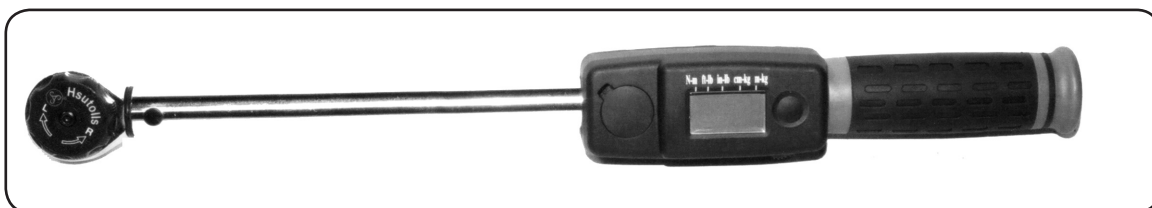




DIGITAL TORQUE WRENCH

Model	95840 95841
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ASSEMBLY AND OPERATION INSTRUCTIONS



Due to continuing improvements, actual product may differ slightly from the product described herein.



3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY, READ AND UNDERSTAND
ALL WARNINGS AND INSTRUCTIONS BEFORE USE.**

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For technical questions or replacement parts, please call 1-800-444-3353.

SPECIFICATIONS

	95840-3/8"	95841-1/2"
Drive	3/8"	1/2"
Net Weight	2.2 Lbs.	2.55 Lbs.
Material	Carbon steel head and tube, thermoplastic LCD read-out, rubber Handle	Carbon steel head and tube, thermoplastic LCD read-out, rubber Handle
Tool Length	14-3/4" L	17-3/4" L
Head Depth	.75" T	.75" T
Head Width	1.7" W	1.7" W
Gear Action	10 degrees	10 degrees
Shaft Width	0.87"	0.87"
Maximum Range	83.3 Ft.-Lbs./ 1000 In. Lbs., m-KG 11.5/ cm - KG 1150/ N-m113	150 Ft.-Lbs., 1800 In. Lbs., m-Kg 20.7, CM-KG 2070, N-m 203
Minimum Range	16.0 Ft. Lbs./ 195 In. Lbs., M- KG 2.25/ CM -KG 225/ N-m 22.0	30.0 Ft. Lbs., 360 In. Lbs., M- Kg 4.1, CM-KG 410, N-m 40.5
Increments	0.1	0.1
Accuracy	3% acceptable variation through full torque range	3% acceptable variation through full torque range
Power Source	3 Volt Battery-CR2032 (included)	3 Volt Battery CR2032 (included)
The Torque Wrench is certified to have been calibrated prior to shipment to the accuracy of +/- 4% in the right hand direction and +/- 6% in the left hand direction on readings 20% to 100% of capacity. On readings below 20% of capacity, the accuracy is +/- two minor scale increments.		

Save This Manual

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Write the product's serial number in the back of the manual near the assembly diagram, or write month and year of purchase if product has no number. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY RULES



WARNING!

READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed below may result in
electric shock, fire, and/or serious injury.
SAVE THESE INSTRUCTIONS

1. **Use only 1/2" (95841) or 3/8" (95840) sockets with the torque capability shown in the specifications chart on prior page.** Otherwise, the socket could fly off the drive anvil or break apart, causing injury.
2. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.
3. **Keep children away while operating the Digital Torque Wrench.** Keep children out of the work area.
4. **Stay alert.** Do not operate the Digital Torque Wrench while tired or under the influence of drugs, alcohol, or medication.
5. **Do not overload the Digital Torque Wrench.** Use the correct tool for your application. Do not use it for applications other than intended.
6. **Maintain the Torque Wrench with care.** Do not use a damaged Torque Wrench. Tag a damaged Torque Wrench "Do not use" until repaired.
7. **Torque Wrench service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.
8. **When servicing the Torque Wrench, use only identical replacement parts.** Follow instructions in the "Inspection and Maintenance" section of this manual.
9. **Use eye and ear protection.** Always wear ANSI-approved impact safety goggles and hearing protection.
10. **Do not use cheater bars or hammers to force the Torque Wrench.**
11. **Do not use the Torque Wrench to break a fastener loose.**
12. **Always pull a Torque Wrench towards you.** Pushing the Torque Wrench may force it past its maximum capacity and increase the risk of losing control, which may cause injury.
13. **Maintain tools with care.** Make certain that the Torque Wrench has a fresh battery. Inspect the Torque Wrench periodically and, if damaged, have it repaired by an authorized technician.
14. **Do not expose this product to rain or wet conditions.** Water entering a Digital Torque Wrench will damage it.
15. **Do not use the Torque Wrench:**
 - a. If the battery is low
 - b. Near any explosive gasses or fumes
 - c. If any abnormal operation is detected (if in doubt about the condition of the Torque Wrench have it serviced)

