REAR SUSPENSION

RSU

F

G

Н

J

Κ

L

M

Ν

0

D

CONTENTS

PRECAUTION2	Removal an
PRECAUTIONS	Inspection a Disposal
PREPARATION3	SUSPENSIO Exploded V
PREPARATION	Removal ar Inspection a
Commercial Service Tools3	FRONT LOV
SYMPTOM DIAGNOSIS4	Exploded V Removal ar Inspection
NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING4 NVH Troubleshooting Chart4	REAR STAE Exploded V
PERIODIC MAINTENANCE5	Removal an Inspection .
REAR SUSPENSION ASSEMBLY5 Inspection5	UNIT REMO
WHEEL ALIGNMENT 6 Inspection 6 Adjustment 6	REAR SUSP Exploded V Removal an Inspection a
REMOVAL AND INSTALLATION8	SERVICE D
REAR LOWER LINK & COIL SPRING8	(SDS)
Exploded View8 Removal and Installation8	SERVICE DA
Inspection9	Wheel Align

Removal and Installation
SUSPENSION ARM13Exploded View13Removal and Installation13Inspection and Adjustment13
FRONT LOWER LINK15Exploded View15Removal and Installation15Inspection15
REAR STABILIZER17Exploded View17Removal and Installation17Inspection17
UNIT REMOVAL AND INSTALLATION18
REAR SUSPENSION MEMBER18Exploded View18Removal and Installation18Inspection and Adjustment19
SERVICE DATA AND SPECIFICATIONS (SDS)20
SERVICE DATA AND SPECIFICATIONS (SDS) 20 Wheel Alignment 20 Ball Joint 20 Wheel Height 20

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

Precautions for Suspension

INFOID:0000000006225656

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

PREPARATION

< PREPARATION >

PREPARATION

PREPARATION

Special Service Tools

INFOID:0000000006225657

Α

В

Tool number (Kent-Moore No.) Tool name	Description	С
KV10109300 (–) Holder	 Removing and installing bracket	D
		RSU

ZZA1010D

Commercial Service Tools

INFOID:0000000006225658

Tool name		Description
Power tool		Loosening bolts and nuts
Spring compressor	PBIC0190E	Removing and installing coil spring
	S-NT717	
Socket		Removing and installing bumper rubber
a: 80 mm (3.15 in)		
	JPEIB0233ZZ	

0

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

SYMPTOM DIAGNOSIS

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:0000000006225659

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

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

 $[\]times$: Applicable

REAR SUSPENSION ASSEMBLY

< PERIODIC MAINTENANCE >

PERIODIC MAINTENANCE

REAR SUSPENSION ASSEMBLY

Inspection INFOID:0000000006225660 В

MOUNTING INSPECTION

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

BALL JOINT AXIAL END PLAY

Measure axial end play by placing and moving up/down with an iron bar or equivalent between suspension arm or front lower link and axle assembly.

Axial end play : Refer to RSU-20, "Ball Joint".

CAUTION:

- · Never depress brake pedal when measuring.
- Never perform with tires on level ground.
- Be careful not to damage ball joint boot.

SHOCK ABSORBER

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

RSU

D

Α

F

Н

K

L

Ν

WHEEL ALIGNMENT

< PERIODIC MAINTENANCE >

WHEEL ALIGNMENT

Inspection INFOID:0000000000225661

DESCRIPTION

Measure wheel alignment under unladen conditions.

NOTE:

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

PRELIMINARY CHECK

Check the following:

- · Tires for improper air pressure and wear
- Road wheels for runout. Refer to WT-64, "Inspection".
- Wheel bearing axial end play. Refer to <u>RAX-5</u>, "Inspection".
- Ball joint axial end play of suspension arm and front lower link. Refer to RSU-20, "Ball Joint".
- Shock absorber operation
- Each mounting point of axle and suspension for looseness and deformation
- Each of front lower link, rear lower link, rear suspension member, suspension arm and shock absorber for cracks, deformation, and other damage
- Vehicle height (posture)

GENERAL INFORMATION AND RECOMMENDATIONS

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

ALIGNMENT PROCESS

IMPORTANT:

Use only the alignment specifications listed in this Service Manual.

