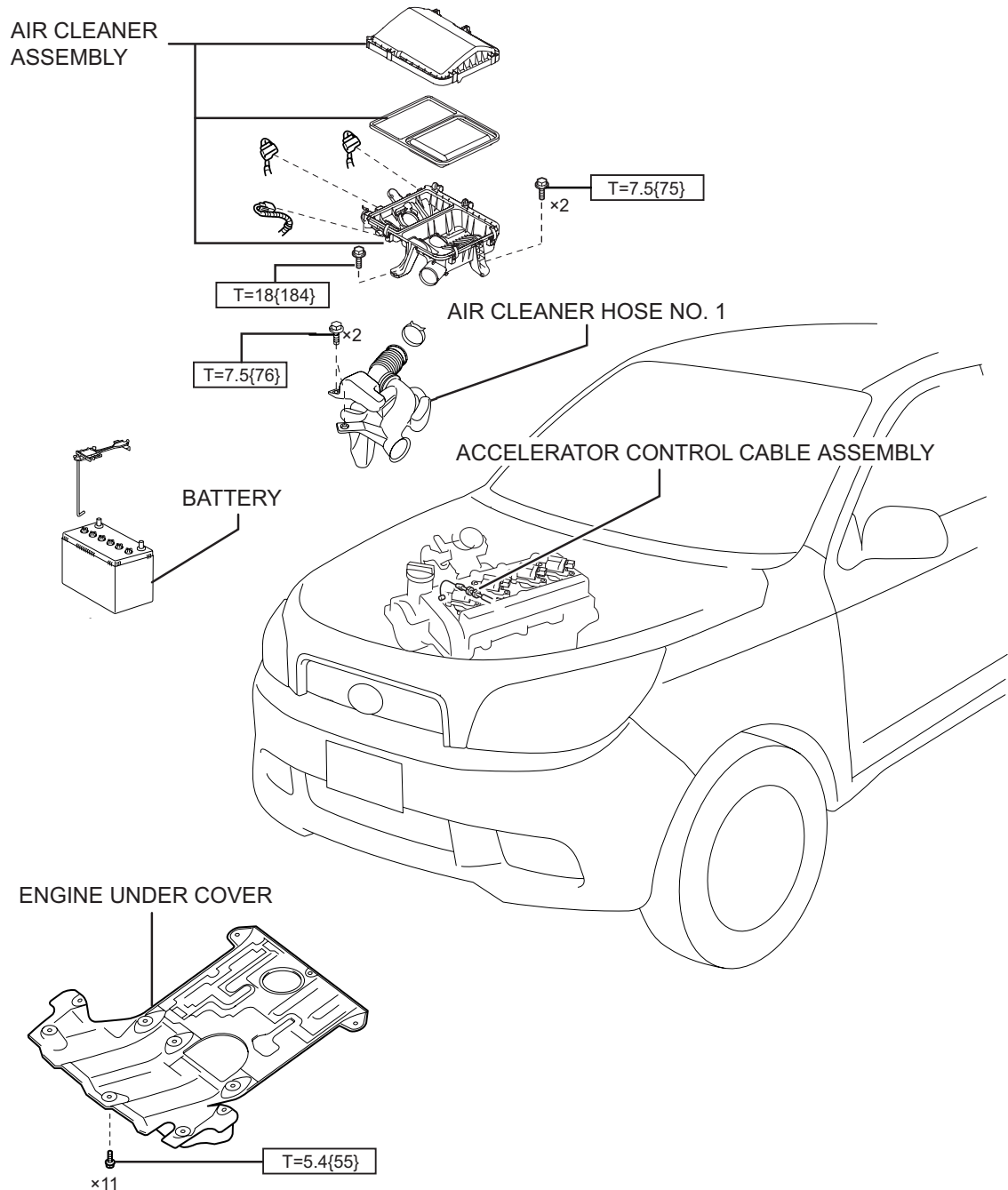


TRANSMISSION UNIT ASSEMBLY (MTM)

