

M2 Precision™ .50 BMG Primer Seater

Thank you for purchasing the M2 Precision™ .50 BMG Primer Seater. It is a precision tool that will provide years of operation, but a few notes are in order.

Safety

This primer seater is used to seat .50 BMG primers. Safe operation is the responsibility of the user. Please follow the safety tips listed below:

1. Always wear eye and ear protection when using this primer seater. The eye protection part is obvious, but if any primer goes off during seating, hearing damage can result. This is especially true for large primers like the .50 BMG.
2. When seating a primer, keep hands, face and other body parts away from the case mouth.
3. Read and understand the directions on how to adjust and use this primer seater.
4. It is recommended to use cases without a military crimp. Some new cases, or cases that have or once had a military crimp can have undersize primer pockets. Seating primers in these cases can distort the primer before it is properly seated.
5. It is recommended that RWS primers be used. Some other primers (CCI for example) have thicker and larger cups that tend to hang up on the primer pocket lead-in. This causes the primer to deform before it reaches the bottom of the primer pocket. This can adversely affect accuracy.
6. In general, treat all reloading tools with the same care and respect that you would give a firearm: Be safe.

The manufacturer and/or seller of this primer seater assumes no liability for any consequences of its use.

Setup

This tool is a precision device used to help you produce the most consistent and accurate match ammunition. Please read and understand the following so that you can properly setup and use the tool. The primer seater has many precision fitted parts: don't use pliers, channel locks etc. on it.

Setting up the tool in the press as follows:

1. Put a .50 BMG shell holder in the press and lock it down
2. Install a lock ring on the primer seater, but don't lock it down yet.
3. Thread the primer seater into the press part way.
4. Pull the press handle, raising the press ram to its full upright position.
5. Screw the primer seater into the press until the .50 BMG shell holder in the press compresses the primer seater fully. At this point, you should not be able to screw the primer seater in any more.

6. Lower the press ram.
7. Screw the primer seater in one additional turn and secure the lock ring.

Note that this primer seater does not count on the press camming over at the top to get consistent seating depth. The primer seater is designed with a built in stop (plate bottoms out on the primer seater body). This is part of what makes the tool so accurate, but counts on the primer seater hitting its internal stop before the press runs out of travel.

Usage

It's now time to use the tool.

1. Make sure that all of your cases have the primer pockets cut to the same depth. I use the K&M tool for this. If your primer pockets are not consistent in depth, then this tool will not give you consistent primer crush.
2. Unscrew the primer seater cap so that it's up about one turn from the bottom
3. Put a **SPENT** primer in the top of the primer seater.
4. Put a case in the primer seater.
5. Screw the primer seater cap down, then back off just a touch.
6. Pull the lever and seat the primer. Note that the idea is for the case to be slightly loose so that case can move in the shell holder and line up the primer pocket with the primer.
7. Lower the press ram slightly.
8. Tighten the cap down until it's snug.
9. Raise the press ram and seat the primer fully. Note that the shell holder in the press ram must fully compress the primer seater.
10. Unscrew the cap slightly and remove the case.

You should now measure the seating depth of the spent primer and compare it to the depth that you seated live primers in your match ammo. The primer seater will likely need adjustment to get the same seating depth.

Adjustment



1. Loosen, but don't remove, the set-screw on the side of the die with a 3/32 Allen wrench. **Don't drop the internal plunger when the set-screw is loosened.**



2. Remove the internal plunger assembly and temporarily remove the spring on the priming pin.



3. Using a caliper, measure and record the overall length of the internal plunger assembly (from the bottom plate to the top of the priming pin). This length was initially set to 3.800"



4. Loosen but don't remove the brass set-screw on the side of the plunger.



5. Turn the primer pin to lengthen or shorten the overall length. Lengthening will increase the primer seating depth, and shortening it will decrease the seating depth. Turn this pin by hand - don't use a wrench on it.



6. Measure the overall length of the plunger assembly with the caliper, and when you're satisfied, tighten down the brass set screw.



8. Reinstall the spring on the priming pin and put the plunger assembly back in the seater body. Make sure that's in the full up position, the primer pin protrudes out of the center ring. If it doesn't, then you'll have a high primer, which you won't be able to remove from the primer seater.



9. While pushing upward so as to fully compress the plunger, tighten down the set-screw on the side, until it just stops, then back off 1/2 turn.

10. Seat another spent primer and readjust as necessary.

Care

The primer seater is made out of hardened 416 stainless steel and is designed for years of use. Please note the following:

1. It is designed with extremely tight tolerances. Treat it with care. Don't use pliers, channel locks, vice grips etc. on it as these may damage precision fit parts.
2. Seating primers will sometimes produce small brass shavings. The tool may need to be disassembled and cleaned out.
3. The threads between the body and cap are extremely tight tolerance and must be kept clean and lubed.
4. If the primer seater starts to feel rough, it is because of dirt. Clean and lube it now.

Cleaning the cap threads

When the cap feels rough when turning, clean as follows:

1. Unscrew the cap completely.
2. Clean the body and cap threads with spray solvent and blow off with compressed air. If you don't have air, use a clean toothbrush and a lint free cloth. Lint on the threads will cause roughness - that's how tight the fit is.
3. Lube the threads with heavy oil or grease and reassemble.

Cleaning the plunger and inside

Periodically, it will be necessary to take the plunger out and clean out brass shavings.

1. Remove the plunger as described in the adjustment section.
2. Blow off the plunger and the inside of the seater body with compressed air. If you don't have air, use a lint free cloth.
3. Reassemble

