

Removing stuck bullets from Point Forming Dies...

When a bullet sticks in a point forming die, it is usually because there was insufficient lubricant, or the seated core/jacket was too large in diameter. There are a few other, less likely causes, discussed in the Corbin Handbook of Bullet Swaging. But it is important NOT to destroy the die by trying to remove the stuck bullet incorrectly:

1. Do NOT try to "melt" the bullet out by using heat.

Dies are hardened and tempered. Applying heat can destroy the careful heat treatment, and almost never removes the stuck bullet. The die won't "expand" away from the bullet as some folks think. Molten lead is not enough to destroy the temper of the die and render it soft and useless.

2. Do NOT try to "dig" the bullet out with metal tools.

Stuck bullets are pressed firmly against the die wall, and are soft material which will simply tear apart, leaving the rest of the jacket tightly jammed. The fine diamond lapped surface of the die can be gouged, scratched, and damaged before the bullet is partly torn apart, leaving portions stuck tightly in the now-ruined die.

3. Do NOT use acid, mercury or chemicals to "dissolve" the bullet.

Most of the chemicals that could, eventually, dissolve the copper and lead would thoroughly destroy the surface of the die and could produce dangerous by-products. You would save time and money by just throwing the die away. (The use of dynamite, nitro-glycerine, or a jack hammer are likewise discouraged.)

4. Do NOT try to drill out the stuck bullet.

Unless the drill is precisely selected, perfectly aligned using a lathe and carefully controlled so it does not break through the jacket and damage the die walls, that is exactly what will happen. The drill makes a hole for a tap, and the tap is held in the tailstock of a lathe. Then the tailstock hand screw is turned to "pull" the bullet out. This takes experience and exact size for the caliber and ogive shape.

The stuck bullet often has been "penetrated" by the ejection pin. The force holding the bullet in the die is more than the strength of material under the ejection pin area. So remove the ejection pin entirely, and close the hole by re-swaging in the die (do not extrude lead up the ejection pin hole and fill it, however). This may seem counter-intuitive: push the bullet further in when it is already stuck. But moving it closes the hole and helps break the jacket to die wall bond.

Obtain a short piece of ejection pin wire, about the length of the die body. Place it in the die from the threaded end. Put a drop of swage lube in the die. Place the die over a hole in a solid support, so the bullet has somewhere to drop out. Tap the piece of hardened pin wire with a small hammer. If the bullet is penetrated again, pull the pin back out with pliers, and reswage the bullet (without the ejector).

Repeat this until the bullet jacket fatigues and the bullet comes out. Don't use hex keys or nails: get the right size of ejection pin wire, which is available from Corbin. The diameter is etched on the end of the die as a decimal number (such as ".091" or ".105") along with ogive shape and caliber.

Or send the die back and let the die makers remove the stuck bullet using the drill, tap, and lathe tailstock extraction method. There is no charge other than shipping cost.

To prevent stuck bullets, read the information about this on www.corbins.com or in the Corbin Handbook of Bullet Swaging. Prevention is always the best option.