

STOP!

Don't Connect Unless You Inspect!

**Verify that Instruction Sheet (408-Series)
Pertains to Connector Kit Being Terminated**

To Verify, Refer to Product Drawing for
Applicable Instruction Sheet at:

www.te.com

(Search by Connector Kit Part Number,
Click on the Part Number. Click on Product Drawing)

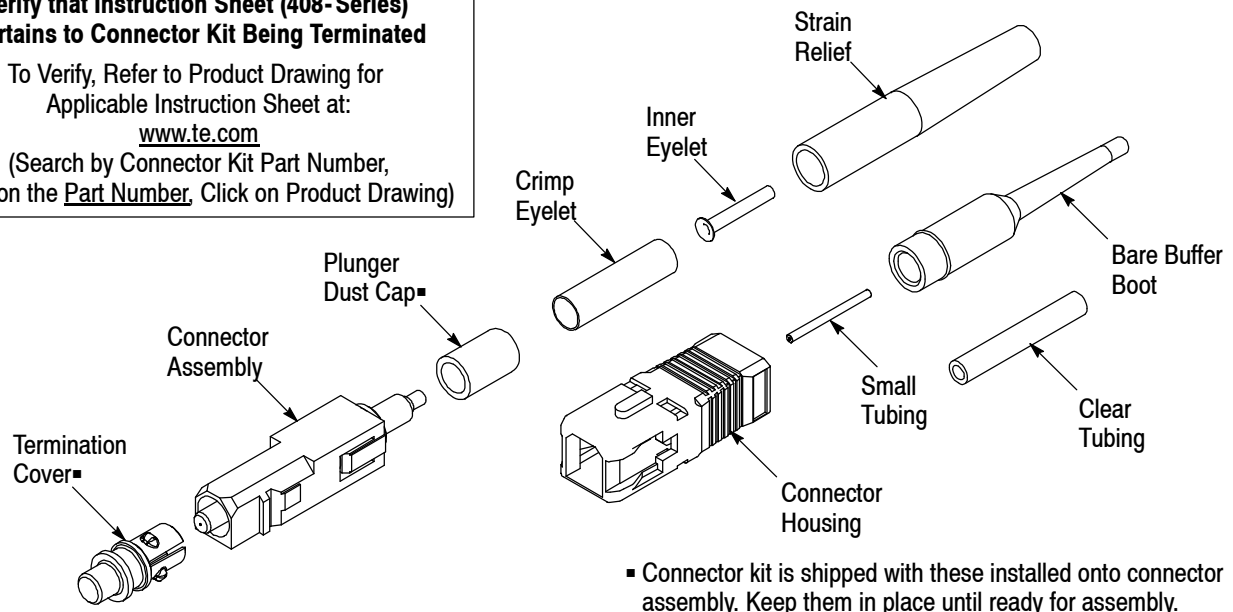


Figure 1

1. INTRODUCTION

LightCrimp Plus SC simplex fiber optic connector kits are designed to be applied to fiber optic cable. The connectors are used with singlemode or multimode 125- μm glass fiber cable. These kits can be used with any of the following media (paragraph of assembly procedure is indicated next to media).

5.1. 900- μm Bare Buffered Fiber

5.2. 250- μm Coated Fiber

5.3. 2.5- to 3.0- mm Loose Jacketed Cable

NOTE: Any jacketed cable used with SC connectors must allow for the axial movement of the buffered fiber in the jacket which occurs when the connector is mated to another connector or device. Certain cable constructions do not allow axial movement and are not suitable for use with SC connectors. Refer to Inspection Specification 129-1496 for a method of determining whether a given cable construction allows axial movement (result of the buffer pull test).

5.4. 900- μm Easy Strip or Semi-Tight Buffered Fiber

Read these instructions thoroughly before assembling the connector kits.

NOTE



All numerical values in this instruction sheet are in metric units. Dimensions are in millimeters. Figures are for reference only and are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 6, REVISION SUMMARY.

2. DESCRIPTION (See Figure 1)

Each connector kit consists of a connector housing, connector assembly, strain relief, inner eyelet, crimp eyelet, and clear tubing. Each kit is also supplied with a bare buffer boot and small tubing to compensate for small diameter cable. Also included, assembled onto the connector, are a termination cover for the ferrule (front of connector) and a plunger (rear of connector).

3. SAFETY PRECAUTIONS



To avoid personal injury, ALWAYS wear eye protection when working with optical fibers.

NEVER look into the end of terminated or unterminated fibers. Laser radiation is invisible but can damage eye tissue. NEVER eat, drink, or smoke when working with fibers. This could lead to ingestion of glass particles.



BE VERY CAREFUL to dispose of fiber ends properly. The fibers create slivers that can easily puncture the skin and cause irritation.



DO NOT use defective or damaged components. Replace them with new components.

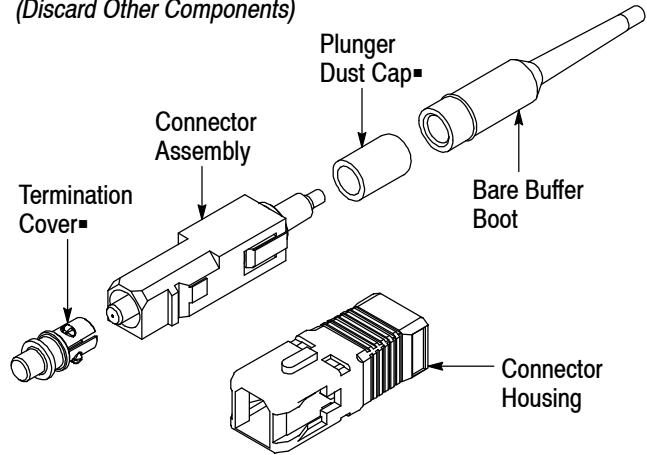
4. REQUIRED TOOLS AND MATERIALS

- Cable Holder Assembly 1278023-1 or 2064540-1
- Miller Strip Tool 1754708-1
- Alcohol Fiber Wipe Packet 501857-2
- isopropyl alcohol
- Fiber Optic Cleaver 1871696-1 (408-10086)
- LightCrimp Plus SC Die Set with Crimping Tool 492782-1 (consists of Die Set 492783-1 and PRO-CRIMPER* III Hand Tool 2064431-1)
Can be used for terminating all fiber and cable.
- LightCrimp* Inline Splice Die Set with Crimping Tool 2064603-1 (consists of Die Set 1985766-1 and PRO-CRIMPER III Hand Tool 2064431-1)
Can only be used for terminating 900- μ m bare buffered fiber, 250- μ m coated fiber, and 1.6- to 2.0-mm jacketed cable.

5. ASSEMBLY PROCEDURE

5.1. 900- μ m Bare Buffered Fiber

Kit Components Required
(Discard Other Components)



- Connector kit is shipped with these installed onto connector assembly. Keep them in place until ready for assembly.

A. Preparing 900- μ m Bare Buffered Fiber (Figure 2)

1. Slide the bare buffer boot (small diameter end first) over the buffer. See Figure 2, Detail A.
2. Remove the plunger dust cap from the connector assembly, and discard.
3. Push the connector assembly into the holder of the cable holder assembly with the termination cover facing outward. See Figure 2, Detail B. Make sure that the connector butts against the lip on the arm of the cable holder assembly. Slide the fiber into the channel marked "BUFFER". Make sure that the tip of the buffer butts against the end of the channel.
4. Mark the buffer at each cross-slot of the channel. See Figure 2, Detail B. Remove the buffer from the cable holder assembly.
5. Using the strip tool, strip the fiber to the first mark. It is recommended holding the strip tool at an angle to the fiber and stripping the fiber in three sections. See Figure 2, Detail C. Clean the fiber with an alcohol fiber wipe to remove the fiber coating residue.



Before using the strip tool, make sure that the "V" opening is clean; otherwise the fiber could break. Only use isopropyl alcohol on the tool.

B. Cleaving (Figure 3)

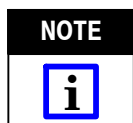
1. Open the fiber clamp of the fiber optic cleaver. Press the button, and slide the carriage back (toward the fiber clamp). Then move the fiber slide back until it stops.
2. Place the stripped fiber into the slot so that the end of the buffer is at the 8-mm marking. See Figure 3, Detail A.
3. While applying pressure on the buffer, carefully slide the fiber slide forward (toward the carriage) until it stops. See Figure 3, Detail B.
4. Gently close the fiber clamp, and slide the carriage forward. DO NOT touch the button while sliding the carriage. See Figure 3, Detail C.
5. Open the fiber clamp, and move the fiber slide back until it stops.
6. Remove the cleaved fiber, and properly dispose of the scrap fiber.



CAUTION DO NOT attempt to clean the fiber after it has been cleaved.

C. Crimping (Figures 4 and 5)

1. Open the cable clamp of the cable holder assembly, and position the buffer (with the cleaved end facing the connector) inside the clamp. Move the buffer so that the end of the fiber is even with the front of the arm of the cable holder assembly, and holding the buffer in place, close the clamp. See Figure 4, Detail A.
2. Carefully insert the fiber into the plunger of the connector assembly until the fiber bottoms against the internal fiber. Make sure that the remaining mark on the buffer enters the plunger. The resultant bend in the buffer should hold the fiber against the internal fiber. See Figure 4, Detail B.



NOTE It is important that the fiber bottoms against, and remains against, the internal fiber. If the mark does not enter the plunger or if the fiber does not seem to bottom against the internal fiber, the fiber may be caught on internal guides. Rotating the connector and backing the fiber out a small amount and re-entering may help. However, if the mark will not enter the plunger, the fiber must be re-stripped.

