

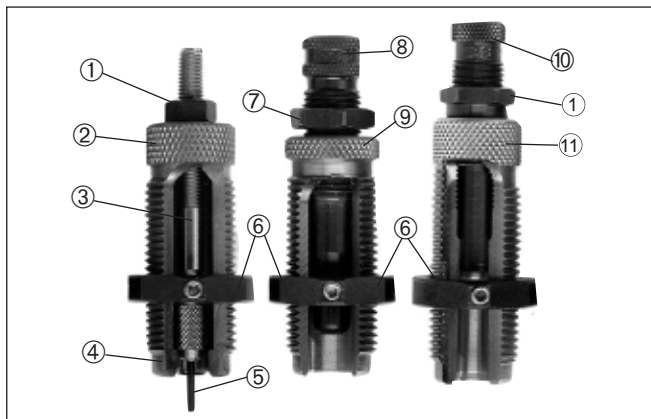
RCBS[®]

COWBOY DIES



PRODUCT INSTRUCTIONS

PARTS LIST FOR 3 DIE SET



Note: The photo above is not the actual RCBS Cowboy Die set, but represents the components of a three die set.

KEY	PART #	DESCRIPTION
1	709644	Lock Ring 1/2-20
2	-	Sizer Die
3	709617	Decapping Rod
4	709618	Decap Pin Holder
5	90164	Decapping Pin
6	709646	Lock Ring 7/8-14
7	709645	Lock Ring 9/16-18
8	-	Expander
9	-	Expander Die Body
10	-	Seater Plug
11	-	Seater Die Body

IMPORTANT: READ THIS SECTION FIRST

Before using the RCBS Cowboy Dies, read the instruction manual carefully to fully learn how to safely operate the related reloading equipment. Failure to properly operate certain reloading equipment can result in severe personal injury and/or equipment damage. If you have read these instructions and still do not understand some operation, call us at **1-800-533-5000** and a technician will assist you. 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.

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.
- Don't 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. Don't 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. Scrap 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 guns in which the resulting ammunition may be used, we assume no responsibility, expressed or implied, for the use of ammunition reloaded with this product.

FEATURES

RCBS Cowboy Dies match tough steel to the tough jobs. The die bodies are machined and hardened until they're tough enough to meet our standards, yet smooth enough to handle the most delicate brass case.

Sizer dies are vented to avoid case damage and are made to absolutely precise tolerances. And there's extra muscle where it counts, in the headed decapping pin. Expander decapping units are designed so the decapping pin can be replaced, if necessary. Seater dies have a unique design which aligns the bullet with the case mouth an instant before seating.

Interior polishing helps brass work smoothly with very little friction and cannot chip or peel with age. All RCBS Cowboy Dies feature a solid brass lock ring that allows tight control over precise adjustments. RCBS dies are manufactured with the standard 7/8"-14 thread and are designed for use with a shell holder having a lip thickness of 0.125". Any variations of these dimensions may cause headspace or insufficient sizing problems.



GENERAL INFORMATION

Reloading rifle or pistol ammunition with lead (non-jacketed) bullets requires a 3-Die Set. The first die sizes and decaps the case. The second die expands the case neck to the correct diameter to securely hold the lead bullet and flare the case mouth to avoid shaving lead off the bullet. The third die seats and crimps the bullet

PACKAGING

All RCBS Cowboy Dies are packaged in convenient and attractive traditional storage boxes specially designed by RCBS to protect your dies in shipment and during storage. A sturdy cradle holds the dies firmly in place to prevent damage and rolling around. Each box contains a label for recording your favorite loads and can be adhered to the inside lid for quick reference. The die caliber is listed on the outside of the box for easy identification.



A label is provided with each die box for recording your favorite loads.

CUSTOMER SERVICE

All RCBS Cowboy Dies are carefully checked and thoroughly inspected before shipping. Each die will reload fired cases from any standard chamber of the caliber stamped on the die. Should the die perform unsatisfactorily, call or write to RCBS, explaining the problem in detail. In most cases we can help you overcome the problem without the inconvenience and expense of returning the dies. If necessary, we will authorize the return of the dies. Do not attempt to alter the dies in any way.

Cowboy seater plugs are designed to fit bullets cast in RCBS Cowboy Bullet Moulds. It is impossible to make one seater plug fit every possible variation in bullet style and weight. If the seater plug furnished with the seater die does not fit the bullet you are using, a custom seater plug will have to be produced. Please provide us with two sample bullets – both will be returned with the new seater plug – along with your order and payment. Be sure to specify caliber and 1/2"-20 thread size. Call, e-mail or write RCBS Customer Service for current price so that you can include payment and avoid any unnecessary delay. Note: We do not keep bullets on file, so you must send samples to guarantee a perfect fit.

