SECTION RSU
REAR SUSPENSION

CONTENTS

HOW TO USE THIS MANUAL

APPLICATION NOTICE

How to Check Vehicle Type

INFOID:0000000011734836

Check the vehicle type to confirm the service information.

x: Applicable, —: Not applicable

Service information	Grade	NISMO-specific suspension	Brake air guide
TYPE 1	• GTR Black edition • GTR Premium edition	—	—
TYPE 2	• GTR N-Package	x	—
	• GTR Track edition • GTR NISMO		x

SYMPTOM DIAGNOSIS

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

TYPE 1

TYPE 1 : NVH Troubleshooting Chart

INFOID:0000000011490204

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

			Reference	RSU-14, RSU-19, RSU-24, RSU-28, RSU-31, RSU-35, RSU-36	RSU-14	—	—	—	RSU-14, RSU-19, RSU-24, RSU-28, RSU-31, RSU-35, RSU-36	RSU-12	RSU-35	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 or 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
Symptom	REAR SUSPENSION	Noise		×	×	×	×	×	×			×	×	×	×	×	×	×	×
		Shake		×	×	×	×		×			×		×	×	×	×	×	×
		Vibration		×	×	×	×	×				×		×	×		×		×
		Shimmy		×	×	×	×			×				×	×	×		×	×
		Judder		×	×	×								×	×	×		×	×
		Poor quality ride or handling		×	×	×	×	×		×	×			×	×	×			

×: Applicable

TYPE 2

TYPE 2 : NVH Troubleshooting Chart

INFOID:0000000011490205

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

			Reference	Improper installation or 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
			Possible cause and SUSPECTED PARTS	Improper installation or 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
Symptom	REAR SUSPENSION	Noise	RSU-14, RSU-21, RSU-25, RSU-29, RSU-32, RSU-35, RSU-36	×	×	×	×	×	×			×	×	×	×	×	×	×	×
		Shake		×	×	×	×		×			×		×	×	×	×	×	×
		Vibration		×	×	×	×	×				×		×	×		×		×
		Shimmy		×	×	×	×			×				×	×	×		×	×
		Judder		×	×	×								×	×	×		×	×
		Poor quality ride or handling	RSU-14	×	×	×	×	×		×	×			×	×	×			
			RSU-21, RSU-25, RSU-29, RSU-32, RSU-35, RSU-36																
			RSU-14																
			—																
			—																
			—																
			RSU-14, RSU-21, RSU-25, RSU-29, RSU-32, RSU-35, RSU-36																
			RSU-12																
			RSU-35																
			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.																

×: Applicable

PRECAUTION

PRECAUTIONS

Aluminum Die-Casting Parts Handling

INFOID:0000000011490206

PROHIBITION OF WELDING OR BEATING REPAIR

- Material made of aluminum die-casting parts is heat-treated and looses strength when being exposed to welding heat. Do not perform welding repair for cracks, damage or others.
- For aluminum die-casting parts deformation, do not perform repair by beating. Always repair by replacement as an assembly.

CRACK CHECK

When the vehicle is damaged, always perform a visual deformation check and a crack check.

Crack Check Procedures

For a crack check, use dye penetrant inspection fluid (pre-cleaning fluid, penetrant fluid and developer fluid).

CAUTION:

Always perform a crack check in accordance with the procedures specified by the manufacturer of the dye penetrant inspection fluid.

1. Spray pre-cleaning fluid on the checking surface for cleaning.
2. Spray penetrant fluid on the checking surface and wait until the penetrant fluid soaks into any cracks.
3. Wipe off excessive penetrant fluid, and then also lightly wipe off penetrant fluid using a wet cloth.
4. Spray developer fluid on the checking surface.
5. Cracks, if any, are dyed red in color.

STRAY CURRENT CORROSION

- Corrosion occurs to aluminum die-casting parts by the stray current corrosion phenomenon, when directly contacting other parts made of steel. Always apply anti-stray current corrosion paint (primer) on the mounting surface.
- Clean mounting surface to prevent any foreign matter, steel powder or others from being mixed in. Always apply the specified adhesive when installing.
- Corrosion by stray current corrosion may occur when installing with any other bolts than the specified bolt. Always use the specified bolt that is surface treated.
- When loosening the specified bolt that is tightened, the treated surface may peel. Never reuse the specified bolt that is tightened once.

TIGHTENING TORQUE CONTROL

Material made of aluminum die-casting parts is soft in term of hardness. Tightening torque must be controlled exactly as specified. Always use a torque wrench to install any part to the specified tightening torque.

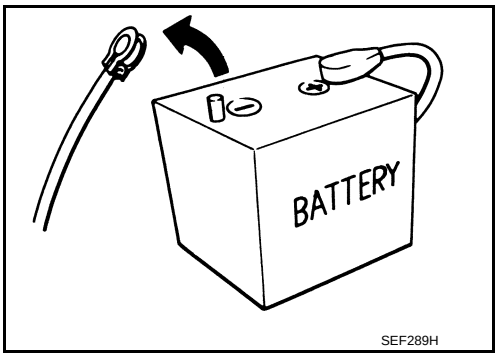
WARNING:

Never use a power tool to remove or tighten bolts for aluminum die-casting part to prevent damage to aluminum die-casting parts.

Precautions for Removing Battery Terminal

INFOID:0000000011490207

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
  NOTE:
  ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.



- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
  NOTE:

The removal of 12V battery may cause a DTC detection error.

Titanium Muffler Handling

INFOID:0000000011490208

CAUTION:

- **Never touch the titanium muffler directly with bare hands or allow oils to adhere to it during inspection, removal, and installation.**
- **Always wear new thick cotton gloves or working gloves. (Never use oil-adhered gloves.)**
- **After oil adhesion, wait until the titanium muffler cools and immediately remove oil with parts cleaner.**
- **Always use genuine parts cleaner (dry type) or the equivalent.**
- **When cleaning oil in on-board condition, apply parts cleaner to a waste to wipe out oil. By doing so, peripheral parts can be protected from parts cleaner adhesion.**
- **Be careful not to cut fingers with the insulator edge or the main muffler cooling fin.**

General Precautions

INFOID:0000000011490209

CAUTION:

After finishing servicing, check that all the tools and waste are stored in a customary place.

Precautions for Suspension (GT-R certified NISSAN dealer)

INFOID:0000000011490210

- 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. Always wipe out any spilled oil.
- Unladen conditions mean that fuel, engine coolant and lubricant are full. Jack, hand tools and mats are in designated positions.
- After servicing suspension parts, always 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.
- Carry out a shakedown driving for (approximately) 1,000 miles or 2,000 km to adjust the suspension parts after the replacement.
- Before starting and after the sports driving, always check for the damage on Bilstein DampTronic* and the oil leakage.
  *: The Bilstein DampTronic is the trademark owned by Thyssen Krupp Bilstein Suspension GmbH, Germany.
- Before and after the sports driving, check each link and the mounting part of the shock absorber for backlash and looseness.
- For vehicles with a NISMO-specific suspension, the following instructions must be also observed.
- When installing rubber bushings, the final tightening must be carried out under unladen conditions with tires on ground.
- Before starting and after the sports driving, always check for the damage on shock absorber and the oil leakage.
- For the coil spring, the spring rate and the orientation tolerance are factory-configured to eliminate the axial load difference during cornering and the load difference between the front and the rear axles during acceleration/deceleration. Therefore, it is necessary to replace all of four coil springs together as a set.

PRECAUTION FOR WHEEL ALIGNMENT

Before Adjusting Wheel Alignment

- Adjust wheel alignment with the vehicle in customer's regular use condition (e.g. normal stock items).
- Confirm customer's requests to adjust the wheel alignment according to the customer's requests. If there is no request from the customer, adjust the wheel alignment to the specified value according to the level of wear in tires. For alignment values, refer to RSU-38, "TYPE 1 : Wheel Alignment" (TYPE 1), RSU-39, "TYPE 2 : Wheel Alignment" (TYPE 2).
- Tires with the tendency of partial wear: Show and explain the customer the partial wear and adjust the camber in the positive direction, and in addition, adjust the toe-in distance in the IN direction.
- Tires with no tendency of partial wear: Adjust to the value of the default setting at delivery.
- Vehicle attitude is high immediately after jack up. Before setting the vehicle on the alignment tester, drive the vehicle at least 656 ft or 200 m while steering right and left fully to allow the vehicle attitude to fit in.
- Use an alignment tester calibrated periodically.
- If a vehicle is used with the alignment value for NG zone, tire performance cannot be delivered sufficiently, causing lower fuel economy due to excessive tire wear and an increase in rolling resistance. Therefore, never use the alignment value for NG zone. Toe-out is particularly prohibited. If the alignment becomes outside the specified value due to toe-out, this cannot be covered by the warranty.

- Never change alignment. If it is changed, vehicle attitude may become higher because the suspension does not fit in sufficiently until the vehicle is driven (approximately) 1,000 miles or 2,000 km.
- Always check and adjust wheel alignment at the first special maintenance (the mileage of 1,000 miles or 2,000 km).

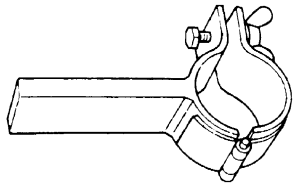
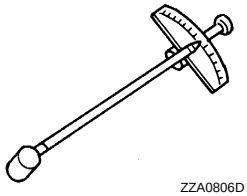
PREPARATION

PREPARATION

Special Service Tool (GT-R certified NISSAN dealer)

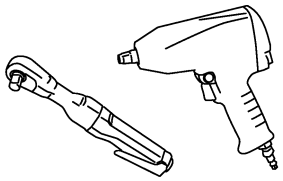
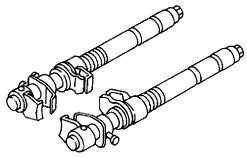
INFOID:0000000011490211

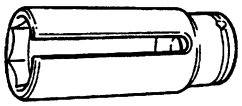
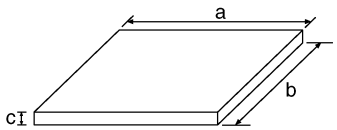
The actual shapes of Kent-Moore tools may differ from those of the special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
ST35652000 (–) Strut attachment  ZZA0807D	Disassembling and assembling strut
ST3127S000 (J-25765-A) Preload gauge  ZZA0806D	Measuring rotating torque of ball joint

Commercial Service Tool (GT-R certified NISSAN dealer)

INFOID:0000000011490212

Tool name	Description
Power tool  PBIC0190E	Loosening bolts and nuts
Spring compressor  S-NT717	Removing and installs coil spring

Sensor socket 17 mm (0.67 in)	 ZZA1007D	Removing and installs shock absorber piston rod lock nut
Plate (Steel or wooden) a: Approx. 300 mm (11.81 in) b: Approx. 200 mm (7.87 in) c: 15 mm (0.59 in) **CAUTION:** **Plate thickness: 15 mm (0.59 in) without exception**	 JSEIA0480ZZ	Installing radius rod, front lower link, and rear lower link (NISMO-specific suspension)

PERIODIC MAINTENANCE

REAR SUSPENSION ASSEMBLY

Inspection

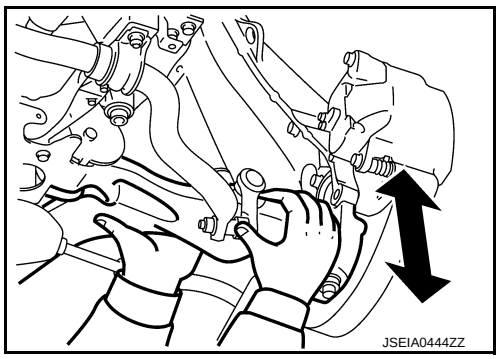
INFOID:0000000011490213

MOUNTING INSPECTION

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

Ball Joint Axial End Play

Move axle side of suspension arm in the axial direction by hand. Check there is no end play.



Axial end play **: Refer to RSU-40, "Ball Joint (GT-R certified NISSAN dealer)".**

CAUTION:

- **Never depress brake pedal when measuring.**
- **Never perform with tires on level ground.**
- **Be careful not to damage ball joint boot. Never damage the installation position by applying excessive force.**

SHOCK ABSORBER

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

WHEEL ALIGNMENT

Inspection

INFOID:0000000011490214

DESCRIPTION

Measure wheel alignment under unladen conditions.

NOTE:

“Unladen conditions” means that fuel, engine coolant, and lubricant are full. Jack, hand tools and mats are in designated positions.

PRELIMINARY CHECK

Check the following:

- Tires for improper pressure and wear.
- Wheel bearing axial end play. Refer to RAX-7, "Inspection".
- Ball joint axial end play of suspension arm. Refer to RSU-11, "Inspection".
- Shock absorber operation.
- Each mounting point of axle and suspension for looseness and deformation.
- Each of front lower link, rear lower link, radius rod, rear suspension member, suspension arm and shock absorber for cracks, deformation, and other damage.
- Vehicle height (posture).

