

B12 ENGINE MOUNTING

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1 ENGINE MOUNTING RIGHT INSULATOR

1-1 REMOVAL AND INSTALLATION

1-1-1 ARTICLES TO BE PREPARED

Instrument

Torque wrench

Lubricant, adhesive, others

Wooden block

1-1-2 OPERATION BEFORE REMOVAL

1. Disconnect the air cleaner hose No. 1.

(1) Vehicle mounted with Type 1KR engine

Refer to Page B3-1.

(2) Vehicle mounted with Type K3 engine

Refer to Page B3-9.

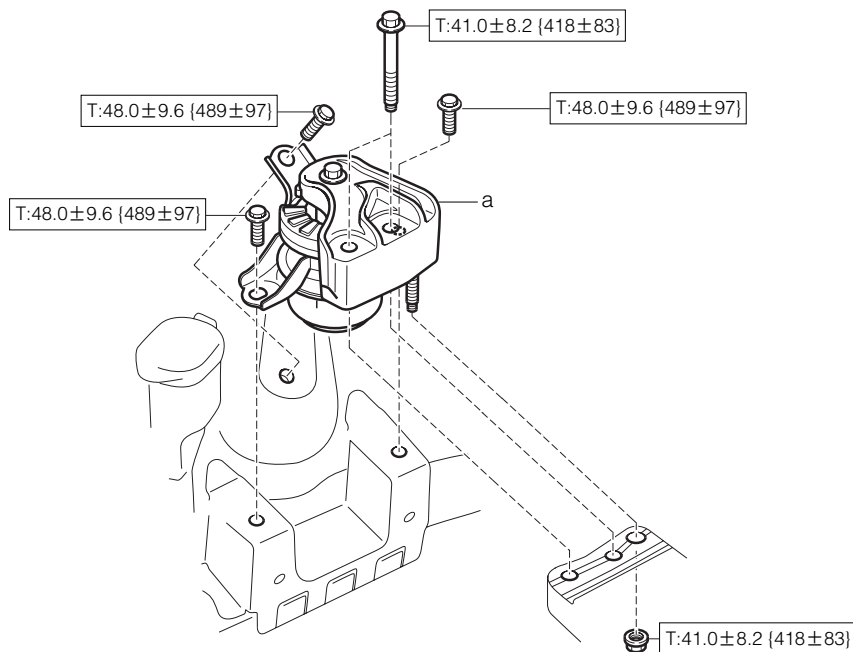
2. Lift up the vehicle.

