

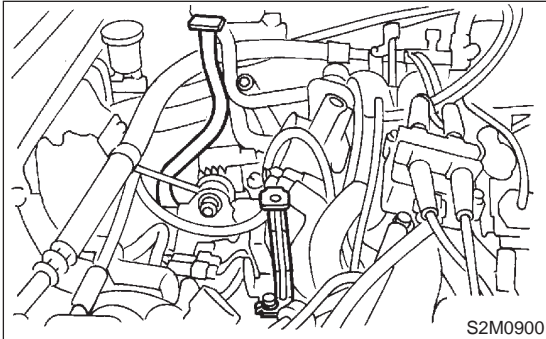
4. Manual Transmission Assembly

S503224

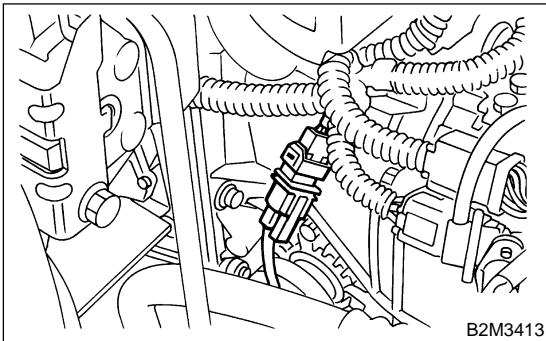
A: REMOVAL

S503224A18

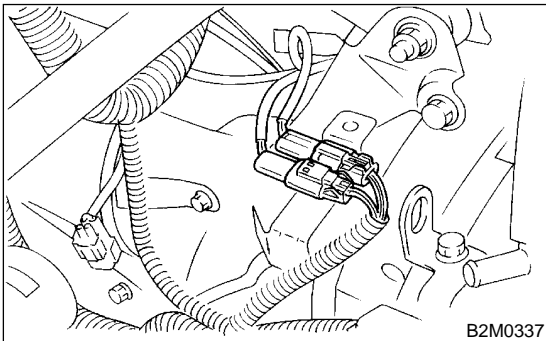
- 1) Open front hood fully, and support with stay.
- 2) Disconnect battery ground terminal.
- 3) Remove air intake duct and cleaner case.
- 4) Remove air cleaner case stay.



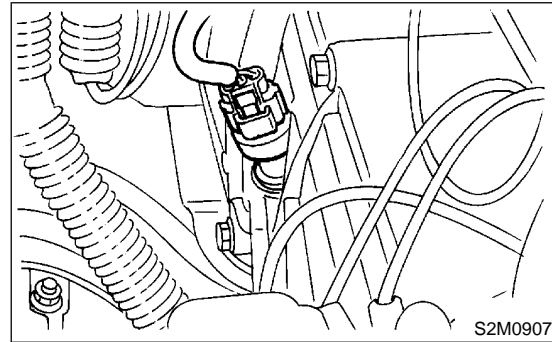
- 5) Disconnect the following connectors.
 - (1) Front oxygen sensor connector



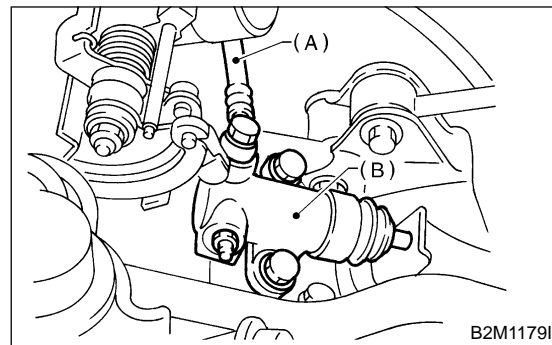
- (2) Neutral position switch connector
- (3) Back-up light switch connector



- (4) Vehicle speed sensor

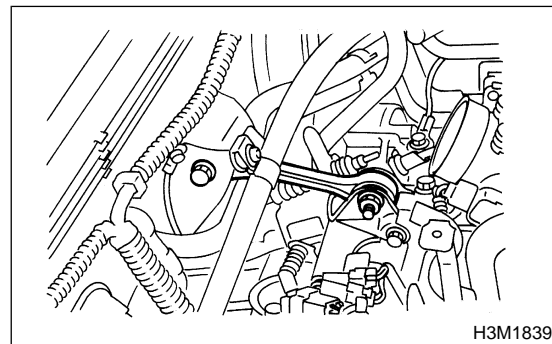


- 6) Remove starter. <Ref. to SC(H4)-7 REMOVAL, Starter.>
- 7) Remove operating cylinder from transmission.



