

## 2003 Chrysler Truck PT Cruiser L4-2.4L VIN B

[Vehicle Level](#) → [Engine, Cooling and Exhaust](#) → [Engine](#) → [Oil Pump](#) → [Service and Repair](#) ←

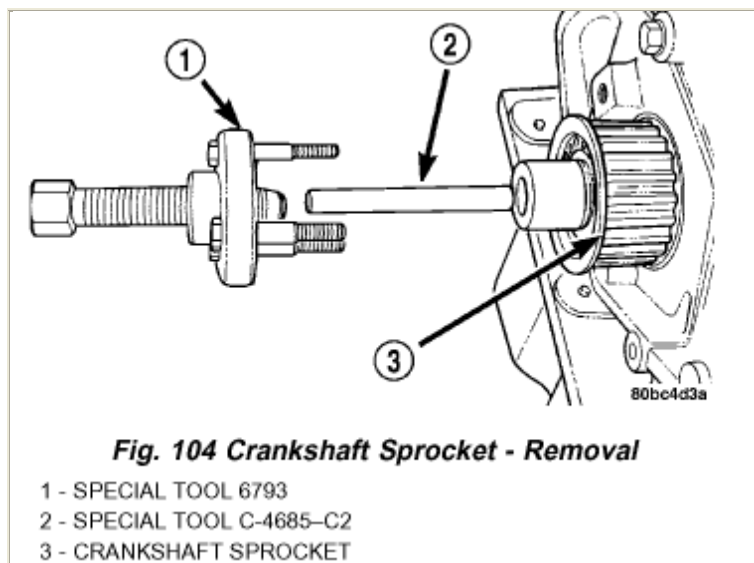
### Service and Repair

[Notes](#)

## OIL PUMP

### REMOVAL

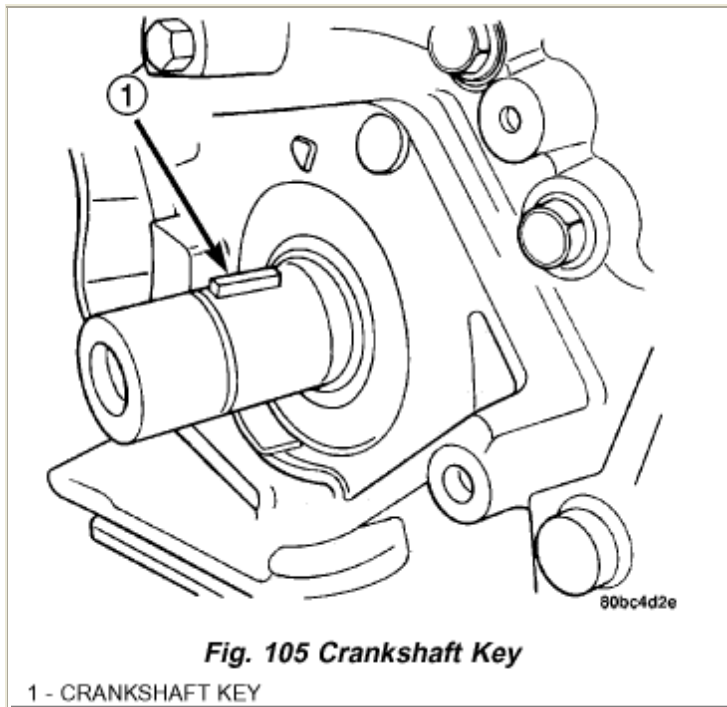
1. Disconnect negative cable from battery.
2. Remove [timing belt](#).
3. Remove [timing belt](#) rear cover.
4. Remove [oil pan](#).



