



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

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.

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/PUSH ROD COVER

ATTACH AND ALIGN GASKET(S): Use a quick drying adhesive, applied sparingly. If gasket has installation tabs, adhesive is not required. **IMPORTANT:** If gasket is rubber, install dry.

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.

Use manifold gasket(s) with open center port(s) as supplied in this set or with restrictor assemblies in place as noted.

■ - Restricted □ - Open

Center Ports: Right Left

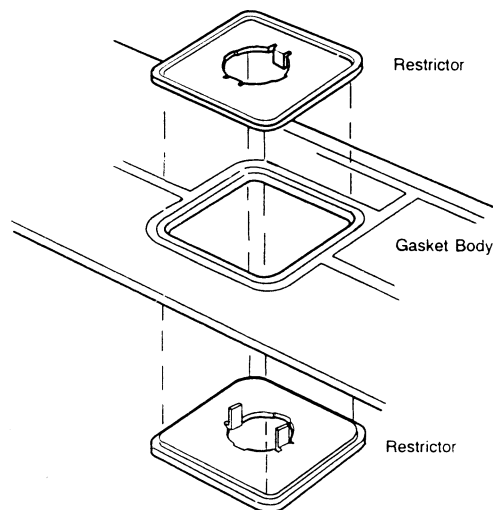
Passenger Car

396 Eng. 1965-70	Exc. Special Hi-Perf. and Heavy Duty	☐	☐
400 Eng. 1970-72	4 Barrel, Big Block	☐	☐
427 Eng. 1966-69	Exc. Special Hi-Perf. and Heavy Duty	☐	☐
454 Eng. 1975-76	Exc. Heavy Duty	☐	☐
1973-74	Exc. Heavy Duty	☒	☐
1970-72	Exc. Special Hi-Perf. and Heavy Duty	☐	☐

Truck

366, 396, 427 Eng. 1966-85		☐	☐
400 Eng. 1971-72	4 Barrel, Big Block	☐	☐
454 Eng. 1979		☐	☐
1975-78	Exc. California	☒	☐
	California	☐	☐
1973-74	Exc. EGR	☐	☐
	EGR	☒	☐
1971-72		☐	☐

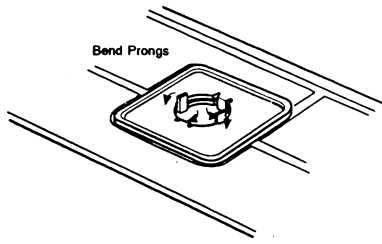
RESTRICTED PORT GASKET:



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.

EXHAUST MANIFOLD GASKET

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

WATER OUTLET GASKET

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