Make sure that the fiber does not pull rearward from the contact (with the internal fiber) during the crimping operation.

3. If using Die Set 492783-1, remove (and retain) the termination cover.
If using Die Set 1985766-1, do not remove the termination cover.

4. Squeeze the handles of the hand tool until the ratchet releases. Allow the handles to open fully. Then:

If using Die Set 492783-1, slowly close the handles until you hear 2 clicks from the ratchet.

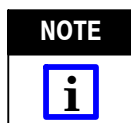
If using Die Set 1985766-1, slowly close the handles until you hear 3 clicks from the ratchet.

5. With the connector assembly in the cable holder assembly, position the ferrule or termination cover in the upper cavity of the front die and the plunger in the upper cavity of the rear die. See Figure 4, Detail C.



CAUTION The arrows marked on the front die indicate the direction that the ferrule or termination cover must be pointing when the connector is positioned in that cavity. For proper placement, and to avoid damage to the fiber, observe the direction of the arrows. Refer to Figure 4, Detail C and Figure 5, Detail A.

6. Gently push the buffer toward the connector assembly to make sure that the fiber is still bottomed, then slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully, and remove connector from the dies.
7. Position the plunger of the connector assembly in the first (smallest) cavity of the front die with the knurl against the edge of the groove in the die and the ferrule or termination cover pointing in the direction of the arrow. See Figure 5, Detail A.
8. Slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully, and remove the connector assembly from the die.
9. Slide the bare buffer boot over the plunger until the boot butts against the connector assembly. See Figure 5, Detail B.
10. Remove the connector assembly from the cable holder assembly.
11. Align the key of the connector housing with the chamfered edges of the connector assembly. Slide the housing over the assembly until it snaps in place. See Figure 5, Detail C.



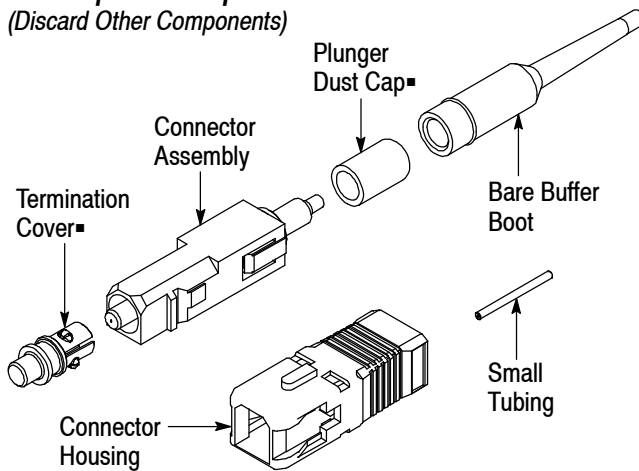
NOTE DO NOT force the components together. They are designed to fit only one way.

The assembly procedure for 900- μ m bare buffered fiber is now complete.

- If connecting connectors, refer to Paragraph 5.5.

5.2. 250- μ m Coated Fiber

Kit Components Required (Discard Other Components)



- Connector kit is shipped with these installed onto connector assembly. Keep them in place until ready for assembly.

A. Preparing 250- μ m Coated Fiber (Figure 2)

1. Slide the bare buffer boot (small diameter end first) over the fiber. See Figure 2, Detail A.
2. Remove the plunger dust cap from the connector assembly, and discard.
3. Insert the small (white) tubing into the plunger of the connector assembly until the tubing bottoms. See Figure 2, Detail A.
4. Push the connector assembly into the holder of the cable holder assembly with the termination cover facing outward. See Figure 2, Detail B. Make sure that the connector butts against the lip on the arm of the cable holder assembly. Slide the fiber into the channel marked "BUFFER". Make sure that the tip of the fiber butts against the end of the channel.
5. Mark the fiber at each cross-slot of the channel. See Figure 2, Detail B. Then, remove the fiber from the cable holder assembly.
6. Using the strip tool, strip the fiber to the first mark. It is recommended holding the strip tool at an angle to the fiber and stripping the fiber in three sections. See Figure 2, Detail C. Clean the fiber with an alcohol fiber wipe to remove the fiber buffer residue.



Before using the strip tool, make sure that the "V" opening is clean; otherwise the fiber could break. Only use isopropyl alcohol on the tool.

B. Cleaving (Figure 3)

1. Open the fiber clamp of the fiber optic cleaver. Press the button, and slide the carriage back (toward the fiber clamp). Then move the fiber slide back until it stops.
2. Place the stripped fiber into the slot so that the end of the buffer is at the 8-mm marking. See Figure 3, Detail A.
3. While applying pressure on the buffer, carefully slide the fiber slide forward (toward the carriage) until it stops. See Figure 3, Detail B.
4. Gently close the fiber clamp, and slide the carriage forward. DO NOT touch the button while sliding the carriage. See Figure 3, Detail C.
5. Open the fiber clamp, and move the fiber slide back until it stops.
6. Remove the cleaved fiber, and properly dispose of the scrap fiber.

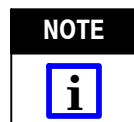


DO NOT attempt to clean the fiber after it has been cleaved.

C. Crimping (Figures 4 and 5)

1. Open the cable clamp of the cable holder assembly, and position the fiber (with the cleaved end facing the connector) inside the clamp. Move the fiber so that the end of the fiber is even with the front of the arm of the cable holder assembly, and holding the fiber in place, close the clamp. See Figure 4, Detail A.
2. Carefully insert the fiber into the plunger of the connector assembly until the fiber bottoms against the internal fiber. Make sure that the remaining mark on the fiber enters the plunger. The resultant bend in the fiber should hold the fiber against the internal fiber. See Figure 4, Detail B.

Also, the fiber coating must enter the small tubing that was installed in Step 3 of Paragraph 5.2.A. Make sure that the start of the fiber coating is not caught on the entry of the small tubing.



It is important that the fiber bottoms against, and remains against, the internal fiber. If the mark does not enter the plunger or if the fiber does not seem to bottom against the internal fiber, the fiber may be caught on internal guides. Rotating the connector and backing the fiber out a small amount and re-entering may help. However, if the mark will not enter the plunger, the fiber must be re-stripped.

Make sure that the fiber does not pull rearward from the contact with the internal fiber during the crimping operation.

3. If using Die Set 492783-1, remove (and retain) the termination cover.

If using Die Set 1985766-1, do not remove the termination cover.

4. Squeeze the handles of the hand tool until the ratchet releases. Allow the handles to open fully. Then:

If using Die Set 492783-1, slowly close the handles until you hear 2 clicks from the ratchet.

If using Die Set 1985766-1, slowly close the handles until you hear 3 clicks from the ratchet.

5. With the connector assembly in the cable holder assembly, position the ferrule or termination cover in the upper cavity of the front die and the plunger in the upper cavity of the rear die. See Figure 4, Detail C.



The arrows marked on the front die indicate the direction that the ferrule or termination cover must be pointing when the connector is positioned in that cavity. For proper placement, and to avoid damage to the fiber, observe the direction of the arrows. Refer to Figure 4, Detail C and Figure 5, Detail A.

6. Gently push the fiber toward the connector assembly to make sure that the fiber is still bottomed, then slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully, and remove the connector from the dies.

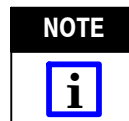
7. Position the plunger of the connector assembly in the first (smallest) cavity of the front die with the knurl against the edge of the groove in the die and the ferrule or termination cover pointing in the direction of the arrow. See Figure 5, Detail A.

8. Slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully, and remove the connector assembly from the die.

9. Slide the bare buffer boot over the plunger until the boot butts against the connector assembly. See Figure 5, Detail B.

10. Remove the connector assembly from the cable holder assembly.

11. Align the key of the connector housing with the chamfered edges of the connector assembly. Slide the housing over the assembly until it snaps in place. See Figure 5, Detail C.



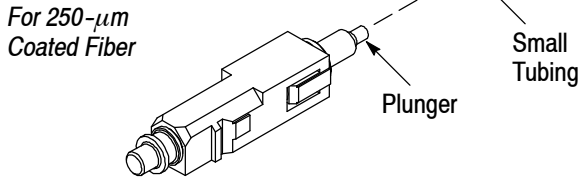
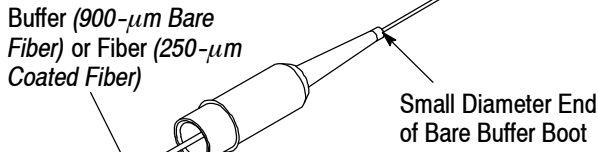
DO NOT force the components together. They are designed to fit only one way.

The assembly procedure for 250- μ m coated fiber is now complete.

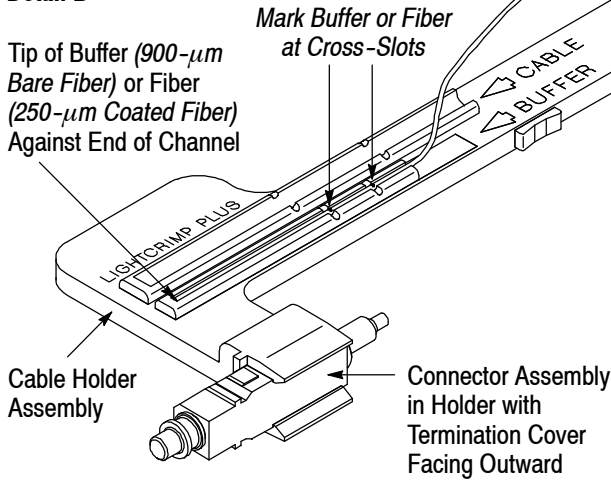
► If connecting connectors, refer to Paragraph 5.5.

