

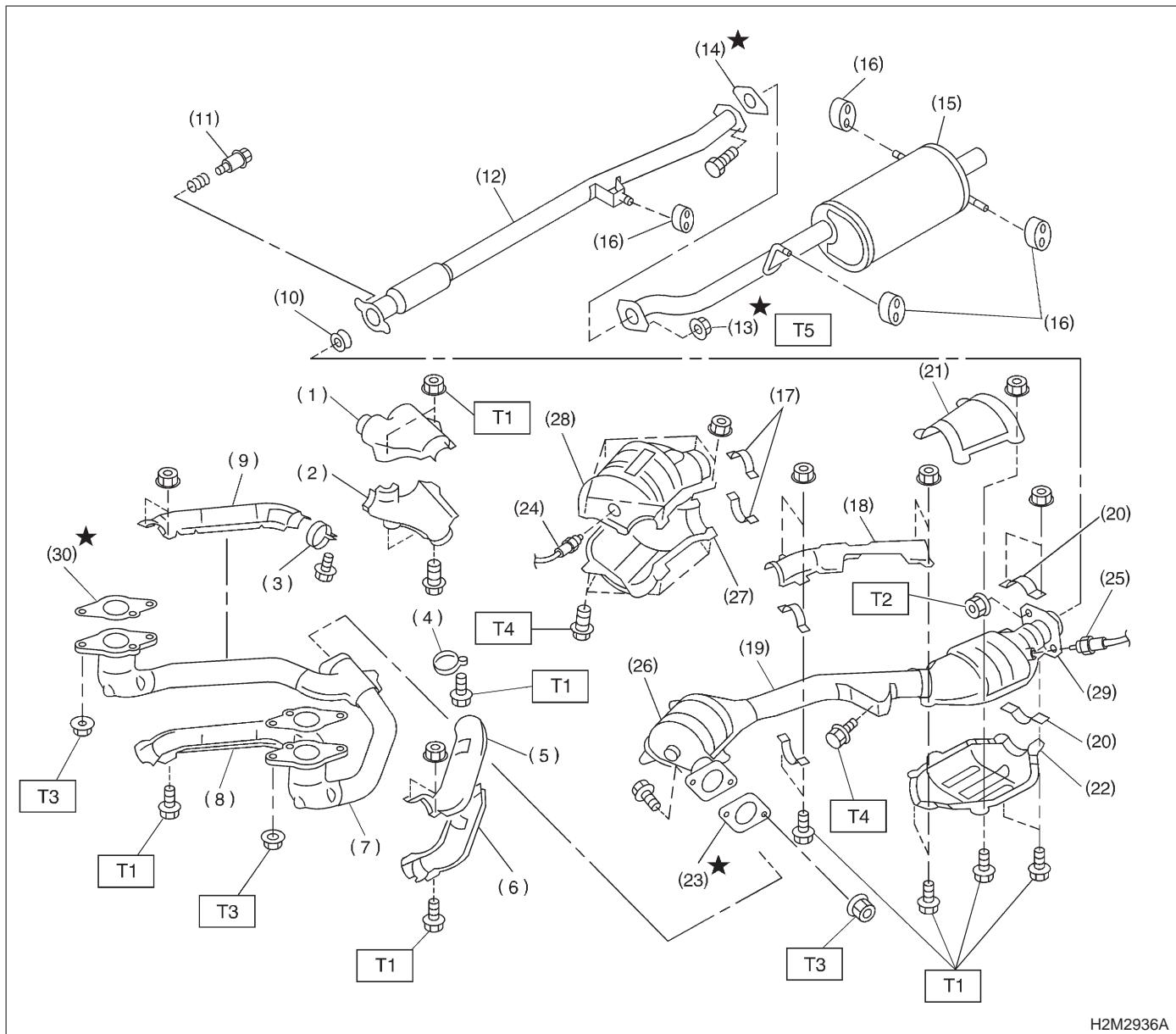
EXHAUST SYSTEM

2-9

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1. Exhaust System

A: 2200 cc MODEL



H2M2936A

(1) Upper front exhaust pipe cover CTR	(12) Rear exhaust pipe	(24) Front oxygen (A/F) sensor (California spec. vehicle) Front oxygen sensor (Except California spec. vehicle)
(2) Lower front exhaust pipe cover CTR	(13) Self-locking nut	(25) Rear oxygen sensor
(3) Band RH	(14) Gasket	(26) Front catalytic converter
(4) Band LH	(15) Muffler	(27) Lower front catalytic converter cover
(5) Upper front exhaust pipe cover LH	(16) Cushion rubber	(28) Upper front catalytic converter cover
(6) Lower front exhaust pipe cover LH	(17) Clamp	(29) Rear catalytic converter
(7) Front exhaust pipe	(18) Upper center exhaust pipe cover	(39) Gasket
(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) Rear oxygen sensor	

