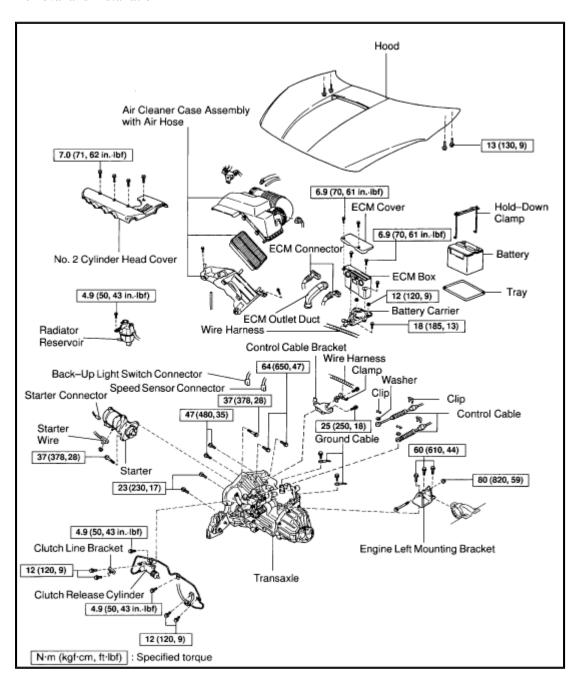
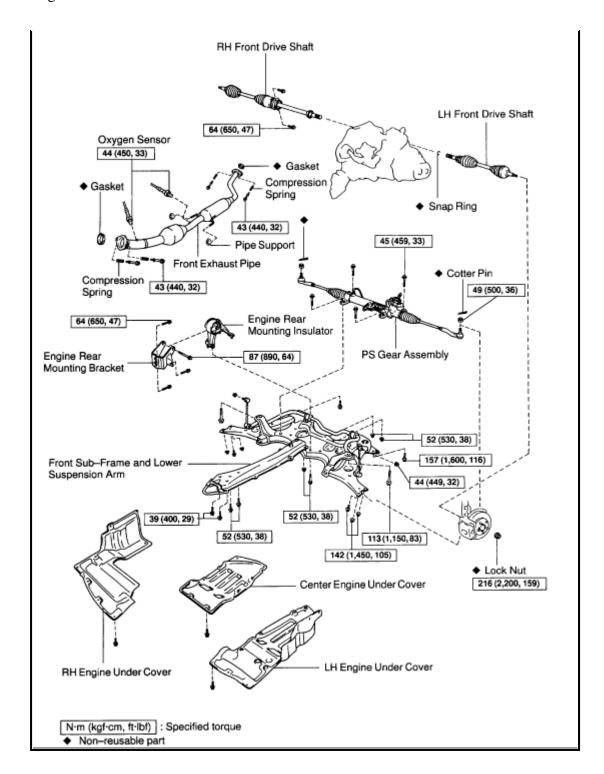
### **Removal and Installation**







#### **REMOVAL**

### 1. REMOVE HOOD **HINT:**

- o At the time of installation, please refer to the following item.
- o Adjust the hood.
- 2. REMOVE No.2 CYLINDER HEAD COVER Remove the 4 bolts and No.2 cylinder head cover. Torque: 7.0 Nm (71

kgf-cm, 62 inch lbs.)

- 3. DISCONNECT RADIATOR RESERVOIR Remove the bolt and disconnect the radiator reservoir. Torque: **4.9 Nm** (**50 kgf-cm**, **43 inch lbs.**)
- 4. REMOVE BATTERY
- 5. REMOVE AIR CLEANER CASE ASSEMBLY WITH AIR HOSE AND ECM BOX
- a) Remove the 2 bolts and ECM cover. Torque: **6.9 Nm (70 kgf-cm, 61 inch lbs.)**

b) Disconnect the ECM connectors from the ECM.

c) Remove the ECM outlet duct.

d) Remove the air cleaner <u>case</u> assembly with the air hose.

e) Remove the 3 bolts and ECM box.

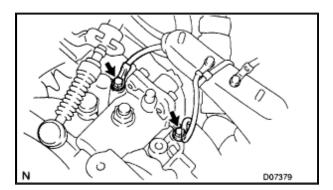
Torque: **6.9 Nm** (**70 kgf-cm**, **61 inch lbs.**)

f) Disconnect the wire harness, and remove the 2 nuts, bolt and battery carrier.

