

DRAPER **EXPERT**

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Original Instructions
Version 1 - 10/24

TORQUE WRENCH

17653, 17738, 17766



1. Product Introduction

User Manual for: Torque Wrenches
Stock Nos: 17653, 17738, 17766
Part Nos: EXMTW-3/8, EXMTW-1/2, EXMTW-1/2B

Revisions

Version 1: October 2024
First release

1.1 Intended Use

This tool has been designed to tighten screws, bolts and other fixings to the required torque.

Any other application beyond the conditions established for use will be considered misuse. Draper Tools accepts no responsibility for improper use of this product.

Read this manual in full before using this product and retain it for future use. Always use the latest version of the manual. Please visit drapertools.com/manuals for the latest version.

1.2 Specification

Stock No.	17653	17738	17766
Part No.	EXMTW-3/8	EXMTW-1/2	EXMTW-1/2B
Drive Size	3/8"	1/2"	1/2"
Torque Range	20 – 142Nm	40 – 200Nm	60 – 340Nm
Accuracy	+/- 4%	+/-4%	+/-4%
Application	Clockwise only	Clockwise only	Clockwise only
Head Style	Fixed ratchet	Fixed ratchet	Fixed ratchet
Tooth Count	32T	32T	32T
Overall Length (approx.)	450mm	535mm	615mm

This torque wrench is accurate to +/- 4% of the set load and has been manufactured and tested in accordance to ISO 6789-2:2017.

Note: The torque wrench is calibrated in Nm. The ft/lb scale is the conversion of Nm scale, so the ft/lb scale is only for reference.

Important: Read all the Health and Safety instructions before attempting to operate, maintain or repair this product. Failure to follow these instructions may result in damage to the workpiece, tool or cause it to require recalibration.



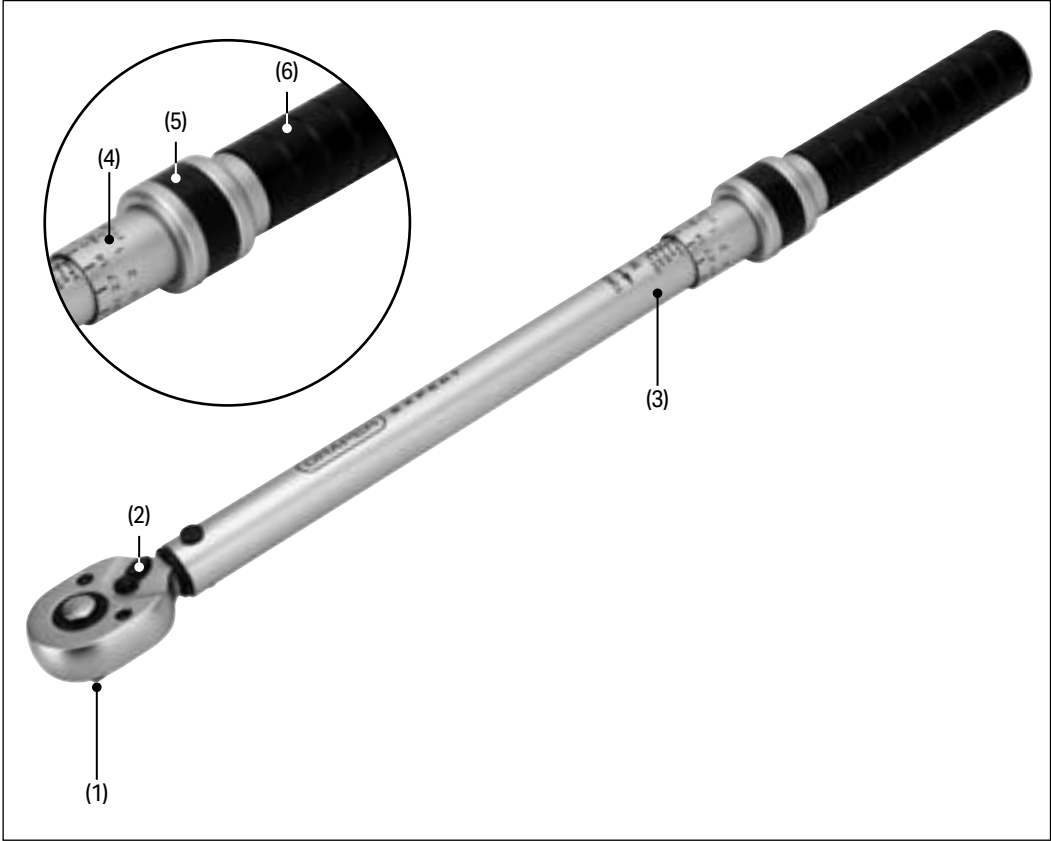
WARNING! DO NOT use this product if it is damaged in any way. Contact Draper Tools for repair and replacement options.