Figure 2: Preparing the Fiber

Detail A



Detail B



Detail C

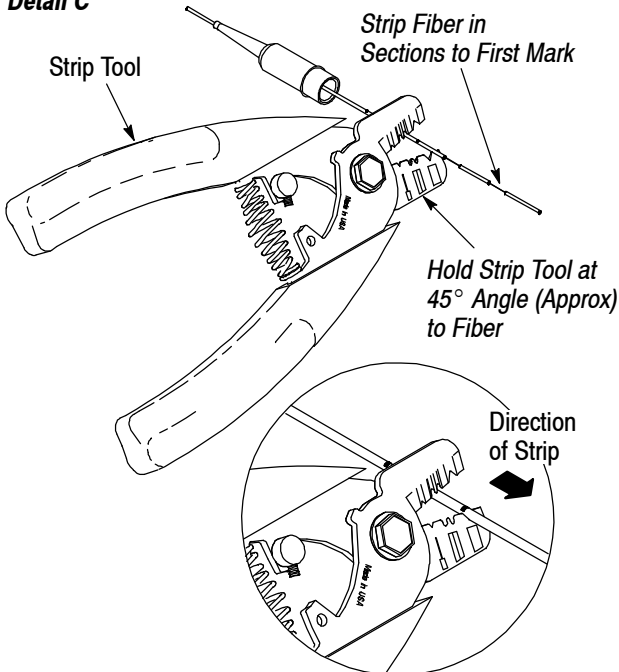
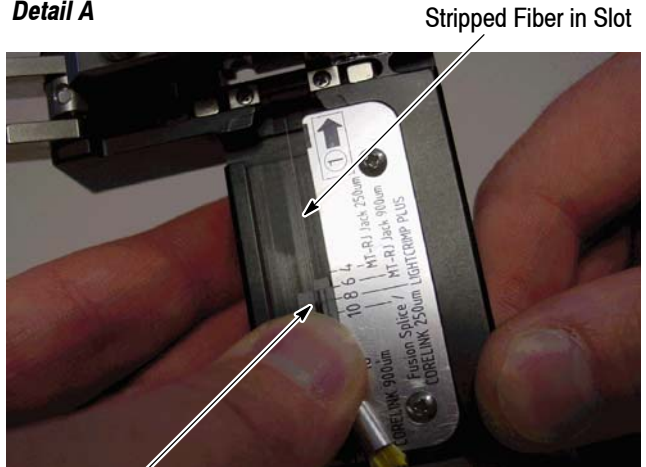


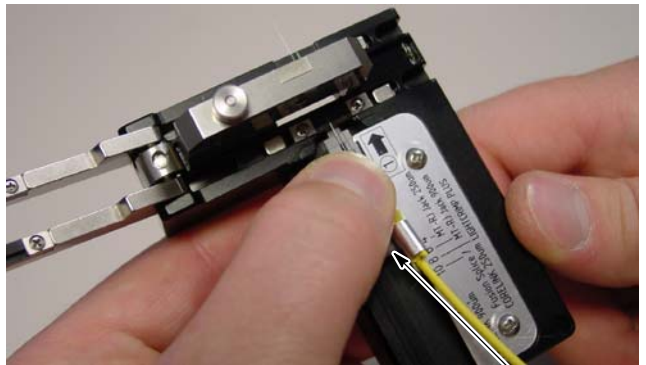
Figure 3: Cleaving

Detail A

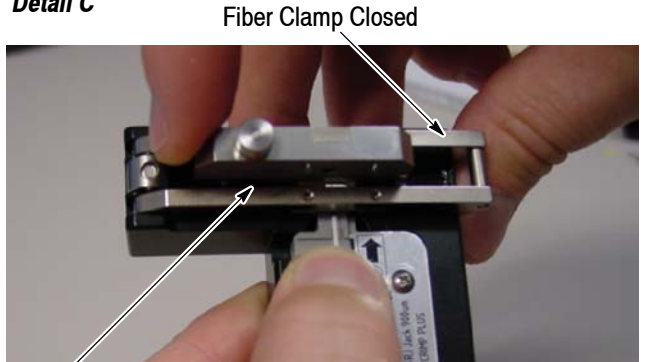


End of Buffer at 8-mm Marking

Detail B



Detail C



Slide Carriage Forward

Figure 4: Crimping

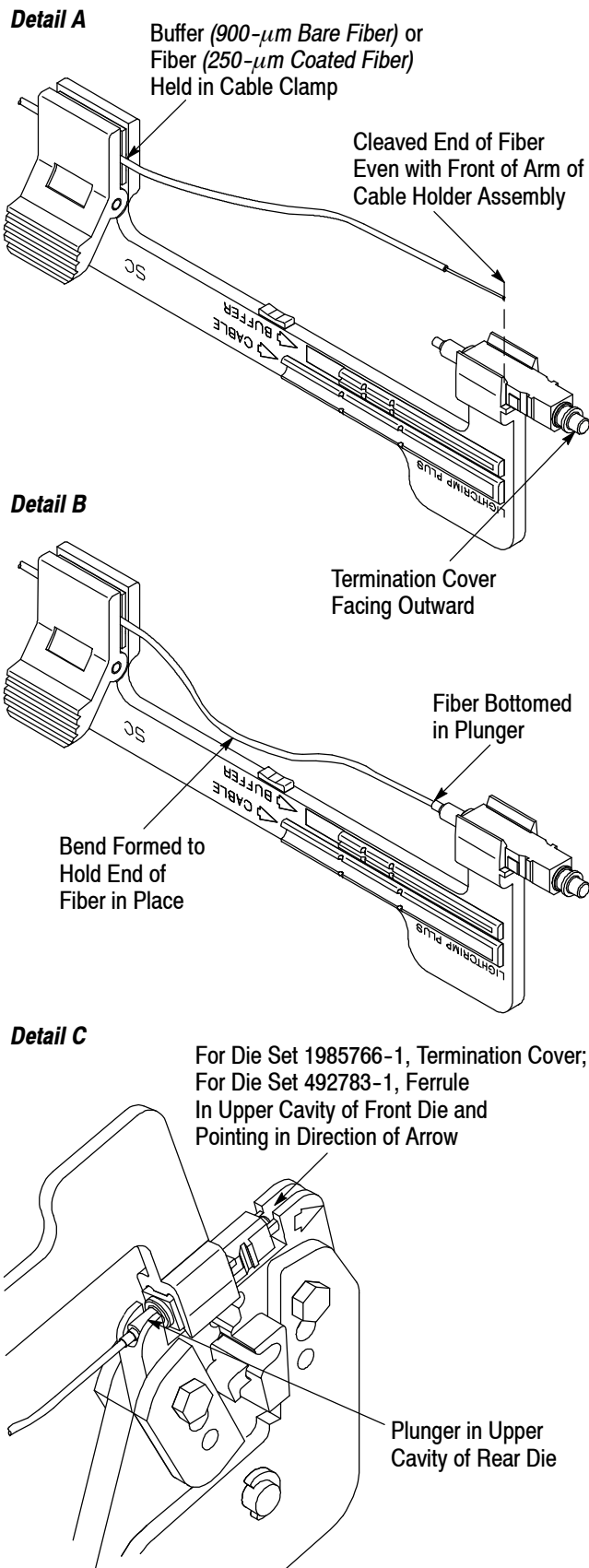
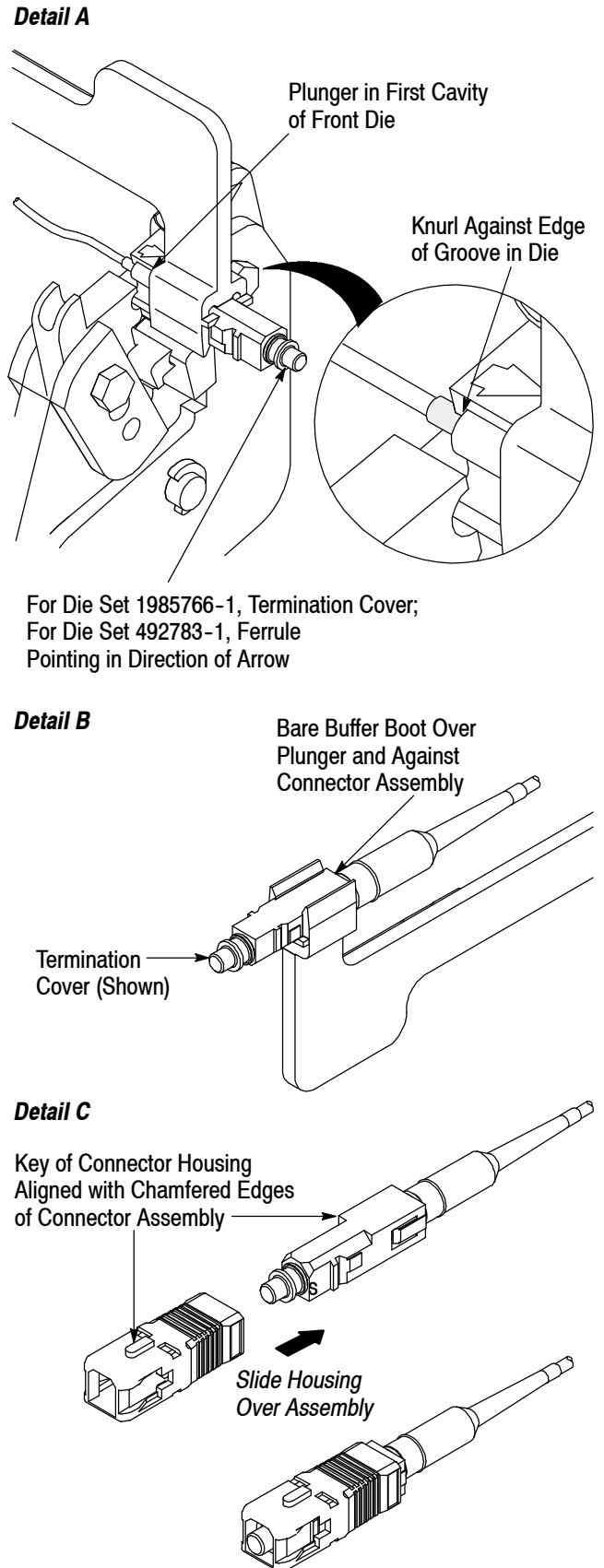
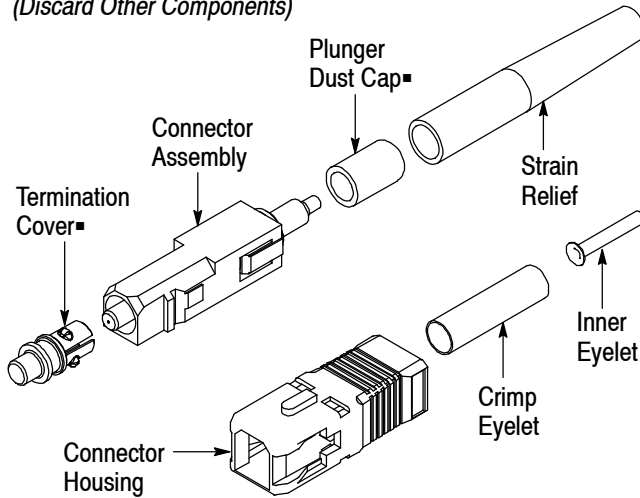