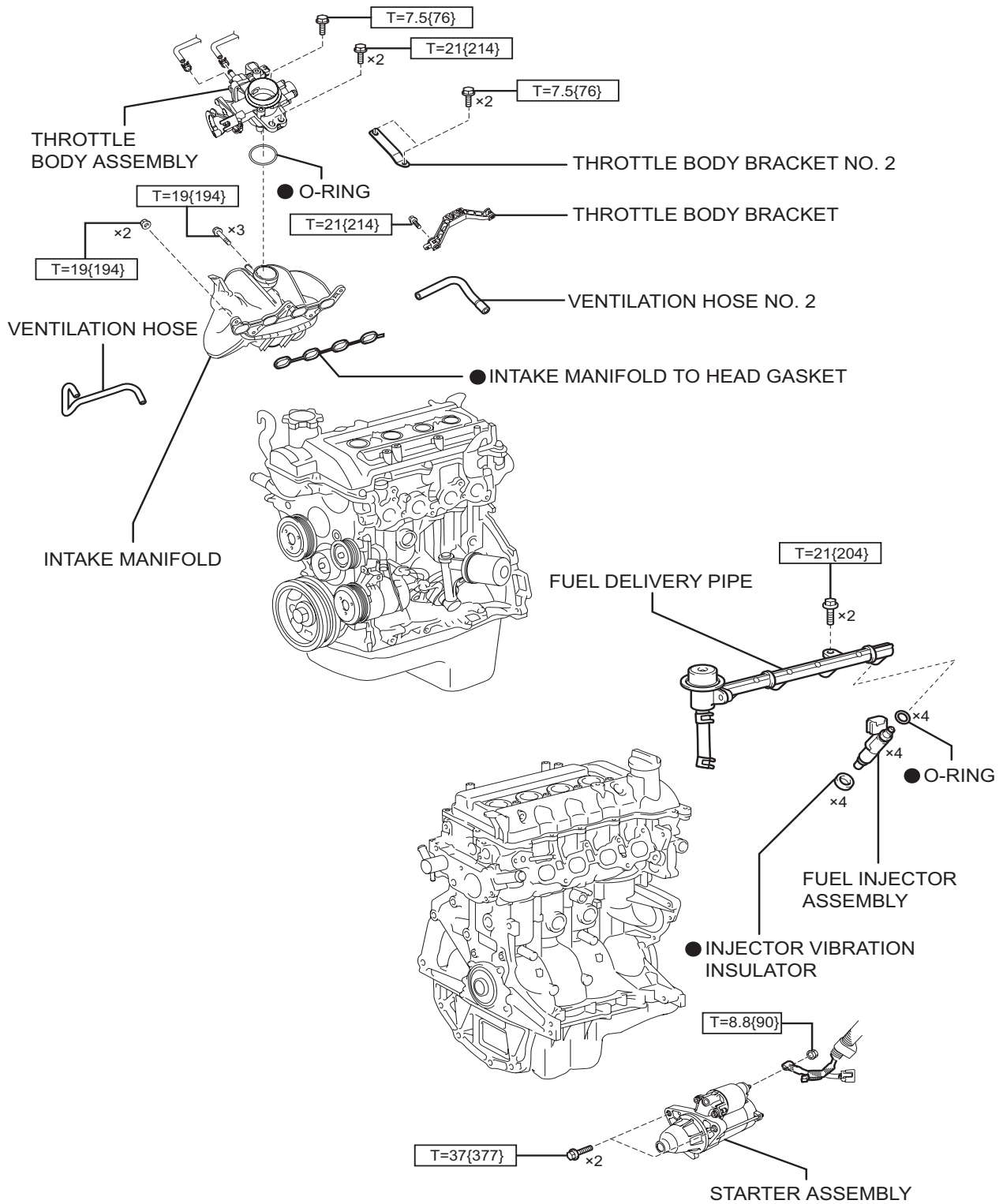
COMPONENTS



.....TIGHTENING TORQUE [N*m{kgf*cm}]

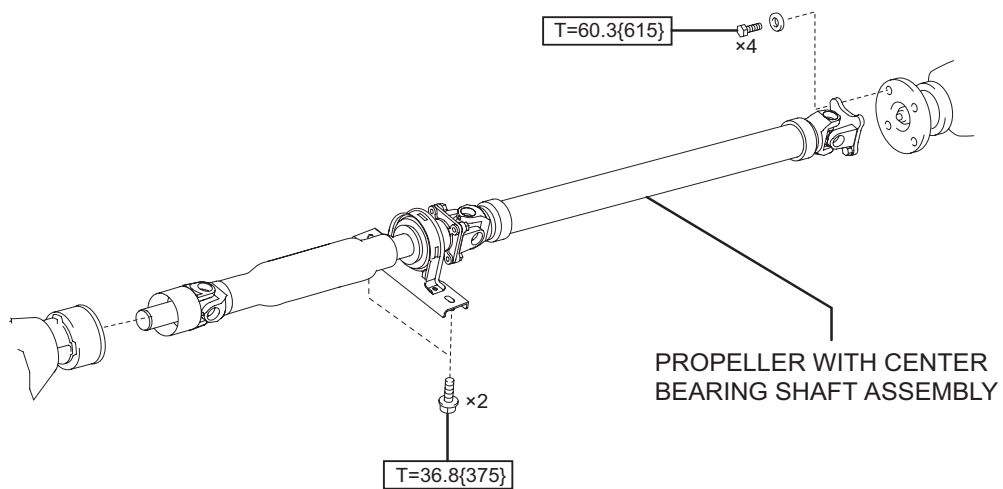
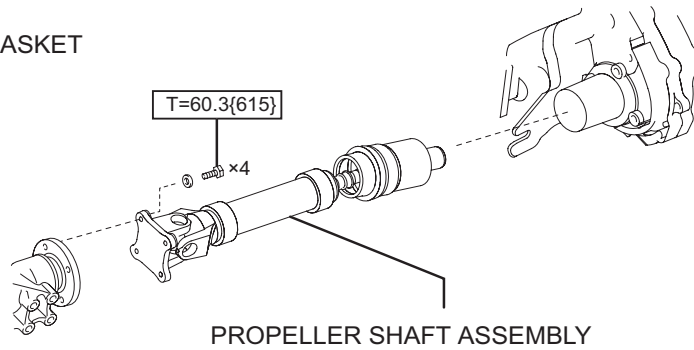
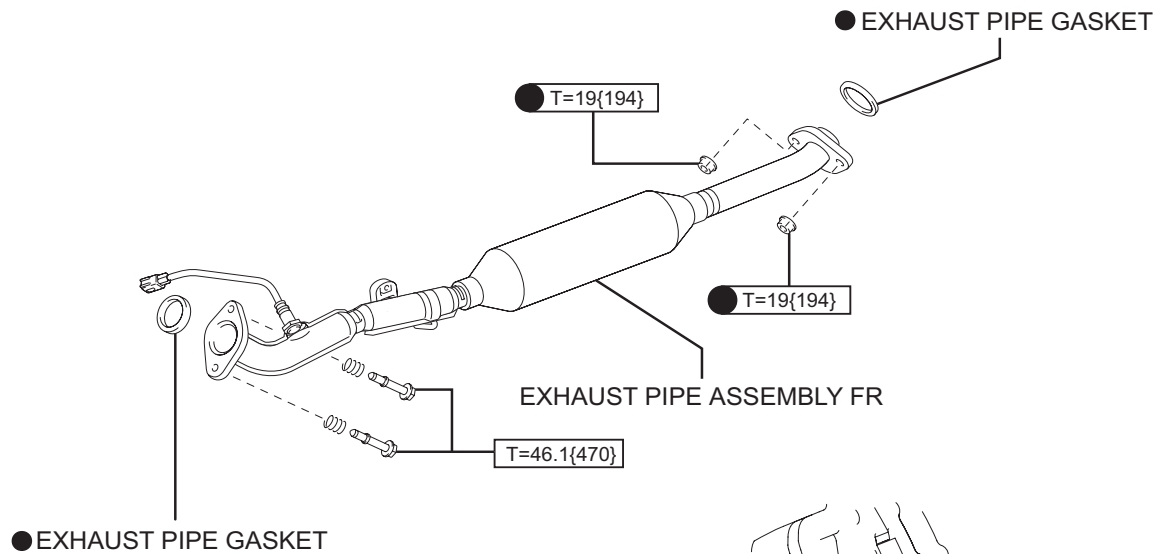
C141337J01





 TIGHTENING TORQUE [N*m{kgf*cm}]

