

REMOVAL

1. REMOVE LEVEL GAUGE

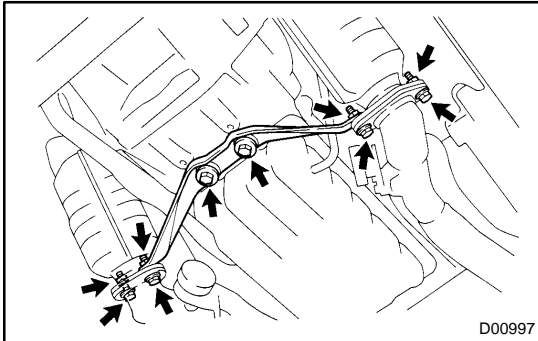
2. RAISE VEHICLE

NOTICE:

Make sure that the vehicle is securely supported.

3. REMOVE ENGINE UNDER COVER

4. REMOVE FRONT SUSPENSION PROTECTOR



5. REMOVE FRONT EXHAUST PIPE

(a) Disconnect the 2 heated oxygen sensors.

Torque: 44 N·m (450 kgf-cm, 32 ft-lbf)

HINT:

At the time of installation, please refer to the following items.

- Before installing the heated oxygen sensor, twist the sensor wire counterclockwise 3 and 1/2 turns.
- After installing the heated oxygen sensor wire is not twisted. If it is twisted, remove the heated oxygen sensor and reinstall it.

(b) Remove the 4 bolts, nuts and 2 gaskets from the LH and RH front TWC.

Torque: 43 N·m (440 kgf-cm, 32 ft-lbf)

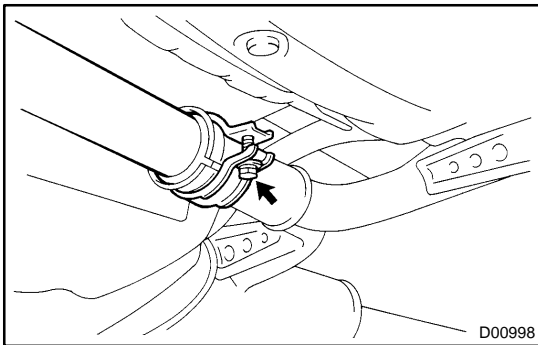
HINT:

At the time of installation, please refer to the following item.

Replace the used nuts and gaskets with new ones.

(c) Remove the 2 bolts and support bracket.

Torque: 43 N·m (440 kgf-cm, 32 ft-lbf)



(d) Remove the pipe clamp set bolt and gasket.

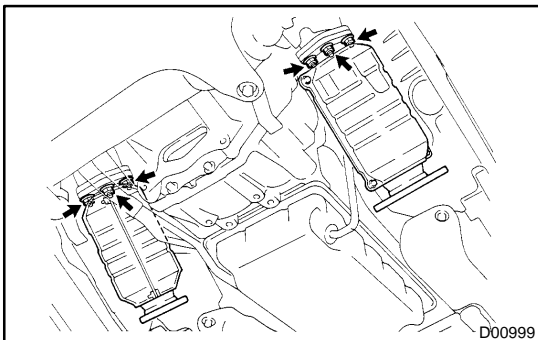
(See page [EM-120](#))

HINT:

At the time of installation, please refer to the following item.

Replace the used gasket with a new one.

(e) Remove the front exhaust pipe.



6. REMOVE LH AND RH FRONT TWC

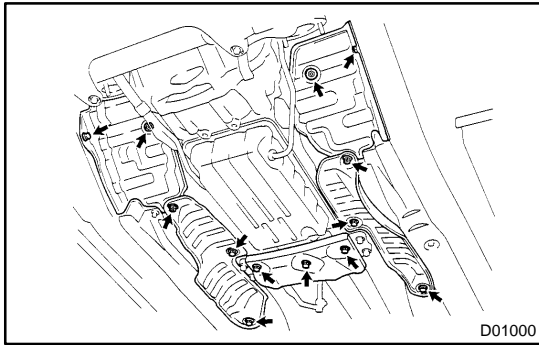
Remove the 6 nuts, 2 gaskets, LH and RH front TWC.

Torque: 62 N·m (630 kgf-cm, 46 ft-lbf)

HINT:

At the time of installation, please refer to the following item.

Replace the used nuts and gaskets with new ones.



7. REMOVE HEAT INSULATOR AND ENGINE REAR MOUNTING MEMBER BRACKET PLATE

- (a) Remove the 4 nuts, 6 bolts and heat insulators.
- (b) Remove the 3 bolts and bracket plate.

Torque: 5.4 N·m (55 kgf-cm, 48 in.-lbf)

8. REMOVE BOLT AND FILLER PIPE

HINT:

At the time of installation, please refer to the following item.
Replace the used O-ring with a new one.