Tightening torque: N·m (kg·m, ft·lb)

T1: 13 ± 3 (1.3±0.3, 9.4±2.2)

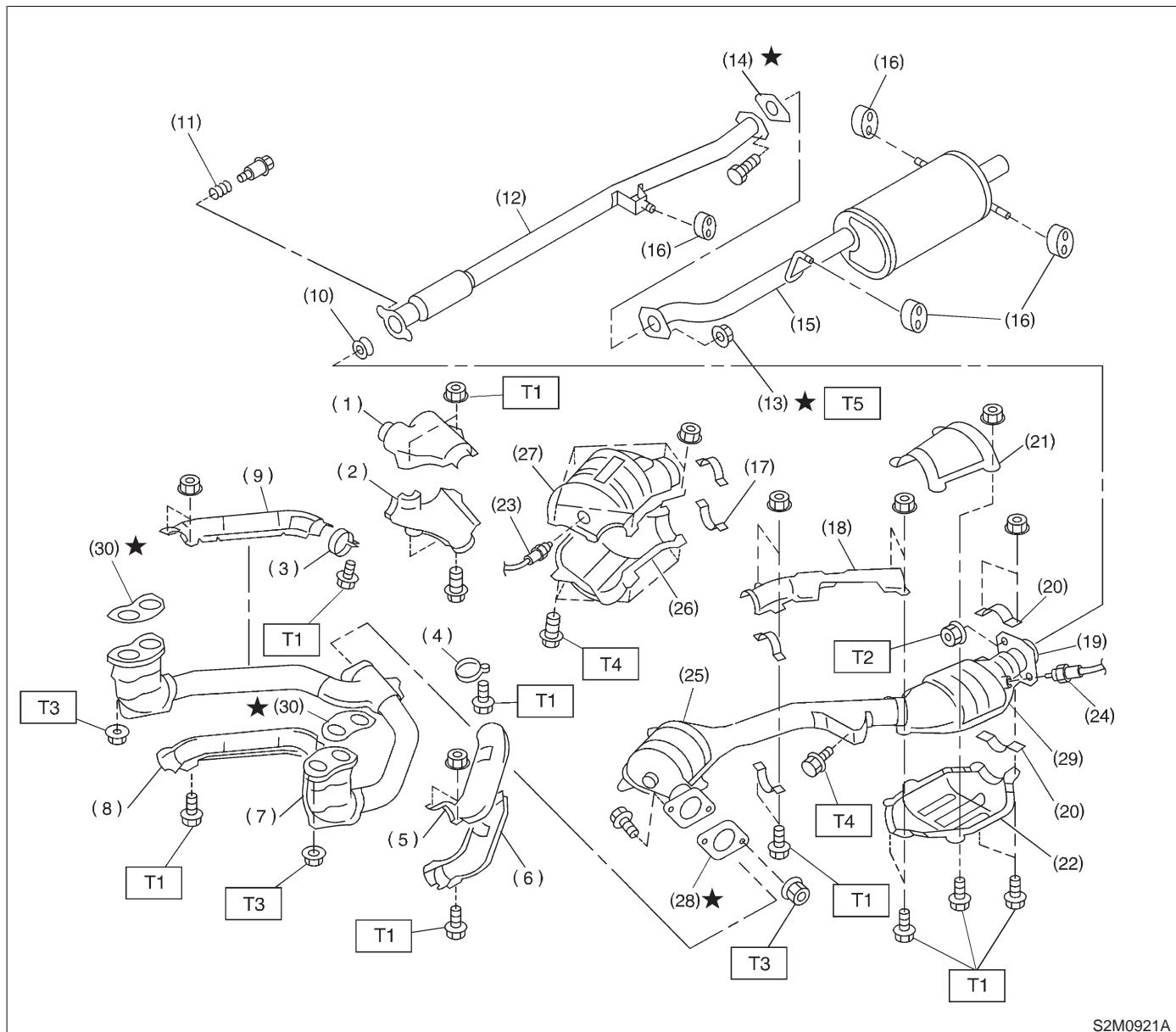
T2: 18 ± 5 (1.8±0.5, 13.0±3.6)

