

# FAQs

## General FAQ

### Primer Tube Safety Reminder

In rare circumstances, primers can become lodged in tubes that are obstructed, damaged or improperly maintained. As called out in the instruction manuals accompanying all RCBS primer tubes, RCBS would like to remind its customers to never force or pound/tap on live primers, tap or pound on loaded primer tubes or otherwise attempt to clear obstructions on your own. Doing so can cause serious injury.

### **How safe is hand-loading?**

In a word, very. Because today's smokeless gun powders are a lot different than the old black powders of our ancestors. In fact, modern smokeless powders are classified as propellants, not explosives, meaning when properly used these powders only burn when ignited. So, while common sense and certain precautions should not be ignored, hand-loading is by no means a high risk hobby. Always remember to wear safety glasses while shooting and hand-loading.

### **How good is hand-loading ammo?**

The truth is, carefully hand-loaded ammunition is usually better than factory loaded, because it can be fine-tuned to fit a specific gun and a certain type of shooting. The result is far greater accuracy.

### **How complicated is hand-loading?**

It's simple. There are only four components to a rifle or pistol cartridge: the primer, the powder, the bullet and the brass case. When a cartridge is fired, the primer ignites the powder, the powder then propels the bullet out of the barrel. All that's left is the brass case and the spent primer. And this is where the hand-loading comes in. The brass can be reloaded over and over. All you do is push out the fired primer, resize the brass case, insert a new primer, add the right amount of powder and seat a new bullet on the case. That's hand-loading in very simplified terms. More details are on the following pages.

### **How many types of cartridges can be hand-loaded?**

Most any and all kinds except rimfire type, like .22's. Most brass cases can be reloaded 5 to 20 times, depending upon the caliber and powder charge.

## DIES FAQ

**I've reloaded for over 20 years, and I have a problem I've never experienced before. After cases are sized, they won't chamber in my rifle. I took my rifle to my gunsmith and he says the chamber is dimensionally correct. Factory ammunition works just fine. There must be something wrong with the dies!**

There are several places where things can go wrong:

1. Be sure the dies are the same caliber as the gun chamber.

2. When setting up the full length sizer die, screw the die down until it touches the shell holder at the top of the press stroke. Then lower the shell holder and screw the die down about 1/8 to 1/4 turn. You will feel a slight thump as the leverage system cams over center. Size the case and again check it in the chamber. Size a couple more cases and check in the chamber. If these cases chamber, go ahead and size and load the rest of the cases.

3. If the cases don't chamber, please return the sizer die along with the five fired cases. The fired cases will give us your chamber dimensions and if the chamber is in standard factory tolerance, we'll make the necessary adjustment in the die for you without cost.

**I see a Small Base Die Set listed for my caliber. Do I need these or should I buy a Full Length Die Set or Neck Die Set? How does each set differ?**

The Small Base Die set is intended for use for ammunition to be used in auto, semi-auto, and lever action rifles so that the loaded round chambers and extracts easily. The Small Base Sizer Die sizes the case from the shoulder to the head of the case a couple of thousandths smaller than a Full Length Sizer Die. In certain calibers it also sets the shoulder of the case back a thousandth or two more than the Full Length Sizer Die. The Full Length Die Set or Neck Die Set is not normally recommended for ammo to be used in auto, semi-auto, or lever action rifles. The Full Length Die set is recommended for ammunition used in bolt action rifles, particularly for ammunition to be used for hunting. The Neck Die Set can also be used to produce ammunition for use in bolt action rifles. The Neck Sizer Die sizes only the neck of the case so it will hold the bullet firmly. It does not size the body of the case nor does it set the shoulder back. Neck sized cases will usually chamber for three or more firings, depending on the powder charge and chamber dimensions. However, over a period of time, a slight drag will be noticed when the bolt is locked. At this point, cases will need to be full length sized and the shoulder set back so they will chamber and extract easily.

**I had a stuck case in my sizer die and when I finally got it out, I damaged the Expander-Decapping Unit (Rod, Ball, and Pin). I can't find one locally. What can I do?**

If this item is not available from your dealer, you may call or e-mail us. We'll need to know the caliber and whether the dies are in a heavy duty green storage box (standard dies) or a clear plastic clamshell (Reloader Special dies). The part will be mailed to you without cost via first class mail.

**When I seat the bullet, the seater plug cuts a ring around the bullet just below the nose. What causes this?**

In short, the seater plug does not fit the bullet you are using. The seater plug furnished with the Seater Die normally will fit the great majority of the bullets for that particular caliber. However, we cannot make one seater plug fit all bullets currently available. If you experience this problem or any similar problem where the seater plug doesn't match the bullet and you wish to have a special seater plug made, we can supply one at minimum cost. Call or email us for current pricing.

**The brass setscrew in your die lock rings is extremely soft and I've ruined several. Can I get replacements from you?**

Sure. Just give us a call or e-mail. To reduce the chance of more damage, we'll include some lead shot with your order. Place a lead shot ahead of the setscrew. The lead is softer than the setscrew and will flow into the die thread and stop the lock ring from turning. And much less pressure is required on the head of the setscrew.

