

**SUPPLEMENT FOR 6 CYLINDER
ENGINE MODEL**

This service manual has been prepared to provide SUBARU service personnel with the necessary information and data for the correct maintenance and repair of SUBARU vehicles.

This manual includes the procedures for maintenance, disassembling, reassembling, inspection and adjustment of components and diagnostics for guidance of experienced mechanics.

Please peruse and utilize this manual fully to ensure complete repair work for satisfying our customers by keeping their vehicle in optimum condition. When replacement of parts during repair work is needed, be sure to use SUBARU genuine parts.

All information, illustration and specifications contained in this manual are based on the latest product information available at the time of publication approval.

FOREWORD**FW****HOW TO USE THIS MANUAL****HU****SPECIFICATIONS****SPC****PRECAUTION****PC****NOTE****NT****IDENTIFICATION****ID****RECOMMENDED MATERIALS****RM****PRE-DELIVERY INSPECTION****PI****PERIODICAL MAINTENANCE****PM**

**SUPPLEMENT FOR 6 CYLINDER
ENGINE MODEL****FUEL INJECTION (FUEL SYSTEMS) FU(H6)****EMISSION CONTROL
(AUX. EMISSION CONTROL DEVICES) EC(H6)****INTAKE (INDUCTION) IN(H6)****MECHANICAL ME(H6)****EXHAUST EX(H6)****COOLING CO(H6)****LUBRICATION LU(H6)****SPEED CONTROL SYSTEMS SP(H6)****IGNITION IG(H6)****START/CHARGING SYSTEMS SC(H6)****ENGINE (DIAGNOSTICS) EN(H6)****REAR SUSPENSION RS****WIRING SYSTEM WI**

EXHAUST

EX(H6)

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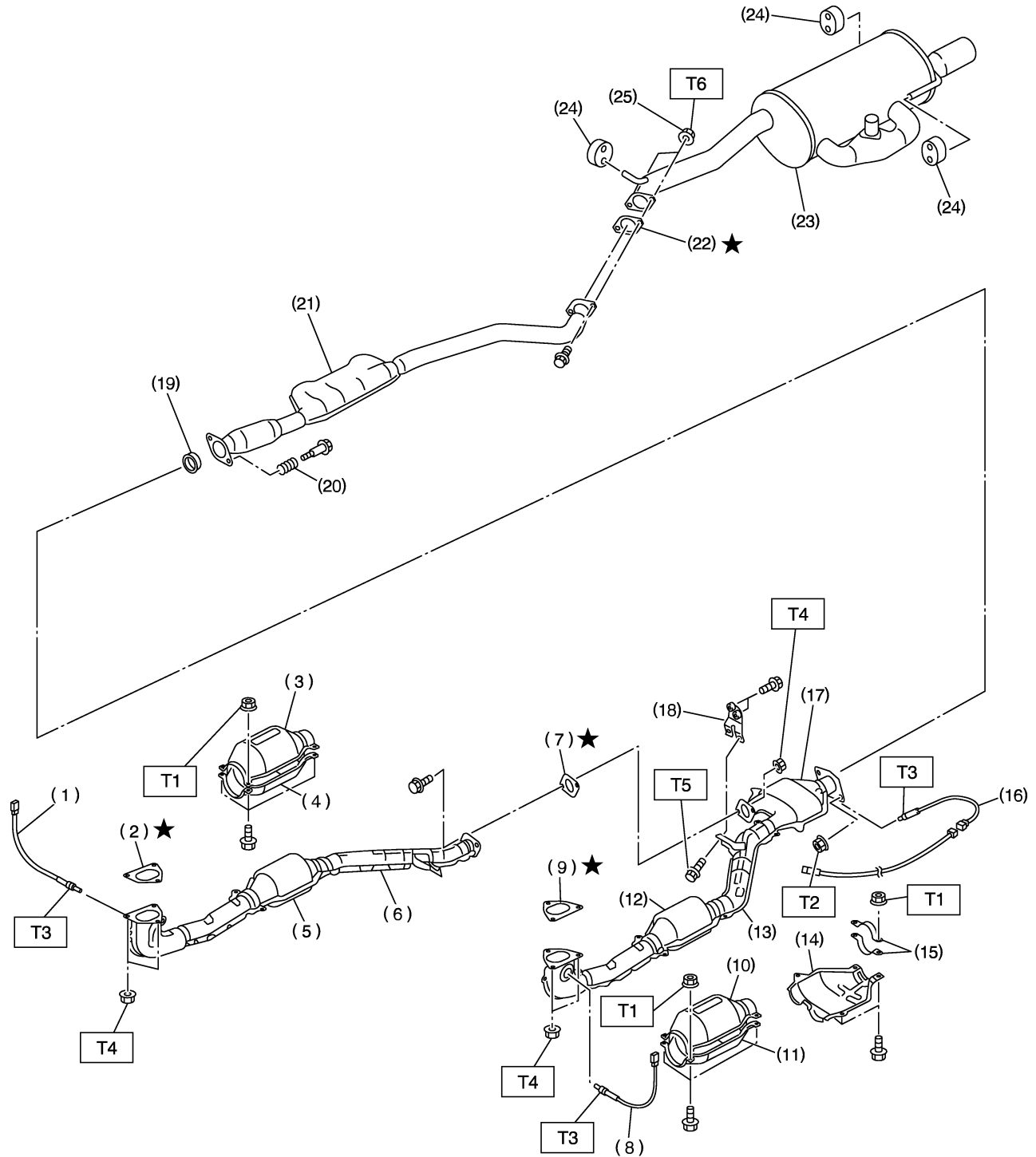