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)

B: 2500 cc MODEL



S2M0921A

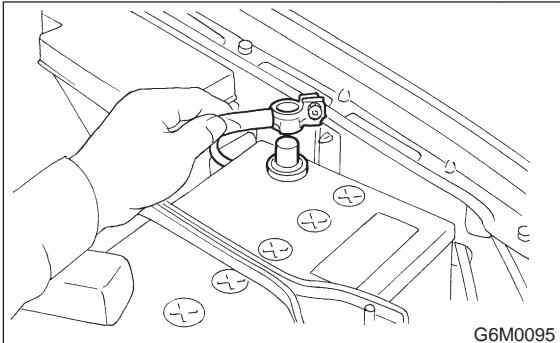
(1) Upper front exhaust pipe cover CTR	(11) Spring	(25) Front catalytic converter
(2) Lower front exhaust pipe cover CTR	(12) Rear exhaust pipe	(26) Lower front catalytic converter cover
(3) Band RH	(13) Self-locking nut	(27) Upper front catalytic converter cover
(4) Band LH	(14) Gasket	(28) Gasket
(5) Upper front exhaust pipe cover LH	(15) Muffler	(29) Rear catalytic converter
(6) Lower front exhaust pipe cover LH	(16) Cushion rubber	(30) Gasket
(7) Front exhaust pipe	(17) Clamp	
(8) Lower front exhaust pipe cover RH	(18) Upper center exhaust pipe cover	
(9) Upper front exhaust pipe cover RH	(19) Center exhaust pipe	
(10) Gasket	(20) Clamp B	
	(21) Upper rear catalytic converter cover	
	(22) Lower rear catalytic converter cover	
	(23) Front oxygen sensor	
	(24) Rear oxygen sensor	

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)

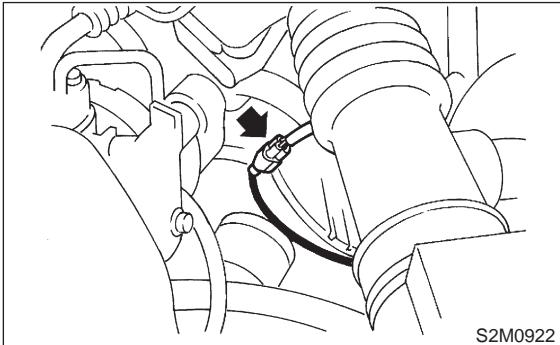
1. Front Exhaust Pipe and Center Exhaust Pipe

A: REMOVAL

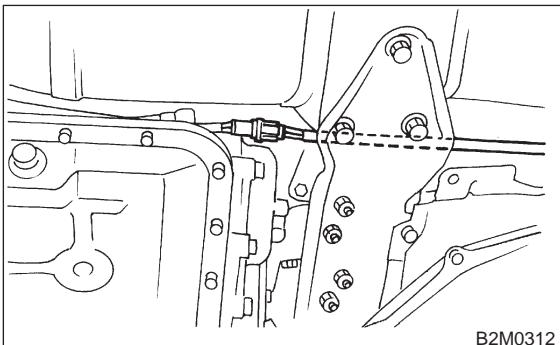
- 1) Disconnect battery ground cable.



- 2) Disconnect front oxygen sensor connector.



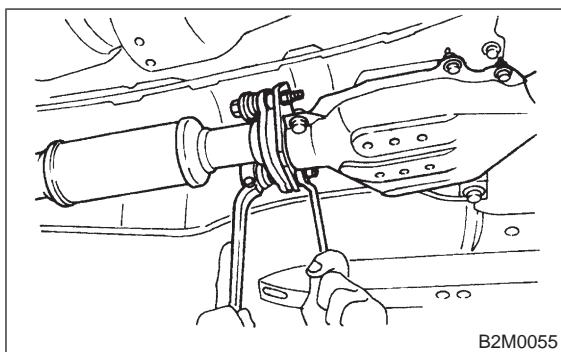
- 3) Lift-up the vehicle.
- 4) Disconnect rear oxygen sensor connector.



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

WARNING:

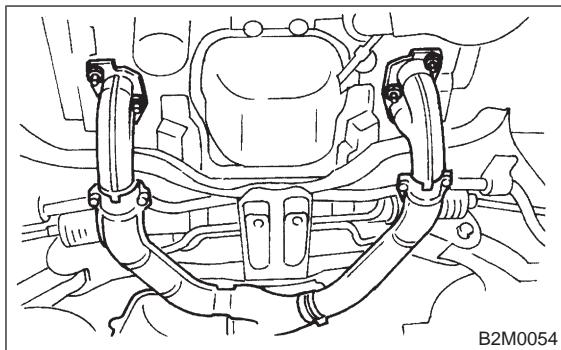
Be careful, exhaust pipe is hot.



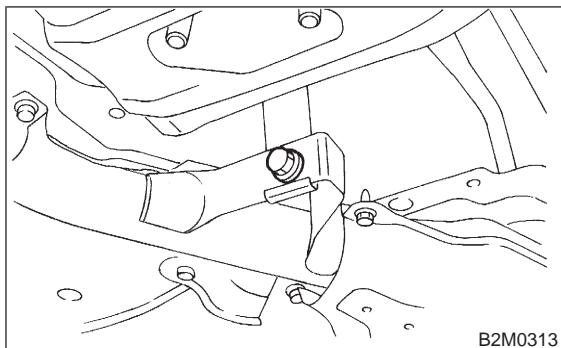
- 6) Remove bolts which hold front exhaust pipe onto cylinder heads.

CAUTION:

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



- 7) Remove bolt which installs front and center exhaust pipe assembly to hanger bracket.



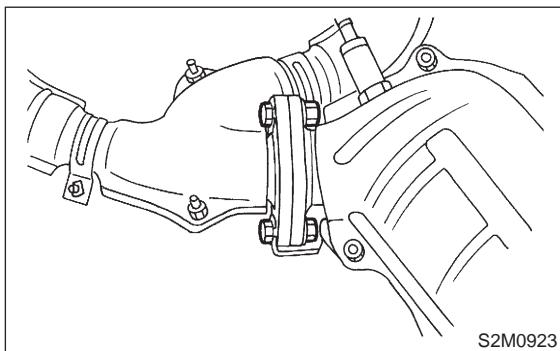
- 8) Remove front and center exhaust pipe assembly from the vehicle.

CAUTION:

- Be careful not to let front and center exhaust pipe assembly fall off when removing as it is quite heavy.
- After removing front and center exhaust assembly, do not apply excessive pulling force on rear exhaust pipe.

1. Front Exhaust Pipe and Center Exhaust Pipe

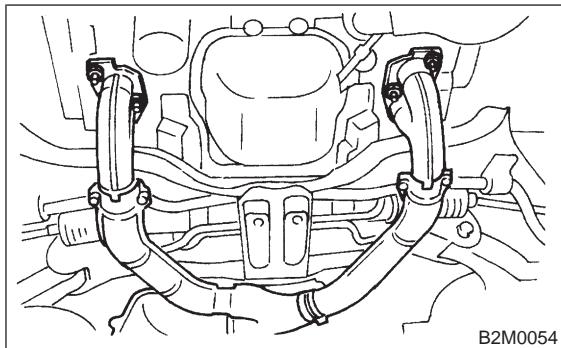
9) Separate front exhaust pipe from front catalytic converter and center exhaust pipe assembly.



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

Tightening torque:

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



B: INSTALLATION

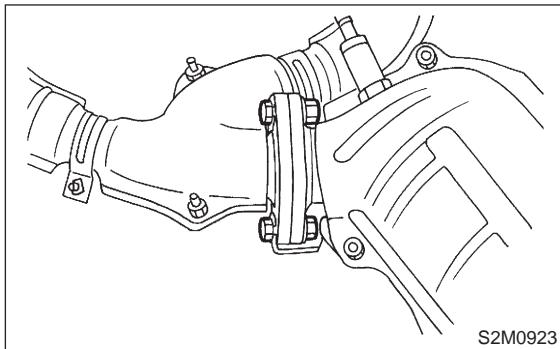
1) Install front exhaust pipe to front catalytic converter and center exhaust pipe assembly.

CAUTION:

Replace gaskets with new ones.

Tightening torque:

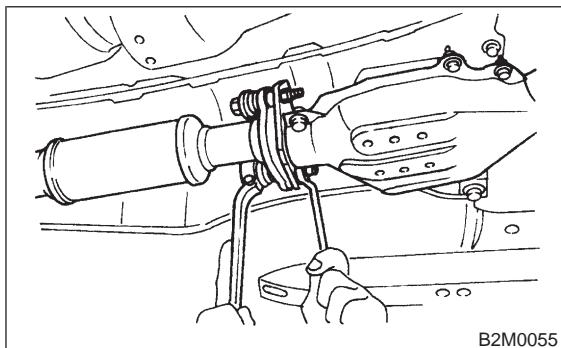
$30\pm 5 \text{ N}\cdot\text{m} (3.1\pm 0.5 \text{ kg}\cdot\text{m}, 22.4\pm 3.6 \text{ ft-lb})$



5) Tighten bolts which install front and center exhaust pipe assembly to rear exhaust pipe.

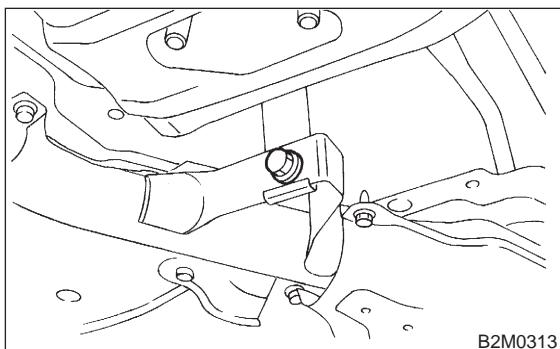
Tightening torque:

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



2) Install front and center exhaust pipe assembly to the vehicle.

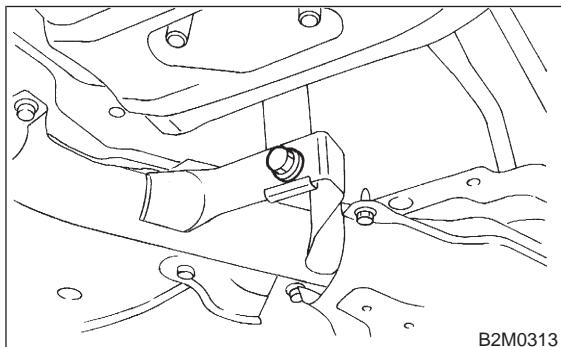
3) Temporarily tighten bolt which installs front and center exhaust pipe assembly to hanger bracket.



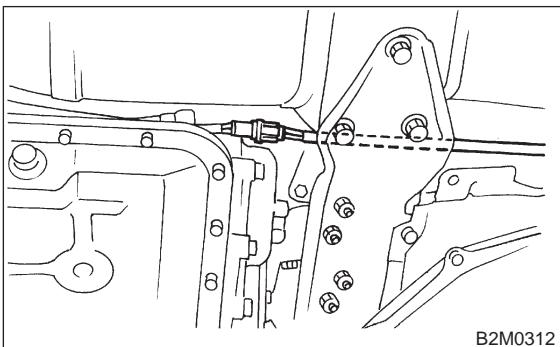
6) Tighten bolt which holds front and center exhaust pipe assembly to hanger bracket.

Tightening torque:

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

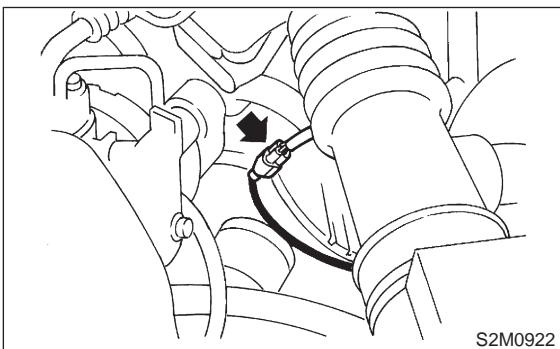


7) Connect rear oxygen sensor connector.

