

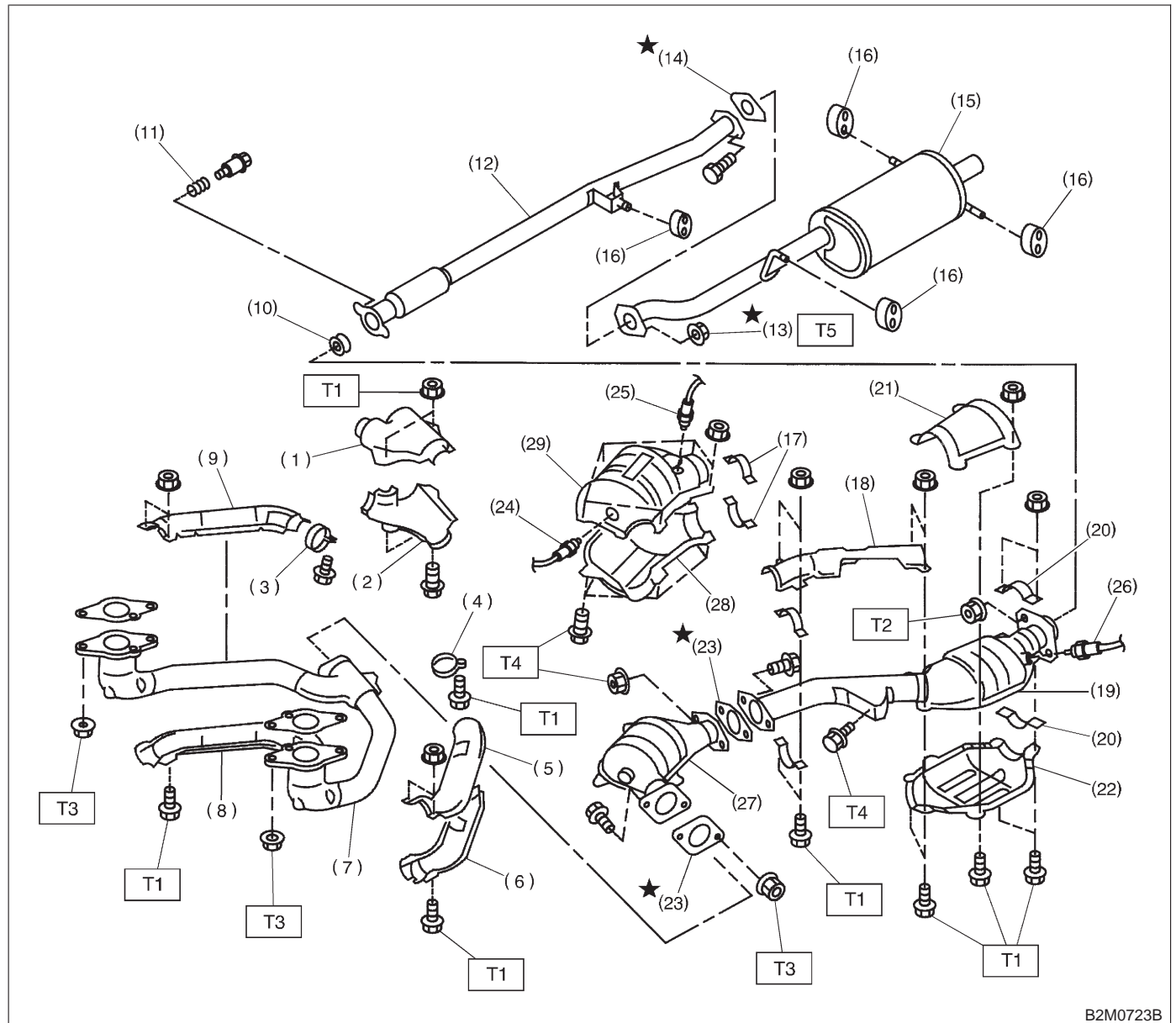
# EXHAUST SYSTEM 2-9

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## 1. Exhaust System

### A: 2200 cc MODEL



B2M0723B

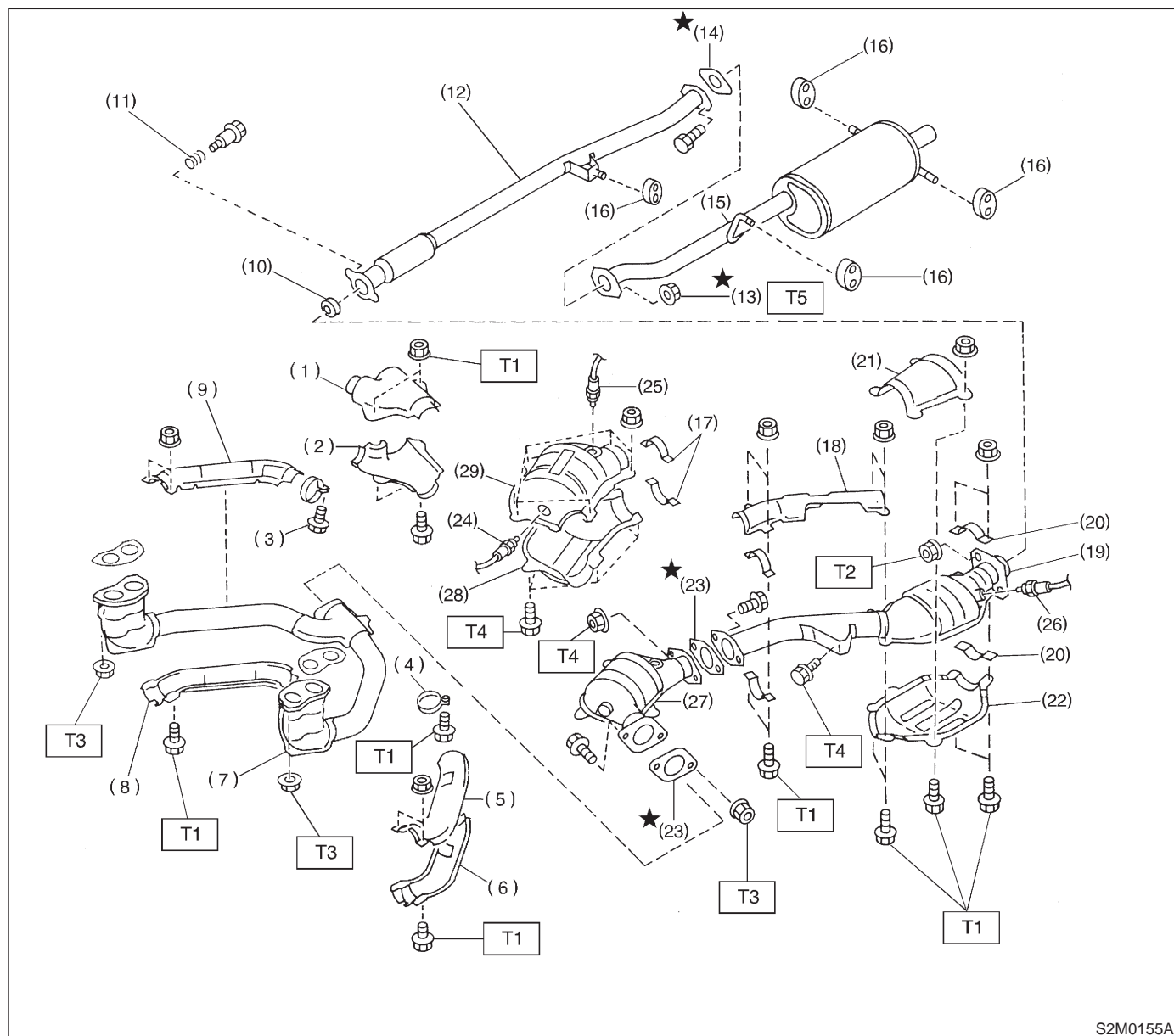
- |  |   |  |
|--|---|--|
| (1) Upper front exhaust pipe cover CTR | (10) Gasket                               | (23) Gasket  |
| (2) Lower front exhaust pipe cover CTR | (11) Spring                               | (24) Front oxygen sensor                                   |
| (3) Band RH                            | (12) Rear exhaust pipe                    | (25) Rear oxygen sensor (California spec. vehicles)        |
| (4) Band LH                            | (13) Self-locking nut                     | (26) Rear oxygen sensor (Except California spec. vehicles) |
| (5) Upper front exhaust pipe cover LH  | (14) Gasket                               | (27) Front catalytic converter                             |
| (6) Lower front exhaust pipe cover LH  | (15) Muffler                              | (28) Lower front catalytic converter cover                 |
| (7) Front exhaust pipe                 | (16) Cushion rubber                       | (29) Upper front catalytic converter cover                 |
| (8) Lower front exhaust pipe cover RH  | (17) Clamp                                |  |
| (9) Upper front exhaust pipe cover RH  | (18) Upper center exhaust pipe cover      |  |
|  | (19) Center exhaust pipe                  |  |
|  | (20) Clamp B                              |  |
|  | (21) Upper rear catalytic converter cover |  |
|  | (22) Lower rear catalytic converter cover |  |

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<i>Tightening torque: N·m (kg-m, ft-lb)</i>	
<i>T1:</i>	<i>13±3 (1.3±0.3, 9.4±2.2)</i>
<i>T2:</i>	<i>18±5 (1.8±0.5, 13.0±3.6)</i>
<i>T3:</i>	<i>30±5 (3.1±0.5, 22.4±3.6)</i>
<i>T4:</i>	<i>35±5 (3.6±0.5, 26.0±3.6)</i>
<i>T5:</i>	<i>48±5 (4.9±0.5, 35.4±3.6)</i>

