

LEVER TYPE COLLET CLOSER MOUNTING INSTRUCTIONS

- 1) Open gear train door on rear of machine, if necessary.
Install rear end spindle adapter as follows:

Threaded Adapter - Clean threads on spindle. Thread rear end spindle adapter onto spindle and tighten with spanner wrench.

Smooth Adapter - Clean O.D. of spindle. Slip rear end adapter onto spindle and tighten set screws.

NOTE: Although Royal Products has most makes and models of lathes on file, it is sometimes necessary to provide the rear end spindle adapter with an undersize bore. The reason for providing an undersize bore is that the spindle O.D.'s for the same make and model machine may vary by as much as .01 inch. If you have received an undersized adapter it may be bored out as follows:

- a) Remove set screws and locating ring from rear end spindle adapter.
- b) Chuck rear end spindle adapter and indicate 1.400 bore to run true.
- c) Bore out to spindle diameter $+.0005/-0$.
- d) Lightly face shoulder to square it to the bore.
- e) Replace set screws and locating ring.

- 2) Indicate the locating ring on the rear end spindle adapter as follows:

- i) Set the indicator against the face of the locating ring (fig.1). Rotate the spindle by hand to check for runout. If indicator reads less than .001 T.I.R. proceed to step iii. Otherwise proceed to step ii.
- ii) Loosen screws holding locating ring to adapter and install shims behind locating ring where necessary, (fig.1). Tighten screws and indicate again. Repeat until less than .001 T.I.R. is obtained.

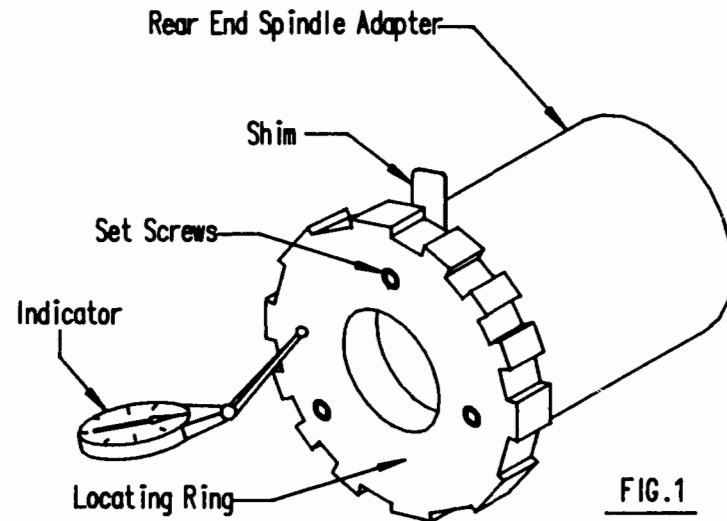


FIG. 1

- iii) Set indicator against inside diameter of locating ring, (fig.2). Rotate spindle by hand and check for runout. If indicator reads less than .001 T.I.R. the locating ring is indicated satisfactorily. If T.I.R. is greater than .001 proceed to step iv.
- iv) Loosen screws slightly, making sure not to disturb previously installed shims. Gently tap the outside of the locating ring until running true. Lock screws firmly.
- v) Check indicator reading on face of spindle again and readjust if necessary.

