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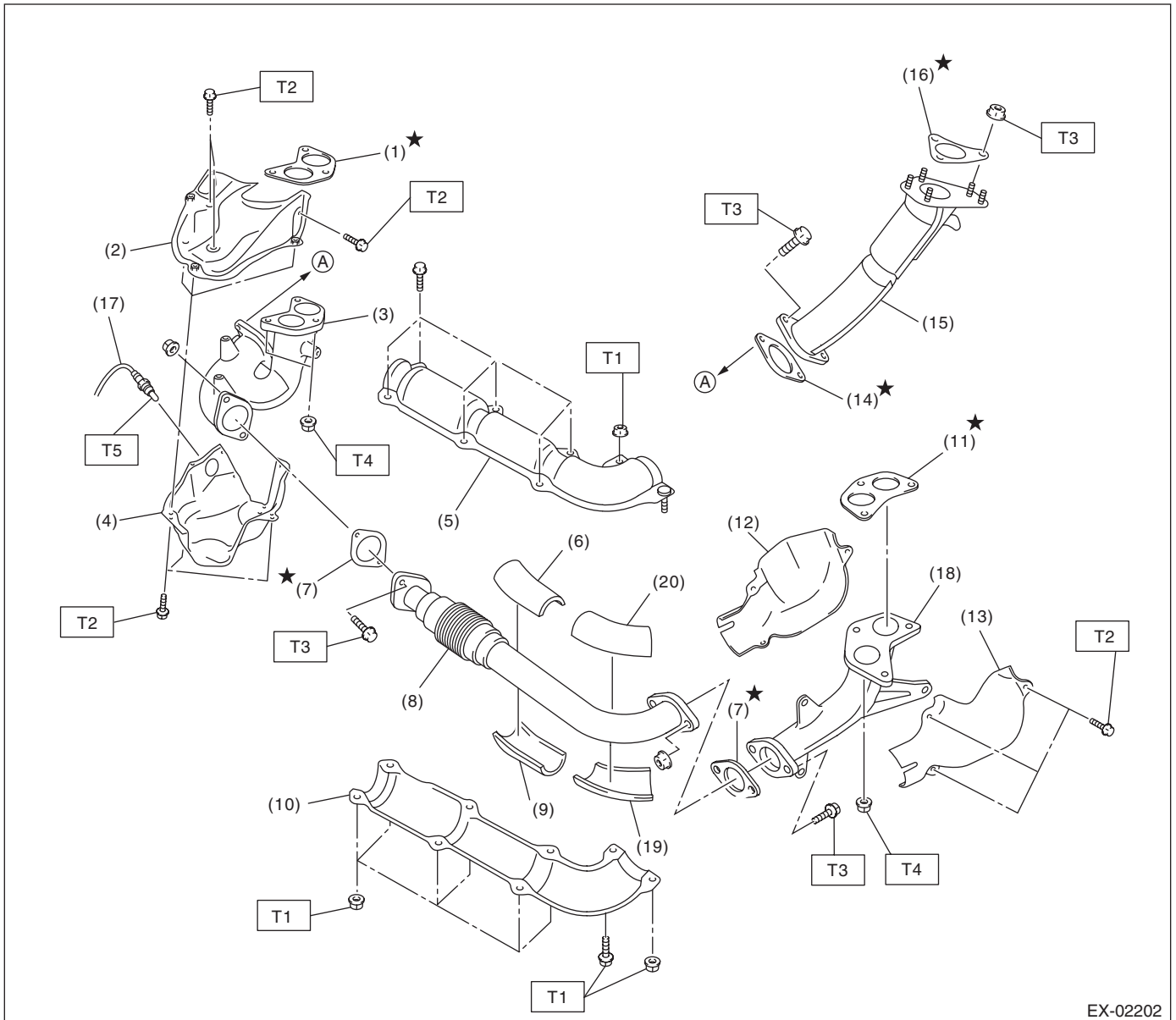
EXHAUST

