



OPERATING INSTRUCTIONS

CHANCE® DIGITAL TORQUE INDICATOR C303-1578

The CHANCE® Digital Torque Indicator is designed for use in installation of CHANCE screw anchors/piles in soils. These instructions are intended to illustrate the proper use of the C3031578 torque indicator. Anchor installation tools covered in these instructions should be used by competent personnel familiar with and following good work and safety practices. These instructions are not intended as a substitute for adequate training and experience in safe procedures for this type of equipment.

INSTALLATION

The torque indicator is installed between a CHANCE Kelly bar adapter and anchor drive tool or locking dog adapter, using the bolts and lockwashers provided with the torque indicator. Be sure to use the appropriate adapters and bolts for the maximum installation torque to be transmitted. All CHANCE screw anchor installation tools are torque rated; mounting bolts and bolt tightening torques for anchor installation torque ranges are shown below:

Max Torque (Ft.-Lbs.)	Bolt Circle Dia. (in.)	Bolts with lockwashers			
		Total Required	Size (in.)	SAE J429 Grade	T. Torque (lb-ft)
0 to 10,000	5 ¹ / ₄ " or 7 ⁵ / ₈ "	12	1 ¹ / ₂ "	5	75
10,000 to 30,000	Only 7 ⁵ / ₈ "	24	5 ⁸ / ₈ "	2	95

⚠ WARNING

Loose parts may be thrown at high speed.
Can cause property damage, serious injury or death.
Use installation tooling and mounting bolts with strength ratings higher than anchor installing torque.

Attach Kelly bar adapter to top and anchor drive tool or locking dog assembly to bottom of torque indicator as described above. Align the Kelly bar adapter with the Kelly bar so that the cross pin holes will match up and slide the Kelly bar adapter onto the Kelly bar. Secure in place with the bent arm pin and coil lock provided with the Kelly bar adapter.

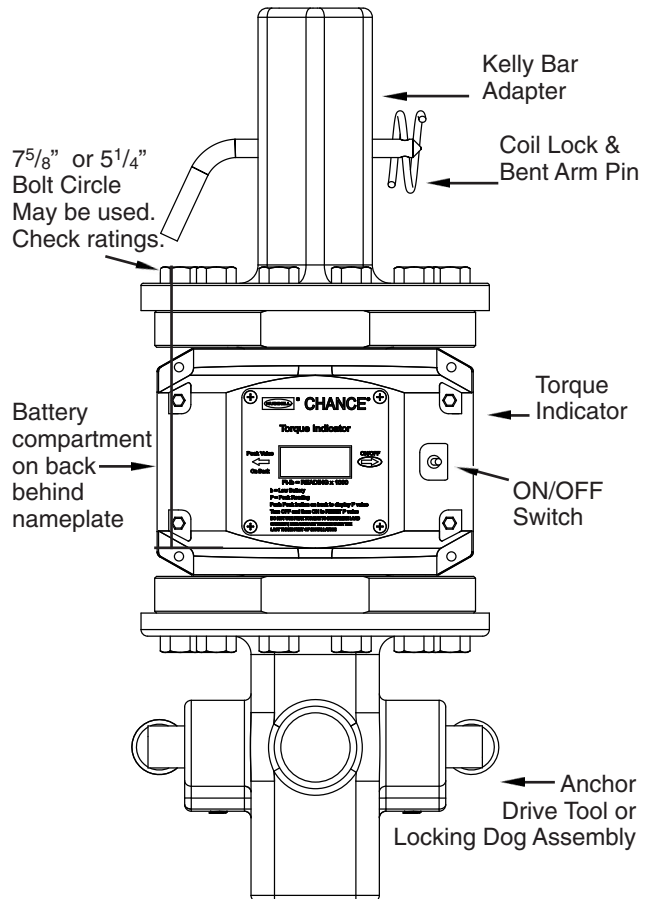
⚠ WARNING

Loose parts may be thrown at high speed.
Can cause property damage, serious injury or death.
Use only the proper size CHANCE® bent arm pins and coil locks for cross-pin attachment of Kelly bar adapters to Kelly bars and anchors to drive tools.

USE

Follow standard installation procedures for the appropriate CHANCE screw anchor. Before installing the anchor, be sure to turn on the Torque Indicator using the ON/OFF switch located on the front of the unit. Monitor torque indications during the whole installation in ensure anchor and tooling torque ratings are not exceeded. The peak torque will be recorded. To display the peak torque (P value) press the Peak button on back of torque indicator. The peak torque will be reset when the indicator is turned off and on. To predict anchor capacity, use the average torque developed during the last three feet of installation. Do not use the peak torque shown on the screen. Remain at a safe distance from the drive train whenever torque is being transmitted, even when taking readings.

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⚠ WARNING

Loose parts may be thrown at high speed.
Can cause property damage, serious injury or death.
Stay away from drive train.

USE (continued)

Relieve all loads (axial, torsional, and bending) on the drive train and check zero setting and bolt tightness after each anchor installation.

WARNING

Loose parts may be thrown at high speed.
Can cause property damage, serious injury or death.
Monitor the condition of all parts in the drive train and repair or replace as necessary. Check all fasteners along the drive train periodically to ensure they remain tight and undamaged. Loose or damaged bolts may fail at or below rated torque or contribute to damage elsewhere in the drive train. Replacement bolts must be the same size, grade and length as the originals supplied by CHANCE.

Maintain alignment along the drive train. Excessive axial and/or bending forces could affect torque readings. Digging equipment can impose high bending moments on the drive train if alignment is not maintained. This can damage or destroy drive train components.

WARNING

Loose parts may be thrown at high speed.
Can cause property damage, serious injury or death.
Do not allow bending moments in excess of 6000 lb-ft to develop in drive train.

CAUTION

Improper use can damage internal parts.
Can render the torque indicator inoperable and will void the warranty.
Do not use in obstruction-laden soil.

The Torque Indicator will go into a sleep mode after 20 minutes of inactivity. To reactivate the digital screen the torque indicator will have to be turned off and turned back on.

The torque indicator runs off a single 9V battery. To access or replace the battery remove the nameplate on the back of the indicator.

STORAGE

The CHANCE Digital Torque Indicator has a sealed case to prevent water penetration during ordinary exposure (ie, working in rain or snow). The seal will not protect it from long term exposure to the elements or from forced entry of water such as from immersion or highway transportation in the open. It must be stored and transported such that it is protected from water penetration of the case.

CAUTION

Moisture inside case can damage internal parts.
Can render the torque indicator inoperable and will void the warranty.
Protect from moisture penetration of case during storage and transportation.

1 year warranty. There are no internal field serviceable parts. Warranty is void if improper use, storage or transportation has occurred or if outer housing or any internal part removed. For repair or calibration check call your Hubbell Power Systems Territory Manager.

These instructions do not cover all details or variations in equipment, nor do they provide for all possible conditions to be met with concerning installation, use, maintenance or storage of this equipment. If further information is desired or if particular problems are encountered which are not sufficiently covered in these instructions, contact Hubbell Power Systems.