3. Remove the engine under cover RH.

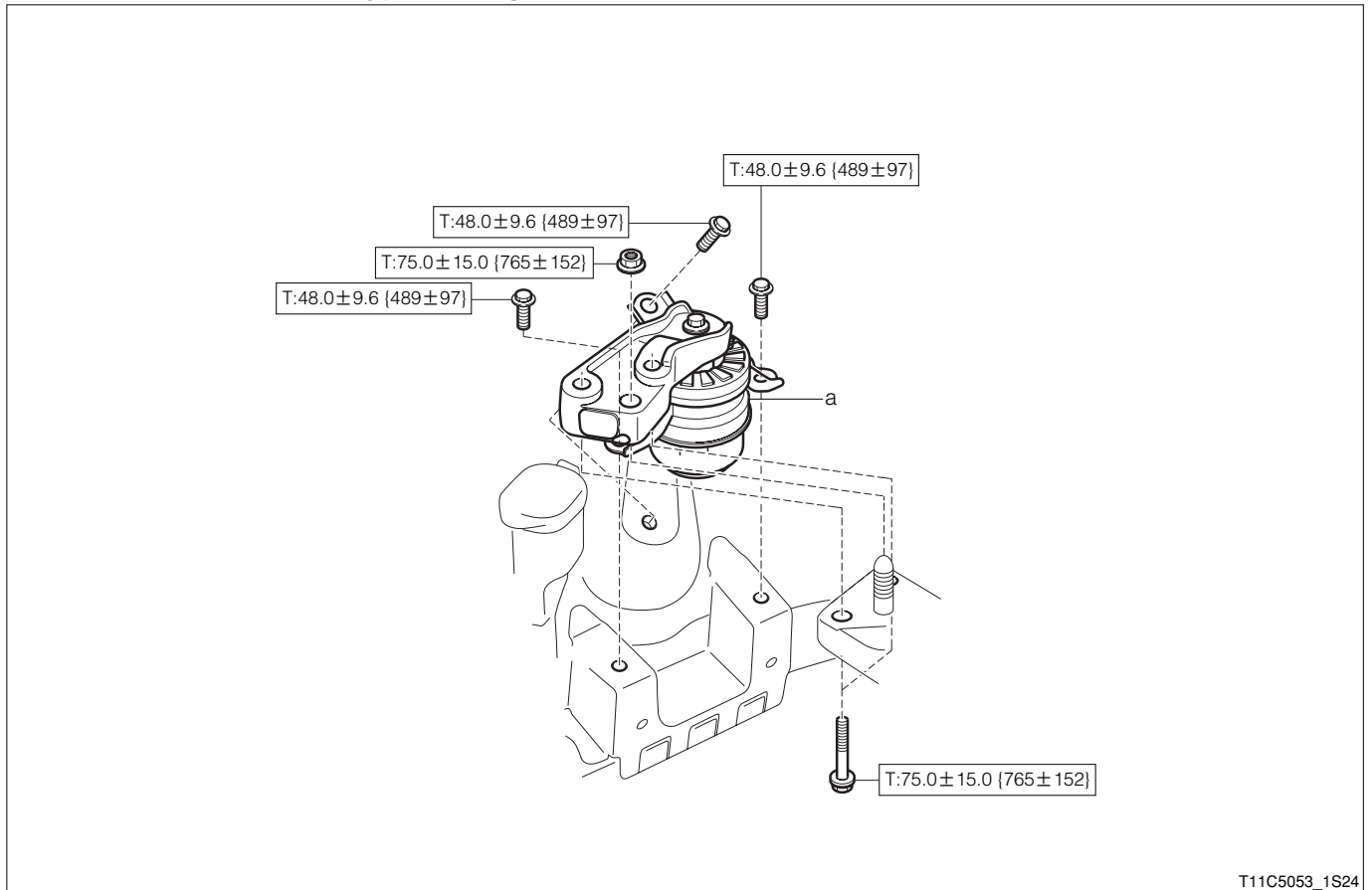
1-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) Components

① Vehicle mounted with type 1KR engine



② Vehicle mounted with type K3 engine



T11C5053_1S24

Unit:N·m{kgf·cm}

(2) Removal and installation procedures

- ▼ ▲ 1 a Insulator S/A, engine mounting, RH

1-1-4 POINTS OF REMOVAL**(1) Insulator S/A, engine mounting, RH**

1. Apply a garage jack to the joint section between the engine Ay and the manual transaxle Ay/automatic transaxle Ay to support.

CAUTION

- When applying a garage jack, be sure to interpose a wooden block or cloth so as not to scratch the parts.

2. Apply a garage jack to the joint section of the engine Ay and the compressor Ay with magnet clutch.

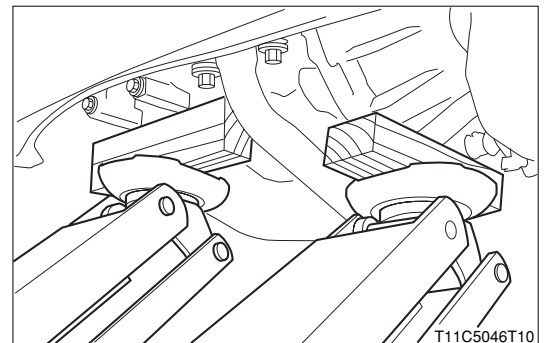
CAUTION

- When applying a garage jack, be sure to interpose a wooden block or cloth so as not to scratch the parts.
- Be very careful not to bring the garage jack in contact with the tank section of the oil pan S/A. (Engine)

3. Remove the insulator S/A.

NOTE

- Do not disassemble the insulator section and bracket section during the removal of the insulator S/A.



