SECTION RAX
REAR AXLE

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PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:0000000014907751

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper repair, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery or batteries, and wait at least three minutes before performing any service.**

Precautions for Drive Shaft

INFOID:0000000014630341

Observe the following precautions when disassembling and assembling drive shaft:

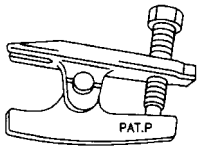
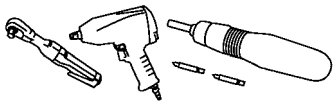
- Do not disassemble joint sub-assembly because it is non-overhaul parts.
- Perform work in a location which is as dust-free as possible.
- Clean the parts before disassembling and assembling.
- Prevent the entry of foreign objects during disassembly.
- Reassemble disassembled parts carefully in the correct order. If work is interrupted, a clean cover must be placed over parts.
- Use paper shop cloths. Fabric shop cloths must not be used because of the danger of lint adhering to parts.
- Clean disassembled parts (except for rubber parts) with kerosene which shall be removed by blowing with air or wiping with paper shop cloths.

PREPARATION

PREPARATION

Commercial Service Tool

INFOID:0000000014630342

Tool name	Description
Ball joint remover  NT146	Removing wheel stud
Power tools  PIIB1407E	Loosening nuts, screws, and bolts

SYMPTOM DIAGNOSIS

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:0000000014630343

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

Reference			RAX-7	—	RAX-6	RSU-4	WT-62	WT-62	BR-48
Possible cause and SUSPECTED PARTS			Improper installation, looseness	Parts interference	Wheel bearing damage	REAR SUSPENSION	TIRE	WHEEL	BRAKE
Symptom	REAR AXLE	Noise	×	×	×	×	×	×	×
		Shake	×	×	×	×	×	×	×
		Vibration	×	×	×	×	×		
		Shimmy	×	×		×	×	×	×
		Shudder	×			×	×	×	×
		Poor quality ride or handling	×	×		×	×	×	

×: Applicable

PERIODIC MAINTENANCE

REAR WHEEL HUB AND HOUSING

Inspection

INFOID:0000000014630344

INSPECTION

Make sure the conditions (looseness, back lash) of each component and component conditions (wear, damage) are normal.

WHEEL HUB AND BEARING INSPECTION

- Move wheel hub and bearing in the axial direction by hand. Make sure there is no looseness of wheel bearing.

Axial end play : Refer to RAX-9, "Wheel Bearing".

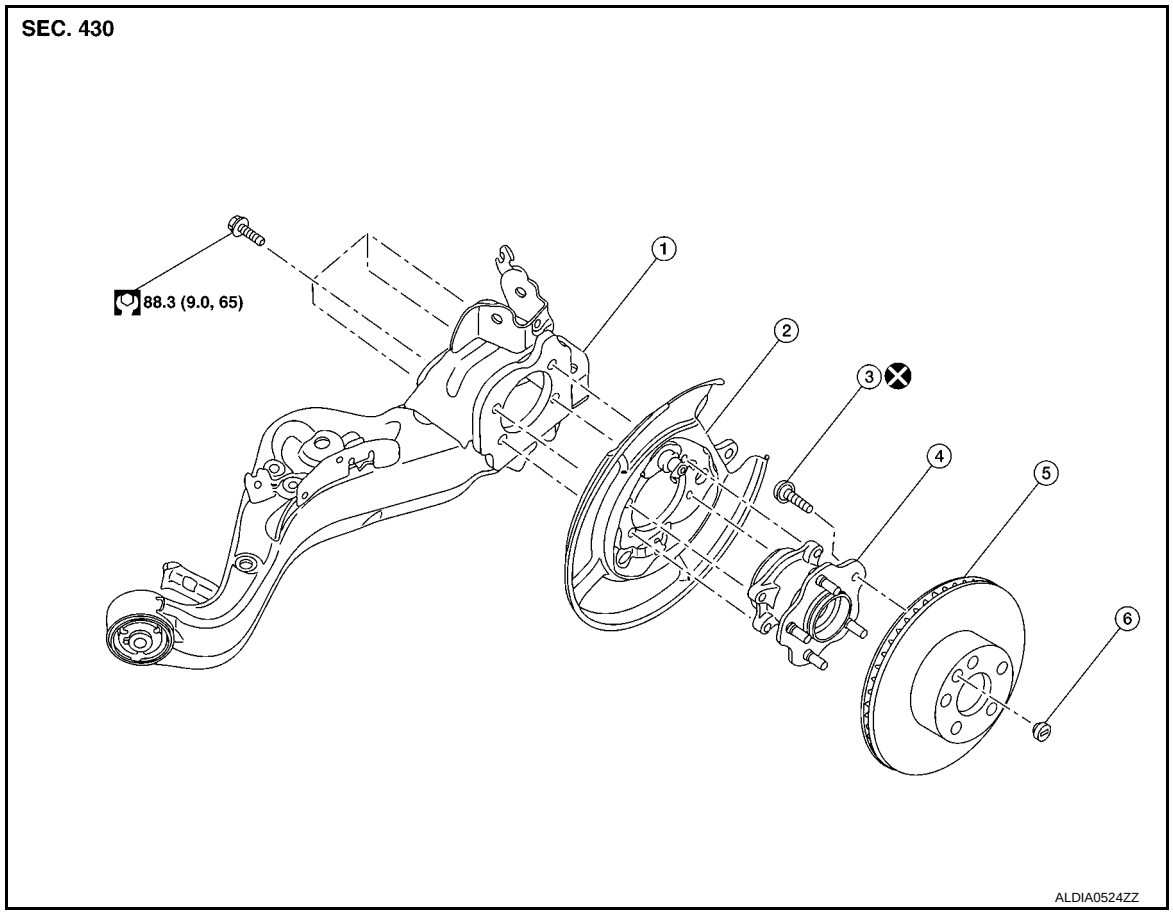
- Rotate wheel hub, and make sure there is no unusual noise or other irregular conditions. If there is any of irregular conditions, replace wheel hub and bearing.