Torque:

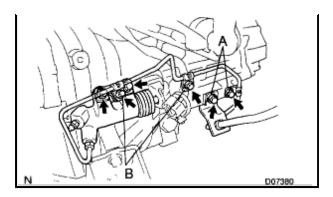
Bolt: 18 Nm (185 kgf-cm, 13 ft. lbs.) Nut: 12 Nm (120 kgf-cm, 9 ft. lbs.)

- 6. DISCONNECT CONTROL CABLE
- a) Remove the 2 clips and washers.
- b) Remove the 2 clips and disconnect the control cables from the transaxle.



- 7. DISCONNECT GROUND CABLE Remove the 2 set bolts of the 2 ground cables from the transaxle.
- 8. DISCONNECT SPEED SENSOR AND BACK-UP LIGHT SWITCH CONNECTORS





# 9. DISCONNECT <u>CLUTCH RELEASE CYLINDER</u>

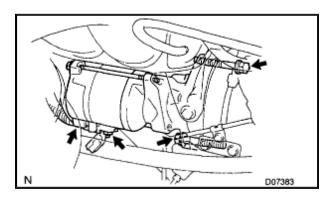
a) Remove the 4 set bolts of the clutch line.

Torque:

Bolt A: 12 Nm (120 kgf-cm, 9 ft. lbs.) Bolt B: 4.9 Nm (50 kgf-cm, 43 inch lbs.)

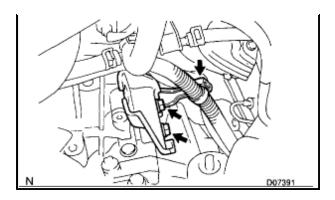
b) Remove the 2 set bolts of the <u>clutch release cylinder</u> and clutch line bracket.

Torque: 12 Nm (120 kgf-cm, 9 ft. lbs.)



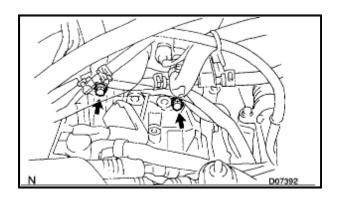
### 10. REMOVE STARTER

- a) Disconnect the starter connector.
- b) Remove the nut and disconnect the starter wire.
- c) Remove the 2 bolts and starter. Torque:37 Nm (378 kgf-cm, 28 ft. lbs.)

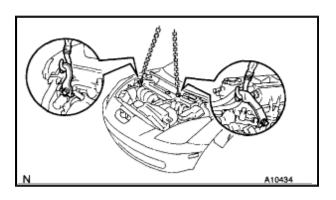


# 11. REMOVE <u>CONTROL CABLE</u> BRACKET

- a) Disconnect the wire harness from the clamp.
- b) Remove the 2 bolts, clamp and <u>control cable</u> bracket from the transaxle. Torque:**25 Nm** (**250 kgf-cm**, **18 ft. lbs.**)



12. REMOVE 2 TRANSAXLE UPPER SIDE MOUNTING BOLTS Torque: 64 Nm (650 kgf-cm, 47 ft. lbs.)



### 13. ATTACH ENGINE SLING DEVICE TO ENGINE HANGER

a) Disconnect the 2 PCV hoses.

b) Install the No.1 and No.2 engine hangers in the correct direction.

Parts No.:

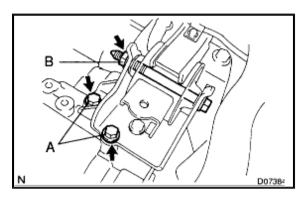
No.1 engine hanger: 12281-88600 No.2 engine hanger: 12282-88600

Bolt: 91512-61020

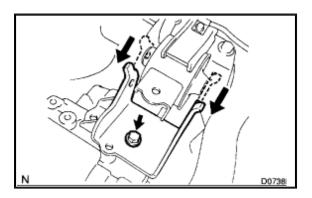
Torque: 38 Nm (387 kgf-cm, 28 ft. lbs.)

c) Attach the engine chain hoist to the engine hangers.