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## B: 2500 cc MODEL



S2M0155A

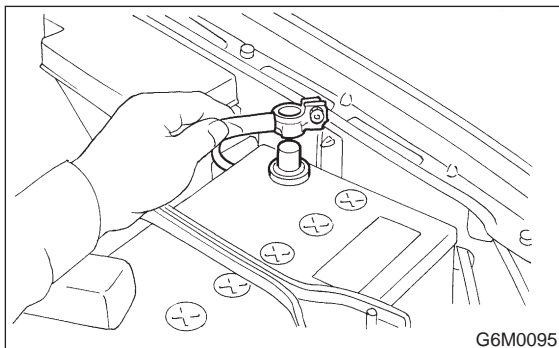
- |  |   |  |
|--|---|--|
| (1) Upper front exhaust pipe cover CTR | (12) Rear exhaust pipe                              | (26) Rear oxygen sensor (Except California spec. vehicles) |
| (2) Lower front exhaust pipe cover CTR | (13) Self-locking nut                               | (27) Front catalytic converter                             |
| (3) Band RH                            | (14) Gasket   | (28) Lower front catalytic converter cover                 |
| (4) Band LH                            | (15) Muffler  | (29) Upper front catalytic converter cover                 |
| (5) Upper front exhaust pipe cover LH  | (16) Cushion rubber                                 |  |
| (6) Lower front exhaust pipe cover LH  | (17) Clamp  |  |
| (7) Front exhaust pipe                 | (18) Upper center exhaust pipe cover                |  |
| (8) Lower front exhaust pipe cover RH  | (19) Center exhaust pipe                            |  |
| (9) Upper front exhaust pipe cover RH  | (20) Clamp B  |  |
| (10) Gasket                            | (21) Upper rear catalytic converter cover           |  |
| (11) Spring                            | (22) Lower rear catalytic converter cover           |  |
|  | (23) Gasket   |  |
|  | (24) Front oxygen sensor                            |  |
|  | (25) Rear oxygen sensor (California spec. vehicles) |  |

**Tightening torque: N-m (kg-m, ft-lb)****T1: 13±3 (1.3±0.3, 9.4±2.2)****T2: 18±5 (1.8±0.5, 13.0±3.6)****T3: 30±5 (3.1±0.5, 22.4±3.6)****T4: 35±5 (3.6±0.5, 26.0±3.6)****T5: 48±5 (4.9±0.5, 35.4±3.6)**

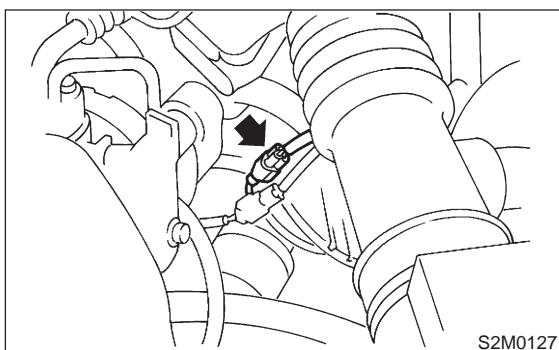
## 1. Front Exhaust Pipe

### A: REMOVAL

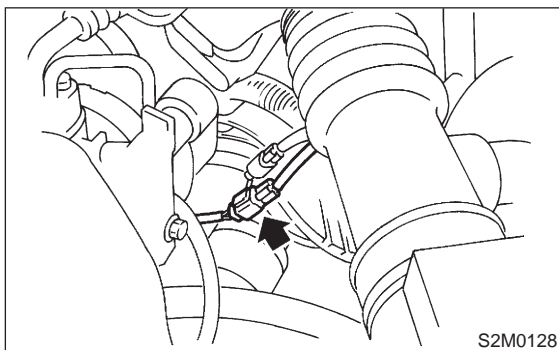
- 1) Disconnect battery ground cable.



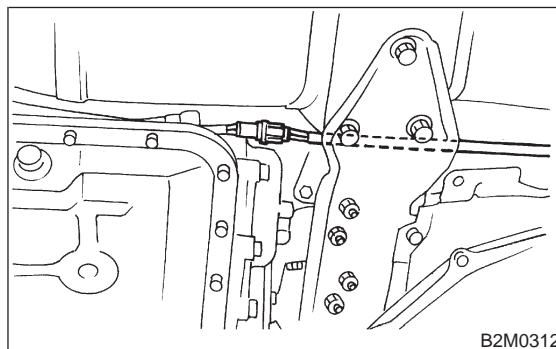
- 2) Disconnect front oxygen sensor connector.



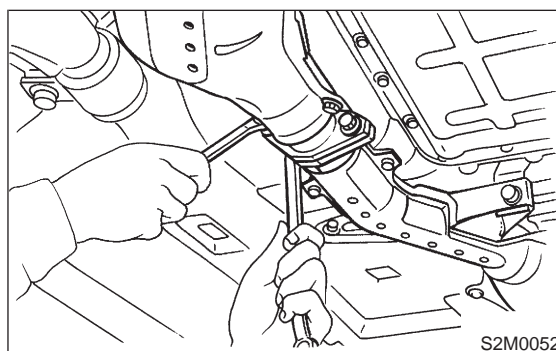
- 3) Disconnect rear oxygen sensor connector.  
(California spec. vehicles)



- 4) Lift-up the vehicle.
- 5) Disconnect rear oxygen sensor connector.  
(Except California spec. vehicles)



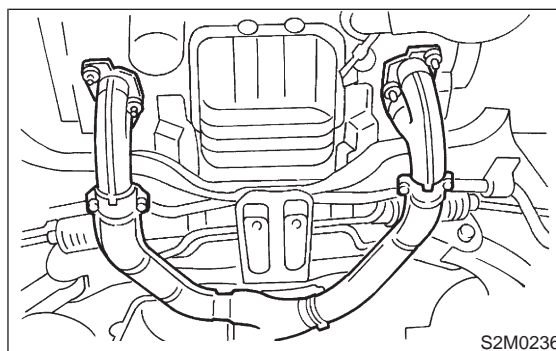
- 6) Separate center exhaust pipe from front exhaust pipe.