**What is the difference between a roll crimp and a taper crimp?**

With a roll crimp the seater die actually rolls a very small portion of the case mouth into the bullet cannelure. If the seater die is set too low or the bullet does not have a cannelure, the die will attempt to form the crimp. However, it may turn too much of the case mouth in, or eliminate space to roll the neck into, which will distort or crush the case. The taper crimp die actually

squeezes the case around the bullet. There should not be any indentation or other indication of a visible crimp. The die merely removes the bell from the case mouth that was used to ease seating of the bullet and pushes the case mouth parallel to the bullet. Anymore than that and the die begins to push down on the case wall and causes a bulge, preventing it from chambering.

## **SCALES FAQ**

### **My Powder Pro or Partner Scale will not calibrate. It sticks on "Error1." Is it defective?**

When "Err1" comes up on the display, a Factory Calibration is required. You must follow the calibration sequencing precisely as listed below. To do otherwise can result in incorrectly programming the scale which can cause damage to the scale and/or incorrect weights.

If you have the Powder Pro Powder Scale:

1. Remove the Scale Pan from the Platen
2. The scale must be turned off. (If the "On/Off" button does not work, unplug the scale and depress each of the four buttons five times. Plug the scale back in and proceed.
3. Press the "On/Off" button to turn the scale on. The display will read "test" for about 1 or 2 seconds.
4. While the word "test" is showing on the display, you must simultaneously press and hold for 5 seconds the "Gms/Grains", the "Zero" and the "On/Off" buttons. Do not press the "Cal" button. The display will now read "- -0-". If the display reads "00.0", either you were not fast enough, or the buttons did not go down simultaneously. Turn the scale off and try again beginning with #3 above.
5. When you get the "- -0-" press the "Cal" button, the display will read "hold" and then "- -20-". Place the 20 weight on platen. Wait about 5 seconds to allow the scale to stabilize, then press "Cal", "hold" will appear and then "- -50-". Place the 50 weight on the platen. Wait for about 5 seconds to allow the scale to stabilize and press hold. The scale will ask for the "- -70-" weight. Place the small weight on top of the large one. Wait for about 5 seconds to allow the scale to stabilize. Press "Cal", the scale will read "hold" then "- -0-". Place the weights back in the storage wells and press "Cal". The display will now read "hold" followed by "00.0". To be absolutely safe, the scale should now be calibrated following the Calibration procedure found in the instruction booklet.

If you have the Partner Powder Scale:

1. Remove the Scale Pan from the Platen.
2. The scale must be turned off. (If the "On/Off" button does not work, disconnect the battery and depress each of the four buttons five times. Re-attach the battery and proceed.
3. Press the "On/Off" button to turn the scale on. The display will read "test" for about 1 or 2 seconds.
4. While the word "test" is showing on the display, you must simultaneously press and hold for 5 seconds the "Gms/Grains", the "Zero" and the "On/Off" buttons. Do not press the "Cal" button. The display will now read "- -0-". If the display reads "00.0", either you were not fast enough, or the buttons did not go down simultaneously. Turn the scale off and try again beginning with #3 above.
5. When you get the "- -0-" press the "Cal" button, the display will read "hold" and then "- -20-". Place the 20 weight on platen. Wait about 5 seconds to allow the scale to stabilize, then press

"Cal", "hold" will appear and then "- -30-". Place the 30 weight on the platen. Wait for about 5 seconds to allow the scale to stabilize and press hold. The scale will ask for the "- -50-" weight. Place the small weight on top of the large one. Wait for about 5 seconds to allow the scale to stabilize. Press "Cal", the scale will read "hold" then "- -0-". Place the weights back in the storage wells and press "Cal". The display will now read "hold" followed by "00.0". To be absolutely safe, the scale should now be calibrated following the Calibration procedure found in the instruction booklet.

NOTE: The display may build "8's and 0's" after you release the three buttons in step 4. Press "cal" to get out of this. It will then give you an arbitrary number. Ignore this by pressing "cal" again. Then you will get the --0- reading. Continue with the calibration.

## Batteries

The battery in your PARTNER scale must put out 7.9 volts or better for proper operation (a new one will run about 9.5 volts and provide approximately 12 to 15 hours). When the battery drops below this, the scale will display "Err1" when you attempt to calibrate it. Note that while the battery will still have more than sufficient power to operate the computer and power the display, it lacks the voltage required to drive the load cell circuit.

## Storage

The PARTNER draws a slight amount of power while it is "off". If you are using your scale every day, the battery may be left in. However, if you're like most re-loaders, many days may separate your reloading sessions. That being the case, it is recommended that you disconnect the battery between sessions.

## PRIMING FAQ

### **I'm having trouble with the Hand Priming Tool not seating the primer deep enough. What am I doing wrong?**

You probably aren't doing anything wrong. The usual cause for "high" primers is caused by the shell holder not sitting down tight on the Primer Feed. This usually happens with older RCBS and other brands of shell holders--they simply do not have enough chamfer on the inside of the primer hole. To check to see if this is a problem, install the shell holder on the primer feed. If you see any daylight between the bottom of the shell holder and the primer feed, the shell holder must be replaced.