

MAIN DISTRIBUTING FRAMES CORDS, PLUGS, AND TEST CONNECTORS

1. GENERAL

1.01 This section describes the cords, plugs, and test connectors used on main distributing frames.

1.02 This section includes information originally contained in Section 201-205-301. Section 201-205-302 now covers maintenance of protectors and is retitled:

Main Distributing Frames
Maintaining Protectors

1.03 The following equipment which was not previously covered is added in this Section.

(a) P2EF, W2GL, W2GM, W4CJ, and W4CK cords

(b) 453A plug

(c) D, G, and H test connectors

(d) KS-20244,L1 plug.

1.04 Tables A through H list the cords, plugs and test connectors and the equipment with which they are associated.

TABLE A

PLUGS USED WITH C-TYPE PROTECTORS

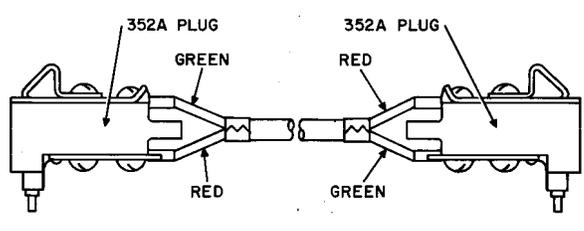
PLUG	DESCRIPTION AND USE	ILLUSTRATION
352A	Forms part of 356A plug. Contains a heat coil and is arranged to make connections to protector block spring and heat coil spring of C50 and similar protector mountings.	 <p style="text-align: center;">356A PLUG TPA-556557</p> <p style="text-align: center;">Fig. 1</p>
356A	Consists of a P2AY cord equipped with a 352A plug at each end. Used on C50 and similar type protectors to reverse a cable pair to give temporary service when ring side of the circuit has been accidentally grounded or to temporarily correct tip and ring turnover until outside plant change can be made.	
B Test Connector	Used to provide access to 50 cable pairs. Refer to Section 102-110-101, covering B and C test connectors.	Refer to Section 102-110-101.

TABLE B

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

PLUG	DESCRIPTION AND USE	ILLUSTRATION AND SCHEMATIC
<p>412A 412C</p> <p>418B (Fig. 2)</p>	<p>Forms part of 418B plug. Test plugs arranged to plug into receptacles for 1A1-type protector units.</p> <p>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 or to temporarily correct tip and ring turnover until outside plant change can be made. This plug will not ground the line when protector units are removed.</p>	<p style="text-align: right;">TPA 556558</p>
<p>C Test Connector</p>	<p>Used to provide access to 50 cable pairs. Refer to Section 102-110-101 covering B and C test connectors.</p>	<p>Refer to Section 102-110-101.</p>

TABLE C

PLUGS USED WITH 302- AND 303-TYPE CONNECTORS

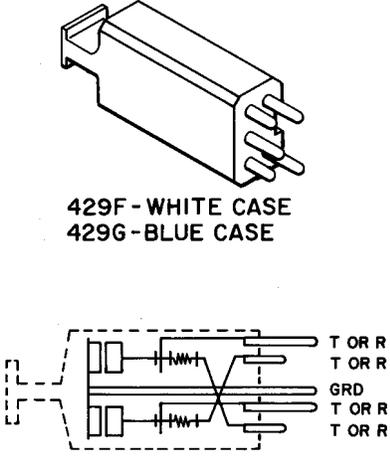
PLUG	DESCRIPTION AND USE	ILLUSTRATION AND SCHEMATIC
<p>429F Replaces 429A (Fig. 3)</p> <p>429G Replaces 429A and 429E</p>	<p>Consists of 4A5C protector components housed in a white case. The color is white to indicate that the pair being reversed is in trouble outside the central office.</p> <p>Consists of 4A5C protector components housed in a blue case. The color is blue to indicate that the pair is being reversed within the central office and is not necessarily a trouble.</p> <p><i>Note:</i> 429F and 429G plugs can be used on both 302-and 303-type connectors. Older 429A and 429E plugs can only be used on 302-type connectors.</p>	 <p>429F - WHITE CASE 429G - BLUE CASE</p> <p>TPA 556559</p> <p>Fig. 3</p>
<p>453A (Fig. 4)</p>	<p>Consists of a single pair test plug to be inserted into test field of 302- or 303-type connectors. Two gold plated plungers make contact with test terminals. Male terminals are access points for test equipment.</p>	 <p>453A TPA 556560</p> <p>Fig. 4</p>
<p>D,G,and H Test Con- nectors</p>	<p>Used to provide access to all 50 test terminals on a test terminal field on 302- or 303-type connectors.</p>	<p>Refer to Section 106-315-121.</p>