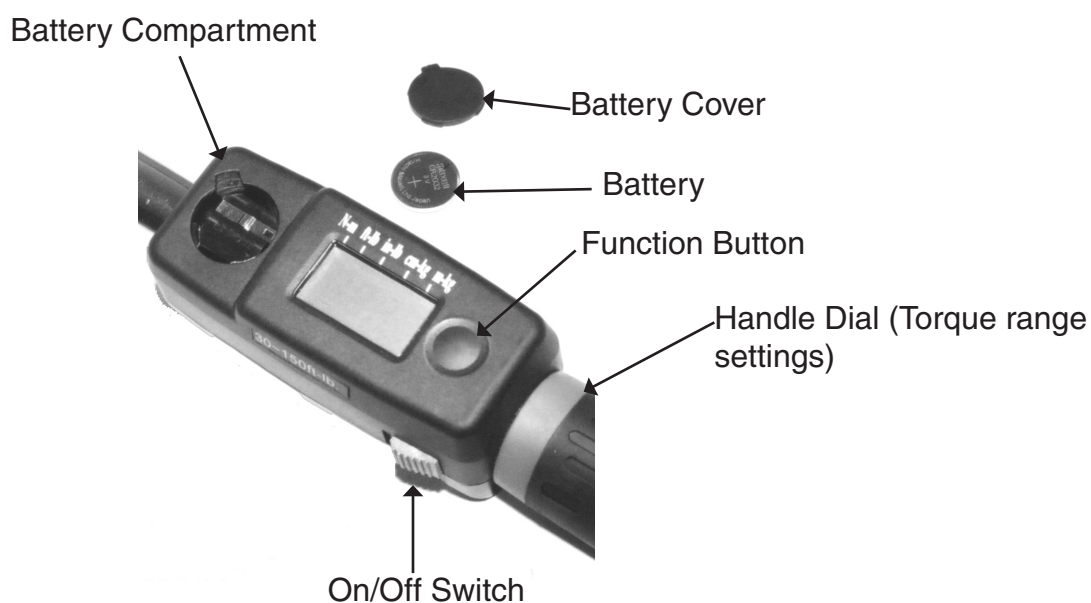
- d. If the Battery Cover is open
16. **Do not bump or shock the Torque Wrench when applying it to any workpiece.** Rough treatment may damage the highly sensitive mechanism.

UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

OPERATION

Figure 1




1. Put on ANSI-approved face shield or safety glasses.
2. Select the desired socket. Make certain that the socket fits properly on the Nut or Bolt being threaded on or off.
3. Set the Torque Wrench to the desired Torque. The Torque Wrench can be set for digital readout in Inch-Lbs., Ft.- Lbs., N-m, m-Kg and Cm-Kg.
4. Slide On-Off Switch to the ON position-see Figure 1. The Wrench has an Auto-Off Feature and will automatically shut off after two minutes of non-operation.
5. Press the Function Button to scroll through the readout functions-see Figure 1.
6. Rotate the Handle Dial until the LCD readout shows the desired Torque-see Figure 1.

7. Press the socket onto the drive anvil of the Torque Wrench.
8. Set the Torque Wrench Direction Switch, located on the end of the Torque Wrench, for clockwise or counterclockwise operation.
9. Place the socket onto the nut or bolt and pull the Handle steadily until a click is heard or felt.
10. Stop pulling the Torque Wrench.

REPLACING THE BATTERY

1. Except for replacing the battery, all other maintenance functions must be done by a qualified service technician.
2. When the Battery has a low charge and needs replacing, the words LOW BATTERY will appear in the LCD readout. A picture of a Battery will show in the readout when the Battery has a significant charge existing.
3. Use a flat head screwdriver or other flat object and place it under the Battery Cover to lift it out off of the Battery Compartment. Gently remove the Battery Cover-see Figure 1.
4. Remove the discharged battery and replace it with a new 3V, CR2032 battery as marked on the Battery Cover. Install the battery according to the polarity indicated in the Battery Compartment.
5. Gently insert the Battery Cover back into place.

