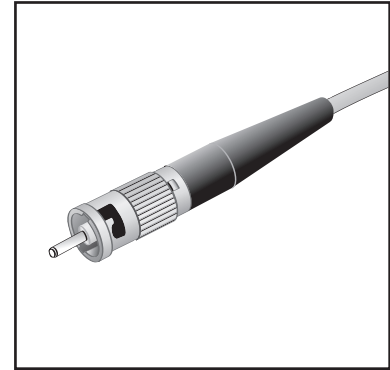
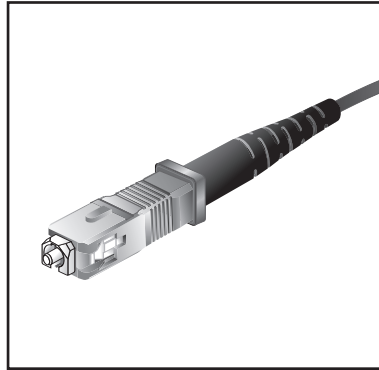
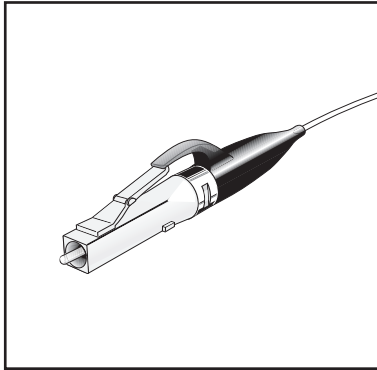


OptiMo[®] LC, SC and ST Compatible Connectors



Installation Instructions

OptiMo[®] Connector Installation Instructions

OptiMo implies the OptiMo Multimode (50 μm & 62.5 μm) and Singlemode connectors

INST	REV	ECN	DWN BY	DATE	CHK BY	DATE	APP BY	DATE
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Information subject to change without notice. Ortronics reserves the right to make changes in product design or components as progress in engineering or manufacturing may warrant.

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Installation on jacketed fiber	33
Cleaning procedures	64
Fiber Preparation Guide	ANNEX

About this guide

This guide contains assembly procedures for the OptiMo® Connector.

Before starting an installation, check to make sure that you have the required tools and materials outlined at the start of the procedure.

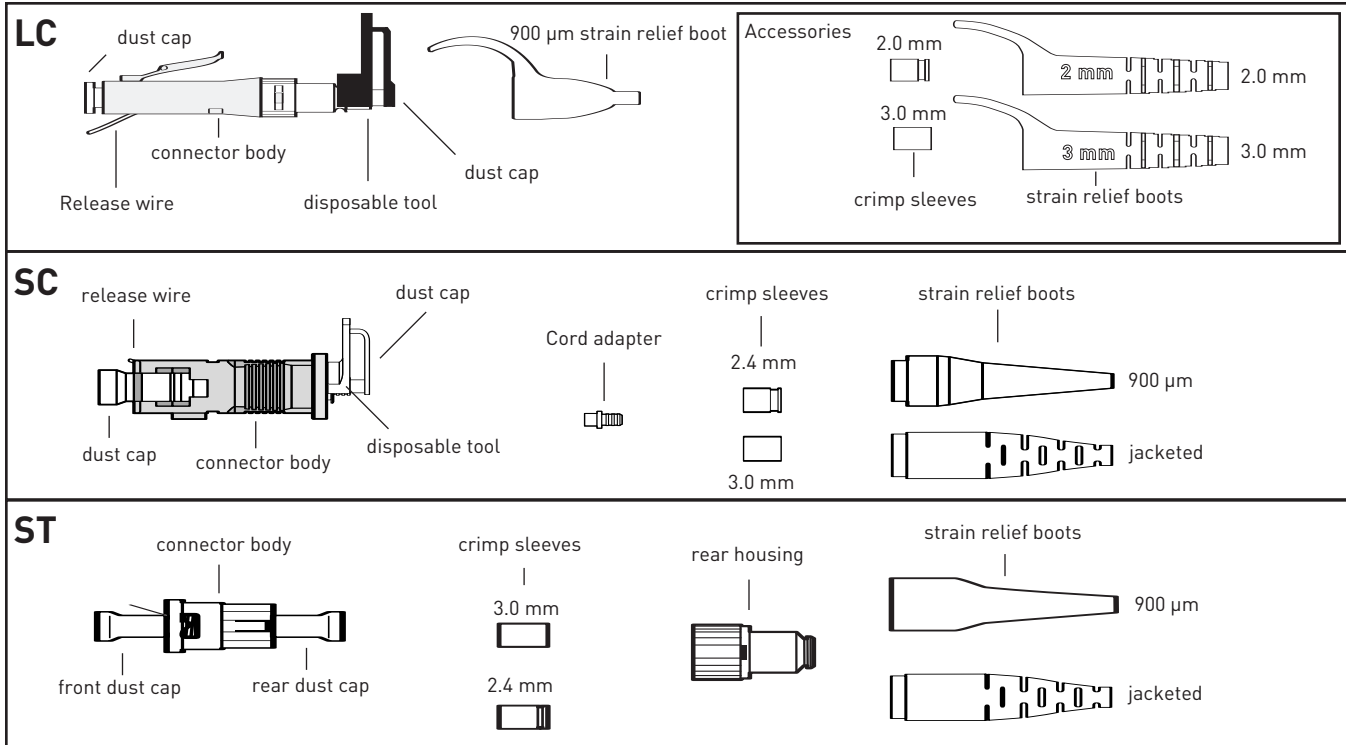
Review each procedure to familiarize yourself with the graphic symbols and the actions required.

Safety precautions

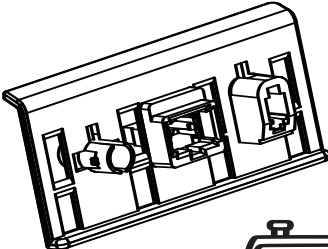
CAUTION:

- When installed on a live system, invisible laser radiation may be present.
Do not stare into connector endface or view directly with optical instruments.
- Wear safety glasses when working with optical fiber.
- Dispose of all scrap fiber in the waste bottle to avoid getting fiber slivers.

Connector components



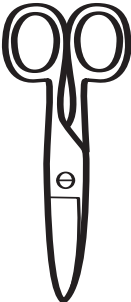
Connector installation tools



multihead adapter



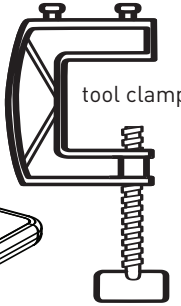
fiber cleaver



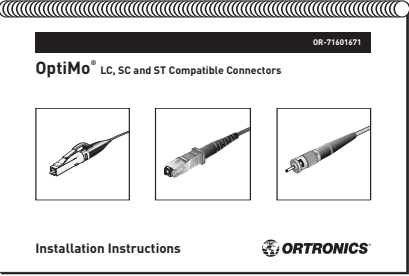
scissors



alcohol wipes



tool clamp



installation manual



tweezers



crimping tool

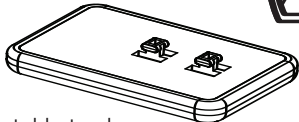
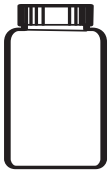


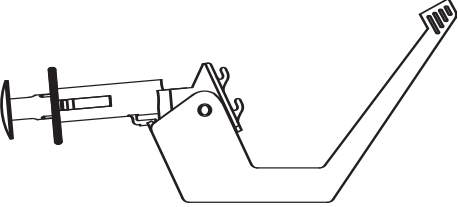
table top base



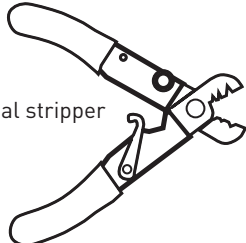
ink marker



fiber waste bottle



universal installation tool



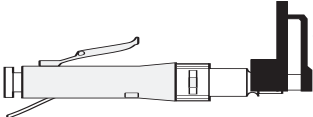
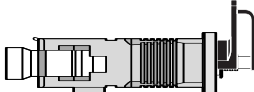
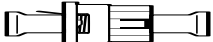
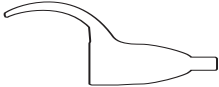
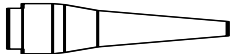
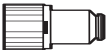
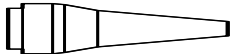

universal stripper



microscope

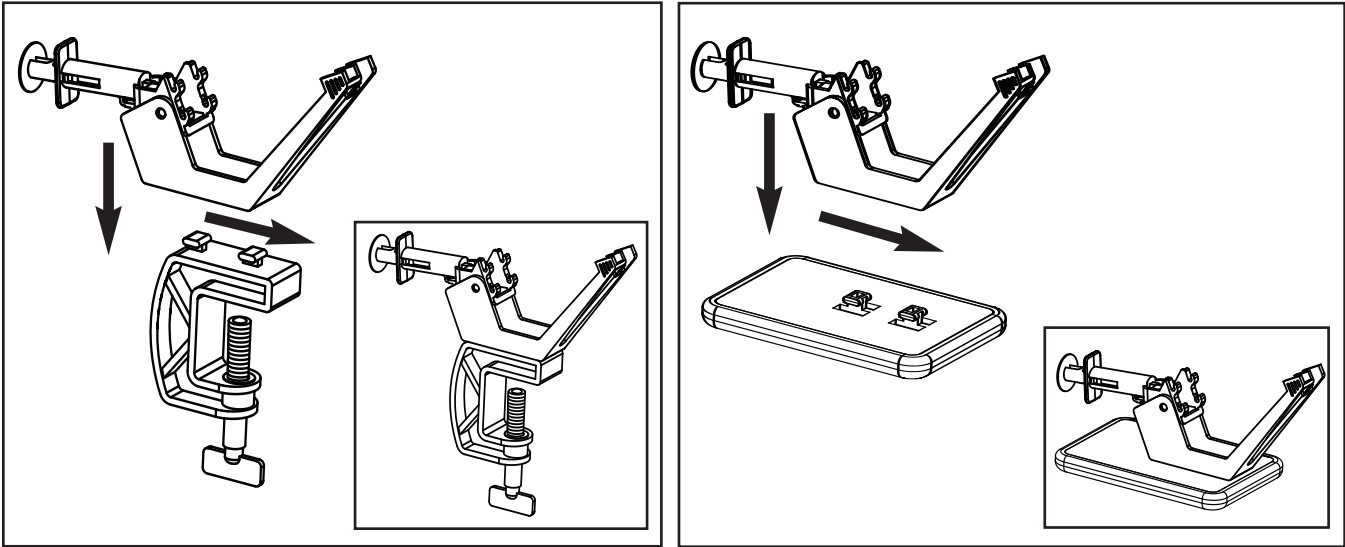
Installation on 900 μm buffered fiber or loose tube with breakout kit

1 Open the bag and select the parts required for installation on 900 μm buffered fiber. (Connector body and 900 μm strain relief boot.)

LC	SC	ST
 <p>connector body</p>	 <p>connector body</p>	 <p>connector body with dust caps</p>
 <p>900 μm strain relief boot</p>	 <p>900 μm strain relief boot</p>	 <p>rear housing</p>
	 <p>900 μm strain relief boot</p>	 <p>900 μm strain relief boot</p>

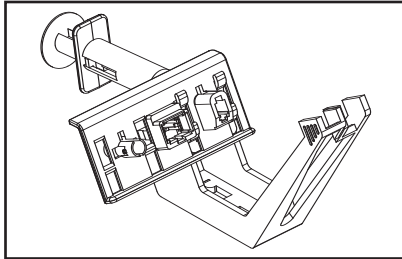
Installation on 900 μm buffered fiber or loose tube with breakout kit

2^a Install the installation tool on the C clamp as shown, then clamp to the table. The table top base can be used as an alternative.

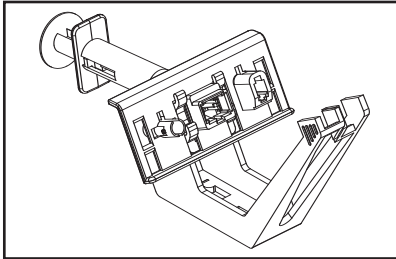


Installation on 900 μm buffered fiber or loose tube with breakout kit

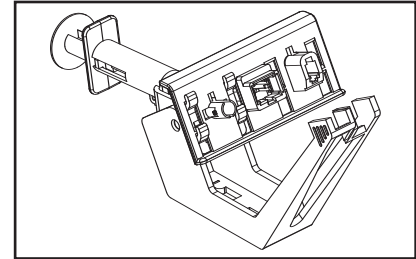
2^b Install the multihead adapter on the tool in the appropriate position as illustrated below.



LC position



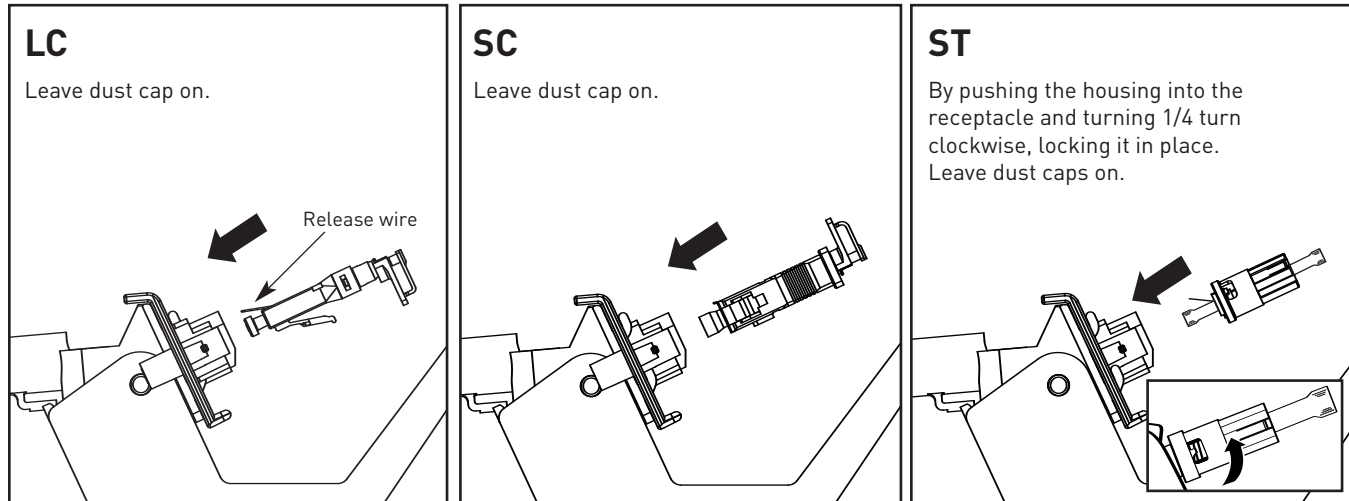
SC position



ST position

Installation on 900 μm buffered fiber or loose tube with breakout kit

- 3** Load the connector body into the installation tool, with the release wire up.

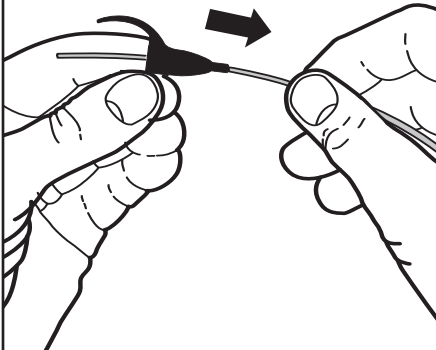


Installation on 900 μm buffered fiber

4

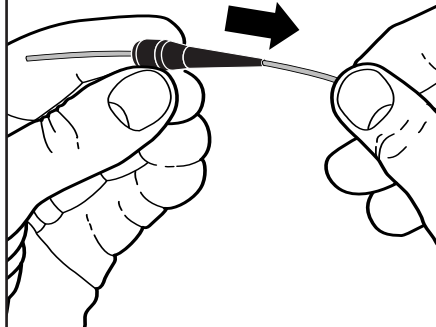
LC

Slide the boot down the fiber, narrow end first, until it is out of the way.



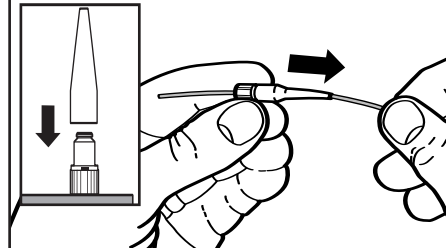
SC

Slide the boot down the fiber, narrow end first, until it is out of the way.



ST

Slide the 900 μm strain relief boot onto the rear housing until it locks in place. (Holding the boot on its smaller end will ease insertion.) Slide the rear housing with boot down the fiber, narrow end first, until it is out of the way.



Installation: stripping 900 μm buffered fiber (if using loose tube with breakout kit, skip to step 11)

5 Strip approximately 40 mm of the 900 μm buffered fiber as shown below. Be sure to strip fiber in small (5 mm) sections to avoid breaking it. Buffer end should be clean and square.

- * If unfamiliar with stripping optical fiber, it is advised to practice using a spare piece of fiber.
- * Make sure the fiber optic stripper tool you are using is in proper operating condition before attempting this step. Use of a tool that is not in proper operating condition could cause the fiber to break.

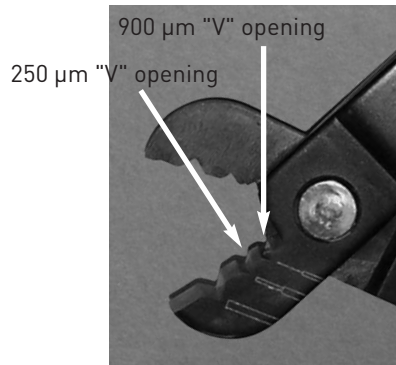


Fig. 1

Step 1. (Fig. 1) Insert fiber into 250 μm "V" opening of the tool.

