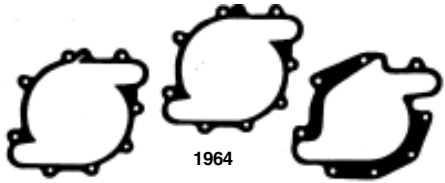


## EXHAUST MANIFOLD GASKET

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

## WATER OUTLET, WATER PUMP, FUEL PUMP AND TIMING COVER GASKETS

This set contains 3 water pump gaskets. Select gasket as indicated.



For 1965-90 except 1970  
Tornado & 1971-81 with  
heavy duty or air  
conditioning. 307 Eng.  
1982-84 except air  
conditioning. 350 Diesel  
Eng. 1982 (1st Design).

For 1970 Tornado &  
1971-90 heavy duty or  
air conditioning. 307  
Eng. 1982-84 with air  
conditioning. 350  
Diesel Eng. 1982 (2nd  
Design) - 84.

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

## ROTATING SHAFT SEALS

**RUBBER SEAL(S):** Install seal with its **largest raised sealing lip toward the engine.** Two-piece rubber seals may be installed using a "shoehorn" installation aid placed underneath seals to protect them from sharp edges.

**ROPE SEALS:** Install seals into grooves of cap and block by firmly pressing packing into grooves with a "packing tool." Ensure that the ends of seals protrude above face of cap and block.

**IMPORTANT:** Final interference of rope packing seals against crankshaft is critical. To achieve proper interference, it is best to install packings using correct **Packing Tool** for your engine. With "packing tool" in position, cut protruded ends of seals flush with cap and block.

**LUBRICATE SEALING LIPS AND CRANKSHAFT** with motor oil or grease. If engine will not be started within several days, grease is recommended.

**IMPORTANT:** Never install any seal without break-in lubricant protection.

**REAR MAIN BEARING CAP:** Prior to installation, apply anaerobic sealant to mating surfaces of cap or block. **AVOID** sealant on ends of seals.

## OIL PAN GASKET

**ATTACH AND ALIGN GASKET(S).** Apply quick-drying adhesive sparingly. Mount gasket and/or seals. **PRIOR TO INSTALLING OIL PAN** apply a dab of silicone sealer where all gaskets and seals meet.

# FIT<sup>®</sup>

## 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 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 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 gasket(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

**INSERT VALVES INTO GUIDES** of cylinder head assembly. Place assembly on a flat covered surface to prevent damage to valve heads and cylinder head gasket surface.

**SUPPORT OR PROP UP EACH VALVE HEAD:** with a wood block or other resilient material prior to installing seals.

**NYLON TYPE SEAL:** Place directly on valve stem seal.

**TAP SEAL DOWN** gently using provided plastic tube placed over stem. Move seal down approximately halfway on stem. The seal will find its proper position on the stem once the engine starts.

**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/PUSH ROD COVER

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

## INTAKE MANIFOLD GASKET

**V-TYPE ENGINES - FIBER SIDE GASKET(S) ALONG WITH FRONT AND REAR END SEAL(S):** Attach and align gasket(s) and end seal(s) using quick-drying adhesive sparingly. **PRIOR TO INSTALLING INTAKE MANIFOLD** apply a dab of silicone sealer where all gaskets and seal meet.

**INLINE ENGINES:** Attach and align gaskets to cylinder heads.

**IMPORTANT: WHEN INSTALLING STEEL SHIM GASKET(S):** Apply sealer around intake ports on both sides. If gasket(s) have water ports, apply a 1/8" continuous bead of silicone sealer around each water port on both sides. While silicone sealer is wet, install intake manifold.

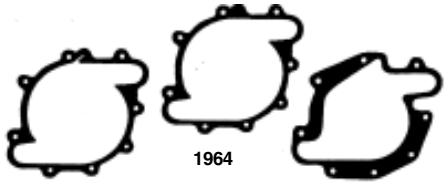
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