TABLE D

PLUGS AND TEST CONNECTORS USED WITH 444-TYPE JACKS (301-TYPE CONNECTOR)

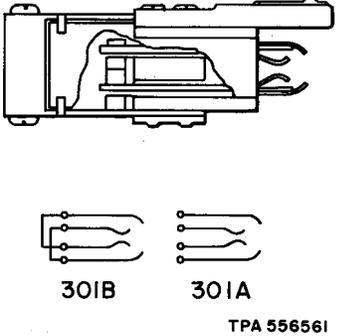
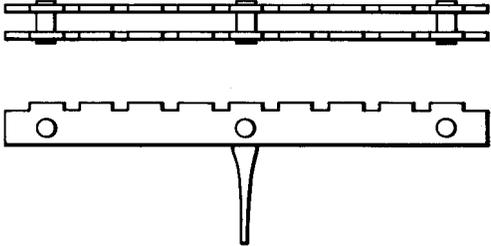
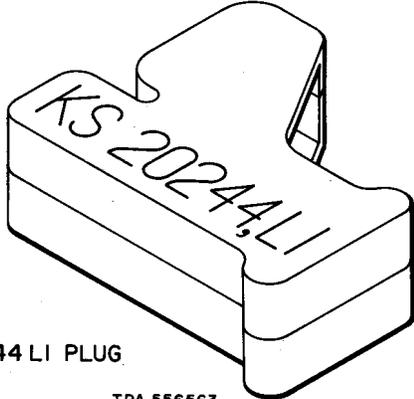
PLUG OR CONNECTOR	DESCRIPTION AND USE	ILLUSTRATION AND SCHEMATIC
<p>301B (Fig. 5)</p>	<p>Same as 301A except terminals are strapped internally to reverse tip and ring of the cable pair. Used for trouble caused by ground on ring side of cable pair. [See 356A (Table A) and 418B (Table B) plugs.] 301A plugs as part of test cords are used to make contact to cable pairs.</p>	 <p>Fig. 5</p>
<p>318A (Fig. 6)</p>	<p>Consists of a dummy plug with two strips of insulating material and a handle. Opens contacts for ten consecutive jacks on one side of a vertical.</p>	 <p>318A TPA 556562</p> <p>Fig. 6</p>
<p>KS-20244 L1 Replaces 319C and 319D (Fig. 7)</p>	<p>KS-20244 L1 plug is a single piece molding of flame retardant plastic with a snap-in spring retainer. Used to open a single cable pair for testing or cutover purposes. KS-20244 L1 plug replaces both the 319C and 319D dummy plugs.</p>	 <p>KS-20244 L1 PLUG TPA 556563</p> <p>Fig. 7</p>
<p>F Test Connector</p>	<p>Used to provide access to 50 cable pairs. Refer to Section 106-315-120 covering B, C, and F test connectors.</p>	<p>Refer to Section 106-315-120.</p>

