

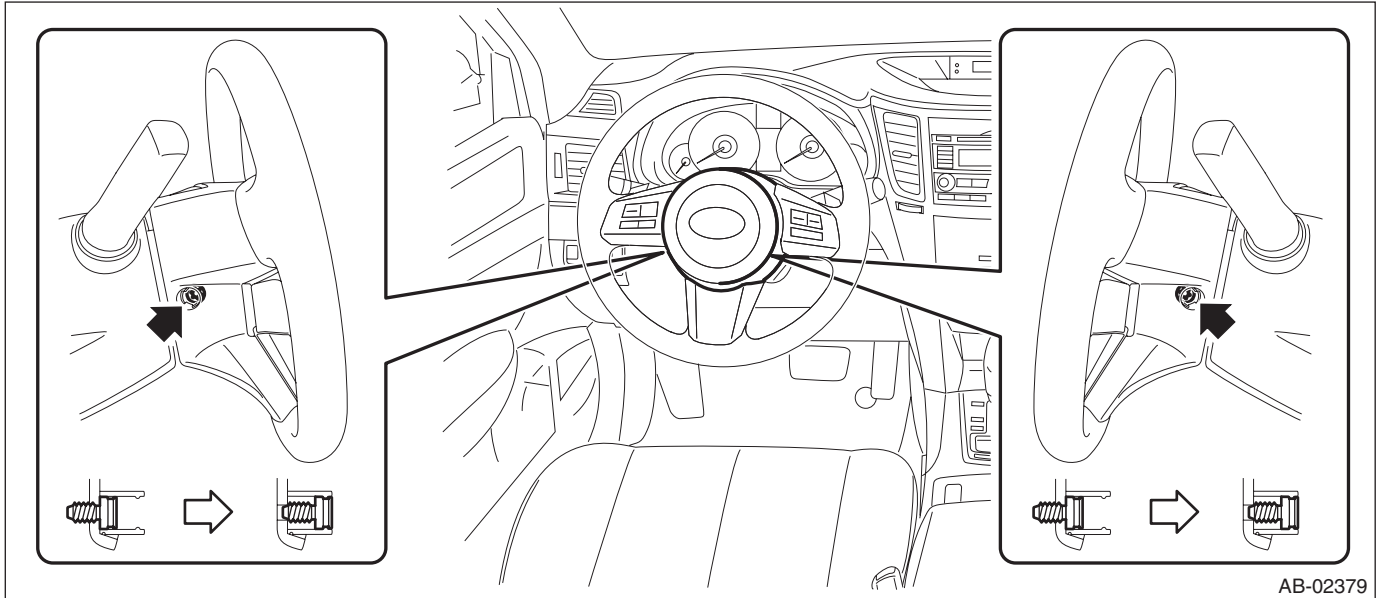
### 13.Roll Connector

#### A: REMOVAL

- 1) Position the front wheels straight ahead. (After moving a vehicle 5 m (16 ft) or more with front wheels positioned straight ahead, make sure that the vehicle moves straight ahead.)
- 2) Turn the ignition switch to OFF.
- 3) Disconnect the ground cable from battery and wait for at least 60 seconds before starting work.
- 4) Remove the driver's airbag module assembly.

