

EXHAUST

EX(H4DOTC)

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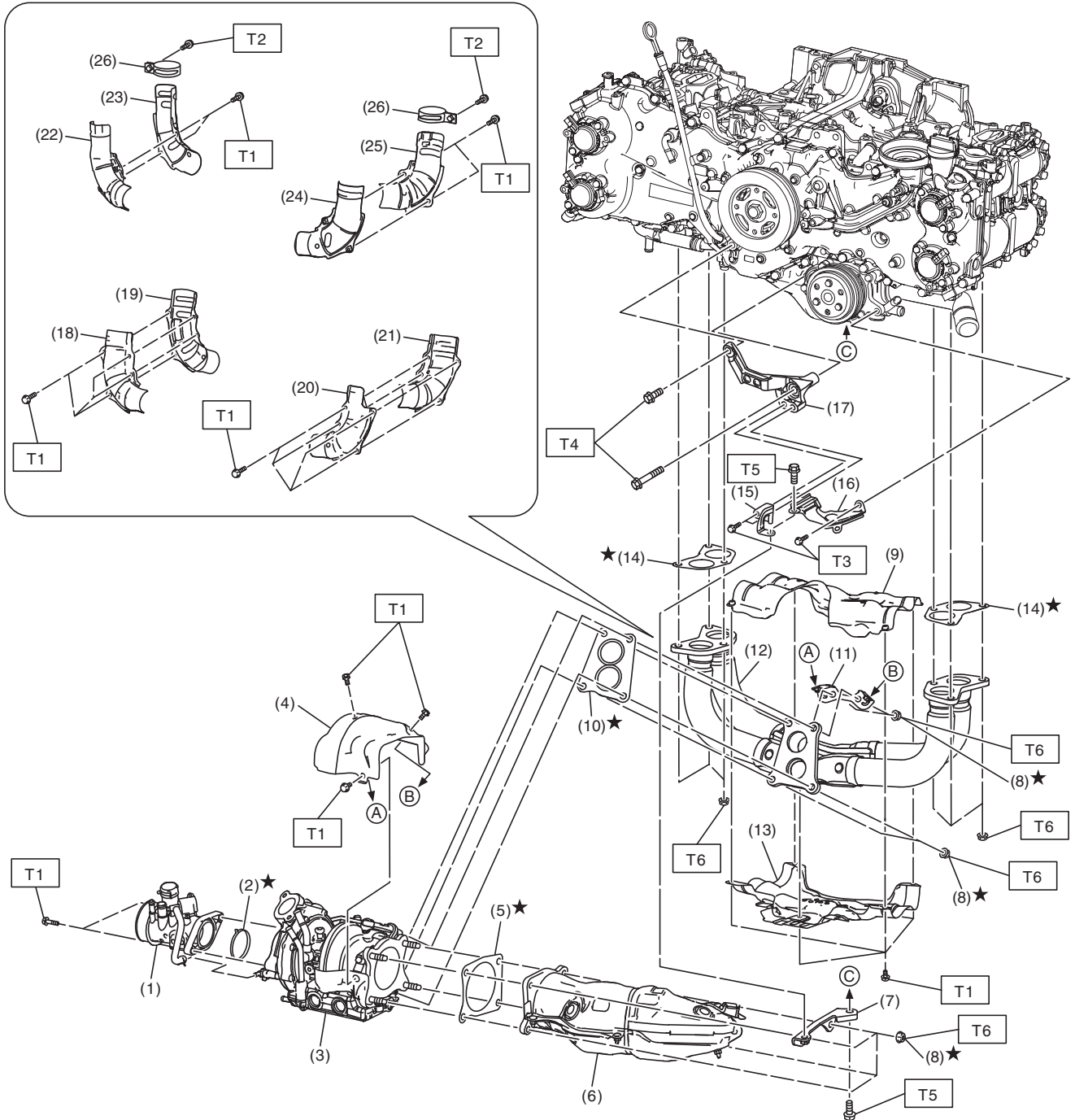
General Description

EXHAUST

1. General Description

A: COMPONENT

1. FRONT EXHAUST PIPE



EX-03086

EX(H4DOTC)-2

General Description

EXHAUST

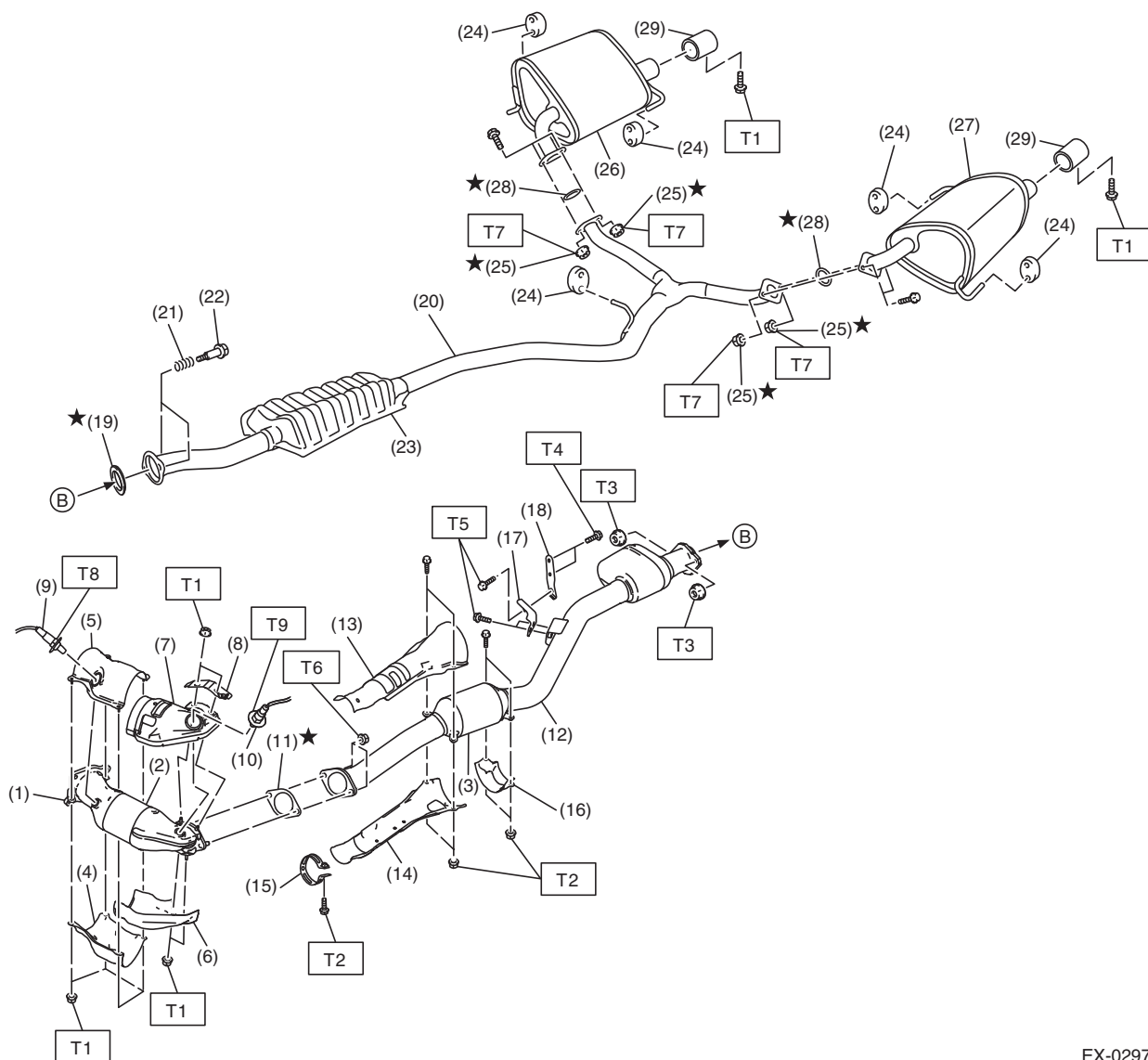
- | | | |
|---------------------------------|------------------------------|------------------------------|
| (1) Intake duct No. 1 | (13) Exhaust pipe cover C | (25) Exhaust pipe cover K |
| (2) O-ring | (14) Gasket | (26) Front exhaust pipe band |
| (3) Turbocharger | (15) Exhaust pipe stay B | |
| (4) Exhaust pipe cover A | (16) Water pump pulley cover | |
| (5) Gasket | (17) Turbocharger stay B | |
| (6) Center exhaust pipe (front) | (18) Exhaust pipe cover D | |
| (7) Turbocharger stay A | (19) Exhaust pipe cover E | |
| (8) Self-locking nut | (20) Exhaust pipe cover F | |
| (9) Exhaust pipe cover B | (21) Exhaust pipe cover G | |
| (10) Gasket | (22) Exhaust pipe cover H | |
| (11) Exhaust pipe stay A | (23) Exhaust pipe cover I | |
| (12) Front exhaust pipe | (24) Exhaust pipe cover J | |

Tightening torque: N·m (kgf-m, ft-lb)**T1: 6.4 (0.7, 4.7)****T2: 13 (1.3, 9.6)****T3: 19 (1.9, 14.0)****T4: 30 (3.1, 22.1)****T5: 33 (3.4, 24.3)****T6: 42.5 (4.3, 31.3)**

General Description

EXHAUST

2. CENTER AND REAR EXHAUST PIPE, AND MUFFLER



EX-02975

EX(H4DOTC)-4

General Description

EXHAUST

- | | |
|---------------------------------|-------------------------------|
| (1) Center exhaust pipe (front) | (15) Center exhaust pipe band |
| (2) Front catalytic converter | (16) Exhaust pipe cover H |
| (3) Rear catalytic converter | (17) Exhaust pipe bracket |
| (4) Exhaust pipe cover A | (18) Hanger bracket |
| (5) Exhaust pipe cover B | (19) Gasket |
| (6) Exhaust pipe cover C | (20) Rear exhaust pipe |
| (7) Exhaust pipe cover D | (21) Spring |
| (8) Exhaust pipe cover E | (22) Bolt |
| (9) Front oxygen (A/F) sensor | (23) Chamber |
| (10) Rear oxygen sensor | (24) Cushion rubber |
| (11) Gasket | (25) Self-locking nut |

- | | |
|---------------------------------|-----------------|
| (12) Center exhaust pipe (rear) | (26) Muffler RH |
| (13) Exhaust pipe cover F | (27) Muffler LH |
| (14) Exhaust pipe cover G | (28) Gasket |

- (29) Muffler cutter

Tightening torque: N-m (kgf-m, ft-lb)

T1: 7.5 (0.8, 5.5)

T2: 13 (1.3, 9.6)

T3: 18 (1.8, 13.3)

T4: 23 (2.3, 17.0)

T5: 35 (3.6, 25.8)

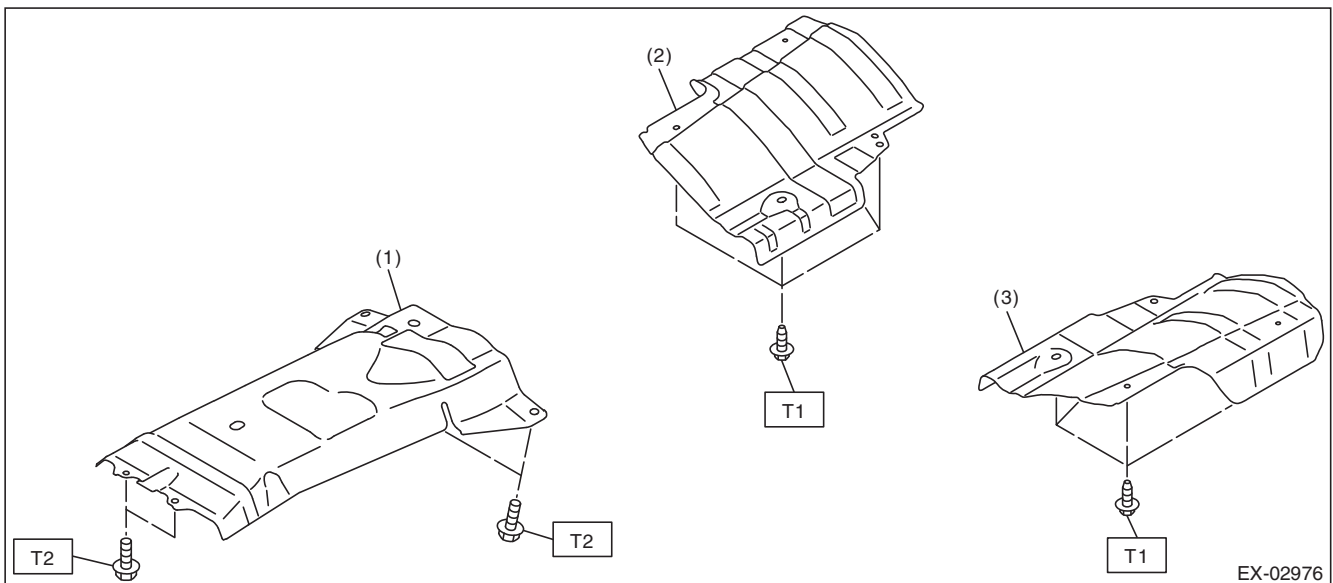
T6: 42.5 (4.3, 31.3)

T7: 48 (4.9, 35.4)

T8: <Ref. to FU(H4DOTC)-128, INSTALLATION, Front Oxygen (A/F) Sensor.>

T9: <Ref. to FU(H4DOTC)-131, INSTALLATION, Rear Oxygen Sensor.>

3. HEAT SHIELD COVER



- | | |
|---------------------------|---------------------------|
| (1) Center exhaust cover | (3) Rear exhaust cover LH |
| (2) Rear exhaust cover RH | |

Tightening torque: N-m (kgf-m, ft-lb)

T1: 10 (1.0, 7.4)

T2: 18 (1.8, 13.3)

General Description

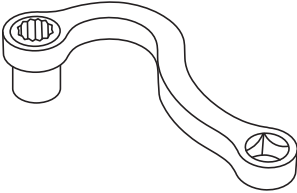
EXHAUST

B: CAUTION

- Prior to starting work, pay special attention to the following:
 1. Always wear work clothes, a safety cap, protective shoes. Additionally, wear a helmet, protective goggles, etc. if necessary.
 2. Protect the vehicle using a seat cover, fender cover, etc.
 3. Prepare the service tools, clean cloth, containers to catch grease and oil, etc.
- Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.
- When performing a repair, identify the cause of trouble and avoid unnecessary removal, disassembly and replacement.
- Before disconnecting connectors of sensors or units, be sure to disconnect the ground cable from battery.
- Always use the jack-up point when the shop jacks or rigid racks are used to support the vehicle.
- Remove contamination including dirt and corrosion before removal, installation, disassembly or assembly.
- Keep the removed parts in order and protect them from dust and dirt.
- All removed parts, if to be reused, should be reinstalled in the original positions with attention to the correct directions, etc.
- Bolts, nuts and washers should be replaced with new parts as required.
- Be sure to tighten the fasteners including bolts and nuts to the specified torque.
- If any fat adheres to the exhaust pipe, wipe it off. Otherwise a fire may happen.

C: PREPARATION TOOL

1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST18283AA010	18283AA010	WRENCH ADAPTER	Used for removing and installing center exhaust pipe (front).

2. GENERAL TOOL

TOOL NAME	REMARKS
TORX® socket E10	Used for removing and installing center exhaust pipe (front).

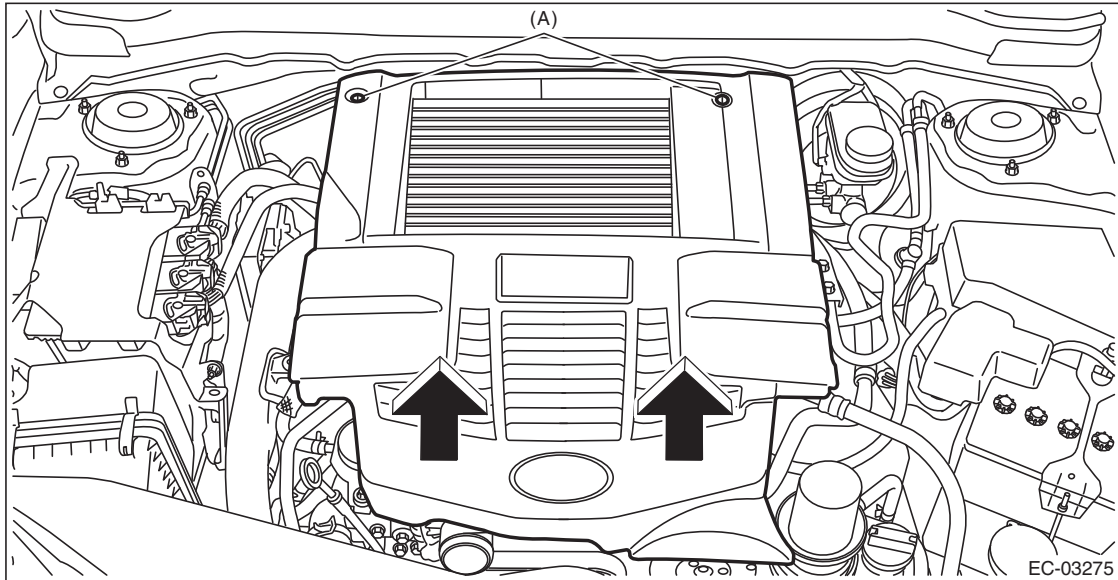
2. Front Exhaust Pipe

A: REMOVAL

CAUTION:

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

1) Remove the clip (A), lift the front of the collector cover in the direction of arrow, and then remove the collector cover.



2) Disconnect the ground cable from battery.

3) Remove the air intake duct (rear). <Ref. to IN(H4DOTC)-19, REMOVAL, Air Intake Duct.>

4) Remove the radiator sub fan and fan motor assembly. <Ref. to CO(H4DOTC)-55, REMOVAL, Radiator Sub Fan and Fan Motor.>

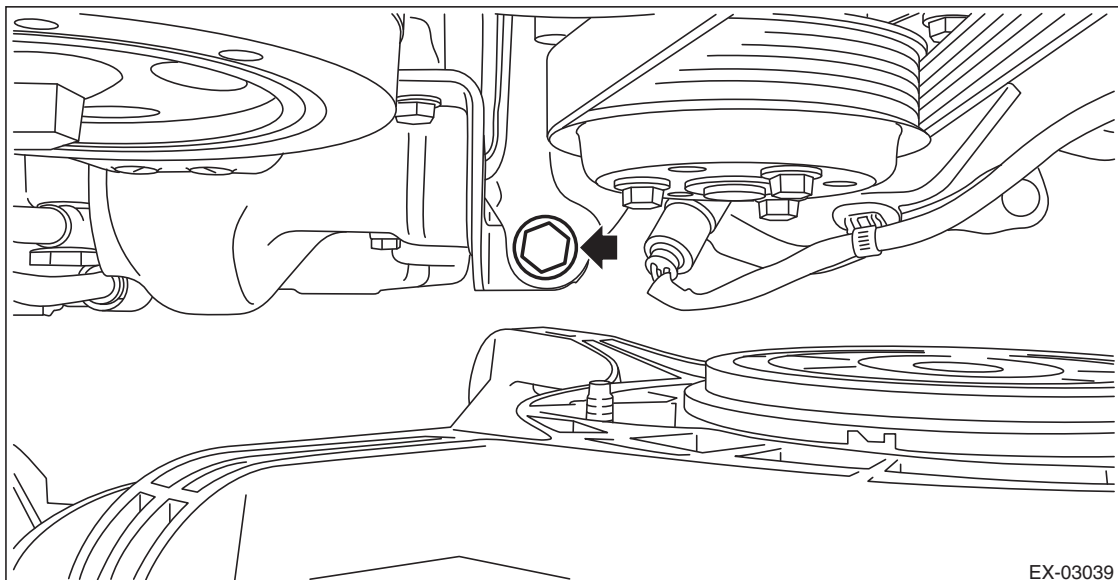
5) Lift up the vehicle.

6) Remove the under cover. <Ref. to EI-22, REMOVAL, Front Under Cover.>

7) Drain engine coolant. <Ref. to CO(H4DOTC)-13, DRAINING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

8) Lower the vehicle.

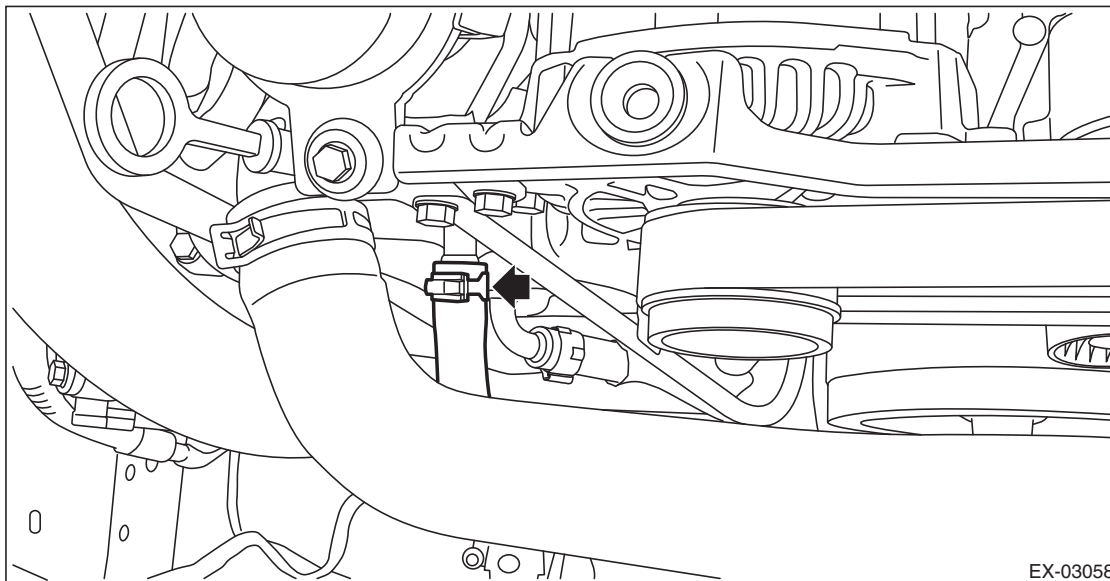
9) Remove the bolts which secure the water pump pulley cover to the turbocharger stay.



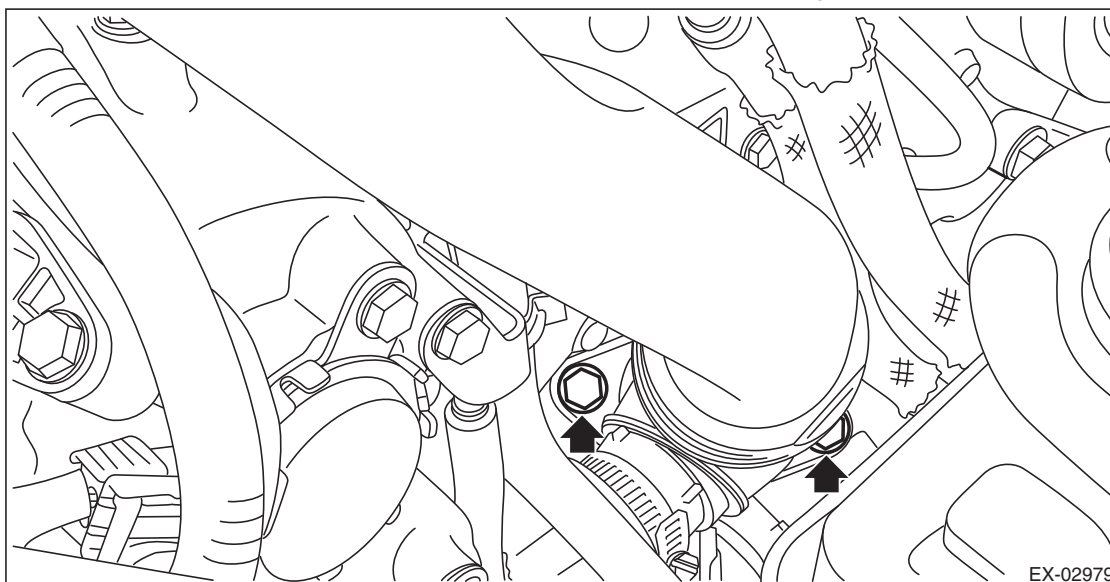
Front Exhaust Pipe

EXHAUST

- 10) Disconnect the engine coolant hose from the water pipe assembly.



- 11) Remove the bolts which secure the intake duct No. 2 to the turbocharger.

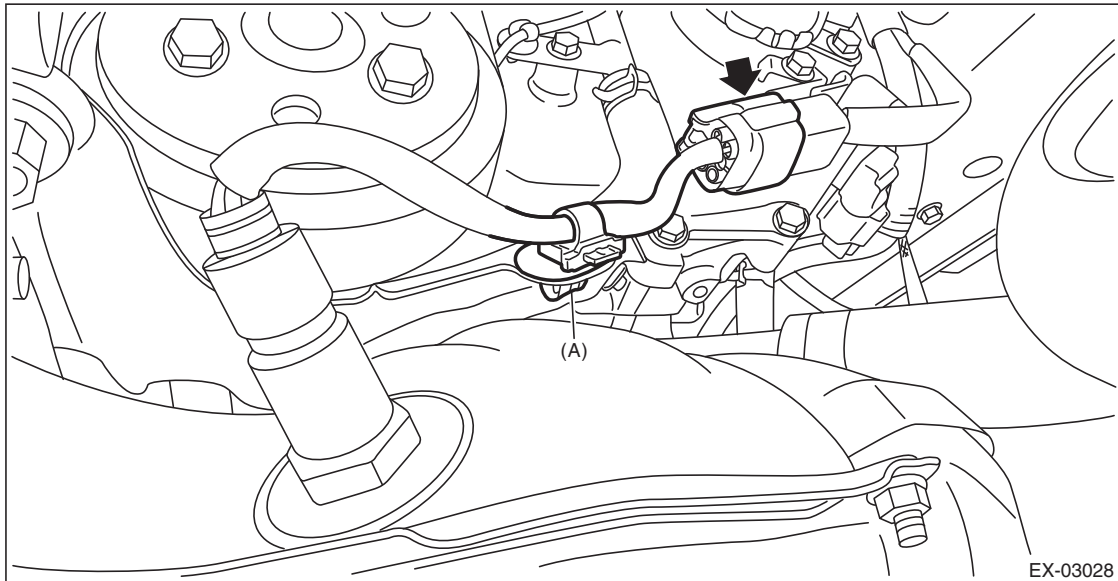


- 12) Lift up the vehicle.