1. General Description

A: COMPONENT

1. FRONT EXHAUST PIPE

- Except for STI model



EX-02202

General Description

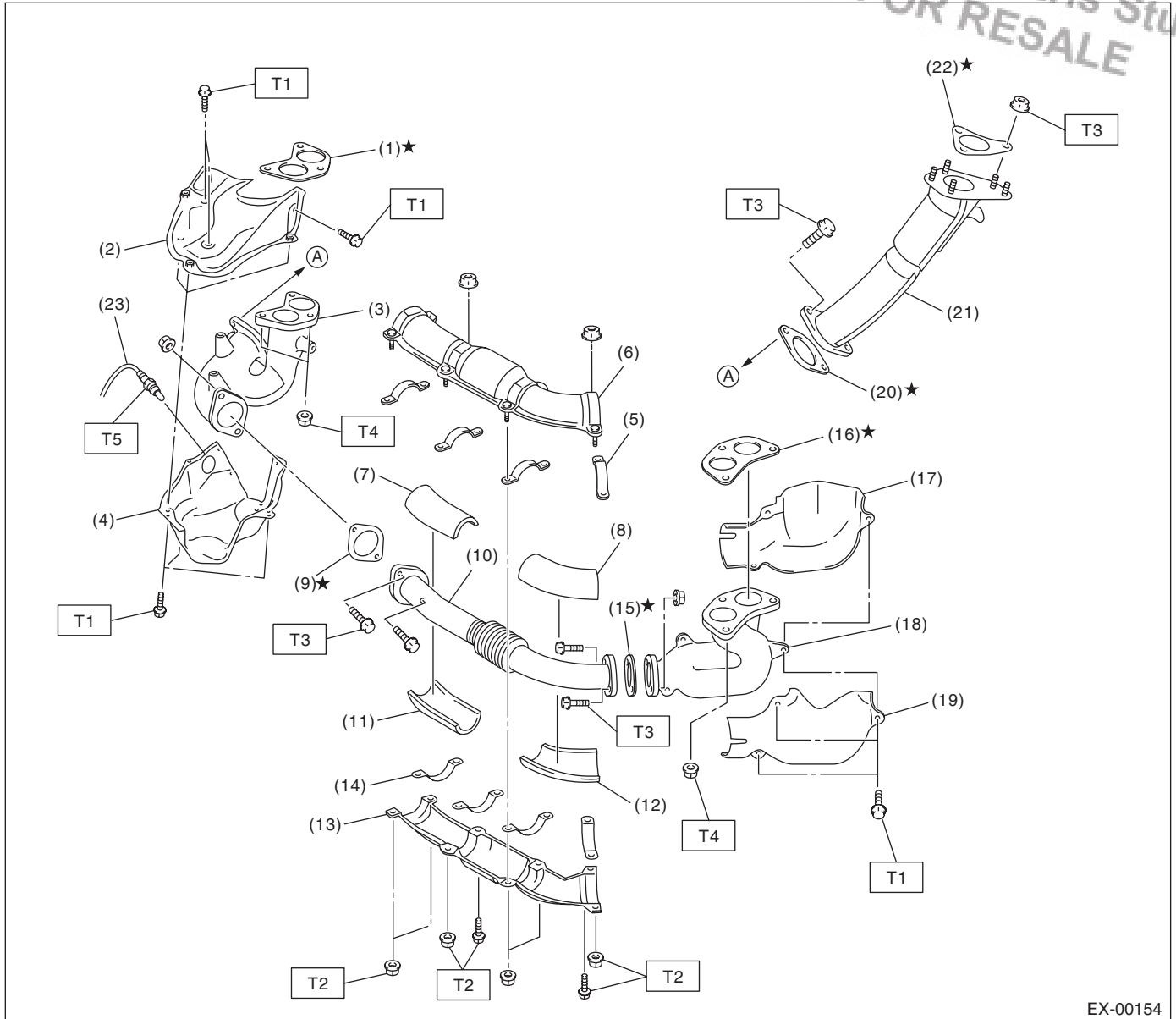
EXHAUST

(1) Gasket	(10) Front exhaust pipe lower cover	(20) Front exhaust pipe upper insulator (LH)
(2) Exhaust manifold upper cover (RH)	(11) Gasket	
(3) Exhaust manifold (RH)	(12) Exhaust manifold inner cover (LH)	
(4) Exhaust manifold lower cover (RH)	(13) Exhaust manifold outer cover (LH)	Tightening torque:N·m (kgf-m, ft-lb)
(5) Front exhaust pipe upper cover	(14) Gasket	T1: 7.5 (0.8, 5.5)
(6) Front exhaust pipe upper insulator (RH)	(15) Turbocharger joint pipe	T2: 19 (1.9, 14.0)
(7) Gasket	(16) Gasket	T3: 35 (3.6, 26)
(8) Front exhaust pipe	(17) Front oxygen (A/F) sensor	T4: 40 (4, 28.9)
(9) Front exhaust pipe lower insulator (RH)	(18) Exhaust manifold (LH)	T5: <Ref. to FU(H4DOTC)-46, INSTALLATION, Front Oxygen (A/F) Sensor.>
	(19) Front exhaust pipe lower insulator (LH)	

General Description

EXHAUST

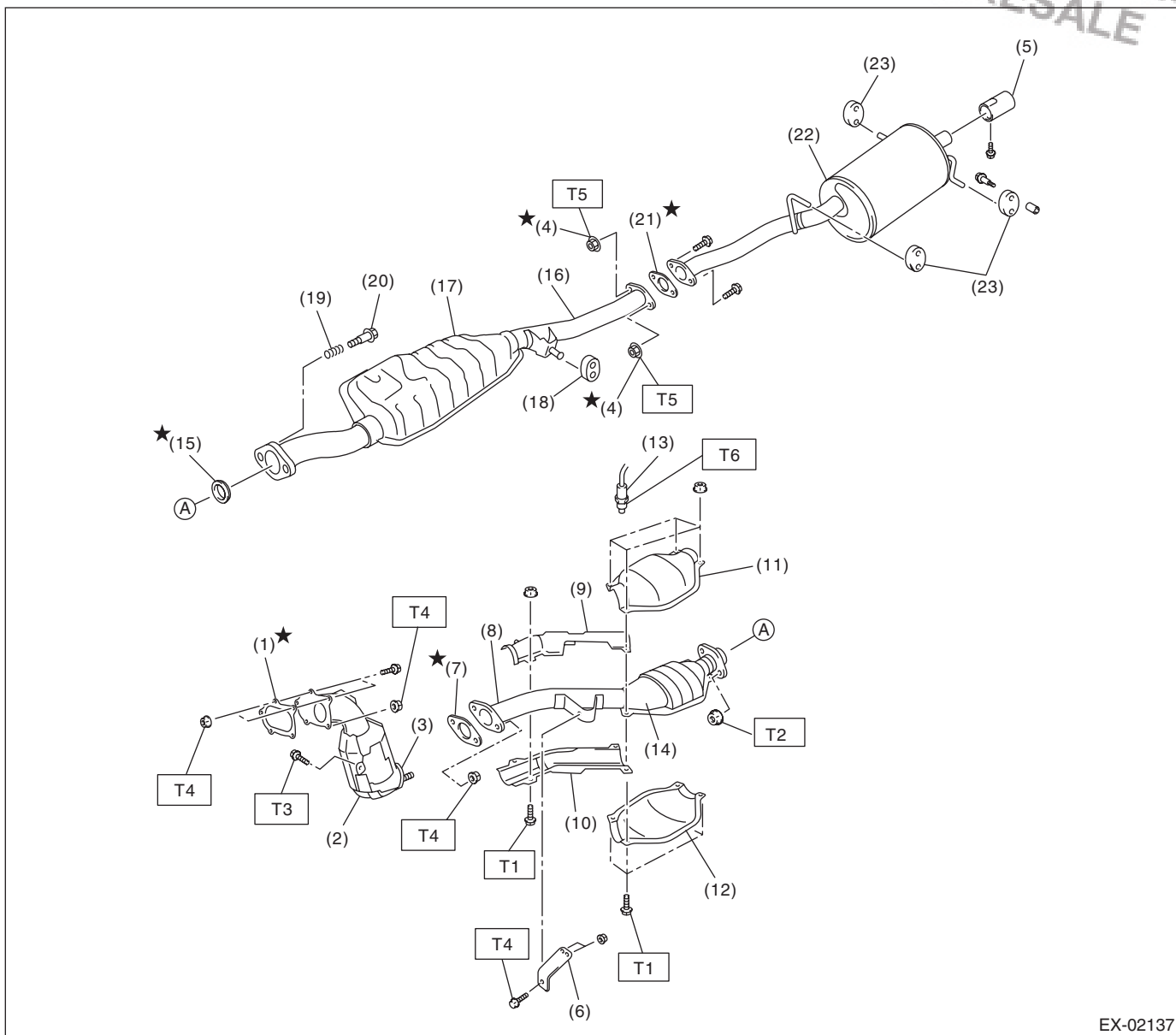
- STI model



(1) Gasket	(10) Front exhaust pipe	(21) Turbocharger joint pipe
(2) Exhaust manifold upper cover (RH)	(11) Front exhaust pipe lower insulator (RH)	(22) Gasket
(3) Exhaust manifold (RH)	(12) Front exhaust pipe lower insulator (LH)	(23) Front oxygen (A/F) sensor
(4) Exhaust manifold lower cover (RH)	(13) Front exhaust pipe lower cover	
(5) Front exhaust pipe upper clamp	(14) Front exhaust pipe lower clamp	Tightening torque: N·m (kgf-m, ft-lb)
(6) Front exhaust pipe upper cover	(15) Gasket	T1: 19 (1.9, 14.0)
(7) Front exhaust pipe upper insulator (RH)	(16) Gasket	T2: 25 (2.5, 18.1)
(8) Front exhaust pipe upper insulator (LH)	(17) Exhaust manifold inner cover (LH)	T3: 35 (3.6, 26)
(9) Gasket	(18) Exhaust manifold (LH)	T4: 40 (4, 28.9)
	(19) Exhaust manifold outer cover (LH)	T5: <Ref. to FU(H4DOTC)-46, INSTALLATION, Front Oxygen (A/F) Sensor.>
	(20) Gasket	

