

BURT Joint 1 and 2 Cabling

BARRETT MEDICAL

REV. 01.01

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Terminology:

Cable – a “wire rope” typically made from very fine strands of stainless steel. The composite tensile strength and stiffness is very high in a stranded cable yet it maintains flexibility in bending.

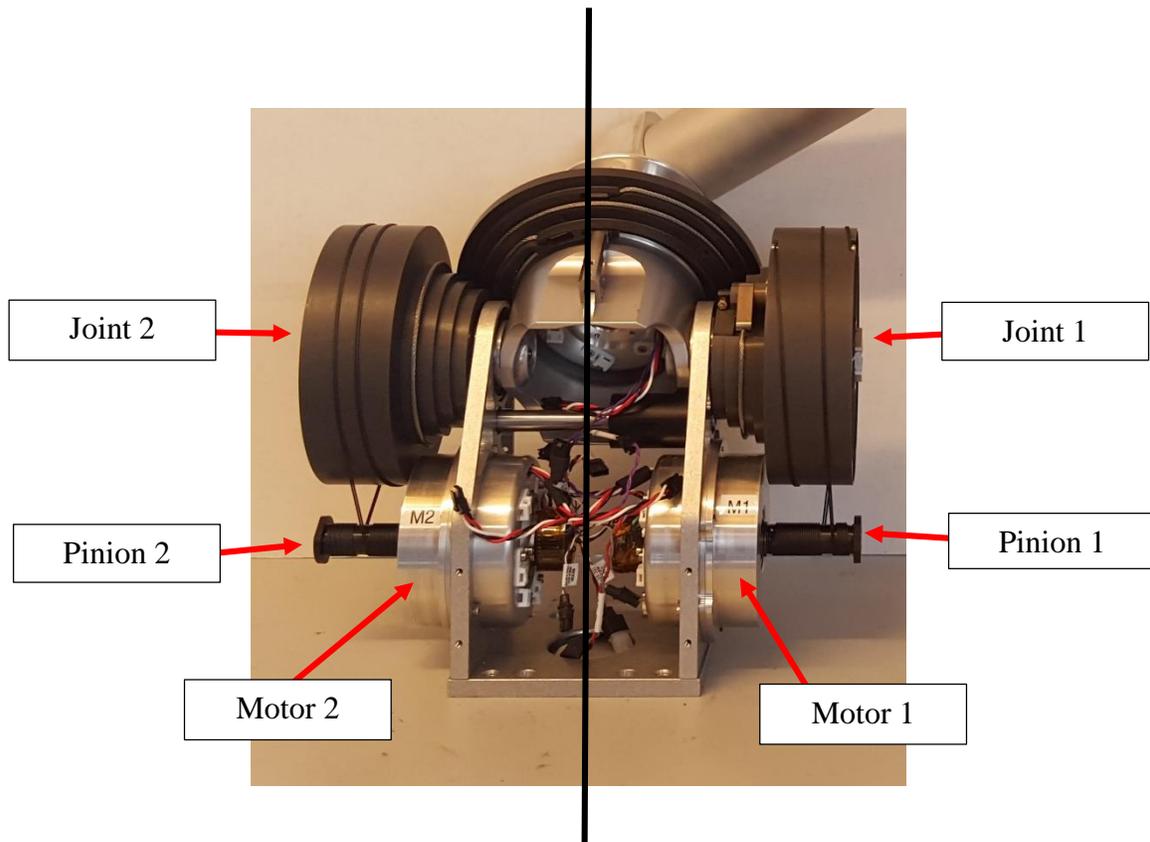
Termination – a brass sphere swaged or crimped onto the end of a cable, which serves as a point to hold onto the cable.

Anchor – location on the Pulley or Pinion that the cable terminations are inserted into for retention and tensioning.

Pinion – the small diameter, high speed cylinder in a pair of cabled transmission elements.

