

108A AND 109A TEST SETS

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1. GENERAL

1.01 This section describes the 108A and 109A Tests Sets intended for identifying pairs in working and nonworking cables. It also describes the cords required in connecting 108A sets to cable pairs as well as the cords needed in connecting identifying current and power supply to 108A sets.

1.02 The cords formerly supplied for connecting 108A sets to C50, C52 or 1177-Type Protectors were furnished in a fiber case desig-

nated as the 1A Cord Kit. This kit has been superseded by the 1B Cord Kit. The cords in the B kit can be used to connect to the above protectors as well as to 300 Connectors or 121 Protectors.

1.03 One hundred cable pairs can be identified with one setting of the cords.

1.04 The section has been revised to cover the 1B Cord Kit and the B Test Cord.

2. 108A TEST SET

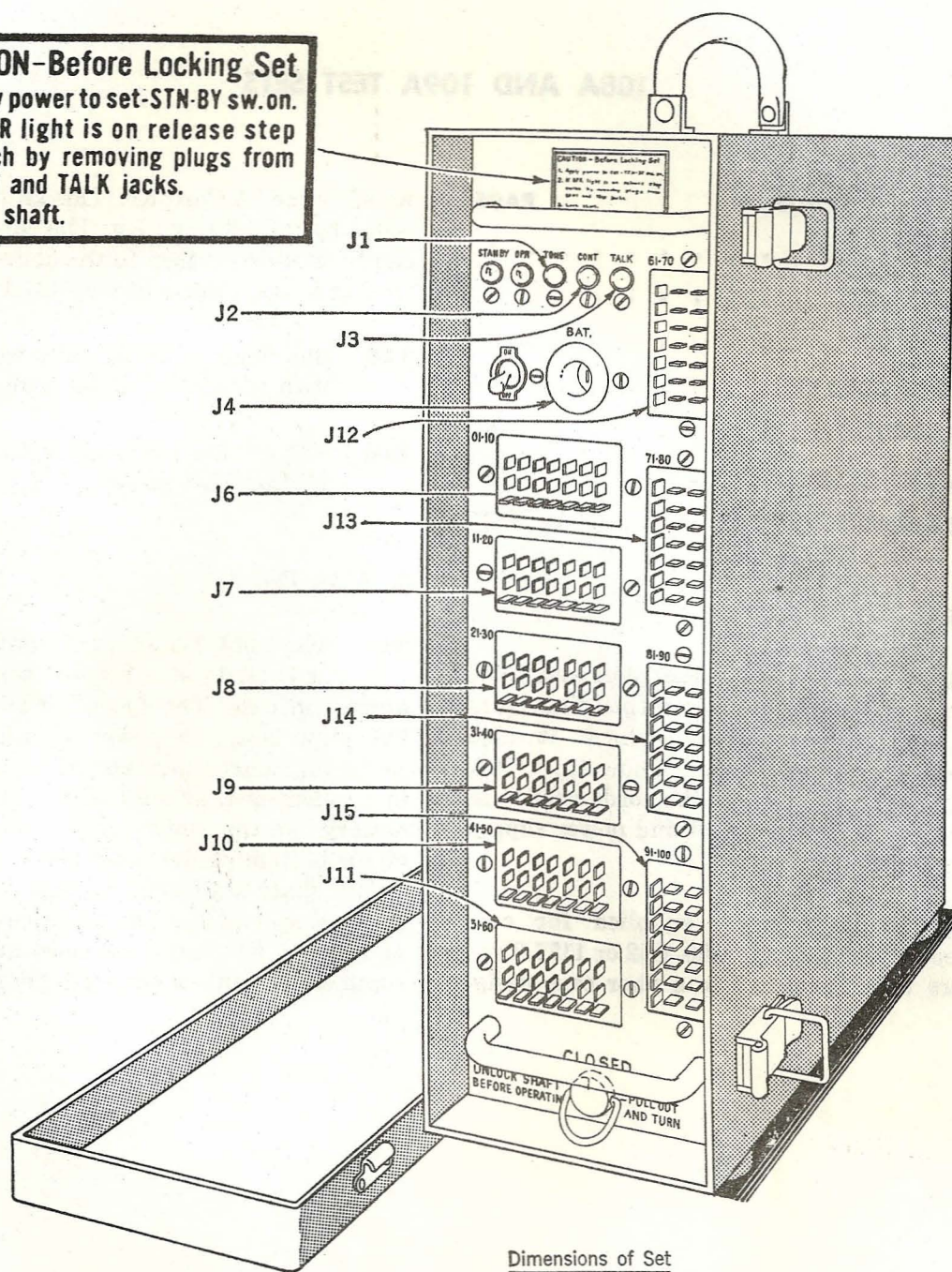
2.01 The 108A Test Set is illustrated in Fig. 1.

