

EMERGENCY REPORTING

TELEPHONE SET

570 TYPE

1.00 INTRODUCTION

1.01 This section covers the 570 outdoor-type telephone set, which has been designed specifically for municipal and industrial emergency reporting systems which are used to report fires and other emergencies. A selective routing feature, which is available with some sets, enables the station to also be used by the police for their calls to police headquarters.

1.02 This section is reissued to bring the information up-to-date. Due to extensive changes, marginal arrows have been omitted.

2.00 GENERAL

2.01 The 570-type telephone set, see Figs. 1 and 2, is primarily designed for use with the type of emergency reporting line circuits associated with a 520-type PBX system. However, with minor changes the set may be used with other emergency reporting line circuits (see note following Table A).

2.02 The telephone set may be used as a direct line station to the centralized reporting switchboard, or may be used with concentrator equipment in the central office where individual station lines are concentrated into a group of a few trunks to the reporting switchboard.



FIG. 1—570-TYPE TELEPHONE SET—
FRONT VIEW

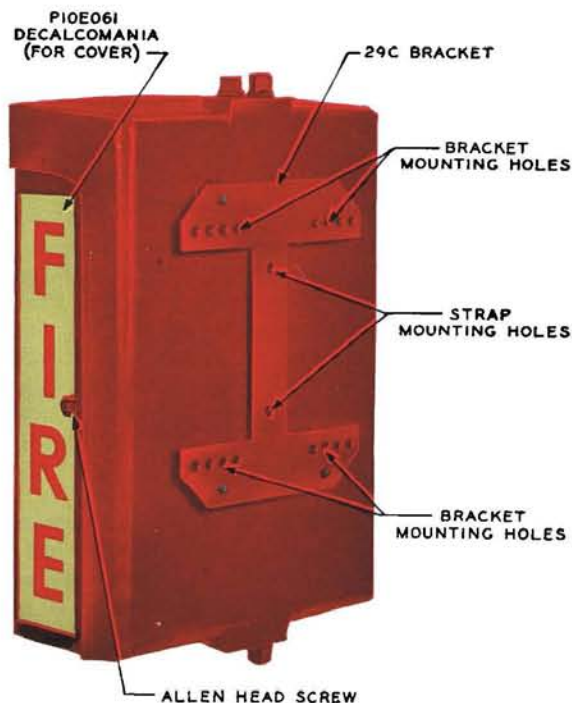


FIG. 2—570-TYPE TELEPHONE SET—
SIDE AND REAR VIEW WITH
29C BRACKET

2.03 In order to increase the reliability of the reporting system, the line conductors and 570-type telephone sets (including the handset and cord) are electrically supervised by the emergency reporting line circuit. Any break in circuit continuity, grounds, or crosses will operate a visual and audible trouble signal at the fire switchboard. Direct line systems utilize a continuous current flow to supervise the circuit (continuous loop test), while the concentrator equipment makes a periodic test of the circuit (line reversal loop test).

Caution: *Since the telephone sets and associated line equipment are arranged for electrical supervision and are used to report emergencies, notify the proper authority before performing any work operations on working circuits. All appearances of these lines should be protected on distributing frames and in cable terminals. They should be properly identified on all records as lines or trunks requiring special service maintenance.*

2.04 Although most installations are intended for originating service only, some types of sets, as furnished, are equipped with a ringer. Service requiring auxiliary signal relays shall use separately mounted relays and signals.

3.00 DESCRIPTION

3.01 The 570-type telephone set, see Fig. 1, has a cast aluminum 111A apparatus box housing with the word **TELEPHONE** cast at the top of the box. The front and sides consist of a door on the left and a cover on the right, each of which is hinged in the center of the set. Inside the housing is an 8-type apparatus unit on which is mounted a G-type handset and 500-type telephone set components.

Note: The P-10E055 door assembly consists of a P-10E073 door equipped with a P-10E075 handle and a P-10E047 decalcomania. Two RH Phillip's recessed HD ST-STL screws 1/4-28 x 1 2 (coded RM-630114) are used to secure the handle to the door. The P-10E056 cover assembly consists of a P-10E074 cover equipped with a P-10E061 decalcomania. A B-860063 decalcomania (half length) is used for old style doors.

