

**30000**  
**HAND DIGITAL TACHOMETER**  
**Shimpo**

<DT-205B> Non-contact type(LCD)  
 with adapter for contact measurements

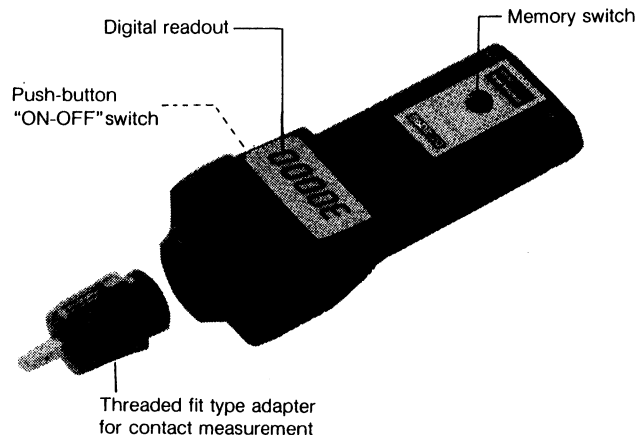
**Instruction Manual**

3500 DEVON AVENUE, LINCOLNWOOD,  
 ILLINOIS 60659  
 TEL: 312/679-6765 TELEX: 289441

**1. GENERAL**

SHIMPO DT-205B is a battery operated, handheld, computer-circuitry-controlled, both contact and non-contact type tachometer. The DT-205B 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 6RPM!!!  
 - 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 LCD
- 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.

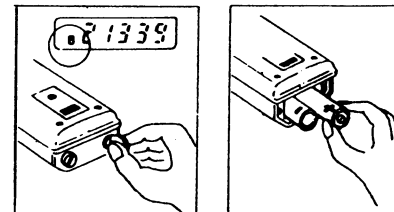
Return the damaged unit to SHIMPO America Corp. prepaid with a written explanation of the problem. Any unauthorized attempt at servicing any SHIMPO product will void this warranty.

**2. SPECIFICATIONS**

Reading Range	6 – 30,000 rpm
Accuracy	<ul style="list-style-type: none"> <li>● 1 rpm – 6 to 5,000 rpm</li> <li>● 2 rpm – 5,000 to 30,000 rpm</li> </ul>
Display	5 digit 23/64" (9mm) high LCD
Memory System	Last reading displayed for 2 minutes after instrument removal. Four intermediate readings, last, maximum and minimum readings stored in memory automatically or by selection.
System Control	Single-chip C-MOS micro-computer
Detection	Effective Distance: Up to 3 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" flashing display
Operating Temperature	32° to 120°F (0 – 45°C)
Construction	Die-cast aluminum housing
Weight	1 pound (450g)
Dimensions	6¾"L x 2-3/8"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 flashing "B" readout display. Loosen end cover screws and replace batteries. Please note polarity as reversing polarity will cause unit to show no display.



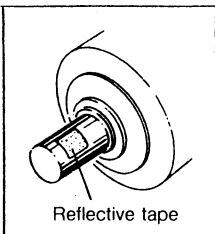
\* Batteries are loaded at factory before shipment.

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.

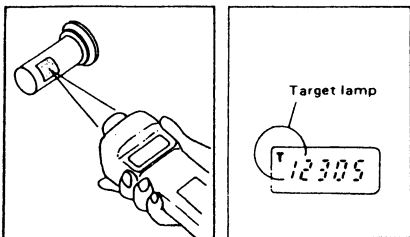
## OPERATING PROCEDURE

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.

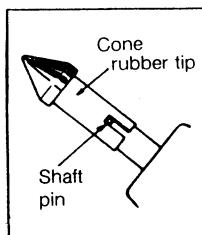
2.



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.

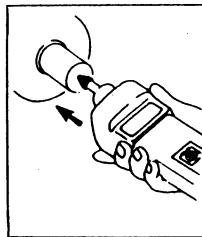
3. Hold on-off switch on. Display will be updated in approximately 1 second intervals.
4. On-off switch must be released prior to removal of tachometer from rotating object
5. After removal, unit will display last reading. This reading will remain in the display for a period of 2 minutes after release 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 perpendiculary. 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 followings 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. A dot will blink at end of display (see fig.1). Up to 4 selections can be stored. (Each blink of dot represents 1 memory storage).

1st Press: 4th selection 1 ▸ 21343.  
 2nd Press: 3rd selection 2 ▸ 21338.  
 3rd Press: 2nd selection 3 ▸ 21340.  
 4th Press: 1st selection 4 ▸ 21339.  
 5th Press: Maximum reading 21345\*  
 6th Press: Minimum reading 21338.

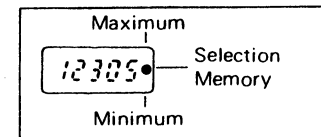


Fig.1

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