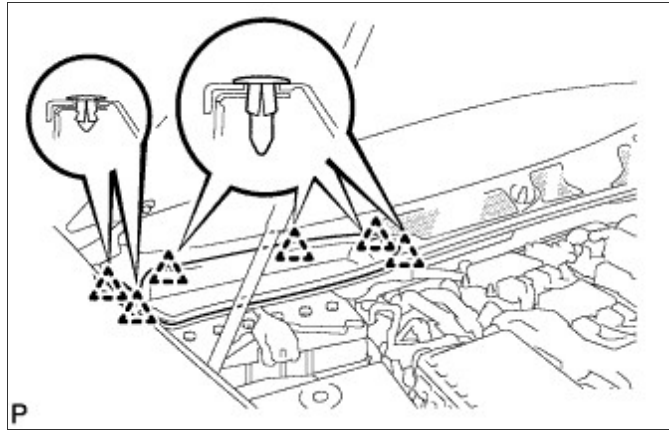


1UR-FSE INTAKE > INTAKE MANIFOLD > REMOVAL**1. REMOVE COWL TOP VENTILATOR LOUVER RH**

- a. Remove the 6 clips and cowl top ventilator louver RH.

**2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL****CAUTION:**

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

NOTICE:

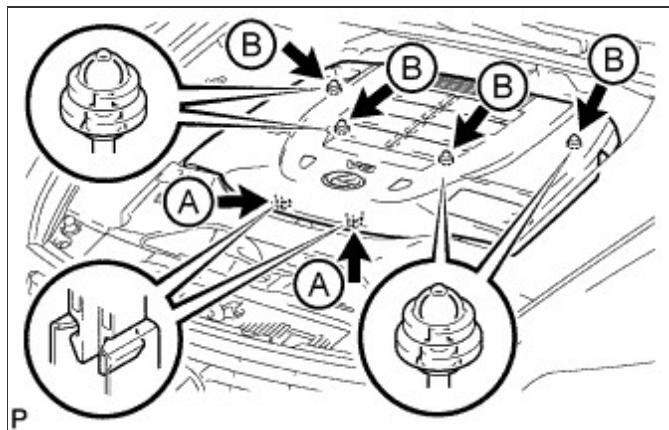
After the engine switch is turned off, the HDD navigation system requires approximately 6 minutes to record various types of memory and settings. As a result, after turning the engine switch off, wait 6 minutes or more before disconnecting the cable from the negative (-) battery terminal.

3. REMOVE V-BANK COVER SUB-ASSEMBLY

- a. Using both hands, lift the rear side of the cover upwards to detach the 4 clips labeled B. Then slide the cover toward the front of the vehicle to detach the 2 clips labeled A and remove the V-bank cover.

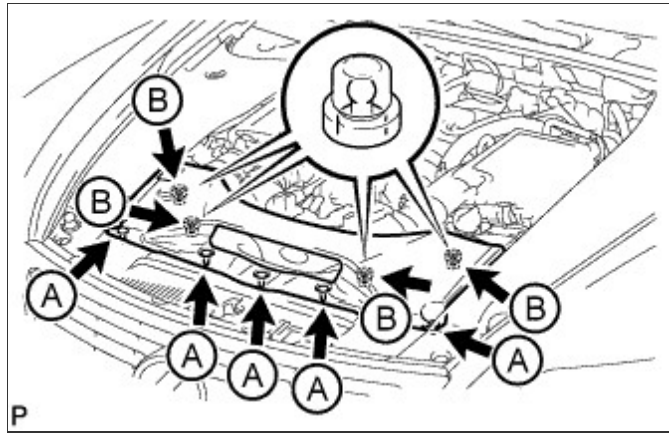
NOTICE:

- The V-bank cover may be damaged if its front and rear are lifted at the same time.
- When detaching the clips labeled A, be sure to slide the cover toward the front of the vehicle.

**4. REMOVE AIR CLEANER INLET COVER**

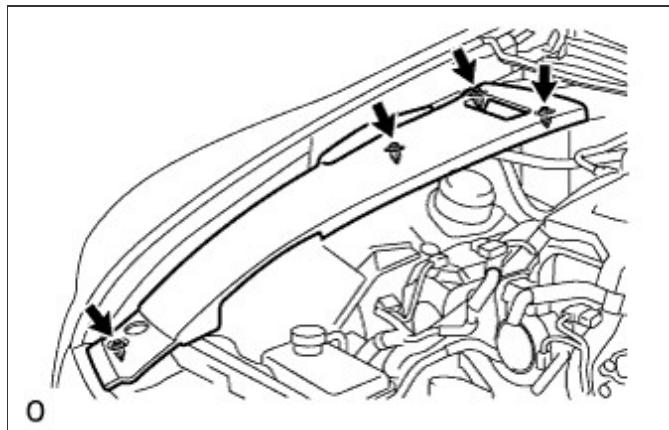
- a. Remove the 5 clips A.

- b.** Lift up the air cleaner inlet cover to detach the 4 clips B, and remove the air cleaner inlet cover.



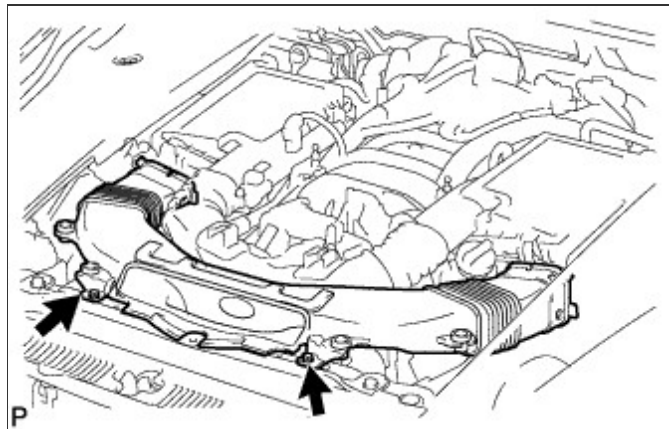
5. REMOVE ENGINE ROOM SIDE COVER RH

- a.** Remove the 4 clips and engine room side cover.



