

3M

2178 Fiber Optic Splice Case and 2181 Cable Addition Kit

Instructions

January 1994

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1.0 General

The 3M brand 2178 Fiber Optic Splice Case is a fire retardant closure that can be used in underground, aerial, building entrance, Central Office Vault and pedestal applications, **please refer to your company's approved applications.** The splice case has two cable entrance ports on each end. Port plugs allow the case to be used for butt or in-line splices. The rigid non-encapsulated case provides moisture protection and can be pressurized.

One Universal Organizer Adapter is included with the Splice Case, for use with any organizer.

The 3M brand 2180 Cable Kit is used when the 2178 Fiber Optic Case is reentered. All materials necessary for cable addition and splice case reassembly are included.

The 3M brand 2181 Cable Addition Kit increases the cable entrance capacity of the 2178 Fiber Optic Splice Case. One adapter is included in each 2181 Kit. A single adapter allows the 2178 Splice Case to accommodate four cables in a butt configuration or eight cables total. Double stacking the adapter increases the capacity to six cables in a butt configuration or twelve cables total. The 2181B Double Adapter Kit and 2181C Triple Adapter Kit contain the fasteners necessary to assemble the splice case when the adapters are double or triple stacked. The 2181 Kit can be installed at initial splicing or at reentry.

2.0 Specifications

- Maximum cable diameter: 1.0" (25 mm)
- Minimum cable diameter: 0.4" (10 mm)
- Closure length: 26" (66.0 cm)
- Closure width: 8.75" (22.2 cm)
- Closure height: 7.75" (19.7 cm)
- Available splice chamber space:
 - length .. 16" (40.6 cm)
 - width ... 5.5" (14.0 cm)
 - height .. 3.5" (8.9 cm)
- 2181 Cable Addition Kit, height: 1.5" (3.55 cm)

2.1 Splice Trays Capacity:

Number of 2181 Cable Addition Kits Added	0	1	1	2	2	2	3	3	3	3
Number of Cables Installed	2-4	2-4	5-8	2-4	5-8	9-12	2-4	5-8	9-12	13-16
Number of Central Spacer Clamp Assemblies Installed	0	0	1	0	1	2	0	1	2	3
Capacity (Maximum Number of 2524 Splice Trays)	8	12	8	15	12	8	18	15	12	8
Capacity (Maximum Number of 2116, 2118 or 2120 Splice Trays)	9	13	9	16	13	9	19	16	13	9
Capacity (Maximum Number of 2672 Multi-Fiber High Density Trays)	5	7	5	9	7	5	11	9	7	5

Note: Capacity of 2524 Splice Tray 24 Fibrlok™ Splices
 24 Fusion Splices

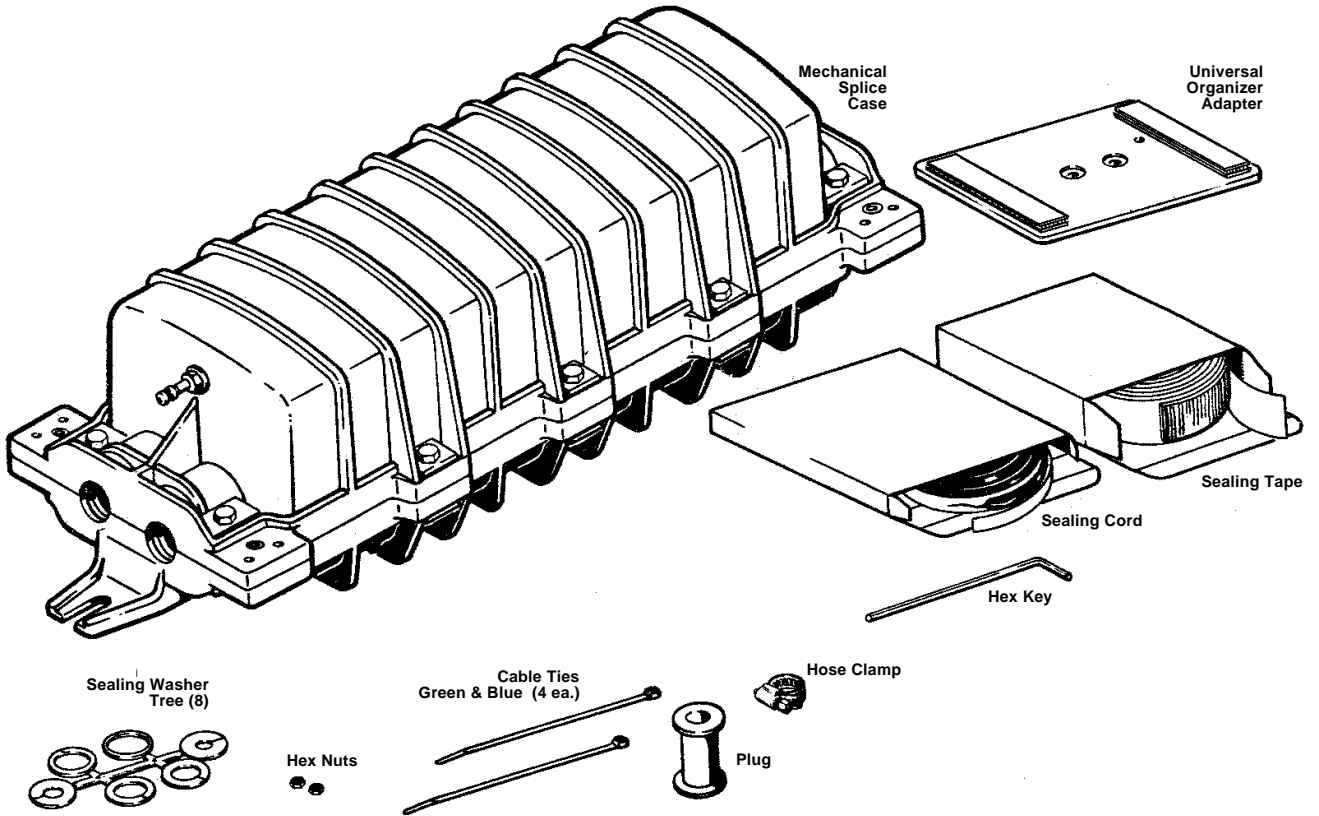
Capacity of 2116 Splice Tray 12 Fusion Splices

Capacity of 2118 Splice Tray 12 Fibrlok Splices

Capacity of 2672 Splice Tray 6 - 12 Fibrlok Multi-Fiber Splices (varies with ribbon size)

