

## TELEPHONE SET — F-50682

### GROUND OBSERVER'S TELEPHONE

#### 1.00 INTRODUCTION

This section covers the identification, installation, connections, and maintenance of the F-50682 telephone set.

#### 2.00 IDENTIFICATION

**2.01** This set is used by ground observer posts for transmitting calls over private line facilities to the Air Force Filter Centers (see Fig. 1). It consists essentially of an 8- by 10- by 7-inch black finished, metal box in which is mounted a KS-13766 hand generator having a crank shaft which projects through the right side of the box; a 274L and a 274AJ retardation coil; a 181B induction coil; a 3B varistor; an F-50917, a 511D, and a 5BA capacitor; and two 10-141 Jones terminal strips.

**2.02** Space is provided for three KS-6542-type batteries which are required for operation but are not furnished with this set (see Figs. 2 and 3). A 592A subscriber set is mounted on the outside of the box on the left side, and the F-50721 head telephone set is connected to the set by means of a 15-foot spring cord which is furnished as part of the headset.

**2.03** Also, a 1AH2 Micro Switch is furnished as part of the headset; when depressed, it will transmit. An entrance hole is provided in the lower left side of the box for line wires. Holes for mounting the set to a wall are provided in the back cover of the box.

#### 3.00 INSTALLATION

**3.01** Locate the set in accordance with instructions from the supervisor in charge of the ground observer post and as covered in other sections.

- Because this set is not waterproof, it must be located indoors. The ground observer using the headset is outdoors; therefore, precautions must be taken to protect the spring cord from damage where it passes from indoors to outdoors.

**3.02** The set must be located so the generator crank handle can be conveniently operated from the outside of the building by the ground observers.

**3.03** An 81-type backboard or equivalent shall be used to mount the F-50682 telephone set in all locations except where the sets can be mounted on a suitable wood surface.

