

- Always wear safety glasses.
- Understand what you are doing and why. Read handbooks and manuals on reloading. Talk to experienced reloaders. Write or call suppliers of equipment or components if you have questions or are in doubt.
- Read and understand all warnings and instructions accompanying your equipment and components. If you do not have written instructions, request a copy from the manufacturer. Keep instructions for future reference.
- Don't rush or take short cuts. Establish a routine and follow it at a leisurely pace.
- Keep complete records of reloads. Label each box showing the date produced, and the type of primer, powder and bullet used.
- Do not smoke while reloading, or reload near sources of heat, sparks, or flame.
- Observe good housekeeping in the reloading area. Keep tools and components neat, clean, and orderly. Promptly and completely clean up any spills.

RELOADING SAFETY

Reloading is an enjoyable and rewarding hobby when conducted safely. But, as with many hobbies, carelessness or negligence can make reloading hazardous. When reloading, always follow these safety guidelines to minimize the risk of personal injury or death.



SAFETY

NOTICE : This manual is not intended to provide comprehensive instructions or safety information on how to reload, or handle or use reloading components. Always read and thoroughly understand a reloading manual before attempting to reload ammunition.

Before using the RCBS UPM-3 Competition Powder Measure, 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 (US or Canada)
Or email us by filling out the "Contact Us" form on RCBS.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.

WARNING

RCBS®

UPM-3 COMPETITION POWDER MEASURE



**WARNING: NOT FOR
USE WITH BLACK POWDER**

PRODUCT INSTRUCTIONS

9032

PRECISIONEERED RELOADING EQUIPMENT

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

Customer Service
 1-530-538-2699 (U.S. or Canada)
 To communicate via E-mail, fill out the
 "Contact Us" form on RCBS.com
 RCBS • 605 Oro Dam Blvd. East • Oroville, CA 95965

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- Keep all reloading equipment and components out of reach of children.
- Stay alert. Reload only when you can give your undivided attention. Do not reload when tired, ill, rushed or under the influence of drugs or alcohol.
- Because RCBS® has no control over the choice, assembly, or use of components or other reloading equipment, RCBS assumes no liability, expressed or implied, for the use of ammunition reloaded with this product.
- Store 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 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.
- DO NOT attempt to prime military cartridge cases with crimped/staked primer pockets until the crimp/staking has been removed with a reamer or by swaging. Attempting to seat primers into staked/crimped primer pockets can result in primer detonation, which can cause serious personal injury.
- DO NOT decap live primers. This is extremely dangerous and can result in primer detonation, causing serious personal injury.
- 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.

LOADING DATA

- DO NOT SMOKE WHILE RELOADING
- OBSERVE ALL WARNINGS ABOUT THE USE OF MAXIMUM LISTED LOADS.
- Use only laboratory tested reloading data. We recommend the SPEER Reloading Manual.



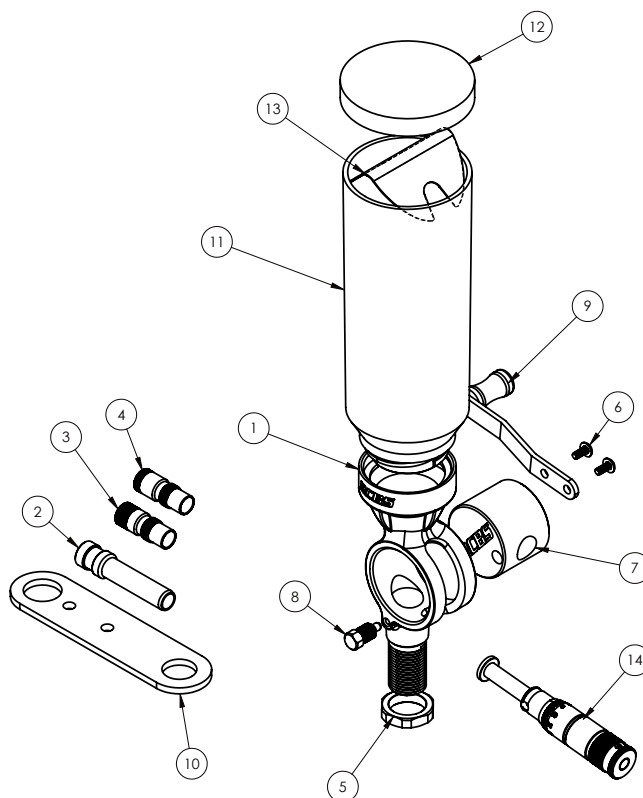
WARNING:

- The UPM-3 Competition is for use with smokeless powders only. Do not use with Black Powder (used in muzzle loading firearms).
- If Black Powder should come into contact with an electrical spark, an explosion may occur, resulting in serious injury or death.

RECORD KEEPING

- 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.
- 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.



LIFETIME LIMITED WARRANTY

Your RCBS UPM-3 Competition Powder Measure 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 UPM-3 Competition is defective in material or workmanship, you must return it to RCBS, postage paid for evaluation. If defective, the product will be repaired or replaced at RCBS' option at no charge.

Send a dated proof of purchase to RCBS for return shipping and handling, along with the UPM-3 Competition to:

RCBS

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. RCBS IS NOT LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT AND UNDER NO CIRCUMSTANCES SHALL RCBS BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. HOWEVER, SOME STATES DO NOT ALLOW LIMITATIONS OR 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 product. This warranty gives you specific legal rights, and you may also have other rights which vary from State to State.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	20044708	UPM-3 CASTING	1
2	20044716	QC DRAIN TUBE	1
3	7109022	DROP TUBE LG	1
4	7109023	DROP TUBE SM	1
5	7109187	HEX LOCK RING 7/8-14 NO HOLE	1
6	7186144	10-32 X 3/8 BHCS	2
7	20089298	UPM-3 COMP CYLINDER	1
8	20089314	UPM-3 COMP LOCK SCREW	1
9	20044727	UPM HANDLE ASSEMBLY	1
10	7109020	UPM STAND PLATE	1
11	20044711	UPM-3 HOPPER LARGE	1
12	7189029	QC HOPPER CAP	1
13	7109031	QC PM BAFFLE	1
14	20089299	MIC ADJUSTMENT SCREW ASSEM	1

MAIN FEATURES & SPECIFICATIONS

- **Threaded Hopper**
- **Quick Change Hopper Drain**
- **Ambidextrous design**
- **Hopper Capacity is 1 lb of powder**
- **Approximate Metering Range:**
 - IMR 4350 Extruded Powder = 5.4 (+/- 0.3) grains - 94.6 (+/- 0.4) grains
 - One full rotation of Metering Screw = 3 grains
 - Alliant 300-MP Ball Powder = 1.3 (+/- 0.1) grains - 103.8 (+/- 0.4) grains
 - One full rotation of Metering Screw = 4 grains
 - Alliant Bullseye Flake Powder = 0.4 (+/- 0.1) grains - 63.0 (+/- 0.3) grains
 - One full rotation of Metering Screw = 3 grains

The UPM-3 Competition Powder Measure is a volumetric powder measuring device that measures powder by volume, not by weight. With cycling of the handle, the UPM-3 Competition will measure powder efficiently and effectively to within a fraction of a grain. The benefit of UPM-3 Competition is that using the included drop tubes, the powder can be measured and dispensed directly into the cartridge case, saving valuable time.

When using a volumetric powder measure, such as the UPM-3 Competition, it is important to note that before dispensing powder, the device must be disassembled, cleaned, and dried thoroughly to remove all residual oil, rust preventative, or moisture. This action is extremely important as oil or moisture attracts and holds powder, causing inaccurate charge weights. It is also recommended to wipe down any plastic components with a dryer sheet or an anti-static spray to eliminate any static charge that has built up on the plastic components, which can attract and hold powder.

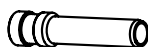
BEFORE USE

Disassemble the unit completely and thoroughly clean it to prepare your powder measure. First, remove the plastic hopper by rotating it in a counterclockwise direction. Remove the three parts bags and baffle contained within the hopper. Remove the black rubber stopper inserted in the Metering Cylinder and carefully slide the cylinder out of the Main Casting. Open the three parts bags and verify that you have all the components.