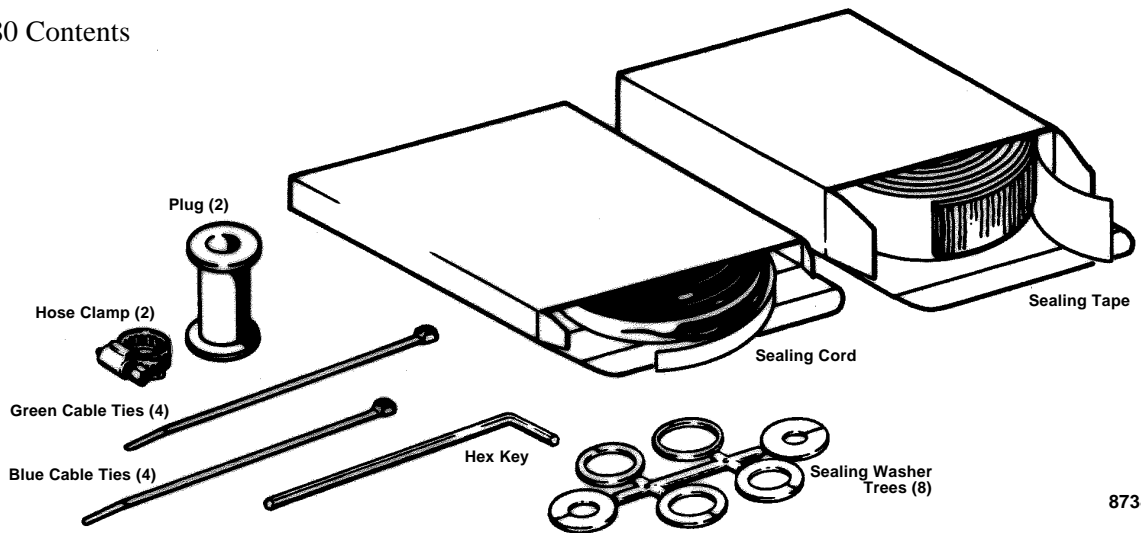
3.0 Kit Contents

3.01 2178 Contents



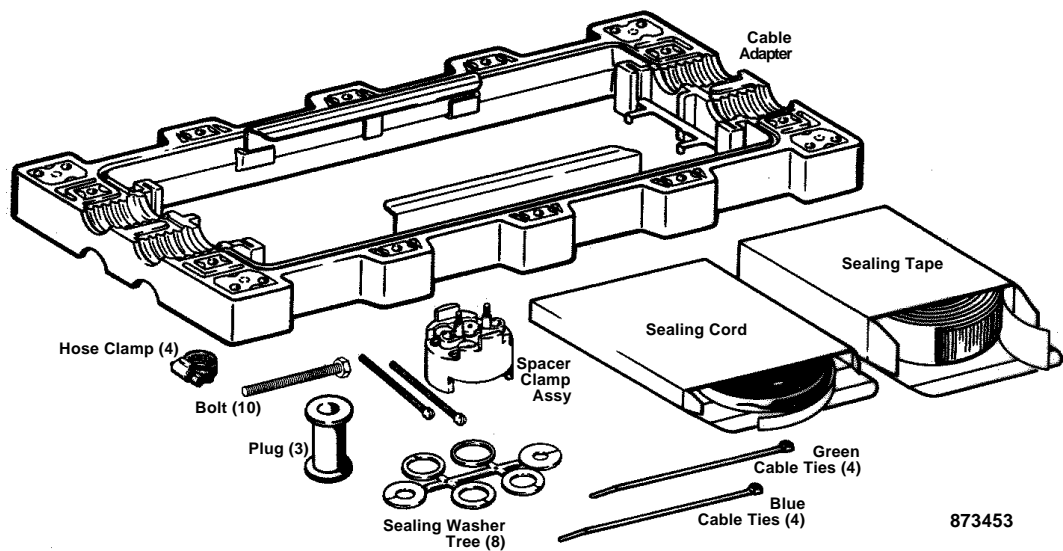
Note: Not shown – Sheath Scuff and Organizer Fastening Strap

3.02 2180 Contents



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3.03 2181 Contents



3.04 2181B and 2181C Contents



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3.05 Additional Material Required

- 3/4" (19 mm) Vinyl Tape
- 2" (51 mm) Rubber Tape
- Cable Cleaner
- Shield Bond Connectors
- #6 AWG Ground Wire or equivalent
- Splice Tray / Organizer

3.06 Tools Required

- 3/8" (9.5 mm) Hex Driver
- 1/2" (12.7 mm) Hex Driver
- 7/16" (11.1 mm) Hex Driver
- Side Cutting Pliers
- Needlenose Pliers
- Cable Stripper
- Cable Splicer Knife
- Tape Measure
- Wire Cutter for Steel Strength Members
- Electricians Scissors

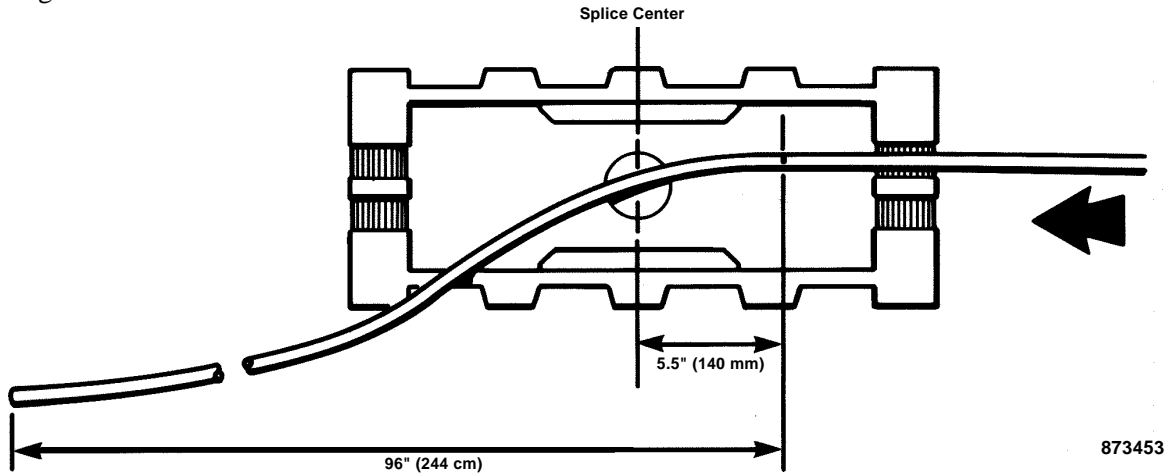
SECTION 1: 3M BRAND 2178 FIBER OPTIC SPLICE CASE INSTRUCTIONS

Note: Proper sealing of the 2178 Splice Case depends on strict adherence to these instructions and the use of specified sealing materials. Deviations can cause leakage or case damage. Maintain clean and grease free sealing surfaces to ensure proper sealing. Do not use any release agents or other unspecified materials.

