## REAR AXLE & REAR SUSPENSION

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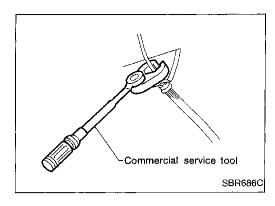








#### PRECAUTIONS AND PREPARATION



#### **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 tubes.
- After installing removed suspension parts, check wheel alignment and adjust if necessary.
- Do not jack up at the lower arm.
- Always torque brake lines when installing.

#### **Special Service Tools**

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

Tool number (Kent-Moore No.) Tool name	Description	
HT71780000 ( — ) Spring compressor	NT144	Removing and installing coil spring
ST35652000 ( — ) Shock absorber attachment	NT145	Fixing shock absorber
ST30031000 (J22912-01) Bearing puller	NT412	Removing inner race of wheel bearing  a: 50 mm (1.97 in) dia.
ST38280000 ( — ) Arm bushing remover	NT157	Removing and installing bushing of rear axle housing
IM23600800 ( — ) Attachment Wheel alignment	NT148	Measure rear wheel alignment  a: Screw M24 x 1.5 pitch  b: 35 mm (1.38 in) dia.  c: 65 mm (2.56 in) dia.  d: 56 mm (2.20 in)  e: 12 mm (0.47 in)

#### PRECAUTIONS AND PREPARATION

#### **Commercial Service Tools**

Tool name	Description		
Flare nut crows foot     Torque wrench		Removing and installing each brake piping	<b>-</b> (6)
			MA
	NT360	a: 10 mm (0.39 in)	9970ZA3 —
Rear wheel hub drift	b   <del>   </del>	Installing bearing	
			EM
	a	a: 49 mm (1.93 in) dia.	LC
	NT635	b: 41 mm (1.61 in) dia.	_
Wheel bearing drift	b	Removing rear wheel hub	
			EC
	a	a: 40 mm (1.57 in) dia. b: 26 mm (1.02 in) dia.	FE
Rear drive shaft plug seal	101633	Installing rear drive shaft plug seal	-
drift		instailing real drive shall plug seal	GL
	a b (())		
	1	a: 85 mm (3.35 in) dia.	MT
	NT474	b: 67 mm (2.64 in) dia.	_
Rear axle housing ball joint drift		Removing ball joint	AT
diff	a b	a: 28 mm (1.10 in) dia.	
		b: 20 mm (0.79 in) dia.	PD
	c d	c: 43 mm (1.69 in) dia.	שו
	NT164	d: 40 mm (1.57 in) dia.	_
Rear axle housing ball joint drift	110	Installing ball joint	FA
diff	albi	a: 43 mm (1.69 in) dia.	
		b: 33 mm (1.30 in) dia.	RA
	0/0	c: 40 mm (1.57 in) dia.	
	NT164	d: 30 mm (1.18 in) dia.	
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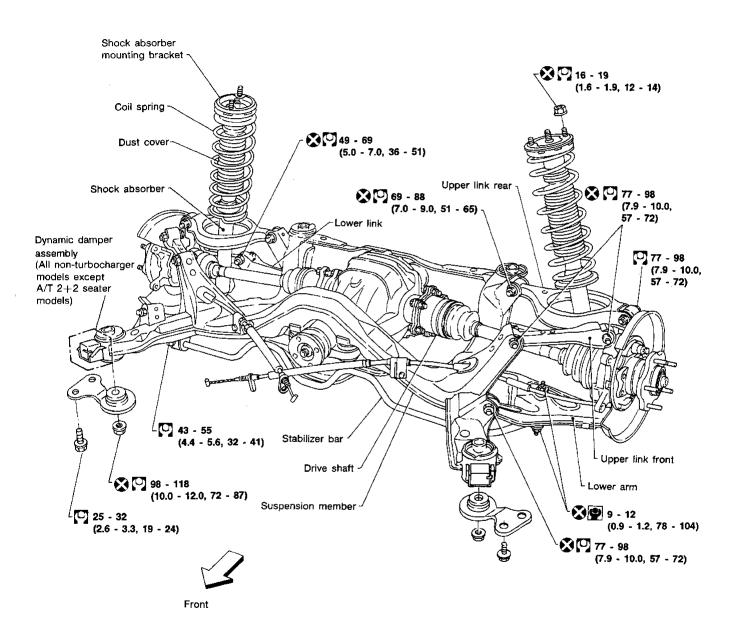
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#### SEC. 380-396-430-431

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

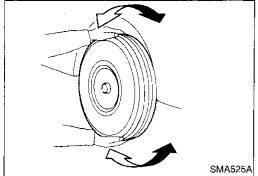
Fuel, radiator coolant and engine oil full.
 Spare tire, jack, hand tools and mats in designated positions.