..... NON-REUSEABLE PART

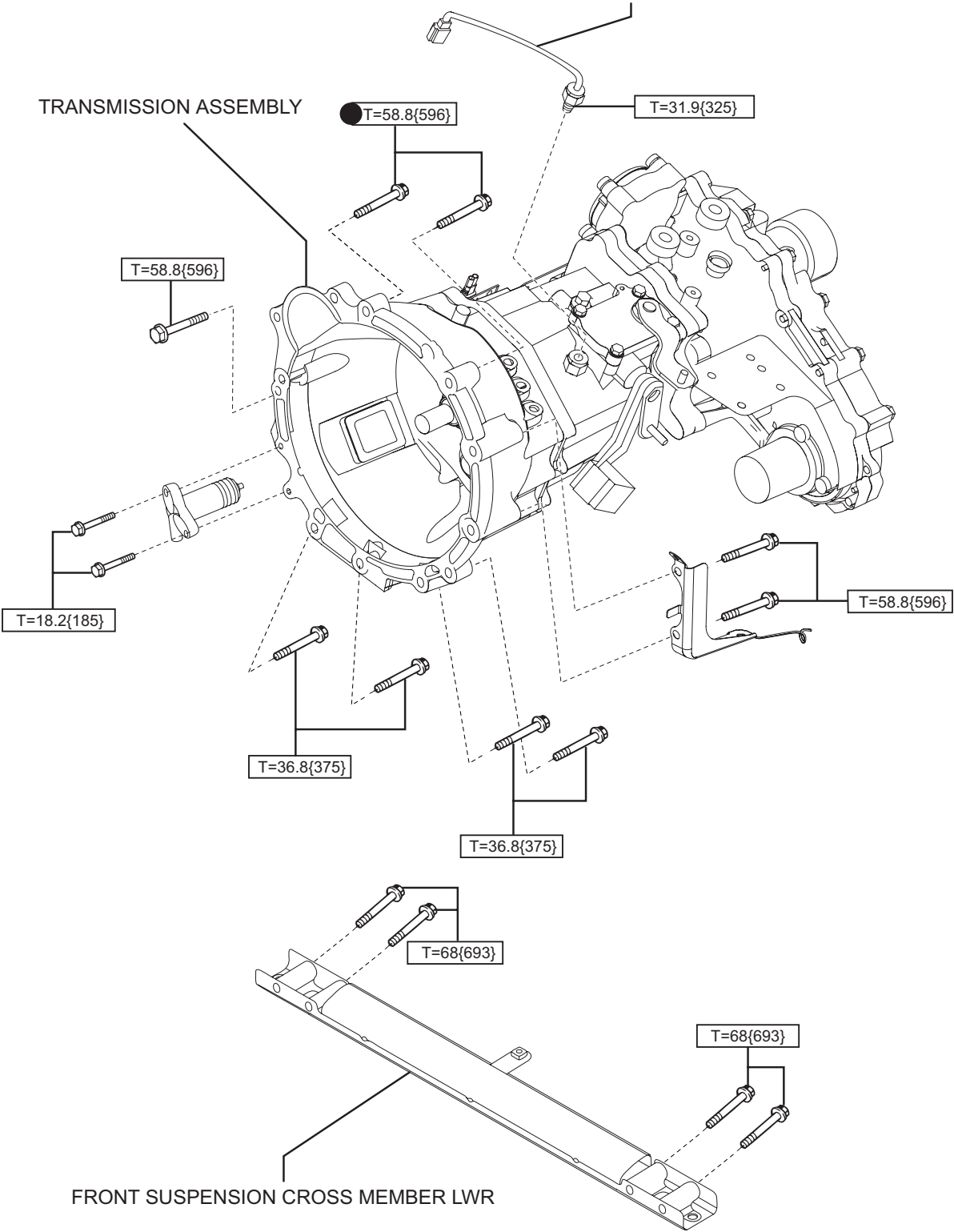


● NON-REUSEABLE PART

..... TIGHTENING TORQUE [N*m{kgf*cm}]

TRANSMISSION ASSEMBLY

BACK-UP LIGHT SWITCH ASSEMBLY

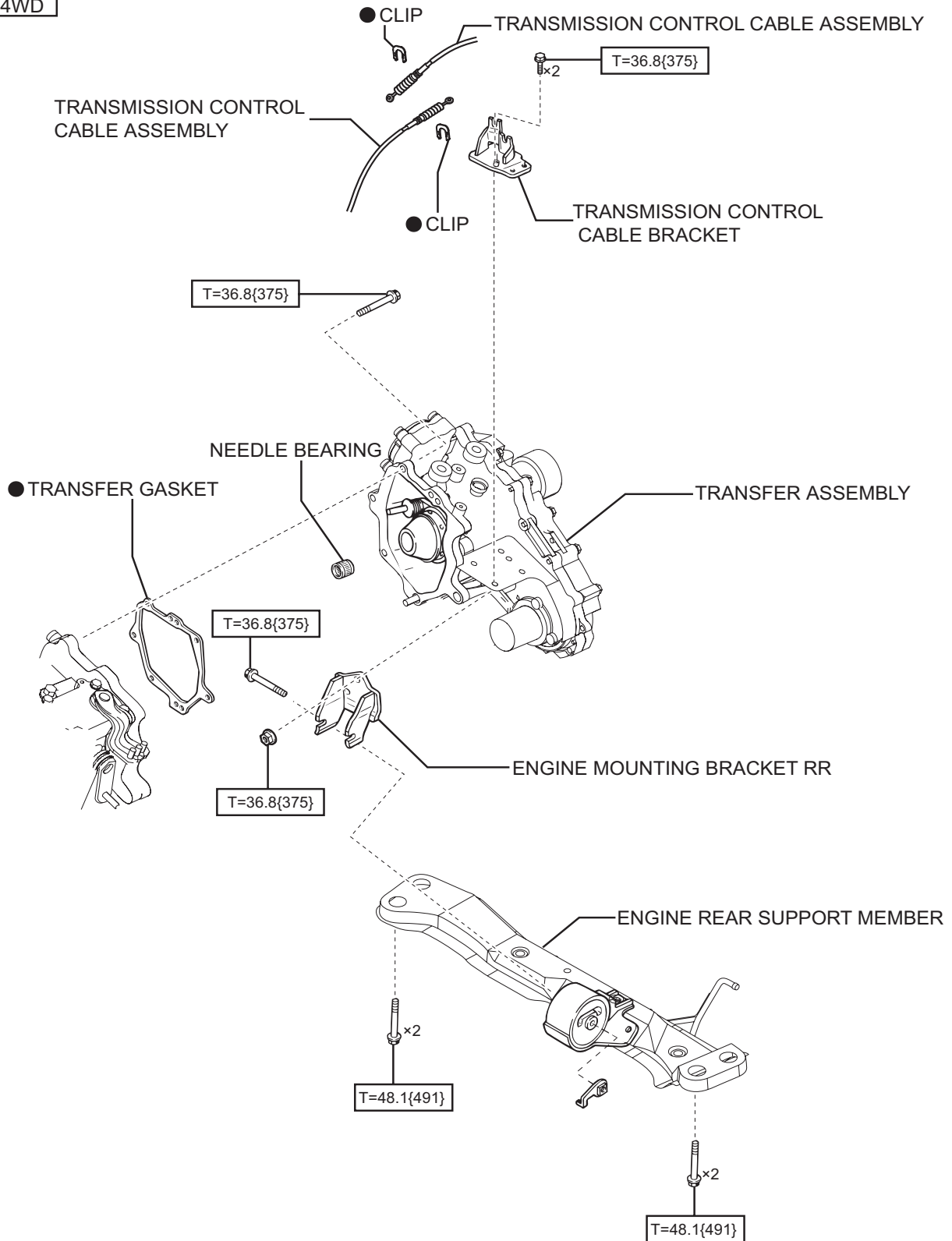


.....TIGHTENING TORQUE [N*m{kgf*cm}]

