

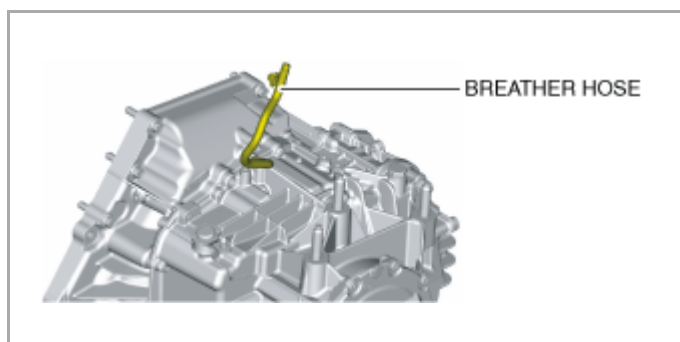
# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

## 2013 Mazda CX-9 Service and Repair Manual

[Go to manual page](#)

29. Connect the front stabilizer control links to the front stabilizer. (See [FRONT STABILIZER REMOVAL/INSTALLATION](#).)
30. Connect the front lower arms to the steering knuckles. (See [FRONT LOWER ARM REMOVAL/INSTALLATION](#).)
31. Connect the tie-rod ends to the steering knuckles. (See [STEERING GEAR AND LINKAGE REMOVAL/INSTALLATION](#).)
32. Connect the clips securing the brake hose to the front shock absorbers. (See [FRONT BRAKE HOSE REMOVAL/INSTALLATION \[WITH 2-PISTON FLOATING CALIPER\]](#).)
33. Connect the front ABS wheel-speed sensors to the steering knuckles. (See [FRONT ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION](#).)
34. Connect the water hose to the oil cooler. (Automatic Transaxle Replacement) (See [OIL COOLER REMOVAL/INSTALLATION \[GW6A-EL, GW6AX-EL \(SKYACTIV-G 2.5T\)\]](#).)
35. Connect the oil cooler to the transaxle with the hose connected. (Except Automatic Transaxle Replacement) (See [OIL COOLER REMOVAL/INSTALLATION \[GW6A-EL, GW6AX-EL \(SKYACTIV-G 2.5T\)\]](#).)
36. Install the front under cover No.1. (See [FRONT UNDER COVER No.1 REMOVAL/INSTALLATION](#).)
37. Install the front under cover No.2. (See [FRONT UNDER COVER No.2 REMOVAL/INSTALLATION](#).)
38. Install the front tires. (See [WHEEL AND TIRE REMOVAL/INSTALLATION](#).)
39. Connect the intermediate shaft to the steering gear and linkage. (See [STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION](#).)
40. Install the joint cover. (See [STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION](#).)
41. Connect the breather hose to the transaxle.



ac5uuw00009942

52.Install the following parts as a single unit. (See [INTAKE-AIR SYSTEM REMOVAL/INSTALLATION \[SKYACTIV-G 2.5T\].](#))

- Air cleaner cover
- Air cleaner element
- Fresh-air duct
- Air cleaner case
- Air hose

53.Connect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))

54.Refill the engine coolant. (See [ENGINE COOLANT REPLACEMENT \[SKYACTIV-G 2.5T\].](#))

55.Add the ATF. (See [AUTOMATIC TRANSAXLE FLUID \(ATF\) REPLACEMENT \[GW6A-EL, GW6AX-EL\].](#))

56.Install the plug hole plate. (See [PLUG HOLE PLATE REMOVAL/INSTALLATION \[SKYACTIV-G 2.5T\].](#))

