

## SERVICE MANUAL UPDATE

**Subject:** New Rear Main Seal and Special Tool for Installation

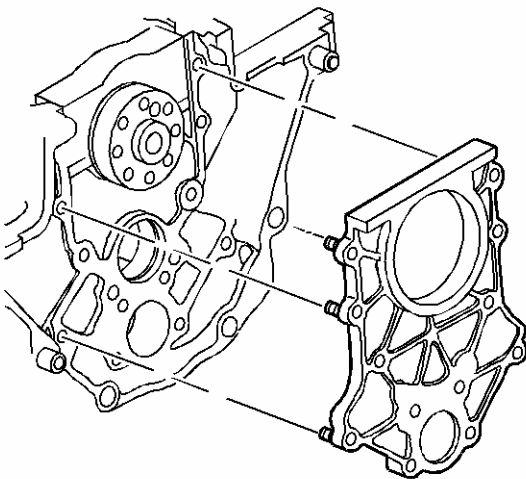
Year(s)	Model(s)
1998-1999	Buick Riviera
1998-2004	Buick Century, Le Sabre, Park Avenue, Regal
1998-2001	Chevrolet Lumina
1998-2002	Chevrolet Camaro
1998-2004	Chevrolet Monte Carlo
2000-2004	Chevrolet Impala
1998-1999	Oldsmobile Eighty-Eight, LSS
1998-2002	Oldsmobile Intrigue
1998-2002	Pontiac Firebird
1998-2004	Pontiac Bonneville, Grand Prix

with 3.8L V6 engine (VIN K, 1, 2, 4 -RPO L36, L67, L26, L32)

### Condition

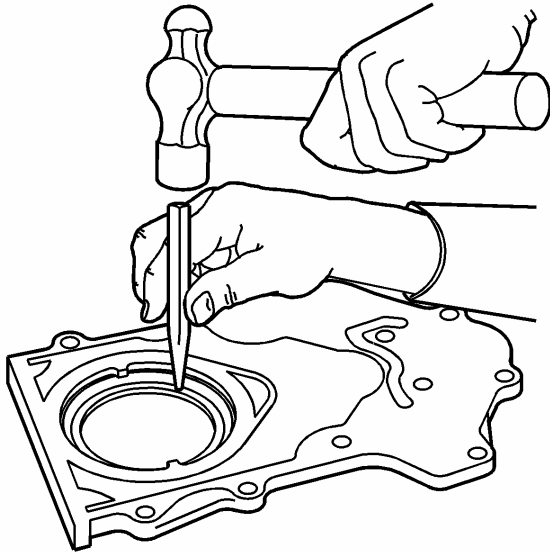
A new crankshaft rear oil seal and installation tool have been released. This new seal requires that the rear main housing be removed from the vehicle in order to properly install the seal with the new tool.

### Crankshaft Rear Oil Seal and Housing Removal



art # 26125

1. Remove oil pan assembly as outline in the appropriate Service Information Manual.
2. Remove the crankshaft rear oil seal housing bolts
3. Remove the crankshaft rear oil seal housing and gasket.



art 1437945

4. Place the crankshaft rear oil seal housing face down on a clean surface and support with blocks of wood
5. Use a suitable driving tool and hammer and lightly tap around the outer edge of the seal to remove it.
6. Clean and inspect the crankshaft rear oil seal housing making sure it is free of any foreign material.
7. With all bolts removed from the housing, place it face up on a flat clean surface.

## **Crankshaft Rear Oil Seal and Housing Installation**

EN 47623 Rear Main Seal Installer  
J 8092 Drive Handle  
J 45059 Angle Meter

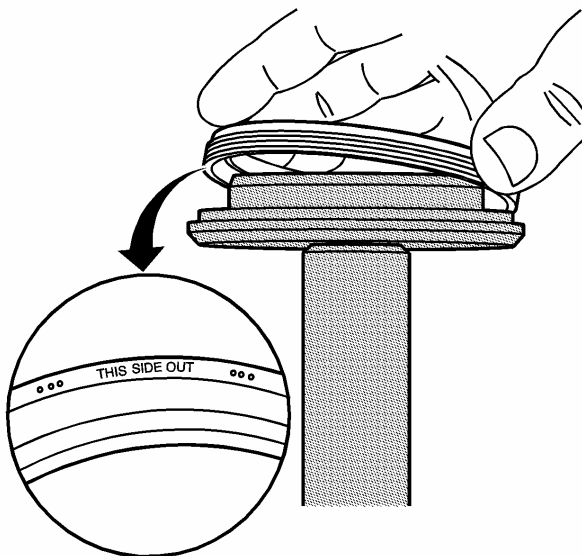
### **IMPORTANT:**

**Do not apply or use any oil lubrication on the rear main oil seal, rear main oil seal housing or rear main seal installer EN 47623. Do not touch the sealing lip of the rear main oil seal once the protection sleeve is removed. Doing so will damage/deform the seal.**

