



# VeriTorg®

## Digital Torque Wrench Tester

by **Sturtevant Richmond**



### Models:

Part No.	Model
10362	VeriTorg® 1 Nm/10 in.lbs.- 120 VAC
10363	VeriTorg® 6 Nm/50 in.lbs.- 120 VAC
10364	VeriTorg® 12 Nm/100 in.lbs.- 120 VAC
10365	VeriTorg® 34 Nm/300 in.lbs.- 120 VAC
10366	VeriTorg® 109 Nm/80 ft.lbs.- 120 VAC
10367	VeriTorg® 201 Nm/150 ft.lbs.- 120 VAC
10368	VeriTorg® 339Nm/250 ft.lbs.- 120 VAC
10369	VeriTorg® 814 Nm/600 ft.lbs.- 120 VAC
10371	VeriTorg® 1 Nm/10 in.lbs.- 240 VAC
10372	VeriTorg® 6 Nm/50 in.lbs.- 240 VAC
10373	VeriTorg® 12 Nm/100 in.lbs.- 240 VAC
10374	VeriTorg® 34 Nm/300 in.lbs.- 240 VAC
10375	VeriTorg® 109 Nm/80 ft.lbs.- 240 VAC
10376	VeriTorg® 201 Nm/150 ft.lbs.- 240 VAC
10377	VeriTorg® 339Nm/250 ft.lbs.- 240 VAC
10378	VeriTorg® 814 Nm/600 ft.lbs.- 240 VAC

### Safety Rules

To avoid possible injury, the following precautions should always be taken when using this tester:

- » Wear safety glasses or goggles at all times.
- » Be sure torque wrench properly engages tester prior to applying torque.
- » The torque tester and AC Adapter are for dry location use only. Do not stand in water when using tester or allow tester to get wet.
- » Maintain firm footing and balanced body position when applying torque.
- » The installation location must be capable of resisting the torque transmitted to it during tester use without tipping either forward or to the side.

The **VeriTorg®** Digital Torque Wrench Tester is designed and manufactured to provide consistent and efficient torque testing of clicker-type torque wrenches. It is not for use with power tools. It meets or exceeds the tester requirements of ASME B107.14M and ISO 6789, and ASME B107.29M. The tester is accurate to +/- 1% of indicated value from 10% to 100% of capacity in both the clockwise and counterclockwise directions.

### Components and Installation

There are other components packed with the tester:

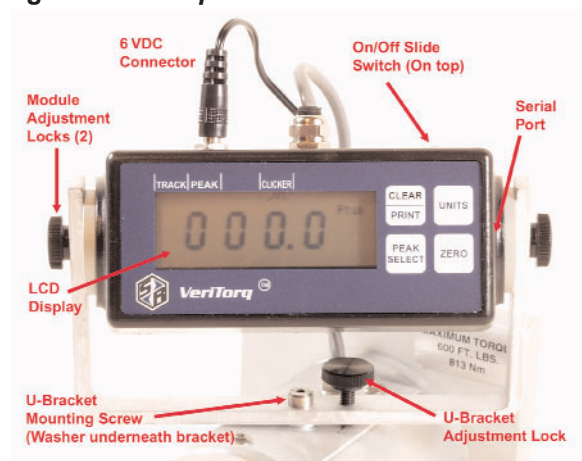
- An AC Adapter (120 VAC or 240 VAC to 6 VDC)
- Square drive adapter (one w/80 - 250 ft.lb. models, two w/600 ft.lb. model)
- A special serial cable
- A hex key (for attaching U-bracket to top of transducer housing)
- A Certificate of Calibration.

The tester must be installed on a very sturdy mounting surface capable of completely resisting the torque forces transmitted to it through the tester, such as on an I-beam or strong and heavy workbench. The tester may be mounted in a horizontal or vertical orientation. There must be an appropriate power source within 3 feet of the installation location. Installation height should be about 29 inches.

Two 5/16" diameter bolts (not supplied) are required for installation. To install the tester, position it in the mounting location and mark the bolt hole locations (2) to be used to mount it to the surface. Remove the tester and drill the holes for the two 5/16" diameter bolts. Position the tester over the holes, insert the bolts through the tester L-bracket and mounting surface, and install and tighten the nuts to 120-135 inch pounds.

Insert the pin connector of the AC adapter into the marked connector on top of the electronics module of the tester, then plug the other end of the AC adapter into the power outlet.

### Using the VeriTorg®



### To prepare VeriTorg® for testing:

1. Gently slide the power switch to the On position.
2. Allow the tester to go through its starting procedure, during which it will display the software level and the capacity of the tester. When completed, the tester will display zeroes in the numeric display, the current unit of measure to the right of the numbers, and the current testing mode icon at the top of the display will be lit.

