

## Leak Repair

# Exhaust Manifold Gasket Sets (MS)

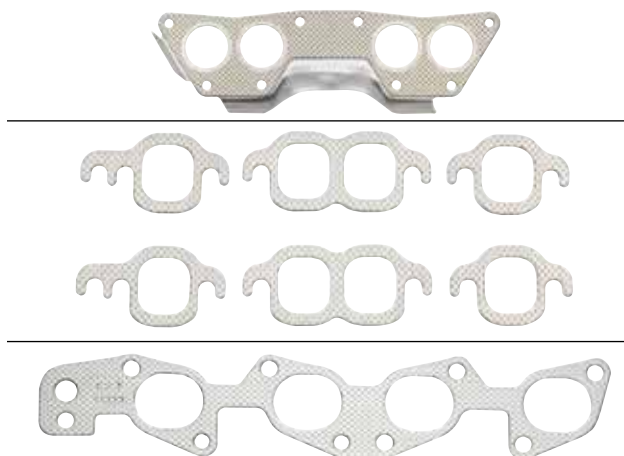
### Warping, Corrosion Require Advanced Gasket

Many new engines are assembled without exhaust manifold gaskets. Since the castings are new and machined surfaces are smooth, the exhaust manifold can fit tightly against the cylinder head without leaks. After prolonged use with high exhaust temperatures and numerous heating/cooling cycles, the manifold sealing surfaces may warp and corrode. Even just removing the manifold may slightly warp it. So when servicing the manifold, there is a good chance that an exhaust manifold gasket will be required to provide an effective seal.

Because of the expansion and contraction from the heating/cooling cycles, many exhaust manifold gaskets are constructed with a fiber facing material on one side and perforated steel on the other.

When this is the case, the steel face of the gasket is installed toward the exhaust manifold, with the fiber surface against the cylinder head. This allows expansion and contraction of the exhaust manifold to take place without damaging the fiber side of the gasket.

This design seals the exhaust manifold while allowing it to move on the metal surface of the gasket, just like it does on the metal surface of the cylinder head in the absence of a gasket.



### Engineered for Easier Installation

Federal-Mogul engineers design Fel-Pro® gaskets with easy installation in mind. For example, on many exhaust manifold gaskets, the engineers provide two "hook-style" bolt holes per gasket rather than traditional bolt holes. This allows technicians to position the exhaust manifold using the two bolts at the hook-style holes, and then simply slip the gasket into place between the cylinder head and exhaust manifold which have been pre-assembled. It's a feature that can save the installer up to 20 minutes in a V-type engine.



### Included for Convenience

Fel-Pro Head Sets (HS) and Head Installation Sets (HIS) always include exhaust manifold gaskets.