CORDS AND PLUGS ASSOCIATED WITH 302-, 303-, AND 305-TYPE CONNECTORS

CONTENTS PAGE

1. GENERAL

1.01 This section describes plugs, cords, and test connectors used with the 302-, 303-, and ▶305-◀ type connectors associated with main distributing frames and COSMIC distributing frames.

1.02 This section is reissued to add the 305-type connector and associated cords and plugs and to add the C-4920 and C-4930 multiple pair test connectors. The section title is revised to include the 305-type connector.

1.03 Plugs, cords, and test connectors used on other than 302-, 303-, and ▶305-◀ type connectors are covered in Sections 201-206-102 and 201-207-102.

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

2. CORDS, PLUGS, AND TEST CONNECTORS

A. Plugs and Test Connectors Used With 302-, 303-, and 305-Type Connectors

2.01 Table A lists plugs and test connectors used with 302-, 303-, and ▶305-type◀ connectors.

B. Cords Used With 302-, 303-, and 305-Type Connectors

2.02 Table B lists cords used with 302-, 303-, and ▶305-◀ type connectors.

3. D, G, H, M, AND N TEST CONNECTORS AND C-4920 AND C-4930 MULTIPLE PAIR TEST CONNECTORS

A. General

3.01 ▶This part describes the D, G, H, M, and N test connectors and the Communications Technology Corporation C-4920 and C-4930 multiple pair test connectors (see Section 106-315-119) and covers their use in testing outside plant cable pairs terminated on 302-, 303-, or 305-type connectors. The D, G, H, and N test connectors are similar except for the mounting arrangement and pair numbering. The D test connector mounts on the test terminal field of the 302A1 and 302B1 connectors. The G test connector mounts on the test terminal field of the 302A2 and 302B2 connectors, and the H test connector mounts on the test terminal field of the 303A1 and 303B1 connectors. The N test connector mounts on the test terminal field of the 305-type connectors. The M test connector is used to connect the test terminal field of the 305A1 or 305B1 connector to automatic pair identification equipment. The C-4920 and C-4930 multiple pair test connectors connect the test terminal fields of

the 302- or 303-type connectors to automatic pair identification equipment.

B. Description

3.02 The G test connector used with the 302A2 and 302B2 connectors on the double-sided protector frame (DSPF) (Fig. 1) consists of 100 contacts mounted in a plastic housing. Each contact consists of a gold-plated brass plunger, a gold-plated brass spike, and a gold-plated music wire-spring which bridges the plunger to the spike. The spring also presses the plunger against the recessed test button on the 302-type connector. The spikes on the face of the test connector protect the gold-plated buttons of the 302-type connector from damage when a B test point is used.

3.03 The D used with the 302A1 and 302B1 connectors on the modular protector frame (PF) test connector (Fig. 2) is similar to the G test connector except for the mounting arrangement (Fig. 3).

3.04 The H test connector (Fig. 4) is similar to the G test connector except for the number of locating pins on the rear and the pair numbering on the front.

3.05 The N test connector used with the 305-type connector has the test field spikes at right angles to the spring loaded contacts to facilitate testing due to the orientation of the 305-type connector mounting on the main frame (Fig. 5). The test connector is mounted to the 305-type connector test terminal field with captured thumb screws. Connection is made to all 200 recessed gold-plated test buttons (100 pairs). Numbering is 1 through 00 (100).

3.06 C-4920 and C-4930 multiple pair test connectors (Fig. 6) consists of a plastic shell in which 100 gold plated pins (50 pairs) are housed and internally connected to the 50-pair test cord. The 15-foot test cord divides into two 25-pair branches which terminate in two KS-19162-L4 (or equivalent) connectors.

3.07 The C4920 multiple pair test connector is designed for use with either the 302A2, 302B2, or 303-type connectors.

3.08 The C4930 multiple pair test connector is designed for use with the 302A1 or 302B1 connectors.

3.09 The M test connector (Fig. 7) used with the 305-type connector is similar to the multiple pair test connector except it contacts all 100 pairs of the test terminal field. Two 50-pair, 15-foot long cables terminate in two each KS-19162-L4 connectors. The four connectors are numbered 1-25, 26-50, 51-75, and 76-100 respectively.

C. Use

CAUTION: All connectors must be handled and used carefully to avoid damage and contamination to spring loaded contacts and/or test field spikes.

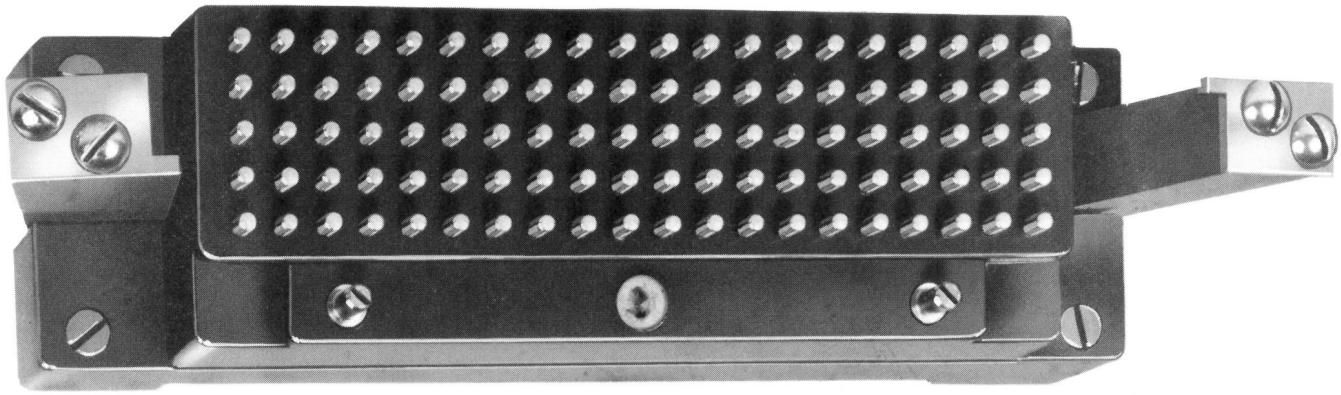
3.10 The D, G, or H test connector is placed over the 50-pair test terminal field on the 302- or 303-type connector and held in place by slots in the modular protector frame (D test connector) or by hooks over the rear of the connector (G and H test connector). The spikes on the face of the test connector will withstand repeated contacts with a B test point; whereas, the recessed gold-plated buttons on the 302-, 303-, and 305- type connector test panel will not.

