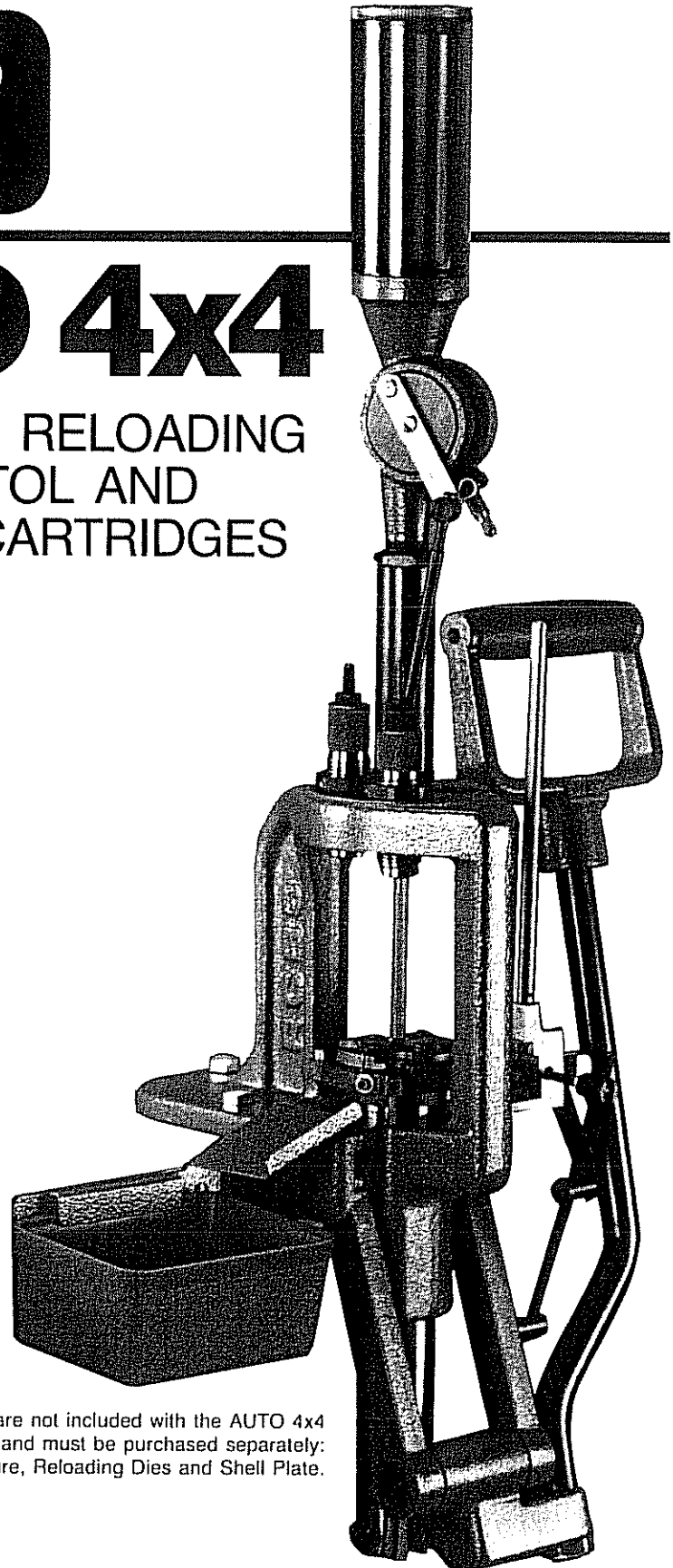




AUTO 4x4

A PROGRESSIVE RELOADING
PRESS FOR PISTOL AND
MEDIUM RIFLE CARTRIDGES



These items are not included with the AUTO 4x4
and must be purchased separately:
RCBS UniFlow Powder Measure, Reloading Dies and Shell Plate.

Safety and Operating Instructions

SAFETY

Reloading is an enjoyable and rewarding hobby that is easily conducted with safety. But carelessness or negligence can make reloading hazardous. This Press has been designed from the beginning with the user's safety in mind.

As when loading with any other reloading press, some safety rules must be followed. By observing these few rules, the chance of a hazardous occurrence causing damage or injury becomes extremely remote.

GENERAL

- Use the reloading equipment as the manufacturer recommends. Study the instructions carefully and become thoroughly familiar with the operation of the tool. Don't take short cuts.
- 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. Develop a reloading routine to avoid mistakes. Avoid haste—load at a leisurely pace.
- Always wear adequate eye protection. You assume unnecessary risk when reloading without wearing safety glasses.
- If any unusual resistance is encountered when moving the operating handle, STOP IMMEDIATELY and investigate the cause. To proceed against unusual resistance may damage equipment and/or cause serious injury!

LOADING DATA

- Use only laboratory tested reloading data. We highly recommend the use of the 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.
- DO NOT use primers of unknown identity. To destroy unwanted primers, soak in oil for a few days and then bury.
- Keep primers in original factory container until ready to use. Return unused primers to the same factory packaging for safety and to preserve their identity.
- 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 use any powder unless its identity is positively known. Discard all mixed powders and those of uncertain or unknown 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.
- Before charging cases, settle the powder in the Powder Hopper. Throw and check the weight of at least ten charges. This will assure you that the correct powder charge is being thrown.
- After a reloading session ends, pour the remaining powder back in its original factory container. This will preserve the identity and shelf life of the powder.
- DO NOT smoke while handling powder or primers.

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.

Since Omark Industries has no control over the choice of components, the manner in which they are assembled, the use of this press, or the guns in which the resulting ammunition may be used, no responsibility, either expressed or implied, is assumed for the use of ammunition reloaded with this press.

INTRODUCTION

The AUTO 4x4 Press is the ideal reloading press for high volume shooters and reloaders who prefer a continuous series process over a "batch" process. It is simple enough for the beginning reloader, but incorporates features, capabilities and a level of quality that will please the most discriminating expert.

It is a four station, fully progressive tool designed primarily for rapid reloading of either medium length rifle or pistol cartridges. In addition, the AUTO 4x4 can be used as a single stage tool and has the strength and power to form wildcat cases or swage bullets with the proper tooling.

The AUTO 4x4 Press was designed and built to traditional RCBS quality standards. No expense has been spared in the materials, production or assembly of this high quality, precision reloading press.

The instruction manual is limited to the operation of the AUTO 4x4 Press. Beginning reloaders desiring specific instructions on reloading procedures, loading data and ballistic information can find such information in the SPEER Reloading Manual available at your local dealer. Utilize the operating instructions furnished with the reloading dies and the Uniflow Powder Measure for use on the AUTO 4x4 Press.

UNPACKING

Unpack the press and look for the following: Refer to parts list on page 14 for identification.

