

3. Select Lever

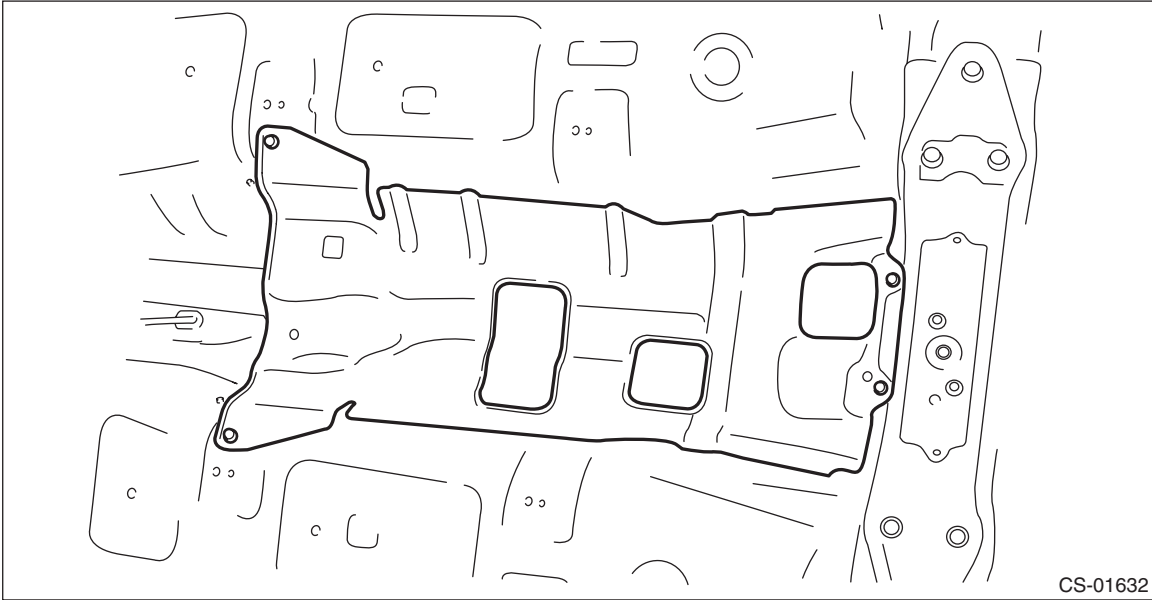
A: REMOVAL

- 1) Shift the select lever to "N" range.
- 2) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>

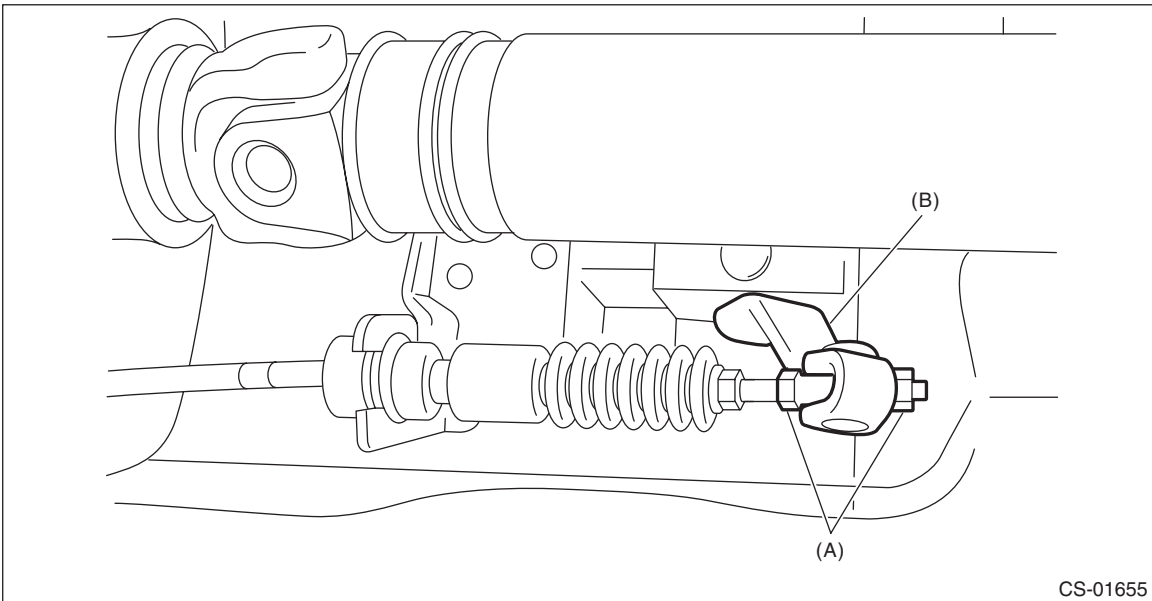
NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

- 3) Lift up the vehicle.
- 4) Remove the center exhaust pipe. <Ref. to EX(H4DO(w/o HEV))-14, REMOVAL, Center Exhaust Pipe.>
- 5) Remove the center exhaust cover.

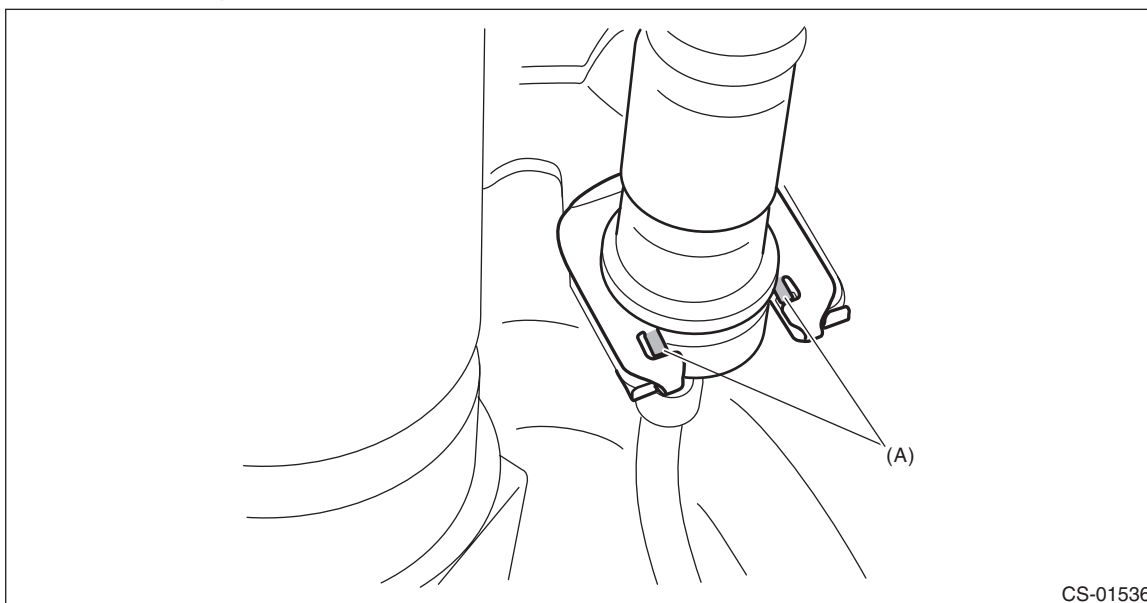


- 6) Disconnect the cable from the arm COMPL.



- (A) Adjusting nut
(B) Arm COMPL

7) Raise the claw of clamp and remove the cable.

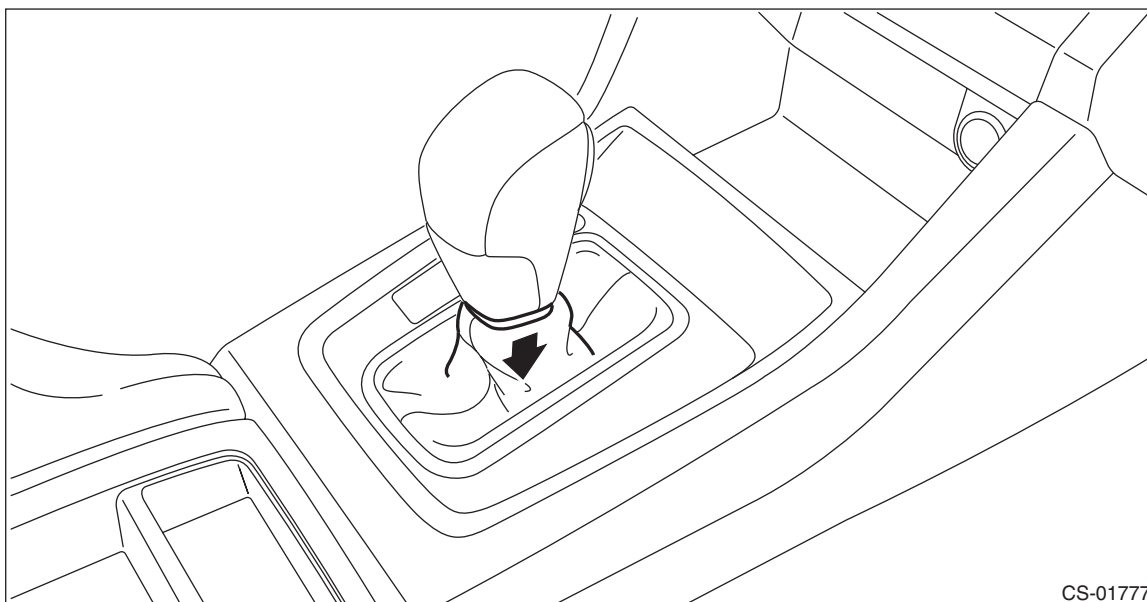


(A) Claw

8) Lower the vehicle.

9) Shift the select lever to “N” range.

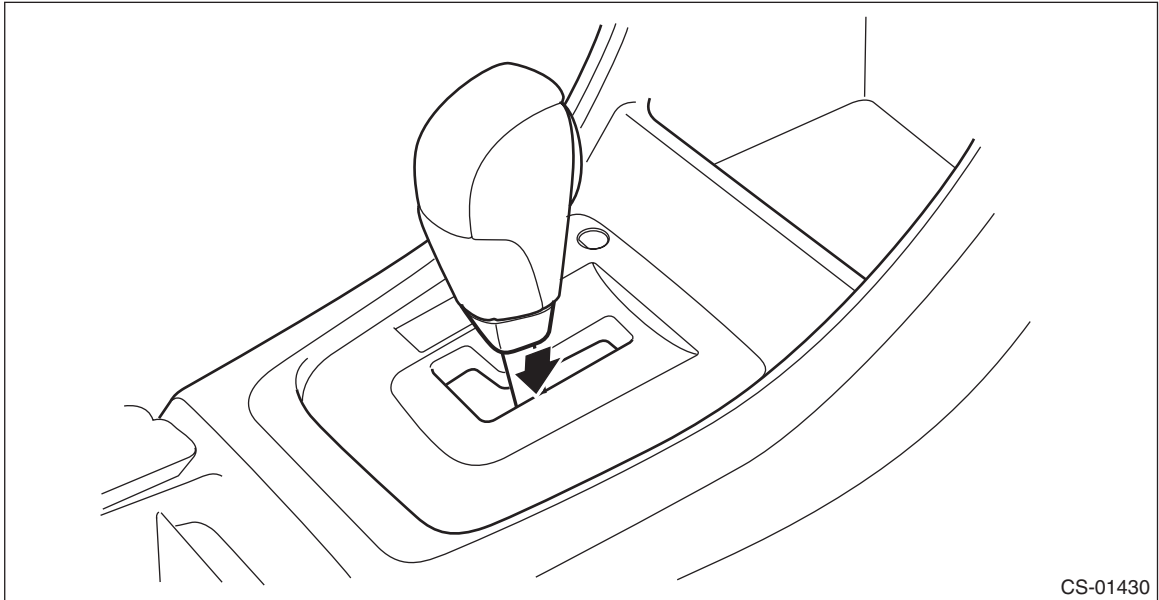
10) Lower the boot assembly vertically toward the lever. (Model with boot shifter)



Select Lever

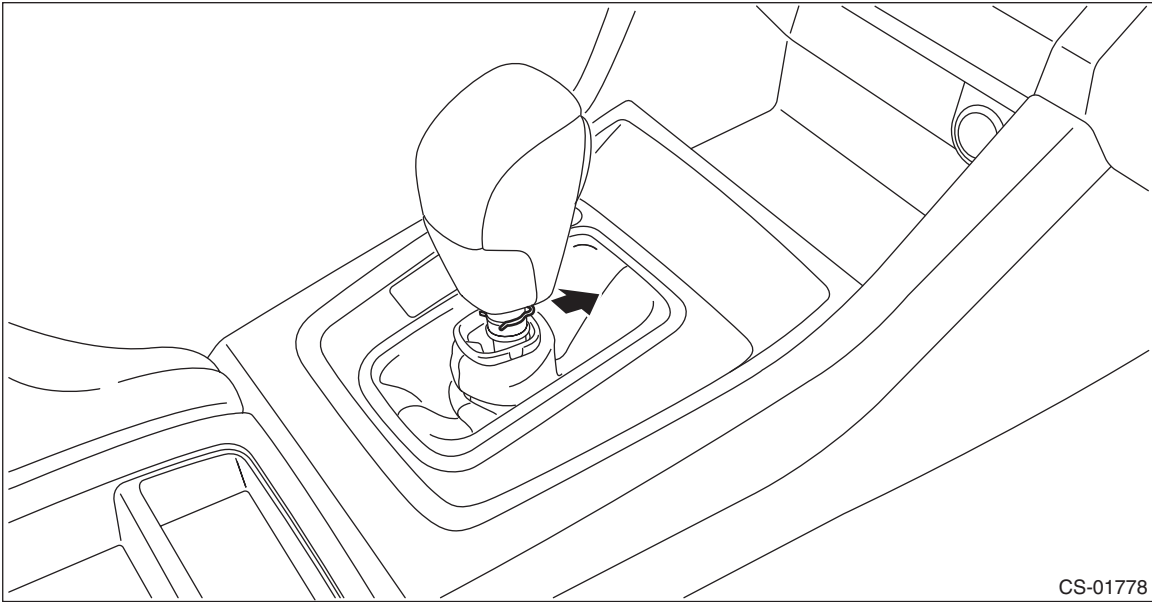
CONTROL SYSTEMS

11) Lower the cover grip AT vertically toward the lever. (Model with gate shifter)

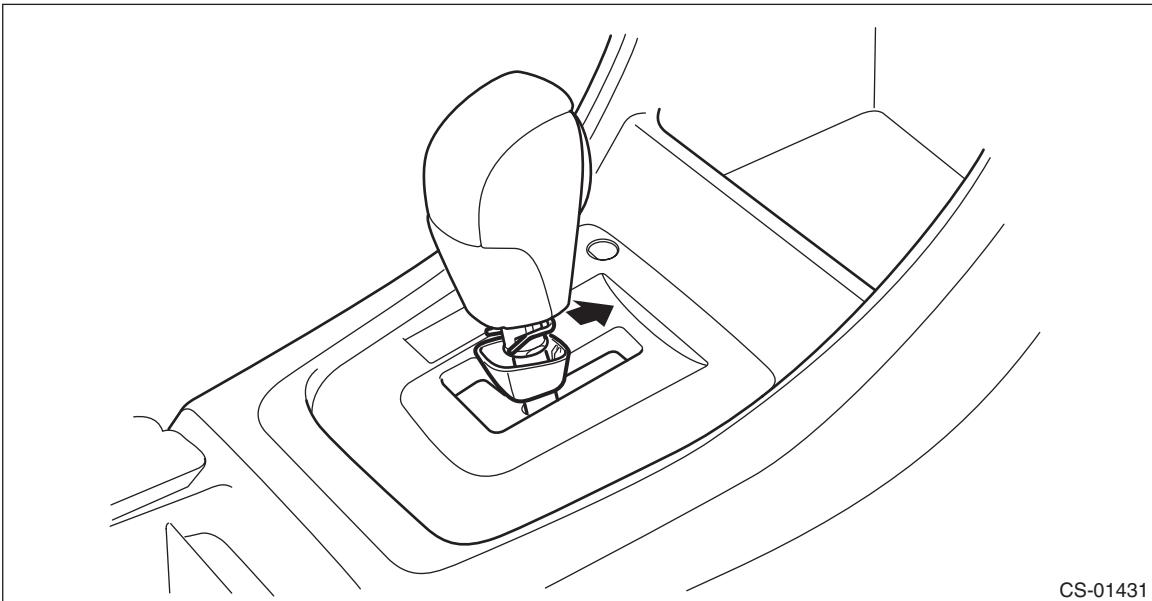


12) Remove the clamp grip pin.

