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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]
Title: FRONT SUSPENSION: FRONT SHOCK ABSORBER: INSTALLATION; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

INSTALLATION

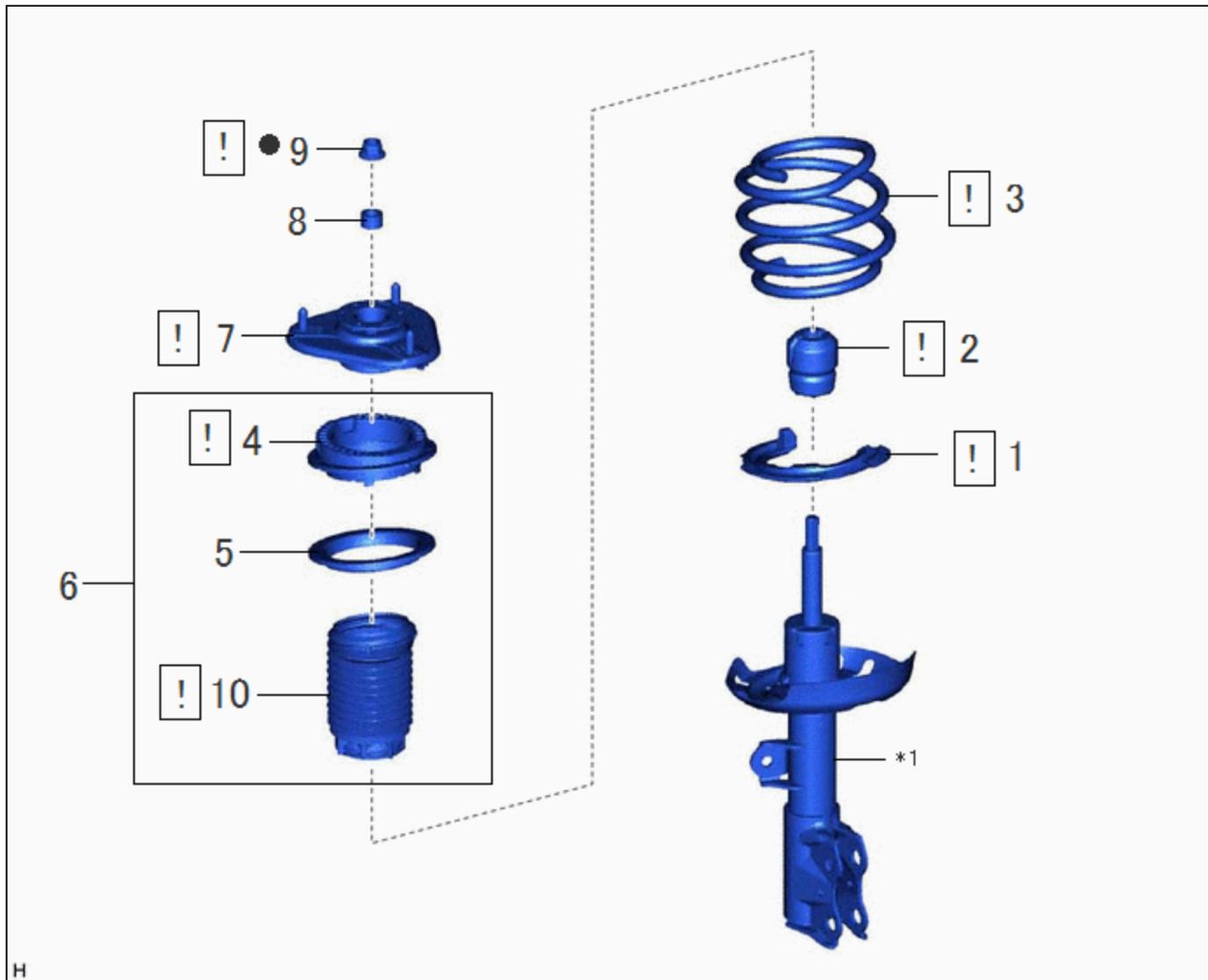
CAUTION / NOTICE / HINT

HINT:

- Use the same procedure for the RH side and LH side.
- The following procedure is for the LH side.

CAUTION / NOTICE / HINT

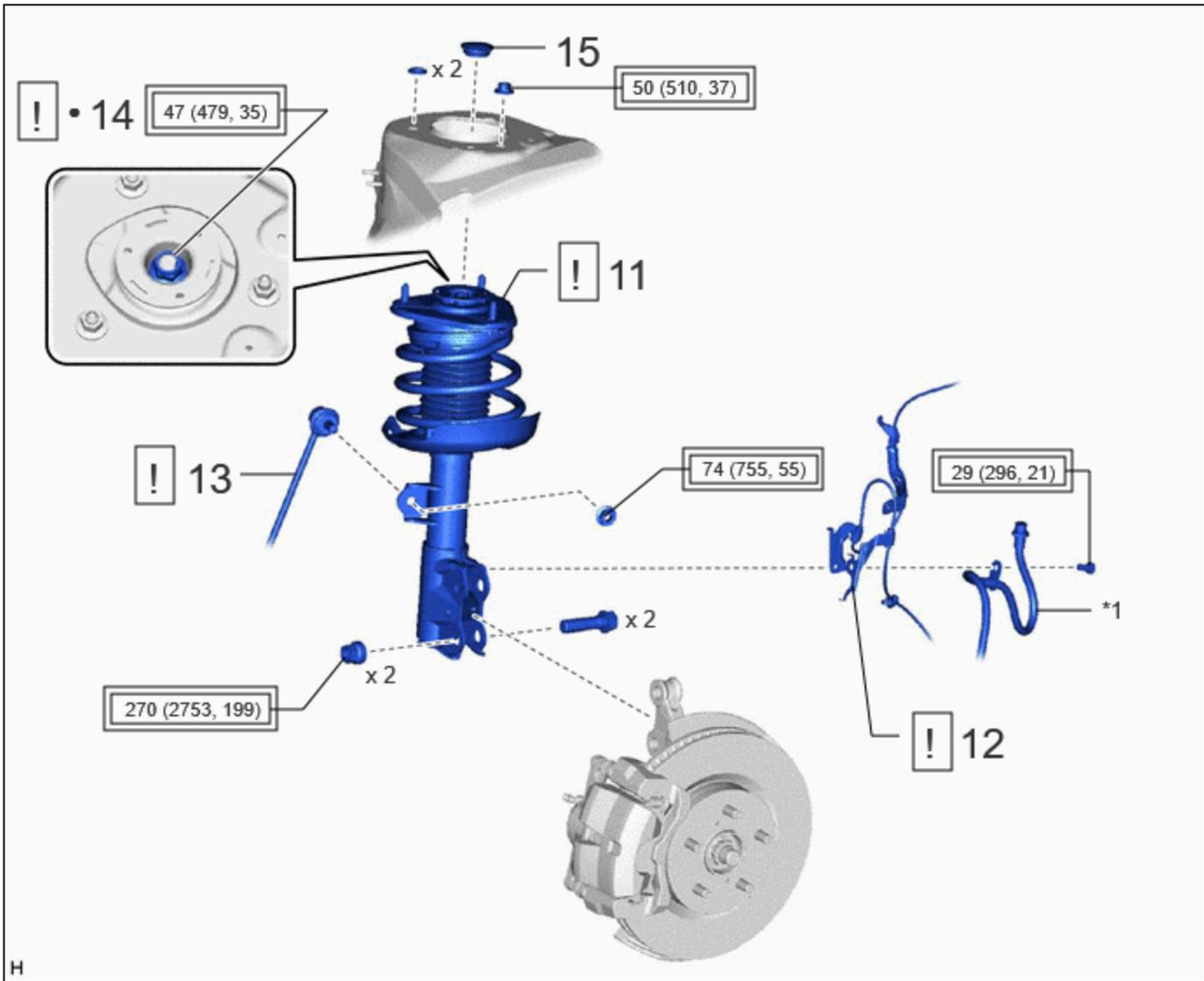
COMPONENTS (INSTALLATION)



