CORDS, PLUGS AND C TEST CONNECTOR USED WITH 300-TYPE CONNECTORS AND 121-TYPE PROTECTORS DESCRIPTION CONVENTIONAL MAIN DISTRIBUTING FRAMES

CONTENTS PAGE

1. GENERAL

1.01 This section describes plugs, cords, and C test connector, B connector case, and method of installing the C-type connector on the 300-type connectors ▶and 121-type protectors used with conventional◀ main distributing frames.

1.02 This section is reissued for the reasons listed below. Change arrows have been used to denote significant changes.

(1) Change title to read "Cords, Plugs and C Test Connector-Used With 300-Type Connectors and 121-Type Protectors-Description—Conventional Main Distributing Frames

(2) Revise Table A

(3) Add Figs. 6 and 7.

1.03 Plugs, cords, and test connectors used on other than the 300-type connectors are covered in Sections 201-206-102, 201-208-102, ▶and 201-208-106.◀

1.04 Other sections which may be helpful are in the 032 Division.

1.05 The C test connector is used to connect apparatus rapidly to the 50 consecutive pair terminations at the 300-type connector on a main distributing frame.

1.06 The P100A and P100B cords are used to connect test apparatus to the 300-type connectors and to bridge test connectors.

1.07 The B connector case is used for storing and transporting the C test connector.

2. PLUGS, CORDS, AND C TEST CONNECTOR

A. Plugs And Test Connector Used With 300-Type Connectors and 121-Type Protectors

2.01 Table A lists plugs and the C test connector used with the 300- type connector.

B. Cords Used With 300-Type Connector and 121-Type Protectors

2.02 Table B lists cords used with the 300- type connectors and 121-type protectors.

3. C TEST CONNECTOR, P100A AND P100B CORDS

A. C Test Connector

3.01 The front and back views of the C test connector are shown in Fig. 1 and 2. The connector consists of a plastic baseplate containing an assembly of 100 spring-mounted plungers (50 pairs). The plungers are arranged to make positive contact with the cable pair test buttons located on the left side of 300-type connectors.

3.02 The plungers make or break contact with the cable pair test buttons by hand-operated plastic slides. The plungers ride on top of special circuit markers and thus avoid contact with pairs so equipped.

3.03 The C test connector is supported vertically on the test strip by a steel positioning bracket at the top. The connector is held against the test strip by three molded plastic hook brackets which engage the test strip at the rear. Two retractable blades at the front of the connector engage slots in the faceplate of the 300-type connector for locking the connector into position.

3.04 The C test connector has two 25-pair connectors on the face for attaching a P100A or P100B cord.

3.05 In offices with shallow, double-sided protector frames, a test jack box may occasionally interfere with mounting the C test connector. The test connector can be mounted if the jack box is temporarily loosened at its frame mounting screws and moved as far to the left as possible. The C test connector may also interfere with speaker system microphones which appear about one in every twelve verticals. Most of these microphones are on collapsible arms, but those which are not must be temporarily unscrewed from the frame.

B. P100A and P100B Cords

3.06 The P100A and P100B cords are illustrated in Fig. 3 and 4. The cords are not supplied with the test connectors but must be ordered separately.

3.07 The P100A cord, which is 30 feet long, is required to connect test equipment to a test connector. The plugs on the Y end of the cord are engaged with mating connectors on test equipment. Plugs and connectors with similar numbers on the hoods of the cord plugs and on the test equipment should be mated. The jack screws are engaged and turned simultaneously so the plugs and connectors mate squarely. The P100A cord is removed from the test equipment by reversing the jack screws simultaneously.

3.08 The P100B cord is a 50-foot extension cord. One or more P100B cords and a P100A cord are required to bridge between test connectors. Jack screws of the plugs on the Y end of the P100A cord mate with the connectors on the Y end of the P100B cord. Plugs on the tandem end of the P100B cord connect to a test connector or to connectors on the Y end of another P100B cord or test equipment. Turn jack screws, as described in ◗paragraph◖ 3.07, when mating plugs and connectors.