4.0 Cable Preparation

Note: When removing cable sheathing, do not cut, kink, or damage underlying layers. If damage occurs, cut back sheath components to adequately inspect and repair.

4.01 Establish splice centerline and mark each cable jacket 5.5" (140 mm) from centerline. Provide cable lengths from sheath mark to cable end as shown.



4.02 Remove 96" (244 cm) of outer cable sheath (and shield or armor if present). Remove successive sheath layers and wrapping to expose primary tubes protecting fibers. Stagger layers as recommended by cable manufacturer or per standard practice.

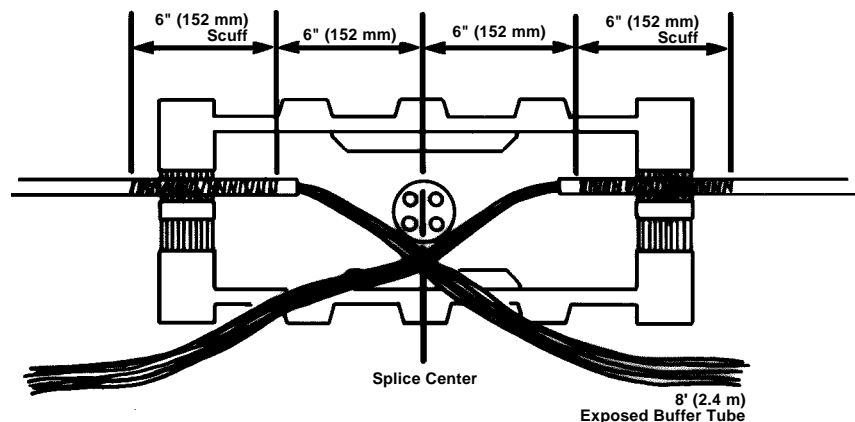
4.03 Remove all cable grease. Clean all primary tubes and dielectric strands with approved cleaner. Cover all sharp edges with vinyl tape.

Note: Carefully follow health, safety and environmental instructions as given on Material Safety Data Sheet or container label for cable cleaner solvent being used.

4.04 Trim any solid filler tubes and discard. Trim central strength members (if present) to 7" (178 mm) from sheath openings.

4.05 Scuff 6" (152 mm) of each cable as shown using supplied sheath scuff.

Note: Do not use a carding brush to scuff sheaths.

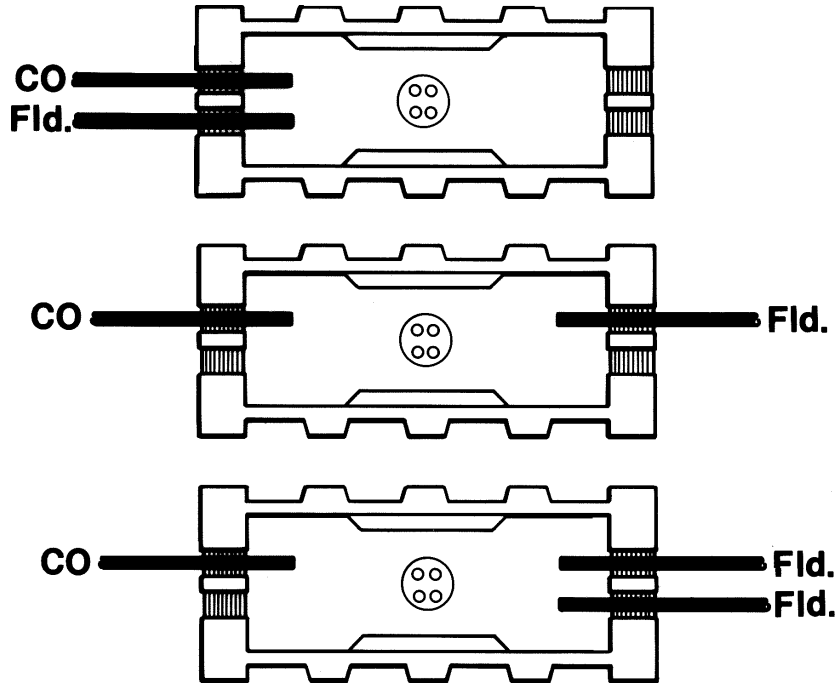


5.0 Cable Installation

5.01 Slide two sealing washers down each cable. Use sealing washers with smallest inside diameter which will slide on the cable.

Note: If necessary, sealing washers can be slit and placed on the cable.

5.02 Locate cables in appropriate entrance ports as shown.

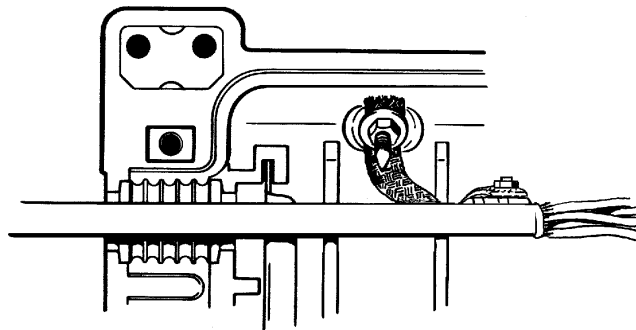


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5.03 Bonding and grounding for shielded cable.

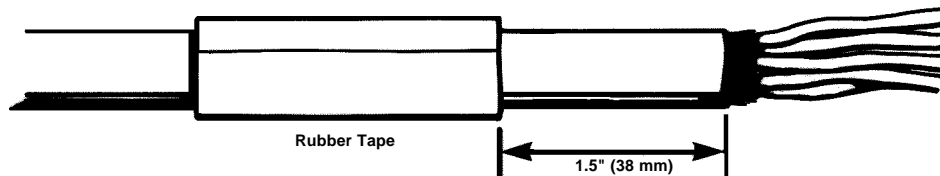
Note: Use care when installing shield bond connectors so underlying layers of cable are not damaged.

- Install shield bond connector on side of cable per company practice.
- If separate external grounding is required, bond "C.O. Cable" and "Field Cable" directly to separate ground studs.
- If separate external grounding is not required, bond across splice to either ground stud.



