F/T Sensor Mounting Guide



Follow these mounting instructions for optimal Force Torque Sensor performance.

Kit contains a beam torque wrench, a spanner tool, cotton swabs, a syringe filled with Starrett Tool and Instrument Oil (McMaster#: 23455A636), and a small bottle with isopropyl alcohol.





Unscrew the cap off of the Tool Oil syringe, lightly saturate a cotton swab tip with the Tool Oil and run it over the male threads of the Force Torque Sensor as shown. Soak up any excess oil by running a dry cotton swab over the threads. The oil layer should be a very thin sheen, and should not drip.







Lightly saturate a cotton swab tip with the alcohol and use it to wipe clean the outside edge of the bottom surface of the Force Torque Sensor as well as the outside edge of the WAM's tool plate. Make sure to remove any oil residue off of these surfaces. Use multiple swabs if necessary.



Repeat the same steps with the BarrettHand. Oil the male threads on the base of the BarrettHand. Clean the outer edge of its bottom surface and the outer edge of the Force Torque Sensors top plate with alcohol.

Attach and lightly hand-tighten the FT Sensor to the BarrettHand. Mount the Hand/Sensor Assembly onto the WAM, and lightly hand-tighten (video on how to do this can be found at web.barrett.com/support/FT-Mounting-Procedure.avi).

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Insert the beam torque wrench into the square socket of the spanner as shown.

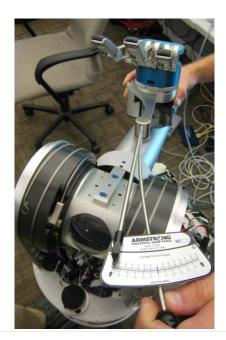




Rotate Joint 7 of the WAM counter clockwise until it is up against its joint stop. Insert the spanner pin into one of the two holes on the WAM's screw ring. Hold the wrist with a finger on the spanner to prevent the pin from popping out.



Holding the beam torque wrench by the ball handle, carefully tighten the screw ring to the level indicated by the black arrow on the dial. (Approximately 12 N-m of torque about the threads)



Insert the spanner into the second hole on the screw ring, on the opposite side from the first, and tighten to the same level. (This will ensure evenly distributed clamping forces)



Use the same method to tighten the hand to the FT Sensor, torqueing down both sides of the FT screw ring.

