

# **RCBS**®

## **Pro 2000®**

### **PROGRESSIVE RELOADING PRESS**



PRODUCT INSTRUCTIONS

**⚠ WARNING**

Before using the RCBS Pro 2000 manual indexing progressive press, read these instructions carefully to fully learn how to safely operate the related reloading equipment. Failure to properly operate the related reloading equipment can result in severe personal injury and/or equipment damage.

**If you have any questions while assembling or operating this tool,**

**Call us at 1-800-533-5000 or 1-530-533-5191**

**Monday – Thursday 6:30 am – 4:00 pm Pacific Time**

(hours may vary)

Or email us at [rcbs.tech@atk.com](mailto:rcbs.tech@atk.com)

This instruction manual contains specific safety and operating information. It should be considered a permanent part of your reloading equipment and remain with the equipment at all times for easy reference.

**LIMITED LIFETIME WARRANTY**

Your Pro 2000 reloading press 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. 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 Pro 2000 reloading press is defective in material or workmanship, you must return it to Ammunition Accessories Inc. through its Oroville operation (hereinafter "Oroville Operations") postage paid for evaluation. If defective, the product will be repaired or replaced at Oroville Operations' option, at no charge.

Send a dated proof of purchase to Oroville Operations for return shipping and handling, along with the Pro 2000 to:

Ammunition Accessories Inc.,  
Oroville Operations  
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 reloading press. 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 SPEER Reloading Manual.
- OBSERVE ALL WARNINGS ABOUT THE USE OF MAXIMUM LISTED LOADS

## PRIMERS AND POWDER

- Store primers and powder beyond the reach of children and away from heat, dampness, open flames and electrical equipment. Avoid areas where static electricity is evident.
- DO NOT use primers of unknown identity.
- Dispose of unknown primers in accordance with applicable regulations.
- Keep primers in the original factory container until ready to use. Return unused primers to the same factory packaging for safety and to preserve their identity. Primer packaging is designed to provide safe storage.
- DO NOT store primers in bulk. The blast of just a few hundred primers is sufficient to cause serious injury to anyone nearby.
- DO NOT force primers. Use care in handling primers.
- DO NOT have more than one can of powder on the bench at one time. Powder cans should be stored away from the bench to avoid picking up the wrong one.
- DO NOT use any powder unless its identity is positively known. The only positive identification is the

- manufacturer's label on the original canister. Discard all mixed powders and those of uncertain identity.
- If you use a powder measure, replace the lids on both the powder hopper and powder can after the powder hopper has been filled.
- When using a powder measure, settle the powder in the powder hopper before charging any cases. Throw and check the weight of at least ten charges. This will assure you that the correct powder charge is being thrown.
- When you finish a reloading session, pour any remaining powder back into its original factory container. This will preserve the identity and shelf life of the powder.
- DO NOT smoke while reloading.

## RECORD KEEPING

- Keep complete records of reloads. Apply a descriptive label to each box showing the date produced, and the primer, powder and bullet used. Labels for this purpose are packed with SPEER bullets.
- Never attempt to guess at the identity of your ammunition.

*Because RCBS has no control over the choice of components, the manner in which they are assembled, the use of this product, or the firearms in which the resulting ammunition may be used, we assume no responsibility, expressed or implied, for the use of ammunition reloaded with this product*

## UNPACKING

Refer to the list below to Identify parts as you unpack your new Pro 2000.

1. Bullet Tray
2. APS Strip Loader
3. APS Strip Loader Handle
4. Spent Primer Tube
5. Press Assembly
6. Die Plate
7. Uniflow Powder Measure
8. Handle Assembly
9. Bin #1 (Contains the following parts)
  - Ammo Bin
  - **Pro 2000 parts bag #1**
    - Hex key wrench 5/64" (Diagram A)
    - Hex key wrench 3/32" (Diagram A)
    - Hex key wrench 1/8" (Diagram A)
    - Hex key wrench 9/64" (Diagram A)
    - Hex key wrench 5/16" (Diagram A)
    - Return Spring (Diagram A)
    - Return Spring Plate (Diagram A)
    - Handle Nut
    - 8-32 X 1/4" Socket Head Cap Screw (2) (Diagram A)
    - 8-32 X 3/8" Socket Head Button Screw (2) (Diagram A)

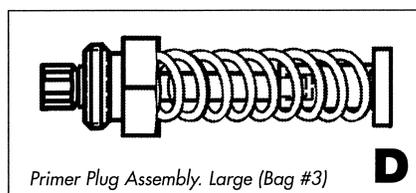
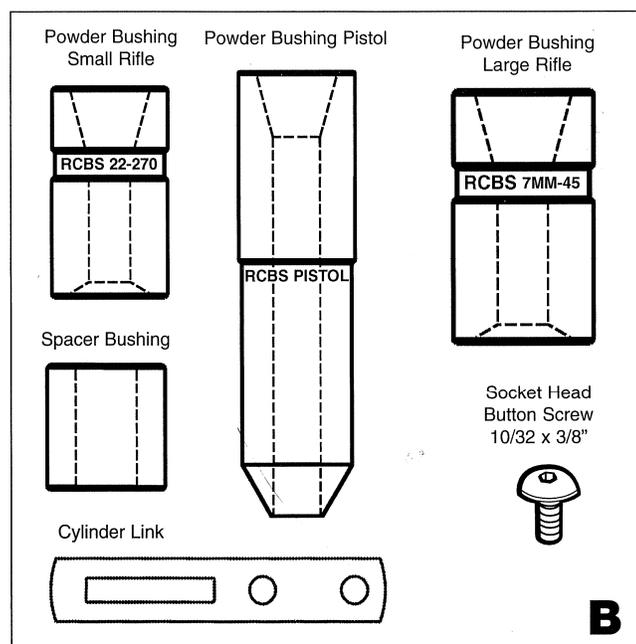
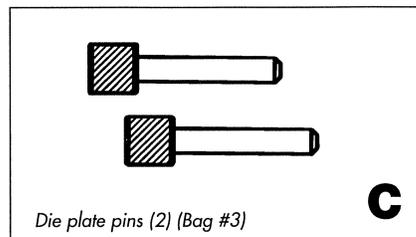
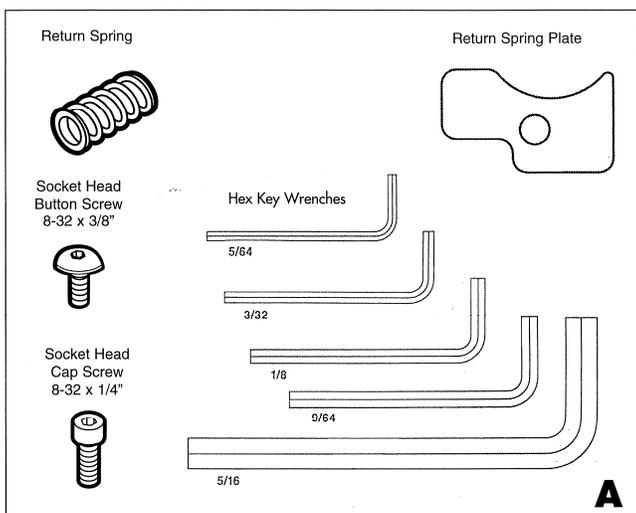
### • Pro 2000 parts bag #2