3.11 The D, G, or H test connector can be used on either of the two test terminal fields of a 302- or 303-type connector. The D and G test connector must be inverted from one test terminal field to another (top to bottom). They have two sets of pair numberings: one set (pairs 1 through 50) inverted from the other set (pairs 51 through 100). The H test connector should not be inverted when moved from one test terminal field to another. Both sets of pair numbering on the H test connector have the same orientation.

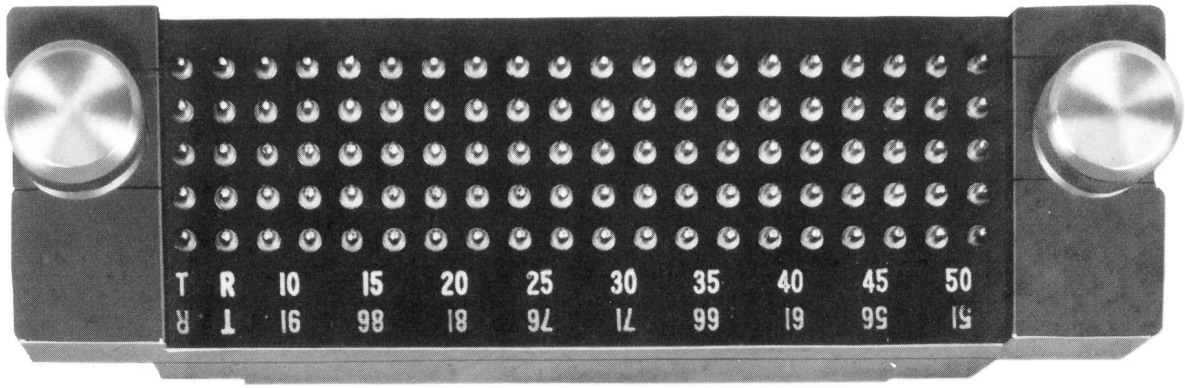
3.12 The test connectors will not make contact with the test buttons on any special service pair covered with a KS-19478 L1 Guard.

3.13 The test connector spikes also accommodate the chuck-type connectors of the W2FH and W2FM cords (Fig. 8 and Table B) for connection of outside plant or other test equipment.

3.14 The M and N test connectors are designed for use with the 305-type connectors.



REAR VIEW



FRONT VIEW

Fig. 1—G Test Connector (For 302A2 and 302B2 Connector)

