



### **MULTITEST CALIBRATION SYSTEMS**

The **MULTITEST Torque**, **Force and Tension Calibration System** is the most sophisticated system available in the industry. This system will test and calibrate most types of torque wrenches, torque screwdrivers, torque multipliers, cable tensiometers, tension and compression gauges and nonimpact power tools such as nutrunners and electric screwdrivers.

The Multitest Calibration System can be ordered several ways. Each system begins with the same three basic components: the Multitest Digital Monitor, the Roller Cabinet and the 2000 ft. lb. Mechanical Loader. We offer three different systems, the "Premier", the "Supreme" and the "Basic". These systems and their components are described in detail on the next few pages.

In addition, you may order any component separately to build your own "custom" system.

### **MULTITEST CALIBRATION SYSTEMS INCLUDE:**

### **Features**

- Automatic sensor recognition with "smart" transducers
- Range: 5 in. oz. to 2000 ft. lb. torque (bi-directional)
- Accuracy: ± 0.25% of indicated value, cw & ccw, from 10% to 100% of full scale, (except 2000-4-02\*)
- Built-in, low profile serial printer
- Date and time stamp for stored values
- · Statistical analysis performed on stored data
- Stores up to 3000 torque values
- Programmable manual or automatic options for clear, store and print functions
- 110 or 220 Volts selectable. Foreign plugs are included
- Recall and review of stored torque values
- Track, peak, first peak, power tool modes
- RS232C port, analog output
- Eight torque measurement units:
   in. oz., in. lb., ft. lb., Nm, dNm, cNm, mkg and cmkg
- Six force units: ounce, pound, newton, deciNewton, kilopound (kilogram) and gram
- Automatic lock-up for transducer protection
- · All transducers supplied with certification
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.

		(mechanical)	(mechanical)	(mechanical)	(motorized)	(motorized)
CDI#	Description	2000-1	2000-2	2000-3	2800-1	2800-3
Various	Digital Monitor	Х	Х	Х	χ	Х
2000-600-02	Mechanical Loader Max 2000 ft.lbs.	Х	х	х	Х	х
2000-100-02	Roller/Storage Cabinet	Х	х	Х	Х	х
2000-400-02	4 in 1 Transducer 4 in. lb. to 250 ft. lbs.	Х	Х	Х		
2000-500-02	4 in 1 Transducer Adapter Kit	Х	Х	Х		
2000-4-02	Transducer Range from 5-50 in. ozs.	Х	Х			
2000-5-02	Transducer Kit-Range 15-200 in. ozs.	Х	Х			
2000-6-02	Transducer Kit-Range 4-50 in. lbs.	Х				
2000-65-02	Transducer Kit-Range 15-150 in. lbs.	Х				
2000-7-02	Transducer Kit-Range 30-400 in. lbs.	Х				
2000-8-02	Transducer Kit-Range 80-1000 in. lbs.	Х				
2000-10-02	Transducer Kit-Range 10-125 ft. lbs.	Х				
2000-11-02	Transducer Kit-Range 20-250 ft. lbs.	Х				
2000-12-02	Transducer Kit-Range 60-600 ft. lbs.	Х				Х
2000-13-02	Transducer Kit-Range 100-1000 ft. lbs.	Х	Х			
2000-14-02	Transducer Kit-Range 200-2000 ft. lbs.	Х	Х			Х
900-0-1KIT	1/4", 50 in. lb. Joint Rate Simulator	Х	Х			
900-2-01KIT	3/8", 400 in. lb. Joint Rate Simulator	Х	Х			
900-3-01KIT	3/8", 1000 in. lb. Joint Rate Simulator	Х	Х			
2000-550-02	Extension Arm Reach up to 80"	Х	Х		Х	Х
2000-750-02	Torque Screwdriver Testing Kit	Х				
2000-320-0	Weight Set #1	Х				
2500-50-0	2 1/2" Calibration Wheel	Х				
2000-151-0	5" Calibration Wheel	Х				
2000-152-0	10" Butterfly Calibration Wheel	Х				
2000-154-0	40" Calibration Arm	Х				
390-2-2	4 oz. Calibration Weight Tray	Х				
2000-301	8 oz. Calibration Weight Tray	Х				
2000-304-0	7.5 lb. Calibration Weight Tray	Х				
2000-302-0	15 lb. Calibration Weight Tray	Х				
2000-303-0	50 lb. Calibration Weight Tray	Х				
2000-250-02	Calibration Stand Kit	Х				
2000-260-0	Force (Tensiometer) Testing Kit	Х				
2000-261-0	Force (Tension) Gage Kit	Х				
2000-262-0	Force (Compression) Gage Kit	Х				
2000-263-02	Force Arm Kit-Small and Large Arms	Х				
2000-SW	Wedgelink Software	Х	Х			Х
2000-50-1	Cable from Multitest to PC	Х	Х			Х











# **Snap-2n** Industrial Brands





### **MULTITEST PREMIER CALIBRATION SYSTEM**

CDI's All Inclusive Calibration System Model 2000-1

### **Features**

- Our most comprehensive calibration system for torque and force
- Calibrate torque wrenches up to 2000 ft. lbs.
- Check the accuracy and calibrate cable tensiometers, tension and compression gauges
- Includes the easy-to-use 4-in-1 transducer kit
- Eleven single transducers ranging from 5 in. oz. up to 2000 ft. lbs.
- Includes torque screwdriver testing kit
- Automatic safety feature locks system to prevent overloading and possible damage to transducers
- Displays eight units of torque and six units of force
- Also includes a calibration stand and all necessary calibration wheels, arms, weights and trays
- Downloading software included

### **MODEL 2000-1 INCLUDES:**

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Product Code	Description	Product Code	Description
2000-610-02	MULTITEST Monitor	2000-550-02	Extension Arm Kit for Long Torque Wrenches
2000-600-02	Mechanical Loader 2000 ft. lb. capacity	2000-750-02	Torque Screwdriver Testing Kit
2000-100-02	Roller Cabinet	2000-320-0	No. 1 Weight Set
2000-400-02	4 in 1 Transducer Kit, 4 in. lbs. to 250 ft. lbs.	2500-50-0	2-1/2" Calibration Wheel
2000-500-02	4 In 1 Transducer Adapter Kit	2000-151-0	5" Calibration Wheel
2000-4-02*	Transducer Range From 5 - 50 in. ozs. (*± 0.5%)	2000-152-0	10" Butterfly Wheel
2000-5-02	Transducer Range From 15 - 200 in. ozs.	2000-154-0	40" Calibration Arm
2000-6-02	Transducer Range From 4 - 50 in. lbs.	390-2-2	4 oz. Weight Hanger
2000-65-02	Transducer Range From 15 - 150 in. lbs.	2000-301	8 oz. Weight Hanger
2000-7-02	Transducer Range From 30 - 400 in. lbs.	2000-304-0	7.5 lb. Weight Hanger
2000-8-02	Transducer Range From 80 - 1000 in. lbs.	2000-302-0	15 lb. Weight Hanger
2000-10-02	Transducer Range From 10 - 125 ft. lbs.	2000-303-0	50 lb. Weight Hanger
2000-11-02	Transducer Range From 20 - 250 ft. lbs.	2000-250-02	Calibration Stand Kit
2000-12-02	Transducer Range From 60 - 600 ft. lbs.	2000-260-0	Tension Meter
2000-13-02	Transducer Range From 100 - 1000 ft. lbs.	2000-261-0	Force Gauge
2000-14-02	Transducer Range From 200 - 2000 ft. lbs.	2000-262-0	Compression Gauge
900-0-1KIT	Joint Rate Simulator 50 in. lbs. capacity	2000-263-02	Force Arm Kit
900-2-01KIT	Joint Rate Simulator 400 in. lbs. capacity	2000-SW	PC Software
900-3-01KIT	Joint Rate Simulator 1000 in. lbs. capacity	2000-50-3	PC Cables Multitest/Suretest





4 in 1 Transducer Kit with Mounting Adapter



Multitest Digital Monitor with Soft Touch Keys.



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### **MULTITEST SUPREME CALIBRATION SYSTEM**

CDI's Torque-Only System Model 2000-2. Listed below are all of the components to CDI's "Supreme" MULTITEST Torque Calibration System. This is our mid-range system for torque, which has a range from 5 in. ozs. to 2000 ft. lbs. Designed for the user who requires precision accuracy and reliability in a torque calibration system. This set includes an extension arm for long torque wrenches and 3 joint rate simulators for testing power tools. (Not for use with impact and pulse tools.) PC compatible software and cables are also included.

### **MODEL 2000-2 INCLUDES:**

MIUDEL 4	2000-2 INCLUDE9:	
Product Code	Description	
2000-610-02	Multitest Digital Monitor	
2000-600-02	Mechanical Loader Max 2000 ft.lb.	
2000-100-02	Roller / Storage Cabinet 55" W x 24" D x 38" H	
2000-400-02	4 in 1 Transducer Kit-Range 4 in. lb. to 250 ft. lb.	
2000-500-02	4 in 1 Transducer Adapter Kit	
2000-4-02*	Transducer Range From 5 - 50 in. ozs. (*± 0.5%)	
2000-5-02	Transducer Kit-Range 15-200 in. oz.	
2000-12-02	Transducer Kit-Range 60-600 ft. lb.	
2000-13-02	Transducer Kit-Range 100-1000 ft. lb.	
2000-14-02	Transducer Kit-Range 200-2000 ft. lb.	
2000-550-02	Extension Arm for Long Torque Wrench, Reach up to 80"	
900-0-1KIT	1/4" drive, 50 in. lb. Capacity Joint Rate Simulator	
900-2-01KIT	3/8" drive, 400 in. lb. Capacity Joint Rate Simulator	
900-3-01KIT	3/8" drive, 1000 in. lb. Capacity Joint Rate Simulator	
2000-SW	Wedgelink Software	
2000-50-3	PC Cables Multitest/Suretest	Made in U.S.A.





4 in 1 Transducer Kit with Mounting Adapter.

### **MULTITEST BASIC CALIBRATION SYSTEM**

Listed below are all of the components to CDI's "Basic" MULTITEST Calibration System Model 2000-3. The system includes the 4 in 1 transducer, which is capable of calibrating torque tools from 4 in. lbs. through 250 ft. lbs. Also included is the 2000 ft. lb. loader and the MULTITEST monitor.

### **MODEL 2000-3 INCLUDES:**

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Product Code	Description	
2000-610-02	Multitest Digital Monitor	
2000-600-02	Mechanical Loader Max 2000 ft.lb.	
2000-100-02	Roller / Storage Cabinet 55" W x 24" D x 38" H	
2000-400-02	4 in 1 Transducer Kit-Range 4 in. lb. to 250 ft. lb.	N/II
2000-500-02	4 in 1 Transducer Adapter Kit	Made in U.S.A.



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Snap-on Industrial Brands offers factory torque training at our manufacturing facility in the City of the Industry, California. We also offer the same top tier training on-site at your location. Training includes a certificate of completion for each student. All of our training is full immersion hands-on training, not just reading from an instruction manual. Contact your representative for details.









# **Snap-277** INDUSTRIAL BRANDS





**Dual Mode Function Manual and Automatic** 



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### **MULTITEST MOTORIZED SYSTEMS**

CDI has taken torque calibration to a higher level. Increase your productivity with the 2000 ft. Ib. fully automatic motorized loader. Designed for the high volume calibration laboratory that requires a high-speed, automatic torque calibration system. In the automatic mode, the **MULTITEST Motorized System Model 2800-1** will cycle, test and calibrate most torque wrenches. With our optional kits, you can calibrate torque screwdrivers, cable tensiometers, tension and compression gauges utilizing the manual mode, (hand crank only).

The MULTITEST Motorized System consists of the Monitor, Motorized Loader, Roller Cabinet and Extension Arm. Please order the transducers separately based on your individual needs. (Not for use with impact and pulse tools.)

### **Features**

- Automatic sensor recognition with "smart" transducers
- Range: 5 in. oz. to 2000 ft. lb. torque (bi-directional)
- Accuracy: ± 0.25% of indicated value, cw & ccw, from 10% to 100% of full scale
- Dual mode function (manual & automatic)
- Automatic speed control
- Built-in, low profile serial printer
- Date and time stamp for stored values
- · Statistical analysis performed on stored data
- Emergency stop button
- Programmable manual or automatic options for clear, store and print functions
- Recall and review of stored torque values
- Track, peak, first peak, power tool modes
- RS232C port, analog output
- Eight torque measurement units: in. oz., in. lb., ft. lb., Nm, dNm, cNm, mkg and cmkg
- Six force units: ounce, pound, newton, deciNewton, kilopound and gram
- Automatic lock-up for transducer protection
- All transducers are individually serialized with matching certificate of calibration traceable to N.I.S.T.

### **MODEL 2800-1 INCLUDES:**

Product Code	Description
2000-810-01	MULTITEST Digital Monitor
2000-800-02	Motorized Loader with roller cabinet
2000-550-02	Extension Arm for Long Torque Wrench, Reach up to 80"
	2000-810-01 2000-800-02

### **MODEL 2800-3 INCLUDES:**

Product Code	Description	
2800-1	Base System (see system for details)	
2000-400-02	4-in-1 Transducer Kit, 4 in. lbs. to 250 ft. lbs.	
2000-500-02	Bracket for 4-in-1 Transducer Adapter Kit	
2000-12-02	Transducer Range from 60 - 600 ft. lbs.	
2000-14-02	Transducer Range from 200 - 2000 ft. lbs.	
2000-SW	Software	*XVSA
2000-50-3	PC Cables Multitest/Suretest	Made in U.S.A.

Snap-on Industrial Brands offers factory torque training at our manufacturing facility in the City of the Industry, California. We also offer the same top tier training on-site at your location. Training includes a certificate of completion for each student. All of our training is full immersion hands-on training, not just reading from an instruction manual. Contact your representative for details.



### **SURETEST CALIBRATION SYSTEMS**

The **SURETEST Model 5000-1** is a laboratory grade instrument which captures torque measurements with a user friendly interface. It features a large LCD graphic display. It may be used with a single transducer or can be used as the principal component of a Torque Calibration System.

The SURETEST Model 5000-2 is a midrange torque system with a range of 5 in. ozs. to 2000 ft. lbs.

The SURETEST features versatile data acquisition capabilities including measurement storage retrieval, statistical analysis and automatic downloading to an external printer/computer. The SURETEST stores, recalls and downloads up to 3000 torque readings. The system provides readings with an accuracy of  $\pm$  .25% of indicated value and features multiple languages: English, Spanish, French, Japanese and German.

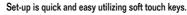
The SURETEST Torque Calibration System may be ordered in three different combinations. The "Premier", the "Supreme" and the "Basic" systems are described on these pages. In addition, you may order any component separately to build your own "custom" system.