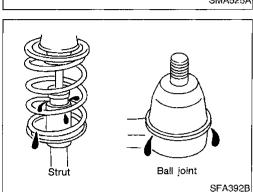


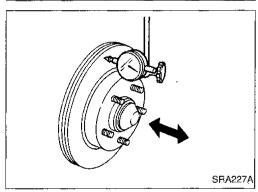
○ : N•m (kg-m, ft-lb)

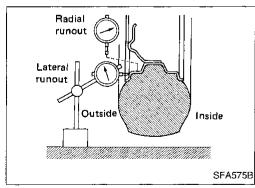
: N•m (kg-m, in-lb)

#### **ON-VEHICLE SERVICE**









#### Rear Axle and Rear Suspension Parts

Check axle and suspension parts for excessive play, cracks, wear or other damage.

- Shake each rear wheel to check for excessive play.
- Retighten all nuts and bolts to the specified torque.

**Tightening torque:** 

Refer to REAR SUSPENSION (RA-16).

- Make sure that cotter pin is inserted.
- Check shock absorber for oil leakage or other damage.
- Check wheelarch height.
   Refer to FA section ("Front Axle and Front Suspension Parts", "ON-VEHICLE SERVICE").
- Check suspension ball joint for grease leakage and ball joint dust cover for cracks or other damage.
   If ball joint dust cover is cracked or damaged, replace lower arm.

#### Rear Wheel Bearing

• Check tightening torque of wheel bearing lock nut.

(21 - 28 kg-m, 152 - 203 ft-lb)

- Check that wheel bearings operate smoothly.
- 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-9).

#### **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 proper inflation.
- Check rear wheel bearings for excessive play.
- Check wheel runout.

#### Wheel runout:

Refer to FA section ("Inspection and Adjustment", "SDS").

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

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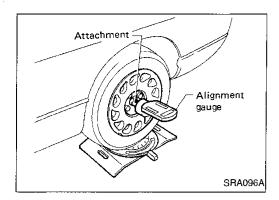
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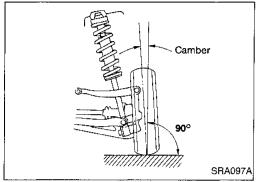
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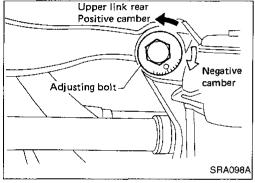
## Rear Wheel Alignment (Cont'd) CAMBER

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-24).

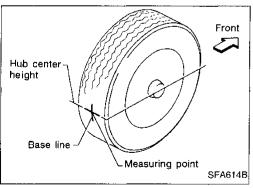


- If camber is not within specification, adjust by turning the adjusting bolt.
- (1) Turn the adjusting bolt to adjust.

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

(2) Tighten to the specified torque.

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



#### TOE-IN

Measure toe-in using the following procedure. If out of specification, inspect and replace any damaged or worn rear suspension parts.

#### **WARNING:**

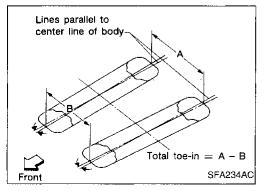
- Always perform the following procedure on a flat surface.
- Make sure that no person is in front of the vehicle before pushing it.
- 1. Bounce rear of vehicle up and down to stabilize the posture.
- 2. Push the vehicle straight ahead about 5 m (16 ft).
- 3. Put a mark on base line of the tread (rear side) of both tires at the same height of hub center. This mark is a measuring point.
- 4. Measure distance "A" (rear side).
- 5. Push the vehicle slowly ahead to rotate the wheels 180 degrees (1/2 turn).

If the wheels have rotated more than 180 degrees (1/2 turn), try the above procedure again from the beginning. Never push vehicle backward.

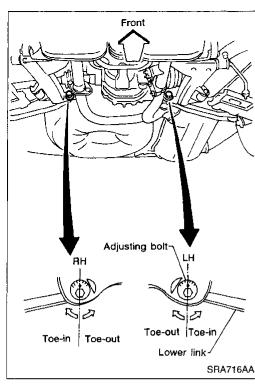
6. Measure distance "B" (front side).

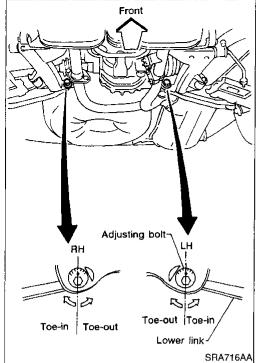
Total toe-in:

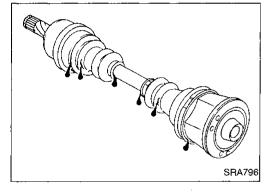
Refer to SDS (RA-24).



#### **ON-VEHICLE SERVICE**







#### Rear Wheel Alignment (Cont'd)

- 7. Loosen adjusting bolt fixing nuts.
- Adjust toe-in by turning adjusting bolts.

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

Tighten adjusting bolt fixing nuts to the specified torque.

