

REAR AXLE & REAR SUSPENSION

SECTION **RA**

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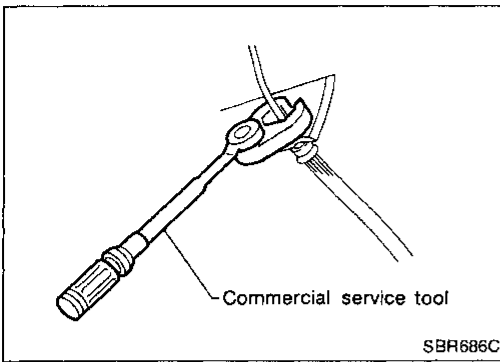
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PRECAUTIONS AND PREPARATION

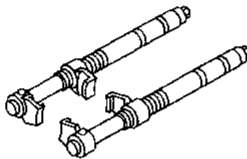
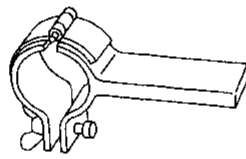
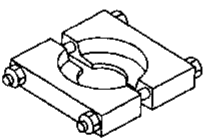
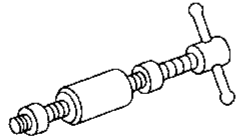
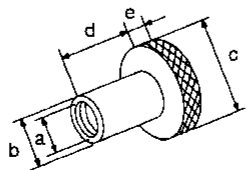


Precautions

- When installing rubber parts, 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 flare nut wrench when removing or installing brake lines.
- After installing removed suspension parts, check wheel alignment and adjust if necessary.
- Always torque brake lines when installing.
- Do not jack up at the lower arm.

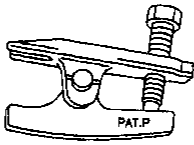
Preparation

SPECIAL SERVICE TOOLS

Tool number (Kent-Moore No.) Tool name	Description
HT71780000 (—) Spring compressor	 <p>Removing and installing coil spring</p> <p>NT144</p>
ST35652000 (—) Shock absorber attachment	 <p>Fixing strut assembly</p> <p>NT145</p>
ST30031000 (J22912-01) Bearing puller	 <p>Removing inner race of wheel bearing</p> <p>NT071</p>
ST38280000 (—) Arm bushing remover	 <p>Removing and installing rear axle housing bushing</p> <p>NT157</p>
IM23600800 (—) Attachment	 <p>Measure rear wheel alignment</p> <p>a: Screw M24 x 1.5 b: 35 (1.38) dia. c: 65 (2.56) dia. d: 56 (2.20) e: 12 (0.47)</p> <p>Unit: mm (in)</p> <p>NT148</p>

PRECAUTIONS AND PREPARATION

Preparation (Cont'd)

Tool number (Kent-Moore No.) Tool name	Description	
HT72520000 (J25730-A) Ball joint remover		Removing tie-rod outer end and lower ball joint
	NT146	

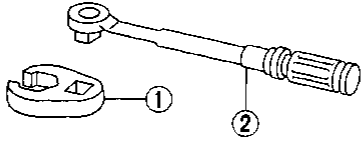
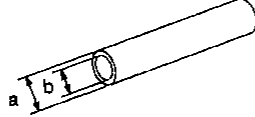
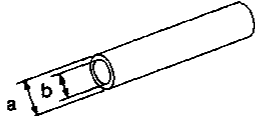
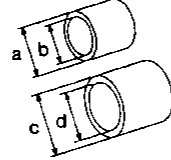
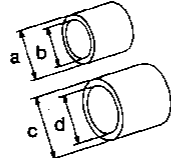
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COMMERCIAL SERVICE TOOLS

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Tool name	Description	
① Flare nut crows foot ② Torque wrench		Removing and installing each brake piping
	NT223	
Rear wheel bearing drift		Installing wheel bearing a: 76 mm (2.99 in) dia. b: 68.5 mm (2.697 in) dia.
	NT065	
Rear drive shaft plug seal drift		Installing rear drive shaft plug seal a: 78 mm (3.07 in) dia. b: 72 mm (2.83 in) dia.
	NT065	
Rear axle housing ball joint drift		Removing ball joint a: 28 (1.10) dia. b: 20 (0.79) dia. c: 43 (1.69) dia. d: 40 (1.57) dia.
	NT164	Unit: mm (in)
Rear axle housing ball joint drift		Installing ball joint a: 43 (1.69) dia. b: 33 (1.30) dia. c: 40 (1.57) dia. d: 30 (1.18) dia.
	NT164	Unit: mm (in)

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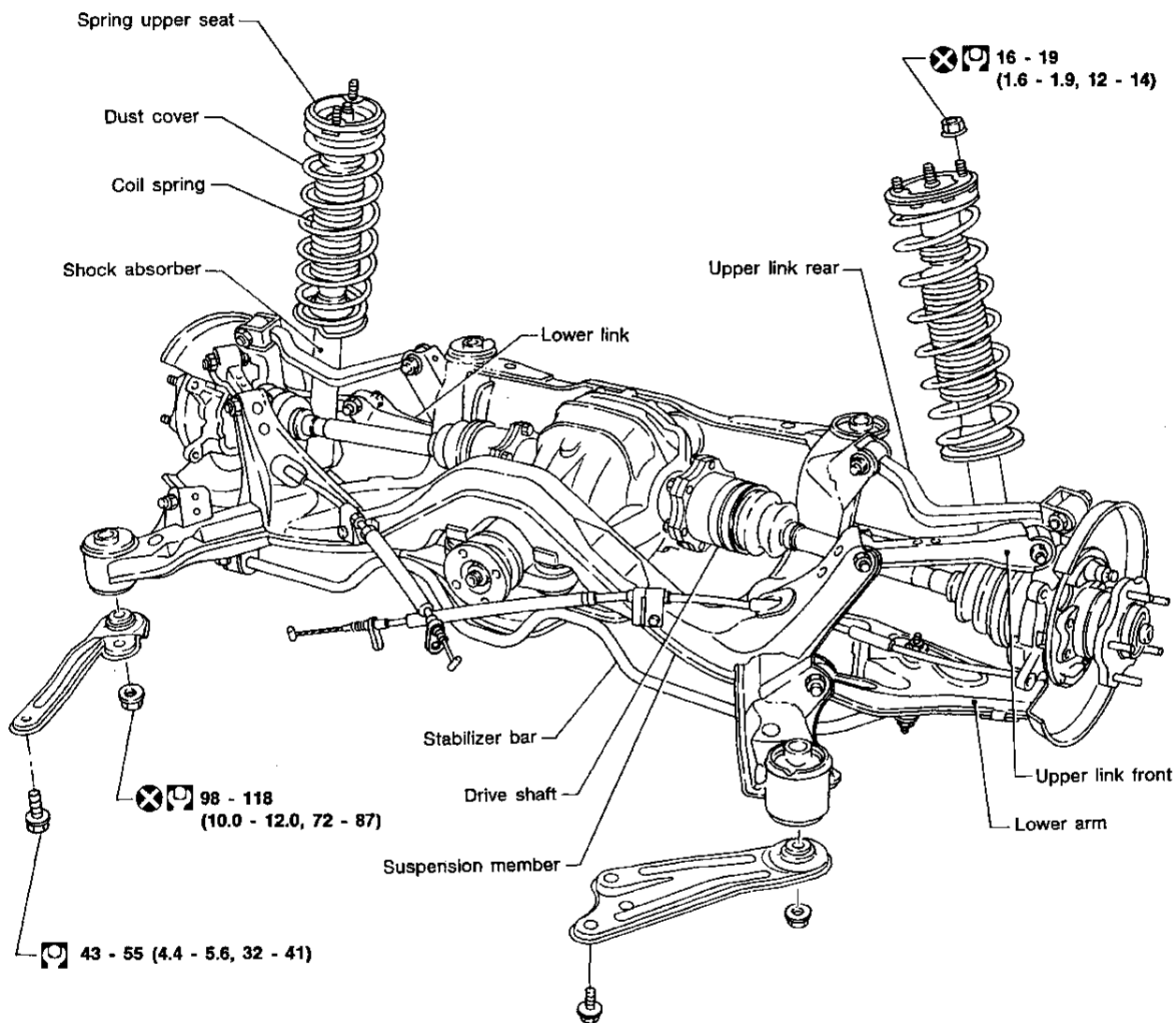
REAR AXLE AND REAR SUSPENSION

When installing rubber parts, final tightening must be carried out under unladen condition* with tires on ground.

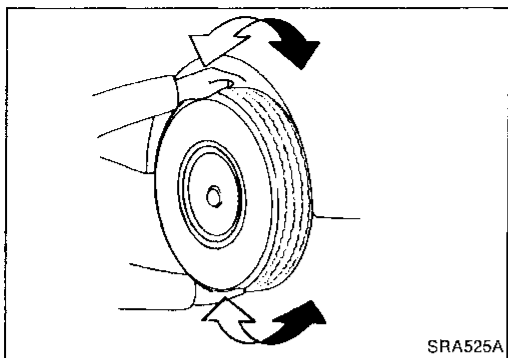
* Fuel, radiator coolant and engine oil full.

Spare tire, jack, hand tools and mats in designated positions.

For models equipped with SUPER HICAS system, refer to "SUPER HICAS".



: N·m (kg·m, ft·lb)



Rear Axle and Rear Suspension Parts

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

- Shake each rear wheel to check for excessive play.

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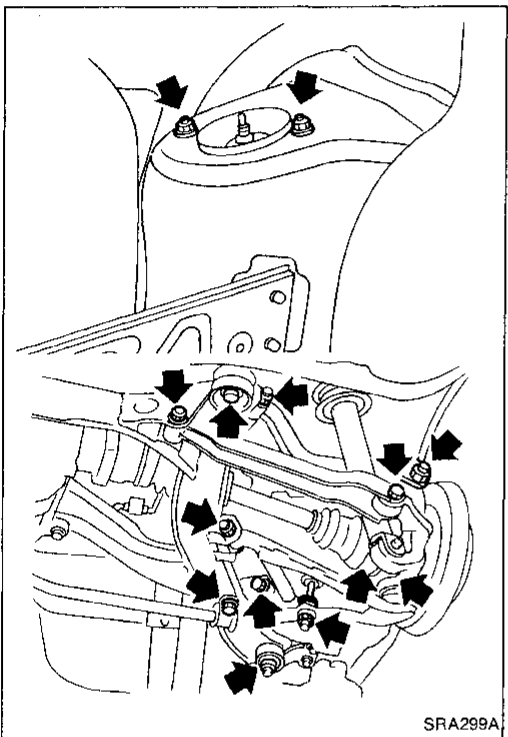
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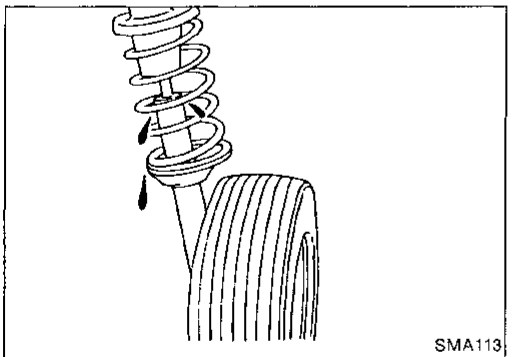
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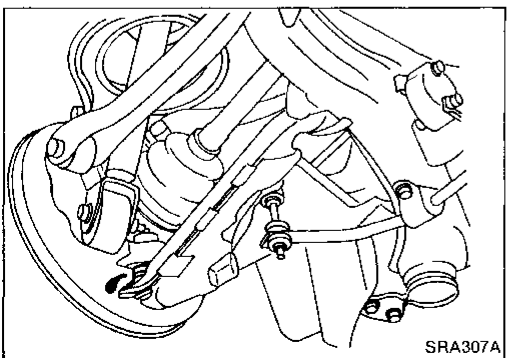
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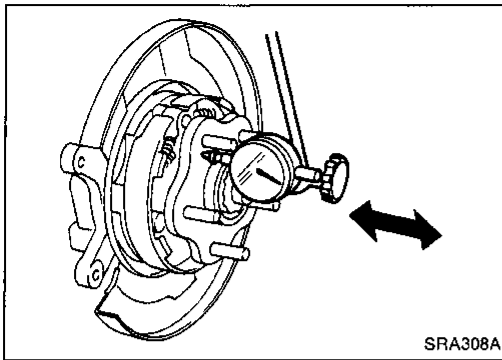
- Retighten all nuts and bolts to the specified torque.
Tightening torque:
Refer to drawing in REAR SUSPENSION (RA-20).
- Make sure that cotter pin is inserted.