It consists of a step switch housed in an aluminum case. The faceplate is equipped with two pilot lamps, a power switch (toggle) and jacks for connecting the set to the cable pairs to be identified, as well as for connecting tone, battery and the control pair to the set. The knob at the bottom of the faceplate is for locking the switch shaft to prevent damage during handling and transportation. The set is equipped with an alarm with which the workmen at the splice can summon the central office attendant.

108A TEST SET

CAUTION-Before Locking Set

1. Apply power to set-STN-BY sw. on.
2. If OPR light is on release step switch by removing plugs from CONT and TALK jacks.
3. Lock shaft.



Dimensions of Set

Height.....18 $\frac{1}{4}$ in.

Width.....5 $\frac{1}{4}$ in.

Depth.....13 $\frac{13}{16}$ in.

Note: J Numbers pertain to Schematic only.

Fig. 1

2.02 The jacks marked 01-10, 11-20, 21-30, etc., are for connecting the set to the cable pairs. The jack marked BAT is for connecting the battery required to operate the step switch. A 48-volt central office battery should be used but, if not available, a KS-6948 (45-volt) Dry Battery may be employed. The jack marked TONE is for connecting central office tone or tone from a 76-Type Test Set to the 108A set. The jack marked CONT (control) is for connecting the control pair in the cable to the set. The jack marked TALK is for connecting a 1011B Test Set having its cord terminated in a 310 Plug or the equivalent across the control pair.

2.03 The toggle switch is for turning power on or off. The lamp marked STAN BY (stand by) lights up when the switch is turned on. The lamp marked OPR (operate) lights up when the workman turns the dial-release switch on the 109A set to the dialing position.

2.04 The 108A set is supplied with the guard assembly illustrated in Fig. 2. The guard assembly is for protecting the 108A set from being accidentally struck by a main frame ladder. The method of attaching the assembly to the guard rail of a main frame is shown in Fig. 2.