Pulley – the large diameter, slower speed cylinder in a pair of cabled transmission elements

General BURT Diagrams:



Tools:

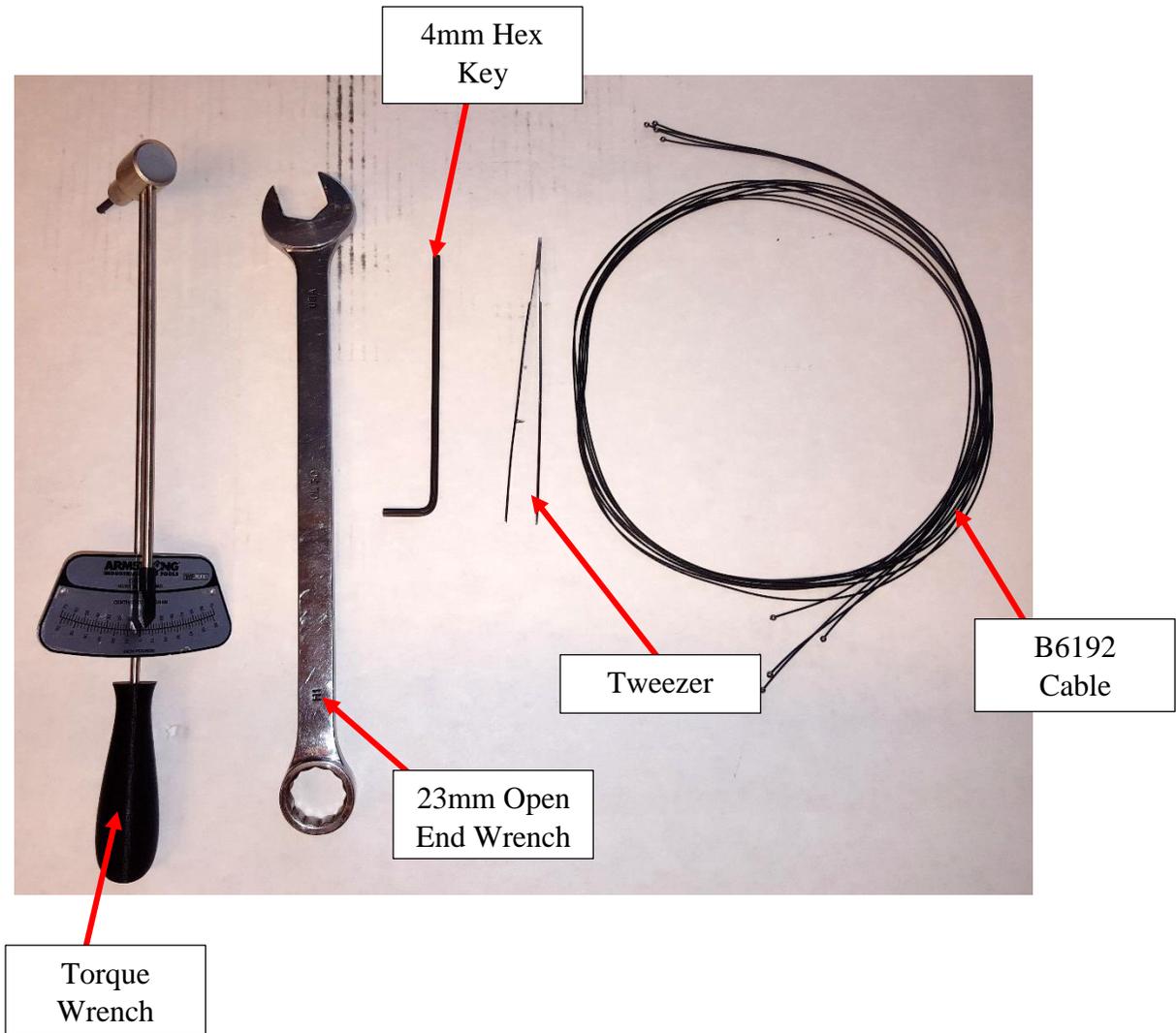
4 – B6192 Cable

1 – 23mm Open End Wrench

1 – 4mm Hex Key

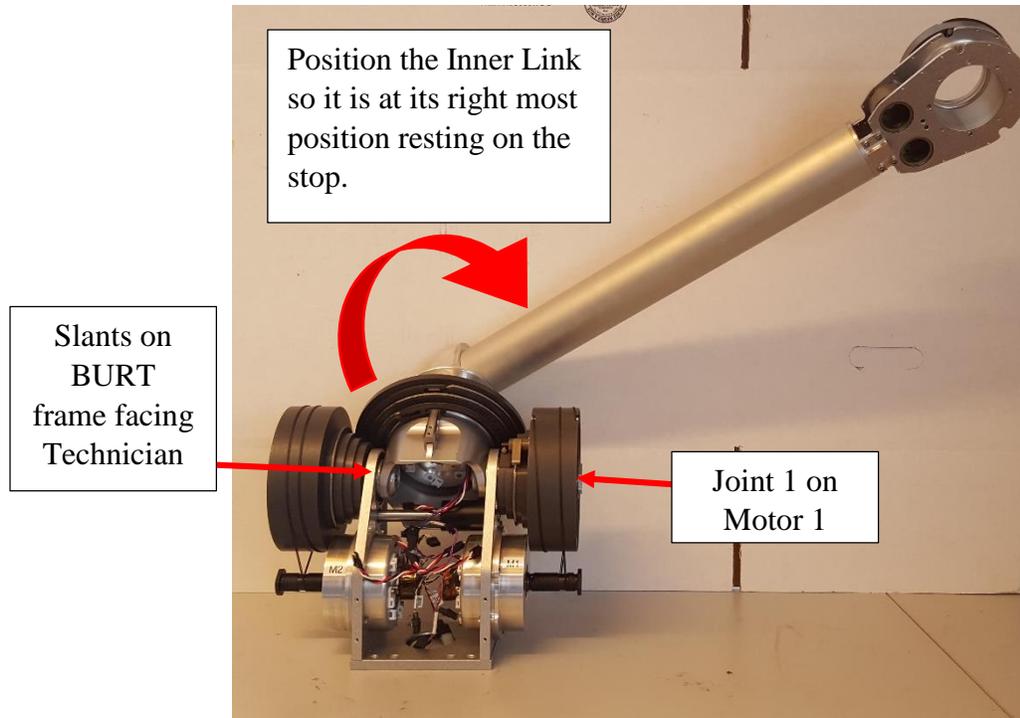
1 – Tweezer

1 – Torque Wrench (60in-lb or 70kg-cm range)

