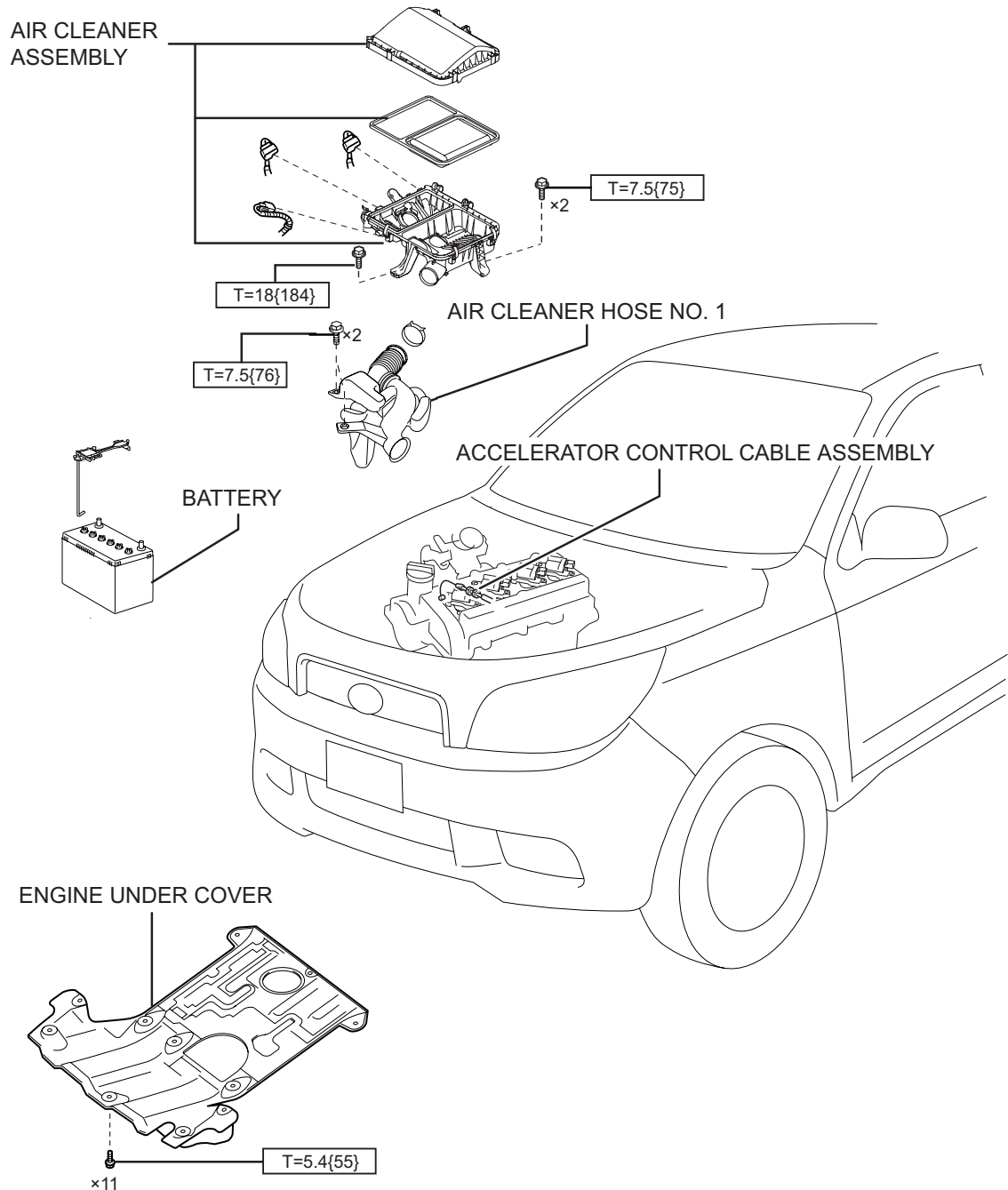


AUTOMATIC TRANSMISSION ASSEMBLY

COMPONENTS

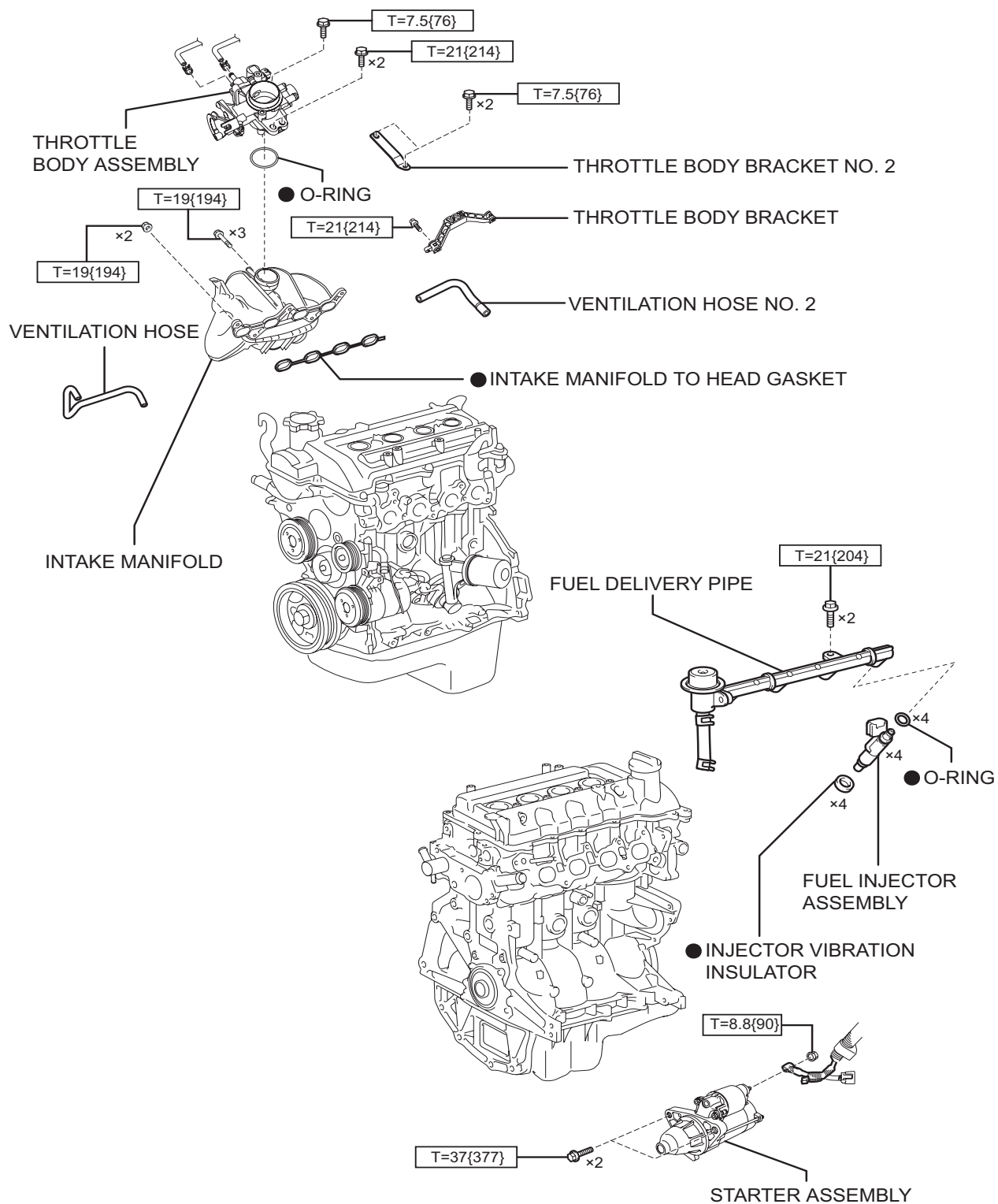