3.09 After the test connector is installed on the protector, the P100A cord is connected to the test connector and secured with the jack screws provided on the cord plugs. The plugs numbered 1 through 25 and 51 through 75 should be mated with

the upper connector which is associated with numbers 1 through 25 and 51 through 75 on the test connector number plate. The plugs numbered 26 through 50 and 76 through 100 are connected to the lower connector which is associated with those numbers on the number plate. Engage the jack screws, and turn the screws simultaneously so the plug will enter the connector without binding. The end of the P100A cord where one plug is in line with the other is attached to the connectors on the test connector. The Y termination end of the P100A cord is connected to the test equipment.

3.10 The tandem ends of the P100A and P100B cords (which attach to the test connectors) are provided with a clip about 1-1/2 feet behind the cordage breakout to the plugs. Attach the clips to a cable ring between verticals to relieve the strain on the test connectors due to the weight of the vertical portion of the cord. Adjust the portion of the cord hanging vertically to position within the space between the adjacent protector mountings. Do not allow the cord to protrude into the aisle space.

3.11 Place the remaining cordage passing between verticals on the floor behind the ladder guardrail, and neatly coil excess cordage so it does not protrude into the aisle space.

3.12 Follow the procedures in ♦paragraph♦ 3.09 where the P100A cord is used alone to connect the test connectors with test equipment. Place the test equipment as close to the vertical containing the pairs under test as practicable, and allow only the minimum cordage needed to connect to the test equipment in the aisle space outside the guardrail.

3.13 Remove the cords by unscrewing the jack screws on them. Turn screws simultaneously until the plugs come away squarely from the connectors.

C. Placing C Test Connector

3.14 To place a C test connector, withdraw the plastic slides to the ***out*** position so all contact plungers are recessed into the baseplate.

3.15 Place the steel positioning bracket on top of the test strip of the 300-type connector, and engage the plastic hook brackets with the rear of the test strip. Hold the test connector in place against the 300-type connector, and screw the retractable blades at the front of the test connector into the slots provided on the 300-type connector.

3.16 Contact to the cable pair test buttons is made in groups of ten or more by pushing the edge of one hand against the rear of the associated slides. ***Do not operate the slides on special service pairs or on pairs involved on a cable transfer.***

3.17 After installing the C test connector, a P100A cord is plugged to the connectors on the front face and secured with the jack screws provided on the cord plugs. The plugs numbered 1 through 25 and 51 through 75 mate with the upper connector similarly numbered, and the plugs numbered 26 through 50 and 76 through 100 mate with the lower connector. To enable the plug to enter the connector squarely, engage the jack screws and turn the screws simultaneously. The tandem end of the P100A cord is attached to the C test connector. The Y end is connected to a test set or to a P100B cord.

3.18 Attach the cords to the cable rings, and store the excess cordage as described in ♦ paragraphs♦ 3.10 3.11, and 3.12.

3.19 When the C test connector is to be removed for storage or relocation to another 300-type connector, the following steps should be followed.

(1) Remove the cords.

(2) Break contact with the test strip by pulling out the slides.

(3) Turn out the knurled screws and remove test connector.

D. Main Frame Ladder Clearance

3.20 To prevent a moving ladder from causing damage to the connectors, adjust the distance of the ladder top rail guide from the main frame to provide 1-inch minimum clearance along the entire length of the frame.

3.21 Temporary clearance can be obtained by using a P-20A356 guard as shown in Section 106-310-120 (providing clearance for a 108A test set). This guard extends 7 inches out and 16 inches along the main frame guardrail. This clearance is sufficient to permit the ladder to pass the test connector.

3.22 Permanent clearance can be provided by extending the guardrail per ED-95099-70, fur-

nished by the equipment engineer. However, temporary clearance is preferred for economic reasons.

