

SECTION **RSU**  
 REAR SUSPENSION

A  
B  
C  
D

**RSU**

CONTENTS

|  |    |  |    |   |
|--|----|--|----|---|
| <b>PRECAUTION</b> .....                            | 2  | Removal and Installation .....             | 10 | F |
| <b>PRECAUTIONS</b> .....                           | 2  | Inspection and Adjustment .....            | 11 |   |
| Precautions for Suspension .....                   | 2  | Disposal .....                             | 12 |   |
| Precautions for Removing of Battery Terminal ..... | 2  | <b>SUSPENSION ARM</b> .....                | 13 | G |
| <b>PREPARATION</b> .....                           | 3  | Exploded View .....                        | 13 |   |
| <b>PREPARATION</b> .....                           | 3  | Removal and Installation .....             | 13 | H |
| Special Service Tools .....                        | 3  | Inspection and Adjustment .....            | 13 |   |
| Commercial Service Tools .....                     | 3  | <b>FRONT LOWER LINK</b> .....              | 15 | I |
| <b>SYMPTOM DIAGNOSIS</b> .....                     | 4  | Exploded View .....                        | 15 |   |
| <b>NOISE, VIBRATION AND HARSHNESS</b>              |    | Removal and Installation .....             | 15 | J |
| <b>(NVH) TROUBLESHOOTING</b> .....                 | 4  | Inspection .....                           | 15 |   |
| NVH Troubleshooting Chart .....                    | 4  | <b>REAR STABILIZER</b> .....               | 17 | K |
| <b>PERIODIC MAINTENANCE</b> .....                  | 5  | Exploded View .....                        | 17 |   |
| <b>REAR SUSPENSION ASSEMBLY</b> .....              | 5  | Removal and Installation .....             | 17 | L |
| Inspection .....                                   | 5  | Inspection .....                           | 17 |   |
| <b>WHEEL ALIGNMENT</b> .....                       | 6  | <b>UNIT REMOVAL AND INSTALLATION</b> ..... | 18 | M |
| Inspection .....                                   | 6  | <b>REAR SUSPENSION MEMBER</b> .....        | 18 |   |
| Adjustment .....                                   | 6  | Exploded View .....                        | 18 | N |
| <b>REMOVAL AND INSTALLATION</b> .....              | 8  | Removal and Installation .....             | 18 |   |
| <b>REAR LOWER LINK &amp; COIL SPRING</b> .....     | 8  | Inspection and Adjustment .....            | 19 | O |
| Exploded View .....                                | 8  | <b>SERVICE DATA AND SPECIFICATIONS</b>     |    |   |
| Removal and Installation .....                     | 8  | <b>(SDS)</b> .....                         | 20 | P |
| Inspection .....                                   | 9  | <b>SERVICE DATA AND SPECIFICATIONS</b>     |    |   |
| <b>REAR SHOCK ABSORBER</b> .....                   | 10 | <b>(SDS)</b> .....                         | 20 |   |
| Exploded View .....                                | 10 | Wheel Alignment .....                      | 20 |   |
|  |    | Ball Joint .....                           | 20 |   |
|  |    | Wheel Height .....                         | 20 |   |

# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

#### Precautions for Suspension

INFOID:000000009008531

- When installing rubber bushings, the final tightening must be carried out under unladen conditions with tires on ground. Spilled oil might shorten the life of rubber bushings. Be sure to wipe off any spilled oil.
- Unladen conditions mean that fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.
- After servicing suspension parts, be sure to check wheel alignment.
- Self-lock nuts are not reusable. Always use new ones when installing. Since new self-lock nuts are pre-oiled, tighten as they are.

#### Precautions for Removing of Battery Terminal

INFOID:000000009864313

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

**NOTE:**

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

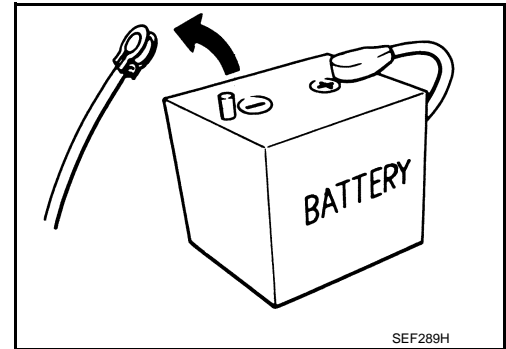
**NOTE:**

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

**NOTE:**

The removal of 12V battery may cause a DTC detection error.



# PREPARATION

< PREPARATION >

## PREPARATION

### PREPARATION

#### Special Service Tools

INFOID:000000009008532

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

| Tool number<br>(Kent-Moore No.)<br>Tool name | Description                     |
|--|---------------------------------|
| KV10109300<br>( - )<br>Holder                | Removing and installing bracket |

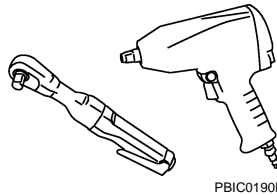


ZZA1010D

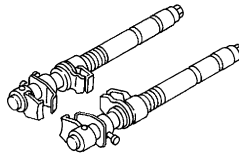
#### Commercial Service Tools

INFOID:000000009008533

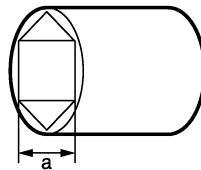
| Tool name                    | Description                           |
|------------------------------|---------------------------------------|
| Power tool                   | Loosening bolts and nuts              |
| Spring compressor            | Removing and installing coil spring   |
| Socket<br>a: 80 mm (3.15 in) | Removing and installing bumper rubber |



PBIC0190E



S-NT717



JPEIB0233ZZ

A  
B  
C  
D  
RSU  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

# NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

#### NVH Troubleshooting Chart

INFOID:000000009008534

Use chart below to find the cause of the symptom. If necessary, repair or replace these parts.