- When displaying the alignment settings, many alignment machines use "indicators": (Green/red, plus or minus, Go/No Go). Never use these indicators.
- The alignment specifications programmed into your machine that operate these indicators may not be correct.
- This may result in an ERROR.
- Some newer alignment machines are equipped with an optional "Rolling Compensation" method to "compensate" the sensors (alignment targets or head units). **Never use this "Rolling Compensation" method.**
- Use the "Jacking Compensation Method". After installing the alignment targets or head units, raise the vehicle and rotate the wheels 1/2 turn both ways.
- See Instructions in the alignment machine you're using for more information on this.

Adjustment

CAMBER

WHEEL ALIGNMENT

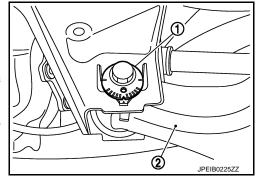
< PERIODIC MAINTENANCE >

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

Camber: Refer to RSU-20, "Wheel Alignment".

CAUTION:

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



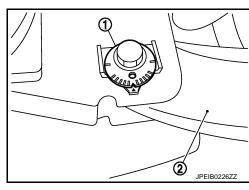
TOE-IN

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

Toe-In : Refer to RSU-20, "Wheel Alignment".

CAUTION:

- Be sure to adjust equally on right and left side with adjusting bolt.
- When tightening the nut firmly and checking the torque, use a wrench to prevent the turning of bolt.
- If toe-in is not still within the specification, inspect and replace any damaged or worn suspension parts.



RSU

D

Α

В

F

G

Н

Κ

L

M

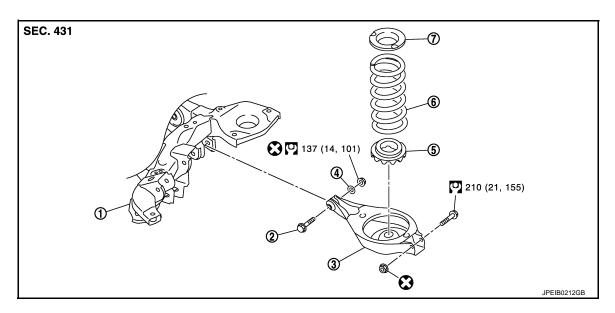
Ν

0

REMOVAL AND INSTALLATION

REAR LOWER LINK & COIL SPRING

Exploded View



- 1. Rear suspension member
- 4. Eccentric disc
- 7. Upper seat

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

- Adjusting bolt
- Rubber seat

- Rear lower link
- 6. Coil spring

Removal and Installation

INFOID:0000000006225664

REMOVAL

- 1. Remove tires with power tool. Refer to WT-64, "Removal and Installation".
- 2. Remove wheel sensor harness. Refer to BRC-135, "REAR WHEEL SENSOR: Removal and Installation".
- Remove height sensor from rear lower link (right side). Refer to EXL-136, "Removal and Installation".
- 4. Remove vehicle height sensor from rear lower link (left side). Refer to SCS-98, "Removal and Installation".
- 5. Set suitable jack under rear lower link.
- Using a spring compressor (commercial service tool), compress coil spring between rubber seat and upper seat until coil spring with a spring compressor is free.
 CAUTION:

Be sure a spring compressor is securely attached coil spring. Compress coil spring.

- 7. Remove rear lower link mounting bolt (axle housing side).
- 8. Slowly lower jack, then remove upper seat, coil spring and rubber seat from rear lower link.
- 9. Remove rear lower link mounting nut, eccentric disc, and adjusting bolt and then remove rear lower link.
- 10. Perform inspection after removal. Refer to RSU-9, "Inspection".

INSTALLATION

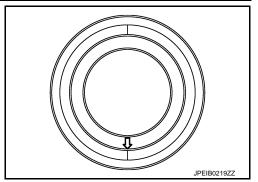
Note the following, and install in the reverse order of removal.

REAR LOWER LINK & COIL SPRING

< REMOVAL AND INSTALLATION >

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

> $\langle \neg$: Vehicle outside

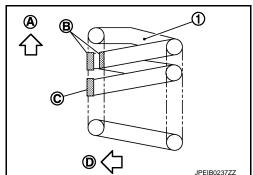


• When installing the coil spring (1), check that coil spring is attached as shown in the figure.

> : Vehicle upper side Α В : Two paint marks С : One paint mark D : Vehicle inside

• Perform the final tightening of rear suspension member and axle housing rubber bushing position under unladen condition with tires on level ground.

Perform inspection after installation. Refer to RSU-9, "Inspection".