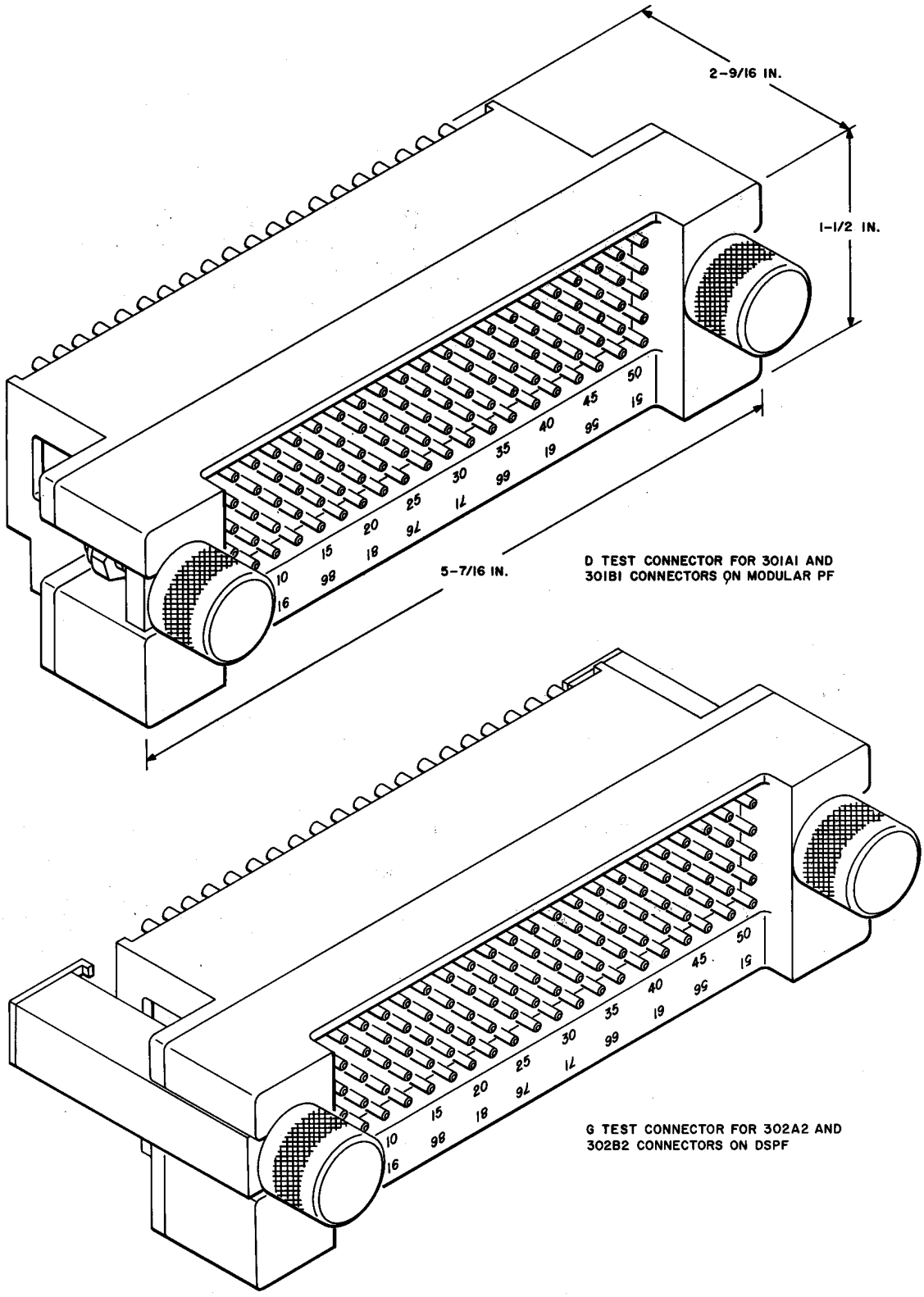
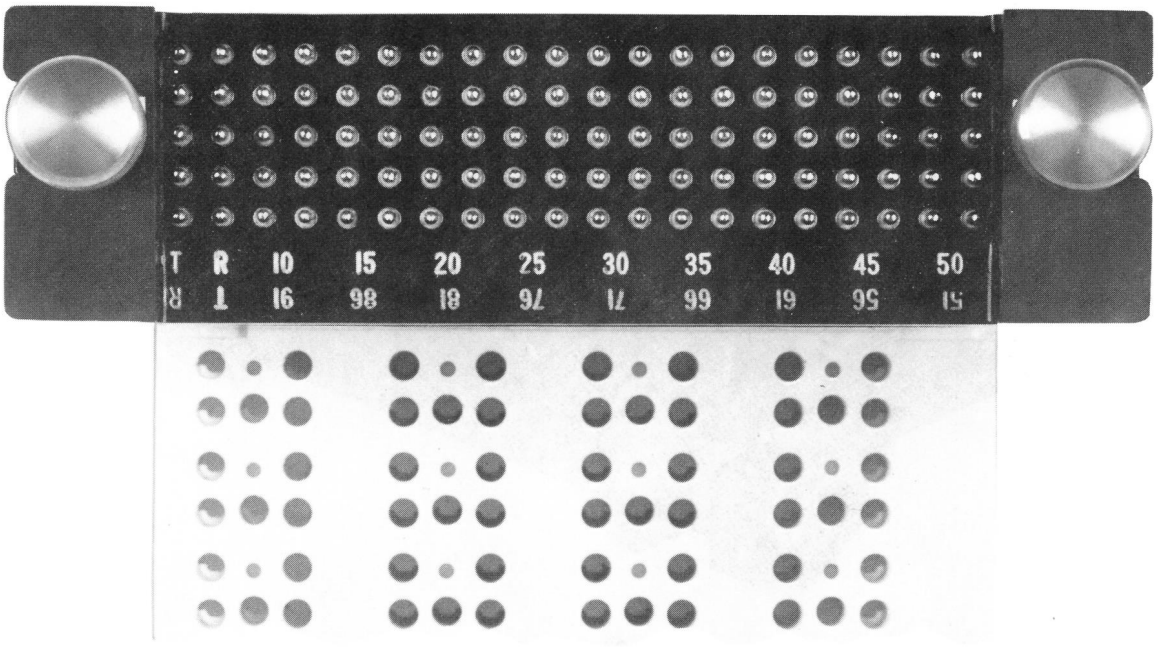
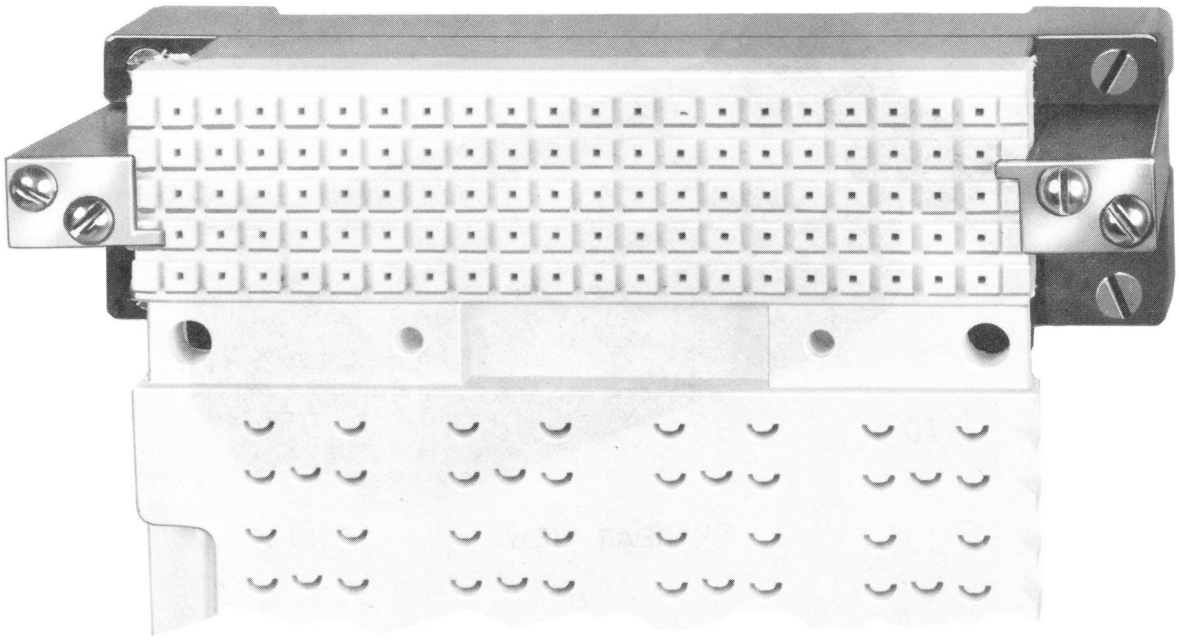