- Check shock absorber for oil leakage or other damage.
- Check wheelarch height. Refer to Front Axle and Front Suspension Parts of ON-VEHICLE SERVICE in FA section.



- Check suspension ball joint for grease leakage and ball joint dust cover for cracks or other damage.



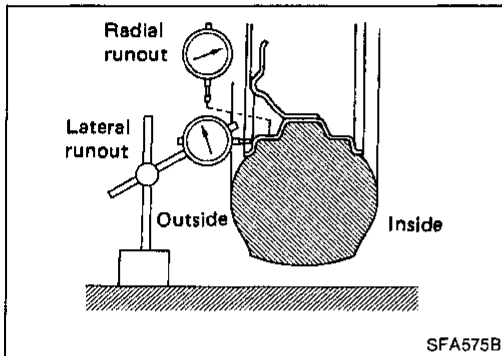
Rear Wheel Bearing

- Check wheel bearings for smooth operation.
- Check axial end play.

Axial end play:

0.05 mm (0.0020 in) or less

If axial end play is not within specification or wheel bearing does not turn smoothly, replace wheel bearing assembly. Refer to REAR AXLE — Wheel Hub and Axle Housing (RA-10).



Rear Wheel Alignment

Before checking rear wheel alignment, be sure to make a preliminary inspection.

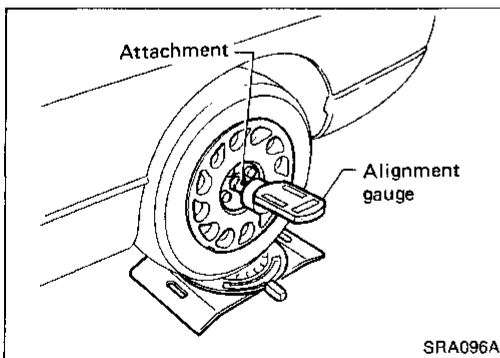
PRELIMINARY INSPECTION

Make the following checks. Adjust, repair or replace if necessary.

- Check tires for wear and for improper inflation.
- Check rear wheel bearings for looseness.
- Check wheel runout.

Refer to SDS in FA section.

- Check that rear shock absorber works properly.
- Check rear axle and rear suspension parts for looseness.
- Check vehicle posture (Unladen).
("Unladen": Fuel tank, radiator and engine oil full. Spare tire, jack, hand tools and mats in designated positions.)

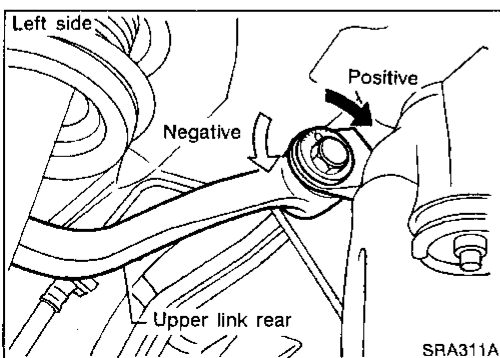


CAMBER

- Measure camber of both right and left wheels with a suitable alignment gauge and adjust in accordance with the following procedures.

Camber:

Refer to SDS (RA-31).



If camber is not within specification, adjust by turning the adjusting bolt.

- (1) Turn the adjusting bolt to adjust.

Camber changes about 5' with each graduation of the adjusting bolt.

- (2) Tighten to the specified torque.

**⌚: 69 - 88 N·m
(7.0 - 9.0 kg-m, 51 - 65 ft-lb)**

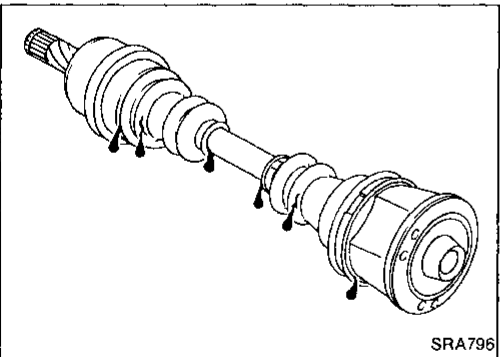
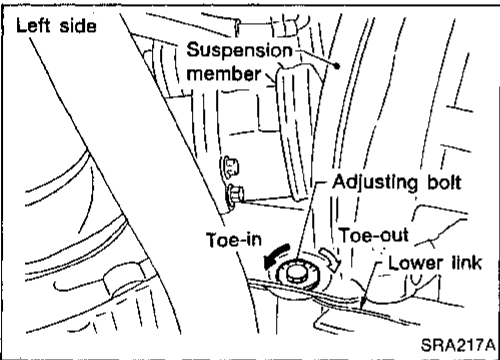
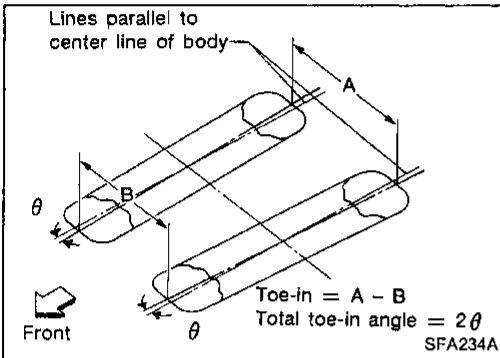
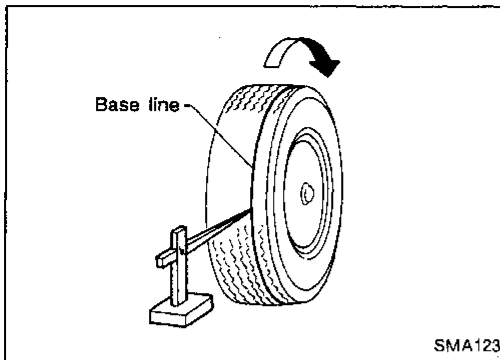
ON-VEHICLE SERVICE

Rear Wheel Alignment (Cont'd)

TOE-IN

1. Draw a base line across the tread.

After lowering rear of vehicle, move it up and down to eliminate friction.



2. Measure toe-in.

Measure distance "A" and "B" at the same height as hub center.

Toe-in:

Refer to SDS (RA-31).

3. Adjust toe-in by turning adjusting bolts. For models equipped with SUPER HICAS system, refer to SUPER HICAS (RA-28).

Toe changes about 1.5 mm (0.059 in) [One side] with each graduation of the adjusting bolt.

4. Tighten to the specified torque.

: 69 - 88 N·m

(7.0 - 9.0 kg-m, 51 - 65 ft-lb)

Drive Shaft

Check boot and drive shaft for cracks, wear, damage or grease leakage.

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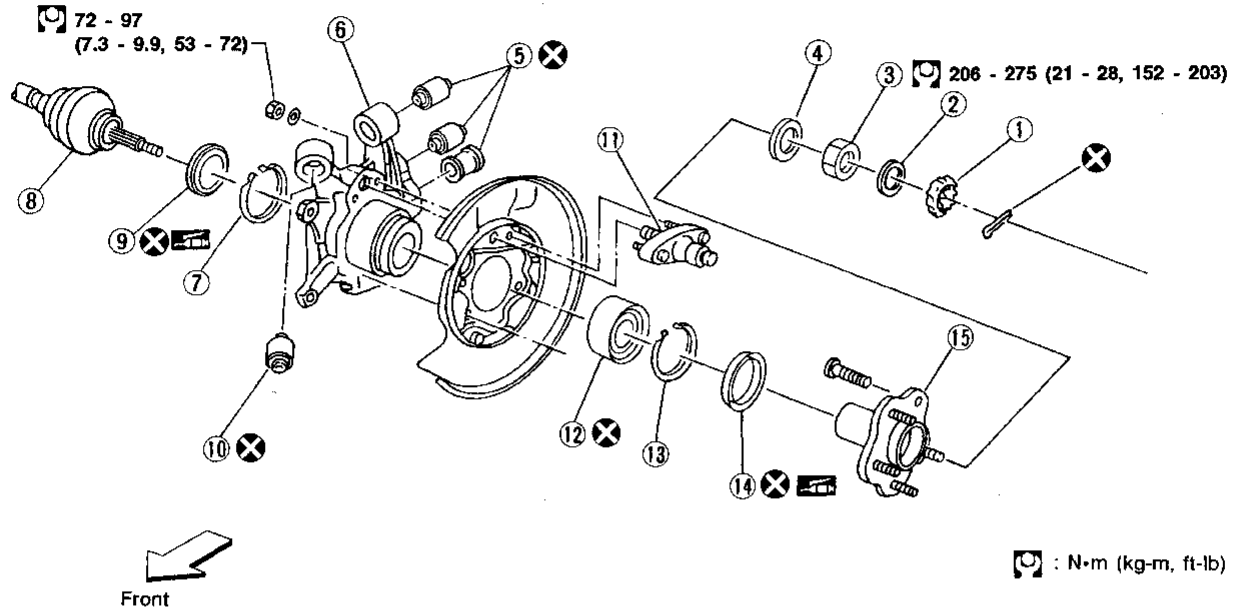
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REAR AXLE

When installing rubber parts, final tightening must be carried out under unladen condition* with tires on ground.

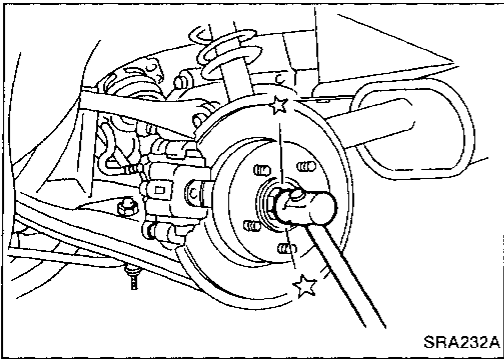
* Fuel, radiator coolant and engine oil full.
Spare tire, jack, hand tools and mats in designated positions.