### **Features**

- Large LCD graphical display
- Five built-in languages
- Date and time stamp
- Dual RS-232 ports, analog output
- SPC built-in
- Automatic downloading
- Accuracy: ± 0.25% of indicated value, CW & CCW, from 10% to 100% of full scale
- Transducers available from 5 in. ozs. to 2000 ft. lbs. of torque
- All transducers are "smart" (plug and play)
- Readout in eight different engineering units
- Stores and recalls 5000 torque values (date & time)
- Fully automatic voltage input adaptation (100 240 VAC input)
- Data is saved when SURETEST is turned off
- All transducers are individually serialized with matching certificate of calibration traceable to N.I.S.T.









Easy, quick change transducers.

### **SURETEST CALIBRATION SYSTEMS INCLUDE:**

Product Code	Description	5000-1 Premier	5000-2 Supreme	Product Code	Description	5000-1 Premier	5000-2 Supreme
5000-ST	Suretest Monitor w/Cable and Case	х	х	2000-320-0	Weight Set #1	х	
2000-600-02	Mechanical Loader Max 2000 ft.lb.	x	x	2500-50-0	2 1/2" Calibration Wheel	x	
2000-100-02	Roller / Storage Cabinet 55" W x 24" D x 38" H	x	x	2000-151-0	5" Calibration Wheel	X	
2000-400-02	4 in 1 Transducer Kit-Range 4 in. lb. to 250 ft. lb.	x	x	2000-152-0	10" Butterfly Calibration Wheel	X	
2000-500-02	4 in 1 Transducer Adapter Kit	x	x	2000-154-0	40" Calibration Arm	X	
2000-4-02	Transducer Kit-Range 5-50 in. oz.	x	x	390-2-2	4 oz. Hanger Calibration Weight Tray	X	
2000-5-02	Transducer Kit-Range 15-200 in. oz.	x	x	2000-301	8 oz. Hanger Calibration Weight Tray	X	
2000-12-02	Transducer Kit-Range 60-600 ft. lb.	x	x	2000-304-0	7.5 lb. Calibration Weight Tray	X	
2000-13-02	Transducer Kit-Range 100-1000 ft. lb.	x	x	2000-302-0	15 lb. Calibration Weight Tray	X	
2000-14-02	Transducer Kit-Range 200-2000 ft. lb.	x	x	2000-303-0	50 lb. Calibration Weight Tray	X	
2000-550-02	Extension Arm for Long Torque Wrench, Reach up to 80"	x	x	2000-250-02	Calibration Stand Kit	X	
900-0-1KIT	1/4" drive, 50 in. lb. Capacity Joint Rate Simulator	x	x	2000-SW	Wedgelink Software	X	x
900-2-01KIT	3/8" drive, 400 in. lb. Capacity Joint Rate Simulator	x	x	2000-50-3	PC Cables Multitest/Suretest	X	x
900-3-01KIT	38" drive, 1000 in. lb. Capacity Joint Rate Simulator	x	x				
2000-750-02	Torque Screwdriver Testing Kit for 2000-600-02 Loader	x					











# **Snap-277** Industrial Brands





### SURETEST™ BASIC CALIBRATION SYSTEM

The **SURETEST Model 5000-3** is a laboratory grade instrument which captures torque measurements with a user friendly interface. It features a large LCD graphical display. It may be used with a single transducer or can be used as the principal component of a Torque Calibration System.

The SURETEST features versatile data acquisition capabilities including measurement storage, retrieval, statistical analysis and automatic downloading to an external printer/computer. The SURETEST stores, recalls and downloads up to 3000 torque readings. The system provides readings with an accuracy of +/- .25% of indicated value and features multiple languages: English, Spanish, French, Japanese and German.

### **Features**

- Large LCD graphical display
- Five built-in languages
- Date and time stamp
- Dual RS-232 ports, analog output
- SPC built-in
- Automatic downloading
- Accuracy is +/- 0.25% of indicated value, CW & CCW, from 10% to 100% of full scale
- Transducers available from 5 in. ozs. to 2000 ft. lbs. of torque
- All transducers are "Smart" (Plug and Play)
- Readout in eight different engineering units
- Stores and recalls 3000 torque values (Date & Time)
- Fully automatic voltage input adaptation (100 240 VAC input)
- Data is saved when SURETEST is turned off
- All transducers supplied with certification
- All transducers are individually serialized with matching certificate of calibration traceable to N.I.S.T.



4 in 1 Transducer Kit with Mounting Adapter.

### **MODEL 5000-3 INCLUDES:**

Product Code	Description	
5000-ST	Suretest Monitor w/Cable and Case	
600TL-2	Mechanical Loader 600 ft. lb.	
2000-400-02	4 in 1 Transducer Kit-Range 4 in. lb. to 250 ft. lb.	
2000-500-02	4 in 1 Transducer Adapter Kit	
2000-12-02	Transducer Kit-Range 60-600 ft. lb.	



### **CUSTOM CALIBRATION SYSTEMS**

Don't see the exact system you're looking for? Please call customer service to request a quotation on a custom calibration system. We will provide assistance designing a testing system to fit your application and specifications.



Snap this code with your smartphone to watch the video!



### **TEST/CALIBRATION ACCESSORIES**

CDI's calibration equipment is expressly designed to calibrate the complete line of CDI Torque Transducers. All weight trays, arms and brackets supplied by CDI Torque Products are built with precision accuracy to meet the demanding needs of the calibration professional. All calibration wheels and arms are certified as to length, and supplied with a certificate of accuracy, which is traceable to N.I.S.T. (National Institute of Standards and Technology). Weights, trays and hangers are weight certified and are also supplied with a certificate of accuracy traceable to N.I.S.T. Mass Classification is Class F. Mating adapters are available to facilitate the use of the various components. Written procedures are available upon request for calibrating any of CDI's manufactured torque products.

### **TEST/CALIBRATION ACCESSORIES**

Product Code	Description
2000-750-02	Torque Screwdriver Testing Kit for 2000-600-02 Loader
2000-750-06	Torque Screwdriver Testing Kit for 600TL Loader
2000-320-0	Weight Set #1 - For all Transducers
2000-321-0	Weight Set #2 - For 200 in. oz. to 600 ft. lbs.
2000-322-0	Weight Set #3 - For 600 ft. lb. to 2000 ft. lbs.
390-2-2	4 oz. Hanger Calibration Weight Tray
2000-301	8 oz. Hanger Calibration Weight Tray
2000-302-0	15 lb. Calibration Weight Tray
2000-303-0	50 lb. Calibration Weight Tray
2000-304-0	7.5 lb. Calibration Weight Tray
2000-250-02	Calibration Stand Kit
2500-50-0	2½" Calibration Wheel
2000-151-0	5" Calibration Wheel
2000-152-0	10" Butterfly Calibration Wheel
2000-154-0	40" Calibration Arm
2000-152-3	½" x ¾" Male & Female Reducer Adapter
2000-226-3	3/4" x 1/2" Male & Female Reducer Adapter
2000-226-2	1" x ¾" Male & Female Reducer Adapter
2000-0154-18	1 1/4" x 3/4" Male & Female Reducer Adapter
S/2000-221-0	1 ¼" x ¾" Flange Adapter for 40" Arm
2000 Calkit	Complete Calibration Kit up to 2000 ft.lbs.
342-35	Transducer Mounting Bracket up to 1000 in. lb. (TB342/1)
342-36	Transducer Mounting Bracket 125-600 ft. lb. (TB342/2)
2000-150-03	Transducer Bracket, 1000-2000 ft.lb.
343-25	Transducer Mounting Bracket 4 in 1 ETT (TB343)

### **SOCKET ADAPTERS FEMALE X FEMALE**

Product Code	Opening	×	Opening
260-27	1/4" hex	X	1/4" sq
342-40	1/4" sq	×	1/4" sq
342-41-1	1/4" sq	×	3/8" sq
342-41-2	3/8" sq	×	3/8" sq
65-26-2	1/2" sq	×	3/8" sq
65-26-3	1/2" sq	×	1/2" sq
65-78-1	1/2" sq	×	3/4" sq
65-78-2	3/4" sq	×	3/4" sq
75-25-1	1" sq	×	3/4" sq
75-20	1" sq	×	1" sq











# **Snap-277** Industrial Brands



### **MULTITORO TORQUE & DATA COLLECTION SYSTEMS**

The MULTITORQ portable electronic torque meter displays torque readings from sensors that attach between sockets and driver. MULTITORQ is a highly versatile torque analyzer/data acquisition system that can be used with sockets, extensions, universal joints, ratcheting drivers or any combination of these. Sensors are sold separately, available in 8 ranges from 2-20 in. ozs. to 150-1500 ft. lb. Accuracy  $\pm$  1% of reading ( $\pm$  2% reading for 20 in. oz., and 10 in. lb.) 10-100% of sensor range.

The torque analyzer features a wide angle viewing LCD display with selectable readouts; ft. lb., in. lb., in. oz., Nm, dNm, mkg, and cmkg units. Torque target settings are entered via a push button membrane keyboard. High and low torque limits are adjustable to give an audible and visual alarm. The user selects Track mode to display torque values as they are applied, or Peak mode to display the highest torque value applied.



- 4 digit w/ alpha & numerical function flags
- 4 digit, 8000 counts display capacity
- Accuracy: ± 1% of indicated value, cw & ccw, from 10% to 100% of full scale, 201-O-MT and 101-I-MT are  $\pm$  2%
- Soft touch keys: hi/lo alarm, zero tare, set-up, units, store/recall/clear, send, statistics, enter
- Units of measurement: ft. lb., in. lb., in. oz., Nm, dNm, mkg and cmkg
- Storage: -20 to 50 degrees C (-2 to 122 degrees F)
- Humidity: up to 90%, non-condensing
- Dimensions: 3" wide, 2.5" high (3" with belt clip), 6" deep
- Weight: 1 pound
- Charge life (full charge to shutoff): 20 hours continuous
- Battery chargers: 120 VAC
- Optional 220 Volt charger available
- Output: 9VDC, 200mA
- Data storage/recall: 3500 measurements
- Serial output port: RS-232 (true), 300-19.2k baud, and mitutoyo (statistical protocol)
- Rechargeable Ni-Cad batteries
- Reads bi-directionally (cw and ccw)

# **MULTITORO TORQUE & DATA COLLECTION SYSTEMS**

### Standard Set Includes: Product Code 1600-MT MULTITORQ Unit includes: power pack/charger (P115-30) and case (1600-50)

### Sensors: (sold separately)

Product Code	Torque Range	Drive	
201-0-MT	2 - 20 in. oz.	1/4"	
101-I-MT	1 - 10 in. lb.	1/4"	
501-I-MT	5 - 50 in. lb.	1/4"	
2001-I-MT	20 - 200 in. lb.	1/4"	
1002-F-MT	10 - 100 ft. lb.	3/8"	
2503-F-MT	25 - 250 ft. lb.	1/2"	
6004-F-MT	60 - 600 ft. lb.	3/4"	
15005-F-MT	150 - 1500 ft. lb.	1"	

Certificate of accuracy traceable to N.I.S.T. supplied with each transducer.

All components ordered separately.

Optional Accessories:			
Product Code	Description		
2000-50-1	Download Cable Rs-232 to 9 Pin Serial Point		
1800-5027	220 VAC (50-60 Hz) Charger		







Turns any ordinary ratchet wrench.....



...into a highly accurate digital torque tool.



### **DIGITAL TORQUE TESTER™ (DTT)**

### **TEST THE HEALTH OF YOUR TORQUE WRENCHES -**ANYWHERE WITH THE DIGITAL TORQUE TESTER.

Utilizing the testing protocol and standards developed by the American Society of Mechanical Engineers (ASME)

The **Digital Torque Tester™ (DTT)** is designed to be an affordable torque tester that can be mounted on a wall or with the optional table bracket to allow the operator to conveniently test torque wrenches and torque screwdrivers. It features an easy to use touch pad screen to capture peak torque values during a test in real time, and download stored torque data to a PC. All DTT torque testers are sold in a kit with the tester, carrying case and AC/DC power supply.



### **DIGITAL TORQUE TESTER™ (DTT)**

Product Code	Female Drive	Range English	Range cNm, Nm	Range, kgcm
1001-O-DTT	1/4"	10 - 100 in.oz.	7,06 - 70.6 cNm	.720 - 7.20 cmkg
8001-O-DTT*	1/4"	20 - 800 in.oz.	14.1 - 565 cNm	1.44 - 57.6 cmkg
501-I-DTT	1/4"	5 - 50 in.lb.	56 - 565 cNm	5.76 - 57.60 cmkg
1001-I-DTT	1/4"	10 - 100 in.lb.	113 - 1113 cNm	11,5 - 115 cmkg
2502-I-DTT	3/8"	25 - 250 in.lb.	2.82 - 28.25 Nm	28.80 - 288.0 cmkg
4002-I-DTT	3/8"	40 - 400 in.lb.	4.52 - 45.2 Nm	46 - 460 cmkg
10002-I-DTT	3/8"	100 - 1000 in.lb.	11.3 - 113 Nm	115 - 1152 cmkg
2503-F-DTT	1/2"**	25 - 250 ft.lb.	33.8 - 338 Nm	3.45 - 34.5 kgm
6004-F-DTT	3/4"	60 - 600 ft.lb.	81.3 - 813 Nm	8.30 - 83 kgm

± 0.50% 10% to 100% CW & CCW of indicated test value @ 25° C Accuracy:

\*Accuracy:  $\pm$  1% CW & CCW from 2-1/2% to 100% of full scale. New for Torque Screwdriver.

Units of Measure: Nm, kgcm, ft.lb., in.lb., in.oz., kgm, cNm

Operation Modes: PEAK, FIRST PEAK Operating Temperature: 10 to 32° C (50 to 90° F) Storage Temperature: -20 to 50° C (-2 to 122° F)

85% Relative Humidity @ 21° C (70° F) Humidity:

Power Supply: Included 9-volt A/C D/C adapter. 6 AA batteries included.

Data Storage/Recall: Memory Capacity - 500 Records Dimensions: W - 10" x H - 16" x D - 2.5"

Weight: (Tester Only) - 10.7 lbs., (with Carrying Case) - 17.4 lbs.

\*\* Includes 1/2" - 3/8" Reducer



Snap this code with your smartphone to watch the video!

Table Mounting Bracket

### **DTT OPTIONAL ACCESSORIES**

Product Code	Description
2344-0050-03	Table Mounting Bracket for DTT Series Testers
2344-0051-02	Male SQ Adapter 3/8" x 3/8"
2344-0051-11	1/4" to 1/4" Male x Male Square Adapter
2344-0051-13	1/2" to 1/2" Male x Male Square Adapter
2344-0051-16	3/8" to 1/2" Male x Male Square Adapter
2344-0051-19	3/4" to 1-1/4" Male x Male Square Adapter



# **TORQUE COMPARATOR**

Large dual scale. Perfect when a quick check of your wrench is required before usage. Compact design allows for mounting on any flat surface in either horizontal or vertical position. Torque Comparator is calibrated on torque testers which are certified using test bars and "F" weights traceable to NIST. +/- 2% accuracy from 20% of full scale to full scale. Calibration Compliance Certificate.