GENERAL DESCRIPTION

Exhaust

1. General Description S142001

A: COMPONENT S142001A05



B2M4421A

EX(H6)-2

GENERAL DESCRIPTION

Exhaust

- (1) Front oxygen (A/F) sensor (RH)
- (2) Gasket (RH)
- (3) Upper front catalytic converter cover (RH)
- (4) Lower front catalytic converter cover (RH)
- (5) Front catalytic converter (RH)
- (6) Front exhaust pipe (RH)
- (7) Gasket (RH)
- (8) Front oxygen (A/F) sensor (LH)
- (9) Gasket (LH)
- (10) Upper front catalytic converter cover (LH)

- (11) Lower front catalytic converter cover (LH)
- (12) Front catalytic converter (LH)
- (13) Front exhaust pipe (LH)
- (14) Lower rear catalytic converter cover
- (15) Clamp
- (16) Rear oxygen sensor
- (17) Rear catalytic converter
- (18) Bracket
- (19) Gasket
- (20) Spring
- (21) Rear exhaust pipe

- (22) Gasket
- (23) Muffler
- (24) Cushion rubber
- (25) Self-locking nut

Tightening torque: N·m (kgf-m, ft-lb)

T1: 13 (1.3, 9.4)

T2: 18 (1.8, 13.0)

T3: 21 (2.1, 15)

T4: 30 (3.1, 22.4)

T5: 35 (3.6, 26.0)

T6: 48 (4.9, 35.4)

