

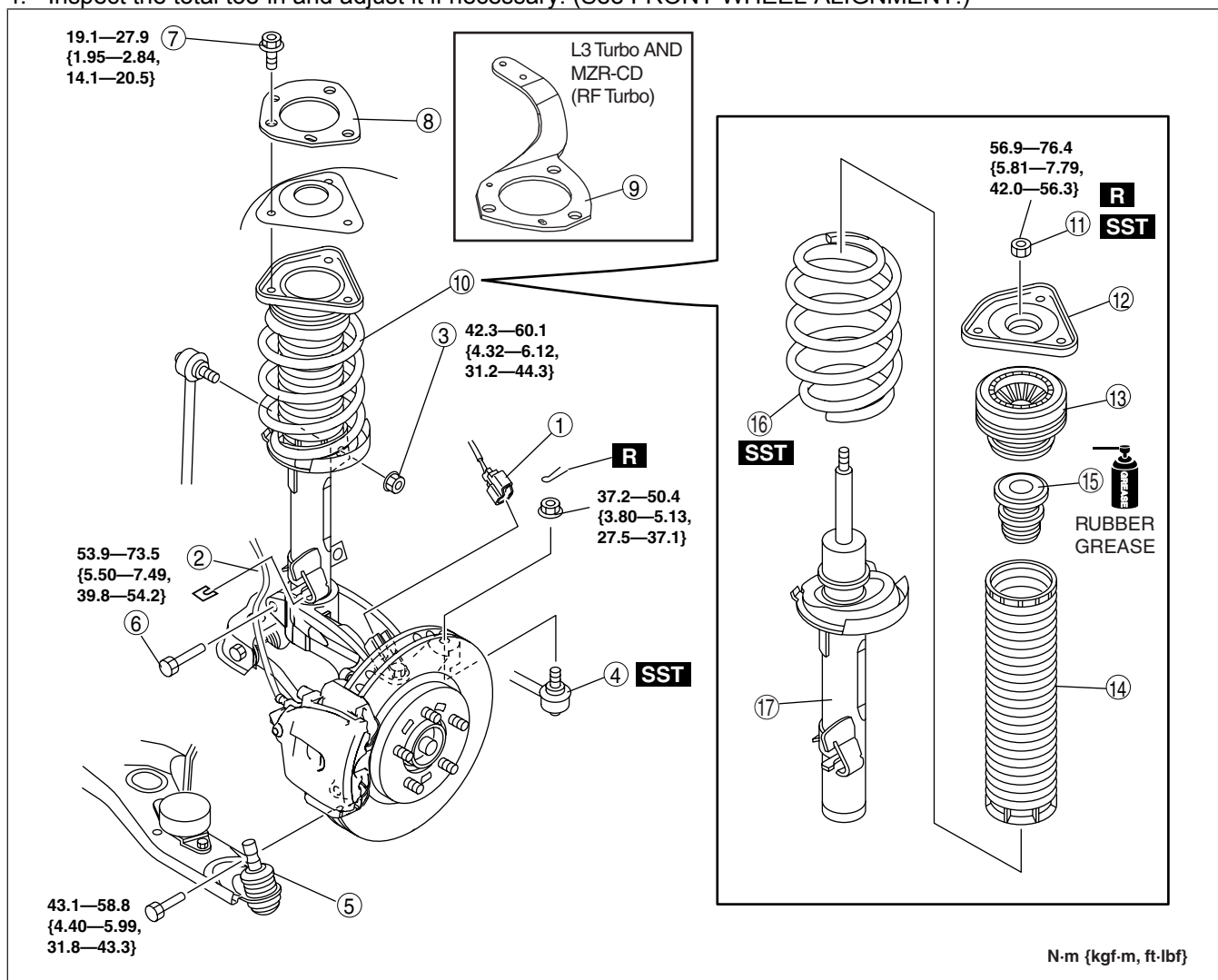
FRONT SHOCK ABSORBER AND COIL SPRING REMOVAL/INSTALLATION

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Caution

- Performing the following procedures without first removing the ABS wheel-speed sensor may possibly cause an open circuit in the wiring harness if it is pulled by mistake. Before performing the following procedures, disconnect the ABS wheel-speed sensor wiring harness connector (axle side) and fix the wiring harness to an appropriate place where it will not be pulled by mistake while servicing the vehicle.