6. REMOVE NO. 1 AIR CLEANER INLET

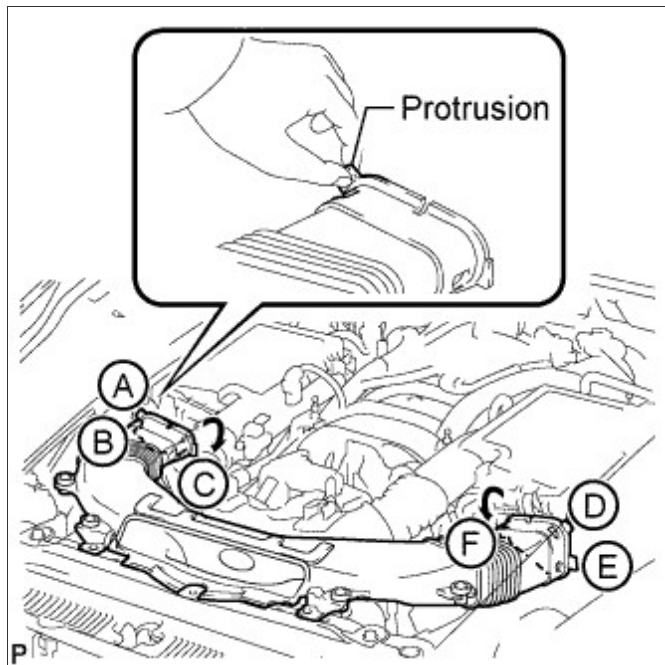
- a.** Remove the 2 bolts.



- b.** Hold the air cleaner inlet by the protrusions A and B, and detach the connections.
- c.** Rotate the No. 1 air cleaner inlet as shown in the illustration to detach the protrusion C.
- d.** Hold the air cleaner inlet by the protrusions D and E, and detach the

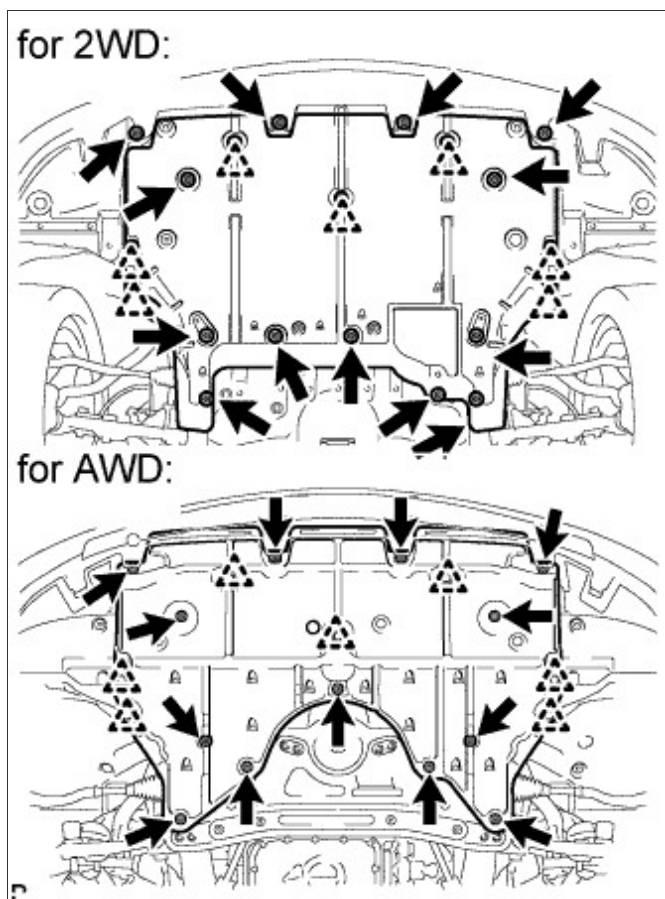
connections.

- e. Rotate the No. 1 air cleaner inlet as shown in the illustration to detach the protrusion F.



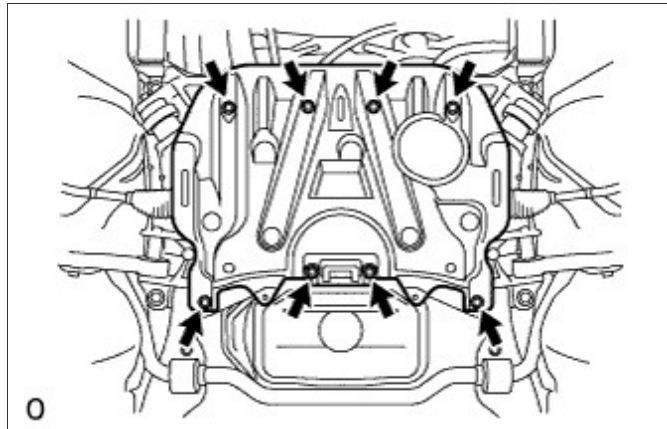
7. REMOVE NO. 1 ENGINE UNDER COVER

- a. Remove the 13 screws, 7 clips and cover.



