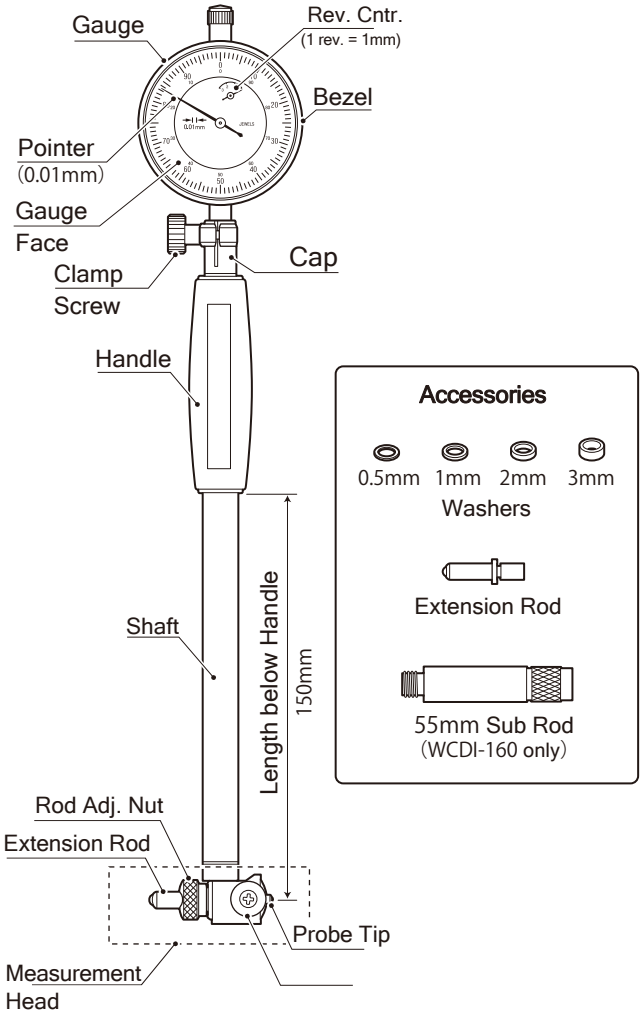
SK DIAL BORE GAUGE

Instruction Manual

Model No.: WCDI-50／WCDI-100／WCDI-160
＜combined＞

Thank you for purchasing the Dial Bore Gauge.
Please read this manual thoroughly before use for proper operation.

■ PART IDENTIFICATION



■ SPECIFICATIONS

＊Including supplied Dial Gauge

Dial Gauge		WCDI-50	WCDI-100	WCDI-160
Measuring Range	(mm)	35～50	50～100	50～160
Graduation	(mm)	0.01	0.01	0.01
＊Wide Range Acc'y	(μm)	15	18	18
＊Adjacent Error	(μm)	5	6	6
＊Repeat Accuracy	(μm)	3	3	3
Single Stroke Range	(mm)	1.2	1.6	1.6
Washer	(mm)	0.5・1・2・3mm (1 piece / size)		
Weight	(g)	440	465	540

Extension Rods：

WCDI-50・・・・35・40・45・50mm（4 pieces）

WCDI-100・・・50・55・60・65・70・75・80・85・90・95
100mm（11 pieces）

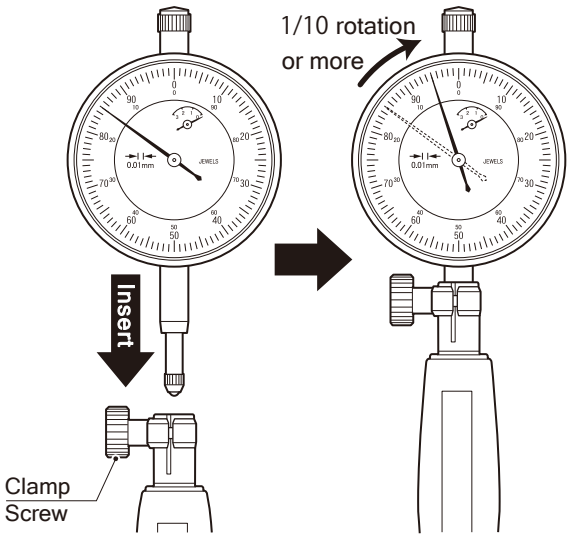
WCDI-160・・・50・55・60・65・70・75・80・85・90・95
100・105mm（12 pieces）
＋ 55mm Sub Rod (1piece)

⚠ NOTICE

- This is a precision instrument, handle with care.
- Do not disassemble or modify.
- Keep instrument away from water and oil.
- Use only with supplied Extension Rods and Washers.
- Keep instrument away from direct sunlight and high temperatures such as in a car, or near a stove or heat source.
- After use, remove dust and cutting chips, and apply rust preventative oil to Extension Rods and Washers. When not in use store in supplied storage case.
- This product is for measuring inside diameter; use only as directed. Improper use may cause accident or injury.

■ ASSEMBLY

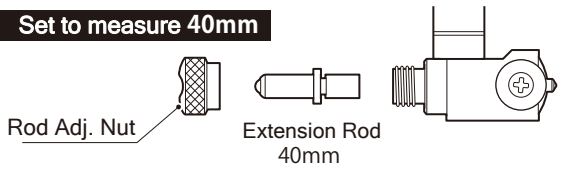
① Loosen the Clamp Screw and insert the Dial Gauge until the Pointer rotates 1/10 turn or more. Tighten the Clamp Screw to secure.



