



# Brake Drum Micrometer

## Operating Instructions and Parts Identification

**No. 908500**  
**90850050**

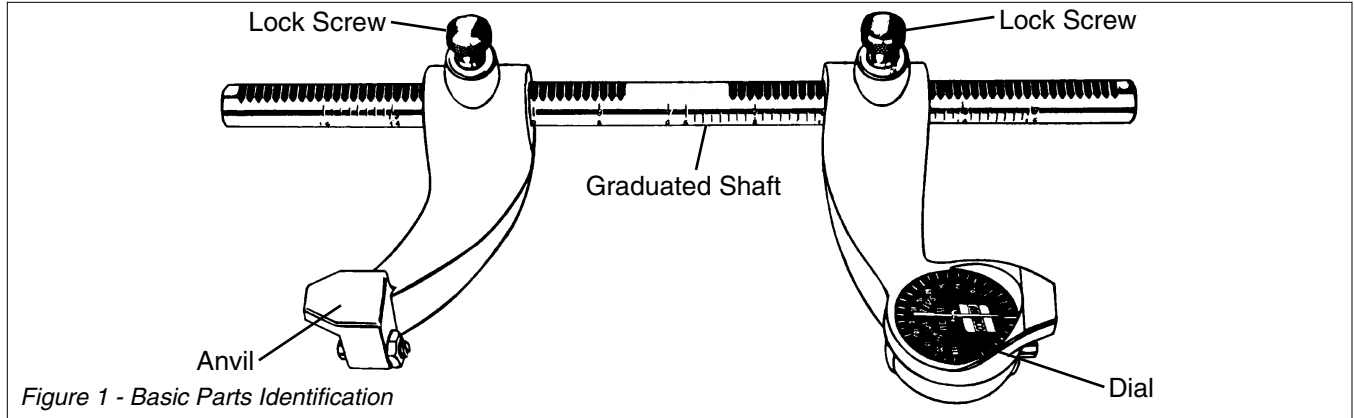


Figure 1 - Basic Parts Identification

	8500	8500-50
<b>Unit of Measure</b>	Inch	Metric
<b>Drum Diameter</b>	6" to 16.125"	15 cm to 41 cm
<b>Scale Graduations</b> (Increments)	.001"	.1 mm
<b>Graduated Shaft</b>	1" and .125"	1 cm and 2 mm
<b>Optional Shaft</b>	16" - 26"	39 cm - 66 cm

### Measuring the Drum (Figure 2)

1. Loosen 2 lock screws and move both dial and anvil along the shaft until the "whole" number of the drum diameter is visible at each arrow.

NOTE: Metric shafts have even numbers on one side, odd on the other. Inch shafts have identical scales.

2. Place micrometer inside the drum across the greatest diameter to be measured. Hold anvil steady and move dial back and forth against the braking surface to obtain the highest reading.

### Calibration (Figure 3)

The micrometer is calibrated at the factory. Check the calibration using a No. 909582 Checking Gauge or a standard outside micrometer. To recalibrate, loosen the jam nut (#22) and adjust set screw (#21) until the correct reading is obtained. Tighten jam nut while holding set screw stationary.