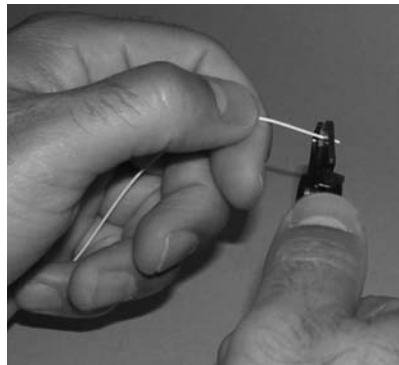
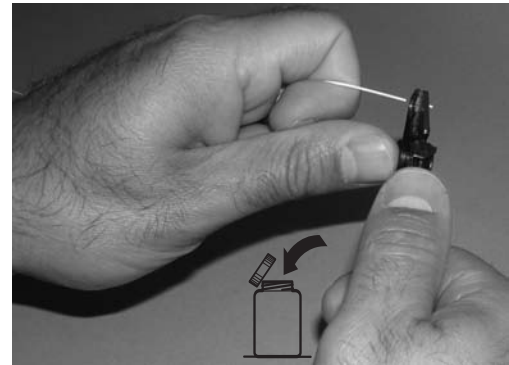


Fig. 2

Step 2. (Fig. 2) Close the tool squarely around the fiber.



Fiber waste

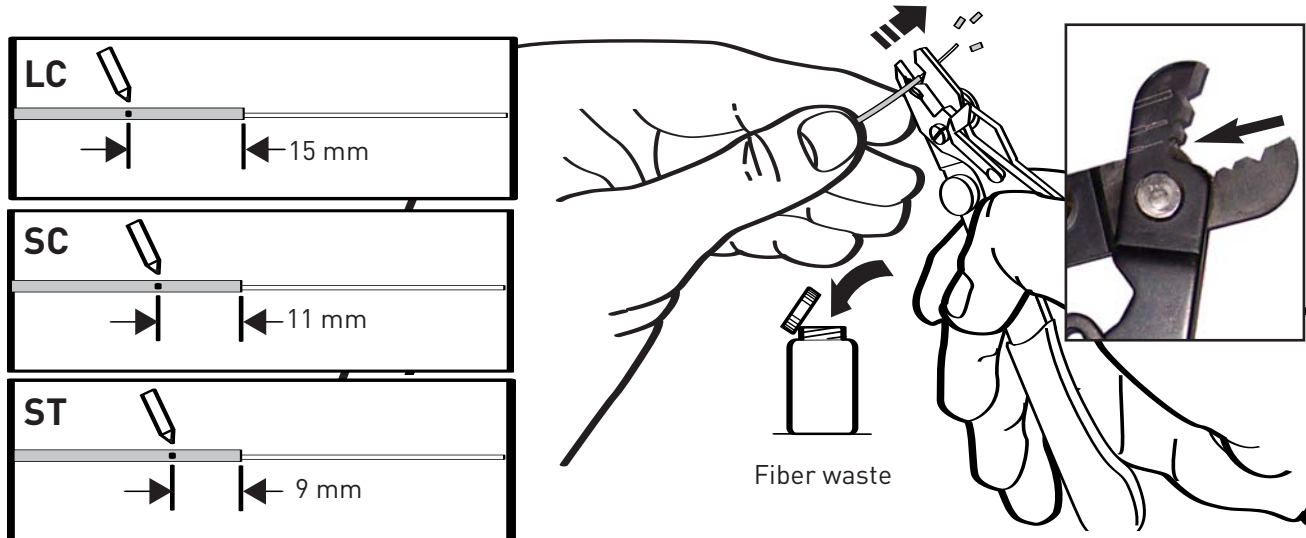
Fig. 3

Step 3. (Fig. 3) Draw the tool along the fiber using thumb pressure while keeping the tool perpendicular to the fiber.

Installation: stripping 900 μm buffered fiber (if using loose tube with breakout kit, skip to step 11)

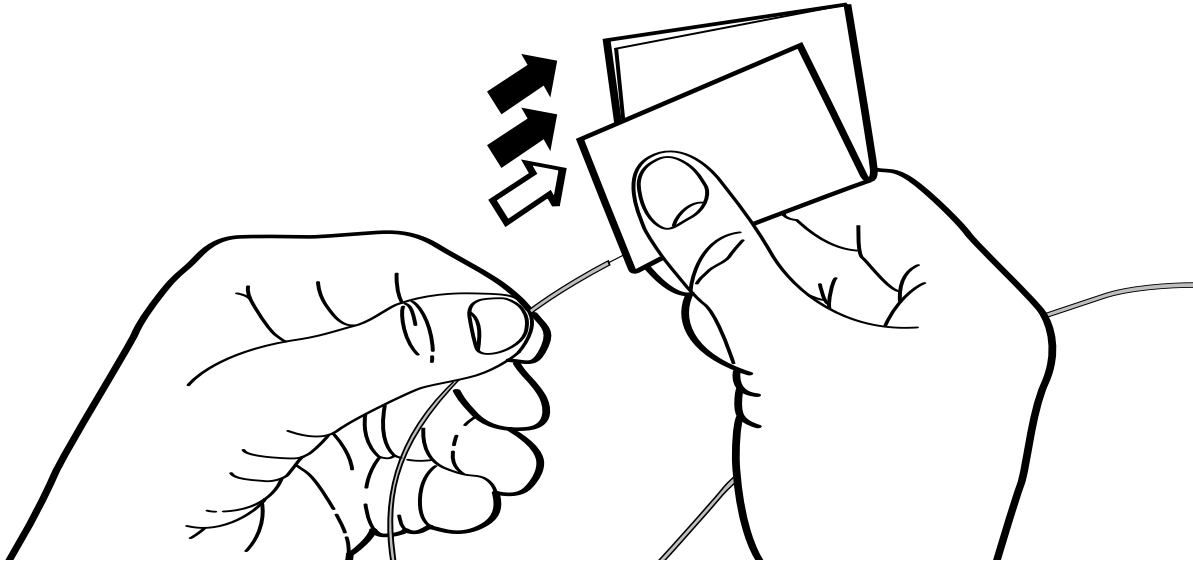
6 Strip approximately 40 mm of the 900 μm buffered fiber. Be sure to strip fiber in small (5 mm) sections to avoid breaking it. Buffer end should be clean and square. After stripping, measure and mark the buffer from its end as illustrated below.

* If unfamiliar with stripping optical fiber, it is advised to practice using a spare piece of fiber.



Installation on 900 μm buffered fiber

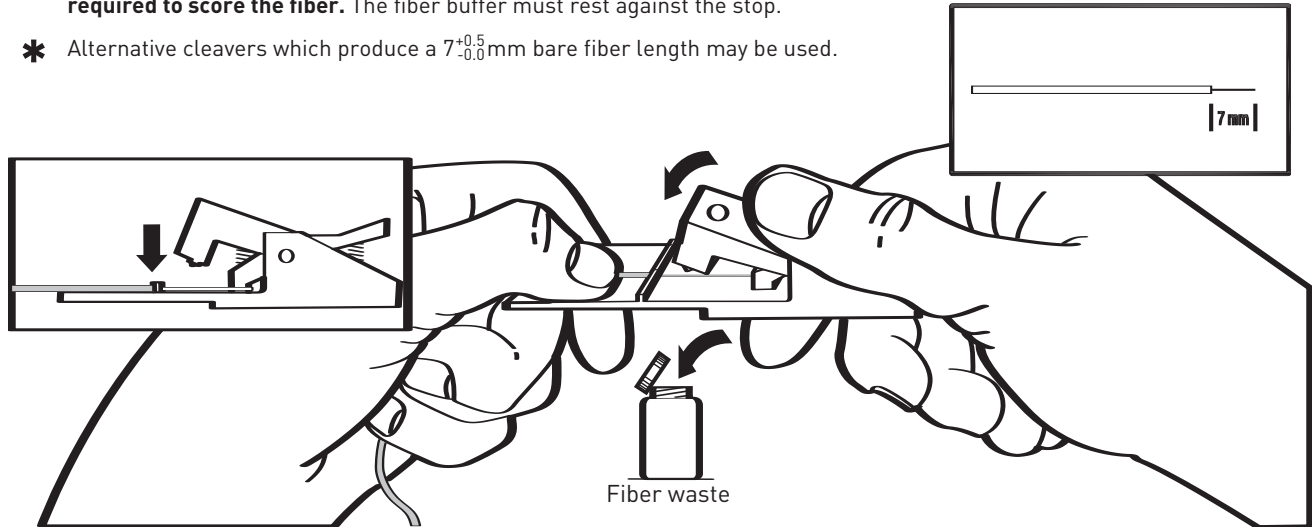
- 7** Carefully clean the bare fiber with a folded alcohol wipe or alcohol soaked lint-free paper. Use two or three passes. Avoid touching the bare fiber, or laying it down on the table, after it has been cleaned.



Pre-Set Cleaver Installation on 900 μm tight buffered fiber (if using an adjustable cleaver, skip to step 8b)

8a Cleave the fiber 7 mm from the end of the buffer. **Be sure to read and understand the procedure included with your cleaver that is provided with your Ortronics® Field Installation Kit prior to attempting this step.** (The procedure can be downloaded from the Ortronics web site at [http://www.ortronics.com/us/resources/technical-information/.](http://www.ortronics.com/us/resources/technical-information/))

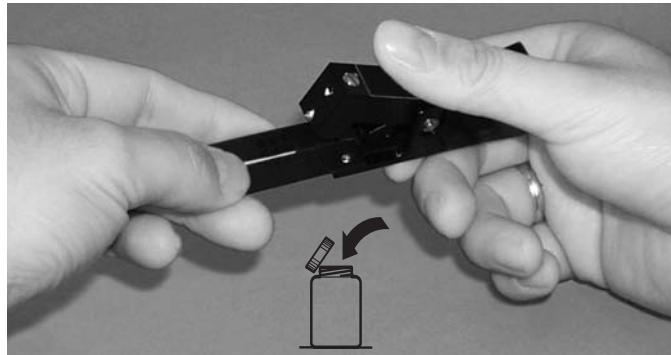
- * If unfamiliar with cleaving, it is advised to practice using a spare piece of fiber. **Generally, a light touch is all that is required to score the fiber.** The fiber buffer must rest against the stop.
- * Alternative cleavers which produce a $7^{+0.5}_{-0.0}$ mm bare fiber length may be used.



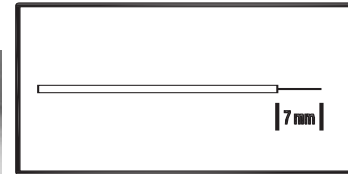
Adjustable Cleaver Installation on 900 μm tight buffered fiber

8b Cleave the fiber 7 mm from the end of the buffer. **Be sure to read and understand the procedure included with your cleaver that is provided with your Ortronics® Field Installation Kit prior to attempting this step.** (The procedure can be downloaded from the Ortronics web site at [http://www.ortronics.com/us/resources/technical-information/.](http://www.ortronics.com/us/resources/technical-information/))

- * If unfamiliar with cleaving, it is advised to practice using a spare piece of fiber. **Generally, a light touch is all that is required to score the fiber.** The fiber buffer must be set to produce a $7^{+0.5}_{-0.0}$ mm bare fiber length.
- * Alternative cleavers which produce a $7^{+0.5}_{-0.0}$ mm bare fiber length may be used.



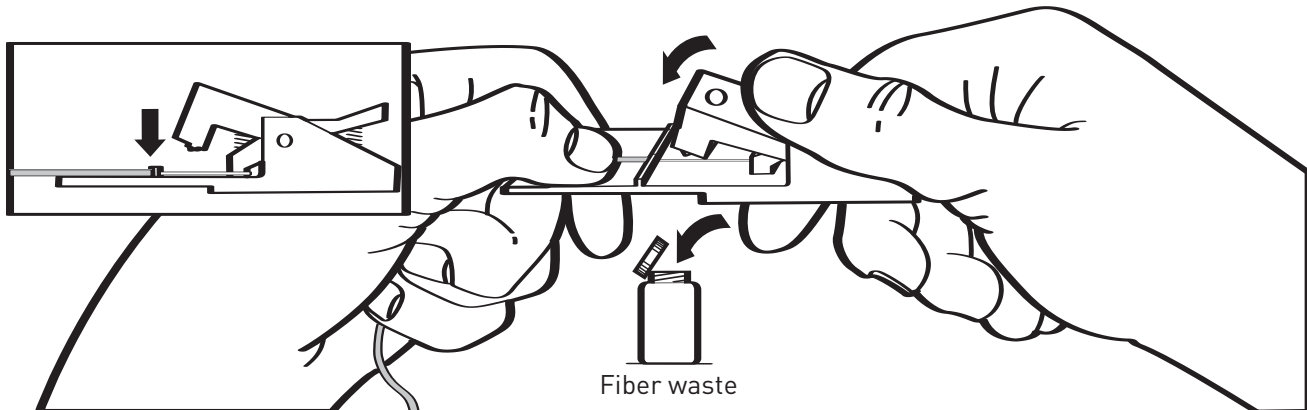
Fiber waste



Installation on 900 μ m buffered fiber

9 Cleave the fiber 7 mm from the end of the buffer. Be sure to read and understand the operating instructions included with the cleaver. Using tweezers, discard waste fiber into the proper waste container.

- * If unfamiliar with cleaving, it is advised to practice using a spare piece of fiber. **Generally, a light touch is all that is required to score the fiber.** The fiber buffer must rest against the stop.
- * Alternative cleavers which produce a $7^{+0.5}_{-0.0}$ mm bare fiber length may be used.

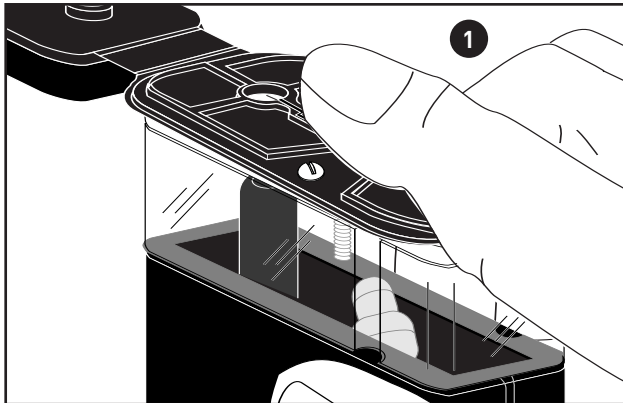


Installation on 900 μm buffered fiber

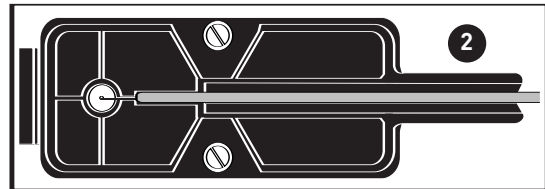
10 Use the microscope to check the quality of the cleave. Pointing the microscope at a white surface will provide a brighter image.

* **Note:** If the Ortronics® Precision Cleave Tool (OR-60300189) is used, cleave inspection with a microscope is not required.

1 Turn microscope over and place fiber on stage.

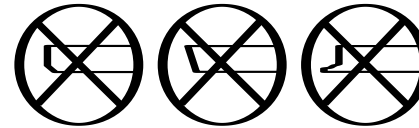
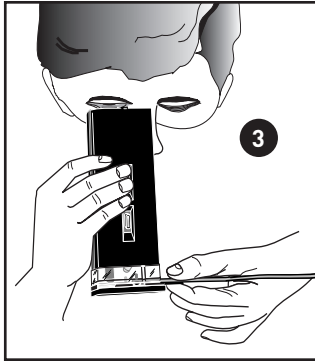


2 Make sure fiber position is as illustrated.

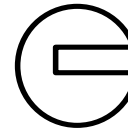


Installation on 900 μm buffered fiber

- 3** Close stage and check fiber. It is recommended to rotate the fiber 90° - 180° to verify from different angles.



Unacceptable cleaves



Acceptable cleave

*** Note:** Batteries are not required.

If the cleave is unacceptable, then the fiber must be re-prepared starting from step 5. If fiber or fiber endface appear dirty clean it as in step 6.

Once this step is successfully completed, proceed to step 11

Installation: stripping 900 μm loose tube fiber with breakout kit (if using tight buffered, go to step 5)

11 Strip the 900 μm tube as shown below such that the distance from the end of the tube to the end of the fiber is approximately 40 mm. Tube end should be clean and square.

- * If unfamiliar with cleaving, it is advised to practice using a spare piece of fiber.
- * Make sure the fiber optic stripper tool you are using is in proper operating condition before attempting this step. Use of a tool that is not in proper operating condition could cause the fiber to break.

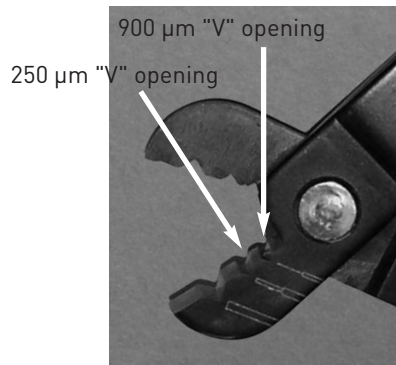


Fig. 1

Step 1. (Fig. 1) Insert fiber into 900 μm "V" opening of the tool.

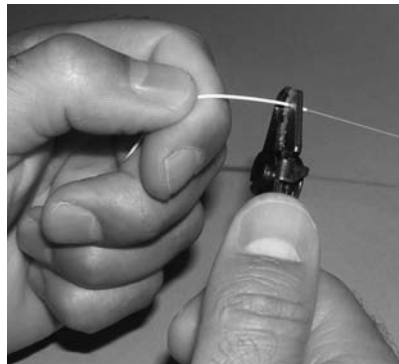


Fig. 2

Step 2. (Fig. 2) Close the tool squarely around the fiber.

