INNOVATIVE SOLUTIONS FOR THE OFF-HIGHWAY MARKET

Parker | Lord

ENGINEERING YOUR SUCCESS.

PROVIDING INNOVATIVE SOLUTIONS THAT MATTER TO YOU

Our knowledge and experience in solving problems across a variety of industries allows us to help OEMs increase productivity, reduce operating costs, improve operator comfort and safety, and increase uptime.

We do this with innovative vibration isolation solutions and magnetically responsive technologies that significantly reduce risk and improve product performance. Our product portfolio includes thousands of engineered solutions for the agricultural, construction, mining, material handling, turf and utility, forestry and marine markets.

Our technical expertise is built on decades of experience and knowledge in engineering and science. Customers say our technical support is one of our defining strengths. We provide value to our Off-Highway customers by collaborating closely with them on product design, process engineering and product performance.

MAXIMIZING EFFICIENCY & PRODUCTIVITY

COST REDUCTION

TIME SAVING

VIBRATION AND SHOCK REDUCTION

NOISE CONTROL & REDUCTION

ENHANCED QUALITY & RELIABILITY

DRIVETRAIN PROTECTION

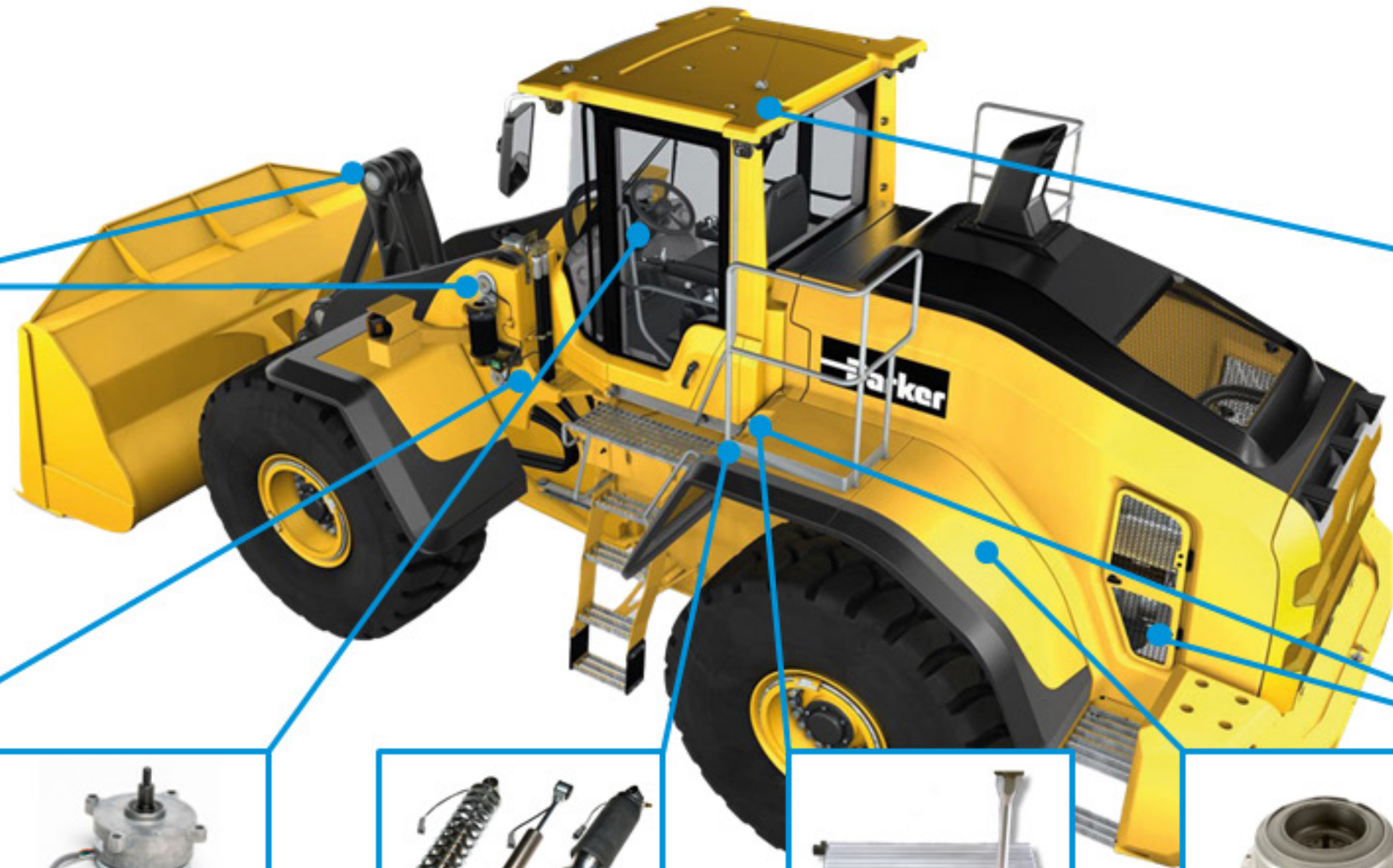
ADAPTIVE STEERING FEEDBACK

Our solutions include the following:

- LORD® Elastomeric Mounts & Bearings
- Fluidlastic™ Cab Mounts
- Elastomeric Flexible Couplings
- Advanced Suspension Systems
- Tactile Feedback Device (TFD®) Steering Unit
- Force Feedback Device (FFD™) Steering Unit
- Magneto-Rheological (MR) Suspension Systems

Our product portfolio includes thousands of standard parts that allow us to address most motion and noise problems. However, our engineers can also design and develop new innovative, customizable solutions for our customers' needs.

APPLICATIONS & TOTAL SOLUTIONS



High-Capacity Elastomeric Bearings

Mini-Mounts for Sensitive Electronics

Fluidlastic™ Viscous Cab Mounts

Steer-by-Wire Feedback Devices

Semi-Active Suspension Systems

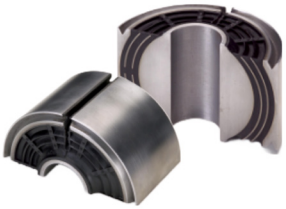
Assembly & Protection Solutions

Dynaflex™ Drivetrain Couplings

Elastomeric Vibration Isolators

PRODUCT PORTFOLIO

ELASTOMERIC MOUNTS & BEARINGS



The adverse effects of vibration, shock and noise disturbances range from simple annoyances to shortened equipment life, and can negatively affect performance, reliability, comfort and safety of your vehicle. Our customizable application of LORD Elastomeric Mounts and Bearings provide simple, reliable and cost-effective solutions to accommodate motion and decrease noise.

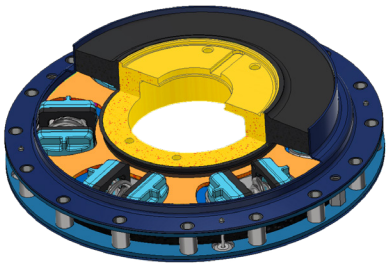
An excellent replacement for conventional bearings, High Capacity Elastomeric (HCE) bearings offer several advantages such as no lubrication requirement, the ability to support high radial loads with moderate oscillatory motion, and reliable operation in harsh environmental conditions.

FLUIDLASTIC™ CAB MOUNTS

LORD Fluidlastic Cab Mounts combine elastomeric and viscous fluid damping technology to reduce cab noise and vibration levels measurably better than conventional rubber mounts.

These mounts conform to environmental demands, even if the natural frequencies of the roll, bounce, and pitch are different, providing stability and damping for static loads ranging from 1000 N to more than 5000 N. The mounts' stiffness and damping properties can also be customized to the demands of the application. Our Roll Over Protection Structure (ROPS) model has a high-strength reinforcement plate to ensure driver safety without the need for additional protection components.

ELASTOMERIC FLEXIBLE COUPLINGS

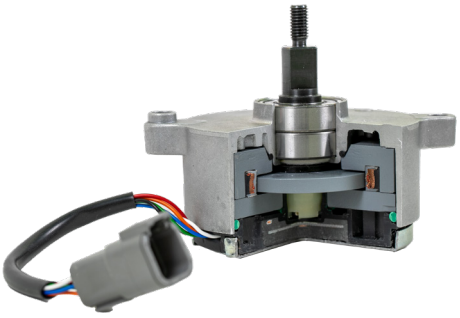


Internal combustion engine powertrains often contribute to noise, vibration, and harsh conditions, significantly impacting operator comfort and acceptance of off-highway vehicles. Elastomeric flexible couplings address these challenges by prolonging drivetrain component life through load reduction, vibration attenuation, and accommodation of misalignments. They improve operator comfort by isolating vibrations and shift shock events, mitigate noise and vibration issues by acting as barriers against noise from meshing gears and engaging clutches, and facilitate the efficient transmission of power.

PRODUCT PORTFOLIO

TACTILE FEEDBACK DEVICE (TFD®) STEERING UNIT

Our TFD Steering Unit uses our patented Magneto-Rheological (MR) technology to provide a continuously variable resistive steering torque in all-electric or electro-hydraulic steering systems. The device automatically adapts the manual steering force and the number of steering wheel turns to the vehicle speed and other operating parameters. LORD TFD Steering Units deliver high-fidelity steering "feel" and maximum control to the operator, and can be customized to your steering preference to improve driver safety, ergonomics and reduce fatigue.



