




REAR SHOCK ABSORBER


INSTALLATION AND USER'S INSTRUCTIONS

Thank you for purchasing a MAZDASPEED accessory.
Before removal and installation, be sure to thoroughly read these instructions.
Please read the contents of this booklet in order to properly install and use the rear shock absorber. Your safety depends on it.
Keep these instructions with your vehicle records for future reference.

WARNING

- There are several  **WARNING** and  **CAUTION** sections in this booklet concerning safety when installing or removing the rear shock absorber. Always read and follow them in order to prevent injuries, accidents, and possible damage to the vehicle.

 **WARNING:** Indicates a situation in which serious injury or death could result if the warning is ignored.

 **CAUTION:** Indicates a situation in which bodily injury or damage to the vehicle could result if the caution is ignored.

- Do not modify the rear shock absorber.
- Do not install the rear shock absorber in any way other than described in the following instructions.
- If in any doubt, please ask your Mazda dealer to install the accessory in order to prevent errors in installation.
- If you have any questions about the use of the accessory, ask your Mazda dealer for proper advice before using it.
- Mazda and its suppliers are not responsible for injuries, accidents, and damage to persons and property that arise from the failure of the dealer or installer to follow these instructions.
- To ensure safety and reliability of the work, installation, removal and disposal work by an Authorized Mazda Dealership is recommended.
- Be careful not to lose removed parts, and be sure that they are kept free from scratches, grease or other dirt.

PART NAME: REAR SHOCK ABSORBER
PART NUMBER: QNCA 28 700
VEHICLE: Mazda MX-5

NOTE

To the dealer

- Please turn over these instructions to the customer after installation.

To the customer

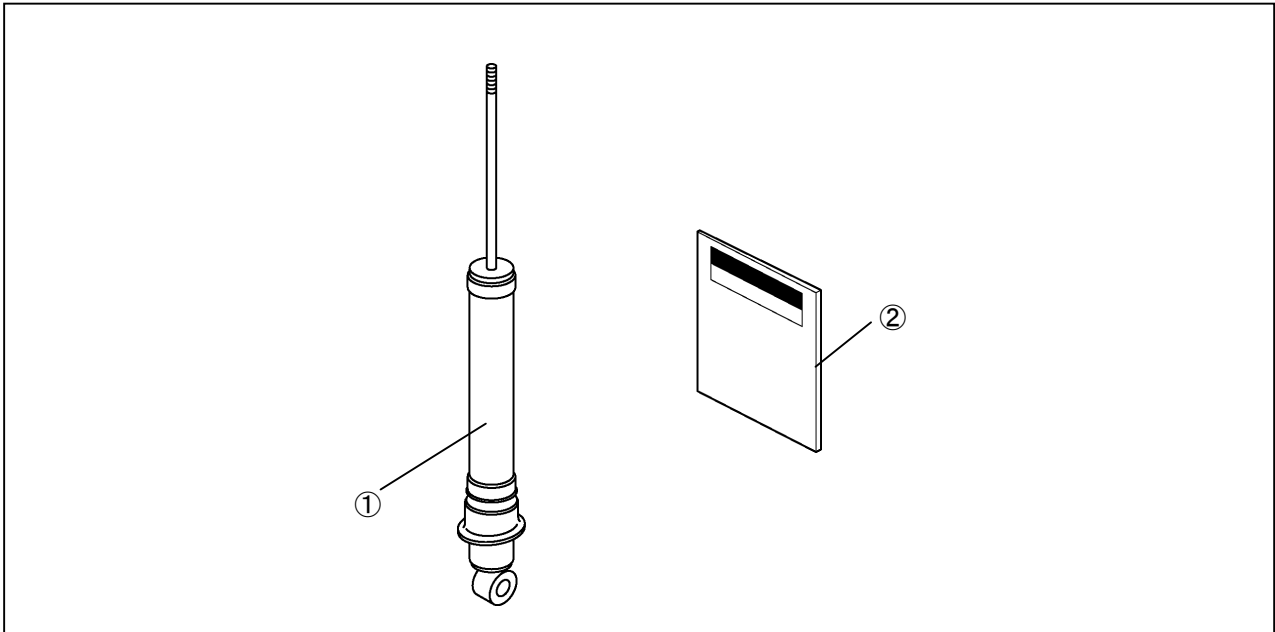
- Keep these instructions after installation. The instructions may be necessary for installing other optional parts or removal of this accessory.
- Should the vehicle or this accessory be resold, always leave these instructions with it for the next owner.