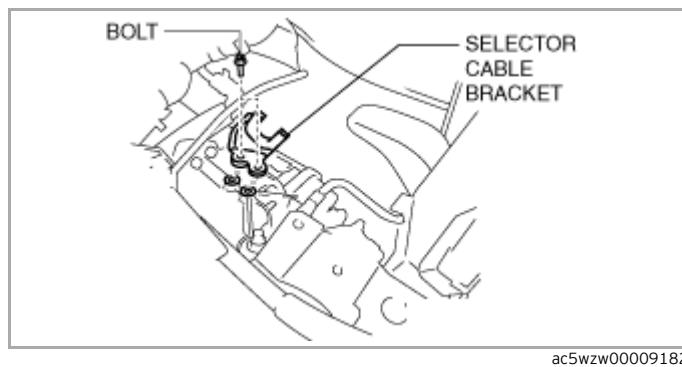
57.Perform the “TCM configuration” (automatic transaxle replacement). (See [TCM CONFIGURATION \[GW6A-EL, GW6AX-EL\].](#))

58.Perform the “Initial Learning” (automatic transaxle replacement). (See [INITIAL LEARNING \[GW6A-EL, GW6AX-EL\].](#))

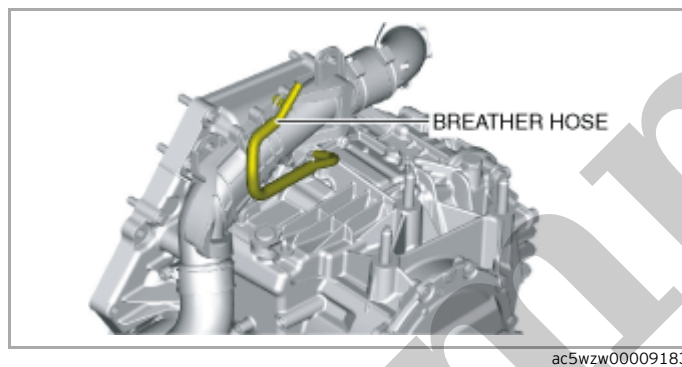
59.Perform the “Mechanical System Test”. (See [MECHANICAL SYSTEM TEST \[GW6A-EL, GW6AX-EL\].](#))

9. Disconnect the selector cable from the transaxle. (See [SELECTOR CABLE REMOVAL/INSTALLATION.](#))

10. Remove the selector cable bracket.



11. Disconnect the breather hose from the transaxle.



12. Remove the joint cover. (See [STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION.](#))

13. Disconnect the intermediate shaft from the steering gear and linkage. (See [STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION.](#))

14. Drain the engine coolant. (See [ENGINE COOLANT REPLACEMENT \[SKYACTIV-D 2.2\].](#))

15. Remove the EGR cooler. (See [EGR COOLER REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))

16. Disconnect the solenoid valve connectors and the wiring harness from the solenoid valve component. (See [COMPRESSOR BYPASS SOLENOID VALVE REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#)) (See [REGULATING SOLENOID VALVE REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#)) (See [WASTEGATE SOLENOID VALVE REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))

30. Disconnect the tie-rod ends from the steering knuckles. (See [STEERING GEAR AND LINKAGE REMOVAL/INSTALLATION.](#))

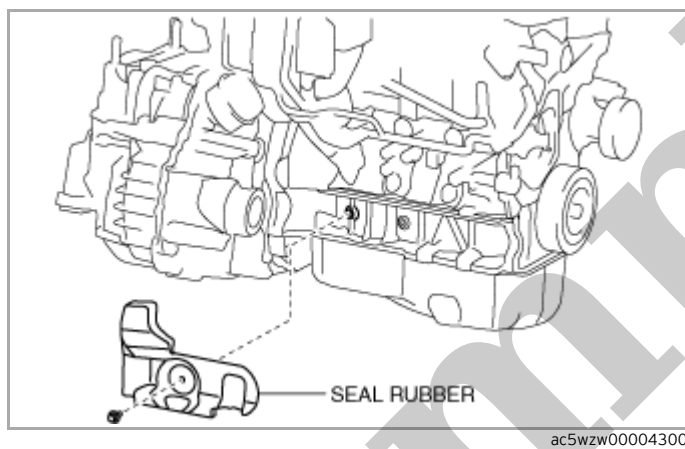
31. Disconnect the front lower arms from the steering knuckles. (See [FRONT LOWER ARM REMOVAL/INSTALLATION.](#))