E. B Connector Case

3.23 The B connector case is available on separate order to house and transport a C test connector.

3.24 The B connector case (Fig. 5) consists of a lightweight plastic box with a hinged cover, a carrying handle, a latch, and two snap catches.

3.25 There are two longitudinal ribs on both the cover and the bottom of the case which, along with the catches, permit stacking two cases and carrying them as a unit.

TABLE A

PLUGS USED WITH 300-TYPE CONNECTORS AND 121-TYPE PROTECTORS

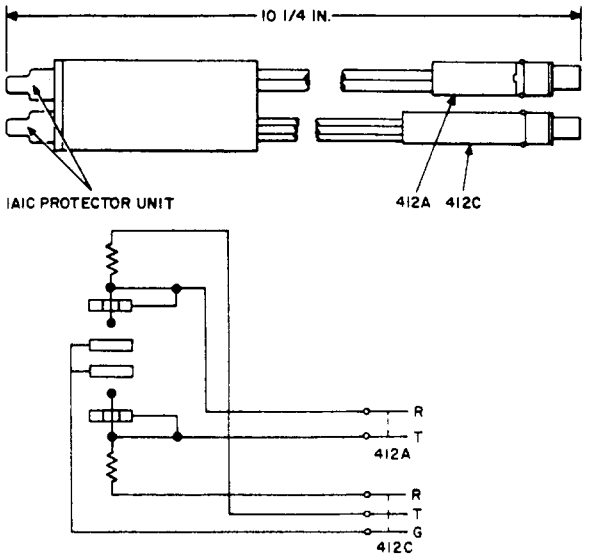
PLUG	DESCRIPTION AND USE	ILLUSTRATION AND SCHEMATIC
412A 412C 418B	Forms part of 418B plug. Test plugs arranged to plug into receptacles for 1A1-type protector units. Reversing plug consisting of two 1A1C protector units in a metal housing and connected to 412A and 412C plugs. Arranged to reverse tip and ring of a cable pair with respect to central office circuits temporarily, until outside plant change can be made. This plug will not ground the line when protector units are removed.	
C Test Connector	Used to provide access to 50 cable pairs.	See Fig. 1 and 2 and paragraph 3.01.
B Pair Identifier	Used for identification tests by contacting test points on 121-type or 300-type connectors. Refer to Section 106-315-103.	See Fig. 6
B Test Clip	Used to facilitate connecting to test points on the test panel of 300-type connectors. Refer to Section 106-315-101.	See Fig. 7

TABLE B

CORD ASSEMBLIES USED WITH 300-TYPE CONNECTORS AND 121-TYPE PROTECTORS

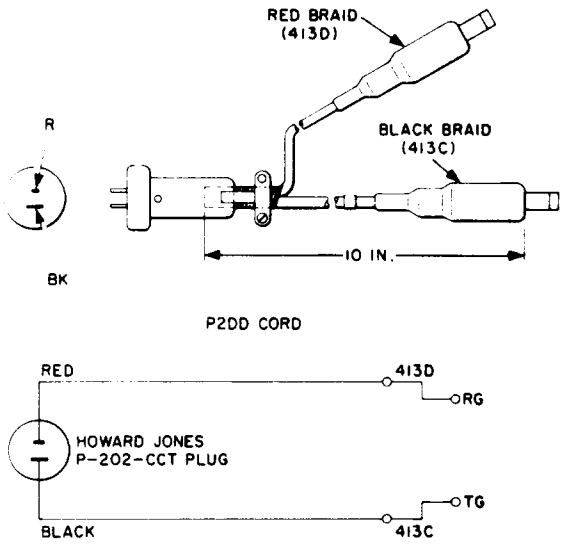
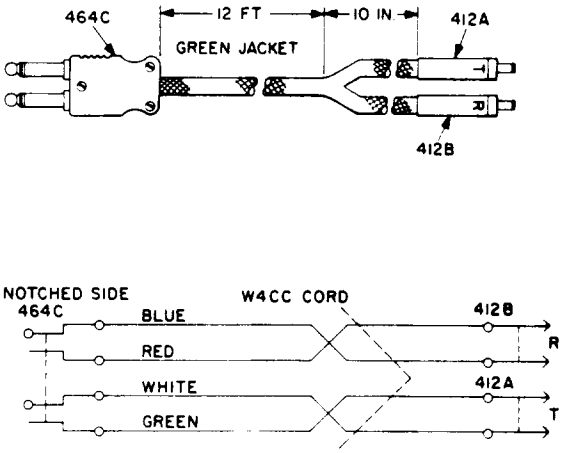
ASSEMBLY	USE	ILLUSTRATION AND SCHEMATIC
2P34A	Used with P2DB cord to connect cable pairs from 300-type connectors to KS-14103 test set.	
4W11A	Used at distributing frames for plugging-up and connecting test trunk circuits to circuits terminated on 300-type connectors.	