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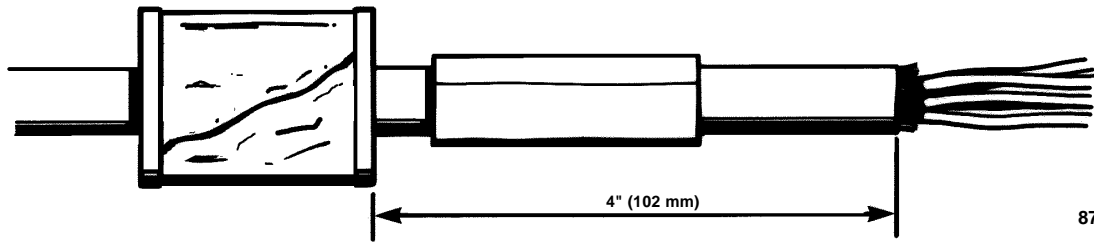
5.04 Wrap each cable with two wraps of 2"(51 mm) wide rubber tape. Locate tape wraps 1.5" (38 mm) from cable end.



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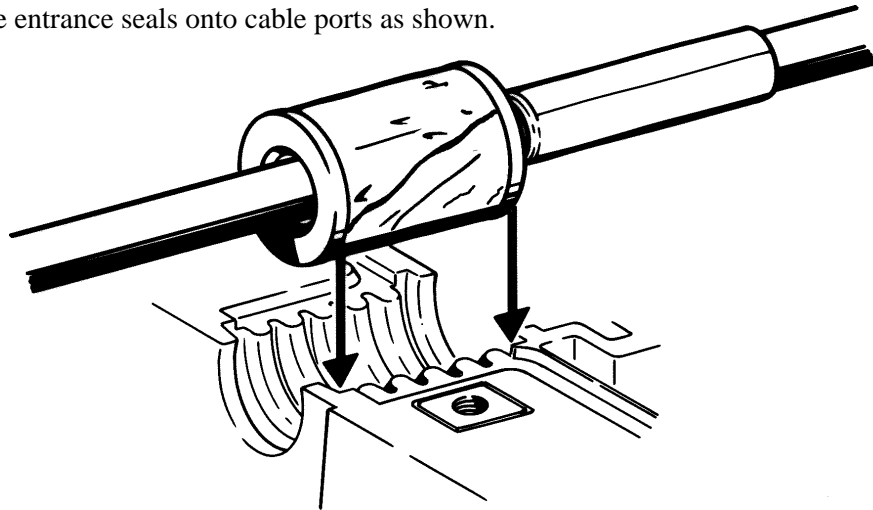
5.05 Build cable entrance seals by wrapping sealing tape between sealing washers 4.0" (102 mm) from each cable end. Wrap each cable until sealing tape outside diameter is **flush with sealing washer OD**. Both ends of sealing tape should be angled to prevent leaks.

Note: Do not wrap sealing tape above sealing washer diameter (OD). Case leakage may occur if sealing tape is wrapped above sealing washer diameter (OD). Any extra space will be filled in by cable port ridges.



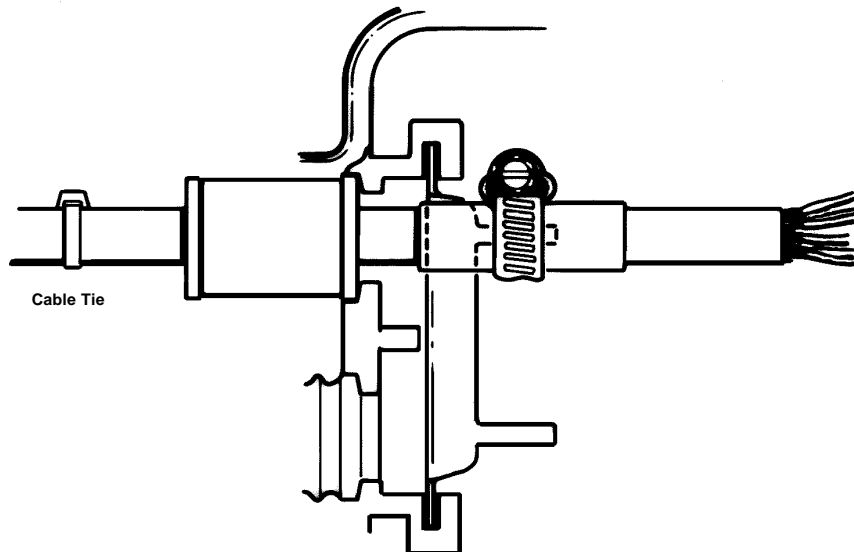
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5.06 Press cable entrance seals onto cable ports as shown.



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5.07 Attach each cable to closure base by installing and tightening a hose clamp over previously wrapped rubber tape on cable tie down bracket as shown.



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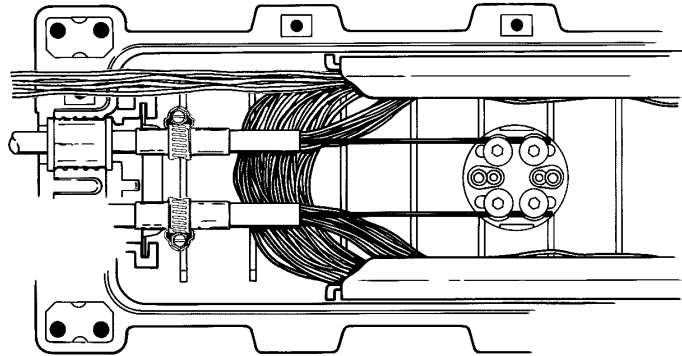
5.08 Install one green cable tie on the "C.O. Cable" as shown and trim. Install one blue cable tie on each "Field Cable" and trim.

Note: Cable ties may also be placed inside the case on the cable sheaths.

6.0 Primary Tube Preparation

- 6.01 Gather all primary tubes from "C.O. Cable" and install one green cable tie approximately 36" (914 mm) from sheath end. Install one blue cable tie on the "Field Cable" primary tubes. Install two blue cable ties on "Branch Cable" primary tubes.
- 6.02 Coil primary tube bundles inside closure base per company standard or organizer installation instructions.
- 6.03 Position central strength members under central clamp retention screws as shown. Using the supplied 7/32" hex key, firmly tighten each retention screw. If Kevlar¹ is used for cable strain relief instead of a central strength member, wrap the Kevlar fibers twice around one central clamp retention screw and tighten the screw. Cut Kevlar fibers 1/2" (13 mm) from screw.