- (A) Clutch hose
- (B) Operating cylinder

- 8) Remove pitching stopper.



MANUAL TRANSMISSION ASSEMBLY

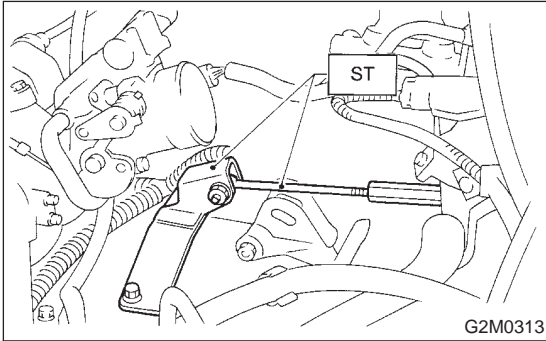
Manual Transmission and Differential

9) Set ST.

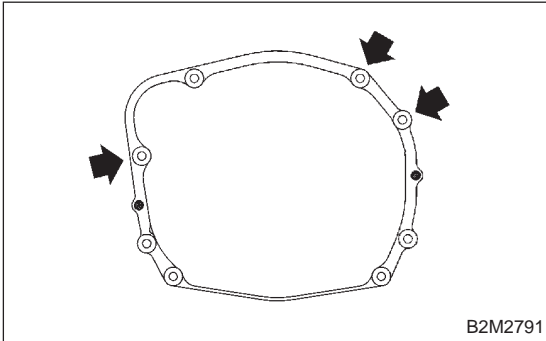
NOTE:

Also is available Part No. 927670000.

ST 41099AA020 ENGINE SUPPORT ASSY

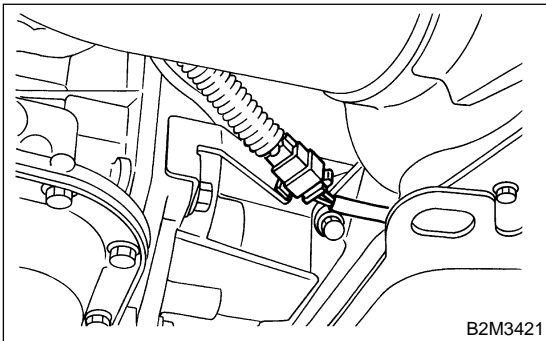


10) Remove bolt which holds right upper side of transmission to engine.



11) Remove under cover.

12) Remove rear oxygen sensor connector from bracket.



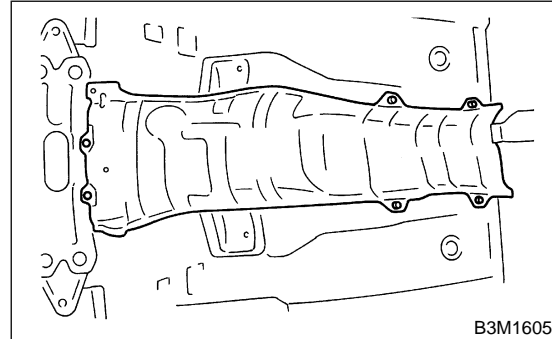
13) Remove front and center exhaust pipes.

14) Remove rear exhaust pipe and muffler.