32. Disconnect the front stabilizer control links from the front stabilizer. (See [FRONT STABILIZER REMOVAL/INSTALLATION.](#))

33. Disconnect the front drive shaft (LH) from the transaxle. (See [FRONT DRIVE SHAFT REMOVAL/INSTALLATION.](#))

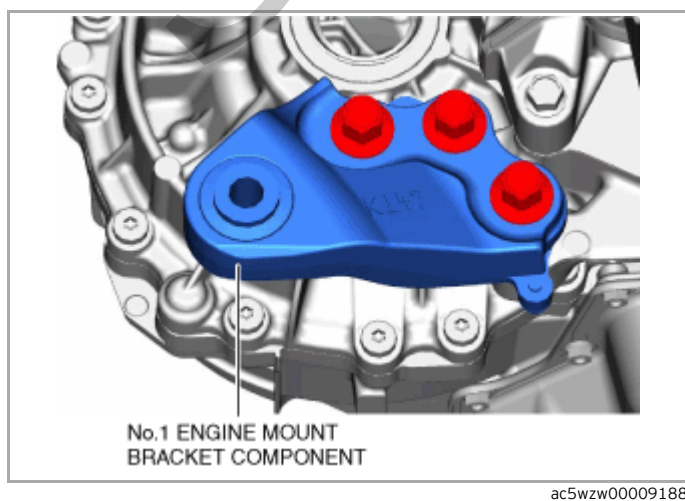
34. Disconnect the front drive shaft (RH) from the transaxle. (See [FRONT DRIVE SHAFT REMOVAL/INSTALLATION.](#))

35. Remove the seal rubber.

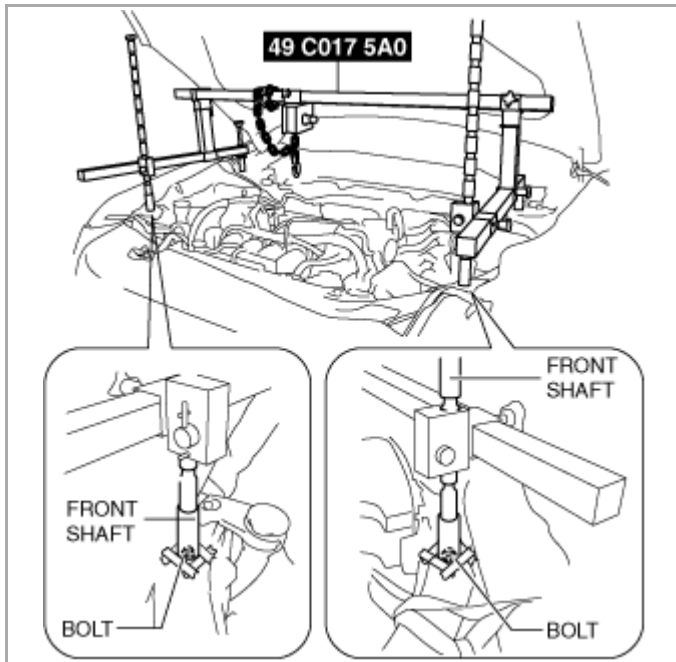


36. Remove the front crossmember component and No.1 engine mount rubber as a single unit. (See [FRONT CROSSMEMBER REMOVAL/INSTALLATION.](#))