- Model with boot shifter



- Model with gate shifter

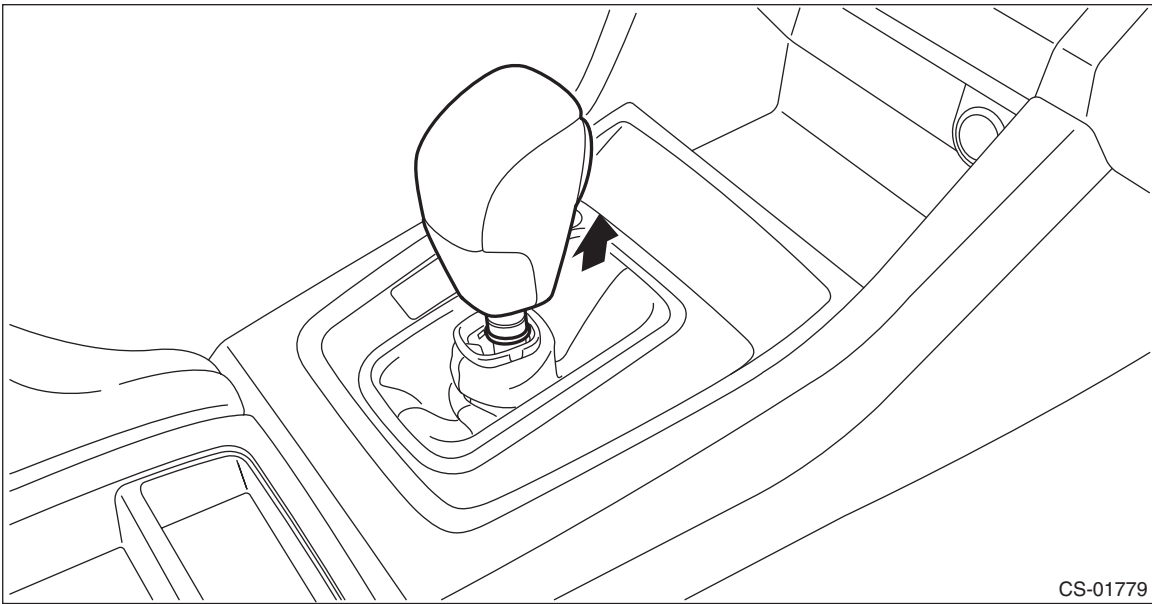


Select Lever

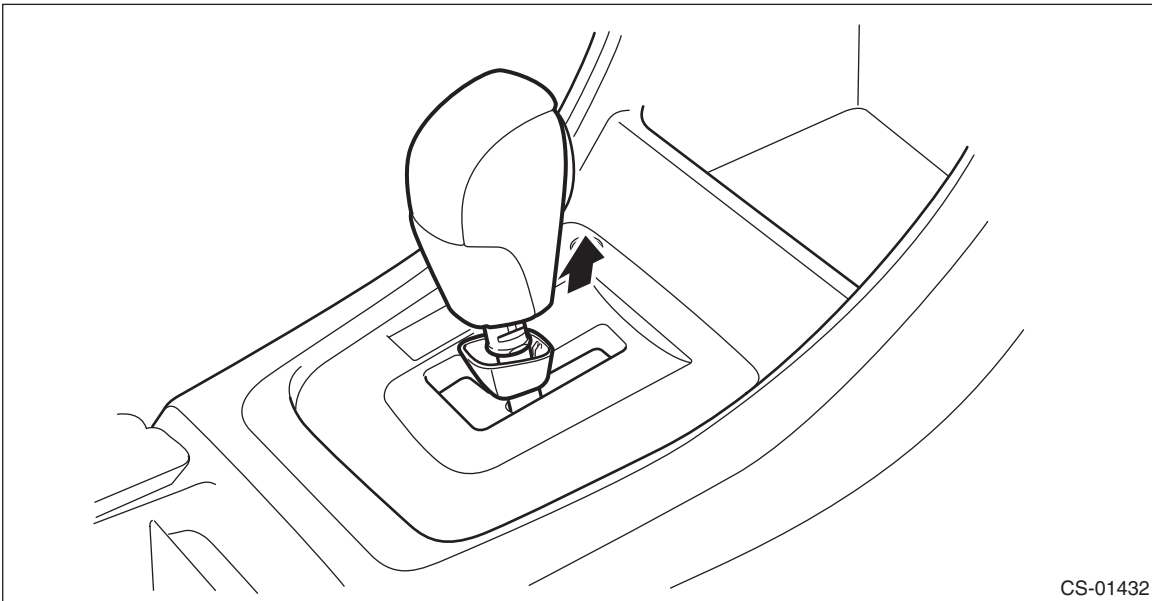
CONTROL SYSTEMS

13) Remove the grip assembly.

- Model with boot shifter



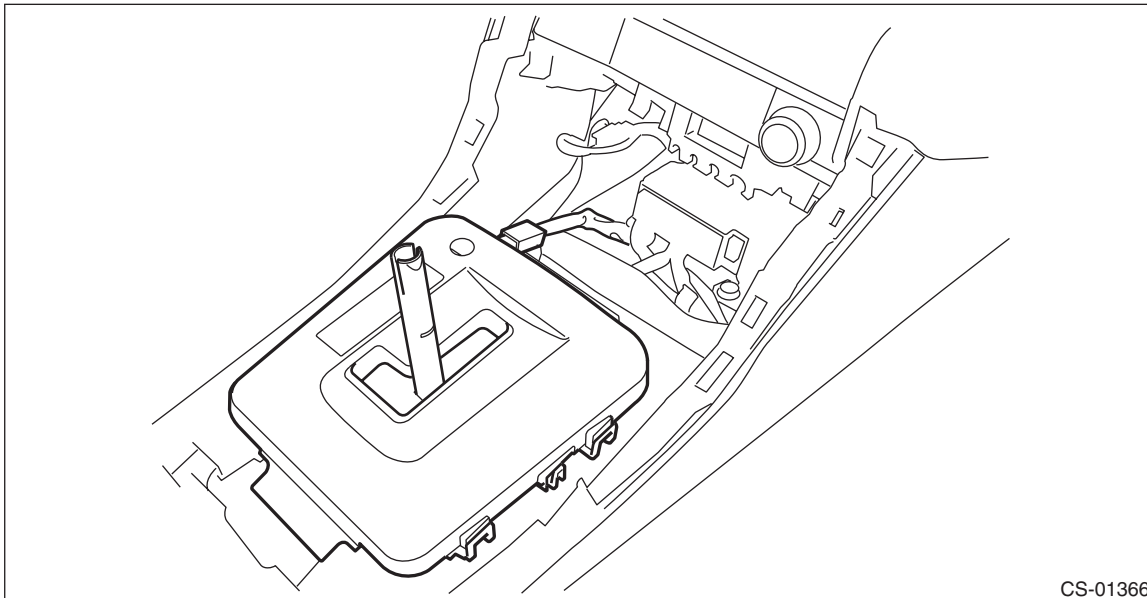
- Model with gate shifter



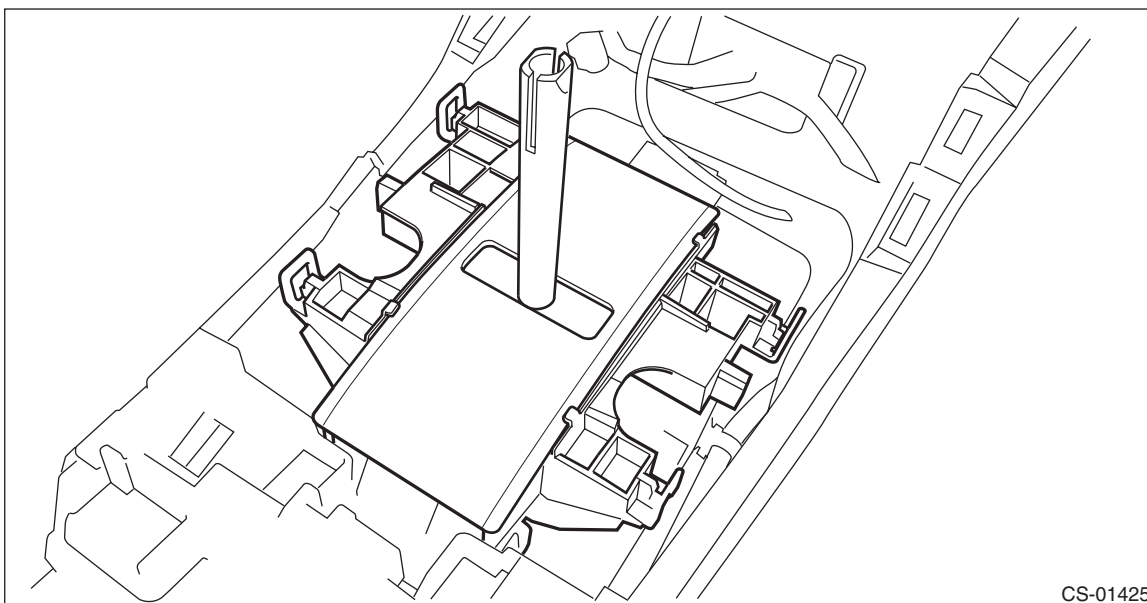
14) Remove the console box. <Ref. to EI-81, REMOVAL, Console Box.>

15) Remove the cover - shift lever. <Ref. to EI-81, REMOVAL, Console Box.>

- 16) Disconnect the connector, and remove the indicator cover from the housing. (Model with gate shifter)



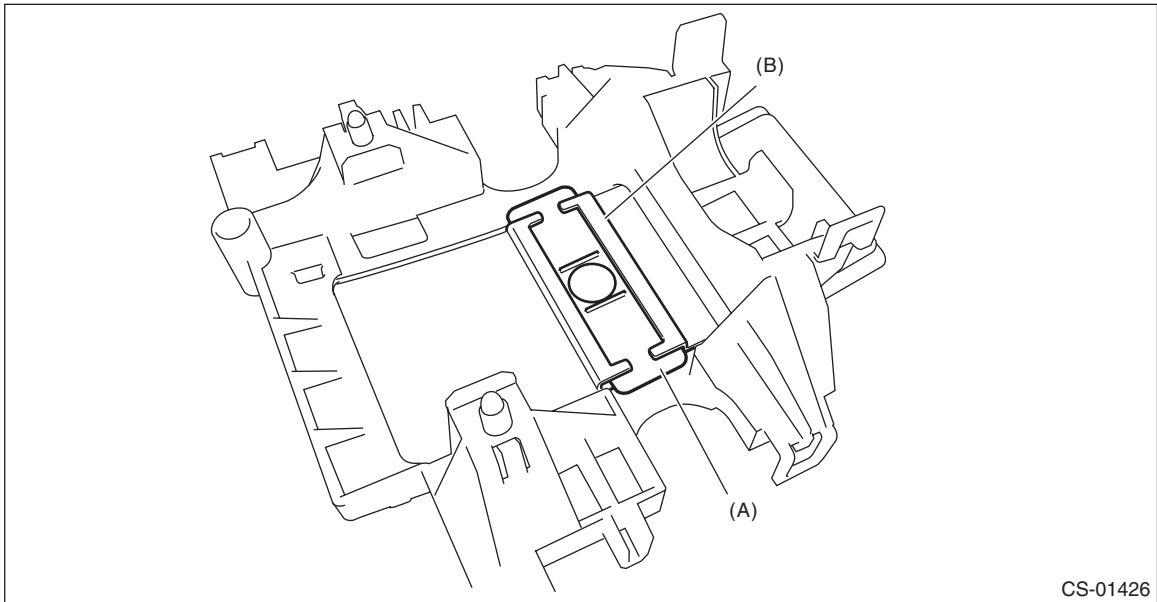
- 17) Remove the housing with the blind A and blind B. (Model with gate shifter)



Select Lever

CONTROL SYSTEMS

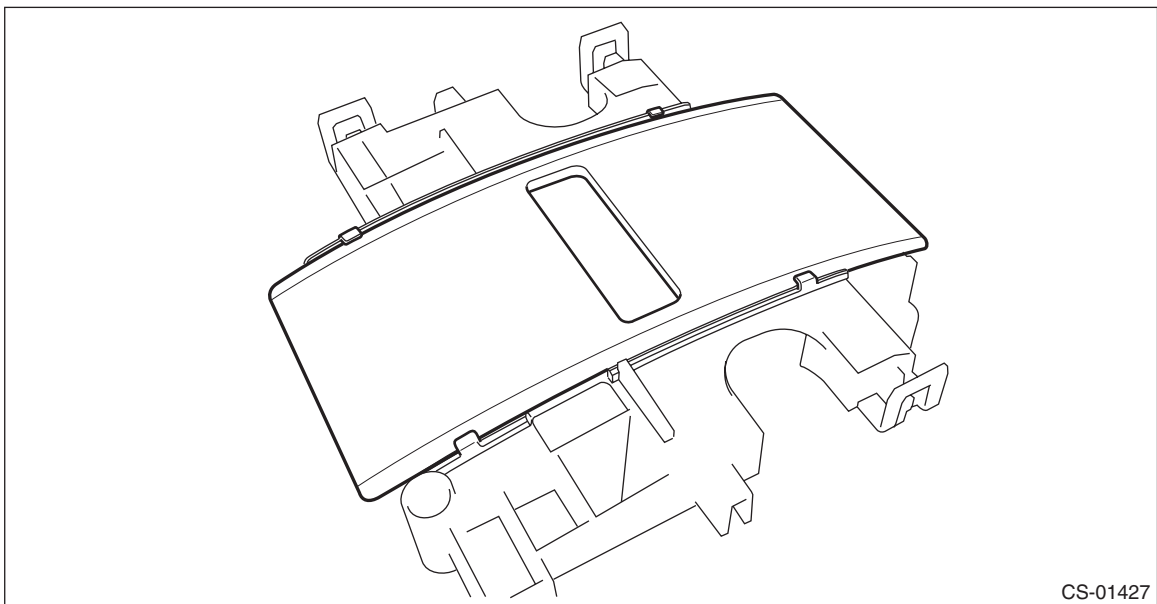
18) Remove the blind B. (Model with gate shifter)



