

## Engine Repair World-Class Sealing Solutions

When it comes to engine repair, gaskets are critical components. Head gaskets are particularly important: They provide the engine's most critical seal and must be able to withstand extreme combustion temperatures and constant contact with hot antifreeze and motor oil. For these and other key engine gaskets it is vital that they incorporate the latest technology and design innovations.



Fel-Pro® is the industry's leading brand of replacement sealing products for passenger cars, light trucks, medium-duty trucks, and heavy-duty trucks. The Fel-Pro line also offers specialty lines for performance, sport, and marine engines.

Fel-Pro is backed by the world-class manufacturing capabilities and global resources of Federal-Mogul. These resources include Federal-Mogul Motorparts engineers who are continually pushing ahead with new sealing science, and are first-to-market with new, problem-solving products.

These resources also include state-of-the-art testing facilities where new sealing systems are subjected to rigorous tests:

- Dynamometer Thermal Shock Cycles The engine, running on a dynamometer, is overheated, then super-cooled several times to test parts under extreme expansion and contraction.
- Environmental "Shake and Bake" Gasketed components are vibrated and heated on a testing stand to gauge gasket durability during accelerated life-cycles.
- **Nitrogen Pressure Test** The engine is pressurized with nitrogen to test the combustion seal.

Field testing is also conducted, combining on-the-road driving, tear-downs, and installations to evaluate gasket effectiveness during actual use and in repair environments. And of course, track testing in arenas such as Professional Stock Car Racing, World of Outlaws®, and NHRA® put Fel-Pro gaskets to the ultimate test while aiding in product development.

In addition, because Federal-Mogul is a global producer of engine and sealing products, the design and durability of our replacement parts benefit from proven expertise in the engineering and manufacturing of OEM components and subsystems for the world's major automotive manufacturers. This extensive field experience translates into aftermarket sealing parts that meet technicians' specific needs in the repair environment.

With Federal-Mogul's vast resources behind it, Fel-Pro has the capabilities needed to offer customers the ultimate in engine repair sealing technologies.

## **Engine Repair Sealing Technologies**

**PermaTorqueMLS®** 

Innovative head gaskets that provide the correct design for MLS-equipped vehicles and feature a unique aftermarket coating that accommodates surface finishes up to 60 Ra (360 Rz)

**PermaTorque®** 

The industry standard for no-retorque head gaskets. Featuring premium coatings, facings, and

combustion armors

**PermaTorqueSD®** 

Severe-duty head gaskets engineered for extra strength under punishing conditions