●..... NON-REUSEABLE PART

MT

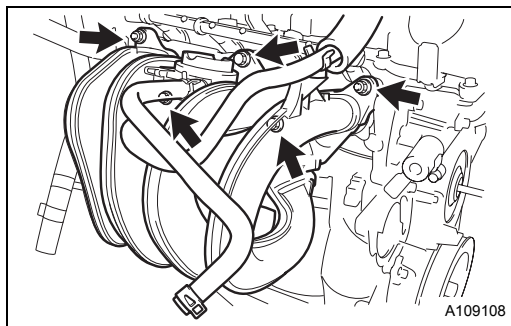
4WD

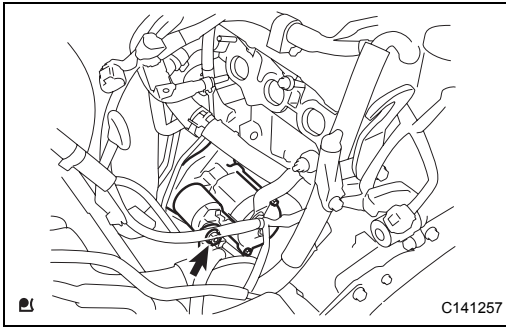


..... TIGHTENING TORQUE [N*m{kgf*cm}] ●..... NON-REUSEABLE PART

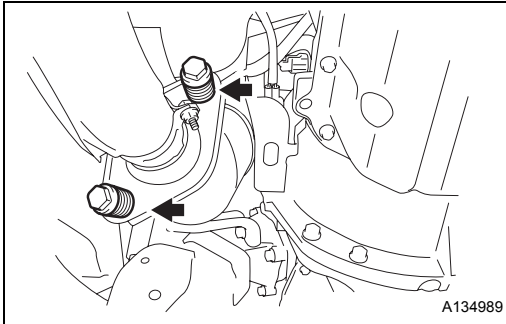
REMOVAL

1. DISCHARGE FUEL SYSTEM PRESSURE (See page EM-146)
2. REMOVE ENGINE UNDER COVER
3. REMOVE ENGINE UNDER COVER RR RH
4. REMOVE ENGINE UNDER COVER RR LH
5. DRAIN MANUAL TRANSMISSION FLUID
 - (a) Remove the drain plug, filler plug, and gasket, and drain the manual transmission fluid.
 - (b) Install the drain plug using a new gasket.
Torque: 39 N*m (400 kgf*cm)
6. DRAIN ENGINE COOLANT (See page CO-9)
7. REMOVE AIR CLEANER HOSE NO. 1 (See page CO-15)
8. REMOVE AIR CLEANER ASSEMBLY (See page EM-146)
9. REMOVE VENTILATION HOSE (See page EM-147)
10. REMOVE VENTILATION HOSE NO. 2 (See page EM-147)
11. DISCONNECT ACCELERATOR CONTROL CABLE ASSEMBLY (See page EM-147)
12. REMOVE FUEL HOSE NO. 2 (See page EM-148)
13. DISCONNECT VACUUM HOSE ASSEMBLY (See page EM-148)
14. REMOVE FUEL DELIVERY PIPE (See page EM-149)
15. REMOVE THROTTLE BODY ASSEMBLY (See page EM-148)
16. REMOVE THROTTLE BODY BRACKET (See page EM-149)
17. REMOVE FUEL INJECTOR ASSEMBLY (See page EM-149)
18. REMOVE INTAKE MANIFOLD
 - (a) Remove the bolt and disconnect the oil level gauge guide from the intake manifold.
 - (b) Disconnect the water bypass hose from the cylinder head.
 - (c) Disconnect the wiring harness from the intake manifold.
 - (d) Remove the 3 bolts and 2 nuts, then remove the intake manifold.
 - (e) Remove the gasket from the intake manifold.





- (f) Remove the nut and disconnect the connector from the starter assembly.

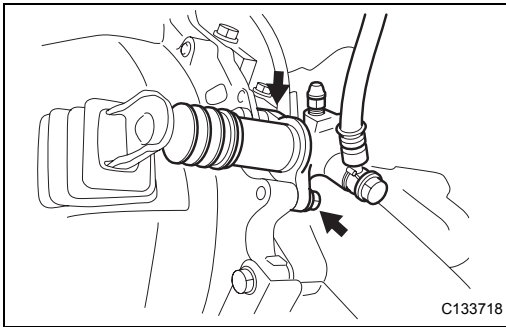


- 19. DISCONNECT EXHAUST PIPE ASSEMBLY FR**
 (a) Remove the 2 bolts and 2 springs, then disconnect the exhaust pipe assembly FR from the exhaust manifold.

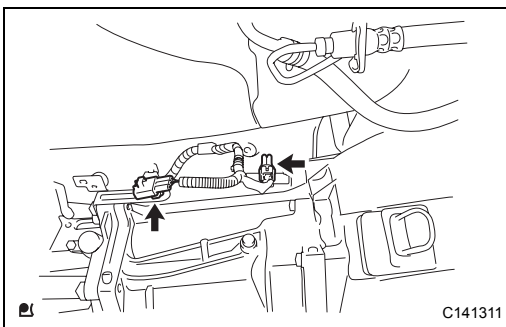
- 20. REMOVE FRONT SUSPENSION CROSS MEMBER LWR (FOR 4WD) (See page PR-3)**

- 21. REMOVE PROPELLER WITH CENTER BEARING SHAFT ASSEMBLY (See page PR-6)**

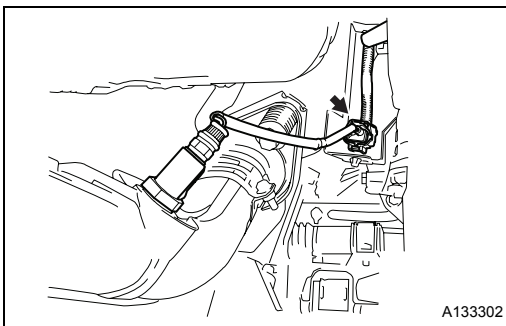
- 22. REMOVE FRONT PROPELLER SHAFT ASSEMBLY (FOR 4WD) (See page PR-3)**