1. Press
2. Handle Assembly
3. Powder Measure Adaptor and Assembly
4. Depriming Tube
5. Automatic Primer Feed Tube Assembly, Large
6. Automatic Primer Feed Tube Assembly, Small
7. Accessory Pack (see photo #1) consisting of:
 - Ammunition Catcher Box and Base
 - Hex Key Wrenches
 - Powder Drop Tubes
 - Cleaning Brush
 - Resizing Lubricant
 - Primer Tray
 - Hex Lock Nut 7/8-14
 - Depriming Bottle and Depriming Bottle Cap
 - Ram Return Spring
 - Index Ball and Index Ball Spring
 - Primer Plug Large
 - Primer Sleeve Large
 - Primer Plug Coil Spring

Report any shortage to your dealer immediately.

MOUNTING

The press should be bolted to a sturdy bench using 3/8 inch bolts installed through the three drilled holes on the rear flange. Make certain that the linkage is free to cycle without contacting any under-the-bench obstructions.



Photo #1

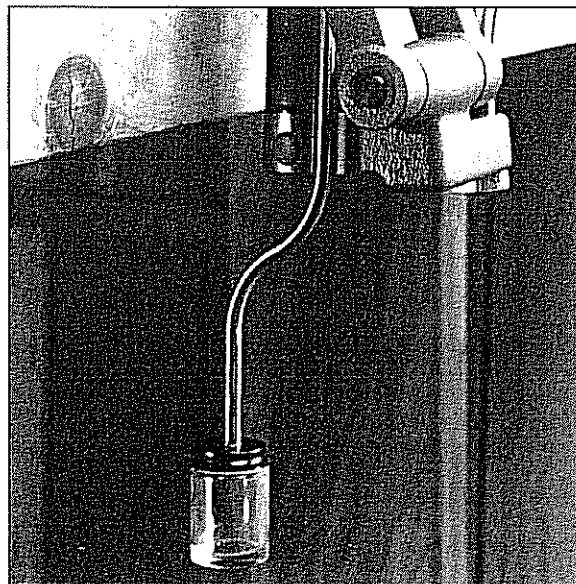


Photo #2

HANDLE ASSEMBLY

Attach the Handle Assembly with the double elbow outward making certain it clears the Priming Arm when cycled. The Handle Nut must be securely tightened to prevent handle rotation during use.

DEPRIMING SYSTEM ASSEMBLY

The press was packaged without the Depriming Tube, Ram Return Spring, Depriming Bottle or Depriming Bottle Cap assembled. To assemble the depriming system:

1. Place the Depriming Bottle Cap over the unflared end of the Depriming Tube and slide it down to the flared end.
2. Screw the Depriming Bottle to the Depriming Bottle Cap. The Depriming Bottle Assembly should now be captive on the flared end of the Depriming Tube (see photo #2).
3. With the press operating handle raised (ram in lowered position), insert the unflared end of the Depriming Tube Assembly into the 3/8" hole on the underside of the press adjacent to the ram. The 3/8" hole is under station No. 1.
4. Raise the Depriming Tube Assembly through the hole until it contacts the underside of the Shell Plate Holder. Raise the Ram/Shell Plate Holder Assembly enough to place the Ram Return Spring over the exposed end of the Depriming Tube.
5. Raise the Depriming Tube Assembly and the Ram/Shell Plate Holder Assembly simultaneously until the Ram reaches the top of its stroke. Insert the Depriming Tube into the mating socket in the Shell Plate Holder. Rotate the Depriming Tube so that the bends are in a fore and aft orientation (see photo #2). Secure Depriming Tube in place by tightening the recessed setscrew with the 1/16 Hex Key Wrench (see photo #3). Do not over tighten which might collapse the tube.

GENERAL ORIENTATION

The sequential reloading operations take place in the four die stations and corresponding positions in the Shell Plate. Shell Plate rotation is in the counter clockwise direction. See photo #4.

DIE STATION

OPERATION

#1	Resizing Depriming
#2	Case Mouth Expanding (pistol cases) Priming
#3	Powder Dispensing
#4	Bullet Seating Bullet Crimping

POWDER MEASURE ADAPTOR

Screw the Uniflow Powder Measure Adaptor securely into Station #3.

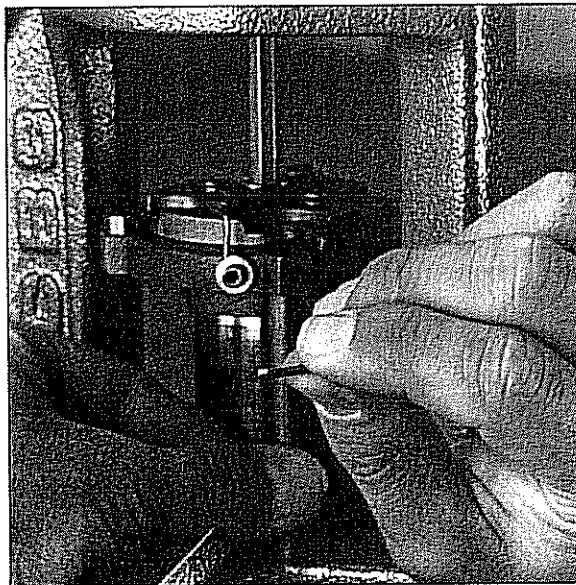


Photo #3

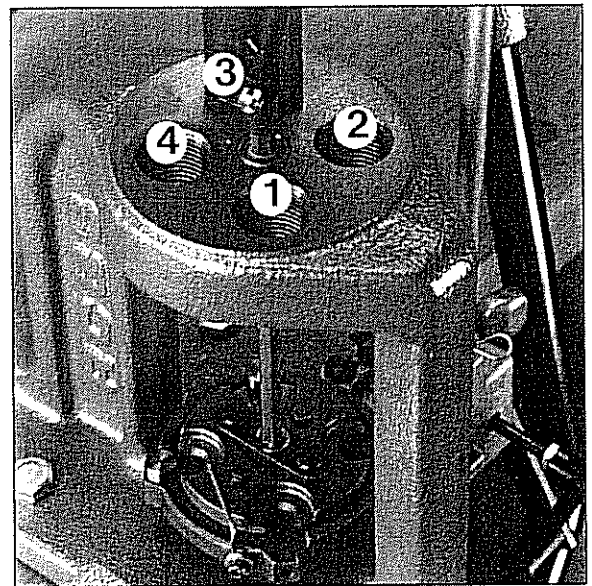


Photo #4

SHELL PLATES

The AUTO 4x4 Press utilizes a four position shell plate that incorporates the same numbering system as used on conventional RCBS Shell Holders. Consult with your dealer or contact RCBS for the Shell Plate appropriate to the caliber you wish to reload.

AUTO 4x4 Shell Plates are not available for cartridges utilizing conventional Shell Holders #5, #8, #13, #14, #22, #29 or #31 due to excessively large or thick rim dimensions.