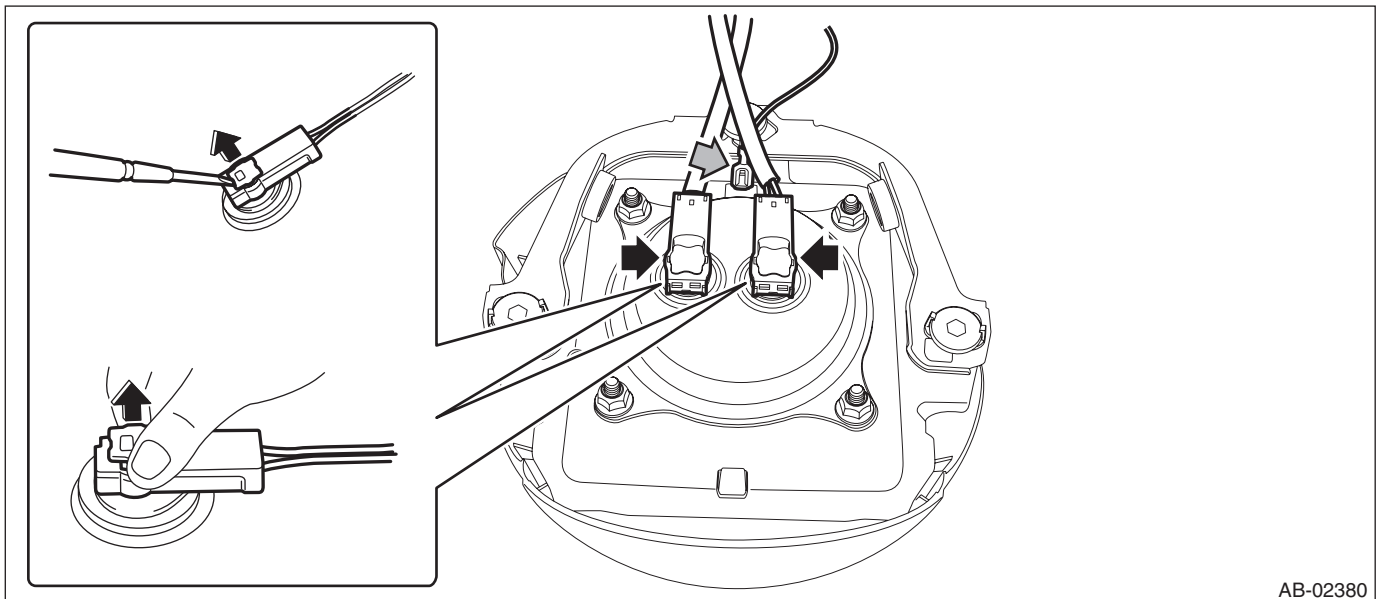
#### **Preparation tool: TORX® T30**

- (1) Loosen the TORX® bolts located on the sides of the steering wheel.



- (2) Disconnect the airbag connector and remove the airbag module assembly. <Ref. to AB-18, PROCEDURE, Airbag Connector.>

- (3) Disconnect the horn harness.

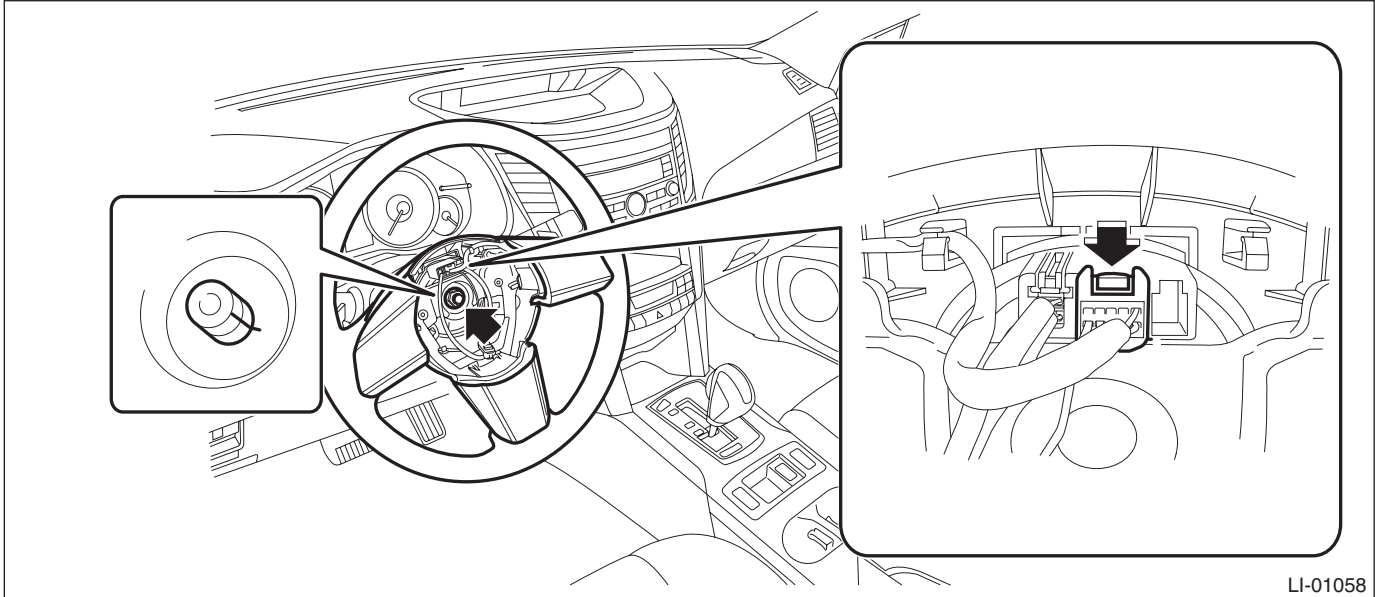


5) Remove the steering wheel.