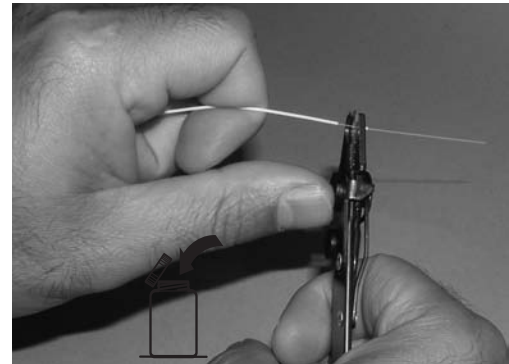
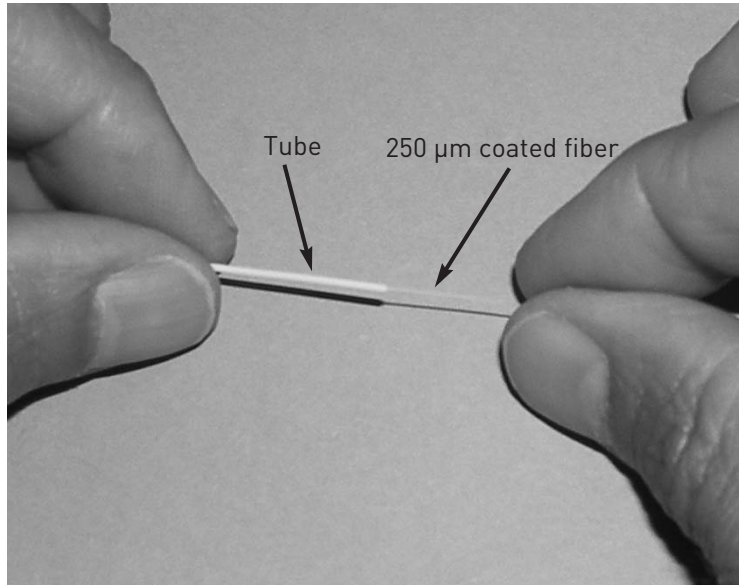


Fig. 3

Step 3. (Fig. 3) Draw the tool along the fiber using thumb pressure while keeping the tool perpendicular to the fiber.

Installation: stripping 900 μm loose tube fiber with breakout kit

- 12** Using your fingers, carefully grip the end of the 250 μm coated fiber as shown, and gently push the fiber back into the tube as far as it will go without bending.



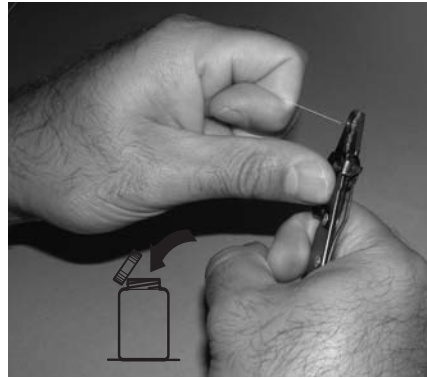
Installation: stripping 900 μm loose tube fiber with breakout kit

13 Position the fiber stripper at the end of the tube, and proceed to remove the 250 μm coating in one even stripping motion as shown in Figures 1 and 2 below. 250 μm coating end should be clean and square. Using your fingers, carefully grip the bare fiber close to the 250 μm coating as shown in Fig. 3 below, and gently push the fiber back into the tube as far as it will go. The 250 μm coating **must always** be visible when the fiber is lightly pushed into the tube. There must be 0.50 mm–1.50 mm of 250 μm coating extending beyond the tube as shown in Fig. 4 below.



Fig. 1

Step 1. (Fig. 1) Insert fiber into the 250 μm "V" opening of the tool (shown in previous page). Close the tool squarely around the fiber.



Fiber waste

Fig. 2

Step 2. (Fig. 2) Draw the tool along the fiber using thumb pressure while keeping the tool perpendicular to the fiber.

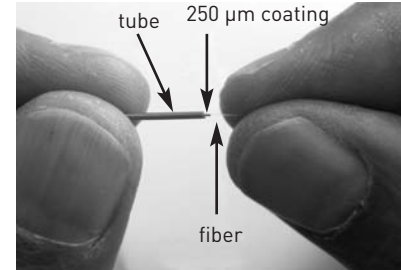


Fig. 3

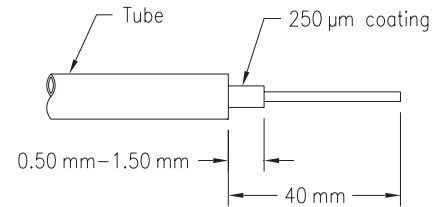
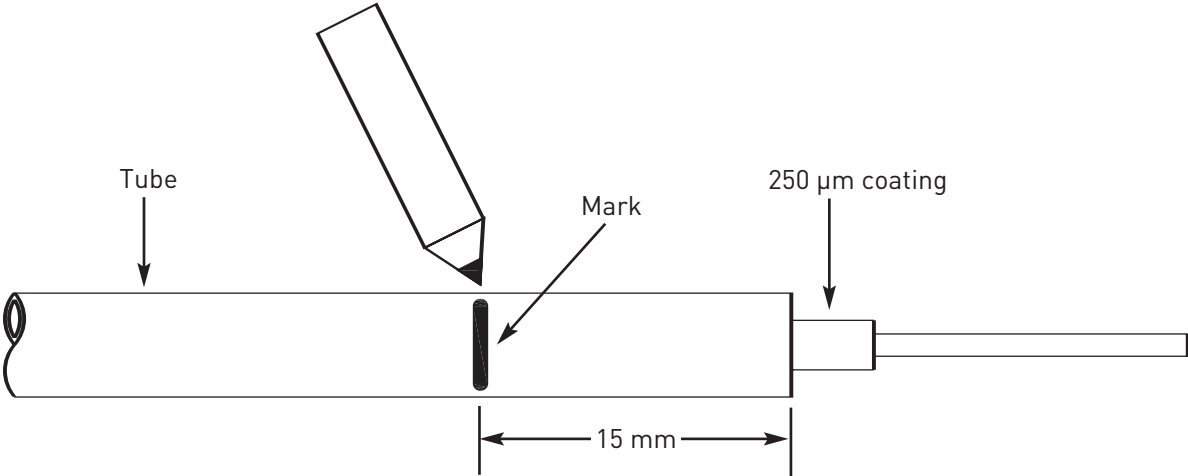


Fig. 4

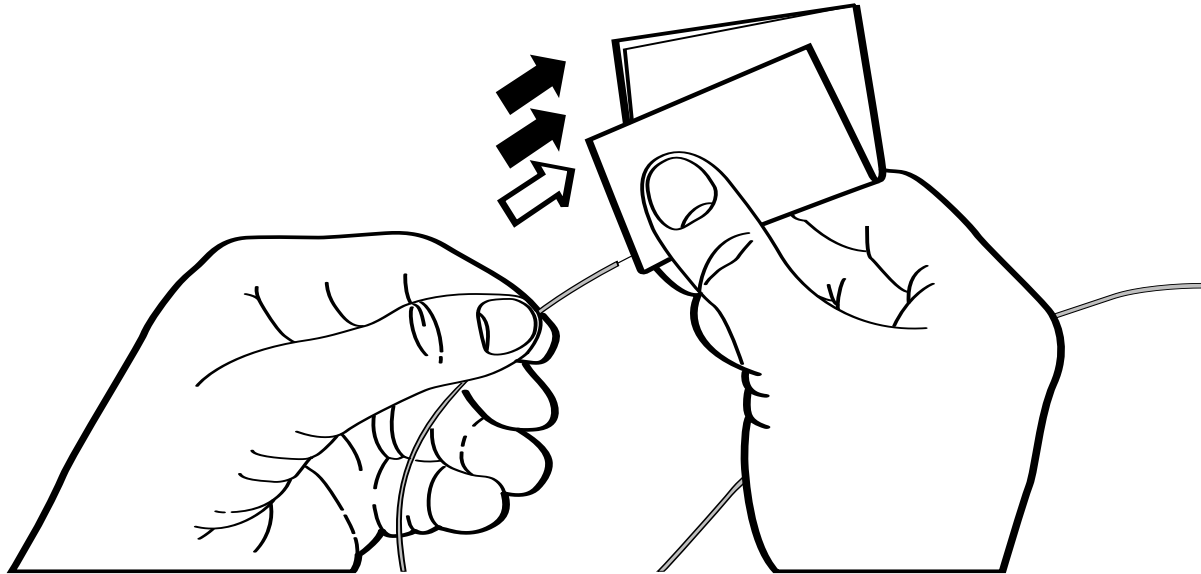
Installation: marking the 900 μm loose tube fiber with breakout kit

14 Place a mark 15 mm from the end of the tube, as shown below.



Installation: cleaning 900 μ m loose tube fiber with breakout kit

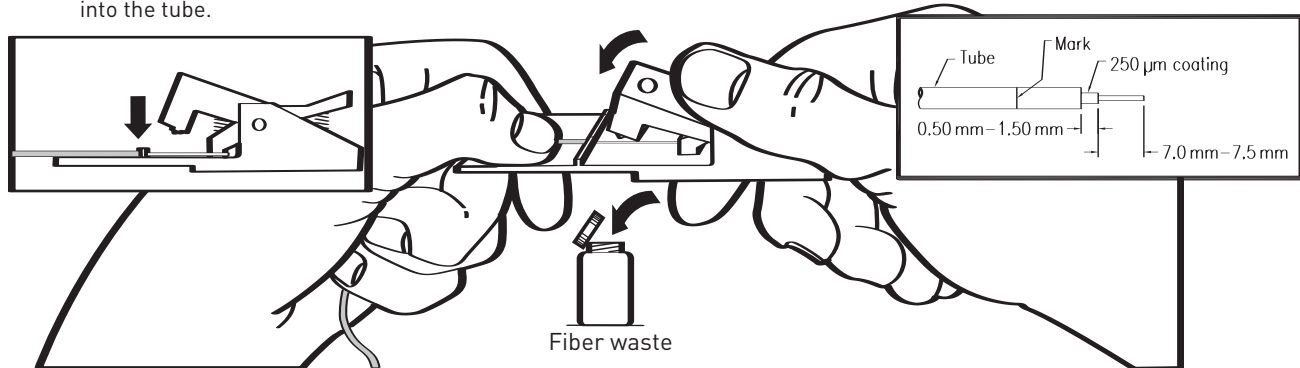
- 15** Carefully clean the bare fiber with a folded alcohol wipe or alcohol soaked lint-free paper. Use two or three passes. Use care not to remove the mark on the tube in the process. Avoid touching the bare fiber, or laying it down on the table, after it has been cleaned.



Pre-Set Cleaver Installation on 900 μm loose tube fiber (if using an adjustable cleaver, skip to step 16b)

16^a Cleave the fiber 7.0 mm–7.5 mm from the end of the 250 μm coating (not from the end of the tube). **Be sure to read and understand the procedure included with your cleaver that is provided with your Ortronics® Field Installation Kit prior to attempting this step.** (The procedure can be downloaded from the Ortronics web site at [http://www.ortronics.com/us/resources/technical-information/.](http://www.ortronics.com/us/resources/technical-information/))

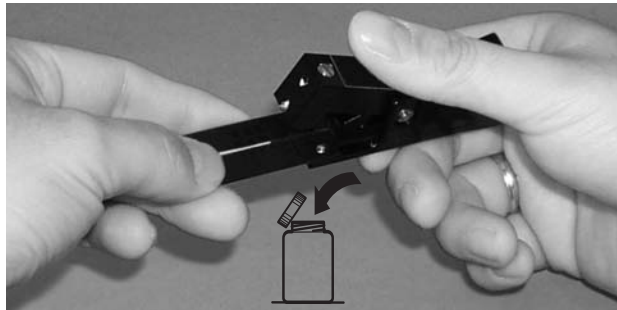
- * If unfamiliar with cleaving, it is advised to practice using a spare piece of fiber. **Generally, a light touch is all that is required to score the fiber.** The 250 μm coating must rest against the stop.
- * Alternative cleavers which produce a $7^{+0.5}_{-0.0}$ mm bare fiber length may be used.
- * After cleaving, there must still be 0.50 mm–1.50 mm of 250 μm coating extending beyond the tube as shown. If required, using your fingers, carefully grip the bare fiber close to the 250 μm coating as shown in Fig. 3 of step 13, and gently push the fiber back into the tube as far as it will go. The 250 μm coating must always be visible when the fiber is lightly pushed into the tube.



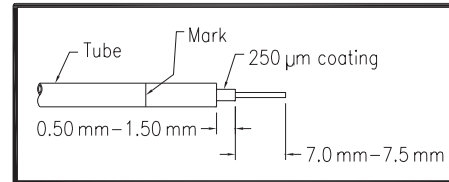
Adjustable Cleaver Installation on 900 μm loose tube fiber

16^b Cleave the fiber 7.0 mm–7.5 mm from the end of the 250 μm coating (not from the end of the tube). **Be sure to read and understand the procedure included with your cleaver that is provided with your Ortronics® Field Installation Kit prior to attempting this step.** (The procedure can be downloaded from the Ortronics web site at [http://www.ortronics.com/us/resources/technical-information/.](http://www.ortronics.com/us/resources/technical-information/))

- * If unfamiliar with cleaving, it is advised to practice using a spare piece of fiber. **Generally, a light touch is all that is required to score the fiber.** The 250 μm coating must be set to produce a $7^{+0.5}_{-0.0}$ mm bare fiber length.
- * Alternative cleavers which produce a $7^{+0.5}_{-0.0}$ mm bare fiber length may be used.
- * After cleaving, there must still be 0.50 mm–1.50 mm of 250 μm coating extending beyond the tube as shown. If required, using your fingers, carefully grip the bare fiber close to the 250 μm coating as shown in Fig. 3 of step 13, and gently push the fiber back into the tube as far as it will go. The 250 μm coating must always be visible when the fiber is lightly pushed into the tube.



Fiber waste

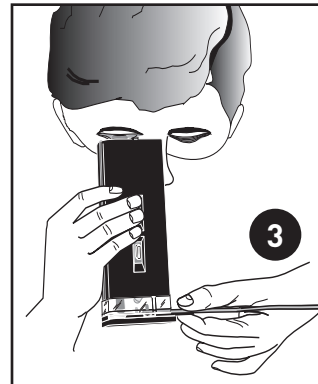
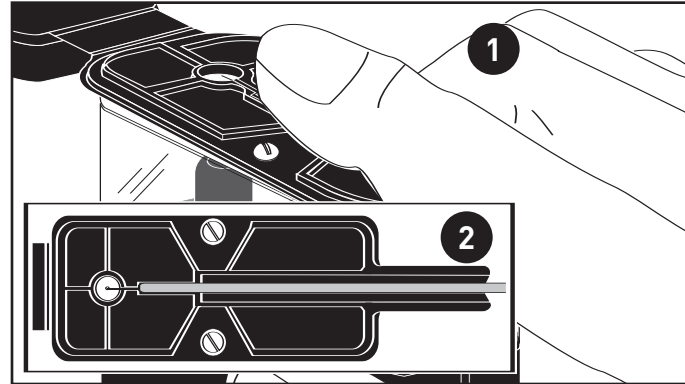


Installation: cleave inspection of 900 μm loose tube fiber

17 Use the microscope to check the quality of the cleave. Pointing the microscope at a white surface will provide a brighter image. If the cleave is unacceptable, then the fiber must be re-prepared starting from step 11. If fiber or fiber end-face appears dirty, reclean fiber as in step 15.

- 1 Turn microscope over and place fiber on stage.
- 2 Make sure fiber position is as illustrated.
- 3 Close stage and check fiber.
- 4 Slowly adjust focus knob until fiber profile is clear.
- 5 It is recommended to rotate the fiber 90° - 180° to verify different angles

*** Note:** Batteries are not required.
If the Ortronics® Precision Cleave Tool (OR-60300189) is used, cleave inspection with a microscope is not required.



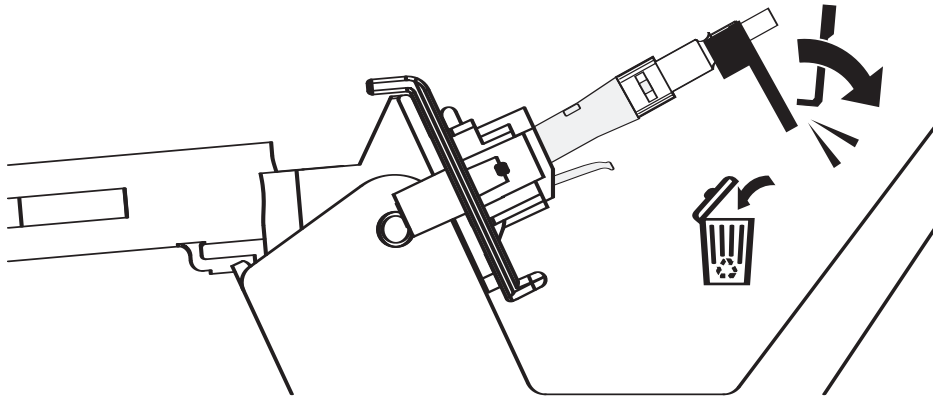
Unacceptable cleaves



Acceptable cleave

Installation on 900 μm tight buffered fiber or loose tube with breakout kit

18 Break dust cap from the disposable tool. Discard.



Installation on 900 μm tight buffered fiber or loose tube with breakout kit

- 19** Carefully insert the bare fiber into the stem of the connector until you feel the end of the fiber touch the fiber stub inside the connector. Gently rotating the fiber between your thumb and forefinger may ease insertion. **DO NOT** rotate or remove the fiber once fully inserted into the connector. When fully inserted, the pen mark on the buffer should be near the edge of the connector stem. Clamp the fiber into the installation tool clamp as shown in Fig. 1. In order to ensure that the fiber end face being installed maintains contact with the fiber end face inside the connector during subsequent handling, there **MUST** BE a bow of approximately 15 mm–20 mm (0.6 in.–0.75 in.) as illustrated.

