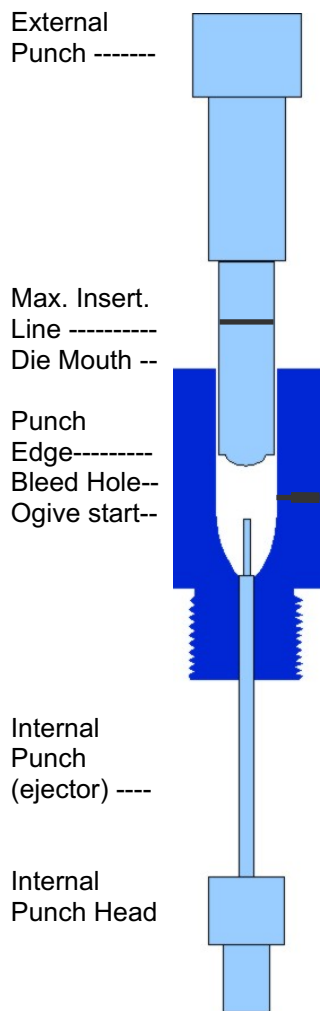


How to Avoid Damaging Your Point Form Die's

External Punch:



The external or base punch for a PF-1-SP or PF-1-HP die has a line scribed around it to indicate the maximum insertion into the die with which it is matched. This line should always be visible above the die mouth during operation.

If the line disappears into the die, it means you have pushed the punch past the bleed hole depth, blocking the bleed holes so lead cannot be properly extruded.

The bleed hole area is directly ahead of the ogive curve (nose section) of the die cavity. If the end of the punch is pushed into the start of the ogive, the punch edge will be rolled inward (peened over). When the punch edge is rolled inward, it leaves a space into which a flashing of lead will flow when you try to swage the slug. This leaves a ragged thin film of lead on the base.

All it takes is one time of inadvertently pushing the punch too deep into the die for the punch edge to be ruined. From that point on, the slugs will all have a rough edge with a thin flashing of extruded lead. The amount of "rounding" is usually too small to see and difficult to measure. It is the mirror image of the lead flashing.

The only "fix" is to recut the punch edge or replace the punch. The punches are hardened, and will require a ceramic bit to make a clean cut. It is usually best to return them for repair once the edge has been "peened over" by shoving it into the ogive area.

Note that this normally happens to a beginner who has not swaged slugs before, and usually happens on the first attempt to do so without reading and understanding the proper operation. Because it can happen on the initial set-up of the die and punch, the operator may never realize what he has done, and think that the die or punch simply "doesn't work right". Attempts to make too light a bullet for the caliber, ogive, and hollow point size can lead to excessively deep punch adjustment and punch damage.

Another seemingly unrelated issue is that if the base punch is pushed just far enough to block or partly obscure the bleed hole, the pressure relief hole area is now changed. The pressure will grow much higher to extrude lead, if it will extrude at all. This will force lead past the ejection pin and cause a flashing of lead on the nose as well as the base. A partially blocked bleed hole will extrude a flat ribbon of lead instead of a round wire. This is a good indication the external punch is set too low in the press.