

Fiber Optic Cleaver • User Guide

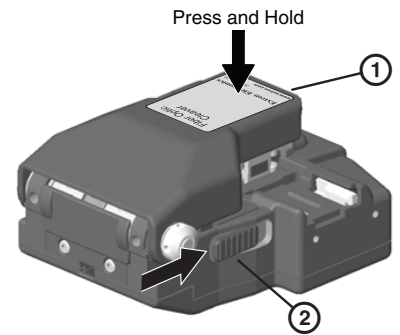
This guide provides instructions for an experienced installer to properly cleave optical glass fibers using the Extron Fiber Optic Cleaver. The cleaver can cut single fiber, 125 μ m diameter strands to any length from 6 mm to 20 mm.

- WARNING:**
- Serious injury can result from improper use of the cleaver.
 - Safety glasses should be worn during fiber preparation and splicing operation. Fiber fragments can be extremely dangerous if they come into contact with your eyes or skin.
 - The cleaver blade is extremely sharp. Personal injury can result from contact with the blade.

Unlocking and Storing the Cutting Lever:

To Unlock the Cutting Lever:

1. Press down and hold the cutting lever, (①).
2. Slide the stopper, (②), to release the cutting lever as shown at right.



Storing the Cleaver:

1. Before storing the cleaver, empty the contents of the fiber scrap container box, see "Fiber Scrap Collector Mechanism Installation and Removal" on page 3.
2. Press the cutting lever, (①), down, until the stopper, (②), can be slid in place to lock it.

Cleave a Fiber Strand

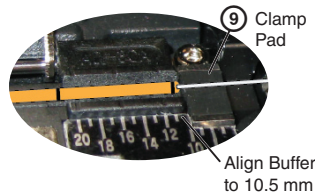
To Cleave a Fiber Strand:

1. Prepare the fiber cable. Refer to the fiber stripping instructions in the *Fiber Optic Termination Kit User Guide*.
2. Clean the exposed fiber.
3. Push the slide button, (③), inward until it locks. See the figure at right.

WARNING: Do not leave a finger in the driving area of the slide button, (③), when cleaving. Personal injury could result.

4. Insert the bare fiber into the open scrap collector and lay it across the two clamp pads. Set the buffer in the groove on the fiber plate, (⑦), and fix it in place by lowering the fiber holder, (⑧).

5. Slide the cable to align the end of the buffer with the 10.5 mm mark on the graduated scale of the cleave gauge, (⑤). The buffer will be very close to touching the clamp pad, (⑨), as shown in the magnified view.

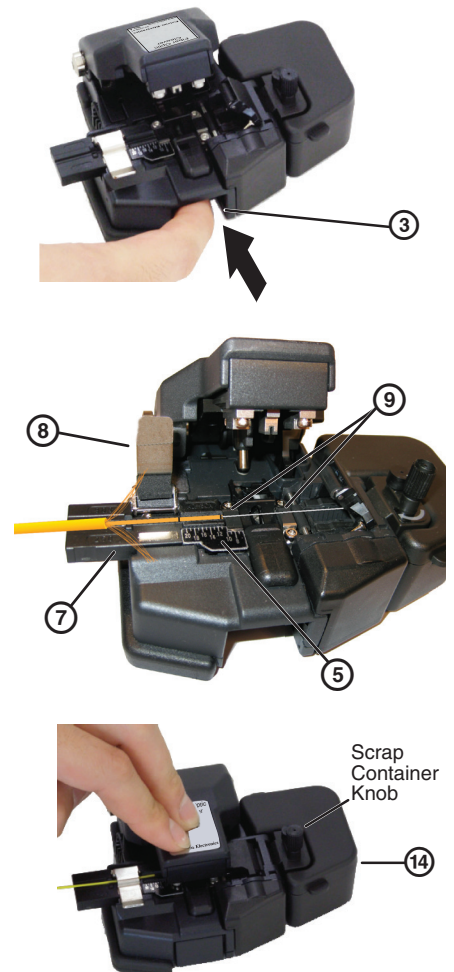


6. Press down the cutting lever, (①), until it reaches the bottom of its travel, then release. A spring force will return it to the open position.

NOTE: Always press the cutting lever all the way down. Releasing pressure on the cutting lever before reaching the bottom may result in poor cleaving quality.

