105-TYPE CABLE TERMINALS
DESCRIPTION AND INSTALLATION

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1. GENERAL

1.01 This section covers the description and installation of the 105-type cable terminals.

1.02 The reasons for reissuing this section are listed below. Since this reissue is a general revision, no revision arrows have been used to denote significant changes.

(a) Include the 105B1-10 and 105B1B-10 cable terminals

(b) Update information on 105A2-type cable terminals

(c) Rate the 104-type cable terminals Mfr Disc.

(d) Rate the 105A2-12 and 105A2B-10 additions and maintenance (A&M)

(e) Update text and illustrations.

1.03 The 105-type cable terminals are strand mounted cable terminals for outside use on nonpressurized polyethylene-insulated conductor (PIC) cables. They are available with or without cable protection (2A1B protector units). These terminals are not for use as splice closures.

1.04 The 105A2-25 cable terminal is a 25-pair nonprotected terminal.

1.05 The 105B1-type cable terminals are smaller "mini" versions of the 105A-type cable terminals. The 105B1-10 is nonprotected and the 105B1B-10 is furnished with 2A1B protector units.

1.06 The 104-type cable terminals are rated Mfr Disc. The 105A2-12 and 105A2B-10 cable terminals are rated A&M.

1.07 For additional information on the 105-type cable terminals refer to the following sections:

SECTION TITLE

631-020-200 Brackets—51B and 38-Y-3913—Description and Use

644-203-101 Aerial Plant Rehabilitation—Rebuilding Terminals and Closures
2. DESCRIPTION

2.01 Figures 1 through 3 illustrate the 105-type cable terminal. Table A lists the cable terminals and their features.

Fig. 1 — 105A2-25 Cable Terminal
Fig. 2—10581-10 Cable Terminal
## TABLE A

### 104- AND 105-TYPE CABLE TERMINALS

<table>
<thead>
<tr>
<th>CABLE TERMINAL</th>
<th>RATING</th>
<th>MAXIMUM CABLE DIAMETER (NOTE)</th>
<th>NO. OF PAIRS IN STUB CABLE</th>
<th>NO. OF BINDING POSTS (PAIRS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>105A2-12</td>
<td>A&amp;M</td>
<td>1.8 In.</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>105A2-25</td>
<td>Std</td>
<td>1.8 In.</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>105A2B-10*</td>
<td>A&amp;M</td>
<td>1.8 In.</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>105B1-10</td>
<td>Std</td>
<td>1.3 In.</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>106B1B-10*</td>
<td>Std</td>
<td>1.3 In.</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

*Note: When these terminals are to be used with cables larger than the maximum od, 1A1 or 1B1 terminal stubs must be used in conjunction with the terminal as covered in Section 631-210-211.

*The 105A2B-10 and 105B1B-10 cable terminals are equipped with 2A1B protector units.*
2.02 The housing assembly of the 105-type cable terminal snaps in place over the terminal panel assembly. A security screw (Fig. 4) is provided for use where additional security is desired.

Fig. 4—Security Screw
3. CABLE TERMINAL LOCATION

3.01 Figures 5 through 12 show the location of the 105-type cable terminals.

3.02 The 105-type cable terminal shall not be used at a junction splice between paper insulated and PIC cables. It may be used at a minimum distance of 7 feet from this splice provided an air plug is made in the PIC cable between the terminal and the splice case as covered in Section 637-242-201.
Fig. 7—Terminal Location at Dead-End Pole

Fig. 8—Terminal Location at Cable Dead End
Fig. 9—Terminal Location at Junction of Aerial and Underground Cable

Fig. 10—Terminal Location at Extension Arm
Fig. 11—Terminal Location on Self-Supporting Cable at Intermediate Pole

Fig. 12—Terminal Location on Self-Supporting Cable at Dead-End Pole
3.03 At cable dead ends, up to 300 pairs (1.8 inch od cable) may be contained in a 105A-type cable terminal and up to 200 pairs (1.3 inch od cable) in a 105B1-type cable terminal. Clear ends with 25-pair 710-type connector modules as described in Section 632-055-205. If end of boot is open on 105A-type cable terminal, plug with formed roll of B or D sealing tape.