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1-1-5 INSPECTION

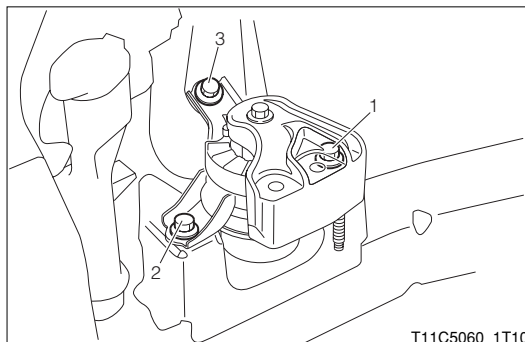
(1) Insulator S/A, engine mounting, RH

1. Replace any insulator S/A that exhibits cracks, fluid leakage or a flattened condition.

1-1-6 POINTS OF INSTALLATION

(1) Insulator S/A, engine mounting, RH

1. Install the insulator S/A while adjusting the position of the engine with a garage jack.
2. Thoroughly tighten the three attaching bolts at the body side in the order of (1), (2) and (3) indicated in the right figure.
3. Lower the garage jack. With the load applied to the insulator S/A, thoroughly tighten the bolts and nuts connected to the engine Ay.



1-1-7 OPERATION AFTER INSTALLATION

1. Install the engine under cover RH.
2. Lift down the vehicle.
3. Connect the air cleaner hose No.1.
 - (1) Vehicle mounted with Type 1KR engine
Refer to Page B3-1.
 - (2) Vehicle mounted with Type K3 engine
Refer to Page B3-9.

2 ENGINE MOUNTING LEFT INSULATOR

2-1 REMOVAL AND INSTALLATION

2-1-1 ARTICLES TO BE PREPARED

Instrument

Torque wrench

Lubricant, adhesive, others

Wooden block

2-1-2 OPERATION BEFORE REMOVAL

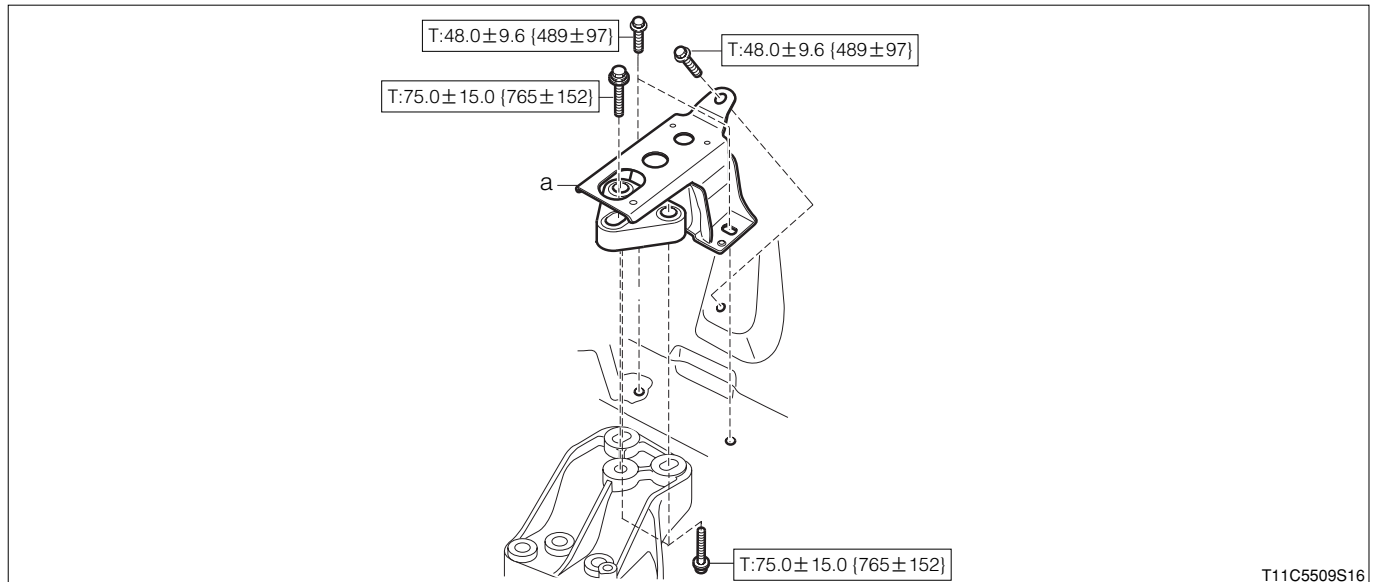
1. Remove the battery carrier.
Refer to Page J5-3.