Figure 5: Crimping



5.3. 2.5- to 3.0- mm Loose Jacketed Cable

Kit Components Required (Discard Other Components)



- Connector kit is shipped with these installed onto connector assembly. Keep them in place until ready for assembly.

A. Preparing 2.5- to 3.0- mm Loose Jacketed Cable (Figures 6 and 7)

1. Slide the strain relief (small diameter end first) over the cable. See Figure 6, Detail A.
2. Remove the plunger dust cap from the connector assembly, and discard.
3. Push the connector assembly into the holder of the cable holder assembly with the termination cover facing outward. See Figure 6, Detail B. Make sure that the connector is sitting flat against the arm of the cable holder assembly. Slide the cable into the channel marked "CABLE." Make sure that the tip of the jacket butts against the end of the channel.
4. Mark the cable at the right-most cross-slot of the channel. See Figure 6, Detail B. Then, remove the cable from the cable holder assembly.
5. Using the strip tool, cut through the jacket at the mark. See Figure 6, Detail C.
6. Remove the jacket segment, gather the strength members in a bundle, and fold them back along the jacket. See Figure 6, Detail D.
7. Slide the crimp eyelet over the buffer and onto the strength members to hold them in place. Slide the inner eyelet, non-flanged end first, onto the buffer. Push the inner eyelet under the strength members until the face is flush with the front of the crimp eyelet. See Figure 7, Detail B.

8. Slide the buffer into the channel marked "BUFFER" on the cable holder assembly. Make sure that the tip of the buffer butts against the end of the channel. See Figure 7, Detail C.

9. Mark the buffer at each cross-slot of the channel and at the right end of the channel (total of three marks). See Figure 7, Detail C. Remove the buffer from the cable holder assembly.

10. Using the strip tool, strip the buffer to the first mark. It is recommended holding the strip tool at an angle to the buffer and stripping the buffer in three sections. See Figure 7, Detail D. Clean the fiber with an alcohol fiber wipe to remove fiber coating residue.



Before using the strip tool, make sure that the "V" opening is clean; otherwise the fiber could break. Only use isopropyl alcohol on the tool.

B. Cleaving (Figure 8)

1. Open the fiber clamp of the fiber optic cleaver. Press the button, and slide the carriage back (toward the fiber clamp). Then move the fiber slide back until it stops.
2. Place the stripped buffer into the slot so that the end of the fiber is at the 8-mm marking. See Figure 8, Detail A.
3. While applying pressure on the fiber, carefully slide the fiber slide forward (toward the carriage) until it stops. See Figure 8, Detail B.
4. Gently close the fiber clamp, and slide the carriage forward. DO NOT touch the button while sliding the carriage. See Figure 8, Detail C.
5. Open the fiber clamp, and move the fiber slide back until it stops.
6. Remove the cleaved fiber, and properly dispose of the scrap fiber.



DO NOT attempt to clean the fiber after it has been cleaved.

C. Crimping (Figures 9, 10, and 11)

Only use Die Set 492783-1 to terminate 2.5- to 3.0-mm loose jacketed cable.

1. Open the cable clamp of the cable holder assembly, and position the buffer (with the cleaved end facing the connector) inside the clamp. Move the buffer so that the end of the fiber is even with the front of the arm of the cable holder assembly, and holding the buffer in place, close the clamp. See Figure 9, Detail A.

2. Carefully insert the buffer into the plunger of the connector assembly until the fiber bottoms against the internal fiber. See Figure 9, Detail B. Make sure that the remaining mark on the buffer enters the plunger. The resultant bend in the buffer should hold the fiber against the internal fiber. Only a slight bend is necessary.

NOTE


It is important that the fiber bottoms against, and remains against, the internal fiber. If the mark does not enter the plunger or if the fiber does not seem to bottom against the internal fiber, the fiber may be caught on internal guides. Rotating the connector and backing the buffer out a small amount and re-entering may help. However, if the mark will not enter the plunger, the fiber must be re-stripped.

Make sure that the fiber does not pull rearward from the contact with the internal fiber during the crimping operation.

3. Squeeze the handles of the hand tool until the ratchet releases. Allow the handles to open fully. Slowly close the handles until you hear 2 clicks from the ratchet.

4. Remove the termination cover from the connector assembly, and retain.

5. With the connector assembly in the cable holder assembly, position the ferrule in the upper cavity of the front die and the plunger in the upper cavity of the rear die. See Figure 9, Detail C.

CAUTION


The arrows marked on the front die indicate the direction that the ferrule must be pointing when the connector is positioned in that cavity. For proper placement, and to avoid damage to the fiber, observe the direction of the arrows. Refer to Figure 9, Detail C (also shown in Figure 10, Detail B).

6. Gently push the buffer toward the connector assembly to make sure that the fiber is still bottomed, then slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully, and remove the connector from the dies.

7. Open the cable clamp of the cable holder, and straighten the cable. Close the cable clamp so that the cable is aligned with, and tracks straight back from, the plunger and through the cable clamp. See Figure 10, Detail A. Make sure that the inner eyelet is still aligned with the right-most mark on the buffer. If necessary, adjust the position of the jacket.

CAUTION


Make sure that a space of 3 to 5 mm exists between the face of the inner eyelet (shown in Figure 7, Detail B) and the plunger (rear of connector assembly). Refer to Figure 10, Detail A.

CAUTION


Failure to ensure that this space exists may result in improper connector performance when mated to a connector.

8. Position the plunger of the connector assembly in the first (smallest) cavity of the front die with the knurl against the edge of the groove in the die and the ferrule pointing in the direction of the arrow. See Figure 10, Detail B.

9. Slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully, and remove the connector assembly from the die.

10. Slide the crimp eyelet away from the connector assembly until the strength members are free, then slide the crimp eyelet toward the connector until the strength members and crimp eyelet butt against the connector. See Figure 10, Detail C.

11. Position the crimp eyelet *against* the last cavity of the front die with the ferrule pointing in the direction of the arrow. Make sure that the connector assembly is butted against the die. The crimp eyelet will move into the cavity when the dies are closed. See Figure 11, Detail A. Slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully. Remove the connector assembly from the die.

12. Install the termination cover onto connector assembly.

13. Cut the strength members flush with the crimp sleeve. Slide the strain relief over the plunger until the strain relief butts against the connector assembly. See Figure 11, Detail B.

14. Remove the connector assembly from the cable holder assembly.

15. Align the key of the connector housing with the chamfered edges of the connector assembly, and slide the housing over the assembly until it snaps in place. See Figure 11, Detail C.

NOTE


DO NOT force the components together. They are designed to fit only one way.

The assembly procedure for 2.5- to 3.0-mm loose jacketed cable is now complete.

► If connecting connectors, refer to Paragraph 5.5.