3.02 The door, which is held closed by a spring, is easily opened by a large handle on the left side to provide access to the telephone handset. The words **PULL TO OPEN** are cast in the handle.

3.03 The cover, which is held closed by a special Allen head screw on its right side, provides access to the component parts of the telephone set. The Allen head screw can be removed with a KS-8187 wrench.

3.04 The entire set, with the exception of the words **TELEPHONE** and **PULL TO OPEN**, is colored red. Decalcomanias, printed with the word **FIRE** in a vertical position, are provided on the sides of the door and cover. Any other signs required by the customer must be installed locally. Signs installed in the field should be given a coat of clear lacquer or quick drying varnish after being applied.

3.05 The 8-type apparatus unit is fastened in the apparatus box by four screws. The completely assembled apparatus unit may be removed or replaced through the cover by disconnecting the line wires and removing one mounting screw and loosening the three others.

3.06 Space is provided on the apparatus unit to mount a 111A fuseless protector and the other additional apparatus required for the different features of each code of set.

3.07 A ground termination, consisting of a screw and washers, is provided near the lower right inside corner of the housing, to terminate up to a No. 8 AWG wire. This is used to ground the housing as well as to provide a point where the protector and signaling ground connections can be made.

3.08 Two wire entrance holes are provided at the top and two at the bottom of the housing. The entrance holes are threaded to fit a 1 1/2-inch conduit. Three of the holes are closed with 1 1/2-inch pipe plugs. The entrance holes should be kept closed with either conduit or plugs.

