

Removal Of Rear Trunnion Rivets On AK-47/74 Type Rifles

Following the below information will allow you to drill out the rear trunnion rivets without braking the drill bit. While cobalt or other exotic drills are nice to have, this entire operation was accomplished with standard high speed steel drills. The important thing to remember is to have “SHARP” drill bits (Drill Doctor will provide you with sharp drills).

WEAR EYE PROTECTION DURING DRILLING

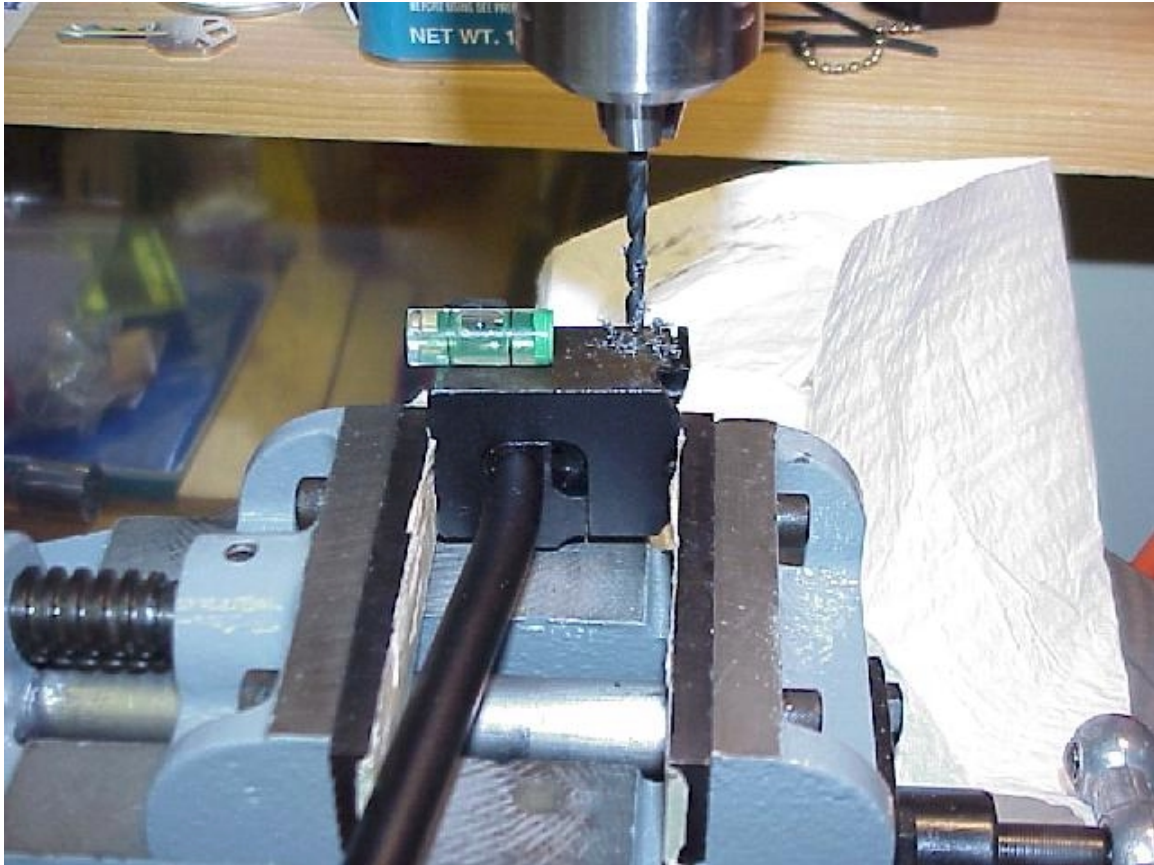
1. Using a file, remove any excess rivet that protrudes above the rear trunnion surface.
2. Chuck the rear trunnion in the drill press vise and make level on both “X” and “Y” axis. Failure to accomplish this leveling may cause the drill bit to hit the side of the trunnion and snap.





3. Using a #3 center drill, locate center of rivet and drill a small pilot recess. Remove the center drill and insert a #31 drill. This will be the first drill you will use to drill completely through the rivet.
4. Put some lubricant on the drill and also in the pilot recess.
5. This type of drilling is considered "Deep Drilling" and extra care is required to prevent the drill from locking up and braking. Drill RPM should be around 425 – 500, feed rate into the rivet should be very slow (were not in a race).

6. Begin drilling. Every time you drill deeper than 2 -3 times the diameter of the drill bit, clean all metal chips from the drill and the hole. After cleaning the chips away from the work, re-lubricate the drill and hole. Continue drilling and cleaning and lubricating until you have drilled through the entire rivet. **Again, feed rate into the metal rivet needs to be slow.**



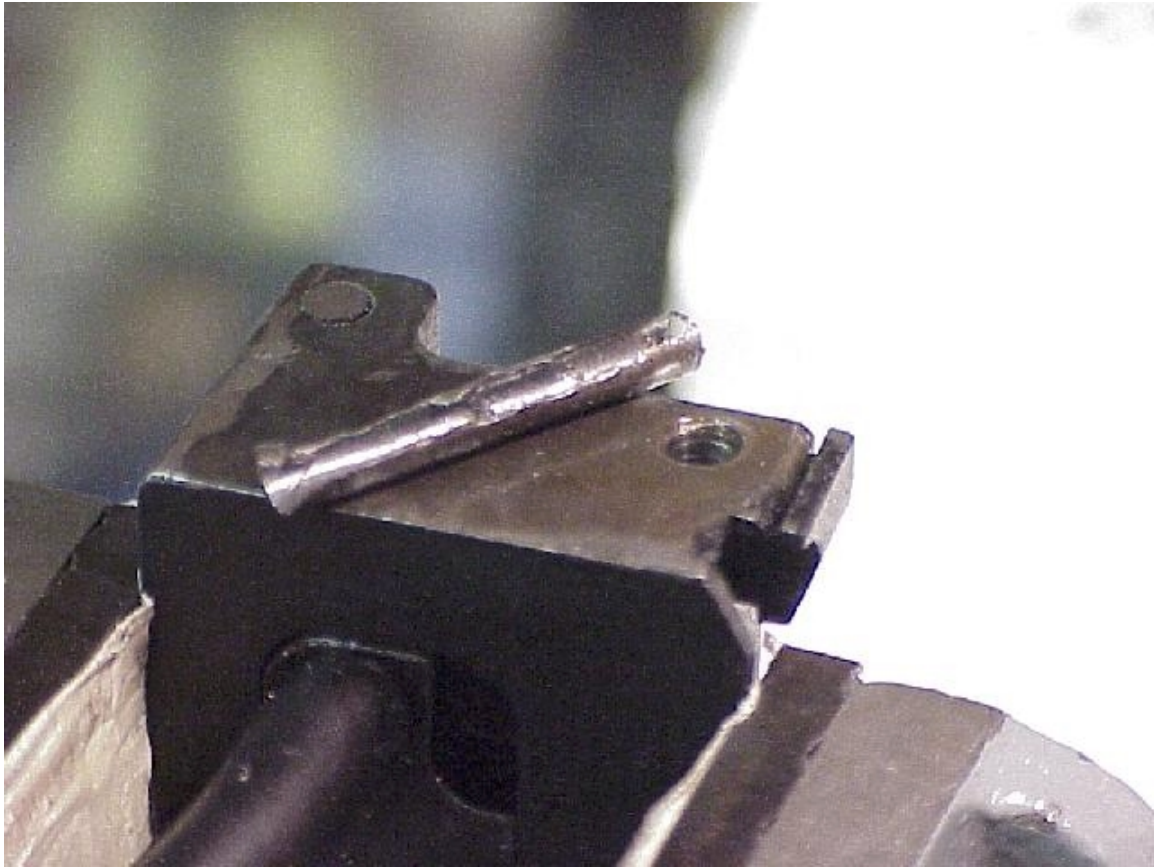
7. Once through the rivet, change drills and continue with the same practice as outlined in item # 6.

8. Drills used to accomplish this operation were:

- a. # 3 Center Drill
- b. # 31 through # 19 drills
- c. # 18 and # 17 drills were needed on removing one of the rivets but might not be necessary in all applications.



9. When you have completed drilling using the # 21 drill, each succeeding drill should be used with more care as at one point the rivet will start to come out as the drill cuts into it.



10. As a final note, listen to what sounds the drilling operation is making. As you proceed with larger drills if you start to hit the hard steel of the trunnion the sound of the drill hitting that material will sound different (kind of like a chirping sound) than when drilling into the rivet. If this occurs slowly withdraw the drill, clean the drill and hole, re-lubricate the drill and hole and try again (**feed into the hole must be slow**). If the noise continues stop drilling and use an “Easy Out” to remove the rivet.

I have been using this technique for all my rear trunnions and never had any problems. The most important item is not to rush, take your time.