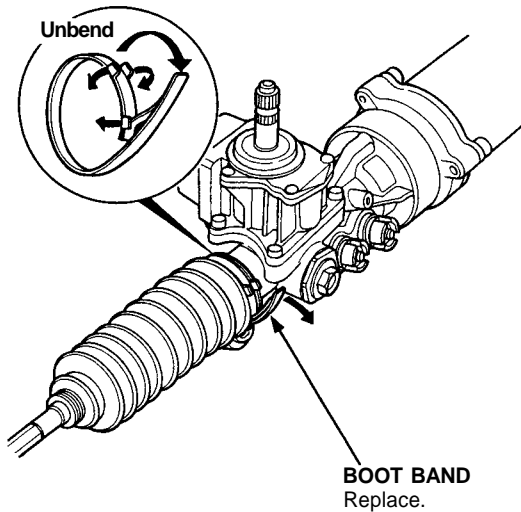


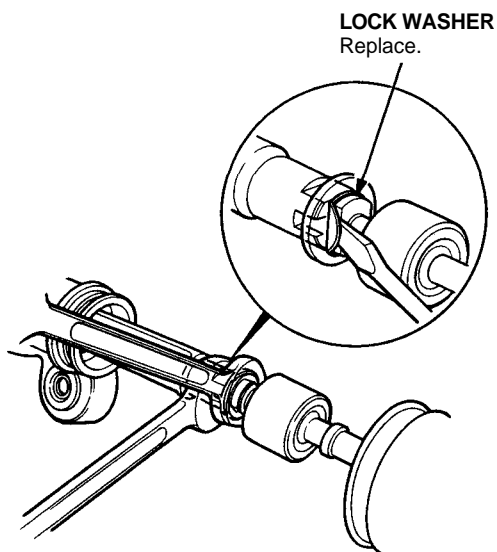


## Inspection

1. Carefully clamp the gearbox in a vise with soft jaws.
2. Remove the boot bands.



3. Pull the boots away from the ends of the gearbox, unbend the tie-rod lock washers.
4. Hold the rack with a wrench, and unscrew the tie-rods with another wrench.

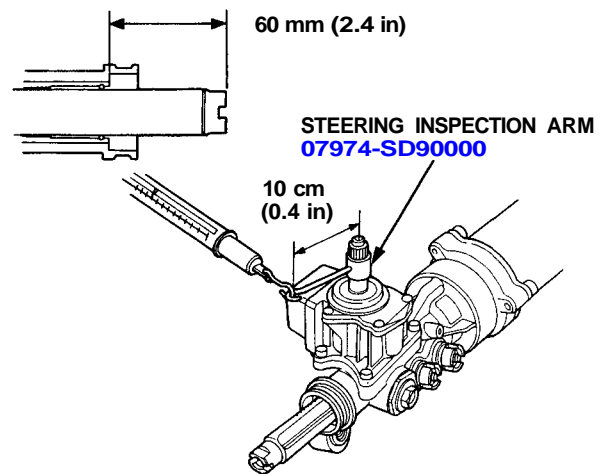


- Preload Inspection:

NOTE: Slide the steering rack in the cylinder until the end of the rack projects 60 mm (2.4 in) from the cylinder end. Inspection is made near this rack position.

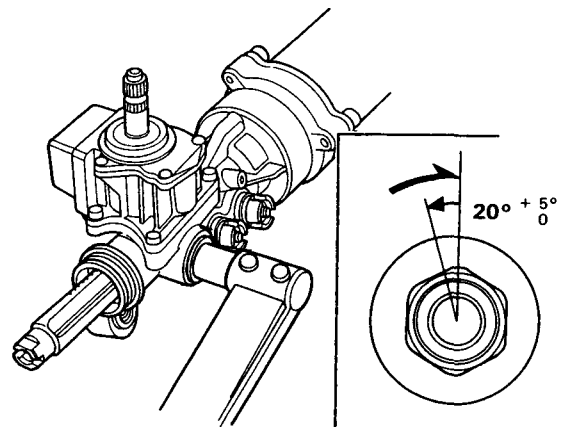
Install the special tool on the pinion shaft and check the preload with a spring scale. If the preload is out of the specification, adjust the rack guide.

**Preload 30 N (3 kg, 6.6 lbs) maximum**



- Rack guide screw adjustment:

- Loosen the rack guide screw locknut.
- Tighten, loosen and retighten the rack guide screw two times to 4 N·m (0.4 kg·m, 2.9 lb-ft), back it off  $20^{\circ} + \frac{5^{\circ}}{0}$ .