3.09 Mounting holes, spaced to fit a 29C mounting bracket, are provided through the back of the housing.

3.10 A plastic waterproofing shield is provided between the cover and the telephone apparatus unit (see Fig. 3).

3.11 Component parts of the 570-type telephone set are shown in Figs. 4 and 5.

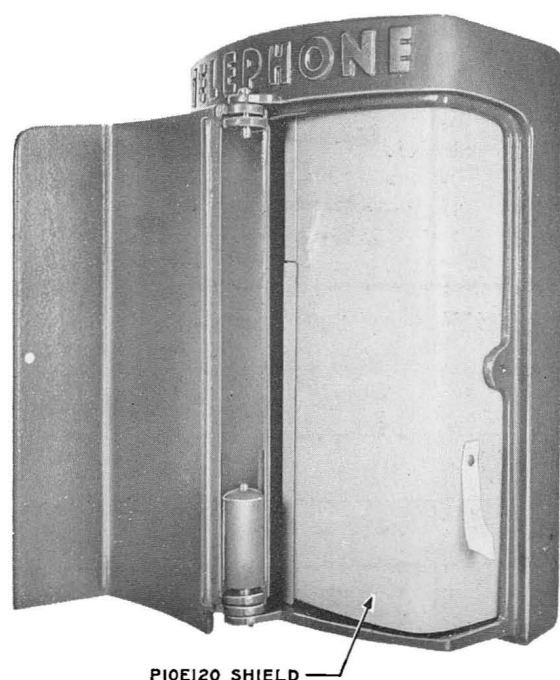


FIG. 3 — PLASTIC WATERPROOFING SHIELD IN PLACE

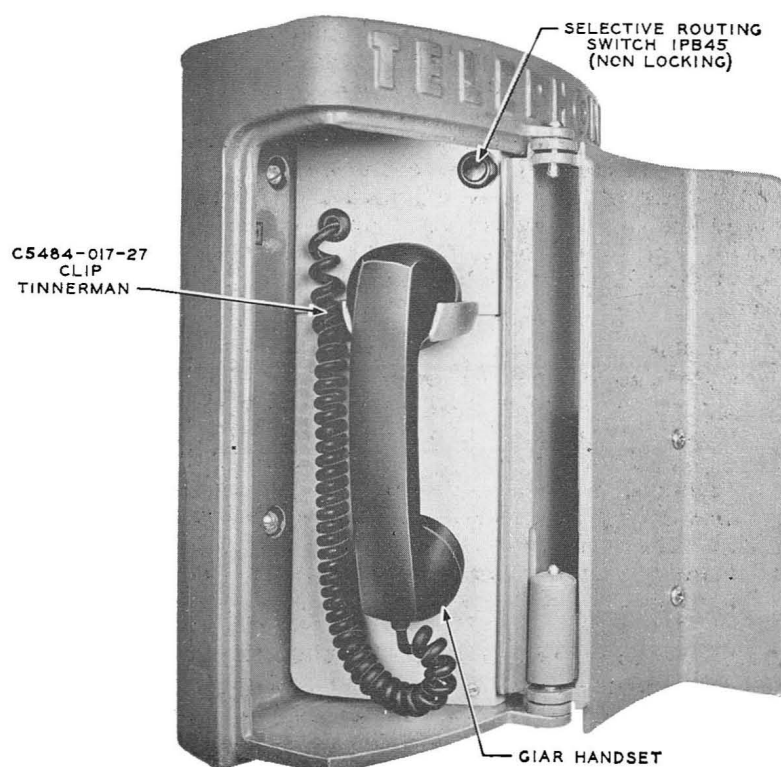


FIG. 4 — 570-TYPE TELEPHONE SET WITH DOOR OPEN SHOWING HANDSET AND SELECTIVE ROUTING SWITCH

3.12 A push-button nonlocking-type microswitch for selective routing is provided on some types of sets (see Fig. 4). This switch is required when the telephone set is to be used for communication with *both* the fire and police departments. To route the call to police headquarters the push button must be held depressed during the time the handset is lifted from the hook. After the handset is lifted from the hook the push button should be released. The type of circuit used, as shown in Figs. 7 and 8, is governed by the type of equipment installed in the central office.

3.13 In order to provide for continuous or periodic electrical testing of the conductor loop and telephone set circuit, sets used with a concentrator system are equipped with a 420G varistor. Sets used as an individual direct line are equipped with a KS-14603, List 2A 7300-ohm resistor. The varistor or resistor is permanently connected between terminals **C** and **L2** of the network for *X* or *Y* wiring (as shown in the schematic drawings.) Either *X* (periodic line reversal loop test) or *Y* (continuous loop test) will be used, depending on the type of equipment installed in the central office.

3.14 Available sets with their special features and their application are outlined in Table A.

3.15 Wiring used in early model sets is shown in Fig. 9.

4.00 INSTALLATION AND MAINTENANCE

4.01 The location of the set will generally be selected by prearrangement with the customer.

4.02 It should be securely mounted where it will not be an obstruction to pedestrians or where it will not be endangered by vehicular traffic. If these requirements cannot be met the matter should be referred to the supervisor.

4.03 The set may be attached directly to a solid wall, or a 29C bracket may be used. The 29C bracket is intended for use in mounting 570-type telephone sets on buildings, poles, etc. The 29C bracket is the same as the 29B bracket, except the color is red. The bracket is not furnished with the set and must be ordered separately. Screws and lockwashers for mounting the telephone set to the bracket are furnished with the bracket.

TABLE A

				Direct Line System		Concentrator System	
Telephone Set	App. Unit	Ringer		Continuous Electrical Test (Resistor) Y Wiring	Selective Routing Switch Only	Periodic Electrical Test (Varistor) X Wiring	Selective Routing Switch with Resistor and Varistor
		Yes	No				
570 AR	8A	X				X	
570 BR	8B	X				X	X
570 CR	8C	X		X			
570 DR	8D	X		X	X		
570 ER	8E		X			X	
570 FR	8F		X			X	X
570 GR	8G		X	X			
570 HR	8H		X	X	X		

Note: The continuous electrical test resistor (Y wiring) may be replaced locally with one of a different value if the type of line circuit involved so specifies.

