

HAND DIGITAL TACHOMETER **Shimpo**

DT-207B > Non-contact type(LED)

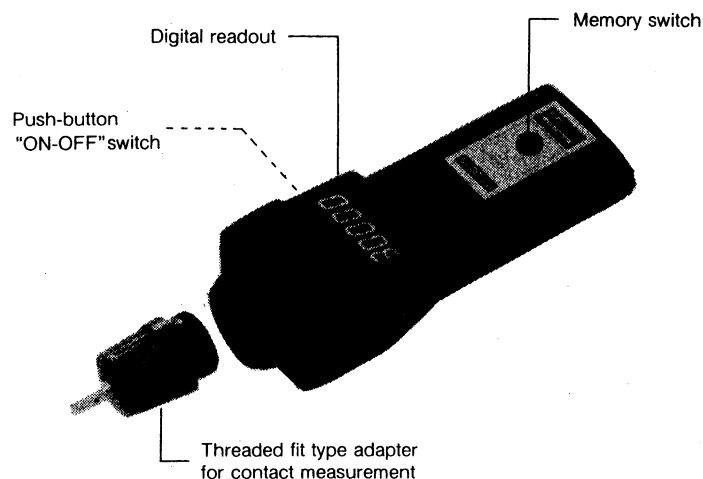
Instruction Manual

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1. GENERAL

SHIMPO DT-207B is a battery operated, handheld, computer-circuitry-controlled, both contact and non-contact type tachometer. The DT-207B will directly display RPM measurements sensed from an easy-to-aim visible light beam directed toward a rotating shaft without adapter or from contact measurements with accessory adapter and rubber tip. It incorporates the latest micro-computer to provide;

- MEASUREMENT OF SPEEDS AS LOW AS 6.0RPM!!!
The only non-contact tachometer with this capability!!
- C-MOS SINGLE CHIP MICRO COMPUTER HIGH RELIABILITY AND LOW MAINTENANCE
- LARGEST MEMORY CAPACITY
- OVERSIZED 5 DIGIT LED
- RUGGED CONSTRUCTION



*For contact measurement
use with the adapter and rubber tip.

IMPORTANT

All SHIMPO products are warranted against defects in material and workmanship. SHIMPO America Corp. shall replace or repair any part proven to be defective within one year after the date of purchase.

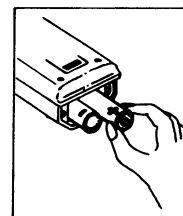
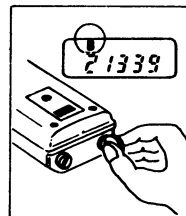
Return the damaged unit to SHIMPO America Corp. prepaid with a written explanation of the problem. Any unauthorized attempt at servicing any SHIMPO product will void this warranty.

2. SPECIFICATIONS

Reading Range	6.0 — 30,000 rpm
Accuracy	• 1 digit — 6.0 to 5,000 rpm • 2-digit — 5,000 to 30,000 rpm
Display	5 digit 0.4" (10mm) high LED with floating decimal point.
Memory System	Last reading displayed for 10 seconds and can be recalled within 4 minutes period. Four intermediate readings, maximum and minimum readings stored in memory automatically and retained for 4 minutes ... or four intermediate readings can be stored by selection.
System Control	Single-chip C-MOS micro-computer
Detection	Effective Distance: Up to 2 feet Light Source: Incandescent light Sensor: Photo-transistor Reflection Mark: Single tab reflective tape
Up-Date Gate Time	Typically 1 second
Batteries, included	Size: 4 1.5V AA Life: Averages 6 hours continuous use
Low Voltage Indicator	"B" display
Operating Temperature	32° to 120°F (0 — 45°C)
Construction	Die-cast aluminum housing
Weight	1 pound (450g)
Dimensions	6.9" L x 2.4" W x 2" H (172 x 61 x 51mm)
Accessories included	Accessory adapter 35 Reflective tabs 1 cone rubber tip Carrying case Instruction manual
Warranty	1 year

3. BATTERY REPLACEMENT

Low battery voltage is indicated by a "B" readout display. Loosen end cover screws and replace batteries. Please note polarity as reversing polarity will cause unit to show no display.



