

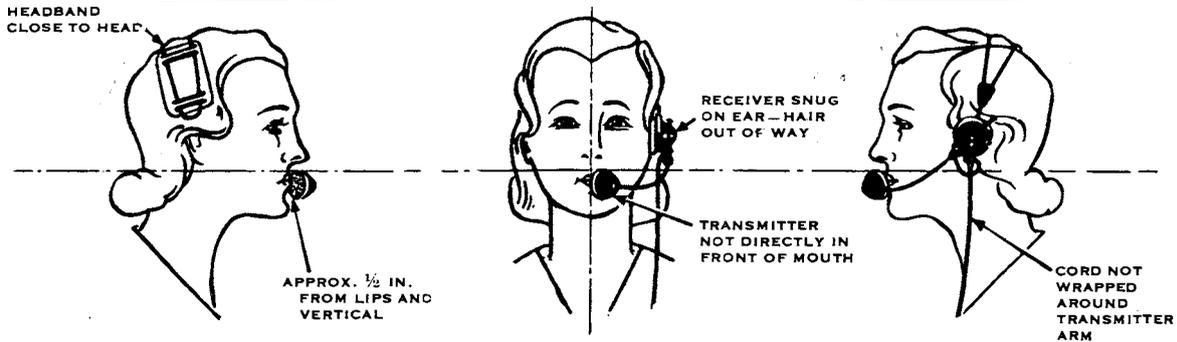
**NO. 52 TYPE  
HEAD TELEPHONE SET**

**INSTRUCTION BULLETIN NO. 1133  
ISSUE NO. 3**

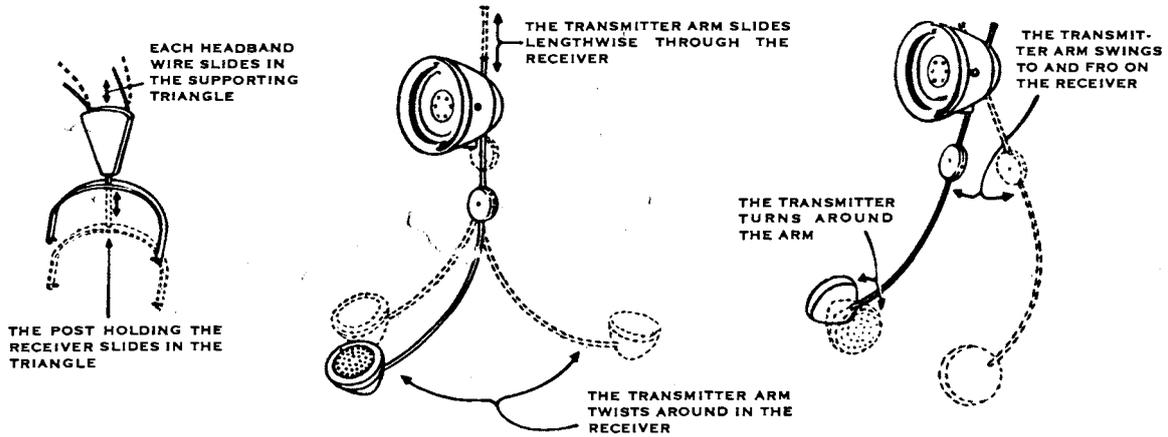


***Western Electric***

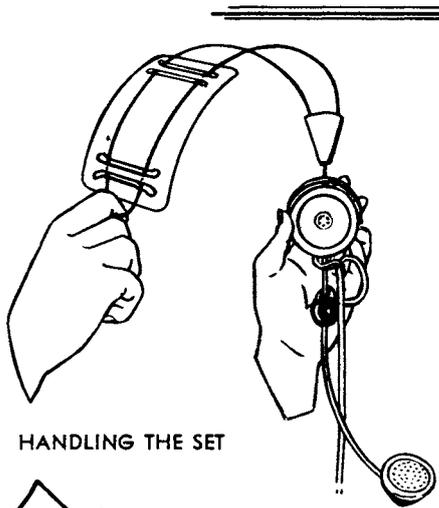
# 52 AW HEAD TELEPHONE SET



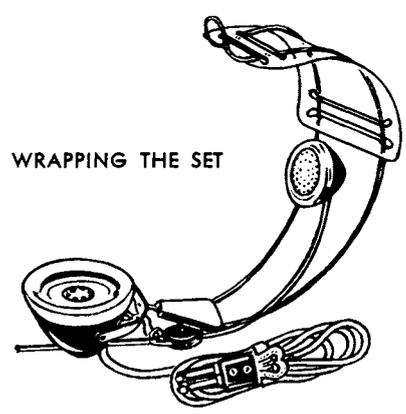
TO GET THE POSITION ILLUSTRATED ABOVE, ADJUSTMENTS ARE PROVIDED WHICH SHOULD BE THOROUGHLY UNDERSTOOD



IN ADJUSTING THE ARM, HOLD THE RECEIVER FIRMLY IN ONE HAND AND GRASP THE ARM DIRECTLY BELOW THE BLACK DISC WITH THE OTHER HAND.



