

PREFORMED LINE PRODUCTS®

SPLICE CASE FOR ENCLOSING UNDERGROUND AND

OVERHEAD SPLICES

1. GENERAL

1.01 This section is a cover sheet for the Preformed Line Products, Section PDLP 633620006, "Splice Case for Enclosing Underground and Overhead Cable Splices".

1.02 (Reserved for future use.)

1.03 This practice is to be used when installing the Preformed Splice Case.

1.04 If corrections are required in the manufacturer's instruction, use Form E 3973-1PT as described in Section 000-010-901PT to process the correct information.

1.05 If equipment and/or design problems occur, refer to Section 010-700-010PT for procedures on how to file an engineering complaint.

1.06 When revised instructions reflect modifications due to equipment changes, retain the superseded information.

2. TRAINING

2.01 All training will be conducted through the Pacific Bell Human Resources Department.

3. MAINTENANCE

3.01 Field repairs of the units are *not* recommended.

4. ORDERING PROCEDURES

4.01 Ordering of all equipment/units is through the standard ordering procedures.

5. REPAIR/RETURN

5.01 Repair and return of units are through the standard procedures.

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Attachment:

Preformed Line Products, Splice Case for Enclosing Underground and Overhead Cable Splices, PDLP 633020006, Issue 6, March 1984.

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SPLICE CASE FOR ENCLOSING UNDERGROUND AND OVERHEAD CABLE SPLICES

Be sure to read completely and understand this procedure before applying product. Be sure to select the proper size PREFORMED product before application.

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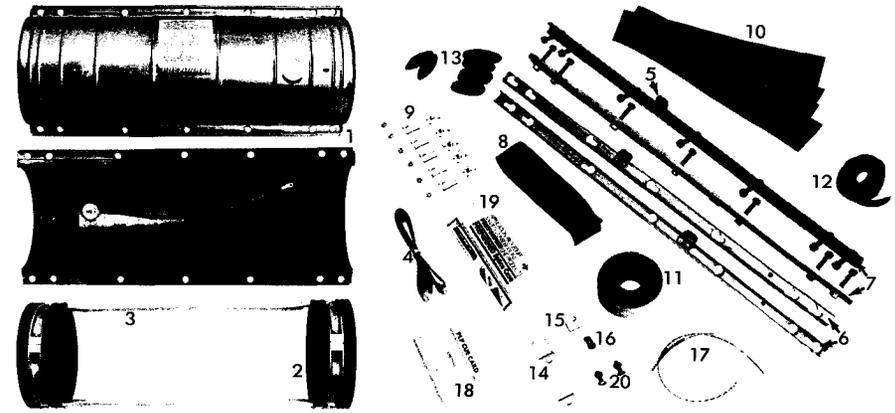


Figure 1 — PREFORMED Splice Case Kit (8000630)

1.00 NOMENCLATURE

1. Splice Case Halves
2. Standard Two-Section End Plates - 9-1/2" (4", 6-1/2" End Plates do not have metal collar)
3. Torque Bars
4. Cable Bonding Braid
5. LOCKBAR™ Positioning Tab
6. LOCKBAR (Front; Keyhole Section)
7. LOCKBAR (Back; Nut and Bolt, Studded, Section)
8. Emery Cloth for Scuffing Sheath
9. SURE-GRIP™ Shield Connectors
10. End Plate LOCK-Tape™ Strips
11. Cable LOCK-Tape Roll
12. Mastic Sealant (U.V. Protection Tape)
13. Pair Protectors
14. Suspension Plates
15. Exterior Bonding Clamp
16. Air Flange Plug
17. Cable Mea-SURE™ Tape
18. CUE CARD
19. Application Procedure
20. Hanger Studs, 2 each (1/4" x 3/4")
21. C-Cement (not shown)

1.01 PREFORMED Splice Case contains everything needed for installation except tools and vinyl tape.

1.02 Tools Needed

- Snips
 - Tabbing Shears
 - Common Screwdriver
 - 3/8" Nut Driver
 - 1/2" and 7/16" Deep Well Sockets
 - Torque Wrench (Inch-Pound Readings)*
 - End Plate Cutter*
- * Available from Preformed Line Products

2.00 DESCRIPTION

2.01 PREFORMED Splice Cases can accommodate lead cable, plastic-jacketed cable, single or double-sheathed cable, tip cable for vault use, or fiber optic cable; and systems that are pressurized, non-pressurized, or pre-connected.

2.02 For Safety Considerations refer to the end of this application procedure.

3.00 SELECTING PROPER MODEL

3.01 Use the following charts to select proper size case for splice bundle diameter, cable opening, and end plate cable capacity. (Fig. 2)

| Catalog No. (With Bonding) | Catalog No. (Without Bonding) | Splice Case Diameter | Max. Cable Opening |
|----------------------------|-------------------------------|----------------------|--------------------|
| 8000624 | 8006021 | 4.0" (10.16) | 16.5" (41.91) |
| 8000626 | 8006022 | 6.5" (16.51) | 19.0" (48.26) |
| 8000630 | 8006023 | 9.5" (24.13) | 18.0" (45.72) |
| 8000634 | 8006024 | 6.5" + (16.51) | 29.0" (73.66) |
| 8000635 | 8006025 | 9.5" + (24.13) | 28.0" (71.12) |
| 8006176 | 8006177 | 9.5" * (24.13) | 35.0" (88.90) |

