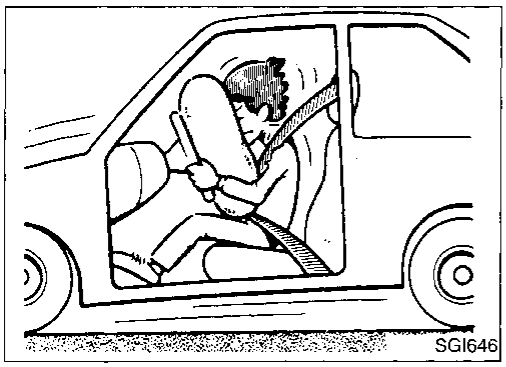
SECTION ST

CONTENTS



Precautions

SUPPLEMENTAL RESTRAINT SYSTEM SUPPLEMENTAL "AIR BAG"

The Supplemental Restraint System Supplemental "Air Bag", used along with seat belts, helps to reduce the risk of severity of injury to the driver in a frontal collision. The Supplemental Restraint System consists of a supplemental air bag module (located in the center of the steering wheel), sensors, a diagnosis (control) unit, warning lamp, wiring harness and spiral cable. Information necessary to service the system safely is included in the **BF section** of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could lead to personal injury or death in the event of a severe frontal collision, all maintenance must be performed by an authorized NISSAN dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system.**
- **All SRS electrical wiring harnesses and connectors are covered with yellow outer insulation. Do not use electrical test equipment on any circuit related to the SRS Supplemental "Air Bag".**

STEERING SYSTEM

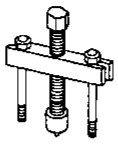
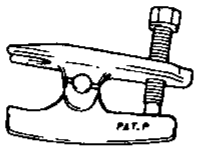
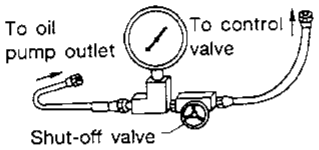
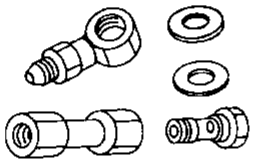
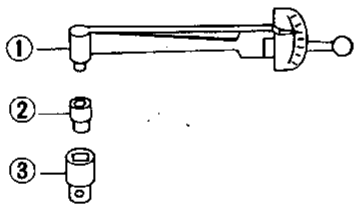
- **Before disassembly, thoroughly clean the outside of the unit.**
- **Disassembly should be done in a clean work area. It is important to prevent the internal parts from becoming contaminated by dirt or other foreign matter.**
- **When disassembling parts, be sure to place them in order in a parts rack so they can be reinstalled in their proper positions.**
- **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 ATF* 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.**

***: Type F Automatic Transmission Fluid.**

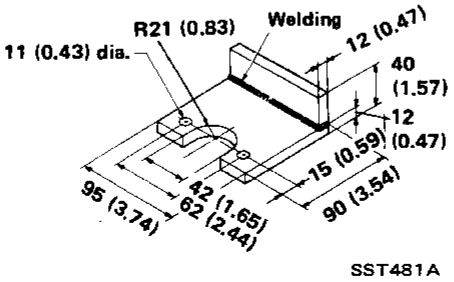
Special Service Tools

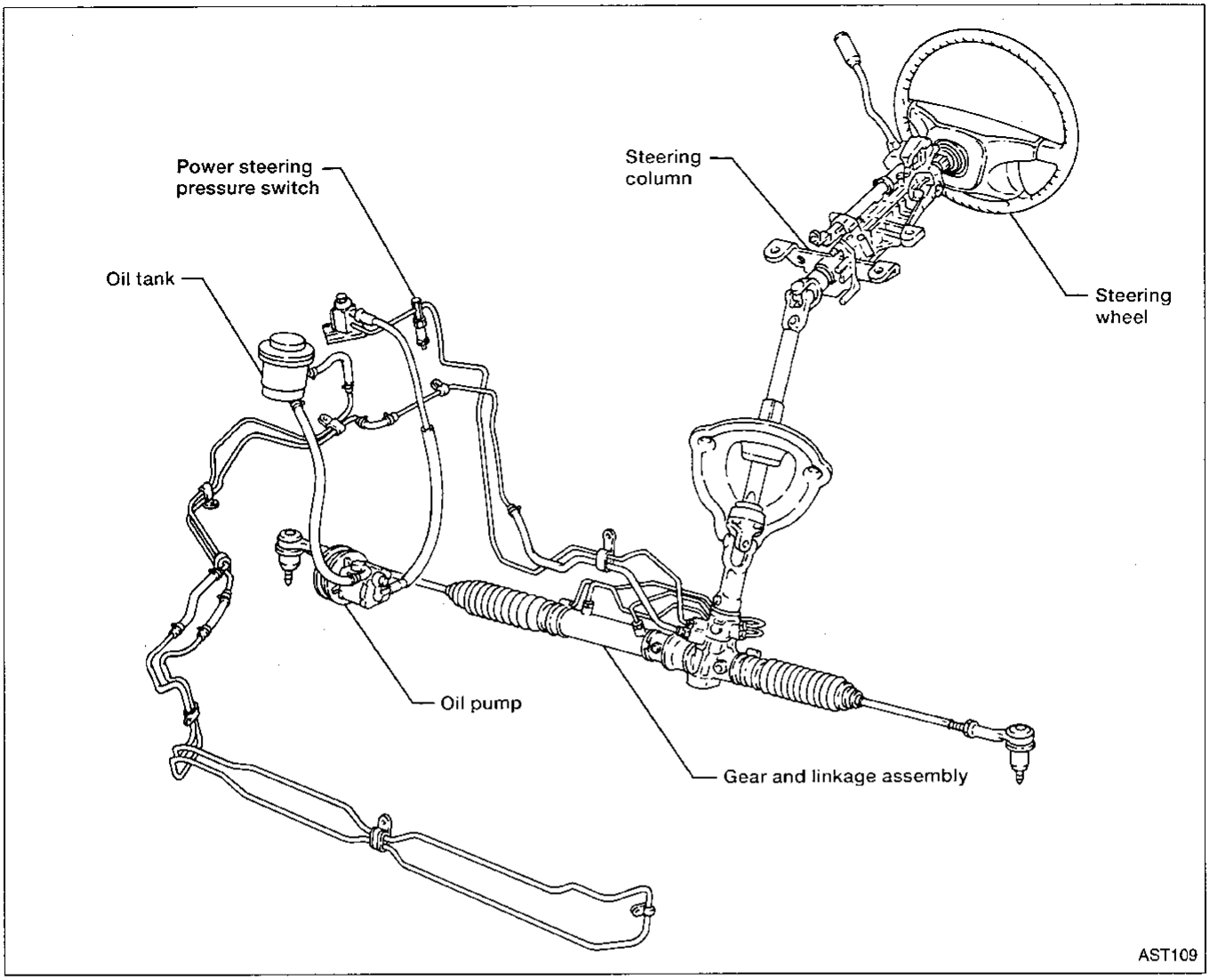
Tool number (Kent-Moore No.) Tool name	Description
KV48100700 (J26364) Torque adapter	 Measuring pinion rotating torque

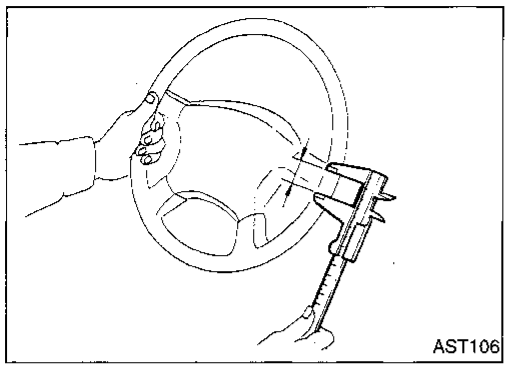
Special Service Tools (Cont'd)

Tool number (Kent-Moore No.) Tool name	Description	
ST27180001 (J25726-A) Steering wheel puller		Removing and installing steering wheel
HT72520000 (J25730-A) Ball joint remover		Removing tie-rod outer end and lower ball joint
ST27091000 (J26357) Pressure gauge		Measuring oil pressure
KV48102500 (—) Pressure gauge adapter		Measuring oil pressure
ST3127S000 ① GG91030000 (See J25765-A) Torque wrench ② HT62940000 (—) Socket adapter ③ HT62900000 (—) Socket adapter		Measuring turning torque

Commercial Service Tool

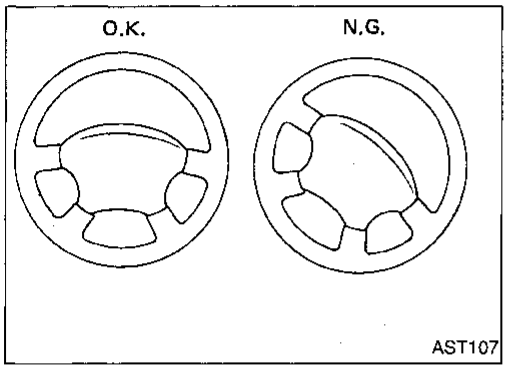
Tool name	Description	
Oil pump attachment	 Unit: mm (in)	Disassembling and assembling oil pump


Power steering
pressure switch
Steering
column
Oil tank
Steering
wheel
Oil pump
Gear and linkage assembly
AST109


AST106

Checking Steering Wheel Play

- With wheels in a straight-ahead position, check steering wheel play.
  Steering wheel play:
  35 mm (1.38 in) or less
- If it is not within specification, check the following for loose or worn components.
  (1) Steering gear assembly
  (2) Steering column
  (3) Front suspension and axle



AST107

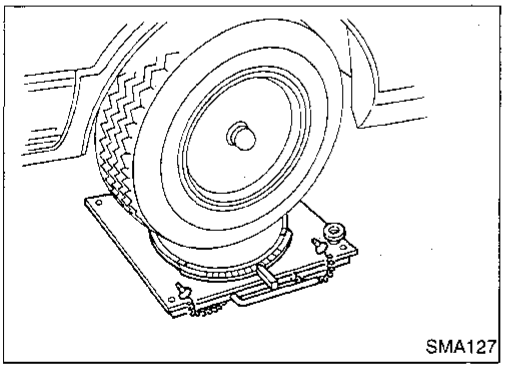
Checking Neutral Position on Steering Wheel

Pre-checking

- Make sure that wheel alignment is correct.
  Wheel alignment:
  Refer to FA section ("Front Wheel Alignment", "ON-VEHICLE SERVICE").

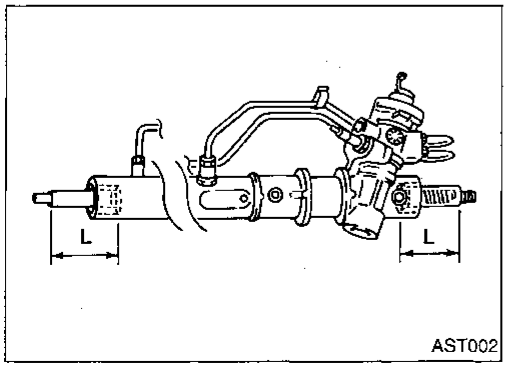
Checking

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 by aligning marks on steering wheel hub and steering column.
3. If the neutral position is still not correct, loosen tie-rod lock nut and move tie-rod in the opposite direction by the same amount on both left and right sides to compensate for error in the neutral position.