Fig. 2—D and G Test Connector Mounting Arrangement

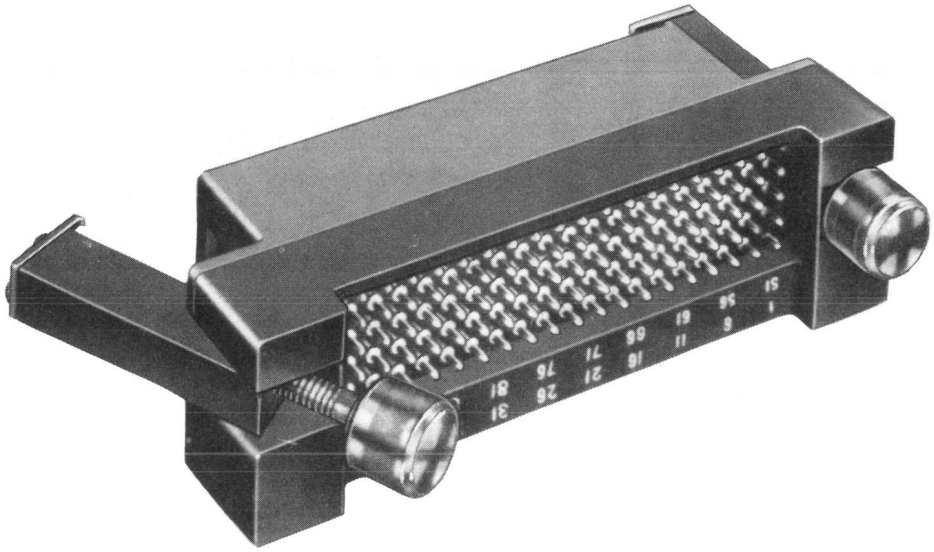


FRONT VIEW

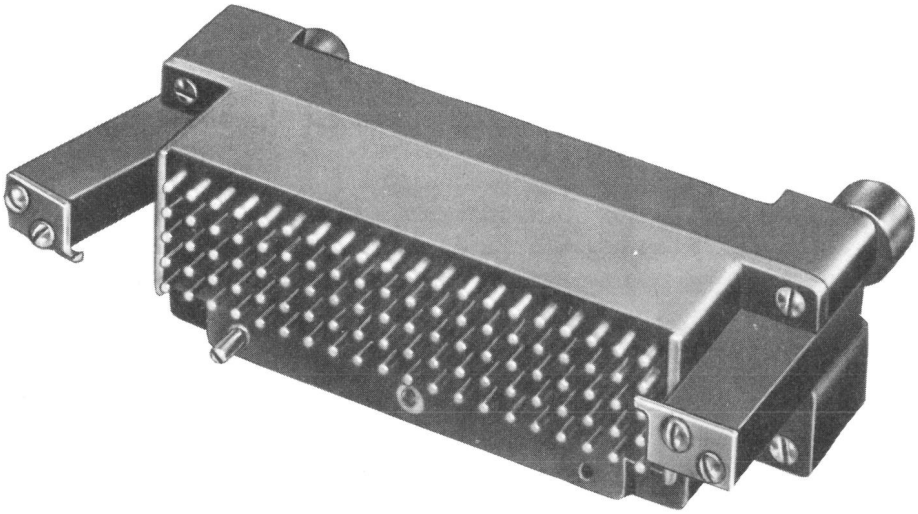


REAR VIEW

Fig. 3—G Test Connector Mounted—(For 302A2 and 302B2 Connectors Mounted on Double-Sided Protector Frame)



FRONT VIEW



REAR VIEW

Fig. 4—H Test Connector (For 303-Type Connectors)

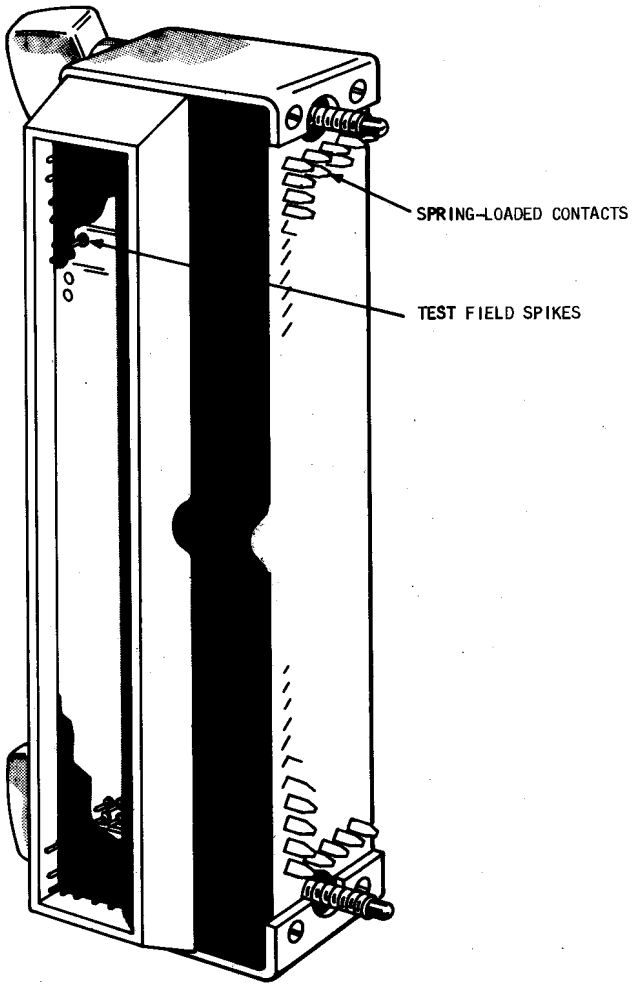


Fig. 5—N Test Connector (For 305-Type Connector)