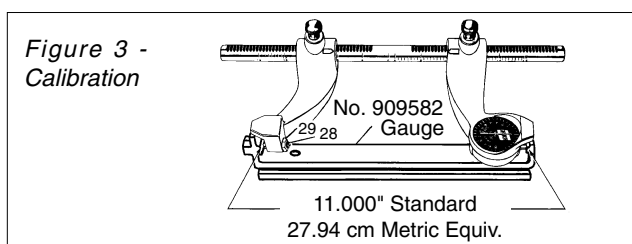
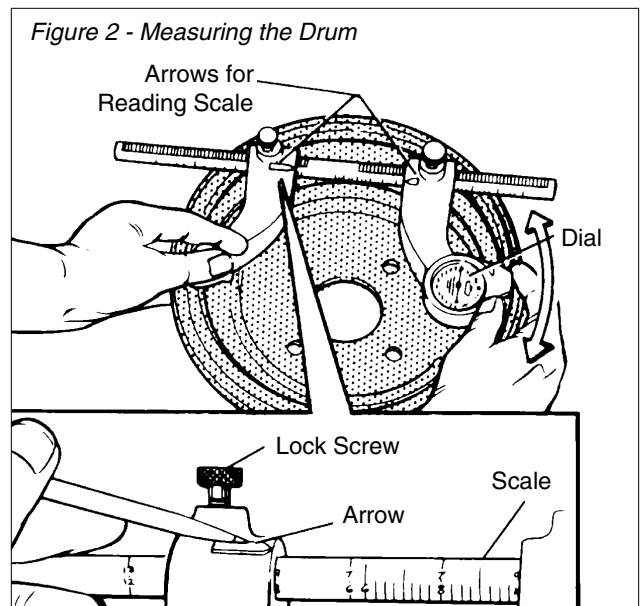


Figure 3 -  
Calibration



### Drum Condition

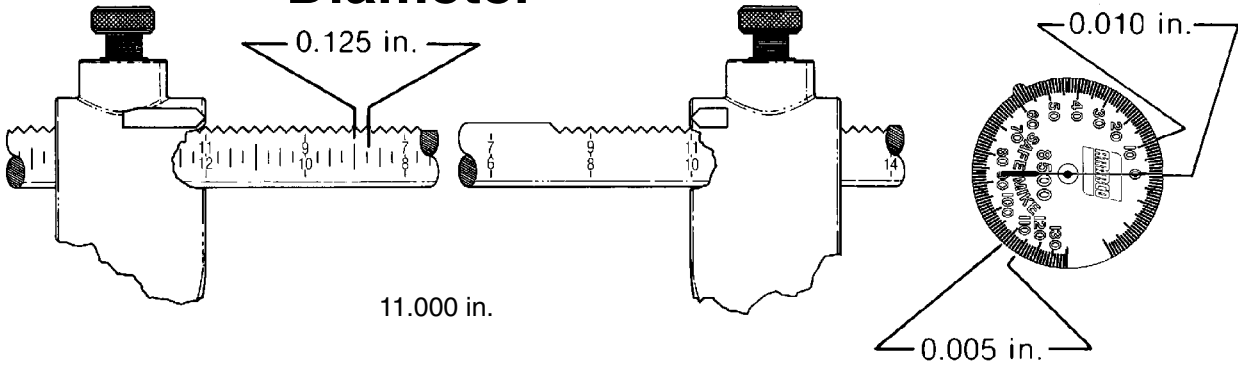
Drums should always be carefully inspected for cracks, worn or loose bearing races, scoring, heat checks taper, bell-mouth, and out-of-roundness. Drum out-of-round conditions are checked by taking micrometer readings at 2 or more positions around the drum. Scoring, out-of-roundness, bell-mouth, and taper should be corrected by machining.

Correcting most of the above conditions will require cutting material from the drum wall. If the drum diameter after machining is larger than the manufacturer's specified rebores limit it must be replaced.

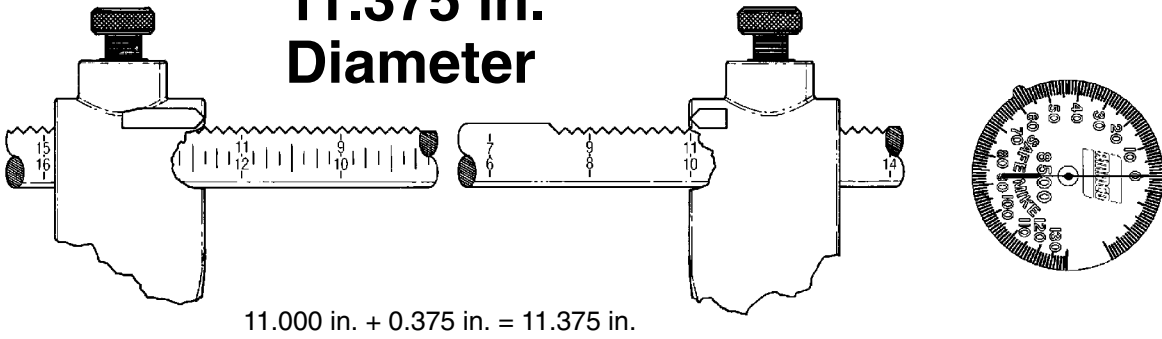
Drums that are too thin are apt to be weak and springy, and will not dissipate heat well, resulting in a loss of braking power. Defective drums should be scrapped.

