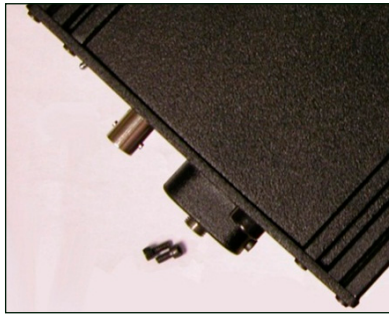


## Replacing the FORJ Optical Fiber

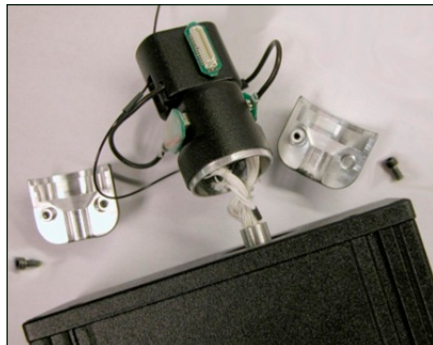
Note: Images are not to scale.

### To remove a currently installed FORJ:

1. Use a 3/32" Allen hex key to remove the two screws securing the fiber optic rotary joint to the commutator face.



2. Use the hex key to remove the two screws securing the encoder clamping plates.



3. Carefully pull the FORJ away from the commutator face until the fiber is free.



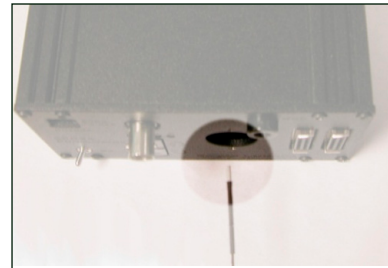
4. Disconnect the fiber from the joint.



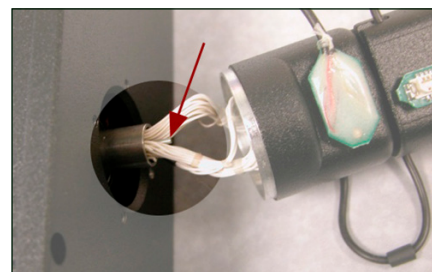
The fiber optic rotary joint (FORJ) assembly includes an FC/PC optical fiber connector and a single channel optical fiber threaded through the module. The FORJ assembly can be removed and re-installed by the user to allow for replacement of the optical fiber. The assembly supports use of fiber with a 1.25 mm cannula [tip].

### To install the FORJ:

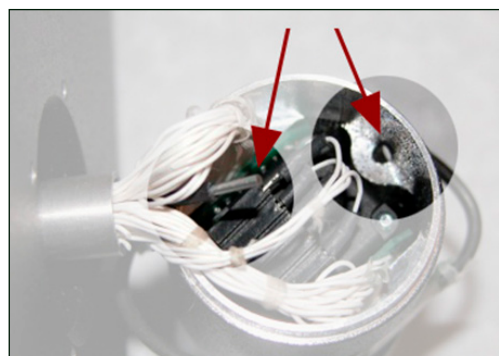
1. Insert metal cannula end of fiber into the center of the gear inside of the ACO32.



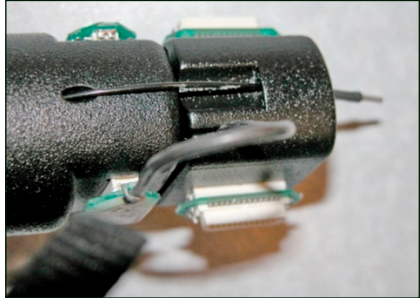
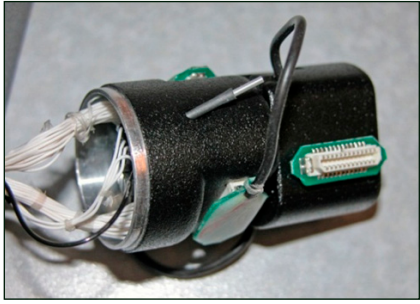
2. Slowly push the fiber through the hole until the end appears among the wires on the other side of the ACO32.



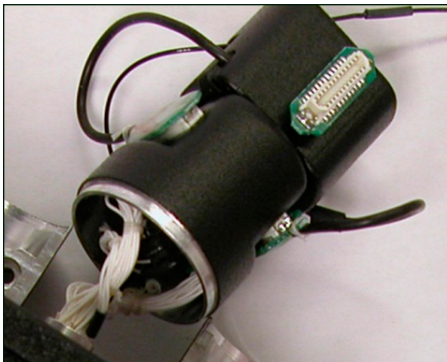
3. Using a pair of tweezers, carefully pull the end of the fiber and insert it into the hole next to the encoder.



4. Pull the end of the fiber through the hole and insert it through the hole in the groove of the connector module.



5. Leave enough slack in the section of fiber between the encoder and connector modules to match the loop of the other wires. A small lightweight tie can be loosely attached to hold the fiber adjacent to the wires.



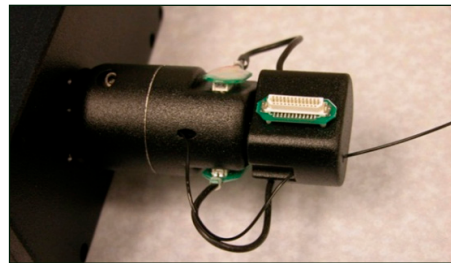
6. Connect the FC/PC connector end of the fiber to [the internal section of] the fiber optic rotary joint.



7. Slowly pull all of the excess fiber through the ACO32 until the FC/PC connector is inside the ACO32 and the fiber optic rotary joint plate can be attached to the ACO32 plate.

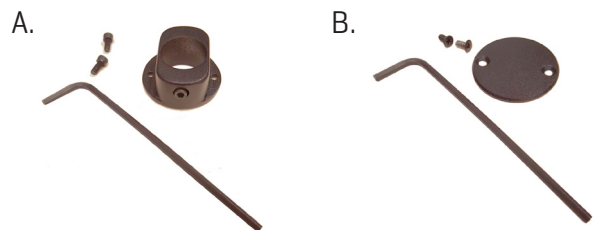


8. Attach the encoder clamping plates back onto the ACO32 shaft by tightening the screws. The plate should be just below body of the ACO32 and the encoder body should sit snugly inside the lip of the clamping plates. Be careful not to pinch any wires or the fiber as the plates are tightened together.



### Change Kits

TDT provides two kits for users removing or adding an FORJ after initial purchase. If you purchased the ACO32 without an FORJ, then add one; use kit A below to mount the new optics to the ACO32 faceplate. If you purchased the ACO32 with an FORJ and wish to remove it, use kit B below to cover the opening where the FORJ was previously mounted. Note: the two configurations use different screws, so be sure to save all screws.



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