37. Remove the No.1 engine mounting bracket component.

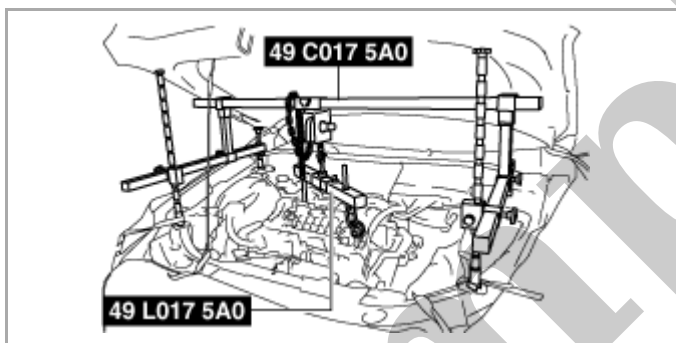


38. Install the SST using the following procedures.



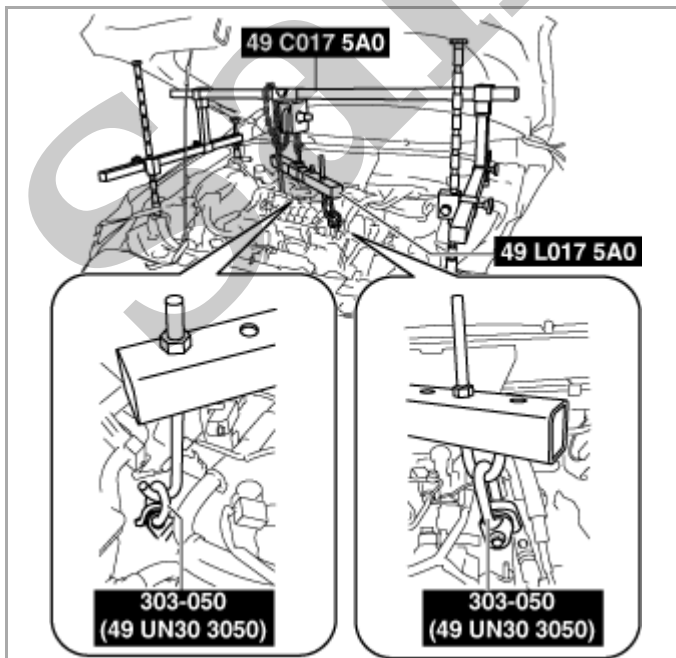
ac5wzw00009195

(8) Install the SST (49 L017 5A0) to the SST (49 C017 5A0) as shown in the figure.



ac5jjw00010787

(9) Install the SST (49 L017 5A0) to the SST (49 UN30 3050) with the hook of the SST (49 L017 5A0) facing outward.

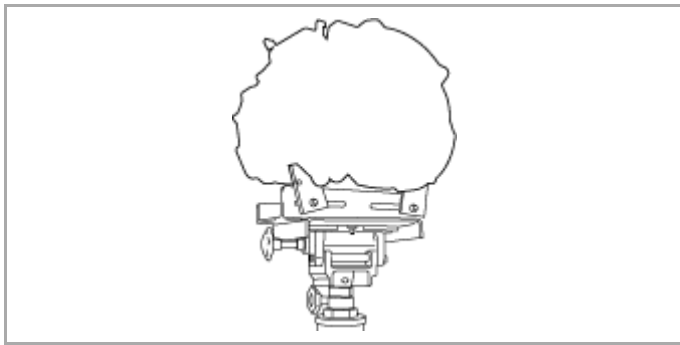


ac5jjw00010788

(10) Adjust the height of the left and right side bars so that they are leveled, then tighten each part of the SST.

(11) Apply tension to the chain to secure the engine.

