VALVE COVER GASKET

ATTACH AND ALIGN GASKET.

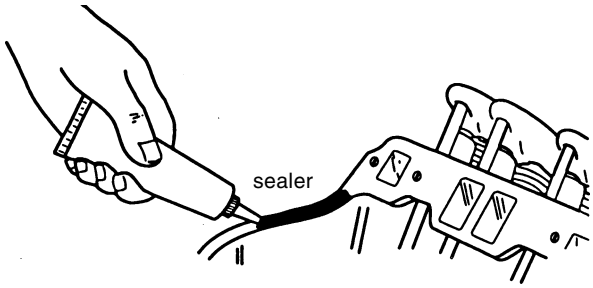
> **IMPORTANT:** This molded rubber silicone gasket must be installed **DRY** without any chemical adhesive.

PLACE GASKET IN VALVE COVER. This gasket is intentionally manufactured undersized and **requires slight stretching** to fit snugly into the cover.

INTAKE MANIFOLD GASKET

IMPORTANT: Intake manifolds with a rear heater hose connection use gasket(s) with restricted rear coolant ports **only.**

ATTACH AND ALIGN GASKET(S) TO CYLINDER HEADS. Apply a quick drying adhesive sparingly in several places on the cylinder head(s). **Allow time for adhesive to set.** Test for slippage with light pressure. If gasket moves, allow more time.



CREATE INTAKE MANIFOLD END SEALS by applying a continuous 3/16" bead of silicone sealer across the front and rear ends of the cylinder block, from one cylinder head to the other.

REINSTALL INTAKE MANIFOLD TO ENGINE while sealer is still wet. **IMPORTANT:** The bolts attaching the manifold to the heads should be coated with a thread locking sealer. Torque securely to OEM specifications.

EXHAUST MANIFOLD GASKET

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

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

ATTACH AND ALIGN GASKET.

MISCELLANEOUS FLUID SEALING GASKETS

ATTACH AND ALIGN GASKET(S)/SEAL(S): If supplementary sealer is desired, apply a thin coat of gasket sealer to both sides of gasket(s). However, molded rubber gasket(s) or those with colored Printoseal® sealing beads, install **DRY.**

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

Form No. I-1298 (Rev. 3/94)
Printed in U.S.A.

FEL-PRO INSTALLATION TIPS

GENERAL INSTRUCTIONS

CLEAN MATING SURFACES. Use a degreaser.

CLEAN THREADS of bolts/studs; for nuts/threaded holes use a bottoming tap.

BOLT PREPARATION: Those **entering** coolant passages require a pliable non-hardening sealer on threads and underside of bolt heads. Those **not entering** coolant passages require oil on threads and underside of bolt heads. **Exhaust Assembly:** Apply a high temperature anti-seize lubricant to threadings.

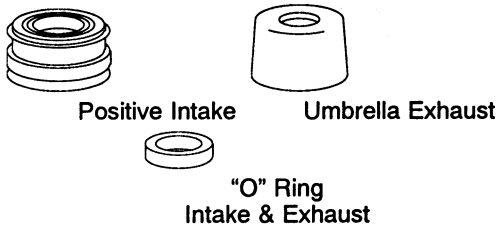
CHECK CASTINGS for flatness. Straighten, resurface or replace if needed. **CYLINDER HEAD AND BLOCK:** Refer to OEM manual to determine flatness tolerances and resurfacing limitations.

FINAL ASSEMBLY: Torque all fasteners to OEM specifications unless noted. CYLINDER HEAD torquing is critical; we recommend that you confirm with OEM.

HEAD GASKET

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

VALVE STEM SEALS



For 1981 and later applications use Positive **Intake** and Umbrella **Exhaust** in addition to the "O" Ring. Prior to 1981 use "O" Ring **Intake & Exhaust** only.

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 approiate diameter. Center tool (or socket) over the shoulder of the seal and tap the seal down over the guide until it bottoms.

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 once the engine starts.

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.

- Continued -

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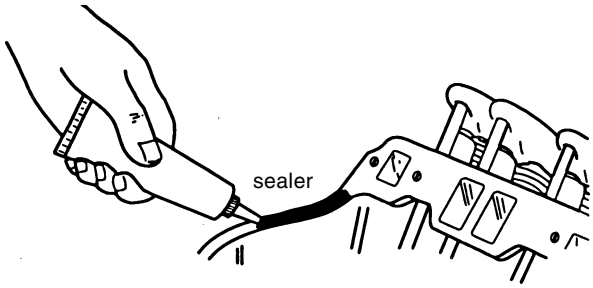

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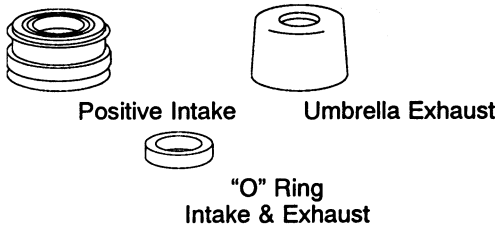

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