

# Steering Column

## POWER ASSISTED SYSTEM (POWER STEERING)

### 5. Steering Column

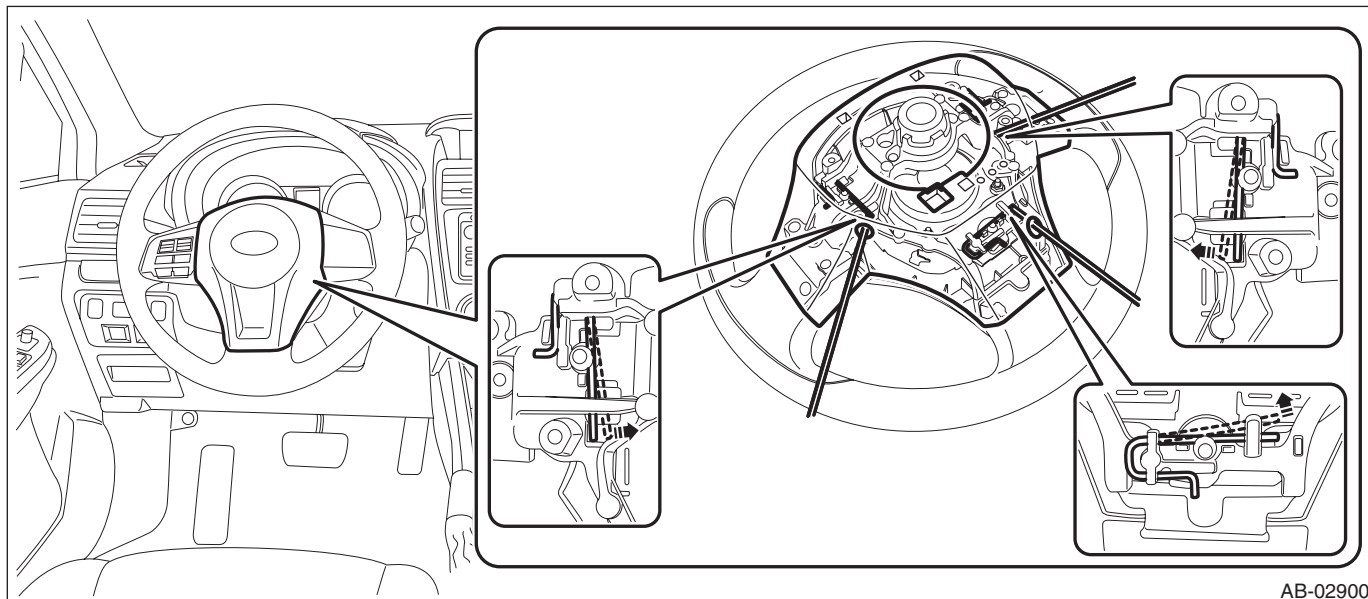
#### A: REMOVAL

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

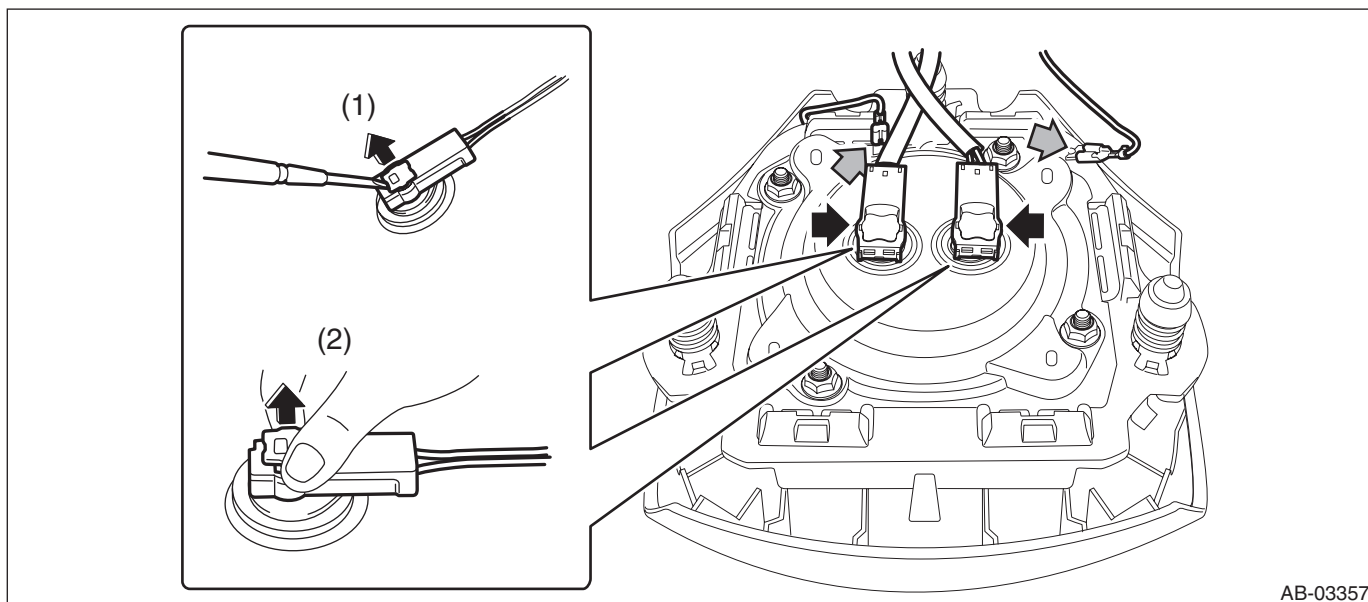
#### CAUTION:

Before performing service on the airbag module, always refer to “CAUTION” of “General Description” in “AIRBAG