

MT Gear Shift Lever

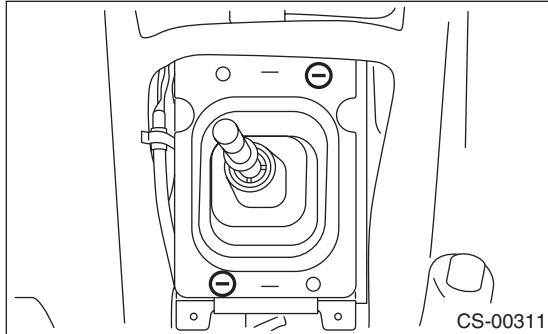
CONTROL SYSTEMS

8. MT Gear Shift Lever

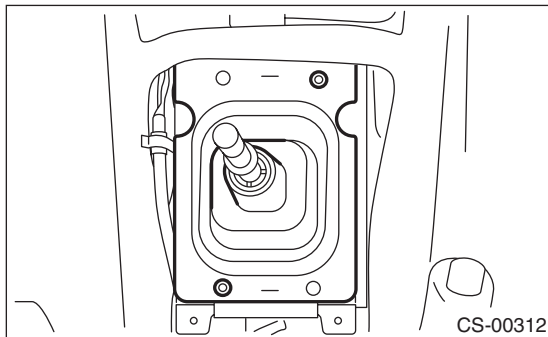
A: REMOVAL

1. 5MT MODEL

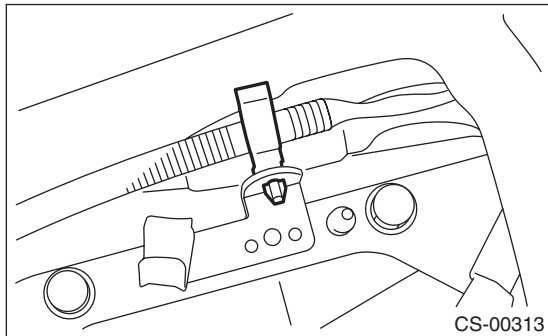
- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from the battery.
- 3) Remove the gear shift knob.
- 4) Remove the console box. <Ref. to EI-51, REMOVAL, Console Box.>
- 5) Remove the front cover assembly.
- 6) Remove the clamp.



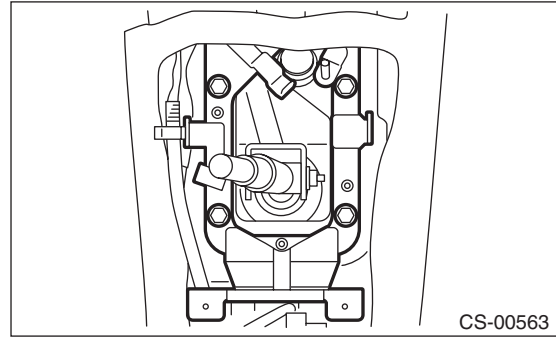
- 7) Remove the bushing and insulator assembly.



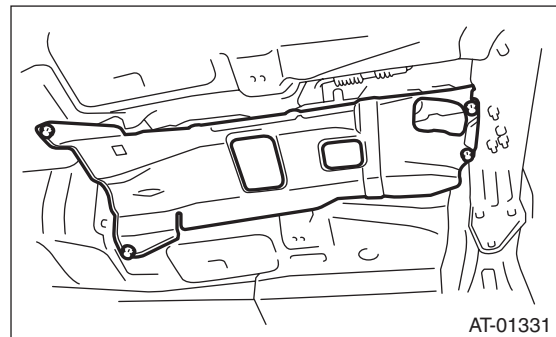
- 8) Remove the harness clamp from the plate assembly.



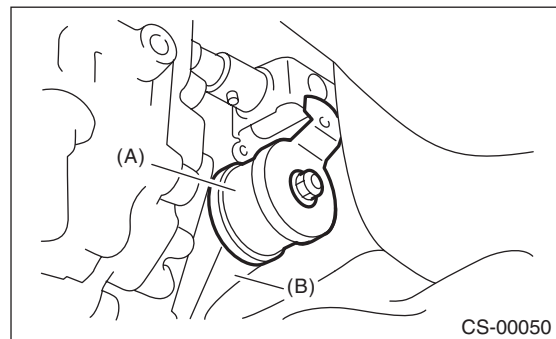
- 9) Remove the plate assembly from the vehicle body.



- 10) Lift the vehicle.
- 11) Remove the rear exhaust pipe and muffler.
 - SOHC and DOHC 2.0 L model
<Ref. to EX(H4SO)-8, REMOVAL, Rear Exhaust Pipe.> <Ref. to EX(H4SO)-10, REMOVAL, Muffler.>
 - DOHC turbo model
<Ref. to EX(H4DOTC)-12, REMOVAL, Rear Exhaust Pipe.> <Ref. to EX(H4DOTC)-11, REMOVAL, Joint Pipe.>
- 12) Remove the heat shield cover.

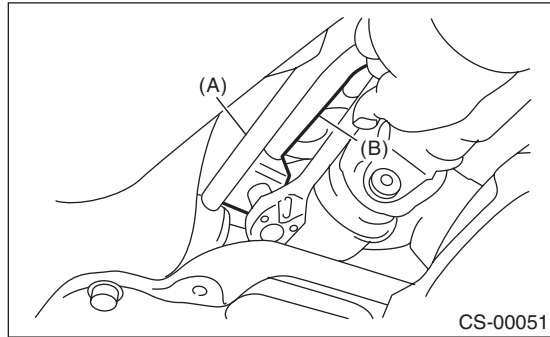


- 13) Remove the stay from transmission bracket.



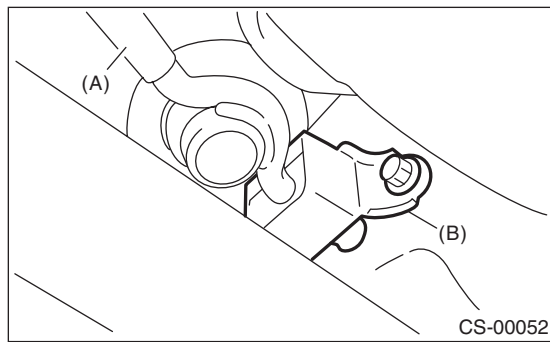
- (A) Stay
(B) Transmission bracket

14) Remove the rod from joint.



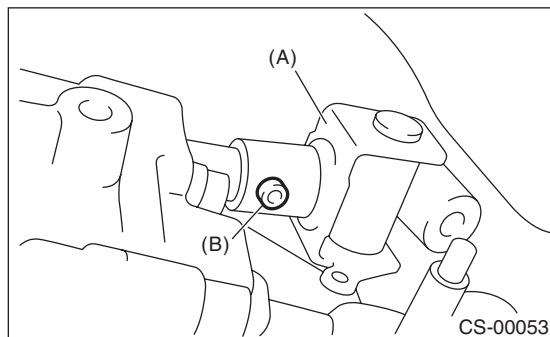
- (A) Stay
- (B) Rod

15) Remove the cushion rubber from the vehicle body.



- (A) Stay
- (B) Cushion rubber

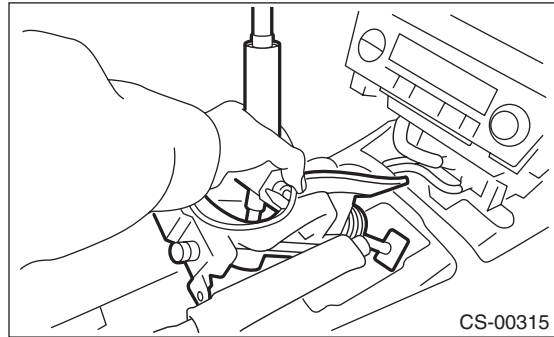
16) Extract the spring pin and remove the joint.



- (A) Joint
- (B) Spring pin

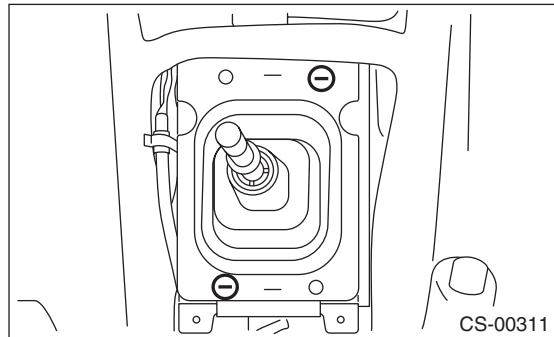
17) Lower the vehicle.

