

## LEGEND

ТО	RQUE WREN	ICH	ES		
-(±3)-	Accuracy (%)	0-	Ratchet		Digital Display
	Single Scale	<b>D</b> •	Torque Handle	•••	IP Rated
	Dual Scale		Fixed	Ê	Case Included
	Multi Scale		Calibration Certificate		
<b>A</b>	Adjustment Lock	Î¥	Torque & Angle		
MA	NUAL TORQ	UE	MULTIPLIERS	5	
-(±4)-	Accuracy (%)		Calibration Certificate		Anti Wind-up Ratchet
	Adjustable Reaction		UKAS Certification		Case Included
PO		QUI		RS	
±3	Accuracy (%)	19)0	Air Consumption - litres/sec	0	Adjustable Reaction
	Dual Scale	<b>↑</b>	Lifting Attachment	\$¥	Torque & Angle
	Multi Scale	2≣	2 Speed		Calibration Certificate
	Digital Display	↔	Bi-Directional	•••	IP Rated
*	Bluetooth Connection		Case Included		
то	RQUE MEASI	JRE	MENT INSTR	UMI	ents
-(±1)-	Accuracy (%)	D	Digital Display		Case Included
	Multi Transducers		Calibration Certificate		Back-up Data
	Multi Scale		UKAS Certification		
HY	DRAULIC TO	OL	CALIBRATIC	DN F	IXTURES
±0.5	Accuracy (%)				
HA	RSH ENVIRO	NM		MEN	NTS
-±0,5	Accuracy (%)		UKAS Certification		Case Included
	Multi Transducers	•••	IP Rated		
	Multi Scale	D	Digital Display		
ULTRASONIC MEASUREMENT					
	Multi Scale		Back-up Data		Case Included
	Digital Display		Calibration Certificate		
CA	LIBRATION E	BEAL	15 & WEIGH	TS	
	UKAS		Case Included		
	Certification				

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### INTRODUCTION



#### **GLOBAL SERVICE**

We are the worlds foremost specialist in torque control and we are engaged solely in the design, development and production of torque tightening and measuring equipment.

Our customers include manufacturers and engineering services in such diverse sectors as aerospace, energy, oil and gas, mining and sub-sea.

There are sales and service branches in North America, Australia, Singapore, China and India. In addition, we have distributors of our torque control products in more than 60 countries around the world.

#### A FAMILY BUSINESS

The Brodey family has owned Norbar since Bill Brodey incorporated the company in 1943. We are now the third generation of the family to manage the business and are passionate about its every aspect.

At Norbar we are determined to bring our customers advanced new products and this year we are excited to be launching our ClickTronic torque wrench in this product list. This new product combines the proven mechanism from our Professional torque wrench family with a digital scale making one of the most accurate and easy to use torque wrenches on the market.

We continue to invest in the very latest design, manufacturing and quality control technology to achieve the highest level of innovation and precision in the field of torque control and equipment.



The Norbar Directors from top left to bottom right: Catherine Rohll (Commercial Director), Philip Brodey (Sales & Marketing Director), Neill Brodey (Managing Director), Craig Brodey (Director)

## **TORQUE WRENCHES**

Norbar Torque Tools manufacture an extensive range of high quality torque screwdrivers and torque wrenches to cover torque values from 0.3 N·m to 2000 N·m. They are designed and manufactured to exceed international standards for accuracy.

In addition to the normal 'adjustable' torque wrenches, Norbar offer Production 'P' Type versions which can be pre-set and dedicated to a particular application. This setting system is designed to discourage unauthorised alteration.

All Norbar torque wrenches are offered as standard with a quality ratchet. For applications where interchangeable end fittings are required, 'Torque Handles', which allow for interchangeable spanner fittings, are also available in various models up to 650 N·m.

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### TORQUE SCREWDRIVERS











Shown with TruCheck™

Screwdriver Kit

## Versatile, accurate and easy torqueing for smaller fasteners and restricted spaces

- Accuracy exceeds the requirements of ISO6789:2003
- Supplied with 1/4" hexagon bit holder
- Bit holder can be removed and replaced with widely available screwdriver blades
- Single scale, either N·m or lbf·in

2	
13475	TTs1.5 N·m, ¼", 0.3 - 1.5 N·m
13476	TTs3.0 N·m, ¼", 0.6 - 3 N·m
13509	TTs6.0 N·m, ¼", 1.2 - 6 N·m
2	ADJUSTABLE lbf·in
13515	TTs13 in·lb, ¼", 2.5 - 13 lbf·in
13516	TTs26 in·lb, ¼", 5 - 26 lbf·in
13517	TTs53 in·lb, ¼", 10 - 53 lbf·in
2	PRODUCTION 'P' TYPE
13510	TTs1.5, ¼", 0.3 - 1.5 N·m, 2.5 - 13 lbf·in
13511	TTs3.0, ¼", 0.6 - 3 N·m, 5 - 26 lbf·in
13512	TTs6.0, ¼", 1.2 - 6 N·m, 10 - 53 lbf·in
SQ2222	Pre-set, etch and certify
	(Allow 3 days delivery for this service)
_	
2	
13700	TTs0.3 - 1.5 N·m Kit with 12 piece bit set and case
13701	TTs0.6 - 3 N·m Kit with 12 piece bit set and case
13702	TTsI.2 - 6 N·m Kit with I2 piece bit set and case
28937	12 Piece ¼", Hex Bit Set

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## TTi TORQUE WRENCHES









TTi60 - TTi300 Ratchet is 'push through' for clockwise and anticlockwise torque control

## For no-nonsense torqueing - comfortable, accurate and easy to use

- Accurate to  $\pm 3\%$  of reading which meets and exceeds ISO6789:2003
- Micrometer scale for simple and error free setting
- Available with either dual scale (N·m and lbf·ft) or single denomination torque scale
- 'Push Through' ratchets adapt for torque control in both the clockwise and anticlockwise directions
- Tough ratchets with narrow engagement angles allow for easy positioning of the tool in confined spaces
- All models feature a lock to prevent accidental adjustment of the set torque
- Handle and lens materials resistant to commonly used industrial chemicals





2	RATCHET ADJUSTABLE - DUAL SCALE
13285	TTi20, ¼", I - 20 N·m, 10 - 180 lbf·in
13640	TTi20, ¾", I - 20 N·m, 10 - 180 lbf·in
13658	TTi50, ¾", 8 - 50 N·m, 6 - 35 lbf·ft
13659	TTi50, ½", 8 - 50 N·m, 6 - 35 lbf·ft
13679	TTi60, ¾", 12 - 60 N·m, 10 - 45 lbf·ft
13680	TTi60, ½", 12 - 60 N·m, 10 - 45 lbf·ft
13440	TTil00, ¾", 20 - 100 N·m, 15 - 75 lbf·ft
13441	TTi100, ½", 20 - 100 N·m, 15 - 75 lbf·ft
13442	TTi150, ½", 30 - 150 N·m, 20 - 110 lbf·ft
13443	TTi200, ½", 40 - 200 N·m, 30 - 150 lbf·ft
13444	TTi250, ½", 50 - 250 N·m, 40 - 185 lbf·ft
13445	TTi300, ½", 60 - 300 N·m, 45 - 220 lbf·ft

2	RATCHET ADJUSTABLE - N·m ONLY
13648	TTi20 N·m, ¼", I - 20 N·m
13649	TTi20 N·m, ¾", I - 20 N·m
13662	TTi50 N·m, ¾", 8 - 50 N·m
13663	TTi50 N·m, ½", 8 - 50 N·m
13681	TTi60 N·m, ³∕ø", 12 - 60 N·m
13682	TTi60 N·m, ½", 12 - 60 N·m
13450	TTil00 N·m, <b>³∕s"</b> , 20 - 100 N·m
13451	TTil00 N·m, ½", 20 - 100 N·m
13452	TTiI50 N·m, ½", 30 - I50 N·m
13453	TTi200 N·m, ½", 40 - 200 N·m
13454	TTi250 N·m, ½", 50 - 250 N·m
13455	TTi300 N·m. ½", 60 - 300 N·m

2	RATCHET ADJUSTABLE - Ibf-ft ONLY
13652	TTi15 ft·lb, ¼", 10 - 180 lbf·in
13653	TTil5 ft·lb, 3⁄8", 10 - 180 lbf·in
13664	TTi35 ft·lb, 3/8", 6 - 35 lbf·ft
13665	TTi35 ft·lb, ½", 6 - 35 lbf·ft
13683	TTi45 ft·lb, 3/6", 10 - 45 lbf·ft
13684	TTi45 ft·lb, ½", 10 - 45 lbf·ft
13460	TTi75 ft·lb, 3/6", 15 - 75 lbf·ft
13461	TTi75 ft·lb, ½", 15 - 75 lbf·ft
13462	TTil10 ft·lb, ½", 20 - 110 lbf·ft
13463	TTi150 ft·lb, ½", 30 - 150 lbf·ft
13464	TTi185 ft·lb, ½", 40 - 185 lbf·ft
13465	TTi220 ft·lb, 1⁄2", 45 - 220 lbf·ft
13466	TTi250 ft·lb, ½", 50 - 250 lbf·ft

## TT TORQUE WRENCHES

### TTF FIXED HEAD TORQUE WRENCHES

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## TTfth FEMALE TORQUE HANDLES









#### Ultra robust, non-ratcheting fixed head

TTf Fixed Head

- Accurate to  $\pm 3\%$  of reading which meets and exceeds ISO6789:2003
- Micrometer scale for simple, error free setting
- Available with either dual scale (N·m and lbf·ft) or single denomination torque scale

#### ADJUSTABLE - DUAL SCALE

13550	TTf20 ³/8", I - 20 N·m, I0 - I80 lbf·in
13685	TTf60 3/8", 12 – 60 N·m, 10 – 45 lbf·ft
13552	TTf100 3/8", 20 - 100 N·m, 15 - 75 lbf·ft
13553	TTf100 ½", 20 - 100 N·m, 15 - 75 lbf·ft
13554	TTf150 1⁄2", 30 - 150 N·m, 20 - 110 lbf·ft
13555	TTf200 1⁄2", 40 - 200 N·m, 30 - 150 lbf·ft
13556	TTf250 <b>'⁄2</b> ", 50 - 250 N·m, 40 - 185 lbf·ft
13557	TTf300 <b>1⁄2"</b> , 60 - 300 N·m, 45 - 220 lbf·ft

