



FEL-PRO INSTALLATION TIPS

Fel-Pro products are the result of exhaustive research and strict quality control. However, no sealing product is better than the quality of its installation.

HEAD GASKET

CLEAN MATING SURFACES of all foreign materials. You may wish to use a degreaser.

CHECK HEAD AND BLOCK for flatness. Refer to OEM manual to determine flatness tolerances and resurfacing limitations.

CLEAN ALL THREADED HOLES in the block by using a bottoming tap. Tap below the maximum bolt penetration to prevent bottoming.

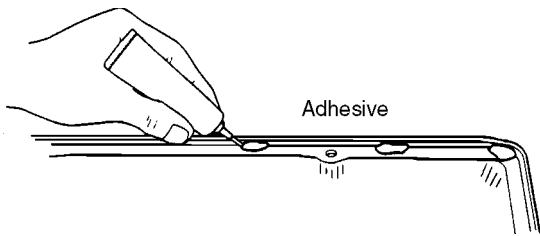
CLEAN ALL BOLT THREADS by using a wire brush. Lubricate the underside of **every** bolt head with oil. Determine which bolts extend into the coolant passages. Those **entering** the coolant passages require a pliable non-hardening sealer on the threads. Those bolts **not entering** the coolant passages require oil on the threads.

VALVE COVER GASKET

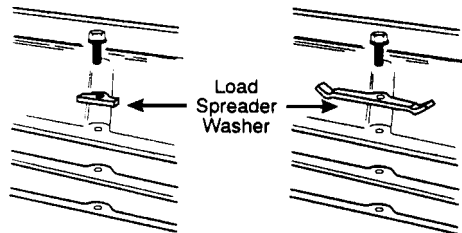
Be sure to retain the load spreader washers when you remove the valve cover.

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

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



ATTACH AND ALIGN GASKET TO COVER. 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.



PRIOR TO INSTALLING VALVE COVER, place a load spreader washer under each bolt head.

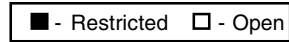
REINSTALL VALVE COVER TO ENGINE. Torque securely to OEM specifications. Over-torquing can distort cover and cause leakage.

INTAKE MANIFOLD GASKET



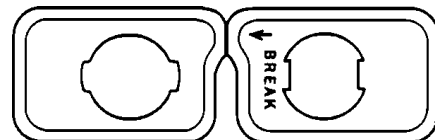
This set contains 2 manifold gaskets with the center port open, and 2 stainless steel restrictor assemblies attached to one of these gaskets.

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

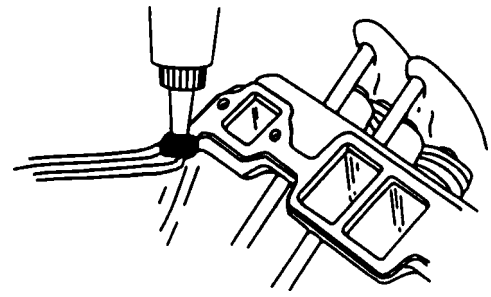
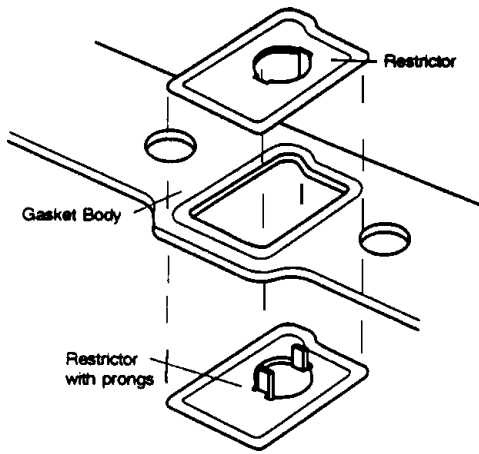


