Appendix I Deep Sediment Trap Connectors

Sediment Traps deployed at depths from 7,000 to 10,000m, require high pressure penetrators on the controller COM port and motor connector. These high pressure penetrators have a locking collar with an inner locking ring.

To remove the motor from the Sediment Trap, the motor connector must fit through a hole in the rotator. First, the red locking collar and inner locking ring must be removed.

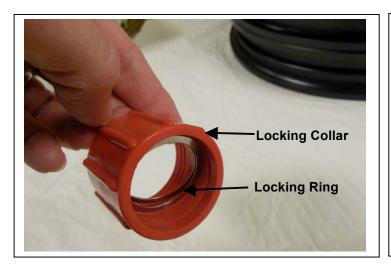




Figure I-1: High Pressure Penetrators with Locking Collar and Inner Locking Ring

Removing Penetrator Locking Collar and Locking Ring

Before removing the motor from the Sediment Trap, you must complete the following steps to remove the high pressure penetrator locking collar and locking ring.

NOTE

Remove the locking collar and locking rinrg only if you are removing the motor from the Sediment Trap.

1. Unscrew the locking collar from the Sediment Trap controller housing and unplug the motor bulkhead and slide the red locking collar onto the motor cable.





Figure I-2: Unscrew Locking Collar and Unplug Bulkhead Connector



Figure I-3: Lift to Release Tab of Silver Locking Ring

- 2. Using a screwdriver or other flat tool such as pliers, lift the silver locking ring by the groove and pull up onto top of locking collar. Continue pulling locking ring until the ring releases from groove inside the locking collar.
- 3. Remove the red locking collar from the motor cable.
- 4. Twist the locking ring off of the motor cable to remove.



Remove Locking Ring



Figure I-4: Slide Locking Collar Off Motor Cable and Twist Off Locking Ring

5. Remove the motor cable by fitting the motor cable through the hole in the rotator.



Figure I-5: Fit Motor Cable Down Through Hole in Rotator Plate

Re-attaching Penetrator Locking Collar and Locking Ring

Complete the following steps to re-attach the locking collar, locking ring and reconnect the motor cable.

- 1. Slide the motor cable up through the rotator plate.
- 2. Twist the locking ring sideways onto the motor cable and slide the locking collar back onto motor cable. Face the grooves in the locking collar towards the bulkhead connector.



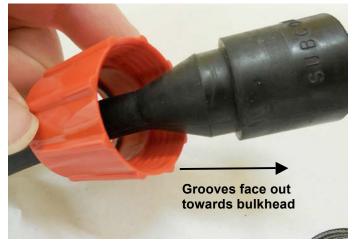


Figure I-6: Twist Silver Locking Ring onto Motor Cable and Slide Red Collar onto Cable

3. Turn the locking ring to the side to fit into the groove inside the locking collar.





Figure I-7: Fit Silver Locking Ring Inside Locking Collar Groove



4. With thumb secured on bottom of red collar, push forward towards bulkhead. This motion should push the locking ring inside the groove. The locking ring is secure when you hear it snap into place with a 'click'.



Figure I-8: Push Red Collar Towards Bulkhead

COM Cable Wiring

The cable connecting the controller to the computer must be wired correctly for proper communications. A wiring diagram for the COM cable is included below. The M3854 cable converts the MCBH to IL-5.

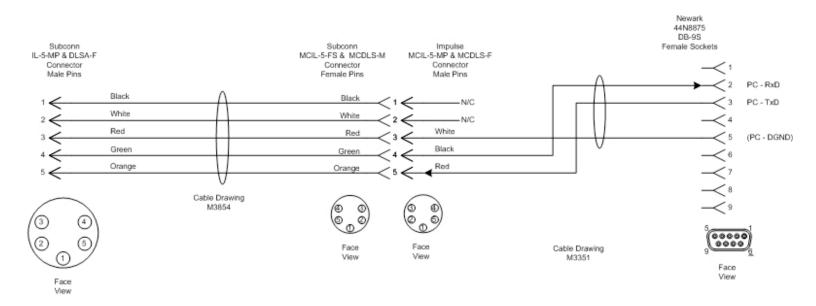


Figure I-9: COM Connector Diagram

NOTES

