

TELEPHONE SETS
507, 509, 532, 533, 535, 536, 557, AND 559 TYPES (AMPLIFIER)
IDENTIFICATION AND ASSEMBLY OF PARTS

1.00 INTRODUCTION

1.01 This section covers the identification and assembly of parts of 507-, 509-, 532-, 533-, 535-, 536-, 557-, and 559-type (amplifier) telephone sets.

1.02 Information on the 507-, 509-, 532-, 533-, 535-, and 536-type (amplifier) telephone sets was previously covered in C38.595.00.

1.03 The 557- and 559-type (amplifier) sets are wall type and will be included in this section.

2.00 GENERAL

2.01 Code numbers, such as 507AR/BR, cover both manual and dial versions of each type telephone set. This permits converting to either without changing the code number stamped on the base. The letter R has been added to indicate that the sets are equipped with spring handset cords.

2.02 Description of telephone set components (ie, handsets, ringers, dials, etc) may be found in the C Section pertaining to these items.

2.03 Assembly, disassembly, and general information covering these sets may be found in the C Section entitled Telephone Sets, 500, 501, 554, and 556 Types, Identification and Assembly of Parts.

3.00 IDENTIFICATION

3.01 Amplifier-type telephone sets are for use in common battery areas, manual or dial.

3.02 All components including amplifier and tube are mounted on a metal base. The network, line switch, and amplifier are riveted to the baseplate and are not to be replaced in the field.

3.03 A transmission equalizer is provided in the 425B- and C-type networks.

- Sets coded 507A/B and 509A/B have a 151C amplifier and a 425C network. (See Note.)
- Sets coded 557A/B and 559A/B have a 151F amplifier and a 425C network.
- Sets coded 532A/B, 533A/B, 535A/B, and 536A/B have a 425B network.

Note: All 507A/B and 509A/B telephone sets manufactured after April 1, 1962, may be equipped with the 151F amplifier.

3.04 All 500-type sets are manufactured with 7-type dials. Distributing houses will replace 7-type dials with a 95-type apparatus blank when manual sets are specified.

3.05 All 500-type amplifier sets are manufactured with a C4A ringer. Earlier 500-type sets were manufactured with the C2A ringer. The volume of these ringers may be adjusted to one of four levels. A modification can be made to provide bell cutoff when authorized locally.



Fig. 1 — 507-Type Set, Exterior

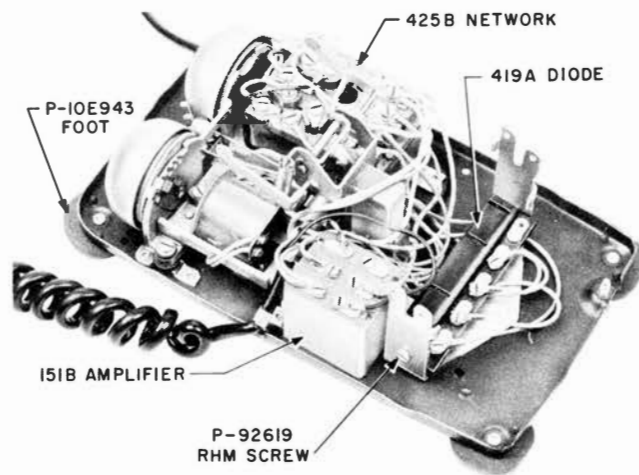


Fig. 2 — 507-Type Set, Interior

3.06 The ringing circuit of 509-, 533-, 536-, and 559-type telephone sets employs a 3-element, cold cathode, gas-filled tube which is coded 426A. A 4-element tube, coded 425A, is available for conditions of excessive power induction.