7. Lift the holder, (⑧), and remove the fiber.
8. Turn the knob on the top of the scrap container, (⑭), to drive the fiber scrap into the container.

NOTE: Discard the fiber contents of the scrap container box frequently.



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Maintenance and Adjustments

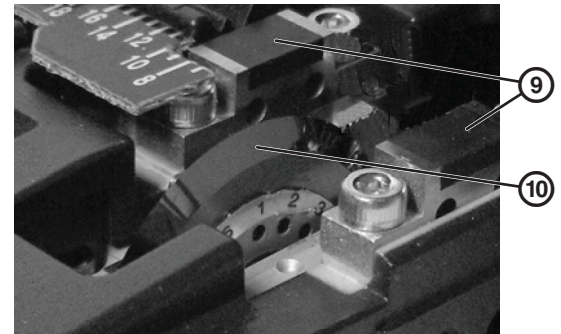
The following section describes three maintenance operations; blade and pad cleaning, blade position, and blade height adjustment, that must be performed regularly to ensure optimum operation of the cleaver.

Cleaning the Cleaver

For proper operation of the cleaver, the blade and clamp pads must be cleaned frequently.

To clean the blade and pads:

1. Remove the blade cover, (⑥), see “Blade Position Adjustment” below.
2. Clean the visible portion of the circular blade, (⑩), and the clamp pads, (⑨), with cotton swabs soaked with a few drops of the included cleaner.
3. Allow to air dry for several minutes, then replace the blade cover.



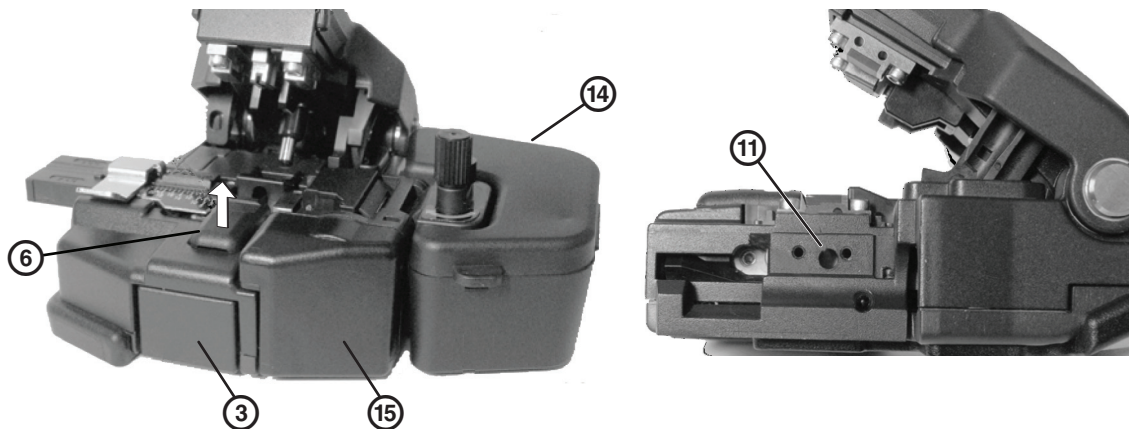
Blade Position Adjustment

The cleaver uses a circular blade with 16 cleaving positions. If the cleaver does not cut properly, or does not cut the fiber cleanly on the first attempt, rotate the blade 1/16th of a turn to the next cleaving position to replace the worn portion of blade with a sharp blade.

To rotate the blade:

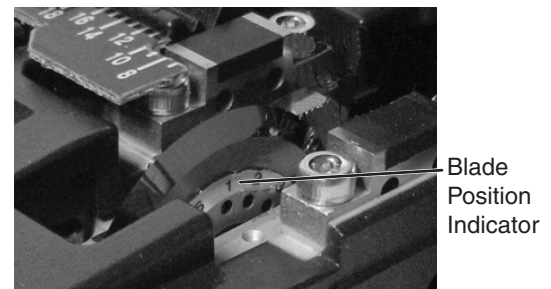
1. Remove the blade cover, (⑥), by prying it up from the housing with a small flat blade screwdriver.

CAUTION: The slide button, (③), must be in its outer position before the blade cover can be removed.



Warning: Do not touch the blade. Personal injury could result.

