

REINSTALL FLYWHEEL to crankshaft. When installing a **one-piece seal**, some of the threadings in the crankshaft end may have been drilled too deep by OEM. If this condition exists, oil leakage may occur and be misdiagnosed as coming from the oil pan or rear main bearing seal. To prevent leakage, coat threadings with thread locking sealer. Torque securely to OEM specifications.

OIL PAN 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 TO PAN.

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

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



FEL-PRO INSTALLATION TIPS

GENERAL INSTRUCTIONS

CLEAN MATING SURFACES of all foreign material. Use a degreaser.

CLEAN THREADS of bolts/studs using a wire brush; all nuts/threaded holes use a bottoming tap.

Determine Which Bolts extend into the coolant passages. Those **entering** the coolant passages require a pliable non-hardening sealer on the bolt threads and the underside of bolt head. Those **not entering** the coolant passages require oil on the bolt threads and underside of the bolt head.

Exhaust Assembly: Apply a high temperature anti-seize lubricant to the threadings.

CHECK ALL CASTINGS for flatness; straighten, resurface or replace if out of flat conditions exists.

FINAL ASSEMBLY always requires torquing of fasteners according to OEM specifications. For certain assemblies we have provided specific torquing specifications.

Some procedures may be repeated with additional specific information for your application.

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 sealing beads, install **DRY**.

TIMING COVER 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.

IMPORTANT: Rubber seals are properly installed when its largest raised sealing lip is closest towards engine.

REAR MAIN BEARING SEAL

PRIOR TO INSTALLING THE REAR MAIN BEARING CAP apply a thin coat of locking compound to the outside diameter of the seal.

INSTALL SEAL into the recessed cavity of the seal retainer. The seal is properly installed when its largest raised sealing lip is toward the **front** of the engine. (Seals with the metal garter spring require the spring to face towards the **front** of the engine.)

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