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|--------------------------|----------------|--------------------|
| ① Adjusting cap | ⑥ Axle housing | ⑪ Brake anchor pin |
| ② Insulator | ⑦ Snap ring | ⑫ Wheel bearing |
| ③ Wheel bearing lock nut | ⑧ Drive shaft | ⑬ Snap ring |
| ④ Washer | ⑨ Grease seal | ⑭ Grease seal |
| ⑤ Bushing | ⑩ Bushing | ⑮ Wheel hub |

REAR AXLE



Removal

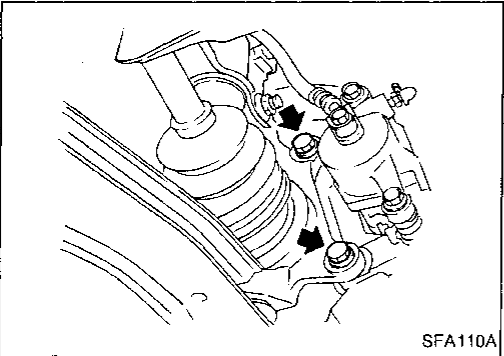
- Remove wheel bearing lock nut.
- Separate drive shaft from axle housing by lightly tapping it. If it is hard to remove use puller.

When removing drive shaft, cover boots with shop towel to prevent them from being damaged.

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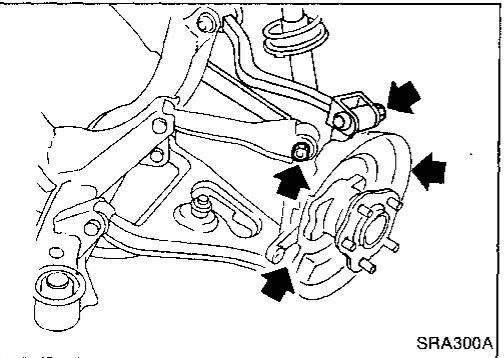
- Remove brake caliper assembly and rotor. **Brake line need not be disconnected from brake caliper. Be careful not to depress brake pedal, or piston will pop out. Do not pull or twist brake hose.**

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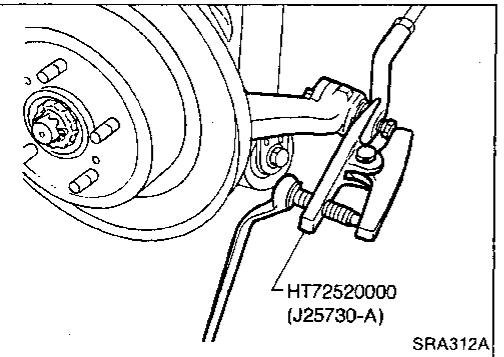
- Remove axle housing.

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- Disconnect ball joint with Tool. (Models with SUPER HICAS system) **Do not remove nut completely while using Tool.**

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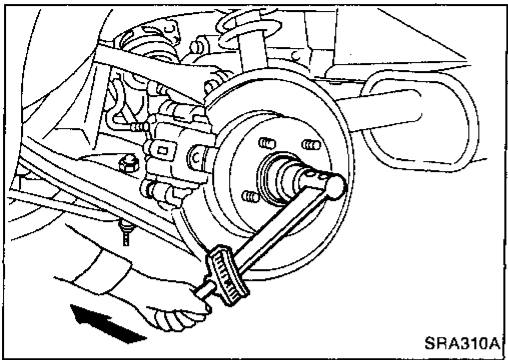
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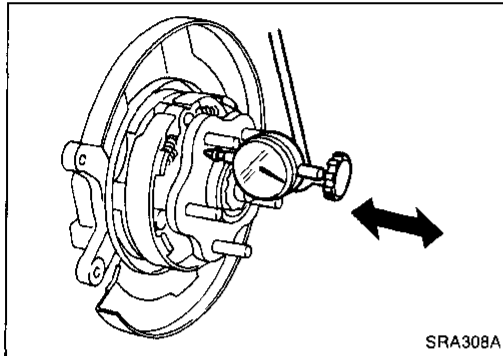
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REAR AXLE — Wheel Hub and Axle Housing



Installation

- Install axle housing with wheel hub.
- Tighten wheel bearing lock nut.
□: 206 - 275 N·m
(21 - 28 kg-m, 152 - 203 ft-lb)



- Check wheel bearing axial end play.
Axial end play: 0.05 mm (0.0020 in) or less
- Make sure that wheel bearings operate smoothly.
- Check toe-in — Refer to ON-VEHICLE SERVICE (RA-7).

Disassembly

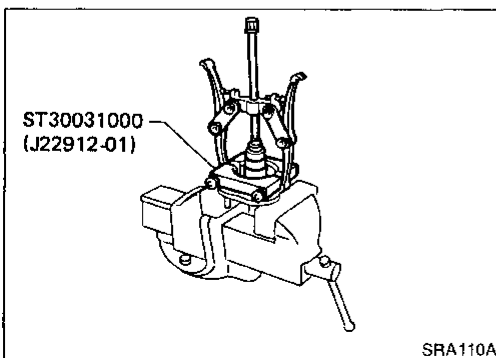
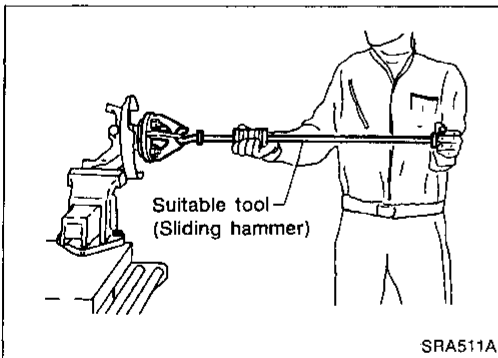
CAUTION:

Wheel bearing usually does not require maintenance. If any of the following symptoms are noted, replace wheel bearing assembly.

- Growling noise is emitted from wheel bearing during operation.
- Wheel bearing drags or turns roughly when hub is turned with your hand after bearing lock nut is tightened to specified torque.
- After wheel bearing is removed from hub.

WHEEL BEARING

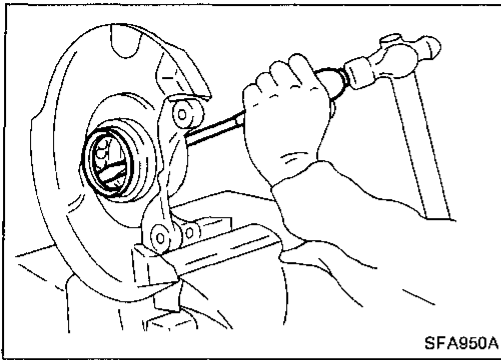
- Remove wheel hub from axle housing using a suitable tool.



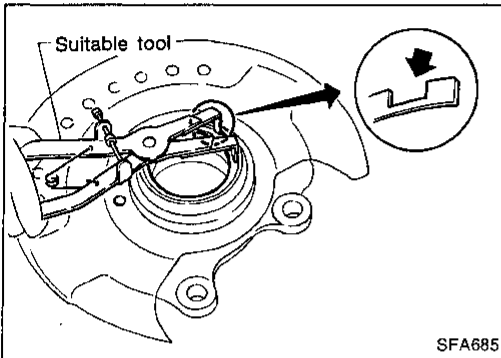
- Remove inner race from hub using a bearing replacer/puller.

REAR AXLE — Wheel Hub and Axle Housing

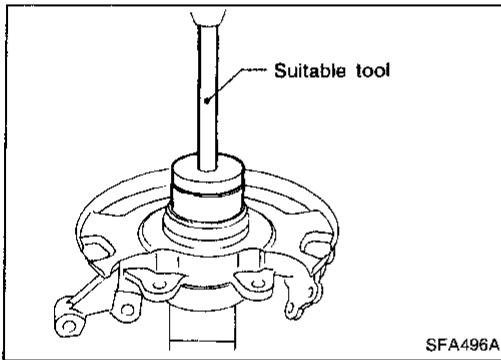
Disassembly (Cont'd)



- Remove grease seal from axle housing.



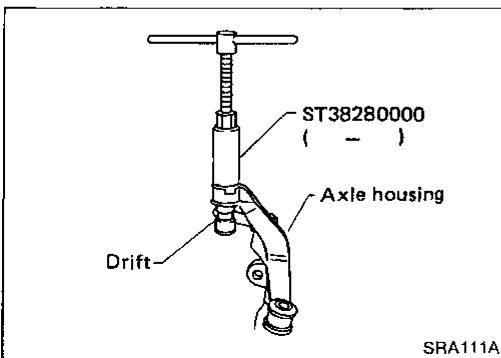
- Remove snap ring.



- Press out bearing outer race.

CAUTION:

Do not reuse old inner race although it is of the same brand as the bearing assembly.



AXLE HOUSING

- Attach a drift on outer shell of bushing as shown in figure at left, remove bushing using arm bushing remover.

When placing axle housing in a vise, use wooden blocks or copper plates as pads.

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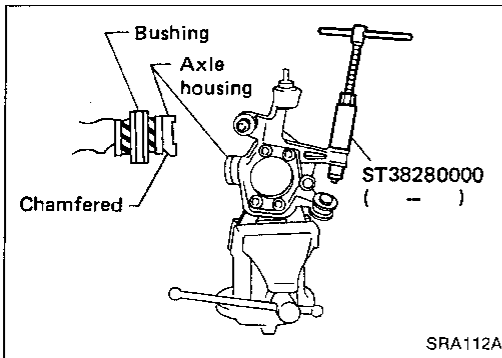
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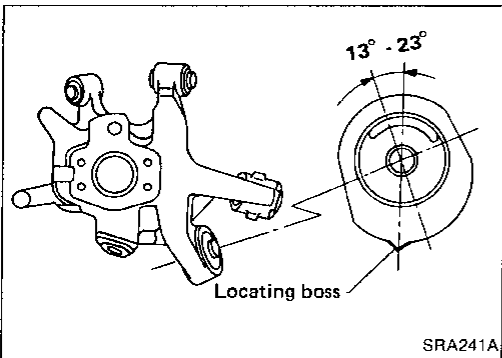
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REAR AXLE — Wheel Hub and Axle Housing

Disassembly (Cont'd)



- Ensure axle housing bore is free from scratches or deformities before pressing bushing into it.
- Attach bushing to chamfered bore end of axle housing and press it until it is flush with end face of axle housing.



- When installing shock absorber bushing, make sure that it is positioned as shown.

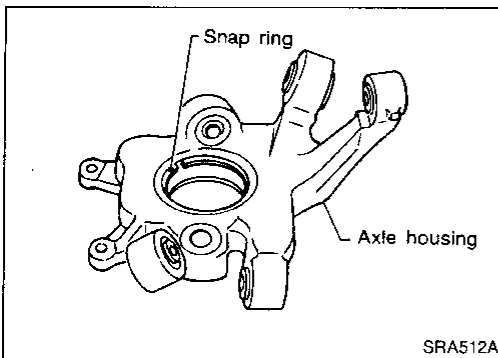
Inspection

WHEEL HUB AND AXLE HOUSING

- Check wheel hub and axle housing for cracks by using a magnetic exploration or dyeing test.
 - Check wheel bearing for damage, seizure, rust or rough operation.
 - Check rubber bushing for wear or other damage.
 - Check snap ring for wear or cracks.
- Replace if necessary.

Assembly

1. Install snap ring into groove of axle housing.



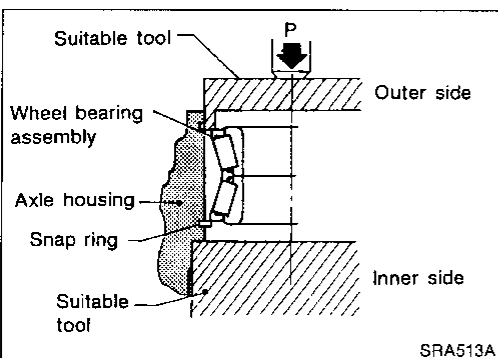
2. Press new wheel bearing assembly into axle housing. Press only on outer race of wheel bearing assembly.

