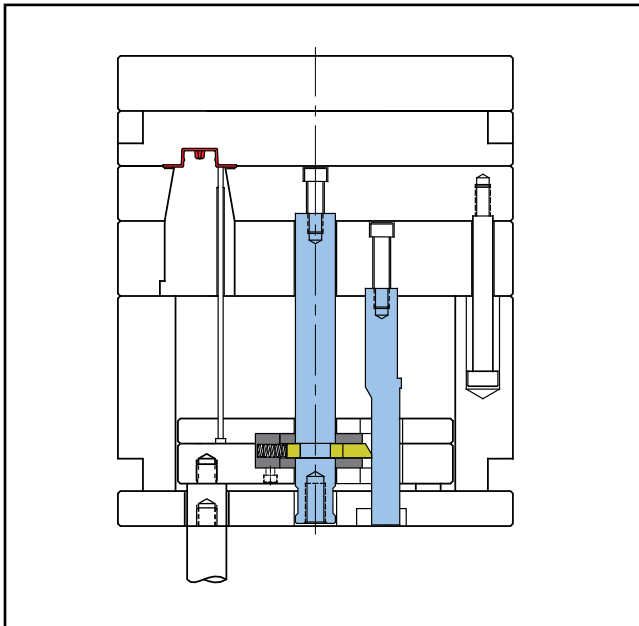
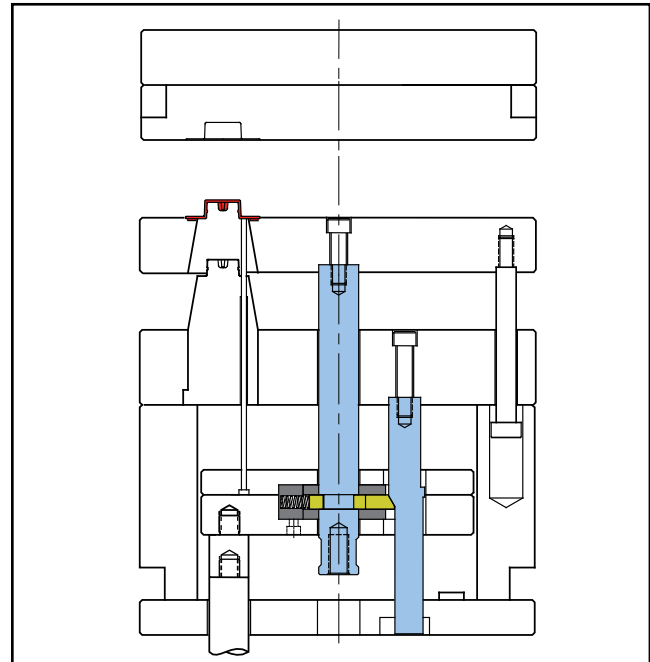




Internal Plate Locks provide a positive, mechanical method for locking and actuating plates in molds requiring multiple ejection actions. Optionally, using the press knock-out locations, the internal ejection system can be used to actuate the ejectors after the stripper plates.

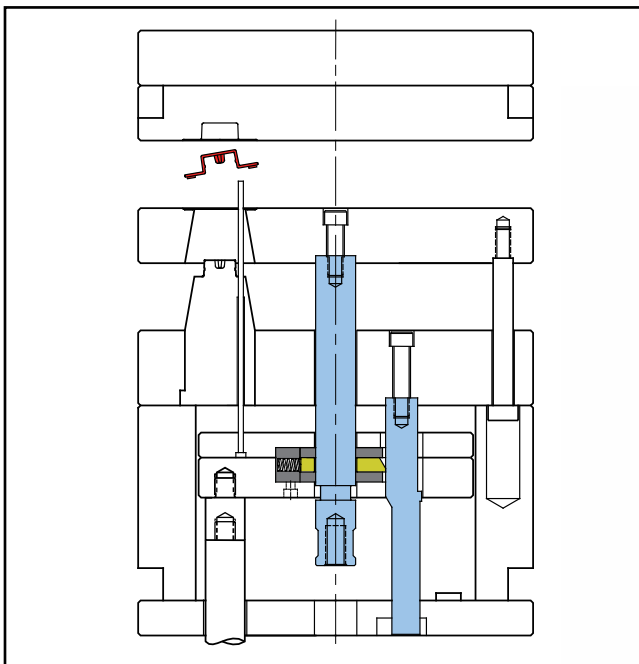


Mold Closed



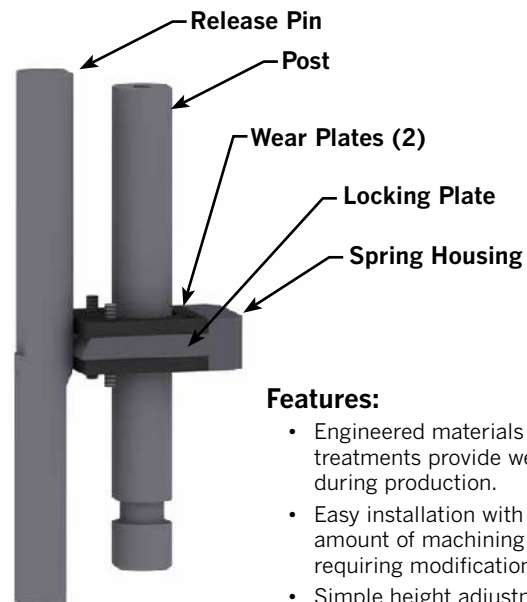
Mold Open: Plate Strips Part From Core

Lock begins to disengage and stripper and ejector plates move forward.



