

## 2. Front Exhaust Pipe

### A: REMOVAL

#### CAUTION:

**Vehicle components are extremely hot after driving. Be wary of receiving burns from heated parts.**

1) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>

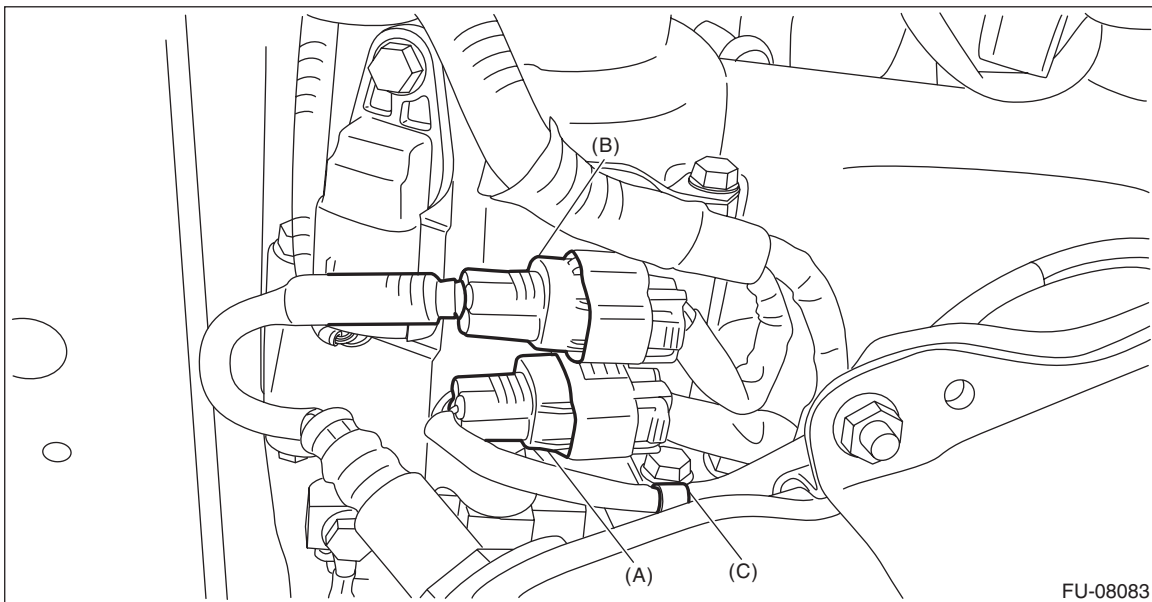
#### NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

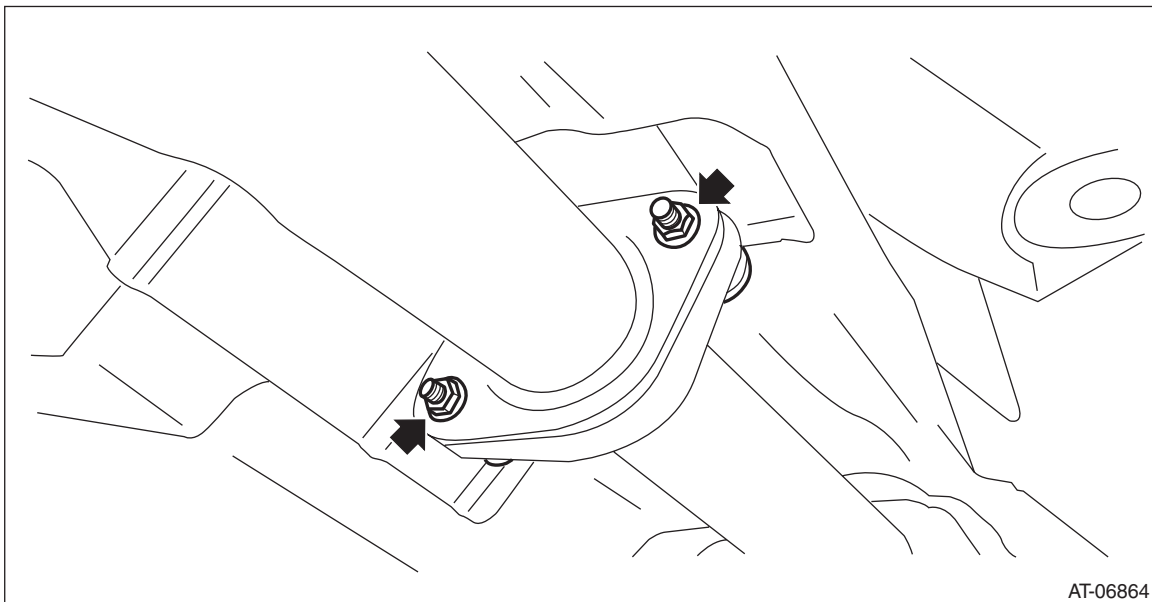
2) Lift up the vehicle.

3) Remove the under cover. <Ref. to EI-32, REMOVAL, Front Under Cover.>

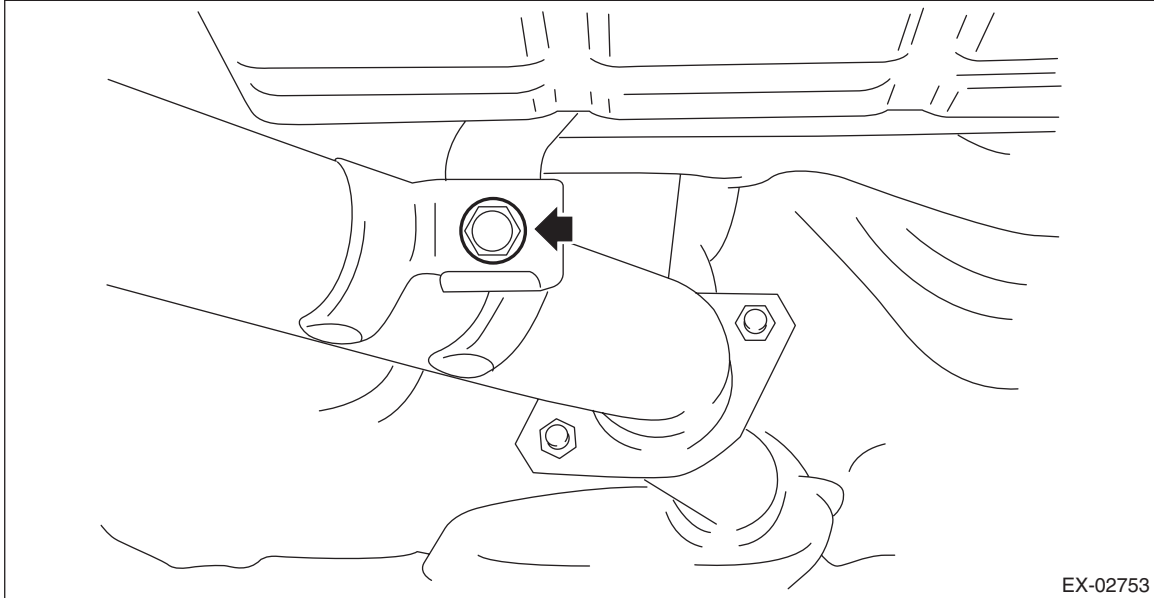
4) Disconnect the front oxygen (A/F) sensor connector (A) and rear oxygen sensor connector (B) and remove the clip (C) fastening the harness.



5) Remove the bolts, springs, and nuts securing the rear exhaust pipe to the center exhaust pipe.



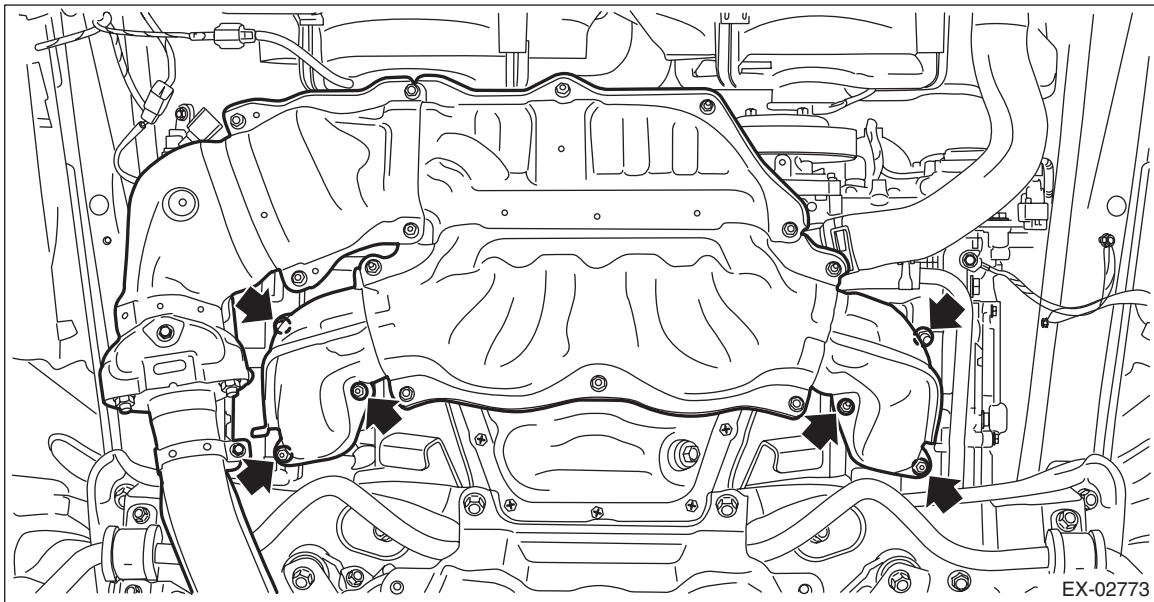
6) Remove the bolt which holds center exhaust pipe to hanger bracket.



7) Remove the front exhaust pipe and center exhaust pipe from vehicle as a unit.

**CAUTION:**

- The front exhaust pipe and center exhaust pipe assembly are very heavy. Be careful not to drop the exhaust pipes when removing.
- After removing the front exhaust pipe and center exhaust pipe assembly, do not pull the rear exhaust pipe with excessive force.



# Front Exhaust Pipe

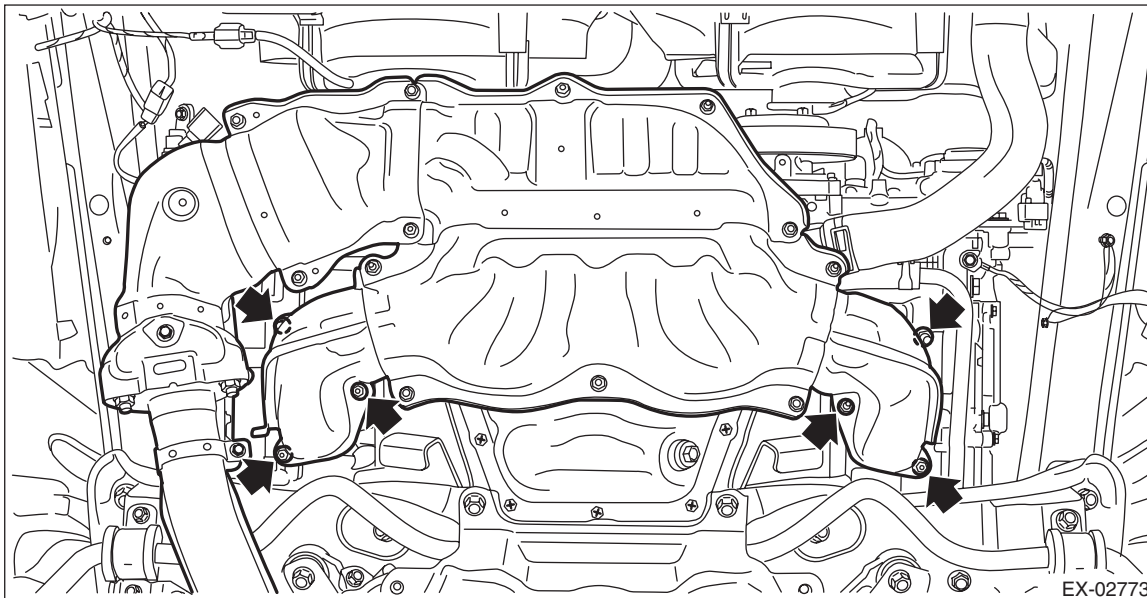
## EXHAUST

### B: INSTALLATION

1) Set the front exhaust pipe and center exhaust pipe to the vehicle, and temporally tighten the nuts which secure the front exhaust pipe to cylinder head.

NOTE:

Use a new gasket.



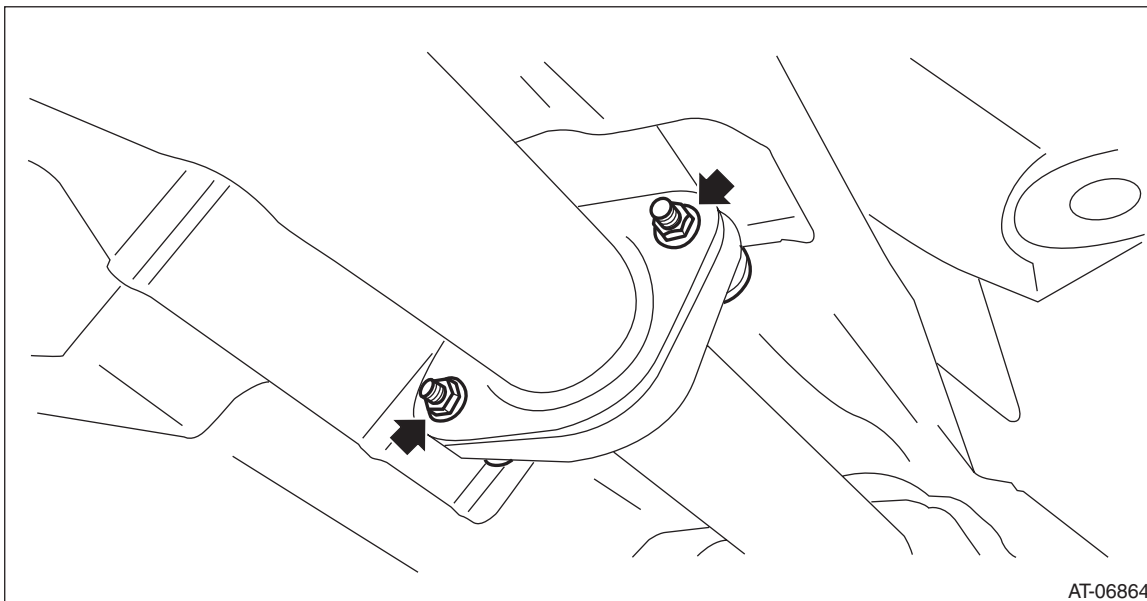
2) Install the bolts, springs, and nuts which secure the rear exhaust pipe to the center exhaust pipe.

NOTE:

Use a new gasket.

**Tightening torque:**

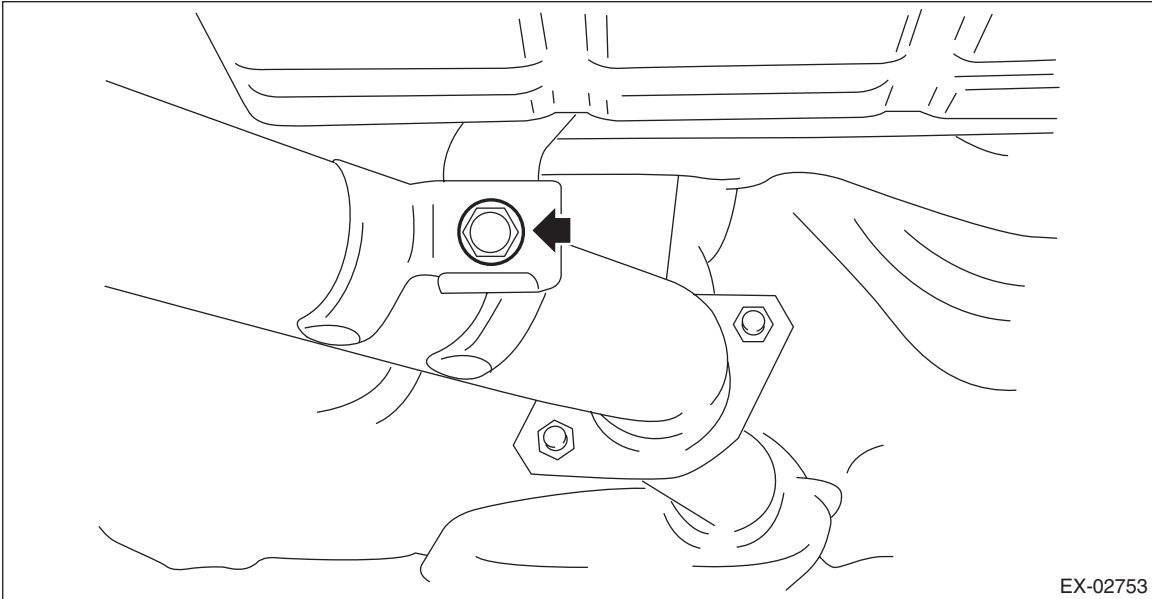
**18 N·m (1.8 kgf-m, 13.3 ft-lb)**



- 3) Tighten the bolts which secure the center exhaust pipe to the hanger bracket.

**Tightening torque:**

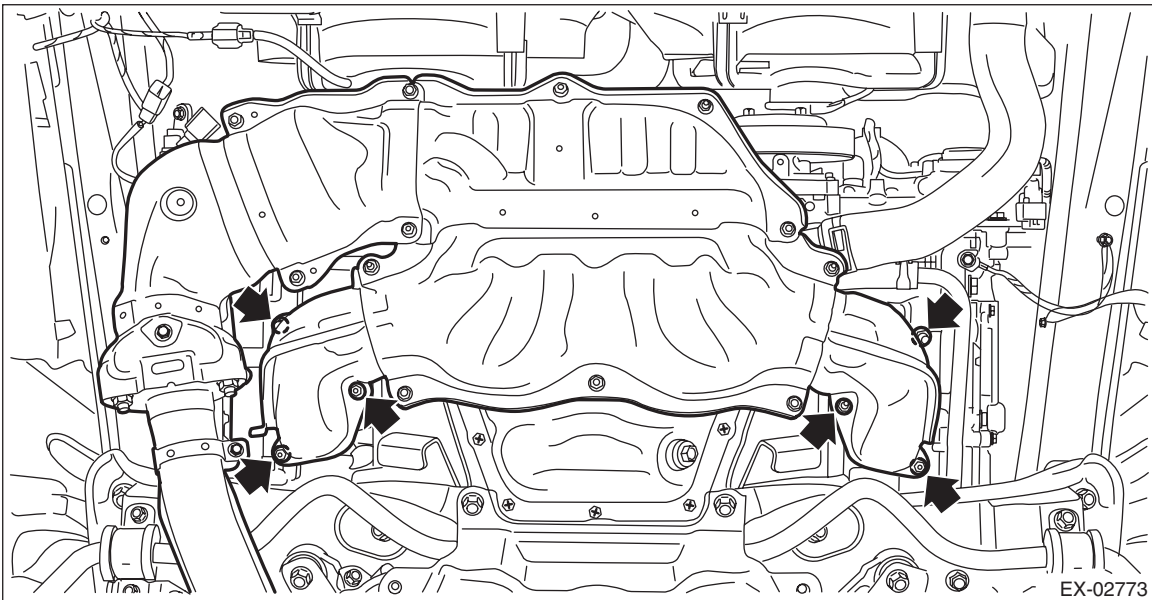
**35 N·m (3.6 kgf-m, 25.8 ft-lb)**



- 4) Tighten the nuts which hold front exhaust pipe to cylinder heads.

**Tightening torque:**

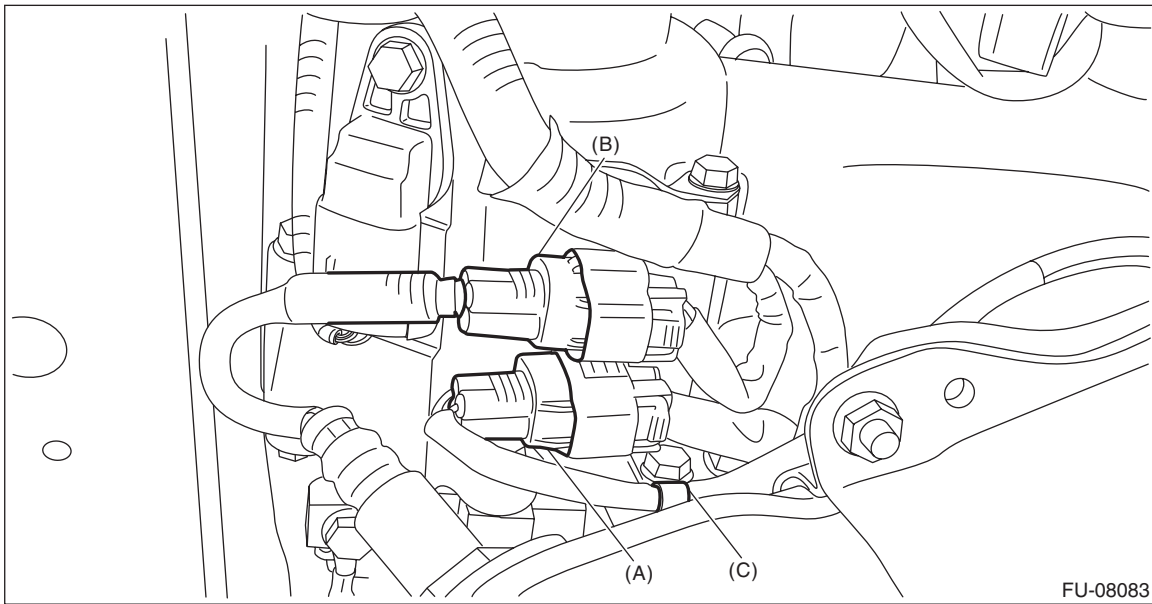
**30 N·m (3.1 kgf-m, 22.1 ft-lb)**



## Front Exhaust Pipe

### EXHAUST

5) Connect the front oxygen (A/F) sensor connector (A) and rear oxygen sensor connector (B), and fasten the harness with the clip (C).



6) Install the under cover. <Ref. to EI-32, INSTALLATION, Front Under Cover.>

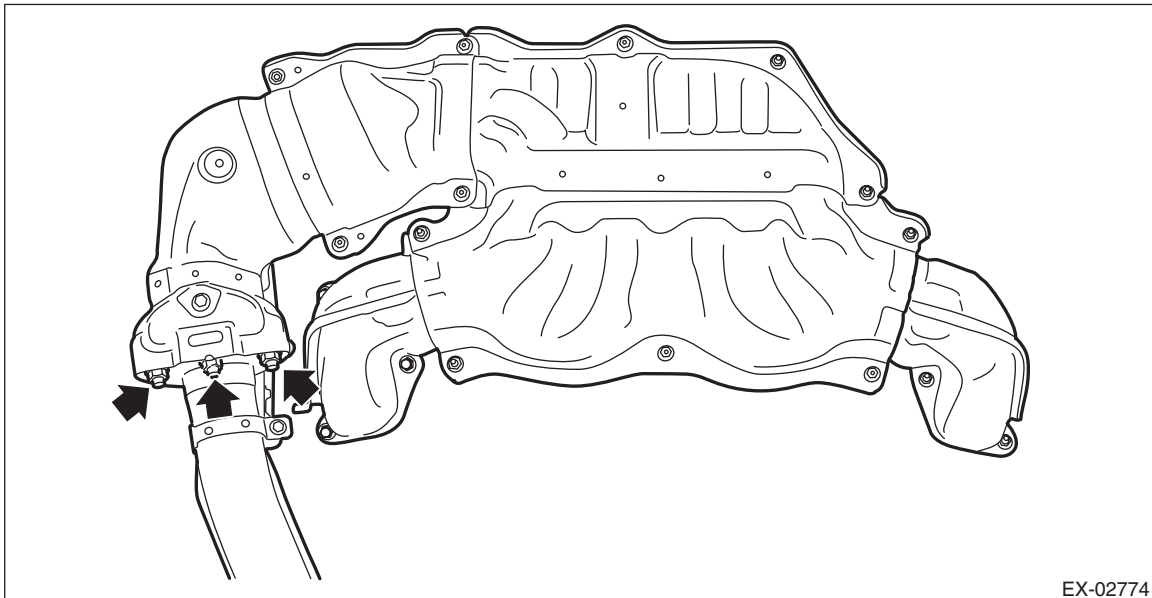
7) Lower the vehicle.

