

PRESET "L" HANDLE SLIP TYPE TORQUE TOOLS

HOW TO USE

1. Acquire proper socket or adapter for fastener to be torqued.
2. Attach socket to square drive of tool. The spring loaded ball will retain socket.
3. Depending on the model ordered (left or right hand torque) simply couple socket to fastener. Grasp handle at furthest point away from drive and turn smoothly and evenly. When the pre-set torque is reached you will feel a sharp snap. The tool has reached it's value and has reloaded. The first brake will most likely be a surprise. We suggest you smoothly cycle the tool a couple of times, since over tightening is impossible, This will only assure the fastener is properly torqued down.

CAUTION

NEVER USE YOUR "L" HANDLE AS A HAMMER. ANY DENTING OF IT'S HOUSING MAY RESTRICT MOVING INTERNAL PARTS AND RETARD THE TORQUE SETTING. THIS WILL ALSO VOID WARRANTY.

RECALIBRATION

Before one attempts to calibrate an "L" handle (or any torque tool) a torque analyzer or standards must be available. The torque unit must be accurate and have sufficient range and/or resolution of scale for the tool being tested.

Seekonk Mfg. will not accept responsibility for performance and/or conformation to any specification when calibration is not performed by our factory trained technicians.

RECALIBRATION PROCEDURE

There are 2 types of adjustment for "L" handles.

Type 1 External Handle (LT-M)

Type 2 Internal Screw (MR-1,2,3 / LT-R & LT-0)

Type 1 LT-M

Loosen set screw in knurled portion of the adjusting handle end of the tool. Grasp the knurled handle with one hand and the square drive end with the other. Turn handle clockwise to increase torque value. Counter-clockwise to decrease torque value. After sufficient adjusting and testing against analyzer readings tighten set screws in knurled handle.

CAUTION: Do not over tighten set screws. Any denting of the tubular housing may damage the internal threads. This will make the adjustment handle hard to turn the next time you want to make an adjustment.

Type 2 MR-1,2,3 / LT-R & LT-0

Remove rubber grip(MR-1&2 Heat cal-lock screw to break the loc-tite). Loosen 10-24 set screw with a 3/32 hex wrench. Remove the top locking screw with a spanner wrench leaving the adjustment screw in place. Turn the adjustment screw with a 5/16 hex wrench clockwise to increase torque value, counterclockwise to decrease value.

NOTE: MR series tools have a very heavy spring. A "T" handle 5/16 hex wrench or a modified standard tool is required to turn the adjustment screw. After sufficient adjusting and testing with a suitable analyzer, reinstall calibration lock screw. Screw it down until it just touches the adjustment screw and then tighten the 10-24 set screw. When you are satisfied with the setting make sure the locking screw did it's job. CHECK IT. It should not move. Now that the wrench is recalibrated and the screws will not back out from vibration, replace the rubber grip.

NOTE: LT-R & LT-0 Hex wrench sizes are 1/16" and 7/32" Follow procedure 2

OVERVIEW:

Slip-type torque tools generate torque by a cam and follower mechanism. Each rise on the cam develops a torque event which in turn transmits a turning movement unto a fastener. The peak value of this torque action will determine the turning force delivered to the fastener. This turning force can be effected by tool geometry temperature, and rate of actuation.

Acceptable analysis of a tools accuracy assumes that care has been taken to assure proper tool geometry. What that implies is that the axis of the tools drive is directed straight through the center of the axis of the fastener., Angles, side loading and downwards forces must be minimized. Also, working temperatures are assumed to be moderate (50°F to 90°F). Lastly, we assume the tool will be actuated at a reasonable rate of speed (1 actuation/ 1-3 seconds). Torque motion must be smooth and consistent.

Composite Accuracy: With a high quality torque analyzer set to the first peak hold mode generate and document at least twice the number of data points as there are lobes on the cam in the tool being tested, LT-0, LT-M & LT-R tools have six cam lobes, MR-1,2,3 have 10 cam lobes. Average of these points to determine a value that should be within a +/- 4% of stated tool setting.

Event Specific Accuracy. Seekonk Slip-type torque tools have a stated accuracy of +/-4% based on single data point analysis. However, since any single data point can be effected by tool geometry, rate and consistency of actuation and analytical anomalies such as false triggering and line noise., No single out of bound's data point should be considered grounds for accuracy failure. when an out of bounds data point is encountered, the technician should pay special attention to the next time that cam lobe is actuated. Repeated out of range readings on any cam does constitute failure of accuracy test.