



## IPT PRESET TORQUE WRENCH

Model	Item #	American		Square Drive
		S.I.	American	
IPT 18	280041	5 - 25 N.m	3.7 - 18.4 lbf.ft	1/4"
IPT 36	280042	10 - 50 N.m	7.4 - 36.9 lbf.ft	3/8"
IPT 73	280043	20 - 100 N.m	14.8 - 73.8 lbf.ft	3/8"
IPT 110	280044	30 - 150 N.m	22.1 - 110.7 lbf.ft	3/8"
IPT 150	280045	40 - 200 N.m	29.5 - 147.6 lbf.ft	1/2"
IPT 250	280046	60 - 340 N.m	44.3 - 250.9 lbf.ft	1/2"

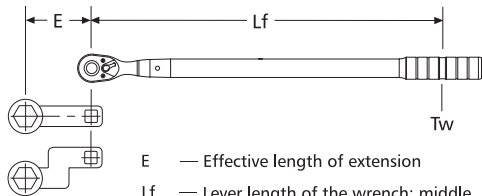
Model	Item #	Length (mm)	Width (mm)	Lf (mm)
IPT 18	280041	226	22.5	175
IPT 36	280042	300	31.2	228
IPT 73	280043	376	31.2	303
IPT 110	280044	386	31.2	313
IPT 150	280045	500	41	420
IPT 250	280046	587	41	510

## Calibration & Maintenance

Torque wrenches go out of calibration with use. A wrench must be properly calibrated and maintained on a preventative maintenance and calibration schedule. In order to maintain accuracy, it is crucial that a wrench be calibrated regularly using a torque tester.

## Calculations For Torque Wrench Extensions

When using extensions, the torque applied to the nut is greater than the setting. To ensure that the correct torque is applied when using extensions, keep the extension "in-line" with the axis of the wrench (as shown in diagram). To calculate the increase, use the formula below:



- E — Effective length of extension
  - Lf — Lever length of the wrench: middle of handle to center of square drive
  - Tw — Torque setting on the wrench
  - Ta — Torque applied by the extension to the fastener
- $$Tw \text{ (Torque Setting)} = Ta \times \frac{Lf}{Lf+E}$$

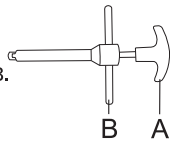
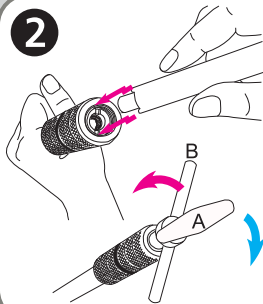


FOR INDUSTRIAL ASSEMBLY

# IPT PRESET TORQUE WRENCH

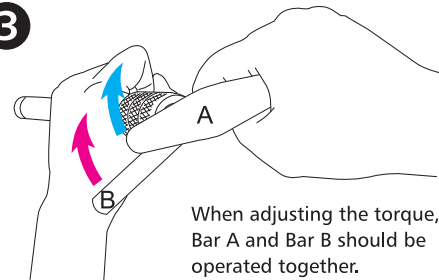
**1**

The setting key possesses two operating bars, Bar A and Bar B.

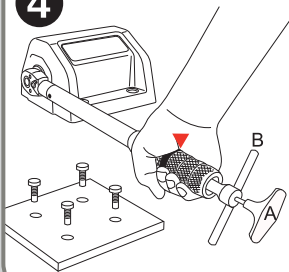
**2**

To insert Bar B into the hole of the handle bottom, make sure the grooves are aligned with two points of setting key.

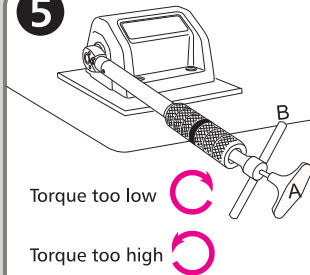
After usage, the screws inside should maintain tightly. Turn Bar A clockwise and turn Bar B counterclockwise in order to loosen the locking system.

**3**

When adjusting the torque, Bar A and Bar B should be operated together.

**4**

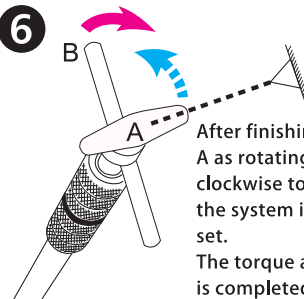
Use torque tester to proceed with torque adjustment; operator should apply force vertically on correct point. When checking the torque with torque tester, the equipment needs to be mounted securely before operating.

**5**

Torque too low

Torque too high

If the torque is too low, hold Bar A and Bar B and turn clockwise together; if the torque is too high, hold Bar A and Bar B and turn counterclockwise together. Repeat operation several times until it meets desired torque.

**6**

After finishing adjustment, fix Bar A as rotating center and turn Bar B clockwise to tighten the screw. As the system is locked, the torque is set. The torque adjustment procedure is completed.