- Use this product only for its intended purpose and do not modify it in any way.

- **Important: ALWAYS** read the manufacturer's instructions for the recommended torque settings. Incorrect torque settings can result in serious damage or injury when the workpiece is used.
- This torque wrench is a precision tool. It must **NOT** be used to pry or loosen nuts, bolts or fixings; to separate materials; as a substitute for ratchet spanners or hammers; or as a breaker bar. Used in such a way will damage the calibration setting and invalidate your warranty.
- **DO NOT** interfere with or loosen the lock nut as this will affect the calibration. If it becomes loose **DO NOT** use the torque wrench.
- **DO NOT** use to torque left handed threads.
- Before first use, test the torque wrench on non-critical fixings to familiarise yourself with the responses that indicate the configured torque is reached.
Important: Some responses may be less noticeable at lower torques.
- **ALWAYS** select the correct size and type of socket for use with the fixing.
- **NEVER** set the torque wrench beyond its maximum or minimum settings as this may damage the internal spring and distort the calibration.
- **ALWAYS** return the torque wrench to its minimum setting when not in use. – Failure to do this will weaken the internal spring and distort the calibration of the tool. Damage caused to the tool in this way is not covered by your warranty.
- **DO NOT** over-tighten fixings as this may result in breakages.
- Stop applying force as soon as a noticeable 'Click' is heard.
- **DO NOT** turn the adjustment lever (2) anti-clockwise while setting the torque as this may result in damage.
- Observe all standard safety precautions and good practices when in a workshop environment.
- Inspect the product before every use for cracked, corroded or broken parts.

3. Identification and Unpacking

3.1 Product Overview



- | | | | |
|-----|----------------------|-----|-------------------------------|
| (1) | Drive square | (4) | Torque secondary scale collar |
| (2) | Adjustment lever | (5) | Locking ring |
| (3) | Torque primary scale | (6) | Handle |

3.2 Packaging

Carefully remove the product from the packaging and examine it for any signs of damage that may have occurred during shipment.

Keep the product packaging for the duration of the warranty period for reference should the product need to be returned for repair.

If any part is damaged or missing, do not attempt to use the product. Please contact the Draper Helpline; contact details can be found at the back of this manual.

WARNING! Keep packaging materials out of reach of children. Dispose of packaging correctly and responsibly and in accordance with local regulations.

Please visit **[drapertools.com](https://www.drapertools.com)** for our full range of accessories and consumables.

4.1 Setting the Torque

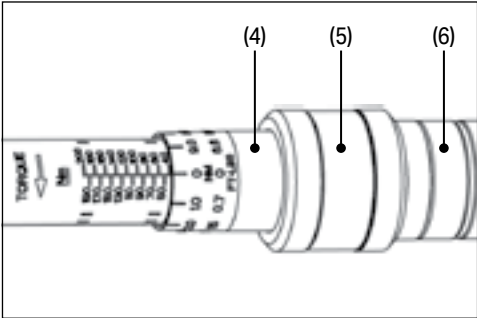


Fig. 1

1. To unlock handle, pull the locking ring (5) down and turn the handle (6).
 2. Set the required torque by turning the handle until the selected torque on the primary scale aligned with the '0' on the secondary scale collar (4). Then continue to turn the handle make minor adjustment on the secondary scale (Fig. 2).
 3. Lock the handle by releasing the locking ring until you hear or feel a 'CLICK' and the handle does not turn.
- When the torque wrench is not in use, ensure the adjustment is at the lowest torque setting.

Setting Examples

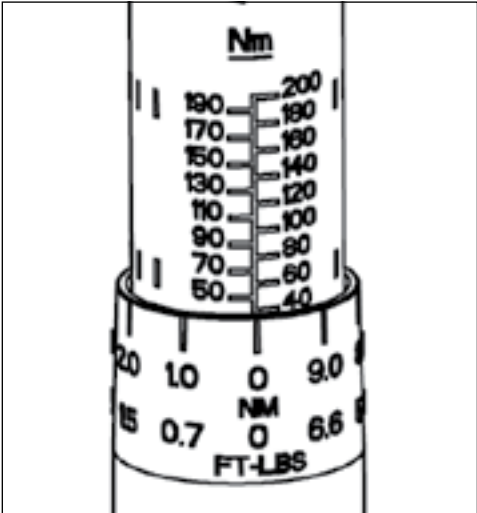


Fig. 2 – Setting example 40Nm

4. Operating Instructions

4.2 Using the Torque Wrench

Important:

- Always use the correct size socket.
- Apply a steady slow force on the grip handle. When the required torque is reached, this will be indicated by the following:
 - **Audible click:** The click will be quieter at lower torque settings.
 - **Touch:** The handle will be felt to “break away” at the point of the set torque.
 - **Visually:** The handle will be seen to “break away” at the point of the set torque.