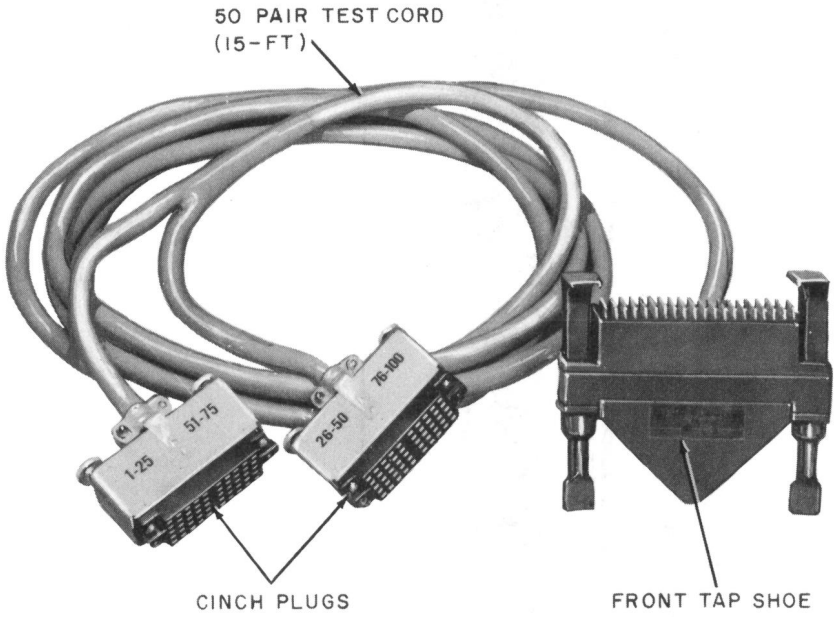


Fig. 6—►C-4920 and C-4930 Multiple Pair Test Connector (KS-19162 L4 Equivalent)◄

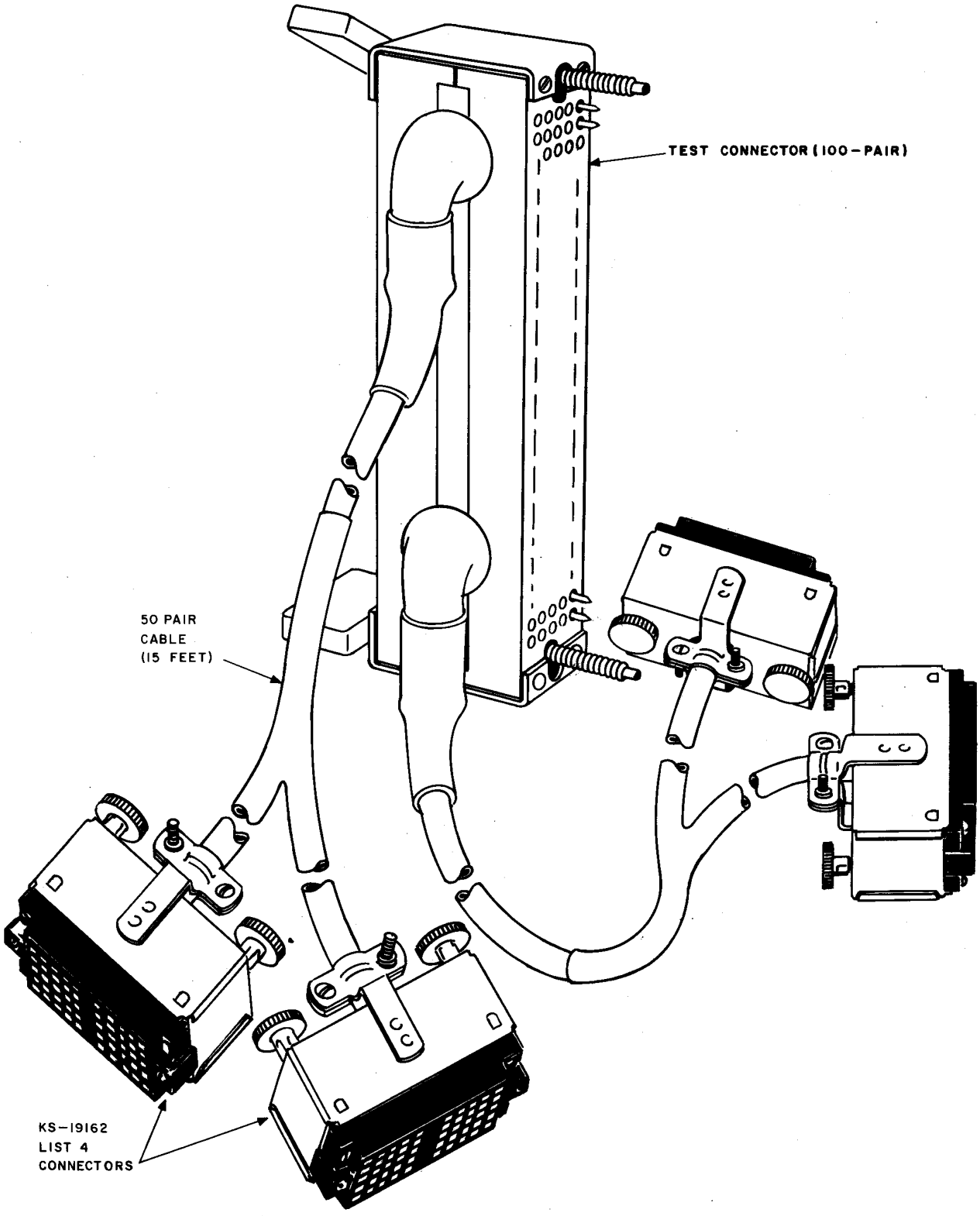


Fig. 7—◗M Test Connector (AT-8323) (For 305-Type Connector)◖

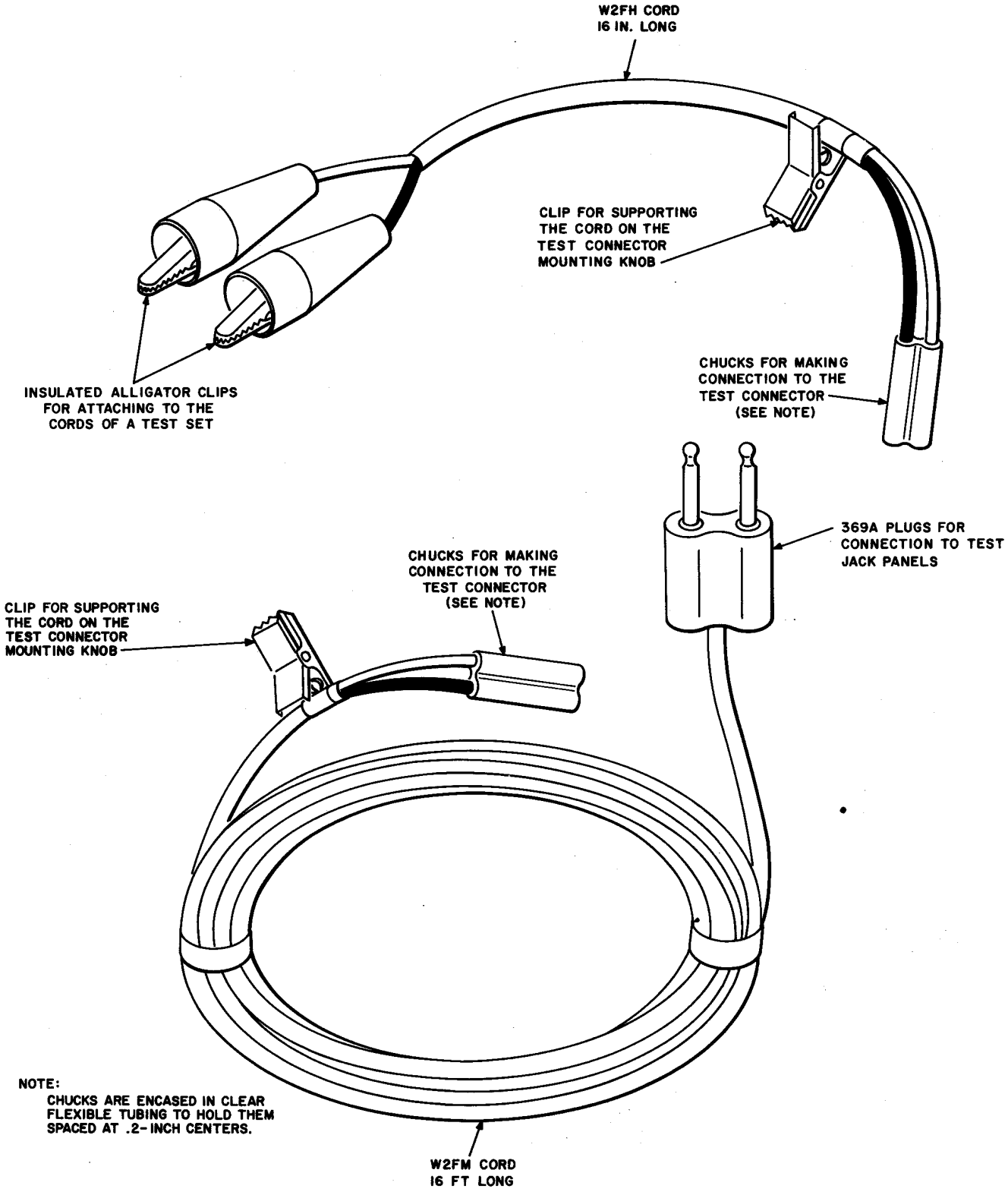
