

CRESFIBER-TK

CresFiber Termination Kit

1 Termination Kit Contents

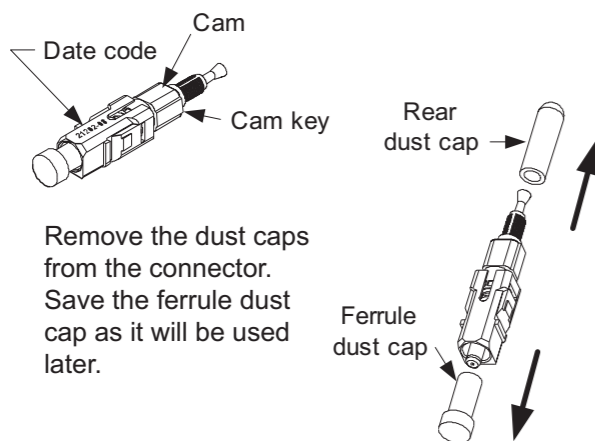
The Crestron® CRESFIBER-TK CresFiber Termination Kit comes with all the tools required for installing SC-compatible UniCam connectors to CresFiber fiber optic cables.

The tools include the following:

- Pretium UniCam Installation Tool
- Pretium Cleaver
- Cable Jacket Stripping Tool
- Dual-Hole Fiber Optic Stripping Tool
- UniCam Crimp Tool
- UniCam Connectors and associated parts
- Retractable Black Permanent Marker
- Scissors
- Fiber Wipes and Fiber Optic Cleaning Fluid

2 Connector Preparation

The connector cam may move slightly in shipment, so verify the connector is in its open position. SC connectors are in their open position when the cam key (the slightly raised rectangle) is 90 degrees from the date code.

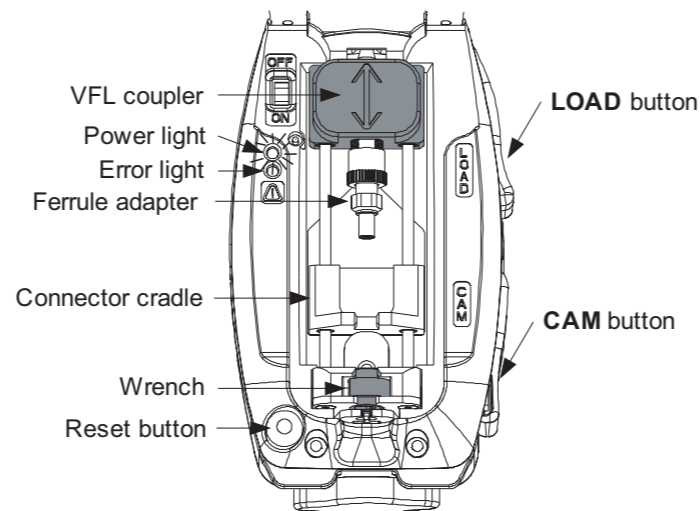


Remove the dust caps from the connector. Save the ferrule dust cap as it will be used later.

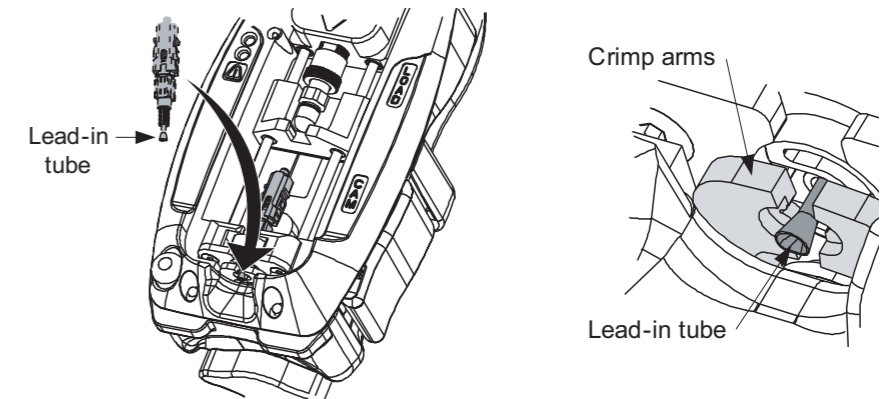
3 Tool Preparation

Prepare the Pretium UniCam Installation Tool using the following procedure.

1. Open the cover, ensure the tool is turned ON and verify the following:
 - a. The Power light is illuminated and not flashing.
 - b. The VFL coupler and wrench are in their starting positions, with the VFL coupler in the upward position and the wrench closed. If not, press the Reset button.



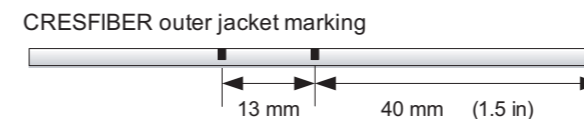
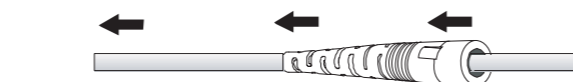
2. Press and hold the **LOAD** button in order to move the connector cradle away from the wrench.
3. Insert the connector into the wrench with the date code facing up, lead-in tube first, as shown in the illustrations below. Guide the connector into the connector cradle and slowly release the **LOAD** button at the same time. You must make sure the connector (with the dust caps removed) sits firmly in the connector cradle, with the lead-in tube protruding through the crimp arms.



