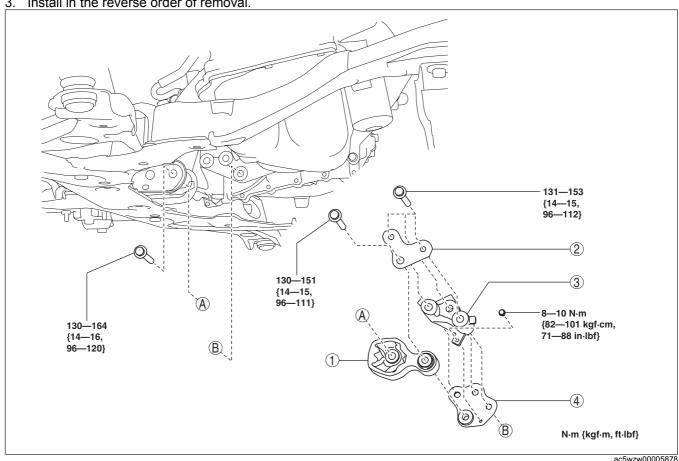
ENGINE MOUNT DISASSEMBLY/ASSEMBLY [SKYACTIV-D 2.2]

id0110s5806900

No.1 Engine Mount (2WD)

- 1. Remove the front under cover No.2. (See FRONT UNDER COVER No.2 REMOVAL/INSTALLATION.)
- Remove in the order indicated in the table.
- Install in the reverse order of removal.



ĺ	1 No.1 engine mount rubber	
		(See No.1 engine mount rubber removal note
		(2WD).)
		(See No.1 engine mount installation note (2WD).)
Ĭ	2	Bracket plate (No.1)
		(See No.1 engine mount installation note (2WD).)

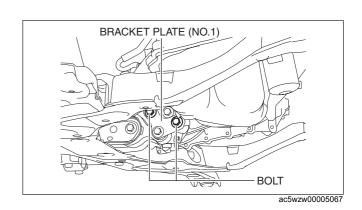
	ac3w2w0000301
3	No.1 engine mount bracket
	(See No.1 engine mount installation note (2WD).)
4	Bracket plate (No.2)
	(See No.1 engine mount installation note (2WD).)

No.1 engine mount rubber removal note (2WD)

1. Loosen the bolts shown in the figure.

Note

- The bracket plate (No.1) can move slightly by loosening the bolts shown in the figure and the No.1 engine mount rubber can be easily removed.
- 2. Remove the No.1 engine mount rubber.



No.1 engine mount installation note (2WD)

1. Install the No.1 engine mount bracket, plate (No.1), and plate (No.2) and temporarily tighten the installation bolts.

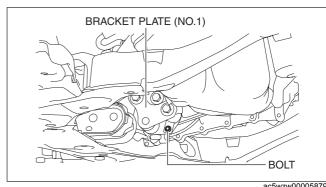
2. Tighten the bolt shown in the figure.

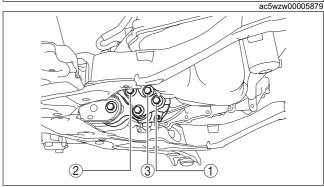
Tightening torque 8-10 N·m {82-101 kgf·cm, 71-88 in·lbf}

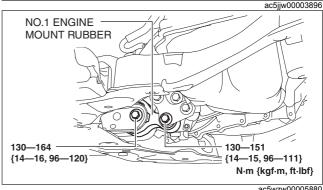
- 3. Install the No.1 engine mount rubber and temporarily tighten the installation bolts.
- 4. Tighten the No.1 engine mount bracket, plate (No. 1) and plate (No.2) installation bolts in the order shown in the figure.