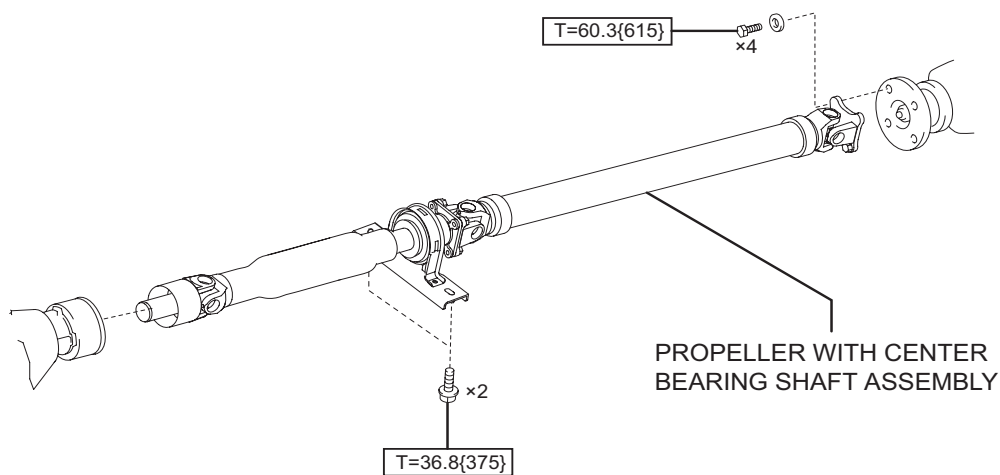
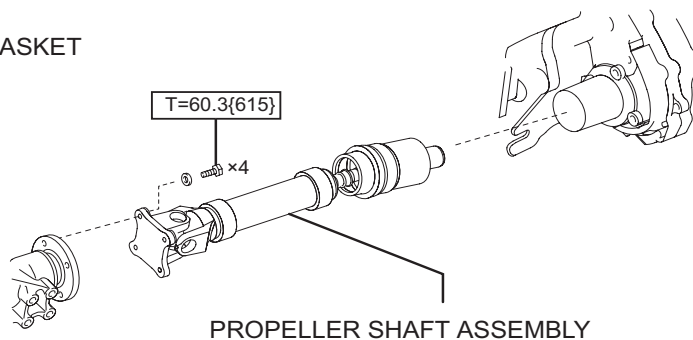
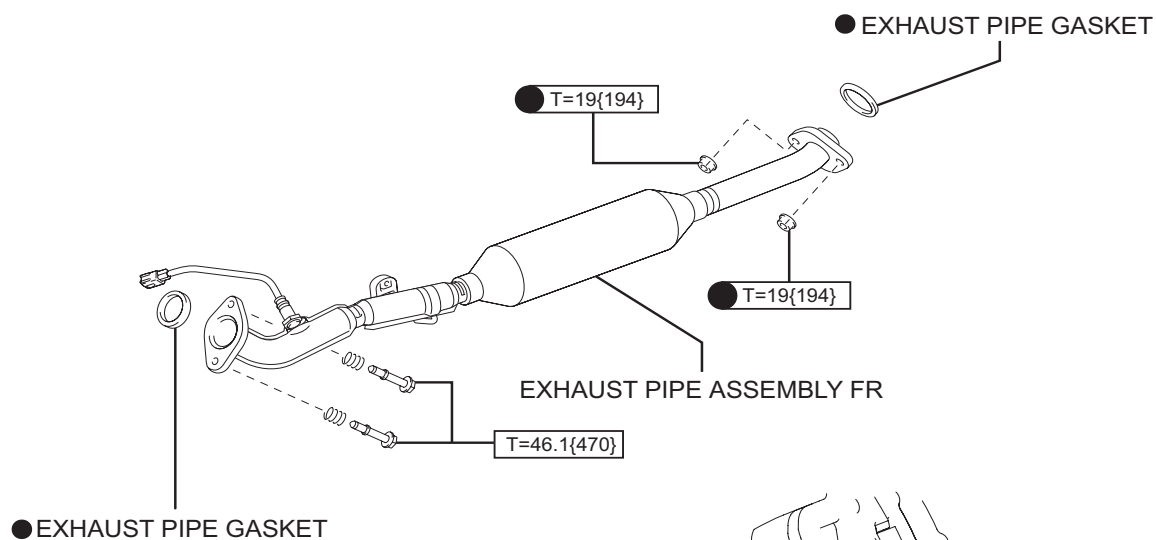
AT