**CAUTION:**

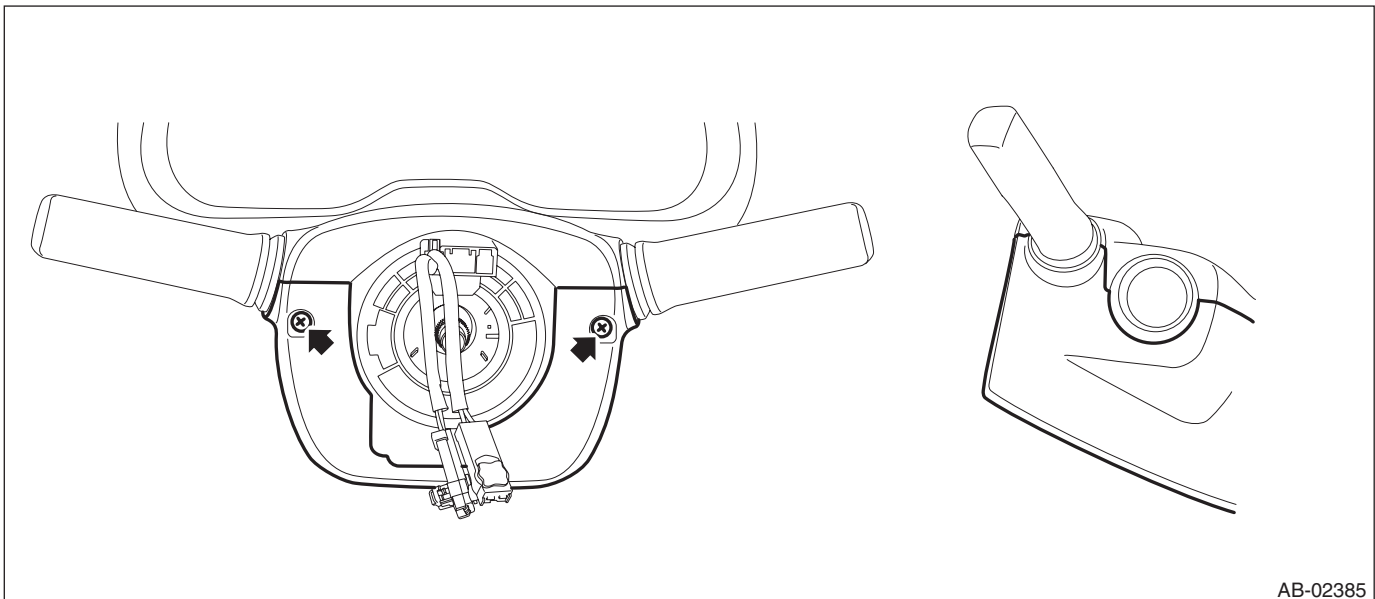
- Always use the steering wheel puller for removal to avoid deforming the steering wheel.
- If the steering wheel has been removed, make sure that the roll connector is not turned from the original position.

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



6) Remove the steering column cover.