TABLE B (Cont)

CORD ASSEMBLIES USED WITH 300-TYPE CONNECTORS AND 121-TYPE PROTECTORS

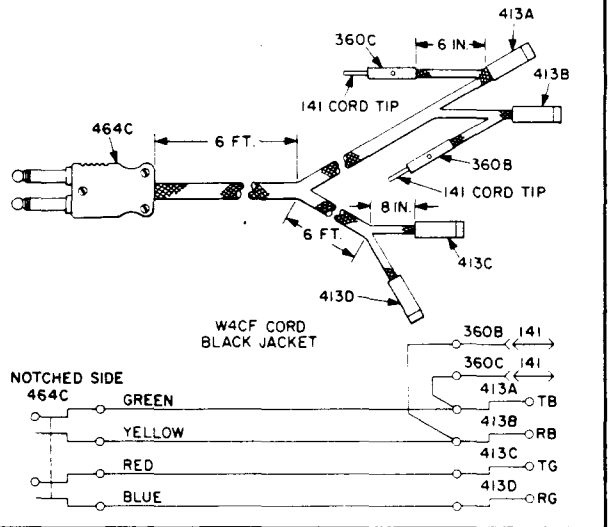
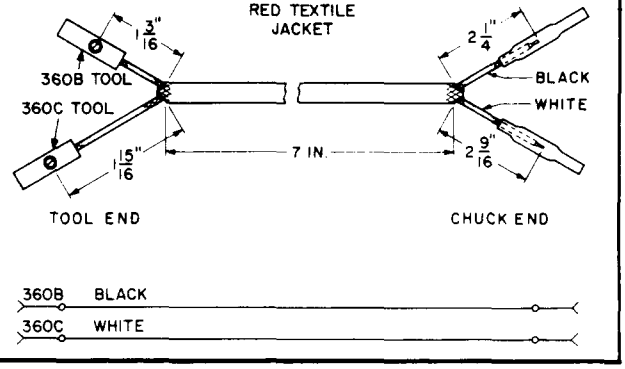
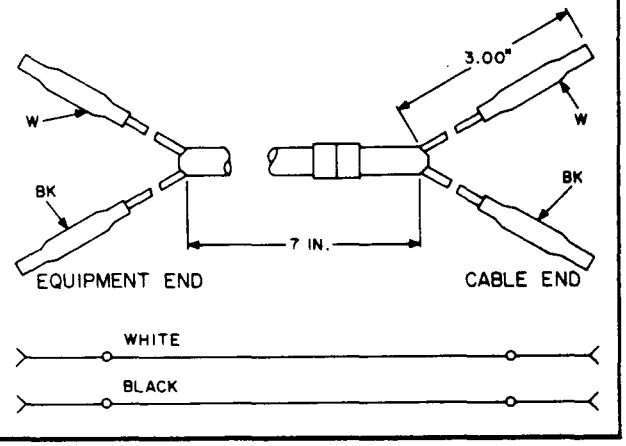
ASSEMBLY	USE	ILLUSTRATION AND SCHEMATIC
4W12A	Used at distributing frames for connecting Varley test trunks to conductors terminated on 300-type connectors.	
M2EM	Used with B test clip for shunting protector units at 300-type connectors when necessary to inspect carbon blocks without opening the circuit. Note: B test clip not recommended for use with 121-type protectors. Refer to Section 106-315-101.	