SYSTEM” section. <Ref. to AB-9, 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 assembly. <Ref. to AB-21, DRIVER'S AIRBAG MODULE, KNEE AIRBAG MODULE, CURTAIN AIRBAG MODULE AND PRETENSIONER, PROCEDURE, Airbag Connector.>



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3) Remove the steering wheel.

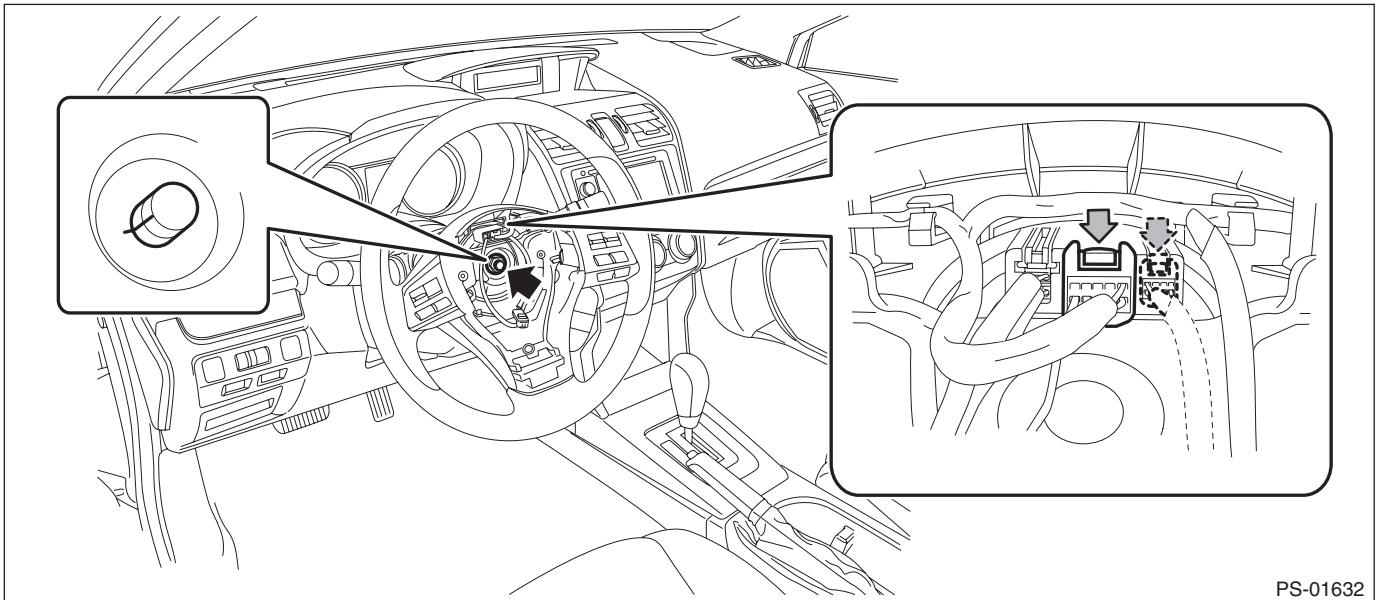
## CAUTION:

- 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:

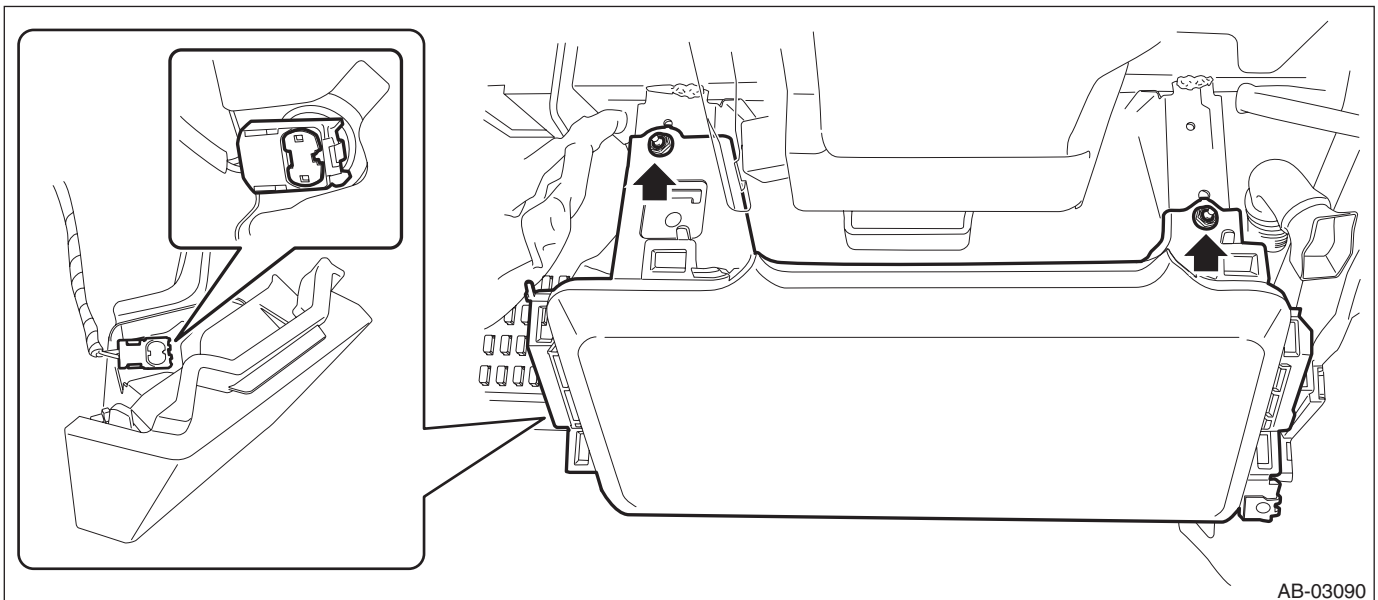
### Steering wheel puller

- (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. <Ref. to EI-59, REMOVAL, Instrument Panel Lower Cover.>

