



ATD-8658  
Digital Drum Gauge  
Instructions

INSTRUCTIONS FOR  
**DIGITAL DRUM GAUGE**  
530mm/20.65 inch

Thank you for purchasing our product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

**IMPORTANT**

PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS, AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE. FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY.

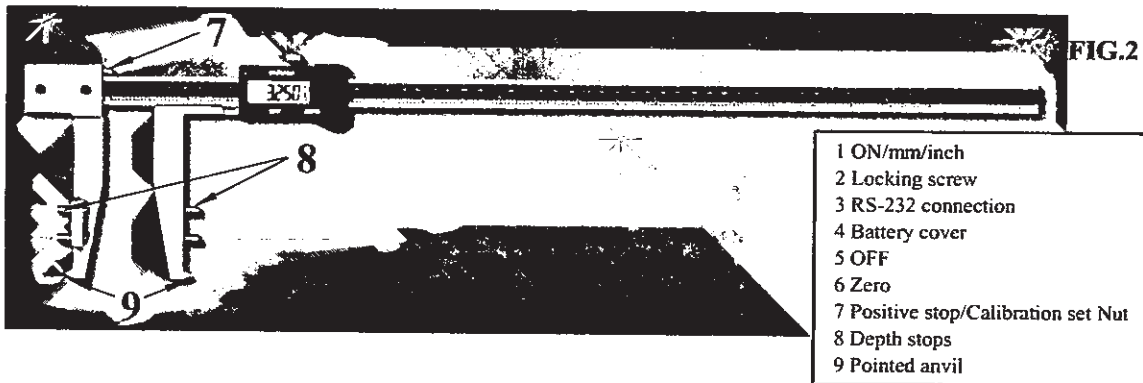
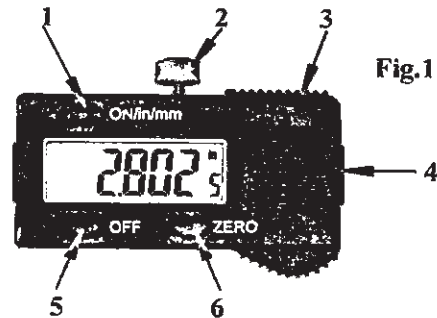
**1. SAFETY INSTRUCTIONS**

- WARNING!** Ensure Health and Safety, local authority and general workshop practice regulations are adhered to when using tools and equipment.
- × **DO NOT** use caliper if damaged.
- ✓ Maintain caliper in good and clean condition for best and safest performance.
- ✓ Keep the work area clean, uncluttered and ensure there is adequate lighting.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery. Contain or tie back long hair.
- ✓ Keep children and unauthorized persons away from the work area.
- × **DO NOT** use the caliper for any purpose other than for which it is designed.
- × **DO NOT** get caliper wet or use in damp or wet locations, or areas where there is condensation. Keep caliper clean and dry using a dry cotton cloth only.
- × **DO NOT** dip or submerge the caliper in any type of liquid.
- × **DO NOT** expose caliper to bright sunlight or dust.
- × **DO NOT** dis-assemble caliper. The caliper must be checked by qualified service personnel only.
- × **DO NOT** apply any voltage to the caliper i.e. with an electric marker pen.
- ✓ The caliper is a precision instrument, treat with care, avoid using force and do not subject to knocks or shocks.
- ✓ Take particular care not to damage or scratch the scale surface.
- ✓ Use caliper in a reasonably constant temperature conditions of approximately 20 °C.
- ✓ When not in use, **turn off** and store caliper in a safe, dry, childproof location.

**2. INTRODUCTION & SPECIFICATIONS**

Hardened and tempered stainless steel gauge. BIG LCD display for ease of reading. Metric or Imperial read-out at any time. Zero setting control allows for comparative measurement. Supplied complete with setting gauge, adjustment tool and carry-case.

Specification	Digital drum gauge
Resolution	0.01mm (0.0005in)
Range	530mm / 20.65in
Accuracy	± 0.02mm ( ± 0.001in) @ <100mm ± 0.03mm ( ± 0.001in) @ >100mm <200mm ± 0.04mm ( ± 0.0015in) @ >200mm
Functions	Zero set, mm/inch select
Battery type	SR44/LR44/AG13 (1.5V)
Operating temp	0 -- + 40 °



- 1 ON/mm/inch
- 2 Locking screw
- 3 RS-232 connection
- 4 Battery cover
- 5 OFF
- 6 Zero
- 7 Positive stop/Calibration set Nut
- 8 Depth stops
- 9 Pointed anvil

### 3. OPERATION

3.1.1 Ensure all measuring surfaces are clean and then turn on calliper by pressing "ON" switch. Wait at least one second before use.

