



FEL-PRO INSTALLATION TIPS

GENERAL INSTRUCTIONS

CLEAN MATING SURFACES of all foreign material.
Use a degreaser.

CLEAN THREADS of all bolts/studs using a wire brush; all nuts/threaded holes use a bottoming tap.

Determine Which Bolts extend into the coolant passages. Those entering the coolant passages require a pliable non-hardening sealer on the bolt threads and the underside of the bolt head. Those not entering the coolant passages require oil on the bolt threads and the underside of the bolt head.

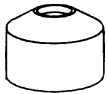
Exhaust Assembly: Apply a high temperature anti-seize lubricant to the threadings.

CHECK ALL CASTINGS for flatness; straighten, resurface or replace if out of flat conditions exists.

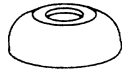
FINAL ASSEMBLY always requires torquing of fasteners according to OEM specifications. For certain assemblies we have provided specific torquing specifications.

Some procedures may be repeated with additional specific information for your application.

VALVE STEM SEALS



Positive Intake



Umbrella Exhaust

Use the valve stem seals included in this set for the application indicated.

INSTALL NEW SEALS.

POSITIVE GUIDE SEAL: Use the plastic installation sleeve(s), included in this set, to prevent damage to the lip of the seal. Trim the plastic sleeve so it extends 1/16" below the keeper groove. Place the sleeve on the stem.

Carefully start valve stem seal over sleeve.

Remove plastic installation sleeve and reuse for installing remaining seals.

FOR RUBBER JACKET SEALS: Push seal down over valve guide until it bottoms.

FOR SOLID OR METAL JACKET SEALS: The use of an OEM service tool is recommended. If tool is unavailable, use a deep socket or rigid tube of appropriate diameter. Center tool (or socket) over the shoulder of the seal and tap the seal down over the guide until it bottoms.

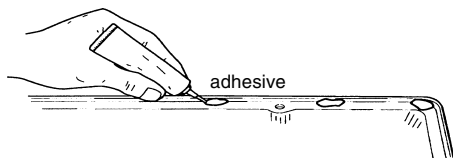
REPLACE VALVE SPRING ASSEMBLIES. Compress springs just enough to install keepers. **IMPORTANT:** Excessive compression can result in spring retainer damaging valve stem seal. Release spring carefully.

HEAD GASKET

Follow any directional markings shown on gasket(s). If no markings exist, install gasket(s). **Fiber Faced Gasket(s):** Install dry. **Metal Faced Gasket(s):** Requires a thin even coat of gasket sealer applied to the metal side(s) of gasket.

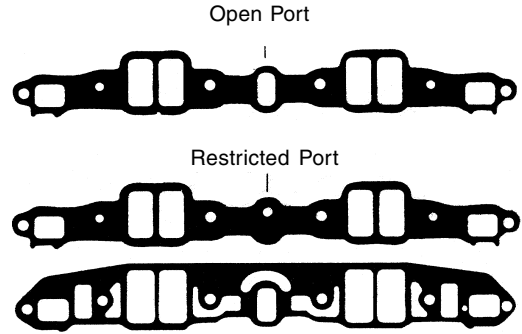
VALVE COVER GASKET

The valve cover gasket in this set is constructed of a rubber coated, exceptionally heat resistant fiber.



ATTACH AND ALIGN GASKET. 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.

INTAKE MANIFOLD GASKET



This set contain 5 manifold side gaskets. Select 2 as indicated.

Truck:

For the 318 LA Eng., 2 Bbl. the choice of gasket depends on whether the cylinder heads have an **EXHAUST OR WATER CENTER CROSSOVER PORT** (see illustration)

With **EXHAUST** crossover - use 2 of Part No. 90009.

With **WATER** crossover - use 1 of Part No. 90009 open center port (left side driver's side) and use 1 of Part No. 90041 restricted center port (right side/passenger side)

For the 360 Eng. 2 Bbl. the choice of gaskets depends on the port size and whether the cylinder heads have and **EXHAUST OR WATER CENTER CROSSOVER PORT** (see illustration).

Large port (1" X 2 3/16") - use 2 of Part No. 90109.

Small port (7/8" X 2" with **EXHAUST** crossover - use 2 of Part No. 90009.

Small port (7/8" X 2") with **WATER** crossover - use 1 of Part No. 90009 open center port (left side/driver's side) and use 1 of Part No. 90041 restricted center port (right side/passenger side).

318 LA Eng. 4 Bbl. - use 2 of Part No. 90109-1

360 Eng. 4 Bbl. - use 2 of the Part No. 90109-1

PASSENGER CAR:

318 LA Eng. 2 Bbl. - use 2 of Part No. 90009

318 Eng. 4 Bbl. - use 2 of the Part No. 90109-1

340 Eng. - use 2 of Part No. 90109-1

360 Eng. - use 2 of the Part No. 90109-1

FIBER FACED GASKET: Position gasket with plastic retainers inserted into second bolt holes from each end. Do not use any chemical adhesives or sealers when installing this gasket.

STEEL SHIM GASKET: Apply a thin coat of sealer, around the intake ports on the underside of the gasket to prevent vacuum loss. Now apply a 1/8" continuous bead of silicone sealer, such as RTV Black, around each water port on the cylinder heads. Attach and align gasket(s) to engine. Position gasket(s) by means of strapped protrusions into corresponding bolt holes in the heads.

Apply a thin coat of sealer, around the intake ports on the top side of the gasket.

Now apply a 1/8" continuous bead of silicone sealer, such as RTV Black around each water port on the gasket.

EXHAUST MANIFOLD GASKET

ATTACH AND ALIGN GASKET(S). If gasket has only one steel faced side, install steel side towards manifold.



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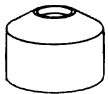
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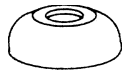
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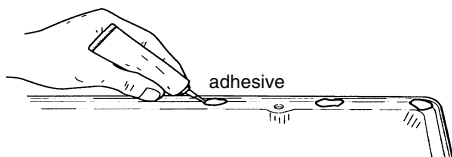
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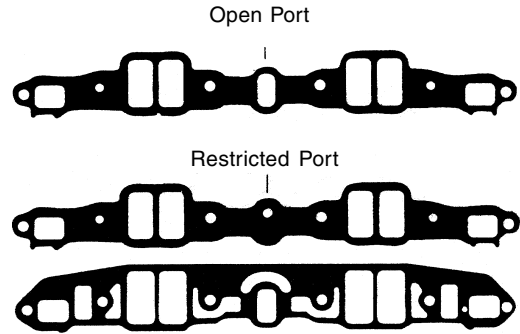
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