

FGA CALIBRATION INSTRUCTIONS

Rev 2.0 (9/1/2022)

Tools Required

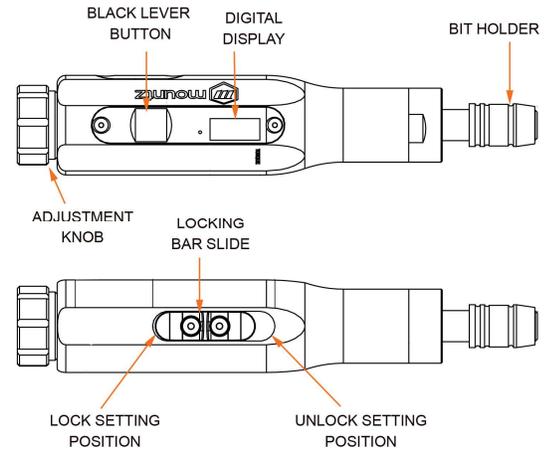
- 5mm hex key
- Small insertion tool (paper clip, pin, etc)
- Torque analyzer or torque sensor matching desired calibration range

Calibration Process

Step 1: Adjust the tool to the maximum torque setting per the display. Apply three (3) torque loadings.

Step 2: Rotate the adjustment knob counterclockwise as far as it will go to remove all load from the tool. Then wait 5 seconds, per the ISO6789 standard.

Press the Lever button to turn on the screwdriver. Once the unit is on, use small insertion tool (ie: paperclip) and press on the Calibration button (pin hole size).



Step 3: The screen will briefly display “CAL” before showing the torque unit selection screen. Press Lever button to cycle through the options to reach your desired units, then press Calibration button again to select.

FGA-8, FGA-20 & FGA-40

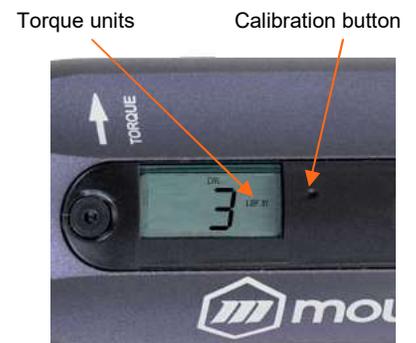
Five options available:

- ozf.in
- lbf.in
- cN.m
- N.m
- kgf.cm

FGA-80 MODEL

Three options available:

- lbf.in
- N.m
- kgf.cm



Step 4: Using the Lever button, cycle through the ranges until the display reads the value corresponding to your tool model. Then press the Calibration button to accept. A breakdown of the models and their display can be found below.

- FGA-8 model: 8.00 lbf.in
- FGA-20 model: 20.0 lbf.in
- FGA-40 model: 40.0 lbf.in
- FGA-80 model: 80.0 lbf.in

Example: FGA-40



The value displayed when selecting the model is the max range of the tool and displays on whatever units were selected before. If you are calibrating an FGA-8 in cN.m, you need to choose the maximum capacity for that model in cN.m torque unit.

Step 5: Before starting the calibration process, recommend that you calculate the torque values that will be used for it. The screen will bring up the first point of calibration displayed in the percentage of max setting. The image on the left reads 10%. Calculate target torque based on the displayed percentage. This first percentage will differ depending on which tool model is being calibrated:

- FGA-8 model: 20%
- FGA-20, FGA-40 and FGA-80 models: 10%

Example: FGA-40



Step 6: Using the torque analyzer or sensor, adjust the tool to the target torque calculated based off of percentages of the max torque shown below. The tool must be set to the target value from a lower setting. If the target is exceeded, the tool must be adjusted below the target and readjusted up.

Model	Torque Level % (Calculated percentages shown in lbf.in)				
	10%	20%	30%	50%	100%
FGA-8i	NA	1.6	NA	4	8
FGA-20i	2	NA	NA	10	20
FGA-40i	4	NA	NA	20	40
FGA-80i	8	NA	24	40	80

Step 7: Using the torque analyzer or sensor apply ten (10) loadings and record all values. All ten of these values must be within $\pm 6\%$ of the target and the average of the recorded values must be within $\pm 2\%$ of the Target. If either of these criteria is not met, adjust the tool as necessary and repeat.

Press the Lever button to capture the value.

Step 8: Once the above criteria are met, press the Lever button to set the setting to the tool. Once the above criteria are met, press the Lever button to store the setting to the tool. The number shown is the calibration factor for that tool setting.

Note: The power button may be pressed several times without any issues if the display does not change immediately.

Press the Calibration button to advance to the next step.



Step 9: Repeat steps 5-8 for the remaining torque levels shown in the table in step 6.

Example: FGA-40



Step 10: When all set points are complete, the screen will flash 'don' to signify the calibration procedure is complete. Tool will resume normal function using the new calibration afterward.



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 three state-of-the-art calibration lab and repair facilities.

About Mountz

Mountz, The Torque Tool Specialists[®], has been a leader in the torque tool industry for more than 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.

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