





## GENUINE FRONT SHOCK ABSORBER

### INSTALLATION AND USER'S INSTRUCTIONS

Thank you for purchasing a genuine Mazda 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 front 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 front 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 front shock absorber.
- Do not install the front 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 must be carried out by an Authorized Mazda Dealership.
- Be careful not to lose removed parts, and be sure that they are kept free from scratches, grease or other dirt.

**PART NAME: FRONT SHOCK ABSORBER**  
**PART NUMBER: QSEA 34 700**  
**VEHICLE: Mazda RX-8**

#### 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

## Note

- Verify that the kit includes all the following parts and that they are free of dirt, scratches, or damage.
- The actual part number is QSEA 34 700, however, the part number indicated on the accessory is QSE1 34 700. This does not indicate a port shipment mistake.

Part name	Qty.
Front shock absorber	1

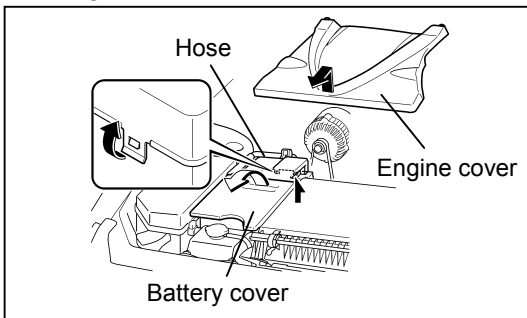
# 2 BEFORE INSTALLATION

## REQUIRED TOOLS

Prepare the following tools or items before installation.

- ★Wrench
- ★49 T028 3A0 (Special service tool)
- ★49 T034 1A0 (Special service tool)
- ★49 T034 101 (Special service tool)
- ★49 T034 105 (Special service tool)
- ★49 0107 680A (Special service tool)
- ★49 T034 102 (Special service tool)
- ★49 T034 103 (Special service tool)
- ★49 T034 104 (Special service tool)
- ★Clean rag

## Battery removal



1. Remove the engine cover.
2. Remove the hose from the battery cover.
3. Lift up the rear of the battery cover and remove.
4. Disconnect the negative battery cable.

## ⚠ WARNING

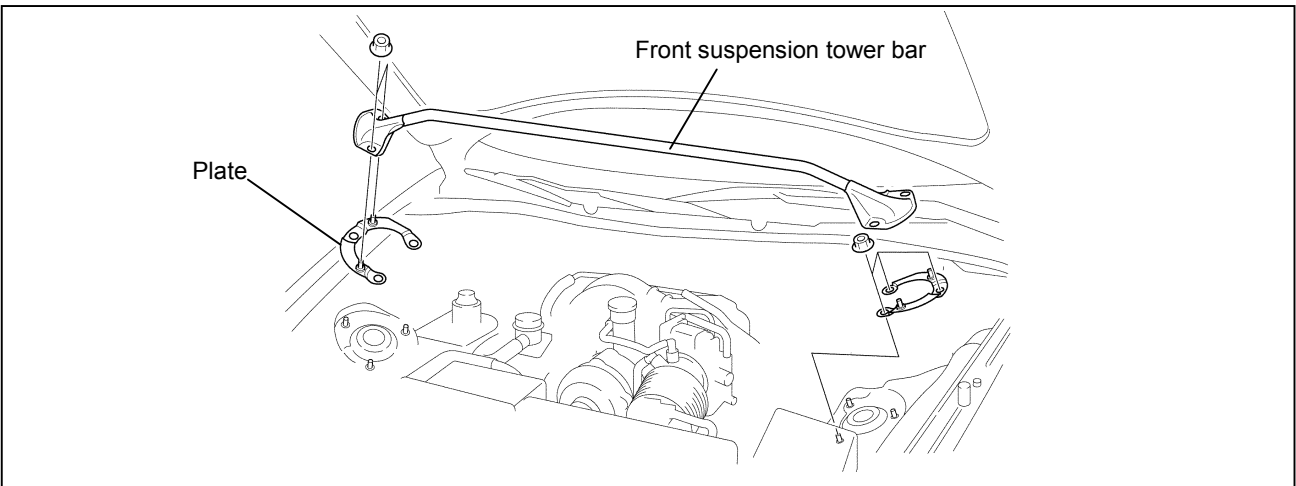
- Never place the battery near an open flame. Flammable gas from the battery can be ignited resulting in an explosion.