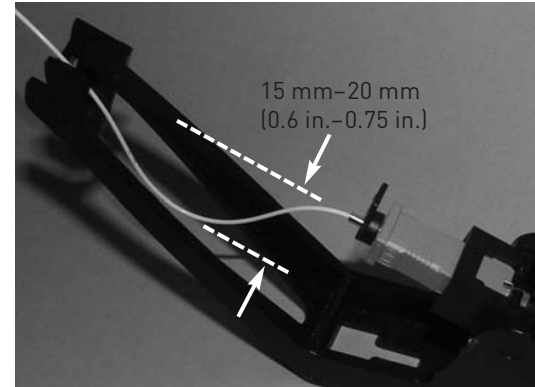
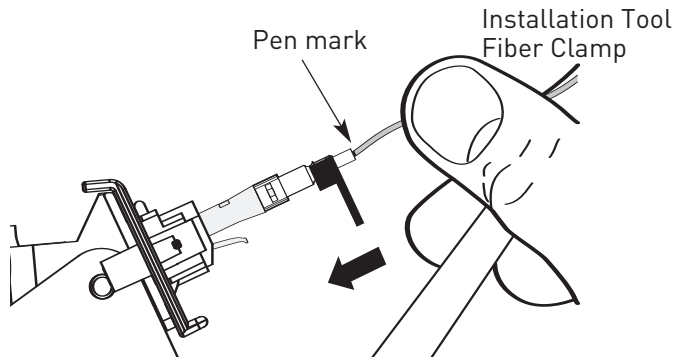
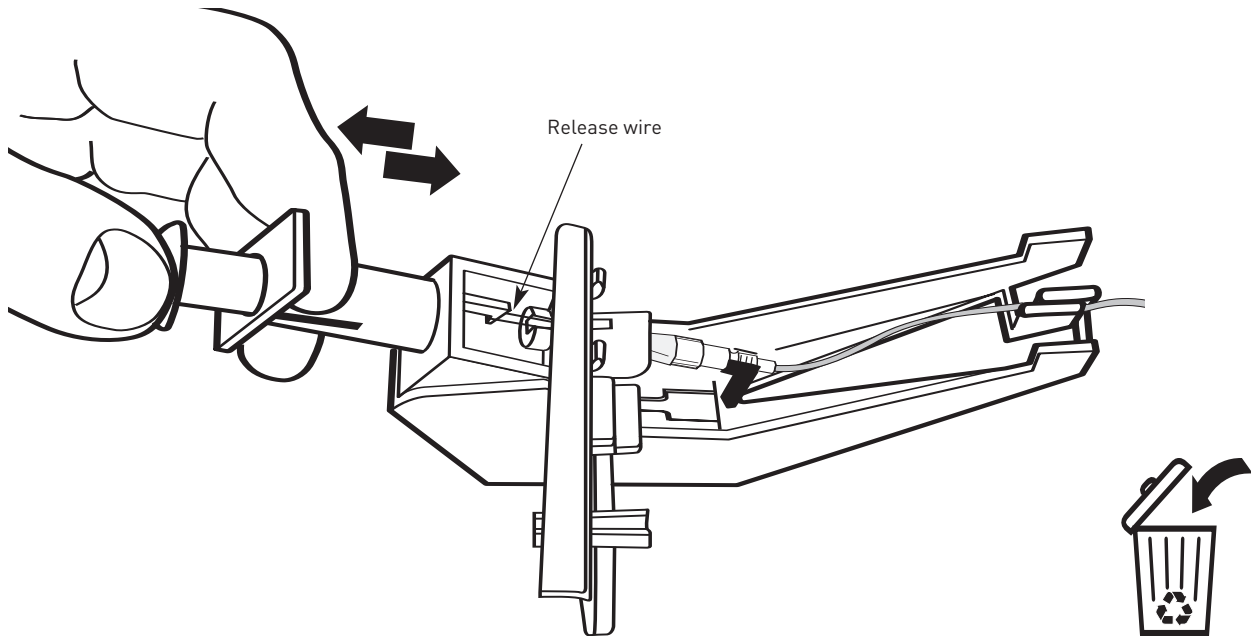


Figure 1

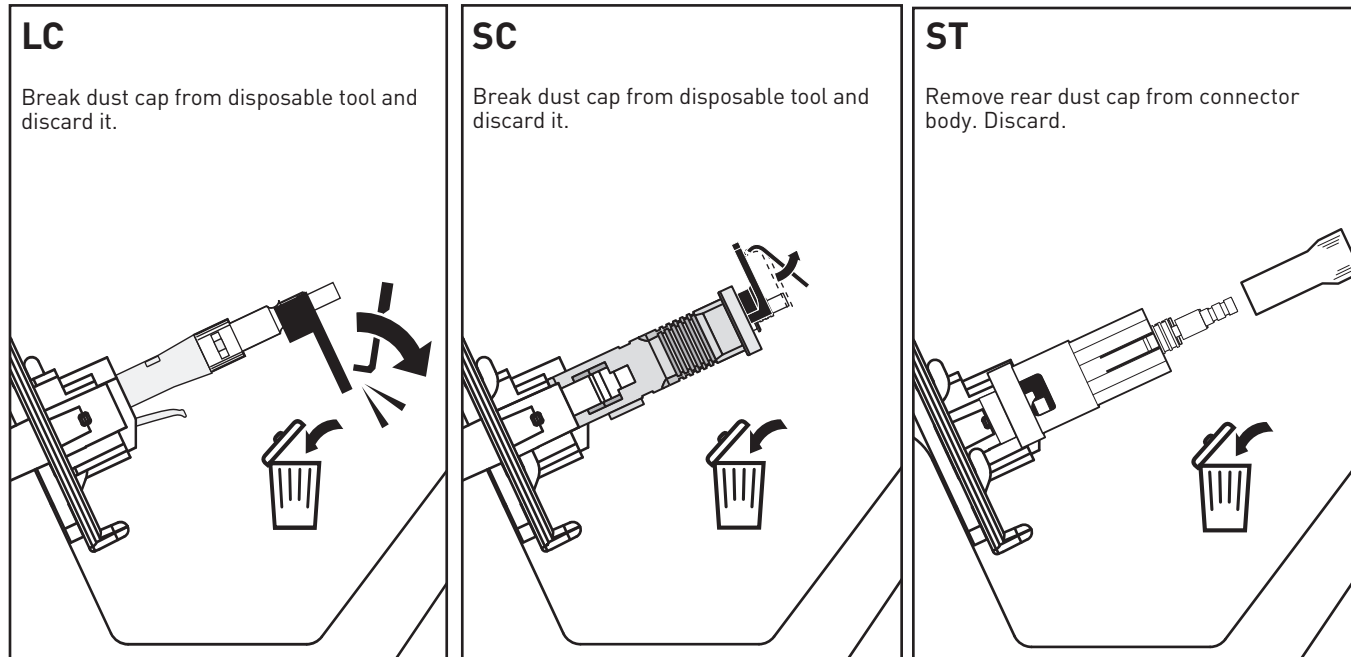
Installation on 900 μm tight buffered fiber or loose tube with breakout kit

- 20** Depress the installation tool plunger. Ensure it hooks the release wire, then **slowly** release the plunger. Discard the release wire.



Installation on 900 μm buffered fiber

21



Installation on 900 μm tight buffered fiber or loose tube with breakout kit

22 Carefully insert the bare fiber into the stem of the connector until you feel the end of the fiber touch the fiber stub inside the connector. Gently rotating the fiber between your thumb and forefinger may ease insertion. **DO NOT** rotate or remove the fiber once fully inserted into the connector. When fully inserted, the pen mark on the buffer should be near the edge of the connector stem. Clamp the fiber into the installation tool clamp as shown in Fig. 1. In order to ensure that the fiber end face being installed maintains contact with the fiber end face inside the connector during subsequent handling, there **MUST** BE a bow of approximately 15 mm–20 mm (0.6 in.–0.75 in.) as illustrated.

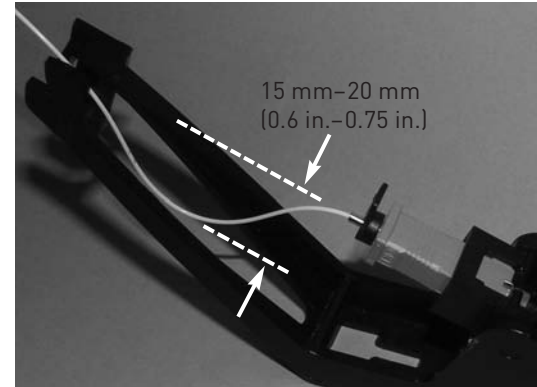
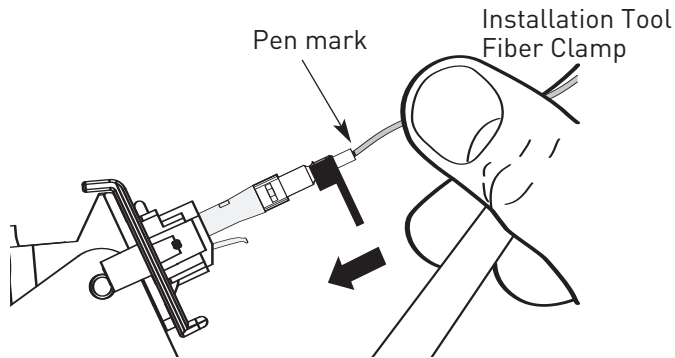
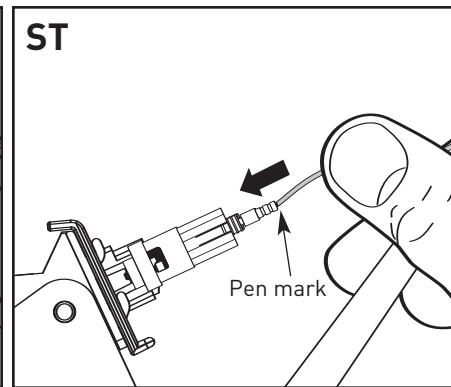
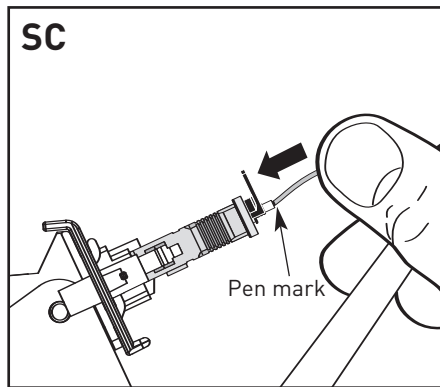
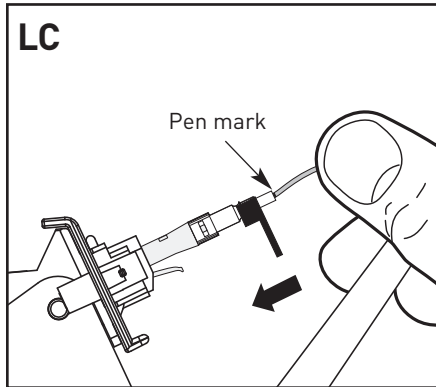
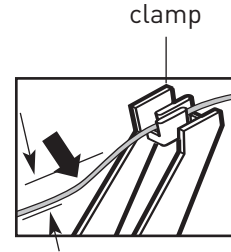


Figure 1

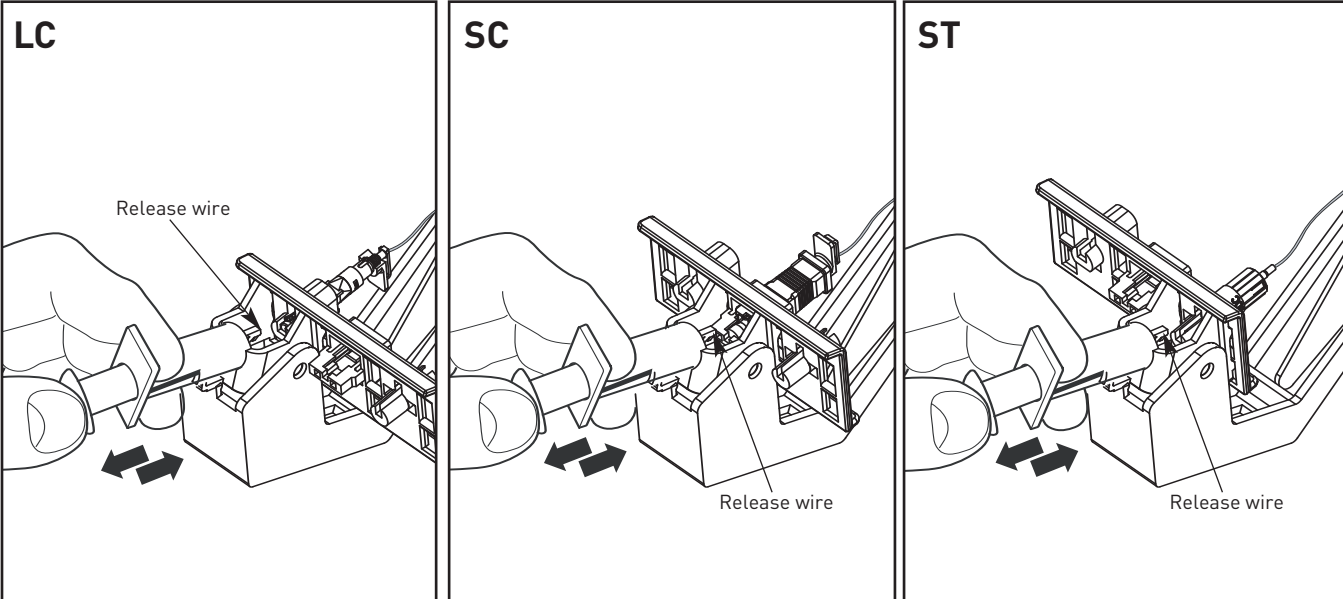
Installation on 900 μm buffered fiber

23 Carefully insert the bare fiber into the stem of the connector until you feel the **fibers make contact**. Gently twisting the fiber may ease insertion. Do not twist or remove the fiber once it is fully inserted. When fully inserted, the pen mark on the buffer should be near the edge of the stem of the connector. Clamp the fiber into the clamp of the installation tool. There must be a bow of approximately 15mm-20mm (0.6in-0.75in) as illustrated in the fiber in order to maintain a contact between the end faces of the fibers.



Installation on 900 μm buffered fiber

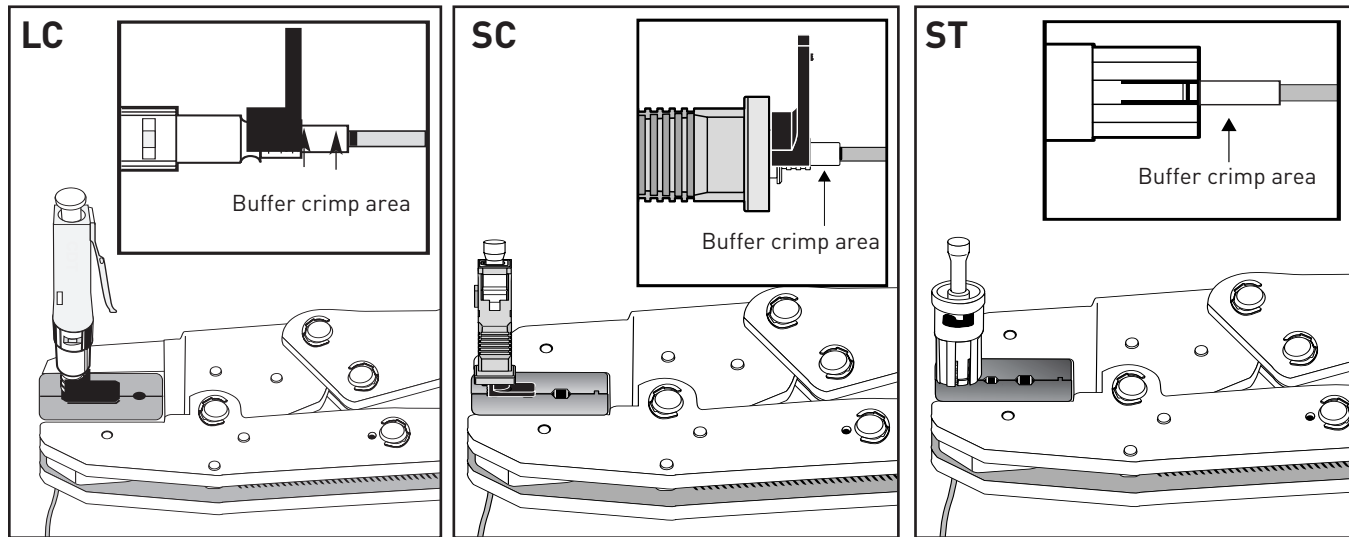
24 Depress the installation tool plunger. Ensure it hooks the release wire, then **slowly** release the plunger.



Installation on 900 μm buffered fiber

25 Unclamp the fiber. **Carefully** remove the connector from the installation tool. Hold the crimping tool horizontally and close it partially. Load the connector into the first and smallest die (.068 hex) of the crimping tool as shown with the disposable tool tab pointing at the crimping tool handle. The smallest diameter hex face is against the disposable tool tab. Crimp firmly until tool release latch opens.

- * Make sure that the crimp tool you are using is in proper operating condition before attempting this step. Also make sure that the tool is set to the settings shown in the Technical Bulletin—OptiMo® Field Installable Connectors document that is provided with your Ortronics® Field Installation Kit. (The document can be downloaded from the Ortronics web site at <http://www.ortronics.com/us/resources/technical-information/>.)



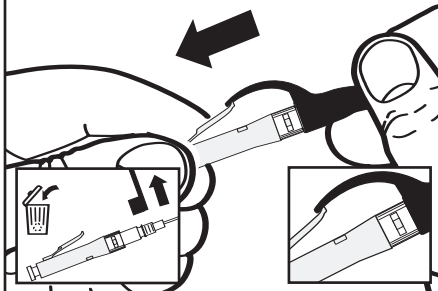
Installation on 900 μm buffered fiber

26^a

LC

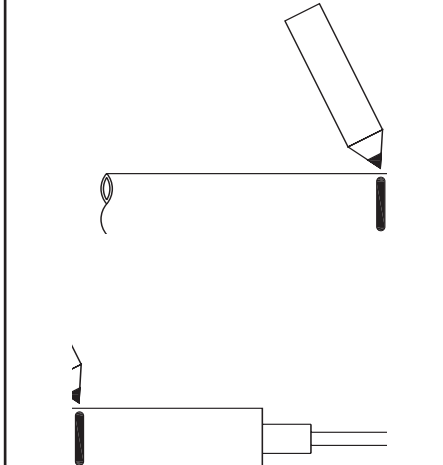
Remove disposable tool and discard it.
Holding the boot by its collar, align the anti snag with the latch of the LC connector, slide it onto the rear of the connector until its step reaches the connector body. The installation is now completed.

- * Be sure to clean the connector as described in the "Cleaning Procedures" section before using the connector.



