

# BMX Torque Sensor Operation Instructions

Rev 2.5 (3/22/2017)

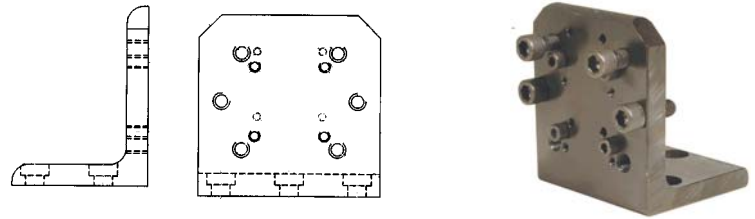
## Mounting the BMX Torque Sensor

The BMX torque sensor needs to be mounted securely before operating. Immobilizing the sensor is critical for the safety of the operator as well as for the accuracy of torque measurements during operation. A loose BMX sensor during utilization can impact the validity of torque readings. Mountz offers mounting brackets for the BMX torque sensors.

### For BMX Models

BMX20z thru BMX500F models  
 BMX1000F thru BMX5000F models

Item #  
 062109  
 062128



## BMX Cabling/Connecting

Attach the appropriate cable (sold separately) for connecting the BMX with a Mountz Torque Analyzer:

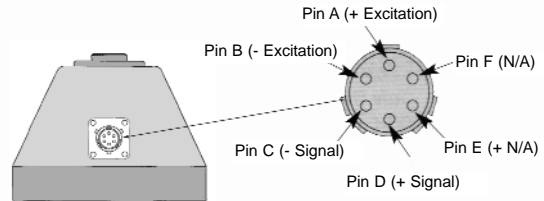
For non-Mountz Torque Analyzers, please reference Pin Diagram. Mountz can make cables for non-Mountz Torque Analyzers, please contact Customer Service at 408-292-2214.

### Mountz Analyzer

LTT & PTT  
 TorqueMate® Plus  
 TorqueLab®  
 Wizard  
 Wizard Plus

### Cable Item #

072002  
 065145-XD5  
 065145-XD5  
 065145-WD5  
 065180



## Operating BMX

Once the BMX is connected with a Mountz Torque Analyzer, follow the instructions in the Torque Analyzer manual for accessing external transducers.

## Using Hand Tools

Make sure the tool is within the torque range of the BMX 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 BMX and damage the sensor. Place the wrench or hand screwdriver's drive into the BMX's female square drive and apply torque. You may require adapters for calibration or testing. Always make certain adapters are as short as possible and fit properly, with little "play."

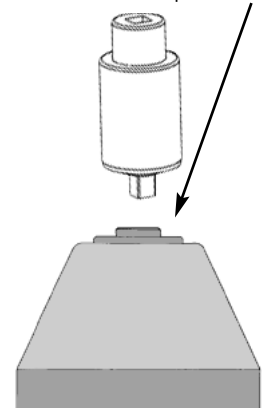
## Using Power Tools

Make sure the tool is within the torque range of the BMX 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 BMX and damage the transducer.

Always use a quality joint rate simulator (run down adapter) when testing power tools in a simulated application. Place the rundown adapter in the BMX as shown in the drawing on the right. Then place a square drive adapter into the bit socket of the power tool and then slide it into the run down adapter.

Switch the driver into "Forward" mode and apply torque. Once the rundown is complete, switch the driver in "Reverse" and reverse the Run Down Adapter to a consistent "home" position.

Place Run Down Adapter into BMX



**Note! Not recommended for impact wrenches.**



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## Calibration Procedures

1. Attach the BMX securely to a work surface with the cable connector toward the top so that the axis of tool rotation is parallel to the ground.
2. Connect the BMX to a torque analyzer/display. Review the torque range of the 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 input drive of the BMX.
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 sensor.

## 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.

Since 1965, Mountz Inc. has proven in-depth knowledge of torque is reflected in our tool's craftsmanship and our ability to provide solutions to both common and uncommon torque applications. We perform calibrations in accordance with ANSI/NCSL-Z540. Mountz is dedicated solely to the manufacturing, marketing and servicing of high quality torque tools.

## Tool Service & Repair Capability

- Torque Wrench Calibration: Click Wrench, Dial Torque Wrench, Beam Wrench, Cam-Over & Break-Over Wrench
- Torque Screwdrivers: Dial, Micrometer, Preset & Adjustable
- Torque Analyzers/Sensors: All brands
- Electric Screwdrivers: All brands
- Air Tools: All brands  
Impact Wrenches, Drills, Pulse Tools, Grinders, Percussive Tools, Air Screwdrivers, Nutrunners, DC Controlled Nutrunners
- Torque Multipliers: All brands

## 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  
Phone: (408) 292-2214  
Fax: (408) 292-2733

[www.mountztorque.com](http://www.mountztorque.com)  
[sales@mountztorque.com](mailto:sales@mountztorque.com)

Download a "Service Form" and include a copy when you send the tools in to be serviced.

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