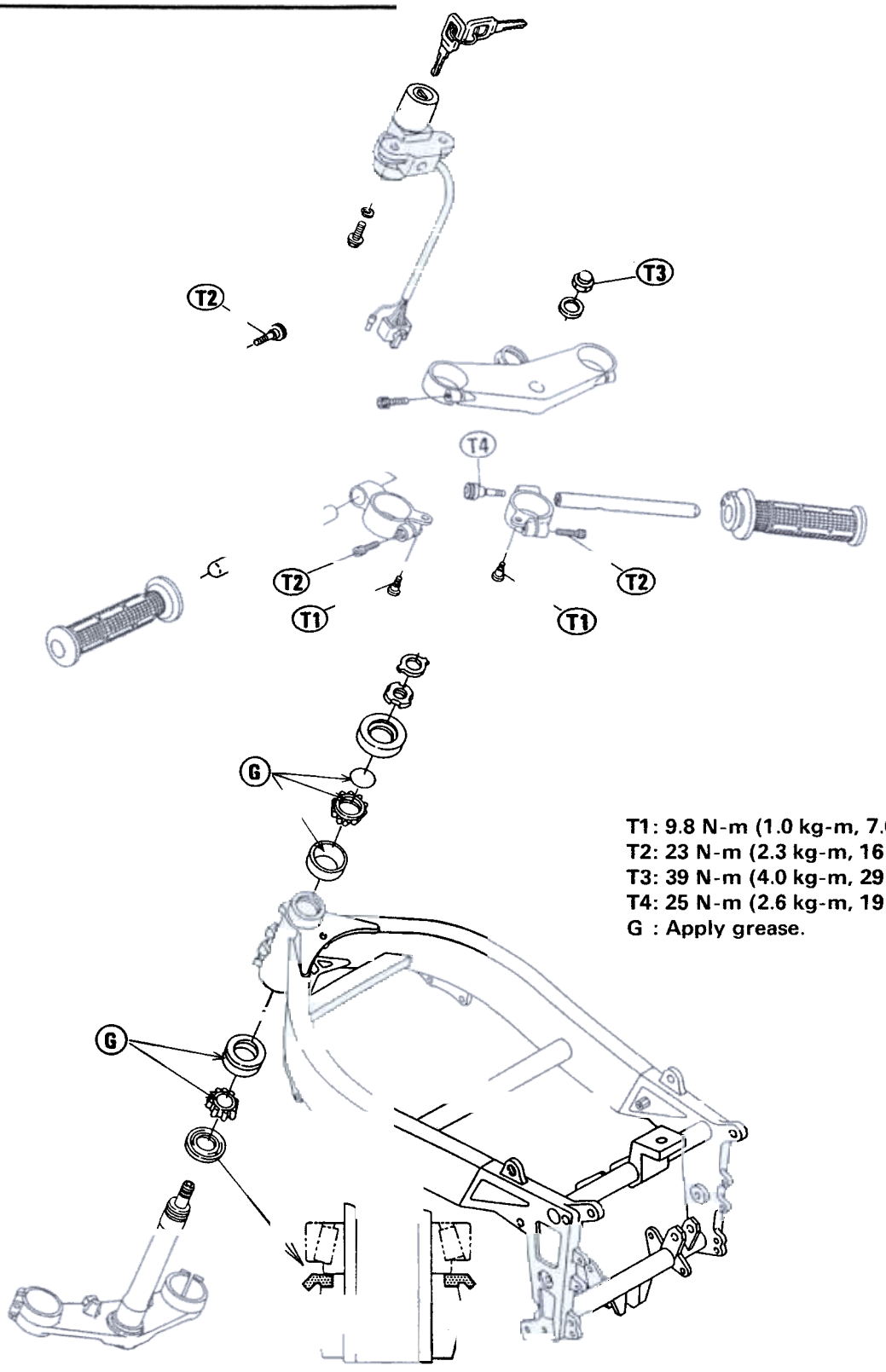
Steering

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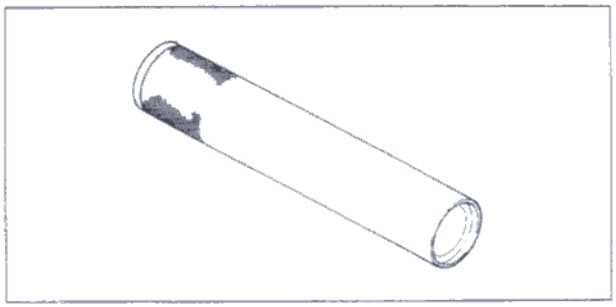
Exploded View