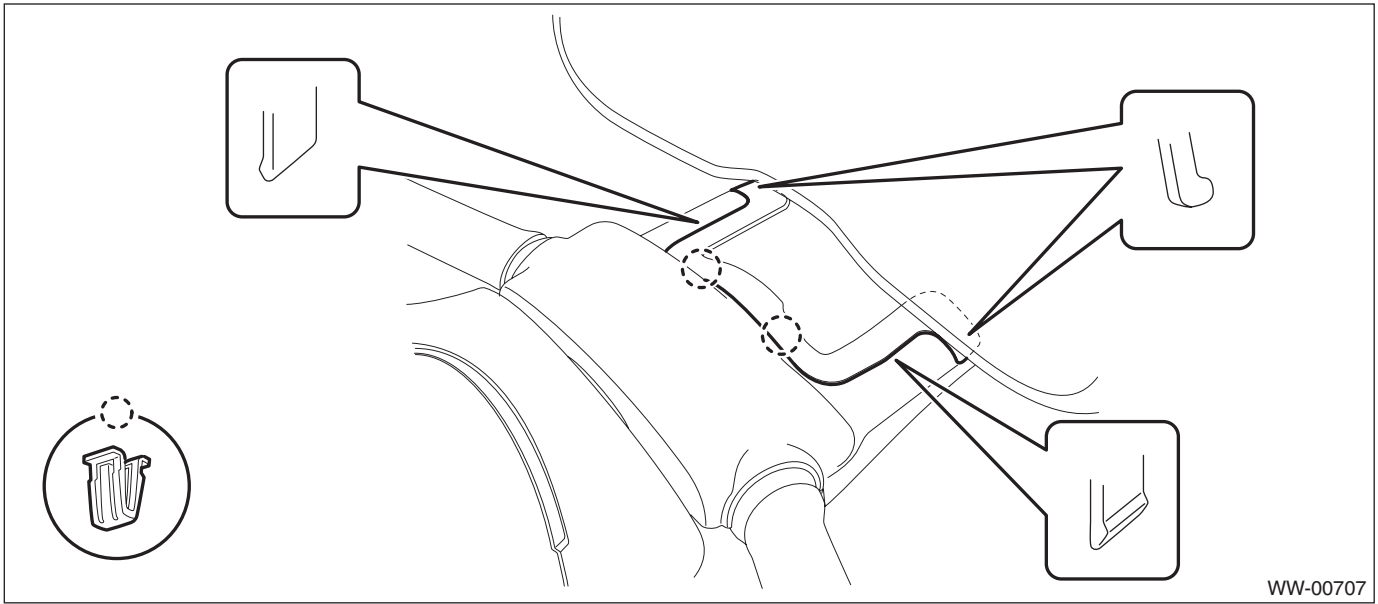
- (1) Lower the lever of the steering column.
- (2) Release the claws and remove the screws, then detach the steering column lower cover.



## Roll Connector

### AIRBAG SYSTEM

- (3) Separate the steering column upper cover and steering upper cover, and remove the steering column upper cover.

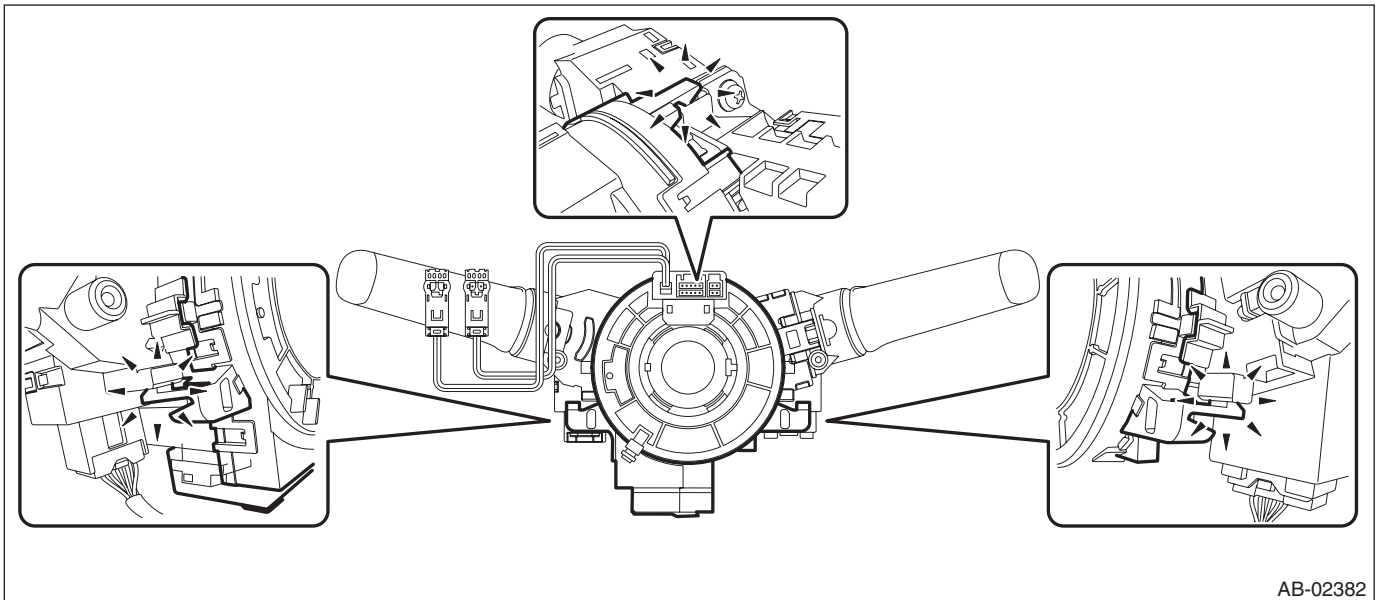


- 7) Remove the roll connector.

