

# TB SIG 286

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

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## HEADSET H - 113 / U

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Department of the Army, Washington 25, D. C.

18 October 1955

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**1. Scope.** This bulletin provides instructions for the installation, operation, and maintenance of Headset H-113/U.

**2. Forms and Records.** The following forms will be used for reporting unsatisfactory conditions of this headset:

a. DD Form 6 (Report of Damaged or Improper Shipment) will be filled out and forwarded as prescribed in SR 745-45-5 (Army) ; Navy Shipping Guide, Article 1850-4 (Navy) ; and AFR 71-4 (Air Force).

b. DA Form 468 (Unsatisfactory Equipment Report) will be filled out and forwarded to the Office of the Chief Signal Officer as prescribed in SR 70045-5.

c. DD Form 535 (Unsatisfactory Report) will be filled out and forwarded to Commanding General, Air Materiel Command, Wright-Patterson Air Force Base, Dayton, Ohio, as prescribed in SR 70045-5 and AF TO 00-35D-54.

d. Use other forms and records as authorized.

**3. Purpose and Use.** Headset H-113/U is designed for use under the regular steel helmet or the armored vehicle crash helmet. It is used principally with radio equipment, but can be used with wire equipment to which the characteristics of the headset are adaptable.

**4. Description.** Headset H-113/U (fig. 1) consists of two earphones which are mounted on an adjustable headband, and a connecting cord and plug. The earphones are provided with rubber ear cushions. The cord extends approximately 18 inches from the right-hand earphone, and is terminated in a plug. The headset has an impedance of 600 ohms at 1,000 cycles per second.

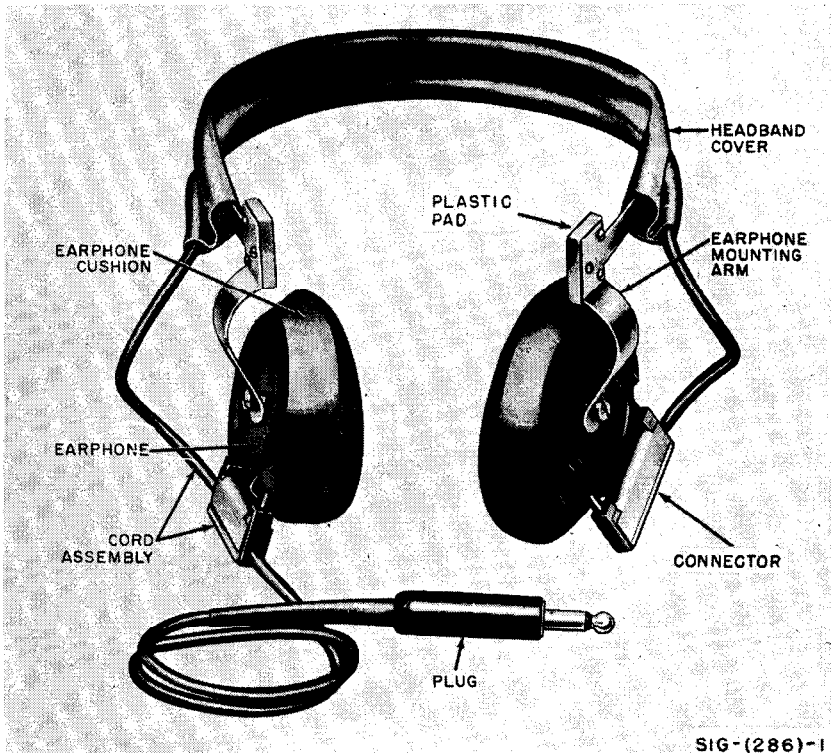


Figure 1. Headset H-113/U.