2. Lift up the vehicle.
3. Remove the engine under cover LH.

2-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) Components

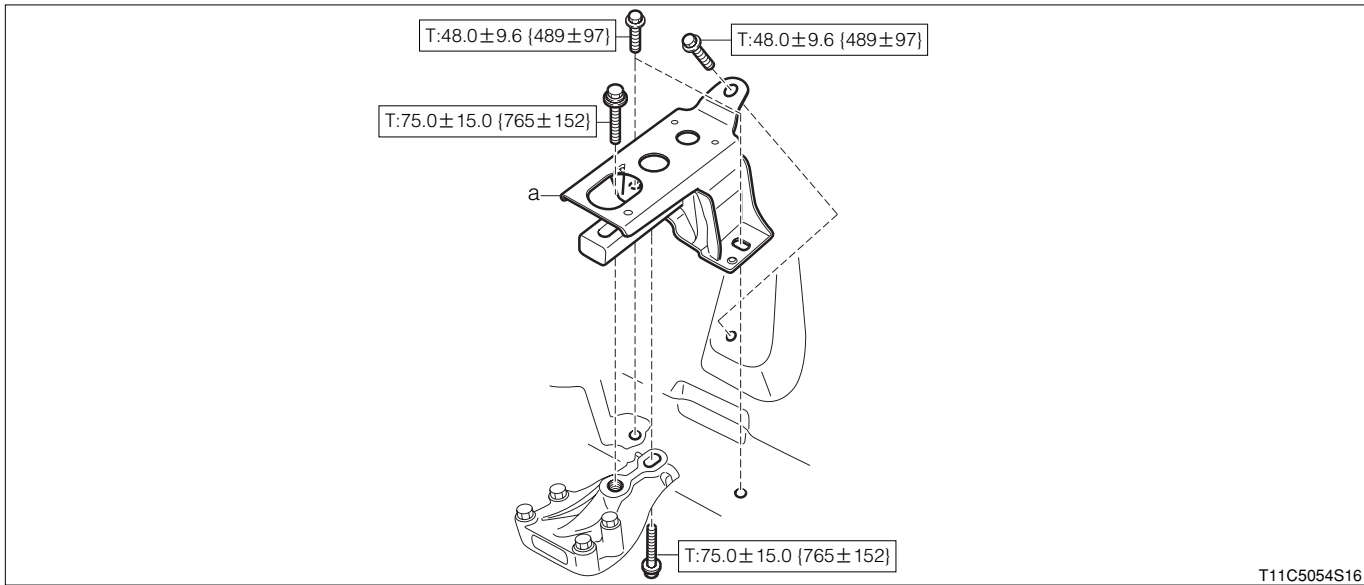
① M/T Vehicle



T11C5509S16

Unit: N·m {kgf·cm}

② A/T Vehicle



Unit:N·m{kgf·cm}

(2) Removal and installation procedures

- ▼ ▲ 1 a Insulator S/A, engine mounting, LH

2-1-4 POINTS OF REMOVAL

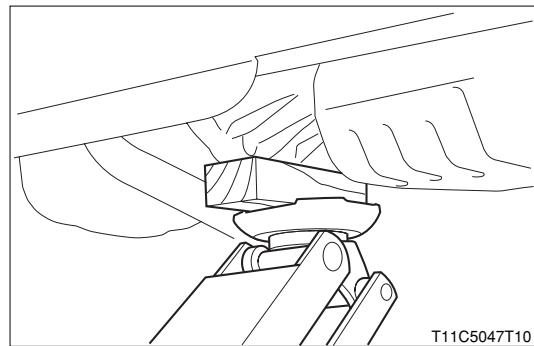
(1) Insulator S/A, engine mounting, LH

1. Apply a garage jack to the joint section between the engine Ay and the manual transaxle Ay/automatic transaxle Ay to support.

CAUTION

- When applying a garage jack, be sure to interpose a wooden block or cloth so as not to scratch the parts.

2. Remove the insulator S/A.



2-1-5 INSPECTION

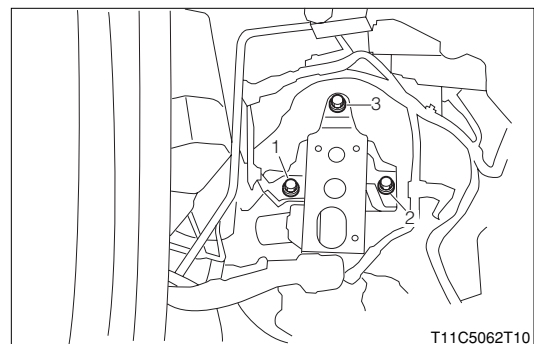
(1) Insulator S/A, engine mounting, LH

1. Replace any insulator S/A that exhibits cracks, or a flattened condition.

2-1-6 POINTS OF INSTALLATION

(1) Insulator S/A, engine mounting, LH

1. Install the insulator S/A to the body. Then, fully tighten the bolts in the sequence of (1), (2), and (3) in the right figure.
2. Install the insulator S/A to the LH engine mounting bracket while adjusting the position of the automatic transaxle Ay with a garage jack.
3. Completely lower the garage jack. Under the condition in which the load is applied to the insulator S/A, fully tighten the bolts attaching the LH engine mounting bracket.