Tightening torque 131—153 N·m {14—15 kgf·m, 97—112 ft·lbf}

5. Tighten the No.1 engine mount rubber installation bolts.







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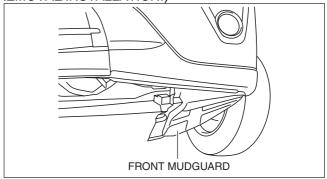
No.1 Engine Mount (4WD)

Note

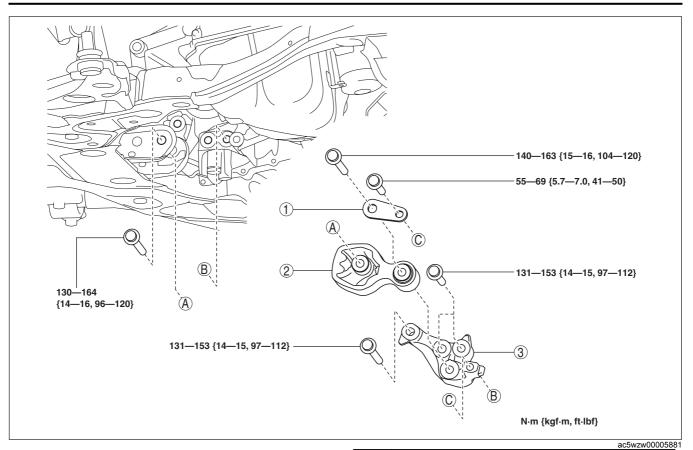
- When removing the No.1 engine mount rubber for 4WD vehicles, loosen the front crossmember installation bolts and perform the procedure with the front crossmember component lowered to 15—20 mm {0.60— 0.78 in}.
- When removing the No.1 engine mount bracket for 4WD vehicles, perform the procedure with the front crossmember component and transfer completely removed from the vehicle.

1. Remove the front under cover No.1 and No.2. (See FRONT UNDER COVER No.1 REMOVAL/ INSTALLATION.) (See FRONT UNDER COVER No.2 REMOVAL/INSTALLATION.)

- 2. Set the front mudguard away from the front crossmember and front bumper. (See MUDGUARD REMOVAL/INSTALLATION.)
- 3. Remove the splash shield. (See SPLASH SHIELD REMOVAL/INSTALLATION.)
- 4. Remove in the order indicated in the table.
- 5. Install in the reverse order of removal.
- 6. Inspect the front wheel alignment. (See FRONT WHEEL ALIGNMENT.)



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1	Bracket plate
	(See No.1 engine mount rubber, bracket plate
	installation note (4WD).)
2	No.1 engine mount rubber
	(See No.1 engine mount rubber removal note
	(4WD).)
	(See No.1 engine mount rubber, bracket plate
	installation note (4WD).)

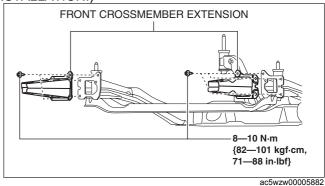
No.1 engine mount bracket (See No.1 engine mount bracket removal note (See No.1 engine mount bracket installation note (4WD).)

No.1 engine mount rubber removal note (4WD)

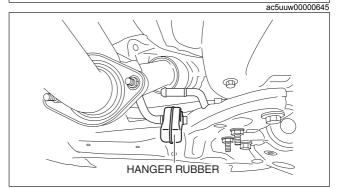
Remove the joint bolt (steering gear side) and disconnect the steering shaft from the steering gear and linkage.

(See STEERING WHEEL AND COLUMN REMOVAL/INSTALLATION.)

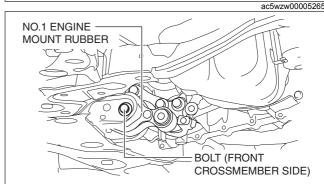
Disconnect the front crossmember extension.



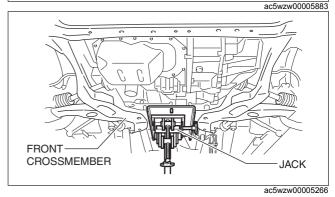
- 3. Remove the insulator shown in the figure.
- 8—10 {82—101, 71—88} CLIP N·m {kgf·cm, in·lbf}
- 4. Disconnect the hanger rubber from the front crossmember and set it aside.
- Disconnect the front stabilizer link (front stabilizer side). (See FRONT STABILIZER REMOVAL/ INSTALLATION.)



6. Remove the No.1 engine mount rubber installation bolt (front crossmember side).



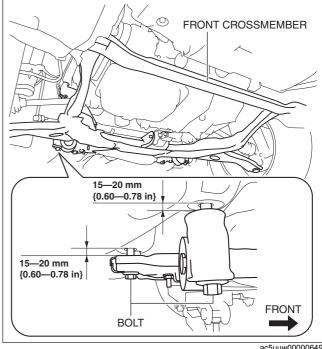
7. Support the front crossmember component using a jack.



