

SECTION **RSU**
 REAR SUSPENSION

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RSU

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NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:000000000957820

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

| Symptom | | Possible cause and SUSPECTED PARTS | | | | | | | | | | | | | Reference page | | | |
|-----------------|-------------------------------|------------------------------------|--|-----------------------------------|--------------------|----------------|----------------------|---------------------------|------------------------|-----------------|--------------|-------------------------------|-------|-------------|----------------|--------|----------|------------------------------|
| | | 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 | TIRES | ROAD WHEELS | DRIVE SHAFT | BRAKES | STEERING | |
| REAR SUSPENSION | Noise | x | x | x | x | x | x | | | x | x | x | x | x | x | x | x | RSU-17 |
| | Shake | x | x | x | x | | x | | | x | | x | x | x | x | x | x | RSU-9 |
| | Vibration | x | x | x | x | x | | | | x | | x | x | | x | | | — |
| | Shimmy | x | x | x | x | | | x | | | | x | x | x | | x | x | — |
| | Judder | x | x | x | | | | | | | | x | x | x | | x | x | — |
| | Poor quality ride or handling | x | x | x | x | x | | x | x | | | x | x | x | | | | RSU-17 |
| | | | | | | | | | | | | | | | | | | RSU-19 |
| | | | | | | | | | | | | | | | | | | RSU-15 |
| | | | | | | | | | | | | | | | | | | 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. |

x: Applicable

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

Precautions for Suspension

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CAUTION:

- When installing rubber bushings, the final tightening must be carried out under unladen conditions with tires on ground. 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.

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PREPARATION

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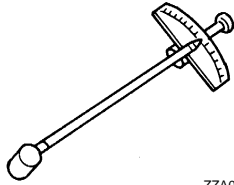
PREPARATION

PREPARATION

Special Service Tool

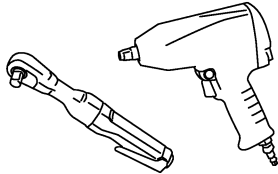
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

| Tool number (Kent-Moore No.) Tool name | Description |
|---|---|
| ST3127S000 (J-25765-A) Preload gauge  ZZA0806D | Measuring rotating torque of ball joint |

Commercial Service Tool

INFOID:000000000957823

| Tool name | Description |
|---|--------------------------|
| Power tool  PBIC0190E | Loosening bolts and nuts |

REAR SUSPENSION ASSEMBLY

< ON-VEHICLE MAINTENANCE >

ON-VEHICLE MAINTENANCE

REAR SUSPENSION ASSEMBLY

Inspection and Adjustment

INFOID:000000000957824

MOUNTING INSPECTION

Make sure 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 and axle assembly.

Standard

End play

: Refer to [RSU-19, "Ball Joint"](#).

CAUTION:

Be careful not to damage ball joint boot.

SHOCK ABSORBER

Check for oil leakage, damage and replace if malfunction is detected.

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WHEEL ALIGNMENT

< ON-VEHICLE MAINTENANCE >

WHEEL ALIGNMENT

Wheel Alignment Inspection

INFOID:000000000957825

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.

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.
- Some newer alignment machines are equipped with an optional “Rolling Compensation” method to “compensate” the sensors (alignment targets or head units). **Do not 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.

Preliminary Check

Check the following:

- Tires for improper air pressure and wear.
- Road wheels for runout. Refer to [BRC-101, "REAR SENSOR ROTOR : Removal and Installation"](#).
- Wheel bearing axial end play. Refer to [RAX-15, "Wheel Bearing"](#).
- Ball joint axial end play of suspension arm. Refer to [RSU-11, "Removal and Installation"](#).
- 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).