**INCH** (Examples For Reading The Inch Micrometer)

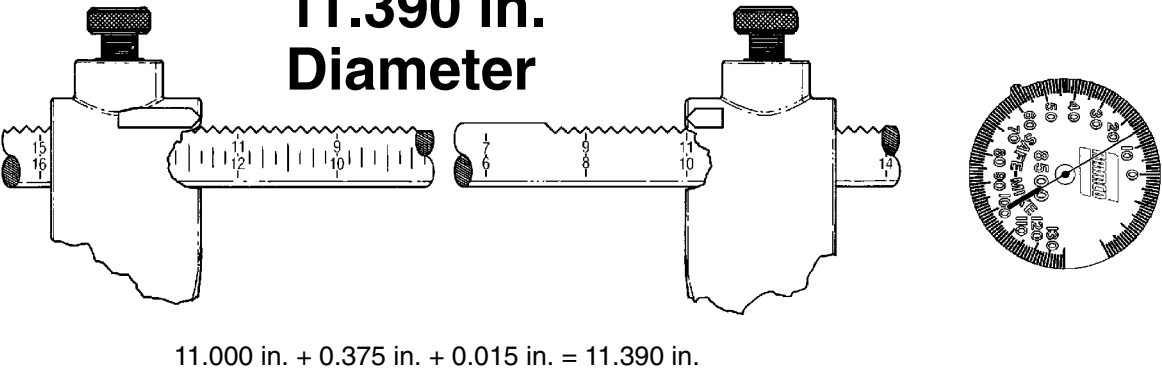
**11.000 in.  
Diameter**



**11.375 in.  
Diameter**

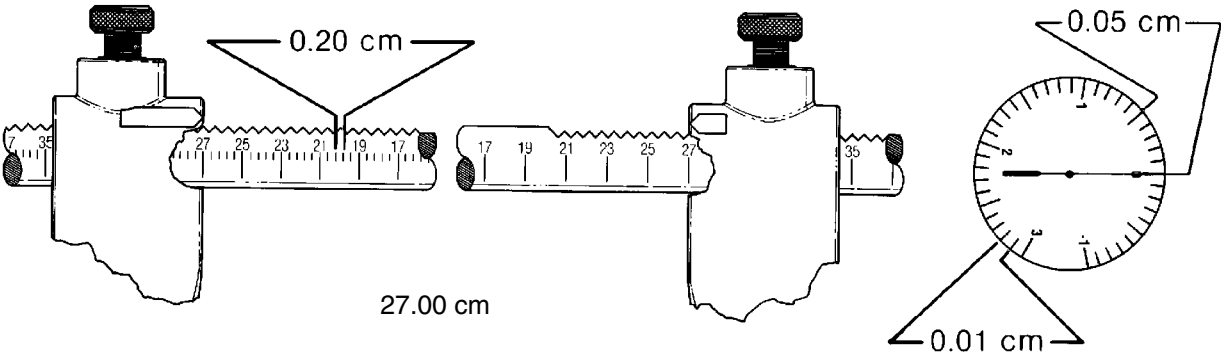


**11.390 in.  
Diameter**

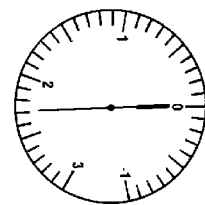
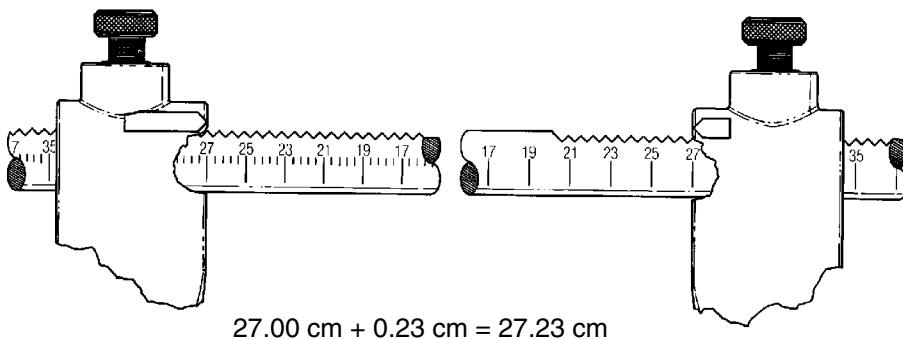