SMA127

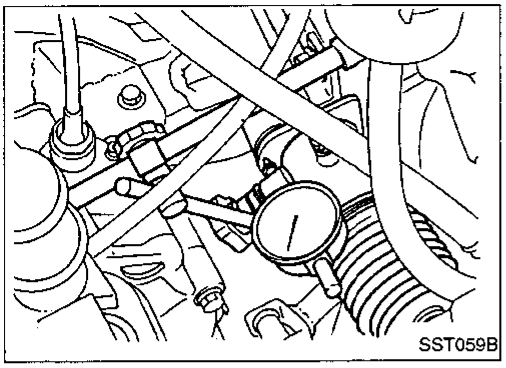
Front Wheel Turning Angle

1. Rotate steering wheel all the way right and left; measure turning angle.
   Front wheel turning angle:
   Refer to FA section ("Wheel Alignment", "SERVICE DATA & SPECIFICATIONS").



AST002

2. If it is not within specification, check rack stroke.
   Rack stroke "L":
   Refer to ST-30.

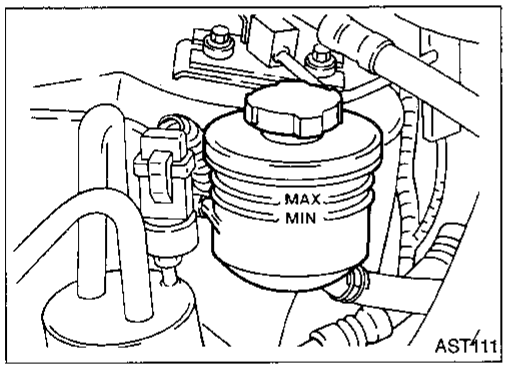


Checking Gear Housing Movement

1. Check the movement of steering gear housing during stationary steering on a dry paved surface.
- Apply a force of 49 N (5 kg, 11 lb) to steering wheel to check the gear housing movement.
  Turn off ignition key while checking.
  Movement of gear housing:
  ±2 mm (±0.08 in) or less
2. If movement exceeds the limit, replace mount insulator after confirming proper installation of gear housing clamps.

Checking and Adjusting Drive Belts

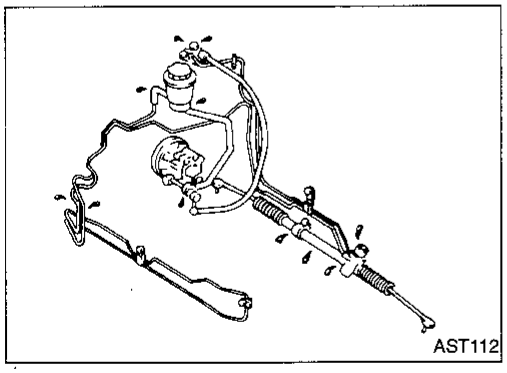
Refer to MA section ("Checking Drive Belts", "Engine Maintenance").



Checking Fluid Level

Check fluid level.
Fluid level should be checked at fluid temperatures of 0 to 30°C (32 to 86°F).

CAUTION:
- **Do not overfill.**
- **Recommended fluid is Type F Automatic Transmission Fluid.**



Checking Fluid Leakage

Check the lines for improper attachment and for leaks, cracks, damage, loose connections, chafing or deterioration.

1. Run engine at idle speed or 1,000 rpm.
   Make sure temperature of fluid in oil tank rises to 60 to 80°C (140 to 176°F).
2. Turn steering wheel right-to-left several times.
3. Hold steering wheel at each "lock" position for five seconds and carefully check for fluid leakage.

CAUTION:
Do not hold the steering wheel in a locked position for more than 15 seconds.

4. If fluid leakage at connectors is noticed, loosen flare nut and then retighten.

Do not overtighten connector as this can damage O-ring, washer and connector.

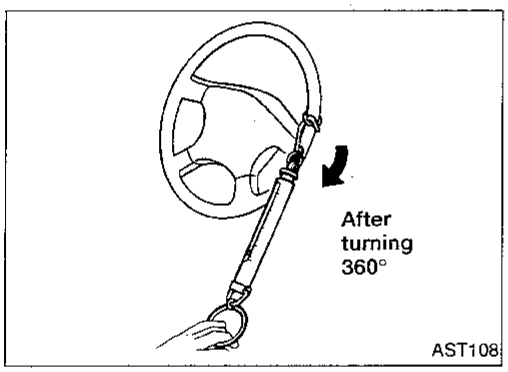
Bleeding Hydraulic System

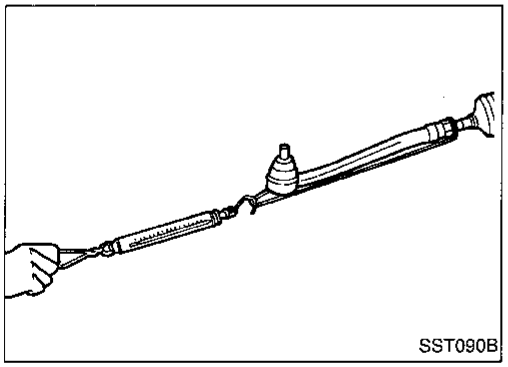
1. Raise front end of vehicle until wheels clear ground.
2. Add fluid into oil tank to specified level. Meanwhile, slowly turn steering wheel fully to right and left and lightly touch steering stoppers.
   Repeat steering wheel operation until fluid level no longer decreases.
3. Start engine.
   Repeat step 2 above.

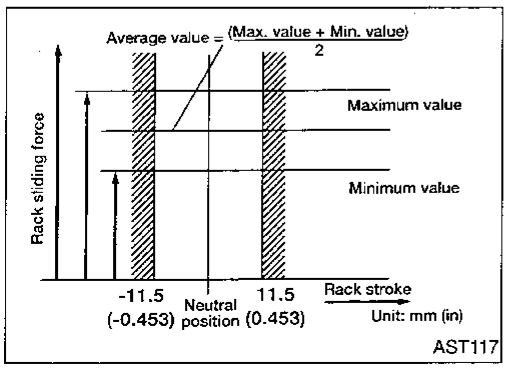
- Incomplete air bleeding will cause the following to occur. When this happens, bleed air again.

a. Generation of air bubbles in reservoir tank
b. Generation of clicking noise in oil pump
c. Excessive buzzing in oil pump

While the vehicle is stationary or while turning the steering wheel slowly, fluid noise may occur in the valve or oil pump. This noise is inherent in this steering system, and it will not affect performance or durability of the system.







Checking Steering Wheel Turning Force

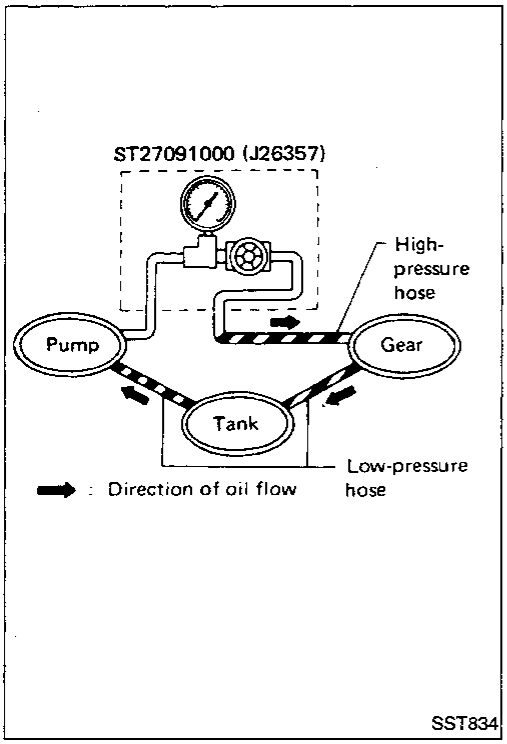
1. Park vehicle on a level, dry surface and set parking brake.
2. Start engine.
3. Bring power steering fluid up to adequate operating temperature. [Make sure temperature of fluid is approximately 60 to 80°C (140 to 176°F).]

Tires need to be inflated to normal pressure.

4. Check steering wheel turning force when steering wheel has been turned 360° from the neutral position.
   Steering wheel turning force:
   39 N (4 kg, 9 lb) or less
5. If steering wheel turning force is out of specifications, check rack sliding force to detect condition of steering gear assembly.

a. Disconnect steering column lower joint and knuckle arms from the gear.
b. Start and run engine at idle to make sure steering fluid has reached normal operating temperature.
c. While pulling tie-rod slowly in the ±11.5 mm (±0.453 in) range from the neutral position, make sure rack sliding force is within specification.
   Rack sliding force:
   108 - 284 N (11 - 29 kg, 24 - 64 lb)
d. Check sliding force outside above range.
   Maximum rack sliding force:
   Not more than 324 N (33 kg, 73 lb)

6. If rack sliding force is not within specification, replace steering gear assembly.



Checking Hydraulic System

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

1. Set Tool. Open shut-off valve. Then bleed air. Refer to ST-7.
2. Run engine.

Make sure temperature of fluid in tank rises to 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, oil pressure in oil pump will increase to relief pressure, resulting in an abnormal rise in oil temperature.

3. Check pressure with steering wheel fully turned to left and right positions with engine idling at 1,000 rpm.

CAUTION:

Do not hold the steering wheel in a locked position for more than 15 seconds.

Oil pump maximum standard pressure:
7,355 - 8,336 kPa
(75 - 85 kg/cm^2, 1,067 - 1,209 psi)

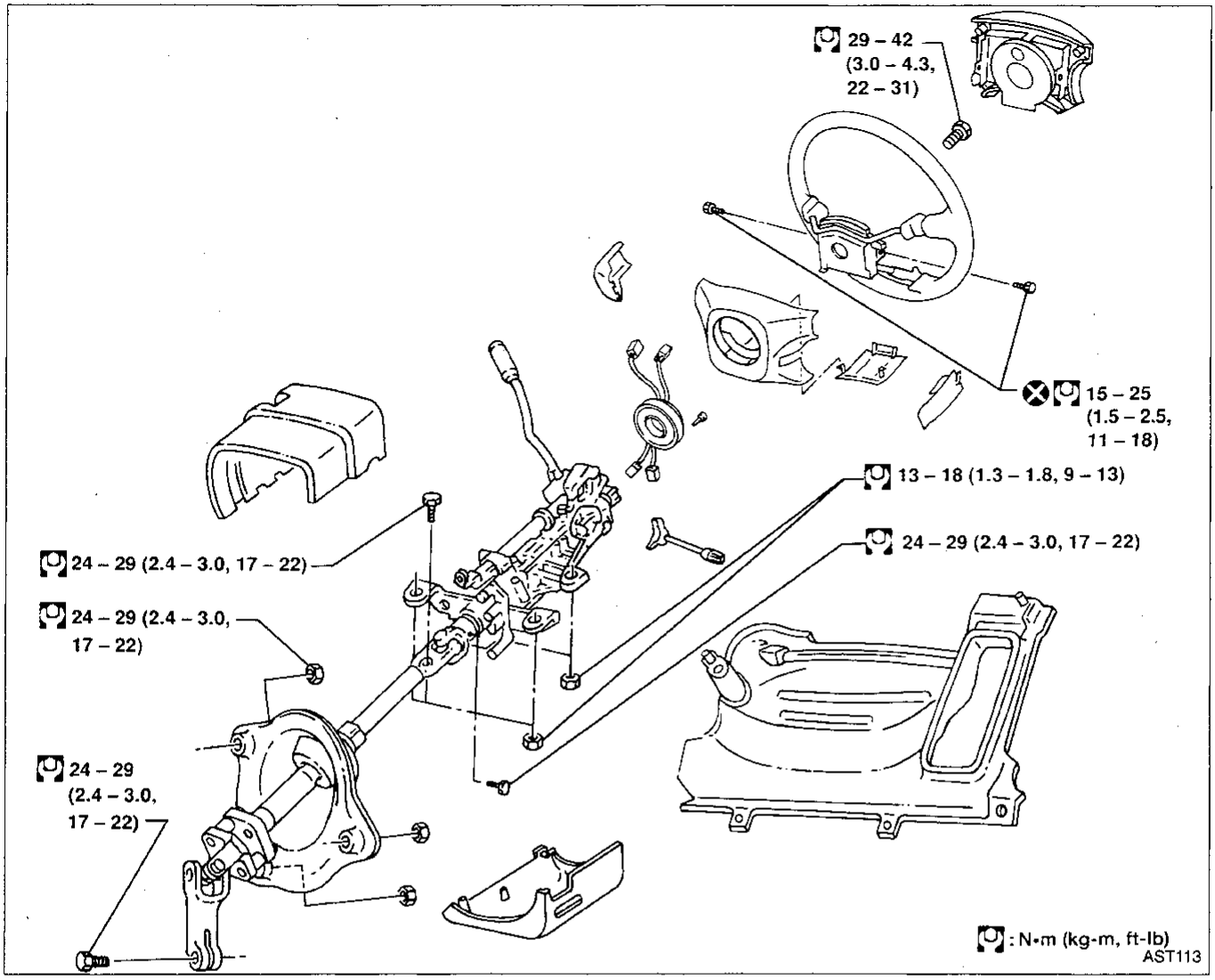
4. If oil pressure is below the standard pressure, slowly close shut-off valve and check pressure.