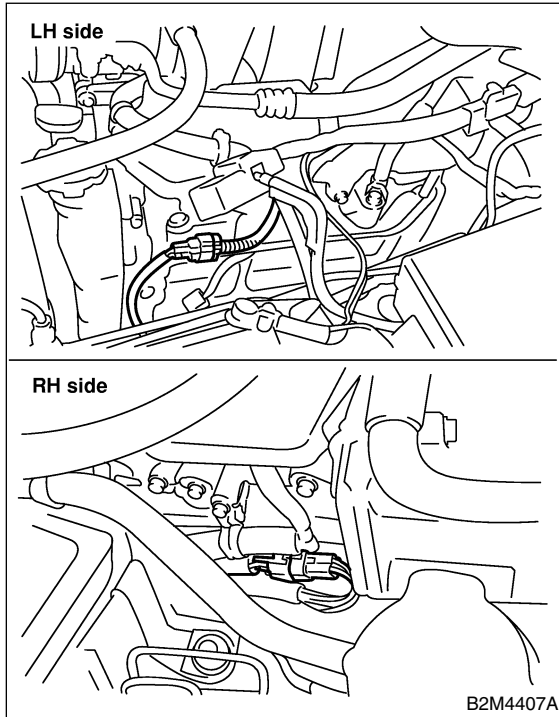
B: CAUTION S142001A03

- Wear working clothing, including a cap, protective goggles, and protective shoes during operation.
- Remove contamination including dirt and corrosion before removal, installation or disassembly.
- Keep the disassembled parts in order and protect them from dust or dirt.
- Before removal, installation or disassembly, be sure to clarify the failure. Avoid unnecessary removal, installation, disassembly, and replacement.
- Be careful not to burn your hands, because each part on the vehicle is hot after running.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or safety stands at the specified points.
- Before disconnecting electrical connectors of sensors or units, be sure to disconnect negative terminal from battery.

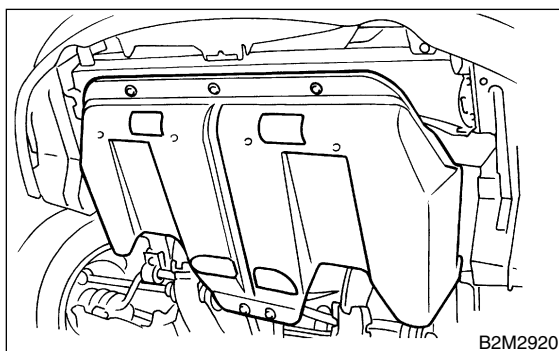
2. Front Exhaust Pipe S142065

A: REMOVAL S142065A18

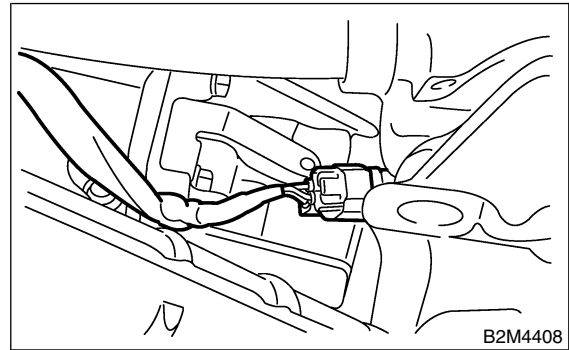
- 1) Remove battery.
- 2) Remove air cleaner case and air intake duct.
<Ref. to IN(H6)-5, REMOVAL, Air cleaner.> and
<Ref. to IN(H6)-7, REMOVAL, Air Intake Duct.>
- 3) Disconnect front oxygen (A/F) sensor connector.



- 4) Lift-up the vehicle.
- 5) Remove under cover.

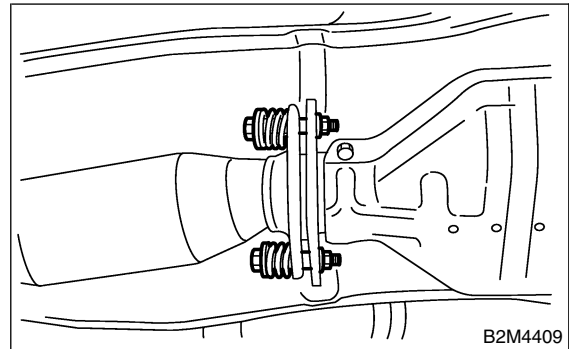


- 6) Disconnect rear oxygen sensor connector.



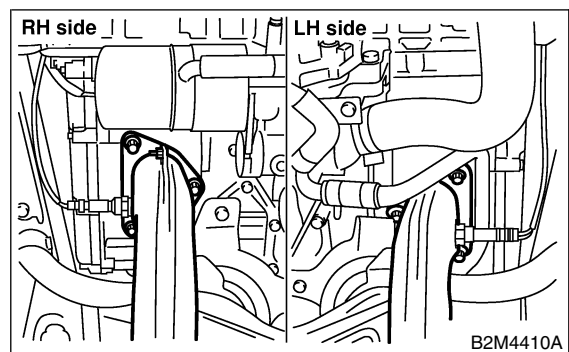
- 7) Separate front exhaust pipe assembly from rear exhaust pipe.

