

HANDSETS

G1, G2, G3, G4, AND G5 TYPES

IDENTIFICATION, MAINTENANCE, AND CONNECTIONS

1. GENERAL

1.01 This section is reissued to:

- Include G3AA, G3AB, and G3AC handsets
- Change type of receiver units in Tables A, B, and C
- Delete types of receiver and transmitter units from Fig. 6 through 18
- Add Fig. 19

2. IDENTIFICATION

2.01 The G-series handset (Fig. 1) consists of a molded handle, receiver unit, transmitter unit, transmitter cup, receiver and transmitter caps, and a handset cord.

2.02 An R as the last letter of a handset code indicates that the handset is equipped with a retractile (spring) cord. Later model codes do not include the R but are equipped with retractile cords.

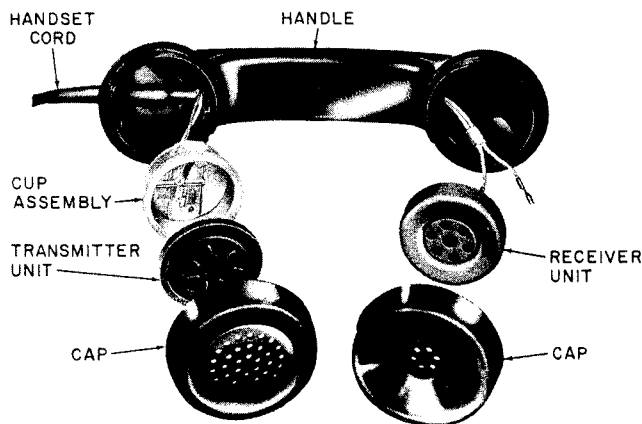


Fig. 1—G Series Handset

2.03 Early G-series handsets were equipped with cord retainer parts in the transmitter cavity (Fig. 2). Current G-series handsets are equipped with transmitter cups having the cord retainer molded on the cup (Fig. 3). The two types of cord retainer arrangements are not interchangeable.

2.04 A P-26E836 waterproof membrane assembly, which fits over the transmitter and is a part of the G3S and G3T handsets, may be installed in any G-series handset. When this cover is used, it is necessary to install a special P-87C700 transmitter cap (Fig. 4).