(1): 69 - 88 N·m

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

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#### **Drive Shaft**

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

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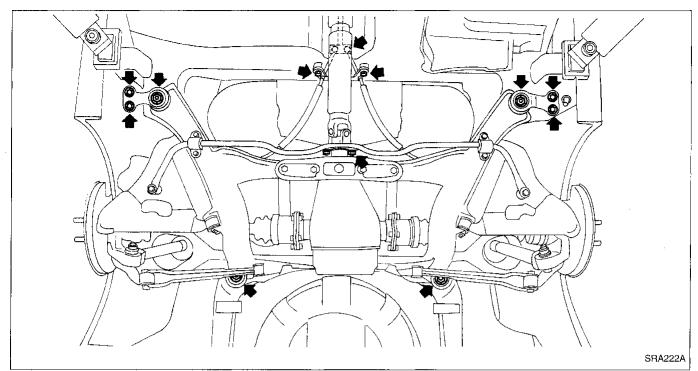
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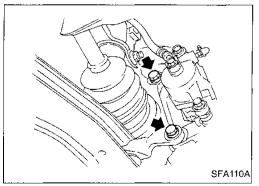
#### Removal and Installation



- Remove exhaust tube.
- Disconnect propeller shaft rear end.
- 3. Disconnect hand brake wire front end.

#### **CAUTION:**

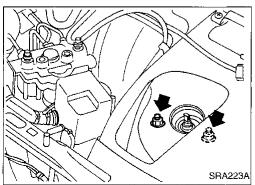
Before removing the rear suspension assembly, disconnect the ABS sensor from the assembly. Then move it away from the rear suspension assembly. Failure to do so may result in damage to the sensor wires and the sensor becoming inoperative.



4. Remove brake caliper assembly.

Brake hose need not be disconnected from brake caliper. In this case, suspend caliper assembly with wire so as not to stretch brake hose. Be careful not to depress brake pedal, or piston will pop out.

Make sure brake hose is not twisted.

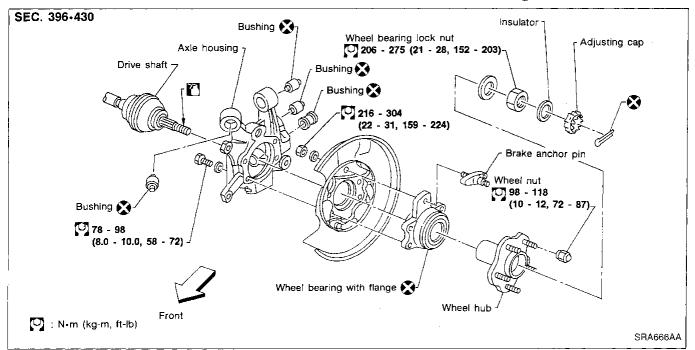


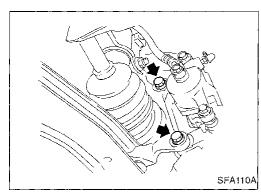
5. Remove upper end nuts of shock absorber.

Do not remove piston rod lock nut on vehicle.

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

#### Wheel Hub and Axle Housing





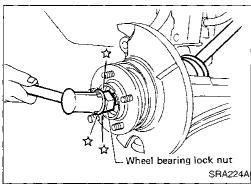


Remove wheel bearing lock nut.

Remove brake caliper assembly and rotor.

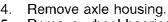
Brake hose need not be disconnected from brake caliper. In this case, suspend caliper assembly with wire so as not to stretch brake hose. Be careful not to depress brake pedal, or piston will pop out.

Make sure brake hose is not twisted.



Separate drive shaft from axle housing by lightly tapping it. If it is hard to remove, use a puller.

Cover boots with shop towel so as not to damage them when removing drive shaft.



Remove wheel bearing with flange, and wheel hub from axle housing.

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#### REAR AXLE

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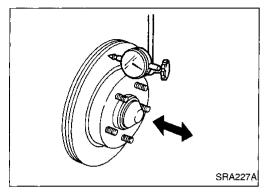
#### Wheel Hub and Axle Housing (Cont'd) INSTALLATION

- Install axle housing with wheel hub.
- Tighten wheel bearing lock nut. Before tightening, apply oil to threaded portion of rear spindle and both sides of plain washer.

(I): 206 - 275 N·m

(21 - 28 kg-m, 152 - 203 ft-lb)

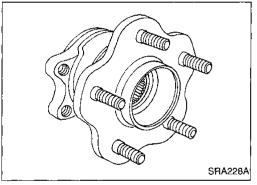
3. Make sure that wheel bearings operate smoothly.



Check wheel bearing axial end play.

Axial end play:

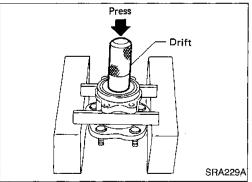
0.05 mm (0.0020 in) or less



#### DISASSEMBLY

Wheel bearing with flange does not require maintenance. If any of the following symptoms are noted, replace wheel bearing assembly (including flange, and inner and outer seals).

