

## Leak Repair

# Intake Manifold Gasket Sets (MS)

### Crucial Seal Eliminates Driveability Problems

Leaks at the intake manifold are a common engine problem. A vacuum leak allows too much air to enter the engine. This can lead to driveability problems such as rough idling and stumbling on acceleration. Vacuum leaks at the intake manifold can also cause:

- Hot-running engine
- Detonation
- Decreased valve life
- Increased oxides of nitrogen (NOX) emissions

An intake manifold coolant leak is also a possibility in today's engines. Where applicable, Fel-Pro® offers a premium PermaDryPlus® problem-solving gasket for applications that have proved specifically difficult to seal in the aftermarket repair environment.

### Upper Intake Manifold Sets

Typically, upper and lower manifold gaskets are both included in Fel-Pro Intake Manifold Sets. For certain fuel-injection applications, however, upper intake manifold sets are offered separately. These sets include intake manifold-to-plenum gaskets, as well as other required accessory gaskets. Technicians use an upper manifold set when working on the fuel-injection system, or on some valve cover repairs where it is necessary to remove parts of the fuel-injection system.

### Valley Pan Gaskets

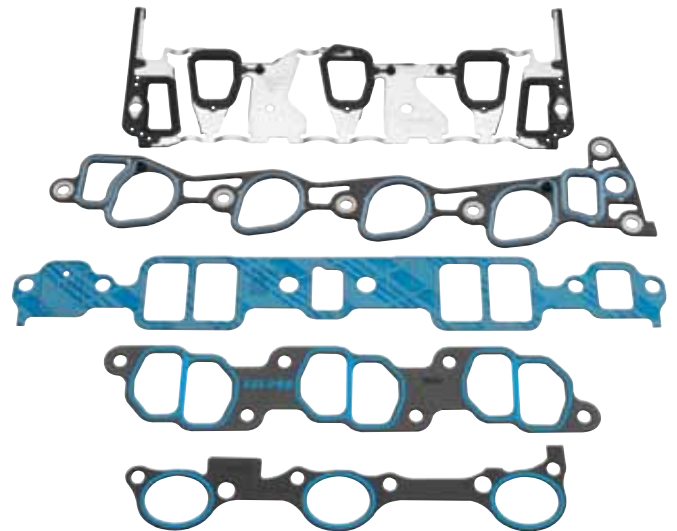
Some V-type engines use a wide steel intake manifold gasket called a valley pan (also referred to as a dishpan, turkey pan, or turtleback). It is designed to prevent oil from caking on the hot underside of the intake manifold. Because these intake valley pan gaskets are so large, they are not included in Fel-Pro Head Sets (HS) and Full Sets (FS) contents. They are packaged in a separate box to prevent bending or other damage. The Fel-Pro catalog entry and the label on the Head Set and Full Set boxes both indicate that the intake valley pan gasket must be supplied separately.

### PermaTorque® – Type Construction

Many Fel-Pro intake manifold designs feature rubber/fiber facing over a steel core for leak-free sealing and easy removal when necessary.

### PermaDryPlus®

Problem-solving Fel-Pro PermaDryPlus gaskets feature advanced technologies designed to address sealing problems unique to the aftermarket repair environment. Their construction includes sophisticated molded-rubber designs, rigid carriers, and sealing advances to help the technician complete the repair faster and more easily with a permanent seal.



*Fel-Pro Intake Valley Pan Set*