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

C141337J01



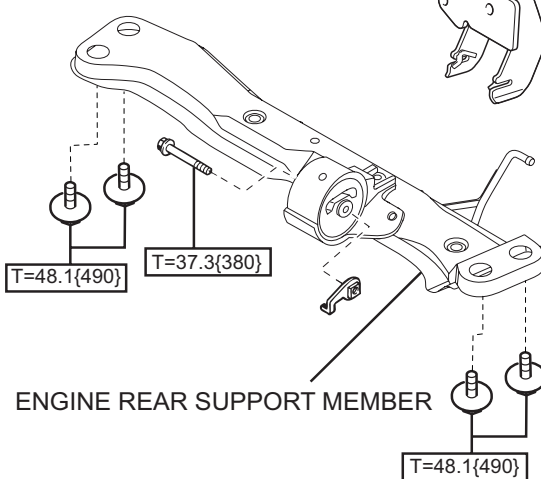
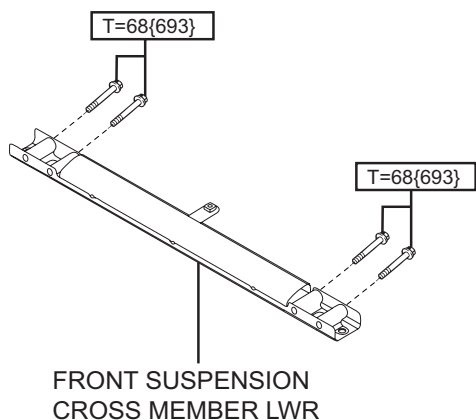
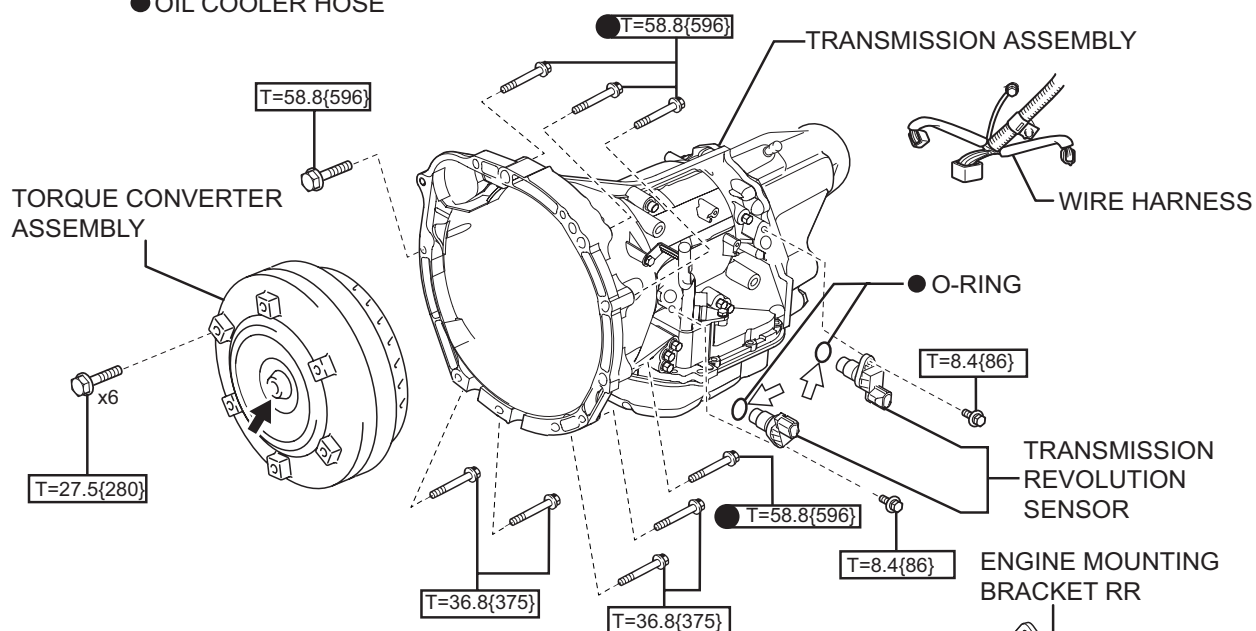
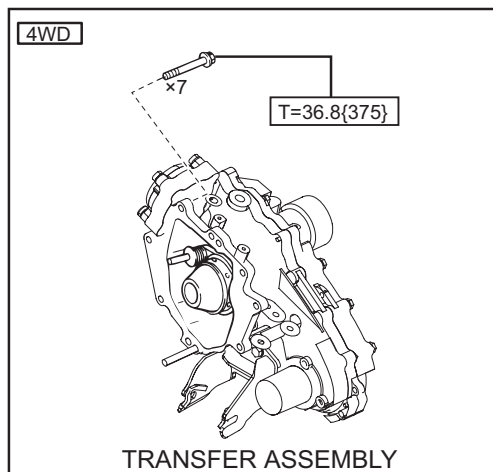
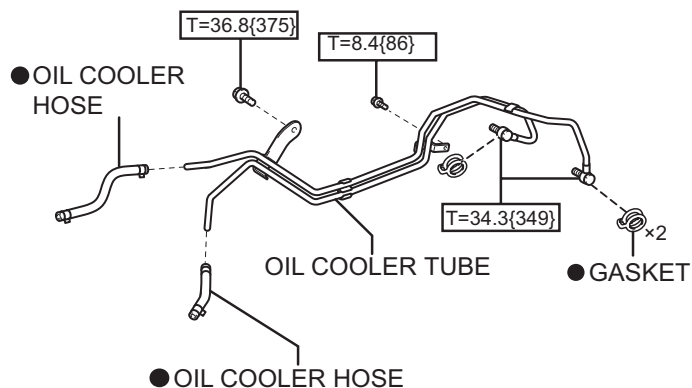




