

RADIO SIGNAL SUPPRESSION IN TELEPHONE SETS

1.00 INTRODUCTION

This section covers the identification, selection, installation, connections, and maintenance for the 1542A inductor, the KS-13814, List 7 capacitor (0.02 mf), and the 129F capacitor (0.006 mf). These devices are intended to suppress radio interference, which may be encountered in the customers' telephone receiver, in areas where a radio transmitting station is located.

2.00 GENERAL

2.01 The 1542A inductor consists of a terminal block assembly, an inductor permanently mounted in the base, and a 101A-9 (brown) connecting block cover which is furnished as a part of the complete unit. An ivory (101-4) cover may be used for appearance reasons.

2.02 The 1542A inductor can be used with all type telephones.



FIG. 1—1542A INDUCTOR

2.03 The KS-13814, List 7 capacitor is intended for use only in 500-type telephone sets, and where the levels of interference are less serious. Should this capacitor fail to eliminate the radio interference, install the 1542A inductor.

2.04 The 129F capacitor is used in E- and F-type handsets to prevent packing of the transmitter carbon and to suppress radio-frequency interference in the receiver circuit.

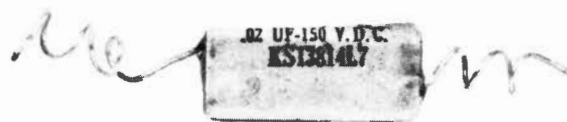


FIG. 2—KS-13814, LIST 7 CAPACITOR



FIG. 3—129F CAPACITOR

3.00 INSTALLATION

3.01 The 1542A inductor is the same size as the 44A connecting block and uses the same fastening devices. When used, the inductor replaces the 42A connecting block.

3.02 The 1542A inductor may be connected to the inside wiring circuit at any convenient place within 50 feet of the telephone set, when a conduit outlet or plug and jack installation is used.

3.03 The KS-13814, List 7 capacitor is mounted on the 425-type network and should be positioned so it does not interfere with the operation of the telephone set (see Fig. 4).

3.04 The 129F capacitor is mounted in E and F handles and is bridged across the transmitter as shown in Fig. 6.

4.00 CONNECTIONS

4.01 The cording and connections for the 1542A inductor are shown in Figs. 5 and 7.

4.02 The KS-13814, List 7 capacitor should be connected as shown in Table A; Fig. 4 shows the 500C/D connection.

4.03 Connect the bare wires of the KS-13814, List 7 capacitor under the terminal screws, and cover the exposed portion of the bare wire with tape or tubular insulation. In 500A/B and 501A/B sets, the capacitor is mounted on the 311A equalizer. A screw

(P-294615) or an unused screw from the 425-type network is required to connect the capacitor to the L terminal.

4.04 The outer terminal of the 129F capacitor (with eyelet) is placed under mounting screw of the center spring. The inner terminal is placed under the outer contact spring, as shown in Fig. 6.

TABLE A

Type Set	Connect
500A and B 501A and B	Across terminals <i>L</i> and <i>RW</i> of 311A equalizer and place against side of equalizer nearest switch.
500J and K 501J and K	Across terminals <i>L2</i> and <i>GN</i> of network and place against side of network nearest the ringer
500C, D, E, F, H, L, M, P, and U 501C, D, F, P, and U	Across terminals <i>F</i> and <i>L2</i> of network and place between end of network and ringer gong, except in the case of the tip party on 2-party message rate service where connection should be made across <i>L1</i> and <i>L2</i> . In some cases an additional 0.02-mf capacitor across terminals <i>R</i> and <i>RR</i> and placed against side of network nearest the ringer is necessary.

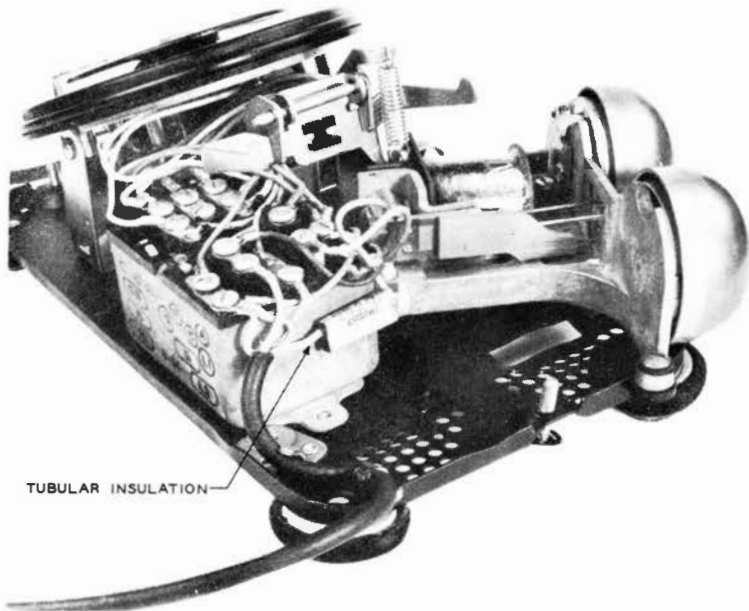


FIG. 4—500C/D CONNECTIONS

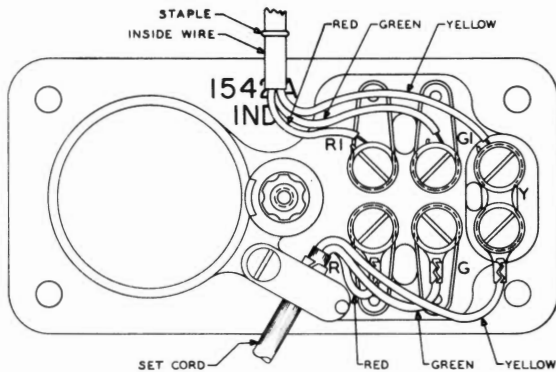


FIG. 5—CORDING DIAGRAM—1542A INDUCTOR



FIG. 6—F-TYPE HANDSET WITH 129-TYPE CAPACITOR

5.00 MAINTENANCE

When the installation of these suppression devices fails to eliminate radio interference in rural areas, check the outside wire circuit for loose or corroded connections.

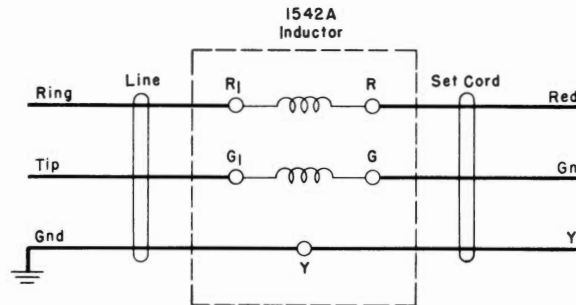


FIG. 7—CONNECTING DIAGRAM—1542A INDUCTOR (SCHEMATIC)