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). **Do not use these indicators.**
  - The alignment specifications programmed into your machine that operate these indicators may not be correct.
  - This may result in an ERROR.
- See instructions in the alignment machine.

Adjustment

INFOID:0000000011490215

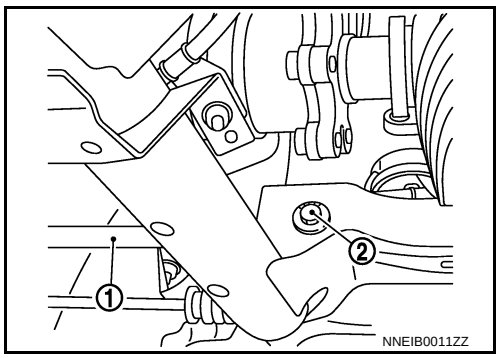
CAUTION:

- **When adjusting wheel alignment, refer to “PRECAUTION FOR WHEEL ALIGNMENT” in RSU-7, "Precautions for Suspension (GT-R certified NISSAN dealer)".**
- **Adjust wheel alignment with the vehicle in customer's regular use condition (e.g. normal stock items), with the fuel in full-tank condition, and with no one in the vehicle.**
- **To adjust wheel alignment, set tire pressure at 250 kPa (2.5 kg/cm^2, 36 psi). After adjusting wheel alignment, adjust tire pressure to the specified value. Refer to WT-81, "Tire".**

TOE-IN

1. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".

2. Adjust using the adjust bolt (2) of rear lower link (1).



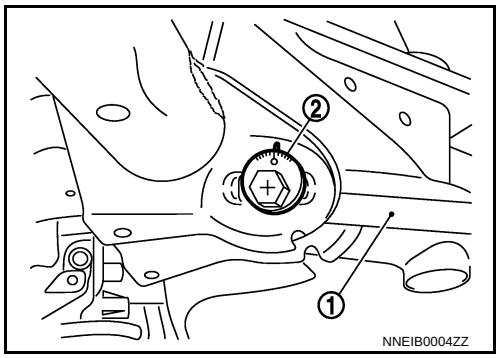
Toe-in **: Refer to RSU-38, "TYPE 1 : Wheel Alignment" (TYPE 1), RSU-39, "TYPE 2 : Wheel Alignment" (TYPE 2).**

CAUTION:

- **Always evenly adjust both toe-in alternately and adjust the difference between the left and right to the standard.**
- **Always hold the adjust bolt firmly when tightening nut.**
- **Always adjust to toe-in. The toe changes, depending on an attitude change or a permanent set of bush. Accordingly, the state of the front wheels change to toe-out and the rear wheels, toe-in. If the wheels change to toe-out, tire partial wear is accelerated and local heating may be accelerated in the inner side of tires.**
- **Engaging in performance driving on a racetrack and ultra-high-speed driving, be sure to adjust toe-in to 2.0 mm (0.079 in) or less. If used beyond this range, it is not covered by the warranty.**

CAMBER

1. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
2. Adjust using the adjust bolt (2) of front lower link (1).



Camber **: Refer to RSU-38, "TYPE 1 : Wheel Alignment" (TYPE 1), RSU-39, "TYPE 2 : Wheel Alignment" (TYPE 2).**

CAUTION:

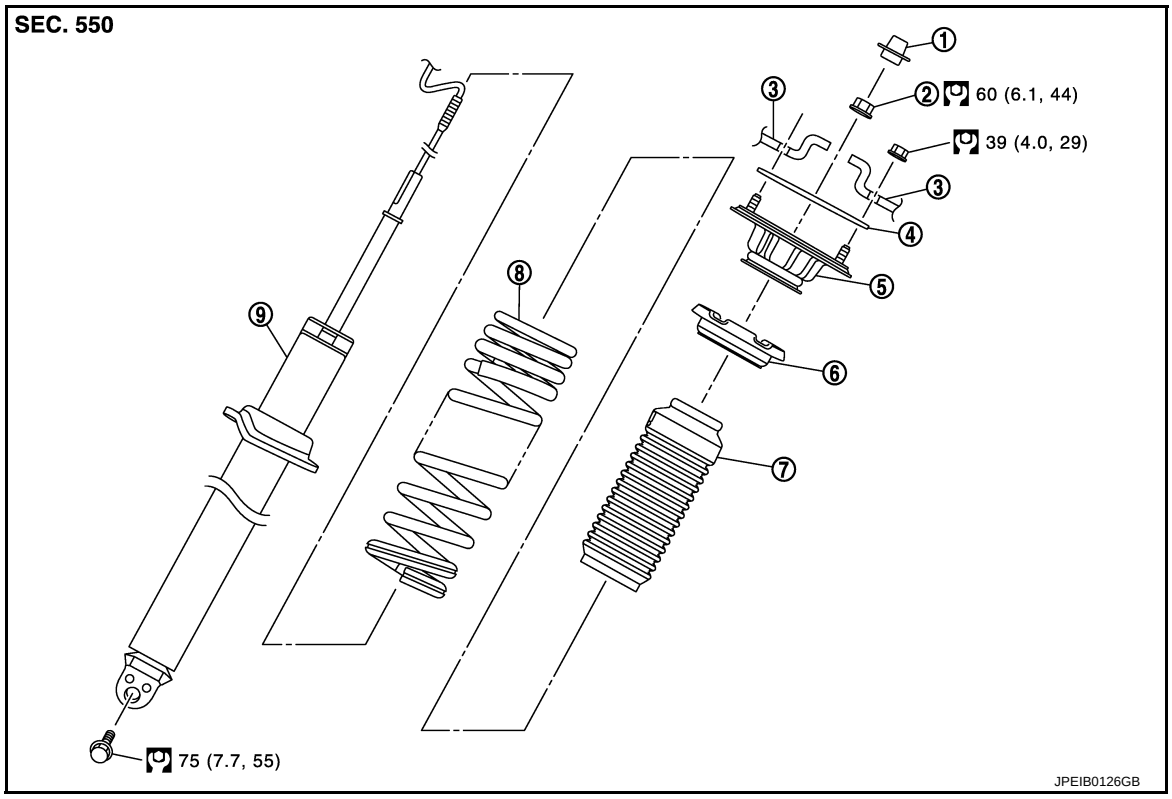
- **Always hold the adjust bolt firmly when tightening nut.**
- **Always check toe-in after adjusting camber.**

REMOVAL AND INSTALLATION

REAR COIL SPRING AND SHOCK ABSORBER

Exploded View

INFOID:0000000011490216



1. Cap
2. Piston rod lock nut
3. Vehicle body
4. Mounting seal
5. Mount insulator
6. Rubber seat
7. Bound bumper
8. Coil spring*
9. Shock absorber

*: To replace, all of four coil springs must be replaced together as a set. (Vehicles with NISMO-specific suspension)

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

Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490217

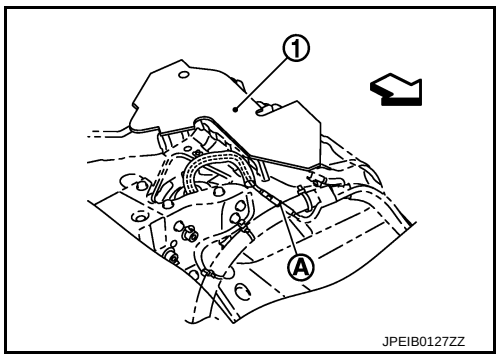
REMOVAL

1. Remove tires with power tool. Refer to WT-74, "EXCEPT NISMO : Exploded View" (Except NISMO), WT-74, "NISMO : Exploded View" (NISMO).
   NOTE:
   Check the vehicle type. Refer to WT-4, "How to Check Vehicle Type".
2. Remove shock absorber from axle housing with power tool.
3. Remove rear parcel shelf finisher. Refer to INT-19, "Exploded View".

4. Remove shock absorber actuator harness connector (A) and seat (1).

⇦ : Vehicle front

5. Remove shock absorber assembly.



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INSTALLATION

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

- Install the seat to cover the shock absorber actuator harness connector.
- Perform final tightening of bolts and nuts at the vehicle installation position (rubber bushing), under unladen conditions with tires on level ground.

Disassembly and Assembly (GT-R certified NISSAN dealer)

INFOID:0000000011490218

DISASSEMBLY

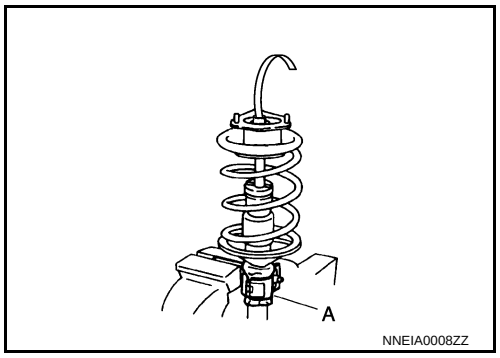
CAUTION:

- **Never damage shock absorber piston rod when removing components from shock absorber.**
- **Before disassembly, distinguish coil spring right and left.**

1. Install shock absorber attachment (A) [SST: ST35652000 (—)] to shock absorber and it in a vise

CAUTION:

When installing the shock absorber attachment to shock absorber, wrap a waste cloth around shock absorber to protect it from damage.



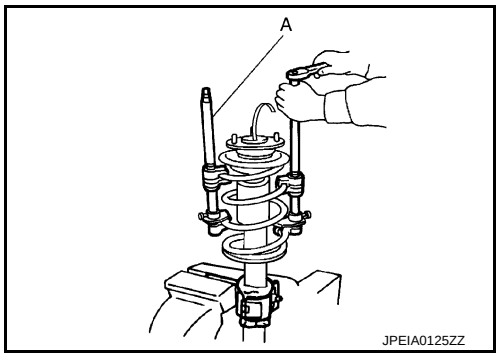
NNEIA0008ZZ

2. Using a spring compressor (A) (commercial service tool), compress coil spring between rubber seat and shock absorber until coil spring with a spring compressor is free.

CAUTION:

Always a spring compressor is installed coil spring. Compress coil spring.

3. Remove cap.



JPEIA0125ZZ

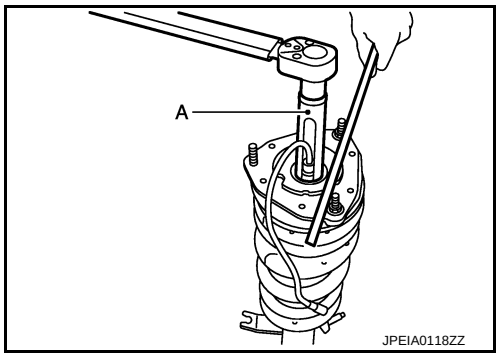
4. Check coil spring with a spring compressor between rubber seat and shock absorber is free. And then remove piston rod lock nut while securing the piston rod tip so that piston rod does not turn with socket (A) (commercial service tool) [17 mm (0.67 in)].

CAUTION:

Never damage shock absorber actuator harness connector.

5. Remove mounting seal, mount insulator, rubber seat, bound bumper from shock absorber.
6. After remove coil spring with a spring compressor, and then gradually release a spring compressor.

CAUTION:



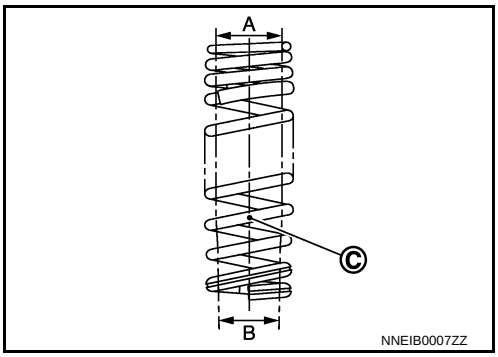
JPEIA0118ZZ

- **Loosen while checking coil spring attachment position does not move.**
- **To replace coil springs, all of four coil springs must be replaced together as a set. (Vehicles with NISMO-specific suspension)**

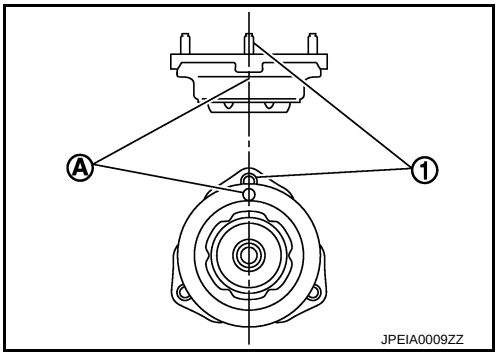
7. Remove the shock absorber attachment from shock absorber.