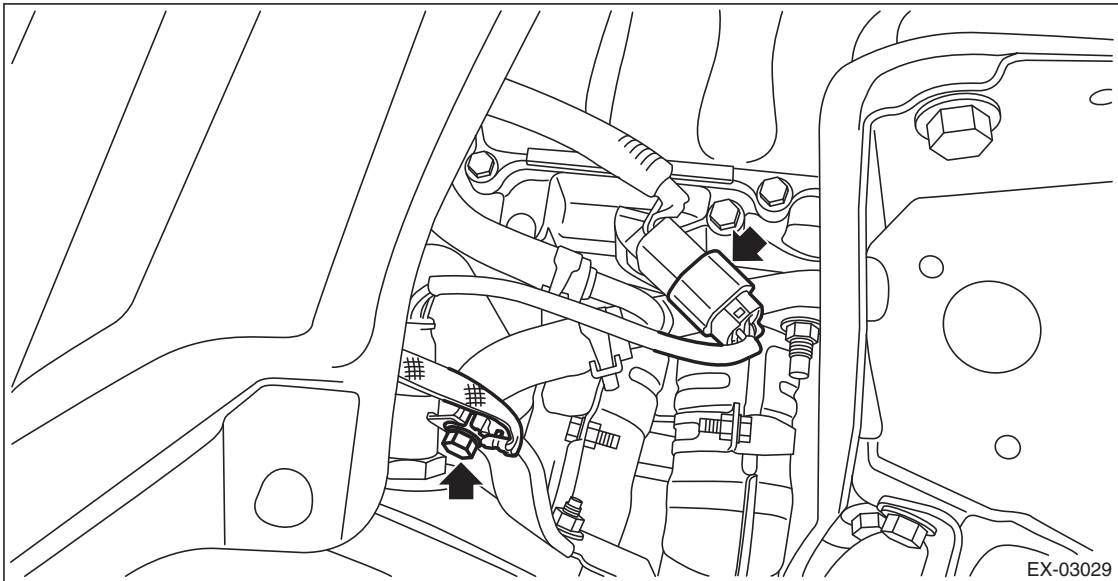
Front Exhaust Pipe

EXHAUST

- 13) Disconnect the connector on the front oxygen (A/F) sensor from the engine harness, and remove the clip (A) which secures the front oxygen (A/F) sensor harness to the water pump pulley cover.



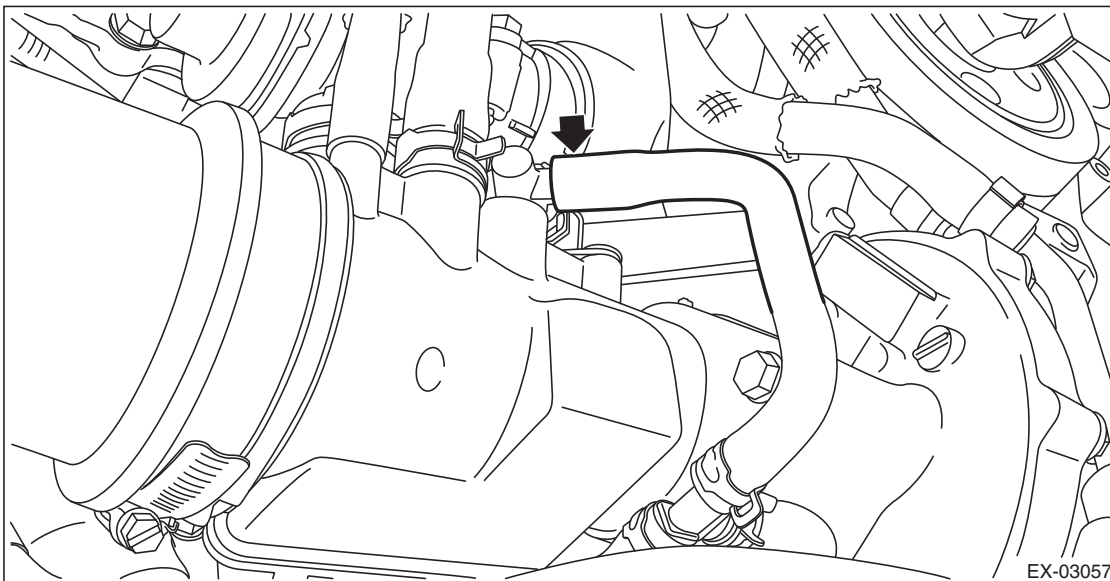
- 14) Disconnect the connector on the rear oxygen sensor from the engine harness, and disconnect the ground cable from the exhaust pipe cover.



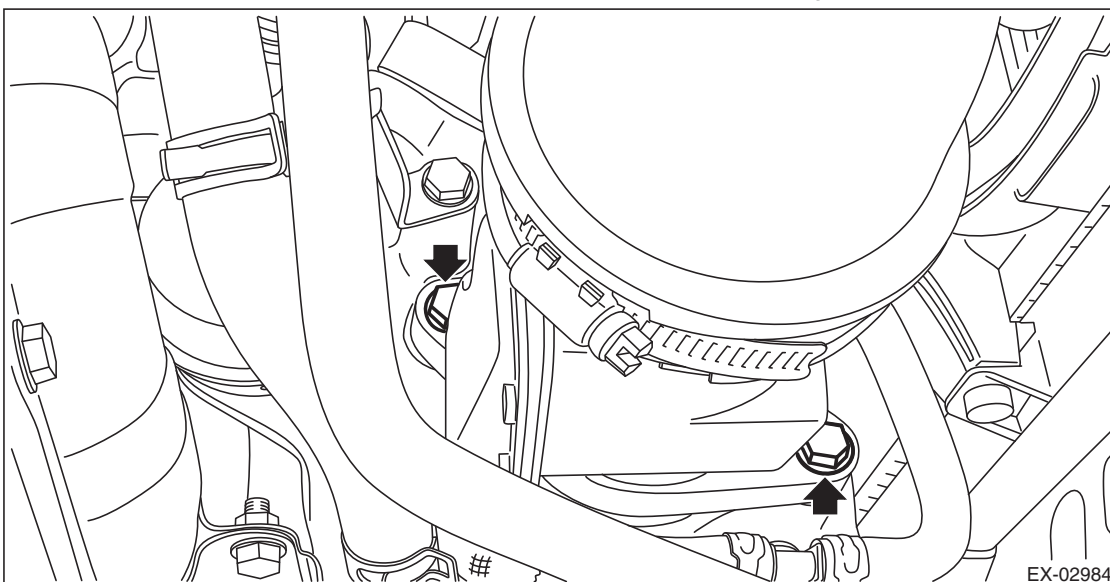
Front Exhaust Pipe

EXHAUST

- 15) Disconnect the vacuum control hose from the wastegate control solenoid valve.



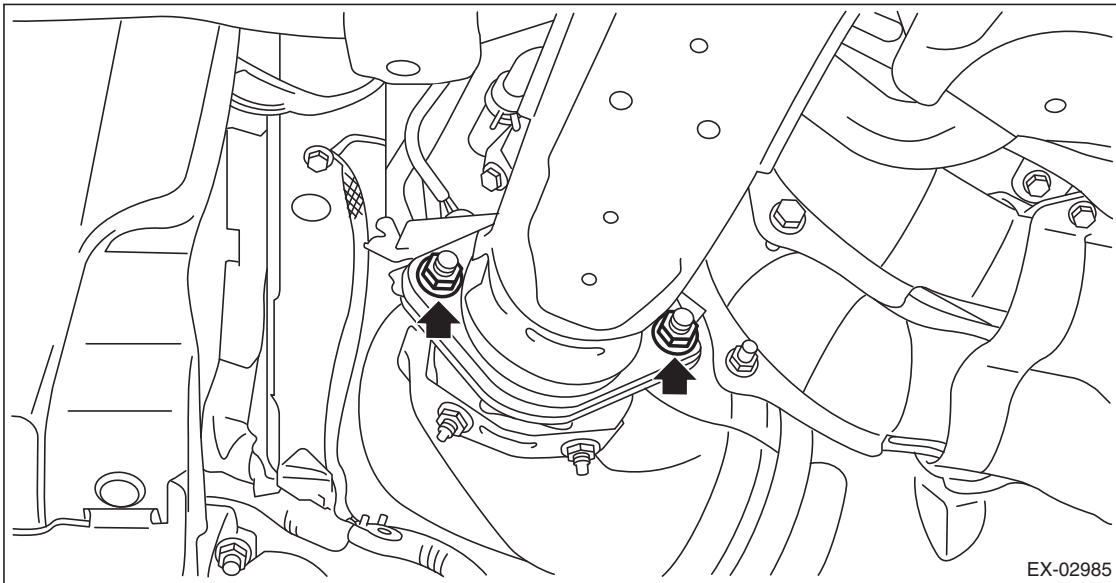
- 16) Remove the bolts which secure the intake duct No. 1 to the turbocharger.



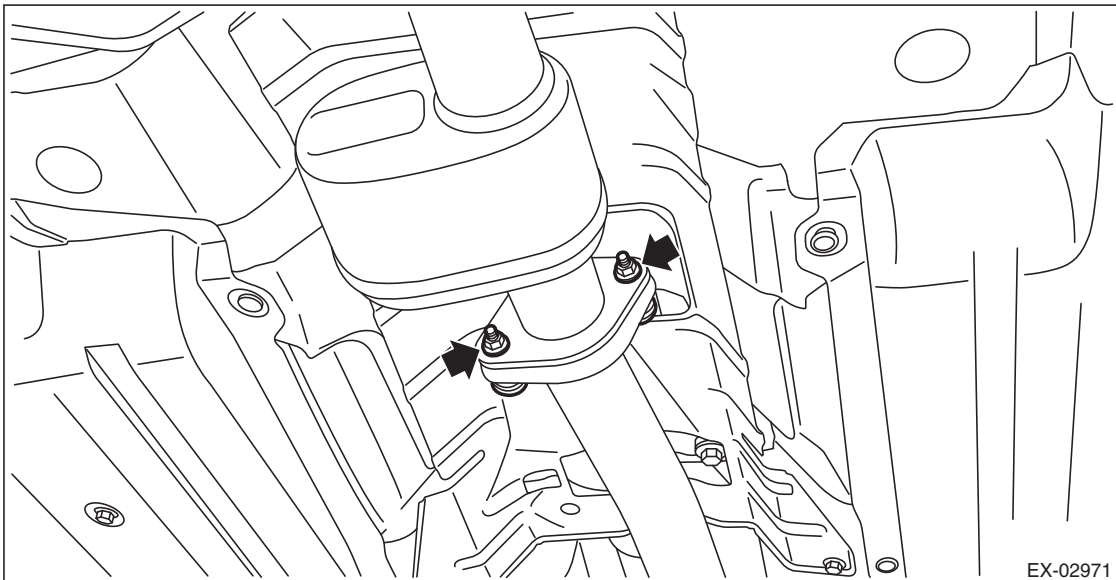
Front Exhaust Pipe

EXHAUST

- 17) Remove the nuts which secure the center exhaust pipe (rear) to the center exhaust pipe (front).



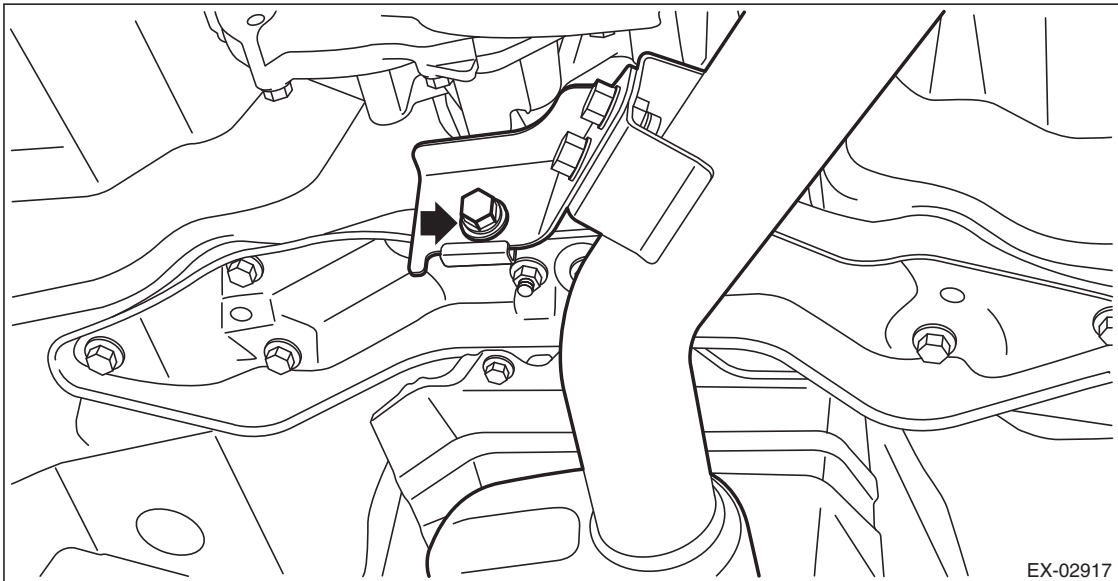
- 18) Remove the bolts, springs, and nuts which secure the rear exhaust pipe to the center exhaust pipe (rear).



Front Exhaust Pipe

EXHAUST

19) Remove the bolt which holds center exhaust pipe (rear) to the hanger bracket, and remove the center exhaust pipe (rear).



20) Disconnect the union screw pipe assembly from the oil pipe assembly, and disconnect the engine coolant hose (A) from the water pipe RH.

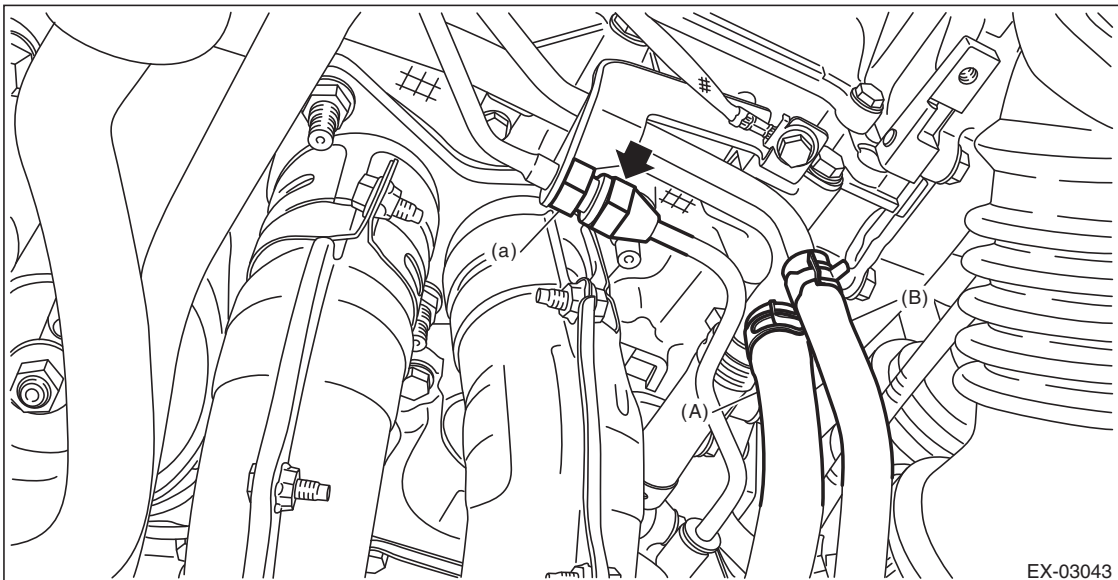
CAUTION:

In order to prevent damaging the oil pipe assembly, fix the section (a) shown in the figure when loosening the flare nut on the union screw pipe assembly, and avoid the part from rotating together while loosening the nut.

21) Disconnect the turbocharger hose (B) from the oil pipe, and drain the engine oil in the oil catch tank.

NOTE:

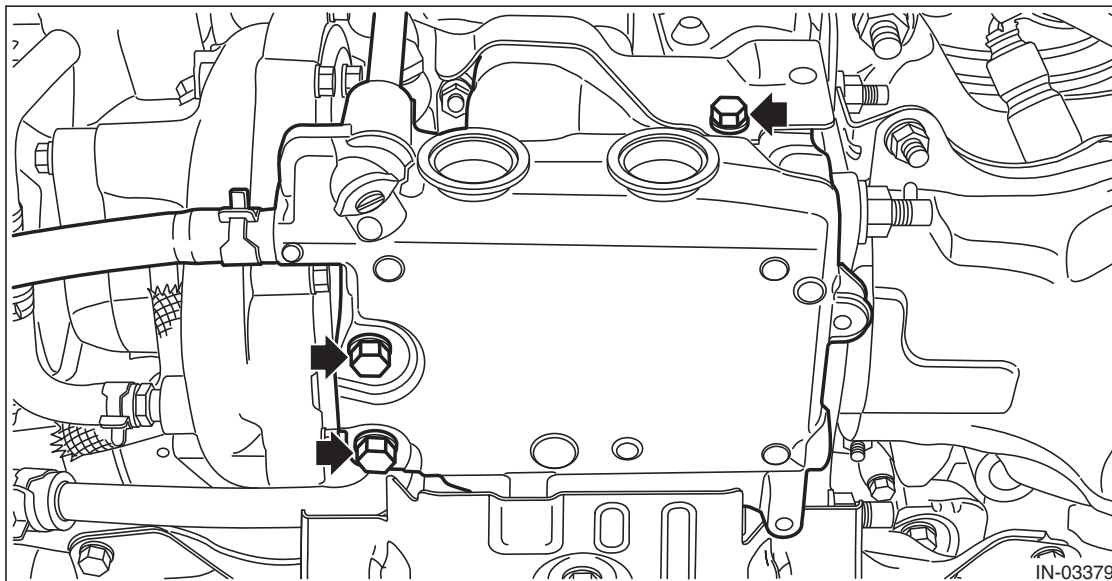
Prepare the container for draining of engine oil.



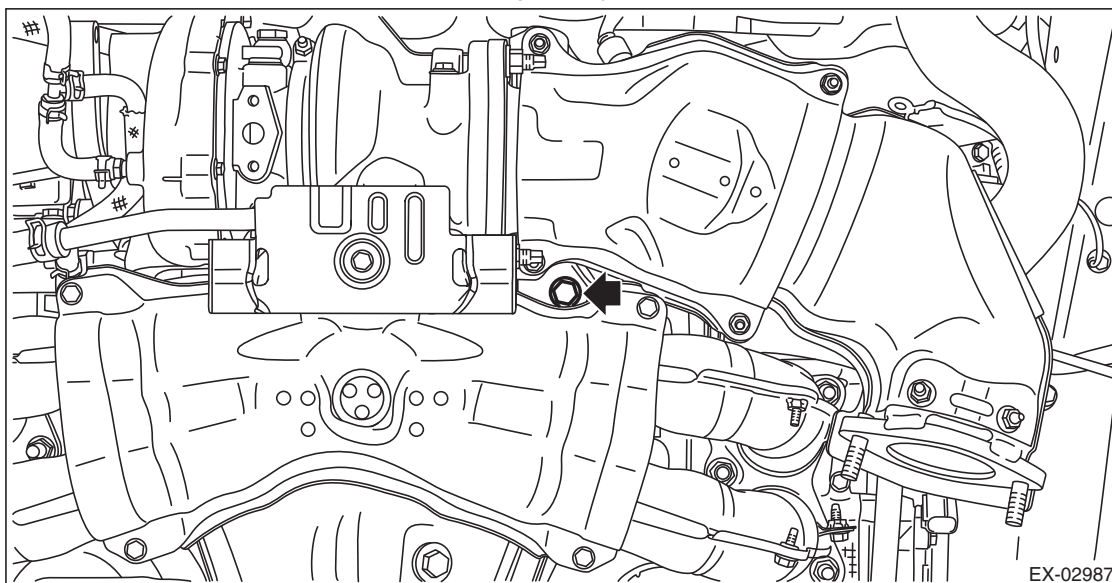
Front Exhaust Pipe

EXHAUST

22) Remove the bolts securing the oil catch tank to the turbo charger and the exhaust stay, and place the oil catch tank aside so that it does not interfere operation.



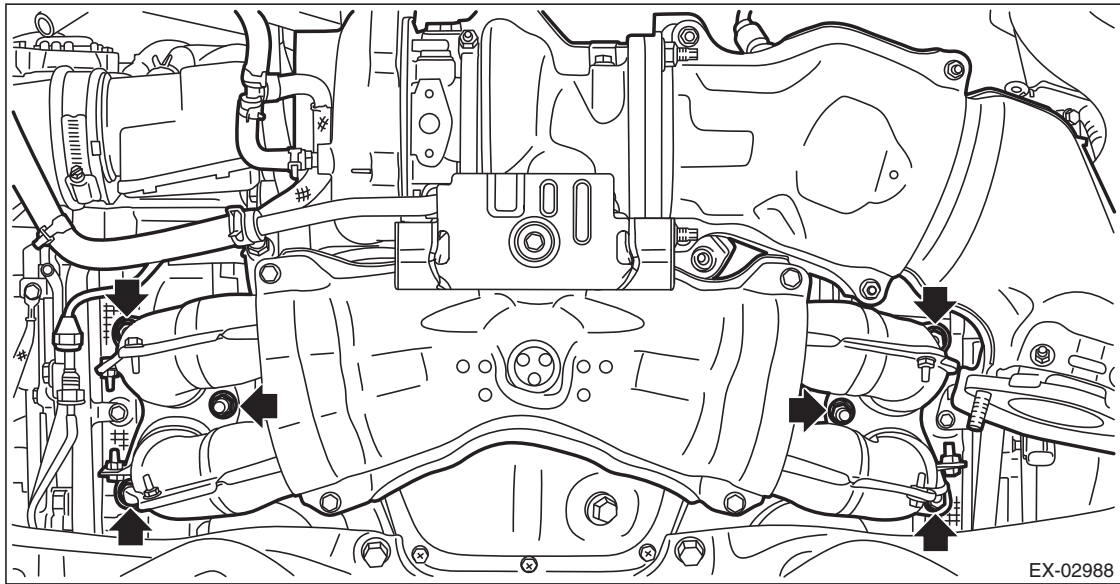
23) Remove the bolts which secure the turbocharger stay.



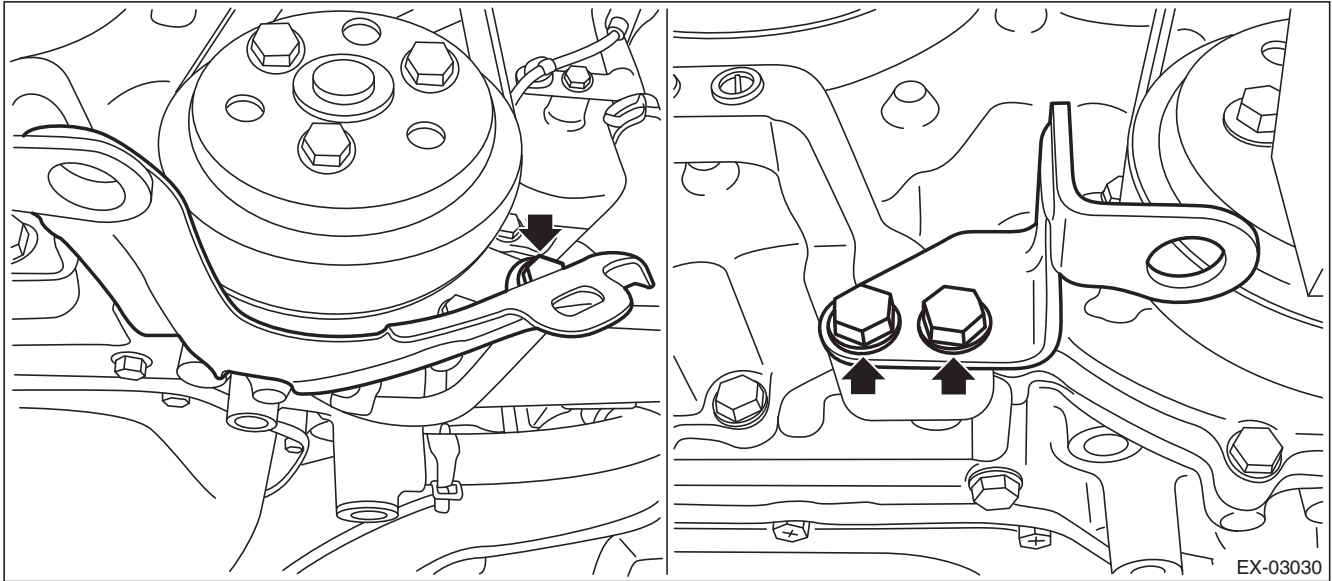
Front Exhaust Pipe

EXHAUST

24) While holding the front exhaust pipe with transmission jack, remove the nuts which hold the front exhaust pipe to the cylinder head exhaust port, and remove the front exhaust pipe.



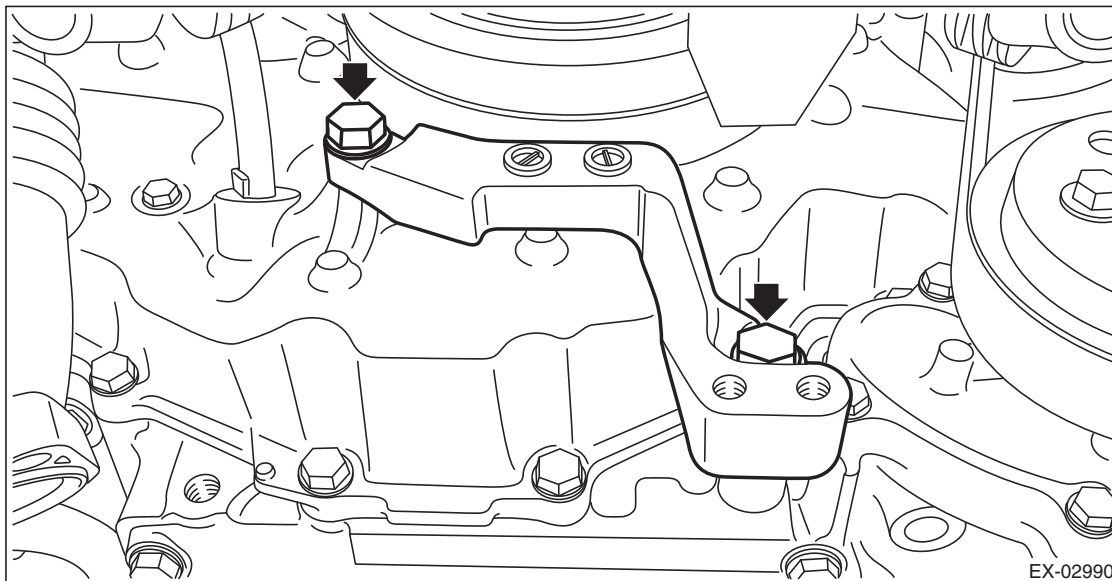
25) Remove the water pump pulley cover and exhaust pipe stay from the engine and turbocharger stay.