**IMPORTANT:**

**Clean crankshaft sealing surface with a clean, lint free towel. Inspect lead-in edge of crankshaft for burrs/sharp edges that could damage the rear main oil seal. Remove burrs/sharp edges with crocus cloth before proceeding.**

1. Carefully remove protection sleeve from new rear oil seal assembly.

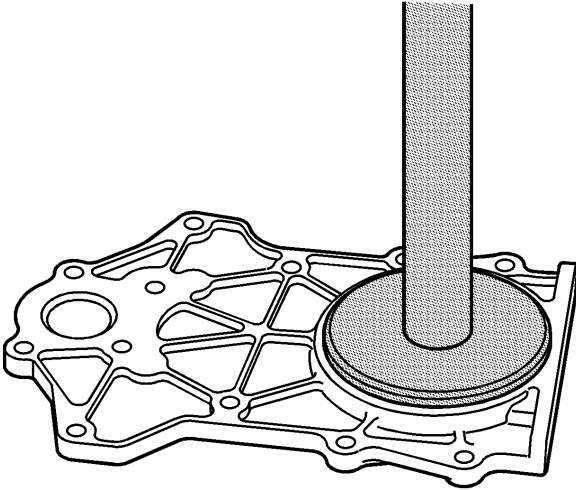


*art 1437953*

**IMPORTANT:**

**Notice the direction of the rear oil seal. The new design seal is a reverse style as opposed to what has been used in the past. “THIS SIDE OUT” has been molded into the seal as shown in the graphic.**

2. Install the seal onto EN 47623 by placing the seal on an angle and using a twisting motion until it is fully seated.

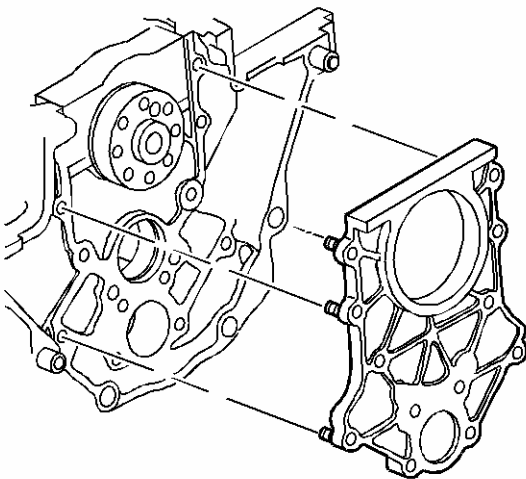


*art 1437955*

3. Place EN 47623 along with J 8092 onto the housing as shown and apply a constant downward force until the seal is fully seated.

**IMPORTANT:**

Do not use a sealant or adhesive when installing this component. Use of a sealant or adhesive can cause improper sealing. A component that is not sealed properly can leak leading to extensive engine damage.



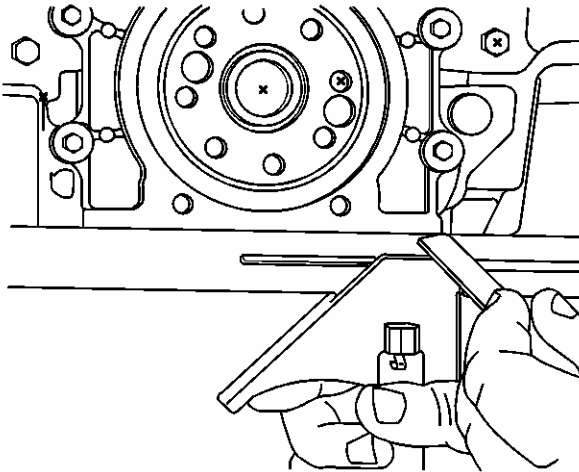
art 26125

4. Install the crankshaft rear oil seal housing housing onto the engine. Make sure to use a new oil seal housing gasket.

**IMPORTANT:**

The plastic inserts found on the rear oil seal housing retaining bolts are used to aid production assembly only. The inserts are not required for service.

5. Install the crankshaft rear oil seal housing bolts finger tight.



art 406048

6. Place a straight edge on the engine block oil pan flange and the crankshaft rear oil seal housing flange. Use a feeler gage to ensure there is no more than 0.10 mm (0.004 in) step on each side. If necessary, gently rotate the crankshaft rear oil seal housing to make the step equal on each side.

**NOTICE:** Refer to Fastener Notice on page P-7 in Cautions and Notices.

## 7. **Tighten**

Tighten the crankshaft rear oil seal housing bolts to 15 Nm (11 lb ft). Use J 45059 to tighten the bolts an additional 50 degrees.

8. Recheck the step height on each side to ensure the crankshaft rear oil seal housing did not move. If the step height is beyond specification, reinstall the crankshaft rear oil seal housing and measure the step again. Replace the crankshaft rear oil seal housing if the clearance is still beyond specification.
9. Continue with oil pan installation as outlined in the Service Information Manual.