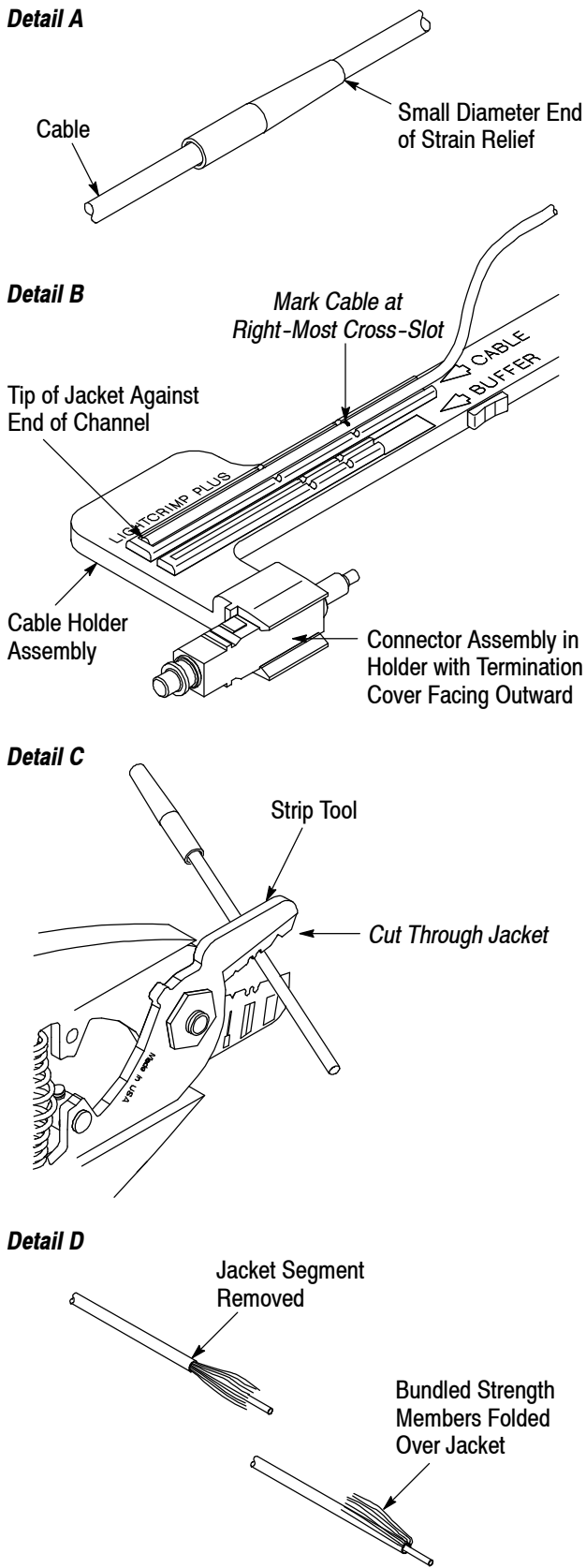
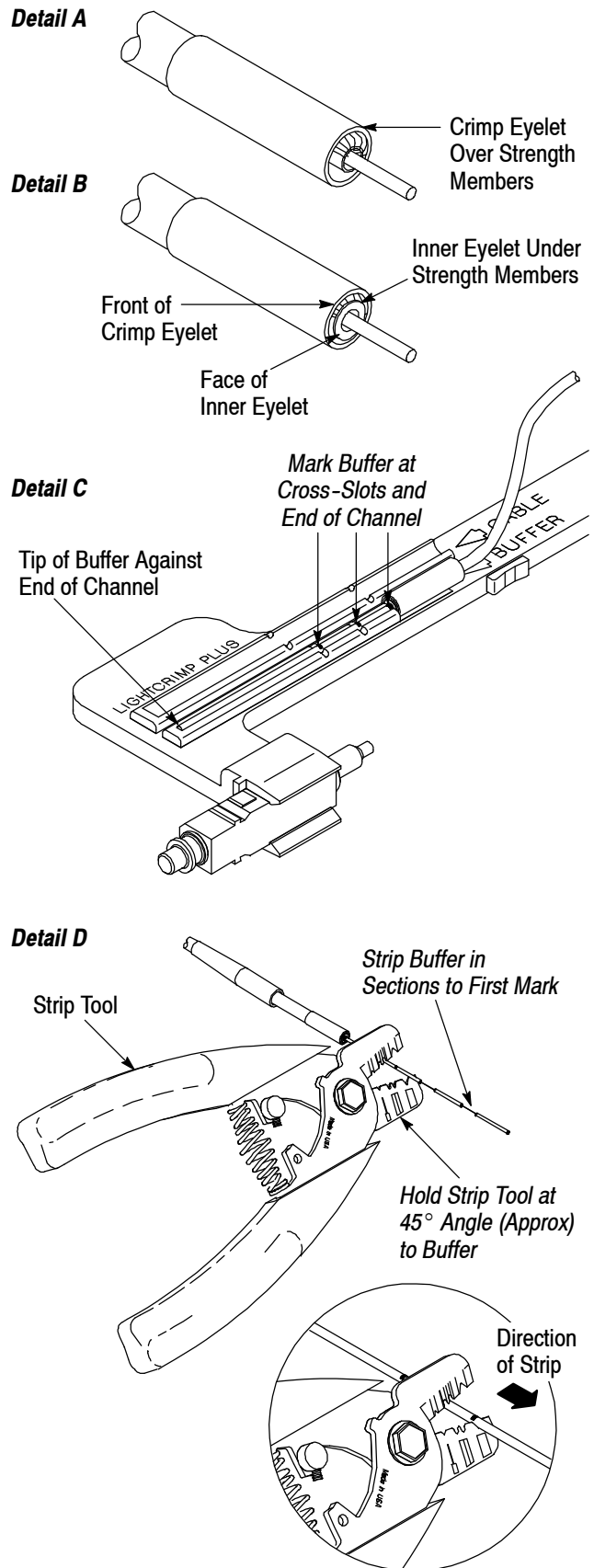
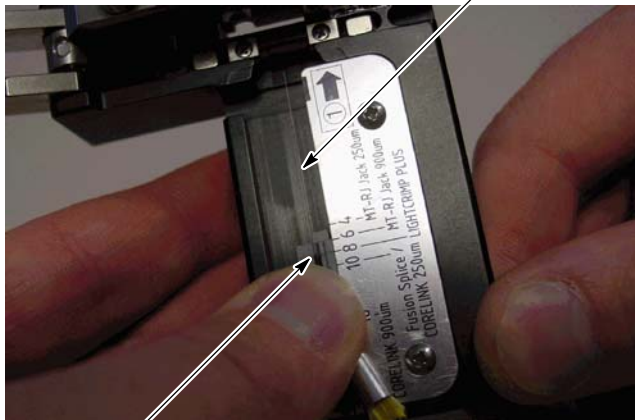
Figure 6: Preparing the Cable