2. CENTER AND REAR EXHAUST PIPE, AND MUFFLER

- Except for STI model



EX-02137

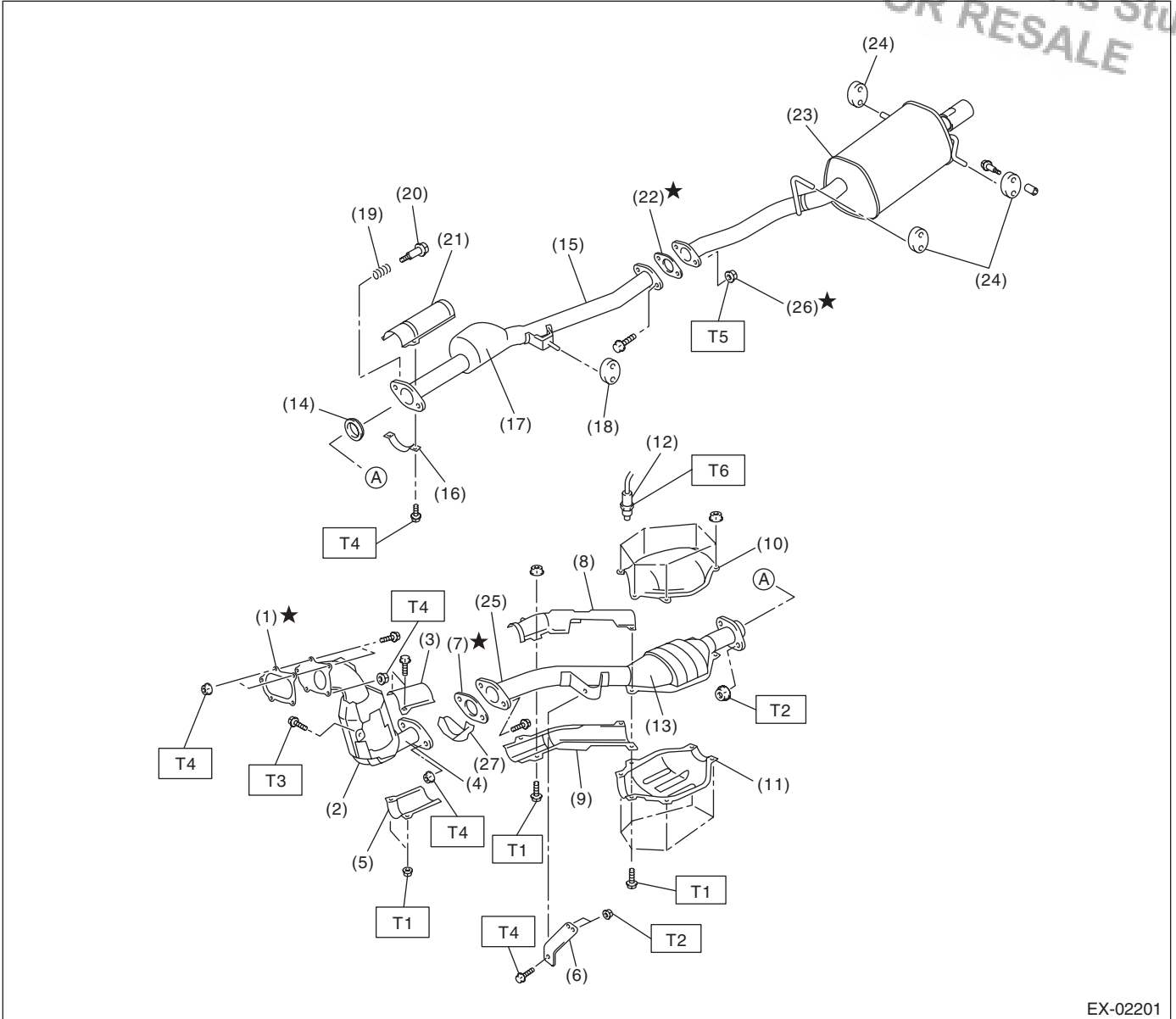
(1) Gasket	(12) Rear catalytic converter lower cover	(23) Cushion rubber
(2) Front catalytic converter	(13) Rear oxygen sensor	
(3) Center exhaust pipe (Front)	(14) Rear catalytic converter	
(4) Self-locking nut	(15) Gasket	
(5) Muffer cutter	(16) Rear exhaust pipe	
(6) Bracket	(17) Chamber	
(7) Gasket	(18) Cushion rubber	
(8) Center exhaust pipe (Rear)	(19) Spring	
(9) Center pipe upper cover (Rear)	(20) Bolt	
(10) Center pipe lower cover (Rear)	(21) Gasket	
(11) Rear catalytic converter upper cover	(22) Muffler	

Tightening torque:N·m (kgf-m, ft-lb)		
T1:	13 (1.3, 9.6)	
T2:	18 (1.8, 13)	
T3:	30 (3.1, 22.4)	
T4:	35 (3.6, 26)	
T5:	48 (4.9, 35.4)	
T6:	<Ref. to FU(H4DOTC)-48, INSTALLATION, Rear Oxygen Sensor.>	

General Description

EXHAUST

- STI model



EX-02201

- | | | |
|---|--|---------------------------------|
| (1) Gasket | (13) Rear catalytic converter | (25) Center exhaust pipe (Rear) |
| (2) Front catalytic converter | (14) Gasket | (26) Self-locking nut |
| (3) Center pipe upper cover (Front) | (15) Rear exhaust pipe | (27) Flange cover |
| (4) Center exhaust pipe (Front) | (16) Clamp | |
| (5) Center pipe lower cover (Front) | (17) Chamber | |
| (6) Bracket | (18) Cushion rubber | |
| (7) Gasket | (19) Spring | |
| (8) Center pipe upper cover (Rear) | (20) Bolt | |
| (9) Center pipe lower cover (Rear) | (21) Rear exhaust pipe upper cover (Front) | |
| (10) Rear catalytic converter upper cover | (22) Gasket | |
| (11) Rear catalytic converter lower cover | (23) Muffler | |
| (12) Rear oxygen sensor | (24) Cushion rubber | |

Tightening torque: N·m (kgf·m, ft·lb)

T1: 13 (1.3, 9.6)

T2: 18 (1.8, 13)

T3: 30 (3.1, 22.4)

T4: 35 (3.6, 26)

T5: 48 (4.9, 35.4)

T6: <Ref. to FU(H4DOTC)-48, INSTALLATION, Rear Oxygen Sensor.>

B: CAUTION

- Wear appropriate work clothing, including a cap, protective goggles and protective shoes when performing any work.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust and dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly and replacement.
- Vehicle components are extremely hot after driving. Be wary of receiving burns from heated parts.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or rigid racks at the specified points.
- Before disconnecting connectors of sensors or units, be sure to disconnect the ground cable from the battery.
- If any fat adheres to the exhaust pipe, wipe it off. Otherwise a fire may happen.

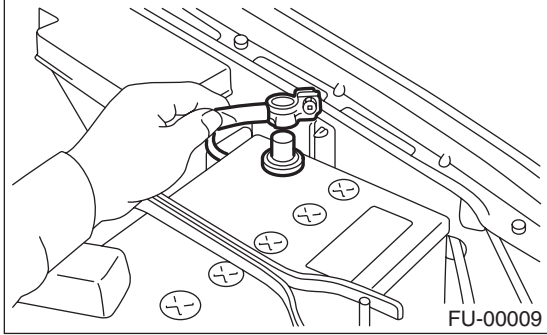
2. Front Exhaust Pipe

A: REMOVAL

CAUTION:

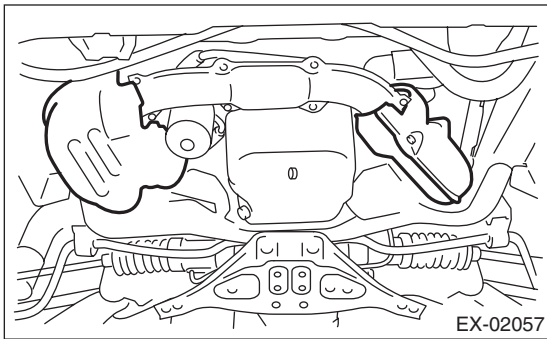
Be careful not to burn yourself, because the exhaust pipe becomes extremely hot after running.

- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from the battery.

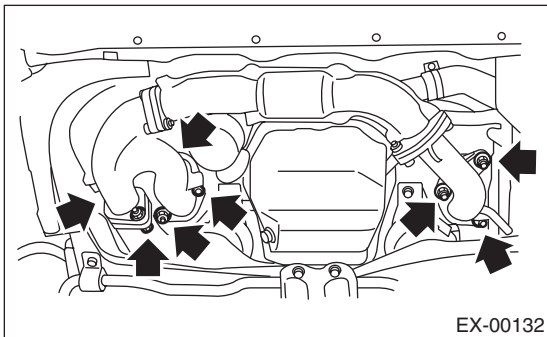


3) Remove the front oxygen (A/F) sensor. <Ref. to FU(H4DOTC)-46, REMOVAL, Front Oxygen (A/F) Sensor.>

- 4) Remove the under cover.
- 5) Remove the exhaust manifold lower cover (RH) and the exhaust manifold cover (LH).



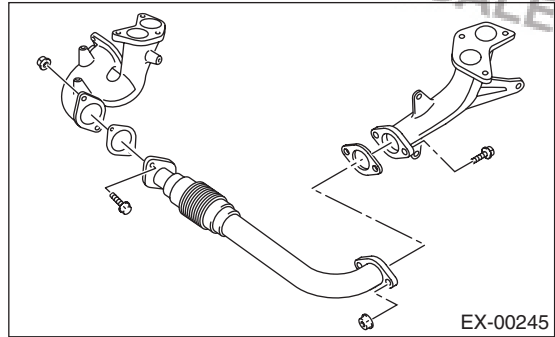
- 6) Remove the bolts and nuts which hold front exhaust pipe assembly to the turbocharger joint pipe.
- 7) While holding the front exhaust pipe assembly with one hand, remove the nuts which hold the front exhaust pipe assembly to cylinder head exhaust port.



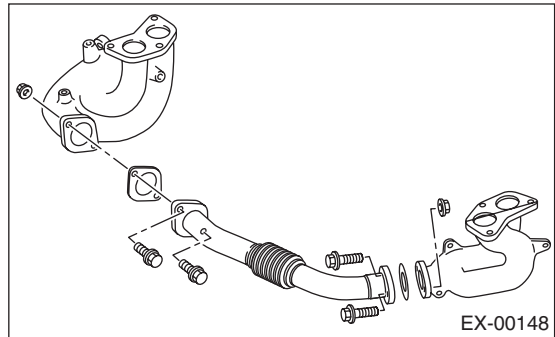
- 8) Remove the front exhaust pipe assembly.
- 9) Remove the covers from exhaust manifold and front exhaust pipe.

10) Separate the front exhaust pipe from exhaust manifolds.

- Except for STI model



- STI model



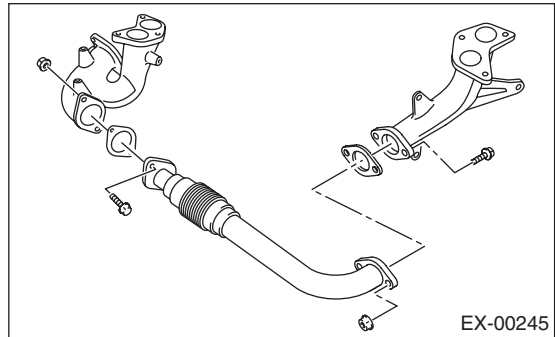
B: INSTALLATION

1) Install the front exhaust pipe and the exhaust manifold.

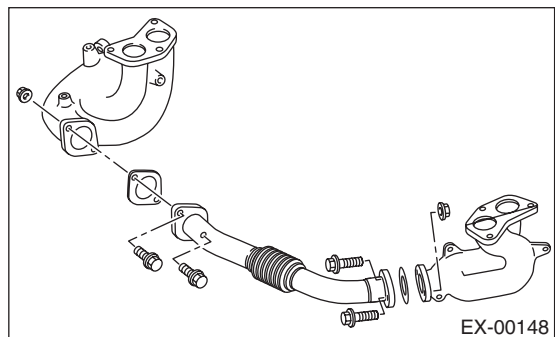
NOTE:
Use a new gasket.

Tightening torque:
35 N·m (3.6 kgf-m, 26 ft-lb)

- Except for STI model



- STI model



2) Install the front exhaust pipe cover.

Tightening torque:

Except for STI model

7.5 N·m (0.8 kgf-m, 5.5 ft-lb)

STI model

25 N·m (2.5 kgf-m, 18.1 ft-lb)

3) Install the exhaust manifold upper cover (RH).

Tightening torque:

19 N·m (1.9 kgf-m, 14.0 ft-lb)

4) Install the front exhaust pipe assembly.

NOTE:

Use a new gasket.

Tightening torque:

35 N·m (3.6 kgf-m, 26 ft-lb)

5) Connect the exhaust manifold (RH) to turbo-charger joint pipe.

NOTE:

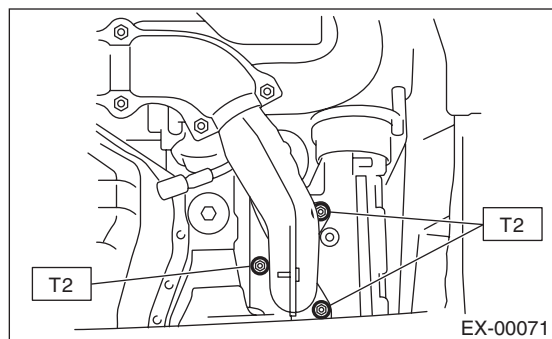
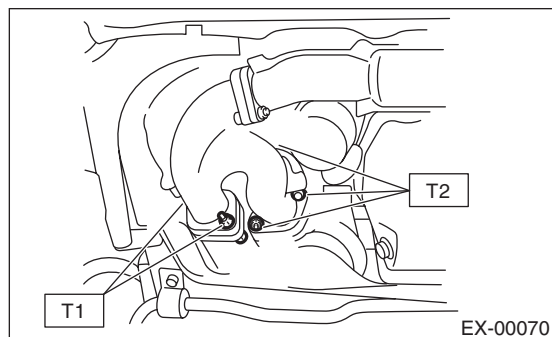
Use a new gasket.

- Except for STI model

Tightening torque:

T1: 35 N·m (3.6 kgf-m, 26 ft-lb)

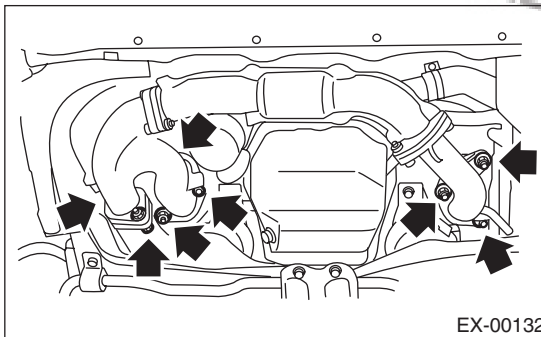
T2: 40 N·m (4 kgf-m, 28.9 ft-lb)



- STI model

Tightening torque:

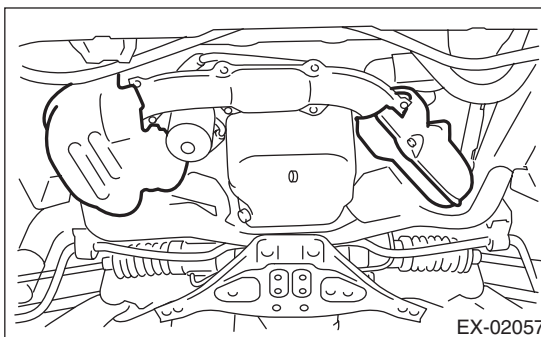
35 N·m (3.6 kgf-m, 26 ft-lb)



6) Install the exhaust manifold lower cover (RH) and the exhaust manifold cover (LH).

