# Co-Ax® Press Instruction Manual



# Owner's Instruction Manual For Forster Co-Ax® Press Fine Rifle and Pistol Reloading Tool

### (Order 028271)

SUCH A PLEASURE TO USE, ONCE YOU HAVE LOADED YOUR CASES YOU'LL WANT TO PULL THE BULLETS AND RELOAD THEM OVER AGAIN. IT'S HARD TO BELIEVE THE FANTASTIC CLAIMS WE MAKE FOR THIS PRESS. BUT, ONCE YOU TRY IT, YOU'LL SEE WHAT WE MEAN. CHECK OUT THESE GREAT FEATURES FROM A TO Z...

- A. Powerful Leverage... 40:1 mechanical advantage as the handle moves through a full 180 degree stroke.
- B. Snap-In and Snap-Out Quick Die Change.
- C. No shell holders required! Standard "S" Jaws hold 90% of commercial cartridge cases.
   Optional "LS" Jaws cover the rest.
- D. Heavy workload takes place when operator's arm is extended in an advantageous position.
- E. Floating Guide Rods ensure perfect alignment with minimum friction and wear.
- F. No spent primer nuisance. Primers and caustic residue drop into a container, which is easily emptied.
- G. Universal Shell Holder Jaws will accommodate almost all rifle and pistol cartridges.
- H. Universal Shell Holder Jaws are self-acting. The cartridge case can be inserted in the
  die and forced home for full length resizing, at which time the Shell Holder Jaws
  automatically open and close on the cartridge case head. When the operating lever is
  reversed and the case has been extracted from the die, the Shell Holder automatically
  opens and releases the cartridge case!
- I. Self-Acting Shell Holder permits the case to enter the die Co-Axially without shear or distortion.
- J. Self Acting Shell Holder accurately maintains headspace provided in the die.
- K. Self Acting Shell Holder will not mar cases.
- L. Lots of working room for both right handed and left handed operators.
- M. Self-Acting Shell Holder is positive in action. We have extracted 200 consecutive 300 H
   & H Magnum cases Ñ once fired, dry and unlubricated from a full length resizing die without pulling the head from a single case!
- N. Primers are seated at the point of least mechanical advantage, thereby minimizing the danger of crushing primer pellets.
- O. Primers are consistently seated .005" under flush with the Stop Method.
- P. The top Shell Holders are adjustable for alignment to produce the Co-Axial seating of primers.
- Q. Although we strongly recommend our own Forster Bench Rest® dies, you can use any 7/8"-14 thread dies with the Forster Co-Ax® Press.
- R. The Forster Co-Ax® Press is handsome as well as extremely functional and dependable.
- S. In the development of the Forster Co-Ax® Press, all engineering efforts were focused on producing a tool that was easy to use, fast, attractive and extremely accurate. All of these qualities are completely compatible, and none creates conflicts with any of the others.

- T. There is no torque on the head of this press that might impair the alignment of either the
  die and or the shell holder. The center of forces coincide with the center of work, thereby
  eliminating the need for braces that might obstruct visibility and or complicate the operation.
- U. Self-Acting Shell Holder Jaws permit insertion of both a bullet and a cartridge case into the die, thereby reducing danger of injuring the operator's fingers.
- V. The handle is always in an easy, accessible position.
- W. The handle has two built-in stops; one for each dead center position.
- X. With its powerful Linkage System, your Co-Ax® Press will resize the biggest rifle cartridge with more ease than other presses on a .223 case.
- Y. The Floating Jaws of the Shell Holder prevent shear when drawing cases from the die.
- Z. The parts of the Forster Press will wear longer since all the primer grit, ground glass, etc., falls into the drop tube, passes through the carrier, through the bottom of the frame and down into the Spent Primer Jar. For eight consecutive days we de capped fired cases at the Camp Perry National Matches and found not one particle of primer grit on the carrier. Nor was it necessary to clean the moving parts of the Automatic Shell Holder. None of this abrasive material ever contaminates the working parts of the Forster Co-Ax®Press.