WARNING:
Be careful, exhaust pipe is hot.



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

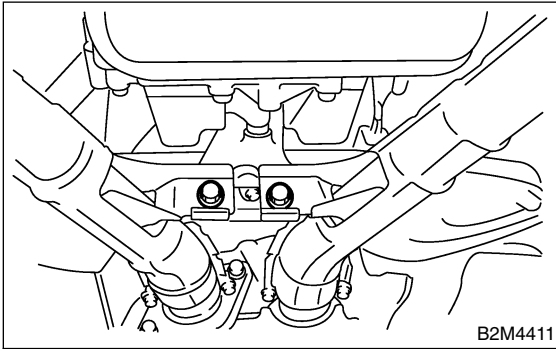
CAUTION:
Be careful not to pull down front and center exhaust pipe assembly.



FRONT EXHAUST PIPE

Exhaust

- 9) Remove bolt which secures front exhaust pipe assembly to hanger bracket.

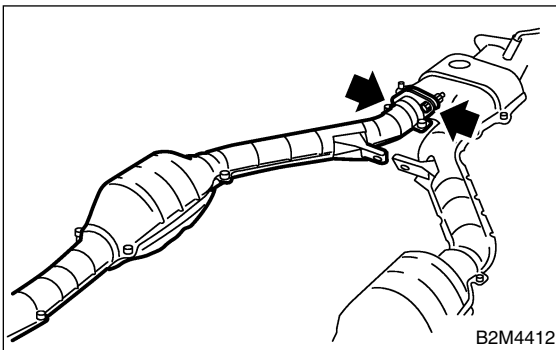


- 10) Remove front exhaust pipe from the vehicle.

CAUTION:

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

- 11) Separate front exhaust pipe (RH) from front exhaust pipe assembly.

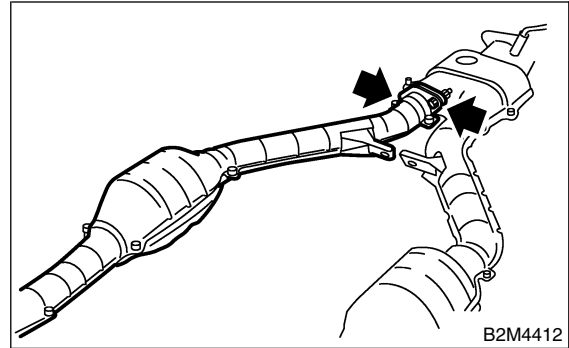


B: INSTALLATION S142065A11

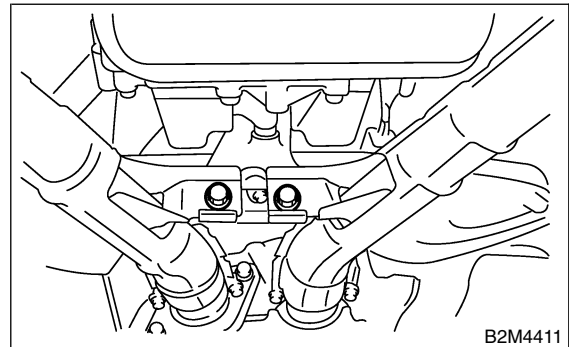
- 1) Install front exhaust pipe (RH) to front exhaust pipe assembly.

CAUTION:
Replace gaskets with new ones.

