

LORD® Axial Isolator

Shock Absorber For Probe-Style
MWD Tools

Patent No.: US 10,480,260 B2



Creating Solutions to Your Most Demanding Challenges

Extend the Life of Your MWD Tools

HIGH-TEMPERATURE
VERSIONS AVAILABLE

Reduces Axial Shock Events by 70-80%

- Protects MWD tool strings from shock and vibration, offering improved reliability, durability and service life in the toughest conditions

Improves MWD Reliability

- Customers report staying in the hole longer in their toughest wells from North Dakota to West Texas

Field-Proven

- Commercially available since 2015

Simple is Better

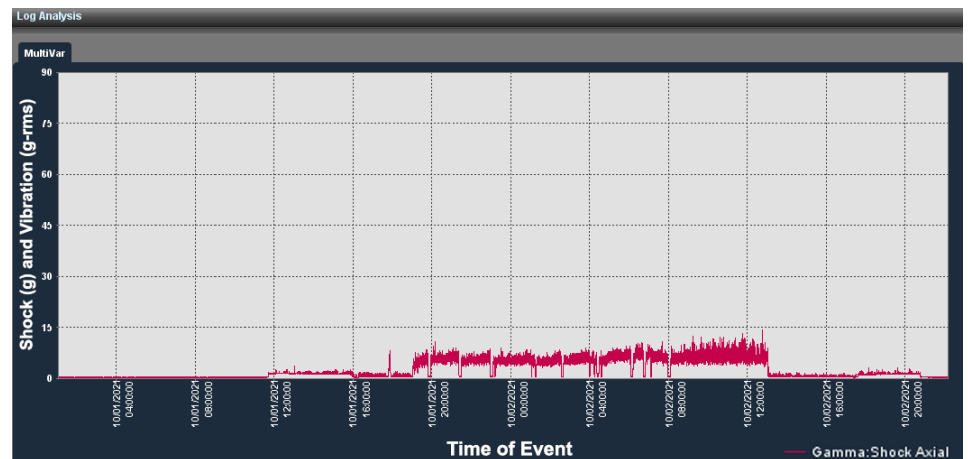
- No oil fill required
- Utilizes non-linear elastomer spring/damper elements, which improves reliability and shortens maintenance cycles versus conventional metal spring with fluid compensation alternatives

Substantially fewer shock events with LORD Axial Isolator

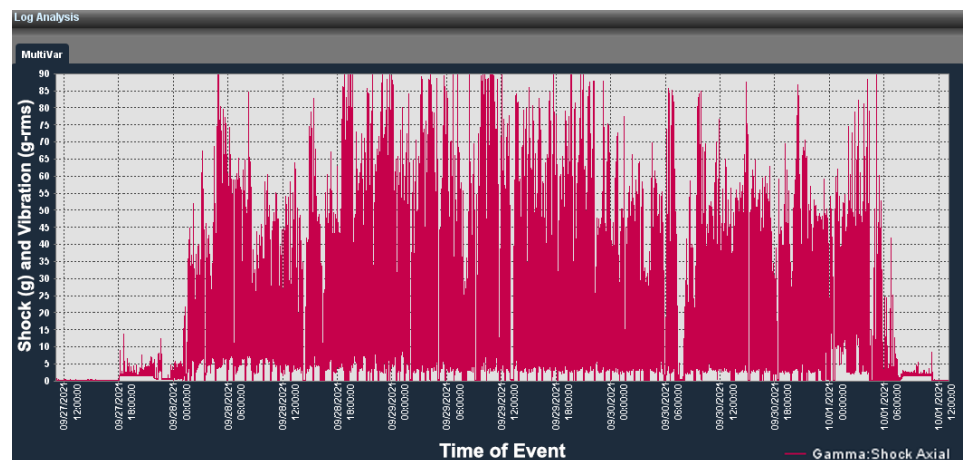
SHOCK COUNT		
Magnitude	Without LORD Axial Isolator	With LORD Axial Isolator
30-40g	1495	2
40-50g	70	0

Representative charts. Detailed run histories available upon request.

With Parker LORD® Axial Isolator



Without Parker LORD® Axial Isolator



ENGINEERING YOUR SUCCESS.

Axial Isolator Variants

Tool Variant	Generation	Tool Part Number	Mounting Type	Replacement Elastomer Kit	Operating Temperature*
Standard	Gen 4.0	J-28348-65	Bottom - Mounted	J-28460-34	< 275°F (< 135°C)
High-Temperature	Gen 4.0	J-28348-65-HT	Bottom - Mounted	J-28460-38	275-350°F (135-175°C)
Standard	Gen 3.5	J-28348-64	Bottom - Mounted	J-28460-34	< 275°F (< 135°C)
High-Temperature	Gen 3.5	J-28348-64-HT	Bottom - Mounted	J-28460-38	275-350°F (135-175°C)
Standard	Gen 1.0	J-28348-59	Top - Mounted	J-28460-34	< 275°F (< 135°C)
High-Temperature	Gen 1.0	J-28348-59-HT	Top - Mounted	J-28460-38	275-350°F (135-175°C)

* High-Temperature (HT) variant designed for optimal isolation at 350°F (175°C). Prolonged exposure to elevated temperatures may shorten elastomer life. For temperatures below 275°F (135°C), use the standard tool & elastomer kits for optimal performance. The standard tool can easily be upgraded to the HT variant as needed simply by rebuilding the tool with the HT elastomer kit.

Combined Axial & Lateral Protection for MWD Tools

As lateral shock and vibration become an increasing concern, we have addressed the problem by incorporating lateral stabilization into the axial isolator. This is easily accomplished by swapping out the standard sealing sub with part number J-28460-72, giving the user the ability to customize the fin size to maximize lateral shock and vibration mitigation. Available bonded fin sizes are shown in the table below.

Installed Diameter (inches)	Bonded Fin Part Number
3-3¼	J-28801-1
3-3½	J-28801-4
3-3¾	J-28801-6



Serviceability

Tools are available for purchase or lease. Parker LORD also offers a service contract for customer-owned tools.

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