1 PARTS

⚠ CAUTION

- Before installation, verify that the kit includes all the following parts and that they are free of dirt, scratches, or damage.

No.	Part name	Qty.	No.	Part name	Qty.
	Rear shock absorber	1ea.		Installation and user's instructions	1



2 BEFORE INSTALLATION

REQUIRED TOOLS

Prepare the following tools or items before installation.

Special service tool (SST)

- ★Coil spring compressor set (49 T034 1A0)

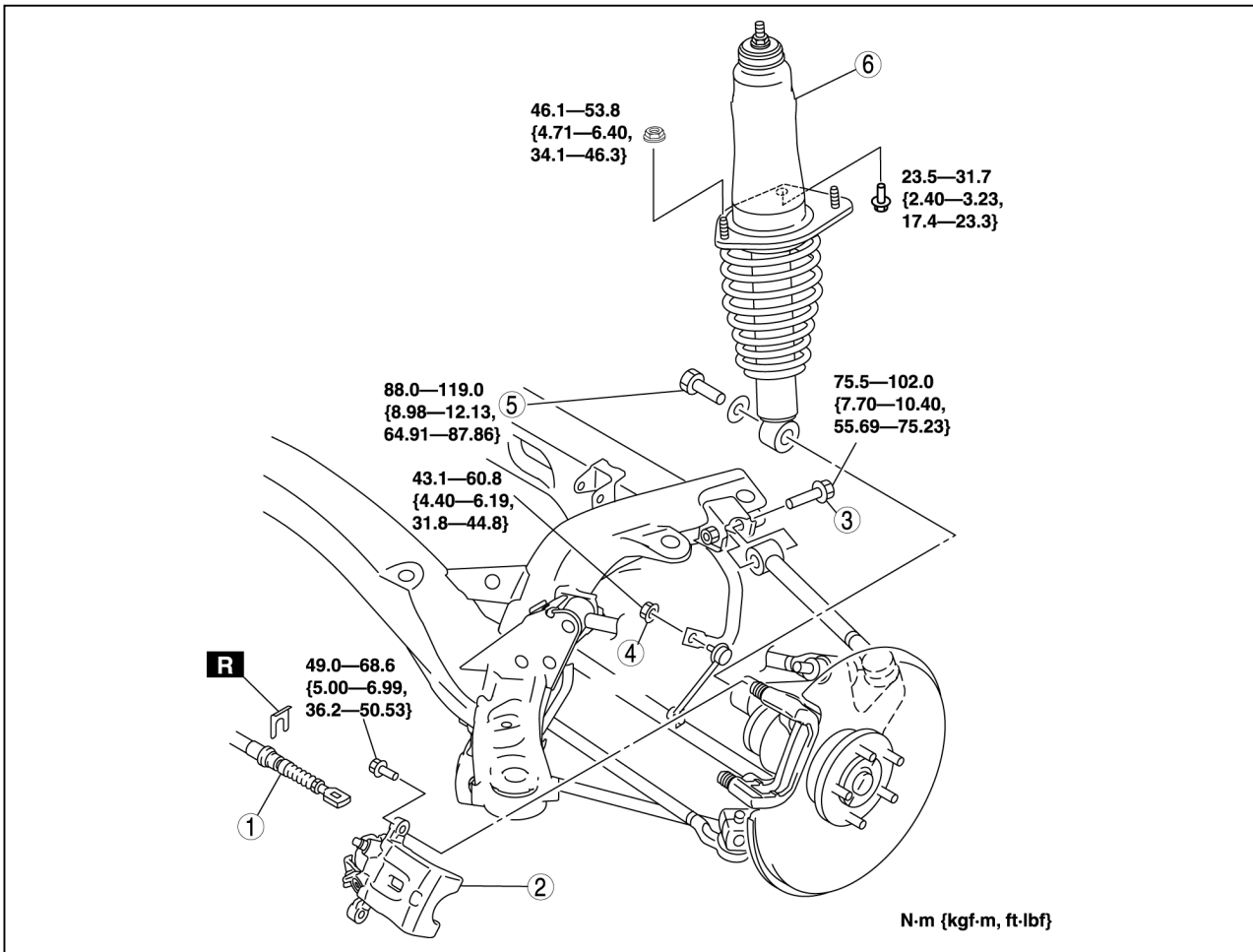
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REAR SHOCK ABSORBER INSTALLATION

