

When The Going Gets Tough

The Tough **Go Further**

**INCREASE  
FUEL  
ECONOMY**

**REDUCE  
OPERATING  
COSTS**

PREMIUM MOTOR OIL

**Engine Guard™**



FS Lubricants are blended and backed locally within the FS System in Council Bluffs, IA.



Fuels | Lubricants | Knowledge | Service



## WHAT ROLE DOES A GASOLINE ENGINE OIL PLAY?

Motor oil does more than just lubricate. A high-quality gasoline engine oil is designed to reduce fuel consumption, increase power output, and protect the engine in order to extend the life cycle of the vehicle. Engine oil creates a separating lubricating film between engine surfaces to minimize direct contact between them, decreasing friction and reducing wear, in order to protect the engine. It also carries heat away from the engine and holds contaminants in suspension, keeping the engine clean.

Different oil technologies provide different levels of protection. A combination of base oil, additives, and viscosity modifier technology equates to a finished product that goes into protecting the engine. As regulations drive changes to hardware, a high-performing motor oil is even more important, especially in turbocharged and gasoline direct injection engines. FS formulates to not only meet the current specifications to overcome challenges like low-speed pre-ignition (LSPI) in newer engine hardware, but in some cases, FS exceeds industry specifications to offer better protection.



## HOW CAN FS ENGINE GUARD

# IMPROVE PERFORMANCE?

FS Engine Guard is engineered to improve performance in all four-stroke gasoline engines used in passenger cars; light-duty trucks; sport utility vehicles; boats; motorcycles; and agricultural, commercial, and industrial equipment. From older engines to newer technology designed to improve fuel economy and reduce emissions, FS Engine Guard is formulated to reduce operating costs and help improve fuel economy. Unlike some other engine oils found on the shelves, FS Engine Guard meets a wide range of engine oil specifications, including General Motors (GM) dexos1 Gen 3 (full synthetic), ILSAC GF-6, and API SP (and is compatible with other current API specifications). FS Engine Guard also meets the current specifications for most major original equipment manufacturers (OEMs).



## FS ENGINE GUARD IS DESIGNED TO:

- Protect against oil thickening, maintaining oil flow to reach critical engine parts quickly
- Provide protection against low-speed pre-ignition (LSPI), which is a phenomenon that can lead to pre-ignition knock that can occur in small, turbocharged engines and gasoline direct injection engines
- Provide excellent engine cleanliness for all gasoline engines, including turbocharged engines and gasoline direct injection engines
- Enhance the life of the catalyst and after-treatment systems
- Deliver exceptional wear protection of engine parts through advanced anti-wear additives to maximize engine life
- Feature a high viscosity index to ensure easy cold starting and protective films for engine parts at high temperatures
- Meet or exceed the latest oil requirements of gasoline engine manufacturers
- Feature a high level of dispersancy to protect against sludge, engine rust, and corrosion
- Offer low volatility for reduced oil consumption

## EXCEEDS INDUSTRY SPECIFICATIONS

- 60% better protection against an average number of LSPI events in a Ford engine test as set forth by API SN Plus (specification limit of <5 events in the Ford LSPI test)
- 65% better wear protection than the API SN Plus specification in the Sequence VIII test (monitors bearing weight loss in mg)
- Improved results over the API SN Plus specification limits in the Sequence IIIG test for protection against viscosity increase and cam and lifter wear



## FS HAS YOU COVERED FOR ALL OF YOUR GASOLINE ENGINE OIL NEEDS.

### FS Engine Guard Full Synthetic Motor Oil

- SAE 0W-20, 5W-20, and 5W-30
- Formulated with full synthetic base oil and a proprietary additive package
- Meets or exceeds the requirements of:
  - API SP
  - Resource Conserving
  - ILSAC GF-6
  - GM dexos1 Gen 3 licensed (0W-20 and 5W-30)
  - Ford WSS-M2C947-B1 (0W-20), WSS-M2C945-B1 (5W-20), WSS-M2C946-B1 (5W-30)
- Meets the engine test requirements of Chrysler MS-6395
- Meets the service fill requirements of JAMA member OEMs

### FS Engine Guard Synthetic Blend Motor Oil

- SAE 5W-20 and 5W-30
- Synthetic blend
- Meets or exceeds the requirements of:
  - API SP
  - Resource Conserving
  - ILSAC GF-6
  - WSS-M2C945-B1 (5W-20), WSS-M2C946-B1 (5W-30)
- Meets the performance requirements of Chrysler MS-6395
- Meets the service fill requirements of JAMA member OEMs

### FS Engine Guard SAE 10W-30 Motor Oil

- Recommended for older vehicles and a few late model trucks and cars. Often these vehicles have a larger 6-cylinder, V-8, or high-performance engine.
- Meets or exceeds the requirements of:
  - API SP
  - Resource Conserving
  - ILSAC GF-6
- Meets the performance requirements of Chrysler MS-6395
- Meets the service fill requirements of JAMA member OEMs

API's Certification Mark and Service Symbol identify quality motor oils for gasoline- and diesel-powered vehicles. Oils displaying these marks meet performance requirements set by U.S. and international vehicle and engine manufacturers and the lubricant industry. Hundreds of companies worldwide participate in this voluntary program, which is backed by a marketplace sampling and testing program.



## **FS - THE PEOPLE TO TAKE YOU FURTHER**

For more than 75 years, FS has carried only the finest line of lubricants, coolants, and grease. FS continually evaluates and tests products to ensure their usability and dependability is never compromised.

When it comes to the success of your operation, you can rely on your local FS Energy Specialists. They are uniquely qualified with the knowledge and expertise to help you improve profits, cut downtime, and reduce maintenance expenses.



**[fssystem.com](https://www.fssystem.com)**