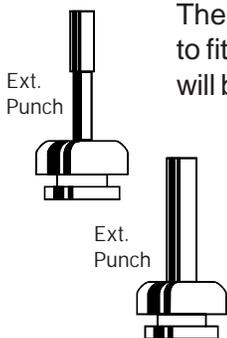


The first die is the CORE SEATER. It is used to expand the jacket to proper diameter while pressing (seating) the lead filling (core) into the jacket.

The INTERNAL punch stays inside the die body and is used to push the bullet out. A knock-out rod slips into the top of the die. Tapping the head of this rod pushes the bullet out.

The EXTERNAL punch can be different diameters and shapes on the tip, depending on what it must do. For jacketed rifle bullets with open tips, the punch fits inside the jacket you plan to use and presses the lead firmly enough to expand the jacket.



The diameter of the external punch has to fit the point where the jacket and lead will be seated. If you use too big a punch it will dig into the jacket wall and you cannot press the lead firmly, so the bullet will be undersized and have a ring in it where the punch hits it.

If you use too small a punch diameter, lead can spurt out around it and the pressure cannot rise enough, also making an undersized bullet. The right size punch presses the lead without letting it leak out, and without digging into the jacket.

The ideal fit will just go into the jacket firmly by light press pressure. A .22 LR case used for 224 or 6mm jacket often has a roll crimped mouth that makes the ID appear smaller than it really is.

A punch of about .204-inch diameter will fit into most .22 cases after they are drawn to size (a range of .202 to .205 would be OK). A commercial benchrest jacket would probably use a .196 to .201 inch diameter core seating punch.



To seat a core, first cut or cast the lead core to a weight which, when combined with the jacket, gives you the total bullet weight. Clean the cores by boiling in hot water with a little detergent added, rinse and dry them to remove all grease and oil. Put the clean cores into the jackets. Then put a little Corbin Swage Lube on your fingertips and pick up the jacket and core, placing it over the core seating punch (which snaps into the slotted ram of your reloading press -- do not use a shell holder with it).

Screw the core seating die into the top of the press a few turns, and raise the ram with the jacket, core and punch all the way to the top without encountering any resistance. Lower the die until you cannot turn it by hand (internal punch comes up against the jacket).

Then lower the ram slightly, and give the die about 1/8 to 1/4 turn lower (closer to the ram). Raise the ram and see if you feel any resistance. If so, eject the seated core and jacket. If the diameter is about .0002 to .0005 inches smaller than the final desired diameter, you did well. If the jacket sticks on the punch, then probably the punch is either too loose, too tight, or the core is too short (light) for that jacket. You can probably remove it by simply pressing a little harder until it comes off in the die.

After making a quantity of seated cores, remove the core seating die and punch, and screw in the point forming die and its larger diameter punch. Do not use a core seating punch, as the bases will be severely damaged by the undersized punch tip. Apply a little more lube to the jacket, and push it into the point forming die. Eject it and see if the tip is closed enough. The tip should be about the size of the ejection pin (.081 inches is typical).

For more information on rifle and handgun bullets, removing stuck bullets, and making FMJ and lead tips, see the *Corbin Handbook of Swaging, HB-9e* (on CD-ROM) or log onto www.Corbins.com