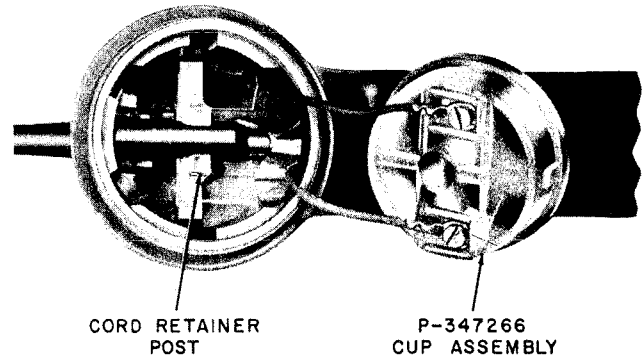


Fig. 2—Early G Series Handset

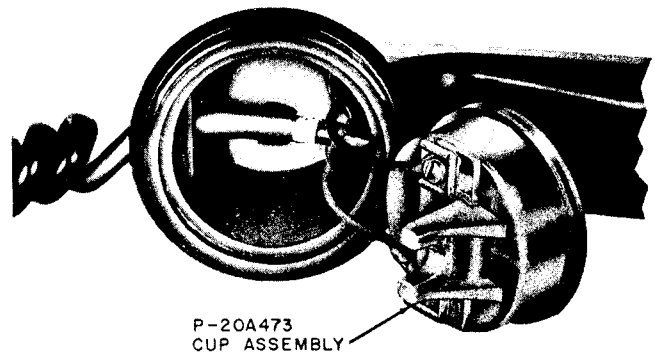


Fig. 3—Current G Series Handset

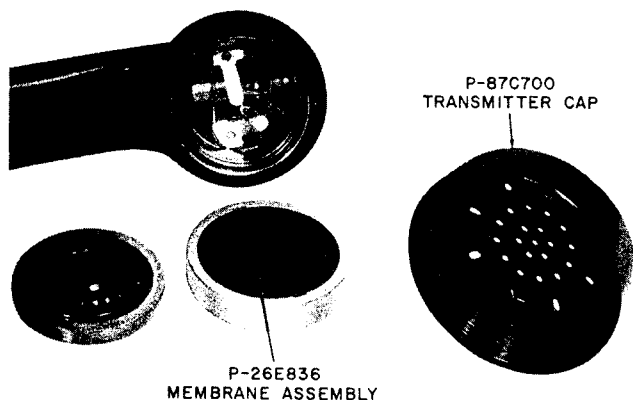


Fig. 4—Waterproof Transmitter Assembly

G1-TYPE

2.05 The G1-type handsets are available in black (-3) only.

2.06 Weighted G1-type handsets are used on older modified coin collectors. The handsets are weighted by installing an RS-9099 weight in the transmitter cavity. The modified coin collectors are identified by the letter N following the type number.

2.07 Table A lists the G1-type handsets with component parts and intended uses. Reference to the appropriate connection diagram is also given.

2.08 Maintenance of G1-type handsets consists of replacing cracked or broken caps, defective transmitter and receiver units, and replacing defective handset cords.

2.09 To replace handset cord proceed as follows:

- (1) Remove receiver and transmitter units, disconnect cord tips, remove cotton acoustical barrier, and pull defective cord outward through hole in handle.
- (2) Pass free conductors of handset end of new cord through hole in handle.
- (3) Advance cord through hole into transmitter bowl by turning it with a threading motion until grommet is in proper position.

Note: Because of an occasional snug fit it may be necessary, after advancing cord through hole, to grasp it firmly by groove on grommet with a pair of long-nose pliers. Use pliers as a lever inside bowl to pull grommet into position.

- (4) Fold a piece of fairly stiff wire back onto itself to form a long fishing tool. Insert the closed end of the tool into the handle through the receiver well. Push fish wire into handle until closed end protrudes into the transmitter bowl.

TABLE A

G1-TYPE HANDSETS

HANDSET (See Note)	CORD	TRMTR UNIT	CONNECTION DIAGRAM	USED WITH
G1AR	H4CJ	T1	Fig. 7	500-series telephone sets
G1DR	H4BL		Fig. 8	PBX system order turrets
G1FR	H4BN-3		Fig. 7	Telephone sets, 570-types
G1G*	H4CG	T2	Fig. 7	Coin collectors equipped with armored cords
G1J	H4CS	T1		525A and 525B telephone sets

*Manufacture Discontinued (MD).

Note: All G1-type handsets are equipped with the following parts:

- P-339616 handle
- P-80A203 receiver cap
- P-80A103 transmitter cap
- U3 receiver unit

- (5) Place ends of receiver conductors through loop of fish wire and feed conductors into handle while pulling wire through to receiver well.
- (6) Connect cord leads to transmitter cup and to receiver. Using the transmitter cup, anchor the cord and replace the transmitter and transmitter cap.
- (7) Insert the cotton acoustical barrier and dress the excess receiver leads into the receiver well. Replace the receiver and receiver cap.

Note: Acoustical barrier should not extend into receiver well.

- 2.10** If a G1-type handset is defective and must be replaced, use a comparable G3-type as the replacement.

G2-TYPE

- 2.11** The G2-type are push-to-talk or push-to-listen handsets which are equipped with a pushbar switch in the handle.
- 2.12** G2-type handsets are rated MD and have been replaced by the G5-type.
- 2.13** Repair or adjustment of pushbar contacts or springs should not be made in the field. The G2-type handsets having defective switches should be replaced by a comparable G5-type.

G3-TYPE

- 2.14** The G3-type handsets are available in standard telephone colors. See section covering telephone apparatus color.
- 2.15** Table B lists the G3-type handsets with component parts and intended uses. Reference to appropriate connection diagram is also given.
- 2.16** The G3BR, G3CR, and G3DR handsets are equipped with U4 receiver units for use in systems requiring receivers with higher impedance (600 ohms).
- 2.17** G3FR, M, P, R, S, and T handsets are intended for use on coin collectors. Some coin collectors are equipped with armored handset cords. The G3S and G3T handsets are also equipped with a waterproof transmitter cover for use on outdoor coin collectors (Fig. 4).

