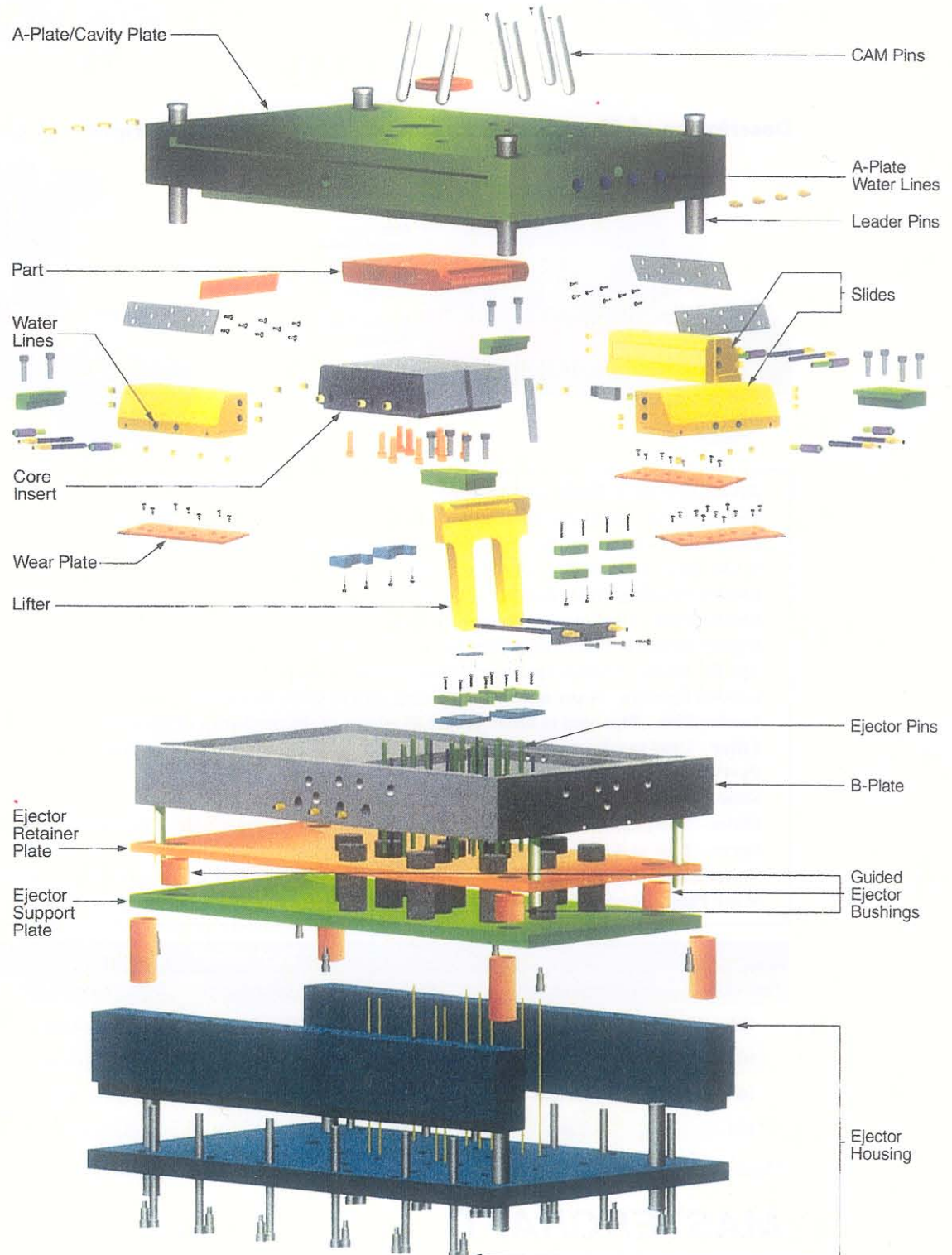


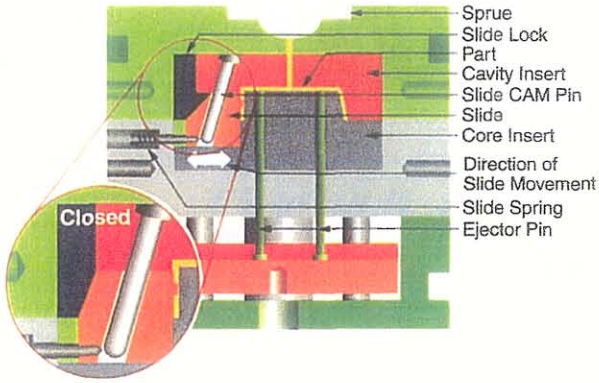


# ANATOMY OF A MOLD

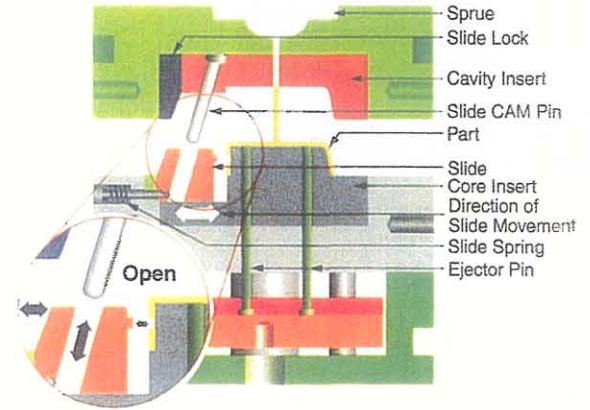


# ANATOMY OF A MOLD

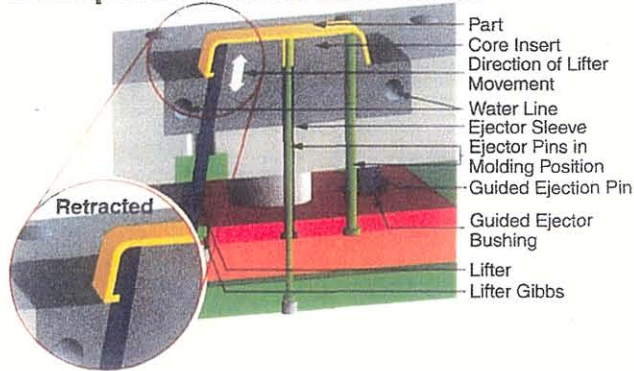
## Description of Closed Slide Action



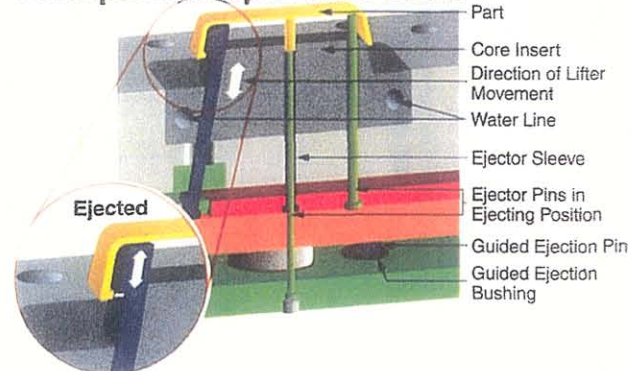
## Description of Open Slide Action



## Description of Closed Lifter Action



## Description of Open Lifter Action



### Anatomy of a Mold Definitions

**Cavity Insert** - Insert that the outside part geometry is machined into, creates the outside of the part.

**Core Insert** - Insert that the inside part geometry will be machined into, creates the inside of the part.

**CAM Pins** - A pin used to activate a slide.

**Ejector Housing** - Back housing of the mold base that retains the ejector system.

**Ejector Pins** - Used to eject the part off the core insert.

**Ejector Retainer Plate** - Plate that the ejector pins are retained in, allows them to move all together.

**Ejector Sleeve** - Used to eject screw bosses off of a core pin.

**Guided Ejection** - A pin and bronze bushing used to guide the ejector system, usually four are used.

**Leader Pins** - Pins used to insure proper alignment of the two halves of the mold, usually four are used.

**Lifter** - Used to release an undercut feature from the inside of the part or no draft surface.

**Part** - The actual piece that the injection mold will produce.

**Slide Spring** - Assists in slide movement and location.

**Slides** - Insert that is used to create an undercut feature from the outside of the part or no draft surface.

**Sprue** - Hole in A-Plate/Cavity insert through which plastic is injected.

**Water Lines** - Cooling channels machined into the mold base, cavity, core and slides to provide cooling for the mold.

**Wear Plate** - Hardened or self-lubricated plate that is placed under a slide for better tool life.

### Tool Chart

Tool Class	Production Volume	Production Part Quantity*	Mold Base Steel	Core/Cavity Steel	Ejection
101	High	1,000,000 to 2,000,000	#2 steel (4140)	H-13	Guided
102	Medium High	500,000 to 1,000,000	#2 steel (4140)	H-13/P-20	Guided
103	Medium	100,000 to 500,000	#3 Steel (P20)	P-20	Guided
104	Low	100,000	#1 Steel (1030)	1010 Steel/Aluminum	N/A

\*Tool production quantities are dependent on material type, part geometry and complexity.