

RCBS®

POWDER THRU EXPANDER FOR PRO 2000

LIMITED LIFETIME WARRANTY

Your Powder Thru Expander for Pro 2000 is warranted to be free from defects in material or workmanship for as long as the original owner owns it. This warranty is extended only to the original consumer purchaser. This warranty excludes any electrical components or products. All RCBS products are intended for non-commercial use by hobbyists. Any other use of these products will void the warranty. Should you believe that your Powder Thru Expander for Pro 2000 is defective in material or workmanship, you must return the Powder Thru Expander for Pro 2000 to RCBS postage paid for evaluation. If defective, the product will be repaired or replaced at RCBS' option, at no charge.

Send a dated proof of purchase for return shipping and handling, along with the Powder Thru Expander for Pro 2000 to:

RCBS
605 Oro Dam Blvd East
Oroville, California 95965

Warranty services cannot be provided without meeting the above requirements.

THIS LIMITED LIFETIME WARRANTY DOES NOT COVER DEFECTS OR DAMAGE RESULTING FROM: CARELESSNESS, MISUSE, COMMERCIAL USE, ABUSE, IMPROPER INSTALLATION, MODIFICATION, OR NORMAL WEAR AND TEAR. THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED TO THE DURATION OF THIS LIMITED LIFETIME WARRANTY. OROVILLE OPERATIONS IS NOT LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT AND UNDER NO CIRCUMSTANCES SHALL OROVILLE OPERATIONS BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. HOWEVER, SOME STATES DO NOT ALLOW LIMITATIONS ON INCIDENTAL, OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

The above warranty provides the sole and exclusive warranty available to the customer in the event of a defect in material or workmanship in the Powder Thru Expander for Pro 2000. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

SAFETY

Reloading is an enjoyable and rewarding hobby that can be conducted safely. But, as with any hobby, carelessness or negligence can make reloading hazardous. This product has been designed from the beginning with the user's safety in mind. When reloading, safety rules must be followed. By observing these rules, the chance of a hazardous occurrence causing personal injury or property damage is minimized.

GENERAL

- Use all equipment as the manufacturer recommends. Study the instructions carefully and become thoroughly familiar with the operation of the product. If you do not have written instructions, request a copy from the equipment manufacturer.
- Do not take short cuts. Attempting to bypass established procedures is an invitation to an accident.
- Observe "good housekeeping" in the reloading area. Keep tools and components neat, clean and orderly. Promptly and completely clean up primer and powder spills.

- Reload only when you can give your undivided attention. Do not reload when fatigued or ill, or under the influence of medications or alcohol.
- Develop a reloading routine to avoid mistakes which may prove hazardous. Do not rush - load at a leisurely pace.
- Always wear adequate eye protection to protect your eyes from flying particles. You assume unnecessary risk when reloading without wearing safety glasses.

LOADING DATA

- Use only laboratory tested reloading data. We highly recommend the current Hodgdon Reloading Manual.
- OBSERVE ALL WARNINGS ABOUT THE USE OF MAXIMUM LISTED LOADS

INTRODUCTION

The Powder Thru Expander for Pro 2000 is designed to allow expanding of the case mouth while dropping a powder charge. This will allow for one more usable station in the Pro 2000 Press. The Powder Thru Expander for Pro 2000 features a M-style expander which allows the user to expand a case to bullet diameter. The advantage of the M-style design is that it provides a stepped "lead-in" to the case mouth to help align the bullet during seating. This M-style expander design works equally well with jacketed, plated or lead bullets. The M-style expander will work in conjunction with case mouth flare(bell) for use with lead bullets. Jacketed bullets will, when correctly sized, "snap" into the upper expanded section. The case mouth flare(bell) is optional with jacketed bullets unless using the RCBS Pistol Bullet Feeder (sold separately). The RCBS Pistol Bullet Feeder requires you to expand the case mouth .030" over bullet diameter for proper function. A case mouth flare(bell) of a specific bullet diameter plus .030" is a good guide to follow. For example: a .451" diameter bullet + .030" = .481" case mouth flare(bell).

CASE PREPARATION

Trim cases to the same length to ensure consistent case mouth expansion and bullet crimp during the seating process. Untrimmed cases of varying lengths will result in inconsistent expanded diameters at the case mouth.



Photo 1

ASSEMBLY

Your Powder Thru Expander is shipped with rust preventative oil and must be thoroughly cleaned, internally and externally. Spray ALL surfaces with Outers Crud Cutter or wipe with alcohol to remove all oil. Failure to do this will cause inconsistent powder charges and erratic performance.

Detach the Return Spring and remove the Thumb Screw from the Powder Measure Linkage on your Pro 2000 Press(Photo 1). Remove the Powder Measure Assembly from the lower Powder Die and remove any powder left in the hopper. Remove the Pistol Drop Tube from the Powder Die. Insert the desired Powder Thru Expander into the Powder Die, funnel end up (Figure 1). Re-install the Powder Measure Assembly into the Powder Die.