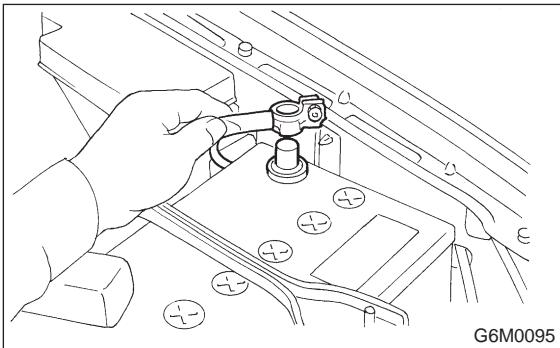


8) Lower the vehicle.

9) Connect front oxygen sensor connector.



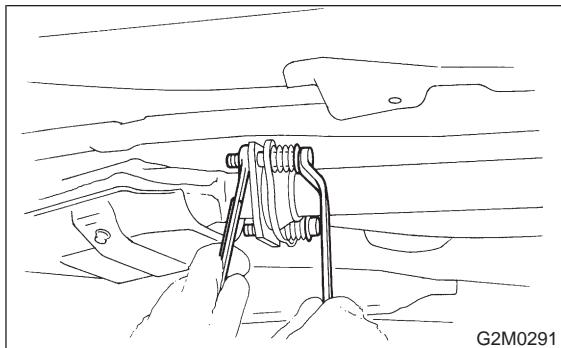
10) Connect battery ground cable.



2. Rear Exhaust Pipe

A: REMOVAL

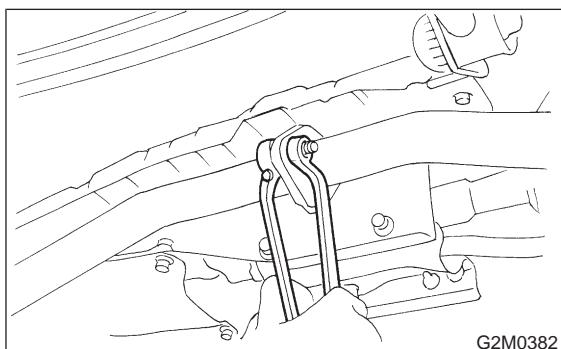
1) Separate rear exhaust pipe from front catalytic converter.



2) Separate rear exhaust pipe from muffler.

CAUTION:

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

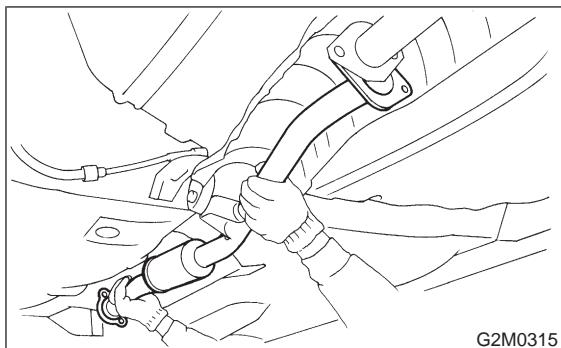


3) Remove rear exhaust pipe bracket from rubber cushion.

NOTE:

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

SUBARU CRC (Part No. 004301003)



B: INSTALLATION

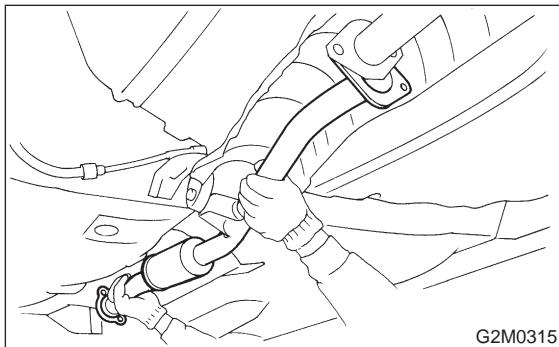
CAUTION:

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.

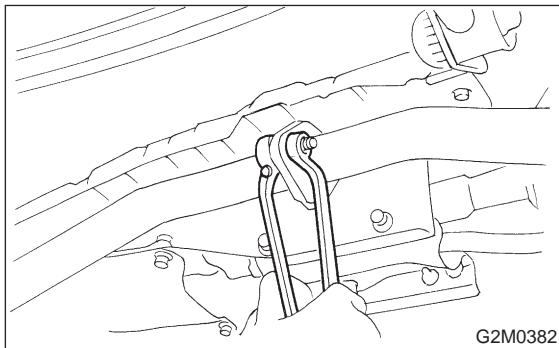
SUBARU CRC (Part No. 004301003)

G2M0315

- 2) Install rear exhaust pipe to muffler.