● NON-REUSEABLE PART

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

AT



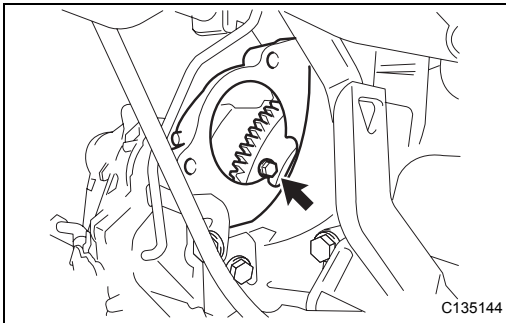
← APPLY MP GREASE ← APPLY ATF

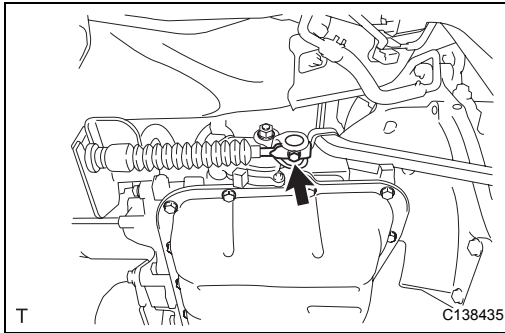
..... TIGHTENING TORQUE [N*m{kgf*cm}]

● 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 AUTOMATIC TRANSMISSION FLUID
 - (a) Remove the drain plug and gasket, and drain the fluid.
Torque: 24.5 N*m (250 kgf*cm)
6. DRAIN TRANSFER FLUID (FOR 4WD)(See page TF-7)
7. DRAIN ENGINE COOLANT(See page CO-9)
8. REMOVE AIR CLEANER HOSE NO. 1 (See page CO-15)
9. REMOVE AIR CLEANER ASSEMBLY(See page EM-146)
10. REMOVE VENTILATION HOSE(See page EM-147)
11. REMOVE VENTILATION HOSE NO. 2 (See page EM-147)
12. DISCONNECT ACCELERATOR CONTROL CABLE ASSEMBLY(See page EM-147)
13. REMOVE FUEL HOSE NO. 2(See page EM-148)
14. DISCONNECT VACUUM HOSE ASSEMBLY(See page EM-148)
15. REMOVE FUEL DELIVERY PIPE(See page EM-149)
16. REMOVE THROTTLE BODY ASSEMBLY(See page EM-148)
17. REMOVE THROTTLE BODY BRACKET(See page EM-149)
18. REMOVE FUEL INJECTOR ASSEMBLY(See page EM-149)
19. REMOVE INTAKE MANIFOLD(See page EM-149)
20. DISCONNECT EXHAUST PIPE ASSEMBLY FR(See page MT-10)
21. REMOVE FRONT SUSPENSION CROSS MEMBER LWR (FOR 4WD)(See page PR-3)
22. REMOVE PROPELLER WITH CENTER BEARING SHAFT ASSEMBLY(See page PR-6)
23. REMOVE FRONT PROPELLER SHAFT ASSEMBLY (FOR 4WD)(See page PR-3)
24. REMOVE STARTER ASSEMBLY(See page MT-10)
25. REMOVE TORQUE CONVERTER SET BOLT
 - (a) Remove the 6 torque converter set bolts.
26. SUSPEND ENGINE ASSEMBLY(See page MT-12)
27. SUPPORT TRANSMISSION ASSEMBLY (AUTOMATIC TRANSMISSION)(See page MT-12)