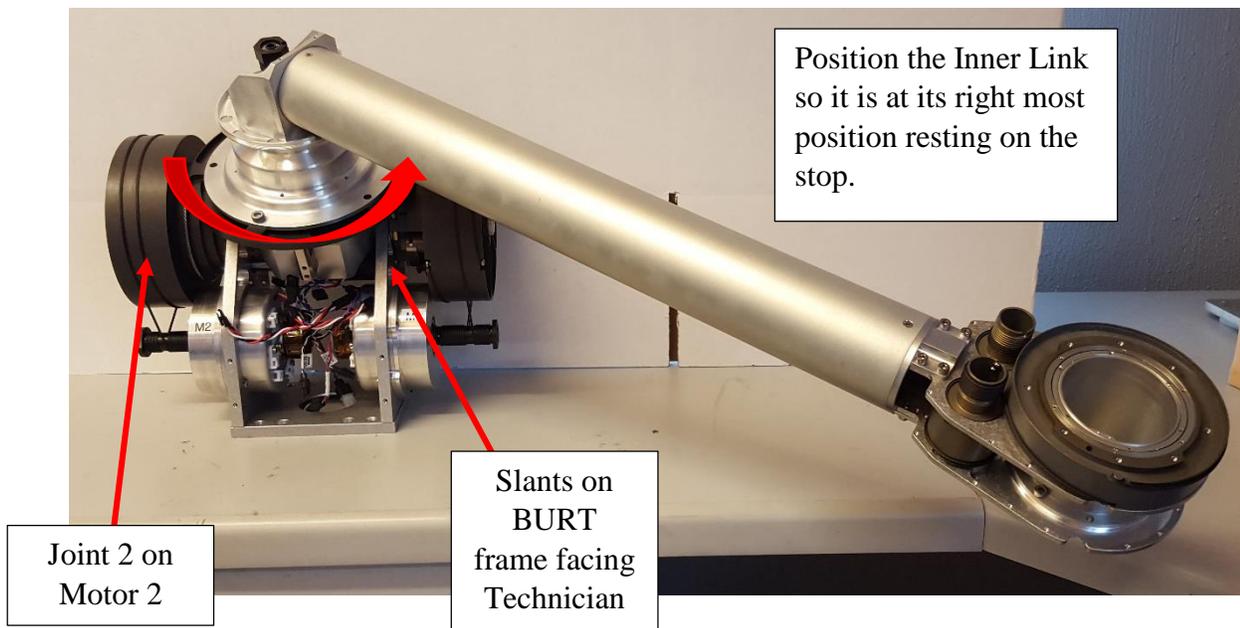


Cabling Orientation:

Joint 1

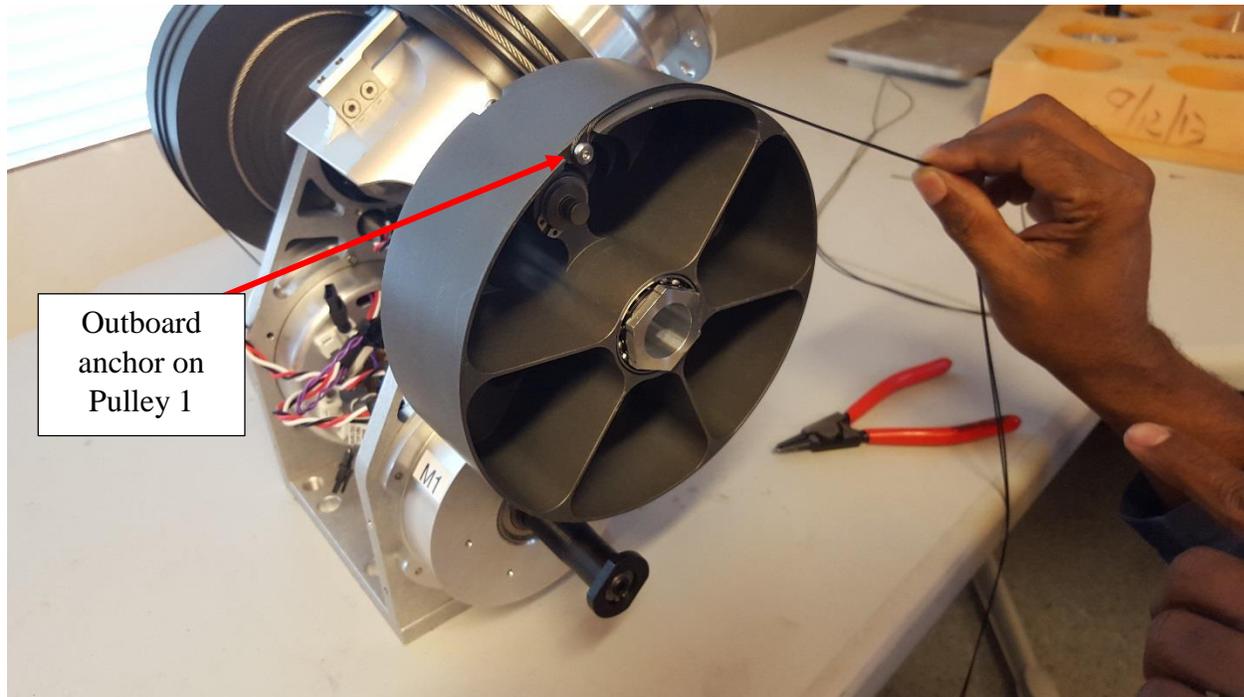


Joint 2

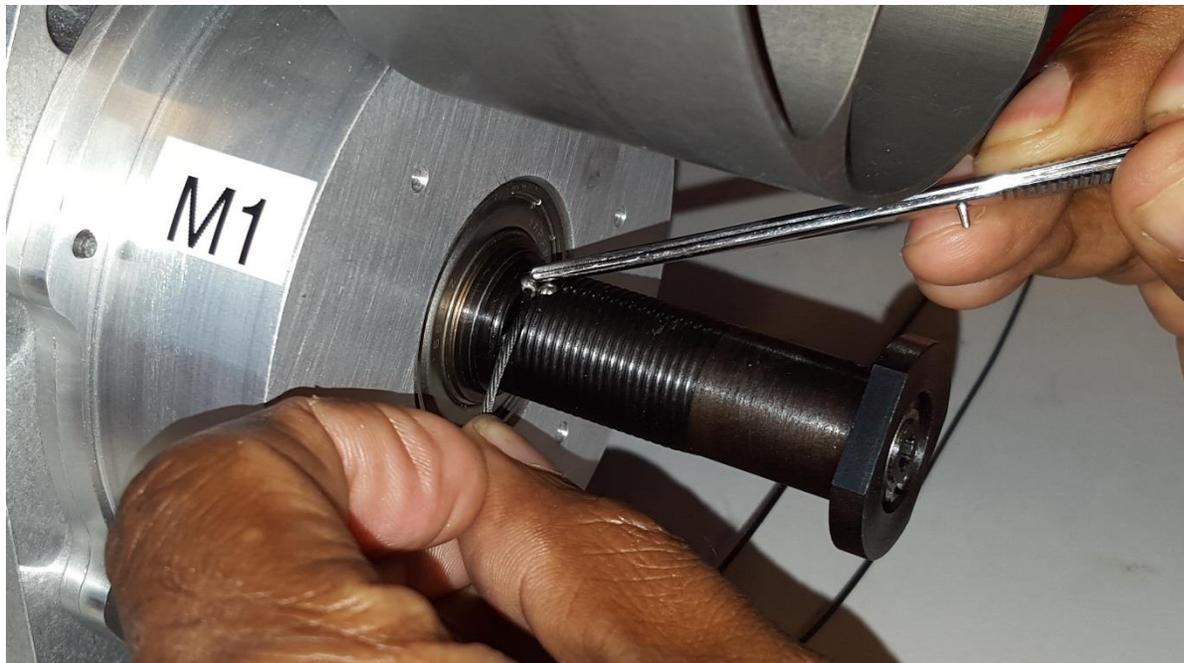


Cabling Joint 1

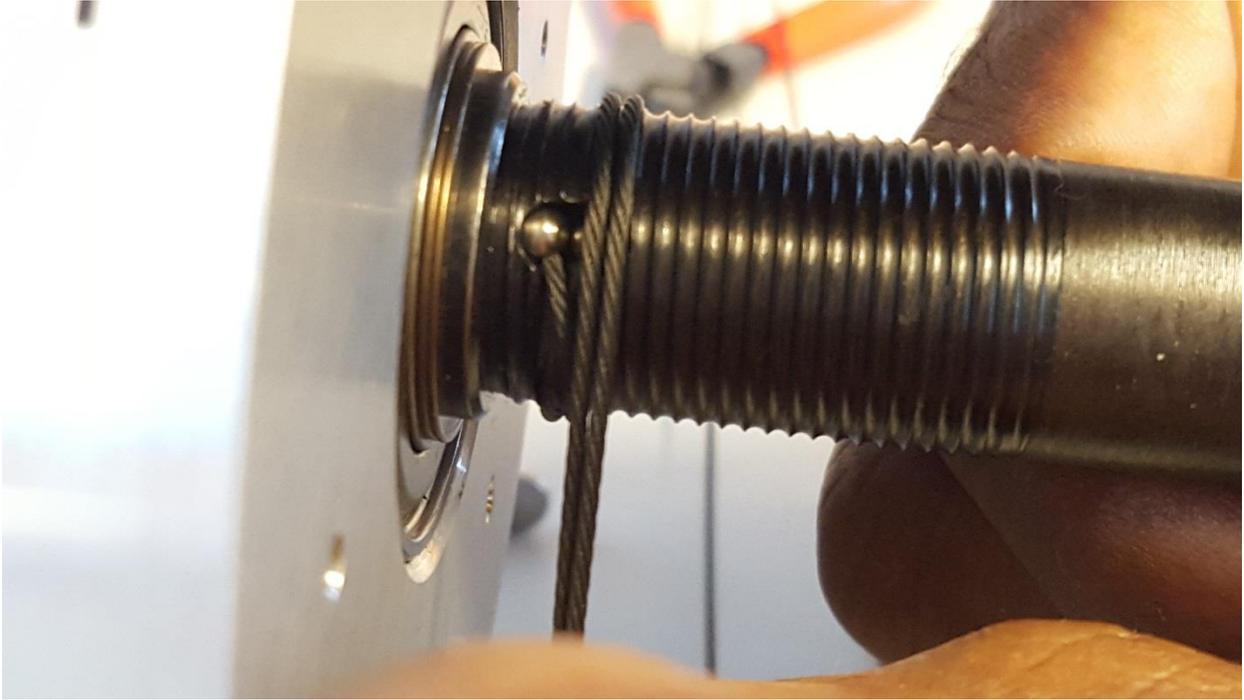
1. Position the BURT system in the correct orientation to initiate Joint 1 cabling.
2. Take Cable B6192 and match the two Termination ends together. Attach the middle portion of Cable B6192 to the outboard anchor on Pulley 1 as shown going clockwise.



