

2022 Lexus IS 500 RWD V8-5.0L (2UR-GSE)

Vehicle > Steering and Suspension > Suspension > Suspension Strut / Shock Absorber > Service and Repair > Removal and Replacement

REAR SHOCK ABSORBER - INSTALLATION [09/2020 -]

REAR SUSPENSION: REAR SHOCK ABSORBER: INSTALLATION; 2021 - 2023 MY IS200T IS250 IS300 IS350 IS500 [09/2020 -]

CAUTION / NOTICE / HINT

HINT:

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

PROCEDURE

1. INSTALL REAR NO. 1 SPRING BUMPER

- a. Install the rear No. 1 spring bumper to the rear shock absorber assembly.

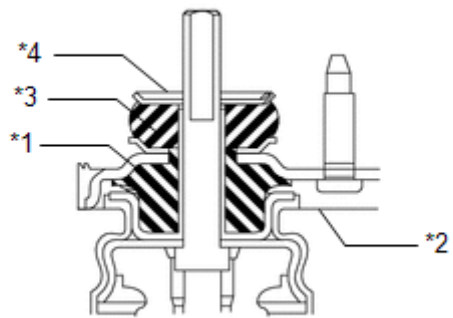
2. INSTALL REAR SUSPENSION SUPPORT ASSEMBLY

- a. w/o AVS:

1. Install the rear No. 2 shock absorber cushion, rear suspension support assembly, rear No. 1 shock absorber cushion and rear shock absorber cushion washer to the rear shock absorber assembly.

NOTICE:

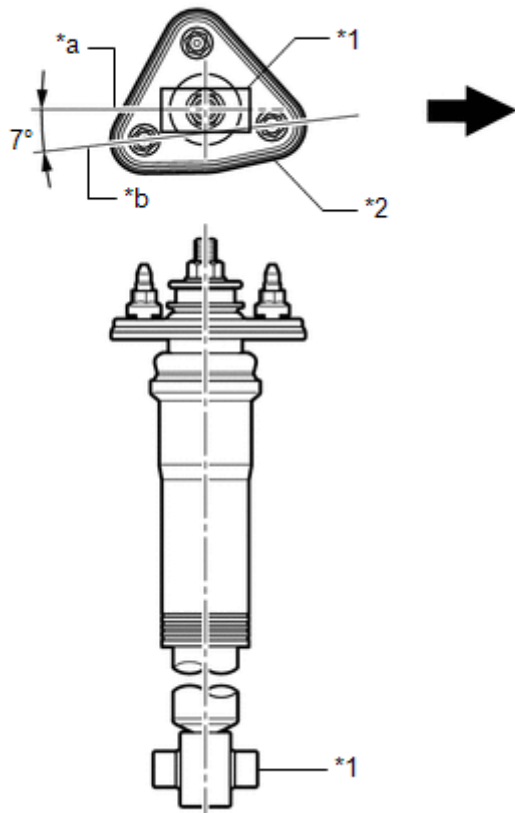
Be sure to install the rear shock absorber cushion washer in the correct direction.




C

*1	Rear No. 2 Shock Absorber Cushion
*2	Rear Suspension Support Assembly
*3	Rear No. 1 Shock Absorber Cushion
*4	Rear Shock Absorber Cushion Washer

2. Temporarily tighten a new lock nut.
3. Align the rear suspension support assembly so that the stud bolts of the rear suspension support assembly are positioned as shown in the illustration.



c

*1	Rear Shock Absorber Lower Bushing
*2	Rear Suspension Support Assembly
*a	Rear Shock Absorber Lower Bushing Axis Line
*b	Rear Suspension Support Assembly Stud (Toward Vehicle Interior) 2-point Axis Line
	Front of the Vehicle

4. Using a union nut wrench, fully tighten the lock nut while holding the rod of the rear shock absorber assembly with a 6 mm hexagon socket wrench.

Torque : 18 Nm (184 kgf-cm, 13 ft-lbf)

NOTICE:

- **Securely insert the 6 mm hexagon socket wrench into the rear shock absorber rod to prevent damage to the rear shock absorber assembly when tightening the lock nut.**
- **Use the formula to calculate special torque values for situations where the union nut wrench is combined with a torque wrench.**
Click here [INTRODUCTION: REPAIR INSTRUCTION: PRECAUTION]

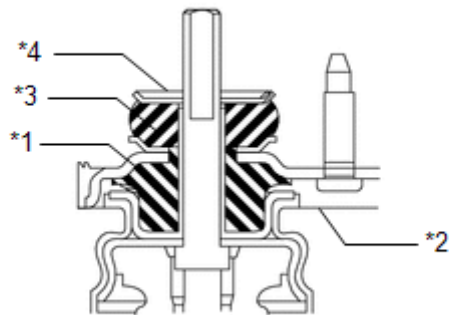
b. w/ AVS:

1. Install the rear No. 2 shock absorber cushion, rear suspension support assembly, rear No. 1 shock absorber cushion and rear shock absorber cushion washer to the rear shock absorber assembly.

NOTICE:

Be sure to install the rear shock absorber cushion washer in the correct direction.

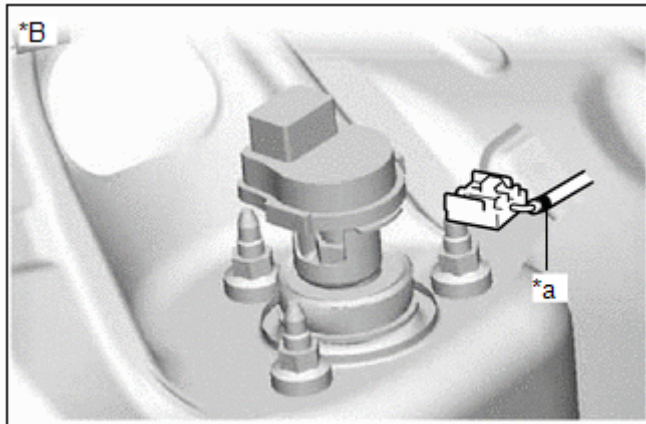
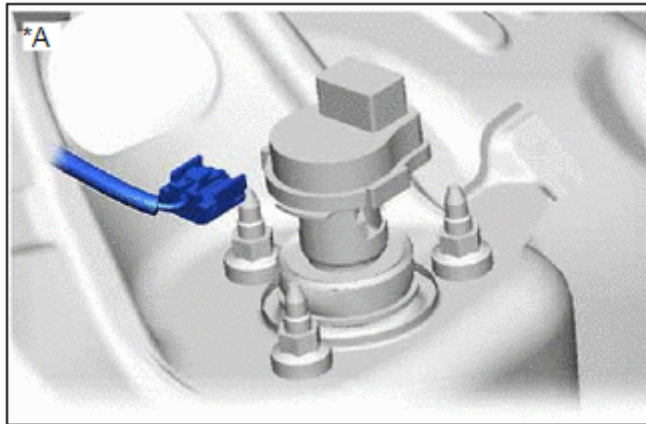
2. Install the rear actuator support bracket to the rear shock absorber assembly and then temporarily tighten a new lock nut.



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*1	Rear No. 2 Shock Absorber Cushion
*2	Rear Suspension Support Assembly
*3	Rear No. 1 Shock Absorber Cushion
*4	Rear Shock Absorber Cushion Washer

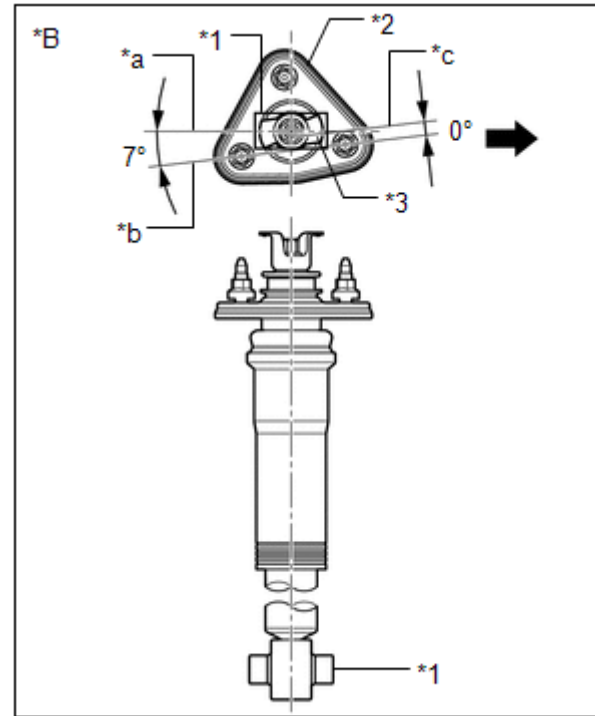
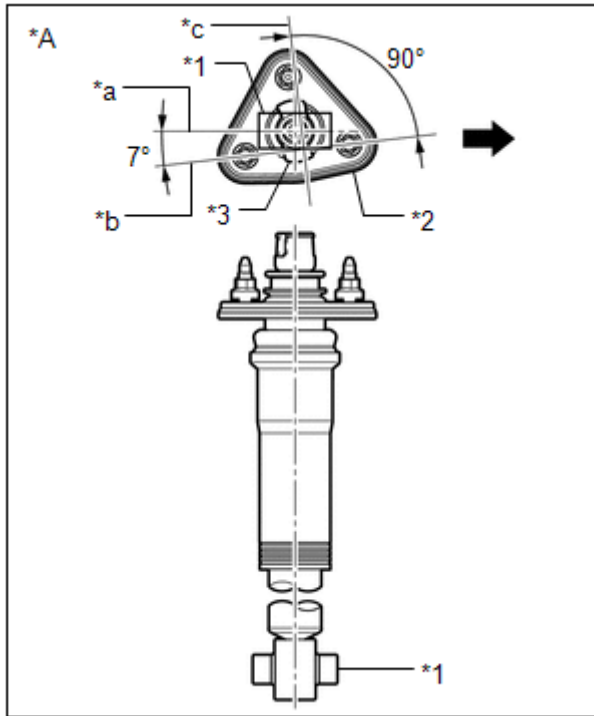
3. Check for identification tape on the wire harness of the absorber control actuator (for rear side).



H

*A	w/o Identification Tape
*B	w/ Identification Tape
*a	Identification Tape (Pink)

- Align the rear suspension support assembly and rear actuator support bracket so that the stud bolts of the rear suspension support assembly and rear actuator support bracket are positioned as shown in the illustration.



c

*A	w/o Identification Tape	*B	w/ Identification Tape
*1	Rear Shock Absorber Lower Bushing	*2	Rear Suspension Support Assembly
*3	Rear Actuator Support Bracket	-	-
*a	Rear Shock Absorber Lower Bushing Axis Line	*b	Rear Suspension Support Assembly Stud (Toward Vehicle Interior) 2-point Axis Line
*c	Line Extending from Width Across Flats of Absorber Rod	-	-
➔	Front of the Vehicle	-	-

NOTICE:

Depending on whether identification tape is attached to the wire harness of the absorber control actuator (for rear side), the direction of the rear actuator support bracket differs.

5. Secure the rear actuator support bracket of the rear shock absorber assembly between aluminum plates in a vise.

NOTICE:

Do not overtighten the vise.

6. Fully tighten the lock nut.

Torque : 18 Nm (184 kgf-cm, 13 ft-lbf)

3. TEMPORARILY INSTALL REAR SHOCK ABSORBER ASSEMBLY

- a. Install the 3 nuts to the upper side of the rear shock absorber assembly.

Torque : 74 Nm (755 kgf-cm, 55 ft-lbf)

- b. Temporarily install the rear shock absorber assembly to the rear No. 2 suspension arm assembly with the bolt and nut.

NOTICE:

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

HINT:

Insert the bolt with the threaded end facing the front of the vehicle.

4. INSTALL ABSORBER CONTROL ACTUATOR (w/ AVS)

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

5. INSTALL TOE CONTROL LINK SUB-ASSEMBLY

- a. Install the toe control link sub-assembly to the rear axle assembly with a new nut.

Torque : 70 Nm (714 kgf-cm, 52 ft-lbf)

6. STABILIZE SUSPENSION

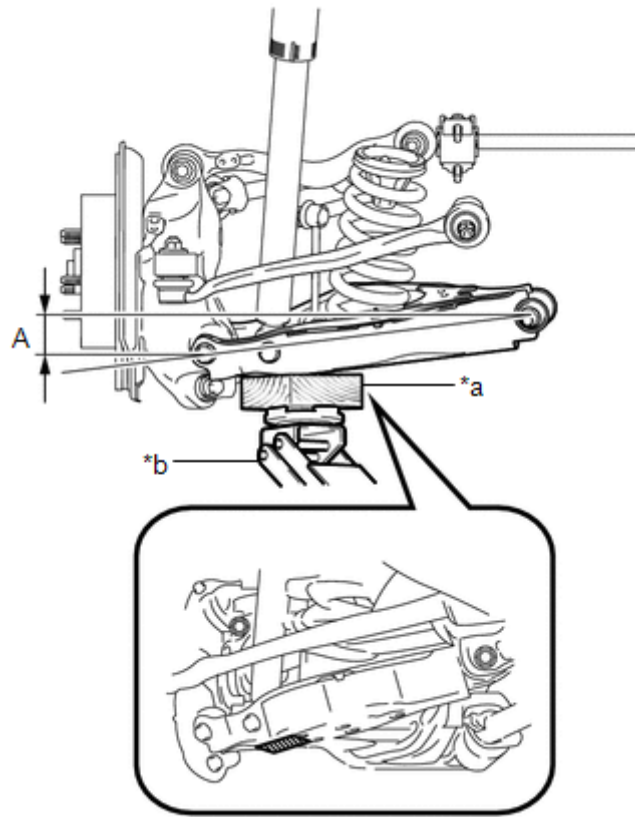
- a. Jack up the rear No. 2 suspension arm assembly, and place a wooden block underneath to avoid damage. Apply load to the suspension so that the rear No. 2 suspension arm assembly is positioned as shown in the illustration.

CAUTION:


Do not jack up the rear No. 2 suspension arm assembly too high as the vehicle may fall.

NOTICE:

- **When jacking up the rear No. 2 suspension arm assembly, be sure to jack it up slowly.**
- **Make sure to perform this operation with the vehicle kept as low as possible.**



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*a	Wooden Block
*b	Jack
	Wooden block placement location

Standard Length (A):
 9.7 mm (0.382 in.)

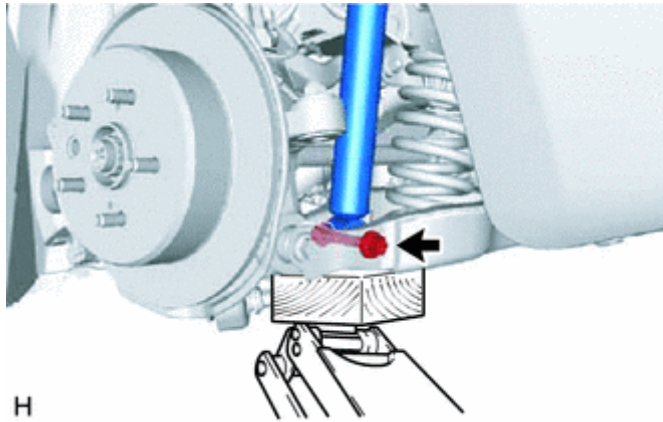
7. INSTALL REAR SHOCK ABSORBER ASSEMBLY

- a. Install the rear shock absorber assembly with the bolt.

Torque : 110 Nm (1122 kgf-cm, 81 ft-lbf)

NOTICE:

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



8. INSTALL REAR WHEEL

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

9. INSTALL LUGGAGE COMPARTMENT TRIM COVER

Click here [[DOOR / HATCH: LUGGAGE DOOR HINGE TORSION BAR: INSTALLATION+](#)]

10. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

Click here [[ALIGNMENT / HANDLING DIAGNOSIS: REAR WHEEL ALIGNMENT: ADJUSTMENT](#)] [[ALIGNMENT / HANDLING DIAGNOSIS: REAR WHEEL ALIGNMENT: ADJUSTMENT](#)]