2-1-7 OPERATION AFTER INSTALLATION

1. Install the engine under cover LH.
2. Lift down the vehicle.
3. Install the battery carrier.

Refer to Page J5-3.


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3 ENGINE MOUNTING REAR INSULATOR

3-1 REMOVAL AND INSTALLATION

3-1-1 ARTICLES TO BE PREPARED

SST

Shape	Part No.	Part name
	09628-00011-000 (09611-87701-000)	Puller, tie-rod end

Instrument

Torque wrench

Lubricant, adhesive, others

Wooden block

3-1-2 OPERATION BEFORE REMOVAL

1. Separate the joint at the steering gear assembly side of the steering shaft universal joint assembly No.2.
Refer to Page G1-5.
2. Push out the steering column hole shield to the vehicle outside under a condition where it is attached to the steering gear assembly.
3. Lift up the vehicle.
4. Remove the disc wheels. (Front)
Refer to Page C3-3.
5. Remove the front speed sensor RH/LH from the steering knuckle RH/LH. (ABS-equipped vehicle)
Refer to Page E3-4.
6. Remove the front disc brake caliper Ay RH/LH and suspend it with wire, etc.
Refer to Page E1-53.
7. Remove the Front disc.
Refer to Page E1-60.
8. Separate the stabilizer link from the suspension lower arm S/A RH/LH with bush.
Refer to Page C1-14.
9. Remove the nuts of the front drive shaft Ay RH/LH.
Refer to Page D2-8.