Zoom

Sized for Print

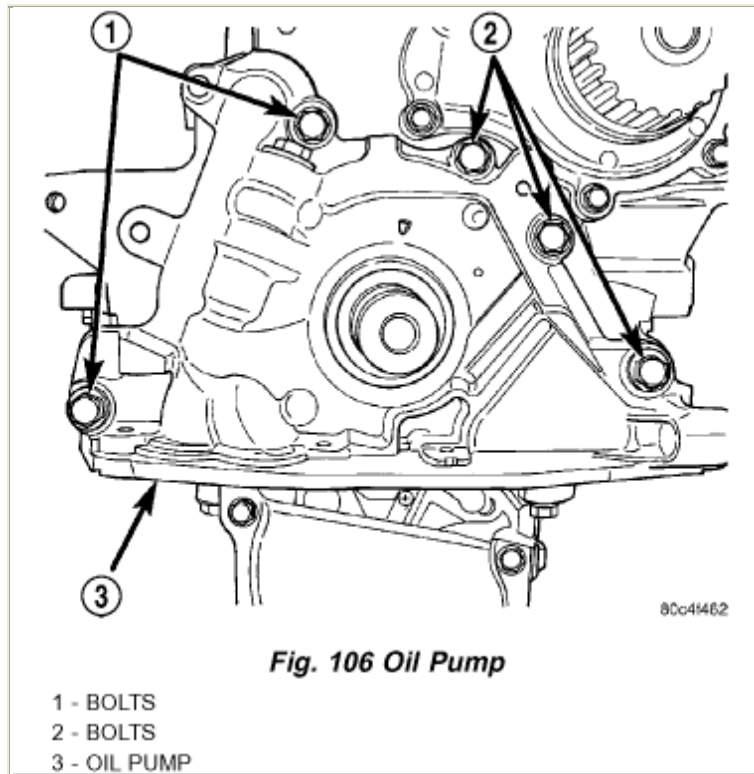
5. Remove crankshaft sprocket using Special Tools 6793 and C-4685-C2 (Fig. 104).



