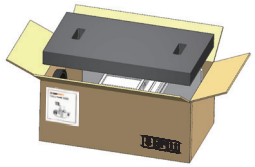
GEARWRENCH

Torque Tester loader Instructions for Assembly and Use

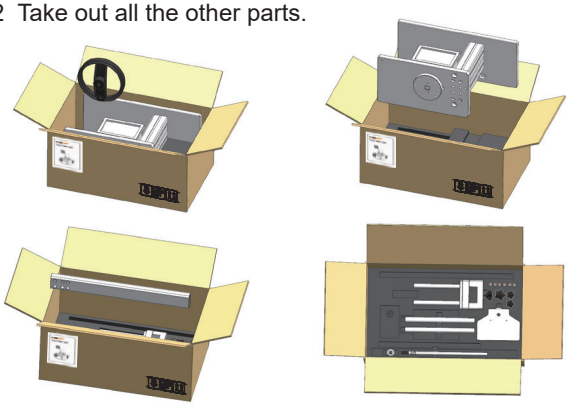
This torque tester loader is equipped with a labor-saving and torque-increasing reducer, which can test torque wrenches of different specifications. It is easy to operate and can be used with GearWrench torque tester and transducer. (Other torque meters and transducers may also be used.)

1 Unpacking

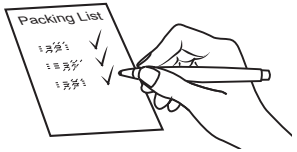


1.1 Put your fingers into the holes of the EVA top cover and remove it.

1.2 Take out all the other parts.



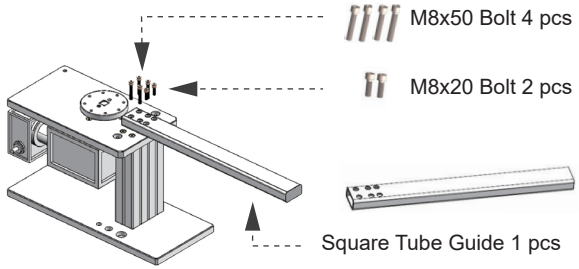
1.3 Check with packing list one by one.



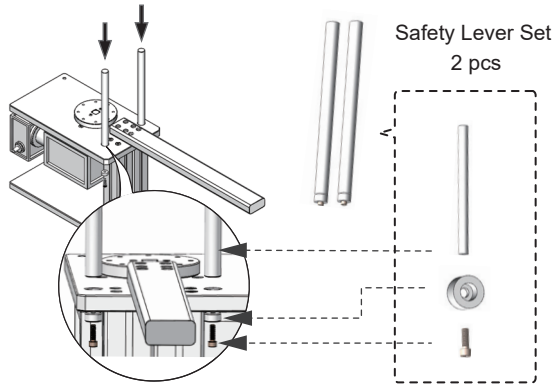
2 How to Assemble

2.1 Place the main body on the table.

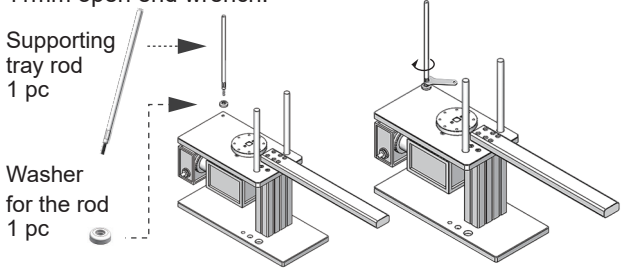
2.2 Assemble the square tube guide:
Tighten the bolts with 6mm Allen wrench.



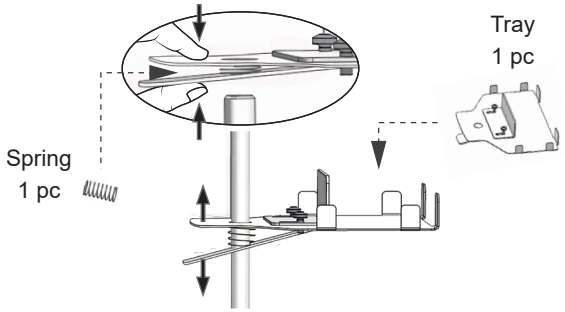
2.3 Assemble the safety lever set:
Insert two safety levers as shown, tighten the bolts with 6mm Allen wrench from underneath the table-top.



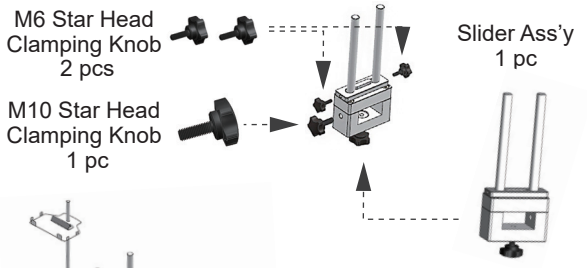
2.4 Assemble the supporting tray rod:
Place the washer under the rod, tighten the rod by 11mm open end wrench.

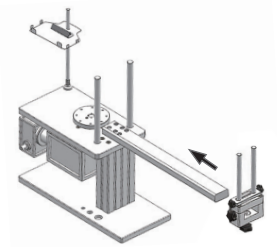


2.5 Assemble the tray:
Insert the spring into the clip of the tray, press and hold the spring clip by hand, thread the tray onto the rod. Release your hand and the tray will stay there. Adjust the tray height to a comfortable position.