**5. Packaging Data.** Headset H-113/U is wrapped in cushioning material. It is then inclosed in a close fitting carton.

**6. Installation and Operation.** a. Place the headset on the head with the plastic mounting arm pads toward the front of the head. Adjust the headset by sliding the earphone mounting arms up or down on the headband until the earphone cushions are positioned securely over the ears.

b. Insert the plug on the end of the cord into the jack which is connected to the radio or wire equipment.

c. Headset H-113/U is designed for operation in temperatures from 65° below zero to 132° above zero. It is moistureproof and fungus resistant.

**7. Preventive Maintenance Techniques.** a. Use a clean, dry, lint-free cloth or a dry soft brush for cleaning.

b. If necessary, clean all parts except plug contacts, with a cloth or brush lightly moistened with solvent, dry cleaning (SD) ; then wipe the parts with a clean, dry, lint-free cloth.

c. Clean electrical contacts with a dry cloth and plug polish.

**Caution:** Do not push any sharp object through the holes in the earphones.

8. Organizational Maintenance. a. *Tools and Equipment.* The following tools and equipment are required for organizational maintenance of Headset H-113/U:

Screwdriver TL-455/U

Screwdriver TL-21

Open-end wrench, ¼-inch

Multimeter TS-297/U

b. *Maintenance Procedure.*

(1) Tighten loose connections and earphone mounting screws.

(2) Make electrical continuity check of cord assembly and earphones.

(3) Replace defective earphones.

9. Field Maintenance. a. *Tools and Equipment.* The following tools and equipment are required for field maintenance of Headset H-113/U :

Screwdriver TL-455/U

Screwdriver TL-21

Open-end wrench, ¼-inch

Screwdriver TL-523/U

Pliers TL-126

Pliers TL-103

Knife TL-29

Multimeter TS-352/U

Test Set 1-142, I-142-A, or I-142-B

b. *Maintenance Procedure.*

(1) Tighten loose connections and earphone mounting screws.

(2) Make electrical continuity check of cord assembly and earphones, using Multimeter TS-352/U.

(3) Replace defective earphones.

(4) Replace defective cord assembly.

(5) Replace defective plug.

(6) Replace headband.

(7) Make receiving efficiency test on headset as explained in TM 11-2062, Test Sets I-142, I-142-A, and I-142-B.

## 10. Troubleshooting Chart.

Symptoms	Probable trouble	Correction
No reception.	Plug not seated in jack properly.	Insert, plug securely in jack.
Intermittent reception. Weak reception.	Bad connection at plug terminal or earphone connector.	Tighten all electrical connections.
	Defective cord assembly.	Replace cord assembly.
	Short circuit or partial short circuit in plug.	Check plug connections or replace plug.
	Defective earphone.	Replace earphone.
	Defective earphone.	Replace earphone.
Distorted signal.	Defective earphone.	Replace earphone.

## 11. Disassembly and Reassembly (fig. 2). a. *Disassembly.*

- (1) Carefully pull back the edges of the earphone cushion (2) to gain access to the set screws (16) located on each side of each earphone (3), and loosen the set screws. *Do not remove the set screws.*
  - (2) Pull the connectors (4) out of the earphones.
  - (3) Remove the screws (6) and lockwashers (5) at the rear of each earphone, and remove the earphones from the earphone mounting arms (7).
  - (4) Carefully pull back the rear edges of the earphone cushions, and remove the cushions from the earphones.
  - (5) Remove the screws (8) and lockwashers (9) from the earphone mounting arms (7), and slide each arm from the headband (11).
  - (6) Slide the headband ( 11) out of the headband cover (1).
  - (7) Unscrew the plug shell (12) and slide it onto the cord assembly (17).
  - (8) Remove the cord clamp (13).
  - (9) Remove the screws (14) and pull the plug body (15 ) from the cord assembly.
  - (10) Slide the plug shell from the cord assembly.
6. *Reassembly.* Reverse the procedure outlined in (1) through (10) above. When connecting the cord assembly (17) to the plug

body (15 ), connect the white lead to the tip terminal, and the black lead to the sleeve terminal (fig. 3).