H

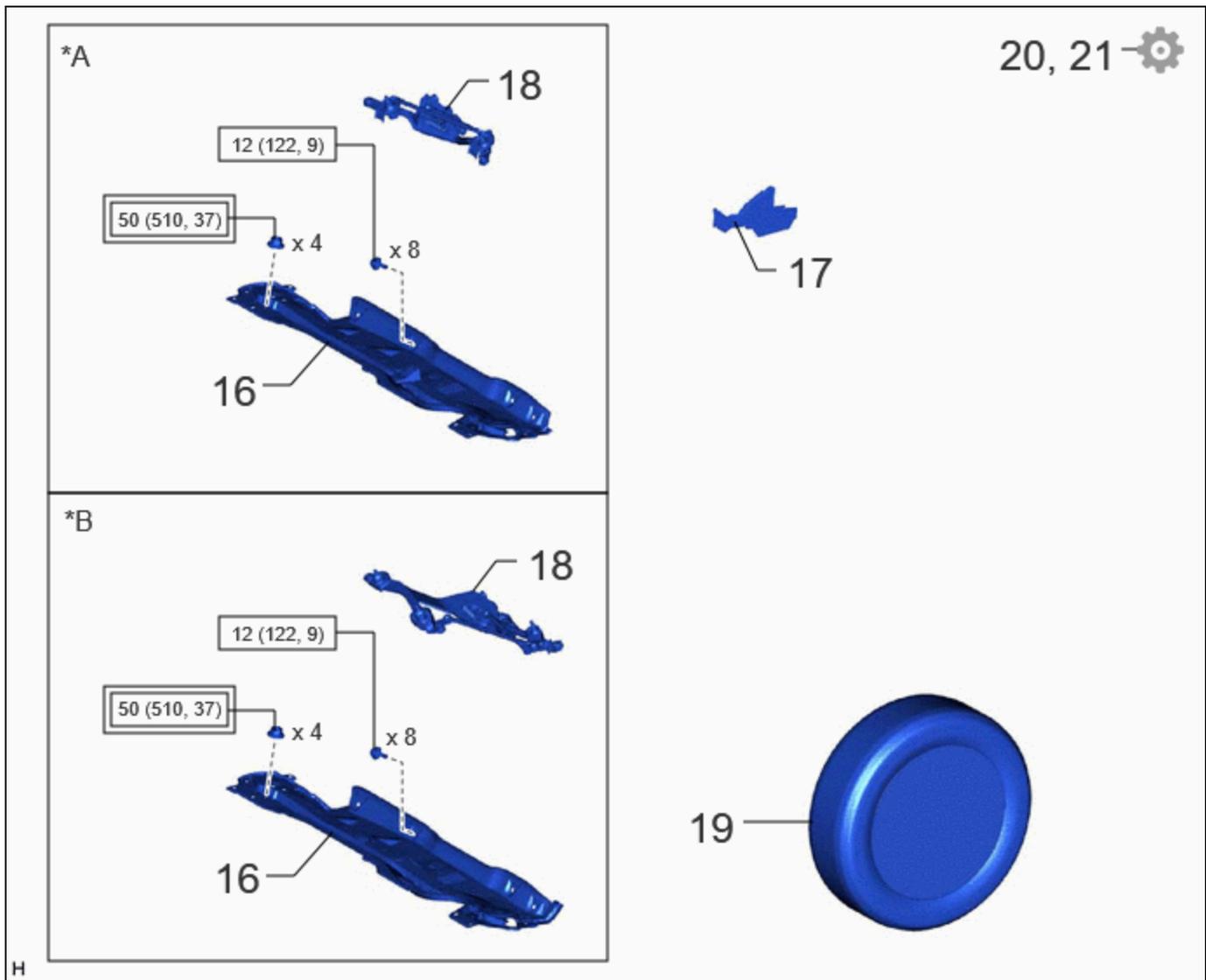
PROCEDURE		PART NAME CODE			
1	FRONT LOWER COIL SPRING INSULATOR	48158C	INFO	-	-
2	FRONT SPRING BUMPER	48331C	INFO	-	-
3	FRONT COIL SPRING	48132	INFO	-	-
4	STRUT MOUNTING BEARING	48619A	INFO	-	-
5	FRONT UPPER COIL SPRING INSULATOR	48157C	-	-	-
6	STRUT MOUNTING BEARING WITH DUST COVER	-	-	-	-
7	FRONT SUSPENSION SUPPORT SUB-ASSEMBLY	48609	INFO	-	-
8	COLLAR	-	-	-	-
9	TEMPORARILY TIGHTEN FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT	48609E	INFO	-	-
10	FRONT NO. 1 SHOCK ABSORBER DUST COVER	48559B	INFO	-	-