Maximum load P:

29 kN (3 ton, 3.3 US ton, 3.0 Imp ton)

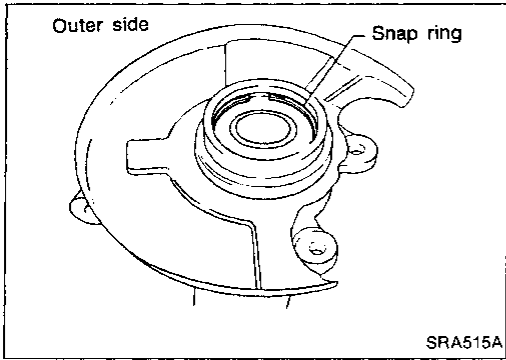
CAUTION:

- Do not press inner race of wheel bearing assembly.
- Do not apply oil or grease to mating surfaces of wheel bearing outer race and axle housing.
- Before pressing, check for correct bearing grease seal orientation, as inner and outer seals are different.

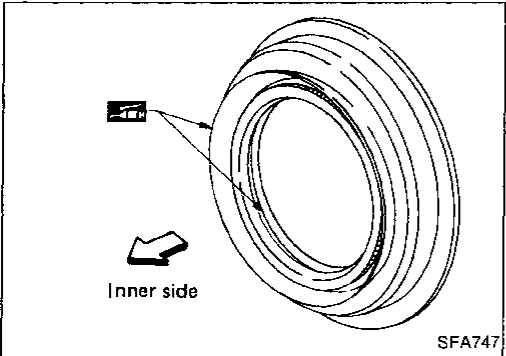


REAR AXLE — Wheel Hub and Axle Housing

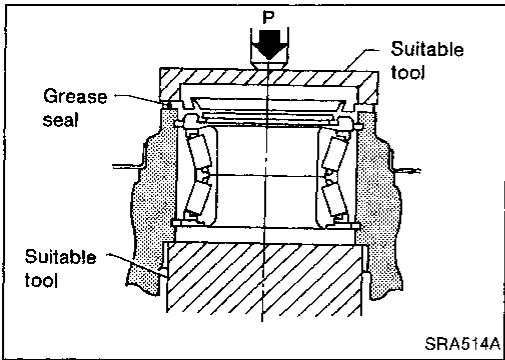
Assembly (Cont'd)



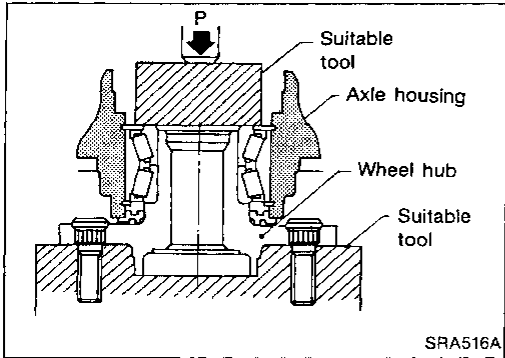
- Install snap ring.



- Pack grease seal lip with multi-purpose grease.



- Install outer grease seal.



- Press wheel hub into axle housing with suitable tool.
Maximum load P:
29 kN (3 ton, 3.3 US ton, 3.0 Imp ton)
Be careful not to damage grease seal.

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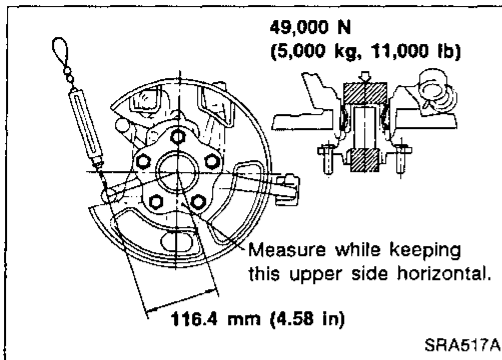
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REAR AXLE — Wheel Hub and Axle Housing

Assembly (Cont'd)



With wheel hub pressed into axle housing, apply 49,000 N (5,000 kg, 11,000 lb) to wheel hub and rotate both clockwise and counterclockwise 10 times to minimize resistance.

Attach spring scale in the position shown at left and pull at a rate of 10 rpm to measure rotating torque.

Load:

49,000 N (5,000 kg, 11,000 lb)

Rotating torque:

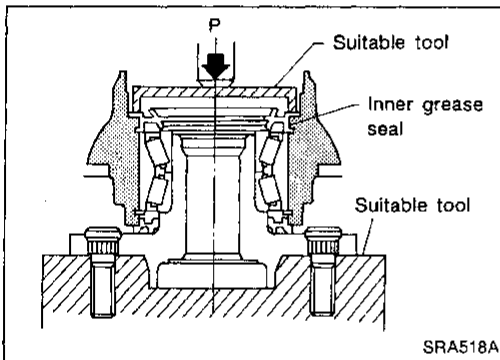
0.2 - 2.4 N·m (0.023 - 0.24 kg-m, 0.2 - 1.7 ft-lb)

Spring scale reading:

2.0 - 20.6 N (0.2 - 2.1 kg, 0.4 - 4.6 lb)

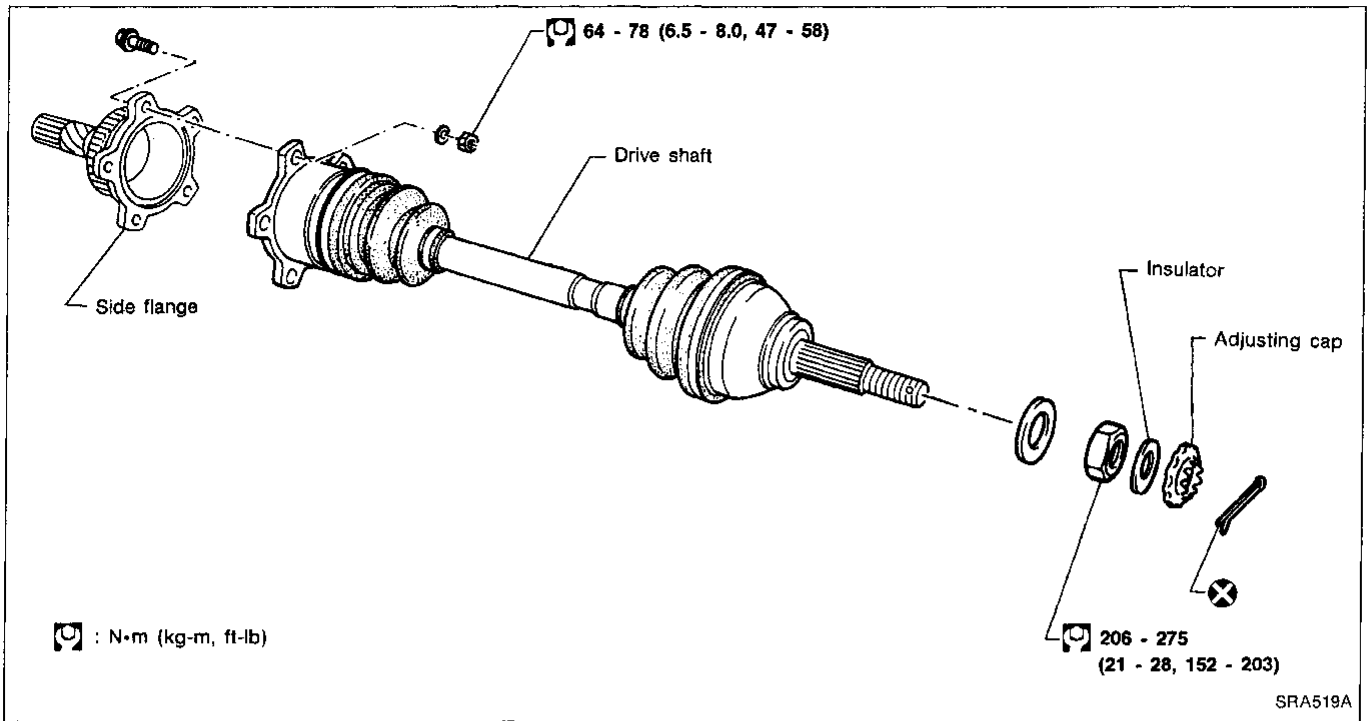
If measured value is outside specifications, replace wheel bearing.

Also make sure axial play does not exist in wheel hub when a 49,000 N (5,000 kg, 11,000 lb) load is applied.

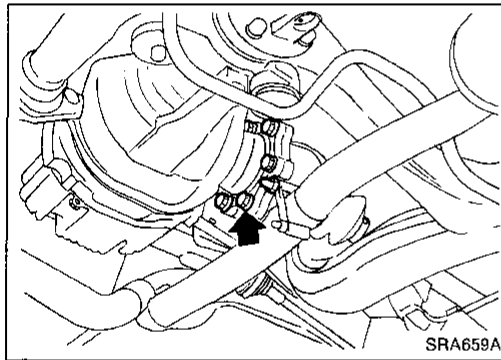


- Install inner grease seal.

REAR AXLE — Drive Shaft



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Removal

When removing drive shaft, cover boots with shop towel to prevent damage to them.

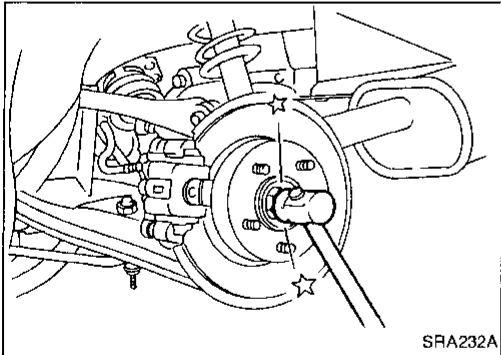
FINAL DRIVE SIDE

Remove side flange mounting bolt and separate shaft.

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WHEEL SIDE

Remove drive shaft by lightly tapping it with a copper hammer. If it is hard to remove, use puller.

To avoid damaging threads of drive shaft, install a nut while removing drive shaft.

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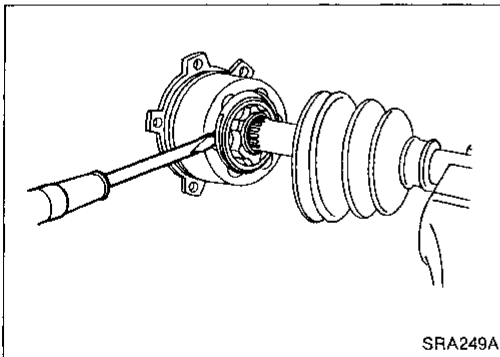
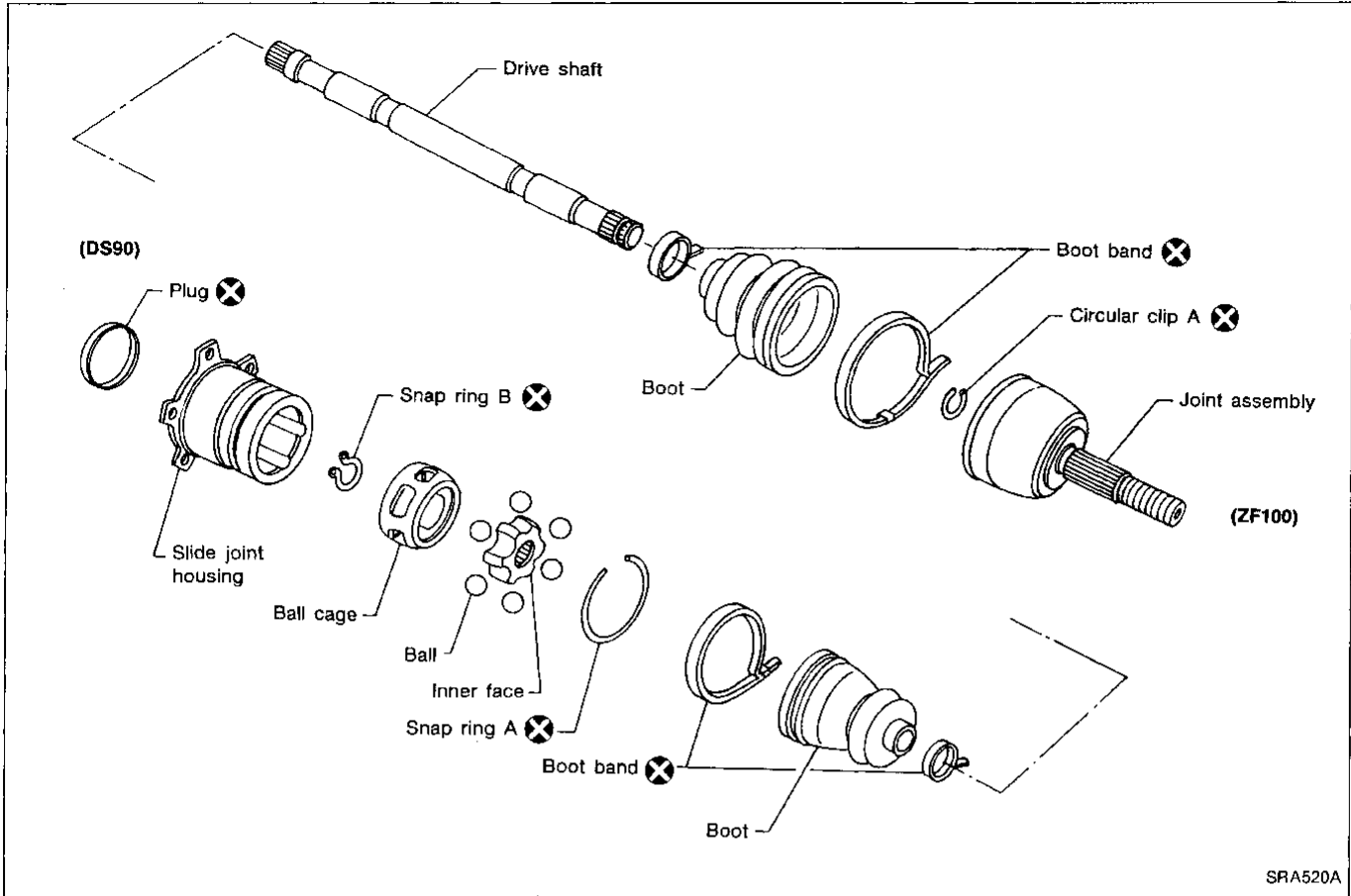
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Installation

- Insert drive shaft from wheel hub and temporarily tighten wheel bearing lock nut.
- Tighten side flange mounting bolts to specified torque.
- Tighten wheel bearing lock nut to specified torque. Refer to REAR AXLE — Wheel Hub and Axle Housing (RA-10).

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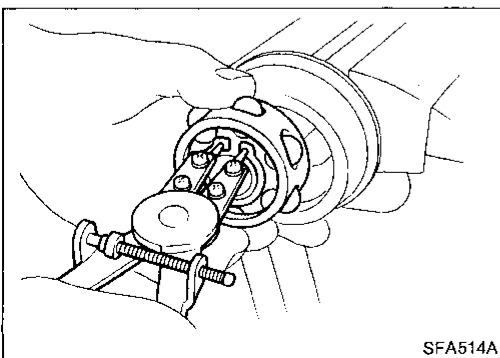
Components



Disassembly

FINAL DRIVE SIDE

1. Remove boot bands.
2. Put matchmarks on slide joint housing and inner race, before separating joint assembly.
3. Pry off snap ring "A" with a screwdriver, and pull out slide joint housing.



4. Put matchmarks on inner race and drive shaft.
5. Pry off snap ring "B", then remove ball cage, inner race and balls as a unit.
6. Draw out boot.

Cover drive shaft serration with tape so as not to damage the boot.

REAR AXLE — Drive Shaft

Disassembly (Cont'd)

WHEEL SIDE

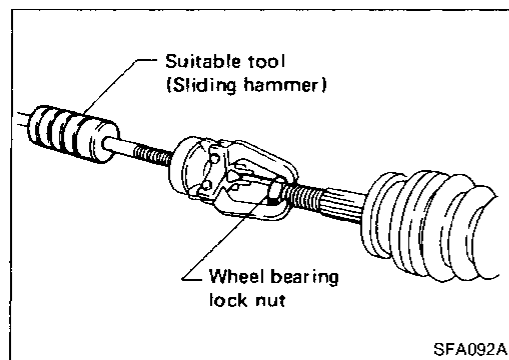
CAUTION:

The joint on the wheel side cannot be disassembled.

- Before separating joint assembly, put matchmarks on drive shaft and joint assembly.
- Separate joint assembly with suitable tool.

Be careful not to damage threads on drive shaft.

- Remove boot bands.



Inspection

Thoroughly clean all parts in cleaning solvent, and dry with compressed air. Check parts for evidence of deformation or other damage.

DRIVE SHAFT

Replace drive shaft if it is twisted or cracked.

BOOT

Check boot for fatigue, cracks, or wear. Replace boot with new boot bands.

JOINT ASSEMBLY (Final drive side)

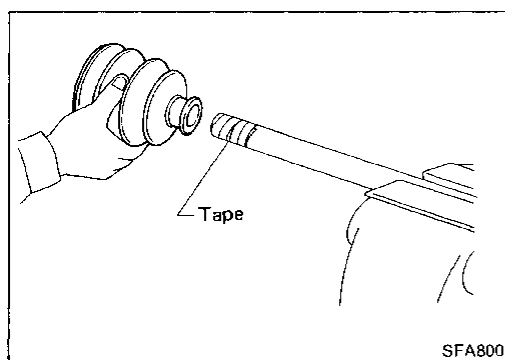
- Replace any parts of double offset joint which show signs of scorching, rust, wear or excessive play.
- Check serration for deformation. Replace if necessary.
- Check slide joint housing for any damage. Replace if necessary.

JOINT ASSEMBLY (Wheel side)

Replace joint assembly if it is deformed or damaged.

Assembly

- After drive shaft has been assembled, ensure that it moves smoothly over its entire range without binding.
- Use NISSAN GENUINE GREASE or equivalent after every overhaul.



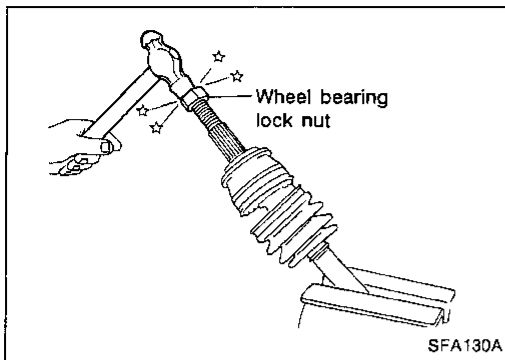
WHEEL SIDE

1. Install boot and new small boot band on drive shaft.

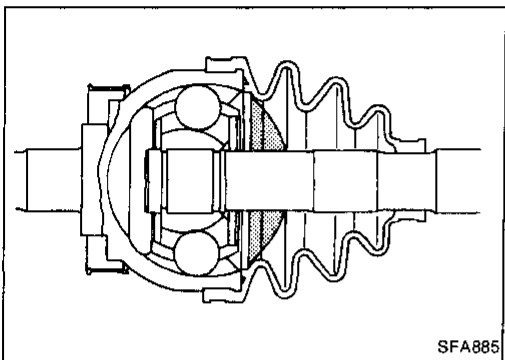
Cover drive shaft serration with tape so as not to damage boot during installation.

REAR AXLE — Drive Shaft

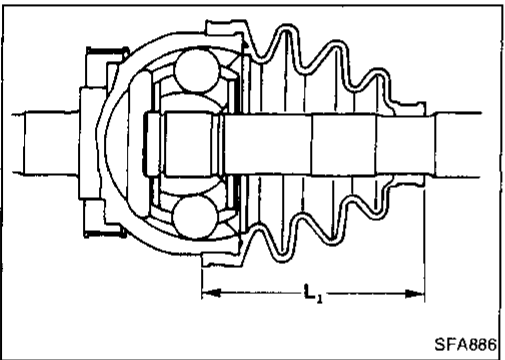
Assembly (Cont'd)



2. Set joint assembly onto drive shaft by lightly tapping it. Install joint assembly securely, ensuring marks which were made during disassembly are properly aligned.



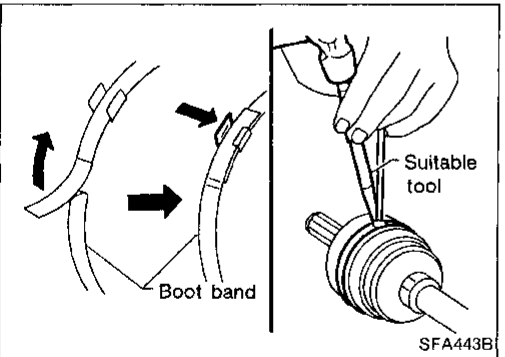
3. Pack drive shaft with specified amount of grease.
Specified amount of grease:
150 - 160 g (5.29 - 5.64 oz)



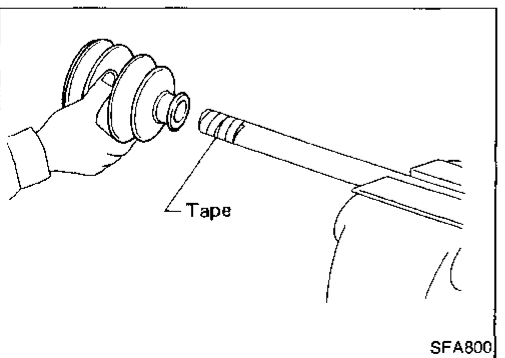
4. Set boot so that it does not swell and deform when its length is "L₁".

Make sure that boot is properly installed on the drive shaft groove.

Length "L₁":
96 - 98 mm (3.78 - 3.86 in)



5. Lock new larger and smaller boot bands securely with a suitable tool.

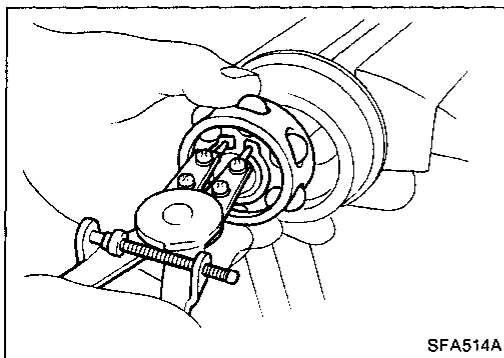


FINAL DRIVE SIDE

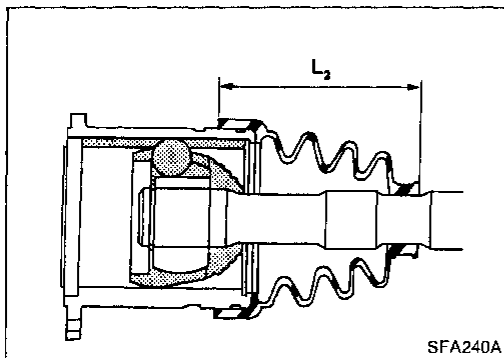
1. Install boot and new small boot band on drive shaft.
Cover drive shaft serration with tape so as not to damage boot during installation.

REAR AXLE — Drive Shaft

Assembly (Cont'd)



2. Securely install ball cage, inner race and balls as a unit, making sure the marks which were made during disassembly are properly aligned.
3. Install new snap ring "B".



4. Pack drive shaft with specified amount of grease.

Specified amount of grease:

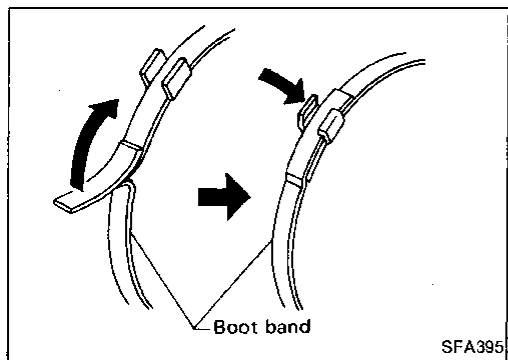
165 - 175 g (5.82 - 6.17 oz)

5. Install slide joint housing, then install new snap ring "A".
6. Set boot so that it does not swell and deform when its length is " L_2 ".

Make sure that boot is properly installed on the drive shaft groove.

Length " L_2 ":

93 - 95 mm (3.66 - 3.74 in)



7. Lock new larger and smaller boot bands securely with a suitable tool.

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REAR SUSPENSION

CAUTION:

Do not jack up at lower link.

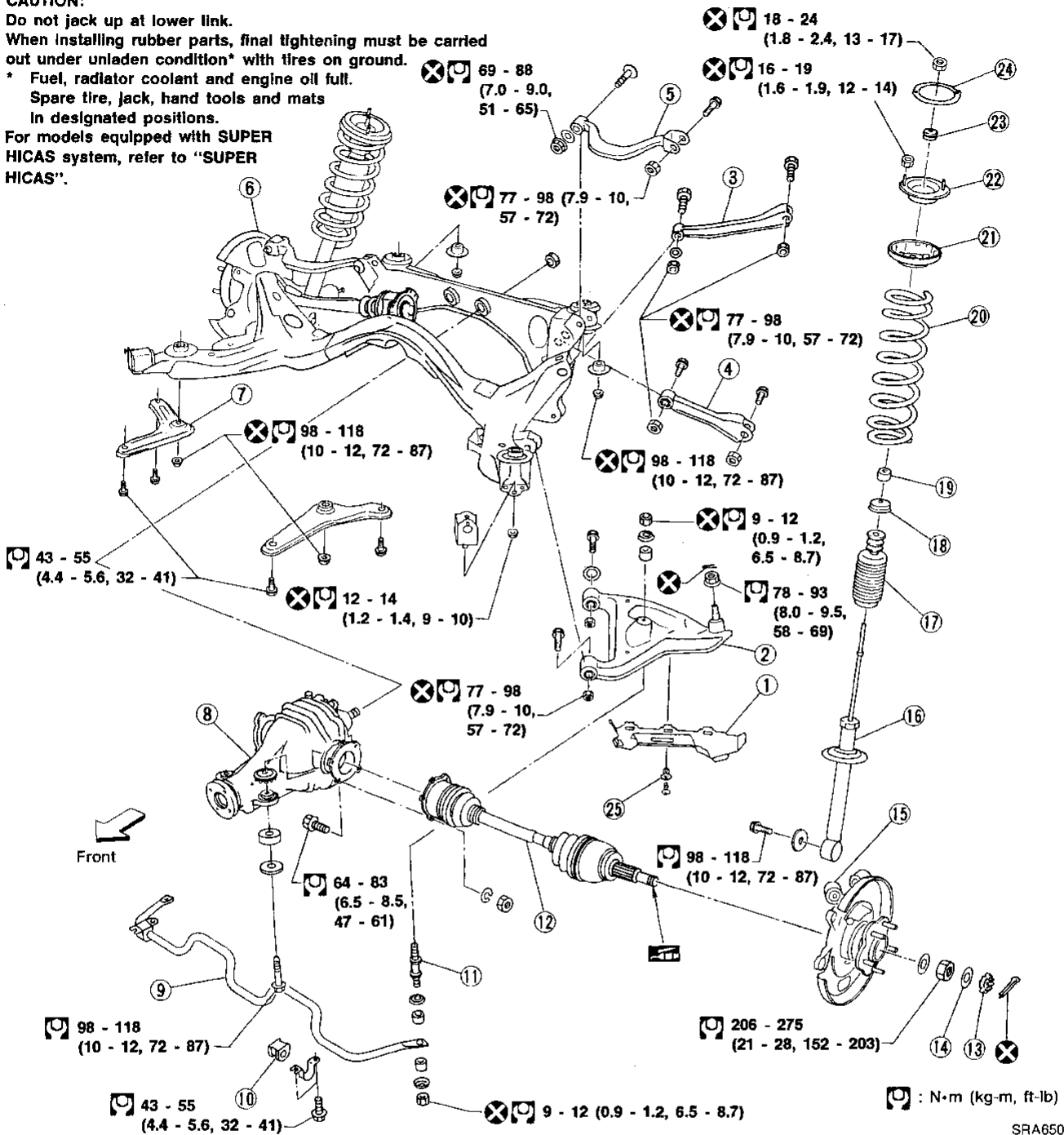
When installing rubber parts, final tightening must be carried out under unladen condition* with tires on ground.

* Fuel, radiator coolant and engine oil full.

Spare tire, jack, hand tools and mats

In designated positions.

For models equipped with SUPER HICAS system, refer to "SUPER HICAS".

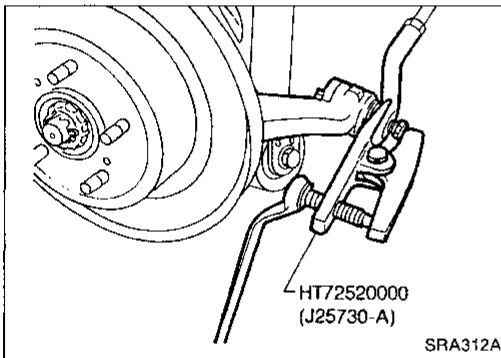
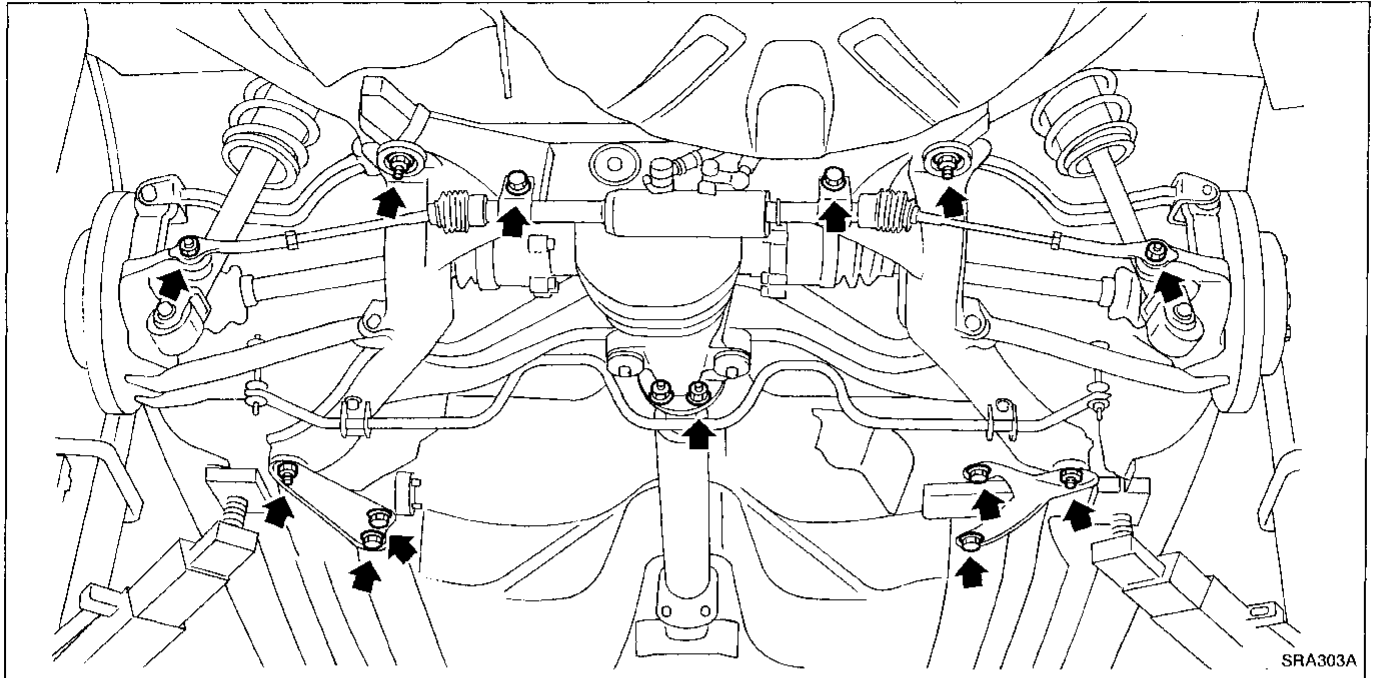


- | | | |
|---------------------|------------------|---------------------|
| ① Protector | ⑩ Bushing | ⑱ Plate |
| ② Lower link | ⑪ Connecting rod | ⑲ Bushing |
| ③ Lateral link | ⑫ Drive shaft | ⑳ Coil spring |
| ④ Front upper link | ⑬ Adjusting cap | ㉑ Upper rubber seat |
| ⑤ Rear upper link | ⑭ Insulator | ㉒ Upper spring seat |
| ⑥ Suspension member | ⑮ Axle housing | ㉓ Bushing |
| ⑦ Member stay | ⑯ Shock absorber | ㉔ Gasket |
| ⑧ Final drive | ⑰ Bound bumper | ㉕ Clip |
| ⑨ Stabilizer | | |

SRA650A

REAR SUSPENSION

Removal and Installation



CAUTION:

Before removing the rear suspension assembly, disconnect the ABS sensor from the assembly and move it away from the rear suspension assembly area.

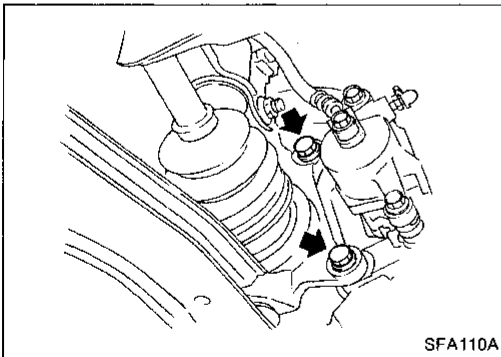
Failure to do so may result in the sensor wires being damaged and the sensor becoming inoperative.

- Remove exhaust tube.
- Disconnect propeller shaft rear end.
- Disconnect hand brake wire front end.
- For models equipped with SUPER HICAS system, refer to SUPER HICAS (RA-28).
- Use Tool to disconnect ball joints (SUPER HICAS).
- Remove brake caliper assembly.

Brake line need not be disconnected from brake caliper.

Be careful not to depress brake pedal, or piston will pop out.

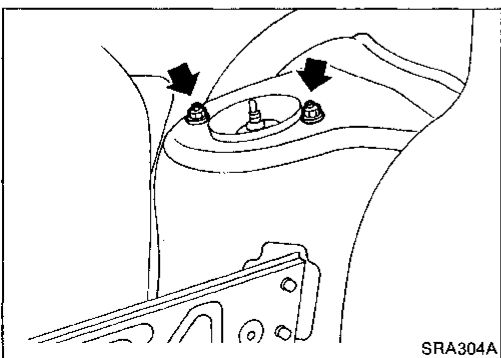
Do not pull or twist brake hose.



- Remove upper end nuts of shock absorber.

Do not remove piston rod lock nut.

- Remove suspension member fixing nuts. Then draw out rear axle and rear suspension assembly.



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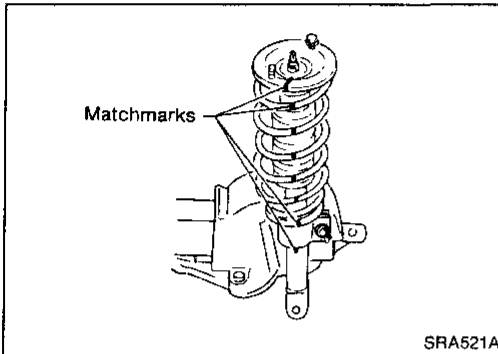
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Removal

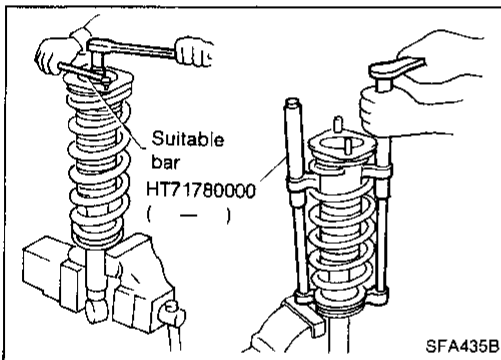
Remove shock absorber upper and lower fixing nuts.

Do not remove piston rod lock nut on vehicle.



Disassembly

- Put matchmarks on coil spring and shock absorber.



1. Set shock absorber on vise with attachment, then loosen piston rod lock nut.

Do not remove piston rod lock nut.

2. Compress spring with Tool so that the strut upper spring seat can be turned by hand.
3. Remove piston rod lock nut.

Inspection

SHOCK ABSORBER ASSEMBLY

- Check for smooth operation through a full stroke, both compression and extension.
- Check for oil leakage occurring on welded or gland packing portions.
- Check piston rod for cracks, deformation or other damage. Replace if necessary.

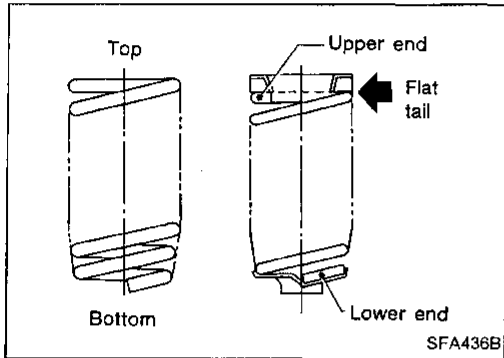
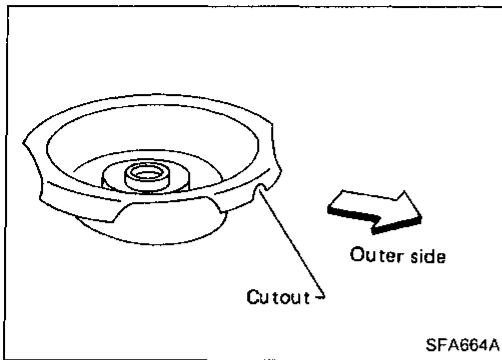
UPPER RUBBER SEAT AND BUSHING

Check rubber parts for deterioration or cracks. Replace if necessary.

COIL SPRING

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

REAR SUSPENSION — Coil Spring and Shock Absorber



Assembly

- Install upper spring seat with its cutout facing the outer side of vehicle.

- When installing coil springs, be careful not to reverse top and bottom direction. (Top end is flat.)
- When installing coil spring on strut, it must be positioned as shown in figure at left.

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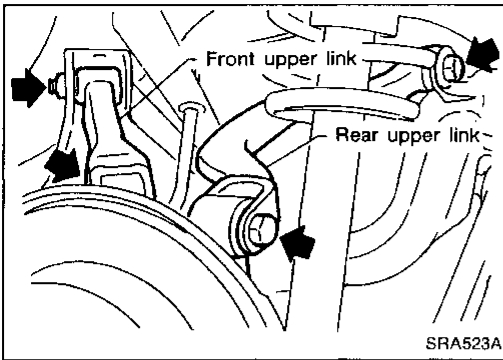
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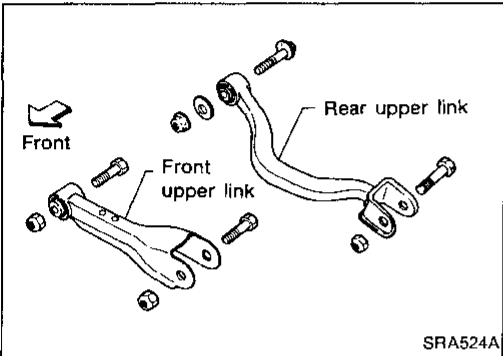
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REAR SUSPENSION — Multi-link and Lower Ball Joint

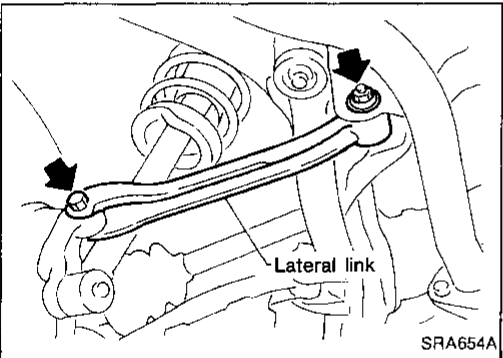


Removal and Installation

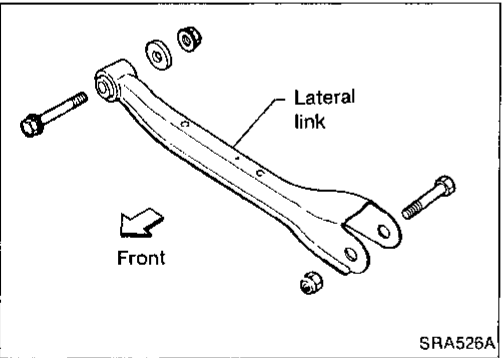
- Remove upper link.



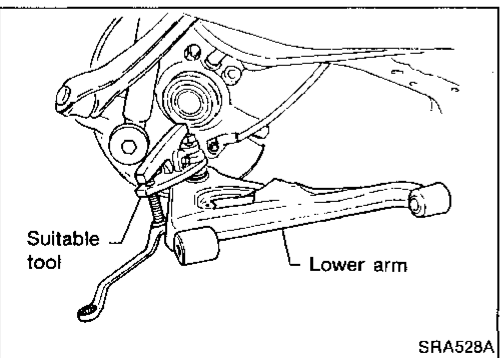
- Install upper link.



- Remove lateral link.



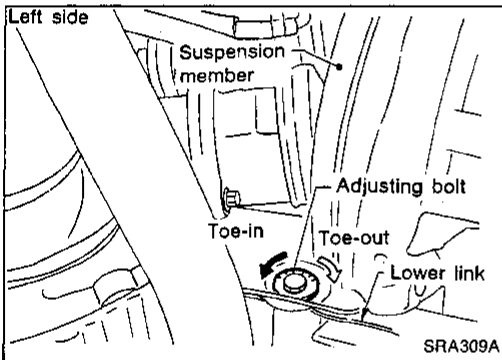
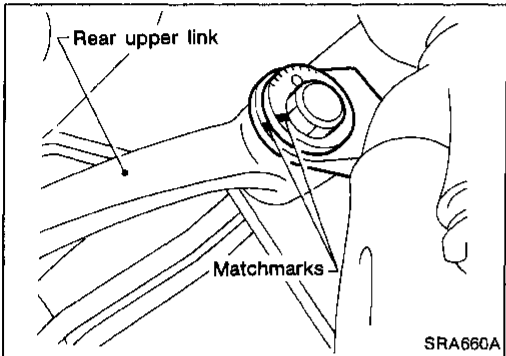
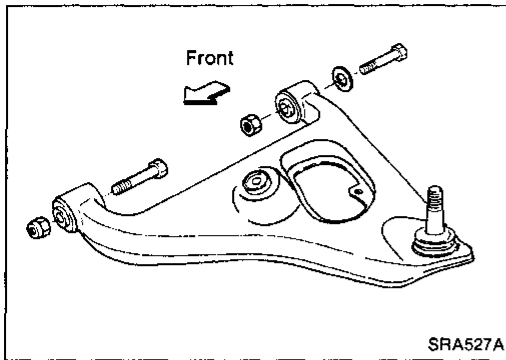
- Install lateral link.



- Remove lower arm.

REAR SUSPENSION — Multi-link and Lower Ball Joint

Removal and Installation (Cont'd)



- Install lower arm.

Before removing, put matchmarks on adjusting bolt.

- When installing, final tightening must be done under unladen condition with tires on ground.

- After installation, check wheel alignment. Refer to Rear Wheel Alignment in ON-VEHICLE SERVICE (RA-6).

Inspection

REAR SUSPENSION MEMBER

Replace suspension member assembly if cracked or deformed or if any part (insulator, for example) is damaged.

UPPER, LOWER AND LATERAL LINKS

Replace upper, lower or lateral link as required if cracked or deformed or if bushing is damaged.

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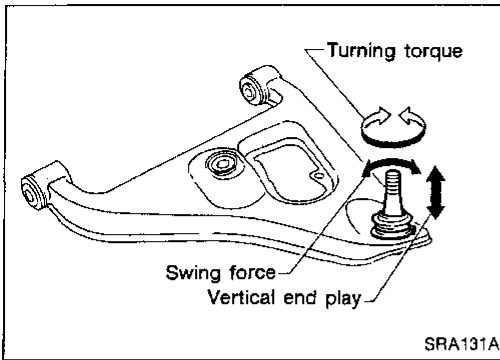
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REAR SUSPENSION — Multi-link and Lower Ball Joint

Inspection (Cont'd)

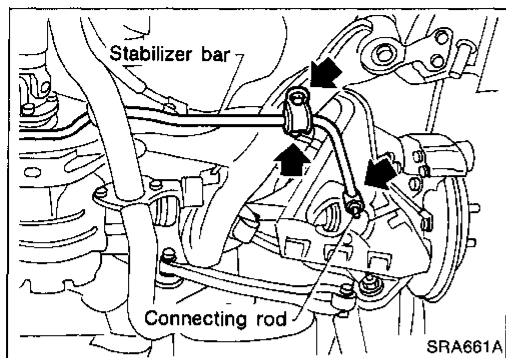
SUSPENSION LOWER BALL JOINT

- Measure swing force, turning torque and vertical end play in axial direction. (Use same measurement procedures as that of FA section.)
- If ball stud is worn, play in axial direction is excessive, or joint is hard to swing, replace lower arm.



Ball joint specifications	Swing force	7.8 - 54.9 N (0.8 - 5.6 kg, 1.8 - 12.3 lb)
	Turning torque	0.5 - 3.4 N·m (5 - 35 kg-cm, 4.3 - 30.4 in-lb)
	Vertical end play	0 mm (0 in)

REAR SUSPENSION — Stabilizer Bar

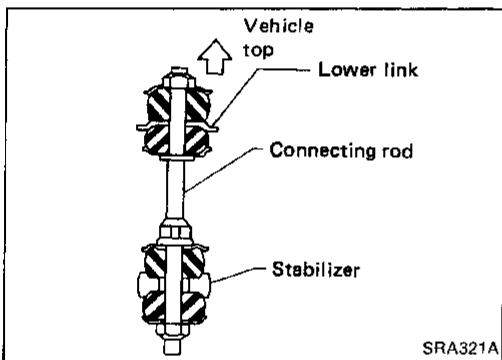


Removal

Remove connecting rod and clamp.

Inspection

- Check stabilizer bar for deformation or cracks. Replace if necessary.
- Check rubber bushings for deterioration or cracks. Replace if necessary.



Installation

When installing connecting rod, make sure direction is correct (as shown at left).

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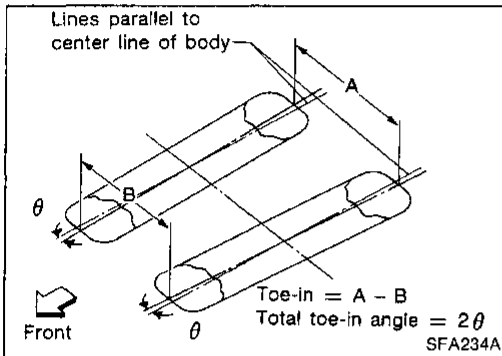
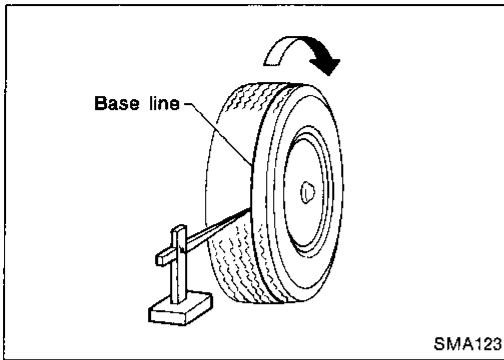
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Rear Wheel Alignment

TOE-IN

1. Draw a base line across the tread.
After lowering rear of vehicle, move it up and down to eliminate friction.



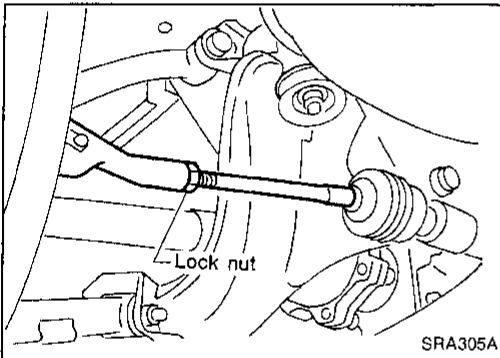
2. Measure toe-in.

Measure distance "A" and "B" at the same height as hub center.

**Toe-in:
Refer to SDS (RA-31).**

3. Adjust toe-in by varying length of power cylinder lower links.

- (1) Loosen lock nuts.
- (2) Adjust toe-in by turning lower links forward or backward.



Make sure both lower links are the same length.

Standard length "L":

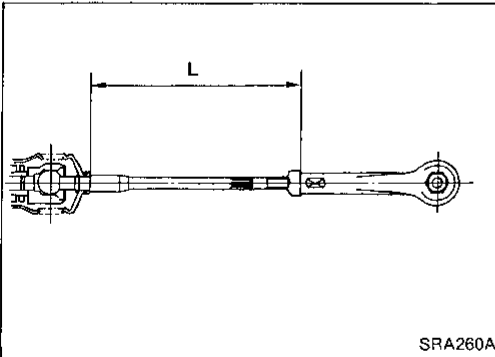
185.5 mm (7.30 in)

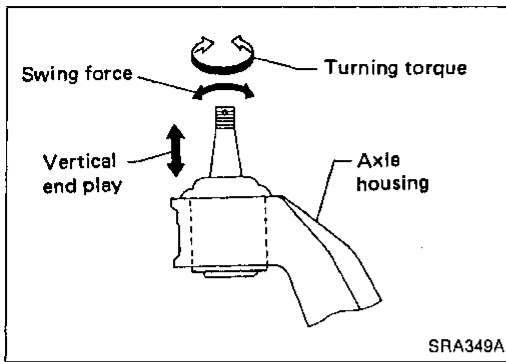
- (3) Tighten lock nuts to the specified torque.

□: 37 - 46 N·m

(3.8 - 4.7 kg-m, 27 - 34 ft-lb)

- Refer to ON-VEHICLE SERVICE for other procedures.



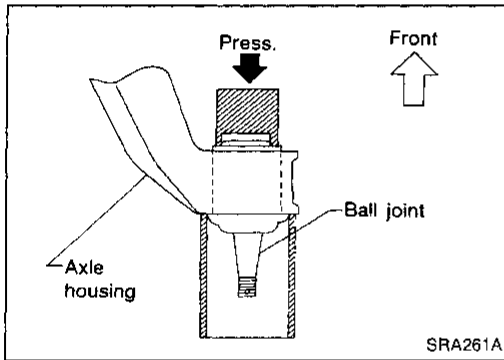


Rear Axle Housing Ball Joint

INSPECTION

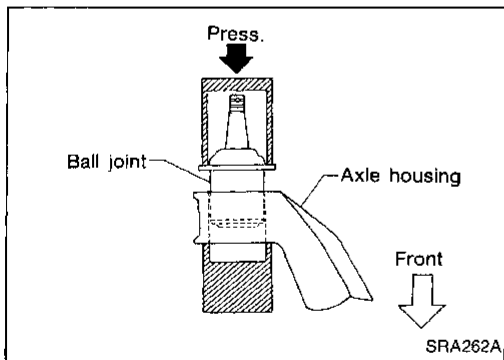
- Measure swing force, turning torque and vertical end play in axial direction.
- If ball stud is worn, play in axial direction is excessive, or joint is hard to swing, replace ball joint.

Ball joint specifications	Swing force	6.9 - 68.6 N (0.7 - 7.0 kg, 1.5 - 15.4 lb)
	Turning torque	0.3 - 2.9 N·m (3 - 30 kg-cm, 2.6 - 26.0 in-lb)
	Vertical end play	0 mm (0 in)



REMOVAL

- Remove ball joint snap ring.
- Press out ball joint from axle housing.



ASSEMBLY

- Press new ball joint assembly into axle housing.
- Install snap ring into groove of ball joint.
- Refer to REAR AXLE — Wheel Hub and Axle Housing for other procedures.
- Refer to Power Cylinder, SUPER HICAS SYSTEM — Repair of Component Parts in ST section.

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SERVICE DATA AND SPECIFICATIONS (SDS)

General Specifications

COIL SPRING

Applied model	Without HICAS	With HICAS
Wire diameter mm (in)	12.3 (0.484)	12.6 (0.496)
Coil diameter mm (in)		
Small	103.1 (4.06)	103.4 (4.07)
Large	119.3 (4.70)	119.6 (4.71)
Free length mm (in)	430.0 (16.93)	410.0 (16.14)
Spring constant N/mm (kg/mm, lb/in)	19.6 (2.0, 112)	21.6 (2.2, 123)
Identification color	Red x 1, Orange x 1	White x 1, Purple x 1

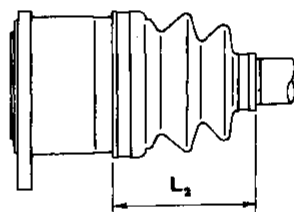
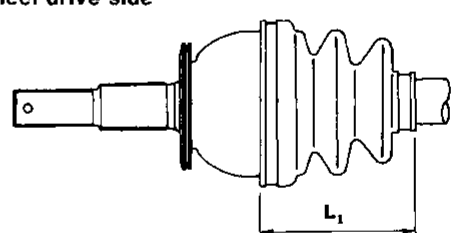
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Applied model	All
Piston rod diameter mm (in)	12.5 (0.492)
Damping force [at 0.3 m (1.0 ft)/sec.] N (kg, lb)	
Expansion	706 - 961 (72 - 98, 159 - 216)
Compression	255 - 392 (26 - 40, 57 - 88)

STABILIZER BAR

Applied model	Without HICAS	With HICAS
Diameter mm (in)	19.1 (0.752)	17.3 (0.681)

DRIVE SHAFT

Joint type			Final drive side
Final drive side		DS90	
Wheel side		ZF100	
Grease		Nissan genuine grease or equivalent	
Specified amount of grease	g (oz)		Wheel drive side
Final drive side		165 - 175 (5.82 - 6.17)	
Wheel side		150 - 160 (5.29 - 5.64)	
Boot length	mm (in)		
Final drive side (L2)		93 - 95 (3.66 - 3.74)	
Wheel side (L1)		96 - 98 (3.78 - 3.86)	

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SERVICE DATA AND SPECIFICATIONS (SDS)

Inspection and Adjustment

WHEEL ALIGNMENT (Unladen*)

Camber	degree	-1°30' to -0°30'
Toe-in		
A - B	mm (in)	0 - 4 (0 - 0.16)
Total angle 2θ	degree	0' - 28'

* Fuel, radiator coolant and engine oil full.
Spare tire, jack, hand tools and mats in designated positions.

WHEEL BEARING

Wheel bearing axial end play mm (in)	0.05 (0.0020) or less
Wheel bearing lock nut Tightening torque N·m (kg-m, ft-lb)	206 - 275 (21 - 28, 152 - 203)

WHEEL RUNOUT (Radial and lateral)

Wheel type	Radial runout	Lateral runout
Aluminum wheel	mm (in)	0.3 (0.012) or less

LOWER BALL JOINT

Swing force (Measuring point: cotter pin hole of ball stud) N (kg, lb)	7.8 - 54.9 (0.8 - 5.6, 1.8 - 12.3)
Turning torque N·m (kg-cm, in-lb)	0.5 - 3.4 (5 - 35, 4.3 - 30.4)
Vertical end play mm (in)	0 (0)

LOWER LINK BALL JOINT (SUPER HICAS)

Swing force (at cotter pin hole) N (kg, lb)	6.9 - 68.6 (0.7 - 7.0, 1.5 - 15.4)
Turning torque N·m (kg-cm, in-lb)	0.3 - 2.9 (3 - 30, 2.6 - 26.0)
Vertical end play mm (in)	0 (0)

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