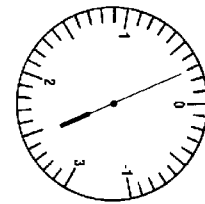
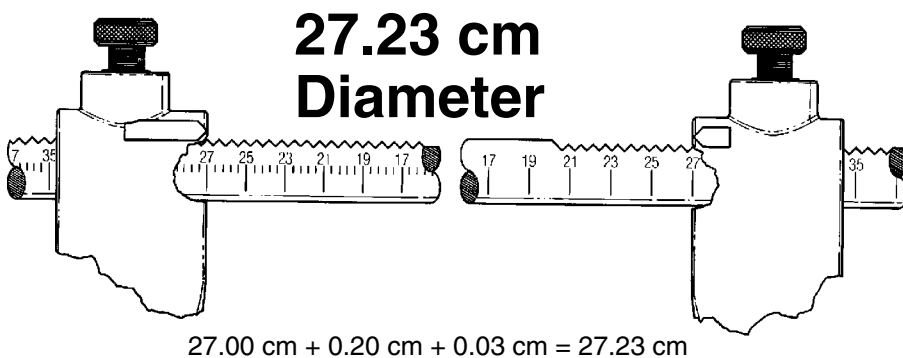
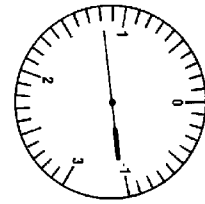
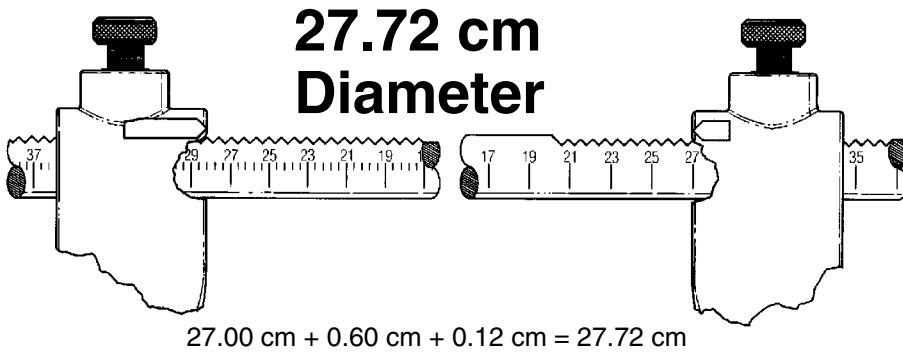
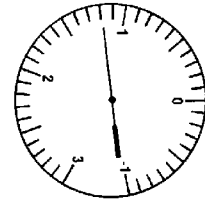
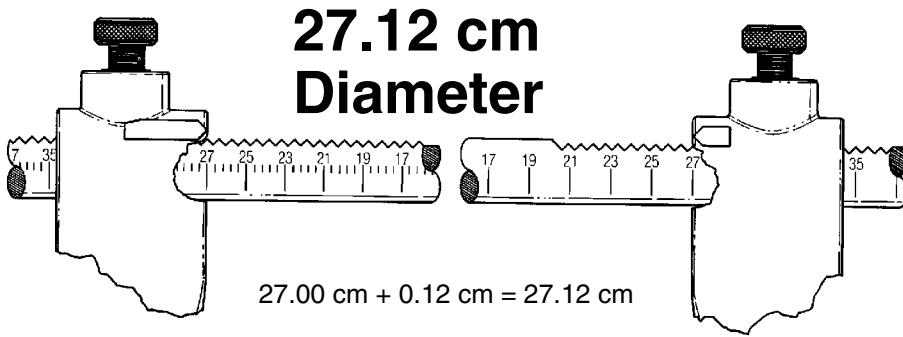
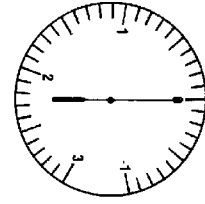
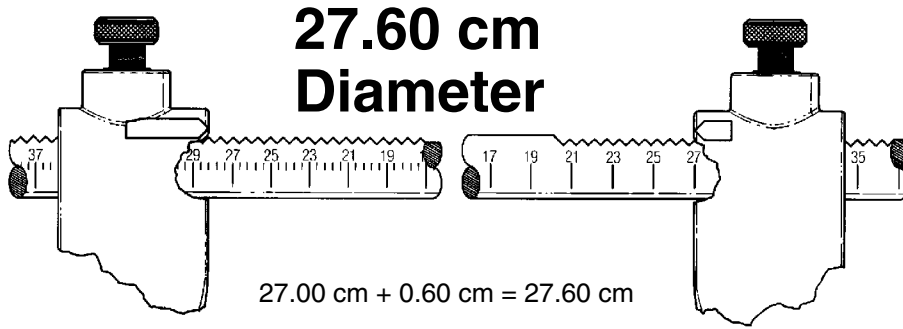