2	ADJUSTABLE - N·m ONLY
13559	TTf20 N·m, 3⁄8", I - 20 N·m
13686	TTf60 N·m, <b>¾</b> ", 12 – 60 N·m
13565	TTf100 N·m, ¾", 20 - 100 N·m
13566	TTf100 N·m, 1⁄2", 20 - 100 N·m
13567	TTf150 N·m, <b>½</b> ", 30 - 150 N·m
13568	TTf200 N·m, <b>'/2"</b> , 40 - 200 N·m
13569	TTf250 N·m, <b>'⁄2</b> ", 50 - 250 N·m
13570	TTf300 N·m, 1⁄2", 60 - 300 N·m

2	ADJUSTABLE - Ibf·ft ONLY
13573	TTf15 ft·lb, 3/8", 10 - 180 lbf·in
13687	TTf45 ft·lb, 3/8", 10 - 45 lbf·ft
13575	TTf75 ft·lb, 3/8", 15 - 75 lbf·ft
13576	TTf75 ft·lb, 1⁄2", 15 - 75 lbf·ft
13577	TTf110 ft·lb, 1⁄2", 20 - 100 lbf·ft
13578	TTf150 ft·lb, 1⁄2", 30 - 150 lbf·ft
13579	TTf185 ft·lb, 1⁄2", 40 - 185 lbf·ft
13580	TTf220 ft·lb, <b>'⁄2</b> ", 45 - 220 lbf·ft

- Accurate to  $\pm 3\%$  of reading which meets and exceeds ISO6789:2003
- Micrometer scale for simple, error free setting

TTfth Torque Handle

- Available with either dual scale (N·m and lbf·ft) or single denomination torque scale
- Two fittings are catered for: Rectangular female type,  $9 \times 12$ mm and  $14 \times 18$ mm
- Suitable for a huge range of widely available fittings

2	ADJUSTABLE - DUAL SCALE
13600	TTfth20, 9 x 12 mm, 1 - 20 N·m, 10 - 180 lbf·in
13666	TTfth50, 9 x 12 mm, 8 - 50 N·m, 6 - 35 lbf·ft
13667	TTfth60, 9 x 12 mm, 12 - 60 N·m, 10 - 45 lbf·ft
13603	TTfth100, 9 x 12 mm, 20 - 100 N·m, 15 - 75 lbf·ft
13604	TTfth150, 9 × 12 mm, 30 - 150 N·m, 20 - 110 lbf·ft
13605	TTfth200, 9 x 12 mm, 40 - 200 N·m, 30 - 150 lbf·ft
13606	TTfth200, 14 x 18 mm, 40 - 200 N·m, 30 - 150 lbf·ft
13607	TTfth250, 14 x 18 mm, 50 - 250 N·m, 40 - 185 lbf·ft
13608	TTfth300, 14 x 18 mm, 60 - 300 N·m, 45 - 220 lbf·ft

2	ADJUSTABLE - N·m ONLY
13670	TTfth20 N·m, 9 x 12 mm, 1 - 20 N·m
13671	TTfth50 N·m, 9 x 12 mm, 8 - 50 N·m
13672	TTfth60 N·m, 9 x 12 mm, 12 - 60 N·m
13673	TTfh100 N·m, 9 x 12 mm, 20 - 100 N·m
13674	TTfth150 N·m, 9 x 12 mm, 30 - 150 N·m
13675	TTfth200 N·m, 9 × 12 mm, 40 - 200 N·m
13676	TTfth200 N·m, 14 x 18 mm, 40 - 200 N·m
13677	TTfth250 N·m, 14 x 18 mm, 50 - 250 N·m
13678	TTfth300 N·m, 14 x 18 mm, 60 - 300 N·m

## NORTRONIC<sup>®</sup> ELECTRONIC TORQUE WRENCH



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The NorTronic<sup>®</sup>, our first electronic torque wrench, sets the benchmark with its unique Torque Data System (TDS) software and combination of accuracy, wireless capability and angle measurement, in a versatile, robust and easy to use package.

- Accurate and traceable torque and angle control
- Two full colour OLED displays positioned at 90° to each other for visual indication both horizontally and vertically
- 3 Models covering 5 N·m 330 N·m
- IP44 protection against dust and water ingress
- One piece aluminium handle
- Extruded aluminium case
- Torque and Angle readings can be sent to TDS in real time or downloaded via the USB lead or wi-fi. For wi-fi a wireless adaptor is required for your PC, each wireless adaptor can handle up to 8 wrenches.
- Angle calibration in accordance with VDI/VDE 2648 Note: Optional UKAS accredited calibration is from 20% to 100% of full scale.

#### NORTRONIC<sup>®</sup> 868 MHZ

43500	NorTronic 50, ³∕8" sq. dr., 868 MHz, 5 - 50 N·m
43501	NorTronic 50, ½" sq. dr. 868 MHz, 5 - 50 N·m

- 43502 NorTronic 200 ½" sq. dr., 868 MHz, 20 200 N·m
- **43503** NorTronic 330, ½" sq. dr., 868 MHz, 30 330 N⋅m
- 43508 USB Wireless Adaptor, 868 MHz
- For UK, Europe, Singapore and India

#### NORTRONIC<sup>®</sup> 915 MHZ

43504	NorTronic 50, ¾" sq. dr., 915 MHz, 5 - 50 N·m
43505	NorTronic 50, ½" sq. dr., 915 MHz, 5 - 50 N·m
43506	NorTronic 200, ½" sq. dr., 915 MHz, 20 - 200 N·m
43507	NorTronic 330, ½" sq. dr., 915 MHz, 30 - 330 N·m
43509	USB Wireless Adaptor, 915 MHz
For USA,	Canada, Australia and New Zealand











Compatible with Norbar's huge range of spanner end fittings

Unique Torque Data System software enables data management and archiving to a PC



## SPECIALIST TORQUE WRENCHES

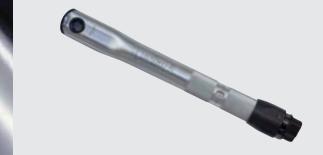




#### PROFESSIONAL TORQUE WRENCHES MODEL 5







# The Model 5 is a unique torque wrench that offers the convenience of interchangeable <sup>1</sup>/<sub>4</sub>" hexagon bits. (ISO 1173:1988 Form C drive bits).

- Accuracy exceeds the requirements of ISO6789:2003
- Traceable calibration certificate supplied, to satisfy ISO9000 quality systems
- Non length dependent. The Model 5 remains accurate regardless of hand position
- Supplied in a storage case. The case allows space for the storage of additional drive bits, and optional stepless ratchet

#### ADJUSTABLE

13001	Pro 5, ¼" female hex, I - 5 N·m
13002	Pro 5, ¼" female hex, 10 - 50 lbf·in
13003	Pro 5, ¼" female hex, 10 - 50 kgf·cm



#### Model 5 'P' Type in storage case

Also available as Production 'P' Types, preventing unauthorised alteration of torque setting. No external calibration equipment is required to set the Model 5 'P' Type.

2	PRODUCTION 'P' TYPE
13004	Pro 5, ¼" female hex, I - 5 N·m
13005	Pro 5, ¼" female hex, 10 - 50 lbf·in
13006	Pro 5, ¼" female hex, 10 - 50 kgf·cm
8	MODEL 5 ACCESSORY
8 13122	MODEL 5 ACCESSORY Stepless Ratchet ¼" Female hex

Carefully selected and tested materials replace the ferrous components present in standard torque wrenches, thereby giving an extremely low magnetic footprint. Being based on the TT range of torque wrenches means that they also retain the high standards of Norbar's other Torque Wrenches. Perfect for MRI scanner applications.

4	ADJUSTABLE - DUAL SCALE
13292	TT20, 3/8", 1 - 20 N·m, 10 - 180 lbf·in
13585	TT20, 1⁄2", 1 - 20 N·m, 10 - 180 lbf·in
13294	TT50, 3/8", 8 - 50 N·m, 6 - 35 lbf·ft
13295	TT50, <b>'⁄2</b> ", 8 - 50 N·m, 6 - 35 lbf·ft

### INSULATED TORQUE WRENCH



Using injection moulded Nylon 11, Norbar's insulated torque wrench complies with IEC 60900:2004 and is more durable than the traditional PVC dipped insulated tools. Certified to 1000 volts.

#### ADJUSTABLE - DUAL SCALE

13540	TT60, ³/8", 8 - 60 N·m, 6 - 44 lbf·ft
13541	TT60, <b>1⁄2</b> ", 8 - 60 N·m, 6 - 44 lbf·ft

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## PROFESSIONAL TORQUE WRENCHES

## PROFESSIONAL TORQUE WRENCH







Automotive Ratchet



Industrial Ratchet



Unlocked

Timestrip<sup>®</sup>



Locked



Professional Scale

Since its original, award winning launch in 1984 and extensive face-lift in 2000, Norbar's Professional torque wrench range has become one of the most popular wrench ranges available worldwide. In this re-engineered version, the core principles of accuracy, durability and comfort are carried over but every component part is new and improved.

## Compared with the previous Professional models, the new range has these features:

- Accurate to  $\pm 3\%$  of reading which meets and exceeds ISO6789:2003
- The scale is 60% larger for better visibility and more accurate setting
- The scale adjusts 40% faster but the effort required to adjust is reduced. If you adjust your wrench regularly, you can do more work
- The lock is now a push/pull type. It is faster and more intuitive to use. A coloured band on the lock clearly shows that the wrench is unlocked
- Improved serviceability means longer life and reduced ownership costs
- The handle has a superior, ergonomic shape and has a higher proportion of soft-feel, high grip material. It is more comfortable to use
- Square drive adaptors are provided with the 50 N·m and 100 N·m Industrial Ratchet models
- 'Industrial Ratchet' versions have a 'mushroom square drive' to allow more rapid bolt run-down
- The 200 N·m 'Automotive Ratchet' version is fitted with a new, high strength 48 tooth reversible ratchet

#### Compared with other torque wrenches:

Norbar's 'harmonic drive' scale provides a long scale length for good resolution and accurate setting in both scale units. By contrast, micrometer type scales allow accurate setting in the primary scale unit but relatively poor accuracy of setting in the secondary units because of limited resolution. When this is coupled with Norbar's 60% increased scale size, the new Professional wrench is amongst the easiest wrenches on the market to accurately set.

