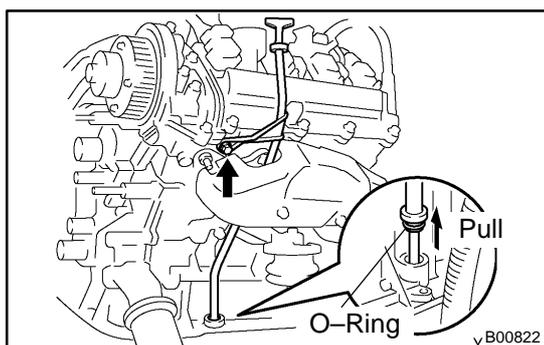


## REMOVAL

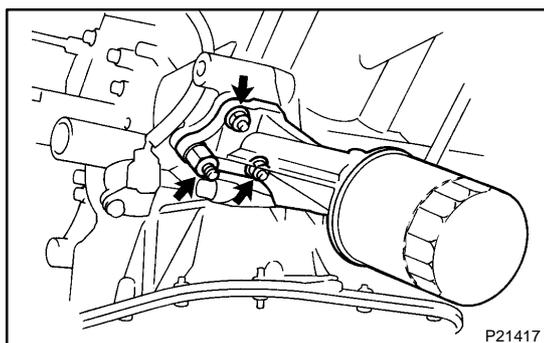
### HINT:

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

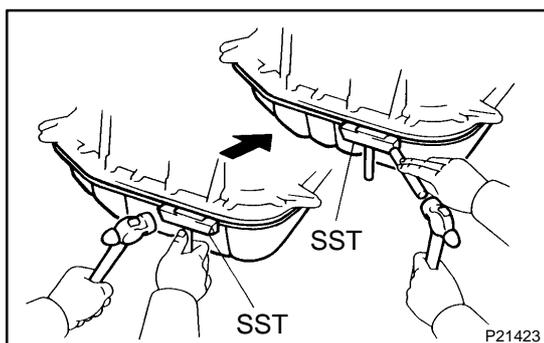
1. REMOVE ENGINE FROM BODY (See page EM-77)
2. SEPARATE ENGINE AND TRANSMISSION (See page EM-77)
3. INSTALL ENGINE TO ENGINE STAND FOR DISASSEMBLY
4. REMOVE TIMING BELT (See page EM-15)
5. REMOVE NO.2 AND NO.1 IDLER PULLEYS (See page EM-15)
6. REMOVE CRANKSHAFT TIMING PULLEY (See page EM-15)



7. 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.
8. REMOVE OIL LEVEL SENSOR



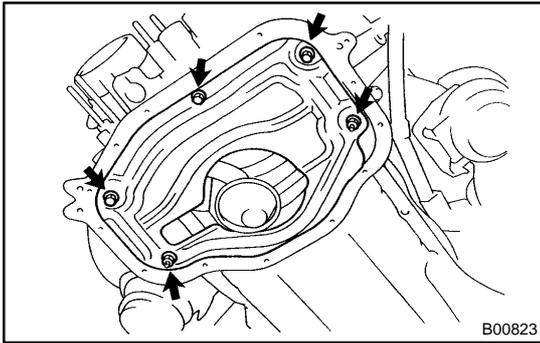
9. REMOVE OIL FILTER AND FILTER BRACKET ASSEMBLY
  - (a) Remove the stud bolt, 2 nuts, the oil filter and filter bracket assembly.
  - (b) Remove the gasket from the filter bracket.
10. REMOVE CRANKSHAFT POSITION SENSOR
11. REMOVE NO.2 OIL PAN
  - (a) Remove the 12 bolts and 2 nuts.



- (b) 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

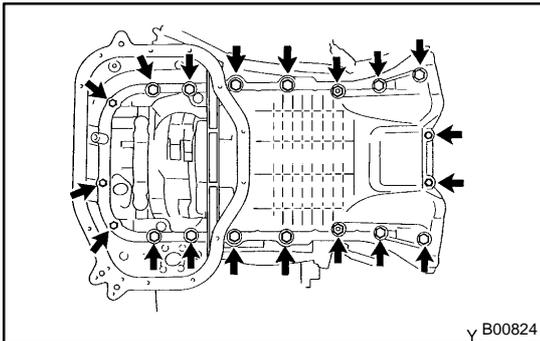
### NOTICE:

- 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.



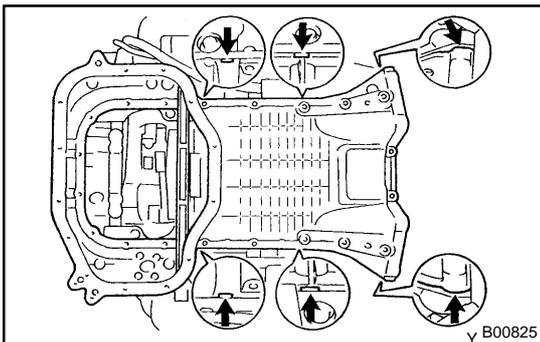
**12. REMOVE OIL PAN Baffle PLATE**

Remove the 3 bolts, 2 nuts and baffle plate.

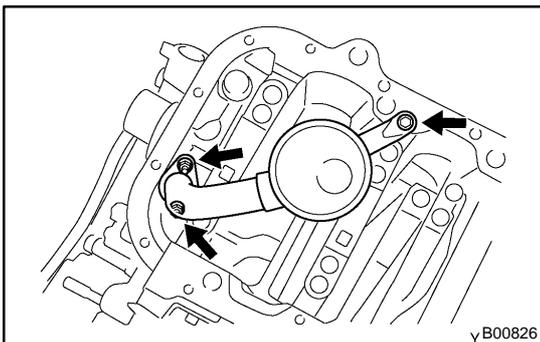


**13. REMOVE NO.1 OIL PAN**

(a) Remove the 17 bolts and 2 nuts.

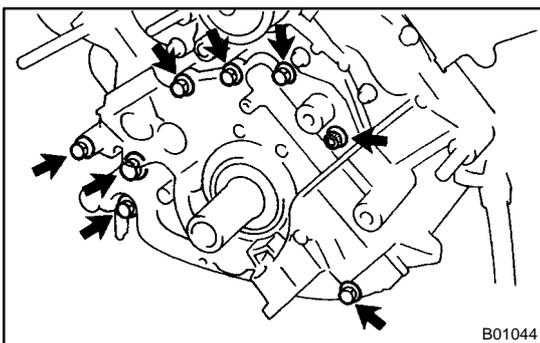


(b) Using a screwdriver, remove the No.1 oil pan by prying between the oil pan and cylinder block in the sequence shown.



**14. REMOVE OIL STRAINER**

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



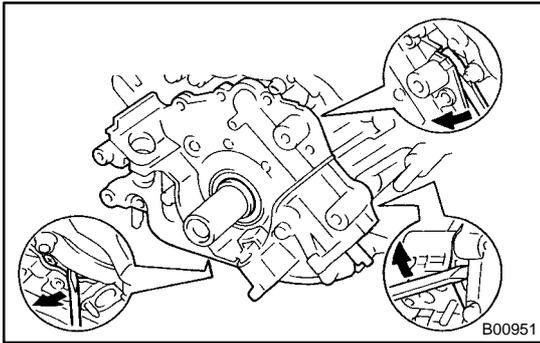
**15. REMOVE OIL PUMP**

(a) Remove the 8 bolts.

HINT:

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

## LUBRICATION - OIL PUMP



- (b) Using a screwdriver, remove the oil pump by prying the portions between the oil pump and cylinder block.
- (c) Remove the O-ring from the cylinder block.