10. Separate the steering knuckle RH/LH from the ball joint section of the tie-rod end S/A RH/LH, using the SST.

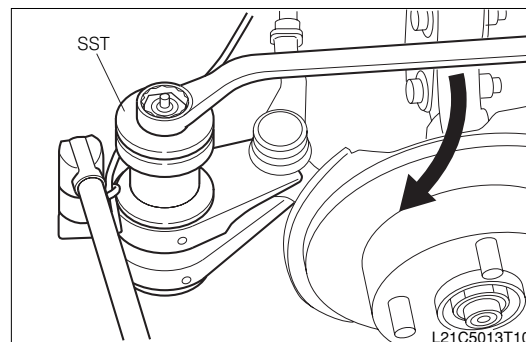
CAUTION

- When setting the SST, attach a dummy nut to the threaded portion of the tie-rod end S/A RH/LH so that the threaded portion may not be damaged.
- Hang the SST using a cord.

SST: 09628-00011-000

11. Separate the front shock absorber Ay from the steering knuckle RH/LH.

Refer to Page C1-6.



12. Pull out the front drive shaft Ay RH/LH from the steering knuckle RH/LH and suspend it with wire, etc.

Refer to Page D2-8.

13. Separate the steering knuckle RH/LH from the ball joint section of the suspension lower arm S/A with bush RH/LH, using the SST.

CAUTION

- When setting the SST, attach a dummy nut to the threaded portion of the suspension lower arm S/A with bush RH/LH so that the threaded portion may not be damaged.
- Hang the SST using a cord.

SST: 09628-00011-000

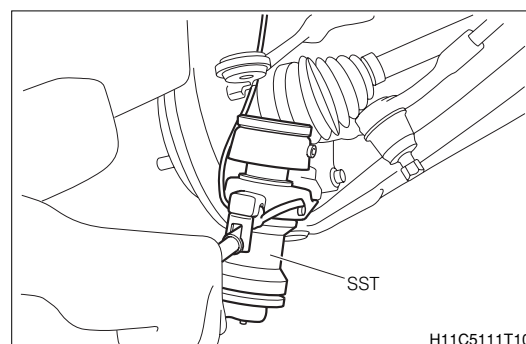
14. Remove the exhaust front pipe Ay.

(1) Vehicle mounted with Type 1KR engine

Refer to Page B4-3.

(2) Vehicle mounted with Type K3 engine

Refer to Page B4-6.



15. Remove the transmission floor shift Ay.(M/T vehicle)

Refer to Page F2-15.

16. Remove the transmission control cable Ay.(A/T vehicle)

Refer to Page F3-34.

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17. Apply a garage jack to the joint section between the engine Ay and the manual transaxle Ay/automatic transaxle Ay to support.

CAUTION

- When applying a garage jack, be sure to interpose a wooden block or cloth so as not to scratch the parts.
- Care must be exercised so that the engine will not come down, while supporting with the garage jack.

18. Remove the bolts connecting the rear engine mounting bracket and the engine mounting control rod S/A.

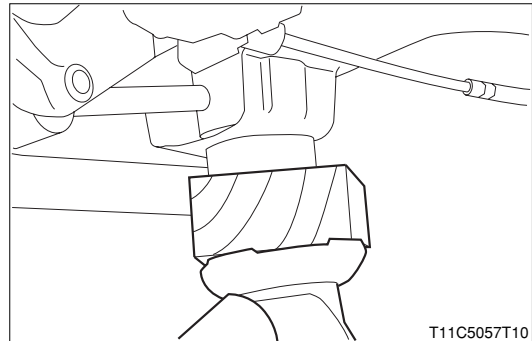
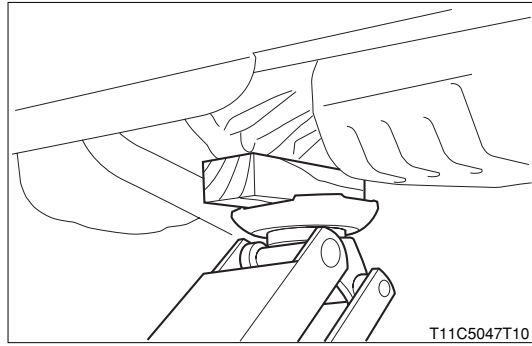
19. Apply a garage jack to the jack point of the front suspension crossmember S/A.