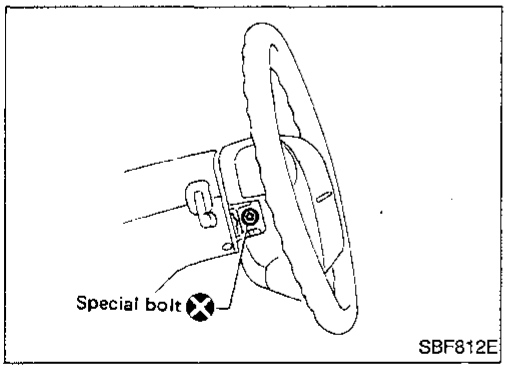
- When pressure reaches standard pressure, gear is damaged.
- When pressure remains below standard pressure, pump is damaged.

CAUTION:

Do not close shut-off valve for more than 15 seconds.

5. If oil pressure is higher than standard pressure, check oil pump flow control valve.
6. After checking hydraulic system, remove Tool and add fluid as necessary, then completely bleed air out of system. Refer to ST-7.





Steering Wheel

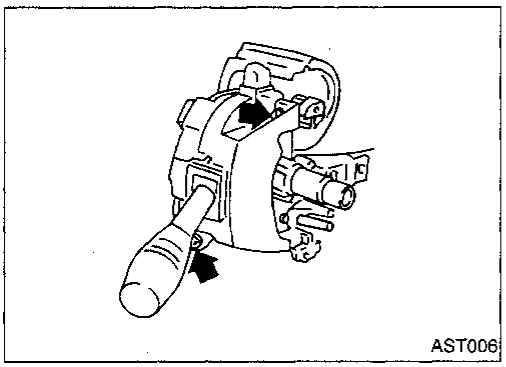
REMOVAL AND INSTALLATION

Refer to BF section ("SUPPLEMENTAL RESTRAINT SYSTEM").

Steering Column

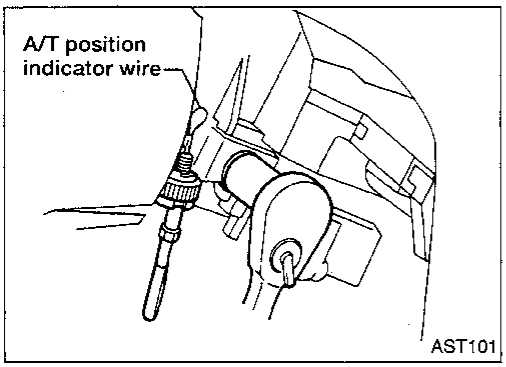
REMOVAL

CAUTION:
The rotation of the spiral cable (SRS Supplemental "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.
If steering column is to be removed, refer to BF section ("Removal — Supplemental Air Bag Module and Spiral Cable", "SUPPLEMENTAL RESTRAINT SYSTEM").



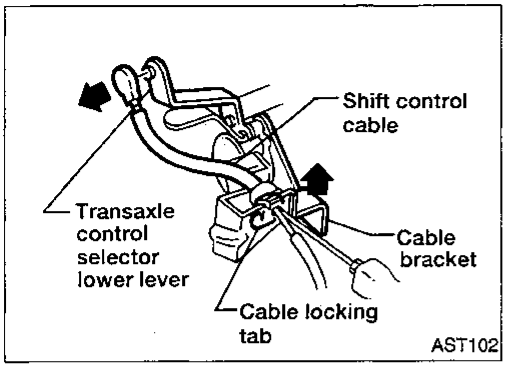
- **Ensure that vehicle front wheels are in the straight-ahead position.**

1. Rotate ignition lock cylinder to "ON" position. Using a 3.18 mm (1/8 in) drift, depress lock cylinder retaining pin through access hole in bottom of cylinder housing and remove lock cylinder.
   If it is difficult to remove lock cylinder, remove ignition switch from actuator housing.
2. Disconnect electrical connectors from ignition switch and shift lock solenoid.
3. Remove two multi-function switch retaining screws and remove multi-function switch.

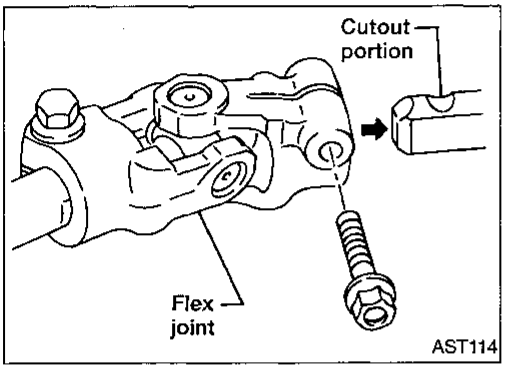


4. Move shift lever to 1st gear position. Remove A/T position indicator wire from shift control shaft.
   - Remove A/T position indicator wire retaining screw.
   - Disconnect the wire loop.

Steering Column (Cont'd)



5. Disengage cable locking tab and remove shift control cable from cable bracket and transaxle control selector lower lever.
6. Remove brake switch and ASCD cancel switch.
7. Remove four actuator housing fixing nuts.



INSTALLATION

- Ensure that vehicle front wheels are in straight-ahead position.
- When installing steering column, fingertighten all lower bracket and clamp retaining bolts; then tighten them securely. Do not apply undue stress to steering column.
- When attaching flex joint, be sure tightening bolt faces cutout portion.

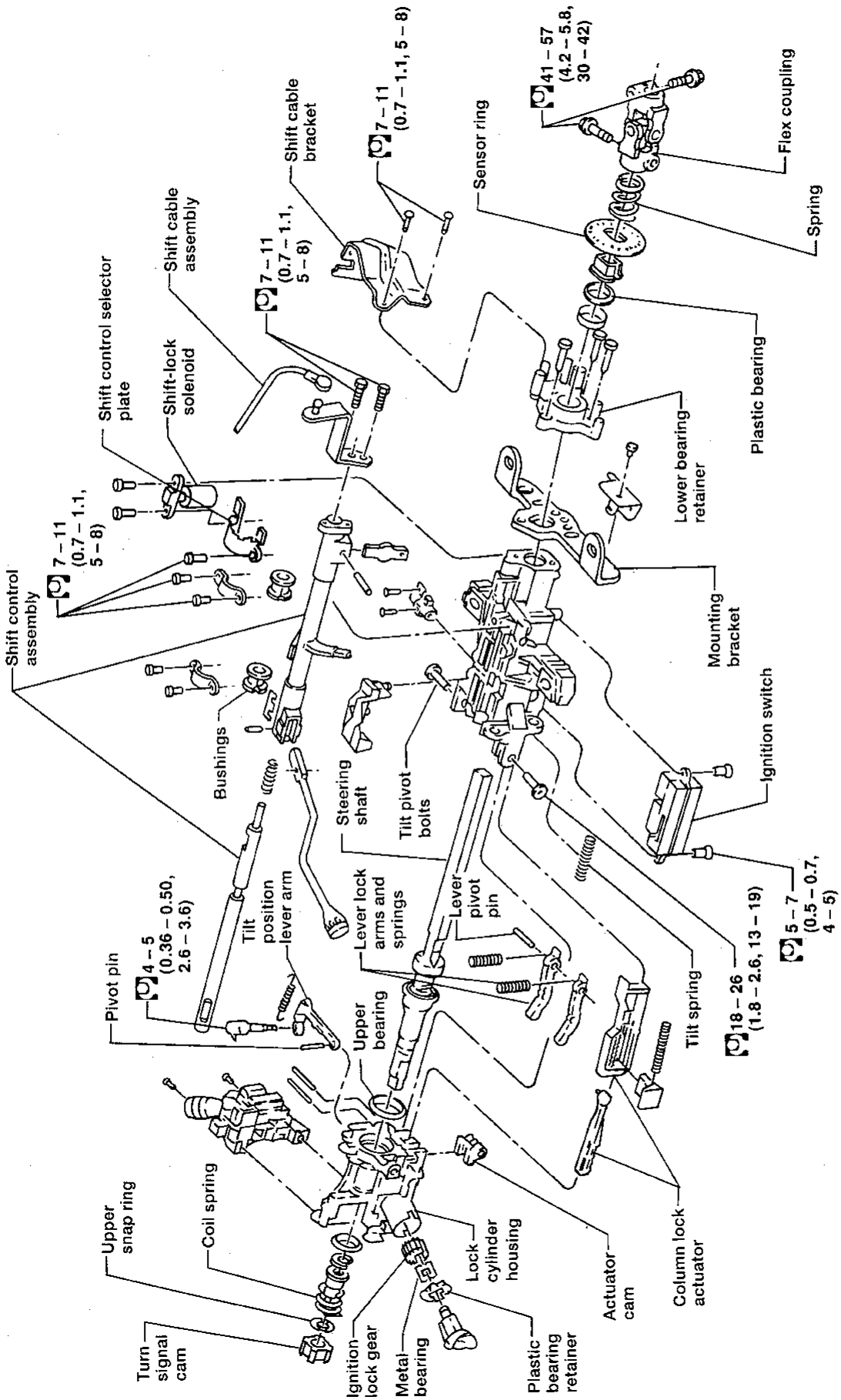
CAUTION:

To re-center spiral cable, if removed, rotate in direction of arrow ← until tight, then rotate in opposite direction 3 turns. Refer to BF section ("Installation — Supplemental Air Bag Module and Spiral Cable", "SUPPLEMENTAL RESTRAINT SYSTEM").

After installing steering column, turn steering wheel to make sure it moves smoothly and that the number of turns from the straight forward position to left and right locks are equal.

Be sure that the steering wheel is in a neutral position when driving straight ahead.

Description

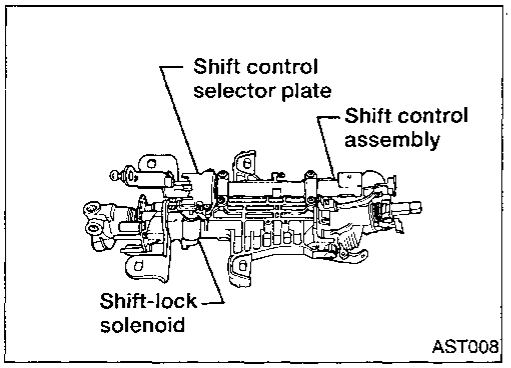


AST007

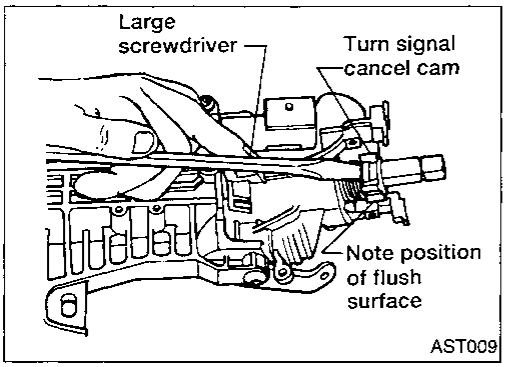
Disassembly

STEERING COLUMN

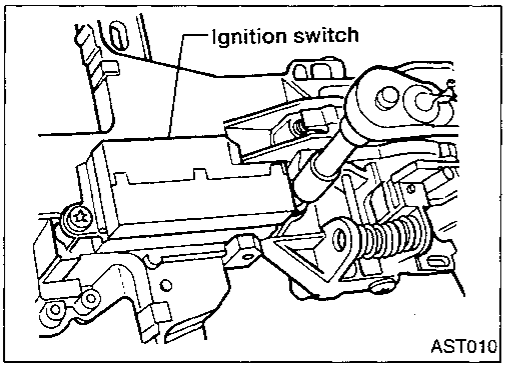
1. Remove flex coupling, sensor ring, spring and plastic bushing.



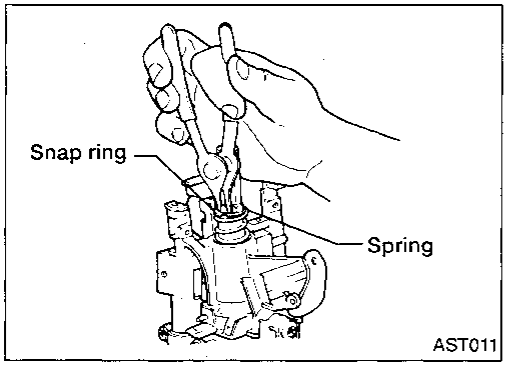
2. Remove shift control assembly, shift control selector plate, shift cable bracket and shift lock solenoid.



3. Remove turn signal cancel cam by pushing up with flat-blade screwdriver.



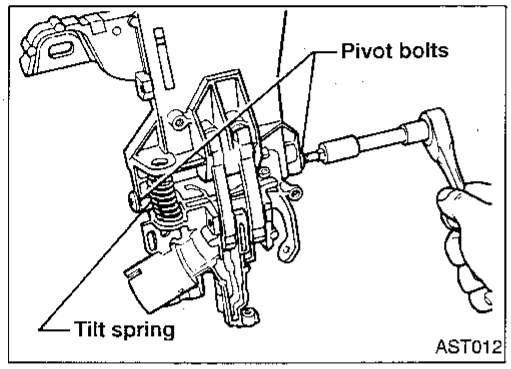
4. Remove ignition switch assembly.



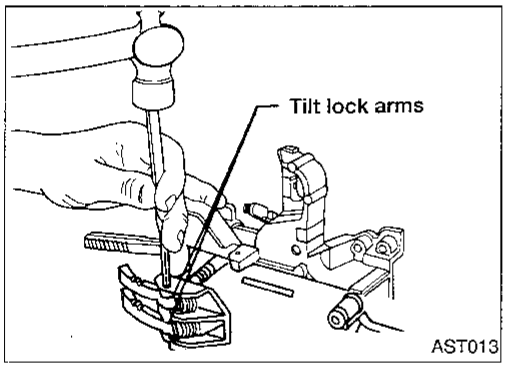
5. Remove upper snap ring and coil spring.
6. Remove plastic bearing retainer from lock cylinder bore.

Disassembly (Cont'd)

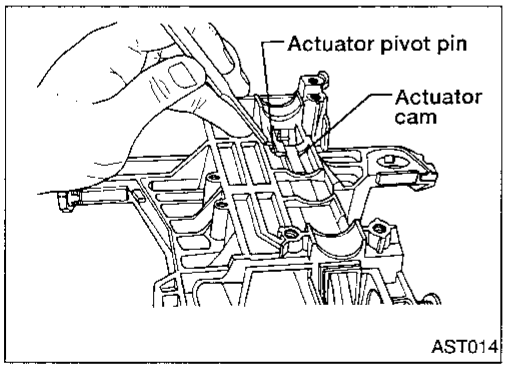
7. Remove metal bearing from lock cylinder bore.
8. Remove ignition lock gear.



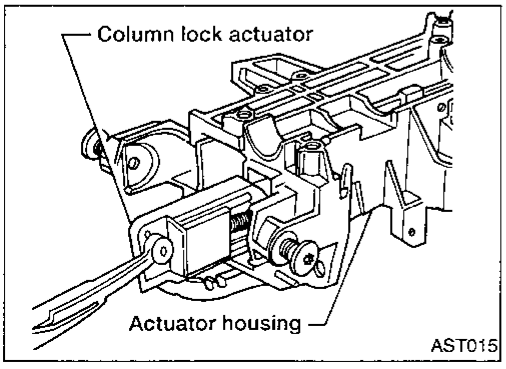
9. Remove two tilt pivot bolts. Use caution as tilt spring will release when bolts are removed. Remove lock cylinder housing.



10. Remove tilt position lever arm pivot pin using a drift. Remove lever lock arms and springs.



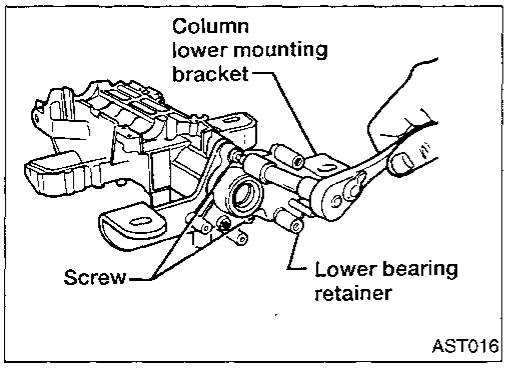
11. Using a drift tap lock actuator cam pivot pin loose. Remove with diagonal pliers.



12. Remove column lock actuator.

Disassembly (Cont'd)

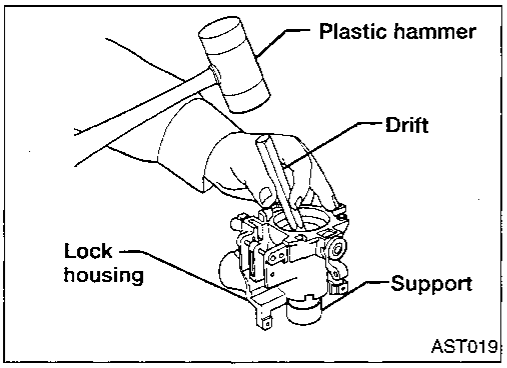
13. Remove lower bearing retainer and mounting bracket.
14. Remove bearing retainer clip from steering shaft.
15. Remove steering shaft from lock cylinder housing.



Shaft bearing, upper column

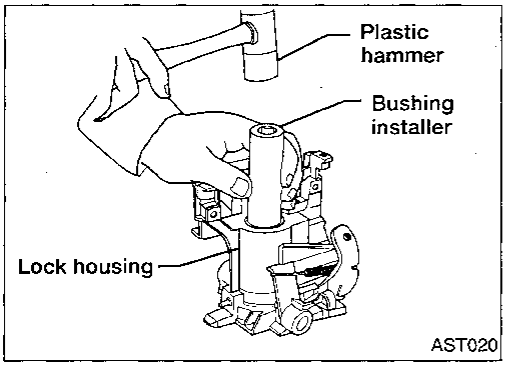
Removal

- Suitably support housing and tap out small bearing with an appropriate drift and a plastic hammer.



Installation

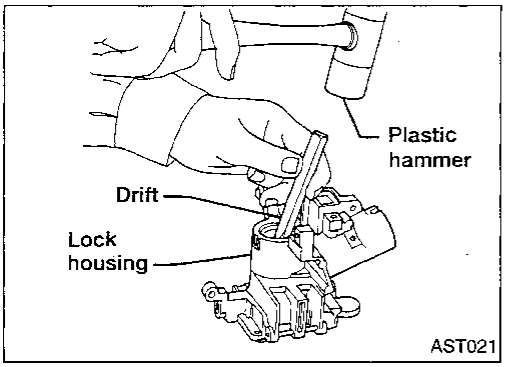
- Suitably support housing. Position small bearing so that the opening between races is "up". Tap into place with a plastic hammer and a bushing driver installer or socket the same size as outer race of bearing.



Shaft bearing, intermediate column

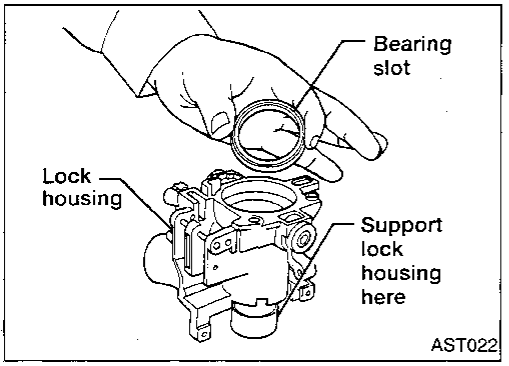
Removal

- Set housing flat on workbench and tap large bearing loose with suitable drift and a plastic hammer.

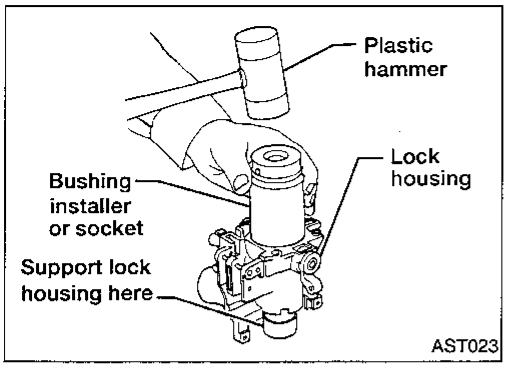


Installation

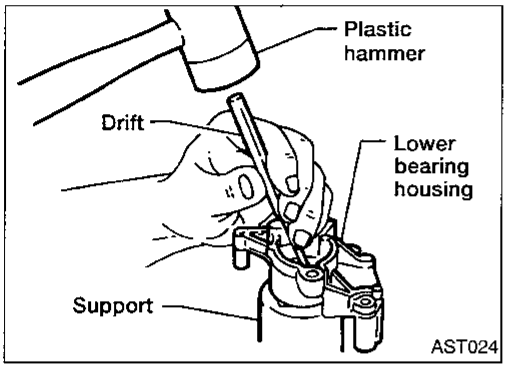
- Position bearing so that the opening between races will face up, or out from housing, when installed.



Disassembly (Cont'd)



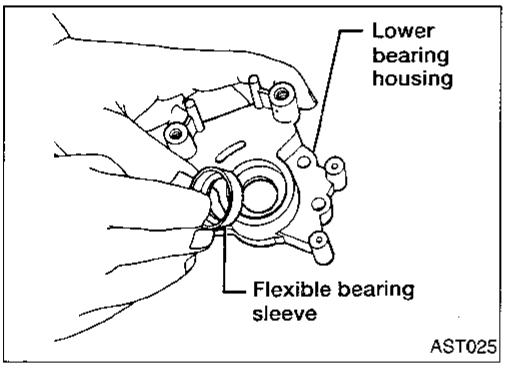
- Using a socket or bushing driver the same size as outer race of bearing, tap bearing into housing with a plastic hammer until seated.



Shaft bearing, lower column

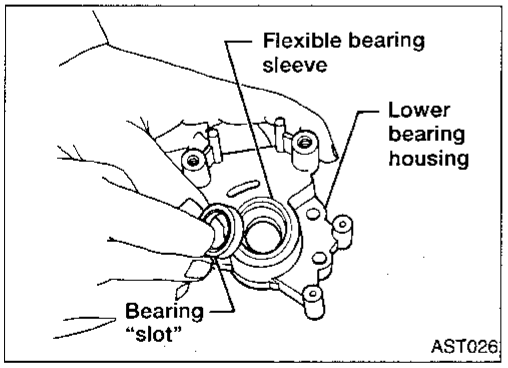
Removal

- Suitably support housing and tap out bearing with an appropriate drift and a plastic hammer.

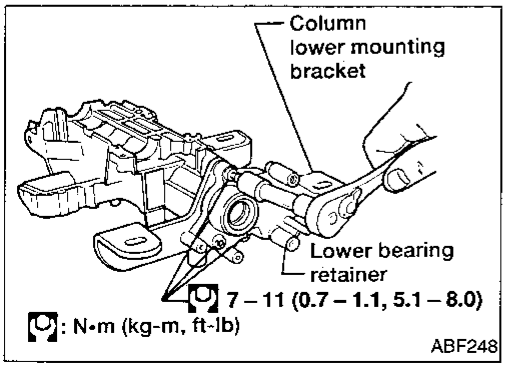


Installation

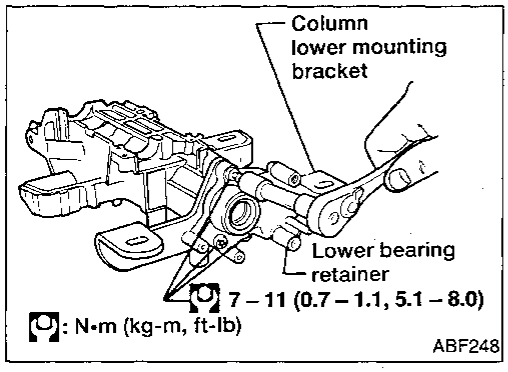
- Inspect flexible bearing sleeve. Replace if damaged.



- Position bearing sleeve in housing.

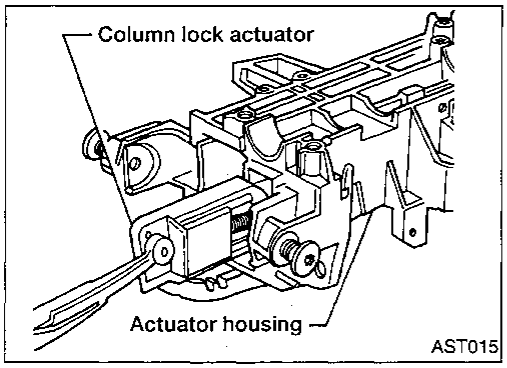


- Press the new bearing with thumb pressure until seated. Slot between inner and outer races should face down when installed in the vehicle.
- Install bearing housing on steering column.

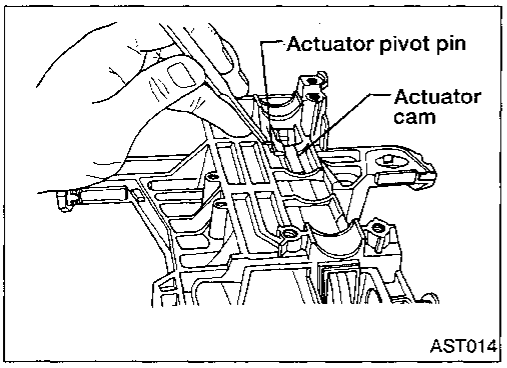


Assembly

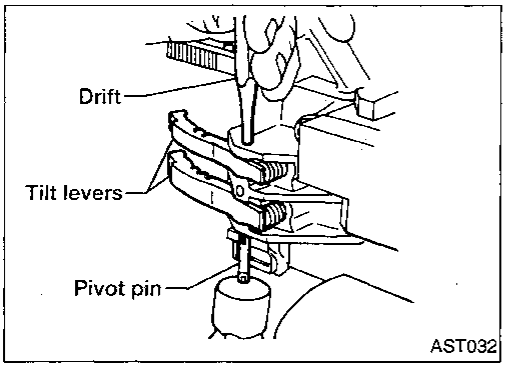
1. Install steering shaft into lock cylinder housing and install bearing retainer clip on steering shaft.
2. Install lower bearing retainer and column mounting bracket.



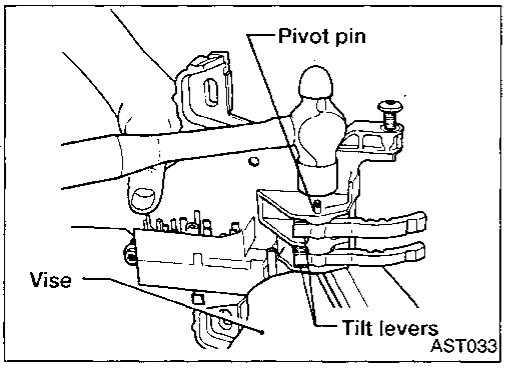
3. Position lock actuator assembly in housing.



4. Position actuator cam in lock housing and install cam pivot pin with small hammer. Tap pin in until flush with housing.

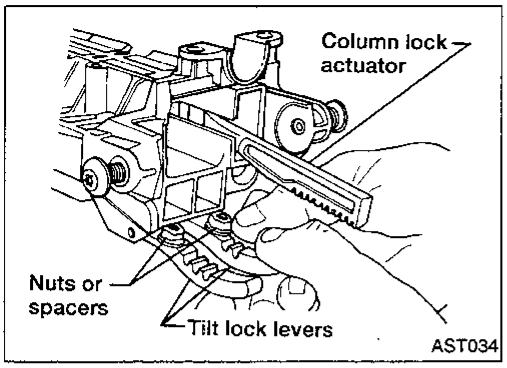


5. Install one tilt lever spring and arm into housing using a drift to hold in place.
6. Install the other lever spring and arm with pivot pin. Tap pin into place while driving out drift.

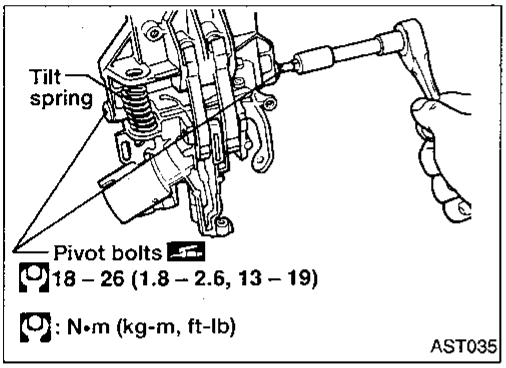


7. Support housing in a vise and drive pin flush with housing.

Assembly (Cont'd)

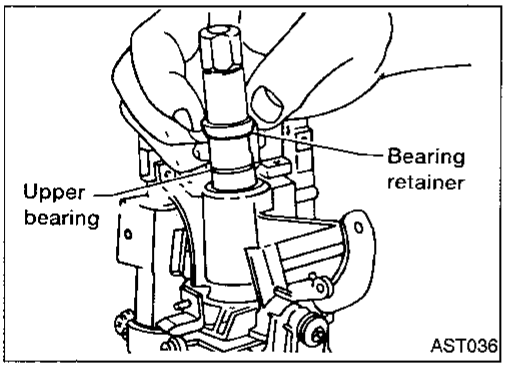


8. Place two nuts or spacers to hold tilt lock arms away from housing.

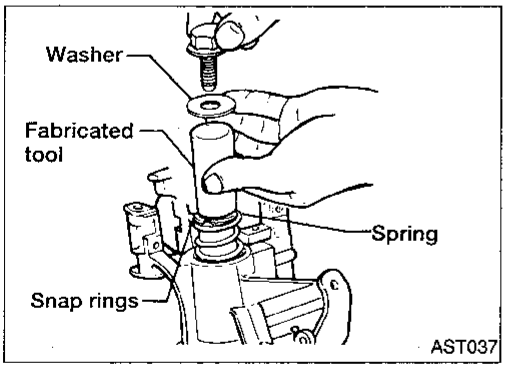


9. Position tilt spring on lock housing. With assistant, install lock housing and pivot bolts.

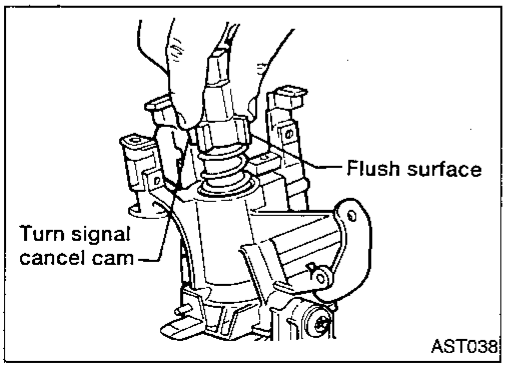
Lubricate pivot bolts with multi-purpose grease before installing.



10. Install bearing retainer over steering shaft upper bearing.

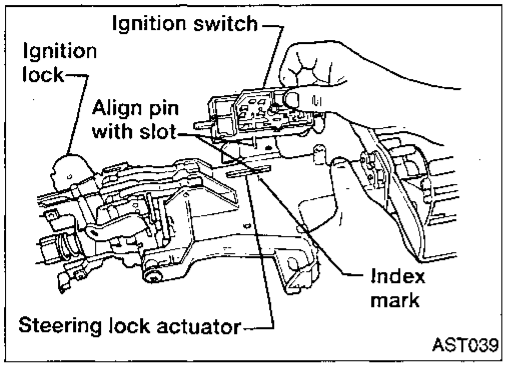


11. Install spring and new snap ring on top side of spring using a suitable tool.

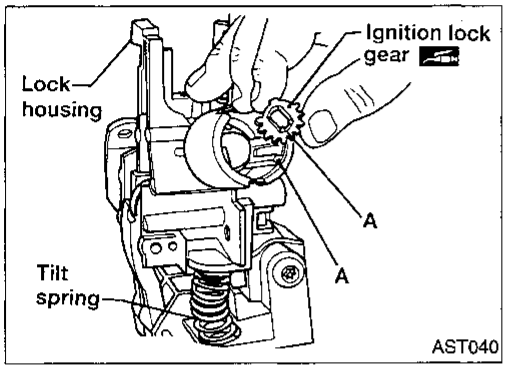


12. Install turn signal cancel cam, flush surface "up".

Assembly (Cont'd)

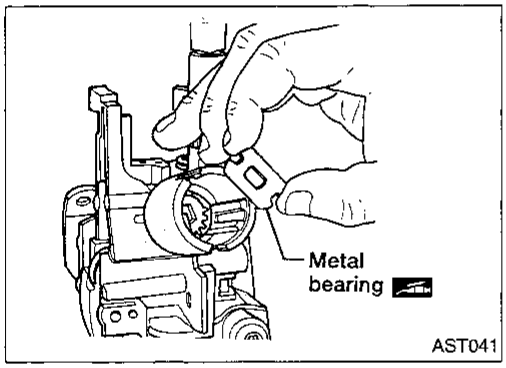


13. Install ignition switch. Align pin from switch with slot in lock/column assembly.

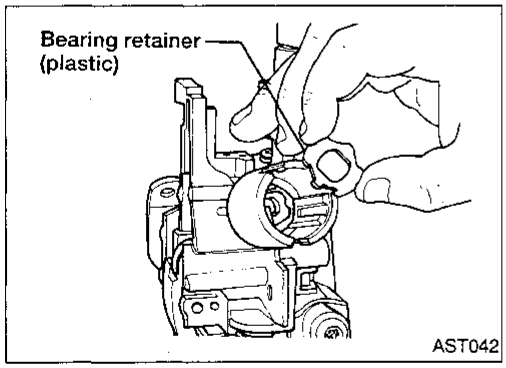


14. Install ignition lock gear. Coat gear with multi-purpose grease.

Align points A with ignition switch in "ON" position.

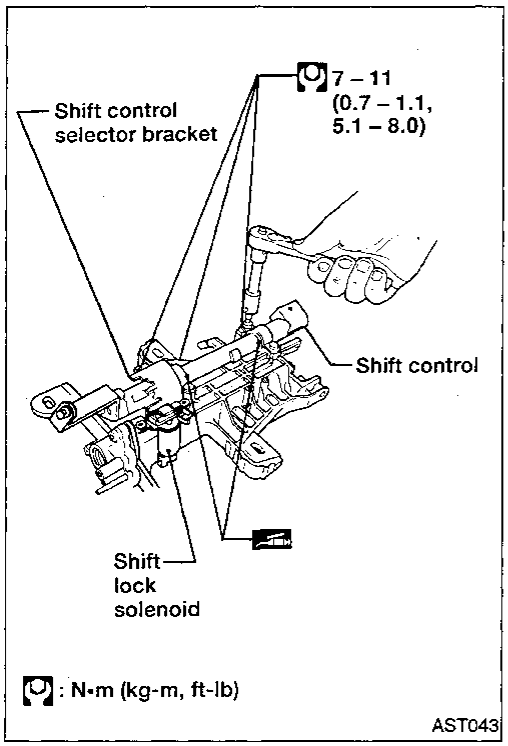


15. Install metal bearing. Lubricate with multi-purpose grease.

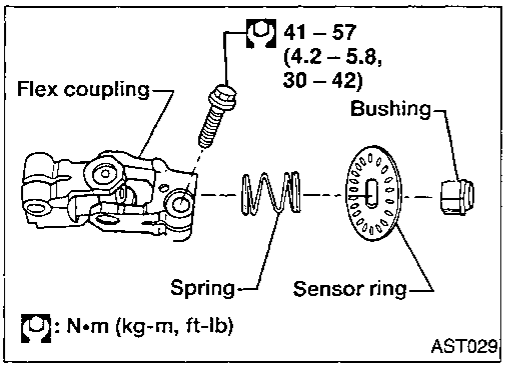


16. Install plastic bearing retainer.

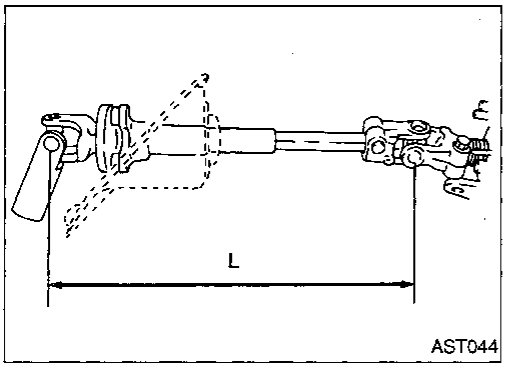
Assembly (Cont'd)



17. Install shift control tube assembly. Coat bushings with multi-purpose grease.



18. Install sensor ring, bushing, spring and flex coupling to steering shaft.



Inspection

- When steering wheel can not be rotated smoothly, check the steering column for the following and replace damaged parts:

a. Check column bearings for damage or unevenness. Lubricate with recommended multi-purpose grease or replace steering column as an assembly, if necessary.

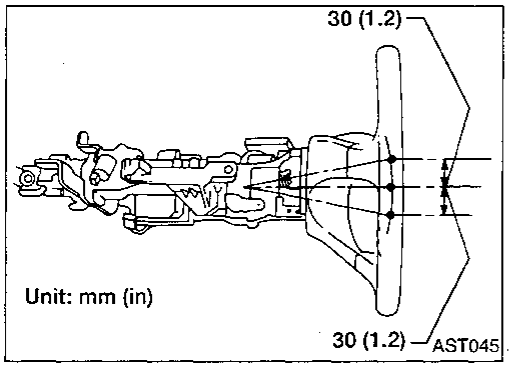
b. Check lower joint assembly for deformation or breakage. Replace if necessary.

- When the vehicle is involved in a light collision, check column length "L". If it is not within specifications, replace lower joint assembly.

Column length "L":
334 - 341 mm (13.15 - 13.43 in)

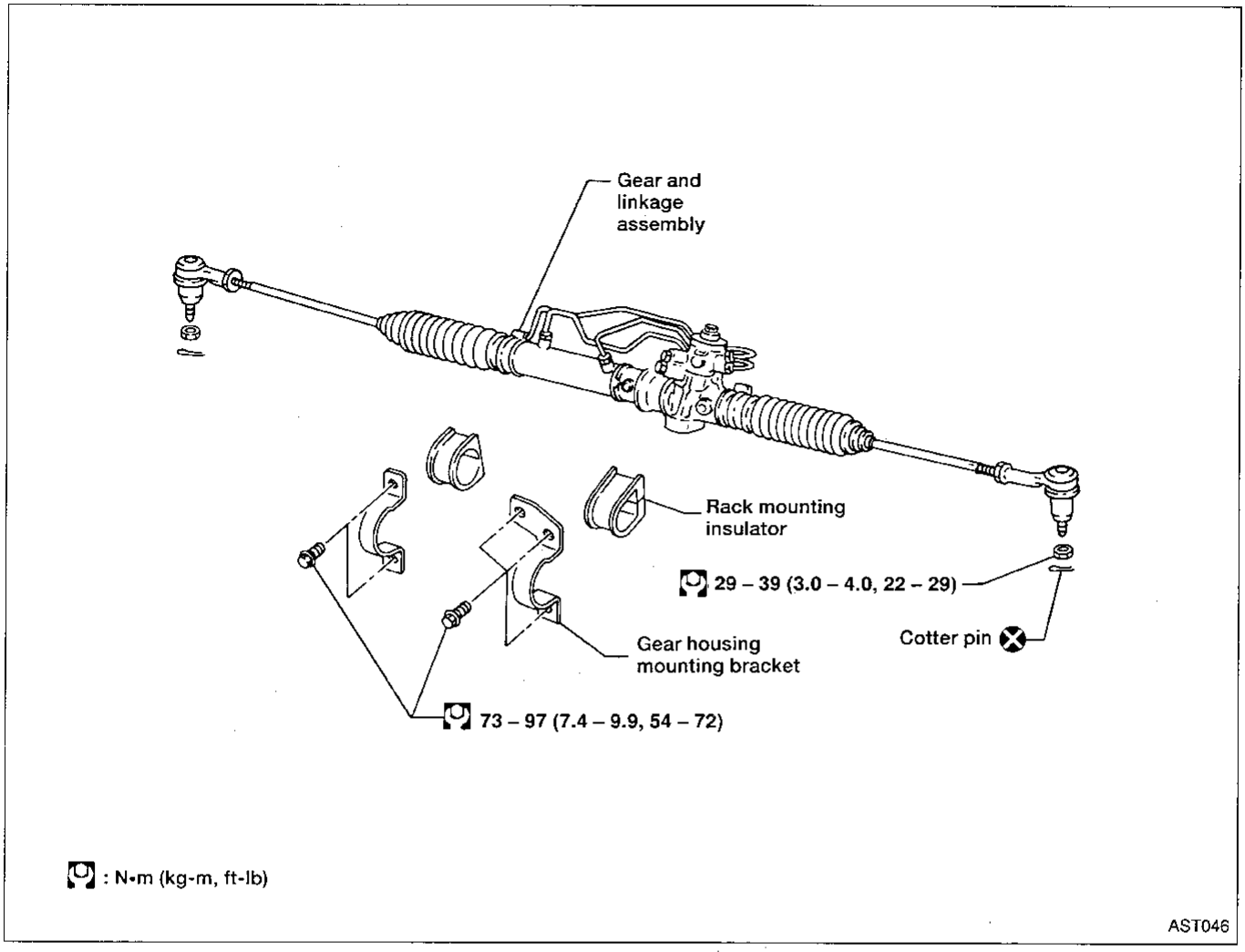
Inspection (Cont'd)

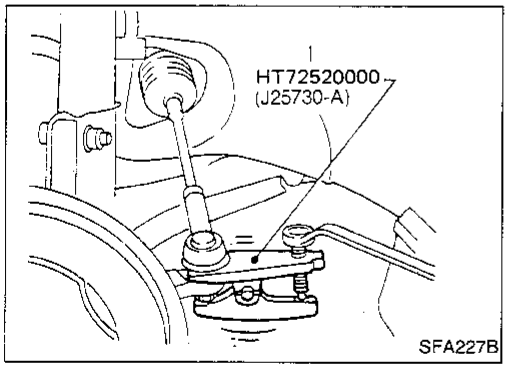
Tilt mechanism



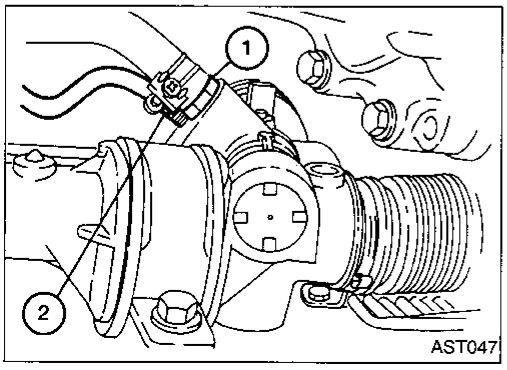
- After installing steering column, check tilt mechanism operation.

Removal and Installation



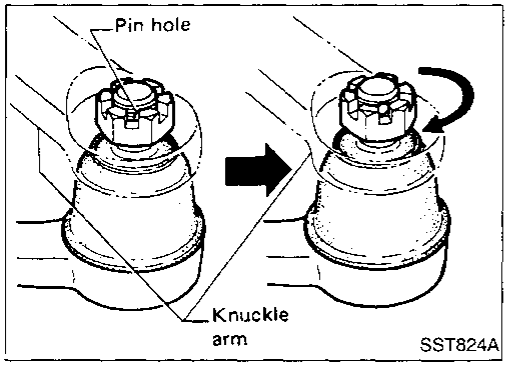


- Detach tie-rod outer sockets from knuckle arms with Tool.



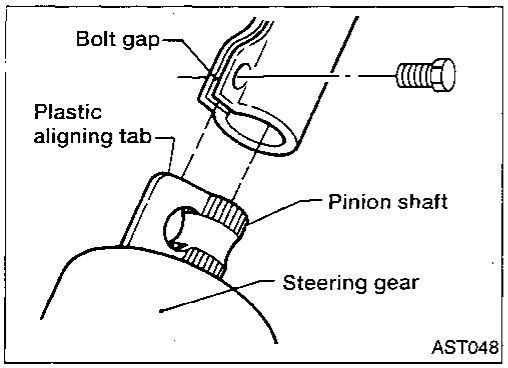
- Install pipe connector.
- Observe specified tightening torque when tightening high-pressure and low-pressure pipe connectors. Excessive tightening will damage threads of connector or O-ring.
  Low-pressure side "①":
  : 27 - 39 N·m (2.8 - 4.0 kg-m, 20 - 29 ft-lb)
  High-pressure side "②":
  : 15 - 25 N·m (1.5 - 2.5 kg-m, 11 - 18 ft-lb)
- The O-ring in low-pressure pipe connector is larger than that in high-pressure connector. Take care to install the proper O-ring.

Removal and Installation (Cont'd)



- Initially tighten nut on tie-rod outer socket and knuckle arm to 29 to 39 N·m (3 to 4 kg-m, 22 to 29 ft-lb). Then tighten further to align nut groove with first pin hole so that cotter pin can be installed.

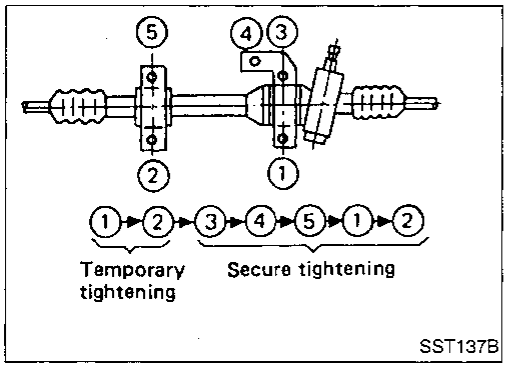
CAUTION:
Tightening torque must not exceed 49 N·m (5 kg-m, 36 ft-lb).



CAUTION:
The rotation of the spiral cable (SRS Supplemental "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.

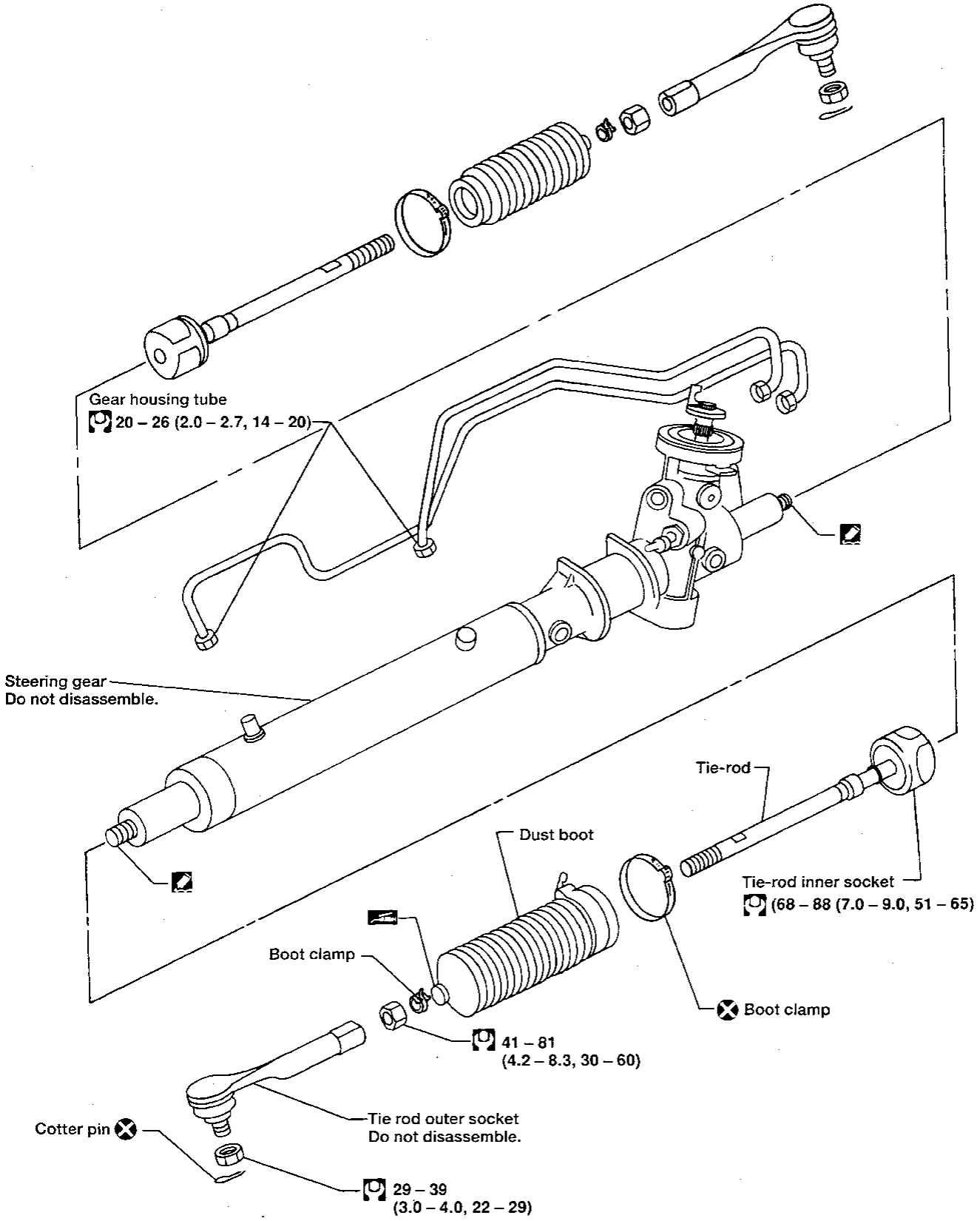
- Before removing lower joint from gear, set gear in neutral (wheels in straight-ahead position).
- To install, set left and right dust boots to equal deflection. Raise steering gear and linkage assembly so plastic aligning tab on pinion shaft enters bolt gap on lower joint assembly.

Service parts may not have plastic aligning tab.



- Tighten gear housing mounting bracket bolts in the order shown.

Description



: N•m (kg-m, ft-lb)

: Always replace after every disassembly.

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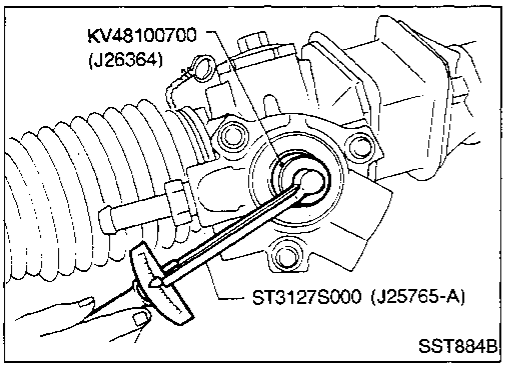
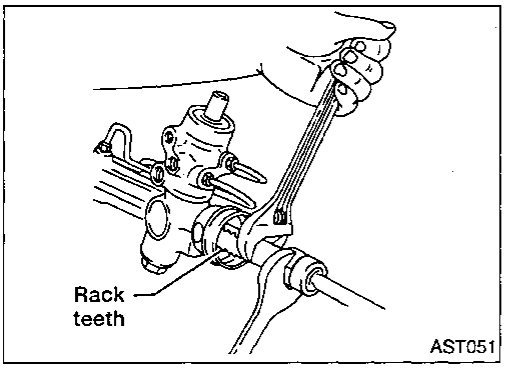


Disassembly

1. Prior to disassembling, measure pinion rotating torque. Record the pinion rotating torque as a reference.

- **Before measuring, disconnect gear housing tube and drain fluid.**
- **Use soft jaws when holding steering gear housing. Handle gear housing carefully, as it is made of aluminum. Do not grip cylinder in a vise.**



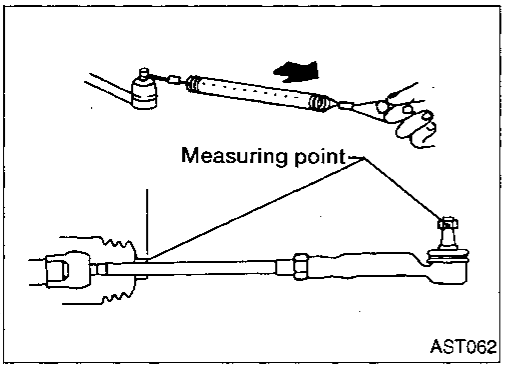
2. Remove tie-rod outer sockets and boots.
3. Remove tie-rod inner sockets.

Inspection

Thoroughly clean all parts in cleaning solvent or Type F Automatic Transmission Fluid, and blow dry with compressed air, if available.

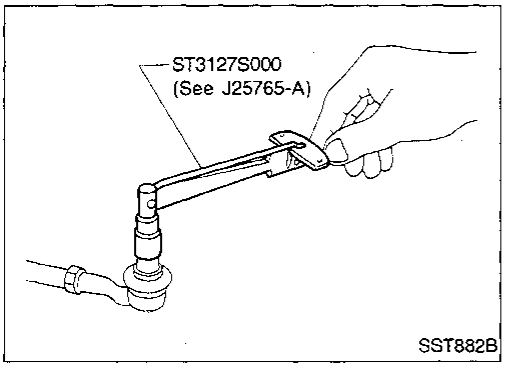
BOOT

Check condition of boot. If cracked excessively, replace it.

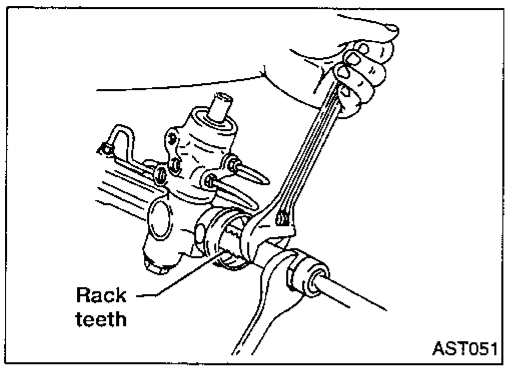


TIE-ROD OUTER AND INNER SOCKET

- Check ball joint for swinging force.
  Tie-rod outer ball joint:
  At cotter pin hole
  2.0 - 137.3 N
  (0.2 - 14 kg, 0.4 - 30.9 lb)
  Tie-rod inner ball joint:
  0.20 - 19.61 N
  (0.02 - 2 kg, 0.04 - 4.41 lb)



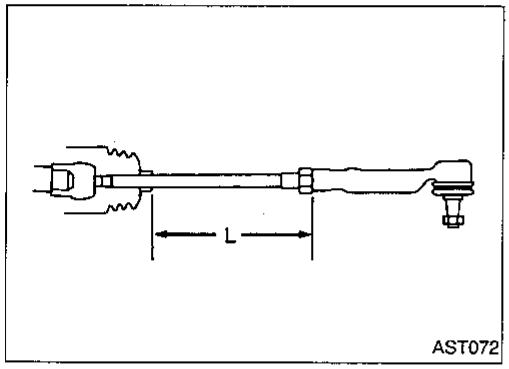
- Check ball joint for rotating torque.
  Tie-rod outer ball joint:
  0.15 - 6.22 N·m
  (1.5 - 63.4 kg-cm, 1.3 - 55.0 in-lb)
- **Check condition of dust cover. If cracked excessively, replace outer tie-rod.**



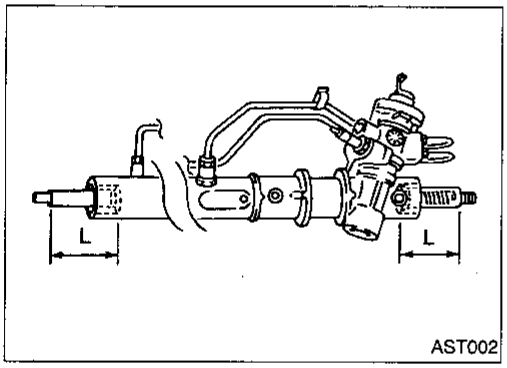
Assembly

1. Install tie-rod inner sockets and outer sockets.

Apply locking sealant to inner socket threads.



2. Tighten outer socket lock nut.
   Tie-rod length "L":
   Refer to ST-29.

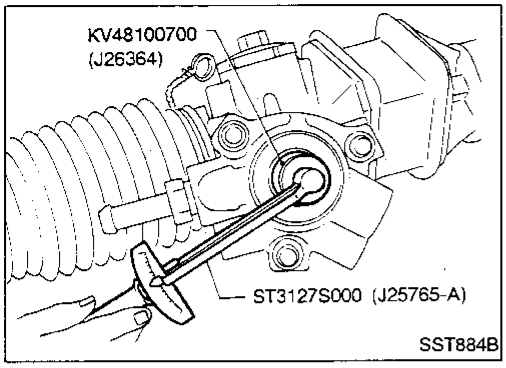


3. Measure rack stroke.
   Rack stroke "L":
   Refer to ST-30.

4. Install boot clamps.

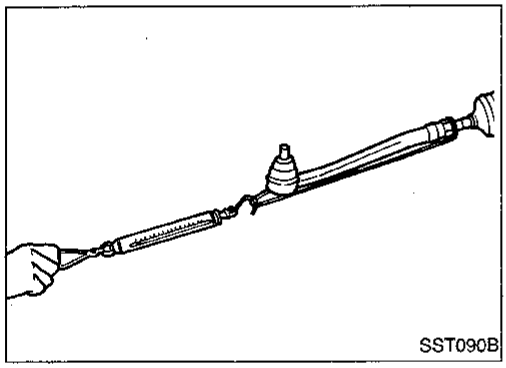
- Install boot clamps so they are behind the gear housing when it is attached to the vehicle. (This will prevent interference with other parts.)

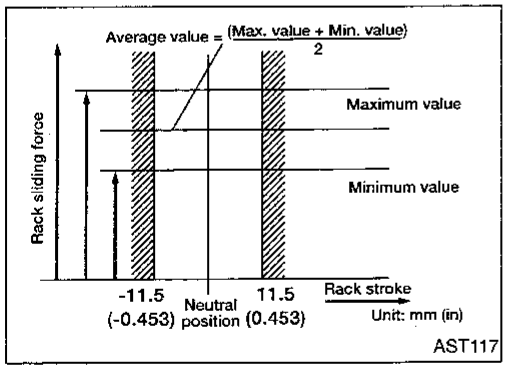
Assembly (Cont'd)



5. Measure pinion rotating torque.
   Within ±100° from the neutral position:
   Average rotating torque
   0.5 - 1.4 N·m (5 - 14 kg-cm, 4.3 - 12.2 in-lb)
   Maximum torque deviation
   0.4 N·m (4 kg-cm, 3.5 in-lb)
   Except for above measuring range:
   Maximum rotating torque
   1.9 N·m (19 kg-cm, 16 in-lb)
   Maximum force deviation
   0.6 N·m (6 kg-cm, 5.2 in-lb)

- **If pinion rotating torque is not within specifications, replace steering gear assembly.**

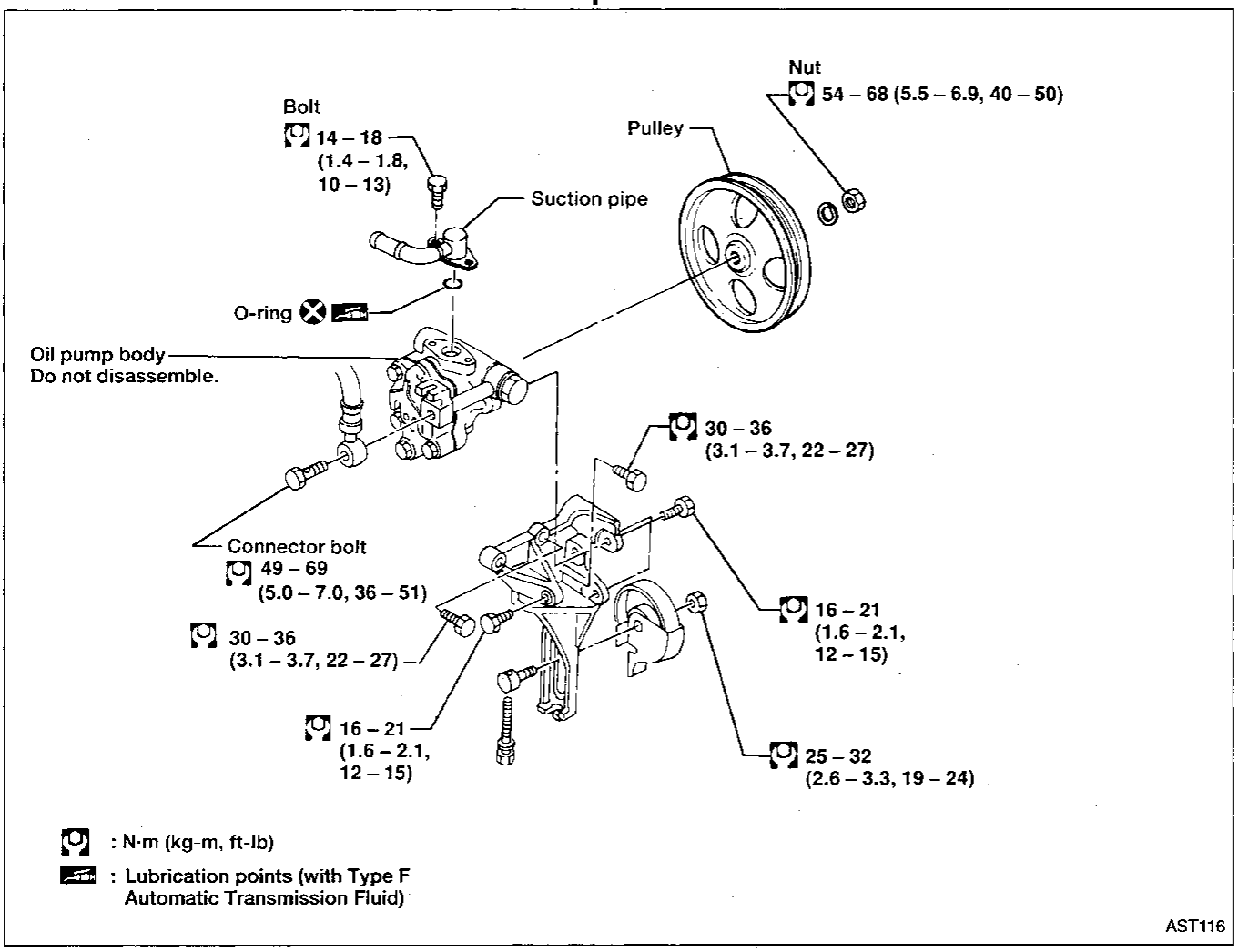


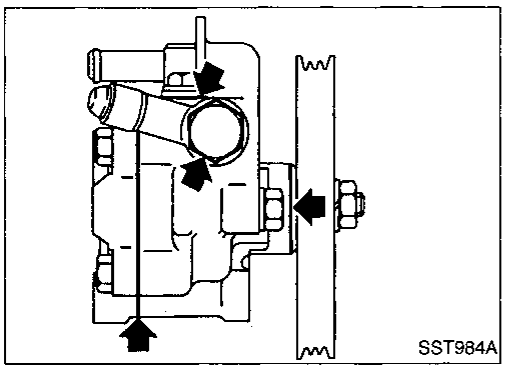


6. Check rack sliding force on vehicle as follows:
a. Install steering gear onto vehicle, but do not connect tie-rod to knuckle arm.
b. Connect all piping and fill with steering fluid.
c. Start engine and bleed air completely.
d. Disconnect steering column lower joint from the gear.
e. Keep engine at idle and make sure steering fluid has reached normal operating temperature.
f. While pulling tie-rod slowly in the ±11.5 mm (±0.453 in) range from the neutral position, make sure rack sliding force is within specification.
   Rack sliding force:
   108-284 N (11 - 29 kg, 24 - 64 lb)
g. Check sliding force outside above range.
   Maximum rack sliding force:
   Not more than 324 N (33 kg, 73 lb)

- **If rack sliding force is not within specification, gear assembly needs to be replaced.**

Description





Inspection

Check the following:

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

General Specifications

Applied model	All
Steering model	Power steering (TRW)
Steering gear type	PR28T
Turns of steering wheel (Lock to lock)	3.0
Steering column type	Collapsible, tilt

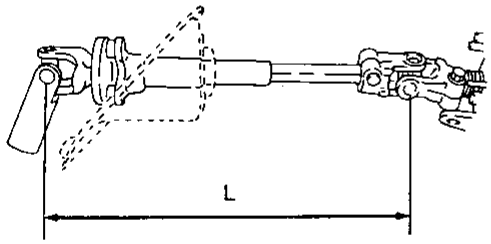
Inspection and Adjustment

GENERAL

Steering wheel axial play mm (in)	Up: 0 (0), Down: 10 (0.39) or less
Steering wheel play mm (in)	35 (1.38) or less
Movement of gear housing mm (in)	±2 (±0.08) or less

STEERING COLUMN

Steering column length "L" mm (in)	334 - 341 (13.15 - 13.43)



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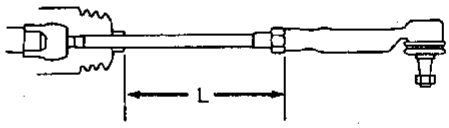
STEERING GEAR AND LINKAGE

Steering gear type		PR28T
Tie-rod outer ball joint		
Swinging force at cotter pin hole	N (kg, lb)	2.0 - 137.3 (0.2 - 14, 0.4 - 30.9)
Rotating torque	N·m (kg-cm, in-lb)	0.15 - 6.22 (1.5 - 63.4, 1.3 - 55.0)
Tie-rod inner ball joint		
Swinging force*	N (kg, lb)	0.20 - 19.61 (0.02 - 2, 0.04 - 4.41)
Axial end play	mm (in)	0 (0)
Tie-rod standard length "L"	mm (in)	205.1 (8.07)

*: Measuring point at outside end of boot

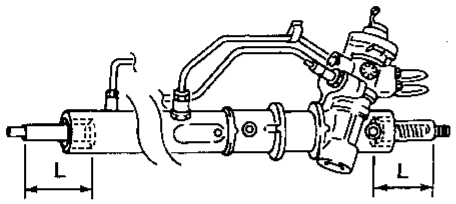


AST072

Inspection and Adjustment (Cont'd)

STEERING GEAR AND LINKAGE (Cont'd)

Steering gear type	PR28T
Rack stroke "L" mm (in)	72 (2.83)



AST002

Pinion gear preload without gear oil N·m (kg-cm, in-lb)	
Within ±100° from the neutral position	
Average rotating torque	0.5 - 1.4 (5 - 14, 4.3 - 12.2)
Maximum torque deviation	0.4 (4, 3.5)
Except above range	
Maximum rotating torque	1.9 (19, 16)
Maximum torque deviation	0.6 (6, 5.2)

POWER STEERING

Rack sliding force N (kg, lb)	
Under normal operating oil pressure	
Range within ±11.5 mm (±0.453 in) from the neutral position	108-284 (11 - 29, 24 - 64)
Except above range	Not more than 324 (33, 73)
Steering wheel turning force (Measured at one full turn from the neutral position) N (kg, lb)	39 (4, 9) or less
Fluid capacity (Approximate) ℓ (US qt, Imp qt)	1.1 (1-1/8, 1)
Oil pump maximum pressure kPa (kg/cm^2, psi)	7,355 - 8,336 (75 - 85, 1,067 - 1,209)