3. Use the PEAK SELECT button on the electronics module to select the mode of operation. Press the button until the icon beneath the mode name is lit. Use CLICKER mode to test clicker-type torque wrenches or torque screwdrivers, PEAK mode to test camover-type torque wrenches, and TRACK mode to test dial and digital or beam-type torque wrenches. **There is no mode for testing power tools. Power tools are not to be tested on this tester.**
4. Press the UNITS button to select the unit of measure of the torque wrench to be tested.
5. If the torque value display reads other than zero, press the ZERO button. **Note:** Never press the ZERO button with a wrench connected to the tester. Doing so will cause inaccurate results.
6. To adjust the angle of the display, loosen the two module adjustment locks and tilt the electronics module, then retighten to hold in place. To adjust the angle of the U-bracket, loosen the U-bracket adjustment lock and rotate the U-bracket, then retighten the lock to hold in place.
7. The tester should be preloaded to 50% of its capacity, in the direction (CW or CCW) of testing, three times prior to actual wrench testing. Adjust a torque wrench to 50% of the tester capacity. Engage the transducer drive (square or hex) with the wrench with the handle in the 2 or 3 o'clock position for clockwise testing or 9 or 10 o'clock position for counterclockwise testing. Slowly cycle (click) the wrench three times, stopping immediately at the click and removing pressure from the wrench each time. Remove the wrench from the tester when three cycles are done and press the ZERO button. This should be performed again if the same wrench is to be tested in a different direction.

#### Testing Clicker-Type Torque Wrenches

1. Use the UNITS button to select the correct unit of measure.
2. Use the PEAK SELECT button to select the CLICKER mode.
3. Set the torque wrench to the first test point and engage the torque wrench to the drive of the transducer (socket to hex or male square to female square) with the wrench in the 2 or 3 o'clock position for clockwise testing or 9 or 10 o'clock position for counterclockwise testing.
4. Slowly apply pressure to the wrench grip until the wrench clicks, then release the pressure immediately. To obtain an accurate reading, make sure the pressure is applied perpendicular to the drive square; do not push in, out, forward or back on the grip.
5. Once the wrench clicks, the numeric value of the torque will be displayed on the tester LCD. Press the CLEAR/PRINT button to clear the display for the next test, or wait 2 seconds with zero torque applied and the display will clear automatically.

#### Testing Camover-Type Torque Wrenches

1. Use the UNITS button to select the correct unit of measure.
2. Use the PEAK SELECT button to select the PEAK mode.
3. Set the torque wrench to the first test point and engage the torque wrench to the drive of the transducer (socket to hex or male square to female square) with the wrench in the 2 or 3 o'clock position for clockwise testing or 9 or 10 o'clock position for counterclockwise testing.
4. Slowly apply pressure to the wrench grip until the wrench cams over, then release the pressure immediately. To

obtain an accurate reading, make sure the pressure is applied perpendicular to the drive square; do not push in, out, forward or back on the grip.

5. At the end of the wrench camover, the numeric value of the torque will be displayed on the tester LCD. Press the CLEAR/PRINT button to clear the display for the next test, or wait 2 seconds with zero torque applied and the display will clear automatically.

#### Testing Dial or Beam-Type Torque Wrenches

1. Use the UNITS button to select the correct unit of measure.
2. Use the PEAK SELECT button to select either the PEAK mode. Note: TRACK mode may be used instead, but the torque on the tester will reduce when pressure on the tool is reduced; the test point reading will not be retained on the display.
3. Engage the torque wrench to the drive of the transducer (socket to hex or male square to female square) with the wrench in the 2 or 3 o'clock position for clockwise testing or 9 or 10 o'clock position for counterclockwise testing.
4. Slowly apply pressure to the wrench grip until the wrench pointer shows the wrench is at the desired test point, then release the pressure immediately.

#### Computer Use with VeriTorq®

The electronics module has a marked serial port on the side. To connect to a PC, engage the single-pin end of the supplied serial cable to the port. Connect the 9-pin connection end to the PC. The tester will send the results to the serial port when the CLEAR/PRINT button is pushed or when the display clears automatically.

You can obtain the results using the Windows® Terminal® or Hyperterminal® program resident in the operating system, or you can use any of a number of proprietary software packages. Consult the Windows® Help function for information on the terminal programs.

#### Care and Cleaning

The tester should only be cleaned with a damp cloth. Do not allow water to enter the unit when cleaning the tester or the area around it.

The tester should be recalibrated periodically. The frequency at which recalibration is needed is dependent upon use rate and service conditions.

#### Limited One Year Warranty

This product carries a one year limited warranty against defects in materials or workmanship. For warranty details, go to our website: [www.srtorque.com](http://www.srtorque.com). Calibration of this product is warranted for ninety (90) days from the date of purchase. For questions pertinent to calibration or to recalibrate (for a charge) after 90 days, call us at 1-800-877-1347.

Additional product information is available at our website, including expanded instructions.

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