4.04 The 29C bracket should be fastened securely to the mounting surface. If mounting holes in the bracket arms are used, the bracket strap should be placed outward. If the two holes in the strap are used to fasten the bracket to a round or narrow surface, the strap should be turned inward. Four No. 14 RH galvanized wood screws or equivalent (anchors, toggle bolts, etc.) should be used in the bracket arm mounting holes. Use one hole in each group of holes, and use holes as far from the center of the bracket as practicable. Two 5/16-inch bolts or lag screws should be used in the bracket strap mounting holes. Use fasteners of sufficient length to mount set securely.

4.05 A 1, 2-inch conduit or some similar means of metallic protection should be provided for line and ground wiring to prevent damage in accessible locations. If the set is mounted on a utility pole, such protection should extend as high as the drop wire attachment or cable and should be equipped with a weather head. Wires running downward from the set should be protected to at least 6 inches below ground level. Station wiring run inside the set should be dressed near the center partition of the apparatus unit, so as not to interfere with the placing of the plastic waterproofing shield. Where condensation might be experienced in the conduit protecting the line wire,

the conduit entrance at the top of the set should be sealed with Ductseal.

4.06 A 111A protector may be mounted, see Fig. 5, if fuseless protection is used. The protector and its mounting screws are not furnished as a part of the telephone set and must be ordered separately. For stations requiring fused protection, the protector should be mounted separately in accordance with standard procedures.

4.07 The housing of the 570-type set should be grounded *in all* cases. The interpretation of code requirements for the ground electrode and its connections may vary from one municipality to another. In any case the grounding should also meet the requirements of Protection and Signaling Ground sections. The ground wire should be terminated in the set under the screw and washer provided on later model sets, otherwise on the lower apparatus mounting screw on earlier models.

4.08 To safeguard against moisture and weather conditions, the plastic waterproofing shield may be ordered for use on sets manufactured before they were so equipped. The P-10E120 shield is inserted behind the lip of the center divider and is self-supporting. No retaining clips will be required.

4.09 The first 570-type telephone sets manufactured were equipped with a smaller door spring assembly than later models. The method of changing from the small to the larger spring assembly is covered in Section C56.113, Door Spring Conversion, 570-type Telephone Sets.

4.10 The door and cover arrangement of early model sets differs from that on later sets, in that on the later models the lower hinge lug on the

cover is below that on the door; whereas on earlier sets their position is reversed.

4.11 When replacing either a door or cover of the earlier type with a door or cover of the later type, it will be necessary to replace both the door and cover in order to have matching lower hinge lug positions.