The AUTO 4x4 is suited for the loading of pistol and medium length rifle cartridges. Long rifle cartridges can be reloaded if the indexing system is removed. This is accomplished by removing the Retaining Rings on the Index Rod and removing the Shell Plate Driver. Then, slide the Index Rod up through the Index Bushing. With the indexing system removed, the Uniflow Powder Measure must be operated manually.

SHELL PLATE INSTALLATION

1. Insert Index Ball Spring, followed by Index Ball into the socket in the Shell Plate Holder as shown in photo #5.
2. Insert the Ram Shoulder Bolt through the appropriate Shell Plate. The Ram Shoulder Bolt Head should be on the same side of the Shell Plate as the Shell Plate number.
3. Thread the Ram Shoulder Bolt/Shell Plate into the Shell Plate Holder until Shell Plate will not rotate. This tightening can be accomplished with your fingers. If any resistance is encountered prior to bottoming on the shell plate, check to make certain that the Locking Set Screw is not engaged too far. The Locking Set Screw is located under the Shell Plate Holder at Station #4. See photo #6.
4. Loosen the Ram Shoulder Bolt approximately 1/8 turn, just enough to allow free rotation of the Shell Plate.
5. Tighten the Locking Set Screw just enough to prevent rotation of the Ram Shoulder Bolt. Do not over tighten.

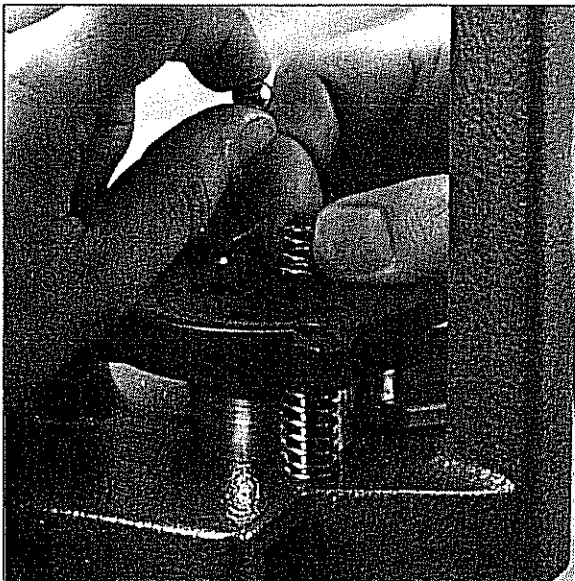


Photo #5

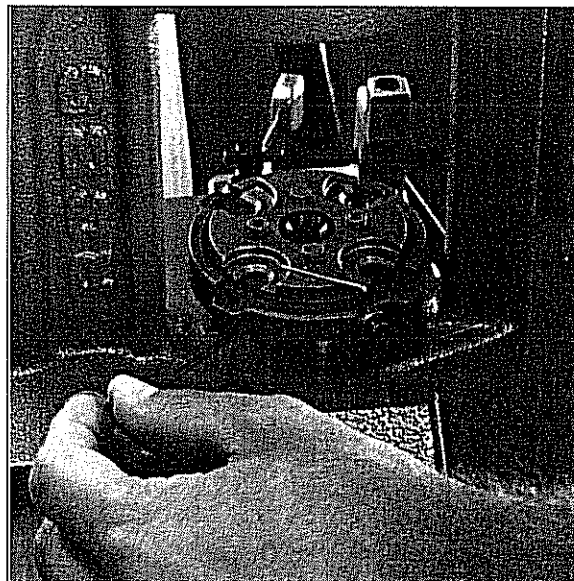


Photo #6

CASE RETAINING BUTTONS

The AUTO 4x4 is equipped with three Case Retaining Button holes located in the Shell Plate Holder at station 2, 3, and 4. One Case Retaining Button (three are supplied with each AUTO 4x4 Shell Plate) fits into each hole. Their function is to position the cartridge case fully into the Shell Plate. Since they slip in and out of the Shell Plate Holder, the buttons may be removed so a cartridge case can be removed for inspection, and then re-inserted. See photo #7.

RESIZING DIE INSTALLATION

Resizing Dies are to be installed in Station #1. Most standard dies with 7/8-14 threads may be used; however, the die must incorporate a decapping assembly. An auxiliary 7/8-14 Hex Lock Nut was included in your accessory pack to use on the sizer die as many standard furnished lock nuts are so large as to interfere with the adjacent die lock nuts.

Adjust the sizer die exactly as you would in a conventional single stage press. Thread the die down until it contacts the shell plate when the ram assembly is in its fully raised position. Lower the ram assembly and screw the resizing die down an additional 1/4 turn and tighten the lock nut.

Carbide sizer dies are highly recommended when reloading straight wall pistol cases. Not only is resizing effort reduced, but the use of resizing lubricant is eliminated. Resizing lubricant must be applied to the cartridge cases when using steel sizer dies.

EXPANDER DIES

Station #2 is reserved for expander dies to accomplish case mouth expansion and flaring on straight walled cases. Adjust the die using your die set instructions or the SPEER Manual.

Most bottle necked cartridge cases do not require an expander die, therefore station #2 may remain unused for certain cartridges.

INDEXING SYSTEM

1. The Shell Plate must be properly installed (as detailed in a previous section) prior to connecting the Indexing System.
2. Lower the Index Rod with the Shell Plate Driver attached to the Index Rod. Rotate the Shell Plate Driver until the Shell Plate Driver holes align with the tapped holes on the Shell Plate.
3. Insert the two Pan Head Screws in the Shell Holder Plate and tighten.

WARNING: DO NOT TRY TO INDEX THE SYSTEM IF RESISTANCE IS FELT. FORCING THE MACHINE TO INDEX WILL DAMAGE THE NYLON INDEX BUSHING. THIS WILL PREVENT THE INDEXING FEATURE FROM WORKING PROPERLY.

4. Damaging the Index Rod will cause excess wear to the Nylon Index Bushing. To replace a damaged Nylon Index Bushing, remove the Retaining Ring and push out the Nylon Bushing. Install a new Bushing and replace the Retaining Ring.

