

**CAPSULE TRANSMITTER
ADAPTER KIT
FOR TYPE 38 HANDSET**

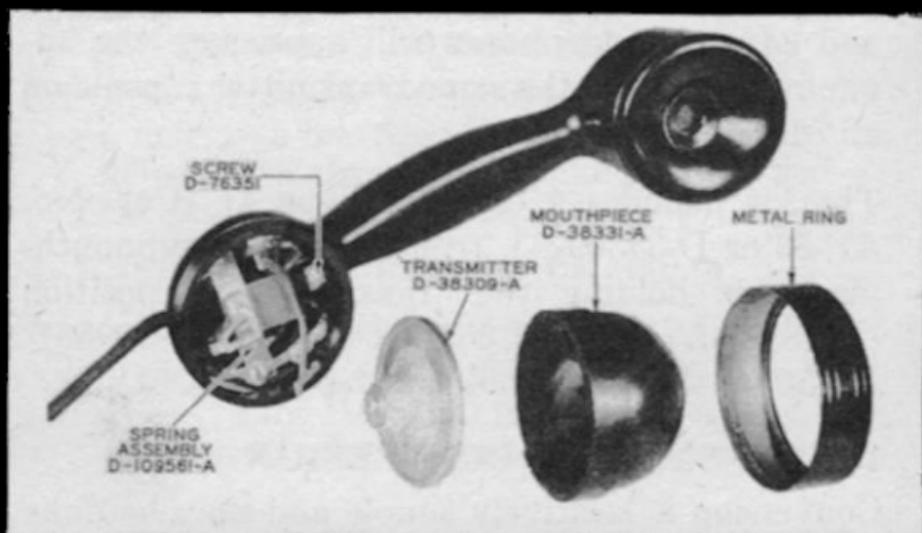


Fig. 1 A Converted Type 38 Handset

**AUTOMATIC ELECTRIC
COMPANY**

333 W VAN BUREN STREET · CHICAGO, ILLINOIS

CAPSULE TRANSMITTER ADAPTER KIT FOR TYPE 38 HANDSET

Including Type 41 Transmitter, Mouthpiece, and Conversion Springs

This adapter kit provides the necessary parts for placing the standard Type 41 Capsule Transmitter in the Type 38 and similar handsets which were originally arranged to include the Types 35A7 or 5 transmitters. These transmitters were used on Types 34A3, 35A5, 1, 4, 8, 10, 18, 371B, in two-line, in bracket, and in outdoor Monophones.

Telephone companies operating Types 40, 43, 50 and 34A3B Monophones will appreciate the advantages of using the same transmitter capsule on all Monophones.

The kit includes a capsule, Type 41 (Cat. No. AF-53 or D-38309-A), transmitter, a new mouthpiece for holding the transmitter in position (D-38331-A), a set of contact springs (D-109561-A), and a short cord holder screw (D-76351).

1. TRANSMITTER CONVERSION

Conversion is relatively simple and may be done on the subscriber's premises as no soldering is involved.

- 1.1 Unscrew the metal ring which holds the mouthpiece in place.
 - (a) Grasp the handset in the right hand, with the transmitter end up and the right thumb firmly pressed against the left inner side of the mouthpiece. (See Fig. 2.)
 - (b) Grip the metal ring with the thumb and forefinger of the left hand and turn the ring in a counterclockwise direction. If the fingers should slip when attempting to unscrew the ring, wrap a large rubber band or a piece of friction tape around the ring.

- (c) When removing or replacing the mouthpiece, see that the mouthpiece itself is not twisted and that the moulded keys are properly seated so that no damage may occur to them.
- 1.2 Lift off metal ring and old mouthpiece.
 - 1.3 Remove the transmitter assembly.
 - 1.4 Disconnect transmitter lead wires by removing the two terminal screws "a" & "b" on the handset shell (Fig. 3). These wires will not be reused.
 - 1.5 Replace the high stay-cord screw, "c," (if present) with the short screw (Fig. 3) supplied with the kit. Secure the stay-cord.
 - 1.6 Take the spring assembly from the kit. Place it in the handset shell as shown in Figs. 1 & 3, with the prongs pointed outward and the bend inward toward the stay-cord screw.