CAUTION

- When applying a garage jack, be sure to interpose a wooden block or cloth so as not to scratch the parts.

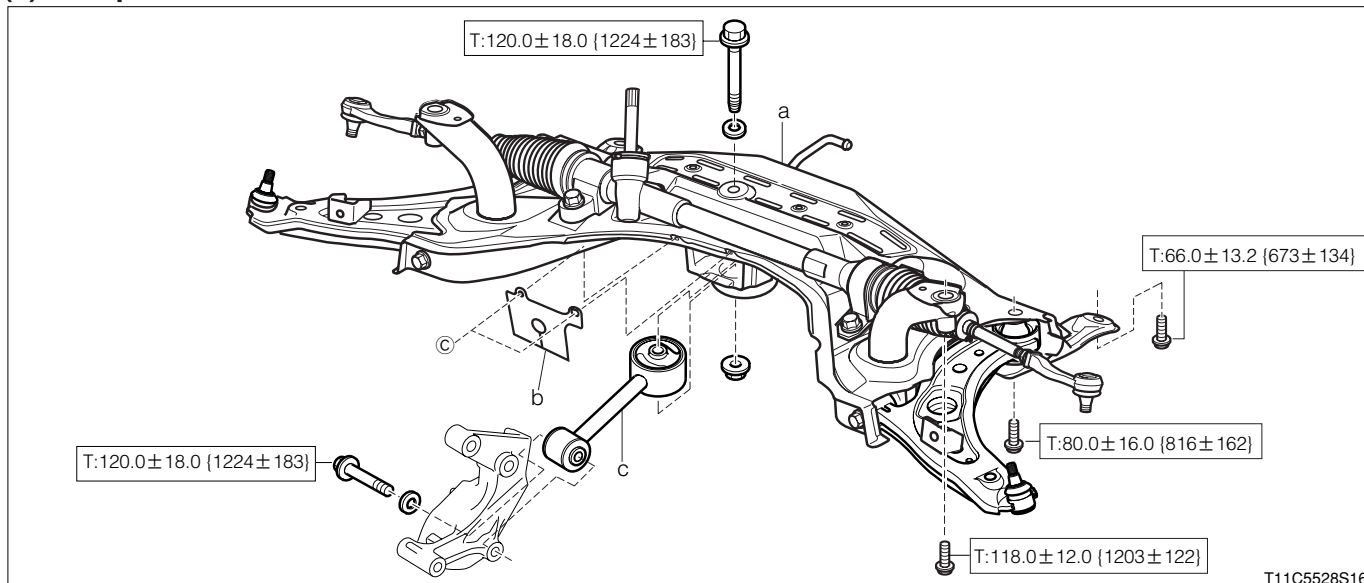
20. With the following parts installed, remove the front suspension crossmember S/A from the vehicle.

- (1) Arm S/A, suspension lower w/bush, RH/LH
- (2) Gear Ay, steering
- (3) Cover, engine mounting hole (Cold region specification vehicle)
- (4) Rod S/A, engine mounting control



3-1-3 REMOVAL AND INSTALLATION PROCEDURES

(1) Components



Unit:N·m{kgf·cm}

(2) Removal procedures

- 1 a Crossmember S/A, front suspension
- 2 b Cover, engine mounting hole (Cold region specification vehicle)
- 3 c Rod S/A, engine mounting control

(3) Installation procedures

- 1 a Crossmember S/A, front suspension
- ▲ 2 c Rod S/A, engine mounting control
- 3 b Cover, engine mounting hole (Cold region specification vehicle)

3-1-4 INSPECTION

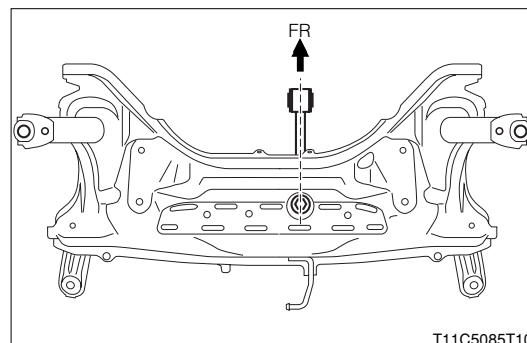
(1) Rod S/A, engine mounting control

1. Replace any rod S/A that exhibits cracks, or a flattened condition.

3-1-5 POINTS OF INSTALLATION

(1) Rod S/A, engine mounting control

1. Install the rod S/A to the front suspension crossmember S/A, making sure that it faces the front direction of the vehicle as shown in the figure. Then, tighten from the bolt side.



