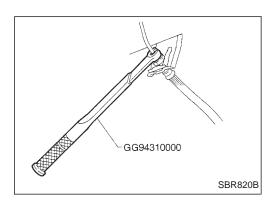
REAR AXLE & REAR SUSPENSION



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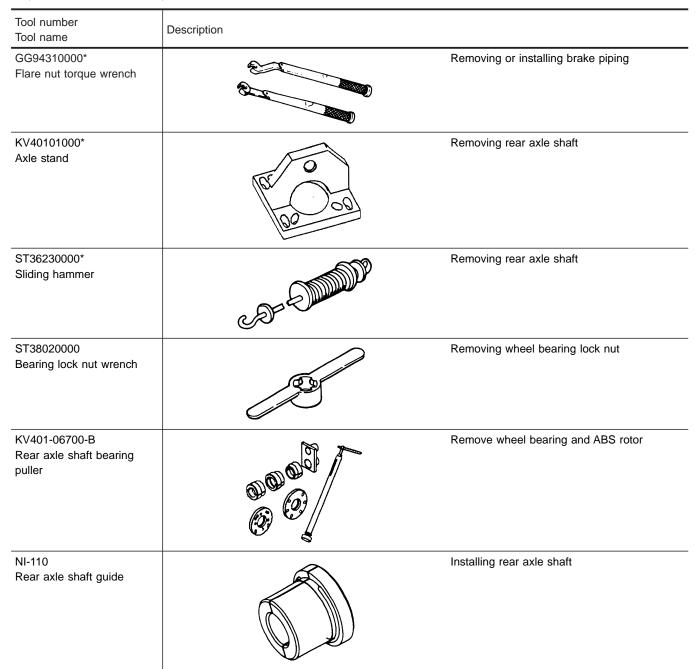


Precautions

- When installing each rubber part, final tightening must be carried out under unladen condition* with tires on ground.
 - * Fuel, radiator coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.
- Use Tool when removing or installing brake tubes.
- If suspension or suspension parts are dismounted, check wheel alignment and adjust if necessary.
- Do not jack up vehicle at lower link.

Preparation SPECIAL SERVICE TOOLS

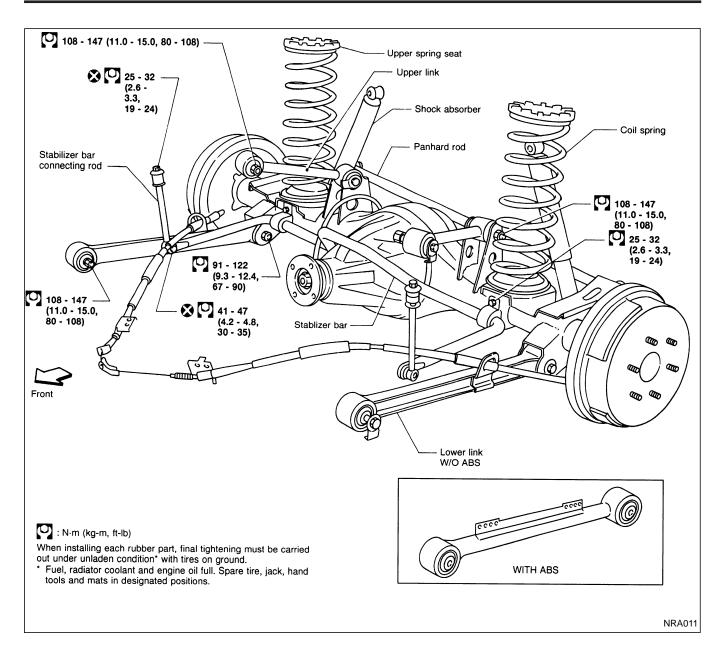
*: Special tool or commercial equivalent