4. INSTALLING CABLE TERMINAL

4.01 Figures 13 through 17 illustrate the installation of the 105A-type cable terminal.

Fig. 13—Step 1—Preparing Cable
NOTE: IT IS NOT NECESSARY TO REMOVE THE JACKET FROM SELF-SUPPORTING CABLE STRAND WHEN USING CURRENT STRAND ADAPTER.

1. PULL ON FINGER TAB TO OPEN THE COVER. SEPARATE THE TERMINAL PANEL ASSEMBLY FROM THE HOUSING ASSEMBLY BY PRYING APART AT THE BOTTOM EDGE.
2. CENTER TERMINAL PANEL ASSEMBLY OVER SHEATH OPENING.
3. TORQUE STRAND ADAPTER BOLT TO 75 INCH-POUNDS. DO NOT EXCEED 100 INCH-POUNDS.

Fig. 14—Step 2—Installing Terminal Panel Assembly (105A-Type Cable Terminal)

1. INSTALL BOND CLAMPS BY SLIDING INNER SHOE OF BOND CLAMP BETWEEN CORE WRAP AND METAL SHIELD UNTIL THREADED STUD HITS END OF SHEATH (TO TIGHTEN, USE 216-TYPE TOOL ONLY)
2. PLACE DRIP COLLARS:
   (1) SCUFF SHEATH IN AREA WHERE DRIP COLLAR IS TO BE FORMED.
   (2) PLACE LAYER OF SEALING TAPE AROUND CABLE.
   (3) WRAP SEALING TAPE WITH 2 LAYERS OF VINYL TAPE.
3. CUT END OF BOOT TO MATCH CABLE DIAMETER AND PLACE BOOT OVER CABLE.
4. PLACE, TIGHTEN, AND TRIM CABLE TIES 3 ON FLAT, ONE ON TAPER (EACH BOOT).

Fig. 15—Step 3—Installing Bond Clamps and Drip Collar (105A-Type Cable Terminal)
1. PERFORM SPLICING OPERATION AS REQUIRED
2. PLACE HOUSING ASSEMBLY (WHEN FULLY SEATED THERE IS AN AUDIBLE SNAP)

Fig. 16—Step 4—Installing Housing Assembly (105A-Type Cable Terminal)

FOR SECURITY (IF DESIRED)
TIGHTEN SECURITY SCREW USING KS-191B2 LI WRENCH
2 TERMINATE DROP WIRE
3 CLOSE COVER AND SECURE LATCH

Fig. 17—Step 5—Completed Installation (105A-Type Cable Terminal)
4.02 Figures 13, and 18 through 21 illustrate the installation of the 105B1-type cable terminal.

NOTE:
A WRAP OF VINYL TAPE AROUND CLAMP AND SLIT AREA IS RECOMMENDED TO COVER SHARP EDGES. (TOP PLATE OF BOND CLAMP OMITTED FOR CLARITY)

CABLES LESS THAN 0.9 INCH DIAMETER AND ALL DEPIC CABLE.

1 INCH CORE WRAP EXPOSED

1- PULL ON FINGER TAB TO OPEN THE COVER. SEPARATE THE TERMINAL PANEL ASSEMBLY FROM THE HOUSING ASSEMBLY BY PRYING APART AT THE BOTTOM EDGE.

2- INSTALL BOND CLAMPS (P/D TERMINAL PANEL ASSEMBLY) BY SLIDING INNER SHOE OF BOND CLAMP BETWEEN CORE WRAP AND METAL SHIELD UNTIL THREADED STUD HITS END OF JACKET. (TO TIGHTEN, USE 216-TYPE TOOL ONLY.)