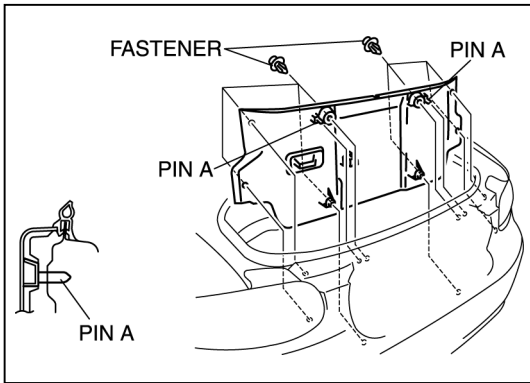
⚠ CAUTION

- 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 operations, remove the ABS wheel-speed sensor (axle side), and move the sensor away from the harnesses.

- Remove the battery cover.
- Disconnect the negative battery cable. (See Negative Battery Cable Installation.)
- When working on the left side, remove the fuel tank protector. (See Fuel Tank Protector Removal.)
- Remove parts in the order indicated in the table.
- Replacing the removed rear shock absorber with the accessory kit rear shock absorber, reinstall the removed parts in the reverse order of removal
- Inspect the rear wheel alignment, and adjust it if necessary. (See 5 REAR WHEEL ALIGNMENT.)



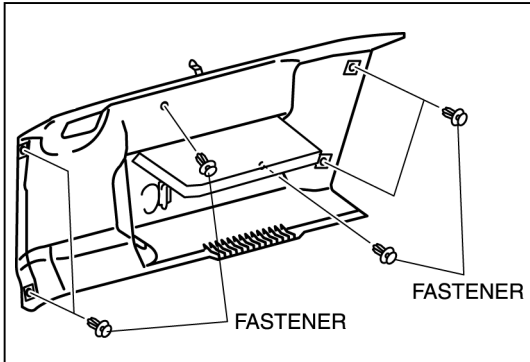
1	Parking brake cable	4	Stabilizer control link upper nut
2	Caliper (See Caliper Removal.)	5	Rear shock absorber lower bolt
3	Rear lateral link (upper) bolt	6	Rear shock absorber and coil spring (See 4 REAR SHOCK ABSORBER AND COIL SPRING DISASSEMBLY/ASSEMBLY.)



Fuel Tank Protector Removal

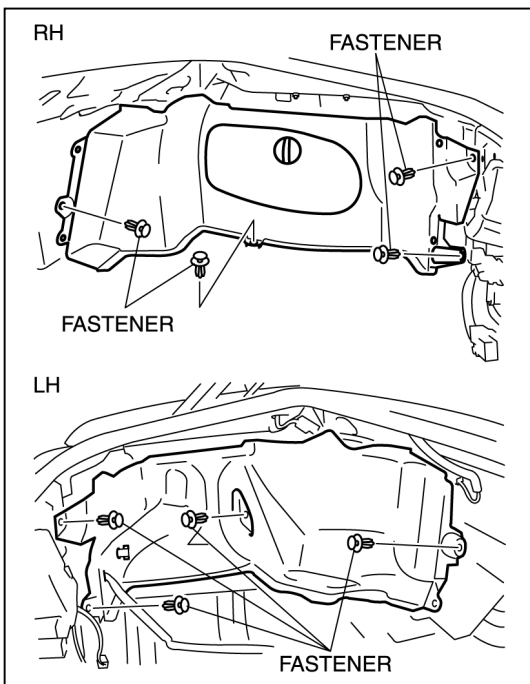
1. Trunk End Trim Removal/Installation

- (1) . Remove the fasteners.
- (2) . Disconnect the trunk compartment light connector.
- (3) . Disconnect the trunk lid cancel switch connector.
- (4) . Remove the trunk end trim.