Figure 7: Preparing the Cable


Figure 8: Cleaving

Detail A



Stripped Buffer in Slot

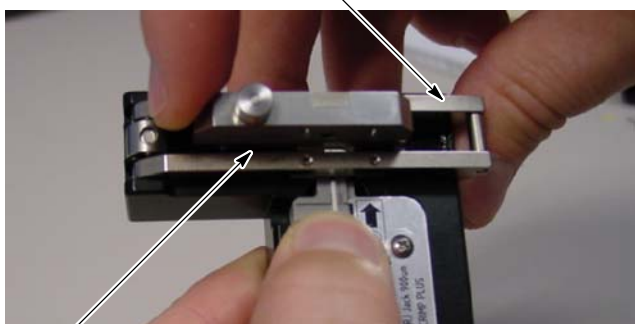
End of Fiber at 8-mm Marking

Detail B



Slide Fiber Slide Forward

Detail C

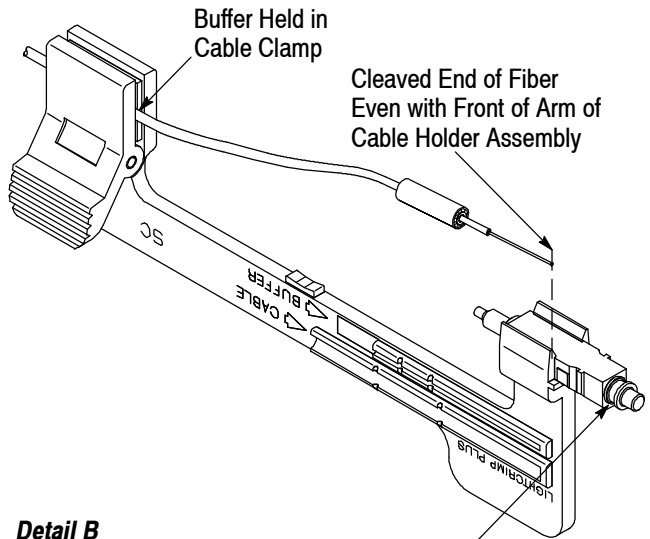


Fiber Clamp Closed

Slide Carriage Forward

Figure 9: Crimping

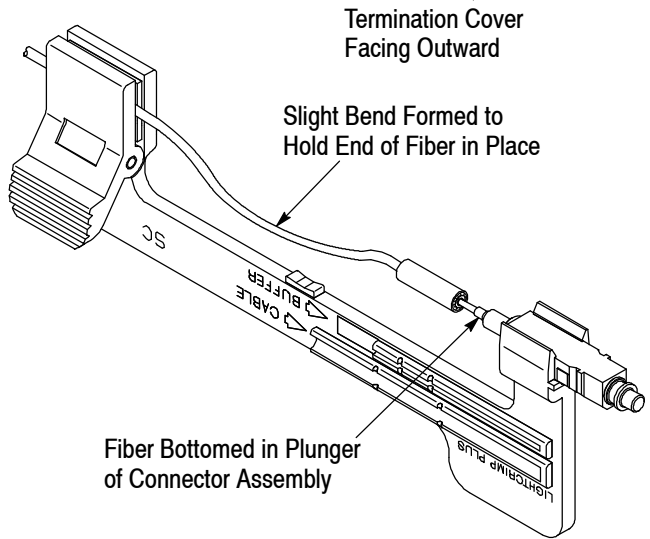
Detail A



Buffer Held in Cable Clamp

Cleaved End of Fiber Even with Front of Arm of Cable Holder Assembly

Detail B

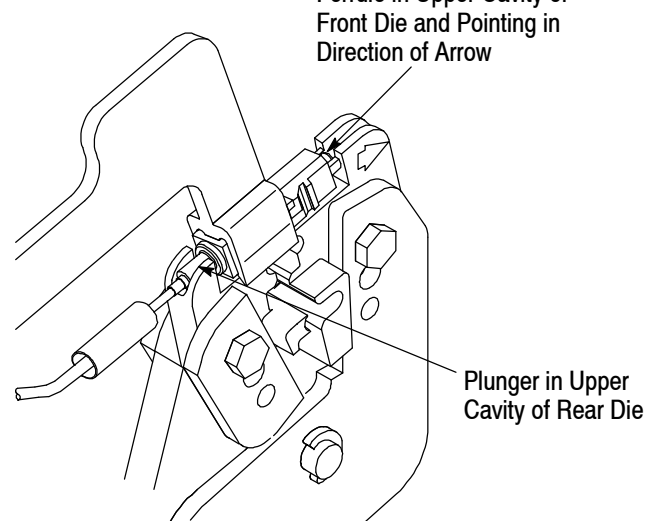


Termination Cover Facing Outward

Slight Bend Formed to Hold End of Fiber in Place

Fiber Bottomed in Plunger of Connector Assembly

Detail C

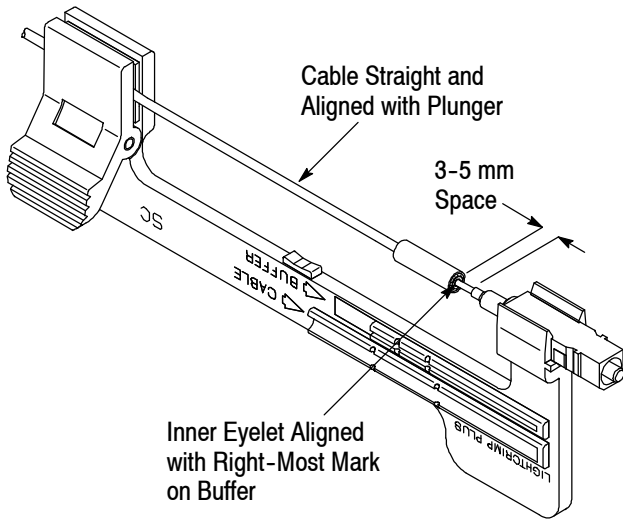


Ferrule in Upper Cavity of Front Die and Pointing in Direction of Arrow

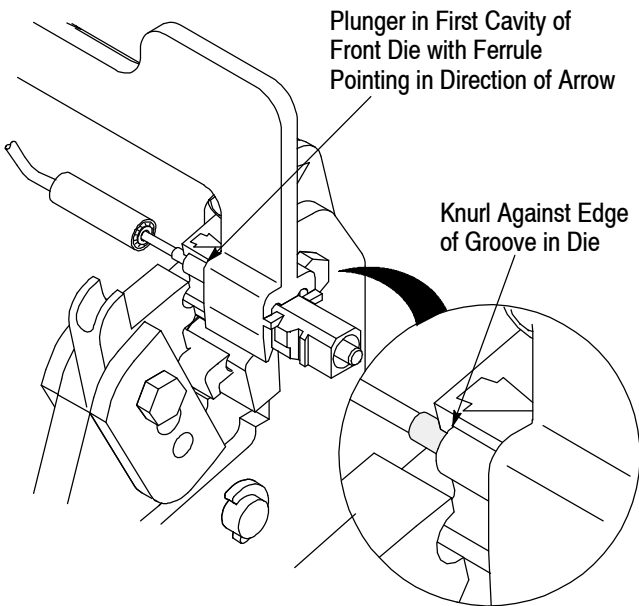
Plunger in Upper Cavity of Rear Die

Figure 10: Crimping

Detail A



Detail B



Detail C

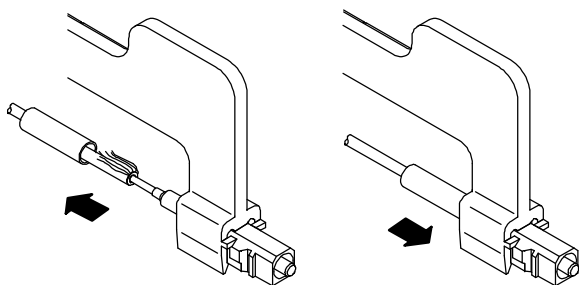
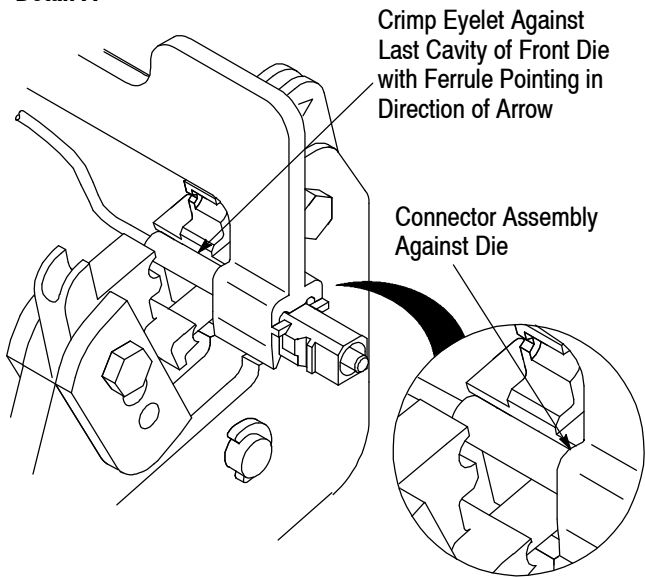
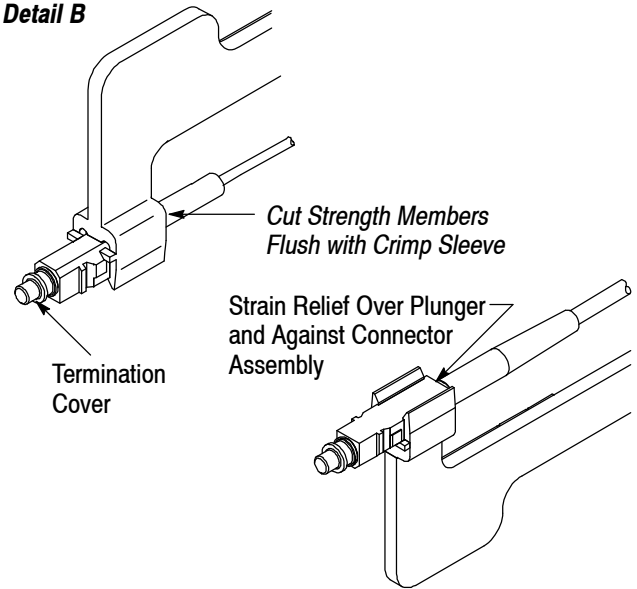


Figure 11: Crimping

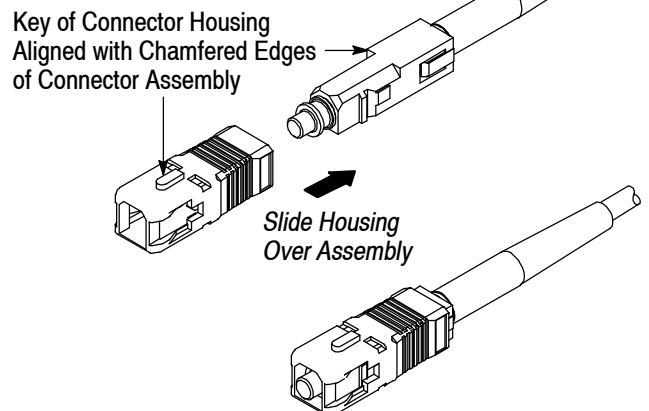
Detail A



Detail B

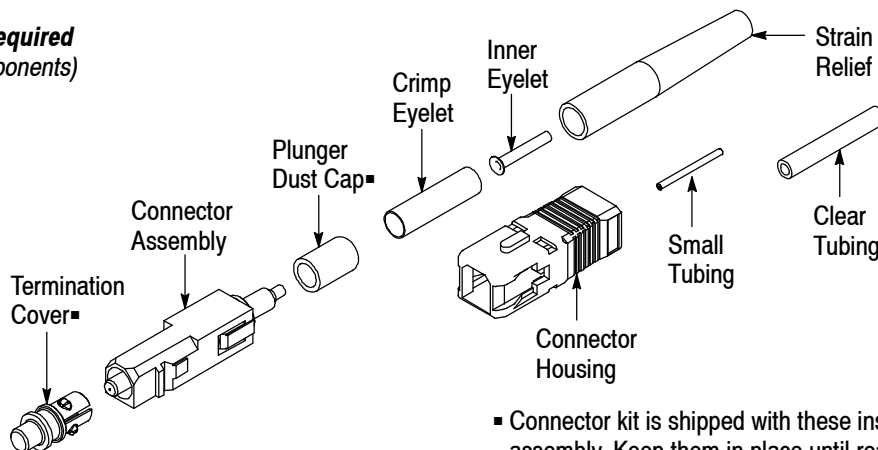


Detail C



5.4. 900- μ m Easy Strip or Semi-Tight Buffered Fiber

Kit Components Required (Discard Other Components)



▪ Connector kit is shipped with these installed onto connector assembly. Keep them in place until ready for assembly.

