

TORQUE WRENCHES

For precision tightening
of nuts and bolts
to preset torque



TORQCLICK**TORQUE WRENCHES**

All TORQCLICK Torque Wrenches indicate with touch, sound and sight when the required torque setting is reached. This 3 phase safety signal ensures that whatever the application, the tightening torque is applied with the highest degree of accuracy and the minimum of effort.

It is now standard practice for designers or manufacturers of component parts to issue recommended torque loads. The importance of these figures cannot be over-emphasised. They are vital to the engineer or mechanic for servicing and repairs and also to industries where mass production techniques are employed.

TORQCLICK Torque Wrenches have proved themselves both reliable and accurate over many years of full service, mastering every conceivable nut tightening operation in all areas of industry.

TORQCLICK Adjustable Ratcheting Torque Wrenches:-

The ratchet action on TORQCLICK Torque Wrenches speeds up operation while still maintaining a controlled torque loading. The ratchet ensures that minimal movement is required giving ease of operation in confined spaces. The heads of the wrenches have been kept very compact for maximum accessibility.

TORQCLICK Production Torque Wrenches:-

With the ever increasing use of fixed torque setting in production line assembly, the need exists for Torque Wrenches capable of being set at a particular load, and then locked in such a manner as to stop unauthorised alteration of the setting.

TORQCLICK Production Torque Wrenches meet this need, available in both reversible non-ratcheting and reversible ratcheting types. These Torque Wrenches provide a constant accurate torque which cannot be altered by the operator, but when required, can be re-set to a different torque load using a suitable test rig.



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SPECIFICATIONS

Wrench No.	Torque Range				Square Drive		Overall Length	
	Newton metres	Kilogramme metres	lb-in	lb-ft	Nominal		in	mm
					in	mm		
Adjustable Models								
Non-Ratcheting								
PVT100A	2.5 to 11	0.3 to 1.2	20 to 100	2 to 8	$\frac{3}{8}$	10	12 $\frac{1}{2}$	317
PVT300A	5 to 33	0.5 to 3.4	40 to 300	4 to 24	$\frac{3}{8}$	10	16 $\frac{5}{8}$	422
PVT600A	12 to 68	1.2 to 7	100 to 600	10 to 50	$\frac{1}{2}$	12.5	18 $\frac{3}{4}$	476
PVT1200A	25 to 135	3 to 14	200 to 1200	20 to 100	$\frac{1}{2}$	12.5	21 $\frac{1}{2}$	546
PVT2000A	50 to 225	5 to 23	400 to 2000	40 to 160	$\frac{1}{2}$	12.5	23 $\frac{1}{2}$	597
PVT3000A	70 to 330	7 to 35	600 to 3000	50 to 250	$\frac{1}{2}$	12.5	32 $\frac{1}{2}$	825
PVT5000	140 to 560	14 to 57	1200 to 5000	100 to 410	$\frac{3}{4}$	20	41 $\frac{1}{2}$	1130
PVT8400	480 to 940	49 to 95	4200 to 8400	350 to 700	1	25	55	1397
PVT12300	700 to 1400	70 to 140	6000 to 12300	500 to 1000	1	25	60	1505
Ratcheting								
PVTR1200	25 to 135	3 to 14	200 to 1200	20 to 100	$\frac{1}{2}$	12.5	21 $\frac{1}{2}$	555
PVTR2000	50 to 225	5 to 23	400 to 2000	40 to 160	$\frac{1}{2}$	12.5	24	610
PVTR3000	70 to 330	7 to 35	600 to 3000	50 to 250	$\frac{1}{2}$	12.5	33 $\frac{1}{8}$	841
Production Models								
Non-Ratcheting								
PFT100	4.5 to 11	0.4 to 1.1	40 to 100	3 to 8	$\frac{3}{8}$	10	10 $\frac{1}{4}$	260
PFT300	9.5 to 34	1.0 to 3.4	85 to 300	7 to 25	$\frac{3}{8}$	10	13 $\frac{3}{4}$	350
PFT720	23 to 82	2.3 to 8.3	200 to 720	20 to 60	$\frac{1}{2}$	12.5	18 $\frac{1}{2}$	470
PFT1200	68 to 136	7 to 14	600 to 1200	50 to 100	$\frac{1}{2}$	12.5	22	555
PFT2000	113 to 226	11.5 to 23.0	1000 to 2000	85 to 160	$\frac{1}{2}$	12.5	26 $\frac{3}{8}$	670
PFT3000	170 to 340	17.5 to 35.0	1500 to 3000	125 to 250	$\frac{1}{2}$	12.5	31 $\frac{1}{8}$	810
PFT5000	140 to 560	14 to 57.0	1200 to 5000	100 to 410	$\frac{3}{4}$	20.0	38 $\frac{1}{4}$	970
Ratcheting								
PFTR720	23 to 82	2.3 to 8.3	200 to 720	20 to 60	$\frac{1}{2}$	12.5	18 $\frac{3}{4}$	475
PFTR1200	68 to 136	7 to 14	600 to 1200	50 to 100	$\frac{1}{2}$	12.5	22 $\frac{1}{2}$	565
PFTR2000	113 to 226	11.5 to 23	1000 to 2000	85 to 160	$\frac{1}{2}$	12.5	26 $\frac{3}{4}$	680
PFTR3000	170 to 340	17.5 to 35	1500 to 3000	125 to 250	$\frac{1}{2}$	12.5	32 $\frac{1}{4}$	820

