

# TLS Pro & TLS Pro ESD Screwdriver Operating Instructions

Rev 1.0 (6/8/2015)

## Calibrating Torque Screwdrivers

To calibrate torque screwdrivers either use a torque tester or torque sensor within the range of the torque screwdriver. For torque screwdrivers calibrate torque in "Peak" mode with a torque tester or torque sensor. Make sure to apply the torque slowly and smoothly.

1. Select a torque tester or torque sensor that covers the torque range of the screwdriver.  
Connect screwdriver to the torque tester or torque sensor using the appropriate adapters as needed.
2. Apply torque clockwise slowly until screwdriver 'slips' and note reading.
3. Adjust screwdriver to required torque setting as described below.
4. Test and repeat adjustment as necessary to obtain desired value.
5. Recalibrate torque screwdriver at prescribed intervals.



## Adjusting Torque Setting

1. Use a 5mm hexagon key to remove end cap from screwdriver. Turn anti-clockwise direction. Also remove the T-bar where fitted (for TLS Pro 450 & 1350 models only).



## To Increase Torque Setting

1. Insert the 5mm hexagon key into the adjuster and turn Clockwise.

## To Decrease Torque Setting

1. When adjusting, always approach the required torque from a lower setting.  
To reduce the torque setting, insert the 5mm hexagon key into the adjuster and rotate counterclockwise past your setting. Then clockwise to increase torque to the required value.



**Note!** Take 10 consistent readings on the Torque Analyzer to confirm the torque setting. Do not adjust torque above or below the recommended torque ranges. Tighten end-cap back on.

## Applying Torque

1. Tighten nut or bolt by applying steady twists. Always ensure that the screwdriver is in correct alignment with the fastener. Screwdriver should be kept at 90 degrees to axis of bolt during tightening. When pre-set torque is reached, the screwdriver will 'slip.' The handle rotates through an angle of 60 degrees before resetting.
2. The screwdriver will automatically reset itself for the next application.
3. With its unique cam-over design, it's impossible to over tighten beyond the preset load.



## Safety & Maintenance

1. Only hold the tool using the hand grip.
2. Torque tools should be regularly calibrated and inspected to ensure correct operation.
3. Ensure the tool is clean and free of oil, grease and water before use.
4. Never dip into cleaning fluid or petroleum.
5. Do not use as a hammer, chisel or pry bar.



## Accessories

1. Quick conversion from 1/4 F/Hex to 1/4 Sq Drive with accessory # 020175.
2. Quick change of the end cap for color coding identification of the preset torque value. Simply replace the color cap at the end the tools (4 color pack accessory option - Black, Red, Green & Blue). Item # 020718

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## **Maintenance Schedule**

Like an automobile, torque screwdrivers contain moving parts that require periodic servicing and lubrication.

## **Expected Tool Life**

With normal use – 100,000 operations

## **Period between Resetting of Torque**

5000 operations (as recommended in BS EN 26789:1994). It is acknowledged that some tools achieve 5000 operations in a relatively short period of time. Under these circumstances the user may decide, with the benefit of their experience, to increase the period between calibration checks.

## **Routine Maintenance**

After 100,000 operations, strip, clean & re-grease the Spindle, Cam & Roller. Any worn components should be replaced.

**Note:** Any tool that is dismantled during its life must be re-lubricated in accordance with the Mountz recommendations. Do not clean tools by immersing them in solvent, as this will destroy the internal lubrication and cause failure of the tool.

## **Tool Lubrication Chart for TLS Pro**

Shell Stamina EP2 Grease
General Use Spring Housing

## **Testing & Servicing**

Torque tools go out of calibration with use. Calibrating a torque tool is a fine-tuning process of bringing the tool back within its tolerance. Regular torque calibration of a hand screwdriver ensures accuracy, repeatable tool performance, and adherence to international standards.

We recommend a general once a year calibration interval. However, it is the user's organization that must determine suitable intervals based upon equipment performance, application, degree of usage and management objectives.

## **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.

With 50 years of experience, Mountz's 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.

Mountz is an ISO 9001 certified and ISO 17025 accredited company.