- 2.18** The G3-type handsets equipped with armored cords for use with coin collectors (G3P, R, S, and T handsets) are sealed units. Receiver and transmitter caps are cemented to the handle to prevent loss of units and the receiver is equipped with a security guard. If the sealed handset or cord require replacing, replace handset and cord as a unit.

- 2.19** Maintenance of G3-type handsets consists of replacing cracked or broken caps, replacing defective receiver or transmitter units, and replacing frayed or damaged cords (except for sealed units).

- 2.20** To replace handset cord (except armored cords) see 2.09.

G4-TYPE

- 2.21** The G4AR and G4B handsets consist of T1 transmitter units, U3 receiver units, and H4CJ cords mounted on a handle having two holes for mounting a shoulder rest (Fig. 5). The shoulder rest is a shipped loose item and can be installed to fit either the left or right shoulder. The G4-type handset can be used as a replacement for G3-type handsets where a shoulder rest is desired. Connection Fig. 7 applies for G4-type handsets.

- 2.22** The G4AR handset is available in black only and is rated MD. The G4B handset replaces G4AR and is available in standard telephone color. The P-88C100 shoulder rest (G4B-type) is available in color also. The last two digits of the part number should reflect the color desired. See section covering telephone apparatus color.

- 2.23** A new molded pad, P-19B931, is available as a replacement for the two piece pad on G4B handset shoulder rests. The new pad is lighter in weight and of a contrasting gray color to be used with all standard handset colors. Current production G4B handsets will incorporate the new pad.

- 2.24** Maintenance of G4-type handsets consists of replacing cracked or broken caps, defective receiver and transmitter units, and worn, frayed, or damaged cords. Damaged or broken shoulder supports and worn or discolored pads should be replaced.

- 2.25** To replace handset cord of G4-type handset see 2.09.

TABLE B

G3-TYPE HANDSETS

HANDSET (Notes)	CORD	TRMTR UNIT	TRMTR CAP	RCVR UNIT	CONNECTION DIAGRAM	USED WITH				
G3AA	H4CS	T1	P-80A100	U3	7	525A and 525B telephone sets				
G3AB	H4BL				8	PBX system order turrets				
G3AC	H4BN				7	570-type-telephone sets				
G3AR	H4CJ or H4CL			U4	U3	Fig. 7	500, 600, 700 series telephone sets			
G3BR								Command Post Alerting Network (COPAN)		
G3CR	H4BL or H4CU					Fig. 9	610-type telephone sets; 700 series key equipment			
G3DR								Fig. 8	112A key equipment	
G3FR	H4CP					U3	U3	Fig. 7	Coin collector with spring cord	
G3K	None								750 type telephone sets; 3A cord reels	
G3L	H4CU							Fig. 9	Key mountings, 420 to 426 and 430 to 432 types	
G3M	H4CW								2A coin telephone	
G3P	H4CY							Fig. 7	1A coin telephone with armored cord	
G3R	H4DA								Coin collectors using armored cords	
G3S	H4CY								Waterproof transmitter cover and armored cord for 1A coin telephone	
G3T	H4DA	Waterproof transmitter cover and armored cord for coin collectors								
G3Y	H4CJ	T1	P-80A100						Fig. 10	2568HP telephone set

Note 1: All G3-type handsets are equipped with the following components:

- P-80A000 handle
- P-80A200 receiver cap

Note 2: When ordering handsets, handles, caps, or cords refer to the section on color for proper codes and availability.

G5-TYPE

2.26 The G5-type handsets (Fig. 6) are equipped with a pushbar switch located in the handle. The pushbar switch is wired for push-to-talk, push-to-listen, or to control an external function.

2.27 Table C lists the G5-type handsets with component parts and intended uses. Reference to connection diagrams are also included.

2.28 The G5ER and G5KR handsets are available in standard telephone colors. Other G5-type handsets are available in black only with the exception of special use units, such as G5GR, G5HR, G5LR, G5MR, G5PR, and G5RR.

2.29 The G5-type handsets replace the G2-type which are rated MD.

2.30 Maintenance of G5-type handsets is limited to replacement of cracked or broken caps, defective receiver or transmitter units, or frayed, worn, or damaged cords. Do not attempt field maintenance of pushbar switches or spring contacts.

