

GEN-TECH®

Model 66400

DIGITAL CONTACT TACHOMETER

INSTRUCTIONS AND PRECAUTIONS

Distributed exclusively by Harbor Freight Tools®.

3491 Mission Oaks Blvd., Camarillo, CA 93011

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



SAVE THESE INSTRUCTIONS. READ ALL PRECAUTIONS AND INSTRUCTIONS.

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

SPECIFICATIONS

Display	LCD 5 Digits
RPM Range	2.5 - 19,999 RPM
Accuracy	± 0.05 plus 1 RPM
Power Source	(4) 1.5 VDC (AA) Batteries (Not Supplied)
Operating Environment	32° - 104° F; 0 - 50° < 85% Humidity

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 document as soon as possible.

Your tool includes:

- Digital Touch Tachometer
- (3) Adapters



IMPORTANT SAFETY INFORMATION

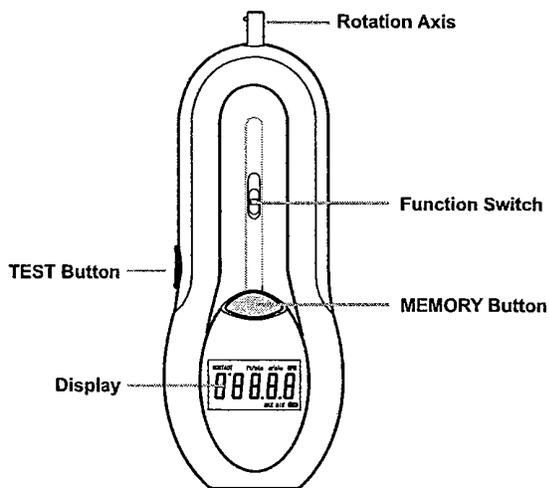
1. When in use, this tool is in contact with rotating parts.
2. Do not touch rotating parts. Do not wear loose clothing when working with rotating parts. Contain hair, jewelry and any item that may become entangled in rotating part.
3. This product is not a toy. Do not allow children to play with or near this item.

4. Position batteries in proper polarity and do not install batteries of different types, charge levels, or capacities together.
5. Use as intended only.
6. Inspect before every use; do not use if parts are loose or damaged.
7. Maintain product labels and nameplates. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this document including all text under subheadings therein before set up or use of this product.

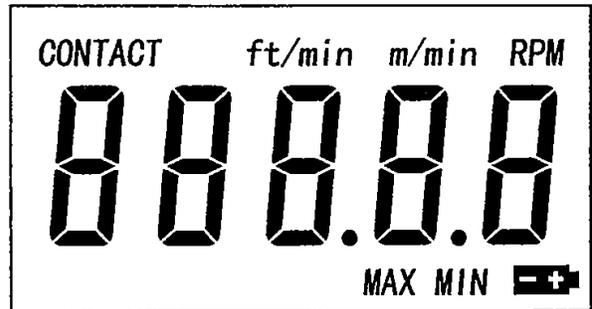
IMPORTANT COMPONENTS AND CONTROLS



1. Rotation Axis. Install the selected Adapter on this Axle.
2. TEST Button. Use to perform Tests.
3. LCD Display. Information is displayed on this screen.
4. MEMORY Button. Use to recall last reading, minimum reading and maximum reading of last test.
5. Function Switch. Use to select desired measurement:
 - a. FT/MIN Linear speed in Feet per Minute

- b. M/MIN Linear Speed in Meters per Minute
- c. CONTACT Rotation speed in RPM

Display



Symbol Meanings:

- a. Battery Symbol: Batteries are low and must be replaced.
- b. MAX: Maximum reading is displayed
- c. MIN: Minimum reading is displayed.
- d. CONTACT: Function Switch test mode setting.
- e. ft/min: Speed Unit in Feet per minute.
- f. m/min: Speed unit in Meters per minute.
- g. RPM: Rotational speed in revolutions per minute.

SET UP AND OPERATION

Battery Installation



1. Before use, install (4) 1.5 VDC "AA" batteries (not supplied).
2. To install batteries, remove Screw (18) from Battery Cover (17).
3. Remove Battery Cover (17) from Back Cover (12).
4. Install 4 "AA" batteries in battery compartment. Be sure to match polarity of batteries to markings inside battery case.
5. Replace Battery Cover (17). Reinstall Screw (18). Do not overtighten.
6. Whenever the Low Battery Indicator appears, replace the batteries.
7. Do not short the battery terminals together when replacing batteries.
8. Do not dispose of old batteries in fire. Always dispose of batteries in accordance with guidelines provided by local authority.
Note: This tool may be used with AC power. Plug adapter (not included) into adapter Socket and into a 120 VAC outlet.

Installing Adapters



1. Before use, the correct Adapter must be installed.
 - Cone RPM Adapter
 - Funnel RPM Adapter
 - Wheel Surface Speed Adapter
2. The Adapters are friction fit. Slide the Adapter on or off as needed.

OPERATION

RPM Measurement

1. Attach the Cone Adapter (24) to the Rotating Axle (27) as described above.
2. Set Function Switch to CONTACT.
3. Press the tip of the cone to the center of the rotating shaft to read shaft RPM. Keep the Tachometer's Rotating Axle in line with the center of the shaft at all times.
4. Press and hold the TEST button.
5. When the cone gains steady rotational speed, read the RPM on the LCD screen.

Linear Speed Measurement

1. Attach the Surface Adapter Wheel (20) to the Rotating Axle (27) as described above. With the Rotating Axle parallel with the rotating shaft, touch the side of the shaft with the side of Surface Adapter Wheel (20). Maintain light and steady pressure against the shaft.
2. Set the Function Switch to FT/MIN (Feet per minute) or M/MIN (Meter per minute).
3. Press and hold the TEST button.