5) Remove the nuts to remove the knee airbag module and disconnect the harness connector. <Ref. to AB-21, DRIVER'S AIRBAG MODULE, KNEE AIRBAG MODULE, CURTAIN AIRBAG MODULE AND PRETENSIONER, PROCEDURE, Airbag Connector.>

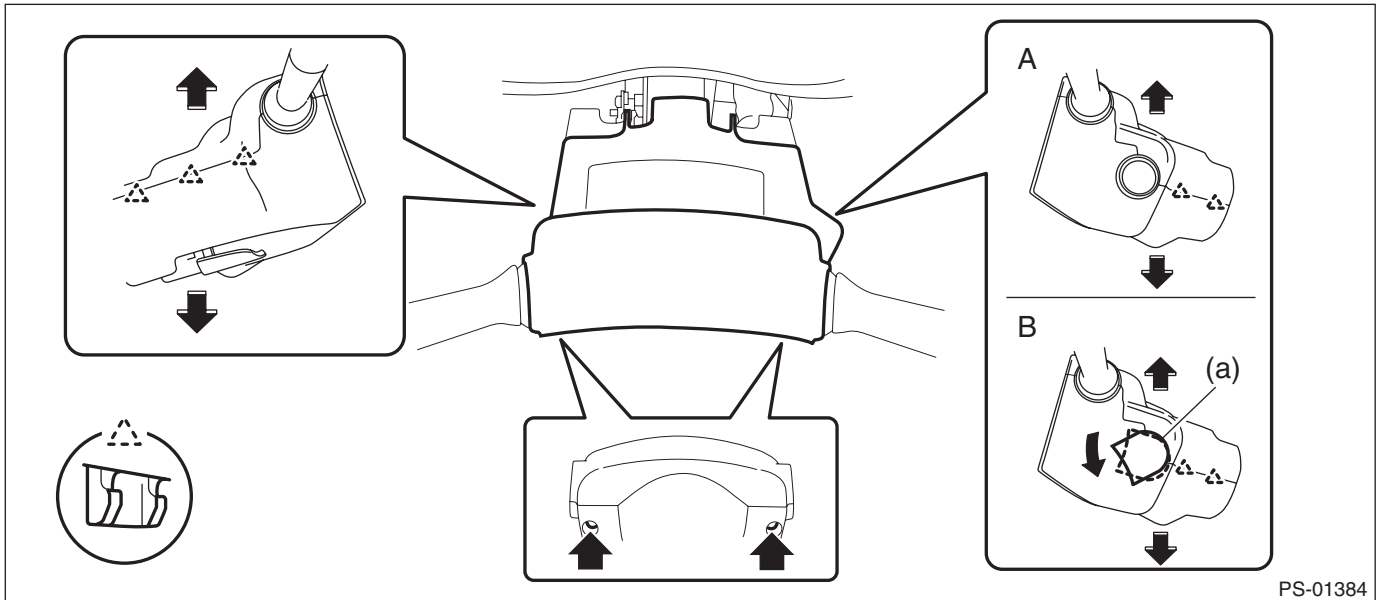


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#### 6) Remove the cover assembly - column.

- (1) Release the screws and claws.
- (2) Remove the cap - key cylinder (a). (Model with keyless access)
- (3) Remove the cover assembly - column UPR and the cover assembly - column LWR.