2.31 To replace handset cord of G5-type handset:

- (1) Remove receiver and transmitter units, disconnect cord tips at receiver, transmitter, and switch, and remove cotton acoustical barrier.

Note: It may be necessary to temporarily remove the pushbar switch to remove and install cords.

(2) Tie a sufficient length of strong cord or string to the receiver cord tips of the old cord and pull cord from handle, feeding the string through the handle to the transmitter bowl.

Note: If pushbar switch has been removed a wire fish tool can be used to fish receiver leads through handle.

(3) Insert the free conductors of the handset end of the new cord through the hole in the handle. Advance cord into transmitter bowl until grommet is properly seated. See note in 2.09(3).

(4) Using the string, tie the receiver leads together close to the spade tips. Feed the receiver leads into the handle using the string to guide the leads past the pushbar switch into the receiver well.

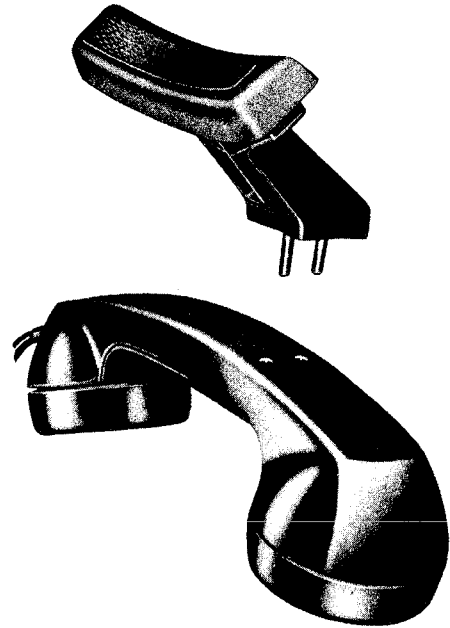


Fig. 5—G4-Type Handset Showing Shoulder Rest Assembly

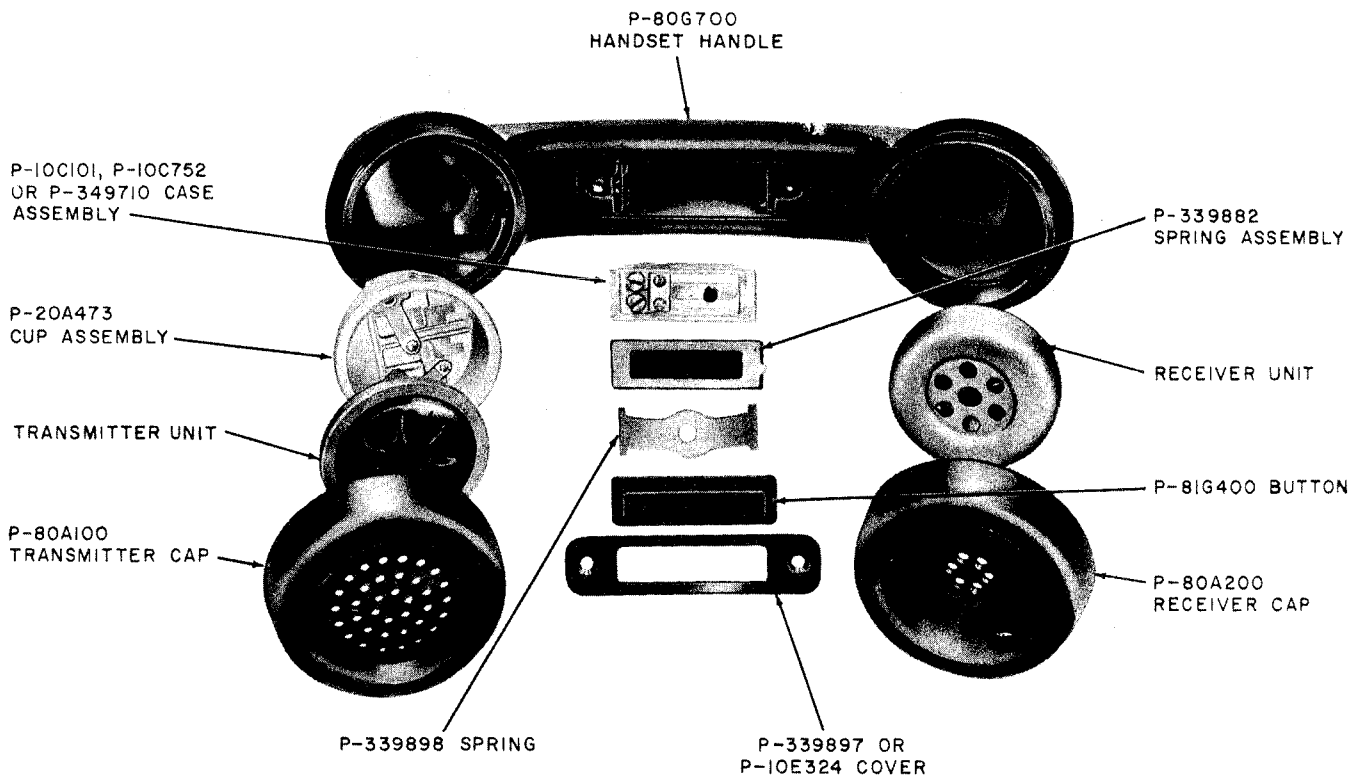


Fig. 6—G5-Type Handset Assembly

TABLE C
G5-TYPE HANDSETS

HANDSET (Notes)	CORD	RCVR UNIT	CONNECTION DIAGRAM	USED WITH
G5AR	H5AB	U3	Fig. 11	Control unit, 47A-3, for MD and MC mobile radio telephones
G5BR	H6C		Fig. 19	4-wire circuits and loudspeaker paging
G5CR	H4CM	U4	Fig. 13	FAA and private line systems
G5ER	H5P	U3	Fig. 14	535-type telephone set in noisy location
G5FR	H4BM		Fig. 15	Bendix MRT9 radio pack set
G5GR	H4CJ	U4	Fig. 13	2- and 4-wire private line stations
G5HR	H5P		Fig. 16	102-type key equipment
G5JR	H6F		Fig. 12	No. 300 switching system
G5KR	H6E	U3	Fig. 19	2A Farm interphone
G5LR	H6F	U4	Fig. 17	617-type telephone set
G5MR	H4CU		Fig. 13	Command Post Alerting Network (COPAN)
G5NR	H5Y	U3	Fig. 11	Air-ground base station