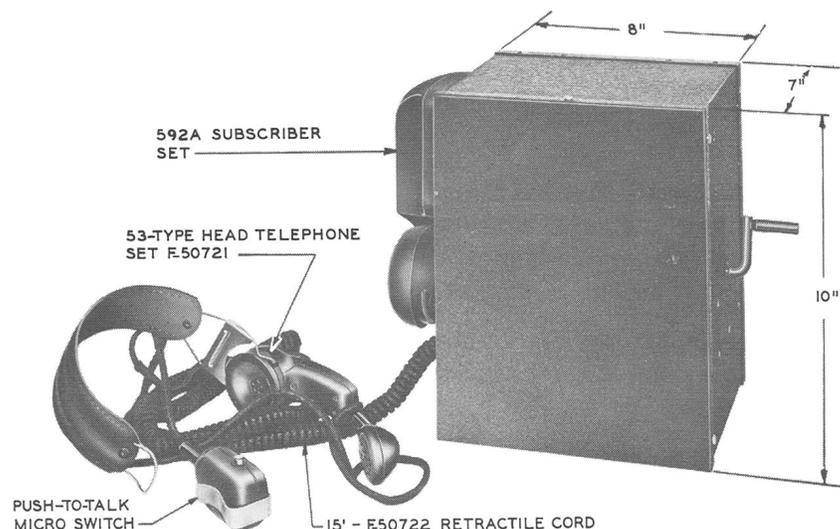


Fig. 1 — F-50682 Telephone Set

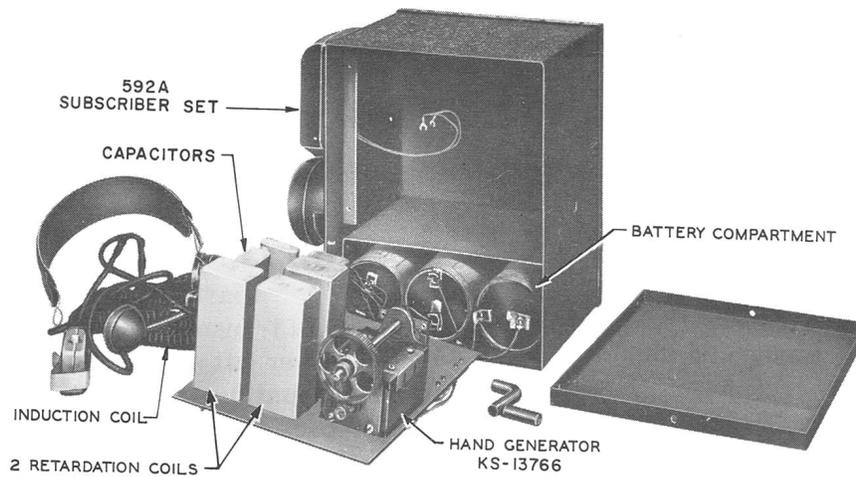


Fig. 2 — F-50682 Telephone Set, Open View

**3.04** The set shall be securely mounted so that the weight of the set, the pull of the spring cord, and the cranking of the generator will not pull out the fasteners.

**3.05** The dry cell batteries shall be marked with the date of installation in the space provided.

**3.06** A new hand-generator crank P-10E190 replaces crank No. 4636. It is manufactured by the Connecticut Telephone and Electric Company.

#### 4.00 CONNECTIONS

The set is furnished wired for 2-wire loop ringing. However, by changing connections on the terminal strip as shown in the table on the drawing, Fig. 4, it can also be wired for ground return ringing, 4-wire loop ringing, or 4-wire ground return ringing.

#### 5.00 MAINTENANCE

**5.01** Before any work is started that may disrupt service, the filter center should be notified of the interruption of service and the estimated time the station will be out of service.

**5.02** In cases where trouble cannot readily be found and cleared, the complete set should be replaced.

**5.03** The Micro Switch, if permanently depressed in the push-to-talk position by tape or other means, will necessitate frequent replacement of the dry cells.

**5.04** Because of its use in civil defense and constant handling, it may be desirable to establish a routine maintenance schedule for the F-50682 telephone set.

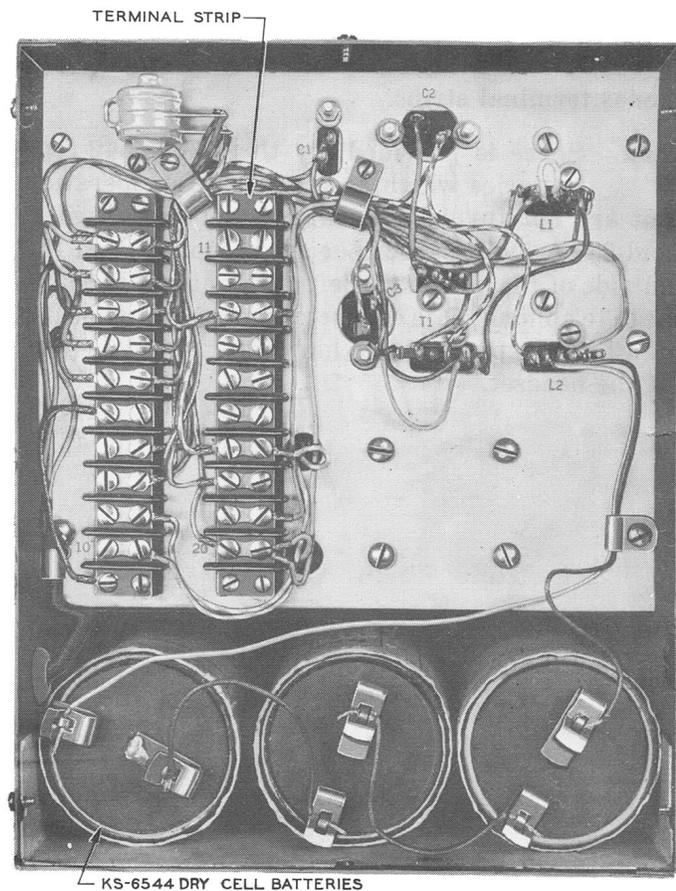


Fig. 3 — Terminal Strip and Battery Location

LEAD	2-WIRE	4-WIRE	RINGING	
			LOOP	GROUND
Y-BK	1	11		
G-BK	2	13		
BK-W	13	14		
R-W			9	6
Y-BL			10	19
BK			17	6
G-W			17	9
BR-Y			18	9
BR-R			20	10

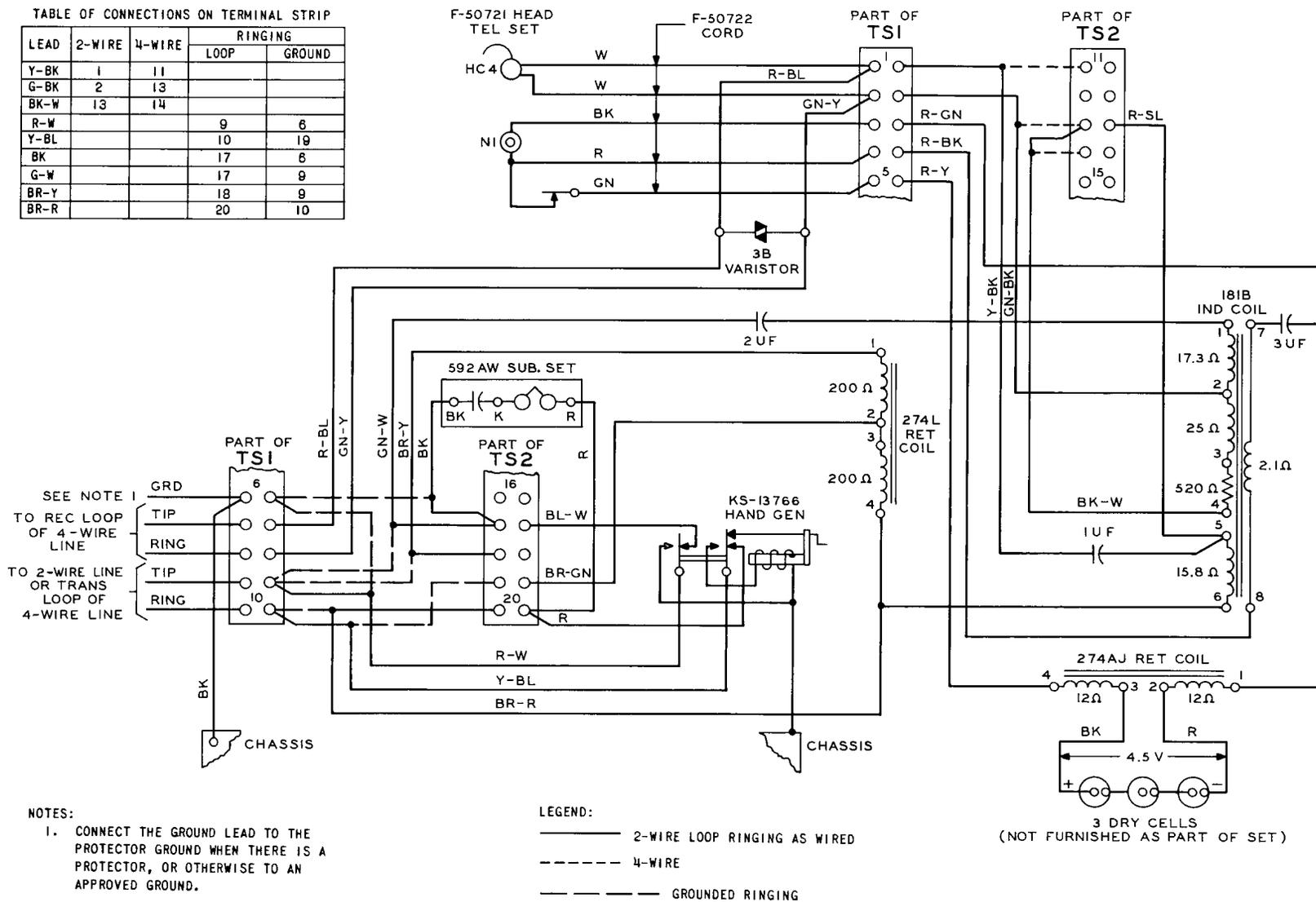


Fig. 4 – Telephone Set Connections