#### Timestrip<sup>®</sup> Feature

Torque wrenches should be calibrated once a year as a minimum, more frequently in harsh environments and with high levels of usage. Norbar's Timestrip<sup>®</sup> gives a visual indication that the wrench is due for re-calibration and has 3, 6, 9 and 12 month graduations. (Timestrip<sup>®</sup> is a registered trademark of Timestrip UK Ltd).

## PROFESSIONAL TORQUE WRENCH











'Mushroom' Square Drive

2	INDUSTRIAL RATCHET ('Mushroom' head) - DUAL SCALE
I5002 <sup>+</sup>	Pro 50, <b>¾</b> ", 10 - 50 N·m, 7.5 - 37.5 lbf·ft
15003 <sup>-</sup>	Pro 100, ½", 20 - 100 N·m, 15 - 75 lbf·ft
15004	Pro 200, ½", 40 - 200 N·m, 30 - 150 lbf·ft
15005	Pro 300, ½", 60 - 300 N·m, 50 - 220 lbf·ft
15006	Pro 340, ½", 60 - 340 N·m, 50 - 250 lbf·ft
15007*	Pro 400, <b>¾</b> ", 80 - 400 N·m, 60 - 300 lbf·ft

2	INDUSTRIAL RATCHET ('Mushroom' head) - N·m ONLY
I5042 <sup>+</sup>	Pro 50, ³∕€", 10 - 50 N·m
15043 <sup>-</sup>	Pro 100, ½", 20 - 100 N·m
15044	Pro 200, ½", 40 - 200 N·m
15045	Pro 300, ½", 60 - 300 N·m
15046	Pro 340, ½", 60 - 340 N·m
15047*	Pro 400, ¾", 80 - 400 N·m

2	INDUSTRIAL RATCHET ('Mushroom' head) - Ibf·ft ONLY
15172⁺	Pro 50, 3/8", 7.5 - 37.5 lbf·ft
15173 <sup>-</sup>	Pro 100, ½", 15 - 75 lbf·ft
15174	Pro 200, ½", 30 - 150 lbf·ft
15175	Pro 300, ½", 50 - 220 lbf·ft
15176	Pro 340, ½", 50 - 250 lbf·ft
15177*	Pro 400, 3⁄4", 60 - 300 lbf·ft

	2	INDUSTRIAL RATCHET ('Mushroom' head) - Ibf in ONLY
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15052*	Pro 50, ³∕∎", 90 - 440 lbf•in
15053 <sup>-</sup>	Pro 100, ½", 200 - 900 lbf·in
15054	Pro 200, ½", 400 - 1800 lbf·in
15055	Pro 300, ½", 500 - 2500 lbf·in

- 15056 Pro 340, 1/2", 500 3000 lbf·in
- 15057\* Pro 400, 3/4", 700 3500 lbf·in
- \* Supplied with  ${}^{3\!\prime}\!\!\!\!\!\!8"$  sq. dr. adaptor
- $^{\text{-}}$  Supplied with  $^{\text{!}}\!\!/_2$  " sq. dr. adaptor
- \* Model 400 supplied with Reversible Industrial Ratchet

2	AUTOMOTIVE RATCHET (Reversible) - DUAL SCALE
15012	Pro 50, 3⁄8", 10 - 50 N·m, 7.5 - 37.5 lbf·ft
15013	Pro 50, ½", 10 - 50 N·m, 7.5 - 37.5 lbf·ft
15014	Pro 100, ³∕₃", 20 - 100 N·m, 15 - 75 lbf·ft
15015	Pro 100, ½", 20 - 100 N·m, 15 - 75 lbf·ft
15016	Pro 200, ½", 40 - 200 N·m, 30 - 150 lbf·ft

2	AUTOMOTIVE RATCHET (Reversible) - N·m ONLY
15022	Pro 50, <b>¾</b> ", 10 - 50 N·m
15023	Pro 50, ½", 10 - 50 N·m
15024	Pro 100, <b>¾</b> ", 20 - 100 N·m
15025	Pro 100, ½", 20 - 100 N·m
15026	Pro 200, ½", 40 - 200 N·m
2	AUTOMOTIVE RATCHET (Reversible) -

15142	Pro 50, 3⁄8", 7.5 - 37.5 lbf·ft
15143	Pro 50, ½", 7.5 - 37.5 lbf·ft
15144	Pro 100, 3/8", 15 - 75 lbf·ft
15145	Pro 100, ½", 15 - 75 lbf·ft
15146	Pro 200, ½", 30 - 150 lbf·ft

2	AUTOMOTIVE RATCHET (Reversible) - lbf in ONLY
15032	Pro 50, 3⁄8", 90 - 440 lbf·in
15033	Pro 50, ½", 90 - 440 lbf·in
15034	Pro 100, 3/8", 200 - 800 lbf·in
15035	Pro 100, ½", 200 - 800 lbf·in
15036	Pro 200, ½", 400 - 1800 lbf·in







2	TORQUE HANDLES ADJUSTABLE 16mm SPIGOT - DUAL SCALE
15062	Pro 50, 16mm spigot, 10 - 50 N·m, 7.5 - 37.5 lbf·ft
15063	Pro 100, 16mm spigot, 20 - 100 N·m, 15 - 75 lbf·ft
15064	Pro 200, 16mm spigot, 40 - 200 N·m, 30 - 150 lbf·ft
15065	Pro 300, 16mm spigot, 60 - 300 N·m, 50 - 220 lbf·ft
2	TOROUE HANDLES ADILISTABLE 16mm SPIGOT - N·m

-	ONLY
15072	Pro 50, 16mm spigot, 10 - 50 N·m
15073	Pro 100, 16mm spigot, 20 - 100 N·m
15074	Pro 200, 16mm spigot, 40 - 200 N·m
15075	Pro 300, 16mm spigot, 60 - 300 N·m

### 2 TORQUE HANDLES ADJUSTABLE 16mm SPIGOT - Ibf-ft

	ONLI
15082	Pro 50, 16mm spigot, 7.5 - 37.5 lbf•ft
15083	Pro 100, 16mm spigot, 15 - 75 lbf·ft
15084	Pro 200, 16mm spigot, 30 - 150 lbf•ft
15085	Pro 300 16mm spigot 50 - 220 lbf.ft

2	TORQUE HANDLES ADJUSTABLE 16mm SPIGOT - Ibf-in ONLY
15092	Pro 50, 16mm spigot, 90 - 440 lbf·in
15093	Pro 100, 16mm spigot, 200 - 800 lbf·in
15094	Pro 200, 16mm spigot, 400 - 1800 lbf·in
15095	Pro 300, 16mm spigot, 500 - 2500 lbf·in



