TOYOTA SERVICE BULLETIN

Group: 09 No.: 36 Date: Jul, 17

Model: LandCruiser 200

Subject: Corrections to Repair Manual RM19U2E

Please ensure these pages are distributed to all relevant staff for their information; and a copy made available for future reference, with the above repair manual.

Section	Title	Paragraph
SUPPLEMENTAL RESTRAINT SYSTEMS	SPIRAL CABLE	INSTALLATION (2011/09 - 2012/02)
		INSTALLATION (2012/01 -)

The revised pages listed above are attached.

(The corrected parts are indicated by arrows.)

This bulletin does not cause the Flat Rate Manual to be changed

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Tester Connection	Condition	Specified Condition
E12-10 - z36-3	Always	Below 1 Ω
E12-9 - z36-2	Always	Below 1 Ω
E12-8 - z36-1	Always	Below 1 Ω
E12-8 - z37-2	Always	Below 1 Ω
E12-7 - z37-1	Always	Below 1 Ω

RS

NOTICE:
As the spiral cable may break, do not rotate the spiral cable more than the specified amount.

[Added]

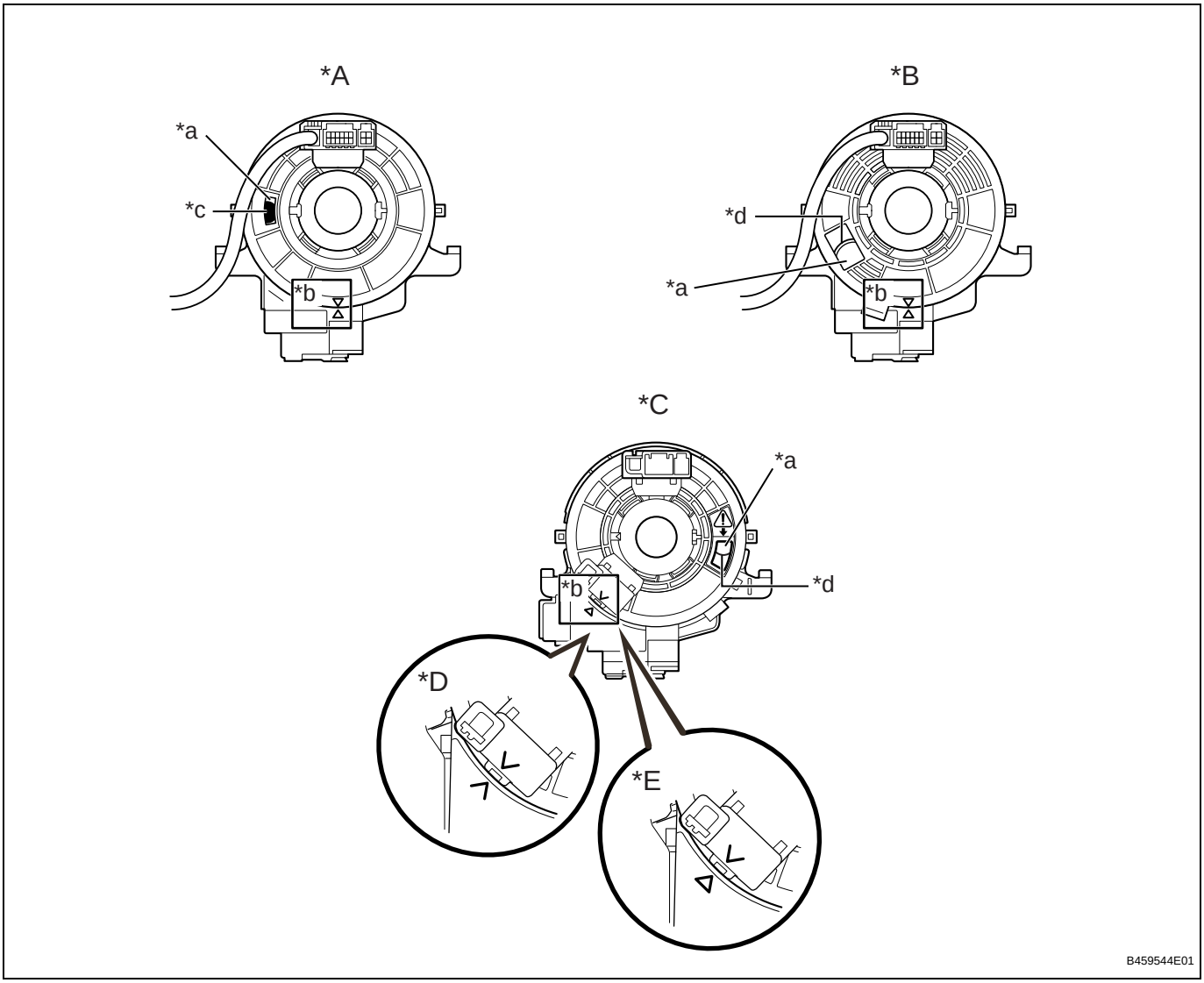
INSTALLATION

1. INSPECT SPIRAL CABLE SUB-ASSEMBLY

(a) Check that the spiral cable sub-assembly is center position.

OK:

The connector is at the top.
The matchmarks are aligned.
The colored roller or the top of the flat cable U-turn can be checked from the check window.



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Text in Illustration

*A	Colored Roller (Visible Type)	*B	Flat Cable (Visible Type), w/o Steering Heater
*C	Flat Cable (Visible Type), w/ Steering Heater	*D	for Type A
*E	for Type B	-	-
*a	Check Window	*b	Matchmark
*c	Colored Roller	*d	Top of Flat Cable U-turn

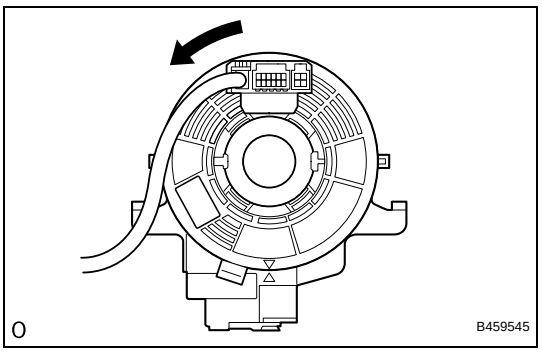
RS

(b) If the spiral cable sub-assembly is not centered, center it.

NOTICE:

Failure to observe the following precautions may result in damage to the spiral cable sub-assembly.

- **Do not turn the spiral cable sub-assembly using the airbag wire harness.**
- **Do not forcibly rotate the part.**



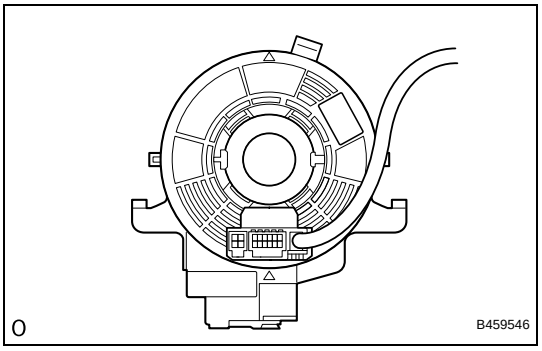
(1) Make sure to rotate the spiral cable sub-assembly counterclockwise slowly by hand until it stops.