3. Using the tweezers, connect the two termination ends to the inbound anchor of Pinion 1. **Use caution not to twist the cable.**



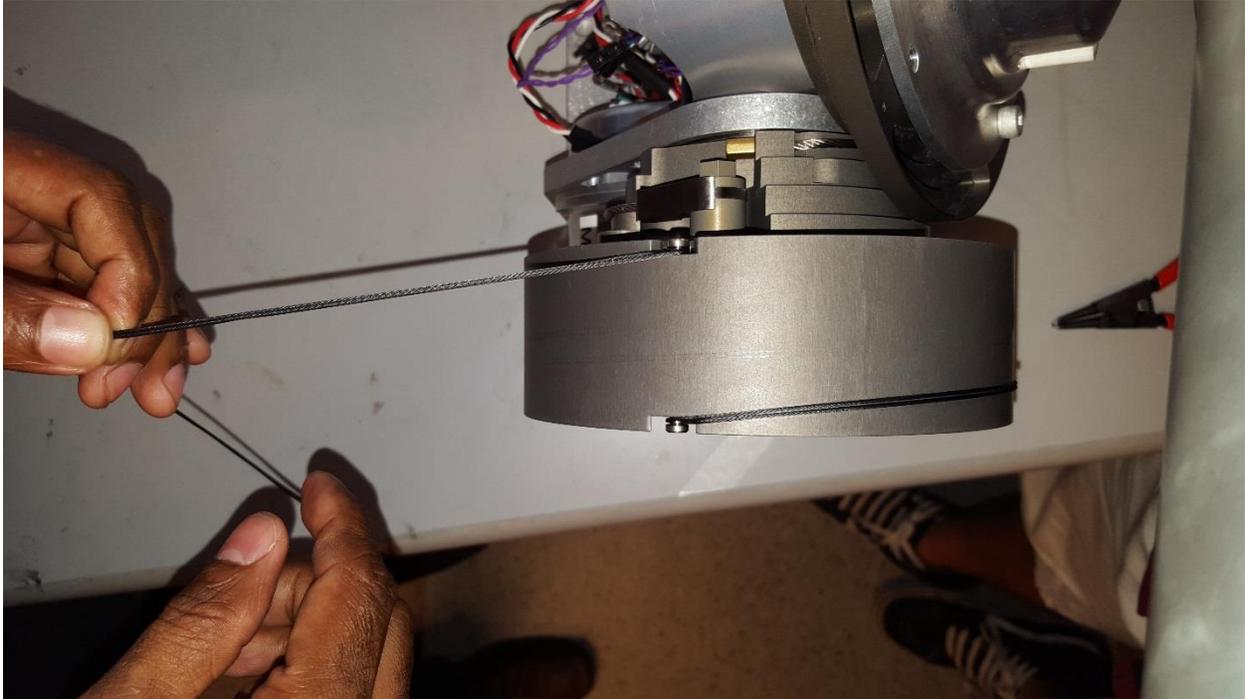
4. Rotate Pinion 1 so the cable begins to spool. Overlap the cable on top of the outer termination in the anchor like shown.