| Symptom         |                               | Possible cause and SUSPECTED PARTS |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             | Reference |       |                                       |
|-----------------|-------------------------------|------------------------------------|--|-----------------------------------|--------------------|----------------|----------------------|---------------------------|------------------------|-----------------|--------------|-------------------------------|------|------------|-------------|-----------|-------|---------------------------------------|
|                 |                               | Improper installation, looseness   | Shock absorber deformation, damage or deflection | Bushing or mounting deterioration | Parts interference | Spring fatigue | Suspension looseness | Incorrect wheel alignment | Stabilizer bar fatigue | PROPELLER SHAFT | DIFFERENTIAL | REAR AXLE AND REAR SUSPENSION | TIRE | ROAD WHEEL | DRIVE SHAFT |           | BRAKE | STEERING                              |
| REAR SUSPENSION | Noise                         | x                                  | x  | x                                 | x                  | x              | x                    |                           |                        | x               | x            | x                             | x    | x          | x           | x         | x     | RSU-8, RSU-10, RSU-13, RSU-15, RSU-18 |
|                 | Shake                         | x                                  | x  | x                                 | x                  |                | x                    |                           |                        | x               |              | x                             | x    | x          | x           | x         | x     | RSU-11                                |
|                 | Vibration                     | x                                  | x  | x                                 | x                  | x              |                      |                           |                        | x               |              | x                             | x    |            | x           |           |       | —                                     |
|                 | Shimmy                        | x                                  | x  | x                                 | x                  |                |                      | x                         |                        |                 |              | x                             | x    | x          |             | x         | x     | —                                     |
|                 | Judder                        | x                                  | x  | x                                 |                    |                |                      |                           |                        |                 |              | x                             | x    | x          |             | x         | x     | —                                     |
|                 | Poor quality ride or handling | x                                  | x  | x                                 | x                  | x              |                      | x                         | x                      |                 |              |                               | x    | x          | x           |           |       | RSU-8, RSU-10, RSU-13, RSU-15, RSU-18 |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | RSU-6                                 |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | RSU-17                                |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | NVH in DLN section.                   |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | NVH in DLN section.                   |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | NVH in RAX and RSU sections.          |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | NVH in WT section.                    |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | NVH in WT section.                    |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | NVH in RAX section.                   |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | NVH in BR section.                    |
|                 |                               |                                    |  |                                   |                    |                |                      |                           |                        |                 |              |                               |      |            |             |           |       | NVH in ST section.                    |

x: Applicable

# REAR SUSPENSION ASSEMBLY

< PERIODIC MAINTENANCE >

## PERIODIC MAINTENANCE

### REAR SUSPENSION ASSEMBLY

#### Inspection

INFOID:000000009008535

#### COMPONENT PART

Check the mounting conditions (looseness, backlash) of each component and component conditions (wear, damage) are normal.

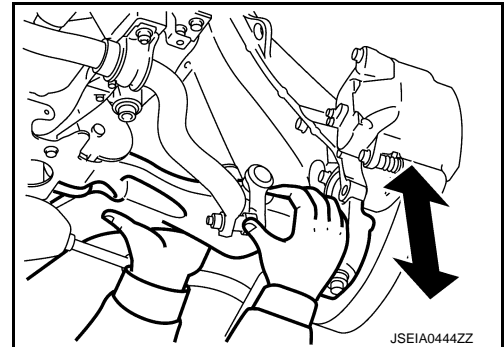
#### Ball Joint Axial End Play

Move axle side of suspension arm and front lower link in the axial direction by hand. Check there is no end play.

**Axial end play** : Refer to [RSU-20, "Ball Joint"](#).

#### CAUTION:

- Never depress brake pedal when measuring.
- Never perform with tires on level ground.
- Be careful not to damage ball joint boot. Never damage the installation position by applying excessive force.



#### SHOCK ABSORBER

Check for oil leakage and damage. Replace it if necessary.

A  
B  
C  
D  
RSU  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

# WHEEL ALIGNMENT

< PERIODIC MAINTENANCE >

## WHEEL ALIGNMENT

---

### Inspection

INFOID:000000009008536

#### DESCRIPTION

Measure wheel alignment under unladen conditions.

#### NOTE:

"Unladen conditions" means that fuel, engine coolant, and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

#### PRELIMINARY CHECK

Check the following:

- Tires for improper air pressure and wear. Refer to [WT-68, "Tire Air Pressure"](#).
- Road wheels for runout.
- Wheel bearing axial end play. Refer to [RAX-5, "Inspection"](#).
- Ball joint axial end play of suspension arm and front lower link. Refer to [RSU-5, "Inspection"](#).
- Shock absorber operation.
- Each mounting point of axle and suspension for looseness and deformation.
- Each of front lower link, rear lower link, rear suspension member, suspension arm and shock absorber for cracks, deformation, and other damage.
- Vehicle height (posture).

#### GENERAL INFORMATION AND RECOMMENDATIONS

- A four-wheel thrust alignment should be performed.
- This type of alignment is recommended for any NISSAN/INFINITI vehicle.
- The four-wheel "thrust" process helps ensure that the vehicle is properly aligned and the steering wheel is centered.
- The alignment rack itself should be capable of accepting any NISSAN/INFINITI vehicle.
- The rack should be checked to ensure that it is level.
- Make sure the machine is properly calibrated.
- Your alignment equipment should be regularly calibrated in order to give correct information.
- Check with the manufacturer of your specific equipment for their recommended Service/Calibration Schedule.

#### ALIGNMENT PROCESS

##### IMPORTANT:

Use only the alignment specifications listed in this Service Manual.

- When displaying the alignment settings, many alignment machines use "indicators": (Green/red, plus or minus, Go/No Go). **Never use these indicators.**
- The alignment specifications programmed into your machine that operate these indicators may not be correct.
- This may result in an ERROR.
- Most camera-type alignment machines are equipped with both "Rolling Compensation" method and optional "Jacking Compensation" method to "compensate" the alignment targets or head units. "Rolling Compensation" is the preferred method.
- If using the "Rolling Compensation" method, after installing the alignment targets or head units, push or pull on the rear wheel to move the vehicle. **Do not push or pull on the vehicle body.**
- If using the "Jacking Compensation" method, after installing the alignment targets or head units, raise the vehicle and rotate the wheels 1/2 turn both ways.

##### NOTE:

- Do not use the "Rolling Compensation" method if you are using sensor-type alignment equipment.
- Follow all instructions for the alignment machine you're using for more information.

### Adjustment

INFOID:000000009008537

#### CAMBER

# WHEEL ALIGNMENT

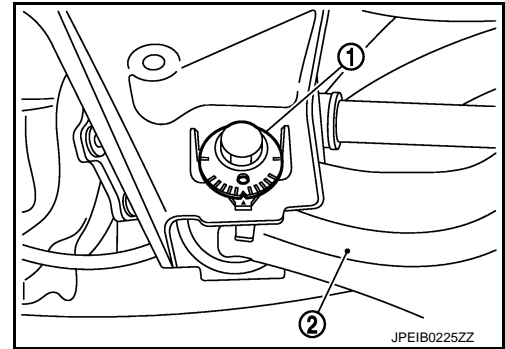
## < PERIODIC MAINTENANCE >

Adjust with adjusting bolt (1) in front lower link (2).

**Camber** : Refer to [RSU-20, "Wheel Alignment"](#).

### CAUTION:

- When tightening the nut firmly and checking the torque, use a wrench to prevent the turning of bolt.
- After adjusting camber, be sure to check toe-in.
- If camber is not still within the specification, inspect and replace any damaged or worn suspension parts.