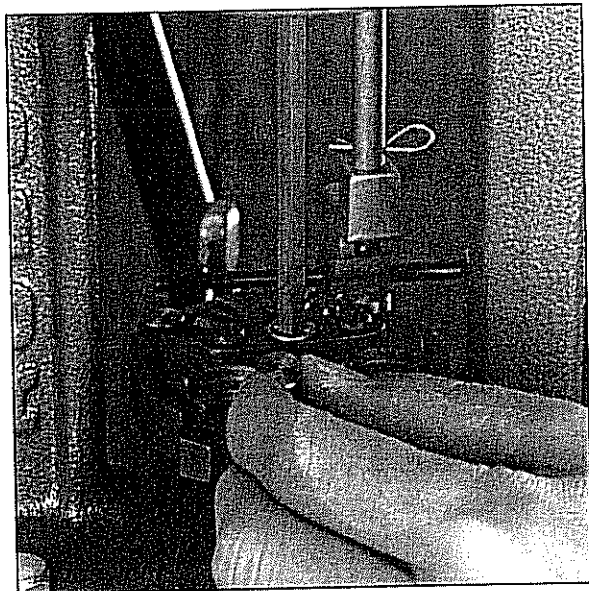


Photo #7

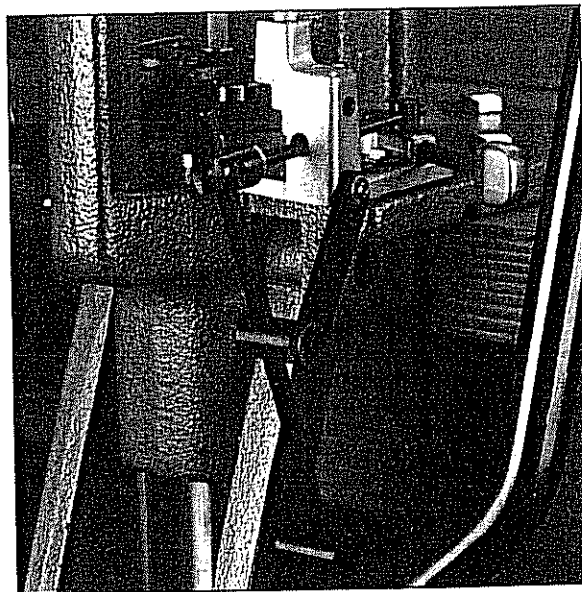


Photo #8

PRIMING SYSTEM

Your AUTO 4x4 was shipped with an automated priming system. To protect the priming system components while in shipment, a portion of the system is unassembled. Final assembly is required. See photo #8.

PRIMING SYSTEM ADJUSTMENT

1. Loosen the Button Head Cap Screws approximately 1/2 turn each or until the Priming Plate is just movable on the frame. See photo #9.
2. Slowly and carefully lower the Ram while at the same time shifting the Priming Plate so that the Priming Plug Assembly mates into the corresponding priming hole in the Shell Plate Holder.
3. Hold the Ram/Shell Plate Holder in their lowest position. Carefully hold down the Priming Plate. Release the operating handle and tighten the Button Head Cap Screws.
4. Check the priming function by raising and lowering the Ram/Shell Plate Holder over the Priming Plug Assembly. The Shell Plate Holder must not contact the Priming Sleeve or priming difficulties will be experienced.
5. The Socket Screw and Hex Lock Nut are pre-set at the factory.

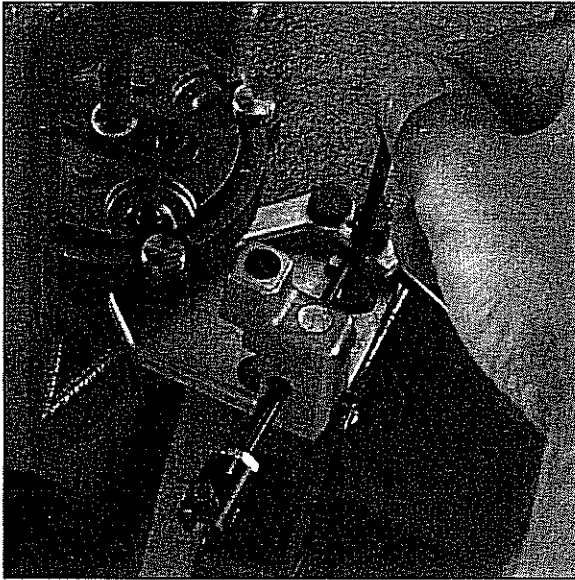


Photo #9

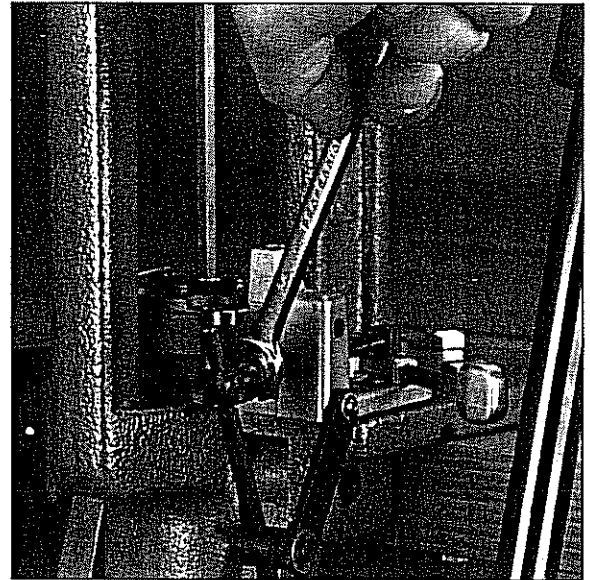


Photo #10

6. To adjust the primer arm timing, raise the Ram to its highest position. At this point the Primer Sleeve should override the Stop Pin and be positioned under the Primer Tube. The Primer Arm should reach this position as the Ram reaches its highest position. If the timing is off it can be corrected by loosening the Hex Jam Nut on the Push Rod. By twisting the Push Rod, the proper timing can be achieved. See photo #10.

Raise and lower the Ram a few times to check the timing. When the timing is correct, tighten the Push Rod Jam Nut, being careful not to rotate the Push Rod.

WARNING: DO NOT ATTEMPT TO PRIME MILITARY CARTRIDGE CASES WITH CRIMPED PRIMER POCKETS UNTIL THE CRIMP HAS BEEN REMOVED WITH A COUNTER SINK, A SPECIAL REAMER OR BY SWAGING. PRIMERS SEATED INTO CRIMPED POCKETS ARE SUBJECT TO DEFORMATION WHICH CAN CAUSE MISFIRES AND EVEN DETONATION DURING SEATING WHICH CAN CAUSE PERSONAL INJURY.

WARNING: DO NOT ATTEMPT TO SEAT PRIMERS AGAINST EXCESSIVE RESISTANCE WHICH MIGHT CAUSE DETONATION AND POSSIBLE PERSONAL INJURY. CHECK TO BE CERTAIN THAT THE CASE WAS NOT PREVIOUSLY PRIMED, THAT THE FIRED PRIMER WAS REMOVED, THAT A PORTION OF THE PRIMER CUP WALL MIGHT STILL BE IN THE PRIMER POCKET AND THAT YOU ARE USING THE CORRECT SIZE PRIMER.

WARNING: DO NOT MODIFY THE AUTO 4x4 PRIMING SYSTEM OR PARTS IN ANY MANNER OR ATTEMPT TO USE SIMILAR PARTS OR PRIMING SYSTEMS FROM OTHER MANUFACTURERS. DO NOT USE THE AUTO 4x4 PRIMING SYSTEM ON ANY OTHER RELOADING PRESS. TO DO SO COULD RESULT IN PRIMER DETONATIONS RESULTING IN PERSONAL INJURY.

Empty the Depriming Bottle each time the Primer Tube is filled with new primers. The AUTO 4x4 Reloading Press Priming System was designed specifically to use CCI brand primers.