18) Remove the gear shift lever.

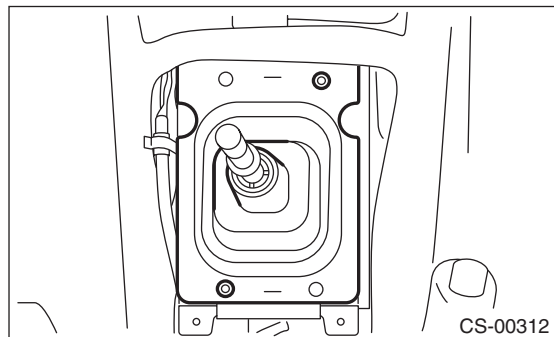


2. 6MT MODEL

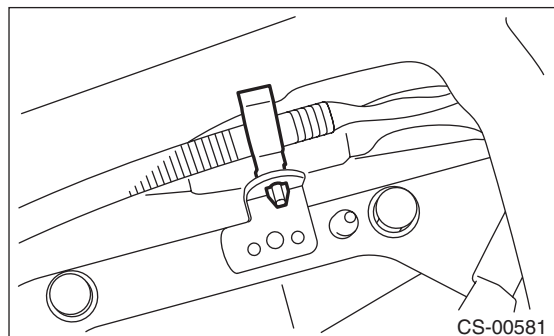
- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from the battery.
- 3) Remove the gear shift knob.
- 4) Remove the console box front. <Ref. to EI-51, REMOVAL, Console Box.>
- 5) Remove the front cover assembly.
- 6) Remove the clamp.



7) Remove the bushing and insulator assembly.



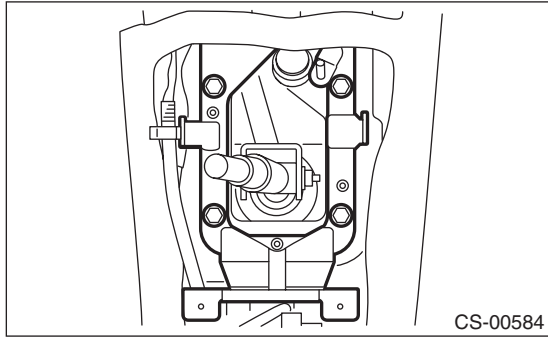
8) Remove the harness clamp from the plate assembly.



MT Gear Shift Lever

CONTROL SYSTEMS

9) Remove the plate assembly from the vehicle body.

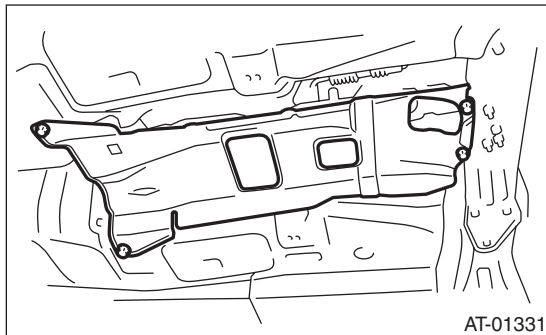


10) Lift the vehicle.

11) Remove the under cover.

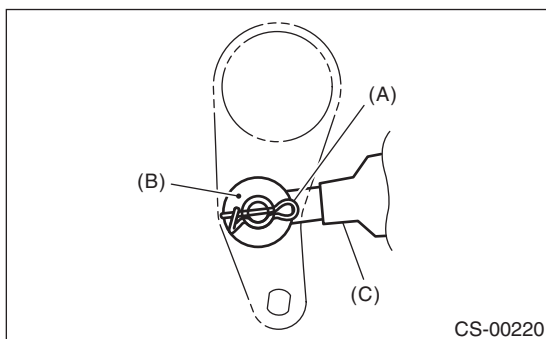
12) Remove the rear exhaust pipe and muffler.
<Ref. to EX(H6DO)-7, REMOVAL, Rear Exhaust Pipe.> <Ref. to EX(H6DO)-9, REMOVAL, Muffler.>

13) Remove the heat shield cover.



14) Remove the crossmember. <Ref. to 6MT-31, REMOVAL, Transmission Mounting System.>

15) Remove the snap pin and washer, and remove the reverse check cable from the reverse check lever.



(A) Snap pin

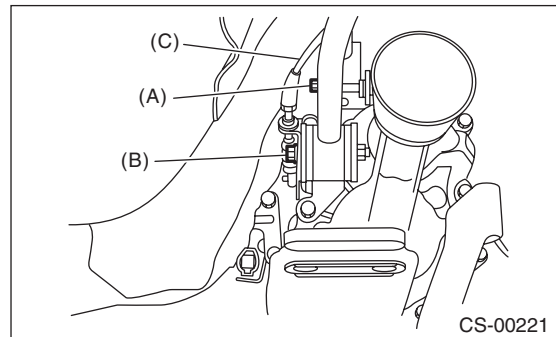
(B) Washer

(C) Reverse check cable

16) Move the transmission to the right side, and remove the joint COMPL, stay bolts and reverse check cable.

NOTE:

If the transmission is not moved aside, the joint COMPL and stay bolts may contact the body and cause damage.

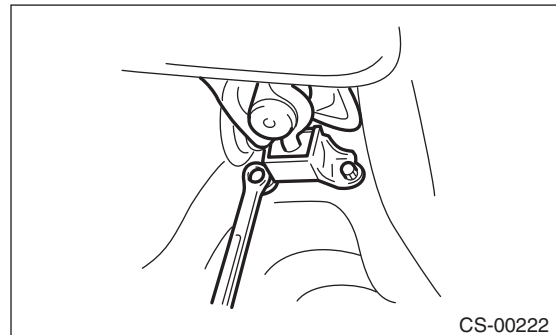


(A) Joint COMPL bolt

(B) Stay bolt

(C) Reverse check cable

17) Remove the cushion rubber from the vehicle body.



18) Lower the vehicle.

19) Remove the gear shift lever.

B: INSTALLATION

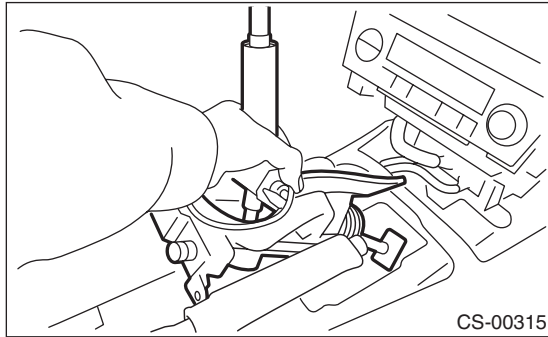
1. 5MT MODEL

1) Install the joint to the transmission and secure with a spring pin.

2) Insert the gear shift lever from the room side.

NOTE:

Insert the rod and the stay, and then temporarily set them onto the transmission mount.

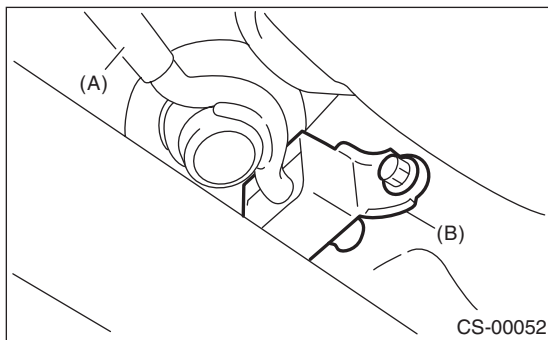


3) Lift the vehicle.

4) Mount the cushion rubber on the vehicle body.

Tightening torque:

18 N·m (1.8 kgf·m, 13.3 ft·lb)

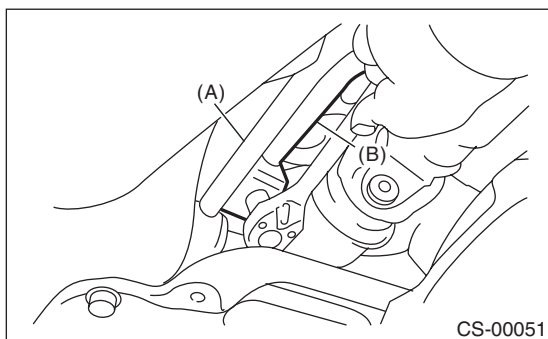


- (A) Stay
- (B) Cushion rubber

5) Using new self-locking nuts, connect the rod to the joint.