SC

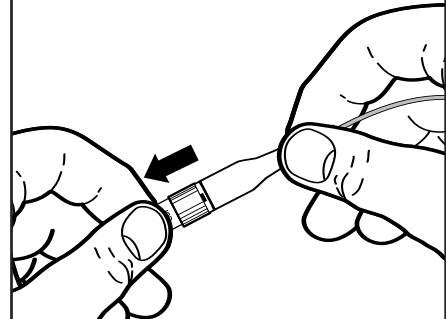
Grab the disposable tool as shown. Pull until a click is heard. Remove the tool and discard it.



ST

Align and press the rear housing with boot into the front housing until a click is heard. The installation is now complete.

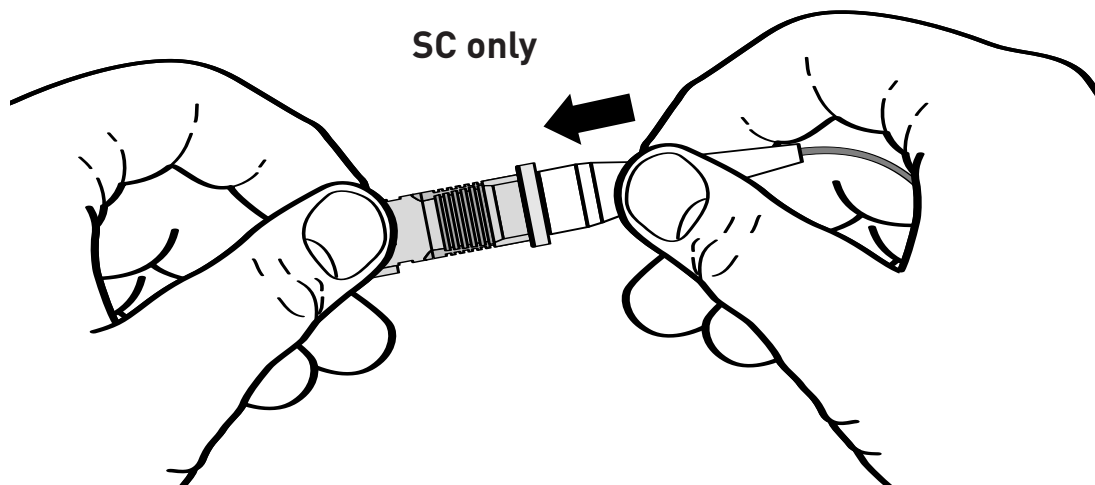
- * Be sure to clean the connector as described in the "Cleaning Procedures" section before using the connector.



SC Installation on 900 μ m buffered fiber

26^b **Holding the boot by its collar**, slide it onto the rear of the connector until its step reaches the connector body. The installation is now completed.

- * Be sure to clean the connector as described in the “Cleaning Procedures” section before using the connector (See page 64).



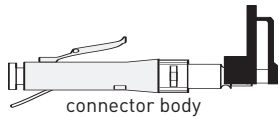
Notes

Installation on jacketed fiber

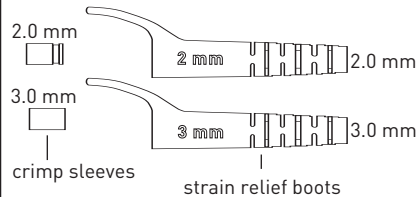
1

LC

Open the connector bag and the accessories bag. Select the appropriate parts required for installation on 2.0mm or 3.0mm jacketed fiber. (Connector body, crimp sleeve and strain relief boot)

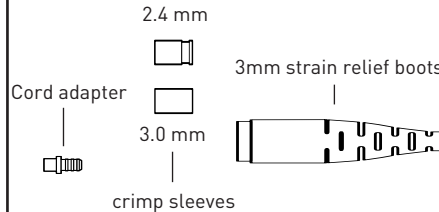
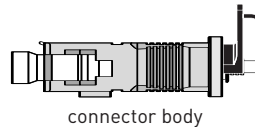


Accessories



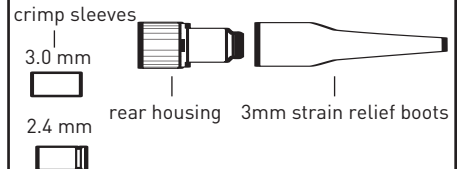
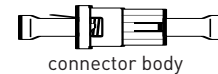
SC

1a) Before you start an installation on jacketed fiber, you need to determine the installation method (there are two) and the parts you are going to need. You simply have to determine the outer diameter of the cable jacket you are installing the connector on.



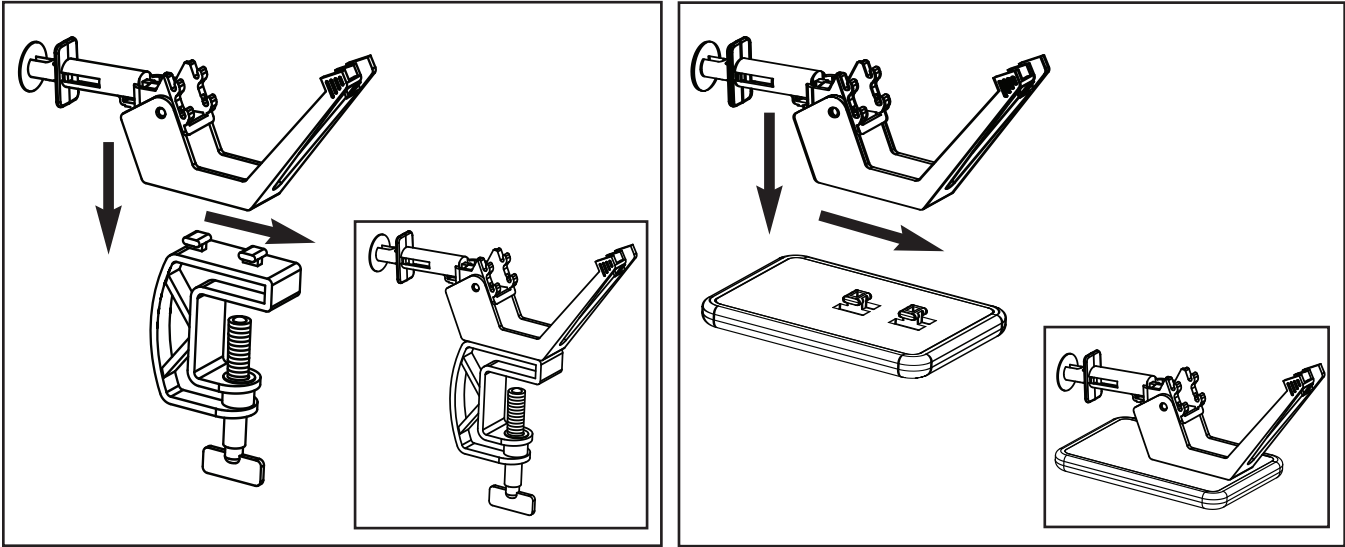
ST

Open the bag of materials and take out the connector body and the rear housing. In order to select the crimp sleeve, you need to first determine the outer diameter of the cable jacket you are installing. The appropriate crimp sleeve for a cord, size from 2.0 mm to 2.4 mm is the 2.4 mm sleeve. For a cord size from 2.5 mm to 3.0 mm, use the 3.0 mm crimp sleeve.



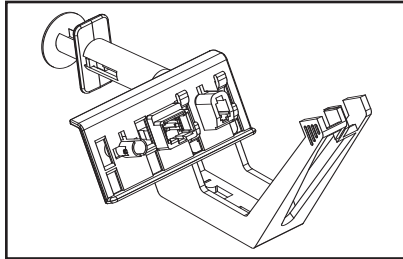
Installation on jacketed fiber

2^a Install the installation tool on the C clamp as shown, then clamp to the table. The table top base can be used as an alternative.

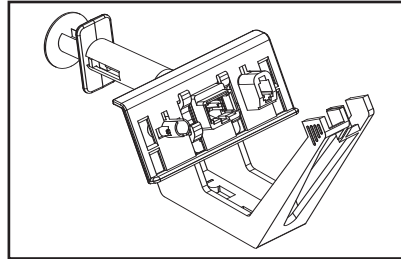


Installation on jacketed fiber

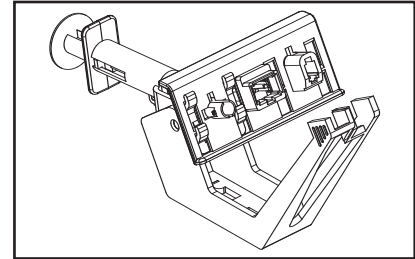
2^b Install the multihead adapter on the tool in the appropriate position as illustrated below.



LC position



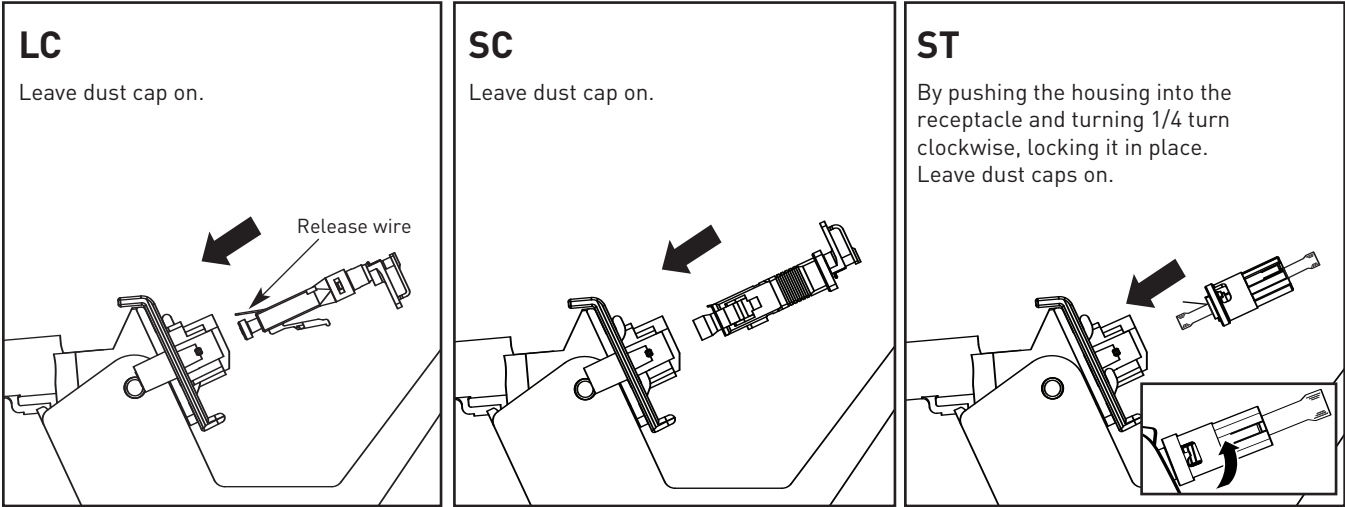
SC position



ST position

Installation on jacketed fiber

3 Load the connector body into the installation tool, with the release wire up.

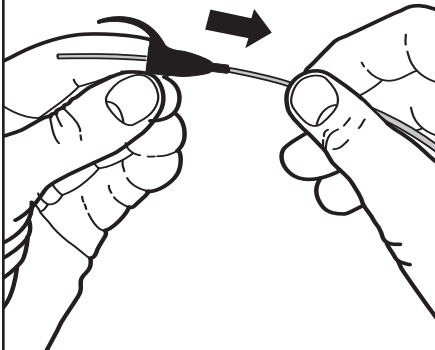


Installation on jacketed fiber

4

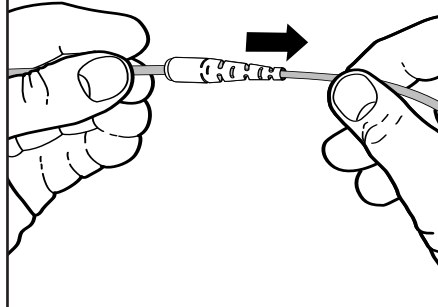
LC

Slide the boot down the fiber, narrow end first, until it is out of the way.



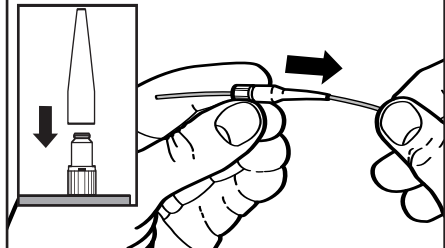
SC

Slide the boot down the fiber, narrow end first, until it is out of the way.



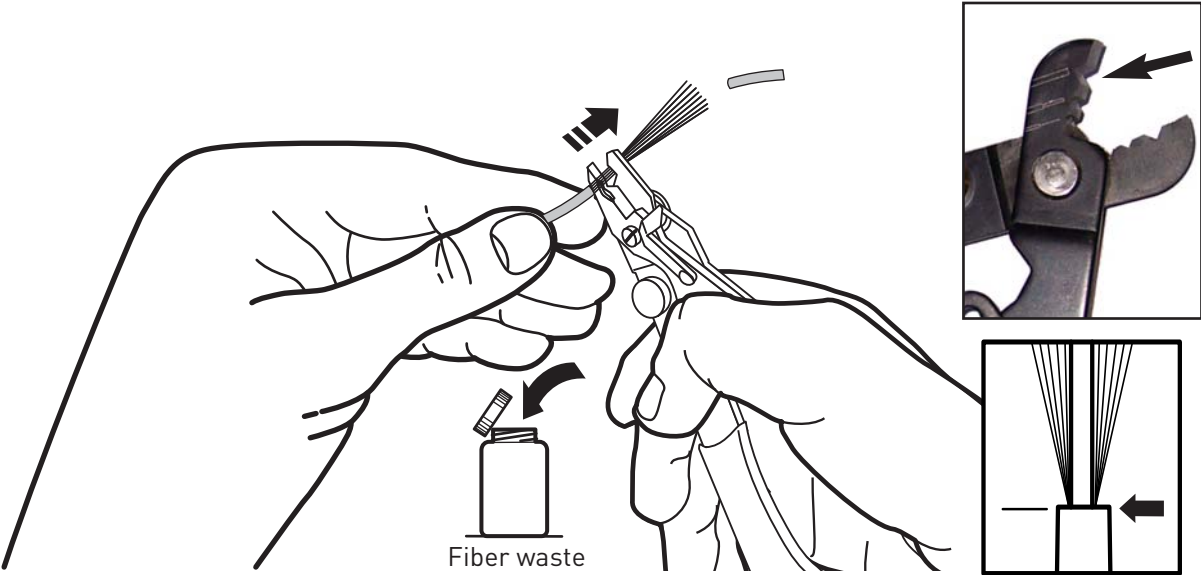
ST

Slide the strain relief boot onto the rear housing until it locks in place. (Holding the boot on its smaller end will ease insertion.) Slide the rear housing with boot, narrow end first.



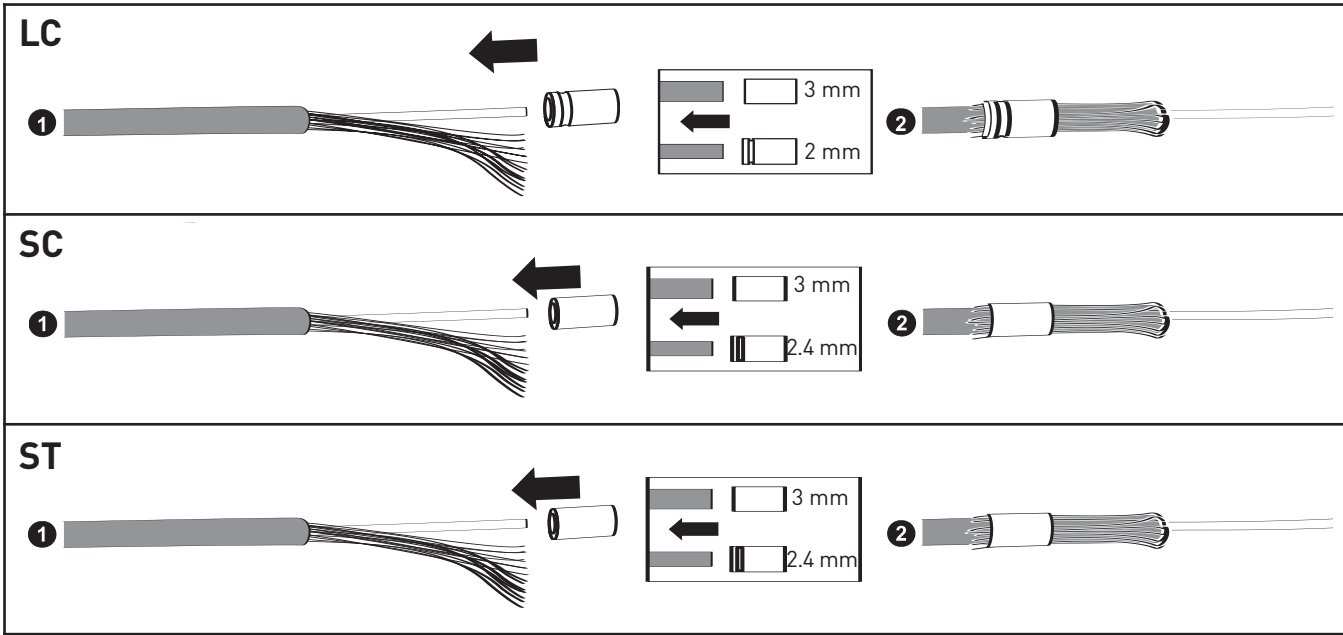
Installation on jacketed fiber

5 Using the universal stripper as shown cut squarely and remove 50 mm of the outer jacket from the end of the cord. The jacket must be cut cleanly and square.