Mold Open: Part Ejected From Plate

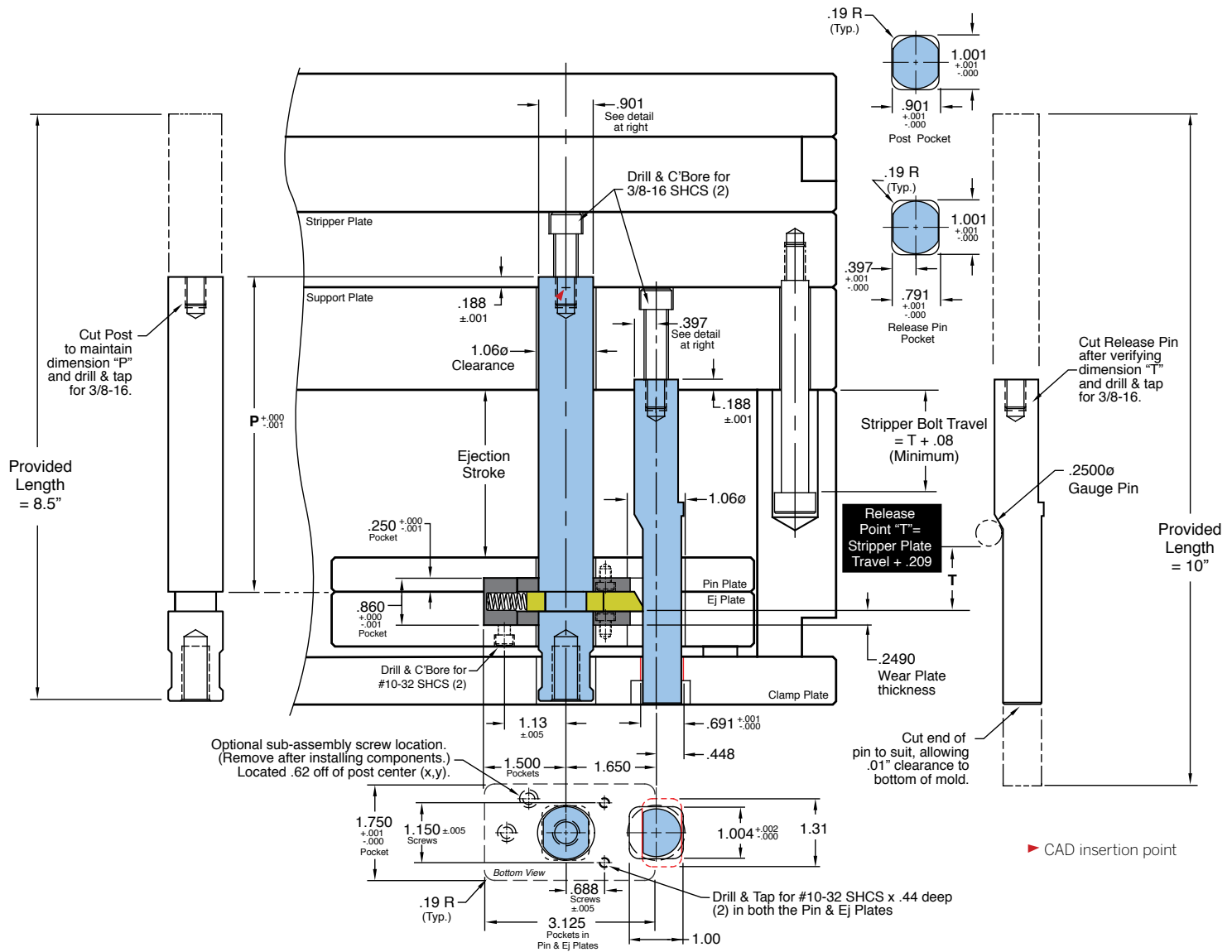
With the stripper plate stopped, the ejector system continues and pushes the part from the plate.



Features:

- Engineered materials and treatments provide wear resistance during production.
- Easy installation with only a small amount of machining on plates already requiring modification.
- Simple height adjustment and timing.
- Designed to re-engage when fully retracted.
- For activating large mold plates, multiple Internal Plate Locks can be installed.

Patents pending



Design & Installation Guidelines:

- It is recommended that ejector rods or PKO extensions are tied into the pin plates and guided ejection is utilized.
- For small molds (12 x 20 max), one or two assemblies may be used. For molds larger than 12 x 20, four assemblies should be installed. On all designs, consider fastener and assembly access points and install the Plate Locks equal distances from center to ensure proper balance of the mold.
- Determine the Post length by verifying the distance in dimension "P" according to the information above. Cut, drill, and tap the Post to suit.
- By using a .250ø gauge pin tangent to the flat and the angle on the Release Pin, determine the release point "T" as shown above. Calculate the overall length of the Release Pin and then cut, drill, and tap.
- Machine all pockets and install all components, utilizing the sub-assembly screw to hold the Locking Plate to the retracted position if required during assembly.

CATALOG NUMBER	DESCRIPTION
PLN100	Internal Plate Lock Assembly

Internal Plate Lock Assemblies include:

- All five machined components listed at right.
- Compression Springs (2)
- #10-32 LHCS (4)

PART NAME	MATERIAL/TREATMENT
Locking Plate	A-2, 58-60 HRC
Wear Plate (2)	H-13 50-54 HRC, Nitrided, Black Oxide
Spring Housing	4140, 28-32 HRC
Release Pin	4340, 30-35 HRC, Nitrided
Post	4340, 30-35 HRC, Nitrided