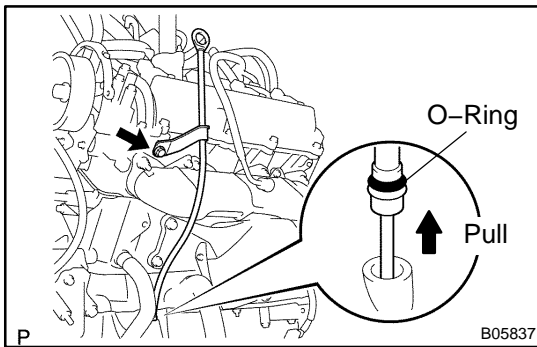


REMOVAL

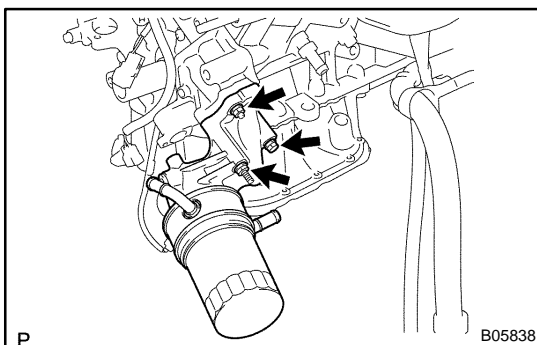
HINT:

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

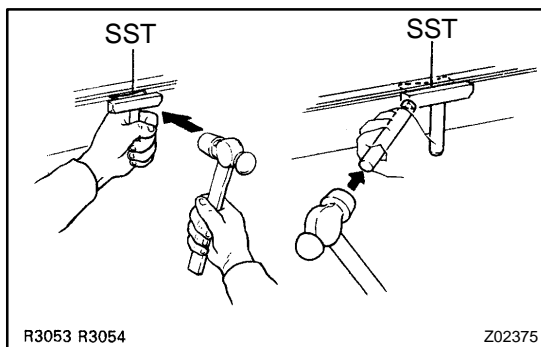
1. **REMOVE ENGINE FROM VEHICLE**
(2WD: See page [EM-79](#))
(4WD: See page [EM-92](#))
2. **INSTALL ENGINE TO ENGINE STAND FOR DIS-ASSEMBLY**
3. **REMOVE TIMING BELT** (See page [EM-16](#))
4. **REMOVE NO.1 IDLER PULLEY** (See page [EM-16](#))
5. **REMOVE NO.2 IDLER PULLEY** (See page [EM-16](#))
6. **REMOVE CRANKSHAFT TIMING PULLEY**
(See page [EM-16](#))
7. **REMOVE CRANKSHAFT POSITION SENSOR**
(See page [IG-11](#))



8. **REMOVE OIL DIPSTICK AND GUIDE**
 - (a) Remove the bolt holding the oil dipstick to the LH cylinder head.
 - (b) Pull out the dipstick guide together with the dipstick from the No.1 oil pan.
 - (c) Remove the O-ring from the dipstick guide.
9. **REMOVE OIL FILTER, OIL COOLER AND FILTER BRACKET ASSEMBLY**
 - (a) Disconnect the oil pressure switch connector.
 - (b) Take out the vinyl tape, and disconnect the wire from the clamp.
 - (c) Turn the clamp counterclockwise, and remove the clamp from the oil filter bracket.
 - (d) Disconnect the oil cooler hose from the oil cooler.



- (e) Remove the 2 bolts, nut, the oil filter, oil cooler and filter bracket assembly.
 - (f) Remove the gasket from the filter bracket.

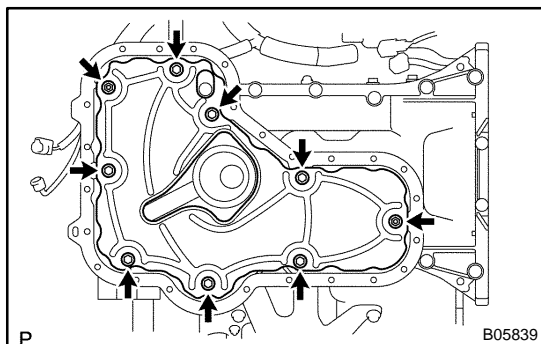
**10. REMOVE NO.2 OIL PAN**

- Remove the 24 bolts and 2 nuts.
- Insert the blade of SST between the No.1 and No.2 oil pans, cut off applied sealer and remove the No.2 oil pan.

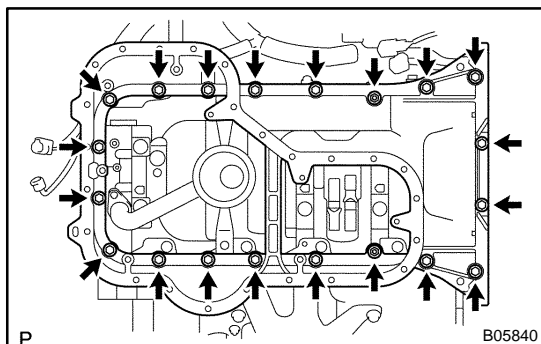
SST 09032-00100

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 No.2 oil pan flange.

**11. REMOVE OIL PAN BAFFLE PLATE**

Remove the 7 bolts, 2 nuts and baffle plate.

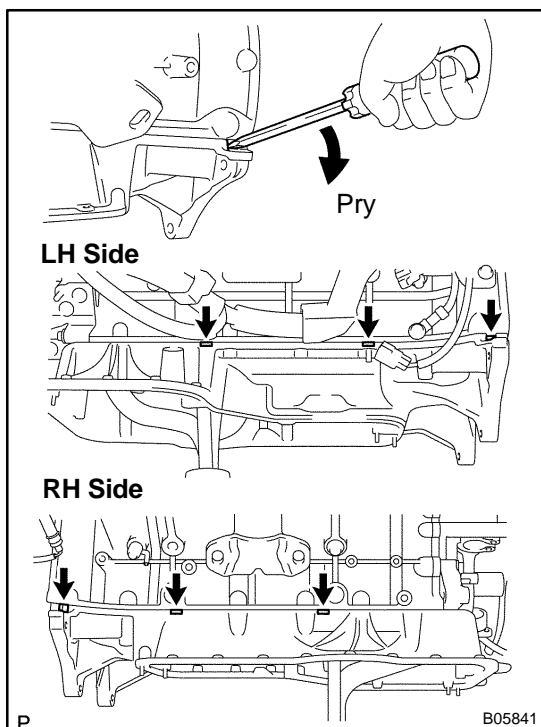
**12. REMOVE NO.1 OIL PAN**

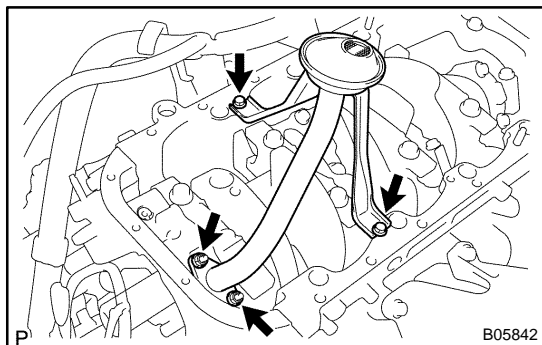
- Remove the 18 bolts and 2 nuts.

- Using a screwdriver, remove the No.1 oil pan by prying between the oil pan and cylinder block in the sequence shown.

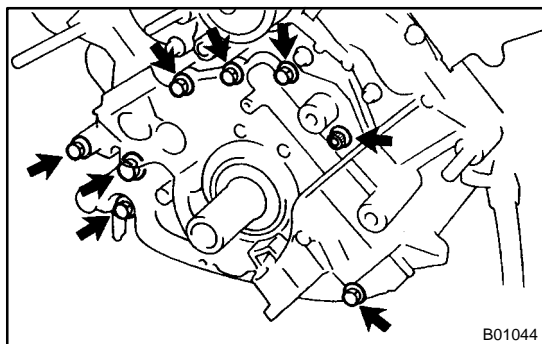
NOTICE:

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



**13. REMOVE OIL STRAINER**

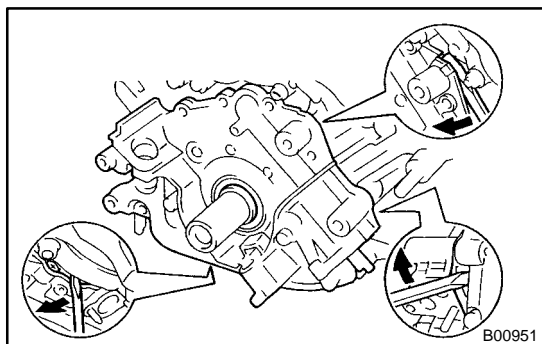
Remove the 2 bolt, 2 nuts, oil strainer and gasket.

**14. REMOVE OIL PUMP**

(a) Remove the 8 bolts.

HINT:

Use a 6 mm hexagon wrench for the hexagon head bolt.



(b) Using a screwdriver, remove the oil pump by prying the portions between the oil pump and cylinder block.

NOTICE:

Be careful not to damage the contact surface of the cylinder block and oil pump.

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