Zoom

Sized for Print

6. Remove [crankshaft](#) key (Fig. 105).
7. Remove oil pick-up tube.



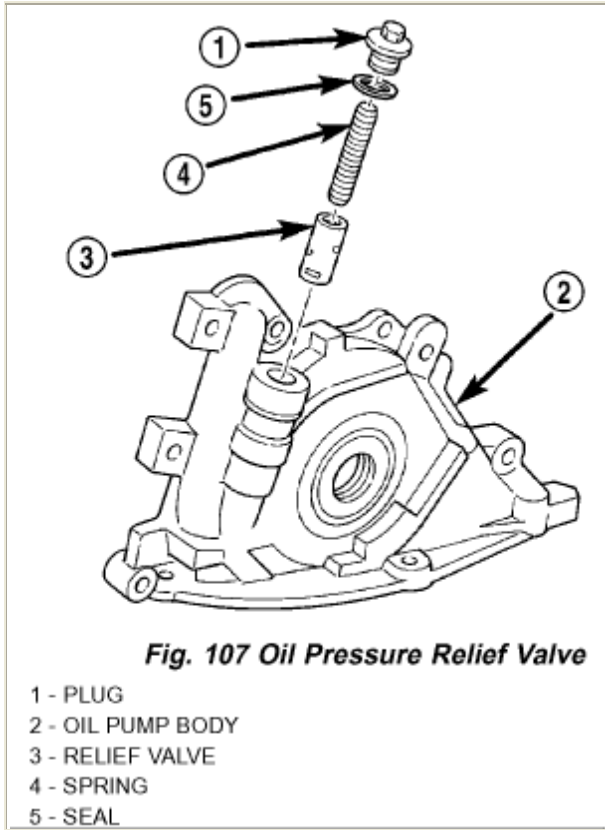
Zoom

Sized for Print

8. Remove oil pump (Fig. 106) and [front crankshaft seal](#).

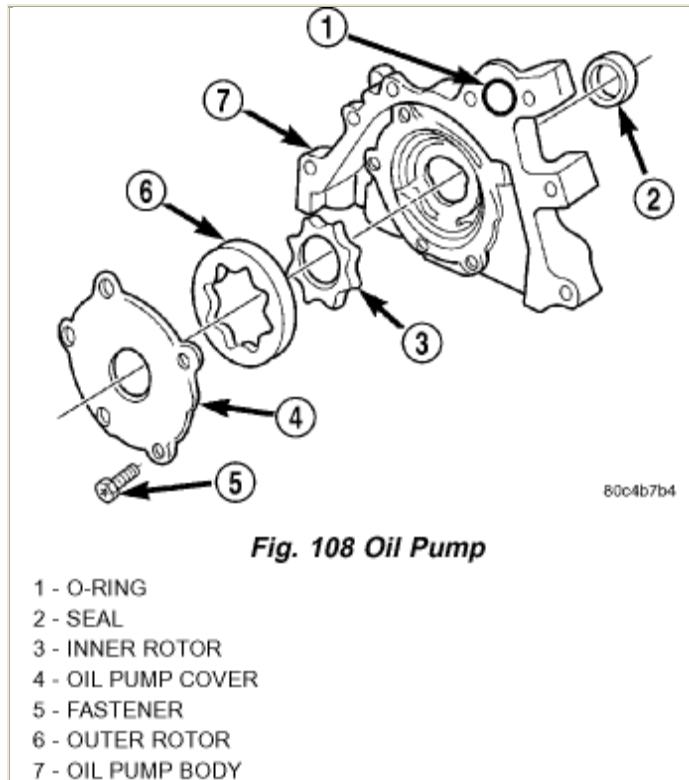
## DISASSEMBLY

1. To remove the relief valve, proceed as follows:



Zoom	Sized for Print
------	-----------------

- a. Remove the threaded plug and gasket from the oil pump (Fig. 107).
- b. Remove spring and relief valve (Fig. 107).



Zoom

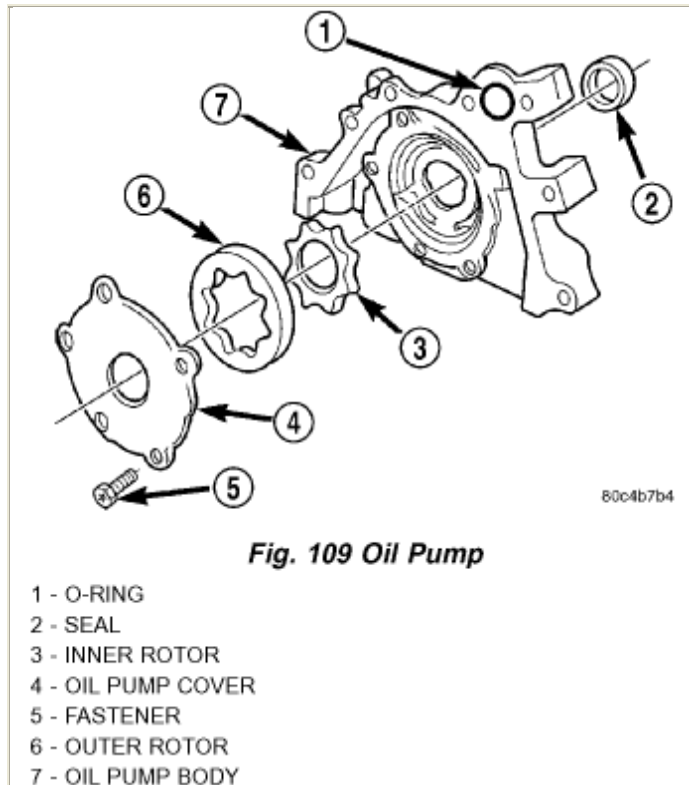
Sized for Print

2. Remove [oil pump cover](#) fasteners, and lift off cover (Fig. 108).
3. Remove pump rotors (Fig. 108).
4. Wash all parts in a suitable solvent and inspect carefully for damage or wear.

### **CLEANING**

Clean all parts thoroughly.