The flat strip of the spring assembly is placed against the plastic shell so that the hole in either end coincides with the tapped holes in the plastic.

- 1.7 Place the shunting link "d" (Fig. 3) over the spring strip (Fig. 1).
- 1.8 Replace the terminal screws "a" and "b" loosely.

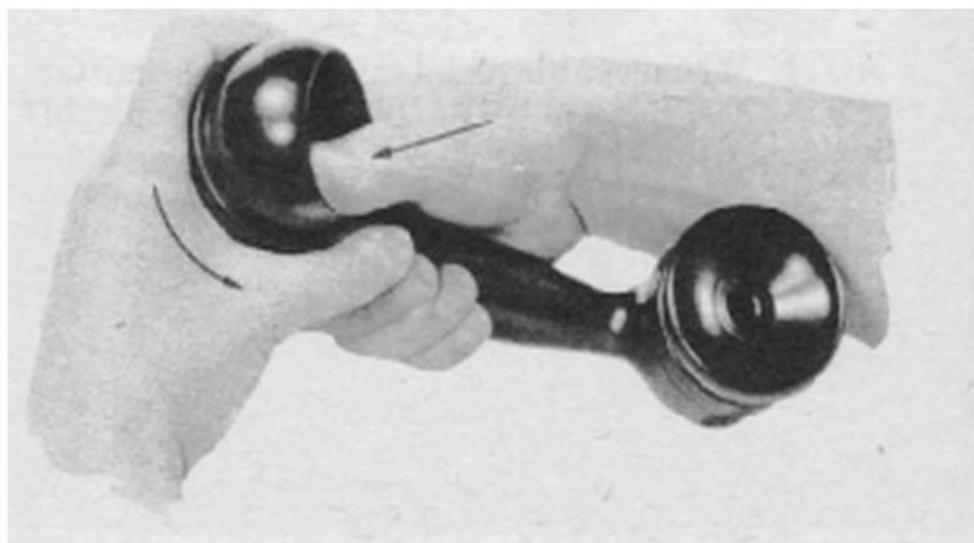


Fig. 2 To Remove Mouthpiece, Turn Metal Ring in a Counter-Clockwise Direction Holding Moulded Piece with Thumb