9. REMOVE HEAT INSULATOR

Remove the 6 bolts and heat insulator.

Torque: 5.4 N·m (55 kgf-cm, 48 in.-lbf)

10. REMOVE CROSSMEMBER BRACE

- (a) Remove the 4 bolts and front center floor crossmember brace.

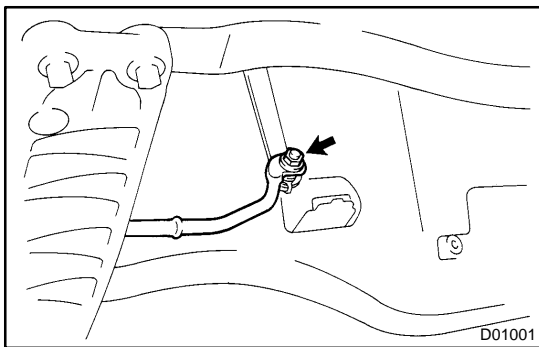
Torque: 13 N·m (130 kgf-cm, 9 ft-lbf)

- (b) Remove the 4 nuts and rear center floor crossmember brace.

Torque: 13 N·m (130 kgf-cm, 9 ft-lbf)

11. REMOVE PROPELLER SHAFT

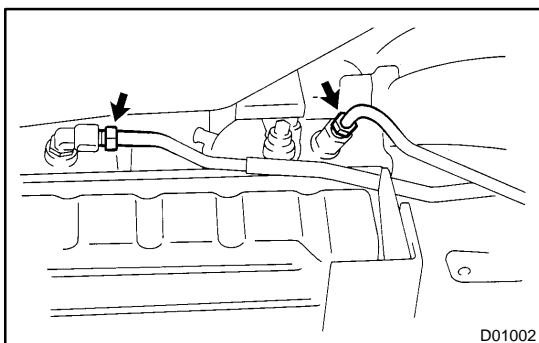
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12. REMOVE SHIFT CONTROL ROD

Remove the nut and disconnect the rod.

Torque: 13 N·m (130 kgf-cm, 9 ft-lbf)



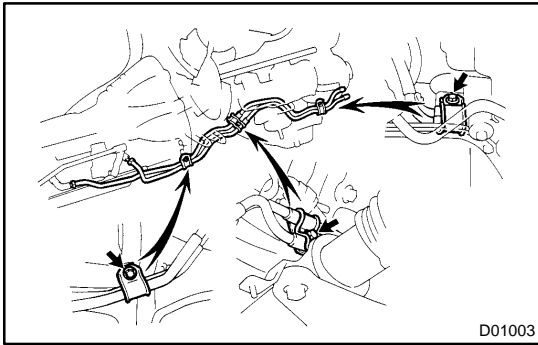
13. DISCONNECT OIL COOLER PIPE

- (a) Loosen the 2 union nuts from the transmission.

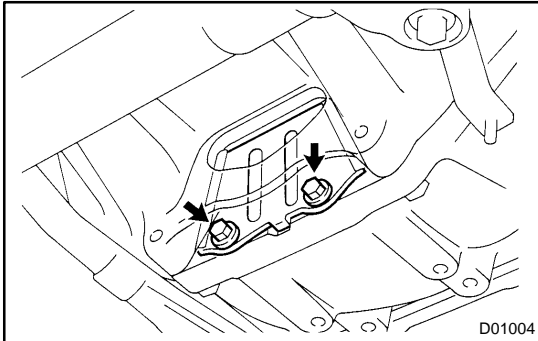
Torque: 44 N·m (450 kgf-cm, 32 ft-lbf)

NOTICE:

Be careful no to damage the oil cooler pipe.

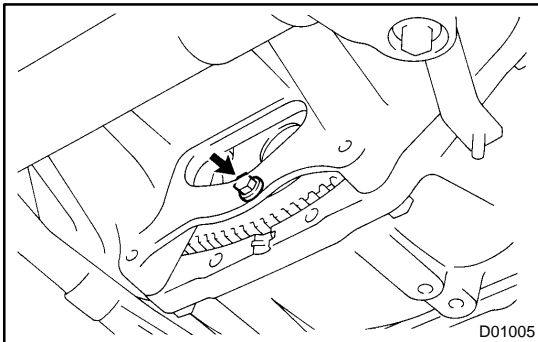


- (b) Disconnect the 3 set bolts of the clamp.
Torque: 4.9 N·m (50 kgf-cm, 43 in.-lbf)
- (c) Disconnect the 2 oil cooler pipes from the transmission.