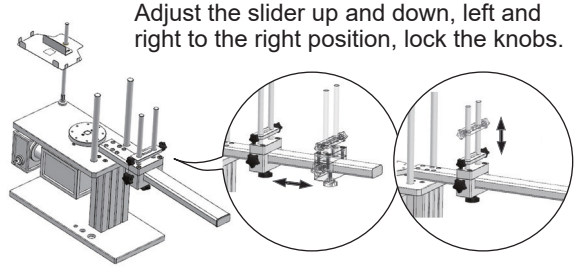
2.6 Assemble the slider assembly:
Screw in the star head clamping knobs on the slider assembly, do not tighten them.



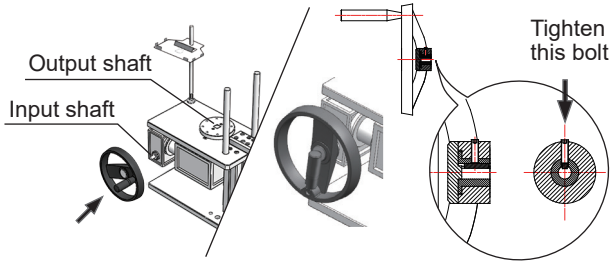


Sleeving the slider assembly from the end of the square tube guide.

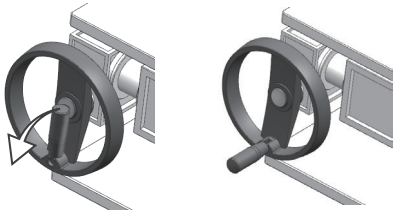
Adjust the slider up and down, left and right to the right position, lock the knobs.



2.7 Assemble the hand wheel:
Attach the hand wheel to the input shaft of the main body and tighten the bolt with 3mm Allen wrench.



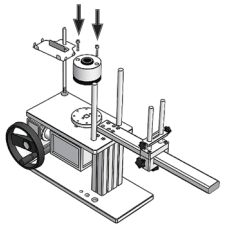
Pull the folding handle perpendicular to the wheel plate. Turn the hand wheel and you can see the output shaft is turning.



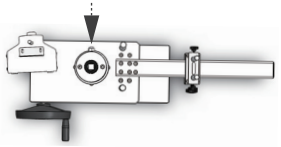
3 Torque Tester Assembly

Here we take "GearWrench" torque tester as an example.

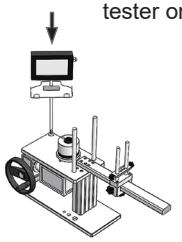
3.1 Assemble torque transducer:
Insert two set screws into the transducer, with the connection socket positioned facing backwards, and screw into any two of the six holes in the output shaft chassis.



Note: The Connection socket should face backwards



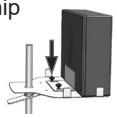
3.2 Place the torque tester on the tray and fix it with 6mm Allen wrench.



A. Loose the screws, push the press clip aside and place the tester on the tray

B. Push the press clip against the tester

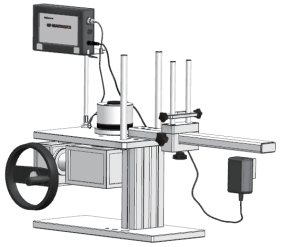
C. Tighten the screws to hold the press chip



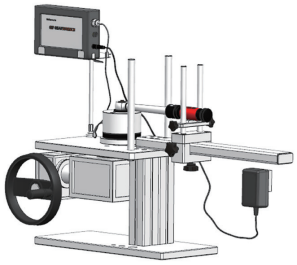
D. Make sure the tester is fixed

3.3 Connect the connection between the torque tester and transducer. Plug in the power connector on the torque tester.

3.4 Plug in the AC end of the power adapter, the "GearWrench" Logo appears on the torque tester, indicating that the connection is normal.



3.5 Put on the wrench. To make sure the reversing lever is in the right direction, you may slowly turn the hand wheel to observe whether the direction is correct. If it is correct, you can start to test.

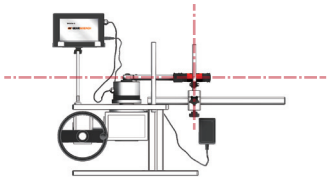


4 How to Use

4.1 Before Test:

Fit the torque wrench's square drive with the hole of the transducer, if the sizes do not match, use an appropriate conversion connecter. Make sure the reversing lever of wrench is in the correct direction.

Move the slider on the square tube guide so that the midpoint of the wrench's grip is against the reaction rod, and adjust the position of the lever on the slider so that the axis of the wrench is horizontal. Then lock the four Star Head Clamping Knobs.



4.2 Testing:

Test the wrench by slowly turning the hand wheel in the direction indicated.

Indicator on label

CW indicates that the wrench is applying force in a clockwise direction (i.e., tightening the bolt). CCW indicates counterclockwise application of force.

Stop rotating the hand wheel as soon as you hear the "Click" sound of the wrench, and unload the force. Then read the data displayed on the torque tester.

Note that the "Click" sound of the small torque wrench is not noticeable, you may need to watch the torque value and immediately stop applying force as soon as the torque value stops increasing.

Before recording the readings, the wrench usually should be fully loaded three times in the test direction, and clear the meter to zero. Then preset the wrench to the low end of the test points to start testing at 20%, 60%, 100% of capacity, each point test five readings (according to ASME.B107.300 -2010).

The speed at which the handwheel rotates is determined by the data displayed on the tester. Generally, you should slow down after the test data reaches 80% of the test point value, and take 0.5-4 seconds to complete 80%-100% range.