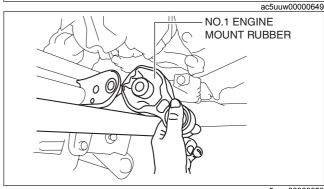
8. Loosen the front crossmember installation bolts (8) and lower the front crossmember component to 15 -20 mm {0.60-0.78 in}.

Note

To remove the No.1 engine mount, lower the front crossmember component to make clearance between the component and transfer.



9. Remove the No.1 engine mount rubber.



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No.1 engine mount bracket removal note (4WD)

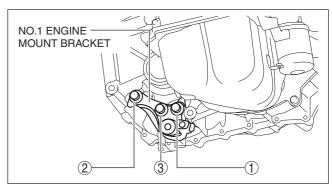
- 1. Remove the front crossmember component and No.1 engine mount rubber as a single unit. (See FRONT CROSSMEMBER REMOVAL/INSTALLATION.)
- 2. Remove the transfer. (See TRANSFER REMOVAL/INSTALLATION [D66MX-R] (MTX).) (See TRANSFER REMOVAL/INSTALLATION [GW6AX-EL] (ATX).)
- 3. Remove the No.1 engine mount bracket.

No.1 engine mount bracket installation note (4WD)

1. Install the No.1 engine mount bracket and tighten the bolts in the order shown in the figure.

Tightening torque 131—153 N·m {14—15 kgf·m, 97—112 ft·lbf}

2. Install in the reverse order of removal.

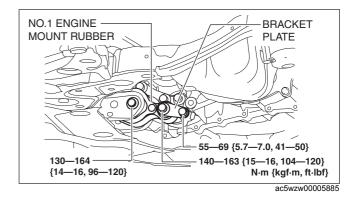


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No.1 engine mount rubber, bracket plate installation note (4WD)

- 1. Install the No.1 engine mount rubber to the front crossmember.
- 2. Tighten the front crossmember installation bolts. (See FRONT CROSSMEMBER REMOVAL/INSTALLATION.)
- 3. Remove the jack.

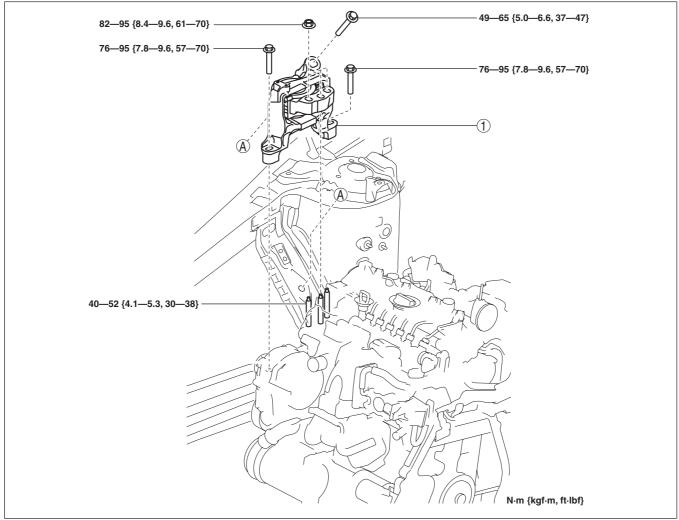
- 4. Tighten the No.1 engine mount rubber installation bolts.
- 5. Install in the reverse order of removal.



No.3 Engine Mount

Caution

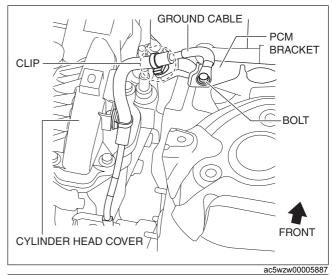
- Slots have been adopted for the No.3 engine mount installation holes. If the No.3 engine mount is deviated from the original position when installing the No.3 engine mount, engine noise or vibration could increase. Before removing the No.3 engine mount, place alignment marks on the No.3 engine mount and body so that they can be assembled to the same positions as before removal.
- 1. Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)
- 2. Remove the engine cover. (See ENGINE COVER REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 3. Remove in the order indicated in the table.
- 4. Install in the reverse order of removal.