Tightening torque:

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

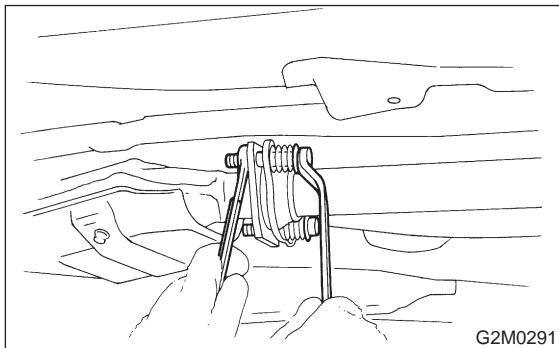


G2M0382

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

Tightening torque:

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

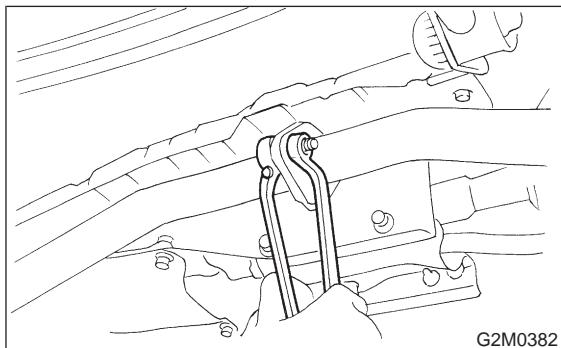


G2M0291

3. Muffler

A: REMOVAL AND INSTALLATION

- 1) Separate muffler from rear exhaust pipe.



G2M0382

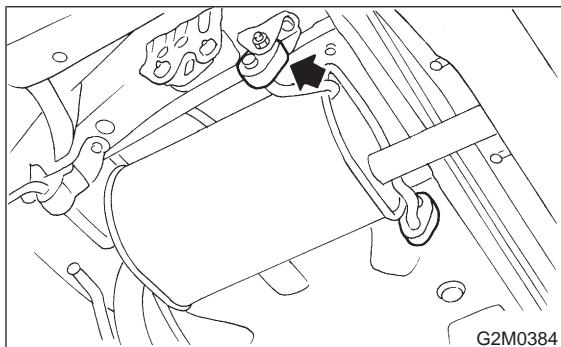
- 2) Remove left and right rubber cushions.

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.

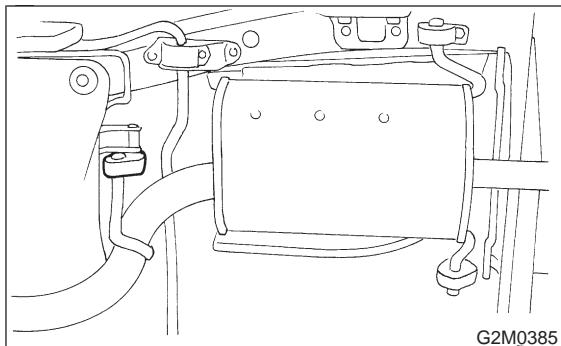
SUBARU CRC (Part No. 004301003)

G2M0384

- 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)

G2M0385

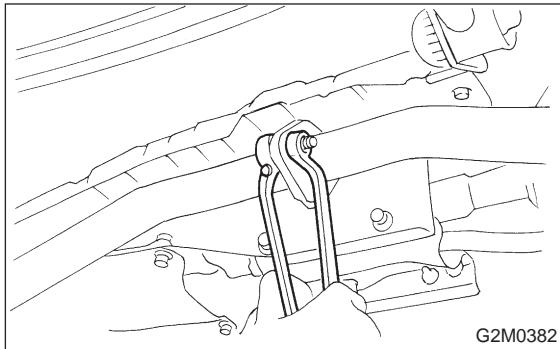
4) Installation is in the reverse order of removal.

CAUTION:

Replace gasket with a new one.

Tightening torque:

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



MEMO: