

Russian **Reloads**

Presents the

PARTIZAN MK IV

Berdan primer conversion system and tools.



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This is the unique tool we have all been waiting for. Finally we can convert the Berdan steel or brass cartridges to use the common Boxer Primer in a few simple steps that are very easy to follow. You will start out slow when you are getting the feel for it but once you have done a few it is like second nature and you will be converting them in a very rapid pace. First you need to get you some fired Cartridges. We suggest you use the ones that you have shot out of your gun. If you do not have any then don't worry you will just have to inspect just a little closer to make sure that whatever gun it was fired out of was within tolerances or your found Cartridges might not be a good choice to reload. Remember if you are picking up range cartridges you will have so many that you can pick out the best ones to load. If you are in doubt if the cartridge is good just throw it out. Now before we start we will need a few other tools. A few of them are mandatory to be able to do the conversion but they are easy to find online and in your local reloading store. Here is a list of the tools that are needed and some part numbers to help you find and track them down much easier.

Other Tools needed

Drill (hand)

Drill Press (Strongly Recommended)

RCBS Primer pocket swaging tool #9481

RCBS Primer pocket Uniformer tool large # 90378 for 7.62 x 54R cartridge

RCBS Primer pocket Uniformer tool small # 90379 for 7.62 x 39 and 5.45 x 39 cartridges

Cutting fluid

Die Sets:

RCBS 7.62 x 54R Die Set # 29001 or 29002

RCBS 7.62 x 39 Die Set # 35001

RCBS 5.45 x 39 Die Set # 56065

Lee 7.62 X 54 Russian Pacesetter 3-Die Set (recommended) # 90731

Lee 7.62 X 39 Pacesetter 3-Die Set (recommended) # 90565

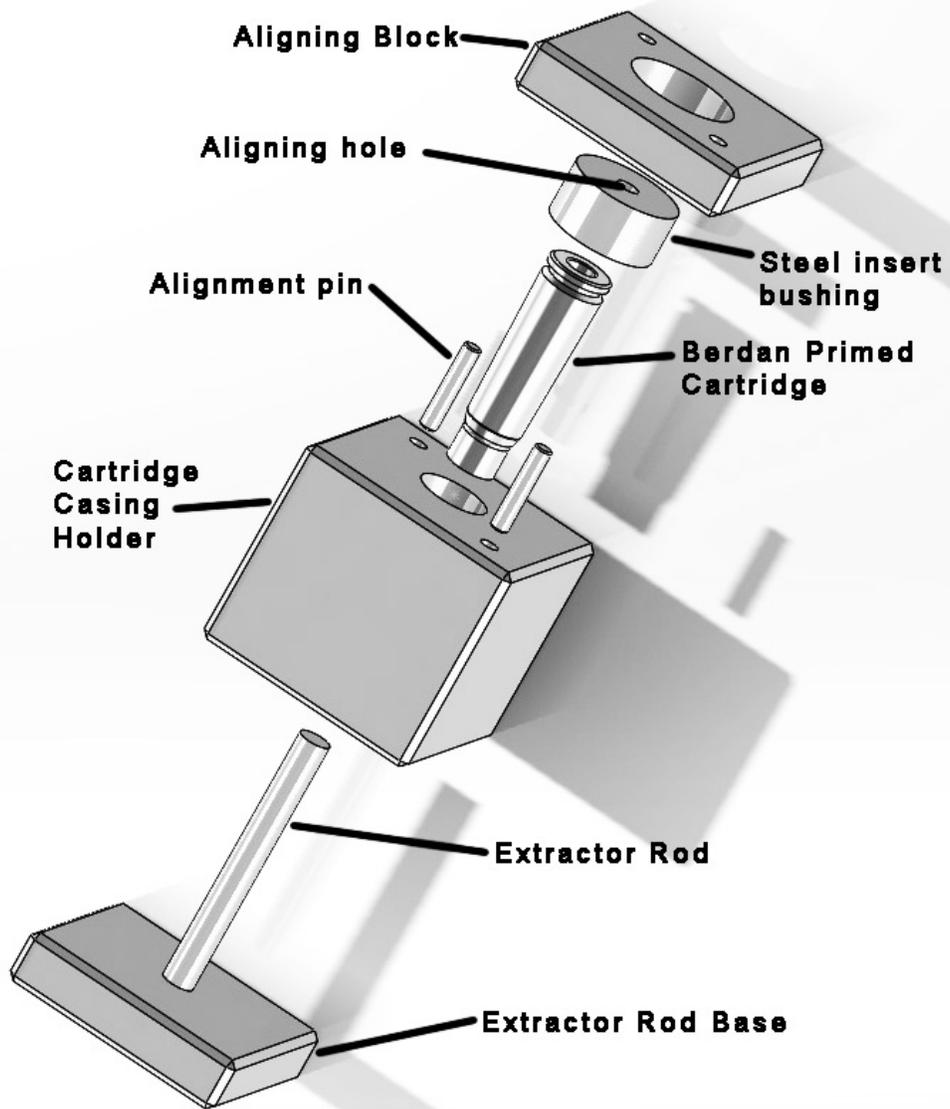
Misc tools :