NOTE: The Large Rifle Drop Tube is necessary for 9mm, .40 S&W and .45 ACP cases. You must adjust the Powder Measure position if using the Large Rifle Drop Tube. Loosen the two Button Head Cap Screws on the Upper Bracket 1 to 1-1/2 turns (Photo 2). While holding the Upper Bracket slide the Powder Measure Assembly upward until the hole in the link for the Thumbscrew aligns with the hole in the Upper Bracket. Tighten the two Button Head Cap Screws. Reattach Thumb Screw but do not reattach the Return Spring at this time.



Photo 2

SET UP

It is necessary to 'bottom out' the Powder Measure Metering Screw in order to expand/flare a case. Screw the Powder Measure into the press 3-4 turns. Position a SIZED case in the expander station, raise the Ram then screw the Powder Measure assembly down until the Powder Measure Metering Screw bottoms out against the upper part of the slot in the casting. Lower the ram slightly and adjust the Powder Measure assembly down a half turn. Cycle the case through the Powder/Expand station. Check the expansion/flare of the case mouth. Adjust the assembly further down until you obtain the desired amount of expansion/flare of the case mouth.

There are two expansion/flaring options on the Powder Thru Expanders. The first is a M-style expanding portion that will allow a bullet to slightly enter the case. This feature keeps the bullet stationary in the case and reduces tilting of the bullet while indexing. Above this feature is the traditional flare (bell). Flare (bell) the case mouth if you have a RCBS Pistol Bullet Feeder installed on your Pro 2000 Press or are using lead bullets. Adjusting the desired amount of expansion/flare is a 'trial and error' operation.

Jacketed/plated bullets: check if one of your jacketed/plated bullets will "snap" into the case mouth. If it does, simply lock the Powder Measure in place to the Die Plate. If not, turn the Powder Measure down another half turn and run the case back into the expander. Check if the bullet will "snap" into the case mouth. Repeat until the desired setting is found then lock the Powder Measure Lock Ring. This is a 'trial and error' adjustment. You can, if desired, put case mouth flare (bell) on the case mouth. Simply adjust the Powder Measure down until case mouth flare (bell) is seen or measured.

Lead bullets: set the Powder Thru Expander based on the bullet diameter + .030" setting. Measure the case mouth, adjust the Powder Measure down and cycle the case through the Expander. Measure the case mouth again. Adjust the Powder Measure down until you achieve the bullet diameter + .030" reading and then lock the Powder Measure Lock Ring.

At this point your Powder Measure may not be situated in a desirable position. To turn the Powder Measure to a desired position, slightly loosen the Top Spring Anchor and two Button Head Cap Screws in the Lower Bracket on the Powder Die, (Photo 3) about 1 - 1-1/2 turns. Turn the Powder Measure Assy to your desired location. Tighten the Cap Screws and Top Spring Anchor. Check the expansion/flare on the case. Reattach Return Spring.



Photo 3

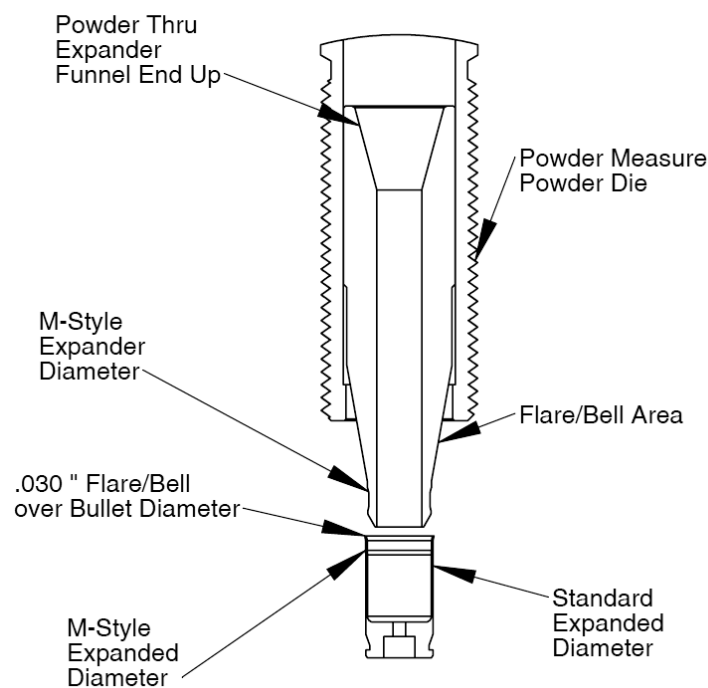


Figure 1

USE

You are now ready to load using the Powder Thru Expander in your Pro 2000 Reloading Press. Refer to your Pro 2000 Reloading Press Instructions for operation information.

MAINTENANCE

Periodically clean Powder Measure components and Powder Thru Expander. Use Outers Crud Cutter or alcohol to remove powder residue

Customer Service

530-538-2699

e-mail:rcbs.tech@rcbs.com

or visit our website at www.rcbs.com

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