Send your order and payment with securely packed sample bullets to:

RCBS Customer Service
Custom Seater Plug
605 Oro Dam Blvd.
Oroville, CA 95965-5718

The seater plug for Cowboy calibers can be removed by screwing the seater plug *up* and out of the die after the lock ring has been loosened.

A case stuck in the sizer die may be removed with an *RCBS Stuck Case Remover*—available from your RCBS dealer. Or you may return the sizer die along with your name and address. We will remove the stuck case or replace the die under terms of the RCBS Lifetime Warranty.

PREPARING THE DIES

Some sizer dies for bottleneck type cases contain a small vent hole through which trapped air escapes during resizing. Sometimes the vent hole will plug up with factory polishing material. This material will scratch and dent cases unless it is removed. To clean, unscrew the decap unit from the die. Insert a straightened paper clip, needle or similar object into the vent hole. This will push the material into the die body. The debris can then be easily removed by cleaning the inside of the die using a patch saturated with *Outers Solvent*. Reassemble the die.

IMPORTANT: We find that most scratching of the die interior is caused by

nickel cases or grit on the brass surface. If you are using nickel pistol cases, we recommend that you use a carbide sizer die. This die is hard enough to resist the scratching that nickel cases cause. The best method for cleaning brass cases of grit is to tumble them. Tumbling the cases will clean the surface and prevent scratching the internal die surface. Your cases should be cleaned periodically to protect both your dies and the chamber of your firearms. The *RCBS Vibratory Case Cleaner* is recommended for cleaning cases. Before storing dies, lightly spray them with *Outers Tri Lube* or *Metal Seal* to protect them from rust.

PREPARING THE CASES

Clean and inspect cases before lubricating and sizing. Discard any cases with indications of a split neck or partial head separation. Check cases for the correct overall length. If necessary, **trim after sizing**. If bullets are to be crimped, it is imperative that cases be trimmed to the same overall length. Trimmed case mouths should be deburred and lightly chamfered inside and out with an *RCBS Deburring Tool* or use the *RCBS Three Way Cutter* in your case trimmer.

Cases must be properly lubricated before sizing. Over-lubrication will result in a dented case shoulder. Improper or no lubrication will result in a case stuck in the sizer die. For best results use *RCBS Case Slick Spray Lube* or *Case Lube-2* applied to an *RCBS Case Lube Pad*. Case mouths should be very lightly lubricated with an *RCBS Case Neck Brush*. These accessories are available from your dealer as individual items or combined in the *RCBS Case Lube Kit*. **Do not lubricate the shoulders of bottle-neck type cases.** After the cases are lubricated they are ready to go through the reloading steps.

3-DIE SET FOR BOTTLE-NECK RIFLE AND PISTOL CASES

The decapping pin is adjusted by loosening the small lock ring at the top of the die and turning the decapping unit until the desired setting is obtained. When the decapping



Lightly chamfer the case mouth with a Deburring Tool to remove rough edges for easier bullet seating.



Roll cases on an RCBS Case Lube Pad for proper lubrication.

unit is adjusted correctly, the decapping pin will protrude below the bottom of the die just enough to reliably knock out the spent primer (approx. 1/4"). Trim cases after the sizing and expanding operation. We suggest trimming 10 thousandths less than the maximum length. The next step is to prime the case and then fill it with the predetermined powder charge. Then seat the bullet. Usually the reloader performs one operation at a time on each lot of cases; sizing and decapping, priming and filling them with powder and then seating the bullets.

SIZING WITH CARBIDE SIZER DIES

Screw the Sizer Die into the press until the die touches the top of the shell holder when the shell holder is brought up to the top of the press stroke. Tighten the large lock ring. **DO NOT CAM OVER.**

PLEASE NOTE:

A Tungsten Carbide Sizer Die will give a lifetime of perfect service if properly cared for. However, the die will not withstand severe impact, such as dropping. The shell holder should never strike the bottom of the die. When using a Carbide Sizer Die it is not necessary to lubricate a pistol straight-wall case. Screw the die into the press until it just touches the shell holder. **DO NOT CAM OVER.**

SIZING WITH STANDARD STEEL SIZER DIES

Screw the Sizer Die into the press until the die touches the top of the shell holder when the shell holder is brought up to the top of the press stroke. Be sure all play is removed from the press leverage system. To do this, adjust the die as above, lower the shell holder and set the die 1/8 to 1/4 of a turn lower. Set the large lock ring. The decapping unit is adjusted by loosening the small lock ring at the top of the die and turning the decapping rod until the desired setting is obtained. When the decapping unit is adjusted correctly, the decapping pin will protrude below the bottom of the die just enough to reliably knock out the spent primer (approx. 1/4").