Front Exhaust Pipe

EXHAUST

26) Remove the turbocharger stay from the engine.

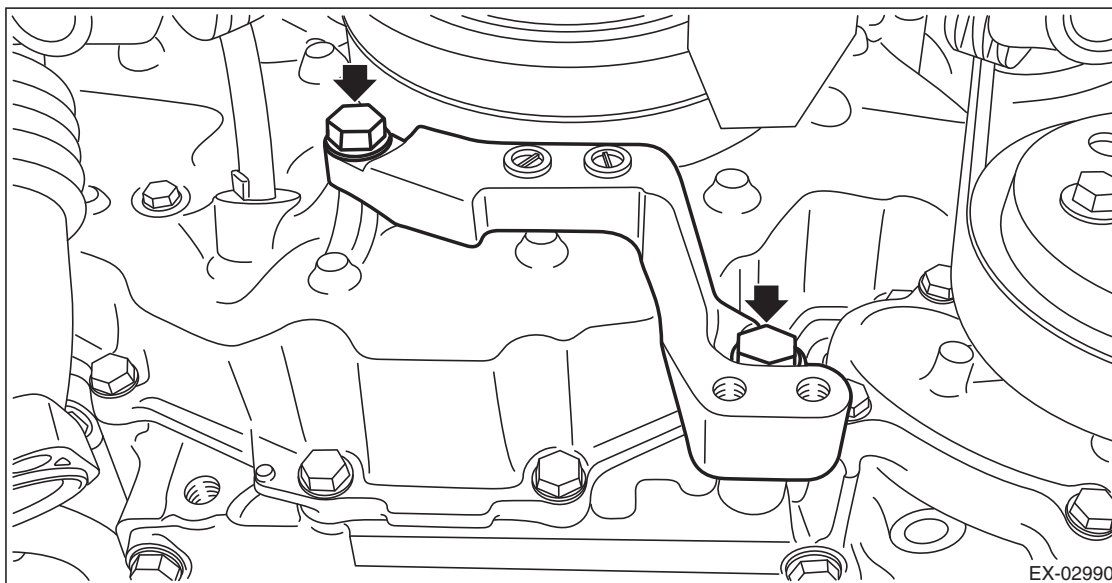


B: INSTALLATION

1) Install the turbocharger stay to the engine.

Tightening torque:

30 N·m (3.1 kgf-m, 22.1 ft-lb)



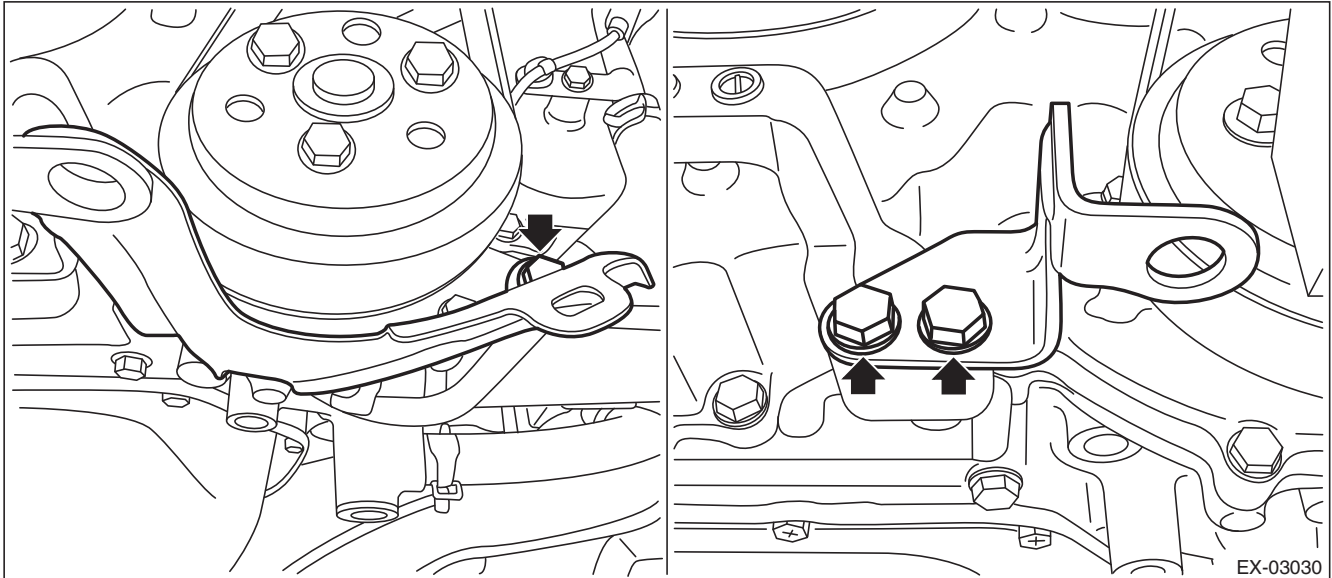
Front Exhaust Pipe

EXHAUST

2) Install the water pump pulley cover and exhaust pipe stay to the engine and turbocharger stay.

Tightening torque:

19 N·m (1.9 kgf-m, 14.0 ft-lb)



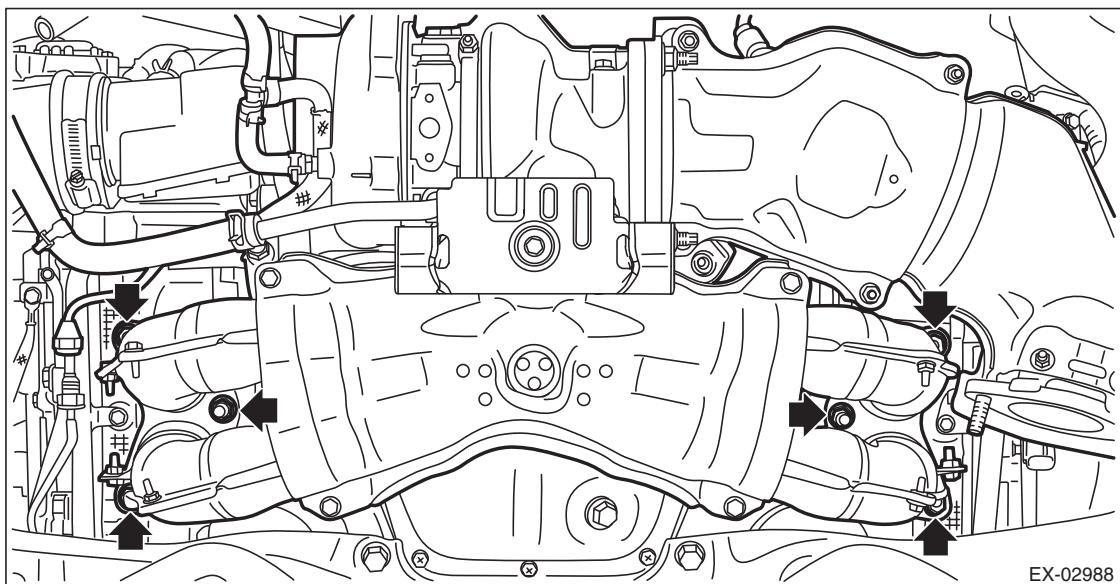
3) While holding the front exhaust pipe with transmission jack, set the front exhaust pipe, and install the nuts which hold the front exhaust pipe to the cylinder head exhaust port.

NOTE:

Use a new gasket.

Tightening torque:

42.5 N·m (4.3 kgf-m, 31.3 ft-lb)



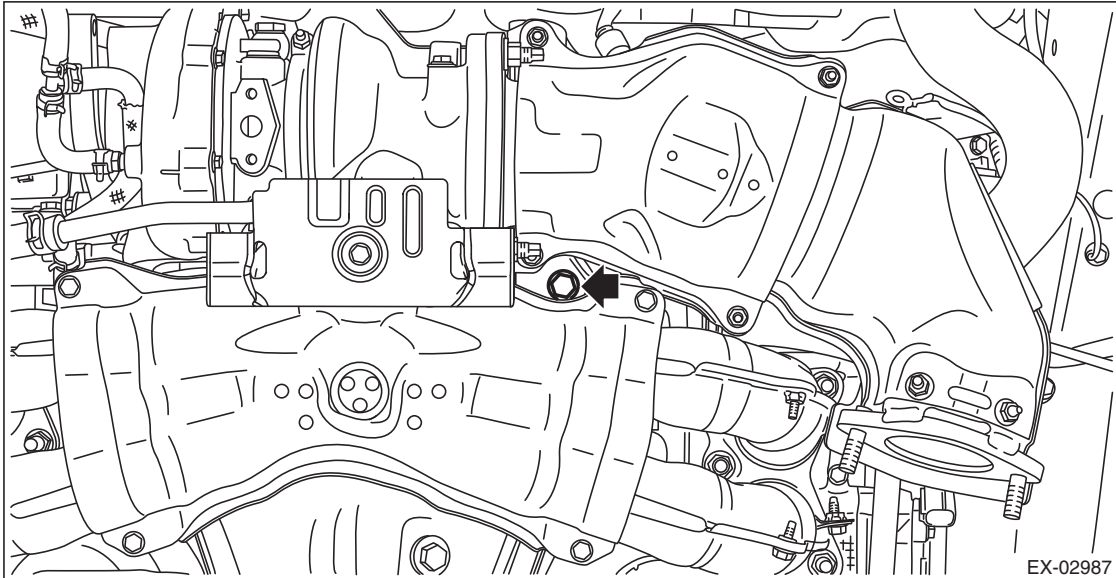
Front Exhaust Pipe

EXHAUST

- 4) Attach the bolt which holds the turbocharger stay.

Tightening torque:

33 N·m (3.4 kgf-m, 24.3 ft-lb)

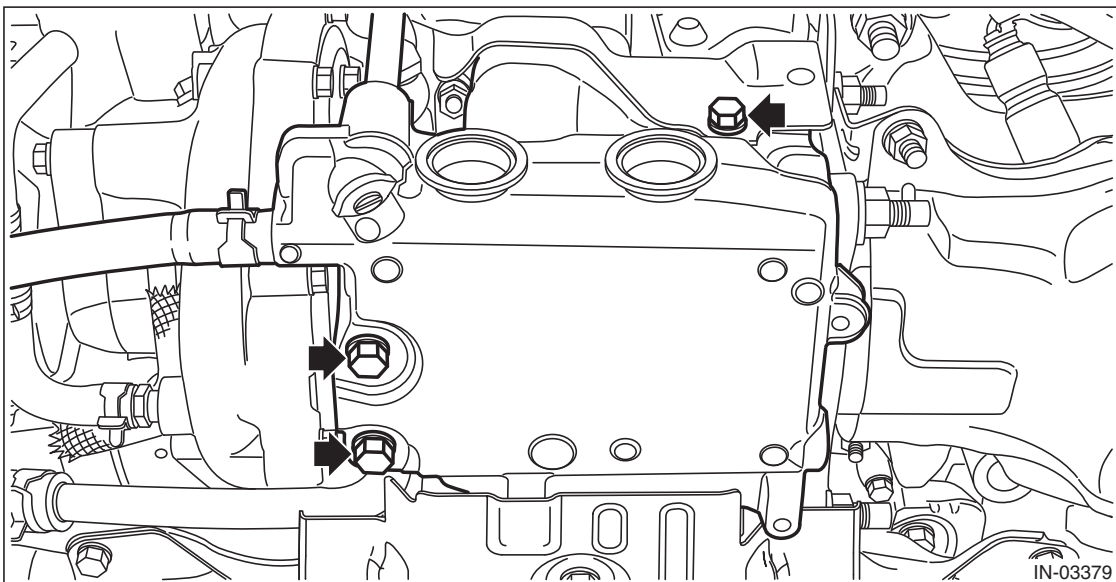


- 5) Install the oil catch tank to the turbocharger and exhaust stay.

(1) Set the oil catch tank to the turbocharger, and temporarily tighten the bolts which secure the oil catch tank to the turbocharger and exhaust stay.

NOTE:

Use a new gasket.



Front Exhaust Pipe

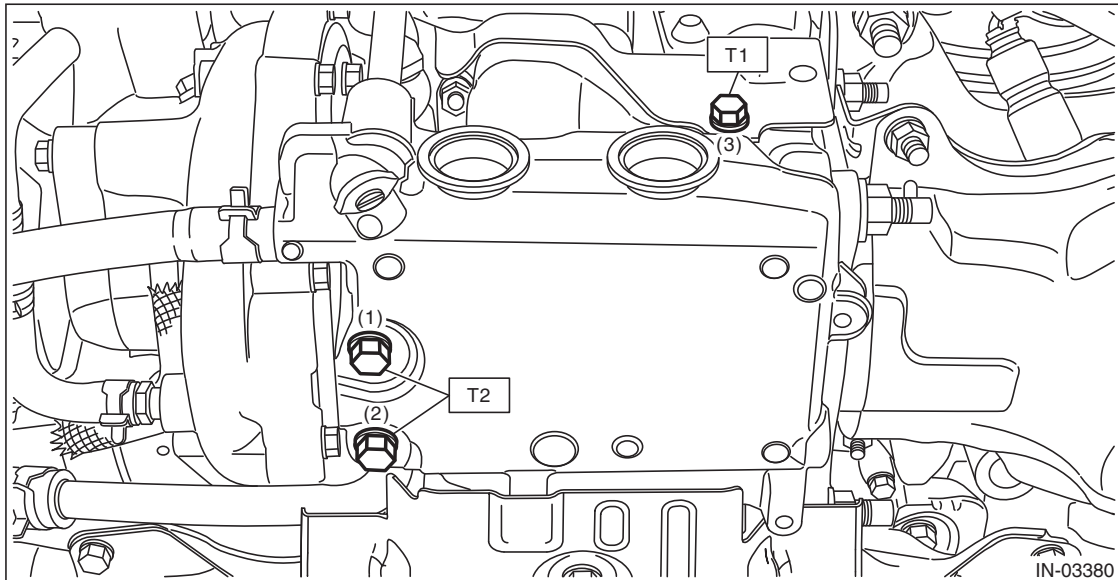
EXHAUST

(2) Tighten the bolts which secure the oil catch tank to the turbocharger and exhaust stay in numerical order as shown in the figure.

Tightening torque:

T1: 6.4 N·m (0.7 kgf-m, 4.7 ft-lb)

T2: 10.5 N·m (1.1 kgf-m, 7.7 ft-lb)



6) Connect the turbocharger hose (B) to the oil pipe.

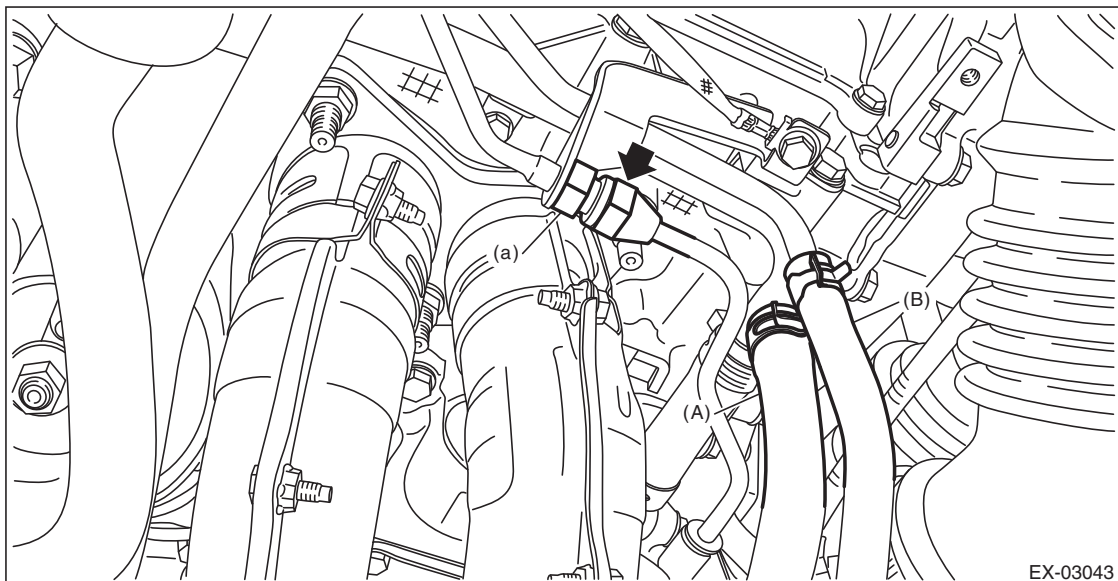
7) Connect the union screw pipe assembly to the oil pipe assembly, and connect the engine coolant hose (A) to the water pipe RH.

CAUTION:

In order to prevent damaging the oil pipe assembly, fix the section (a) shown in the figure when tightening the flare nut on the union screw pipe assembly, and avoid the part from rotating together while tightening the nut.

Tightening torque:

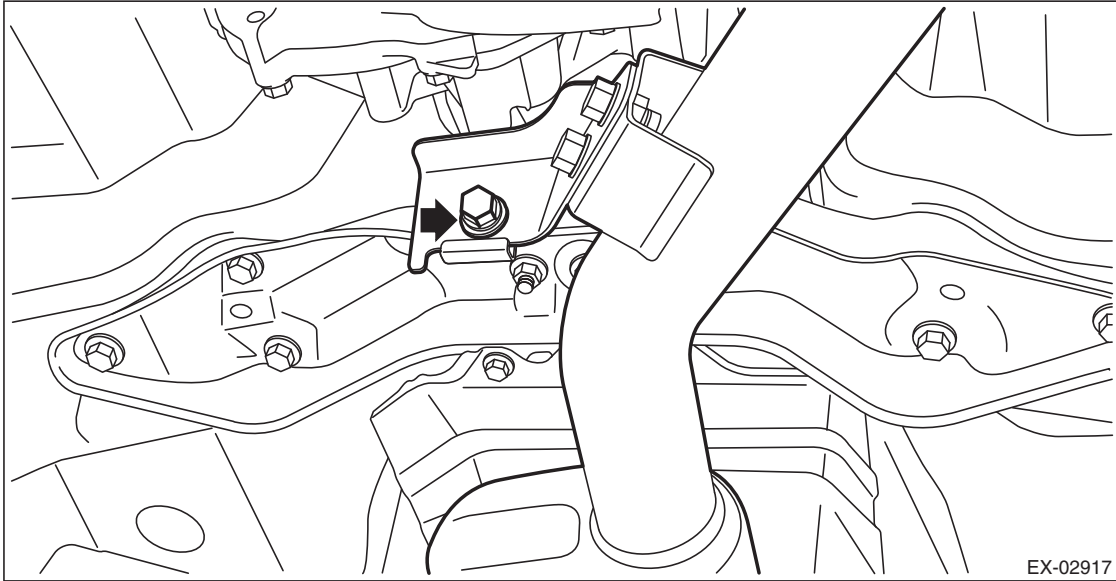
20 N·m (2.0 kgf-m, 14.8 ft-lb)



Front Exhaust Pipe

EXHAUST

- 8) Set the center exhaust pipe (rear), and temporarily tighten the bolt which holds the center exhaust pipe (rear) to the hanger bracket.



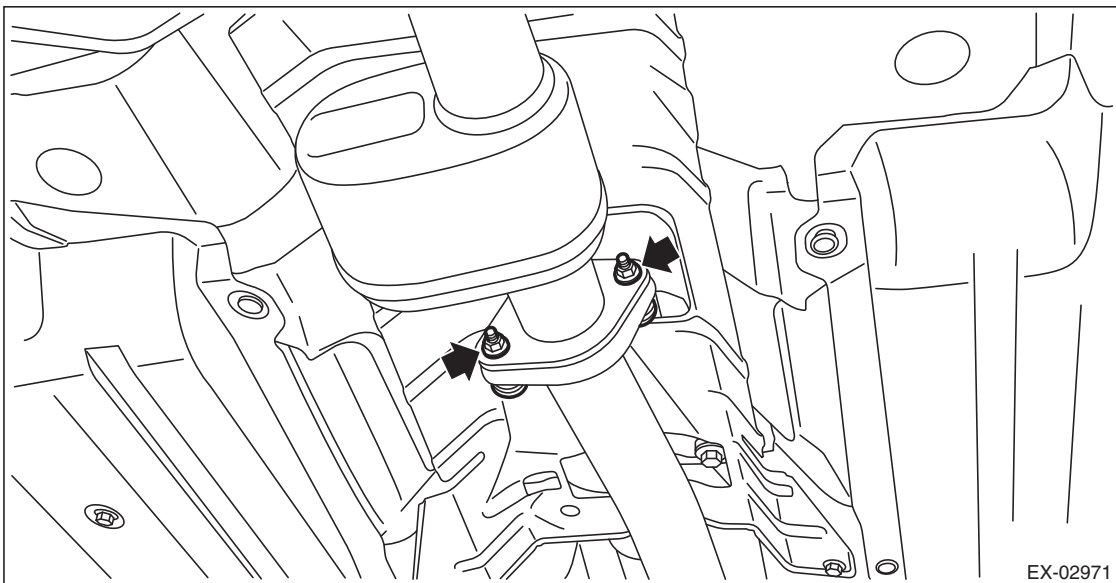
- 9) Install the bolts, springs, and nuts which secure the rear exhaust pipe to the center exhaust pipe (rear).

NOTE:

Use a new gasket.

Tightening torque:

18 N·m (1.8 kgf-m, 13.3 ft-lb)



Front Exhaust Pipe

EXHAUST

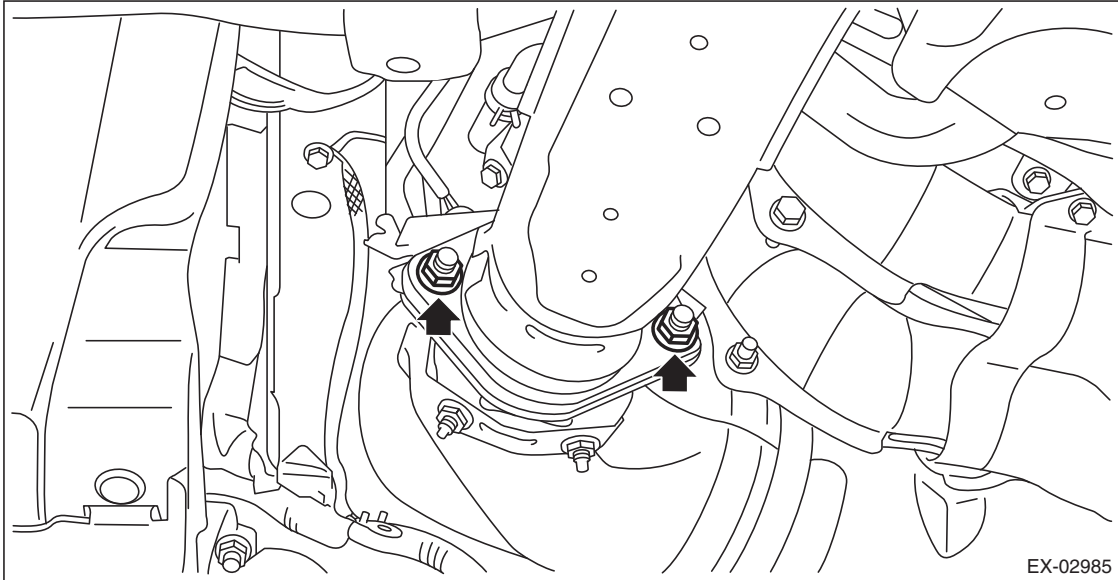
10) Install the nuts which secure the center exhaust pipe (rear) to the center exhaust pipe (front).

NOTE:

Use a new gasket.

Tightening torque:

42.5 N·m (4.3 kgf-m, 31.3 ft-lb)

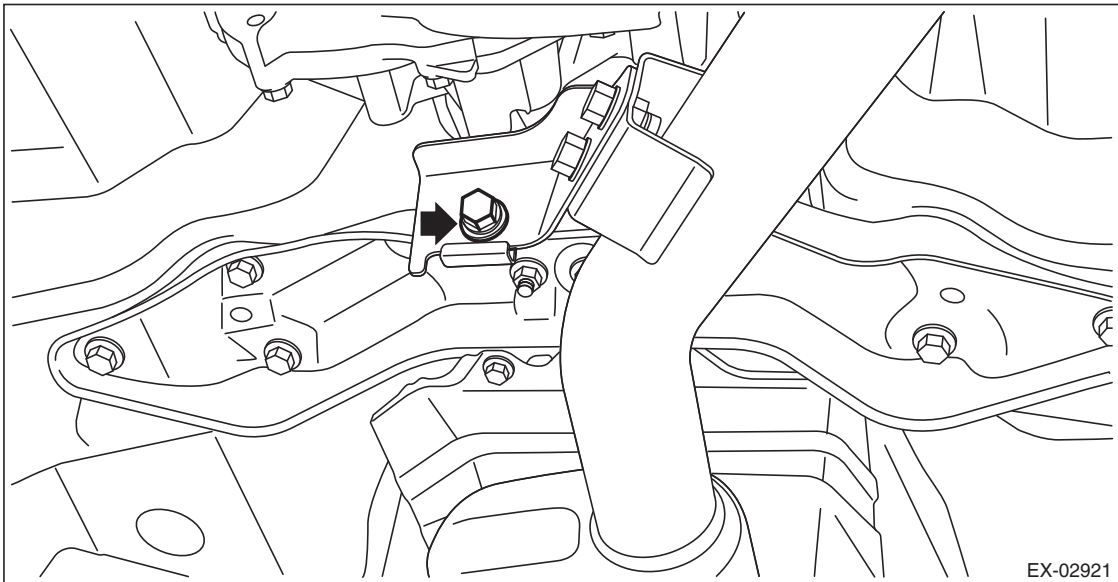


EX-02985

11) Tighten the bolts which hold center exhaust pipe (rear) to the hanger bracket.

Tightening torque:

35 N·m (3.6 kgf-m, 25.8 ft-lb)



EX-02921

Front Exhaust Pipe

EXHAUST

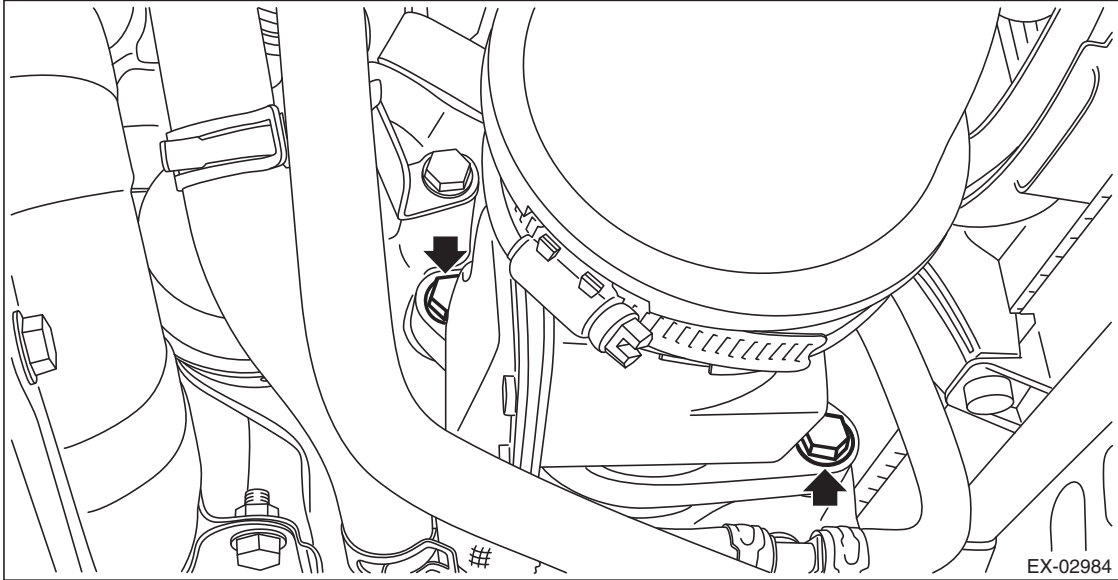
12) Install the bolt which secure the intake duct No. 1 to the turbocharger.

NOTE:

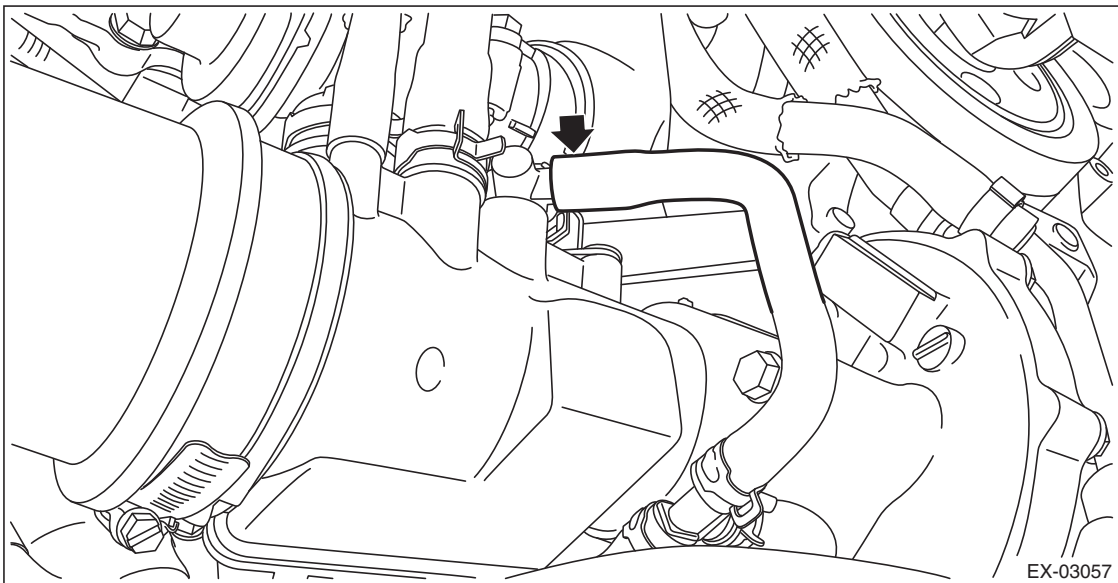
- Use new O-rings.
- Be careful not to pinch the O-ring.

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



13) Connect the vacuum control hose to the wastegate control solenoid valve.



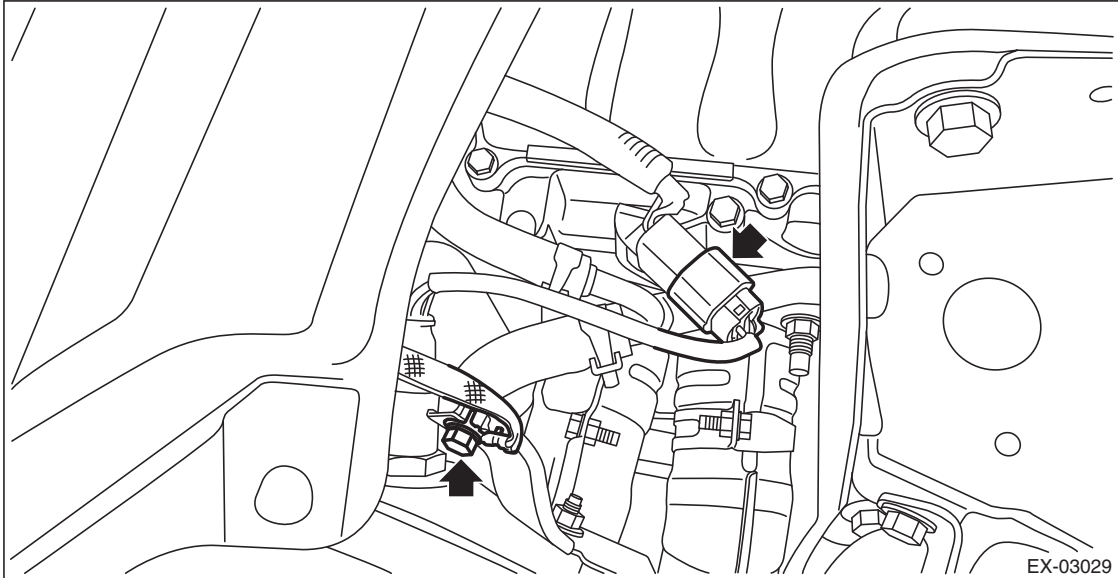
Front Exhaust Pipe

EXHAUST

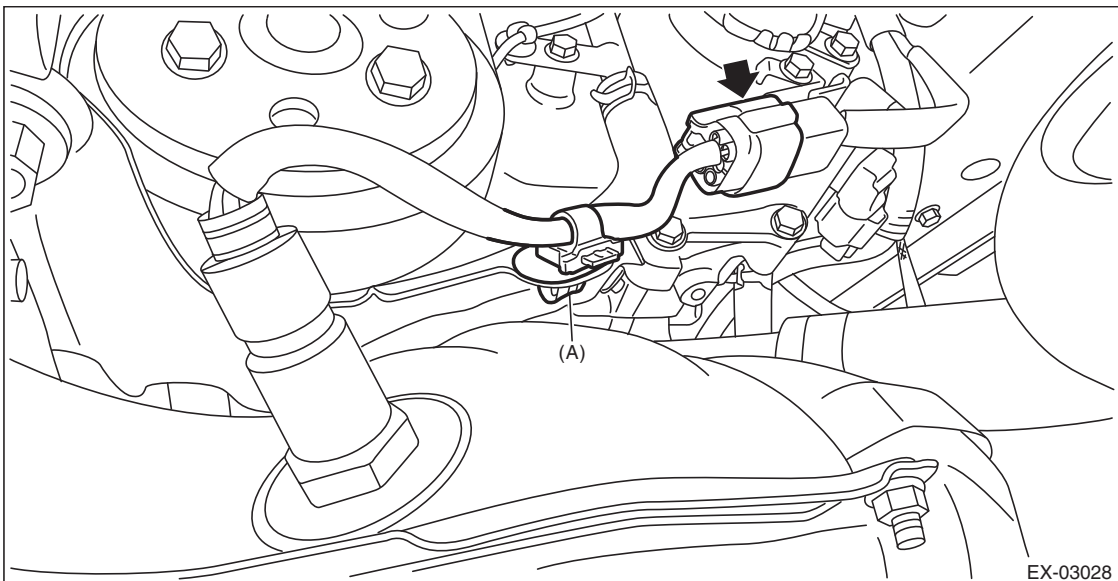
14) Connect the connector on the rear oxygen sensor to the engine harness, and connect the ground cable to the exhaust pipe cover.

Tightening torque:

7 N·m (0.7 kgf-m, 5.2 ft-lb)



15) Secure the front oxygen (A/F) sensor harness to the water pump pulley cover with the clip (A), and connect the front oxygen (A/F) sensor connector to the engine harness.



16) Install the under cover. <Ref. to EI-22, INSTALLATION, Front Under Cover.>

17) Lower the vehicle.

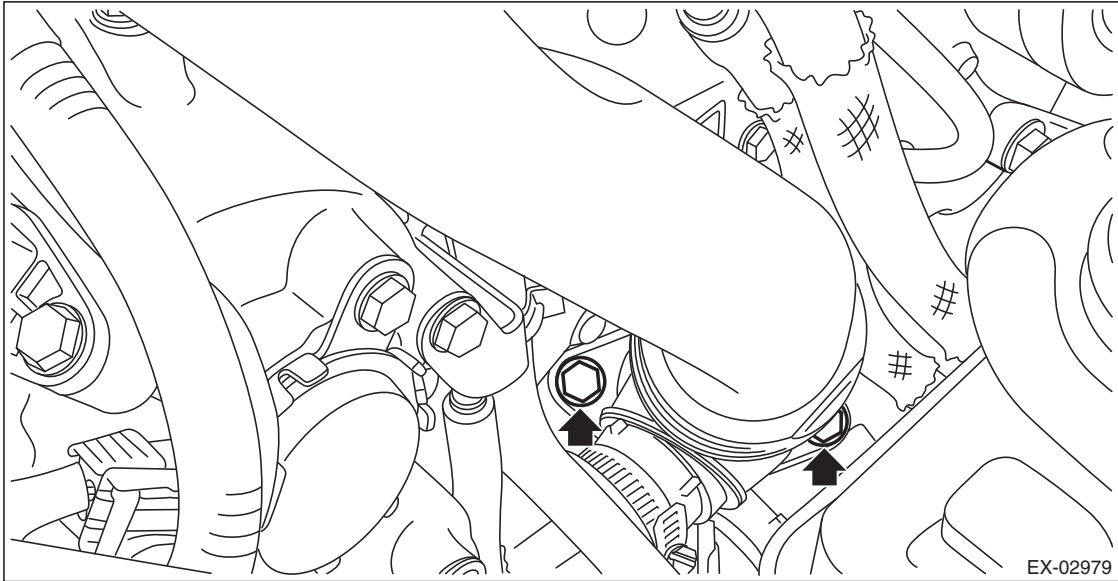
Front Exhaust Pipe

EXHAUST

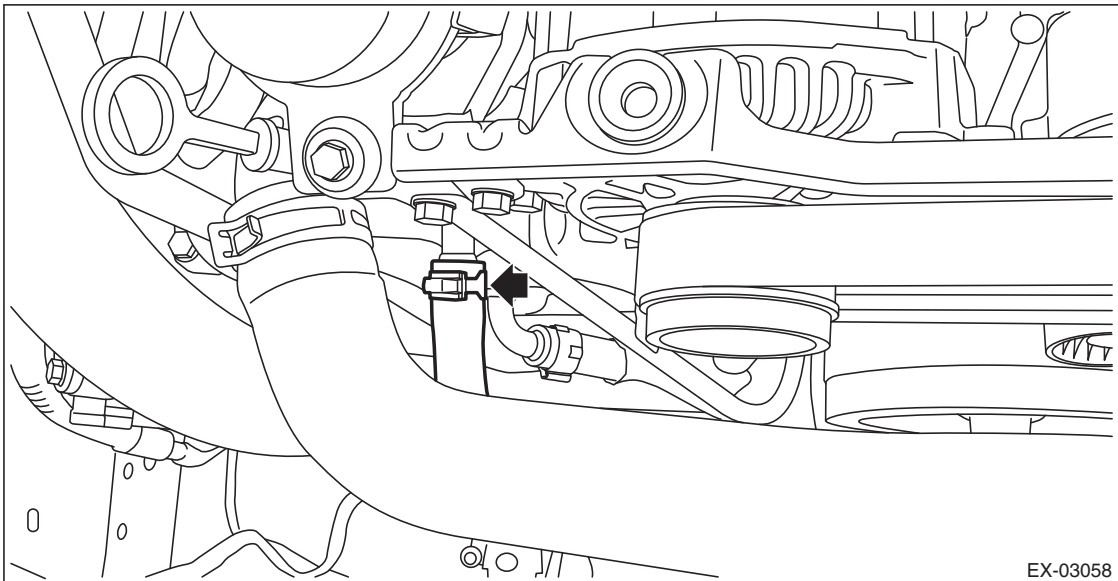
18) Install the bolts which secure the intake duct No. 2 to the turbocharger.

Tightening torque:

16 N·m (1.6 kgf-m, 11.8 ft-lb)



19) Connect the engine coolant hoses to the water pipe assembly.



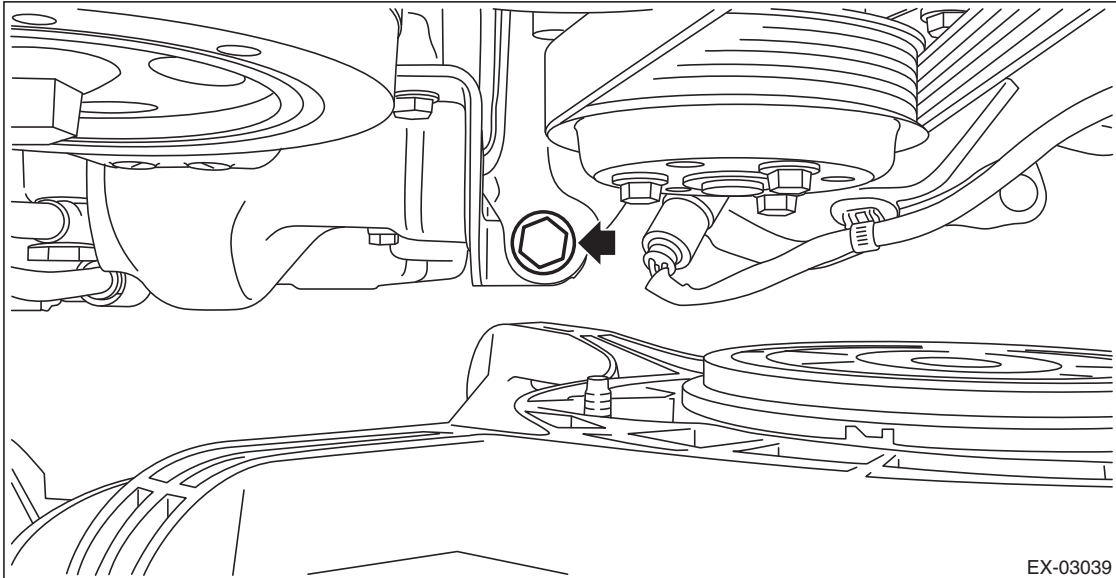
Front Exhaust Pipe

EXHAUST

20) Attach the bolt which secures the water pump pulley cover to the turbocharger stay.

Tightening torque:

33 N·m (3.4 kgf-m, 24.3 ft-lb)



21) Install the radiator sub fan and fan motor assembly. <Ref. to CO(H4DOTC)-55, INSTALLATION, Radiator Sub Fan and Fan Motor.>

22) Install the air intake duct (rear). <Ref. to IN(H4DOTC)-19, INSTALLATION, Air Intake Duct.>

23) Connect the battery ground terminal.

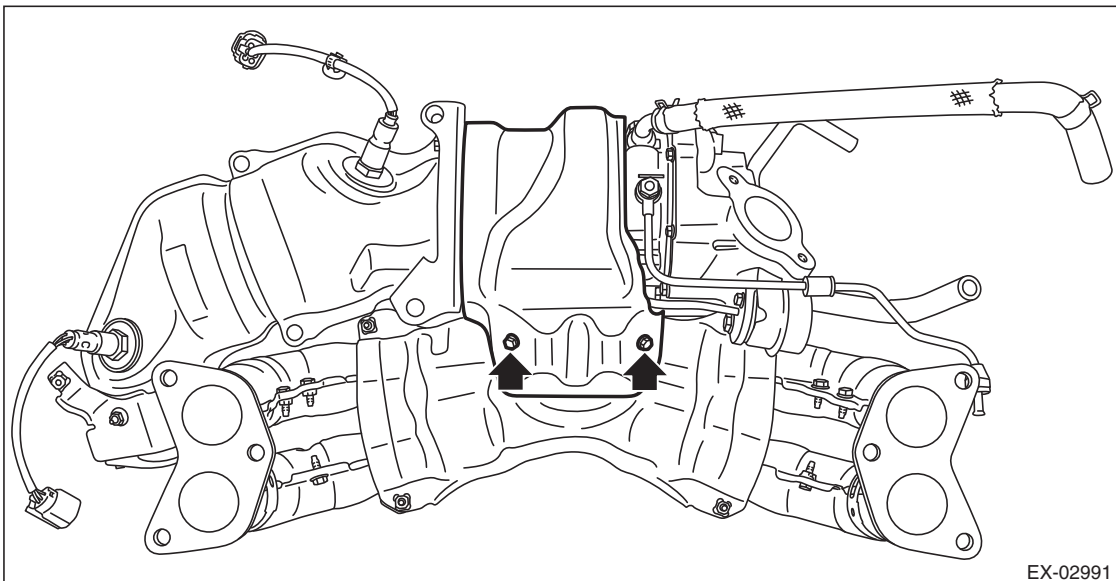
24) Fill engine coolant. <Ref. to CO(H4DOTC)-14, FILLING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

25) Check the engine oil level and replenish the engine oil if necessary. <Ref. to LU(H4DO)-13, INSPECTION, Engine Oil.>

26) Install the collector cover.

C: DISASSEMBLY

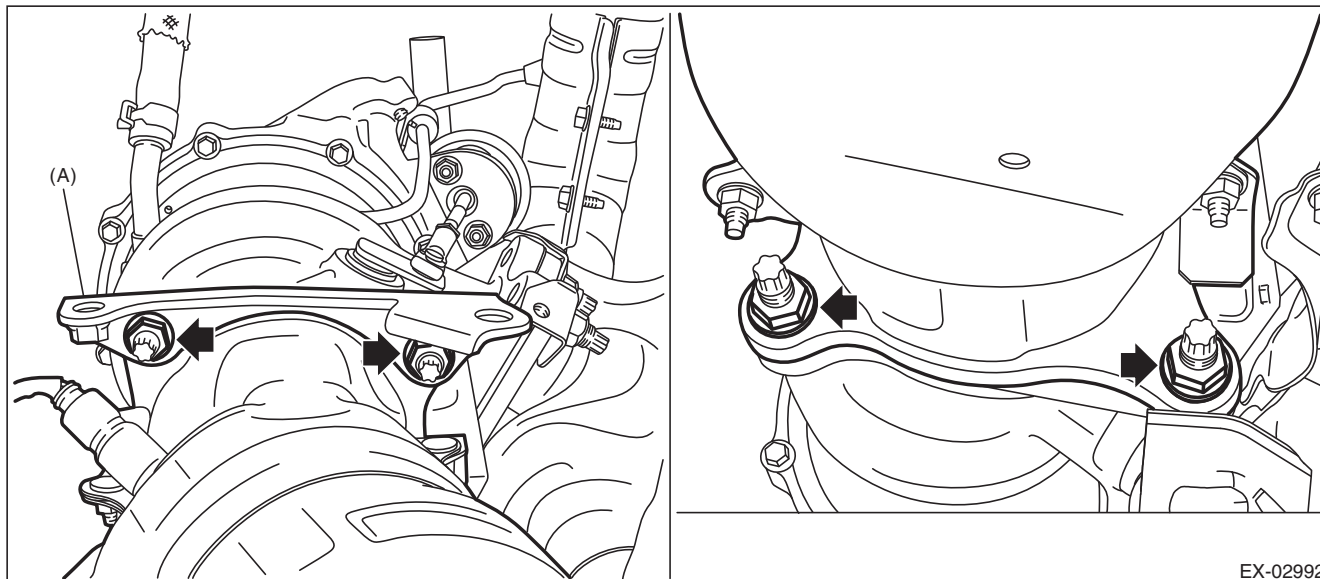
1) Remove the exhaust pipe cover from the turbocharger stay.



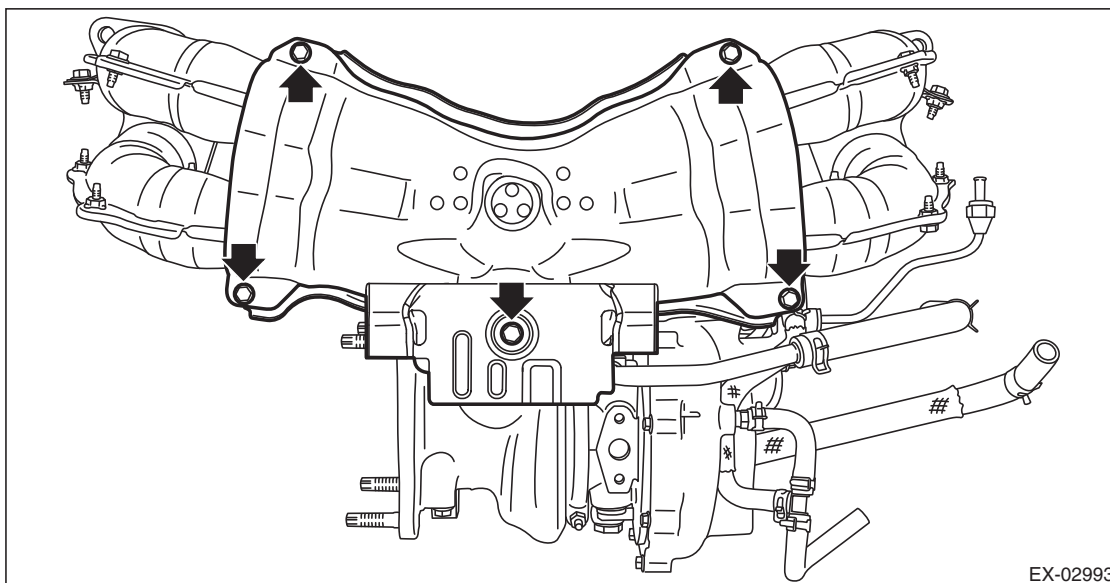
Front Exhaust Pipe

EXHAUST

2) Remove nuts which hold the center exhaust pipe (front) to the turbocharger, and remove the center exhaust pipe (front) together with the turbocharger stay (A).



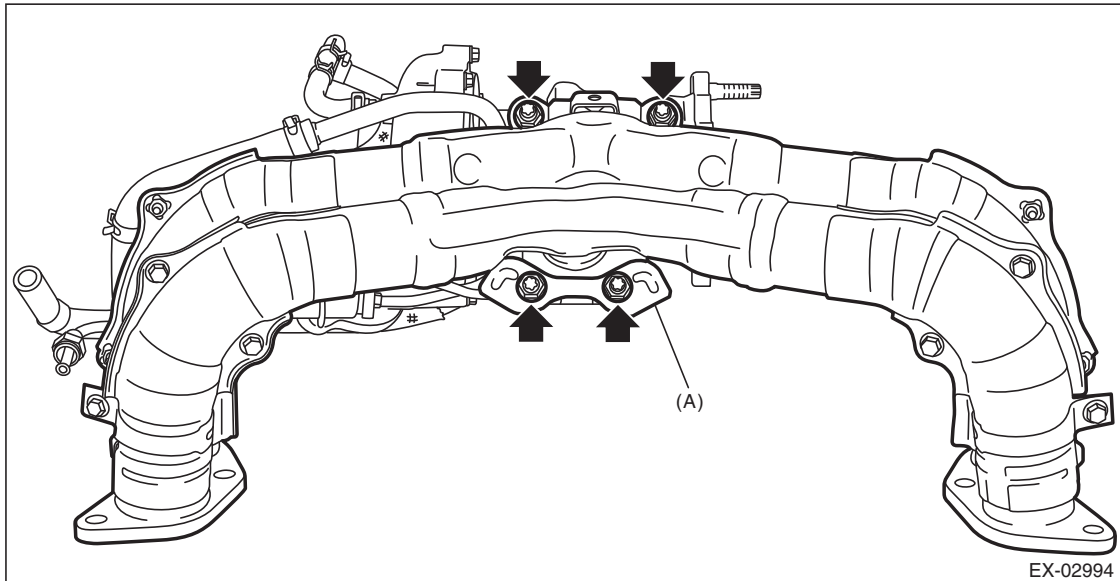
3) Remove the exhaust pipe cover from the front exhaust pipe.



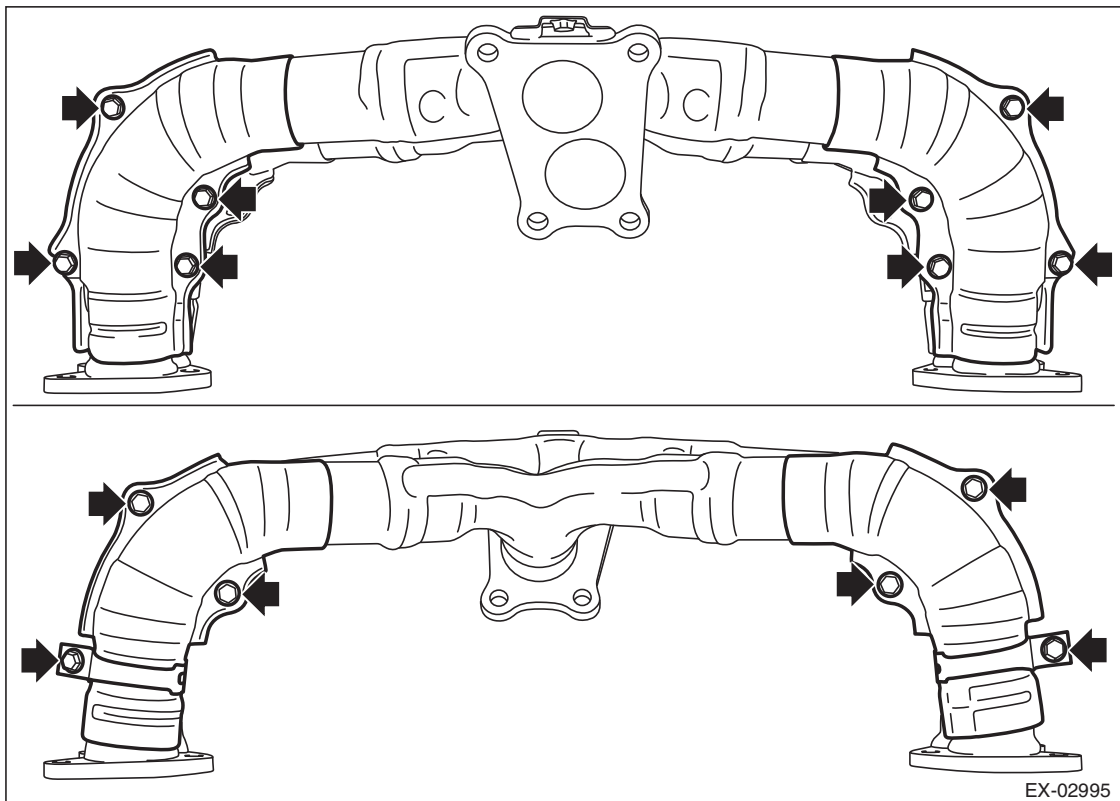
Front Exhaust Pipe

EXHAUST

4) Remove nuts which secure the front exhaust pipe to the turbocharger, and remove the front exhaust pipe together with the turbocharger stay (A).



5) Remove the exhaust pipe cover from the front exhaust pipe.



Front Exhaust Pipe

EXHAUST

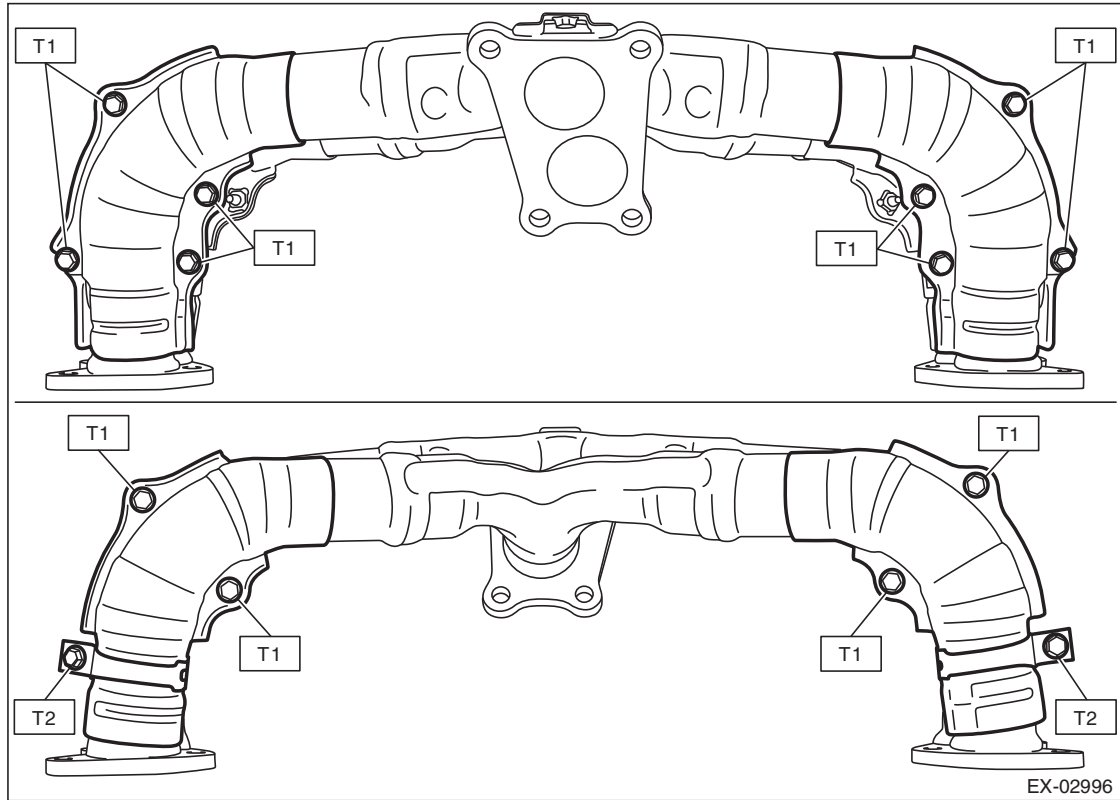
D: ASSEMBLY

1) Install the exhaust pipe cover to the front exhaust pipe.

Tightening torque:

T1: 6.4 N·m (0.7 kgf-m, 4.7 ft-lb)

T2: 13 N·m (1.3 kgf-m, 9.6 ft-lb)



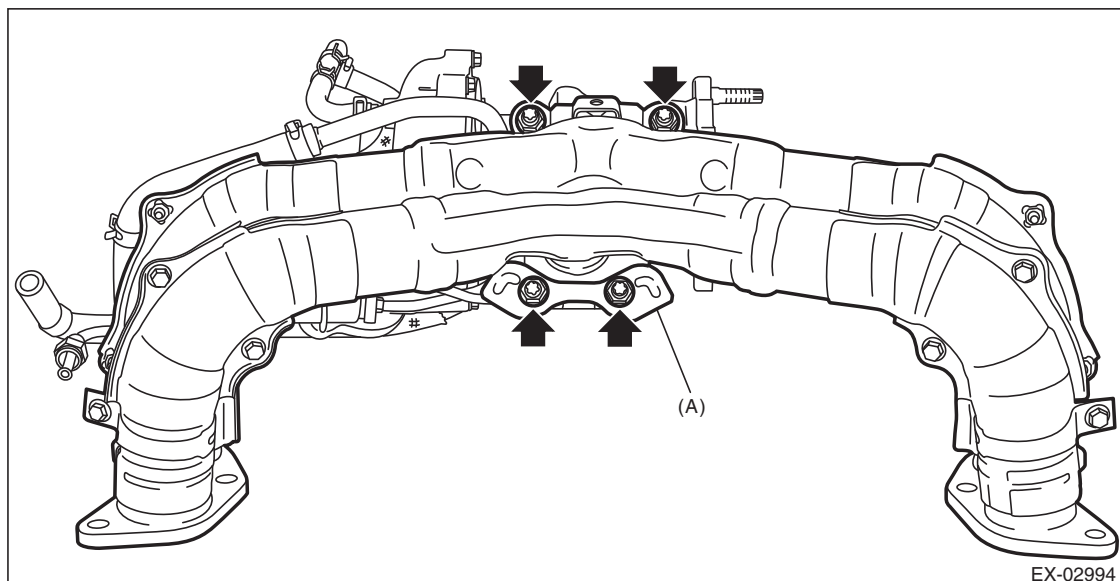
2) Install the front exhaust pipe together with the turbocharger stay (A) to the turbocharger.

NOTE:

Use a new gasket and self-locking nut.

Tightening torque:

42.5 N·m (4.3 kgf-m, 31.3 ft-lb)



EX(H4DOTC)-27

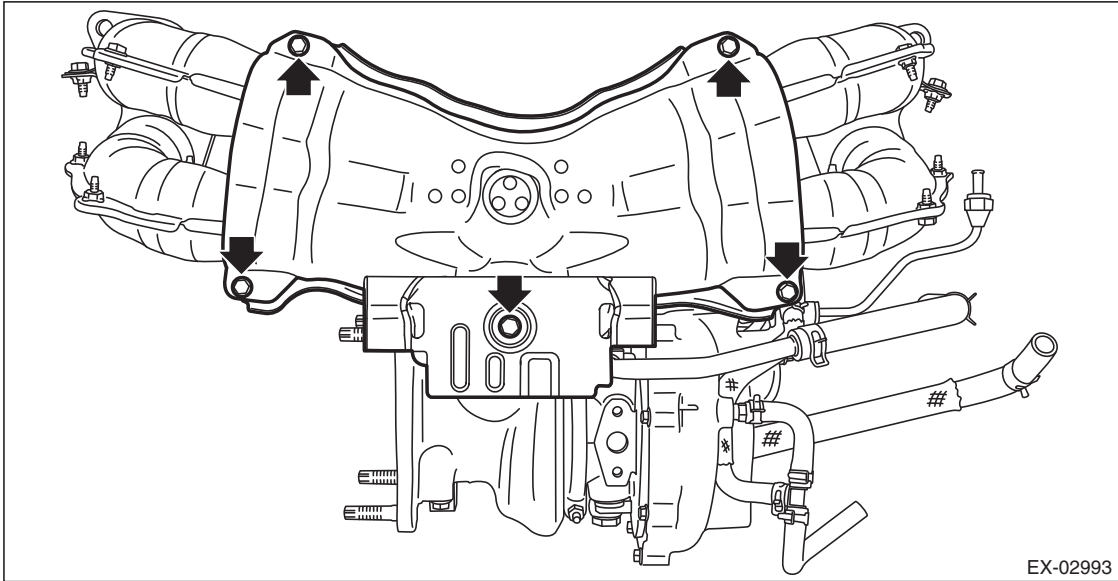
Front Exhaust Pipe

EXHAUST

3) Install the exhaust pipe cover to the front exhaust pipe.

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



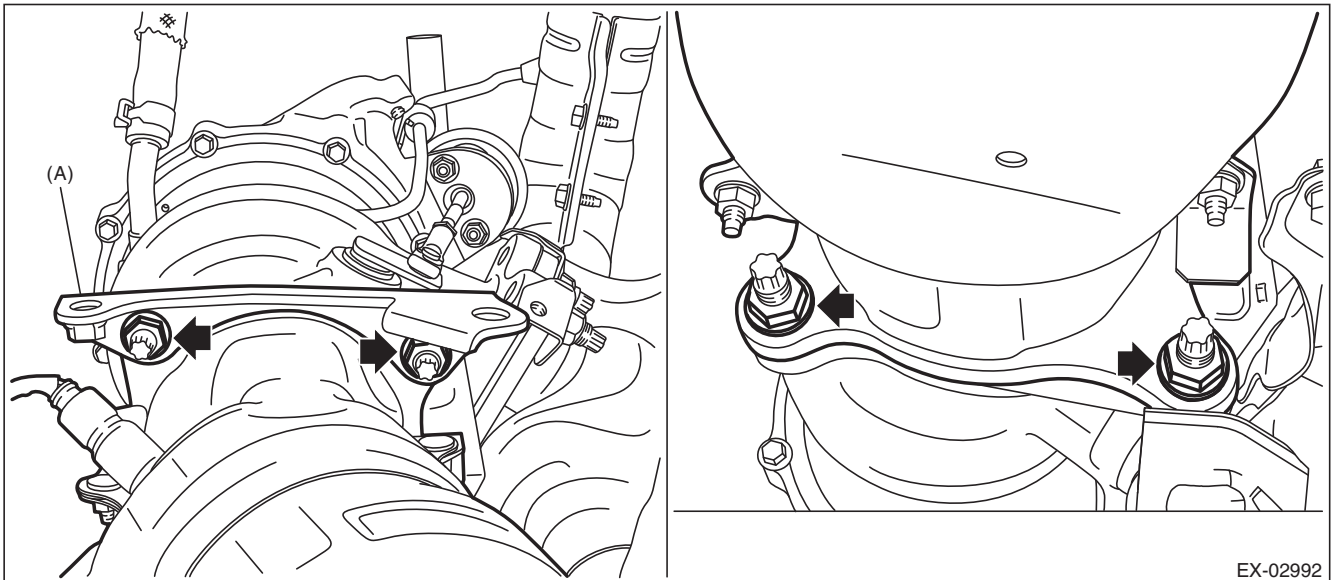
4) Install the center exhaust pipe (front) together with the turbocharger stay (A) to the turbocharger.

NOTE:

Use a new gasket and self-locking nut.

Tightening torque:

42.5 N·m (4.3 kgf-m, 31.3 ft-lb)



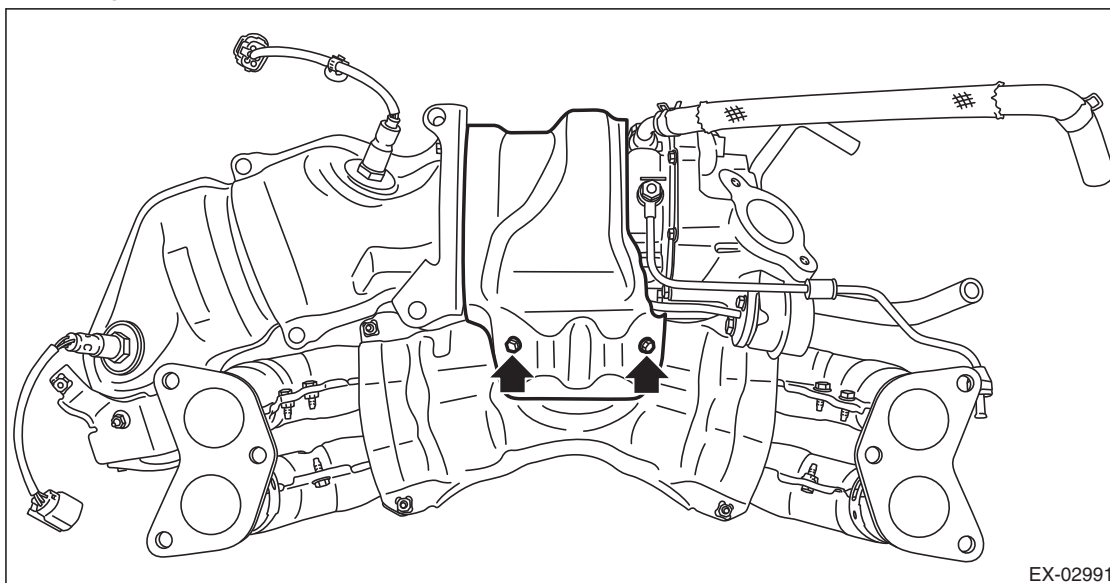
Front Exhaust Pipe

EXHAUST

5) Install the exhaust pipe cover to the turbocharger stay.

Tightening torque:

6.4 N·m (0.7 kgf-m, 4.7 ft-lb)



E: INSPECTION

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

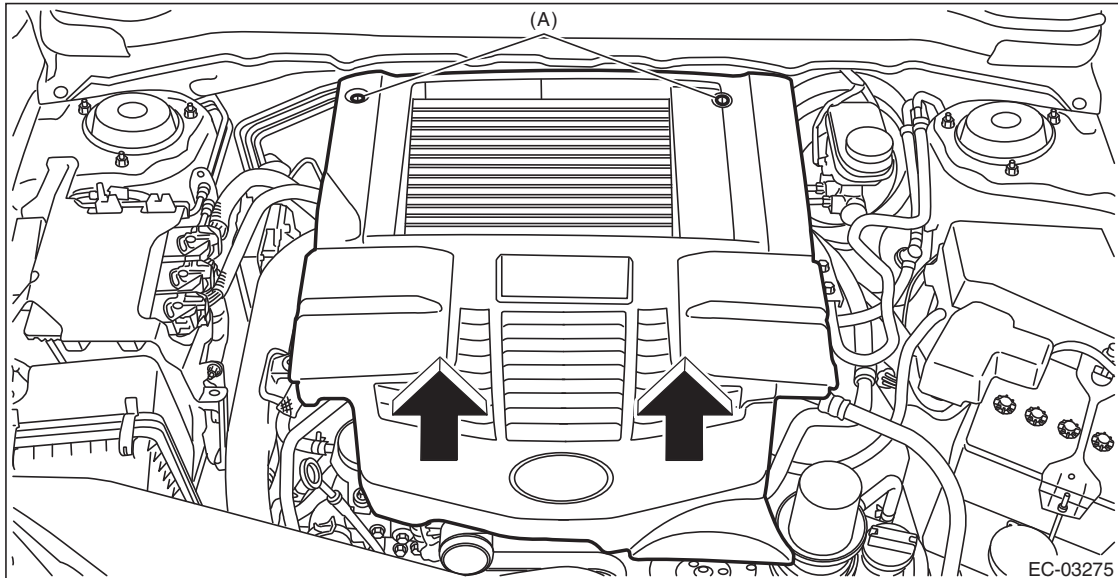
Center Exhaust Pipe

EXHAUST

3. Center Exhaust Pipe

A: REMOVAL

1) Remove the clip (A), lift the front of the collector cover in the direction of arrow, and then remove the collector cover.

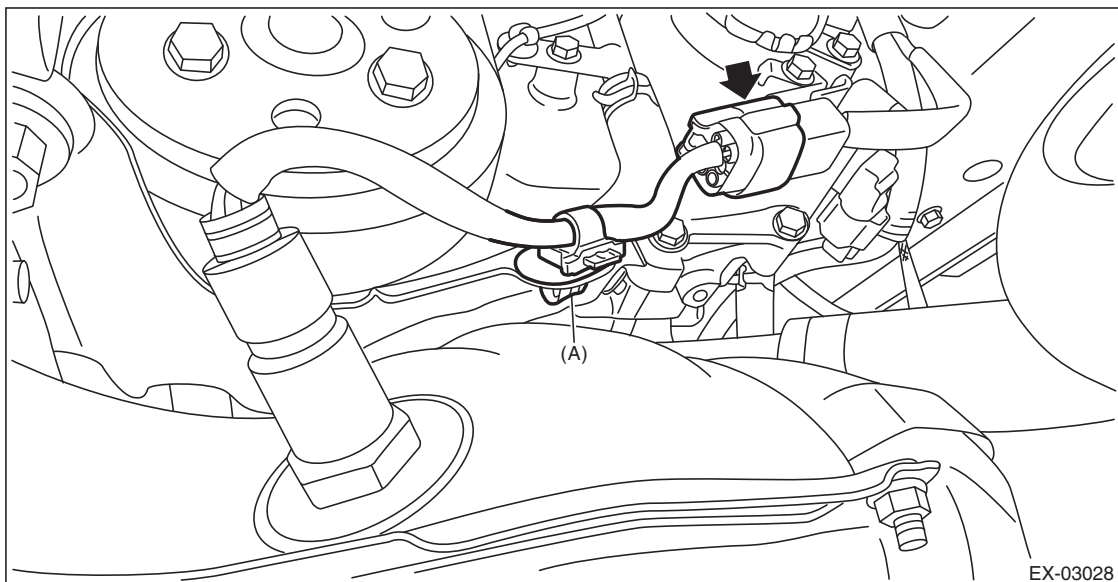


2) Disconnect the ground cable from battery.

3) Lift up the vehicle.

4) Remove the under cover. <Ref. to EI-22, REMOVAL, Front Under Cover.>

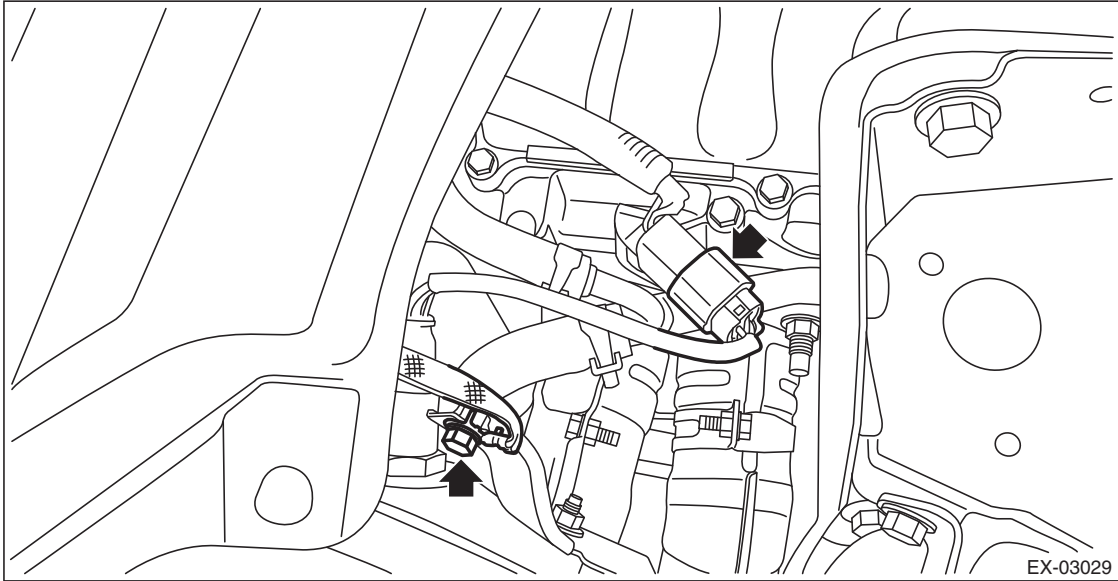
5) Disconnect the connector on the front oxygen (A/F) sensor from the engine harness, and remove the clip (A) which secures the front oxygen (A/F) sensor harness to the water pump pulley cover.



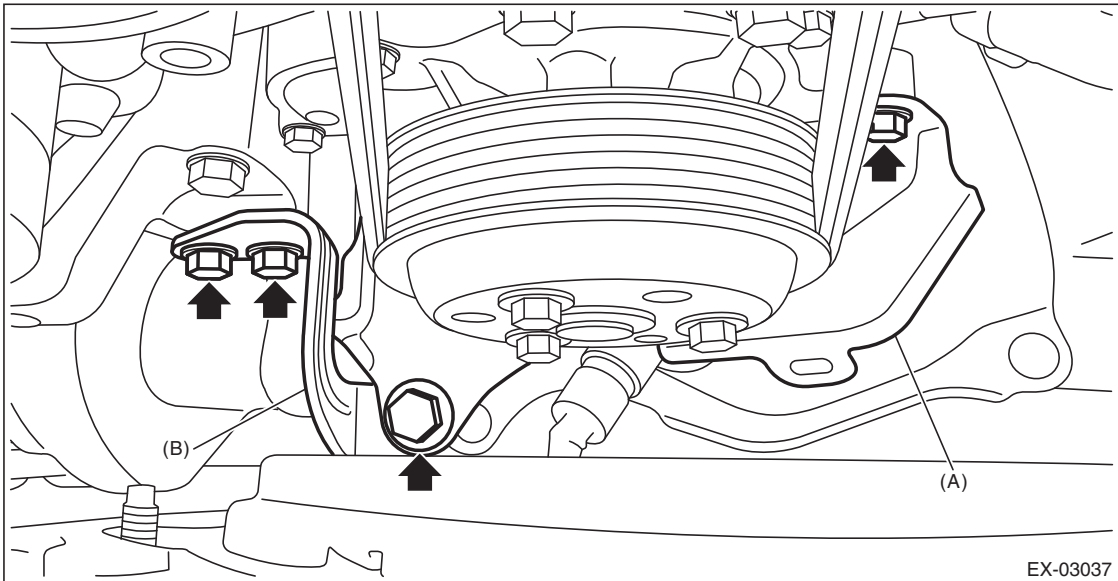
Center Exhaust Pipe

EXHAUST

- 6) Disconnect the connector on the rear oxygen sensor from the engine harness, and disconnect the ground cable from the exhaust pipe cover.



- 7) Lower the vehicle.
8) Remove the bolts which secure the water pump pulley cover (A) and exhaust pipe stay (B) to the turbocharger stay, and remove the water pump pulley cover (A) and exhaust pipe stay (B) from the water pump and turbocharger stay.

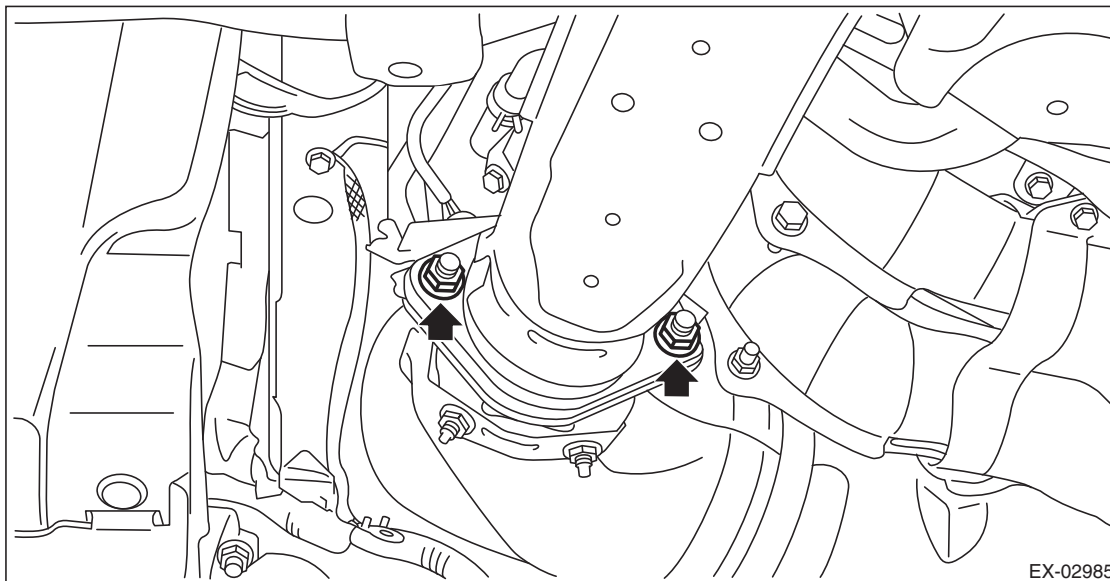


- 9) Lift up the vehicle.

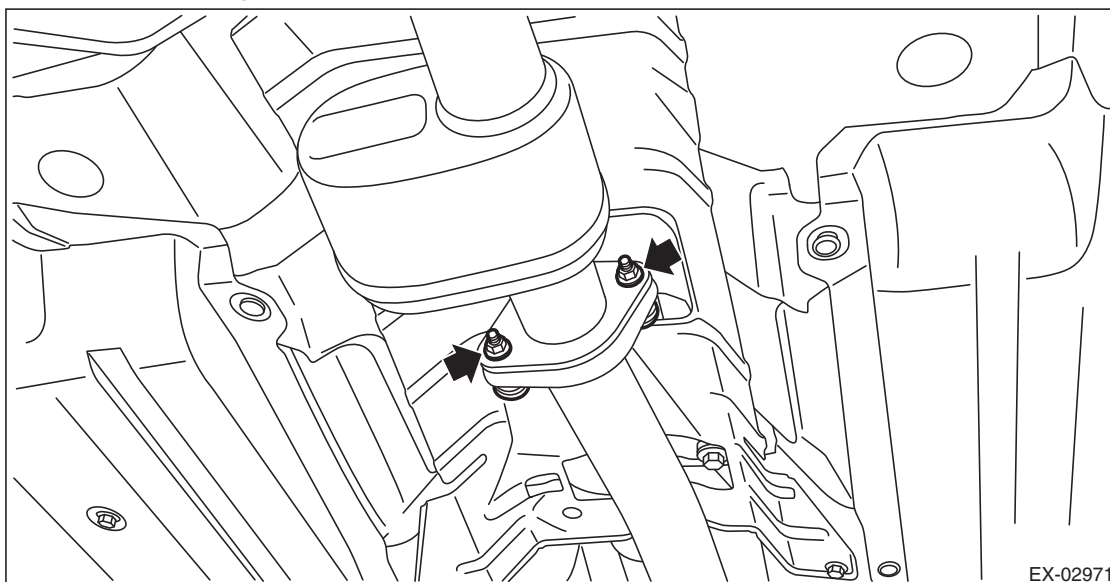
Center Exhaust Pipe

EXHAUST

- 10) Remove the nuts which secure the center exhaust pipe (rear) to the center exhaust pipe (front).



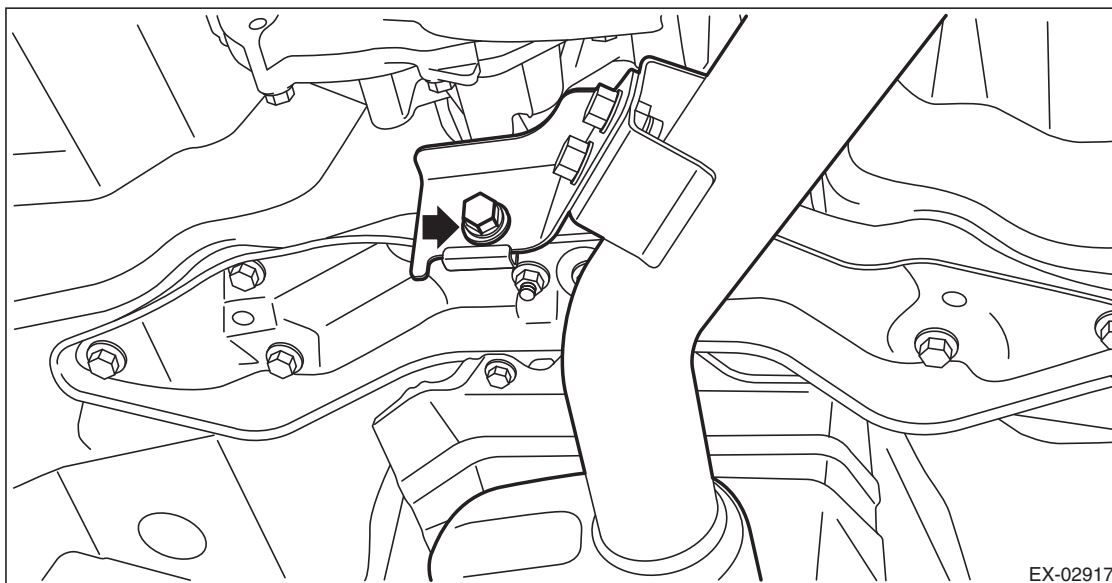
- 11) Remove the bolts, springs, and nuts which secure the rear exhaust pipe to the center exhaust pipe (rear).



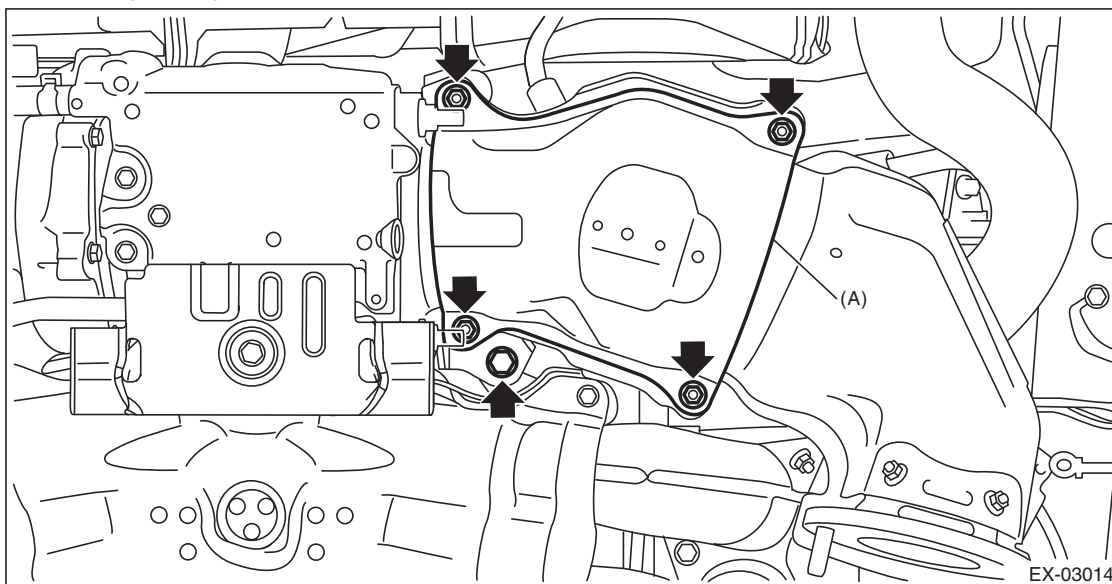
Center Exhaust Pipe

EXHAUST

- 12) Remove the bolt which holds center exhaust pipe (rear) to the hanger bracket, and remove the center exhaust pipe (rear).



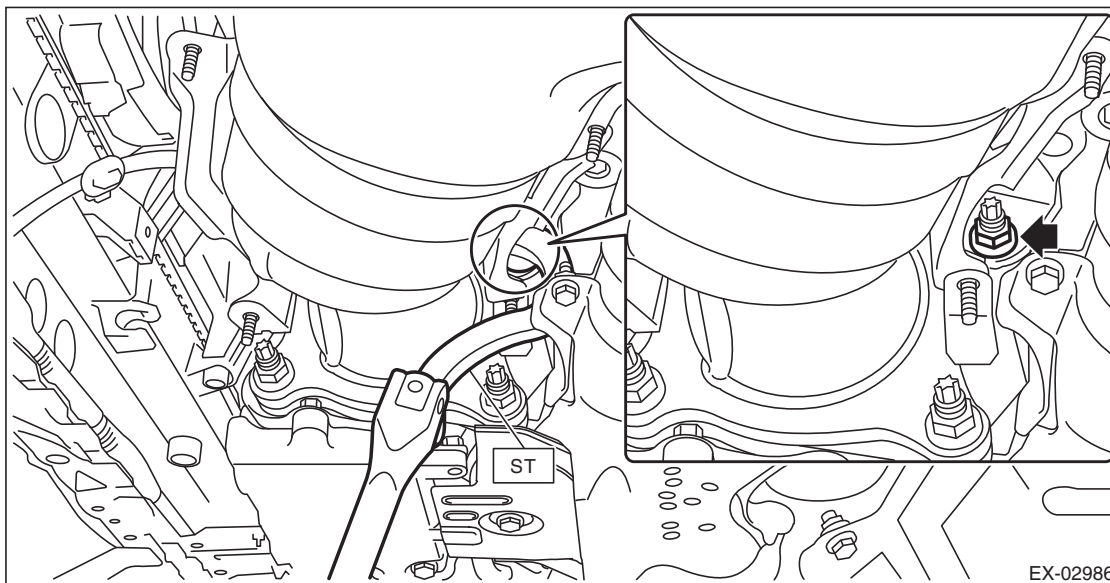
- 13) Remove the exhaust pipe cover (A) from the center exhaust pipe (front), and remove the bolts which secure the turbocharger stay.



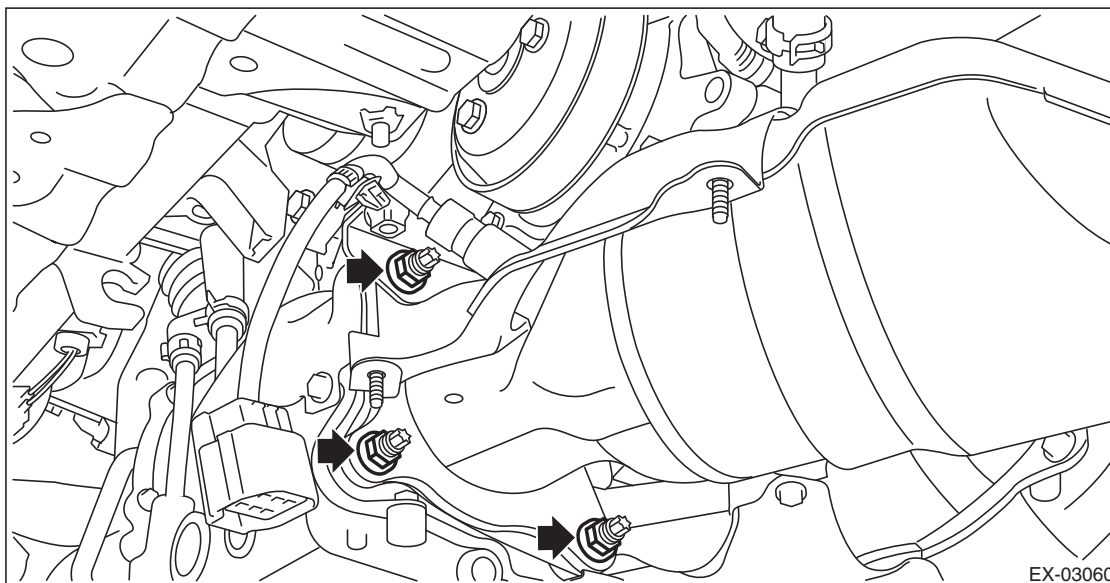
Center Exhaust Pipe

EXHAUST

- 14) Using ST, remove the nut (1 place) which secures the center exhaust pipe (front) to the turbocharger.
ST 18283AA010 WRENCH ADAPTER



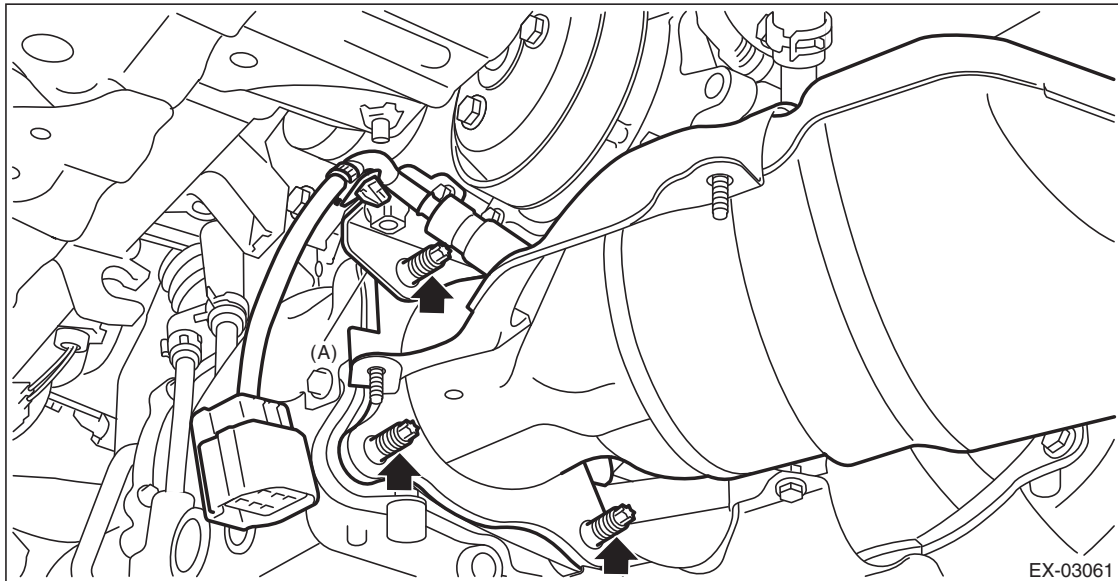
- 15) Remove the nuts (3 places) which secure the center exhaust pipe (front) to the turbocharger.



Center Exhaust Pipe

EXHAUST

16) Using the TORX® socket E10, remove stud bolts (3 places) from the turbocharger, and remove the center exhaust pipe (front) together with turbocharger stay (A).



B: INSTALLATION

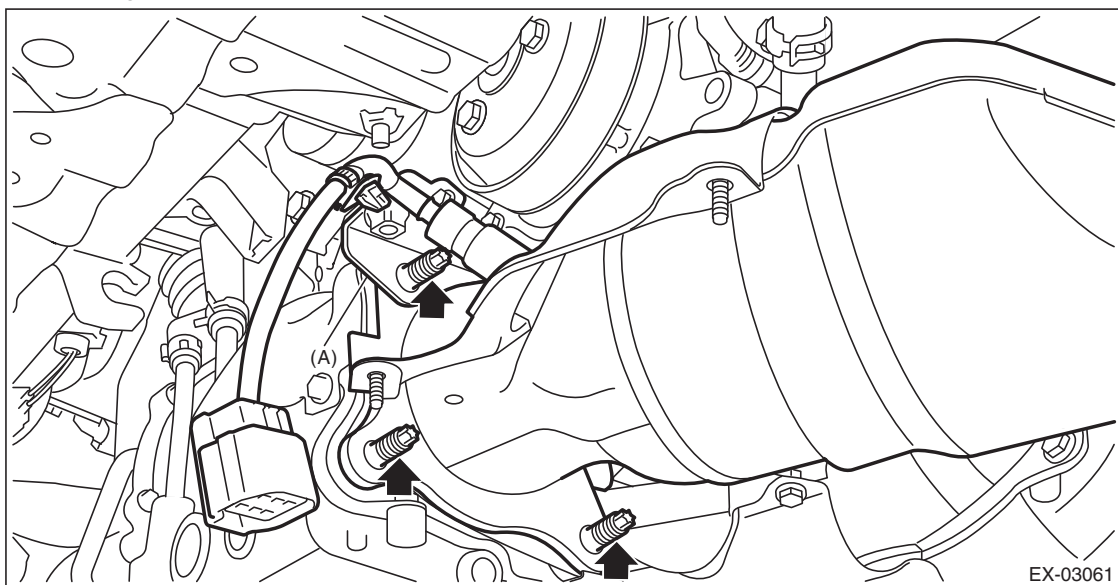
1) Set the center exhaust pipe (front) together with turbocharger upper stay (A), and install stud bolts (3 places) to the turbocharger by using the TORX® socket E10.

NOTE:

Use a new gasket.

Tightening torque:

14.7 N·m (1.5 kgf·m, 10.8 ft·lb)



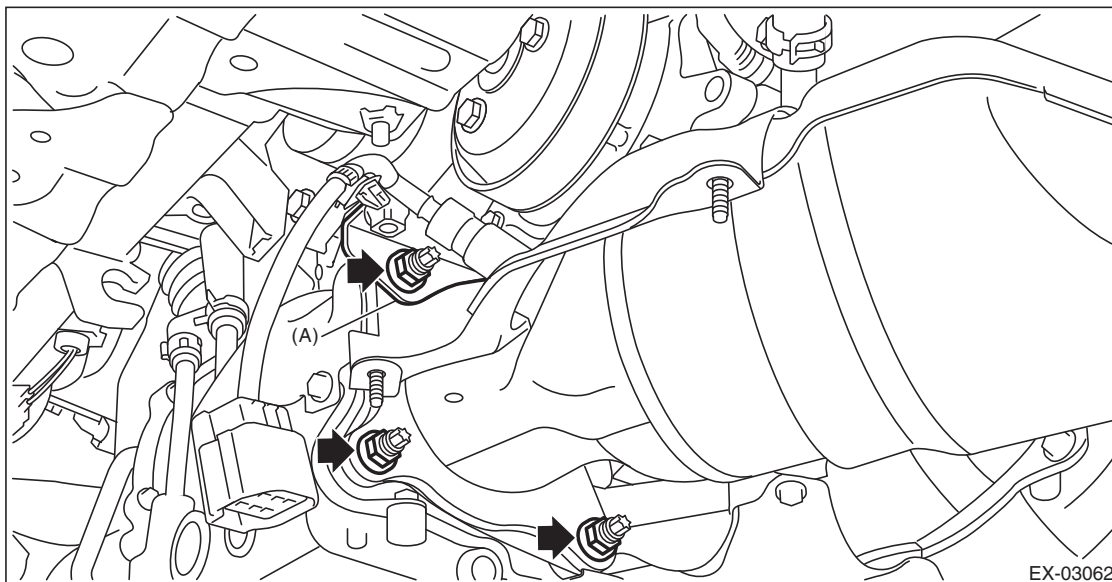
Center Exhaust Pipe

EXHAUST

2) Temporarily tighten the nuts (3 places) which secure the center exhaust pipe (front) to the turbocharger together with the turbocharger upper stay (A).

NOTE:

Use a new self-locking nut.



Center Exhaust Pipe

EXHAUST

3) Using ST, install the nut (1 place) which secures the center exhaust pipe (front) to the turbocharger.

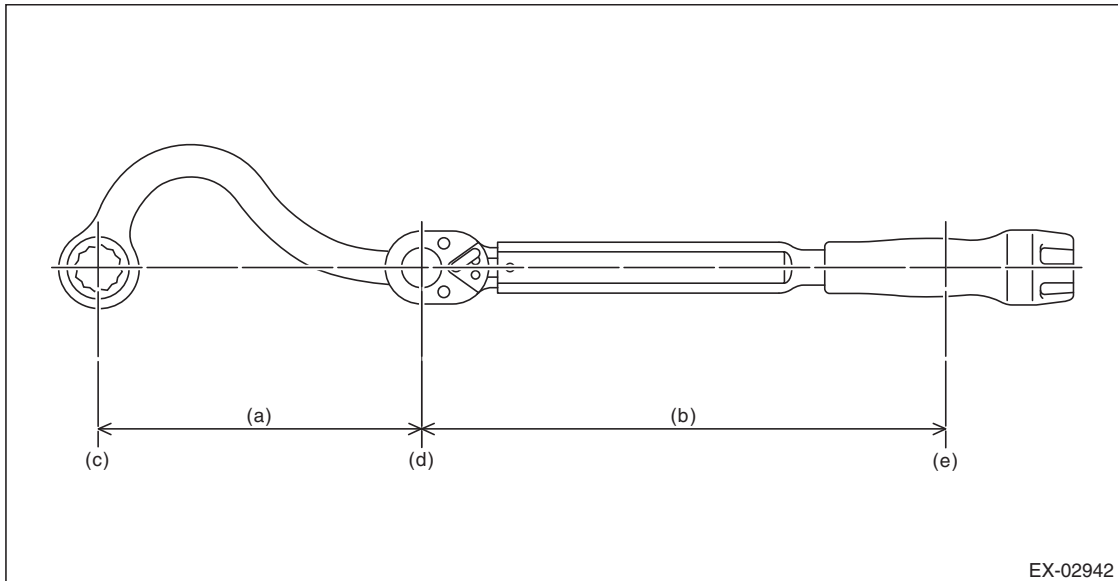
NOTE:

Use a new self-locking nut.

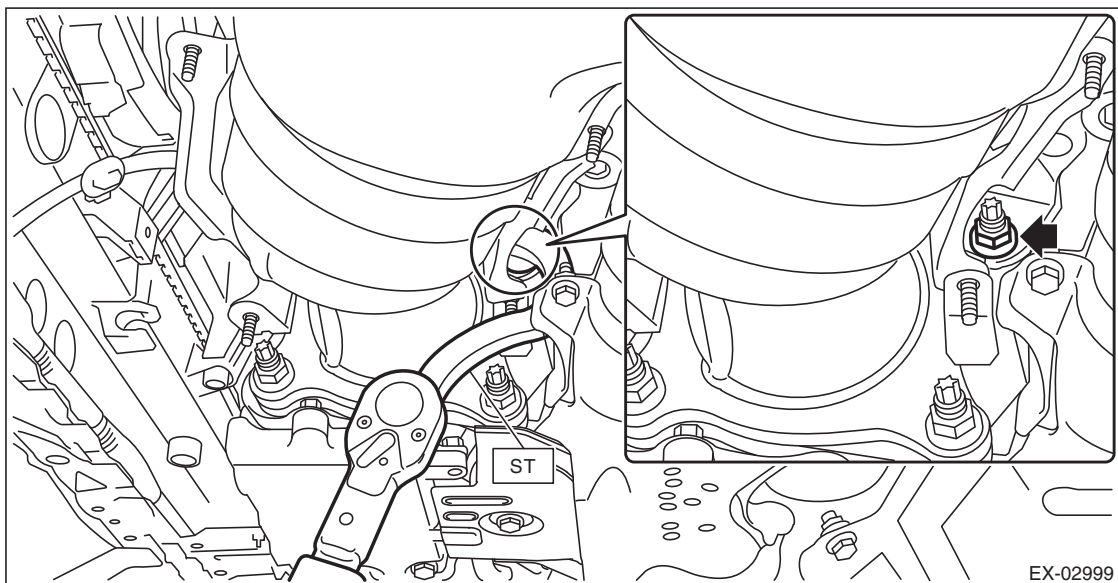
ST 18283AA010 WRENCH ADAPTER

Tightening torque:

Calculation formula
$T = L / (120 \text{ mm (4.72 in)} + L) \times 42.5 \text{ N}\cdot\text{m (4.3 kgf}\cdot\text{m, 31.3 ft}\cdot\text{lb)}$
T: Tightening torque L: Effective length of torque wrench
NOTE: If the effective length of the torque wrench used is unknown, consult the manufacturer of the torque wrench.



- (a) Effective length of the ST
- (b) Effective length of the torque wrench
- (c) Center of drive angle of the ST
- (d) Center of drive angle of the torque wrench
- (e) Center of the position where a force is applied by hand



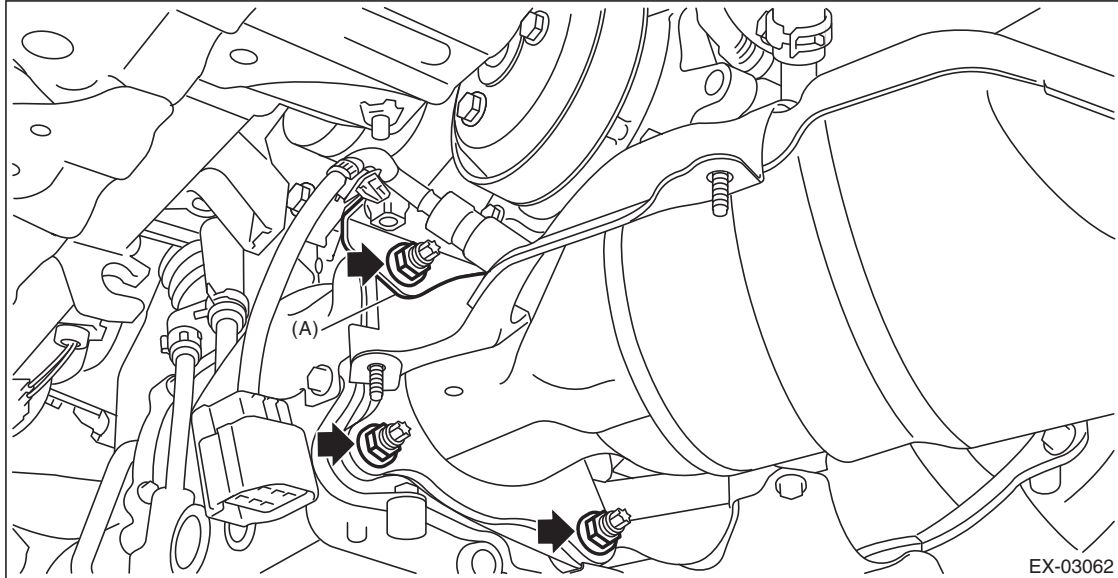
Center Exhaust Pipe

EXHAUST

4) Temporarily tighten the nuts (3 places) which secure the center exhaust pipe (front) to the turbocharger together with the turbocharger stay (A).