PRIMER SIZE CHANGE OVER

Only the Primer Plug and Primer Sleeve need to be changed to convert between primer sizes. The change over can be accomplished without removing the priming system from the press, but some may find it more convenient to first remove the entire priming system. All parts are in the accessory pack.

To change primer sizes:

1. Pull the Primer Sleeve down the Primer Plug far enough to expose the cross hole. The 1/16 hex key or a straightened paper clip can be used to turn the primer plug out with a counter clockwise rotation. Use care in turning the primer plug as it is under force from the spring and may fly loose.
2. Drop the other size Primer Plug through the other size Primer Sleeve. Place the Primer Coil Spring over the threaded end of the Primer Plug.
3. Screw the Primer Plug into the Primer Arm. Do not over tighten.
4. Check from time to time to be certain the Primer Plug remains tight.

PRIMER FEED TUBE FILLING

The plastic primer tray and cover have been designed to orient primers for fast, easy handling and pick-up with the Primer Feed Tubes. To use:

1. Gently scatter primers onto the grooved surface of the primer tray.
2. Gently shake the tray horizontally until all primers are positioned anvil side up.
3. Place the cover on the primer tray and while holding the tray and cover together, turn the tray upside down.
4. The primers are now oriented anvil side down for easy pick-up with the appropriate size Primer Feed Tube. See photo #11.
5. Insert the APF Cotter Pin through the drilled hole in the Primer Feed Tube prior to primer pick-up. It will be removed after the tube is inserted into the priming system.

WARNING: CARE MUST BE TAKEN WHEN LOADING THE PRIMER FEED TUBE. DO NOT FORCE PRIMERS. BECAUSE OF THE STACKED CONDITION OF THE PRIMERS, IF ONE SHOULD IGNITE, ALL THE PRIMERS IN THE TUBE WILL EXPLODE CAUSING AN EXTREME HAZARD. NO MORE THAN FIVE POUNDS OF FORCE SHOULD BE APPLIED WHEN PICKING UP PRIMERS WITH THE PRIMER FEED TUBE (THIS CAN BE CHECKED USING A BATHROOM SCALE). IF DIFFICULT PRIMER PICK-UP SHOULD OCCUR, INVESTIGATE THE CAUSE AND CLEAR THE CONDITION OR RETURN THE PRIMER FEED TUBE TO RCBS FOR CORRECTION. ALWAYS WEAR EYE PROTECTION WHEN HANDLING PRIMERS OR RELOADING EQUIPMENT.

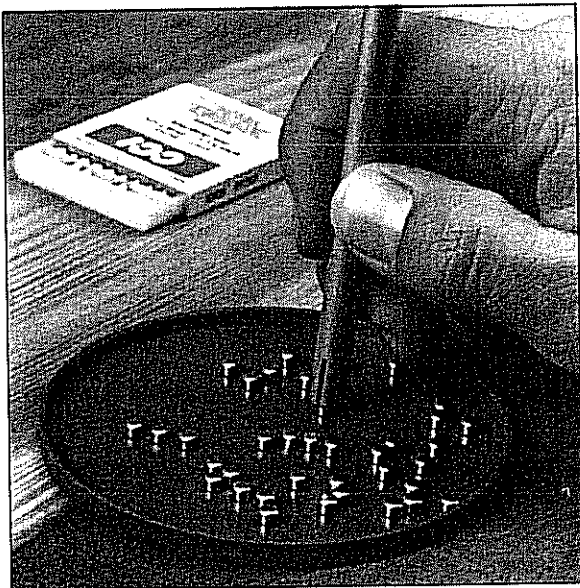


Photo #11

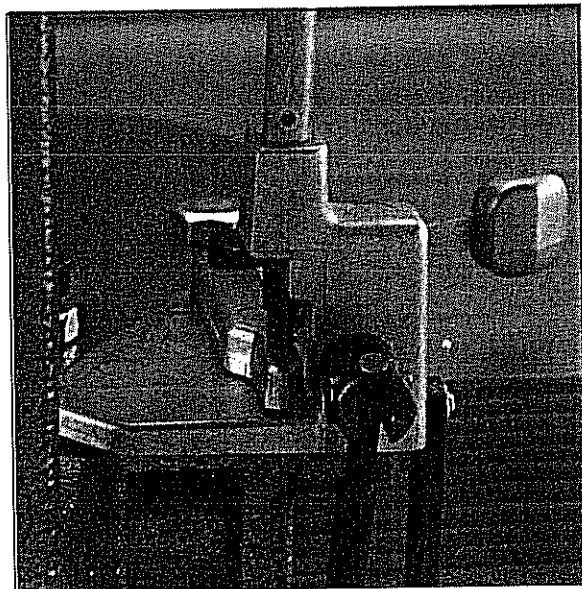


Photo #12

PRIMING ON THE AUTO 4x4

Priming on the AUTO 4x4 is accomplished at the bottom of the Ram stroke while the operating handle is in essentially a vertical position. It is extremely important to seat primers correctly in the cartridge primer pocket to prevent misfires or other unsafe conditions. Primers **MUST** be seated below flush of the case head to insure proper function of the AUTO 4x4, and to prevent misfires or "slam fires." Ideally, the primer should be .002 to .005 inch below flush.

WARNING: PRIMERS NOT SEATED BELOW FLUSH OF THE CARTRIDGE CASE HEAD CAN RESULT IN A "SLAM FIRE," A CONDITION WHEREIN THE CARTRIDGE FIRES INADVERTENTLY AS THE GUN MECHANISM IS CYCLED. A "SLAM FIRE" CAN RESULT IN SERIOUS EQUIPMENT DAMAGE AND PERSONAL INJURY.

To prime on the AUTO 4x4:

1. Fill the Primer Feed Tube as described in the proceeding section.
2. Insert the cotter pin end of the tube into the mating socket of the raised portion of the Priming Plate.
3. Remove the Cotter Pin and the primers will drop down to the Stop Pin. The priming system is now ready to use.
WARNING: DO NOT ATTEMPT TO PUSH INTO THE FULL PRIMING TUBE THE LAST PRIMER THAT REMAINS CAPTIVE IN THE FOUR FINGERED END OF THE PRIMING TUBE. IF THAT PRIMER SHOULD BE DETONATED A PROBABILITY EXISTS THAT THE OTHER PRIMERS IN THE TUBE COULD MASS DETONATE CAUSING SERIOUS PERSONAL INJURY.
4. Check to be certain that the primer plug and primer sleeve are the correct size for the primers used.

5. As the Ram is fully raised, the Priming Arm will move under the Primer Tube and a single primer will be deposited into the Primer Sleeve. See photo #12.
6. As the Ram is lowered, the Primer Arm will move under the priming station on the Shell Holder Plate. See photo #13.