3.07 All 500-type amplifier sets are equipped with G-type hand sets.

3.08 The 507-, 509-, 557-, and 559-type telephone sets are intended for use on long loops (1500- to 2400-ohm resistance). The loops are beyond the transmission capabilities of other

type sets. To provide a transmission level comparable to that of other type telephone sets on the shorter loops they employ a 151C or 151F fixed gain amplifier. These sets also use a 425C network which contains a sidetone balancing network especially designed to provide a satisfactory impedance match to open wire on loaded cable, see Fig. 2. They are electrically similar except that 509- and 559-type sets have a 426A electron tube in the ringing circuit, see Fig. 3. The 507- and 509-type sets are similar in external appearance to the 500C/D set. The 557 and 559 types also resemble the 554B-type wall set.

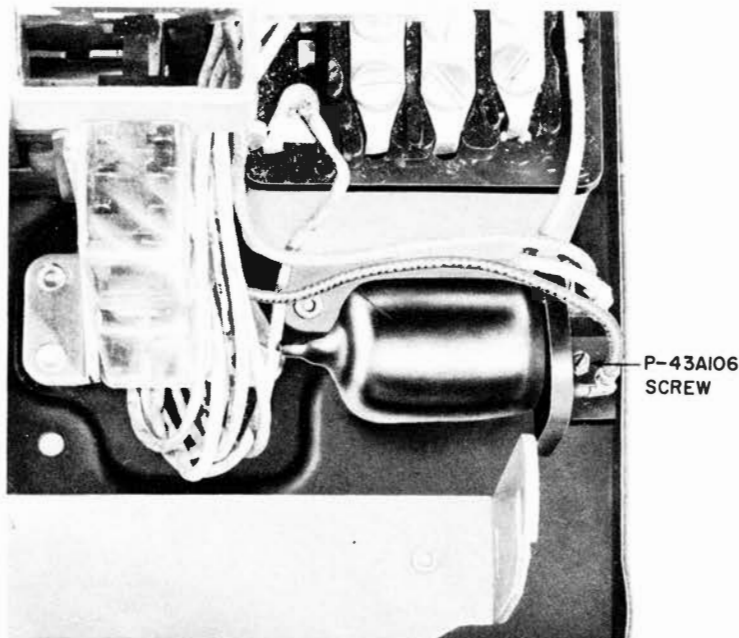


Fig. 3 — 509-Type Set, Tube Assembly

Fig. 4 — 532-, 533-, or 536-Type Set, Exterior

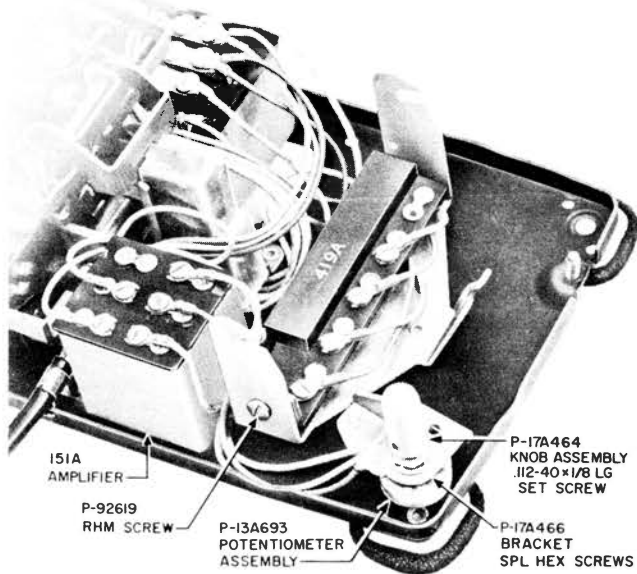


Fig. 5 — 532-Type Set, Interior

3.09 The 532- and 533-type telephone sets are for use where customers require receiver amplification (see Fig. 4, 5, and 6). They operate on normal line voltage and do not require power from local batteries. The input to the amplifier is connected in place of the receiver, and the receiver is connected across the output of the amplifier. The operating current for the amplifier is controlled by moving the potentiometer knob clockwise to increase receiver amplification and counterclockwise to decrease amplification.