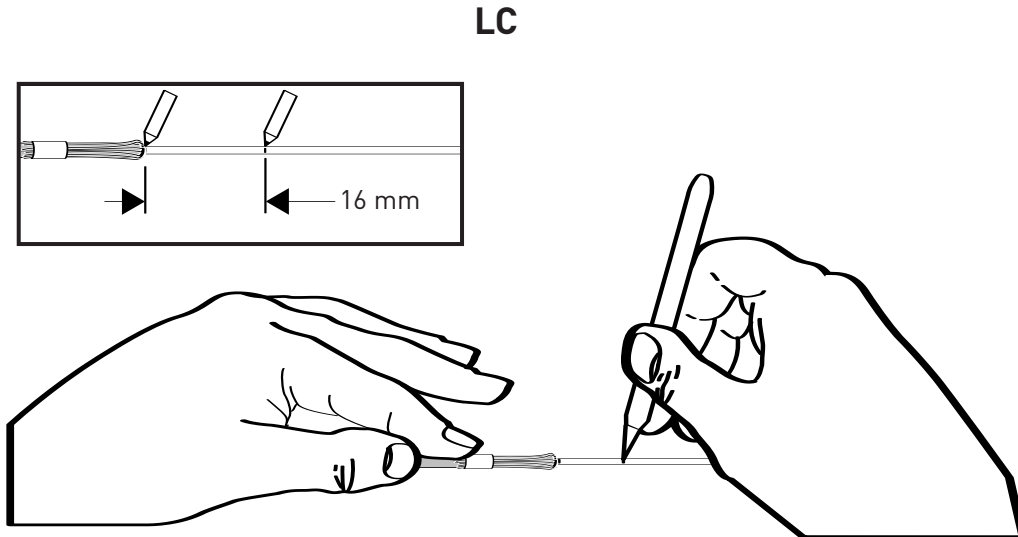
Installation on jacketed fiber

6 Insert the crimp sleeve down the fiber approx. 30 mm from the edge of the jacket, hold the Kevlar with the crimp sleeve.



LC Installation on jacketed fiber

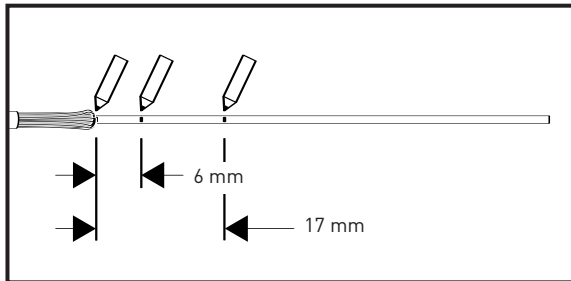
- 7** Make sure all the slack fiber is pushed back inside the jacket. First mark the buffer at the end of the jacket. Then mark it again at 16 mm.



SC Installation on jacketed fiber

8a For 2.0 mm to smaller than 2.4 mm cord

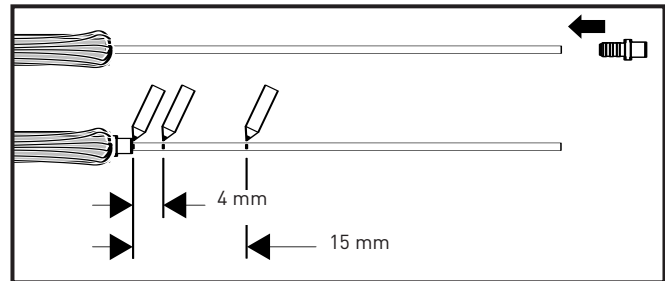
Make sure all the slack fiber is pushed back inside the jacket. First mark the buffer at the end of the jacket. Mark it again at 6 mm and 17 mm.



8b For 2.4 mm to 3.0 mm cord

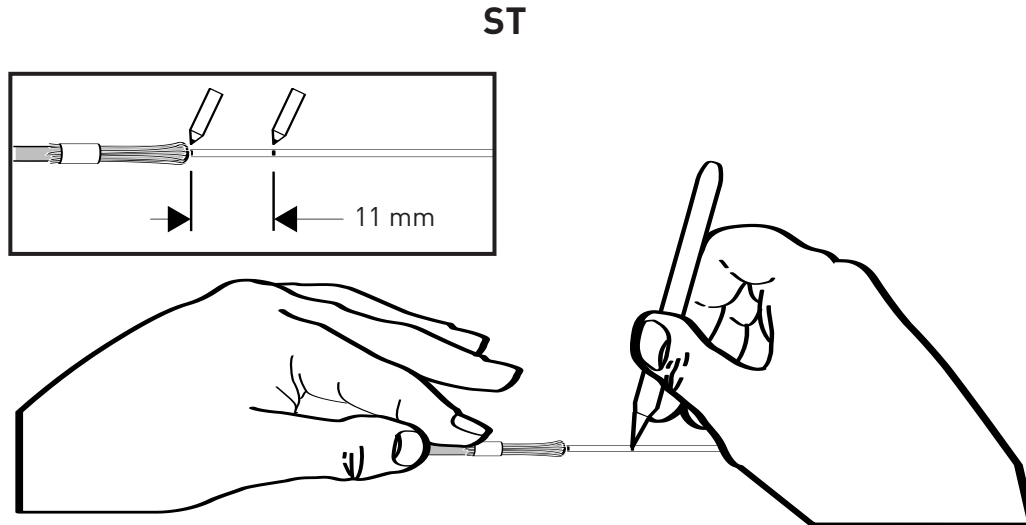
Make sure all the slack fiber is pushed back inside the jacket. Insert the cord adapter as shown. First mark the buffer at the end of the cord adapter. Mark it again at 4 mm and 15 mm.

SC



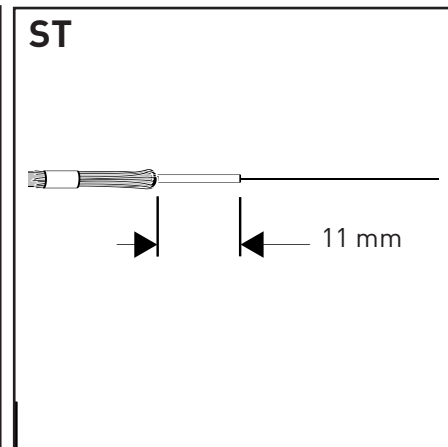
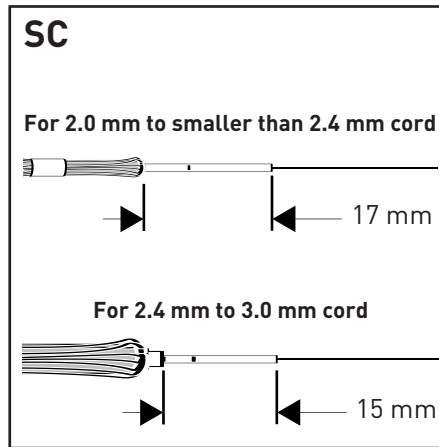
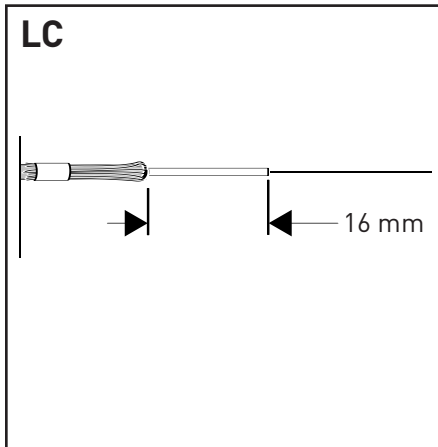
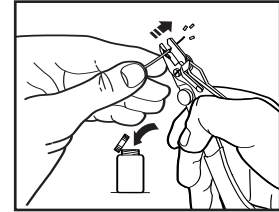
ST Installation on jacketed fiber

- 9 **Make sure all the slack fiber is pushed back inside the jacket.** First mark the buffer at the end of the jacket. Then mark it again at 11 mm.



Installation on jacketed fiber

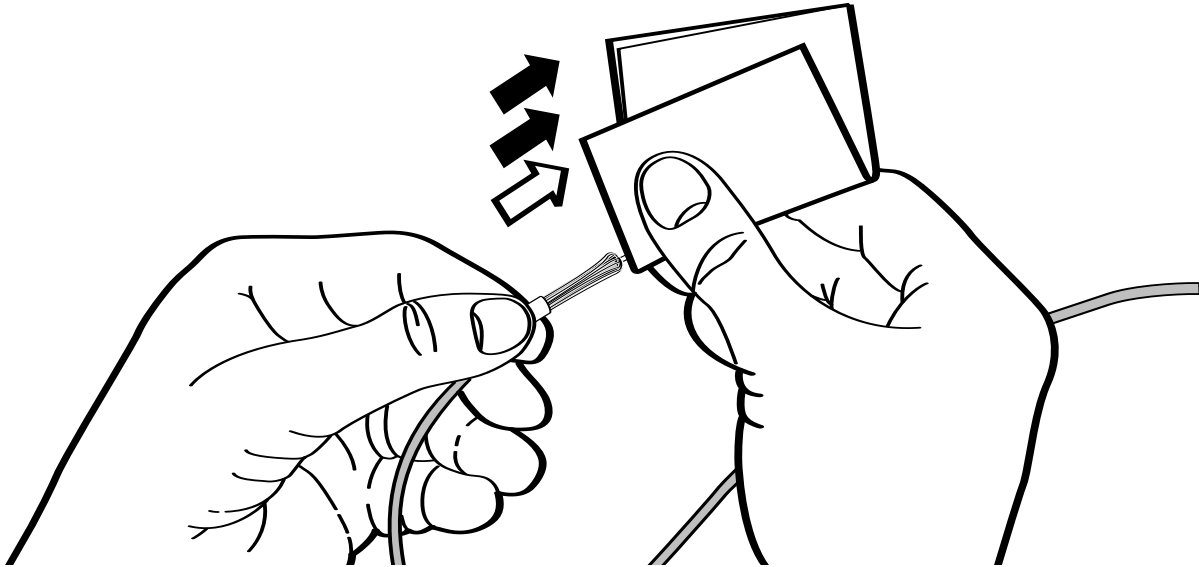
10 Hold the fiber on the exposed buffer section. Strip the fiber to the mark. Be sure to strip the buffer from the fiber in small (5 mm) sections to avoid breaking the fiber.



* If unfamiliar with stripping optical fiber, it is advised to practice using a spare piece of fiber.

Installation on jacketed fiber

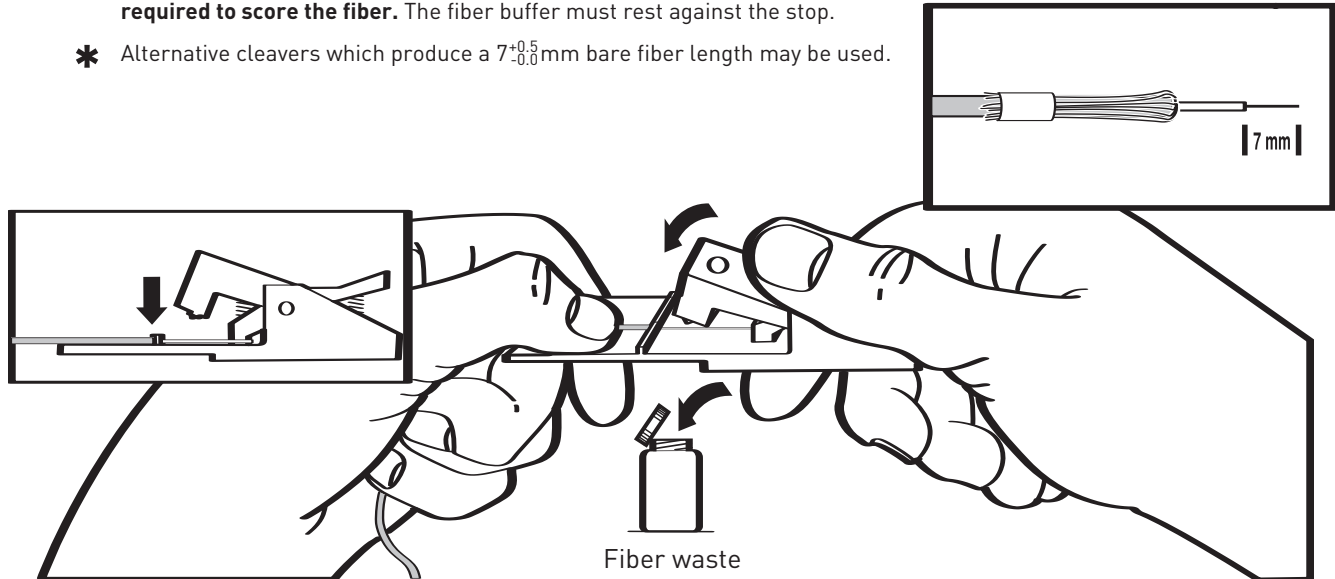
- 11** Carefully clean the bare fiber with a folded alcohol wipe or alcohol soaked lint-free paper. Use two or three passes. Avoid touching the bare fiber, or laying it down on the table, after it has been cleaned.



Pre-Set Cleaver Installation on jacketed fiber

12^a Cleave the fiber 7 mm from the end of the buffer. **Be sure to read and understand the procedure included with your cleaver that is provided with your Ortronics® Field Installation Kit prior to attempting this step.** (The procedure can be downloaded from the Ortronics web site at [http://www.ortronics.com/us/resources/technical-information/.](http://www.ortronics.com/us/resources/technical-information/))

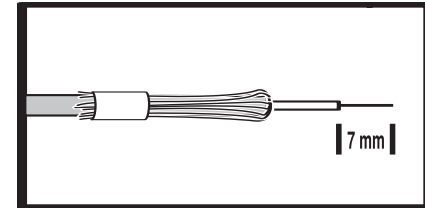
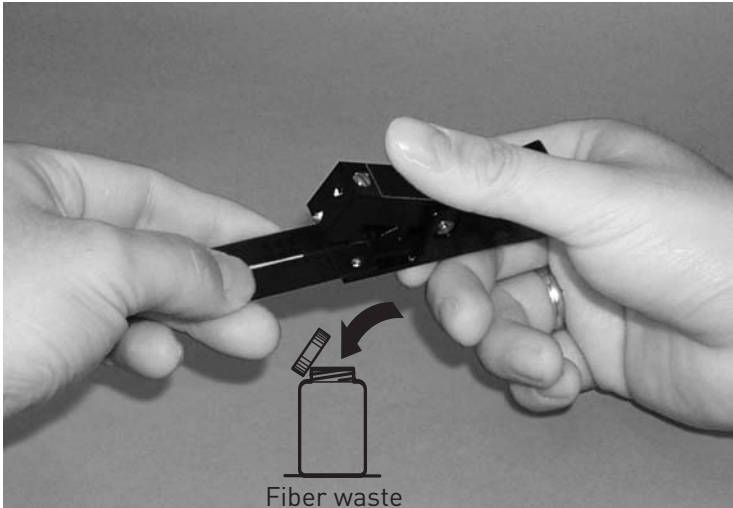
- * If unfamiliar with cleaving, it is advised to practice using a spare piece of fiber. **Generally, a light touch is all that is required to score the fiber.** The fiber buffer must rest against the stop.
- * Alternative cleavers which produce a $7^{+0.5}_{-0.0}$ mm bare fiber length may be used.



Adjustable Cleaver Installation on jacketed fiber

12^b Cleave the fiber 7 mm from the end of the buffer. **Be sure to read and understand the procedure included with your cleaver that is provided with your Ortronics® Field Installation Kit prior to attempting this step.** (The procedure can be downloaded from the Ortronics web site at [http://www.ortronics.com/us/resources/technical-information/.](http://www.ortronics.com/us/resources/technical-information/))

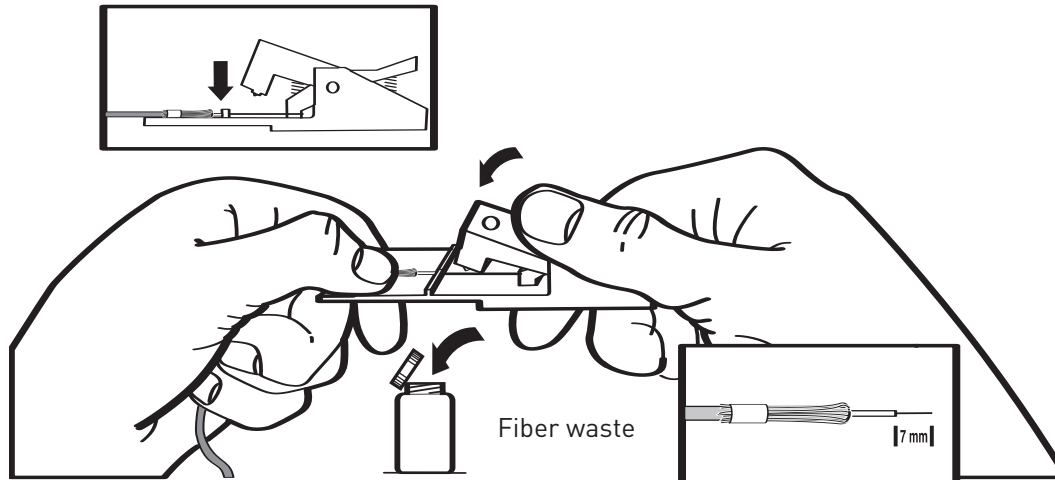
- * If unfamiliar with cleaving, it is advised to practice using a spare piece of fiber. **Generally, a light touch is all that is required to score the fiber.** The fiber buffer must be set to produce a $7^{+0.5}_{-0.0}$ mm bare fiber length.
- * Alternative cleavers which produce a $7^{+0.5}_{-0.0}$ mm bare fiber length may be used.



Installation on jacketed fiber using preset cleaver

13 Press the buffer into place on the cleaver, and cleave the fiber 7 mm from the end of the buffer. Be sure to read and understand the operating instructions included with the cleaver. Using tweezers, discard waste fiber into the proper waste container.

- * If unfamiliar with cleaving, it is advised to practice using a spare piece of fiber. **Generally, a light touch is all that is required to score the fiber.** The fiber buffer must rest against the stop.
- * Alternative cleavers which produce a $7^{+0.5}_{-0.0}$ mm bare fiber length may be used.