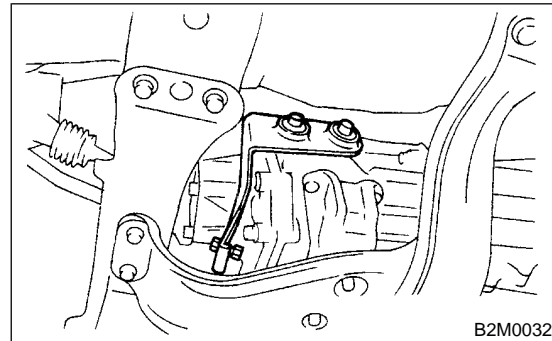
CAUTION:

When removing exhaust pipes, be careful each exhaust pipe does not drop out.

15) Remove heat shield cover.



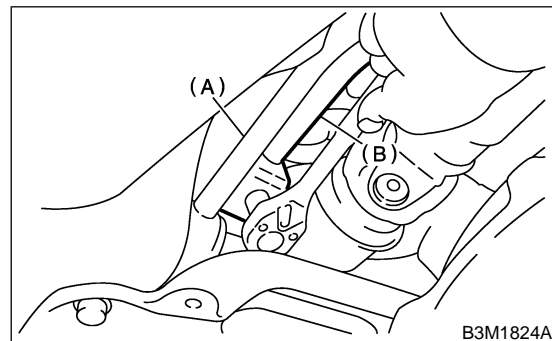
16) Remove hanger bracket from right side of transmission.



17) Remove propeller shaft. <Ref. to DS-13 REMOVAL, Propeller Shaft.>

18) Remove gear shift rod and stay from transmission.

- (1) Disconnect stay from transmission.
- (2) Disconnect rod from transmission.

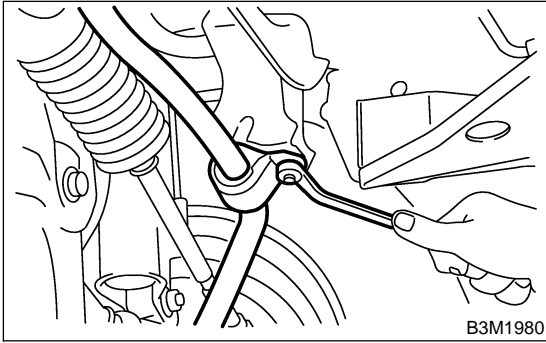


- (A) Stay
(B) Rod

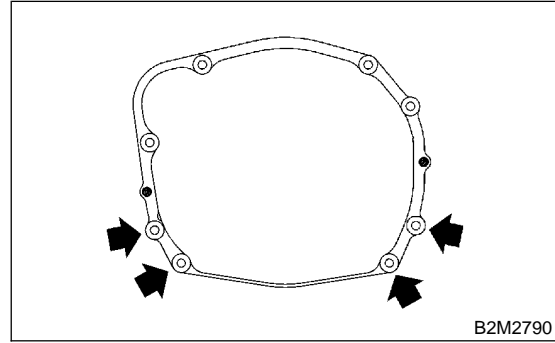
MANUAL TRANSMISSION ASSEMBLY

Manual Transmission and Differential

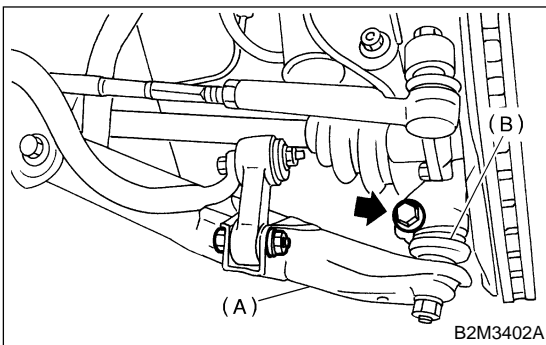
19) Remove bolts which install stabilizer clamps onto crossmember.



21) Remove nuts which hold lower side of transmission to engine.



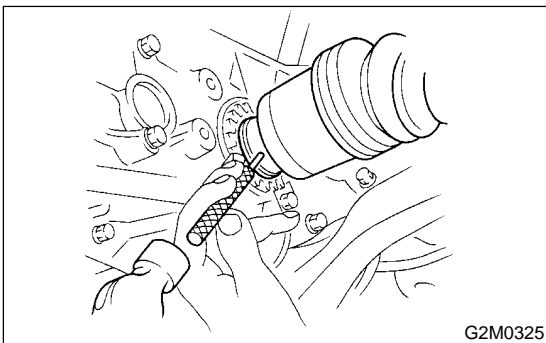
20) Remove front drive shafts from transmission.
(1) Remove transverse link from housing.



