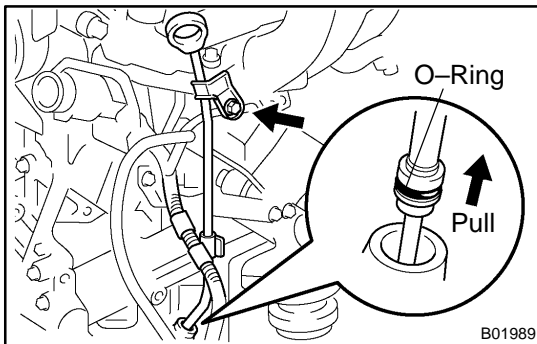


REMOVAL

HINT:

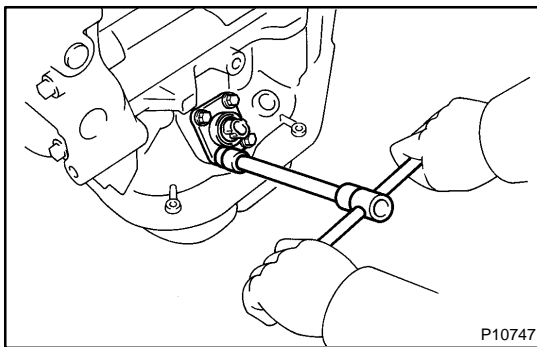
When repairing the oil pump, the oil pan and strainer should be removed and cleaned.

1. **REMOVE ENGINE WITH TRANSMISSION**
(See page [EM-62](#))
2. **SEPARATE ENGINE AND TRANSMISSION**
(See page [EM-62](#))
3. **INSTALL ENGINE TO ENGINE STAND FOR REMOVAL**
4. **REMOVE CRANKSHAFT POSITION SENSOR**
5. **REMOVE TIMING BELT, IDLER PULLEY AND CRANKSHAFT TIMING PULLEY** (See page [EM-16](#))



6. REMOVE OIL DIPSTICK AND GUIDE

- (a) Disconnect the engine wire clamp from the dipstick guide.
- (b) Remove the bolt.
- (c) Pull out the dipstick guide together with the dipstick.
- (d) Remove the O-ring from the dipstick guide.



7. REMOVE OIL LEVEL SENSOR

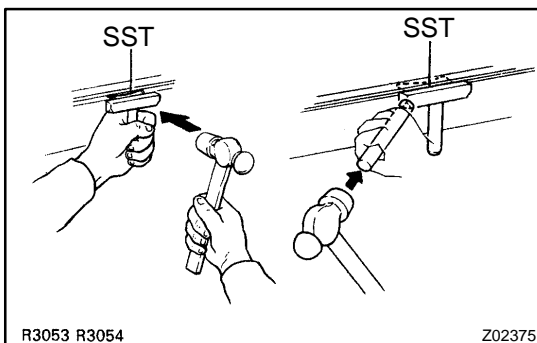
- (a) Disconnect the level sensor connector.
- (b) Remove the 4 bolts and level sensor.
- (c) Remove the gasket from the level sensor.

NOTICE:

Be careful not to drop the oil level sensor when removing it.

8. REMOVE NO.2 OIL PAN

- (a) Remove the 16 bolts and 2 nuts.

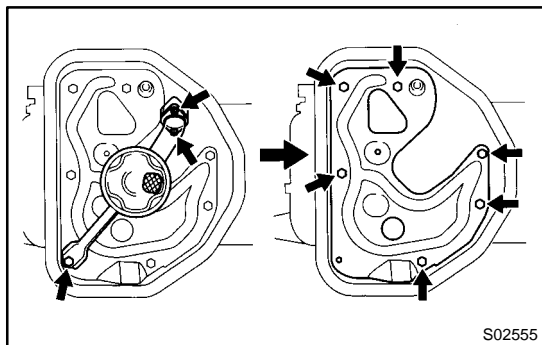


- (b) Insert the blade of SST between the No.1 and No.2 oil pan, break the seal of the applied sealer and remove the No.2 oil pan.

SST 09032-00100

NOTICE:

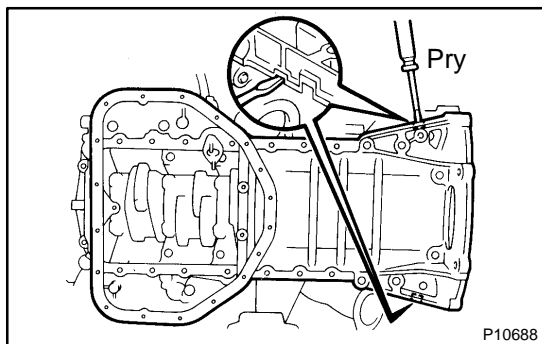
Be careful not to damage the No.2 oil pan contact surface of the No.1 oil pan. Be careful not to damage the oil pan flange.

**9. REMOVE OIL STRAINER**

Remove the bolt, 2 nuts, oil strainer and gasket.

10. REMOVE OIL PAN BAFFLE PLATE

Remove the 6 bolts and baffle plate.

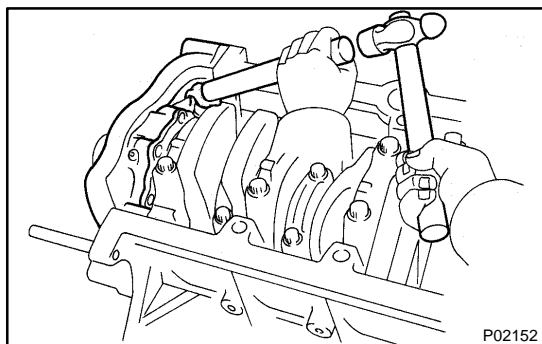
**11. REMOVE NO.1 OIL PAN**

- (a) Remove the 22 bolts.
- (b) Remove the No.1 oil pan by prying the portions between the cylinder block and No.1 oil pan with a screwdriver.

NOTICE:

Be careful not to damage the contact surfaces of the cylinder block and No.1 oil pan.

- (c) Remove the O-ring from the cylinder block.

**12. REMOVE OIL PUMP**

- (a) Remove the 9 bolts.
- (b) Using a hammer and a brass bar, remove the oil pump by carefully tapping the oil pump body.
- (c) Remove the 2 O-rings from the cylinder block.