

**RAYCHEM'S PED CAP R
PEDESTAL SPLICE ENCLOSE SYSTEM
DESCRIPTION AND INSTALLATION**

1. GENERAL

1.01 This section is a cover sheet for the Raychem's Ped Cap R Pedestal Splice Enclose System practice, Section RYCH-63-101. PTEL 2017 authorizes the use of this equipment in Pacific Company (PAC).

1.02 (Reserved for future use)

1.03 The Raychem's Ped Cap R is a 15 inch plastic pipe with a permanent dome closure at one end, and fused to the other end is 6 inches of heat shrinkable material for an overall length of 21 inches. Ped Cap R is available in 2-inch and 4-inch diameter sizes and provides a method to encapsulate and seal a pedestal splice for both new construction and restoration.

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 design and/or manufacturing problems should occur, refer to Section 010-700-011PT for procedures on how to file an

Engineering Complaint for General Trade Products (GTPs).

2. ORDERING PROCEDURES

2.01 Place orders through the Regional Procurement Operations (RPO) coordinators in accordance with SI 60, Section 2, Supplement 1. Enter the suppliers name and address on all requisitions.

2.02 Order by the package (10 kits per package).

2.03 Order direct from the manufacturer:

Raychem Corporation
Telecommunications Division
300 Constitution Drive
Menlo Park, CA

<i>Nomenclature</i>	<i>Number of Kits Per Package</i>
Ped Cap "R" four inch kit	Ten
Ped Cap "R" two inch kit	Ten

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Attachment:

Raychem System Practice, Section RYCH-63-101, Issue 1, March 1979

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**RAYCHEM'S PED CAP R
PEDESTAL SPLICE ENCLOSE SYSTEM**

CONTENTS	PAGE
1. GENERAL	1
2. PRECAUTIONS	1
3. TOOLS AND MATERIALS	1
4. DESCRIPTION	2
5. INSTALLATION FOR NEW CONSTRUCTION	2
6. INSTALLATION FOR REHABILITATION	8
7. METHOD FOR ENCAPSULATION	9
8. REENTRY	10
9. REFERENCE DOCUMENTS	11

1. GENERAL

- 1.01 This section covers the description and installation of Raychem's Ped Cap R.
- 1.02 The Ped Cap R provides a method to encapsulate and seal a pedestal splice for both new construction and rehabilitation.
- 1.03 The S-Compound provides a method to encapsulate the connectors and conductors of a splice.
- 1.04 The heat-shrinkable pedestal cap provides a water tight seal to the cable sheath.

2. PRECAUTIONS

- 2.01 Safety glasses and gloves should be worn when using an open flame torch. The craftsperson should wear clothing that will provide protection for arms and legs.
- 2.02 Protect adjacent telephone plant where open flame is applied by covering with fireproof material, such as Raychem's Heat Shield Pad, AD-1460.
- 2.03 Do not place heat-shrinkable pedestal cap over wet cable sheath. Do not allow water to collect inside the Ped Cap prior to installation.
- 2.04 When using a torch to recover the cap onto polyethylene sheathed cable, the exposed cable sheath must be protected with wraps of D.R. tape. The D.R. tape should be extended a minimum of 4 inches (101 mm) beyond the end of the cap and 1 inch (25 mm) inside the end of the cap.
- 2.05 Use only recommended torches for installation.

3. TOOLS AND MATERIALS

3.01 Tools

When using propane:

- (a) Torch, propane (FH-2605)
- (b) Propane gas cylinder: B,C,D or E
- (c) Propane hose, pressure E, 10 foot (30 meters) or 30 foot (90 meters) length
- (d) Propane regulator and gauge (AD-1358)
- (e) Wrench, regulator, C

When using acetylene:

- (a) Torch tip, acetylene (AD-1455)
- (b) Acetylene cylinder, B or MC
- (c) Acetylene hose, pressure D, 10 foot (30 meters) or 30 foot (90 meters) length
- (d) Acetylene regulator
- (e) Wrench, acetylene tank

3.02 General tools

- (a) Striker, torch (AD-1430)
- (b) Heat Shield Pad (AD-1460)
- (c) Cable knife (R2761)
- (d) Carding brush or 80-grid abrasive cloth strip
- (e) Scissors
- (f) Side cutters
- (g) 216 tool
- (h) Caulking gun

3.03 Materials

- (a) Raychem's Ped Cap R kit
- (b) Bonding clamps
- (c) Bonding braid
- (d) D.R. tape
- (e) Vinyl tape

4. DESCRIPTION

4.01 The Ped Cap R is a heat-shrinkable splice closure which, when used with the S-Compound, provides both an encapsulated and water tight enclosure.

