

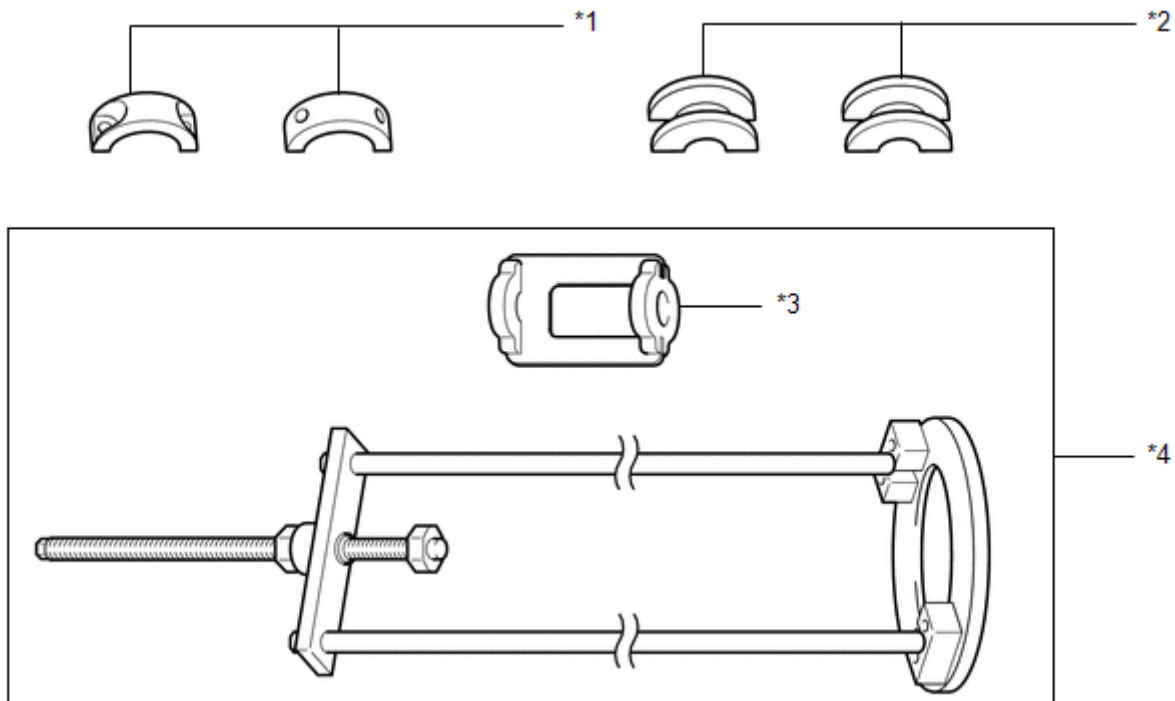
## FRONT SHOCK ABSORBER - REMOVAL [11/2021 - ]

### FRONT SUSPENSION: FRONT SHOCK ABSORBER(for 2WD): REMOVAL; 2022 - 2023 MY IS200T IS250 IS300 IS350 IS500 [11/2021 - ]

#### CAUTION / NOTICE / HINT

**HINT:**

- Use the same procedure for the RH side and LH side.
- The procedure listed below is for the LH side.
- SST used when removing/installing the coil spring are shown as follows. (except 2UR-GSE)



*1	SST(09727-58100)	*2	SST(09727-58110)
*3	SST(09727-58020)	*4	SST(09727-58010)

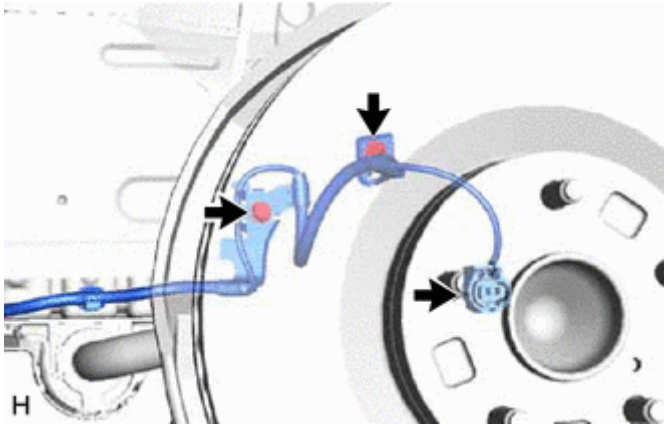
## PROCEDURE

---

### 1. REMOVE FRONT WHEEL

Click here [ [TIRE / WHEEL: TIRE AND WHEEL: REMOVAL](#) ]

### 2. SEPARATE SKID CONTROL SENSOR WIRE



- a. Disconnect the skid control sensor wire connector from the front axle hub sub-assembly.
- b. Remove the 2 bolts and separate the skid control sensor wire from the front shock absorber with coil spring and body.