Accuracy Note:

TORQCLICK Torque Wrenches are manufactured to a calibration tolerance of + 3%.

To ensure continuing accuracy, when setting the wrench always approach the setting from the low side. When not in use, the wrench should be left wound down to the bottom end of the scale.



TORQCLICK

FOR CERTAINTY AND SAFETY ASK FOR

The ever-increasing need for accurate torque tightening through manufacturing and servicing, demands the use of reliable, accurate torque wrenches. When you buy a torque wrench you are paying essentially for safety. Without accuracy that can be relied upon, the results are at best the worst positively dangerous and damaging.

There are many reasons for insisting on TORQCLICK Torque Wrenches.

For certainty and safety ask for TORQCLICK by name and accuracy.

ACCURATE IN USE

Mechanism pivots on the square drive.

Guaranteed accuracy wherever the wrench is grasped.

DURABLE

Hard-wearing, heavy-duty mechanism.

Retains original accuracy of $\pm 3\%$ for up to 10,000 operations without recalibration.

SAFETY IN USE

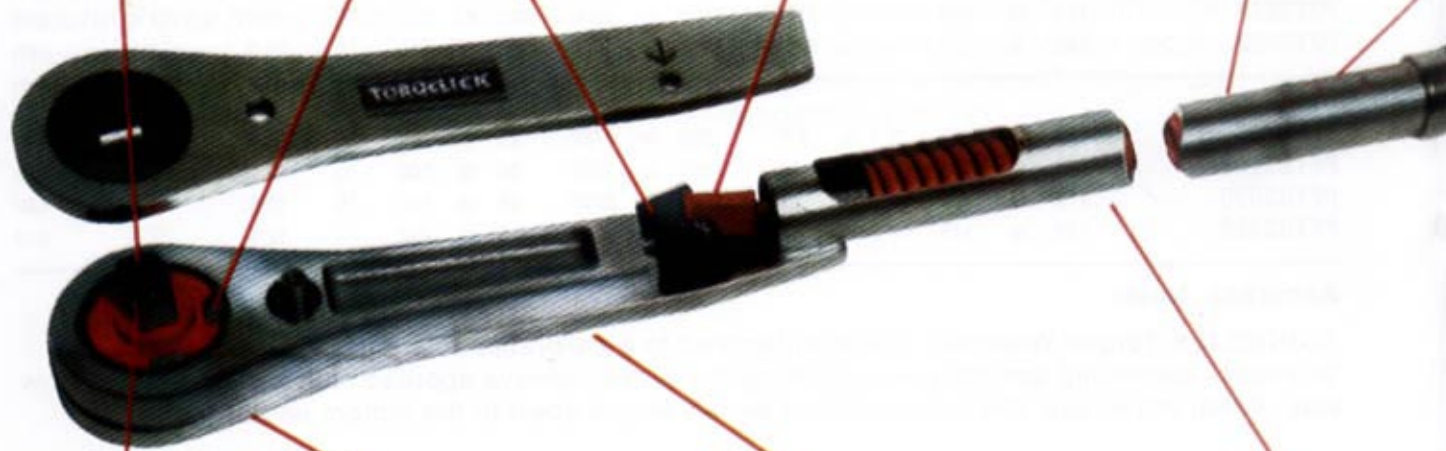
Progressive torque build-up to the selected setting-easily detected by sight, sound and feel.