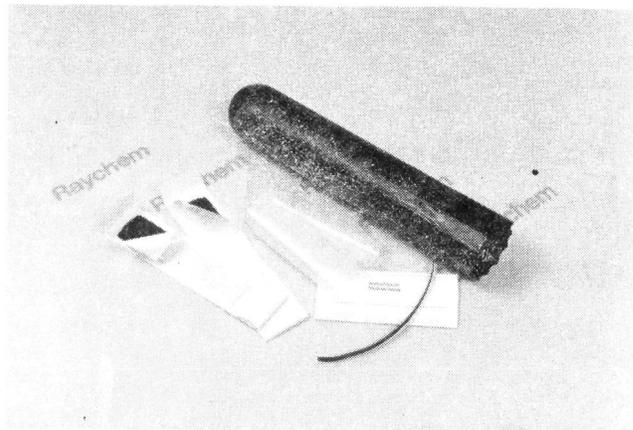


Fig. 1 — Ped Cap R Kit

The Ped Cap R kit contains:

- (a) One molded part cap
- (b) Two strips of S-1061
- (c) One poly bag
- (d) One abrasive strip
- (e) One instruction sheet

5. INSTALLATION FOR NEW CONSTRUCTION

5.01 Remove bonding bracket, backboard and plastic shield from the PC6 pedestal to facilitate cable placing and sheath preparation.

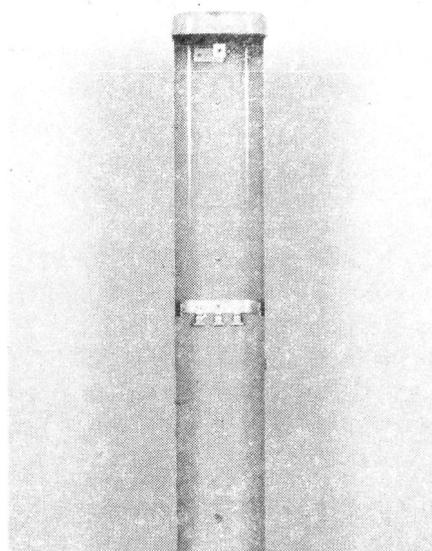


Fig. 2 — Bracket, Backboard And Shield Removed

Note: Separate the backboard from the bonding bracket by removing the small bond strap. Also remove the two 12-inch bond straps.

Note: The plastic shield and the two 12-inch bond straps will not be used with this method.

5.02 Place the cable into pedestal and mark the sheaths 1-inch (25 mm) above top of bracket.

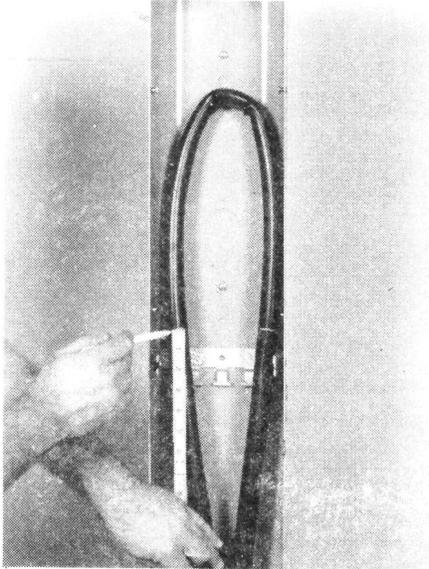


Fig. 3 — Marking Cable Sheath

5.03 Remove the cable sheath and shield between the marks.

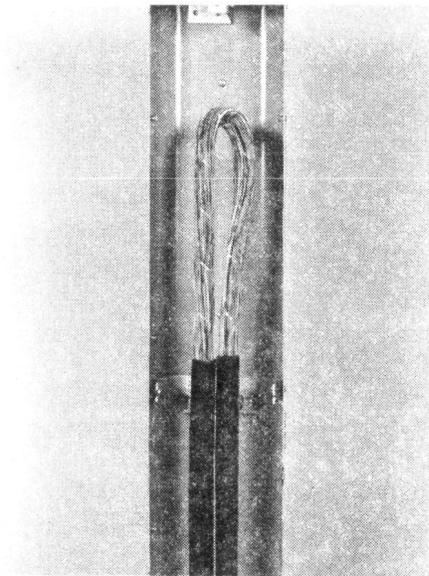


Fig. 4 — Splice Opened

Note: Recommended maximum splice opening is 12 inches (304 mm).