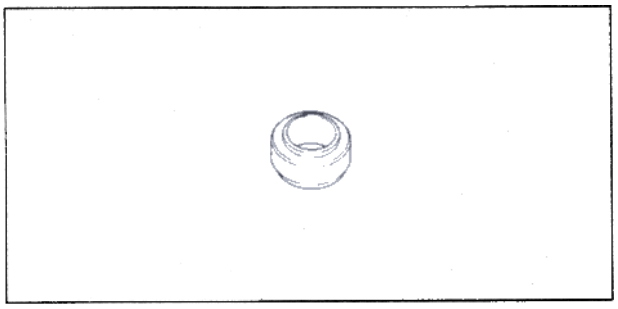
T1: 9.8 N-m (1.0 kg-m, 7.0 ft-lb)
T2: 23 N-m (2.3 kg-m, 16.5 ft-lb)
T3: 39 N-m (4.0 kg-m, 29 ft-lb)
T4: 25 N-m (2.6 kg-m, 19.0 ft-lb)
G : Apply grease.

Special Tools

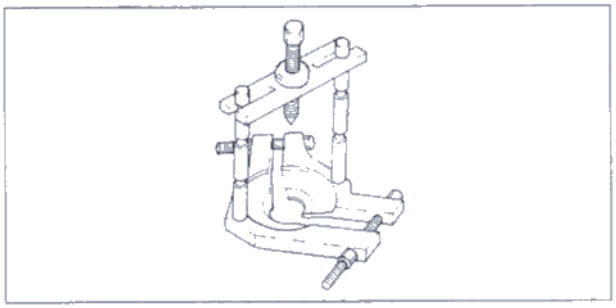
Stem Bearing Driver: 57001-137



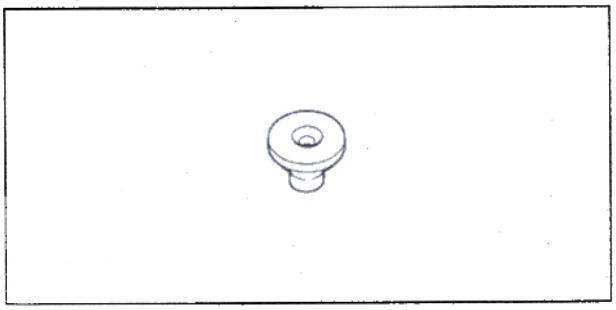
Stem Bearing Driver Adapter: 57001-1092



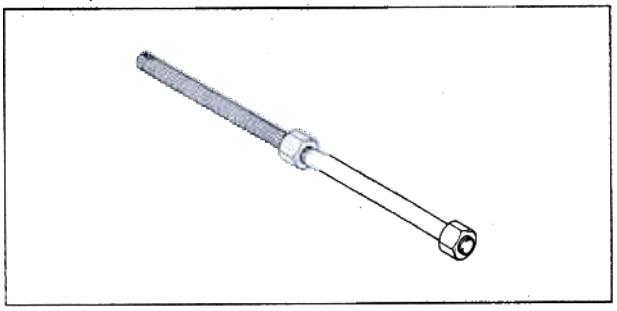
Bearing Puller: 57001-158



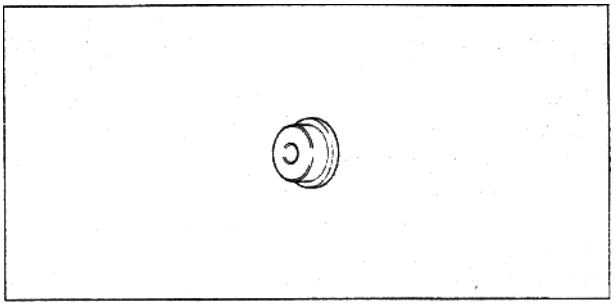
Bearing Puller Adapter: 57001-317



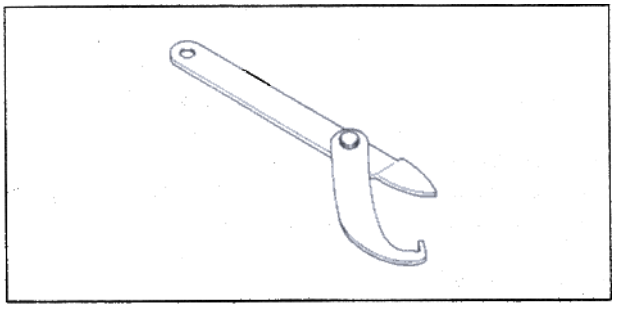
Head Pipe Outer Race Press Shaft: 57001-1075



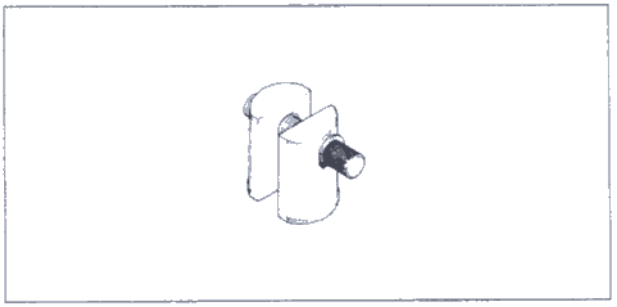
Head Pipe Outer Race Driver: 57001-1106



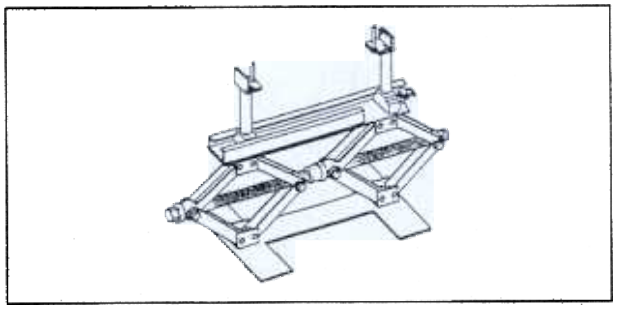