**METRIC**

**27.00 cm  
Diameter**



**METRIC** (Examples For Reading The Metric Micrometer)



ITEM	PART NO.	QTY	DESCRIPTION
1	908515	1	Indicator Body
2	*	1	Driving Gear Segment
3	*	1	Shoulder Stud
4	*	1	Dowel Pin
5	909968 *	1	Intermediate Pinion & Gear
6	*	1	Retaining Ring
7	*	1	Groove Pin
8	*	1	Backlash Spring
9	908507	1	Inch Dial Assembly (0.005)
	908507C	1	Inch Dial Assembly (0.001)
	908508	1	Metric Dial Assembly
10	908528 *	1	Crystal
11	*	1	Retaining Ring
12	*	1	Plunger
13	*	1	Retaining Ring
14	*	1	Plunger Spring
15	*	1	Plug
16	*	1	Retaining Ring
17	909994	2	Plunger Screw Assembly
18	909879	2	Locating Screw
19	903528	2	Jam Nut, 1/4-20 Hex
20	908530	1	Anvil Arm
21	906844	1	Screw, 3/8-24x1 Hex Skt. Hd.
22	906509	1	Jam Nut, 3/8-24 Hex
23	908531 <sup>1</sup>	1	Shaft, Inch Grad., 6"-16-1/8"
	908539 <sup>1</sup>	Opt.	Shaft, Inch Grad., 16"-26"
	908541 <sup>2</sup>	1	Shaft, Metric Grad., 15cm-41cm
	90853950 <sup>2</sup>	Opt.	Shaft, Metric Grad., 39cm-66cm
24	908502	1	Body Assembly, Inch (0.005)
	908502C	1	Body Assembly, Inch (0.001)
	90850250	1	Body Assembly, Metric

**NOTES:**

\* Denotes part included in repair kit (part no. 929935).

<sup>1</sup> Shaft for 908500 inch graduated micrometer

<sup>2</sup> Shaft for 90850050 metric graduated micrometer