- Remove in the order indicated in the table.
- Install in the reverse order of removal.
- Verify the camber and the caster are within the specification.
 - If they are not within the specification, align the piston rod nut with the center of the shock absorber and coil spring again. (See Bearing Installation Note .)
- Inspect the total toe-in and adjust it if necessary. (See FRONT WHEEL ALIGNMENT.)



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|---|---------------------------------------------------------------------------------------------------------------------------------------|
| 1 | ABS wheel-speed sensor wiring harness connector |
| 2 | Brake hose |
| 3 | Stabilizer control link upper nut |
| 4 | Tie-rod end ball joint (See FRONT CROSSMEMBER REMOVAL/ INSTALLATION.) |
| 5 | Front lower arm ball joint (See Front Lower Arm Ball Joint Removal Note .) (See Front Lower Arm Ball Joint Installation Note .) |
| 6 | Shock absorber lower bolt |
| 7 | Shock absorber upper nut |

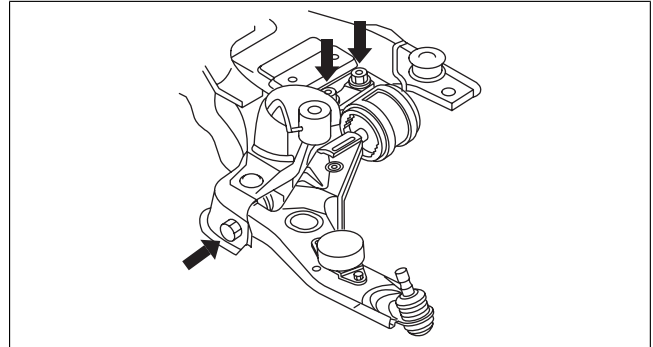
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| 8 | Stiffener (Except L3 Turbo and MZR-CD (RF Turbo)) (See Stiffener Installation Note .) |
| 9 | Strut plate (L3 Turbo and MZR-CD (RF Turbo)) |
| 10 | Shock absorber and coil spring (See Shock Absorber and Coil Spring Removal Note .) (See Shock Absorber and Coil Spring Installation Note .) |
| 11 | Piston rod nut (See Piston Rod Nut Removal Note .) |
| 12 | Mounting rubber |

| | |
|----|--------------------------------------------------|
| 13 | Bearing (See Bearing Installation Note .) |
| 14 | Dust boot (See Dust Boot Installation Note .) |
| 15 | Bound stopper |

| | |
|----|------------------------------------------------------|
| 16 | Coil spring (See Coil Spring Installation Note .) |
| 17 | Front shock absorber |

Front Lower Arm Ball Joint Removal Note

1. Loosen the installation bolt on the inner side of the front lower arm.
2. Separate the lower arm ball joint.



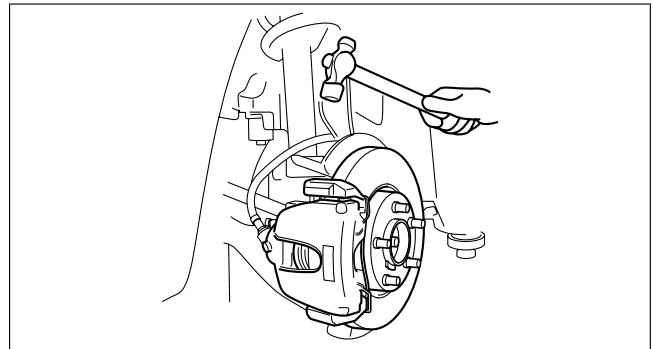
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Shock Absorber and Coil Spring Removal Note

1. Separate the shock absorber from the wheel hub, steering knuckle component by tapping the upper part of the steering knuckle with a hammer.

Caution

- When removing the steering knuckle by lightly tapping, the steering knuckle could fall and cause injury, or damage to the part. When performing the removal, support the bottom of the steering knuckle with a jack.