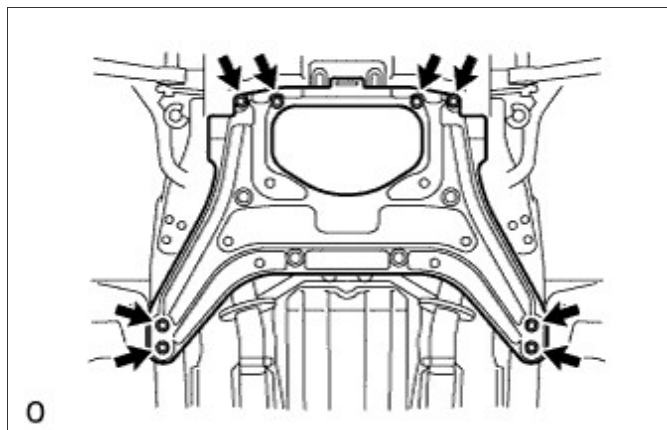
8. REMOVE FRONT SUSPENSION MEMBER PROTECTOR LOWER

- a. Remove the 8 bolts and suspension member protector.



9. REMOVE NO. 2 ENGINE UNDER COVER

- a. Remove the 8 bolts and under cover.



10. DRAIN ENGINE COOLANT

CAUTION:

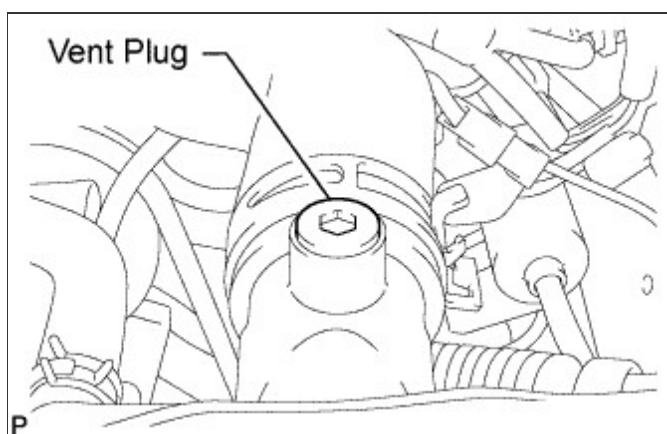
Do not remove the radiator reservoir cap and vent plug while the engine and radiator are still hot. Pressurized, hot engine coolant and steam may be released and cause serious burns.

- a. Loosen the radiator drain cock plug.

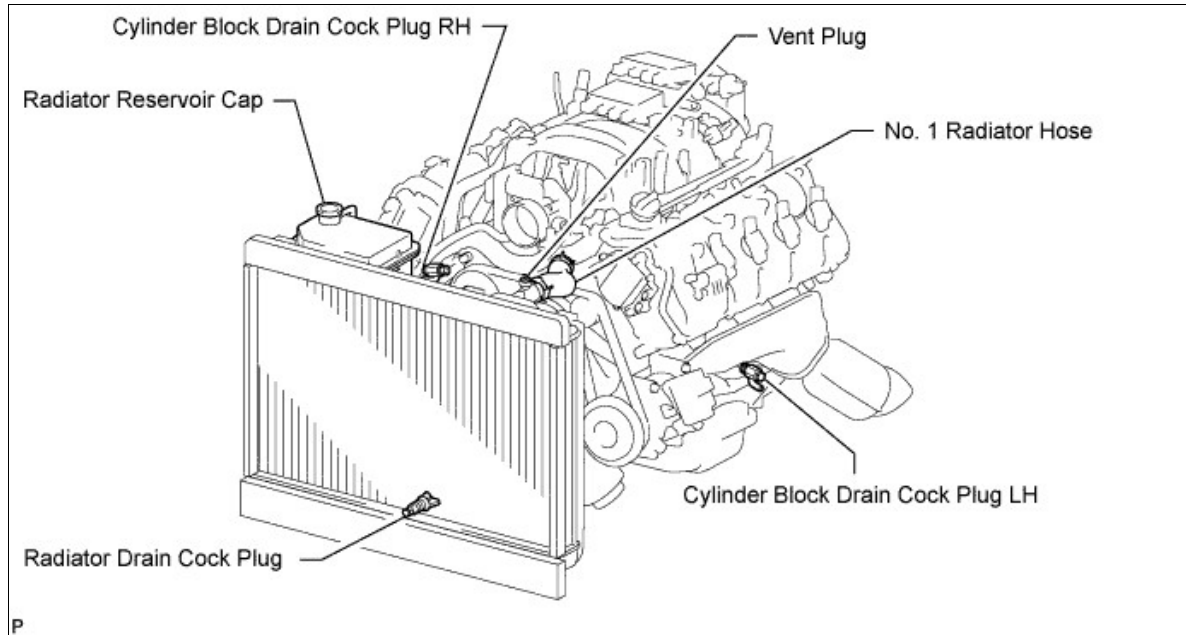
HINT:

Collect the coolant in a container and dispose of it according to the regulations in your area.

- b. Remove the radiator reservoir cap, and using a 6 mm hexagon wrench, remove the vent plug.
- c. Drain coolant.

