

SECTION **RSU**
 REAR SUSPENSION

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RSU

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PRECAUTIONS

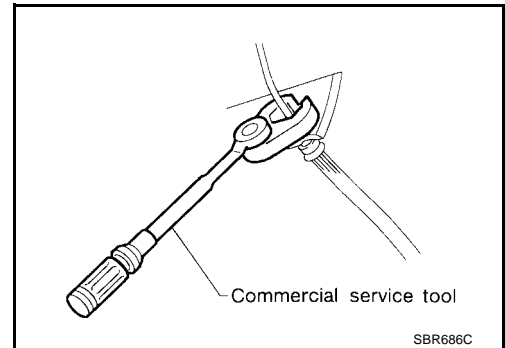
PRECAUTIONS

PFP:00001

Precautions

EES000XB

- When installing rubber parts, final tightening must be carried out under unladen condition* with tires on ground.
*: Fuel, radiator coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.
- After installing removed suspension parts, check wheel alignment and adjust if necessary.



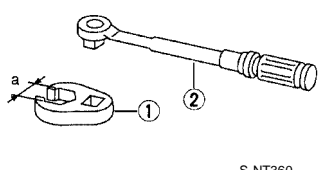
PREPARATION

PREPARATION

PFP:00002

Commercial Service Tools

EES000XC

Tool name	Description
<p>1 Flare nut crowfoot 2 Torque wrench</p>  <p>S-NT360</p>	<p>Removing and installing each brake piping a: 10 mm (0.39 in)</p>

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NOISE VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NOISE VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

PFP:54000

NVH Troubleshooting Chart

EES000XD

Use the 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	Stabilizer bar fatigue	Imbalance	Incorrect air pressure	Uneven tire wear	Deformation or damage	Non-uniformity	Incorrect tire size	PROPELLER SHAFT	DIFFERENTIAL	DRIVE SHAFT		AXLE	SUSPENSION	TIRES	ROAD WHEEL	BRAKES	STEERING
SUSPENSION	Noise	x	x	x	x	x	x								x	x	x	x						
	Shake	x	x	x	x		x								x		x	x			x	x	x	x
	Vibration	x	x	x	x	x									x		x	x			x			x
	Shimmy	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		
	TIRES	Noise	x							x	x	x	x		x	x	x	x	x	x			x	x
		Shake	x							x	x	x	x		x	x	x	x	x	x			x	x
		Vibration									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			x	x
		Poor quality ride or handling	x								x	x	x						x	x			x	
ROAD WHEEL	Noise	x							x		x			x	x	x	x	x	x	x		x	x	
	Shake	x							x		x						x	x	x	x		x	x	
	Shimmy, Judder	x							x		x							x	x	x		x	x	
	Poor quality ride or handling	x								x								x	x	x				