- CAPM\* spacer bushing (Diagram B)
- CAPM\* powder bushing, Lg. rifle (Diagram B)
- CAPM\* powder bushing, Pistol (Diagram B)
- CAPM\* powder bushing, Sm. rifle (Diagram B)
- Cylinder Link (Diagram B)
- 10-32 x 3/8" Button Head Cap Screw (2) (Diagram B)

\*CAPM: Case Activated Powder Measure

### • Pro 2000 parts bag #3

- Die Plate Pins (2) (Diagram C)
  - Detent ball 3/8" diameter
  - Detent spring
  - Primer Plug Assembly, Large (Diagram D)
  - Shell Plate Shoulder Bolt
  - Micrometer Metering Screw Assembly, Small
  - Micrometer Metering Screw, Large
  - Star Wheel
  - Spent Primer Bottle
  - Spent Primer Bottle Cap
10. Bin #2 (Contains the following parts)
    - Ammo Bin
    - UPM Cylinder, Small
    - UPM Cylinder, Large



### PRESS ASSEMBLY

1. Select a solid bench on which to mount the Pro 2000 Press. You must use the two slots for mounting holes (use casting as a template). For benches with limited space, or to increase the rigidity of your bench, try our Accessory Base Plate (pn 09280), available through your local dealer. See photo below.



RCBS Accessory Base Plate

2. Select an area with approximately one foot of clearance on each side of the Pro 2000 Press. Install with two 3/8" bolts, or four 1/4" bolts, length to be determined by the thickness of your reloading bench (mounting hardware not included).



Photo 1

3. Install the Pro 2000 handle and tighten the handle nut. See photo 2

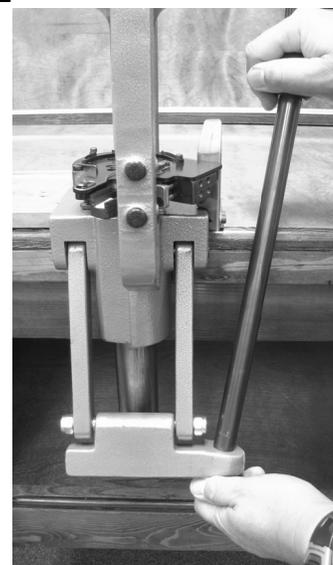


Photo 2

4. Install the Bullet Tray with two 8-32x1/4" socket head cap screws(A). Attach two Ammo Bins to the front of the Bullet Tray(B). See photo 3

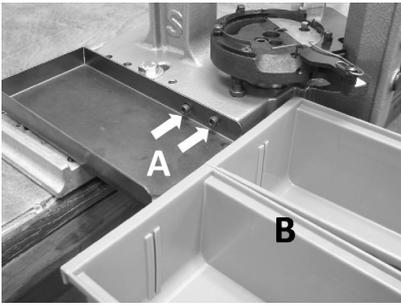


Photo 3

5. Slide the Bottle Cap over end of Spent Primer Tube down to flared end and attach Bottle to Cap. Next, slide on the Return Spring Plate with the squared section pointed at the Bullet Tray as shown in photo 4, then slide on the Spring.

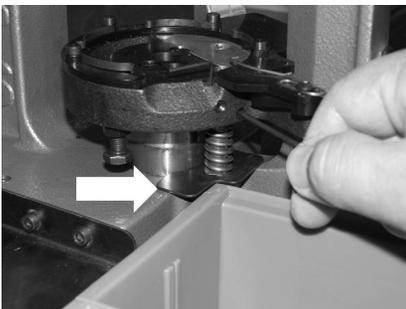


Photo 4

6. Raise the Ram to the top of the press stroke and install the Return Spring Plate, Spring, Spent Primer Tube and Bottle assembly by securing the setscrew at the bottom side of the Shell Plate Holder Assembly. *NOTE: The Return Spring Plate must rest on top of the Press Frame. See photo 4 above.*

#### CALIBER SET UP

The following steps should be completed for every caliber changeover.

1. Install the Detent Spring and Ball into Shell Plate Holder. See photo 5.

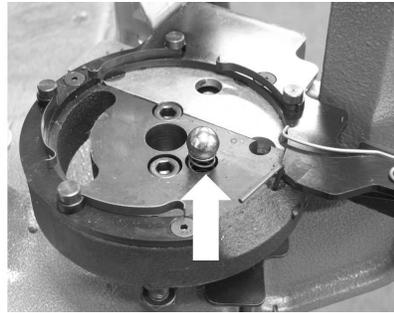


Photo 5

2. Attach Star Wheel to Shell Plate using two 8-32x3/8" socket head button screws.
3. Install the Shell Plate onto the Shell Plate Holder assembly with the Shoulder Bolt and 5/16" hex wrench. See photo 6



Photo 6

4. Loosen the 5/64" SHSS in the shell plate holder assembly and adjust Case Eject Wire to point to the rear of the shell holder slot. Tighten SHSS using the included 5/64" hex key wrench. See photo 7.



Photo 7

5. The Small Primer Plug assembly is factory installed. Replace with the Large Primer Plug assembly if desired.

6. Tighten the primer plug assembly with a 7/16" open-end wrench (not included). See photo 8.



Photo 8

7. Insert a case into station 1. Loosen the 3/32" BHCS, adjust station 1 case holder spring to barely touch the rim of the case, hold spring in place and tighten BHCS. Use included 3/32" hex key wrench. Remove the case. See photo 9. *NOTE: This adjustment must be made each time you change shell plates.*



Photo 9

8. Thread in the Case Activated Powder Measure assembly into Station 3 of the Press Frame.
9. Install Die Plate and lock into place with the two Die Plate Pins. See photo 10. The two outside holes are for pin storage when Die Plate is removed.