WARNING. DO NOT FORCE A PRIMER THAT FAILS TO COMPLETELY FALL INTO THE PRIMING SLEEVE AND JAMS THE MECHANISM WITH MORE FORCE THAN IS APPLIED WITH THE PRIMING RETURN SPRING AS A PRIMER EXPLOSION MAY OCCUR WITH RESULTING INJURIES. GENTLY CLEAR ANY JAMMED CONDITION IN THE PRIMING SYSTEM.

7. Gently lower the Ram and a prepared cartridge will be in position over the new primer in the Priming System.
8. Apply firm and substantial force to the operating handle to seat the primer into the case.
9. Check every case primed for proper seating until the "feel" of the operation is learned. This is accomplished by removing the Case Retaining Button and removing the cartridge.
10. Do not raise the ram until the primer has been seated properly.

WARNING: DAMAGE TO THE INDEXING SYSTEM WILL RESULT FROM JAMMING OF SHELL PLATE.

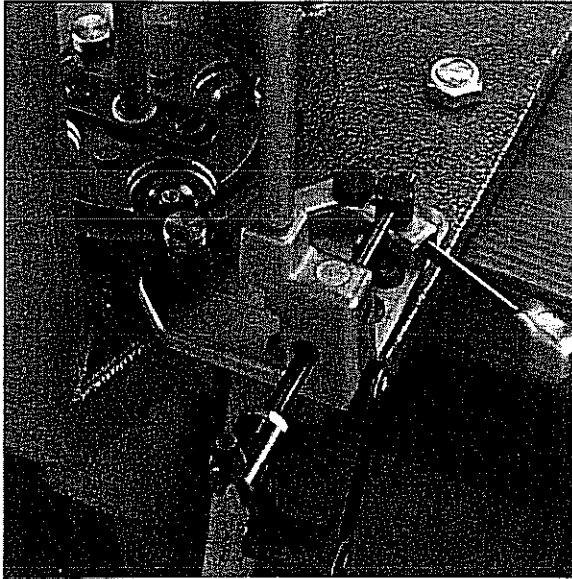


Photo #13

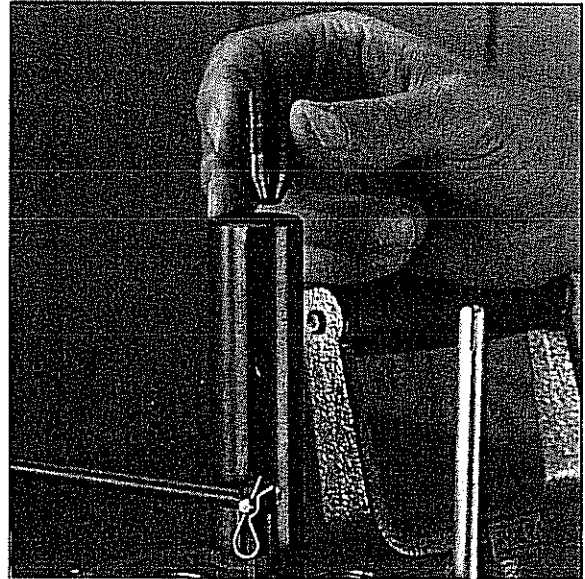


Photo #14

POWDER DISPENSING SYSTEM

Install the Powder Measure Adaptor in Station #3 as described in a previous section. One of the Powder Drop Tubes supplied in the Accessory Pack **MUST** be used with the system.

WARNING: THE POWDER MEASURE ADAPTER AND POWDER DROP TUBES ARE DIPPED IN A RUST PREVENTATIVE BEFORE SHIPPING AND MUST BE WIPED DRY BEFORE USING.

WARNING: THE "FLOW" CHARACTERISTICS OF POWDER VARIES CONSIDERABLY DUE TO WEATHER, OPERATOR TECHNIQUE AND OTHER FACTORS INHERENT TO THE POWDER ITSELF. LONG AND/OR LARGE GRANULED POWDERS MAY TEND TO "BRIDGE" IN THE POWDER DROP SYSTEM AND CAUSE ERRATIC CHARGE WEIGHT. BE CERTAIN THAT THE POWDER YOU SELECT FLOWS FREELY THROUGH THE POWDER DISPENSING SYSTEM.

Choose the appropriate Powder Drop Tube and insert it with the reduced diameter end down. See photo #14. It should freely slide down until retained by a wire ring approximately 1/2 inch from the bottom.

The linkage for the AUTO 4x4 is designed for use with the RCBS Uniflow Powder Measure only. To convert an RCBS Uniflow Powder Measure for automated use, remove the Handle and replace it with the Cylinder Handle as illustrated in photo #15.

Thread the empty Uniflow Powder Measure into the Powder Measure Adaptor until it bottoms out. Then unscrew the Powder Measure with the Powder Measure Handle in the down position and the Ram at the bottom of the stroke until the connecting Yoke (with the Yoke at its upper position) mates with the Cylinder Handle. Then, insert the Cotter Pin to secure the Yoke in place.

Position the Powder Measure at a slight angle so the connecting rod will not shift or bind. Then, tighten the Powder Measure Lock Nut. Cycle the Ram and insure that the Powder Measure Cylinder rotates the full cycle.

When the Powder Measure is adjusted correctly, remove the Cotter Pin and disconnect the Yoke from the Cylinder Handle. Powder may now be added to the Hopper. The Powder Measure may now be adjusted for the proper charge.

Remember to connect the Yoke to the Powder Measure only when a sized and primed cartridge is located at the powder dispensing station. Powder will automatically dump with each pull of the handle when the Yoke is connected.

WARNING: THE OPERATOR IS SOLELY RESPONSIBLE FOR ALL ASPECTS OF THE POWDER DISPENSING SYSTEM. EITHER INSUFFICIENT OR EXCESSIVE POWDER CHARGES CAN RESULT IN GUN DAMAGE AND SERIOUS PERSONAL INJURY. BE CERTAIN THAT THE CORRECT TYPE OF POWDER IS USED AND THAT THE POWDER MEASURE DOES NOT RUN OUT OF POWDER. CONFIRM ON AN ACCURATE RELOADING SCALE THAT THE CORRECT CHARGE WEIGHT IS BEING DISPENSED. BE ABSOLUTELY CERTAIN THAT ONLY ONE CHARGE IS DISPENSED INTO EACH CARTRIDGE. NO MORE, NO LESS. IF IN DOUBT, CHECK CASE PRIOR TO SEATING BULLETS.



