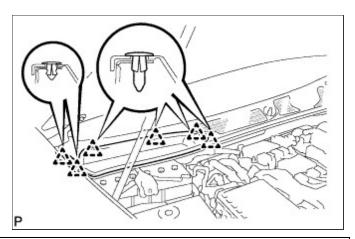
1UR-FSE ENGINE CONTROL SYSTEM > AIR FUEL RATIO SENSOR (for 2WD) > REMOVAL

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:

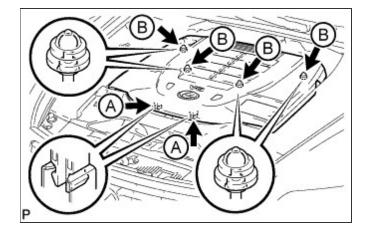
After the engine switch is turned off, the HDD navigation system requires approximately 6 minutes to record various types of memory and settings. As a result, after turning the engine switch off, wait 6 minutes or more before disconnecting the cable from the negative (-) battery terminal.

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:

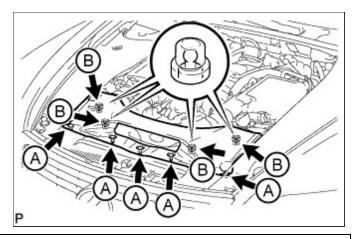
- The V-bank cover may be damaged if its front and rear are lifted at the same time.
- When detaching the clips labeled A, be sure to slide the cover toward the front of the vehicle.



4. REMOVE AIR CLEANER INLET COVER

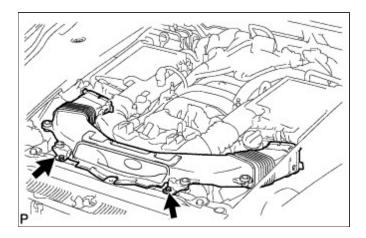
a. Remove the 5 clips A.

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

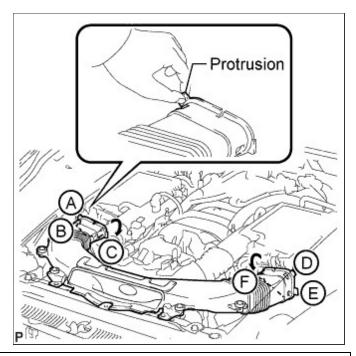


5. REMOVE NO. 1 AIR CLEANER INLET

a. Remove the 2 bolts.

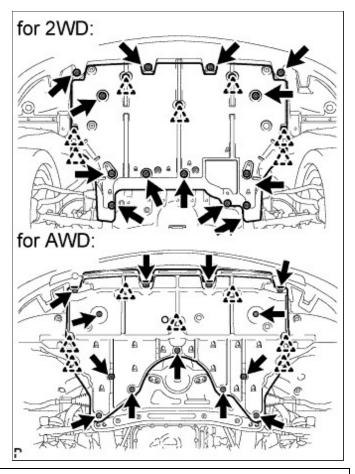


- b. Hold the air cleaner inlet by the protrusions A and B, and detach the connections.
- **c.** Rotate the No. 1 air cleaner inlet as shown in the illustration to detach the protrusion C.
- **d.** Hold the air cleaner inlet by the protrusions D and E, and detach the connections.
- **e.** Rotate the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



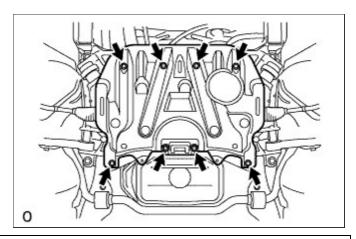
6. REMOVE NO. 1 ENGINE UNDER COVER

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



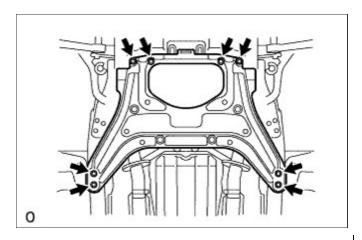
7. REMOVE FRONT SUSPENSION MEMBER PROTECTOR LOWER

a. Remove the 8 bolts and suspension member protector.