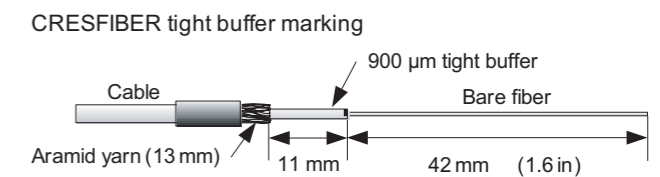
4. Slide the VFL coupler down and ensure the ferrule adapter is completely seated on the connector.
5. Close the tool cover and check for the Error light. The light should remain OFF. If the light is flashing, redo steps 1 through 5.

4 Fiber Preparation

1. Begin by removing about 8 inches (~200 mm) of the outer cable insulation to expose the four subjackets of the CresFiber cables. To avoid damage to the fiber, be careful not to bend the wire sharply. There is a red ripcord inside the jacket that can tear the outer insulation for easy removal.
2. Select one of the cables and slide a large strain relief boot onto it, as shown in the illustration below.
3. Use the included marker pen to mark a point 40 mm from the end of the cable and a second point 13 mm from the 40 mm mark, as shown in the illustration to the right.
4. Strip off the fiber outer jacket from the 40 mm mark using the 16 AWG notch in the included cable jacket stripping tool.
5. Use the included scissors to trim the aramid yarn to be flush with the end of the outer jacket.
6. Strip off the 13 mm section of outer jacket using the 16 AWG notch of the stripping tool.
7. Fold the aramid yarn back over the fiber cable jacket and slide a connector crimp ring around 5 mm down the yarn to hold it out of the way, as shown in the illustration to the right.



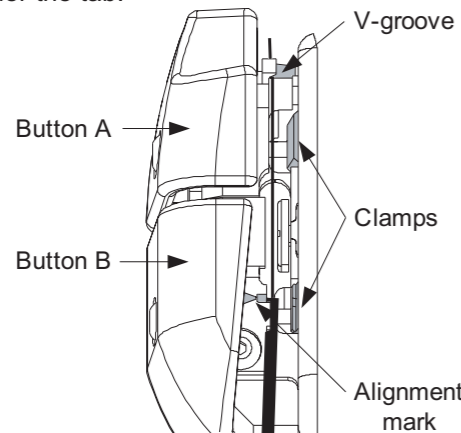
8. Mark the cable jacket 11 mm from the end of the yarn and remove the 900 µm tight buffer and 250 µm outer coating using the included fiber optic stripper.
9. Clean the bare fiber with two passes of an included fiber wipe damped with fiber optic cleaning fluid. Do not touch the bare fiber after this cleaning.



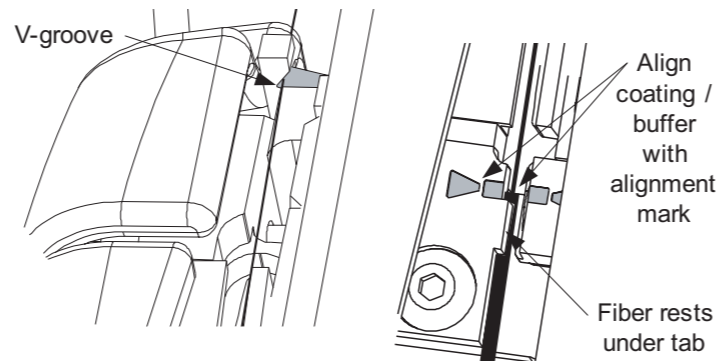
Refer to the latest version of the CRESFIBER-TK Cable Card (Doc. 6833), included with your Termination Kit.

5 Fiber Cleaving

1. Ensure the included Pretium Cleaver is clean and free of fiber. Squeeze buttons A and B at the same time to open the clamps.
2. Place the prepared fiber into the cleaver slot as shown in the illustration below. Make sure the bare fiber is in the V-groove, the buffer or coating is aligned with the alignment mark and the fiber rests under the tab.