x: Applicable

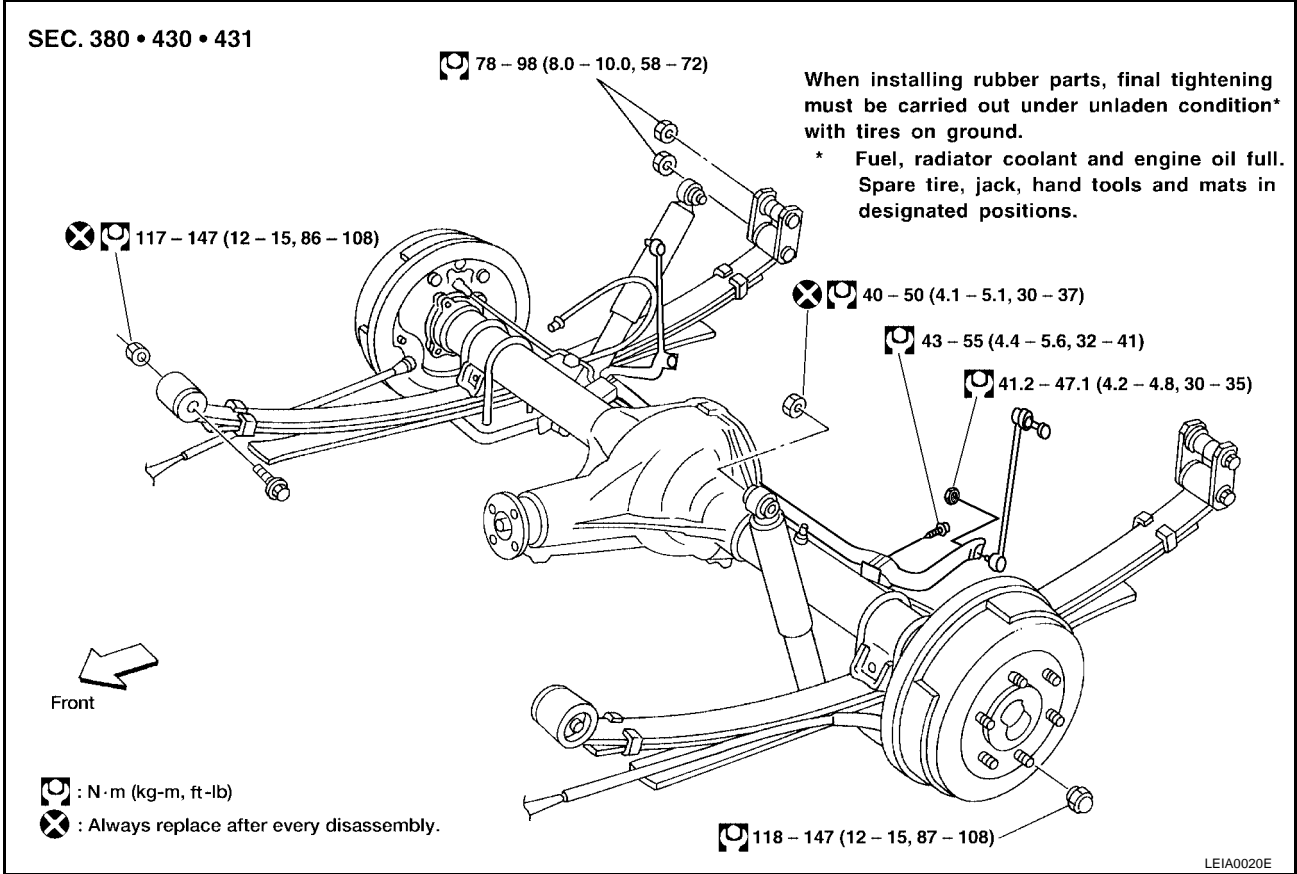
REAR SUSPENSION ASSEMBLY

REAR SUSPENSION ASSEMBLY

PF5:55020

Components 2WD KA24DE MODEL

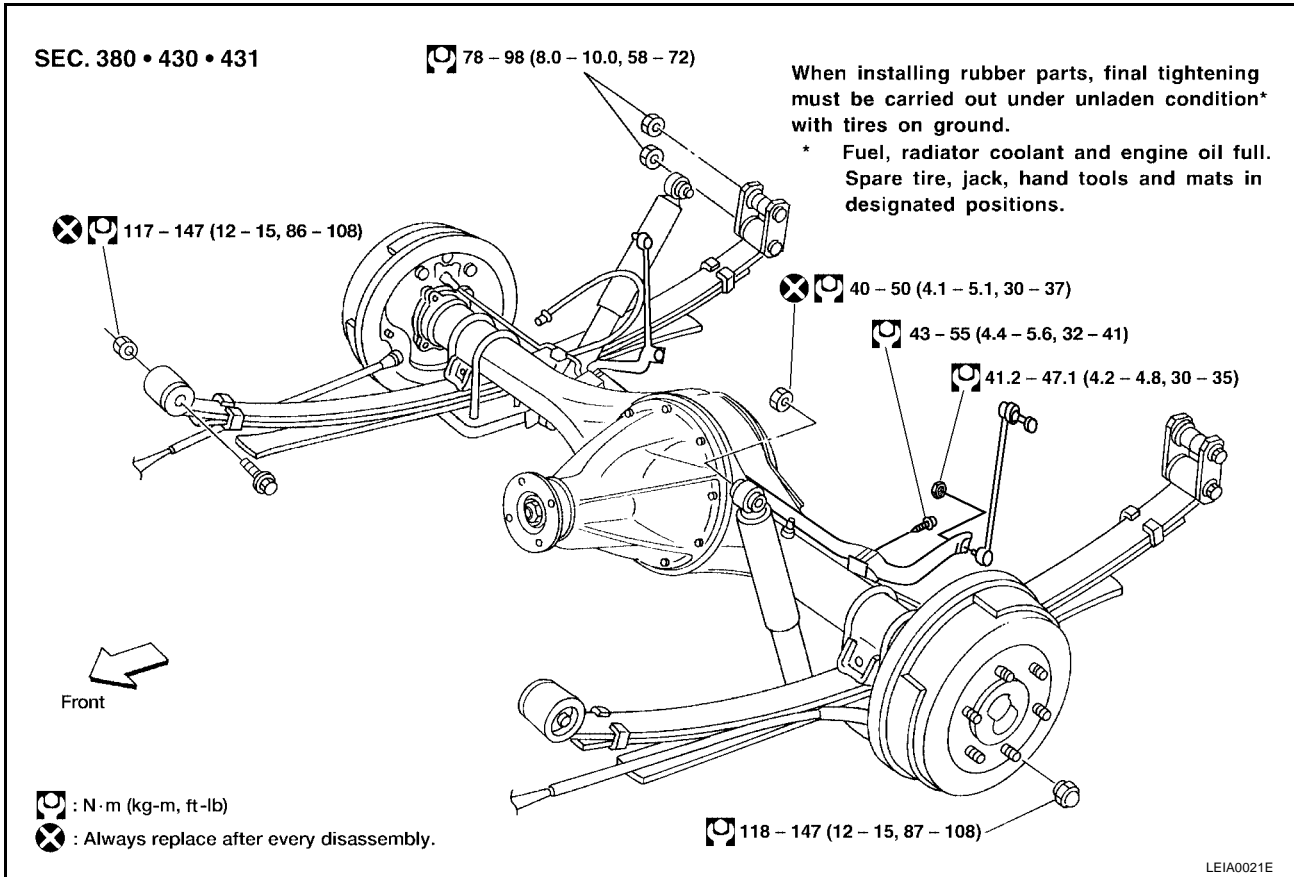
EES000XE



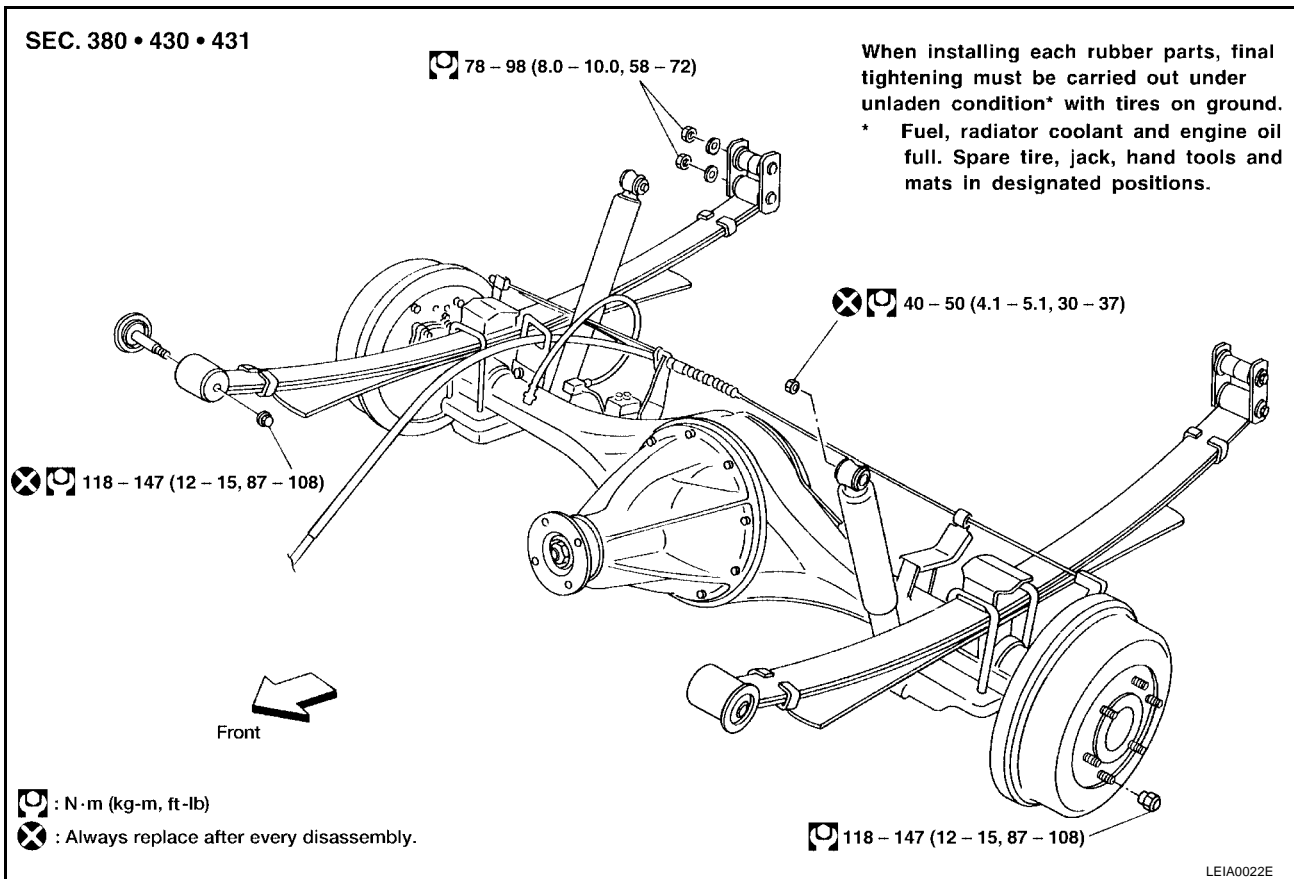
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REAR SUSPENSION ASSEMBLY

2WD VG33E AND VG33ER MODEL



4WD MODEL

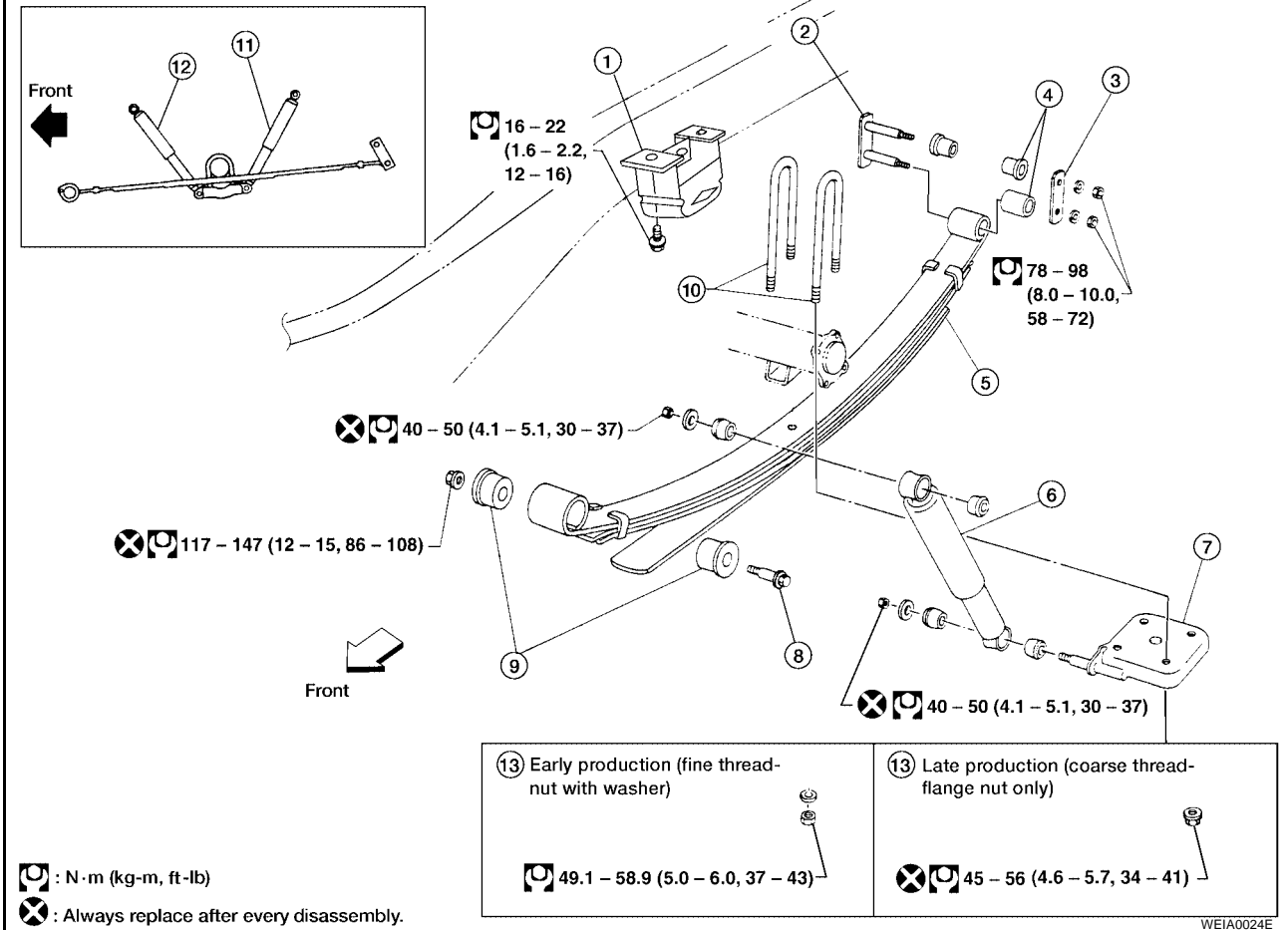


ON-VEHICLE SERVICE

Component

Rear Suspension

SEC. 431



- | | | |
|----------------------------------|---------------------------------|--------------------------------|
| 1. Bumper | 2. Rear spring shackle | 3. Rear spring plate |
| 4. Rear spring bushing | 5. Rear leaf spring | 6. Shock absorber |
| 7. Rear spring pad | 8. Rear spring front bolt | 9. Rear spring bushing |
| 10. Rear spring clip U-bolt | 11. Shock absorber (right side) | 12. Shock absorber (left side) |
| 13. Nut (and washer if equipped) | | |

CAUTION:

When installing the rubber components, the final tightening of the nuts and bolts must be done with the vehicle in an unladen condition (the fuel, engine coolant, and engine oil at full; the spare tire, jack, hand tools and mats in their designated positions) with the tires on the ground.

NOTE:

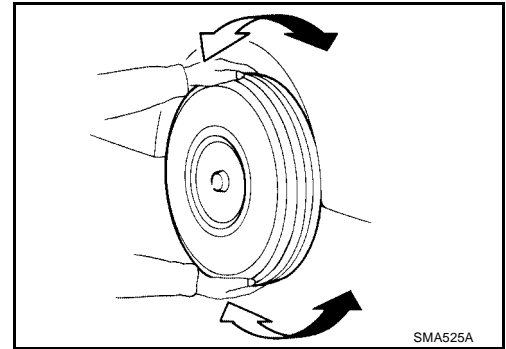
The early production rear spring clip U-bolt is a fine thread with a washer and nut. The late production rear spring clip U-bolt is a coarse thread with a self-locking flange nut, a new flange nut must be used for installation.

Rear Suspension Parts

- Check the rear suspension parts for any excessive play, cracks, wear, and other damage.

ON-VEHICLE SERVICE

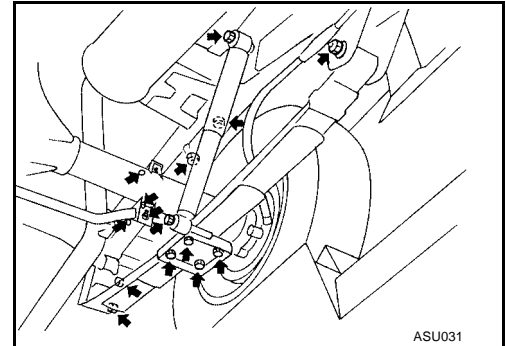
- Shake each rear wheel to check for any excessive play as shown.



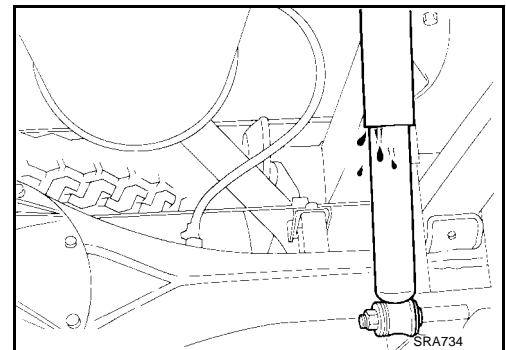
- Tighten all of the nuts and bolts to the specified torque. Refer to [RSU-7, "Component"](#).

CAUTION:

When installing the rubber components, the final tightening of the nuts and bolts must be done with the vehicle in an unladen condition (the fuel, engine coolant, and engine oil at full; the spare tire, jack, hand tools and mats in their designated positions) with the tires on the ground.



- Check the shock absorber for oil leakage and other damage as shown.



- Check the shock absorber bushings for excessive wear and other damage.

SHOCK ABSORBER

SHOCK ABSORBER

PFP:56210

Removal and Installation

EES000XH

1. Remove shock absorber by disconnecting upper and lower end.
2. Install in the reverse order of removal.

Refer to [FSU-5, "Components"](#)

Inspection

EES000XI

- If oil leakage, cracks and deformation occurs, replace shock absorber assembly.
- If rubber bushings are cracked and deformed, replace rubber bushings.

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LEAF SPRING

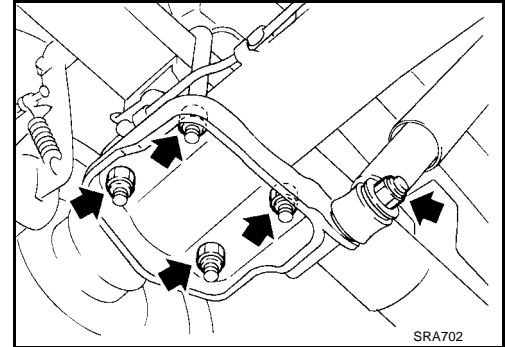
LEAF SPRING

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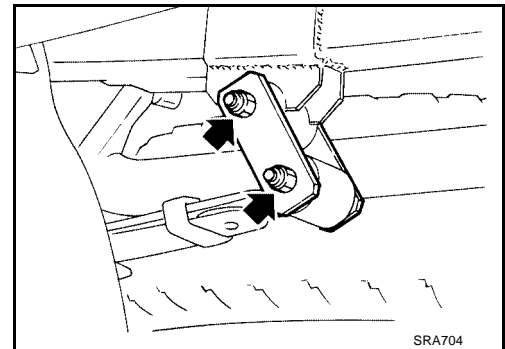
Removal

EES000XJ

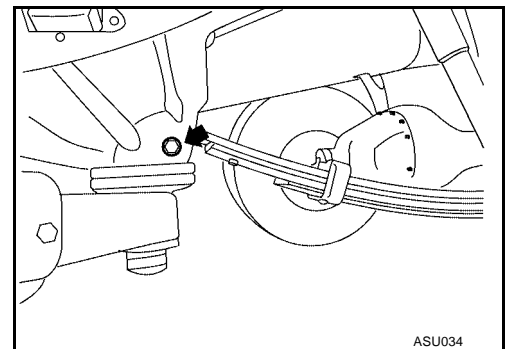
1. Disconnect shock absorber lower end, and remove U-bolts.
Support axle with jack stand prior to removing leaf spring.



2. Remove the spring shackle.



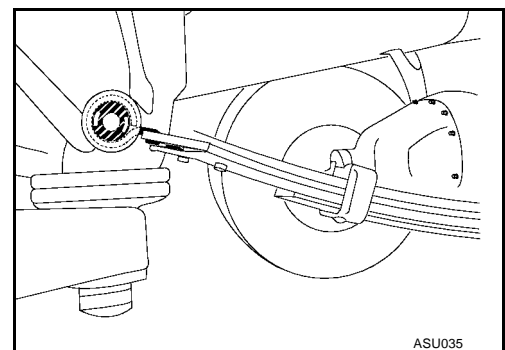
3. Remove the front pin.
4. Remove the leaf spring.



Inspection

EES000XK

- Check leaf spring for cracks. Replace if necessary.
- Check front bracket and pin, shackle, U-bolts and spring pad for wear, cracks, straightness and damaged threads. Replace if necessary.
- Check all bushings for deformation and cracks. Replace if necessary.
(4WD models: Rear spring front bushing)
Make sure that front bushing is properly installed.



LEAF SPRING

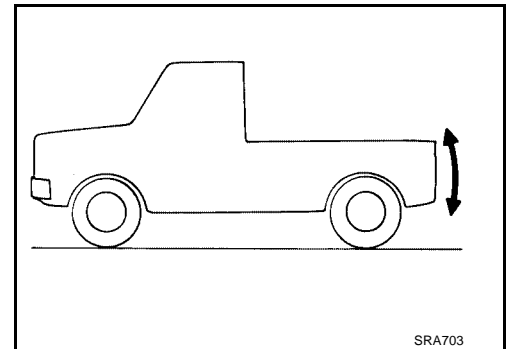
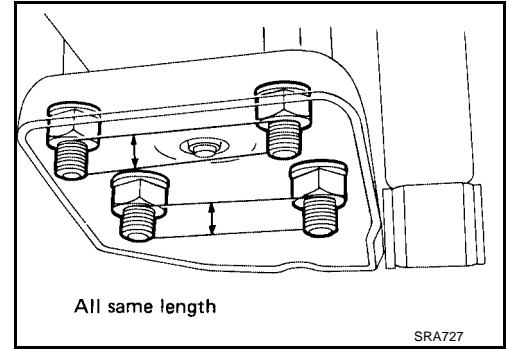
EES000XL

Installation

1. Apply soapsuds to rubber bushing.
2. Install spring shackle and front pin, and finger tighten the nuts.
3. Install spring pad and nuts under leaf spring or axle case.
4. Tighten U-bolt mounting nuts diagonally.
Tighten U-bolts so that the lengths of all U-bolts under spring pad are the same.

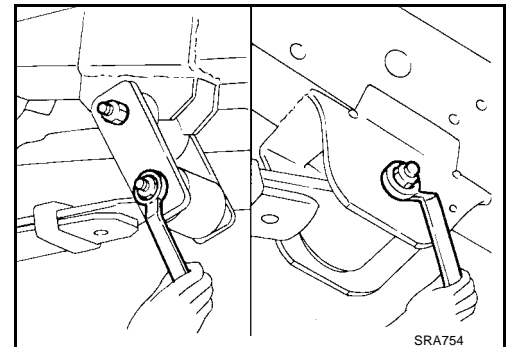
Refer to [FSU-8, "Component"](#).

5. Install shock absorber, and finger tighten the nuts.
6. Remove stands and bounce the vehicle to stabilize suspension. (Unladen)



7. Tighten spring shackle nuts, front pin nuts and shock absorber nuts.
When installing rubber parts, final tightening must be carried out under unladen condition* with tires on the ground.
*** Fuel, radiator coolant and engine oil full. Spare tire, jack, hand tools and mats in designated positions.**

Refer to [FSU-8, "Component"](#).



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STABILIZER BAR

STABILIZER BAR

PF:54611

Removal

EES000XM

Remove stabilizer bar connecting bolts and clamp bolts.

Inspection

EES000XN

- Check stabilizer bar for twist and deformation.
- Check rubber bushing for cracks, wear and deterioration.
Replace if necessary.

Installation

EES000XO

Install in the reverse order of removal.

Refer to [RSU-5, "Components"](#) .

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

PFP:00030

General Specifications (Rear)

EES000XP

Suspension type	Rigid axle with semi-elliptic leaf spring
Shock absorber type	Double-acting hydraulic

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SERVICE DATA AND SPECIFICATIONS (SDS)