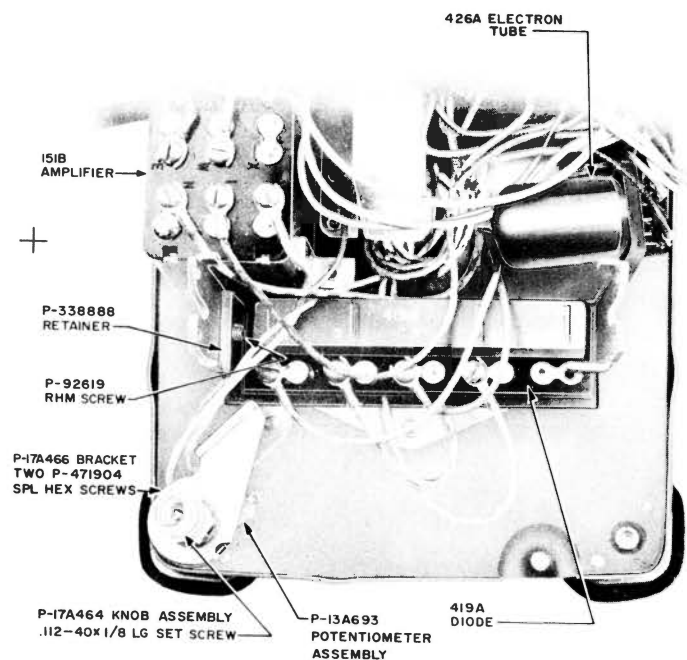


Fig. 6 — 533-Type Set, Interior



Fig. 7 — 535-Type Set, Exterior

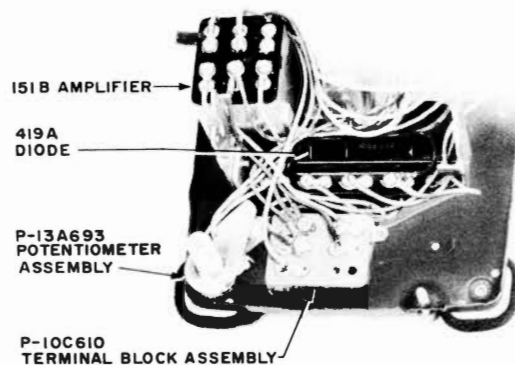


Fig. 8 — 535-Type Set, Interior

3.10 The 535-type telephone set is for use at noisy locations (see Fig. 7 and 8). It provides limited receiver amplification and limited reduction of transmitter and sidetone levels with the handset push-to-listen button normal. At high noise levels, it provides full receiver amplification and almost complete disabling of the transmitter when the handset push-to-listen button is operated. The operating current for the amplifier is obtained from the central office line. Rotating the potentiometer knob clockwise will increase amplification.

3.11 The 536-type telephone set is used for customers requiring speech amplification or for whispered confidential conversations (see Fig. 4 and 9).

3.12 The 532-, 535-, and 536-type telephone sets are not recommended for use with 1A key telephone equipment on long loops. The increase in set resistance will cause the release of held lines. First preference is the 1A1 key telephone equipment. See the C Section entitled Telephone Sets, Connections.

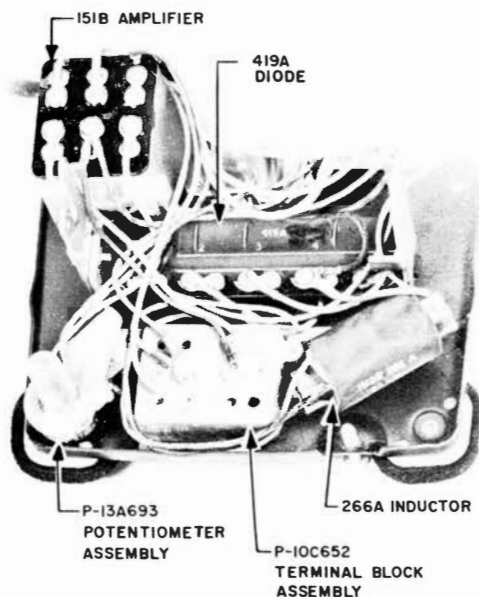


Fig. 9 — 536-Type Set, Interior