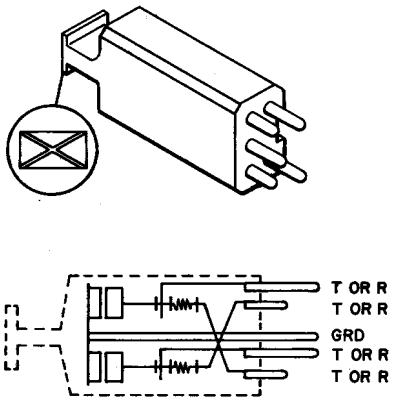


Fig. 8—W2FH and W2FM Cords

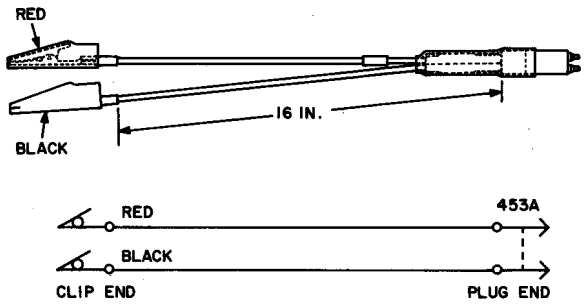
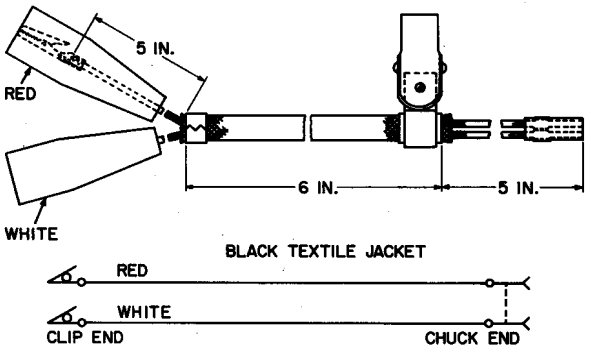
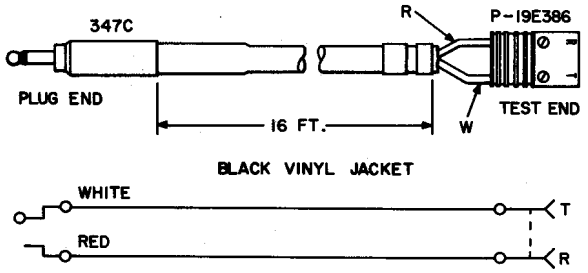
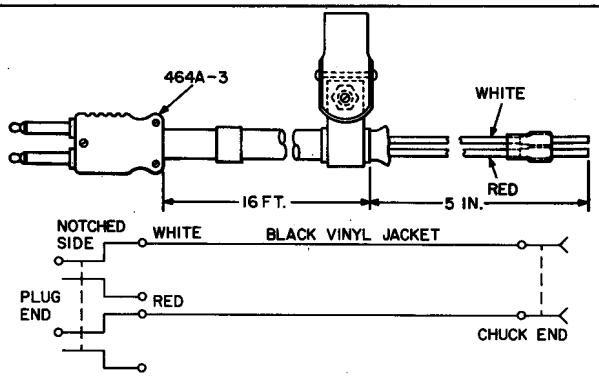
→TABLE A←