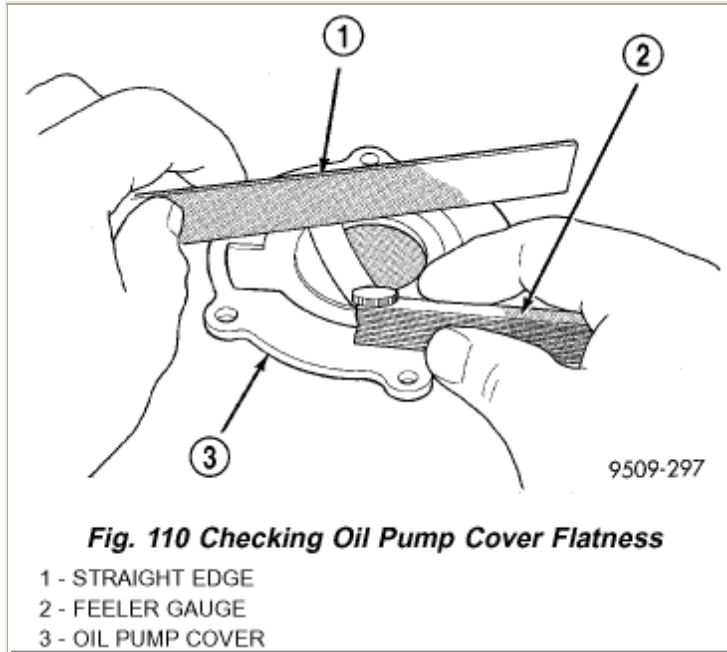
### **INSPECTION**



Zoom

Sized for Print

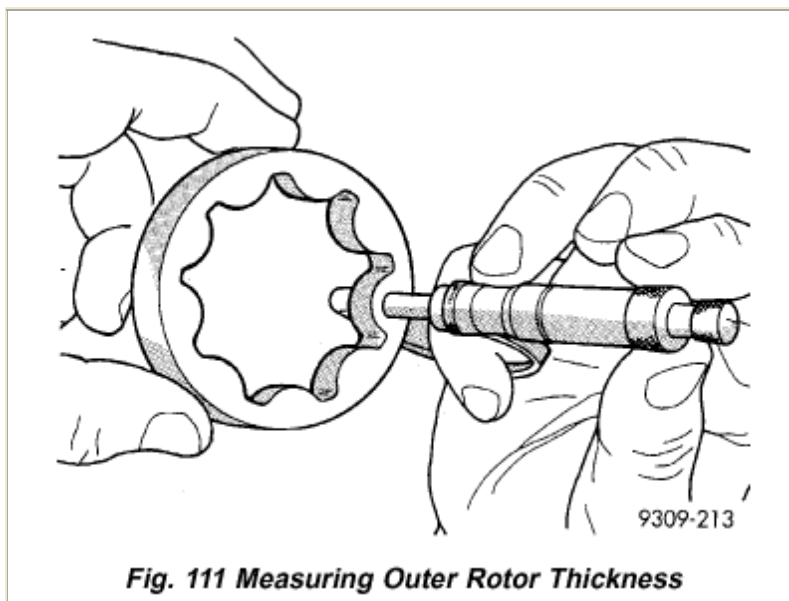
1. Inspect the mating surface of the oil pump. Surface should be smooth (Fig. 109). Replace pump cover if scratched or grooved.



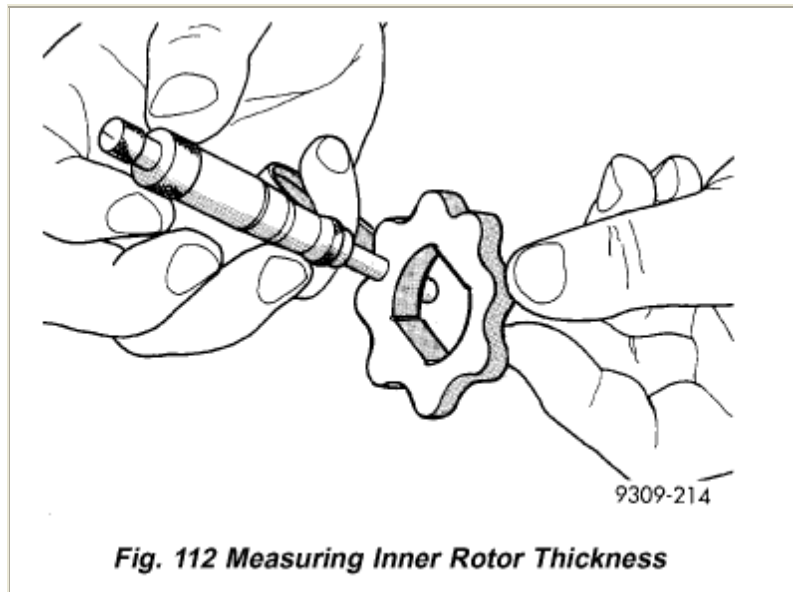
Zoom

Sized for Print

2. Lay a straightedge across the pump cover surface (Fig. 110). If a **0.025 mm (0.001 inch)** feeler gauge can be inserted between cover and straight edge, cover should be replaced.