2	FEMALE TORQUE HANDLES ADJUSTABLE -
15102	DUAL SCALE
15102	Pro 50, 9 x 12mm, 10 - 50 N·m, 7.5 - 37.5 lbf·ft Pro 100, 9 x 12 mm, 20 - 100 N·m, 15 - 75 lbf·ft
15105	Pro 200, 9 x 12 mm, 40 - 200 N·m, 30 - 150 lbf·ft
15105	Pro 200, 14 × 18 mm, 40 - 200 N·m, 30 - 150 lbf·ft
15106	Pro 300, 14 × 18 mm, 60 - 300 N⋅m, 50 - 220 lbf·ft
15107	Pro 340, 14 × 18 mm, 60 - 340 N⋅m, 50 - 250 lbf·ft
15108	Pro 400, 14 x 18 mm, 80 - 400 N·m, 60 - 300 lbf·ft
2	FEMALE TORQUE HANDLES ADJUSTABLE - N·m ONLY
15112	Pro 50, 9 × 12mm, 10 - 50 N·m
15113	Pro 100, 9 × 12 mm, 20 - 100 N⋅m
15114	Pro 200, 9 × 12 mm, 40 - 200 N·m
15115	Pro 200, 14 × 18 mm, 40 - 200 N·m
15116	Pro 300, 14 x 18 mm, 60 - 300 N·m
15117	Pro 340, 14 × 18 mm, 60 - 340 N⋅m
15118	Pro 400, 14 × 18 mm, 80 - 400 N·m
2	
2	FEMALE TORQUE HANDLES ADJUSTABLE - Ibf·ft ONLY
2 15122	
	lbf·ft ONLY
15122	lbf•ft ONLY Pro 50, 9 × 12mm, 7.5 - 37.5 lbf•ft
15122 15123	Ibf ft ONLY     Pro 50, 9 × 12mm, 7.5 - 37.5 lbf ft     Pro 100, 9 × 12 mm, 15 - 75 lbf ft
15122 15123 15124	Ibf ft ONLY     Pro 50, 9 × 12mm, 7.5 - 37.5 lbf ft     Pro 100, 9 × 12 mm, 15 - 75 lbf ft     Pro 200, 9 × 12 mm, 30 - 150 lbf ft
15122 15123 15124 15125	Ibf ft ONLY     Pro 50, 9 × 12mm, 7.5 - 37.5 lbf ft     Pro 100, 9 × 12 mm, 15 - 75 lbf ft     Pro 200, 9 × 12 mm, 30 - 150 lbf ft     Pro 200, 14 × 18 mm, 30 - 150 lbf ft
15122 15123 15124 15125 15126	Ibf ft ONLY     Pro 50, 9 × 12mm, 7.5 - 37.5 lbf ft     Pro 100, 9 × 12 mm, 15 - 75 lbf ft     Pro 200, 9 × 12 mm, 30 - 150 lbf ft     Pro 200, 14 × 18 mm, 30 - 150 lbf ft     Pro 300, 14 × 18 mm, 50 - 220 lbf ft
15122 15123 15124 15125 15126 15127 15128	Ibf ft ONLY   Pro 50, 9 × 12mm, 7.5 - 37.5 lbf ft   Pro 100, 9 × 12 mm, 15 - 75 lbf ft   Pro 200, 9 × 12 mm, 30 - 150 lbf ft   Pro 200, 14 × 18 mm, 30 - 150 lbf ft   Pro 300, 14 × 18 mm, 50 - 220 lbf ft   Pro 340, 14 × 18 mm, 50 - 250 lbf ft   Pro 400, 14 × 18 mm, 60 - 300 lbf ft
15122 15123 15124 15125 15126 15127	Ibf ft ONLY     Pro 50, 9 × 12mm, 7.5 - 37.5 lbf ft     Pro 100, 9 × 12 mm, 15 - 75 lbf ft     Pro 200, 9 × 12 mm, 30 - 150 lbf ft     Pro 200, 14 × 18 mm, 30 - 150 lbf ft     Pro 300, 14 × 18 mm, 50 - 220 lbf ft     Pro 340, 14 × 18 mm, 50 - 250 lbf ft
15122 15123 15124 15125 15126 15127 15128	Ibf ft ONLY     Pro 50, 9 × 12mm, 7.5 - 37.5 lbf ft     Pro 100, 9 × 12mm, 15 - 75 lbf ft     Pro 200, 9 × 12mm, 30 - 150 lbf ft     Pro 200, 14 × 18 mm, 30 - 150 lbf ft     Pro 300, 14 × 18 mm, 50 - 220 lbf ft     Pro 340, 14 × 18 mm, 50 - 250 lbf ft     Pro 400, 14 × 18 mm, 60 - 300 lbf ft     Pro 400, 14 × 18 mm, 60 - 300 lbf ft
15122 15123 15124 15125 15126 15127 15128 2 15132 15132	Ibf ft ONLY     Pro 50, 9 × 12mm, 7.5 - 37.5 lbf ft     Pro 100, 9 × 12mm, 15 - 75 lbf ft     Pro 200, 9 × 12mm, 30 - 150 lbf ft     Pro 200, 14 × 18 mm, 30 - 150 lbf ft     Pro 300, 14 × 18 mm, 50 - 220 lbf ft     Pro 340, 14 × 18 mm, 50 - 250 lbf ft     Pro 400, 14 × 18 mm, 60 - 300 lbf ft     Pro 400, 14 × 18 mm, 60 - 300 lbf ft
15122 15123 15124 15125 15126 15127 15128 2 15132 15132 15133 15134	Ibf ft ONLY     Pro 50, 9 × 12mm, 7.5 - 37.5 lbf ft     Pro 100, 9 × 12mm, 15 - 75 lbf ft     Pro 200, 9 × 12mm, 30 - 150 lbf ft     Pro 200, 14 × 18mm, 30 - 150 lbf ft     Pro 300, 14 × 18mm, 50 - 220 lbf ft     Pro 340, 14 × 18mm, 50 - 250 lbf ft     Pro 400, 14 × 18mm, 60 - 300 lbf ft     Pro 50, 9 × 12 mm, 90 - 440 lbf in
15122 15123 15124 15125 15126 15127 15128 2 15132 15132 15133 15134 15135	Ibf ft ONLY   Pro 50, $9 \times 12$ mm, 7.5 - 37.5 lbf ft   Pro 100, $9 \times 12$ mm, 15 - 75 lbf ft   Pro 200, $9 \times 12$ mm, 30 - 150 lbf ft   Pro 200, $14 \times 18$ mm, 30 - 150 lbf ft   Pro 300, $14 \times 18$ mm, 50 - 220 lbf ft   Pro 340, $14 \times 18$ mm, 50 - 250 lbf ft   Pro 400, $14 \times 18$ mm, 60 - 300 lbf ft <b>FEMALE TORQUE HANDLES ADJUSTABLE - Ibf in ONLY</b> Pro 50, $9 \times 12$ mm, 90 - 440 lbf in   Pro 200, $9 \times 12$ mm, 400 - 1800 lbf in   Pro 200, $9 \times 12$ mm, 400 - 1800 lbf in   Pro 200, $14 \times 18$ mm, 400 - 1800 lbf in
15122 15123 15124 15125 15126 15127 15128 2 15132 15133 15134 15135 15136	Ibf ft ONLY     Pro 50, $9 \times 12$ mm, 7.5 - 37.5 lbf ft     Pro 100, $9 \times 12$ mm, 15 - 75 lbf ft     Pro 200, $9 \times 12$ mm, 30 - 150 lbf ft     Pro 200, $14 \times 18$ mm, 30 - 150 lbf ft     Pro 300, $14 \times 18$ mm, 50 - 220 lbf ft     Pro 400, $14 \times 18$ mm, 50 - 220 lbf ft     Pro 400, $14 \times 18$ mm, 60 - 300 lbf ft     Pro 50, $9 \times 12$ mm, 90 - 440 lbf in     Pro 100, $9 \times 12$ mm, 200 - 800 lbf in     Pro 200, $14 \times 18$ mm, 400 - 1800 lbf in     Pro 200, $14 \times 18$ mm, 400 - 1800 lbf in     Pro 300, $14 \times 18$ mm, 500 - 2500 lbf in
15122 15123 15124 15125 15126 15127 15128 2 15132 15132 15133 15134 15135	Ibf ft ONLY   Pro 50, $9 \times 12$ mm, 7.5 - 37.5 lbf ft   Pro 100, $9 \times 12$ mm, 15 - 75 lbf ft   Pro 200, $9 \times 12$ mm, 30 - 150 lbf ft   Pro 200, $14 \times 18$ mm, 30 - 150 lbf ft   Pro 300, $14 \times 18$ mm, 50 - 220 lbf ft   Pro 340, $14 \times 18$ mm, 50 - 250 lbf ft   Pro 400, $14 \times 18$ mm, 60 - 300 lbf ft <b>FEMALE TORQUE HANDLES ADJUSTABLE - Ibf in ONLY</b> Pro 50, $9 \times 12$ mm, 90 - 440 lbf in   Pro 200, $9 \times 12$ mm, 400 - 1800 lbf in   Pro 200, $9 \times 12$ mm, 400 - 1800 lbf in   Pro 200, $14 \times 18$ mm, 400 - 1800 lbf in

## CLICKTRONIC TORQUE WRENCH

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Automotive Ratchet



Industrial Ratchet



Lock Adjustment Knob





Digital Scale

A first for our range of torque wrenches, ClickTronic combines the accuracy, durability and comfort from the mechanism of the tried and tested Professional wrench with a new dynamic, easy to use, digital readout all packaged in a sleek, aesthetically appealing product.

- Accurate to  $\pm 3\%$  of reading which meets and exceeds ISO6789:2003
- O.L.E.D display provides a clear and easy to read display, which helps to significantly reduce setting errors
- Multiple torque units of measure available
- The lock is now a push/pull type. It is faster and more intuitive to use. A coloured band on the lock clearly shows that the wrench is unlocked
- Utilises a rechargeable lithium battery which is charged using a mini USB lead
- Square drive adaptors are provided with the 50  $N{\cdot}m$  and 100  $N{\cdot}m$  Industrial Ratchet models

#### Timestrip<sup>®</sup> Feature

Torque wrenches should be calibrated once a year as a minimum, more frequently in harsh environments and with high levels of usage. Norbar's Timestrip<sup>®</sup> gives a visual indication that the wrench is due for re-calibration and has 3, 6, 9 and 12 month graduations. (Timestrip<sup>®</sup> is a registered trademark of Timestrip UK Ltd).







#### Automotive Ratchet

These compact ratchets allow rapid direction change enabling you to, for example, back off a nut that you have tightened. Torque control is in the clockwise direction only.

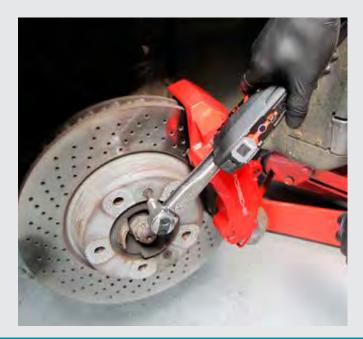


#### Industrial Ratchet

The square drive of these robust ratchets can be removed and replaced in the other side of the ratchet head so that the wrench will give torque control in both the clockwise and anticlockwise directions.

2	AUTOMOTIVE RATCHET (Reversible)
15152	ClickTronic 50, 3⁄8", 10 - 50 N·m
15153	ClickTronic 50, ½", 10 - 50 N·m
15154	ClickTronic 100, ¾", 20 - 100 N·m
15155	ClickTronic 100, ½", 20 - 100 N⋅m
15156	ClickTronic 200, ½", 40 - 200 N·m

2	INDUSTRIAL RATCHET (Mushroom Head)
15166	ClickTronic 50, ⅔, 10 - 50 N·m
15167	ClickTronic 100, ½", 20 - 100 N·m
15168	ClickTronic 200, ½", 40 - 200 N·m
15157	ClickTronic 300, ½", 60 - 300 N·m
15158	ClickTronic 340, ½", 68 - 340 N·m





## PROFESSIONAL TORQUE WRENCHES

#### PROFESSIONAL TORQUE WRENCH RATCHET 'P' TYPE



## 

For production line applications requiring a sealed torque setting. 'P' Type wrenches have no scale and must be set against a suitable torque measuring device (see pages 42 - 45).

- Accurate to within ±3% of torque setting
- Colour coded adjustment seals and locking tool provided
- On request 'P'Type wrenches can be set, marked with the setting and certified for production line applications requiring a sealed torque setting.