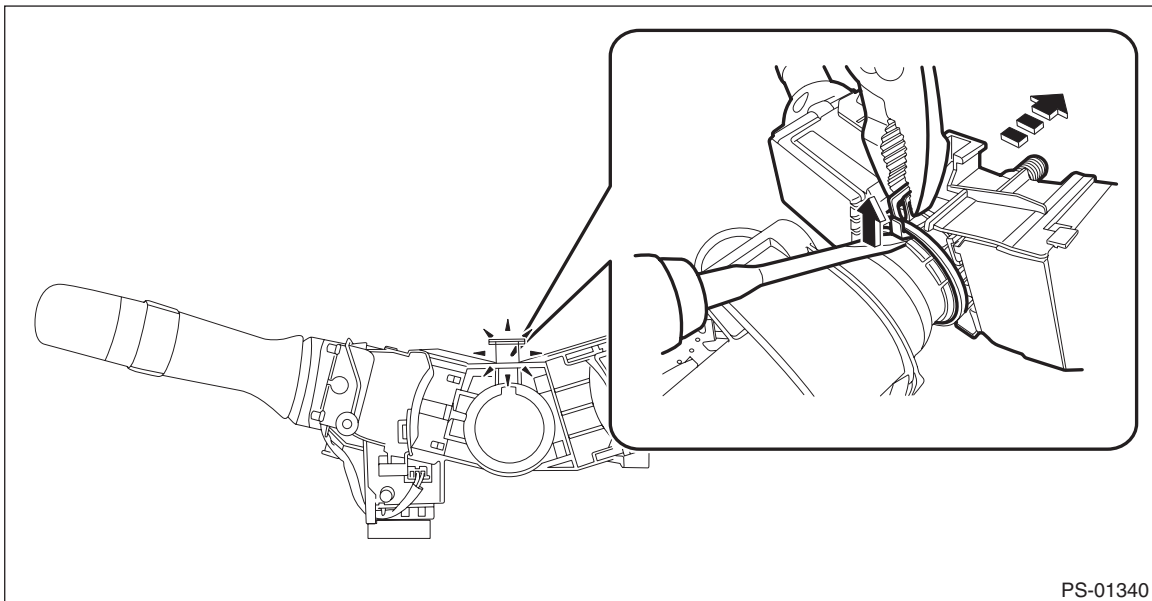


A Models without keyless access

B Models with keyless access

#### 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.

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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.**

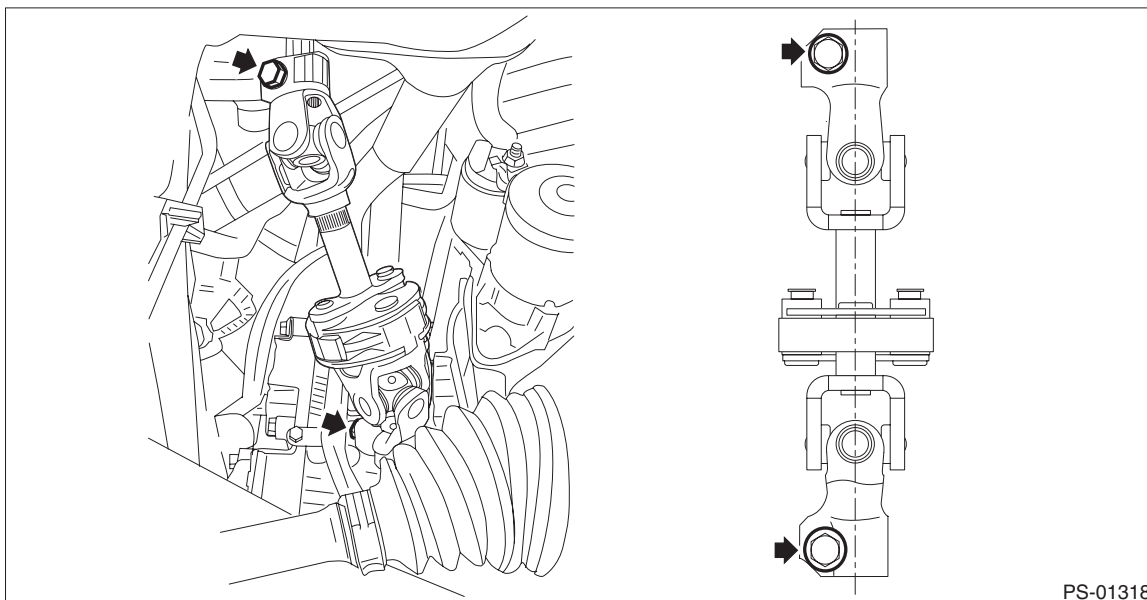
(1) Place alignment marks on the universal joint assembly - steering.