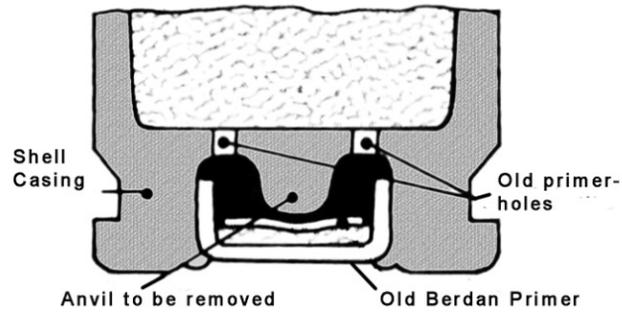
Deburring tool

Counter sink

Micrometer

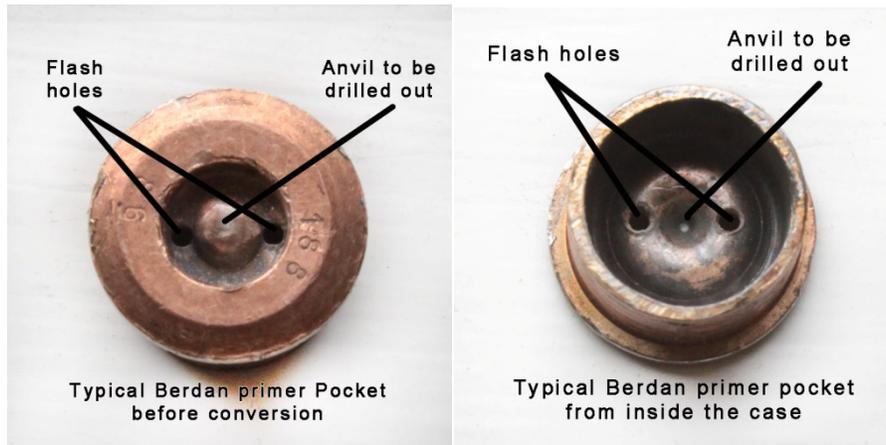
3/32" cobalt drill bit



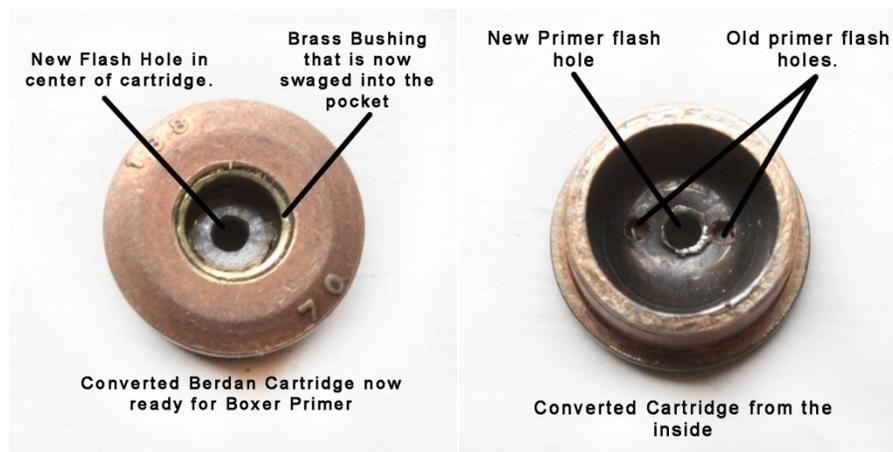


A typical Berdan cartridge.

This is a cut away diagram of the typical Berdan cartridge and you can see the anvil that will be center drilled and then machined out of that very small pocket with this precision system that will be able to do it time after time.



This is a Typical Berdan primer pocket from both the outside (with the primer removed for viewing of the anvil) and from the rear and you can see the anvil from the rear as well as the old primer holes. This anvil is what we will be center drilling through the old primer that is still going to stay in the pocket while we convert it into a brass bushing to be swaged for the new primer.