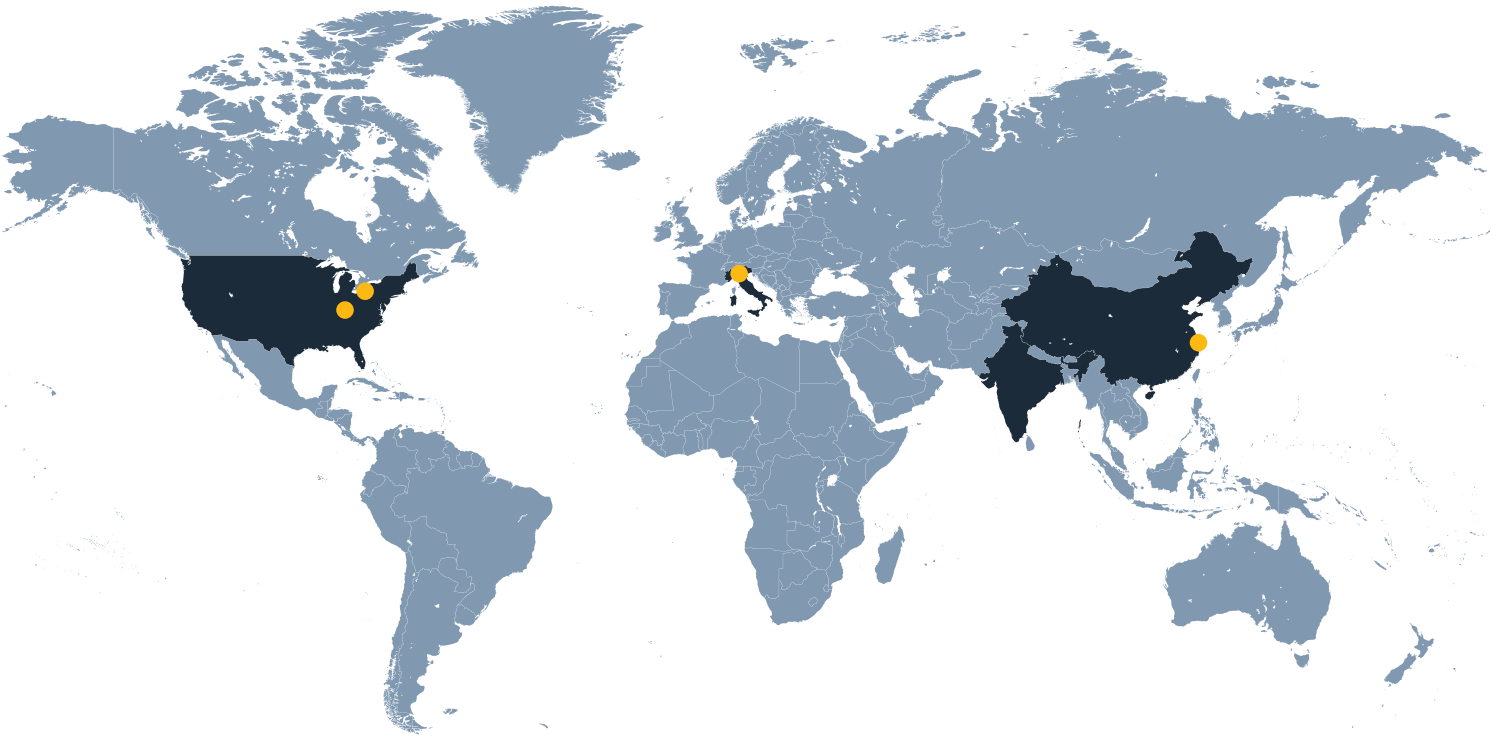
FORCE FEEDBACK DEVICE (FFD™) STEERING UNIT

Our FFD steering unit enhances Steer-by-Wire (SbW) systems by providing highly responsive, low-effort steering performance that improves operator confidence and comfort. This innovative solution eliminates the mechanical connection between the steering wheel and road wheels, addressing the challenge of delivering a high-quality steering feel. With its exceptional performance, the FFD offers OEMs greater design flexibility, ultimately leading to increased productivity and a better bottom line for both manufacturers and end users. By combining our Tactile Feedback Device (TFD) technology with an electric motor, our new FFD provides the best of both worlds – offering smooth tactile feedback as well as active operator feedback features.

MAGNETO-RHEOLOGICAL (MR) SUSPENSION SYSTEMS

Heavy machinery operators spend a lot of their time in harsh and unpleasant vibration environments. Unlike passive suspension systems, LORD Advanced Suspension Systems use patented Magneto-Rheological (MR) Technology to continuously alter suspension settings in real time. Our products provide superior vibration isolation with greatly enhanced shock control (hitting end stops), while continuing to provide protection against roll and pitch motions. Enhanced comfort and safety conditions contribute to improved driver responsiveness and efficiency.

PARKER LORD INDUSTRIAL MANUFACTURING LOCATIONS



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