

LORD MR Suspension System

For Military Tactical and Combat Vehicles

Military tactical and combat vehicles are being used in more demanding conditions than ever before and traditional suspensions are struggling to keep up with changing conditions. LORD Corporation's Magneto-Rheological (MR) Suspension System provides a solution to these challenges, enabling new levels of performance in military primary suspension systems.

Features & Benefits

Unlike traditional passive suspensions with fixed characteristics, LORD Corporation's Controllable MR Suspensions react to vehicle and terrain conditions thousands of times per second, allowing the suspension to adapt its characteristics to the situation. This provides improved dynamic stability over passively damped systems, which can provide significant benefits:

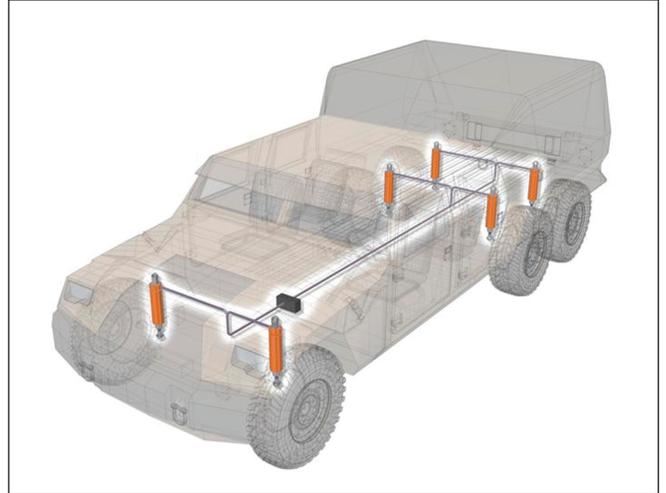
Adaptable – With a simple retrofit, the system is able to react to vehicle and terrain conditions thousands of times per second, allowing the suspension to adapt its characteristics to the situation.

Improves Safety – Reduces risk of roll over; improves maneuverability and safe driving speed; provides improved dynamic stability over passively damped systems.

Increases Component Life – Reduces wear and tear on suspension and drive train components (particularly in applications where the vehicle is loaded at or beyond the design Gross Vehicle Weight).

Commercially Proven Technology

LORD MR Suspensions are enabled by our remarkably versatile MR fluid technology, which allows systems to respond instantly and controllably to varying levels of vibration, shock or motion. When exposed to a magnetic field, the behavior of MR fluids reversibly and instantaneously changes from a free-flowing liquid to a semi-solid with controllable yield strength – perfectly suited for controllable suspension dampers.



LORD MR Suspension System replaces conventional shocks

LORD Corporation's MR technology has been proven through the licensing and broad intellectual property portfolio used in developing BWI Group's MagneRide™ suspension system. First introduced on the 2002 Cadillac Seville, the system now appears on more than 500,000 devices in more than a dozen models from multiple automotive OEMs including Audi, Ferrari, GM, and Holden Special Vehicles. The rapid acceptance of the technology by a wide range of manufacturers, from high-performance sports cars to SUVs, demonstrates the confidence the automotive industry has in the performance, reliability and durability of LORD MR technology.



LORD MR Controller



LORD MR Dampers

LORD PRODUCT INFORMATION

The rapid acceptance of the technology by a wide range of manufacturers, from high-performance sports cars to SUVs, demonstrates the confidence the industry has in LORD MR technology's performance, flexibility and reliability.

System Flexibility

LORD Corporation's MR Suspension Systems are incredibly flexible and well-suited to a wide range of military applications, from lightweight tactical vehicles to line-haul tractors and combat vehicles. MR dampers do not need more space than conventional passive shock absorbers. Therefore, LORD MR Suspension Systems can be a simple retrofit to existing vehicles or easily integrated into new production vehicles.

Every LORD MR Suspension has three key components: dampers, sensors and a controller. These components can be configured in a variety of ways so as to serve all of our customer's requirements.

LORD Suspension and MR Experience

LORD has extensive experience with controllable damping and vibration control. In the 1970s, due to our work on semi-active suspensions, LORD received one of the first patents on 'skyhook' control. This innovation is now incorporated into nearly every controllable suspension.

In addition to MR suspensions, LORD has also worked extensively with passive dampers, electro-rheological (ER) suspensions, servo-valve semi-active suspensions, and linear actuator fully-active suspensions.

Due to MR controllable damping system's many advantages, LORD is focusing exclusively on MR Suspension Systems for military vehicles.

LORD has production capability in place with a fully operational manufacturing facility in Cambridge Springs, PA.

LORD Corporation's MR experience is unparalleled. As the only provider of commercial MR fluids with more than 110 MR fluid patents worldwide, LORD is the largest manufacturer of MR devices and systems. Much more on our capabilities can be found at www.lord.com.

"Ask Us How" is a trademark of LORD Corporation or one of its subsidiaries. MagneRide is a trademark of Delphi Corporation.

LORD provides valuable expertise in adhesives and coatings, vibration and motion control, and magnetically responsive technologies. Our people work in collaboration with our customers to help them increase the value of their products. Innovative and responsive in an ever-changing marketplace, we are focused on providing solutions for our customers worldwide ... Ask Us How.

LORD Corporation World Headquarters

111 Lord Drive
Cary, NC 27511-7923
USA

Customer Support Center (in United States & Canada)

+1 877 ASK LORD (275 5673)

www.lord.com

For a listing of our worldwide locations, visit LORD.com.