5.04 Install locally approved bonding clamps and 30 inches (762 mm) of bonding braid to each bonding clamp.

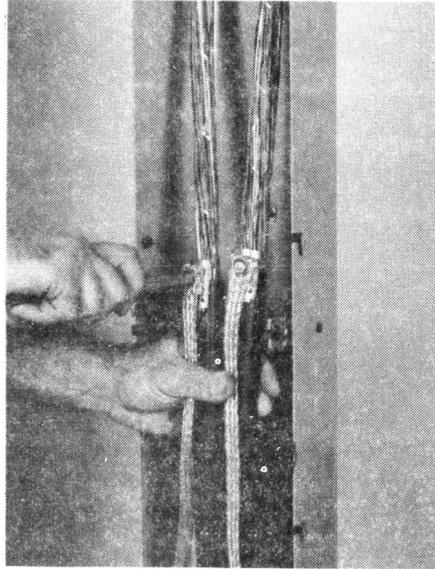


Fig. 5 — Installing Bonding Equipment

5.05 Remove excess bond studs from clamps.

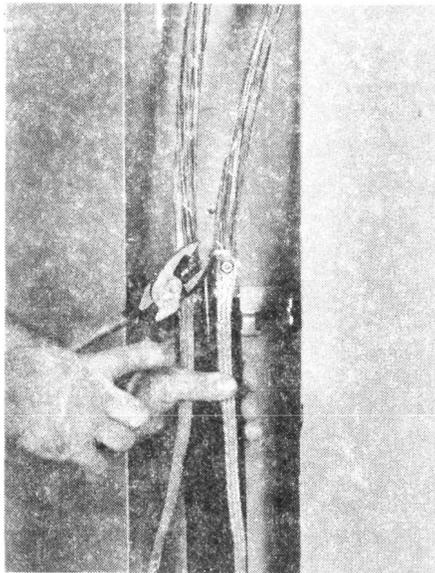


Fig. 6 — Removing Excess Studs

5.06 Wrap both bond clamp areas with two layers of D.R. tape.

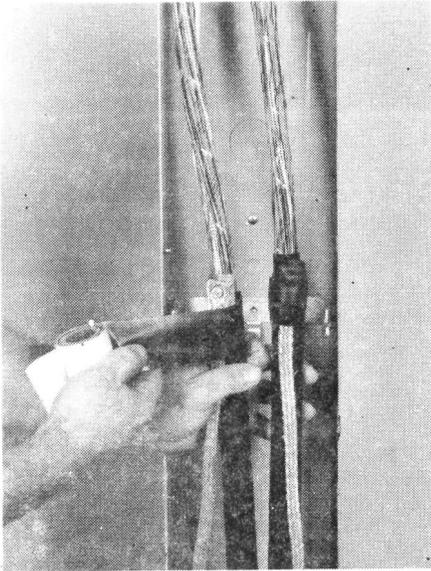


Fig. 7 — Wrapping Bond Clamps

5.07 Complete any wire work needed, such as splicing in fixed court terminal block, drops, etc.

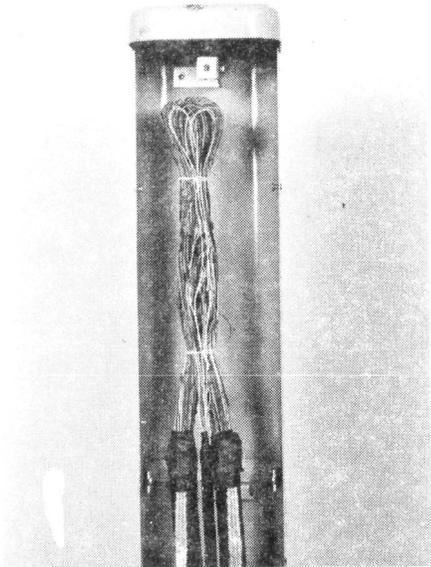


Fig. 8 — Completed Splice

Note: Remove just enough sheath from the end of the terminal stub to allow splicing. Any excess slack will lay in pedestal.

5.08 Using the abrasive strip supplied or a carding brush, circumferentially scuff the sheath of all cables 7 inches (178 mm) down from the ends of the bonding clamps.

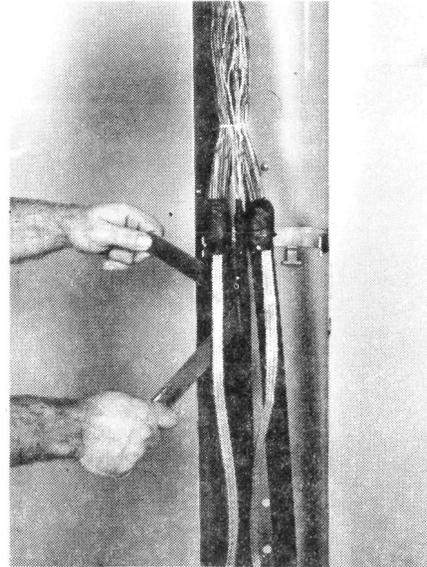


Fig. 9 — Scuffing Cable Sheaths

5.09 Using the S-1061 sealant supplied in the kit, make a "S" configuration about 1 inch (25 mm) long at the beginning of one strip.