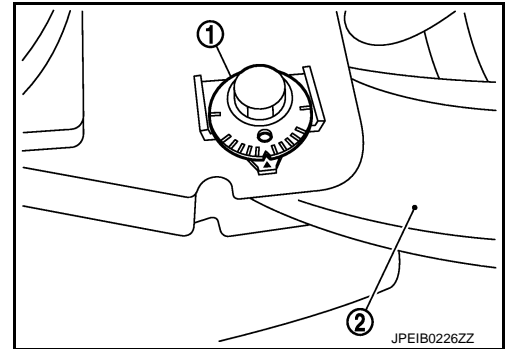
### TOE-IN

Adjust with adjusting bolt (1) in rear lower link (2).

**Toe-In** : Refer to [RSU-20, "Wheel Alignment"](#).

### CAUTION:

- Be sure to adjust equally on right and left side with adjusting bolt.
- When tightening the nut firmly and checking the torque, use a wrench to prevent the turning of bolt.
- If toe-in is not still within the specification, inspect and replace any damaged or worn suspension parts.
- After toe-in adjustment, adjust neutral position of steering angle sensor. Refer to [BRC-62, "Work Procedure"](#).



A  
B  
C  
D

RSU

F  
G  
H

I

J

K

L

M

N

O

P

# REAR LOWER LINK & COIL SPRING

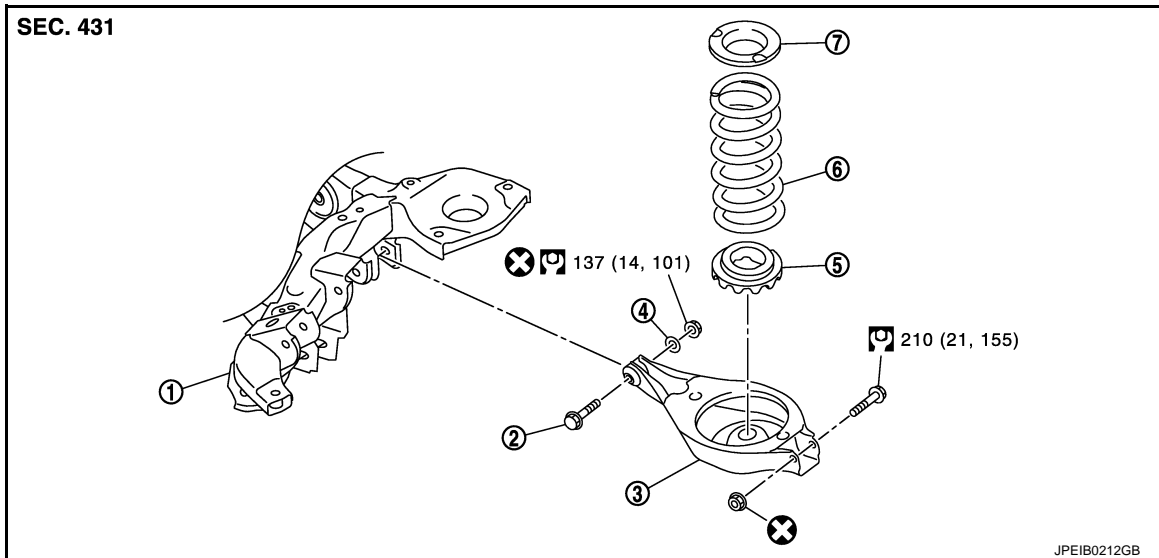
< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION

### REAR LOWER LINK & COIL SPRING

Exploded View

INFOID:000000009008538



- |                           |                   |                    |
|---------------------------|-------------------|--------------------|
| 1. Rear suspension member | 2. Adjusting bolt | 3. Rear lower link |
| 4. Eccentric disc         | 5. Rubber seat    | 6. Coil spring     |
| 7. Upper seat             |                   |                    |

Refer to [GI-4, "Components"](#) for symbols in the figure.

## Removal and Installation

INFOID:000000009008539

### REMOVAL

1. Remove tires with power tool. Refer to [WT-63, "Removal and Installation"](#).
2. Remove wheel sensor harness. Refer to [BRC-144, "REAR WHEEL SENSOR : Removal and Installation"](#).
3. Remove height sensor from rear lower link (right side). Refer to [EXL-134, "Removal and Installation"](#).
4. Remove vehicle height sensor from rear lower link (left side). Refer to [SCS-98, "Removal and Installation"](#).
5. Set suitable jack under rear lower link.
6. Using a spring compressor (commercial service tool), compress coil spring between rubber seat and upper seat until coil spring with a spring compressor is free.  
**CAUTION:**  
**Be sure a spring compressor is securely attached coil spring. Compress coil spring.**
7. Remove rear lower link mounting bolt (axle housing side).
8. Slowly lower jack, then remove upper seat, coil spring and rubber seat from rear lower link.
9. Remove rear lower link mounting nut, eccentric disc, and adjusting bolt and then remove rear lower link.
10. Perform inspection after removal. Refer to [RSU-9, "Inspection"](#).

### INSTALLATION

Note the following, and install in the reverse order of removal.

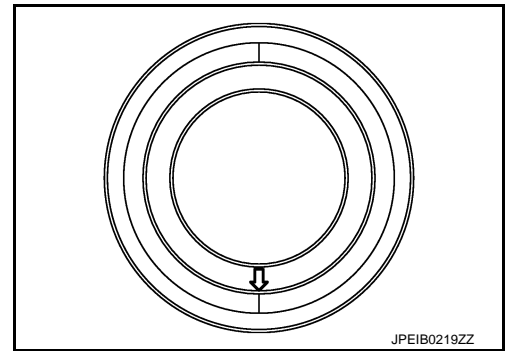


## REAR LOWER LINK & COIL SPRING

### < REMOVAL AND INSTALLATION >

- Make sure that upper seat and rubber seat are attached as shown in the figure.

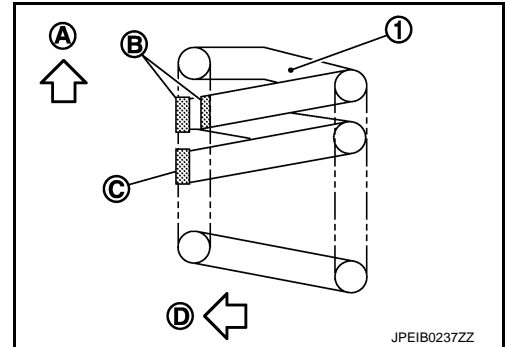
← : Vehicle outside



- When installing the coil spring (1), check that coil spring is attached as shown in the figure.

A : Vehicle upper side  
B : Two paint marks  
C : One paint mark  
D : Vehicle inside

- Perform the final tightening of rear suspension member and axle housing rubber bushing position under unladen condition with tires on level ground.
- Perform inspection after installation. Refer to [RSU-9, "Inspection"](#).



### Inspection

INFOID:000000009008540

#### INSPECTION AFTER REMOVAL

Check rear lower link, bushing and coil spring for deformation, crack, and damage. Replace it if necessary.

#### INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to [RSU-6, "Inspection"](#).
2. Adjust neutral position of steering angle sensor. Refer to [BRC-62, "Work Procedure"](#).

# REAR SHOCK ABSORBER

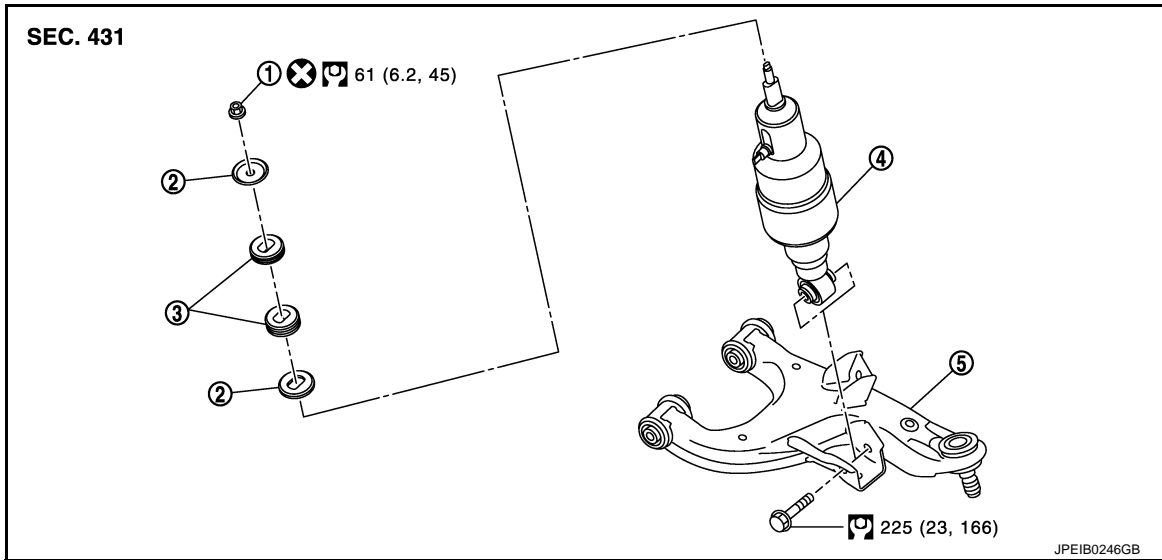
< REMOVAL AND INSTALLATION >

## REAR SHOCK ABSORBER

Exploded View

INFOID:000000009008541

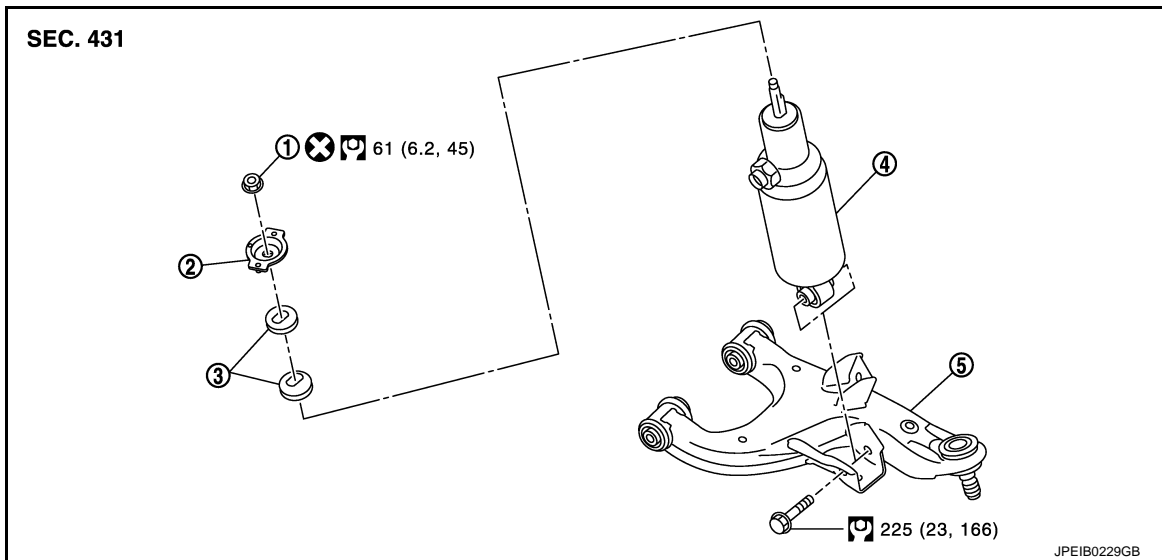
WITHOUT HBMC



1. Piston rod lock nut
2. Washer
3. Bushing
4. Shock absorber
5. Front lower link

Refer to [GI-4, "Components"](#) for symbols in the figure.

WITH HBMC



1. Piston rod lock nut
2. Bracket
3. Bushing
4. Shock absorber
5. Front lower link

Refer to [GI-4, "Components"](#) for symbols in the figure.

## Removal and Installation

INFOID:000000009008542

### REMOVAL

1. Reduce system pressure. (With HBMC) Refer to [SCS-18, "Work Procedure"](#).

**CAUTION:**

# REAR SHOCK ABSORBER

## < REMOVAL AND INSTALLATION >

**Inadvertent piping removal causes fluid to splatter.**

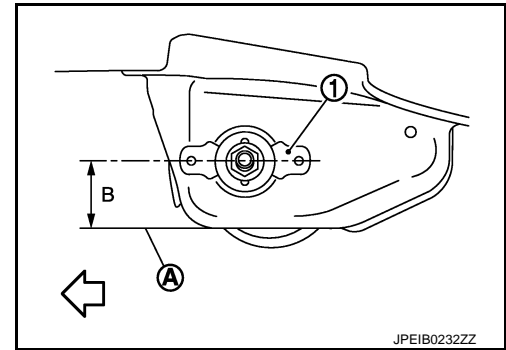
2. Remove tires with power tool. Refer to [WT-63, "Removal and Installation"](#).
3. Remove height sensor from rear lower link (right side). Refer to [EXL-134, "Removal and Installation"](#).
4. Remove vehicle height sensor from rear lower link (left side). Refer to [SCS-98, "Removal and Installation"](#).
5. Remove air tube from shock absorber assembly. Refer to [SCS-95, "Removal and Installation"](#).
6. Remove middle tube assembly from shock absorber assembly. (With HBMC) Refer to [SCS-44, "REAR TUBE ASSEMBLY : Removal and Installation"](#).
7. Remove shock absorber mounting bolt (lower side).
8. Remove piston rod lock nut.
9. Remove bracket, bushings, and shock absorber. (With HBMC)
10. Remove washers, bushings, and shock absorber. (Without HBMC)
11. Perform inspection after removal. Refer to [RSU-11, "Inspection and Adjustment"](#).

