

## **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

#### FRONT CRANKSHAFT SEAL

**PRIOR TO INSTALLING THE 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.

- Continued -



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#### REAR MAIN BEARING SEAL

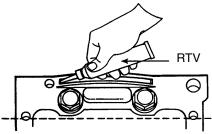
**PRIOR TO INSTALLING THE REAR MAIN BEARING CAP** apply an anaerobic sealant to either the rear main bearing cap or cylinder block mating surfaces. **Never** apply sealant on the ends of the seals.

REINSTALL CAP TO CYLINDER BLOCK. Torque to OEM specifications.

**LUBRICATE SURFACE** of seal lip and crankshaft by applying a thin coat of 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.

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



FILL SIDE CAVITIES with silicone sealer. Then wipe off excess RTV.

## **OIL PAN GASKET**

ATTACH AND ALIGN GASKET(S). Apply a 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.

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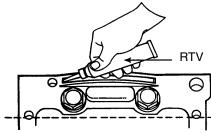
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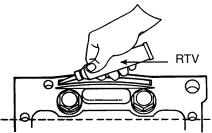
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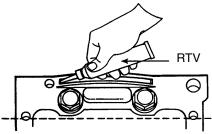
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