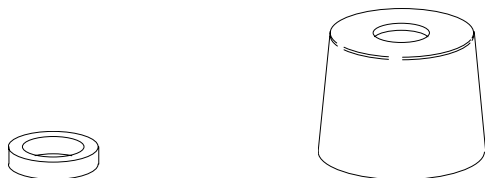




FEL-PRO INSTALLATION TIPS

Fel-Pro products are the result of exhaustive research and strict quality control. However, no sealing product is better than the quality of its installation.

VALVE STEM SEALS



This set contains: "O" Rings and Umbrella Seals, install as indicated.

Passenger Car

Taxi and Police

Exhaust:

1967 - early 1970 Use "O" Ring Seal.

Exhaust:

late 1970 - 1972 Use Umbrella Seal.

Intake:

1967 - 1972 Use Umbrella Seal.

Except Taxi and Police

Intake & Exhaust:

1965 - 1972 Use Umbrella Seal.

Truck

Intake & Exhaust:

240 Eng. 1965 - 1974 Use Umbrella Seal.

300 Eng. 1971 - 1986 Use Umbrella Seal.

F100, F250, F350 (4x2)

1965 - 1970 Use Umbrella Seal.

Except F100, F250, F350 (4x2)

Intake:

1965 - 1970 Use Umbrella Seal.

Exhaust:

1965 - 1970 Use "O" Ring Seal.

REMOVE SPRING ASSEMBLIES, KEEPERS and the old valve stem seals.

REMOVE BURRS (IF ANY) FROM VALVE STEMS. Use a fine stone or crocus cloth. Clean stems thoroughly to remove all abrasives or dust particles. Lubricate lightly.

INSTALL NEW SEALS.

UMBRELLA TYPE SEAL: Start valve stem seal over valve stem and push seal down on seal body until it touches top of valve stem guide or "boss." The seal will find its proper position on the stem once the engine starts.

"O" RING TYPE SEAL: Place "O" Ring seal on valve stem and position it into the proper groove. If "O" RING IS USED IN CONJUNCTION WITH A POSITIVE OR UMBRELLA SEAL, install the "O" Ring last.

REPLACE VALVE SPRING ASSEMBLIES AND INSTALL "O" RINGS. Compress springs just enough to install "O" Ring seal in second groove. **IMPORTANT:** If other types of seals are also being used, excessive compression can result in spring retainer damaging the seals. Install "O" Ring seal, then install keepers in first groove. Release spring carefully.

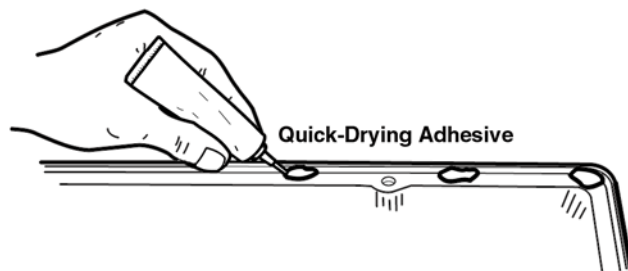
VALVE COVER GASKET



FEL-PRO BLUE STRIPE® valve cover gaskets are your visual assurance of quality.

CLEAN MATING SURFACES of all foreign material including old gaskets, RTV and oil. You may wish to use a degreaser. Also, clean oil return holes.

CHECK COVER FLANGES for flatness. Straighten stamped metal covers. Replace if severely distorted. Distorted cast aluminum or plastic covers are difficult to straighten and should be replaced.



ATTACH AND ALIGN GASKET TO COVER. Apply quick-drying adhesive, sparingly in several places on the mating surface of cover. If gasket has installation tabs, adhesive is **not** required. Mount gasket on cover. **Allow time for adhesive to set.** Test for slippage with light pressure. If gasket moves, allow more time.

REINSTALL VALVE COVER TO ENGINE. Torque securely to OEM specifications. Over-torquing can distort cover and cause leakage.

INTAKE AND EXHAUST MANIFOLD GASKETS

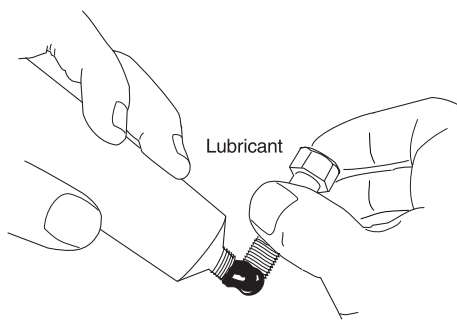
Upon disassembly, it is likely to find the absence of an exhaust manifold gasket since none was offered as original equipment.