Note: Responses may be less perceptible at lower torques.

**WARNING!** Once the set torque is reached, **DO NOT** continue to turn the torque wrench as this will deliver an incorrect torque and may damage the parts.

1. Select the required socket or bit and adaptors as appropriate and fit onto the square drive.
2. Set the adjustment direction by moving the lever (2) on the back of the wrench head:
 - To rotate the ratchet head clockwise, move the switch to the right position.
 - To rotate the ratchet head anticlockwise, move the switch to the left position.
3. Set the wrench torque; see section 4.1.
4. Place the bit or socket onto the fixing and apply a slow steady force in the desired direction.
5. When the set torque has been reached, the tool will exhibit an audible, tangible and visual response.
6. Carefully remove the wrench from the fixing.

4.3 Conversion Chart

	mN/m millinewton- metre	cN/m centinewton- metre	N/m newton- metre	daN/m decanewton- metre	cm/kg centimetre- kg	m/kg metre- kg	in-oz inch- ounce	in-lb inch- pound	ft-lb foot- pound
1mN/m	1	0.1	0.001	0.0001	0.0102	0.000102	0.1416	0.00885	0.000738
1cN/m	10	1	0.01	0.001	0.102	0.00102	1.416	0.0885	0.00738
1N/m	1000	100	1	0.1	10.2	0.102	141.6	8.85	0.738
1daN/m	10000	1000	10	1	102	1.02	1416	88.5	7.38
1cm/kg	98	9.8	0.098	0.0098	1	0.01	13.9	0.868	0.0723
1m/kg	9810	981	9.81	0.98	100	1	1390	86.8	7.23
lin-oz	7.06	0.706	0.00706	0.0007	0.072	0.00072	1	16	192
lin/lb	112.9	11.29	0.1129	0.01129	1.152	0.0115	0.063	1	12
lft-lb	1355	35	1.355	0.1135	13.8	0.138	0.0052	0.083	1

5.1 General Maintenance and Storage

Important: A torque wrench is a precision tool. Failure to calibrate your tool regularly or to store correctly will constitute misuse and invalidate your warranty.

- The torque wrench is lubricated for life and should not be oiled. The only exception is the head which may be lubricated as needed for smooth operation.
- Keep the product free from grease, chemicals and other substances to prevent damage from corrosion.
- Wipe the wrench with a dry cloth **only**.
- **DO NOT** use solvents or chemicals that may interfere with the internal lubrication.
- Store this product in the storage case supplied, in a clean and dry location, out of direct sunlight and out of reach of children.
- **ALWAYS** return the torque wrench to its lowest setting before storage. Failure to do this will weaken the internal springs and distort the calibration of the tool.
 - Frequently used tools should be calibrated more often.
- **NEVER** attempt to repair or adjust this product. Servicing, repairs and calibration must be carried out **ONLY** by qualified and authorised service agents.

If the torque wrench fails to function correctly for any of the following reasons, return the tool to an authorised Draper Tools agent:

- The ratchet fails to function.
 - The handle lock fails to function.
 - The wrench does not “click” at the set torque.
 - The handle does not break away at the set torque.
- At the end of its working life, dispose of the product responsibly and in line with local regulations; recycle where possible.

5.2 Calibration

- Have the torque wrench calibrated at least once a year or after approximately 5000 cycles by a certified calibration centre. **For the first recalibration, the period of validity starts with user's first operation of the torque tool.**
- Torque tools are classified as test devices. If a calibration routine is required, the calibration interval shall be chosen on the basis of the factors of operation such as required accuracy, frequency of use, typical load during operation as well as ambient conditions during operation and storage conditions.
- The interval should be decided according to the user's procedures for the control of test devices and by the requirements of the user.
- The torque tool shall be recalibrated when it has been subjected to an overload greater than 125% of maximum rated load and after repair, or after any improper handling which might influence any errors in measurement.

NOTE: the recalibration routine for the torque wrench is NOT covered by the product warranty.

6. Warranty

Should the tool develop a fault, return the complete tool to your nearest distributor or contact Draper Tools directly. Proof of purchase must be provided.

If, upon inspection, it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This warranty covers parts and labour for the lifetime of the product. However, if the tools are hired out, the warranty period is 90 days from the date of purchase.

This warranty does not apply to any consumable parts, batteries or normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper Tools repair agent.

Visit drapertools.com/warranty for full details.

Contact Details

Draper Tools

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Please contact the Draper Tools Product Helpline for repair and servicing enquiries.