

**Shock Tool** 



The Prime Horizontal Shock Tool is a simple drilling enhancement tool designed to reduce bit bounce and impact forces. Reducing bit bounce will increase formation contact and therefore increase the rate of penetration. Reducing impact forces will increase drilling motor and bit life.

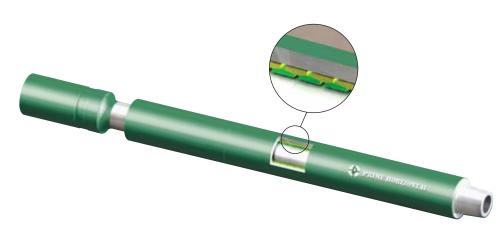
## **Benefits**

The use of Prime Horizontal's Shock Tooling will increase your bit life and protect your drill string.

- Vibration Dampening Device should limit damage to down-hole electronic tooling
- Spring Stack compensates for fluctuation in bit weight requirements
- Absorbs both natural and induced vibrations
- Longer bit life by eliminating unusual vibration wear patterns on bit
- Self-lubricated for prolonged life
- Double sealed thread joints and pistons

The Prime Horizontal Shock Tool has a relatively soft spring rate and linear travel that will function effectively in a wide range of weight on bits. Because the Prime Horizontal Shock Tool does not rely on internal hydraulic fluid and valves it operates consistently in a wide range of temperatures.

As the name implies the tool is a linear shock absorber that uses unique load dampening steel springs to reduce impact forces and bit bounce. The drilling torque is transmitted through a heavy duty spline. The Prime Horizontal Shock Tool is the ultimate in mechanical simplicity for reliable performance in a wide range of drilling conditions.



Steel springs to reduce impact forces and bit bounce.

## **Specifications**

	Model Number	Outside Diameter	Internal Diameter	Tool Length	Torque Capability	Tensile Yield Load	Spring Rate	Max - Min Working Compression Load	Tool Weight
Metric	ST 475	127 mm	50.8 mm	320 cm	51,521 nm	181,437 kg	321.44 kg/mm	22,679 – 2,721 kg	240 kg
	ST 650	165 mm	50.8 mm	198 cm	88,128 nm	290,299 kg	392.87 kg/mm	18,143 – 3,628 kg	254 kg
	ST 800	203 mm	71.1 mm	219 cm	176,256 nm	351,534 kg	607.17 kg/mm	31,751 – 4,535 kg	415 kg
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Imperial	ST 475	5.0 in	2.00 in	10.5 ft	38,000 ft-lbs	400,000 lbs	18,000 lbs/in	50,0000 - 6,000 lbs	530 lbs
	ST 650	6.5 in	2.00 in	6.5 ft	65,000 ft-lbs	640,000 lbs	22,000 lbs/in	40,000 - 8,000 lbs	560 lbs
	ST 800	8.0 in	2.80 in	7.2 ft	130,000 ft-1bs	775,000 lbs	34,000 lbs/in	70,000 - 10,000 lbs	915 lbs