Torque setting cannot be exceeded by accident-avoids mechanical damage and risk of injury.

ACCURATE IN DESIGN

Guaranteed accuracy of $\pm 1\%$ throughout the torque range.

Ensures safety and avoidance of damage.



CONVENIENCE IN USE

Push-through, user-replaceable square drive.

Enables wrench to be turned over and used in opposite direction: with no need to return wrench to manufacturer for drive repair.

COMPACT

Head no wider than a typical socket or, in the case of ratcheting versions, no bigger than a typical ratchet handle head.

Improved access in confined spaces.

ROBUST

Extremely strong construction.

Resists all but the most severe accidental damage.

EASE IN USE

Length controlled by a controlled expansion settings-essentially limiting situations.

Avoids accidents by not exceeding setting so no damage and

TORQCLICK BY NAME AND ACCEPT NO SUBSTITUTES

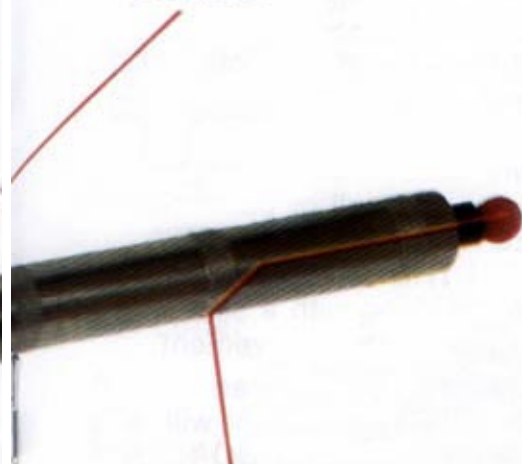
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rate torque wrenches.
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EASY TO USE TORQUE SCALE

Large, clear scale markings in Nm, kg/m, lbf/in and lbf/ft.

Accurate setting easily obtained.



SECURITY

Secure and rapid torque setting adjustment.

Easily adjusted yet impossible to alter by accident—ensures accurate settings at all times.

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safety risks.

Does your torque wrench have all the essential features?