In this illustration we have a converted cartridge from the outside where you can see the brass bushing that was converted from the old primer that is now swaged firmly in the primer pocket walls. Notice how clean the pocket is after all the steps are completed and a nice uniform flash hole. Also a shot of the cartridge from the inside so you can see how it is opened up in the flash hole in the middle for the new boxer primer.

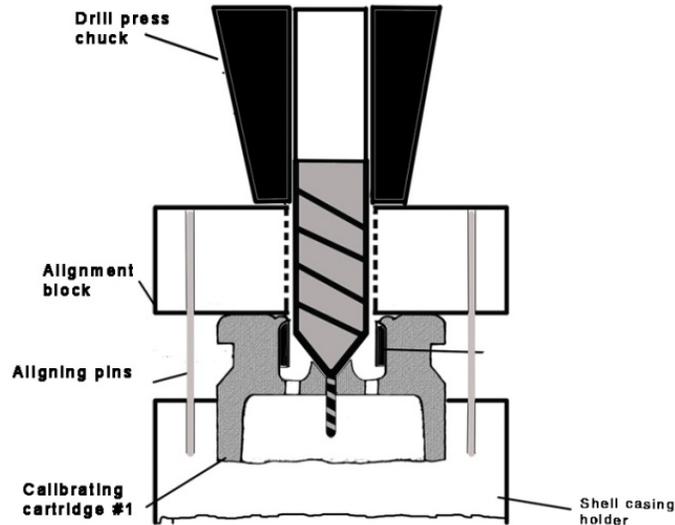
Step 1. **INSPECTION**

Inspect cases for any cracks or major defects especially around the casing neck area. Small dings are not an issue on the body of the cartridge. Clean cases and measure them and make sure that all measurements are within tolerances before you start to do your conversion on the primer. Refer to applicable reloading data from cartridge reloading manuals. Measure and inspect the case base for any signs of bulging...and take a measurement there. Then do the same for the Neck.

Step 2. **CALIBRATION**

Load aligning Cartridge 1 into the cartridge holder and place top cap onto aligning pins and press down firmly. The cartridge will wedge itself against the walls of the holder to keep it aligned for the process. Place the penetrating bit into the aligning hole and push it firmly all the way until it stops at the bottom of the hole. (See illustration) Align it with the drill press chuck and sink the chuck all the way to the aligning plate and when it bottoms out tighten the chuck before removing the bit from the hole and it should be properly aligned for the depth of the drill. Remove the aligning top cap and remove the Calibrating cartridge and keep it safe do no lose this cartridge This is an important step. This will ensure that the bit is able to penetrate into the hole and pierce the anvil directly in the center.

Machine bit # 1 Calibrating depth with calibrating cartridge



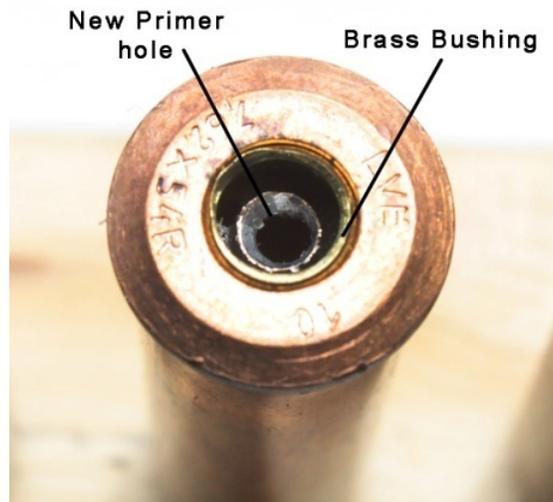
Step 3. **INSERT CARTRIDGE**

Insert fired cartridge into the Cartridge holding assembly. Place a drop of cutting fluid on the primer. Now place the top on the aligning pins and press on firmly to make sure that the cartridge is wedged tightly in the hole.

Step 4. **FIRST DRILLING**

Turn on your drill press and lower the bit into the alignment hole. Hold the top alignment assembly block down firmly as you drill. Put gentle but firm pressure in the drilling. Take your time and let the bit do its work so that it does not overheat. You will feel the bit as it makes the first penetration and shortly after it will make a second penetration (the Anvil) This is a VERY precise step and has to be done slowly or your hole might not be centered properly. Slowly run the bit all the way down until the Chuck runs into the top alignment plate. (don't worry about the chuck contacting the machining surface it is made from a hardened steel) Remove the drill bit from the hole and if all steps were

followed you should see a perfect hole in the middle with a slight bit of metal sticking out in the bottom of the shell.