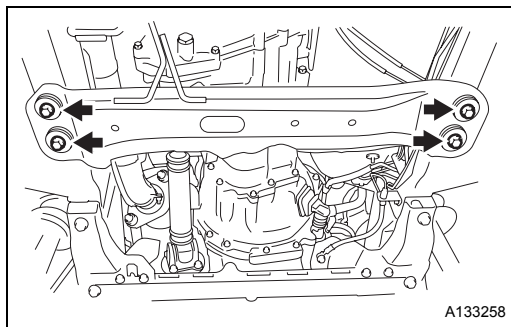
- 23. DISCONNECT CLUTCH RELEASE CYLINDER ASSEMBLY**
 (a) Remove the 2 bolts, then disconnect the clutch release cylinder assembly from the transmission assembly.



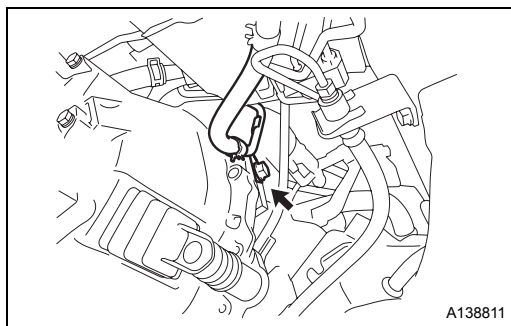
- 24. DISCONNECT CONNECTOR**
 (a) Disconnect the backup light switch assembly connectors.



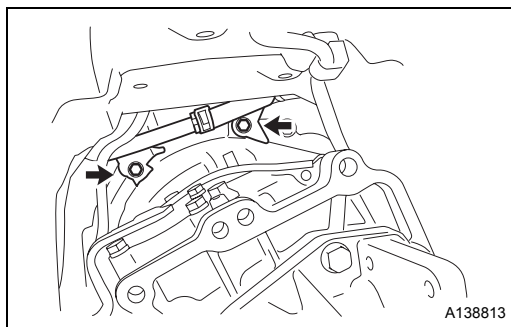
- (b) Disconnect the wire harness clamp of the oxygen sensor.
- 25. REMOVE STARTER ASSEMBLY**
 (a) Using a high transmission jack, support the engine rear support member.



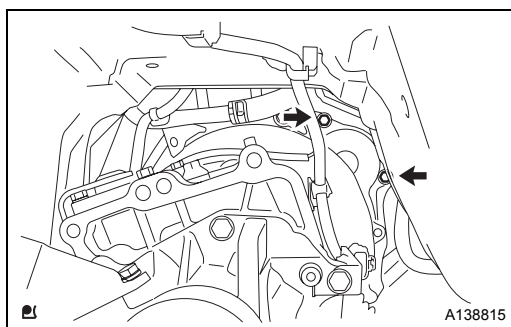
- (b) Remove the 4 bolts and disconnect the engine rear support member.



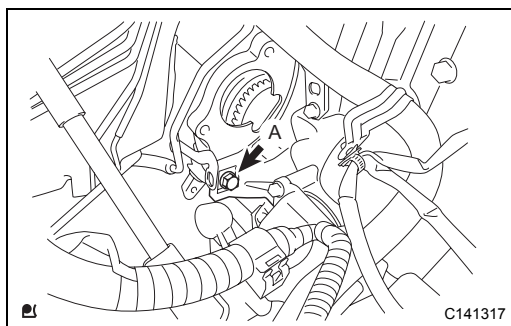
- (c) Remove the bolt, then disconnect the fuel delivery pipe.



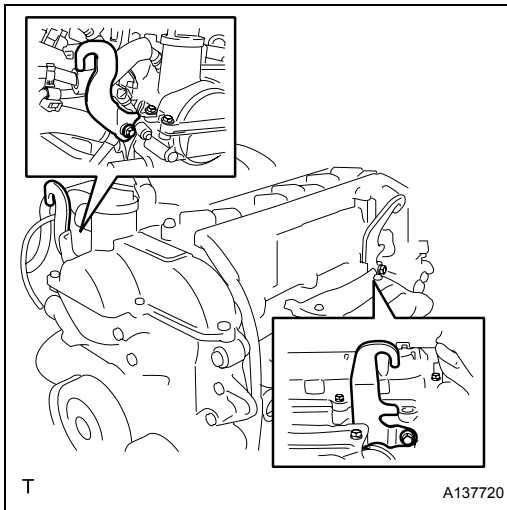
- (d) Remove the 2 bolts, then disconnect water bypass pipe No. 2.
 (e) Lower the high transmission jack so that the 2 starter assembly mounting bolts can be removed.



- (f) Using an extension bar (600 mm), remove the 2 starter assembly mounting bolts.
 (g) Temporarily install the engine rear support member.
 (h) Lower the vehicle and remove the starter assembly from the engine room side.



- (i) Remove transmission assembly mounting bolt A.

**26. SUSPEND ENGINE ASSEMBLY**

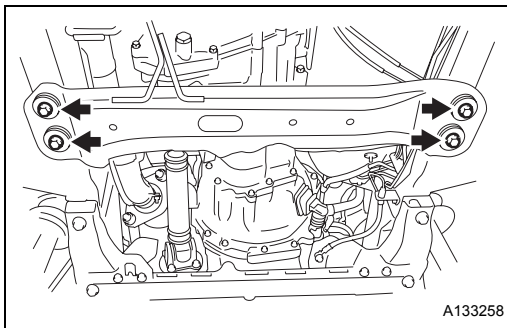
- (a) Install engine hanger No. 1 and No. 2 with the bolts to the locations shown in the illustration.

Torque: 20 N*m (204 kgf*cm)

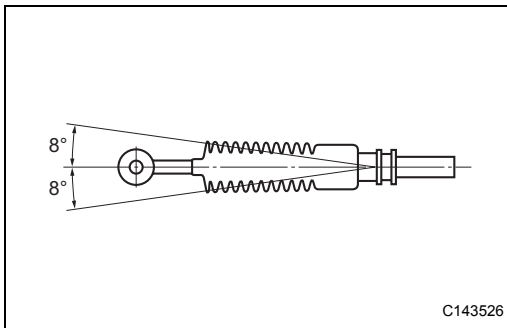
- (b) Use an engine sling device, hold the engine.