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

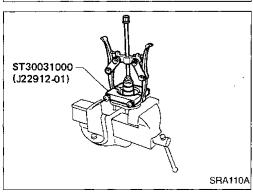


#### Wheel hub

Remove wheel bearing (with flange) and wheel hub as one unit from axle housing before disassembling.

#### Wheel bearing

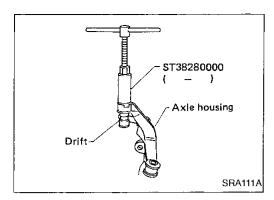
- Using a press and drift as shown in figure at left, press wheel bearing out.
- Discard old wheel bearing assembly. Replace with a new wheel assembly.



3. Remove inner race from hub using a bearing replacer/puller. **CAUTION:** 

- Do not reuse old inner race although it is of the same brand as the bearing assembly.
- Do not replace grease seals as single parts.

#### REAR AXLE



#### Wheel Hub and Axle Housing (Cont'd)

#### Axle housing

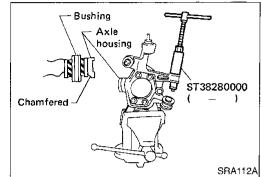
1. Attach a drift on outer shell of bushing as shown in figure at left. Remove bushing using arm bushing remover.

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



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Ensure axle housing bore is free from scratches or deformities before pressing bushing into it.

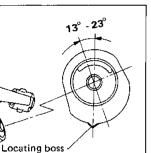
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Attach bushing to chamfered bore end of axle housing and press it until it is flush with end face of axle housing.



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

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#### 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 opera-

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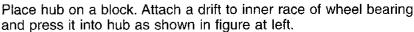
Check rubber bushing for wear or other damage. Replace if necessary.

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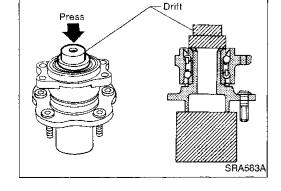
Maximum load P:

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

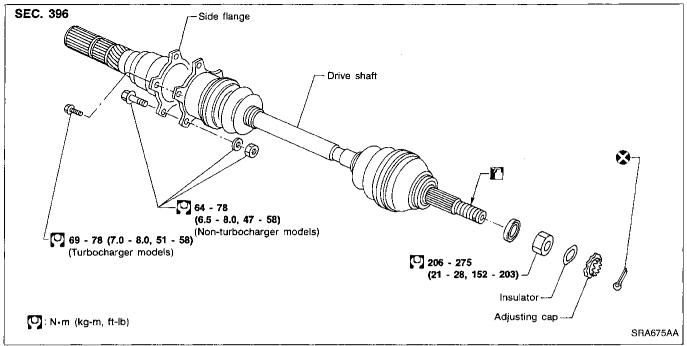
Be careful not to damage grease seal.

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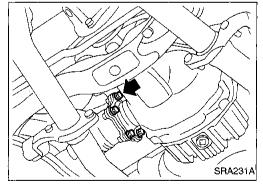


#### **Drive Shaft**



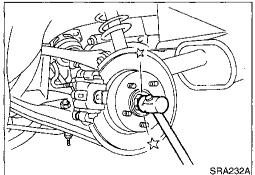
#### REMOVAL

- Before removing the drive shaft assembly, disconnect the ABS wheel sensor to prevent the damage of the sensor.
- Cover boots with shop towel so as not to damage them when removing drive shaft.



#### Final drive side

Remove side flange mounting bolt and separate shaft.



#### Wheel side

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

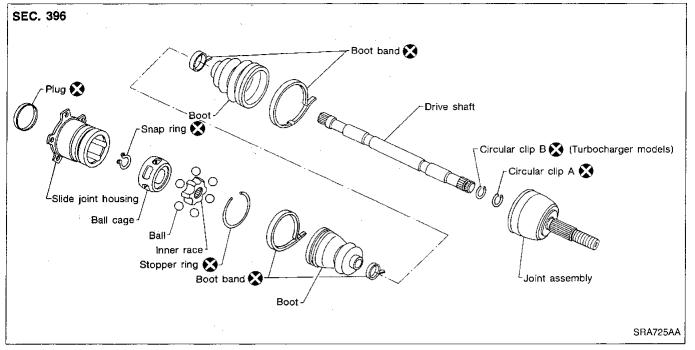
To avoid damaging threads of drive shaft, install a nut while removing drive shaft.

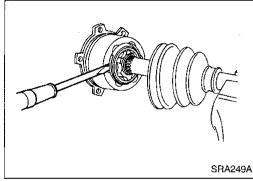
#### INSTALLATION

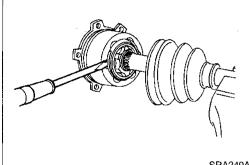
- 1. Insert drive shaft from wheel hub and temporarily tighten wheel bearing lock nut.
- 2. Tighten side flange mounting bolts to specified torque.
- 3. Tighten wheel bearing lock nut to specified torque.

