

# RTSX Torque Sensor Operation Instructions

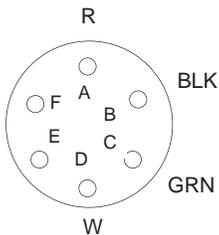
Rev 2.3 (3/23/2017)

## RTSX Cabling/Connecting

Attach the appropriate cable (sold separately) for connecting the RTSX with a Mountz Torque Tester:

For non-Mountz Torque Testers, please reference Pin Diagram. Mountz can make cables for non-Mountz Torque Analyzers, please contact Customer Service at 408-292-2214.

### 6-Pin Connection



- A = Excitation (+)
- B = Excitation (-)
- C = Output (-)
- D = Output (+)
- E = Shield
- F = 100% control (full scale)

<u>Mountz Torque Tester</u>	<u>Cable Item #</u>
TorqueMate® Plus	065138
TorqueLab®	065138
LTT, PTT or FTA	072005
FTA-100, PTT or LTT for RTSX1500F	072000

## Operating RTSX

The torque sensor is the ideal torque-auditing tool for testing the actual torque being applied on the assembly application. By connecting a rotary torque sensor between an electric or pneumatic tool and assembly application, you can monitor the torque being applied from the tool to fastener or bolt.

Connect the tool to the "input drive" side of the RTSX. Connect bit and/or adapter to "output drive" side. Once the RTSX is connected with a Mountz torque tester, follow the instructions in the torque tester manual for accessing external transducers.

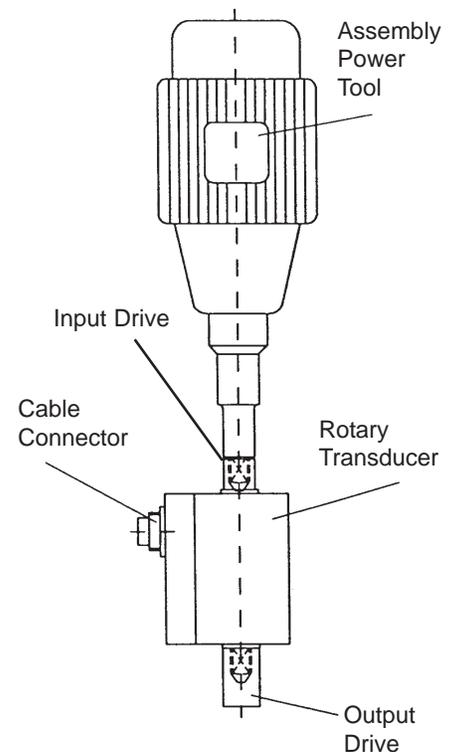
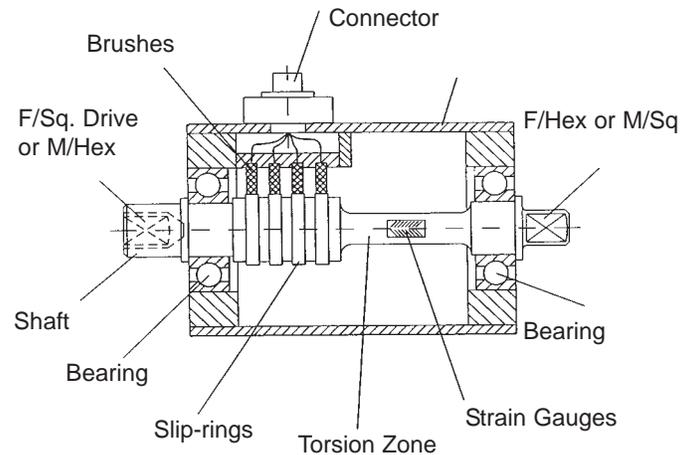
## Using Power Tools

Make sure the tool is within the torque range of the RTSX model. If the tool is under the torque range, then the accuracy may not be reliable. If the tool is over the torque range, then you may overtorque the RTSX and damage the transducer. You may require adapters for calibration or testing. Always make certain adapters are as short as possible and fit properly, with little "play."

Note: Not recommended for Impact Wrenches

## Using Hand Tools

Make sure the tool is within the torque range of the RTSX model. If the tool is under the torque range, then the accuracy may not be reliable. If the tool is over the torque range, then you may overtorque the RTSX and damage the transducer. You may require adapters for calibration or testing. Always make certain adapters are as short as possible and fit properly, with little "play."





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## Calibration Procedures

1. Attach the RTSX securely to a device that keeps the Rotary torque sensor in a stable position for the calibration process.
2. Connect the RTSX to a torque tester/ display. Review the torque range of the torque sensor and select the appropriate measurement units.
3. Determine type of calibration to be performed.  
*Calibration at 3 Pts.                      Test at 10%, 50% and 100 of Full Scale.*  
*Calibration at 6 Pts.                      Test at 10%, 20%, 40%, 60% 80% and 100 of Full Scale.*  
*Direction                                      Clockwise and/or Counter Clockwise*
4. Select the appropriate Calibration Arm or Wheel. Attach it to the output drive of the RTSX.
5. Gently connect the Hanger to the Calibration Arm or wheel.
6. Load 3 times to minimum 80% FS in direction of operation and reset to zero after loading.
7. Apply series of increasing torques in direction of operation starting from the lowest test point.
8. Record readings from the test device at each test point prior to performing any adjustments.
9. Repeat steps 6-8 in the opposite direction (if required).
10. Perform calibration adjustments. Repeat test as described above until readings at all test points are within tolerances.
11. Repeat test as described above and record 5 readings from test device at each test point. Compile all necessary details to generate test report.
12. Remove old calibration label and place new label on torque sensor.

## Maintenance Procedures

1. Recommend cleaning cycle is approximately 1,000,000 Revolutions.
2. Loosen the 4 fixing screw and remove the cover plate.
3. Use a soft linen cloth, a fine hair brush or oil-free compressed air to clean the dust from the slip-rings and the spaces between them. Carefully clean the brushes and the plastic part with the spring using a hair brush or oil-free compressed air. Also clean the connector.
4. Measure the brush thickness, it should be more that 0.5 mm. New brushes can only be fitted at the manufacturer.
5. Replace the cover plate carefully and re-tighten the fixing screws.
6. The Rotary Torque Sensor should be recalibrated every year.

## Mountz Calibration & Repair Services

Mountz Inc. features an experienced calibration and repair staff. Our trained technicians can calibrate and repair most any tool. Mountz provides rapid service with quality that you can trust as we offer two state-of-the-art calibration lab and repair facilities that can calibrate up to 20,000 lbf.ft. We perform calibrations in accordance with ANSI/NCSL-Z540.

Since 1965, Mountz Inc. has proven its in-depth knowledge of torque and torque solutions by consistently developing, producing, marketing and servicing highly sophisticated, cutting-edge tools. Mountz Inc. is known to the industry as the premier torque tool supplier.

### Mountz Service Locations

#### Eastern Service Center

19051 Underwood Rd.  
Foley, AL 36535  
Phone: (251) 943-4125  
Fax: (251) 943-4979

#### Western Service Center

1080 N.11th Street  
San Jose, CA 95112  
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