SECTION PS
POWER STEERING SYSTEM

CONTENTS

PRECAUTIONS

PFP:00001

Precautions for Supplemental Restraint System (SRS) “AIR BAG” and “SEAT BELT PRE-TENSIONER”

EGS000KU

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. This system may include seat belt switch inputs and dual stage front air bag modules. If equipped with dual stage front air bag modules, the SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

The vehicle may be equipped with a passenger air bag deactivation switch. Because no rear seat exists where a rear-facing child restraint can be placed, the switch is designed to turn off the passenger air bag so that a rear-facing child restraint can be used in the front passenger seat. The switch is located in the center of the instrument panel, near the ashtray. When the switch is turned to the ON position, the passenger air bag is enabled and could inflate for certain types of collision. When the switch is turned to the OFF position, the passenger air bag is disabled and will not inflate. A passenger air bag OFF indicator on the instrument panel lights up when the passenger air bag is switched OFF. The driver air bag always remains enabled and is not affected by the passenger air bag deactivation switch.

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, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, 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 SRS 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 harness connectors.**
- **The vehicle may be equipped with a passenger air bag deactivation switch which can be operated by the customer. When the passenger air bag is switched OFF, the passenger air bag is disabled and will not inflate. When the passenger air bag is switched ON, the passenger air bag is enabled and could inflate for certain types of collision. After SRS maintenance or repair, make sure the passenger air bag deactivation switch is in the same position (ON or OFF) as when the vehicle arrived for service.**

Precautions for Steering System

EGS000KV

- **Before disassembly, thoroughly clean the outside of the unit.**
- **Disassembly should be done in a clean work area. It is important to prevent the internal parts from becoming contaminated by dirt or other foreign matter.**
- **For easier and proper assembly, place disassembled parts in order on a parts rack.**
- **Use nylon cloths or paper towels to clean the parts; common shop rags can leave lint that might interfere with their operation.**
- **Before inspection or reassembly, carefully clean all parts with a general purpose, non-flammable solvent.**
- **Before assembly, apply a coat of recommended power steering fluid* to hydraulic parts. Petroleum jelly may be applied to O-rings and seals. Do not use any grease.**
- **Replace all gaskets, seals and O-rings. Avoid damaging O-rings, seals and gaskets during installation. Perform functional tests whenever designated.**

***: Genuine NISSAN PSF II or equivalent. Refer to MA-12, "Recommended Fluids and Lubricants" .**

PREPARATION

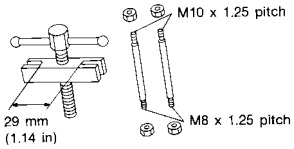
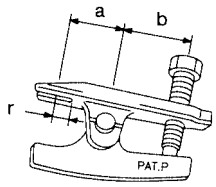
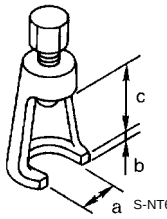
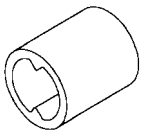
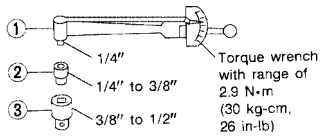
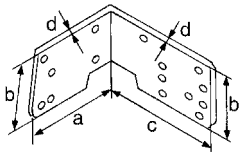
PFP:00002

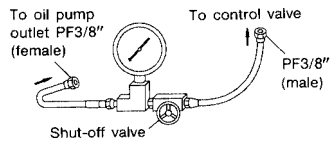
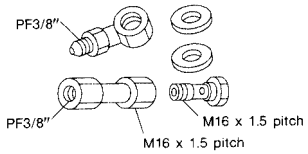
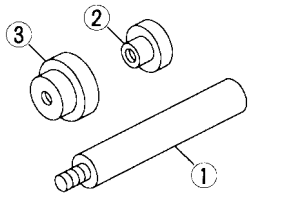
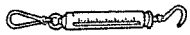
Special Service Tools

EGS000KW

POWER STEERING

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

Tool number (Kent-Moore No.) Tool name		Description
ST27180001 (J25726-A) Steering wheel puller	 S-NT544	Removing steering wheel
HT72520000 (J25730-B) Ball joint remover	 NT546	Removing ball joint and swivel joint **a: 33 mm (1.30 in)** **b: 50 mm (1.97 in)** **r: 11.5 mm (0.453 in)**
ST29020001 (J24319-01) Steering gear arm puller	 S-NT694	Removing pitman arm **a: 34 mm (1.34 in)** **b: 6.5 mm (0.256 in)** **c: 61.5 mm (2.421 in)**
KV48100700 (J26364) Torque adapter	 NT169	Adjusting worm bearing preload
ST3127S000 (see J25765-A) 1: GG91030000 (J25765-A) Torque wrench 2: HT62940000 (—) Socket adapter 3: HT62900000 (—) Socket adapter	 S-NT541	Measuring turning torque
KV48100301 (—) Strut & steering gearbox attachment	 NT688	Steering gear installation. **a: 162 mm (6.38 in)** **b: 110 mm (4.33 in)** **c: 190 mm (7.48 in)** **d: 9 mm (0.35 in)**

KV48103500 (J26357 or J26357-10) Pressure gauge	 S-NT547	Measuring oil pressure
KV48102500 (—) Pressure gauge adapter	 S-NT542	Measuring oil pressure (Use with KV48103500)
KV481009S0 (—) Oil seal drift set 1: KV48100910 (—) Drift 2: KV48100920 (J26367) Adapter 3: KV48100930 (J26367) Adapter	 NT174	Installing oil seal
(J44372) 5–60 Pound pull gauge	 LST024	Measuring steering wheel turning force

NOISE, VIBRATION, AND HARSHNESS (NVH) TROUBLESHOOTING

PFP:00003

NVH Troubleshooting Chart

EGS000KX

Reference page			PS-7	PS-8	PS-22	PS-22	PS-22	PS-8	PS-6	PS-15	MA-15, "Checking Drive Belts" or MA-24, "Checking Drive Belts"	—	PS-13	PS-13	PS-10	PS-22	PR-3, "NVH Troubleshooting Chart"	FFD-5, "NVH Troubleshooting Chart"	PR-3, "NVH Troubleshooting Chart"	FAX-4, "NVH Troubleshooting Chart"	FSU-4, "NVH Troubleshooting Chart"	WT-3, "NVH Troubleshooting Chart"	WT-3, "NVH Troubleshooting Chart"	BR-6, "NVH Troubleshooting Chart"	
SUSPECTED PARTS (Possible cause)			Fluid level	Air in hydraulic system	Tie-rod ball joint swinging force	Tie-rod ball joint rotating torque	Tie-rod ball joint end play	Steering gear fluid leakage	Steering wheel play	Steering gear turning force	Drive belt looseness	Improper steering wheel	Improper installation or looseness of tilt lock lever (if equipped)	Steering column deformation or damage	Improper installation or looseness of steering column	Steering linkage looseness	PROPELLER SHAFT	DIFFERENTIAL	DRIVE SHAFT	AXLE	SUSPENSION	TIRES	ROAD WHEEL	BRAKES	
Symptom	STEERING	Noise	X	X	X	X	X	X	X	X	X						X	X	X	X	X	X	X	X	
		Shake										X	X				X		X	X	X	X	X	X	
		Vibration										X	X	X	X		X		X	X	X	X			
		Shimmy										X	X			X				X	X	X	X	X	
		Judder														X				X	X	X	X	X	