REMOVAL AND INSTALLATION

REAR WHEEL HUB

Exploded View

INFOID:0000000014630345



1. Suspension arm
2. Back plate
3. Wheel stud
4. Wheel hub and bearing
5. Disc brake rotor
6. Plug

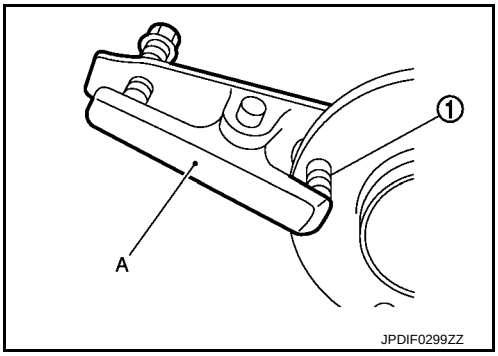
Removal and Installation

INFOID:0000000014630346

REMOVAL

1. Remove the wheel and tire using power tool. Refer to WT-67, "Removal and Installation".
2. Remove the bolt and separate the rear wheel sensor from the wheel hub and bearing. Refer to BRC-201, "REAR WHEEL SENSOR : Exploded View".
   CAUTION:
   - **Failure to separate the rear wheel sensor from the wheel hub and bearing may result in damage to the rear wheel sensor.**
   - **Pull out the rear wheel sensor, being careful to turn it as little as possible. Do not pull on wheel sensor harness.**
3. Remove brake caliper torque member bolts using power tool, leaving the brake hose attached. Position brake caliper aside with wire. Refer to BR-77, "BRAKE CALIPER ASSEMBLY : Exploded View".
   CAUTION:
   Do not depress brake pedal while brake caliper is removed.
4. Put alignment marks on the disc brake rotor and on the wheel hub and bearing. Remove the disc brake rotor.
   CAUTION:
   Do not drop disc brake rotor.

5. Remove the hub bolts and the wheel hub and bearing. Support the back plate and parking brake components with wire.
   CAUTION:
   Do not drop the back plate or the parking brake components.
6. If necessary, remove the wheel studs (1) from the wheel hub and bearing using a suitable tool (A).
   CAUTION:
   - **Remove the wheel studs only when necessary.**
   - **Do not hammer the wheel studs or damage to the wheel hub and bearing may occur.**
   - **Pull out the wheel studs in a direction perpendicular to the wheel hub and bearing.**



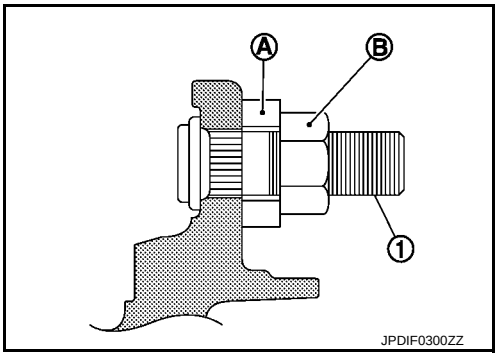
INSPECTION AFTER REMOVAL

Check wheel hub and bearing for wear, cracks, and damage. Replace if necessary.

INSTALLATION

Installation is in the reverse order of removal.

- Place a washer (A) as shown to install the wheel studs (1) by using the tightening force of the nut (B).
  CAUTION:
  - **Do not reuse the wheel stud.**
  - **Check that there is no clearance between the wheel stud and the wheel hub and bearing.**



- Install the rear wheel sensor to the wheel hub and bearing. Refer to BRC-201, "REAR WHEEL SENSOR : Exploded View".
  CAUTION:
  - **Before installing, make sure there is no foreign material such as iron fragments adhered to the pick-up part of the rear wheel sensor.**
  - **When installing, make sure there is no foreign material such as iron fragments on and in the hole in the wheel hub and bearing for the rear wheel sensor. Make sure no foreign material has been caught in the sensor rotor. Remove any foreign material and clean the mount.**
- Align the matching marks made during removal when reusing the disc brake rotor.
- Check that the wheel hub and bearing operates smoothly.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Wheel Bearing

INFOID:0000000014630347

Item	Standard
Axial end play	0.05 mm (0.002 in) or less

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:0000000014907752

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper repair, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery or batteries, and wait at least three minutes before performing any service.**

Precautions for Drive Shaft

INFOID:0000000014630349

Observe the following precautions when disassembling and assembling drive shaft:

- Do not disassemble joint sub-assembly because it is non-overhaul parts.
- Perform work in a location which is as dust-free as possible.
- Clean the parts before disassembling and assembling.
- Prevent the entry of foreign objects during disassembly.
- Reassemble disassembled parts carefully in the correct order. If work is interrupted, a clean cover must be placed over parts.
- Use paper shop cloths. Fabric shop cloths must not be used because of the danger of lint adhering to parts.
- Clean disassembled parts (except for rubber parts) with kerosene which shall be removed by blowing with air or wiping with paper shop cloths.

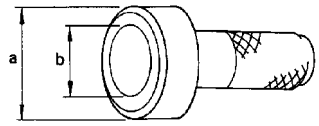
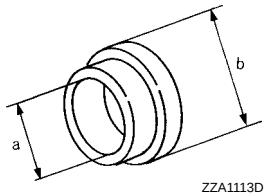
PREPARATION

PREPARATION

Special Service Tool

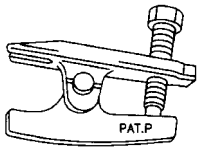
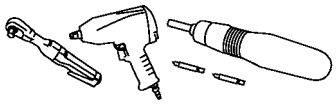
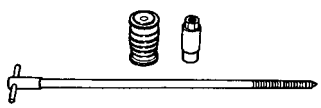
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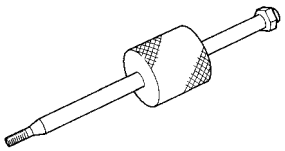
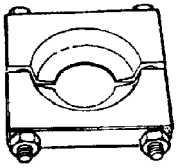
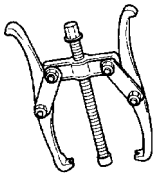
The actual shape of the tools may differ from those illustrated here.

Tool number (TechMate No.) Tool name	Description
KV38100500 (—) Drift  ZZA0701D	Installing sensor rotor a: 80 mm (3.15 in) dia. b: 60 mm (2.36 in) dia.
KV40101840 (—) Collar  ZZA1113D	Installing sensor rotor a: 67 mm (2.64 in) dia. b: 85 mm (3.35 in) dia.