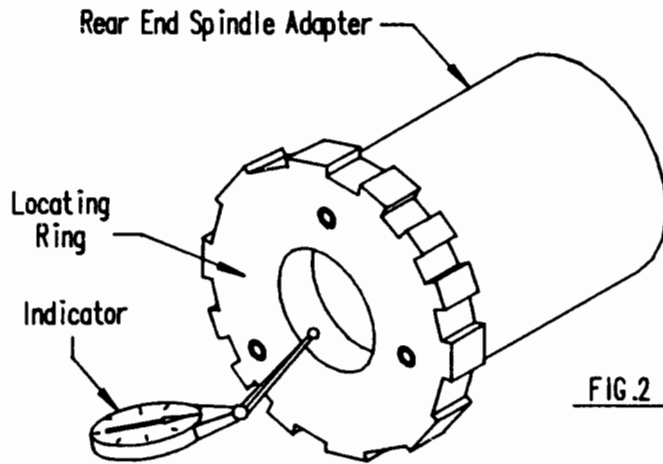
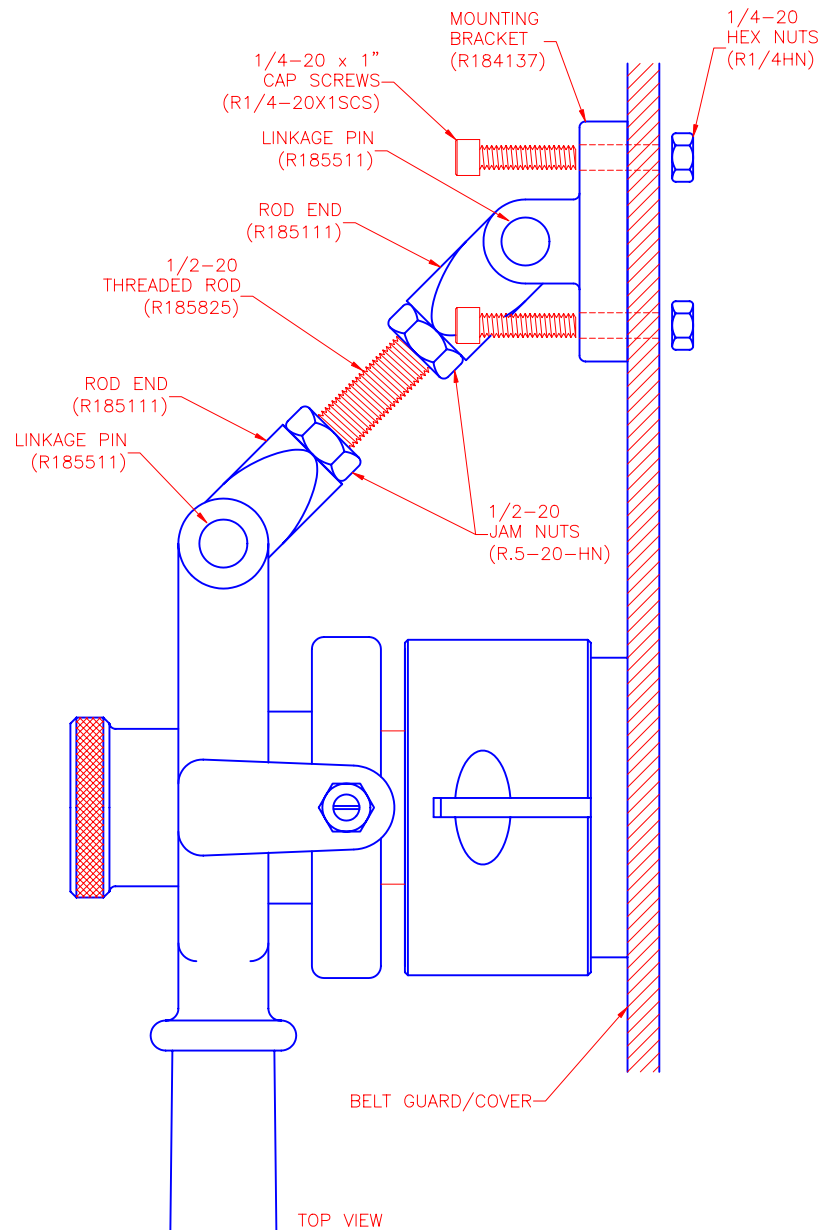


FIG. 2

- 3) Slowly swing door closed and check for interference with rear end adapter and locating ring. If interference occurs then the opening in the door must be enlarged accordingly.
- 4) Screw the nose cap onto the spindle nose. Note - nose caps are only provided for machines with threaded or L-type spindle noses.
- 5) Clean the spindle and collet adapter tapers. Lightly tap the collet adapter into the spindle by hand. The collet adapter may be removed from the spindle by passing a brass or aluminum bar through the rear of the spindle and lightly tapping the adapter. For threaded and L-type spindles the nose cap may be spun off to remove the adapter.
- 6) Remove the knurled stop nut on the tube and install the handle assembly. Replace stop nut and slide the tube assembly through the rear end spindle adapter and spindle.
- 7) Connect linkage according to separate instruction sheet.
- 8) Place collet into adapter, release locating finger, and thread collet into tube. Open and close handle and adjust to achieve desired tension on workpiece. After tension is set snap locating finger into closest notch on locating ring.
- 9) Make final adjustments to linkage. Handle should move an equal distance from left to right of 90° to the spindle centerline.

Standard Linkage (R182146) Mounting Instructions for 5-C Levertype Collet Closer



- 1) Connect threaded rod to handle assembly by inserting linkage pin through handle and rod end.
 - 2) Connect mounting bracket to other end of threaded rod with linkage pin.
 - 3) Swing bracket until it makes contact with door or guarding.
 - 4) Locate a suitable mounting position for bracket on door or guarding. The spot chosen should be such that the threaded rod is parallel with the floor and makes an angle with the door or guarding of no less than 45° but no greater than 90°. The jam nuts may be loosened and the rod ends rotated to increase or decrease the rod length if necessary.
 - 5) Once the mounting location has been determined hold bracket in place and work handle left and right to ensure smooth operation.
 - 6) Drill four holes in door/guarding corresponding to the four holes in the bracket and secure bracket to machine with 1/4-20 cap screws and nuts supplied. (For some machines it may be necessary to drill and tap mounting holes in the headstock and mount the bracket with alternate hardware.)
- Any questions, call a Royal Products application engineer at 1-800-645-4174