TABLE B (Cont)

CORD ASSEMBLIES USED WITH 300-TYPE CONNECTORS AND 121-TYPE PROTECTORS

ASSEMBLY	USE	ILLUSTRATION AND SCHEMATIC
M2EN	Used with B test clip for shunting protector units at 300-type connectors when necessary to inspect carbon blocks without opening the circuit.	

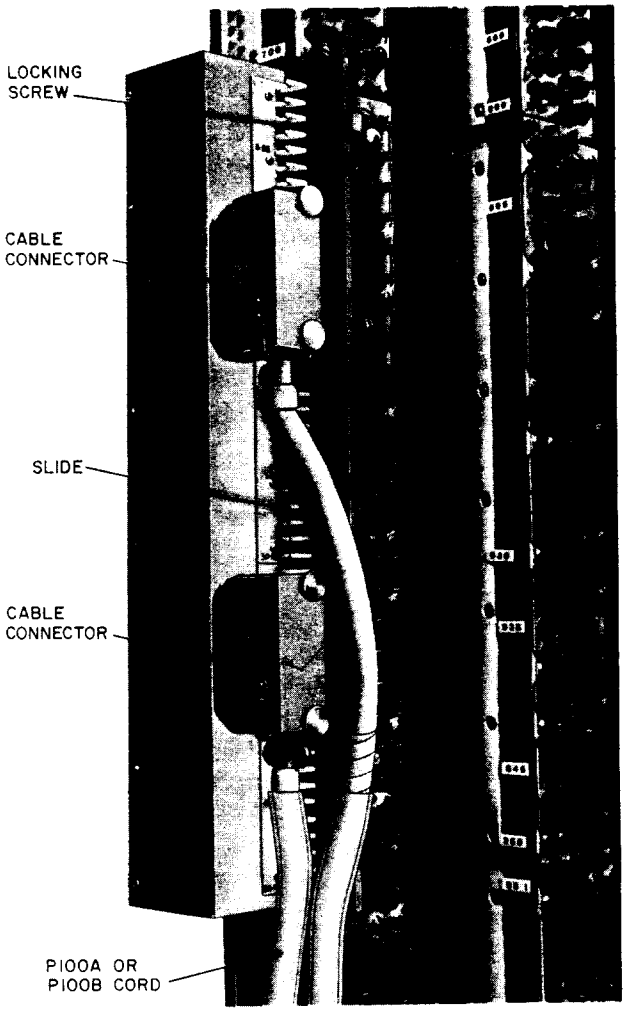


Fig. 1—C Test Connectors on 300-Type Connector

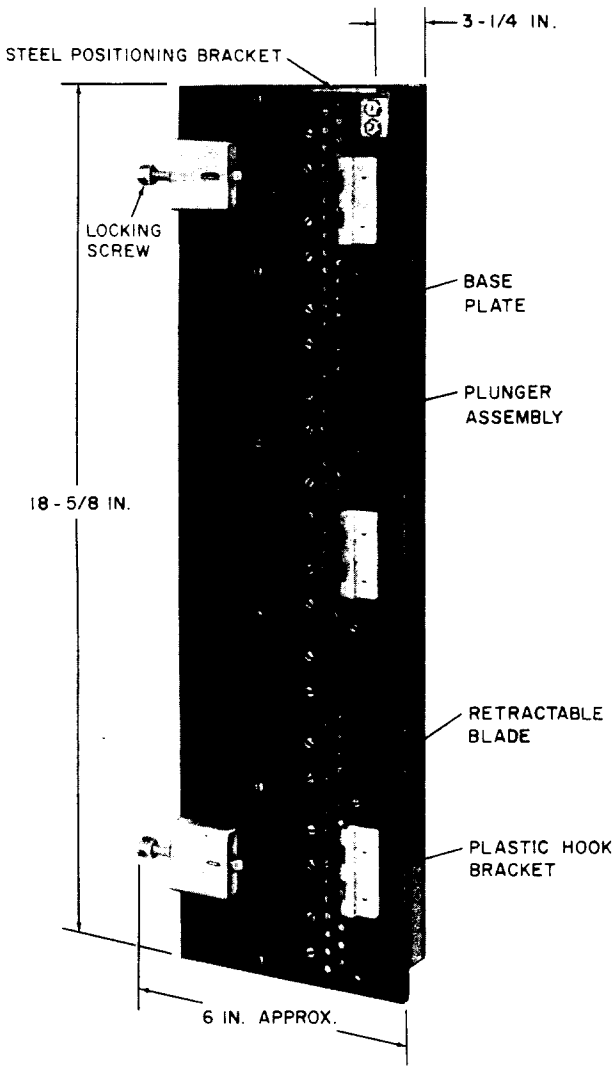