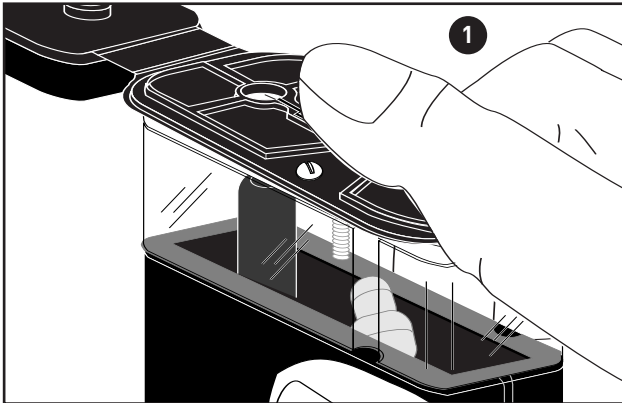


Installation on jacketed fiber

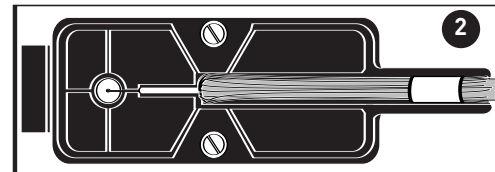
14 Use the microscope to check the quality of the cleave. Pointing the microscope at a white surface will provide a brighter image.

* **Note:** If the Ortronics® Precision Cleave Tool (OR-60300189) is used, cleave inspection with a microscope is not required.

1 Turn microscope over and place fiber on stage.

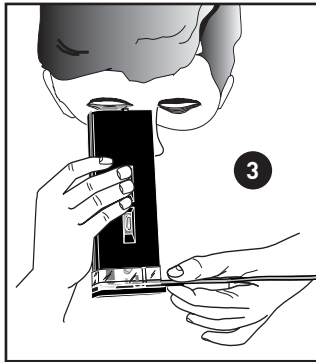


2 Make sure fiber position is as illustrated.

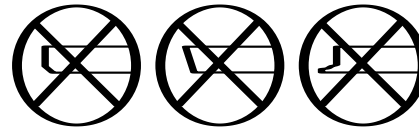


Installation on jacketed fiber

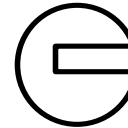
- 3** Close stage and check fiber. It is recommended to rotate the fiber 90° - 180° to verify from different angles.



*** Note:** Batteries are not required.



Unacceptable cleaves

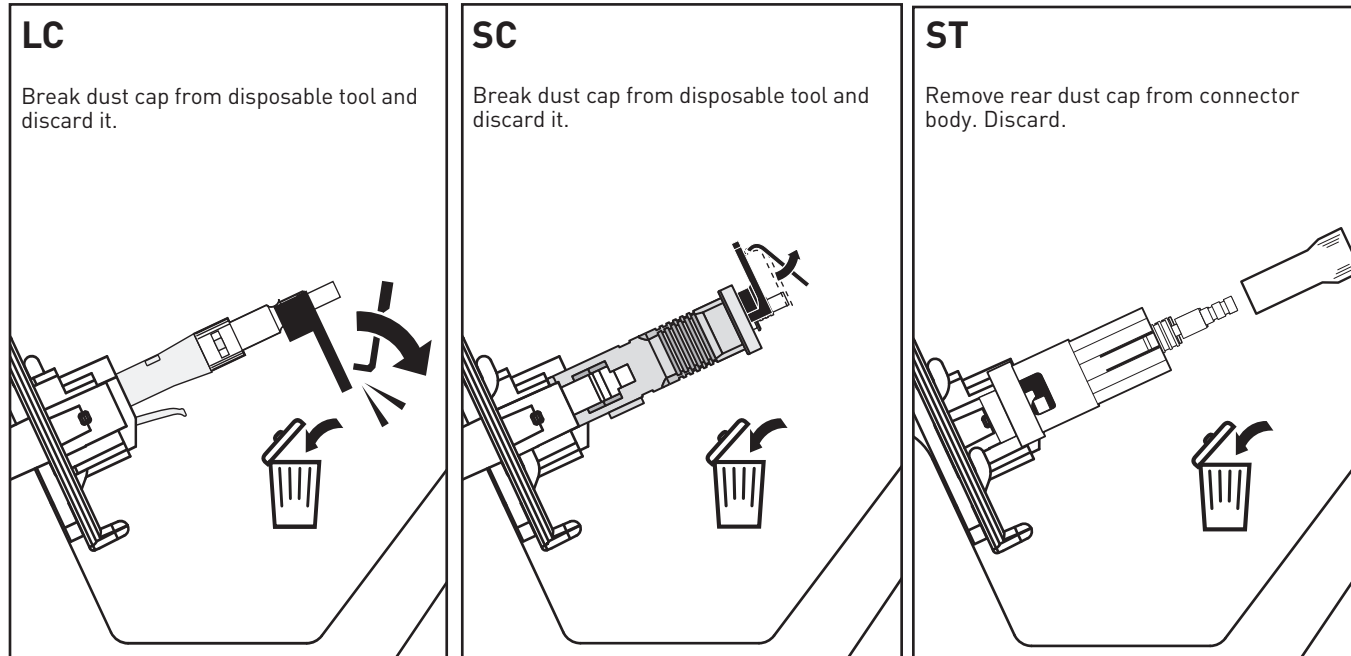


Acceptable cleave

If the cleave is unacceptable, then the fiber must be re-prepared starting from step 5. If fiber or fiber endface appear dirty, clean it as in step 11.

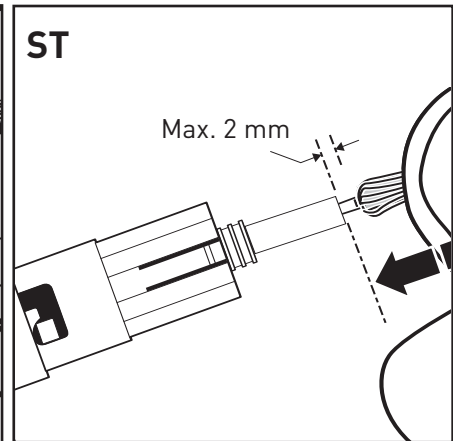
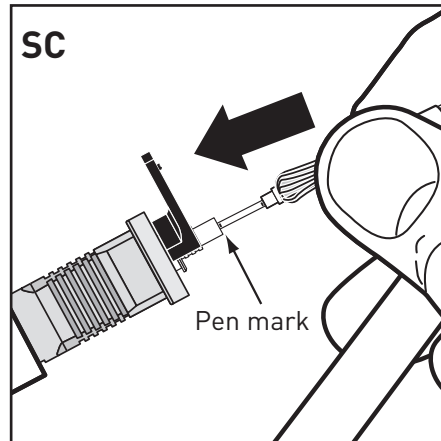
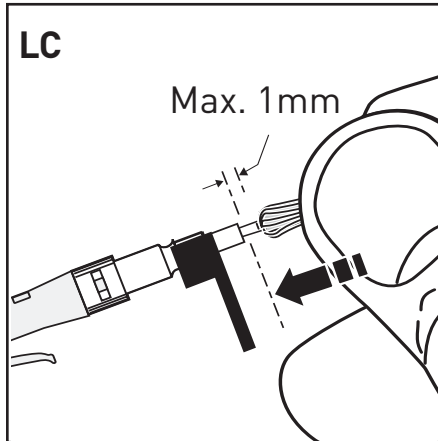
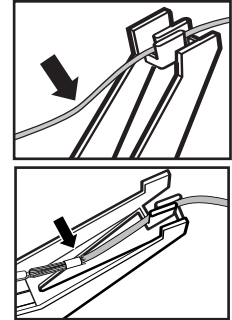
Installation on jacketed fiber

15



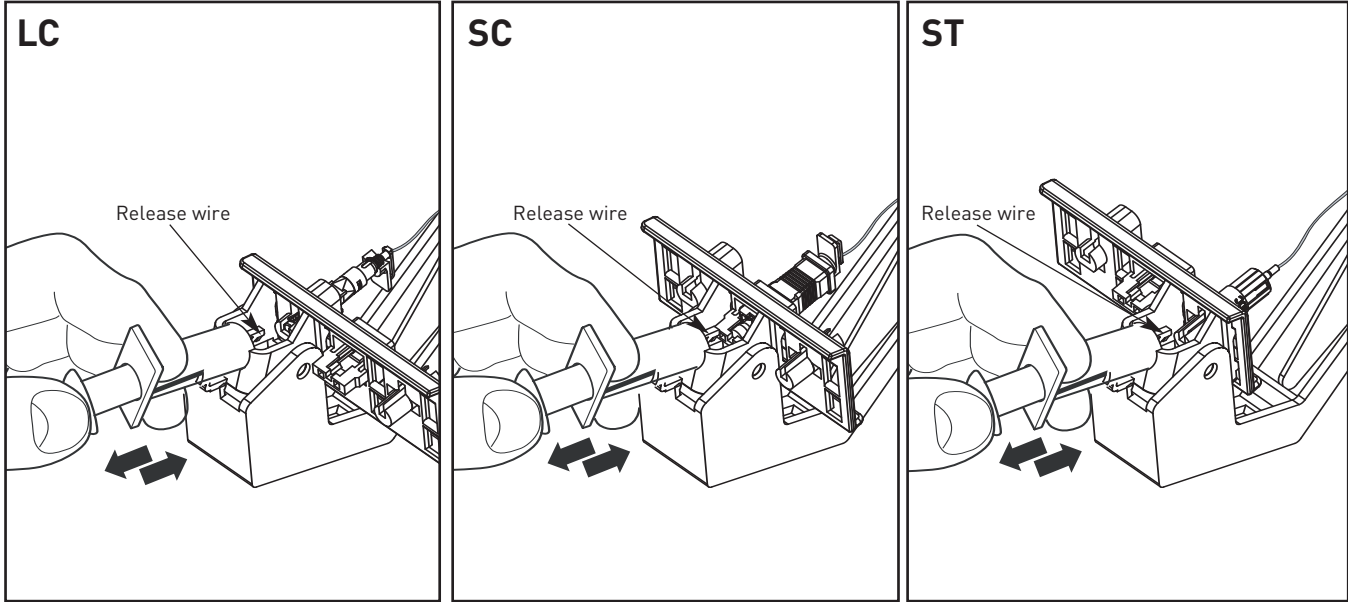
Installation on jacketed fiber

16 Carefully insert the bare fiber into the stem of the connector until you feel the fibers make contact. Gently twisting the fiber may ease insertion. Do not twist or remove the fiber once it is fully inserted. When fully inserted, the pen mark on the buffer should be near the edge of the stem of the connector. Clamp the fiber into the clamp of the installation tool. Must be a bow of approximately 15mm-20mm to maintain a contact between the end faces of the fibers.



Installation on jacketed fiber

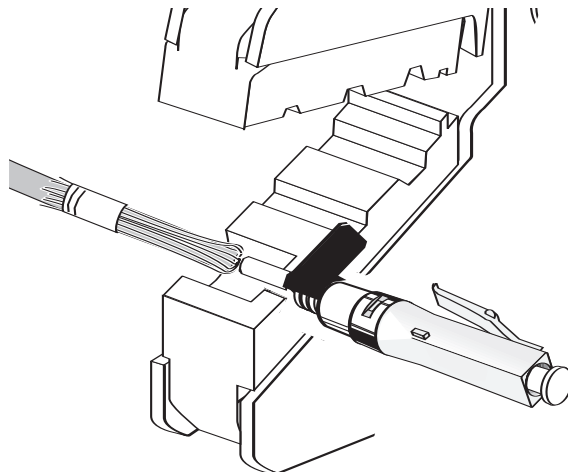
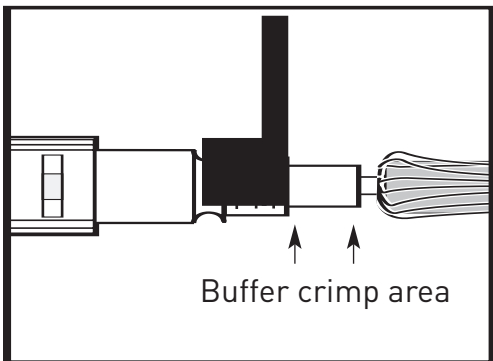
17 Depress the installation tool plunger. Ensure it hooks the release wire, then **slowly** release the plunger.



LC Installation on jacketed fiber

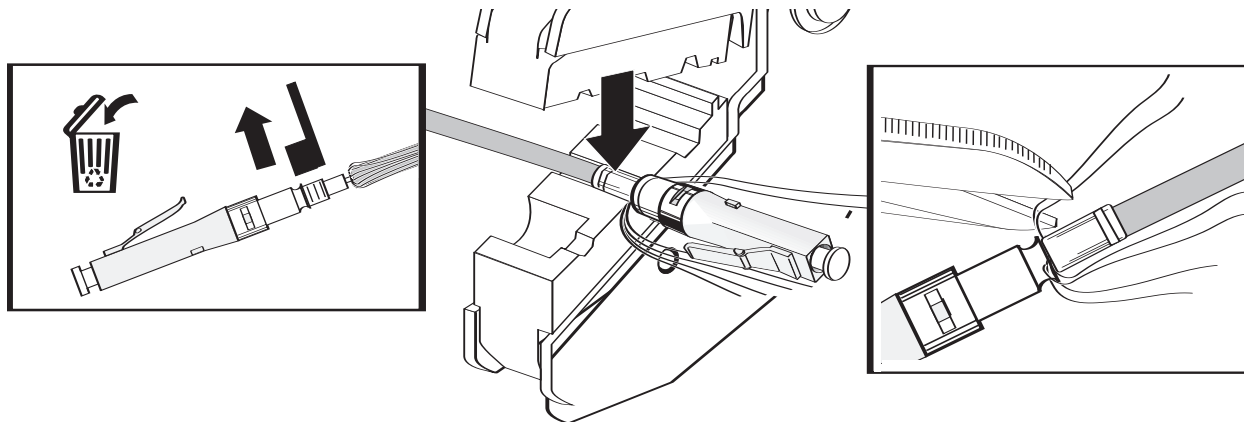
18 Unclamp the cord. **Carefully** remove the connector from the installation tool. Hold the crimping tool vertically and rest the crimping tool against the disposable tool tab to ensure it is aligned properly. The disposable tool must be rotated in order for its tab to be pointing at the crimp tool handle. Using the first and smallest die (.068 hex) on the crimping tool, strongly crimp the stem on the buffer at the “buffer crimp area”, making sure neither the jacket nor any aramid yarn is in the way. The smallest diameter hex face is against the disposable tool tab.

- * Make sure that the crimp tool you are using is in proper operating condition before attempting this step. Also make sure that the tool is set to the settings shown in the Technical Bulletin—OptiMo® Field Installable Connectors document that is provided with your Ortronics® Field Installation Kit. (The document can be downloaded from the Ortronics web site at <http://www.ortronics.com/us/resources/technical-information/>.)



LC Installation on jacketed fiber

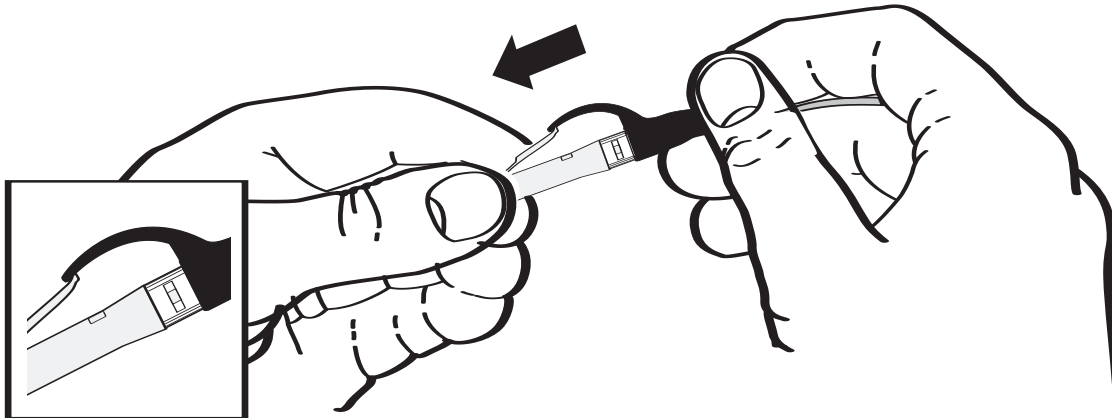
- 19** Remove disposable tool and discard it. Gently pull the Kevlar towards the connector to make sure there is no slack. Slide the crimp sleeve over the Kevlar. Spread the Kevlar evenly around the connector. **Carefully** remove the connector from the installation tool. Ensure the crimp sleeve is against the rear of the connector and strongly crimp the crimp sleeve using the middle die (.128 hex) of the crimping tool. Now you can cut excess aramid yarn.



LC Installation on jacketed fiber

20 **Holding the boot by its collar**, align the anti snag with the latch of the LC connector, slide it onto the rear of the connector until its step reaches the connector body. The installation is now completed.

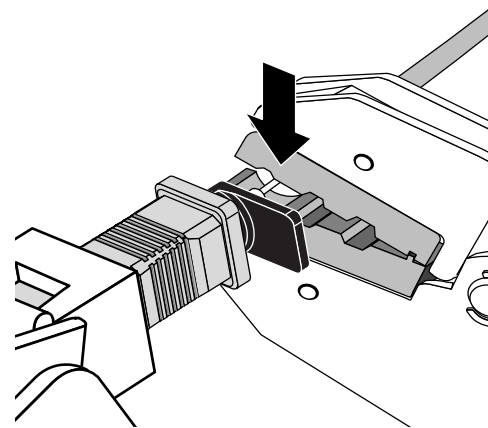
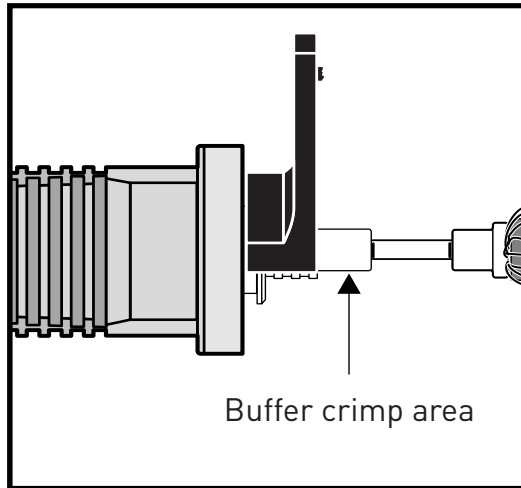
* Be sure to clean the connector as described in the "Cleaning Procedures" section before using the connector (See page 64).



