



FEL-PRO INSTALLATION TIPS

GENERAL INSTRUCTIONS

CLEAN MATING SURFACES. Use a degreaser.

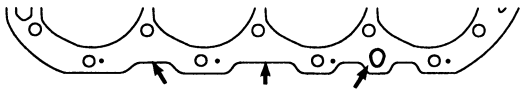
CLEAN THREADS of bolts/studs; for nuts/threaded holes use a bottoming tap.

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.

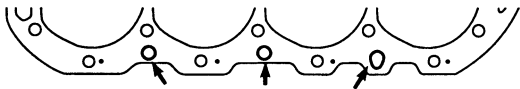
CHECK CASTINGS for flatness. Straighten, resurface or replace if needed. **CYLINDER HEAD AND BLOCK:** Refer to OEM manual to determine flatness tolerances and resurfacing limitations.

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

HEAD GASKET



No holes in cylinder block or with 1 end hole, use 8180 PT-2.



Holes in cylinder block, use 8523 PT.

IMPORTANT: There are 2 series of coolant configurations for the 427 and 454 C.I.D. engines. Only use head head gasket 8523 PT on the engine blocks **having** the 3 additional coolant holes Engine blocks **not having** the extra coolant holes can only use head gasket 8180 PT-2.

VALVE STEM 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 and reuse plastic sleeve.

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.

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.

VALVE COVER GASKET



To effectively seal this sophisticated engine application, FEL-PRO has included PERMA-DRY® molded rubber gasket(s) in this set.

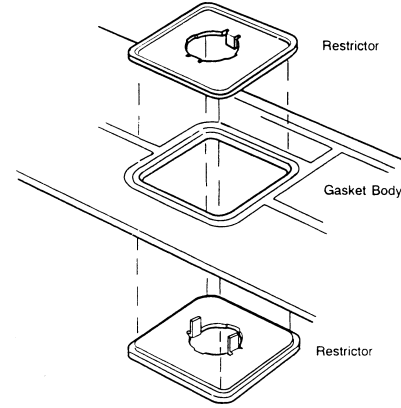
ATTACH AND ALIGN GASKET.

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

INTAKE MANIFOLD GASKET

This set contains 2 manifold gaskets with the center port open, and 1 stainless steel restrictor assembly attached to one of these gaskets. install open center port gasket on the left side and install the restricted center port gasket on the right side.

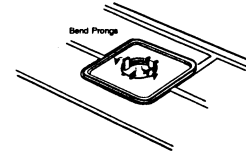
RESTRICTED PORT GASKET:



PLACE 1 RESTRICTOR HALF - with prongs up - on the workbench.

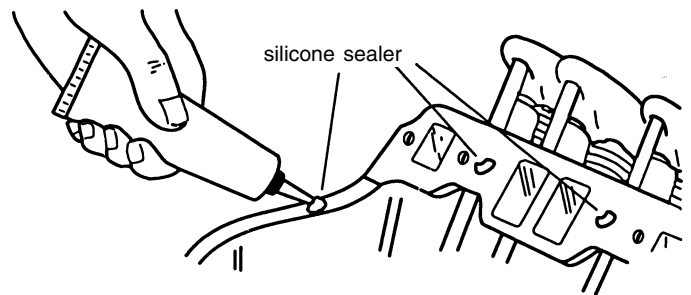
POSITION THE CENTER PORT OF THE MANIFOLD GASKET over the restrictor half.

PLACE THE OTHER RESTRICTOR HALF OVER the gasket's center port.



BEND THE 2 PRONGS OF THE LOWER RESTRICTOR HALF OUTWARD over the outer edge of the upper restrictor half using a blunt tool. Make certain the prongs are pressed down tightly so that the restrictor assembly is held securely in the gasket body. Turn the gasket over and repeat the prong bending operation with the other restrictor half.

IMPORTANT: When properly installed, the outer edge of the upper and lower restrictor halves will overlap the gasket body around the center port. Failure to do so may cause restrictor to slide out of position.



ATTACH AND ALIGN END SEALS. Apply quick-drying adhesive sparingly to cylinder block. Mount end seals. **Allow time for adhesive to set.** Test for slippage with light pressure. if seals move, allow more time.

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

PRIOR TO INSTALLING INTAKE MANIFOLD apply a small dab of silicone sealer where all gaskets and seals meet.

Never apply silicone sealer completely across gaskets or seals.

EXHAUST MANIFOLD GASKET

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

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.**