39. Remove in the order shown in the figure.



ac5jjw00003179

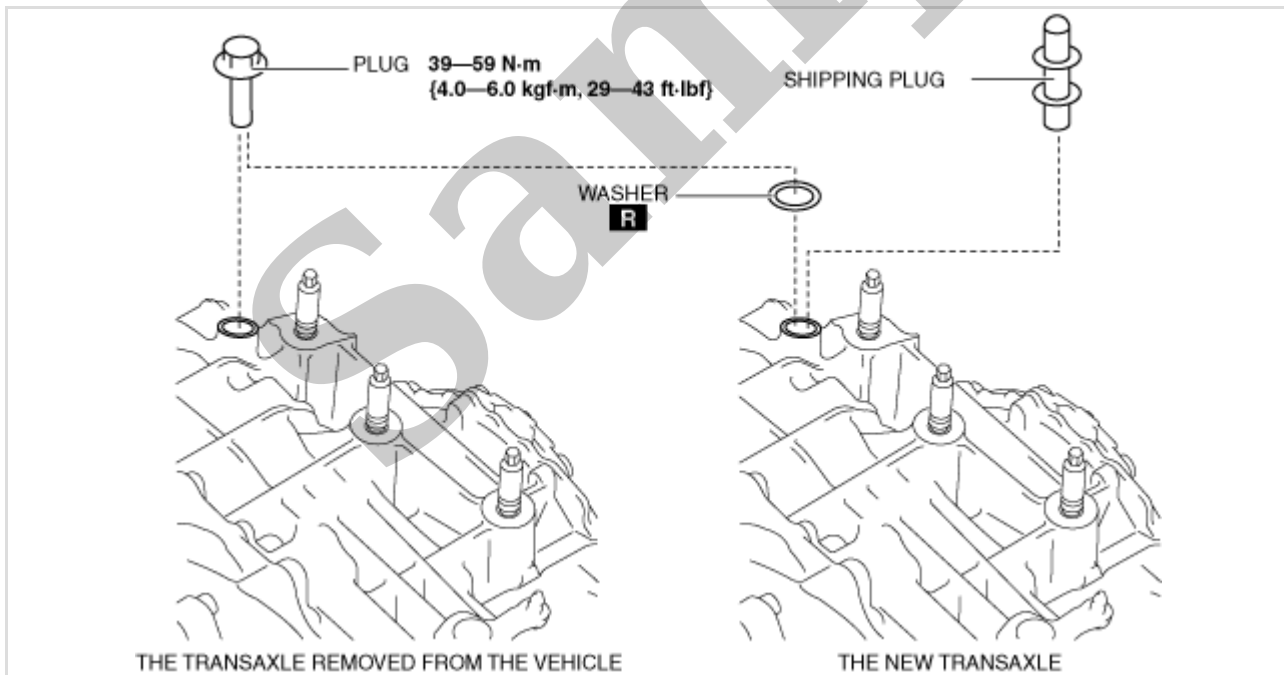
3.Remove the transaxle mounting bolts (lower side).

4.Remove the transaxle.

## Installation

1.If the transaxle is replaced with a new one, perform the following procedure.

- (1)Remove the shipping plug from the new transaxle.
- (2)Remove the plug from the transaxle removed from the vehicle.
- (3)Install the plug and washer that were removed to the new transaxle.



ac9uuw00011693

## Caution

- Verify that the torque converter stud bolts are inserted into the drive plate bolt holes, and install the transaxle installation bolts. Otherwise, the drive plate could be damaged.

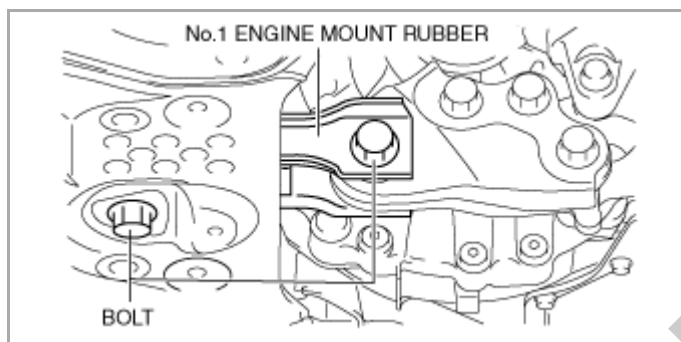
2.Verify that the torque converter stud bolts are inserted into the drive plate bolt holes from the starter installation hole.

