

Fig. 7. Setting the full form anvils of the Knife Edge Thread Gauge to an effective diameter plug gauge.

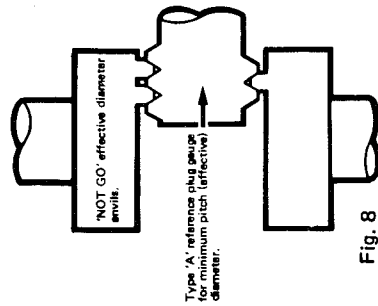


Fig. 8

#### RE-ASSEMBLY OF THE GAUGE

The anvils should then be re-assembled in the frame as in Fig. 2, great care being taken to avoid damage; the locating abutments on the frame are hard and must not be allowed to foul the crests of the thread profile on the anvils.

The anvils marked with a letter F or an H figure should face the same way as the marking on the gauge frame giving the size of the gauge.

#### SETTING AND LOCKING

Reset to setting plugs as shown in Figs. 7, 8 and 9. These setting plugs are absolutely necessary when customers undertake the regrinding operation.

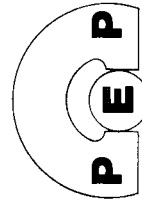
When resetting the anvils it is recommended that the initial setting be to a core figure of 0.005 in. less than that finally desired. It will then be normally possible to make the final adjustments by tension on the locking screw A only.

We recommend a setting slightly closer than final and a light tap with a hide hammer on the faces of the front anvils to relax and disperse any strains on the same.

After setting and final locking, the gauges may be sealed with lead seals. Users trade marks or initials can be stamped on the seals by means of a special punch and is a safeguard against the operator disturbing the setting of the gauge. Seals can be supplied as an extra accessory.

It is a useful precaution to recheck the core diameter of the 'GO' and 'NOT GO' gaps after resetting and for this purpose the use of Gauge Blocks is recommended. When using these however, great care must be taken not to damage the crests of the thread of the anvils, particularly those of the 'GO' gap.

If it is found necessary to supply new anvils, the complete gauge should be returned to the makers.

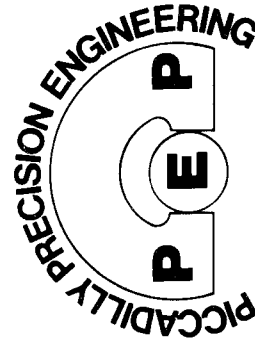


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CARE & MAINTENANCE OF KNIFE EDGE TYPE

# ADJUSTABLE THREAD CALIPER GAUGES



## GENERAL

This booklet has been written to assist users who are desirous of setting and maintaining their own gauges. It will also enable the user to obtain the maximum benefit from the system and the greatest economy in the use of the gauges themselves.

If the instructions given are faithfully carried out, the gauges will give long life with accurate performance and trouble-free assembly of the product.

## USE OF THE GAUGES

Most of the maintenance necessary is required to restore chipped or worn 'GO' anvils. The causes of this condition may be various but are generally found to be due to the incorrect application of the gauge to the work. The work should be passed from the front to the back of the anvils. Care should be taken to set the dies so that the work passes as easily as possible through the 'GO' or front anvils, without passing through the 'NOT GO' anvils.

Do not make the work a fit in the 'GO' anvils. This not only causes excessive wear on the anvils and takes a long time to inspect, but also eliminates the advantages of the tolerances available on the product.

Do not force the work through the 'GO' anvils, AND ABOVE ALL DO NOT PULL THE WORK THROUGH FROM THE BACK as shown in Fig. 1.

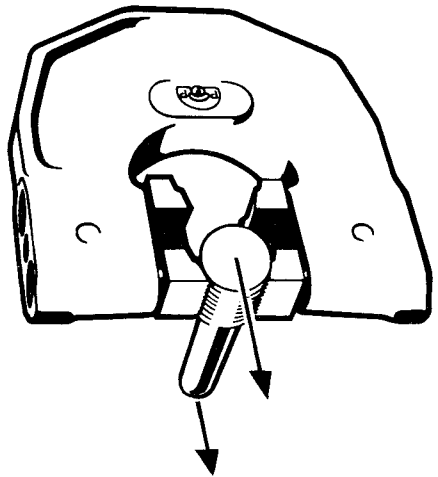


Fig. 1. Incorrect method of using the gauge. The work should never be pulled through the gauge from the back.

## REGRINDING THREADED ANVILS

### REMOVING ANVILS

First remove the lead seals at the end of the anvil holes with a small screwdriver or similar tool. Slacken locking screw A, Fig. 2, with the special adjusting key (available as an extra accessory) as shown in Fig. 3. Insert the two pegs of the key, through the two holes in the locking screw A, into the slot in the adjusting screw B, removing both A and B together. Then remove spherical locking cone C. The anvils can then be removed, except on gauges ranging from  $\frac{1}{4}$  to  $\frac{1}{2}$ . On this latter size the following procedure should be used:-

Push the 'GO' and 'NOT GO' anvils on one side of the gauge, back against the frame to the extreme position; the 'GO' anvil should be reversed from its normal position as shown in Fig. 4, before pushing back. The opposite 'GO' and 'NOT GO' anvils can now be removed, by tapping the shank with a  $\frac{5}{16}$  in. diameter brass rod, without any danger of chipping the threads on the other anvil.

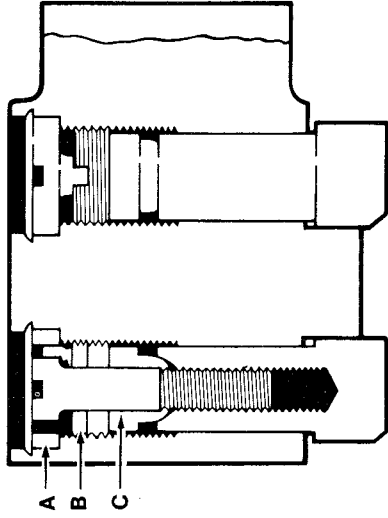


Fig. 2. A section through the anvils showing the combined fine adjustment and lock.

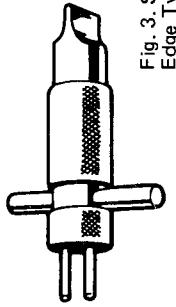
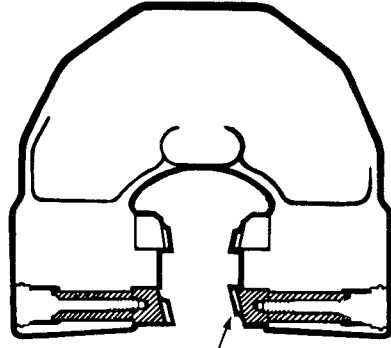


Fig. 3. Special adjusting key for setting Knife Edge Type Adjustable Thread Caliper Gauges.



'GO' anvil should be partly withdrawn and reversed so that opposite anvil may be withdrawn.

Fig. 4. Showing method of removing 'GO' anvils on gauges ranging from 0 to  $\frac{1}{2}$  in.

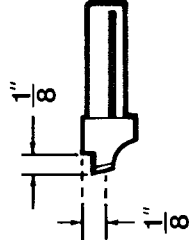


Fig. 6. Regrinding must not extend beyond  $\frac{1}{8}$  in. from the crests and  $\frac{1}{8}$  in. from the top face of the anvil.