Photo #15

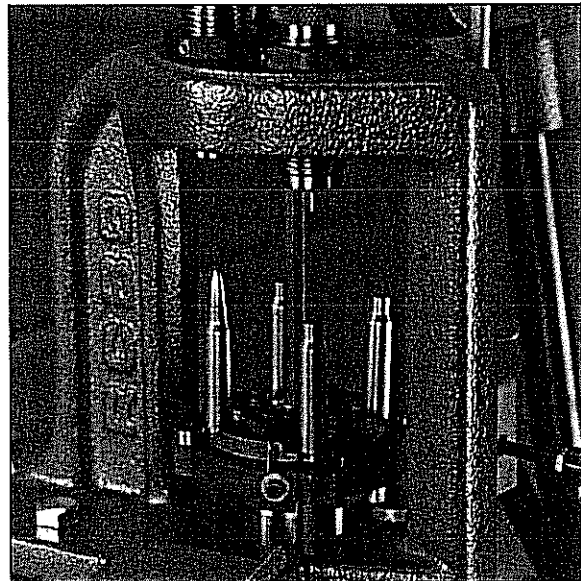


Photo #16

BULLET SEATING AND CRIMPING

Bullet seating and crimping is accomplished in Station #4. See photo #16. Adjust your die the same as you would in a single stage reloading press. Some seater dies of older manufacture do not have sufficient entry chamfer for use in a progressive reloader. Return them to the manufacturer for adjustment or replacement.

If you wish to taper crimp certain hand gun cartridges, RCBS offers seater plug capability in currently produced taper crimp dies. Contact your dealer for more information.

AUTO CASE EJECTION

The Case Ejection Spring is held by a clamp. By loosening the clamp screw the spring may be rotated to insure proper case ejection action. Mount the Catcher Base to the front of the loading bench or table, just to the left of the press. Install the ammo-catcher box in the Catcher Base.

CAUTION: DO NOT SACRIFICE QUALITY FOR SPEED OF OPERATION. THE VERY PURPOSE OF RELOADING IS DEFEATED FOR THOSE WHO DO NOT STRIVE FOR ABSOLUTE RELIABILITY, SAFETY, ACCURACY AND ECONOMY. MAKE YOUR OWN CHECK LIST OF SEQUENTIAL OPERATIONS TO FOLLOW.

Suggested check list (once operation has reached steady state):

- Insert fired case.
- Position bullet.
- Ram up.
- Ram down.
- REPEAT -

HELPFUL HINTS

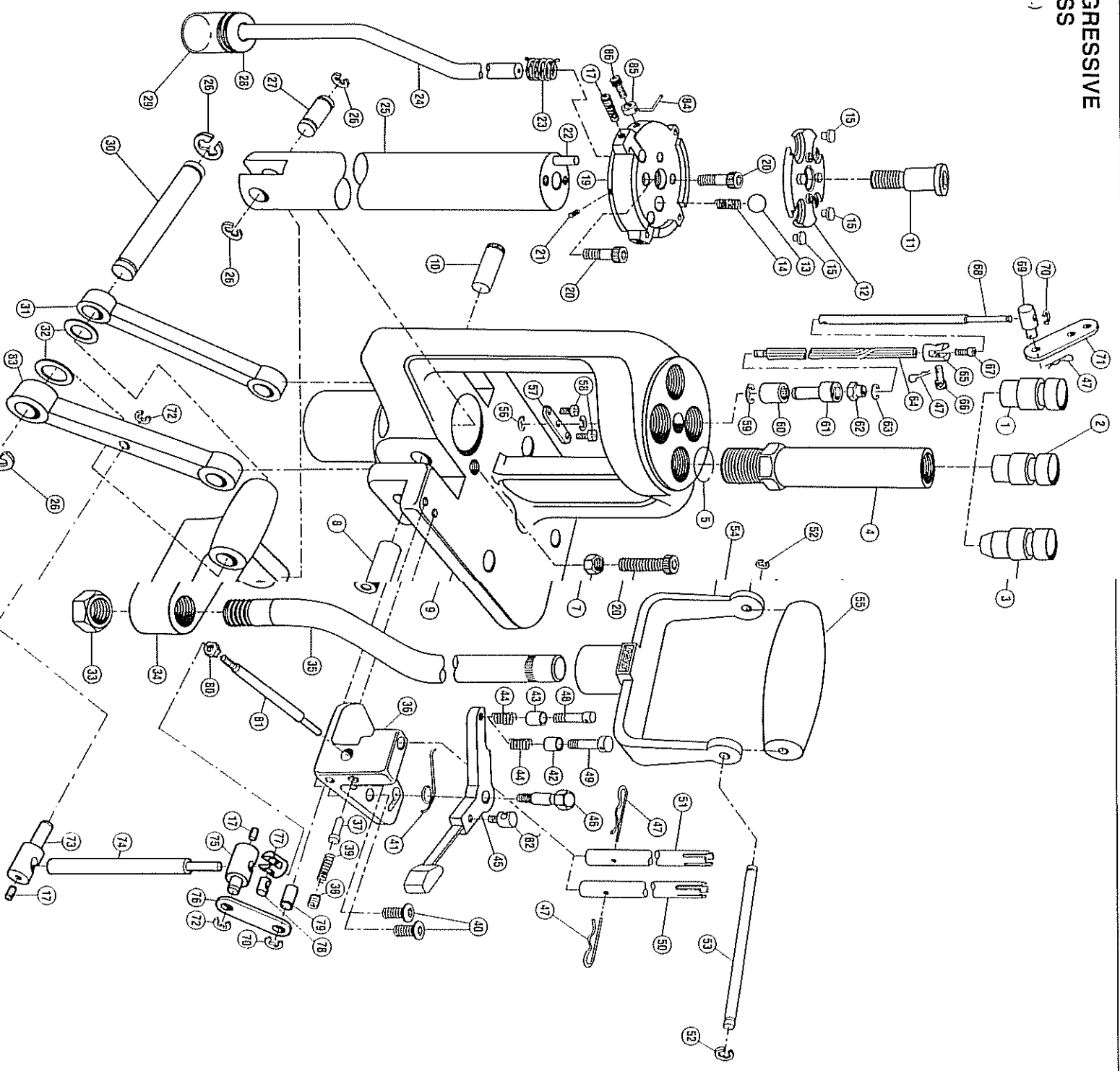
1. Box the reloaded ammunition in an orderly manner as you proceed rather than dropping each round into a large container. An occurrence such as an empty powder hopper will not affect an entire lot, but can be backtracked in the ammo box.
2. Reload alone. Do not let anyone or anything distract you!
3. If you have the slightest doubt whether a particular round contains powder, set it aside. Often an empty round can be detected by weighing or shaking. Take no chances!
4. Develop the habit of running your forefinger across the case head while boxing the round. A primer protruding as little as .001 can be detected by feel with practice.
5. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE!

