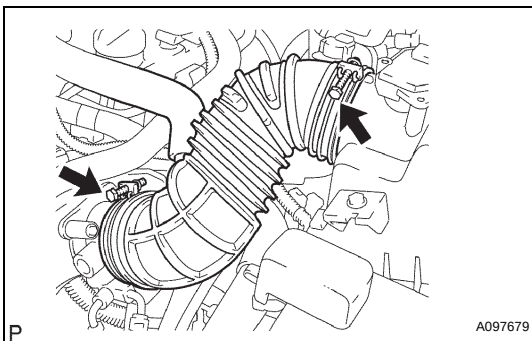
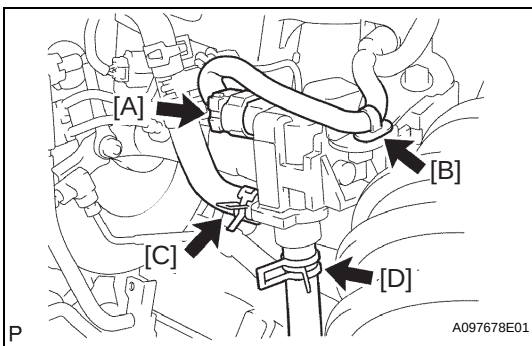


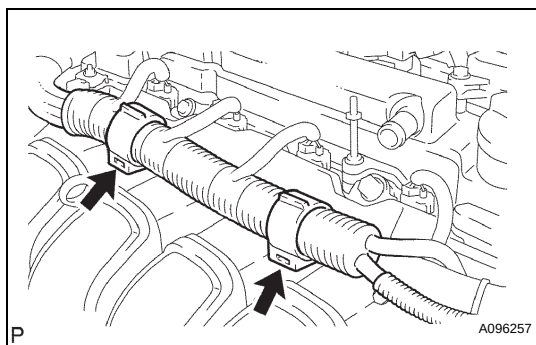
REMOVAL

1. **DISCHARGE FUEL SYSTEM PRESSURE**
 - (a) Discharge the fuel system pressure (See page [FU-1](#)).
2. **DISCONNECT BATTERY NEGATIVE TERMINAL**
3. **REMOVE FRONT WHEEL RH**
4. **REMOVE ENGINE UNDER COVER RH**
5. **REMOVE CYLINDER HEAD COVER NO.2**
 - (a) Remove the cylinder head cover No. 2 (See page [EM-15](#)).
6. **DRAIN ENGINE COOLANT**
 - (a) Drain the engine coolant (See page [IG-3](#)).
7. **SEPARATE EXHAUST PIPE ASSEMBLY FRONT**
 - (a) Separate the exhaust pipe assembly front (See page [EX-2](#)).
8. **REMOVE MANIFOLD STAY**
 - (a) Remove the manifold stay (See page [EX-2](#)).
9. **REMOVE FAN AND GENERATOR V BELT**
 - (a) Remove the fan and generator V belt (See page [EM-5](#)).
10. **SEPARATE VANE PUMP ASSEMBLY**
 - (a) Separate the vane pump assembly (See page [PS-7](#)).
11. **REMOVE GENERATOR ASSEMBLY**
 - (a) Remove the generator assembly (See page [CH-6](#)).
12. **REMOVE ENGINE MOUNTING INSULATOR RH**
 - (a) Remove the engine mounting insulator RH (See page [EM-15](#)).
13. **REMOVE IGNITION COIL ASSEMBLY**
 - (a) Remove the ignition coil assembly (See page [EM-15](#)).
14. **REMOVE CYLINDER HEAD COVER SUB-ASSEMBLY**
 - (a) Remove the cylinder head cover sub-assembly (See page [EM-15](#)).
15. **REMOVE V-RIBBED BELT TENSIONER ASSEMBLY**
 - (a) Remove the V-ribbed belt tensioner assembly (See page [EM-15](#)).
16. **REMOVE ENGINE MOUNTING BRACKET RH**
 - (a) Remove the engine mounting bracket RH (See page [EM-15](#)).
17. **REMOVE WATER PUMP ASSEMBLY**
 - (a) Remove the water pump assembly (See page [CO-9](#)).
18. **SEPARATE CRANKSHAFT POSITION SENSOR**
 - (a) Separate the crankshaft position sensor (See page [EM-15](#)).

19. **SET NO. 1 CYLINDER TO TDC / COMPRESSION**
 - (a) Set the No. 1 cylinder to the TCD/compression (See page [EM-15](#)).
20. **REMOVE CRANKSHAFT PULLEY**
 - (a) Remove the crankshaft pulley (See page [EM-15](#)).
SST 09960-10010 (09962-01000, 09963-01000)
21. **REMOVE CHAIN TENSIONER ASSEMBLY NO.1**
 - (a) Remove the chain tensioner assembly No. 1 (See page [EM-15](#)).
22. **REMOVE TIMING CHAIN OR BELT COVER SUB-ASSEMBLY**
 - (a) Remove the timing chain or belt cover sub-assembly (See page [EM-15](#)).
23. **REMOVE TIMING CHAIN OR BELT COVER OIL SEAL**
 - (a) Remove the timing chain or belt cover oil seal (See page [EM-15](#)).
24. **REMOVE CRANKSHAFT POSITION SENSOR PLATE NO.1**
 - (a) Remove the crankshaft position plate No. 1 (See page [EM-15](#)).
25. **REMOVE CHAIN TENSIONER SLIPPER**
 - (a) Remove the chain tensioner slipper (See page [EM-15](#)).
26. **REMOVE CHAIN SUB-ASSEMBLY**
 - (a) Remove the chain sub-assembly (See page [EM-15](#)).
27. **REMOVE CHAIN VIBRATION DAMPER NO.1**
 - (a) Remove the chain vibration damper No. 1 (See page [EM-15](#)).
28. **REMOVE AIR CLEANER HOSE NO.1**
 - (a) Disconnect the VSV connector [A].
 - (b) Remove the clamp [B] of the engine wire.
 - (c) Disconnect the fuel vapor feed hose No. 1 [C] from the VSV.
 - (d) Disconnect the fuel vapor feed hose No. 3 [C] from the VSV.

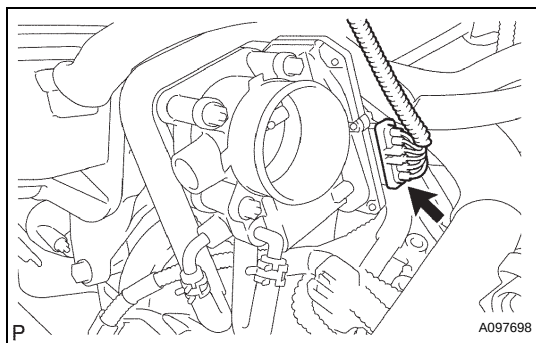


- (e) Loosen the 2 hose clamp bolts, then remove the air cleaner hose No. 1.
29. **REMOVE OIL LEVEL GAGE SUB-ASSEMBLY**

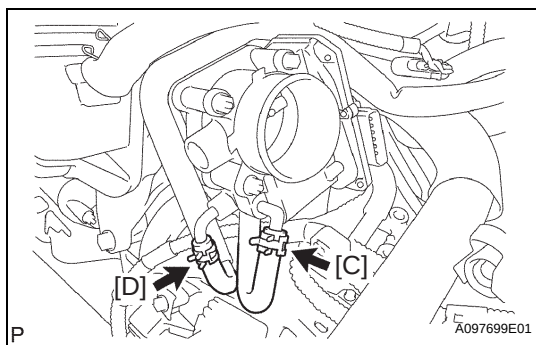


30. REMOVE INTAKE MANIFOLD

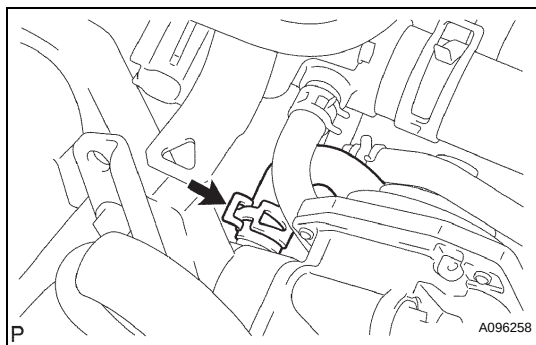
- (a) Remove the 2 clamps of the engine wire from the clamp bracket.