# 3 VEHICLE PARTS REMOVAL

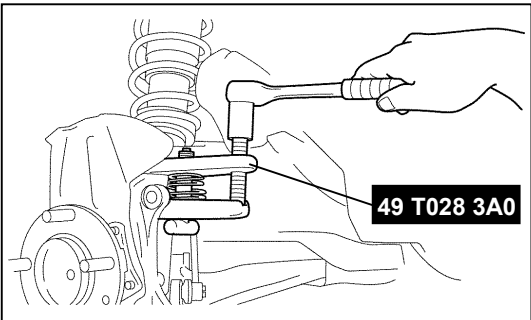
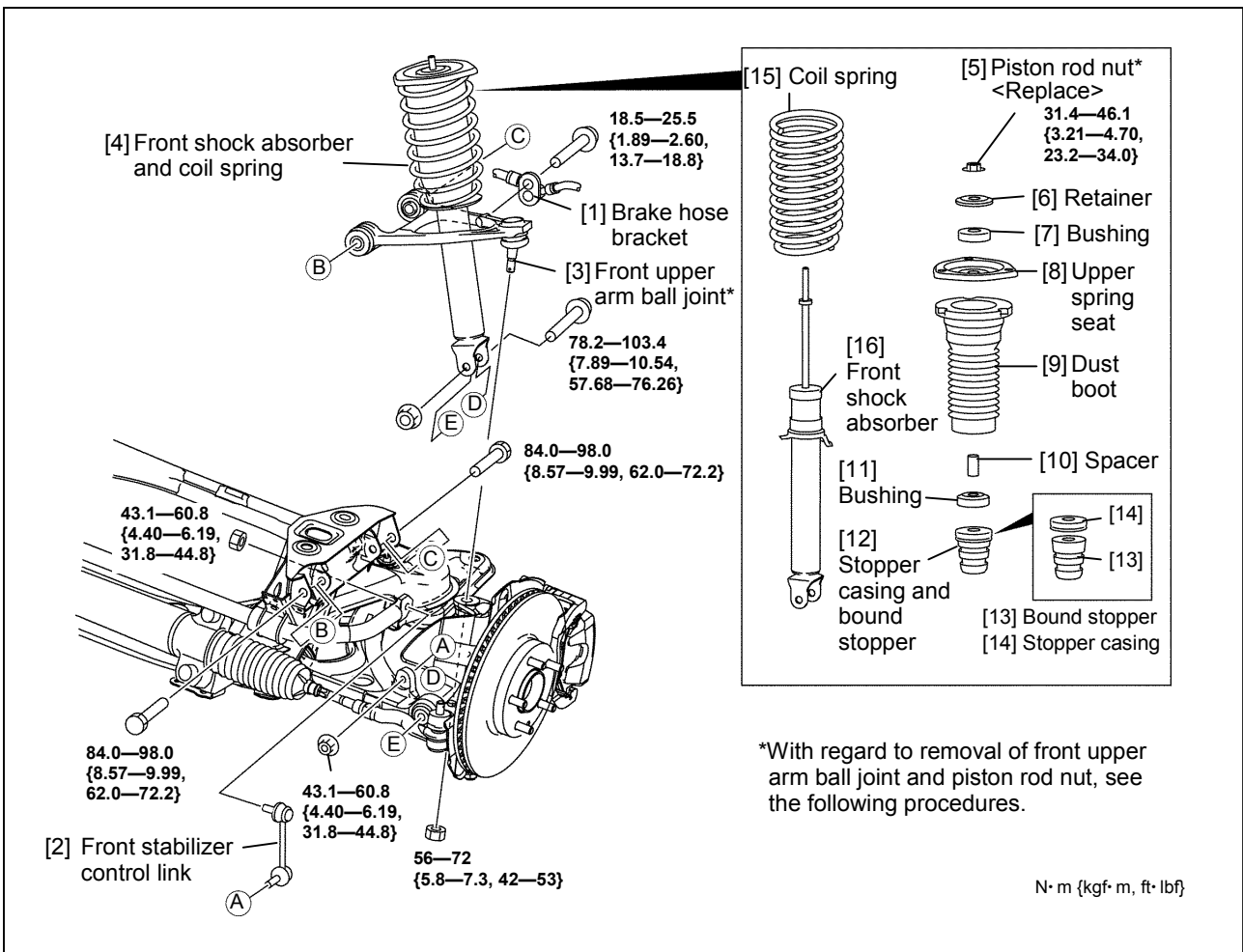
## ⚠ CAUTION