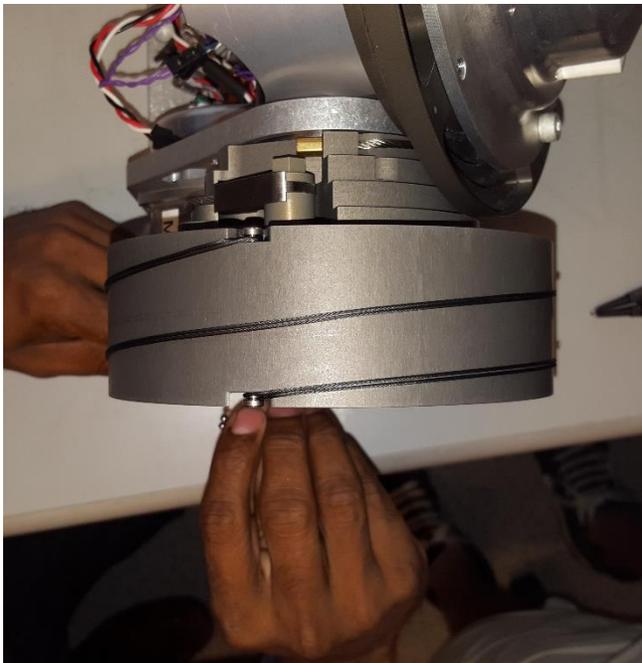
5. Continue to rotate Pinion 1 till all the slack in the cable is removed.



6. Take Cable B6192 and match the two termination ends together. Attach the middle portion of Cable B6192 to the inbound anchor on Pulley 1 as shown going counter clockwise. **Use caution not to cross the cable.**



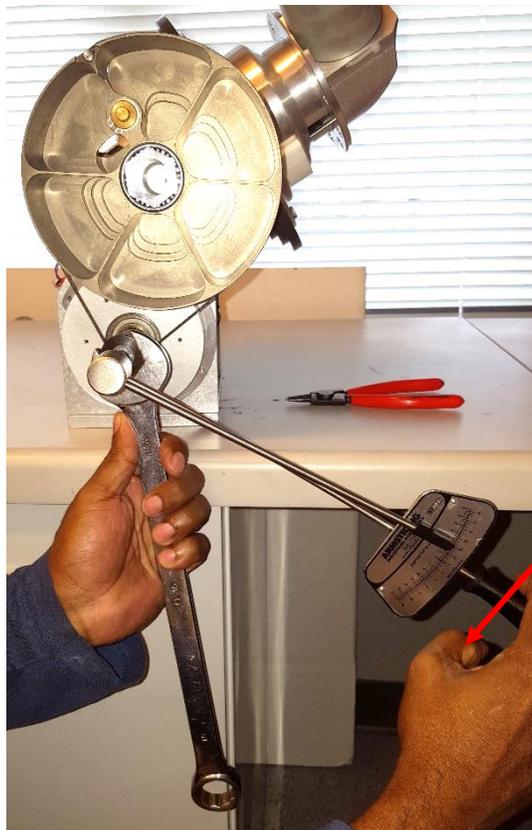
7. Wrap the cable around Pulley 1 one time like shown and connect the cable terminations to the outbound cable anchor using tweezers. **Use caution not to cross the clockwise cable.**



8. Insert the 4mm hex key into the one-way tension clutch and hold the key while holding tension on the cable. Rotate the end of Pinion 1 by hand until the cable has no slack.



9. Using the 23mm open end wrench and the torque wrench, tension the one-way tension clutch to 22.5 in-lb or 26 kg-cm.



Cabling Joint 2

1. Position the BURT in the correct orientation to cable Joint 2.
2. Follow steps 2 through 9 in order to complete Joint 2 cabling.