

Pinpuller Concept

The figure below shows the basic principle by which all TiNi SMA actuated Pinpullers operate.

When in the extended position, the Pin or output shaft can be seen to be loaded by a compression spring. The Pin remains firmly locked in this position due to the ball lock shown. This is made up of a spring loaded latch which drives outward and array of detent balls. Once actuated however, the Nitinol element drives the latch upwards thereby causing the balls to roll inward and allowing the Pin to retract under the force of the Drive Spring. The Pinpuller is reset by manually moving the Pin back into the extended position. This is done by either pulling it out from the top or pushing it from the bottom.