- 7) Remove bolts which hold front exhaust pipe onto cylinder heads.

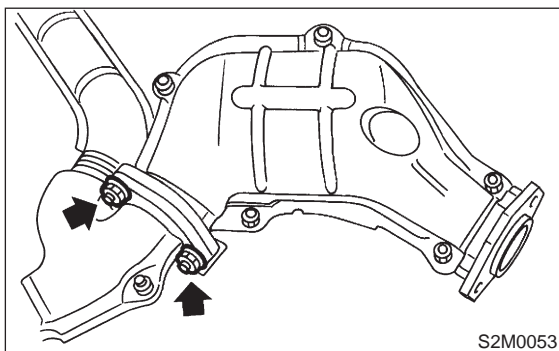
#### CAUTION:

Be careful not to pull down front exhaust pipe and center exhaust pipe.



## 1. Front Exhaust Pipe

- 8) Separate front exhaust pipe from front catalytic converter.

**B: INSTALLATION**

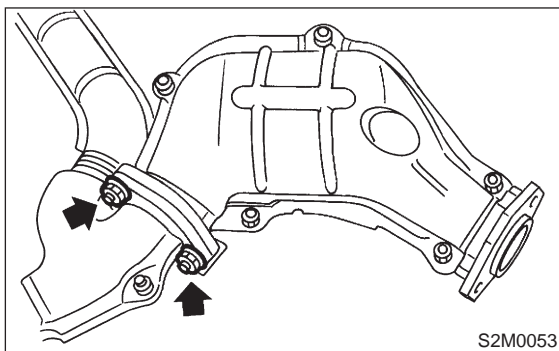
- 1) Install front catalytic converter to front exhaust pipe.

**CAUTION:**

Replace gaskets with new ones.

**Tightening torque:**

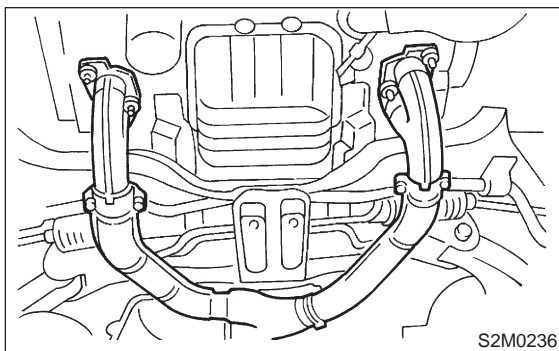
**$30 \pm 5 \text{ N-m}$  ( $3.1 \pm 0.5 \text{ kg-m}$ ,  $22.4 \pm 3.6 \text{ ft-lb}$ )**



- 2) Tighten bolts which hold front exhaust pipe onto cylinder heads.

**Tightening torque:**

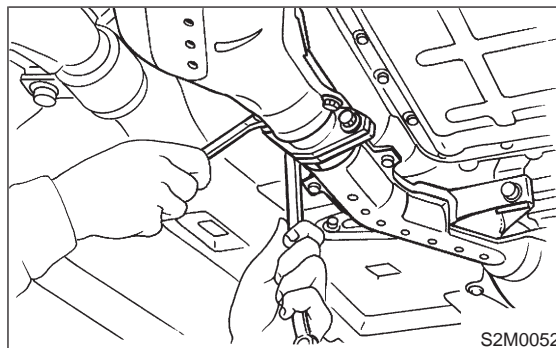
**$30 \pm 5 \text{ N-m}$  ( $3.1 \pm 0.5 \text{ kg-m}$ ,  $22.4 \pm 3.6 \text{ ft-lb}$ )**



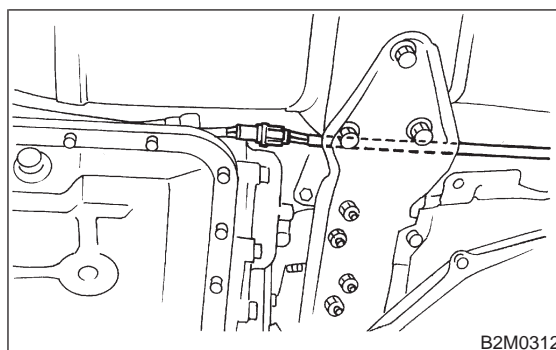
- 3) Install center exhaust pipe to front exhaust pipe.