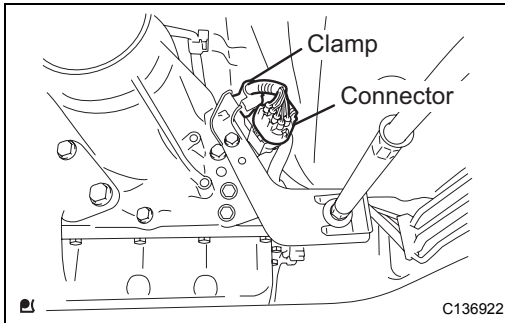


28. DISCONNECT TRANSMISSION CONTROL CABLE ASSEMBLY

- (a) Remove clip and bolt, and disconnect the transmission control cable assembly from the neutral start switch.

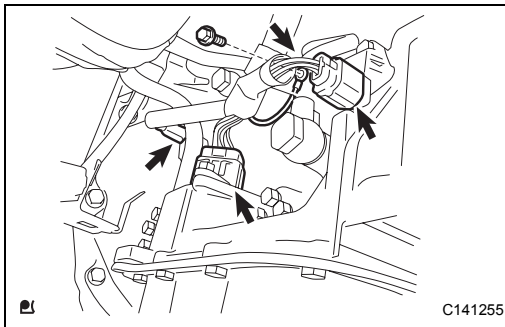
NOTICE:

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

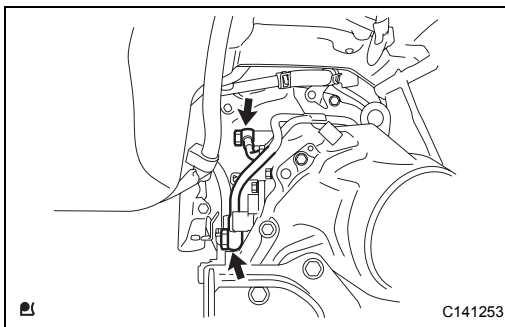


29. DISCONNECT CONNECTOR

- (a) Disconnect the neutral start switch connector.
- (b) Disconnect the transmission solenoid connector and the 2 transmission revolution sensor connectors.

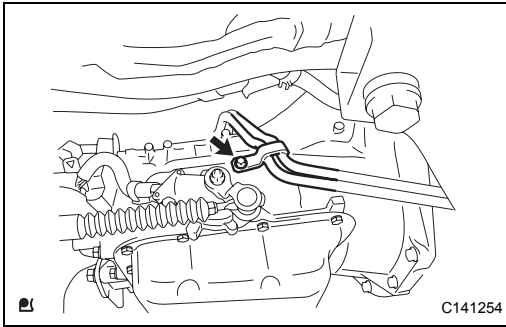


- (c) Remove the bolt and earth wire.



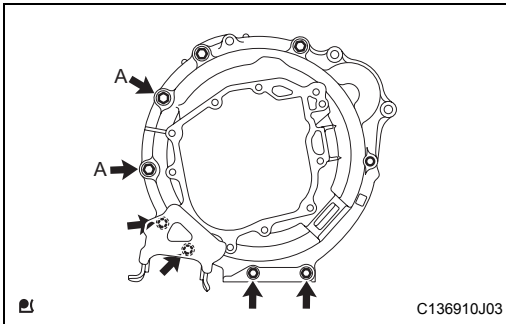
30. REMOVE OIL COOLER TUBE

- (a) Remove the 2 union bolts, then disconnect the oil cooler tube from the transmission assembly.



- (b) Remove the bolt, then disconnect the oil cooler tube clamp from the transmission assembly.

31. REMOVE ENGINE REAR SUPPORT MEMBER(See page MT-12)



32. REMOVE TRANSMISSION ASSEMBLY (AUTOMATIC TRANSMISSION)

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

HINT:

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

NOTICE:

- Using a belt, secure the automatic transmission assembly to the high mission jack to prevent the automatic transmission assembly from falling.
- To avoid damage to the knock pin, do not pry the connecting portion of the automatic transmission assembly and the engine.

33. REMOVE TORQUE CONVERTER ASSEMBLY

- (a) Put matchmarks on the converter and case.
- (b) Remove the torque converter assembly from the automatic transmission assembly.

34. REMOVE ENGINE MOUNTING BRACKET RR (FOR 2WD)(See page MT-13)

AT

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

INSTALLATION

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

2. INSTALL ENGINE MOUNTING BRACKET RR NO. 1

- (a) Install the engine mounting bracket RR No. 1 to the transmission assembly with the 3 bolts.

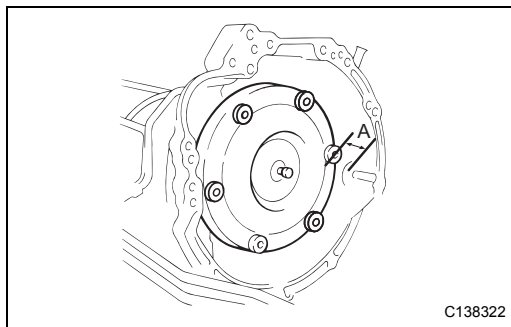
Torque: 36.8 N*m (375 kgf*cm)

3. INSTALL TORQUE CONVERTER ASSEMBLY

- (a) Clean the mounting hole of the converter set bolt on the drive plate.
- (b) Apply MP grease to the edge of the torque converter assembly.
- (c) Aligning the matchmarks on the case and converter, engage the spline of the input shaft with the spline of the turbine liner.

NOTICE:

Perform this operation while keeping the converter level.



- (d) After installing the torque converter, measure dimension A from the edge surface of the housing to the converter set block.

Standard:

16.5 mm or more from the T/M fitting surface

4. TEMPORARILY TIGHTEN TRANSMISSION ASSEMBLY (AUTOMATIC TRANSMISSION)

- (a) Check that 2 knock pins are attached to the engine side.
 (b) Using a high-mission jack, level the engine and automatic transmission assembly, and engage the knock pin with the knock pin hole.

NOTICE:

- To protect the oil pan, place the high-mission jack attachment on the receiving stand of the high-mission jack and perform the tasks.
- Check that the high-mission jack attachment and oil pan are on the center of the receiving stand of the high-mission jack.
- Do not forcibly twist the transmission assembly.

- (c) 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 the bracket of the rear O2 sensor together.

5. INSTALL ENGINE REAR SUPPORT MEMBER(See page MT-14)

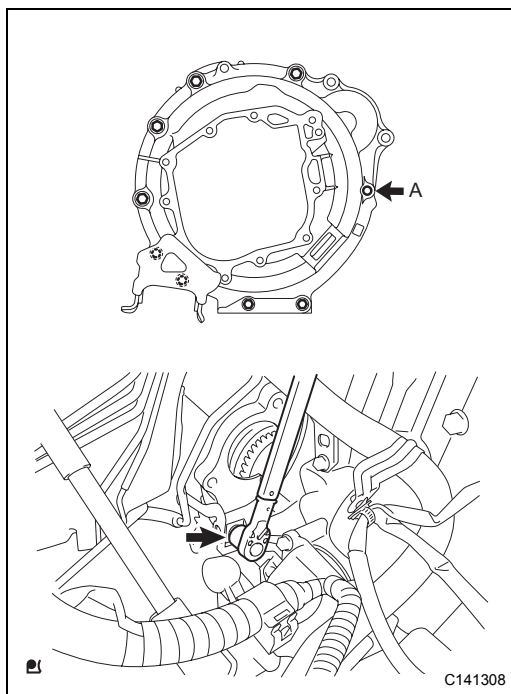
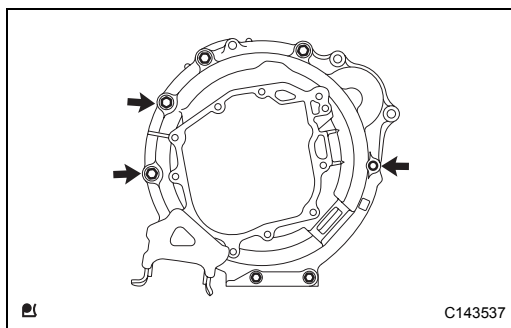
6. FULLY TIGHTEN TRANSMISSION ASSEMBLY (AUTOMATIC TRANSMISSION)

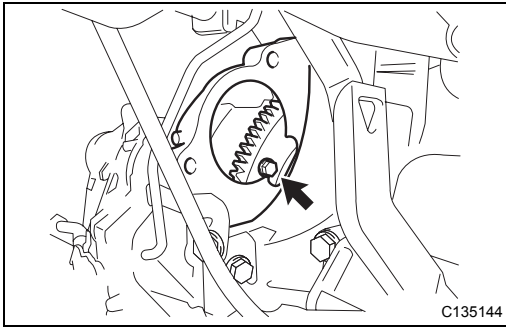
- (a) Lower the vehicle.
 (b) Using a pre set torque wrench, tighten new mounting bolt A of the transmission assembly.

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

HINT:

Bolt A part number 91619-61250 (Length under bolt head 50 mm)





7. INSTALL TORQUE CONVERTER SET BOLT

- (a) Install the 6 torque converter set bolts.

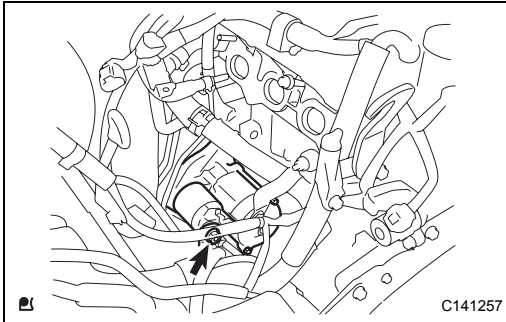
Torque: 27.5 N*m (280 kgf*cm)

NOTICE:

- First, tighten the standard bolt (blue silver white color plating).
- Tighten the remaining 5 bolts uniformly.

