FEL-PRO INSTALLATION TIPS

VALVE STEM SEALS

REMOVE SPRING ASEMBLIES, KEEPERS and 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.

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 the 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.

VALVE COVER GASKET

The valve cover gasket in this set replaces the molded rubber sealing bead gasket supplied by OEM.
Do not use wire wheel to clean plastic valve cover.

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

IMPORTANT: If valve cover flange has a molded rubber sealing bead use a sharp blade to remove the raised section of the bead flush to the flange surface.

CHECK COVER FLANGES for flatness. Distorted plastic covers are difficult to straighten and should be replaced.

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 adhesives to set.** Test for slippage with light pressure.If gasket moves, allow more time.

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

- Continued -

MISCELLANEOUS FLUID SEALING GASKET(S)/SEAL(S)

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.**

ROTATING SHAFT SEALS

PRIOR TO INSTALLING THE ROTATING SHAFT AND/OR SEAL apply a thin coat of lubricant, such as grease, on the sealing lip and shaft.

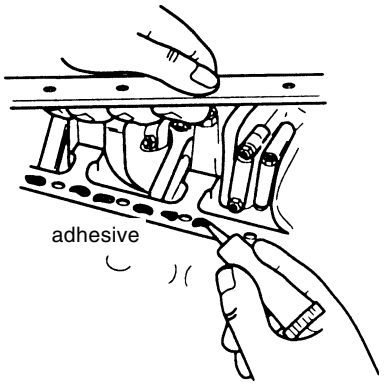
IMPORTANT: Do not install any seal without break-in lubricant protection.

OIL PAN GASKET

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

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

ATTACH AND ALIGN END SEAL(S). Apply quick-drying adhesive sparingly in several places on the engine casting or oil pan (depending upon engine model). Mount seal(s) on surface where adhesive was applied. **Allow time for adhesive to set.** Test for slippage with light pressure. If seal(s) move, allow more time.



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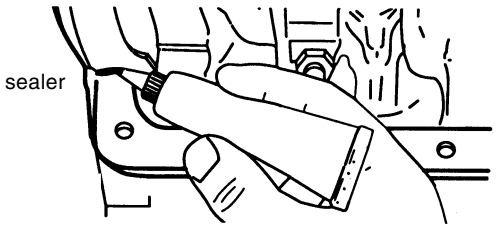

PRIOR TO INSTALLING OIL PAN apply a small dab of silicone sealer where all gaskets and seal(s) meet.

REINSTALL OIL PAN TO ENGINE. Install cap screws, finger tight. Torque cap screws to OEM specifications. Over-torquing can distort pan and cause leakage.

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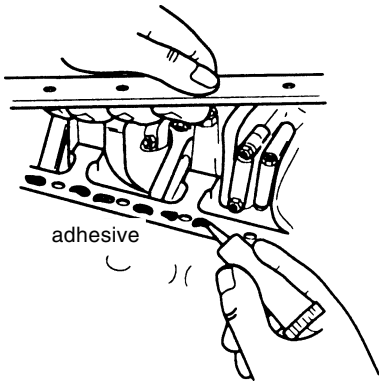

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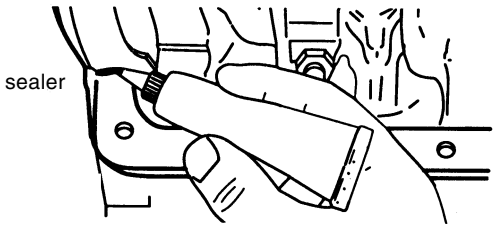

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