3. Measure thickness and diameter of outer rotor. If outer rotor thickness measures **9.40 mm (0.370 inch)** or less (Fig. 111), or if the diameter is **79.95 mm (3.148 inch)** or less, replace outer rotor.



4. If inner rotor measures **9.40 mm (0.370 inch)** or less replace inner rotor (Fig. 112) .

## ASSEMBLY

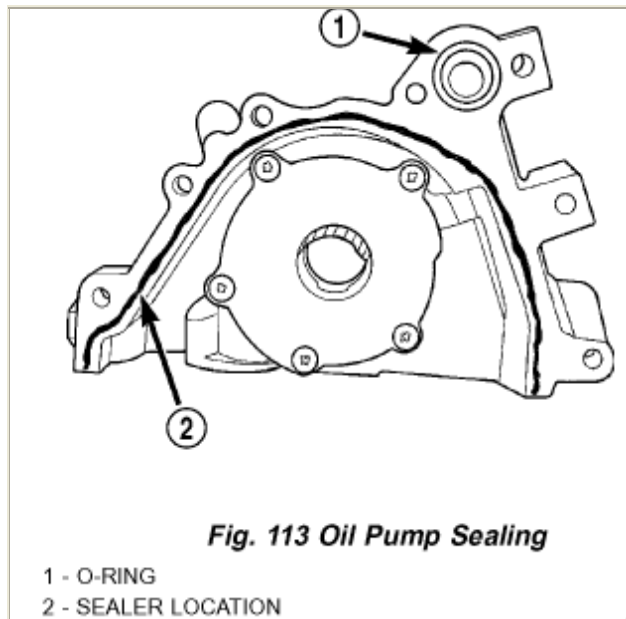
1. Assemble pump, using new parts as required. Install the inner rotor with chamfer facing the cast iron [oil pump cover](#).
2. Prime oil pump before installation by filling rotor cavity with engine oil.
3. Install cover and tighten fasteners to **12 Nm (105 inch lbs.)** (Fig. 108).  
**CAUTION:** Oil pump pressure relief valve must be installed as shown in

(Fig. 107) or serious engine damage may occur.