Steering Stem Nut Wrench: 57001-1100



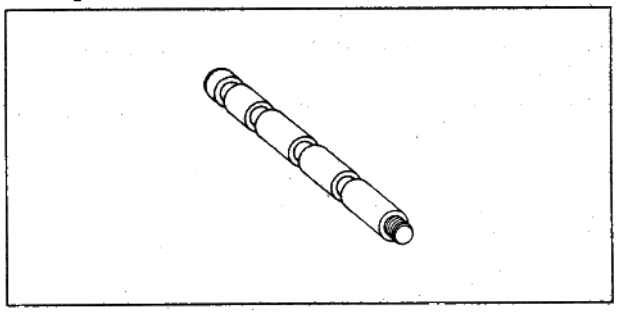
Head Pipe Outer Race Remover: 57001-1107



Jack: 57001-1238



Bearing Puller Stud: 57001-1190



Steering

Adjustment

●Check the steering.

○Lift the front wheel off the ground using the jack (special tool: 57001-1238, see Wheels/Tires chapter).

○With the front wheel pointing straight ahead, alternately tap each end of the handlebar. The front wheel should swing fully left and right from the force of gravity until the lower bracket hits the stop.

★If the wheel binds or catches before the stop, the steering is too tight.

○Feel for steering looseness by pushing and pulling the forks.

★If you feel looseness, the steering is too loose.

NOTE

○*The cables and wiring will have some effect on the motion of the fork which must be taken into account. Be sure the wires and cables are properly routed.*

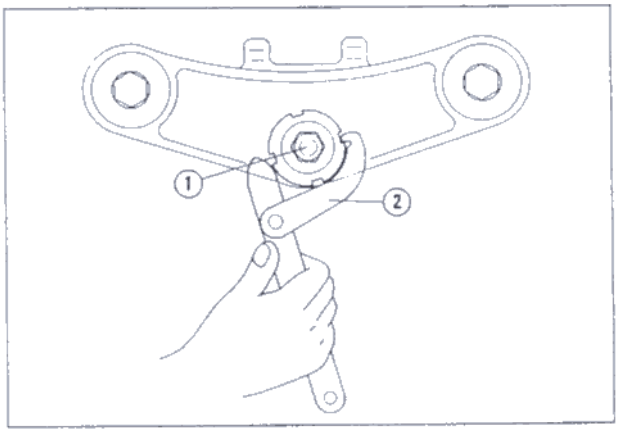
○*The bearings must be in good condition and properly lubricated in order for any test to be valid.*

★Adjust the steering if necessary.

●Remove the following parts.

Upper Fairing (see Frame chapter)
Fuel Tank (see Fuel System chapter)
Fork Lower Clamp Bolts (both sides, loosen)
Stem Head Nut (Loosen)

●Adjust the steering with the stem nut wrench (special tool).



1. Stem Head Nut
2. Stem Nut Wrench: 57001-1100

★If the steering is too tight, loosen the stem locknut a fraction of a turn.

★If the steering is too loose, tighten the locknut a fraction of turn.

NOTE

○*Turn the locknut 1/8 turn at a time maximum.*

●Tighten the following bolts and nut to the specified torque (see Exploded View).

Steering Stem Head Nut
Front Fork Lower Clamp Bolts

●Check the steering again.

★If the steering is still too tight or too loose, repeat the adjustment.

Steering Stem

Removal

● Remove the following parts.
Surge Tank (see Fuel System chapter)
Upper and Lower Fairings (see Frame chapter)
Front Fork Legs (see Suspension chapter)
Brake Hose Joint
Steering Stem Head Nut
Stem Head, Handlebar, Handle Holder

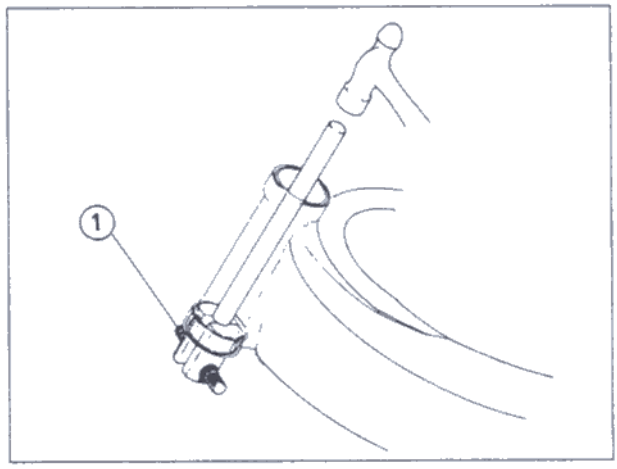
● Push up on the stem base, and remove the steering stem locknut using the stem nut wrench (special tool: 57001-1100), then remove the steering stem base.

● Remove the upper tapered roller bearing inner race.

● To remove the outer races pressed into the head pipe, install the outer race remover (special tool) as shown below.

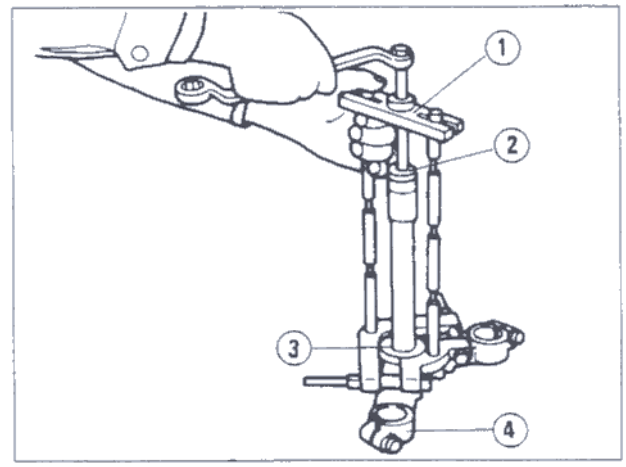
NOTE

○ *If either steering stem bearing is damaged, it is recommended that both the upper and lower bearings (including outer races) should be replaced with new ones.*



1. Outer Race Remover: 57001-1107

● Remove the lower tapered roller bearing (with its grease seal) which is pressed onto the steering stem with the steering stem bearing puller and adapters (special tools).

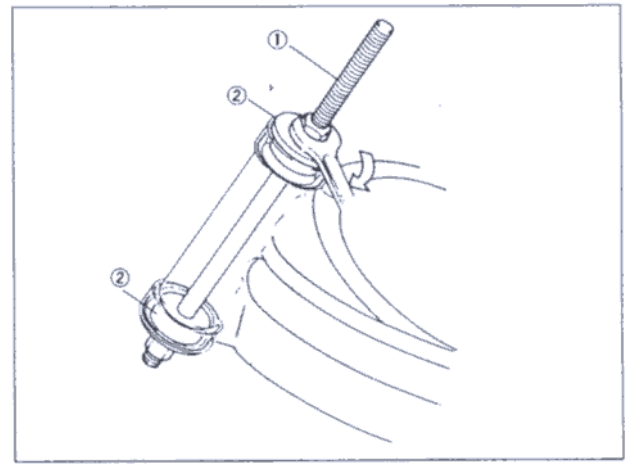


1. Bearing Puller: 57001-158
2. Adapter: 57001-317
3. Bearing Puller Stud: 57001-1190
4. Tapered Roller Bearing
5. Stem Base

Installation

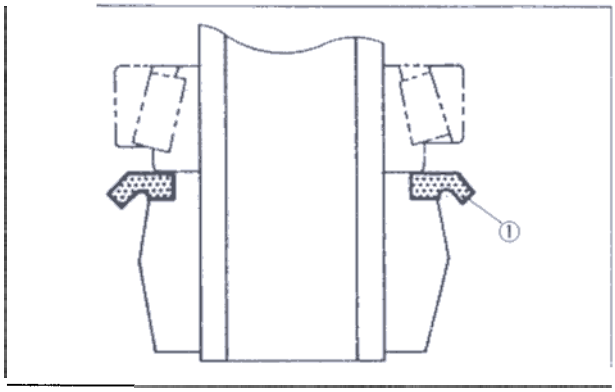
● Installation is the reverse of removal. Note the following.

○ Apply grease to the outer races, and then drive them into the head pipe using the drivers and the press shaft (special tools).



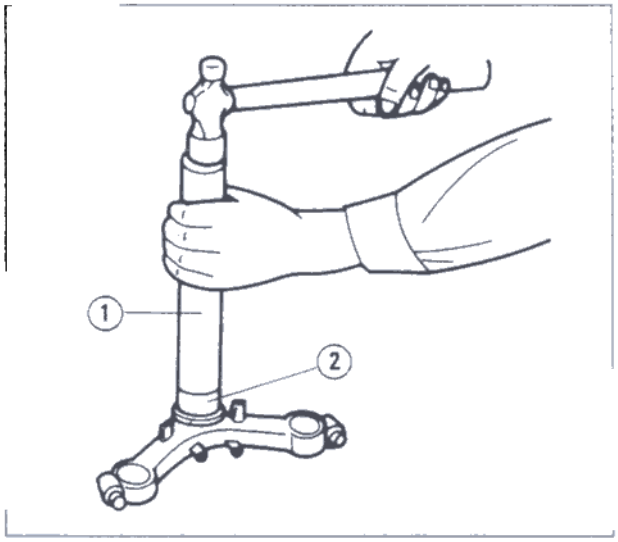
1. Press Shaft: 57001-1075
2. Driver: 57001-1106

● Install the grease seal, noting the direction shown.



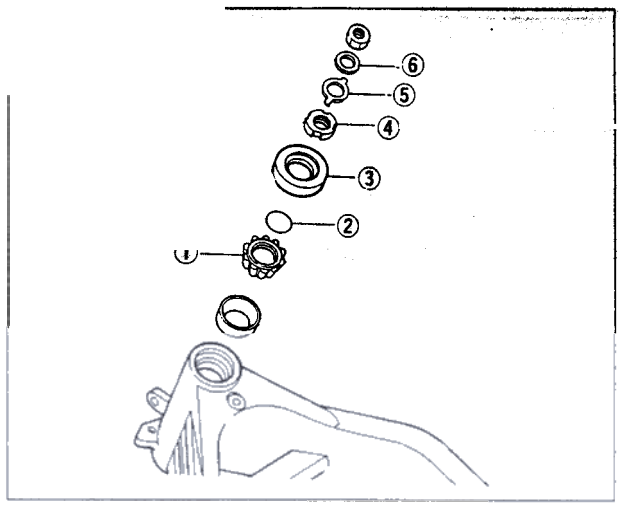
.1 Grease Seal

○Apply grease to the lower tapered roller bearing, and drive it onto the steering stem using the stem bearing driver and adapter (special tools: 57001-137 and 57001-1092).



1. Stem Bearing Driver: 57001-137
2. Adapter: 57001-1092

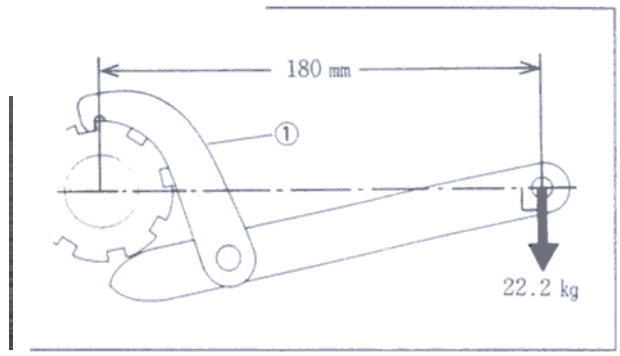
●Install the steering stem base on the head pipe, and install the following parts.



1. Upper Bearing
2. O-ring
3. Grease Seal
4. Stem Locknut
5. Pawl Washer
6. Washer

●The following four steps should be performed after steering bearing installation. This procedure settles the bearings in place.

○Using the stem nut wrench, tighten the stem locknut to 39 N-m (4.0 kg-m, 29 ft-lb) of torque. (To tighten the steering stem locknut to the specified torque, hook the wrench on the stem locknut, and pull the wrench at the hole by 22.2 kg force in the direction shown.)



Stem Nut Wrench: 57001-1100

○Check that there is no play and the steering stem turns smoothly without the rattle.

★If not, the steering stem bearing may be damaged.

○Again back out the stem lockout a fraction of a turn until it turns lightly.

○Turn the stem locknut lightly clockwise until it just becomes hard to turn. Do not overtighten, or the steering will be too tight.

●Tighten the following fasteners to the specified torque.
Front Fork Clamp Bolts (Upper and Lower, see Suspension chapter)
Steering Stem Head Nut (see this chapter)
Front Axle Nut (see Wheel/Tires chapter)
Front Axle Clamp Bolts (see Suspension chapter)
Caliper Mounting Bolts (see Brake chapter)

●Check and adjust the following items after installation.
Steering
Throttle Cables

Choke Cables
Clutch
Front Brake

Steering Stem Bearing

Bearing Lubrication

●Perform the following.
○Remove the steering stem.
○Using a high-flash point solvent, wash the upper and lower tapered roller bearings in the cages.
○Wipe the upper and lower outer races, which are press-fitted into the frame head pipe, clean of grease and dirt.
○Visually check the outer races and the rollers.
★Replace the bearing assemblies if they show wear or damage.
○Pack the upper and lower tapered roller bearings in the cages with grease, and apply light coat of grease to the upper and lower outer races.
○Install the steering stem, and adjust the steering.

Bearing Wear, Damage

★Replace the bearing assemblies if they show damage.

Stem Cap Deterioration, Damage

★ Replace the grease seal if necessary.

Steering Stem Warp

★If the steering stem shaft is bent, replace the steering stem.