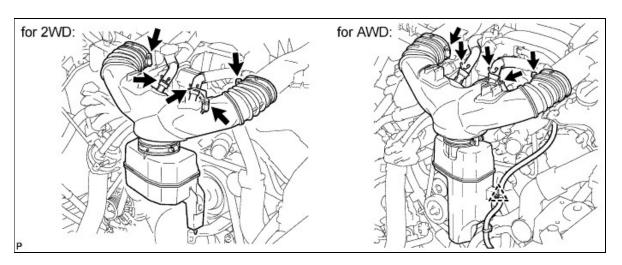
8. REMOVE NO. 2 ENGINE UNDER COVER

a. Remove the 8 bolts and under cover.



9. REMOVE INTAKE AIR CONNECTOR PIPE

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



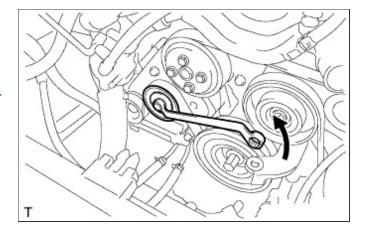
- for AWD: Using a clip remover, detach the wire harness clamp.
- **c.** Loosen the 3 hose clamps, and remove the intake air connector pipe.

10. REMOVE V-RIBBED BELT

a. Rotate the tensioner pulley counterclockwise to loosen the belt tension.

HINT:

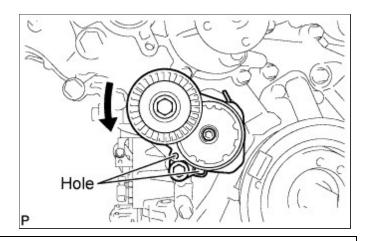
The pulley bolt for the belt tensioner has a left-handed thread.



i. While turning the belt tensioner

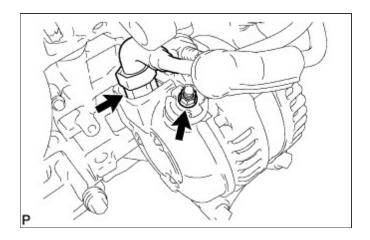
counterclockwise, align the holes. Insert a bar of ϕ 5 mm (0.197 in.) into the holes to fix the belt tensioner in place.

b. Remove the V-ribbed belt.

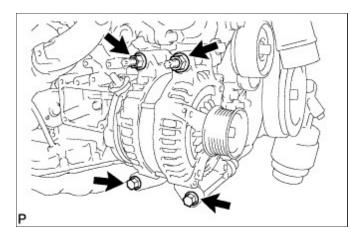


11. REMOVE GENERATOR ASSEMBLY

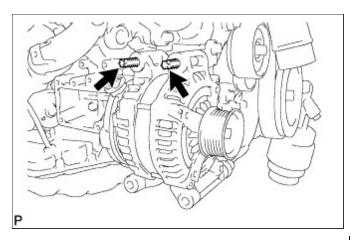
- **a.** Remove the nut, and disconnect the harness from the +B terminal.
- **b.** Disconnect the generator connector.



c. Remove the 2 bolts and 2 nuts.



d. Using an E8 "TORX" socket wrench, remove the 2 stud bolts and generator.

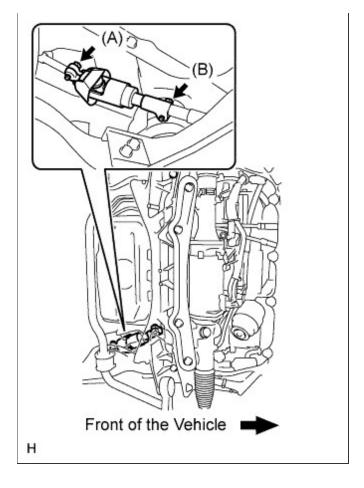


12. REMOVE FRONT EXHAUST PIPE ASSEMBLY

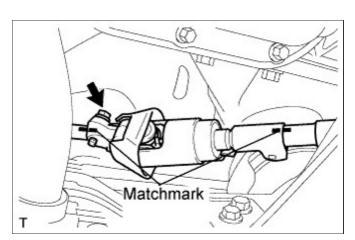
- Remove the front exhaust pipe (Refer to <u>1UR-FSE EXHAUST > EXHAUST PIPE > REMOVAL</u> (200909)).
- **a.** Loosen bolt (A) and remove bolt (B), and then slide the steering sliding yoke with shaft.