## INSTALLATION

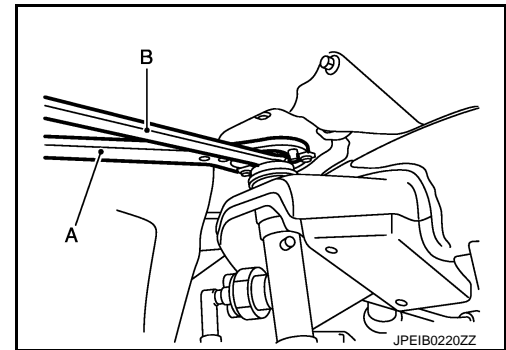
Note the following, and install in the reverse order of removal.

- When installing the bracket (1), check that bracket is attached as shown in the figure. (With HBMC)

- ← : Vehicle front  
A : Frame edge line  
B : Almost parallel



- Use the holder (A) [SST: KV10109300 ( - )] and a suitable tool (B) to tighten piston rod lock nut so that the bracket does not become misaligned. (With HBMC)
- Install air tube to shock absorber assembly. Refer to [SCS-95, "Removal and Installation"](#).
- Perform final tightening of bolts and nuts at the shock absorber lower side (rubber bushing), under unladen conditions with tires on level ground.
- Perform inspection after installation. Refer to [RSU-11, "Inspection and Adjustment"](#).
- After replacing the shock absorber, always follow the disposal procedure to discard the shock absorber. Refer to [RSU-12, "Disposal"](#).



## Inspection and Adjustment

INFOID:000000009008543

### INSPECTION AFTER REMOVAL

Check the following items, and replace the parts if necessary.

- Shock absorber assembly for deformation, cracks, damage.
- Piston rod on shock absorber assembly for damage, uneven wear, and distortion.
- Welded and sealed areas for oil leakage.

### INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to [RSU-6, "Inspection"](#).
2. Adjust neutral position of steering angle sensor. Refer to [BRC-62, "Work Procedure"](#).

### ADJUSTMENT AFTER INSTALLATION (WITH HBMC)

Bleed air from the HBMC. Refer to [SCS-18, "Work Procedure"](#).

# REAR SHOCK ABSORBER

< REMOVAL AND INSTALLATION >

## Disposal

INFOID:000000009008544

### WITHOUT HBMC

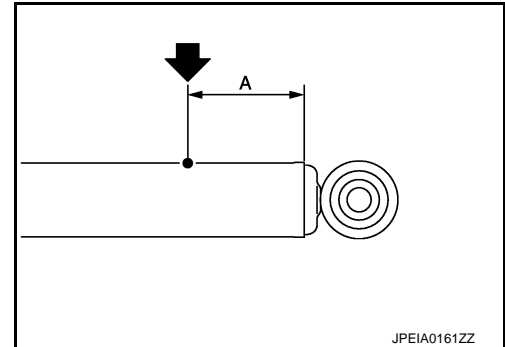
1. Set shock absorber horizontally with the piston rod fully extended.
2. Drill 2 – 3 mm (0.08 – 0.12 in) hole at the position (●) from top as shown in the figure to release gas gradually.

**CAUTION:**

- Wear eye protection (safety glasses).
- Wear gloves.
- Be careful with metal chips or oil blown out by the compressed gas.

**NOTE:**

- Drill vertically in this direction (←).
- Directly to the outer tube avoiding brackets.
- The gas is clear, colorless, odorless, and harmless.



**A : 20 – 30 mm (0.79 – 1.18 in)**

3. Position the drilled hole downward and drain oil by moving the piston rod several times.

**CAUTION:**

**Dispose of drained oil according to the law and local regulations.**

### WITH HBMC

**NOTE:**

Releasing gas is not required.

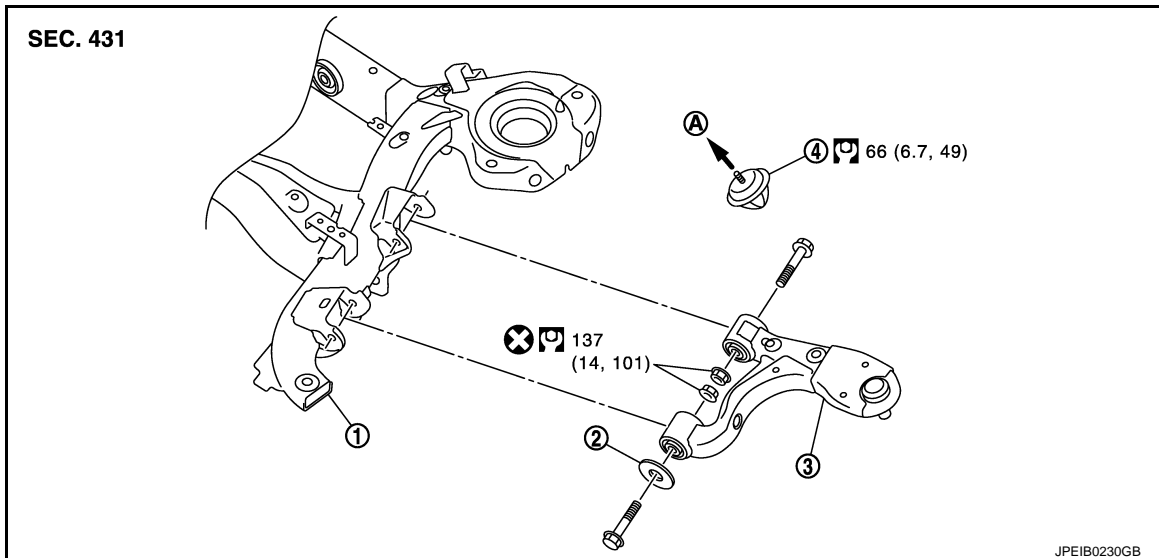
# SUSPENSION ARM

< REMOVAL AND INSTALLATION >

## SUSPENSION ARM

### Exploded View

INFOID:000000009008545



1. Rear suspension member
2. Stopper rubber
3. Suspension arm
4. Bumper rubber
- A. To frame

Refer to [GI-4, "Components"](#) for symbols in the figure.

## Removal and Installation

INFOID:000000009008546

### REMOVAL

1. Remove tires with power tool. Refer to [WT-63, "Removal and Installation"](#).
2. Remove rear suspension member assembly. Refer to [RSU-18, "Removal and Installation"](#).
3. Remove bumper rubber from frame, using a socket (commercial service tool).
4. Remove suspension arm from axle housing. Refer to [RAX-7, "Removal and Installation"](#).
5. Remove suspension arm mounting bolts, nuts, and stopper rubber from rear suspension member.
6. Remove suspension arm.
7. Perform inspection after removal. Refer to [RSU-13, "Inspection and Adjustment"](#).

### INSTALLATION

Note the following and, install in the reverse order of removal.