NOTICE:

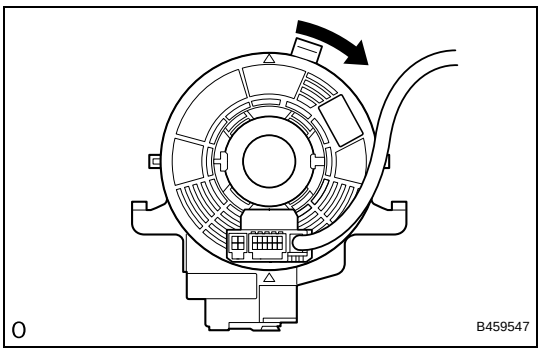
Make sure to rotate the spiral cable sub-assembly counterclockwise. If rotated clockwise, it may be damaged or centering may no longer be possible.

Text in Illustration

➡	Counterclockwise



(2) If the spiral cable sub-assembly stops rotating and the connector has moved past the bottom, return the connector to the bottom as shown in the illustration.



(3) Rotate the spiral cable sub-assembly clockwise approximately 2.5 times to move the connector from the bottom to the top.

NOTICE:

If the connector is rotated clockwise from the bottom 5 times or more, the spiral cable sub-assembly may be damaged.

Text in Illustration

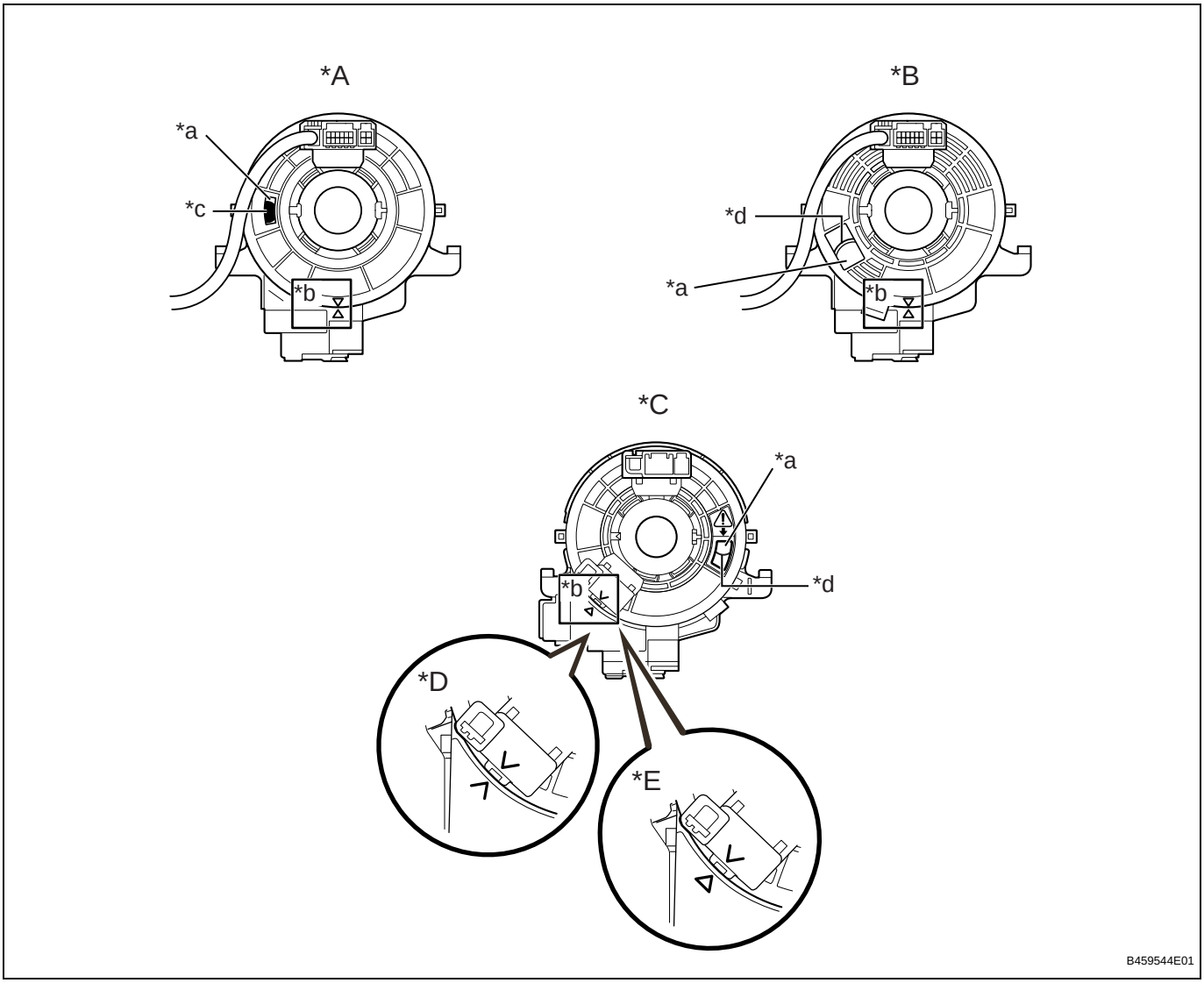
➡	Clockwise

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(4) Check that the spiral cable sub-assembly is center position.

OK:

The connector is at the top.
The matchmarks are aligned.
The colored roller or the top of the flat cable U-turn can be checked from the check window.



Text in Illustration

*A	Colored Roller (Visible Type)	*B	Flat Cable (Visible Type), w/o Steering Heater
*C	Flat Cable (Visible Type), w/ Steering Heater	*D	for Type A
*E	for Type B	-	-
*a	Check Window	*b	Matchmark
*c	Colored Roller	*d	Top of Flat Cable U-turn

NOTICE:
If the spiral cable sub-assembly cannot be centered, it is possible that the spiral cable sub-assembly is broken. Replace the spiral cable sub-assembly with a new one.

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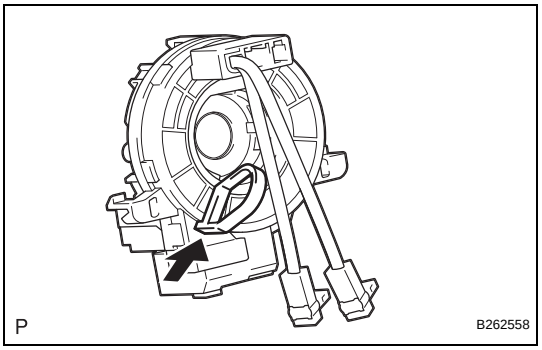
[Added]

RS

2. INSTALL SPIRAL CABLE

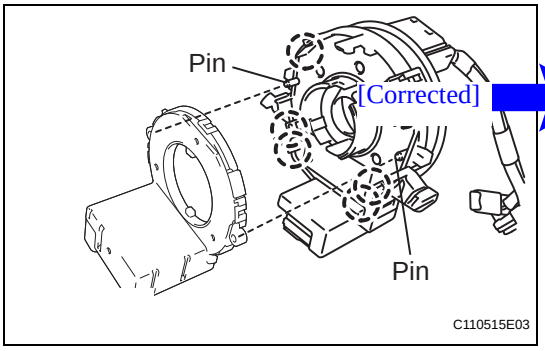
NOTICE:

- **Do not replace the spiral cable sub-assembly with the auxiliary battery connected and the power switch on.**
- **Do not rotate the spiral cable sub-assembly with the auxiliary battery connected and the power switch on.**
- **When rotating the spiral cable sub-assembly to check the operation of the spiral cable sub-assembly (checking for abnormal noise, checking the DTC, Data list, etc.) make sure to perform the inspection with the steering wheel assembly installed.**
- **If the steering sensor is installed to a misaligned spiral cable, DTCs for an abnormal steering sensor value such as DTC C1231, C1290 are stored and it is impossible to repair them. If this happens, replace the spiral cable sub-assembly with a new one.**
- **When replacing the spiral cable sub-assembly with a new one, remove the lock pin before installing the steering wheel assembly.**



Text in Illustration

➡	Lock Pin



(a) Align the pins on the spiral cable with the installation holes on the steering sensor.