(A) Blind B

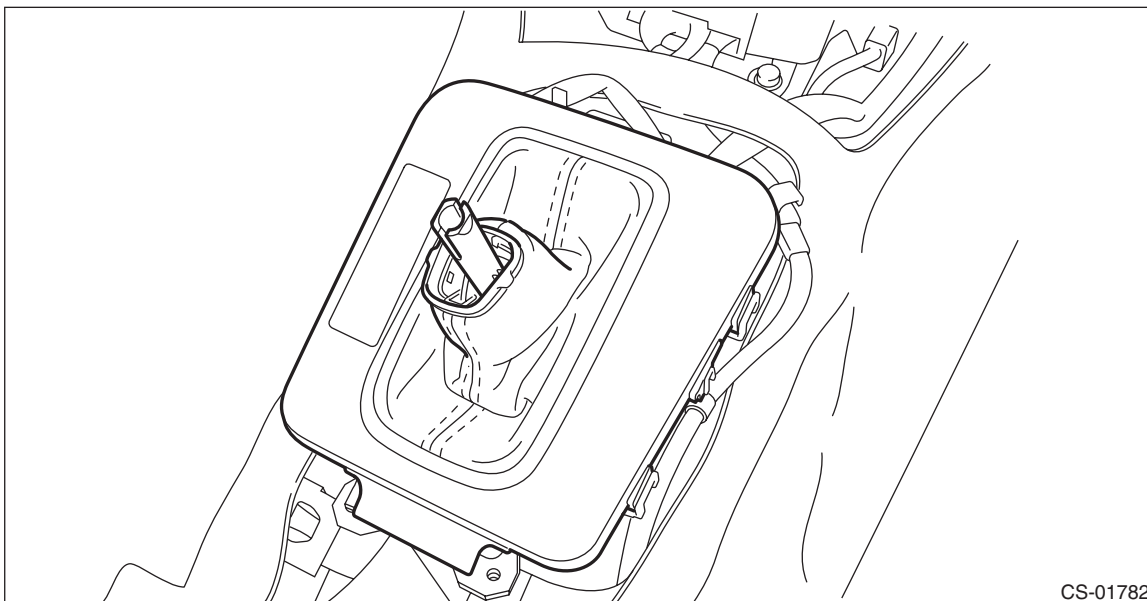
(B) Blind A

19) Remove the blind A from the housing. (Model with gate shifter)

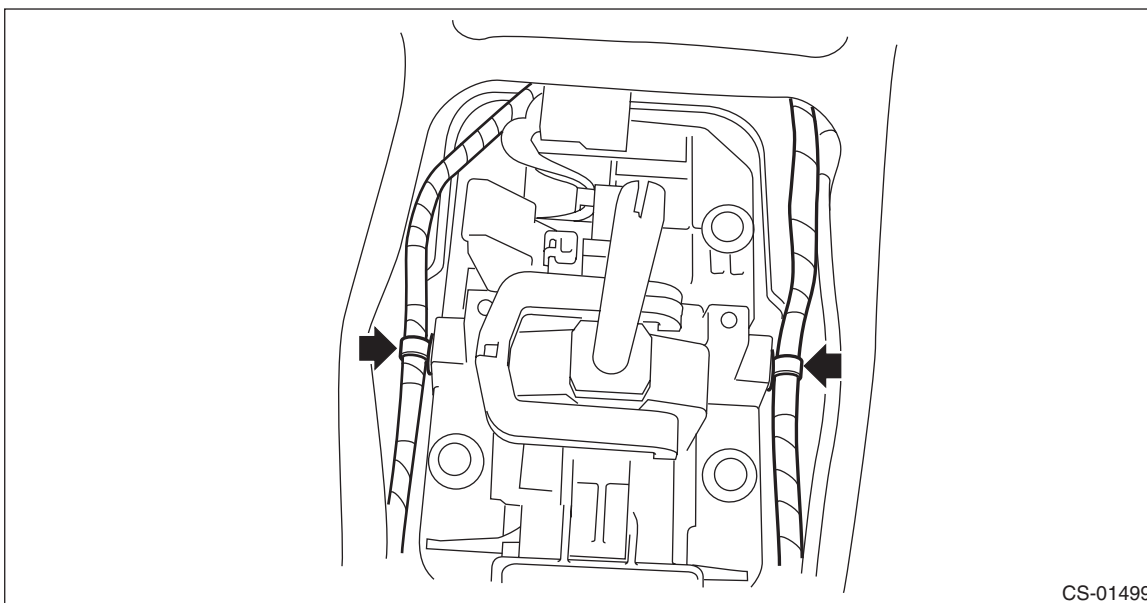


20) Remove the panel center LWR LH and RH. <Ref. to EI-81, REMOVAL, Console Box.>

21) Disconnect the connector, and remove the indicator assembly. (Model with boot shifter)



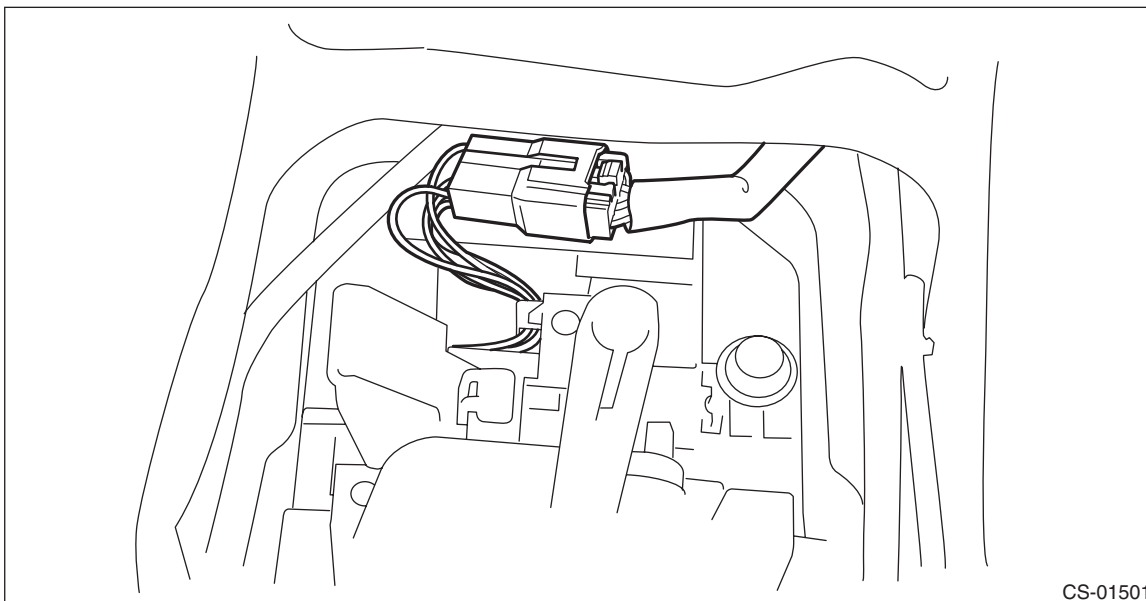
22) Remove the harness clip from the select lever assembly.



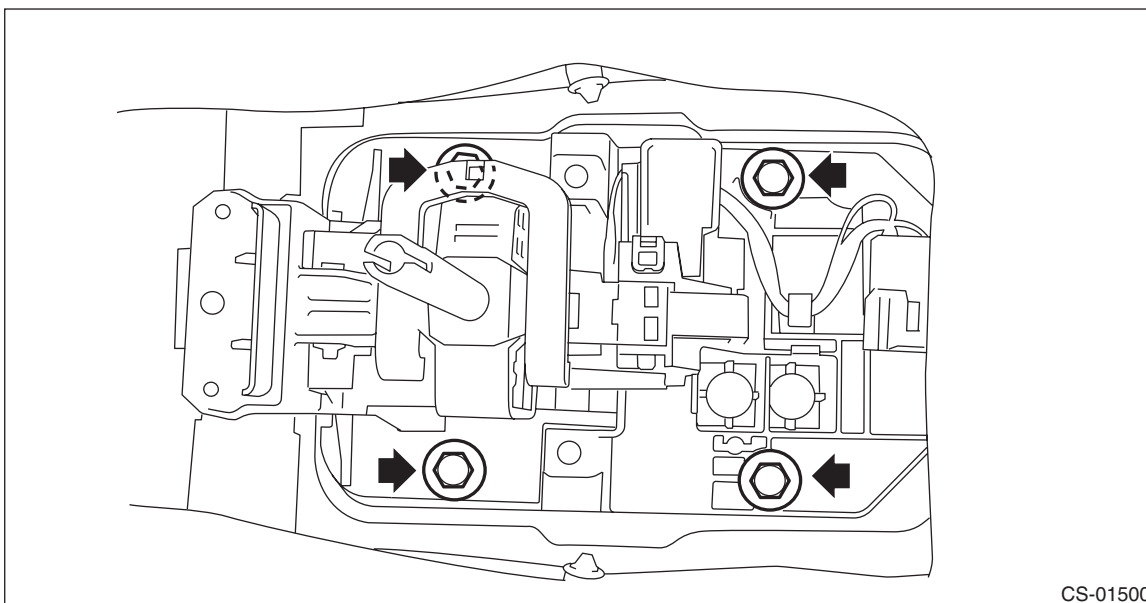
Select Lever

CONTROL SYSTEMS

23) Disconnect the harness connector.

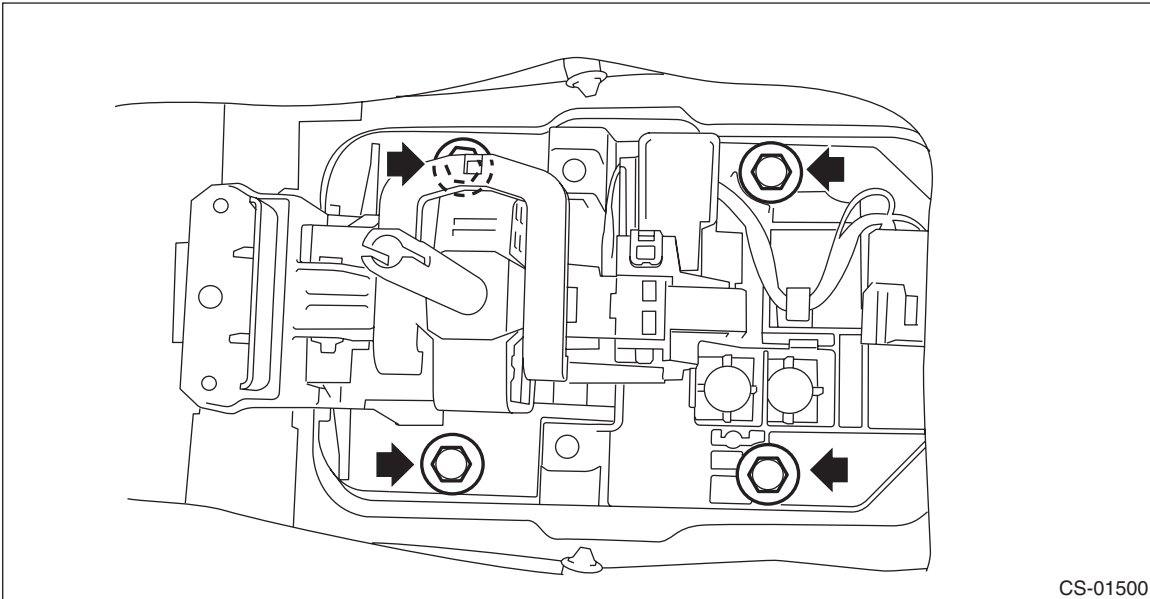


24) Remove the four bolts to remove the select lever assembly.

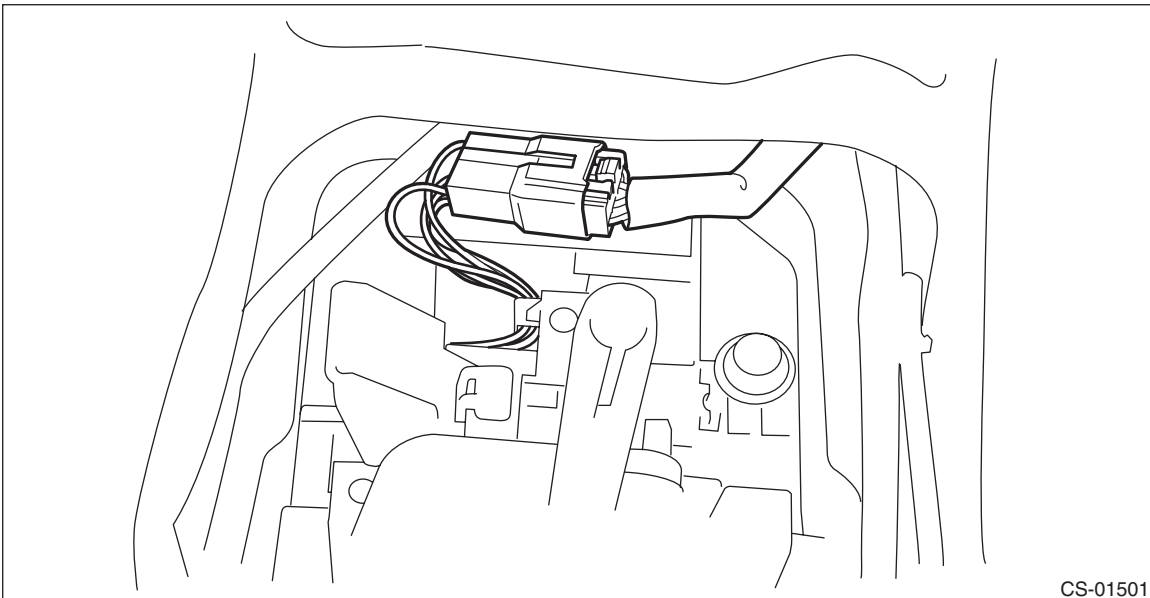


B: INSTALLATION

- 1) Set the select lever assembly to the vehicle body.
- 2) Tighten the four mounting bolts to attach the select lever assembly to the vehicle body.