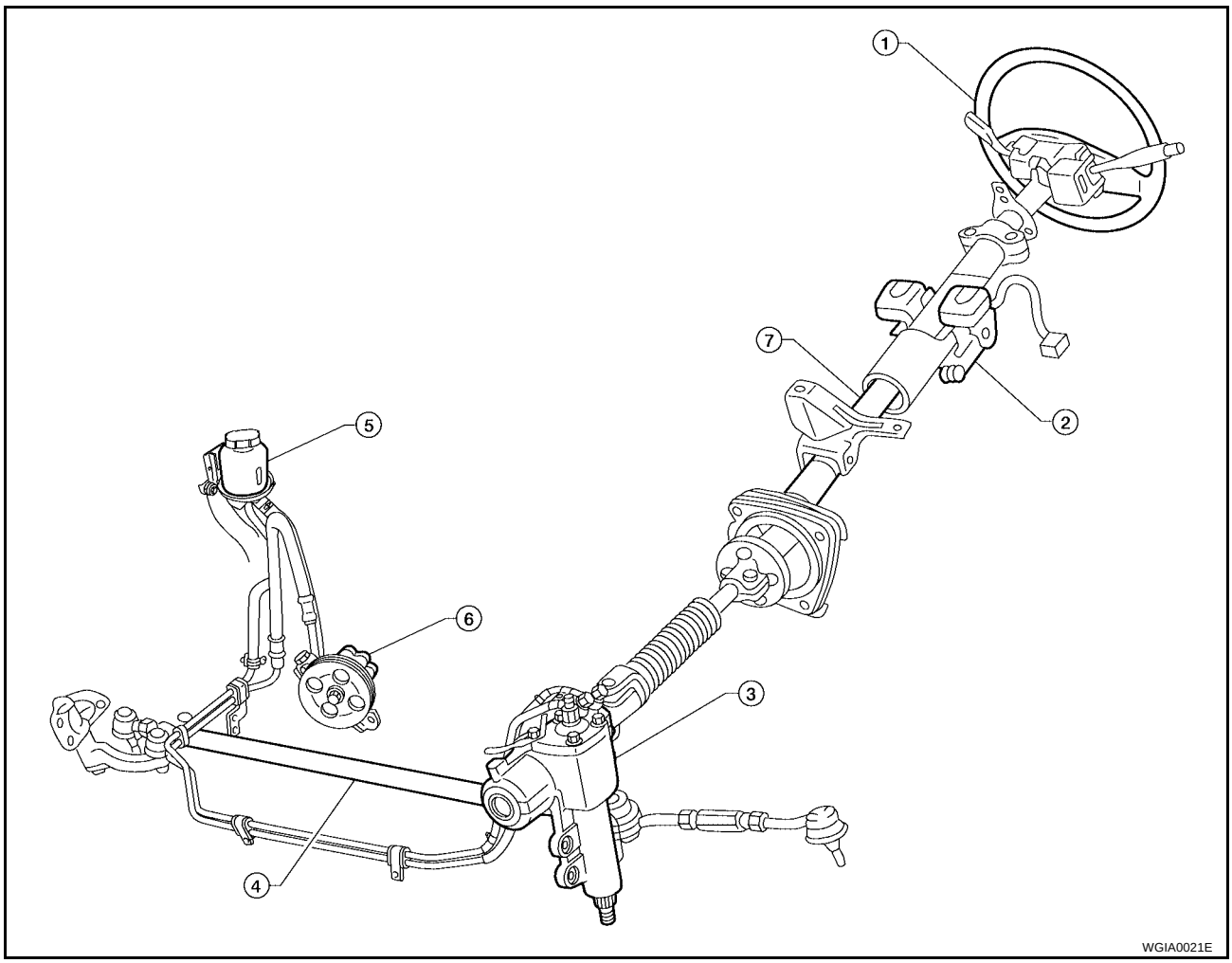
X: Applicable

ON-VEHICLE SERVICE

PFP:00000

Steering System

EGS000KY



1. Steering wheel
2. Tilt mechanism (if equipped)
3. Steering gear assembly
4. Steering linkage
5. Power steering oil tank
6. Power steering oil pump
7. Steering column

Checking Steering Wheel Play

EGS000KZ

- Place wheels in straight ahead position and check steering wheel play.

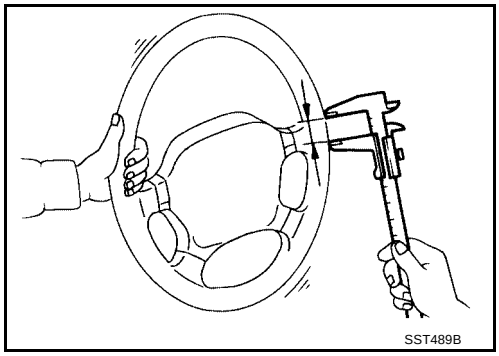
Steering wheel play : 35 mm (1.38 in) or less

- If steering wheel play is not within specification, check the following for loose or worn components.

– Steering column. Refer to PS-13, "Inspection" .

– Front suspension and axle. Refer to FSU-5, "Components" and FAX-5, "Front Axle Parts" .

– Steering gear. Refer to PS-15, "Inspection and Adjustment" .

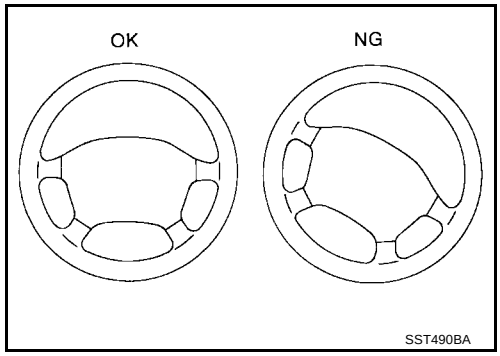


Checking Neutral Position on Steering Wheel

EGS000L0

PRE-CHECKING

- Make sure that wheel alignment is correct. Refer to FSU-10, "Front Wheel Alignment" .
- Verify that the steering gear is centered before removing the steering wheel.



CHECKING

1. Check that the steering wheel is in the neutral position when driving straight ahead.
2. If it is not in the neutral position, remove the steering wheel and reinstall it correctly.
3. If the neutral position is still not correct:

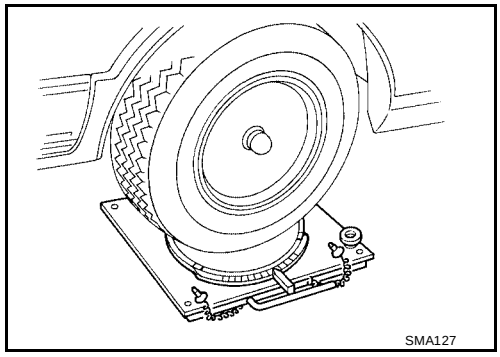
a. Loosen tie-rod lock nuts.

b. Move tie-rods, in opposite direction, the same amount on both left and right sides. This will compensate for error in the neutral position.

Checking Front Wheel Turning Angle

EGS000L1

1. Rotate steering wheel fully right, then left; measure turning angle. Refer to FSU-14, "FRONT WHEEL TURNING ANGLE" .
2. If it is not within specification, check stopper bolt adjustment. Refer to FSU-14, "FRONT WHEEL TURNING ANGLE" .



Checking and Adjusting Drive Belts

EGS000L2

Refer to MA-15, "Checking Drive Belts" (KA24DE) or MA-24, "Checking Drive Belts" (VG33E and VG33ER).

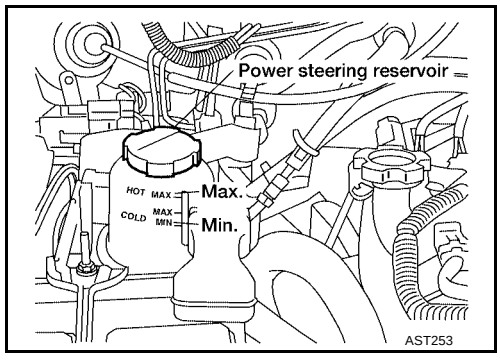
Checking Fluid Level

EGS000L3

- Check fluid level with engine off.
- Check fluid level referring to the scale on the reservoir tank.
- Use “HOT” range for fluid temperatures of 50 to 80°C (122 to 176°F).
- Use “COLD” range for fluid temperatures of 0 to 30°C (32 to 86°F).

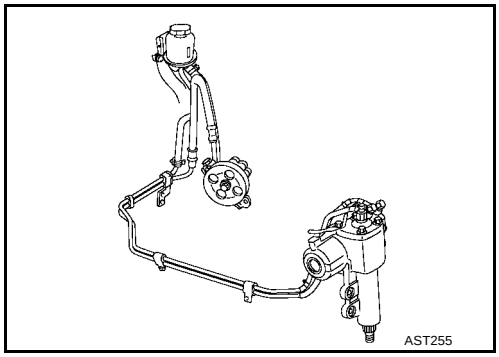
CAUTION:

- **Do not overfill.**
- **Recommended fluid is Genuine NISSAN PSF II or equivalent. Refer to MA-12, "Recommended Fluids and Lubricants" .**



Checking Fluid Leakage

EGS000L4



Check lines for improper attachment, leaks, cracks, damage, chafing and deterioration.

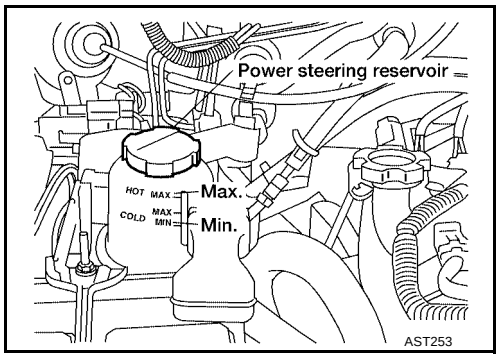
1. Run engine between idle speed and 1,000 rpm.
2. Bring power steering fluid up to adequate operating temperature. [Make sure temperature of fluid is approximately 60 to 80°C (140 to 176°F).]
3. Turn steering wheel right-to-left several times.
4. Hold steering wheel at each “lock” position for 5 seconds and carefully check for fluid leakage.

   CAUTION:
   Do not hold steering wheel at lock position for more than 15 seconds.
5. If fluid leakage from any line is noticed, loosen flare nut and then retighten.