A. Preparing 900- μ m Easy Strip or Semi-Tight Buffered Fiber (Figure 12)

1. Mark a circumferential line (approximately 90° around) 4 mm from one end of the clear tubing. See Figure 12, Detail A.
2. Place the inner eyelet, small diameter end first, inside the clear tubing with the flange of the inner eyelet against the end of the clear tubing. See Figure 12, Detail A.
3. Slide the strain relief (small diameter end first), clear tubing (with the inner eyelet inside), and crimp eyelet onto the fiber. See Figure 12, Detail B.
4. Remove the plunger dust cap from the connector assembly, and discard.
5. Insert the small (white) tubing into the plunger of the connector assembly until the tubing bottoms. See Figure 12, Detail C.
6. Push the connector assembly into the holder of the cable holder assembly with the termination cover facing outward. See Figure 12, Detail D. Make sure that the connector butts against the lip on the arm of the cable holder. Slide the fiber into the channel marked "BUFFER. Make sure that the tip of the fiber butts against the end of the channel.
7. Mark the fiber at each cross-slot of the channel. See Figure 12, Detail D. Also, mark the fiber at the end of the channel. Then, remove the fiber from the channel.
8. Using the strip tool, strip the 250- μ m fiber coating and buffer to the first mark. It is recommended holding the strip tool at an angle to the fiber coating and stripping the coating in three sections. Refer to Figure 12, Detail E. Clean the fiber with an alcohol fiber wipe to remove the fiber coating residue.

9. Using the strip tool, apply slightly less pressure than when stripping 125- μ m fiber, and strip the buffer only (leave the 250- μ m fiber coating in place) to the second mark. Practice this first.

10. Mark the 250- μ m fiber coating at the shoulder of the 900- μ m buffer. Strip the buffer to the third mark.



Before using the strip tool, make sure that the "V" opening is clean; otherwise the fiber could break. Only use isopropyl alcohol on the tool.

B. Cleaving (Figure 13)

1. Open the fiber clamp of the fiber optic cleaver. Press the button, and slide the carriage back (toward the fiber clamp). Then move the fiber slide back until it stops.
2. Place the stripped fiber into the slot so that the end of the buffer is at the 8-mm marking. See Figure 3, Detail A.
3. While applying pressure on the buffer, carefully slide the fiber slide forward (toward the carriage) until it stops. See Figure 3, Detail B.
4. Gently close the fiber clamp, and slide the carriage forward. DO NOT touch the button while sliding the carriage. See Figure 3, Detail C.
5. Open the fiber clamp, and move the fiber slide back until it stops.
6. Remove the cleaved fiber, and properly dispose of the scrap fiber.



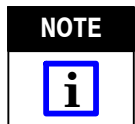
DO NOT attempt to clean the fiber after it has been cleaved.

C. Crimping (Figures 14 and 15)

Only use Die Set 492783-1 to terminate 900- μ m easy strip or semi-tight buffered fiber.

1. Open the cable clamp of the cable holder assembly, and position the fiber (with the cleaved end facing the connector) inside the clamp. Move the fiber so that the end is even with the front of the arm of the cable holder assembly, and holding the fiber in place, close the clamp. See Figure 14, Detail A.
2. Holding the 250- μ m fiber coating, carefully insert the fiber into the plunger of the connector assembly until the fiber bottoms against the internal fiber. Make sure that the second mark on the coating enters the plunger. The resultant bend in the fiber should hold the fiber against the internal fiber. See Figure 14, Detail B.

Also, the fiber coating must enter the small tubing installed in Step 5 of Paragraph 5.5.A. Make sure that the start of the fiber coating is not caught on the entry of the small tubing.



It is important that the fiber bottoms against, and remains against, the internal fiber. If the mark does not enter the plunger or if the fiber does not seem to bottom against the internal fiber, the fiber may be caught on internal guides. Rotating the connector and backing the fiber out a small amount and re-entering may help. However, if the mark will not enter the plunger, the fiber must be re-stripped.

Make sure that the fiber does not pull rearward from the contact with the internal fiber during the crimping operation.

3. Squeeze the handles of the hand tool until the ratchet releases. Allow the handles to open fully. Slowly close the handles until you hear 2 clicks from the ratchet.
4. Remove the termination cover from the connector assembly, and retain.
5. With the connector assembly in the cable holder assembly, position the ferrule in the upper cavity of the front die and the plunger in the upper cavity of the rear die. See Figure 14, Detail C.



The arrows marked on the front die indicate the direction that the ferrule must be pointing when the connector is positioned in that cavity. For proper placement, and to avoid damage to the fiber, observe the direction of the arrows. Refer to Figure 14, Details C and D.

6. Gently push the fiber toward the connector assembly to make sure that the fiber is still bottomed, then slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully, and remove the connector from the dies.

7. Position the plunger of the connector assembly in the first (smallest) cavity of the front die with the knurl against the edge of the groove in the die and the ferrule pointing in the direction of the arrow. See Figure 14, Detail D.

8. Slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully, and remove the connector assembly from the die.

9. Slide the crimp eyelet up to, and until it butts against, the connector assembly.

10. Slide the clear tubing with the inner eyelet into the crimp eyelet until the circumferential line is aligned with the end of the crimp eyelet. See Figure 15, Detail A.

11. While maintaining the position of the clear tubing relative to the crimp eyelet, position the crimp eyelet against the last cavity of the front die with the ferrule pointing in the direction of the arrow. Make sure the connector assembly is against the die and the circumferential line on the clear tubing is aligned with the opposite end of the crimp eyelet. The crimp eyelet will move into the cavity when the dies are closed. See Figure 15, Detail B.

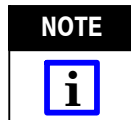
12. Slowly squeeze the tool handles together until the ratchet releases. Allow the handles to open fully.

13. Install the termination cover onto connector assembly.

14. Open the cable clamp of the cable holder assembly, and remove the fiber from the clamp. Slide the strain relief over the crimp eyelet until it butts against the connector assembly. See Figure 15, Detail C.

15. Remove the connector assembly from the cable holder assembly.

16. Align the key of the connector housing with the chamfered edges of the connector assembly, and slide the housing over the assembly until it snaps in place. See Figure 15, Detail D.



DO NOT force the components together. They are designed to fit only one way.

The assembly procedure for 900- μ m easy strip or semi-tight buffered fiber is now complete.

► If connecting connectors, refer to Paragraph 5.5.