NEVER HOLD OR CARRY THE SET BY THE TRANSMITTER ARM



- 1 DROP THE HEADBAND FORWARD AND OVER THE RECEIVER AND TURN IT SO THAT WIRES LIE ALONG THE ARM
- 2 BRING PLUG UP TO RECEIVER, THEN FOLD CORD AND SNAP FASTENER AROUND FOLDS AS SHOWN
- 3 PLACE IN CABINET WITH TRANSMITTER AND RECEIVER FACES UP AS SHOWN



## *Western Electric*

### **INSTRUCTIONS FOR ADJUSTMENT AND HANDLING OF 52AW, 52BW, 52CW AND 52DW HEAD TELEPHONE SETS**

#### **1. General**

The 52AW set is for general operator use; the 52BW set has a longer cord for supervisor's use; the 52CW set is primarily intended for use in circuits where a high impedance receiver is required; the 52DW set has a 15-foot cord for night operator's use.

The illustrations on the opposite page show the adjustments, position and handling of the sets. The following notes outline in more detail their care and use.

#### **2. Correct Position for the Set**

The receiver and head band should, of course, be in the usual comfortable position, but the effectiveness of the set depends on the proper position of the transmitter. Especial care should be taken therefore that the following conditions are fulfilled whenever the sets are in use.

A. The center of the face of the transmitter should be a little below the lips of the user and slightly to one side of the center of the lips. This position minimizes the breath sound picked up by the transmitter. The old style horn type transmitters differed in this respect in that they were located directly in front of the mouth to attain best results.

A close approximation to this position can be obtained after the user has become familiar with the set, by having the

transmitter just touch the hand when placed horizontally just above the lips, and again when the hand is held vertically against the lips, just to the far side of the center of the mouth.

- B. The face of the transmitter should be as nearly vertical as possible when the head is in normal operating position so that the transmitter will pick up a maximum voice sound and a minimum of room noise.
- C. The transmitter should be about one-half inch from the lips and should never touch them. This permits the fingers to pass between the lips and the transmitter just grazing both, since the fingers are about one-half inch thick.
- D. The transmitter arm should follow the line of the lower jaw and generally be low and close to it, so as not to obstruct the vision.

Ample flexibility is provided through the various adjustments in the head band, the transmitter arm and the transmitter itself as discussed later to give comfort in use and to achieve the correct position for optimum performance.

#### **3. Precautions in Handling the Set**

Since the set has been made lighter and more sensitive, it must be handled with care. The user should become familiar with the follow-

ing precautions and always observe them in handling, adjusting, and using the set.

- A. When putting the set on or taking it off and when handling it generally, always hold it by the receiver. Never hold it by the transmitter or transmitter arm since damage to the set is more likely when it is held in that way. The picture in the lower left-hand corner of the illustration shows the proper method of holding, although it is not always necessary, of course, to hold the head band.
- B. When wearing the set see that the cord hangs between the transmitter arm and the cheek rather than outside the transmitter arm.
- C. When moving the transmitter arm to proper position, be sure that the cord does not become wrapped around the arm.
- D. When sliding the transmitter arm up or down, it should be grasped just below the black disc on the arm. Holding the transmitter or the disc may damage either of these parts.
- E. Always hold the plug in one hand when handling the set so that the cord will not swing from or put a strain on the connection with the receiver and so the plug will not be dropped to the floor.
- F. When wearing a 52BW or 52DW set always use the braided loop to prevent the long cord from pulling on the head set, wearing the loop on the wrist or on the belt.

#### **4. Manipulating the Parts of the Set**

A number of adjustments are provided so that the set may be fitted satisfactorily to the head. The user should become familiar with all possible movements of the head band, transmitter arm, and transmitter as shown in the illustrations before the set is worn for the first time, so that the user will not only be able to produce each motion but will understand what it is for.

- A. Each wire of the head band moves in and out of the triangular block and this block slides up and down on a post to care for different head sizes. The latter motion allows for the height of the head above the ear, and the wire adjustments accommodate the size, shape, and contour of the individual head.
- B. The transmitter arm slides up and down through the back of the receiver to vary the distance between the receiver and the transmitter.
- C. The transmitter arm twists in the back of the receiver. By this movement the distance between the transmitter and the mouth can be varied.
- D. The transmitter arm and the back of the receiver through which it passes swing around an axis in the receiver. This motion allows the transmitter to be raised or lowered with respect to the mouth.
- E. The transmitter turns partially around on the arm so that it is possible to keep the transmitter at the proper angle.

