

238A AMPLIFIER

1.00 INTRODUCTION

This section identifies and describes the 238A amplifier.

2.00 GENERAL

2.01 The 238A amplifier is a transistor amplifier designed for long loop service where long line circuits are used. This is a single stage amplifier consisting of a transistor, capacitor, inductor, and two resistors mounted on a printed circuit board which in turn is mounted on the back of a colored plastic transmitter cup. (See Fig. 1.)

2.02 Each 238A amplifier shipped will include an information label reading: EQUIPPED WITH 238A AMPLIFIER. This label has an adhesive back and should be applied to the underside of the metal base plate on the telephone set in which the amplifier is installed. Fig. 3 shows the base plate of a 500- and 700-type telephone set with the label attached.

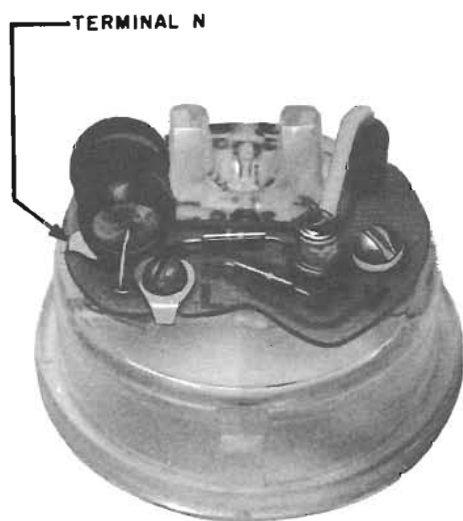


Fig. 1 — 238A Amplifier



The area to which the label is applied must be dust free.

3.00 IDENTIFICATION

3.01 This assembly is designed to replace any transmitter cup in a G-type hand set where long loop conversion is desired. If in the process of conversion an older G-type hand set handle having cord retainer posts molded in the transmitter bowl is encountered, it will be necessary to substitute a handle without them.

3.02 The input and output impedances of the 238A amplifier are 500 and 1000 ohms, respectively.

3.03 Terminals L, N, and V are shown in Fig. 2. Terminal N is not marked on the assembly, but is located under the inductor and is electrically connected to one of the springs in the transmitter cup by a mounting screw. For proper operation of the 238A amplifier, the transmitter leads of the handset cord must be connected to the screw terminals marked L and V. (See Table A.) Terminal V of the 238A amplifier must always be positive relative to terminal L.



If correct polarity of the 238A amplifier is not maintained, the transmitter will be inoperative.

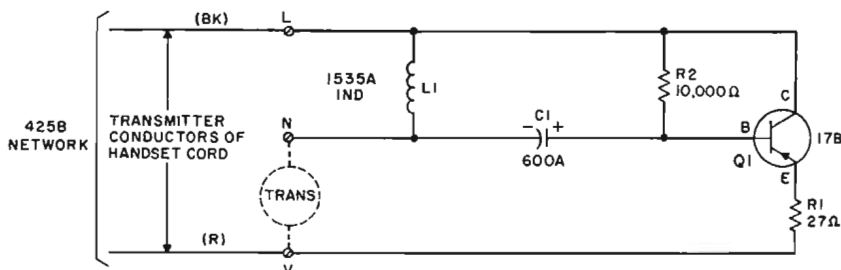
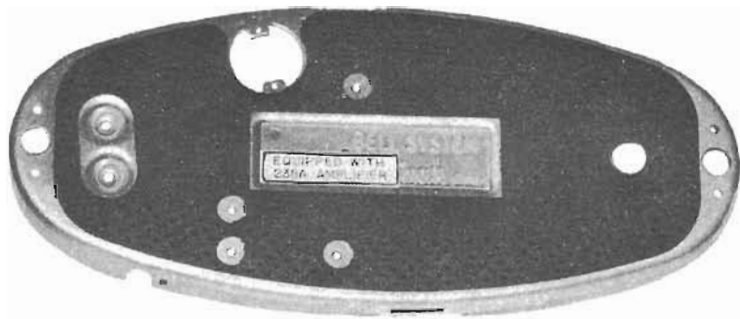


Fig. 2 — 238A Amplifier Circuit Diagram

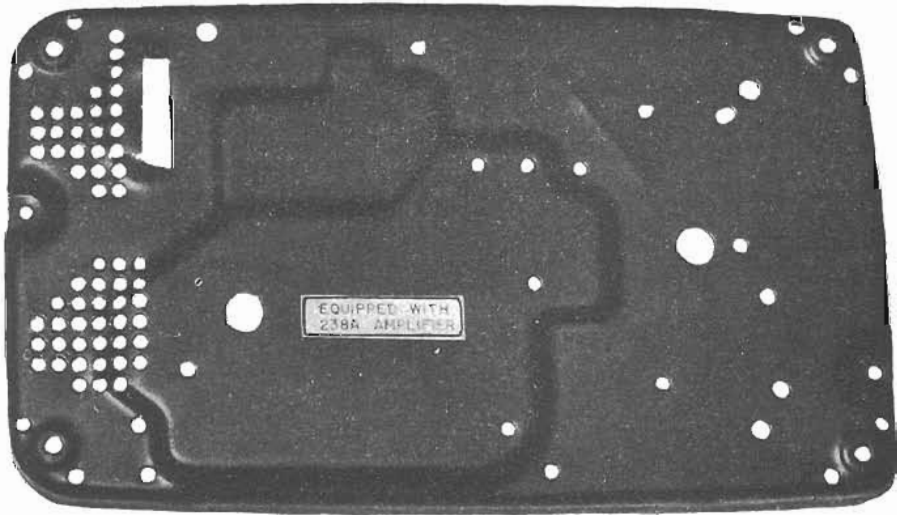
TABLE A
HANDSET CORD LEADS
CONNECTIONS

Handset Leads	Individual Party*	Ring Party*	Tip Party*
R	V	V	L
BK	L	L	V

* Connections shown are for use with all auxiliary long line circuits except those in accordance with SD-26129-01 and SD-96588-01. When these circuits are used, reverse the red and black lead connections shown in Table A.



700-TYPE TELEPHONE, BASE PLATE



500-TYPE TELEPHONE, BASE PLATE

Fig. 3 – Base Plates with Label Attached