PLUGS USED WITH 302-, 303-, AND 305-TYPE CONNECTORS

PLUG	DESCRIPTION AND USE	ILLUSTRATION AND SCHEMATIC
429F Replaces 429A	Consists of 4A5C protector components housed in a white case. The color is white to indicate that the pair is being reversed. ***Note:*** 429F plugs can be used on 302-, 303-, and 305-type connectors. Older 429A and 429E plugs can only be used on 302-type connectors.	
D and G Test Connectors	Used to provide access to all 50 test terminals on a test terminal field of 302-type connectors.	See Figures 1 and 2 and 3.08.
H Test Connectors	Used to provide access to all 50 test terminals on a test terminal field of 303-type connectors.	See Figures 4 and 3.08.
M Test Connector	Used with 305-type connectors for connecting 100 pair test field to automatic pair identification equipment.	See Figure 7 and 3.07.
N Test Connector	Used to provide access to all 100 test terminals on the test terminal field on the 305-type connectors.	See Figure 5 and 3.05.
C-4920 Multiple Pair Test Connector	Used with 303 or 302A2 or 302B2 connectors to connect test terminal fields to automatic pair identification equipment.	See Figure 6 and 3.06.
C-4930 Multiple Pair Test Connector	Used with 302A1 or 302B1 connectors to connect test terminal fields to automatic pair identification equipment.	See Figure 6 and 3.06.

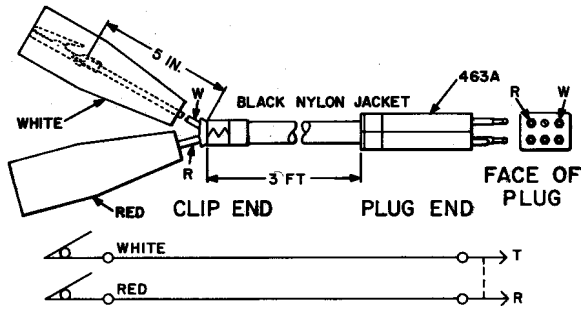
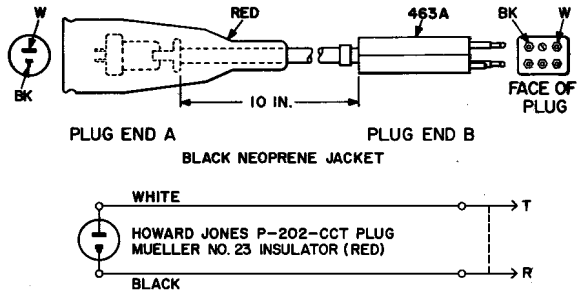
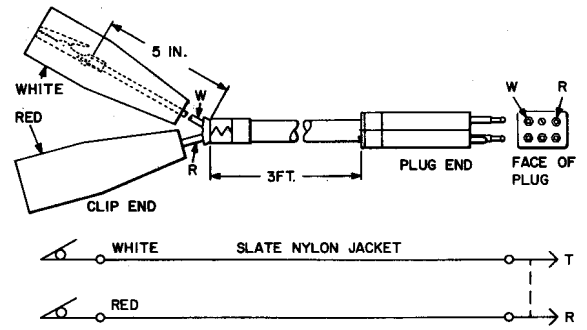
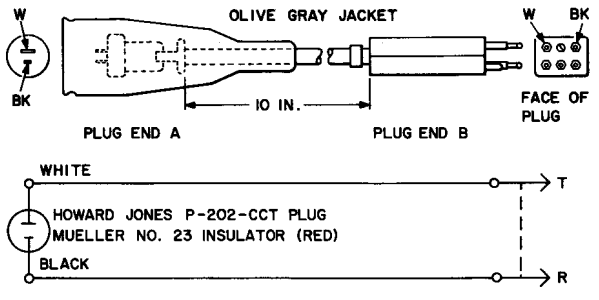
→TABLE B←

CORDS USED WITH 302-, 303-, AND 305-TYPE CONNECTORS

CORD	USE	ILLUSTRATION AND SCHEMATIC
W2EF	Used to apply short between tip and ring or to apply ground to either tip or ring or both. ***CAUTION: Not to be used as an adapter for connecting longer cords.***	
W2FH	Connects outside plant test sets to a cable pair.	
W2FL	Used on rear of No. 1 ESS Modular MDF to patch between 78B-64 connecting block and service observing jack panel.	
W2FM	Used in conjunction with D, G, and H test connectors for 302- and 303-type connectors.	

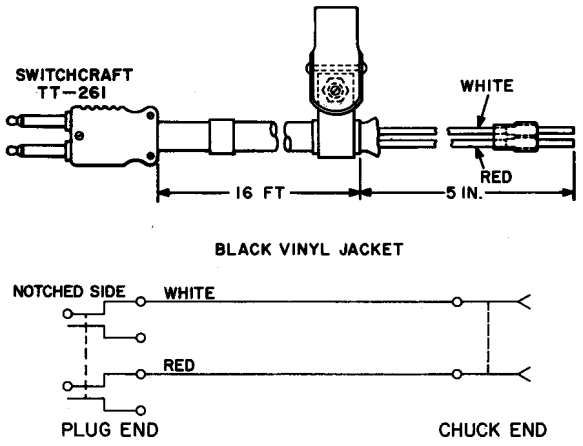
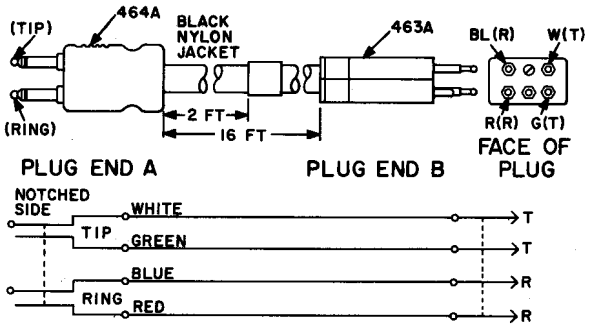
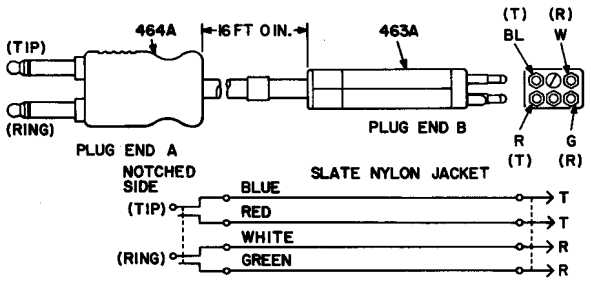
→TABLE B (Contd)←