- (A) Transverse link
- (B) Ball joint

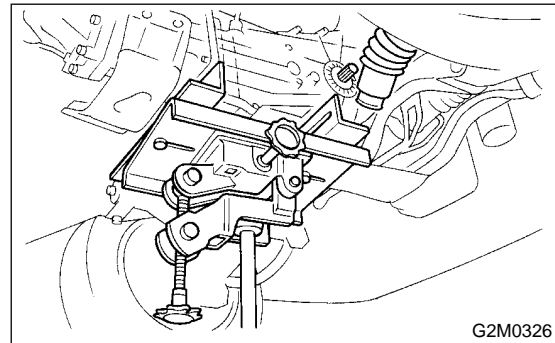
(2) Lower transverse link.
(3) Remove spring pins and separate front drive shafts from each side of the transmission.

CAUTION:
Discard removing spring pin. Replace with a new one.

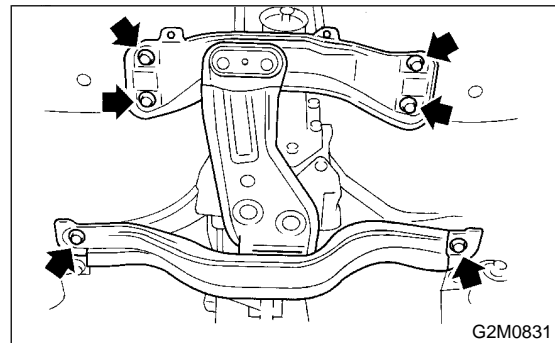


22) Place transmission jack under transmission.

CAUTION:
Always support transmission case with a transmission jack.



23) Remove transmission rear crossmember from vehicle.



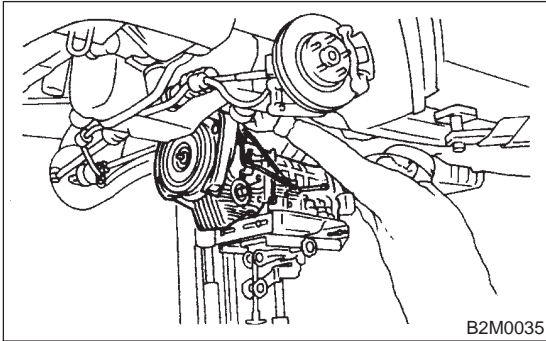
MANUAL TRANSMISSION ASSEMBLY

Manual Transmission and Differential

24) Remove transmission.

CAUTION:

Move transmission jack toward rear until main shaft is withdrawn from clutch cover.



25) Separate transmission assembly and rear cushion rubber.

B: INSTALLATION

S503224A11

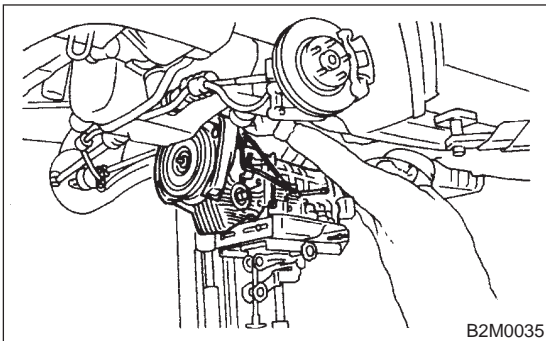
1) Install rear cushion rubber to transmission assembly.

Tightening torque:

34 N·m (3.5 kgf-m, 25.3 ft-lb)

2) Install transmission onto engine.

(1) Gradually raise transmission with transmission jack.



(2) Engage them at splines.