Tightening torque:

42.5 N·m (4.3 kgf-m, 31.3 ft-lb)

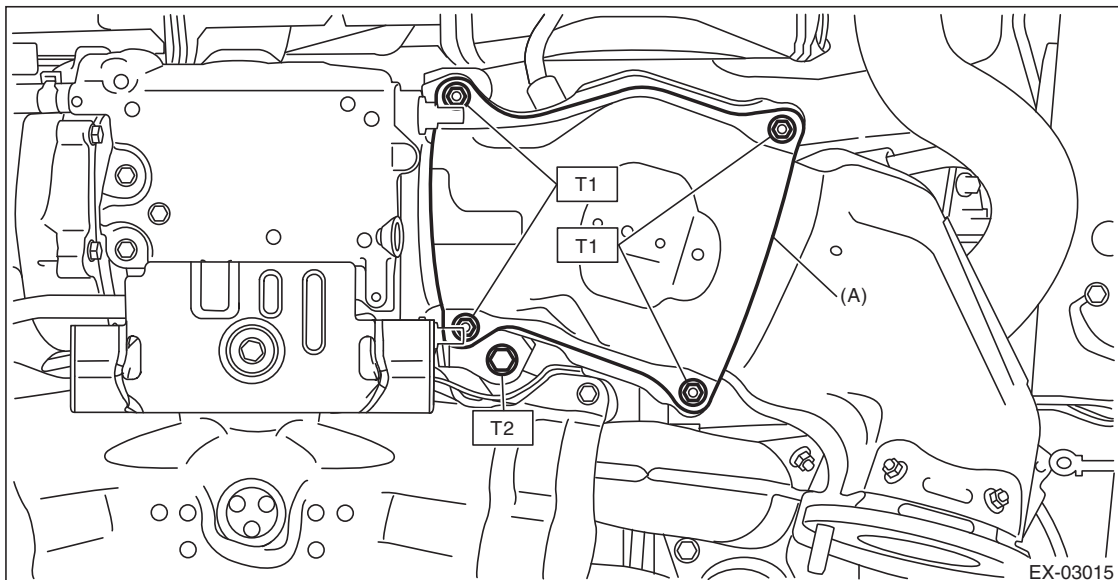


5) Install the bolt which secures the turbocharger stay, and install the exhaust pipe cover (A) to the center exhaust pipe (front).

Tightening torque:

T1: 7.5 N·m (0.8 kgf-m, 5.5 ft-lb)

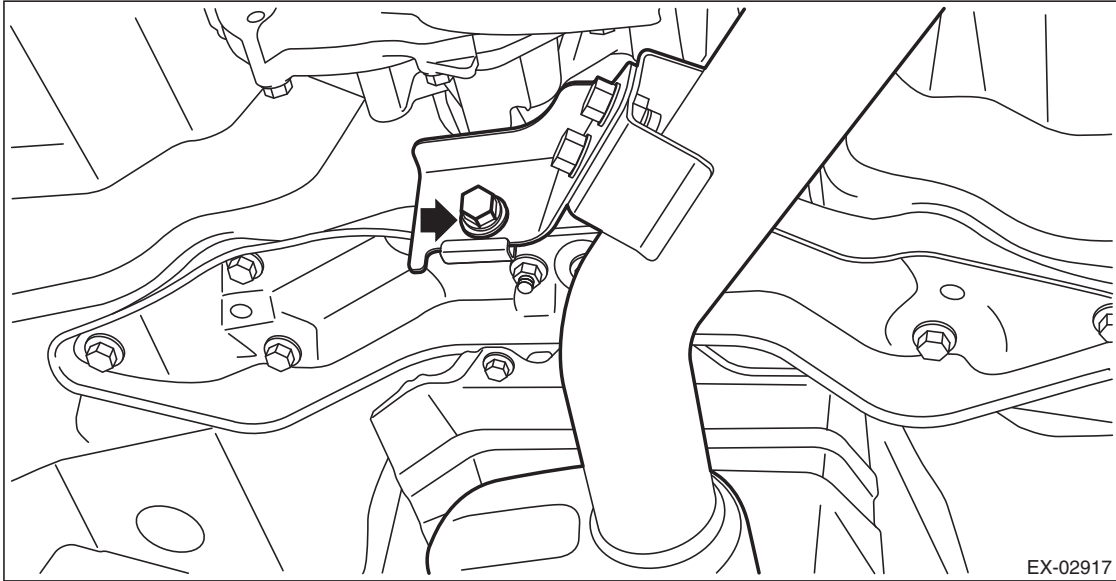
T2: 33 N·m (3.4 kgf-m, 24.3 ft-lb)



Center Exhaust Pipe

EXHAUST

- 6) Install the center exhaust pipe (rear) and temporarily tighten the bolt which holds center exhaust pipe (rear) to the hanger bracket.



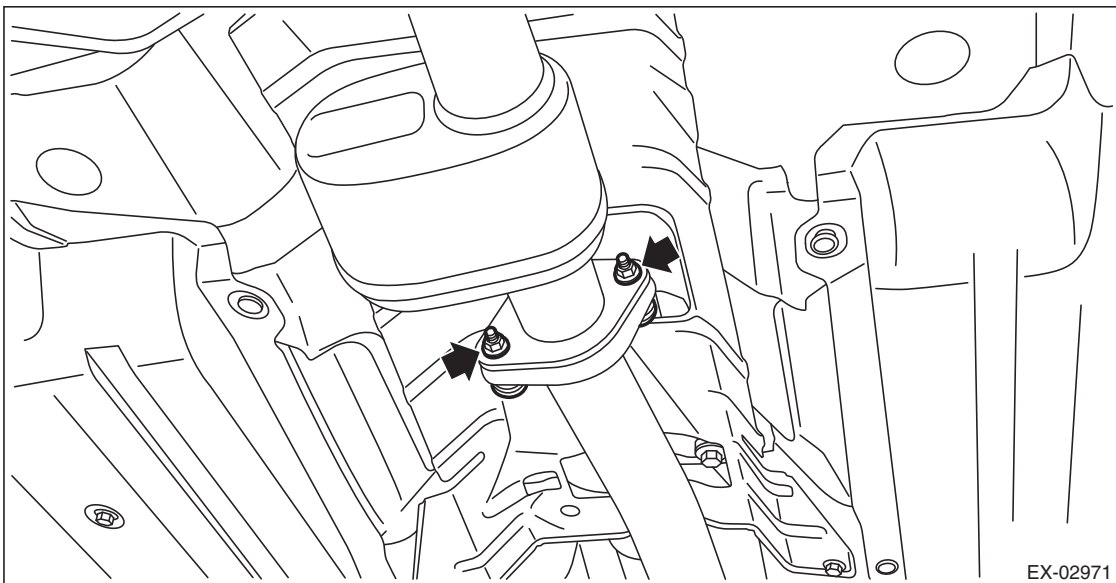
- 7) Install the bolts, springs, and nuts which secure the rear exhaust pipe to the center exhaust pipe (rear).

NOTE:

Use a new gasket.

Tightening torque:

18 N·m (1.8 kgf-m, 13.3 ft-lb)



Center Exhaust Pipe

EXHAUST

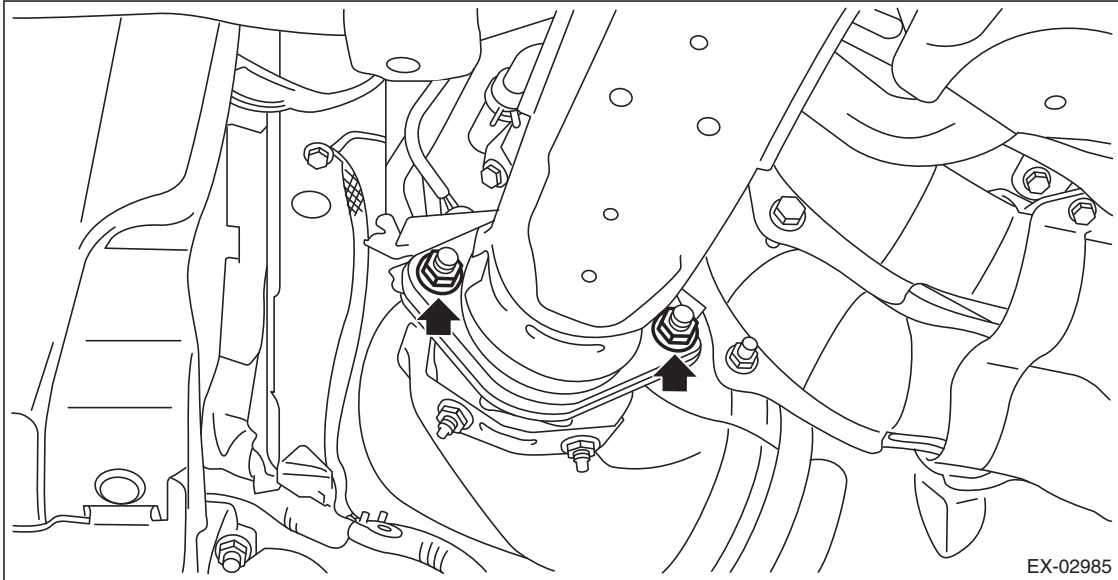
8) Install the nuts which secure the center exhaust pipe (front) to the center exhaust pipe (rear).

NOTE:

Use a new gasket.

Tightening torque:

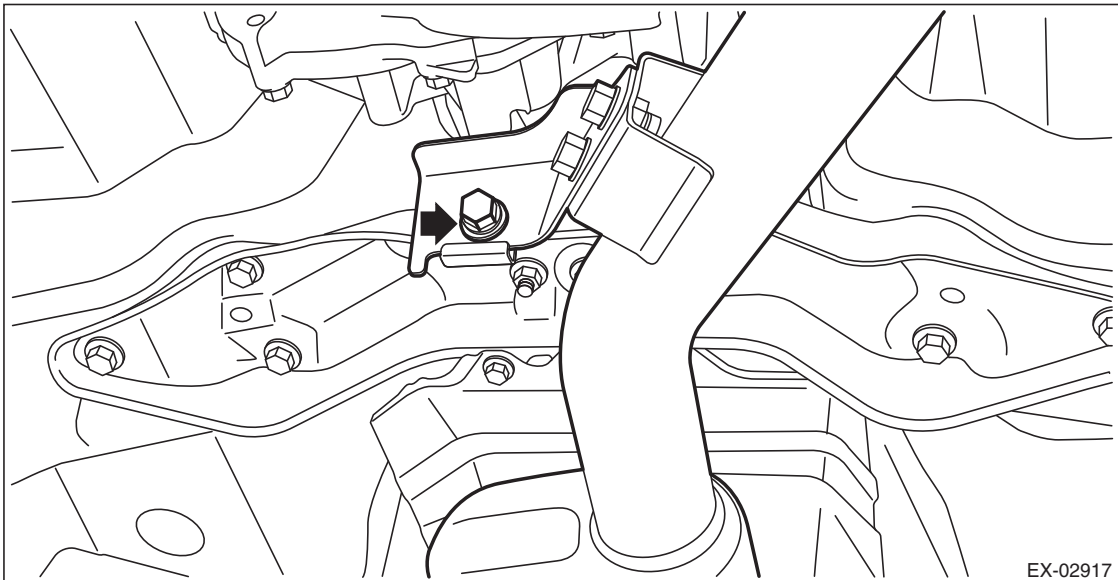
42.5 N·m (4.3 kgf-m, 31.3 ft-lb)



9) Tighten the bolts which hold center exhaust pipe (rear) to the hanger bracket.

Tightening torque:

35 N·m (3.6 kgf-m, 25.8 ft-lb)



10) Lower the vehicle.

Center Exhaust Pipe

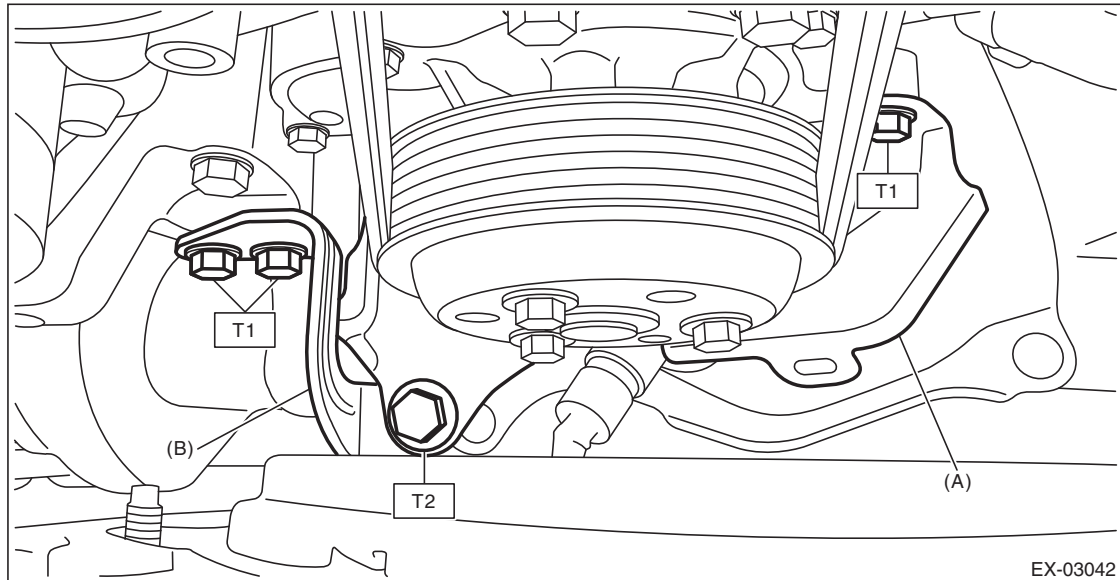
EXHAUST

11) Install the exhaust pipe stay (B) and water pump pulley cover (A) to the turbocharger stay and water pump, and install the bolts which secure the water pump pulley cover (A) and exhaust pipe stay (B) to the turbocharger stay.

Tightening torque:

T1: 19 N·m (1.9 kgf-m, 14.0 ft-lb)

T2: 33 N·m (3.4 kgf-m, 24.3 ft-lb)

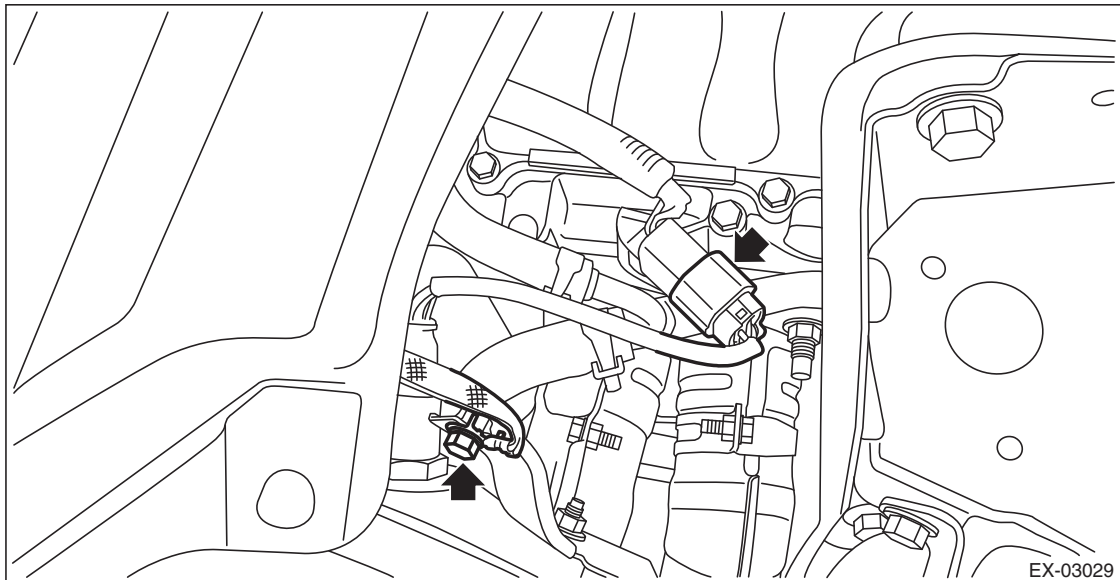


12) Lift up the vehicle.

13) Connect the connector on the rear oxygen sensor to the engine harness, and connect the ground cable to the exhaust pipe cover.

Tightening torque:

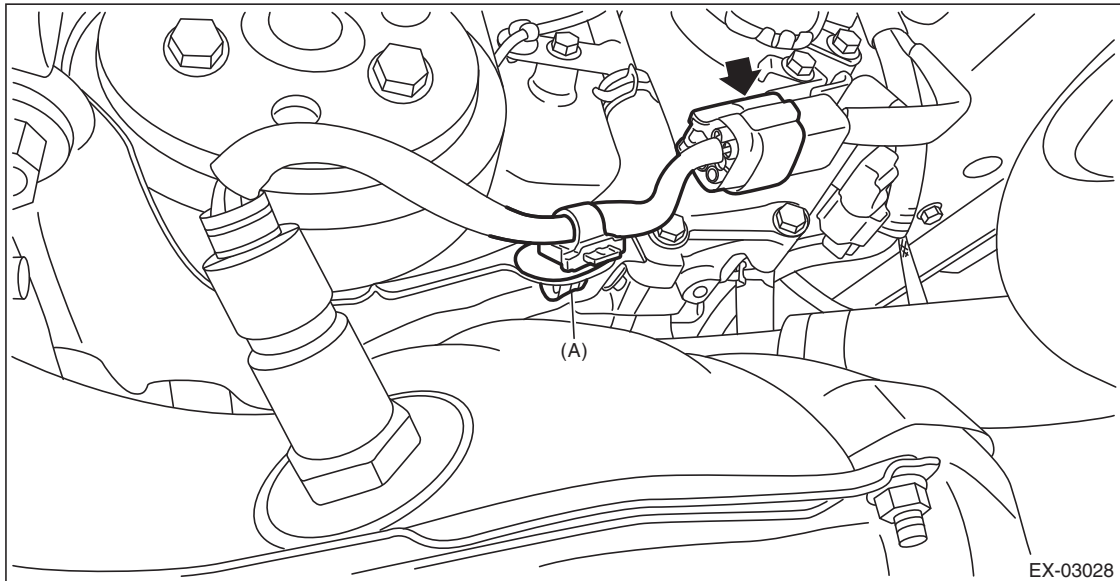
7 N·m (0.7 kgf-m, 5.2 ft-lb)



Center Exhaust Pipe

EXHAUST

14) Secure the front oxygen (A/F) sensor harness to the water pump pulley cover with the clip (A), and connect the front oxygen (A/F) sensor connector to the engine harness.



15) Install the under cover. <Ref. to EI-22, INSTALLATION, Front Under Cover.>

16) Lower the vehicle.

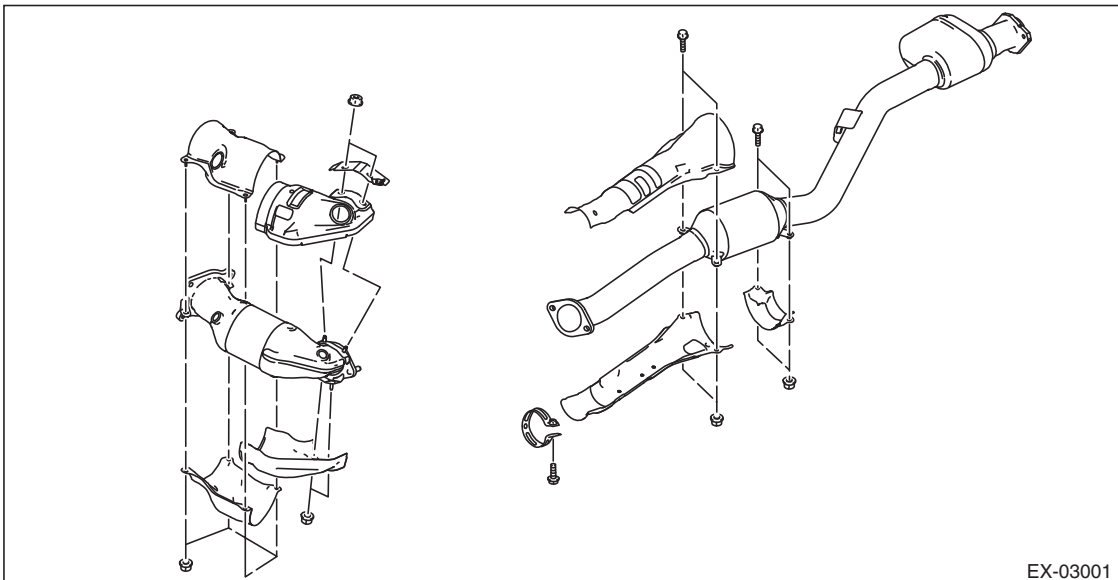
17) Connect the battery ground terminal.

18) Install the collector cover.

C: DISASSEMBLY

1) Remove the front oxygen (A/F) sensor and rear oxygen sensor. <Ref. to FU(H4DOTC)-127, REMOVAL, Front Oxygen (A/F) Sensor.> <Ref. to FU(H4DOTC)-130, REMOVAL, Rear Oxygen Sensor.>

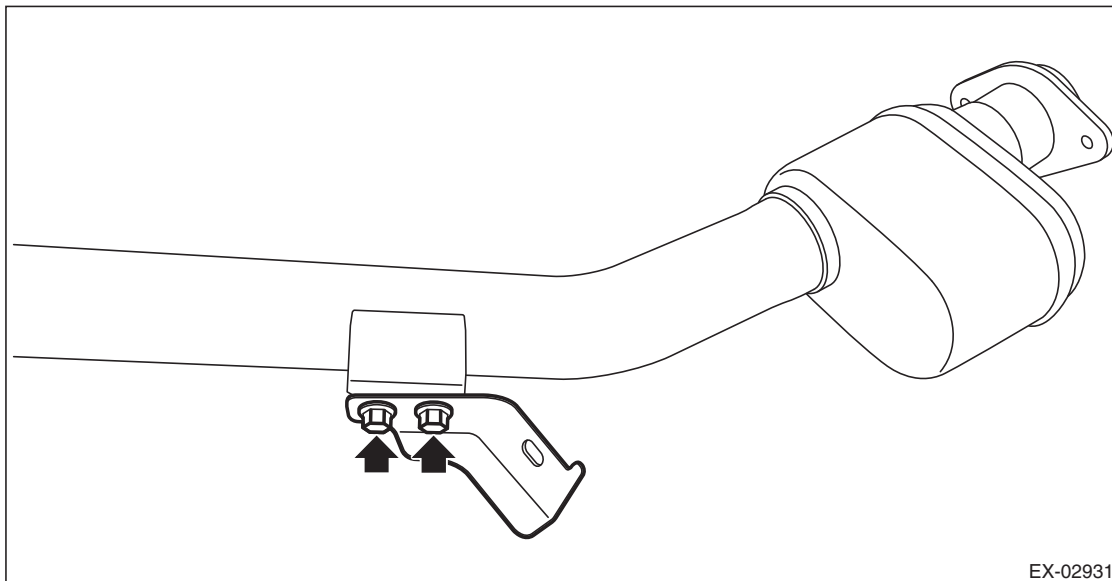
2) Remove the exhaust pipe cover from the center exhaust pipe (front) and center exhaust pipe (rear).



Center Exhaust Pipe

EXHAUST

- 3) Remove the exhaust pipe bracket from the center exhaust pipe (rear).



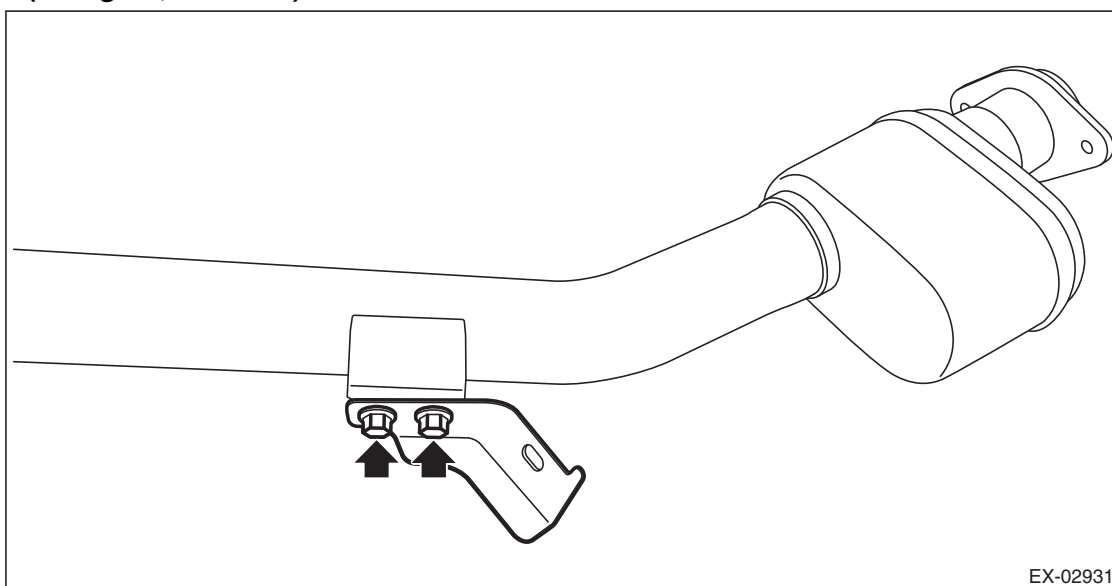
EX-02931

D: ASSEMBLY

- 1) Install the exhaust pipe bracket to the center exhaust pipe (rear).

Tightening torque:

35 N·m (3.6 kgf-m, 25.8 ft-lb)



EX-02931

Center Exhaust Pipe

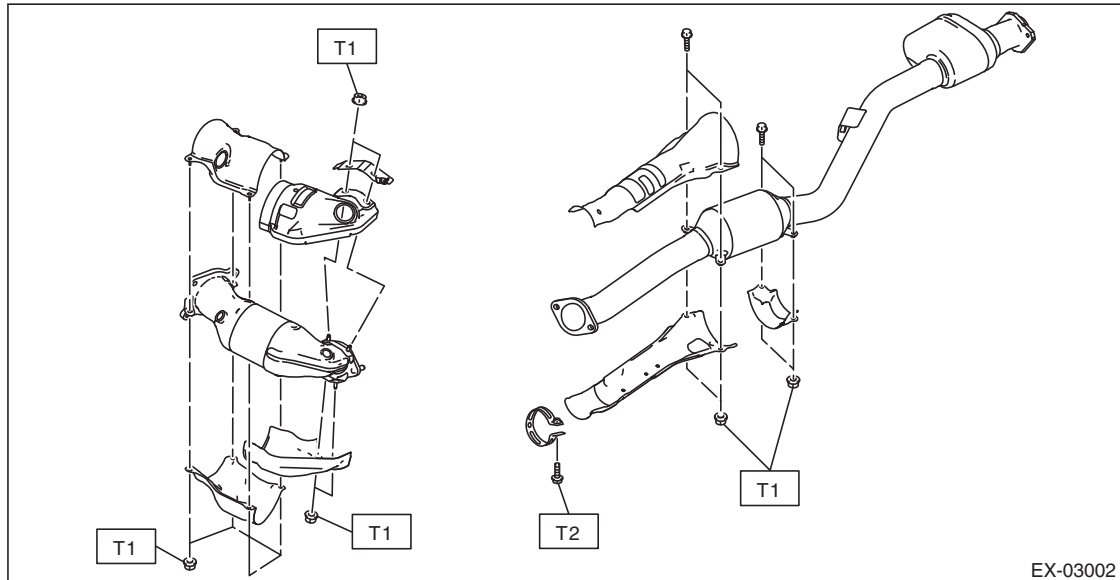
EXHAUST

2) Install the exhaust pipe cover to the center exhaust pipe (front) and center exhaust pipe (rear).

