

TRANSMISSION SECTION

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.

CONTROL SYSTEM**CS****AUTOMATIC TRANSMISSION****4AT****AUTOMATIC TRANSMISSION
(DIAGNOSTIC)****4AT(H4SO)****AUTOMATIC TRANSMISSION
(DIAGNOSTIC)****4AT(H4DOTC)****AUTOMATIC TRANSMISSION
(DIAGNOSTIC)****4AT(H4DOTC 2.5)****MANUAL TRANSMISSION AND
DIFFERENTIAL****5MT****CLUTCH SYSTEM****CL**

CONTROL SYSTEM



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General Description

CONTROL SYSTEM

1. General Description

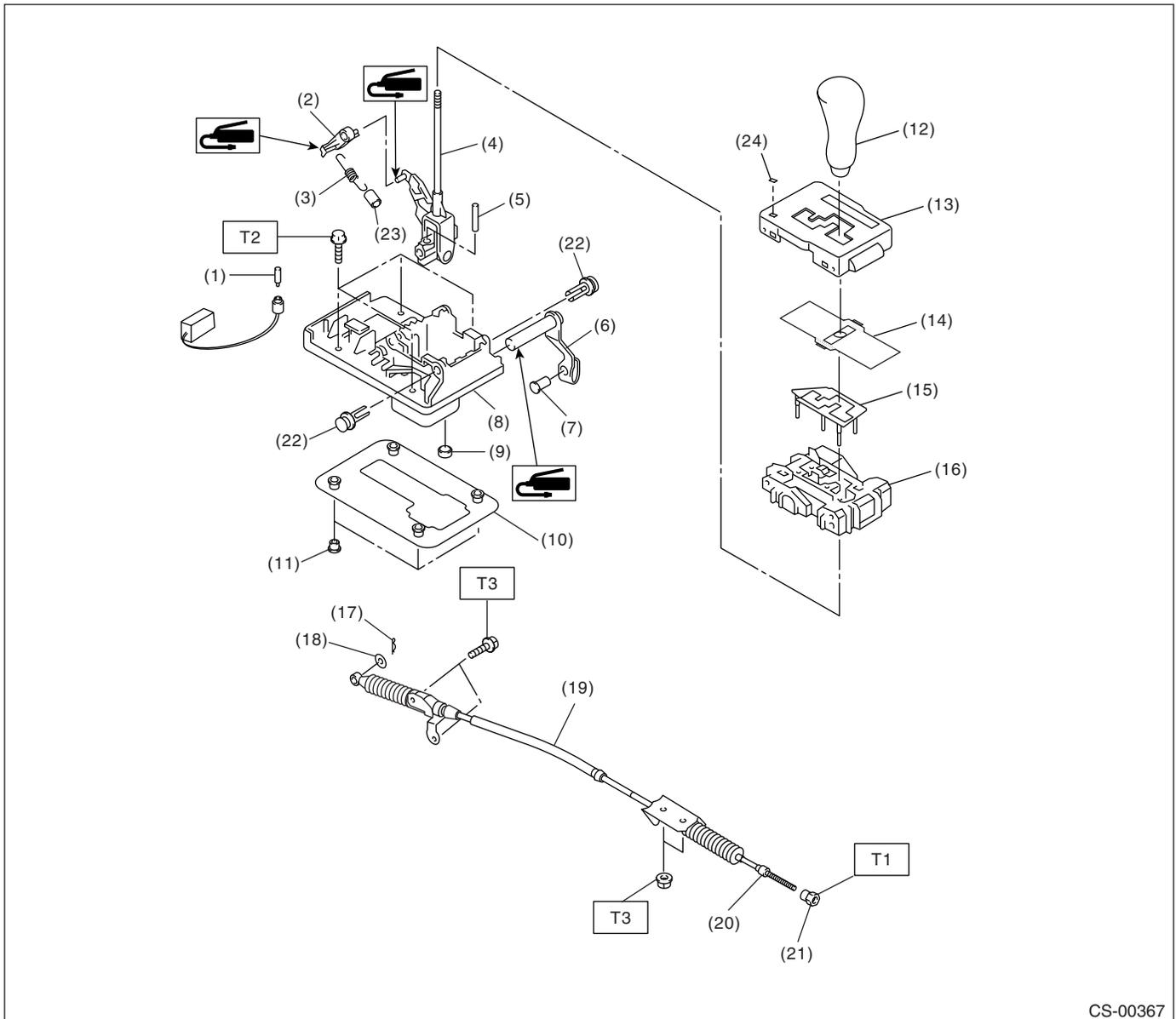
A: SPECIFICATION

Item	Specification
Swing torque of rod against lever N (kgf, lb)	3.7 (0.38, 0.83) or less

B: COMPONENT

1. AT SELECT LEVER

• NON-TURBO MODEL



CS-00367

- | | | |
|-----------------------|----------------------|----------------------|
| (1) Bulb | (11) Spacer | (21) Adjusting nut A |
| (2) Detent arm | (12) Grip | (22) Clip |
| (3) Detent spring | (13) Indicator cover | (23) Tube |
| (4) Select lever ASSY | (14) Blind | (24) Cover |
| (5) Spring pin | (15) Cushion | |
| (6) Arm ASSY | (16) Guide plate | |
| (7) Bushing ASSY | (17) Snap pin | |
| (8) Base plate | (18) Washer | |
| (9) Grommet | (19) Select cable | |
| (10) Packing | (20) Adjusting nut B | |

Tightening torque: N·m (kgf·m, ft·lb)

T1: 7.5 (0.76, 5.5)

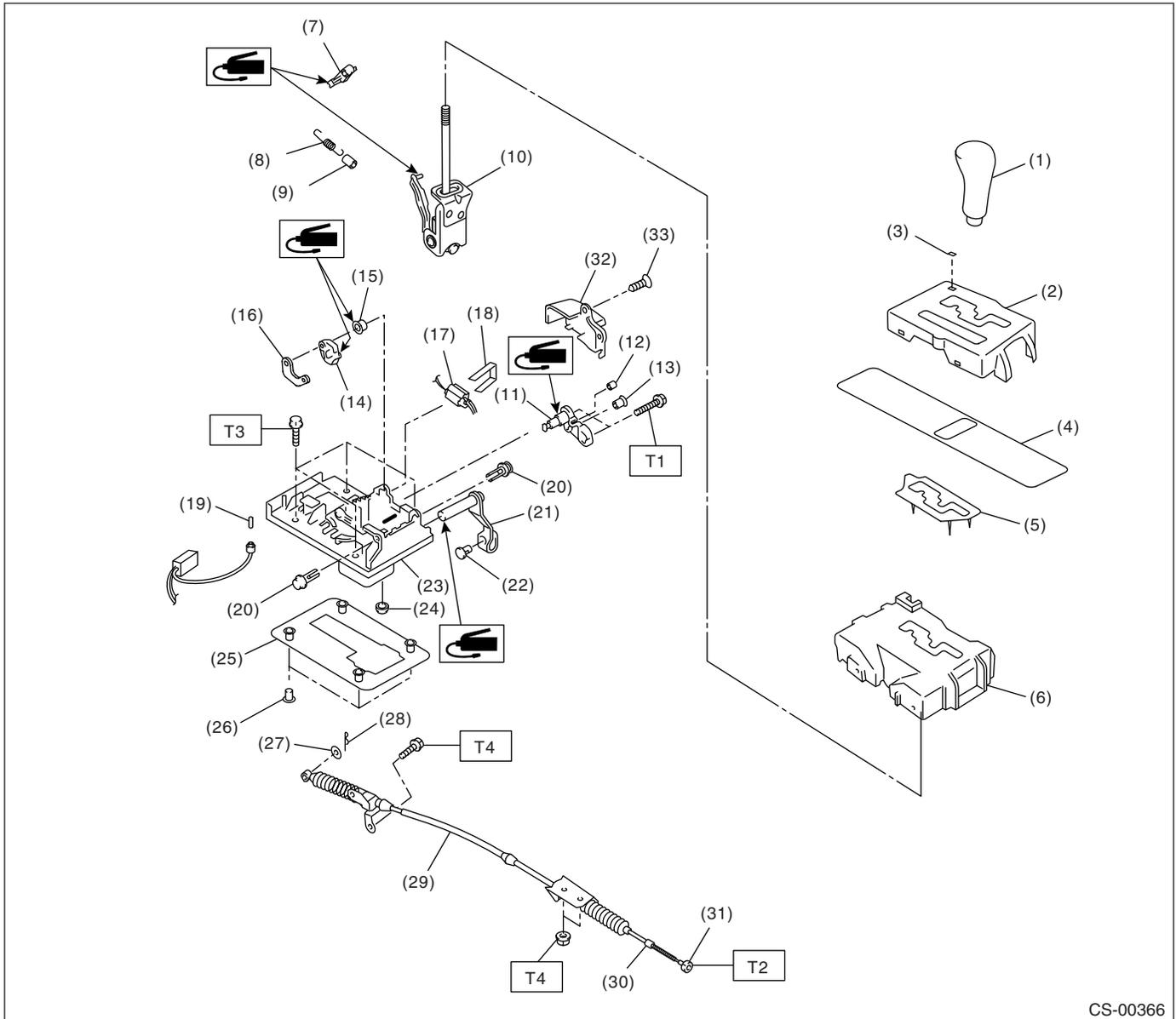
T2: 13 (1.3, 9.4)

T3: 18 (1.8, 13.0)

General Description

CONTROL SYSTEM

• TURBO MODEL



CS-00366

- | | | |
|------------------------|------------------------|----------------------|
| (1) Grip | (14) Lock plate A | (27) Washer |
| (2) Indicator cover | (15) Bushing | (28) Snap pin |
| (3) Cover | (16) Lock plate C | (29) Select cable |
| (4) Blind | (17) N-R lock solenoid | (30) Adjusting nut B |
| (5) Cushion | (18) Clamp | (31) Adjusting nut A |
| (6) Guide plate | (19) Bulb | (32) Cover |
| (7) Detent arm | (20) Clip | (33) Clip |
| (8) Detent spring | (21) Arm ASSY | |
| (9) Tube | (22) Bushing ASSY | |
| (10) Select lever ASSY | (23) Base plate ASSY | |
| (11) Lock plate B | (24) Grommet | |
| (12) Bushing | (25) Packing | |
| (13) Bushing | (26) Spacer | |

Tightening torque: N·m (kgf·m, ft·lb)

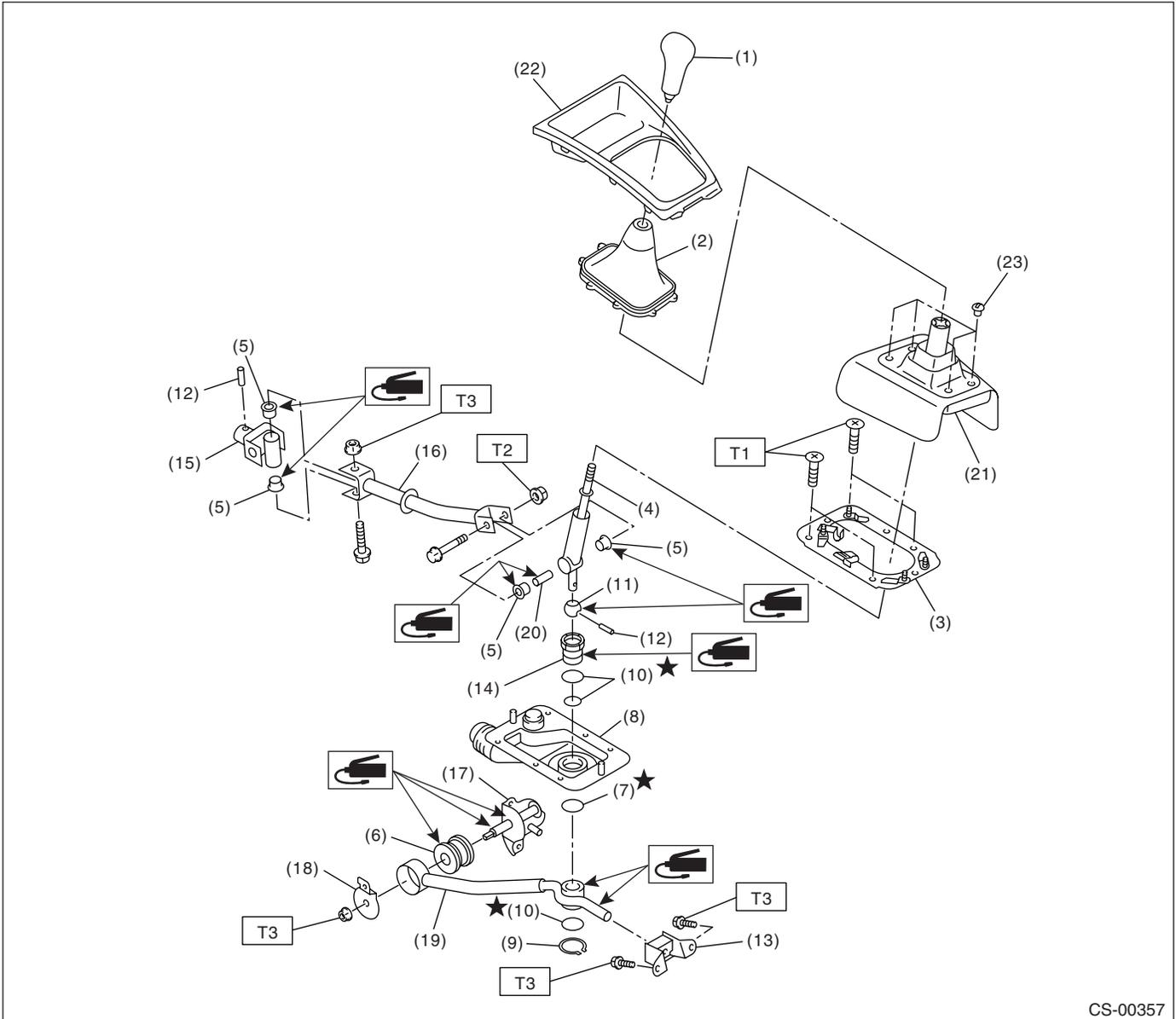
T1: 2.0 (0.2, 1.4)

T2: 7.5 (0.76, 5.5)

T3: 13 (1.3, 9.4)

T4: 18 (1.8, 13.0)

2. MT GEAR SHIFT LEVER



CS-00357

- | | | |
|----------------------|---------------------|----------------------------|
| (1) Gear shift knob | (11) Bushing A | (21) Boot & insulator ASSY |
| (2) Console boot | (12) Spring pin | (22) Front cover |
| (3) Plate ASSY | (13) Cushion rubber | (23) Clamp |
| (4) Gear shift lever | (14) Bushing B | |
| (5) Bushing | (15) Joint | |
| (6) Bushing | (16) Rod | |
| (7) Lock wire | (17) Bracket | |
| (8) Boot | (18) Washer | |
| (9) Snap ring | (19) Stay | |
| (10) O-ring | (20) Spacer | |

Tightening torque: N·m (kgf·m, ft·lb)

T1: 7.5 (0.76, 5.5)

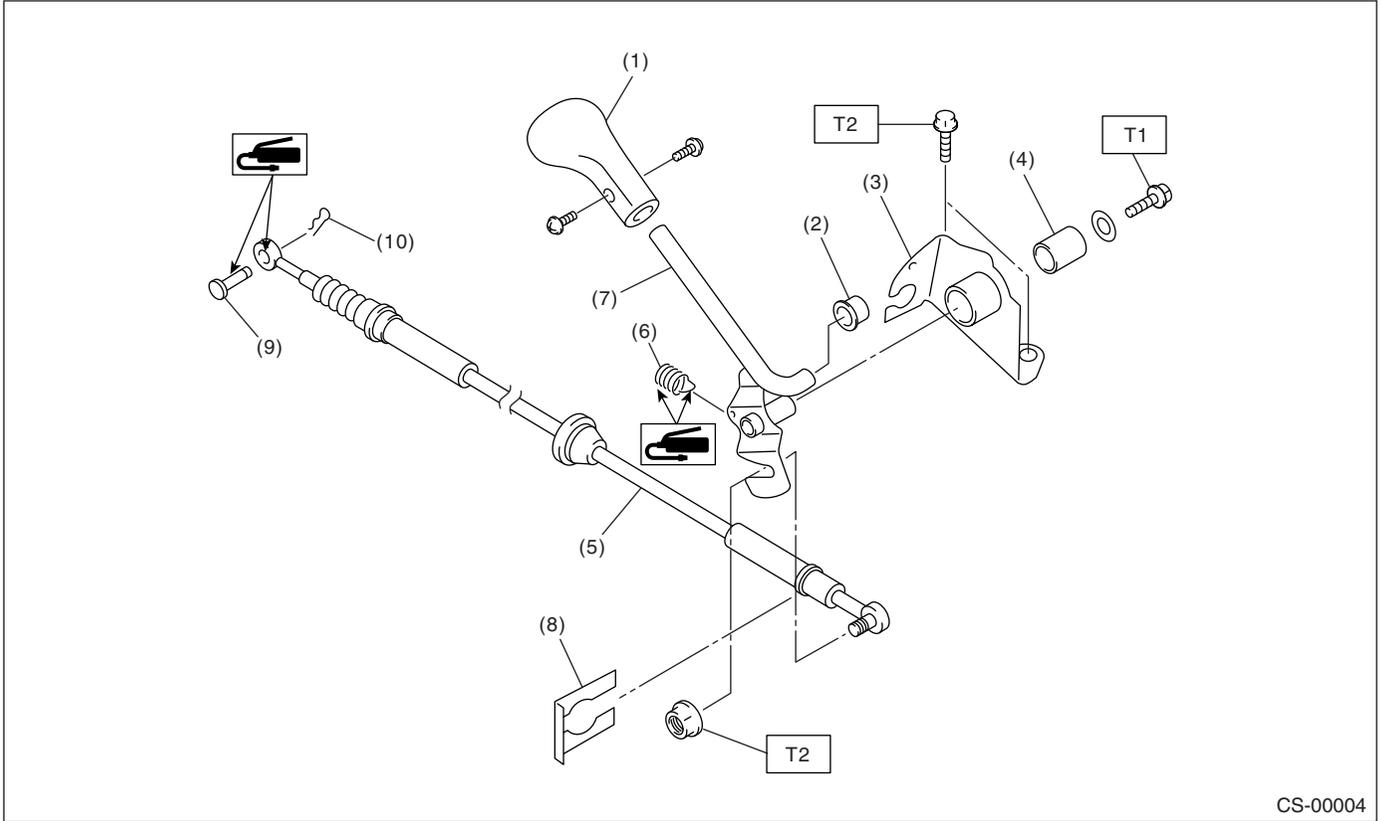
T2: 12 (1.2, 8.7)

T3: 18 (1.8, 13.0)

General Description

CONTROL SYSTEM

3. DRIVE SELECT LEVER



- | | |
|----------------|----------------|
| (1) Knob | (6) Spring |
| (2) Cushion | (7) Lever ASSY |
| (3) Plate ASSY | (8) Clip |
| (4) Bushing | (9) Clevis pin |
| (5) Cable | (10) Snap pin |

Tightening torque: N·m (kgf·m, ft·lb)

T1: 1.6 (0.16, 1.2)

T2: 18 (1.8, 13.0)

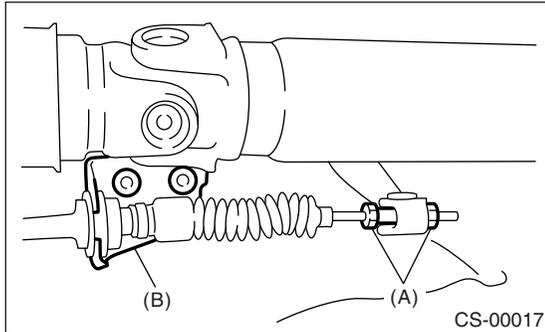
C: CAUTION

- 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.
- Use SUBARU genuine fluid, grease etc. or the equivalent. Do not mix grease etc. with that of another grade or from other manufacturers.
- Be sure to tighten fasteners including bolts and nuts to the specified torque.
- Place shop jacks or rigid racks at the specified points.
- Apply grease onto sliding or revolution surfaces before installation.
- Before installing O-rings or snap rings, apply sufficient amount of grease to avoid damage and deformation.
- Before securing a part on a vise, place cushioning material such as wood blocks, aluminum plate, or cloth between the part and vise.
- Before disconnecting electrical connectors, be sure to disconnect the ground cable from battery.

2. Select Lever

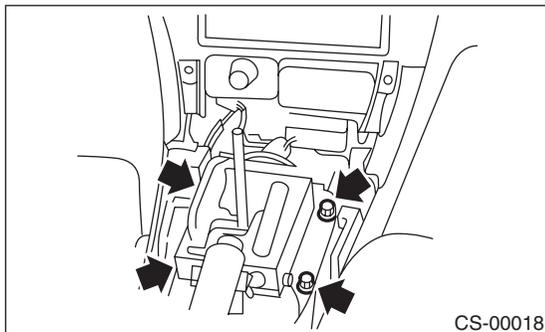
A: REMOVAL

- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from battery.
- 3) Shift the select lever to "N" range.
- 4) Lift-up the vehicle.
- 5) Remove the rear exhaust pipe and muffler.
 - Non-turbo model
<Ref. to EX(H4SO)-11, REMOVAL, Rear Exhaust Pipe.> <Ref. to EX(H4SO)-13, REMOVAL, Muffler.>
 - Turbo model
<Ref. to EX(H4DOTC)-14, REMOVAL, Rear Exhaust Pipe.> <Ref. to EX(H4DOTC)-16, REMOVAL, Muffler.>
- 6) Remove the heat shield cover. (If equipped)
- 7) Disconnect the cable from select lever, and then remove the cable bracket.



- (A) Adjusting nut
- (B) Cable bracket

- 8) Lower the vehicle.
- 9) Remove the console box. <Ref. to EI-39, REMOVAL, Console Box.>
- 10) Disconnect the connectors, then remove the four bolts to take out the select lever assembly from body.

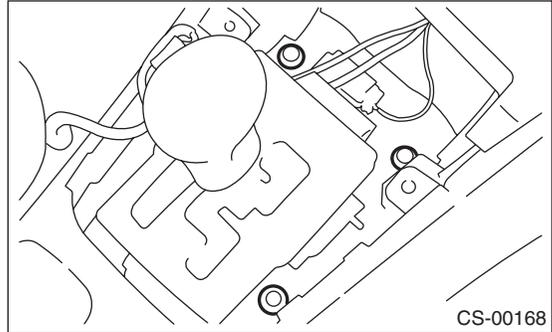


B: INSTALLATION

- 1) Mount the select lever onto vehicle body.
- 2) Tighten the four bolts to install the select lever to vehicle body, then connect the connector.

Tightening torque:

13 N·m (1.3 kgf-m, 9.4 ft-lb)



- 3) Install the console box. <Ref. to EI-39, INSTALLATION, Console Box.>
- 4) Shift the select lever to "N" range.
- 5) Lift-up the vehicle.
- 6) Shift the range select lever to "N" range.
- 7) Insert the thread portion of inner cable into connector hole of the select lever, and fix the outer cable end to bracket.

Tightening torque:

18 N·m (1.8 kgf-m, 13.0 ft-lb)

- 8) Adjust the select cable position. <Ref. to CS-14, ADJUSTMENT, Select Cable.>
- 9) After completion of fitting, make sure the select lever operates smoothly all across the operating range.
- 10) Install the heat shield cover. (If equipped)
- 11) Install the rear exhaust pipe and muffler.
 - Non-turbo model
<Ref. to EX(H4SO)-11, INSTALLATION, Rear Exhaust Pipe.> <Ref. to EX(H4SO)-13, INSTALLATION, Muffler.>
 - Turbo model
<Ref. to EX(H4DOTC)-14, INSTALLATION, Rear Exhaust Pipe.> <Ref. to EX(H4DOTC)-16, INSTALLATION, Muffler.>
- 12) Inspect the following items. If the following inspection reveals problems, adjust the select cable and inhibitor switch. <Ref. to CS-14, ADJUSTMENT, Select Cable.> <Ref. to 4AT-52, ADJUSTMENT, Inhibitor Switch.>

- (1) The engine starts operating when select lever is in "P" range, but not in other ranges.
- (2) The back-up light is lit when the select lever is in "R" range, but not in other ranges.
- (3) Select lever and indicator ranges are matched.

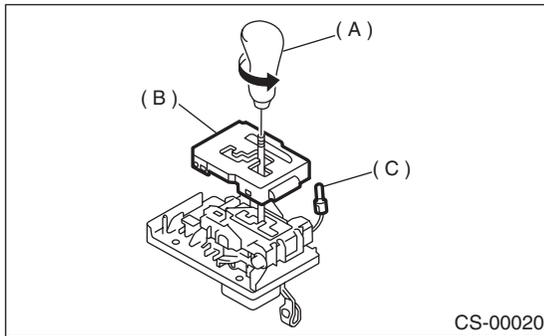
C: DISASSEMBLY

1. NON-TURBO MODEL

- 1) Remove the grip.
- 2) Remove the indicator light, and then remove the indicator cover.

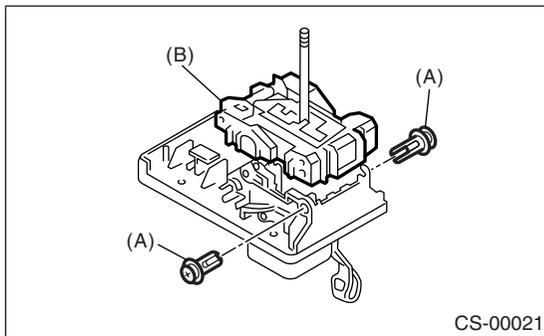
NOTE:

Be careful not to break the indicator light during removal.



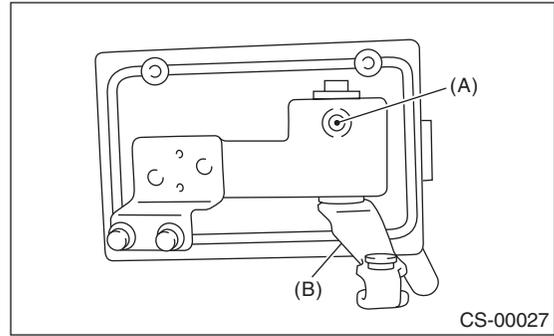
- (A) Grip
- (B) Indicator cover
- (C) Indicator light

- 3) Remove the blind.
- 4) Remove the clips, and then remove the guide plate.



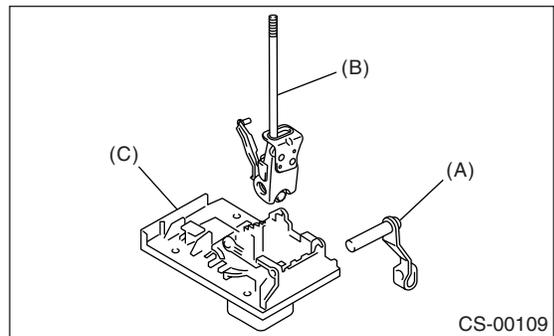
- (A) Clip
- (B) Guide plate

- 5) Remove the grommet, and then extract the spring pin.



- (A) Spring pin
- (B) Arm ASSY

- 6) Remove the arm assembly, and then take away the select lever assembly from base plate.



- (A) Arm ASSY
- (B) Select lever ASSY
- (C) Base plate

Select Lever

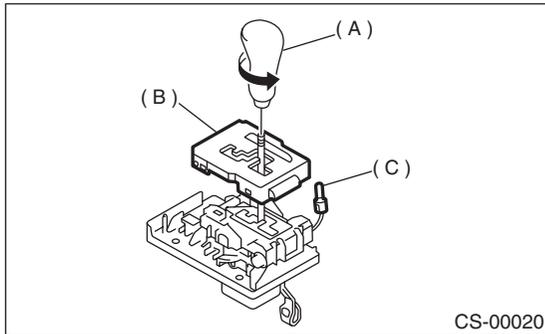
CONTROL SYSTEM

2. TURBO MODEL

- 1) Remove the packing.
- 2) Remove the grip.
- 3) Remove the indicator light, and then remove the indicator cover.

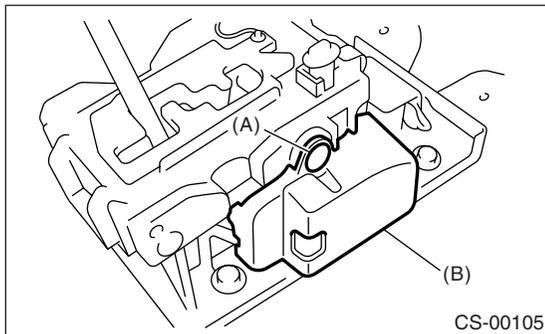
NOTE:

Be careful not to break the indicator light during removal.



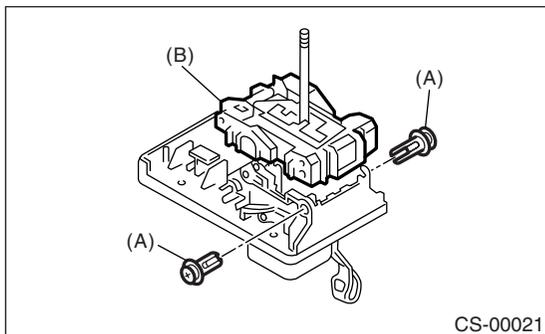
- (A) Grip
- (B) Indicator cover
- (C) Indicator light

- 4) Remove the blind.
- 5) Remove the cover.



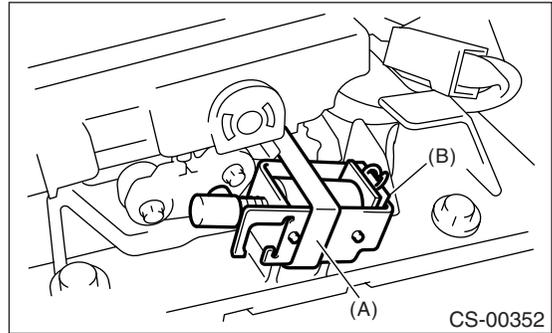
- (A) Clip
- (B) Cover

- 6) Remove the clips, and then remove the guide plate.



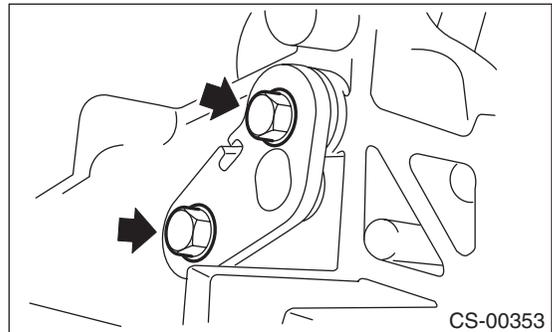
- (A) Clip
- (B) Guide plate

- 7) Remove the clamp, and then remove the N-R lock solenoid.

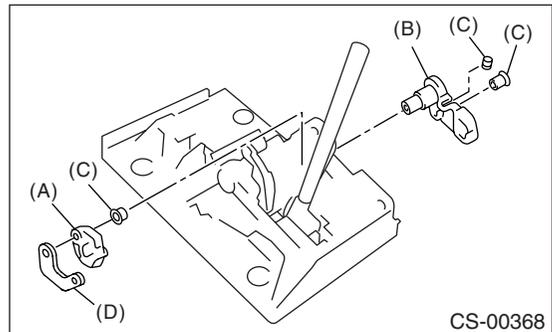


- (A) Clamp
- (B) N-R lock solenoid

- 8) Remove the lock plate B mounting bolt.

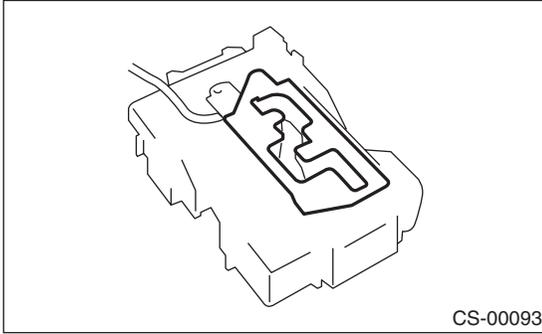


- 9) Remove the lock plate A, B, C and bushing.

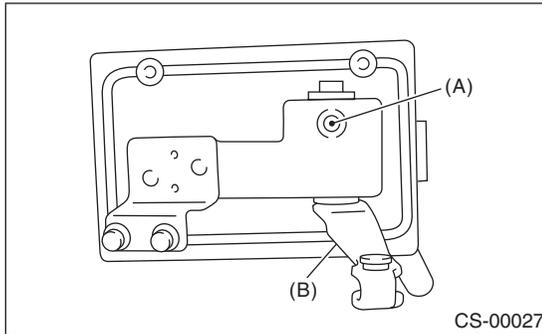


- (A) Lock plate A
- (B) Lock plate B
- (C) Bushing
- (D) Lock plate C

10) Remove the cushion plate.

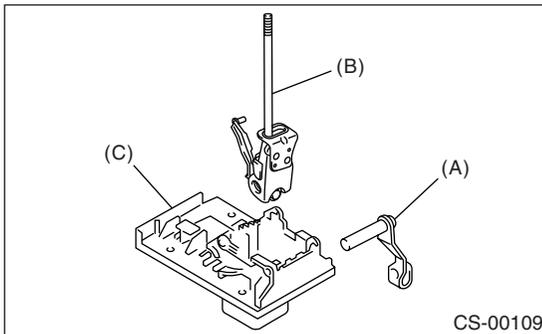


11) Remove the grommet, and then extract spring pin.



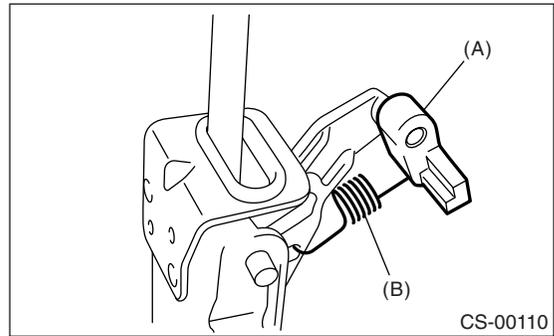
- (A) Spring pin
- (B) Arm ASSY

12) Remove the arm assembly, and then take away the select lever assembly from base plate.



- (A) Arm ASSY
- (B) Select lever ASSY
- (C) Base plate

13) Remove the detent spring, and then remove the detent arm.



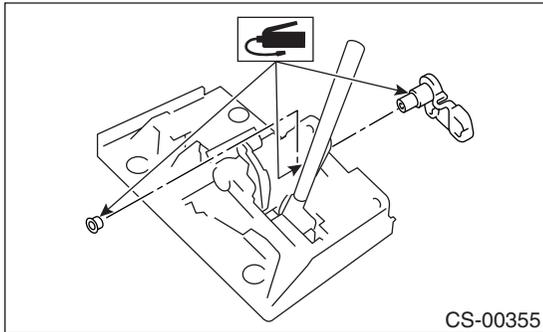
- (A) Detent arm
- (B) Detent spring

D: ASSEMBLY

- 1) Clean all parts before assembly.
- 2) Apply grease [SUNLIGHT 2 (Part No. 003602010) or equivalent] to each part. <Ref. to CS-3, AT SELECT LEVER, COMPONENT, General Description.>

CAUTION:

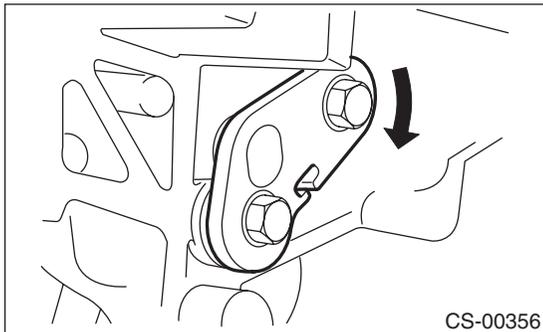
Apply grease [SUNCALL] around the axle of lock plate (Turbo model). Apply grease to only indicated portion.



- 3) Assemble is in the reverse order of disassembly.

NOTE:

- Refer to “COMPONENT” for tightening torque. <Ref. to CS-3, COMPONENT, General Description.>
- Tighten the lock plate bolt uniformly. After installation, put the base plate upside down, and then push the lock plate up. Make sure the lock plate falls by its weight when releasing it. If not, retighten the bolt.



- 4) After completion of fitting, transfer the select lever to range “P” — “1”, then check the indicator and select lever are matched, the pointer and position mark are matched and the operating force.

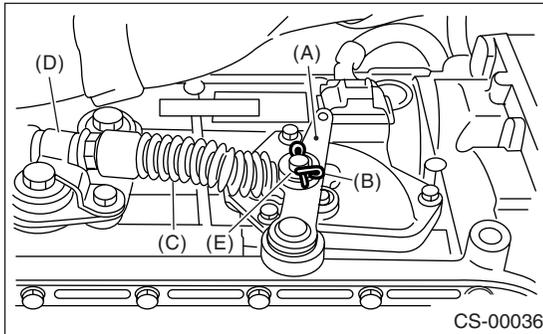
E: INSPECTION

- 1) Inspect the removed parts by comparing with new ones for deformation, damage and wear. Correct or replace if defective.
- 2) Confirm the following parts for operating condition before assembly. Moving condition of the select lever assembly, it should move smoothly.

3. Select Cable

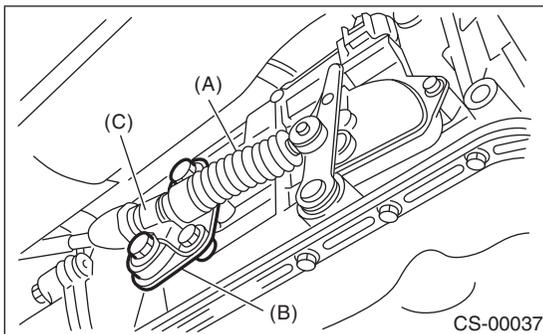
A: REMOVAL

- 1) Set the vehicle on a lift.
- 2) Disconnect the ground cable from battery.
- 3) Prior to removal, shift the select lever to "N" range.
- 4) Lift-up the vehicle.
- 5) Remove the front and center exhaust pipe.
 - Non-turbo model
<Ref. to EX(H4SO)-7, REMOVAL, Front Exhaust Pipe.>
 - Turbo model
<Ref. to EX(H4DOTC)-9, REMOVAL, Center Exhaust Pipe.>
- 6) Remove the heat shield cover. (If equipped)
- 7) Remove the snap pin from range select lever.



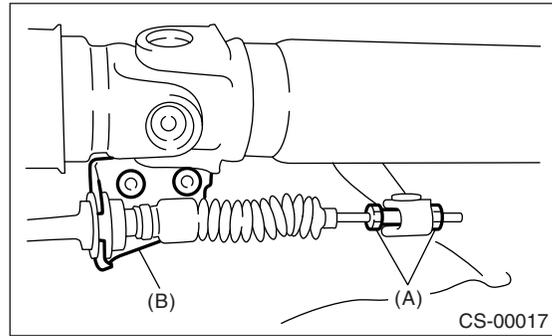
- (A) Range select lever
- (B) Snap pin
- (C) Select cable
- (D) Clamp
- (E) Washer

- 8) Remove the plate assembly from transmission case.



- (A) Select cable
- (B) Plate ASSY
- (C) Clamp

- 9) Disconnect the select cable from range select lever, and then remove the cable bracket.



- (A) Adjusting nut
- (B) Cable bracket

- 10) Remove the select cable from plate assembly.

B: INSTALLATION

- 1) Install the select cable to plate assembly.

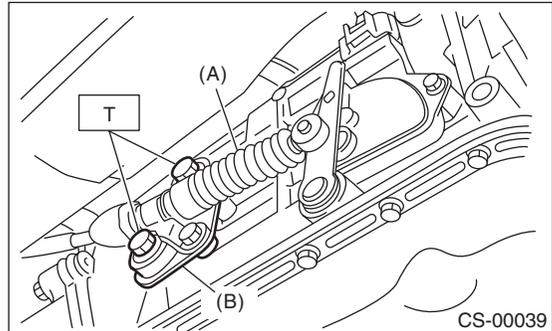
Tightening torque:

18 N·m (1.8 kgf-m, 13.0 ft-lb)

- 2) Install the select cable to range select lever.
- 3) Install the plate assembly to transmission.

Tightening torque:

T: 24.5 N·m (2.5 kgf-m, 18.1 ft-lb)

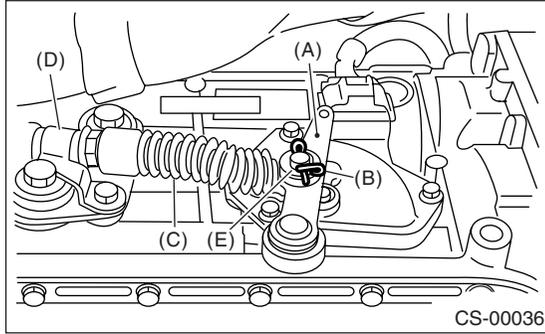


- (A) Select cable
- (B) Plate ASSY

Select Cable

CONTROL SYSTEM

4) Install the snap pin to range select lever.



- (A) Range select lever
- (B) Snap pin
- (C) Select cable
- (D) Clamp
- (E) Washer

5) Shift the select lever to "N" range, then adjust the select cable position. <Ref. to CS-14, ADJUSTMENT, Select Cable.>

6) Install the heat shield cover. (If equipped)

7) Install the front and center exhaust pipe.

- Non-turbo model

<Ref. to EX(H4SO)-8, INSTALLATION, Front Exhaust Pipe.>

- Turbo model

<Ref. to EX(H4DOTC)-10, INSTALLATION, Center Exhaust Pipe.>

C: INSPECTION

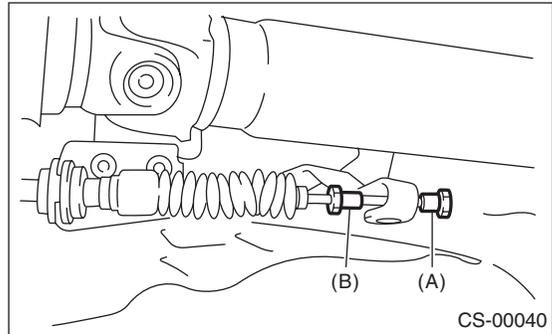
Check the removed cable and replace if damaged, rusty, or defective.

- 1) Check for smooth operation of the cable.
- 2) Check the inner cable for damage and rust.
- 3) Check the outer cable for damage, bends, and cracks.
- 4) Check the boot for damage, cracks, and deterioration.
- 5) Shift the select lever from "P" range to "1" range. You should be able to feel the detentes in each range. If the detentes cannot be felt or the range pointer is improperly aligned, adjust the cable.

D: ADJUSTMENT

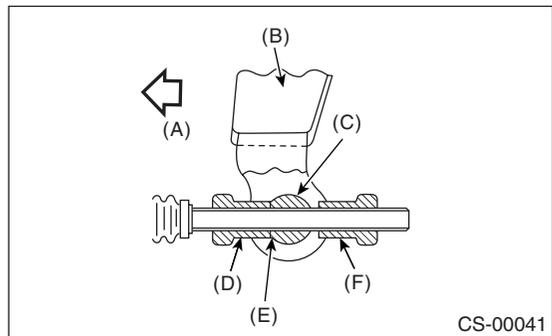
- 1) Set the vehicle on a lift.
- 2) Shift the select lever to "N" range.
- 3) Lift-up the vehicle.
- 4) Remove the rear exhaust pipe and muffler.
- 5) Remove the heat shield cover. (If equipped)

6) Loosen the adjusting nuts on each side.



- (A) Adjusting nut A
- (B) Adjusting nut B

7) Turn the adjusting nut B until it lightly touches the bushing assembly.

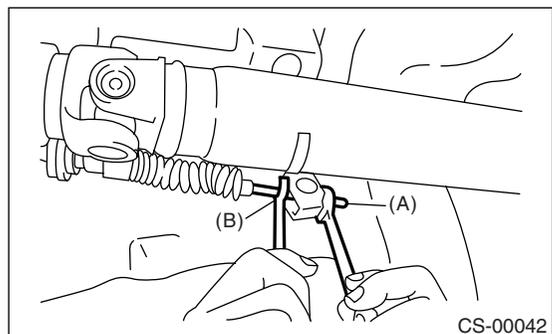


- (A) Front side
- (B) Select lever
- (C) Bushing ASSY
- (D) Adjusting nut B
- (E) Contact point
- (F) Adjusting nut A

8) While preventing the adjusting nut B from moving with a wrench, tighten the adjusting nut A.

Tightening torque:

7.5 N·m (0.76 kgf·m, 5.5 ft·lb)



- (A) Adjusting nut A
- (B) Adjusting nut B

- 9) After completion of fitting, make sure that the select lever operates smoothly all across the operating range.
- 10) Install in the reverse order of removal.

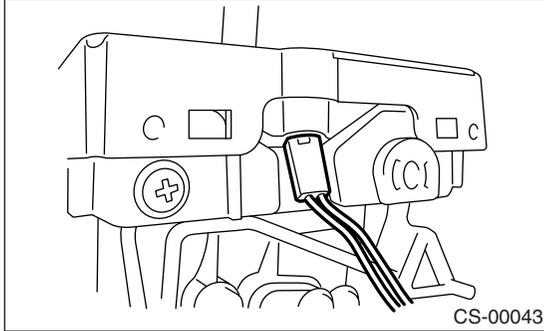
N-R Lock Solenoid

CONTROL SYSTEM

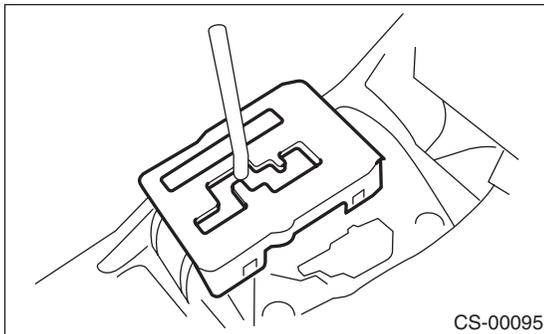
4. N-R Lock Solenoid

A: REMOVAL

- 1) Disconnect the ground cable from battery.
- 2) Remove the console box. <Ref. to EI-39, REMOVAL, Console Box.>
- 3) Disconnect the connector.
- 4) Remove the grip.
- 5) Remove the indicator bulb from indicator cover.



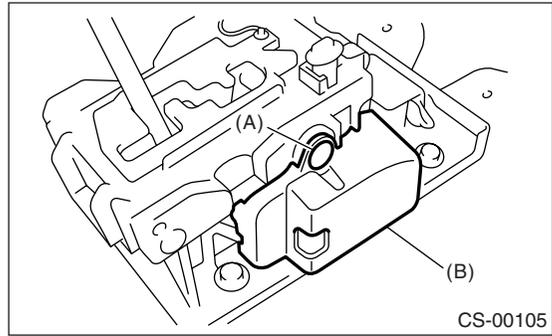
- 6) Remove the indicator cover.



- 7) Remove the slider.

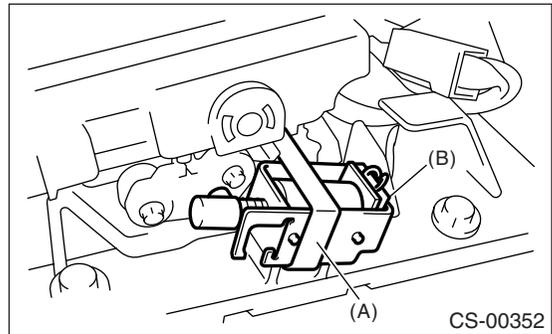
C: INSPECTION

- 8) Remove the cover.



- (A) Clip
- (B) Cover

- 9) Remove the clamp and remove the N-R lock solenoid.



- (A) Clamp
- (B) N-R lock solenoid

B: INSTALLATION

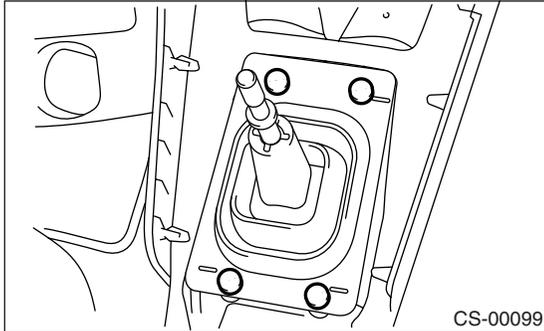
Install in the reverse order of removal.

Step	Check	Yes	No
1 CHECK N-R LOCK SOLENOID. Measure the resistance of N-R lock solenoid connector terminals. <i>Terminal</i> <i>No. 4 — No. 5</i>	Is the resistance 20 — 40 Ω?	Go to step 2.	Replace the N-R lock solenoid.
2 CHECK N-R LOCK SOLENOID. Connect the battery with N-R lock solenoid connector terminal, and operate the solenoid. <i>Terminal</i> <i>No. 4 (+) — No. 5 (-)</i>	Is the N-R lock solenoid operating properly?	Normal	Replace the N-R lock solenoid.

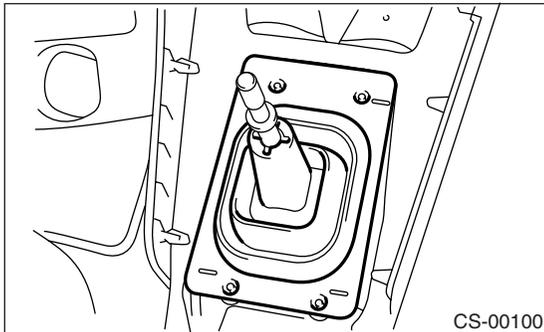
5. MT Gear Shift Lever

A: REMOVAL

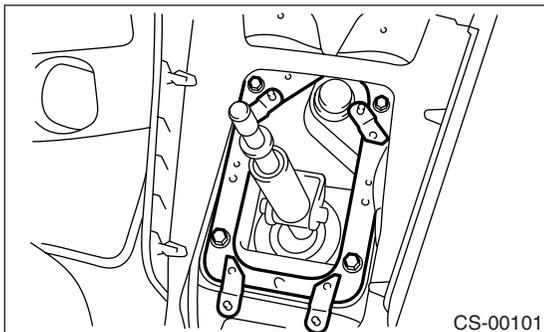
- 1) Set the vehicle on a lift.
- 2) Remove the gear shift knob.
- 3) Disconnect the ground cable from battery.
- 4) Remove the console box. <Ref. to EI-39, REMOVAL, Console Box.>
- 5) Remove the clamp.



- 6) Remove the boot & insulator assembly.

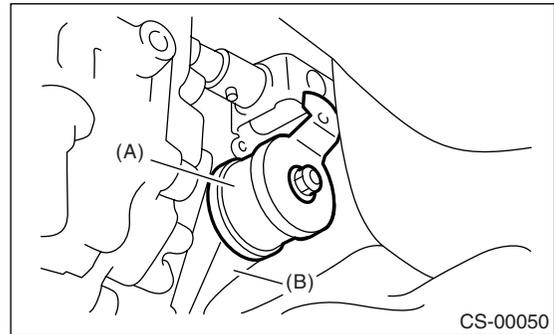


- 7) Remove the drive select cable. <Ref. to CS-25, REMOVAL, Drive Select Cable.>
- 8) Remove the plate assembly from body.



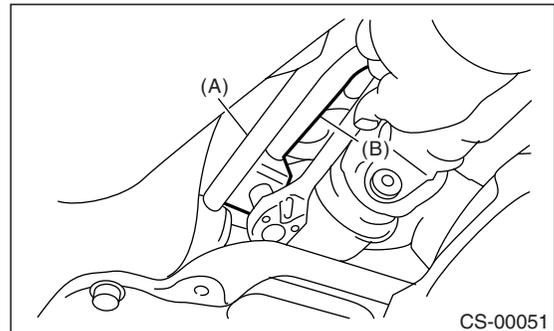
- 9) Lift-up the vehicle.
- 10) Remove the rear exhaust pipe and muffler.

- Non-turbo model
<Ref. to EX(H4SO)-11, REMOVAL, Rear Exhaust Pipe.> <Ref. to EX(H4SO)-13, REMOVAL, Muffler.>
 - Turbo model
<Ref. to EX(H4DOTC)-14, REMOVAL, Rear Exhaust Pipe.> <Ref. to EX(H4DOTC)-16, REMOVAL, Muffler.>
- 11) Remove the heat shield cover. (If equipped)
 - 12) Remove the stay from transmission bracket.



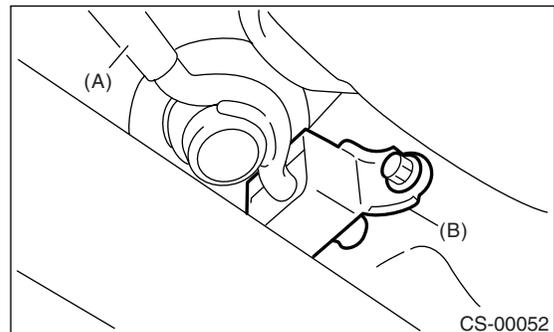
- (A) Stay
- (B) Transmission bracket

- 13) Remove the rod from joint.



- (A) Stay
- (B) Rod

- 14) Remove the cushion rubber from body.

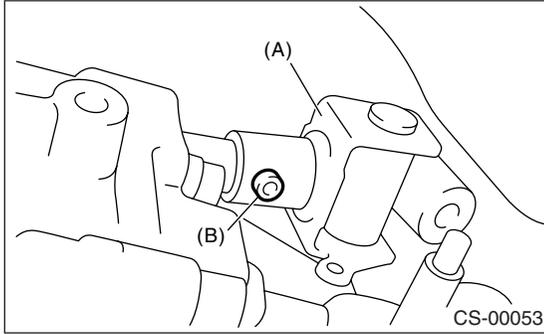


- (A) Stay
- (B) Cushion rubber

MT Gear Shift Lever

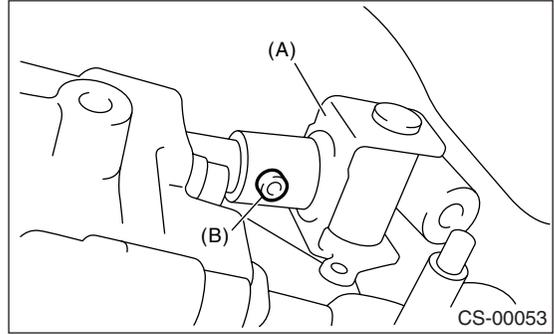
CONTROL SYSTEM

15) Remove the spring pin, and then extract the joint.



- (A) Joint
- (B) Spring pin

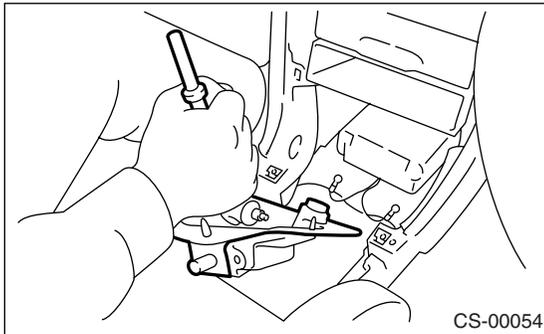
3) Install the joint to transmission and secure with the spring pin.



- (A) Joint
- (B) Spring pin

16) Lower the vehicle.

17) Remove the gear shift lever.

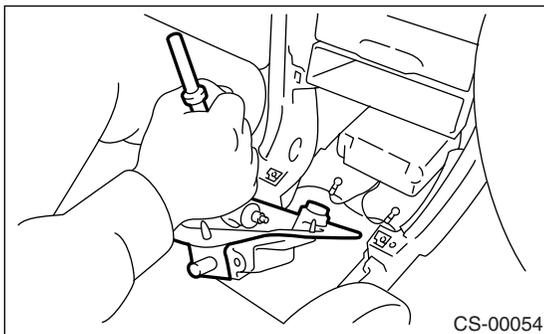


B: INSTALLATION

1) Insert the gear shift lever from room side.

NOTE:

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

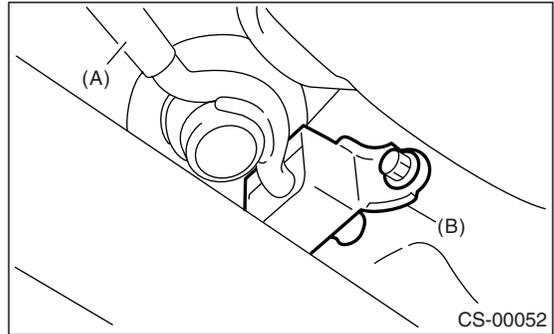


2) Lift-up the vehicle.

4) Mount the cushion rubber on the body.

Tightening torque:

18 N·m (1.8 kgf-m, 13.0 ft-lb)

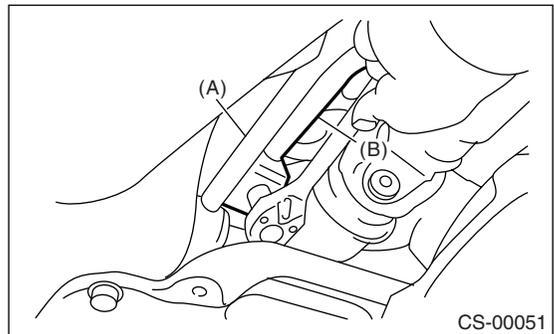


- (A) Stay
- (B) Cushion rubber

5) Connect the rod to the joint.

Tightening torque:

18 N·m (1.8 kgf-m, 13.0 ft-lb)

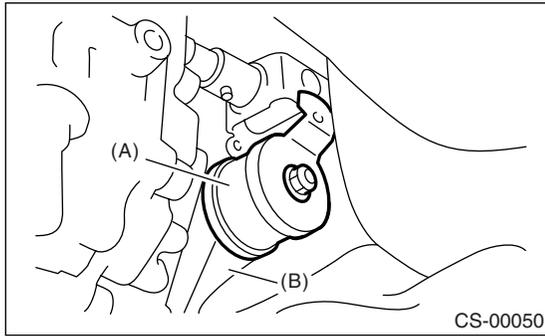


- (A) Stay
- (B) Rod

6) Connect the stay to transmission bracket.

Tightening torque:

18 N·m (1.8 kgf·m, 13.0 ft·lb)



- (A) Stay
- (B) Transmission bracket

7) Install the heat shield cover. (If equipped)

8) Install the rear exhaust pipe and muffler.

- Non-turbo model
<Ref. to EX(H4SO)-11, INSTALLATION, Rear Exhaust Pipe.> <Ref. to EX(H4SO)-13, INSTALLATION, Muffler.>

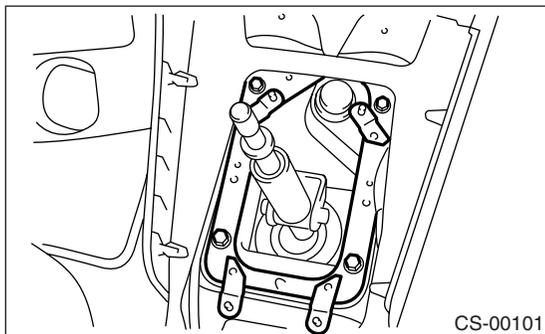
- Turbo model
<Ref. to EX(H4DOTC)-14, INSTALLATION, Rear Exhaust Pipe.> <Ref. to EX(H4DOTC)-16, INSTALLATION, Muffler.>

9) Lower the vehicle.

10) Install the plate assembly to body.

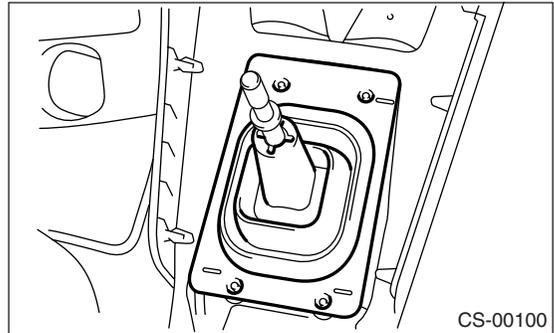
Tightening torque:

7.5 N·m (0.76 kgf·m, 5.5 ft·lb)



11) Install the drive select cable. <Ref. to CS-25, INSTALLATION, Drive Select Cable.>

12) Install the boot and insulator assembly to the vehicle in proper direction.

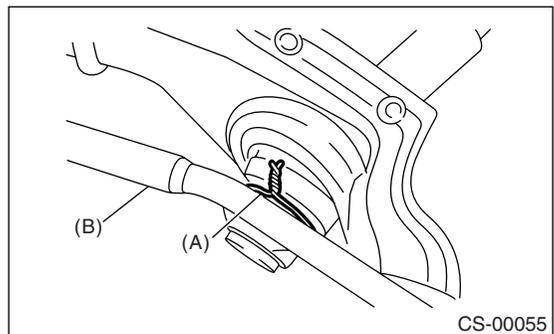


13) Install the clamp.

14) Install the console box. <Ref. to EI-39, INSTALLATION, Console Box.>

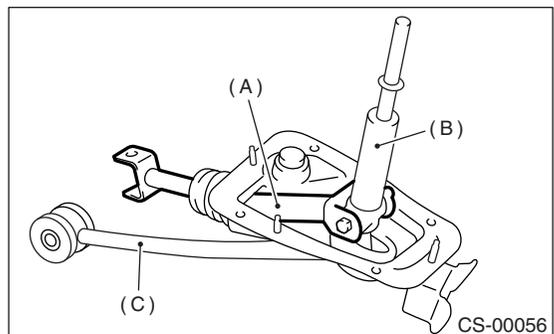
C: DISASSEMBLY

1) Remove the lock wire.



- (A) Lock wire
- (B) Stay

2) Remove the rod from gear shift lever.

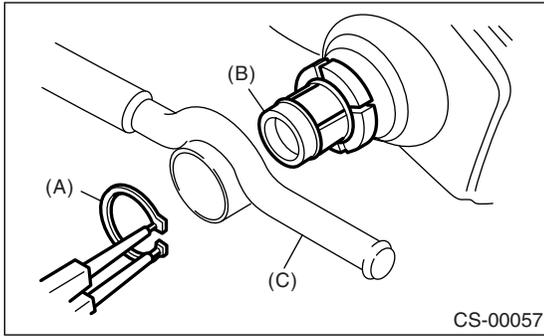


- (A) Rod
- (B) Gear shift lever
- (C) Stay

MT Gear Shift Lever

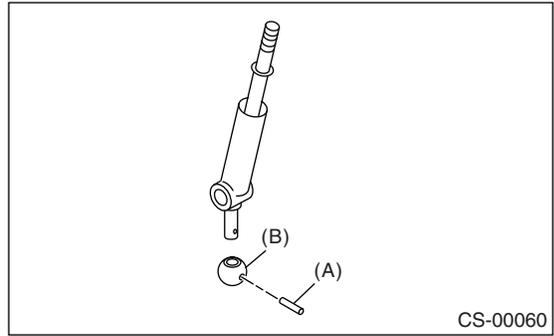
CONTROL SYSTEM

3) Remove the snap ring from bushing B, and then disconnect the stay.



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

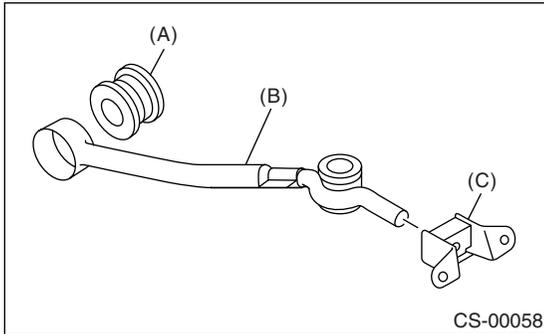
7) Draw out the spring pin, and then remove the bushing A from gear shift lever.



- (A) Spring pin
- (B) Bushing A

4) Remove the boot from gear shift lever.

5) Remove the bushing and cushion rubber from stay.

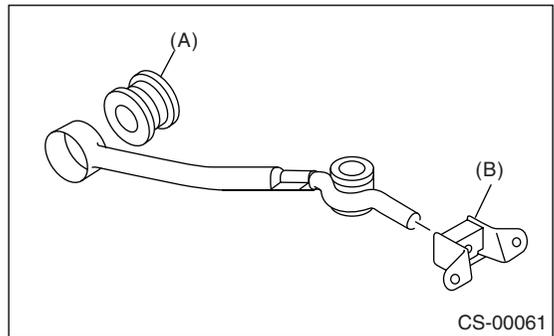


- (A) Bushing
- (B) Stay
- (C) Cushion rubber

D: ASSEMBLY

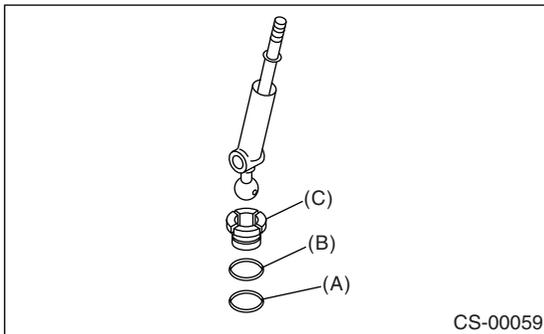
1) Clean all parts before assembly.

2) Mount the bushing and cushion rubber on the stay.



- (A) Bushing
- (B) Cushion rubber

6) Remove the O-ring, and then remove the bushing B.

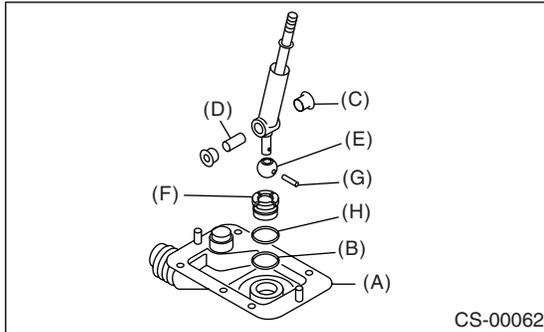


- (A) O-ring
- (B) O-ring
- (C) Bushing B

3) Mount each part; boot, O-ring, bushing A, spacer, bushing B, bushing and spring pin on the gear shift lever.

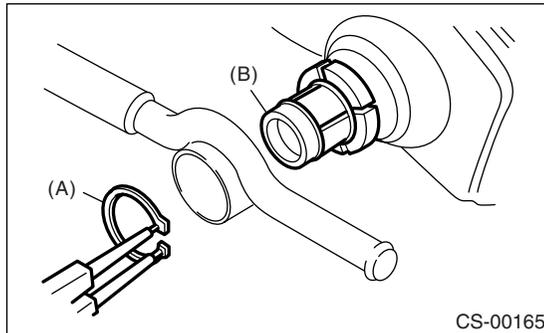
NOTE:

- Always use new O-rings.
- Apply grease [SUNLIGHT 2 (Part No. 003602010) or equivalent] to the inner and side surfaces of the bush when installing the spacer.



- (A) Boot
- (B) O-ring
- (C) Bushing
- (D) Spacer
- (E) Bushing A
- (F) Bushing B
- (G) Spring pin
- (H) O-ring

4) Insert the gear shift lever into boot hole.
5) Install the snap ring and stay to bushing B.

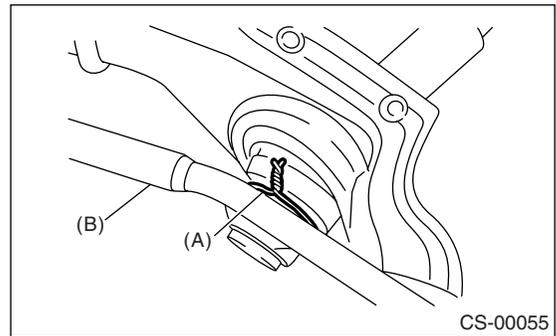


- (A) Snap ring
- (B) Bushing B

6) Tighten with a lock wire to the extent that the boot will not come off.

NOTE:

Always use new lock wire.

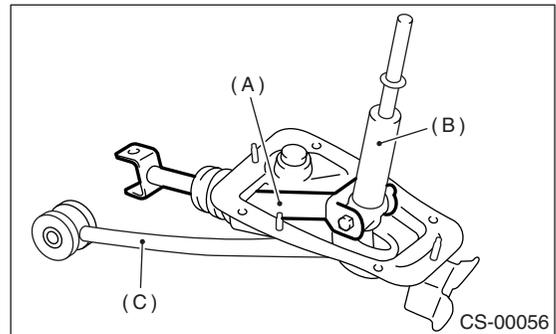


- (A) Lock wire
- (B) Stay

7) Insert the rod into boot hole.
8) Connect the rod to gear shift lever.

Tightening torque:

12 N·m (1.2 kgf-m, 8.7 ft-lb)



- (A) Rod
- (B) Gear shift lever
- (C) Stay

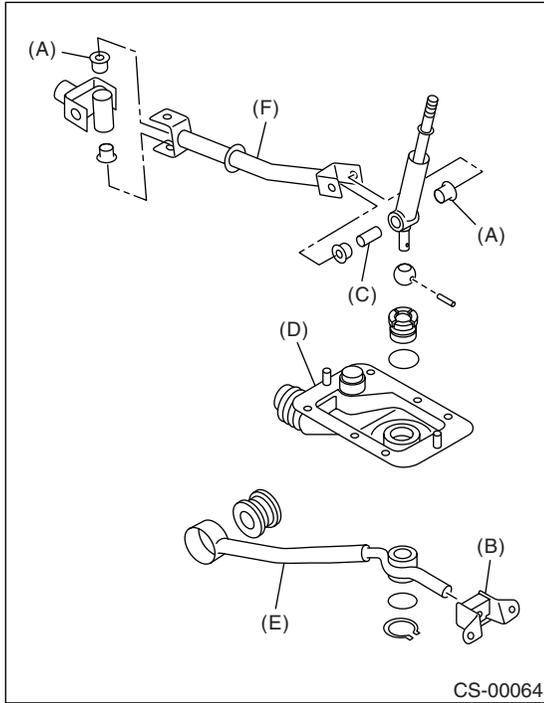
MT Gear Shift Lever

CONTROL SYSTEM

E: INSPECTION

1) Check each part (bushing, cushion rubber, spacer, boot, stay, rod, etc.) for deformation, damage and wear. Repair or replace any defective part. Determine defective parts by comparing with new parts.

3) Check that there is no excessive play and that parts move smoothly.

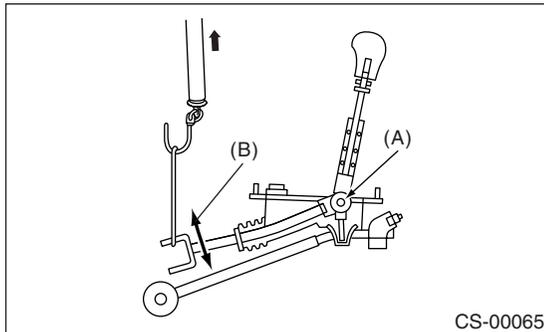


- (A) Bushing
- (B) Cushion rubber
- (C) Spacer
- (D) Boot
- (E) Stay
- (F) Rod

2) Check the swing torque of the rod connected to gear shift lever.
If the torque exceeds specification, replace the bushing or retighten nuts.

Swing torque:

3.7 N (0.38 kgf, 0.83 lb) or less

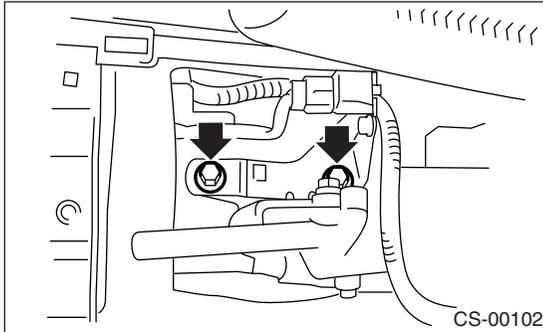


- (A) Center of rotation
- (B) Swing torque

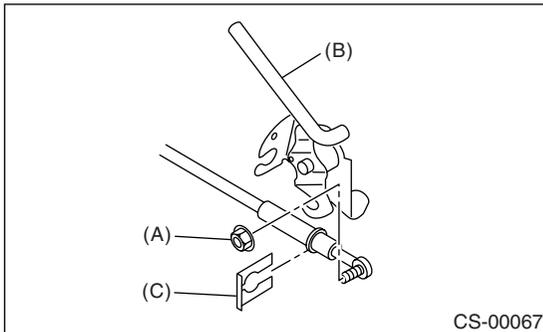
6. MT Drive Select Lever

A: REMOVAL

- 1) Apply parking brake and place chocks to hold wheels.
- 2) Disconnect the ground cable from battery.
- 3) Shift the drive select lever to HI position.
- 4) Remove the knob.
- 5) Remove the console box. <Ref. to EI-39, REMOVAL, Console Box.>
- 6) Remove the bolt installing drive select lever assembly on body.



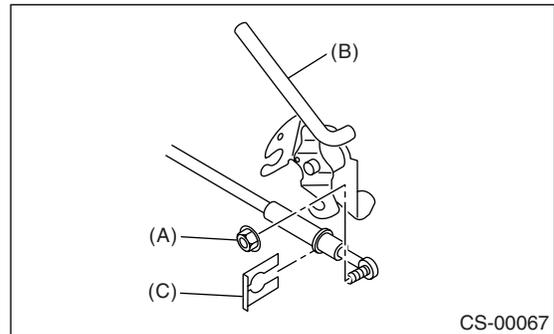
- 7) Remove the flange nut and clip, and then disconnect the cable from lever assembly.



- (A) Flange nut
- (B) Lever ASSY
- (C) Clip

B: INSTALLATION

- 1) Install the drive select cable to lever assembly, and then fasten it with a clip.

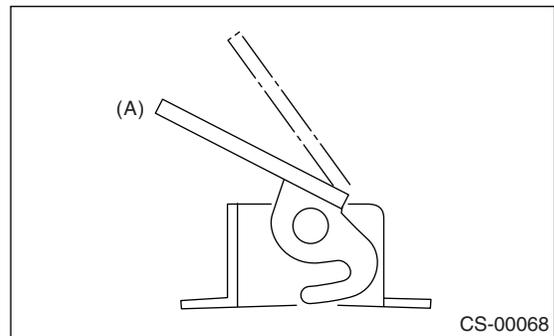


- (A) Flange nut
- (B) Lever ASSY
- (C) Clip

- 2) Install the drive select lever.

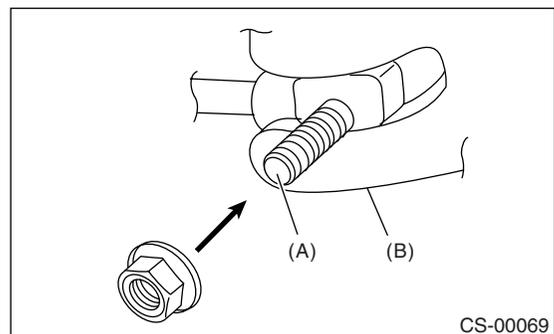
Tightening torque:
18 N·m (1.8 kgf-m, 13.0 ft-lb)

- 3) Shift the drive select lever to HI position.



- (A) HI position

- 4) Insert the cable eye end bolt into lever arm slit.



- (A) Cable eye end bolt
- (B) Lever arm

- 5) Tighten the nut where cable eye end bolt comes to a stop.

Tightening torque:
18 N·m (1.8 kgf-m, 13.0 ft-lb)

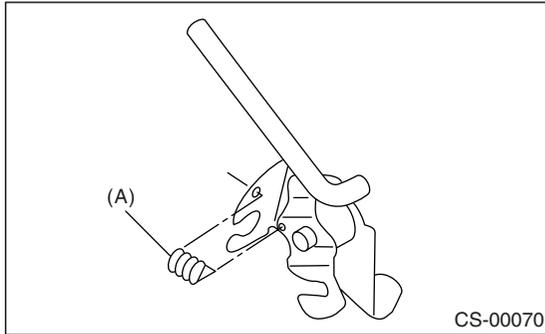
MT Drive Select Lever

CONTROL SYSTEM

6) Install in the reverse order of removal.

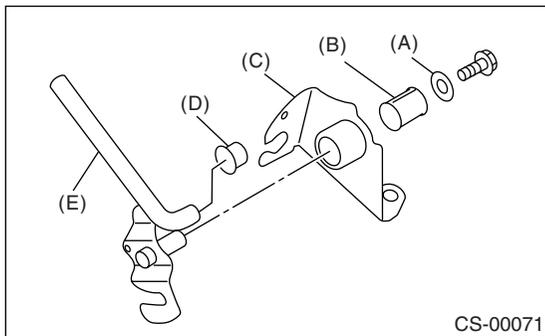
C: DISASSEMBLY

1) Remove the spring.



(A) Spring

2) Remove the lever, cushion and bushing.



- (A) Washer
- (B) Bushing
- (C) Plate ASSY
- (D) Cushion
- (E) Lever ASSY

D: ASSEMBLY

1) Assemble in the reverse order of disassembly.

Tightening torque:

18 N·m (1.8 kgf·m, 13.0 ft·lb)

2) Make sure the select lever moves smoothly.

E: INSPECTION

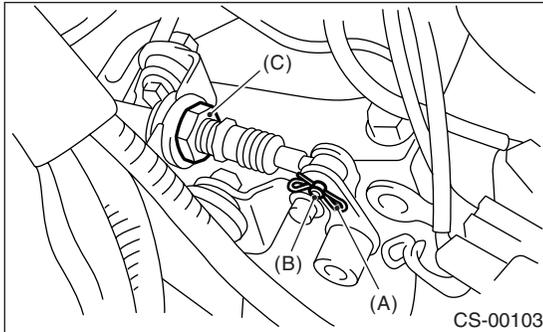
1) Make sure the select lever moves smoothly. If it does not move smoothly, repair or replace it.

2) Make sure the drive select lever is not damaged. If it is damaged, repair or replace it.

7. Drive Select Cable

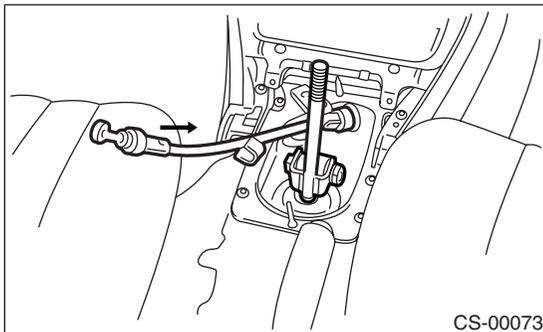
A: REMOVAL

- 1) Remove the drive select lever. <Ref. to CS-23, REMOVAL, MT Drive Select Lever.>
- 2) Remove the intake duct. <Ref. to IN(H4SO)-7, REMOVAL, Air Intake Duct.>
- 3) Remove the air cleaner case. <Ref. to IN(H4SO)-6, REMOVAL, Air Cleaner Case.>
- 4) Remove the snap pin and clevis pin.
- 5) Loosen the nut and disconnect the cable from cable bracket.



- (A) Snap pin
- (B) Clevis pin
- (C) Nut

- 6) Disconnect the cable from transmission clamp.
- 7) Remove the cable from the under side of vehicle.



B: INSTALLATION

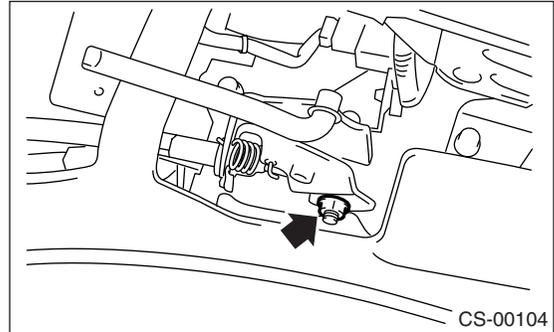
- 1) Install in the reverse order of removal.
- 2) Make sure the drive select lever operates properly.

C: INSPECTION

- 1) Shift the transmission to HI or LO position by moving the drive select lever. If it does not move, adjust the cable. <Ref. to CS-25, ADJUSTMENT, Drive Select Cable.>
- 2) Make sure the cable moves smoothly. If it catches or fails to work properly, repair or replace it.
- 3) Check the cable for damage.

D: ADJUSTMENT

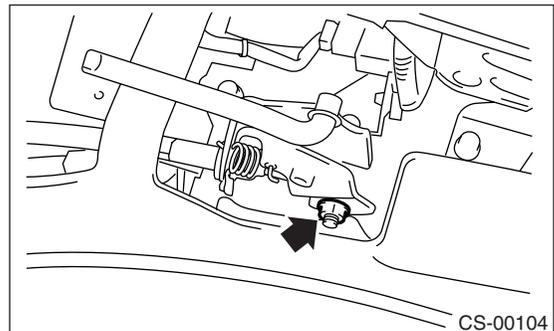
- 1) Shift the drive select lever to HI position.
- 2) Remove the drive select lever knob.
- 3) Remove the console box. <Ref. to EI-39, REMOVAL, Console Box.>
- 4) Remove the nut.



- 5) Make sure the transmission is in HI position. If it is not, pull the cable to put transmission in HI position.
- 6) Tighten the nut in the location where cable end bolt stops naturally.

Tightening torque:

18 N·m (1.8 kgf-m, 13.0 ft-lb)



- 7) Shift the transmission to HI or LO position by moving the drive select lever. If it does not move, readjust the cable.

General Diagnostic Table

CONTROL SYSTEM

8. General Diagnostic Table

A: INSPECTION

Symptom	Possible cause	Remedy
Select lever	Starter does not run.	Adjust the select cable and inhibitor switch, or inspect the circuit.
	Back-up light does not light up.	Adjust the select cable and inhibitor switch, or inspect the circuit.