However, this set includes an exhaust manifold gasket to accommodate slight casting distortion or corrosion that may have occurred over the engine's service life. Therefore, we recommend that the included exhaust manifold gasket be installed by the following instructions.

REMOVE MANIFOLDS from cylinder heads. **IMPORTANT:** You must disassemble the intake manifold from the exhaust manifold to allow for corrected realignment of the manifolds to the cylinder head during the reassembly.

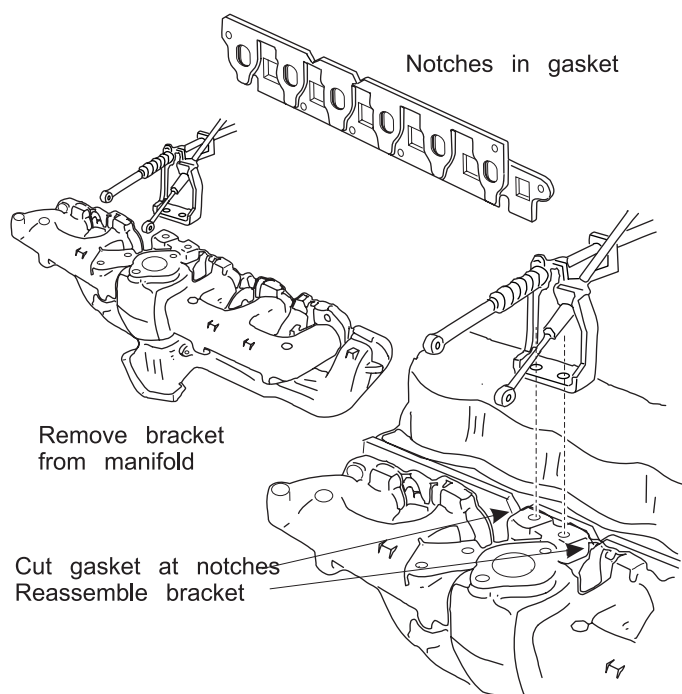
CLEAN MATING SURFACES of all foreign material including old gaskets, RTV and oil. You may wish to use a degreaser.

CHECK MANIFOLD CASTINGS for flatness of gasket surface. Resurface or replace if severely distorted.



CLEAN ALL THREADS by using a wire brush for bolts and studs, tap all bolt holes and stud nuts. Apply a high temperature anti-seize lubricant to the bolt and stud threads.

REASSEMBLE MANIFOLDS. Install the intake-to-exhaust gasket between the intake and exhaust manifolds. Only finger tighten the manifolds together.



PRIOR TO INSTALLING MANIFOLD GASKET the throttle linkage bracket must be unbolted from the manifold (see drawing).

REINSTALL INTAKE AND EXHAUST MANIFOLD ASSEMBLY to cylinder heads. Torque securely following the sequence as indicated on the drawing.

Now torque the intake manifold exhaust connection to O.E.M. specifications. Over-torquing can fracture the manifold and/or cause the bolts and studs to break.

Now cut the gasket at the notches prior to reinstallation of the throttle linkage bracket. **DO NOT** cut the gasket before the manifold is assembled and tightened.

EXHAUST PIPE FLANGE AND E.G.R. VALVE BOLTS

CLEAN MATING SURFACES of all foreign material. You may use a degreaser.

CLEAN ALL THREADS by using a wire brush for bolts and/or studs. Apply a high temperature anti-seize lubricant to the bolt and/or stud threads.

ATTACH AND ALIGN GASKET.

REINSTALL EXHAUST PIPE FLANGE AND/OR E.G.R. VALVE GASKET(s) TO ENGINE. Torque securely to OEM specifications. Over-torquing can cause the bolts and studs to break.

WATER OUTLET GASKET

TO ASSIST IN ALIGNMENT AND SEALING DURING ASSEMBLY, apply a thin coat of gasket sealer to both sides of the gasket(s).

TEST RUN ENGINE. Check all mating areas thoroughly to determine that all seals hold during operation.