TABLE E

CORDS USED WITH C-TYPE PROTECTORS

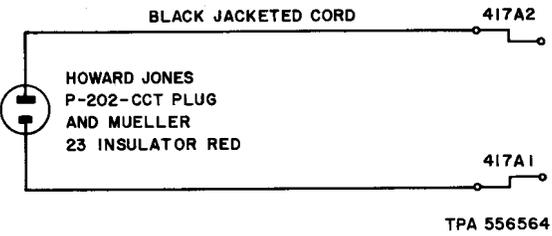
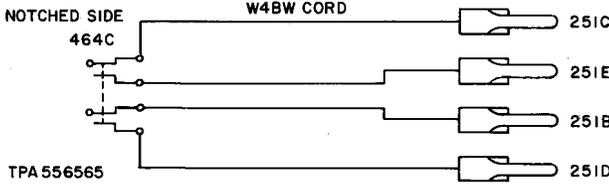
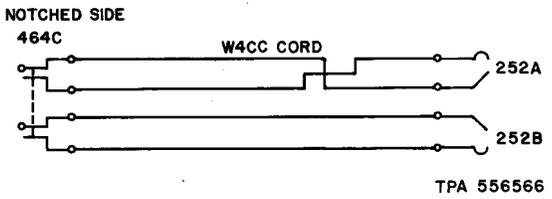
CORD	USE	SCHEMATIC
<p>P2DC (Fig. 8)</p>	<p>Used with P2DB cord to connect cable pairs from 1177, 1268, C50, and C52 type protectors to KS-14103 test set.</p>	 <p style="text-align: center;">Fig. 8</p>
<p>P20F</p>	<p>Used to connect a group of 10 cable pairs on main distributing frames equipped with C-type protectors to 108A test set. Part of 1B cord kit.</p>	<p>Refer to Section 106-310-120 covering 108A test set for cable and plug arrangement.</p>
<p>P20G</p>	<p>Used to connect a group of 10 individual cable pairs on main distributing frames equipped with C-type protectors to 108A test set. Part of 1A cord kit.</p>	<p>Refer to Section 106-310-120 covering 108A test set for cable and plug arrangement.</p>
<p>P40C Along with Two P20M Cords Replaces P40A</p>	<p>Used with two P20M cords to connect 20 cable pairs on main distributing frames equipped with C-type protectors to 108A test set. Part of 1A cord kit.</p>	<p>Refer to Section 106-310-120 covering 108A test set for cable and plug arrangement.</p>
<p>4W3A (Fig. 9)</p>	<p>Used as a test connector for engaging block ends of tip and ring protector block springs on main frame protectors used for Wheatstone bridge tests.</p>	 <p style="text-align: center;">Fig. 9</p>
<p>4W6A (Fig. 10)</p>	<p>Used as a test connector for protectors of main distributing frames of manual and dial offices.</p>	 <p style="text-align: center;">Fig. 10</p>

TABLE F

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

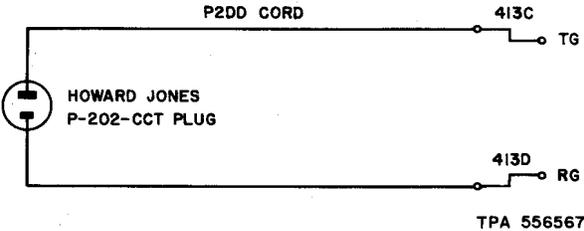
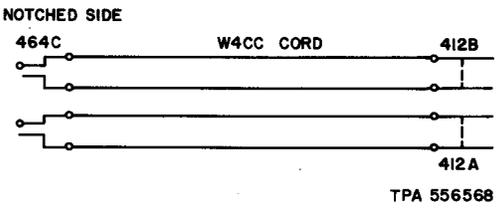
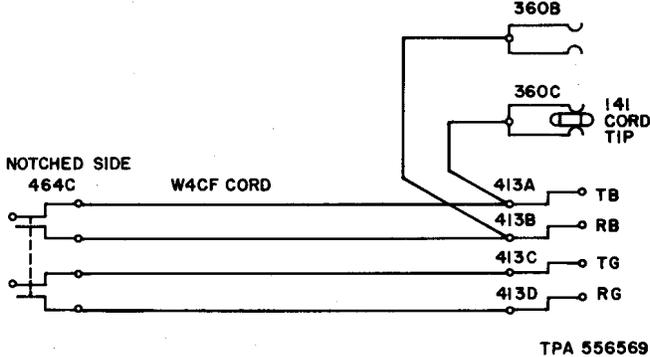
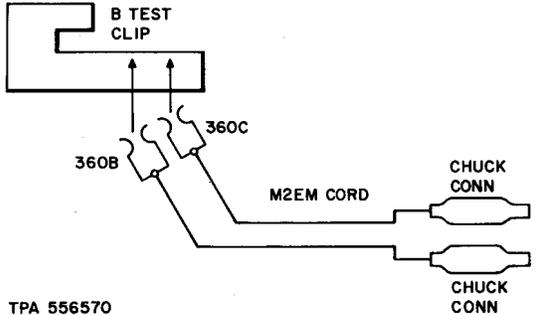
ASSEMBLY	USE	SCHEMATIC
<p>2P34A (Fig. 11)</p>	<p>Used with P2DB cord to connect cable pairs from 300-type connectors to KS-14103 test set.</p>	 <p style="text-align: center;">Fig. 11</p>
<p>4W11A (Fig. 12)</p>	<p>Used at distributing frames for plugging-up and connecting test trunk circuits to circuits terminated on 300-type connectors.</p>	 <p style="text-align: center;">Fig. 12</p>
<p>4W12A (Fig. 13)</p>	<p>Used at distributing frames for connecting Varley test trunks to conductors terminated on 300-type connectors.</p>	 <p style="text-align: center;">Fig. 13</p>
<p>M2EM (Fig. 14)</p>	<p>Used with B test clip for shunting protector units at 300-type connectors when necessary to inspect carbon blocks without opening the circuit. <i>Note:</i> B test clip not recommended for use with 121-type protectors.</p>	 <p style="text-align: center;">Fig. 14</p>