Fig. 10 — Folding S-1061

5.10 Place the “S” configuration between the two main cables as shown in Fig. 11.

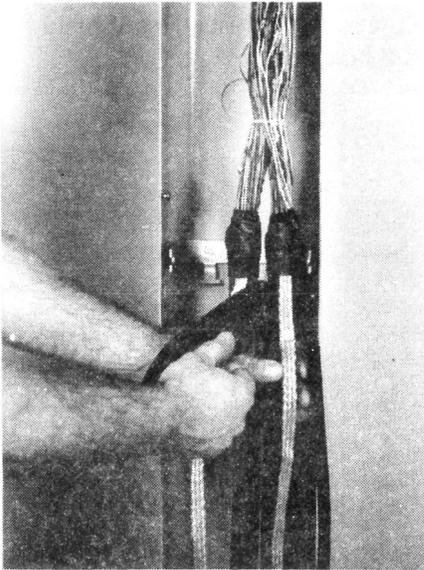


Fig. 11 — Placing S-1061 In Between Cables

5.11 Make one complete wrap of S-1061 around both cables only. (Over cable and under bonding braids, stubs, etc.)

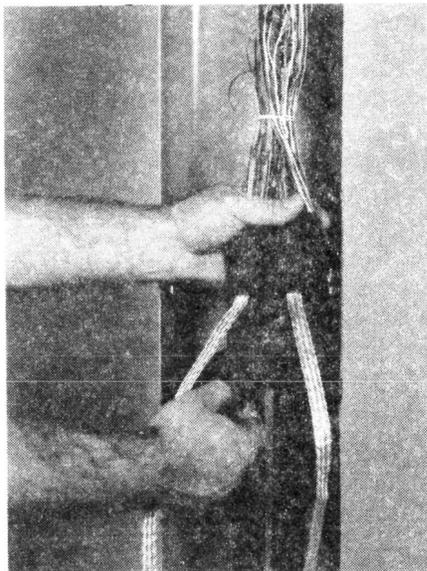


Fig. 12 — Wrapping Cables With S-1061

5.12 When a terminal stub is used, wrap the stub with one complete turn of S-1061 sealant, then press the stub into the S-1061 that has been placed around the cables.

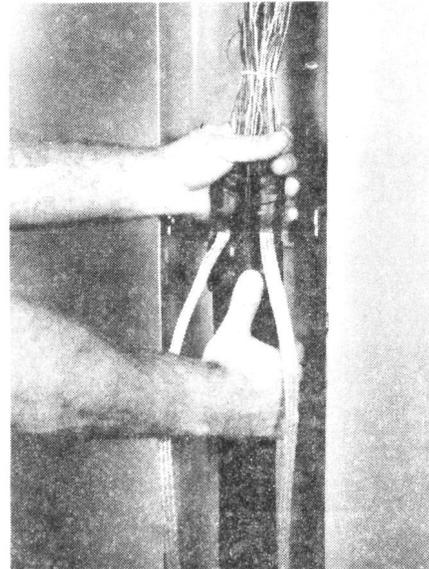


Fig. 13 — Placing Wrapped Stub Into The S-1061

5.13 Splay the bonding braids, flaring approximately 2 inches (50 mm) at the area of the S-1061. Press the flared braid into the S-1061 that has been placed around the cables. This allows sufficient S-1061 to flow in and around the braid to form a water block.

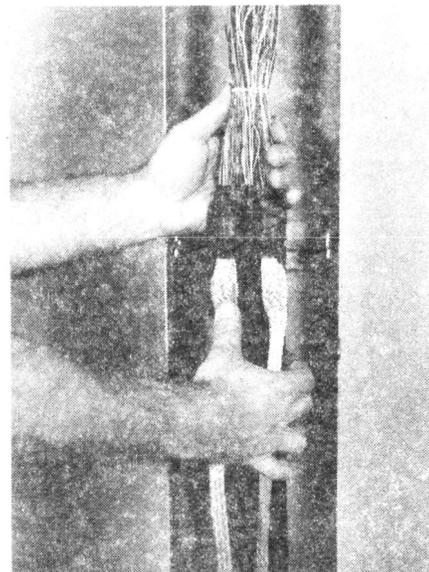


Fig. 14 — Placing Flared Bonding Braid

5.14 Wrap the entire area with one final layer of S-1061.

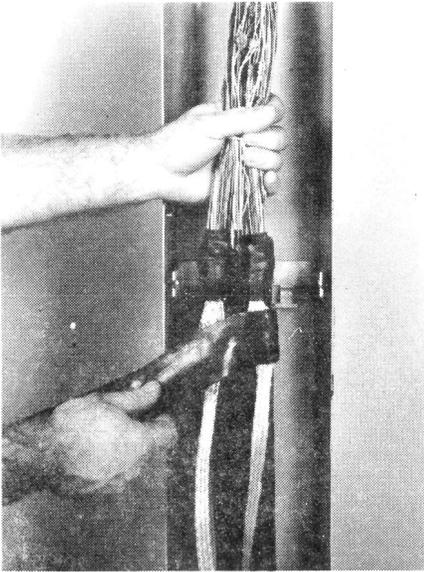


Fig. 15 — Final Wrap Of S-1061 Sealant

5.15 Starting 1 inch (25 mm) down from the base of the S-1061, apply two layers of D.R. tape for a total of 5 inches (127 mm).