### **TORQUE COMPARATOR**

Product Code	Square Drive	<b>English Capacity</b>	Inc.	Nm, Capacity	Inc.
1753-TC	1/2"	175 ft. lbs.	5 ft. lbs.	230 Nm	10 Nm
6004-TC	3/4"	600 ft. lbs.	5 ft. lbs.	800 Nm	20 Nm















# **Snap-on.** Industrial Brands





### **ETT™ ELECTRONIC TOROUE TESTER**

The **ETT (Electronic Torque Tester)** is CDI's portable torque tester. Unlike a torque calibration system, which can be used to generate a torque wrench certification, the ETT is a portable, battery powered stand-alone torque tester. It can also be used on AC power. Its primary use is to check the accuracy of dial and click type torque wrenches and torque screwdrivers to maintain their accuracy in between calibrations. With the addition of a joint rate simulator, ETT can also check stall and clutch type pneumatic and electronic torque tools. It should not be used with any impact or pulse type tools. There are eight models with torque ranges from 10 inch ounces up to 600 foot pounds.

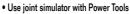
### **Features**

- Integral transducer and sturdy housing allow mounting in virtually any position
- Unique neck design allows the operator to see the LCD display when testing long torque wrenches
- Accuracy: ± 0.5% of indicated value, cw & ccw, from 10% to 100% of full scale + 1 increment or least significant digit
- Four modes of operation: peak mode, power tool mode, first peak mode and track mode
- Dual scale (English/Nm or English/cNm, dNm)
- Auto/manual display reset
- Reads bi-directionally (cw and ccw)
- Rechargeable NiCad batteries
- Designed to be a sturdy low cost tester, ETT can be placed on the wall in the factory, on a portable cart or on a bench allowing operators to test torque wrenches or power tools without having to leave their station

### **ELECTRONIC TORQUE TESTERS (ETT)**

Product Code	SAE	Torque Range Newton Meter	Drive Size	
1001-OETT	10 - 100 in. oz.	7.0 - 70.6 cNm	1/4"	
4001-OETT	40 - 400 in. oz.	28 - 280 cNm	1/4"	
501-I-ETT	5 - 50 in. lb.	5.6 - 56 dNm	1/4"	
1001-I-ETT	10 - 100 in. lb.	11.3 - 113 dNm	1/4"	
2502-I-ETT	25 - 250 in. lb.	28 - 280 dNm	3/8"	
10002-I-ETT	100 - 1000 in. lb.	113 - 1130 dNm	3/8"	
2503-F-ETT	25 - 250 ft. lb.	34 - 339 Nm	1/2"	
6004-F-ETT	60 - 600 ft. lb.	81 - 813 Nm	3/4"	





- Power adapter cord included Part #P115-30
- Bench bracket available Part #343-25
- Socket adapter included with tester (female to female) suited for size of square drive of ETT



### **DIGITAL TOROUE CHECKER**

Perfect for checking mechanical and digital torque wrenches regularly before use. Simple operation and affordable, to allow convenient mounting close to each departments where torque wrenches are used frequently

Product Code	Square Drive	English Capacity	Nm. Capacity	Weight
2503-F-DTC	1/2"	25-250ftlbs	34-339 Nm	4.9 lbs
1003-F-DTC	1/2"	5-100FT LBS	-	4.9 LBS
DTS82-69	A/C Adaptor			
3325-0440-01	Bench Mount E	Bracket		



CDITORQUE

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### Features

- Simple operation enables any torque wrench user to quickly check wrench accuracy
- Uses 3 AA batteries (Included), LCD displays battery
- Large backlit LCD screen
- Audio beep on overtorque (125% of full scale)
- 3/8" Adapter included
- Accuracy +/- 1%

- Push Button Mode Select: First peak, Peak Hold, Tracking
- Units: Ft-Lb, In-Lb, Nm
- Includes Certificate of Calibration
- Compact design for mounting on any flat surface in horizontal or vertical position
- CE Approved
- Overall dimensions are: 4 3/4 x 13 1/2 x 2 3/16



### **COMPUTORQ SG-STEEL GRIP ELECTRONIC TORQUE WRENCH**

### TORQUE IN LESS TIME, WITH MORE ACCURACY AND CONTROL

This new line of Electronic Torque Wrenches from CDI Torque Products is truly revolutionary. They unite torque and angle in a single mode to provide the most accurate and fastest way to tighten fasteners in a sequence. In addition to the LED indicator lights, an audible beep and handle vibration alert you when target torque is achieved.

CDI COMPUTORQ SG Industrial Electronic Torque Wrenches provide instant data on the exact torque actually applied—something mechanical wrenches can't do. The patent-pending Torque and Angle combo mode provides the most accurate and fastest way to achieve torque plus angle in a single motion. Control torque accuracy to +/- 2% clockwise, +/- 3% counterclockwise. Control angle accuracy to +/- 1% of reading and +/- 1 degree.

The rugged, all-steel body is designed to stand up to industrial use and each wrench is backed by a 1 year warranty.



### **LED INDICATOR LIGHTS**

Dual side LED indicator lights with configurable settings provide operational guidance.





Snap this code with your smartphone to watch the video!



### **DID YOU KNOW?**

These Industrial Torque Wrenches are ideal for any working condition thanks to audible, tactile and visual indicators that verify when torque is within the target range.



### **MULTI-SENSORY INDICATORS**

The easy-to-read LCD screen, LED indicator lights, audible beep and handle vibration work together to signal when torque is within the targeted range.









# **Snap-277** INDUSTRIAL BRANDS





### **COMPUTORO SG-STEEL GRIP ELECTRONIC TORQUE WRENCH**

### **CONVENIENCE & CONTROL**

**COMPUTORQ SG TORQUE WRENCHES** are fully programmable for reliable, consistent, and repeatable torque application. Every model features a large, backlit LCD screen for better visibility in a variety of working conditions and a high capacity memory for storage of 1,500 readings.

DATE/TIME	MIN TARGET TORQUE	MAX TARGET	PEAK TORQUE	MIN TARGET	MAX TARGET	PEAK ANGLE	TORQUE UNITS	TORQUE STATUS	ANGLE STATUS	MODE COUNT
1/1/2013 16:38	20	30	20.3	0	0	0	FT-LB	ОК	ок	3
1/1/2013 16:38	20	30	20.55	0	0	0	FT-LB	ОК	ок	2

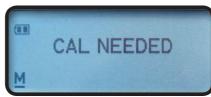
### **CONVENIENT DATA DOWNLOAD**

USB plug and play technology allows data download without additional software. Simply connect the included USB cord to the wrench and a PC to drag and drop data for an audit proof trail and process control.



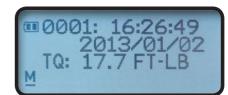
### **FULLY PROGRAMMABLE**

50 memory presets with a batch count up to 99. Presets can be locked to prevent inadvertent changes or tampering.



### **CALIBRATION DUE INDICATOR**

Using a patent-pending\* time based calibration technology, the wrench alerts you when calibration is needed.



### **RELIABLE DATA TRAIL**

Time stamped data trail for quality control, job auditing, and torque verification.

### **SEQUENCE PROGRAMMING**

Allows you to program different torque applications in sequence and lock in job mode to ensure the operator follows sequence without error.



Product Code	2401CASG	1002CASG	2503CASG	6004CASG
Square Drive	1/4"	3/8"	1/2"	3/4"
Head Type	Sealed Flex Head	Sealed Flex Head	Sealed Flex Head	Sealed Fixed Head
Torque Range, in Ib	12-240	60-1200	150-3000	360-7200
Torque Range, ft lb	1-20	5-100	12.5-250	30-600
Torque Range, Nm	1.4-27.2	6.8-135.6	16.9-339	40.7-813.5
Torque Accuracy	+/- 2% Clockwise; +/- 3% Counterclock-wise			
Angle Range	0-360 Degrees	0-360 degrees	0-360 degrees	0-360 Degrees
Storage Capacity	1,500 Readings	1,500 Readings	1,500 Readings	1,500 Readings
Number of Presets	50	50	50	50
All Steel Body	Yes	Yes	Yes	Yes
Batteries Included	3 x AAA Alkaline	3 x AA Alkaline	3 x AA Alkaline	3 x AA Alkaline
Storage Case Included	Yes	Yes	Yes	Yes
Ratchet Service Kit	0514-0029-01RK	0514-0030-01RK	0514-0031-01RK	9610-0112RK
Head Depth (A)	3/4" (19.3 mm)	1-1/32" (26.19 mm)	1-3/10" (33.02 mm)	2-4/5" (71.12 mm)
Head Width (B)	15/16" (23.8 mm)	1-7/10" (43.18 mm)	1-1/2" (63.5 mm)	2-3/5" (66.04 mm)
Warranty	1-Year	1-Year	1-Year	1-Year

All models comply with ISO®-6789-2003 and ASME® B107.300-2010 (B107.28) Standards for Electronic Torque Instruments \*U.S. and Foreign Patents Pending



### **COMPUTORQ 3 ELECTRONIC TORQUE WRENCHES**

The **COMPUTORQ 3** Electronic Torque Wrench is a simple to use digital readout wrench that displays real time torque values in any of four torque units, ft.lbs., in.lbs., Nm, kg.cm. Simply set the desired torque value and apply force until the green LED illuminates. Great for light industrial, automotive, motorcycle, watercraft and aircraft applications.

### **Features**

- Sleek new design
- 15-degree flex ratcheting head
- Push button socket release head
- · Large, easy to read digital display
- Long battery life, uses 2 each CR123 lithium batteries
- Ergonomically designed molded non-slip rubber grip
- Torques in both clockwise and counterclockwise directions
- Battery saving auto-shutoff after two minutes
- COMPUTORQ 3 remembers last unit and torque setting selected
- Audible tone sounds when set torque value is reached, if the set torque value is exceeded, an alarm tone will sound.
- 3 color LED light bar
   YELLOW LED indicates approaching desired torque setting
   GREEN LED indicates desired torque value is reached
   RED LED indicates fastener was overtorqued, loosen and retighten.
- When desired torque value is reached, display will hold value and flash for ten seconds.
- COMPUTORQ 3 will operate in any of four torque units, foot pounds (ft. lbs.), inch pounds (in. lbs.), newton meter (Nm) or kilogram centimeter (kg. cm.).
- ACCURACY:
- ±2% CW of readings from 20% to 100% of full scale ±3% CCW of readings from 20% to 100% of full scale
- N.I.S.T. traceable certificate of calibration included

### STANDARD MODELS

Product Code	Drive	Ft. Lb.	In. Lb.	Nm	Kg. Cm.	Length In. (mm)	Wt. Lbs. (kgs)
2401Cl3	1/4"	2.0 - 20.0	24 - 240	2.71 - 27.10	27.6 - 276	15 (381)	2.0 (.91)
1002CF3	3/8"	10.0 - 100.0	120 - 1200	13.6 - 135.6	138 - 1382	17 (432)	2.2 (1.0)
2503CF3	1/2"	25 - 250	300 - 3000	33.8 - 338	345 - 3456	27 (686)	3.5 (1.59)



### **HIGH ACCURACY MODELS**

Product Code	Drive	Ft. Lb.	In. Lb.	Nm	Kg. Cm.	Length In. (mm)	Wt. Lbs. (kgs)
2401Cl3HA*	1/4"	2.0 - 20.0	24 - 240	2.71 - 27.10	27.6 - 276	15 (381)	2.0 (.91)
1002CF3HA*	3/8"	10.0 - 100.0	120 - 1200	13.6 - 135.6	138 - 1382	17 (432)	2.2 (1.0)
2503CF3HA*	1/2"	25 - 250	300 - 3000	33.8 - 338	345 - 3456	27 (686)	3.5 (1.59)

The certification of accuracy provided per ASME and ISO Standards is 20% to 100% of full scale.

\*HIGH ACCURACY ±1% Clockwise direction only.



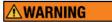
It couldn't be easier to use!







COMPUTORQ 3 Display and 3 Color LED Light Bar













### TORQUE & ANGLE™ ELECTRONIC TORQUE WRENCHES

The CDI **Torque and Angle Electronic Wrench** incorporates 21st Century Technology in a simple to use digital wrench. Specifically designed to meet the needs of the torque professional where torque plus angle is required. It features three units of torque, ft.lbs. In.lbs. and Nm as well as the angle mode.

The Torque and Angle wrench allows the technician to apply a specific torque load, followed by the angle specification, all in one convenient wrench. It features a three LED light bar and audible buzzer. As the angle mode is a separate function, the wrench can also be used as a stand alone digital torque wrench.

### **Features**

- Accuracy is +/- 2% CW, +/- 3% CCW of indicated value
- $\bullet$  Gyro chip senses 360° of movement, and is accurate to within +/- 3.8°
- . No maintenance, just change batteries at 80 hours
- . VERY easy to set up and use quickly
- · Red LED alerts user when over ranged
- Digital torque measurement and digital angle measurement in one convenient package
- · Ergonomic non-slip cushion grip

- 15% Flex Ratchet head
- Long battery life, uses two CR123 lithium batteries
- Convenient, push button socket release ratchet head
- 3 step LED visual signal system:
  Yellow Light = approaching target torque
  Green Light = target torque reached
  Red Light = over torque indicator
- N.I.S.T. traceable certificate of calibration included

### TORQUE & ANGLE™ ELECTRONIC TORQUE WRENCHES

Product Code	Drive	Ft. Lb.	In. Lb.	Nm	Angle	Length In. (mm)	Wt. Lbs. (kgs)
1002TAA-CDI	3/8"	10 - 100	120 - 1200	12.6 - 135.6	0-360°	17 (432)	2.2 (1.0)
2503TAA-CDI	1/2"	25 - 250	300 - 3000	33.8 - 338	0-360°	27 (686)	3.5 (1.59)

The certification of accuracy provided per ASME and ISO Standards is 20% to 100% of full scale.





### HEAVY-DUTY TORQUE & ANGLE™ TORQUE WRENCH

LEADING THE WAY IN HEAVY-DUTY TORQUE AND ANGLE APPLICATIONS WITH INNOVATIVE SOLUTIONS THAT MAKE A DIFFERENCE IN DOING THE JOB RIGHT.

The CDI **600 ft.lb. Heavy-Duty Torque & Angle™ Torque Wrench** eliminates the need for angle gauges and protractors, providing the most accurate and efficient way to achieve torque plus angle tightening sequences now specified by many manufacturers. The digital readout displays a torque setting then with a push of a button, switches to the angle mode. Angle readout not affected by ratcheting. Angle calculation based on the same gyroscopic technology that maintains helicopters at level flight.

