

RCBS®

COMPETITION DIES



PRODUCT INSTRUCTIONS

SAFETY

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

As with any reloading operation, some safety rules must be followed. By observing these few rules, the chance of 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 product. 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.

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

- WARNING: Primers are designed to explode and will do so when subjected to heat or percussion.
- Do not decap live primers.

- Never attempt to seat or reseat a primer in a loaded round.
- 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. Scrap unknown primers in accordance with applicable regulations.
- 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 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, no responsibility, either expressed or implied, is assumed for the use of ammunition reloaded with this product.



INTRODUCTION

RCBS Competition Dies are manufactured for the most demanding competitive marksmen and precision shooters. They offer features not available on standard RCBS reloading dies. First, the Sizer Die has its expander ball in the middle of the decapping rod for extra leverage. This makes for smooth and effortless neck expansion. This die is machined to the tightest tolerances to yield maximum concentricity between the die neck and body. The Seater Die features a micrometer bullet seating head that lets you dial the seating depth you want. Each graduation moves the seating depth approximately $\frac{1}{1000}$ of an inch. The handy bullet “window” lets you insert bullets through the side of the die instead of the bottom, while a special bullet seating sleeve assures correct bullet alignment before and after seating.

All RCBS Dies feature an improved steel lock ring with a “hex” design that allows even tighter control over precise alignments. A solid brass setscrew locks the ring securely, yet will not damage the die threads. Once the large lock ring on the die is set, it can be locked in the desired posi-



After adjusting the die, tighten this setscrew to hold the proper setting.



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

tion by **lightly** tightening the setscrew. The die will then hold the proper setting and may be reused in the same press without readjustment.

Competition Die Sets are furnished with an extended shell holder where needed for reloading short cases. The competition extended shell holder is only used with the competition **seater** die. A standard RCBS shell holder should be used with the competition **sizer** die.

PACKAGING

All RCBS Dies are packaged in convenient plastic storage boxes specially designed by RCBS to protect your dies in shipment and during storage. A unique 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 mounted on the inside lid for quick reference. A label on the outside of the box lists the die caliber for easy identification.

CUSTOMER SERVICE

All RCBS 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. Be sure to mention the caliber of dies and the year of manufacture. 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.

Seater plugs are designed to fit most bullets of a given caliber. However, it is impossible to make one seater plug to 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, check the list of Alternate Seater Plugs for special application in the current RCBS Reloading Catalog. If you are unable to find the one you need, 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 1/4"-28 or 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

Cases stuck in the Sizer Die may be removed with an RCBS Stuck Case Remover-2 Kit – available from your dealer. Or you may return the die along with your name and address to the above address. We will remove the stuck case and return the die to you. Please enclose \$5.00 U.S. to cover shipping & handling.

PREPARING THE DIES

Some Sizer Dies for bottleneck type cases have a tiny vent hole through which trapped air escapes during resizing. Sometimes the vent hole will plug up



Before cleaning the vent hole, unscrew the expander-decap assembly from the die.



Use a straightened paper clip to clean the vent hole.

with factory polishing compound. This compound will scratch and dent cases unless it is removed.

Unscrew the Expander-Decapping Assembly from the die. Insert a needle, straightened paper clip or similar object into the vent hole. This will push the compound into the die body and can be removed by cleaning the inside of each die using a patch saturated with Outers Solvent.

Important: We find that most scratching of the interior of a die is caused by grit on the brass surface. 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 gun chamber. The RCBS Sidewinder Case Tumbler and Vibratory Case Cleaner are recommended for cleaning cases.

As soon as you detect scratches on a resized case, we recommend lightly polishing the interior wall of the Sizer Die in a lathe—using #320 (fine) emery cloth to remove dirt and other foreign particles.

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 and trim if necessary. 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.



Lightly chamfer the case mouth with an RCBS Deburring Tool.



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

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 only RCBS 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.



Adjust the sizer die in the press to properly size the case.

FULL LENGTH RESIZING

Screw the Competition Sizer Die into the reloading press until the sizer die touches the standard shell holder with the ram at the top of the stroke. Lower the ram and set the die $\frac{1}{8}$ to $\frac{1}{4}$ turn further down so the press cams over center. Set the large lock ring and tighten the setscrew with a setscrew wrench. The end of the decapping pin holder must be at least $\frac{3}{16}$ " above the bottom of the die. The decapping pin should protrude below the bottom of the die just enough to knock out the spent primer. The expander-decapping assembly is adjusted by loosening the small lock ring at the top of the die and turning the unit to the desired setting.

BULLET SEATING

The thimble of the Competition Seater Die is adjustable in .001" increments. To set up the seater die, turn the thimble counter-clockwise to near its maximum adjustment. Insert the die into the press screwing it down to almost touch the standard or, where required, extended shell holder. Position the window of the die to the front and set the lock ring. Insert a primed and powder charged case into the shell holder and raise the ram until the case neck engages the bullet



Each graduation on the seater die is .001".



Turn the thimble clockwise to adjust the seating depth.

guide. Insert the bullet, base first, into the bullet guide and complete the bullet seating operation. Turn the thimble clockwise until the bullet is seated to the

COMPETITION DIE PARTS LIST

Caliber	Full Length Die Set	Full Length Sizer Die	Seater Die	Extended Shell Holder	Exp-Decap Assembly
.22 Hornet	38301	38329	38338	38262	38102
.222 Remington	37001	37029	37038	38260	38102
.223 Remington	37201	37229	37238	38260	38102
.22-250 (.22 Varminter)	37101	37129	37138	38253	38102
.243 Winchester	37301	37329	37338	38253	38105
6.5mm x 55 Swedish Mauser	38401	38429	38438	38252	38107
.270 Winchester	37501	37529	37538	—	38108
7mm-08 Remington	37401	37429	37438	38253	38109
7mm Remington Magnum	37601	37629	38739	—	38109
7mm x 64 Brenneke	38501	38529	38538	—	38109
7.5mm Schmidt-Rubin	38601	38629	38638	—	38112
.30-06 Springfield	37701	37729	37738	—	38112
.308 Winchester	37801	37829	37838	38253	38112
8mm x 57 Mauser	38701	38729	38738	—	38117



Place a bullet in the “window” of the seater die.

proper depth. Record the thimble setting in your reloading records to reduce set up time the next time the same bullet is loaded.

Guide Bushing	Exp-Decap Rod	Expander Ball	Decapping Pin Holder	Decapping Pin	Seater Plug Assembly	Bullet Guide
38287	38295	38002	—	09608	38151	38202
38287	38295	38002	—	09608	38151	38202
38287	38295	38002	—	09608	38151	38202
38287	38295	38002	—	09608	38151	38202
38287	38295	38005	—	09608	38152	38205
38288	38297	38007	09611	09609	38154	38207
38288	38297	38008	09611	09609	38155	38208
38288	38297	38009	09611	09609	38156	38209
38288	38297	38009	09611	09609	38156	38209
38288	38297	38009	09611	09609	38156	38209
38288	38297	38012	09611	09609	38157	38212
38288	38297	38012	09611	09609	38157	38212
38288	38297	38012	09611	09609	38157	38212
38288	38297	38017	09611	09609	38159	38214

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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