CORDS USED WITH 302-, 303-, AND 305-TYPE CONNECTORS

CORD	USE	ILLUSTRATION AND SCHEMATIC
W2GC	Used for making connection to a cable pair at a vacant protector socket on a ***302-type connector only.***	
W2GD	Used in series with a P20B cord to connect KS-14103 test set to cable pair at a vacant protector socket on ***302-type connectors only.***	
W2GL	Used for making connection to a cable pair at a vacant protector socket on ***303- and 305-type connectors.***	
W2GM	Used in series with a P20B cord to connect KS-14103 test set to cable pair at a vacant protector socket on ***303- and 305-type connectors.***	

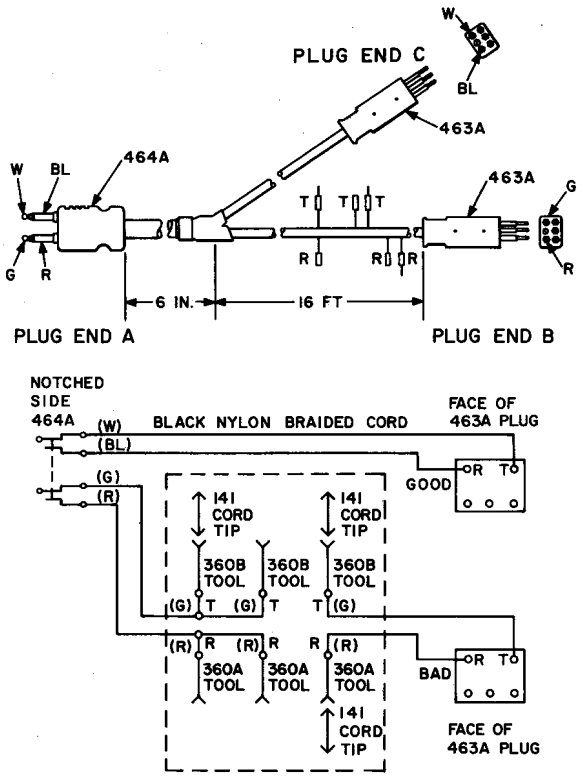
→TABLE B (Contd)←

CORDS USED WITH 302-, 303-, AND 305-TYPE CONNECTORS

CORD	USE	ILLUSTRATION AND SCHEMATIC
W2HA	Bridging cord used with 302, 303, and 305-type connectors on frames equipped with ***Miniature Test/Talk System*** hardware.	
W4BR	Used for making in and out tests from ***302-type connectors only.***	
W4CJ W4CT	Used for making in and out tests from ***303- and 305-type connectors.*** Same as W4CJ with miniature KS-plug. Used with frames equipped with ***Miniature Test/Talk System*** hardware (ED-6C110).	

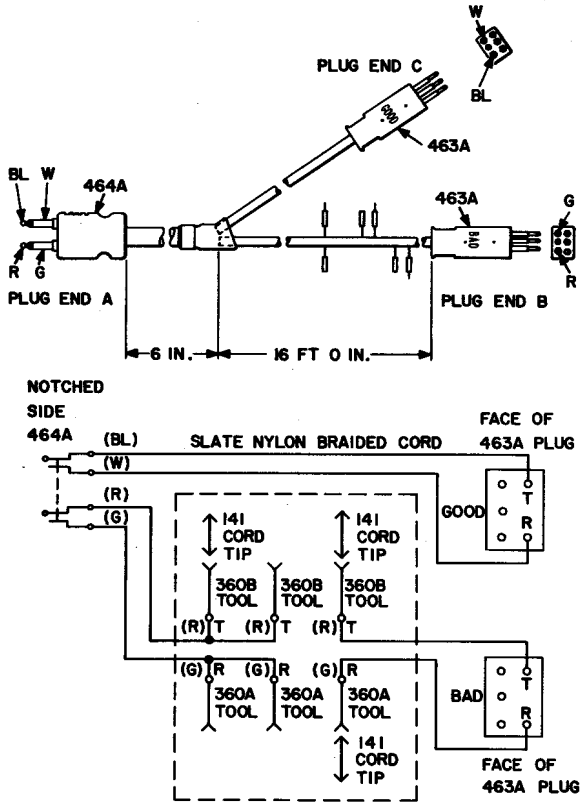
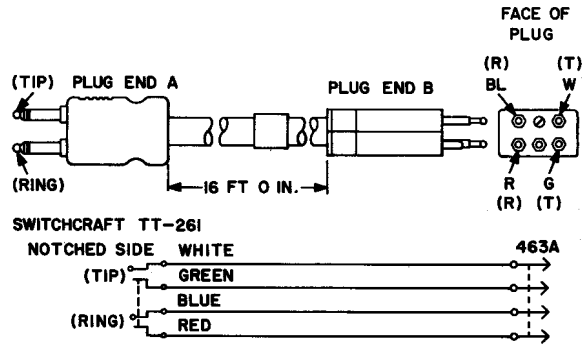
→TABLE B (Contd)←

CORDS USED WITH 302-, 303-, AND 305-TYPE CONNECTORS

CORD	USE	ILLUSTRATION AND SCHEMATIC
W4CL	Used in making manual and automatic Varley measurements on ***302-type connectors only.***	

→TABLE B (Contd)←

CORDS USED WITH 302-, 303-, AND 305-TYPE CONNECTORS

CORD	USE	ILLUSTRATION AND SCHEMATIC
W4CM	Used in making manual and automatic Varley measurements on ***303- and 305-type connectors.***	
W4CP	Used for making in and out tests from ***302-type connectors on frames equipped with Miniature Test/Talk System hardware.***	

→TABLE B (Contd)←

CORDS USED WITH 302-, 303-, AND 305-TYPE CONNECTORS

CORD	USE	ILLUSTRATION AND SCHEMATIC
W4CR	Used in making manual and automatic Varley measurements on ***302-type connectors only.***