Push through ratchet allows clockwise and anti-clockwise torque control

2	PRODUCTION 'P' TYPE - INDUSTRIAL RATCHET (Push through square)
13051	Pro 60, 3⁄8", 8 - 60 N·m, 5 - 45 lbf·ft
13052	Pro 60, <b>1⁄2</b> ", 8 - 60 N·m, 5 - 45 lbf·ft
13053	Pro 100, 3/8", 20 - 100 N·m, 15 - 80 lbf·ft
13054	Pro 100, 1⁄2", 20 - 100 N·m, 15 - 80 lbf·ft
13055	Pro 200, 1⁄2", 40 - 200 N·m, 30 - 150 lbf·ft
13057	Pro 300, <b>1⁄2</b> ", 60 - 300 N·m, 45 - 220 lbf·ft
13056	Pro 400, 3⁄4" 80 - 400 N·m, 60 - 300 lbf·ft
11698	Domed End Cap
SQ2222	Pre-set, etch and certify (Allow 3 days delivery for this service)



• Reversible, 72 tooth ratchet

2	PRODUCTION 'P' TYPE AUTOMOTIVE RATCHET (Reversible)
11164	Pro 60, ¾, 8 - 60 N·m, 5 - 45 lbf·ft
11171	Pro 60, 1⁄2", 8 - 60 N·m, 5 - 45 lbf·ft
11138	Pro 100, ³⁄s", 20 - 100 N·m, 15 - 80 lbf·ft
11139	Pro 100, 1⁄2", 20 - 100 N·m, 15 - 80 lbf·ft
11140	Pro 200, <b>1⁄2</b> ", 40 - 200 N·m, 30 - 150 lbf·ft
SQ2222	Pre-set, etch and certify (Allow 3 days delivery for this service)

## PROFESSIONAL TORQUE HANDLE 'P' TYPE

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Setting a 'P' Type Torque Wrench



2	TORQUE HANDLES PRODUCTION 'P' TYPE 16mm SPIGOT
11167	Pro 60, 16mm spigot, 8 - 60 N·m, 5 - 45 lbf·ft
11143	Pro 100, 16mm spigot, 20 - 100 N·m, 15 - 80 lbf·ft
11144	Pro 200, 16mm spigot, 40 - 200 N·m, 30 - 150 lbf·ft
11117	Pro 300, 16mm spigot, 60 - 300 N·m, 45 - 220 lbf·ft
SQ2222	Pre-set, etch and certify (Allow 3 days delivery for this service)



2	FEMALE TORQUE HANDLES PRODUCTION
11170	Pro 60, 9 × 12mm, 8 - 60 N·m, 5 - 45 lbf·ft
11150	Pro 100, 9 × 12mm, 20 - 100 N·m, 15 - 80 lbf·ft
11151	Pro 200, 9 × 12mm, 40 - 200 N·m, 30 - 150 lbf·ft
11152	Pro 200, 14 × 18mm, 40 - 200 N·m, 30 - 150 lbf·ft
11153	Pro 300, 14 x 18mm, 60 - 300 N·m, 45 - 220 lbf·ft
13068	Pro 400, 14 x 18mm, 80 - 400 N·m, 60 - 300 lbf·ft
SQ2222	Pre-set, etch and certify (Allow 3 days delivery for this service)

## **PROFESSIONAL TORQUE WRENCHES**



## **PROFESSIONAL TORQUE** HANDLES MODELS 650 - 1500 ADIUSTABLE 🐵 <table-cell-rows> 🔒 >• 🛃 💼





#### For precision applications to 1500 N·m

- Exceptionally clear torque signal from unique mechanism
- Non length dependant so can be used with or without the supplied extension handle (optional on Model 650)
- Extension handle significantly reduces operator effort to achieve high torque values
- Accurate to ±3% of reading
- · Supplied with traceable calibration certificate

#### ADJUSTABLE RATCHET - DUAL SCALE

14037	Pro 650, 3/4", 130 - 650 N·m, 100 - 480 lbf·ft
14015	Pro 800, 3⁄4", 200 - 800 N·m, 150 - 600 lbf·ft
14016	Pro 800, I", 200 - 800 N·m, I50 - 600 lbf·ft
14002	Pro 1000, 3⁄4", 300 - 1000 N·m, 220 - 750 lbf·ft
14003	Pro 1000, 1", 300 - 1000 N·m, 220 - 750 lbf·ft
14004	Pro 1500, ¾, 500 - 1500 N·m, 370 - 1100 lbf·ft
14005	Pro 1500, 1", 500 - 1500 N·m, 370 - 1100 lbf·ft

#### ADJUSTABLE RATCHET - N·m ONLY

14038	Pro 650, ¾", 130 - 650 N·m
14024	Pro 800, ¾", 200 - 800 N·m
14025	Pro 800, I", 200 - 800 N·m
14026	Pro 1000, ¾", 300 - 1000 N·m
14027	Pro 1000, 1", 300 - 1000 N⋅m
14028	Pro 1500, ¾", 500 - 1500 N·m
14029	Pro 1500, 1", 500 - 1500 N·m

2	ADJUSTABLE RATCHET - Ibf-ft ONLY
14044	Pro 650, ¾", 100 - 480 lbf·ft
14045	Pro 800, ¾", 150 - 600 lbf·ft
14046	Pro 800, I", 150 - 600 lbf·ft
14047	Pro 1000, ¾", 220 - 750 lbf·ft
14048	Pro 1000, 1", 220 - 750 lbf·ft
14049	Pro 1500, ¾", 370 - 1100 lbf·ft
14050	Pro 1500, 1", 370 - 1100 lbf·ft

TORQUE HANDLE ADJUSTABLE - DUAL SCALE 14040 Pro 650, 22mm spigot, 130 - 650 N·m, 100 - 480 lbf·ft







FEMALE TORQUE HANDLES ADJUSTABLE - DUAL SCALE

14041 Pro 650, 14 × 18mm, 130 - 650 N·m, 100 - 480 lbf·ft



All models supplied in carry case

## PROFESSIONAL TORQUE WRENCHES / SLIMLINE TORQUE WRENCHES



## SLIMLINE TORQUE WRENCHES / INDUSTRIAL TORQUE WRENCHES







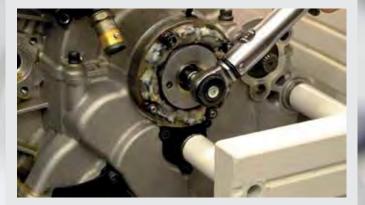




Production 'P' type versions are designed to discourage unauthorised alteration. They have no scale and so must be set against a torque testing device such as Norbar's TruCheck<sup>TM</sup> - see page 42.

PRODUCTION 'P' TYPE
(Must be set using a Torque Tester, see pages 42-45)

11089	SL0 3⁄8" Fixed Head, 1 - 20 N·m, 10 - 180 lbf·in
11085	SL0 ¼", I - 20 N·m, I0 - 180 lbf·in
11086	SL0 ¾, I - 20 N·m, 10 - 180 lbf·in
11090	SL0 16mm spigot, 1 - 20 N·m, 10 - 180 lbf·in
11088	SL0 9 x 12mm female, 1 - 20 N·m, 10 - 180 lbf·in
SQ2222	Pre-set, etch and certify (Allow 3 days delivery for this service)







#### For ultimate torque control in heavy duty applications

- Unique 'break action' mechanism gives unparalleled control over the applied torque
- Perfect for wheel nuts and many other applications
- Accurate to  $\pm 4\%$  of reading
- Supplied with traceable calibration certificate
- Split versions available for when storage space is limited such as vehicle tool kits
- 2000 N·m 6R, see 'split' versions on page 18

2	RATCHET ADJUSTABLE - DUAL SCALE
12001	3AR, ¾", 100 - 500 N·m, 70 - 350 lbf·ft
12001.01	3AR, I", 100 - 500 N·m, 70 - 350 lbf·ft
12006	4R, ¾", 150 - 700 N·m, 100 - 500 lbf·ft
12006.01	4R, 1", 150 - 700 N·m, 100 - 500 lbf·ft
12007	4AR, ¾", 200 - 800 N·m, 150 - 600 lbf·ft
12007.01	4AR, 1", 200 - 800 N·m, 150 - 600 lbf·ft
12009	5R, ¾", 300 - 1000 N·m, 200 - 750 lbf·ft
12009.01	5R, 1", 300 - 1000 N·m, 200 - 750 lbf·ft
12012	5AR, ¾", 700 - 1500 N·m, 500 - 1000 lbf·ft
12012.01	5AR, 1", 700 - 1500 N·m, 500 - 1000 lbf·ft

2	RATCHET ADJUSTABLE - N·m ONLY
12105	4AR, ¾", 200 - 800 N·m
12106	4AR, I", 200 - 800 N·m
12107	5R, ¾", 300 - 1000 N·m
12108	5R, I", 300 - 1000 N·m

2	TORQUE HANDLE ADJUSTABLE - DUAL SCALE
12003*	No.4, 22mm spigot, 130 - 550 N·m,
	100 - 400 lbf ft

\*Carry case not included

## INDUSTRIAL TORQUE WRENCHES



The 11%'s" Bi-square version of the Industrial Torque Wrench was developed specifically with rail track maintenance in mind. The critical need of the rail industry is to reduce the chance of any object being left on the track. Fitting directly onto rail fishplate bolts means that no socket or square drive is required, two components that could potentially be separated from the regular version of the Industrial Torque Wrench.

Other versions of this tool available on request

#### BI-SQUARE - DUAL SCALE

INDUSTRIAL TORQUE WRENCHES - SPLIT

12026 I<sup>11</sup>/<sub>16</sub>" Bi-Square, 300 - 1000 N·m, 200 - 750 lbf·ft



Split Industrials are supplied in two parts for easier transportation and storage, but can be assembled and disassembled in seconds.

2	RATCHET SPLIT ADJUSTABLE - DUAL SCALE
12102	4R 3/4" 150 - 700 Nim 100 - 500 lbf.ft

12102	III, <b>14</b> , 130 700 IV III, 100 300 IDI IL
12102.01	4R, 1", 150 - 700 N·m, 100 - 500 lbf·ft
12101	5R, ¾, 300 - 1000 N·m, 200 - 750 lbf·ft
12101.01	5R, 1", 300 - 1000 N·m, 200 - 750 lbf·ft
12100	6R, 1", 900 - 2000 N·m, 700 - 1500 lbf·ft



Production 'P' type versions are designed to discourage unauthorised alteration. They have no scale and so must be set against a torque testing device such as Norbar's TruCheck<sup>M</sup> - see page 43.