- Torque Accuracy: (2% CW & 3% CCW FROM 20 100% F.S.) (4% CW & 6% CCW FROM 10 – 19% F.S.)
- Angle Accuracy: ± 3.8% of indicated value
- Angular Display Resolution: 1°

### Features

- Torque Units: ft.lb., in.lbs., Nm
- Audible alert when target is reached
- Display Resolution: 0.1 ft.lb., 0.1 Nm, 1 in.lb.
- Comfortable non-slip grip handle
- Sealed Ratchet Head
- 4 "AA" Alkaline Batteries Included
- Low Battery Indicator and Auto Shutoff after two minutes idle
- Operating Temperature: 40 110° F. (5 42° C)
- Storage Temperature: 0 122° F (-20 50° C)
- Humidity up to 90% non-condensing
- EU/CE-DE, ES, FR, IT, NL, PT, UK and Japanese language manual
- Certificate of N.I.S.T. traceability for 20% to 100% of full scale
- Includes storage case

### HEAVY-DUTY TORQUE & ANGLE™ TORQUE WRENCH

Product Code	Drive	Ft. Lb.	In. Lb.	Nm	Angle	Length In. (mm)	Wt. Lbs. (kgs)
6004TAA	3/4"	120 - 600	1440 - 7200	156 - 780	0-360°	49 (1244.6)	14 (6.35)







### **ELECTRONIC DIAL TORQUE WRENCH**

The new **Electronic Dial (ED)** torque wrench features solid-state electronics for accurate torque application and measurement. ED's design provides easy set-up and usage. There is no need to look directly at the digital readout as the wrench features 3 indicating lights and an audible buzzer.

The ED wrench has unsurpassed reliability and durability -- 21st century technology in a simple, easy to read digital torque wrench.

### **Features**

- 4 units of measure...ft lb, in lb, Nm, kg.cm.
- $\bullet$  Accuracy:  $\pm$  1 % CW &  $\pm$  1% CCW of indicated value from 20% to 100% of full scale
- 3 step LED visual signal system
   YELLOW LIGHT = approaching target torque
   GREEN LIGHT = target torque reached
   RED LIGHT = over torque indicator
- Audible tone when desired torque is reached
- Alarm tone sounds if wrench is overtorqued
- · Ergonomically designed wrench body
- Display can be turned 180 degrees to allow left hand usage
- Battery cover designed to be aviation FOD proof
- Holds "peak" torque reading for 10 seconds
- Constructed of special Capron® material for long life and durability
- Resistant to the majority of chemicals used in industrial environments
- Wrench can be hung on tool board
- Bar graph displays orientation of torque application (left or right hand)
- Uses standard 9 volt alkaline battery
- N.I.S.T. traceable certificate of calibration included
- Meets or exceeds ASME B107.300 2010

### **ELECTRONIC DIAL TORQUE WRENCH**

Product Code	Drive	In. Lb.	Ft. Lb.	Nm	Kg. Cm.	Length In. (mm)	Wt. Lbs. (kgs)
501ED-CDI	1/4"	5 - 50	.42 - 4.17	.56 - 5.65	57 - 57.61	11.5 (292)	1.25 (.57)
2502ED-CDI	3/8"	25 - 250	2.08 - 20.83	2.82 - 28.25	28 - 280.03	14.5 (368)	1.51 (.68)
6002ED-CDI	3/8"	60 - 600	5 - 50	6.79 - 67.79	69 - 691.27	14.5 (368)	1.51 (.68)





CDI "ED": Easy to change dial orientation.



The yellow LED illuminates within 10% of target torque.



The green LED illuminates within 4% of target torque. Continuous buzzer sounds when target is reached.



The red LED illuminates 4% beyond target torque, indicating fastener was overtorqued. Rapid "alarm" buzzer sounds.









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# **Snap-277** INDUSTRIAL BRANDS





### **TORQUE LIMITING T-HANDLE - PRE-SET**

		Pre Set Value			
Product Code	Nm	Ft. Lb.	In. Lb.	Bit	
TLPT4NM	4.0	2.9	35.4	4 mm	
TLPT5NM	5.0	3.7	44.3	4 mm	
TLPT6NM	6.0	4.4	53.1	4 mm	

### **Features**

- Torque Limiting Technology to Prevent Over-Tightening
- Magnetic Shank to Interchange Bits as Needed
- Rounded T-Handle Grip for Added Comfort
- Hi-Vis Color for Easy Identification
- Shaft accepts 1/4" hex shank bits, a 4 mm bit is included in each driver





### TORQCONTROL ADJUSTABLE TORQUE TOOL

### ACCURATE, FAST, EASY AND ERROR-PROOF

Applying just the right amount of torque in low-torque applications can be tricky at times. The new patent-pending TorqControl Torque Tool is an adjustable, torque limiting tool that applies torque in a range between 2 Newton Meters (Nm) and 8 Nm, indexing at every tenth Newton Meter.

Product Code	Nm Range	Included Bits
TLA28NM	2.0-8.0	$4~\text{mm},5~\text{mm},6~\text{mm},\text{T25},4^{\text{\tiny H}}\text{Long}4\text{mm},4^{\text{\tiny H}}\text{Long}\text{T25}\text{Bits}$

### **Features**

- Perfect for applying torque to bicycle components
- Magnetic tip holds, and allows for easy bit changes
- Standard 1/4" hex tip can utilize any standard hex bits
- Ergonomic L-shaped handle with rubberized cap for better grip
- Includes Certification of Accuracy
- TorqControl provides easy adjustability



### **TORQUE SCREWDRIVERS - MICRO-ADJUSTABLE**

Adjustable models offer versatility for applications that require more than one torque value. These torque screwdrivers are particularly suited for the electronics industry and for instrument assembly work. A simple, cam-over design prevents over-tightening and possible damage to components.

Torque settings are easily and accurately changed with a unique adjusting knob and easy-to-read window scale. Adjusting the screwdriver is simple. Just pull out the adjusting knob to unlock, turn to the desired setting, then push the knob in until it clicks!

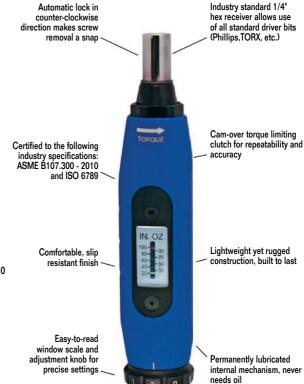
Positive locking knob makes accidental setting changes impossible. Automatic lock in counterclockwise direction makes fastener removal a snap. The Micro-Adjustable series includes

six models with torque settings ranging from 20 in. ozs. to 40 in. lbs.

### **Features**

- 6 models available
- Positive locking pull down adjustment knob
- Trilobular comfort grip
- Universal 1/4" hex bit holder with strong rare earth magnet
- Cam-over torque limiting clutch
- · Slip resistant finish
- Easy-to-read window scale

- Light weight
- Automatic lock in CCW direction for removing screws
- Accuracy: ± 6% of indicated value, CW, from 20% to 100% of full scale
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.
- Meets or exceeds ASME B107.300 2010



### **TORQUE SCREWDRIVERS - MICRO-ADJUSTABLE**

Product Code	Torque Range	Increments	W x L Inches	Wt. Oz.
61SM	20 - 100 in. ozs.	1 in. oz.	1.1 x 5.5	6.8
151SM	3 - 15 in. lbs.	.2 in. lbs.	1.1 x 6.25	8.0
401SM	5 - 40 in. lbs.	.5 in. lbs.	1.2 x 6.75	10.8
61NSM	10 - 80 cNm	1 cNm	1.1 x 5.5	6.8
151NSM	40 - 200 cNm	2 cNm	1.1 x 6.25	8.0
401NSM	50 - 450 cNm	5 cNm	1.2 x 6.75	10.8





### **TORQUE SCREWDRIVERS - SINGLE SETTING**

The tamper resistant design of the **Single Setting** series is particularly suited for highvolume use in assembly operations. A simple, cam-over design prevents over-tightening and possible damage to components.

Torque screwdrivers may be ordered factory pre-set at an additional charge or they may be easily set by the operator with any quality torque calibration system. The end cap removes for easy access to the 1/8" hex adjustment screw. A hex adjustment key is included with each driver.

The Single Setting series includes four models with available torque settings from 6 in. ozs. up to 40 in.lbs. When precision and repeatability are a must, the choice is simple - CDI Torque Screwdrivers.

### Features

- Factory Pre-Set models are set at the factory to the customer's specified torque setting and are furnished with a Certificate of Calibration
- Please specify desired torque setting when order is placed
- 4 models available
- Trilobular comfort grip
- Universal 1/4" hex bit holder with strong rare earth magnet
- . Cam-over torque limiting clutch
- Rugged, light weight aluminum body
- Automatic lock in CCW direction
- Accuracy: ± 6% of indicated value, CW, from 20% to 100% of full scale
- Meets or exceeds ASME B107.300 2010



### **TORQUE SCREWDRIVERS - SINGLE SETTING**

Product Code	Product Code			
Un-Set	Factory Pre-Set	Torque Range	W X L Length	Wt. Oz.
21SP	21SP-SET	6-32 in.ozs	1.1 x 4.5	5.3
61SP	61SP-SET	10 - 100 in.ozs.	1.1 x 5.6	7.0
151SP	151SP-SET	1.5 - 15 in. lbs	1.1 x 5.6	7.0
401SP	401SP-SET	4 - 40 in. lbs.	1.2 x 6.3	9.6











# *Snap-om* Industrial Brands





Prevents premature wear of carbide inserts and damage to cutter head due to improper clamp load.



### **TORKY - SINGLE SETTING WRENCHES**

CDI's **TORKY** is a right angle pre-set torque wrench. Torky is designed for production torque applications that require higher values than a torque screwdriver can deliver. The comfortable design eases the strain of repeated uses. Torque value may be ordered factory pre-set at an additional charge or it may be easily set by the operator with any quality torque calibration system. When the proper torque value is reached, a momentary release or "break" can be felt. Available in three drive styles to fit most needs.

### **Features**

- Factory Pre-Set models are set at the factory to the customer's specified torque setting and are furnished with a Certificate of Calibration
- · Please specify desired torque setting when order is placed
- Three models available
- Simple, easy to use design
- Ruggedly built for years of reliable service
- · Operates bi-directionally
- Accuracy: ± 6% of indicated value, CW, from 20% to 100% of full scale

### **TORKY - SINGLE SETTING WRENCHES**

Product Code Un-Set	Product Code Factory Pre-Set	Drive	Torque Range	W X L Length	Wt. Oz.
1501TPA-1	1501TPA-1-SET	1/4" Female Hex	20-170 in.lbs.	1 x 5.25	8.3
1501TP-1	1501TP-1-SET	1/4" Male Square	20-170 in.lbs.	1 x 5.25	8.3
1502TP-1	1502TP-1-SET	3/8" Male Square	20-170 in.lbs.	1 x 5.25	8.3











### **FIXED-SETTING TORQUE SCREWDRIVERS**

Torque Screwdrivers were specially developed for changing cutting tools on automatic cutting machines in order to ensure consistent, accurate cutting.

		Replacement Bits	
Product Code*	Description	Torx Plus	Torx
BE-6990-IP10	2.0 Nm	BE-6990-IP10-KL	BE-6990TX-T10KL
BE-6990-IP15	3.0 Nm	BE-6990-IP15-KL	BE-6990TX-T15KL
BE-6990-IP6	.6 Nm	BE-6990-IP6-KL	BE-6990TX-T6-KL
BE-6990-IP7	.9 Nm	BE-6990-IP7-KL	BE-6990TX-T7-KL
BE-6990-IP8	1.2 Nm	BE-6990-IP8-KL	BE-6990TX-T8-KL
BE-6990-IP9 * Includes one T	1.4 Nm orx & one Torx Plus Bit	BE-6990-IP9-KL	BE-6990TX-T9-KL

### **Features**

- Designed for correct tightening of precision fasteners on CNC machines
- The three component ergonomically designed handle provides comfort and maximum grip even with oily hands.
- · Torque screwdrivers, fixed setting
- Accuracy +/- 10 %
- Over torque limiting clutch, with a click sound



### **DIAL TORQUE WRENCHES - DUAL SCALE**

Dial Torque Wrenches are designed for the automotive, nuclear and industrial markets in addition to military installations throughout the world. This series features sturdy torsion beam design for dependable long life and accuracy. The small frame model offers working ranges from 3 in. lbs. to 50 ft. lbs. in 1/4" and 3/8" drives. The large frame model continues from 100 ft. lbs. through 2,000 ft. lbs. with 1/2", 3/4" and 1" drives. Accuracy of both series of  $\pm$  3% meets or exceeds ASME standards, ISO 6789 bi-directionally from 20% to 100% of scale. All wrenches supplied with a N.I.S.T. traceable certificate of calibration.

### **Features**

- Sturdy body construction insures durability
- Easy to read laser marked dual scale
- Large easy to read dial is shock resistant and protected by a tough metal guard
- Memory needle retains highest torque reading applied
- Calibrated in both CW and CCW direction
- • Accuracy:  $\pm$  4% of indicated value, CW & CCW, from 20% to 100% of full scale
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.



### **DIAL TORQUE WRENCHES - DUAL SCALE**

Product Code	Drive Size	English Range	Incr.	Nm Range	Incr.	A In.	B In.	C In.	D In.	Wt. Lbs.
Memory Nee	dle Mod	lels								
151LDIN	1/4"	0-15 in. lb.	.25 in. lb.	0-1.8 Nm	.05 Nm	11.5	1.1	1.2	2.75	1.1
301LDIN	1/4"	0-30 in. lb.	.5 in. lb.	0-3.5 Nm	.1 Nm	11.5	1.1	1.2	2.75	1.1
751LDIN	1/4"	0-75 in. lb.	1 in. lb.	0-9 Nm	.2 Nm	11.5	1.1	1.2	2.75	1.1
1502LDIN	3/8"	0-150 in. lb.	2 in. lb.	0-18 Nm	.5 Nm	11.5	1.1	1.2	2.75	1.1
2502LDIN	3/8"	0-250 in.lb.	5 in.lb.	0-30 Nm	.5 Nm	11.5	1.1	1.2	2.75	1.1
3002LDIN	3/8"	0-300 in. lb.	5 in. lb.	0-35 Nm	1 Nm	11.5	1.1	1.2	2.75	1.1
6002LDIN	3/8"	0-600 in. lb.	10 in. lb.	0-70 Nm	2 Nm	15	1.5	1.2	2.75	1.6
502LDFN	3/8"	0-50 ft. lb.	1 ft. lb.	0-70 Nm	2 Nm	15	1.5	1.2	2.75	1.6
1003LDFN	1/2"	0-100 ft. lb.	2 ft. lb	0-140 Nm	2.5 Nm	21.75	2.25	1.50	2.75	3.70
1753LDFN	1/2"	0-175 ft. lb.	5 ft. lb.	0-240 Nm	5 Nm	21.75	2.25	1.50	2.75	3.70
2503LDFN	1/2"	0-250 ft. lb	5 ft. lb	0-350 Nm	10 Nm	21.75	2.25	1.50	2.75	3.70
3504LDFN	3/4"	0-350 ft. lb.	10 ft. lb.	0-480 Nm	10 Nm	28.00	2.25	1.50	2.75	5.75
6004LDFN*	3/4"	0-600 ft. lb.	10 ft. lb.	0-800 Nm	20 Nm	47.00	2.50	1.50	2.75	10.10
10005LDFN*	1"	0-1000 ft. lb.	20 ft. lb.	0-1400 Nm	25 Nm	74.00	2.50	3.50	3.00	30.00
Electric Sign	aling M	odels								
6004LDFE**	3/4"	0-600 ft. lb.	10 ft. lb.	0-800 Nm	20 Nm	47.00	2.50	1.50	2.75	10.10
10005LDFE**	1"	0-1000 ft. lb.	20 ft. lb.	0-1400 Nm	25 Nm	74.00	2.50	3.50	3.00	30.00
20005LDFE***	1"	0-2000 ft. lb.	40 ft. lb.	0-2800 Nm	50 Nm	122.00	3.50	6.50	3.50	47.00

<sup>\*</sup>NOTE: 6004LDFN and 10005LDFN include 1 Extension handle.