ADJUSTMENT

Camber

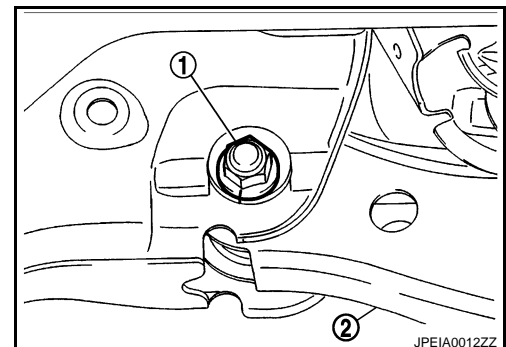
If outside the standard value, adjust with adjusting bolt (1) in front lower link (2).

Standard

Camber: Refer to [RSU-19, "Wheel Alignment"](#).

CAUTION:

After adjusting camber, be sure to check toe-in.



WHEEL ALIGNMENT

< ON-VEHICLE MAINTENANCE >

Toe-In

- If toe-in is not within the specification, adjust with adjusting bolt (1) in rear lower link (2).

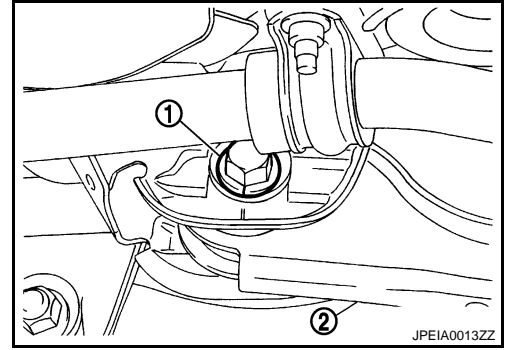
Standard

Toe-In: Refer to [RSU-19, "Wheel Alignment"](#).

CAUTION:

Be sure to adjust equally on RH and LH side with adjusting bolt.

- If toe-in is not still within the specification, inspect and replace any damaged or worn suspension parts.



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REAR LOWER LINK & COIL SPRING

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

REAR LOWER LINK & COIL SPRING

Exploded View

INFOID:000000000957826

Refer to [RSU-17, "Exploded View"](#).

Removal and Installation

INFOID:000000000957827

REMOVAL

1. Remove tires with power tool.
2. Set suitable jack under rear lower link to relieve the coil spring tension.
3. Loosen mounting bolts and nuts of rear lower link inside of suspension member, and then remove mounting bolts and nuts inside of axle with power tool.
4. Slowly lower jack, then remove upper seat, coil spring and rubber sheet from rear lower link.
5. Remove mounting bolts and nuts inside of suspension member to remove rear lower link with power tool.

INSTALLATION

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

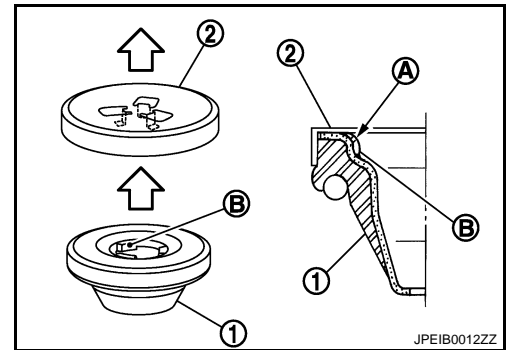
- Make sure that upper seat is attached as shown in the figure.

CAUTION:

Make sure that the projecting parts (A) on upper seat (1) inside is securely fitted on the bracket (2) tabs (B).

⇐ Body

- Match up rubber seat indentions and rear lower link grooves and attach.

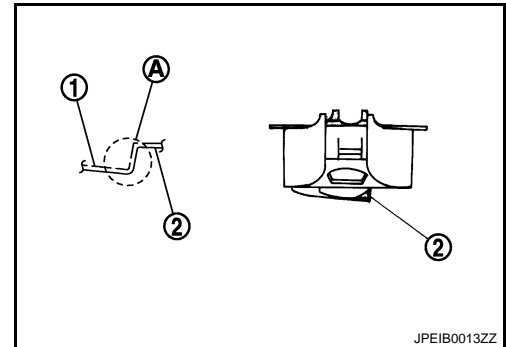


- Install the coil spring by aligning the lower end of the large diameter side to the step (A) between the rubber seat (1) and the rear lower link (2).