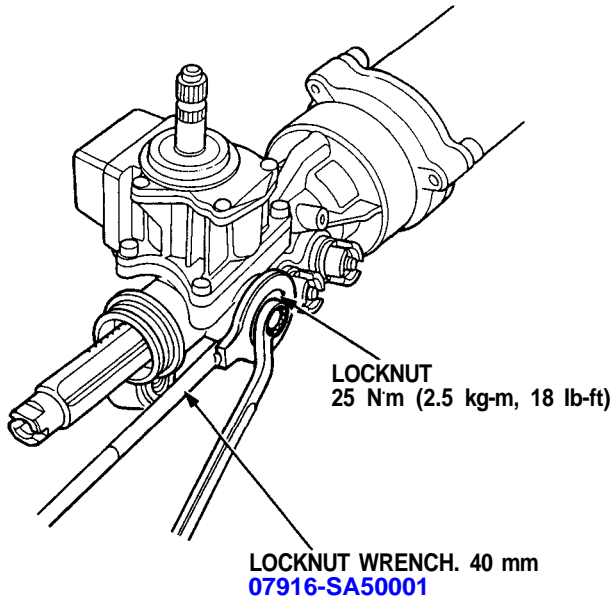


(cont'd)

# Power Steering

## Inspection (cont'd)

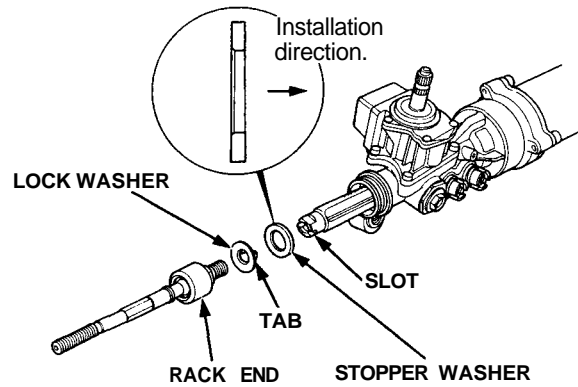
- Retighten the locknut while holding the rack guide screw with a wrench.



### Tie-rod installation:

5. Screw each rack end into the rack while holding the lock washer so its tabs are in the slots in the rack end.

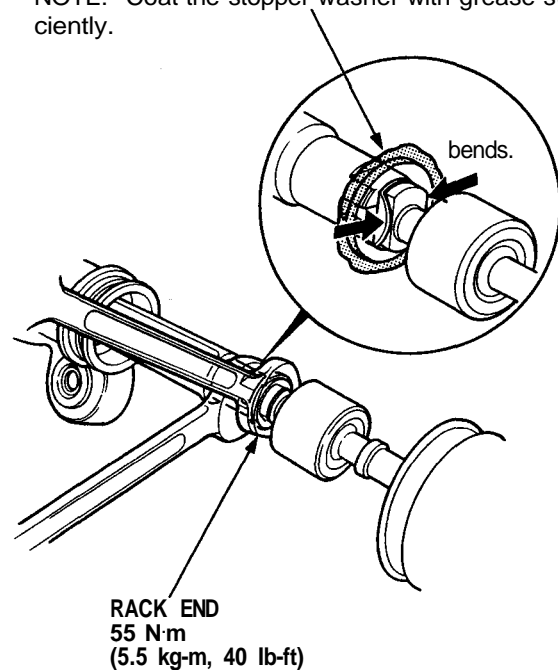
NOTE: Install the stopper washer with the chamfered side facing out.



6. Tighten the rack end securely, then band the lock washer back against the flat on the flange as shown.



NOTE: Coat the stopper washer with grease sufficiently.

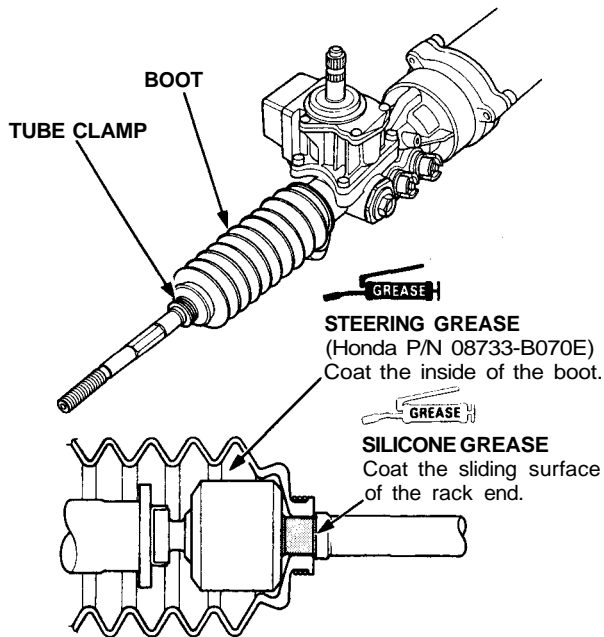




7. Install the boots on the rack end with the tube clamps.

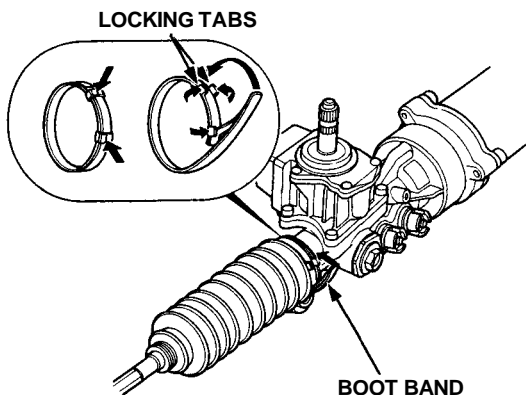
NOTE:

- Coat the rack end and inside of the boot with the grease.
- Before installing the boot, be sure that the pressure inside of the boot is the atmospheric pressure.
- Install the boot band with the rack in the straight ahead condition (i.e. right and left tie-rods are equal in length).

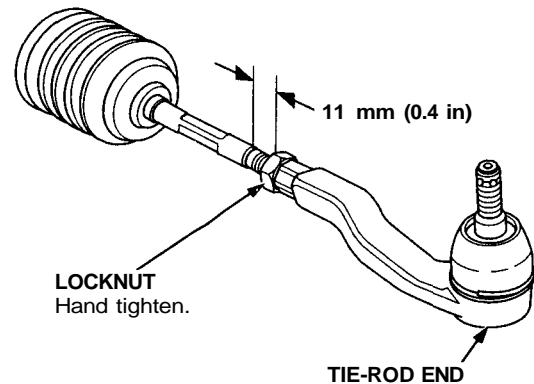


8. Install the new boot bands on the boot and bend both sets of locking tabs. Lightly tap on the doubled portions to reduce their height.

NOTE: After assembling, slide the rack right and left to be certain that the boots are not deformed or twisted.



9. If the tie-rod ends were removed, install the tie-rods on the right and left rack ends and screw them in until the threaded section is 11 mm (0.4 in) in length.



10. Install the gearbox and the front crossbeam (see page 17-66).
11. Check the wheel alignment and adjust if necessary (see section 18).

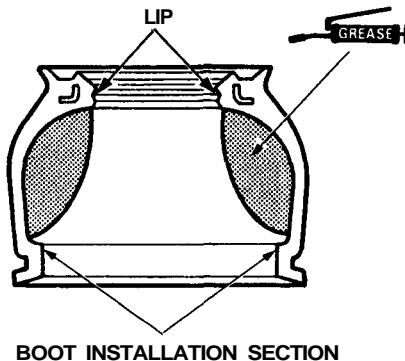
# Power Steering

## Ball Joint Boot Replacement

1. Remove the set ring and the boot.

**CAUTION:** Do not contaminate the boot installation section with grease.

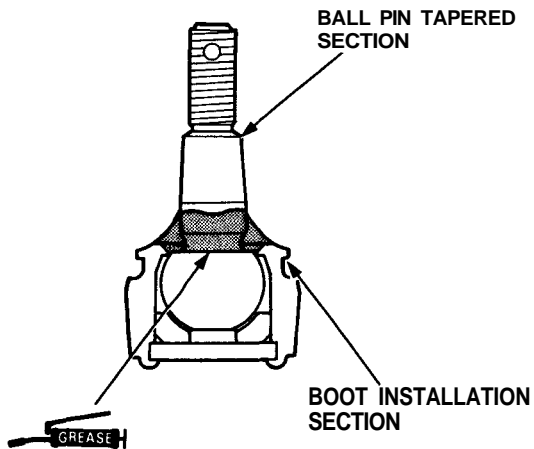
2. Pack the interior of the boot and lip with grease.



3. Wipe the grease off the sliding surface of the ball pin, then pack the lower area with fresh grease.

**CAUTION:**

- Keep grease off the boot installation section and the tapered section of the ball pin.
- Do not allow dust, dirt, or other foreign materials to enter the boot.



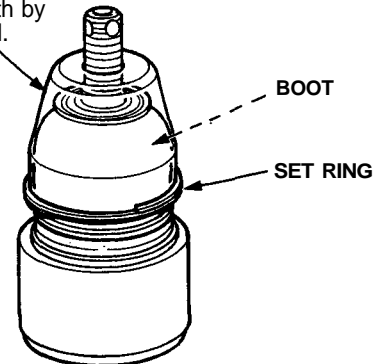
4. Install the boot in the groove of the boot installation section securely, then bleed air.

5. Insert the special tool into the threads in the ball pin and align the end of the tool with the groove in the boot.  
Slide the set ring over the tool and into position.

**BALL JOINT BOOT CLIP GUIDE**

**07MAG-SL00100**

Adjust the depth by turning the tool.



**CAUTION:** After installing the boot, check the ball pin tapered section for grease. Wipe it if necessary.