Important: Do not allow the decapping unit to contact the web of the case.

EXPANDING

Screw the expander die into the press until the die touches the top of the shell holder when the shell holder is brought up to the top of the press stroke. Place

a sized case in the shell holder and run it 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 lock ring on top of the die and turning the expander up or down.

BULLET SEATING AND CRIMPING FOR ROLL CRIMP

IMPORTANT: Please read instructions carefully. Do not adjust the seater die down against the shell holder as it will distort or crush the case. If the bullet you are using has a crimping groove, the bullet can be seated and crimped using the following instructions. Before proceeding, cases must be trimmed to the same overall length to assure a consistent crimp. The crimping feature is machined into the seater die body. It is not a special attachment to the seater plug. The die must be moved up or down to obtain the proper crimp adjustment. To adjust, the seater die, place a sized, primed and powder-charged case into the shell holder and run it to the top of the press stroke.

Screw the seater die into the press until you feel it touch the mouth of the case. Back the die up one full turn and set the large lock ring. This will leave a gap between the bottom of the die and the shell holder. Next, lower the case and insert a bullet in the case mouth. Slowly run the case and bullet into the seater die. Check the bullet for proper seating depth. If the bullet is not seated properly, adjust the



The standard RCBS steel die is shown on the left. The carbide insert is visible in the carbide sizer die on the right.



Seater dies in our 3-die sets use a "through-the-top" style seater plug as shown above. This allows for easy cleaning.



Screw the sizer die into the reloading press.



Notice the sizer die is adjusted so it contacts the shell holder.

seater plug until the proper depth (in the middle of the crimp groove) is obtained.

Next, adjust the die to crimp. While the uncrimped cartridge is still in the seater die, unscrew the seater plug several turns. Screw the seater die downward until you feel it touch the mouth of the case. Lower the reloaded cartridge and adjust the seater die down about 1/8th of a turn. Run the reloaded cartridge into the die and then check the crimp. If more crimp is needed, repeat the preceding step by adjusting the die downward 1/8th of a turn at a time. Over-crimping of the cartridge will cause bulging and may affect chambering. After you are satisfied with the crimp, run the completed cartridge into the seater die, set the large lock ring and then lower the seater plug until it touches the bullet. Tighten the seater plug lock ring. Once the seater die is properly adjusted, the bullet is seated and crimped in one operation.

Caliber	3-Die Full Length Set	3-Die Roll Crimp Set	3-Die Carbide Roll Crimp Set	Decap Unit	Decap Pin
.25-20 Winchester	11850	–	–	09628	90164
.30-30 Winchester	14650	–	–	09628	90164
.32 S&W Long/.32 S&W	–	–	21451	09628	90164
.32 Winchester Special	15750	–	–	09628	90164
.32-20 Winchester	–	18151	–	09628	90164
.32-40 WCF	32550	–	–	09628	90164
.357 Magnum/.38 Spec.	–	–	18251	09628	90164
.38 S&W	–	20351	–	09628	90164
.38-40 WCF	–	35651	–	09628	90164
.38-55 Winchester	–	36551	–	09628	90164
.40-65 Winchester-410"	–	36651	–	09628	90164
.44 S&W Russian/.44 Special	–	–	18651	09628	90164
.44-40 WCF	–	18851	–	09628	90164
.45 S&W Schofield/.45 Colt	–	–	19151	09628	90164
.45-70 U.S. Gov't	–	20951	–	09628	90164

REPLACEMENT PARTS

The Decapping Unit (Key 3, 4, & 5) and Decapping Pins (Key 5) may be available from your dealer. If not, they and all other replacement parts should be ordered from RCBS Customer Service. See the back panel of this instructions booklet for phone number or address.

PLEASE NOTE:

These instruction photos are for general die use and information. The photos shown may not necessarily portray exact RCBS Cowboy Dies, however the information is accurate and useful.

Please call RCBS Customer Service for any questions:

1-800-533-5000

RCBS[®]

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!*

Customer Service

1-800-533-5000 (US or Canada) **or 530-533-5191**

Hours: Monday - Thursday, 6:30am - 3:00pm (hours may vary)

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