G5PR	H6E	U4	Fig. 19	625-type telephone set
G5RR	H4CJ		Fig. 18	596E telephone set

Note 1: All G5-type handsets are equipped with the following:

- P-80G700 handle
- P-80A100 transmitter cap
- Pushbar switch assembly
- T1 transmitter
- P-80A200 receiver cap

Note 2: When ordering handsets, handles, caps, or cords, refer to section on color for proper codes and availability.

(5) Connect cord leads to the transmitter cup, pushbar switch, and receiver unit. Using the transmitter cup, anchor the cord and replace transmitter and transmitter cap.

(6) Insert the cotton acoustical barrier and dress the excess receiver leads into the receiver well. Replace the receiver and receiver cap.

(7) Dress excess switch leads into handle and replace pushbar switch.

3. MAINTENANCE

3.01 Handles, caps, and grids may be cleaned by wiping with a clean cloth moistened with water.



Do not use cleaning fluids or antirust compounds on transmitter, receiver units, or other component parts of handset. Discoloration or tarnish on the silver-plated contact surfaces is not objectionable and no attempt should be made to remove it.

3.02 Use care when cleaning colored handsets to avoid marring the finish. Replace handset if cleaning does not result in a satisfactory appearance.

3.03 Replace cut, worn, cracked, or badly frayed cords. Connections should be checked for tightness at terminals.

3.04 Locking devices for G-type handsets are not available. If necessary, for security reasons, caps may be cemented to the G-type handles. Use N-170 cement (Armstrong Corp. Co.) or Pliobond cement. The application shall consist of coating the handle threads from the top of the base over an area 1/2-inch in length in two opposite places. The caps shall then be tightened by hand.

Additional tightening may be applied using a 514-type tool, but apply no more than 1/2 turn.