Fig. 2—C Test Connector—Rear View

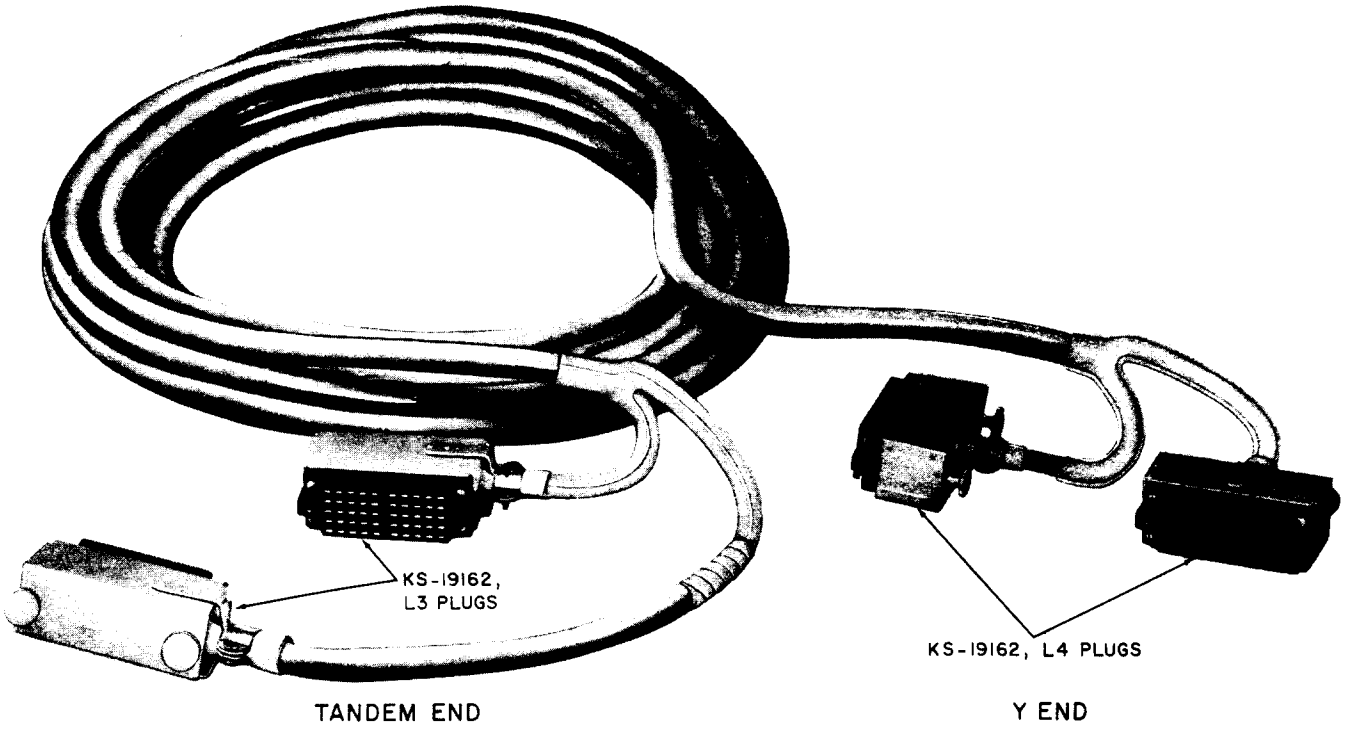


Fig. 3—P100A Cord

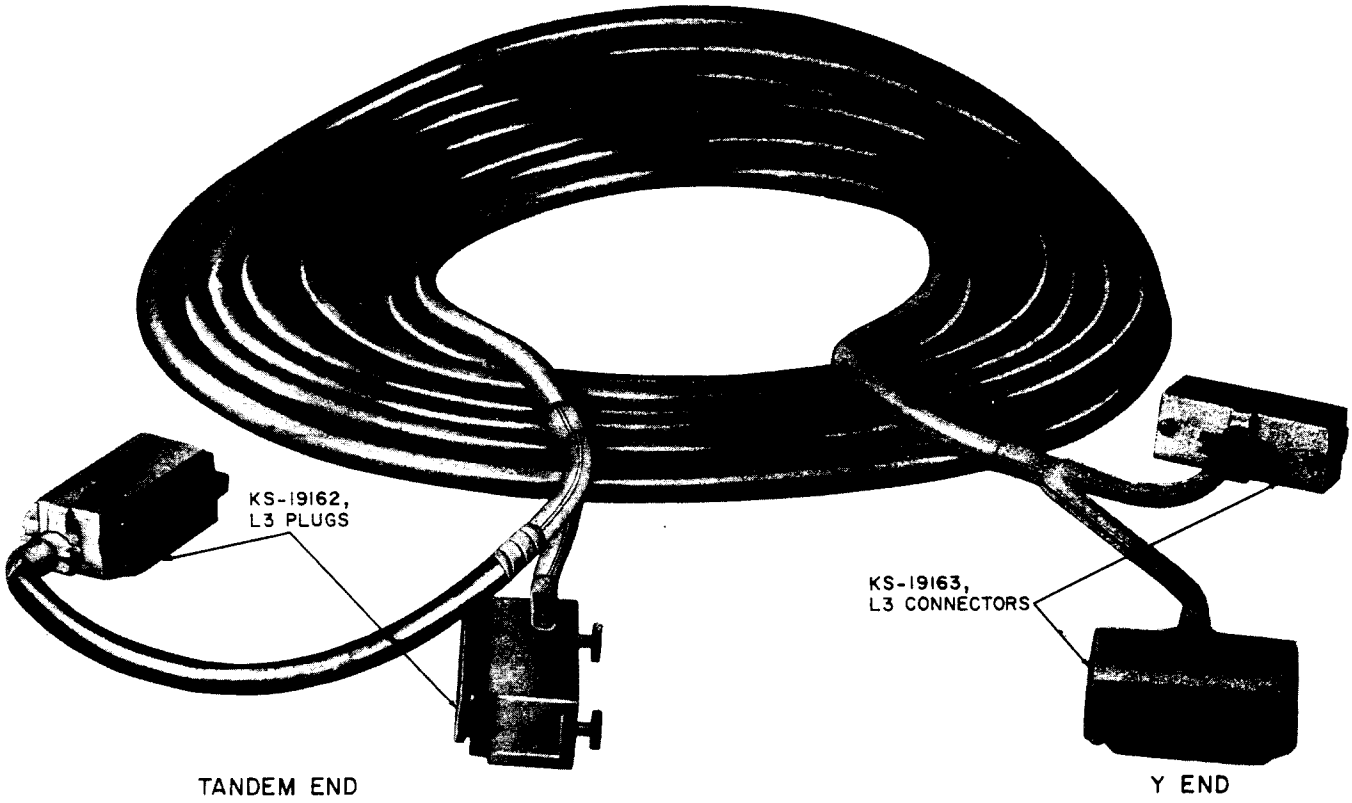


Fig. 4—P100B Cord