Figure 12: Preparing the Fiber

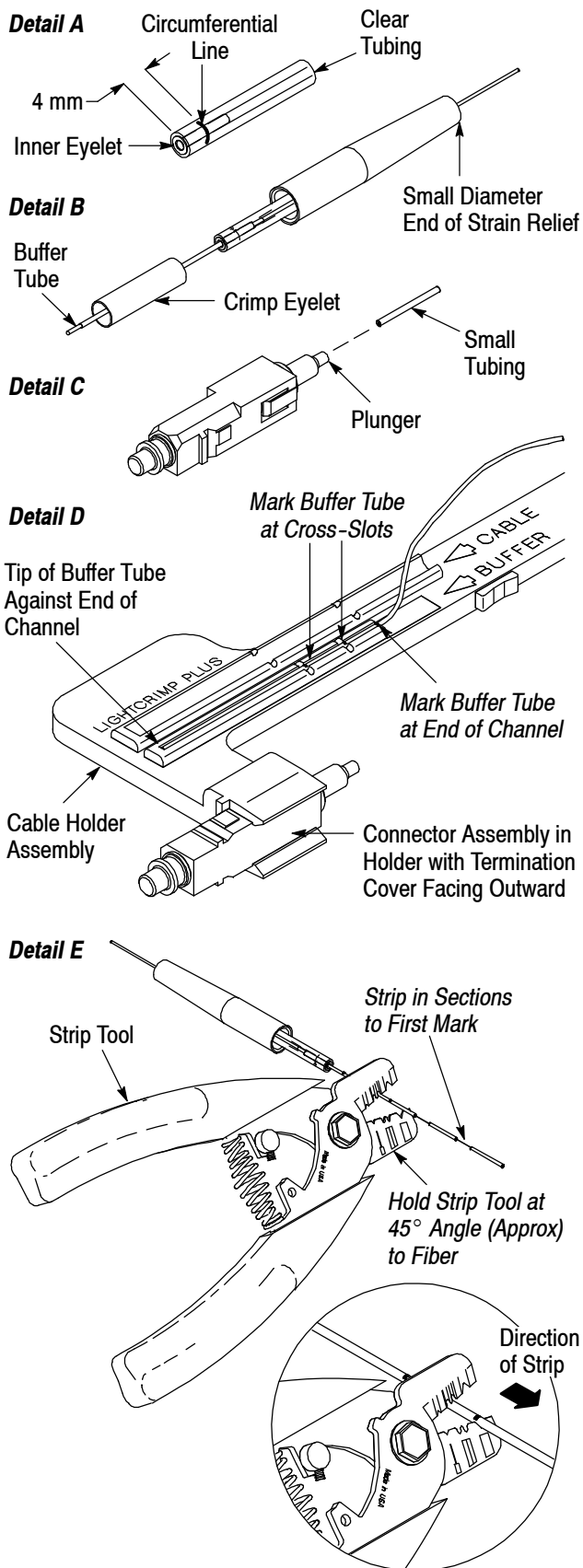


Figure 13: Cleaving

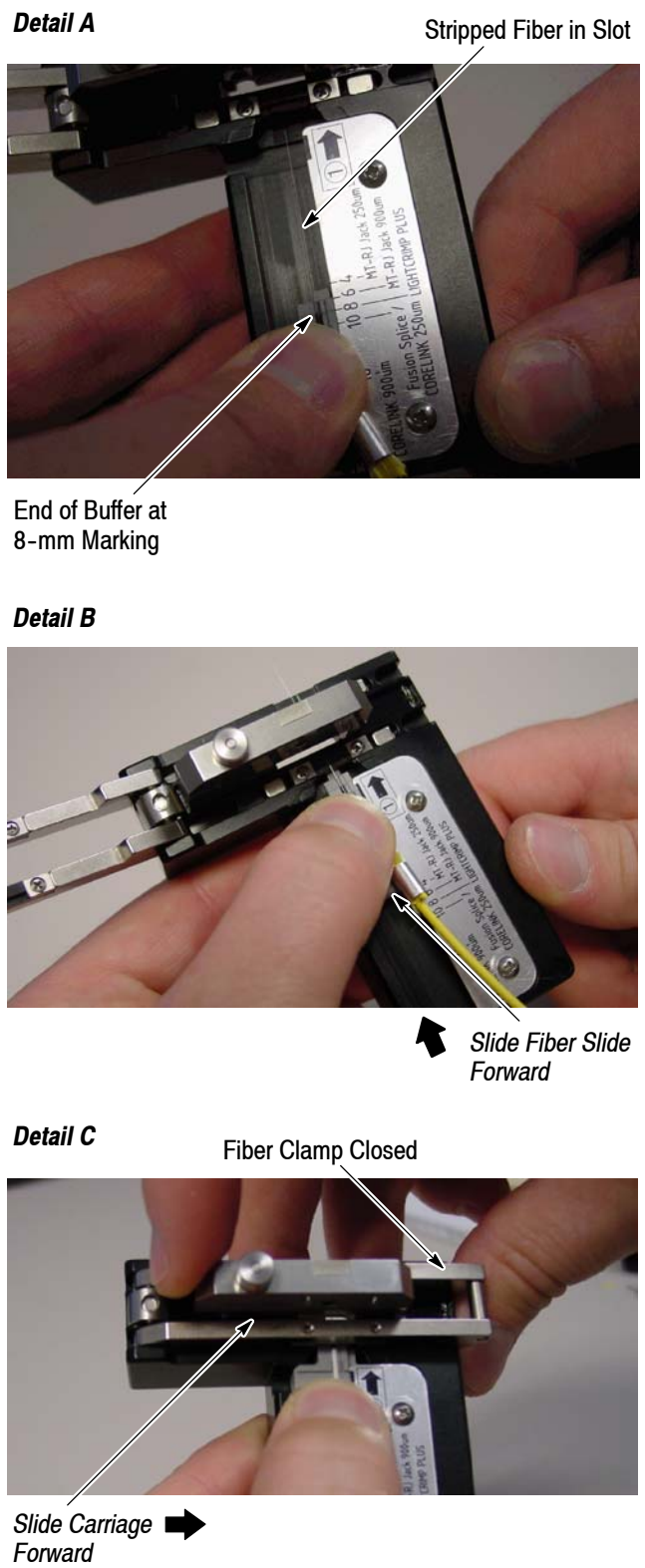
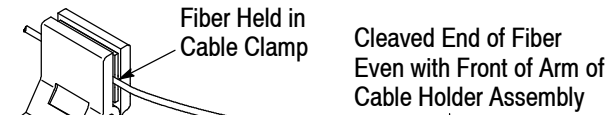
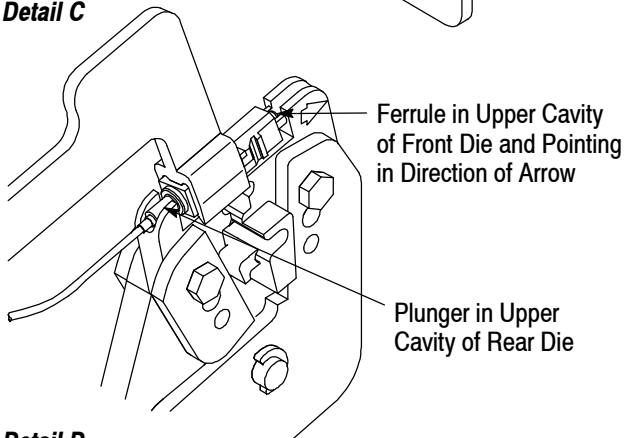
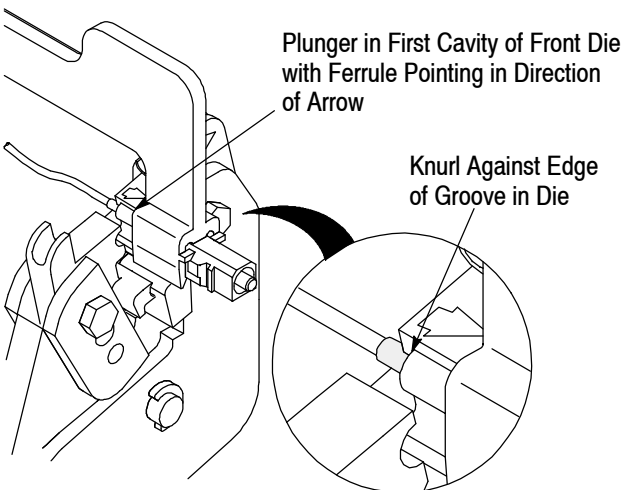
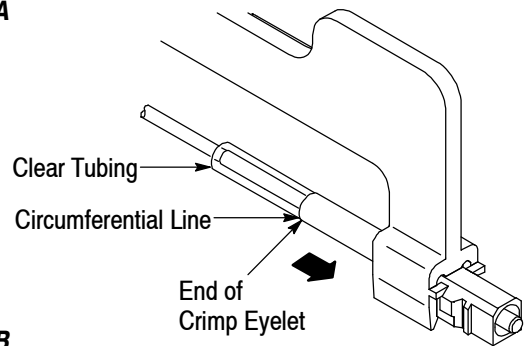
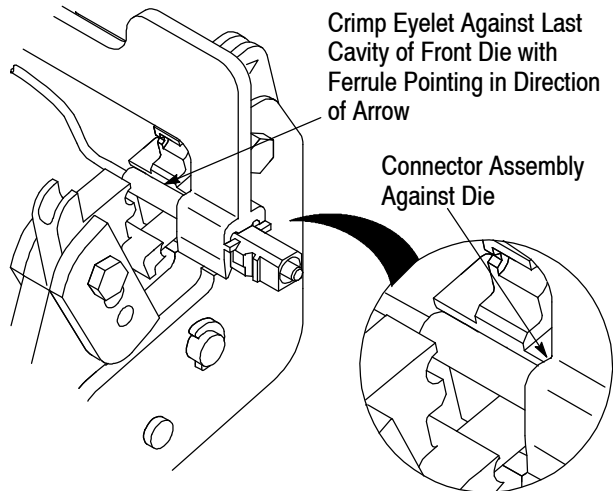
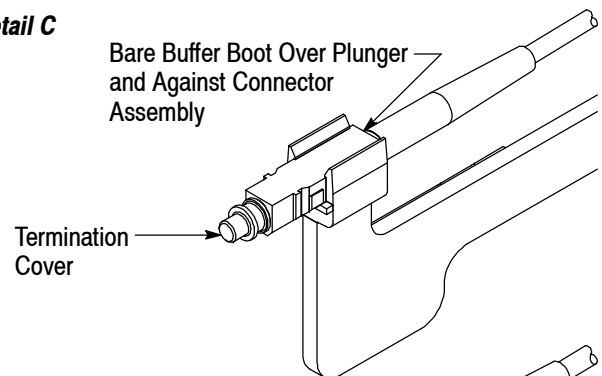
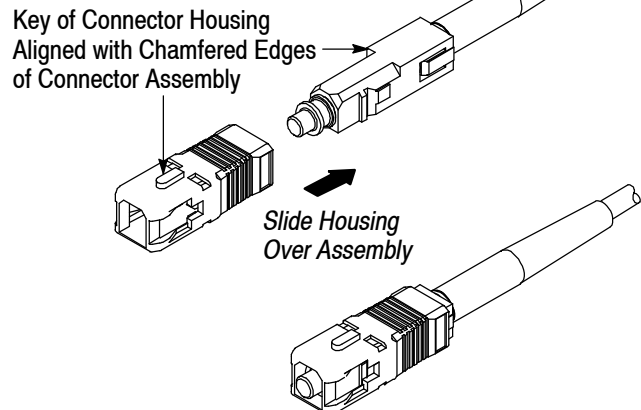


Figure 14: Crimping
Detail A

Detail B


Bend Formed to Hold End of Fiber in Place

Detail C

Detail D

Figure 15: Crimping
Detail A

Detail B

Detail C

Detail D


5.5. Inspection

Remove the termination cover (if installed), and inspect the ferrule end face for cleanliness using 200× Microscope Kit 1754767-1 (includes 2.5-mm adapter cap).

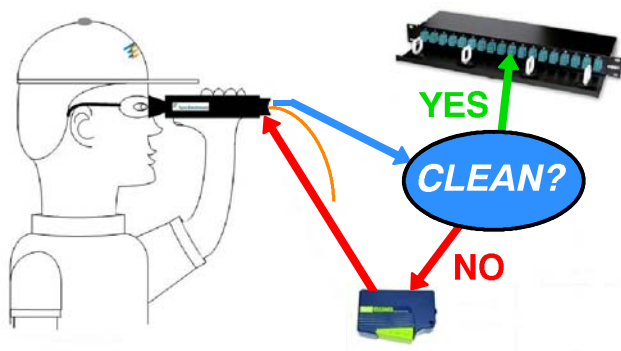
6. REVISION SUMMARY

Revisions to this instruction sheet include:

- Updated document to corporate requirements.

STOP!

Don't Connect Unless You Inspect!



DANGER: Never View Active Fiber Signals