Tightening torque:

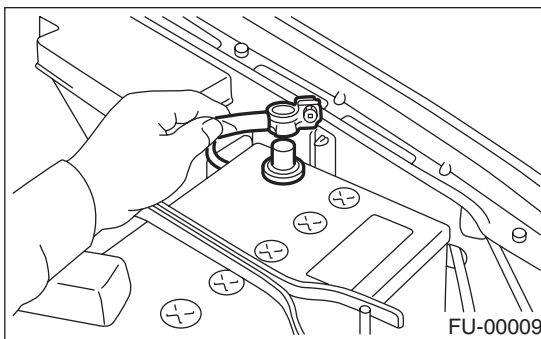
19 N·m (1.9 kgf-m, 14.0 ft-lb)



7) Install the front oxygen (A/F) sensor. <Ref. to FU(H4DOTC)-46, INSTALLATION, Front Oxygen (A/F) Sensor.>

8) Install the under cover.

9) Connect the ground cable to the battery.



C: INSPECTION

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

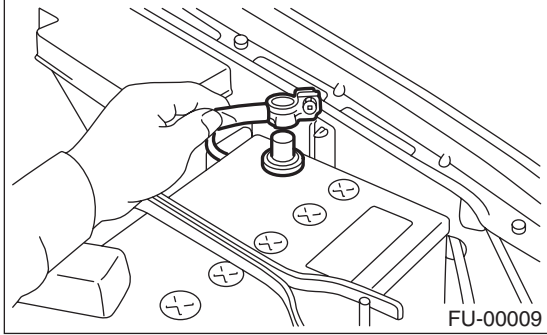
3. Center Exhaust Pipe

A: REMOVAL

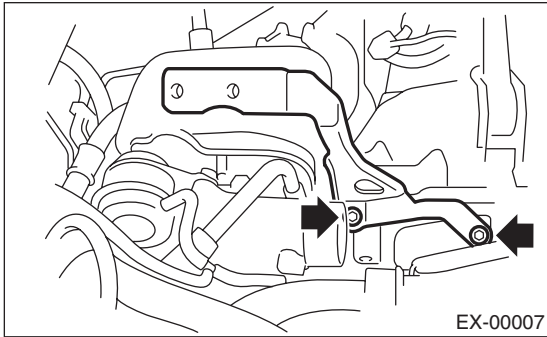
CAUTION:

Be careful not to burn yourself, because the exhaust pipe becomes extremely hot after running.

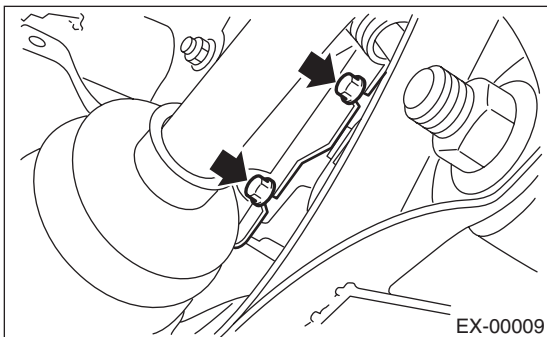
- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from the battery.



- 3) Remove the intercooler. <Ref. to IN(H4DOTC)-13, REMOVAL, Intercooler.>
- 4) Remove the intercooler bracket.

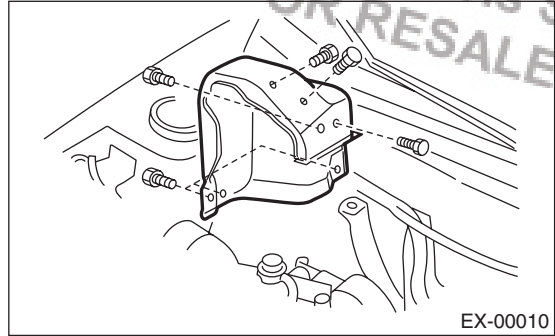


- 5) Lift up the vehicle.
- 6) Remove the under cover.
- 7) Remove the bolts which install the lower side of turbocharger lower cover.

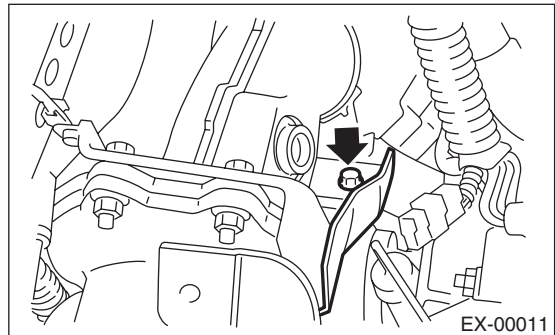


- 8) Lower the vehicle.

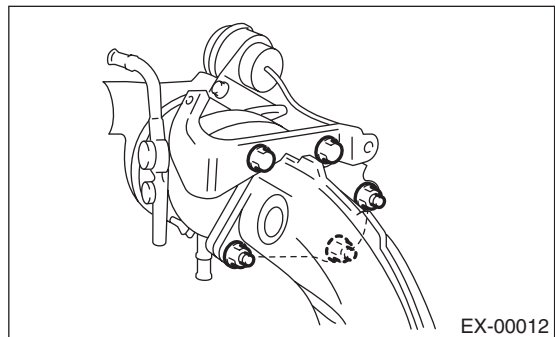
- 9) Remove the turbocharger upper cover.



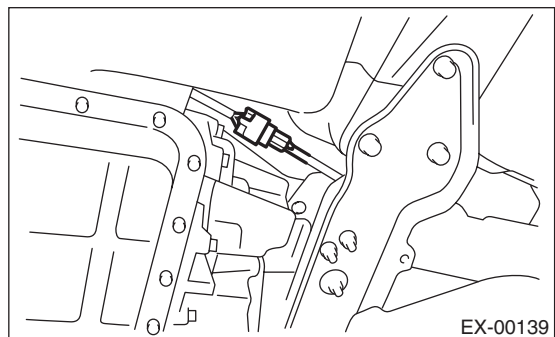
- 10) Remove the bolts which hold the turbocharger lower cover and center exhaust pipe.



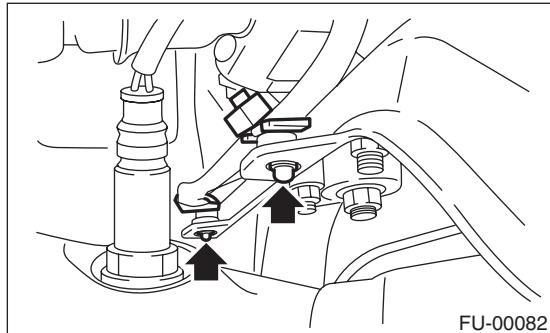
- 11) Separate the center exhaust pipe from turbocharger.



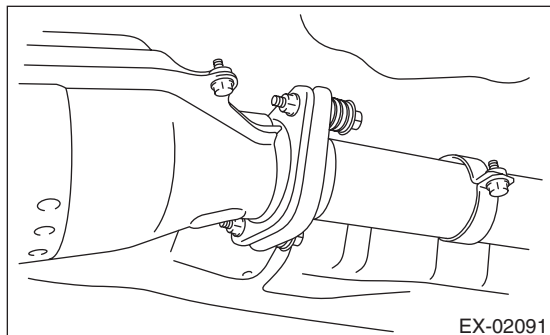
- 12) Lift up the vehicle.
- 13) Disconnect the connector from the rear oxygen sensor.