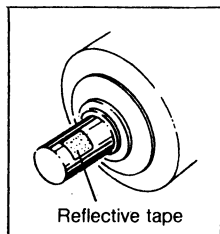
* Batteries are loaded at factory before shipment.

For safety precautions;

- 1) Confirm correct polarity before inserting batteries into case.
- 2) Do not use old and new batteries together.
- 3) Remove batteries from battery case if not use tach for a long time.

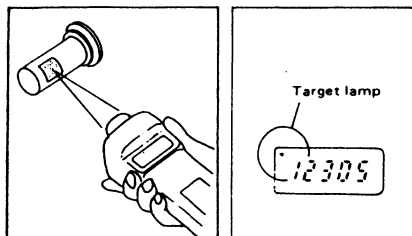
I. OPERATING PROCEDURE

1.



Attach reflective tape to rotational element. Non-reflective area must always be greater than reflective area. If shaft is normally reflective, cover with black tape or black paint before attaching reflective tape.

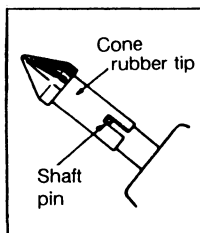
2.



Tach should be aimed perpendicular to shaft at a distance of 2 inches to 2 feet. Press and hold on-off switch. A dot will appear on display when unit is properly aligned.

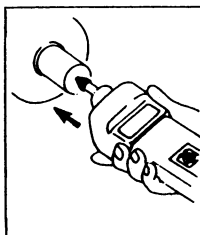
3. Hold on-off switch on. Display will be updated in approximately 1 second intervals.
4. On-off switch must be released prior to removal of tachometer from rotating object
5. After removal, unit will display last reading. This reading will remain in the display for a period of 2 minutes after release of on-off switch. This 2 minute retention may be extended any number of additional 2 minute periods by re-pressing memory switch.

1.



* For contact measurement, attach adapter and rubber tip.

2.



After attaching cone rubber tip, bring it into contact with rotating object or moving surface to be measured. Apply only enough pressure to eliminate slip.

For safety precautions;

- 1) Do not excessively press cone rubber tip on rotatings.
- 2) Do align rubber tip and rotatings perpendicularly. Do not press it slantly.
- 3) Careful not to use tach at high rpm continuously to avoid heat on rubber tip.

5. MEMORY RECALL INSTRUCTIONS

A. Automatic Memory

The following are automatically stored in memory for 4 minutes following release of memory switch.

Last 4 Readings
Maximum Reading
Minimum Reading

These readings will be displayed in the following order when memory switch is pressed.

1st Press: Last reading	1	21343
2nd Press: Next to last reading	2	21338
3rd Press: 3rd to last reading	3	21340
4th Press: 4th to last reading	4	21339
5th Press: Maximum reading		21345
6th Press: Minimum reading		21338

To fill all memory spaces, unit must be run for about 5 seconds. If any of above memory readings are missing, unit needs longer operation.

B. Selection Memory

This mode is designed for laboratory use only and not applicable for general application.

Press memory switch briefly as reading you wish stored appears on display. An "M" will blink at display (see fig.1). Up to 4 selections can be stored. (Each blink of "M" represents 1 memory storage).

1st Press: 4th selection	1	2 ^M 1343
2nd Press: 3rd selection	2	2 ^M 1338
3rd Press: 2nd selection	3	2 ^M 1340
4th Press: 1st selection	4	2 ^M 1339
5th Press: Maximum reading		21345
6th Press: Minimum reading		21338

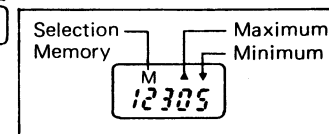


Fig.1

Note: All memory data will be erased if on-off switch is pressed or after 4 minutes after automatic shut-off has occurred.