27. SUPPORT TRANSMISSION ASSEMBLY (MANUAL TRANSMISSION)

- (a) Support the transmission with a high transmission jack.



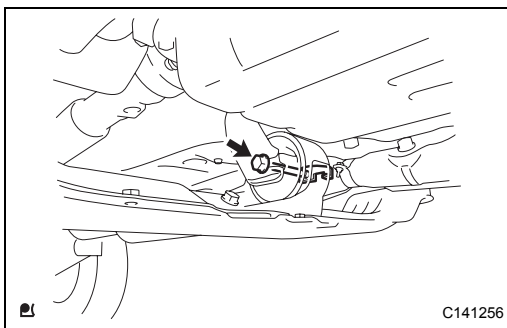
- (b) Remove the 4 bolts and disconnect the engine rear support member.

**28. DISCONNECT TRANSMISSION CONTROL CABLE ASSEMBLY**

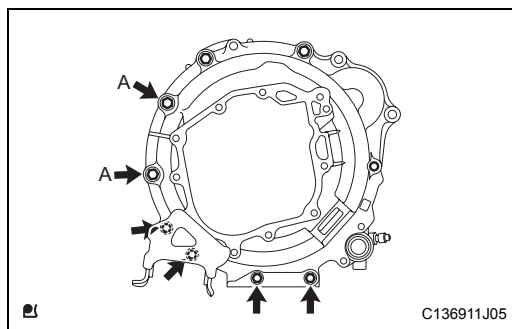
- (a) Remove the 4 clips, and disconnect the transmission control cable assembly from the transmission assembly.

NOTICE:

Do not move the control cable end for more than 8 degrees, or do not apply load to the control cable end.

**29. REMOVE ENGINE REAR SUPPORT MEMBER**

- (a) Remove the bolt and nut, then remove the engine rear support member.



30. REMOVE TRANSMISSION ASSEMBLY (MANUAL TRANSMISSION)

- (a) Remove the 6 bolts and transmission assembly.

HINT:

When removing bolts A, use an extension bar (600 mm).

NOTICE:

Do not shake the transmission unit assembly violently as doing so may cause damage to the input shaft.

31. REMOVE ENGINE MOUNTING BRACKET RR (FOR 2WD)

- (a) Remove the 3 bolts and engine mounting bracket RR.

32. REMOVE TRANSMISSION CONTROL CABLE BRACKET NO. 1 (FOR 2WD)

- (a) Remove the 2 bolts and transmission control cable bracket No. 1.

33. REMOVE TRANSFER ASSEMBLY (FOR 4WD) (See page TF-9)

34. REMOVE BACKUP LIGHT SWITCH ASSEMBLY

- (a) Remove the backup light switch assembly and gasket from the transmission case.

INSTALLATION

1. INSTALL BACKUP LIGHT SWITCH ASSEMBLY

- (a) Install the backup light switch assembly to the transmission case using a new gasket.

Torque: 31.9 N*m (325 kgf*cm)

2. INSTALL TRANSFER ASSEMBLY (FOR 4WD) (See page TF-10)

3. INSTALL TRANSMISSION CONTROL CABLE BRACKET NO. 1 (FOR 2WD)

- (a) Install control cable bracket No. 1 with the 2 bolts.

Torque: 36.8 N*m (375 kgf*cm)

4. INSTALL ENGINE MOUNTING BRACKET RR (FOR 2WD)

- (a) Install the engine mounting bracket RR with the 3 bolts.

Torque: 36.8 N*m (375 kgf*cm)

5. TEMPORARILY TIGHTEN TRANSMISSION ASSEMBLY (MANUAL TRANSMISSION)

- (a) Clean the seal bolt hole of the engine block.

NOTICE:

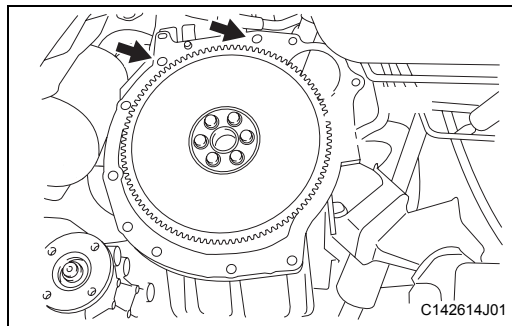
The seat bolts are not reusable.

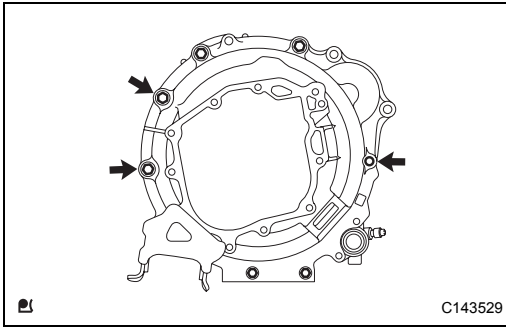
- (b) Check that 2 knock pins are attached to the engine side.

- (c) Using a high transmission jack, level the engine and transmission assembly, and engage the knock pin with the knock pin hole.

NOTICE:

Do not forcibly twist the transmission assembly.

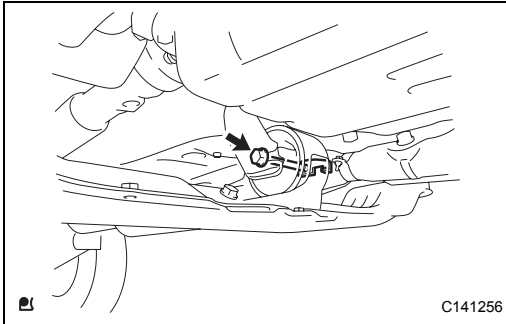




- (d) Temporarily install the transmission assembly with the 3 bolts.

NOTICE:

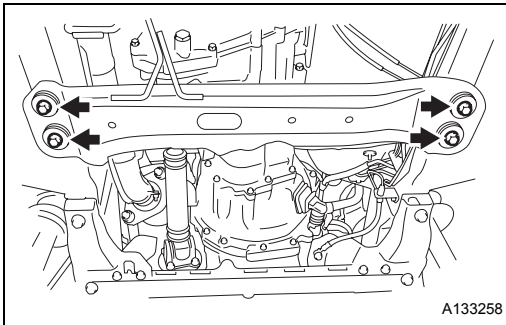
- Do not shake the transmission unit assembly violently as doing so may cause damage to the input shaft.
- Tighten with the oxygen sensor bracket.