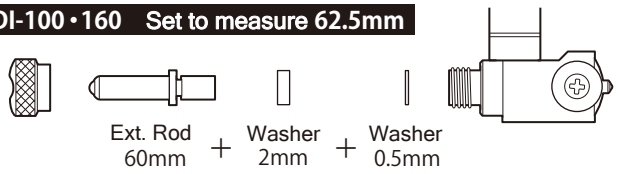
② Select the combination of Sub Rod (WCDI-160 only) Extension Rod and Washers for the dimension you want to measure. Remove the Rod Adj. Nut put on the desired Rod, Sub Rod, and Washers, and secure with the Rod Adj. Nut.

※ Please select combination with fewest number of Washers.

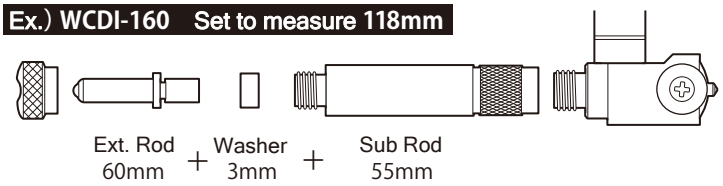
Ex.) WCDI-50 Set to measure 40mm



Ex.) WCDI-100・160 Set to measure 62.5mm



Ex.) WCDI-160 Set to measure 118mm



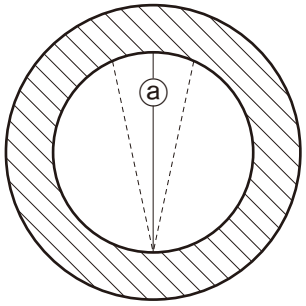
■ OPERATION

※Before use, please make sure the Measurement Head is not loose on the Handle. Tighten as necessary.

SETTING THE 0-POINT

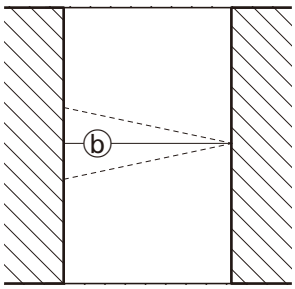
① Prepare a Ring Gauge to use as a reference standard for setting the zero-point. Insert the Measurement Head into the ring gauge.

② In the direction perpendicular to the Ring Gauge axis, position the Bore Gauge to measure diameter ⓐ shown in the cross section (Figure 1). This is the maximum distance, and the Dial Gauge will show the minimum reading. The The Guide moves to automatically position the Gauge Head at this diameter when inserted.

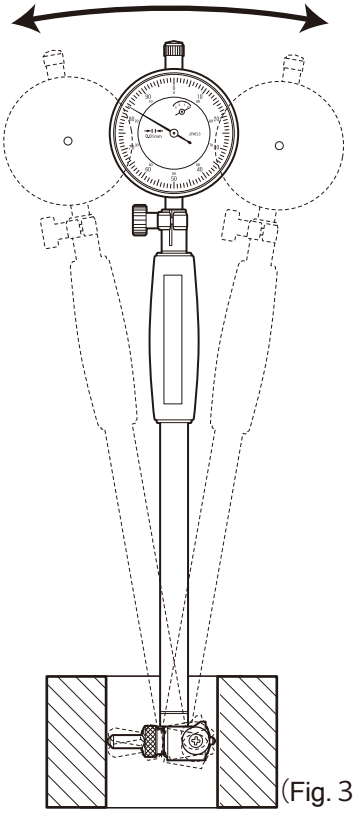


(Figure 1)

③ In the cross section shown in Figure 2, parallel the Ring Gauge axis though diameter ⓐ, position the Bore Gauge to minimize the distance ⓑ. In this position the Dial Gauge will read the maximum value.
This position is determined by manually moving the gauge and noting the position where the Pointer shows the maximum value. (Figure 3)



(Figure 2)

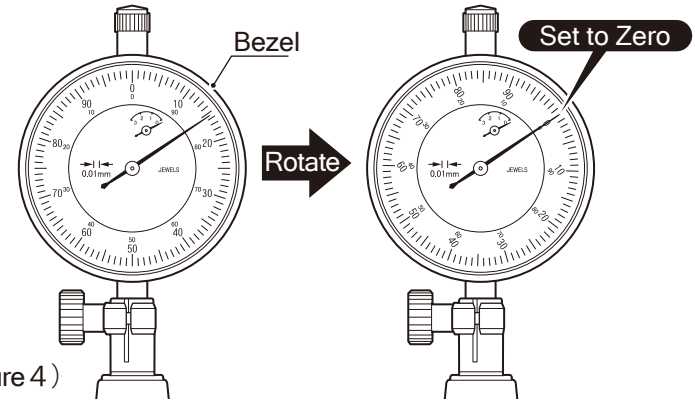

(Fig. 3)

④ The reading obtained at step ③ is the zero-point. Rotate the bezel of the gauge until the Pointer is at the zero point of the Gauge Face. (Figure 4)

MEASUREMENT

Insert the Measurement Head of the Bore Gauge into the object to be measured. As in step ③ of “Setting the 0-Point” above, pivot the gauge while checking the pointer to determine the diameter ⓑ where the indicator will show the maximum value to determine the measurement reading.

This measurement will be the difference in diameter between the part, and the reference Ring Gauge.



(Figure 4)

■ REPAIRS AND SERVICE

- If Gauge does not operate properly, or if you have any questions, please contact distributor or place of purchase.
- Please note, manufacturer is unable to respond to inquires or provide service directly. Please contact distributor or place of purchase.

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