SC Installation on jacketed fiber

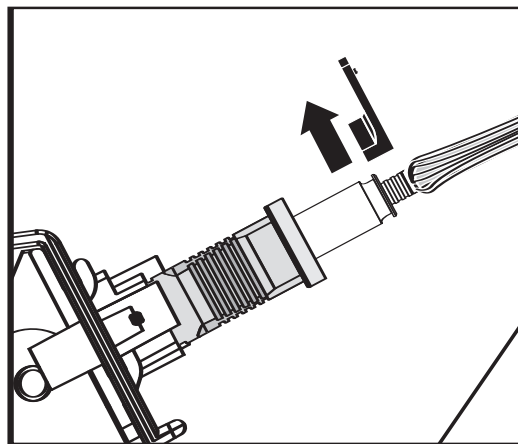
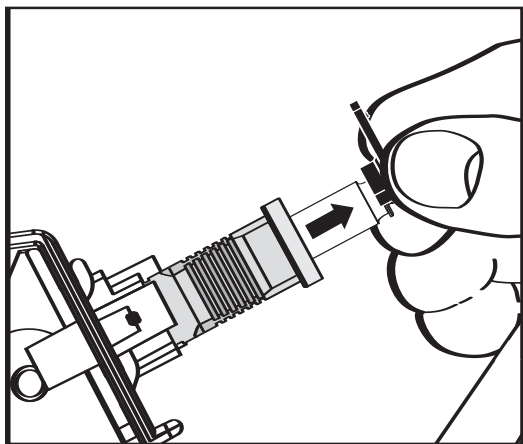
21 Rest the crimping tool against the disposable tool tab to ensure it is aligned properly. The disposable tool must be rotated in order for its tab to be pointing at the crimp tool handle. Using the first and smallest die (.068 hex) on the crimping tool, strongly crimp the stem on the buffer at the “buffer crimp area”, making sure neither the jacket nor any aramid yarn is in the way. The smallest diameter hex face is against the disposable tool tab.

- * Make sure that the crimp tool you are using is in proper operating condition before attempting this step. Also make sure that the tool is set to the settings shown in the Technical Bulletin—OptiMo® Field Installable Connectors document that is provided with your Ortronics® Field Installation Kit. (The document can be downloaded from the Ortronics web site at <http://www.ortronics.com/us/resources/technical-information/>.)



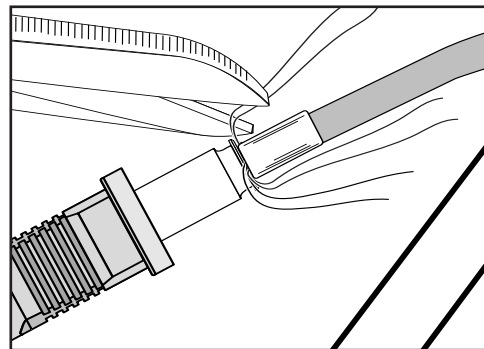
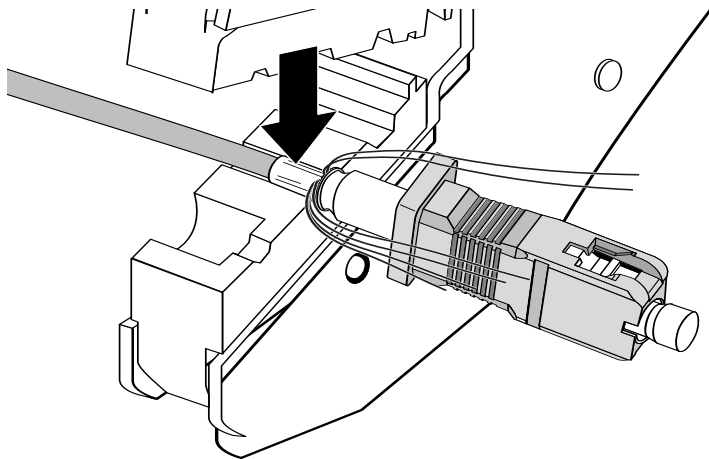
SC Installation on jacketed fiber

22 Grab the disposable tool as shown. Pull in order to expose approximately 8 mm of the sliding part **and until a click is heard**. During this operation, if you are using the cord adaptor, hold it carefully and facilitate its mating with the sliding part. Remove the tool and discard it.



SC Installation on jacketed fiber

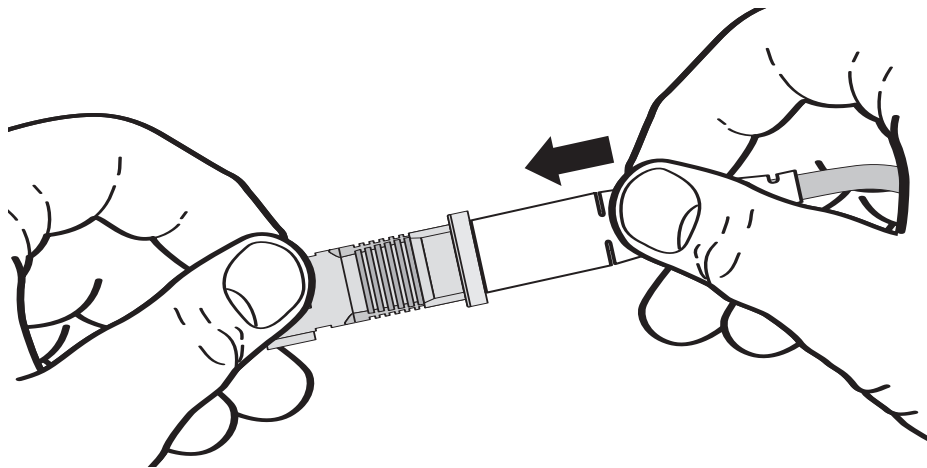
- 23** Slide the crimp sleeve farther down the fiber to release the aramid yarn. Gently pull the aramid yarn towards the connector to make sure there is no slack. Slide the crimp sleeve over the aramid yarn. Spread the aramid yarn evenly around the connector. **Carefully** remove the connector from the installation tool. Ensure the crimp sleeve is against the rear of the connector and strongly crimp the crimp sleeve using the middle die (.128 hex) of the crimping tool. Now you can cut excess aramid yarn.



SC Installation on jacketed fiber

24 Holding the boot on its ribbed section, slide it onto the rear of the connector until it snaps in place. The installation is now complete.

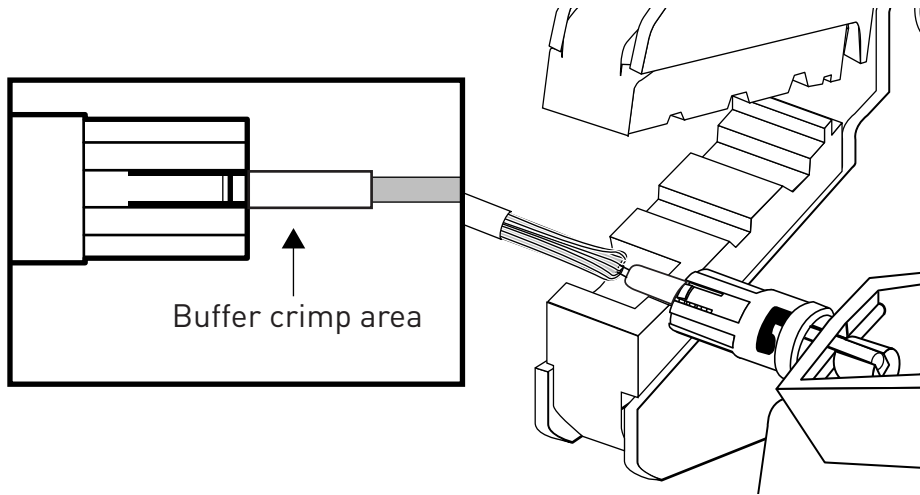
* Be sure to clean the connector as described in the "Cleaning Procedures" section before using the connector (See page 64).



ST Installation on jacketed fiber

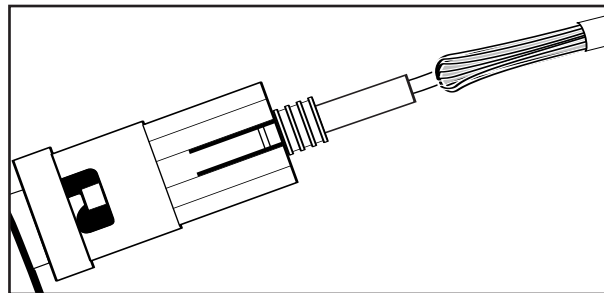
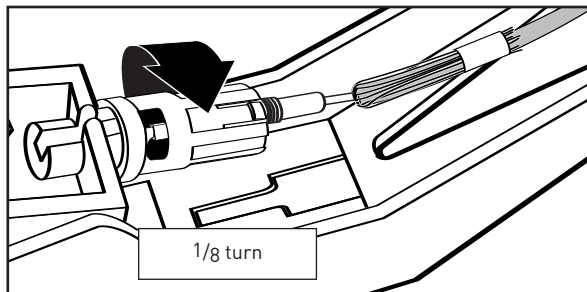
25 Disengage coupling nut by pushing and rotating the connector body 1/4 turn counterclockwise in order to unlock the connector from the installation tool. Rest the crimping tool against the connector body to ensure it is aligned properly. Using the first and smallest die (.068 hex) on the crimping tool, crimp strongly the stem on the buffer at the “buffer crimp area”, making sure neither the jacket nor any aramid yarn is in the way. The smallest diameter hex face is against the rear of the connector.

- * Make sure that the crimp tool you are using is in proper operating condition before attempting this step. Also make sure that the tool is set to the settings shown in the Technical Bulletin—OptiMo® Field Installable Connectors document that is provided with your Ortronics® Field Installation Kit. (The document can be downloaded from the Ortronics web site at <http://www.ortronics.com/us/resources/technical-information/>.)



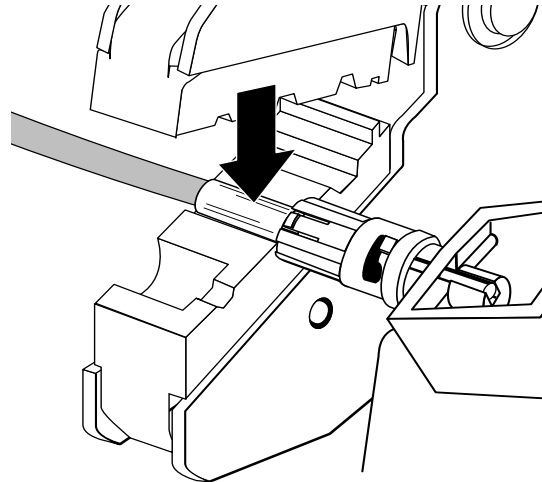
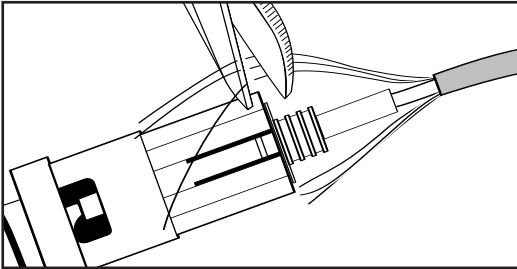
ST Installation on jacketed fiber

26 Reinsert the connector in the installation tool and lock it in place. Turn the connector body housing 1/8 turn counterclockwise so the housing is resting as shown.



ST Installation on jacketed fiber

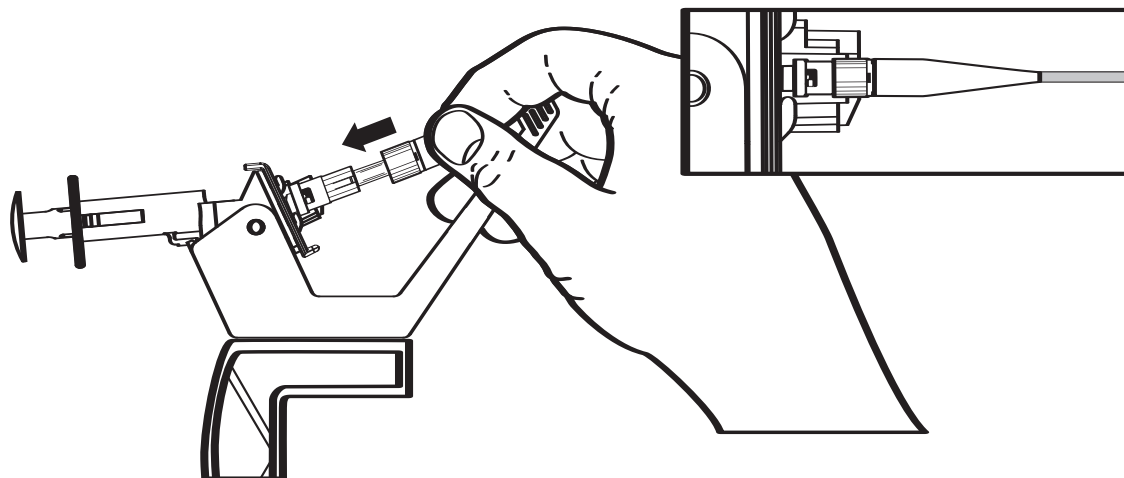
- 27** Slide the crimp sleeve farther down the fiber to release the aramid yarn. Gently cut the aramid yarn ensuring that it reaches the end of the connector body. **Spread the aramid yarn evenly around the stem of the connector.** Slide the crimp sleeve down the fiber toward the connector. Ensure the crimp sleeve is against the retaining ring at the rear of the connector body and strongly crimp the crimp sleeve using the middle die (.128 hex) of the crimping tool.



ST Installation on jacketed fiber

28 Unclamp the cord. Align and press the rear housing with boot into the front housing until a click is heard. Remove the connector from the installation tool. The installation is now complete.

* Be sure to clean the connector as described in the “Cleaning Procedures” section before using the connector.



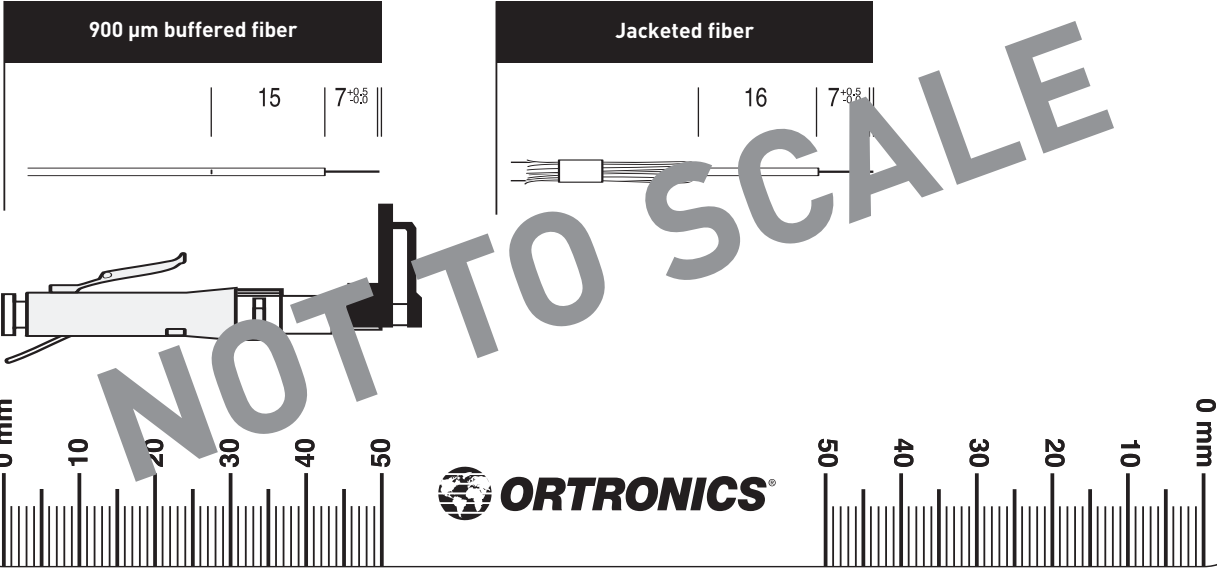
Cleaning procedures

1. Wipe completely around the connector ferrule a few times with a lint-free alcohol soaked wipe. Then wipe across the end of the ferrule.
2. Repeat step 1 with a dry wipe.
3. Blow compressed gas across the end of the ferrule (optional but recommended).
 - * Do not allow ferrule to touch anything before inserting into coupling.
 - * Preferred alcohol is ethanol but isopropyl alcohol may be used.
 - * A dry cleaning tape system may also be used.

Notes

Fiber Preparation Guide

OptiMo® LC Fiber Preparation Guide (for Multimode and Singlemode)



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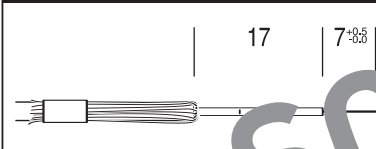
Fiber Preparation Guide

OptiMo® SC Fiber Preparation Guide (for Multimode and Singlemode)

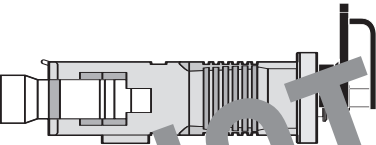
900 μm buffered fiber



Smaller than 2.4 mm cord

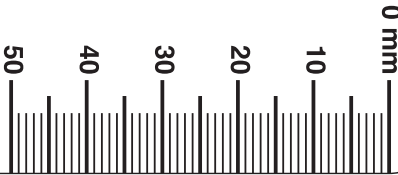


2.4 mm cord or larger



	Crimp sleeve	Cord adapter
< 2.4 mm	NO	NO

	Crimp Sleeve	Cord adapter
2.4 mm ○	2.4 mm	YES
3 mm ○	3 mm	YES

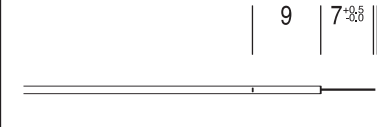


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Fiber Preparation Guide

OptiMo® ST-Type Fiber Preparation Guide (for Multimode and Singlemode)

900 μ m buffered fiber



Jacketed fiber



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