

Dynamic Triggering

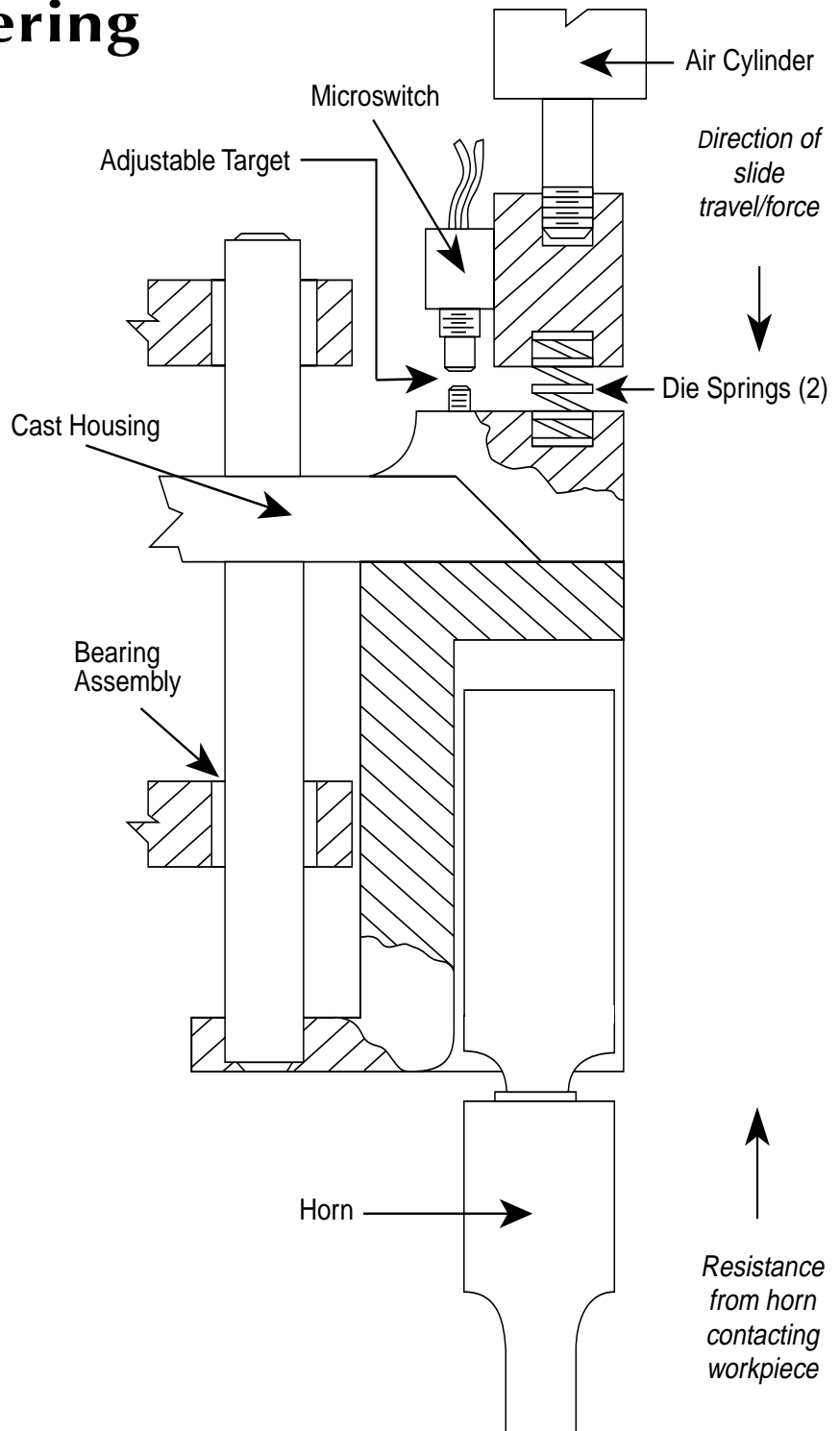
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The dynamic trigger mechanism has three functions:

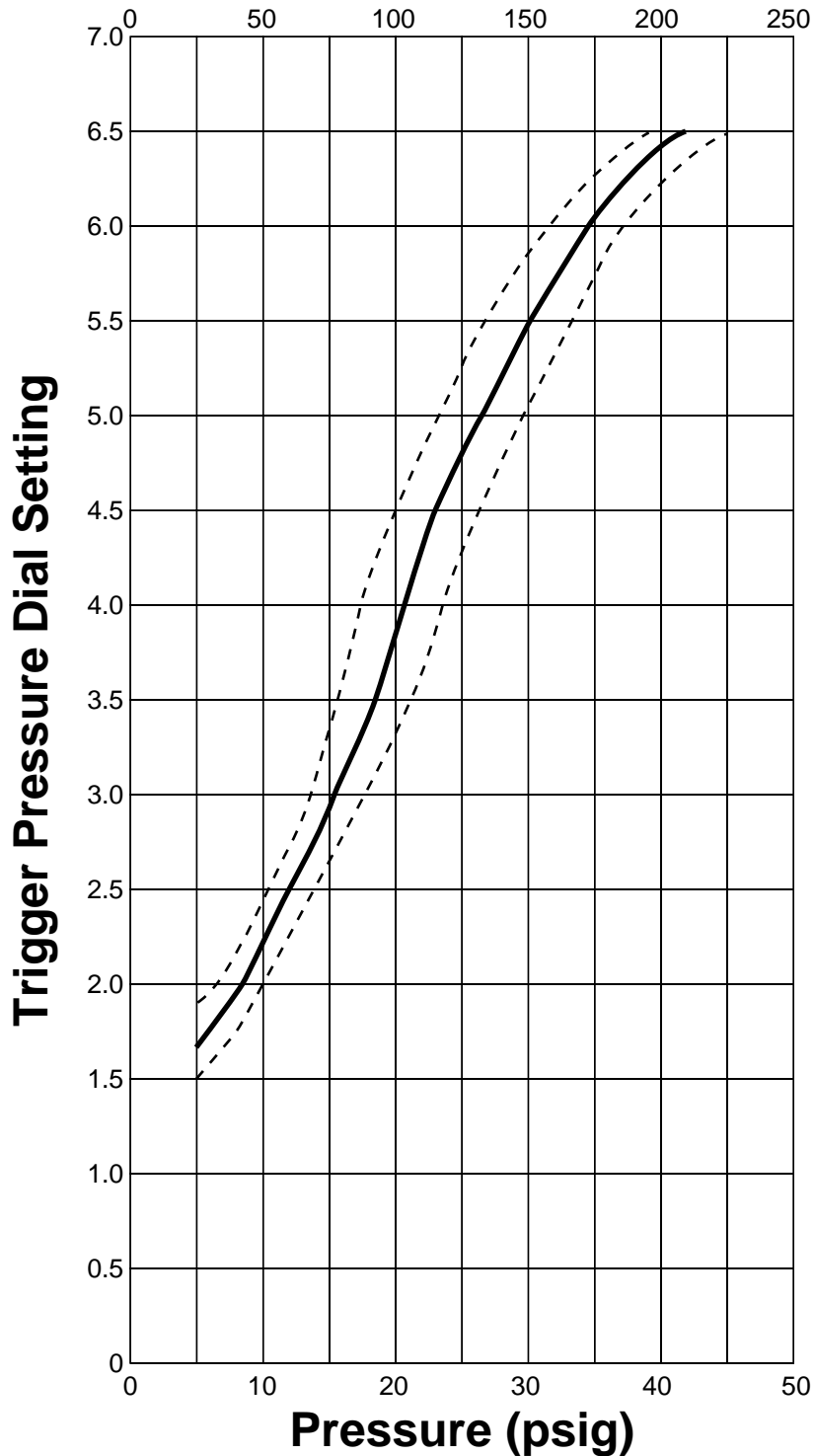
1. Enables the user to select the amount of force applied to the workpiece before ultrasonic energy is initiated. (See *Trigger Pressure Setting Graph* on back.)
2. Provides switch closure to initiate the ultrasonic energy.
3. Maintains constant force on the workpiece via die spring reaction ensuring consistent energy transmission to the melt zone.

Triggering Sequence

1. The horn contacts the workpiece. The die springs begin to compress because they are captured between the slide and the air cylinder.
2. The microswitch and the adjustable target make contact, and the microswitch closure activates the ultrasonic energy.
3. The die springs assure that constant force is applied to the workpiece as the plastic melts down.



Force (lbs) repeatability 2 lbs



Trigger Pressure Setting Graph for 20kHz Heavy-Duty Press/Thruster

The graph shows the trigger setting and air pressure setting required to have a particular amount of force applied to the workpiece when the ultrasonic energy is initiated. The graph shows typical values. The actual amount of force applied depends on the mass and the surface area of the horn.