Commercial Service Tool

INFOID:0000000014630351

Tool name	Description
Ball joint remover  NT146	Removing wheel stud
Power tools  PIIB1407E	Loosening nuts, screws, and bolts
Drive shaft puller  JPDIG0152ZZ	Removing drive shaft joint sub assembly

Sliding hammer  ZZA0023D	Removing drive shaft
Replacer  ZZA0700D	Removing sensor rotor
Puller  ZZA0119D	Removing sensor rotor

SYMPTOM DIAGNOSIS

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:0000000014630352

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

Reference			—	RAX-21	—	RAX-14	—	DLN-104	DLN-120	RSU-4	—	WT-62	WT-62	DLN-104	BR-48
Possible cause and SUSPECTED PARTS			Excessive joint angle	Joint sliding resistance	Imbalance	Improper installation, looseness	Parts interference	PROPELLER SHAFT	DIFFERENTIAL	REAR SUSPENSION	REAR AXLE	TIRE	WHEEL	DRIVE SHAFT	BRAKE
Symptom	DRIVE SHAFT	Noise	×	×				×	×	×	×	×	×		×
		Shake	×		×			×		×	×	×	×		×
	REAR AXLE	Noise				×	×	×	×	×		×	×	×	×
		Shake				×	×	×		×		×	×	×	×
		Vibration				×	×	×		×		×		×	
		Shimmy				×	×			×		×	×		×
		Shudder				×				×		×	×		×
		Poor quality ride or handling				×	×			×		×	×		

×: Applicable

PERIODIC MAINTENANCE

REAR WHEEL HUB AND HOUSING

Inspection

INFOID:0000000014630353

INSPECTION

Make sure the conditions (looseness, back lash) of each component and component conditions (wear, damage) are normal.

WHEEL HUB AND BEARING INSPECTION

- Move wheel hub and bearing in the axial direction by hand. Make sure there is no looseness of wheel bearing.

Axial end play : Refer to RAX-27, "Wheel Bearing".

- Rotate wheel hub, and make sure there is no unusual noise or other irregular conditions. If there is any of irregular conditions, replace wheel hub and bearing.

REAR DRIVE SHAFT

Inspection

INFOID:0000000014630354

Check the following items and replace parts as necessary:
- Check drive shaft mounting point and joint for looseness and other damage.
- Check boot for cracks and other damage.

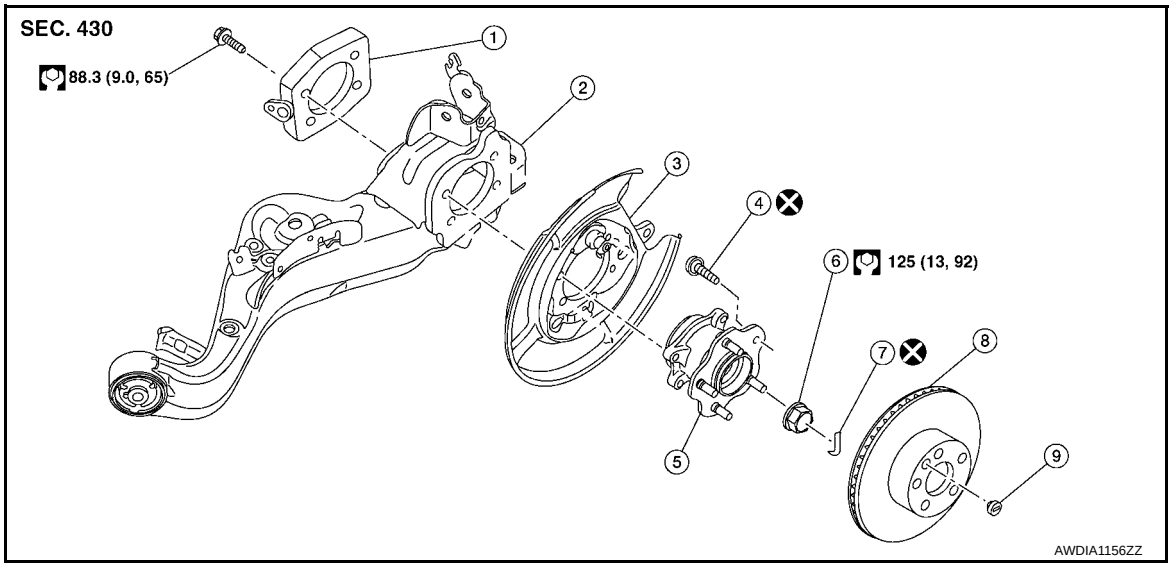
CAUTION:
Replace entire drive shaft when noise or vibration occurs from drive shaft.

REMOVAL AND INSTALLATION

REAR WHEEL HUB AND HOUSING

Exploded View

INFOID:0000000014630355



1. Axle housing
2. Suspension arm
3. Back plate
4. Hub bolt
5. Wheel hub and bearing
6. Wheel hub lock nut
7. Cotter pin
8. Disc brake rotor
9. Plug

Removal and Installation

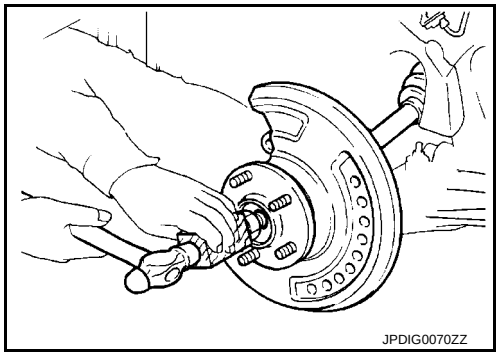
INFOID:0000000014630356

REMOVAL

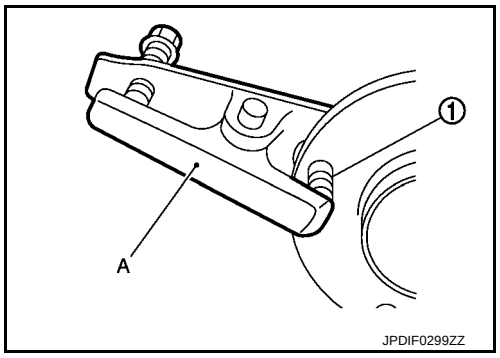
1. Remove the wheel and tire using power tool. Refer to WT-67, "Removal and Installation".
2. Remove the bolt and separate the rear wheel sensor from the axle housing. Position the rear wheel sensor and the harness aside. Refer to BRC-202, "REAR WHEEL SENSOR : Removal and Installation".
   CAUTION:
   - **Pull out the rear wheel sensor, being careful to turn it as little as possible. Do not pull on the wheel sensor harness.**
   - **Failure to remove the rear speed sensor from the axle housing may result in damage to the rear wheel sensor.**
3. Remove brake caliper torque member bolts using power tool, leaving the brake hose attached. Position brake caliper aside with wire. Refer to BR-77, "BRAKE CALIPER ASSEMBLY : Exploded View".
   CAUTION:
   Do not depress brake pedal while brake caliper is removed.
4. Put alignment marks on the disc brake rotor and on the wheel hub and bearing. Remove the disc brake rotor.
   CAUTION:
   Do not drop disc brake rotor.
5. Remove the cotter pin.
6. Loosen, but do not remove, the wheel hub lock nut from the drive shaft using power tool.