Essential torque wrench features	TORQCLICK	Other makes (the majority of these points apply to most brands)
1. Accuracy in design	$\pm 3\%$ guaranteed at all settings.	Accuracy claims are frequently wider than $\pm 3\%$ and often do not apply across the full range of settings.
2. Accuracy in use	Accuracy unaffected by position of hands on the wrench.	Accuracy deteriorates rapidly if the wrench is held anywhere but on the handle. The use of two hands in different positions also affects accuracy.
3. Safety in use	Clear signals (sight, sound and feel) at all torque settings coupled with a progressive and controlled torque build-up.	Usually signals are by sound and feel only. Even these tend to diminish dramatically at low settings and in many cases are barely detectable in workshop conditions. Torque build-up tends to be rapid and increases the risk of exceeding the selected torque level.
4. Durability	The heavy-duty construction resists all but the most severe abuse and maintains accuracy for upto 10,000 operations without recalibration.	Delicate, fully-enclosed mechanisms typify most other torque wrenches and are prone to damage. Accuracy tends to deteriorate much more rapidly in use.
5. Ease of use	The design length is calculated to enable a controlled pulling effort at all settings.	Designs tend to be too short to allow a controlled pulling effort particularly at high torque settings. In some cases it is virtually impossible to use the upper end of the scale.
6. Torque limiting action	This prevents accidentally exceeding the selected torque setting.	Dial and beam type torque wrenches merely indicate the applied torque and fail to prevent excessive loads being applied accidentally.
7. Clear torque scale	Large clear scales, on all standard versions featuring Nm, kg/m, lbf/in and lbf/ft.	The vast majority feature only one scale, are often cramped and require very careful setting.

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Instructions for Setting and Operation.

To set the Wrench

1. Adjustable Models

Either pull out the attached torque adjuster knob and swivel into slot or insert the tommy bar provided through the hole at the extreme end of the handle. When the bar is turned, the bevelled edge of the knurled handle sleeve moves backwards or forwards along the barrel of the wrench and passes over clearly marked scales.

The wrench is correctly loaded when the thin extremity of the bevel cuts across the scale at the graduation mark corresponding to the required torque load.

The handle sleeve is free to rotate. This is intentional and prevents any accidental alteration to the setting.

2. Production Models

Remove plastic handle, insert hexagon key, unlock and remove grub screw.

Slacken outer locking ring with screw driver.

Using a suitable setting rig adjust the inner plug until the required torque setting is obtained.

Check by operating the wrench several times.

Lock up outer locking ring.

Fit grub screw and lock securely.

Check that torque setting is correct and replace plastic handle.

Positioning the Square Drive:

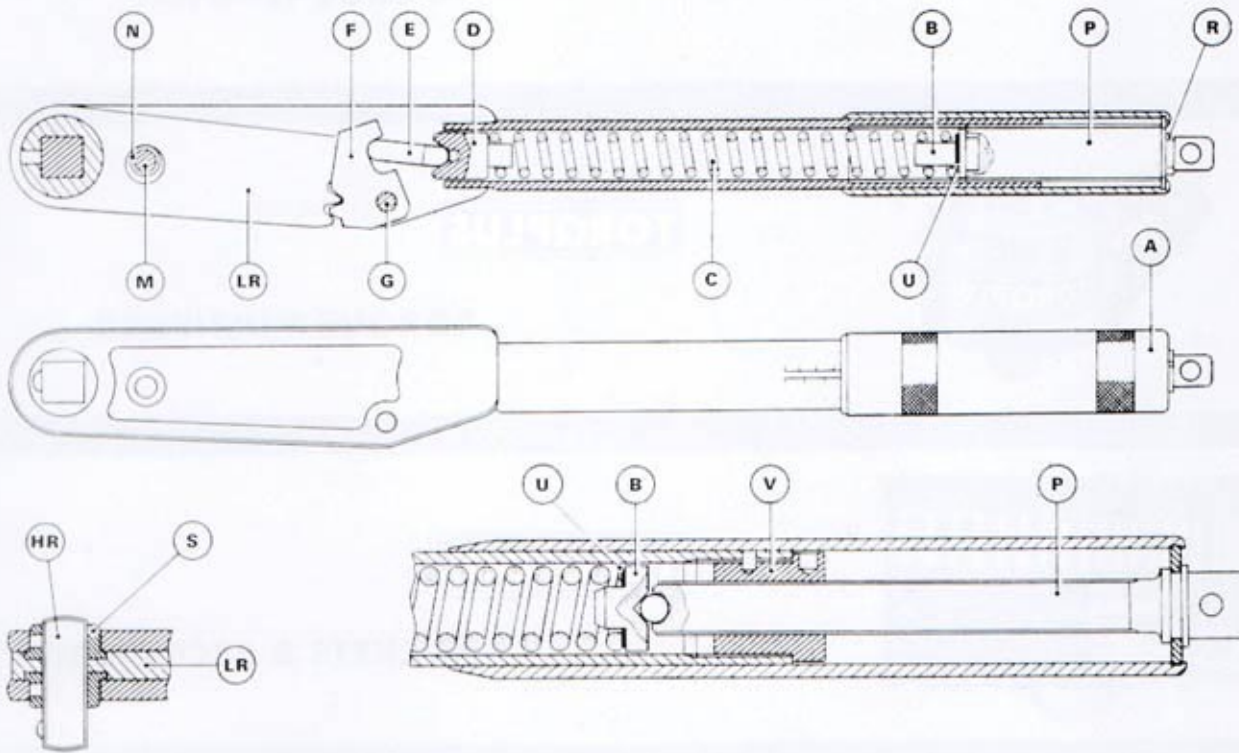
The Square drive plug is movable and can be pushed through the wrench in both directions.