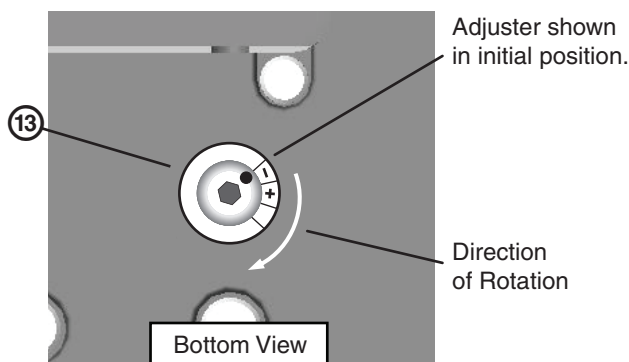
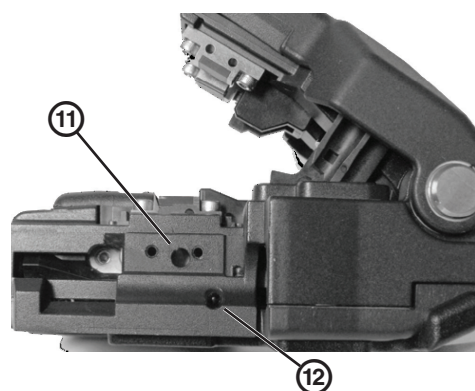
2. Remove the scrap container, (⑭), by pulling it away from the scrap collector mechanism.
3. Using the included 1.5 mm hex wrench, remove the scrap collector mechanism, (⑮), see “To Remove the Scrap Collector:” on the next page.
4. Push the slide button, (③), inward until it locks.
5. Using the included hex wrench, loosen, but do not remove the blade lock screw, (⑩), located between the two scrap collector mechanism screw holes.
6. The circular blade has 16 hole stops to provide positive locating. Rotate the blade one hole stop, or 1/16th of a turn, to the next higher position number indication on the blade using a dental pick or other means to hook a hole stop and rotate the blade.
7. Tighten the blade lock screw, (⑩).
8. Replace the scrap collector mechanism, (⑮), and fiber scrap container box, (⑭).
9. Release the slide button, then replace the blade cover, (⑥).



Blade Height Adjustment

When the circular blade has been rotated one complete revolution (16 positions), its height requires adjustment to compensate for wear.

1. Using the included hex wrench, remove the scrap container, (14), and the scrap collector mechanism, (15), see “Fiber Scrap Collector Mechanism Installation and Removal” below.
2. Using the hex wrench, loosen, but do not remove the blade lock screw, (11).
3. Loosen, but do not remove the height adjuster lock screw, (12).



4. On the bottom of the cleaver, with the hex wrench turn the adjuster, (13), clockwise so the reference dot aligns with the next position mark. Never attempt to rotate the adjuster more than a single position mark.
5. Tighten the height adjuster lock screw, (12).
6. Move the blade so that position 1 is at the top, see “Blade Position Adjustment” on the previous page, then tighten the blade lock screw, (11).

The 16 blade positions may now be used again. After another full rotation it may be raised again.

Blade Replacement

After the circular blade has been raised three times it must be replaced. Contact Extron for ordering details.

Fiber Scrap Collector Mechanism Installation and Removal

The fiber scrap collector mechanism, (15), must be installed before using the cleaver and removed for most maintenance procedures.

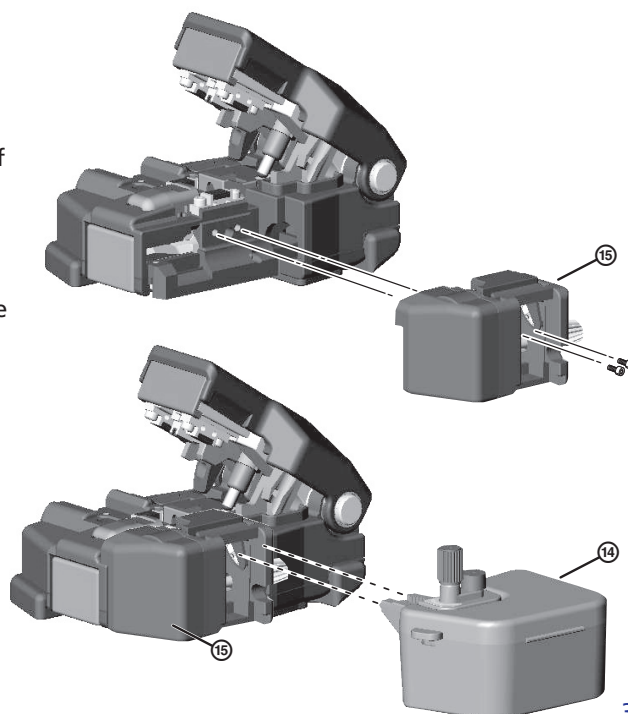
Remove the side cover before installing the mechanism, see “Side Cover Removal” on page 4.