TABLE F

CORD ASSEMBLIES USED WITH 300-TYPE CONNECTORS AND 121-TYPE PROTECTOR (Cont)

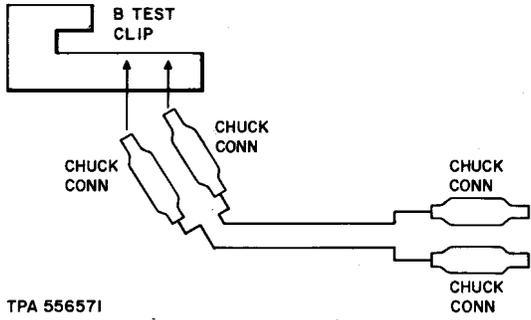
ASSEMBLY	USE	SCHEMATIC
<p>M2EN (Fig. 15)</p>	<p>Used with B test clip for shunting protector units at 300-type connectors when necessary to inspect carbon blocks without opening the circuit.</p>	 <p>TPA 556571</p> <p style="text-align: right;">Fig. 15</p>

TABLE G

CORDS USED WITH 302- AND 303-TYPE CONNECTORS

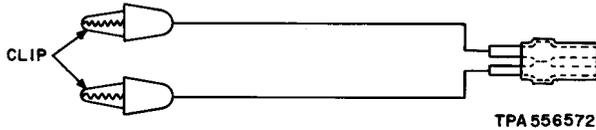
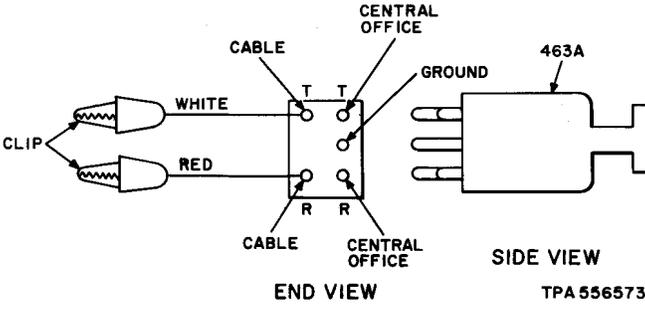
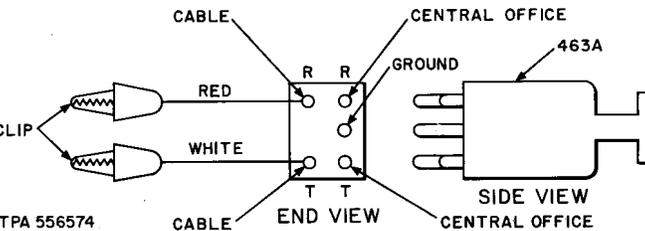
CORD	USE	SCHEMATIC
<p>W2FH (Fig. 16)</p>	<p>Connects outside plant test sets to a cable pair.</p>	 <p>TPA 556572</p> <p style="text-align: right;">Fig. 16</p>
<p>W2GC Replaces W2FJ (Fig. 17)</p>	<p>Used for making connection to a cable pair at a vacant protector socket on a 302-type connector only.</p>	 <p>TPA 556573</p> <p style="text-align: right;">Fig. 17</p>
<p>W2GL (Fig. 18)</p>	<p>Used for making connection to a cable pair at a vacant protector socket on a 303-type connector only.</p>	 <p>TPA 556574</p> <p style="text-align: right;">Fig. 18</p>