4. CONNECTIONS

4.01 Fig. 7 through Fig. 19 show internal connections for the G-series handsets. See Tables A, B, and C for types of receiver and transmitter units.

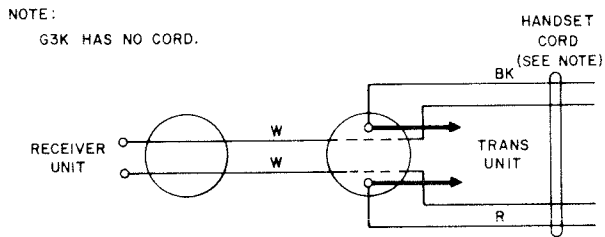


Fig. 7—G1AR, G1FR, G1G, G1J, G3AR, G3BR, G3FR, G3K, G3M, G3P, G3R, G3S, G3T, G4AR, G4B, G3AA, and G3AC Handsets

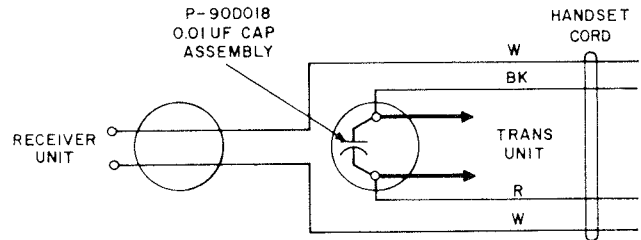


Fig. 10—G3Y Handset

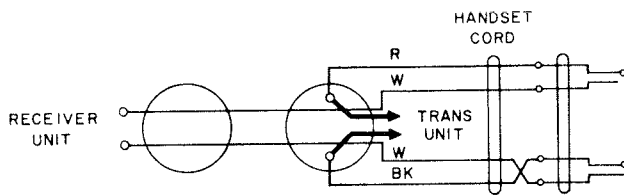


Fig. 8—G1DR, G3DR, and G3AB Handsets

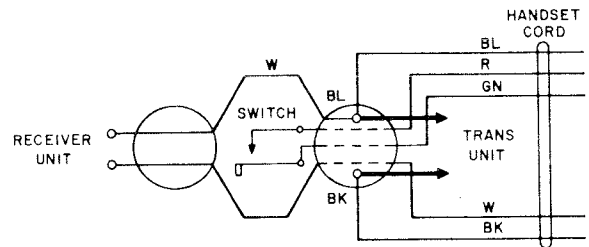


Fig. 11—G5AR and G5NR Handsets

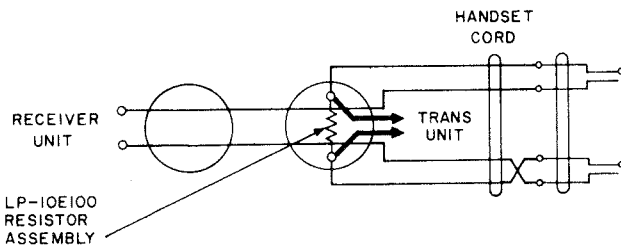


Fig. 9—G3CR and G3L Handsets

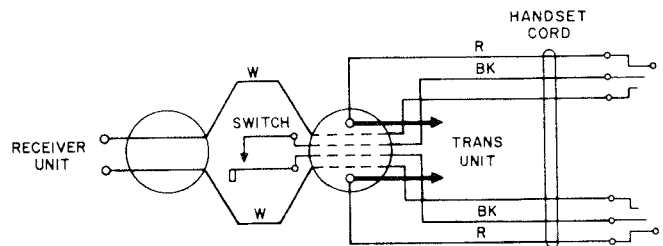


Fig. 12—G5JR Handset

SECTION 501-210-102

NOTE:
CORD PLUG IS NOT PROVIDED
ON G5GR HANDSETS.