- Unique 'break action' mechanism gives unparalleled control over the applied torque
- Perfect for wheel nuts and many other applications
- Accurate to  $\pm 4\%$  of reading

2	RATCHET PRODUCTION 'P' TYPE (Must be set using a Torque Tester, see pages 42-45)
12015	3AR, 3⁄4", 100 - 500 N·m, 70 - 350 lbf·ft
12020	4R, ¾", 150 - 700 N·m, 100 - 500 lbf·ft
12023	5R, ¾", 300 - 1000 N·m, 200 - 750 lbf·ft
12002	5AR, ¾", 700 - 1500 N·m, 500 - 1000 lbf·ft
SQ2222	Pre-set, etch and certify (Allow 3 days delivery for this service)



2	TORQUE HANDLE 'P' TYPE (Must be set using a Torque Tester, see pages 42-45)
12017	No.4, P Type, 22mm spigot, 130 - 550 N·m, 100 - 400 lbf·ft
SQ2222	Pre-set, etch and certify (Allow 3 days delivery for this service)
Carry case not included	

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## INDUSTRIAL TORQUE WRENCHES / ELECTRODE WRENCHES

### INDUSTRIAL TORQUE WRENCH SQUARE DRIVES



## ELECTRODE WRENCHES





8	INDUSTRIAL SPARE SQUARE DRIVES
12297	¾" Square Drive Assy for 3AR - 5AR
12299	I" Square Drive Assy for 3AR - 5AR
18492	I" Square Drive for 6R



#### For torque tightening of carbon electrodes.

Standard torque settings are shown. Other settings are available. The 8" Diameter electrode wrench uses the professional torque handle as the control mechanism. Above 8" the Industrial wrench is used as the control mechanism.

#### UKAS ACCREDITED CALIBRATION CERTIFICATION

See pages 68-69 for Norbar's Calibration Services.

12	ONEDIRECTION
TWCC4.CW	Up to 400 N·m/300 lbf·ft
TWCC5.CW	Up to 1000 N·m/750 lbf·ft
TWCC6.CW	Up to 3000 N·m/2200 lbf·ft

12	TWO DIRECTIONS
TWCC4.CW+CCW	Up to 400 N·m/300 lbf·ft
TWCC5.CW+CCW	Up to 1000 N·m/750 lbf·ft
TWCC6.CW+CCW	Up to 3000 N·m/2200 lbf·ft

9	LOW RANGE
12506	8" (200mm) 312 N·m
12530	10" (250mm) 542 N·m
12531	I2" (300mm) 780 N·m
Other models available on request.	

9	HIGH RANGE
12532	I4" (350mm) II40 N·m
12533	16" (400mm) 1300 N·m
12535	18" (450mm) 1500 N·m
12536	20" (500mm) 2000 N·m
12537	22" (550mm) 2370 N·m
12538	24" (600mm) 2370 N·m
12538.HD	24" (600mm) 3200 N·m



## SPANNER END FITTINGS FOR NORBAR 16mm TORQUE HANDLES

On this page you will find our standard range of end fittings. For other sizes, see page 22 & 23.



2	OPEN ENDS METRIC	2	OPEN ENDS IMPERIAL
29841	7mm	29701	<sup>1</sup> /4"
29842	8mm	29702	5/16"
29843	9mm	29703	3⁄8"
29844	I0mm	29704	7⁄16"
29845	llmm	29705	1/2"
29846	l2mm	29706	<sup>9</sup> /16"
29847	I3mm	29707	5/8"
29848	l4mm	29708	<sup>11</sup> /16"
29849	I5mm	29709	3⁄4"
29850	l6mm	29710	<sup>13</sup> /16"
29851	17mm	29711	7/8"
29876	18mm	29712	15/16"
29877	19mm	29713	"
29852	20mm	29714	1/16"
29853	21mm	29715	1/8"
29854	22mm	29716	3/16"
29855	23mm	29717	1/4"
29856	24mm	29718	5/16"
29857	25mm		
29858	26mm		
29878	27mm		
29860	29mm		
29861	30mm		
29863	32mm		



2	RING ENDS METRIC	2	RING ENDS IMPERIAL
29881	7mm	29726	1/4"
29882	8mm	29727	5⁄16"
29883	9mm	29728	3⁄8"
29884	I0mm	29729	7⁄16"
29885	llmm	29730	1/2"
29886	l2mm	29731	<sup>9</sup> /16"
29887	13mm	29732	5/8"
29888	l4mm	29733	<sup>11</sup> /16"
29889	15mm	29734	3⁄4"
29890	l6mm	29735	<sup>13</sup> /16"
29891	l7mm	29736	7/8"
29913	18mm	29737	<sup>15</sup> /16"
29914	l9mm	29738	"
29892	20mm	29739	<sup> </sup> /16"
29893	21mm		
29894	22mm		
29895	23mm		
29896	24mm		
29915	27mm		

### SPANNER END FITTINGS FOR NORBAR 22mm TORQUE HANDLES





2	OPEN ENDS METRIC	2	RING ENDS METRIC
29963.22	22mm Open End	29960.22	22mm Ring End
29963.24	24mm Open End	29960.24	24mm Ring End
29963.27	27mm Open End	29960.27	27mm Ring End
29963.30	30mm Open End	29960.30	30mm Ring End
29963.32	32mm Open End	29960.32	32mm Ring End
29963.36	36mm Open End	29960.36	36mm Ring End
29963.41	41mm Open End	29960.41	41mm Ring End
29963.46	46mm Open End	29960.46	46mm Ring End

## TORQUE WRENCH ACCESSORIES



## SPIGOT ACCESSORIES





29921	-
	7mm
29922	8mm
29923	9mm
29924	I0mm
29925	llmm
29926	I2mm
29927	I3mm
29928	l4mm
29929	I5mm
29930	l6mm
29931	17mm
29953	18mm
29954	19mm
29932	20mm
29933	21mm
29934	22mm
29935	23mm
29936	24mm
29955	27mm

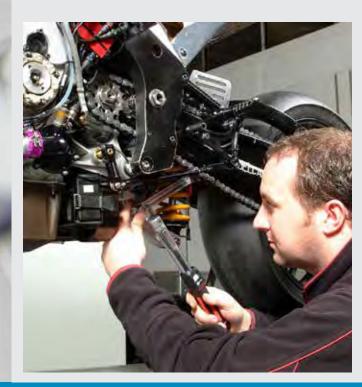


2	16mm SPIGOT ACCESSORIES
44509	³∕ø" Ratchet with Push through square
29825	1⁄2" Ratchet with Push through square
29828	3⁄8" Fixed Square Drive
29827	1⁄2" Fixed Square Drive
29829	3⁄8" Reversible Ratchet Head
29830	1⁄2" Reversible Ratchet Head
29832	Blank End Fitting
85242	Blank End Fitting for Open End
11343	Blank End Fitting for Ring End
72000	Spigot Adaptor 16mm to 22mm



2	22mm SPIGOT ACCESSORIES
29969	3⁄4" Square Drive Fixed Head
29972	3⁄4" Ratchet with Push through square
85719	Blank End Fitting for Open End
85720	Blank End Fitting for Ring End





### LARGE SPANNER END FITTINGS FOR NORBAR 16mm TORQUE HANDLES UP TO 300 N·m

See page 23 for explanation of Part Numbers. Other sizes available on request.



2	OPEN OFFSET METRIC 16mm		OPEN OFFSET IMPERIAL I6mm
29200.Mxx	28 - 42 mm	29200.lxx	1/8" -   5/8"
29200.Mxx	43 - 54 mm	29200.lxx	<sup>11</sup> /16" - 2 <sup>1</sup> /8"
29200.Mxx	55 - 70 mm	29200.lxx	2 3/16" - 2 3/4"





	FLARE OFFSET METRIC 16mm	2	FLARE OFFSET IMPERIAL 16mm
29204.Mxx	25 - 39 mm	29204.lxx	" -   <sup> </sup> /2"
29204.Mxx	40 - 49 mm	29204.lxx	<sup>9</sup> /16" -   <sup>15</sup> /16"
29204.Mxx	50 - 70 mm	29204.lxx	2" - 2 3⁄4"



2	RING OFFSET METRIC 16mm	2	RING OFFSET IMPERIAL 16mm
29202.Mxx	25 - 39 mm	29202.lxx	" -   1⁄2"
29202.Mxx	40 - 49 mm	29202.lxx	<sup>9</sup> /16" -   <sup>15</sup> /16"
29202.Mxx	50 - 70 mm	29202.lxx	2" - 2 3⁄4"

2	OPEN INLINE METRIC 16mm		OPEN INLINE IMPERIAL 16mm
29201.Mxx	25 - 42 mm	29201.lxx	<sup> </sup> /8" -   <sup>5</sup> /8"
29201.Mxx	43 - 54 mm	29201.lxx	<sup>11</sup> /16" - 2 <sup>1</sup> /8"
29201.Mxx	55 - 70 mm	29201.lxx	2 3/16" - 2 3/4"

### LARGE SPANNER END FITTINGS FOR NORBAR 22mm TORQUE HANDLES UP TO 650 N°m

See page 23 for explanation of Part Numbers. Other sizes available on request.





2	FLARE OFFSET METRIC 22mm	2	FLARE OFFSET IMPERIAL 22mm
29210.Mxx	28 - 51 mm	29210.lxx	1/8" -   <sup>15</sup> /16"
29210.Mxx	52 - 88 mm	29210.lxx	2" - 3 7⁄16"



	OPEN INLINE METRIC 22mm		OPEN INLINE IMPERIAL 22mm
29207.Mxx	28 - 55 mm	29207.lxx	<b>1/8" -</b> 2 <b>1/8"</b>
29207.Mxx	56 - 88 mm	29207.lxx	2 ¾6" - 3 1⁄16"

2	OPEN OFFSET METRIC 22mm		OPEN OFFSET IMPERIAL 22mm
29206.Mxx	28 - 55 mm	29206.lxx	<b>1/8</b> " - 2 <b>1/8</b> "
29206.Mxx	56 - 88 mm	29206.lxx	2 ¾6" - 3 1⁄16"



2	RING OFFSET METRIC 22mm	2	RING OFFSET IMPERIAL 22mm
29208.Mxx	28 - 51 mm	29208.lxx	<sup> </sup> / <sub>8</sub> " -   <sup> 5</sup> / <sub>16</sub> "
29208.Mxx	52 - 88 mm	29208.lxx	2" - 3 1⁄16"

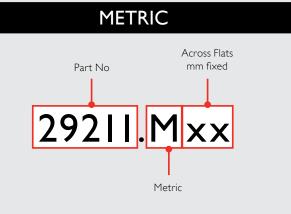
#### PART NUMBERS FOR LARGE SPANNER END **FITTINGS EXPLAINED**

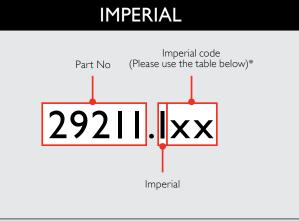


	RING INLINE METRIC 16mm		RING INLINE IMPERIAL 16mm
29203.Mxx	25 - 39 mm	29203.lxx	" -   <sup> </sup> /2"
29203.Mxx	40 - 51 mm	29203.lxx	<b>%/16</b> " - 2"
29203.Mxx	52 - 70 mm	29203.lxx	2 <sup>1</sup> /16" - 2 <sup>3</sup> /4"



2	FLARE INLINE METRIC 16mm	2	FLARE INLINE IMPERIAL 16mm
29205.Mxx	25 - 39 mm	29205.lxx	" -   1⁄2"
29205.Mxx	40 - 51 mm	29205.lxx	<b>%/16" -</b> 2"
29205.Mxx	52 - 70 mm	29205.lxx	2 1/16" - 2 3/4"









2	RING INLINE METRIC 22mm	2	RING INLINE IMPERIAL 22mm	
29209.Mxx	28 - 44 mm	29209.lxx	1/8" -   3/4"	
29209.Mxx	45 - 88 mm	29209.lxx	<sup>13</sup> /16" - 3 7/16"	
27207.11XX 43 - 00 mm 27207.1XX 1 7/16 - 3 /16				

	FLARE INLINE METRIC 22mm		FLARE INLINE IMPERIAL 22mm
29211.Mxx	28 - 44 mm	29211.lxx	<sup> </sup> /8" -   <sup>3</sup> /4"
29211.Mxx	45 - 88 mm	29211.lxx	<sup>13</sup> ⁄16" - 3 7⁄16"

IMPERIAL A/F	CODE	IMPERIAL A/F	(
<sup>5</sup> /16"	05	<sup>15</sup> /16"	
3/8"	06	2"	
7/16"	07	2 1/16"	
1/2"	08	2 <b>!/8</b> "	
<sup>9</sup> /16"	09	2 <sup>3</sup> /16"	
5/8"	10	2 1⁄4"	
"/16"	11	2 5/16"	
3⁄4"	12	2 ³/8"	
<sup>13</sup> /16"	13	2 7/16"	
7⁄8"	14	2 <b>1/2</b> "	
15/16"	15	2 %/16"	
1"	16	2 5/8"	
1/16"	17	2 11/16"	
1/ <b>8</b> "	18	2 3⁄4"	
3/16"	19	2 13/16"	
1/4"	20	2 7/8"	
5/16"	21	2 15/16"	
3/8"	22	3"	
7/16"	23	3 1/16"	
1/2"	24	3 1/8"	
9/16"	25	3 ³/ <b>16</b> "	
5/8"	26	3 1⁄4"	
11/16"	27	3 <sup>5</sup> /16"	
3⁄4"	28	3 <b>3⁄8</b> "	
<sup>13</sup> /16"	29	3 7⁄16"	
7/8"	30		

IMPERIAL A/F	CODE
<sup>15</sup> /16"	31
2"	32
2 1/16"	33
2 <b>1/8</b> "	34
2 ³⁄16"	35
2 1⁄4"	36
2 5/16"	37
2 3/8"	38
2 1/16"	39
2 1⁄2"	40
2 %/16"	41
2 5/8"	42
2 11/16"	43
2 3⁄4"	44
2 13/16"	45
2 7⁄8"	46
2 15/16"	47
3"	48
3 1/16"	49
3 1⁄8"	50
3 <sup>3</sup> ⁄16"	51
3 1⁄4"	52
3 5⁄16"	53
3 3⁄8"	54
3 7⁄16"	55

## **TERMS & CONDITIONS - SUPPLY OF GOODS**

#### I. INTERPRETATION AND APPLICATION OF TERMS

#### 1.1 In these conditions the following words have the following meanings:

in these conditions the following words have the following meanings.		have the following meanings.
	"the Buyer"	means the person(s), firm or company who purchases Goods from Norbar;
	"Norbar"	means Norbar Torque Tools Limited (380480), with a principal place of business at Wildmere Road, Banbury, Oxon, OX16 3JU;
	"Contract"	means the contract between Norbar and the Buyer for the sale and purchase of the Goods, incorporating these Conditions;
	"Delivery Point"	means the address within the UK mainland which is notified to Norbar as the place for delivery of the Goods;
	"Engineer to Order Goods"	means any non-standard Goods specifically designed, modified and/or made for the Buyer or to the Buyer's specification;
	"Goods"	means any goods agreed in the Contract to be supplied to the Buyer by Norbar (including any part or parts of them).

- 1.2 Subject to any variation under condition 1.4 the Contract will be on these Conditions to the exclusion of all other terms and conditions. They supersede any previously issued terms and conditions of supply.
- 1.3 No terms or conditions endorsed upon, delivered with or contained in the Buyer's purchase order, confirmation of order, specification or other document will form part of the Contract.
- 1.4 These conditions apply to all of Norbar's sales and any variation to these conditions and any representations about the Goods will have no effect unless expressly agreed in writing and signed by an authorised representative of Norbar. The Buyer acknowledges that it has not relied on and will have no remedy in respect of any statement, promise or representation made or given by or on behalf of Norbar which is not set out in the Contract. Nothing in this condition will exclude or limit Norbar's liability for fraudulent misrepresentation.
- 1.5 Each order or acceptance of a quotation for Goods by the Buyer from Norbar will be deemed to be an offer by the Buyer to purchase Goods subject to these Conditions and no order placed by the Buyer will be deemed to be accepted by Norbar until a written acknowledgement of order is issued by Norbar or Norbar delivers the Goods to the Buyer, whichever occurs first.
- 1.6 Any quotation is given on the basis that no Contract will come into existence until Norbar despatches an acknowledgement of order or delivers the Goods to the Buyer. Any quotation is valid for a period of 30 days only from its date, provided that Norbar has not previously withdrawn or amended it.

#### 2. DESCRIPTION

- 2.1 The description of the Goods will be as set out in Norbar's catalogue or other published specification current at the time that the relevant order is accepted by Norbar or, in the case of Engineer to Order Goods, as specified in the relevant quotation.
- 2.2 Norbar reserves the right to make any changes to the specification of the Goods (including Engineer to Order Goods) which are required to conform with any applicable statutory or regulatory requirements or which do not materially affect their quality or performance. The Buyer will not be permitted to reject Goods and Norbar will have no liability to the Buyer in respect of any failure of the Goods to comply with any specification in these circumstances.
- 2.3 The Buyer acknowledges that all intellectual property rights in the Goods (including Engineer to Order Goods) and in any novel combinations or applications of the Goods (whether as a kit, system or otherwise) belong solely to Norbar and, to the extent that any such rights do not automatically vest in Norbar by operation of law, hereby assigns to Norbar all such rights. The Buyer will take any action and execute any document reasonably required by Norbar to give full effect to this condition.

#### **3 DELIVERY**

- I In the case of sales within the UK mainland, delivery will take place:
  - a) if the Goods are to be collected, on delivery to the Buyer or to the Buyer's named carrier at Norbar's premises at Wildmere Road, Banbury, Oxon, OX16 3JU; and
  - b) in all other cases, on delivery to the Delivery Point.
  - In the case of sales outside the UK mainland (including non-mainland UK) sales will be delivered FCA Norbar's premises at Wildmere Road, Banbury, Oxon, OX16 3JU (INCOTERMS 2010 edition), except where otherwise agreed in writing.
- 3.2 Any dates specified by Norbar for delivery of the Goods are intended to be an estimate and time for delivery will not be made of the essence by notice. If no dates are so specified, delivery will be within a reasonable time. The Goods may be delivered by instalments.
- 3.3 If for any reason the Buyer will not accept delivery of any of the Goods when they are ready for delivery, or Norbar is unable to deliver the Goods on time because the Buyer has provided appropriate instructions, documents, licenses or authorisations then, without prejudice to any other right or remedy available to Norbar:
  - a) risk in the Goods will pass to the Buyer;
  - b) the Goods will be deemed to have been delivered: and
  - c) Norbar may store the Goods until delivery whereupon the Buyer will be liable for all related costs and expenses (including, without limitation, storage and insurance).
- 3.4 Norbar may, at its discretion, accept returns of Goods ordered in error or no longer required, subject to the payment of a handling charge of 15% of the order value (excluding VAT), except that:
  - a) Production 'P' type wrenches will not be accepted for return;
  - b) Goods supplied with a UKAS accredited calibration certificate will be subject to a recalibration charge in addition to the handling charge;
  - c) Engineer to Order Goods may be charged for up to 100% of full price.

Goods returned for credit will only be accepted if they are returned in the original packaging, in a new, unused condition, carriage paid withing 30 days after the despatch date.

#### 4 NON-DELIVERY

- 4.1 The quantity of any consignment of Goods as recorded by Norbar upon despatch from Norbar's place of business will be conclusive evidence of the quantity received by the Buyer on delivery unless the Buyer can provide conclusive evidence proving contrary.
- 4.2 Norbar will not be liable for any non-delivery of Goods (even if caused by Norbar's negligence) unless written notice is given to Norbar within 14 days of the date when the Goods would, in the ordinary course of events, have been received.
- 4.3 Any liability of Norbar for non-delivery of the Goods will be limited to replacing the Goods within a reasonable time or issuing a credit note at the pro rata Contract rate against any invoice raised for such Goods.

#### 5 RISK/TITLE

- 5.1 The Goods are at the risk of the Buyer from the time of delivery.
- 5.2 Ownership of the Goods will not pass to the Buyer until Norbar has received in full (in cash or cleared funds) all sums due to it in respect of the Goods and all other sums which are or which become due to Norbar from the Buyer or any account.
- 5.3 Until ownership of the Goods has passed to the Buyer, the Buyer will hold all Goods on a fiduciary basis as Norbar's bailee and Norbar will be entitled at any time:
  - a) to require (at no cost to Norbar) that the Goods are stored separately and clearly marked in such a way that they will readily be seen to be the property of Norbar; and/or
  - b) to require the Buyer to deliver up the Goods or any part of them to Norbar and if the Buyer refuses to do so, to immediately repossess them and/or
  - c) to enter any premises or vehicle (by its employees or agents and in the case of premises, with or without vehicles) where Goods still owned by Norbar are stored or reasonably thought to be stored in order to inspect and/or repossess them.
- 5.4 Norbar will be entitled to recover payment for the Goods ordered notwithstanding that ownership of the Goods has not passed from Norbar.
- 5.5 The Buyer may resell the Goods before ownership has passed to it providing that any such sale is made in the ordinary course of its business at full market value and the Buyer is not aware that an event specified in condition 5.6(a) has occurred or is likely to occur.
- 5.6 Until ownership of the Goods has passed to the Buyer, the Buyer's right to possession of the Goods will terminate immediately if:
  - a) the Buyer is made bankrupt or petitions for his own bankruptcy, or has a receiver, administrative receiver or administrator appointed over all or any of its assets or undertaking or, other than for the purposes of a solvent amalgamation or reconstruction, enters into liquidation, enters into any composition or arrangement with or for the benefit of it creditors or ceases to carry business; or
  - b) the Buyer fails to observe or perform any of its obligations under the Contract or any other Contract between Norbar and the Buyer or;
  - c) the Buyer encumbers or in any way charges any of the Goods.
- 5.7 On termination of the Contract for any reason, the Norbar's rights under this condition 5 will remain in effect.

## **TERMS & CONDITIONS - SUPPLY OF GOODS**

#### 6 PRICE AND PAYMENT

- 6.1 Unless otherwise agreed by the Company in writing the price for the Goods will be the price set out in the Company's price list current as at the date of delivery or deemed delivery of the Goods.
- 6.2 The price for the Goods will be exclusive of any value added tax which the Buyer will pay in addition when it is due to pay for the Goods. The price for the Goods includes the cost of delivery if the order (i) is for delivery on Monday to Friday (inclusive) within the UK mainland to the Buyer's usual Delivery Point using the Company's usual delivery method and (ii) has a value of over £100.00 (excluding VAT). In all other cases, the cost of delivery will be charged in addition and will be due for payment at the same time as payment for the Goods is due.
- 6.3 For customers holding an account with the Company, payment of the price for the Goods is due within the agreed payment terms for that account. If any amount payable is not made within 30 days after the due date in accordance with the terms of the account, Norbar may withdraw credit facilities. For customers who do not have an account with the Company, or from whom credit facilities have been withdrawn, payment is due at the time the order is placed and may be tendered by cheque or credit card. In all cases, payment must be in pounds sterling (except where otherwise agreed in writing).
- 6.4 Time for payment will be of the essence.
- 6.5 No payment will be deemed to have been received until the Company has received cleared funds.
- 6.6 All payments payable to the Company under the Contract will become due immediately upon termination of this Contract notwithstanding any other condition of the Contract or any other arrangement or agreement between the parties.
- 6.7 The Buyer will make all payments due under the Contract without any deduction whether by way of set-off, counterclaim, discount, abatement or otherwise unless the Buyer has a valid court order requiring an amount equal to such deduction to be paid by the Company to the Buyer.
- 6.8 If the Buyer fails to pay the Company any sum due pursuant to the Contract the Buyer will be liable to pay interest to the Company on such sum from the due date for payment at the annual rate of 4% above the base lending rate from time to time of HSBC Bank plc, accruing on a daily basis until payment is made, whether before or after any judgment.

#### 7. LIABILITY OF THE COMPANY

- 7.1 The Company warrants that, subject to the other provisions of these Conditions upon delivery, and for a period of 12 months after the date of delivery, the Goods will:
  - a) be of satisfactory quality within the meaning of the Sale of Goods Act 1979; and
  - b) comply in all material respects with the specification for them as set out in the Company's catalogue or other published specification current at the time that the order for the Goods was accepted by the Company.
- 7.2 The Company will not be liable for a breach of any of the warranties in condition 7.1 unless:
  - a) the Buyer gives written notice of the defect to the Company within 14 days of the time when the Buyer discovers or ought to have discovered the defect; and
  - b) the Buyer returns the defective Goods properly packed, carriage paid to the Company's premises at the address given in condition 1.1.
- 7.3 The Company will not be liable for a breach of the warranties in condition 7.1 if:
  - a) the Buyer makes any further use of the Goods after giving such notice; or
  - b) the Goods have been misused, mishandled, overloaded, amended, modified or repaired in any way by the Buyer or its customers, or used for any purpose other than that for which they were designed; or
  - c) the defect is due to fair wear and tear or arises because the Buyer or its customer failed to follow the Company's oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Goods or (if there are none) good trade practice.
- 7.4 Subject to conditions 7.2 and 7.3, if any of the Goods do not conform with any of the warranties in condition 7.1, the Company will at its option repair or replace such Goods (or the defective part of them) or refund the price of such Goods at the pro rata Contract rate.
- 7.5 If the Company complies with condition 7.4, it will have no further liability for a breach of any of the warranties in clause 7.1 in respect of such Goods.
- 7.6 Except as provided in condition 7.1, the Company makes no representation or warranty, whether express or implied, as to the quality or fitness for purpose of the Goods and all warranties, conditions and other terms which may be implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.
- 7.7 Nothing in this Contract excludes or limits the liability of the Company for:
  - a) death or personal injury caused by the Company's negligence; or
  - b) under section 2(3) of the Consumer Protection Act 1987; or
  - c) for fraud or fraudulent misrepresentation; or

d) for any matter which it would be illegal for the Company to exclude or attempt to exclude its liability.

## THE BUYER'S ATTENTION IS IN PARTICULAR DRAWN TO THE PROVISIONS OF CONDITION $\mathbf{7.8}$

7.8 Subject to 7.7:

- a) the Company's total liability in contract, tort (including negligence or breach of statutory duty), misrepresentation, restitution or otherwise arising in connection with the performance or contemplated performance of this Contract will be limited to the price of the Goods; and
- b) the Company will not in any event be liable to the Buyer for any loss of profit, loss of business or depletion of goodwill, in each case whether direct, indirect or consequential, or any claims for consequential compensation whatsoever (howsoever caused) which arise out of or in connection with this Contract.
- 7.9 The Buyer acknowledges that the price of the Goods has been calculated on the basis that the Company excludes and limits its liability in accordance with condition 7.8.
- 7.10 Where the Goods are sold under a consumer transaction, the statutory rights of the Buyer are not affected by these Conditions.

#### 8. FORCE MAJEURE

The Company reserves the right to defer the date of delivery or to cancel the Contract or reduce the volume of the Goods ordered by the Buyer (without liability to the Buyer) if it is prevented from or delayed in the carrying on of its business due to circumstances beyond the reasonable control of the Company including, without limitation, acts of God, governmental actions, war or national emergency, riot, civil commotion, fire, explosion, flood, epidemic, lock-outs, strikes or other labour disputes (whether or not relating to either party's workforce), or restraints or delays affecting carriers or inability or delay in obtaining supplies of adequate or suitable materials or components.

#### 9. NOTICES

Any notice to be given under this Contract will be in writing and will be sent by first class mail within the UK, or by air mail, or by fax; in the case of the Company to the address set out in condition 1.1 and in the case of the Buyer to the Delivery Point or such other address or fax number as the Buyer may from time to time notify to the Company for this purpose in accordance with this condition. Notices sent as above will be deemed to have been received 3 working days after the date of posting (in the case of mail within the UK), or seven working days after the date of posting (in the case of air mail), or on the next working day after transmission (in the case of faxed messages) but only if a transmission report is generated by the sender's fax machine recording error free transmission of all pages to the correct fax number.

#### IO. GENERAL

- 10.1 The parties to the Contract do not intend that any term of the Contract will be enforceable by virtue of the Contracts (Rights of Third Parties) Act 1999 by any person that is not a party to it, except that any member of the group of companies whose holding company is Norbar Torque Tools Holdings Ltd may directly enforce any term of the Contract.
- 10.2 Each right or remedy of the Company under the Contract is without prejudice to any other right or remedy of the Company whether under the Contract or not.
- 10.3 If any provision of the Contract is found by any court, tribunal or administrative body of competent jurisdiction to be wholly or partly illegal, invalid, void, voidable or unenforceable it will to the extent of such illegality, invalidity, voidness, voidability or unenforceability be deemed severable and the remaining provisions of the Contract and the remainder of such provision will continue in full force and effect.
- 10.4 The Buyer will not be entitled to assign the Contract or any part of it without the prior written consent of the Company. The Company may assign the Contract or any part of it or sub-contract any or all of its obligations under the Contract to any person, firm or company.
- 10.5 Failure or delay by the Company in enforcing or partially enforcing any provision of the Contract will not be construed as a waiver of any of its rights under the Contract.
- 10.6 Any waiver by the Company of any breach of, or any default under, any provision of the Contract by the Buyer will not deemed a waiver of any subsequent breach or default and will in no way affect the other terms of the Contract.
- 10.7 The formation, existence, construction, performance, validity and all aspects of the Contract will be governed by English law and the parties submit to the non-exclusive jurisdiction of the English courts.



## NORBAR PROMOTIONAL MATERIAL

CATALOGUES & LEAFLETS		
07426	General Catalogue	
07510	Oil & Gas Leaflet	
07513	Manufacturing & Assembly Leaflet	
07514	Transportation Leaflet	
07512	Aerospace Leaflet	
07515	Energy Generation Leaflet	
07557	Oil & Gas ETO Leaflet	
07516	EvoTorque <sup>®</sup> Leaflet	
07554	USM Leaflet	
07560	T-Box XL™ Leaflet	
07563	New Professional Leaflet	
07536	ClickTronic Leaflet	

#### PROMOTIONAL ITEMS

07509	Norbar Oval Logo Sticker (156mm)
07524	'Made in England' window sticker
07525	'Made in England' wall sticker
07533	Promotional Stickers (A4 sheet)
SQ1946	Set of Posters (various)

## Distributed by

## CUSTOMER RELATIONS

#### **OFFICE OPENING HOURS**

CONTACT DETAILS

## New Sales

Email sales@norbar.com

After Sales Service repairs@norbar.com

#### Norbar Torque Tools Ltd

Wildmere Road, Banbury Oxfordshire, OX16 3JU UNITED KINGDOM