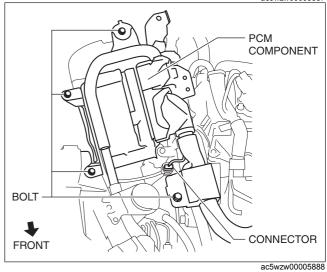
No.3 engine mount (See No.3 engine mount removal note.) (See No.3 engine mount installation note.)

No.3 engine mount removal note

1. Remove the clip and bolt shown in the figure and set the ground cable aside.



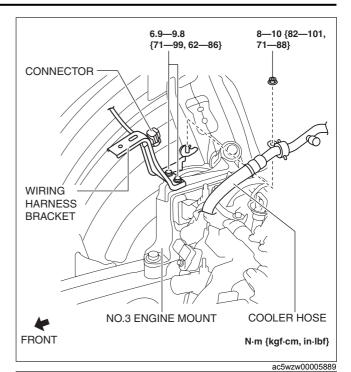
2. Remove the bolts and connector shown in the figure and set the PCM component aside with the PCM connector connected.

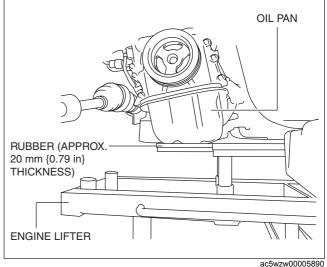


- 3. Set the connector and cooler hose shown in the figure aside and remove the wiring harness bracket.
- Remove the front under cover No.2. (See FRONT UNDER COVER No.2 REMOVAL/ INSTALLATION.)
- Remove the seal plate installed to the underside of the oil pan. (See OIL PAN REMOVAL/ INSTALLATION [SKYACTIV-D 2.2].)

Caution

- To prevent deformation of the oil pan, support the engine using the following methods.
 - When using an engine lifter, insert rubber of appropriate size (approx. 20 mm {0.79 in} thickness) between the engine lifter and the oil pan to support the oil pan.
 - When using a garage jack, place rubber of appropriate size (approx. 20 mm {0.79 in} thickness) on a batten which is large enough to cover and support the oil pan.
- 6. Before removing the No.3 engine mount, support the engine (oil pan) using a commercially available engine lifter or garage jack.

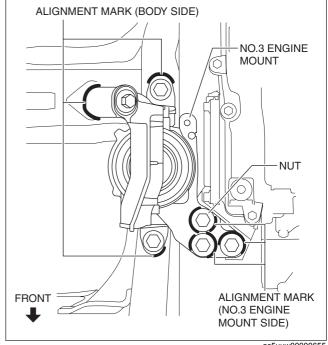




7. Place alignment marks on the locations shown in the figure so that they can be assembled to the same positions as before removal.

Note

- · Paint so that the No.3 engine mount is framed on the body side and the outline of the nut is framed on the No.3 engine mount side.
- 8. Remove the No.3 engine mount.



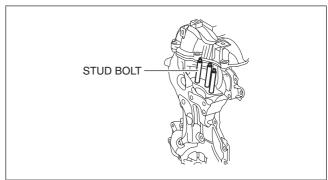
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No.3 engine mount installation note

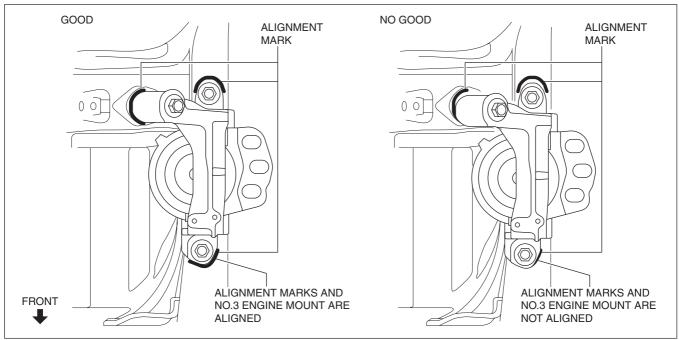
Note

- When replacing the No.3 engine mount, place a mark at the same position as the one placed before removal.
- If the No.3 engine mount nut is loosened, tighten the engine front cover stud bolts because they may have loosened.
- 1. Tighten the engine front cover stud bolts.