To Install the Scrap Collector Mechanism:

1. Insert the gear of the scrap collector mechanism, (15), into the cleaver, then slide it until the screw holes align with the holes of the cleaver.
2. Install two M2x6 screws (included) as shown.
3. Slide the scrap container, (14), in place.
4. After a cleave operation, confirm the scrap collector rollers drive the scrap fiber into the scrap container, (14).

To Remove the Scrap Collector:

1. Remove the scrap container, (14), by pulling it away from the cleaver.
2. Remove the two screws, (uncovered when the scrap container was removed), from the scrap collector mechanism, (15).
3. Slide the scrap collector mechanism, (15), towards the front of the cleaver until the gear clears the housing, then pull it away from the cleaver.

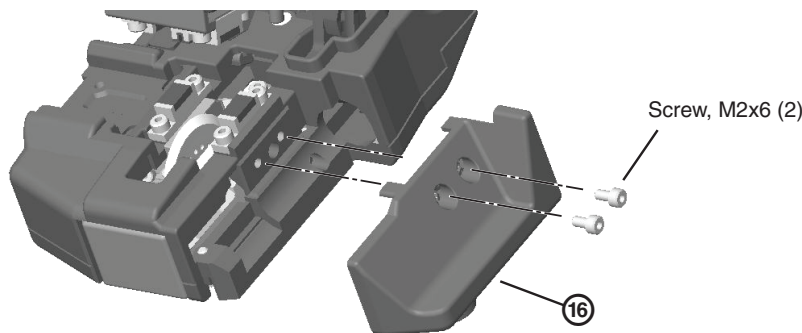


Side Cover Removal

The cleaver ships with a side cover which must be removed before attaching the scrap collector mechanism and scrap container. To remove the side cover:

1. Remove the two M2x6 screws as shown below.
2. Remove the side cover, (16). Do not discard. Place it in the tool case for later use.

NOTE: Install the fiber scrap collector mechanism and container before using the cleaver. See “Fiber Scrap Collector Mechanism Installation and Removal” on page 3.

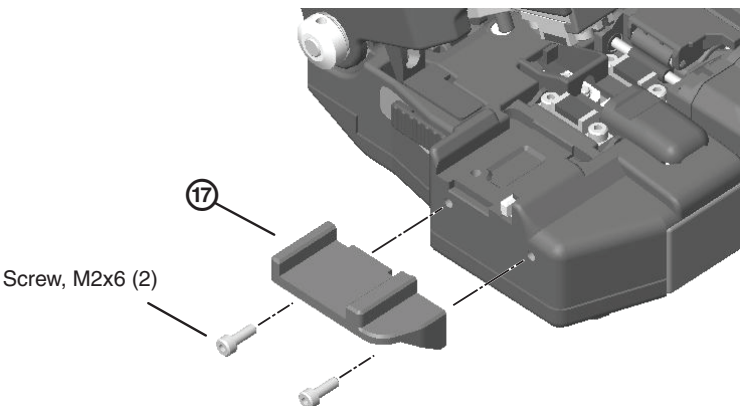


Holder Base Attachment

The cleaver is delivered with the cleave gauge attached. The holder base attachment has been installed. If there is a need to remove it, reverse the following instructions.

To install the holder base:

1. Place the holder base attachment, (17), on the left side of the cleaver so the screw holes align with the holes of the cleaver, see below.
2. Fasten with the two M2x6 screws included with the holder base.



Included Parts

Description	Part Number
Fiber Cleaver	
Fiber Plate	
Fiber Scrap Collector and Mechanism	
Hexagonal Wrench	100-012-09LF
Tool Case	
Screws, M2x6, (x2)	40-362-04LF
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