#### CAUTION:

**Make sure that the roll connector is not turned from the original position.**

- (1) Disconnect the connector under the roll connector.
- (2) Release the claws and remove the roll connector.



## B: INSTALLATION

- 1) Install each part in the reverse order of removal.

#### Tightening torque:

**Airbag module: 10 N·m (1.0 kgf-m, 7.4 ft-lb)**

- 2) Before installing steering wheel, be sure to adjust the direction of roll connector with steering. <Ref. to AB-100, ADJUSTMENT, Roll Connector.>

#### Tightening torque:

**Steering wheel: 39 N·m (4.0 kgf-m, 28.8 ft-lb)**

**Clearance between column cover and steering wheel: 2 — 4 mm (0.08 — 0.16 in)**

## C: INSPECTION

### 1. VISUAL INSPECTION

Check for the following, and replace the damaged parts with new parts.

- Combination switch is cracked or deformed.
- Roll connector is cracked or deformed.

### 2. UNIT INSPECTION OF ROLL CONNECTOR

#### CAUTION:

- Do not rotate the roll connector to more than the specified number of turns. Otherwise, the roll connector internal wire may be broken.
- When determining the end stop, rotate the connector slowly without applying excessive force. Applying excessive force at the end stop may break the internal wire.

1) Adjust the roll connector. <Ref. to AB-100, ADJUSTMENT, Roll Connector.>

2) Set the roll connector to the central position.

3) Connect the test harness to the connector E and connector F.

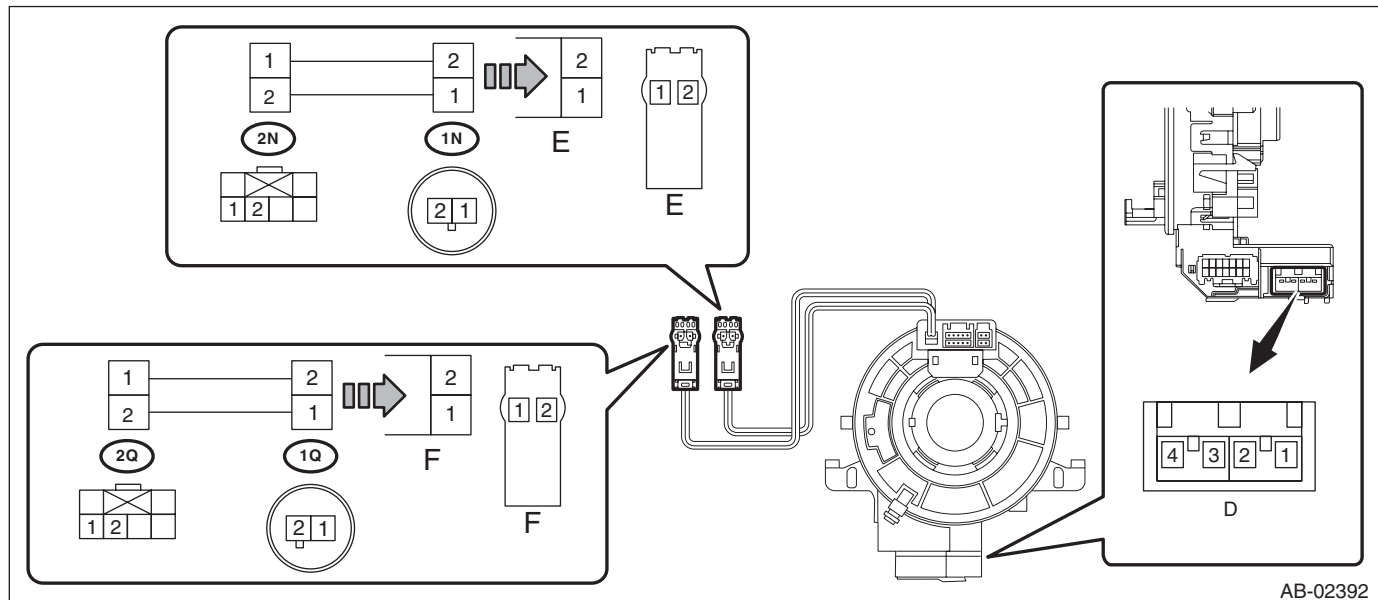
**Preparation tool: Test harness N (98299SA000), Test harness Q (98299SA040)**

- Connector E - Test harness N (1N)
- Connector F - Test harness Q (1Q)

4) With the following conditions, check the resistance between the test harness connector terminals.