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

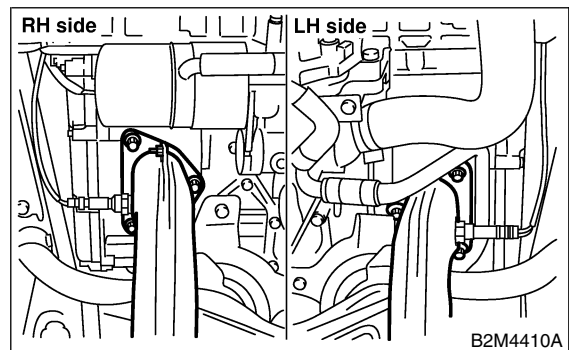


- 2) Install front and rear exhaust pipe assembly to the vehicle.
3) Temporarily tighten bolt which installs front exhaust pipe assembly to hanger bracket.



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

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

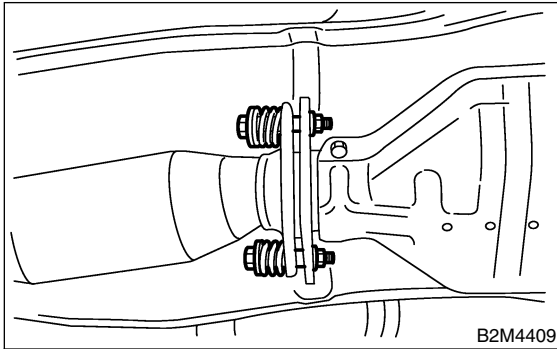


- 5) Install under cover.

- 6) Tighten bolts which install front exhaust pipe to rear exhaust pipe.

Tightening torque:

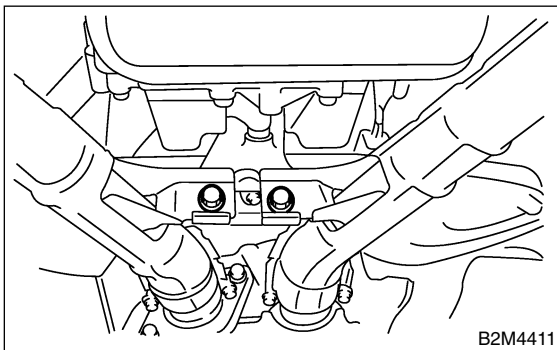
18 N·m (1.8 kgf·m, 13.0 ft·lb)



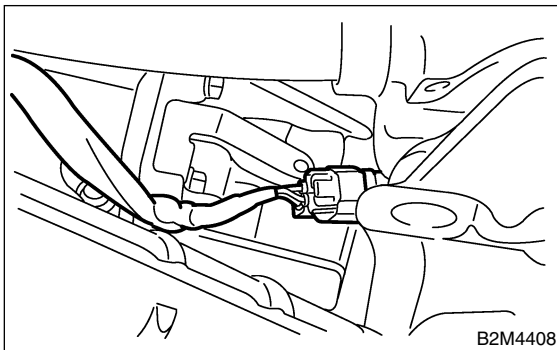
- 7) Tighten bolt which holds front exhaust pipe assembly to hanger bracket.

Tightening torque:

35 N·m (3.6 kgf·m, 26.0 ft·lb)

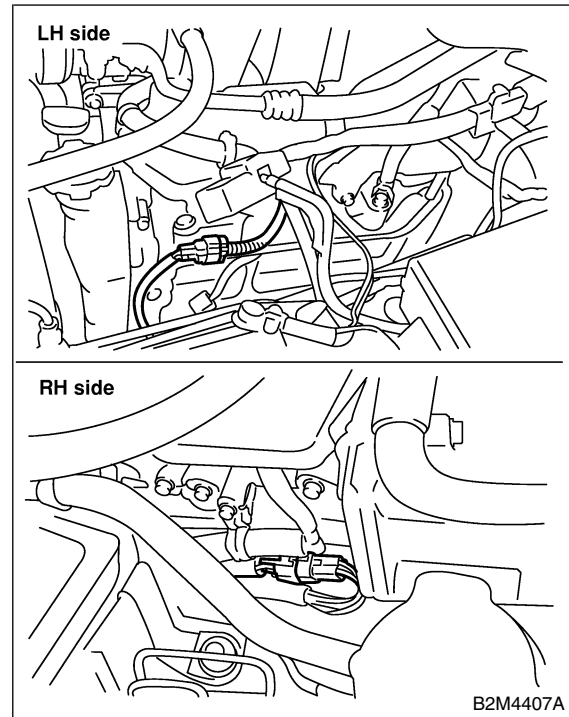


- 8) Connect rear oxygen sensor connector.