**Tightening torque:**

**$35 \pm 5 \text{ N-m}$  ( $3.6 \pm 0.5 \text{ kg-m}$ ,  $26.0 \pm 3.6 \text{ ft-lb}$ )**

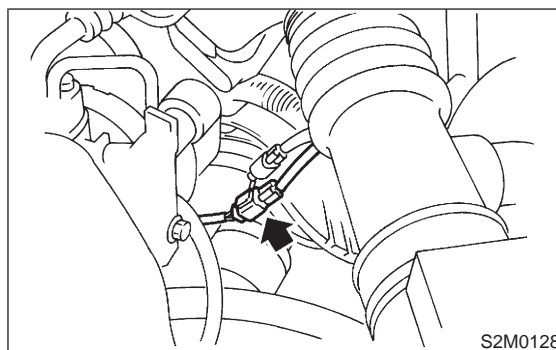


- 4) Connect rear oxygen sensor connector. (Except California spec. vehicles)

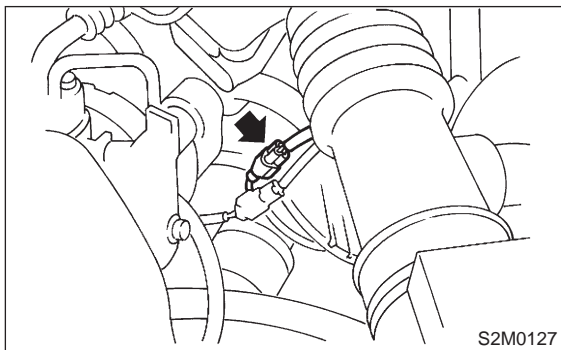


- 5) Lower the vehicle.

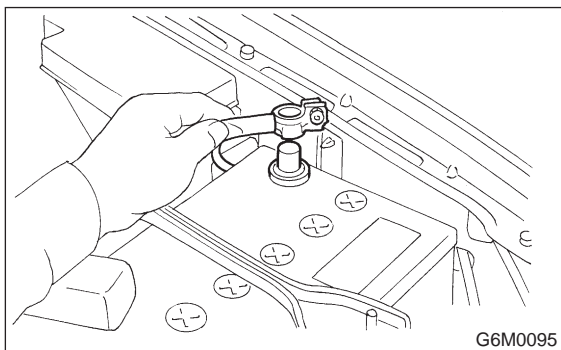
- 6) Connect rear oxygen sensor connector. (California spec. vehicles)



- 7) Connect front oxygen sensor connector.



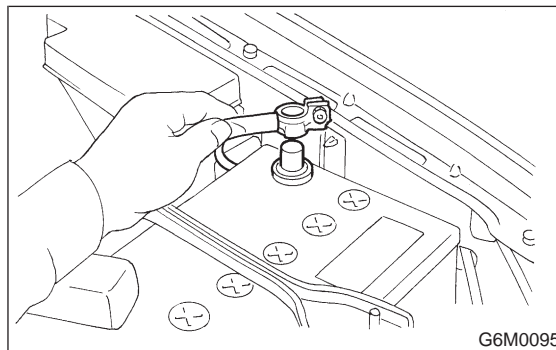
- 8) Connect battery ground cable.



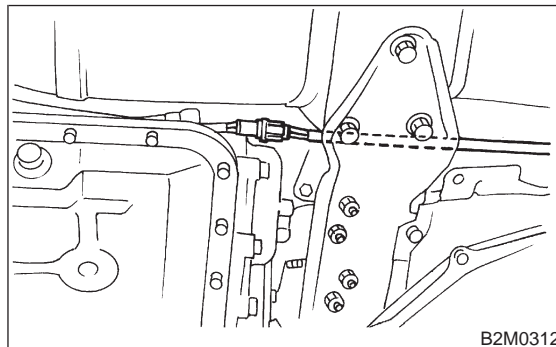
## 2. Center Exhaust Pipe

### A: REMOVAL

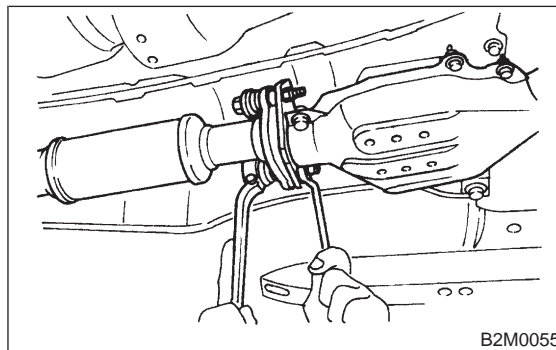
- 1) Disconnect battery ground cable.



- 2) Lift-up the vehicle.  
3) Disconnect rear oxygen sensor connector.  
(Except California spec. vehicles)



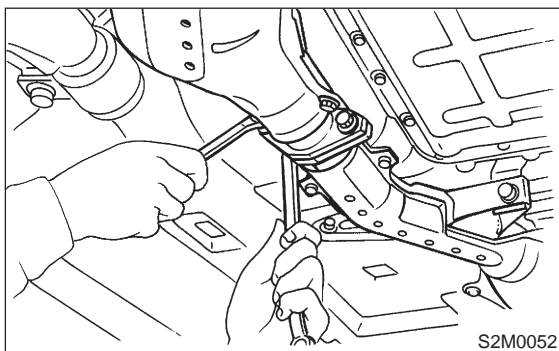
- 4) Separate center exhaust pipe and rear catalytic converter assembly from rear exhaust pipe.





## 2. Center Exhaust Pipe

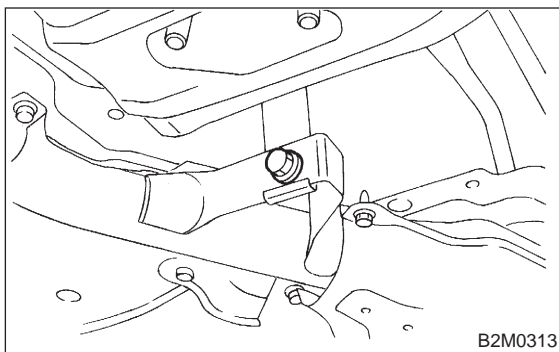
5) Separate center exhaust pipe and rear catalytic converter assembly from front catalytic converter.



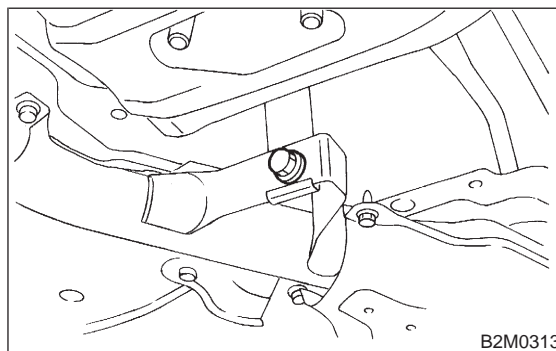
6) Remove center exhaust pipe and rear catalytic converter assembly from hanger bracket.

**CAUTION:**

- Be careful not to pull down center exhaust pipe.
- After removing center exhaust pipe, do not apply excessive pulling force on front catalytic converter and front exhaust pipe.



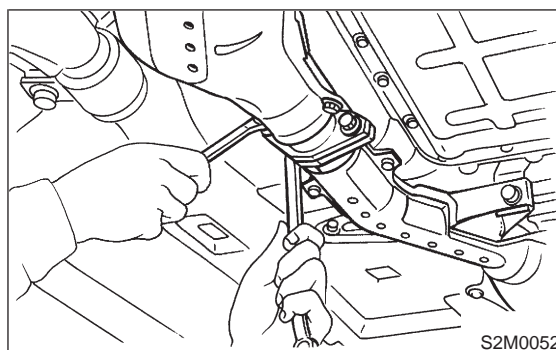
2) Temporarily tighten bolt which installs center exhaust pipe to hanger bracket.



3) Install center exhaust pipe to front catalytic converter.

**Tightening torque:**

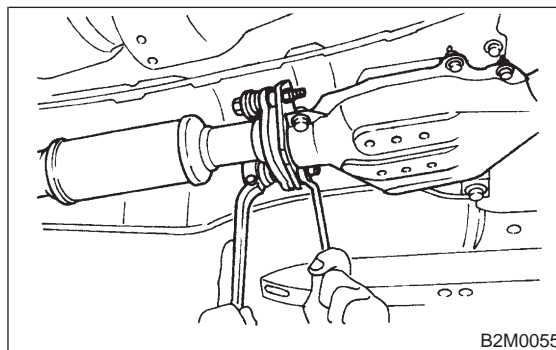
**$35 \pm 5 \text{ N-m}$  ( $3.6 \pm 0.5 \text{ kg-m}$ ,  $26.0 \pm 3.6 \text{ ft-lb}$ )**



4) Install center exhaust pipe to rear exhaust pipe.

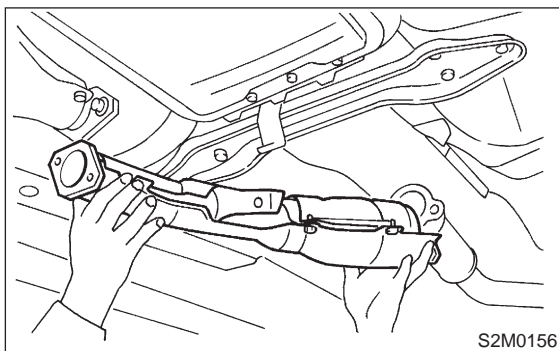
**Tightening torque:**

**$18 \pm 5 \text{ N-m}$  ( $1.8 \pm 0.5 \text{ kg-m}$ ,  $13.0 \pm 3.6 \text{ ft-lb}$ )**

**B: INSTALLATION****CAUTION:**

**Replace gaskets with new ones.**

1) Install center exhaust pipe and rear catalytic converter assembly.

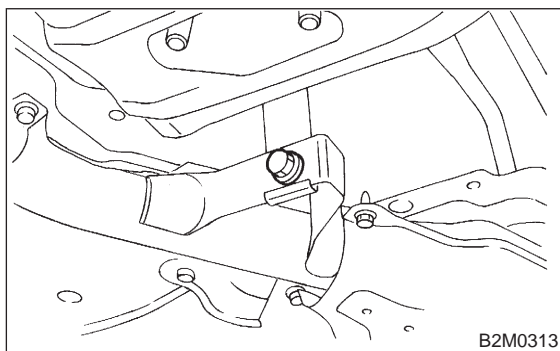




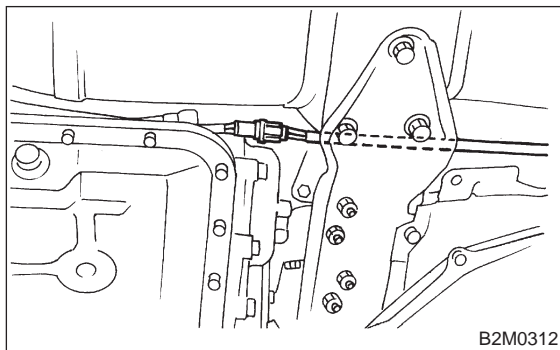
- 5) Tighten bolt which holds center exhaust pipe to hanger bracket.

