Lubricants engineered to improve the functionality, reliability, and longevity of automotive steering and suspension systems.
CHASSIS COMPONENTS
EXTENDING OPERATING LIFE WITH SYNTHETIC LUBRICANTS

Rear Suspension
Leaf springs, typically found on pickup trucks and SUVs, provide rear suspension and shock absorption. Exposed to water, saltwater, and road grit, they can wear down, crack, or produce squeaks and squeals. A viscous synthetic grease fortified for extreme-pressure service reduces wear and corrosion; its high damping capability also minimizes road noise.

Gas Pedal
For safety and ergonomics, pedal positioning systems are proliferating. A dripless, odorless synthetic hydrocarbon grease fortified with PTFE is recommended for the bearings, gears, and sliding surfaces in this motorized assembly.

Kick Down Module & Fluorocarbon Gel 875MS

Steering Column
Steering Angle Position Sensor - NyoGel® 741A-RED & Fluorocarbon Gel 885
Intermediate Shaft Splice - Fluorocarbon Gel 866
Telescoping Steering Column - Rheolube® 362HD
Tilt Steering Column - Fluorocarbon Gel 986MS X
Steering Column Splice - Rheolube® 368F
Column Shaft - NyoGel® 740UFL
Ignition Switch - Rheolube® 362

Electronic Power Steering
As automakers work to improve the efficiency of today’s modern vehicles, many are moving away from the old hydraulic steering assist to the more advanced electronic power steering systems. Reducing friction between mating gears and protecting the sensitive componentry from the elements is a primary concern. Lightweight synthetic hydrocarbon greases with advanced additive packages greatly reduce low temperature torque and friction, while also providing wear protection and vibrational damping. Calcium sulfonate thickened greases can be used on bearings, gears, and as environmental seals due to their superior water washoff/spray-off characteristics, corrosion protection, and wear mitigating capabilities.

EPS Gear - Rheolube® 363F
EPS Housing - Rheotemp® 662

Steering Linkage
The rack and pinion mechanism presents many lubrication challenges. The interface of the toothed rack and the pinion gear requires synthetic lubricants with extreme pressure and anti-wear additives to reduce noise and transferred vibration, often referred to as “rack knock.” Where rack and pinion systems are placed relatively close to the exhaust systems, lubricants must also handle temperature of 150°C or higher. The spring-loaded yoke that keeps rack teeth mated to the pinion gear can be another source of noise and wear. In certain Y-shaped yokes, the racks are heat-treated and the pinion gear requires synthetic lubricants with high loads can prevent wear on uncompensated racks, eliminating the need for labor-intensive, hand-polishing processes.

Steering Column Bearings
Ball bearings located at the end of the steering column can make or break the driving experience. If not properly lubricated, they impact steering responsiveness and transfer noise and vibration through the steering column to the operator. Extreme temperatures, moisture, dust, and constant load shifts require a viscous, wide-temperature, rust-inhibited grease to ensure long service intervals.

Steering Wheel Tilt & Telescoping Mechanisms
Tilt and telescoping mechanisms call for damping greases, which are engineered to prevent wear and inhibit unwanted motion and noise. When thickened with PTFE, they provide reliable, smooth, low-friction motion for high-shear componentry from the elements is a primary concern.

Intermediate Shaft
The intermediate shaft connects the steering column to the rack and pinion system. I-shafts must absorb vibration and shock, without allowing road noise to reach the vehicle interior. For plastic-to-metal interfaces, a medium-viscosity, synthetic hydrocarbon grease enhanced by PTFE ensures good slip and low “stiction.” For metal-to-metal interfaces, a heavier synthetic hydrocarbon grease is recommended. To lubricate the tight spaces within newer telescoping shafts, use a lighter grease designed for sliding surfaces.