6. INSTALL ENGINE REAR SUPPORT MEMBER

- (a) Install the engine rear support member to the transmission assembly with the bolt and nut.

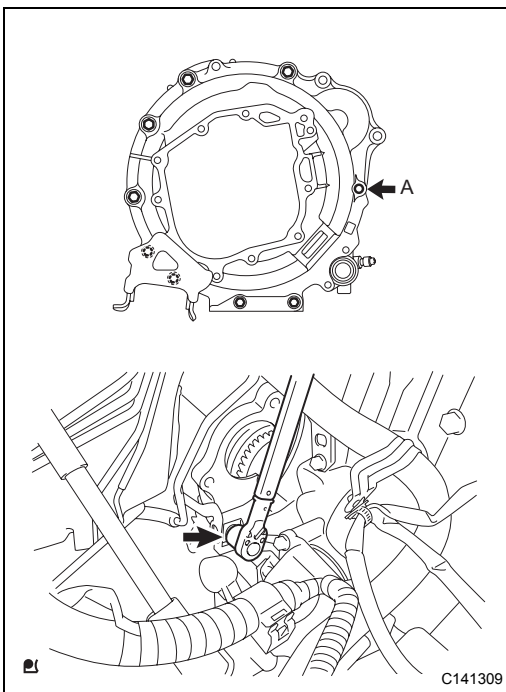
Torque: 37.3 N*m (380 kgf*cm)



- (b) Temporarily install the engine rear support member with the 4 bolts.

7. FULLY TIGHTEN TRANSMISSION ASSEMBLY (MANUAL TRANSMISSION)

- (a) Lower the vehicle.

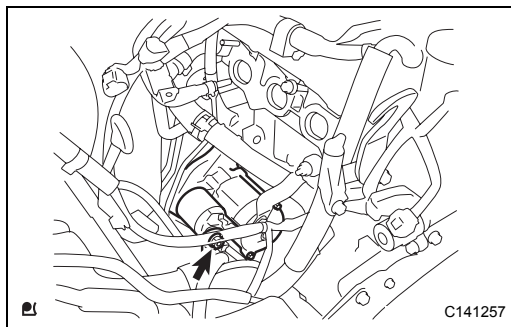


- (b) Using a preset torque wrench, tighten transmission assembly mounting bolt A.

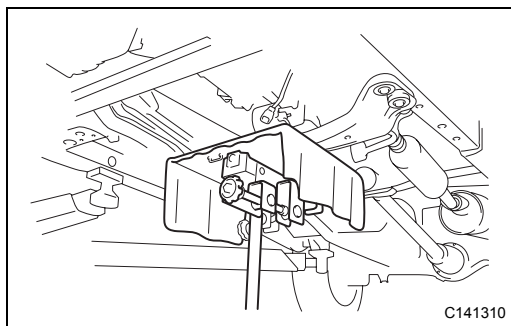
Torque: 58.8 N*m (600 kgf*cm)

8. INSTALL STARTER ASSEMBLY

- (a) Temporarily install the starter assembly with the 2 bolts.



- (b) Connect the starter assembly connector with the nut.
Torque: 8.8 N*m (90 kgf*cm)
- (c) Lift up the vehicle.



- (d) Using a high transmission jack, support the engine rear support member.
- (e) Remove the 4 bolts and disconnect the engine rear support member.
- (f) Using an extension bar (600 mm), tighten the 2 starter assembly mounting bolts.

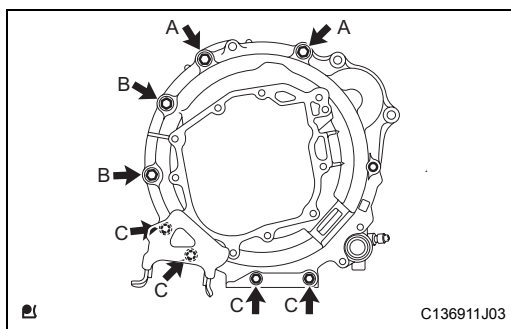
Torque: 37 N*m (377 kgf*cm)

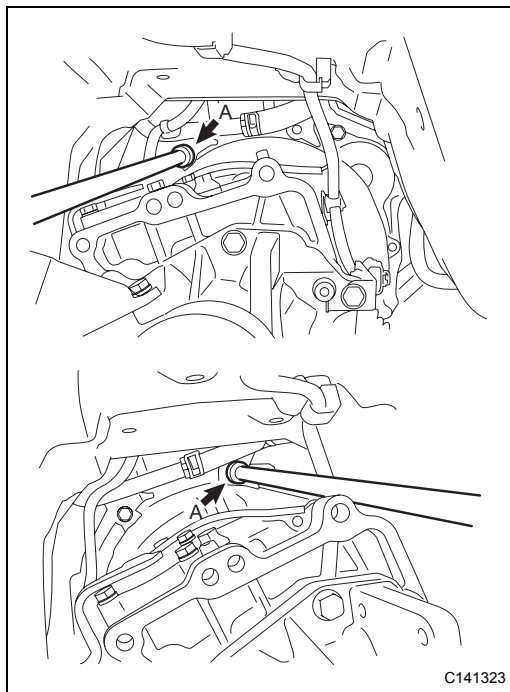
HINT:

Adjust the height of the transmission assembly using a high transmission jack, and tighten the 2 starter assembly mounting bolts.

9. FULLY TIGHTEN TRANSMISSION ASSEMBLY (MANUAL TRANSMISSION)

- (a) Tighten the transmission assembly mounting bolts in the order of A, B, C.





- (1) Using an extension bar (600 mm), tighten bolt A.

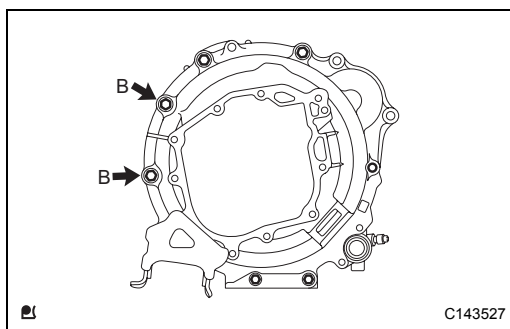
Torque: 58.8 N*m (600 kgf*cm)

NOTICE:

When tightening bolt A, tighten the clamp of water bypass pipe No. 2 together.