(cm)

| Catalog No. (With Bonding) | Catalog No. (Without Bonding) | Splice Case Diameter | Single Sheath | | | |
|----------------------------|-------------------------------|----------------------|---------------|---------------|---------------|---------------|
| | | | 1 Cable | 2 Cables | 3 Cables | 4 Cables |
| 8000624 | 8006021 | 4.0" | 2.2" (5.59) | 1.95" (4.95) | 1.70" (4.32) | 1.45" (3.68) |
| 8000626 | 8006022 | 6.5" | 4.1" (10.41) | 3.85" (9.78) | 3.60" (9.14) | 3.35" (8.51) |
| 8000630 | 8006023 | 9.5" | ** | 6.85" (17.40) | 6.60" (16.76) | 6.35" (16.13) |
| 8000634 | 8006024 | 6.5" + | 4.1" (10.41) | 3.85" (9.78) | 3.60" (9.14) | 3.35" (8.51) |
| 8000635 | 8006025 | 9.5" + | ** | 6.85" (17.40) | 6.60" (16.76) | 6.35" (16.13) |
| 8006176 | 8006177 | 9.5" * | ** | 6.85" (17.40) | 6.60" (16.76) | 6.35" (16.13) |

(cm)

Always allow 1/4" (0.64 cm) clearance between cable holes. This clearance is allowed for in the above chart. These dimensions indicate the maximum combined cable diameters that can be accommodated in one end of the Splice Case.

| Catalog No. (With Bonding) | Catalog No. (Without Bonding) | Splice Case Diameter | Shipping Weight | Dimensions | | | | | |
|----------------------------|-------------------------------|----------------------|-----------------|--------------|--------------|--------------|--------------|-------------|-------------|
| | | | | A | B | C | D | E | F |
| 8000624 | 8006021 | 4.0" | 15 | 25.8"(65.53) | 20.3"(51.56) | 06.8"(14.73) | 04.5"(11.43) | 4.0"(10.16) | 2.2"(5.59) |
| 8000626 | 8006022 | 6.5" | 29 | 28.4"(72.14) | 23.0"(58.42) | 09.25(23.50) | 07.0"(17.78) | 6.5"(16.51) | 4.1"(10.41) |
| 8000630 | 8006023 | 9.5" | 41 | 28.4"(72.14) | 22.0"(56.88) | 12.5"(31.75) | 10.0"(25.40) | 9.5"(24.13) | 7.1"(18.03) |
| 8000634 | 8006024 | 6.5" + | 37 | 38.4"(97.54) | 33.0"(83.82) | 09.25(23.50) | 07.0"(17.78) | 6.5"(16.51) | 4.1"(10.41) |
| 8000635 | 8006025 | 9.5" + | 51 | 38.4"(97.54) | 32.0"(81.28) | 12.5"(31.75) | 10.0"(25.40) | 9.5"(24.13) | 7.1"(18.03) |
| 8006176 | 8006177 | 9.5" * | 59 | 45.2(114.81) | 39.0"(99.06) | 12.5"(31.75) | 10.0"(25.40) | 9.5"(24.13) | 7.1"(18.03) |

(cm)

+38" Stretch PREFORMED Splice Case
 *45" Super Stretch PREFORMED Splice Case
 **Will accommodate any cable size up to 7.1"

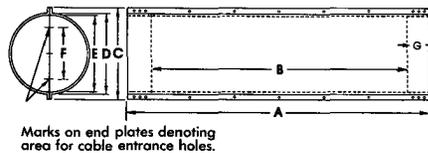


Figure 2 — PREFORMED Splice Case Dimensional Charts

4.00 RACKING AND SECURING CABLE

4.01 The cables entering the Splice Case should have at least 6" of straight and non-stressed entry into the end plates. All cable shall be tied down within 12" of the end plate. (Fig. 3)

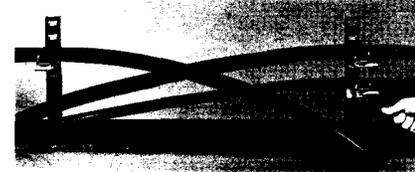


Figure 3 — Racking and Securing Cable

5.00 MEASURING CABLE FOR POWER CIRCLE CUTTER BLADE SELECTION AND LOCK-TAPE APPLICATION

5.01 For lead sheath cable only. Apply one half-lapped layer of 1-1/2" LOCK-Tape to the area of cable where the end plates will be placed and the cable will be measured. (See 8.00) This does not replace other LOCK-Tape applications.

5.02 Measure the cable. The cable measuring tape serves two purposes:
 A. It designates the proper blade to use for cutting holes in the end plates.
 B. It designates either one or two half-lapped layers of 1-1/2" LOCK-Tape to be wrapped around the cable. (See Figure 4, Figure 5.)

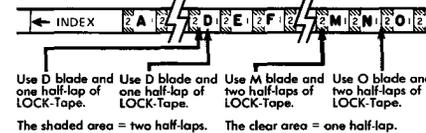


Figure 4 — Cable Mea-SURE™ Tape

PLP TIP:

If index line falls on the line between areas, proceed as if the index line had fallen immediately right of the indexed line. (Refer to Figure 5).

