

CORBIN TECHNICAL BULLETIN

Manufacturing & Supply, Inc.

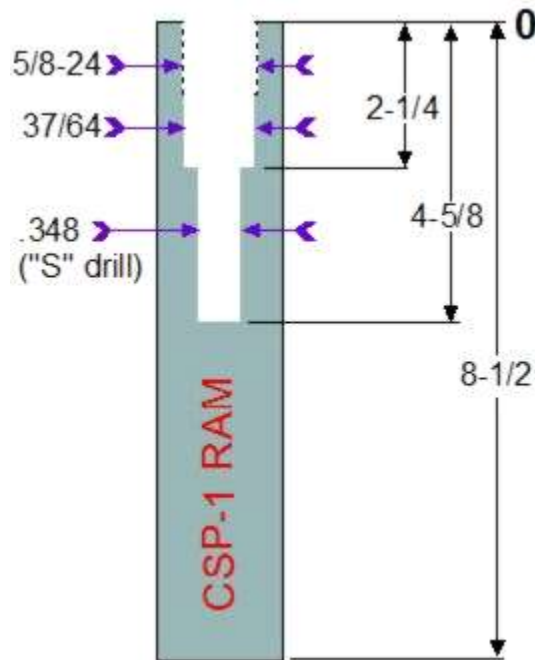
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Cause of Stop Pin Breakage

The stop pin in Corbin CSP-1 S-press passes through the press frame, through the ram slot, and into the rear frame of the press. For all dies except those with captive ejection punches, the head of the internal punch rests on the stop pin on the down stroke. The pin stops the movement of the internal punch, while the ram and die continue down to push out the bullet.

With point forming dies, the stop pin passes through a hole in the punch head, securing the punch to the frame. The die and ram move up and down while the ejection pin (internal punch for the point form die) remains in position pinned to the frame. On the down stroke, the ram lowers the die around the ejection pin to push out the bullet. The only force on the pin normally is the amount needed to push the bullet out of the die, far less than it takes to break the pin.

The tail end of the internal punch in either kind of die fits into a hole in the vertical axis of the ram.



The .348 diameter hole in the drawing can fill partly with debris from reloading and swaging operations, so that the end of the internal punch hits the compacted material. This in turn puts the entire force of press against the punch head, which in the point form die is pinned to the frame through the stop pin. All of the force of the press is now applied to the stop pin, breaking it.

The solution is to remove the ram from the press (pull the stop pin out, and remove the ram pivot pin (it slips out if you loosen the set screw holding it in the bottom of the ram and the two link arms). Then use a size "S" drill turned by hand to "ream out" the impacted debris. *Do not use a drill motor!* You can tell if the hole is clogged by measuring from the top of the ram to the bottom of the hole with a 5/16 dowel. It should go 4-5/8 inches into the ram (from top edge of the ram). The tolerance is about 0.03 inches. Anything shorter means the hole is clogged, which can break the stop pin.