HINT:

Bolt A part number 91619-61250 (Length under bolt head 57 mm)

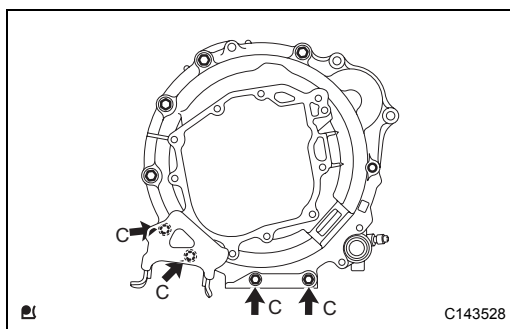


- (2) Using an extension bar (600 mm), tighten bolts B.

Torque: 58.8 N*m (600 kgf*cm)

HINT:

Bolt B part number 91619-61250 (Length under bolt head 57 mm)

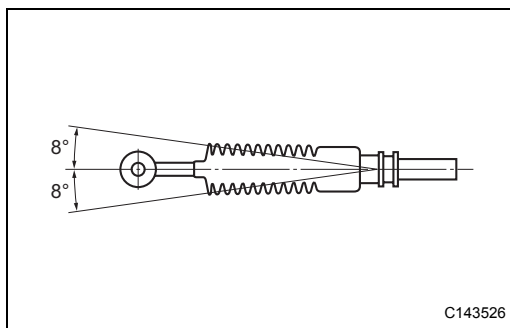


- (3) Tighten bolts C.

Torque: 36.8 N*m (377 kgf*cm)

HINT:

Bolt C part number 90119-10260 (Length under bolt head 40 mm)

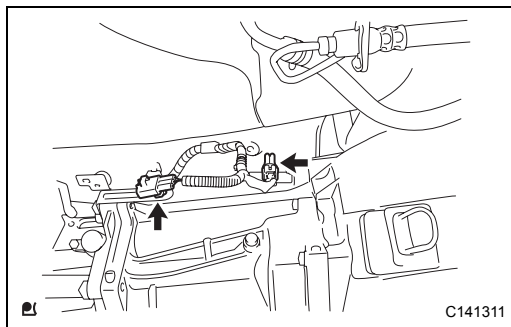


10. INSTALL TRANSMISSION CONTROL CABLE ASSEMBLY

- (a) Using the 4 clips, install the transmission control cable assembly to the shift control cable bracket and transmission assembly.

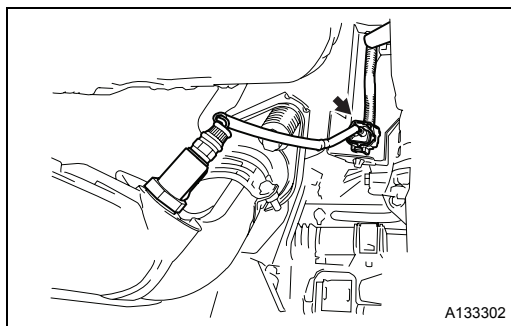
NOTICE:

Do not move the control cable end for more than 8 degrees, or do not apply load to the control cable end.

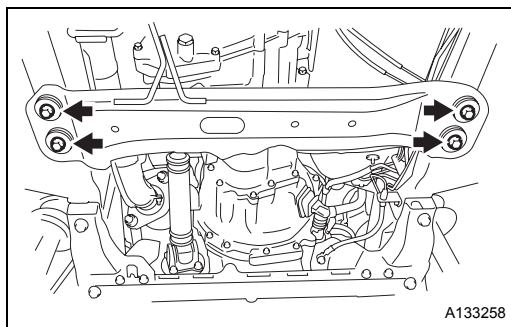


11. CONNECT CONNECTOR

- (a) Connect the backup light switch assembly and vehicle speed sensor connectors.

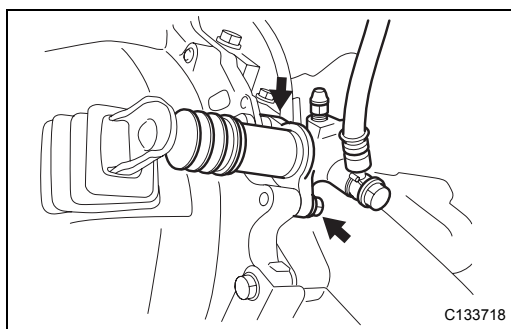


- (b) Install the wire harness clamp of the oxygen sensor assembly.



- (c) Install the engine rear support member with the 4 bolts.
Torque: 48.1 N*m (491 kgf*cm)

MT



12. INSTALL CLUTCH RELEASE CYLINDER ASSEMBLY

- (a) Install the clutch release cylinder assembly to the transmission assembly with the 2 bolts.
Torque: 18.2 N*m (186 kgf*cm)

13. INSTALL FRONT PROPELLER SHAFT ASSEMBLY (FOR 4WD) (See page PR-4)

14. INSTALL PROPELLER WITH CENTER BEARING SHAFT ASSEMBLY (See page PR-7)

15. INSTALL FRONT SUSPENSION CROSS MEMBER LWR (See page PR-4)

16. INSTALL EXHAUST PIPE ASSEMBLY FR (See page EX-2)

17. INSTALL INTAKE MANIFOLD (See page EM-164)

18. INSTALL THROTTLE BODY ASSEMBLY (See page EM-164)

19. INSTALL FUEL INJECTOR ASSEMBLY (See page EM-164)

20. INSTALL FUEL DELIVERY PIPE (See page EM-165)

21. CONNECT VACUUM HOSE ASSEMBLY (See page EM-165)

22. CONNECT ACCELERATOR CONTROL CABLE ASSEMBLY (See page EM-165)
23. INSTALL VENTILATION HOSE (See page EM-166)
24. INSTALL VENTILATION HOSE NO. 2 (See page EM-166)
25. INSTALL BATTERY
26. CONNECT BATTERY NEGATIVE TERMINAL (See page EM-167)
27. INSTALL AIR CLEANER ASSEMBLY (See page EM-167)
28. INSTALL AIR CLEANER HOSE NO. 1(See page CO-18)
29. ADD MANUAL TRANSMISSION FLUID
30. INSPECT MANUAL TRANSMISSION FLUID LEVEL (See page MT-3)
31. ADD ENGINE COOLANT (See page CO-9)
32. CHECK FOR ENGINE COOLANT LEAKS (See page CO-10)
33. CHECK COOLANT LEVEL (See page CO-10)
34. CHECK FOR FUEL LEAKS (See page EM-167)
35. CHECK FOR EXHAUST GAS LEAKS
36. INSTALL ENGINE UNDER COVER RR RH
37. INSTALL ENGINE UNDER COVER RR LH
38. INSTALL ENGINE UNDER COVER
39. INSPECT ENGINE IDLE SPEED (See page EM-2)
40. PERFORM INITIALIZATION
(See page SS-10)

MT