- 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, remove the ABS wheel-speed sensor (axle side) and fix it to an appropriate place where the sensor will not be pulled while the installation work is performed.

1. Remove the front suspension tower bar and then the plates.



2. Remove parts [1] to [16] in the order indicated in the figure.



### Front upper arm ball joint removal

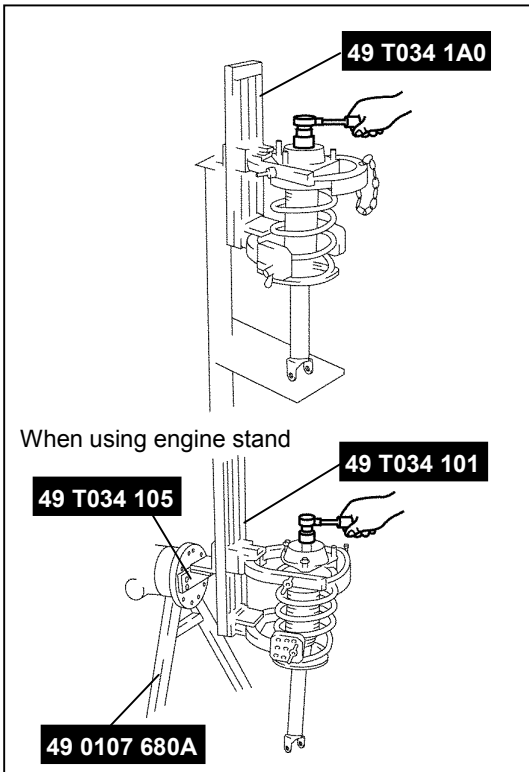
- 1) Remove the front upper arm ball joint from the steering knuckle using the special service tool, 49 T028 3A0.

## Piston rod nut removal

### ⚠ WARNING

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

- 1) Protect the coil spring from scratches using a clean rag, and install the special service tools.
- 2) Compress the coil spring using the special service tools, and remove the piston rod nut.

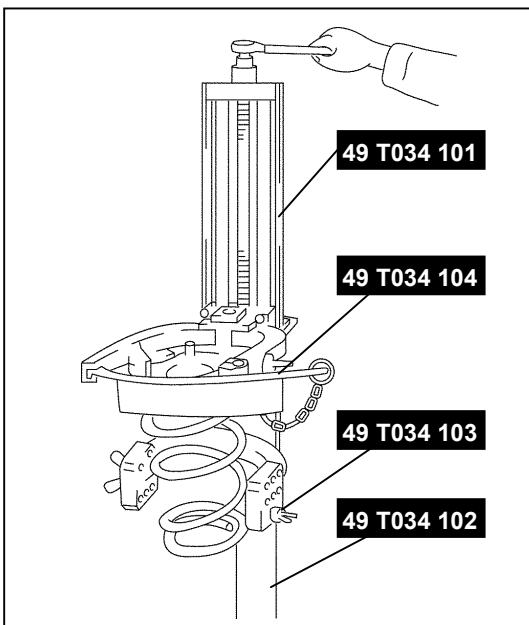


## 4 FRONT SHOCK ABSORBER INSTALLATION

1. Assemble the accessory kit front shock absorber and the coil spring.

### Coil spring installation

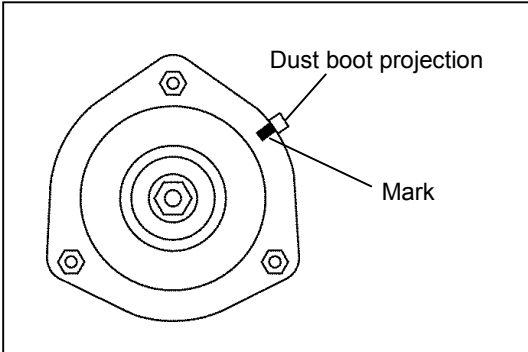
- 1) Protect the coil spring from scratches using a clean rag, and install the special service tools.
- 2) Compress the coil spring using the special service tools.
- 3) Install the shock absorber so that the lower end of the coil spring is seated on the step of the lower spring seat.



2. Reinstall the parts removed in step 2 of 3. VEHICLE PARTS REMOVAL in the reverse order of removal.

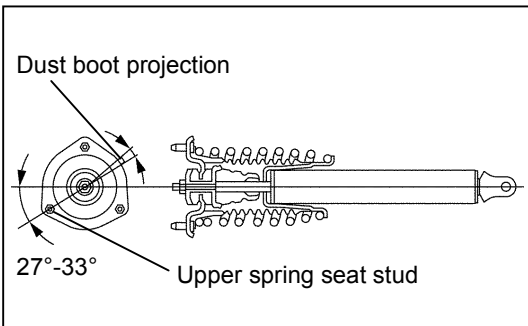
**⚠ CAUTION**

Make sure that the vehicle parts are clean before reinstalling. Clean any dirty parts.



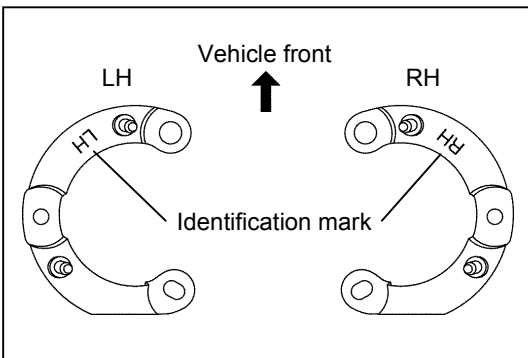
**Upper spring seat installation**

1) Align the mark on the upper spring seat with the dust boot projection.



2) Install the upper spring seat so that the upper spring seat stud is at a **27°-33°** angle to the shock absorber installation shaft (lower side).

3. Install the plates and then the front suspension tower bar.



**Plate installation**

1) Install the plates with the identification marks facing upward.

**Tightening torque:**

**46.1-62.8 N·m {4.71-6.40 kgf·m, 34.1-46.3 ft·lbf}**

**Front suspension tower bar installation**

**Tightening torque:**

**17.6-26.5 N·m {1.80-2.70 kgf·m, 13.0-19.5 ft·lbf}**

4. For the joint sections with rubber bushings, raise the vehicle using a lift, and then temporarily tighten the installation bolts and nuts. Lower the vehicle to the ground and tighten them completely with the specified torque.

## Battery terminal and engine cover reinstallation

- After installing the front shock absorbers, check that each part is securely fixed and all the parts are installed.
- Connect the negative battery cable, and check that operate properly.

### CAUTION

When the battery is disconnected, the DSC indicator light will no longer operate.  
(At this time, the DSC OFF indicator light flashes and the TCS/DSC operation indicator light illuminates.)

Perform the following procedure to enable DSC operation.

1. Turn the ignition switch to the ON position.
2. Turn the steering wheel fully right and then fully left.
3. Verify that the DSC OFF indicator light goes out.
4. Turn the ignition switch off and once again to the ON position.
5. Verify that the TCS/DSC operation indicator light goes out.

If the TCS/DSC operation indicator light and the DSC OFF indicator light do not go out even after the ignition switch is turned to the ON position, contact an Authorized Mazda Dealer.

### CAUTION

When the battery is disconnected, the power window will no longer fully open/close automatically.

Perform the following procedure to restore the function.

1. Turn the ignition switch to the ON position.
2. Press the switch to fully open the window.
3. Pull up the switch to fully close the window and continue to pull it up for about two seconds.

- Install the battery cover, hose, and engine cover in the reverse order of removal.

### CAUTION

After attaching the engine cover, check that it is securely fixed.