

neck, adjust turning tool Ⓚ to the desired cutting depth. Turn the case neck to the proper length. The manual feed speed should be slow enough to let the turning tool give a smooth uniform cut. Slide the adjustment bushing on the shaft until it contacts the cutter guide to the set length. Tighten the setscrew. Continue to turn the handle as the cutter head is slowly returned over the turned case neck. Your manual turning tool is now set and ready for the next case.

#### TIPS AND REMINDERS

- To keep from damaging the feed threads, remember to lift the feed nut when sliding the shaft to align the case and when returning the cutter head over the turned case neck.
- If necessary, make fine adjustments to the depth or length of cut.
- Occasionally lubricate the shaft with a light oil. The pilot should be lubricated as needed with case resizing lubricant.

#### Pilot/Neck Reamer Combinations

.17 Caliber	98877	7mm Caliber	98883
.223 Caliber	98878	.30 Caliber	98884
6mm/.243 Caliber	98879	8mm Caliber	98886
.25 Caliber	98880	.338 Caliber	98887
6.5mm Caliber	98881	.35 Caliber	98889
.270 Caliber	98882	.375 Caliber	98891

# RCBS

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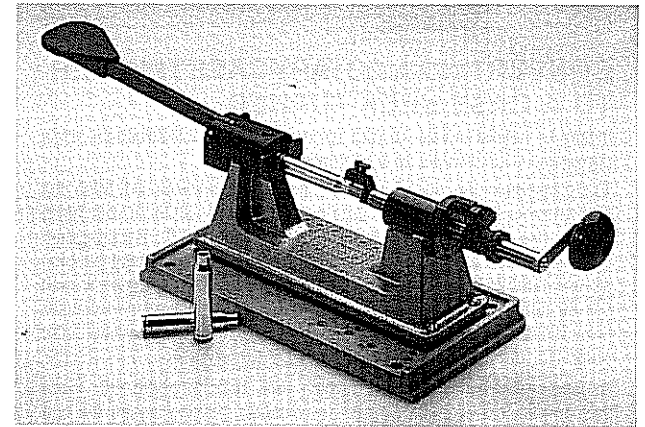
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# RCBS

## CASE NECK TURNING TOOL



PRODUCT INSTRUCTIONS

## INTRODUCTION

The RCBS Case Neck Turning Tool was designed for the reloader desiring a more accurate round. The tool allows your RCBS Rotary Case Trimmer-2 to be converted to an accurate case neck turner in minutes. While the outside of the case neck is being turned, the pilot/neck reamer removes any excess brass from inside the case neck.

A medium size screwdriver and a  $\frac{5}{16}$ " Allen wrench should be the only tools necessary for the conversion. An accurate gauging device, such as a post micrometer for measuring the case neck thickness would also be helpful.

Cases to be turned should first be full-length resized, and then trimmed if necessary. Trimmed cases should be deburred and beveled with an RCBS Deburring Tool.

The Case Neck Turning Tool comes with an auto-feed but the turner can be fed manually if desired. This conversion is described in another section.

As with all reloading operations, be safety conscious. **Always wear adequate eye protection.**

## CONVERTING A ROTARY CASE TRIMMER TO A CASE NECK TURNER

It may be helpful to refer to your rotary case trimmer instructions while converting your trimmer to a case neck turner.

To disassemble the rotary case trimmer, refer to photo #1. With the case trimmer facing you (the cutter assembly knob will be to your right) remove the standard case trimmer cutter from shaft  $\textcircled{D}$ . Remove shaft  $\textcircled{D}$  from cutter guide  $\textcircled{C}$ . Loosen the setscrew in adjustment bushing  $\textcircled{A}$  and remove bushing  $\textcircled{A}$  with fine adjustment bushing  $\textcircled{B}$  from shaft  $\textcircled{D}$ . Be careful not to lose the small brass buffer from behind the setscrew. From the underside of the case trimmer, remove the screw holding cutter guide  $\textcircled{C}$ . Remove the guide.