- Perform the check with the roll connector centered (front wheels direct straightforward).
- Rotate the roll connector counterclockwise from the center (front wheels direct straightforward) to an end stop. Then, perform the check while rotating it clockwise to approximately 4.5 turns.

**Preparation tool: Circuit tester**



Terminal No.	Inspection conditions	Standard
(2N) No. 1 — (2N) No. 2	Always	Less than 1 Ω
(2Q) No. 1 — (2Q) No. 2	Always	Less than 1 Ω

#### NOTE:

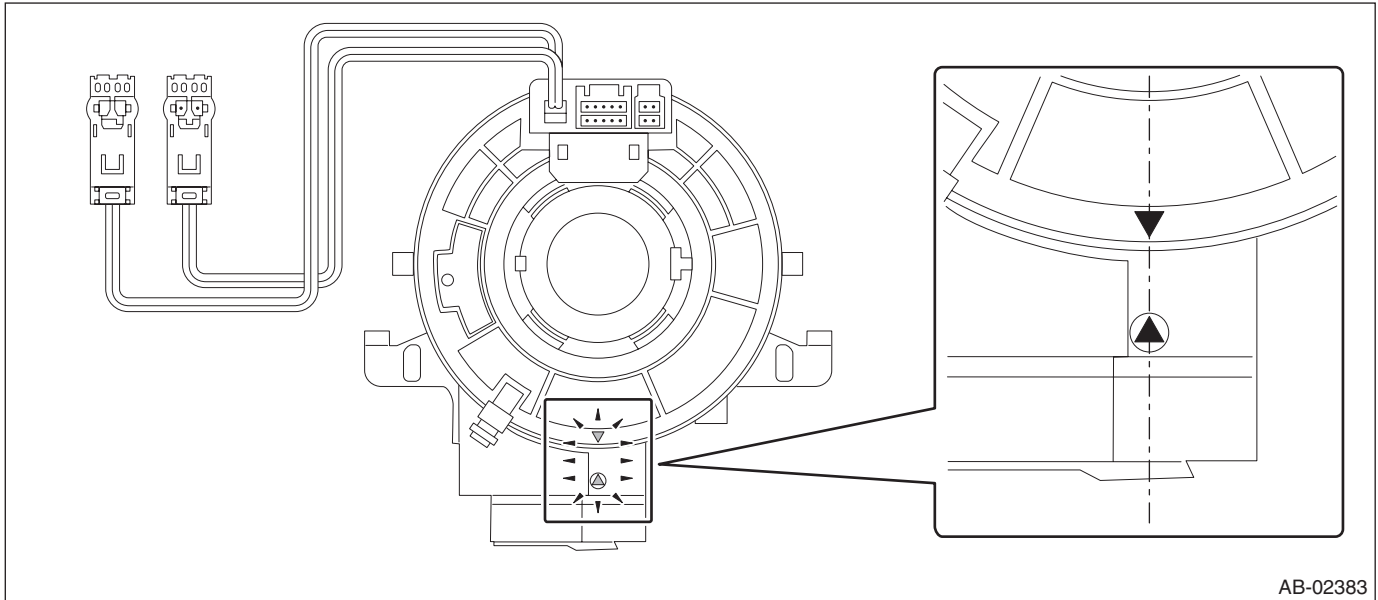
The connector D is designed to short the terminals D1/D2 and D3/D4 when disconnected.

5) Replace the roll connector with a new part if the inspection result is not within the standard value.

## D: ADJUSTMENT

### CAUTION:

- Do not rotate the roll connector to more than the specified number of turns. Otherwise, the roll connector internal wire may be broken.
  - When determining the end stop, rotate the connector slowly without applying excessive force. Applying excessive force at the end stop may break the internal wire.
- 1) Check that front wheels are positioned in straight ahead direction.
  - 2) Rotate the roll connector counterclockwise until it stops.
  - 3) Rotate the roll connector clockwise approx. 3 turns until “▲” marks are aligned.



# AIRBAG SYSTEM (DIAGNOSTICS)

## *AB(diag)*

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