20005LDFE "T" type Dial Wrench must be operated by two persons or a torque multiplier. The handle is over 10 ft. long.











<sup>\*\*</sup>NOTE: 6004LDFE and 10005LDFE include 1 Extension handle, indicating light and buzzer.

<sup>\*\*\*</sup>NOTE: 20005LDFE is a "T" style wrench with 1" drive female head that can be use with a torque multiplier. Includes 5 piece handle assembly, indicating light and buzzer.

# **Snap-277** Industrial Brands



### **DIAL TOROUE WRENCHES - SINGLE SCALE**

Dial Torque Wrenches are designed for the automotive, nuclear and industrial markets in addition to military installations throughout the world. This series features sturdy torsion beam design for dependable long life and accuracy. The small frame model offers working ranges from 3 in. lbs. to 50 ft. lbs. in 1/4" and 3/8" drives. The large frame model continues from 100 ft. lbs. through 2,000 ft. lbs. with 1/2", 3/4" and 1" drives. Accuracy of both series of  $\pm$  3% meets or exceeds ASME standards, ISO 6789 bi-directionally from 20% to 100% of scale. All wrenches supplied with a N.I.S.T. traceable certificate of calibration.



- Sturdy body construction insures maximum durability
- Easy to read laser marked single scale
- Large easy to read dial is shock resistant and protected by a tough metal guard
- Memory needle retains highest torque reading applied
- Calibrated in both CW and CCW direction
- Accuracy: ± 4% of indicated value, CW & CCW, from 20% to 100% of full scale
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.





T-TYPE DIAL WRENCHES must be operated by two persons or a torque multiplier. The handle is over 10 ft. long.

### **DIAL TORQUE WRENCHES - SINGLE SCALE**

DIAL IOILA	<b>JE 1111E</b> 1	TOILE O	III WEE U	UALL				
Product Code	Drive Size (In.)	English Range	Incr.	A In.	B In.	C In.	D In.	WT. Lbs.
Memory Needle M	lodels							
301LDINSS	1/4"	0-30 in.lb.	.5 in.lb.	11.5	1.1	1.2	2.75	1.1
751LDINSS	1/4"	0-75 in.lb.	1 in.lb.	11.5	1.1	1.2	2.75	1.1
752LDINSS	3/8"	0-75 in.lb.	1 in.lb.	11.5	1.1	1.2	2.75	1.1
2502LDINSS	3/8"	0-250 in.lb.	5 in.lb.	11.5	1.1	1.2	2.75	1.1
3002LDINSS	3/8"	0-300 in.lb.	5 in.lb.	11.5	1.1	1.2	2.75	1.1
6002LDINSS	3/8"	0-600 in.lb.	10 in.lb.	15	1.5	1.2	2.75	1.6
502LDFNSS	3/8"	0-50 ft.lbs.	1 ft.lb.	15	1.5	1.2	2.75	1.6
1003LDFNSS	1/2"	0-100 ft. lb.	2 ft. lb	21.75	2.25	1.50	2.75	3.70
1753LDFNSS	1/2"	0-175 ft. lb.	5 ft. lb.	21.75	2.25	1.50	2.75	3.70
2503LDFNSS	1/2"	0-250 ft. lb.	5 ft. lb	21.75	2.25	1.50	2.75	3.70
3504LDFNSS	3/4"	0-350 ft. lb.	10 ft. lb.	28.00	2.25	1.50	2.75	5.75
6004LDFNSS*	3/4"	0-600 ft. lb.	10 ft. lb.	47.00	2.50	1.50	2.75	10.1
10005LDFNSS*	1"	0-1000 ft. lb.	20 ft. lb.	74.00	2.50	3.50	3.00	30.0
Electric Signaling	Models							
6004LDFESS**	3/4"	0-600 ft. lb.	10 ft. lb.	47.00	2.50	1.50	2.75	10.1
10005LDFESS**	1"	0-1000 ft. lb.	20 ft. lb.	74.00	2.50	3.50	3.00	30.0
20005LDFESS***	1"	0-2000 ft. lb.	40 ft. lb.	122.00	3.50	6.50	3.50	47.0

<sup>\*</sup>NOTE: 6004LDFNSS and 10005LDFNSS include 1 extension handle.

<sup>\*\*</sup>NOTE: 6004LDFESS and 10005LDFESS include 1 extension handle, indicating light and buzzer.

<sup>\*\*\*</sup>NOTE: 20005LDFESS is a "T" style wrench with 1" drive female head that can be used with a torque multiplier. Includes 5 piece handle assembly, indicating light and buzzer.



### **DIAL TORQUE WRENCHES NEWTON METER - SINGLE SCALE**

Dial Torque Wrenches are designed for the automotive, nuclear and industrial markets in addition to military installations throughout the world. This series features sturdy torsion beam design for dependable long life and accuracy. The small frame model offers working ranges from 3 in. lbs. to 50 ft. lbs. in 1/4" and 3/8" drives. The large frame model continues from 100 ft. lbs. through 2,000 ft. lbs. with 1/2", 3/4" and 1" drives. Accuracy of both series of ± 3% meets or exceeds ASME standards, ISO 6789 bi-directionally from 20% to 100% of scale. All wrenches supplied with a N.I.S.T. traceable certificate of calibration.

- . Sturdy body construction insures maximum durability
- Easy to read laser marked single scale
- Large easy to read dial is shock resistant and protected by a tough metal guard
- Memory needle retains highest torque reading applied
- Calibrated in both CW and CCW direction
- $\bullet$  Accuracy:  $\pm$  4% of indicated value, CW & CCW, from 20% to 100% of full scale
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.



### **DIAL TORQUE WRENCHES NEWTON METER - SINGLE SCALE**

	Drive	Nm		Α	В	С	D	Wt.
Product Code	Size (In.)	Range	Incr.	ln.	ln.	ln.	ln.	Lbs.
Memory Needle N	/lodels							
1.81NLDNSS	1/4"	0-1.8 Nm	.05 Nm	11.5	1.1	1.2	2.75	1.1
3.51NLDNSS	1/4"	0-3.5 Nm	.1 Nm	11.5	1.1	1.2	2.75	1.1
91NLDNSS	1/4"	0-9 Nm	.2 Nm	11.5	1.1	1.2	2.75	1.1
92NLDNSS	3/8"	0-9 Nm	.2 Nm	11.5	1.1	1.2	2.75	1.1
182NLDNSS	3/8"	0-18 Nm	.5 Nm	11.5	1.1	1.2	2.75	1.1
302NLDNSS	3/8"	0-30 Nm	.5 Nm	11.5	1.1	1.2	2.75	1.1
352NLDNSS	3/8"	0-35 Nm	1 Nm	11.5	1.1	1.2	2.75	1.1
702NLDNSS	3/8"	0-70 Nm	2 Nm	15	1.5	1.2	2.75	1.6
1403NLDNSS	1/2"	0-140 Nm	2.5 Nm	21.75	2.25	1.50	2.75	3.70
2403NLDNSS	1/2"	0-240 Nm	5 Nm	21.75	2.25	1.50	2.75	3.70
3503NLDNSS	1/2"	0-350 Nm	10 Nm	21.75	2.25	1.50	2.75	3.70
4804NLDNSS	3/4"	0-480 Nm	10 Nm	28.00	2.25	1.50	2.75	5.75
8004NLDNSS*	3/4"	0-800 Nm	20 Nm	47.00	2.50	1.50	2.75	10.10
14005NLDNSS*	1"	0-1400 Nm	25 Nm	74.00	2.50	3.50	3.00	30.00

\*NOTE: 8004NLDNSS and 14005NLDNSS include 1 Extension handle.









# **Snap-2n** Industrial Brands



# COMFORT GRIP MICROMETER ADJUSTABLE TORQUE WRENCHES - DUAL SCALE

Comfort-Grip Handle Dual Scale

### **Features**

- Dual scale, calibrated dual direction
- Positive lock with spring loaded pull down lock ring
- Fast, accurate and easy to set
- Easy-to-read laser marked scale
- Most feature quick release buttons which provide good socket retention as well as easy socket removal
- Ergonomic comfort-grip
- Meets or exceeds ASME standards, ISO 6789 standards
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.





# COMFORT GRIP MICROMETER ADJUSTABLE TORQUE WRENCHES - DUAL SCALE

Product Code	Drive Size	English Range	Incr.	Nm Range	Incr.	A In.	B In.	C In.	D In.
1501MRPH	1/4"	20-150 in. lb.	1	2.8 - 15.3 Nm	.12	10.00	1.06	.93	1.06
2502MRPH	3/8"	30-250 in. lb.	1	4.0 - 27.7 Nm	.12	11.25	1.06	1.06	1.06
10002MRPH	3/8"	150-1000 in. lb.	5	19.8 - 110.2 Nm	.6	16.00	1.43	1.20	1.40
1002MFRPH	3/8"	10-100 ft. lb.	1	16.9 - 132.2 Nm	.7	16.00	1.43	1.20	1.40
1503MFRPH	1/2"	20-150 ft. lb.	1	34 - 197 Nm	1.4	19.00	1.70	1.40	1.40
2503MFRPH	1/2"	30-250 ft. lb.	1	47 - 332 Nm	1.4	24.40	1.70	1.40	1.40
6004MFRPH	3/4"	100-600 ft. lb.	5	169 - 779 Nm	6.8	42.00	2.50	2.10	1.40







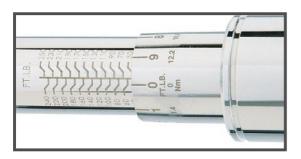
### **MICROMETER ADJUSTABLE NEWTON METER TORQUE WRENCHES - SINGLE SCALE**

Metal Handle Single Scale. The metal handle series offers the user a rugged, industrial strength torque wrench able to withstand the rigors of professional use. Handles are lightly knurled for a tough, non-slip grip.

### **Features**

- Single scale, calibrated dual direction
- Positive lock with spring loaded pull down lock ring
- Fast, accurate and easy to set
- Easy-to-read laser marked scales
- Most feature quick release buttons which provide good socket retention as well as easy socket removal
- Accuracy: ± 4% CW ± 6% CCW of indicated value, CW, from 20% to 100% of full scale
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.







### MICROMETER ADJUSTABLE NEWTON METER TORQUE WRENCHES - SINGLE SCALE

	Nm	Sq.		Α	В	С	D	Wt.
Product Code	Range	Drive	Incr.	ln.	ln.	ln.	ln.	Lbs.
602NMRMHSS	10-60 Nm	3/8"	0.5	16.00	1.43	1.20	1.40	2.50
1002NMRMHSS	20-100 Nm	3/8"	0.5	16.00	1.43	1.20	1.40	2.50
2003NMRMHSS	40-200 Nm	1/2"	2	19.00	1.70	1.40	1.40	3.25
3403NMRMHSS	60-340 Nm	1/2"	2	24.40	1.70	1.40	1.40	3.40
8004NMRMHSS	150-800 Nm	3/4"	5	42.00	2.50	2.10	1.40	11.85
15005NMRMHSS*	300-1500 Nm	1"	10	70.00	3.00	3.00	1.50	25.10

\*NOTE: 15005NMRMHSS supplied with one extension handle and is packed in a metal box.

NOTE: All single scale Newton Meter only.











# **Snap-277** INDUSTRIAL BRANDS



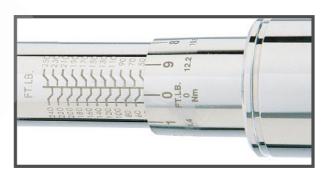


# MICROMETER ADJUSTABLE TORQUE WRENCHES - DUAL SCALE

**Metal Handle Dual Scale**. The metal handle series offers the user a rugged, industrial strength torque wrench able to withstand the rigors of professional use. Handles are lightly knurled for a tough, non-slip grip.

### **Features**

- Dual scale, calibrated dual direction
- Positive lock with spring loaded pull down lock ring
- · Fast, accurate and easy to set
- Easy-to-read laser marked scales
- Most feature quick release buttons which provide good socket retention as well as easy socket removal
- $\bullet$  Accuracy:  $\pm$  4% CW  $\pm$  6% CCW of indicated value, CW, from 20% to 100% of full scale
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.



# MICROMETER ADJUSTABLE TORQUE WRENCHES - DUAL SCALE

Product Code	Drive Size	English Range	Incr.	Nm Range	Incr.	A In.	B In.	C In.	D In.	Wt. Lbs.
501MRMH	1/4"	10-50 in. lb.	0.5	1.4 - 5.4 Nm	0.5	10.15	1.06	0.93	1.06	0.85
1501MRMH	1/4"	20-150 in.lb.	05	2.8-15.3 Nm	0.12	10.15	1.06	0.93	1.06	0.90
1502MRMH	3/8"	20-150 in. lb.	1	2.8 - 15.3 Nm	.12	10.15	1.06	0.93	1.06	0.90
2002MRMH	3/8"	30-200 in. lb.	1	4.0 - 22.0 Nm	.12	10.15	1.06	0.93	1.06	0.85
2502MRMH	3/8"	30-250 in. lb.	1	4.0 - 27.7 Nm	.12	11.25	1.06	0.93	1.06	0.95
7502MRMH	3/8"	100-750 in. lb.	5	14.1 - 81.9 Nm	.6	16.00	1.43	1.20	1.40	2.50
10002MRMH	3/8"	150-1000 in. lb.	5	19.8 - 110.2 Nm	.6	16.00	1.43	1.20	1.40	2.50
25003MRMH	1/2"	300-2500 in. lb.	10	39.6 - 276.9 Nm	1.2	18.00	1.70	1.40	1.40	3.20
752MFRMH	3/8"	5-75 ft. lb.	0.5	10.2 - 98.3 Nm	.7	16.00	1.43	1.20	1.40	2.50
1002MFRMH	3/8"	10-100 ft. lb.	0.5	16.9 - 132.2 Nm	.7	16.00	1.43	1.20	1.40	2.55
1503MFMH	1/2"	20-150 ft lb.	1	34 - 197 Nm	1.4	19.00	1.70	1.40	1.40	3.15
1503MFRMH	1/2"	20-150 ft. lb.	1	34 - 194 Nm	1.4	19.00	1.70	1.40	1.40	3.15
2503MFRMH	1/2"	30-250 ft. lb.	1	47 - 332 Nm	1.4	24.40	1.70	1.40	1.40	3.15
4004MFRMH	3/4"	80-400 ft. lb.	5	85 - 491 Nm	3.4	34.25	2.50	2.10	1.40	10.30
4504MFRMH	3/4"	75-450 ft. lb.	5	119 - 593 Nm	3.40	34.25	2.50	2.10	1.40	10.30
5004MFMH	3/4"	100-500 ft lb.	5	169 - 779 Nm	6.8	42.00	2.5	2	1.15	11.85
6004MFRMH	3/4"	100-500 ft. lb.	5	169 - 779 Nm	6.8	42.00	2.50	2.00	1.15	11.85
10005MFRMH*	1"	200-1000 ft. lb.	5	305 - 1322 Nm	6.8	70.00	3.00	3.00	1.50	25.10
20005MFMHSS**	1"	300-2000 ft. lb.	10	N/A	N/A	108.50	3.15	4.25	1.65	48.75
20005MFMH	1"	300-2000 ft. lb.	10	474-2643	14	108.50	3.15	4.25	1.65	48.75



\*NOTE: 10005MFRMH supplied with one extension handle and is packed in a metal box.

\*\*NOTE: 20005MFMHSS (English scale only) supplied with two extension handles, fixed/non-ratcheting head and is packed in a sturdy cardboard box.



### **OUICK SET SPLIT BEAM TORQUE WRENCHES**

This unique "split beam" measuring element provides consistently accurate readings and rugged, trouble-free performance. Fast setting of desired torque is easily accomplished by rotating adjustment knob until required torque value is displayed in the torque window. 3/4" drive model features three-piece construction for easy disassembly and storage.

### **Features**

- . CDI Sealed Ratchet Head is virtually maintenance free; more time working with the tool, less time on tool maintenance
- Thumb Screw Type Adjustment is faster than cycling through a micrometer style torque wrench. Guard prevents setting from being changed accidentally. Setting is displayed in window. Conversion table to Nm displayed on handle
- Sealed Neck keeps dust and grit away from the torque mechanism for longer tool life
- "Split Beam" Measuring Element provides accurate, reliable readings and eliminates the heavy coil spring used in conventional click type wrenches. This yields fewer moving parts, reducing friction and wear
- . Cushion Grip Handle provides comfort plus control and resists most automotive fluids
- Designed for measuring torque in a clockwise direction only. Wrench is not reversible
- Guaranteed Accuracy: Accurate within ±4% of any clockwise setting from 20% of full scale to full scale.

### **QUICK SET SPLIT BEAM TORQUE WRENCHES**

Product Code	Drive Size	Range	Increments	Length (in.)	Ratchet	
502TQFR	3/8"	120-600 in. lbs.	10.0 in. lbs.	171/8	Flex-Head	
1002TQFR	3/8"	20-100 ft. lbs.	2.0 ft. lbs.	171/8	Flex-Head	
2503TQFR	1/2"	40-250 ft. lbs.	5.0 ft. lbs.	217/16	Flex-Head	
4004TQR	3/4"	130-400 ft. lbs.	10.0 ft. lbs.	381/8	Fixed-Head	NOTION !
6004TQR	3/4"	200-600 ft. lbs.	10.0 ft. lbs.	481/2	Fixed-Head	Made in U.S.A.

CDI WSC-400CA and WSC-600CA Split beam Torque Wrenches accept Williams Heavy Duty Tubular Wrenches that fit the 24TH handle. The length of the wrench heads matches the effective length of the ratchet head and extender that come with the torque wrench, creating the same effective length. Removing the rather head and extender from the torque wrench and inserting the desired Heavy Duty Tubular wrench of choice (fitting 24TH handle) creates an expanded use interchangeable head system. The complete assortment of Tubular Handle Wrenches is found on pages 228 and 229.



### FLEX-HEAD MICROMETER ADJUSTABLE TORQUE WRENCH

Flex-Head English Single Scale

### **Features**

- · Single scale, dual direction
- Positive lock with spring loaded pull down lock ring
- Fast, accurate and easy to set
- Easy-to-read laser marked scales
- Flex Head pivots 15 degrees in both directions
- Rugged for Industrial use
- $\bullet$  Accuracy:  $\pm$  4% CW  $\pm$  6% CCW of indicated value, CW, from 20% to 100% of full scale
- Meets or exceeds ASME standards, ISO 6789 standards
- Individually serialized with matching certificate of calibration traceable to N.I.S.T.

### FLEX-HEAD MICROMETER ADJUSTABLE TORQUE WRENCH

Product Code	Torque Range	Sq. Drive	Incr.	A In.	B In.	C In.	D In.	Wt. Lbs.
802MFRFMHSS	10-80 ft. lb.	3/8"	0.5	16.60	1.25	1.15	0.90	2.500













# \*Note: 800NMIMH & 600T-I new

# \*Note: 800NMIMH & 600T-I new dual pin "Z" receivers accept only dual pin interchangeable heads.



### **INTERCHANGEABLE HEAD TORQUE WRENCHES**

### Features

- Interchangeable heads permit ratcheting, fixed, or open end torquing capability with adjustable torque wrench bodies.
- A push of the locking pin provides quick-change action, with a wide range of head styles to choose from.
- Micrometer Type Adjustment-ensures fast, accurate settings and changes.
- \*Part Number 800NMIMH has Dual Pin Release for added strength
- Accuracy: ± 4% of indicated value, in direction of torque indicator, from 20% to 100% of full scale

### INTERCHANGEABLE HEAD TORQUE WRENCHES - DUAL SCALE

Product Code	Shank Size	Nm Range	Incr.	English Range	OAL In.	
50NMIMH	J	10 - 50	0.5	9.2 - 35	17	
100NMIMH	J	20 - 100	0.5	16.5 - 71.9	20	
200NMIMH	Υ	40 - 200	2	37 - 140	22 ½	
350NMIMH	X	70 - 350	2	59 - 251	24 ½	
800NMIMH*	Z	150 - 800	5	129 - 572	48	

### **INTERCHANGEABLE HEAD TORQUE WRENCHES - SINGLE SCALE**

Product Code	Shank Size	English Range	Incr.	OAL In.	
75MFIMHSS	J	5 - 75	0.5	15.8	
150MFIMHSS	Υ	20 - 150	1	17.3	* AUSA
250MFIMHSS	Υ	30 - 250	1	22.7	Made in U.S.A.



### **SINGLE SETTING TORQUE WRENCHES**

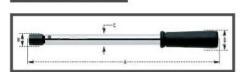
**Single setting torque wrenches** are designed for use on production lines and other applications where a specific torque is required for repetitive operations.

### **Features**

- Factory Pre-Set models are set at the factory to the customer's specified torque setting, and are furnished with a Certificate of Calibration.
- Please specify desired torque setting when order is placed.
- Featuring a durable, non-slip cushion grip
- Uses universal round shank interchangeable heads
- Audible click and feel impulse torque control mechanism
- Tamper proof torque setting for production line use
- Accuracy: ± 4% of indicated value, in direction of torque indicator, from 20% to 100% of full scale
- Meets or exceeds ASME B107.300-2010
- Extra length is added to the front of the 300T-I-48IXL wrench. This allows lower force to be applied by operator to achieve the same torque range as the 300T-I.

### **SINGLE SETTING TOROUE WRENCHES**

	_		_	_					
Product Code Un-Set	Product Code Factory Pre-Set	English Range	Nm Range	Shank Size	A In.	B In.	C In.	D In.	Wt. Lbs.
5T-I	5T-I-SET	10 - 50 in. lb.	1.1 - 5.6	J	6.5	0.63	0.61	1	0.35
10T-I	10T-I-SET	50 - 250 in. lb.	5.6 - 28	J	10	0.63	0.61	1	0.55
10ST-I	10ST-I-SET	60 - 300 in. lb.	6.8 - 34	J	6.2	0.68	0.86	1.4	0.75
50T-I	50T-I-SET	15 - 75 ft. lb.	20 -102	J	11	0.68	0.96	1.4	1.4
100T-I	100T-I-SET	30 - 150 ft. lb.	41 - 203	Υ	19.5	0.94	0.96	1.4	2.3
200T-I	200T-I-SET	40 - 200 ft. lb.	54 - 271	Υ	23.5	0.94	0.86	1.4	2.6
300T-I	300T-I-SET	100 - 300 ft. lb.	135 - 406	X	27.7	1.12	1	1.4	3.9
300T-I-48IXL		100 - 300 ft. lb.	135 - 406	X	48	1.12	1	1.4	6.29
600T-I	600T-I-SET	120 - 600 ft. lb.	162 - 814	Z	55	1.5	1.25	1.25	10.45







### **RATCHETING SQUARE DRIVE HEADS - SAE**



Square Drive (Inches)	J ( 0.425")	Max Torque Ft. Lbs.	Y (0.560")	Max Torque Ft. Lbs.	X ( 0.735")	Max Torque Ft. Lbs.	Z (0.990")	Max Torque Ft. Lbs.	Z Dual Pins	Max Torque Ft. Lbs.
1/4	TCQJD8A-72	60								
3/8	TCQJD12A-80	60	TCQYD12A-80	100						
1/2	TCQJD16A	60	TCQYD16A	240	TCQXD16A	240				
3/4					TCQXD24A	240	TCQZD24B	480	TCQZD24BDP	480
1					TCQXD32A	240	TCQZD32B	480	TCQZD32BDP	480



TCQJD16A

## **FIXED SQUARE DRIVE HEADS - SAE**

Square Drive (Inches)	J ( 0.425")	Max Torque Ft. Lbs.	Y (0.560")	Max Torque Ft. Lbs.	X ( 0.735")	Max Torque Ft. Lbs.	Z (0.990")	Max Torque Ft. Lbs.	Z Dual Pins	Max Torque Ft. Lbs.
1/4	TCQJSD8A	60								
3/8	TCQJSD12A	60	TCQYSD12A	100						
1/2	TCQJSD16A	60	TCQYSD16A	240	TCQXSD16A	240				
3/4					TCQXSD24A	240	TCQZSD24A	480	TCQZSD24ADP	480
1					TCQXSD32A	240	TCQZSD32A	480		



### **OPEN END HEADS - SAE**

Square		Max		Max		Max		Max		Max
Drive	J ( 0.425")	Torque	Y (0.560")	Torque Ft.	X (0.735")	Torque	Z (0.990")	Torque	Z Dual Pins	Torque
(Inches)		Ft. Lbs.		Lbs.		Ft. Lbs.		Ft. Lbs.		Ft. Lbs.
1/4	TCQJO8A	5								
9/32	TCQJO9A	7								
5/16	TCQJO10A	9								
3/8	TCQJO12A	18								
7/16	TCQJO14A	26								
1/2	TCQJO16A	34								
9/16	TCQJO18A	58	TCQYO18A	58						
5/8	TCQJO20A	60	TCQYO20A	70						
11/16	TCQJO22A	60	TCQYO22A	99						
3/4	TCQJO24A	60	TCQYO24A	125	TCQXO24A	125				
13/16	TCQJO26A	60	TCQYO26A	160	TCQXO26A	164				
7/8	TCQJO28A	60	TCQYO28A	160	TCQXO28A	193				
15/16	TCQJO30A	60	TCQYO30A	160	TCQXO30A	200				
1	TCQJO32A	60	TCQYO32A	160	TCQXO32A	240	TCQZO32A	298	TCQZO32ADP	298
1 1/16	TCQJO34A	60	TCQYO34A	160	TCQXO34A	240	TCQZO34A	321	TCQZO34ADP	321
1 1/8	TCQJO36A	60	TCQYO36A	160	TCQXO36A	240	TCQZO36A	367	TCQZO36ADP	367
1 3/16			TCQYO38A	160	TCQXO38A	240	TCQZO38A	433	TCQZO38ADP	433
1 1/4	TCQJO40A	60	TCQYO40A	160	TCQXO40A	240	TCQZO40A	480	TCQZO40ADP	480
1 5/16			TCQYO42A	160	TCQXO42A	240	TCQZO42A	480	TCQZO42ADP	480
1 3/8	TCQJO44A	60	TCQYO44A	160	TCQXO44A	240	TCQZO44A	480	TCQZO44ADP	480
1 7/16			TCQYO46A	160	TCQXO46A	240	TCQZO46A	480	TCQZO46ADP	480
1 1/2	TCQJO48A	60	TCQYO48A	160	TCQXO48A	240	TCQZO48A	480	TCQZO48ADP	480
1 9/16			TCQYO50A	160	TCQXO50A	240	TCQZO50A	480	TCQZO50ADP	480
1 5/8	TCQJO52A	60	TCQYO52A	160	TCQXO52A	240	TCQZO52A	480	TCQZO52ADP	480
1 11/16					TCQXO54A	240	TCQZO54A	480	TCQZO54ADP	480
1 3/4			TCQYO56A	160	TCQXO56A	240	TCQZO56A	480	TCQZO56ADP	480
1 13/16					TCQXO58A	240	TCQZO58A	480	TCQZO58ADP	480
1 7/8			TCQYO60A	160	TCQXO60A	240	TCQZO60A	480	TCQZO60ADP	480
2					TCQXO64A	240	TCQZO64A	480	TCQZO64ADP	480
2 1/16							TCQZO66A	480	TCQZO66ADP	480
2 1/8					TCQXO68	240	TCQZO68A	480	TCQZO68ADP	480
2 1/4			TCQY072	160			TCQZO72A	480	TCQZO72ADP	480
2 3/8									TCQZO76ADP	480
2 1/2			TCQY080	160			TCQZO80A	480	TCQZO80ADP	480
2 3/4							TCQZO88A	480		
3							TCQZO96A	480		



TCQZO36ADP

Center of fastener to retaining pin: TCQJ Series - 2.50"

TCQY Series - 3.00" TCQX Series - 4.50"

TCQZ Series - 5.75"