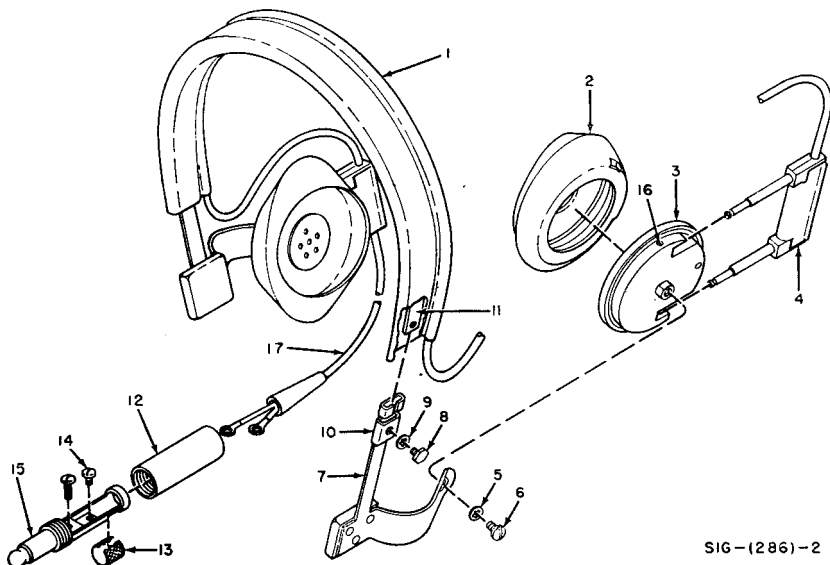


Figure 2. Headset H-113/U, exploded view.

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| 1. Headband cover.                     | 9. Lockwasher (Internal teeth, No. 4). |
| 2. Earphone cushion.                   | 10. Slide.                             |
| 3. Earphone.                           | 11. Headband.                          |
| 4. Connector.                          | 12. Plug shell.                        |
| 5. Lockwasher (Internal teeth, No. 5). | 13. Cord clamp.                        |
| 6. Screw (Fillister head, No. 5--4).   | 14. Plug terminal screws,              |
| 7. Earphone mounting arm.              | 15. Plug body.                         |
| 8. Screw (Hexagonal head, So. 4-40) .  | 16. Earphone set screw.                |
|  | 17. Cord assembly.                     |

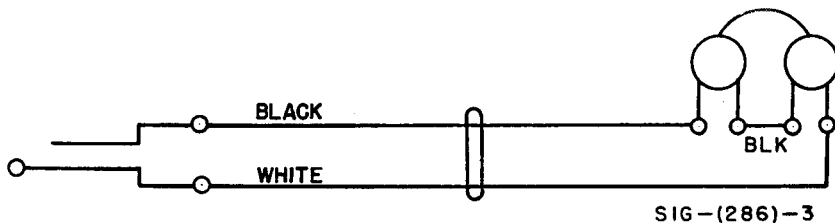


Figure 3. Headset H-113/U, schematic diagram.

**12. Demolition to Prevent Enemy Use. a. Smash.** Smash the earphones, connectors, earphone mounting arms, headband, and plug; use sledges, axes, handaxes, pickaxes, hammers, crowbars, or other heavy tools.

**6. Cut.** Cut the cord, headband cover, and ear cushions; use axes, handaxes, or machetes.

c. Burn. Burn the earphone cushions, cord, and headband cover; use gasoline, kerosene, oil, flame throwers, or incendiary grenades.

d. *Disposal.* Bury or scatter the destroyed parts in slit trenches, fox holes, or throw them into streams.

e. *Destroy.* Destroy everything.

BY ORDER OF THE SECRETARY OF THE ARMY:

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*Chief of Staff.*

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NG: State AG (6) ; units—same as Active Army except allowance is one copy to each unit.

USAR: None.

For explanation of abbreviations used, see SR 320-50-1.