#### NOTICE:

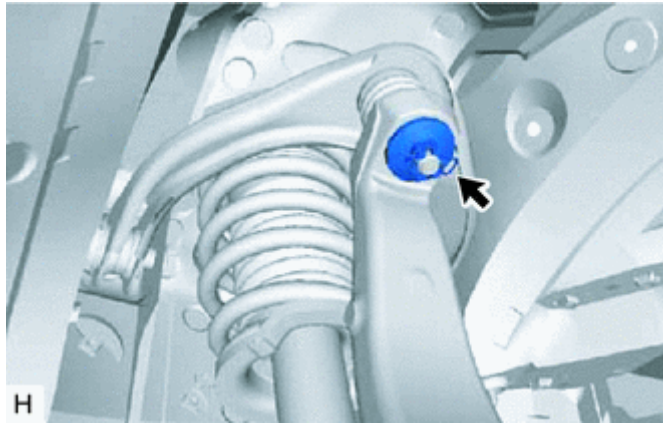
Be careful not to deform the bracket of the front shock absorber with coil spring when removing the bolt.

### 3. REMOVE FRONT STABILIZER LINK ASSEMBLY

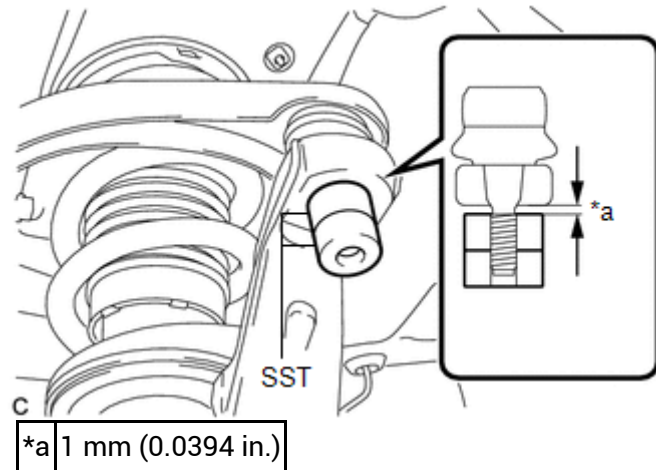
Click here [ [FRONT SUSPENSION: FRONT STABILIZER BAR \(for 2WD\): REMOVAL+](#) ]

### 4. SEPARATE FRONT UPPER SUSPENSION ARM ASSEMBLY

- a. Remove the clip and nut.



b. Install SST to the front upper suspension arm assembly as shown in the illustration.



\*a 1 mm (0.0394 in.)

**SST : 09960-20010**

*09961-02060*

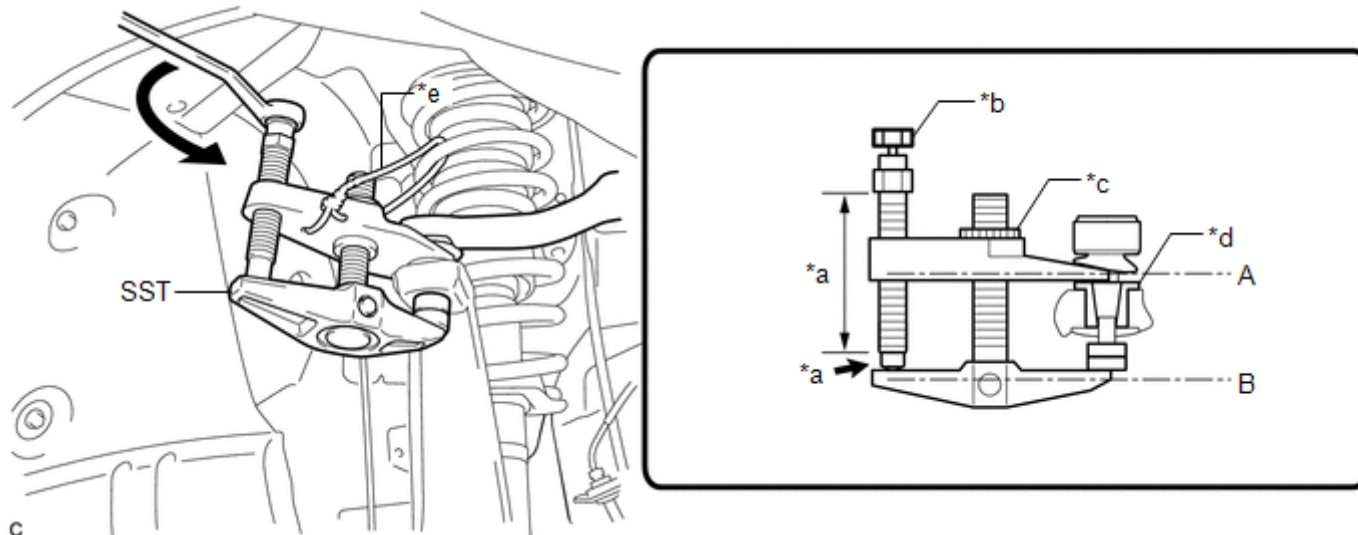
**NOTICE:**

**Check that the clearance measurement between SST and the steering knuckle is 1 mm (0.0394 in.).**

c. Using SST, separate the front upper suspension arm assembly from the steering knuckle.

**SST : 09960-20010**

*09961-02010*



*a	Molybdenum grease application area	*b	Place wrench here
*c	Center Nut	*d	Spacer
*e	String	-	-

**CAUTION:**

Apply molybdenum grease to the threads and end of the SST bolt.

**NOTICE:**

- Install SST with the center nut so that (A) and (B) shown in the illustration are parallel. Otherwise, the front upper suspension arm dust cover may be damaged.
- Be sure to place a wrench on the part indicated in the illustration.
- Do not damage the ball joint dust cover.
- Do not damage the steering knuckle.
- Make sure that SST is securely positioned on the spacer.
- Be sure to tighten the string firmly to secure SST to the front upper suspension arm assembly to prevent SST from falling off.

**HINT:**

If the steering knuckle spacer has come off, replace the steering knuckle with a new one.

**5. REMOVE UPPER SHOCK ABSORBER CAP (w/ AVS)**

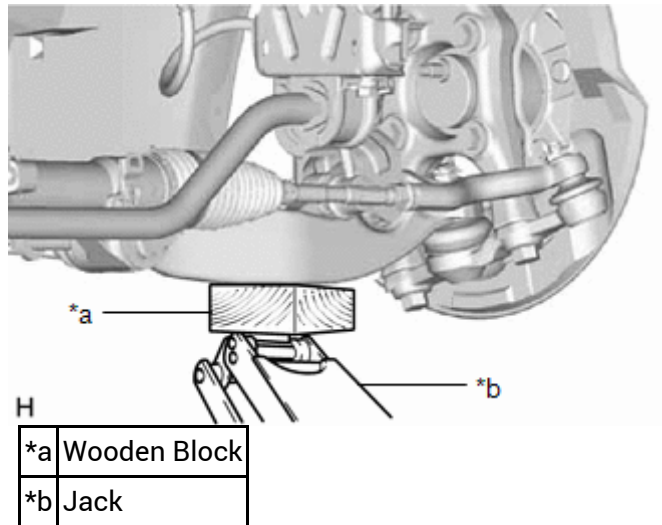
Click here [ [SUSPENSION CONTROL: ABSORBER CONTROL ACTUATOR \(for Front Side\): REMOVAL+](#) ]

## 6. REMOVE ABSORBER CONTROL ACTUATOR (w/ AVS)

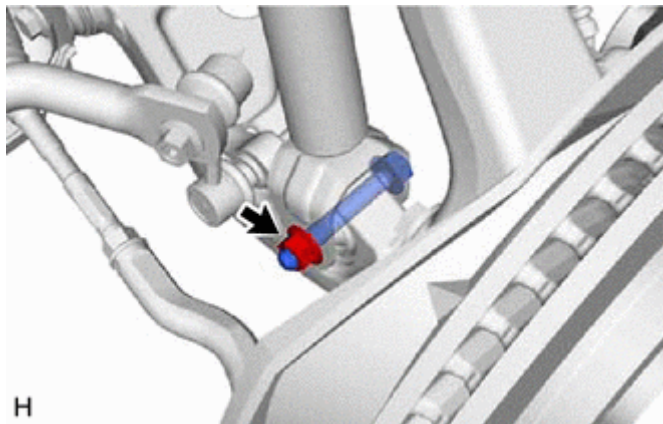
Click here [ [SUSPENSION CONTROL: ABSORBER CONTROL ACTUATOR \(for Front Side\): REMOVAL+](#) ]

## 7. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING

- a. Support the front lower suspension arm assembly using a jack and wooden block.



- b. Remove the nut.

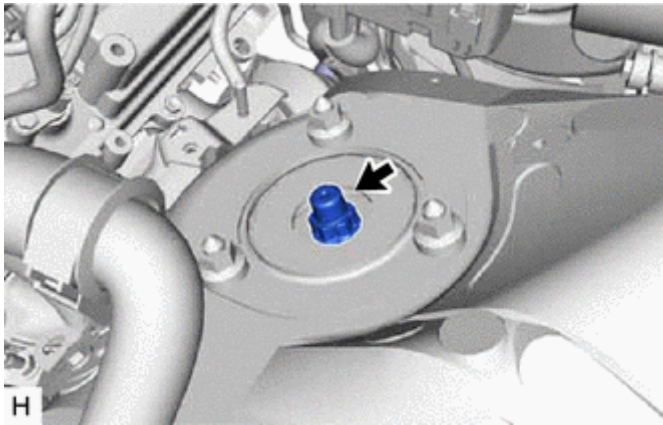


NOTICE:

- Because the nut has its own stopper, do not turn the nut. Loosen the bolt with the nut secured.

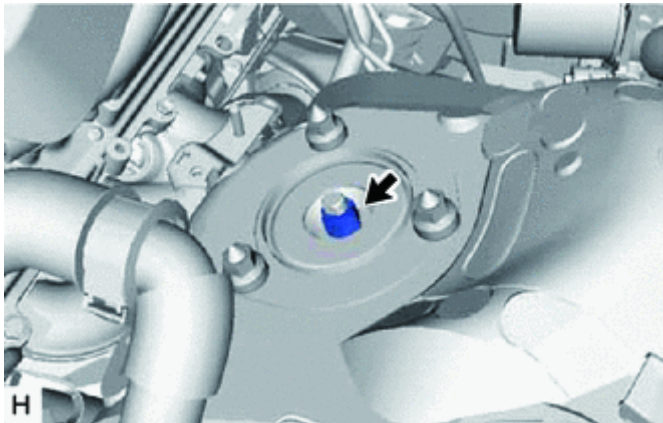
- **Do not remove the bolt.**

c. w/o AVS:



1. Remove the upper shock absorber cap from the lock nut.

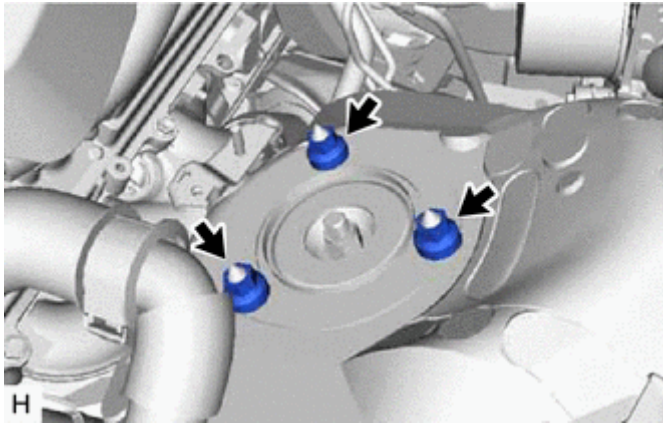
d. Loosen the lock nut.



**NOTICE:**

- **Do not remove the lock nut.**
- **Loosen the lock nut only when the front shock absorber with coil spring needs to be disassembled.**

e. Remove the 3 nuts from the front shock absorber with coil spring (upper side).



- f. Remove the front No. 3 spring support reinforcement.
- g. Remove the bolt from the front shock absorber with coil spring (lower side).
- h. Slowly lower the jack and remove the front shock absorber with coil spring.

## 8. REMOVE FRONT SHOCK ABSORBER ASSEMBLY

a. except 2UR-GSE:

1. Disengage the end of the upper front coil spring insulator LH from the claws of the front shock absorber assembly LH and pull back the upper front coil spring insulator LH.

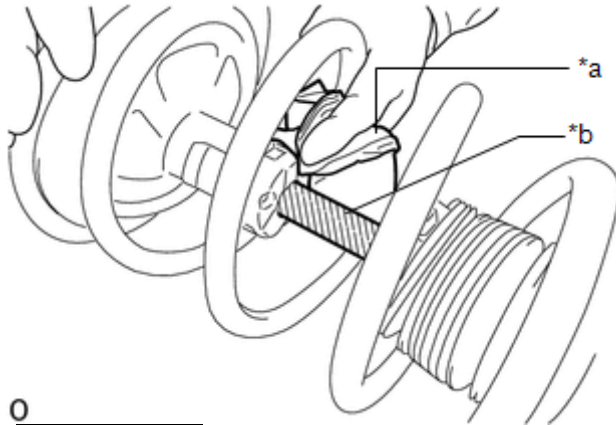


P	
*a	Front Shock Absorber Assembly Claw
*b	End of Front Upper Coil Spring Insulator

**NOTICE:**

Turn the front suspension support assembly to disengage the end of the front upper coil spring insulator from the front shock absorber assembly claws.

- Using a piece of cloth, etc., clean the shock rod and remove any foreign matter and oil.



0

*a	Cloth, etc.
*b	Shock Rod

**NOTICE:**

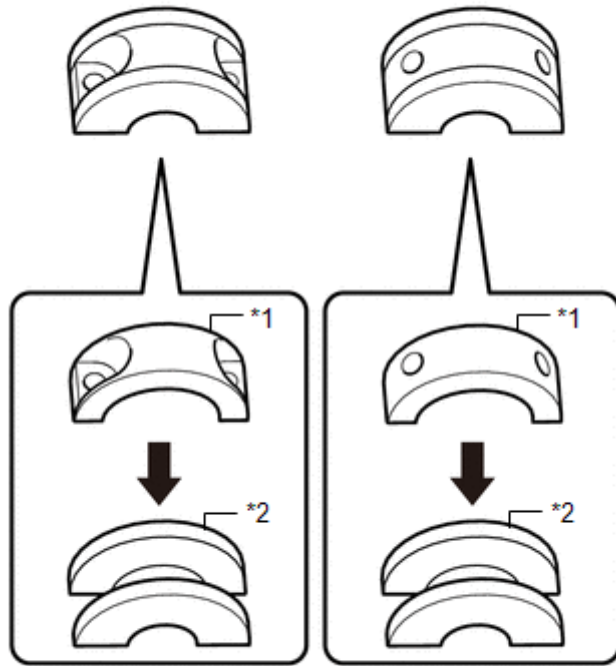
Thoroughly clean the shock rod to prevent damage to the shock rod due to contact of foreign matter.

- Attach SST (09727-58100) to SST (09727-58110).

SST : 09727-58100

SST : 09727-58110





0

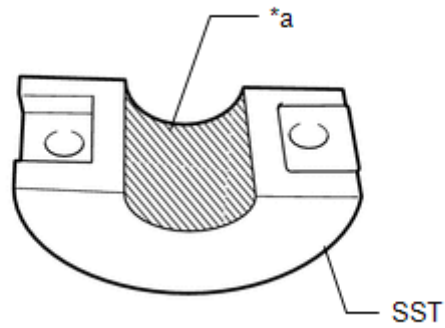
*1	SST(09727-58100)
*2	SST(09727-58110)

**NOTICE:**

Check that there are no cracks or damage in SST (09727-58110) that could prevent it from securing the shock rod of the front shock absorber assembly.

If there are, replace SST (09727-58110) with a new one.

4. Clean the surface of SST (09727-58110) to which the front shock absorber assembly is installed and remove any foreign matter and oil.



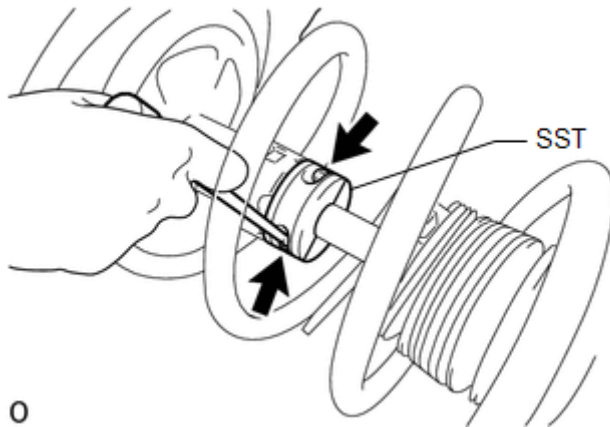
0

*a	Installation Surface
----	----------------------

**NOTICE:**

**Thoroughly clean the installation surface to prevent damage to the shock rod due to contact of foreign matter.**

5. Using a long ball hexagon 5, install SST (09727-58100) and SST (09727-58110) to the shock rod.



0

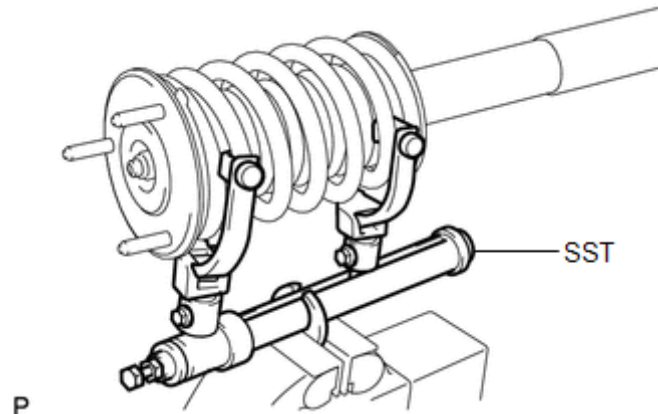
**NOTICE:**

**When installing SST (09727-58100) and SST (09727-58110), do not fold back the front upper coil spring insulator in an improper direction and deform it.**

**HINT:**

- Install SST (09727-58100) and SST (09727-58110) to the base of the shock rod and check that SST (09727-58100) and SST (09727-58110) are securing the shock rod.
- The front shock absorber assembly has a built-in rebound spring and is constructed to constantly contract the shock rod. For this reason, it is difficult to sufficiently contract the coil spring to a level that frees the front suspension support assembly using only the coil spring compressor (09727-30022), making it necessary for SST (09727-58100), SST (09727-58110) and a long ball hexagon 5 to be used to ensure a shock rod free length in which work can be performed with a small amount of compression.

b. Secure SST in a vise.



P

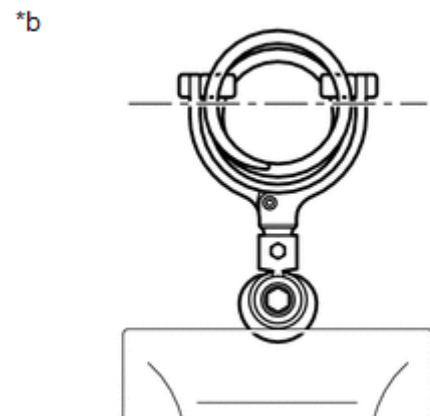
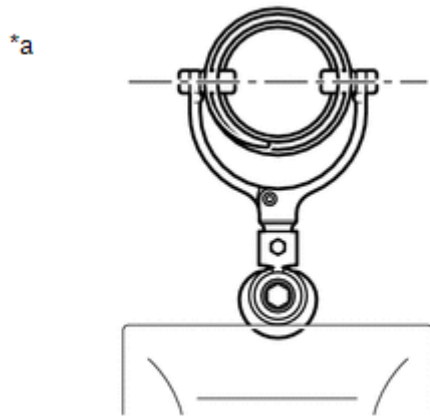
SST : 09727-30021

09727-00010

09727-00021

09727-00031

c. Attach the arms of SST to the diameter of the front coil spring.



*a	Correct
*b	Incorrect

**CAUTION:**

- Make sure that the front coil spring is installed so that the distance between the upper and lower arms of SST is at the maximum.
- Make sure that the claws of the arms are securely attached.

d. Using SST, compress the front coil spring.

**CAUTION:**

- If the front coil spring bends during compression, immediately stop compression and reinstall SST.
- Do not excessively compress the front coil spring so that the coils contact each other.
- Do not use an impact wrench. It will damage SST.

e. Confirm that the front coil spring becomes free and remove the lock nut.

**CAUTION:**

**Do not remove the lock nut when the front coil spring is not free.**

f. w/ AVS:

1. Remove the front actuator support bracket from the front shock absorber assembly.

g. except 2UR-GSE:

1. Remove the front suspension support assembly from the front shock absorber assembly.

h. for 2UR-GSE:

1. Remove the front suspension support assembly from the front shock absorber assembly.



P

*a	Front Shock Absorber Assembly Claw
*b	End of Front Upper Coil Spring Insulator

**NOTICE:**

**Turn the front suspension support assembly to disengage the end of the front upper coil spring insulator from the front shock absorber assembly claws.**

i. Remove the front upper coil spring insulator from the front suspension support assembly.

j. Remove the front spring bumper from the front suspension support assembly.

k. Remove the front coil spring and SST.

**NOTICE:**

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

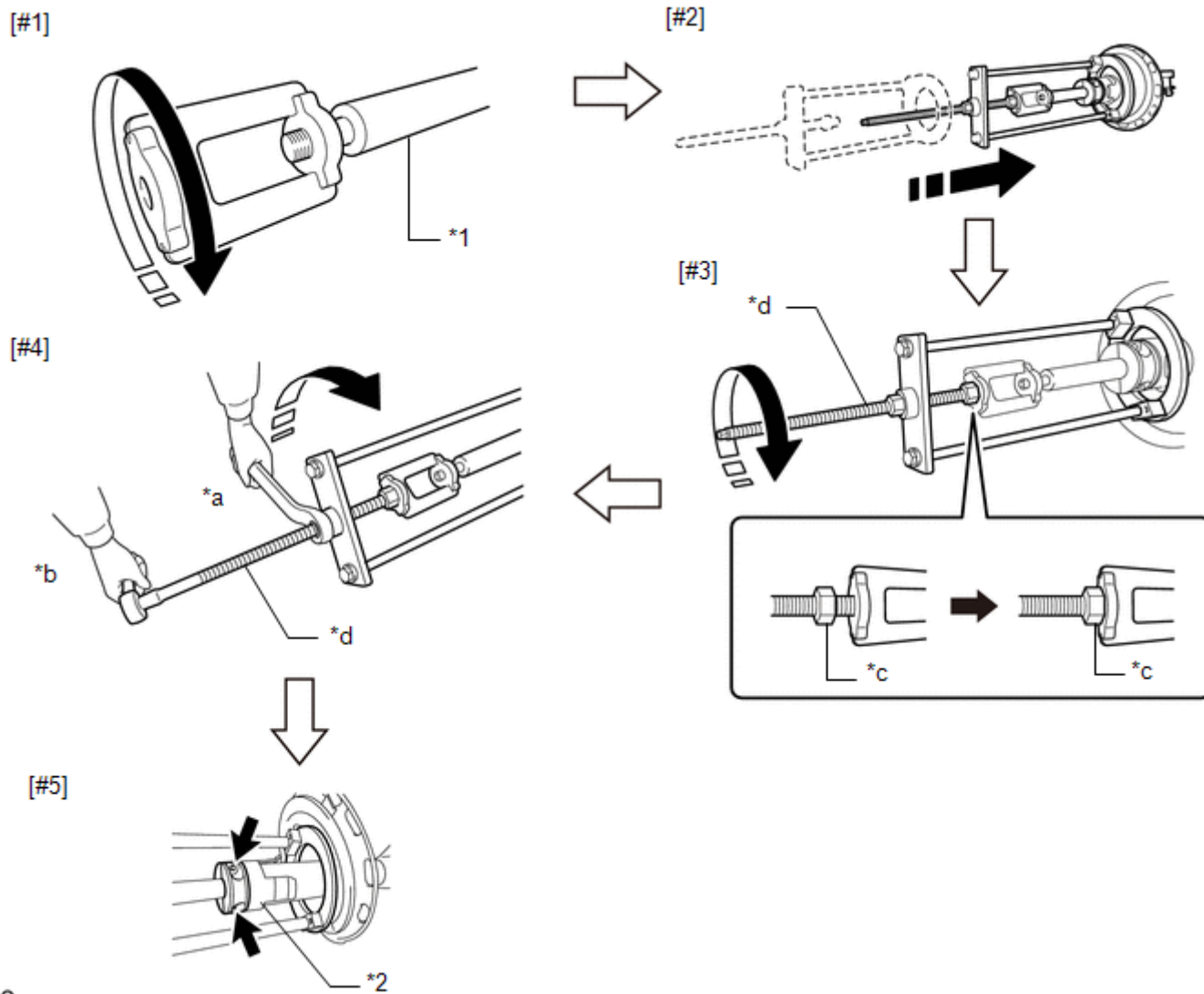
l. Remove the front lower coil spring insulator from the front shock absorber assembly.

m. except 2UR-GSE:

Using SST (09727-58010), remove SST (09727-58100) and SST (09727-58110) from the front shock absorber assembly.

**SST : 09727-58010**

09727-58020



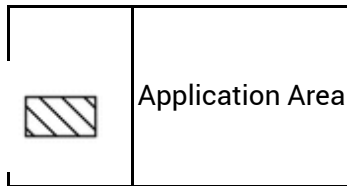
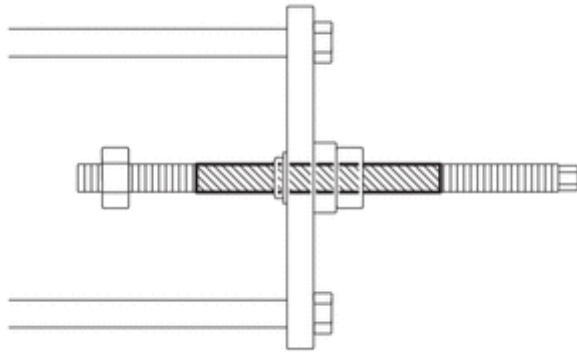
0

*1	Front Shock Absorber Assembly	*2	Shock Absorber Outer Shell
*a	Turn	*b	Hold

*c	Fixing Nut	*d	Bolt
----	------------	----	------

**NOTICE:**

Apply molybdenum grease to the bolt (area with diagonal lines) of SST (09727-58010).



1. Install SST (09727-58020) to the end of the shock rod of the front shock absorber assembly.[#1]
2. Install SST (09727-58010) to the front shock absorber assembly.[#2]

**NOTICE:**

Take due care when installing SST (09727-58010) to ensure the shock rod is not damaged.

3. Secure the SST (09727-58010) bolt and SST (09727-58020) with the fixing nut.[#3]
4. After securing the SST (09727-58010) bolt, rotate the nut clockwise.[#4]

**NOTICE:**

Extend the shock rod until SST (09727-58100) and SST (09727-58110) separate from the shock absorber outer shell.

5. Using a long ball hexagon 5, remove SST (09727-58100) and SST (09727-58110).[#5]

**NOTICE:**

If SST (09727-58100) and SST (09727-58110) are removed without using SST (09727-58010), the action of the rebound spring will cause the shock rod to contract suddenly. Therefore, remove SST (09727-58100) and SST (09727-58110) after securing the shock rod with SST (09727-58010).

6. Using a piece of cloth, etc., clean the shock rod of the front shock absorber assembly and remove any foreign matter and oil.

**NOTICE:**

**If the shock rod is expanded/contracted while foreign matter or oil are still present, it may damage the front shock absorber assembly or cause oil leaks.**

7. After securing the SST (09727-58010) bolt, rotate the nut counterclockwise.

8. Check that the shock rod and SST (09727-58020) have become free before releasing the fixing nut and removing SST (09727-58010) from the end of the shock rod.

**NOTICE:**

**Take due care when removing SST (09727-58010) to ensure the shock rod is not damaged.**

9. Remove SST (09727-58020) from the end of the shock rod.

10. Using a piece of cloth, etc., clean the end of the shock rod threads and remove any foreign matter and oil.