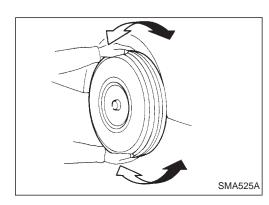


PRECAUTIONS AND PREPARATION Preparation (Cont'd)

Tool number Tool name	Description	
NI-104 Rear axle bearing removal installation kit		Install and remove rear wheel bearing and shaft

REAR AXLE AND REAR SUSPENSION



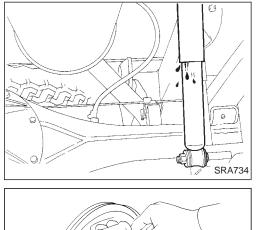


Rear Axle and Rear Suspension Parts

Check rear axle and rear suspension parts for looseness, wear or damage.

• Shake each rear wheel to check for excessive play.

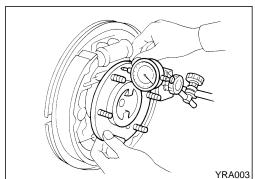
• Retighten all nuts and bolts to the specified torque. **Tightening torque: refer to REAR AXLE AND REAR SUSPENSION, RA-4.**



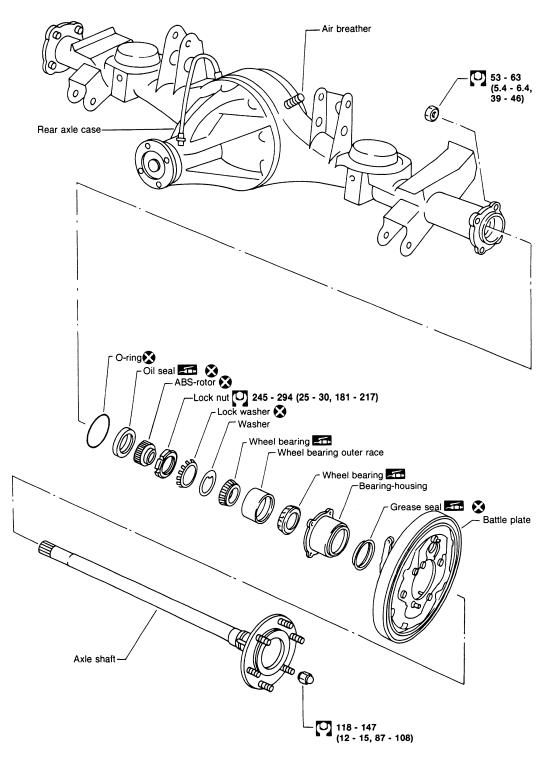
• Check shock absorber for oil leakage or other damage.

Rear Wheel Bearing

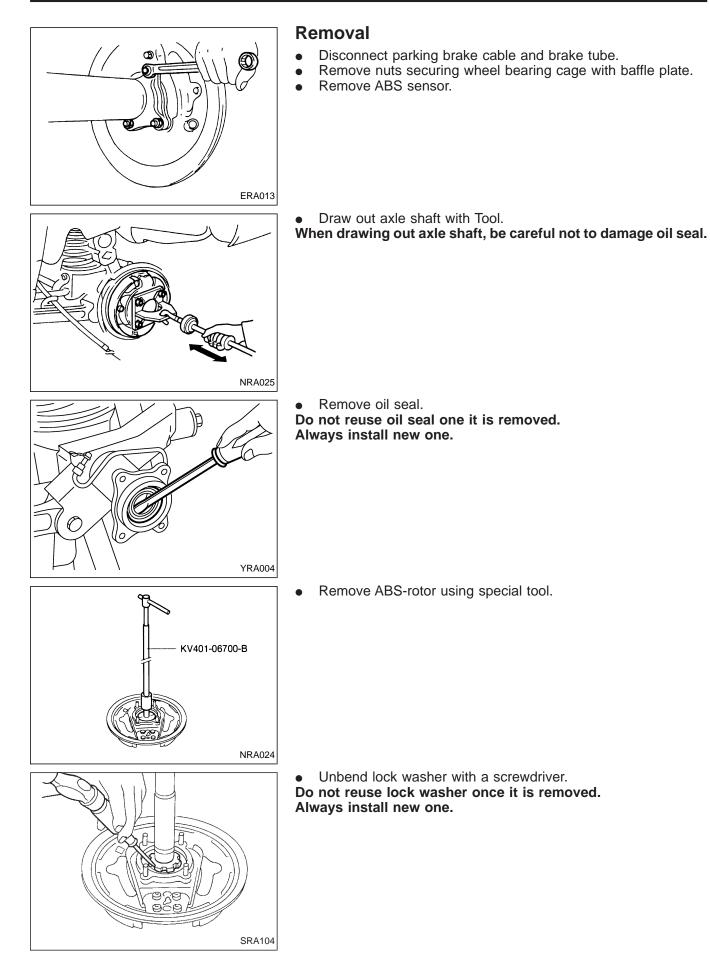
- Check that wheel bearings operate smoothly.
 - Check axial end play. Axial end play: Refer to SDS, RA-16.