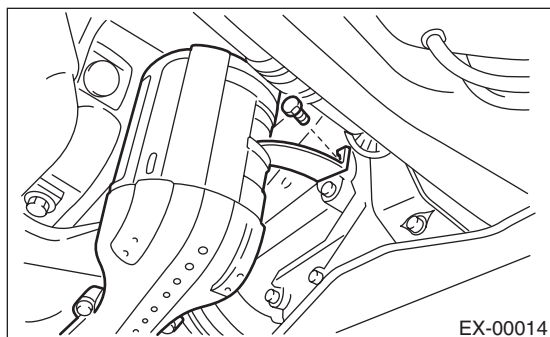
14) Vertically draw out clip from crossmember.



15) Separate the center exhaust pipe from rear exhaust pipe.



16) Remove the bolt which holds center exhaust pipe bracket to transmission.

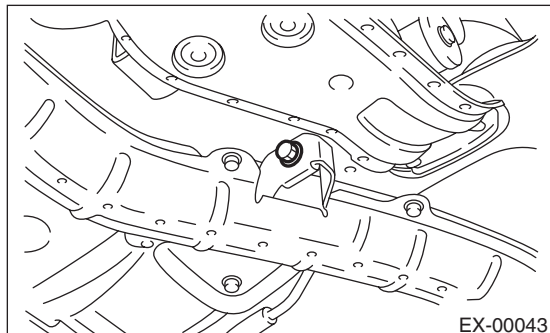


17) Remove the intercooler bracket.

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

CAUTION:

Be careful not to pull down the center exhaust pipe.



19) Remove the center exhaust pipe



B: INSTALLATION

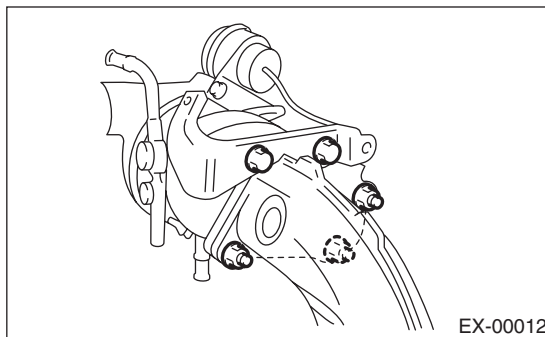
- 1) Install the center exhaust pipe and temporarily tighten the bolt which holds center exhaust pipe to hanger bracket.
- 2) Temporarily tighten the bolt which holds the center pipe to transmission.
- 3) Connect the center exhaust pipe to turbocharger.

NOTE:

Use a new gasket.

Tightening torque:

35 N·m (3.6 kgf-m, 26 ft-lb)



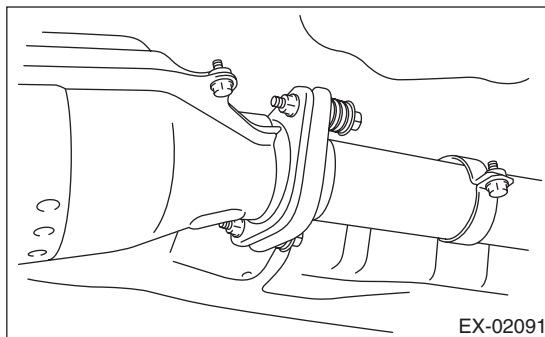
4) Install the center exhaust pipe to rear exhaust pipe.

NOTE:

Use a new gasket.

Tightening torque:

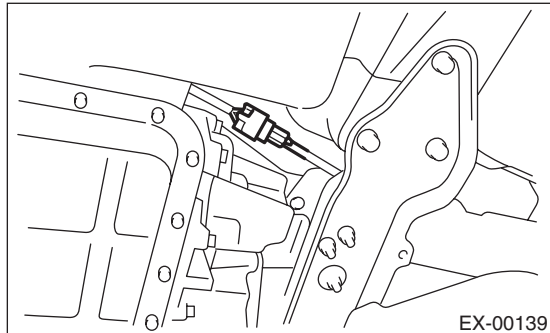
18 N·m (1.8 kgf-m, 13 ft-lb)



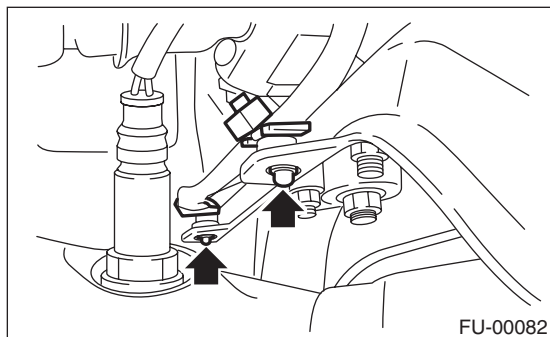
Center Exhaust Pipe

EXHAUST

5) Connect the connector to rear oxygen sensor.

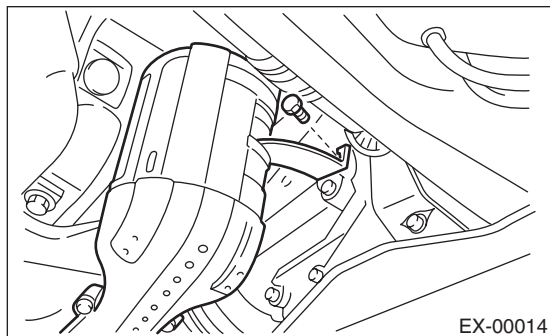


6) Secure clip on the crossmember.



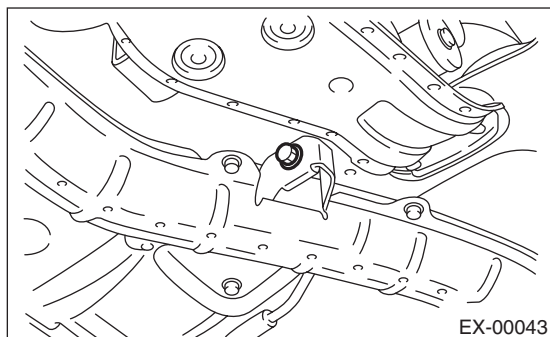
7) Tighten the bolt which holds center exhaust pipe bracket to transmission.

Tightening torque:
30 N·m (3.1 kgf·m, 22.4 ft·lb)



8) Tighten the bolt which holds center exhaust pipe to hanger bracket.

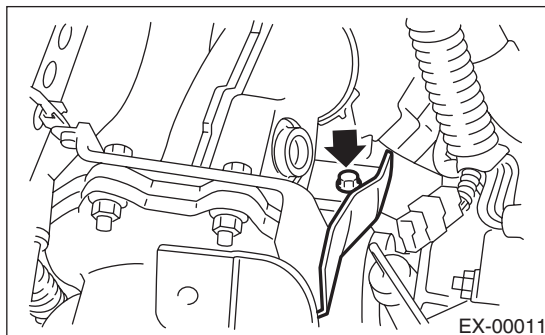
Tightening torque:
35 N·m (3.6 kgf·m, 26 ft·lb)



9) Lower the vehicle.

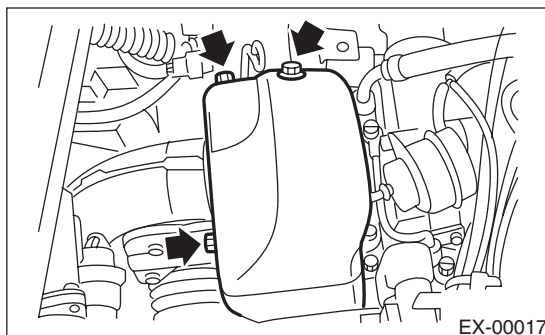
10) Position the turbocharger lower cover, and tighten the bolts which hold the lower cover and center exhaust pipe.

Tightening torque:
7.5 N·m (0.8 kgf·m, 5.5 ft·lb)



11) Position the turbocharger upper cover, and tighten the bolts which install the upper side of upper cover.

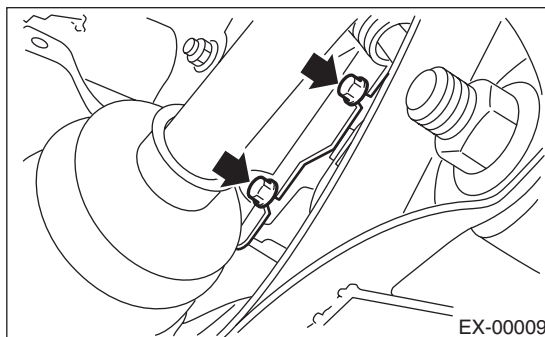
Tightening torque:
7.5 N·m (0.8 kgf·m, 5.5 ft·lb)



12) Lift up the vehicle.

13) Tighten the bolts which install the under side of turbocharger lower cover.

Tightening torque:
7.5 N·m (0.8 kgf·m, 5.5 ft·lb)



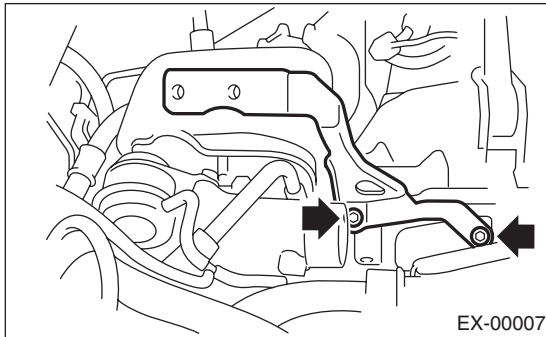
14) Install the under cover.

15) Lower the vehicle.

16) Install the intercooler bracket.

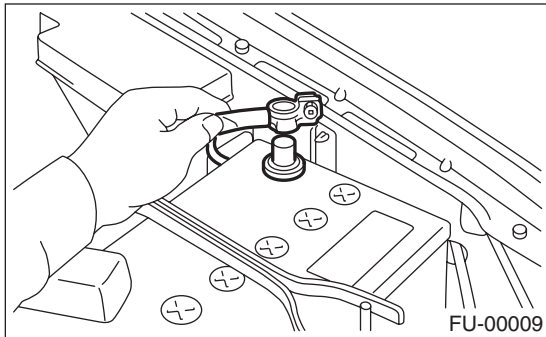
Tightening torque:

16 N·m (1.6 kgf-m, 11.8 ft-lb)



17) Install the intercooler. <Ref. to IN(H4DOTC)-14, INSTALLATION, Intercooler.>

18) Connect the ground cable to the battery.



C: INSPECTION

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

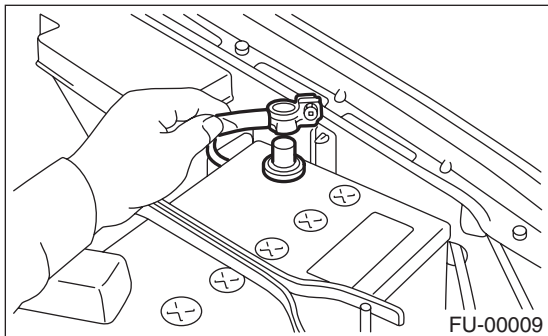
4. Joint Pipe

A: REMOVAL

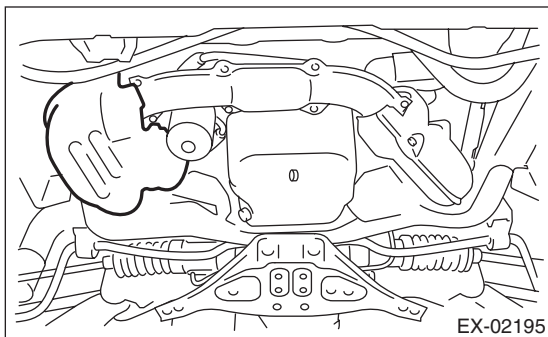
CAUTION:

Be careful not to burn yourself, because the exhaust pipe becomes extremely hot after running.

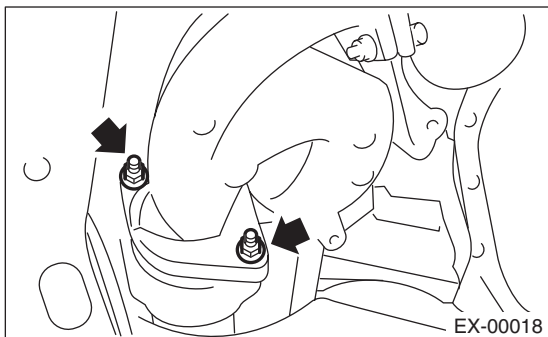
- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from the battery.



- 3) Remove the front oxygen (A/F) sensor. <Ref. to FU(H4DOTC)-46, REMOVAL, Front Oxygen (A/F) Sensor.>
- 4) Remove the under cover.
- 5) Remove the exhaust manifold lower cover (RH).



- 6) Remove the nuts which hold the front exhaust manifold to joint pipe.



- 7) Remove the center exhaust pipe. <Ref. to EX(H4DOTC)-10, REMOVAL, Center Exhaust Pipe.>
- 8) Remove the turbocharger. <Ref. to IN(H4DOTC)-15, REMOVAL, Turbocharger.>
- 9) Take off the joint pipe in the upward direction.

B: INSTALLATION

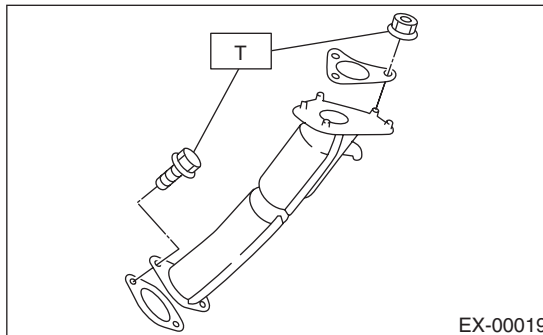
Install in the reverse order of removal.

NOTE:

Use a new gasket.

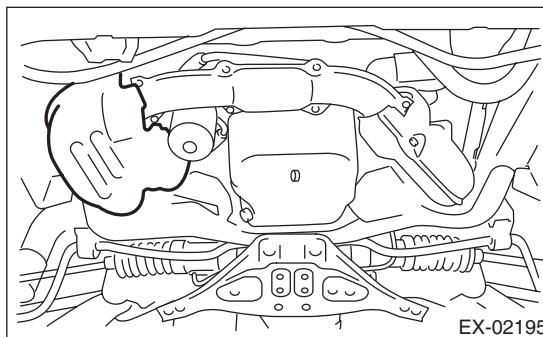
Tightening torque:

T: 35 N·m (3.6 kgf·m, 26 ft·lb)



Tightening torque:

19 N·m (1.9 kgf·m, 14.0 ft·lb)



C: INSPECTION

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

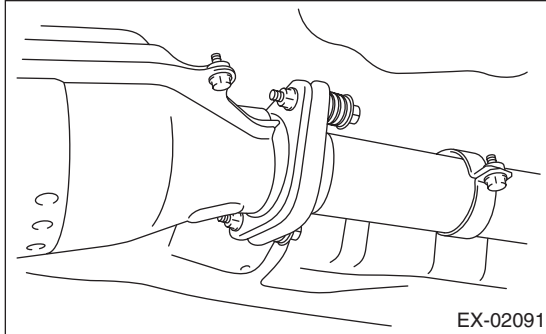
5. Rear Exhaust Pipe

A: REMOVAL

CAUTION:

Be careful not to burn yourself, because the exhaust pipe becomes extremely hot after running.

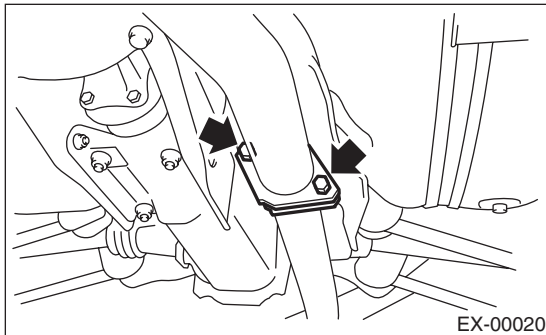
- 1) Set the vehicle on a lift.
- 2) Lift up the vehicle.
- 3) Separate the rear exhaust pipe from center exhaust pipe.



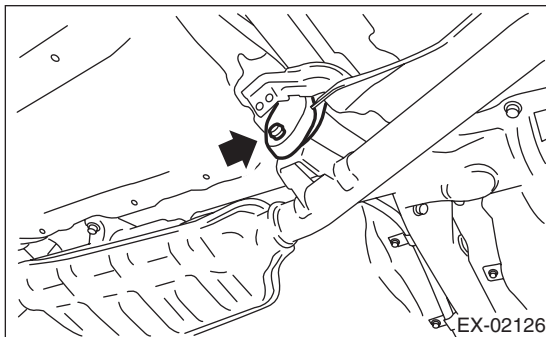
- 4) Separate the rear exhaust pipe from muffler.

CAUTION:

Be careful not to pull down the rear exhaust pipe.



- 5) Apply a coat of spray type lubricant to the mating area of cushion rubber.
- 6) Remove the rear exhaust pipe from the cushion rubber.



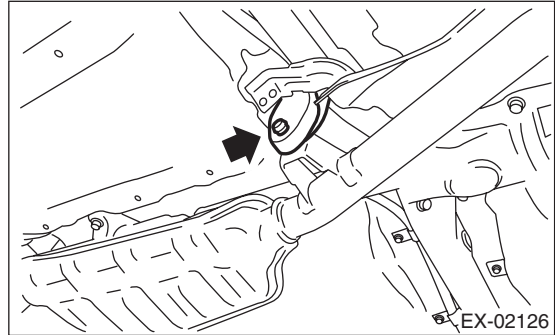
- 7) Remove the rear exhaust pipe.

B: INSTALLATION

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

NOTE:

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



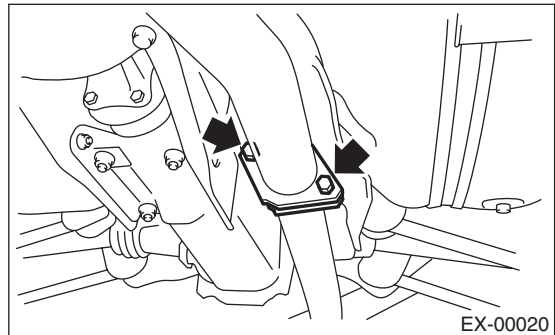
- 3) Install the rear exhaust pipe to muffler.

NOTE:

Use a new gasket and self-locking nut.

Tightening torque:

48 N·m (4.9 kgf-m, 35.4 ft-lb)



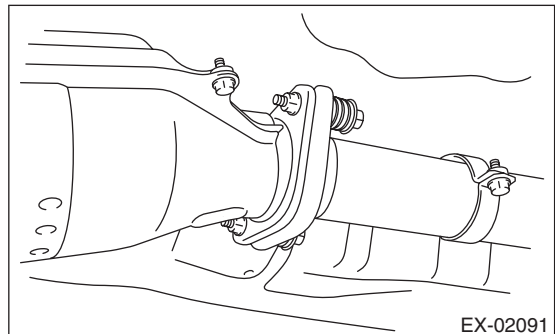
- 4) Install the rear exhaust pipe to center exhaust pipe.

NOTE:

Use a new gasket.

Tightening torque:

18 N·m (1.8 kgf-m, 13 ft-lb)



- 5) Lower the vehicle.

C: INSPECTION

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

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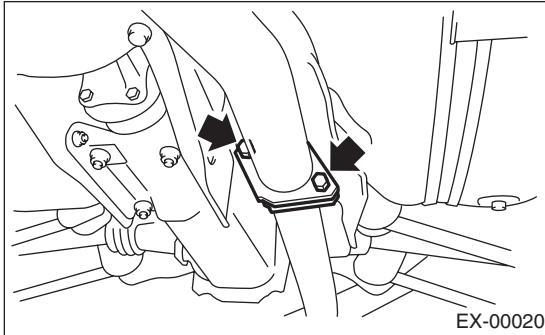
6. Muffler

A: REMOVAL

CAUTION:

Be careful not to burn yourself, because the exhaust pipe becomes extremely hot after running.

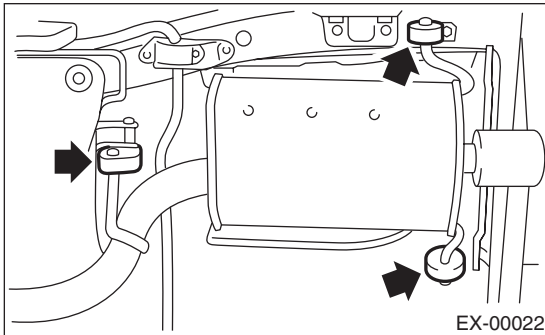
- 1) Set the vehicle on a lift.
- 2) Lift up the vehicle.
- 3) Separate the muffler from rear exhaust pipe.



- 4) Apply a coat of spray type lubricant to the mating area of cushion rubber.
- 5) Remove the cushion rubber, and remove the muffler.

CAUTION:

Be careful not to drop the muffler during removal.



B: INSTALLATION

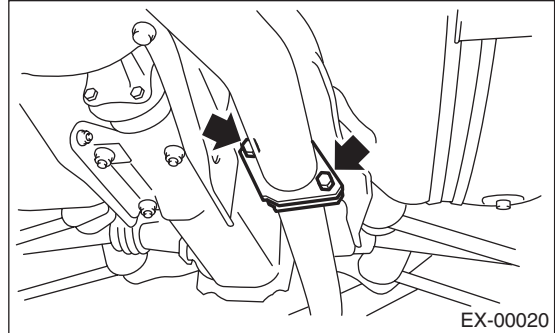
Install in the reverse order of removal.

NOTE:

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

Tightening torque:

48 N·m (4.9 kgf-m, 35.4 ft-lb)



C: INSPECTION

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

EXHAUST

Muffler

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