NOTICE:

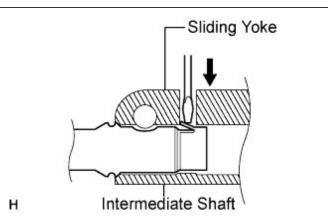
- Do not remove bolt (A).
- Do not separate the steering sliding yoke with shaft from the power steering gear.



b. Put matchmarks on the steering sliding yoke with shaft, No. 2 steering intermediate shaft and steering link.



- **c.** Remove the bolt and steering sliding yoke.
 - i. Remove the bolt.
 - ii. Insert a screwdriver or equivalent into the hole in the yoke. Hold down the claw of the intermediate shaft and remove the steering sliding yoke from the intermediate shaft.



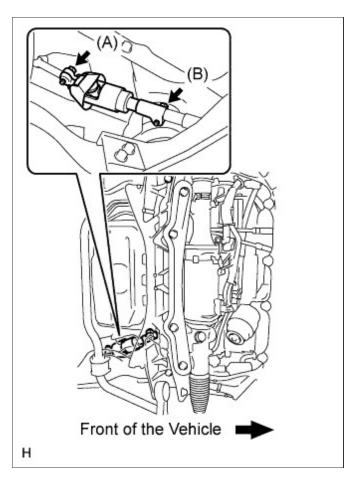
HINT:

Even if the claw is damaged, the intermediate shaft does not have to be replaced.

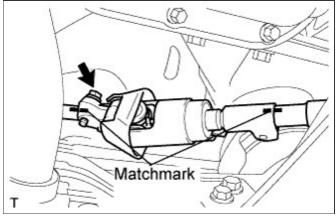
- **d.** Separate the steering sliding yoke with shaft from the steering link.
- a. Loosen bolt (A) and remove bolt (B), and then slide the steering sliding yoke with shaft.

NOTICE:

- Do not remove bolt (A).
- Do not separate the steering sliding yoke with shaft from the power steering gear.



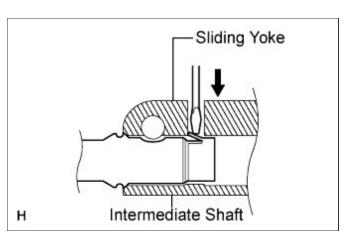
b. Put matchmarks on the steering sliding yoke with shaft, No. 2 steering intermediate shaft and steering link.



- **c.** Remove the bolt and steering sliding yoke.
 - i. Remove the bolt.
 - ii. Insert a screwdriver or equivalent into the hole in the yoke. Hold down the claw of the intermediate shaft and remove the steering sliding yoke from the intermediate shaft.

HINT:

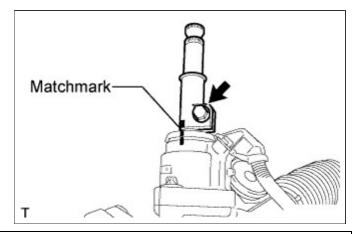
Even if the claw is damaged, the intermediate shaft does not have to be replaced.



d. Separate the steering sliding yoke with shaft from the steering link.

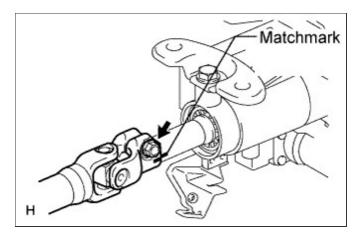
15. REMOVE STEERING INTERMEDIATE SHAFT (w/o VGRS)

- Put the matchmarks on the intermediate shaft and power steering link.
- **b.** Remove the bolt and intermediate shaft from the power steering link.