## Tightening torque

131–153 N·m {14–15 kgf·m, 97–112 ft·lbf}

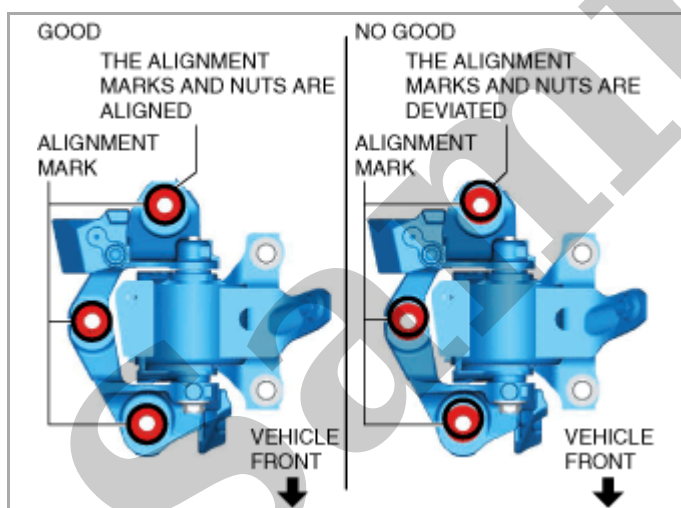
8. Install the front crossmember component and No.1 engine mount rubber as a single unit. (See **FRONT CROSSMEMBER REMOVAL/INSTALLATION.**)

9. Temporarily tighten the No.1 engine mount rubber installation bolts.



ac5wzw00009202

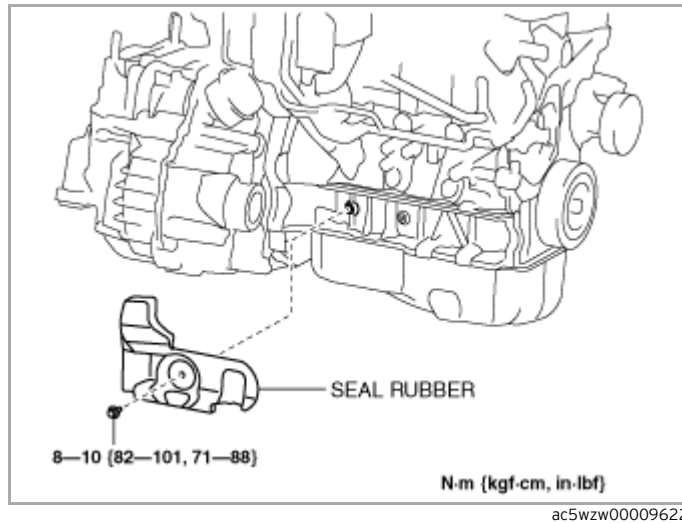
10. Align the positions of the No.4 engine mount bracket installation nuts with the No.4 engine mount bracket.



ac5wzw00009203

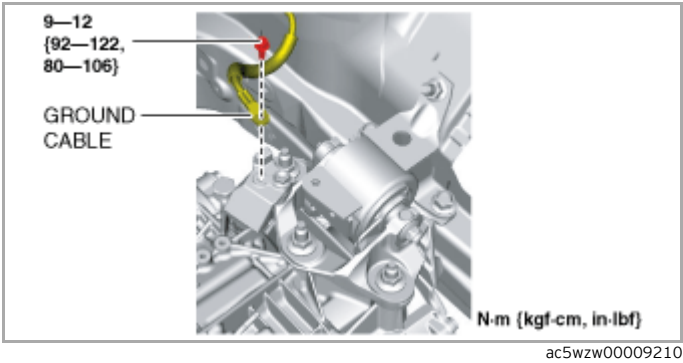
11. Tighten the No.4 engine mount bracket installation nuts and bolt in the order shown in the figure.