Fig. 18—Step 1—Installing Bond Clamps (105B-Type Cable Terminal)
1- (NOT SHOWN) CUT OFF EXCESS STUD AND WRAP CLAMP WITH LAYER OF VINYL TAPE.

2- FORM DRIP COLLAR JUST OUTSIDE TERMINAL PANEL ASSEMBLY (ONE LAYER OF SEALING TAPE AND TWO LAYERS OF VINYL TAPE).

3- PERFORM SPICING OPERATION AS REQUIRED.

Fig. 19—Step 2—Installing Drip Collars and Splicing Stub Cable (1058-Type Cable Terminal)
1- CENTER TERMINAL PANEL ASSEMBLY OVER SHEATH OPENING AND TORQUE STRAND ADAPTER BOLTS TO 75 INCH-POUNDS. DO NOT EXCEED 100 INCH-POUNDS. (IT IS NOT NECESSARY TO REMOVE THE JACKET FROM SELF-SUPPORTING CABLE STRAND)

2- CUT END OF BOOTS TO MATCH CABLE DIAMETER AND PLACE BOOTS OVER CABLE

3- PLACE, TIGHTEN, AND TRIM CABLE TIES

4- PLACE LASHED CABLE SUPPORT AND SPACER (USE APPROXIMATE SIZE CABLE SPACER TO KEEP CABLE AT THE SAME LEVEL OR SLIGHTLY LOWER THAN BOOTS.

Fig. 20—Step 3—Placing Terminal Panel Assembly on Strand (105B-Type Cable Terminal)
1. Place housing assembly on terminal panel assembly (when fully seated there is an audible snap)

2. For security (if desired) tighten security screw using KS-19162 L1 Wrench

3. (Not shown) Terminate drop wire

4. Close cover and secure latch

Fig. 21—Step 4—Completed Installation (105B-Type Cable Terminal)
4.03 Where a terminal is placed on mechanically protected cable, install bond clamps as shown in Fig. 22 through 25. The D bond clamps and straps must be ordered separately, when required.

1. REMOVE OUTER SHIELD AND SHEATH AN ADDITIONAL 2 INCHES ON EACH SIDE OF SHEATH OPENING.
2. POSITION TERMINAL ON STRAND.
3. INSTALL D BOND CLAMP ON FRONT SIDE OF CABLE BY SLIDING INNER SHOE OF BOND CLAMP BETWEEN INNER JACKET AND METAL SHEILD UNTIL STUD HITS END OF SHEATH.

NOTE: FOR CABLES LESS THAN 0.8 INCH IN DIAMETER, SLIT THE SHEATH APPROXIMATELY 2 INCHES ON BACK SIDE OF CABLE TO ALLOW CLAMP TO SLIDE IN ON FRONT SIDE. WRAP CLAMP AND SLIT AREA WITH VINYL TAPE.

Fig. 22—Bonding Preparation for Mechanically Protected Cable
1 - INSTALL BOND CLAMP PROVIDED WITH CABLE TERMINAL DIRECTLY BEHIND BOND CLAMP BY SLIDING INNER SHOE OF BOND CLAMP BETWEEN CORE WRAP AND METAL SHIELD UNTIL STUD HITS END OF SHEATH.

2 - BEFORE TIGHTENING, REMOVE NUT COMPLETELY TO BREAK THE "STAKE" ON THE STUD THREADS. REPLACE NUT AND TIGHTEN. (THIS PROVIDES THE NORMAL CABLE BOND.)

Fig. 23—Installing Bond Clamps
Fig. 24—Installing Bond Straps

1—FORM 6-INCH BOND STRAP.
1 - PLACE THE BOND STRAP, WASHERS, AND NUTS AND TIGHTEN WITH 216-TYPE TOOL.

2 - COMPLETE INSTALLATION OF TERMINAL OR CLOSURE AS INSTRUCTED IN APPROPRIATE BELL SYSTEM PRACTICE.

Fig. 25 - Mechanically Protected Cable—Bonding Completed