

CORBIN[®]

Bullet Reducing Die

BRD-1 **-R**
 -M
 -H

FROM _____ TO _____

The Corbin Bullet Reducing Die draws down (reduces) the diameter of a bullet by pushing it through a die and out the top. The punch presses on the BASE of the bullet, and should match the base diameter and shape of the finished (drawn) bullet. If a punch is used that is too small or the wrong shape for the base, it will deform the bullet resulting in poor accuracy.

Bullets can usually be reduced at least 0.005-in diameter, depending on the material strength and thickness of the jacket walls. It is possible to reduce .357 pistol bullets to make .355 (9mm). It is also possible in most cases to reduce a .323 rifle bullet to .318 even though this is .006 inches.

Some bullets will curve or extrude too much lead core from the open end when they are drawn down. All bullets will do this if drawn down far enough. It is usually better to make the bullet by swaging rather than reducing an existing bullet. But in cases where the draw is less than .005 inches, the potential accuracy of the bullet is not damaged enough to matter for practical purposes.



The die screws into the head of the press, replacing the floating punch holder in Corbin swaging presses. It has a 7/8 X 14 thread for types -R, -M, or -S, or 1-1/2 X 12 for type -H. The punch fits into the press ram. In type -R die sets, the punch fits the shell holder slot of the reloading press (without a shell holder present). In type -M and -H sets, the punch screws directly into the press ram like a swaging die.



OPERATION:

Lubricate the bullet by wiping with fingers moistened with Corbin Swage Lube. Place the bullet on top of the punch. Raise the ram to the top. Screw the die down until it contacts the bullet. Lower the ram slightly, and screw the die down a little at a time until the bullet fits far enough into the die so it moves freely. Short bullets may not emerge entirely from the die at this point, but they should be past the constriction in the die.

The die should NOT be run down all the way and then the bullet pushed up into it, because this would not use the full leverage of the press. When the press is adjusted correctly, you can use rather mild pressure on the handle of the press and the bullet will draw with little effort.

A lock ring is not normally used on the draw die, because if it is allowed to float slightly in the threads of the press, it can align better with the punch and make the bullet go through more evenly drawn.

If the die is less the two full turns (threads) in the press head, do not attempt to draw with that setting. It is important to have at least two full threads engaged to avoid putting too much pressure on too few threads, which can cause thread damage.

The bullets may not emerge until you have drawn two or three of them. With some diameters and lengths, the bullet can pop out with a sudden rush, perhaps flying out the top of the die with some force. Therefore, do NOT look down into the die or place any part of your face near the top of the die while drawing.

Each draw die is designed to use a certain range of length, diameter, and wall thickness, and may not work or could even be broken if an attempt is made to draw other materials. The only bullet guaranteed to come out the correct diameter is the sample bullet used to adjust and test the die. If you did not send at least ten sample bullets with the order, then a stock bullet had to be used. Because jacket and core materials may vary in hardness, thickness, temper, and alloy from type, brand, and lot, pushing a different bullet through the same die usually results in differences in finished diameter. Therefore, it is extremely important that you send sample bullets and use the same exact type, brand and lot if you expect the diameter to be precisely as ordered. Variations as much as .0015 inches can occur with changes in brand alone.

Bullets are always more accurately swaged from internal pressure than reduced by external pressure: for best accuracy, use Corbin Bullet Swaging equipment. However, for draws of less than .005 inches, acceptable accuracy is usually obtained. Draws of .002 or less inches cause no noticeable change in performance.