INFOID:0000000006225665

INSPECTION AFTER REMOVAL

Inspection

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

INSPECTION AFTER INSTALLATION

- 1. Check wheel alignment. Refer to RSU-6, "Inspection".
- Adjust neutral position of steering angle sensor. Refer to <u>BRC-64, "Work Procedure"</u>.
- 3. Adjust levelizer adjustment of height sensor. Refer to EXL-61, "LEVELIZER ADJUSTMENT: Special Repair Requirement".
- 4. Check standard vehicle height setting of vehicle height sensor. Refer to SCS-67, "Work Procedure".

RSU

D

Α

В

Н

K L

J

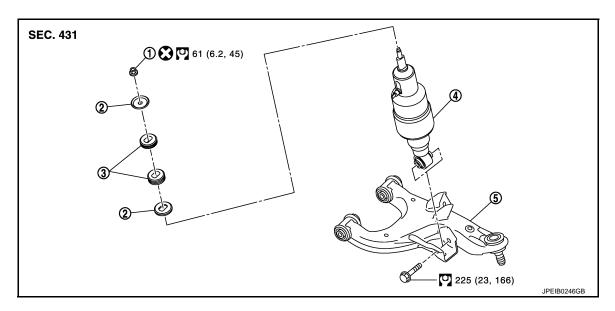
M

Ν

REAR SHOCK ABSORBER

Exploded View

WITHOUT HBMC

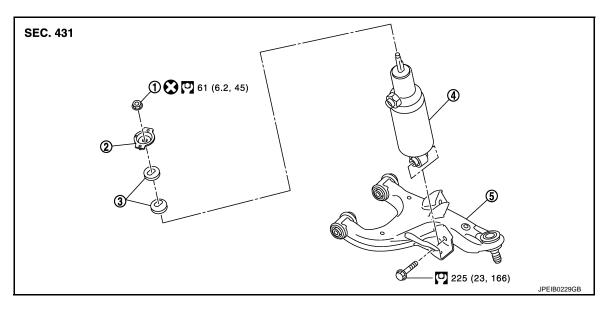


- Piston rod lock nut
 Shock absorber
- 2. Washer
- 5. Front lower link

3. Bushing

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

WITH HBMC



- Piston rod lock nut
 Shock absorber
- 2. Bracket
- 5. Front lower link

3. Bushing

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

Removal and Installation

emoval and installation

REMOVAL

 Reduce system pressure. (With HBMC) Refer to <u>SCS-18, "Work Procedure"</u>. CAUTION:

REAR SHOCK ABSORBER

< REMOVAL AND INSTALLATION >

Inadvertent piping removal causes fluid to splatter.

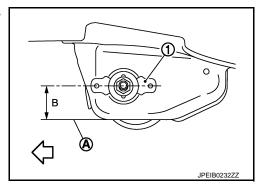
- Remove tires with power tool. Refer to <u>WT-64, "Removal and Installation"</u>.
- Remove height sensor from rear lower link (right side). Refer to <u>EXL-136, "Removal and Installation"</u>.
- 4. Remove vehicle height sensor from rear lower link (left side). Refer to SCS-98, "Removal and Installation".
- 5. Remove air tube from shock absorber assembly. Refer to SCS-95, "Removal and Installation".
- 6. Remove middle tube assembly from shock absorber assembly. (With HBMC) Refer to SCS-44, "REAR TUBE ASSEMBLY: Removal and Installation".
- 7. Remove shock absorber mounting bolt (lower side).
- 8. Remove piston rod lock nut.
- 9. Remove bracket, bushings, and shock absorber. (With HBMC)
- 10. Remove washers, bushings, and shock absorber. (Without HBMC)
- Perform inspection after removal. Refer to RSU-11, "Inspection and Adjustment".

INSTALLATION

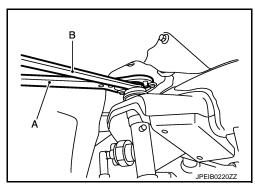
Note the following, and install in the reverse order of removal.

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

: Vehicle frontA : Frame edge lineB : Almost parallel



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



Inspection and Adjustment

INSPECTION AFTER REMOVAL

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

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

INSPECTION AFTER INSTALLATION

- 1. Check wheel alignment. Refer to RSU-6, "Inspection".
- Adjust neutral position of steering angle sensor. Refer to <u>BRC-64, "Work Procedure"</u>.
- 3. Adjust levelizer adjustment of height sensor. Refer to EXL-61, "LEVELIZER ADJUSTMENT: Special Repair Requirement".
- 4. Check standard vehicle height setting of vehicle height sensor. Refer to <u>SCS-67</u>, "Work <u>Procedure"</u>.