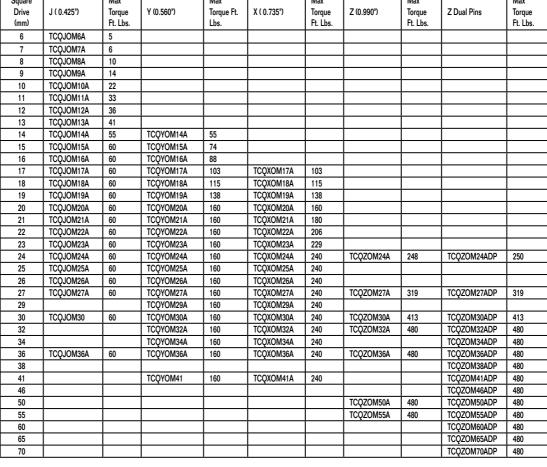
# **Snap-2n** Industrial Brands





### **OPEN END HEADS - METRIC**











### **OPEN END THIN HEADS - SAE**

Square Drive		Max	1	Max
(Inches)	J ( 0.425")	Torque	Y (0.560")	Torque
unches		Ft. Lbs.		Ft. Lbs.
11/16	TCQJO22ARTH60	60	1	
1	TCQJO32ARTH	60		
1 1/16	TCQJO34ARTH	60		
1 1/8	TCQJO36ARTH	60		
1 3/16	TCQJO38ARTH	60		
1 1/4	TCQJO40ARTH	60		
1 3/8	TCQJO44ARTH	60		
1 1/2	TCQJO48ARTH	60		
1 9/16	TCQJO50ARTH	60	1	
1 5/8	TCQJO52ARTH	60	TCQYO52ARTH	160
1 3/4	TCQJO56ARTH	60	TCQYO56ARTH	160
1 7/8	TCQJO60ARTH	60	TCQYO60ARTH	160
2	TCQJO64ARTH	60	TCQYO64ARTH	160
2 1/16	TCQJO66ARTH	60		
2 1/8			TCQYO68ARTH	160
2 1/4			TCQYO72ARTH	160
2 11/16	TCQJO86ARTH	60		





### 12-POINT BOX END 15° OFFSET HEADS - SAE

Drive		·		ı	1		1	1	1	1	
Inches    Fl. Lbs.	Square	1/0 40510	Max	)/ (0 =00ll)	Max	V ( o more)	Max	7 (0 000  )	Max	75 15	Max
1/4	-	J (0.425")		Y (0.560°)		X (0.735°)		2 (0.990")		Z Dual Pins	
9/32   TCQ,XISA		TCO IYAA			I t. LUS.		T L. LUS.	1	T L. LUS.		TI. LUS.
S/16		<u> </u>			1	+	+	1	+		_
3/8   TCQ.X12A   60		<u> </u>			-		+	-	+	-	
7/16		<del> </del>			<u> </u>	+	1	-	1	<u> </u>	
1/2		<del></del>			<del>                                     </del>		+		<del>                                     </del>		
9/16 TCQ,X18A 60 TCQ/X18A 112 5/8 TCQ,X2DA 60 TCQ/X2DA 160 TCQX2DA 171 11/16 TCQ,X2DA 60 TCQ/X2DA 160 TCQX2ZA 200 11/16 TCQ,X2DA 60 TCQ/X2DA 160 TCQXX2DA 219 13/46 TCQ,X2BA 60 TCQ/X2BA 160 TCQXX2BA 240 TCQXXBA 240 15/16 TCQ,X2BA 60 TCQ/X2BA 160 TCQXX2BA 240 15/16 TCQ,X2BA 60 TCQ/X2BA 160 TCQXX2BA 240 15/16 TCQ,X3DA 60 TCQ/X3DA 160 TCQXX2BA 240 15/16 TCQ,X3DA 60 TCQ/X3DA 160 TCQXX2BA 240 1 TCQ,X3DA 60 TCQ/X3DA 160 TCQXXBA 240 TCQXXBA 240 1 TCQ,X3DA 60 TCQ/X3DA 160 TCQXX3DA 240 TCQX3DA 300 1 TCQ,X3DA 60 TCQ/X3DA 160 TCQXX3DA 240 TCQX3DA 300 1 TYPE 1/16 TCQ,X3DA 60 TCQ/X3BA 160 TCQXXBA 240 TCQXBADP 300 1 1/1/6 TCQ,X3DA 60 TCQ/X3BA 160 TCQXXBA 240 TCQXBADP 300 1 1/1/8 TCQ,X3DA 60 TCQXBADP 480 TCQXBADP 480 TCQXBADP 480 1 1/1/6 TCQ,X3DA 160 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 1/1/6 TCQ,X3DA 160 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 1/1/4 TCQXBDA 160 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBDD 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBDD 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBD 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBD 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 160 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 1/1/6 TCQXBDA 240 TCQXBDA 480 TCQXBDDP 480 1 TCQXBDA 4		<u> </u>		T00\0/404	l		+	1	-		
TCQX20A		<u> </u>		<del></del>					-		
111/16		<u> </u>		<u> </u>		7000000	1				
3/4				•		•			<u> </u>		$\perp$
13/16		<del> </del>				<u> </u>			<u> </u>		
7/8         TCQJX28A         60         TCQYX28A         160         TCQXX28A         240            15/16         TCQJX30A         60         TCQYX30A         160         TCQXX30A         240         TCQZX30A         300           1         TCQJX32A         60         TCQYX32A         160         TCQXX32A         240         TCQZX34A         480         TCQZX34ADP         300           1 1/16         TCQJX34A         60         TCQYX34A         160         TCQXX34A         240         TCQZX36A         480         TCQZX36ADP         480           1 1/18         TCQYX36A         160         TCQXX38A         240         TCQZX36A         480         TCQZX36ADP         480           1 3/16         TCQYX36A         160         TCQXX36A         240         TCQZX36A         480         TCQZX36ADP         480           1 1/14         TCQYX40A         160         TCQXX40A         240         TCQZX40A         480         TCQZX36ADP         480           1 5/16         TCQYX42A         160         TCQXX42A         240         TCQZX42A         480         TCQZX42ADP         480           1 3/8         TCQYX42A         160         TCQXX44A         240		<del></del>				<u> </u>					
15/16   TCQJX30A   60   TCQYX30A   160   TCQXX30A   240   TCQZX30A   300		TCQJX26A	60	TCQYX26A	160	TCQXX26A	240			TCQZX26ADP	275
1         TCQJX32A         60         TCQYX32A         160         TCQXX32A         240         TCQZX34A         480         TCQZX34ADP         300           1 1/16         TCQJX34A         60         TCQYX34A         160         TCQXX36A         240         TCQZX36A         480         TCQZX36ADP         480           1 3/16         TCQYX38A         160         TCQXX38A         240         TCQZX38A         480         TCQZX38ADP         480           1 1/4         TCQYX40A         160         TCQXX40A         240         TCQZX40A         480         TCQZX40ADP         480           1 5/16         TCQYX42A         160         TCQXX42A         240         TCQZX42A         480         TCQZX42ADP         480           1 3/8         TCQYX46A         160         TCQXX44A         240         TCQZX44A         480         TCQZX46ADP         480           1 1/2         TCQYX46A         160         TCQXX46A         240         TCQZX46A         480         TCQZX46ADP         480           1 9/16         TCQYX50A         160         TCQXX50A         240         TCQZX50A         480         TCQZX50ADP         480           1 5/8         TCQYX52A         160         TCQXX	7/8	TCQJX28A	60	TCQYX28A	160	TCQXX28A	240				
1 1/16	15/16	TCQJX30A	60	TCQYX30A	160	TCQXX30A	240	TCQZX30A	300		
11/8	1	TCQJX32A	60	TCQYX32A	160	TCQXX32A	240				
1 3/16	1 1/16	TCQJX34A	60	TCQYX34A	160	TCQXX34A	240	TCQZX34A	480	TCQZX34ADP	300
11/4	1 1/8			TCQYX36A	160	TCQXX36A	240	TCQZX36A	480	TCQZX36ADP	480
15/16         TCQYX42A         160         TCQXX42A         240         TCQZX42A         480         TCQZX42ADP         480           13/8         TCQXX46A         240         TCQZX44A         480         TCQZX46ADP         480           17/16         TCQYX46A         160         TCQXX46A         240         TCQZX46A         480         TCQZX46ADP         480           11/2         TCQYX48A         160         TCQXX50A         240         TCQZX50A         480         TCQZX50ADP         480           19/16         TCQYX50A         160         TCQXX50A         240         TCQZX50A         480         TCQZX50ADP         480           15/8         TCQYX52A         160         TCQXX52A         240         TCQZX52A         480         TCQZX52ADP         480           11/1/6         TCQXX54A         240         TCQX54A         480         TCQZX54ADP         480           13/4         TCQXX56A         240         TCQXX56A         480         TCQX56ADP         480           113/16         TCQXX58A         240         TCQX58A         480         TCQX56ADP         480           17/8         TCQXX60A         240         TCQX60A         480         TCQX56ADP	1 3/16	Ì		TCQYX38A	160	TCQXX38A	240	TCQZX38A	480	TCQZX38ADP	480
13/8	1 1/4	İ		TCQYX40A	160	TCQXX40A	240	TCQZX40A	480	TCQZX40ADP	480
1 7/16         TCQYX46A         160         TCQXX46A         240         TCQZX46A         480         TCQZX46ADP         480           1 1/2         TCQYX48A         160         TCQXX48A         240         TCQZX48A         480         TCQZX48ADP         480           1 9/16         TCQYX50A         160         TCQXX50A         240         TCQZX50A         480         TCQZX50ADP         480           1 5/8         TCQYX52A         160         TCQXX52A         240         TCQZX52A         480         TCQZX52ADP         480           1 11/16         TCQXX54A         240         TCQX54A         480         TCQZX54ADP         480           1 3/4         TCQXX56A         240         TCQX56A         480         TCQX56ADP         480           1 13/16         TCQXX58A         240         TCQX58A         480         TCQX58ADP         480           1 7/8         TCQXX60A         240         TCQX56AA         480         TCQX56ADP         480           2 1/16         TCQXX64A         240         TCQX6AA         480         TCQX6ADP         480           2 1/16         TCQX66A         TCQX6AA         TCQX6AA         480         TCQX6ADP         480 <tr< td=""><td>1 5/16</td><td>i</td><td>İ</td><td>TCQYX42A</td><td>160</td><td>TCQXX42A</td><td>240</td><td>TCQZX42A</td><td>480</td><td>TCQZX42ADP</td><td>480</td></tr<>	1 5/16	i	İ	TCQYX42A	160	TCQXX42A	240	TCQZX42A	480	TCQZX42ADP	480
11/2         TCQYX48A         160         TCQXX48A         240         TCQZX48A         480         TCQZX48ADP         480           1 9/16         TCQYX50A         160         TCQXX50A         240         TCQZX50A         480         TCQZX50ADP         480           1 5/8         TCQYX52A         160         TCQXX52A         240         TCQZX52A         480         TCQZX52ADP         480           1 11/16         TCQXX54A         240         TCQXX54A         480         TCQZX54DP         480           1 3/4         TCQXX56A         240         TCQXX56A         480         TCQXX56ADP         480           1 13/16         TCQXX58A         240         TCQXX58A         480         TCQXX58ADP         480           1 7/8         TCQXX60A         240         TCQX56AA         480         TCQX56ADP         480           2         TCQXX64A         240         TCQX6AA         480         TCQX6ADP         480           2 1/16         TCQX66A         TCQX6AA         480         TCQX6ADP         480           2 1/8         TCQX76BA         TCQX76AA         480         TCQX76ADP         480           2 3/16         TCQX70ADP         480         TCQX72ADP </td <td>1 3/8</td> <td>İ</td> <td></td> <td></td> <td></td> <td>TCQXX44A</td> <td>240</td> <td>TCQZX44A</td> <td>480</td> <td></td> <td></td>	1 3/8	İ				TCQXX44A	240	TCQZX44A	480		
1 9/16         TCQYX50A         160         TCQXX50A         240         TCQZX50A         480         TCQZX50ADP         480           1 5/8         TCQYX52A         160         TCQXX52A         240         TCQZX52A         480         TCQZX52ADP         480           1 11/16         TCQXX54A         240         TCQXX54A         480         TCQZX54ADP         480           1 3/4         TCQXX56A         240         TCQXX56A         480         TCQXX56ADP         480           1 13/16         TCQXX58A         240         TCQXX58A         480         TCQXX58ADP         480           1 7/8         TCQXX60A         240         TCQX56AA         480         TCQX56ADP         480           2         TCQXX64A         240         TCQX6AA         480         TCQX6ADP         480           2 1/16         TCQX66AA         240         TCQX6AA         480         TCQX6ADP         480           2 1/8         TCQX6AA         TCQX6AAA         480         TCQX6AADP         480           2 1/4         TCQX70ADP         480         TCQX70ADP         480           2 3/8         TCQX76ADP         480         TCQX76ADP         480	1 7/16	Ì		TCQYX46A	160	TCQXX46A	240	TCQZX46A	480	TCQZX46ADP	480
1 5/8         TCQYX52A         160         TCQXX52A         240         TCQZX52A         480         TCQZX52ADP         480           1 11/16         TCQXX54A         240         TCQZX54A         480         TCQZX54DP         480           1 3/4         TCQXX56A         240         TCQXX56A         480         TCQZX56ADP         480           1 13/16         TCQXX58A         240         TCQXX58A         480         TCQZX58ADP         480           1 7/8         TCQXX60A         240         TCQX60A         480         TCQX60ADP         480           2         TCQXX64A         240         TCQX64A         480         TCQX64ADP         480           2 1/16         TCQX66A         480         TCQX66ADP         480           2 1/8         TCQX66A         480         TCQX66ADP         480           2 3/16         TCQX70ADP         480         TCQX70ADP         480           2 1/4         TCQX76ADP         480         TCQX76ADP         480	1 1/2	ĺ		TCQYX48A	160	TCQXX48A	240	TCQZX48A	480	TCQZX48ADP	480
111/16         TCQXX54A         240         TCQZX54A         480         TCQZX54DP         480           1 3/4         TCQXX56A         240         TCQXX56A         480         TCQZX56ADP         480           1 13/16         TCQXX58A         240         TCQXX58A         480         TCQXX58DP         480           1 7/8         TCQXX60A         240         TCQX50A         480         TCQX50ADP         480           2         TCQXX64A         240         TCQX64A         480         TCQX64ADP         480           2 1/16         TCQX66A         480         TCQX66ADP         480           2 1/8         TCQX66A         480         TCQX66ADP         480           2 3/16         TCQX70ADP         480         TCQX70ADP         480           2 1/4         TCQX72A         480         TCQX72ADP         480	1 9/16	İ		TCQYX50A	160	TCQXX50A	240	TCQZX50A	480	TCQZX50ADP	480
1 3/4         TCQXX56A         240         TCQZX56A         480         TCQZX56ADP         480           1 13/16         TCQXX58A         240         TCQXX58A         480         TCQZX58ADP         480           1 7/8         TCQXX60A         240         TCQX60A         480         TCQX60ADP         480           2         TCQXX64A         240         TCQX64A         480         TCQX64ADP         480           2 1/16         TCQX66A         480         TCQX66ADP         480           2 1/8         TCQX66A         480         TCQX6ADP         480           2 3/16         TCQX70ADP         480         TCQX70ADP         480           2 1/4         TCQX72A         480         TCQX72ADP         480           2 3/8         TCQX76ADP         480         TCQX76ADP         480	1 5/8	İ		TCQYX52A	160	TCQXX52A	240	TCQZX52A	480	TCQZX52ADP	480
1 13/16         TCQXX58A         240         TCQXX58A         480         TCQXX58DP         480           1 7/8         TCQXX60A         240         TCQX60A         480         TCQX60ADP         480           2         TCQXX64A         240         TCQX64A         480         TCQX64ADP         480           2 1/16         TCQX66A         480         TCQX66ADP         480           2 1/8         TCQX68A         480         TCQX68ADP         480           2 3/16         TCQX70ADP         480         TCQX72ADP         480           2 1/4         TCQX72ADP         480         TCQX76ADP         480	1 11/16	İ			1	TCQXX54A	240	TCQZX54A	480	TCQZX54ADP	480
1 7/8         TCQXX60A         240         TCQZX60A         480         TCQZX60ADP         480           2         TCQXX64A         240         TCQZX64A         480         TCQZX64ADP         480           2 1/16         TCQZX66A         480         TCQZX66ADP         480           2 1/8         TCQZX68A         480         TCQZX68ADP         480           2 3/16         TCQZX70ADP         480         TCQZX70ADP         480           2 1/4         TCQZX72A         480         TCQZX72ADP         480           2 3/8         TCQZX76ADP         480         TCQZX76ADP         480	1 3/4		İ			TCQXX56A	240	TCQZX56A	480	TCQZX56ADP	480
2         TCQXX64A         240         TCQZX64A         480         TCQZX64DP         480           2 1/16         TCQZX66A         480         TCQZX66ADP         480           2 1/8         TCQZX68A         480         TCQZX68ADP         480           2 3/16         TCQZX70ADP         480         TCQZX70ADP         480           2 1/4         TCQZX72A         480         TCQZX72ADP         480           2 3/8         TCQZX76ADP         480         TCQZX76ADP         480	1 13/16					TCQXX58A	240	TCQZX58A	480	TCQZX58ADP	480
2 1/16         TCQZX66A         480         TCQZX66ADP         480           2 1/8         TCQZX68A         480         TCQZX68ADP         480           2 3/16         TCQZX70ADP         480         TCQZX70ADP         480           2 1/4         TCQZX72A         480         TCQZX72ADP         480           2 3/8         TCQZX76ADP         480         TCQZX76ADP         480	1 7/8	i			1	TCQXX60A	240	TCQZX60A	480	TCQZX60ADP	480
2 1/8         TCQZX68A         480         TCQZX68ADP         480           2 3/16         TCQZX70ADP         480           2 1/4         TCQZX72A         480         TCQZX72ADP         480           2 3/8         TCQZX76ADP         480         TCQZX76ADP         480	2					TCQXX64A	240	TCQZX64A	480	TCQZX64ADP	480
2 1/8         TCQZX68A         480         TCQZX68ADP         480           2 3/16         TCQZX70ADP         480         480         TCQZX70ADP         480           2 1/4         TCQZX72A         480         TCQZX72ADP         480           2 3/8         TCQZX76ADP         480         TCQZX76ADP         480	2 1/16					•		TCOZX66A	480	TCOZX66ADP	480
2 3/16 TCQZX70ADP 480 2 1/4 TCQZX72A 480 TCQZX72ADP 480 2 3/8 TCQZX72ADP 480 TCQZX76ADP 480		<u> </u>			1			<del> </del>		<del>, ,</del>	
2 1/4 TCQZX72A 480 TCQZX72ADP 480 2 3/8 TCQZX76ADP 480		i			<u> </u>	İ		1		<del> </del>	
2 3/8 TCQZX76ADP 480		<del> </del>	<del>                                     </del>		<u> </u>		1	TCOZX72A	480	<u> </u>	
		<del>                                     </del>					1	1	† · · ·	<u> </u>	
	2 1/2	<del> </del>					1	TCQZX80A	480	TCQZX80ADP	480





