

# FGC PRESET CAM-OVER WRENCH OPERATING INSTRUCTIONS

Rev 1.1 (6/1/2020)

The FGC has no external adjustment scale and must be preset using a torque analyzer or torque sensor. If the tool has not been preset to a set torque value, then follow the directions for adjusting the torque setting before using the wrench.

## Adjusting the Torque Setting for a Preset Value

1. Use a 1/4" hexagonal key and remove end cap with from wrench anti-clockwise direction.
2. FGC-5 and FGC-10 Models
3. Insert the 5/32" hexagonal key into the torque adjuster mechanism, push in and turn hex key clockwise to increase torque and counter-clockwise to decrease torque.

FGC-30, FGC-75 and FGC-125 Models

Insert the 1/4" hexagonal key into the torque adjuster mechanism, push in and turn hex key clockwise to increase torque and counter-clockwise to decrease torque.

4. Cycle wrench 10 times prior to taking readings.
5. Take 10 consistent readings on the Torque Analyzer to confirm the torque setting. Do not adjust torque above or below the recommended torque ranges for the torque wrench or torque analyzer. Hand tighten end-cap back on using a 1/4" hexagonal key.

**Note:** Do not adjust the torque setting while the wrench is connected to a torque analyzer or torque sensor as you can over torque and damage the sensor.

## Applying Torque

1. Tighten fastener or bolt by applying even pull. Wrench should be kept at 90 degrees to the axis of the bolt during tightening. When pre-set torque is reached, the wrench will 'slip.'
2. The wrench will automatically reset itself for the next application.
3. With its unique cam-over design, it's impossible to overtighten beyond the preset load.

## Calibrating Cam-Over Wrench

To calibrate cam-over wrench either use a torque analyzer or torque sensor within the range of the torque wrench. For cam-over wrenches 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 wrench. Connect wrench to the torque tester or torque sensor using the appropriate adapters as needed.
2. Apply torque clockwise slowly until wrench 'slips' and note reading.
3. Adjust wrench to required torque setting as described above.
4. Test and repeat adjustment as necessary to obtain desired torque value.



5. Recalibrate cam-over wrench at prescribed intervals.

## Maintenance Schedule

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

## Period Between Resetting of Torque

10,000 fastening operations. It is acknowledged that some tools may achieve 10,000 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 intervals.

## Routine Maintenance

After 50,000 operations, strip, clean and re-grease the spring, bearings and internal components. 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 a solvent, as this will destroy the internal lubrication and cause the failure of the tool.

## Testing and 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 cam-over wrench 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 and 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.

## About Mountz

Mountz, The Torque Tool Specialists<sup>®</sup>, has been a leader in the torque tool industry for 55 years. Engineered in the Silicon Valley and serving the globe, Mountz focuses on delivering high-quality torque products, services, and solutions to ensure customers can always proceed with confidence. We are committed to forging a safer world through precision and accuracy and by innovating every day.