

# Steering Column

POWER ASSISTED SYSTEM (POWER STEERING)

## 5. Steering Column

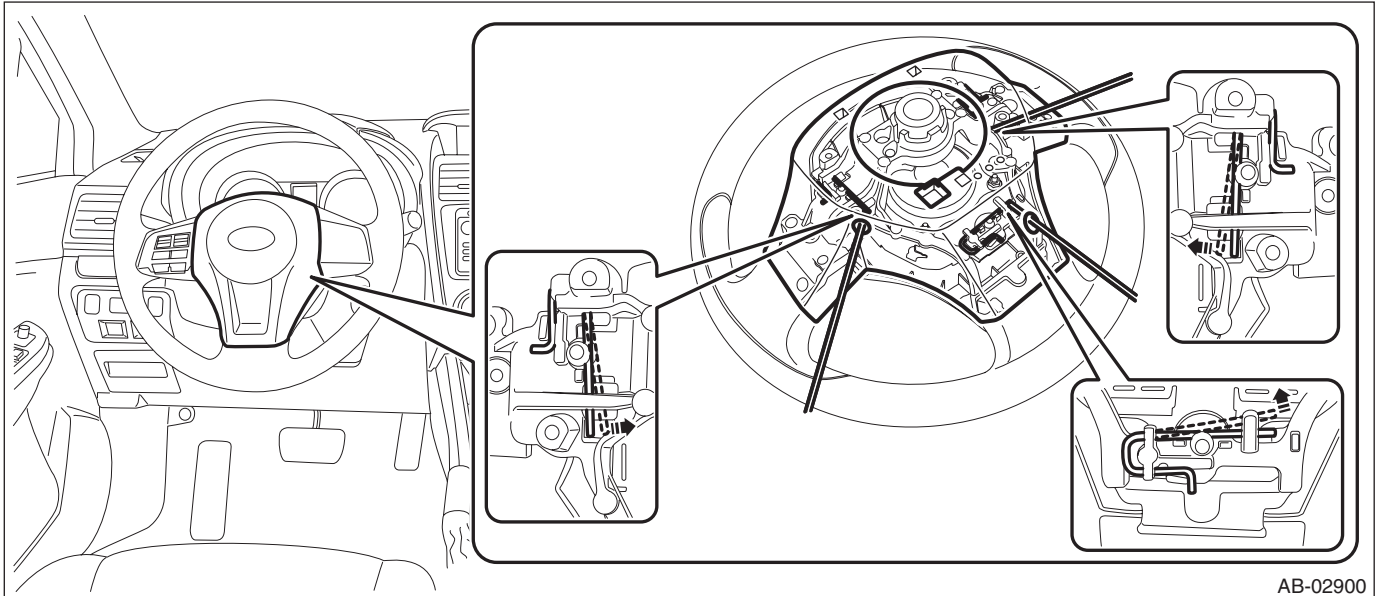
### A: REMOVAL

- 1) Disconnect the ground cable from battery and wait for at least 60 seconds before starting work.
- 2) Remove the driver's airbag module.

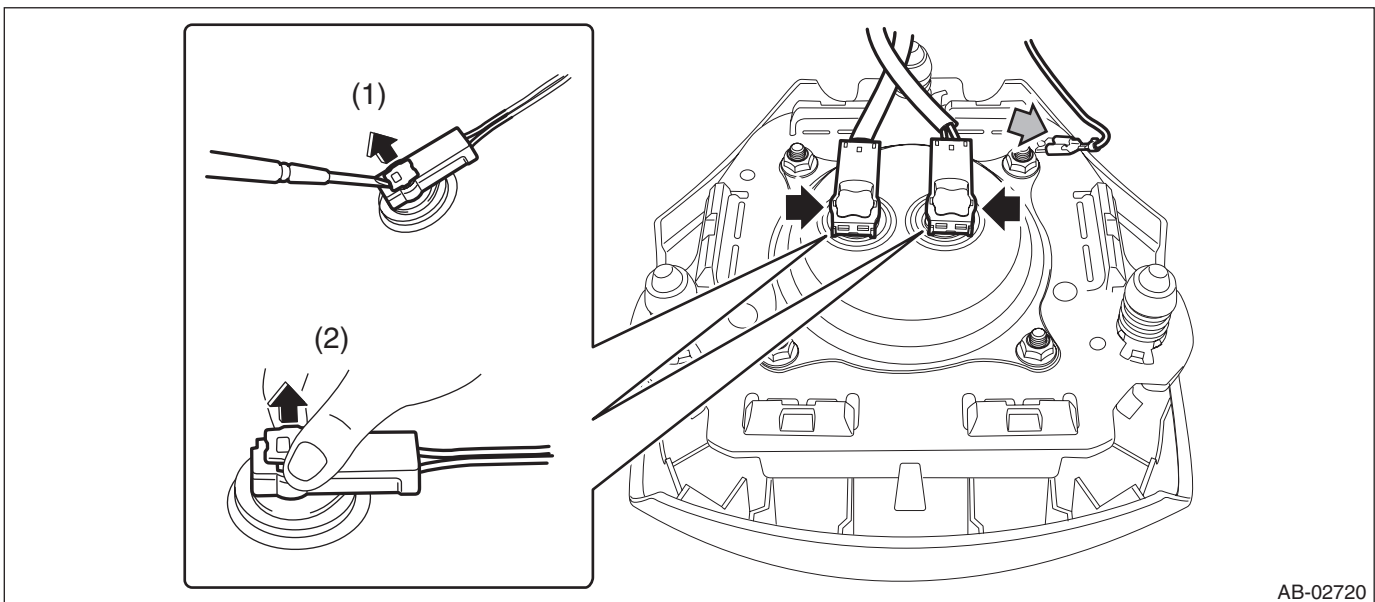
#### CAUTION:

Before performing service on the airbag module, always refer to "CAUTION" of "General Description" in "AIRBAG SYSTEM" section. <Ref. to AB-11, CAUTION, General Description.>

- (1) Using a hexagon wrench etc. wrapped by protective tape, insert the snap pins and release the locks (3 locations).



- (2) Disconnect the horn harness and airbag connector, and remove the airbag module. <Ref. to AB-24, DRIVER'S AIRBAG MODULE, CURTAIN AIRBAG MODULE & PRETENSIONER, PROCEDURE, Air-bag Connector.>



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3) Remove the steering wheel.

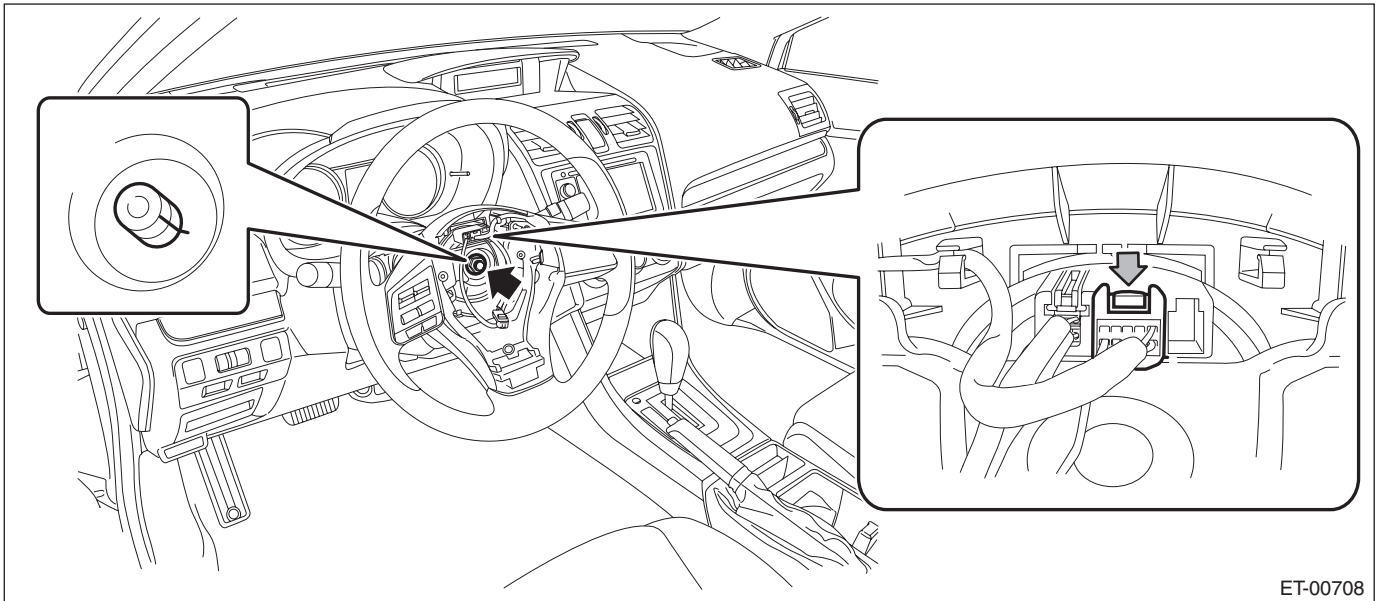
### CAUTION:

- Always use the steering wheel puller for removal to avoid deforming the steering wheel.
- If the steering wheel has been removed, make sure that the steering roll connector is not turned from the original position.

### Preparation tool:

#### Steering wheel puller

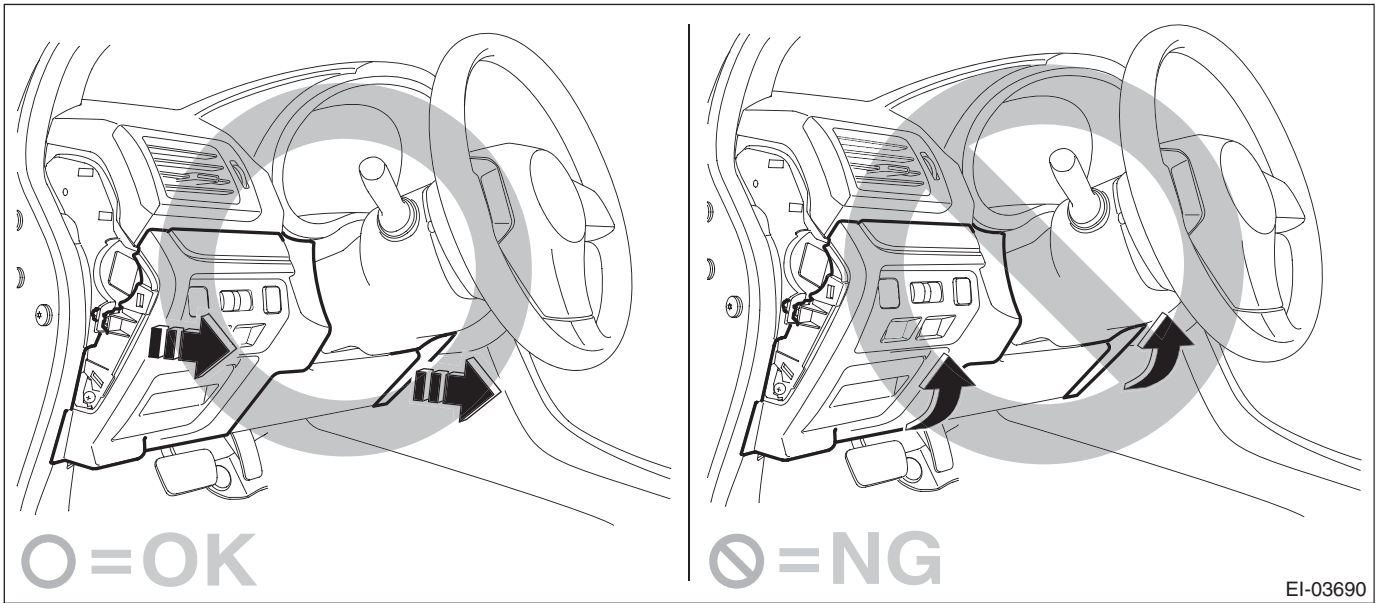
- (1) Disconnect the connector and remove the nut.
- (2) Put alignment marks and remove the steering wheel.



4) Remove the cover assembly - instrument panel LWR driver.

### CAUTION:

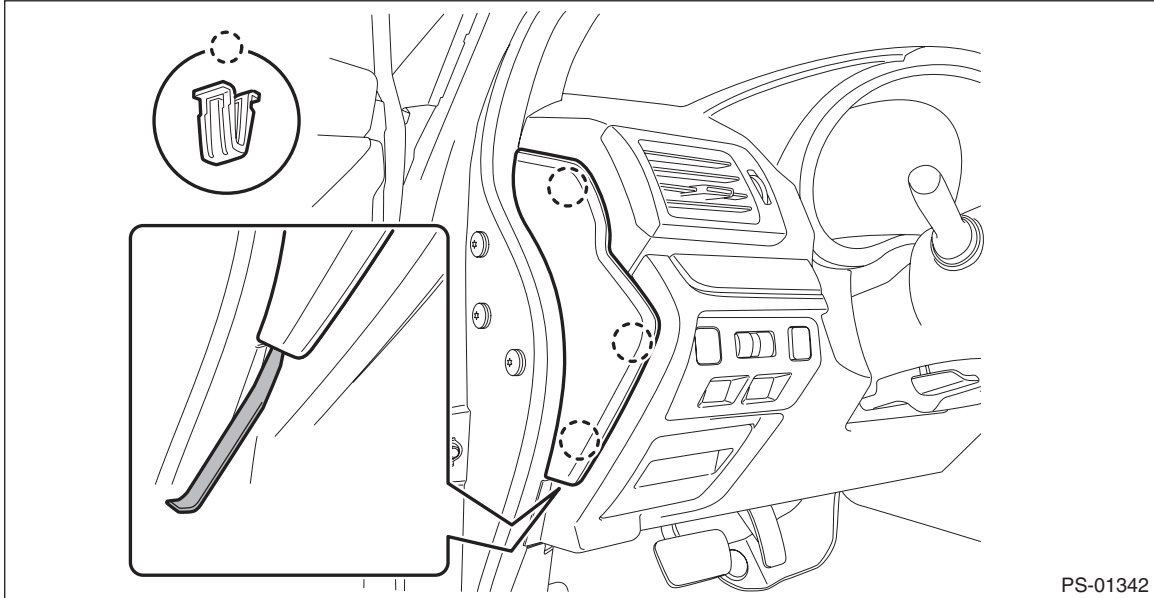
When removing the cover assembly - instrument panel LWR driver, be sure to pull it toward you. If attempting to remove by turning it upward, the claws may be damaged.



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(1) Remove the clips, and remove the cover - instrument panel side LH.

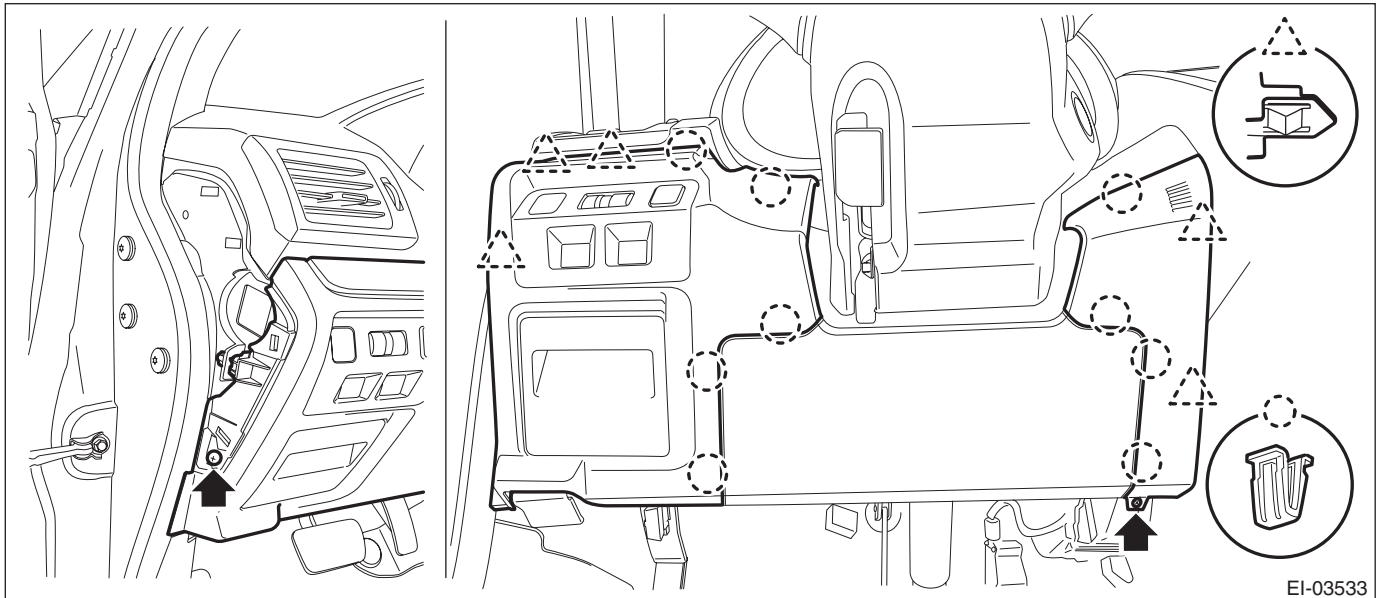


### NOTE:

Using a plastic remover, open the cover - instrument panel side LH.

(2) Remove the screws and release the clips and claws.

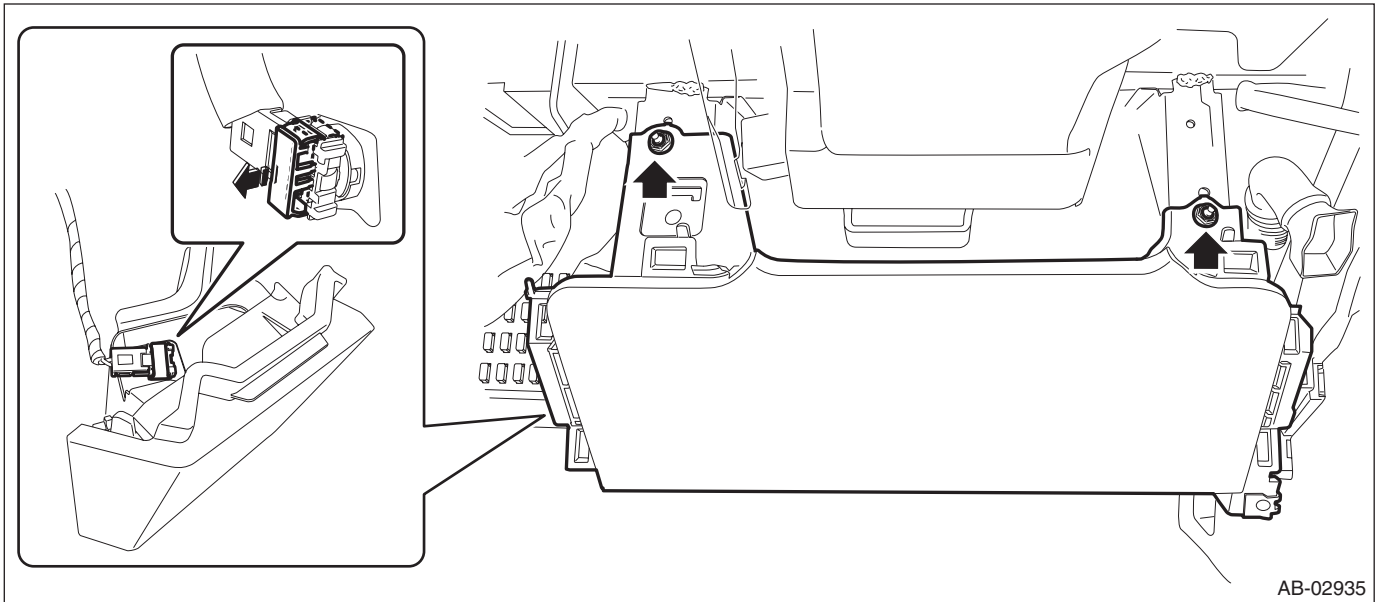
(3) Disconnect the harness connectors, and remove the cover assembly - instrument panel LWR driver INN and the cover assembly - instrument panel LWR driver OUT.



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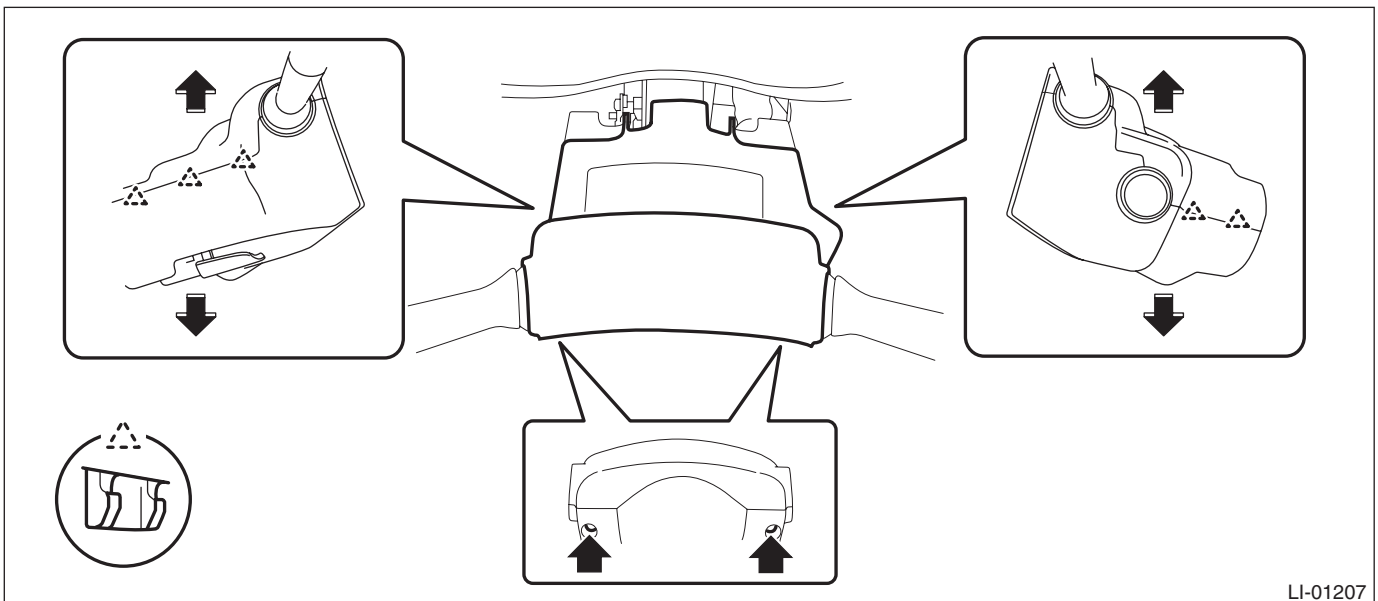
5) Remove the nuts to remove the knee airbag module and disconnect the harness connector. <Ref. to AB-33, KNEE AIRBAG MODULE, PROCEDURE, Airbag Connector.>



6) Remove the cover assembly - column.

(1) Remove the screws.

(2) Release the claw, and remove the cover assembly - column UPR and the cover assembly - column LWR.

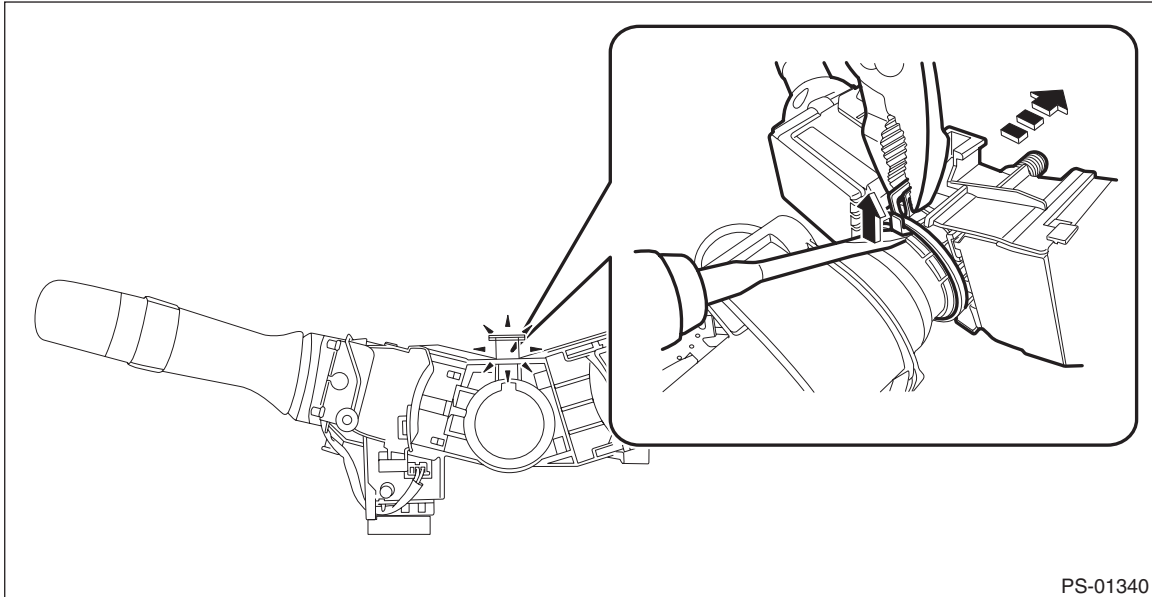


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7) Remove the switch assembly - combination.

- (1) Disconnect the connector, and loosen the clamp to release the claws.
- (2) Pull out the switch assembly - combination from the column assembly - steering.



8) Remove all connectors from the column assembly - steering.

9) Remove the universal joint assembly - steering.

### CAUTION:

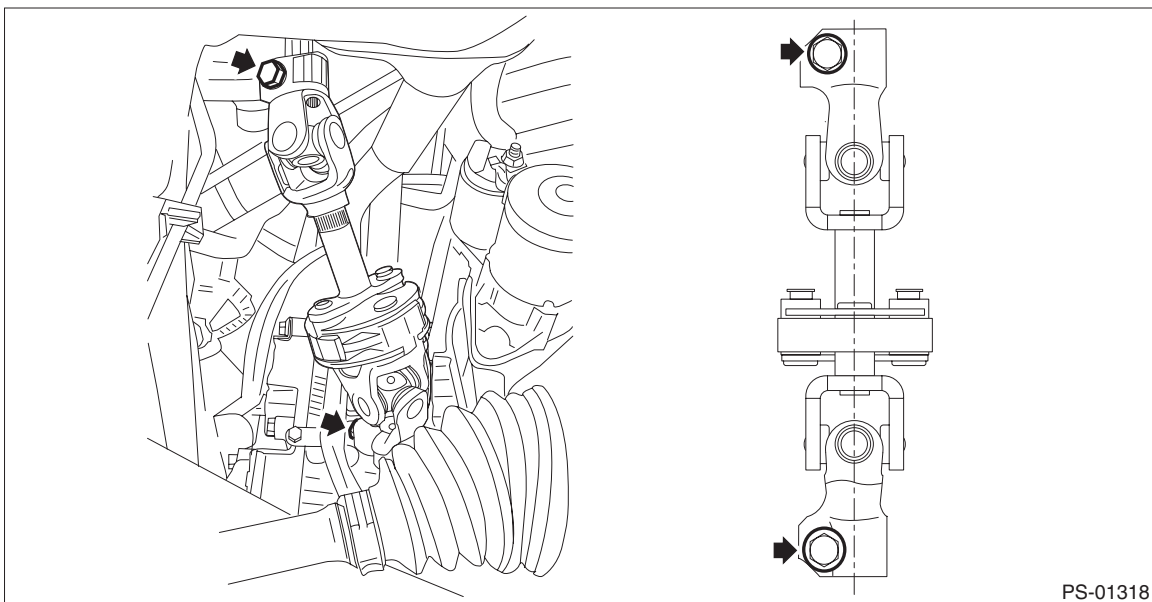
**To prevent damage to the universal joint assembly - steering and error of handling force, make sure to remove the universal joint assembly - steering.**

- (1) Place alignment marks on the universal joint assembly - steering.

### NOTE:

Place alignment marks on the following positions.

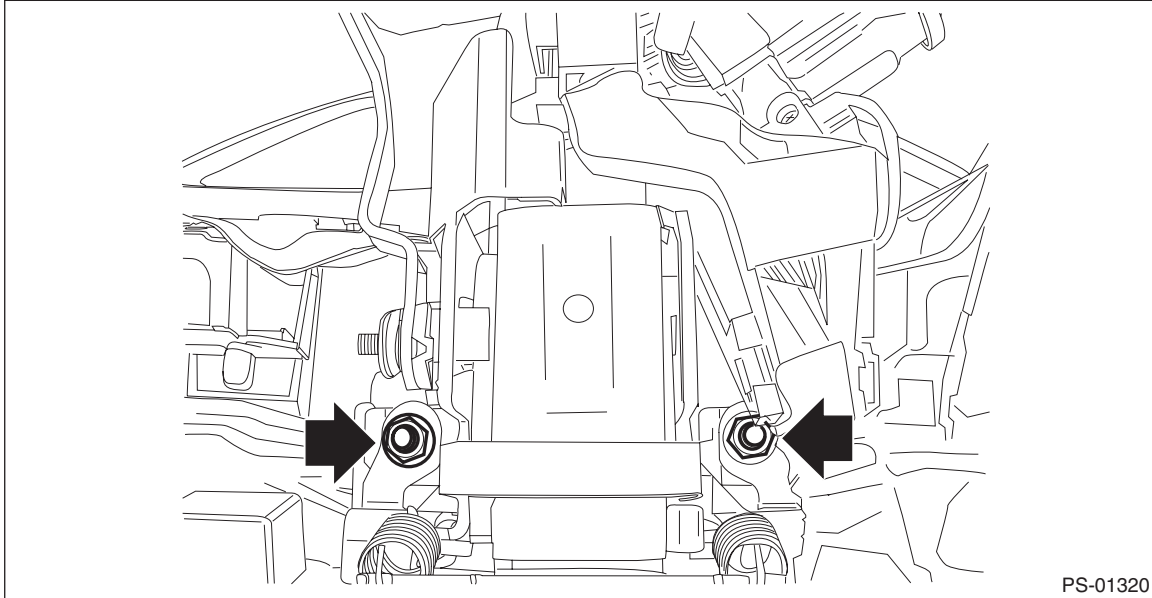
- Between the column assembly - steering and the universal joint assembly - steering
  - Between the steering gearbox assembly and the universal joint assembly - steering
- (2) Remove the bolt, and remove the universal joint assembly - steering.



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- 10) Remove the two nuts under the beam COMPL - steering securing the column assembly - steering.



- 11) Pull out the column assembly - steering from the hole on toe board.

## CAUTION:

**Do not loosen the tilt lever when the column assembly - steering is not secured to the vehicle.**

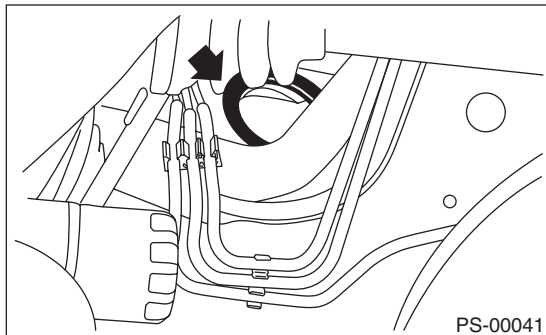
- 12) Remove the ignition key lock from the column assembly - steering. <Ref. to SL-61, REPLACEMENT, Ignition Key Lock.>

## B: INSTALLATION

### CAUTION:

**If the steering wheel and steering angle sensor are removed, perform “VDC sensor midpoint setting mode” of the VDC. <Ref. to VDC-19, VDC SENSOR MIDPOINT SETTING MODE, ADJUSTMENT, VDC Control Module and Hydraulic Control Unit (VDCCM&H/U).>**

- 1) Install the grommet to the toe board.



- 2) Insert the end of the column assembly - steering into the toe board grommet.
- 3) Tighten the column assembly - steering installation bolt located under the beam COMPL - steering with the tilt lever fixed.

### **Tightening torque:**

**20 N·m (2.04 kgf·m, 14.8 ft·lb)**

- 4) Connect all connectors located under the beam COMPL - steering.
- 5) Connect the horn harness and airbag connector, and install the airbag module.
- 6) Install the knee airbag module.
- 7) Install the cover assembly - instrument panel LWR driver INN and OUT.

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8) Install the universal joint assembly - steering. <Ref. to PS-14, INSTALLATION, Universal Joint.>

### CAUTION:

- Always install the universal joint assembly - steering after installing the steering column to avoid damage to the universal joint assembly - steering.
- Be sure to follow the tightening order and tightening torque of the universal joint assembly - steering to avoid the steering effort from becoming heavy.

9) Align the center position of the steering roll connector. <Ref. to AB-109, ADJUSTMENT, Roll Connector.>

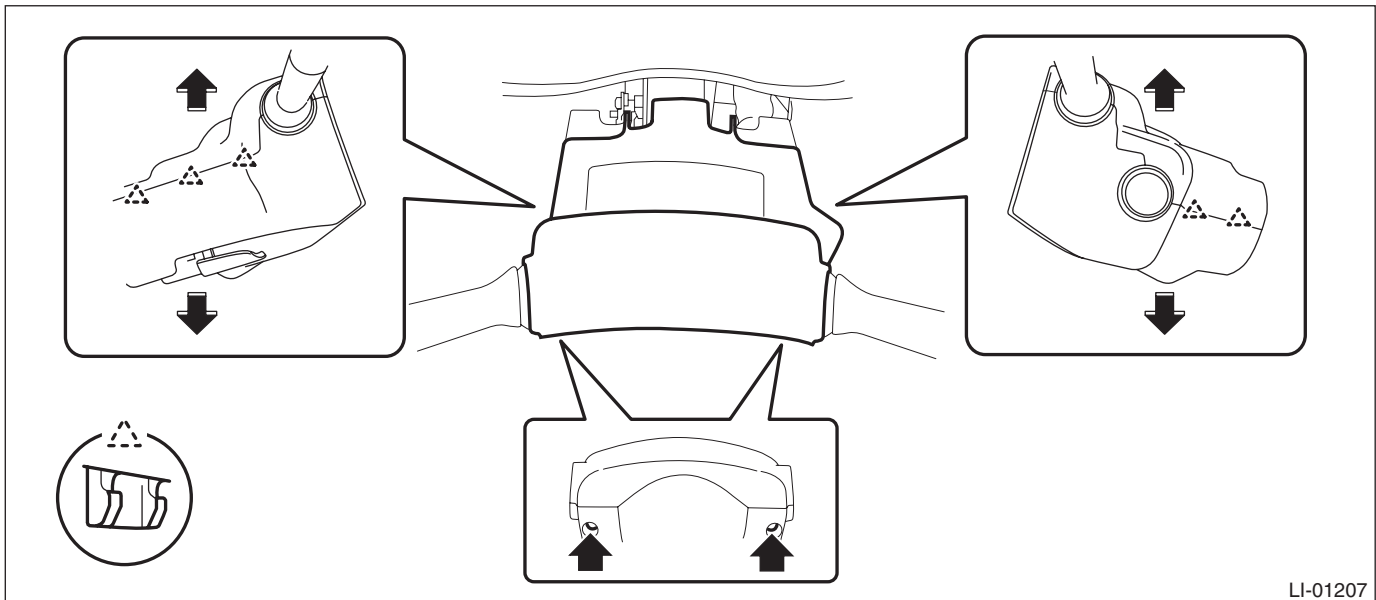
10) Install the steering wheel. <Ref. to PS-10, INSTALLATION, Steering Wheel.>

## C: DISASSEMBLY

1) Remove the cover assembly - column.

(1) Lower the lever of the steering column.

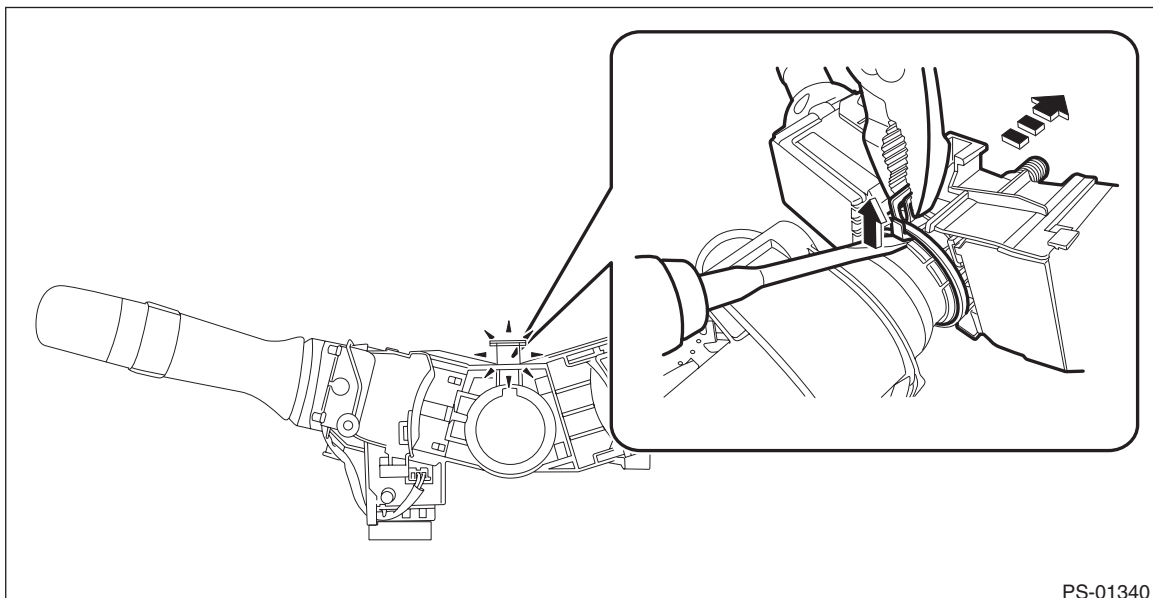
(2) Release the screw and claw, and remove the cover assembly - column UPR and the cover assembly - column LWR.



2) Remove the switch assembly - combination.

(1) Disconnect the connector, and loosen the clamp to release the claws.

(2) Pull out the switch assembly - combination from the column assembly - steering.



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## D: ASSEMBLY

Assemble each part in the reverse order of disassembly.

## E: INSPECTION

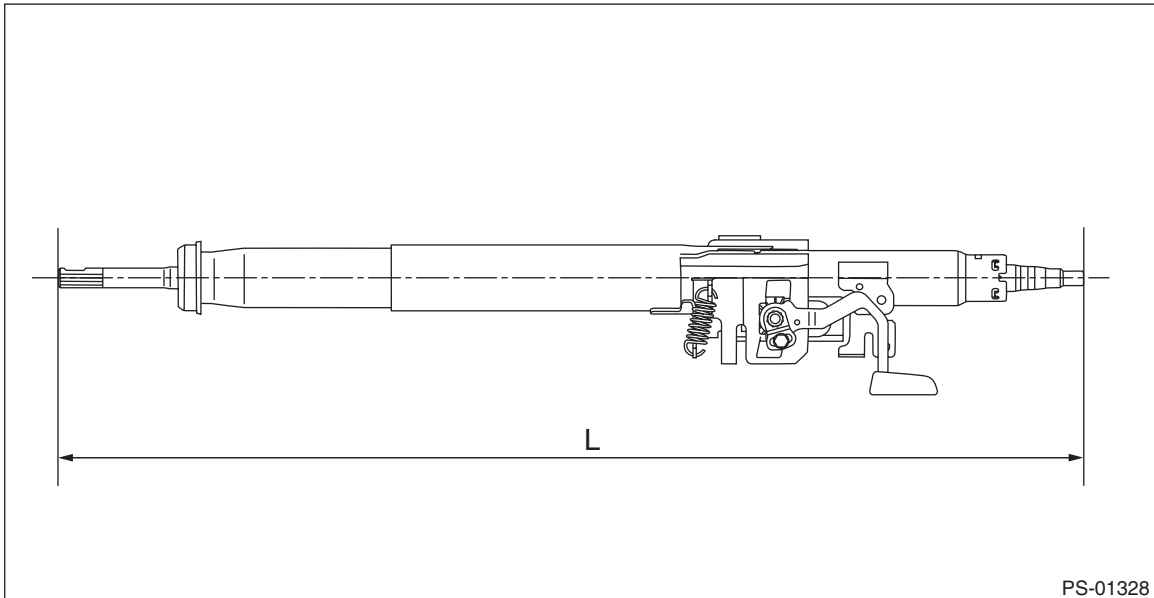
### 1. UNIT INSPECTION

Measure the overall length of the column assembly - steering. If not within specification, replace it.

**Standard: Overall length L**

**Tilt and telescopic column (measure while minimized):**

**$819.7^{+1.5}_{-1.5}$  mm ( $32.3^{+0.059}_{-0.059}$  in)**



PS-01328

### 2. INSPECTION OF AIRBAG SYSTEM

Refer to "Airbag System" for airbag inspection procedure. <Ref. to AB-43, INSTALLATION, Driver's Airbag Module.>