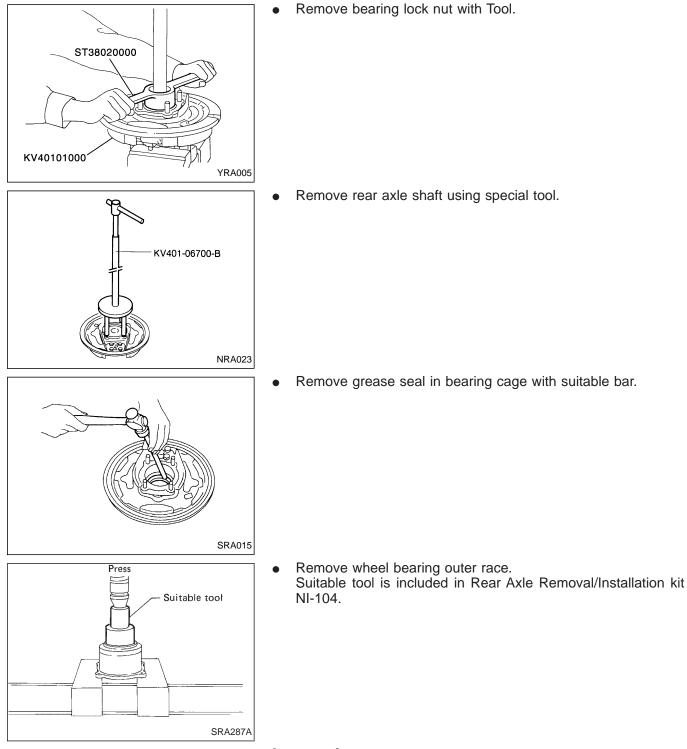
Components



: N·m (kg-m, ft-lb)



Removal (Cont'd)



Inspection

AXLE SHAFT

• Check axle shaft for straightness, cracks, damage, wear or distortion. Replace if necessary.