## TO FASTEN TO YOUR BENCH

Drill four holes in your working bench and attach firmly to your loading bench. Drill on a centerline of a 2" wide x 2 1/2" deep rectangle for proper alignment with the holes in the casting. Start 3/4" from edge of bench. Due to the extreme mechanical advantage which is inherent in this press, two "C" clamps will suffice when the press is taken to the range.

# SETUP AND ASSEMBLY



PHOTO 1

The Co-Ax® Press is virtually ready to use right out of the box. Simply insert the operating handle and install the Primer Catcher as outlined here.

- 1)To install the Primer Catcher, insert the threaded part of the drop tube (#53) through the hole in the cover from below, then screw the lid (#50) to the cup (#51).
- 2) Pass the tube through the middle hole in the bottom of the frame (#31), then screw into tapped hole in bottom of the guide block (#45) finger-tight.



3) To adjust the die vertically in the "T" Slot of the press frame, back the die most of the way out of the lock ring. Bring the handle all the way down against the stop. Hold the lock ring and screw the die through the lock ring until it makes contact with the jaws of the Shell Holder. (see photo) Use a slotted screwdriver to lock the ring in place on the die. Do not over tighten lock ring retaining screw (#28)! This screw should be just tight enough to keep the die lock ring under tension. The die must be allowed to float for Co-Ax® alignment.

Note: We recommend using Forster cross bolt locking rings (Order 011321) on all your loading dies. (Two are supplied with your press)



РНОТО 3



#### **AUTOMATIC JAW OPENING SCREW ADJUSTMENT**

This long tapered screw (#44) is screwed into the bottom frame of the press (see photo). It adjusts the amount the lower Shellholder Jaws open to accept cases when the press operating handle is raised to its uppermost position. Adjust the height of this screw so the shellholder jaws will completely open when the handle is in the full UP position against overhead stops. CAUTION, setting the screw in too high a position could damage the shellholder housing (#37) when the handle is pushed all the way up.

PHOTO 4

# **OPERATION OF THE CO-AX® LOADING PRESS**



CASE RE-SIZING AND BULLET SEATING

#### THE AUTOMATIC SHELL HOLDER JAWS MAY BE USED IN TWO MANNERS:

"Standard" Method A- most commonly used for sizing and seating
With this setting and with the handle in the UP position, cases can be set on the guide
block between the jaws in much the same manner as a conventional shell holder is used.
Jaws will automatically close on the case as the handle is pulled. For more information
see section on automatic shellholder changeover.

**PHOTO 5** 

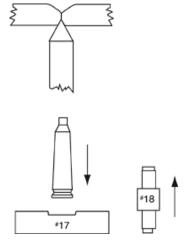


# Caliber Adjusting Screw Adjustment Method B - for seating only

This shorter screw (#43) is located in the front hole of the guide block (see photo #6). This is only used when using seating method "B" which is described here. Hold the index finger against the side (not the bottom) of the case. Bring operating lever down (see photo #7). Shell Holder will automatically open and close over the case rim. Bullet will be seated and the jaws will automatically open to release the case when the handle is returned to the full OPEN position! This method works for most cases. It is slower than the standard method but it gives you an added edge in bullet alignment.



РНОТО 7



## PRIMER SEATING

#### SETTING THREE TOP JAWS FOR PRIMING.

Select which end of jaw to use (.050 or .070) and match them. Move press handle down until there is enough room to insert locator (#18) up into jaw block (#17) from underneath. Match proper locator end to primer pocket being used (small .175" end for small primers or large .210" end for large primer). Raise the handle until you feel a "stop" situation and the locator will appear in the center hole of jaw block. At this point, center the unprimed case on the locator, move the jaws inward onto the case rim and tighten the three screws to lock them in place. It is not necessary to over tighten the socket head screws. Lower the handle and remove locator. You are now ready to prime. In the event the case rim is either too loose or too tight, try using the opposite end of the jaws.