## NOTE:

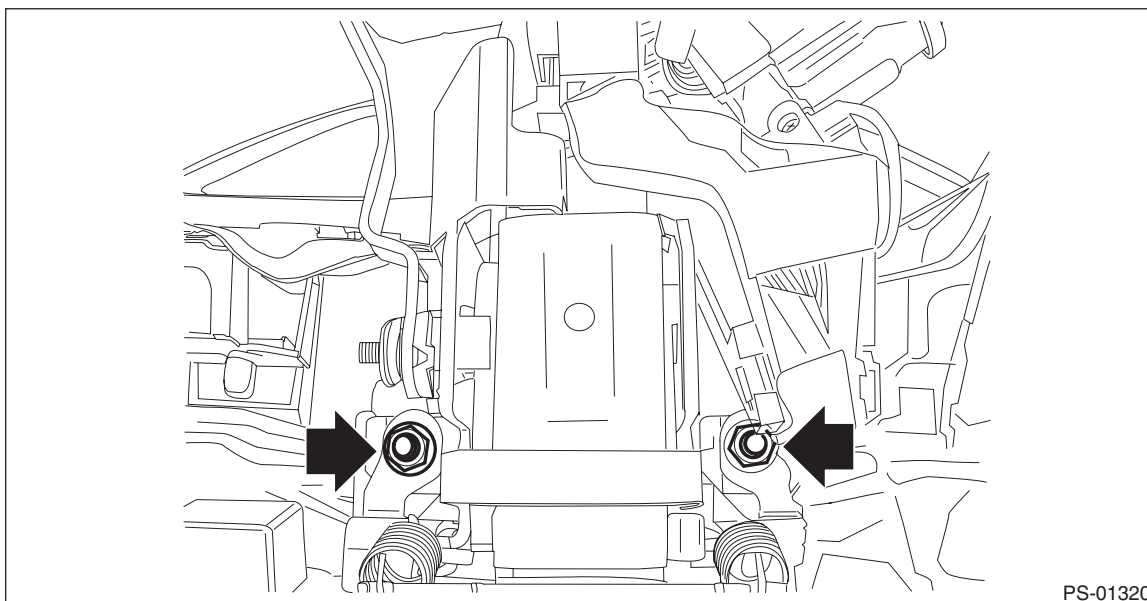
Place alignment marks on the following positions.

- 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.



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-58, REPLACEMENT, Ignition Key Lock.>

# Steering Column

## POWER ASSISTED SYSTEM (POWER STEERING)

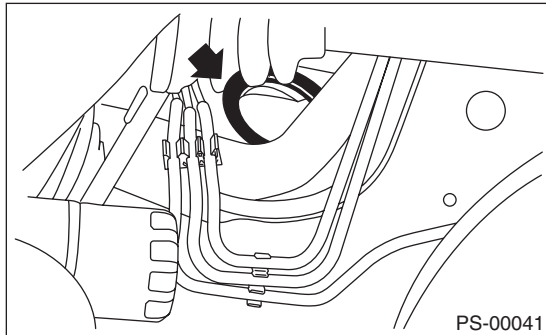
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### B: INSTALLATION

#### CAUTION:

If the steering wheel and steering angle sensor are removed, perform “VDC sensor midpoint setting mode” of the VDC. <Ref. to VDC-23, 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 nut 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.

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.

