SECTION FSU
FRONT SUSPENSION

CONTENTS

PRECAUTIONS

PFP:00001

Caution

NES0001Z

- When installing rubber bushings, final tightening must be carried out under unladen conditions with tires on ground. Oil will 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.
- Caulking nuts are not reusable. Always use new ones when installing. Since new caulking nuts are pre-oiled, tighten as they are.
- Avoid burden to front cross bar.

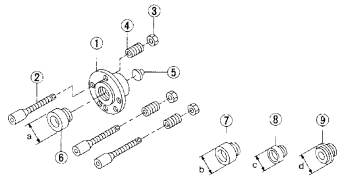
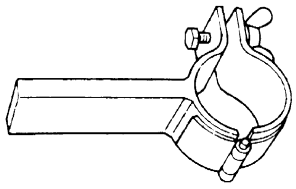
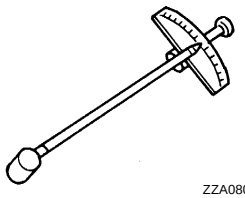
PREPARATION

PFP:00002

Special Service Tools

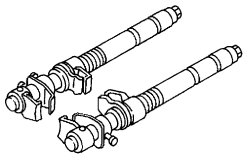
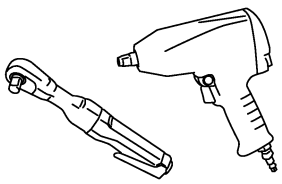
NES000LI

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
KV991040S0 (—) CCK gauge attachment 1. Plate 2. Guide bolts 3. Nuts 4. Springs 5. Center plate 6. KV99104020 Adapter A a: 72 mm (2.83 in) dia. 7. KV99104030 Adapter B b: 65 mm (2.56 in) dia. 8. KV99104040 Adapter C c: 57 mm (2.24 in) dia. 9. KV99104050 Adapter D d: 53.4 mm (2.102 in) dia.  S-NT498	Measuring wheel alignment
ST35652000 (—) Strut attachment  ZZA0807D	Disassembling and assembling shock absorber
ST3127S000 (J-25765-A) Preload gauge  ZZA0806D	Measuring rotating torque of ball joint

Commercial Service Tools

NES000LJ

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

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

PFP:00003

NVH Troubleshooting Chart

NES00022

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

Reference page			FSU-8	FSU-11	—	—	—	FSU-8	FSU-6	FSU-18	NVH in PR section	NVH in RFD section.	NVH in FAX and FSU section.	NVH in WT section.	NVH in WT section.	NVH in RAX section.	NVH in BR section.	NVH in PS section.
Possible cause and SUSPECTED PARTS			Improper installation, looseness	Shock absorber deformation, damage or deflection	Bushing or mounting deterioration	Parts interference	Spring fatigue	Suspension looseness	Incorrect wheel alignment	Stabilizer bar fatigue	PROPELLER SHAFT	DIFFERENTIAL	FRONT AXLE AND FRONT SUSPENSION	TIRES	ROAD WHEEL	DRIVE SHAFT	BRAKES	STEERING
Symptom	FRONT SUSPENSION	Noise	×	×	×	×	×	×			×	×	×	×	×	×	×	×
		Shake	×	×	×	×		×			×		×	×	×	×	×	×
		Vibration	×	×	×	×	×				×		×	×		×		×
		Shimmy	×	×	×	×			×				×	×	×		×	×
		Judder	×	×	×								×	×	×		×	×
		Poor quality ride or handling	×	×	×	×	×		×	×			×	×	×			

×: Applicable

FRONT SUSPENSION ASSEMBLY

PFP:54010

On-Vehicle Inspection and Service

NES00023

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

INSPECTION OF BALL JOINT END PLAY OF EACH LINK

1. Set front wheels in a straight-ahead position. Do not depress brake pedal.
2. Check ball joint axial end play of each link.

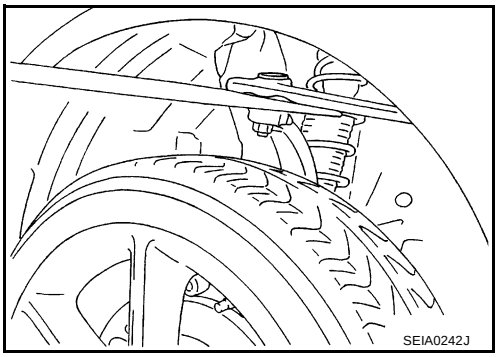
CAUTION:
Be careful not to damage ball joint boot.

Upper Link Ball Joint

Measure axial end play by installing and moving up/down with an iron pry bar or something similar between upper link and steering knuckle.

Standard value

Axial end play : 0 mm (0 in)

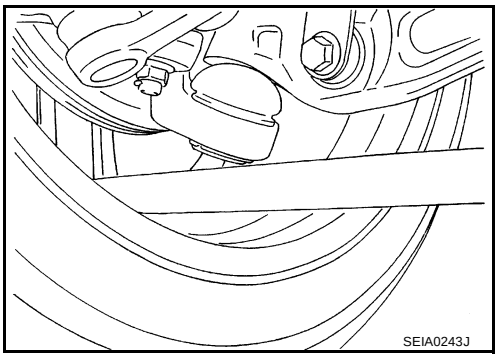

SEIA0242J

Steering Knuckle Lower Ball Joint

Measure axial end play by installing and moving up/down with an iron pry bar or something similar between steering knuckle and wheel.

Standard value

Axial end play : 0 mm (0 in)

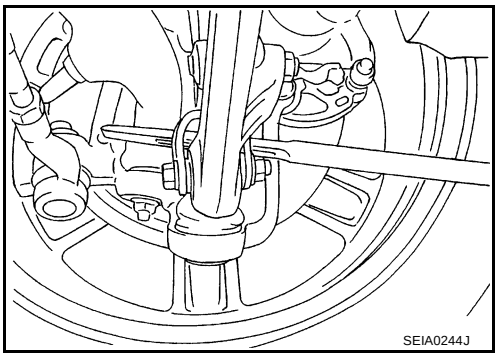

SEIA0243J

Compression Rod Ball Joint

Measure axial end play by installing and moving up/down with an iron pry bar or something similar between compression rod and transverse link.

Standard value

Axial end play : 0 mm (0 in)


SEIA0244J

SHOCK ABSORBER INSPECTION

Check shock absorber for oil leakage, damage and replace if necessary. Refer to FSU-11, "INSPECTION AFTER DISASSEMBLY" .

Wheel Alignment Inspection

NES000DP

DESCRIPTION

- Measure wheel alignment under unladen conditions.

  NOTE:
  Unladen conditions mean that fuel, engine coolant, and lubricant are full. Spare tire, jack, hand tools and mats are designated positions.

PRELIMINARY CHECK

- Check tires for improper air pressure and wear.
- Check road wheels for runout.
- Check wheel bearing axial end play.
- Check ball joint axial end play of compression rod, upper link, and steering knuckle.
- Check shock absorber operation.
- Check each mounting part of axle and suspension for looseness and deformation.
- Check each link, rod and member for cracks, deformation and other damage.
- Check vehicle 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.

THE 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.

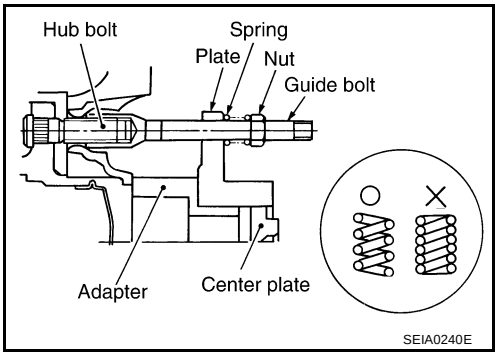
INSPECTION OF CAMBER, CASTER AND KINGPIN INCLINATION ANGLES

- Camber, caster, kingpin inclination angles cannot be adjusted.
- Before inspection, mount front wheels onto turning radius gauge. Mount rear wheels onto a stand that has same height so vehicle will remain horizontal.

Using a CCK Gauge

Install CCK gauge attachment (SST: KV991040S0) as following procedure in wheel, then measure wheel alignment.

1. Remove wheel nuts (2), and install a guide bolt to hub bolt.
2. Screw adapter into plate body until it contacts body tightly.
3. Screw center plate into plate.
4. Insert plate on guide bolt. Put spring in, and then evenly screw both guide bolt nut. When fastening guide bolt nut, do not completely compress spring.

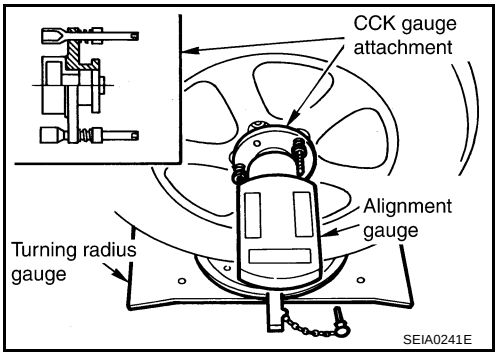


5. Place the dent of alignment gauge onto the projection of center plate and tightly contact them to measure.

Standard value

Camber, caster, kingpin inclination angles:

Refer to FSU-20, "SERVICE DATA AND SPECIFICATIONS (SDS)" .