14. REMOVE TORQUE CONVERTER CLUTCH MOUNTING BOLT

- (a) Remove the 2 bolts and flywheel housing under cover.
Torque: 18 N·m (185 kgf-cm, 13 ft-lbf)

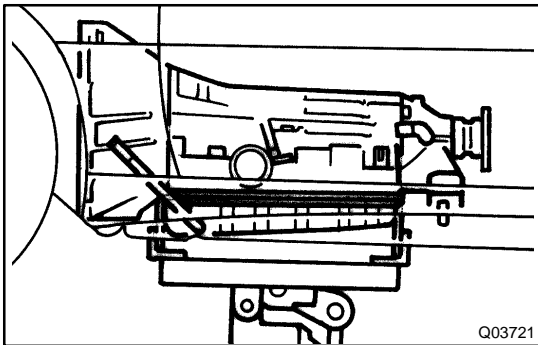


- (b) Turn the crankshaft to gain access to each bolt.
- (c) Hold the crankshaft pulley nut with a wrench and remove the 6 bolts.

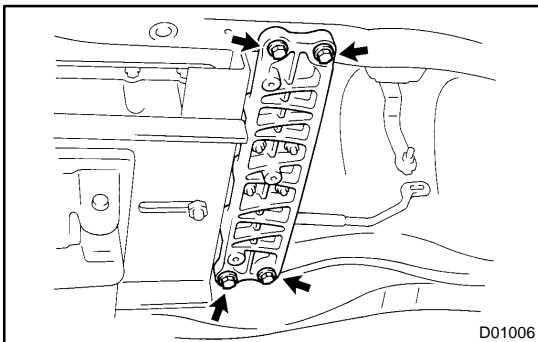
Torque: 48 N·m (490 kgf-cm, 35 ft-lbf)

HINT:

At the time of installation, please refer to the following item.
First install black colored bolt and then the 5 other bolts.

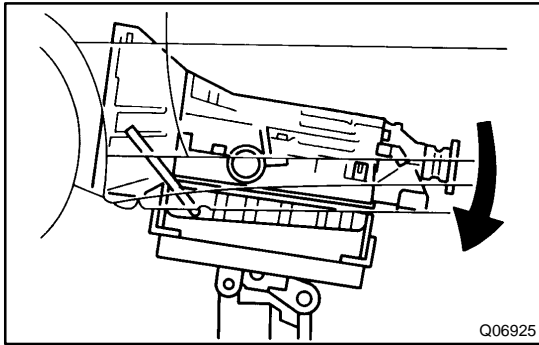


15. SUPPORT TRANSMISSION WITH JACK



16. REMOVE ENGINE REAR MOUNTING 4 SET BOLTS

Torque: 26 N·m (270 kgf-cm, 20 ft-lbf)



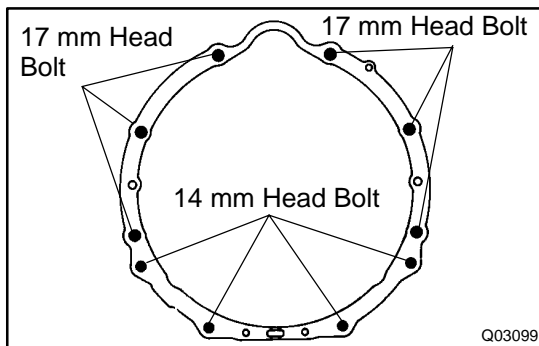
17. DISCONNECT CONNECTORS AND WIRE HARNESS

- (a) Tilt down the transmission.

NOTICE:

Take care so that the cooling fan does not come in contact with the fan shroud.

- (b) Disconnect the following connectors:
- (1) O/D direct clutch speed sensor connector
 - (2) Vehicle speed sensor connector
 - (3) Park/neutral position switch connector
 - (4) Solenoid connector
- (c) Disconnect the wire harness from the clamp on transmission.



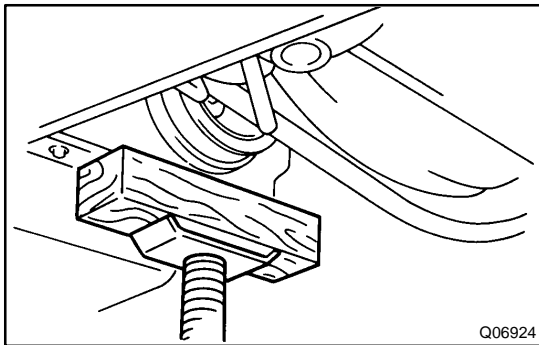
18. REMOVE TRANSMISSION

Remove the 10 bolts and transmission.

Torque:

14 mm head bolt: 37 N·m (380 kgf·cm, 27 ft·lbf)

17 mm head bolt: 72 N·m (730 kgf·cm, 53 ft·lbf)



HINT:

At the time of installation, please refer to the following item.
Lift the engine front side.