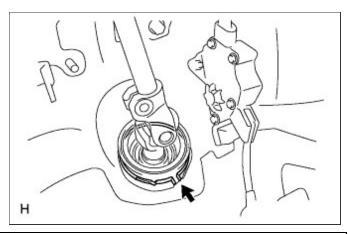


16. REMOVE NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY (w/ VGRS)

- Put matchmarks on the No. 2 steering intermediate shaft and steering column.
- **b.** Remove the bolt.

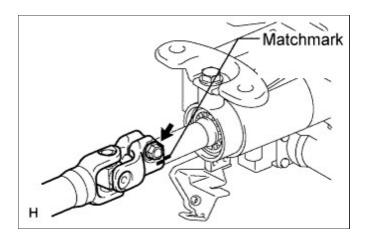


c. Remove the clamp and No. 2 steering intermediate shaft.

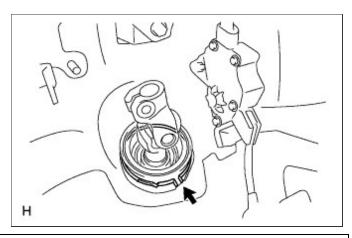


17. REMOVE NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY (w/o VGRS)

a. Put matchmarks on the No. 2 steering intermediate shaft and the steering column. b. Remove the bolt.

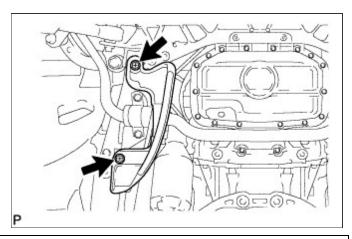


c. Remove the clamp and No. 2 steering intermediate shaft.



18. REMOVE ENGINE UNDER COVER REAR LH

a. Remove the 2 screws and the engine under cover rear LH.



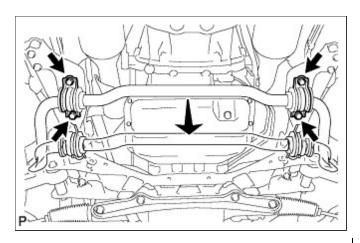
19. REMOVE ENGINE UNDER COVER REAR RH

HINT:

Remove the RH side following the same procedures as the LH side.

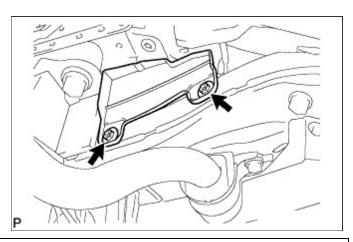
20. REMOVE FRONT STABILIZER BAR

a. Remove the 4 bolts and disconnect the stabilizer bar from the rear brace.



21. REMOVE ENGINE UNDER COVER SUB-ASSEMBLY LH

a. Remove the 2 screws and the engine under cover sub-assembly LH from the front suspension member reinforcement LH.



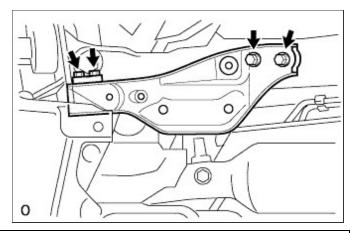
22. REMOVE ENGINE UNDER COVER SUB-ASSEMBLY RH

HINT:

Remove the RH side following the same procedures as the LH side.

23. REMOVE FRONT SUSPENSION MEMBER REINFORCEMENT LH

a. Remove the 4 bolts and front suspension member reinforcement LH from the vehicle.



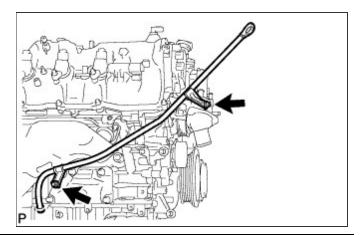
24. REMOVE FRONT SUSPENSION MEMBER REINFORCEMENT RH

HINT:

Remove the RH side following the same procedures as the LH side.