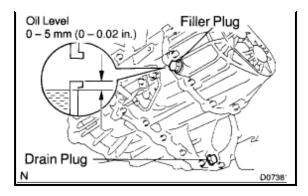
CAUTION: Do not attempt to hang the engine by hooking the chain to any other part.



14. REMOVE ENGINE LEFT MOUNTING BRACKET 3 SET BOLTS AND NUT Torque: Bolt A: 60 Nm (610 kgf-cm, 44 ft. lbs.) Nut B: 80 Nm (820 kgf-cm, 59 ft. lbs.)



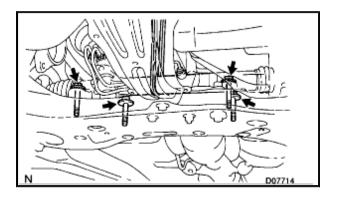
- 15. REMOVE ENGINE LEFT MOUNTING BRACKET Lower the transaxle side, and remove the bolt and engine left mounting bracket. Torque: **60 Nm (610 kgf-cm, 44 ft. lbs.)**
- 16. RAISE VEHICLE **CAUTION**: Make sure that the vehicle is securely supported.
- 17. REMOVE CENTER, LH AND RH ENGINE UNDER COVERS



- 18. DRAIN TRANSAXLE OIL Oil grade: API GL-4 or GL-5 Viscosity: SAE 75W-90 Capacity: 2.3 liters (2.4 US qts, 2.0 Imp. qts) Torque: 39 Nm (400 kgf-cm, 29 ft. lbs.)
- 19. REMOVE LH AND RH FRONT DRIVE SHAFTS
- 20. REMOVE FRONT EXHAUST PIPE
- a) Disconnect the 2 heated oxygen sensors. Torque: **44 Nm (450 kgf-cm, 33 ft. lbs.)**

#### 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, check that the sensor wire is not twisted. If it is twisted, remove the heated oxygen sensor and reinstall it.
- b) Remove the 4 bolts, compression springs and 2 gaskets. Torque: **43 Nm (440 kgf-cm, 32 ft. lbs.)**
- c) Disconnect the front exhaust pipe from the pipe supports and remove it.

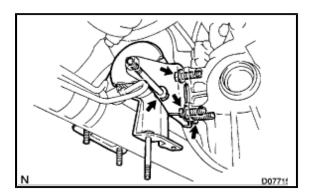


#### 21. REMOVE FRONT SUB-FRAME AND LOWER SUSPENSION ARM

a) Tie the PS gear assembly to the proper position with a code or an equivalent to suspend the assembly securely.

b) Remove the 4 set bolts of the PS gear assembly. Torque: **45 Nm (459 kgf-cm, 33 ft. lbs.)** 

- c) Disconnect the LH and RH stabilizer bar links from the shock absorber.
- d) Remove the front sub-frame and lower suspension arm.



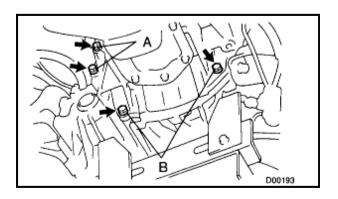
#### 22. REMOVE ENGINE REAR MOUNTING INSULATOR AND BRACKET

a) Remove the bolt and engine rear mounting insulator. Torque: 87 Nm (890 kgf-cm, 64 ft. lbs.)

b) Remove the 3 bolts and engine rear mounting bracket.

Torque: 64 Nm (650 kgf-cm, 47 ft. lbs.)

23. JACK UP TRANSAXLE SLIGHTLY Using a transmission jack, support the transaxle.



- 24. REMOVE 4 TRANSAXLE LOWER SIDE MOUNTING BOLTS Torque: Bolt A: 47 Nm (480 kgf-cm, 35 ft. lbs.) Bolt B:23 Nm (230 kgf-cm, 17 ft. lbs.)
- 25. REMOVE TRANSAXLE Lower the engine left side and remove the transaxle from the engine. **HINT:** .
  - o At the time of installation, please refer to the following items.
  - o Align the <u>input shaft</u> with the <u>clutch disc</u> and install the transaxle to the engine.
  - o Temporarily tighten the transaxle mounting bolts.

# INSTALLATION

Installation is in the reverse order of removal.

**HINT:** After installation, check and inspect items as follows.

- Front wheel alignment.Do the road test.