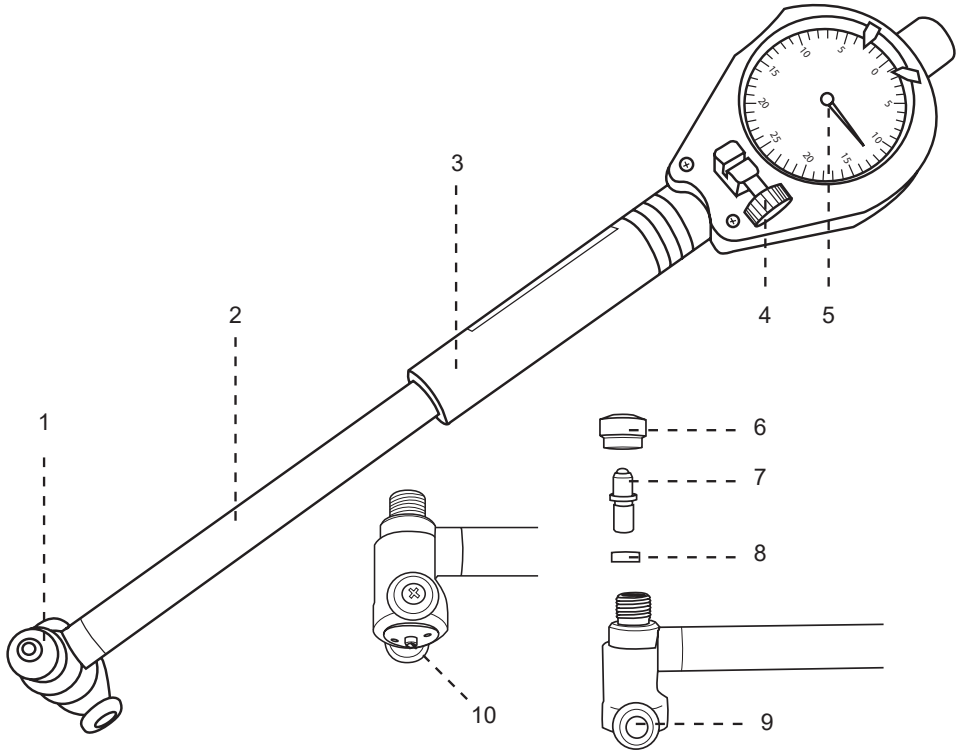
# DIAL BORE GAGE




1. Main Device
2. Joint
3. Grip
4. Screw
5. Dial Indicator
6. Anvil Locking Nut
7. Anvil or Component
8. Washer
9. Guide Device
10. Contact Point

## WHAT'S INCLUDED

| SKU # | Range | Bore Depth | No. of Anvils | Graduation | Bore Gage Accuracy | Bore Gage Repeatability |
|---|---|---|---|---|---|---|
| 303-4713 | 0.24-0.4" | 1.57" | 9 | .0005" | ±0.00059" | 0.00011" |
| 303-4715 | 0.4-0.7" | 4" | 9 | .0005" | ±0.00059" | 0.00011" |
| 303-4717 | 0.7-1.5" | 5" | 11 | .0005" | ±0.00059" | 0.00011" |
| 303-4719 | 1.4-2.4" | 6" | 6 | .0005" | ±0.00070" | 0.00011" |
| 303-4721 | 2-6" | 6" | 11 | .0005" | ±0.00070" | 0.00011" |
| 303-4746 | 2-6" | 20" | 11 | .0005" | ±0.00070" | 0.00011" |
| 303-4723 | 6-10" | 16" | 6 | .0005" | ±0.00070" | 0.00011" |
| 303-4736 | 10-16" | 16" | 6 | .0005" | ±0.00070" | 0.00011" |
| 303-4724 | 0.24-0.4" | 1.57" | 9 | .0001" | ±0.00023" | 0.000078" |
| 303-4725 | 0.4-0.7" | 4" | 9 | .0001" | ±0.00023" | 0.000078" |
| 303-4726 | 0.7-1.5" | 5" | 11 | .0001" | ±0.00023" | 0.000078" |
| 303-4727 | 1.4-2.4" | 6" | 6 | .0001" | ±0.00027" | 0.000078" |
| 303-4728 | 2-6" | 6" | 11 | .0001" | ±0.00027" | 0.000078" |
| 303-4730 | 6-10" | 16" | 6 | .0001" | ±0.00027" | 0.000078" |

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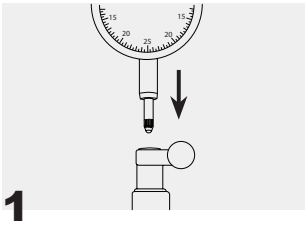
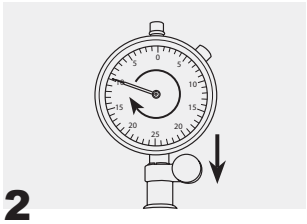
## ASSEMBLY



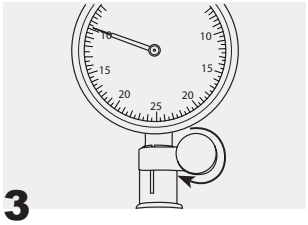
1

Insert the indicator's spindle into the joint.



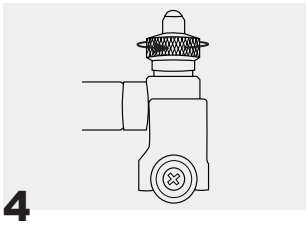
2

Press the indicator down until the hand turns about one revolution.



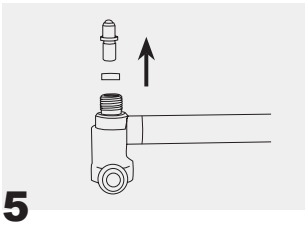
3

Turn the screw to lock the indicator in place.



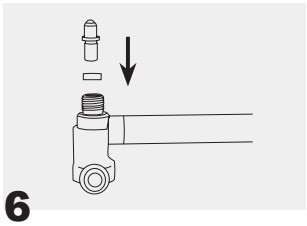
4

Turn the anvil locking nut to unlock and remove it.



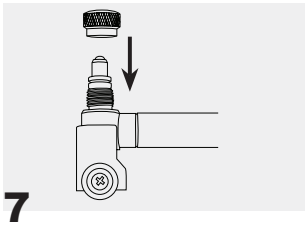
5

Remove any unwanted anvils and washers.



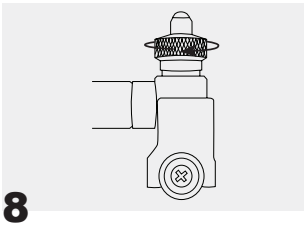
6

Install the correct anvils, washers, or combination anvils.



7

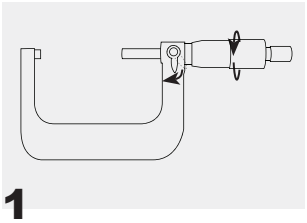
Replace the anvil locking nut.



8

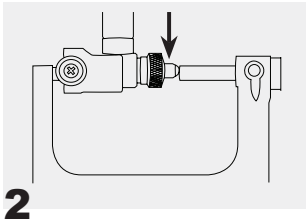
Turn it to lock it into place.

## DIMENSION SETTING



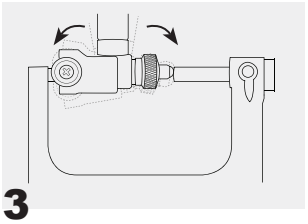
1

Set the outside micrometer to the exact dimension to be measured, then lock the spindle after the dimension is set.



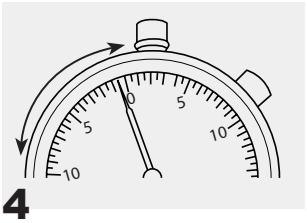
2

Place the bore gage measuring contacts across the micrometer faces.



3

Adjust the bore gage between the micrometer's spindle faces until the hand of the dial indicator is at




4

Turn the indicator's bezel until the "0" point lines up with the indicator hand's max position.

## MEASURING AND READING METHODS

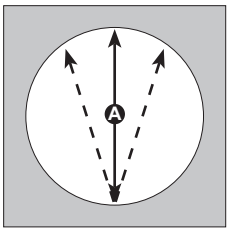



*Fig. 1*

When measuring in cross section, position the gage in position A in Fig. 1, so the hand of the indicator points to the min. reading. Then, turn the bore gage as shown in Fig. 2 to find the position A.

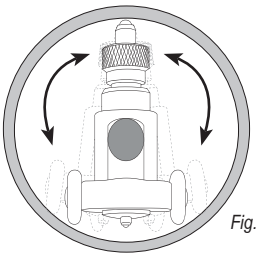


*Fig. 2*

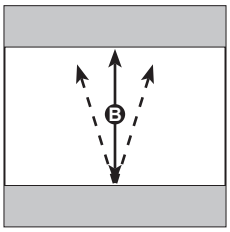



*Fig. 3*

When measuring in vertical section, position the gage in position B in Fig. 3, so the hand of the indicator points to the min. reading. Then, turn the bore gage as shown in Fig. 4 to find the position B.

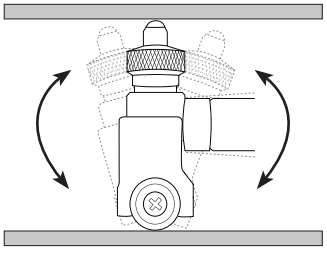
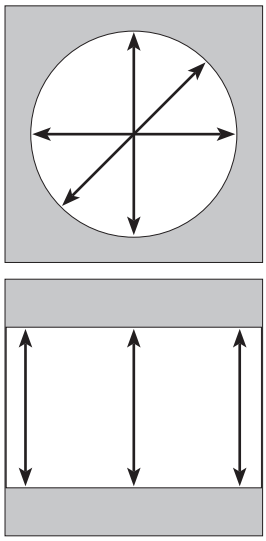


*Fig. 4*



Measure in several different positions in order to get the most accurate data.

## PRECAUTIONS

-Do not disassemble or modify the gage
-Do not subject the gage to blow or knocks
-Clean and apply antirust after using, disassemble the indicator (laying indicator with the gage together may effect the precision), place the gage in the box
-Do not embezzle the anvil, washer etc.