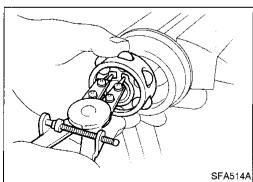
#### REAR AXLE

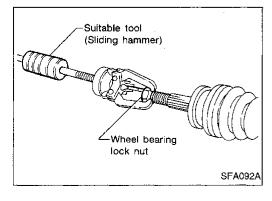
#### **Drive Shaft (Cont'd)** COMPONENTS











#### DISASSEMBLY

#### Final drive side

- 1. Remove boot bands.
- Put matching marks on slide joint housing and inner race, before separating joint assembly.
- Remove stopper ring with a screwdriver, and pull out slide joint housing.
- Put matching marks on inner race and drive shaft.
- Remove snap ring, then remove ball cage, inner race and balls as a unit.
- Draw out boot.

Cover drive shaft serration with tape to prevent damage to the boot.

#### Wheel side

#### **CAUTION:**

#### The joint on the wheel side cannot be disassembled.

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

#### Be careful not to damage threads on drive shaft.

- Remove boot bands.
- 4. Draw out boot.

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#### Drive Shaft (Cont'd)

#### 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.

#### Root

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

#### Joint assembly (Final drive side)

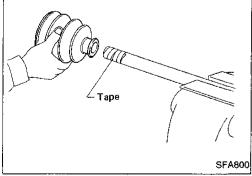
- Replace any parts of double offset joint which show signs of scorching, rust, wear or excessive play.
- Check serration for deformation. Replace if necessary.
- Check slide joint housing for any damage. Replace if necessary.

#### Joint assembly (Wheel side)

Replace joint assembly if it is deformed or damaged.

#### **ASSEMBLY**

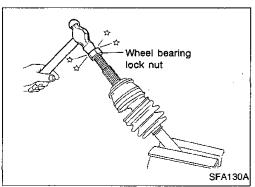
- After drive shaft has been assembled, ensure that it moves smoothly over its entire range without binding.
- Use NISSAN GENUINE GREASE or equivalent after every overhaul.



#### Wheel side

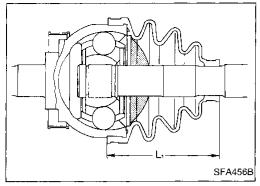
1. Install boot and new small boot band on drive shaft.

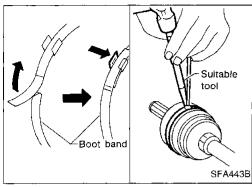
Cover drive shaft serration with tape so as not to damage boot during installation.

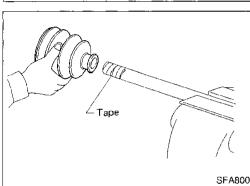


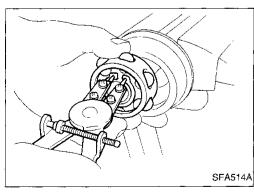
Set joint assembly onto drive shaft by lightly tapping it.
 Install joint assembly securely, ensuring marks which were made during disassembly are properly aligned.

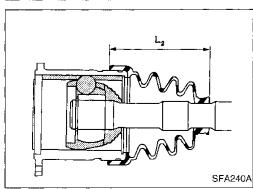
#### REAR AXLE











#### **Drive Shaft (Cont'd)**

Pack drive shaft with specified amount of grease.

Specified amount of grease:

Without turbocharger 113 - 123 g (3.99 - 4.34 oz) With turbocharger 125 - 145 g (4.41 - 5.11 oz)

Make sure that boot is properly installed on the drive shaft

Set boot so that it does not swell and deform when its length is "L<sub>1</sub>".

Length "L1":

Without turbocharger 96 - 98 mm (3.78 - 3.86 in) With turbocharger 101 - 103 mm (3.98 - 4.06 in)

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.

Install ball cage, inner race and balls as a unit, making sure the marks which were made during disassembly are properly aligned.

Install new snap ring.

Pack drive shaft with specified amount of grease.

Specified amount of grease:

Without turbocharger 165 - 175 g (5.82 - 6.17 oz) With turbocharger 155 - 175 g (5.47 - 6.17 oz)

Install slide joint housing, then install new stopper ring.

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

Set boot so that it does not swell and deform when its length is "L2".

Length "La": Without turbocharger 93 - 95 mm (3.66 - 3.74 in) With turbocharger 95.5 - 97.5 mm (3.76 - 3.84 in)

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

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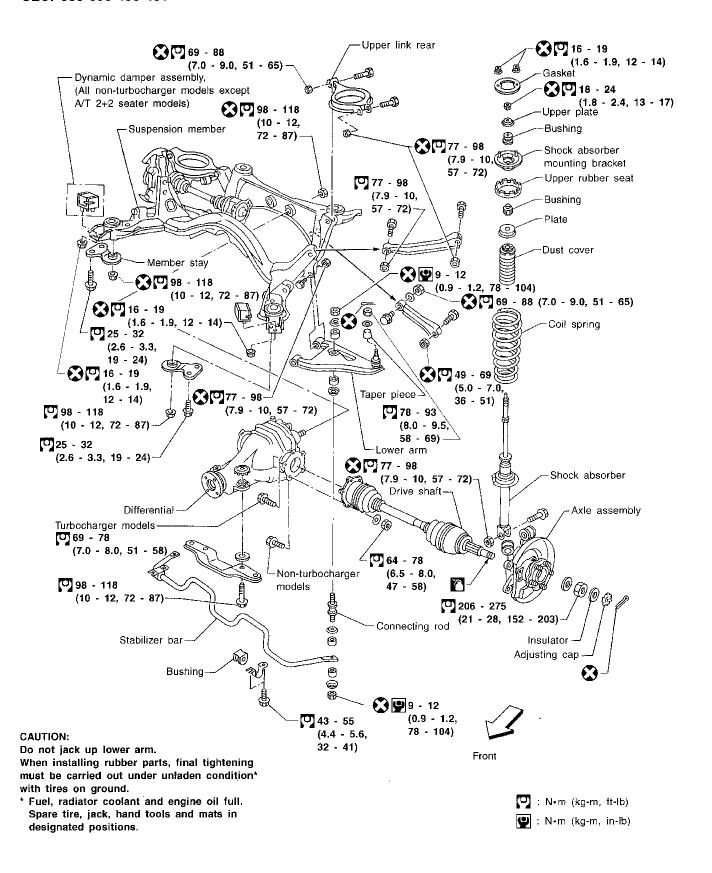
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#### Coil Spring and Shock Absorber

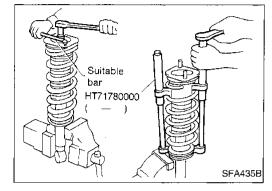
#### **REMOVAL**

- Remove shock absorber upper and lower fixing nuts.
- Do not remove piston rod lock nut on vehicle.









#### DISASSEMBLY

- Set shock absorber on vise with attachment, then loosen piston rod lock nut.
- Do not remove piston rod lock nut at this time.
- Compress spring with Tool so that the shock absorber mounting bracket can be turned by hand.



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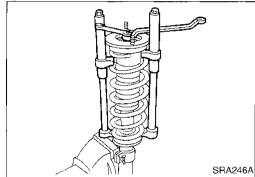


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#### INSPECTION

#### Shock absorber assembly

Remove piston rod lock nut.

- Check for smooth operation through a full stroke, both compression and extension.
- Check for oil leakage 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.

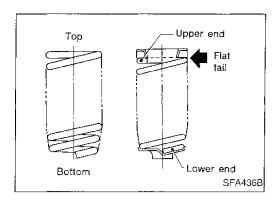
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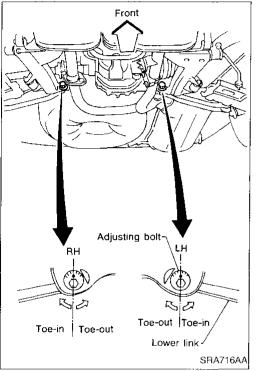
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## Coil Spring and Shock Absorber (Cont'd) ASSEMBLY

When installing coil spring on shock absorber, it must be positioned as shown in figure at left.

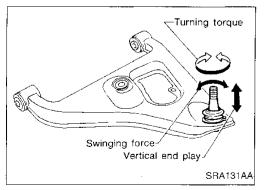


## Multi-link and Lower Ball Joint REMOVAL AND INSTALLATION

 Refer to "Removal and Installation" of REAR AXLE AND REAR SUSPENSION ASSEMBLY (RA-8).

#### Before removing, put matchmarks on adjusting bolt.

- When installing, final tightening must be done at curb weight with tires on ground.
- After installation, check wheel alignment.
   Refer to "Rear Wheel Alignment" of ON-VEHICLE SERVICE (RA-5).



#### INSPECTION

#### Rear suspension member

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

#### Upper and lower links

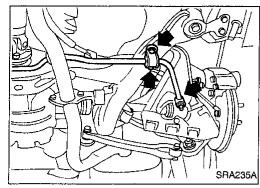
 Replace upper or lower link as required if cracked or deformed or if bushing is damaged.

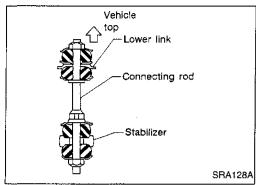
#### Suspension lower ball joint

- Measure swinging 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	Swinging 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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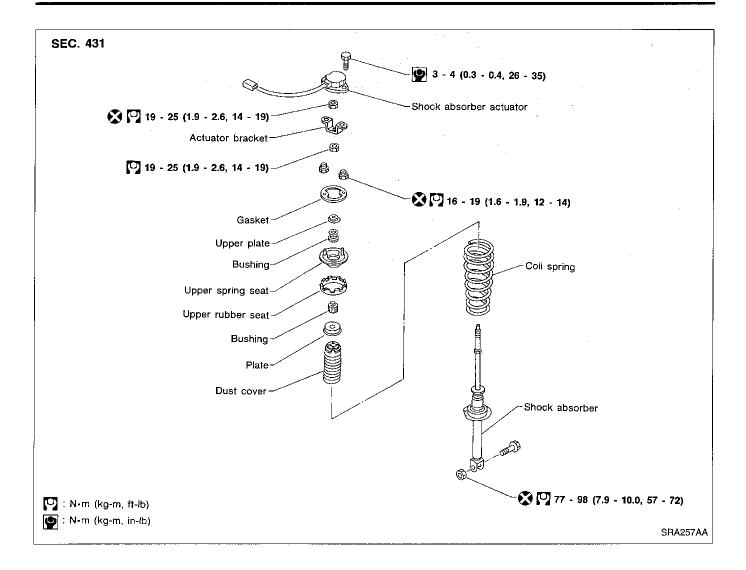
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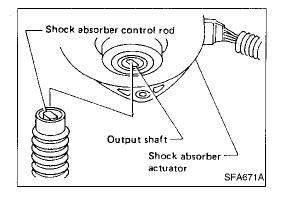
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#### **ADJUSTABLE SHOCK ABSORBER**





#### Removal and Installation

- Remove room trim. Refer to BT section ("Side, Luggage and Floor Trim", "INTERIOR TRIM").
- 2. Disconnect sub-harness connector.
- 3. Remove shock absorber actuator fixing bolts.
- Before installing actuator, ensure angle of shock absorber control rod is aligned with that of actuator output shaft.
   Otherwise, actuator may be damaged.
- Refer to REAR SUSPENSION for other procedures.

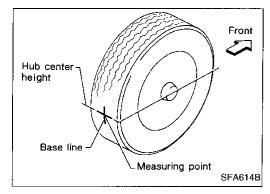
#### Inspection

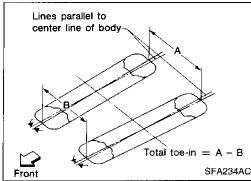
 Replace shock absorber assembly if it is damaged. Refer to REAR SUSPENSION — Coil Spring and Shock Absorber (RA-17).

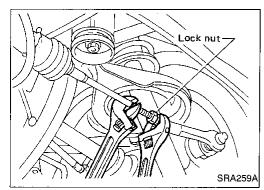
#### **Trouble Diagnosis**

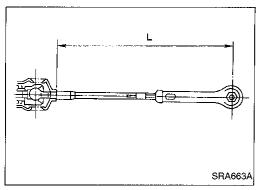
Refer to FA section ("Trouble Diagnoses", "ADJUSTABLE SHOCK ABSORBER").

#### **SUPER HICAS**









#### **Rear Wheel Alignment**

#### TOE-IN

Measure toe-in using the following procedure. If out of specification, inspect and replace any damaged or worn rear suspension parts.

#### **WARNING:**

- Always perform the following procedure on a flat surface.
- Make sure that no person is in front of the vehicle before pushing it.
- 1. Bounce rear of vehicle up and down to stabilize the posture.
- 2. Push the vehicle straight ahead about 5 m (16 ft).
- 3. Put a mark on base line of the tread (rear side) of both tires at the same height of hub center. This mark is a measuring point.
- Measure distance "A" (rear side).
- 5. Push the vehicle slowly ahead to rotate the wheels 180 degrees (1/2 turn).

If the wheels have rotated more than 180 degrees (1/2 turn), try the above procedure again from the beginning. Never push vehicle backward.

6. Measure distance "B" (front side).

Total toe-in: Refer to SDS (RA-24).

- Adjust toe-in by varying length of power cylinder lower links.
- 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":
290.4 mm (11.43 in)

(3) Tighten lock nuts to the specified torque.

(8 - 10 kg-m, 58 - 72 ft-lb)

Refer to ON-VEHICLE SERVICE for other procedures.

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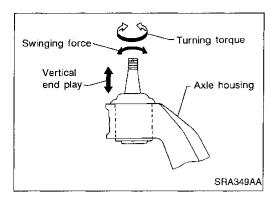
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**RA-21** 

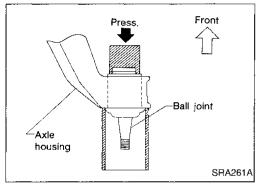


## Rear Axle Housing Ball Joint

#### **INSPECTION**

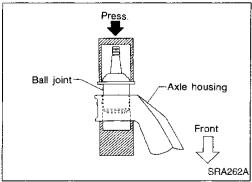
- Measure swinging force, turning torque and vertical end play in axial direction.
- If ball joint is worn, play in axial direction is excessive, or joint is hard to swing, replace ball joint.

Ball joint specifications	Swinging 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**

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



#### **ASSEMBLY**

- 1. Press new ball joint assembly into axle housing.
- 2. Install snap ring into groove of ball joint.
- Refer to REAR AXLE Wheel Hub and Axle Housing for other procedures.
- Refer to ST section ("Trouble Diagnoses", "SUPER HICAS").

#### **SERVICE DATA AND SPECIFICATIONS (SDS)**

#### **General Specifications**

#### **COIL SPRING**

Applied model		Engine			
		VG30DE		VG30DETT	
		2 seater	2+2 seater, Convertible	2 seater	
Wire diameter	mm (in)	11.	4 (0.449)	11.2 (0.441)	
^ 1	Large	111.3 (4.38)		110.4 (4.35)	
Coil outer diameter	mm (in) Small	100.8 (3.97)		100.4 (3.95)	
Free length	mm (in)	372 (14.65)	380 (14.96)	370 (14.57)	
Spring constant	N/mm (kg/mm, lb/in)	21.6 (2.2, 123)		23.5 (2.4, 134)	
Identification color		White x 1, Yellow x 2	Purple x 1, Pink x 1	Purple x 1, Light green x 1	

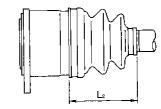
#### **SHOCK ABSORBER**

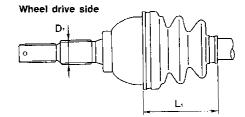
Applied model			Engine	
		VG30DE	VG30	DETT
Piston rod diameter	mm (in)	12.5 (0.492)	14.0 (0.551)	
Damping force [at 0.3 m (1.0 ft)/sec.]	N (kg, lb)	~	Sport	Touring
Expansion		873 - 1,187 (89 - 121, 196 - 267)	1,304 - 1,736 (133 - 177, 293 - 390)	834 - 1,128 (85 - 115, 187 - 254)
Compression		520 - 755 (53 - 77, 117 - 170)	971 - 1,383 (99 - 141, 218 - 311)	481 - 696 (49 - 71, 108 - 157)

#### **DRIVE SHAFT**

Applied model	En	gìne
Applied model	VG30DE VG30DETT	
Joint type	-	
Final drive side	DS90	DS95
Wheel side	ZF100	BF95
Diameter mm (in)		
Wheel side D <sub>1</sub>	30 (1.18)	33 (1.30)
Grease	Nissan genuine grease or equivalent	
Specified amount of grease g (oz)		
Final drive side	165 - 175 (5.82 - 6.17)	155 - 175 (5.47 - 6.17)
Wheel side	113 - 123 (3.99 - 4.34)	125 - 145 (4.41 - 5.11)
Boot length mm (in)		
Final drive side (L <sub>2</sub> )	93 - 95 (3.66 - 3.74)	95.5 - 97.5 (3.76 - 3.84)
Wheel side (L <sub>1</sub> )	96 - 98 (3.78 - 3.86)	101 - 103 (3.98 - 4.06)

#### Final drive side





#### SRA668A

#### STABILIZER BAR

	Engine		
Applied model	VG30DE		
Applied Model	2 seater Convertible 2+2 seater VG30DB		VG30DETT
Stabilizer diameter			
mm (in)			
Outer	15.9 (0.626)	21.0 (0.827)	25.4 (1.000)
Inner	12.3 (0.484)	15.8 (0.622)	19.4 (0.764)

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#### **SERVICE DATA AND SPECIFICATIONS (SDS)**

## Inspection and Adjustment LOWER BALL JOINT

Vertical end play

#### WHEEL ALIGNMENT (Unladen\*)

Cambo	er	Minimum	1°36′ (-1.60°)
Degree minute		Nominal	-1°06′ (-1.10°)
	(Decimal degree)	Maximum	-0°36′ (-0.60°)
Total toe-in		Minimum	0.4 (0.016)
Distance (A–B)		Nominal	2.4 (0.094)
	mm (in)	Maximum	4.4 (0.173)
Angle (left plus right)		Minimum	2' (0.03°)
Degree minute	Nominal	13' (0.22°)	
(Decimal degree)		Maximum	24' (0.40°)

<sup>\*:</sup> 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)	

Swinging 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)

0 (0)

## REAR AXLE HOUSING BALL JOINT (SUPER HICAS)

mm (in)

Swinging force (at cotter pi	n hole) (kg, lb)	6.9 - 68.6 (0.7 - 7.0, 1.5 - 15.4)
Turning torque N·m (kg-cn	n, in-lb)	0.3 - 2.9 (3 - 30, 2.6 - 26.0)
Vertical end play r	nm (in)	0 (0)