*1	FRONT SHOCK ABSORBER ASSEMBLY	-	-
•	Non-reusable part	-	-



PROCEDURE		PART NAME CODE			
11	FRONT SHOCK ABSORBER WITH COIL SPRING	-	INFO	-	-
12	FRONT SPEED SENSOR	89543	INFO	-	-
13	FRONT STABILIZER LINK ASSEMBLY	48810	INFO	-	-
14	FULLY TIGHTEN FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT	48609E	INFO	-	-
15	FRONT SUSPENSION SUPPORT DUST COVER	48684B	-	-	-

*1	FRONT FLEXIBLE HOSE	-	-	-
	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping": N*m (kgf*cm, ft.*lbf)			<ul style="list-style-type: none"> Non-reusable part



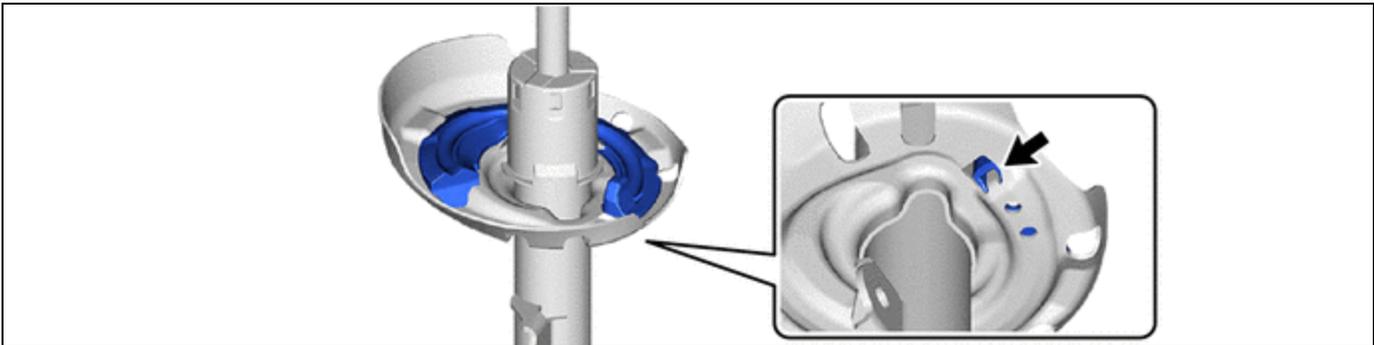
PROCEDURE		PART NAME CODE			
16	OUTER COWL TOP PANEL SUB-ASSEMBLY	55701J	-	-	-
17	WATER GUARD PLATE	55734D	-	-	-
18	WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY	-	-	-	-
19	FRONT WHEEL	-	-	-	-
20	INSPECT AND ADJUST FRONT WHEEL ALIGNMENT	-	-	-	INFO
21	PERFORM INITIALIZATION	-	-	-	INFO

*A	for 2ZR-FXE	*B	for M20A-FXS
	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping": N*m (kgf*cm, ft.*lbf)		N*m (kgf*cm, ft.*lbf): Specified torque

PROCEDURE

1. INSTALL FRONT LOWER COIL SPRING INSULATOR

	<p>NOTICE:</p> <p>When installing the front lower coil spring insulator, insert the positioning pin of the spring seat into the hole of the front lower coil spring insulator.</p>
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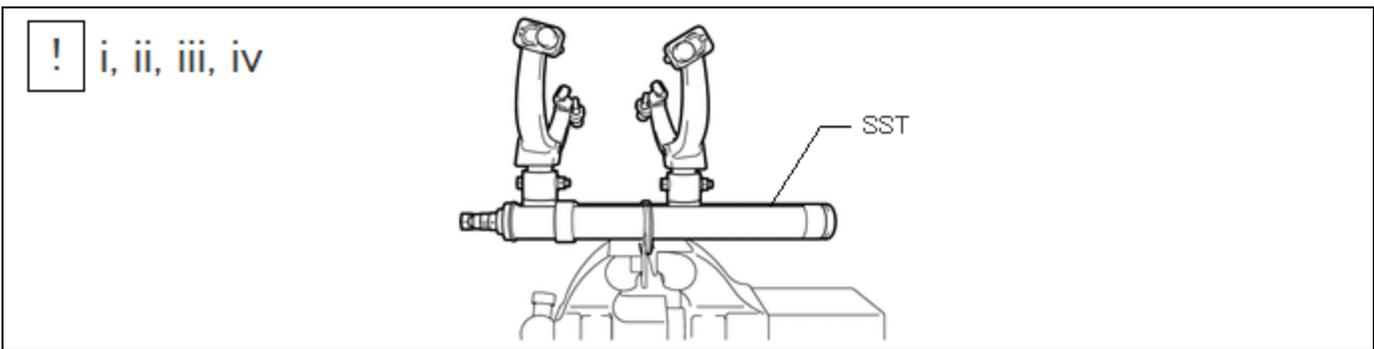


	Positioning Pin	-	-
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2. INSTALL FRONT SPRING BUMPER

	<p>NOTICE:</p> <ul style="list-style-type: none"> • Face the smaller diameter end of the front spring bumper downward. • Do not apply lubricants to the front spring bumper. • Do not apply lubricants to the front shock absorber assembly cap or rod. • Do not clean the front spring bumper with water or solvent.
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3. INSTALL FRONT COIL SPRING



(1) Secure SST in a vise.

SST: 09727-00051

SST: 09727-30022

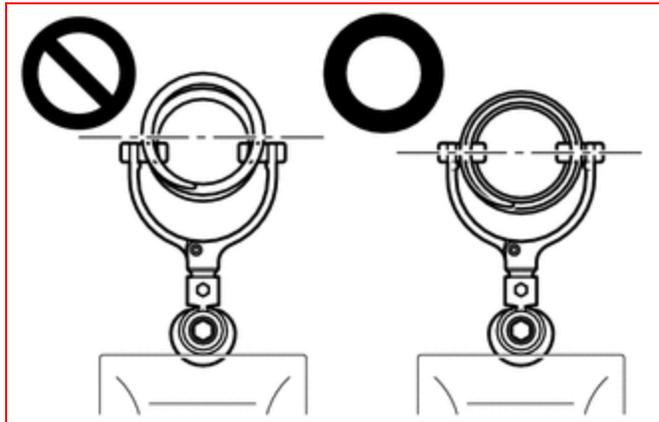
09727-00010

09727-00031

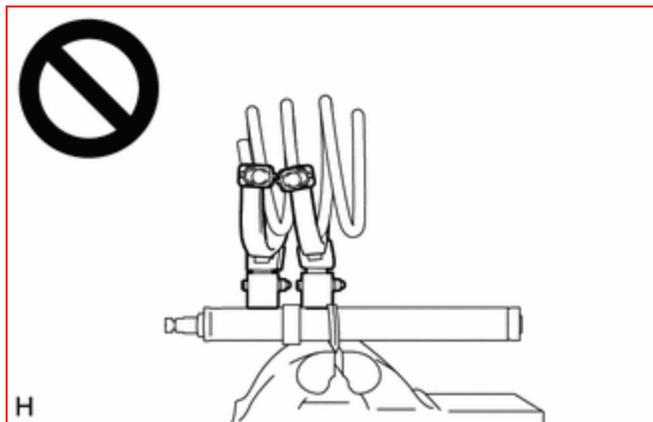
(2) Attach the hooks of each SST arm across the diameter of the coil spring.

CAUTION:

- Make sure that the hooks are securely attached to the coil spring.

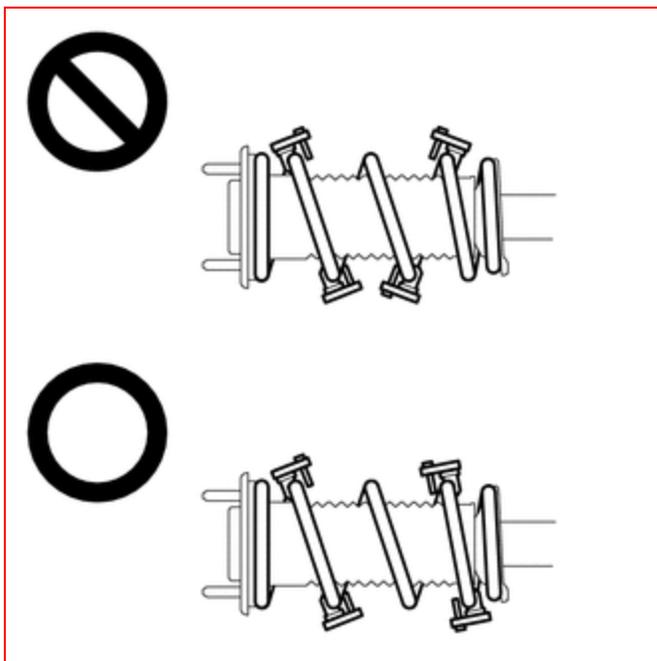


- If a hook disengages from the coil spring, the coil spring may fly out, resulting in injury.
- Make sure that the hooks of the upper and lower SST arms are attached to the coil spring so that the distance



between the hooks is as large as possible.

- If a hook disengages from the coil spring, the coil spring may fly out, resulting in injury.
- Make sure that the arms of SST are parallel and the number of coils between the arms is the same on each



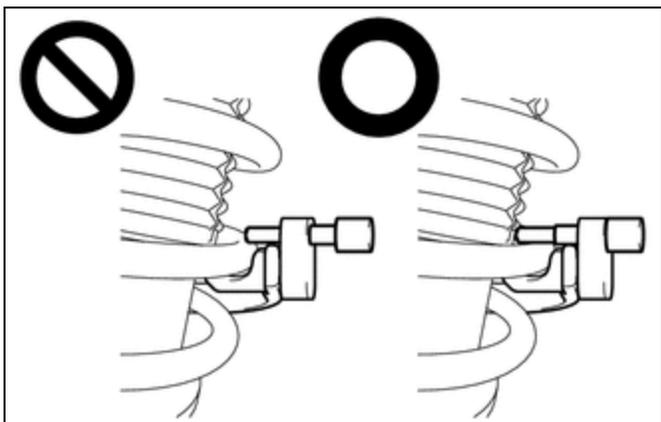
side.

- If a hook disengages from the coil spring, the coil spring may fly out, resulting in injury.

(3) Install the stopper pins to the hooks of SST.

CAUTION:

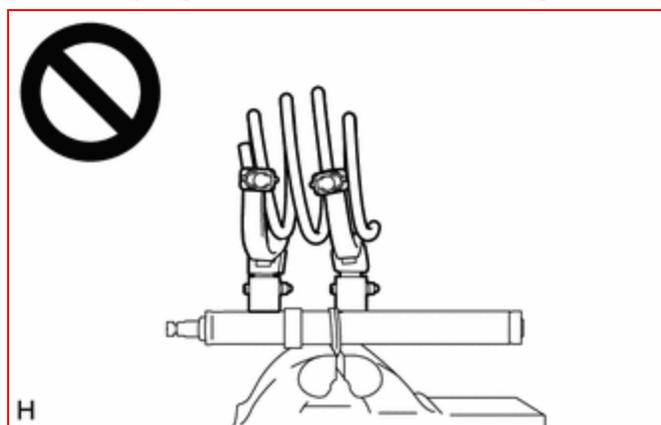
- Make sure that the stopper pins are installed securely.
- If a hook disengages from the coil spring, the coil spring may fly out, resulting in injury.



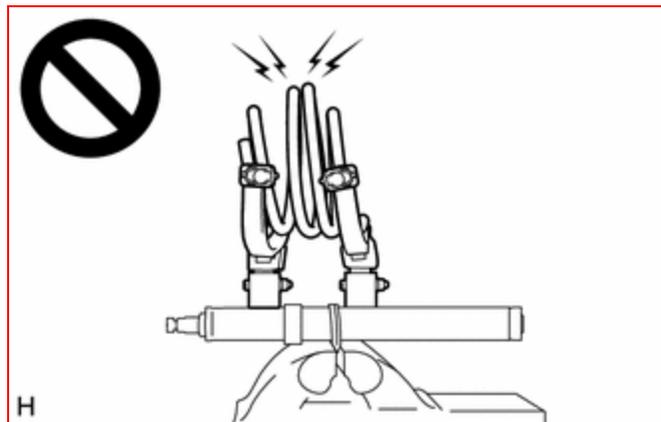
(4) Using SST, compress the coil spring.

CAUTION:

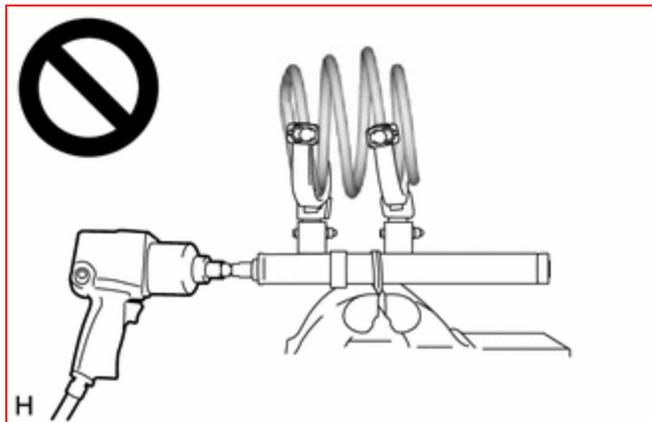
- If the coil spring starts to bow out while using SST, stop immediately and reattach SST correctly.



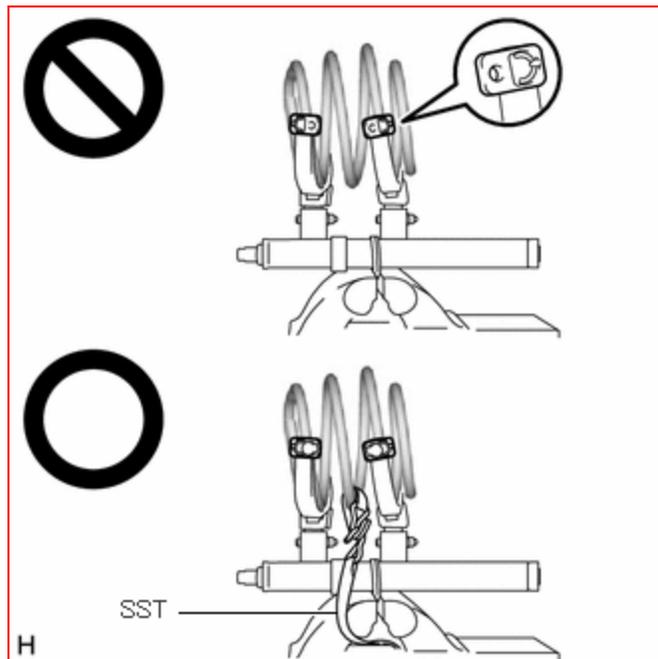
- If a hook disengages from the coil spring, the coil spring may fly out, resulting in injury.
- Do not compress the coil spring to the point where the coils touch each other.



- If a hook disengages from the coil spring, the coil spring may fly out, resulting in injury.



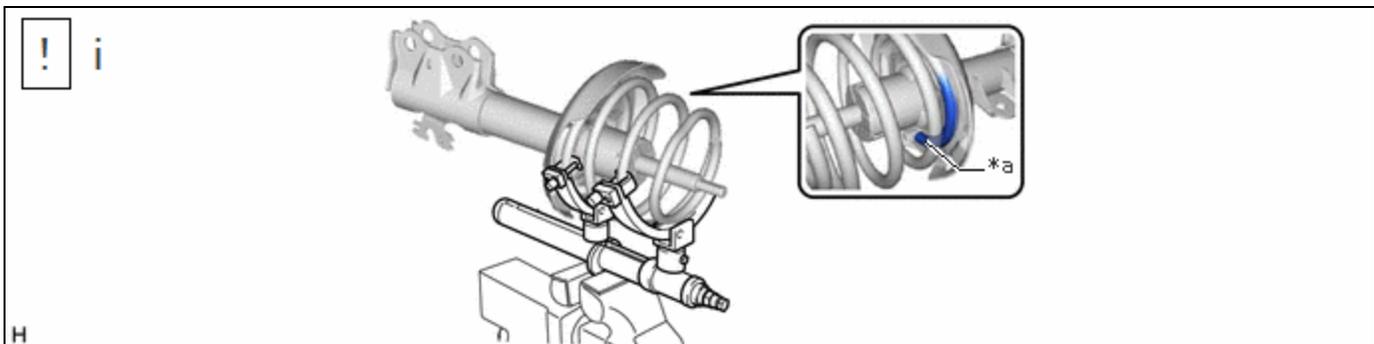
- Do not use an impact wrench.
- If an impact wrench is used, the threads of SST may be damaged, or sudden compression of the coil spring may cause a hook to disengage and the coil spring to fly out, resulting in injury.
- If a stopper pin touches the coil spring while using SST, remove the stopper pin and continue with the



procedure.

- If a stopper pin is removed, install a coil spring stopper belt as shown in the illustration.
- If a hook disengages from the coil spring, the coil spring may fly out, resulting in injury.

SST: 09727-00110



*a	Depression	-	-
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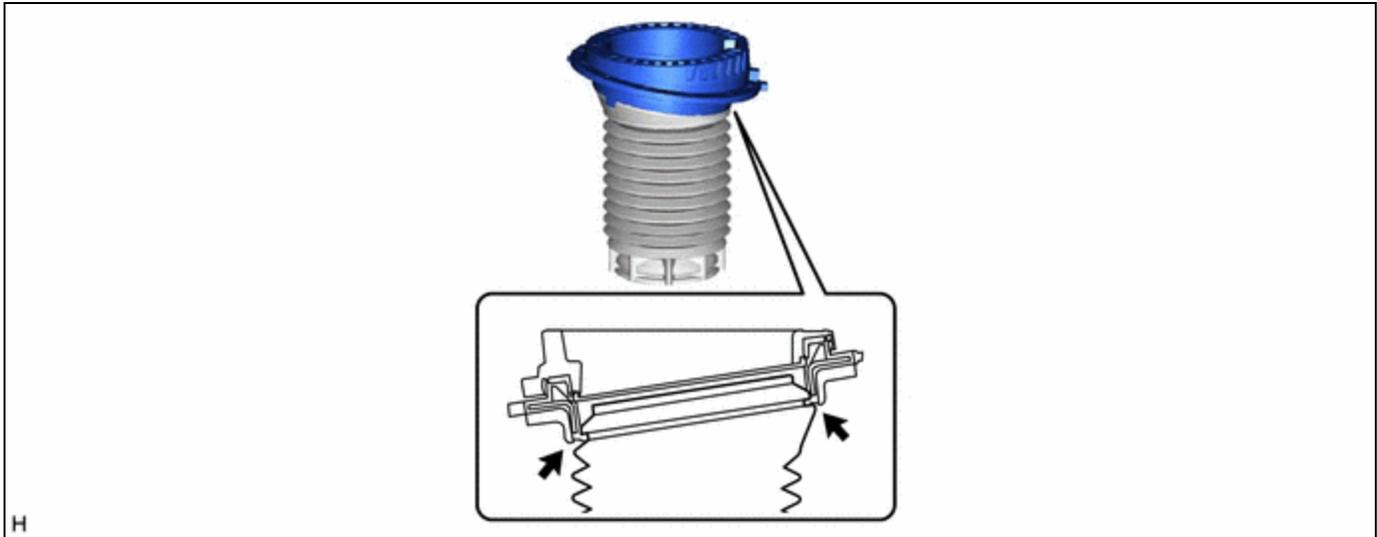
(1) Align the end of the front coil spring with the flange of the front lower coil spring insulator and install the front coil spring.

NOTICE:

Make sure to fit the end of the front coil spring that has the larger diameter into the depression of the front lower coil spring insulator.

4. INSTALL STRUT MOUNTING BEARING

	<p>NOTICE:</p>	<p>Make sure that the top end of the front No. 1 shock absorber dust cover and strut mounting bearing are securely attached.</p>
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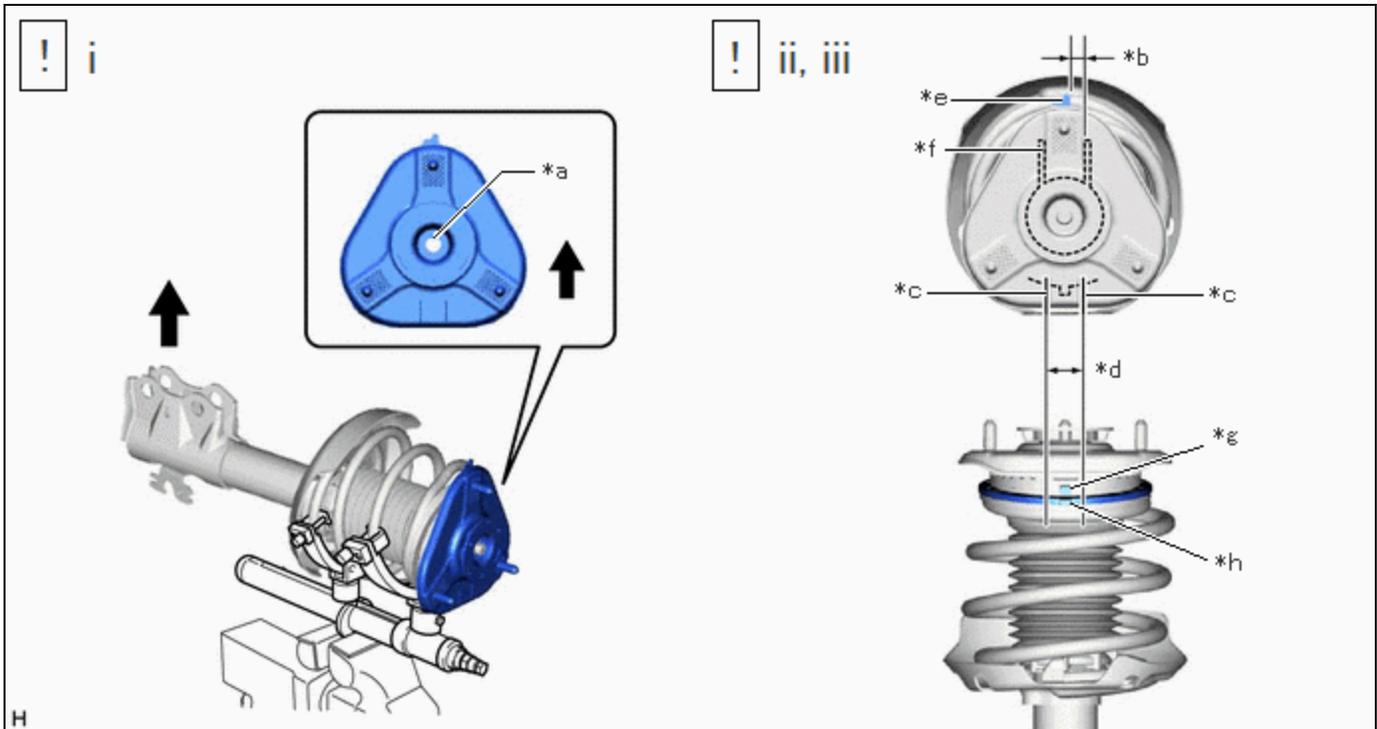


	<p>Top End of the Front No. 1 Shock Absorber Dust Cover</p>	-	-
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5. INSTALL FRONT UPPER COIL SPRING INSULATOR

6. INSTALL STRUT MOUNTING BEARING WITH DUST COVER

7. INSTALL FRONT SUSPENSION SUPPORT SUB-ASSEMBLY



*a	Slot	*b	0°+/- 5°
*c	Guide Line of Front Suspension Support Sub-assembly	*d	Area in Which Protrusions Must Be Aligned
*e	Protrusion of Front Suspension Support Sub-assembly	*f	Front Shock Absorber Lower Bracket
*g	Protrusion of Upper Case	*h	Protrusion of Lower Case
	Outside of the Vehicle	-	-

(1) Install the front suspension support sub-assembly as shown in the illustration.

NOTICE:

Check that the slot on the piston rod and the slot on the front suspension support sub-assembly are aligned.

(2) Align the protrusion of the front suspension support sub-assembly with the front shock absorber lower bracket as shown in the illustration.

NOTICE:

Make sure to install the front suspension support sub-assembly so that the protrusion of the front suspension support sub-assembly is aligned within +/- 5° of the center of the front shock absorber lower bracket.

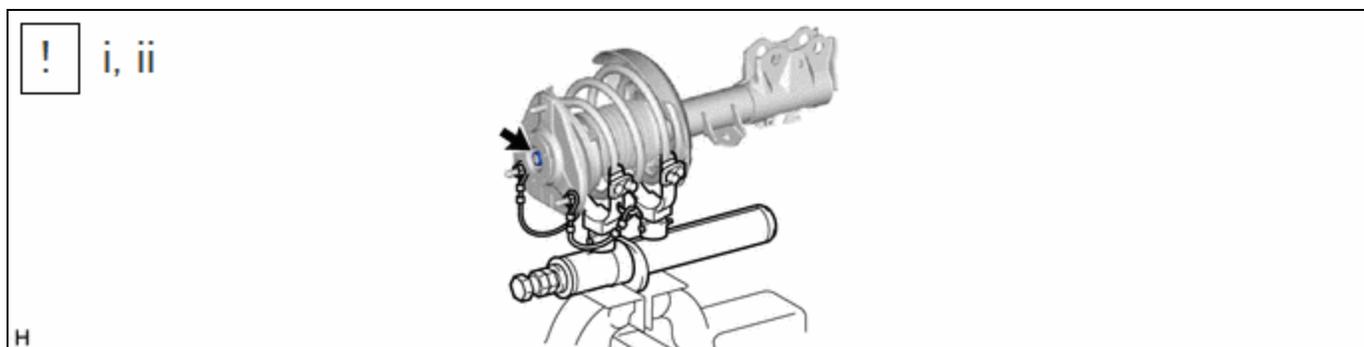
(3) Align the protrusions of the upper case and lower case of the strut mounting bearing as shown in the illustration.

NOTICE:

Make sure to install the strut mounting bearing with dust cover so that the protrusion of the upper case of the strut mounting bearing overlaps with the protrusion of the lower case within the guide lines of the front suspension support sub-assembly.

8. INSTALL COLLAR

9. TEMPORARILY TIGHTEN FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT



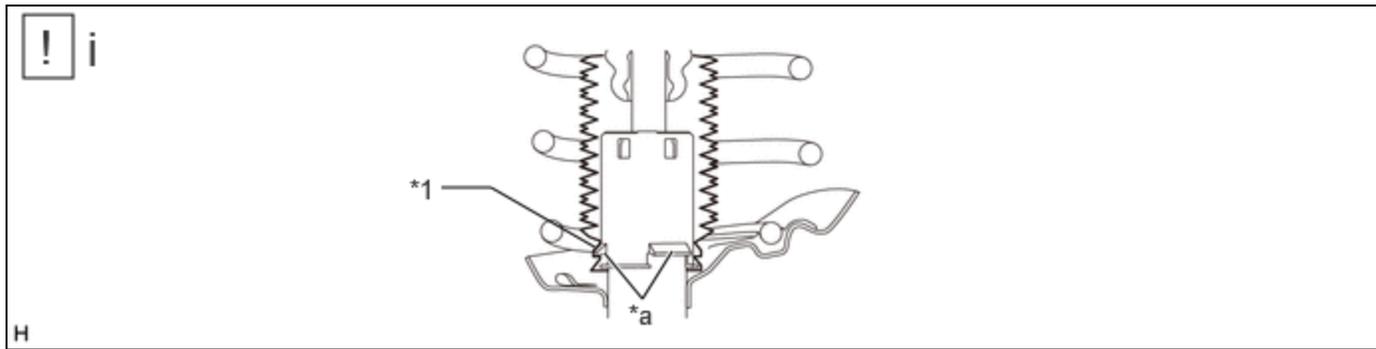
(1) Temporarily tighten a new front support to front shock absorber nut.

(2) Remove SST from the front coil spring.

NOTICE:

Do not use an impact wrench. It will damage SST.

10. CONNECT FRONT NO. 1 SHOCK ABSORBER DUST COVER



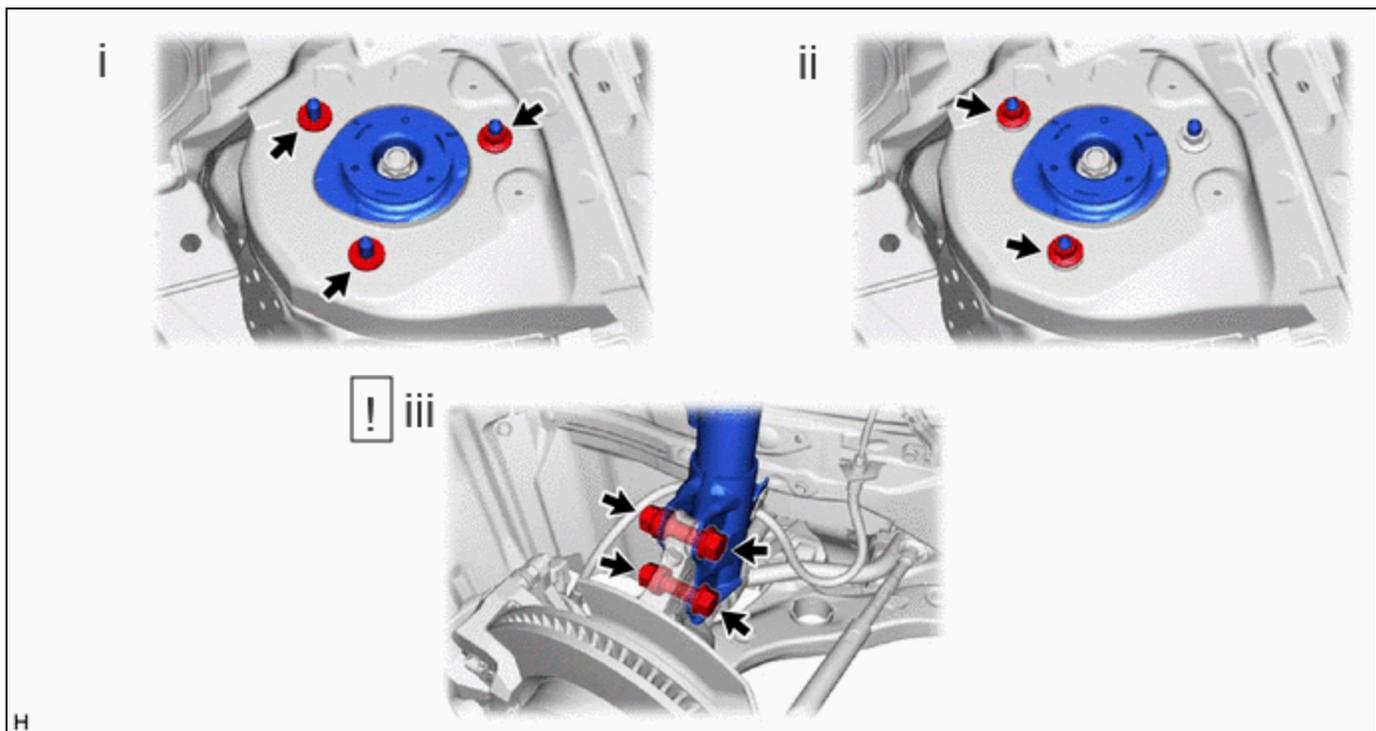
*1	Front No. 1 Shock Absorber Dust Cover	-	-
*a	Claw	-	-

(1) Connect the end of the front No. 1 shock absorber dust cover with the claws of the front shock absorber assembly.

NOTICE:

- Make sure that the end of the front No. 1 shock absorber dust cover is securely attached to the claws of the front shock absorber assembly.
- Make sure there is no excessive damage to the bellows of the front No. 1 shock absorber dust cover.
- Do not allow oil, grease, etc., to contact the front No. 1 shock absorber dust cover.
- If there is oil or grease on the insulator, wipe clean with a cloth. Do not use an alcohol based cleaner.

11. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING



(1) Install the front shock absorber with coil spring (upper side) with the nut and 2 spacers.

Torque:

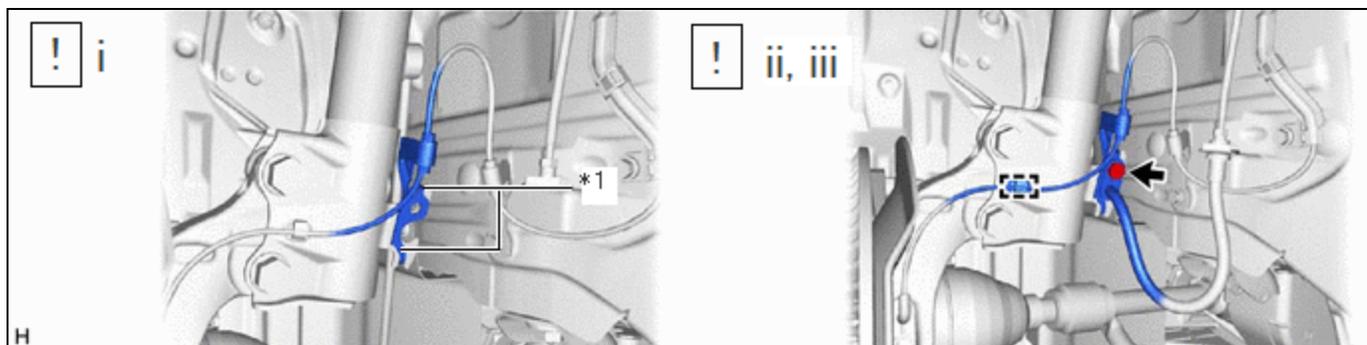
50 N·m {510 kgf·cm, 37 ft·lbf}

(2) Temporarily install the 2 nuts to the front shock absorber with coil spring.

(3) Install the front shock absorber with coil spring (lower side) to the steering knuckle with the 2 bolts and 2 nuts.

Torque:**270 N·m {2753 kgf·cm, 199 ft·lbf}****NOTICE:**

- When installing the nuts, keep the bolts from rotating.
- Do not apply lubricants to the steering knuckle and shock absorber contact surfaces.

12. INSTALL FRONT SPEED SENSOR

*1	Hook	-	-
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(1) Engage the 2 hooks to install the front speed sensor clamp bracket.

NOTICE:

Do not twist the front speed sensor when installing it.

(2) Install the front speed sensor and front flexible hose to the front shock absorber assembly with the bolt.

Torque:**29 N·m {296 kgf·cm, 21 ft·lbf}**

(3) Engage the clamp.

NOTICE:

Do not twist the front speed sensor when installing it.

13. INSTALL FRONT STABILIZER LINK ASSEMBLY**Torque:****74 N·m {755 kgf·cm, 55 ft·lbf}****HINT:**

If the ball joint turns together with the nut, use a 6 mm hexagon socket wrench to hold the stud bolt.

14. FULLY TIGHTEN FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

(1) Fully tighten the front support to front shock absorber nut.

Torque:

47 N·m {479 kgf·cm, 35 ft·lbf}

NOTICE:

Perform this step only when the front shock absorber with coil spring has been disassembled.

(2) Remove the 2 nuts from the front shock absorber assembly.

15. INSTALL FRONT SUSPENSION SUPPORT DUST COVER

16. INSTALL OUTER COWL TOP PANEL SUB-ASSEMBLY

Torque:

Bolt :

12 N·m {122 kgf·cm, 9 ft·lbf}

Nut :

50 N·m {510 kgf·cm, 37 ft·lbf}

17. INSTALL WATER GUARD PLATE

18. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY

Click here [INFO](#)

19. INSTALL FRONT WHEEL

Click here [INFO](#)

20. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

Click here [INFO](#)

21. PERFORM INITIALIZATION

Parking Assist Monitor System	INFO
Panoramic View Monitor System	INFO
Advanced Park	INFO