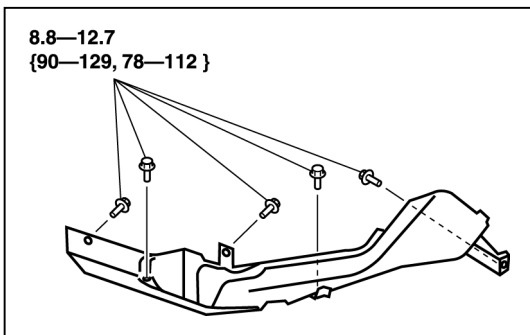
2. Partition Board Removal/Installation

- (1) . Remove the fasteners.
- (2) . Remove the partition board.



3. Trunk side Trim Removal/Installation

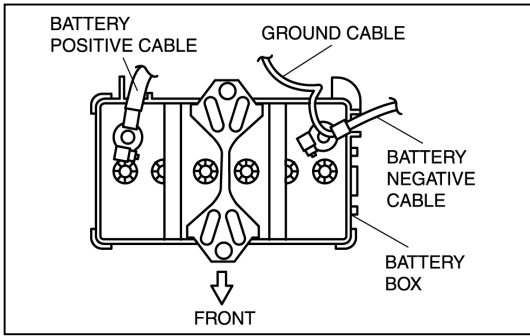
- (1) . Remove the fasteners.
- (2) . Remove the trunk side trim.



4. Remove the bolts.
5. Remove the fuel tank Protector.

Caliper Removal

1. Remove the caliper, and hang the cable out of the way.



Negative Battery Cable Installation

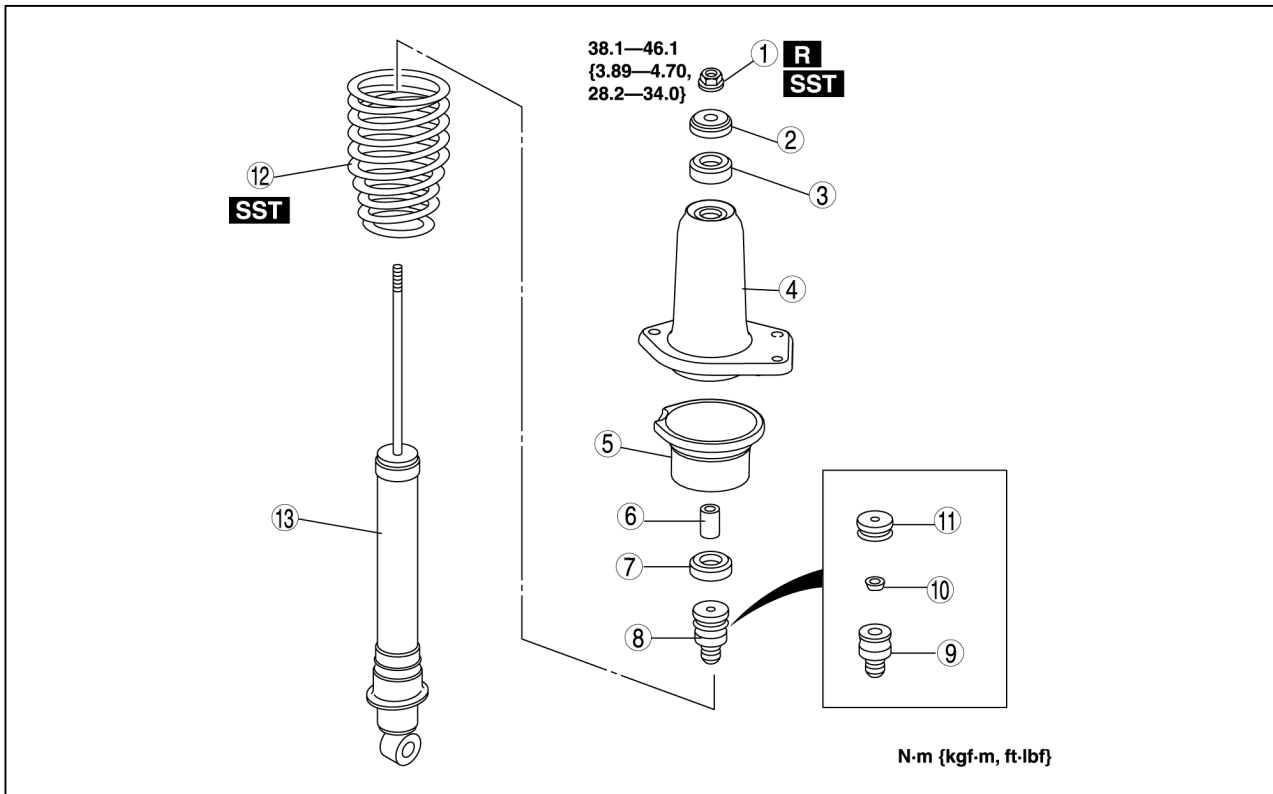
1. When connecting the negative battery cable to the battery, connect the negative battery cable and the ground cable as shown in the figure.

4 REAR SHOCK ABSORBER AND COIL SPRING DISASSEMBLY/ASSEMBLY

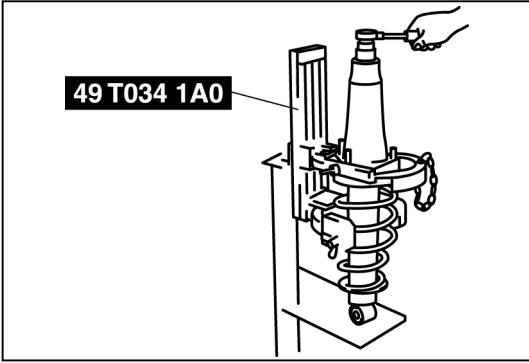
⚠ WARNING

- Removing/installing the shock absorber and coil spring is dangerous. The shock absorber and coil spring could fly off and cause injury or death, and damage the vehicle.

1. Remove the rear shock absorber and coil spring.
2. Remove in the order indicated in the table.
3. Install in the reverse order of removal.



1	Piston rod nut (See Piston Rod Nut Removal.)	8	Bound stopper and stopper casing
2	Retainer	9	Bound stopper
3	Bushing	10	Collar (See Collar Installation.)
4	Upper spring seat (See Upper Spring Seat Installation.)	11	Stopper casing
5	Spring seat rubber (See Spring Seat Rubber Installation.)	12	Coil spring (See Coil Spring Installation.)
6	Spacer	13	Rear shock absorber
7	Bushing		

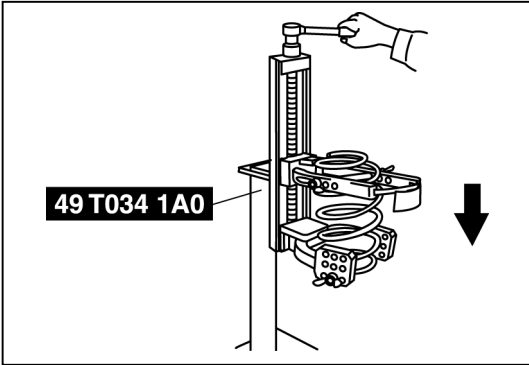


Piston Rod Nut Removal

⚠ WARNING

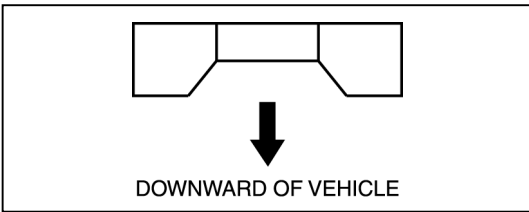
- Before removing the piston rod nut, secure the shock absorber and coil spring in the **SST**. Otherwise, the shock absorber and coil spring could fly off under tremendous pressure and cause serious injury or death, or damage to vehicle parts.

1. Set the **SST** using cloth to prevent the spring from being damaged.
2. Using the **SST**, compress the coil spring and remove the piston rod nut.



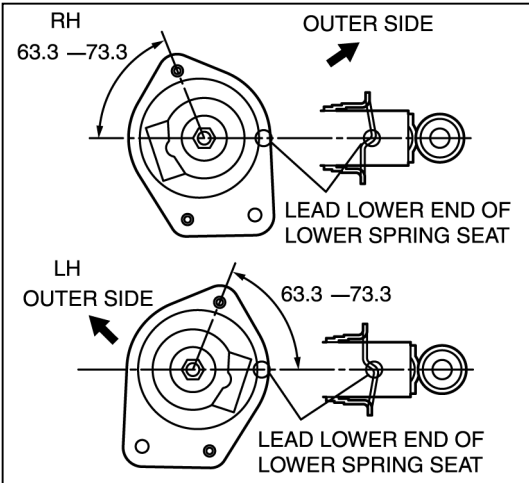
Coil Spring Installation

1. Set the coil spring to the **SST** using cloth.
2. Using the **SST**, compress the coil spring.
3. Install the shock absorber so that the lower end of the coil spring is seated on the step of the lower spring seat.



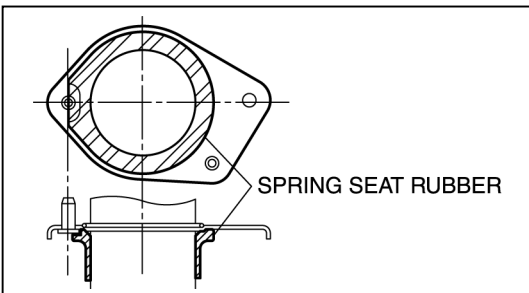
Collar Installation

1. Install the collar so that the tapered side is facing downward as shown in the figure.



Upper Spring Seat Installation

1. Install the coil spring with the lead lower end of the lower spring seat facing the direction shown in the figure.



Spring Seat Rubber Installation

1. Install the spring seat rubber to the upper spring seat as shown in the figure.

5 REAR WHEEL ALIGNMENT

[16-inch wheel]

Item		Specification	
Total toe-in	Tire [Tolerance $\pm 4\text{mm}\{0.15\text{in}\}$] (mm {in})	3 {0.12}	
	Rim inner (mm {in})	$1.8 \pm 2.4\{0.071 \pm 0.094\}$	
	degree	$0^\circ 17' \pm 22'$	
Camber [Tolerance $\pm 1^\circ$]	Vehicle height: From the end of the rear fender to the center of the wheel (mm{in})	354–363{14.0–14.2}	$-1^\circ 33'$
		364–373{14.4–14.6}	$-1^\circ 18'$
		374–383{14.8–15.0}	$-1^\circ 04'$
		384–393{15.2–15.4}	$-0^\circ 54'$
		394–403{15.6–15.8}	$-0^\circ 45'$

NOTE

- Unloaded vehicle: Fuel tank is full. Engine coolant and engine oil are at specified level. Jack and tools are in designated position.
- Difference between the left and right camber angle is within 1° .

[17-inch wheel]

Item		Specification	
Total toe-in	Tire [Tolerance $\pm 4\text{mm}\{0.15\text{in}\}$] (mm {in})	3 {0.12}	
	Rim inner (mm {in})	$2.2 \pm 2.8\{0.083 \pm 0.110\}$	
	degree	$0^\circ 17' \pm 22'$	
Camber [Tolerance $\pm 1^\circ$]	Vehicle height: From the end of the front fender to the center of the wheel (mm{in})	349–358{13.8–14.0}	$-1^\circ 42'$
		359–368{14.2–14.4}	$-1^\circ 25'$
		369–378{14.6–14.8}	$-1^\circ 11'$
		379–388{15.0–15.2}	$-0^\circ 59'$
		389–398{15.4–15.6}	$-0^\circ 49'$

NOTE

- Unloaded vehicle: Fuel tank is full. Engine coolant and engine oil are at specified level. Jack and tools are in designated position.
- Difference between the left and right camber angle is within 1° .