TABLE G

CORDS USED WITH 302- AND 303-TYPE CONNECTORS (Cont)

CORD	USE	SCHEMATIC
<p>W2GD Replaces W2FK (Fig. 19)</p>	<p>Used in series with a P20B cord to connect KS-14103 test set to cable pair at a vacant protector socket on <i>302-type connectors only</i>.</p>	<p>TPA 556575</p> <p>Fig. 19</p>
<p>W2GM (Fig. 20)</p>	<p>Used in series with a P20B cord to connect KS-14103 test set to cable pair at a vacant protector socket on <i>303-type connectors only</i>.</p>	<p>TPA 556576</p> <p>Fig. 20</p>
<p>W2FL (Fig. 21)</p>	<p>Used on cabling side of protector in service observing.</p>	<p>TPA 556577</p> <p>Fig. 21</p>
<p>W2FM (Fig. 22)</p>	<p>Bridging cord.</p>	<p>TPA 556578</p> <p>Fig. 22</p>
<p>W4BR Replaces W4BK (Fig. 23)</p>	<p>Used for making in and out tests from <i>302-type connectors only</i>.</p>	<p>TPA 556579</p> <p>Fig. 23</p>

TABLE G

CORDS USED WITH 302- AND 303-TYPE CONNECTORS (Cont)

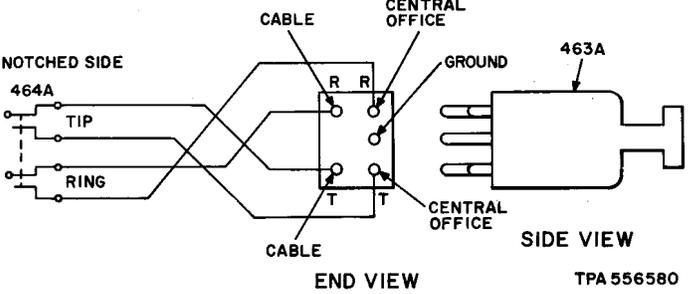
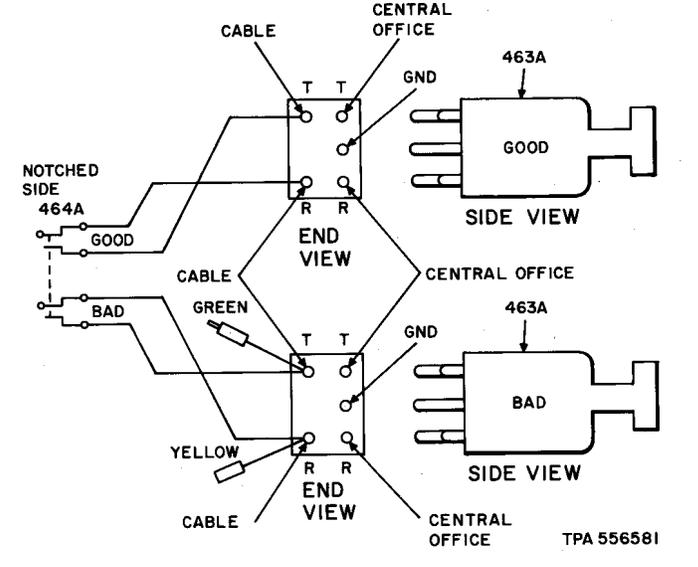
CORD	USE	SCHEMATIC
<p>W4CJ (Fig. 24)</p>	<p>Used for making in and out tests from 303-type connectors only.</p>	 <p>Fig. 24</p>
<p>W4BS Replaces W4BL (Fig. 25)</p>	<p>Used in making manual and automatic Varley measurements on 302-type connectors only.</p>	 <p>Fig. 25</p>

TABLE G

CORDS USED WITH 302- AND 303-TYPE CONNECTORS (Cont)