#### **5. Adjusting the Set**

The following procedure is recommended when a set is being fitted to an individual for the first time. Thereafter, if the same set is used continuously by the same person all the steps described here will not be required each time the set is put on. Also, the order of procedure may be varied and the steps repeated until the necessary adjustments have been made to assure that the set is properly fitted and arranged. A mirror will be helpful to check the appearance of the set on the user in relation to the illustrations until sufficient familiarity with the set is attained so that the correct position can be determined by the "feel".

First, arrange the head band and receiver firmly and comfortably on the head and then adjust the transmitter, observing the following steps.

A. Adjust the receiver to the head. Before placing the set on the head, push the wires and the post of the head band all the way down, push the pad toward the free end of the head band, and pull out the transmitter arm to its maximum length, swinging it up and twisting it outward so that it will not touch the chin in the first steps.

- (1) Holding the receiver in one hand and the free end of the head band in the other, place the set on the head.
- (2) Holding the free end of the head band with one hand, pull the receiver down with the other hand until it is comfortable on the ear.
- (3) Holding the receiver firmly in position with one hand, with the other hand pull up the wires as needed to obtain a proper fit across the head.
- (4) Move the pad to the most comfortable position.
- (5) If the head band is tight or loose, remove the set and change the curve of the wires as required. First grasp the set by the triangle on the head band post and the free end of the head band. Then momentarily pull the band out straight to loosen the pressure or swing the outside end toward and past the triangle, first on one side of it, then on the other, to increase the pressure. In the operation to increase the pressure, the free end of the band must be kept close to the triangle or the wires will turn in their mounting and no benefit will be obtained.

B. Adjusting the Transmitter. Hold the receiver firmly against the ear with one hand so as not to lose the head band adjustment while arranging the transmitter with the other hand. Use the various transmitter adjustments shown in the illustrations to bring the transmitter into the position described in "2". The following order is generally applicable but need not be followed if a more satisfactory sequence is found.

- (1) Swing the transmitter arm down on its axis in the receiver so that the arm comes close to the line of the lower jaw.
- (2) Twist the transmitter arm around in the receiver until the edge of the face of the transmitter farthest from the receiver is about in front of the center of the mouth and turn the transmitter around gently on the arm to face the lips so that it is approximately vertical.
- (3) Bring the top edge of the face of the transmitter approximately to a level with the top of the upper lip by further movement as described in "(1)."
- (4) Push the transmitter arm up through the receiver until the transmitter is about one-half inch from the lips.
- (5) Look in the mirror and make sure that the transmitter is placed as shown in the illustrations and as described in "2" and make any further adjustments necessary to assure this position.

#### **6. Removing the Set from the Head**

Grasp the receiver and the head band in the same manner as in putting the set on and lift it off.

#### **7. Changing from One Ear to the Other**

Remove the head set and swing the transmitter arm so that the transmitter is in the opposite direction. Then put on the set and make the necessary adjustments as described in "5"

#### **8. Suggestions for Wrapping the Set for Storage**

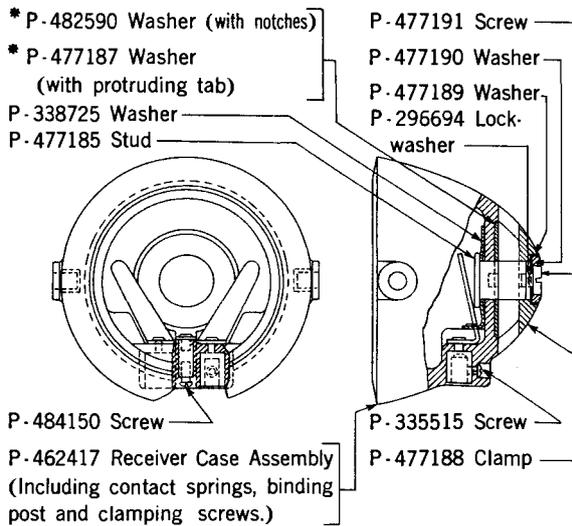
The following method for wrapping the set is recommended to avoid disturbing the adjustments any more than necessary and to prevent excessive wear of the set or the cord from sharp bending or twisting.