INSPECTION, MAINTENANCE, AND CLEANING

1.  **WARNING!** Make sure the Power Switch of the tool is in its “OFF” position before performing any inspection, maintenance, or cleaning procedures.
2. **BEFORE EACH USE**, inspect general condition of the tool. Check for cracked or broken parts and any other condition that may affect its safe operation. **Do not use if damaged.** The Wrench is lubricated for life and should not be oiled. The only exception is the ratchet head which may be lubricated as needed.
3. Protect the Torque Wrench from rough use. It is a precision instrument and should be handled and stored with care. Do not throw, use as a hammer, or use as a prying tool.
4. **DO NOT IMMERSE WRENCH OR ANY PORTION OF IT IN ANY LIQUID.** The plastic grip may be damaged by some industrial solvents. Keep Wrench clean and dry. Clean with a clean cloth soaked in mineral spirits or denatured alcohol. Store in a dry location out of reach of children.
5. This is a precision calibrating instrument. Calibration and servicing must be done regularly and is the owner’s responsibility.

TROUBLESHOOTING

Problem	Possible Causes	Probable Solutions
LCD flashes continuously	1. Battery charge is to low.	1. Replace Battery.
Display doesn't change when Handle Dial is moved	1. Circuit needs to be reset.	1. Remove the battery, wait 30 seconds, replace battery and turn the Torque Wrench "On".
LCD display does not show	1. Battery has poor connection or battery voltage is to low	1. Take battery out and adjust connections. Replace the battery as necessary.

WARRANTY


LIMITED LIFETIME WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the life of the product. This warranty does not apply to damage due directly or indirectly to misuse, abuse, negligence or accidents; repairs or alterations outside our facilities; or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. **THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.**

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date, and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair, or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of storing, and returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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ADDITIONAL INFORMATION

**GENERAL TORQUE SPECIFICATION CHART FOR
ENGLISH FASTENERS** (in Foot Pounds)*

MATERIAL OR GRADE BOLT SIZE	SAE 2 (Mild Steel)	SAE 5	SAE 8	SOCKET HEAD CAP SCREWS	BRASS	Stainless AISI TYPE 303
1/4-20	6	11	12	13	5	5
1/4-28	7	13	15	16	6	7
5/16-18	13	21	25	27	8	9
5/16-24	14	23	30	33	9	10
3/8-16	23	38	50	52	15	17
3/8-24	26	40	60	60	16	18
7/16-14	37	55	85	86	23	25
7/16-20	41	60	95	95	25	28
1/2-13	57	85	125	130	32	37
1/2-20	64	95	140	145	34	40
9/16-12	80	125	175	180	44	50
9/16-18	91	140	195	210	48	54
5/8-11	111	175	245	255	68	75
5/8-18	128	210	270	290	73	80
3/4-10	180	300	425	410	104	115
3/4-16	200	330	460	445	115	125
7/8-9	275	450	660	580	155	170
7/8-14	300	490	700	615	170	185
1"-8	415	680	990	830	235	260
1"-14	435	715	1050	880	250	270

**GENERAL TORQUE SPECIFICATION CHART FOR
METRIC FASTENERS** (in Newton Meters)*

MATERIAL CLASS BOLT DIAM MM INCH	4.6	4.8	5.8	8.8	9.8	10.9	12.9
5	.197	3	4	5	7	8	11
6	.236	5	6	8	12.5	14	17
6.3	.248	5.5	8	9.5	14	16	21
8	.315	12	16	20	30	34	44
10	.394	23	32	40	60	70	85
12	.472	40	56	70	103	120	150
14	.551	65	90	110	167	190	240
16	.630	100	140	170	270	290	380
18	.709	137	177	225	350	-	480
20	.787	200	-	330	520	-	740

*These torque values are approximate and should not be accepted as accurate limits. Indeterminant factors (surface finish, type of plating and lubrication in specific applications preclude the publication of accurate values for universal use. Manufacturers of various types of equipment usually provide specific tightening instructions which should be followed. **DO NOT USE** the above values for gasketed joints or joints of soft materials, **DO NOT USE** your torque wrench for values greater than its maximum scale reading.

TORQUE UNIT CONVERSION

MULTIPLY NUMBER OF TO OBTAIN	Inch Ounces	Inch Pounds	Foot Pounds	Newton Meters
Inch Ounces	1	16	192	141.6
Inch Pounds	.0625 ¹	1	12	8.851
Foot Pounds	.005208	.08333 ²	1	.7376
Newton- Meters	.007061	.1130	1.356	1

¹ or divide by 16

² or divide by 12