CAUTION:

Make sure spring is not up side down. The top and bottom are indicated by paint color.

- Perform the final tightening of rear suspension member and axle installation position (rubber bushing) under unladen condition with tires on level ground.



Inspection

INFOID:000000000957828

INSPECTION AFTER REMOVAL

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

INSPECTION AFTER INSTALLATION

- Check wheel alignment. Refer to [RSU-19, "Wheel Alignment"](#).
- Adjust neutral position of steering angle sensor after checking the wheel alignment. Refer to [BRC-8, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement"](#).

REAR SHOCK ABSORBER

< ON-VEHICLE REPAIR >

REAR SHOCK ABSORBER

Exploded View

INFOID:000000000957829

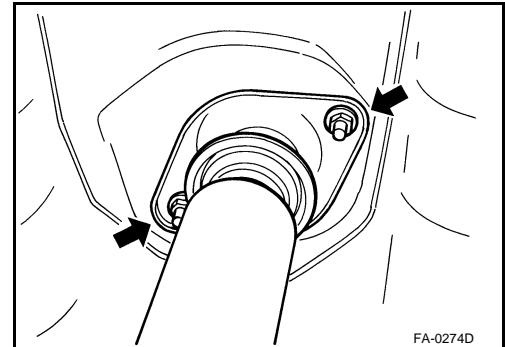
Refer to [RSU-17, "Exploded View"](#).

Removal and Installation

INFOID:000000000957830

REMOVAL

1. Remove tires with power tool.
2. Set suitable jack under axle assembly to relieve the coil spring tension.
3. Remove shock absorber lower end bolt with power tool.
4. Gradually lower the jack to remove it from rear lower link.
5. Remove shock absorber assembly upper end nuts with power tool, and then remove shock absorber assembly from vehicle.



INSTALLATION

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

- Perform final tightening of bolts and nuts at the shock absorber lower side (rubber bushing), under unladen conditions with tires on level ground.

Disassembly and Assembly

INFOID:000000000957831

DISASSEMBLY

CAUTION:

Never damage shock absorber piston rod when removing components from shock absorber.

1. Remove cap from mounting bracket
2. Wrap a shop cloth around lower side of shock absorber and fix it with a vise.
CAUTION:
Never set the cylindrical part of shock absorber with a vise.
3. Secure the piston rod tip so that piston rod does not turn, and remove piston rod lock nut.
4. Remove mounting seal, mounting bracket and bound bumper cover from shock absorber.

ASSEMBLY

Install in the reverse order of removal.

Inspection

INFOID:000000000957832

INSPECTION AFTER REMOVAL

- Check shock absorber assembly for deformation, cracks, damage, and replace if there are.
- Check welded and sealed areas for oil leakage, and replace if there are.

INSPECTION AFTER INSTALLION

- Check wheel alignment. Refer to [RSU-19, "Wheel Alignment"](#).
- Adjust neutral position of steering angle sensor after checking the wheel alignment. Refer to [BRC-8, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement"](#).

INSPECTION AFTER DISASSEMBLY

Bound Bumper and Bushing

Check bound bumper cover and bushing for cracks and damage. Replace if there are.

REAR SHOCK ABSORBER

< ON-VEHICLE REPAIR >

Shock Absorber

Check the following:

- Shock absorber for deformation, cracks, and other damage. Replace if there are.
- Piston rod for damage, uneven wear, and distortion. Replace if there are.

INSPECTION AFTER ASSEMBLY

Make sure piston rod on shock absorber is not damaged when attaching components to shock absorber.

SUSPENSION ARM

< ON-VEHICLE REPAIR >

SUSPENSION ARM

Exploded View

INFOID:000000000957833

Refer to [RSU-17, "Exploded View"](#).