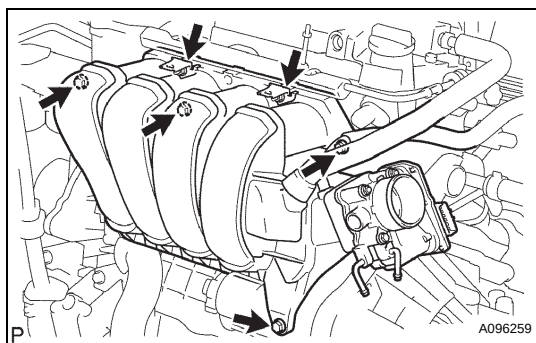
- (b) Disconnect the throttle control motor connector.



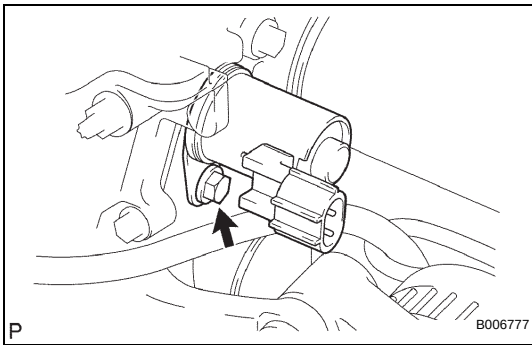
- (c) Disconnect the water by-pass hose [C] from the throttle body.
 (d) Disconnect the water by-pass hose No. 2 [D] from the throttle body.



- (e) Disconnect the union to check valve hose from the intake manifold.

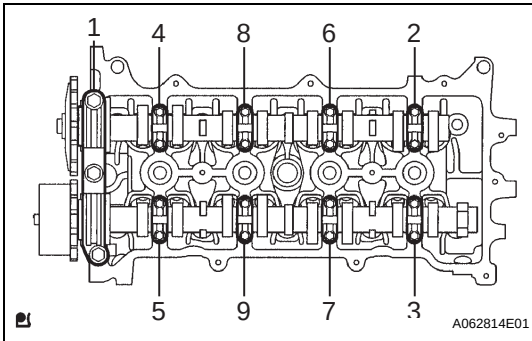


- (f) Remove the 4 bolts, 2 nuts and 2 clamp brackets.
 (g) Remove the intake manifold and throttle body.
 (h) Remove the gasket from the intake manifold.



31. REMOVE CAMSHAFT TIMING OIL CONTROL VALVE ASSEMBLY

- (a) Remove the bolt, then remove the camshaft timing oil control valve.



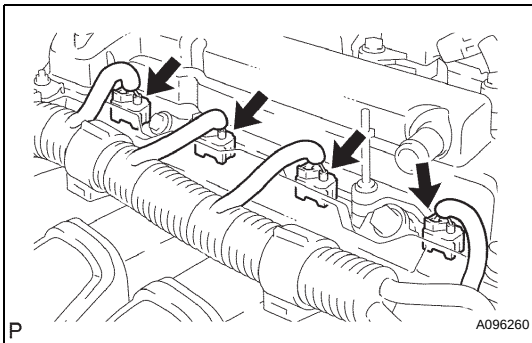
32. REMOVE CAMSHAFT

- (a) Using several steps, uniformly loosen and remove the 19 bearing cap bolts in the sequence shown in the illustration.
- (b) Remove the 9 bearing caps, then remove the 2 camshafts from the cylinder head.

33. DISCONNECT FUEL TUBE SUB-ASSEMBLY

- (a) Disconnect the fuel tube sub-assembly (See page [FU-11](#)).

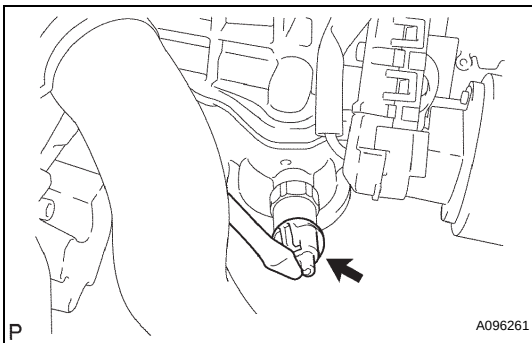
SST 09268-21010



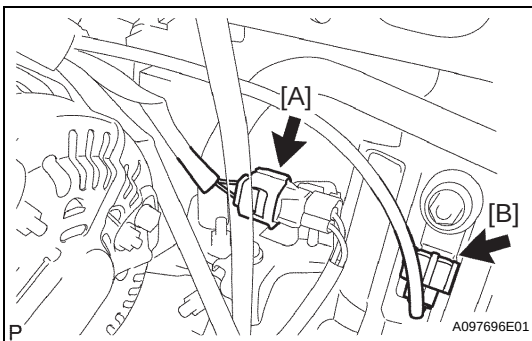
34. REMOVE CYLINDER HEAD SUB-ASSEMBLY

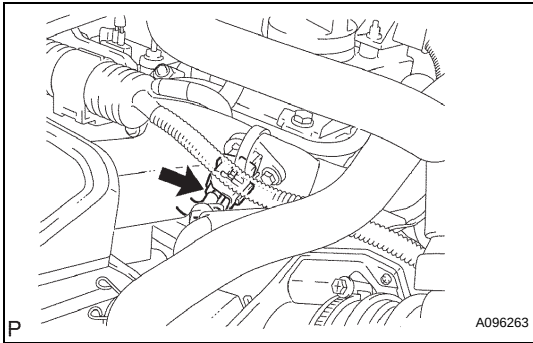
- (a) Disconnect the engine wire.
 - (1) Disconnect the 4 fuel injector connectors.

- (2) Disconnect the oil pressure switch connector.

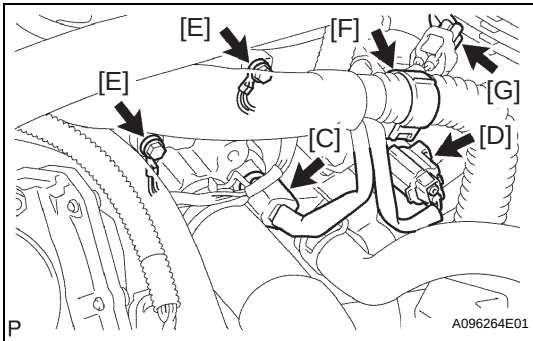


- (3) Disconnect the crankshaft position sensor connector [A].
- (4) Disconnect the knock sensor connector [B].

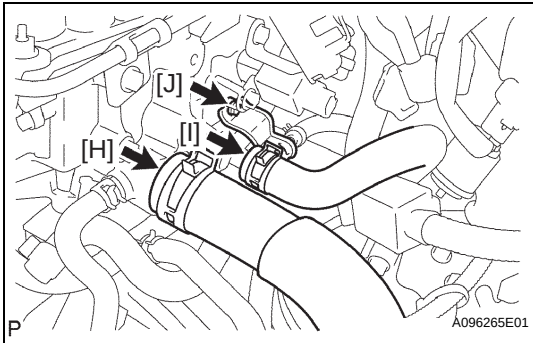




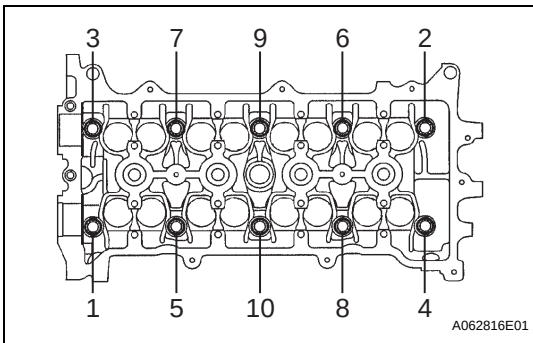
- (5) Disconnect the camshaft position sensor connector.



- (6) Disconnect the engine coolant temperature sensor connector [C].
 (7) Disconnect the radio setting condenser connector [D].
 (8) Disconnect the 2 engine earths [E].
 (9) Remove the clamp [F] from the clamp bracket.
 (10) Disconnect the heated oxygen sensor connector [G].



- (b) Disconnect the radiator hose inlet [H].
 (c) Disconnect the heater inlet water hose [I].
 (d) Remove the bolt [J], then separate the water bypass pipe No. 1.



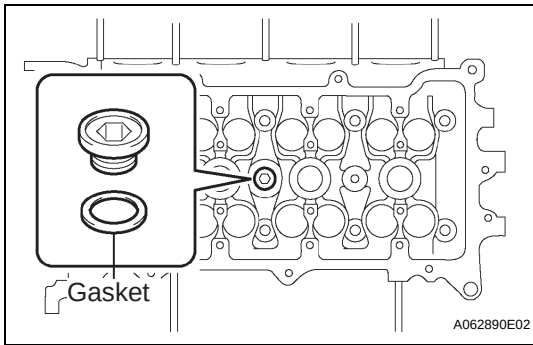
- (e) Using several steps, uniformly loosen and remove the 10 cylinder head bolts with a bi-hexagon wrench 10 mm in the sequence shown in the illustration. Remove the 10 cylinder head bolts and 10 plate washers.

NOTICE:

- Be careful not to drop the plate washers into the cylinder head.
- Head warpage or cracking could result from removing the bolts in the wrong order.

- (f) Remove the cylinder head.

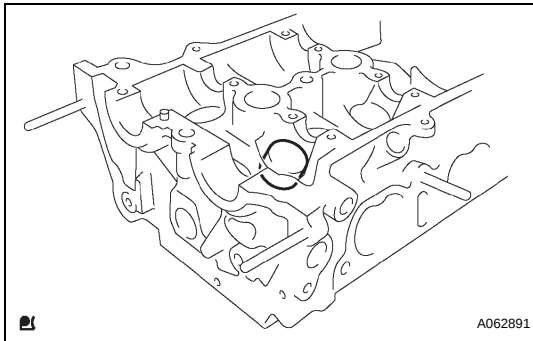
35. REMOVE CYLINDER HEAD GASKET



DISASSEMBLY

1. REMOVE W/HEAD TAPER SCREW PLUG NO.2

- (a) Using a socket hexagon wrench 10 mm, remove the taper screw plug and gasket.



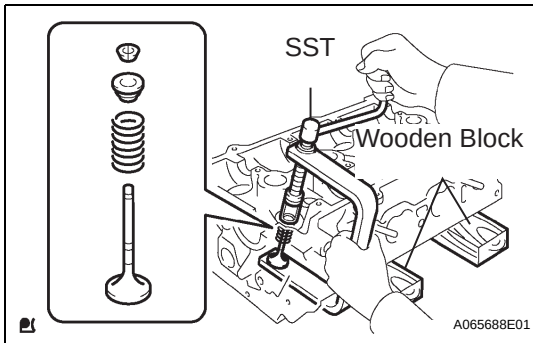
2. REMOVE VALVE LIFTER

- (a) Remove the 16 valve lifters from the cylinder head.

3. REMOVE VALVE

HINT:

Remove all the valves from the cylinder head in accordance with the procedure below.

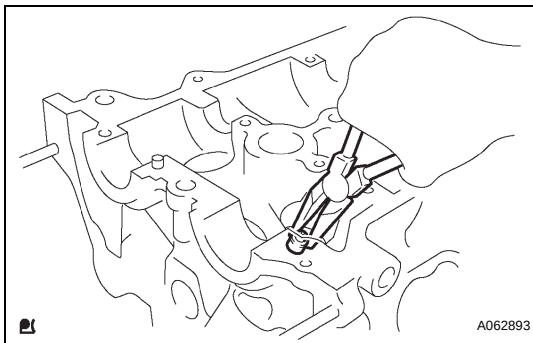


- (a) Place the cylinder head on wooden blocks.

- (b) Using SST, compress the spring, then remove the 2 retainer locks.

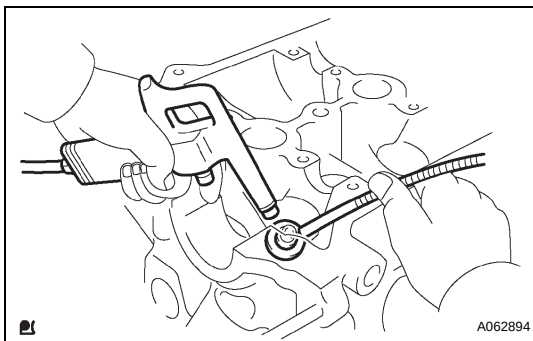
SST 09202-70020 (09202-00010, 09202-01010, 09202-01020)

- (c) Remove the retainer, spring and valve from the cylinder head.



4. REMOVE VALVE STEM OIL O SEAL OR RING

- (a) Using needle-nose pliers, remove the 16 oil seals.



5. REMOVE VALVE SPRING SEAT

- (a) Using a compressed air and a magnetic finger, remove the 16 spring seats.

EM