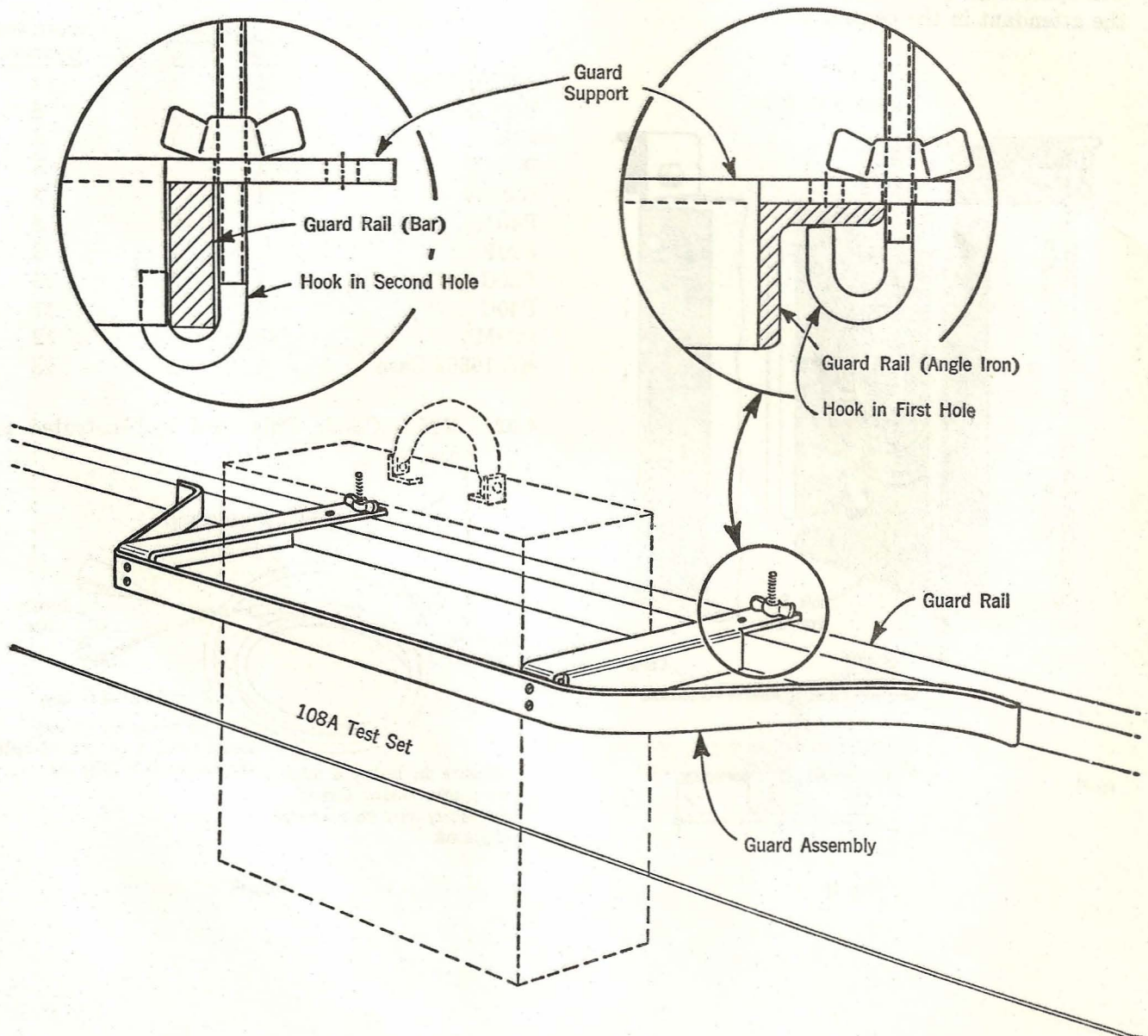


Fig. 2

3. 109A TEST SET

3.01 The 109A Test Set is illustrated in Fig. 3.

It consists of a dialing unit for operating the 108A set from a splice. The dialing unit is housed in an aluminum case equipped with two one-bolt clamps. Provision has also been made for attaching a sealing clamp to the set. The one-bolt clamps are for use in attaching the set to a suspension strand and the sealing clamp for attaching the set to a large diameter cable. The set is equipped with a permanently attached cord for connecting the set to the control pair in the cable. The ground terminal must be connected to the cable sheath. The signal key, when depressed, will operate the alarm in the 108A set to summon the attendant in the central office.