- A. After removing the set from the head and while still holding it in both hands, swing the entire head band down across the face of the receiver at the same time giving the head band a turn on the post so that the wires of the head band will lie roughly along the transmitter arm. Allow the head band to assume this position freely without twisting or altering the adjustments in any way.
- B. Hold the set in one hand so that the transmitter arm and the head band are hanging down. Place the plug beside the receiver so that the cord band with the glove fastener is just within the lower edge of the hand. Then proceed as follows.
  1. Set with Regular Cord. (52 AW or 52 CW). With the free hand bring the loop made by the cord up a little above the plug, grasp it with the hand holding the set, and then repeat this operation. Then secure the folds of the cord by snapping the cord strap, attached to the plug, around the cord folds seeing that none of the other parts of the set are within the strap.
  2. Set with Retractable Cord. (52 BW or 52 DW). With the free hand grasp the cord a little below the retractile coil and bring it up to the hand holding the set. Hold the loop with the hand holding the set so that the two ends of the retractile coil are even and the straight cord makes a small loop a few inches above the hand holding the set. Then, leaving the retractile coil alone, bring the free loop of the straight cord up and grasp it so that this new loop is even with the first loop. Repeat this operation once more and then fasten the cords together with the cord strap, attached to the plug, seeing that none of the retractile coil nor any other part of the set is within the strap.
- C. Place the set in the storage compartment receiver first with the head band and receiver arm lying more or less horizontally. Do not attempt to wrap the cord around the set in any way but if a retractile cord is involved, fold this on one side of the set so that it does not protrude from the compartment.

APPARATUS LIST

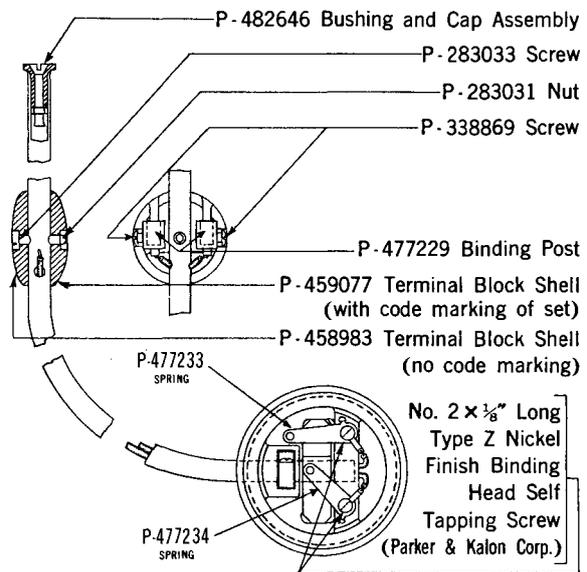
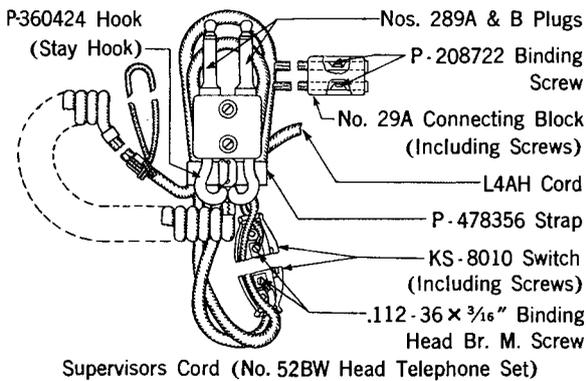
- 55AW Transmitter Arm
- NI Transmitter Unit
- 10A Receiver Holder
- HC3 Receiver Unit
- HC4 Receiver Unit
- 15A Headband
- L4AG Cord
- L4AH Cord (10 Ft. Retractable)
- L4AK Cord (15 Ft. Retractable)
- 289B Plug
- P-458981 Transmitter Cap
- P-16A600 Receiver Cap
- P-478356 Cord Fastener
- KS-8010 Switch
- 29A Connecting Block

Head Telephone Set			
52AW	52BW	52CW	52DW
1	1	1	1
1	1	1	1
1	1	1	1
1	1	—	1
—	—	1	—
1	1	1	1
1(5 Ft.)	—	1(7 Ft.)	—
—	1	—	—
—	—	—	1
1	1	1	1
1	1	1	1
—	1	—	—
—	1	—	—

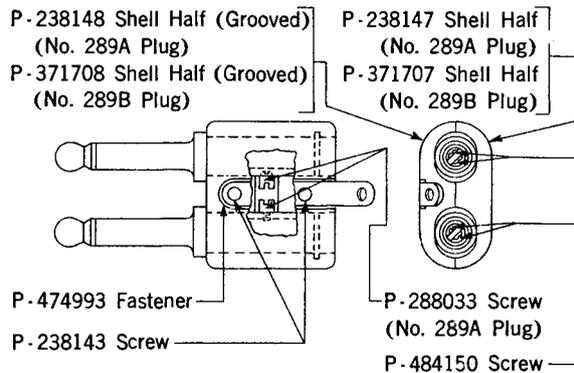


\* When a receiver case assembly is to be replaced and the washer has a protruding tab (P-477187,) order the P-482590 washer as well as the receiver case assembly.

No. 10A Receiver Holder



No. 55AW Transmitter Arm Assembly



Nos. 289A and B Plugs

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