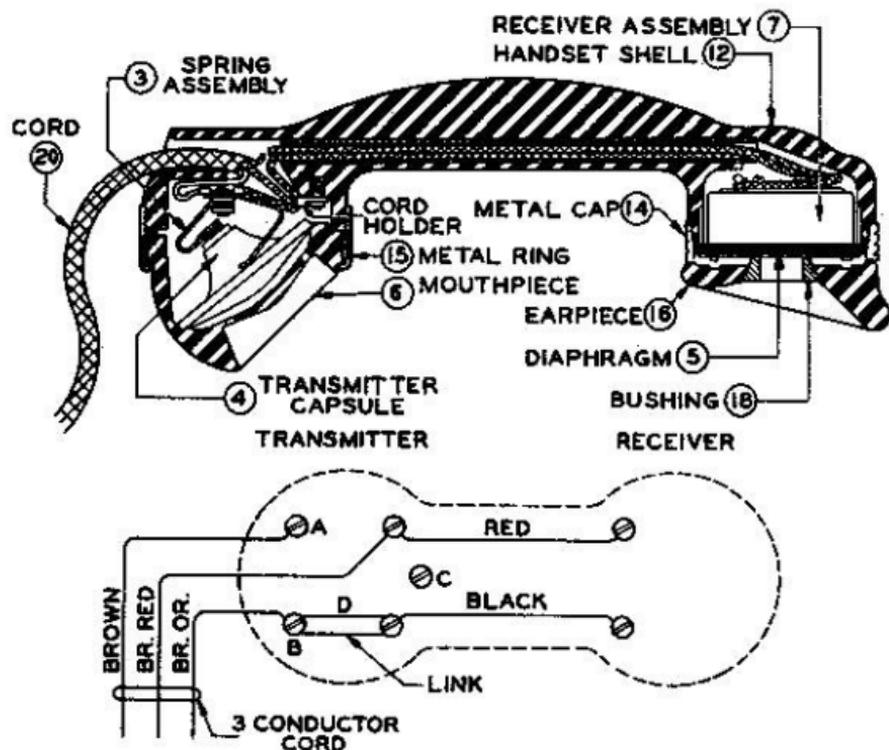


Fig. 3 Cross-Section of a Type 38 Handset Including a Wiring Diagram

- 1.9 Replace the cord clips as before—the brown-orange lead going to the link side and the plain brown to the open side. Tighten the terminal screws.
- 1.10 Take the metal ring in the right hand. Drop the new mouthpiece downward into the ring.
- 1.11 Still holding the ring and mouthpiece in the right hand, slip the capsule type transmitter face-downward into the mouthpiece. The capsule will seat at an angle parallel to the perforated face of the mouthpiece.
- 1.12 Take the handset in the left hand and lower face-downward onto the transmitter unit held in the right hand, aligning the moulded keys. (See Fig. 1.)
- 1.13 Put the thumb of the left hand against the inner side of the mouthpiece so as to hold the mouthpiece tightly against the handset shell. Turn the handset so that the transmitter faces upward.

- 1.14 Pressing downward with the left thumb on the right inner side of the mouthpiece, check that keys of the mouthpiece are in place so that it will not turn when the ring is tightened.
- 1.15 Grasp the metal ring between the thumb and forefinger of the right hand. Turn in a clockwise direction until tight. The conversion has now been made.

2. FUTURE REPLACEMENTS OF TRANSMITTER

- 2.1 Unscrew the metal ring as detailed in 1.1 above.
- 2.2 Hold the left hand over the mouthpiece and turn the handset face down. The mouthpiece and transmitter capsule will fall free.
- 2.3 A new transmitter should be substituted for a defective one according to 1.11 above. The defective transmitter should be returned to the manufacturer for repairs.

3. REMOVAL OF EAR PIECE (Fig. 4)

- 3.1 Grasp metal receiver cap in the left hand.
- 3.2 Insert the nut end of the combination wrench H-43172 (or H-50754) into the octagonal hole of the ear piece bushing and turn wrench in a

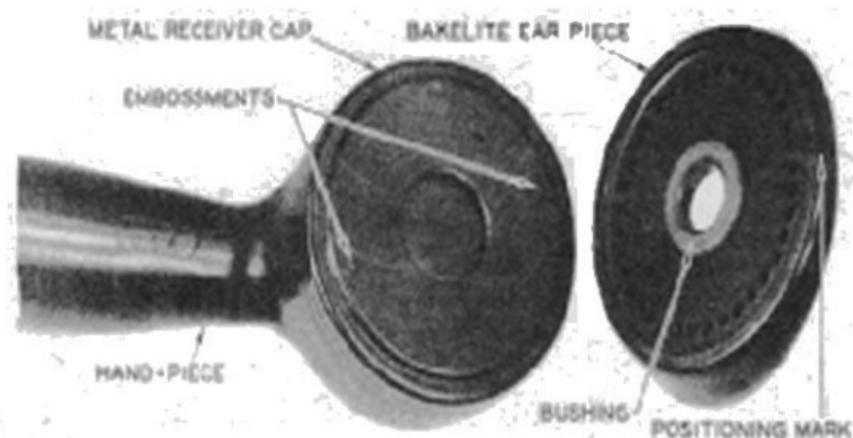


Fig. 4 View Showing Receiver End of Handset with Ear Piece Removed

counterclockwise direction. The plastic ear piece will now fall free from the metal receiver cap which holds the diaphragm in place.

4. REMOVAL OF METAL CAP AND DIAPHRAGM

Unscrew metal receiver cap by turning the metal ring in a counterclockwise direction. This can be done without removing the ear piece.

Repairs to the receiver assembly should not be attempted beyond replacing the diaphragm. New receiver units should be used to replace faulty assemblies and the latter returned to the manufacturer for repairs.

5. REPLACEMENT OF EAR PIECE

5.1 Tighten metal receiver cap.

5.2 Set the ear piece on the metal receiver cap such that the positioning mark on the periphery of the ear piece will approximately align with the center of the hand piece. In doing this, see that the two embossments on the receiver cap engage two diametrically opposite holes of the series encircling the bottom of the ear piece.

NOTE Whenever the metal ear cap or transmitter ring is removed, apply three drops of switch lubricant (Spec. 5232) or a light grade of machine oil to the threads of the metal ring before reassembling.