TROUBLE SHOOTING

- | | |
|---|---|
| 1. Shell Plate doesn't rotate | <ul style="list-style-type: none">• Ram shoulder bolt not adjusted properly.• Fired primer at Station #1 not pushed clear of case• New primer at Station #2 not seated deep enough• Fired primers stacked up in Depriming Tube |
| 2. Seated Primer Upside Down or Sideways | <ul style="list-style-type: none">• Shell Plate Holder contacting Primer Sleeve on down stroke• Picked-up wrong in Priming Tube• Incorrect size Primer Plug and Priming Sleeve• Incorrect Case Retaining Buttons installed |
| 3. Deformed Primer during seating | <ul style="list-style-type: none">• Military case with crimped primer pocket• Debris laying on Primer Rod• Incorrect size Priming Plug and Priming Sleeve• Incorrect Case Retaining Buttons installed |
| 4. Primer Plug Assembly did not pick-up primer | <ul style="list-style-type: none">• Primer Tube empty• Wrong size primer• Loose Primer Plug• Primer Plug bent• Primer Arm not properly adjusted |
| 5. Spilled powder at Station #3 | <ul style="list-style-type: none">• Wrong size or absence of Powder Drop Tube• Powder Drop Tube installed upside down• Powder Measure Adaptor needs cleaning• Excessive powder charge• Over rapid Ram lowering• Case not at powder station |
| 6. Spilled Powder at Station #4 | <ul style="list-style-type: none">• Over rapid or abrupt indexing• Excessive powder charge• Powder selection not suited for progressive tool reloading, i.e.: powder level too close to case mouth |
| 7. Fired case hangs up trying to enter size die | <ul style="list-style-type: none">• Case not fully inserted into shell plate• Case mouth bent• Inadequate entry chamfer on die (common to older dies) |

AUTO 4x4™ PROGRESSIVE RELOADING PRESS

(See next page for parts list.)



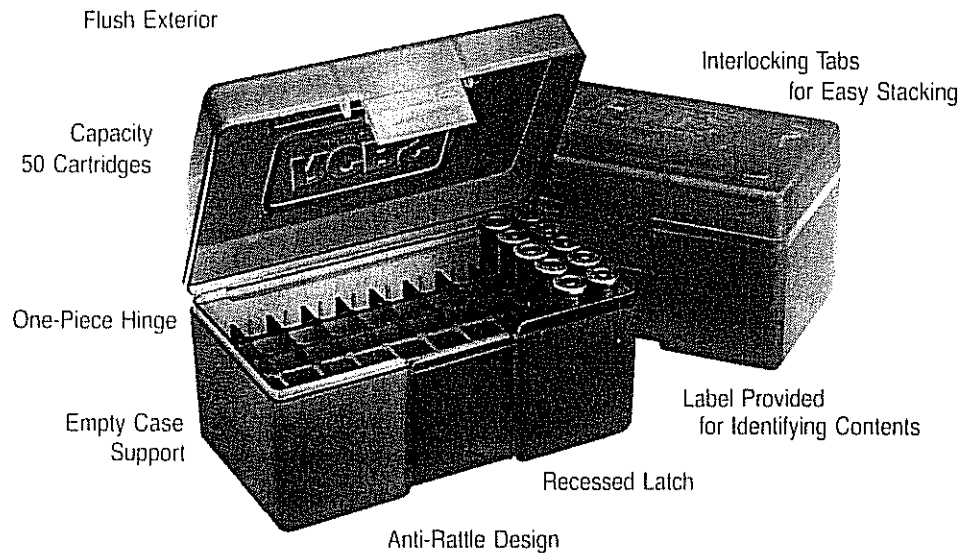
AUTO 4x4™ PROGRESSIVE RELOADING PRESS

KEY	PART #	DESCRIPTION	KEY	PART #	DESCRIPTION
1	87191	Small Rifle Drop Tube	57	87655	Shell Plate Driver
2	87192	Large Rifle Drop Tube	58	87659	Pan Head Screw 8-32x3/16
3	87193	Pistol Drop Tube	59	87658	Retaining Ring
4	87190	Powder Measure Adapter	60	87653	Clutch
5	38286	Retaining Ring	61	87651	Inner Race
7	87175	1/4-28 Hex Nut	62	87650	Index Bushing (Nylon)
8	09128	Link Arm Pin, Right	63	87654	Retaining Ring
9	87690	Press Frame	64	87656	Index Rod
10	09127	Link Arm Pin, Left	65	87676	Connector
11	87691	Ram Shoulder Bolt	66	87678	Cross Pin
12	—	Shell Plate	67	87680	8-32x1/4 Socket Screw
13	87152	Index Ball 3/8"	68	87675	Connecting Rod
14	87153	Index Ball Spring	69	87679	Handle Connecting Yoke
15	87154	Case Detent	70	87670	Retaining Ring
16	87155	Case Detent Spring	71	87677	Cylinder Handle
17	81004	Socket Head Setscrew 10-32x3/16	72	80056	Retaining Ring
18	87157	Hex Lock Nut 6/32	73	87669	Yoke Long
19	87692	Shell Plate Holder	74	87668	Rod Long
20	87159	1/4-28 x 3/4 Socket Screw	75	87667	Yoke Short
21	87160	10-32 x 3/8 Brass Tipped SHSS	76	87666	Connector Link
22	87158	3/16 x 5/8 Roll Pin	77	87600	Connector 10-32
23	87167	Ram Return Spring	78	87663	Swivel
24	87176	Depriming Tube	79	87665	Link Pin
25	87165	Ram	80	87661	10-32 Hex Nut
26	09105	Retaining Ring	81	87662	Push Rod
27	87166	Ram Pin	82	87664	Connector
28	87178	Depriming Bottle Cap	83	87693	Link Arm, Right
29	87177	Depriming Bottle	84	87686	Case Ejector Spring
30	87146	Toggle Block Pin	85	87685	Wire Clamp
31	09150	Link Arm, Left	86	87687	Socket Screw 10-32x1/4
32	09144	Bow Washer 134-5-20			
33	09136	Handle Nut 5/8-18			
34	87145	Toggle Block			
35	87171	Handle Shaft			
36	87180	Priming Plate			
37	09595	APF Stop Pin			
38	09591	Setscrew 1/4-28 x 3/16 Cup Point			
39	09596	APF Coil Spring			
40	87181	Button Head Cap Screw 10/32 x 5/8			
41	87184	Priming Return Spring			
42	09506	Primer Sleeve UPA, Large			
43	09507	Primer Sleeve UPA, Small			
44	09508	Primer Plug Coil Spring			
45	87182	Priming Arm			
46	87183	Priming Shoulder Bolt			
47	09599	APF Cotter Pin			
48	09555	Primer Plug UPA, Small			
49	09554	Primer Plug UPA, Large			
50	09588	APF Tube, Small			
51	09587	APF Tube, Large			
52	86733	Retaining Ring			
53	09155	Handle Grip Pin			
54	09153	Handle Grip Fork			
55	09160	Handle Grip			
56	87657	Retaining Ring			

These products are included with the AUTO 4x4 but not shown in the drawing.

86625	Ammunition Catcher Box
86794	Hex Key Wrench - 1/8
09635	Hex Key Wrench - 3/32
87161	Hex Key Wrench - 1/16
86764	Cleaning Brush
09301	Resizing Lubricant
09475	Primer Tray
09021	Hex Lock Nut - 7/8-14
09244	Case Catcher Base

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