ASSEMBLY

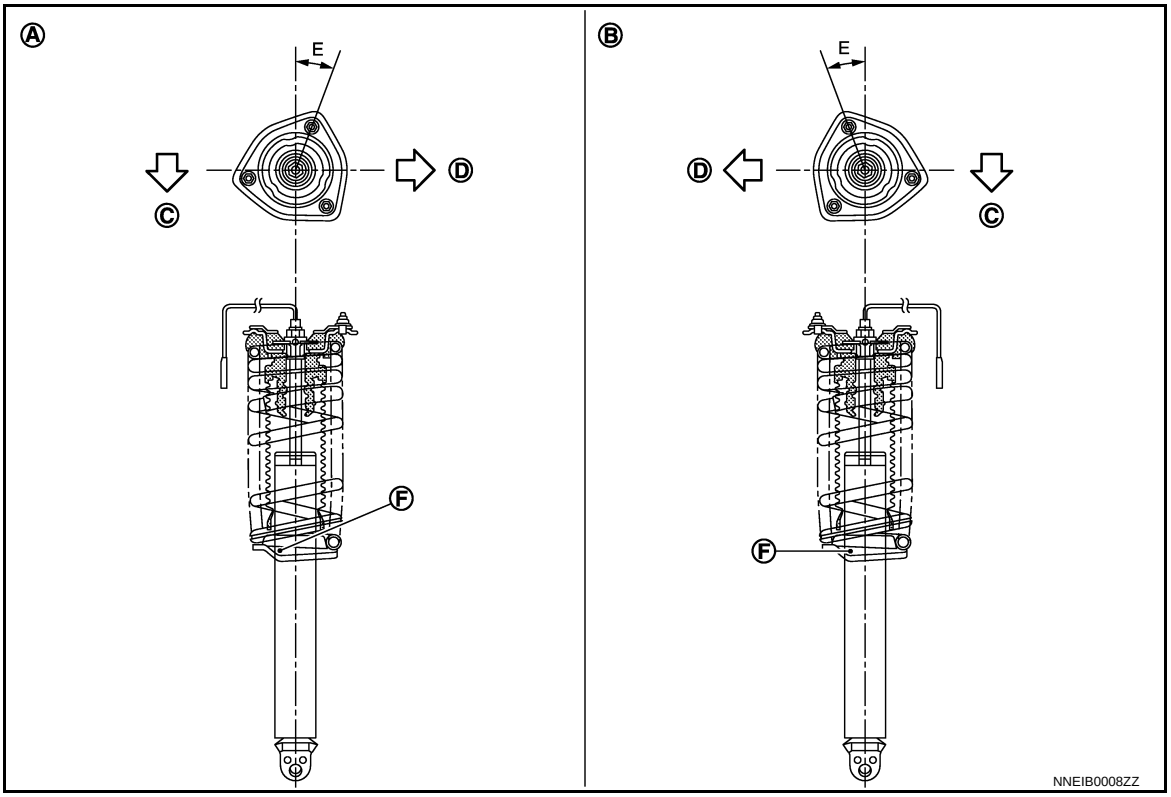
1. Install shock absorber attachment (A) [SST: ST35652000 (—)] to shock absorber and secure it in a vise.
   CAUTION:
   When installing the shock absorber attachment to shock absorber, wrap a waste cloth around shock absorber to protect it from damage.
2. Compress the coil spring using a spring compressor, and then set it to the shock absorber.
   CAUTION:
   - **Install the coil spring with larger-diameter side (A) facing up and the smaller-diameter side (B) facing down. Then, check that the paint mark (C) is facing downward.**
   - **Start compressing the coil spring after checking that the spring compressor is completely installed to the coil spring.**
   - **To replace coil springs, all of four coil springs must be replaced together as a set. (Vehicles with NISMO-specific suspension)**



3. Assemble the rubber seat to the mount insulator as shown in the figure.
   CAUTION:
   Align the positions of the paint mark (A) and the stud bolt (1).
4. Apply soapy water to bound bumper.
   CAUTION:
   Never use machine oil.



5. Install the rubber seat and mount insulator to the shock absorber.



A. Left side B. Right side C. Vehicle front
D. Vehicle out side

- Install the mount insulator so that the stud bolt is in the position shown in the figure.

  Angle (E) : 20.0°

- Install the coil spring so that the lower edge is in the position (F) of the lower seat shown in the figure.
  CAUTION:
  Never lift up the shock absorber with the shock absorber harness connector.

6. Secure piston rod tip so that piston rod does not turn, then tighten piston rod lock nut with specified torque with socket [17 mm (0.67 in)].
   CAUTION:
   Never damage shock absorber actuator harness connector.
7. Gradually release a spring compressor, and remove coil spring.
   CAUTION:
   Loosen while checking coil spring attachment position does not move.
8. Remove the shock absorber attachment from shock absorber.
9. Install the mounting seal to mount insulator.

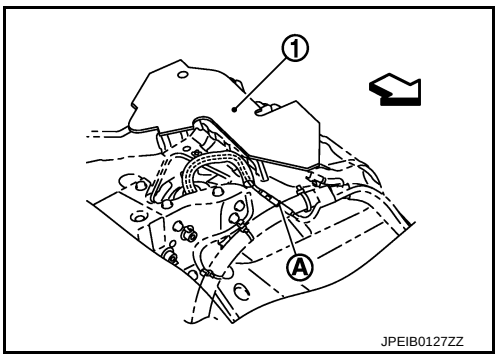
Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490219

INSPECTION AFTER INSTALLATION

1. Check shock absorber actuator harness connector (A) and seat (1) for proper connection.

⇦ : Vehicle front



2. Check wheel alignment. Refer to RSU-12, "Inspection".
3. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

INSPECTION AFTER DISASSEMBLY

Shock Absorber

Check the following items, and replace the part if necessary.
- Shock absorber for deformation, cracks or damage.
- Piston rod for damage, uneven wear or distortion.
- Oil leakage.
- Shock absorber harness connector for damage.

Mount Insulator and Rubber Parts Inspection

Check mount insulator for cracks and rubber parts for wear. Replace it if necessary

Coil Spring

Check coil spring for cracks, wear or damage. Replace it if necessary.

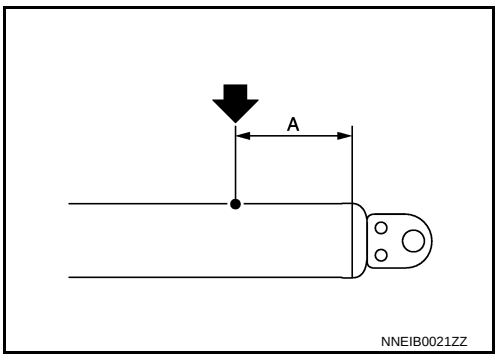
Disposal

INFOID:0000000011490220

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.

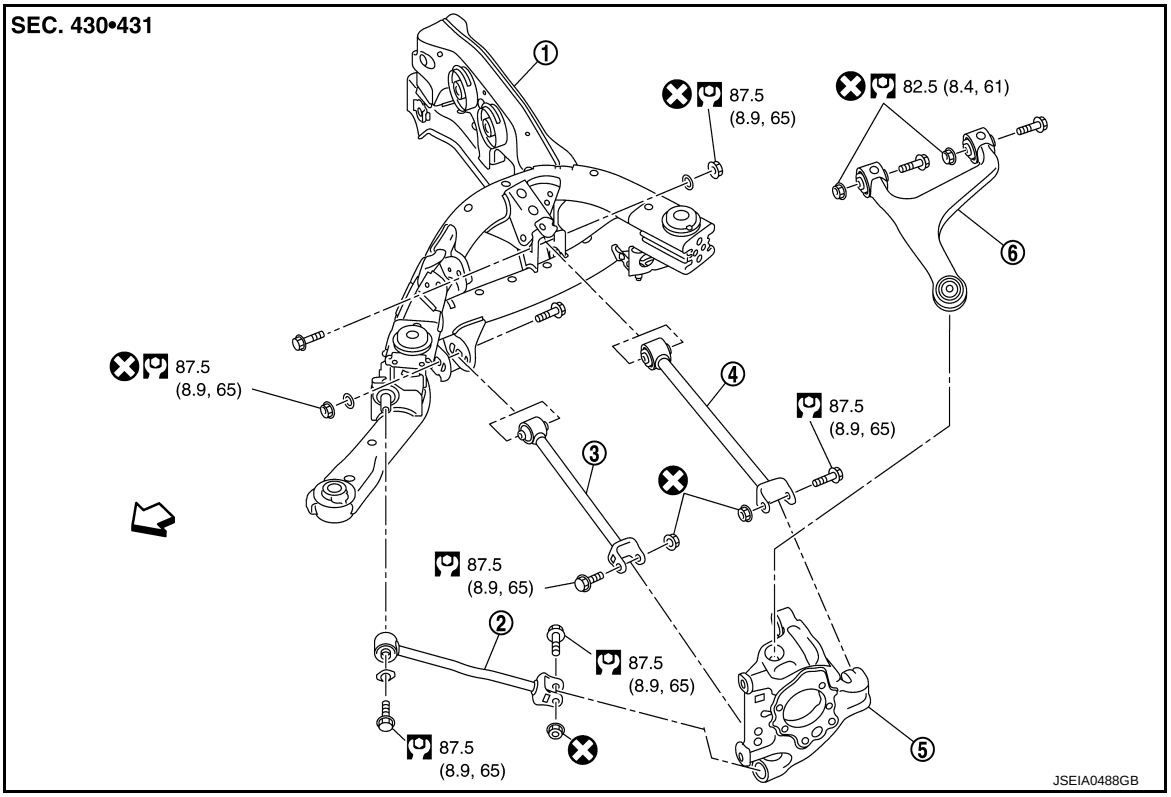
CAUTION:
Dispose of drained oil according to the law and local regulations.

SUSPENSION ARM

TYPE 1

TYPE 1 : Exploded View

INFOID:0000000011490221



1. Rear suspension member
2. Radius rod
3. Front lower link
4. Rear lower link
5. Axle housing
6. Suspension arm

⇦: Vehicle front

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

TYPE 1 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490222

REMOVAL

1. Remove tire with power tool. Refer to WT-74, "EXCEPT NISMO : Exploded View".
2. Remove brake hose bracket. Refer to BR-25, "REAR : Exploded View".
3. Remove caliper assembly mounting bolts. Hang caliper assembly in a place where it will not interfere with work. Refer to BR-46, "BRAKE CALIPER ASSEMBLY : Exploded View (GT-R certified NISSAN dealer)".
4. Remove disc rotor. Refer to BR-47, "BRAKE CALIPER ASSEMBLY : Removal and Installation (GT-R certified NISSAN dealer)".
5. Set suitable jack under axle assembly.
6. Separate shock absorber from axle housing. Refer to RSU-14, "Exploded View".
7. Remove cotter pin of suspension arm ball joint, and loosen nut. Refer to RAX-9, "Exploded View".
8. Remove suspension arm mounting bolts and nuts from rear suspension member.
9. Remove suspension arm from axle housing. Refer to RAX-9, "Exploded View".
10. Remove suspension arm.

INSTALLATION

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

- Perform final tightening of bolts and nuts at the vehicle installation position (rubber bussing), under unladen conditions with tires on level ground.
- Never reuse cotter pin.

TYPE 1 : Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490223

INSPECTION AFTER REMOVAL

Appearance

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

- Suspension arm for deformation, cracks or damage.
- Axle housing side bushing boots for cracks, damage or leakage of grease.

NOTE:
Pillow ball bushing to axle housing side of suspension arm.

Pillow ball bushing Inspection

Manually move pillow ball bushing to check that it moves smoothly with no binding and check for looseness. Replace the suspension arm if necessary.

INSPECTION AFTER REMOVAL (BALL JOINT)

Appearance

Check the following items, and replace the part if necessary

- Suspension arm and ball joint for deformation, cracks or damage.
- Ball joint boot for cracks, damage or leakage of grease.

Ball Joint Inspection

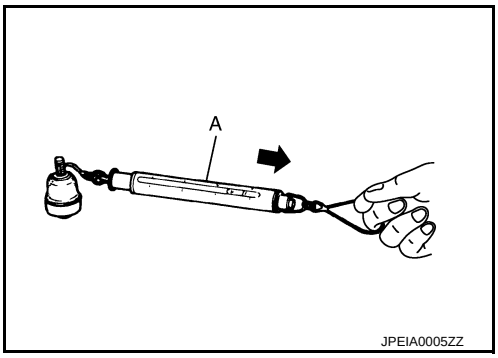
Manually move ball joint to check that it moves smoothly with no binding and check for looseness. Replace the suspension arm if necessary.

Swing Torque Inspection

1. Move the ball joint ten times or more by hand to check for smooth movement.
2. Hook spring balance (A) at cotter pin mounting hole. Check that the reading at the moment that the ball stud begins moving is within the standard.

Swing torque : Refer to RSU-40, "Ball Joint (GT-R certified NISSAN dealer)".

- If swing torque outside standard range, replace suspension arm assembly.