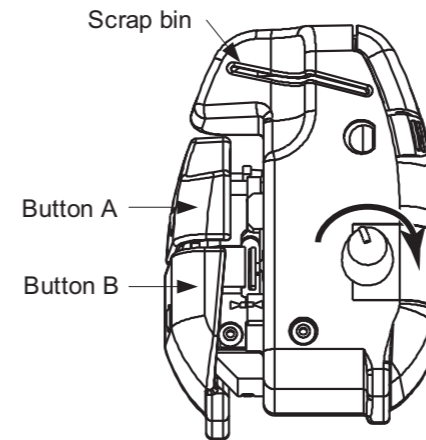


3. Release button B, then button A. Make sure both the bare fiber and the coated fiber are secured by the clamps.



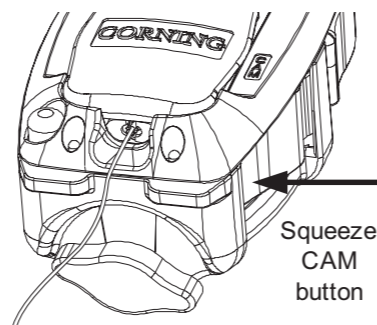
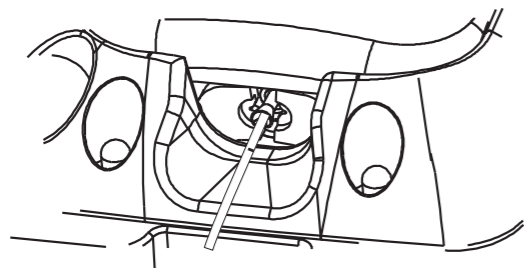
4. Slowly rotate the knob clockwise 360 degrees in order to cleave the fiber.
5. Squeeze button A, remove the scrap fiber and place it into the scrap fiber bin, shown in the illustration to the right.

6. While holding the fiber, squeeze button B and remove the cleaved fiber. The remaining piece of bare fiber should be about 3/8" (10 mm) long.
7. Once the fiber is cleaved, do not allow it to touch anything. If the cleaved fiber does contact something, repeat fiber preparation and re-cleave the fiber.



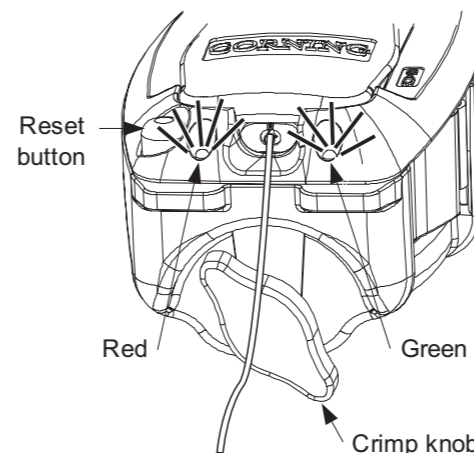
6 Connector Termination

1. Ensure the Pretium UniCam Installation Tool's cover is closed and insert the cleaved fiber into the UniCam connector lead-in tube, as shown in the illustration below. Hold the fiber so it remains fully inserted in the lead-in tube.
2. Press the fiber inward so that a slight bend is created in the fiber. Squeeze the **CAM** button until the button locks.



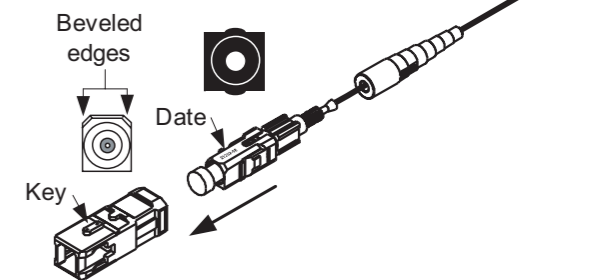
3. Check the termination lights. If the green light is on, proceed to step 4. **DO NOT PRESS THE RESET BUTTON UNTIL THE CONNECTOR IS REMOVED.** If the red light is on, press the Reset button, remove the fiber, recleave the fiber and try again.
4. Turn the crimp knob 180 degrees in either direction to crimp the lead-in tube onto the fiber, locking the connector to the fiber.

5. Open the tool cover, slide the VFL coupler back to its starting position and slightly press the **LOAD** button to release the connector. Lift the connector straight up out of the tool and replace its ferrule dust cap.
6. Press the Reset button to make the tool ready for your next connector.



7 Connector Completion

1. With the clear ferrule dust cap installed, hold the cable and slide the crimp ring back along the jacket, away from the connector, to free the aramid yarn.
2. Flare the yarn around the connector. The end of the yarn should just touch the back of the square cam.
3. Hold the connector and push the crimp ring over the aramid yarn, against the back of the connector's cam.
4. Place the connector crimp ring into the opening of the included Crimp Tool jaws. Squeeze the crimp tool handles until they automatically release. Then remove the connector.
5. Slide the strain relief boot up the back of the connector until it reaches the cam. Install the outer shroud by lining up the date code with the key side of the outer shroud. Push the UniCam assembly into the outer shroud until it snaps into place.



Laser Safety

The Pretium UniCam Installation Tool conforms to the requirements contained in IEC 60825-1:1993 plus Amendments 1:1997 and 2:2001. $P_{max} < 1.0 \text{ mW}$, $\lambda = 635 \text{ nm}$.

LASER LIGHT
DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS (MAGNIFIERS).
CLASS 1M LASER PRODUCT

WARNING: Viewing the laser output with certain optical instruments (for example, eye loupes, magnifiers and microscopes) within a distance of 4 inches (100 mm) may pose an eye hazard.

WARNING: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.