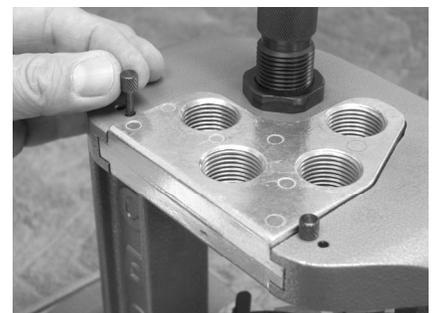
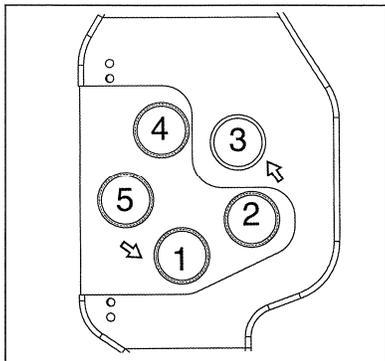


Photo 10

## PRESS SET-UP

Refer to reloading Die instructions and Powder Measure instructions for individual adjustment and set-up. See diagram for position and rotation.

Indexing is in a counter-clockwise direction.



## STATION SET-UP OPTIONS

### Station 1:

1. Sizing Die
2. Lube Die is optional when reloading bottleneck cartridges.
3. Decap Die: Size and expand in Station 2 with an elevated Expander Ball.

### Station 2:

1. Expander Die for straight wall cases.
2. No die for bottleneck cartridges.
3. Sizing Die if using Lube Die at Station 1. This allows you to elevate the Decap Rod and Expander, which enhances the expanding operation.

### Station 3:

1. Powder charging. Refer to Powder Measure instructions on page 8-10.

### Station 4:

1. Lock Out Die (optional for pistol calibers 9mm and larger).
2. Powder Checker Die (optional, for most rifle and pistol calibers).
3. Seat Die.
4. Bullet Feeder

### Station 5:

1. Seat die or seat/crimp die
2. Crimp die (optional if you choose to seat and crimp separately).

## DIE ADJUSTMENT

Standard die adjustments are listed in this section. Refer to PRESS SET-UP for die position. If you have questions after reading these instructions,

please refer to the Die Instructions included with your die set.

## 2-DIE SET FOR BOTTLENECK RIFLE AND PISTOL CASES

The end of the expander ball must be at least 3/16" inside the bottom of the die. The Expander Ball and Decapping pin are adjusted by loosening the small lock nut at the top of the die and turning the Expander-Decapping Rod until the desired setting is obtained. When the Expander Ball is adjusted correctly, the Decapping pin will protrude below the bottom of the die just enough to knock out the spent primer. The case is sized (full length or neck), deprimed and expanded in one operation. If cast lead bullets are being used, you will need an RCBS Neck Expander Die as a second operation. This die expands a sized rifle case neck to the correct diameter and slightly flares (bells) the case mouth for lead bullet seating.

## FULL LENGTH OR NECK SIZING

**⚠ CAUTION:** *To prevent sticking your cases in the sizing die, always lube cases before sizing, unless using a carbide sizing die.*

Lower the handle and raise the ram to the top of the stroke. Thread the Sizing Die into the press until the die touches the Shell Plate. Be sure all play is removed from the press leverage system. To do this, slightly raise the handle to lower the shell plate and, thread the die 1/8 to 1/4 turn further down so the press cams over center. Set the Die Lock Ring and you're ready to size.

## BULLET SEATING WITHOUT CRIMPING

**⚠ CAUTION:** *Do not adjust the Seater Die down against the shell plate as it will distort or crush the case.*

These instructions are for seating the bullet without crimping. To adjust the Seater Die, place a sized case (no primer or powder, this case becomes a "dummy" or "setup" round), into the Shell Plate at Station 5 and run it to the top of the press stroke. Thread the Seater Die down into the press until you feel it touch the mouth of the case. Back the die up one full turn and lock the Die Lock Ring. This will leave a gap between the bottom of the die and the shell plate.

Raise the handle and re-insert the case into Station 5. Place the bullet onto the case mouth and slowly cycle the handle to seat the bullet. Measure the overall length of the cartridge to check for proper bullet seating depth. If the bullet is not seated to the correct depth, adjust the Bullet Seat Plug, up or down, until the proper cartridge overall length is obtained. This is a "trial and error" operation. Once the proper bullet seating depth is attained, tighten the Seat Plug Lock Nut.

## BULLET SEATING WITH CRIMPING

**⚠ CAUTION:** *Do not adjust the Seater Die down against the shell plate as it will distort or crush the case.*

First, follow the instructions for BULLET SEATING WITHOUT CRIMPING, before continuing with this section.

We will now adjust the Seater Die to crimp the case mouth into the bullet. Insert the uncrimped "setup" cartridge back into Station 5 and lower the handle. With the uncrimped cartridge up in the Seater Die, loosen the Bullet Seat Plug Lock Nut and unscrew(raise) the Bullet Seat Plug several turns. Loosen the Die Lock Ring and thread the Seater Die body down until you feel it touch the mouth of the case.

Raise the handle slightly to lower the cartridge and adjust the Seater Die body down another 1/8 of a turn. Lower and then raise the handle to run the cartridge back into the Seater Die. Check the crimp. If more crimp is desired, repeat the preceding step by adjusting the die downward another 1/8 of a turn. This is a "trial and error" operation. Typically, you will not lower the Seater Die body down more than one-half a turn for proper crimp. After you are satisfied with the crimp, tighten the Die Lock Ring. Insert the "setup" cartridge back into Station 5 and lower the handle. To re-set for cartridge overall length, thread the Bullet Seat Plug down until it firmly touches the bullet. Tighten the Bullet Seat Plug Lock Nut.

The Seater Die is now properly adjusted to seat the bullet and crimp in one operation.

### 3-DIE SET FOR STRAIGHTWALL RIFLE AND PISTOL CASES

Reloading straight-wall type cases requires a 3-Die Set instead of a 2-Die Set because it is not possible to size and expand the mouth of a straight walled case at the same time. In a 3-die set, the first die sizes and deprimed the case. The second die expands and flares (bells) the case mouth to receive the bullet and the third die seats and, if necessary, crimps the bullet.

### SIZING WITH CARBIDE SIZER DIES

Lower the handle and raise the ram to the top at the stroke. Thread the Carbide Sizer Die into the press until the die touches the top of the Shell Plate. Tighten the Die Lock Ring. DO NOT CAM OVER.

### SIZING WITH STEEL SIZER DIES

This setup operation is the same as FULL LENGTH OR NECK SIZING. Please refer to that section for proper instruction.

### EXPANDING

Lower the handle and raise the ram to the top at the stroke. Thread the Expander Die Body down until it contacts the Shell Plate and tighten the Die Lock Ring. Raise the handle and place a sized case in the shell plate at Station 2. Cycle the handle to run the case into the Expander Die. The case mouth should be expanded and flared (belled) just enough to accept the bullet when placed on top of the case. The Expander is tapered and may be adjusted for more or less flaring (belling) by loosening the Expander Plug Lock Nut on top of the die and turning the Expander Plug up or down. This is a "trial and error" operation.