Tightening torque 40—52 N·m {4.1—5.3 kgf·m, 30—38 ft·lbf}

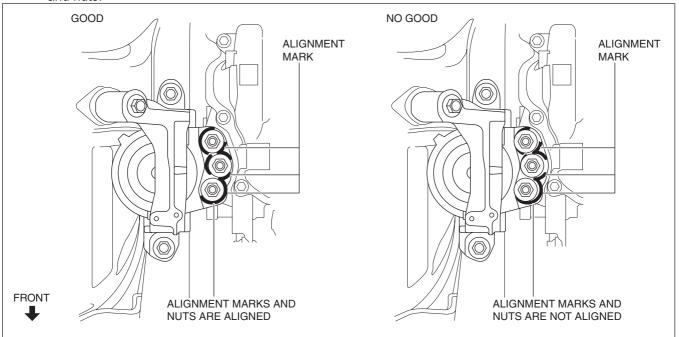


- 2. Temporarily tighten the No.3 engine mount installation bolts and nuts using the following procedure:
 - (1) Align the alignment marks on the body side and No.3 engine mount, and temporarily tighten the bolts shown in the figure.



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(2) Temporarily tighten the nuts shown in the figure while aligning the alignment marks of the No.3 engine mount and nuts.



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Note

• If the alignment marks are deviated, align the alignment marks while slightly moving the engine and temporarily tighten the nuts.

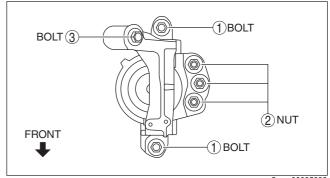
3. Tighten the No.3 engine mount installation bolts and nuts in the order as shown in the figure.

Tightening torque

No.	Tightening torque
1	76—95 N·m {7.8—9.6 kgf·m, 57—70 ft·lbf}
2	82—95 N·m {8.4—9.6 kgf·m, 61—70 ft·lbf}
3	49—65 N·m {5.0—6.6 kgf·m, 37—47 ft·lbf}

4. Remove the engine lifter or garage jack.

5. Install the seal plate. (See OIL PAN REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)

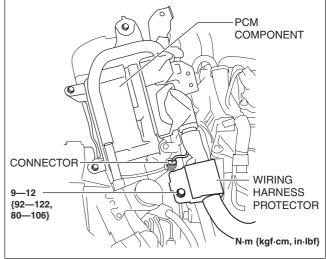


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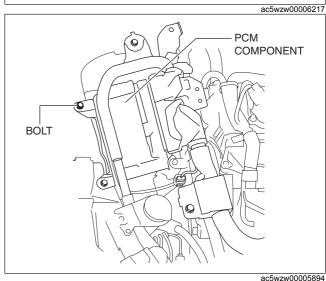
- 6. Install the front under cover No.2. (See FRONT UNDER COVER No.2 REMOVAL/INSTALLATION.)
- 7. Install the wiring harness bracket, cooler hose and connector.

8. Install the PCM component using the following procedure:

(1) Install the wiring harness protector and connector.



(2) Temporarily tighten the bolt shown in the figure.

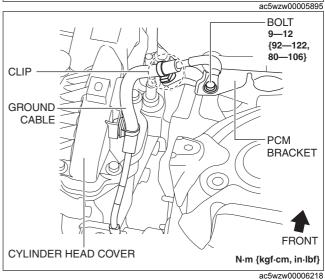


(3) Tighten the PCM component installation bolts in the order shown in the figure.