8. INSTALL STARTER ASSEMBLY

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

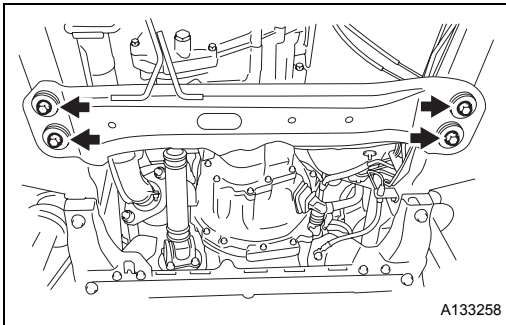


- (b) Connect the starter assembly connector with the nut.

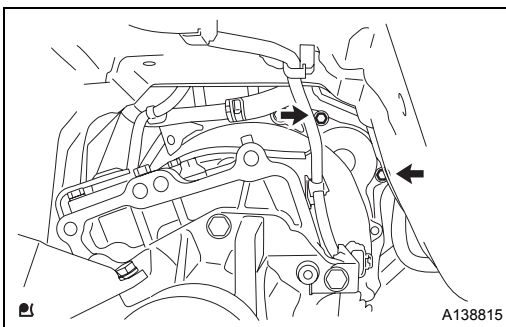
Torque: 8.8 N*m (90 kgf*cm)

- (c) Lift up the vehicle.

- (d) Using a high-mission jack, support the engine rear support member.



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

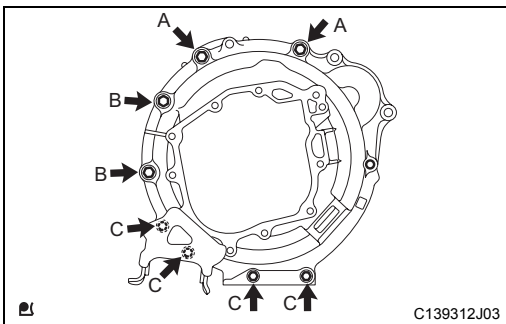


- (f) Using an extension bar (600 mm), tighten the 2 starter assembly mounting bolts.

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

HINT:

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

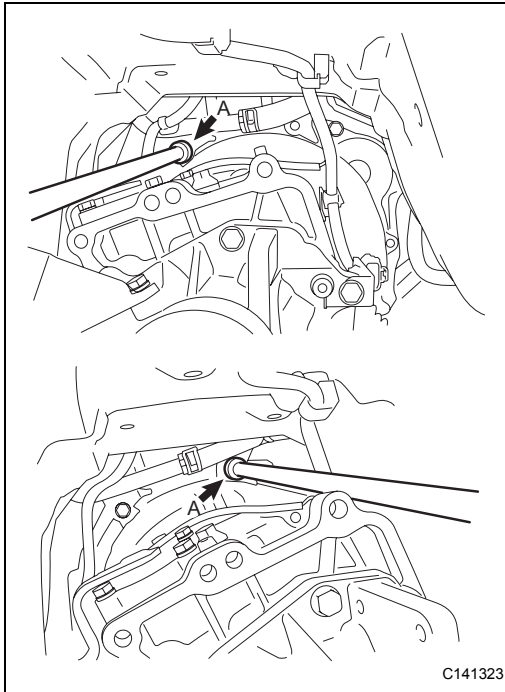


9. FULLY TIGHTEN TRANSMISSION ASSEMBLY (AUTOMATIC TRANSMISSION)

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

HINT:

- Bolt A, B product number 90041-19968 (Length under bolt head 57 mm)
- Bolt C product number 91612-61040 (Length under bolt head 40 mm)



- (1) Using an extension bar (600 mm), tighten the 2 new bolts A.

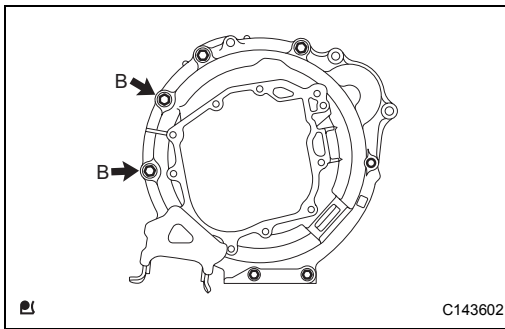
Torque: 58.8 N*m (600 kgf*cm)

NOTICE:

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

HINT:

Bolt A product number 90041-19968 (Length under bolt head 57 mm)



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

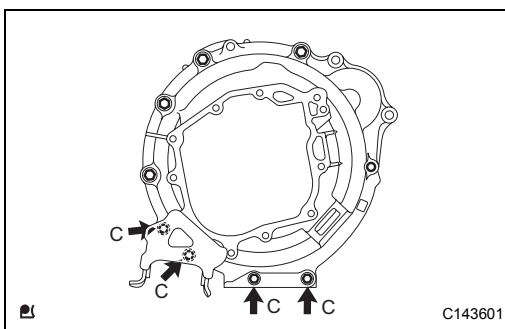
NOTICE:

Tighten the C2 sensor bracket together.