### BULLET SEATING WITHOUT CRIMPING

**⚠ CAUTION:** *Do not adjust the Seater Die down against the shell plate as it will distort or crush the case.*

These instructions are for seating the bullet to the proper OAL and prior to applying crimp. To adjust the Seater Die, place a sized and expanded case (no primer or powder, this case becomes a "dummy" or "setup" round), into the Shell Plate at Station 5 and run it to the top of the press stroke. Thread the Seater Die down

into the press until you feel it touch the mouth of the case. Back the die up one full turn and tighten the Die Lock Ring. This will leave a gap between the bottom of the die and the Shell Plate.

Raise the handle and re-insert the case into Station 5. Place the bullet onto the case mouth and slowly cycle the handle to seat the bullet. Measure the overall length of the cartridge to check for proper bullet seating depth. If the bullet is not seated to the correct depth, adjust the Bullet Seat Plug, up or down, until the proper cartridge overall length is obtained. This is a "trial and error" operation. Once the proper bullet seating depth is attained, tighten the Seat Plug Lock Nut.

### BULLET SEATING AND CRIMPING - Roll Crimp

**⚠ CAUTION:** *Do not adjust the Seater Die down against the shell plate as it will distort or crush the case.*

First, follow the instructions for BULLET SEATING, before continuing with this section.

We will now adjust the Roll Crimp Seater Die to crimp the case mouth into the bullet. Roll Crimped cartridges are typically used in revolvers. Insert the uncrimped "setup" cartridge back into Station 5 and lower the handle. With the uncrimped cartridge up in the Seater Die, loosen the Bullet Seat Plug Lock Nut and unscrew(raise) the Bullet Seat Plug several turns. Loosen the Die Lock Ring and thread the Seater Die body down until you feel it touch the mouth of the case.

Raise the handle slightly to lower the cartridge and adjust the Seater Die body down another 1/8 of a turn. Lower and then raise the handle to run the cartridge back into the Seater Die. Check the crimp. If more crimp is desired, repeat the preceding step by adjusting the die downward another 1/8 of a turn. This is a "trial and error" operation. Typically, you will not lower the Roll Crimp Seater Die body down more than one-half a turn for proper crimp. After you are satisfied with the amount of roll crimp, tighten the Die Lock Ring.

Insert the "setup" cartridge back into Station 5 and lower the handle. To re-set for cartridge overall length, thread the Bullet Seat Plug down until it

firmly touches the bullet. Tighten the Bullet Seat Plug Lock Nut.

The Roll Crimp Seater Die is now properly adjusted to seat the bullet and roll crimp in one operation.

### BULLET SEATING AND CRIMPING - Taper Crimp

**⚠ CAUTION:** *Do not adjust the Seater Die down against the shell plate as it will distort or crush the case.*

First, follow the instructions for BULLET SEATING, before continuing with this section.

We will now adjust the Taper Crimp Seater Die to crimp the case mouth into the bullet. Taper Crimped cartridges are typically used in semi-automatic firearms that headspace off of the case mouth.

Insert the uncrimped "setup" cartridge back into Station 5 and lower the handle. With the uncrimped cartridge up in the Seater Die, loosen the Bullet Seat Plug Lock Nut and unscrew(raise) the Bullet Seat Plug several turns. Loosen the Die Lock Ring and thread the Seater Die body down. You will start to feel firm resistance, stop here. Raise the handle.

Check the amount of taper crimp. Measure the case at the base of the bullet and then measure the case at the case mouth. The measurement at the case mouth should be .001" to .002" smaller than the measurement of the case at the base of the bullet. If more crimp is needed, repeat the preceding step by adjusting the die downward another 1/8 of a turn. This is a "trial and error" operation. After you are satisfied with the taper crimp, tighten the Die Lock Ring.

Insert the "setup" cartridge back into Station 5 and lower the handle. To re-set for cartridge overall length, thread the Bullet Seat Plug down until it firmly touches the bullet. Tighten the Bullet Seat Plug Lock Nut.

The Taper Crimp Seater Die is now properly adjusted to seat the bullet and apply taper crimp in one operation.

## POWDER MEASURE

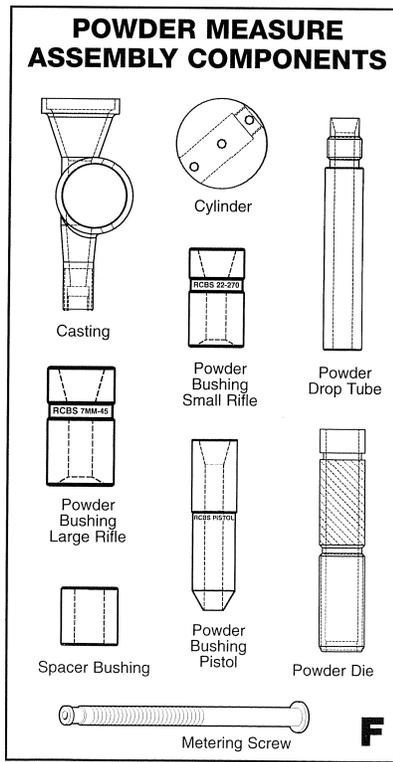
A powder measure is basically a device which measures powder by volume, not weight. However, before you start throwing a given charge with a powder measure, the first charge must always be weighed on a powder scale to arrive at the desired charge. Accurate powder measure charges will also depend upon the size and uniformity of the powder kernels used.

**⚠ DANGER: DO NOT use the Uniflow Powder Measure with black powder!**

*Helpful Tip:* The consistency of the powder and static electricity are causes of erratic powder charges. Slowly roll the powder container several times to homogenize it before pouring it into the powder hopper. Static electricity can be reduced by wiping down the powder hopper with a clothes dryer sheet.

**⚠ CAUTION:** All internal components of the powder measure assembly must be thoroughly cleaned of rust preventatives applied at the factory. Failure to do this will cause powder charges to be inconsistent and provide erratic performance of your reloads. **See Diagram F for the following items that must be clean and dry before use:**

- Casting
- Cylinder
- Metering Screw
- Powder Die
- Powder Bushings
- Spacer Bushings
- Powder Drop Tube



## POWDER MEASURE ASSEMBLY COMPONENTS-

A dependable powder scale should be used to set the first charges in the powder measure. It is not necessary to empty the powder hopper each time you change charges unless a different powder is required.

## POWDER MEASURE ASSEMBLY

Choose the correct cylinder.

- The large cylinder throws charges of ~5-99 grains.
- The small cylinder throws charges of ~2 to 50 grains.

To install the cylinder, make sure the screw holes are oriented facing toward the Linkage Assembly before you slide it into the Main Casting. See *Photo A*.



*Photo A*

**⚠ CAUTION:** DO NOT leave powder in the measure, as it will deteriorate and may clog and jam the measuring cylinder and etch the powder hopper.

Included with the Pro 2000 is a small and large Micrometer Adjustment Screw for the Uniflow Powder Measure. To allow alignment of the linear scale index, in any position the operator chooses, three thin washers are included. The only way to determine the number of washers needed is by trial and error. Each washer provides a 90 degree, counter-clockwise, rotation of the body. To set the index lines in the position you wish, first thread the Micrometer body into the cylinder until snug. Note the position of the index lines. If the alignment is not satisfactory, remove the body and add a washer to the body over the threads.

Thread the body into the cylinder again, and note the change in the location of the index.

By adding or deleting washers, you will be able to set the index according to your preference. See *photo B*.



*Photo B*

## INSTALLING SMALL METERING SCREW

Having determined how many washers are required to properly locate the index scale, remove the Micrometer body from the small powder measure cylinder. Thread the small metering screw into the Micrometer body ten turns. Next, insert body and metering screw through the front of the powder measure casting and into the cylinder. Screw the body into the powder cylinder (with correct number of washers). Make sure the washers align in the counter bore of the cylinder. Use the wrench flats on the end of the body to tighten the body securely.

Next, slip the micrometer thimble over the shank and secure it to the metering screw using the setscrew that is in the top of the thimble. Holding the cylinder halfway through its travel, *see photo C*, turn the Micrometer down as far as it will go until the metering screw stops against the powder measure casting.



*Photo C*

Loosen the setscrew and adjust the thimble position to set the Micrometer at the "zero" reading. *See photo D.*



*Photo D*

Rotate the powder measure cylinder to make sure the Micrometer Adjustment Screw is not rubbing against the casting. If it does rub the casting, unscrew the Micrometer one or two graduations. Then loosen the setscrew and re-zero the Micrometer. Tighten the setscrew. The Uniflow Powder Measure with the Micrometer Adjustment Screw is ready to use.

### INSTALLING LARGE METERING SCREW

Having determined how many washers are required to properly locate the index scale, remove the Micrometer body from the large powder measure cylinder. Drop the metering screw into the powder hopper, threaded end first. The screw will drop into the hole of the cylinder and the threaded end can be grasped from the outside.

Holding the shank of the metering screw, turn the body of the Micrometer (with the correct number of washers) onto the shank until the

threads of the body come in contact with the cylinder. Release the shank and thread the Micrometer body into the powder measure cylinder. Make sure the washers align in the counter bore of the cylinder. Use the wrench flats on the end of the body to tighten the body securely.

Next, slip the Micrometer thimble over the shank and secure it to the metering screw using the setscrew that is in the top of the thimble. Holding the cylinder halfway through its travel (*see photo C*) turn the Micrometer down as far as it will go until the metering screw stops against the powder measure casting. Loosen the setscrew and adjust the thimble position to set the Micrometer at the "zero" reading. *See photo D.*

Rotate the powder measure cylinder to make sure the Micrometer Adjustment Screw is not rubbing against the casting. If it is rubbing, unscrew the micrometer one or two graduations. Then loosen the setscrew and re-zero the micrometer. Tighten the setscrew and the Uniflow Powder Measure with the Micrometer Adjustment Screw is ready to use.

The Micrometer Adjustment feature allows the hand loader to record the Micrometer reading for a specific charge of a given powder. By using the Micrometer, you can return to that setting at a later date when the charge is again being used. Although the same setting will probably not give exactly the same charge due to changes in powder lot, humidity and other variables, the Micrometer setting will be very close and save the hand loader considerable time.

### POWDER MEASURE INSTALLATION

Slip the slotted portion of cylinder link over the drive pin. *See photo E.*



*Photo E*

Now install the cylinder link with two 10-32x3/8" socket head button screws using the 1/8" Hex Key Wrench. *See photo F.*



*Photo F*

Thread the Powder Die three full turns into Station 3. Select the correct powder bushing, small rifle 22-270, large rifle 7mm-45, or pistol. Install bushings with the funnel end up. *See photo G. See Powder Bushings in Diagram F on page 8 for correct orientation.*



*Photo G*

Install Powder Measure assembly into Powder Die. *See photo H.*



Photo H

Connect the Powder Measure Linkage and tighten the Thumb Screw. See photo I.



Photo I

Do not install the return spring. Insert case in Station 3 and raise ram. Adjust powder dump in relation to case height by threading the powder measure assembly down on the case until a full stroke of the powder measure is achieved. NOTE: Full stroke is within 1/16" to barely touching the top of the slot in the Uniflow Powder Measure casting. See photo J. This allows the powder die to turn one full turn to orient the powder measure to a convenient position.



Photo J

Should the Powder die hit the Shell Plate before the powder measure

stroke is achieved, back off the Powder die nine turns and install the spacer on top of the powder bushing. Thread the Powder die down until full stroke on the powder measure is achieved.

Lower the ram and attach the Return spring. See photo K.

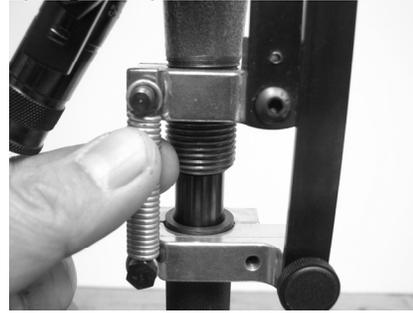


Photo K

Tighten the 7/8-14" lock ring on the Powder die. Powder Measure installation is complete.

To remove the Powder Measure from the Press, simply remove the Thumb Screw and Return Spring, then, lift off the Uniflow Powder Measure Assembly. NOTE: Check Thumb Screw for tightness during the loading session.

### **HANDLE SWING vs. POWDER BRIDGING**

*Helpful Tip:* When using some extruded (long grain) or large flake powder, bridging can occur. This happens when the powder jams (bridges) together and stops the flow of powder. This is caused by the powder dumping too quickly from the powder measure cylinder into the drop tube.

To eliminate this possible problem, the handloader can slow down the press handle swing, which slows the cylinder rotation and pours the powder from the powder measure cylinder. Otherwise, a fast dump may cause the powder to bridge in the powder bushing. To prevent bridging, slow down the press handle swing halfway through its stroke.

*NOTE: This problem exists only with some long grain extruded or large flake powders.*

## PRESS OPERATION

We recommend that several cases be completely reloaded one at a time before proceeding with full operation. This will help you to become familiar with the loading process. **NOTE:** Place bullets in bullet tray and empty cases in the ammo bin on the left front of the bullet tray. Loaded rounds will fall into the ammo bin on the right front of bullet tray. See photo L.



Photo L

### Step 1:

Install an APS primer strip. With the handle in the full back position, feed the strip, hook end first and anvil side up, until it stops firmly against the Primer Plug. See strip in photo M. You should hear two “clicks” before contacting the primer plug. Release pressure on the handle and let it return to the “neutral” position. **NOTE:** Use a full stroke with each cycle of the press.

**NOTE:** Strips can be connected for continuous loading. See photo N.

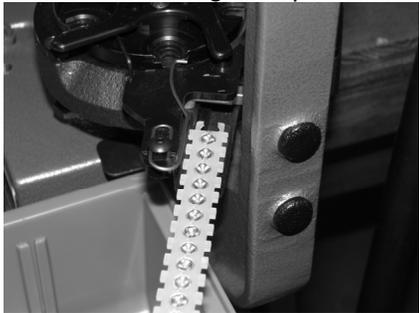


Photo M



Photo N

### Step 2:

Place a case into Station 1, and lower the handle. See photo O. The case

will be sized and the spent primer will be ejected. Raise the handle and press all the way to the rear, allow the handle to return to the neutral position, index the shell plate counter-clockwise.



Photo O

Firmly push the handle all the way to the rear to insert a new primer into the case. The primer is seated in the last 1/2” of the handle stroke below the shell plate neutral position. Remove the case and inspect primer depth. Adjust primer stop if necessary. See photo P.

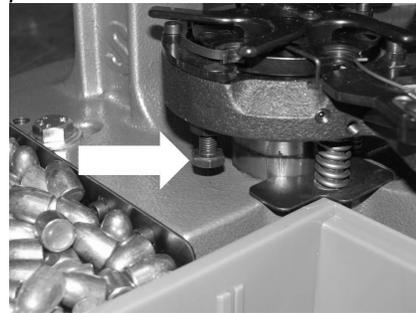


Photo P

**NOTE:** Primer depth can be set by the primer depth adjustment screw. Primers can also be seated by “feel” by simply adjusting the stop out of the way.

### Step 2:

Lower the handle and raise case into Station 2 to expand and flare/bell the mouth of the case.

**NOTE:** Station 2 is for the expanding of straight wall rifle and pistol cases and is an empty station for bottleneck rifle and pistol cases.

Raise the handle and index the Shell Plate.

### Step 3:

Cycle the handle to raise the case into Station 3 (Powder Measure) to charge the sized, primed and expanded case with powder. Index the Shell Plate and remove the case to verify that the powder charge is correct. Reinsert the case back into the Shell Plate at

station four. Check every fifty rounds to ensure that the powder charge has not changed. **NOTE:** Refer to Powder Measure instructions for adjustment.

### Step 4:

Cycle the handle and index the shell plate to move the case through Station 4. **NOTE:** This is an extra station that allows options such as a Powder Checker Die, Lock-Out Die, Bullet Feeder or to seat and crimp bullets in separate operations. You may choose to have this as an empty station.

### Step 5:

Insert a bullet onto the case mouth, cycle the handle to seat and crimp the bullet. Index the shell plate and the loaded cartridge will be ejected into the cartridge box. See photo Q.



Photo Q

## APS STRIP LOADER

The APS Strip loader is designed for those who have a supply of primers not preloaded into APS Primer Strips. This tool makes fast easy work out of loading conventionally packed primers into the APS Primer Strips. Whenever loading primers into the APS Strips, be sure to refer to the color code chart in the enclosed APS instruction booklet, to prevent any confusion and misidentification. For complete instructions on how to operate the APS Strip Loader, refer to the instruction booklet included with your APS Strip Loader inside your Pro 2000 box.

**NOTE:** A far more convenient way to prime on your Pro 2000 is to buy your primers already pre-packed in APS Strips. CCI offers pre-packaged primers in APS Strips. This will completely eliminate having to load each primer individually into a primer tube or 25 at a time into an empty strip.

## PRO 2000 OPERATING PROCEDURE

Now that you have read the instructions and are familiar with your Pro 2000, you are ready to reload! Based on our experience, we will explain the most efficient way to use your new Pro 2000. You may choose to change your technique as you become more accustomed to the function of this tool, but for now, we strongly suggest you use the following operating procedure.

Place your bullets in the bullet tray and your empty cases in the left ammo bin. The right ammo bin will be used to catch the loaded ammunition as it is ejected from the press. With the handle in the up and full back position, insert the primer strip into the APS Priming System. Push the primer strip in hook end first and anvil side up until it stops firmly against the Primer Plug. Now release the handle and it will return to the neutral position.

With your right hand on the handle ball, pick up an unsized case with your left hand and place it into Station 1. Be sure the case holder spring is adjusted to barely touch the rim of the case. Now smoothly pull the handle down. This will size and deprime the case in Station 1. Raise the handle to the top of the stroke and smoothly push the handle to the rear, allow the handle to come back to the neutral position and rotate the Shell Plate.

You now have a sized case in Station 2. Insert another unsized case into Station 1 and lower the handle. Again, this will size and deprime the case in Station 1, while at the same time, expand the case in Station 2.

Raise the handle and push to the rear to reprime the case and then let the handle return to the neutral position. Rotate the Shell Plate.

You now have a sized case in Station 2 and an expanded and reprimed case in Station 3. Insert another case into Station 1 and lower the handle. Station 1 and 2 will repeat the same operation while the powder charge is being dispensed in Station 3. Raise the handle and push to the rear and then let it return to the neutral position. Rotate the Shell Plate.

You now have a sized case in Station 2, an expanded and reprimed case in Station 3, and a powder charged case in Station 4. Insert another case in Station 1 and lower the handle. Stations 1, 2 and 3 will repeat the same operations. Next, raise the handle and push to the rear and then let it return to the neutral position. Rotate the Shell Plate.

Station 4 may perform a variety of operations, depending on your preferred reloading technique. In the case of rifle calibers, this may be an empty station or you may use a Powder Checker Die. In the case of pistol calibers, you may select to seat in Station 4 and crimp in Station 5. As another option, if loading pistol rounds, you may use an RCBS Lock-Out Die in Station 4, then, seat and crimp in one operation in Station 5. Or you may install the optional RCBS Bullet Feeder in Station 4.

Whichever method you choose is fine. Versatility is a big advantage of owning a five station progressive press.

By now you should be getting the hang of the sequence of operating your Pro 2000. Once the Shell Plate has a case in all five stations, the basic operating procedure remains the same time after time. Always follow this same loading procedure:

### **Bullet, Case, Size, Prime, Index.**

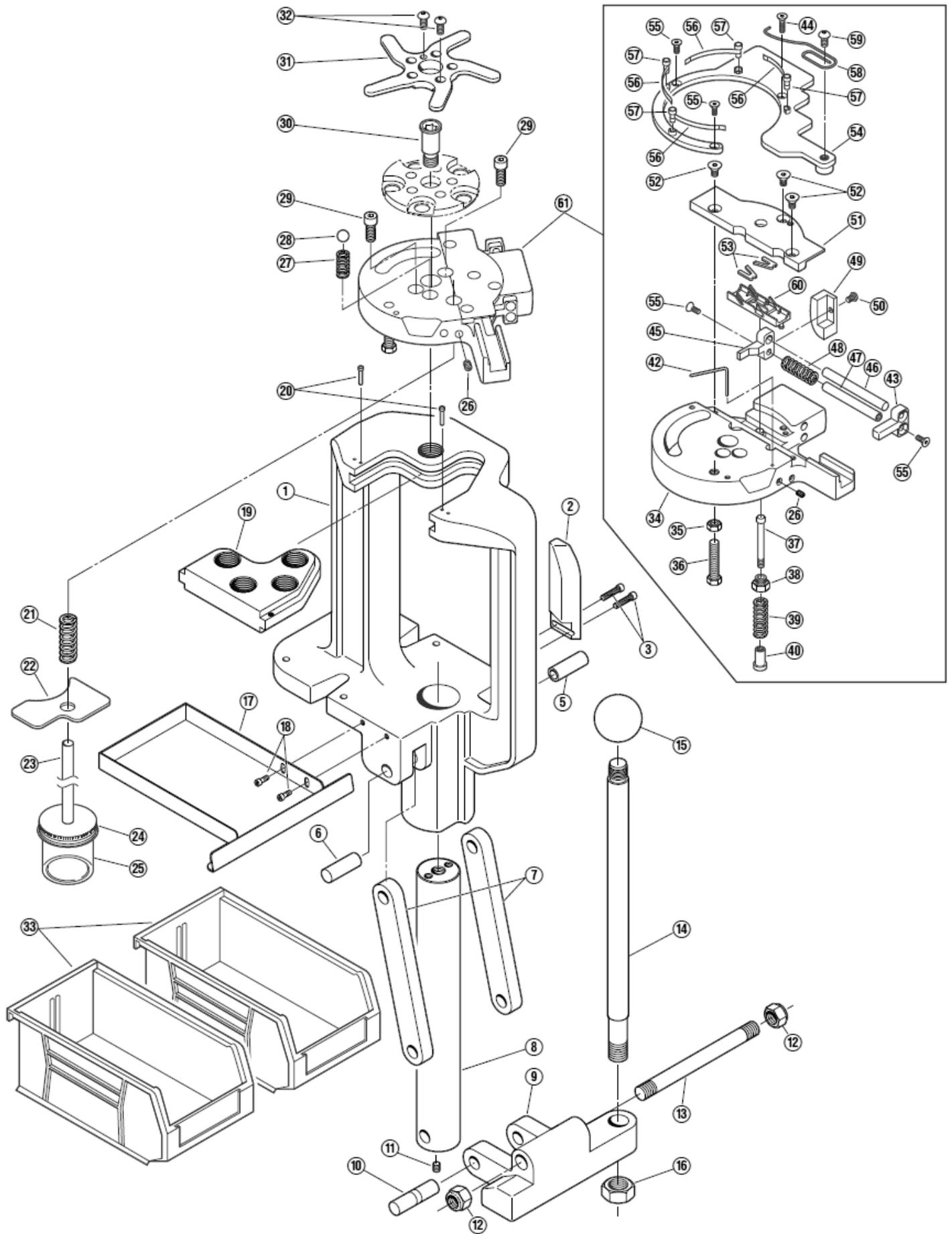
It will help you to repeat these words to yourself each time you cycle the press:

### **Bullet, Case, Size, Index, Prime:**

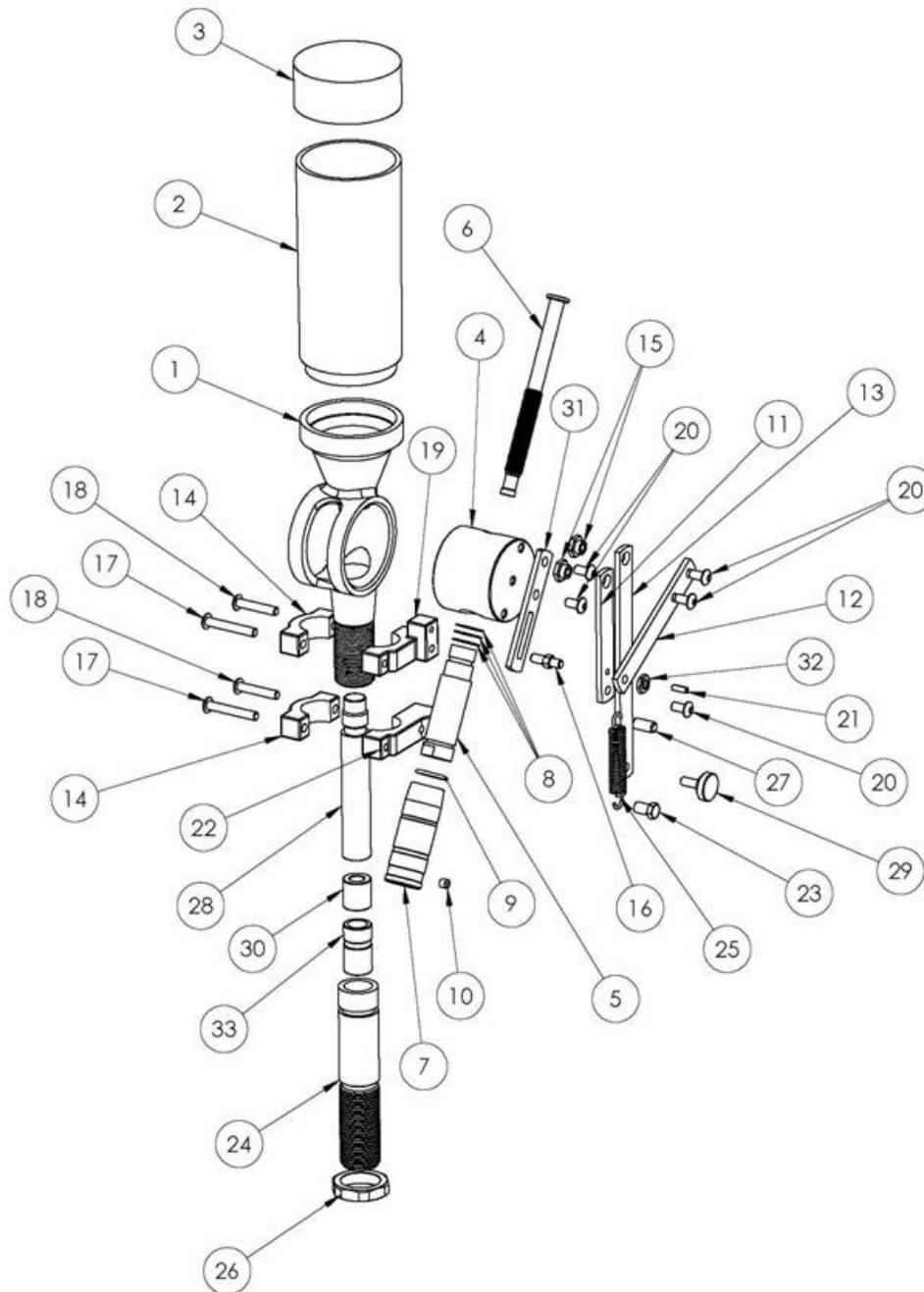
1. Bullet: Place bullet on case under seat die.
2. Case: Place unsized case in Station 1.
3. Size: Lower Handle and size case.
4. Prime: Raise handle and push to the rear to prime case in Station 2.
5. Index: Rotate the Shell Plate.

This is the sequence that will be repeated over and over as you operate your Pro 2000. By now, everything should be working great. If not, reread this portion of the instructions. If you are still experiencing problems, give us a call, we'd be glad to help.

**IMPORTANT:** Your Pro 2000 has been designed and manufactured to be a manually indexed reloading press. Any alteration or attempt to alter the function of this press will void any and all warranties offered by RCBS. We specifically warn against any attempt to convert this press to any motorized method of operation.



#	Description	Part #	Qty	#	Description	Part #	Qty
1	Pro2000 Press Frame	788901	1	33	Ammo and Case Bin	187204	2
2	Pro2000 CAM	187209	1	34	Shell Plate Holder	788904	1
3	8-32 x 3/4" Button Head Cap Screw	187221	2	35	1/4"-28 Hex Nut	109604	1
5	Link Arm Pin Right	709128	1	36	1/4"-28 x 1" Hex Head Bolt	187220	1
6	Link Arm Pin Left	709127	1	37	Primer Plug Small	788930	1
7	Pro2000 Link	788902	2	37	Primer Plug Large	788929	1
8	Pro2000 RAM	788918	1	38	Priming Plug Bushing	788913	2
9	Pro2000 Toggle Block	788903	1	39	Primer Plug Spring	187226	2
10	Pro2000 RAM Pin	788919	1	40	Primer Plug Base	788914	2
11	1/4"-28 x 3/8" Socket Head Set Screw	187219	1	42	Case Eject Spring	188038	1
12	7/16"-20 Nyloc Nut	187212	2	43	Pusher Bracket Rt.	788908	1
13	Toggle Block Pin	788912	1	44	6-32 x 1/2" Flat Head Cap Screw	187223	1
14	Handle	709120	1	45	Pusher Bracket Lt.	109700	1
15	Handle Ball	109121	1	46	Pusher Rod Top	788960	1
16	Handle Nut	709136	1	47	Pusher Rod Bottom	788915	1
17	Bullet Tray	788907	1	48	Pusher Spring	187225	1
18	8-32 x 1/4" Socket Head Cap Screw	187680	2	49	CAM Guide	187202	1
19	Die Plate	788905	1	50	5-40 x 1/4" Button Head Cap Screw	187222	1
20	Die Plate Pin	788917	2	51	Priming Plate	102505	1
21	Return Spring	187231	1	52	8-32 x 3/8" Flat Head Cap Screw	187218	3
22	Return Spring Plate	788958	1	53	Detent	186265	2
23	Spent Primer Tube	788932	1	54	Case Retention Bracket	187207	1
24	Spent Primer Bottle Cap	787178	1	55	6-32 x 3/8" Flat Head Cap Screw	187215	1
25	Spent Primer Bottle	187177	1	56	Case Retaining Spring Station #2-5	187206	4
26	8-32 x 1/4" Socket Head Set Screw	109509	2	57	Retaining Spring Plug	788943	4
27	Detent Spring	188037	1	58	Case Retaining Spring Station #1	187208	1
28	Detent Ball 3/8"	187152	1	59	8-32 x 5/16" Button Head Cap Screw	186147	1
29	1/4"-28 x 3/4" Socket Head Cap Screw	187159	2	60	APS Primer Strip Pusher	186264	1
30	Shoulder Bolt	788009	1	61	Shell Plate Holder Assembly	788967	1
31	Star Wheel	187200	1	62	Primer Plug Assy Sm.	788990	1
32	8-32 x 3/8" Button Head Cap Screw	187217	2	63	Primer Plug Assy Lg.	788970	1



KEY #	PART #	DESCRIPTION	KEY #	PART #	DESCRIPTION
1	7709025	UPM MAIN CASTING	18	7187211	BUTTON HEAD SCREW 10-32X1"
2	7109026	UPM HOPPER	19	7788951	CAPM TOP FRONT BRACKET
3	7109030	UPM HOPPER CAP	20	7186144	BUTTON HEAD 10-32X3/8"
4	7709006	UPM MEASURING CYLINDER SMALL	21	7187213	ROLL PIN
4	7709005	UPM MEASURING CYLINDER LARGE	22	7788950	CAPM LOWER FRONT BRACKET
5	7798903	MICROMETER SCREW BODY	23	7788941	CAPM BOTTOM SPRING ANCHOR
6	7798907	METERING SCREW SM	24	7788928	CAPM POWDER DIE
6	7798904	METERING SCREW LG	25	7187214	CENTURY SPRING
7	7798905	METERING SCREW THIMBLE	26	7109187	HEX LOCK RING
8	7198906	COMPENSATION WASHER	27	7788940	CAPM TOP SPRING ACHOR
9	7181015	"O" RING	28	7788935	CAPM DROP TUBE
10	7181004	SET SCREW	29	7186146	THUMB SCREW
11	7788947	CAPM PIVOT LINK	30	7788936	CAPM SPACER BUSHING
12	7788945	CAPM DRIVE LINK	31	7788948	CAPM CYLINDER LINK
13	7788946	CAPM LONG LINK	32	7109603	HEX NUT 10-32
14	7788949	CAPM BACK BRACKET	33	7788934	CAPM BUSHING RIFLE .22-.270
15	7788916	CAPM LINKAGE NUT	33	7788938	CAPM BUSHING RIFLE 7MM-.45
16	7788944	CAPM UPM DRIVE PIN	33	7788939	CAPM BUSHING PISTOL
17	7187210	BUTTON HEAD 10-32X 1-1/4"			



**PRECISIONEERED RELOADING EQUIPMENT**

We think that we make the very best reloading equipment in the world. If you agree, please tell your friends. If you disagree, tell us we want to do something about it!

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