# *New Severe Gear<sup>®</sup> Synthetic SAE 190 and SAE 250 Gear Lubricants Round Out the Severe Gear Lineup*



Two new premium high viscosity gear lubricants have been added to the Severe Gear lineup. New Severe Gear Synthetic SAE 190 (SRN) and SAE 250 (SRT) Gear Lubricants are recommended for off-road truck racing, rock racing, rock crawling, tractor pulling, funny car racing and dragster racing applications that require heavier viscosity gear lubricants.

Off-road truck racing applications encounter high speeds, heavy loads, shock loading and centrifugal sling-off. Drag racing vehicles, including funny cars and dragsters with high 3,000 to 8,000 horsepower engines, launch so quickly from the starting line that the gear lube flows away from the front of the differential, starving the pinion gear and bearings of essential lubrication protection. Because rock crawling and rock racing vehicles must maneuver over rocks and obstacles with little ground clearance, racers often incorporate differentials designed with the pinion on top instead of the bottom, causing pinion

gears and bearings to operate with little lubrication protection. In addition, rock crawling and rock racing vehicles often operate in precarious positions, including sideways and upside down, causing lubricants to flow away from gears and bearings and leaving them to operate with no lubrication at all.

AMSOIL Severe Gear Synthetic SAE 190 and SAE 250

Gear Lubricants are premium grade, extreme pressure gear lubes engineered specifically for the demands of severe racing conditions. They are formulated with shear stable, heavy synthetic base oils for "high film strength" and extra heavy treatments of additives. Their synthetic formulations provide improved flow over conventional oils, reducing viscous drag and power loss. Severe Gear SAE 190 and SAE 250 Gear Lubes provide a barrier cushion between metal surfaces that absorbs impact. AMSOIL proprietary extreme pressure additives form an iron-sulfide barrier coating on gear surfaces for the ultimate line of defense against wear, pitting and scoring.

#### Performance

AMSOIL Severe Gear Synthetic SAE 190 and SAE 250 Gear Lubricants are specifically engineered for high horsepower, high torque conditions where centrifugal gear lube sling-off is encountered. These tenacious formulations cling to gears and bearings for the best possible protection during shock loading, high G-forces and where pinion gears are installed at steep angles. Custom Severe Gear Synthetic Gear Lubricants provide exceptional reliability and extended gear life.

- Protect gears from shock loading and tire shake
- Resist sling-off from G-forces and high speeds
- Cling to gears in high pinion style differentials and at steep angles
- Promote cooler operating temperatures
- Protect against rust and corrosion
- Extend gear and bearing life

## Severe Gear Synthetic SAE 190 and SAE 250 Gear Lubricants Data Bulletin

Can.

3.50

The new G2498 Severe Gear Synthetic SAE 190 and SAE 250 Gear Lubricants Data Bulletin is available for purchase.

Qtv.

25

U.S.

2.80

Stock #

G2498



#### Applications and Service Life

AMSOIL Severe Gear Synthetic SAE 190 and SAE 250 Gear Lubricants are excellent for severe differential applications, including off-road truck racing, rock racing, rock crawling, tractor pulling, funny car racing and dragster racing. Other severe duty applications include heavy duty trucks and equipment where increased lubricant film is necessary. These oils are recommended for use in hypoid gear differentials and other applications requiring a high viscosity, API GL-5 gear lube. Where limited slip performance is required, use AMSOIL Slip-Lock® limited slip additive. Change Severe Gear SAE 190 and SAE 250 Gear Lubes as conditions dictate. Where extended drain intervals are desired, monitor by oil analysis.

#### Passenger Vehicles

Just as race vehicles require special gear lube properties, modern vehicles are designed with more horsepower and torque than their predecessors, allowing greater hauling and towing capability, but leading to higher gear loading and hotter running differentials. In addition, increased interior space and lower floor boards push axles higher into the vehicle's body, reducing air flow and increasing heat. The closer proximity of the axles to the exhaust system also effectively raises heat, while more aerodynamic body styles and air dams result in restricted airflow to the differentials.

Many motorists operate their vehicles under severe operating conditions, including snow plowing, hauling heavy loads and towing heavy trailers. These extremes place an increased level of stress on drivetrain compo-

nents. As vehicle stress increases, transmission and differential temperatures rise and cause conventional



lubricants to thin, causing inadequate lubrication that can lead to component failure. Modern gear oils are faced with the challenge of providing adequate wear protection during severe service operating conditions, while also providing maximum fuel efficiency.

#### Severe Gear Synthetic Gear Lubes

AMSOIL Severe Gear 75W-90 (SVG), 75W-110 (SVT) and 75W-140 (SVO) Synthetic Gear Lubes are specially formulated to provide superior protection, performance and fuel efficiency under severe operating conditions. They are excellent for vehicles subjected to towing, hauling, plowing, steep hill driving, commercial use, racing, off-road use, rapid acceleration, stop-and-go driving and high ambient temperatures.

Formulated with exclusive blends of high viscosity, shear stable synthetic base stocks and increased levels of premium quality additives, Severe Gear Synthetic Gear Lubes maintain viscosity for long-lasting protection against wear, pitting and scoring in both hot and cold temperature extremes and provide excellent limited-slip and locking differential performance. Severe Gear effectively prevents

thermal runaway, a phenomenon caused by a lubricant's inability to control friction and increased heat under high-stress conditions. By preventing thermal runaway, Severe Gear Synthetic Gear Lubes inhibit component damage and rapid lubricant degradation, Severe Gear provides extended drain intervals of 100,000 miles in normal service or 50,000 miles in severe service, or longer if specified by the owners manual.

### More Premium AMSOIL Synthetic Gear Lubes

Long Life 75W-90 (FGR) and 80W-140 (FGO) Synthetic Gear Lubes are specifically engineered for extended drain intervals in over-the-road trucks and heavy equipment, providing maximum wear protection, extended equipment life and improved fuel efficiency.

- Excellent all-season performance
- · Outperform all conventional gear oils
- Reduce operating temperatures
- Protect against rust and corrosion
- Resist acid, carbon and varnish formation
- Maintain protective viscosities for extended drain intervals

Synthetic 80W-90 Gear Lube (AGL) is a high quality replacement for applications specifying SAE 80W-90 conventional gear lube, providing excellent wear protection, improved fuel economy and long equipment life.

- Maintains protective viscosity
- Provides excellent cold flow properties
- Extends oil and equipment life
- Reduces maintenance costs
- Compatible with conventional and synthetic gear lubes

Gear Lube

Excellent for multiple applications