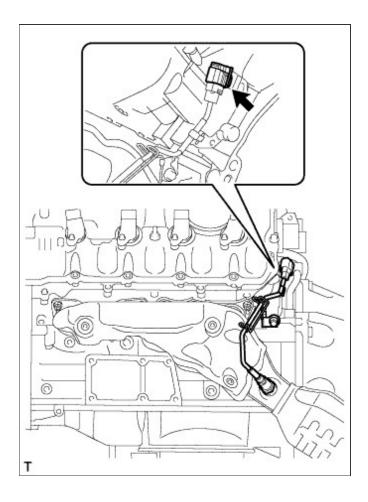
25. REMOVE OIL DIPSTICK GUIDE

- a. Remove the dipstick.
- **b.** Remove the 2 bolts and dipstick guide.

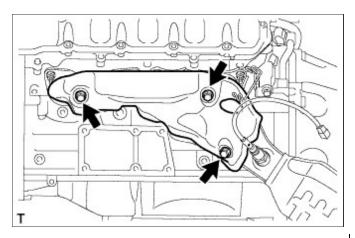


26. REMOVE NO. 2 EXHAUST MANIFOLD HEAT INSULATOR

a. Disconnect the air fuel ratio sensor connector.

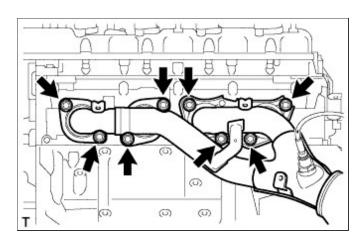


b. Remove the 3 bolts and No. 2 exhaust manifold heat insulator.

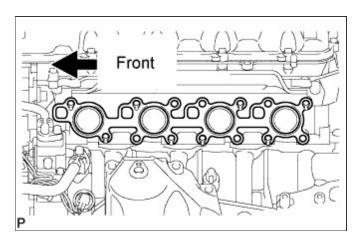


27. REMOVE EXHAUST MANIFOLD SUB-ASSEMBLY LH

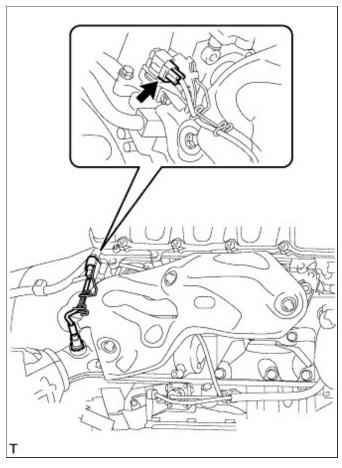
a. Remove the 8 nuts and exhaust manifold LH.



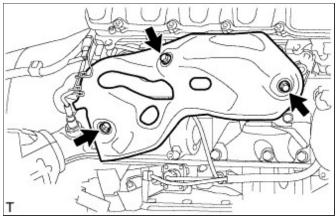
b. Remove the gasket.



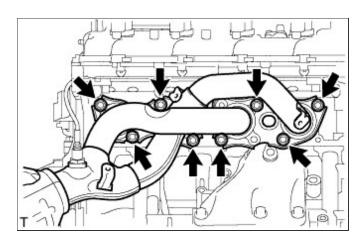
a. Disconnect the air fuel ratio sensor connector.



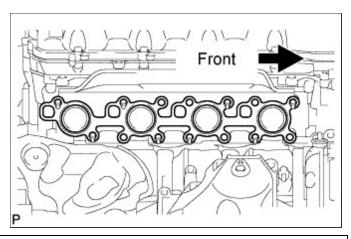
b. Remove the 3 bolts and No. 1 exhaust manifold heat insulator.



a. Remove the 8 nuts and exhaust manifold RH.

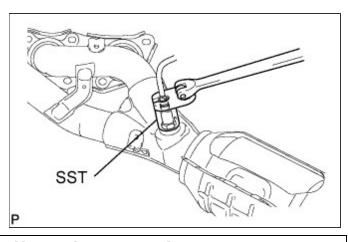


b. Remove the gasket.



30. REMOVE AIR FUEL RATIO SENSOR (for Bank 1 Sensor 1)

a. Using SST, remove the air fuel ratio sensor from the exhaust manifold LH. 09224-00010



31. REMOVE AIR FUEL RATIO SENSOR (for Bank 2 Sensor 1)

a. Using SST, remove the air fuel ratio sensor from the exhaust manifold RH. SST

09224-00010