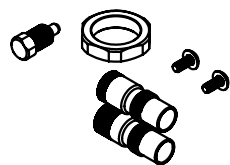
Start by cleaning the Main Casting with a 0.75" diameter phosphorus bronze bore brush (similar to a 12 gauge bore brush), concentrating on all areas exposed to powder. RCBS makes a Weapons Cleaning Solution, which is great for cleaning metallic and plastic parts and leaves a dry rust-preventive protective layer on parts protecting from oxidation. Any mild cleaning solvent, such as Isopropyl Alcohol, will work if it does not leave an oily residue. Continue to clean the remaining metallic components, ensuring that all oily residue is not present. Thread in the Micrometer thimble completely to expose the length of the Metering Screw. Clean the exposed screw and the assembly just above the graduation marks. Once all components are clean and dry, the UPM-3 Competition is ready to be assembled.



BAG 1: Micrometer Screw Assembly



BAG 2: Drain Tube Attachment



BAG 3: Misc. Parts

ASSEMBLY

Carefully insert the Metering Cylinder into the Machined Casting. The fit between these two components is very tight. It helps to rotate or vibrate the cylinder while inserting it into the Machined Casting. DO NOT force it into the casting, as this can damage the Metering Cylinder. The Metering Cylinder has three 10-32 threaded holes on one side and one larger 3/8-24 threaded hole on the opposite side. The 10-32 threaded holes are where the Handle will be installed. Keep this in mind when installing Cylinder. The UPM-3 Competition can be set up for left or right-handed operation; the photo (above) shows right-handed operation.



Insert Metering Cylinder into Casting

Insert the Micrometer Screw Assembly into the Metering Cylinder. Ensure the hole in the Micrometer Screw Assembly is aligned with the 3/8-24 threaded hole in the Metering Cylinder, as shown. This action will center the graduation on the Micrometer Body Assembly. Insert the 3/8-24 Lock Screw into Metering Cylinder. You should be able to wiggle the Micrometer Screw Assembly in and out of the Metering Cylinder slightly. Tighten the Lock Screw enough to prevent the Metering Screw Assembly from rotating. DO NOT over-tighten.



Correct Alignment for the Lock Screw



Correct Alignment of the Graduation Marks

NOTE: THE MICROMETER BODY SHOULD NOT ROTATE, IF IT DOES, THE LOCK SCREW IS NOT MAKING PROPER CONTACT WITH THE RELIEF IN THE MICROMETER BODY.

Clockwise rotation of the Micrometer Body Assembly will advance the Metering Screw inwards, reducing the volume and reducing the metered weight. Counterclockwise rotation will advance the Metering Screw outwards, increasing the volume and increasing the metered weight.

Next, install the Handle Assembly. Using a 1/8" hex wrench and the two 10-32x3/8" button head cap screws, secure the Handle Assembly to the Metering Cylinder. The Handle can be positioned in either "handle down" or "handle up" orientation, depending on the user's preference.



"Handle Down" Orientation



"Handle Up" Orientation

Once the Micrometer Screw Assembly and Handle have been installed, place the UPM-3 Competition into the included UPM Stand Plate or the RCBS Advanced Powder Measure Stand (not included). Thread the 7/8-14 Lock Ring onto the Powder Measure to secure it to the Plate or Stand. Next, thread the Hopper into the top of the Casting, place the Baffle into the Hopper, and place the Cap on top of the Hopper. If the user prefers to dispense metered powder directly from UPM-3 Competition into a cartridge case, install the large or small Powder Measure Drop Tube. The Small Drop Tube has a smaller diameter hole and will accommodate cartridge cases ranging from .22 to 7mm, and the Large Drop Tube has a larger diameter hole. It will accommodate cartridge cases from .30 to 45 caliber. *An optional .17-.20 caliber drop tube, not included, is available from your RCBS dealer or can be purchased directly at RCBS.com.*



Filling Metering Cylinder (Handle Down)



Dispensing Metered Charge (Handle Down)



Powder Measure with Drop Tube installed