Note: *If necessary to insure proper fit, remove excess coating on central strength member.*



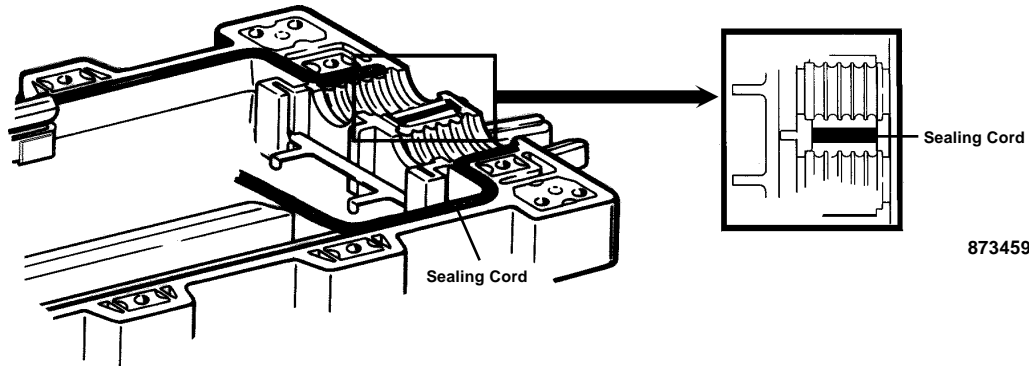
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- 6.04 Install Organizer and splice per your company standard or organizer installation instructions.

7.0 Splice Case Assembly

Note: *If 3M brand 2183 Universal Aerial Hanger Bracket is to be used, follow the 2183 practice prior to splice case assembly.*

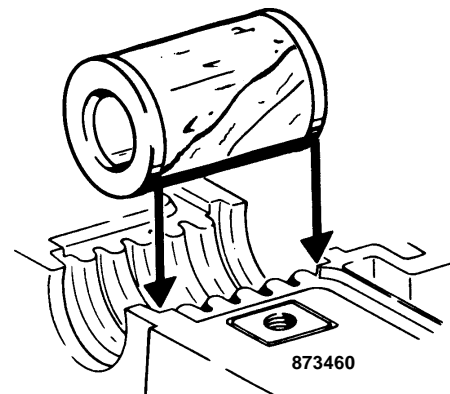
- 7.01 Seal Closure Walls
 - a. Lay sealing cord into channel along both sides of closure base as shown. **Do not stretch sealing cord.**
 - b. Lay strip of sealing cord 1.5" (38 mm) in length on the raised surface (**not in U-Channel**) between the cable entrance ports on each end of closure base as shown.



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- 7.02 Seal Plug Construction
 - a. Wrap each plug two times with sealing tape. Sealing tape OD should be flush with plug OD. Both ends of sealing tape should be angled to prevent leaks.
 - b. Press seal plugs into each vacant cable entrance port.

Note: *Do not wrap sealing tape above the edge of the plug. Case leakage may occur if sealing tape is wrapped above the edge of the plug.*

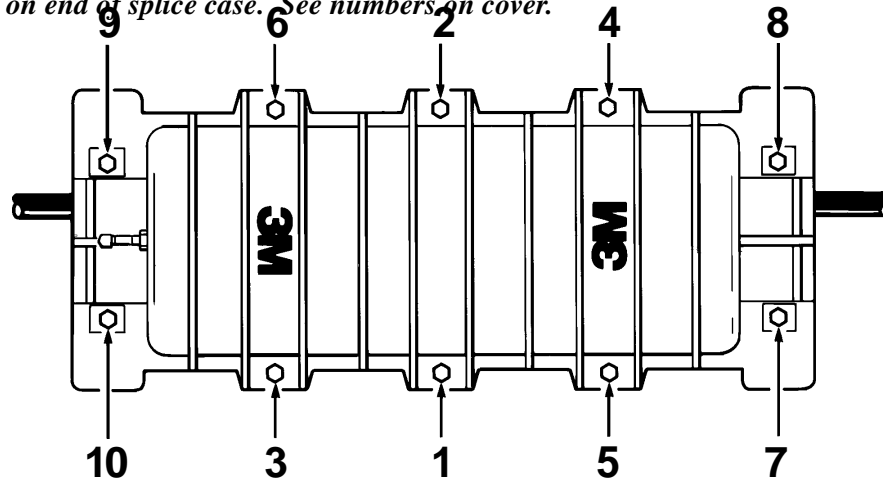


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¹ - Trademark of DuPont Co.

- 7.03 Set closure cover directly on top of closure base.
- 7.04 Screw all bolts until they have been threaded several complete turns into the nut inserts.
- 7.05 Tighten ten (10) bolts in sequence shown until there is metal to metal contact (bottom-out closure halves). Bolts may be pulled down with air impact wrench. Final tightening should be done with a hand wrench to 20 ft.lbs. (27.12 N-m) torque. **Case leakage may occur if above procedure is not followed.**

Note: See label on end of splice case. See numbers on cover.



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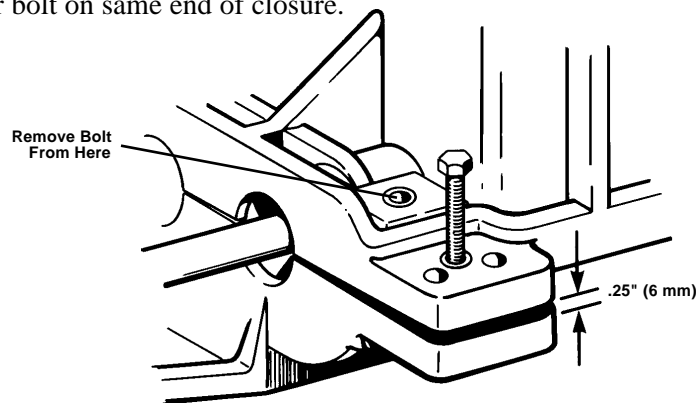
- 7.06 After 5 minutes, retighten bolts to 20 ft.lbs. maximum.
- 7.07 **Flash test splice case with 10 psi (.67 bars) MAXIMUM.**
- 7.08 If leaks are detected, retighten bolts.

8.0 Splice Case Reentry

- 8.01 Remove the 10 bolts holding splice case halves together.

Note: See label on end of splice case.

- 8.02 Using these bolts, loosely screw one bolt into each of the four threaded corner inserts in the closure cover.
- 8.03 Beginning with any corner, screw in bolt until the closure halves have been pried apart about .25" (6 mm). Repeat with the other bolt on same end of closure.