[Corrected]

(b) Attach the 6 claws to install the spiral cable to the steering sensor.

(c) Check that the power switch is off.

(d) Check that the cable is disconnected from the auxiliary battery negative (-) terminal.

CAUTION:
Wait at least 90 seconds after disconnecting the cable from the auxiliary battery negative (-) terminal to disable the SRS system.

[Added]

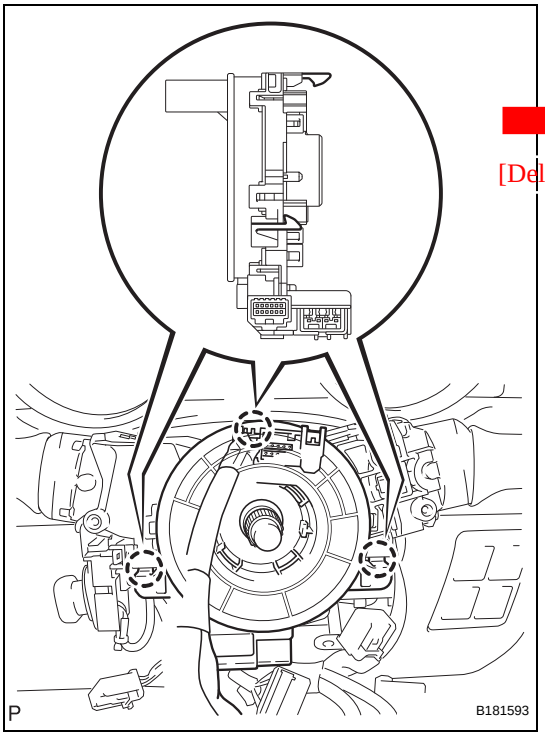
(e) Check that the front wheels are facing straight ahead.

(f) Set the turn signal switch to the neutral position.

NOTICE:
If it is not in the neutral position, the turn signal switch cancel ratchet may snap.

[Corrected]

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[Deleted]

(g) Attach the 3 claws to install the spiral cable sub-assembly.

CAUTION:
When replacing the spiral cable with a new one, remove the lock pin before installing the steering wheel assembly.

(h) Connect the connectors to the spiral cable with steering sensor.

NOTICE:
When handling the airbag connector, take care not to damage the airb ag wire harness.

3. INSTALL UPPER STEERING COLUMN COVER (See page)

4. INSTALL LOWER STEERING COLUMN COVER (See page)

5. ADJUST SPIRAL CABLE

(a) Check that the power switch is off.

(b) Check that the cable is disconnected from the auxiliary battery negative (-) terminal.

CAUTION:
Wait at least 90 seconds after disconnecting the cable from the auxiliary battery negative (-) terminal to disable the SRS system.

[Corrected]

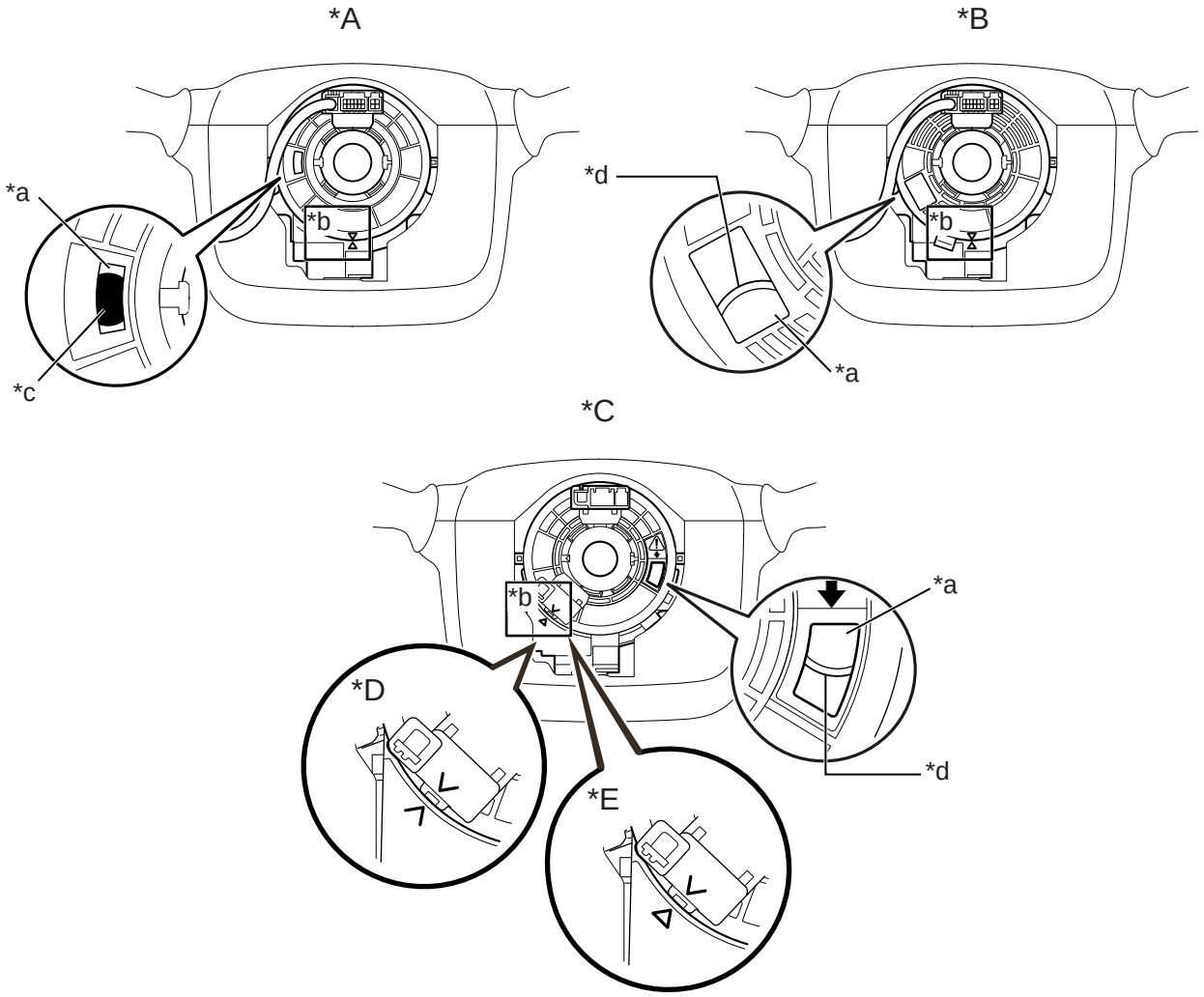
(c) Check that the spiral cable sub-assembly is center position.

OK:
The connector is at the top.
The matchmarks are aligned.
The colored roller or the top of the flat cable U-turn can be checked from the check window.

RS

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Text in Illustration

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*C	Flat Cable (Visible Type), w/ Steering Heater	*D	for Type A
*E	for Type B	-	-
*a	Check Window	*b	Matchmark
*c	Colored Roller	*d	Top of Flat Cable U-turn

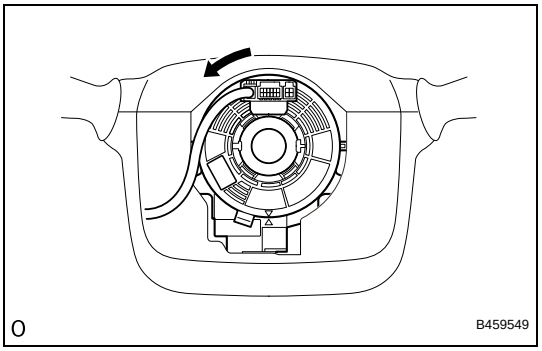
(d) If the spiral cable sub-assembly is not centered, center it.

NOTICE:

Failure to observe the following precautions may result in damage to the spiral cable sub-assembly.

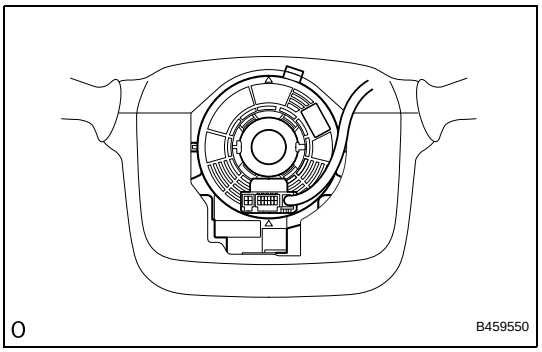
- **Do not turn the spiral cable sub-assembly using the airbag wire harness.**
- **Do not forcibly rotate the part.**

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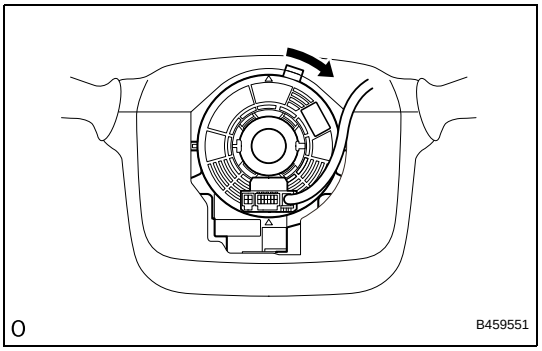


(1) Make sure to rotate the spiral cable sub-assembly counterclockwise slowly by hand until it stops.
NOTICE:
Make sure to rotate the spiral cable sub-assembly counterclockwise. If rotated clockwise, it may be damaged or centering may no longer be possible.
Text in Illustration

➡	Counterclockwise



(2) If the spiral cable sub-assembly stops rotating and the connector has moved past the bottom, return the connector to the bottom as shown in the illustration.



(3) Rotate the spiral cable sub-assembly clockwise approximately 2.5 times to move the connector from the bottom to the top.
NOTICE:
If the connector is rotated clockwise from the bottom 5 times or more, the spiral cable sub-assembly may be damaged.
Text in Illustration

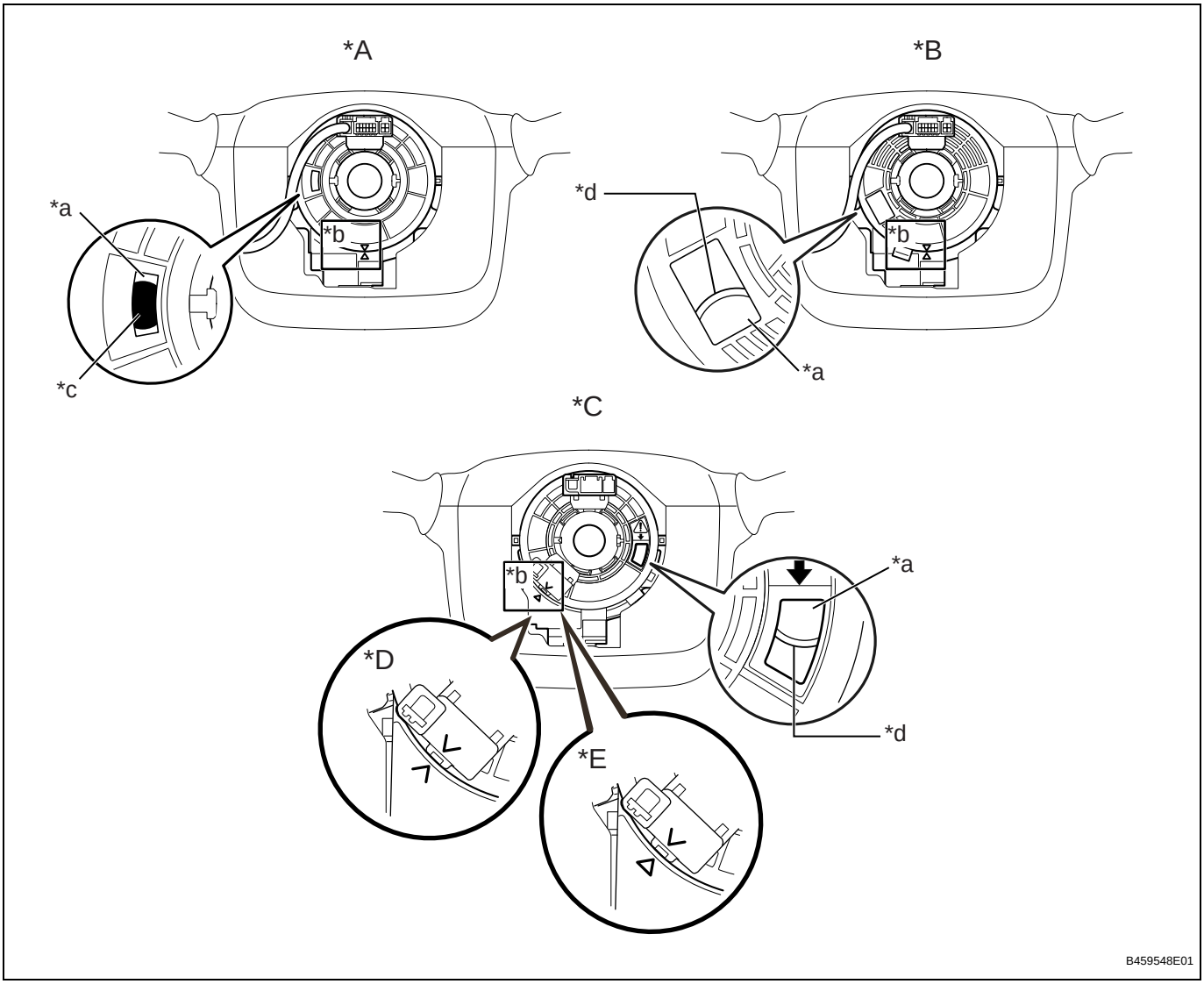
➡	Clockwise

(4) Check that the spiral cable sub-assembly is center position.
OK:
The connector is at the top.
The matchmarks are aligned.
The colored roller or the top of the flat cable U-turn can be checked from the check window.

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[Corrected]

RS



Text in Illustration

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*E	for Type B	-	-
*a	Check Window	*b	Matchmark
*c	Colored Roller	*d	Top of Flat Cable U-turn

NOTICE:
If the spiral cable sub-assembly cannot be centered, it is possible that the spiral cable sub-assembly is broken. Replace the spiral cable sub-assembly with a new one.

6. **INSTALL STEERING WHEEL ASSEMBLY (See page)**
7. **INSTALL STEERING PAD (See page)**
8. **INSTALL LOWER NO. 3 STEERING WHEEL COVER (See page)**
9. **INSTALL LOWER NO. 2 STEERING WHEEL COVER (See page)**

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Tester Connection	Condition	Specified Condition
E12-10 - z36-3	Always	Below 1 Ω
E12-9 - z36-2	Always	Below 1 Ω
E12-8 - z36-1	Always	Below 1 Ω
E12-8 - z37-2	Always	Below 1 Ω
E12-7 - z37-1	Always	Below 1 Ω

RS

NOTICE:
As the spiral cable may break, do not rotate the spiral cable more than the specified amount.

[Added]

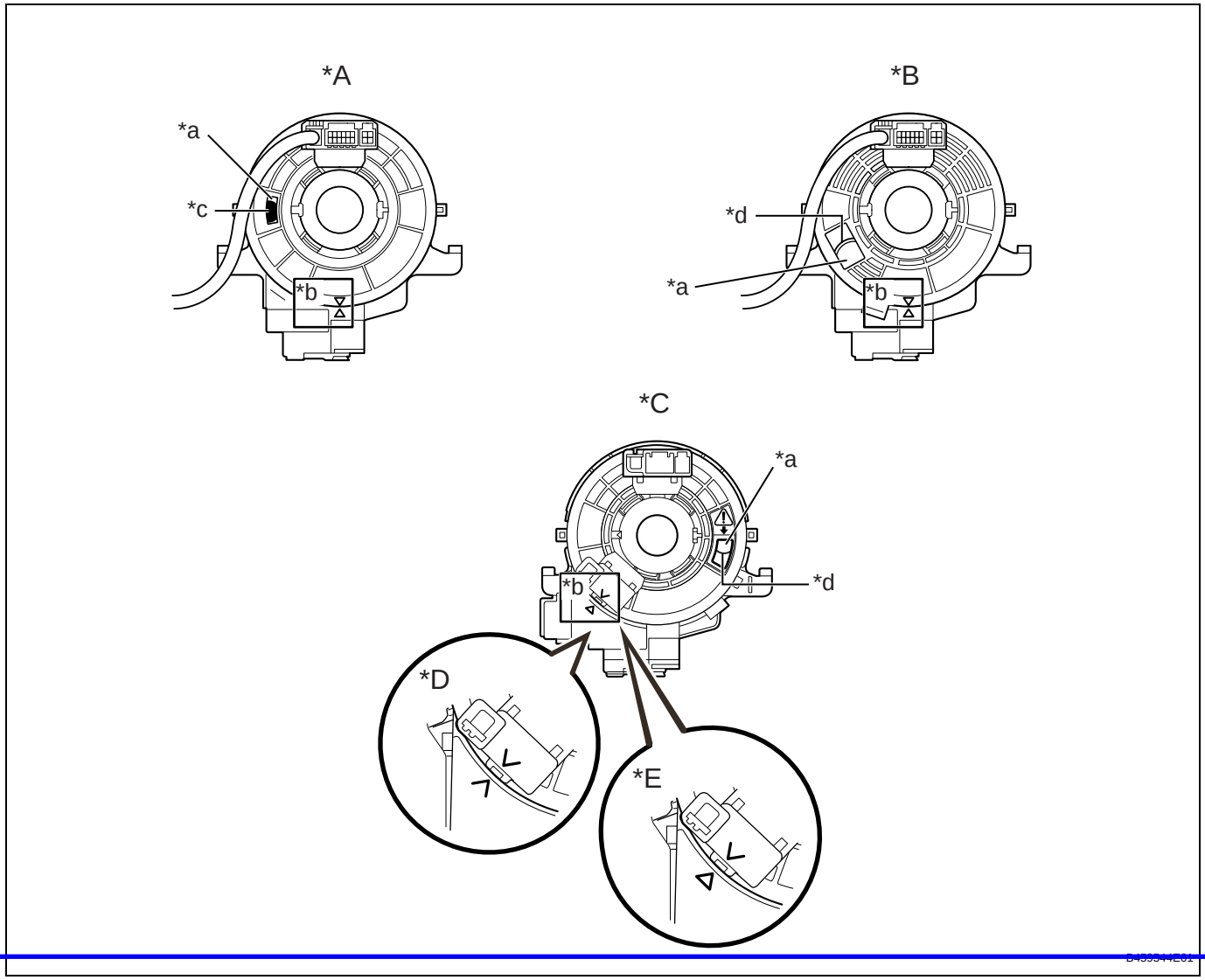
INSTALLATION

1. INSPECT SPIRAL CABLE SUB-ASSEMBLY

(a) Check that the spiral cable sub-assembly is center position.

OK:

The connector is at the top.
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Text in Illustration

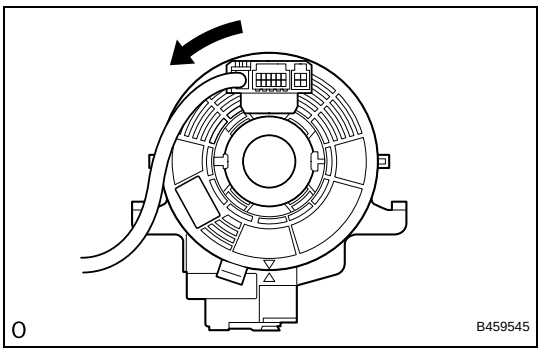
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*a	Check Window	*b	Matchmark
*c	Colored Roller	*d	Top of Flat Cable U-turn

(b) If the spiral cable sub-assembly is not centered, center it.

NOTICE:

Failure to observe the following precautions may result in damage to the spiral cable sub-assembly.

- **Do not turn the spiral cable sub-assembly using the airbag wire harness.**
- **Do not forcibly rotate the part.**



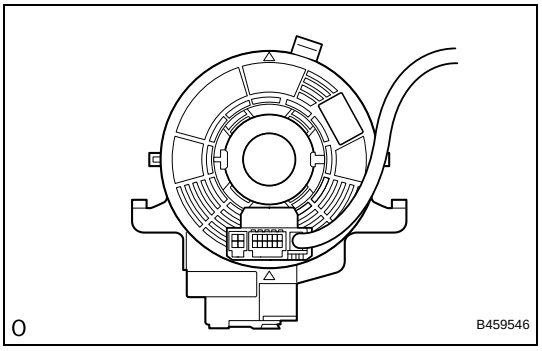
(1) Make sure to rotate the spiral cable sub-assembly counterclockwise slowly by hand until it stops.

NOTICE:

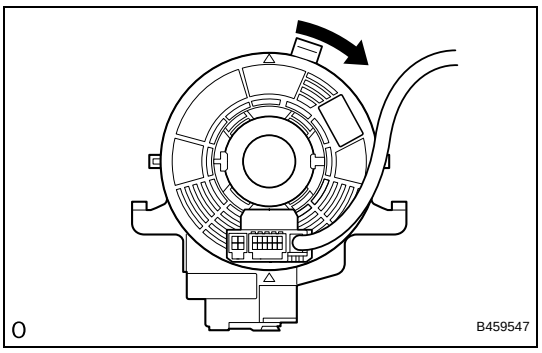
Make sure to rotate the spiral cable sub-assembly counterclockwise. If rotated clockwise, it may be damaged or centering may no longer be possible.

Text in Illustration

➡	Counterclockwise



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(3) Rotate the spiral cable sub-assembly clockwise approximately 2.5 times to move the connector from the bottom to the top.

NOTICE:

If the connector is rotated clockwise from the bottom 5 times or more, the spiral cable sub-assembly may be damaged.

Text in Illustration

➡	Clockwise

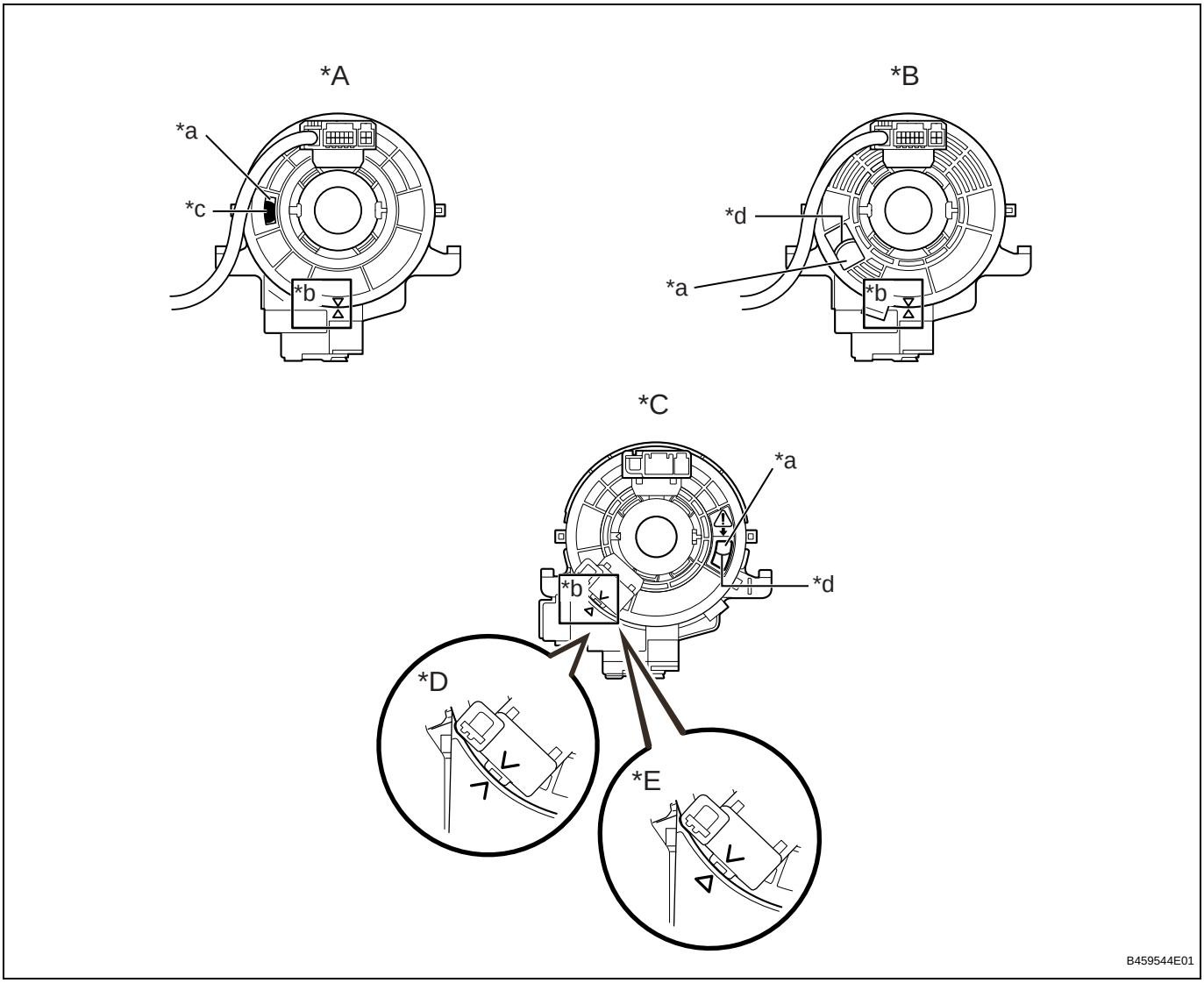
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(4) Check that the spiral cable sub-assembly is center position.

OK:

The connector is at the top.
The matchmarks are aligned.
The colored roller or the top of the flat cable U-turn can be checked from the check window.

RS



Text in Illustration

*A	Colored Roller (Visible Type)	*B	Flat Cable (Visible Type), w/o Steering Heater
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*a	Check Window	*b	Matchmark
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NOTICE:
If the spiral cable sub-assembly cannot be centered, it is possible that the spiral cable sub-assembly is broken. Replace the spiral cable sub-assembly with a new one.

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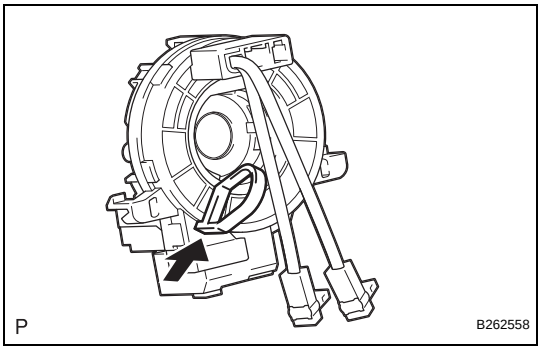
[Added]

RS

2. INSTALL SPIRAL CABLE

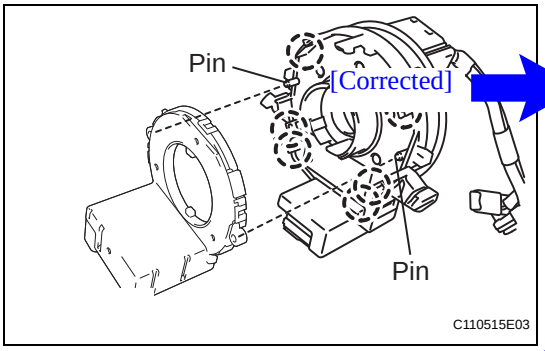
NOTICE:

- **Do not replace the spiral cable sub-assembly with the auxiliary battery connected and the power switch on.**
- **Do not rotate the spiral cable sub-assembly with the auxiliary battery connected and the power switch on.**
- **When rotating the spiral cable sub-assembly to check the operation of the spiral cable sub-assembly (checking for abnormal noise, checking the DTC, Data list, etc.) make sure to perform the inspection with the steering wheel assembly installed.**
- **If the steering sensor is installed to a misaligned spiral cable, DTCs for an abnormal steering sensor value such as DTC C1231, C1290 are stored and it is impossible to repair them. If this happens, replace the spiral cable sub-assembly with a new one.**
- **When replacing the spiral cable sub-assembly with a new one, remove the lock pin before installing the steering wheel assembly.**



Text in Illustration

➡	Lock Pin



(a) Align the pins on the spiral cable with the installation holes on the steering sensor.

[Corrected]

(b) Attach the 6 claws to install the spiral cable to the steering sensor.

(c) Check that the power switch is off.

(d) Check that the cable is disconnected from the auxiliary battery negative (-) terminal.

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the auxiliary battery negative (-) terminal to disable the SRS system.

[Added]

(e) Check that the front wheels are facing straight ahead.

(f) Set the turn signal switch to the neutral position.

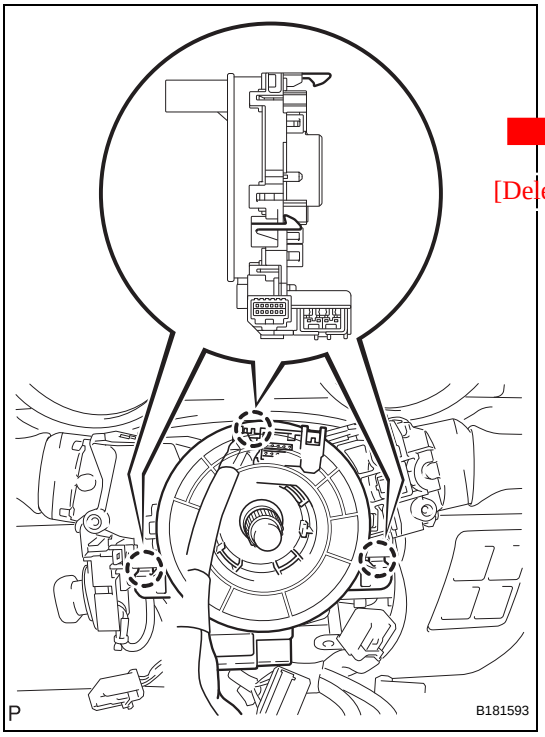
[Corrected]

NOTICE:

If it is not in the neutral position, the turn signal switch cancel ratchet may snap.

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[Corrected]



[Deleted]

(g) Attach the 3 claws to install the spiral cable sub-assembly.

CAUTION:
When replacing the spiral cable with a new one, remove the lock pin before installing the steering wheel assembly.

(h) Connect the connectors to the spiral cable with steering sensor.

NOTICE:
When handling the airbag connector, take care not to damage the airbag wire harness.

3. INSTALL UPPER STEERING COLUMN COVER (See page)

4. INSTALL LOWER STEERING COLUMN COVER (See page)

5. ADJUST SPIRAL CABLE

(a) Check that the ignition switch is off.

(b) Check that the cable is disconnected from the auxiliary battery negative (-) terminal.

CAUTION:
Wait at least 90 seconds after disconnecting the cable from the auxiliary battery negative (-) terminal to disable the SRS system.

[Corrected]

(c) Check that the spiral cable sub-assembly is center position.

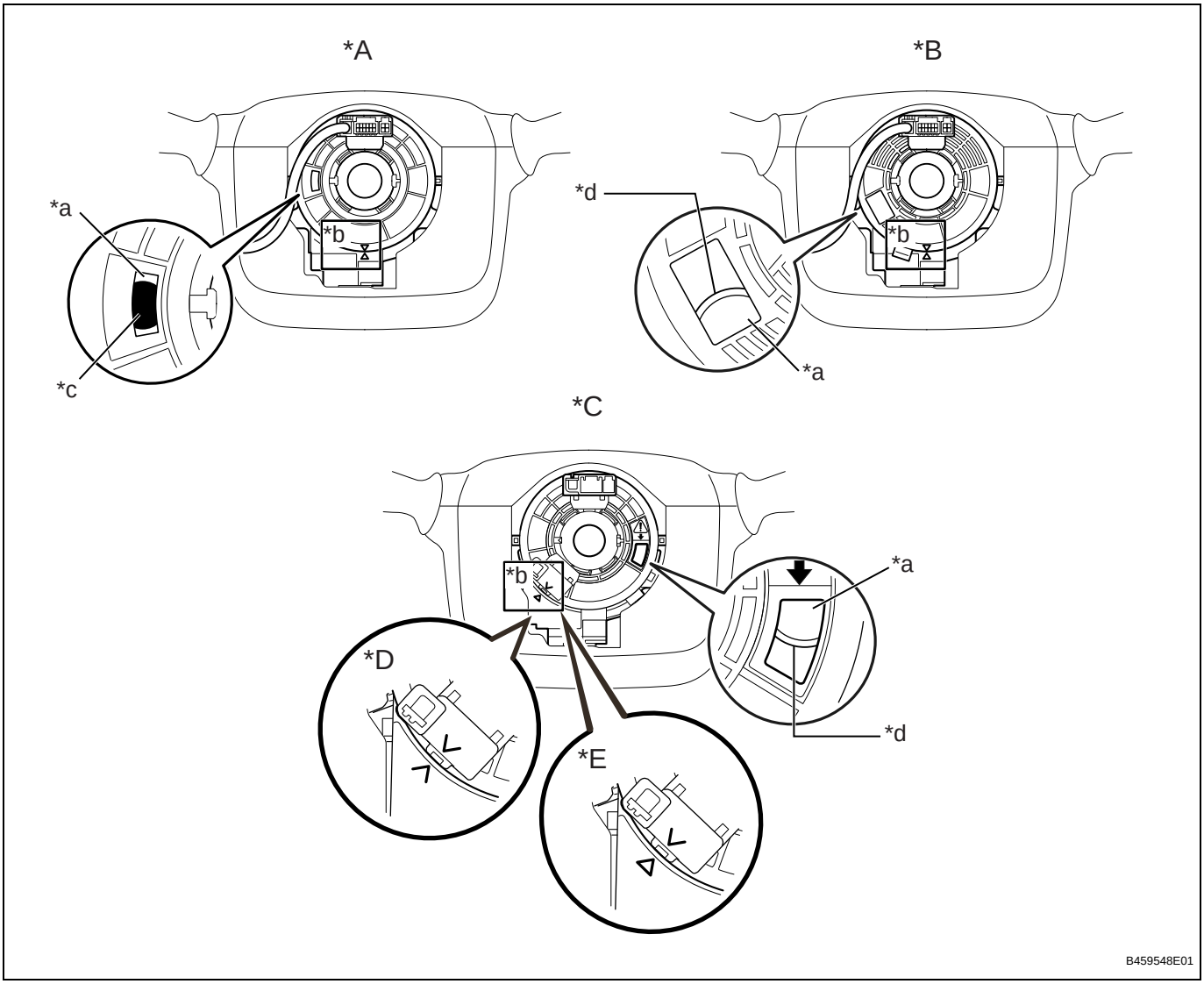
OK:
The connector is at the top.
The matchmarks are aligned.
The colored roller or the top of the flat cable U-turn can be checked from the check window.

RS

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[All Corrected]

RS



Text in Illustration

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*a	Check Window	*b	Matchmark
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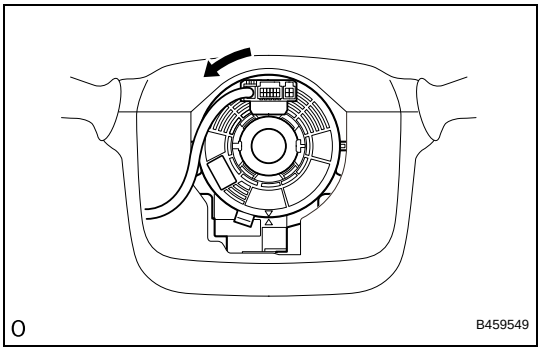
(d) If the spiral cable sub-assembly is not centered, center it.

NOTICE:

Failure to observe the following precautions may result in damage to the spiral cable sub-assembly.

- **Do not turn the spiral cable sub-assembly using the airbag wire harness.**
- **Do not forcibly rotate the part.**

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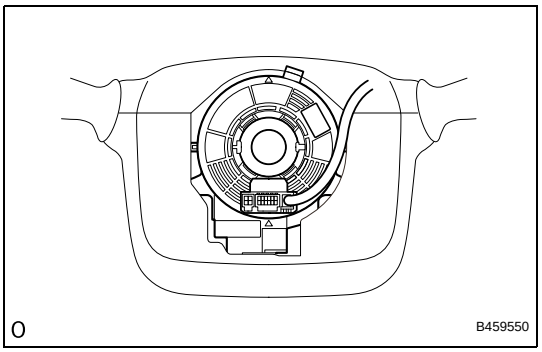
(1) Make sure to rotate the spiral cable sub-assembly counterclockwise slowly by hand until it stops.

NOTICE:

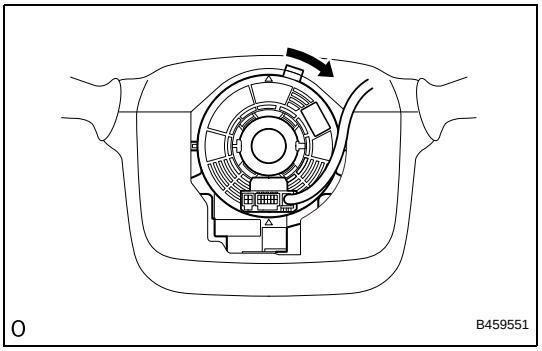
Make sure to rotate the spiral cable sub-assembly counterclockwise. If rotated clockwise, it may be damaged or centering may no longer be possible.

Text in Illustration

➡	Counterclockwise



(2) If the spiral cable sub-assembly stops rotating and the connector has moved past the bottom, return the connector to the bottom as shown in the illustration.



(3) Rotate the spiral cable sub-assembly clockwise approximately 2.5 times to move the connector from the bottom to the top.

NOTICE:

If the connector is rotated clockwise from the bottom 5 times or more, the spiral cable sub-assembly may be damaged.

Text in Illustration

➡	Clockwise

(4) Check that the spiral cable sub-assembly is center position.

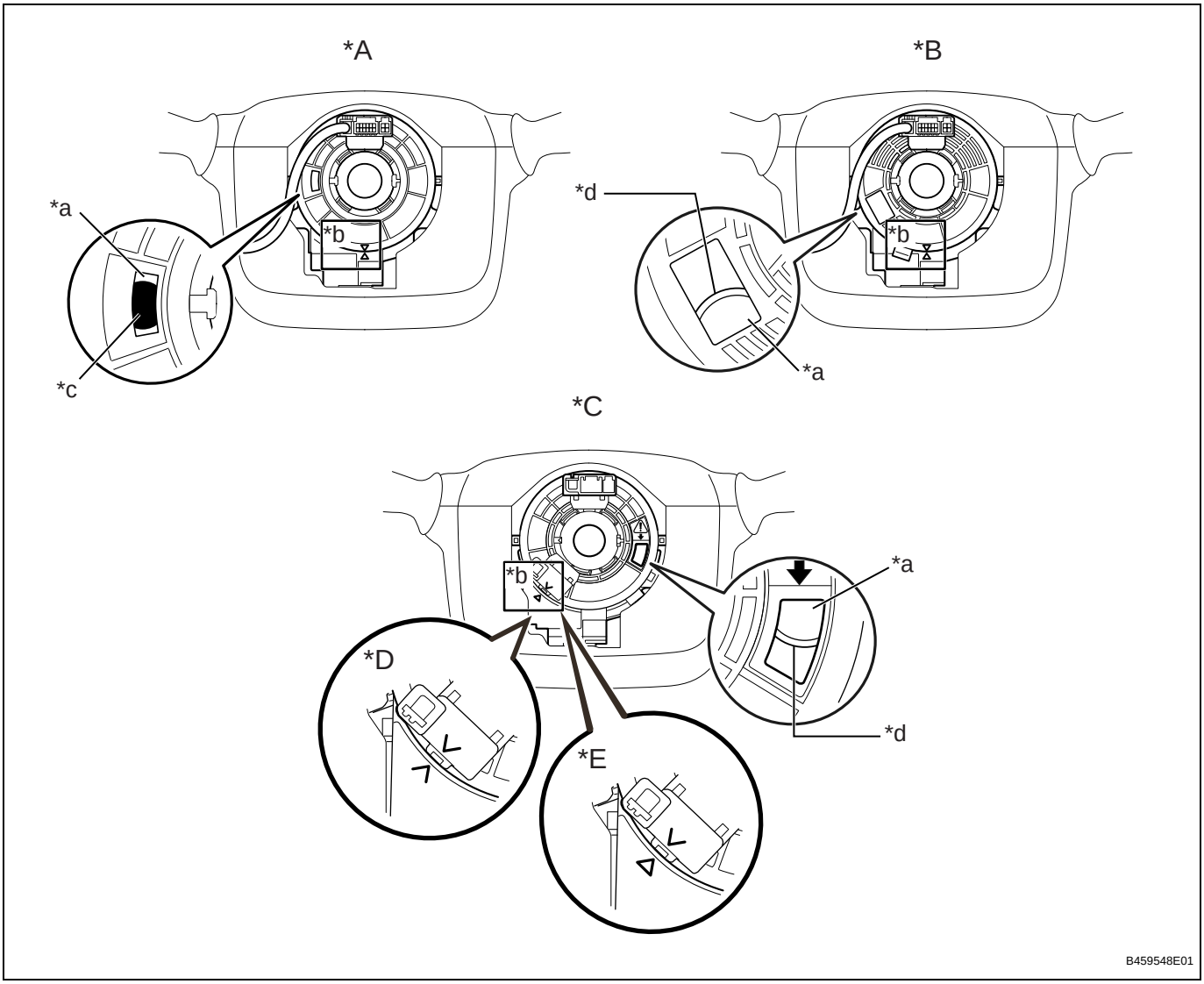
OK:

The connector is at the top.
The matchmarks are aligned.
The colored roller or the top of the flat cable U-turn can be checked from the check window.

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[Corrected]

RS



Text in Illustration

*A	Colored Roller (Visible Type)	*B	Flat Cable (Visible Type), w/o Steering Heater
*C	Flat Cable (Visible Type), w/ Steering Heater	*D	for Type A
*E	for Type B	-	-
*a	Check Window	*b	Matchmark
*c	Colored Roller	*d	Top of Flat Cable U-turn

NOTICE:
If the spiral cable sub-assembly cannot be centered, it is possible that the spiral cable sub-assembly is broken. Replace the spiral cable sub-assembly with a new one.

6. **INSTALL STEERING WHEEL ASSEMBLY (See page)**
7. **INSTALL STEERING PAD (See page)**
8. **INSTALL LOWER NO. 3 STEERING WHEEL COVER (See page)**
9. **INSTALL LOWER NO. 2 STEERING WHEEL COVER (See page)**

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