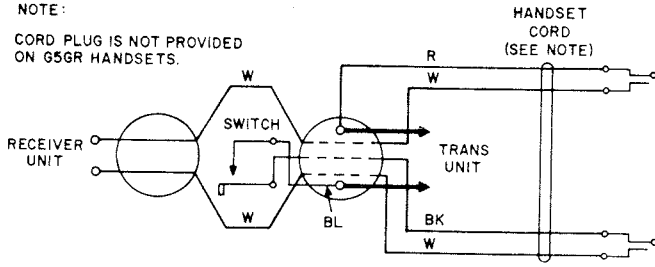


Fig. 13—G5CR, G5GR, and G5MR Handsets

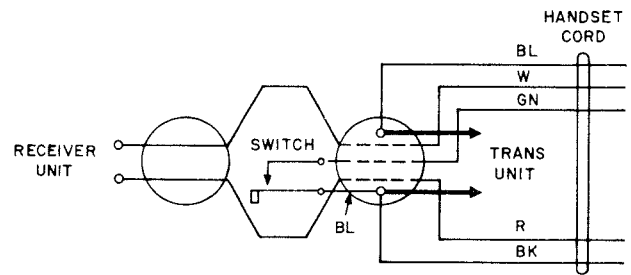


Fig. 16—G5HR Handset

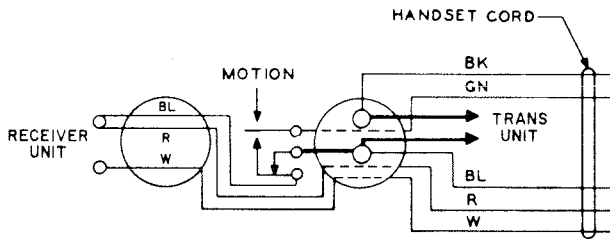


Fig. 14—G2ER and G5ER Handsets

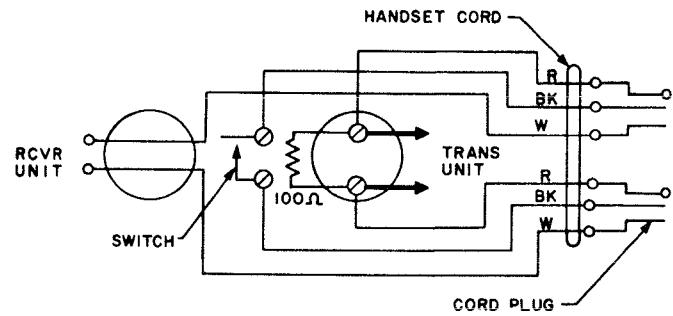


Fig. 17—G5LR Handset

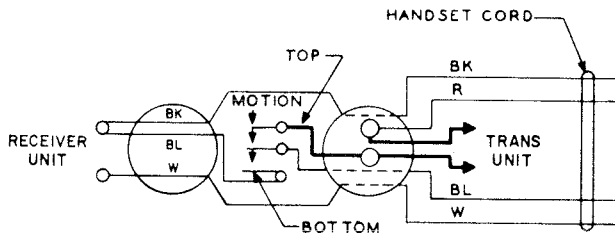


Fig. 15—G2FR and G5FR Handsets

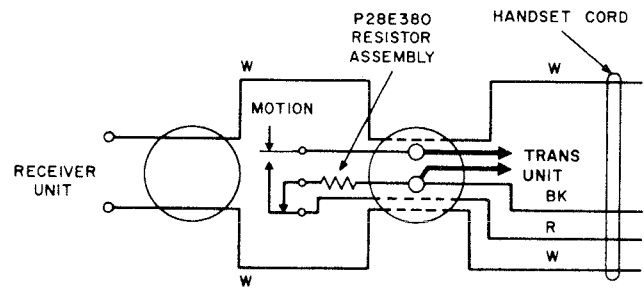


Fig. 18—G5RR Handset

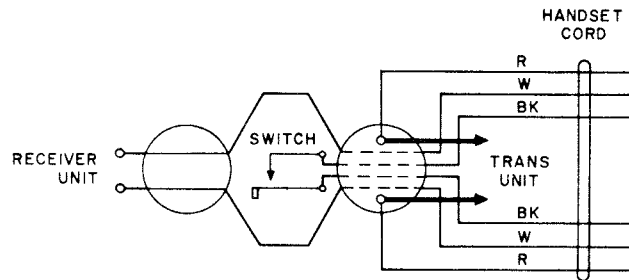


Fig. 19—G5BR, G5KR, and G5PR Handsets