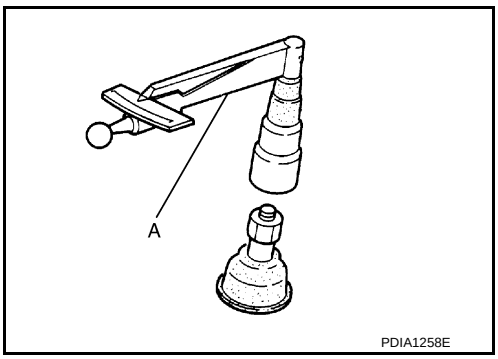


Rotating Torque Inspection

1. Move the ball joint ten times or more by hand to check for smooth movement.
2. Install the mounting nut to ball joint. Check that rotating torque is within the standard with a preload gauge (A) [SST: ST3127S000 (J-25765-A)].

Rotating torque : Refer to RSU-40, "Ball Joint (GT-R certified NISSAN dealer)".

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



Axial End Play Inspection

Move tip of ball joint in axial direction to check looseness.

Axial end play **: Refer to RSU-40, "Ball Joint (GT-R certified NISSAN dealer)".**

- If axial end play outside standard range, replace the suspension arm assembly.

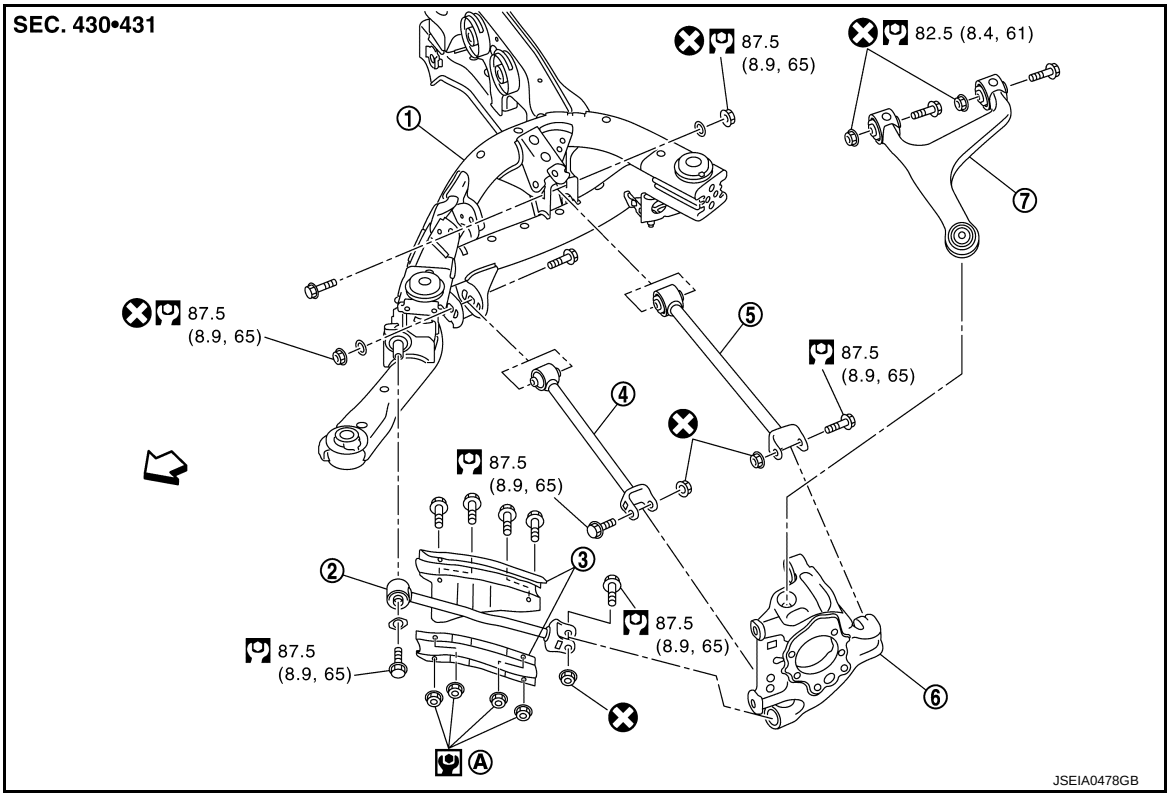
INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to RSU-12, "Inspection".
2. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

TYPE 2

TYPE 2 : Exploded View

INFOID:0000000011490224



1. Rear suspension member
2. Radius rod
3. Brake air guide*
4. Front lower link
5. Rear lower link
6. Axle housing
7. Suspension arm

A. Tightening must be done following the radius rod installation procedure. Refer to RSU-25, "TYPE 2 : Removal and Installation (GT-R certified NISSAN dealer)".

⇦: Vehicle front

*: With brake air guide

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

TYPE 2 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490225

REMOVAL

1. Remove tire with power tool. Refer to WT-74, "NISMO : Exploded View".
2. Remove brake hose bracket. Refer to BR-25, "REAR : Exploded View".
3. Remove caliper assembly mounting bolts. Hang caliper assembly in a place where it will not interfere with work. Refer to BR-46, "BRAKE CALIPER ASSEMBLY : Exploded View (GT-R certified NISSAN dealer)".

4. Remove disc rotor. Refer to BR-47, "BRAKE CALIPER ASSEMBLY : Removal and Installation (GT-R certified NISSAN dealer)".
5. Set suitable jack under axle assembly.
6. Separate shock absorber from axle housing. Refer to RSU-14, "Exploded View".
7. Remove cotter pin of suspension arm ball joint, and loosen nut. Refer to RAX-9, "Exploded View".
8. Remove suspension arm mounting bolts and nuts from rear suspension member.
9. Remove suspension arm from axle housing. Refer to RAX-9, "Exploded View".
10. Remove suspension arm.

INSTALLATION

Note the following and, install in the reverse order of removal.
- Perform final tightening of bolts and nuts at the vehicle installation position (rubber bussing), under unladen conditions with tires on level ground.
- Never reuse cotter pin.

TYPE 2 : Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490226

INSPECTION AFTER REMOVAL

Appearance

Check the following items, and replace the part if necessary.
- Suspension arm for deformation, cracks or damage.
- Axle housing side bushing boots for cracks, damage or leakage of grease.

NOTE:
Pillow ball bushing to axle housing side of suspension arm.

Pillow ball bushing Inspection

Manually move pillow ball bushing to check that it moves smoothly with no binding and check for looseness. Replace the suspension arm if necessary.

INSPECTION AFTER REMOVAL (BALL JOINT)

Appearance

Check the following items, and replace the part if necessary
- Suspension arm and ball joint for deformation, cracks or damage.
- Ball joint boot for cracks, damage or leakage of grease.

Ball Joint Inspection

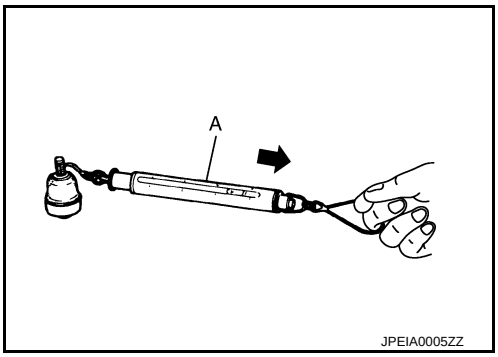
Manually move ball joint to check that it moves smoothly with no binding and check for looseness. Replace the suspension arm if necessary.

Swing Torque Inspection

1. Move the ball joint ten times or more by hand to check for smooth movement.
2. Hook spring balance (A) at cotter pin mounting hole. Check that the reading at the moment that the ball stud begins moving is within the standard.

Swing torque : **Refer to RSU-40, "Ball Joint (GT-R certified NISSAN dealer)".**

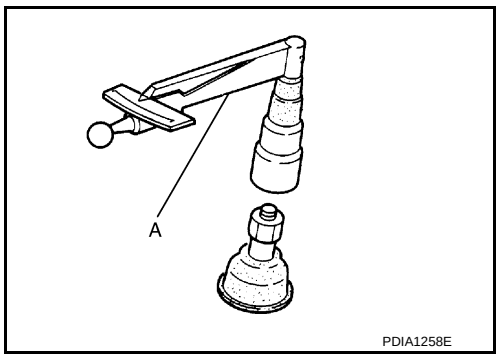
- If swing torque outside standard range, replace suspension arm assembly.



Rotating Torque Inspection

1. Move the ball joint ten times or more by hand to check for smooth movement.

2. Install the mounting nut to ball joint. Check that rotating torque is within the standard with a preload gauge (A) [SST: ST3127S000 (J-25765-A)].



Rotating torque **: Refer to RSU-40, "Ball Joint (GT-R certified NISSAN dealer)".**

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

Axial End Play Inspection

Move tip of ball joint in axial direction to check looseness.

Axial end play **: Refer to RSU-40, "Ball Joint (GT-R certified NISSAN dealer)".**

- If axial end play outside standard range, replace the suspension arm assembly.

INSPECTION AFTER INSTALLATION

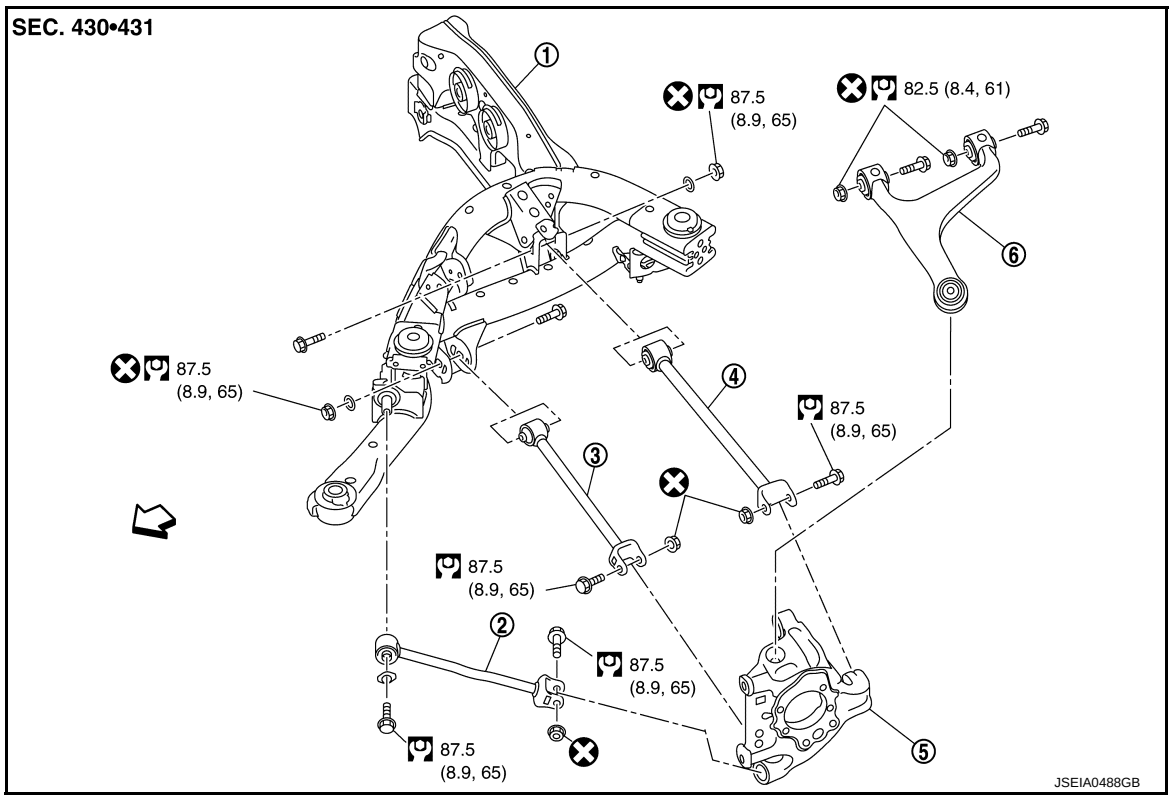
1. Check wheel alignment. Refer to RSU-12, "Inspection".
2. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

RADIUS ROD

TYPE 1

TYPE 1 : Exploded View

INFOID:0000000011490227



1. Rear suspension member
2. Radius rod
3. Front lower link
4. Rear lower link
5. Axle housing
6. Suspension arm

⇦: Vehicle front

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

TYPE 1 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490228

REMOVAL

1. Remove tire with power tool. Refer to WT-74, "EXCEPT NISMO : Exploded View".
2. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
3. Set suitable jack under rear suspension member.
4. Loosen rear suspension member mounting nuts, and gradually lower jack to rear suspension member.
   CAUTION:
   Never remove rear suspension member mounting bolts and nuts.
5. Remove radius rod.

INSTALLATION

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

CAUTION:

Leave approximately 1 mm (0.04 in) of allowance on the bearing surface of mounting nuts and bolts to release bush tension.

- Perform final tightening of bolts and nuts at the vehicle installation position (rubber bushing), under unladen-conditions with tires on level ground.

TYPE 1 : Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490229

INSPECTION AFTER REMOVAL

Check radius rod and bushing for any deformation, cracks and damage. Replace it if necessary.