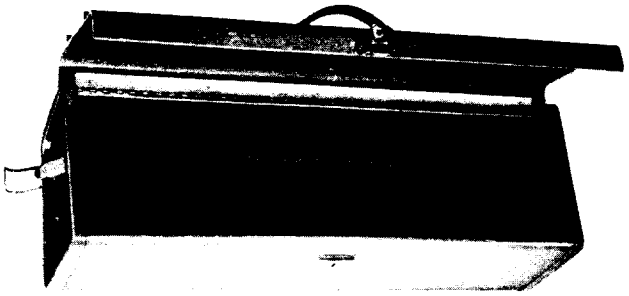
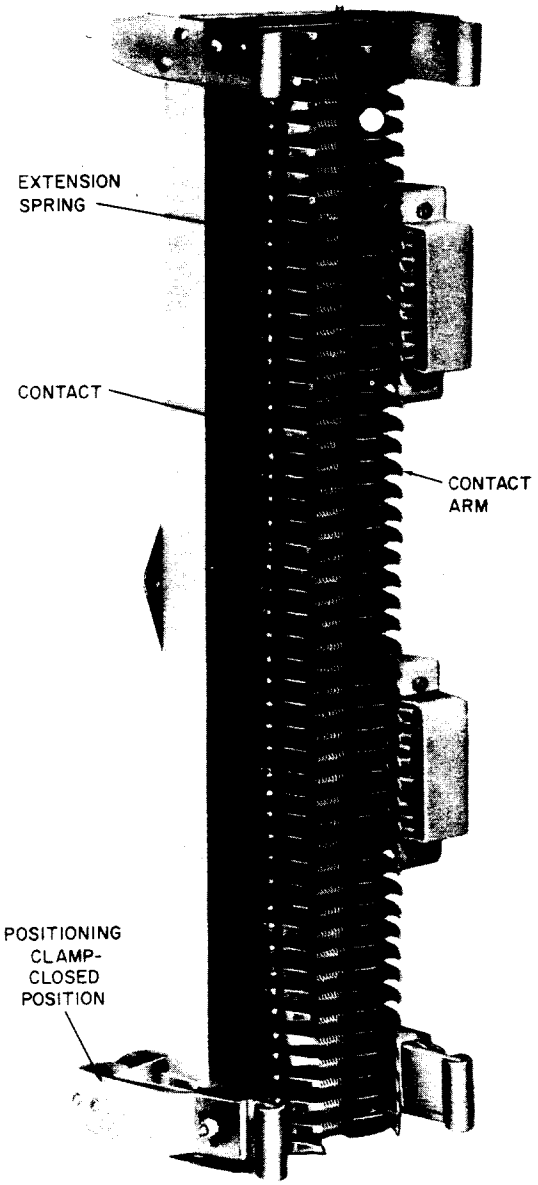
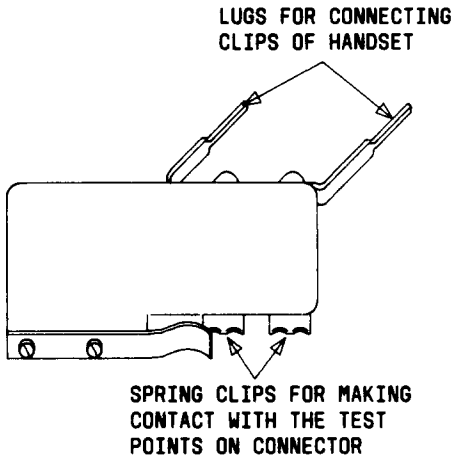


Fig. 5—B Connector Case



◗Fig. 6— B Pair Identifier-Front View◖



◗Fig. 7—B Test Clip◖