- When the cone gains steady rotational speed, read the RPM on the LCD screen.

Memory Function

- After each test, you can review most recent saved measurements.
- Press and release MEMORY button to cycle through most recent MIN and MAX readings.

Record Serial Number Here: _____

Note: If product has no serial number, record month and year of purchase instead.

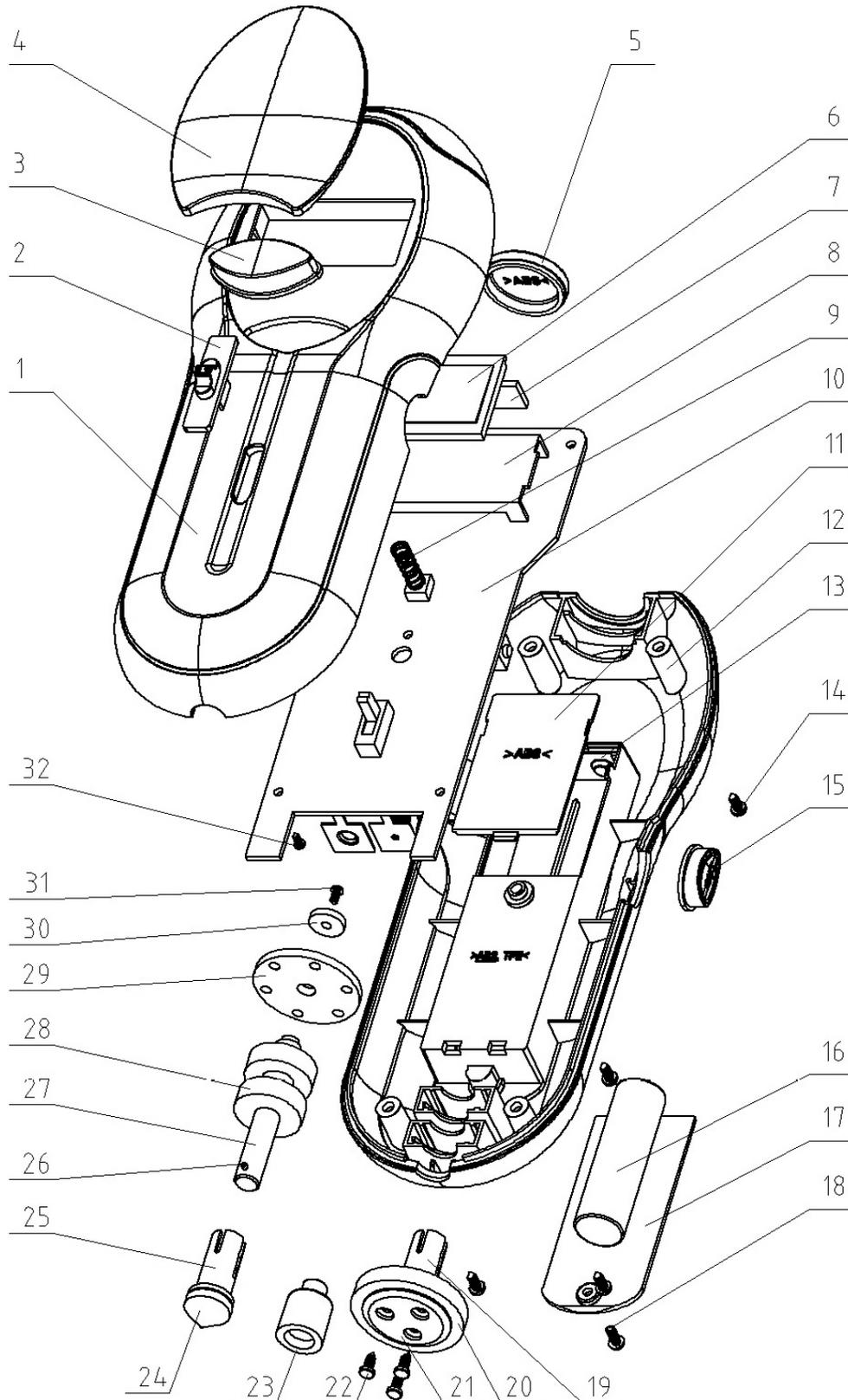
Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS DOCUMENT AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

PARTS LIST		
Part	Description	Qty.
1	Front Cover	1
2	Function Switch	1
3	Memory Button	1
4	LCD Window	1
5	End Cap	1
6	LCD	1
7	Conductive Rubber Gasket	1
8	LCD Holder	1
9	Spring	1
10	Printed Circuit Board	1
11	PCB Cover	1
12	Back Cover	1
13	Battery Connector	1 set
14	Screw st 2.9 x 12	5
15	TEST Button	1
16	Battery 1.5 VDC "AA" (not included)	4
17	Battery Cover	1
18	Screw m2.5 x 6	1
19	Base of Surface Speed Adapter Wheel	1
20	Surface Speed Adapter Wheel	1
21	Cover of Surface Speed Adapter Wheel	1
22	Screw st 2.5 x 8	3
23	Concave Rotating Adapter	1
24	Head of Conical Rotating Adapter	1
25	Base of Conical Rotating Adapter	1
26	Spring Ball Bearing m1.5 x 6	1 set
27	Rotating Axle	1
28	Axle Tree (607)	1
29	Pulse Counter Wheel	1
30	Gasket	1
31	Screw m2 x 6.5	1
32	Screw st 2.3 x 8	5

ASSEMBLY DIAGRAM



LIMITED 90 DAY 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 period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, 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 of 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 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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