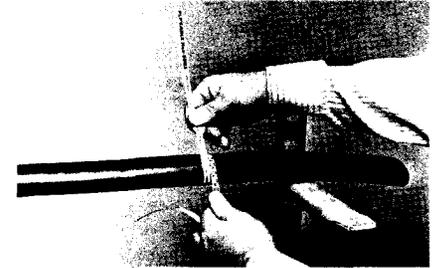


Figure 5 — Measuring Cable with Measuring Tape

CABLE Mea-SURE to determine:

- blade size.
- amount of LOCK-Tape to be applied to cable.

PLP TIP:

Cable will vary in diameter from place to place along its length so be sure to measure each cable at the area where the end plate will be placed.

Be sure to use the PLP CUE CARD, found in each Splice Case, when measuring cables. This field worksheet will assure correct cutter blade size, proper hole cutting locations, and correct amount of LOCK-Tape to be wrapped around cable(s). (Fig. 5A)

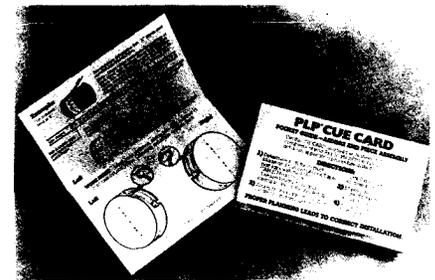


Figure 5a — PLP CUE CARD

6.00 CUTTING END PLATE WITH POWER CIRCLE CUTTER

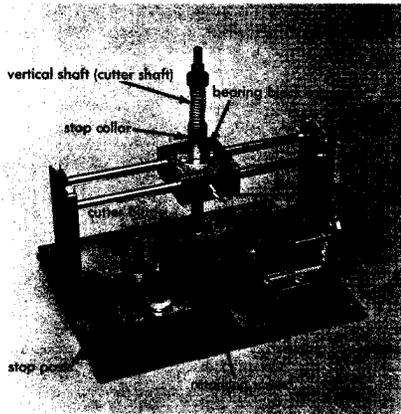


Figure 6 — Power Circle Cutter

6.01 Choose correct size blade from Power Circle Cutter Blade Kit according to reading acquired from Cable MEA-Sure Tape.

6.02 Slide blade into slot in lower end of vertical shaft, insert and tighten retaining screw. (Fig. 7).

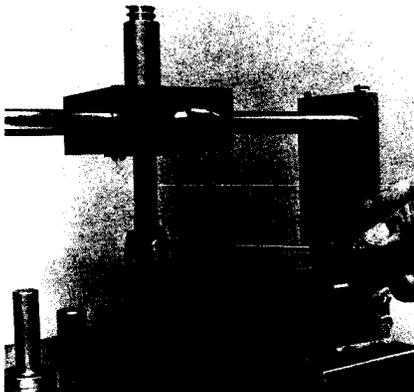


Figure 7 — Tightening Retaining Screw

PLP TIP:

If retaining screw is difficult to tighten, be sure that it is not clogged with dust from previous cuttings.

6.03 Insert stop-posts in tapped holes in base of cutter corresponding to end plate diameter and hand tighten firmly (Fig. 8).

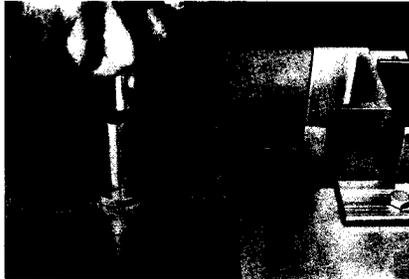


Figure 8 — Inserting Stop-Posts

6.04 Back off clamp screw until end plate can be placed. End plate should lie on top of flanges of stop posts and clamp jaw guides. (Fig. 9).

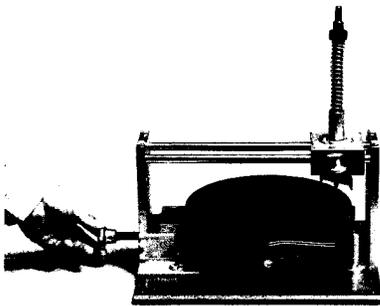


Figure 9 — Placing End Plate in Cutter

PLP TIP:

Make sure outer edges of end plate halves are mated. If not, loosen bolts and adjust.

6.05 Place end plate with seam parallel to guide rods and hand tighten clamp screw. Note that the holes must be cut along the seam of the end plate halves, and within the outer dimensional marks indicated by the arrows. (Fig. 10)(Fig. 10A).

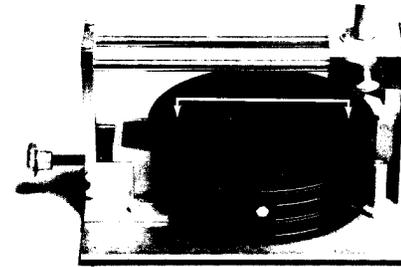


Figure 10 — Positioning End Plate

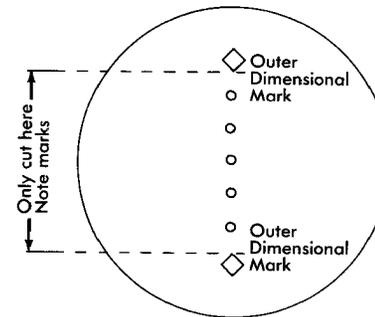


Figure 10a — Positioning End Plate

NOTE: MINIMUM SPACE BETWEEN CABLES IS 1/4" (.64 cm). Do not allow any cable opening to extend beyond the small ridges (see arrows on Fig. 10A) near the outer edge of the joining line of the end plates.

6.06 Loosen lock screw in bearing block. Lower shaft until center point of cutter blade is on desired position for center of hole. Hand tighten lock screw in bearing block. (Fig. 11).

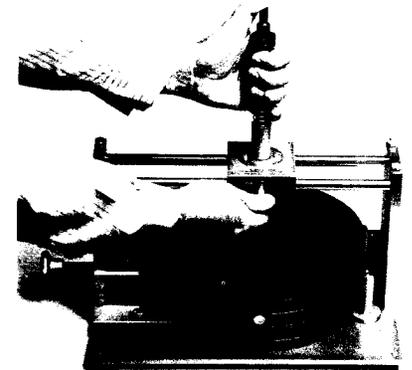


Figure 11 — Centering the Cutter Blade

PLP TIP:

The lock screw in the bearing block is backed up by a small nylon pellet. If undue pressure is necessary to hold the bearing block in place, this pellet may be missing. Do not force the lock screw. This can scar the guide rails and render the cutter unusable. Remove the screw and insert a small piece of cable sheath. This will serve the same purpose as the nylon pellet. Additional nylon pellets are available from Preformed Line Products.

6.07 Mount a 3/8" electric drill (Drill Part #808-51659) with a 1/2" deep well socket to upper end of cutter shaft.

PLP TIP:

A special drill motor is available from Preformed Line Products. No matter what type of electric drill you use, be sure to press down on the body of the drill so the pressure is not exerted sideways on the shaft. This will result in a much longer life of the bearing blocks. Drill through the end plate slowly.

6.08 Cut through black plastic of end plate until foam is just visible in ring. (Fig. 12) Use screwdriver to pop out plastic disc (not necessary for D, E blades). (Fig. 13) Continue cutting through foam and lower black plastic until stop collar on shaft bottoms on bearing block. Never bring blade back up through the end plate while it is still turning.

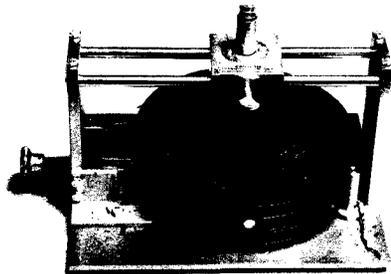


Figure 12 — Cutting Through Plastic Shell

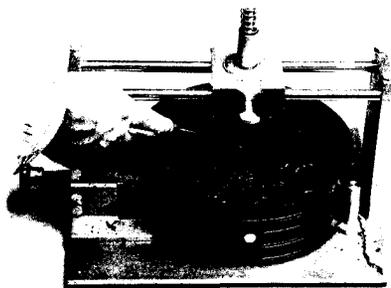


Figure 13 — Removing Plastic Disc

6.09 Remove drill motor. If another hole of same or different diameter is required in end plate, follow appropriate steps above to change cutter blades or to move bearing block to new position.

6.10 Take emery cloth and scuff outside surface of the end plate along the seam and around each cable opening. (Fig. 14).



Figure 14 — Scuffing Outside End Plate Surface

PLP TIP:

This simple procedure assures adhesion of the U.V. Tape. Refer to application step #9.09, #9.10.

6.11 Disassemble end plates by removing the two bolts.

6.12 Use emery cloth provided to remove sharp edges on plastic and foam in area of opening (Fig. 15). Scuff lightly. DO NOT REMOVE TOO MUCH MATERIAL.

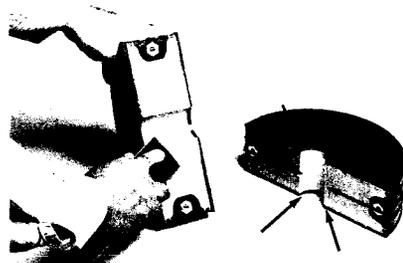


Figure 15 — Scuffing Cable Opening Area

PLP TIP:

This simple operation will help prevent catching the sheath and pinching it when drawing the end plates together. ONLY USE EMERY CLOTH PROVIDED FOR THIS PROCEDURE.

7.00 CABLE PREPARATION

7.01 General Information about cable preparation.

1. Refer to cable opening chart (Figure 2) for maximum cable opening.
2. Apply 1-1/2" LOCK-Tape to the cable(s) only if the end plates are to be installed immediately. This will help prevent the LOCK-Tape from getting dirty.
3. Do not attach splicing tool on the cable sheath where end plates will be placed.
4. Always try to place the end plates on cable sheath that is in good condition.
5. Since the cable is locked into place with the LOCK-Tape, it makes no difference where the Shield Bond connectors are placed, but the tab slit for the connector must not extend under the end plate.
6. If Jelly Filled Cable is opened (prior to installing the end plates) mask the cable with vinyl tape to protect the cable sheath. This simple procedure prevents any cable compounds from affecting the adhesion of LOCK-Tape to the cable sheath. Make certain that the vinyl tape is removed prior to the application of LOCK-Tape.
7. If splicing methods permit, it is preferable to apply the end plates prior to the bonding and splicing operation. This will assure a good clean seal.

7.02 Select end plate halves with threaded bolt holes. Bolt these halves to a torque bar. The offset in the torque bar should face the splice bundle. (Figure 16) Use this assembly to mark area to be cleaned, scuffed, and the cable opening. (Figure 16A).

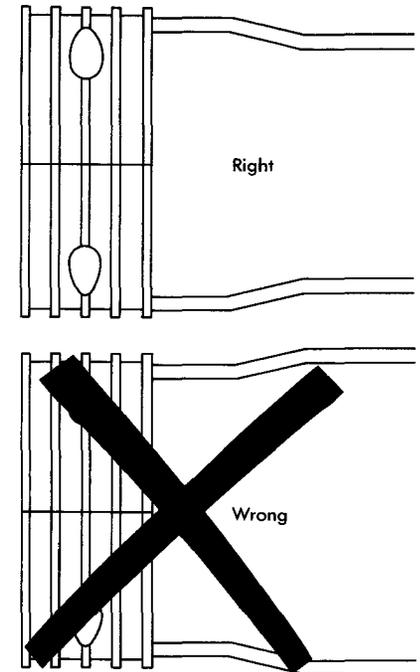


Figure 16 — Torque Bar Placement

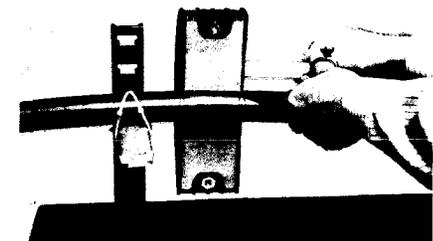


Figure 16a — Marking Sheath Area to be Cleaned

7.03 Remove all grease, cable lubricant, mud, etc., from cable. Thoroughly scuff cable for 6" in the area marked.

PLP TIP:

Use emery cloth provided with case. Always scuff around the cable, never lengthwise along it. Be sure all deep grooves are removed.

8.00 APPLICATION OF 1-1/2" LOCK-TAPE TO CABLE

8.01 Coat scuffed area of cable with "C" cement and allow to dry to a tacky base. Use the procedure described in the PLP Tip following 9.01 to help "C" cement dry fast.

8.02 Half lap 1-1/2" LOCK-Tape around cable (black side up) in area of cable coated with "C" cement. Stretch tape while applying. Use one or two half lapped layers as determined by the measurement. See Figure 17.

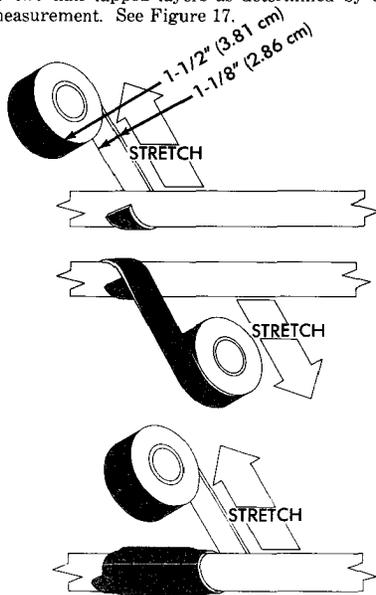


Figure 17 — Applying LOCK-Tape

PLP TIP:

Stretch tape enough to reduce its width to 1-1/8". Be sure to remove backing from white side while applying tape. The white side is the sticky side and should be applied toward the cable. (Figure 18) shows the completed application of one half-lap of LOCK-Tape.



Figure 18 — LOCK-Tape Applied to Sheath

8.03 Be sure to keep the LOCK-Tape wrap dry, free from grease and dirt.

9.00 APPLYING END PLATES TO CABLE

9.01 Apply a thin coat of "C" cement to each inside surface of the end plates as shown in Figure 19.

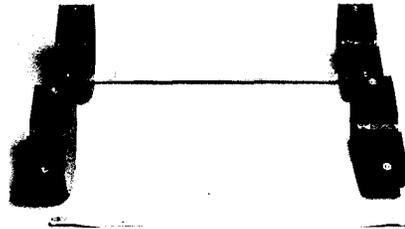


Figure 19 — Application of "C" Cement to End Plate Surfaces

PLP TIP:

Use removed backing from a LOCK-Tape strip to dry "C" cement applied to end plate (Fig. 20).



Figure 20 — Drying "C" Cement

9.02 When "C" cement becomes tacky, remove protective backing and apply the LOCK-Tape, white side down and without stretching tape, to each end plate half, following the contour of the cables holes. Square cut the tape away from the bolt hole area just beyond metal insert. (Fig. 21).

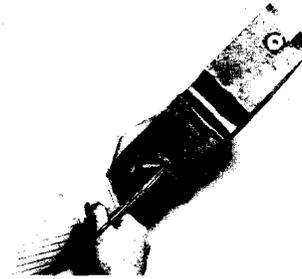


Figure 21 — LOCK-Tape Application to End Plate Half

9.03 Before applying the prepared end plate halves to cable, apply "C" cement 1/2" (1.27 cm) wide adjacent to the hole and 1/2" (1.27 cm) wide into the hole for the total width of the end plate. (Fig. 22).

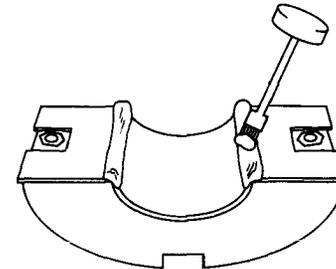


Figure 22 — Applying "C" Cement to End Plate Half

9.04 Figure 23 shows the completed LOCK-Tape application on the end plates.

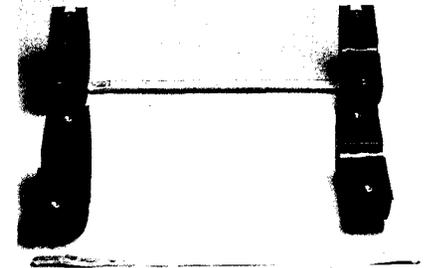


Figure 23 — Completed Preparation of End Plate Halves

9.05 Before applying end plates, oval cable slightly to prevent pinching sheath and apply end plates over oval as shown in Figure 24. Do not overshape lead cable.

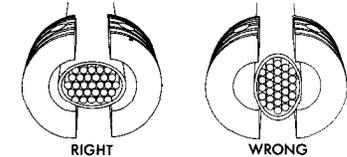


Figure 24 — Shaping Cable

9.06 Position the end plate, torque bar assembly on the cable at the proper point and apply mating end plate halves. Bring the end plates together evenly, tightening each bolt in rotation 2 or 3 turns at a time. **DO NOT USE AIR WRENCHES FOR THIS OPERATION.**

9.07 Using a ratchet wrench draw the end plate halves completely together until the excess LOCK-Tape separates and lays back as illustrated in Figure 25.

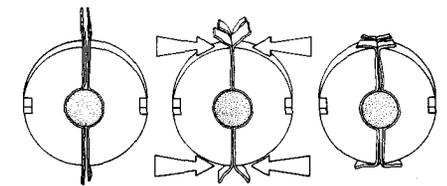


Figure 25 — Drawing End Plate Halves Together

9.08 When end plates are completely together, trim the excess LOCK-Tape with snips to approximately 1/4" (.62cm) of the end plate. Do not pull the tape when trimming (Fig. 26). Fig. 27 illustrates the appearance of the LOCK-Tape after trimming.



Figure 26 — Trimming Excess LOCK-Tape

9.09 Apply one ring of U.V. protective sealant around the cables. Be sure to press sealant firmly against the end plates (Figure 27). This is necessary only on the outside end plate surface.



Figure 27 — Application of U.V. Sealant to Cable

9.10 Apply U.V. protective sealant on the outside seam of both end plates. (Fig. 28).



Figure 28 — Application of U.V. Sealant to End Plates

9.11 Apply two wraps of vinyl tape over exposed LOCK-Tape on cables. (Figure 29).



Figure 29 — Application of Vinyl Tape to Cable

PLP TIP:
The vinyl and U.V. protective sealant tapes will protect the LOCK-Tape from effects of ultraviolet rays and ozone.

9.12 Completed installation of the end plate and torque bar assembly. (Fig. 30).



Figure 30 — Completed Assembly Before Shells

PLP TIP:
One torque bar may be removed for ease of splicing.

9.13 Install torque bar. The torque bars may be wrapped with the splice bundle if care is taken not to bend the torque bar.

PLP TIP:
After torque bars have been re-applied, be sure bolts are fully drawn down so as not to interfere with shell placement.

10.00 INSTALLING THE CASE USING LOCKBAR™ FASTENING

10.01 The front shell of the Splice Case contains a bonding wire. This wire must be attached to one of the cable shield connectors prior to installing the Splice Case Shells. (Fig. 31).



Figure 31 — Installing Bonding Wire from Shell

PLP TIP:
If applying this connector to a shield connector on the cable shield is inconvenient, it can be applied on the braid extending across the splice using another shield connector. Be sure to remove enough plastic insulation for the connection and tape the connection when finished.

10.02 The neoprene in the outer shells must be pliable when installed. In cold weather, for new installations or re-entry, warm outer shells prior to installation. Remove protective paper liners.

PLP TIP:
Shells may be warmed in truck cab or by placing near manhole vent hose. If space permits, bring the shells down into the manhole during splicing operation.

10.03 LOCKBAR Fastening - Important Information Prior to Shell Installation.

1. LOCKBAR Fastening consists of a (back) studded LOCKBAR assembly with factory assembled threaded bolts and nuts, and a (front) keyhole LOCKBAR assembly. The back LOCKBAR assembly mates with the flange of the Splice Case Shells, and then locks into position. (Fig. 32)

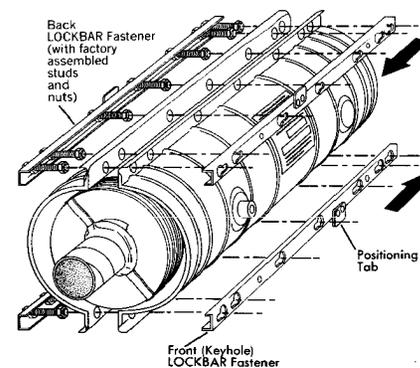


Figure 32 — LOCKBAR Application to Splice Case Flange

- Prior to the application of the back LOCKBAR assembly, be certain that the nuts are near the end of the threaded bolts.
- The ends of the threaded bolts have been treated so that the nuts remain on them, and cannot be easily removed without possible damage (stripping). If damage does occur to the bolts or nuts, replacement assemblies are available from PLP. These replacement assemblies consist of two nuts, a lockwasher, and a replacement bolt. The end of the replacement bolt is not specially treated so that it will allow application of the nut.

| LOCKBAR Stud Replacement Kits | |
|-------------------------------|---|
| Catalog Number | Description |
| 8003025 | Accommodates 4" PREFORMED Splice Case |
| 8003026 | Accommodates 6-1/2" and 9-1/2" PREFORMED Splice Cases |

- Aerial applications require that the suspension plates be installed to the back LOCKBAR Fastener prior to its application to the Splice Case. A special (third) hole is provided on either side of the back LOCKBAR assembly for this purpose. (Fig. 33)

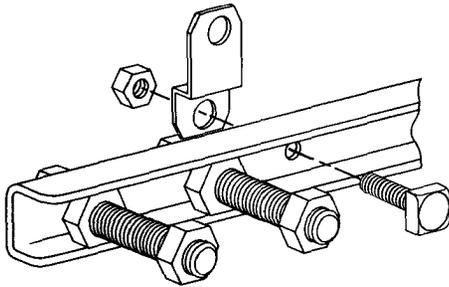


Figure 33 — Suspension Plate Assembly

- For External Bonding, the bolt, bonding clip, and nut must be applied to the (front) keyhole LOCKBAR assembly prior to its mating with the back LOCKBAR assembly. A special (third) hole is provided on either side of the front LOCKBAR assembly for this purpose. The bolt head is applied inside the LOCKBAR channel, the bonding clip and nut are applied to the bolt on the outside LOCKBAR face. Refer to Figure 34 for proper alignment of parts.

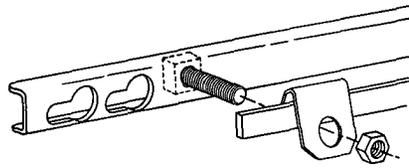


Figure 34 — External Bonding Assembly

- Positioning Tabs have been added to each LOCKBAR Fastener (front and back). These tabs should always point away from the Splice Case and will help assure proper alignment and eliminate the chance of a bar being misapplied. (See Figure 32)

- Now that all LOCKBAR preparatory steps have been accomplished, apply the back shell (not having air flange) over the end plates. (Fig. 35)

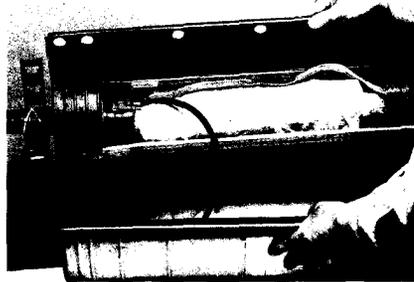


Figure 35 — Application of Back Splice Case Shell

- Apply the front shell and close the case using the LOCKBAR Fastening system. First apply the (back) studded LOCKBAR assembly through the Splice Case flange holes. Then apply the (front) keyhole LOCKBAR assembly. Lock into position so that the shells are secure. (Fig. 32) Be certain to apply the LOCKBAR Fasteners into the flange of the Splice Case, not over it.

10.06 Sequence and Torquing procedure (Fig. 36)

- Nuts have been grouped into sets. Tighten all nuts within each set, beginning at the "X" in the direction of the arrow. Start with set #1 etc.
 - Tighten all nuts until shell flanges meet.
 - Repeat "A", torquing each nut to 125 in/lbs.
 - Retorque 8 corner nuts, example 9.5" x 28" - sets #3, #4, #5, #6.
 - 4" only, follow steps "A" through "C" with torque of 85 in/lbs.
- Metric Torque: All 6.5" and 9.5" cases 1.44 m/kg, 4" cases .98 m/kg.

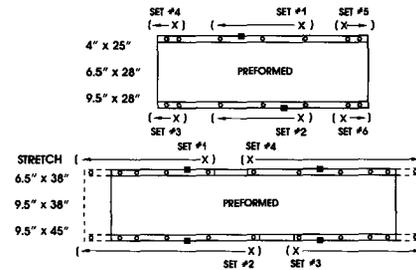


Figure 36 — LOCKBAR Torquing Procedure

- Flash test all installations according to company practices. Be certain to replace the F pressure valve with the plug supplied with the case. If the installation necessitates that the F valve is left on the case, be certain to use a new valve and do not scratch the plated surface.

- After nuts have been tightened to the required torque value, a certain amount of relaxation occurs. This is to be expected. DO NOT RE-TORQUE. This can damage the Splice Case. Figure 37 shows a completed PREFORMED Splice Case installation.



Figure 37 — Completed PREFORMED Splice Case Installation

11.00 EXTERNAL BONDING (Fig. 34)

- Refer to 10.03, point number 5.
- Place outside bonding ribbon into the PLP external bond clamp and tighten securely.

12.00 AERIAL APPLICATION

- Material Required
 - 2 lashing wire clamps (not supplied)
 - 2 PLP Splice Case suspension plates (supplied with kit)
 - 2 nuts (supplied with kit)
 - 2 bolts
- Refer to 10.03, point number 4 and Figure 32.

- Place shells on the end plates so that the flange will run parallel with the strand and torque according to Step #10.06.

- Place lashing wire clamp on the strand directly over the pre-applied suspension plates. The "tie down" side of the lashing wire clamp must be on the stud side of the Splice Case bolt. Tighten lashing wire clamp down according to accepted company practices.

- Remove nut from "tie down" side of lashing wire clamp.

- Be certain all nuts, washers, and plates are in their proper respective position (Fig. 38) and tighten down securely.

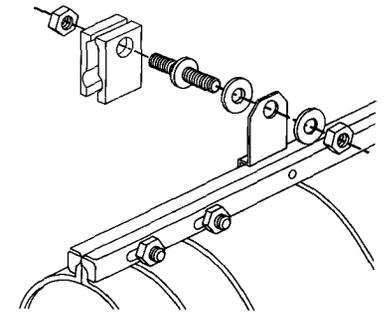


Figure 38 — Aerial PREFORMED Splice Case Assembly

12.07 Strap cables down according to accepted company practices.

13.00 RE-ENTRY

13.01 Loosen all nuts just far enough to enable removal of the LOCKBAR assemblies. **CAUTION:** Bolt ends are treated for nut retention, avoid running nuts into treated area.

13.02 Open case.

13.03 Remove internal bonding wire before fully removing front shell.

13.04 For re-installing, follow sections 10.00 through 10.08.

13.05 If additional cables are to be added, a new end plate must be used. Install according to this practice. Remove all old sealing tape or LOCK-Tape from cable.

13.06 Shells may need to be lubricated before re-installing. Use only Splice Case lubricant supplied by Preformed Line Products Co. Catalog Number 80801566.

13.07 After two or three re-entries, it is advisable to apply shell lubricant to the LOCKBAR studs for continued ease of re-entry.

14.00 UNDERGROUND INSTALLATION

14.01 Splice Case should be installed between the manhole racks.

14.02 PLP Splice Cases are very light. They will float in a water-filled manhole. They must be tied down.

15.00 DOUBLE SHEATH CABLE BLOCKING KIT

15.01 **PREFORMED** Double Sheath Cable Blocking Kit is used on double-sheath cable in a **PREFORMED** Splice Case. Kit contains plastic envelopes and sealing tapes for fashioning polyurethane resin mold around inner and outer sheaths. Special sealant rings and resin block prevent water from entering and air from escaping the Splice Case between cable sheaths. Instructions are included with each kit.

16.00 MAINTENANCE PROCEDURES

16.01 The **PREFORMED** Splice Case is designed for numerous re-entries. However, certain precautions must be taken prior to re-application.

16.02 Be sure to clean shells and end plates thoroughly to remove sand, dirt, desiccant and other foreign substances.

16.03 Any bent or stripped nuts or bolts should be replaced. Only use hardware supplied by Preformed Line Products.

16.04 The shells should be lubricated prior to re-application. A uniform thin layer is all that is necessary. Only use lubrication supplied by Preformed Line Products. Part Number 80801566.

16.05 Any shells that are bent or distorted should not be used.

16.06 Prior to re-installation, the neoprene on the shells should be allowed to return to its original state. Warming the shells speeds the process.

16.07 Should flash testing reveal a leak, check for the following:

- A. Be sure that no foreign objects are between the flanges of the case (bond wires, desiccant, cable pairs, muslin, paper, etc.)
- B. Be sure end plate holes were cut properly.
- C. Look for pinched or cut cable sheath where cable enters end plate.
- D. Be sure LOCK-Tape was properly applied between end plates.
- E. Be sure case nuts were properly torqued and end plates were completely drawn together.
- F. Make sure bolts are not bound by neoprene. **ALL EXPOSED PORTIONS OF BOLTS SHOULD BE EQUAL.**
- G. Check air flange for tightness.

16.08 If an end plate must be replaced, refer to 13.05 and then follow steps 9.00 through 9.13.

NOTE: After nuts have been tightened to the required torque value, a certain amount of relaxation occurs. This is to be expected. **DO NOT RE-TORQUE.** This can damage the Splice Case.

17.00 OPTIONAL 3-SECTION END PLATE

17.01 Optional three-section end plate allows for the addition of extra cables on 9-1/2" diameter Splice Cases. A variety of cable diameters can be accommodated, including three 3.0" cables. (See charts Figure 39 and 39A)

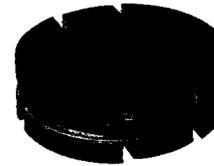


Figure 39 — Three-Section End Plate

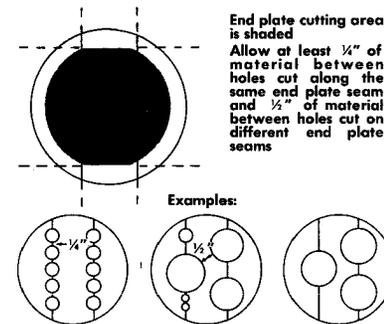


Figure 39a — Three-Section End Plate Hole Cutting Instructions

18.00 CARRIER END PLATE

18.01 Available for various combinations of carrier cable stub diameters and number of entrance ports. For information consult factory. (Figure 40)

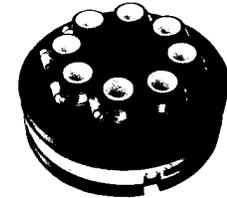


Figure 40 — Carrier End Plate

19.00 SAFETY CONSIDERATIONS

19.01 This application procedure is not intended to supersede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual. Failure to follow these procedures may result in personal injury.

19.02 When working in the area of energized lines, extra care should be taken to prevent accidental electrical contact.

19.03 For proper performance and personal safety be sure to select the proper size **PREFORMED** product before application.

19.04 This product is intended for use by trained craftspeople only. This product should not be used by anyone who is not familiar with, and trained in the use of it.

PREFORMED LINE PRODUCTS 
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