3.1.2 Use the "mm/Inch" button to toggle between inches and mm at any time.

3.1.3 Press the "Zero" button at any time to zero the reading.

**WARNING!** Ensure that you have read and understood Section 1 safety instructions before commencing.

#### 3.2 Set-up

3.2.1 Before you use your caliper, it must be calibrated.

3.2.2 Turn the gauge on, set the display to inches using .mm/inch. button.

3.2.3 Slide the moving arm to the left until it is against the stop screw and press the .zero. button.

3.2.4 Open the calipers so the pointed anvils mate with the gauging plates on the calibrating gauge. (fig.3.)

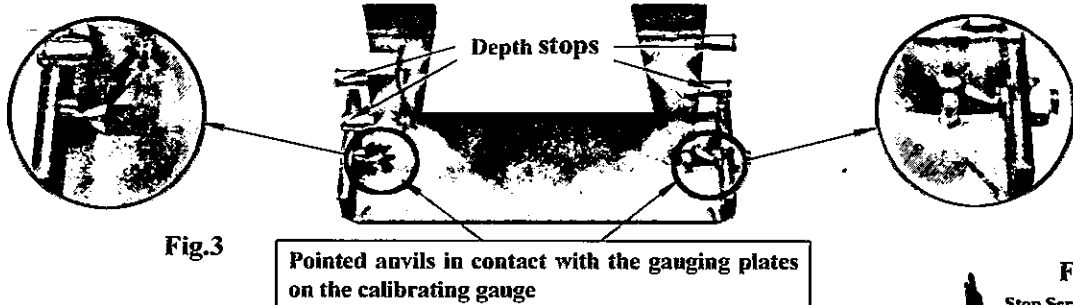


Fig.3

Pointed anvils in contact with the gauging plates on the calibrating gauge

3.2.5 The display should now read  $4.000 \pm .001$  in. and you may use the callipers, If not, proceed as follows.

3.2.6 Place the callipers on the calibrating gauge as in fig.3 and press the zero button.

3.2.7 Slide the moving arm to the left until it reaches the Positive stop screw, the reading will now display a minus figure of approximately  $-4$  in.

3.2.8 Using the combination tool provided, loosen the Locking nut (fig.4.) and turn the Positive stop screw in or out until the display reads exactly  $-4.000 \pm .001$  in. Press the zero button to zero the display.

3.2.9 Open the arms again and check that the reading now reads exactly  $4.000 \pm .001$  in.

when checked against the calibrating gauge. If not, repeat the process again until the correct reading is obtained.

Lock the grub screw and check the reading again.

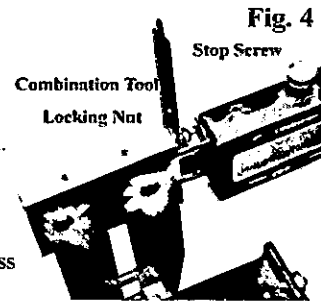


Fig. 4

#### 3.3 Measuring Drum.

3.3.1 To measure unscored surfaces.

3.3.2 Close the caliper and zero the reading. Extend the callipers jaws so the pointed anvils make contact with each side of the drum. The anvils must be kept in parallel with the drum face to within 3mm to obtain an accurate reading.

3.3.3 To achieve this, measure the drum using the ends of the arms as depth stops, or use either the upper or lower of the depth stops (fig.3.) on the drum face.

3.3.4 The displayed reading will be the drum diameter.

3.4 To measure scored surfaces.

3.4.1 Close the callipers and zero the reading, open the callipers in the drum with the fixed arm against one side of the drum and the pointed anvil in the score, extend the moveable arm to the other side and place the pointed anvil in the score at the point of greatest diameter and take a reading.

3.4.2 The displayed reading will be the total drum diameter inclusive of the score.

3.5 To measure depth of score.

3.5.1 Measure the drum diameter next to the score and take a reading.

3.5.2 Zero the reading and measure the drum diameter with the pointed anvils in the score.

3.5.3 Divide the reading by 2 to give you the score depth.

**Note:** If the drum falls outside of the manufacturer's specifications, it should not be machined but withdrawn from use and a new replacement meeting the manufacturer's specifications employed.

### 4. BATTERY FITTING

Fitting a new battery.

A flashing display indicates that the battery is exhausted - replace as follows:

1. Remove battery cover by sliding backward and lifting the lower edge.

2. Remove exhausted battery and fit replacement with +ve side uppermost.

3. Dispose of old battery in a safe and approved manner. Do not burn.

If the display fails to alter when the slide is moved, remove the battery, wait at least 30 seconds and then refit the battery.

**NOTE:** It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

**IMPORTANT:** No liability is accepted for incorrect use of product.

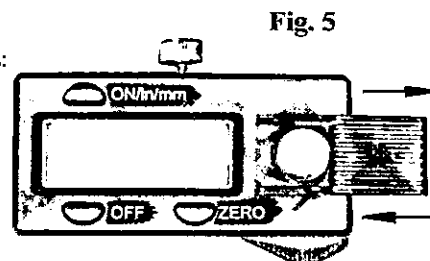


Fig. 5