KOBALT

ITEM #0337333, 0337334

TORQUE WRENCH

MODEL #	TORQUE RANGE
85601	3/8 in. Drive, 20 TO 100 FT-LBS
85602	1/2 in. Drive, 50 TO 250 FT-LBS

ATTACH YOUR RECEIPT HERE

Serial Number _____ **Purchase Date** _____

Questions, problems, missing parts?
Before returning to your retailer, call our customer service department at 1-888-3KOBALT, 8 a.m.- 8 p.m., EST, Monday-Friday.

Safety Markings

- Study, understand, and follow all instructions, safety precautions and warnings before operating this device.
- Do not exceed rated torque as over torquing can cause wrench and/or part failure.
- Do not use wrench to break fasteners loose.

PACKAGE CONTENTS

PART	DESCRIPTION	QTY
A	Torque Wrench	1

PREPARATION BEFORE USE

Before using this product, make sure all parts are present. Compare parts with package contents list. If any part is missing or damaged, do not attempt to use the product. Contact customer service.

3. Turn the handle (B) and set the thimble graduation to "4" (four) on the vertical line. The torque wrench is now set at 64 ft-lb (Figure 2).
4. Lock the handle (B) by releasing the back pressure on lock ring (A) until you hear or feel the torque wrench "CLICK" and the handle doesn't turn.
5. To torque fastener, keep your hand centered on the grip handle, apply a slow steady force in the desired direction until you hear a "CLICK" or feel the impulse. Stop pulling and allow the torque wrench to reset.

Fig. 1

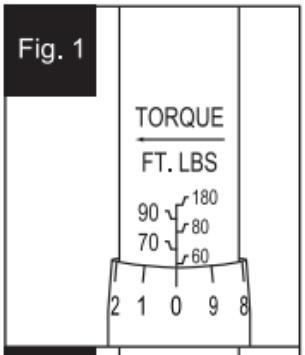
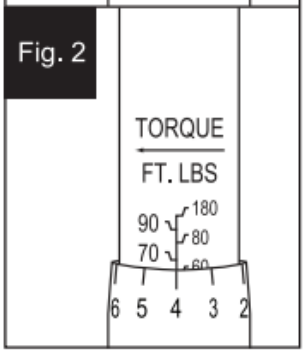


Fig. 2



NOTE:
A number of variables including the length of the adapter or extension, length of the torque wrench, and variations in hand position on the torque wrench, will affect the accuracy of the above calculation.

CONVERSION TABLE					
FROM UNIT	TO UNIT	MULTIPLY BY	FROM UNIT	TO UNIT	MULTIPLY BY
in-oz	in-lb	0.0625	dNm	Nm	0.1000
in-lb	in-oz	16.000	Nm	dNm	10.000
in-lb	ft-lb	0.0834	Nm	cmkg	10.200
in-lb	cmkg	1.1519	Nm	mkg	0.1020
in-lb	mkg	0.0116	Nm	in-lb	8.8500
in-lb	dNm	0.1130	Nm	ft-lb	0.7376
in-lb	Nm	1.1300	cmkg	in-lb	0.8681
ft-lb	in-lb	12.000	cmkg	Nm	0.0981
ft-lb	mkg	0.1382	mkg	in-lb	86.810
ft-lb	Nm	1.3560	mkg	ft-lb	7.2360
dNm	in-lb	0.8850	mkg	Nm	9.8070

The measured tolerances of these torque wrenches, as calibrated at the factory, are certified to meet the accuracy of the following testing standards: ASME B107.14-2004 and ISO:6789. Additionally, all wrenches are calibrated on a torque standard traceable to the National Institute of Standards and Technology (NIST).

CARE AND MAINTENANCE

WARNING: Ratchet mechanism may slip or break if dirty, mismatched or if worn parts are used. Ratchets that slip or break can cause injury.