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

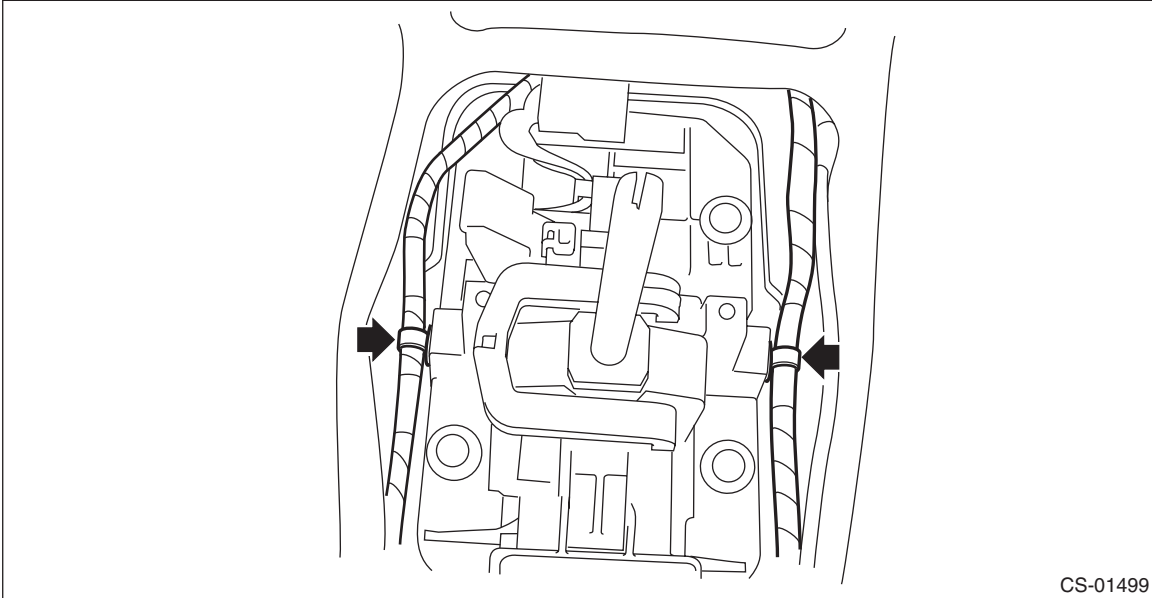
- 3) Connect the harness connector.



Select Lever

CONTROL SYSTEMS

4) Install the harness clip to the select lever assembly.



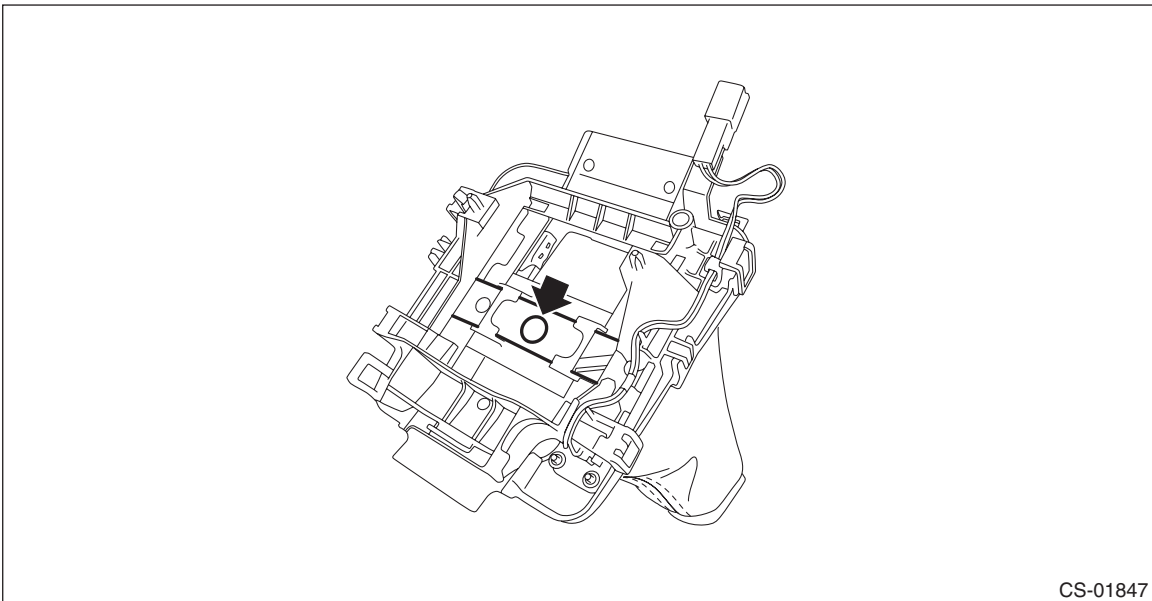
CS-01499

5) Shift the select lever to “N” range.

6) Install the indicator assembly, then connect the connector. (Model with boot shifter)

NOTE:

Insert the select lever through the blind hole sufficiently.



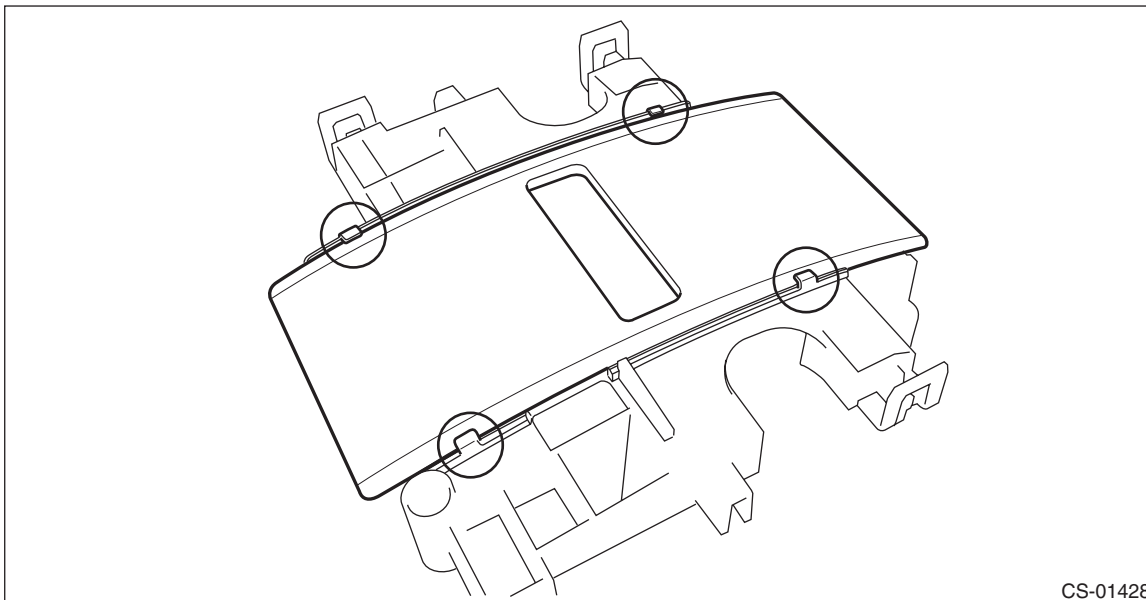
CS-01847

7) Install the panel center LWR LH and RH. <Ref. to EI-82, INSTALLATION, Console Box.>

8) Install the blind A to the housing. (Model with gate shifter)

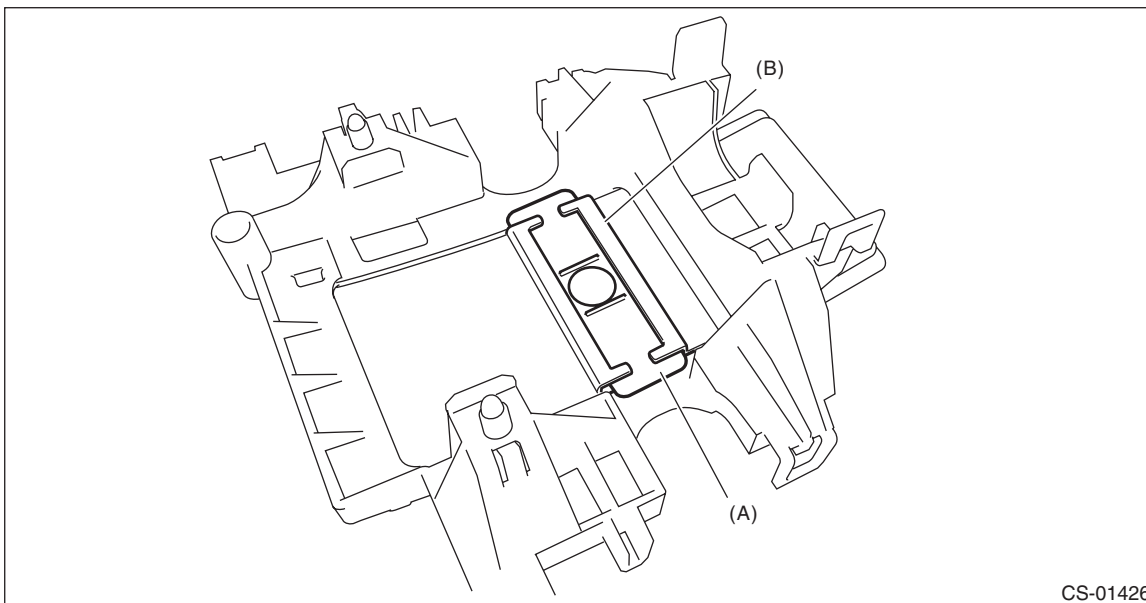
NOTE:

The blind A should be installed so that it is securely caught inside the tab of the housing.



CS-01428

9) Install the blind B behind the blind A. (Model with gate shifter)



CS-01426

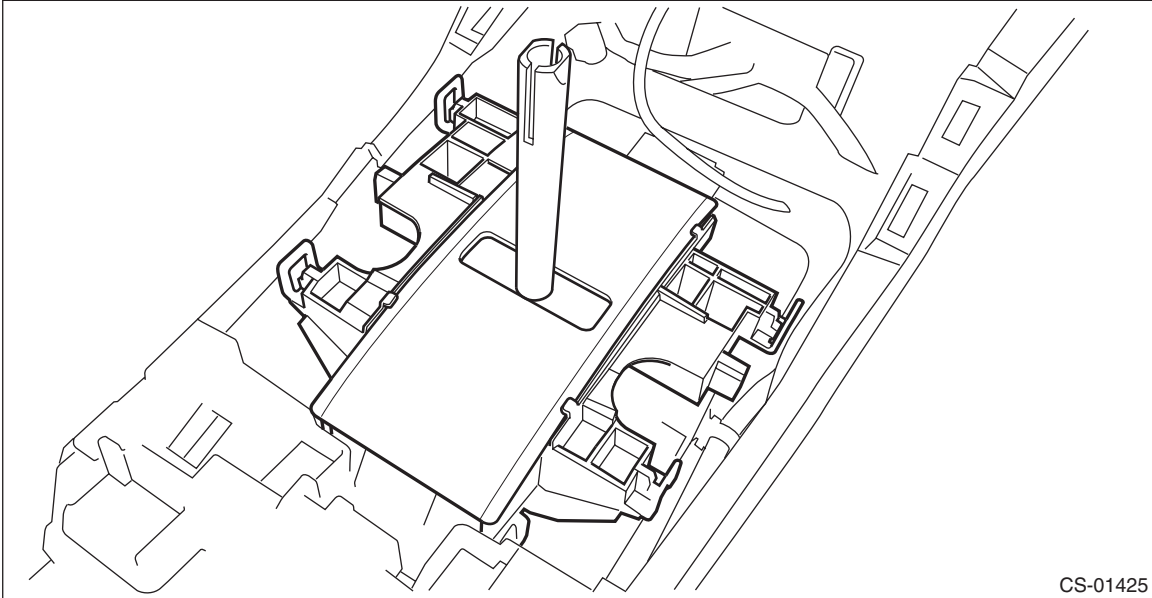
(A) Blind B

(B) Blind A

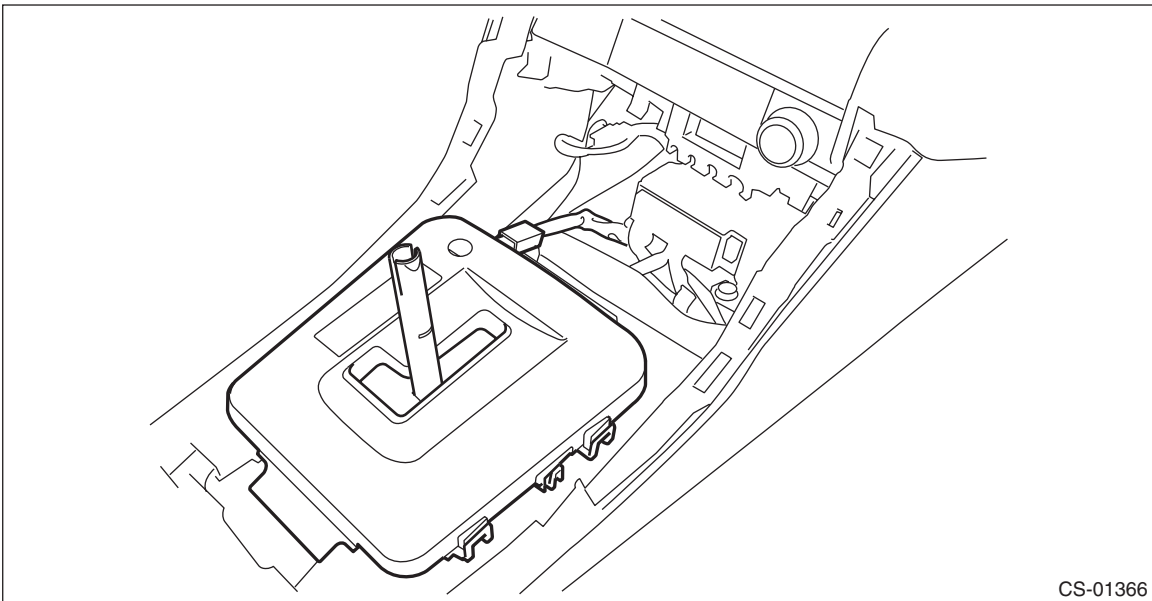
Select Lever

CONTROL SYSTEMS

10) Install the housing. (Model with gate shifter)

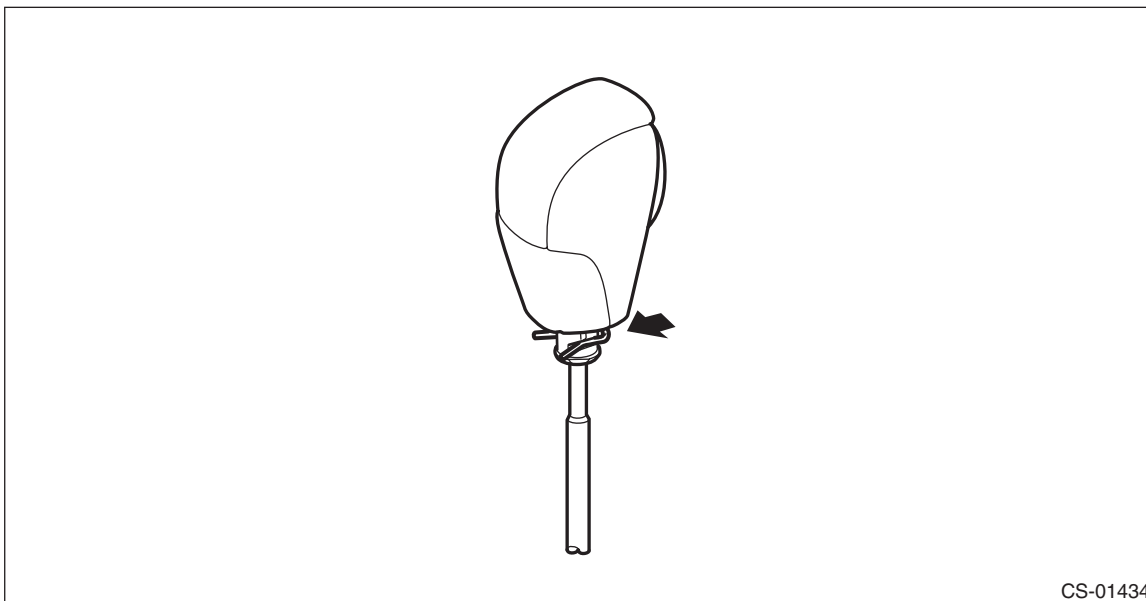


11) Install the indicator cover, then connect the connector. (Model with gate shifter)



12) Install the cover shift lever. <Ref. to EI-82, INSTALLATION, Console Box.>

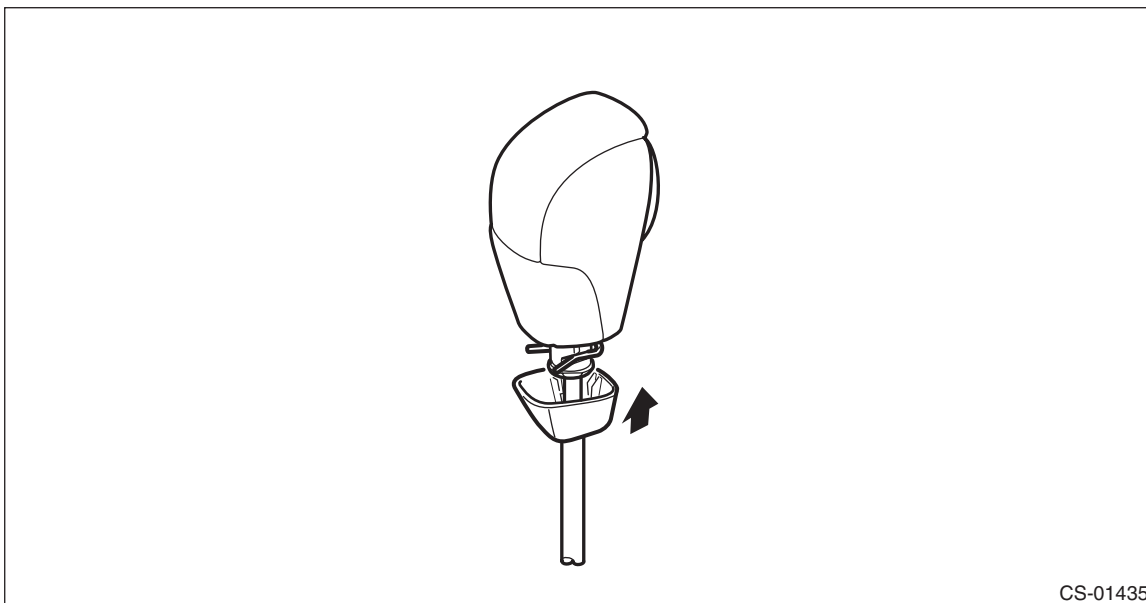
13) Accessing from the button side of the grip, attach the clamp grip pin.



14) Install the cover grip AT securely. (Model with gate shifter)

NOTE:

After installation, check that the cover grip AT cannot be detached.



Select Lever

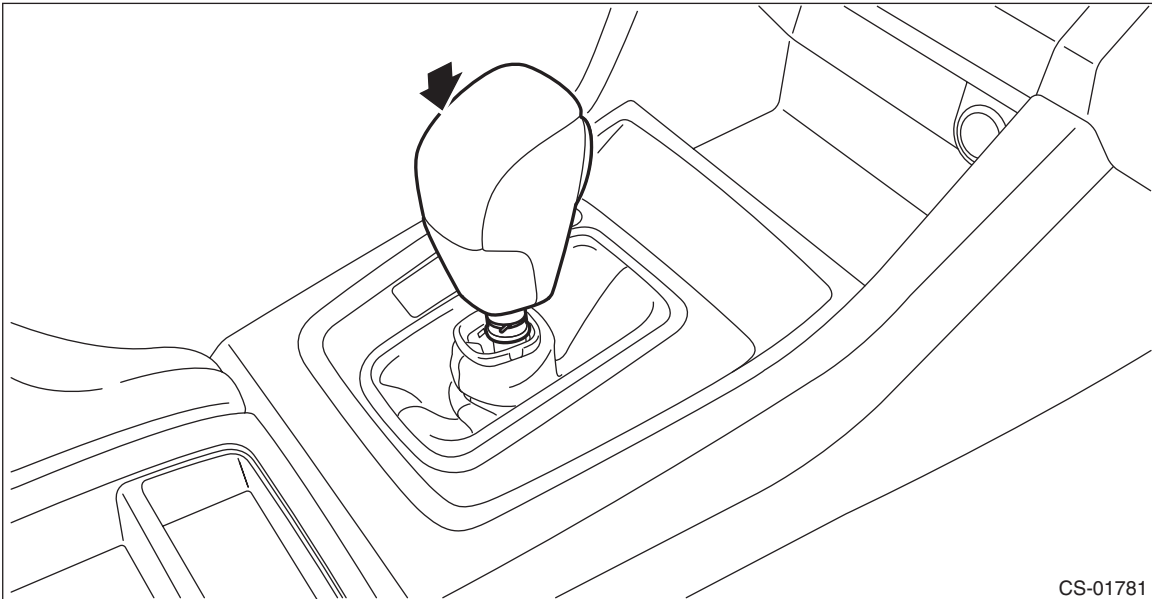
CONTROL SYSTEMS

15) Insert the grip assembly to the select lever and press it down until a click is heard.

NOTE:

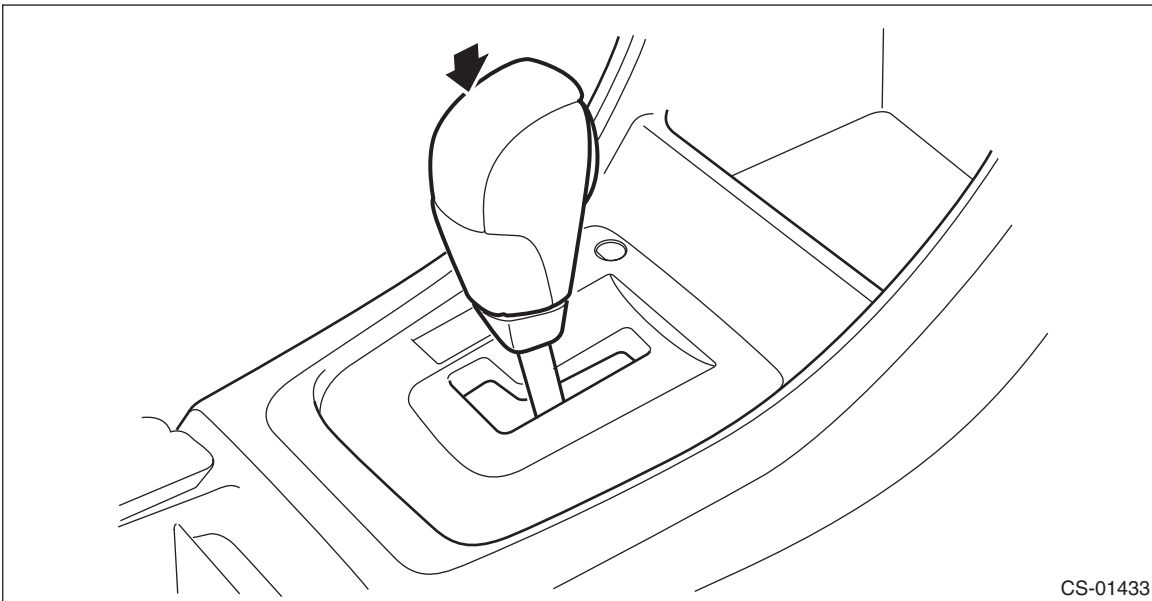
For the model with boot shifter, insert the grip assembly while holding with your fingers so that the clamp grip pin does not come out.

- Model with boot shifter



CS-01781

- Model with gate shifter

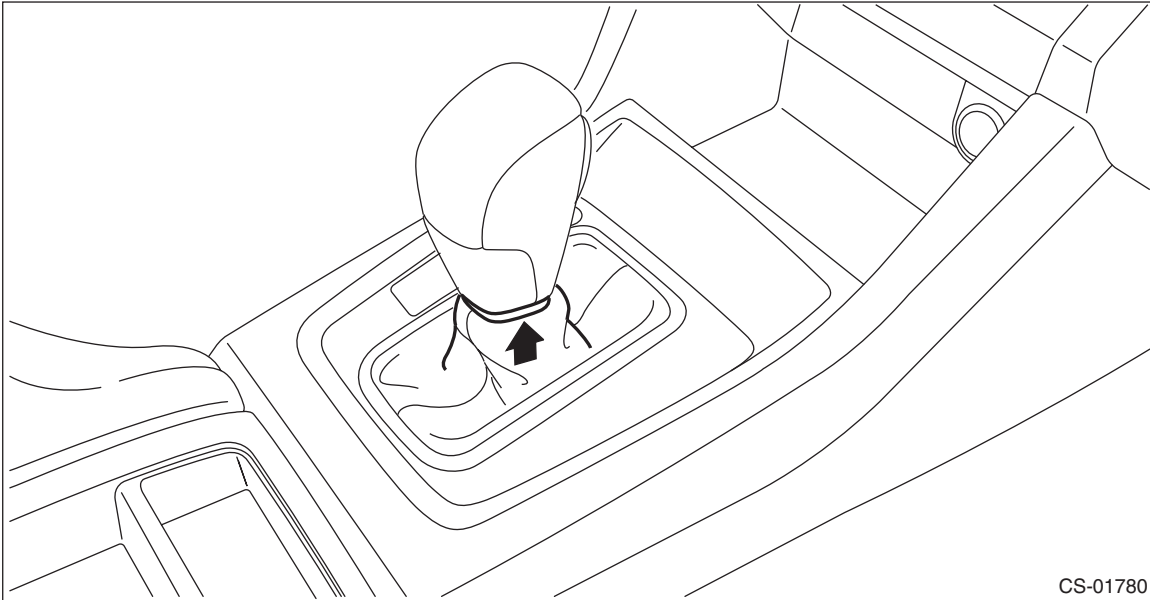


CS-01433

16) Securely install the boot assembly. (Model with boot shifter)

NOTE:

After installation, check that the boot assembly does not come off.



CS-01780

17) After installation of grip, check the following points.

- The grip will not come off.
- The button on the grip operates normally.

18) Install the console box. <Ref. to EI-82, INSTALLATION, Console Box.>

19) Shift the select lever to "N" range.

20) Lift up the vehicle.

21) Secure the cable to the bracket. <Ref. to CS-53, INSTALLATION, Select Cable.>

22) Adjust the select cable position. <Ref. to CS-57, ADJUSTMENT, Select Cable.>

23) After adjustment, confirm that the select lever operates properly at all range positions using the shift lock release button.

NOTE:

According to the select lever operation, confirm that the indicator positions are shown correctly.

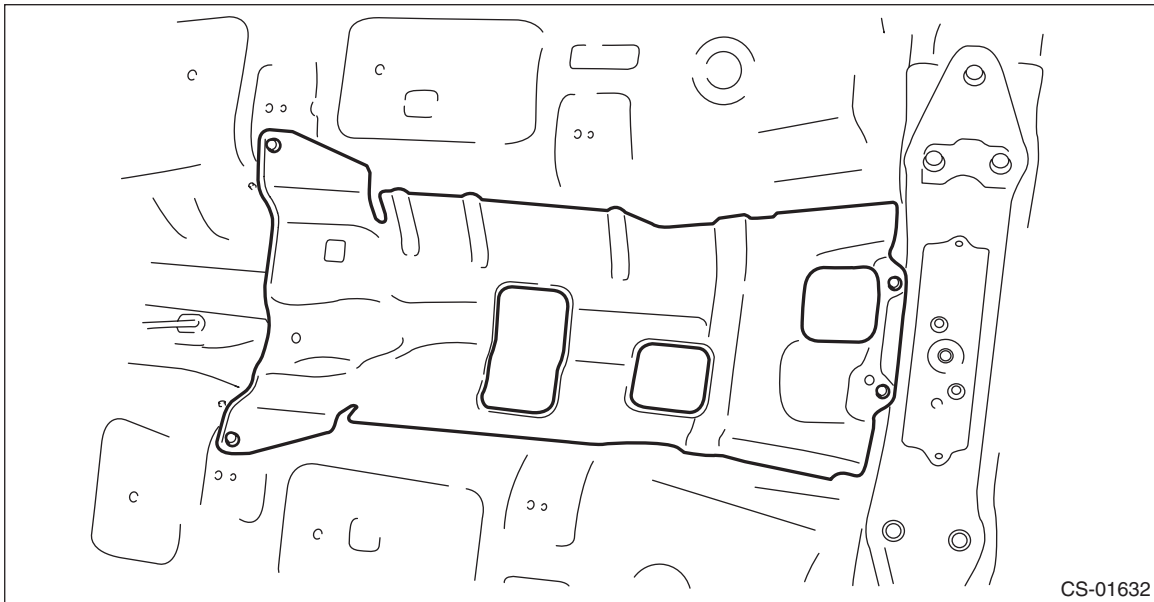
Select Lever

CONTROL SYSTEMS

24) Install the center exhaust cover.

Tightening torque:

18 N·m (1.8 kgf-m, 13.3 ft-lb)



25) Install the center exhaust pipe. <Ref. to EX(H4DO(w/o HEV))-15, INSTALLATION, Center Exhaust Pipe.>

26) Lower the vehicle.

27) Connect the battery ground terminal. <Ref. to NT-5, BATTERY, NOTE, Note.>

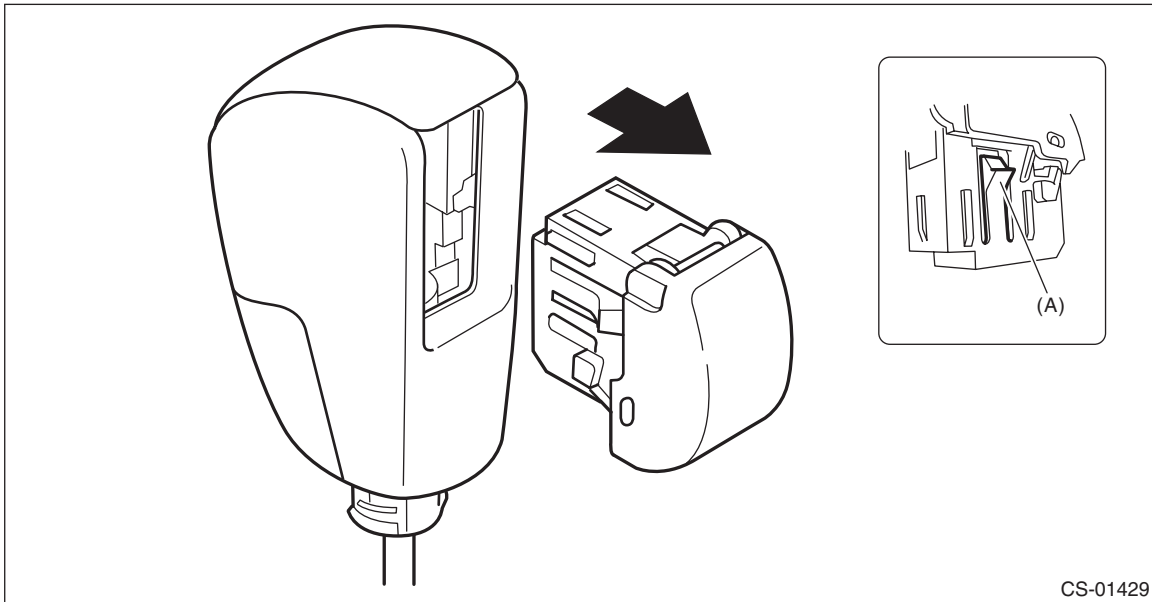
28) Inspect the following items. If a malfunction is found in the inspection, adjust the select cable or inhibitor switch.

- (1) The shift lock operates normally. <Ref. to CS-13, SHIFT LOCK OPERATION, INSPECTION, AT Shift Lock Control System.>
- (2) Engine starts when the select lever is in “P” or “N” range, but not in other ranges.
- (3) Back-up light illuminates when the select lever is in the “R” range, but not in other ranges.
- (4) Select lever and indicator positions are matched.

C: DISASSEMBLY

1. GRIP ASSY

1) Remove the button assembly_AT.

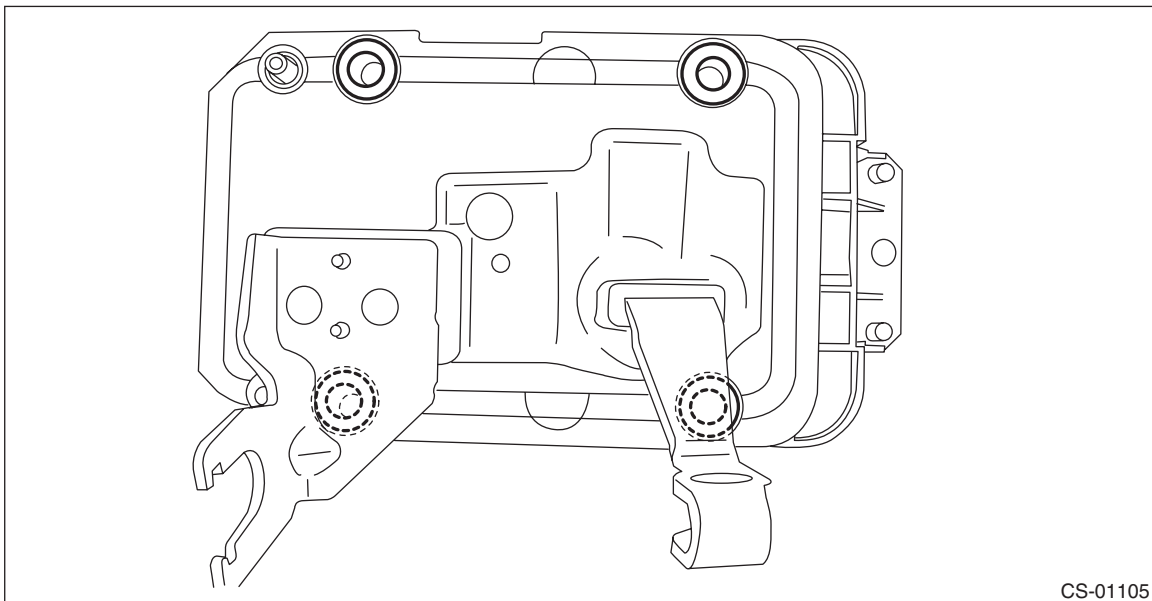


(A) Claw

2) Remove the rod COMPL.

2. AT SELECT LEVER ASSEMBLY

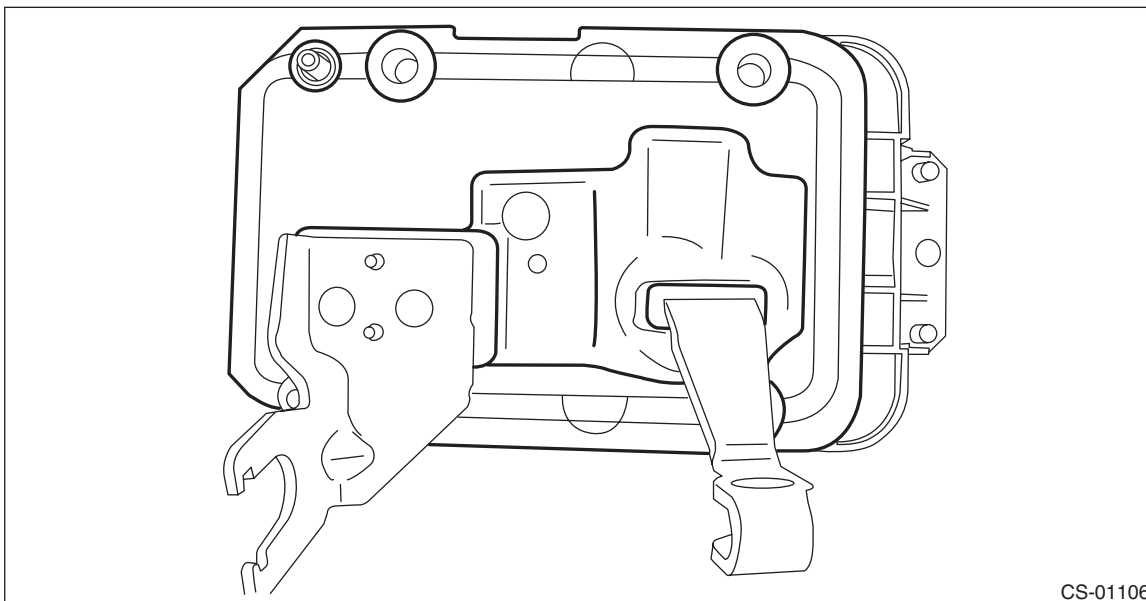
1) Remove the spacer plate.



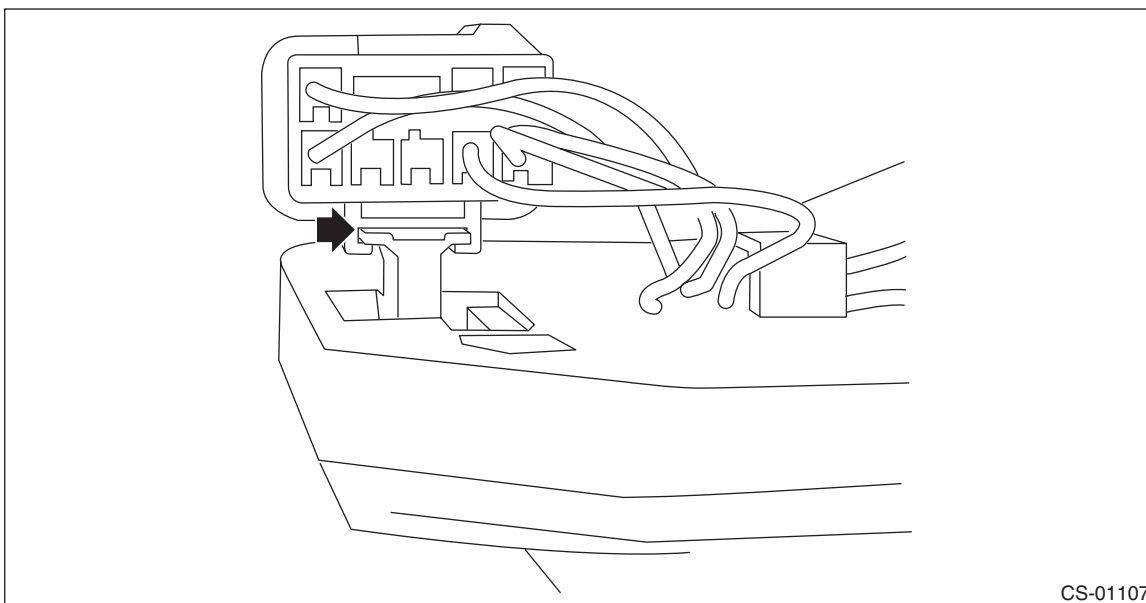
Select Lever

CONTROL SYSTEMS

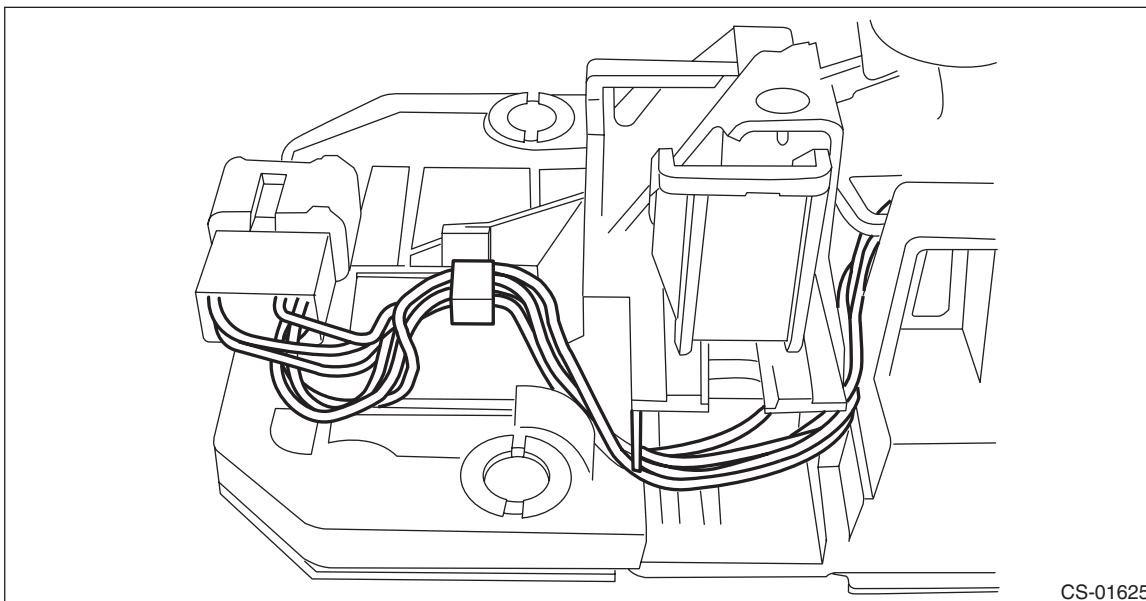
2) Remove the gasket.



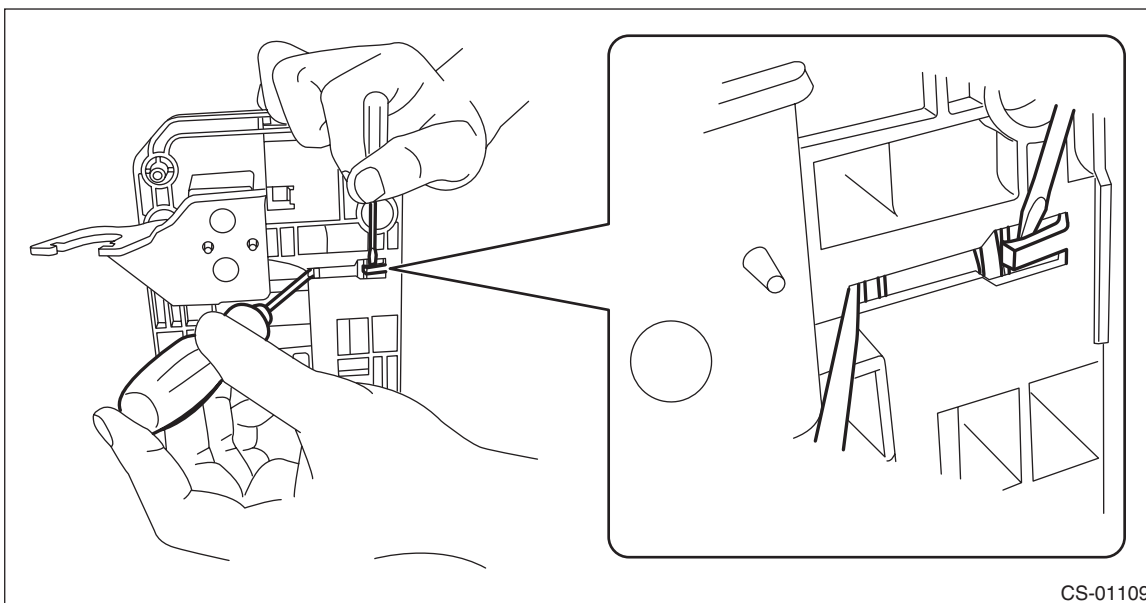
3) Insert a flat tip screwdriver with a thin tip under the connector and disconnect the harness connector from the plate COMPL.



4) Remove the harness from the plate COMPL.



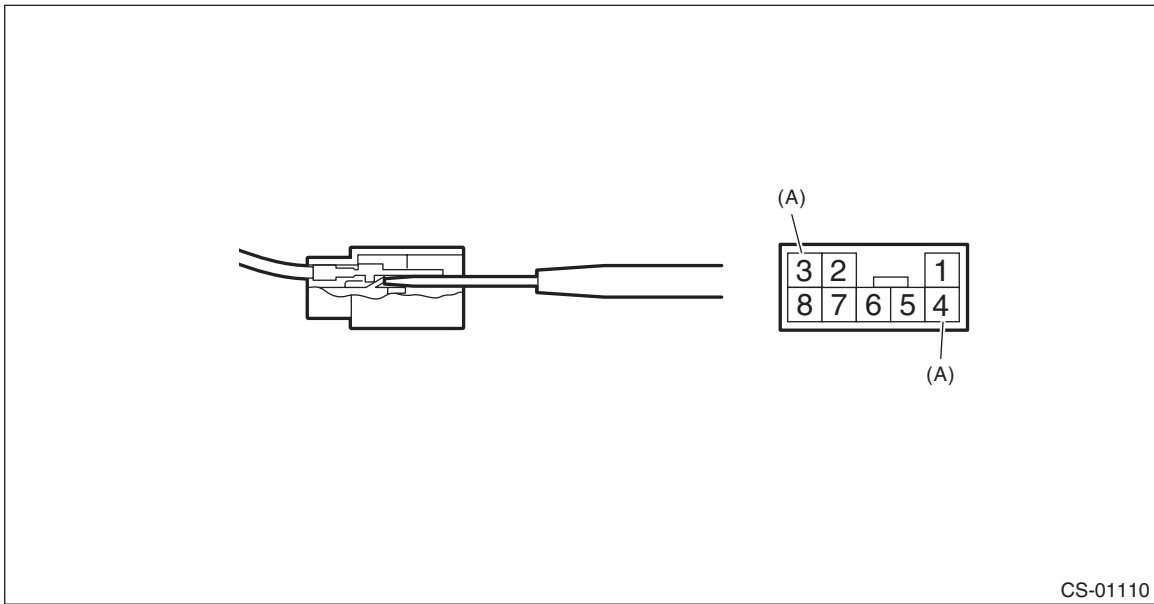
5) Raise the claw with a flat tip screwdriver with a thin tip and remove the solenoid unit.



Select Lever

CONTROL SYSTEMS

6) Remove the terminal of the solenoid unit using a flat tip precision screwdriver with a tip width of 1.3 mm (0.05 in) or less, KTC connector terminal tool ECC-1T or equivalent.

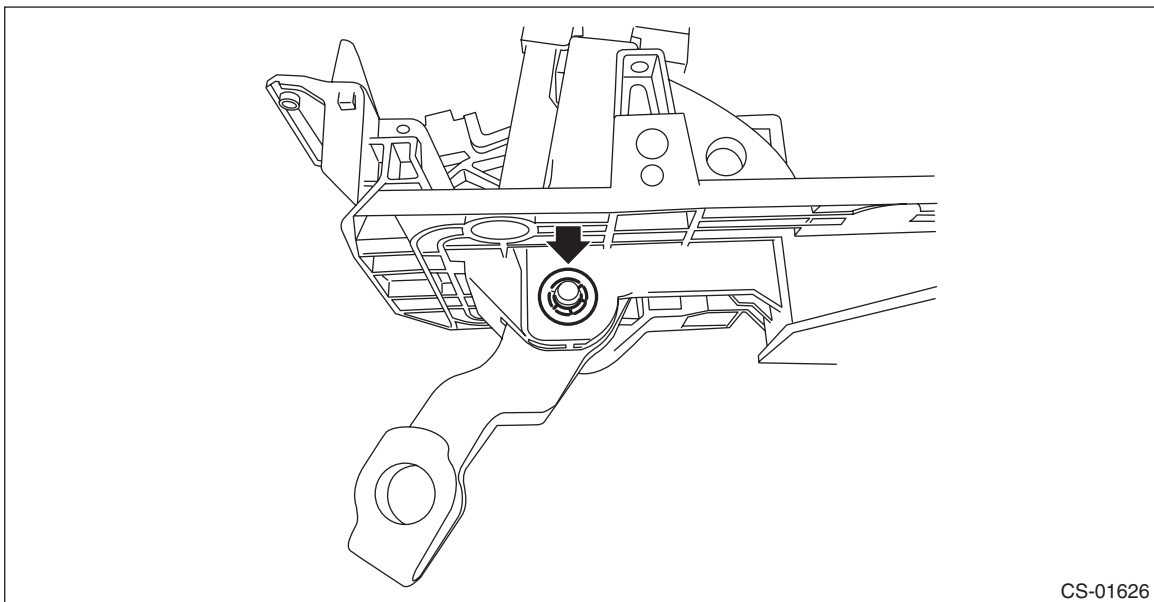


(A) Solenoid unit terminals

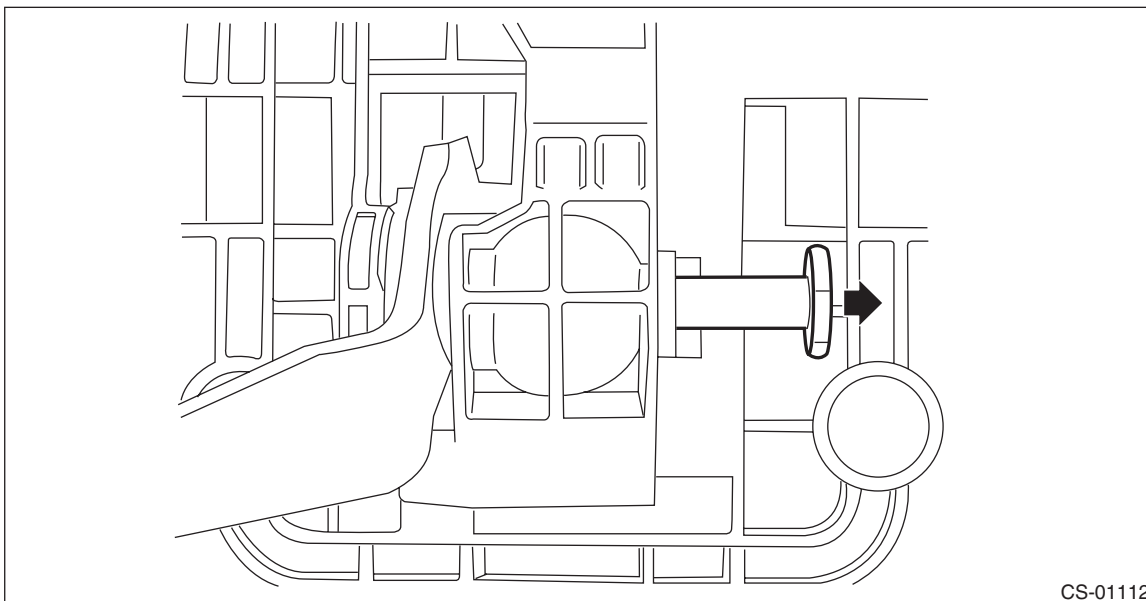
7) Remove the clamp push nut.

NOTE:

Replace the clamp push nut with a new part.



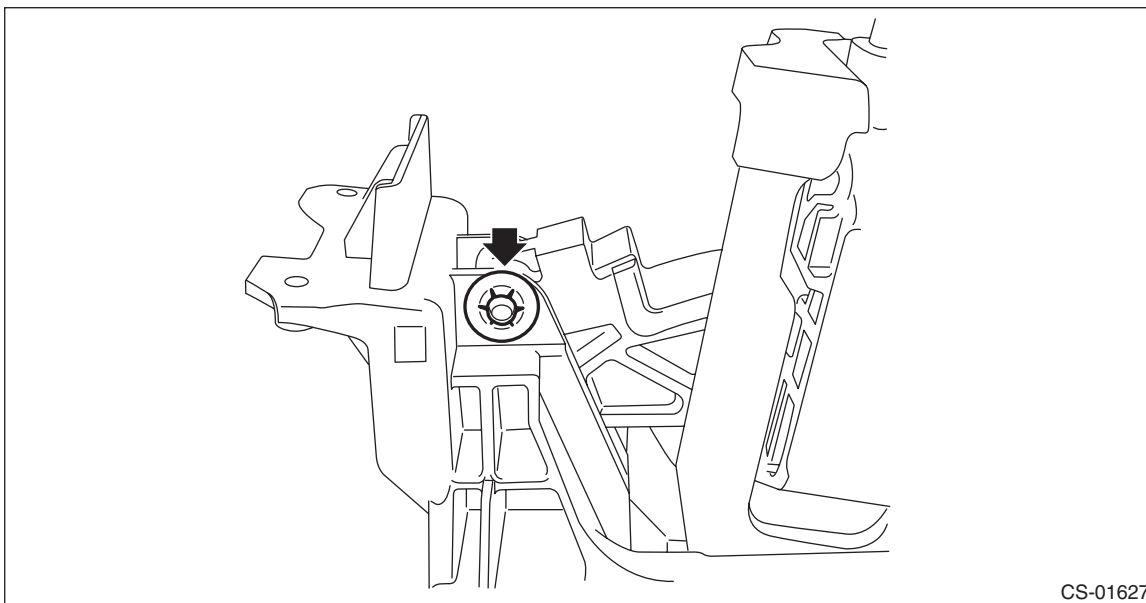
8) Pull out shaft control.



9) Remove the clamp push nut.

NOTE:

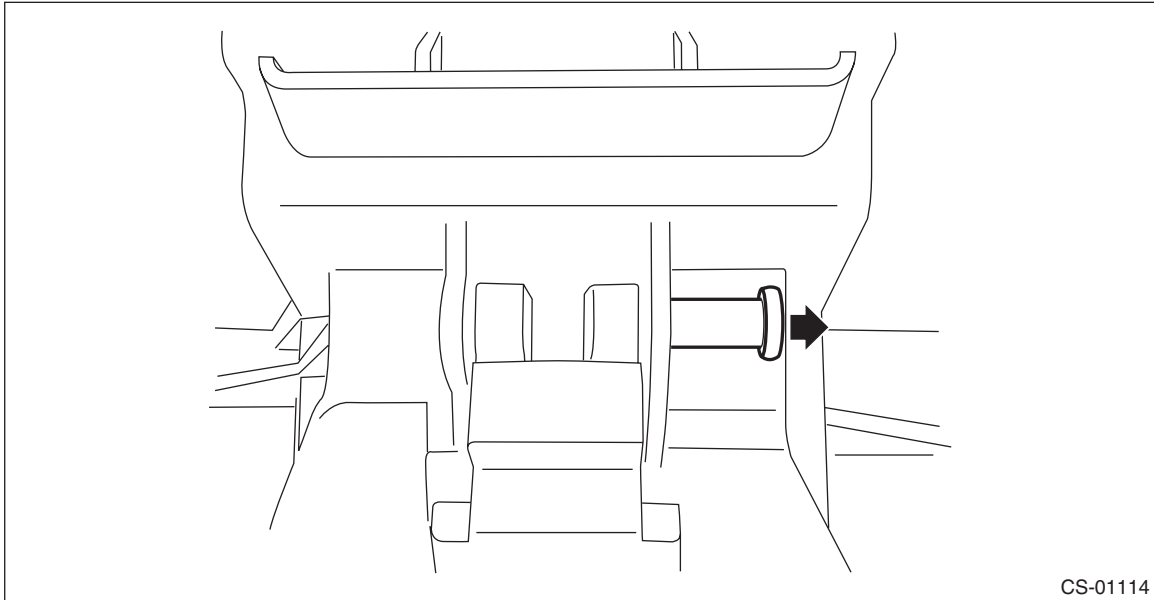
Replace the clamp push nut with a new part.



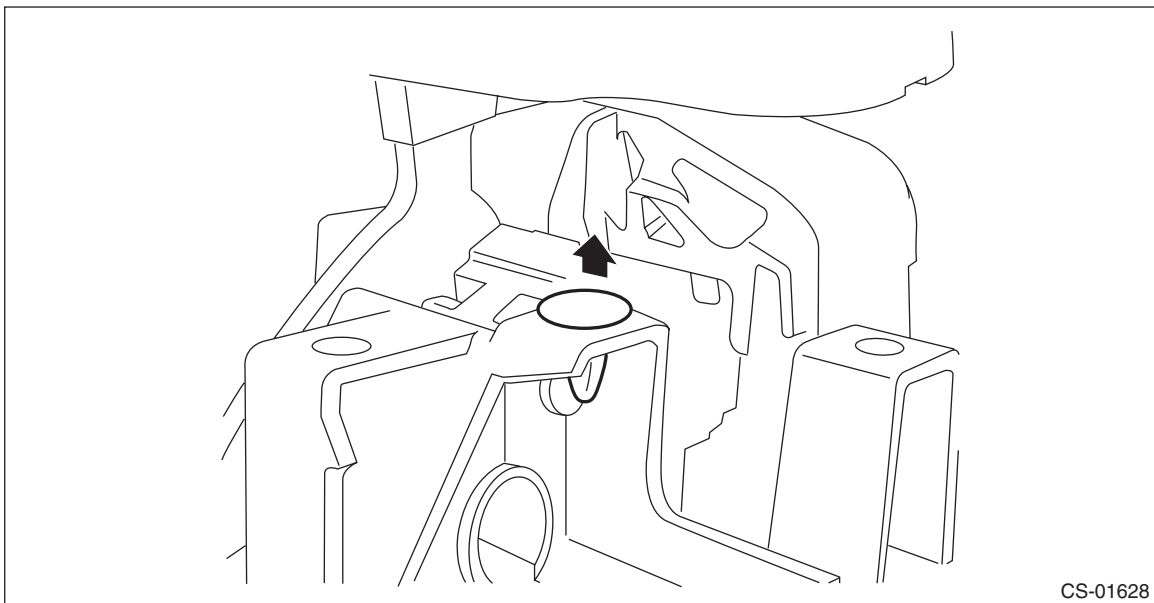
Select Lever

CONTROL SYSTEMS

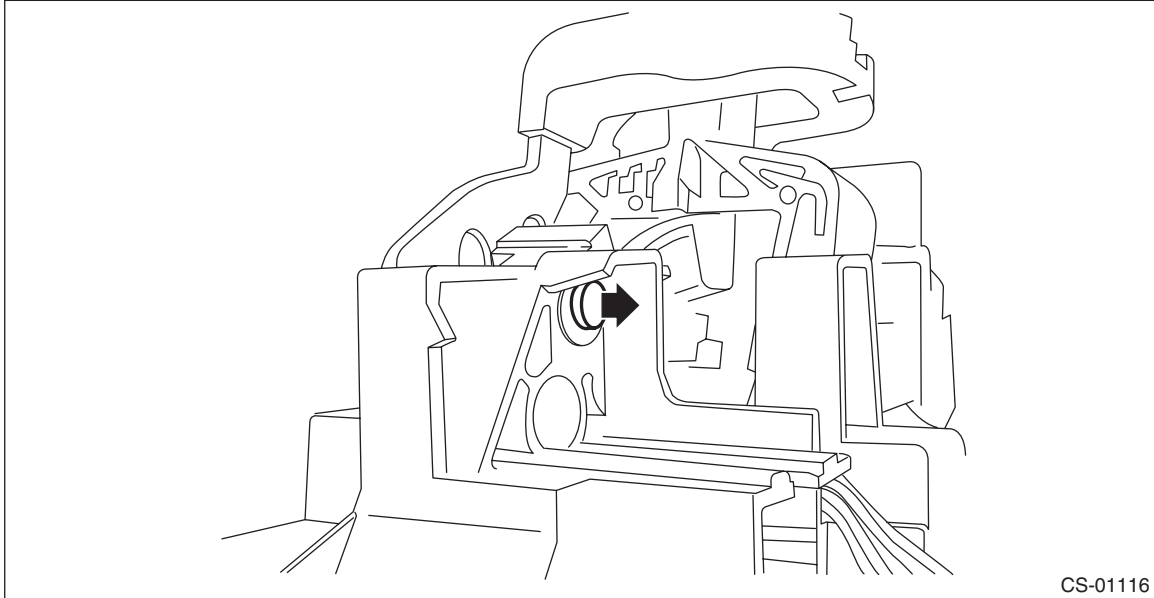
10) Pull out spacer pin guide.



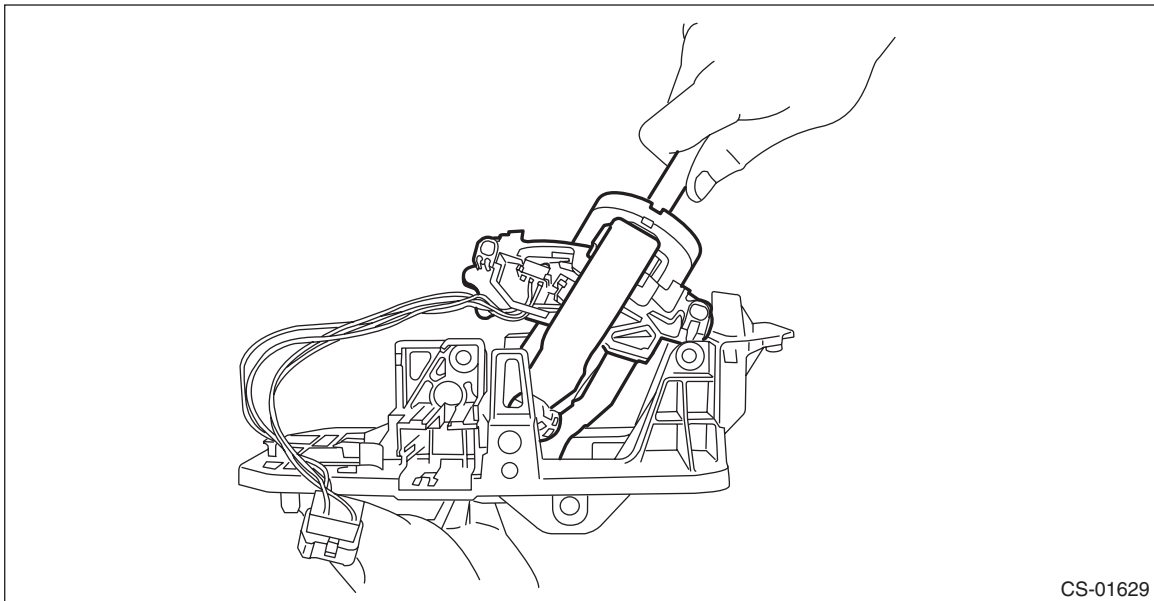
11) Remove the clamp pin.



12) Remove the spacer pin guide.



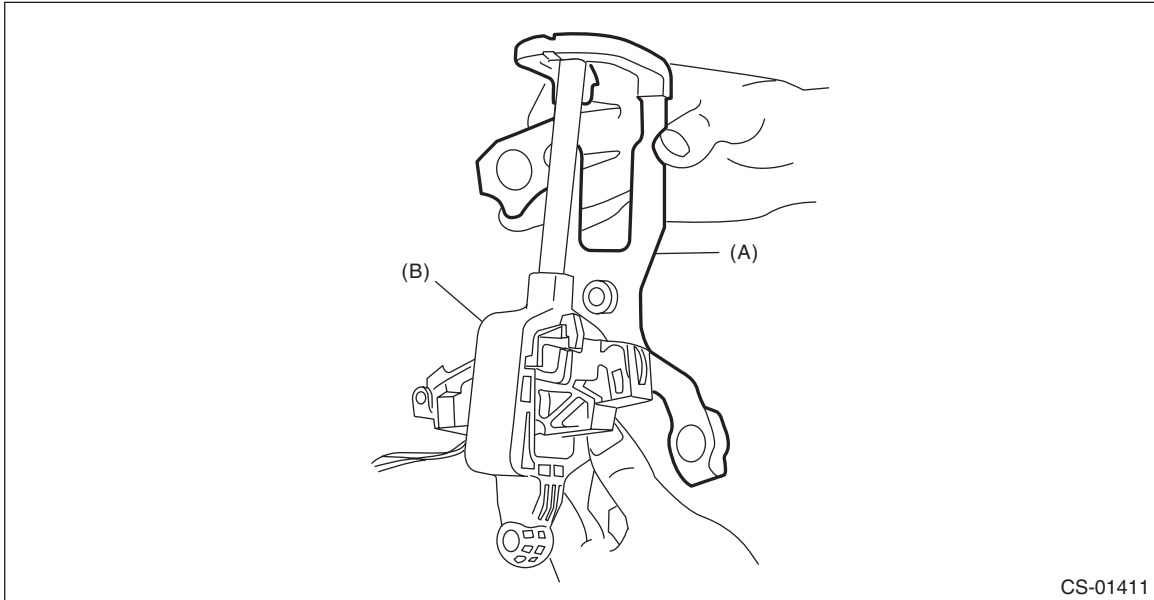
13) Remove the select lever COMPL from the plate COMPL.



Select Lever

CONTROL SYSTEMS

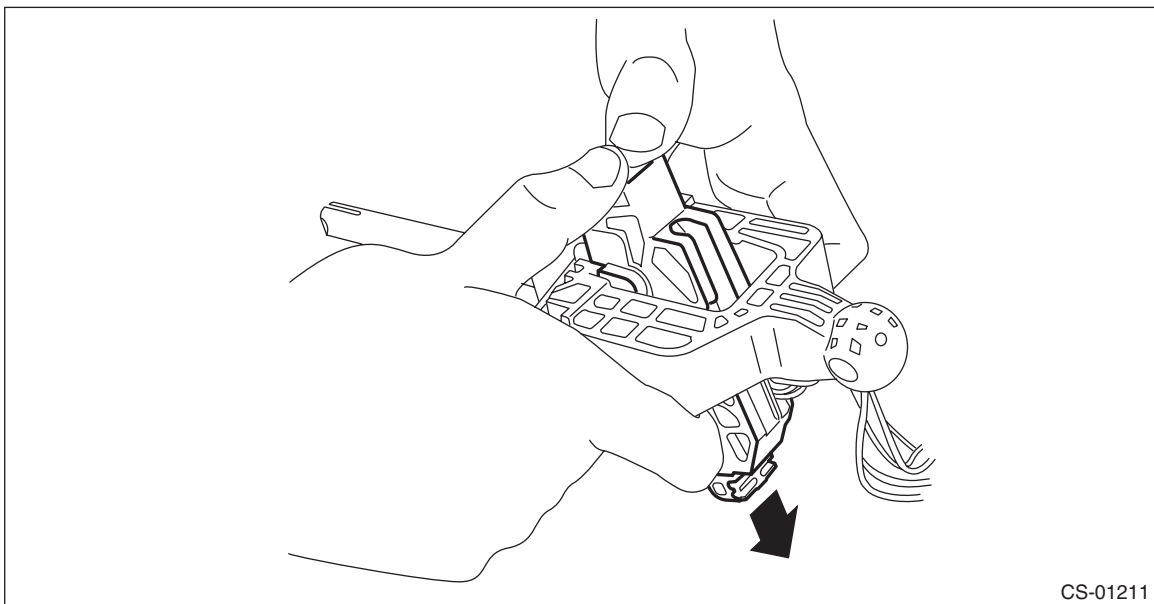
14) Remove the arm COMPL.



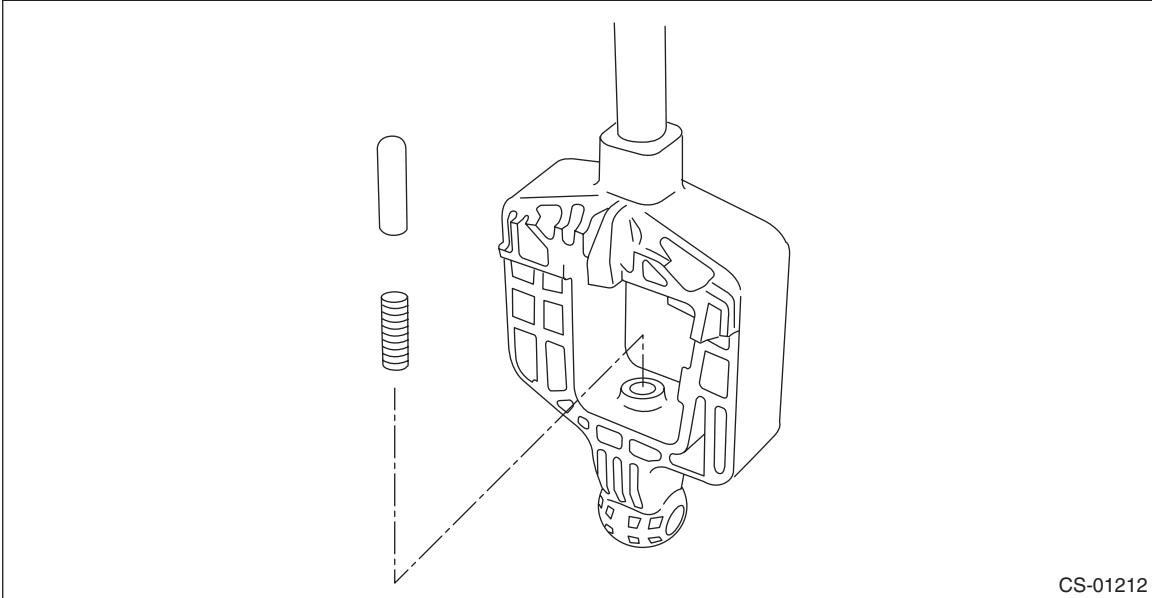
(A) Arm COMPL

(B) Select lever COMPL

15) Remove the plate guide from the select lever COMPL.



16) Remove the rod detent and detent spring from the select lever COMPL.

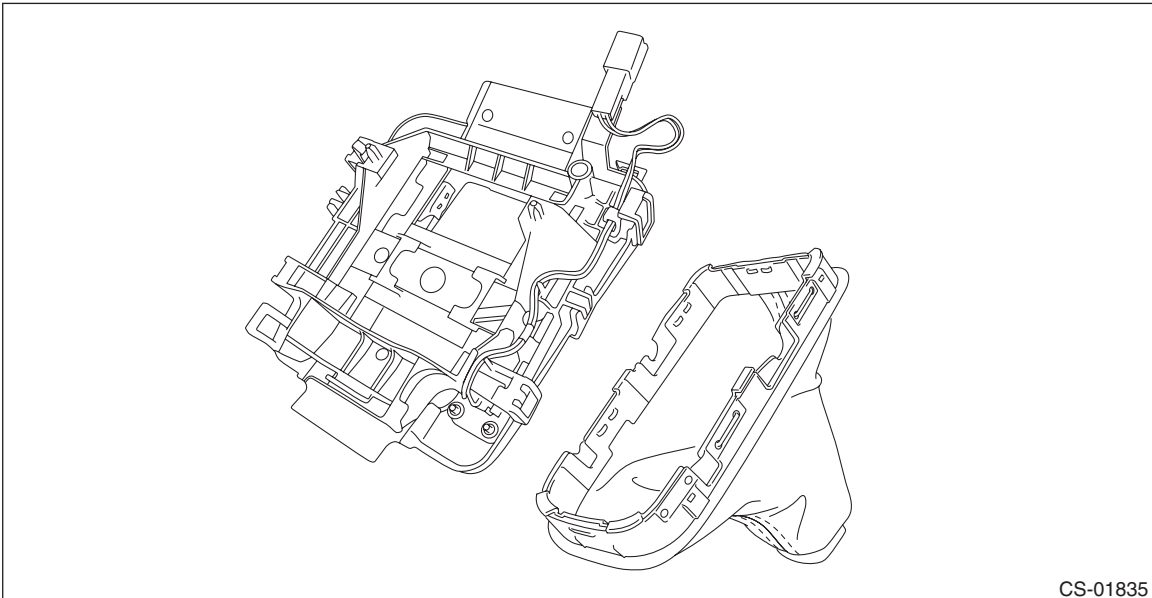


3. INDICATOR ASSY

1) Remove the boot assembly from the indicator assembly.

CAUTION:

When removing the boot assembly, be careful not to damage the boot assembly claws and adjacent parts.



Select Lever

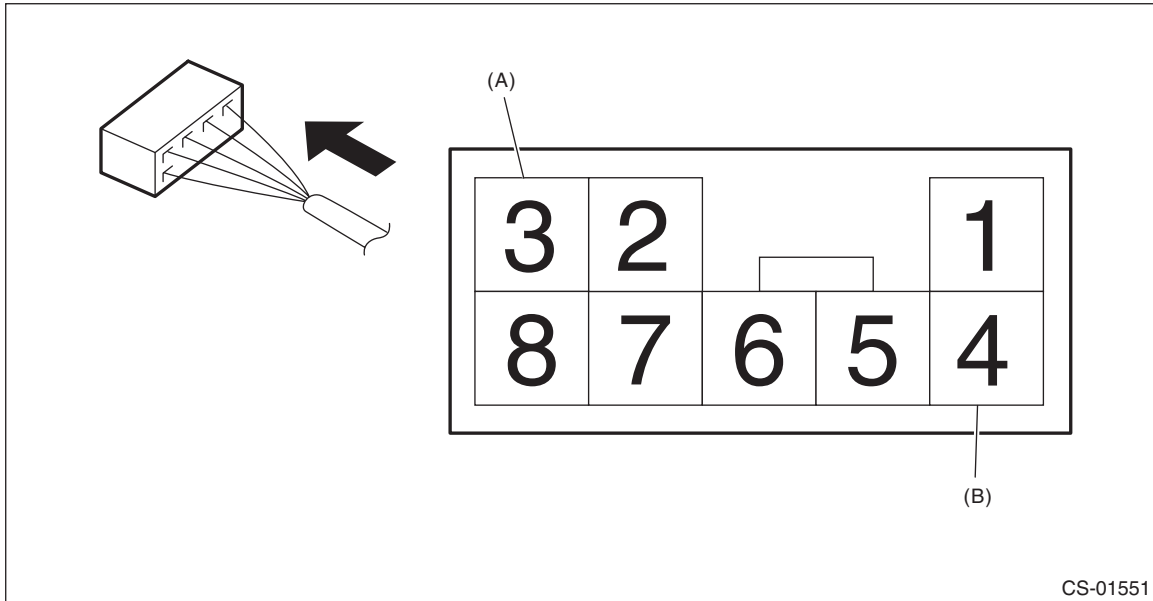
CONTROL SYSTEMS

D: ASSEMBLY

- 1) Clean all the parts before assembly.
- 2) Apply Multemp D or equivalent to the sliding portion of each part.
- 3) Assemble in the reverse order of disassembly.

NOTE:

Insert the solenoid unit terminals to the harness connector.



- (A) Solenoid unit (color code: blue)
(B) Solenoid unit (color code: black)

- 4) After installation, check the following points.

- The select indicator matches the select lever position when the select lever is changed from “P” range to “D” range.
- The select lever position and the position mark match each other.
- Operating force to move the select lever from “P” to “D” range

E: INSPECTION

- 1) Inspect the removed parts by comparing with new parts for deformation, damage and wear. Repair or replace if defective.
- 2) Inspect the select lever assembly operating condition before assembly. Normal if it operates smoothly.