CORBIN Jacket Serrate/Draw Die

SDD-1 \square -R \square -M \square -S \square -H Caliber:

The Corbin SDD-1 Serrate/Draw Die may be used to score the outside of an empty bullet jacket, so the bullet will separate along the score lines on impact. For effective high frangibility projectiles, the empty jacket is pushed *base first* through the die with a *punch that fits inside the jacket*. This scores the length of the jacket. The core is then seated and the ogive is formed, further stressing the score lines in the nose area for rapid expansion at lower velocity than would normally be possible.

Jackets used to make flat base bullets can be serrated before core seating, but jackets to be used for rebated boattail bullets must be serrated after the core has been seated (to avoid rupturing the jacket during the RBT forming process). In that case, a punch with a diameter slightly under the jacket OD is used to push the seated core/RBT jacket combo up through the die *mouth first* (because pushing on the lead core tends to



extrude it out of the jacket). This means the punch may be lightly marked by the hard scoring points, so it is made of a material that will not damage them. Light marks on the punch itself are not a problem.



SDD-1-H shown, in CSP-2 Mega-Mite Press

The serrations are made by four or six cutting points (depending on the bullet diameter). The points are factory-set to the most effective depth, a balance between metal displacement, operating force, and expansion effect. Metal displaced from the serration groove causes the diameter of the jacket to increase; this increase is reduced to proper diameter again by a drawing section built into the die, as the jacket passes up and out through the top of the die. The serrations appear to be very shallow as a

result of this ironing, but they are designed to operate in the most effective manner. Changing the depth of the cutter points is not recommended, as it can cause excessive force, oversized jackets, and broken components. The stress of impact follows the lines of least resistance, so it is neither necessary nor desirable to cut any deeper than a few thousandths of an inch. Only light force should be necessary to serrate the jacket.

If it should be necessary to remove the serrating points, a jacket can be put over a punch and used as a "stop" to adjust the points back in again. This will get the points adjusted about the same position. Then, after pushing the jacket out, each of the adjustments can be turned in another 1/8 to 1/4 of a turn and held while the locking nut is turned with a small wrench to lock them in position. A felt tip pen can be used to put a mark on the screws before they are removed, so that the position of the mark can be adjusted to the same place once the approximate depth is found with a jacket as a stop gauge.





Note: **Be sure to use the correct punch and operating method** for either jackets or seated cores, depending on which kind of tool you have. The empty jacket serrator uses a punch that fits inside the jacket. The seated core serrator uses a punch that pushes on the base of the jacket and is too large to fit inside. If it is for RBT bullets, then the punch has a cup or cavity to help support the RBT bullet base. Jackets with seated cores must be pushed through open-end (nose) first! Empty jackets are pushed through base first.