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3-1-6 OPERATION AFTER INSTALLATION

1. With the following parts installed to the front suspension crossmember S/A, support it with a garage jack. Then, install it to the vehicle, while adjusting the position.

- (1) Arm S/A, suspension lower w/bush, RH/LH
- (2) Gear Ay, steering
- (3) Cover, engine mounting hole (Cold region specification vehicle)
- (4) Rod S/A, engine mounting control

CAUTION

- When applying a garage jack, be sure to interpose a wooden block or cloth so as not to scratch the parts.

2. Apply a garage jack to the joint section between the engine Ay and the manual transaxle Ay/automatic transaxle Ay to support.

CAUTION

- When applying a garage jack, be sure to interpose a wooden block or cloth so as not to scratch the parts.
- Care must be exercised so that the engine will not come down, while supporting with the garage jack.

3. Tighten the bolts connecting the engine mounting rear bracket and engine mounting control rod S/A.

4. Install the transmission floor shift Ay. (M/T vehicle)

Refer to Page F2-15.

5. Install the transmission control cable Ay. (A/T vehicle)

Refer to Page F3-34.

6. Install the exhaust front pipe Ay.

- (1) Vehicle mounted with Type 1KR engine

Refer to Page B4-3.

- (2) Vehicle mounted with Type K3 engine

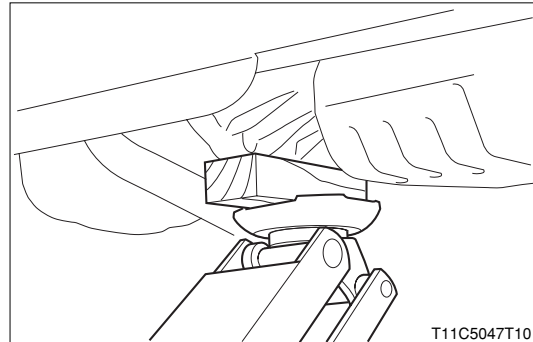
Refer to Page B4-6.

7. Adjust the mounting dimensions of the suspension lower arm S/A with bush RH/LH.

Refer to Page C1-10.

8. Install the ball joint section of the suspension lower arm S/A with bush RH/LH to the steering knuckle RH/LH.

Refer to Page C1-10.



9. Insert the front drive shaft Ay RH/LH into the steering knuckle RH/LH.
Refer to Page D2-8.
10. Install the steering knuckle RH/LH to the front shock absorber.
Refer to Page C1-6.
11. Install the joint section of the steering tie-rod end S/A RH/LH to the steering knuckle RH/LH.
Refer to Page G2-1.
12. Tighten the nuts of the front drive shaft Ay RH/LH.
Refer to Page D2-8.
13. Install the stabilizer link to the suspension lower arm S/A with bush RH/LH.
Refer to Page C1-14.
14. Install the front disc.
Refer to Page E1-60.
15. Install the front disc brake caliper Ay RH/LH.
Refer to Page E1-53.
16. Install the front speed sensor RH/LH to the steering knuckle RH/LH. (ABS-equipped vehicle)
Refer to Page E3-4.
17. Install the disc wheels. (Front)
Refer to Page C3-3.
18. Lift down the vehicle.
19. Install the steering shaft universal joint Ay No.2 to the steering gear Ay.
Refer to Page G1-5.
20. Check and adjust the front wheel alignment.
Refer to Page C1-1.