**Tightening torque:**

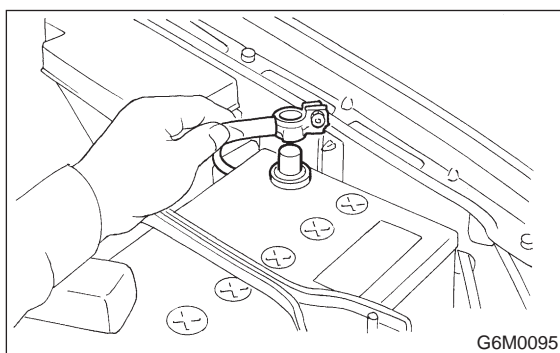
**$35 \pm 5 \text{ N}\cdot\text{m}$  ( $3.6 \pm 0.5 \text{ kg}\cdot\text{m}$ ,  $26.0 \pm 3.6 \text{ ft}\cdot\text{lb}$ )**



- 6) Connect rear oxygen sensor connector. (Except California spec. vehicles)



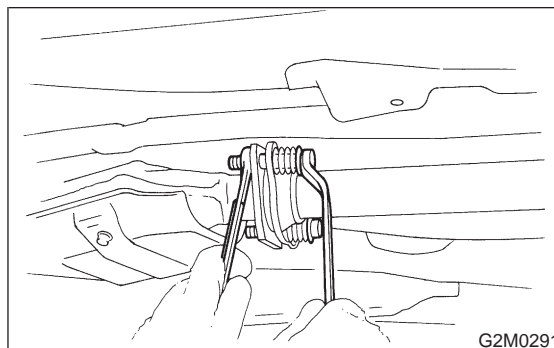
- 7) Lower the vehicle.  
8) Connect battery ground cable.



## 3. Rear Exhaust Pipe

### A: REMOVAL

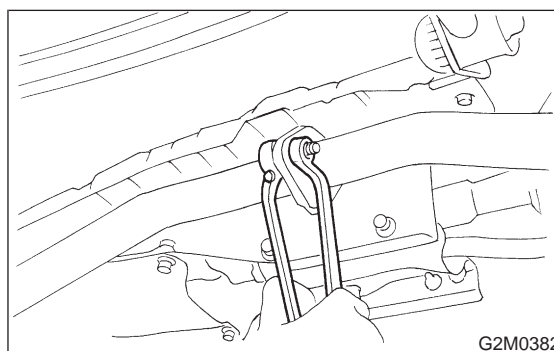
- 1) Separate rear exhaust pipe from front catalytic converter.



- 2) Separate rear exhaust pipe from muffler.

#### CAUTION:

**Be careful not to pull down front exhaust pipe and front catalytic converter.**

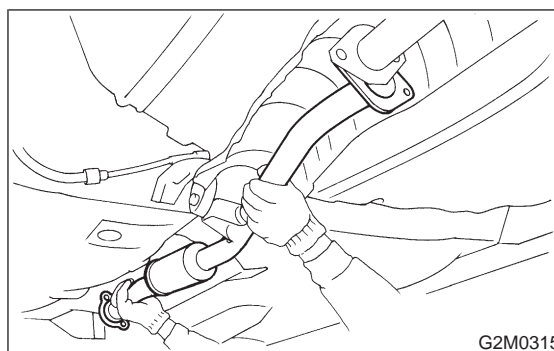


- 3) Remove rear exhaust pipe bracket from rubber cushion.

#### NOTE:

To facilitate removal, apply a coat of SUBARU CRC to pipe bracket in advance.

**SUBARU CRC (Part No. 004301003)**



**B: INSTALLATION****CAUTION:**

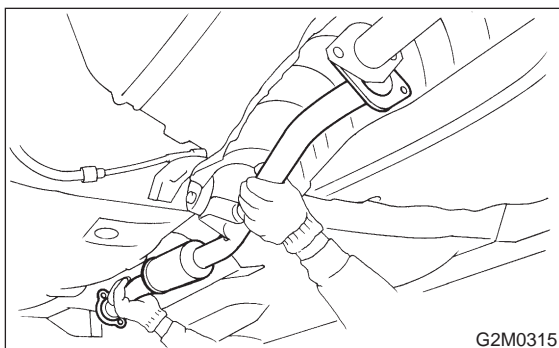
Replace gaskets with new ones.

- 1) Install rear exhaust pipe bracket to rubber cushion.

**NOTE:**

To facilitate installation, apply a coat of SUBARU CRC to mating area of rubber cushion in advance.

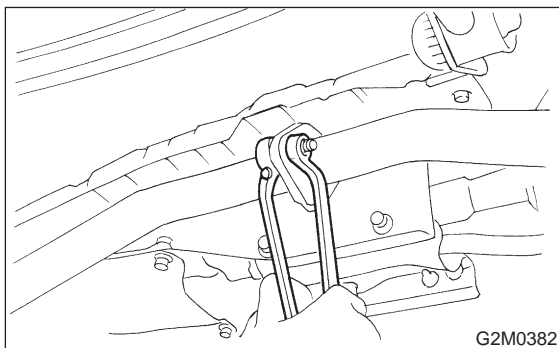
**SUBARU CRC (Part No. 004301003)**



- 2) Install rear exhaust pipe to muffler.

**Tightening torque:**

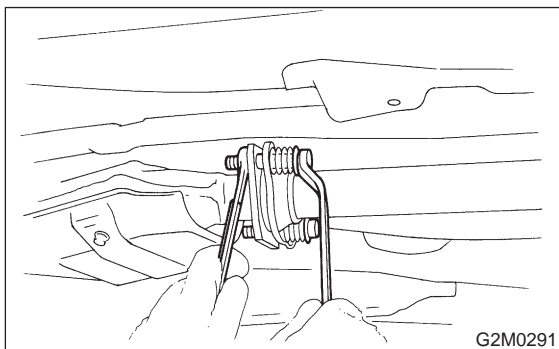
**$48 \pm 5 \text{ N}\cdot\text{m}$  ( $4.9 \pm 0.5 \text{ kg}\cdot\text{m}$ ,  $35.4 \pm 3.6 \text{ ft}\cdot\text{lb}$ )**



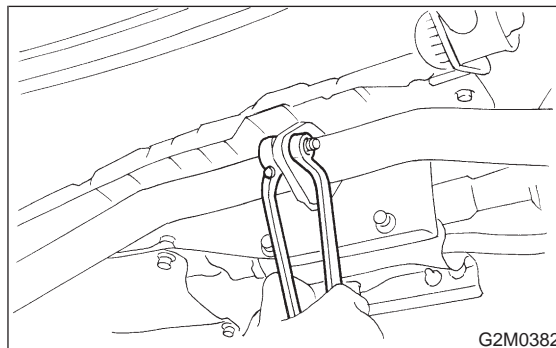
- 3) Install rear exhaust pipe to front catalytic converter.

**Tightening torque:**

**$18 \pm 5 \text{ N}\cdot\text{m}$  ( $1.8 \pm 0.5 \text{ kg}\cdot\text{m}$ ,  $13.0 \pm 3.6 \text{ ft}\cdot\text{lb}$ )**

**4. Muffler****A: REMOVAL AND INSTALLATION**

- 1) Separate muffler from rear exhaust pipe.



- 2) Remove left and right rubber cushions.

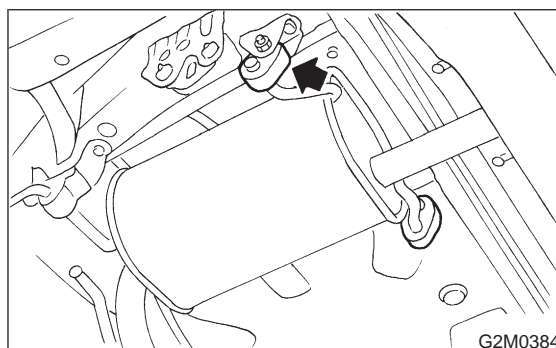
**CAUTION:**

Be careful not to pull down front exhaust pipe and front catalytic converter.

**NOTE:**

To facilitate removal, apply a coat of SUBARU CRC to mating area of rubber cushions in advance.

**SUBARU CRC (Part No. 004301003)**

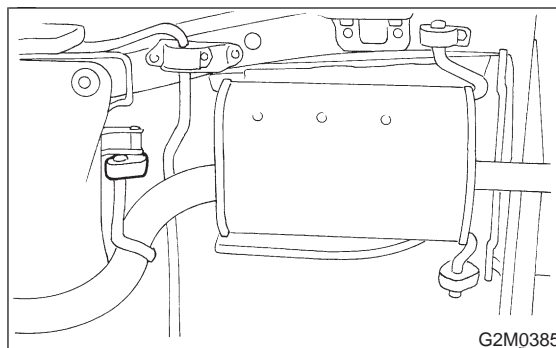


- 3) Remove front rubber cushion, and detach muffler assembly.

**NOTE:**

To facilitate removal, apply a coat of SUBARU CRC to mating area of rubber cushion in advance.

**SUBARU CRC (Part No. 004301003)**



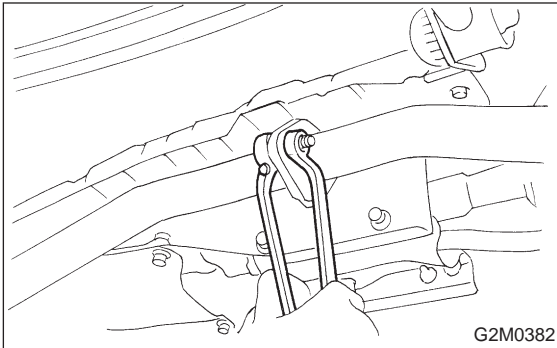
4) Installation is in the reverse order of removal.

**CAUTION:**

**Replace gasket with a new one.**

***Tightening torque:***

***$48 \pm 5 \text{ N}\cdot\text{m}$  ( $4.9 \pm 0.5 \text{ kg}\cdot\text{m}$ ,  $35.4 \pm 3.6 \text{ ft}\cdot\text{lb}$ )***



MEMO: