levels.)

Capsules

3.06 Connect a known operating amplifier per Figs. 4 or 5. (See Fig. 7 for capsule connections.) Test capsules in XMTR − and RCVR positions of the mode switch. (See 2.01 for levels.)

Caution: Use only a specified amplifier for testing each capsule.



Capsule Cord Connections
Fig. 7

4. MAINTENANCE

4.01 The Plantronics Company guarantees these sets for one year. Defective sets will be repaired or replaced at no charge. Sets out of guarantee will be subject to a charge for refurbishing.

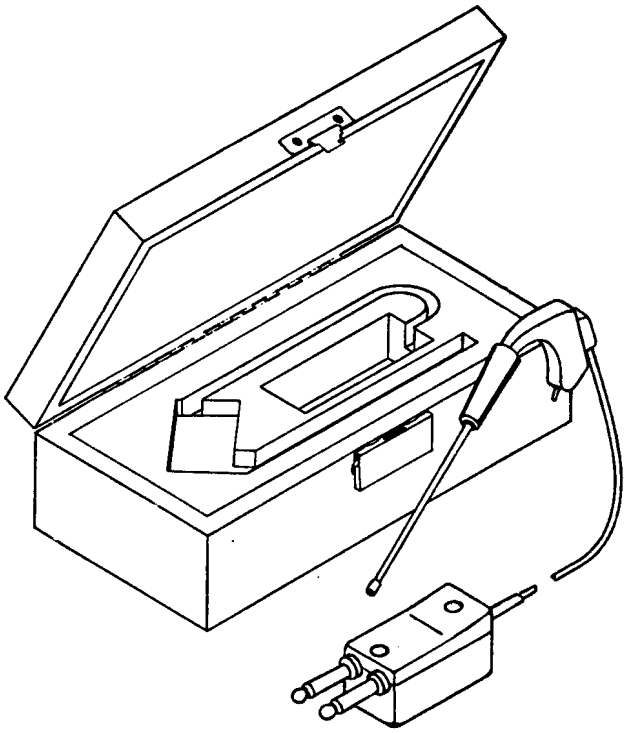
4.02 Other than possible replacement of the AC power cord and transmitter acoustic ports no other maintenance shall be done by field forces.

4.03 Replacement acoustic ports must be assembled as shown in Fig. 8. Mount clear port on the long metal stud and black port on the short metal stud.

Acoustic Ports
Fig. 8

4.04 To determine if the headset tester requires recalibration or repair, the calibration standard may be used. (See Fig. 9.) Test procedure is as follows:

1. Install clear port at TEST MODE position.
2. Connect calibration standard. Levels shall be as indicated in 2.01.



Calibration Standard
Model TS-0139
Fig. 9

4.05 When determined as defective, return the headset tester to:

Plantronics, Inc.
Customer Repair Department
108 Dubois Street
Santa Cruz, CA 95060

Note: Include information identifying the problem when returning tester.

5. ORDERING INFORMATION

5.01 Order the headset tester and the calibration standard via direct purchase from the manufacturer:

Plantronics, Inc.
Attn: Order Service Department
P.O. Box 635
Santa Cruz, CA 95060
(408) 426-5858

5.02 To order tester, use the Purchase Order Form GTP 2-FA as specified in SI 70, Section 3. Send pink copy of Purchase Order to:

Division Staff Manager
General Trade Products (GTP)
Room 226
140 New Montgomery Street
San Francisco, CA 94105

5.03 Order Wording —

(Qty) Headset Tester Plantronics, TS-0133
(Qty) Calibration Standard, TS-0139