Tightening torque 9—10 N·m {92—101 kgf·cm, 80—88 in·lbf}

2 PCM COMPONENT

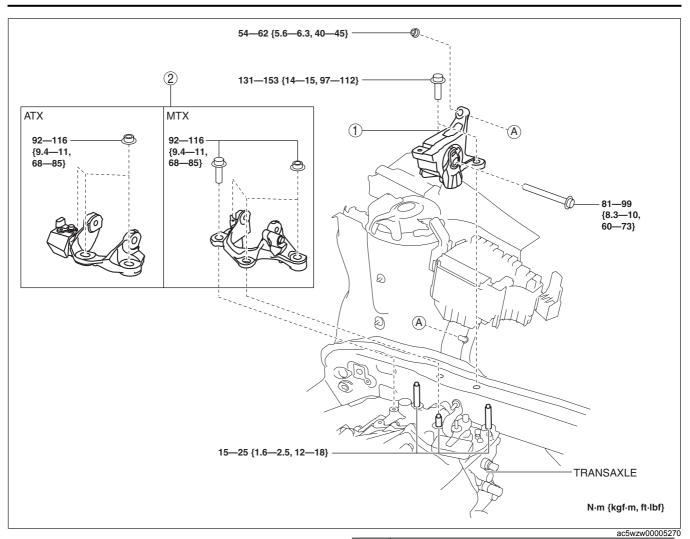
9. Install the ground cable to the PCM bracket.



No.4 Engine Mount

Caution

- Slots have been adopted for the No.4 engine mount bracket installation holes. If the No.4 engine
 mount bracket is deviated from the original position when installing the No.4 engine mount bracket,
 engine noise or vibration could increase. Before removing the No.4 engine mount bracket, place
 alignment marks on the No.4 engine mount bracket so that they can be assembled to the same
 positions as before removal.
- 1. Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)
- 2. Remove the air cleaner and air hose as a single unit. (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 3. Remove the battery and battery tray. (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 4. Remove in the order indicated in the table.
- 5. Install in the reverse order of removal.



No.4 engine mount rubber
(See No.4 engine mount rubber removal note.)
(See No.4 engine mount rubber installation note.)

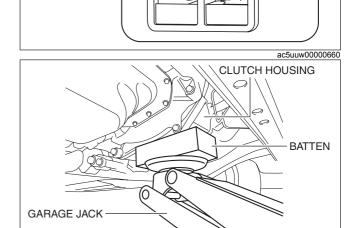
No.4 engine mount bracket
(See No.4 engine mount bracket removal note.)
(See No.4 engine mount bracket installation note.)

No.4 engine mount rubber removal note

- 1. Remove the clips shown in the figure and set the wiring harness protector aside.
- Remove the front under cover No.2. (See FRONT UNDER COVER No.2 REMOVAL/ INSTALLATION.)

Caution

- To prevent deformation of the transaxle, support the transaxle using the following methods.
 - MTX: Support the clutch housing using a batten of appropriate size.

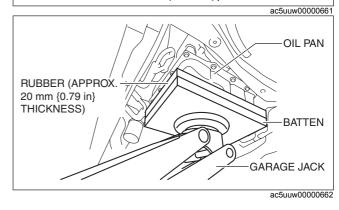


TAB

WIRING HARNESS

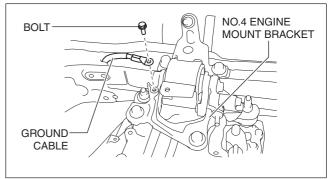
PROTECTOR

- ATX: Place rubber of appropriate size (approx. 20 mm {0.79 in} thickness) on a batten which is large enough to cover and support the oil pan.
- 3. Before removing the No.4 engine mount rubber, support the transaxle using a commercially available engine lifter or garage jack.
- 4. Remove the No.4 engine mount rubber.



No.4 engine mount bracket removal note

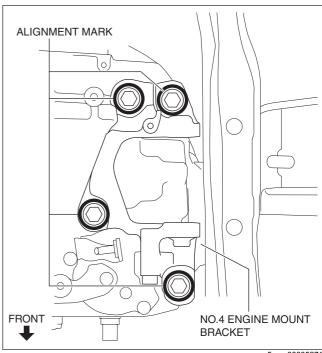
1. Remove the bolt shown in the figure and set the ground cable aside.



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2. Place alignment marks on the locations shown in the figure so that they can be assembled to the same positions as before removal.

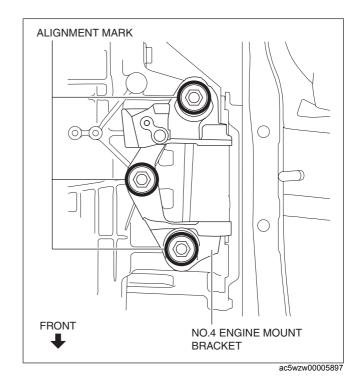
MTX



ATX

Note

- Paint so that the outline of the nut is framed on the bracket side.
- 3. Remove the No.4 engine mount bracket.