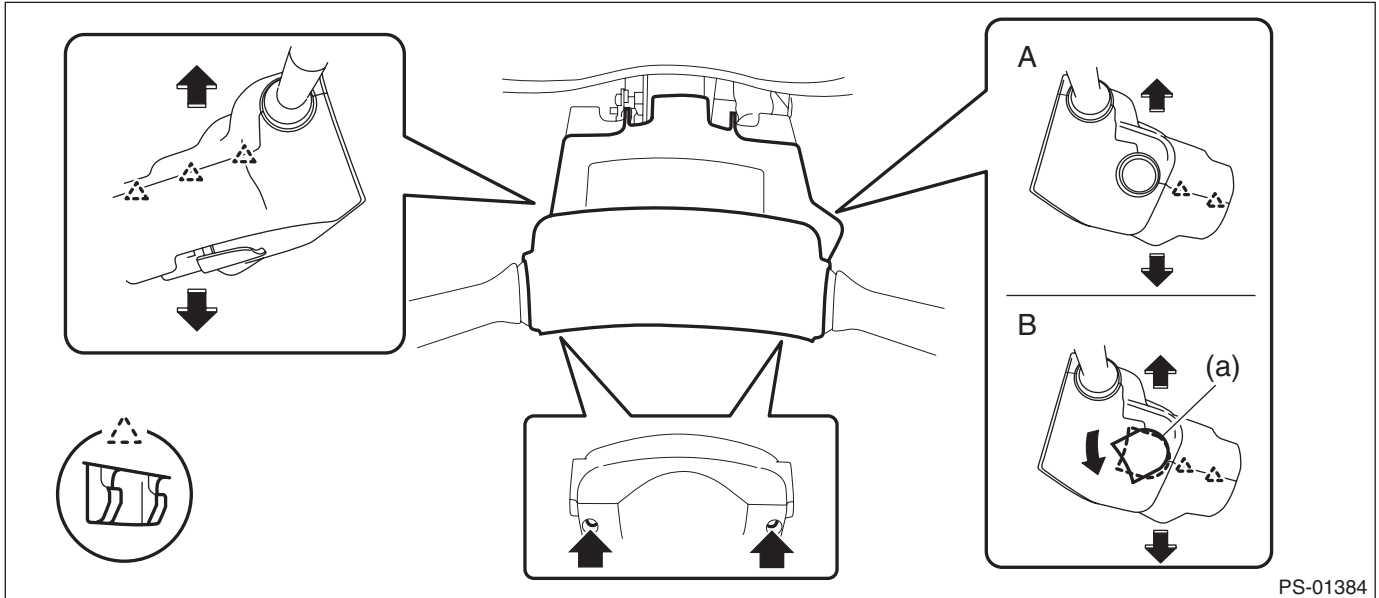
- Be sure to follow the tightening order and tightening torque of the universal joint assembly - steering to avoid the steering effort from becoming heavy.

9) Align the center position of the steering roll connector. <Ref. to AB-103, ADJUSTMENT, Roll Connector.>

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

### C: DISASSEMBLY

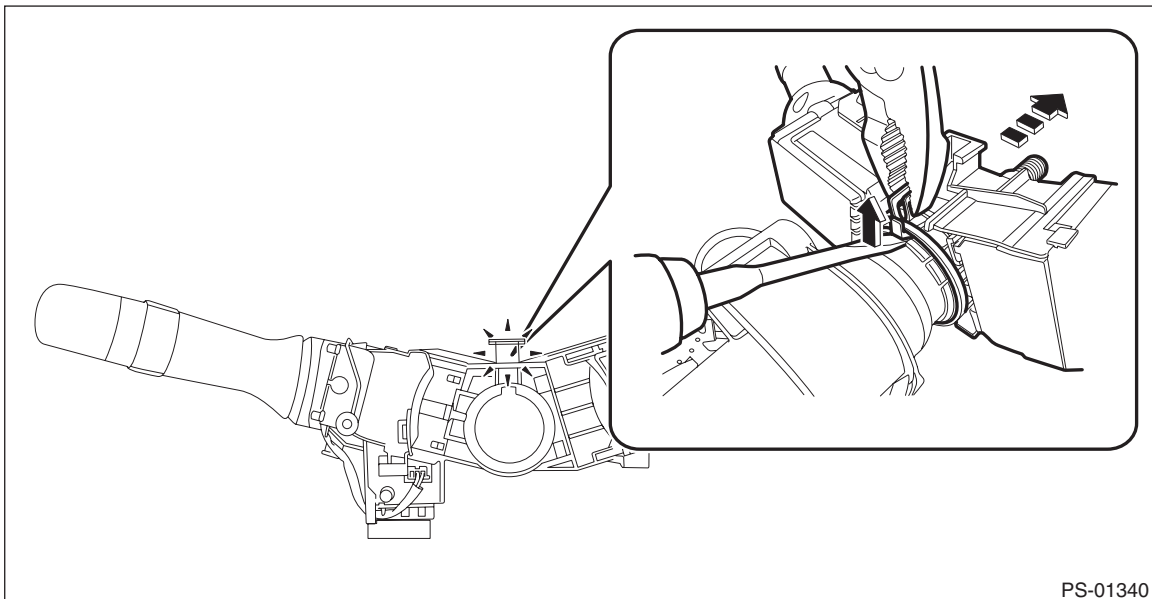
- 1) Remove the cover assembly - column.
  - (1) Release the screws and claws.
  - (2) Remove the cap - key cylinder (a). (Model with keyless access)
  - (3) Remove the cover assembly - column UPR and the cover assembly - column LWR.