4. Install relief valve, spring, gasket and cap as shown in (Fig. 107). Tighten cap to **41 Nm (30 ft. lbs.)**.

## INSTALLATION

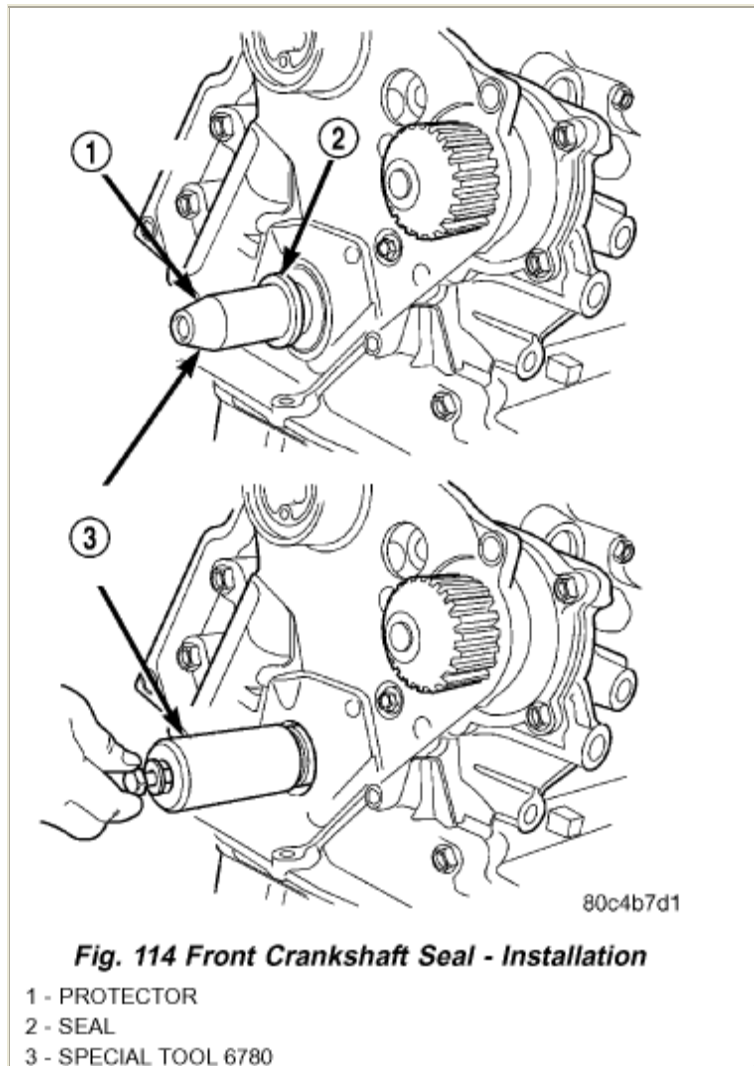
1. Make sure all surfaces are clean and free of oil and dirt.



Zoom

Sized for Print

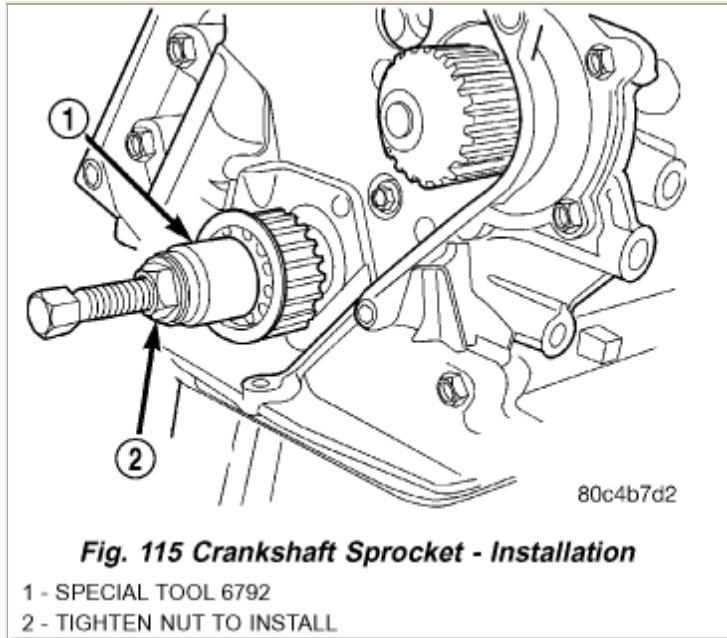
2. Apply Mopar Gasket Maker to oil pump as shown in (Fig. 113). Install O-ring into oil pump body discharge passage.
3. Prime oil pump with engine oil before installation.
4. Align oil pump rotor flats with flats on [crankshaft](#). Install the oil pump to the block (Fig. 106). **CAUTION:** To align, the [front crankshaft seal](#) MUST be out of pump, or damage may result.



Zoom

Sized for Print

5. Install new [front crankshaft seal](#) using Special Tool 6780 (Fig. 114).
6. Install [crankshaft](#) key (Fig. 105). **CAUTION:** The crankshaft sprocket is set to a predetermined depth from the factory for correct [timing belt](#) tracking. If removed, use of Special Tool 6792 is required to set the sprocket to original installation depth. An incorrectly installed sprocket will result in timing belt and engine damage.



Zoom

Sized for Print

7. Install crankshaft sprocket using Special Tool 6792 (Fig. 115).
8. Install oil pump pick-up tube.
9. Install [oil pan](#).
10. Install [timing belt](#) rear cover.
11. Install [timing belt](#).