- Perform final tightening of rear suspension member installation position (rubber bussing), under unladen conditions with tires on level ground.
- Perform inspection after installation. Refer to [RSU-13, "Inspection and Adjustment"](#).
- Perform adjustment after installation. (With HBMC) Refer to [RSU-13, "Inspection and Adjustment"](#).

## Inspection and Adjustment

INFOID:000000009008547

### INSPECTION AFTER REMOVAL

#### Appearance

Check the following items, and replace the part if necessary.

- Suspension arm and bushing for deformation, cracks or damage.
- Boot of ball joint for cracks or damage, and also for grease leakage.

#### Ball Joint Inspection

Manually move ball stud to confirm it moves smoothly with no binding.

#### Swing Torque Inspection

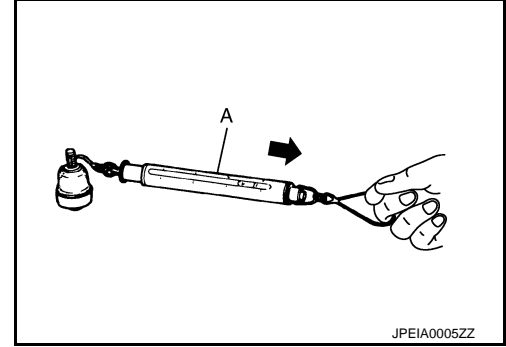
# SUSPENSION ARM

## < REMOVAL AND INSTALLATION >

1. Move the ball joint at least ten times by hand to check for smooth movement.
2. Hook spring balance (A) at groove. Confirm spring balance measurement value is within specifications when ball stud begins moving.

**Swing torque** : Refer to [RSU-20, "Ball Joint"](#).

- If swing torque exceeds the standard range, replace suspension arm assembly.



### Rotating Torque Inspection

1. Move the ball joint at least ten times by hand to check for smooth movement.
2. Check that rotating torque is within the specifications.

**Rotating torque** : Refer to [RSU-20, "Ball Joint"](#).

- If rotating torque exceeds the standard range, replace suspension arm assembly.

### Axial End Play Inspection

1. Move the ball joint at least ten times by hand to check for smooth movement.
2. Move tip of ball stud in axial direction to check for looseness.

**Axial end play** : Refer to [RSU-20, "Ball Joint"](#).

- If axial end play exceeds the standard range, replace suspension arm assembly.

## INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to [RSU-6, "Inspection"](#).
2. Adjust neutral position of steering angle sensor. Refer to [BRC-62, "Work Procedure"](#).

## ADJUSTMENT AFTER INSTALLATION (WITH HBMC)

Bleed air from the HBMC. Refer to [SCS-18, "Work Procedure"](#).

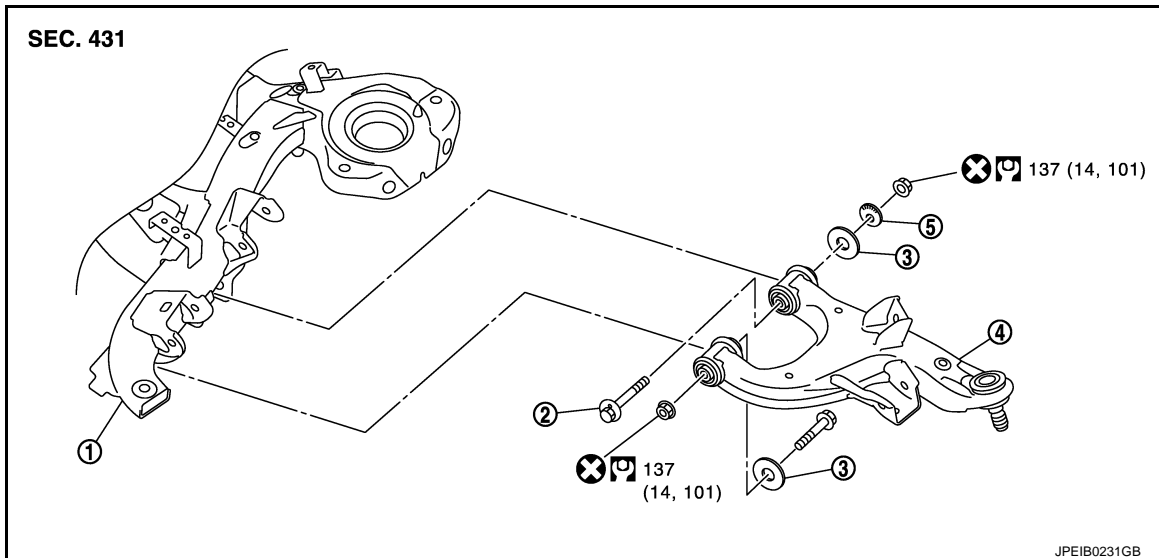
# FRONT LOWER LINK

< REMOVAL AND INSTALLATION >

## FRONT LOWER LINK

### Exploded View

INFOID:000000009008548



- |                           |                   |                   |
|---------------------------|-------------------|-------------------|
| 1. Rear suspension member | 2. Adjusting bolt | 3. Stopper rubber |
| 4. Front lower link       | 5. Eccentric disc |                   |

Refer to [GI-4, "Components"](#) for symbols in the figure.

### Removal and Installation

INFOID:000000009008549

#### REMOVAL

1. Remove tires with power tool. Refer to [WT-63, "Removal and Installation"](#).
2. Set suitable jack under rear lower link.
3. Remove shock absorber mounting bolts from front lower link. Refer to [RSU-10, "Exploded View"](#).
4. Remove stabilizer connecting rod. (Without HBMC) Refer to [RSU-17, "Removal and Installation"](#).
5. Remove front lower link mounting bolts and nuts from axle housing.
6. Remove front lower link mounting bolt, nuts, stopper rubbers, eccentric disc, and adjusting bolt from rear suspension member, and remove front lower link.
7. Perform inspection after removal. Refer to [RSU-15, "Inspection"](#).

#### INSTALLATION

Note the following, and install in the reverse order of removal.

- Perform final tightening of rear suspension member and axle installation position (rubber bushing), under unladen conditions with tires on level ground.
- Perform inspection after installation. Refer to [RSU-15, "Inspection"](#).

#### Inspection

INFOID:000000009008550

#### INSPECTION AFTER REMOVAL

##### Appearance

Check the following items, and replace the part if necessary.

- Front lower link and bushing for deformation, cracks or damage.
- Boot of ball joint for cracks or damage, and also for grease leakage.

##### Ball Joint Inspection

Manually move ball stud to confirm it moves smoothly with no binding.