For right-hand threads, the plug should be level with the side plate containing the words "TORQCLICK", and projecting beyond the side plate containing the wrench number. For left-hand threads, the plug should be level with the side plate containing the wrench number. For left-hand threads, the plug should be level with the side plate containing the wrench number and projecting beyond the side plate containing the words "TORQCLICK".

To Operate the Wrench:

- a) Fix the correct size socket to the square drive and place squarely on the nut.
- b) Grip the wrench at the knurled handle sleeve and pull or push **IN THE DIRECTION OF THE ARROW MARKED ON THE SIDE PLATES**. This should be done with a slow continuously controlled movement.
- c) When the set torque has been applied, a loud metallic 'click' will be heard. **AT THIS POINT DO NOT PULL OR PUSH FURTHER.**
- d) Relax the force on the handle and allow the wrench to return to its original position. In doing so, it automatically resets itself and is ready for instant use again at the same setting.

TORQCLICK Torque Wrench spare parts



This table gives correct descriptions for the parts identified by reference letters on the drawing above.

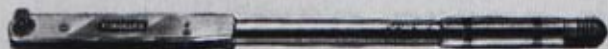
Ref Letter	Description of Part	Ref Letter	Description of Part
A	Knurled Handle Sleeve	LR	Gear Link
B	Spring Adjuster Plug	M	Gear Link Retaining Pin
C	Spring	N	Spacing Washer
D	Plunger	P	Adjusting Screw
E	Toggle	R	Circlip
F	Pinion Link	S	Square Drive Bushes
G	Pinion Link Pivot Pin	U	Packing Washers
HR	Square Drive	V	Barrel Plug

Important: To ensure correct calibration, a new Spring (C) can only be supplied complete with Spring Adjuster Plug (B) and the requisite number of Packing Washers (U). These parts must be kept together prior to assembly in the wrench.

To order a replacement part: Prefix the letter reference for the part required with the wrench number will be found on one of the wrench side plates.

Example—Wrench No. **PVTR1200** Part required is Toggle (E). Quote **PVTR 1200 E**.

QUALITY TORQUE TOOLS FROM POWERMASTER



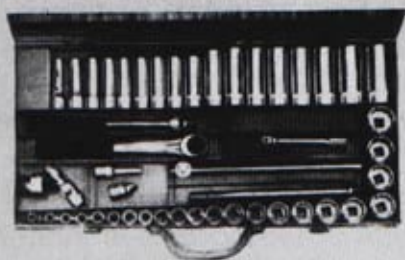
TORQCLICK

TORQUE WRENCH



TORQPLUS

TORQUE MULTIPLIER



TORQTOOL

SOCKETS & ACCESSORIES



TORQSLEDGE

SLUGGING WRENCH



TORQKIT

TOOL KIT

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CAT. No. 512/157