		Center Ports: Right Left	
Passenger Car			
262 Eng.			
1976		<input type="checkbox"/>	<input type="checkbox"/>
1975		<input type="checkbox"/>	<input checked="" type="checkbox"/>
305 Eng.			
1978-86		<input type="checkbox"/>	<input type="checkbox"/>
1976-77		<input type="checkbox"/>	<input checked="" type="checkbox"/>
400 Eng.			
1976	Exc. California	<input type="checkbox"/>	<input type="checkbox"/>
	California	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1975		<input type="checkbox"/>	<input checked="" type="checkbox"/>
1974	2 Barrel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	4 Barrel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1973		<input checked="" type="checkbox"/>	<input type="checkbox"/>
1970-72		<input type="checkbox"/>	<input type="checkbox"/>
Truck			
305 Eng.			
1980-86		<input type="checkbox"/>	<input type="checkbox"/>
1979	Exc. School Bus	<input type="checkbox"/>	<input type="checkbox"/>
	School Bus	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1978	1/2 Ton	<input type="checkbox"/>	<input type="checkbox"/>
	3/4, 1 Ton	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1976-77		<input type="checkbox"/>	<input checked="" type="checkbox"/>
400 Eng.			
1980		<input type="checkbox"/>	<input type="checkbox"/>
1979	Exc. School Bus	<input type="checkbox"/>	<input type="checkbox"/>
	School Bus	<input type="checkbox"/>	<input checked="" type="checkbox"/>
1978	1/2 Ton	<input type="checkbox"/>	<input type="checkbox"/>
	3/4, 1 Ton	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1976-77		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1975		<input type="checkbox"/>	<input checked="" type="checkbox"/>

RESTRICTED PORT GASKET



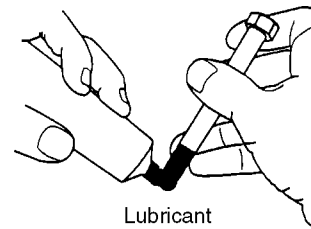
DIVIDE RESTRICTOR ASSEMBLY INTO 2 PIECES as marked. Place 1 restrictor half - with prongs up - on the workbench.



PRIOR TO INSTALLING INTAKE MANIFOLD apply a small dab of silicone sealer to the 4 corner intersections between the end seals and gaskets. **IMMEDIATELY PROCEED** to the next step since sealer normally sets up in 10-15 minutes.

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

CLEAN MATING SURFACES of all foreign material. You may use a degreaser.



Lubricant

CLEAN ALL THREADS by using a wire brush for bolt and/or studs. Apply a high temperature anti-seize lubricant to the bolt and/or stud threads.

ATTACH AND ALIGN GASKET.

REINSTALL EXHAUST PIPE FLANGE AND/OR E.G.R. VALVE GASKET(S) TO ENGINE. Torque securely to OEM specifications. Over-torquing can cause the bolts and studs to break.

WATER OUTLET GASKET

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

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

POSITION THE CENTER PORT OF THE MANIFOLD GASKET over the restrictor half. For proper fit, the offset in the gasket center port contour must match the contour of the insert.

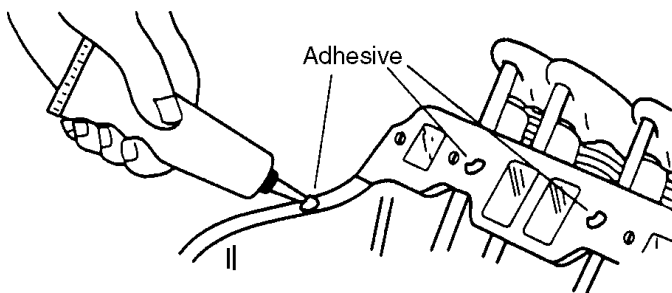
PLACE THE OTHER RESTRICTOR HALF WITHOUT PRONGS over the gasket's center port aligning the offset contour of the restrictor with that of the gasket.

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 tha the restrictor assembly held securely in the gasket body.

IMPORTANT: When properly installed, the outer flange 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.

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

CHECK MANIFOLD CASTINGS for flatness of gasket surface. Resurface or replace if severely distorted or corroded.



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.