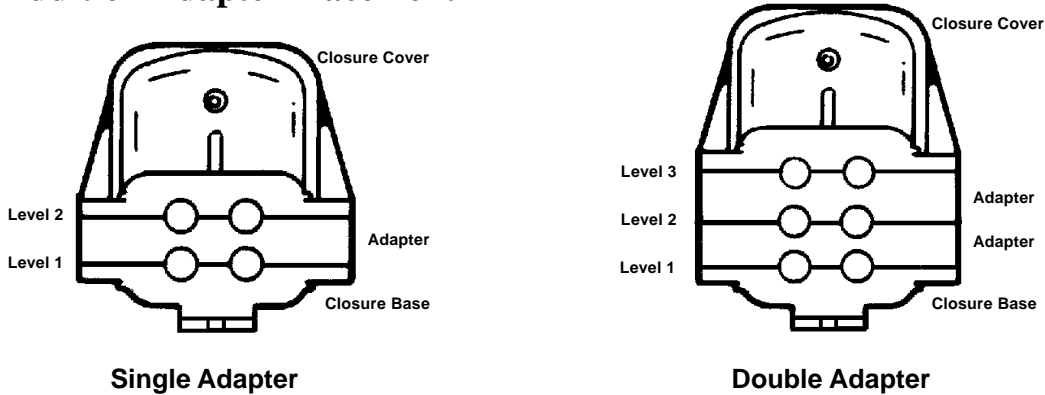
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- 8.04 Follow same procedure with the bolts on opposite end of closure. Continue screwing bolts in .25" increments until the case halves can be easily separated by hand.

Note: If splice case is to be reassembled, old sealant must be removed and cable entrance port seals reconstructed. The 2180 Cable Kit is needed to reseat splice case.

SECTION 2: 3M BRAND 2181 CABLE ADDITION KIT

9.0 Cable Addition Adapter Placement



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10.0 Cable Preparation

- 10.01 Select cables to be installed on level 1 of the closure.
- 10.02 Establish splice center-line and mark each cable jacket 5.5" (140 mm) from centerline. Provide cable lengths from sheath mark to cable end as shown in Step 4.01.
- 10.03 Remove 96" (244 cm) of outer cable sheath (and shield or armor if present). Remove successive sheath layers and wrapping to expose primary tubes protecting fibers. Stagger layers as recommended by cable manufacturer or per standard practice.
- 10.04 Remove all cable grease. Clean all primary tubes and dielectric strands with approved cleaner. Cover all sharp edges with vinyl tape.

Note: *Carefully follow health, safety and environmental instructions as given on Material Safety Data Sheet or.....
container label for cable cleaner solvent being used.*

- 10.05 Trim any solid filler tubes and discard. Trim central strength members (if present) to 7" (178 mm) from sheath openings.
- 10.06 Scuff 6" (152 mm) of each cable as shown in Step 4.05 using supplied sheath scuff.

Note: *Do not use a carding brush to scuff sheaths.*

11.0 Cable Installation

- 11.01 Slide two sealing washers down on each cable. Use sealing washers with the smallest ID which will slide on the cable.

Note: *If necessary, sealing washers can be split and placed on the cable.*

- 11.02 Locate cables in appropriate entrance ports.
- 11.03 Bond and ground shielded cable.

Note: *Use caution when installing shield bond connectors so underlying layers of cable are not damaged.*

- a. Install shield bond connector on side of cable per company practice.
 - b. If separate external grounding is required, bond "C.O. Cable" and "Field Cable" directly to separate ground studs.
 - c. If separate external grounding is not required, bond across splice to either ground stud.
- 11.04 Wrap each cable with two wraps of 2"(51 mm) wide rubber tape. Locate tape wraps 1.5" (38 mm) from cable end.

11.05 Build cable entrance seals by wrapping sealing tape between sealing washers 4.0" (102 mm) from each cable end. Wrap each cable until sealing tape outside diameter is flush with sealing washer OD. Both ends of sealing tape should be angled to prevent leaks.

Note: Do not wrap sealing tape above sealing washer diameter (OD). Case leakage may occur if sealing tape is wrapped above sealing washer diameter (OD). Any extra space will be filled in by cable port ridges.

11.06 Press cable entrance seals onto cable ports as shown in Step 5.06.

11.07 Attach each cable to closure base by installing and tightening a hose clamp over previously wrapped rubber tape on cable tie down bracket as shown in Step 5.07.

11.08 Install one green cable tie on the "C.O. Cable" as shown in Step 5.08 and trim. Install one blue cable tie on each "Field Cable" and trim.

Note: Cable ties may also be placed inside the case on the cable sheaths.

Note: Refer to Section 6.0 Primary Tube Preparation.

12.0 Adapter 1 Installation

12.01 For the SINGLE Adapter Splice Case replace all ten bolts inserted in the closure cover with the ten bolts supplied with the 2181 kit.

For the DOUBLE Adapter Splice Case replace all ten bolts inserted in the closure cover with the ten longer bolts supplied with the 2181B kit.

For the TRIPLE Adapter Splice Case replace all ten bolts inserted in the closure cover with the ten longer bolts supplied with the 2181C kit.

12.02 Seal Closure Walls

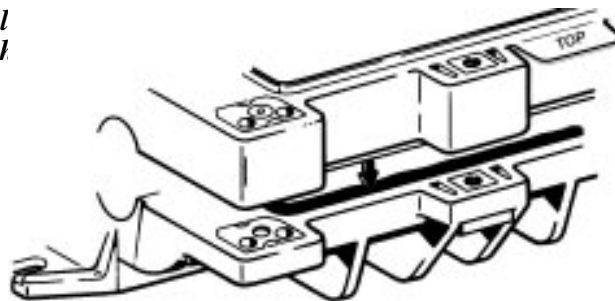
- Lay sealing cord into channel along both sides of closure base as shown in Step 7.01. Do not stretch sealing cord.
- Lay strip of sealing cord 1.5" (38 mm) in length on the raised surface (not in U-Channel) between the cable entrance ports on each end of closure base as shown in Step 7.01.

12.03 Seal Plug Construction

- Wrap each plug two times with sealing tape. Sealing tape OD should be flush with plug OD. Both ends of sealing tape should be angled to prevent leaks.

12.04 Set Adapter 1 plugs into each "TOP" cable entrance directly on top of the closure base.

Note: Do not wrap seal may occur if sealing tape is wrapped above the



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12.05 Set closure directly over Adapter 1. Do not install sealing cord between cover and adapter at this step.

12.06 Screw all bolts until they have been threaded several complete turns into nut inserts.

12.07 Gradually tighten bolts in the sequence shown in Step 7.05 until there is metal to metal contact between adapters. Bolts can be pulled down with an air impact wrench. Then tighten bolts in the same sequence with a hand wrench to 20 ft. lbs. (27.12 N/m) torque. Case leakage may occur if above procedure is not followed.

12.08 Remove all bolts and closure cover.

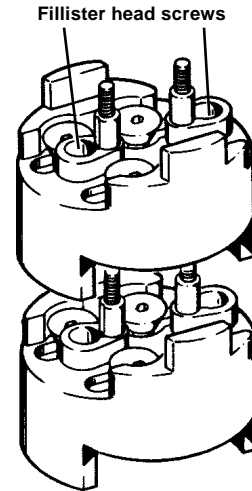
Note: These steps are done to seat sealing cord between closure base and adapter.

