Next apply a 3/16"-1/4" bead of silicone sealer on the front and rear oil pan flange. Position pan on engine, avoid wiping off the RTV. **IMMEDIATELY PROCEED** to the next step, as RTV normally sets up in 10-15 minutes.

REINSTALL OIL PANTO ENGINE. Install cap screws, finger tight. Torque cap screws to OEM specifications. Over-torquing can distort pan and cause leakage.

WHEN STAMPED METAL PAN IS INSTALLED

ATTACH AND ALIGN GASKET(S). Apply a quick-drying adhesive sparingly in several places on the engine casting or oil pan (depending upon engine model). Mount gasket (or gaskets and seals, if multipiece) on surface where adhesive was applied. Allow time for adhesive to set. Test for slippage with light pressure. If gasket moves, allow more time.

PRIOR TO INSTALLING OIL PAN apply a small dab of silicone sealer where all gaskets and seal(s) meet. **IMMEDIATELY PROCEED** to the next step, as RTV normally sets up in 10-15 minutes.

REINSTALL OIL PANTO ENGINE. Install cap screws, finger tight. Torque cap screws to OEM specifications. Over-torquing can distort pan and cause leakage.



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.

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 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.

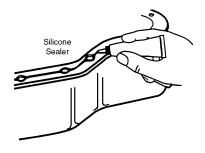
REAR MAIN BEARING CAP: Prior to installation apply an anaerobic sealant to mating surfaces of cap or block. **AVOID** sealant on ends of seals.

OIL PAN GASKET

WHEN PLASTIC PAN IS INSTALLED

SEALING OPTIONS: Plastic oil pans use RTV only. Stamped metal pans use gaskets supplied.

Do not use wire wheel to clean plastic oil pans.



CREATE OIL PAN GASKET by applying a continuous 1/8"-3/16" bead of silicone sealer filling the center of the recessed groove of oil pan flange.

Next apply a 3/16"-1/4" bead of silicone sealer on the front and rear oil pan flange. Position pan on engine, avoid wiping off the RTV. **IMMEDIATELY PROCEED** to the next step, as RTV normally sets up in 10-15 minutes.

REINSTALL OIL PANTO ENGINE. Install cap screws, finger tight. Torque cap screws to OEM specifications. Over-torquing can distort pan and cause leakage.

WHEN STAMPED METAL PAN IS INSTALLED

ATTACH AND ALIGN GASKET(S). Apply a quick-drying adhesive sparingly in several places on the engine casting or oil pan (depending upon engine model). Mount gasket (or gaskets and seals, if multipiece) on surface where adhesive was applied. **Allow time for adhesive to set.** Test for slippage with light pressure. If gasket moves, allow more time.

PRIOR TO INSTALLING OIL PAN apply a small dab of silicone sealer where all gaskets and seal(s) meet. **IMMEDIATELY PROCEED** to the next step, as RTV normally sets up in 10-15 minutes.

REINSTALL OIL PANTO ENGINE. Install cap screws, finger tight. Torque cap screws to OEM specifications. Over-torquing can distort pan and cause leakage.



GENERAL INSTRUCTIONS

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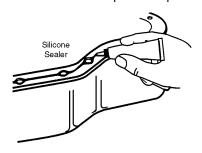
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