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

HINT:

Bolt B product number 90041-19968 (Length under bolt head 57 mm)

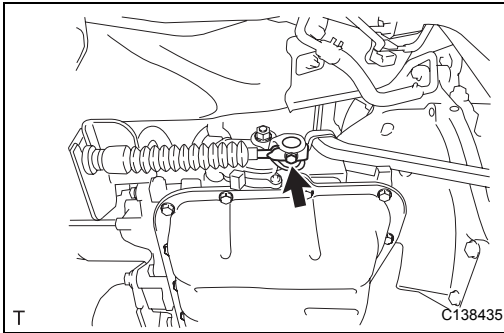


- (3) Tighten 4 bolts C.

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

HINT:

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

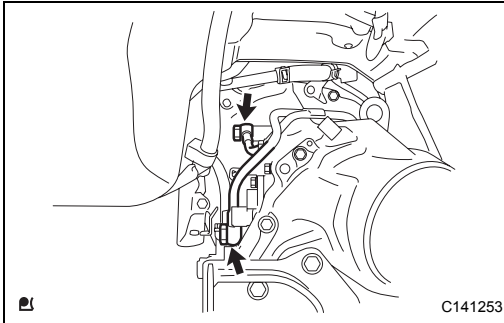
**10. CONNECT TRANSMISSION CONTROL CABLE ASSEMBLY**

- (a) Install the transmission control cable assembly to the neutral start switch with the bolt.

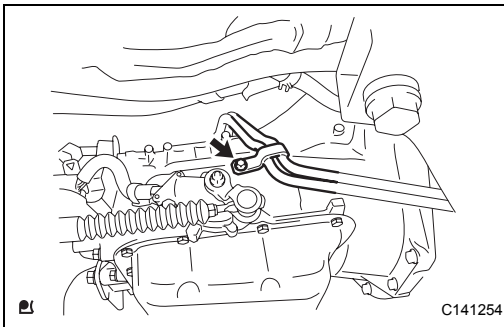
NOTICE:

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

Torque: 9.2 N*m (94 kgf*cm)

**11. INSTALL OIL COOLER TUBE**

- (a) Temporarily install the oil cooler tube to the transmission assembly with the 2 union bolts.



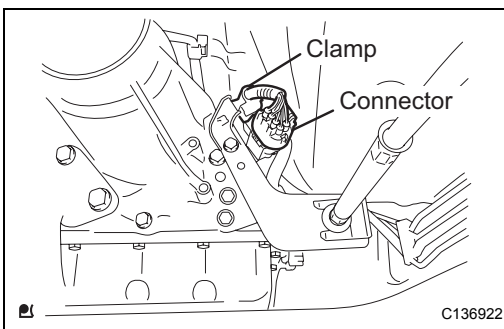
- (b) Temporarily install the oil cooler tube clamp with the bolt.

- (c) Tighten the 2 union bolts.

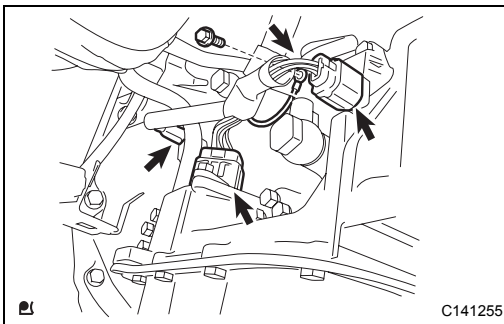
Torque: 34.3 N*m (349 kgf*cm)

- (d) Tighten the mounting bolt of the clamp.

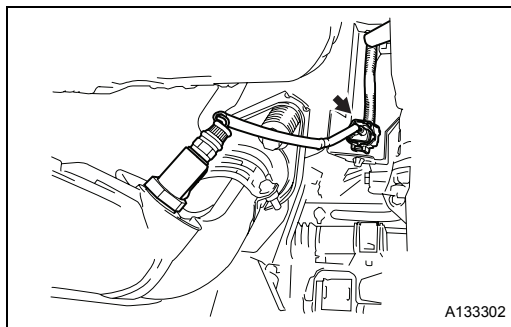
Torque: 8.4 N*m (86 kgf*cm)

**12. CONNECT CONNECTOR**

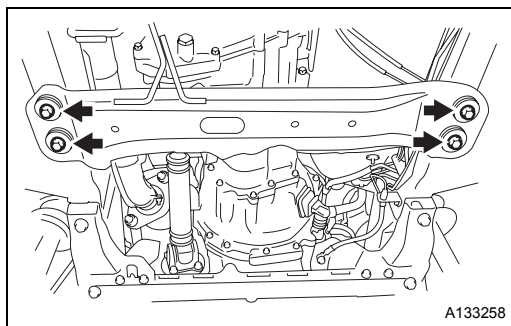
- (a) Connect the neutral start switch connector.
(b) Connect the trans solenoid connector and the 2 transmission revolution sensor connectors.



- (c) Install the earth wire to the transmission body with the bolt.



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



(e) Install the engine rear support member with the 4 bolts.

Torque: 48.1 N*m (490 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 AIR CLEANER ASSEMBLY(See page EM-167)
26. INSTALL AIR CLEANER HOSE NO. 1(See page CO-18)
27. INSTALL BATTERY
28. CONNECT NEGATIVE BATTERY TERMINAL (See page EM-167)
29. ADD AUTOMATIC TRANSMISSION FLUID(See page AT-55)
30. ADD TRANSFER FLUID (FOR 4WD)(See page TF-6)
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. INITIALIZE DS-II AT LEARNED VALUE
(See page AT-15)

AT