SAFETY INFORMATION

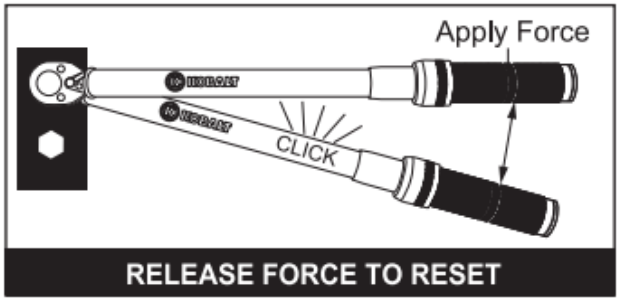
Before using this product, read this manual and follow all Safety Rules and Operational Instructions.

Owner and/or Operator Responsibility

The owner and/or operator shall read and comprehend all instructions and warning labels for product and retain them for future reference.

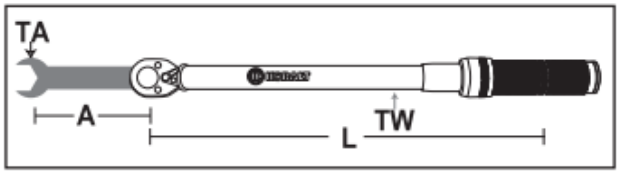
Operation

The owner and/or operator shall have an understanding of the product, its operating characteristics, safety precautions and operating instructions before operating the tool. Safety information shall be emphasized and understood. If the operator is not fluent in English, the product instructions and safety recommendations shall be read to and discussed with the operator in the operator's native language by the purchaser/owner or his designee, making sure that the operator comprehends their contents.



Use of Extensions and Adapters

When using an extension or adapter (increasing the effective length of the torque wrench), the output torque value will change. To calculate the new torque output of the torque wrench, use the following:



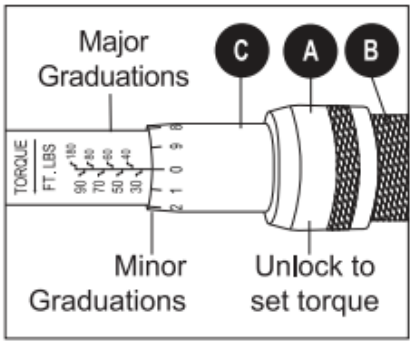
$$TW = \frac{TA \times L}{L + A}$$

(TW=Torque wrench scale reading,
TA=Torque exerted at the end of adapter,
L=Distance between square drive and hand position,
A=Length of adapter or extension)

OPERATION INSTRUCTIONS

WARNING: Do not use cheater extensions on the handle to apply torque. Broken or slipping tools can cause injury.

A. To unlock handle, hold the body tube and pull the lock ring (A) back, allowing the handle (B) to turn clockwise or counter-clockwise.



B. Set the torque wrench to the desired torque setting as follows: **EXAMPLE - 64 ft-lb**

1. Keep slight rearward pull on lock ring (A) during ALL adjustments.
2. Line up the thimble edge (C) with the "60" (sixty) graduation cross line, and the "0" (zero) with the vertical line. The torque wrench is now set at 60 ft-lb (Figure 1).

1. The torque wrench's internal mechanism is permanently lubricated during assembly. Do not attempt to lubricate the wrench's internal mechanism.
2. Clean wrench by wiping with clean cloth. Do not immerse wrench in liquids when cleaning.
3. Store torque wrench in protective case at its lowest torque setting - do not force handle below its lowest setting.
4. Periodic re-calibration is necessary to maintain accuracy. An out-of-calibration torque wrench can cause damage to the tool.

WARRANTY

1-Year Hassle-Free Guarantee. You should never have a problem with your Kobalt tools. However, if you do, return the item to the place of purchase for a free replacement. No questions asked.
For more information, call 1-888-3KOBALT, 8 a.m. - 8 p.m., EST, Monday - Friday.

SERVICE INFORMATION

For technical information or to have the wrench re-calibrated, please call customer service at 1-888-3KOBALT, 8 a.m. - 8 p.m., EST, Monday - Friday.

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