4.12 The procedure for changing doors and covers is outlined in Section C56.113.

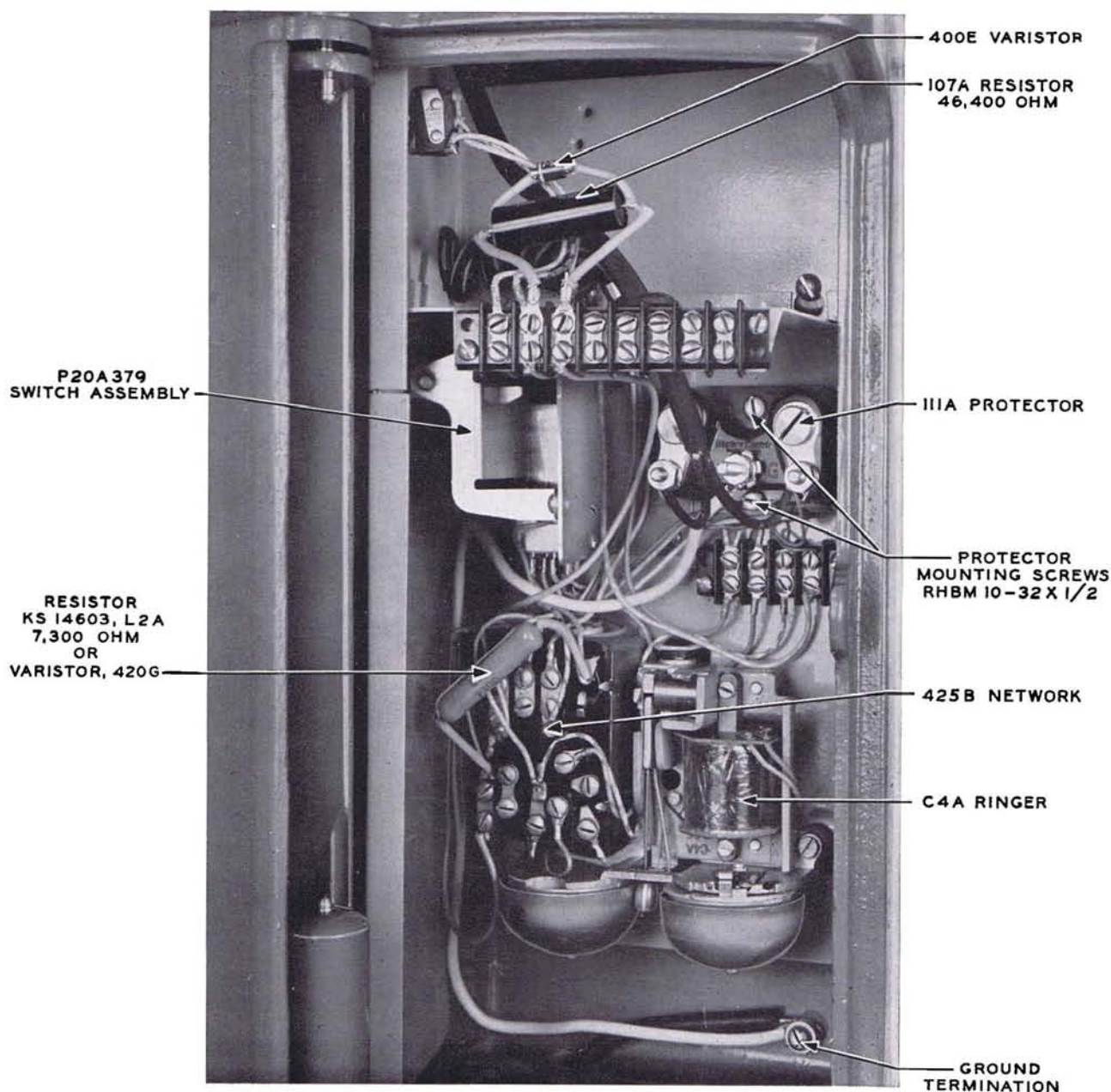


FIG. 5 — 570-TYPE TELEPHONE SET WITH COVER OPEN SHOWING COMPONENTS

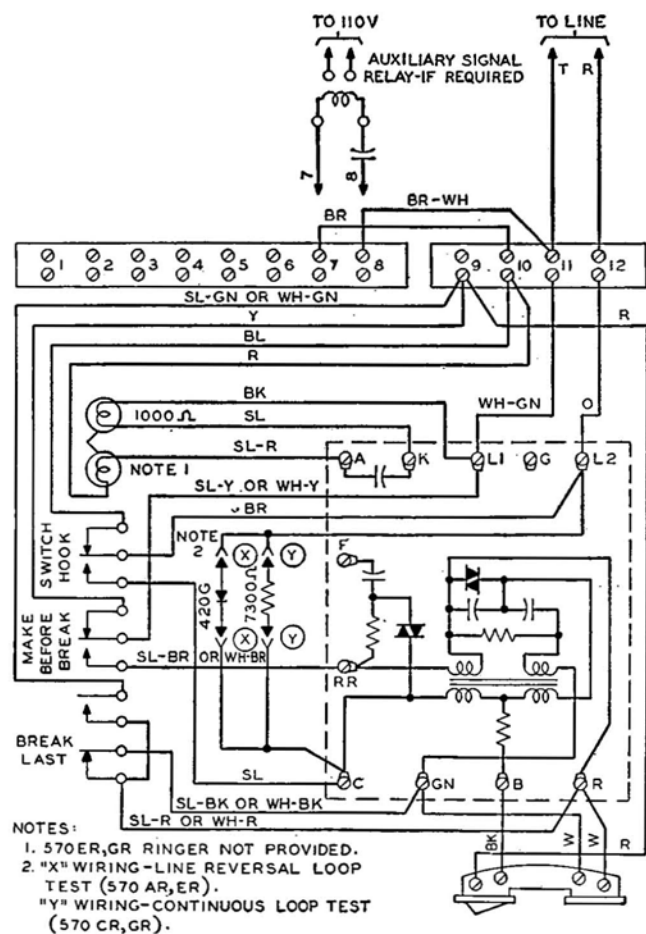


FIG. 6—SCHEMATIC OF 570 AR, CR, ER AND GR TELEPHONE SET

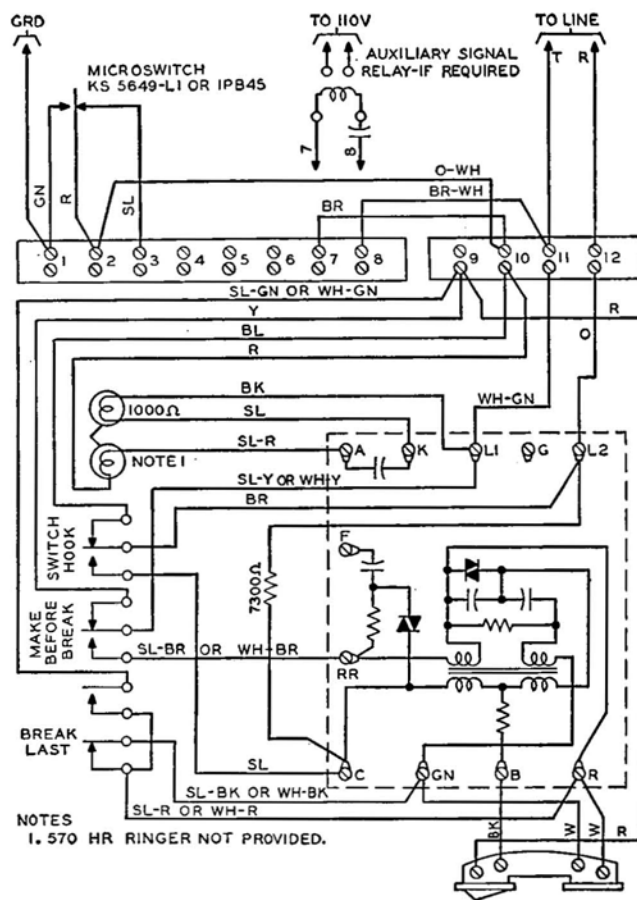


FIG. 7—SCHEMATIC OF 570 DR, AND HR TELEPHONE SET



GRD

MICROSWITCH
KS 5649-LI OR IPB45

400E
107A

MAY BE FURNISHED,
BUT NOT USED.

570 CR, DR, GR, HR
CONNECT R TO L2 OF NETWORK
CONNECT T TO L1 OF NETWORK

NOTE 2
570 DR, HR-
INSTALLER TO PLACE Z
WIRING

1 2 3 4 5 6 7 8 9 10 11 12

SL-GN
Y
BL
R
BK
SL
1000Ω
SL-R
NOTE 1
SL-Y
BR
SL-BR
SL
7300Ω
F
RR
SL-BK
GN
B
R
BK
W
W
R

SWITCH
HOOK
MAKE
BEFORE
BREAK
BREAK
LAST

NOTES

1. 570 GR AND HR RINGER NOT PROVIDED
2. IF DESIRED LINE WIRES MAY BE CONNECTED TO TERMINAL STRIP BY THE FOLLOWING ARRANGEMENT. MOVE WH-GN AND WH-BK WIRES FROM TERMINAL 12(D) TO TERMINAL 11(C)
- PLACE A STRAP WIRE FROM L2 OF NETWORK TO TERMINAL 12(D)
- CONNECT R TO TERMINAL 12(D)
- CONNECT T TO TERMINAL 11(C)

FIG. 9—WIRING USED IN EARLY
MODEL SETS