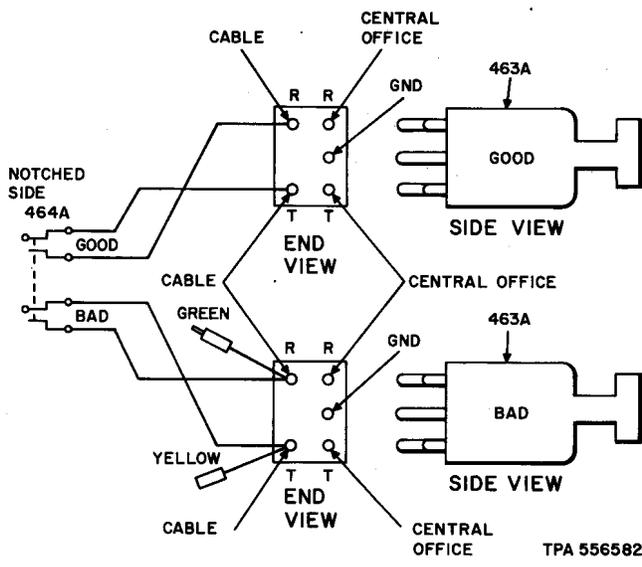
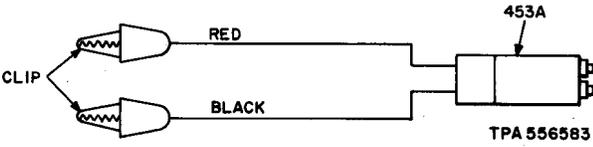
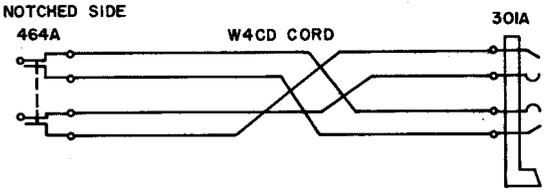
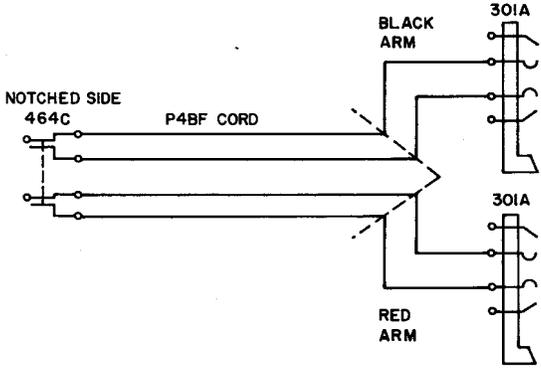
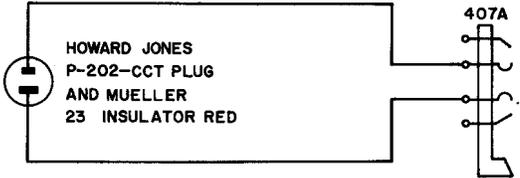
CORD	USE	SCHEMATIC
<p>W4CK (Fig. 26)</p>	<p>Used in making manual and automatic Varley measurements on 303-type connectors only.</p>	 <p>Fig. 26</p>
<p>P2EF (Fig. 27)</p>	<p>Used to gain access for testing a single pair on the test field of a 302- or 303-type connector.</p>	 <p>Fig. 27</p>

TABLE H

CORDS USED WITH 444-TYPE JACKS (301-TYPE CONNECTOR)

CORD	USE	SCHEMATIC
<p>4W7A (Fig. 28)</p>	<p>Used for plugging-up operations and routine testing.</p>	 <p style="text-align: right;">TPA 556584</p> <p style="text-align: center;">Fig. 28</p>
<p>4P23A (Fig. 29)</p>	<p>Used for patching Varley test trunks to conductors terminated on 444-type jacks.</p>	 <p style="text-align: right;">TPA 556585</p> <p style="text-align: center;">Fig. 29</p>
<p>P2CY (Fig. 30)</p>	<p>Used with P2DB cord to connect cable pairs to KS-14103 test set when testing cable pairs connected to 444-type jacks in central offices.</p>	 <p style="text-align: right;">TPA 556586</p> <p style="text-align: center;">Fig. 30</p>