##### Swing Torque Inspection

1. Move the ball joint at least ten times by hand to check for smooth movement.

A

B

C

D

RSU

F

G

H

I

J

K

L

M

N

O

P

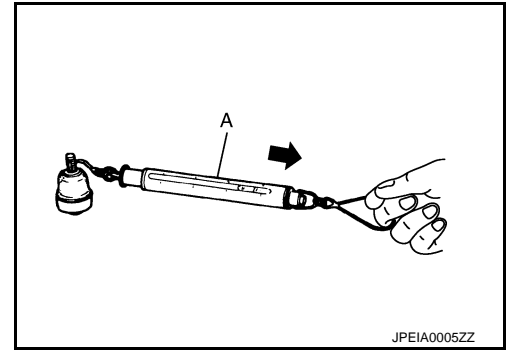
## FRONT LOWER LINK

### < REMOVAL AND INSTALLATION >

- Hook spring balance (A) at groove. Confirm spring balance measurement value is within specifications when ball stud begins moving.

**Swing torque** : Refer to [RSU-20, "Ball Joint"](#).

- If swing torque exceeds the standard range, replace front lower link.



### Rotating Torque Inspection

- Move the ball joint at least ten times by hand to check for smooth movement.
- Check that rotating torque is within the specifications.

**Rotating torque** : Refer to [RSU-20, "Ball Joint"](#).

- If rotating torque exceeds the standard range, replace front lower link.

### Axial End Play Inspection

- Move the ball joint at least ten times by hand to check for smooth movement.
- Move tip of ball stud in axial direction to check for looseness.

**Axial end play** : Refer to [RSU-20, "Ball Joint"](#).

- If axial end play exceeds the standard range, replace front lower link.

### INSPECTION AFTER INSTALLATION

- Check wheel alignment. Refer to [RSU-6, "Inspection"](#).
- Adjust neutral position of steering angle sensor. Refer to [BRC-62, "Work Procedure"](#).



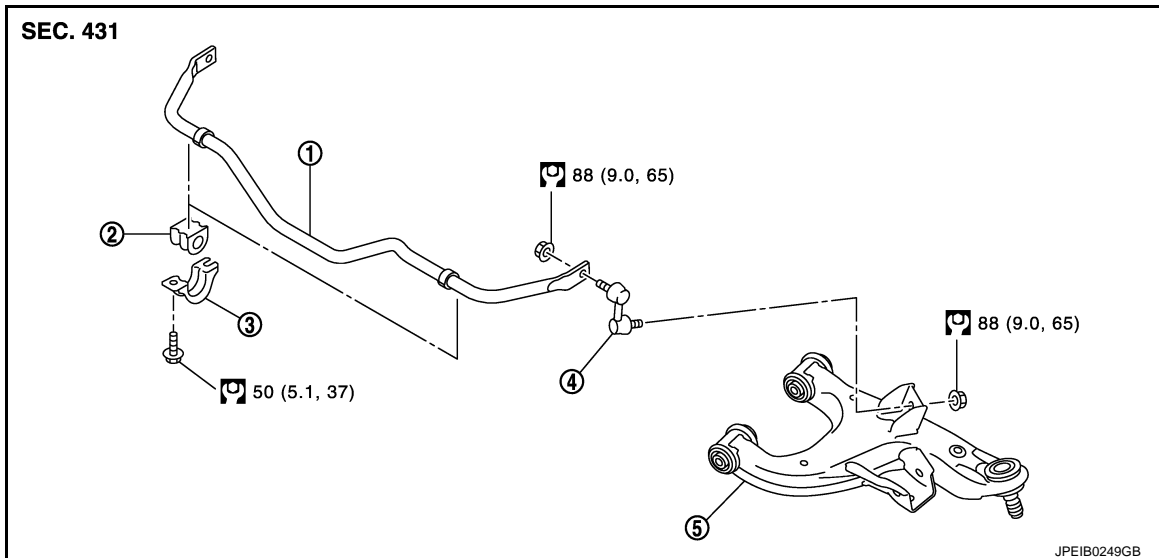
# REAR STABILIZER

< REMOVAL AND INSTALLATION >

## REAR STABILIZER

### Exploded View

INFOID:000000009008551



- |                              |                       |                     |
|------------------------------|-----------------------|---------------------|
| 1. Stabilizer bar            | 2. Stabilizer bushing | 3. Stabilizer clamp |
| 4. Stabilizer connecting rod | 5. Front lower link   |                     |

Refer to [GI-4, "Components"](#) for symbols in the figure.

### Removal and Installation

INFOID:000000009008552

#### REMOVAL

1. Remove stabilizer connecting rods.
2. Remove stabilizer clamps and stabilizer bushings.
3. Remove stabilizer bar.
4. Perform inspection after removal. Refer to [RSU-17, "Inspection"](#).

#### INSTALLATION

Note the following, and install in the reverse order of removal.

- Tighten the mounting nut to the specified torque while holding a hexagonal part of stabilizer connecting rod side.

#### Inspection

INFOID:000000009008553

#### INSPECTION AFTER REMOVAL

Check stabilizer bar, stabilizer connecting rod, stabilizer bushing and stabilizer clamp for deformation, cracks or damage. Replace it if necessary.

# REAR SUSPENSION MEMBER

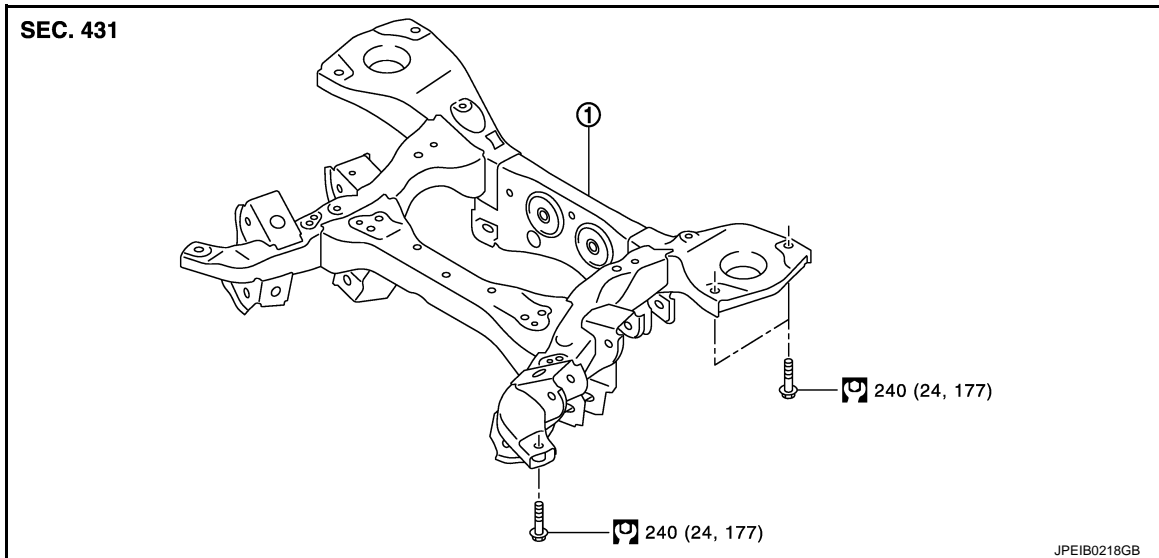
< UNIT REMOVAL AND INSTALLATION >

## UNIT REMOVAL AND INSTALLATION

### REAR SUSPENSION MEMBER

Exploded View

INFOID:000000009008554



1. Rear suspension member

Refer to [GI-4, "Components"](#) for symbols in the figure.