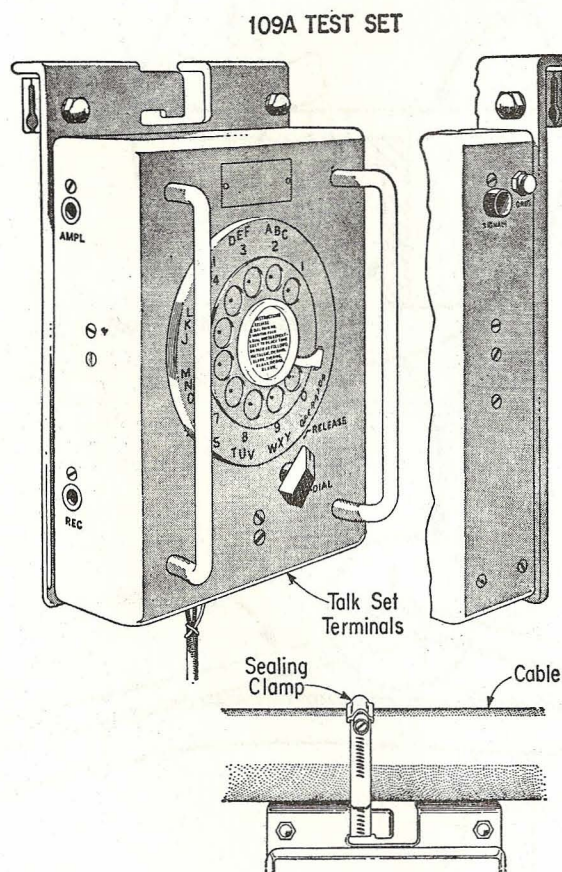


Fig. 3

3.02 The jack marked REC (receiver) is for connecting a receiver to the set. The jack marked AMPL (amplifier) is for connecting a 147- or 107-Type Amplifier to the set; a 3-foot P3E Cord is provided for this purpose. The set is equipped with two terminal lugs for connecting a talking set to the control pair.

4. 1B AND 1A CORD KITS

4.01 The cords which comprise the 1B Cord Kit as well as those of the superseded 1A Cord Kit are listed in TABLE 1.

TABLE 1

	CORD KIT		ILLUSTRATED IN FIGURE
	1B	1A	
M2EL Cord	1	1	4
W2EJ "		1	5
W2J "	1	1	6
W2EU "	1		7
W2EW "	1		7
P40A "		5	8
P20F "	1	1	9
P20G "	1	1	10
P40C "	5		11
P20M "	10		12
KS-16362 Case	1	1	13

4.02 M2EL Cord: This cord is illustrated in Fig. 4.

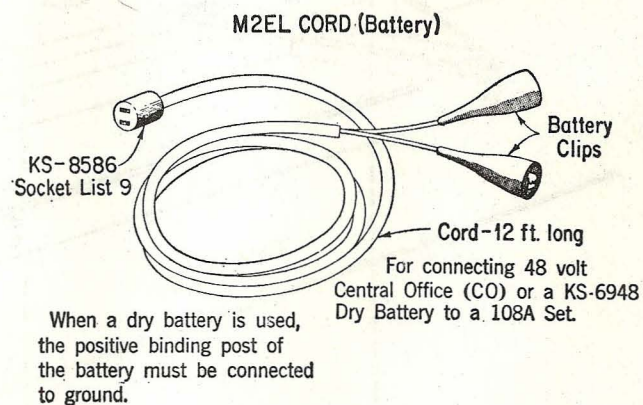


Fig. 4

- 4.03 W2EJ Cord:** This cord is illustrated in Fig. 5.

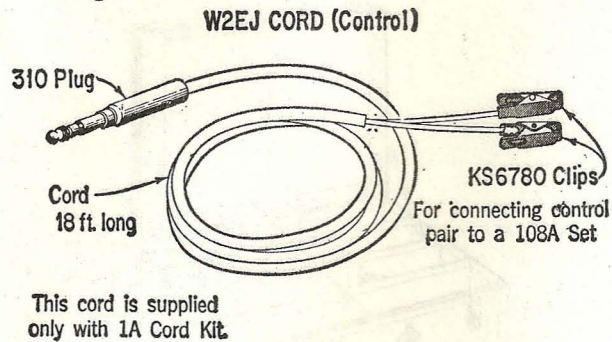


Fig. 5

- 4.04 W2J Cord:** This cord is illustrated in Fig. 6.

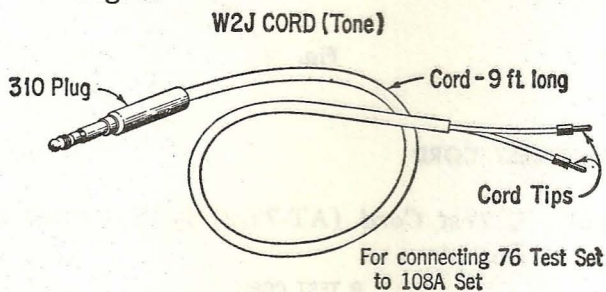


Fig. 6

- 4.05 W2EU and W2EW Cords:** These cords are illustrated in Fig. 7.

