Steps for new brass and load development

First, one must understand that new brass is being changed every firing and if you are using the same cases for development (bullet seating depth, powder charge, primer seating depth…) with all of the cases of your new brass, you are changing and putting those cases through different changes and none of them will ever be the same as each other.

Therefore here are the steps so you can keep as many of those cases the same as each other.

First, you will need 200 pieces of new brass (Lapua preferably) never fired and of the same lot number (very important)

1. Follow steps for “New Brass Prep” for all 200.
2. Fire form this brass with moderate charge of 28gr Varget and a long seating depth of .010” less than the “measured to lands” distance we did. I do not know what your charge should be I am just using this as an example of what I am doing. YOU MUST LOOK UP THE POWDER CHARGE FOR YOUR PARTICULAR CARTRIDGE. Make sure to take chronograph with you to chart your velocities.
3. Clean fired brass and check headspace and load into chamber using “How to headspace brass to rifle” in the Reloading Series Fired Brass #8 video to see how it fits with bolt stripped and see if handle falls
4. After 1st firing, if your brass does not meet “How to headspace brass to rifle” in the Reloading Series Fired Brass #8 video, fire form it again if you need to, because it has not grown enough as shown in “How to headspace brass to rifle” in the Reloading Series Fired Brass #8 video. Prep this brass in the normal way, “Fired brass Prep”, and load it exactly the same way you did for this first fire forming (bullet seating depth, powder charge, primer seating depth…). Make sure to take chronograph with you to chart your velocities.
5. Now check your headspace again and load into chamber using “Checking chamber headspace" method to see how it fits with bolt stripped and see if handle falls. They should all be fire formed now and if you find some that are off by more than .001”, toss them or put them in a “blow offs” bin.
6. Now take 40 of those pieces and use them for powder load development and take 40 of those pieces and use them for seating development. SORT THESE INTO SEPARATE BOXES. Set the other 20 or whatever you have left aside for later to do PRIMER SEATING DEPTH. Set 100 aside for your “Competition Brass” That we will not bet using for the rest of these tests.
7. **First, bullet seating depth tests:** Don’t forget to load 5 blowoffs that will be the same as your first 3 seating depths. Now start your load development tests with 3 shot groups with bullet seating depth first. You should do these at .003” increments. For example: 1.705, 1.702, 1.699, 1.696, ect. Use the same powder charge you used for fire forming
8. Repeat this step until you find your bullet seating depth “Node”.
9. **Second, powder load tests:** Don’t forget to load 5 blowoffs that will be the same as your first 3 powder charges. Now start your powder charge test 3 shot groups using

the bullet seating depth you chose. Start your powder charge at the same as what you used for fire forming.

10. You should do these at .2 grain increments. For example: 28, 28.2, 28.4, 28.6 grains, ect. Repeat this step until you find your powder charge
11. Now take those cases you used for load development and add them to your “blow offs” or “fowlers” bin.
12. **Third, primer seating depth tests:** Don’t forget to load 5 blowoffs that will be the same as your first 3 primer depths. Take the 20 or so cases you set aside in step #4 and start your primer seating depth testing using the powder charge and bullet seating depth test results that you chose to fine tune your final load.

Now that we have established our load, save all 100 pieces of brass and use them for “blow offs” or “fowlers”. You should always fire at least 5 “blow offs” or “fowlers” whenever you go to the range.

Now you are ready to create your “Prime” shooting brass from the other box of 100 that we set aside after fire forming all 200 of them. It is very important to carefully and methodically prepare this brass with your best efforts.

1. Perform steps 1 through 6
2. Taking into consideration you did not change anything in your brass prep and followed all the above directions and videos, you should be done and you will notice major improvements. (not withstanding shooter error:))