Removal and Installation

INFOID:000000000957834

REMOVAL

1. Remove tire with power tool.
2. Remove torque member mounting bolts with power tool. Hang torque member in a place where it will not interfere with work. Refer to [BR-53, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 1 PISTON TYPE\) : Removal and Installation"](#) (front caliper 1 piston type), [BR-57, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 2 PISTON TYPE\) : Removal and Installation"](#) (front caliper 2 piston type).
3. Set suitable jack under axle assembly to relieve the coil spring tension.
4. Remove connecting rod mounting bracket from suspension arm with power tool.
5. Remove drive shaft. Refer to [RAX-9, "Removal and Installation"](#).
6. Remove height sensor (with xenon headlamp). Refer to [EXL-197, "Removal and Installation"](#).
7. Remove cotter pin of suspension arm ball joint, and loosen nut.
8. Remove mounting bolts and nuts between suspension arm and rear suspension member.
9. Use the ball joint remover to remove suspension arm from axle assembly. Be careful not to damage ball joint boot.

CAUTION:

Tighten temporarily mounting nut to prevent damage to threads and to prevent ball joint remover from coming off.

10. Remove suspension arm.

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.

Inspection

INFOID:000000000957835

INSPECTION AFTER REMOVAL

Visual Inspection

- Check suspension arm and bushing for deformation, cracks or damage. If any non-standard condition is found, replace it.
- Check boot of ball joint for cracks or damage, and also for grease leakage. If a malfunction is detected, replace suspension arm.

Ball Joint Inspection

Manually move ball stud at least ten times by hand to check for smooth movement.

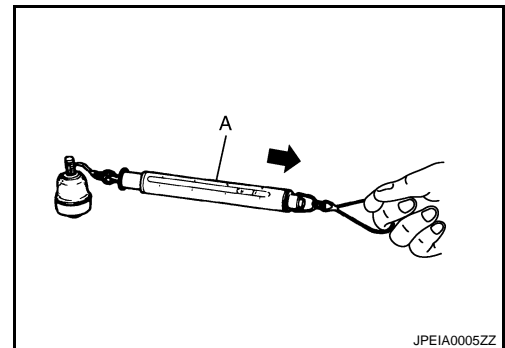
Swing Torque Inspection

- Hook spring balance (A) at cotter pin mounting hole. Confirm spring balance measurement value is within specifications when ball stud begins moving.

Standard

Swing torque : Refer to [RSU-19, "Ball Joint"](#).

- If it is outside the specified range, replace suspension arm assembly.



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Rotating Torque Inspection

SUSPENSION ARM

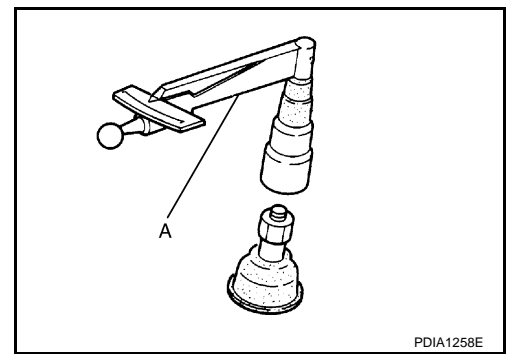
< ON-VEHICLE REPAIR >

- Attach the mounting nut to ball stud. Make sure that rotating torque is within the specifications with a preload gauge (A) [SST:ST3127S000 (J-25765-A)].

Standard

Rotating torque : Refer to [RSU-19, "Ball Joint"](#).

- If it is outside the specified range, replace suspension arm assembly.



Axial End Play Inspection

- Move tip of ball stud in axial direction to check for looseness.

Standard

Axial end play : Refer to [RSU-19, "Ball Joint"](#).

- If it is outside the specified range, replace suspension arm assembly.

INSPECTION AFTER INSTALLATION

- Check wheel alignment. Refer to [RSU-19, "Wheel Alignment"](#).
- Adjust neutral position of steering angle sensor after checking the wheel alignment. Refer to [BRC-8, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement"](#).

RADIUS ROD

< ON-VEHICLE REPAIR >

RADIUS ROD

Exploded View

INFOID:000000000957836

Refer to [RSU-17, "Exploded View"](#).

Removal and Installation

INFOID:000000000957837

REMOVAL

1. Remove tire with power tool.
2. Set suitable jack under axle assembly.
3. Remove mounting bolts and nuts in axle side of radius rod with power tool.
4. Remove mounting bolt in rear suspension member side of radius rod with power tool, then remove radius rod.

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.

Inspection

INFOID:000000000957838

INSPECTION AFTER REMOVAL

Check radius rod and bushing for any deformation, cracks, or damage. Replace if there are.

INSPECTION AFTER INSTALLATION

- Check wheel alignment. Refer to [RSU-19, "Wheel Alignment"](#).
- Adjust neutral position of steering angle sensor after checking the wheel alignment. Refer to [BRC-8, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement"](#).

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FRONT LOWER LINK

< ON-VEHICLE REPAIR >

FRONT LOWER LINK

Exploded View

INFOID:000000000957839

Refer to [RSU-17. "Exploded View"](#).

Removal and Installation

INFOID:000000000957840

REMOVAL

1. Remove tire with power tool.
2. Set suitable jack under axle assembly to relieve the coil spring tension.
3. Remove mounting bolts and nuts between front lower link and rear suspension member with power tool.
4. Remove mounting bolts and nuts between front lower link and axle with power tool.
5. Remove front lower link.

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.

Inspection

INFOID:000000000957841

INSPECTION AFTER REMOVAL

Check front lower link and bushing for any deformation, cracks, or damage. Replace if there are.

INSPECTION AFTER INSTALLATION

- Check wheel alignment. Refer to [RSU-19. "Wheel Alignment"](#).
- Adjust neutral position of steering angle sensor after checking the wheel alignment. Refer to [BRC-8. "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement"](#).

REAR STABILIZER

< ON-VEHICLE REPAIR >

REAR STABILIZER

Exploded View

INFOID:000000000957842

Refer to [RSU-17, "Exploded View"](#).

Removal and Installation

INFOID:000000000957843

REMOVAL

1. Remove mounting bracket of center muffler and remove mounting rubber of main muffler. Refer to [EX-5, "Removal and Installation"](#).
2. Remove lower side mounting nuts on stabilizer connecting rod and remove stabilizer connecting rod from stabilizer bar with power tool.
3. Remove mounting nuts on stabilizer clamp and remove stabilizer bar with power tool.

INSTALLATION

Install in the reverse order of removal.

Inspection

INFOID:000000000957844

INSPECTION AFTER REMOVAL

Check stabilizer bar, stabilizer connecting rod, stabilizer bushing and stabilizer clamp for deformation, cracks or damage. Replace it if a malfunction is detected.

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REAR SUSPENSION MEMBER

< ON-VEHICLE REPAIR >

REAR SUSPENSION MEMBER

Exploded View

INFOID:000000000957845

Refer to [RSU-17, "Exploded View"](#).

Removal and Installation

INFOID:000000000957846

REMOVAL

1. Remove tires from vehicle with power tool.
2. Remove brake caliper with power tool. Hang it in a place where it will not interfere with work. Refer to [BR-53, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 1 PISTON TYPE\) : Removal and Installation"](#) (front caliper 1 piston), [BR-57, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 2 PISTON TYPE\) : Removal and Installation"](#) (front caliper 2 piston).
CAUTION:
Avoid depressing brake pedal while brake caliper is removed.
3. Remove disc rotor. Refer to [BR-53, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 1 PISTON TYPE\) : Removal and Installation"](#) (front caliper 1 piston), [BR-57, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 2 PISTON TYPE\) : Removal and Installation"](#) (front caliper 2 piston).
4. Remove wheel sensor and sensor harness from axle assembly and suspension arm. Refer to [RSU-11, "Removal and Installation"](#).
5. Remove height sensor harness from rear suspension member (with xenon headlamp). Refer to [EXL-197, "Removal and Installation"](#).
6. Remove center muffler and main muffler. Refer to [EX-5, "Removal and Installation"](#).
7. Remove stabilizer bar. Refer to [RSU-15, "Removal and Installation"](#).
8. Remove drive shaft. Refer to [RAX-9, "Removal and Installation"](#).
9. Remove propeller shaft. Refer to [DLN-80, "Removal and Installation"](#).
10. Remove harness from rear final drive and rear suspension member.
11. Remove final drive. Refer to [DLN-55, "Removal and Installation"](#).
12. Remove parking brake cable mounting bolt and separate parking brake cable from vehicle and rear suspension member. Refer to [PB-9, "Removal and Installation"](#).
13. Remove mounting bolts in lower side of shock absorber.
14. Remove rear lower link and coil spring. Refer to [FSU-9, "Removal and Installation"](#).
15. Set suitable jack under rear suspension member.
16. Remove mounting nuts rear suspension member.
17. Slowly lower jack, then remove rear suspension member, suspension arm, radius rod, front lower link and axle from vehicle as a unit.
18. Remove mounting bolts and nuts, then remove suspension arm, front lower link, and radius rod from rear suspension member.

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.
- Check wheel sensor harness for proper connection. Refer to [BRC-100, "Removal and Installation"](#).

Inspection

INFOID:000000000957847

INSPECTION AFTER REMOVAL

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

INSPECTION AFTER INSTALLATION

- Check wheel alignment. Refer to [RSU-19, "Wheel Alignment"](#).
- Adjust neutral position of steering angle sensor after checking wheel alignment. Refer to [BRC-8, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement"](#).
- Adjust parking brake operation (stroke). [PB-3, "PEDAL TYPE : Inspection and Adjustment"](#) (pedal type), [PB-4, "LEVER TYPE : Inspection and Adjustment"](#) (lever type).

REAR SUSPENSION ASSEMBLY

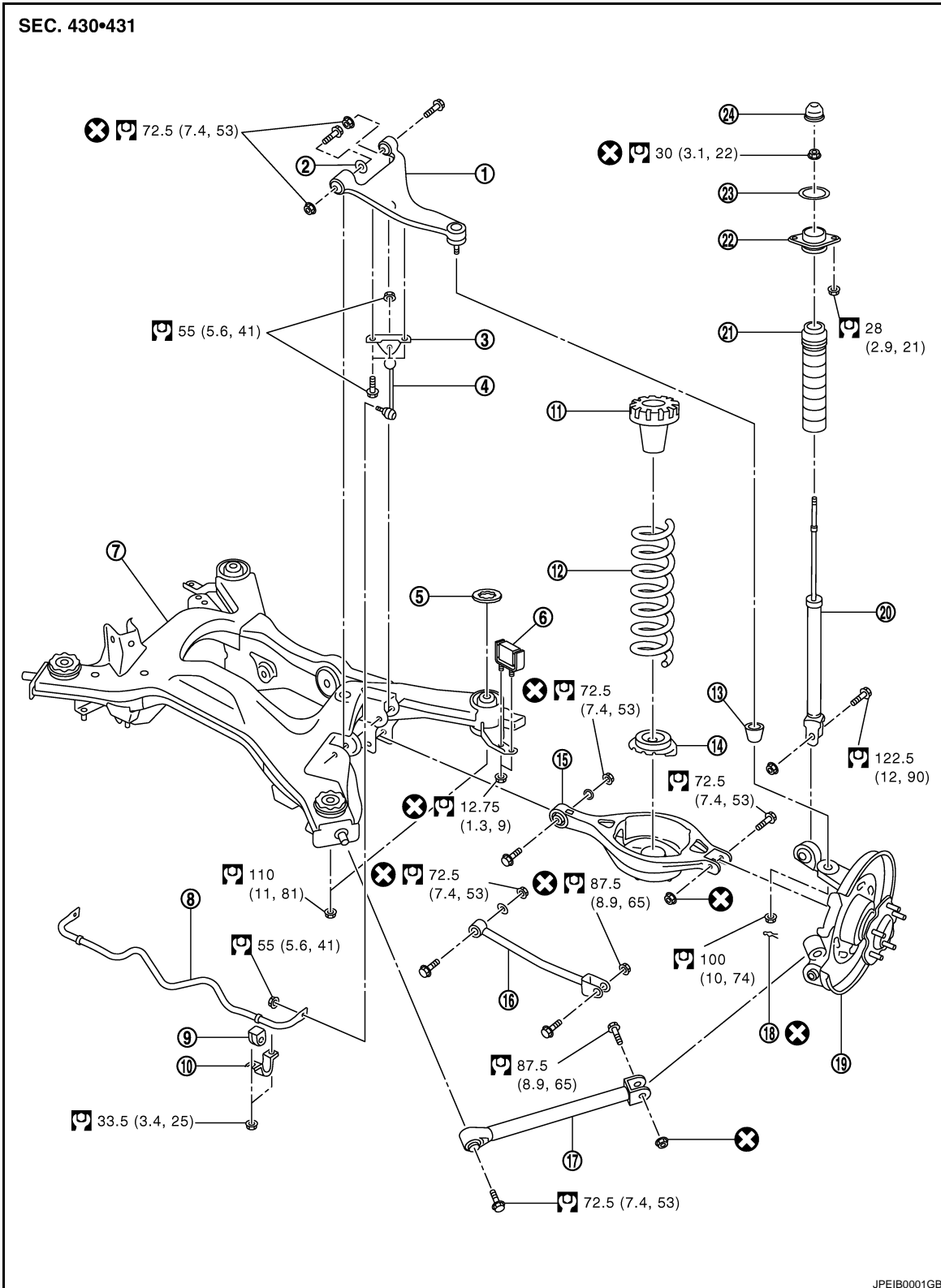
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

REAR SUSPENSION ASSEMBLY

Exploded View

INFOID:000000000957848



REAR SUSPENSION ASSEMBLY

< REMOVAL AND INSTALLATION >

- | | | |
|-------------------------------------|--------------------|---|
| 1. Suspension arm | 2. Stopper rubber | 3. Stabilizer connecting rod mounting bracket |
| 4. Stabilizer connecting rod | 5. Mount stopper | 6. Damper assembly |
| 7. Suspension member | 8. Stabilizer bar | 9. Stabilizer bushing |
| 10. Stabilizer clamp | 11. Upper seat | 12. Coil spring |
| 13. Ball seat | 14. Rubber seat | 15. Rear lower link |
| 16. Front lower link | 17. Radius rod | 18. Cotter pin |
| 19. Axle assembly | 20. Shock absorber | 21. Bound bumper cover |
| 22. Shock absorber mounting bracket | 23. Mounting seal | 24. Cap |

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

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REMOVAL

1. Remove tire with power tool.
2. Remove brake caliper with power tool. Hang it in a place where it will not interfere with work. Refer to [BR-53, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 1 PISTON TYPE\) : Removal and Installation"](#) (front caliper 1 piston type), [BR-57, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 2 PISTON TYPE\) : Removal and Installation"](#) (front caliper 2 piston type).
CAUTION:
Never depressing brake pedal while brake caliper is removed.
3. Put matching marks on both disc rotor and the wheel hub and bearing assembly, and then remove disc rotor. Refer to [BR-53, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 1 PISTON TYPE\) : Removal and Installation"](#) (front caliper 1 piston type), [BR-57, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 2 PISTON TYPE\) : Removal and Installation"](#) (front caliper 2 piston type).
4. Remove wheel sensor from rear final drive. Refer to [BRC-100, "Removal and Installation"](#).
5. Remove height sensor harness from rear suspension member (with xenon headlamp). Refer to [EXL-197, "Removal and Installation"](#).
6. Remove harness from rear final drive and rear suspension member.
7. Remove center muffler. Refer to [EX-5, "Removal and Installation"](#).
8. Remove rear propeller shaft. Refer to [DLN-93, "Removal and Installation"](#) (2WD AT models), [DLN-86, "Removal and Installation"](#) (2WD MT models), [DLN-101, "Removal and Installation"](#) (AWD models).
9. Separate parking brake cable from vehicle and rear suspension member. Refer to [PB-7, "PEDAL TYPE : Removal and Installation"](#) (pedal type), [PB-8, "LEVER TYPE : Removal and Installation"](#) (lever type).
10. Remove rear lower link and coil spring. Refer to [RSU-14, "Removal and Installation"](#).
11. Remove mounting bolt on lower side of shock absorber. Refer to [RSU-9, "Removal and Installation"](#).
12. Set suitable jack under rear final drive.
13. Gradually lowering jack, remove rear suspension assembly.
CAUTION:
Secure suspension assembly to a suitable jack while removing it.

INSTALLATION

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

- Perform the final tightening of each of parts under unladen conditions, with tires on level ground.
- Check wheel sensor harness for proper connection. Refer to [BR-57, "BRAKE CALIPER ASSEMBLY \(FRONT CALIPER 2 PISTON TYPE\) : Removal and Installation"](#).

Inspection

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INSPECTION AFTER REMOVAL

- Check the wheel alignment. Refer to [RSU-19, "Wheel Alignment"](#).
- Adjust neutral position of steering angle sensor after checking the wheel alignment. Refer to [BRC-8, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement"](#).
- Adjust parking brake operation. Refer to [PB-3, "PEDAL TYPE : Inspection and Adjustment"](#) (pedal type), [PB-4, "LEVER TYPE : Inspection and Adjustment"](#) (lever type).

SERVICE DATA AND SPECIFICATIONS (SDS)

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SERVICE DATA AND SPECIFICATIONS (SDS)

Wheel Alignment

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| Applied model | | 2WD | | AWD |
|--|---|------------------|-------------------|------------------|
| | | Without 4WAS | With 4WAS | |
| Camber Degree minute (Decimal degree) | Minimum | -1° 20' (-1.33°) | -1° 25' (-1.42°) | -0° 45' (-0.75°) |
| | Nominal | -0° 50' (-0.83°) | -0° 55' (-0.92°) | -0° 15' (-0.25°) |
| | Maximum | -0° 20' (-0.33°) | -0° 25' (-0.42°) | 0° 15' (0.25°) |
| Total toe-in | Distance | Minimum | 0 mm (0 in) | |
| | | Nominal | 2.8 mm (0.110 in) | |
| | | Maximum | 5.6 mm (0.220 in) | |
| | Angle (left wheel or right wheel) Degree minute (Decimal degree) | Minimum | 0° 00' (0.00°) | |
| | | Nominal | 0° 07' (0.12°) | |
| | | Maximum | 0° 14' (0.23°) | |

Measure value under unladen* conditions.

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

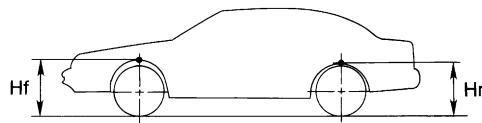
Ball Joint

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| | |
|---|--|
| 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 - 5.6 kg, 1.82 - 12.32 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) |

Wheel Height

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SFA818A

| Applied model | 2WD | | AWD |
|---------------|-------------------|-------------------|-------------------|
| | Without 4WAS | With 4WAS | |
| Tire | 225/55R17 | 245/45R18 | 225/55R17 |
| Rear (Hr) | 707 mm (27.83 in) | 707 mm (27.83 in) | 723 mm (28.46 in) |

Measure value under unladen* conditions.

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