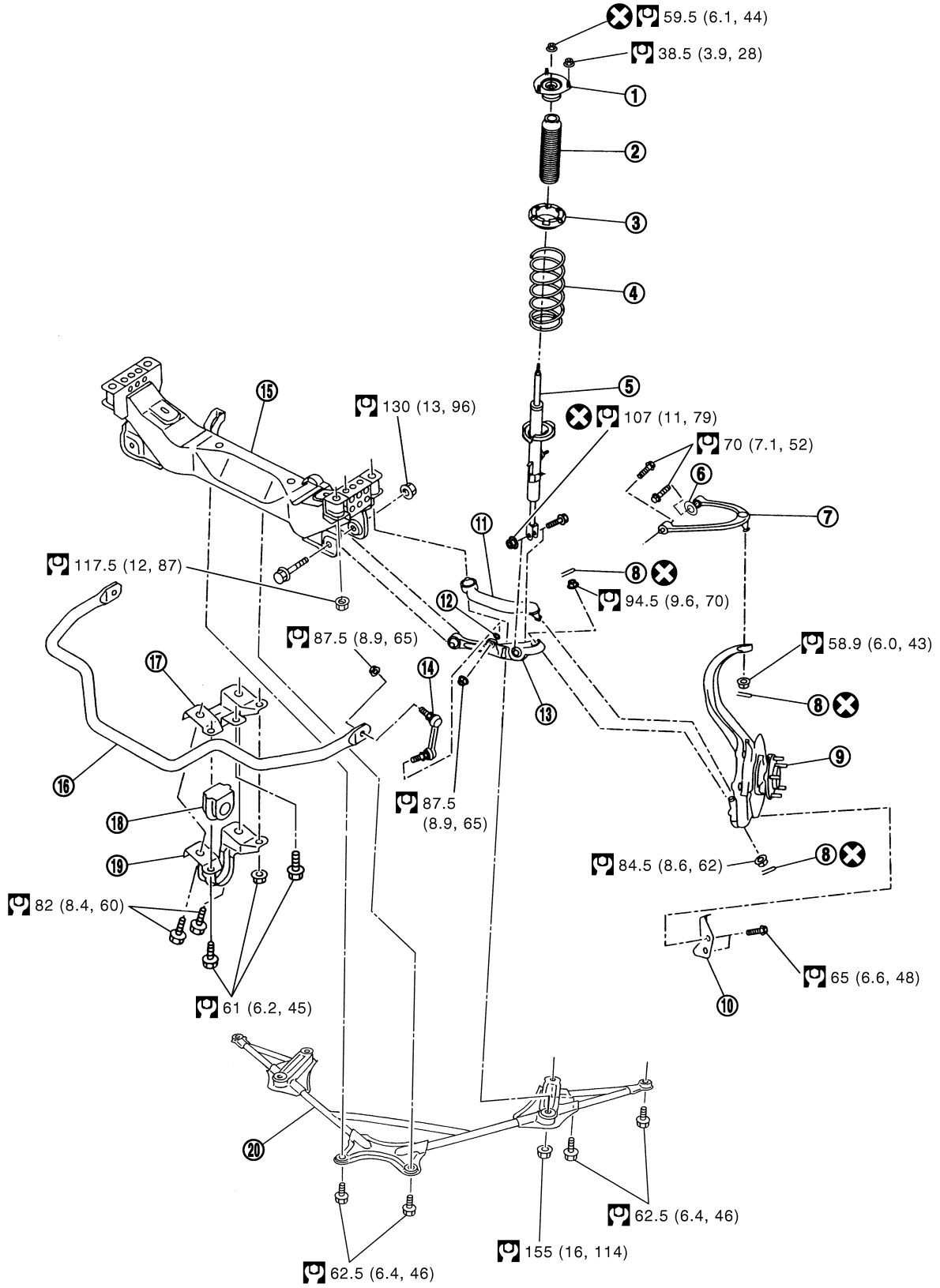
CAUTION:

- **If camber, caster, or kingpin inclination angle is outside the standard, check front suspension parts for wear and damage, and replace suspect parts if necessary.**
- **King pin inclination angle is reference value, no inspection is required. (Due to the type of suspension, the kingpin inclination angle cannot be measured correctly using a normal alignment tester.)**

Components

NES00025

SEC. 400•401•406



1. Mounting insulator
2. Bound bumper
3. Spring upper seat
4. Coil spring
5. Shock absorber
6. Stopper rubber
7. Upper link
8. Cotter pin
9. Front axle
10. Steering stopper bracket
11. Compression rod
12. Washer
13. Transverse link
14. Stabilizer connecting rod
15. Front suspension member
16. Stabilizer bar
17. Stabilizer clamp bracket
18. Stabilizer bushing
19. Stabilizer clamp
20. Front cross bar

Refer to GI-10, "Components" , for the symbols in figure.

Removal and Installation

NES00026

REMOVAL

1. Remove tire 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-21, "FRONT DISC BRAKE" .
3. Remove disc rotor.
4. Remove undercover with power tool.
5. Remove fixing bolts and nuts, then remove front cross bar from vehicle with power tool.
6. Remove steering hydraulic piping bracket from front suspension member. Refer to PS-36, "HYDRAULIC LINE" .
7. Remove steering gear and front suspension member attachment bolts and hang steering gear on vehicle. Refer to PS-19, "POWER STEERING GEAR AND LINKAGE" .
8. Set jack under engine.

   CAUTION:
   When setting jack to engine, use a wooden block or an equivalent for the setting.
9. Remove fixing bolt and nut between shock absorber and transverse link with power tool.
10. Remove cotter pin of upper link ball joint, then loosen mounting nut.
11. Use a ball joint remover (suitable tool) to remove upper link from steering knuckle. Be careful not to damage ball joint boot.

    CAUTION:
    Tighten temporarily mounting nut to prevent damage to threads and to prevent ball joint remover (suitable tool) from coming off.
12. Remove fixing nut and washer located at the bottom of stabilizer connecting rod, and then remove stabilizer connecting rod from transverse link with power tool. Refer to FSU-18, "STABILIZER BAR" .
13. Remove fixing nuts between engine mounting insulator and front suspension member. Refer to EM-131, "ENGINE ASSEMBLY" .
14. Remove fixing nuts between front suspension member and body with power tool.
15. Remove front suspension assembly from vehicle.

INSTALLATION

- Refer to FSU-8, "Components" for tightening torque. Install in the reverse order of removal.

  NOTE:
  Refer to component parts location and do not reuse non-reusable parts.
- Perform final tightening of shock absorber lower side (rubber bushing) under unladen condition with tires on ground. Check wheel alignment. Refer to FSU-20, "SERVICE DATA AND SPECIFICATIONS (SDS)" .

COIL SPRING AND SHOCK ABSORBER

PFP:54302

Removal and Installation

NES00027

REMOVAL

1. Remove tire from vehicle with power tool.
2. Remove harness of wheel sensor from shock absorber. Refer to BRC-58, "WHEEL SENSOR" .

   CAUTION:
   Do not pull on wheel sensor harness.
3. Remove mounting nuts of brake hose from shock absorber. Refer to BR-11, "BRAKE PIPING AND HOSE" .
4. Remove mounting bolt and nut between shock absorber and transverse link with power tool.
5. Remove mounting nuts on mounting insulator with power tool, then remove shock absorber from vehicle.

INSTALLATION

- Refer to FSU-8, "Components" for tightening torque. Install in the reverse order of removal.

  NOTE:
  Refer to component parts location and do not reuse non-reusable parts.
- Perform final tightening of shock absorber lower side (rubber bushing) under unladen condition with tires on ground. Check wheel alignment. Refer to FSU-20, "SERVICE DATA AND SPECIFICATIONS (SDS)" .

Disassembly and Assembly

NES00028

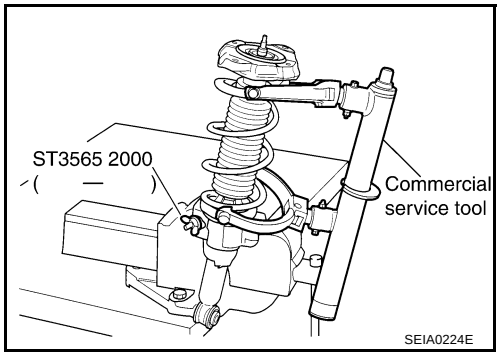
DISASSEMBLY

NOTE:
Make sure piston rod on shock absorber is not damaged when removing components from shock absorber.

1. Install strut attachment (SST) to shock absorber and fix it in a vise.

   CAUTION:
   When installing strut attachment (SST) to shock absorber, wrap a shop cloth around shock absorber to protect it from damage.
2. Using a spring compressor (commercial service tool), compress coil spring between spring upper seat and spring lower seat (on shock absorber) until coil spring is free.

   CAUTION:
   Be sure spring compressor (commercial service tool) is securely attached to coil spring. Compress coil spring.



3. Check that coil spring between spring upper seat and spring lower seat is free and then secure piston rod tip so that piston rod does not turn, and remove piston rod lock nut.
4. Remove mounting insulator, bound bumper, spring upper seat. Then remove coil spring from shock absorber.
5. Gradually release spring compressor (commercial service tool), and remove coil spring.

   CAUTION:
   Loosen while marking sure coil spring attachment position does not move.
6. Remove strut attachment (SST) from shock absorber.

INSPECTION AFTER DISASSEMBLY

Shock Absorber Inspection

- Check shock absorber for deformation, cracks, damage, and replace if necessary.
- Check piston rod for damage, uneven wear or distortion, and replace if necessary.
- Check welded and sealed areas for oil leakage, and replace if necessary.

Mounting Insulator and Rubber Parts Inspection

Check mounting insulator for cracks and rubber parts for wear. Replace them if necessary.

Coil Spring Inspection

Check coil spring for cracks, wear, damage, and replace if necessary.

ASSEMBLY

NOTE:

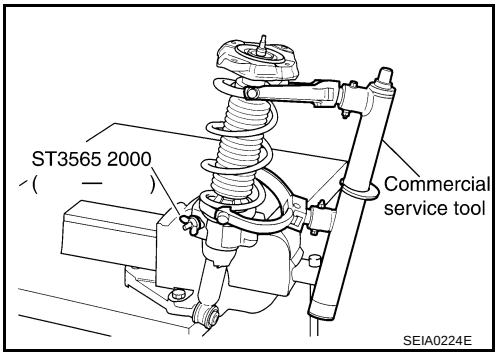
Make sure piston rod on shock absorber is not damaged when attaching components to shock absorber.

1. Install strut attachment (SST) to shock absorber and fix it in a vise.

   CAUTION:

   When installing strut attachment (SST) to shock absorber, wrap a shop cloth around shock absorber to protect it from damage.

2. Compress coil spring using a spring compressor (commercial service tool), and install it onto shock absorber.



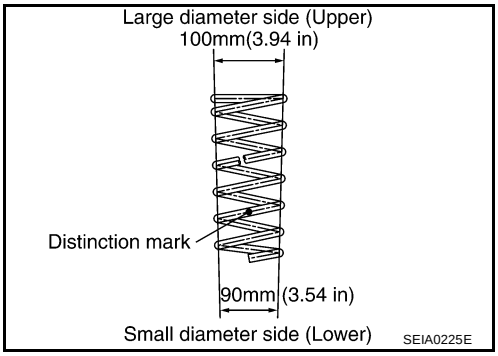
   CAUTION:

   - **Install coil spring as shown in the figure with large diameter side [100 mm (3.94 in] up and small diameter side [90 mm (3.54 in)] down. (Identification paint is the 4th winding point from lower side.**
   - **Be sure spring compressor (commercial service tool) is securely attached to coil spring. Compress coil spring.**

3. Apply soapy water to bound bumper and insert into mounting insulator.

   CAUTION:

   Do not use machine oil.



4. Attach spring upper seat and mounting insulator as shown in the figure.

   CAUTION:

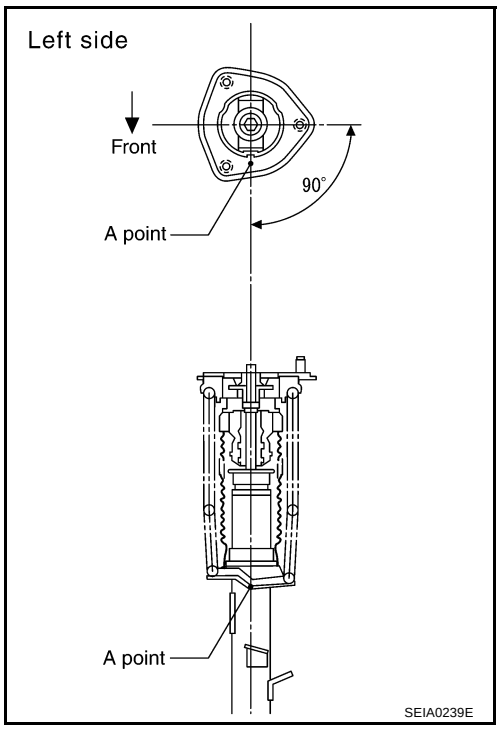
   - **Make sure coil spring is securely seated in spring mounting groove of spring upper seat.**
   - **The bottom part of spring should be at the piston of A point of spring seat.**

5. Secure piston rod tip so that piston rod does not turn, and tighten the specified torque on piston rod lock nut.
6. Gradually release spring compressor (commercial service tool), and remove coil spring.

   CAUTION:

   Loosen spring compressor (commercial service tool) while making sure coil spring attachment position does not move.

7. Remove strut attachment (SST) from shock absorber.



TRANSVERSE LINK

PFP:54500

Removal and Installation

NES00029

REMOVAL

1. Remove tire from vehicle with power tool.
2. Remove undercover with power tool.
3. Remove mounting nut and washer on lower portion of stabilizer connecting rod with power tool. Refer to FSU-18, "STABILIZER BAR" .
4. Remove mounting nut and bolt between transverse link and shock absorber on lower position.
5. Remove mounting nut between transverse link and front suspension member with power tool.
6. Remove transverse link from steering knuckle. Refer to FAX-4, "FRONT WHEEL HUB AND KNUCKLE" .
7. Remove transverse link from vehicle.

INSPECTION AFTER REMOVAL

Visual Inspection

Check transverse link and bushing for deformation, cracks, or damage. If any non-standard condition is found, replace it.

INSTALLATION

- Refer to FSU-8, "Components" for tightening torque. Install in the reverse order of removal.

  NOTE:
  Refer to component parts location and do not reuse non-reusable parts.
- Perform final tightening of front suspension member installation position and shock absorber lower side (rubber bushing) under unladen condition with tires on ground. Check wheel alignment. Refer to FSU-6, "Wheel Alignment Inspection" .

UPPER LINK

PFP:54524

Removal and Installation

NES0002A

REMOVAL

1. Remove tire from vehicle with power tool.
2. Remove shock absorber. Refer to FSU-10, "COIL SPRING AND SHOCK ABSORBER" .
3. Remove cotter pin of upper link ball joint, then loosen mounting nut.
4. Use a ball joint remover (suitable tool) to remove upper link from steering knuckle. Be careful not to damage ball joint boot.

   CAUTION:
   Tighten temporarily mounting nut to prevent damage to threads and to prevent ball joint remover (suitable tool) from coming off.
5. Remove bolts holding upper link to body with power tool.
6. Remove upper link from vehicle.
7. Remove stopper rubber from upper link.

INSPECTION AFTER REMOVAL

Visual Inspection

- Check upper link and bushing for deformation, cracks, or damage. If any non-standard condition is found, replace it.
- Check boot of ball joint for cracks, or other damage, and also for grease leakage. If any non-standard condition is found, replace it.

Ball Joint Inspection

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

Swing Torque Inspection

NOTE:
Before measurement, move boll joint at least ten times by hand to check for smooth movement.

- Hook spring balance at ball stud. Confirm spring balance measurement value is within the specifications when ball stud begins moving.

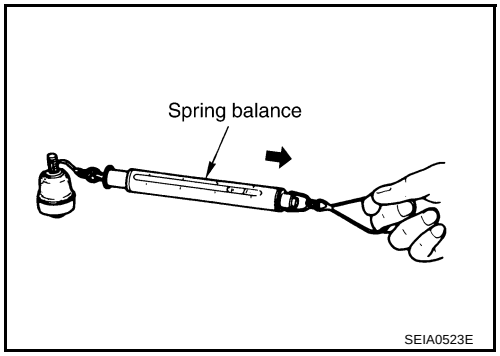
  Standard value

  Swing torque:

  Less than 2.0 N·m (0.20 kg-m, 18 in-lb)

  Measured value of spring balance:

  Less than 34.8 N (3.5 kg, 7.8 lb)



- If it is outside the specified range, replace upper link assembly.

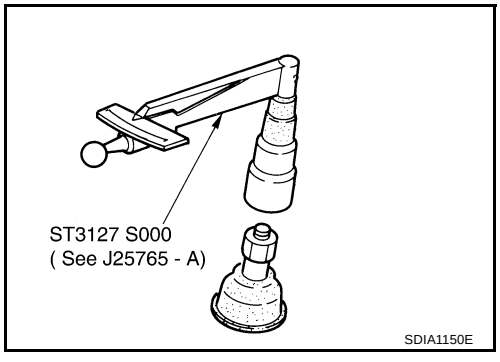
Rotating Torque Inspection

- Attach mounting nut to ball stud. Check that rotating torque is within specifications with a preload gauge (SST).

  Standard value

  Rotating torque:

  Less than 2.0 N·m (0.20 kg-m, 18 in-lb)



- If it is outside the specified range, replace upper link assembly.

Axial End Play Inspection

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

Standard value

Axial end play : 0 mm (0 in)

- If it is outside the specified range, replace upper link assembly.

INSTALLATION

- Refer to FSU-8, "Components" for tightening torque. Install in the reverse order of removal.

NOTE:
Refer to component parts location and do not reuse non-reusable parts.

- Perform final tightening of front suspension member installation position (rubber bushing) under unladen condition with tires on ground. Check wheel alignment. Refer to FSU-20, "SERVICE DATA AND SPECIFICATIONS (SDS)" .

COMPRESSION ROD

PFP:54468

Removal and Installation

NES0002B

REMOVAL

1. Remove tire from vehicle with power tool.
2. Remove undercover with power tool.
3. Remove front cross bar from vehicle with power tool.
4. Remove cotter pin of compression rod ball joint, and loosen nut.
5. Use a ball joint remover (suitable tool) to remove compression rod from steering knuckle. Be careful not to damage ball joint boot.

   CAUTION:
   Tighten temporarily mounting nut to prevent damage to threads and to prevent ball joint remover (suitable tool) from coming off.
6. Remove compression rod from vehicle.

INSPECTION AFTER REMOVAL

Visual Inspection

- Check compression rod and bushing for deformation, cracks, or damage. If any non-standard condition is found, replace it.
- Check boot of ball joint for cracks, or other damage, and also for grease leakage. If any non-standard condition is found, replace it.

Ball Joint Inspection

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

Swing Torque Inspection

NOTE:
Before measurement, move ball joint at least 10 times by hand to check for smooth movement.

- Hook spring balance at ball stud. Confirm spring balance measurement value is within the specifications when ball stud begins moving.

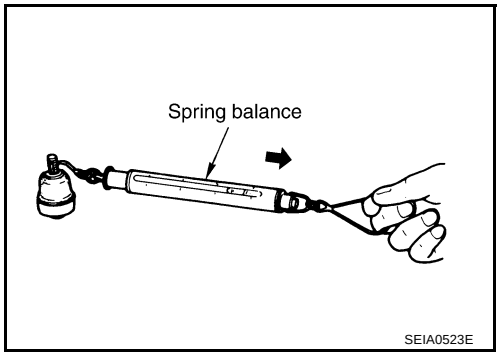
  Standard value

  Swing torque:

  0.147 - 2.45 N·m (0.02 - 0.24 kg-m, 2 - 21 in-lb)

  Measured value of spring balance:

  2.37 - 39.5 N (0.24 - 4.03 kg, 0.53 - 8.88 lb)



- If it is outside the specified range, replace compression rod assembly.

Rotating Torque Inspection

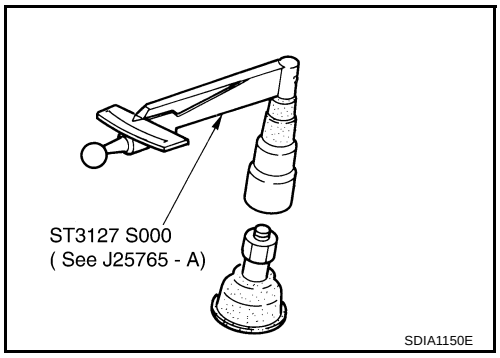
- Attach mounting nut to ball stud. Check that rotating torque is within specifications with a preload gauge (SST).

  Standard value

  Rotating torque:

  0.147 - 2.45 N·m (0.02 - 0.24 kg-m, 2 - 21 in-lb)

- If it is outside the specified range, replace compression rod assembly.



Axial End Play Inspection

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

Standard value

Axial end play : 0 mm (0 in)

- If it is outside the specified range, replace compression rod assembly.

INSTALLATION

- Refer to FSU-8, "Components" for tightening torque. Install in the reverse order of removal.

NOTE:
Refer to component parts location and do not reuse non-reusable parts.

- Perform final tightening of installation position between front suspension member and front cross bar (rubber bushing) under unladen condition with tires on ground. Check wheel alignment. Refer to FSU-6, "Wheel Alignment Inspection" .

STABILIZER BAR

PFP:54611

Removal and Installation

NES0002C

REMOVAL

1. Remove tire from vehicle with power tool.
2. Remove undercover with power tool.
3. Remove mounting nut on upper portion of stabilizer connecting rod with power tool.
4. Remove fixing bolts and nut, then remove stabilizer clamp, stabilizer bushing, and stabilizer clamp bracket.
5. Remove stabilizer bar from vehicle.

INSPECTION AFTER REMOVAL

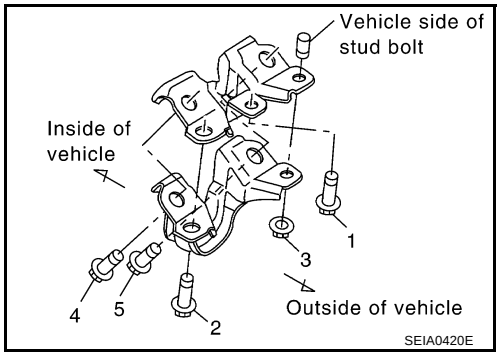
Check stabilizer bar, stabilizer connecting rod, stabilizer bushing, stabilizer clamp and stabilizer clamp bracket for deformation, cracks and damage, and replace if necessary.

INSTALLATION

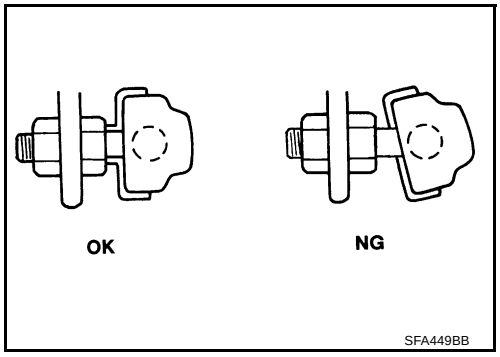
- Refer to FSU-8, "Components" for tightening torque. Install in the reverse order of removal.

  NOTE:
  Refer to component parts location and do not reuse non-reusable parts.

- Tighten each bolt and nut as shown in the figure for tightening stabilizer bracket and stabilizer clamp. Tightening order is as follows. 1 (fully tighten) → 2 (temporarily tighten) → 3 (temporarily tighten) → 2 (fully tighten) → 3 (fully tighten) → 4, 5 (temporarily tighten) → 4, 5 (fully tighten).



- Stabilizer bar uses pillow ball type connecting rod. Position ball joint with case on pillow ball head parallel to stabilizer bar.



FRONT SUSPENSION MEMBER

PFP:54401

Removal and Installation

NES0002D

REMOVAL

1. Remove tire from vehicle with power tool.
2. Remove undercover with power tool.
3. Remove fixing bolts and nuts, then remove front cross bar from vehicle with power tool.
4. Remove steering hydraulic piping bracket from front suspension member. Refer to PS-36, "HYDRAULIC LINE" .
5. Remove steering gear and front suspension member attachment bolts and hang steering gear on vehicle. Refer to PS-19, "POWER STEERING GEAR AND LINKAGE" .
6. Remove transverse link from front suspension member with power tool. Refer to FSU-13, "TRANSVERSE LINK" .
7. Set jack under engine.

   CAUTION:
   When setting jack to engine, use a wooden block or an equivalent for the setting.
8. Remove fixing nuts between engine mounting insulator and front suspension member. Refer to EM-131, "ENGINE ASSEMBLY" .
9. Remove fixing nuts between front suspension member and body with power tool.
10. Remove front suspension member from vehicle.

INSPECTION AFTER REMOVAL

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

INSTALLATION

- Refer to FSU-8, "Components" for tightening torque. Install in the reverse order of removal.

  NOTE:
  Refer to component parts location and do not reuse non-reusable parts.
- Perform final tightening of installation position between front suspension member and transverse link (rubber bushing) under unladen condition with tires on level ground. Check wheel alignment. Refer to FSU-6, "Wheel Alignment Inspection" .

SERVICE DATA AND SPECIFICATIONS (SDS)

PFP:00030

Wheel Alignment (Unladen*)

NES000LF

Tire			17 inch	18 inch	19 inch
Camber Degree minute (Decimal degree)		Minimum	–1°15′ (–1.25°)		–1°10′ (–1.17°)
		Nominal	–0°30′ (–0.50°)		–0°25′ (–0.42°)
		Maximum	0°15′ (0.25°)		0°20′ (0.33°)
		Left and right difference	45′ (0.75°)		
Caster Degree minute (Decimal degree)		Minimum	7°25′ (7.42°)	7°15′ (7.25°)	7°20′ (7.33°)
		Nominal	8°10′ (8.17°)	8°00′ (8.00°)	8°05′ (8.08°)
		Maximum	8°55′ (8.92°)	8°45′ (8.75°)	8°50′ (8.83°)
		Left and right difference	45′ (0.75°)		
Kingpin inclination Degree minute (Decimal degree)		Minimum	4°10′ (4.17°)		
		Nominal	4°55′ (4.92°)		
		Maximum	5°40′ (5.67°)		
Total toe-in	Distance	Minimum	0 mm (0 in)		
		Nominal	1 mm (0.04 in)		
		Maximum	2 mm (0.08 in)		
	Angle (left wheel or right wheel) Degree minute (Decimal degree)	Minimum	0°00′ (0.00°)		
		Nominal	0°02′30″ (0.04°)		
		Maximum	0°05′ (0.08°)		

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

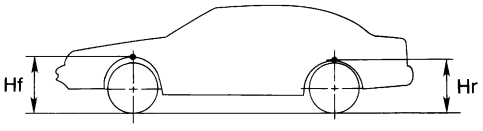
Ball Joint

NES000LG

Swing torque	Less than 2.0 N·m (0.20 kg-m, 18 in-lb) (Upper link) 0.147 - 2.45 N·m (0.02 - 0.24 kg-m, 2 - 21 in-lb) (Compression rod)
Measurement on spring balance	Less than 34.8 N (3.5 kg, 7.8 lb) (Upper link) 2.37 - 39.5 N (0.24 - 4.03 kg, 0.53 - 8.88 lb) (Compression rod)
Rotating torque	Less than 2.0 N·m (0.20 kg-m, 18 in-lb) (Upper link) 0.147 - 2.45 N·m (0.02 - 0.24 kg-m, 2- 21 in-lb) (Compression rod)
Axial end play	0 mm (0 in)

Wheelarch Height (Unladen*)

NES000LH



SFA818A

Applied model	225/50R17 (Front) 235/50R17 (Rear)	225/45R18 (Front) 245/45R18 (Rear)	225/40R19 (Front) 245/40R19 (Rear)
Front (Hf)	691 mm (27.20 in)	694 mm (27.32 in)	699 mm (27.52 in)
Rear (Hr)	702 mm (27.64 in)	710 mm (27.95 in)	

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