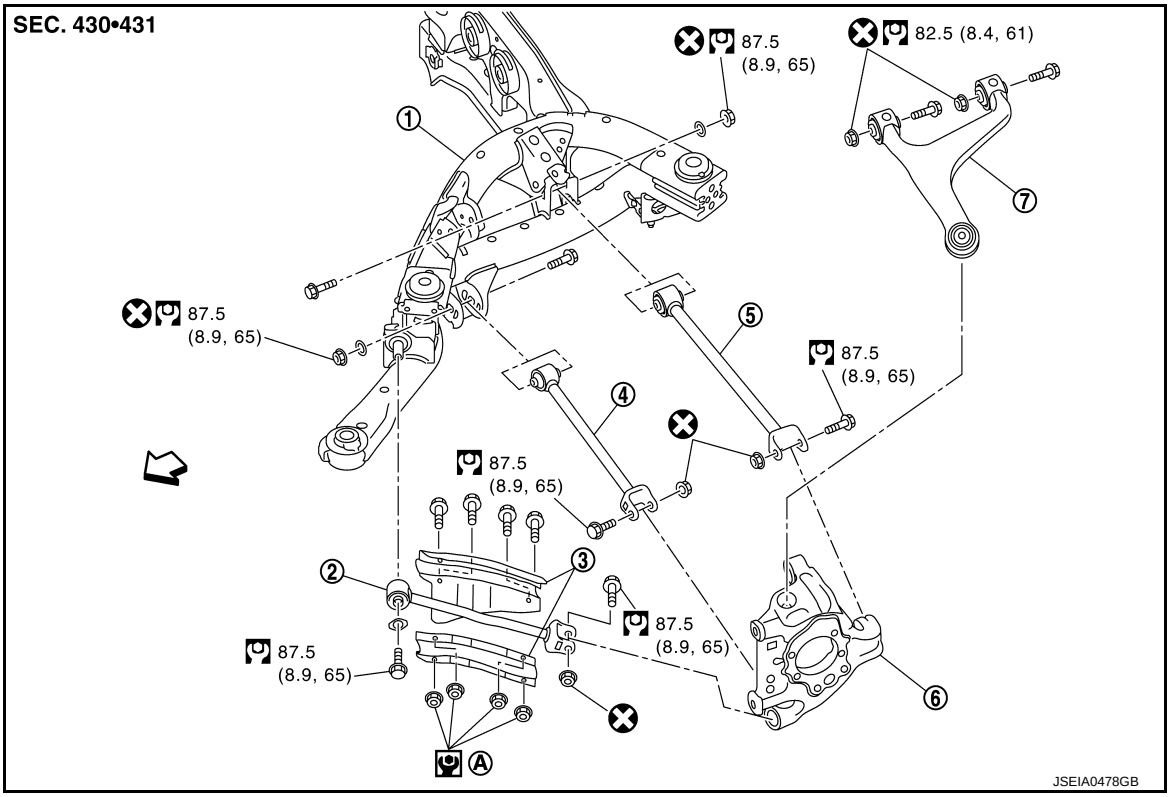
INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to RSU-12, "Inspection".
2. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

TYPE 2

TYPE 2 : Exploded View

INFOID:0000000011490230



1. Rear suspension member
2. Radius rod
3. Brake air guide*
4. Front lower link
5. Rear lower link
6. Axle housing
7. Suspension arm

A. Tightening must be done following the radius rod installation procedure. Refer to RSU-25, "TYPE 2 : Removal and Installation (GT-R certified NISSAN dealer)".

⇦: Vehicle front

*: With brake air guide

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

TYPE 2 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490231

REMOVAL

1. Remove tire with power tool. Refer to WT-74, "NISMO : Exploded View".
2. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
3. Set suitable jack under rear suspension member.
4. Loosen rear suspension member mounting nuts, and gradually lower jack to rear suspension member.

CAUTION:

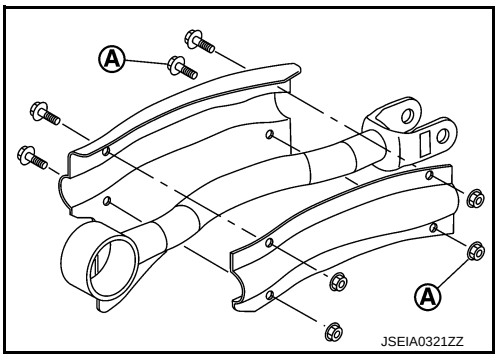
Never remove rear suspension member mounting bolts and nuts.

5. Remove radius rod.
6. Remove brake air guide. (With brake air guide)

INSTALLATION

1. When installing brake air guide, according to the following. (With brake air guide)

a. For positioning, temporarily tighten mounting bolt and nut shown by (A).
NOTE:
The rotation direction and the forward/rearward positions of brake air guide depend on its shape.



b. Temporarily tighten the rest of the mounting bolts and nuts.
c. After tightening the mounting nuts to the torque shown below, loosen them.

: 9.0 - 10.8 N·m (0.92 - 1.1 kg-m, 80 - 95 in-lb)

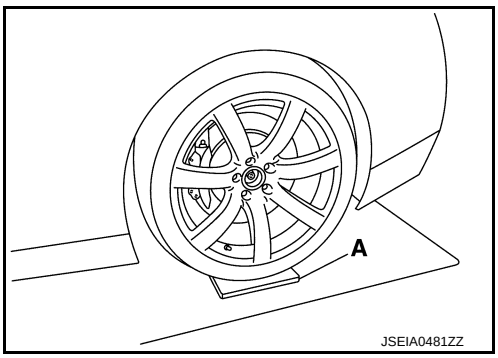
d. Retighten the mounting nuts to the torque shown below.

: 7.2 - 10.8 N·m (0.74 - 1.1 kg-m, 64 - 95 in-lb)

2. Temporarily install radius rod.
CAUTION:
Leave approximately 1 mm (0.04 in) of allowance on the bearing surface of mounting nuts and bolts to release bush tension.
3. Tighten rear suspension member mounting nuts to the specified torque. Refer to RSU-36, "Exploded View".
4. Install tires. Refer to WT-74, "NISMO : Exploded View".
5. To fully tighten radius rod rubber bush, follow the steps below with the vehicle under unladen conditions.
NOTE:
To enhance the straight line stability and the turning performance, tighten bush according to the following steps.

a. Adjust tire pressure to the specified value. Refer to WT-81, "Tire".
b. Set the vehicle on the alignment tester (on the slide table).
c. Loosen mounting nuts of rear lower link (axle housing side) and front lower link (axle housing side) for both right and left wheels.
CAUTION:
Leave approximately 1 mm of allowance on the bearing surface of mounting nut to release bush tension.
d. Move the vehicle back and forth to release friction from tires.
NOTE:
Moving the vehicle back and forth must be performed on and within the slide table.

e. Set plate (A) (commercial service tool) under the rear tire (on the side where final tightening is performed).
CAUTION:
- **Plate size (commercial service tool): Larger than tire ground contact area.**
- **Plate thickness: 15 mm (0.59 in).**



f. Shake the vehicle up and down to release friction from bush.
CAUTION:
The rear side slide table pin must be removed beforehand.
g. Be sure to tighten each link (Plate setting side), observing the following order below.
   1. Tighten front lower link (axle housing side) to the specified torque. Refer to RSU-29, "TYPE 2 : Exploded View".
   2. Tighten rear lower link (axle housing side) to the specified torque. Refer to RSU-32, "TYPE 2 : Exploded View".

3. Tighten radius rod (axle housing side) to the specified torque.
4. Tighten radius rod (rear suspension member side) to the specified torque.

h. After tightening each link, remove plate (commercial service tool).

i. Perform steps (e) to (h) for the other side.
CAUTION:
Even when a part on only one side is removed , tighten mounting bolts both side.

j. After tightening each link, be sure to check and adjust wheel alignment. Refer to RSU-12, "Adjustment".

6. Install rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".

TYPE 2 : Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490232

INSPECTION AFTER REMOVAL

Check radius rod and bushing for any deformation, cracks and damage. Replace it if necessary.

INSPECTION AFTER INSTALLATION

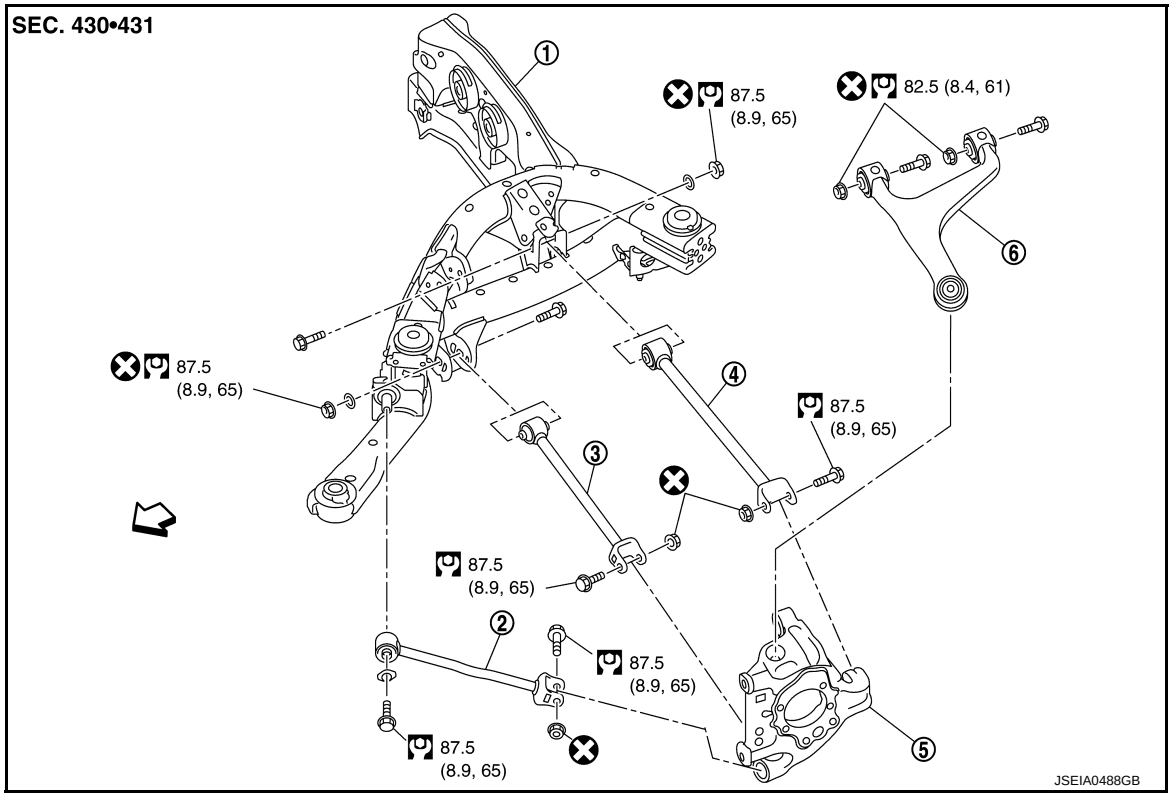
1. Check wheel alignment. Refer to RSU-12, "Inspection".
2. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

FRONT LOWER LINK

TYPE 1

TYPE 1 : Exploded View

INFOID:0000000011490233



1. Rear suspension member
2. Radius rod
3. Front lower link
4. Rear lower link
5. Axle housing
6. Suspension arm

⇦: Vehicle front

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

TYPE 1 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490234

REMOVAL

1. Remove tires with power tool. Refer to WT-74, "EXCEPT NISMO : Exploded View".
2. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
3. Remove front lower link.
   CAUTION:
   Apply a matching mark to the installation position for adjusting bolt and rear suspension member.

INSTALLATION

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

CAUTION:

Leave approximately 1 mm (0.04 in) of allowance on the bearing surface of mounting nuts and bolts to release bush tension.

- Check the matching mark when installing.
- Perform final tightening of bolts and nuts at the vehicle installation position (rubber bushing), under unladen-conditions with tires on level ground.

TYPE 1 : Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490235

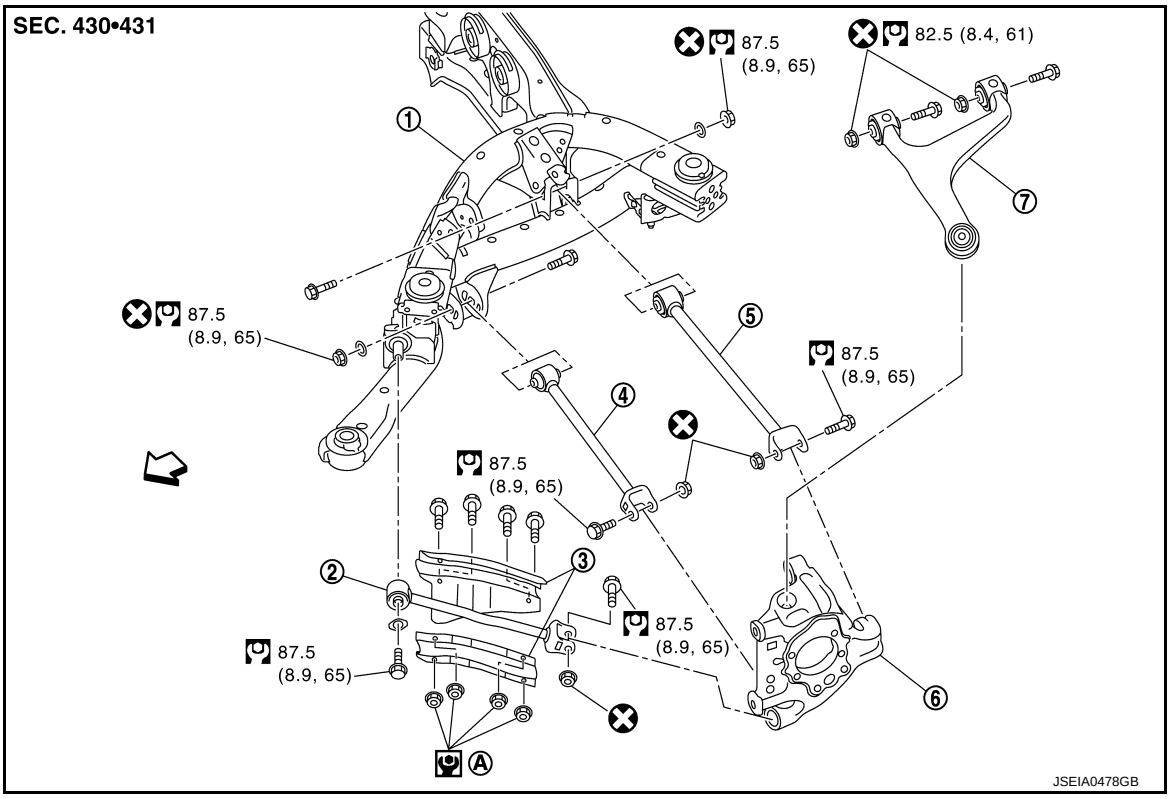
INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to RSU-12, "Inspection".
2. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

TYPE 2

TYPE 2 : Exploded View

INFOID:0000000011490236



1. Rear suspension member
2. Radius rod
3. Brake air guide*
4. Front lower link
5. Rear lower link
6. Axle housing
7. Suspension arm

A. Tightening must be done following the radius rod installation procedure. Refer to RSU-25, "TYPE 2 : Removal and Installation (GT-R certified NISSAN dealer)".

⇦: Vehicle front

*: With brake air guide

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

TYPE 2 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490237

REMOVAL

1. Remove tires with power tool. Refer to WT-74, "NISMO : Exploded View".
2. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
3. Remove front lower link.
   CAUTION:
   Apply a matching mark to the installation position for adjusting bolt and rear suspension member.

INSTALLATION

1. Temporarily install front lower link.
   CAUTION:
   - **To install adjusting bolt, align the matching mark put at the removal procedure.**
   - **Leave approximately 1 mm (0.04 in) of allowance on the bearing surface of mounting nuts and bolts to release bush tension.**

2. Install tires. Refer to WT-74, "NISMO : Exploded View".
3. Fully tighten front lower link (rear suspension member side) rubber bush under unladen conditions.
4. To fully tighten front lower link (axle housing side) rubber bush, follow the steps below with the vehicle under unladen conditions.
   NOTE:
   To enhance the straight line stability and the turning performance, tighten bush according to the following steps.

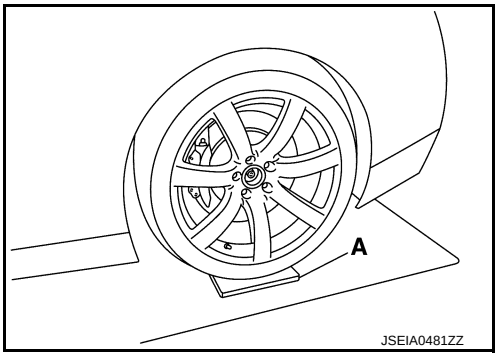
a. Adjust tire pressure to the specified value. Refer to WT-81, "Tire".

b. Set the vehicle on the alignment tester (on the slide table).

c. Loosen mounting nuts of rear lower link (axle housing side) and radius rod (axle housing side) for both right and left wheels.
   CAUTION:
   Leave approximately 1 mm of allowance on the bearing surface of mounting nut to release bush tension.

d. Move the vehicle back and forth to release friction from tires.
   NOTE:
   Moving the vehicle back and forth must be performed on and within the slide table.

e. Set plate (A) (commercial service tool) under the rear tire (on the side where final tightening is performed).
   CAUTION:
   - **Plate size (commercial service tool): Larger than tire ground contact area.**
   - **Plate thickness: 15 mm (0.59 in).**



f. Shake the vehicle up and down to release friction from bush.
   CAUTION:
   The rear side slide table pin must be removed beforehand.

g. Be sure to tighten each link (Plate setting side), observing the following order below.
   1. Tighten front lower link (axle housing side) to the specified torque.
   2. Tighten rear lower link (axle housing side) to the specified torque. Refer to RSU-32, "TYPE 2 : Exploded View".
   3. Tighten radius rod (axle housing side) to the specified torque. Refer to RSU-25, "TYPE 2 : Exploded View"
   4. Tighten radius rod (rear suspension member side) to the specified torque. Refer to RSU-25, "TYPE 2 : Exploded View".

h. After tightening each link, remove plate (commercial service tool).

i. Perform steps (e) to (h) for the other side.
   CAUTION:
   Even when a part on only one side is removed , tighten mounting bolts both side.

j. After tightening each link, be sure to check and adjust wheel alignment. Refer to RSU-12, "Adjustment".

5. Install rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".

TYPE 2 : Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490238

INSPECTION AFTER INSTALLATION

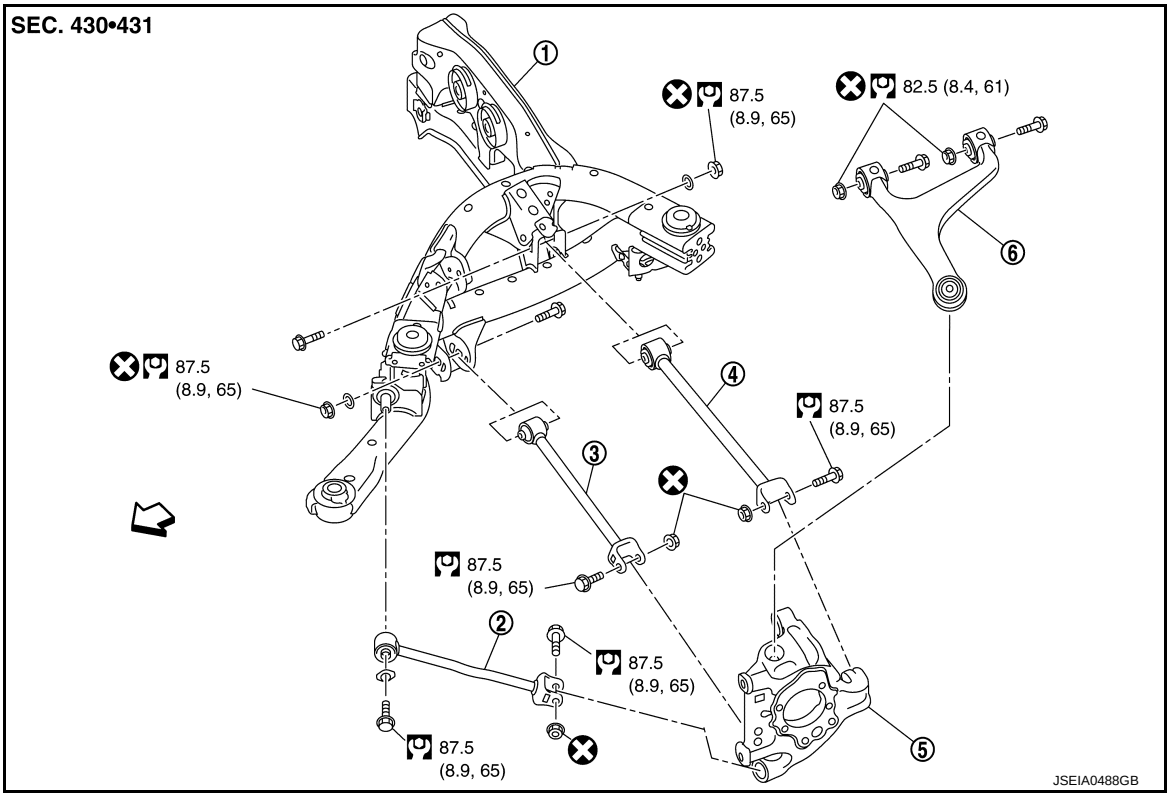
1. Check wheel alignment. Refer to RSU-12, "Inspection".
2. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

REAR LOWER LINK

TYPE 1

TYPE 1 : Exploded View

INFOID:0000000011490239



1. Rear suspension member
2. Radius rod
3. Front lower link
4. Rear lower link
5. Axle housing
6. Suspension arm

⇦: Vehicle front

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

TYPE 1 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490240

REMOVAL

1. Remove tires with power tool. Refer to WT-74, "EXCEPT NISMO : Exploded View".
2. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
3. Remove rear lower link.
   CAUTION:
   Apply a matching mark to the installation position for adjusting bolt and rear suspension member.

INSTALLATION

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

CAUTION:

CAUTION:Leave approximately 1 mm (0.04 in) of allowance on the bearing surface of mounting nuts and bolts to release bush tension.

- Check the matching mark when installing.
- Perform final tightening of bolts and nuts at the vehicle installation position (rubber bushing), under unladen-conditions with tires on level ground.

TYPE 1 : Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490241

INSPECTION AFTER REMOVAL

Appearance

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

- Rear lower link for deformation, cracks or damage.
- Axle housing side bushing boots for cracks, damage or leakage of grease.

NOTE:
Pillow ball bushing to axle housing side of rear lower link.

Pillow ball bushing Inspection

Manually move pillow ball bushing to check that it moves smoothly with no binding and check for looseness. Replace the rear lower link if necessary.

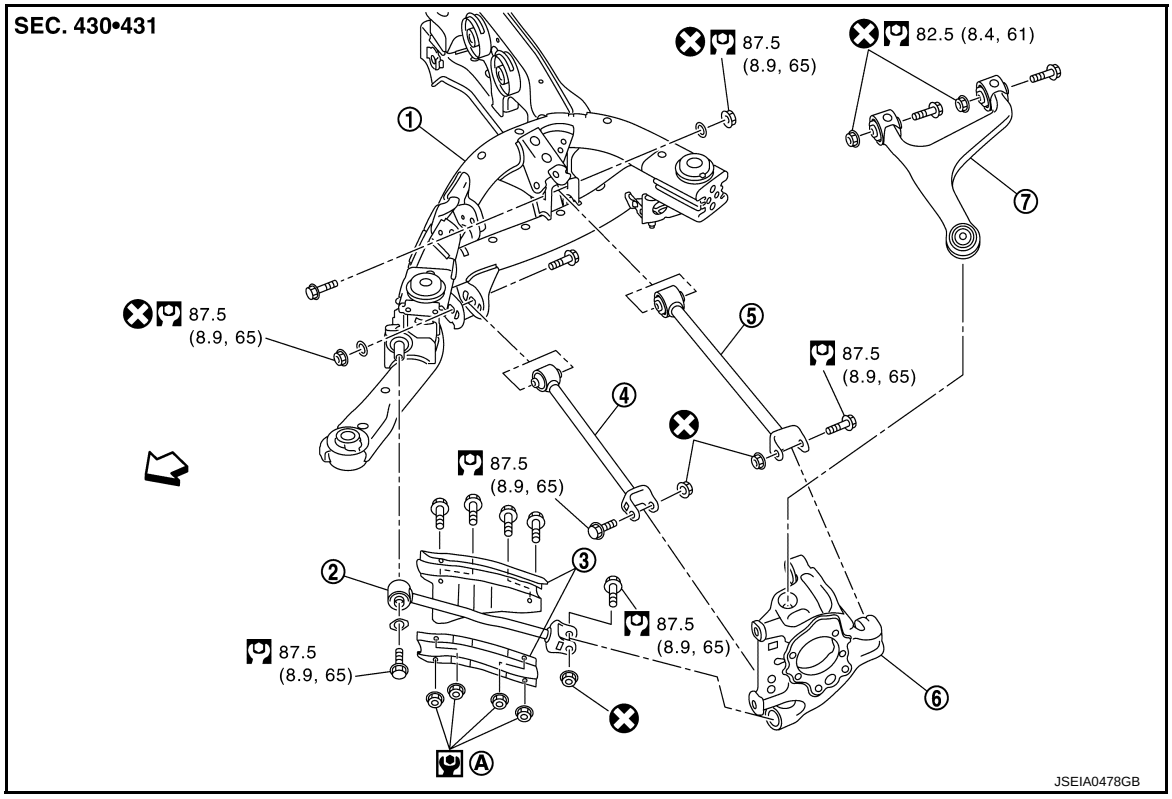
INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to RSU-12, "Inspection".
2. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

TYPE 2

TYPE 2 : Exploded View

INFOID:0000000011490242



1. Rear suspension member
2. Radius rod
3. Brake air guide*
4. Front lower link
5. Rear lower link
6. Axle housing
7. Suspension arm

A. Tightening must be done following the radius rod installation procedure. Refer to RSU-25, "TYPE 2 : Removal and Installation (GT-R certified NISSAN dealer)".

⇦: Vehicle front

*: With brake air guide

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

TYPE 2 : Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490243

REMOVAL

1. Remove tires with power tool. Refer to WT-74, "NISMO : Exploded View".
2. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
3. Remove rear lower link.
   CAUTION:
   Apply a matching mark to the installation position for adjusting bolt and rear suspension member.

INSTALLATION

1. Temporarily install rear lower link.
   CAUTION:
   - **To install adjusting bolt, align the matching mark put at the removal procedure.**
   - **Leave 1 mm (0.04 in) of allowance on the bearing surface of the rear lower link (axle housing side) mounting nut to release bush tension.**
2. Install tires. Refer to WT-74, "NISMO : Exploded View".
3. Fully tighten rear lower link (rear suspension member side) rubber bush under unladen conditions.
4. To fully tighten rear lower link (axle housing side) rubber bush, follow the steps below with the vehicle under unladen conditions.
   NOTE:
   To enhance the straight line stability and the turning performance, tighten bush according to the following steps.

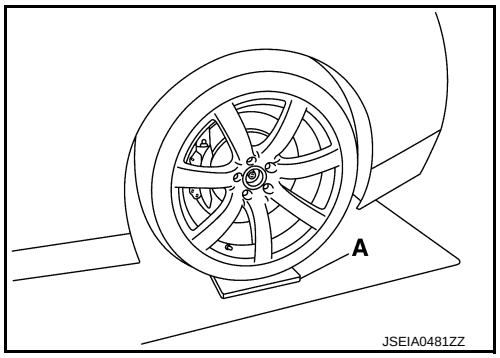
a. Adjust tire pressure to the specified value. Refer to WT-81, "Tire".

b. Set the vehicle on the alignment tester (on the slide table).

c. Loosen mounting nuts of front lower link (axle housing side) and radius rod (axle housing side) for both right and left wheels.
   CAUTION:
   Leave 1 mm of allowance on the bearing surface of mounting nut to release bush tension.

d. Move the vehicle back and forth to release friction from tires.
   NOTE:
   Moving the vehicle back and forth must be performed on and within the slide table.

e. Set plate (A) (commercial service tool) under the rear tire (on the side where final tightening is performed).
   CAUTION:
   - **Plate size (commercial service tool): Larger than tire ground contact area.**
   - **Plate thickness: 15 mm (0.59 in).**



f. Shake the vehicle up and down to release friction from bush.
   CAUTION:
   The rear side slide table pin must be removed beforehand.

g. Be sure to tighten each link (Plate setting side), observing the following order below.
   1. Tighten front lower link (axle housing side) to the specified torque. Refer to RSU-29, "TYPE 2 : Exploded View".
   2. Tighten rear lower link (axle housing side) to the specified torque.
   3. Tighten radius rod (axle housing side) to the specified torque. Refer to RSU-25, "TYPE 2 : Exploded View"
   4. Tighten radius rod (rear suspension member side) to the specified torque. Refer to RSU-25, "TYPE 2 : Exploded View".

h. After tightening each link, remove plate (commercial service tool).

i. Perform steps (e) to (h) for the other side.
   CAUTION:
   Even when a part on only one side is removed , tighten mounting bolts both side.

j. After tightening each link, be sure to check and adjust wheel alignment. Refer to RSU-12, "Adjustment".

5. Install rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".

TYPE 2 : Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490244

INSPECTION AFTER REMOVAL

Appearance

Check the following items, and replace the part if necessary.
- Rear lower link for deformation, cracks or damage.
- Axle housing side bushing boots for cracks, damage or leakage of grease.

NOTE:
Pillow ball bushing to axle housing side of rear lower link.

Pillow ball bushing Inspection

Manually move pillow ball bushing to check that it moves smoothly with no binding and check for looseness. Replace the rear lower link if necessary.

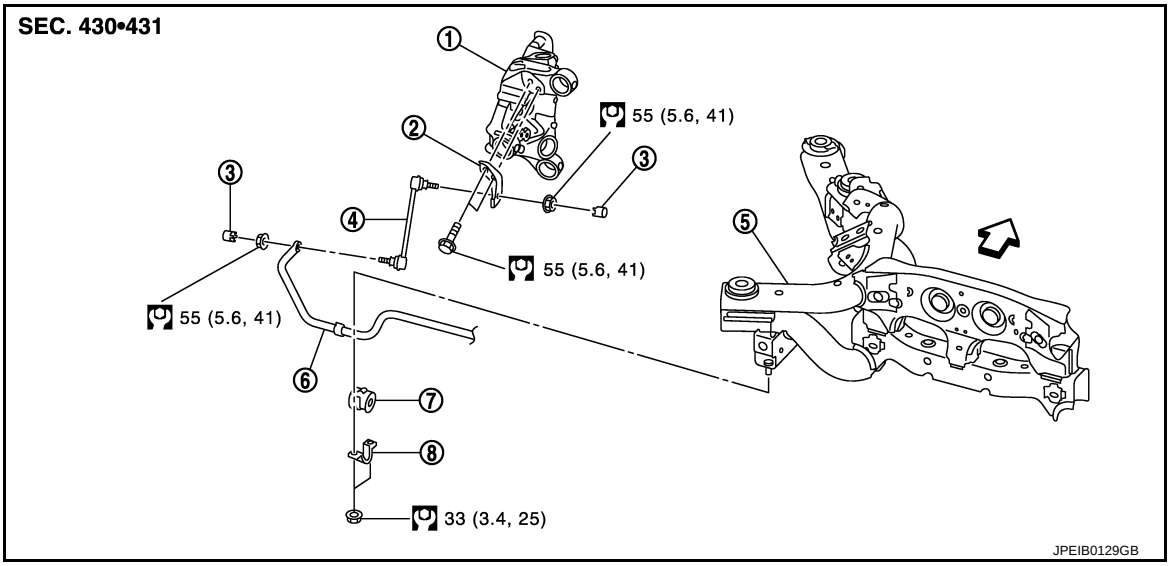
INSPECTION AFTER INSTALLATION

1. Check wheel alignment. Refer to RSU-12, "Inspection".
2. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

REAR STABILIZER

Exploded View

INFOID:0000000011490245



1. Axle housing
2. Stabilizer connecting rod mounting bracket
3. Cap
4. Stabilizer connecting rod
5. Rear suspension member
6. Stabilizer bar
7. Stabilizer bushing
8. Stabilizer clamp

⇦: Vehicle front

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

Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490246

REMOVAL

1. Remove tires with power tool. Refer to WT-74, "EXCEPT NISMO : Exploded View" (Except NISMO), WT-74, "NISMO : Exploded View" (NISMO).
   NOTE:
   Check the vehicle type. Refer to WT-4, "How to Check Vehicle Type".
2. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
3. Remove main muffler assembly. Refer to EX-7, "Exploded View".
4. Remove cap, and then stabilizer connecting rod.
   CAUTION:
   Apply a matching mark to identity the installation position.
5. Remove stabilizer connecting rod mounting bracket.
6. Remove stabilizer clamp and stabilizer bushing, and then remove stabilizer bar.

INSTALLATION

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

- Check the matching mark when installing.
- Tighten the mounting nut to the specified torque while holding a hexagonal part of stabilizer connecting rod side.

Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490247

INSPECTION AFTER REMOVAL

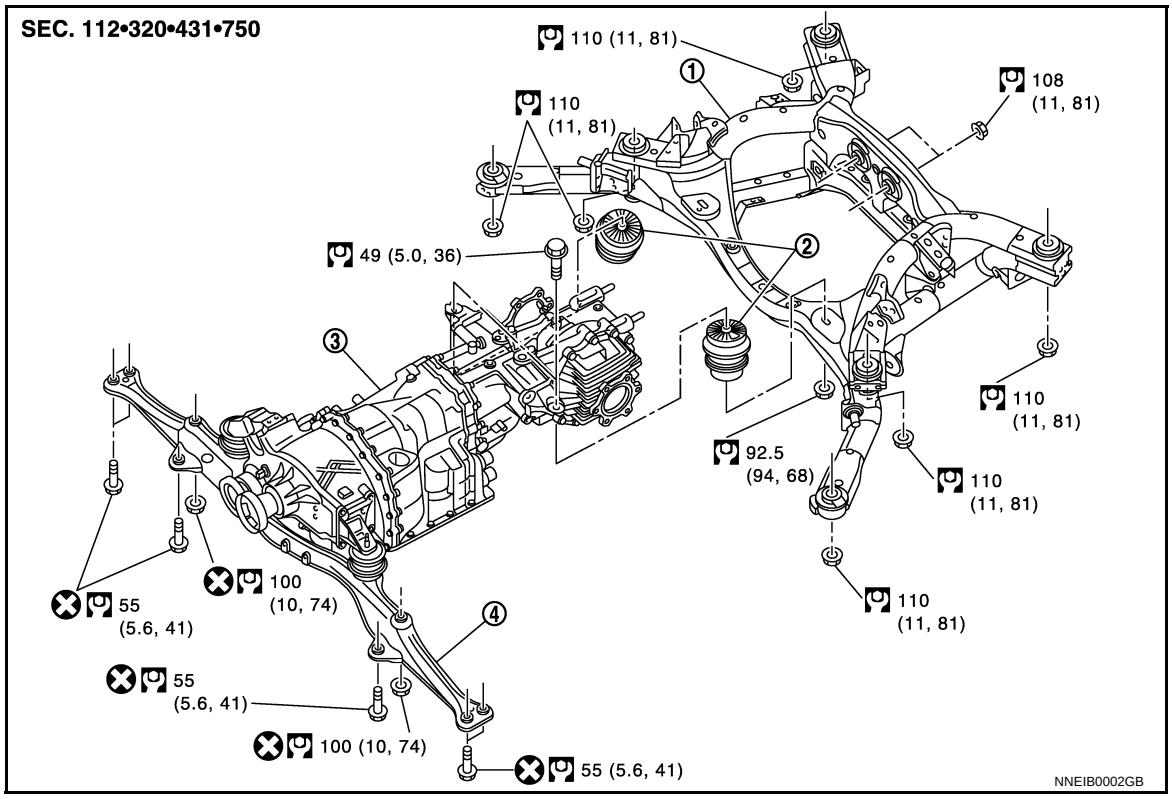
Check stabilizer bar, stabilizer connecting rod, stabilizer bushing, stabilizer clamp and stabilizer connecting rod mounting bracket for deformation, cracks and damage. Replace it if necessary.

UNIT REMOVAL AND INSTALLATION

REAR SUSPENSION MEMBER

Exploded View

INFOID:0000000011490248



1. Rear suspension member
2. Mount insulator
3. Transmission assembly
4. Transmission mount stay

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

Removal and Installation (GT-R certified NISSAN dealer)

INFOID:0000000011490249

REMOVAL

1. Remove tires with power tool. Refer to WT-74, "EXCEPT NISMO : Exploded View" (Except NISMO), WT-74, "NISMO : Exploded View" (NISMO).
   NOTE:
   Check the vehicle type. Refer to WT-4, "How to Check Vehicle Type".
2. Remove rear diffuser. Refer to EXT-44, "REAR DIFFUSER : Exploded View".
3. Remove main muffler assembly. Refer to EX-7, "Exploded View" (Stainless steel muffler), EX-14, "Exploded View" (Titanium muffler).
4. Remove brake hose bracket. Refer to BR-25, "REAR : Exploded View".
5. Remove brake caliper assembly. Hang brake caliper assembly in a place where it will not interfere with work. Refer to BR-46, "BRAKE CALIPER ASSEMBLY : Exploded View (GT-R certified NISSAN dealer)".
6. Remove disc rotor. Refer to BR-47, "BRAKE CALIPER ASSEMBLY : Removal and Installation (GT-R certified NISSAN dealer)".
7. Remove wheel sensor and wheel sensor harness connector. Refer to BRC-148, "REAR WHEEL SENSOR : Exploded View (GT-R certified NISSAN dealer)".
8. Remove stabilizer bar. Refer to RSU-35, "Exploded View".
9. Remove front propeller shaft. Refer to DLN-51, "Exploded View".
10. Remove main propeller shaft. Refer to DLN-60, "Exploded View".

11. Transmission harness connector. Refer to TM-403, "Exploded View (GT-R certified NISSAN dealer)".
12. Remove parking brake of rear cable mounting nuts (front side), and then separate rear cables from front cable. Refer to PB-7, "Exploded View (GT-R certified NISSAN dealer)".
13. Remove transmission of control cable from transmission. Refer to TM-378, "Exploded View (GT-R certified NISSAN dealer)".
14. Remove transmission of water hose. Refer to TM-386, "HEAT EXCHANGER PIPING : Exploded View (GT-R certified NISSAN dealer)".
15. Remove shock absorber mounting bolts from axle housing. Refer to RSU-14, "Exploded View".
16. Set suitable jack under rear suspension member.
17. Remove rear suspension member mounting nuts and transmission mount stay mounting bolts and nuts.
18. Slowly lower jack, then remove rear suspension member, transmission mount stay, transmission, suspension arm, front lower link, rear lower link, radius rod, wheel hub and bearing assembly, axle housing, drive shaft and rear cables from vehicle as a unit.
    CAUTION:
    Secure rear suspension member with transmission to a jack.
19. Remove the following parts.
    - Transmission and breather hose: refer to TM-403, "Exploded View (GT-R certified NISSAN dealer)".
    - Suspension arm: refer to RSU-19, "TYPE 1 : Exploded View" (TYPE 1), RSU-21, "TYPE 2 : Exploded View" (TYPE 2).
    - Front lower link: refer to RSU-28, "TYPE 1 : Exploded View" (TYPE 1), RSU-29, "TYPE 2 : Exploded View" (TYPE 2).
    - Rear lower link: refer to RSU-31, "TYPE 1 : Exploded View" (TYPE 1), RSU-32, "TYPE 2 : Exploded View" (TYPE 2).
    - Radius rod: refer to RSU-24, "TYPE 1 : Exploded View" (TYPE 1), RSU-25, "TYPE 2 : Exploded View" (TYPE 2).
    - Wheel hub and bearing assembly, axle housing and rear cable: refer to RAX-9, "Exploded View", PB-7, "Exploded View (GT-R certified NISSAN dealer)".
    - Drive shaft: refer to RAX-15, "Exploded View (GT-R certified NISSAN dealer)".

INSTALLATION

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

- Perform final tightening of bolts and nuts at the vehicle installation position (rubber bushing), under unladen condition with tire on level ground.
- The transmission mount stay mounting bolts and nuts are aluminum die-casting parts.
  CAUTION:
  - **Never use the power tools when removing and installing the transmission mount stay mounting bolt.**
  - **If the coating on the joint surface with the vehicle is peeled off, apply primer on the surface to prevent electric corrosion.**
  - **The surface of transmission mount stay mounting bolts and nuts are approximately finished. Always use the specified bolts and nuts.**
  - **Never use the bolts and nuts other than those that are specified, otherwise electric corrosion may occur.**
- Never reuse cotter pin.

Inspection (GT-R certified NISSAN dealer)

INFOID:0000000011490250

INSPECTION AFTER REMOVAL

Check rear suspension member for deformation, cracks and damage. Replace if necessary.

INSPECTION AFTER INSTALLATION

1. Check wheel sensor harness connector for proper connection. Refer to BRC-148, "REAR WHEEL SENSOR : Exploded View (GT-R certified NISSAN dealer)".
2. Adjust parking brake operation (stroke). PB-4, "Inspection and Adjustment".
3. Check wheel alignment. Refer to RSU-12, "Inspection".
4. Adjust neutral position of steering angle sensor. Refer to BRC-9, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement (GT-R certified NISSAN dealer)".

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

TYPE 1

TYPE 1 : Wheel Alignment

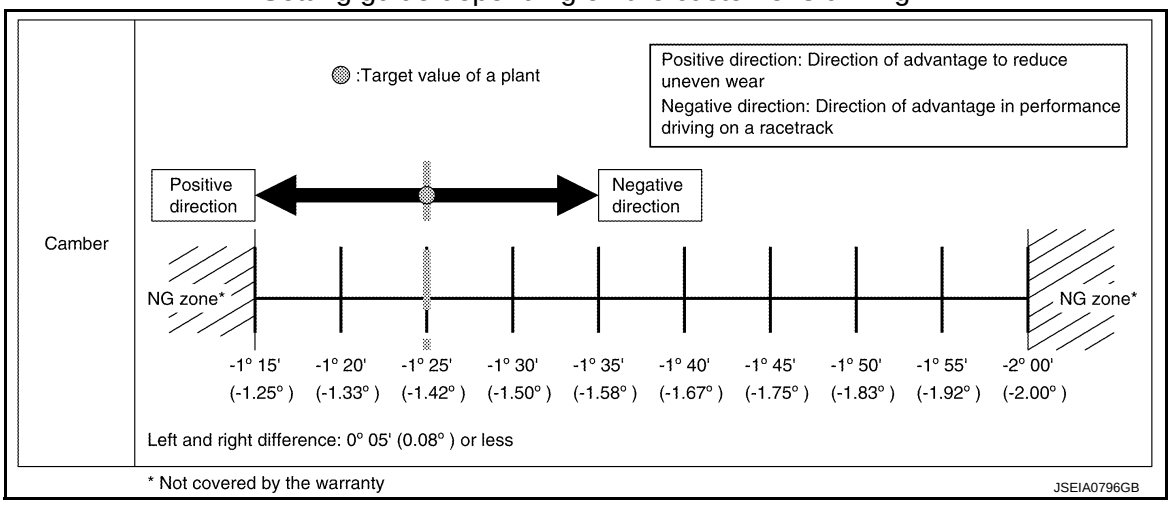
INFOID:0000000011490251

CAUTION:

- **When adjusting wheel alignment, refer to "PRECAUTION FOR WHEEL ALIGNMENT" in RSU-7, "Precautions for Suspension (GT-R certified NISSAN dealer)".**
- **Adjust wheel alignment with the vehicle in customer's regular use condition (e.g. normal stock items).**
- **To adjust wheel alignment, set tire pressure at 250 kPa (2.5 kg/cm^2, 36 psi). After adjusting wheel alignment, adjust tire pressure to the specified value. Refer to WT-81, "Tire".**

CAMBER, TOE-IN

Setting guide depending on the customer's driving



Item			Standard
Toe-in	Total toe-in Distance	Minimum	In 0.2 mm (In 0.008 in)
		Nominal	In 1.9 mm (In 0.075 in)
		Maximum	In 3.6 mm (In 0.142 in)
		Left and right difference	1.0 mm (0.039 in) or less
	Toe angle (Left wheel or right wheel) Degree minute (Decimal degree)	Minimum	In 0° 01′ (0.02°)
		Nominal	In 0° 05′ (0.08°)
		Maximum	In 0° 09′ (0.15°)
		Left and right difference	0° 02′ 30″ (0.04°) or less

- The adoption of the adjustment mechanism allows the GTR wheel alignment to be changed, if necessary. To adjust wheel alignment, check the level of tire wear and consult with the customer.
- To adjust the wheel alignment effectively for performance driving on a racetrack, adjust the camber in the negative direction within the adjustment range.
- To adjust the wheel alignment effectively for preventing uneven wear, adjust the camber in the positive direction, and in addition, adjust the toe-in distance in the IN direction.
- Target adjustment values may not be satisfied, depending on the level of vehicle adaptability, measurement error of the alignment tester, and the vehicle attitude during adjustment.
- Never set to toe-out.
- Always adjust to toe-in. If the wheels change to toe-out, tire partial wear is accelerated and local heating may be accelerated in the inner side of tires.
- For the above reasons, always adjust to toe-in for the vehicle of a customer who drives on a racetrack.
- Wheel alignment can be changed in process of time and mileage, as suspension parts do not adjust to each other up to the mileage of about 1,000 miles or 2,000 km.

- Remarks for up to the mileage of 1,000 miles or 2,000 km
- Toe angle of one-side wheel: See reference value.

TYPE 2

TYPE 2 : Wheel Alignment

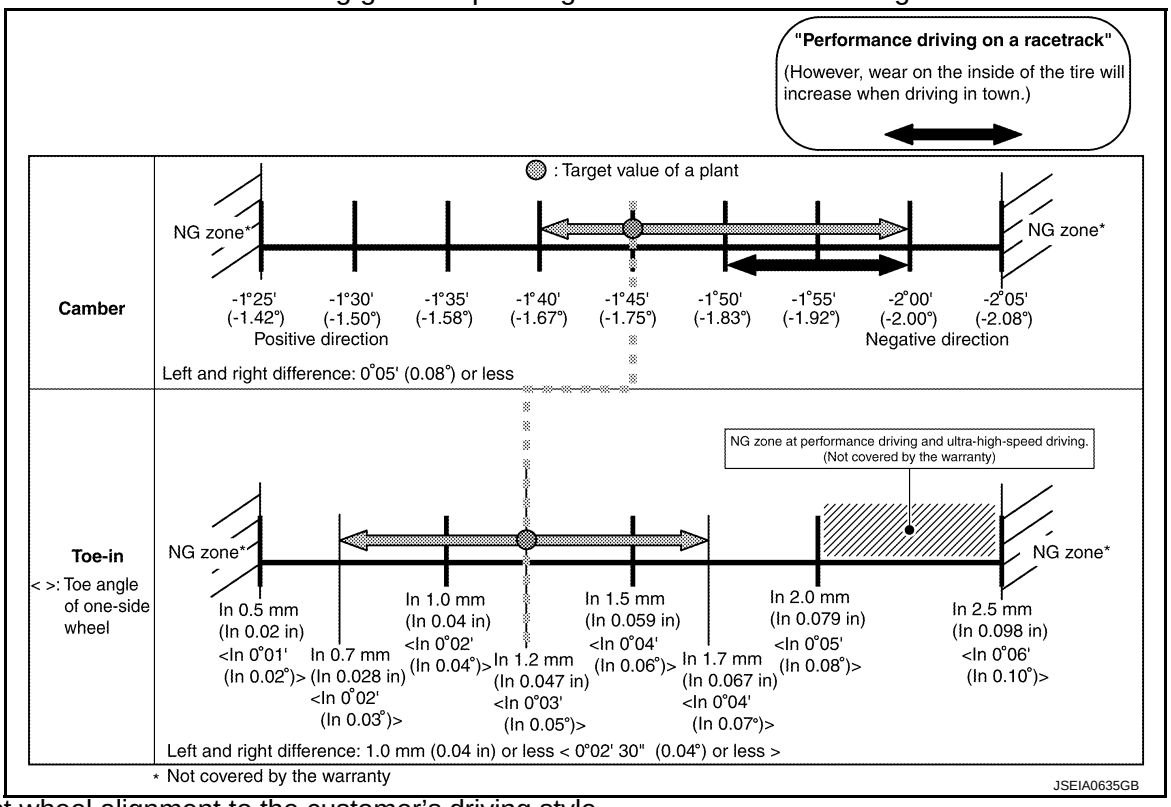
INFOID:0000000011490252

CAUTION:

- **When adjusting wheel alignment, refer to "PRECAUTION FOR WHEEL ALIGNMENT" in RSU-7, "Precautions for Suspension (GT-R certified NISSAN dealer)".**
- **Adjust wheel alignment with the vehicle in customer's regular use condition (e.g. normal stock items).**
- **To adjust wheel alignment, set tire pressure at 250 kPa (2.5 bar, 2.5 bar, 2.5 kg/cm^2, 36 psi). After adjusting wheel alignment, adjust tire pressure to the specified value. Refer to WT-81, "Tire".**

CAMBER, TOE-IN

Setting guide depending on the customer's driving



- Adjust wheel alignment to the customer's driving style.
- Never set to toe-out.
- Always adjust to toe-in. If the wheels change to toe-out, tire partial wear is accelerated and local heating may be accelerated in the inner side of tires.
- For the above reasons, always adjust to toe-in for the vehicle of a customer who drives on a racetrack.
- Engaging in performance driving on a racetrack and ultra-high-speed driving, be sure to adjust toe-in to 2.0 mm (0.079 in) or less. If used beyond this range, it is not covered by the warranty.
- Insufficient negative camber during hard cornering on a racetrack may result in tire wear. Therefore, recommend the customer to adjust negative camber angle in the negative direction when driving on a racetrack. [To avoid uneven wear, recommend the customer to have the camber angle aligned in the positive direction at an inspection after performance driving (at customer's expense).]
- Wheel alignment can be changed in process of time and mileage, as suspension parts do not adjust to each other up to the mileage of about 1,000 miles or 2,000 km.
- Remarks for up to the mileage of 1,000 miles or 2,000 km
- Toe angle of one-side wheel: See reference value.
- Each part of the suspension may not conform during a normal driving because of the adoption of a hard rate coil spring and a high damping shock absorber.

Ball Joint (GT-R certified NISSAN dealer)

INFOID:0000000011490253

Item	Standard
Swing torque	0.5 – 3.4 N·m (0.06 – 0.34 kg-m, 5 – 30 in-lb)
Measurement on spring balance (cotter pinhole position)	8.1 – 54.8 N (0.83 – 5.59 kg, 1.83 – 12.31 lb)
Rotating torque	0.5 – 3.4 N·m (0.06 – 0.34 kg-m, 5 – 30 in-lb)
Axial end play	0 mm (0 in)