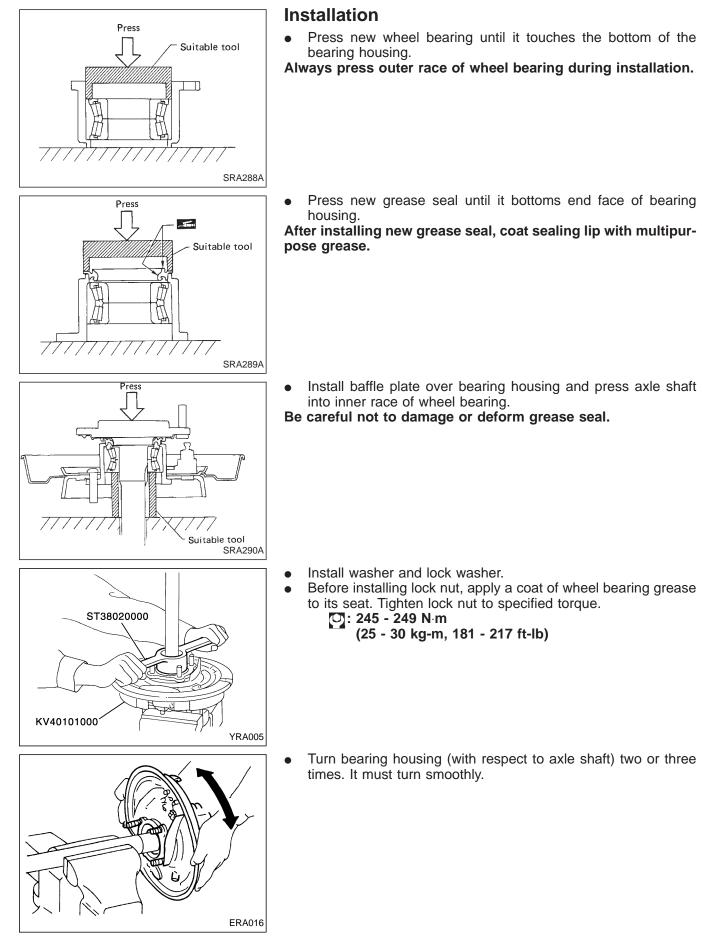
BEARING HOUSING

• Check bearing housing for deformation or cracks. Replace if necessary.

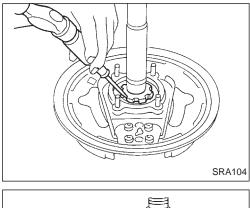
REAR AXLE HOUSING

• Check rear axle housing for yield, deformation or cracks. Replace if necessary.

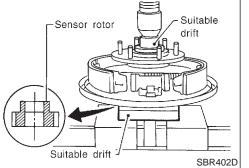
RA-8



Installation (Cont'd)



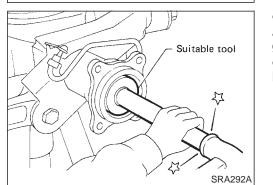
• Secure lock nut by bending one portion of lock washer.



Installation

Install the sensor rotor using suitable drift and press.

- Always replace sensor rotor with new one.
- Pay attention to the direction of front sensor rotor as shown in figure.

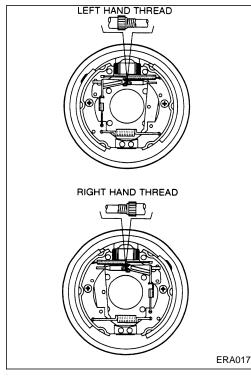


• Install new oil seal to rear axle housing using a suitable tool. After installing new oil seal, coat sealing lip with multi-purpose grease.

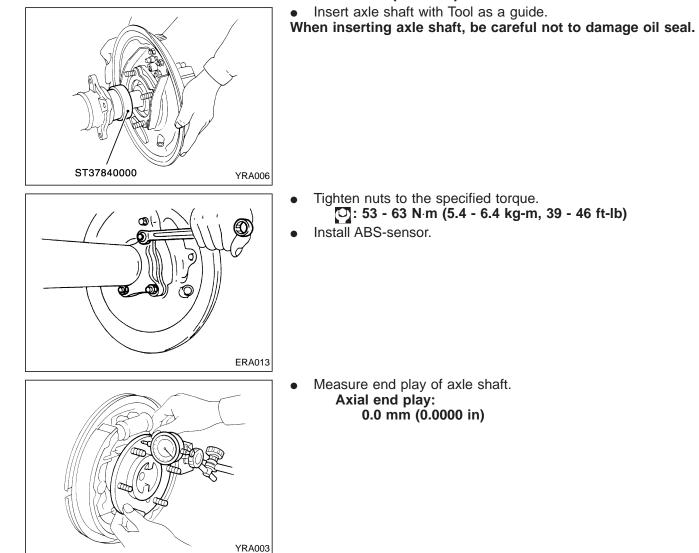
• Position axle shafts in rear axle housing. **Be careful not to damage oil seal.**

 When the ball-bearing holder and the brake are installed in the base of the axle, they need to be correctly positioned.
A quick way to determine on which side the holder should be

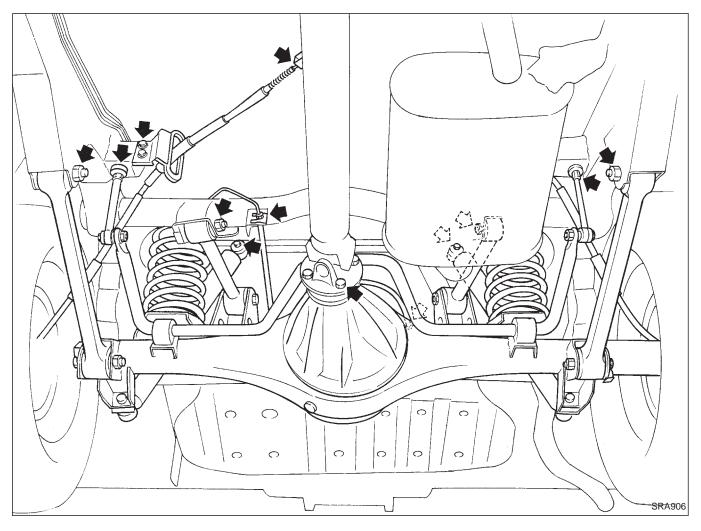
located, is to look at the brake adjustment screw. Left-hand thread: Install the holder on the left side. Right-hand thread (Normal) Install the holder on the right side.

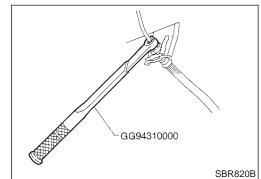


Installation (Cont'd)



Removal and Installation



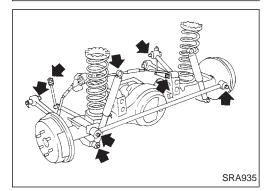


• Disconnect brake hydraulic line and parking brake cable. **CAUTION:**

Use Tool when removing or installing brake tubes.

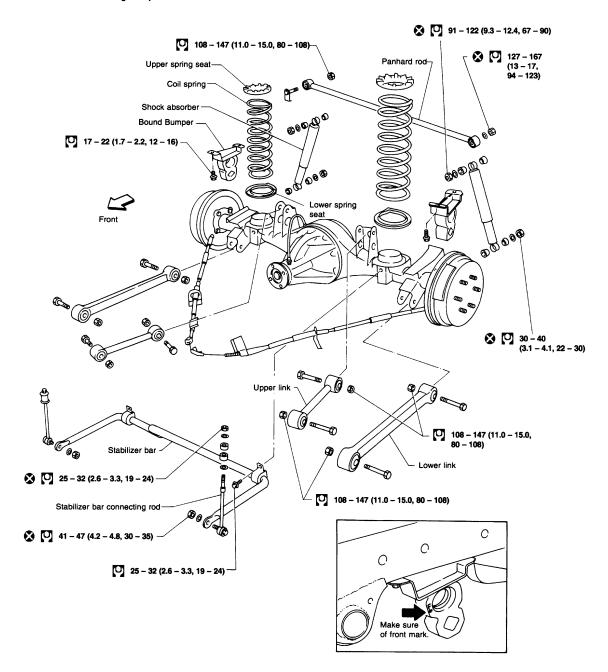
- Remove stabilizer bar from body
- Remove upper links and lower links from body.
- Remove panhard rod from body.
- Disconnect propeller shaft.
- Remove upper end nuts of shock absorber.

Final tightening for rubber parts requires to be carried out under unladen condition with tires on ground.

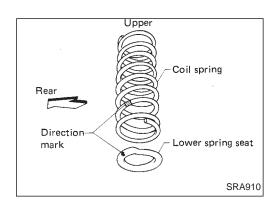


Components

When installing each rubber part, final tightening must be carried out under unladen condition* with tires on ground. * Fuel, radiator coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.



: N·m (kg-m, ft-lb)



Coil Spring Shock Absorber

REMOVAL AND INSTALLATION

 Refer to Removal and Installation of REAR AXLE AND REAR SUSPENSION, RA-12.

When installing coil spring and lower spring seat, pay attention to its direction.

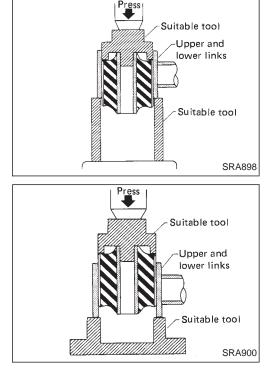
Be sure spring rubber seat is not twisted and has not slipped off when installing coil spring.

INSPECTION

- Check coil spring for yield, deformation or cracks.
- Check coil spring specifications. Refer to SDS, RA-16.
- Check shock absorber for oil leakage, cracks or deformation.
- Check shock absorber specifications. Refer to SDS, RA-16.
- Check all rubber parts for wear, cracks or deformation. Replace if necessary.

Upper Link, Lower Link and Panhard Rod INSPECTION

Check for cracks, distortion or other damage. Replace if necessary.



BUSHING REPLACEMENT

Check for cracks or other damage. Replace with suitable tool if necessary.

• Remove bushing with suitable tool.

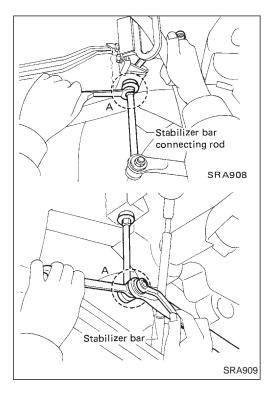
When installing bushing, apply a coating of 1% soap water to outer wall of bushing. Always install new bushing. Do not tap end face of bushing directly with a hammer.

REAR SUSPENSION

Upper Link, Lower Link and Panhard Rod (Cont'd)

INSTALLATION

When installing each link, pay attention to direction of bolts and nuts. Refer to REAR SUSPENSION - Components, RA-13. When installing each rubber part, final tightening must be carried out under unladen condition with tires on ground.



Stabilizer Bar REMOVAL AND INSTALLATION

• When removing and installing stabilizer bar, fix portion A.

General Specifications

Model	Hardtop	Wagon
Coil spring		
Wire diameter mm (in)	13.0 (0.512)	13.5 (0.531)
Free length mm (in)	400 (15.75)	417 (16.42)
Spring constant N/mm (kg/mm, lb/in)	25.5 (2.6, 146)	29 (3.0, 168)
Shock absorber		
Shock absorber type	Non-adjustable (hydraulic)	
Maximum length mm (in)	586 (23.07)	596 (23.46)
Minimum length mm (in)	350 (13.78)	356 (14.02)
Damping force [at 0.3 m (1.0 ft)/sec.] N (kg, lb)		
Expansion	990 - 1,330 (101 - 136, 223 - 229)	1,169 - 1,563 (119 - 159, 223 - 351)
Compression	346 - 524 (35.3 - 53.4, 77.8 - 117.8)	301 - 461 (30.7 - 47.0, 67.7 - 103.6)

COIL SPRING AND SHOCK ABSORBER

STABILIZER BAR

Model		Hardtop	Wagon
Diameter	mm (in)	23 (0.91)	24 (0.94)
Spring constant N/mm (kg/mm, lb/in)		24.5 (2.5, 140)	29.0 (3.0, 166)



RA260

Inspection and Adjustment

WHEEL BEARING

Total end play mm (in) 0 (0)