CAUTION:

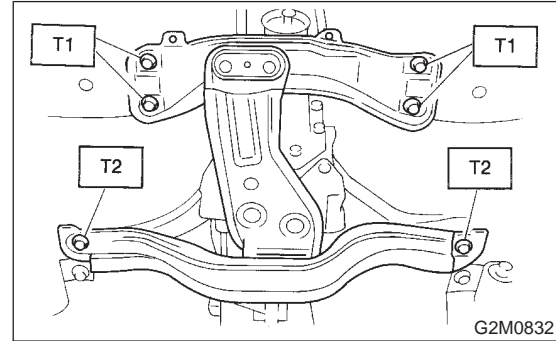
Be careful not to strike main shaft against clutch cover.

3) Install transmission rear crossmember.

Tightening torque:

T1: 70 N·m (7.1 kgf-m, 51 ft-lb)

T2: 140 N·m (14.3 kgf-m, 103 ft-lb)

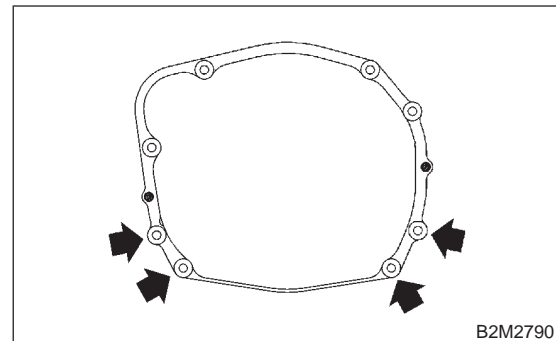


4) Take off transmission jack.

5) Tighten nuts which hold lower side of transmission to engine.

Tightening torque:

50 N·m (5.1 kgf-m, 36.9 ft-lb)



6) Connect engine and transmission.

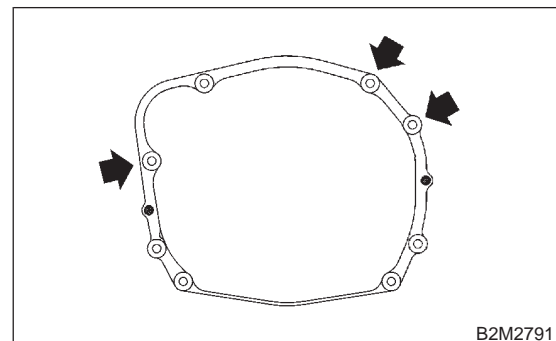
(1) Install starter.

<Ref. to SC(H4)-8 INSTALLATION, Starter.>

(2) Tighten bolt which holds right upper side of transmission to engine.

Tightening torque:

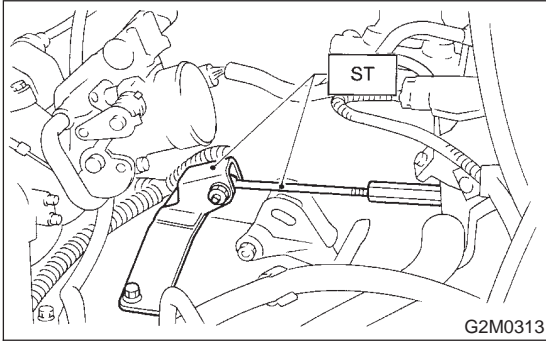
50 N·m (5.1 kgf-m, 36.9 ft-lb)



MANUAL TRANSMISSION ASSEMBLY

Manual Transmission and Differential

7) Remove ST.

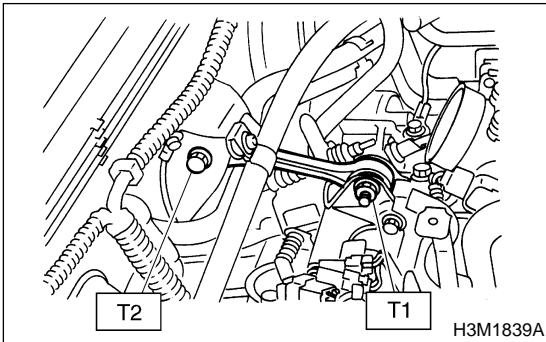


8) Install pitching stopper.