13.0 Stack Central Clamps (needed when adding additional

cables)

- 13.01 Remove the two fillister head screws holding the central clamp to closure base.
- 13.02 Place the second level central clamp directly on top of the closure base central clamp.
- 13.03 If the SINGLE Adapter Splice Case is being installed, secure the two central clamps together using the two fillister head screws supplied with the 2181 Kit.

If the DOUBLE or TRIPLE Adapter Splice Case is being installed, the central clamps are not secured at this time.



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14.0 Cable Preparation

- 14.01 Select cables to be installed on level 2 of the closure.
- 14.02 Establish splice center-line and mark each cable jacket 5.5" (140 mm) from centerline. Provide cable lengths from sheath mark to cable end as shown in Step 4.01.
- 14.03 Remove 96" (244 cm) of outer cable sheath (and shield or armor if present). Remove successive sheath layers and wrapping to expose primary tubes protecting fibers. Stagger layers as recommended by cable manufacturer or per standard practice.
- 14.04 Remove all cable grease. Clean all primary tubes and dielectric strands with approved cleaner. Cover all sharp edges with vinyl tape.

Note: *Carefully follow health, safety and environmental instructions as given on Material Safety Data Sheet of.....
container label for cable cleaner solvent being used.*

- 14.05 Trim any solid filler tubes and discard. Trim central strength members (if present) to 7" (178 mm) from sheath openings.
- 14.06 Scuff 6" (152 mm) of each cable as shown in Step 4.05 using supplied sheath scuff.

Note: *Do not use a carding brush to scuff sheaths.*

15.0 Cable Installation

- 15.01 Slide two sealing washers down each cable. Use sealing washers with smallest inside diameter which will slide on the cable.

Note: *If necessary, sealing washers can be slit and placed on the cable.*

- 15.02 Locate cables in appropriate entrance ports.
- 15.03 Bond and ground shielded cable.

Note: *Use caution when installing shield bond connectors so underlying layers of cable are not damaged.*

- a. Install shield bond connector on side of cable per company practice.
 - b. If separate external grounding is required, bond "C.O. Cable" and "Field Cable" directly to separate ground studs.
 - c. If separate external grounding is not required, bond across splice to either ground stud.
- 15.04 Wrap each cable with two wraps of 2"(51 mm) wide rubber tape. Locate tape wraps 1.5" (38 mm) from cable end.

- 15.05 Build cable entrance seals by wrapping sealing tape between sealing washers 4.0" (102 mm) from each cable end. Wrap each cable until sealing tape outside diameter is **flush with sealing washer OD**. Both ends of sealing tape should be angled to prevent leaks.

Note: Do not wrap sealing tape above sealing washer diameter (OD). Case leakage may occur if sealing tape is wrapped above sealing washer diameter (OD). Any extra space will be filled in by cable port ridges.

- 15.06 Press cable entrance seals onto cable ports as shown in Step 5.06.

- 15.07 Attach each cable to appropriate cable port by installing and tightening a hose clamp over previously wrapped rubber tape on cable tie down bracket as shown in Step 5.07.

- 15.08 Install one green cable tie on the "C.O. Cable" as shown in Step 5.08 and trim. Install one blue cable tie on each "Field Cable" and trim.

Note: Cable ties may also be placed inside the case on the cable sheaths.

Note: Refer to Section 6.0 Primary Tube Preparation.

- 15.06 Install Organizer and splice per your company standard or Organizer instructions.

16.0 Adapter 2 Installation

Note: Steps 16.0 through 20.0 are for installation of the DOUBLE and TRIPLE Adapter Splice Case only. For installation of the SINGLE Adapter Splice Case go directly to step 21.0.

- 16.01 Seal Closure Walls
- Lay sealing cord into channel along both sides of Adapter 1. **Do not stretch sealing cord.**
 - Lay strip of sealing cord 1.5" (38 mm) in length on the raised surface (**not in U-Channel**) between the cable entrance ports on each end of the adapter as shown in Step 7.01.

- 16.02 Seal Plug Construction
- Wrap each plug two times with sealing tape. Sealing tape OD should be flush with plug OD. Both ends of sealing tape should be angled to prevent leaks.
 - Press seal plugs into each vacant cable entrance port.

Note: Do not wrap sealing tape above the edge of the plug. Case leakage may occur if sealing tape is wrapped above the edge of the plug.

- 16.03 Set Adapter 2 (with the word "TOP" facing up) directly on top of the Adapter 1.

- 16.04 Set closure cover directly over Adapter 2. Do not install sealing cord between cover and Adapter 2.

- 16.05 Gradually tighten bolts in the sequence shown in Step 7.05 until there is metal to metal contact between adapters. Bolts can be pulled down with an air impact wrench. Then tighten bolts in the same sequence with a **hand wrench** to 20 ft. lbs. (27.12 N/m) torque. **Case leakage may occur if above procedure is not followed.**

Note: See label on end of splice case. See numbers on cover.

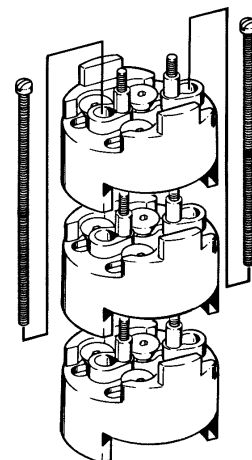
- 16.06 Remove all bolts and remove closure cover.

Note: These steps are done to seat sealing cord between the two adapters.

17.0 Stack Central Clamps (needed when adding additional cables)

- 17.01 Place the third level central clamp directly on top of the second level central clamp.

- 17.02 Secure all three central clamps together using the two long fillister head screws supplied with the 2181 Kit.