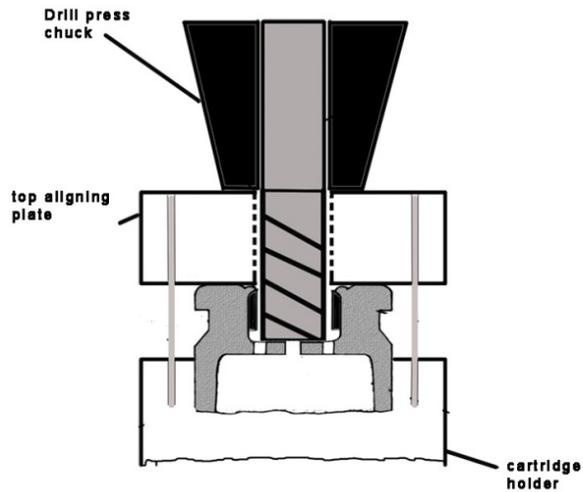


You should be able to see all the way through the primer hole. If it did not penetrate all the way through the anvil, you need go back and adjust the bit so that it penetrates slightly deeper. You should see around the edge you drilled is the now pre formed brass bushing that was formed from the Berdan primer and that will be swaged out in a later step to fill the primer pocket. After this you are set up to drill a series of cartridges for this first step. We have found that if we sit down and do 20 or more cartridges at a time for each step you can get them done much faster as you are not constantly changing the bits. Remove the Cartridge from the holder by placing it on the bottom ram rod and tap it onto the table and it will shove out the cartridge from its wedging. Insert another cartridge and follow the same steps.

Step 5. **SECOND CALIBRATION**

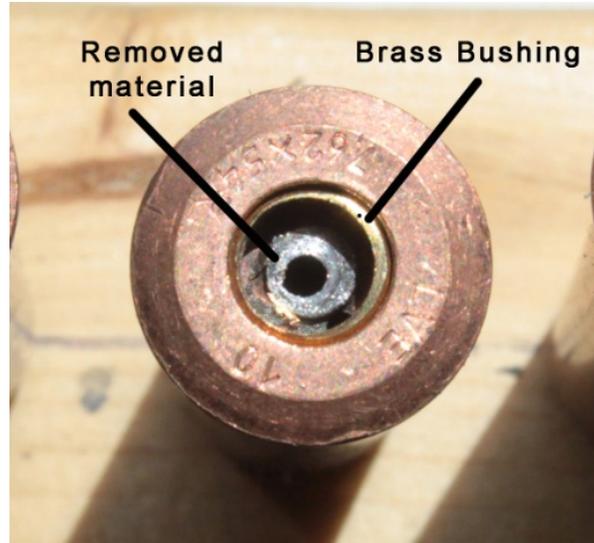
Remove bit number one from the chuck. Remove cartridge and replace with the Calibration Cartridge number 2. Press on the top alignment block and place the squaring bit all the way into the bottom of the hole. This will align the second bit for the proper depth to square out the hole and remove the remainder of the Anvil. Now place it under the drill press and open the chuck up and slowly move the chuck onto the bit and run the chuck all the way down until it contacts the steel insert on the aligning hole. Tighten up the chuck and withdraw it out of the alignment hole. It should be calibrated for the next step.

Machine bit # 2 Calibrating depth with calibration cartridge # 2.



Step 6. Squaring Drill

After you have calibrated the bit as in the illustration above, you will take out the calibration cartridge and put in a cartridge you have drilled in the previous step into the cartridge holder and put back on the top aligning plate and press firmly together. Place the assembly onto the drill press and turn it on. Slowly plunge the Squaring bit into the hole until it reaches the bottom and the drill press chuck runs into the top aligning plate. Do not force it. It is a very fine cut and a small removal of material. As you can see from the illustration below the bottom of the primer pocket is now flattened and excess material has been removed. Do not worry if the brass bushing is not perfect the next process makes it the correct size. Do not worry about the old primer holes. They do not matter.



Step 7. **SWAGING**

On this step you will need to move to your press that you will be using. You can use just about any reloading press out there for this procedure. First take a de-burring bit and slightly ream the inside edge of the brass bushing so that the tool slides into it better. You will be swaging what is left of the Berdan primer that now forms a bushing into the primer pocket wall and making it the correct size for the new Boxer primer.

This procedure **REQUIRES** the use of the Primer Pocket Swager tool #9481 (Here is a link to the tool on RCBS website

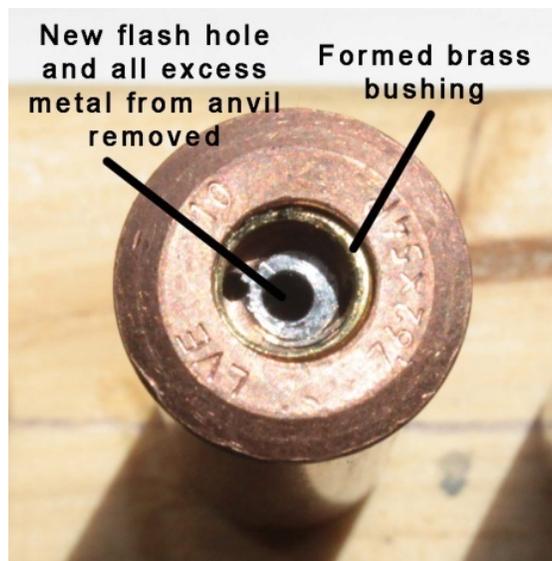
https://shop.rcbs.com/WebConnect/MainServlet?storeId=webconnect&catalogId=webconnect&langId=en_US&action=ProductDisplay&screenlabel=index&productId=6211)



Follow the instruction manual in the RCBS tool kit that came with it to set it up for your loading press.

For a 7.62 x 54R, you will use the large die for the large rifle primers. For the 7.62 x 39 and the 5.45 x 39 you will use the small die for the small rifle primers. This opens the primer pocket up and shapes the bushing for the pocket for the boxer primer. Insert your Cartridge on the nipple on the bottom of your press and run it up into the die.

You will most likely feel it as it travels in and seats it all into place. Some will go in much easier than others do. We have found that if you put a small amount of anti-seize onto the nipple that it is much easier for it to form the pocket with less friction. After this step you have a final cleaning to do with the RCBS Primer Pocket Uniformer tool. You will need the large one (RCBS tool #90378) for the 7.76x54R, or the small one (RCBS tool #90379) for the 7.62 x 39 and 5.45 x 39 cartridges. Put on the end of your hand drill and run it into the hole all the way to the bottom. You should bottom out the tool flush with the bottom of the case. It should now be perfect and free from any excess metal shavings.



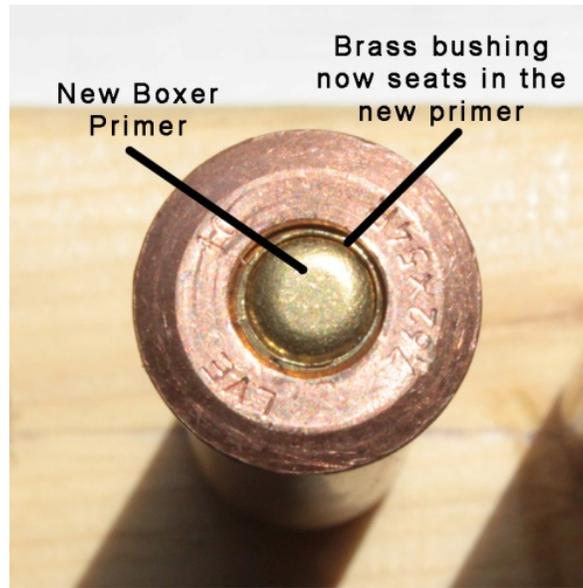
Step 8. FLASH HOLE

This is a step that is not to be over looked. When you do your final inspection, we highly suggest that you run a 3/32 drill bit through the primer hole to make them all uniform. Most of the cartridges in the 7.62X54R will be very close to that diameter hole if not slightly larger. It is always best to make them as uniform as you can. We have noticed that most of the center flash holes on the 7.62X39 and 5.45X39 cartridges are usually slightly under the 3/32 and should be drilled out to that hole size. We had to keep the pilot hole smaller because of the smaller diameter primer in those two types of cartridges. After this step you are ready to start reloading your newly formed cartridges.

**** At this point we HIGHLY suggest that you take a paint pen and mark the back of the cartridge with a stripe so that it is much easier to identify your cartridges when you pick them up off the ground. It makes sorting them out so much easier. We have found that white or a bright color works best. ****

Step 8. RELOADING

Now your last step will be to insert your primer with your press or by hand. You will find it much easier for the Boxer Primer to go into the hole if you use a counter sink or a reamer to make the bushing a little tapered so the primer slides into its new pocket. After you press in the primer it should be flat against the bottom of casing. If you find a primer that will not seat right it is because the primer pocket was not cleaned out thoroughly with the primer pocket uniformer tool. You can usually press the primer out on your press at this time and inspect the hole. If in doubt run the Pocket Uniformer tool into the pocket again until it bottoms out with the case.



Now your cartridge has been converted you will be able to re-load them just as you would do with a brass boxer primed cartridge. There are many loads already available on the web forums for you to try out.

For more information, videos, and cartridge loading recipes please visit our website and forum.

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