## Removal and Installation

INFOID:000000009008555

### REMOVAL

1. Reduce system pressure. (With HBMC) Refer to [SCS-18, "Work Procedure"](#).  
**CAUTION:**  
**Inadvertent piping removal causes fluid to splatter.**
2. Remove tires with power tool. Refer to [WT-63, "Removal and Installation"](#).
3. Remove emergency tires.
4. Remove front tube and main muffler. Refer to [EX-5, "Removal and Installation"](#).
5. Remove caliper assembly. Hang caliper assembly in a place where it will not interfere with work. Refer to [BR-43, "BRAKE CALIPER ASSEMBLY : Removal and Installation"](#).  
**CAUTION:**  
**Avoid depressing brake pedal while brake caliper is removed.**
6. Remove disc rotor. Refer to [RAX-7, "Removal and Installation"](#).
7. Remove wheel sensor harness from rear suspension member. Refer to [BRC-144, "REAR WHEEL SENSOR : Removal and Installation"](#).
8. Remove height sensor from rear lower link (right side). Refer to [EXL-134, "Removal and Installation"](#).
9. Remove vehicle height sensor from rear lower link (left side). Refer to [SCS-98, "Removal and Installation"](#).
10. Remove parking brake cable mounting bolt and separate parking brake cable from vehicle and rear suspension member. Refer to [PB-5, "Removal and Installation"](#).
11. Remove shock absorber mounting bolt (lower side).
12. Remove stabilizer bar. (Without HBMC). Refer to [RSU-17, "Removal and Installation"](#).
13. Remove rear lower link and coil spring. Refer to [RSU-8, "Removal and Installation"](#).
14. Remove drive shaft. Refer to [RAX-11, "Removal and Installation"](#).
15. Remove propeller shaft. Refer to [DLN-155, "Removal and Installation"](#) (2WD), [DLN-146, "Removal and Installation"](#) (AWD).

# REAR SUSPENSION MEMBER

## < UNIT REMOVAL AND INSTALLATION >

16. Remove final drive. Refer to [DLN-214, "Removal and Installation"](#).
17. Remove rear tube assembly A and rear tube assembly B. (With HBMC) Refer to [SCS-44, "REAR TUBE ASSEMBLY : Removal and Installation"](#).
18. Set suitable jack under rear suspension member.
19. Slowly lower jack, then remove rear suspension member, suspension arm, front lower link, wheel hub and housing from vehicle as a unit.
20. Remove mounting bolts and nuts, then remove suspension arm, front lower link, wheel hub and housing from rear suspension member.
21. Perform inspection after removal. Refer to [RSU-19, "Inspection and Adjustment"](#).

## INSTALLATION

Note the following, and install in the reverse order of the removal.

- Perform the final tightening of each of parts under unladen conditions, which were removed when removing rear suspension assembly.
- Perform inspection after installation. Refer to [RSU-19, "Inspection and Adjustment"](#).
- Perform adjustment after installation. (With HBMC) Refer to [RSU-19, "Inspection and Adjustment"](#).

## Inspection and Adjustment

INFOID:000000009008556

## INSPECTION AFTER REMOVAL

Check rear suspension member for deformation, cracks, or any other damage. Replace if necessary.

## INSPECTION AFTER INSTALLATION

1. Adjust parking brake operation (stroke). Refer to [PB-3, "Inspection and Adjustment"](#).
2. Check wheel sensor harness for proper connection. Refer to [BRC-144, "REAR WHEEL SENSOR : Exploded View"](#).
3. Check wheel alignment. Refer to [RSU-6, "Inspection"](#).
4. Adjust neutral position of steering angle sensor. Refer to [BRC-62, "Work Procedure"](#).

## ADJUSTMENT AFTER INSTALLATION (WITH HBMC)

Bleed air from the HBMC. Refer to [SCS-18, "Work Procedure"](#).

A  
B  
C  
D  
RSU  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

# SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

## SERVICE DATA AND SPECIFICATIONS (SDS)

### SERVICE DATA AND SPECIFICATIONS (SDS)

#### Wheel Alignment

INFOID:000000009008557

| Item                                     |   | Standard               |                          |
|--|---|------------------------|--------------------------|
| Camber<br>Degree minute (Decimal degree) | Minimum   | -1° 00' (-1.00°)       |                          |
|  | Nominal   | -0° 30' (-0.50°)       |                          |
|  | Maximum   | 0° 00' (0.00°)         |                          |
|  | Left and right difference                         | 0° 45' (0.75°) or less |                          |
| Toe-in                                   | Total toe-in<br>Distance                          | Minimum                | 0 mm (0 in)              |
|  |   | Nominal                | In 3.4 mm (In 0.134 in)  |
|  |   | Maximum                | In 6.8 mm (In 0.268 in)  |
|  | Total toe-angle<br>Degree minute (Decimal degree) | Minimum                | 0° 00' (0.00°)           |
|  |   | Nominal                | In 0° 13' 48" (In 0.23°) |
|  |   | Maximum                | In 0° 28' 12" (In 0.47°) |

Measure value under unladen\* conditions.

\*: Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.

#### Ball Joint

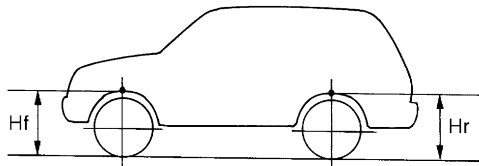
INFOID:000000009008558

| Item  |                  | Standard  |
|---|------------------|---|
| Swing torque                                    |                  | 0.5 – 6.4 N·m (0.06 – 0.65 kg-m, 5 – 56 in-lb)    |
| Measurement on spring balance (groove position) | Suspension arm   | 11.4 – 145.4 N (1.17 – 14.83 kg, 2.57 – 32.68 lb) |
|   | Front lower link | 11.0 – 140.6 N (1.13 – 14.34 kg, 2.48 – 31.60 lb) |
| Rotating torque                                 |                  | 0.5 – 6.4 N·m (0.06 – 0.65 kg-m, 5 – 56 in-lb)    |
| Axial end play                                  |                  | 0 mm (0 in)                                       |

#### Wheel Height

INFOID:000000009008559

| Item       | Standard          |
|------------|-------------------|
| Front (Hf) | 903 mm (35.55 in) |
| Rear (Hr)  | 890 mm (35.04 in) |



SFA746B

Measure value under unladen\* conditions.

\*: Fuel, engine coolant and lubricant are full. Spare tire, jack, hand tools and mats are in designated positions.