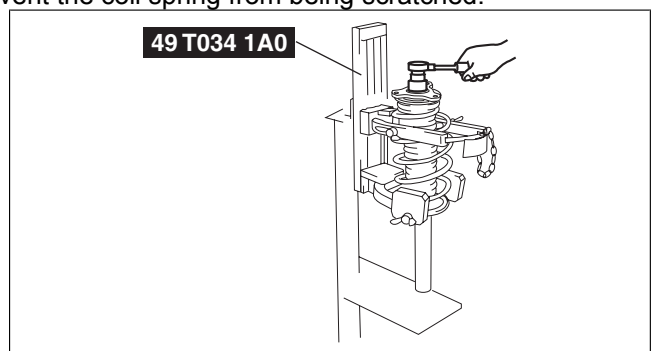
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Piston Rod Nut Removal Note

Warning

- Before removing the piston rod nut, secure the shock absorber and coil spring in the SSTs. Otherwise, the coil spring could fly off under tremendous pressure and cause serious injury or death, or damage to vehicle parts.

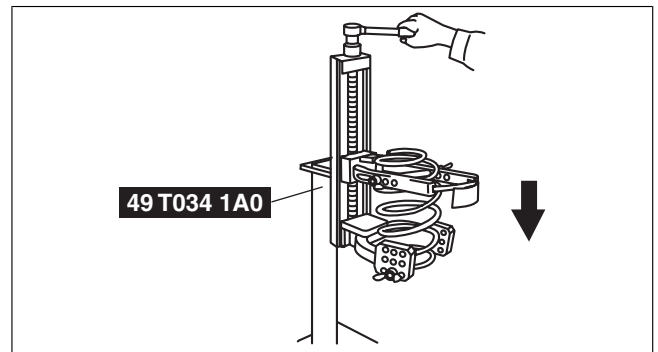
1. Install to the **SSTs** using a piece of cloth in order to prevent the coil spring from being scratched.
2. Compress the coil spring using the **SSTs** and remove the piston rod nut.



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Coil Spring Installation Note

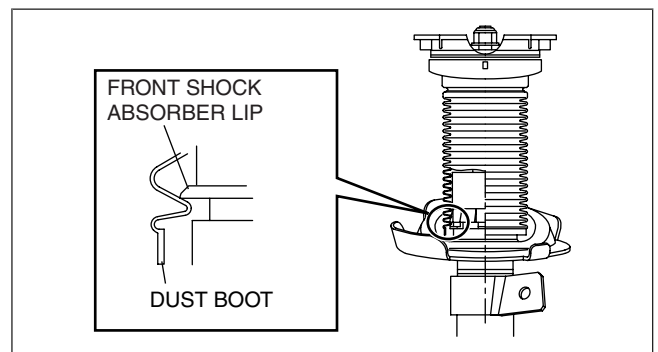
1. Compress the coil spring using the **SSTs**.
2. Install the shock absorber so that the lower end of the coil spring is seated on the step of the lower spring seat.



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Dust Boot Installation Note

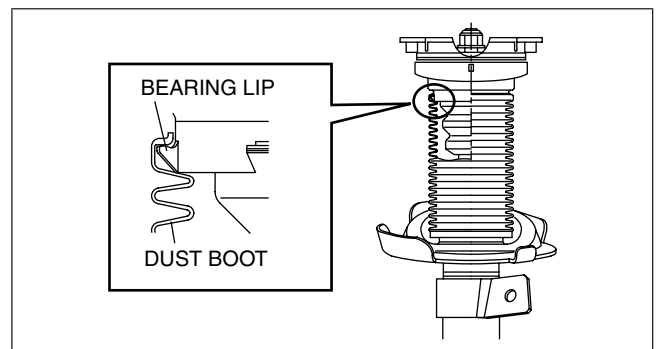
1. Install the dust boot by hooking the bottom edge over the shock absorber lip.



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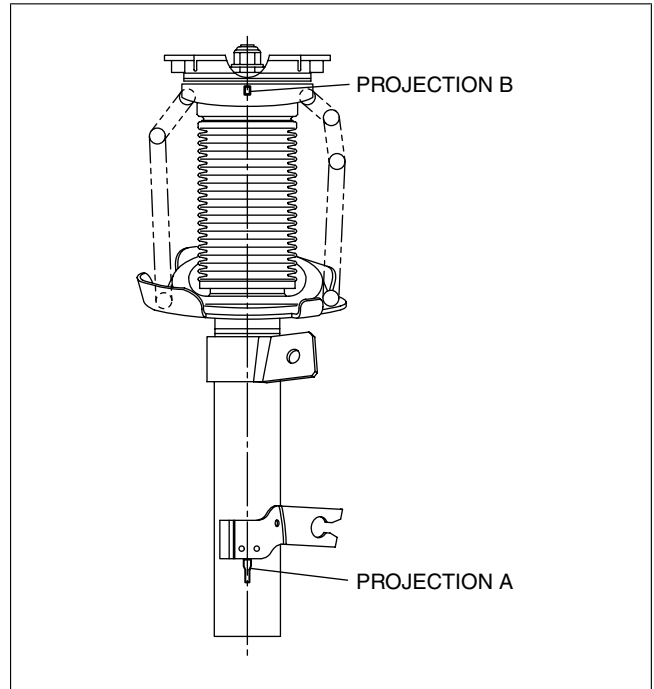
Bearing Installation Note

1. Install the bearing by hooking the upper end of the dust boot to the bearing lip.



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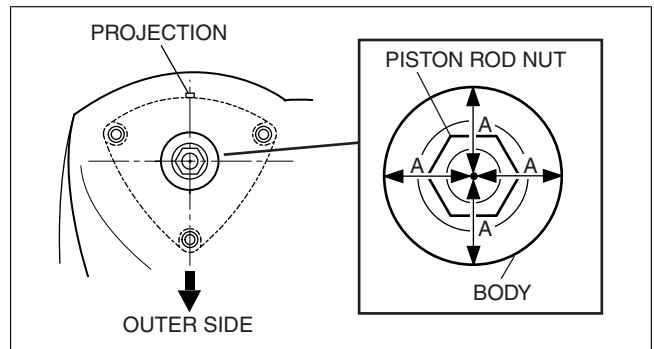
2. Align projection A on the lower part of the shock absorber with the bearing projection B.



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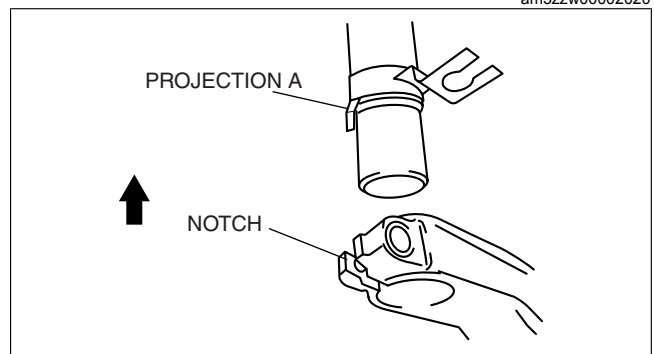
Shock Absorber and Coil Spring Installation Note

1. Align the piston rod nut with the center of the part where the shock absorber is installed by positioning the piston rod nut with lengths A all the same, and tighten the shock absorber upper nuts.
2. Align the knuckle notch with projection A on the lower side of the shock absorber.



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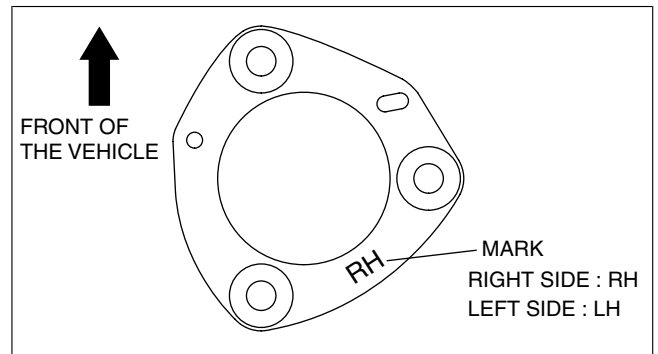
3. Raise the front lower arm using a jack and install the shock absorber and coil spring.
4. Install the front lower arm ball joint.
5. Tighten the front lower arm inner bolt.



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Stiffener Installation Note

1. Install the stiffener so that the mark (RH or LH) faces upward.



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Front Lower Arm Ball Joint Installation Note

1. Tighten the installation bolts.

Tightening torque

- Front side: 130.0—150.0 N·m {13.26—15.29 kgf·m, 95.9—110.5 ft·lbf}
- Rear side: 75.5—102.0 N·m {7.70—10.4 kgf·m, 55.7—75.2 ft·lbf}