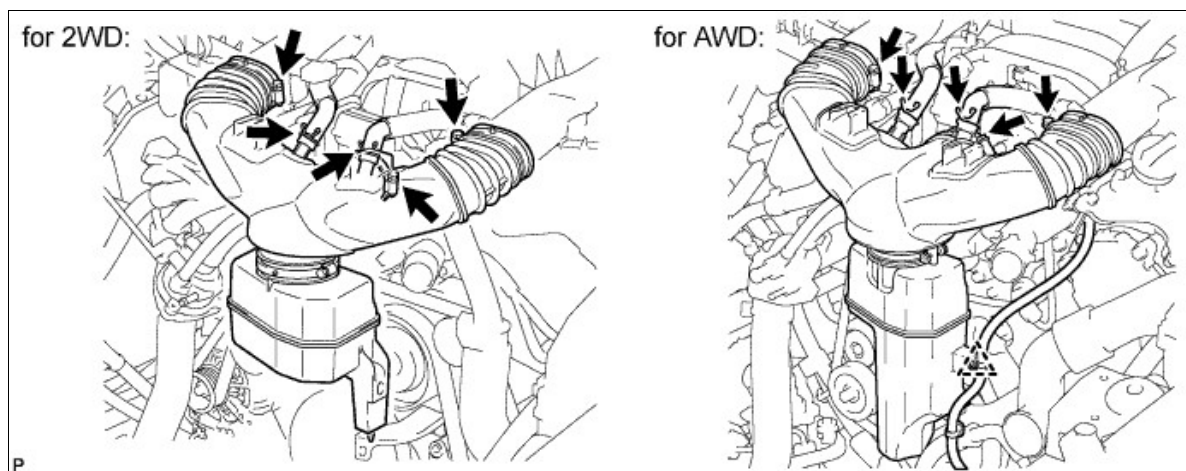


- d.** Loosen the 2 cylinder block drain cock plugs.

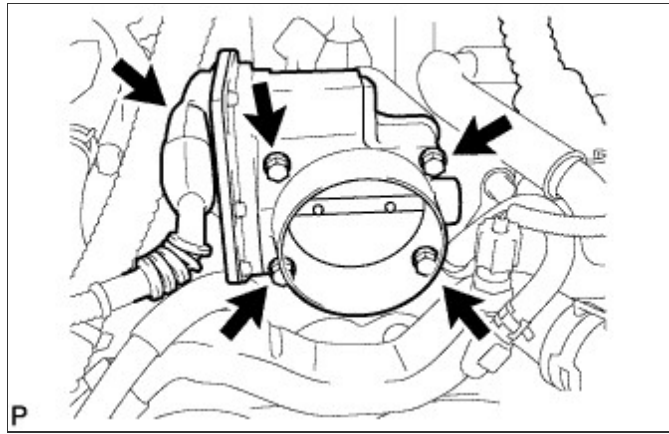


11. REMOVE INTAKE AIR CONNECTOR PIPE

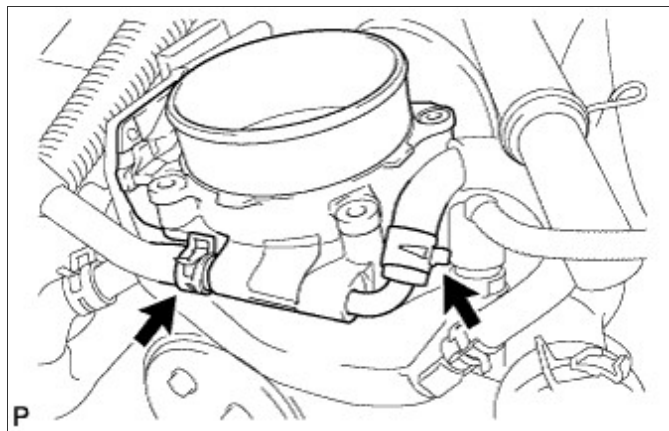
- a.** Disconnect the No. 1 and No. 2 ventilation hoses from the intake air connector pipe.



- b.** for AWD:
Using a clip remover, detach the wire harness clamp.
- c.** Loosen the 3 hose clamps, and remove the intake air connector pipe.
- a.** Disconnect the throttle motor connector.
- b.** Remove the 4 bolts and throttle body.

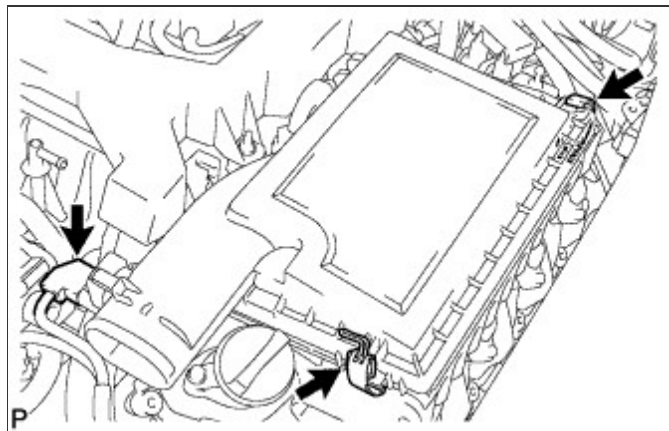


- c.** Disconnect the No. 4 and No. 5 water by-pass hoses from the throttle body.
- d.** Remove the gasket from the intake manifold.

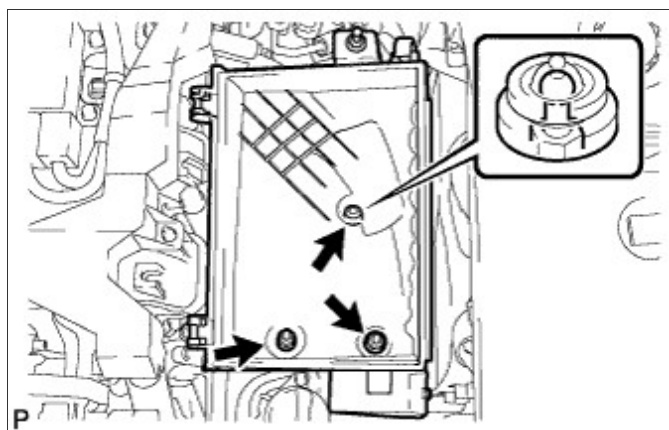


13. REMOVE AIR CLEANER ASSEMBLY LH

- a.** Disconnect the MAF meter connector.
- b.** Disconnect the 2 clamps and remove the air cleaner cap.
- c.** Remove the air cleaner filter element from the air cleaner case.