   CAUTION:
   Do not overtighten connector as this can damage O-ring, washer and connector.
6. If fluid leakage from power steering pump is noticed, check power steering oil pump. Refer to PS-17, "Pre-disassembly Inspection" .
7. If fluid leakage from power steering gear is noticed, check power steering gear. Refer to PS-15, "Inspection and Adjustment" .

Bleeding Hydraulic System

EGS000L5



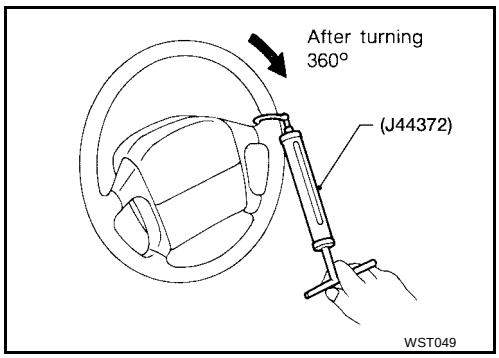
1. Raise front end of vehicle until wheels are clear of the ground.
2. Add fluid to reservoir tank to specified level. Quickly turn steering wheel fully to right and left and lightly touch steering stoppers.
   Repeat steering wheel operation until fluid level no longer decreases.
3. Start engine.
   Repeat step 2 above.
   - Incomplete air bleeding will cause the following to occur:
   - Air bubbles in reservoir tank
   - Clicking noise in power steering pump
   - Excessive buzzing in power steering pump

   When this happens, bleed air again.

Fluid noise may occur in the valve or power steering pump. This is common when the vehicle is stationary or while turning the steering wheel slowly. This does not affect the performance or durability of the system.

Checking Steering Wheel Turning Force

EGS000L6



1. Park vehicle on a level, dry surface and set parking brake.
2. Start engine and run at idle speed or 1,000 rpm.
3. Bring power steering fluid up to adequate operating temperature. [Make sure temperature of fluid is approximately 60 to 80°C (140 to 176°F).]
4. Check steering wheel turning force when steering wheel has been turned 360° from neutral position.

   NOTE:
   Tires need to be inflated to normal pressure.

   Steering wheel turning force : 39 N (4 kg, 9 lb) or less
5. If steering wheel turning force is out of specification, check the following:

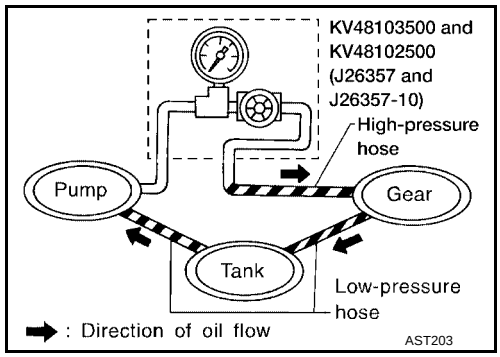
a. Hydraulic system. Refer to PS-9, "Checking Hydraulic System" .
b. Steering column. Refer to PS-13, "Inspection" .

c. Front suspension and axle. Refer to FSU-8, "Component" and FAX-5, "Front Axle Parts" .
d. Steering gear turning torque. Refer to PS-8, "Checking Steering Wheel Turning Force" .

Checking Hydraulic System

EGS000L7

Before starting, check belt tension, driving pulley and tire pressure.



1. Set Tool. Open shut-off valve, then bleed air. Refer to PS-8, "Bleeding Hydraulic System" .
2. Run engine at idle speed or 1,000 rpm.
3. Bring power steering fluid up to adequate operating temperature. [Make sure temperature of fluid is approximately 60 to 80°C (140 to 176°F).]

   WARNING:
   Warm up engine with shut-off valve fully opened. If engine is started with shut-off valve closed, fluid pressure in the power steering pump increases to maximum. This will raise fluid temperature abnormally.
4. Check pressure with steering wheel fully turned to left and right positions while idling at 1,000 rpm.

   CAUTION:
   Do not hold the steering wheel at full lock position for more than 15 seconds.

Power steering pump maximum operating pressure	**: 7,551 - 8,336 kPa (77 - 85 kg/cm^2 , 1,095 - 1,209 psi) at idle**

   - If pressure reaches maximum operating pressure, system is OK.
   - If pressure increases above maximum operating pressure, check power steering pump flow control valve. Refer to PS-17, "Components" .
5. If power steering pressure is below the maximum operating pressure, slowly close shut-off valve and check pressure again.

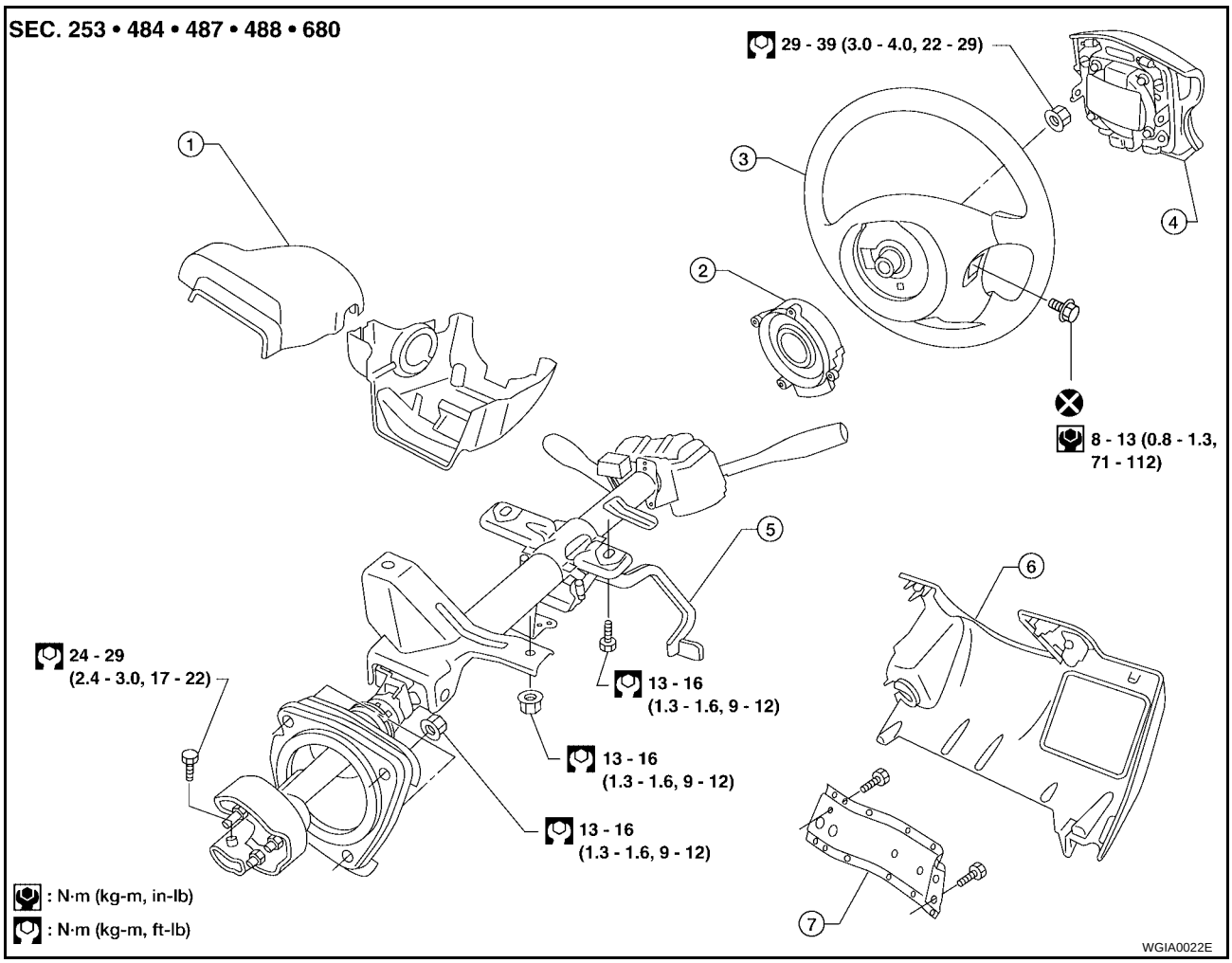
   CAUTION:
   Do not close shut-off valve for more than 15 seconds.
   - If pressure increases to maximum operating pressure, gear is damaged. Refer to PS-17, "Components"PS-15, "Removal and Installation" .
   - If pressure remains below maximum operating pressure, pump is damaged. Refer to PS-17, "Components" .
6. After checking hydraulic system, remove Tool and add fluid as necessary. Completely bleed air out of system. Refer to PS-8, "Bleeding Hydraulic System" .

STEERING WHEEL AND STEERING COLUMN

PFP:48430

Components

EGS000L8



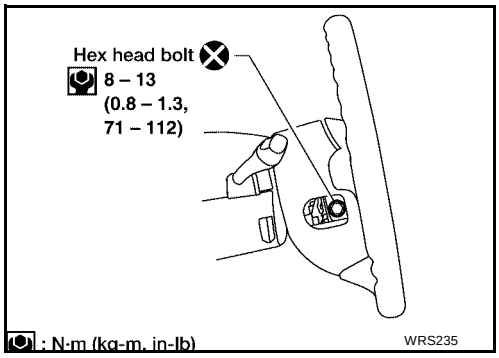
1. Steering column cover
2. Spiral cable. Refer to SRS-42, "Removal and Installation"
3. Steering Wheel
4. Driver air bag module. Refer to SRS-42, "Removal and Installation"
5. Tilt mechanism
6. Instrument lower panel drivers side
7. Knee protector

Removal and Installation

EGS000L9

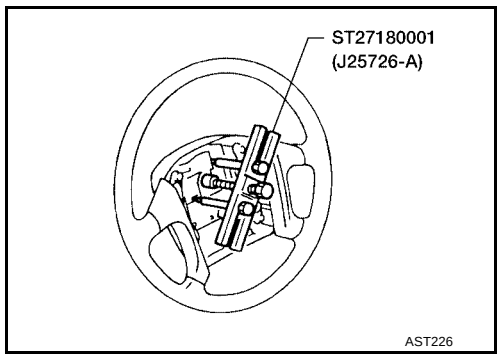
STEERING WHEEL

1. Remove air bag module and spiral cable. Refer to SRS-42, "Removal and Installation" .
2. Disconnect horn connector and remove steering wheel nut.



3. Remove steering wheel using Tool.

- For installation, refer to SRS-42, "Removal and Installation" .



STEERING COLUMN

Removal

CAUTION:

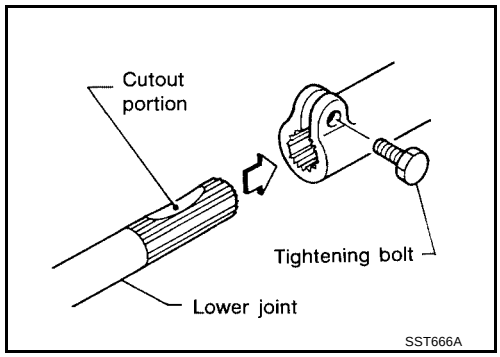
- **The rotation of the spiral cable (SRS "AIR BAG" component part) is limited. If the steering gear must be removed, set the front wheels in the straight-ahead direction.**
  Do not rotate the steering column while the steering gear is removed.
- **Remove the steering wheel before removing the steering lower joint to avoid damaging the SRS spiral cable. Refer to SRS-42, "Removal and Installation" .**

1. Remove steering wheel. Refer to PS-10, "STEERING WHEEL" .
2. Remove steering column covers.
3. Remove instrument lower panel. Disconnect security lamp indicator.
4. Disconnect combination switch electrical connectors and air bag harness connector.
5. Remove knee protector.
6. Disconnect ignition switch and shift lock solenoid connectors.
7. Disconnect shift cable.
8. Remove bolt from lower joint.
9. Remove two steering column bolts and remove steering column.

Installation

- When installing steering column, finger-tighten all lower bracket and clamp retaining bolts; then tighten them securely. Make sure that undue stress is not applied to steering column.
- When fitting steering lower joint, be sure tightening bolt faces cutout portion.
- Align spiral cable correctly when installing steering wheel. Refer to SRS-42, "Removal and Installation" .

  CAUTION:
  After installation, turn steering wheel to make sure it moves smoothly. Ensure the number of turns from the straight forward position to left and right locks are the same. Be sure that the steering wheel is in a neutral position when driving straight ahead.

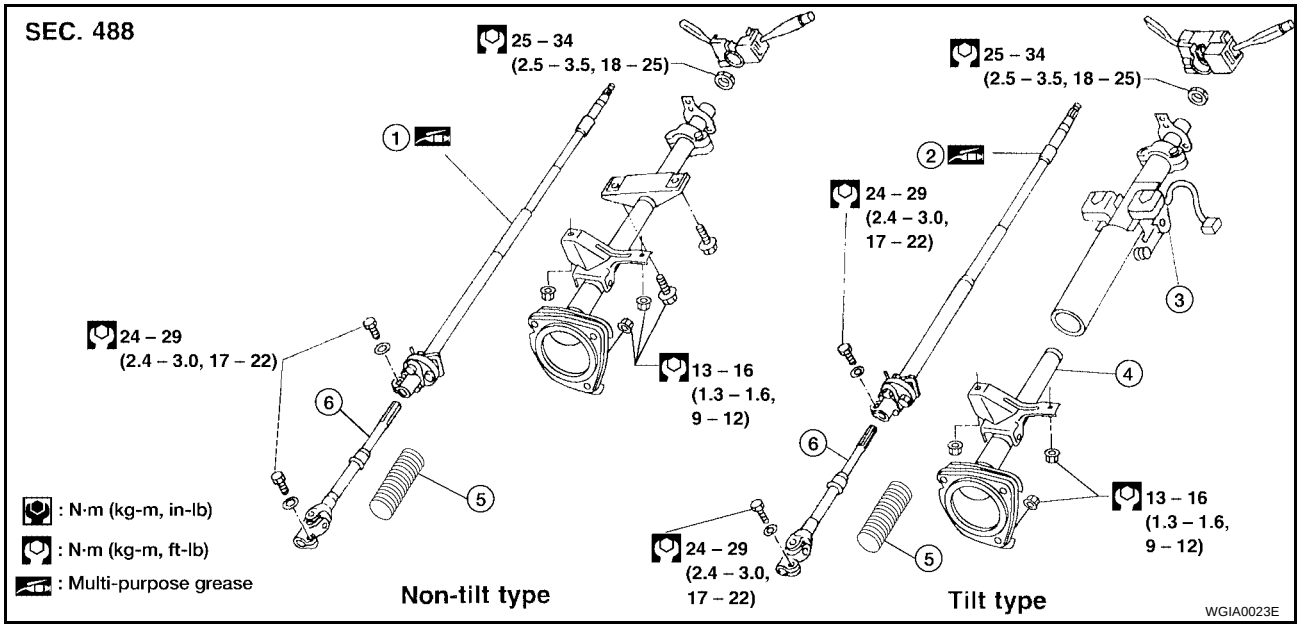


Disassembly and Assembly

EGS000LA

NOTE:

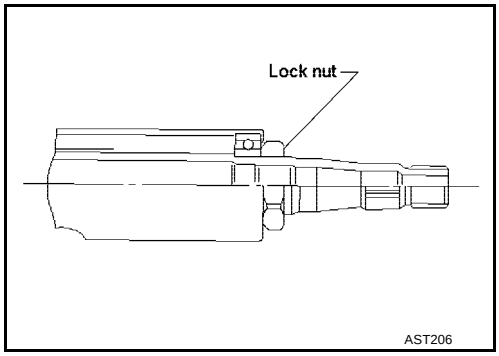
- Do not disassemble the tilt mechanism.
- After installing steering column, check tilt mechanism operation.



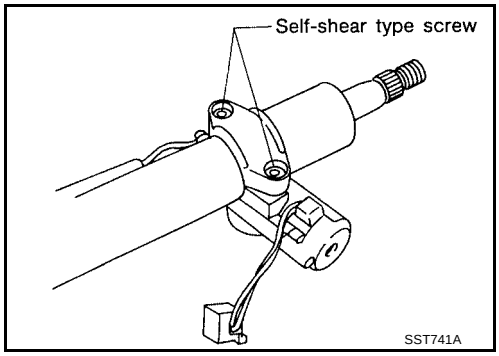
1	Steering column shaft	2	Steering column upper shaft	3	Tilt mechanism
4	Lower tube assembly	5	Bellows	6	Steering column lower shaft

1. When disassembling and assembling, unlock steering lock with key.
2. Install lock nut on steering column shaft and tighten the nut to specification.

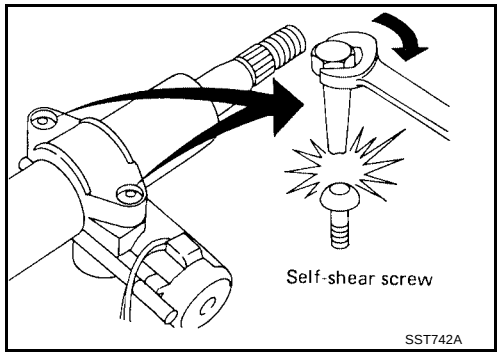
Steering column lock nut **: 25 - 34 N·m (2.5 - 3.5 kg-m, 18 - 25 ft. lb)**



3. Steering lock
   - Break self-shear type screws using a drill or other appropriate tool.



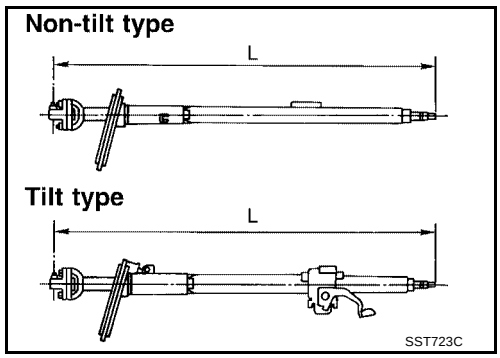
- Install self-shear type screws, then tighten until heads break off.



Inspection

EGS000LB

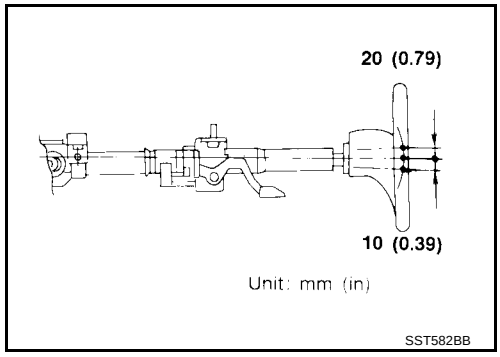
- If steering wheel does not turn smoothly, check the steering column as follows and replace damaged parts.
  - Check column bearings for damage and unevenness. Lubricate with recommended multi-purpose grease or replace steering column as an assembly, if necessary.
  - Check jacket tube for deformation and breakage. Replace if necessary.
- If the vehicle is involved in a light collision, check dimension “L”. If it is not within specification, replace steering column as an assembly.



Column length “L” : 863.1 - 864.7 mm (33.980 - 34.043 in)

TILT MECHANISM

After installing steering column, check tilt mechanism operation.

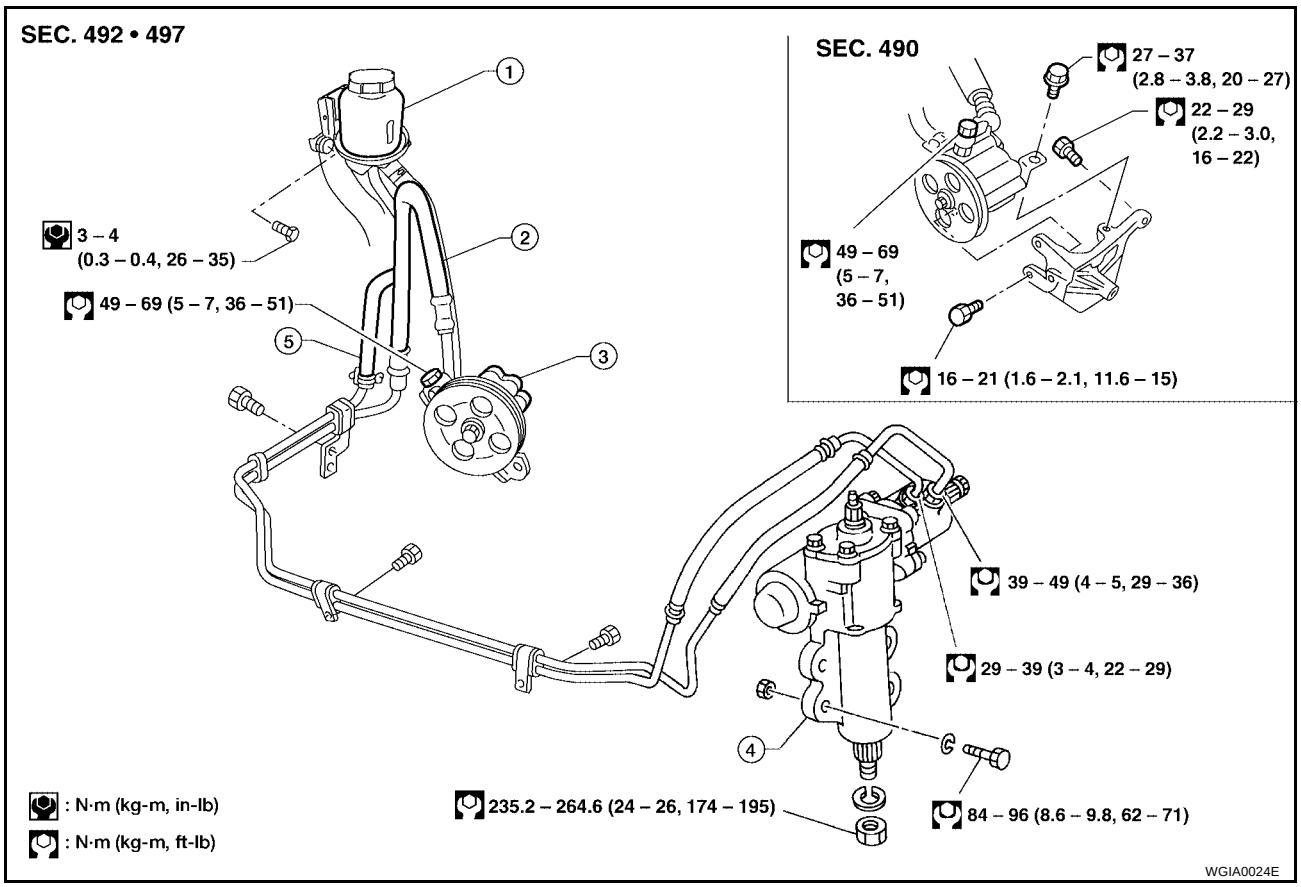


POWER STEERING GEAR (MODEL: D600)

PFP:49001

Description

EGS000LC



1. Power steering oil tank
2. High pressure hose
3. Power steering oil pump
4. Steering gear
5. Low pressure hose

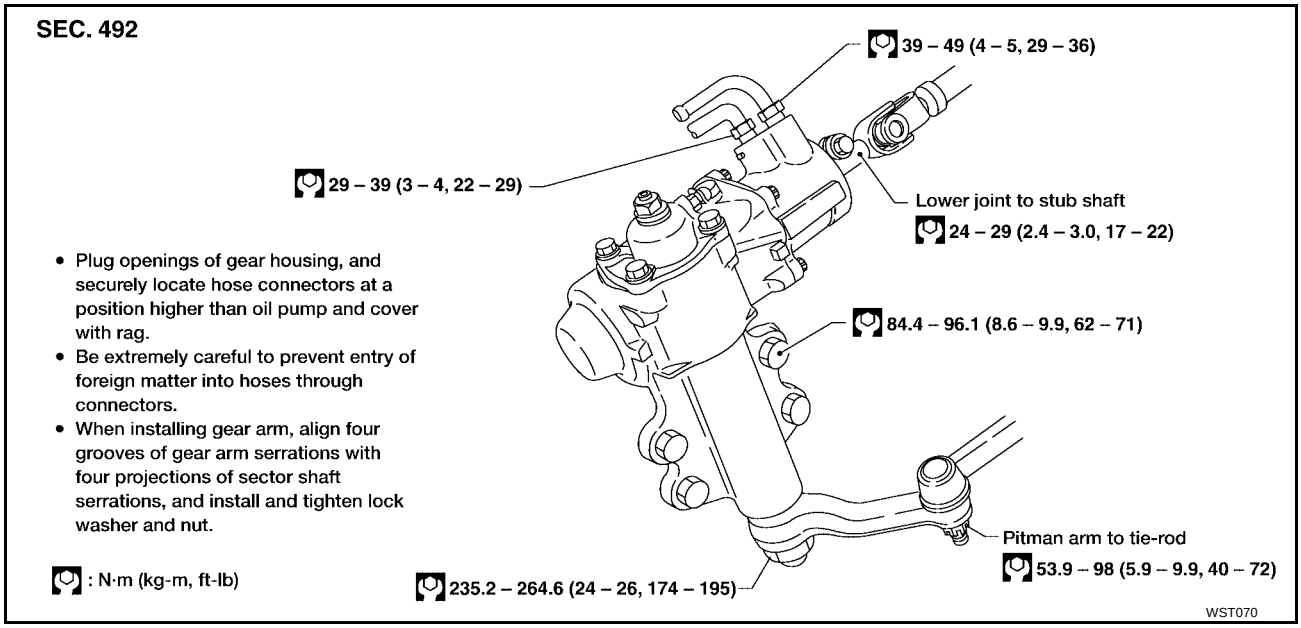
CAUTION:

- **Parts which can be disassembled are strictly limited. Never disassemble parts other than those specified.**
- **Disassemble in as clean a place as possible.**
- **Clean your hands before disassembly.**
- **Do not use rags; use nylon cloths or paper towels.**
- **Follow the procedures and cautions indicated in the Service Manual.**

Removal and Installation

EGS000LD

NOTE:
Before removal, clean gear housing and oil pump exteriors using a steam cleaner, then dry with compressed air.



Inspection and Adjustment

EGS000LE

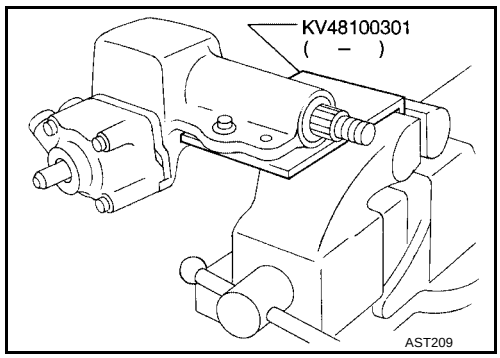
NOTE:
Before replacing power steering, make sure there is no oil leakage around sealing portion and check steering turning torque as follows:
Check sealing portion.

- Sector shaft cover O-ring
- Sector shaft U-packing
- Sector shaft oil seal
- Rear housing O-ring
- Gear housing O-ring

TURNING TORQUE MEASUREMENT

1. Measure turning torque at 360° position.

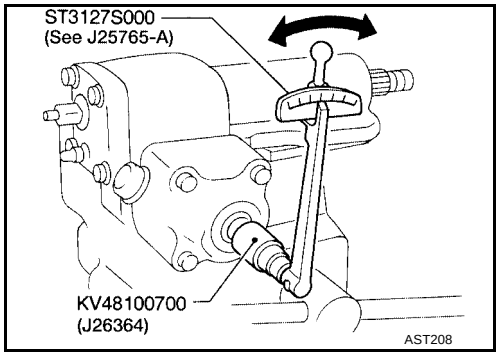
a. Install steering gear on Tool.



b. Turn stub shaft all the way to right and left several times.

c. Measure turning torque at 360° position from straight-ahead position with Tools.

Turning torque at 360° : 0.20 - 0.90 N·m (2.0 - 9.2 kg-cm, 1.8 - 8.0 in-lb)

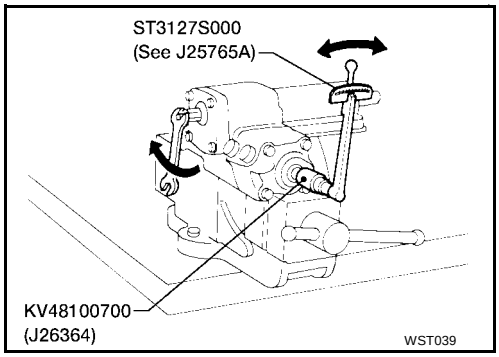


d. Measure turning torque at straight-ahead position.

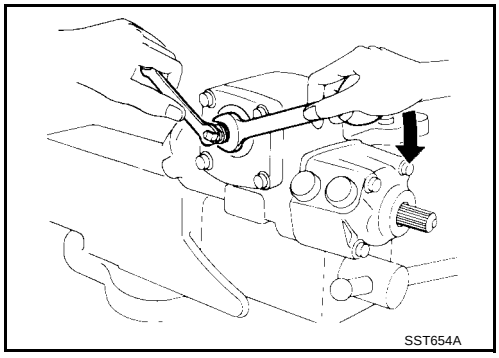
- Straight-ahead position is a position where stub shaft is turned 1.93 turns (two full turns and 50°) from lock position.
- If turning torque is not within specifications, adjust by turning sector shaft adjusting screw.

Turning torque at straight-ahead position (higher than turning torque at 360°) : 0.70 - 1.05 N·m (0.08 - 0.10 kg-m, 7.0 - 9.0 in-lb)

Maximum turning torque : 1.7 N·m (17.3 kg-cm, 15.0 in-lb)



2. Tighten adjusting screw lock nut with tools.

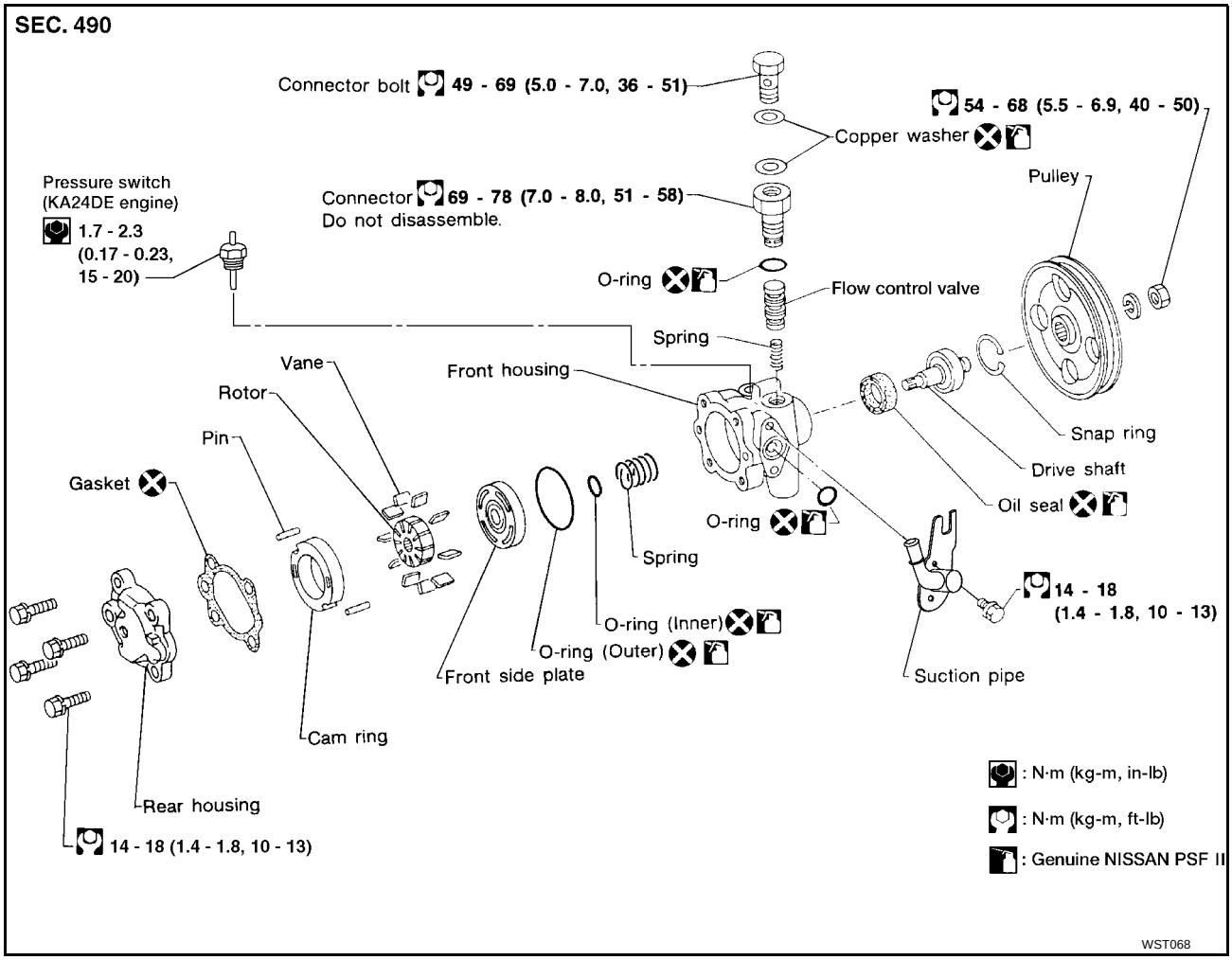


POWER STEERING OIL PUMP

PFP:49110

Components

EGS000LF

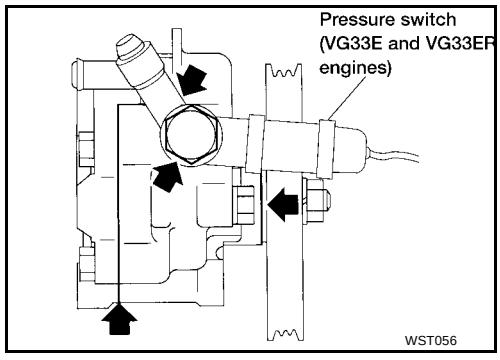


Pre-disassembly Inspection

EGS000LG

Disassemble the power steering oil pump only if the following items are found.

- Oil leak from any point shown in the figure.
- Deformed or damaged pulley.
- Poor performance.



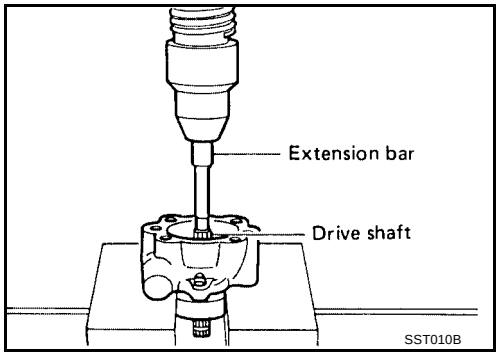
Disassembly

EGS000LH

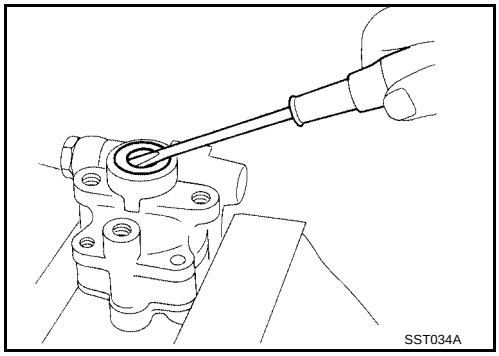
CAUTION:

- **Parts which can be disassembled are strictly limited. Never disassemble parts other than those specified.**
- **Disassemble in as clean a place as possible.**
- **Clean your hands before disassembly.**
- **Do not use rags; use nylon cloth or paper towels.**
- **When disassembling and reassembling, do not let foreign matter enter or contact the parts.**

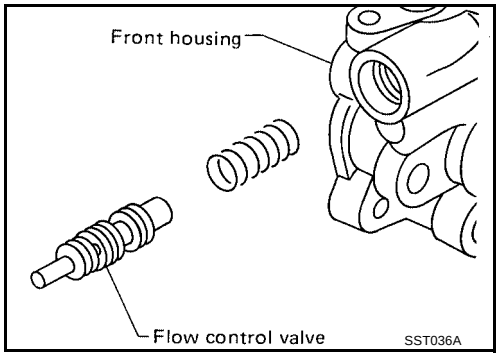
- Remove snap ring, then draw drive shaft out.
- Be careful not to drop drive shaft.



- Remove oil seal.
- Be careful not to damage front housing.



- Remove connector and flow control valve with spring.
- Be careful not to drop flow control valve.



Inspection

EGS000LI

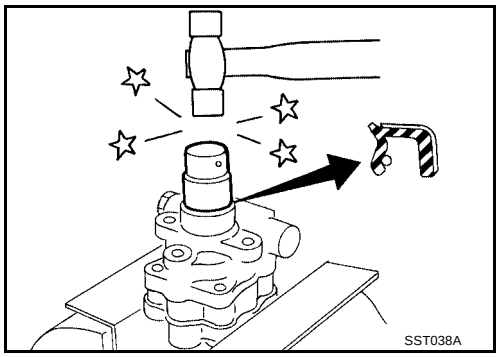
- If pulley is cracked or deformed, replace it.
- If fluid leak is found around the pulley shaft, replace the oil seal.

Assembly

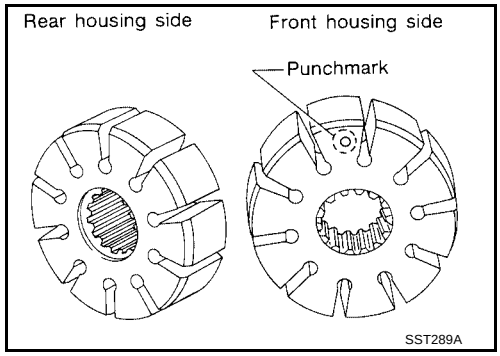
EGS000LJ

Assemble oil pump, noting the following instructions.

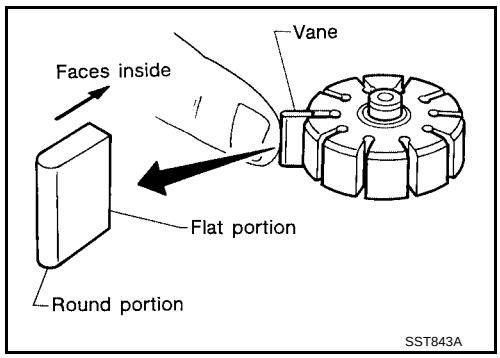
- Make sure O-rings and oil seal are properly installed.
- Always install new O-rings and oil seal.
- Be careful of oil seal direction.
- Cam ring, rotor and vanes must be replaced as a set if necessary.
- When assembling, coat each part with Genuine NISSAN PSF II or equivalent.



- Pay attention to the direction of rotor.

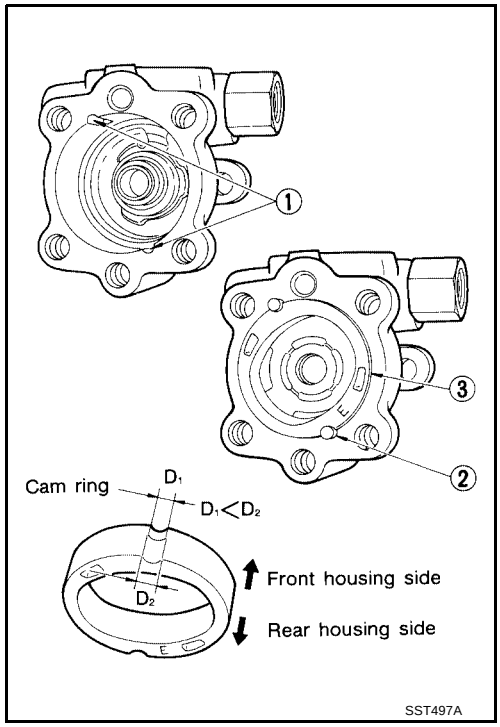


- When assembling vanes to rotor, rounded surfaces of vanes must face cam ring side.



- Insert pin 2 into pin groove 1 of front housing and front side plate. Then install cam ring 3.

Cam ring :D_1 is less than D_2

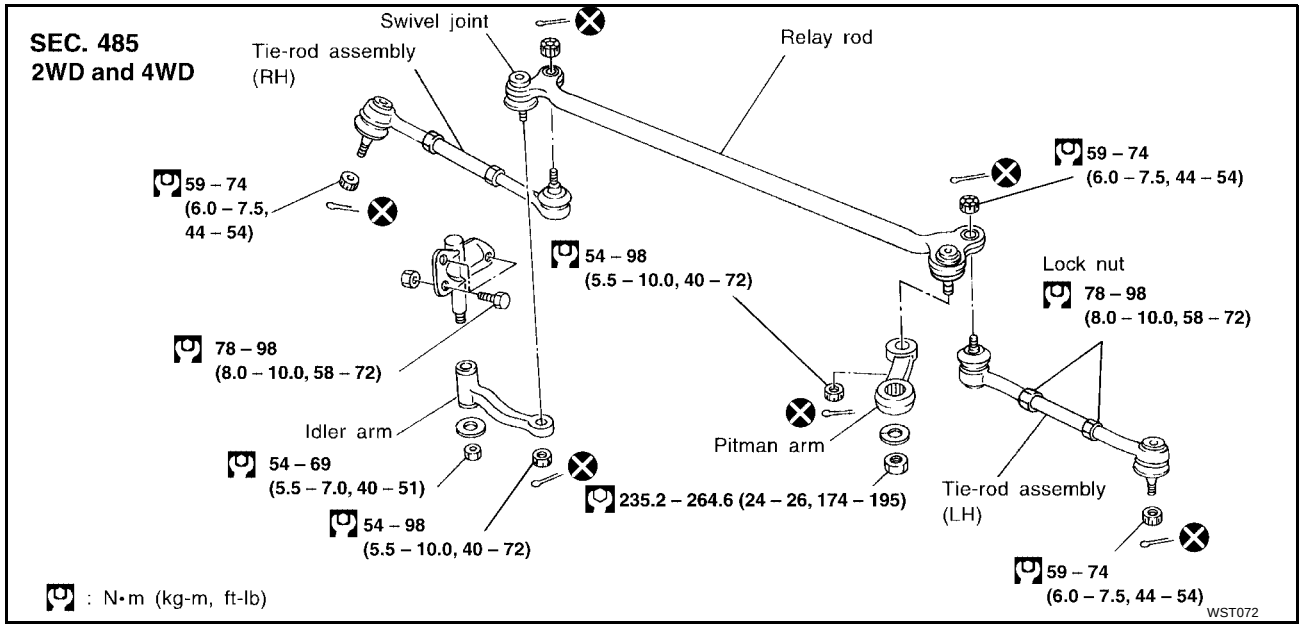


STEERING LINKAGE

PFP:48500

Components

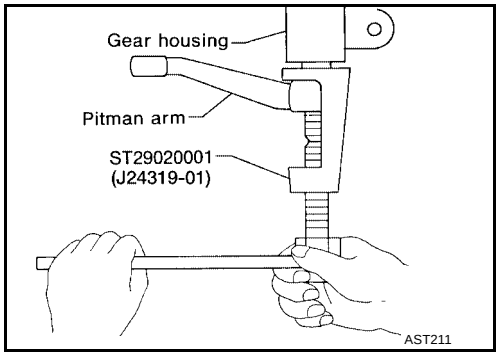
EGS000LK



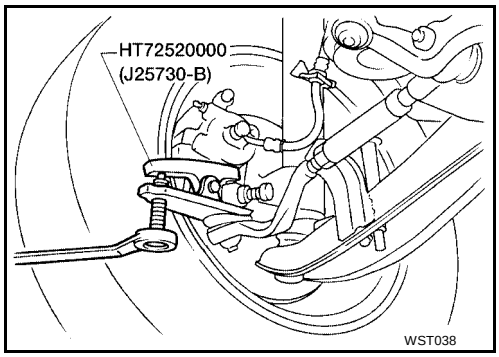
Removal and Installation

EGS000LL

- Remove pitman arm with Tool.



- Remove tie-rod from knuckle arm with Tool.

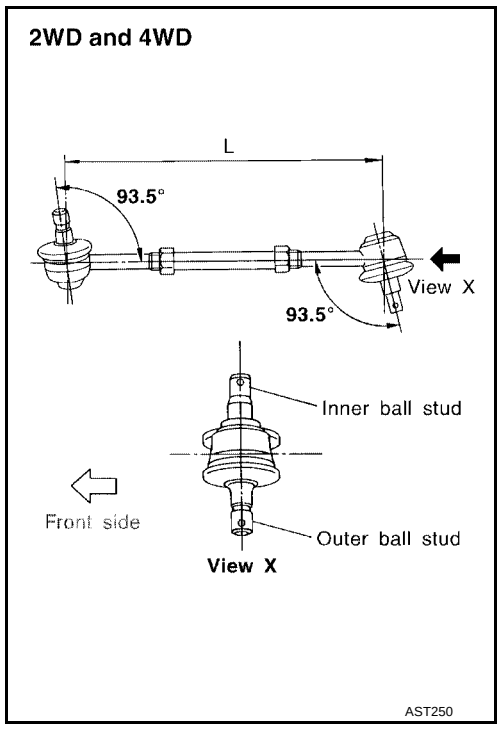


Disassembly and Assembly

EGS000LM

IDLER ARM ASSEMBLY

- Apply coat of multi-purpose grease to bushing.
- Press bushing into idler body, and insert shaft of idler bracket carefully until bushing protrudes.



CROSS ROD AND TIE-ROD

1. When tie-rod ball joints and tie-rod bar are separated, adjust tie-rod length correctly. Adjustment should be done between ball stud centers.
2. Lock tie-rod clamp nut so that ball joint on outer ball stud is as follows with respect to that on inner ball stud.

L	**: Standard dimension before toe-in adjustment**
2WD and 4WD	**: 297.6 mm (11.72 in)**

CAUTION:

Make sure that tie-rod bars are screwed into tie-rod tube more than 22 mm (0.87 in) 2WD and 4WD.

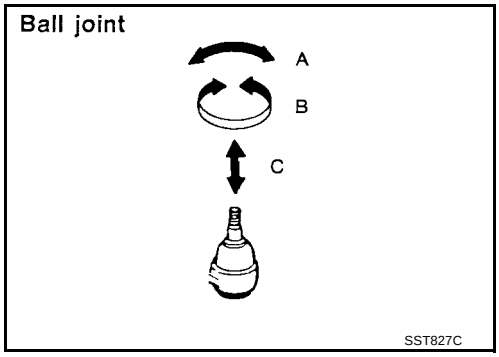
Inspection

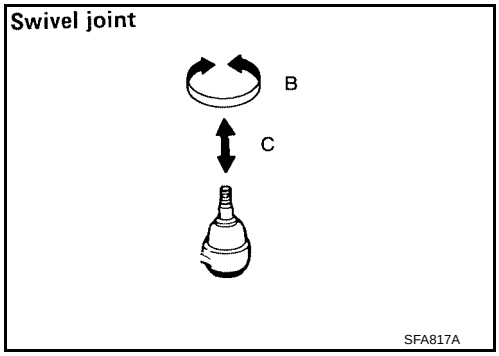
EGS000LN

BALL JOINT AND SWIVEL JOINT

1. Check joints for play. If ball or swivel stud is worn and play in axial direction is excessive, or joint is hard to swing, replace as a complete unit.

Swinging force (Measure point Cotter pin hole) “A”	**: 15.7 - 147.1 N (1.6 - 15.0 kg, 3.5 - 33.1 lb)**
Rotating torque “B”	
Ball joint	**: 0.5 - 4.9 N·m (5 - 50 kg-cm, 4.3 - 43.4 in-lb)**
Swivel joint	**: 1.0 - 5.9 N·m (10 - 60 kg-cm, 8.7 - 52.1 in-lb)**
Axial end play “C”	
Ball joint and swivel joint	**: 0 mm (0 in)**





2. Check condition of dust cover. If it is cracked excessively, replace as a complete unit.

CAUTION:
Be careful not to apply grease or oil to taper of joint.

IDLER ARM ASSEMBLY

- Check rubber bushing of idler arm for breakage, wear or play, and if necessary replace.
- Lubricate idler arm assembly with multi-purpose grease, if necessary.

CROSS ROD AND TIE-ROD

Check tie-rod and cross rod for breakage, bends and cracks, and replace with a new one if necessary.

FIXING LOCATION

- Check fixing location (nuts and cotter pins) for looseness, play or breakage.
- When looseness or play is found, check for wear on tapered portion of joints, gear arm or idler arm.
- When reassembling each joint, use new cotter pins.

SERVICE DATA AND SPECIFICATIONS (SDS)

PFP:00030

General Specifications

EGS000LO

Engine	KA24DE	VG33E and VG33ER
Steering column type (Collapsible)	Tilt or Non-tilt	
	2WD, 4WD	
Steering gear type	D600	
Turns of steering wheel on the vehicle (Lock-to-lock)	3.7	3.4
Steering gear ratio	18.1	17.6

Steering Wheel

EGS000LP

Unit: mm (in)

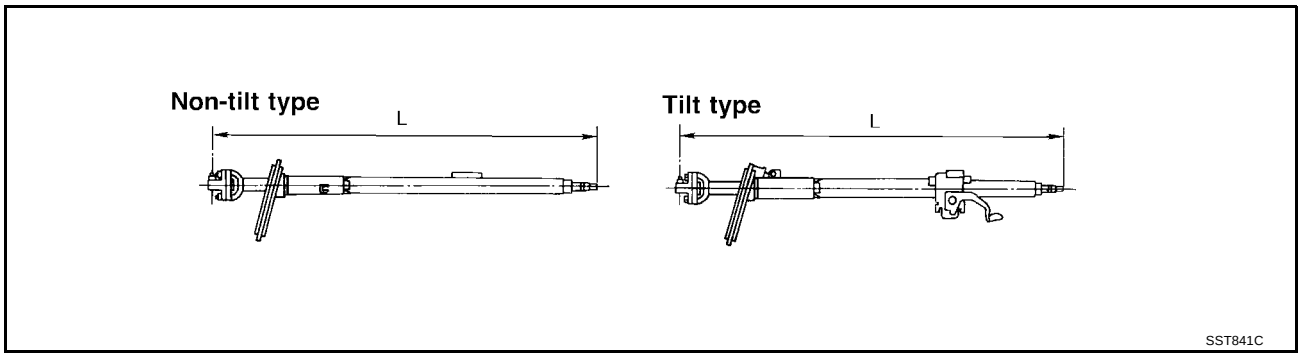
Steering wheel axial play	0 (0)
Steering wheel play	35 (1.38) or less

Steering Column

EGS000LQ

Unit: mm (in)

Dimension “L”	863.1 - 864.7 (33.980 - 34.043)



Power Steering Gear
MODEL: D600

EGS000LR

Steering wheel turning force (at 360° from neutral position and circumference of steering wheel)		39 N (4 kg, 9 lb) or less
Oil pump pressure		7,551 - 8,336 kPa (77 - 85 kg/cm^2 , 1,095 - 1,209 psi) at idle
Fluid capacity		Approximately 1,000 - 1,100 ℓ (35.2 - 38.7 Imp fl oz)
Normal operating temperature		60 - 80 °C (140 - 176 °F)
Steering gear turning torque	360° position from straight-ahead position	0.20 - 0.90 N·m (2.0 - 9.2 kg-cm, 1.8 - 8.0 in-lb)
	Straight-ahead position (higher than turning torque at 360°)	0.70 - 1.05 N·m (0.08 - 0.10 kg-m, 7.0 - 9.0 in-lb)
	Maximum turning torque	1.7 N·m (17.3 kg-cm, 15.0 in-lb)
Backlash at pitman arm top end (in straight- ahead position)		0 - 0.1 mm (0 - 0.004 in)
End play (at sector shaft end in neutral position)		0.1 mm (0.004 in) or less

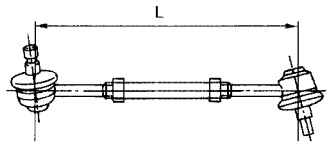
Steering Linkage

EGS000LS

Applied model		2WD, 4WD
Relay-rod swivel joint	Rotating torque	1.0 - 5.9 N·m (10 - 60 kg-cm, 8.7 - 52.1 in-lb)
	Axial end play	0 mm (0 in)

Applied model		2WD, 4WD
Tie-rod & relay-rod ball joint	Swinging force at cotter pin hole	15.7 - 147.1 N (1.6 - 15.0 kg, 3.5 - 33.1 lb)
	Rotating torque	0.5 - 4.9 N·m (5 - 50 kg-cm, 4.3 - 43.4 in-lb)
	Axial end play	0 mm (0 in)
Tie-rod standard length (L)	2WD and 4WD	297.6 mm (11.72 in)

2WD and 4WD



AST251