Tightening torque:

T1: 7.5 N·m (0.8 kgf-m, 5.5 ft-lb)

T2: 13 N·m (1.3 kgf-m, 9.6 ft-lb)



3) Install the front oxygen (A/F) sensor and rear oxygen sensor. <Ref. to FU(H4DOTC)-128, INSTALLATION, Front Oxygen (A/F) Sensor.> <Ref. to FU(H4DOTC)-131, 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.

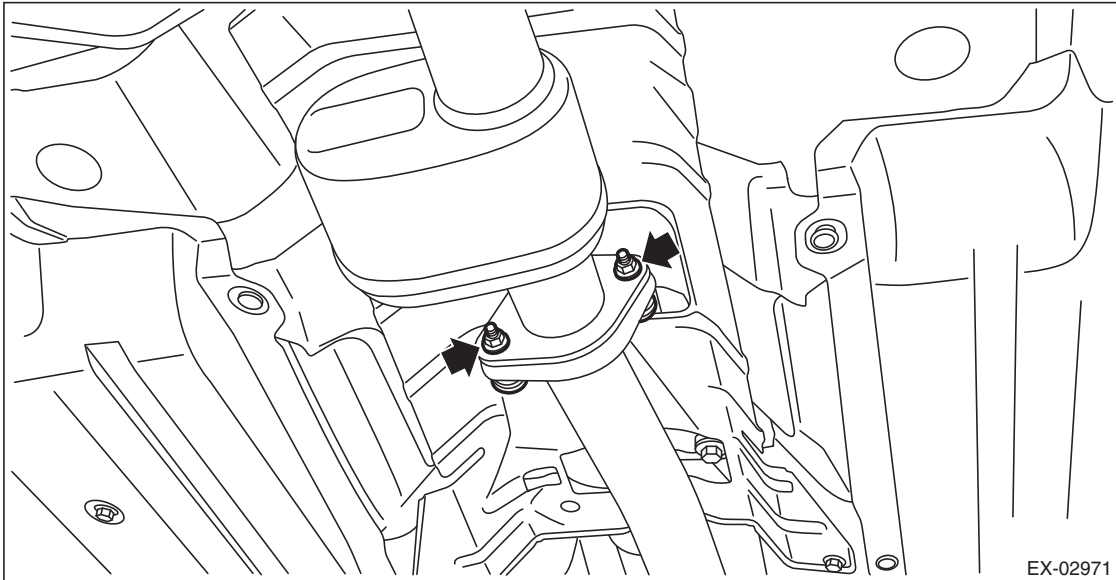
4. Rear Exhaust Pipe

A: REMOVAL

CAUTION:

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

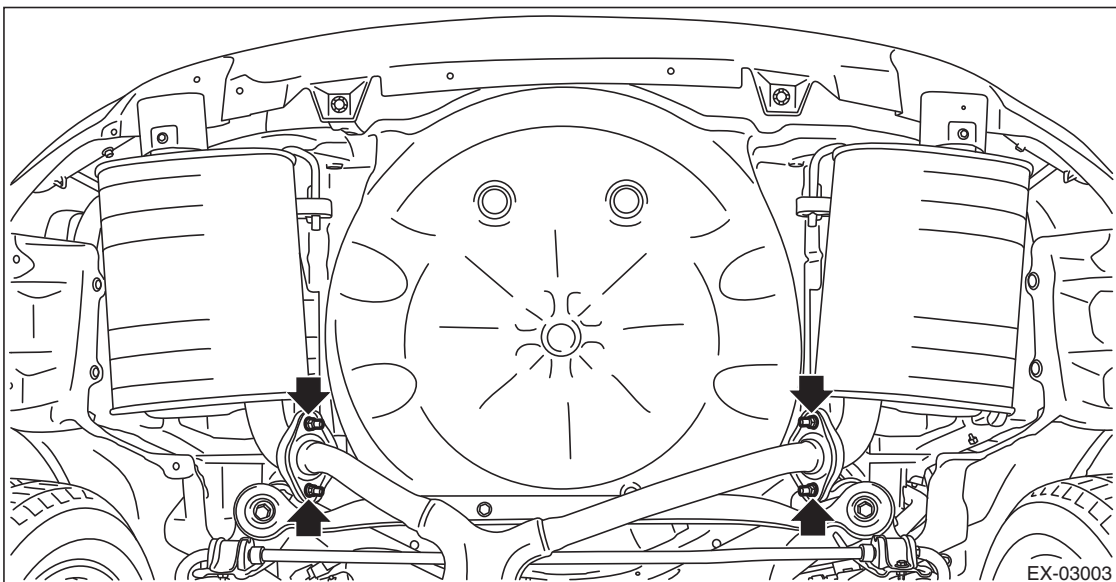
- 1) Lift up the vehicle.
- 2) Remove the bolts, springs, and nuts which secure the center exhaust pipe (rear) to the rear exhaust pipe.



- 3) Remove the bolts and self-locking nuts securing the mufflers to the rear exhaust pipes.

CAUTION:

Be careful not to drop the rear exhaust pipe.



- 4) Apply a coat of spray type lubricant to the mating area of cushion rubber.

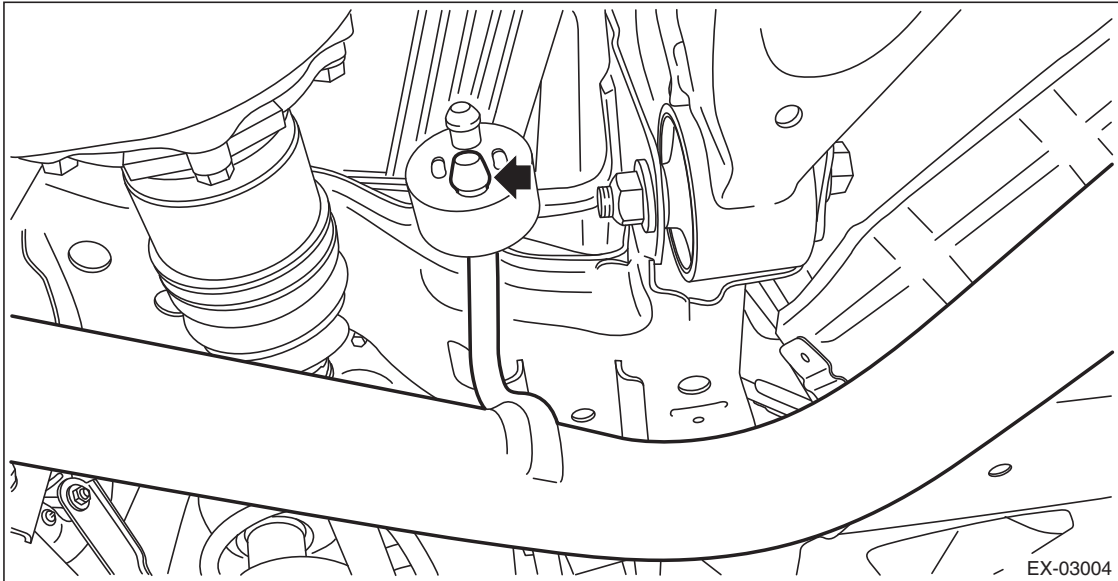
Rear Exhaust Pipe

EXHAUST

5) Remove the rear exhaust pipe from the cushion rubber.

CAUTION:

Be careful not to let the muffler contact the rear bumper.

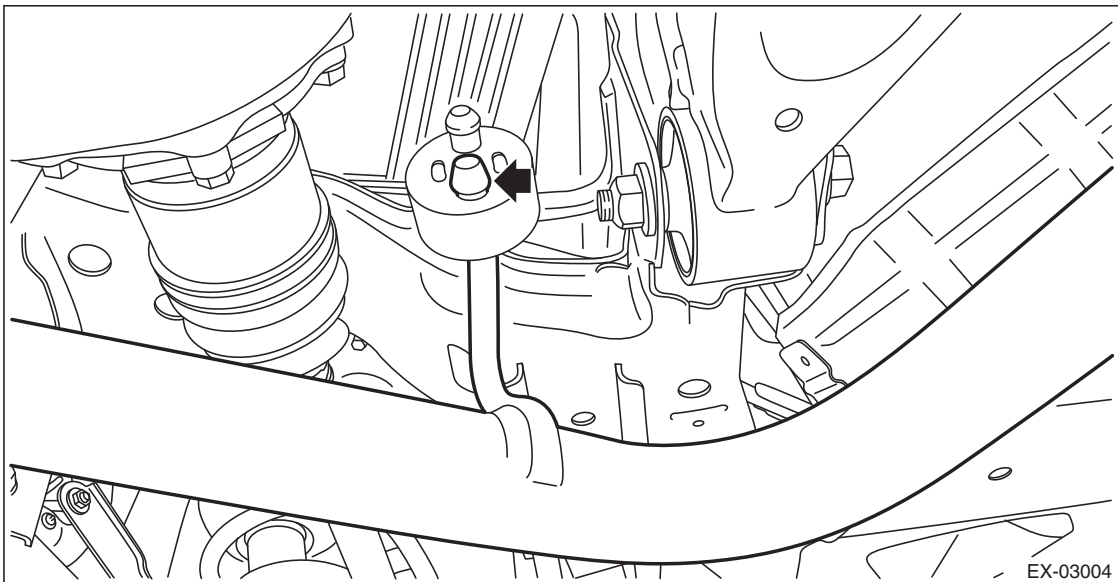


B: INSTALLATION

- 1) Apply a coat of spray type lubricant to the mating area of cushion rubber.
- 2) Install the rear exhaust pipe to cushion rubber.

NOTE:

After assembling, degrease the lubricant which was applied to the cushion rubber while removing/installing.



Rear Exhaust Pipe

EXHAUST

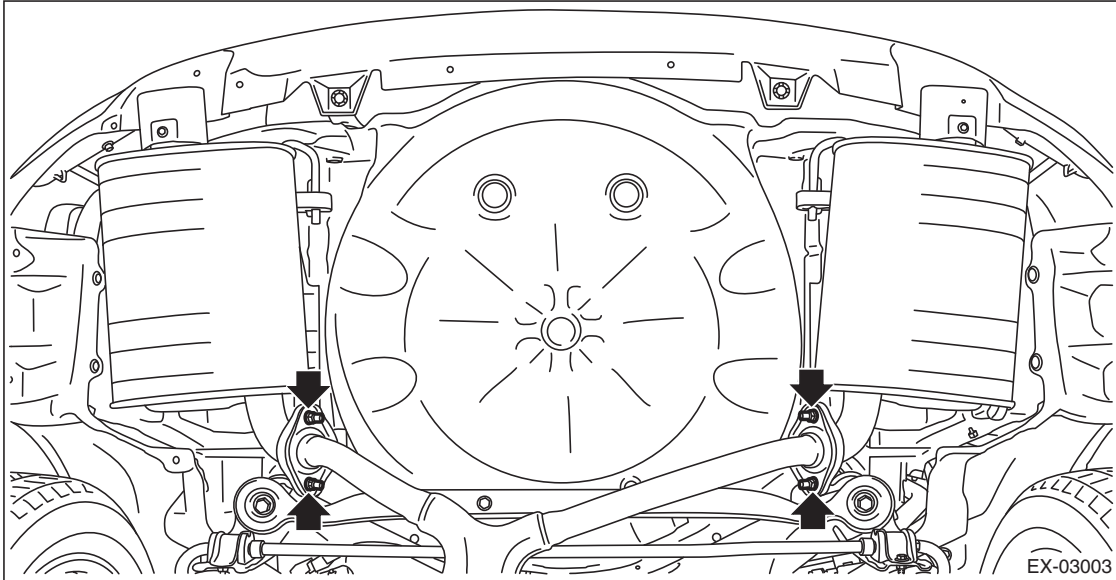
3) Install the bolts and self-locking nuts which secure the muffler to the rear exhaust pipe.

NOTE:

Use a new gasket and self-locking nut.

Tightening torque:

48 N·m (4.9 kgf-m, 35.4 ft-lb)



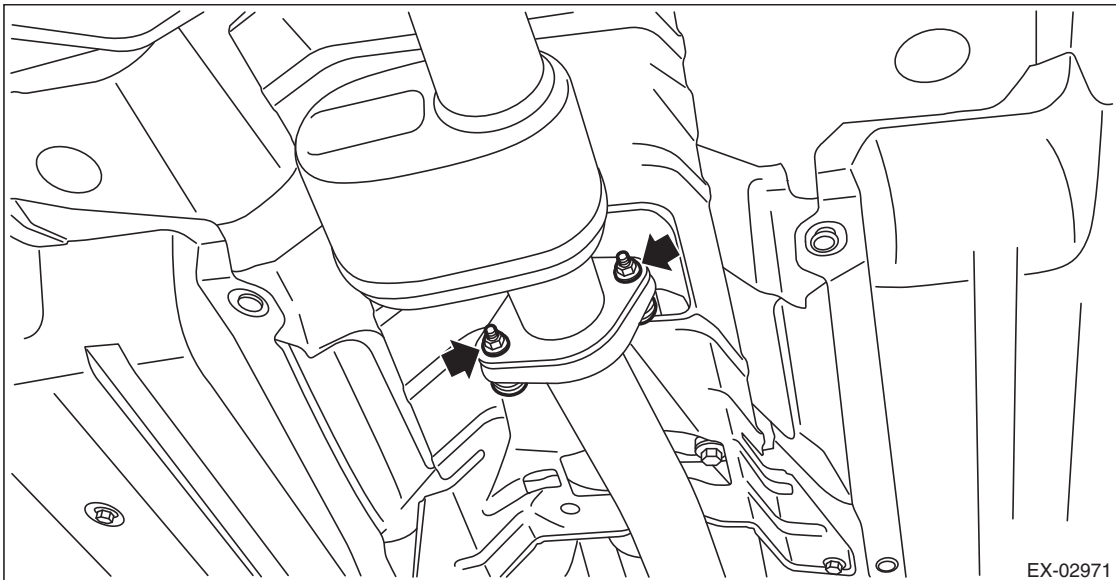
4) Install the bolts, springs, and nuts which secure the center exhaust pipe (rear) to the rear exhaust pipe.

NOTE:

Use a new gasket.

Tightening torque:

18 N·m (1.8 kgf-m, 13.3 ft-lb)



5) Lower the vehicle.

C: INSPECTION

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

Muffler

EXHAUST

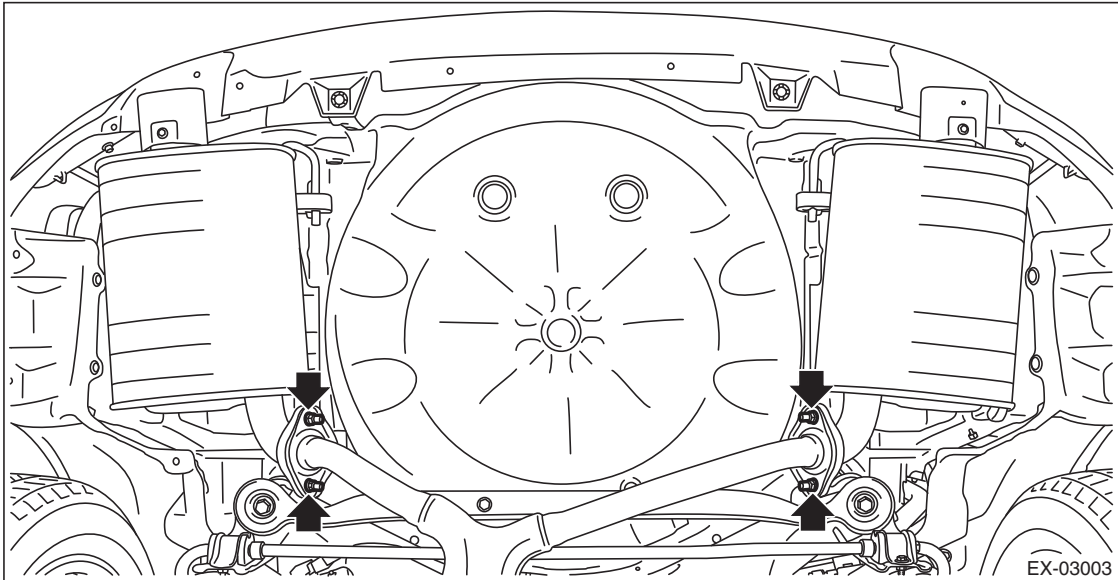
5. Muffler

A: REMOVAL

CAUTION:

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

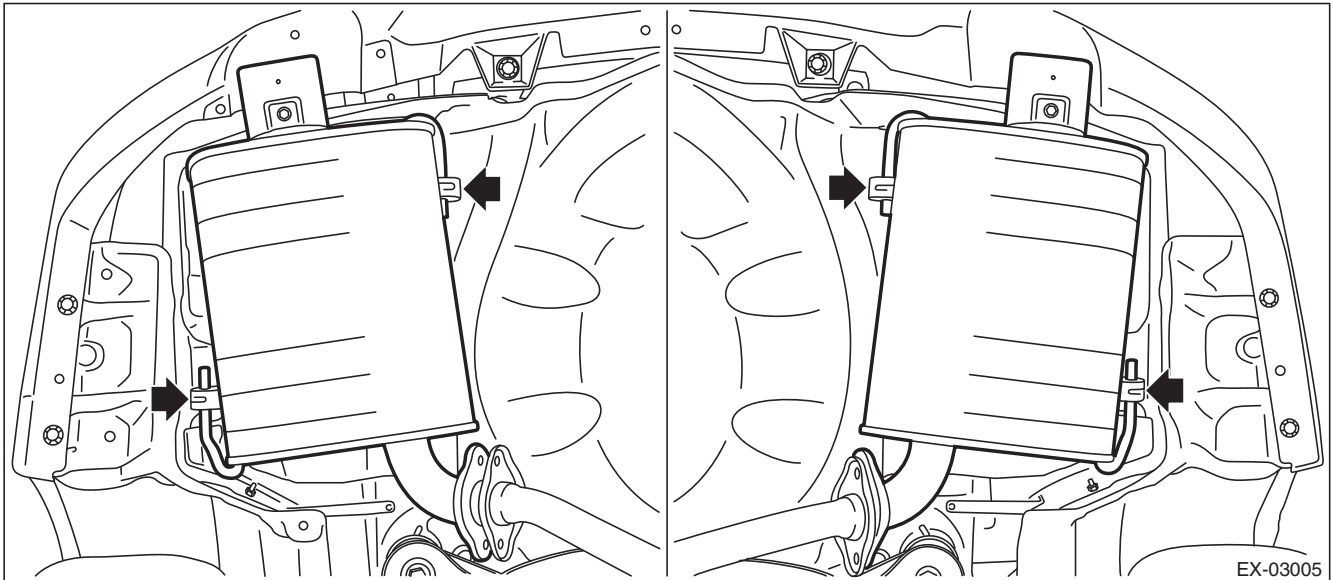
- 1) Lift up the vehicle.
- 2) Remove the bolts and self-locking nuts which secure the rear exhaust pipe to the muffler.



- 3) Apply a coat of spray type lubricant to the mating area of cushion rubber.
- 4) Remove the muffler from the cushion rubber.

CAUTION:

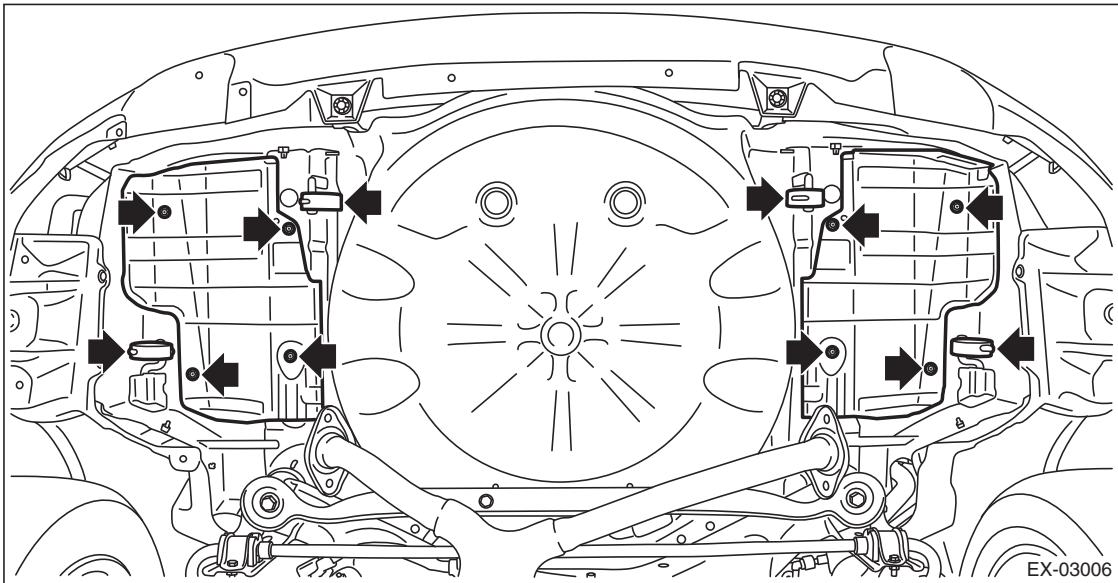
Be careful not to drop the muffler during removal.



Muffler

EXHAUST

- 5) Remove the cushion rubber and rear exhaust cover from the vehicle.



Muffler

EXHAUST

B: INSTALLATION

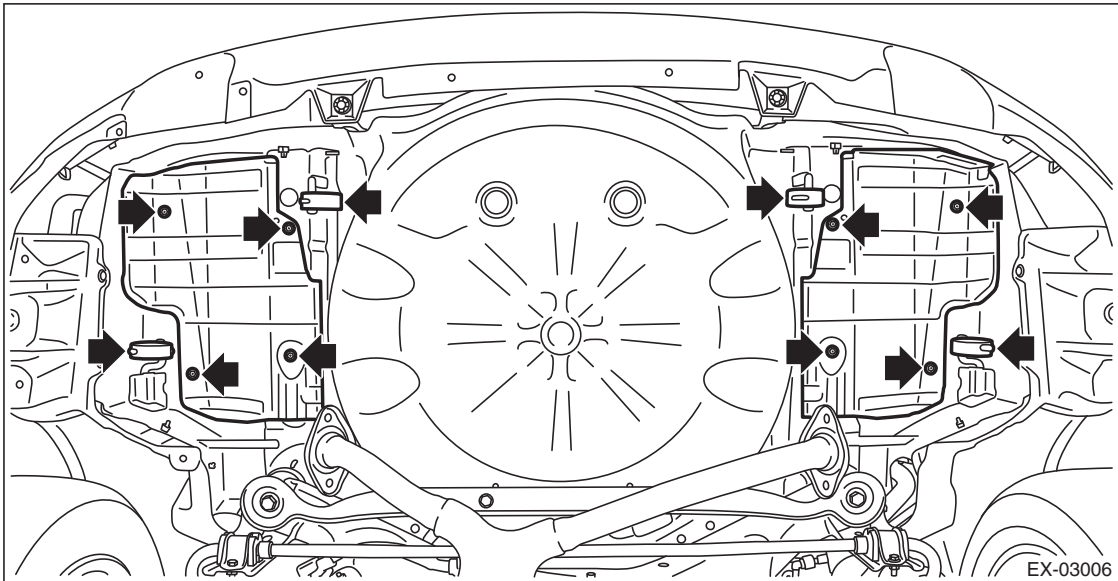
Install in the reverse order of removal.

NOTE:

- Use a new gasket and self-locking nut.
- After assembling, degrease the lubricant which was applied to the cushion rubber while removing/installing.

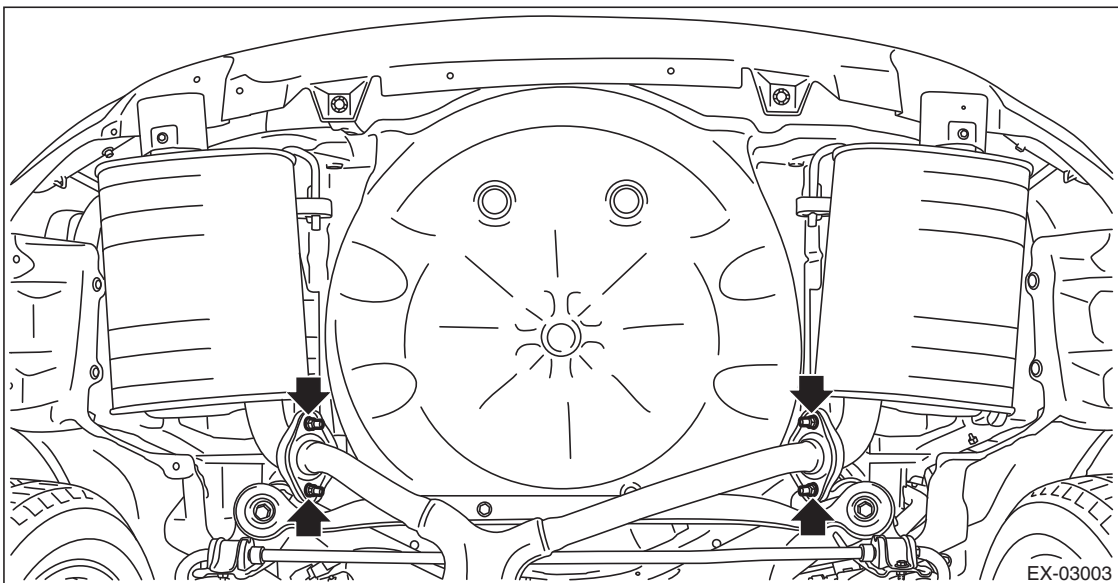
Tightening torque:

10 N·m (1.0 kgf-m, 7.4 ft-lb)



Tightening torque:

48 N·m (4.9 kgf-m, 35.4 ft-lb)



C: INSPECTION

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