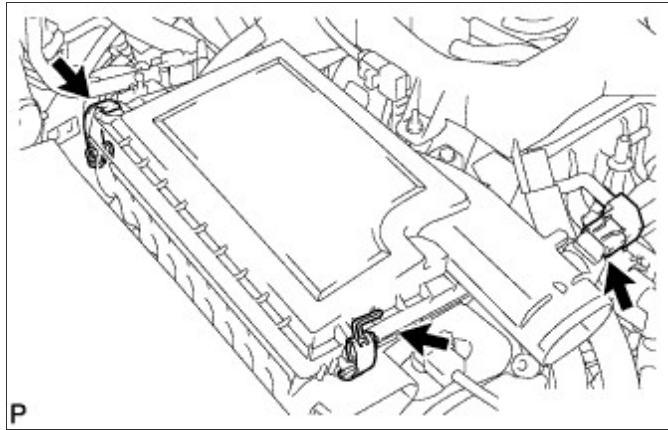


- d.** Remove the 2 nuts, clip and air cleaner case.

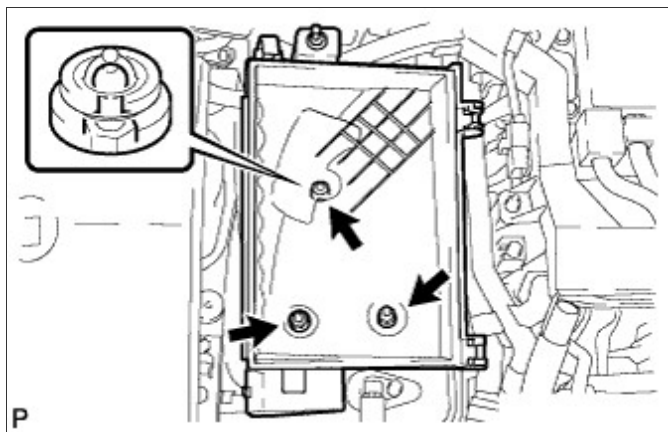


14. REMOVE AIR CLEANER ASSEMBLY RH

- a. Disconnect the MAF meter connector.
- b. Disconnect the 2 clamps and remove the air cleaner cap.
- c. Remove the air cleaner filter element from the air cleaner case.



- d. Remove the 2 nuts, clip and air cleaner case.



15. DISCONNECT ENGINE WIRE

HINT:

Fix the disconnected harnesses, etc. in place with tape or equivalent so that they do not interfere.

- a. for 2WD:

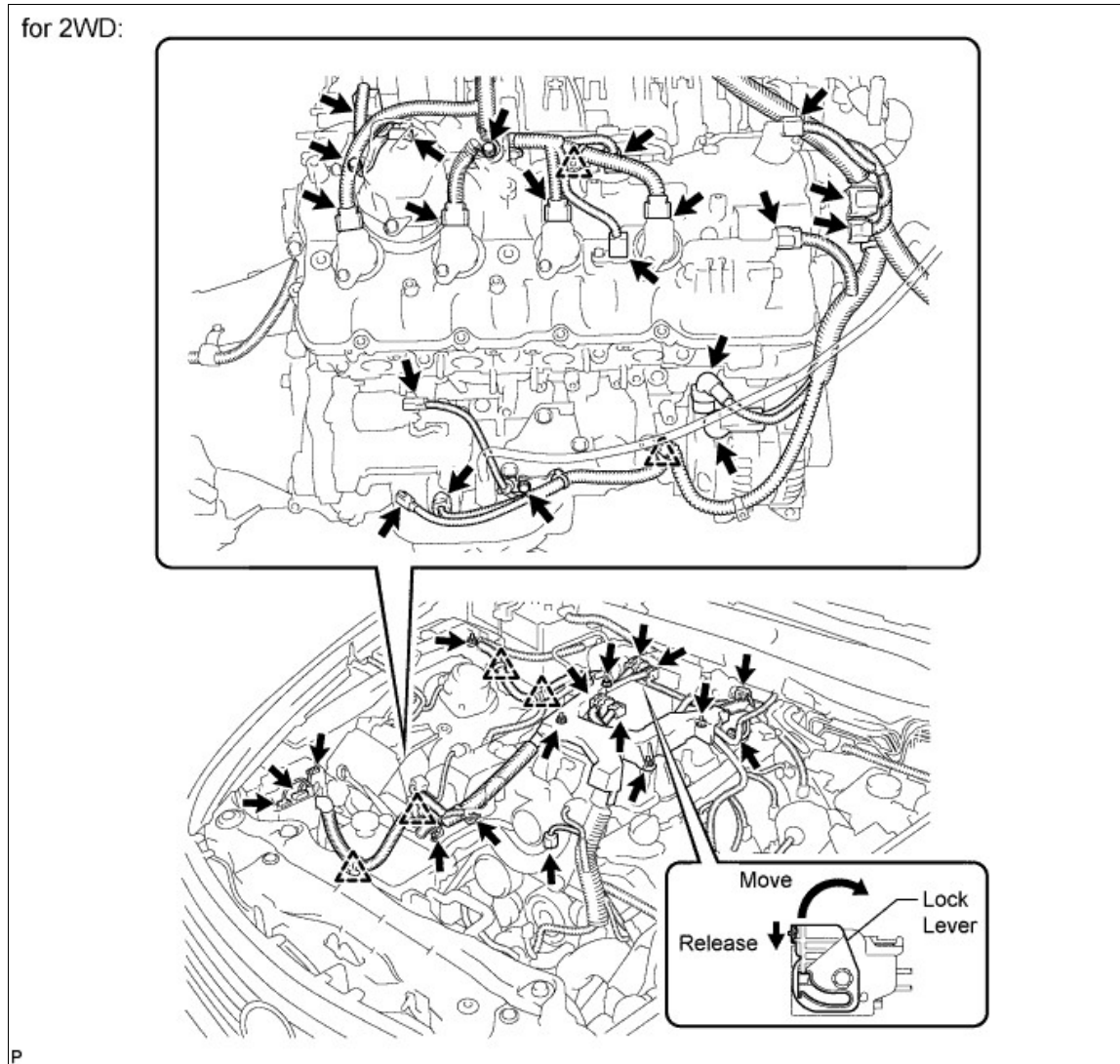
- i. Disconnect the engine wire harness connectors.