# OUR SPECIAL CO-AX® PRESS PRIMING SYSTEM HELPS GUARANTEE CONSISTENT PERFORMANCE.

Proper priming is one of the most critical operations in the reloading process. In order for your ammunition to perform accurately, consistent ignition is mandatory. For that reason, we paid special attention to the priming function in the design of our Co-Ax® press. The primer seater in our press is engineered with such precision that no excessive tolerance or "slop" is required in any of the mating parts. The primer seater moves freely in its channel with only .001" radial clearance as opposed to the customary 1/16" clearance required by most other presses. As illustrated in the two drawings of enlarged views of our primer post, the extremely tight tolerance delivers remarkably consistent seating depth time after time.



Fig. 2: When force is applied to the guide block of the press, the bottom of the primer cup stops against the base of the primer post. The top of the primer cup stops against the head of the cartridge case. Because the primer punch is longer than the cup by .005", the primer will always be seated .005" below the head of the case. Regardless of the variation in the dimension of the shell holder or the amount of force used in seating the primer, it is impossible to crush a primer pellet or vary the seating depth.

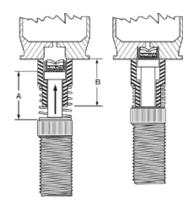


FIG. 1 FIG. 2



РНОТО 8

#### FOR RIGHT-HANDERS

Facing the tool, take a position to the right of the tool; bring operating handle forward approximately 90 degrees. Insert primer from rear with right hand; many reloaders wear thin medical gloves on the primer hand. It aids in grip and keeps oils from contaminating the primer. Insert case in universal jaws with left hand.

#### FOR LEFT-HANDERS

Take a position to the left when facing the tool; bring operating handle forward approximately 90 degrees. Insert primer from rear with left hand. Insert case in jaws with right hand.

#### PRIMING SAFELY

To avoid possible injury to the operator's hand when using the priming device, we recommend the above mentioned two positions for inserting the primers and the cases. This will enable primer gases to bypass an operator's hand in case of a premature primer explosion. The proper position is easy to remember: Left side/left handed; right side/right handed when priming. Always operate the handle with slow, precise movements. Avoid crushing or deforming the Primers. Priming the case is one of the most important operations in reloading a cartridge.

## **AUTOMATIC SHELL HOLDER CHANGEOVER**



Standard "S" Jaws are factory installed and ready for reloading. If the chart below indicates a need to install "LS" Jaws or requires reversal of the "S" Jaws, do the following: Remove two button head screws (#20 from drawing on back cover) and carefully lift the shell holder jaw housing (#37). Insert jaws in shell holder housing with ends properly matched. Re-insert springs against arms of jaws as shown in photo. Replace entire assembly to guide block (#45) and lock in place with the two button head screws (#20). Tighten screws firmly, but don't overdo it.

РНОТО 9

# SHELL HOLDER JAW USAGE CHART

"S" Jaws

"LS" Jaws

Small end - .343 or smaller rim Large end - .468 or smaller rim Small end - .312 or smaller rim Large end - .531 or smaller rim

"S" Jaws P/N001231 that are supplied with press will grip all these cartridges:

Smaller side will handle the following cartridges.

17 Rem 222 Rem. 222 Rem.Magnum 223 Rem. 224 Weatherby 351 S L 5.6 X 50

221 Rem. ÒFireballÓ
30 Luger
30 Carbine
32 S & W
32 S & W Long
32 Short Colt
32 Long Colt
32 Colt New Police
32 Auto (7.65mm)
357 Magnum

9mm Luger 380 Auto 38 Auto Colt Pistol 38 Super Auto Colt Pistol 38 S & W Special 38 Short Colt 38 Long Colt

#### Larger side of the "S" Jaws will handle the following cartridges.

218 Bee 219 Zipper 22 Savage 224 Weatherby 5.6 X 50 22-250 Rem. 6 mm Rem. 243 Win. 25-06 Rem. 6.5 Carcano 6.5 Jap 270 Win. 270 Weatherby 280 Rem. 7mm Rem. Magnum 7mm Mauser 7 x 61 S & H 7 x 57 Mauser 7.5 x 55 Schmidt Rubin 38-55 7.65 Argentine Mauser 7.62 Russian 7mm Magnum 30 Rem.

256 Win. 25-35 Win. 250 Savage 257 Roberts 6.5mm Rem Magnum 264 Win. Magnum 6.5 X 55 22 Rem. Jet 357 Magnum 30-06 Springfield 300 Savage 300 H & H Magnum 300 Win. Magnum 303 Savage 303 British 308 Win. 300 Weatherby 8 x 57 J.S. 8 mm Mauser 32-20 Win. 32 Win. Special 32 Rem. 32-40

38 S & W Special 38 Colt 41 Rem Magnum 44 Rem Magnum 44 S & W Special 45 Colt 45 Auto 10 mm 25-20 Win. 338 Win. 378 Weatherby 340 Weatherby 35 Rem. 350 Rem. Magnum 358 Win. 358 Norma 375 H & H Magnum 38-40 Win. 444 Marlin 44-40 Win. 458 Win. Magnum

# GENERAL INFORMATION ABOUT THE FORSTER CO-AX® LOADING PRESS



For best working conditions, your bench should be about 38 inches high. If you do not have a reloading bench yet, a felt pad under the base will prevent marring your spouse's dining room table.

This is a fine machine, please oil the moving parts. Wipe all unpainted parts with oil to prevent rust.

When not in use, keep a dust cloth over your FORSTER PRESS. Care for it as you would any other prize possession.

The Co-Ax® is made from Iron castings. Dropping or sudden stress never enhances the life of any casting.

This tool has a powerful mechanical advantage. Keep your fingers away from the needle sharp taper pins and potential pinch points.

Position yourself and components at all times so that in case of premature explosion, you will be unharmed. WEAR PROTECTIVE GLASSES WHEN RELOADING AND SHOOTING.

We strongly recommend the combination of our Co-Ax® Press with our Bench Rest® Dies. With this combination, it should be mechanically impossible to assemble a poor cartridge.

Our castings are made from high quality, high carbon material such as are used in automobile engines. The floating guide rods are made of ground and polished accuracy stock and, as in automobiles, these two elements are compatible and long wearing. No expense was spared in the manufacture of tools, jigs, and fixtures to produce this press to the close tolerances demanded. The FORSTER PRESS will operate smoothly and precisely with little friction. The jaws of the Automatic Shell Holder are made from special steel carefully machined, hardened, and ground. Special attention is given to the .125" dimension since this is the tolerance built into all American made dies to establish uniform headspace.

Your FORSTER PRESS is a masterpiece in mechanical perfection, design and functional operation. There is no conflict with accuracy and convenience in its entire program. Beauty and utility are combined. Accuracy in its manufacture and assembly is mandatory; variation in diameters, locations or alignment would render the mechanism unworkable. It is also designed to prevent the disturbance of the axis of the case when resized, or the common axis of the case and bullet when seated with properly designed dies. This is accomplished by both floating the die and the shell holder. No matter how much force is applied to the handle, up or down, the angular position of the carrier and upper frame will not change. The fantastic claims we make for this press seem unrealistic, but its virtues will gradually unfold to you as you become accustomed to it. There are more than 1,000 operations in its manufacture. This press is such a pleasure to use, that once you have loaded your cartridges, you will want to buy more components just so you can load more ammunition. This press makes reloading a pleasant hobby, not just a means to the end.



Click on diagram at right for an enlarged view.