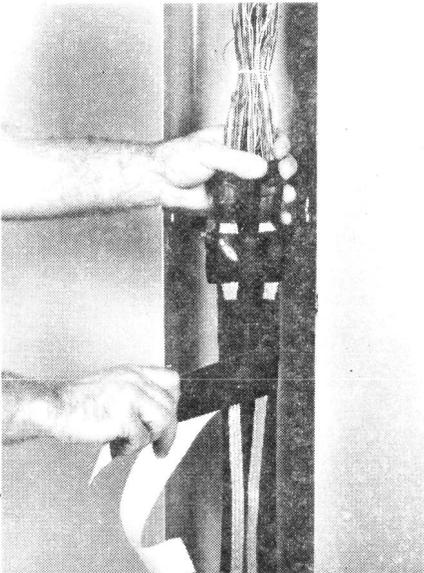


Fig. 16 — Applying D.R. Tape

5.16 Wrap the splice with B poly tape or equivalent, then preheat the area between the B poly tape and the D.R. tape for 10-15 seconds or until warm to the touch. Notice Heat Shield Pad between cables and pedestal.

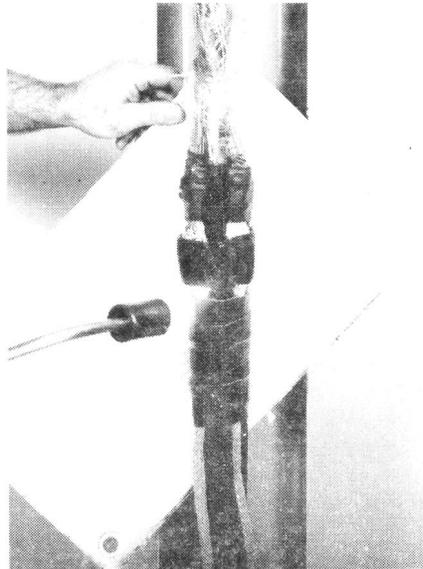


Fig. 17 — Preheating Cables

5.17 Place the heat-shrinkable Ped Cap over the splice area, bringing the end 1 inch (25 mm) over the D.R. tape.

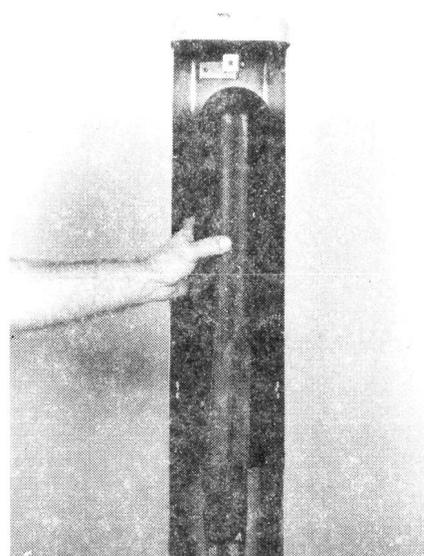


Fig. 18 — Installing Ped Cap

5.18 Use the Heat Shield Pad to protect the pedestal and surrounding area by placing the pad between the cap and the pedestal, as seen in Figs. 17 and 19.

5.19 Using the torch, heat evenly around the entire bottom of the Ped Cap, completely shrinking the end over the cables.

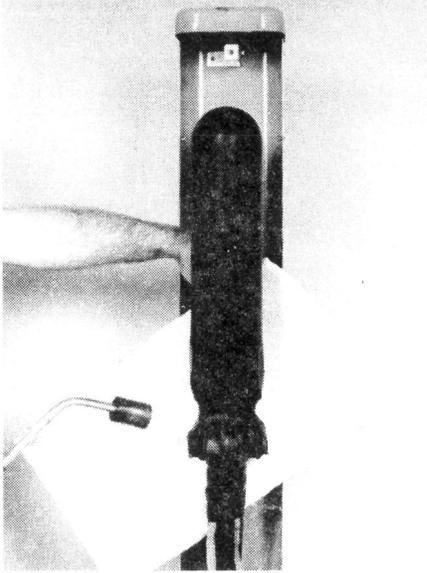


Fig. 19 — Recovering Heat-shrinkable Cap

5.20 Completed pedestal cap.

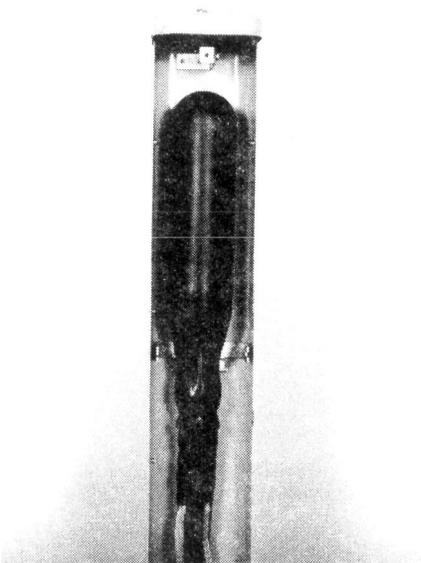


Fig. 20 — Completed Pedestal Cap

5.21 When the cap is cool to the touch, replace the bonding bracket onto the pedestal, bring the fixed terminal block up and inside the bonding bracket.

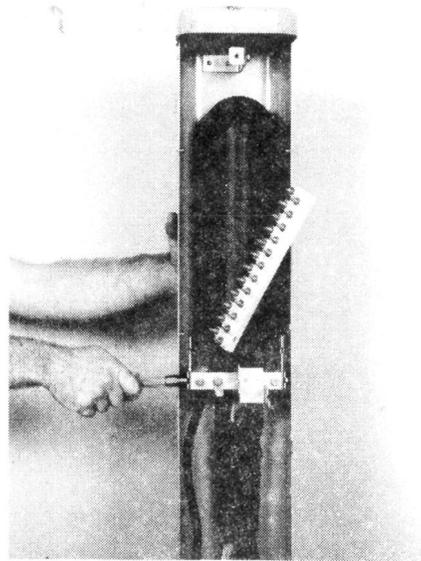


Fig. 21 — Replacing Bonding Bracket

5.22 Replace backboard and connect small bonding strap, both bonding braids and terminal block.

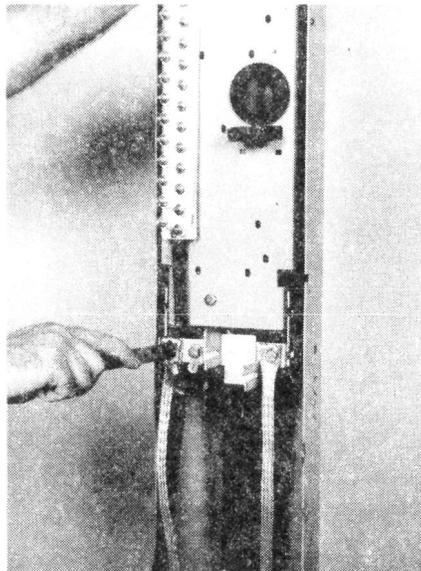


Fig. 22 — Connecting Bonding Braids

5.23 Completed pedestal splice enclosure system.

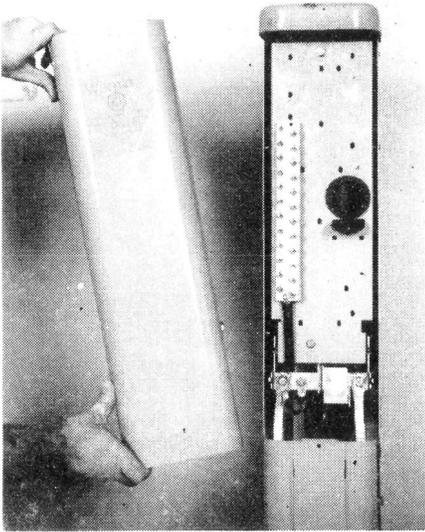


Fig. 23 — Completed Pedestal Splice Enclosure System

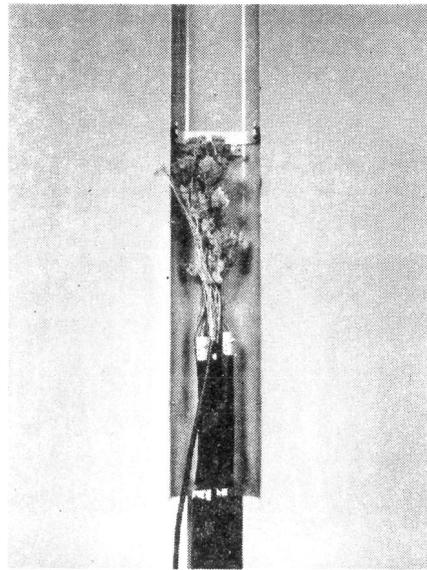


Fig. 25 — Rehabilitated Splice

Caution: During rehabilitation, sheath continuity must be maintained at all times.

6. INSTALLATION FOR REHABILITATION

6.01 Rehabilitate pedestal splice following locally approved methods.

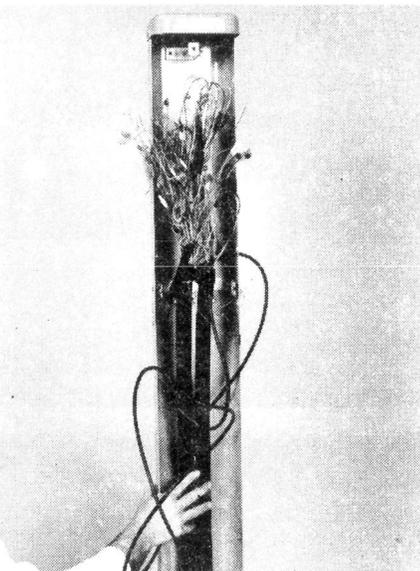


Fig. 24 — Defective Splice

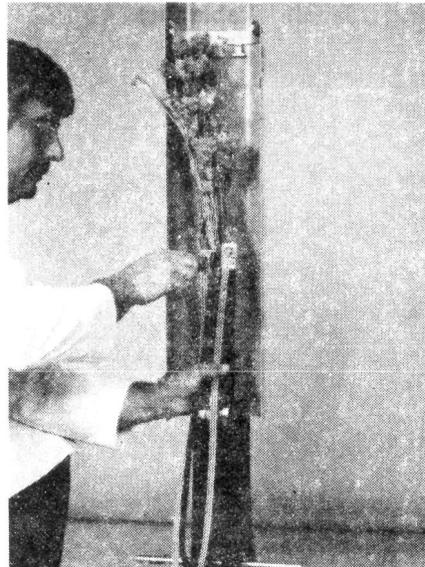


Fig. 26 — Installing Bonding Equipment

6.02 Install locally approved bonding clamps and 30 inches (762 mm) of bonding braid to each clamp.

6.03 Remove excess bonding studs from bonding clamps.

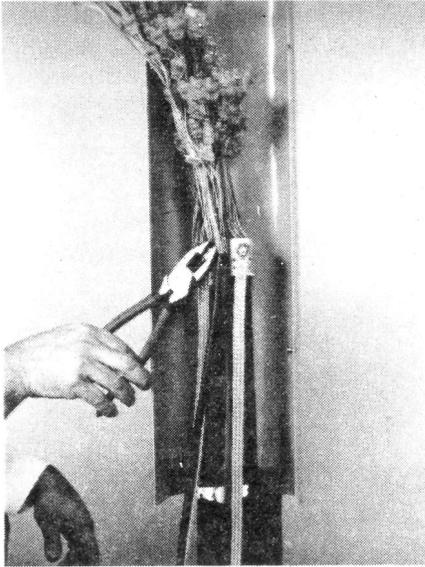


Fig. 27 — Removing Excess Studs

6.04 Follow procedures outlined in Section 5., 5.06 and 5.08 through 5.23.

7. METHOD FOR ENCAPSULATION

7.01 If it becomes desirable to encapsulate a pedestal splice, the following procedure can be followed allowing for a completely encapsulated and water tight splice system using the Ped Cap R and the S-Compound.

7.02 Follow procedures outline in Section 5., 5.01 through 5.15.

7.03 Take a poly bag supplied in the kit and fill it with S-Compound. Use Table A as a guide to select the required amount of compound.

TABLE A

Main Cable Pair	Number of Tubes
25	1
50	1
100	2
200	4



Fig. 28 — Filling Poly Bag

7.04 Place the filled poly bag over the splice.

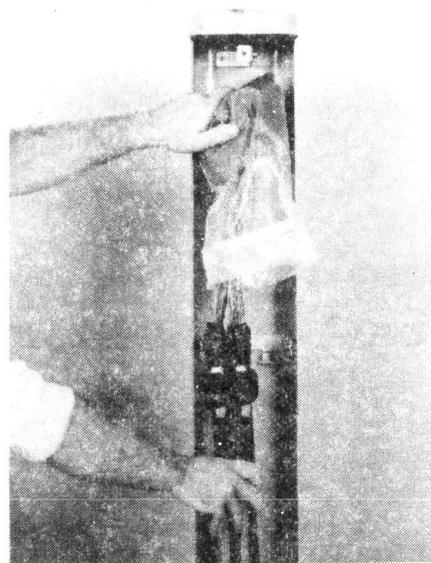


Fig. 29 — Placing Poly Bag

7.05 Using D.R. or vinyl tape, tape the bottom of the bag closed. The tape should not overlap the S-1061 sealant by more than ½ inch (12 mm).

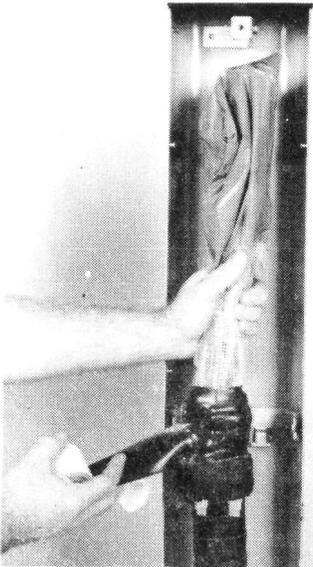


Fig. 30 — Taping Poly Bag

7.06 Massage the entire splice area, ensuring the S-Compound penetrates the splice core and comes into intimate contact with all the conductors and connectors of the splice.

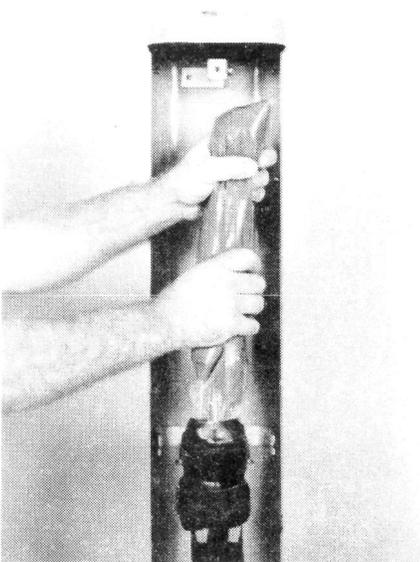


Fig. 31 — Massaging Splice Area

7.07 Wrap the splice area with two half lap layers of vinyl tape. The first layer should be applied with slight tension, starting from the top and working down towards the bonding hardware. This first wrap is used to evenly shape the splice. The second wrap is applied tightly insuring the S-Compound that has penetrated the splice area stays in place.

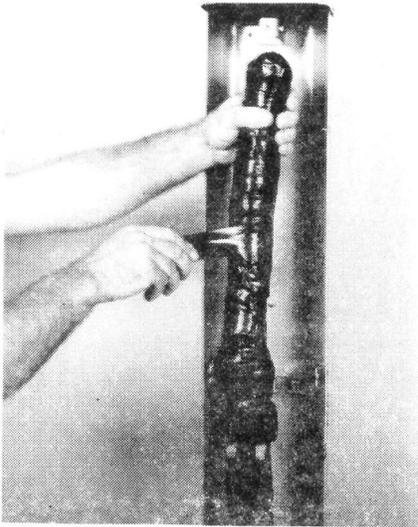


Fig. 32 — Wrapping Splice Area

7.08 Preheat the cable area between the S-1061 sealant and the D.R. tape, then continue with procedures outlined in Section 5., 5.17 through 5.23.

8. REENTRY

8.01 If it becomes necessary to reenter a Ped Cap, begin by removing any pedestal hardware holding the splice in place.

Caution: Sheath continuity must be maintained at all times.

8.02 Using an approved torch, reheat the Ped Cap at the recovered area. When reheating is complete, use a splicer's sheath knife and ring cut the Ped Cap just above the area that has been shrunk and remove.

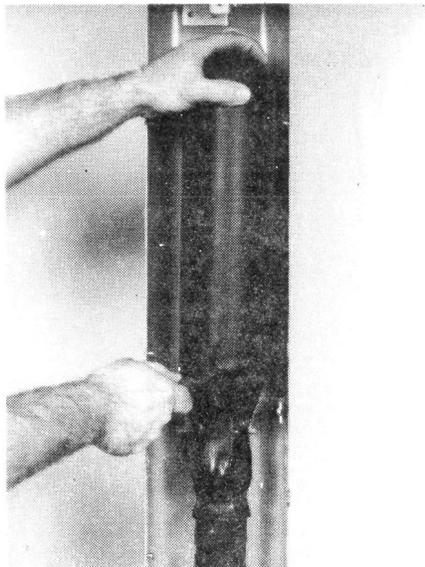


Fig. 33 — Ring Cutting Ped Cap

8.03 Make knife cut down center of the remaining collar of the cap left on the cables.



Fig. 34 — Cutting Center Of Collar

8.04 Using a pair of pliers, remove the collar by pulling away from the cables.

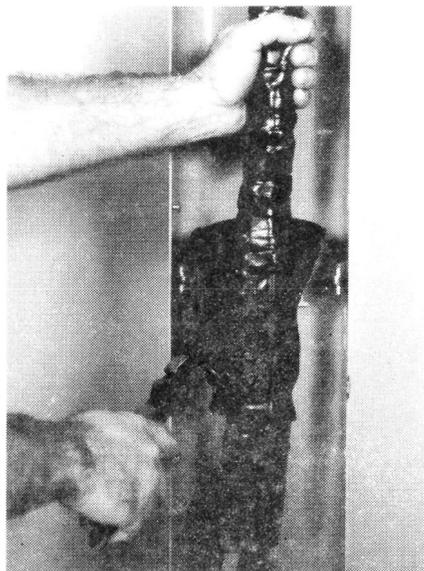


Fig. 35 — Removing Collar

8.05 When the Ped Cap has been removed, complete any necessary rework and reclose following procedures outlined in Section 5.

9. REFERENCE DOCUMENTS

9.01 The following literature may serve as a useful guide when using Raychem's Ped Cap R.

- (1) Installation instructions Ped Cap R
- (2) Splice encapsulating technique using the S-Compound System and Raychem's XAGA Splice Enclosures (RYCH-63-700).

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