- 9) Install under cover.

- 10) Lower the vehicle.
11) Connect front oxygen (A/F) sensor connectors.



- 12) Install air cleaner case and air intake duct. <Ref. to IN(H6)-5, INSTALLATION, Air Cleaner.> and <Ref. to IN(H6)-7, INSTALLATION, Air Intake Duct.>
13) Install battery.

C: INSPECTION S142065A10

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

REAR EXHAUST PIPE

Exhaust

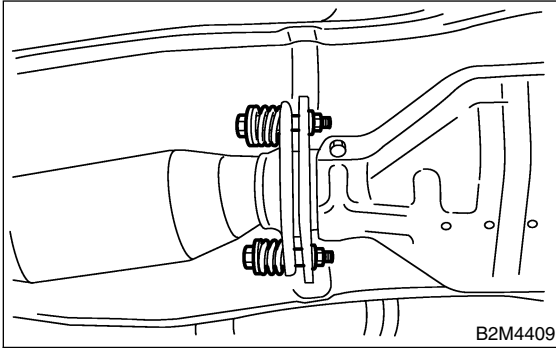
3. Rear Exhaust Pipe S142068

A: REMOVAL S142068A18

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

CAUTION:

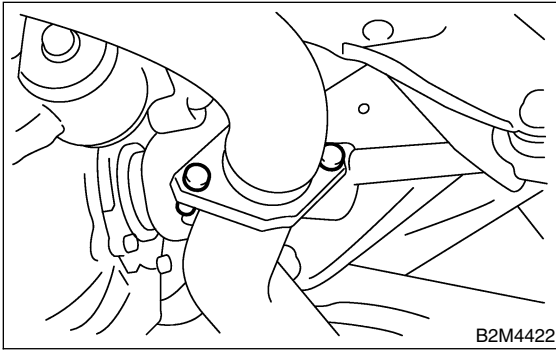
Be careful, exhaust pipe is hot.



- 2) Separate rear exhaust pipe from muffler.

CAUTION:

Be careful not to pull down rear exhaust pipe.



- 3) Remove rear exhaust pipe.

B: INSTALLATION S142068A11

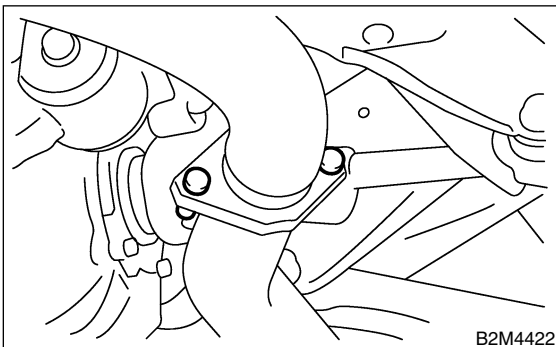
CAUTION:

Replace gaskets with new ones.

- 1) Install rear exhaust pipe to muffler.

Tightening torque:

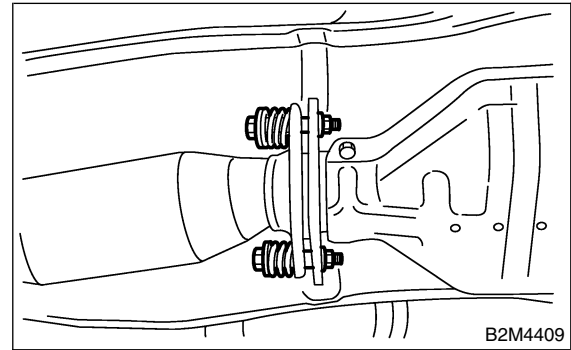
48 N·m (4.9 kgf·m, 35.4 ft·lb)



- 2) Install rear exhaust pipe to front exhaust pipe.

