

# Tool Instruction Digital Torque Tester Kit

4328553R2

Tool Number: 6004-F-DTT



0000429406

Figure 1. 6004-F-DTT Digital Torque Tester Kit

#### Purpose

NOTE: The torque tester does not calibrate torque wrenches. The tester is to be used before applying torque to fasteners to ensure wrench is accurate and the proper torque was applied by the technician.

The Digital Torque Tester (DTT) allows technicians to conveniently test the accuracy of various style torque wrenches, while also providing a method to verify the operator's technique is accurate and not altering the torque application.

1 Read all safety instructions in the "Safety Information" section of the appropriate Engine Service or Diagnostic Manual. Follow all warnings, cautions, and notes. ©2019 Navistar, Inc. All rights reserved. All marks are trademarks of their respective owners.

# Purpose (cont.)

Torque wrenches, regardless of the type have some inherent flaws. By design, they only measure resistance, which varies. They can be out of calibration and the operator can greatly affect the accuracy of the torque wrench being used. The Digital Torque Tester allows technicians to check torque wrenches for accuracy, verify that they are being used properly and not altering the torque applied to a fastener. Torque wrenches can fail or fall out of calibration at any time from wear and tear, torque overloading, miss handling, etc. Today's modern engines / components require a precise torque to achieve efficiency and reliability. This tool is to be used before any procedure where specified torque is called out.

Any time that you are going to use a torque wrench, set the torque wrench to the target specification for the procedure you are about to perform. Following the included DTT instructions and Quick Start Guide, set up the DTT unit and test the wrench and verify you can accurately and repeatedly achieve the target torque value. The intent for the pre-check provides the following:

- Verifies the torque wrench is accurate and ready to be used. Torque wrenches often do not get treated as a precision instrument. Poor storage practices, misuse, and even normal use can affect the accuracy of a torque wrench. ISO standards require torque equipment to be tested and calibrated every 12 months / 5,000 cycles, however if a torque wrench loses its calibration you would never know it until it went in for calibration, which at that point it is too late to prevent engine / component damage.
- Verifies the operator using the torque wrench is not altering the torque applied. This is just as critical as ensuring you are using a calibrated torque wrench. In most cases, the operator has a greater effect on the torque applied much more than the torque wrench. It is very easy to over shoot a torque value by not anticipating and being familiar with how the wrench reacts when it reaches the intended torque value.

## Application(s)

Applies to any vehicle / engine with fasteners requiring a specific torque value.

NOTE: For additional information, manufacturer-supplied training videos are available on the Navistar Education Learning Management System.

**WARNING:** To prevent personal injury and / or death, read all safety instructions in the "Safety Information" section of the Service Manual or Diagnostic Manual.

WARNING: To prevent property damage, personal injury, and / or death, park vehicle on hard flat surface, turn the engine OFF, set the parking brake, and install wheel chocks to prevent the vehicle from moving in either direction.

WARNING: To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

WARNING: To prevent property damage, personal injury, and / or death, inspect tool for wear / damage prior to use. Replace any worn or damaged components as necessary.

WARNING: To prevent property damage, personal injury, and / or death, It is extremely important to calibrate and use proper torquing methods. Ensure that all fasteners are installed, tightened, and torqued to the proper specifications. Failure to do so may result in a collision or component failure.

CAUTION: To prevent component / tool damage, NEVER use impact tools with this essential tool.

# **Tool Contents**

#### Table 1

Image	Tool Number	Qty	Description
<b>EXAMPLE 1</b> 0000428268	6004-F-DTT	1	<ul> <li>Torque Tester Kit Includes:</li> <li>6004-F-DTT: Digital Torque Tester</li> <li>DTS8269: AC/DC 9V Power Adapter</li> <li>DTS002701: Battery Pack Holder</li> <li>USBATOMINIB: USB to MINI Cable</li> <li>2000-226-3: Reducer Adapter</li> <li>Manufacturer Operating Instruction</li> <li>Carrying Case</li> </ul>
NAVISTAR Southernoise 0000160075	4328553R2	1	Tool Instruction

### Instructions

IMPORTANT: Please reference International<sup>®</sup> Service Portal<sup>™</sup> regarding any possible revisions to this document.

IMPORTANT: Use tester before each torque procedure to verify the torque wrench is accurate while validating the correct amount of force being applied.

NOTE: Refer to the Torque Tester Manufacturer's Instruction Guide for specific instruction on Torque Tester operation.

- 1. Mount Torque Tester in an appropriate location. Refer to manufacturer's instruction guide for instructions on installation (optional Torque Tester mounting bracket available on Tools Catalog).
- 2. Turn torque tester power ON. Verify date and time settings before each use.

CAUTION: To prevent component / tool damage, NEVER use impact tools with this essential tool.

NOTE: Refer to appropriate service manual for detailed instructions regarding extensions, crowfoot, or any other adaptor that could alter the accuracy of the torque wrench.

### Instructions (cont.)

3. Test torque wrench for accuracy prior to beginning any torque procedure. Refer to DTT Quick Tip Card for detailed instruction.

NOTE: It is imperative to pay close attention to the amount of force being applied. Use tester before each torque procedure to verify the torque wrench is accurate while validating the correct amount of force being applied. The force applied to a torque wrench can greatly affect the results displayed on the tester.

4. Perform torque procedure. Refer to appropriate service manual / bulletin for detailed instruction.

#### **Care and Maintenance**

- 1. If necessary, clean tool of any contaminants.
- 2. Store torque tester in appropriate cases, free and clear of debris.

#### Service Calibration / Repair Centers

NOTE: Per ASME B107-300-2010 and ISO6789, calibration interval is recommended after 5,000 cycles or every 12 months, whichever comes first.

**IMPORTANT:** Please contact the nearest Snap-On authorized service calibration repair facility to have your precision measuring tools calibrated and / or repaired:

#### Table 2

USA					
East					
Snap-On Eastern Repair Center	Phone: 717-652-7914	Email: easternrepairinquiries@snapon.com			
6320 Flank Drive	Fax: 717-652-7123				
Harrisburg, PA 17112					
North					
Snap-On Northern Repair Center	Phone: 815-479-6850	Fracily porthermonoiring vision Department			
3011 East Route 176	Fax: 815-479-6857	Email: northernrepairinquiries@snapon.com			
Crystal Lake, IL 60014					
West					
Snap-On Western Repair Center	Phone: 775-883-8585				
3602 Challenger Way	Fax: 775-883-8590	Email: Linda.L.Boone@snapon.com			
Carson City, NV 89706					

# Instructions (cont.)

#### Table 3

Canada		
Snap-On - Canada		
7403 48 St. SE		
Calgary, AB T2C 4H6 Canada		
Phone: 866-824-0524		
English: canadacustomercare@snapon.com		
Francais: canadaservicealaclientele@snapon.com		

### **Contact Information**

If you would like to order additional tools or need replacement parts, please refer to the Navistar Service Tool Catalog. If you have questions, concerns, or feedback, please contact Navistar Service Tool Support Center:

- Submit a Service Tool iKNow Case File.
- Phone: 800-365-0088 (toll free). ٠

4328553R2