8) Connect the battery ground terminal. <Ref. to NT-5, BATTERY, NOTE, Note.>

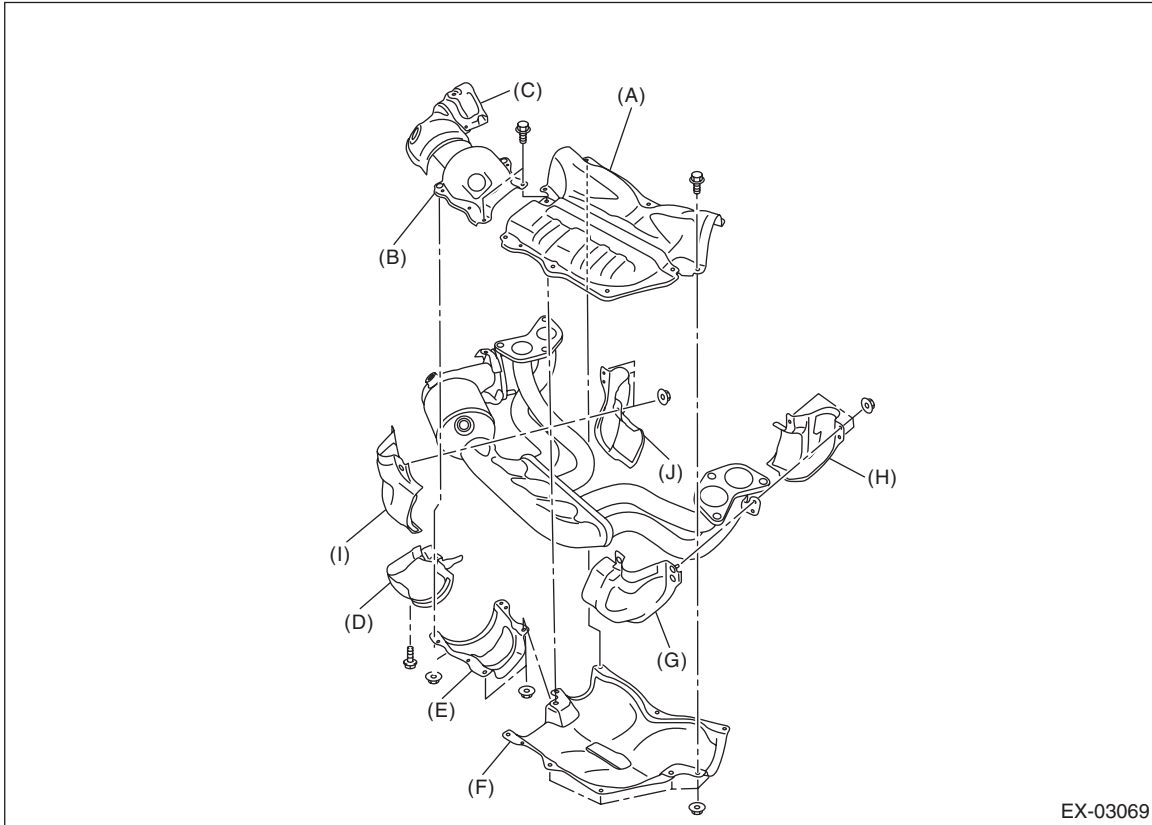
### C: DISASSEMBLY

1) Remove the front oxygen (A/F) sensor and rear oxygen sensor from front exhaust pipe. <Ref. to FU(H4DO(w/o HEV))-92, REMOVAL, Front Oxygen (A/F) Sensor.> <Ref. to FU(H4DO(w/o HEV))-96, REMOVAL, Rear Oxygen Sensor.> <Ref. to FU(H4DO(HEV))-78, REMOVAL, Front Oxygen (A/F) Sensor.> <Ref. to FU(H4DO(HEV))-82, REMOVAL, Rear Oxygen Sensor.>

2) Remove the center exhaust pipe from the front exhaust pipe.



3) Remove each cover from the front exhaust pipe.



- |  |  |  |
|--|--|--|
| (A) Front exhaust pipe upper cover           | (E) Front catalytic converter lower cover LH | (H) Front exhaust pipe side cover LH (rear)  |
| (B) Front catalytic converter upper cover LH | (F) Front exhaust pipe lower cover           | (I) Front exhaust pipe side cover RH (front) |
| (C) Front catalytic converter upper cover RH | (G) Front exhaust pipe side cover LH (front) | (J) Front exhaust pipe side cover RH (rear)  |
| (D) Front catalytic converter lower cover RH |  |  |