A Models without keyless access

B Models with keyless access

- 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.



# Steering Column

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### D: ASSEMBLY

Assemble each part in the reverse order of disassembly.

### E: INSPECTION

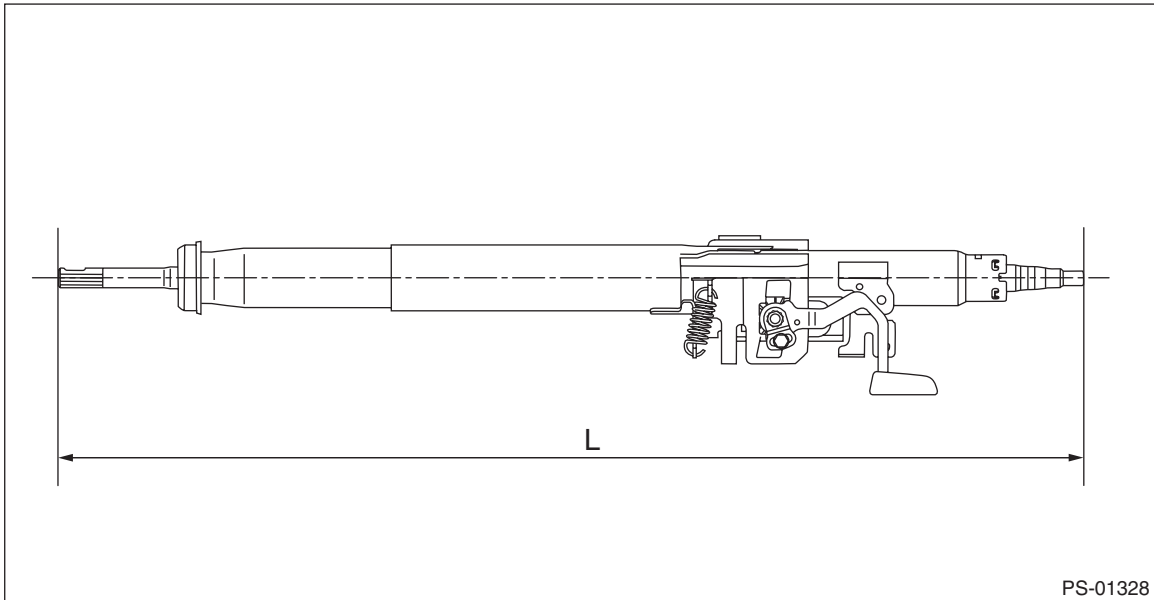
#### 1. UNIT INSPECTION

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):**

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



#### 2. INSPECTION OF AIRBAG SYSTEM

Refer to "Airbag System" for airbag inspection procedure. <Ref. to AB-38, INSTALLATION, Driver's Airbag Module.>