

Leak Repair Exclusive, Innovative Technologies

Popular types of leak repair sets include:

- **Valve Cover Gasket Sets**
- **Oil Pan Gasket Sets**
- **Intake Manifold Gasket Sets**
- **Exhaust Manifold Gasket Sets**
- **Timing Cover Gasket Sets**
- **Rear Main Seal Sets**
- **Individual Gaskets**

Leak repair is inherently problematic, so it requires a wider variety of application-specific materials than does the engine repair. The exclusive innovations Fel-Pro® brings to the aftermarket give installers the sealing solutions they need, whether they are professional technicians or do-it-yourselfers.

Those Fel-Pro innovative technologies include:

- **Edge-molded gaskets**
- **Encapsulated carrier gaskets**
- **Liquid elastomer molded (LEM) gaskets**

Fel-Pro also provides another vitally important advantage: world-class molded-rubber manufacturing capabilities from Federal-Mogul. It's an ability no other gasket-maker can offer. Federal-Mogul's in-house expertise brings an unparalleled understanding of molded-rubber chemistry and processes to Fel-Pro Gaskets.

The R&D, engineering, and manufacturing required to create the sealing solutions of the future are cost-prohibitive for many companies. Federal-Mogul, however, has the resources to make exciting new sealing concepts a reality in the Fel-Pro gaskets they offer the aftermarket – now and in the future.

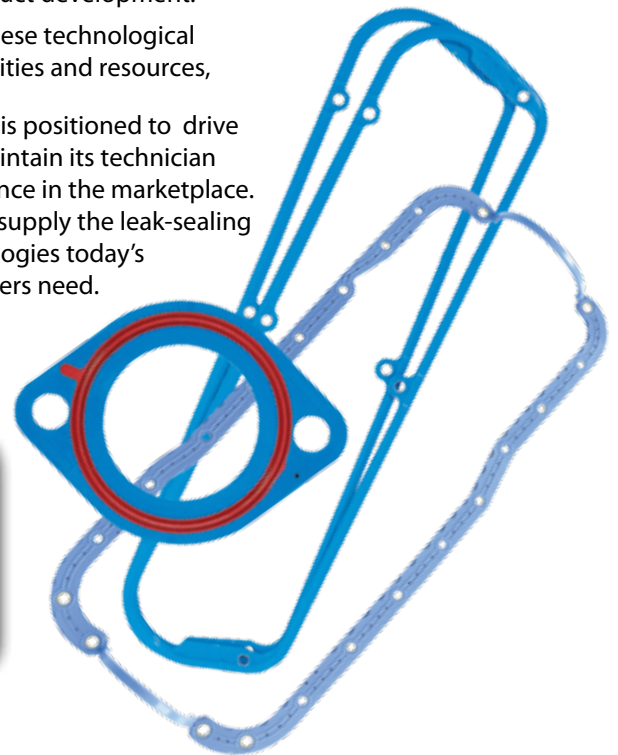
These resources include state-of-the-art testing facilities where new sealing systems are subjected to rigorous tests:

- **Dynamometer Thermal Shock Cycles** – The engine, running on a dynamometer, is overheated, then super-cooled several times to test parts under extreme contraction and expansion.
- **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.

In addition, field testing combines 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.

With these technological capabilities and resources,

Fel-Pro is positioned to drive and maintain its technician preference in the marketplace. And to supply the leak-sealing technologies today's customers need.



Premium Leak-Sealing Technologies

PermaDryPlus®

Problem-solving gaskets featuring advanced technologies designed specifically for the aftermarket repair environment

PermaDry®

Premium molded-rubber gaskets for applications originally equipped with molded-rubber technology

Leak Repair

Timing Cover Gasket Sets (TCS)

Sets Combine Convenience with Technology

Fel-Pro® offers two types of gasket sets to solve the oil leaks associated with the timing cover area of an engine. Both sets include all the gaskets needed when removing and replacing the timing cover.

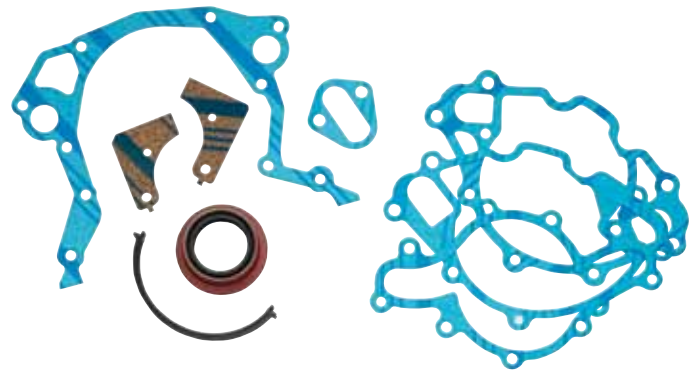
One type of set (Sleeve 'N' Seal®) includes a crankshaft front repair sleeve to seal a grooved hub or shaft. The other type of set, for simple replacement of the shaft seal and related gaskets, offers timing cover gaskets and seals without the repair sleeve.

Timing cover gaskets are made of a variety of materials. For many older vehicles, Fel-Pro Blue Stripe® paper material is very effective. Late-model vehicles, on the other hand, typically require molded-rubber or solid core gaskets with a thicker design to accommodate changes in timing cover castings. What's more, today's engines may have timing covers made of metal or plastic that require the use of a Fel-Pro PermaDryPlus® timing cover gasket made with LEM (Liquid Elastomer Molded) technology.

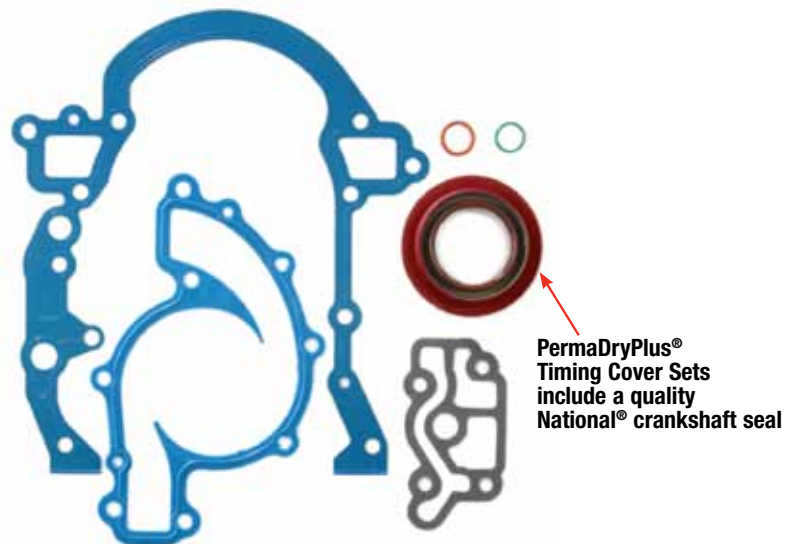
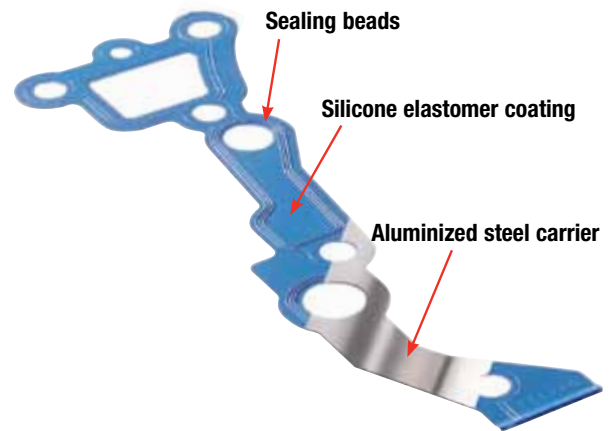
The Fel-Pro PermaDryPlus timing cover gaskets feature a highly sophisticated, patented technology that permits precise location, shape, and height of multiple sealing beads on a rigid carrier. The exclusive LEM design permits significantly faster, easier gasket installation while eliminating potential sealing issues associated with the repair process in many applications.

Each PermaDryPlus timing cover gasket consists of a high-strength metallic carrier encapsulated in an extremely thin layer of silicone rubber. Sealing beads lock potential leak paths while providing the required "recovery" or spring between the mating surfaces.

No matter what material the engine used originally, Fel-Pro offers technicians the problem-solving timing cover gaskets they need for an efficient, reliable repair.



Blue Stripe® Timing Cover Set



PermaDryPlus®
Timing Cover Sets
include a quality
National® crankshaft seal

PermaDryPlus® Timing Cover Set