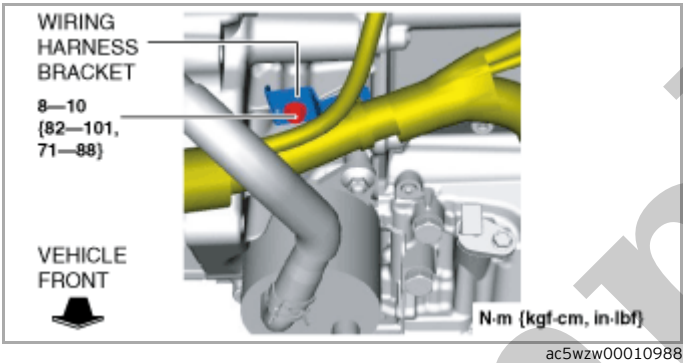


19. Connect the front drive shaft (RH) to the transaxle. (See [FRONT DRIVE SHAFT REMOVAL/INSTALLATION](#).)
20. Connect the front drive shaft (LH) to the transaxle. (See [FRONT DRIVE SHAFT REMOVAL/INSTALLATION](#).)
21. Connect the front stabilizer control links to the front stabilizer. (See [FRONT STABILIZER REMOVAL/INSTALLATION](#).)
22. Connect the front lower arms to the steering knuckles. (See [FRONT LOWER ARM REMOVAL/INSTALLATION](#).)
23. Connect the tie-rod ends to the steering knuckles. (See [STEERING GEAR AND LINKAGE REMOVAL/INSTALLATION](#).)
24. Connect the clips securing the brake hose to the front shock absorbers. (See [FRONT BRAKE HOSE REMOVAL/INSTALLATION \[WITH 2-PISTON FLOATING CALIPER\]](#).)
25. Connect the front ABS wheel-speed sensors to the steering knuckles. (See [FRONT ABS WHEEL-SPEED SENSOR REMOVAL/INSTALLATION](#).)
26. Connect the water hose to the oil cooler. (Automatic transaxle replacement) (See [OIL COOLER REMOVAL/INSTALLATION \[GW6A-EL, GW6AX-EL \(SKYACTIV-D 2.2\)\]](#).)
27. Connect the oil cooler to the transaxle with the hose connected. (Except automatic transaxle replacement) (See [OIL COOLER REMOVAL/INSTALLATION \[GW6A-EL, GW6AX-EL \(SKYACTIV-D 2.2\)\]](#).)
28. Install the front under cover No.1. (See [FRONT UNDER COVER No.1 REMOVAL/INSTALLATION](#).)
29. Install the front under cover No.2. (See [FRONT UNDER COVER No.2 REMOVAL/INSTALLATION](#).)
30. Install the front tires. (See [WHEEL AND TIRE REMOVAL/INSTALLATION](#).)

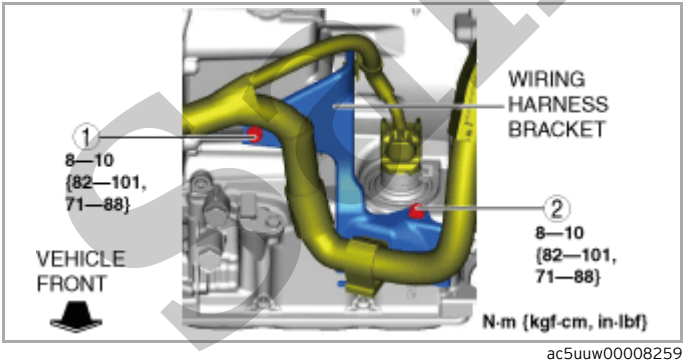
41.Connect the ground cable to the No.4 engine mount bracket.



42.Install the wiring harness bracket.



43.Tighten the wiring harness bracket installation bolts in the order shown in the figure.



44.Connect the control valve body connector.