18.0 Cable Preparation

- 18.01 Select cables to be installed on level 3 of the closure.
- 18.02 Establish splice center-line and mark each cable jacket 5.5" (140 mm) from centerline. Provide cable lengths from sheath mark to cable end as shown in Step 4.01.
- 18.03 Remove 96" (244 cm) of outer cable sheath (and shield or armor if present). Remove successive sheath layers and wrapping to expose primary tubes protecting fibers. Stagger layers as recommended by cable manufacturer or per standard practice.
- 18.04 Remove all cable grease. Clean all primary tubes and dielectric strands with approved cleaner. Cover all sharp edges with vinyl tape.
- Note:** *Carefully follow health, safety and environmental instructions as given on Material Safety Data Sheet or container label for cable cleaner solvent being used.*
- 18.05 Trim any solid filler tubes and discard. Trim central strength members (if present) to 7" (178 mm) from sheath openings.
- 18.06 Scuff 6" (152 mm) of each cable as shown in Step 4.05 using supplied sheath scuff.
- Note:** *Do not use a carding brush to scuff sheaths.*

19.0 Cable Installation

- 19.01 Slide two sealing washers down each cable. Use sealing washers with smallest inside diameter which will slide on the cable.
- Note:** *If necessary, sealing washers can be slit and placed on the cable.*
- 19.02 Locate cables in appropriate entrance ports as shown.
- 19.03 Bond and ground for shielded cable.
- Note:** *Use caution when installing shield bond connectors so underlying layers of cable are not damaged.*
- a. Install shield bond connector on side of cable per company practice.
 - b. If separate external grounding is required, bond "C.O. Cable" and "Field Cable" directly to separate ground studs.
 - c. If separate external grounding is not required, bond across splice to either ground stud.
- 19.04 Wrap each cable with two wraps of 2"(51 mm) wide rubber tape. Locate tape wraps 1.5" (38 mm) from cable end.
- 19.05 Build cable entrance seals by wrapping sealing tape between sealing washers 4.0" (102 mm) from each cable end. Wrap each cable until sealing tape outside diameter is **flush with sealing washer OD**. Both ends of sealing tape should be angled to prevent leaks.
- Note:** *Do not wrap sealing tape above sealing washer diameter (OD). Case leakage may occur if sealing tape is wrapped above sealing washer diameter (OD). Any extra space will be filled in by cable port ridges.*
- 19.06 Press cable entrance seals onto cable ports as shown in Step 5.06.
- 19.07 Attach each cable to appropriate cable port by installing and tightening a hose clamp over previously wrapped rubber tape on cable tie down bracket as shown in Step 5.07.
- 19.08 Install one green cable tie on the "C.O. Cable" as shown in Step 5.08 and trim. Install one blue cable tie on each

20.0 Adapter 3 Installation

20.01 Same procedure as Adapter 2 installation, except the 2181C Cable Addition Kit is used.

20.02 Follow procedures shown in Sections 17, 18 and 19.

Note: Refer to Section 6.0 Primary Tube Preparation.

21.0 Splice Case Assembly

21.01 Seal Closure Walls

- a. Lay sealing cord into channel along both sides of the top adapter. **Do not stretch sealing cord.**
- b. Lay strip of sealing cord 1.5" (38 mm) in length on the raised surface (**not in U-Channel**) between the
cable entrance ports on each end of adapter as shown in Step 7.01.

21.02 Seal Plug Construction

- a. Wrap each plug two times with sealing tape. Sealing tape OD should be flush with plug OD. Both ends of sealing tape should be angled to prevent leaks.
- b. Press seal plugs into each vacant cable entrance port.

Note: Do not wrap sealing tape above the edge of the plug. Case leakage may occur if sealing tape is wrapped above the edge of the plug.

21.03 Set closure cover directly on top of closure base.

21.04 Screw all bolts until they have been threaded several complete turns into the nut inserts.

21.05 Gradually tighten bolts in the sequence shown in Step 7.05 until there is metal to metal contact between adapters. Bolts can be pulled down with an air impact wrench. Then tighten bolts in the same sequence with a **hand wrench** to 20 ft. lbs. (27.12 N/m) torque. **Case leakage may occur if above procedure is not followed.**

Note: See label on end of splice case. See numbers on cover.

21.06 After 5 minutes, retighten bolts.

21.07 **Flash test splice case with 10 psi (.67 bars) MAXIMUM.**

21.08 If leaks are detected, retighten bolts.

22.0 Splice Case Reentry

22.01 Remove the 10 bolts holding splice case halves together.

Note: See label on end of splice case.

22.02 Using these bolts, loosely screw one bolt into each of the four threaded corner inserts in the closure cover.

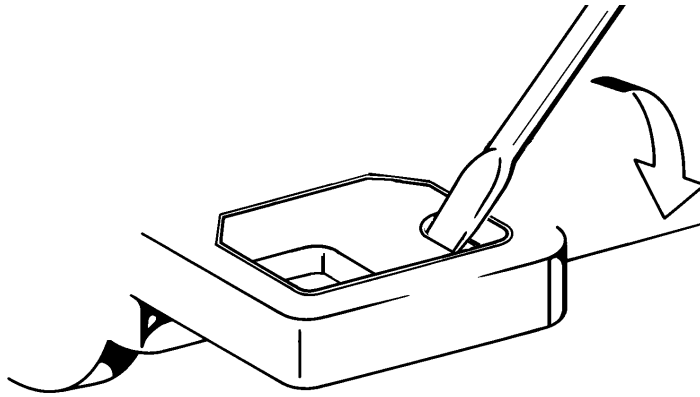
22.03 Beginning with any corner, screw in bolt until the closure halves have been pried apart about .25" (6 mm).
Repeat with the other bolt on same end of closure.

22.04 Follow same procedure with the bolts on opposite end of closure.

22.05 Screw in bolts until the closure halves have been pried apart about .25" (6mm). Continue in .25" increments
until the case halves can be easily separated by hand.

Note: If splice case is to be reassembled, old sealant must be removed and cable entrance port seals reconstructed. The 2180 Cable Kit is needed to reseal splice case.

22.06 Remove the four corner inserts on exposed side of adapter with a screwdriver.



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Note: *Do not discard corner inserts. Inserts must be replaced in adapter before reassembly.*

22.07 Loosely screw one bolt into each of the four threaded corner inserts of the Adapter. The threaded corner inserts are located directly beneath the previously removed corner inserts.

22.08 To separate Adapter 1 from closure base, screw in bolt (beginning with any corner) until the closure halves have been pried apart about .25" (6 mm). Repeat with the other bolt on same end of closure. Follow same procedure with the bolts on opposite end of closure.

To separate Adapter 2 from Adapter 1, screw in bolt (beginning with any corner) until the closure halves have been pried apart about .25" (6 mm). Repeat with the other bolt on same end of closure. Follow same procedure with the bolts on opposite end of closure.

Note: *If splice case is to be reassembled, old sealant must be removed and cable entrance port seals reconstructed. The 2180 Cable Kit is needed to reseal splice case.*

22.09 To separate Adapter 1 from closure base on Double or Triple adapters, remove the four corner inserts on exposed side of adapter with a screwdriver. Loosely screw one bolt into each of the four threaded corner inserts of the Adapter. The threaded corner inserts are located directly beneath the previously removed corner inserts. Screw in bolt (beginning with any corner) until the closure halves have been pried apart about .25" (6 mm). Repeat with the other bolt on same end of closure. Follow same procedure with the bolts on opposite end of closure.

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