### 12-POINT BOX END 0° OFFSET - SAE

Square Drive (Inches)	J ( 0.425")	Max Torque Ft. Lbs.	Y (0.560")	Max Torque Ft. Lbs.
3/8	TCQJXD12A	60		
7/16	TCQJXD14A	60		
1/2	TCQJXD16A	60		
9/16	TCQJXD18A	60		
5/8			TCQYXD20A	160
11/16	TCQJXD22A	60	TCQYXD22A	160
3/4	TCQJXD24A	60	TCQYXD24A	160
7/8	TCQJXD28A	60	TCQYXD28A	160
15/16	TCQJXD30A	60	TCQYXD30A	160
1	TCQJXD32A	60		









# TORQUE PRODUCTS

### 12-POINT BOX END 15° OFFSET - METRIC





TCQJXM14A

Square Drive (mm)	J ( 0.425")	Max Torque Ft. Lbs.	Y (0.560")	Max Torque Ft. Lbs.	X ( 0.735")	Max Torque Ft. Lbs.	Z (0.990")	Max Torque Ft. Lbs.	Z Dual Pins	Max Torque Ft. Lbs
6	TCQJXM6A	15								
7	TCQJXM7A	20	ĺ							
8	TCQJXM8A	22		İ		1				ĺ
9	TCQJXM9A	30				1	1	1		
10	TCQJXM10A	53								
11	TCQJXM11A	59	İ	İ		1				
12	TCQJXM12A	60				1	1			İ
13	TCQJXM13A	60	TCQYXM13A	75			1			
14	TCQJXM14A	60	TCQYXM14A	117		1	1			
15	TCQJXM15A	60	TCQYXM15A	148		1	1	1		
16	TCQJXM16A	60	TCQYXM16A	160	TCQXXM16A	183	1	1		İ
17	TCQJXM17A	60	TCQYXM17A	160	TCQXXM17A	197				
18	TCQJXM18A	60	TCQYXM18A	160	TCQXXM18A	224	1	1		
19	TCQJXM19A	60	TCQYXM19A	160	TCQXXM19A	238	1	1		
20	TCQJXM20A	60	TCQYXM20A	160	TCQXXM20A	240		1		
21	TCQJXM21A	60	TCQYXM21A	160	TCQXXM21A	240				
22	TCQJXM22A	60	TCQYXM22A	160	TCQXXM22A	240				
23	TCQJXM23A	60	TCQYXM23A	160	TCQXXM23A	240	1	1		İ
24	TCQJXM24A	60	TCQYXM24A	160	TCQXXM24A	240	TCQZXM24A	375	TCQZXM24ADP	375
25	TCQJXM25A	60	TCQYXM25A	160	TCQXXM25A	240	TCQZXM25A	413		
26	TCQJXM26A	60	TCQYXM26A	160	TCQXXM26A	240	TCQZXM26A	448		Ť T
27	TCQJXM27A	60	TCQYXM27A	160	TCQXXM27A	240	TCQZXM27A	480	TCQZXM27ADP	480
29		1	TCQYXM29A	160	TCQXXM29A	240	TCQZXM29A	480		
30		i	TCQYXM30A	160	TCQXXM30A	240	TCQZXM30A	480	TCQZXM30ADP	480
32		i	TCQYXM32A	160	TCQXXM32A	240	TCQZXM32A	480	TCQZXM32ADP	480
34			TCQYXM34A	160	TCQXXM34A	240	TCQZXM34A	480	TCQZXM34ADP	480
36	İ	1	TCQYXM36A	160	TCQXXM36A	240	TCQZXM36A	480	TCQZXM36ADP	480
41		T T	1	1	<u> </u>		1		TCQZXM41ADP	480
46			1				1		TCQZXM46ADP	480
50		1					†		TCQZXM50ADP	480
55		1					1		TCQZXM55ADP	480
60	İ	1	İ		İ				TCQZXM60ADP	480

### 12 POINT RATCHET WRENCH HEADS - METRIC

Square Drive (mm)	J ( 0.425")	Max Torque Ft. Lbs.	Y (0.560")	Max Torque Ft. Lbs.
16	TCQJBOERM16	60		
18	TCQJBOERM18	60	TCQYBOERM18	160
22	TCQJBOERM22A	60		
24			TCQYBOERM24	160



### 12 POINT RATCHET WRENCH HEADS - SAE

Square Drive	J ( 0.425")	Max Torque Ft. Lbs.	Y (0.560")	Max Torque Ft. Lbs.
(Inches) 3/8	TCOJBOER12	60 60	1	Ft. LDS.
7/16	TCQJBOER14	60	1	
1/2	TCQJBOER16	60	i	
9/16	TCQJBOER18	60	TCQYBOER18	112
5/8	TCQJBOER20	60	TCQYBOER20	160
11/16			TCQYBOER22	160
3/4	TCQJBOER24	60	TCQYBOER24	160





### 12-POINT BOX END 10° OFFSET - SAE

Square Drive (Inches)	J ( 0.425")	Max Torque Ft. Lbs.	Y (0.560")	Max Torque Ft. Lbs.	X ( 0.735")	Max Torque Ft. Lbs.
1/2	TCQJXB16A	60				
9/16	TCQJXB18A	60				
5/8	TCQJXB20A	60	TCQYXB20A	79		
11/16	TCQJXB22A	60				
3/4	TCQJXB24A	60	TCQYXB24A	160		
7/8			TCQYXB28A	133		
15/16			TCQYXB30A	160		
1			TCQYXB32A	160		
1 1/8			TCQYXB36A	160		
1 3/8					TCQXXB44A	240
1 1/2					TCQXXB48A	240



### 12-POINT BOX END 10° OFFSET - METRIC

Square Drive (mm)	J ( 0.425")	Max Torque Ft. Lbs.	Y (0.560")	Max Torque Ft. Lbs.
11mm	TCQJXBM11A	59		
12mm	TCQJXBM12A	60		
13mm	TCQJXBM13A	60		
14mm	TCQJXBM14A	60		
16mm	TCQJXBM16A	60		
18mm	TCQJXBM18A	60	TCQYXBM18A	160
19mm	TCQJXBM19	60		
24mm			TCQYXBM24A	160
28mm			TCQYXBM28A	160



### 12-POINT BOX END 40° BEND - METRIC

Square Drive (mm)	Y (0.560")	Max Torque Ft. Lbs.
18	TCQYSBXM18A	160
24	TCQYSBXM24A	160

### **12 POINT FLARE NUT HEADS - SAE**

Square Drive	Ì	Max Torque		Max Torque
(Inches)	J ( 0.425")	Ft. Lbs.	Y (0.560")	Ft. Lbs.
9/16	TCQJRX18A	60	TCQYRX18A	67
5/8	TCQJRX20A	60	TCQYRX20A	79
11/16	TCQJRX22A	60	TCQYRX22A	92
3/4	TCQJRX24A	60	TCQYRX24A	104
13/16	TCQJRX26A	60	TCQYRX26A	117
7/8	TCQJRX28A	60	TCQYRX28A	133
15/16	TCQJRX30A	60	TCQYRX30A	146
1	TCQJRX32A	60	TCQYRX32A	158
1 1/16	TCQJRX34A	60	TCQYRX34A	160
1 1/8		Ì	TCQYRX36A	160
1 3/16		Ì	TCQYRX38A	160
1 1/4		ĺ	TCQYRX40A	160
1 3/8			TCQYRX44A	160
1 1/2	İ		TCQYRX48A	160
1 5/8			TCQYRX52A	160
2			TCQYRX64A	160











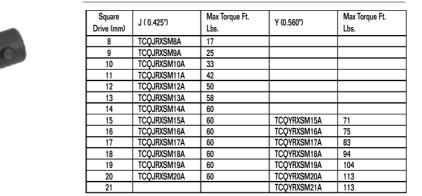




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### **6 POINT FLARE NUT HEADS - METRIC**





TCQJRXSM11A

### **6 POINT FLARE NUT HEADS - SAE**

Square Drive	J ( 0.425")	Max Torque	Y (0.560")	Max Torque
(Inches)	0 ( 0.423 )	Ft. Lbs.	1 (0.500 )	Ft. Lbs.
1/4	TCQJRXS8A	6		
5/16	TCQJRXS10A	17		
3/8	TCQJRXS12A	29		
7/16	TCQJRXS14A	42		
1/2	TCQJRXS16A	54		
9/16	TCQJRXS18A	60	TCQYRXS18A	74
5/8	TCQJRXS20A	60	TCQYRXS20A	74
11/16	TCQJRXS22A	60	TCQYRXS22A	92
3/4	TCQJRXS24A	60	TCQYRXS24A	104
13/16	TCQJRXS26A	60	TCQYRXS26A	117
7/8	TCQJRXS28A	60	TCQYRXS28A	133
15/16	TCQJRXS30A	60	TCQYRXS30A	146
1	TCQJRXS32A	60	TCQYRXS32A	158
1 1/8			TCQYRXS36A	160









### **RATCHETING FLARE NUT HEAD**

Square Drive (Inches)	J ( 0.425")	Y (0.560")	X ( 0.735")
9/16	TCRTWH36J		
5/8	TCRTWH40J		
11/16	TCRTWH44J		
3/4		TCRTWH48Y	
13/16	TCRTWH52J		
7/8		TCRTWH56Y	
15/16		TCRTWH60Y	
1		TCRTWH64Y	
1 1/8		TCRTWH72Y	
1 1/4		TCRTWH80Y	
1 3/8		TCRTWH88Y	
1 1/2			TCRTWH96X
16mm	TCRTWHM16J		
1 5/8		TCRTWH104Y	
1 7/8		TCRTWH120Y	

### **ADAPTORS**

	<del>-</del>
Product Code	Descriptions
TCQJ-Y	J Male to Y Female
TCQXY	X Male to Y Female
TCQY-X	Y Male to X Female
TCQZ-X	Z Male to X Female
TCOZD32A-1	Z Shank 1 Drive Ratchets





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CDI's torque tool factory and repair facility is located in City of Industry (Los Angeles), California. The factory has been ISO 9001 certified since 1998. The CDI Factory Service center repairs and calibrates with N.I.S.T. (National Institute of Standards and Technology) traceable calibration equipment, and CDI Torque Products meet or exceed ASME and ISO standards. Rely on the CDI Torque Products Factory Service Center to do the job right.

www.cdifactoryservice.com

# **TORQUE 101**

Need help educating your department or shop staff on why applying the correct torque is critical to proper assembly or maintenance operations? CDI's **Torque Wrench 101** is the perfect simple and quick-read reference "textbook" to train staff on what torque is, why it's important, torque wrench applications, proper torque wrench selection, and much more. It's a 4-page laminated reference card, item #T101CDIUSER, and available from your Snap-on Industrial Brands representative.