Tightening torque:

18 N·m (1.8 kgf·m, 13.0 ft·lb)



C: INSPECTION S142068A10

- 1) Make sure there are no exhaust leaks from connections and welds.
- 2) Make sure there are no holes or rusting.
- 3) Make sure the cushion rubber is not worn or cracked.

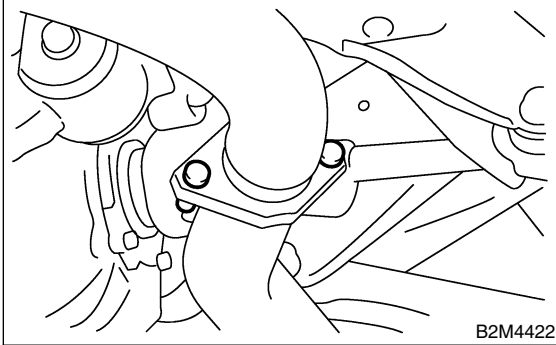
4. Muffler S142066

A: REMOVAL S142066A18

1) Separate muffler from rear exhaust pipe.

CAUTION:

Be careful, exhaust pipe is hot.



2) Remove left and right rubber cushions.

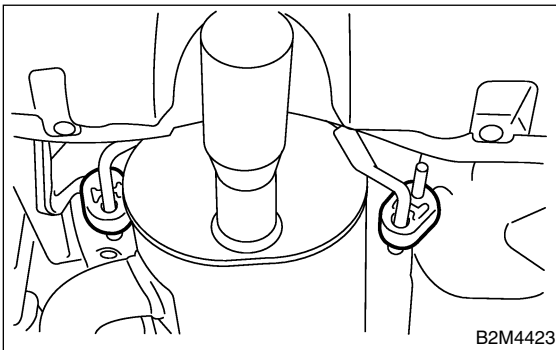
CAUTION:

Be careful not to drop the muffler during removal.

NOTE:

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

SUBARU CRC (Part No. 004301003)

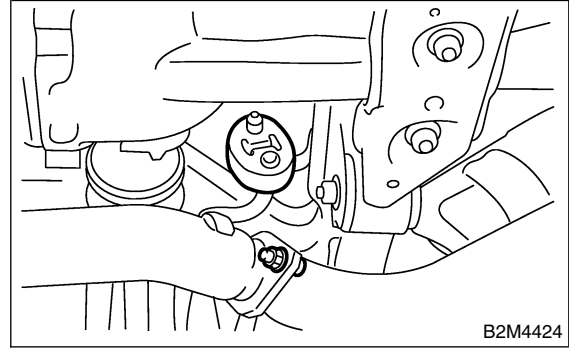


3) Remove front rubber cushion, and detach muffler assembly.

NOTE:

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

SUBARU CRC (Part No. 004301003)



B: INSTALLATION S142066A11

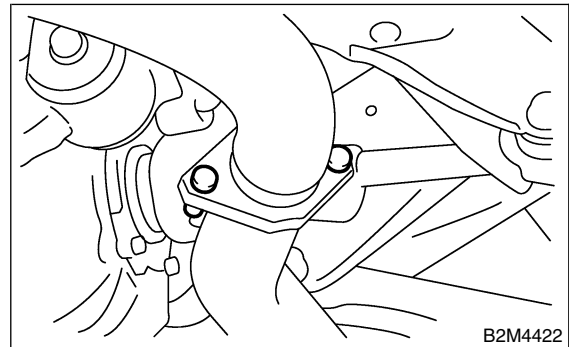
Install in the reverse order of removal.

CAUTION:

Replace gasket with a new one.

Tightening torque:

48 N·m (4.9 kgf-m, 35.4 ft-lb)



C: INSPECTION S142066A10

- 1) Make sure there are no exhaust leaks from connections and welds.
- 2) Make sure there are no holes or rusting.
- 3) Make sure the cushion rubber is not worn or cracked.

MUFFLER

Exhaust

MEMO: