NOTICE

When returning the CO-AX indicator for service or repair please indicate whether or not restraining arm or feelers missing from the package are to be replaced. Also, briefly, reason for return.

READ

BEFORE

USING

Warranty of the CO-AX

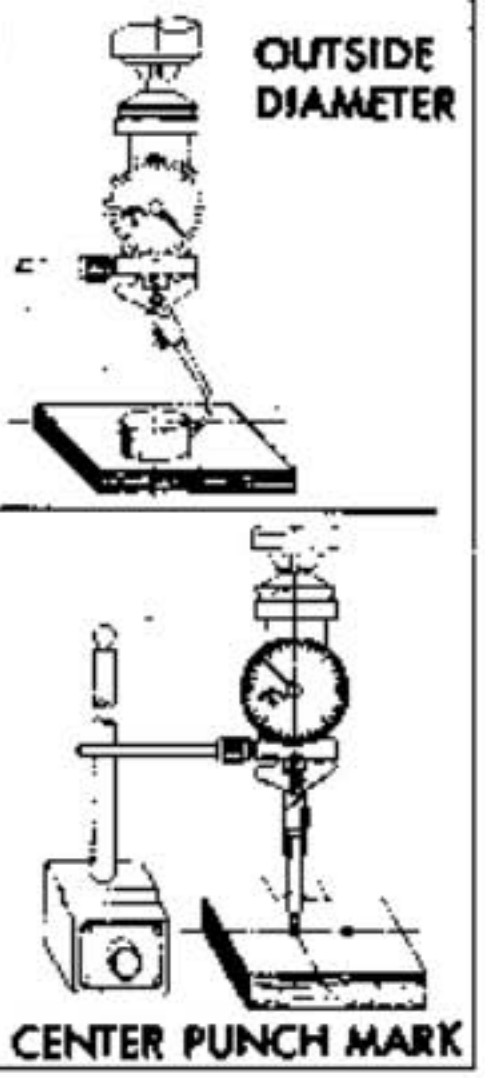
Each CO-AX indicator has been run-in under actual operating conditions and thoroughly checked out for accuracy and freedom from defects before it is approved for packaging, and is fully guaranteed against defective workmanship and materials. In the event service or repair become necessary the instrument should be returned to the factory. Reasonable charge will be made for service or parts not covered under this guarantee.

BLAKE MANUFACTURING CO.

15310 PROCTOR AVENUE
CITY OF INDUSTRY, CALIFORNIA 91745

INSTRUCTIONS

FOR USING THE CO-AX INDICATOR



Cuts Show Typical Set-Up.
For Vertical or Horizontal Use

The CO-AX indicator is designed primarily as a precision centering instrument for locating a work-piece on a horizontal or vertical machine tool while the spindle rotates under power.

The CO-AX indicator is equally useful for positioning work in the situation where it may be desirable to turn the machine spindle by hand. When turning the spindle by hand the direction and distance of location error may be determined thus: DIRECTION is indicated by the radial position of the feeler when the indicator hand is at its high, or low, point of travel. DISTANCE is indicated by the total travel of the indicator hand thru one full revolution of the machine spindle

THE FEELERS

The STRAIGHT FEELER is for use in inside diameters to approx. 4¼ inches.

The CURVED FEELER is for use on outside diameters to approx. 4¼ inches and may be used in inside diameters over approx. one inch.

The CENTER POINT FEELER is for use on center punch marks. In use, the spring loaded point should be depressed into its housing 1/32 to 1/16 inch.

Simple centering adaptees and special feelers may be made for special applications. Reference sketch will be sent on request.

SET-UP AND USE

1—Pre-position work to within the indicator travel range.

2 Place appropriate feeler in indicator rocker bracket and secure with thumb screw. Position rocker bracket on rocker friction joint such that small indicator hand is centrally located on its graduation scale when feeler is in operational contact with workpiece.

3—Start machine spindle. CAUTION: Check for interference before turning on power. Speed should not exceed 700 to 800 R.P.M. at any time.

4—Move machine table along axis of one positioning screw to a point where the indicator hand travel range has diminished to its lowest distance, thus, indicating that the work center is centered in the spindle plane in the one direction.

5—Move the machine table along the axis of the other positioning screw until the indicator hand travel range diminishes to zero, thus indicating that the work-piece center is in axial alignment with the machine spindle.

NOTE: The CO-AX indicator is fitted and tested for operation at or above 58 degrees Fahrenheit. Bearing stiffness may be present at lower temps.

DIAL GRADUATION is divided such that each division represents .0005 inch of AXIS OFFSET (Deviation from true location) when feeler is tracing a diameter of two inches. (Varies slightly with feeler angle)

CARE

Under normal conditions the CO-AX indicator should require no servicing and only the consideration in use and handling due any precision instrument. Allowance for familiarization should be made when it is first being used.