7. Tap the wheel hub lock nut with a piece of wood and a suitable tool to disengage the drive shaft from the wheel hub and bearing.
   CAUTION:
   - **Do not place drive shaft joint at an extreme angle. Be careful not to overextend slide joint.**
   - **Do not allow drive shaft to hang without support.**

   NOTE:
   Use a suitable puller if drive shaft cannot be separated from the wheel hub and bearing.


JPDIG0070ZZ

8. Remove the wheel hub lock nut.
9. Remove the hub bolts and the wheel hub and bearing.
10. Position the parking brake and back plate aside with wire.
11. Remove the coil spring and spring seats. Refer to RSU-10, "Removal and Installation - AWD".
12. Remove the axle housing.
13. If necessary, remove the wheel studs (1) from the wheel hub and bearing using a suitable tool (A).
    CAUTION:
    - **Remove the wheel studs only when necessary.**
    - **Do not hammer the wheel studs or damage to the wheel hub and bearing may occur.**
    - **Pull out the wheel studs in a direction perpendicular to the wheel hub and bearing.**



JPDIF0299ZZ

INSPECTION AFTER REMOVAL

Wheel Hub and Bearing

Check the wheel hub and bearing for wear, cracks, and damage. Replace if necessary.

Axle Housing

Check the axle housing for wear, cracks and damage. Replace if necessary.

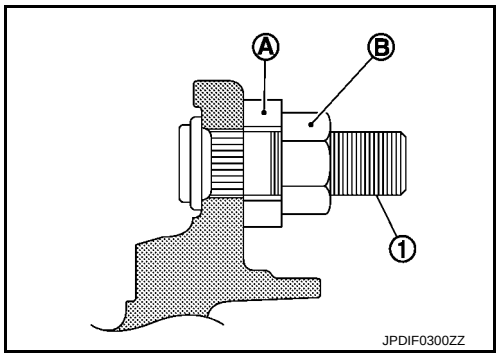
Ball Joint Inspection

Check for boot breakage, axial looseness, and torque of suspension arm ball joint. Refer to RSU-5, "Inspection and Adjustment".

INSTALLATION

Installation is in the reverse order of removal.

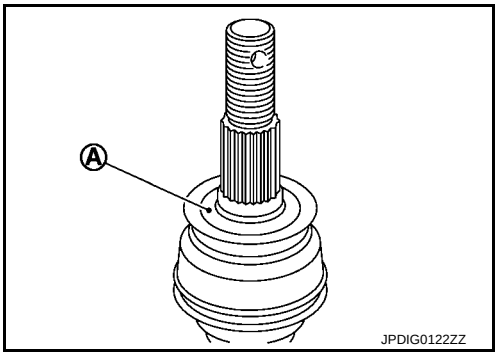
- Place a washer (A) as shown to install the wheel studs (1) by using the tightening force of the nut (B).
  CAUTION:
  - **Check that there is no clearance between wheel stud and the wheel hub and bearing.**
  - **Do not reuse wheel stud.**



JPDIF0300ZZ

- Clean the mating surfaces of the wheel hub lock nut and the wheel hub and bearing.
  CAUTION:
  Do not apply lubricating oil to these mating surface.

- Clean the mating surfaces of the joint sub-assembly and the wheel hub and bearing. Apply Molykote M77 lubricant to the surface (A) of the joint sub-assembly.
  CAUTION:
  Apply lubricant to cover the entire flat surface of joint sub-assembly.
  NOTE:
  Always check with the Parts Department for the latest parts information.



- Hold the wheel hub and bearing. Tighten the wheel hub lock nut.
  CAUTION:
  - **Since the drive shaft is assembled by press-fitting, use a torque wrench to tighten the wheel hub lock nut. Do not use a power tool.**
  - **Too much torque causes axle noise. Too little torque causes wheel bearing looseness. Tighten the wheel hub lock nut to the specification.**
- When installing a cotter pin, securely bend the cotter pin to prevent rattles.
  CAUTION:
  Do not reuse cotter pin.
- Install the rear wheel sensor to the axle housing. Refer to BRC-202, "REAR WHEEL SENSOR : Removal and Installation".

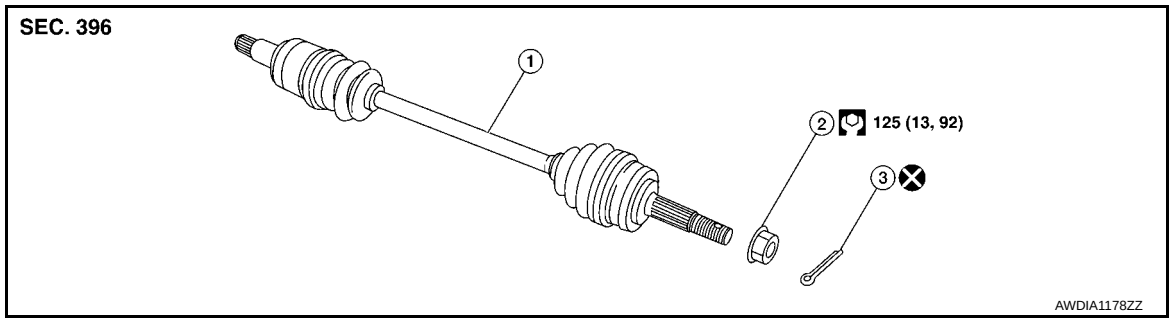
CAUTION:
- **Before installing, make sure there is no foreign material such as iron fragments adhered to the pick-up part of the rear wheel sensor.**
- **When installing, make sure there is no foreign material such as iron fragments on and in the hole in the axle housing for the rear wheel sensor. Make sure no foreign material has been caught in the sensor rotor. Remove any foreign material and clean the mount.**
- Check that the wheel hub and bearing operates smoothly.
- Align the matching marks on the disc brake rotor and on the wheel hub and bearing.

REAR DRIVE SHAFT

Exploded View

INFOID:0000000014630357

REMOVAL



1. Drive shaft
2. Wheel hub lock nut
3. Cotter pin

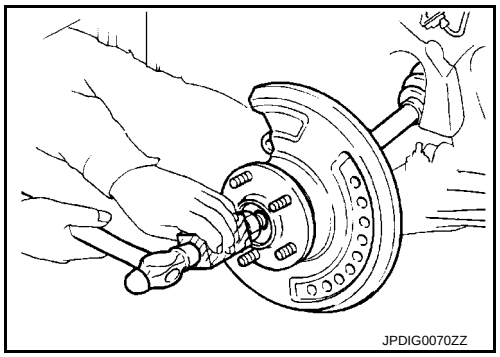
Removal and Installation

INFOID:0000000014630358

REMOVAL

1. Remove the wheel and tire using power tool. Refer to WT-67, "Removal and Installation".
2. Remove the bolt and separate the rear wheel sensor from the axle housing. Position the rear wheel sensor and the harness aside. Refer to BRC-201, "REAR WHEEL SENSOR : Exploded View".
   CAUTION:
   - **Failure to remove the rear speed sensor from the axle housing may result in damage to the rear wheel sensor.**
   - **Pull out the rear wheel sensor, being careful to turn it as little as possible. do not pull on wheel sensor harness.**
3. Remove brake caliper torque member bolts using power tool, leaving the brake hose attached. Position brake caliper aside with wire. Refer to BR-77, "BRAKE CALIPER ASSEMBLY : Exploded View".
   CAUTION:
   Do not depress brake pedal while brake caliper is removed.
4. Put alignment marks on the disc brake rotor and the wheel hub and bearing. Remove the disc brake rotor.
   CAUTION:
   Do not drop the disc brake rotor.
5. Remove the cotter pin.
6. Loosen but do not remove, the wheel hub lock nut from the drive shaft using power tool.
7. Tap the wheel hub lock nut with a piece of wood and suitable tool to disengage the drive shaft from the wheel hub and bearing.
   CAUTION:
   - **Do not place drive shaft joint at an extreme angle. Be careful not to overextend slide joint.**
   - **Do not allow the drive shaft to hang without support.**

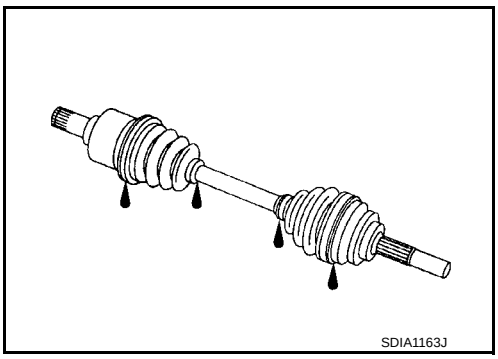
   NOTE:
   Use a suitable puller if the drive shaft cannot be separated from the wheel hub and bearing.



8. Remove the wheel hub lock nut.
9. Remove the coil spring and spring seats. Refer to RSU-10, "Removal and Installation - AWD".
10. Remove the bolts and the suspension member stay. Refer to RSU-21, "Exploded View".
11. Remove drive shaft from final drive.
12. Remove the side oil seal. Refer to DLN-123, "Removal and Installation".

INSPECTION AFTER REMOVAL

- Move joint up/down, left/right, and in the axial direction. Check for motion that is not smooth and for significant looseness.
- Check boot for cracks or other damage, and also for grease leakage.
- If a malfunction is found, disassemble drive shaft, and then replace components as necessary.


SDIA1163J

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Do not reuse the side oil seal.

- Install the side oil seal. Refer to DLN-123, "Removal and Installation".
- Clean the mating surfaces of the wheel hub lock nut and the wheel hub and bearing.

  CAUTION:

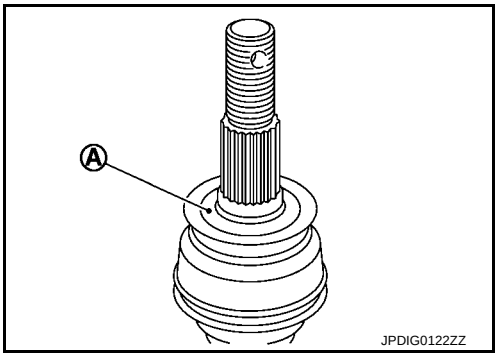
  Do not apply lubricating oil to these mating surfaces.
- Clean the mating surfaces of the joint sub-assembly and the wheel hub and bearing. Apply Molykote M77 lubricant to surface (A) of joint sub-assembly.

  CAUTION:

  Apply lubricant to cover entire flat mating surface of joint sub-assembly.

  NOTE:

  Always check with the Parts Department for the latest parts information.



JPDIG0122ZZ

- Hold the wheel hub and bearing. Tighten the wheel hub lock nut.
- **CAUTION:**
  - **Since the drive shaft is assembled by press-fitting, use a torque wrench to tighten the wheel hub lock nut. Do not use a power tool.**
  - **Too much torque causes axle noise. Too little torque causes wheel bearing looseness. Tighten the wheel hub lock nut to the specification.**
- When installing the cotter pin, securely bend the cotter pin to prevent rattles.

  CAUTION:

  Do not reuse cotter pin.
- Install the rear wheel sensor to the axle housing. Refer to BRC-201, "REAR WHEEL SENSOR : Exploded View".

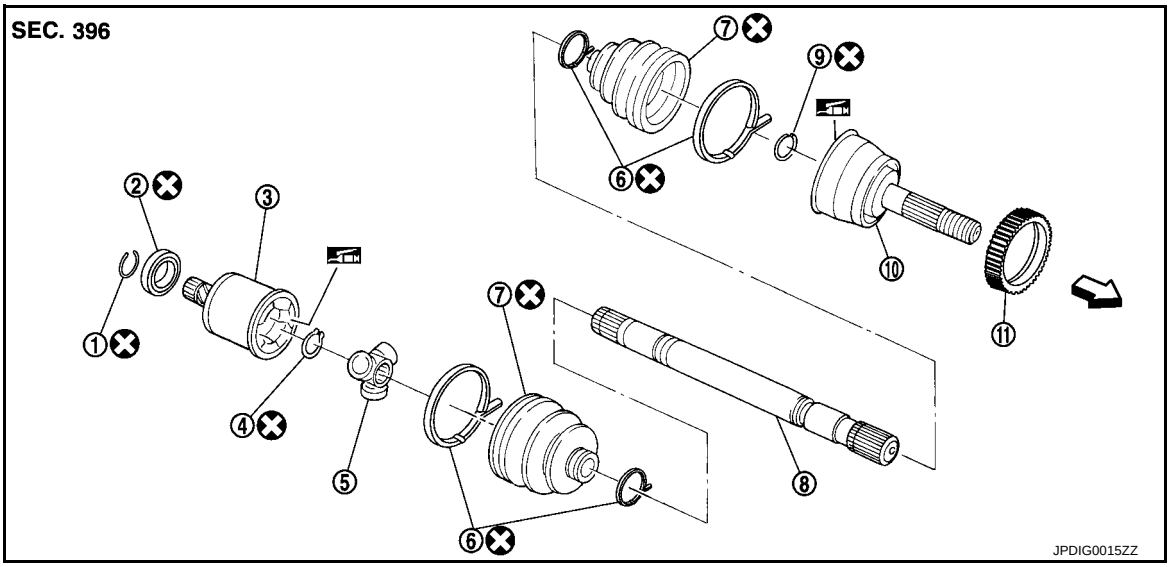
  CAUTION:
  - **Before installing, make sure there is no foreign material such as iron fragments adhered to the pick-up part of the rear wheel sensor.**
  - **When installing, make sure there is no foreign material such as iron fragments on and in the hole in the axle housing for the rear wheel sensor. Make sure no foreign material has been caught in the sensor rotor. Remove any foreign material and clean the mount.**
- Perform the final tightening of each of parts under unladen conditions, which were removed when removing wheel hub and bearing.
- Check that the hub and bearing operates smoothly.
- Align the matching marks on the disc brake rotor and on the wheel hub and bearing.
- Check rear wheel alignment. Refer to RSU-6, "Inspection".
- Adjust the neutral position of the steering angle sensor. Refer to BRC-77, "Description".

UNIT DISASSEMBLY AND ASSEMBLY

REAR DRIVE SHAFT

Exploded View

INFOID:0000000014630359



1. Circular clip
2. Dust shield
3. Slide joint housing
4. Snap ring
5. Spider assembly
6. Boot band
7. Boot
8. Shaft
9. Circular clip
10. Joint sub-assembly
11. Sensor rotor

⇦ Wheel side

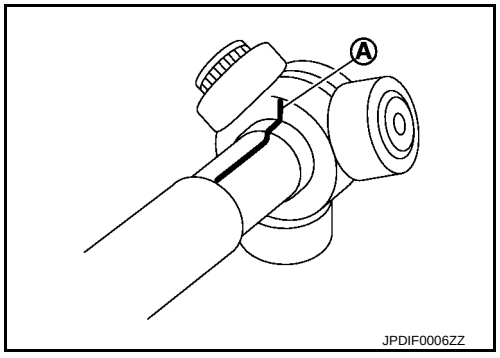
Disassembly and Assembly

INFOID:0000000014630360

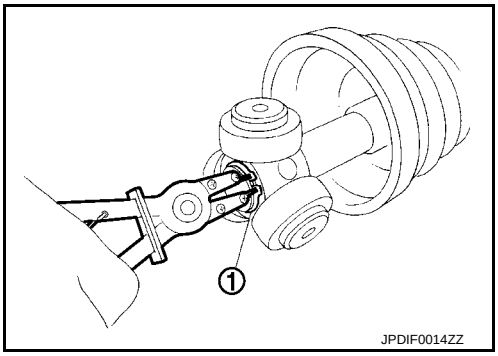
DISASSEMBLY

Final Drive Side

1. Secure drive shaft in a vise.
   CAUTION:
   When securing drive shaft in a vise, always use copper or aluminum plates between vise and shaft.
2. Remove boot bands and slide boot back.
3. Put matching marks on slide joint housing and shaft, and then pull out slide joint housing from shaft.
   CAUTION:
   Use paint or an equivalent for matching marks. Do not scratch the surface.
4. Put matching marks (A) on the spider assembly and shaft.
   CAUTION:
   Use paint or an equivalent for matching marks. Do not scratch the surface.

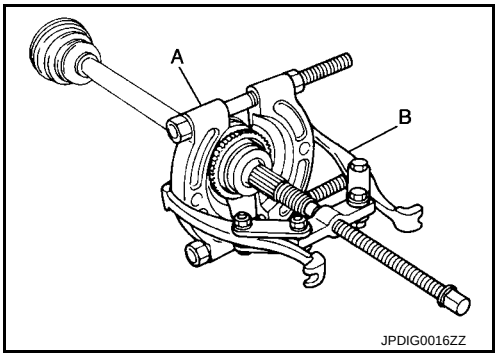


5. Remove snap ring (1).
6. Remove spider assembly from shaft.
7. Remove boot from shaft.
8. Remove circular clip from housing.
9. Remove dust shield from housing.
10. Remove old grease from housing using paper shop cloths.

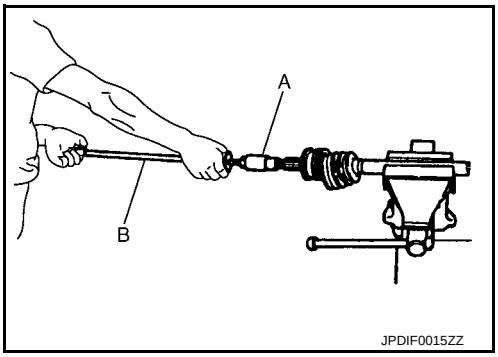


Wheel Side

1. Remove sensor rotor using suitable tools (A) and (B).



2. Secure drive shaft in a vise.
   CAUTION:
   When securing drive shaft in a vice, always use aluminum or copper plates between the vise and the drive shaft.
3. Remove boot bands and slide boot back.
4. Install suitable tool (A) 30 mm (1.18 in) or more into the thread of joint sub-assembly, and pull joint sub-assembly with suitable tool (B) from shaft.
   CAUTION:
   - **Align suitable tool and drive shaft and remove them by pulling forcibly.**
   - **If joint sub-assembly cannot be removed after five or more unsuccessful attempts, replace shaft and joint sub assembly as a set.**
5. Remove circular clip from shaft.
   CAUTION:
   Do not reuse circular clip.
6. Remove boot from shaft.
7. Clean old grease from joint sub-assembly while rotating ball cage.



INSPECTION AFTER DISASSEMBLY

Shaft

Check shaft for runout, cracks, or other damage. Replace components as necessary.

Joint Sub-Assembly (Wheel Side)

Check the following:

- Joint sub-assembly for rough rotation and excessive axial looseness.
- The inside of the joint sub-assembly for entry of foreign material.
- Joint sub-assembly for compression scars, cracks, and fractures inside of joint sub-assembly.

Replace the entire drive shaft if necessary.

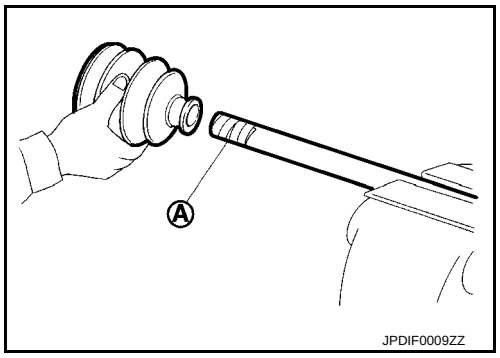
Slide joint housing and spider assembly (Final Drive Side)

Replace the entire drive shaft if there is scratching or wear on the slide joint housing roller contact surface or spider roller contact surface.

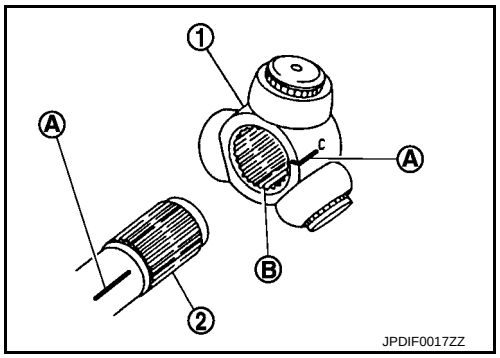
ASSEMBLY

Final Drive Side

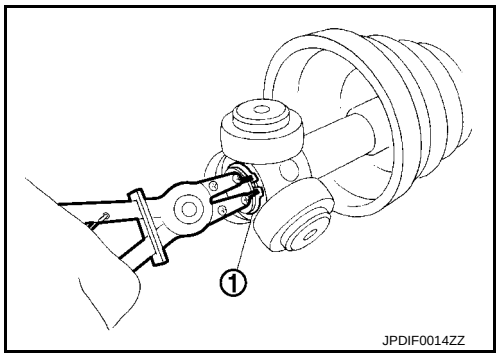
1. Install new boot and new small boot band to shaft.
   CAUTION:
   - **Cover drive shaft serration with tape (A) to prevent damage to boot during installation.**
   - **Do not reuse boot or boot band.**



2. Remove the tape wrapped around the serration on shaft.
3. Align the matching marks (A) on the spider assembly (1) with the matching mark on the shaft (2). Install the spider assembly to the shaft with the chamfer (B) facing the shaft.



4. Install new snap ring (1) using suitable tool onto shaft.
   CAUTION:
   Do not reuse snap ring.

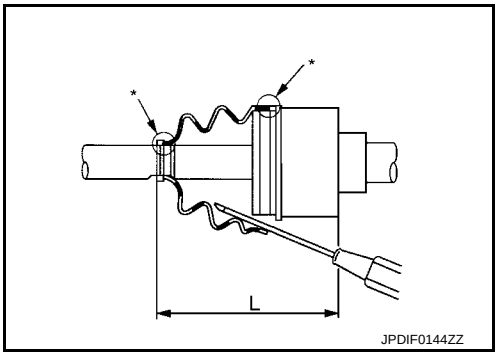


5. Apply the appropriate amount of grease (Genuine NISSAN Grease) onto the spider assembly and the sliding surface of the slide joint housing.
   NOTE:
   Always check with the Parts Department for the latest parts information.
6. Install the slide joint housing onto the spider assembly and apply the balance of the specified amount of grease (Genuine NISSAN Grease) into the slide joint housing.

   Grease quantity : Refer to RAX-27, "Drive Shaft".

   NOTE:
   Always check with the Parts Department for the latest parts information.
7. Align the matching mark on the slide joint housing with the matching mark on the shaft.

8. Install boot securely into grooves (indicated by "*" marks) as shown.
   CAUTION:
   If there is grease on boot mounting surfaces (indicated by "*" marks) on shaft or slide joint housing, the boot may come off. Clean all grease from the boot mounting surfaces.



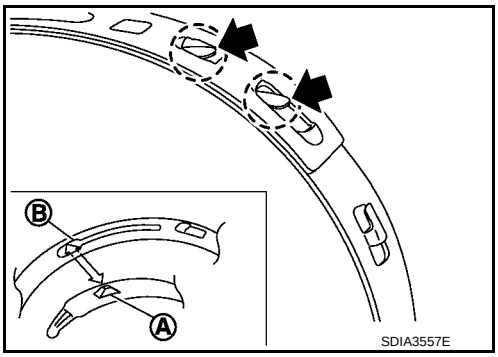
9. Make sure the boot installation length (L) is correct. Insert a suitable tool into large end of boot. Bleed air from boot to prevent boot deformation.

   Boot installation length (L) : **Refer to RAX-27, "Drive Shaft".**

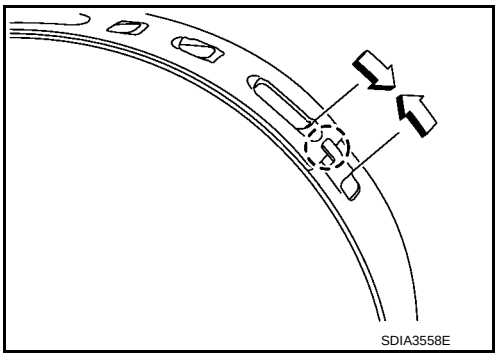
   CAUTION:
   - **The boot may break if boot installation length is not correct.**
   - **Be careful not to touch the inside of the boot with the tip of suitable tool.**

10. Install new boot bands securely.
    CAUTION:
    Do not reuse boot band.

a. Put boot band in the groove on drive shaft boot. Then fit pawls (⬅) into holes for temporary installation.
   NOTE:
   For the large diameter side, fit projection (A) and guide slit (B) at first.



b. Pinch projection on the band with suitable pliers to tighten band.
c. Insert tip of band below end of pawl.

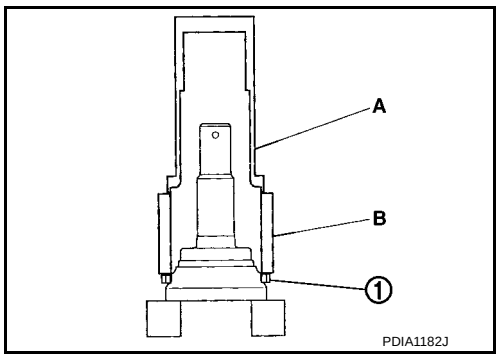


11. Attempt to rotate boot to check whether or not the boot bands are securing the boot. If the boot is not secure, remove the boot bands, reposition the boot, and install new boot bands.
12. Install dust shield to slide joint housing.
    CAUTION:
    Do not reuse dust shield.
13. Install circular clip to slide joint housing.
    CAUTION:
    Do not reuse circular clip.

Wheel Side

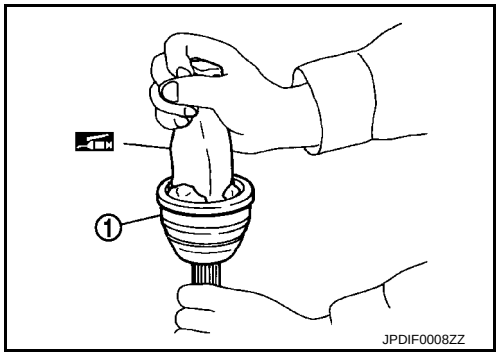
1. Install sensor rotor (1) using Tool (A), Tool (B) and a press.

Tool (A) number : KV38100500 (—)
Tool (B) number : KV40101840 (—)



2. Fill the serration slot on the joint sub-assembly (1) with grease (Genuine NISSAN Grease) until the serration slot and ball groove become full to the brim.

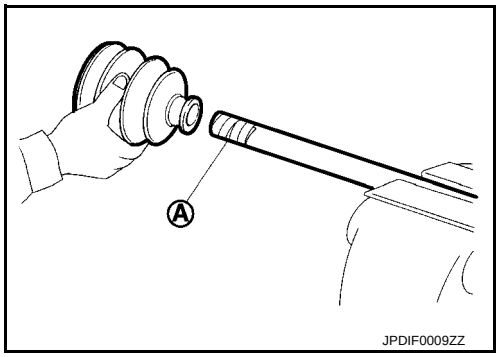
CAUTION:
After applying the grease, use a paper shop cloth to wipe off the grease that has oozed out.
NOTE:
Always check with the Parts Department for the latest parts information.



3. Install new boot and new small boot band to shaft.

CAUTION:
- **Cover drive shaft serration with tape (A) to prevent damage to boot during installation.**
- **Do not reuse boot and boot band.**

4. Remove protective tape wrapped around the serration part on shaft.



5. Install a new circular clip to shaft. Position the circular clip in the shaft groove.

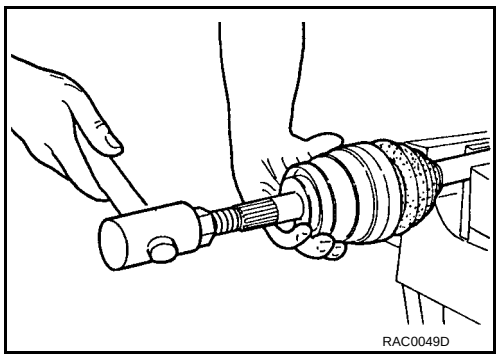
CAUTION:
Do not reuse circular clip.
NOTE:
A drive joint inserter is recommended when installing the circular clip.

6. Align the center axle with the shaft edge and the joint sub-assembly. Assemble the shaft with the joint-sub assembly while holding the circular clip.

CAUTION:
Confirm that joint sub-assembly is correctly engaged while rotating drive shaft.

7. Install the joint sub-assembly to the shaft using a suitable tool.

CAUTION:
- **Make sure the circular clip is properly positioned on the groove of the joint sub-assembly.**
- **Confirm that the joint sub-assembly is correctly engaged while rotating the drive shaft.**

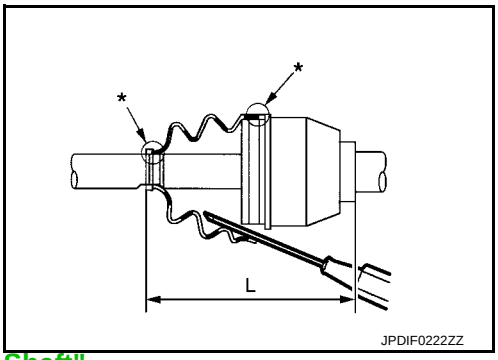


8. Apply the balance of the specified amount of grease (Genuine NISSAN Grease) to the inside of the boot from the large diameter side of the boot.

Grease quantity : Refer to RAX-27, "Drive Shaft".

NOTE:
Always check with the Parts Department for the latest parts information.

9. Install the boot securely into grooves (indicated by "*" marks) as shown.



CAUTION:
If there is grease on the boot mounting surfaces (indicated by "*" marks) on the shaft or joint sub-assembly, the boot may come off. Remove all grease from the boot mounting surfaces.

10. Make sure boot installation length (L) is correct. Insert a suitable tool into the large end of the boot. Bleed air from boot to prevent boot deformation.

Boots installation length (L) : Refer to RAX-27, "Drive Shaft".

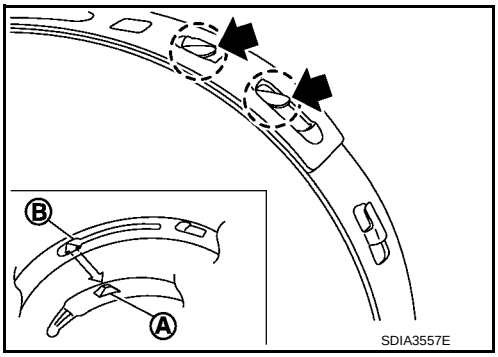
CAUTION:
- **The boot may break if the boot installation length is not correct.**
- **Be careful not to touch the boot with the tip of the suitable tool.**

11. Install new boot bands securely.

CAUTION:
Do not reuse boot band.

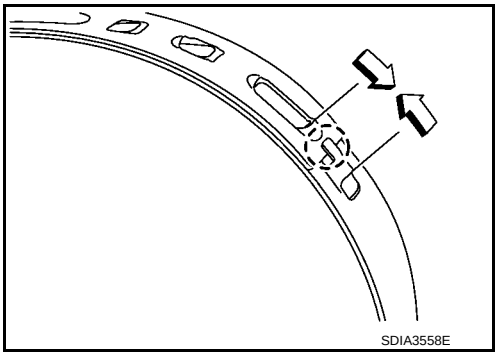
a. Put boot band in the groove on drive shaft boot. Then fit pawls (⬅) into holes for temporary installation.

NOTE:
For the large diameter side, fit projection (A) and guide slit (B) at first.



b. Pinch projection on the band with suitable pliers to tighten band.

c. Insert tip of band below end of pawl.



12. Attempt to rotate boot to check whether or not the boot bands are securing the boot. If the boot is not secure, remove the boot bands, reposition the boot, and install new boot bands.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

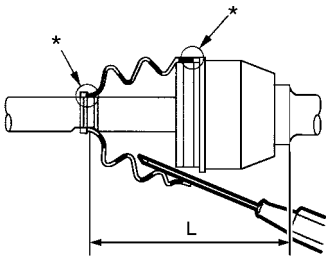
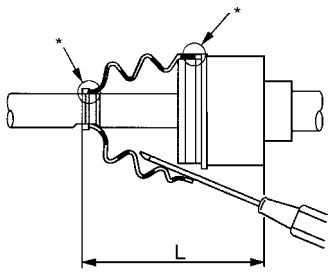
Wheel Bearing

INFOID:0000000014630361

Item	Standard
Axial end play	0.05 mm (0.002 in) or less

Drive Shaft

INFOID:0000000014630362

Item	Standard	
	 JPDIF0142ZZ	 JPDIF0144ZZ
Joint	Wheel side	Final drive side
Grease quantity	55 – 65 g (1.94 – 2.29 oz)	75 – 95 g (2.65 – 3.35 oz)
Boots installed length (L)	95.3 mm (3.75 in)	—