# Front Exhaust Pipe

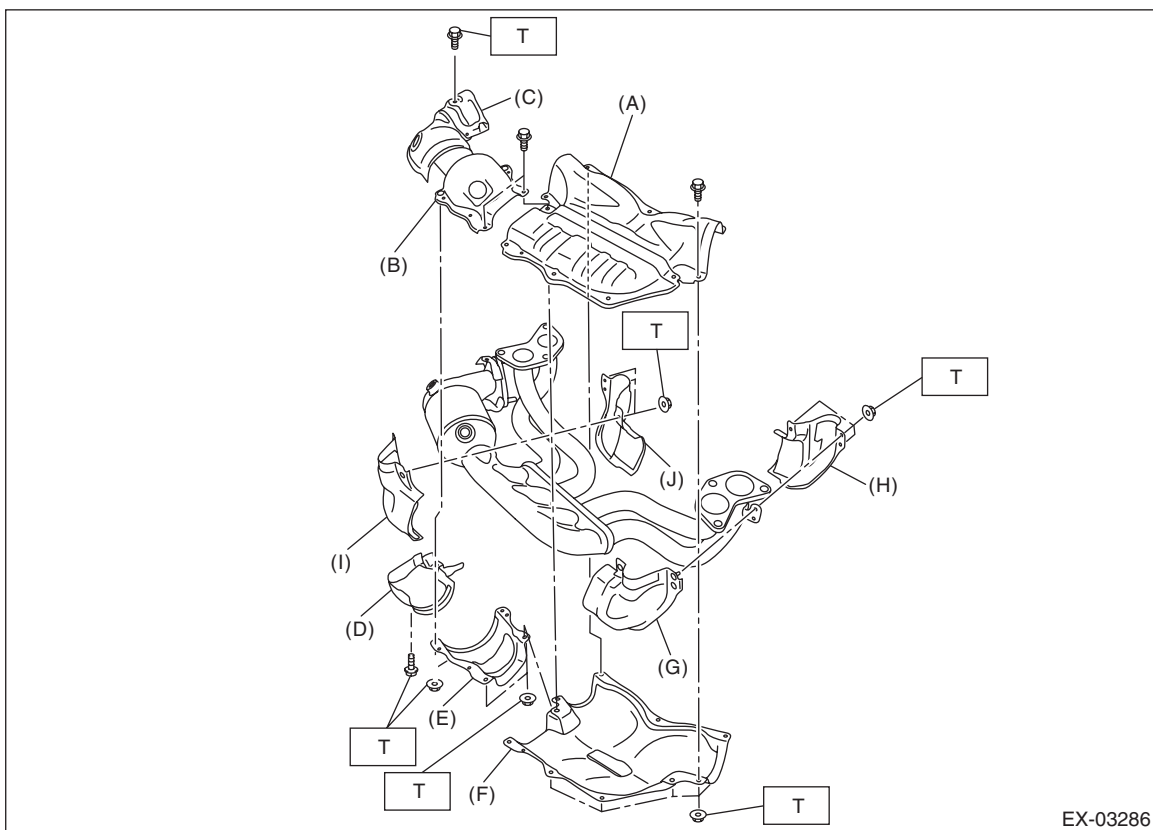
## EXHAUST

### D: ASSEMBLY

1) Install each cover to the front exhaust pipe.

**Tightening torque:**

**13 N·m (1.3 kgf-m, 9.6 ft-lb)**



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- |  |  |  |
|--|--|--|
| (A) Front exhaust pipe upper cover           | (E) Front catalytic converter lower cover LH | (H) Front exhaust pipe side cover LH (rear)  |
| (B) Front catalytic converter upper cover LH | (F) Front exhaust pipe lower cover           | (I) Front exhaust pipe side cover RH (front) |
| (C) Front catalytic converter upper cover RH | (G) Front exhaust pipe side cover LH (front) | (J) Front exhaust pipe side cover RH (rear)  |
| (D) Front catalytic converter lower cover RH |  |  |

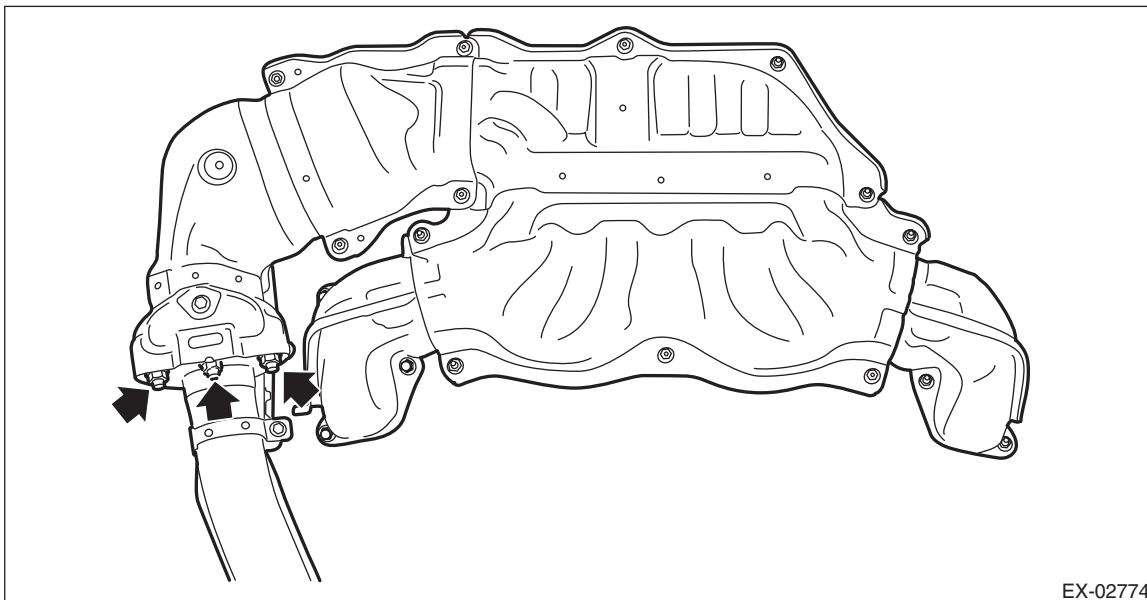
2) Install the center exhaust pipe to front exhaust pipe.

**NOTE:**

Use a new gasket.

**Tightening torque:**

**42.5 N·m (4.3 kgf-m, 31.3 ft-lb)**



3) Install the front oxygen (A/F) sensor and rear oxygen sensor to the front exhaust pipe. <Ref. to FU(H4DO(w/o HEV))-93, INSTALLATION, Front Oxygen (A/F) Sensor.> <Ref. to FU(H4DO(w/o HEV))-97, INSTALLATION, Rear Oxygen Sensor.> <Ref. to FU(H4DO(HEV))-80, INSTALLATION, Front Oxygen (A/F) Sensor.> <Ref. to FU(H4DO(HEV))-83, INSTALLATION, Rear Oxygen Sensor.>

## E: INSPECTION

- 1) Check the connections and welded parts for exhaust leaks.
- 2) Make sure there are no holes or rusting.