HINT:

To disconnect the injector driver connectors, push the claw downward and move the lock lever to release the lock.

- ii. Remove the nut and disconnect the engine wire harness from the +B terminal of the generator assembly.
- iii. Using a clip remover, disconnect the 6 engine wire harness clamps.
- iv. Remove the nut and disconnect the engine wire from the fusible link block assembly.
- v. Remove the bolt and disconnect the engine wire harness ground.
- vi. Remove the 4 bolts and 4 engine wire harness clamp brackets.

- vii. Remove the 4 nuts and disconnect the engine wire harness.



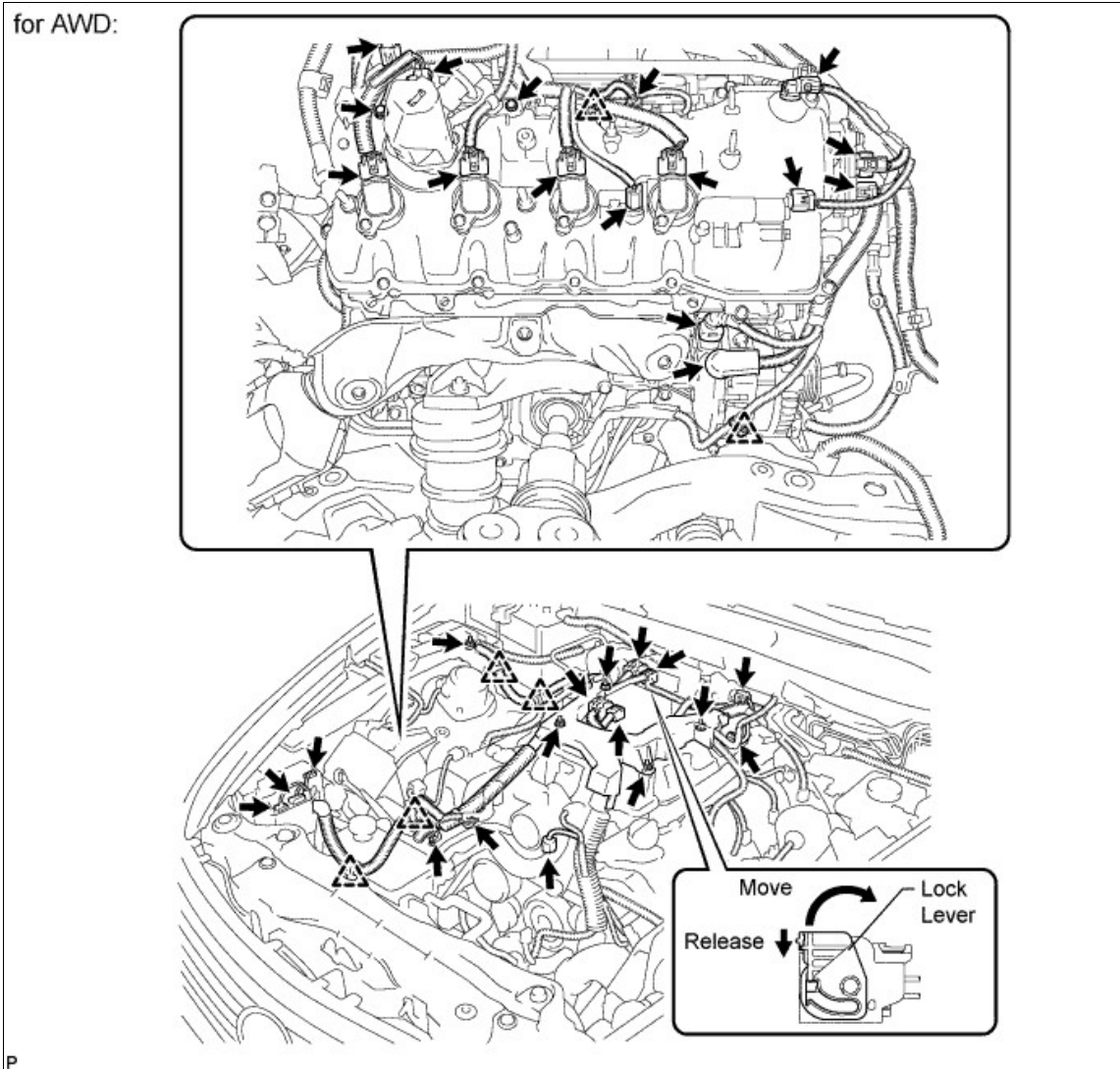
- b. for AWD:

- i. Disconnect the engine wire harness connectors.

HINT:

To disconnect the injector driver connectors, push the claw downward and move the lock lever to release the lock.

- ii. Remove the nut and disconnect the engine wire harness from the +B terminal of the generator assembly.
- iii. Using a clip remover, disconnect the 6 engine wire harness clamps.
- iv. Remove the nut and disconnect the engine wire from the fusible link block assembly.
- v. Remove the bolt and disconnect the engine wire harness ground.
- vi. Remove the 3 bolts and 3 engine wire harness clamp brackets.
- vii. Remove the 4 nuts and disconnect the engine wire harness.



viii. Disconnect the camshaft timing control valve connector.

ix. Disconnect the 4 ignition coil connectors.

x. Disconnect the 2 VVT sensor connectors.

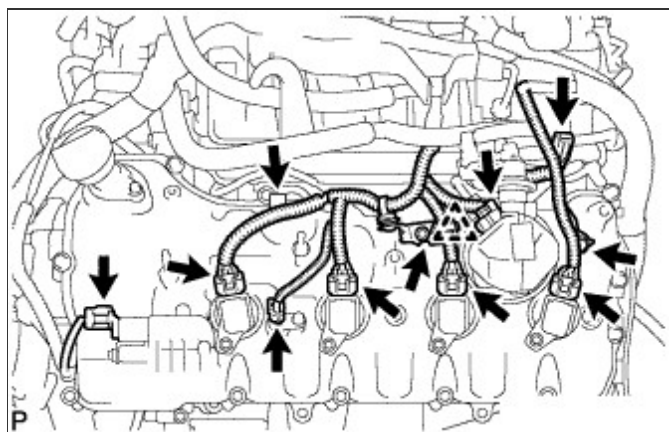
xi. Disconnect the fuel pump connector (for high pressure).

xii. Disconnect the No. 8 engine wire connector.

xiii. Remove the 2 bolts and disconnect the clamp and 2 clamp brackets.

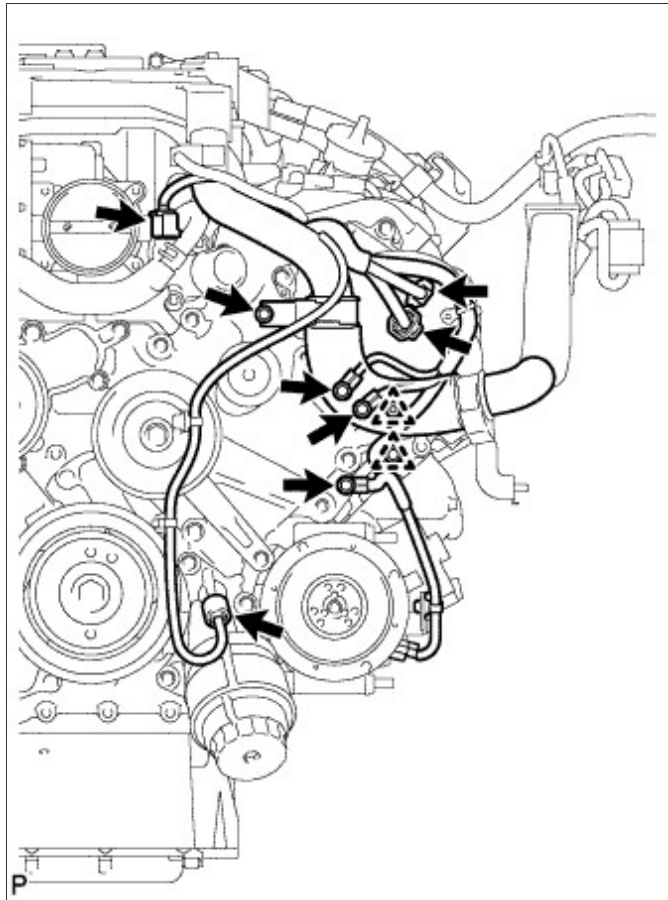
xiv. Disconnect the engine coolant temperature sensor connector.

xv. Disconnect the oil pressure sensor

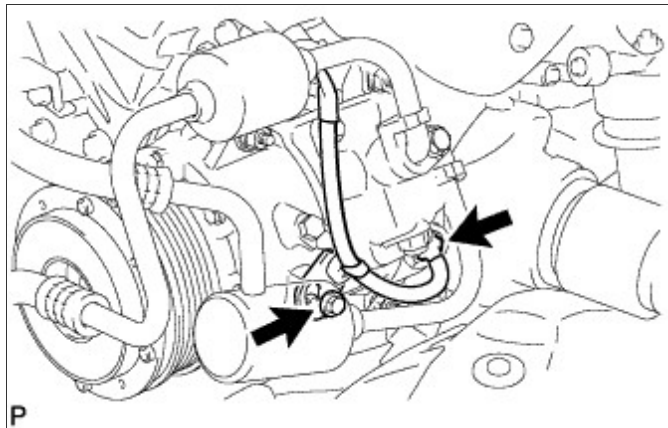


connector.

- xvi.** Disconnect the 2 camshaft timing control motor connectors (for Bank 1).
- xvii.** Remove the 3 bolts and disconnect the 2 clamps and 3 ground wires.
- xviii.** Remove the bolt and clamp bracket.



- xix.** Remove the bolt and disconnect the wire harness bracket.
- xx.** Disconnect the cooler compressor connector.



16. REMOVE INJECTOR DRIVER

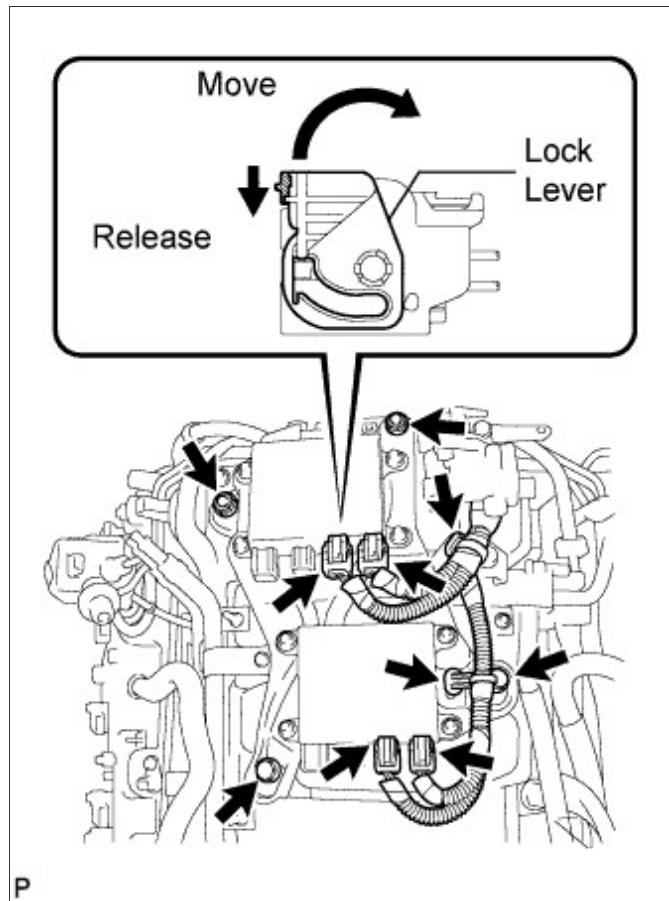
- a.** Disconnect the 4 injector driver connectors.

HINT:

To disconnect the injector driver connectors, push the claw downward and move the lock lever to release the lock.

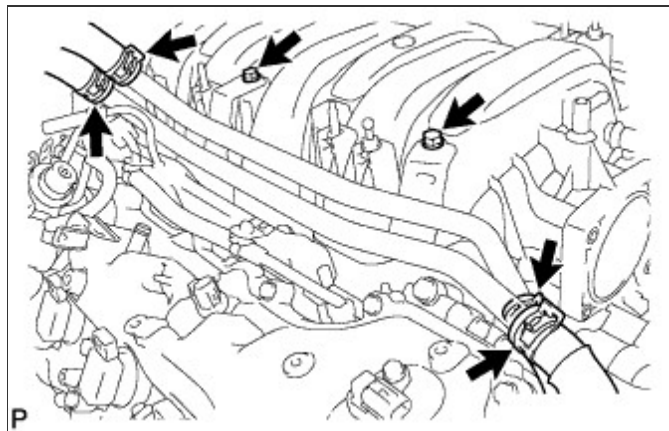
- b.** Disconnect the 2 clamps from the injector driver.

- c. Remove the 2 bolts, 2 nuts and injector driver from the intake manifold.



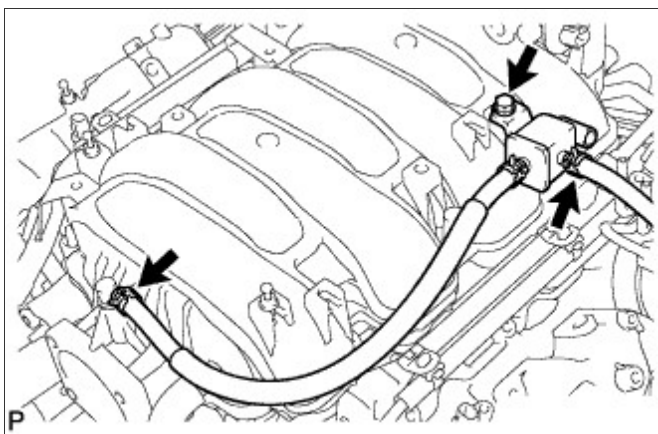
17. REMOVE WATER BY-PASS PIPE SUB-ASSEMBLY

- a. Slide the 4 clamps and disconnect the heater water inlet hose, heater water outlet hose, water inlet hose, and No. 3 water by-pass hose from the water by-pass pipe.
- b. Remove the 2 bolts and water by-pass pipe.



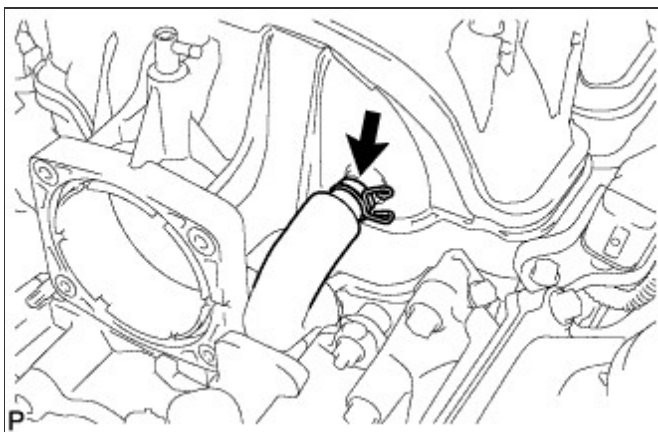
18. REMOVE PURGE VSV

- a. Disconnect the fuel vapor feed hose and No. 2 fuel vapor feed hose.
- b. Remove the bolt and purge VSV.



19. REMOVE INTAKE MANIFOLD

- a. Disconnect the PCV hose from the intake manifold.



- b. Remove the 8 bolts, 2 nuts and intake manifold.
- c. Remove the 2 gaskets from the intake manifold.