ADJUSTMENT AFTER INSTALLATION (WITH HBMC)

D

Α

В

RSU

F

G

Н

0

K

L

M

INFOID:0000000006225668

Ν

 \circ

Р

DUISTMENT AFTER INSTALLATION (MITH HRMC)

REAR SHOCK ABSORBER

< REMOVAL AND INSTALLATION >

Bleed air from the HBMC. Refer to SCS-18, "Work Procedure".

Disposal INFOID:0000000000225669

WITHOUT HBMC

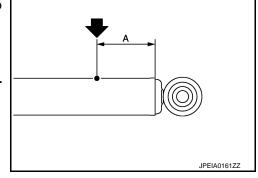
- 1. Set shock absorber horizontally with the piston rod fully extended.
- 2. Drill 2 3 mm (0.08 0.12 in) hole at the position () from top as shown in the figure to release gas gradually.

CAUTION:

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

NOTE:

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



A : 20 – 30 mm (0.79 – 1.18 in)

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

CAUTION

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

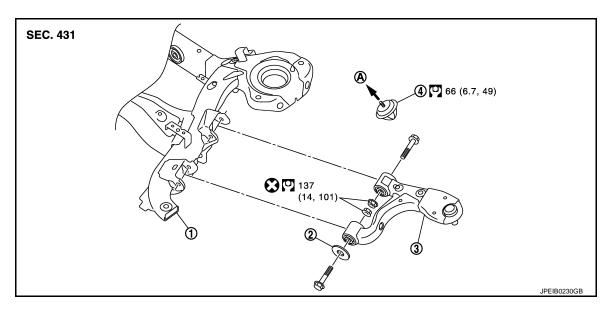
WITH HBMC

NOTE:

Releasing gas is not required.

SUSPENSION ARM

Exploded View INFOID:0000000006225670



- Rear suspension member
- Stopper rubber

Suspension arm

- Bumper rubber
- To frame

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

Removal and Installation

REMOVAL

- Remove tires with power tool. Refer to WT-64, "Removal and Installation".
- 2. Remove rear suspension member assembly. Refer to RSU-18, "Removal and Installation".
- Remove bumper rubber from frame, using a socket (commercial service tool).
- Remove suspension arm from axle housing. Refer to RAX-7, "Removal and Installation".
- Remove suspension arm mounting bolts, nuts, and stopper rubber from rear suspension member.
- 6. Remove suspension arm.
- Perform inspection after removal. Refer to RSU-13, "Inspection and Adjustment".

INSTALLATION

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

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

Inspection and Adjustment

INSPECTION AFTER REMOVAL

Appearance

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

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

Ball Joint Inspection

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

Swing Torque Inspection

RSU-13 Revision: 2010 May 2011 QX56

D

RSU

Α

В

Н

INFOID:000000000622567:

M

Ν

INFOID:0000000006225672

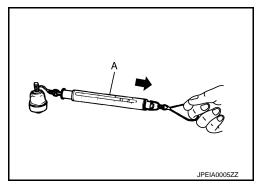
SUSPENSION ARM

< REMOVAL AND INSTALLATION >

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

Swing torque : Refer to RSU-20, "Ball Joint".

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



Rotating Torque Inspection

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

Rotating torque : Refer to RSU-20, "Ball Joint".

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

Axial End Play Inspection

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

Axial end play : Refer to RSU-20, "Ball Joint".

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

INSPECTION AFTER INSTALLATION

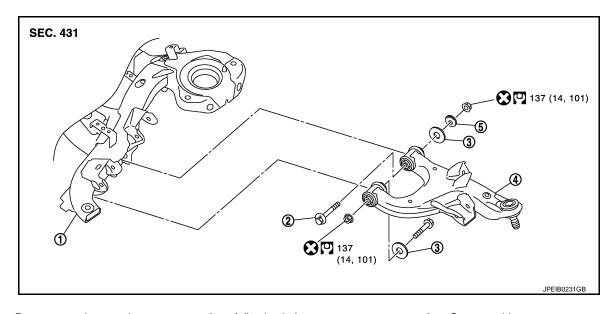
- 1. Check wheel alignment. Refer to RSU-6, "Inspection".
- 2. Adjust neutral position of steering angle sensor. Refer to <u>BRC-64</u>, "Work <u>Procedure"</u>.
- Adjust levelizer adjustment of height sensor. Refer to <u>EXL-61</u>, "<u>LEVELIZER ADJUSTMENT</u>: <u>Special Repair Requirement</u>".
- Check standard vehicle height setting of vehicle height sensor. Refer to <u>SCS-67</u>, "Work <u>Procedure"</u>.

ADJUSTMENT AFTER INSTALLATION (WITH HBMC)

Bleed air from the HBMC. Refer to SCS-18, "Work Procedure".

FRONT LOWER LINK

Exploded View INFOID:0000000006225673



Rear suspension member

Front lower link

- Adjusting bolt
- Eccentric disc

Stopper rubber

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

Removal and Installation

REMOVAL

- 1. Remove tires with power tool. Refer to WT-64, "Removal and Installation".
- Set suitable jack under rear lower link.
- Remove shock absorber mounting bolts from front lower link. Refer to RSU-10, "Exploded View".
- 4. Remove stabilizer connecting rod. (Without HBMC) Refer to RSU-17, "Removal and Installation".
- Remove front lower link mounting bolts and nuts from axle housing.
- Remove front lower link mounting bolt, nuts, stopper rubbers, eccentric disc, and adjusting bolt from rear suspension member, and remove front lower link.
- Perform inspection after removal. Refer to RSU-15, "Inspection".

INSTALLATION

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

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

Inspection INFOID:00000000006225675

INSPECTION AFTER REMOVAL

Appearance

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

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

Ball Joint Inspection

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

Swing Torque Inspection

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

RSU-15 Revision: 2010 May 2011 QX56 В

Α

D

RSU

Н

INFOID:0000000006225674

M

Ν

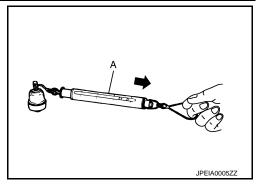
FRONT LOWER LINK

< REMOVAL AND INSTALLATION >

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

Swing torque : Refer to RSU-20, "Ball Joint".

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



Rotating Torque Inspection

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

Rotating torque : Refer to RSU-20, "Ball Joint".

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

Axial End Play Inspection

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

Axial end play : Refer to RSU-20, "Ball Joint".

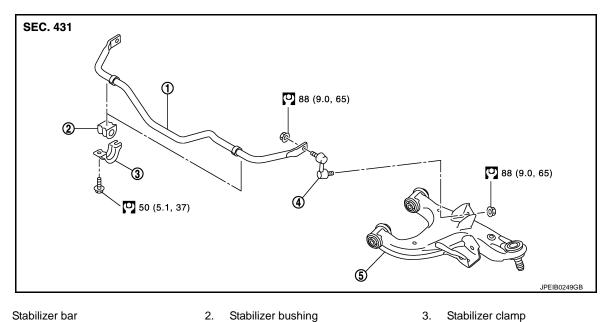
• If axial end play exceeds the standard range, replace front lower link.

INSPECTION AFTER INSTALLATION

- 1. Check wheel alignment. Refer to RSU-6, "Inspection".
- 2. Adjust neutral position of steering angle sensor. Refer to BRC-64, "Work Procedure".

REAR STABILIZER

Exploded View INFOID:0000000006270956



Stabilizer bar

- Stabilizer bushing

 - Front lower link

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

Removal and Installation

Stabilizer connecting rod

REMOVAL

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

INSTALLATION

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

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

Inspection M INFOID:0000000006270958

INSPECTION AFTER REMOVAL

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

RSU

D

Α

В

Н

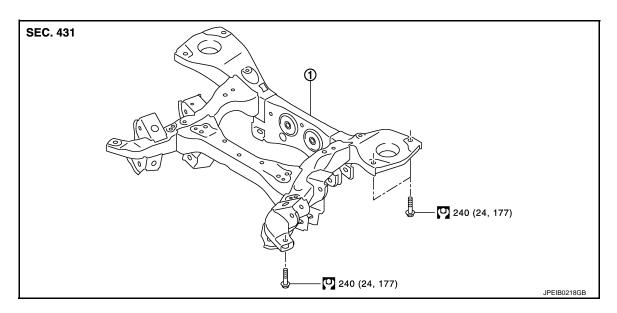
INFOID:0000000006270957

K

UNIT REMOVAL AND INSTALLATION

REAR SUSPENSION MEMBER

Exploded View



1. Rear suspension member

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

Removal and Installation

INFOID:0000000006225677

REMOVAL

Reduce system pressure. (With HBMC) Refer to <u>SCS-18, "Work Procedure"</u>.

Inadvertent piping removal causes fluid to splatter.

- 2. Remove tires with power tool. Refer to WT-64, "Removal and Installation".
- 3. Remove emergency tires.
- 4. Remove front tube and main muffler. Refer to EX-5, "Removal and Installation".
- Remove caliper assembly. Hang caliper assembly in a place where it will not interfere with work. Refer to <u>BR-43, "BRAKE CALIPER ASSEMBLY: Removal and Installation"</u>. <u>CAUTION:</u>

Avoid depressing brake pedal while brake caliper is removed.

- Remove disc rotor. Refer to <u>RAX-7</u>, "<u>Removal and Installation</u>".
- 7. Remove wheel sensor harness from rear suspension member. Refer to <u>BRC-135</u>, "<u>REAR WHEEL SEN-SOR</u>: Removal and Installation".
- 8. Remove height sensor from rear lower link (right side). Refer to EXL-136. "Removal and Installation".
- 9. Remove vehicle height sensor from rear lower link (left side). Refer to SCS-98, "Removal and Installation".
- Remove parking brake cable mounting bolt and separate parking brake cable from vehicle and rear suspension member. Refer to <u>PB-5</u>, "<u>Removal and Installation</u>".
- 11. Remove shock absorber mounting bolt (lower side).
- 12. Remove stabilizer bar. (Without HBMC). Refer to RSU-17, "Removal and Installation".
- 13. Remove rear lower link and coil spring. Refer to RSU-8, "Removal and Installation".
- 14. Remove drive shaft. Refer to RAX-11, "Removal and Installation".
- 15. Remove propeller shaft. Refer to <u>DLN-137, "Removal and Installation"</u> (2WD), <u>DLN-144, "Removal and Installation"</u> (4WD).

REAR SUSPENSION MEMBER

< UNIT REMOVAL AND INSTALLATION >

- 16. Remove final drive. Refer to DLN-201, "Removal and Installation".
- 17. Remove rear tube assembly A and rear tube assembly B. (With HBMC) Refer to SCS-44, "REAR TUBE ASSEMBLY: Removal and Installation".
- 18. Set suitable jack under rear suspension member.
- 19. Slowly lower jack, then remove rear suspension member, suspension arm, front lower link, wheel hub and housing from vehicle as a unit.
- 20. Remove mounting bolts and nuts, then remove suspension arm, front lower link, wheel hub and housing from rear suspension member.
- 21. Perform inspection after removal. Refer to RSU-19, "Inspection and Adjustment".

INSTALLATION

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

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

Inspection and Adjustment

INFOID:0000000006225678

INSPECTION AFTER REMOVAL

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

INSPECTION AFTER INSTALLATION

- Adjust parking brake operation (stroke). Refer to PB-3, "Inspection and Adjustment".
- Check wheel alignment. Refer to RSU-6, "Inspection".
- Adjust neutral position of steering angle sensor. Refer to <u>BRC-64, "Work Procedure"</u>.
- 4. Adjust levelizer adjustment of height sensor. Refer to EXL-61, "LEVELIZER ADJUSTMENT: Special Repair Requirement".
- Check standard vehicle height setting of vehicle height sensor. Refer to <u>SCS-67</u>, "Work Procedure".
- Check wheel sensor harness for proper connection. Refer to BRC-135, "REAR WHEEL SENSOR: Exploded View"

ADJUSTMENT AFTER INSTALLATION (WITH HBMC)

Bleed air from the HBMC. Refer to SCS-18, "Work Procedure".

RSU

Н

D

K

N

SERVICE DATA AND SPECIFICATIONS (SDS)

INFOID:0000000006225679

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Wheel Alignment

	Item	Standard			
		Minimum	-1° 00′ (-1.00°)		
Camber Degree minute (Decimal degree)		Nominal	-0° 30′ (-0.50°)		
		Maximum	0° 00′ (0.00°)		
		Left and right difference	0° 45′ (0.75°) or less		
C	Total toe-in Distance Toe angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0 mm (0 in)		
		Nominal	In 3.4 mm (0.134 in)		
		Maximum	In 6.8 mm (0.268 in)		
Toe-in		Minimum	0° 00′ (0.00°)		
		Nominal	In 0° 07′ (0.12°)		
		Maximum	In 0° 14′ (0.23°)		

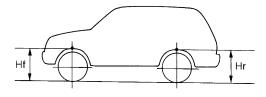
Measure value under unladen* conditions.

Ball Joint

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

Wheel Height

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



SFA746B

Measure value under unladen* conditions.

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

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