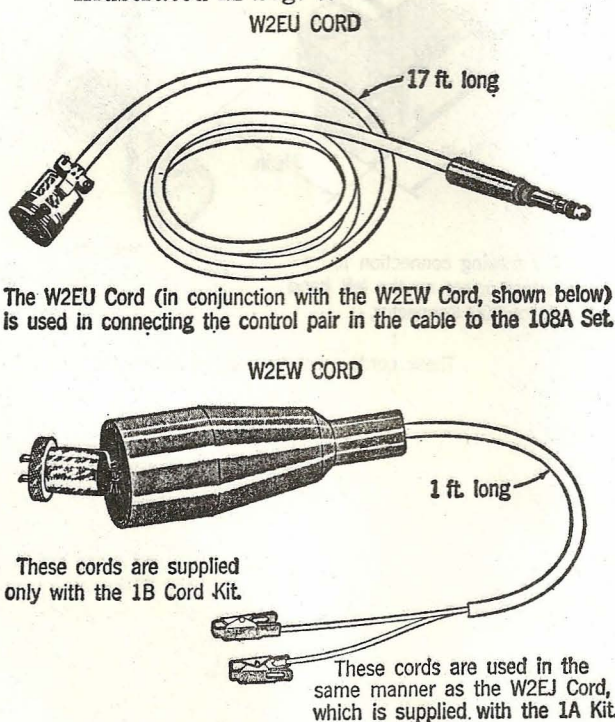


Fig. 7

- 4.06 P40A Cord:** This cord is illustrated in Fig. 8.

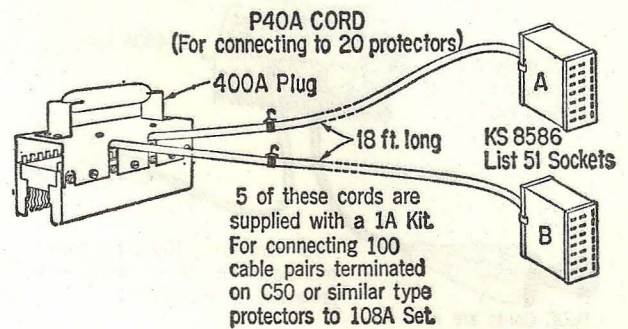


Fig. 8

- 4.07 P20F Cord:** This cord is illustrated in Fig. 9.

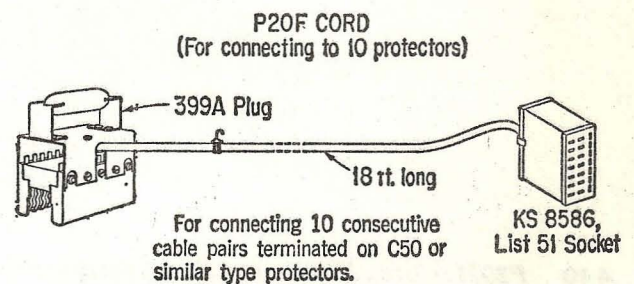


Fig. 9

- 4.08 P20G Cord:** This cord is illustrated in Fig. 10.

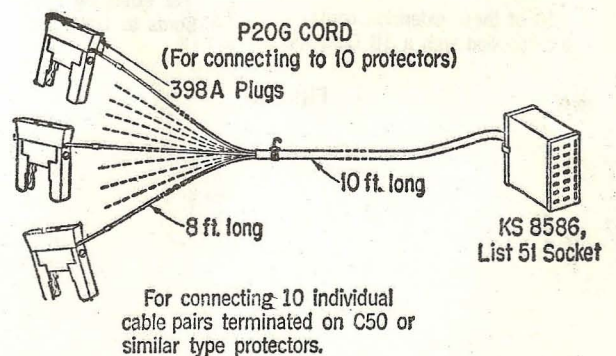


Fig. 10

- 4.09 P40C Cord:** This cord is illustrated in Fig. 11.

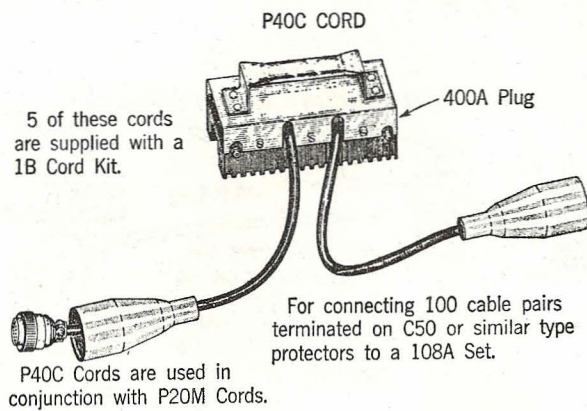


Fig. 11

- 4.11** The cords of a cord kit are supplied in the KS-16362 Case illustrated in Fig. 13.