To reassemble using the neck turning tool, refer to photo #2. Place neck turning cutter guide  $\textcircled{E}$  on case trimmer, making certain the end with the short distance between the screw hole and the end of guide  $\textcircled{E}$  is toward the center of the case trimmer. A portion of guide  $\textcircled{E}$  should

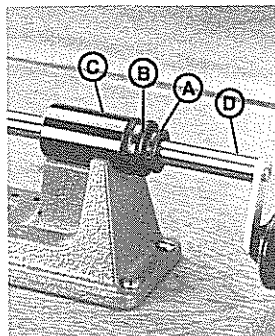


Photo #1

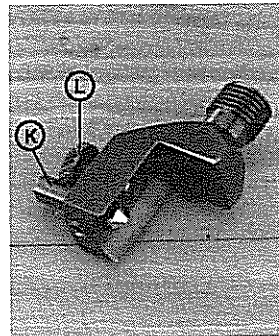


Photo #3

extend over the outside end of the case trimmer base. Secure the guide to the trimmer base and secure the case trimmer to a steady work surface.

Slide clamp ring  $\textcircled{F}$  (with auto-feed assembly attached) onto the cutter guide, making certain the auto-feed assembly is up and pointing to the handle knob. When clamp ring  $\textcircled{F}$  is flush with the cutter guide, tighten the setscrew.

Slide the feed screw  $\textcircled{G}$  onto the shaft with the end containing the setscrew toward the handle knob. Remove the setscrew and insert the brass buffer. Replace the setscrew but do not tighten.

Turn feed nut  $\textcircled{H}$  counter-clockwise until there is slight tension on torsion spring  $\textcircled{I}$ , making certain the spring seats properly in the clamp ring and feed nut. Continue to turn until there is sufficient clearance to insert the shaft into the cutter guide. With the shaft protruding through the guide, gently release the feed nut onto the feed screw. Attach cutter head  $\textcircled{J}$  to the shaft.

To adjust for turning, refer to photo #3. Select the correct pilot/neck reamer and insert the shank completely into the cutter head. Tighten the setscrew. With the case properly in the collet, and the pilot just started into the case neck, slightly loosen the setscrew holding turning tool  $\textcircled{K}$ .

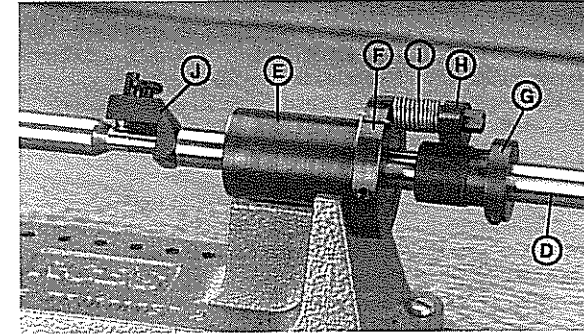


Photo #2

Turn adjustment screw  $\textcircled{I}$  until desired cutting depth is reached. **NOTE:** Only remove the minimum amount of brass necessary to achieve uniform neck thickness.

Begin turning the handle clockwise, feeding the cutter head onto the case neck (manually or using the auto-feed) until the turning tool contacts the shoulder of the case. The cut should blend in with the shoulder. Cutting too deep into the shoulder will weaken the case. Lift the feed nut and slide the feed screw up against the cutter guide. Tighten the setscrew. The length of the cut is now set.

With the feed nut raised, continue turning the handle clockwise. Gently pull on the handle, slowly backing the cutter head off of the case neck. Remove the case. The auto-feed neck turner is now set and ready for the next case.

## MANUAL CASE NECK TURNING

To set up your case trimmer for case neck turning without using the auto feed device, just replace the trimmer cutter with the turning cutter head (photo #3) and install the proper pilot/neck reamer combo.

With the case properly in the collet and the pilot just started in the case