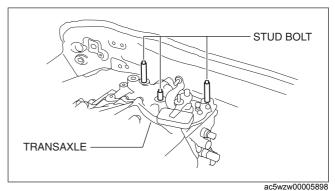


No.4 engine mount bracket installation note

Note

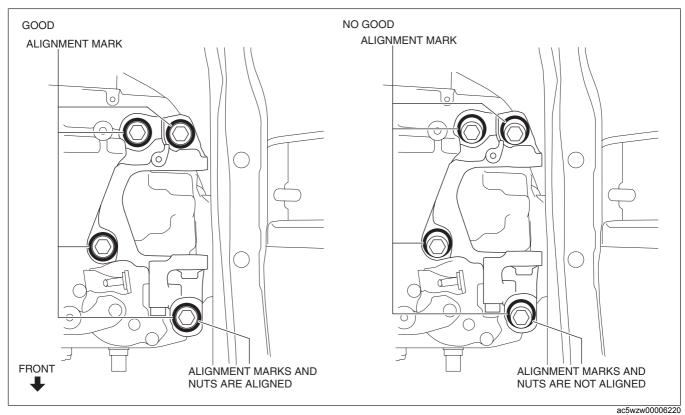
- When replacing the No.4 engine mount bracket, place a mark at the same position as the one placed before removal
- If the No.4 engine mount bracket nut is loosened, tighten the transaxle stud bolts because they may have loosened.
- 1. Tighten the transaxle stud bolts.

Tightening torque 15—25 N·m {1.6—2.5 kgf·m, 12—18 ft·lbf}

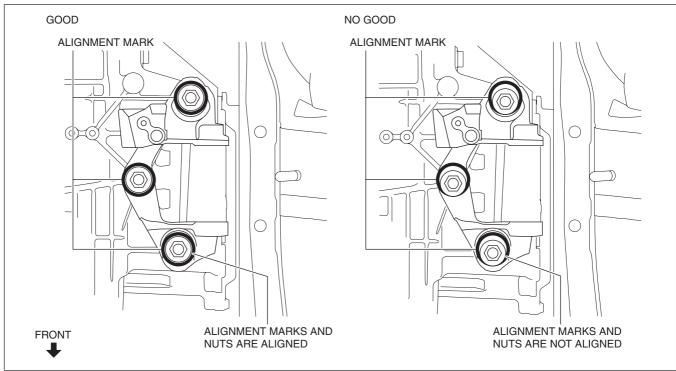


2. Align the alignment marks on the No.4 engine mount bracket and nuts, and temporarily tighten the nuts shown in the figure.

MTX



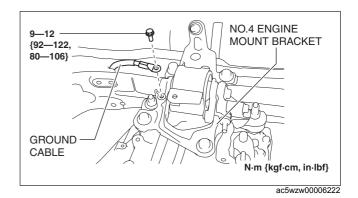
ATX



3. Tighten the No.4 engine mount bracket installation nuts and bolt.

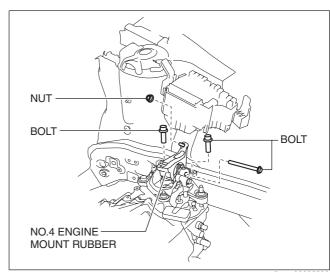
Tightening torque 92—116 N·m {9.4—11 kgf·m, 68—85 ft·lbf}

4. Install the ground cable to the No.4 engine mount bracket.



No.4 engine mount rubber installation note

1. Install the No.4 engine mount rubber and temporarily tighten the bolts and nut shown in the figure.



2. Tighten the No.4 engine mount rubber installation bolts and nut in the order shown in the figure.

Tightening torque

No.	Tightening torque
1. 2	131—153 N·m {14—15 kgf·m, 97—112
1, 2	ft·lbf}
3	54—62 N·m {5.6—6.3 kgf·m, 40—45 ft·lbf}
4	81—99 N·m {8.3—10 kgf·m, 60—73 ft·lbf}

- 3. Remove the engine lifter or garage jack.
- 4. Install in the reverse order of removal.