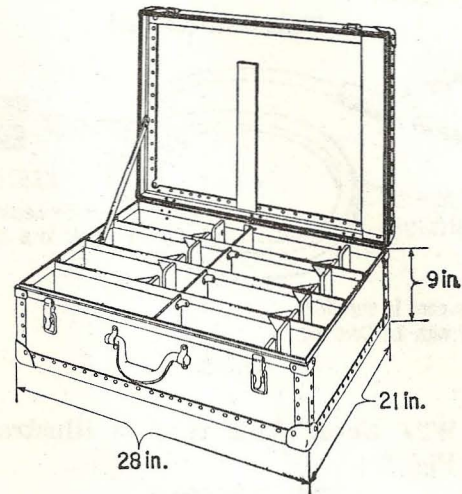


Fig. 13

- 4.10 P20M Cord:** This cord is illustrated in Fig. 12.

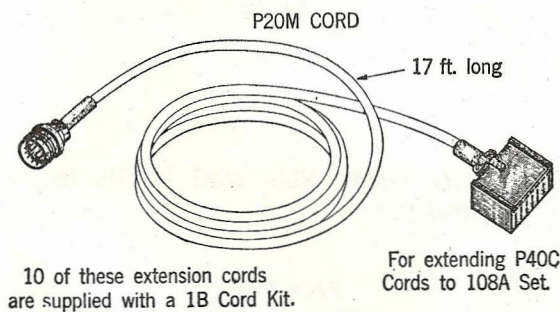
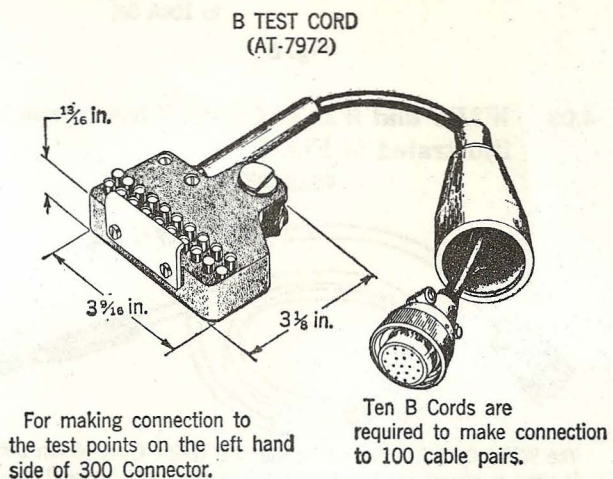


Fig. 12

5. B TEST CORD

- 5.01 B Test Cord (AT-7972)** is illustrated in Fig. 14.



These cords must be ordered separately.

Fig. 14

6. 2P30A AND 2P34A CORDS

6.01 The 2P30A and 2P34A Cords are cords that can be used to advantage. They are not part of the cord kits and therefore must be ordered separately.

6.02 The 2P30A Cord is illustrated in Fig. 15.

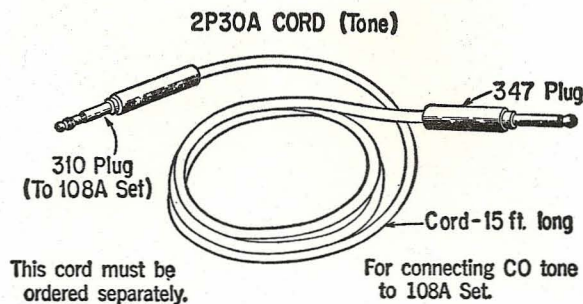


Fig. 15

6.03 The 2P34A Cord is illustrated in Fig. 16.



Fig. 16

7. MAINTENANCE

7.01 The 108A and 109A sets should not be repaired in the field. When maintenance is required, the sets should be returned in accordance with local routine.