Tightening torque:

18 N·m (1.8 kgf·m, 13.3 ft·lb)

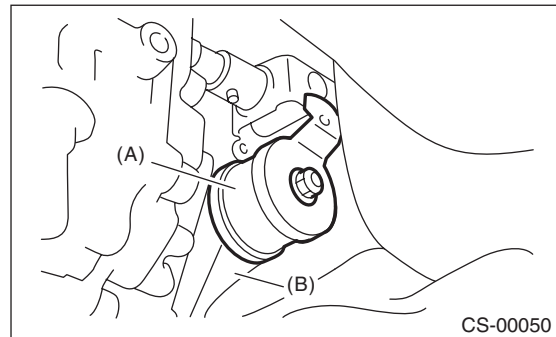


- (A) Stay
- (B) Rod

6) Using new self-locking nuts, connect the stay to the transmission bracket.

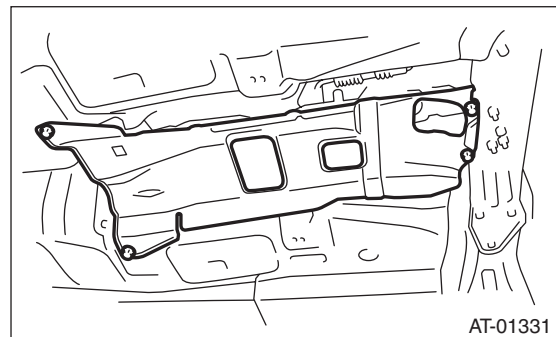
Tightening torque:

18 N·m (1.8 kgf·m, 13.3 ft·lb)



- (A) Stay
- (B) Transmission bracket

7) Install the heat shield cover.



8) Install the rear exhaust pipe and muffler.

- SOHC and DOHC 2.0 L model
<Ref. to EX(H4SO)-8, INSTALLATION, Rear Exhaust Pipe.> <Ref. to EX(H4SO)-10, INSTALLATION, Muffler.>
- DOHC turbo model
<Ref. to EX(H4DOTC)-12, INSTALLATION, Rear Exhaust Pipe.> <Ref. to EX(H4DOTC)-11, INSTALLATION, Joint Pipe.>

9) Install the plate assembly to the vehicle body.

Tightening torque:

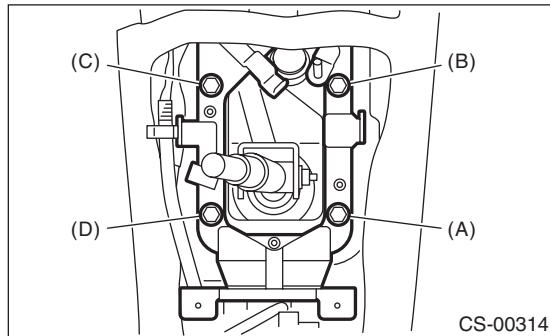
18 N·m (1.8 kgf·m, 13.3 ft·lb)

- (1) Set the plate assembly to the vehicle.
- (2) Temporarily tighten the bolt (A).
- (3) Tighten the bolt (B).
- (4) Tighten the bolt (A).

MT Gear Shift Lever

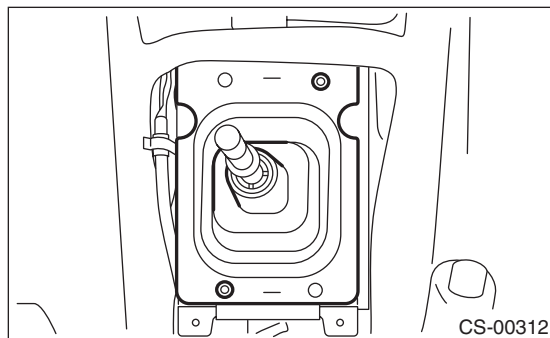
CONTROL SYSTEMS

(5) Tighten the bolts (C) and (D).



10) Install the harness clamp to the plate.

11) Install the boot and insulator assembly, and secure with a clamp.



12) Install the front cover assembly.

13) Install the console box. <Ref. to EI-51, INSTALLATION, Console Box.>

2. 6MT MODEL

1) Insert the gear shift lever from the room side.

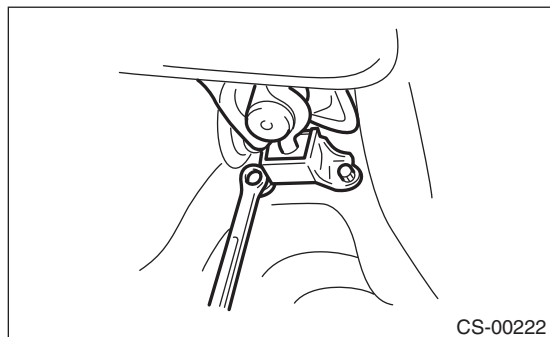
NOTE:

After inserting the rod and stay, temporarily put them onto transmission mount.

2) Mount the cushion rubber on the vehicle body.

Tightening torque:

18 N·m (1.8 kgf-m, 13.3 ft-lb)

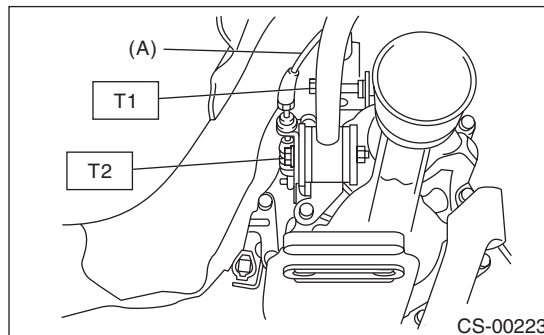


3) Move the transmission to the right side of the vehicle, and attach the joint COMPL and stay.

Tightening torque:

T1: 12 N·m (1.2 kgf-m, 8.9 ft-lb)

T2: 32 N·m (3.3 kgf-m, 23.6 ft-lb)



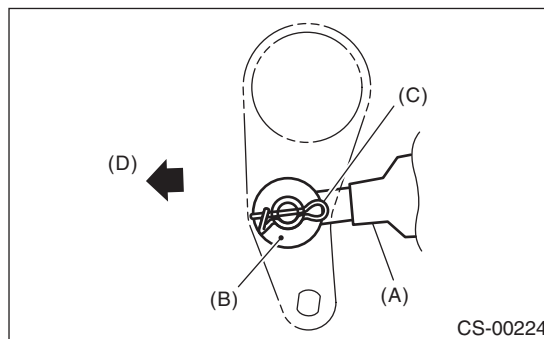
(A) Reverse check cable

4) Install the cross member. <Ref. to 6MT-31, INSTALLATION, Transmission Mounting System.>

5) Install the reverse cable end, washer and snap pin to the reverse check lever.

NOTE:

- Take care to install the snap pin in proper direction.
- Before installing, adjust the reverse check cable. <Ref. to CS-56, ADJUSTMENT, Reverse Check Cable.>



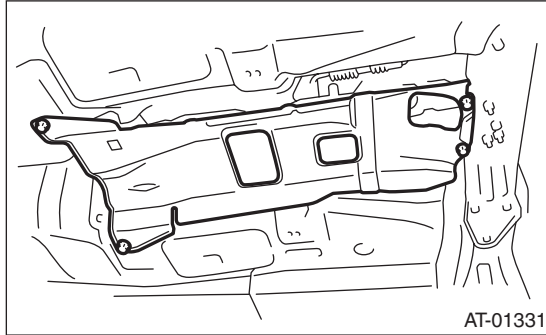
(A) Reverse check cable

(B) Washer

(C) Snap pin

(D) Front side

6) Install the heat shield cover.



7) Install the rear exhaust pipe and muffler. <Ref. to EX(H6DO)-7, INSTALLATION, Rear Exhaust Pipe.> <Ref. to EX(H6DO)-9, INSTALLATION, Muffler.>

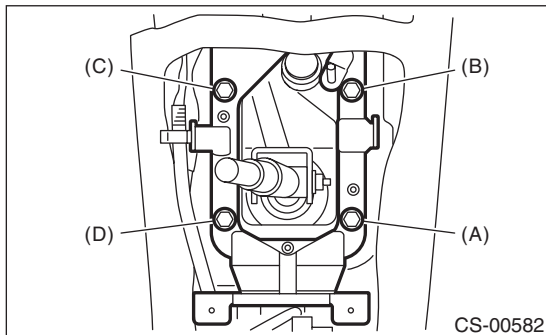
8) Install the under cover.

9) Install the plate assembly to the vehicle body.

Tightening torque:

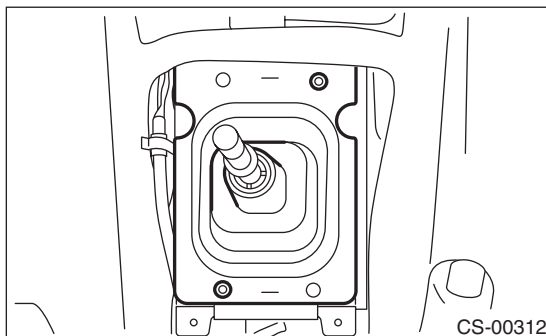
18 N·m (1.8 kgf-m, 13.3 ft-lb)

- (1) Set the plate assembly to the vehicle.
- (2) Temporarily tighten the bolt (A).
- (3) Tighten the bolt (B).
- (4) Tighten the bolt (A).
- (5) Tighten the bolts (C) and (D).



10) Install the harness clamp to the plate assembly.

11) Install the boot and insulator assembly, and secure with a clamp.



12) Install the front cover assembly.

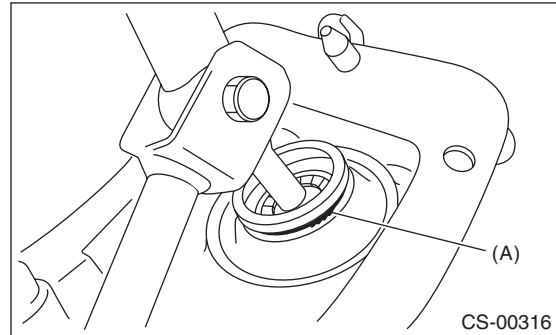
13) Install the console box. <Ref. to EI-51, INSTALLATION, Console Box.>

14) Check that the gear shift can be shifted to each gear properly.

C: DISASSEMBLY

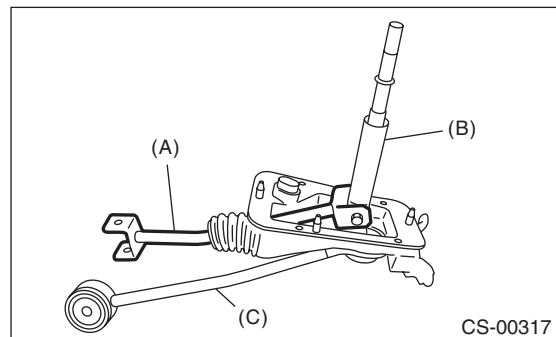
1. 5MT MODEL

1) Remove the lock wires.



(A) Lock wire

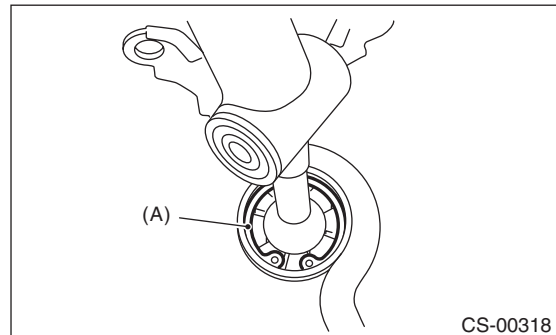
2) Remove the rod from lever.



(A) Rod
(B) Lever
(C) Stay

3) Separate the rod and inner boot.

4) Remove the snap ring from the stay.

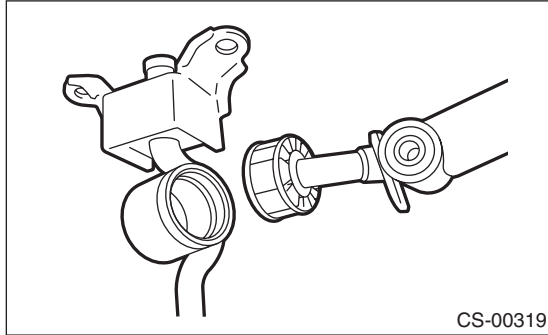


(A) Snap ring

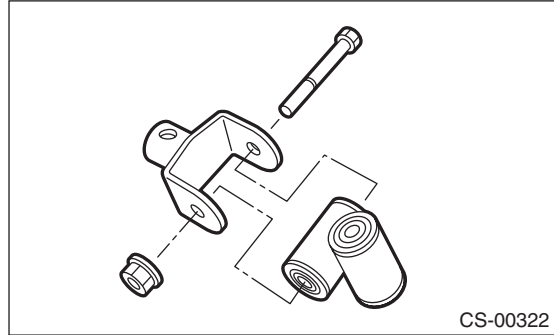
MT Gear Shift Lever

CONTROL SYSTEMS

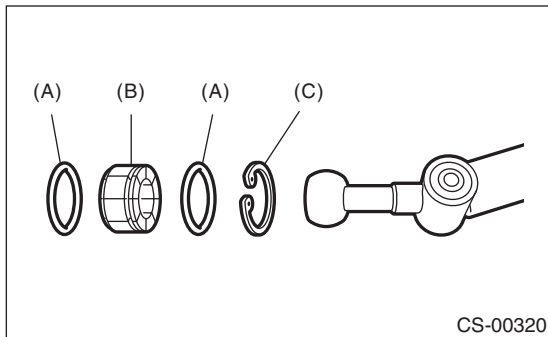
5) Separate the gear shift lever and the stay.



8) Remove the boss from the joint.

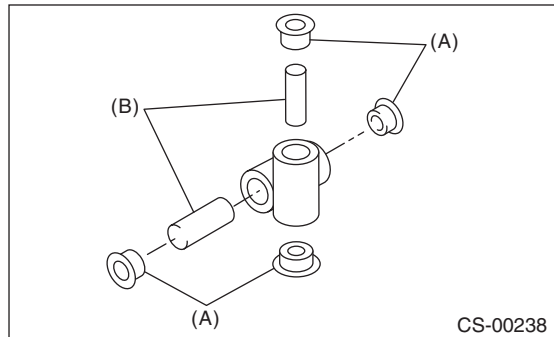


6) Remove the boot, bushing and snap ring from gear shift lever.



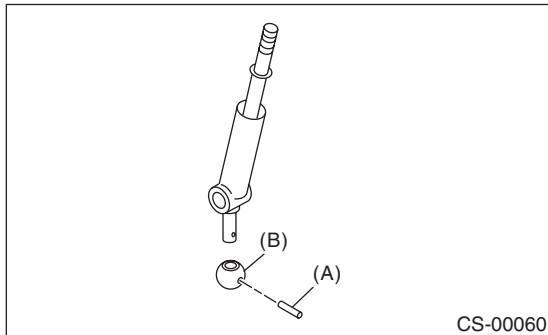
- (A) O-ring
- (B) Bushing
- (C) Snap ring

9) Remove the bushing and spacer from the boss.



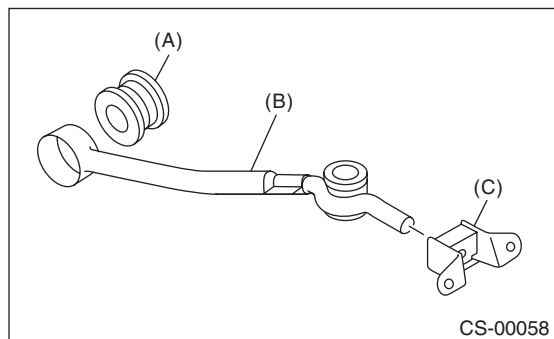
- (A) Bushing
- (B) Spacer

7) Remove the spring pin, and then remove the bushing and snap ring.



- (A) Spring pin
- (B) Bushing

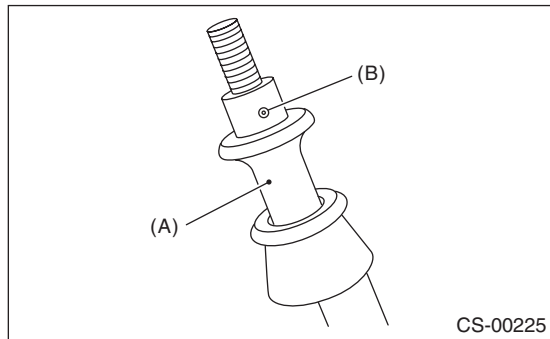
10) Remove the bushing and cushion rubber from the stay.



- (A) Bushing B
- (B) Stay
- (C) Cushion rubber

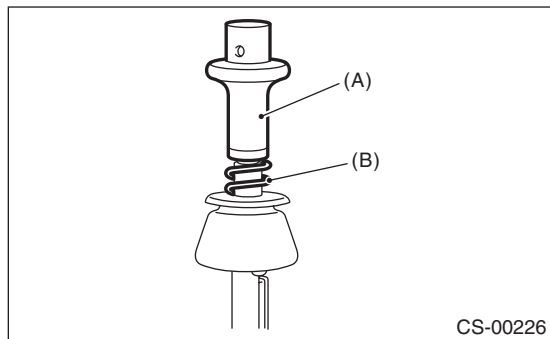
2. 6MT MODEL

1) Remove the spring pin from the slider.



- (A) Slider
- (B) Spring pin

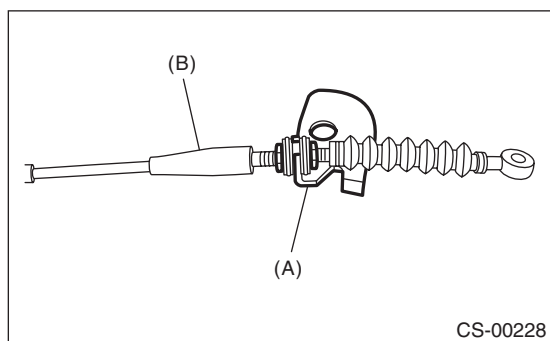
2) Remove the slider and spring.



- (A) Slider
- (B) Spring

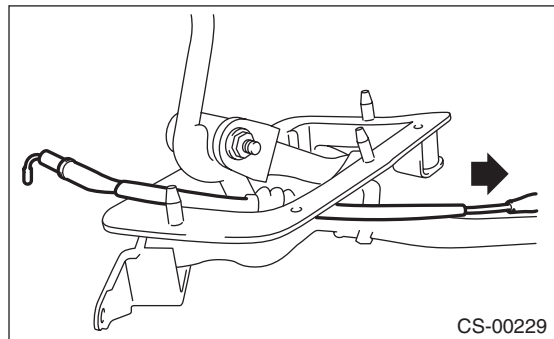
3) Cut the band clip.

4) Remove the reverse check cable from the cable plate.

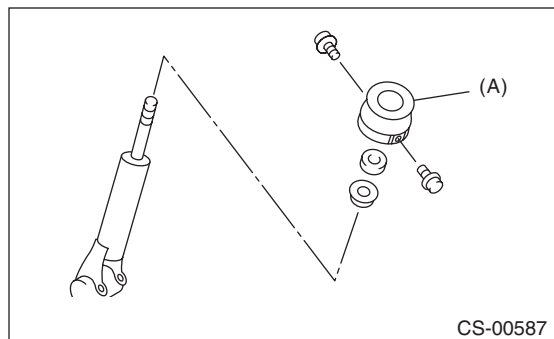


- (A) Cable plate
- (B) Reverse check cable

5) Remove the reverse check cable from the gear shift assembly.



6) Remove the holder and spring.

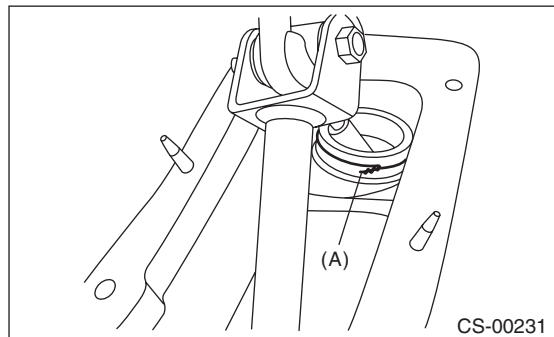


- (A) Holder

7) Disassemble the lock wires.

NOTE:

Do not reuse the lock wire.

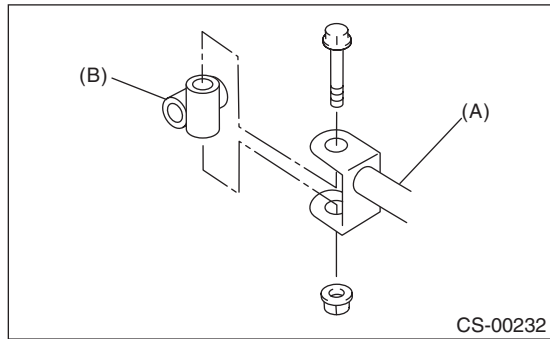


- (A) Lock wire

MT Gear Shift Lever

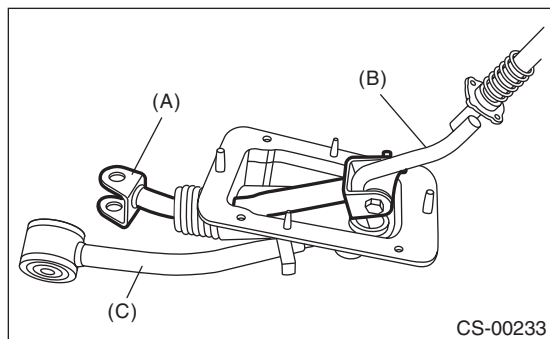
CONTROL SYSTEMS

8) Remove the boss from the rod.



- (A) Rod
- (B) Boss

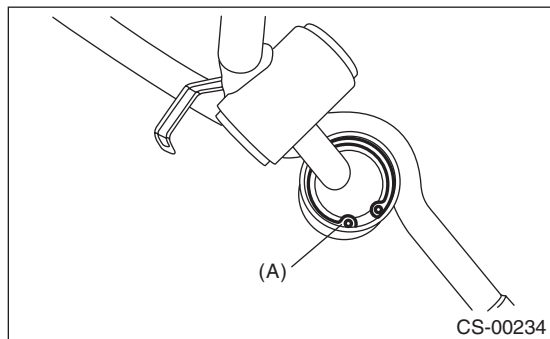
9) Remove the rod from lever.



- (A) Rod
- (B) Lever
- (C) Stay

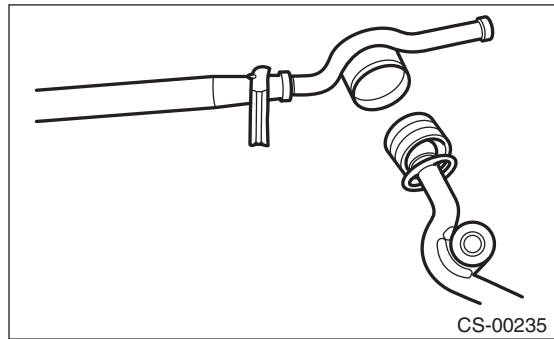
10) Separate the rod and inner boot.

11) Remove the snap ring from the stay.

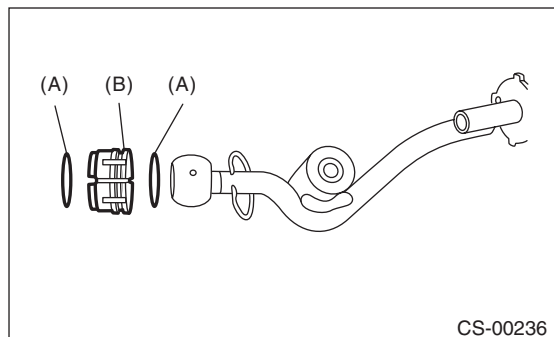


- (A) Snap ring

12) Separate the gear shift lever and the stay.

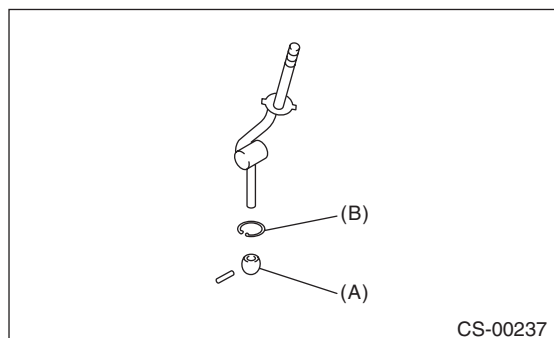


13) Remove the boot and bushing from gear shift lever.



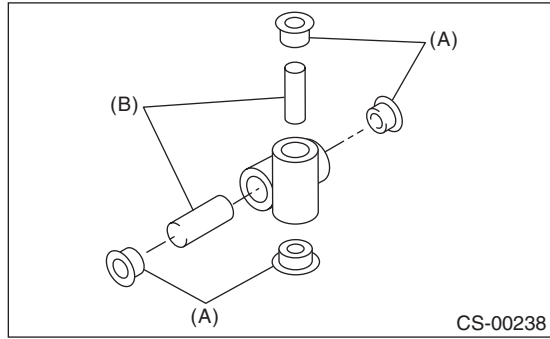
- (A) O-ring
- (B) Bushing

14) Remove the spring pin, and then remove the bushing and snap ring.



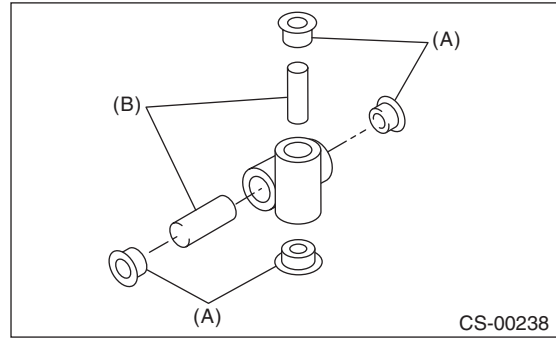
- (A) Bushing
- (B) Snap ring

15) Remove the bushing and spacer from the boss.



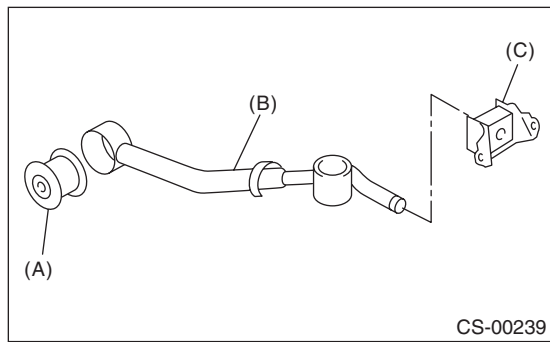
- (A) Bushing
- (B) Spacer

2) Install the bushing and spacer to boss.



- (A) Bushing
- (B) Spacer

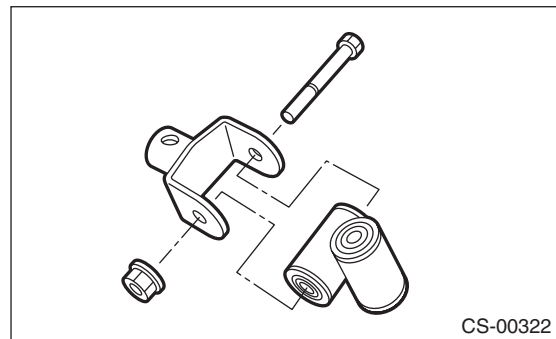
16) Remove the bushing and cushion rubber from the stay.



- (A) Bushing
- (B) Stay
- (C) Cushion rubber

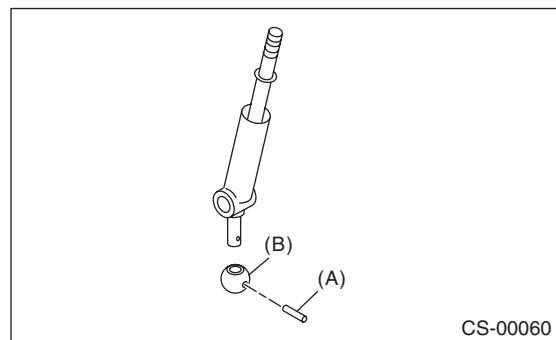
3) Using new self-locking nuts, install the boss to the joint.

Tightening torque:
18 N·m (1.8 kgf·m, 13.3 ft·lb)



4) Install the snap ring to gear shift lever and install the bushing.

NOTE:
 Apply grease to the bushing.



- (A) Spring pin
- (B) Bushing

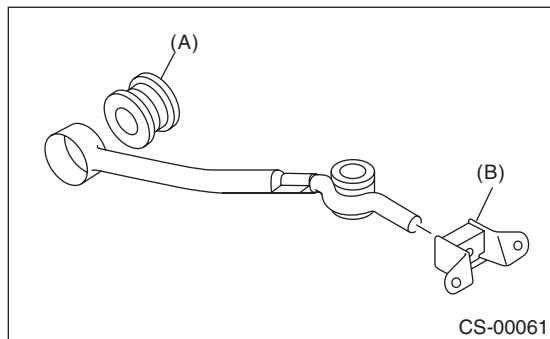
D: ASSEMBLY

1. 5MT MODEL

NOTE:

- Clean all the parts before assembly.
- Apply grease [KOPR-KOTE (Part No. 003603001) or equivalent] to each part.

1) Mount the bushing and cushion rubber to the stay.

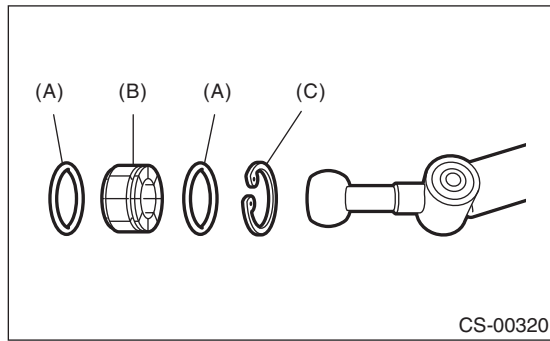


- (A) Bushing
- (B) Cushion rubber

MT Gear Shift Lever

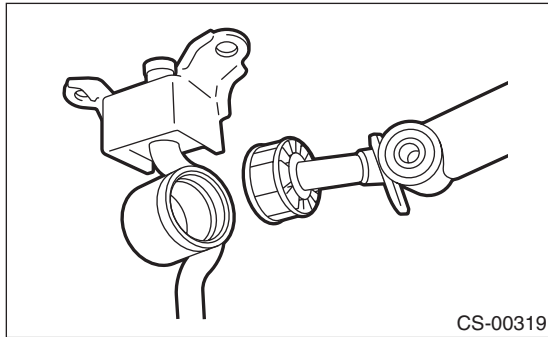
CONTROL SYSTEMS

5) Apply grease to the bushing and O-ring, and then install to gear shift lever.

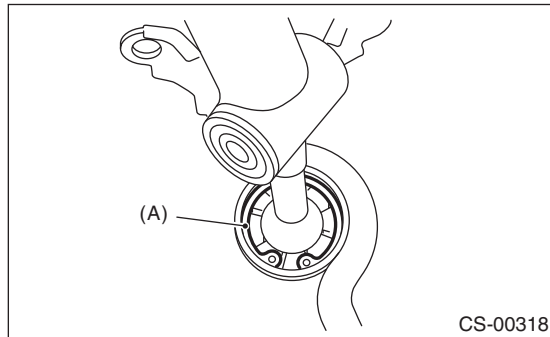


- (A) O-ring
- (B) Bushing
- (C) Snap ring

6) Apply sufficient grease into boss, and then install the gear shift lever to the stay.



7) Install the washer and snap ring.

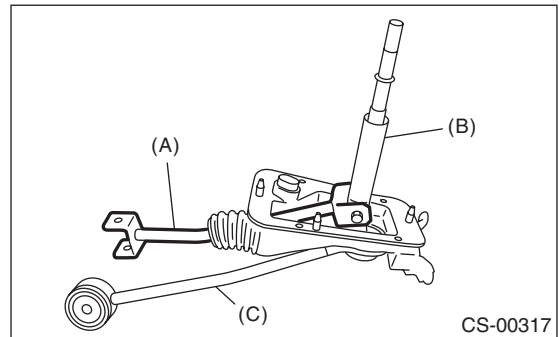


- (A) Snap ring

8) Insert the gear shift lever and rod into boot hole.

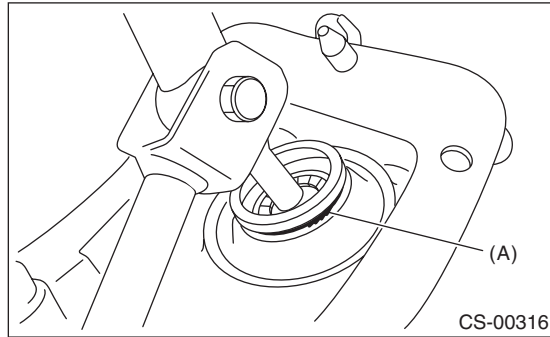
9) Install the rod.

Tightening torque:
12 N·m (1.2 kgf·m, 8.9 ft·lb)



- (A) Rod
- (B) Lever
- (C) Stay

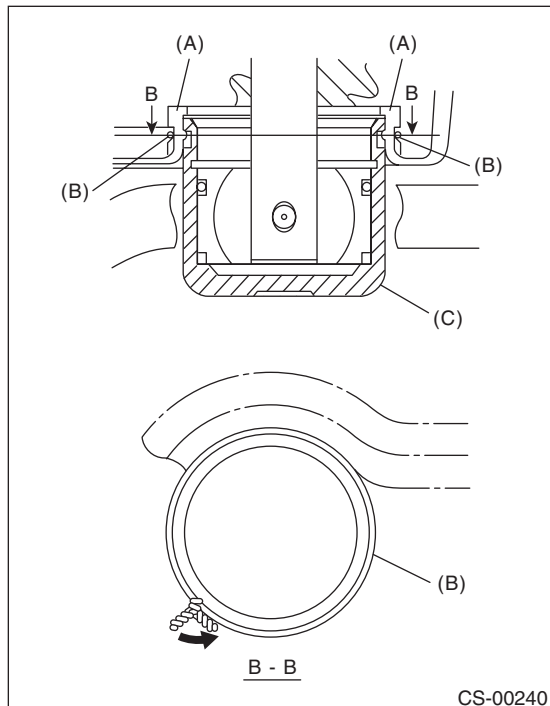
10) Install a new lock wire.



(A) Lock wire

NOTE:

- Install the lock wire to the stay groove.
- Bend the extra wire to the same direction of lock wire winding.



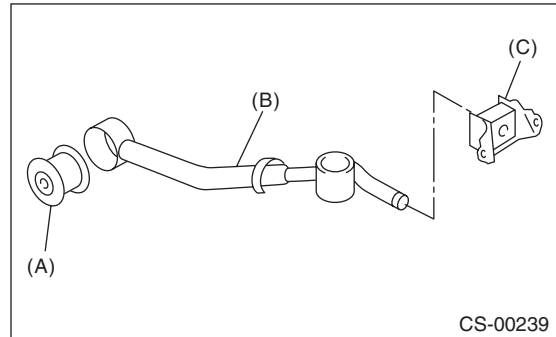
(A) Inner boot
(B) Lock wire
(C) Stay

2. 6MT MODEL

NOTE:

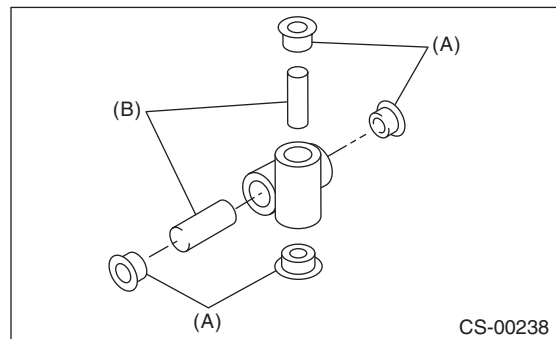
- Clean all the parts before assembly.
- Apply NIGTIGHT LYW No. 2 grease or equivalent to each part.

1) Mount the bushing and cushion rubber to the stay.



(A) Bushing
(B) Stay
(C) Cushion rubber

2) Install the bushing and spacer to boss.

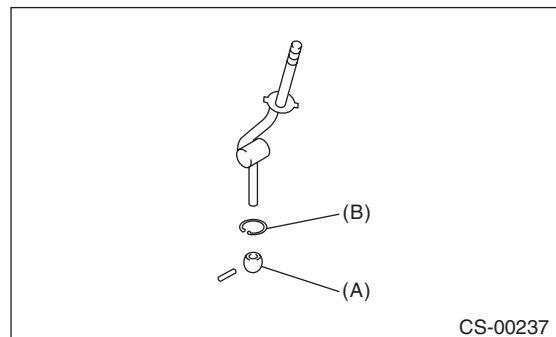


(A) Bushing
(B) Spacer

3) Install the snap ring to gear shift lever and install the bushing.

NOTE:

Apply grease to the bushing.

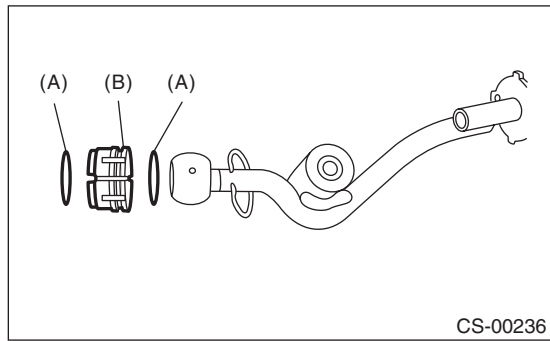


(A) Bushing
(B) Snap ring

MT Gear Shift Lever

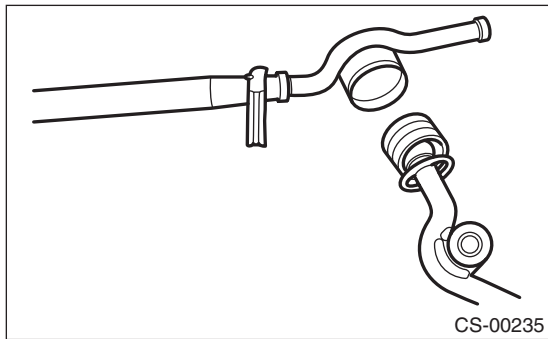
CONTROL SYSTEMS

4) Apply grease to the bushing and O-ring, and then install to gear shift lever.

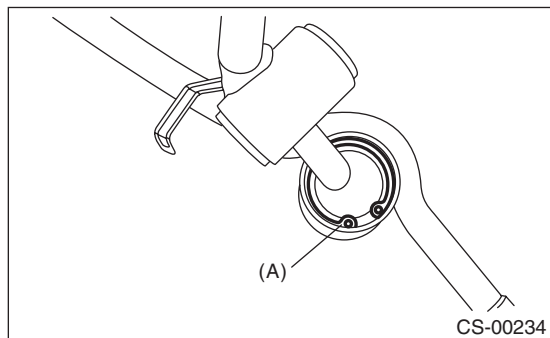


- (A) O-ring
- (B) Bushing

5) Apply sufficient grease into boss, and then install the gear shift lever to the stay.



6) Install the washer and snap ring.

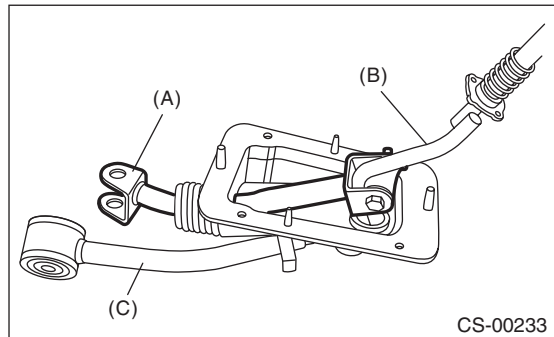


- (A) Snap ring

7) Insert the gear shift lever and rod into boot hole.

8) Install the rod.

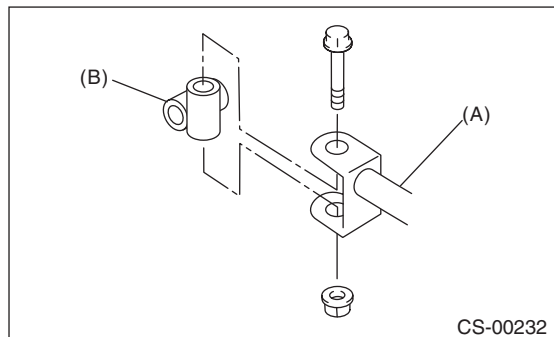
Tightening torque:
12 N·m (1.2 kgf-m, 8.9 ft-lb)



- (A) Rod
- (B) Lever
- (C) Stay

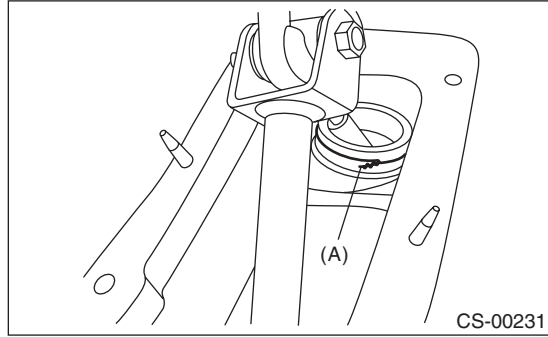
9) Install the boss to the rod.

Tightening torque:
12 N·m (1.2 kgf-m, 8.9 ft-lb)



- (A) Rod
- (B) Boss

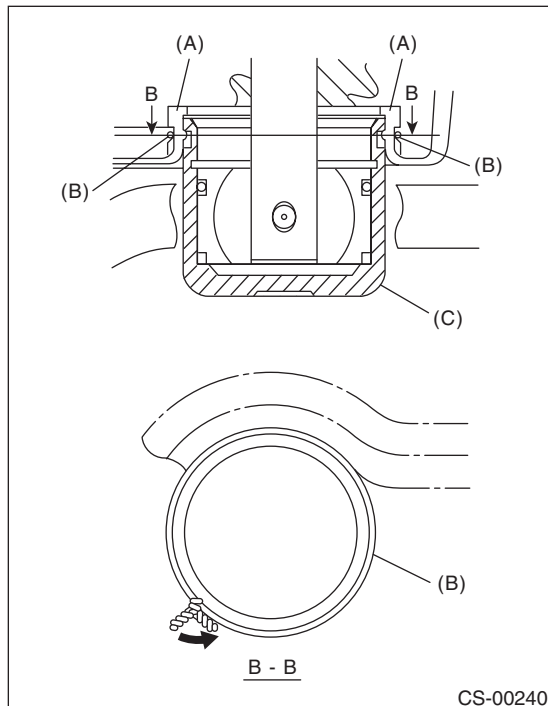
10) Install a new lock wire.



(A) Lock wire

NOTE:

- Install the lock wire to the stay groove.
- Bend the extra wire to the same direction of lock wire winding.

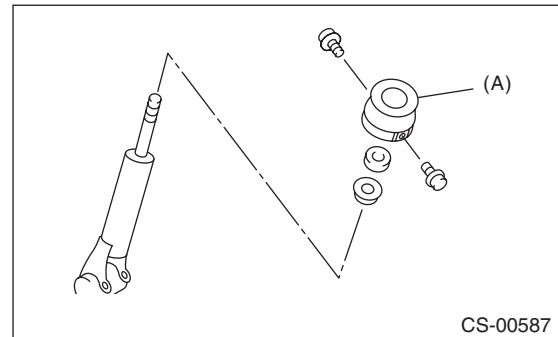


(A) Inner boot
(B) Lock wire
(C) Stay

11) Install the holder.

Tightening torque:

1.3 N-m (0.13 kgf-m, 0.96 ft-lb)



(A) Holder

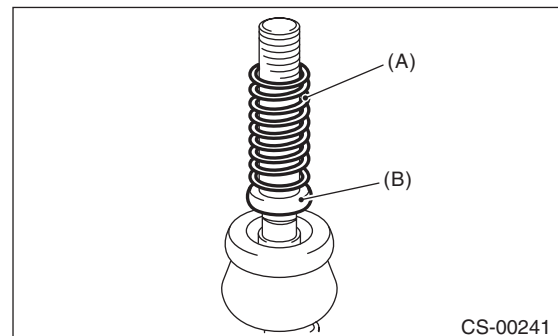
12) Insert the reverse check cable into the boot hole.

13) Insert the reverse check cable to the gear shift assembly, and affix with a band clip.

NOTE:

- Cut the excess band clip.
- Make sure that the reverse check cable is inserted into the gear shift lever assembly without inter-space.

14) Attach the seat cushion and spring.



(A) Spring
(B) Seat cushion

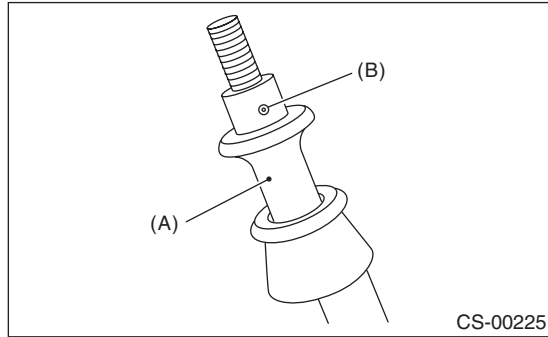
MT Gear Shift Lever

CONTROL SYSTEMS

15) Using the spring pin, fix the end of reverse check cable and slider.

NOTE:

Apply grease to the moving part of slider.

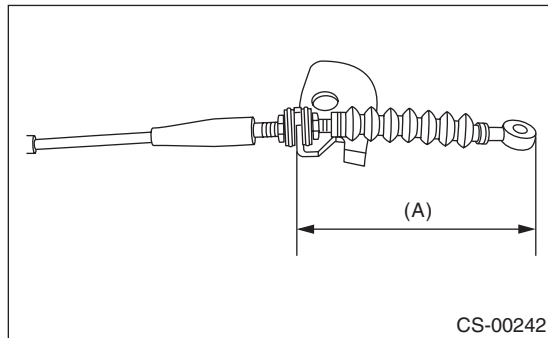


- (A) Slider
- (B) Spring pin

16) With the cable pulled (the slider is lowered), adjust the distance between the edge of cable plate and the reverse check cable to 84 mm (3.31 in), and tighten the lock nut.

Tightening torque:

6 N·m (0.6 kgf·m, 4.4 ft·lb)

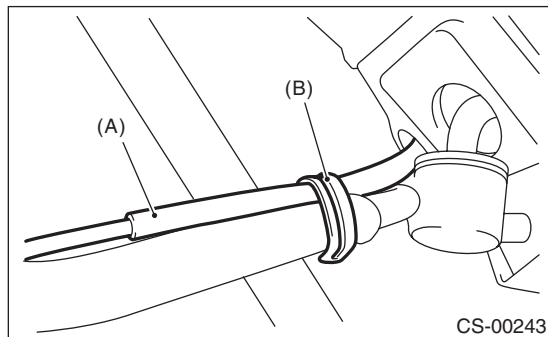


- (A) 84 mm (3.31 in)

17) Fix the reverse check cable to the stay clip.

NOTE:

Install the reverse check cable on top of the stay.

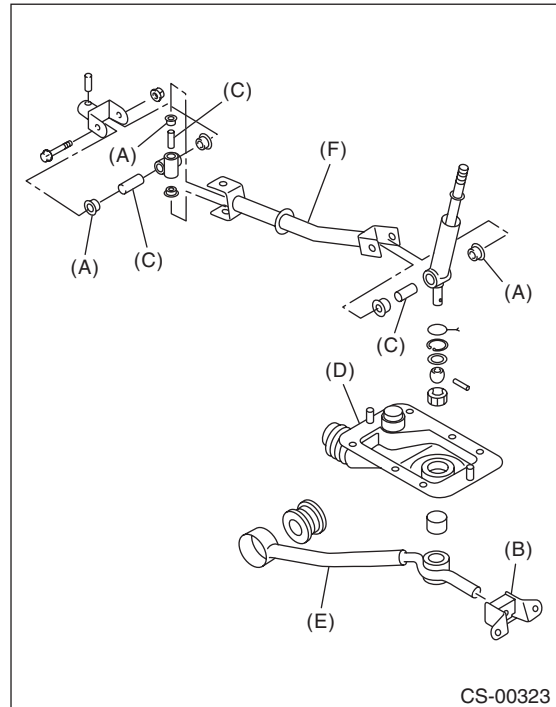


- (A) Reverse check cable
- (B) Clip

E: INSPECTION

1. 5MT MODEL

1) Check the parts (bushing, cushion rubber, spacer, boot, stay and rod, etc.) for deformation, damage and wear. If necessary, correct or replace faulty parts. Compare the removed parts with new parts to judge if there are damages or not.



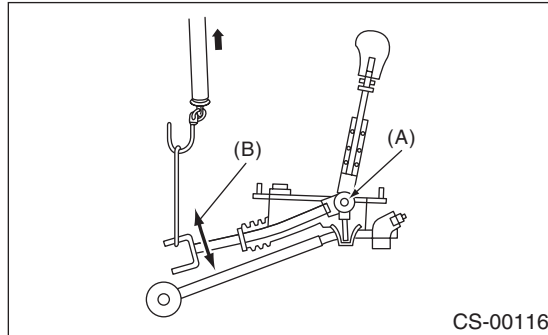
- (A) Bushing
- (B) Cushion rubber
- (C) Spacer
- (D) Boot
- (E) Stay
- (F) Rod

2) Check the swing torque of rod linked with the gear shift lever.

If the torque exceeds the specifications, replace the bushing or retighten nuts.

Swing torque:

3.7 N (0.38 kgf, 0.83 lbf) or less



- (A) Pivot
- (B) Swing torque

2. 6MT MODEL

Check the parts (bushing, cushion rubber, spacer, boot, stay and rod, etc.) for deformation, damage and wear. If necessary, correct or replace faulty parts. Compare the removed parts with new parts to judge if there are damages or not.