Tightening torque:

T1: 50 N·m (5.1 kgf-m, 37 ft-lb)

T2: 58 N·m (5.9 kgf-m, 43 ft-lb)

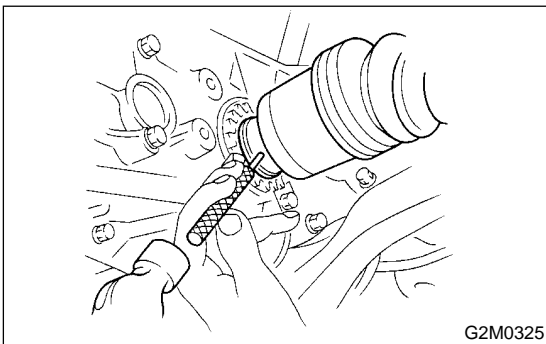


9) Install front drive shafts into transmission.

- (1) Lift-up the vehicle.
- (2) Install front drive shaft into transmission.
- (3) Drive spring pin into chamfered hole of drive shaft.

CAUTION:

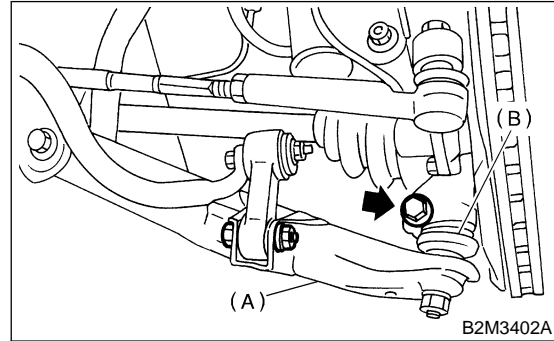
Always use a new spring pin.



(4) Install ball joints of lower arm into knuckle arm of housing, and tighten installing bolts.

Tightening torque:

49 N·m (5.0 kgf-m, 36 ft-lb)

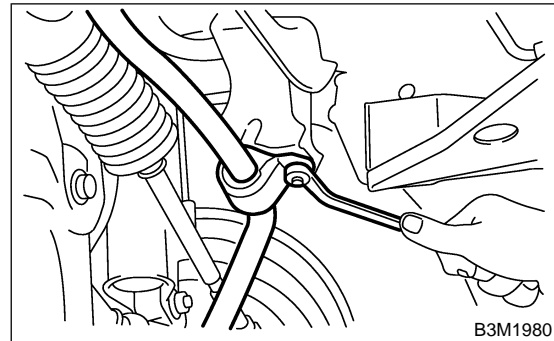


- (A) Transverse link
(B) Ball joint

10) Install stabilizer clamps onto front crossmember.

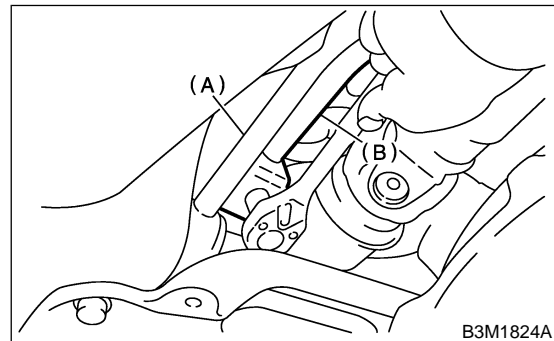
Tightening torque:

25 N·m (2.5 kgf-m, 18.1 ft-lb)



11) Install gear shift rod and stay.

(1) Install gear shift rod onto transmission.



- (A) Stay
(B) Rod

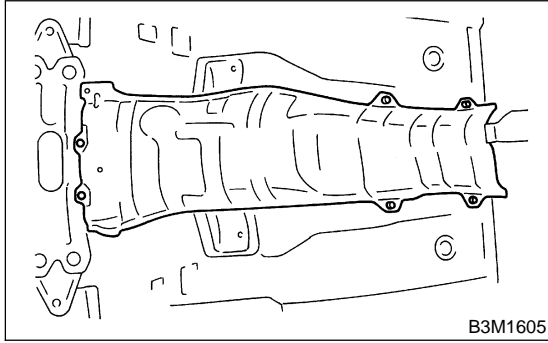
- (2) Install stay onto transmission.
- (3) Install spring.

12) Install propeller shaft. <Ref. to DS-14 INSTALLATION, Propeller Shaft.>

MANUAL TRANSMISSION ASSEMBLY

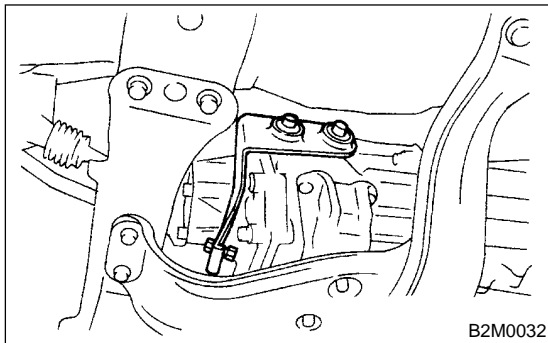
Manual Transmission and Differential

13) Install heat shield cover.

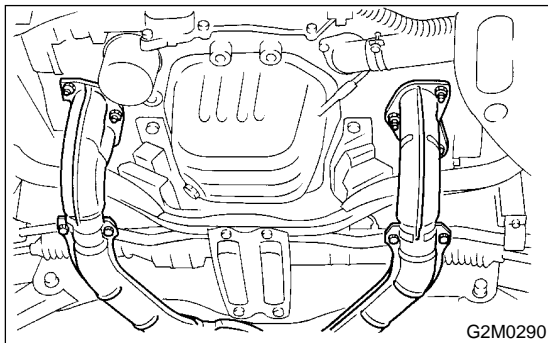


14) Install rear exhaust pipe and muffler.

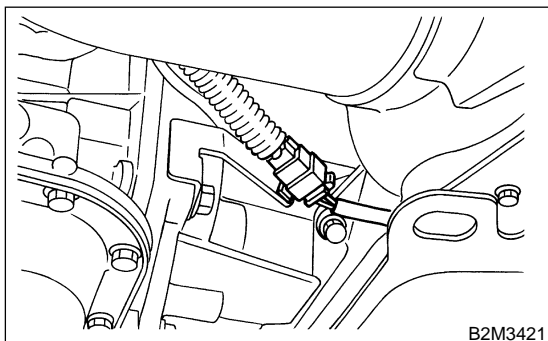
15) Install hanger bracket on right side of transmission.



16) Install front exhaust pipe and center exhaust pipe.



17) Connect rear oxygen sensor connector, and install rear oxygen sensor connector to bracket.

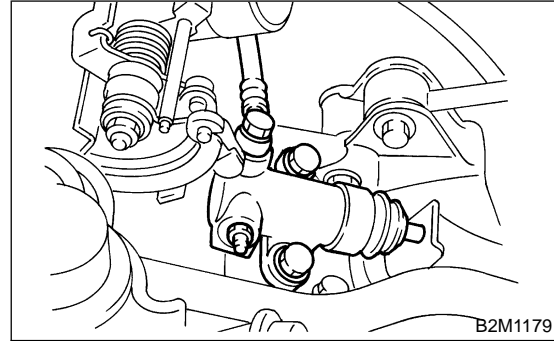


18) Install under cover.

19) Install operating cylinder.

Tightening torque:

37 N·m (3.8 kgf-m, 27.5 ft-lb)



20) Connect the following connectors.

(1) Transmission ground terminal

Tightening torque:

13 N·m (1.3 kgf-m, 9.4 ft-lb)

(2) Oxygen sensor connector

(3) Vehicle speed sensor connector

(4) Neutral position switch connector

(5) Back-up light switch connector

21) Install air cleaner case stay.

Tightening torque:

16 N·m (1.6 kgf-m, 11.6 ft-lb)

22) Install air cleaner case.

23) Connect battery ground cable.

24) Take off vehicle from lift arms.