

## WHEEL ALIGNMENT

< PERIODIC MAINTENANCE >

### WHEEL ALIGNMENT

INFOID:0000060204670321

#### Inspection

#### 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.

#### 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.
- Some newer alignment machines are equipped with an optional "Rolling Compensation" method to "compensate" the sensors (alignment targets or head units). **Never use this "Rolling Compensation" method.**
- Use the "Jacking Compensation Method". After installing the alignment targets or head units, raise the vehicle and rotate the wheels 1/2 turn both ways.
- See Instructions in the alignment machine you're using for more information on this.

#### PRELIMINARY CHECK

Check the following:

- Tires for improper air pressure and wear.
- Road wheels for runout. Refer to WT-95, "Inspection".
- Wheel bearing axial end play. Refer to RAX-5, "Inspection".
- Ball joint axial end play of suspension arm. Refer to RSU-15, "Inspection".
- Shock absorber operation.
- Each mounting point of axle and suspension for looseness and deformation.
- Each of front lower link, rear lower link, radius rod, rear suspension member, suspension arm and shock absorber for cracks, deformation, and other damage.
- Vehicle height (posture).

#### ADJUSTMENT

##### Camber

- If outside the standard value, adjust with adjusting bolt (1) in front lower link (2).

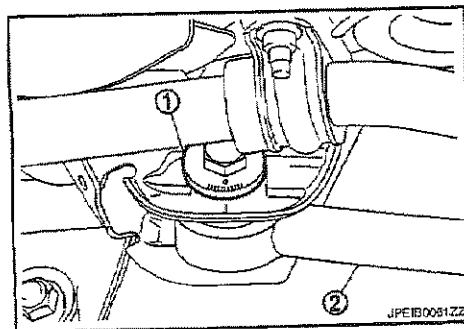
##### Standard

**Camber:** Refer to RSU-26, "Wheel Alignment".

##### CAUTION:

**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.



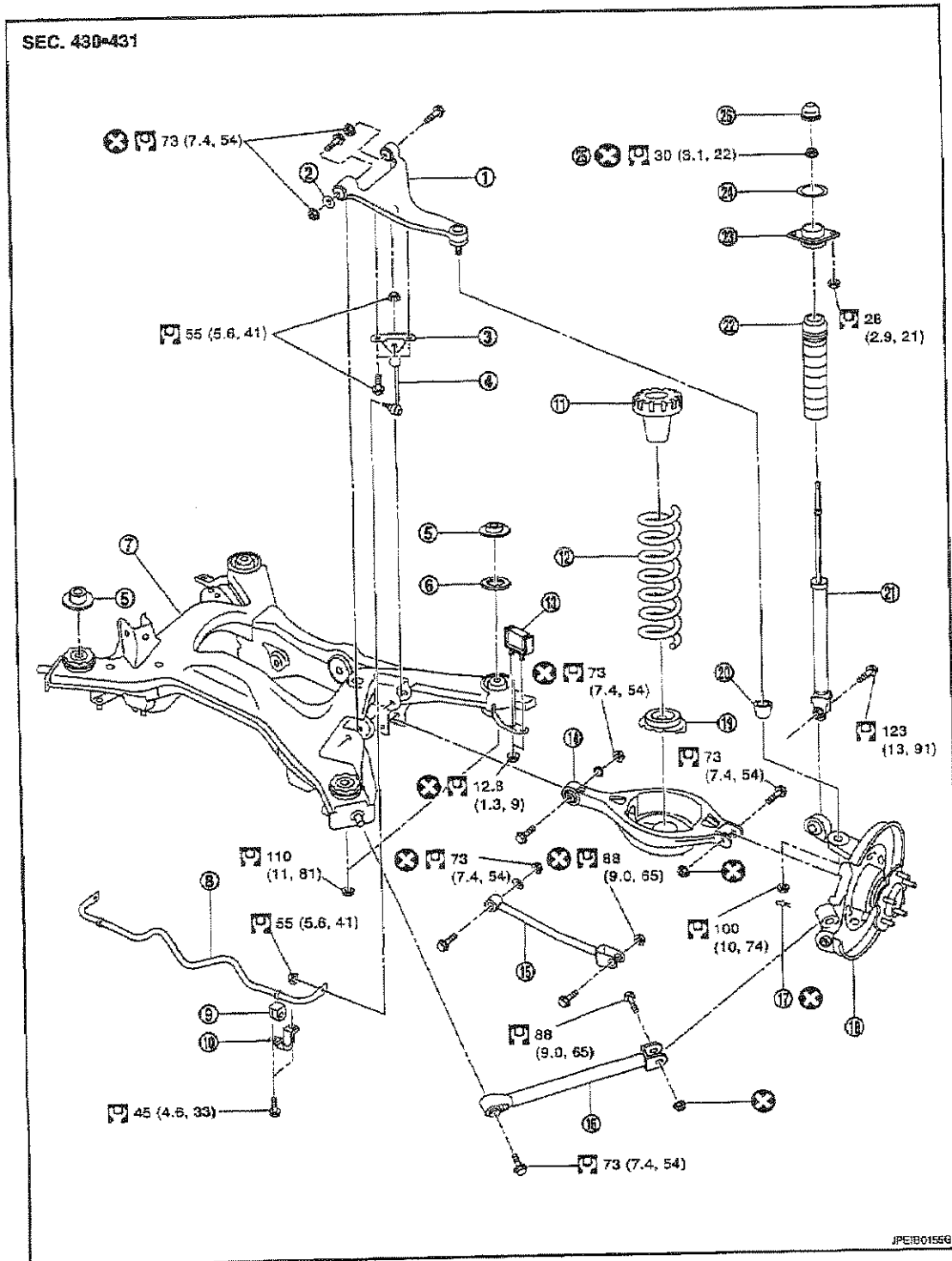
# REAR LOWER LINK & COIL SPRING

< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION REAR LOWER LINK & COIL SPRING

Exploded View

INFO ID: 600000004670322



## REAR LOWER LINK & COIL SPRING

### < REMOVAL AND INSTALLATION >

- |                                 |                                     |   |   |
|---------------------------------|-------------------------------------|---|---|
| 1. Suspension arm               | 2. Stopper rubber                   | 3. Stabilizer connecting rod mounting bracket | A |
| 4. Stabilizer connecting rod    | 5. Upper stopper (4WD model)        | 6. Mount stopper                              |   |
| 7. Suspension member            | 8. Stabilizer bar                   | 9. Stabilizer bushing                         | B |
| 10. Stabilizer clamp            | 11. Upper seat                      | 12. Coil spring                               |   |
| 13. Damper assembly (A/T model) | 14. Rear lower link                 | 15. Front lower link                          |   |
| 16. Radius rod                  | 17. Cotter pin                      | 18. Axle assembly                             | C |
| 19. Rubber seat                 | 20. Ball seat                       | 21. Shock absorber                            |   |
| 22. Bound bumper cover          | 23. Shock absorber mounting bracket | 24. Mounting seal                             | D |
| 25. Piston rod lock nut         | 26. Cap                             |   |   |

Refer to GI-4. "Components" for symbols in the figure.

## Removal and Installation

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RSU

### REMOVAL

1. Remove tires with power tool.
2. Set suitable jack under rear lower link to relieve the coil spring tension.
3. Loosen rear lower link mounting bolts and nuts (rear suspension member side), and then remove rear lower link mounting bolts and nuts (axle housing side) with power tool.
4. Slowly lower jack, then remove upper seat, coil spring and rubber sheet from rear lower link.
5. Remove rear lower link mounting bolts and nuts (rear suspension member side) to remove rear lower link with power tool.

### INSTALLATION

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

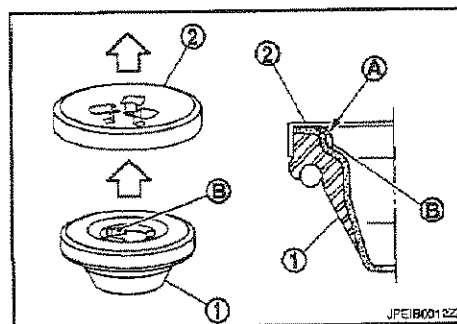
- Make sure that upper seat is attached as shown in the figure.

#### CAUTION:

**Make sure that the projecting parts (A) on upper seat (1) inside is securely fitted on the bracket (2) tabs (B).**

↳ Body

- Match up rubber seat indentions and rear lower link grooves and attach.

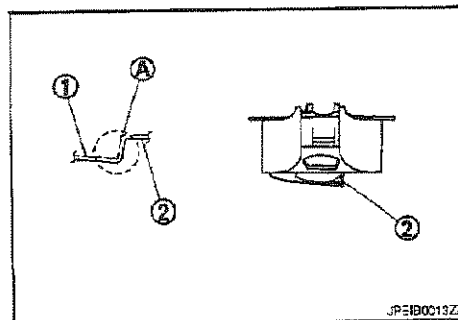


- Install the coil spring by aligning the lower end of the large diameter side to the step (A) between the rubber seat (1) and the rear lower link (2).

#### CAUTION:

**Make sure spring is not up side down. The top and bottom are indicated by paint color.**

- Perform the final tightening of rear suspension member and axle installation position (rubber bushing) under unladen condition with tires on level ground.



## Inspection

### INSPECTION AFTER REMOVAL

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

### INSPECTION AFTER INSTALLATION

## SERVICE DATA AND SPECIFICATIONS (SDS)

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#### Wheel Alignment

INFOID:0000000004504373

Item		Standard	
Camber Degree minute (Decimal degree)	Minimum	-1° 45' (-1.75°)	
	Nominal	-1° 15' (-1.25°)	
	Maximum	-0° 45' (-0.75°)	
Total toe-in	Distance	Minimum	0 mm (0 in)
		Nominal	In 2.8 mm (0.110 in)
		Maximum	In 5.6 mm (0.220 in)
	Angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0° 00' (0.00°)
		Nominal	In 0° 07' (0.12°)
		Maximum	In 0° 14' (0.23°)

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

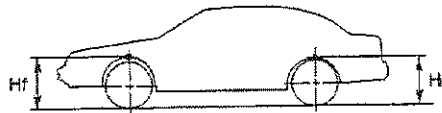
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Item	Standard
Swing torque	0.5 – 3.4 N·m (0.06 – 0.34 kg·m, 5 – 30 in·lb)
Measurement on spring balance (cotter pinhole position)	8.1 – 54.8 N (0.83 – 5.6 kg, 1.82 – 12.32 lb)
Rotating torque	0.5 – 3.4 N·m (0.06 – 0.34 kg·m, 5 – 30 in·lb)
Axial end play	0 mm (0 in)

#### Wheelarch Height

INFOID:0000000004504375

Applied model	2WD		AWD
	Except for sports models	For sports models	
Wheel size	18 inch	19 inch	18 inch
Front (Hf)	712 mm (28.03 in)	715 mm (28.15 in)	726 mm (28.58 in)
Rear (Hr)	702 mm (27.64 in)	705 mm (27.76 in)	718 mm (28.27 in)



SFA81BA

Measure value under unladen\* conditions.

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