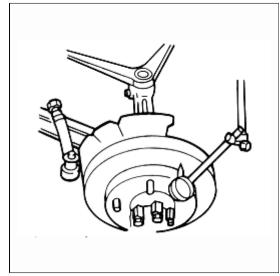
# Sportage [AL] > 2001 > Engine > 2.0 DOHC

# INSPECTION

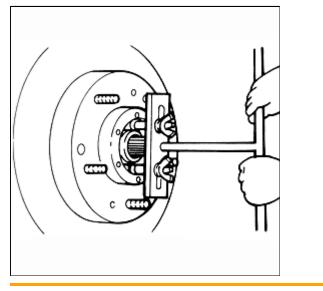
## Wheel Bearings

To inspect wheel bearings, the free wheel hub must first be removed. Refer to "Free Wheel Hub" in this section.

1. Remove wo bolts and remove brake caliper from brake rotor. Tie caliper to vehicle frame with wire.



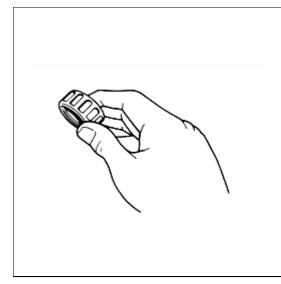
- 2. Mount dial indicator with plunger zeroed against brake rotor at 4.7 inch (12 cm) from rotor center.
- 3. Turn rotor and read dial indicator for runout dimension.



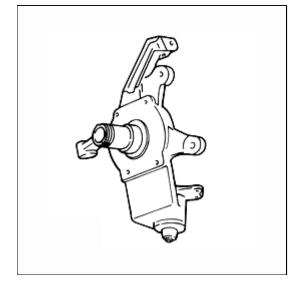
Runout not to exceed 0.004 inch (0.10 mm)

# **Steering Knuckle**

1. Inspect bearing for wear or damage.



2. Inspect steering knuckle for wear or damage.

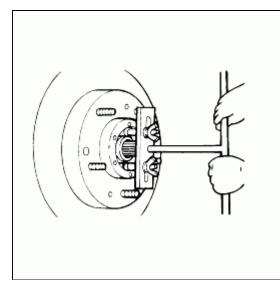


## REMOVAL

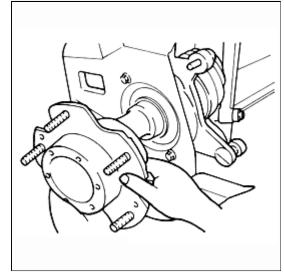
#### Wheel Bearings

To remove wheel bearings, the free wheel hub must first be removed. Refer to "Free Wheel Hub" in this section.

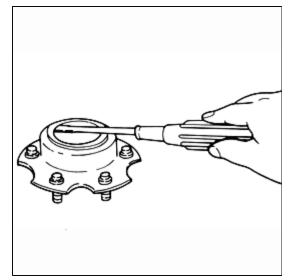
- 1. Remove two bolts and remove brake caliper from brake rotor. Temporarily tie caliper to vehicle frame with wire.
- 2. Remove two screws and take off brake rotor.
- 3. Using a lock nut wrench (or equivalent), remove lock nut.



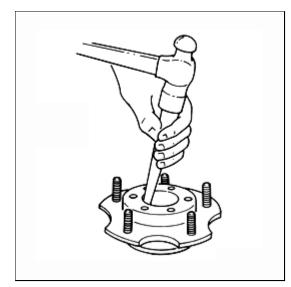
4. Remove wheel bearing hub.



5. Using a screwdriver, pry out oil seal from wheel bearing hub.



6. Remove inner and outer bearings from the wheel bearing hub.



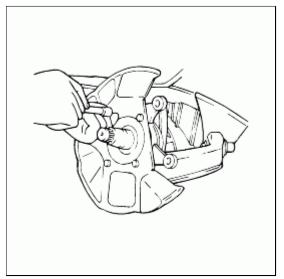
7. Using a suitable drift punch, remove inner and outer bearing race.

## REMOVAL

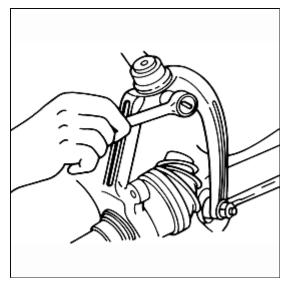
### Steering Knuckle

To remove steering knuckle, the free wheel hub and wheel bearing hub must first be removed. Refer to "Free Wheel Hub" and Wheel Bearings" in this section.

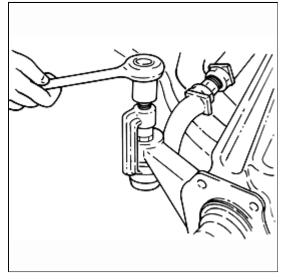
1. Remove dust cover



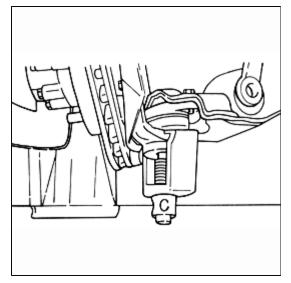
2. Remove the upper control arm link lock bolt, spring washer and nut.



3. Remove tie rod end cotter pin and using a ball joint puller, remove tie rod end from steering knuckle.

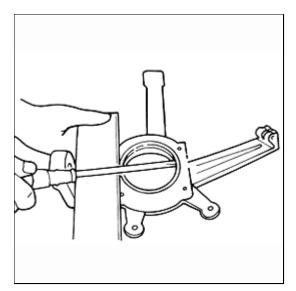


4. Remove lower control arm cotter pin and using a ball joint puller, and remove control arm from steering knuckle.

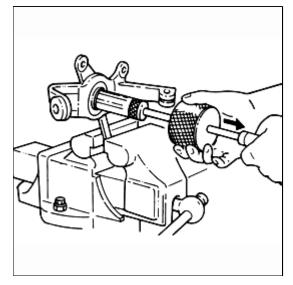


5. Remove steering knuckle from vehicle and using a screwdriver, pry out inner oil seal.

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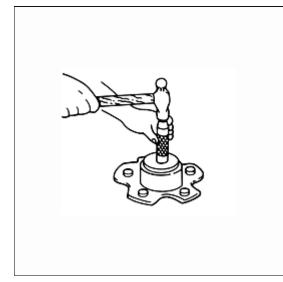
6. Using a needle bearing puller, remove the needle bearing.



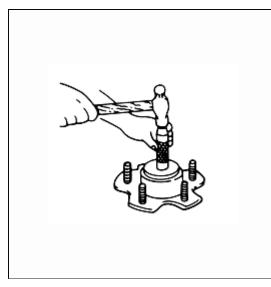


#### Wheel Bearings

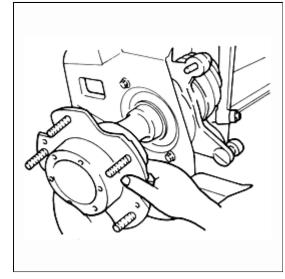
1. Install inner bearing outer race and oil seal.



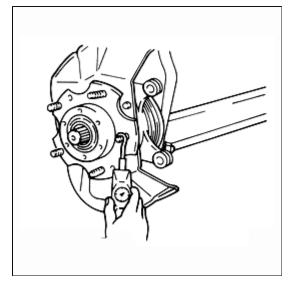
2. Install outer bearing outer race.



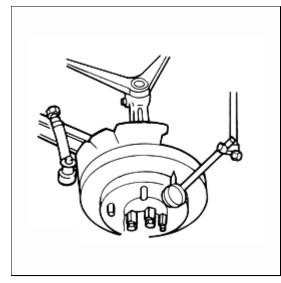
3. Install dust cover with four screws.



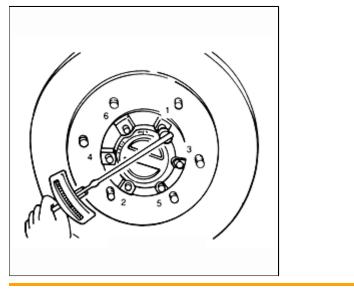
- 4. Apply grease to both bearings and the oil seal lip.
- 5. Put wheel bearing hub assembly on steering knuckle. Turn back and forth to verify correct bearing installation.
- 6. Screw lock nut up against wheel hub assembly and using a lock nut wrench, tighten nut to set bearing preload.



7. Put brake rotor on wheel bearing hub bolts and install the two retaining screws.

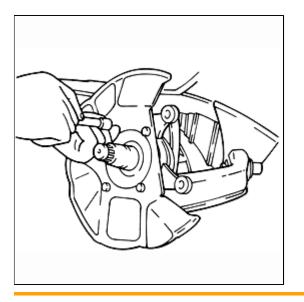


- 8. Mount dial indicator with plunger zeroed against brake rotor at 4.7 inch (12 cm) from rotor center.
- 9. Turn rotor and read dial indicator for runout dimension.



Runout not to exceed 0.004 inch (0.10 mm)

- 10. Install brake caliper and tighten two bolts.
- 11. Align the free wheel hub fixed cam key with the lock nut groove and push on fixed cam assembly. Apply grease to both ends of the snap ring.
- 12. Put spacer on the axle, then using suitable snap ring pliers, install axle retainer snap ring.
- 13. Apply sealant to free wheel hub body mounting surface.
- 14. Install and tighten, in two passes, six bolts in the order shown.



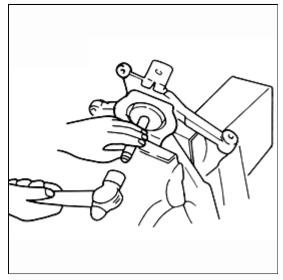
First pass: Tighten hub mounting bolts to 19 lb-ft (25 N·m). Second pass: Tighten hub mounting bolts to 23 lb-ft (31 N·m).

# INSTALLATION

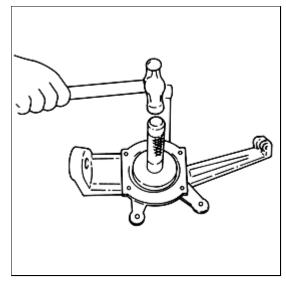
#### Steering Knuckle

#### Required SST:

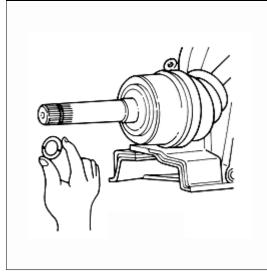
- 1) Needle Bearing Installer: K95B-5011-A
- 1. Using SST K95B-5011-A, install bearing.



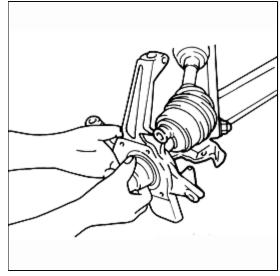
2. Install new oil seal.



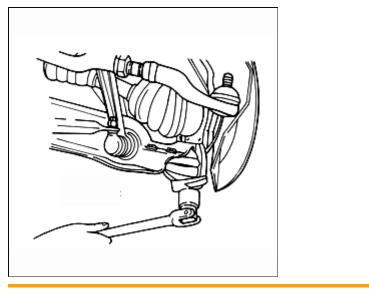
- 3. Apply grease to the needle bearing and seal lip.
- 4. If spacer was removed, apply grease to both sides and install on halfshaft end.



5. Put steering knuckle on the halfshaft end with upper and lower ball joints in mounting holes.

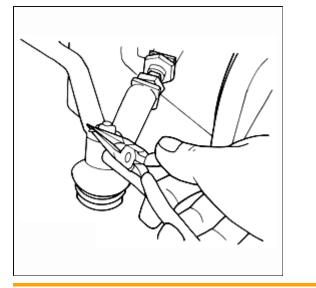


6. Attach lower control arm, tighten lock nut, and install cotter pin.



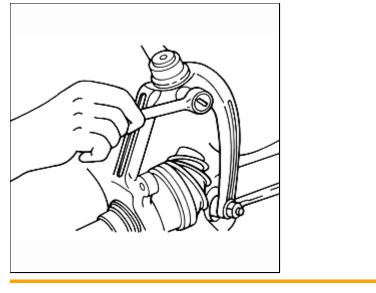
Tighten lock nut to 110 lb-ft (148 N·m).

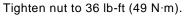
7. Attach tierod end to knuckle, tighten nut, and install cotter pin.



Tighten lock nut to 27 lb-ft (36 N·m).

8. Insert upper control arm link lock bolt with spring washer and tighten nut.



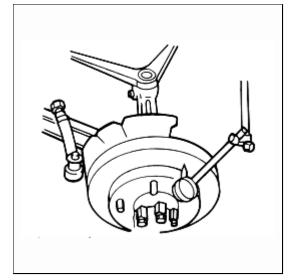


To assemble wheel bearing hub, brake caliper, brake rotor, and free wheel hub, refer to "Free Wheel Hub" and "Wheel Bearings" in this section.

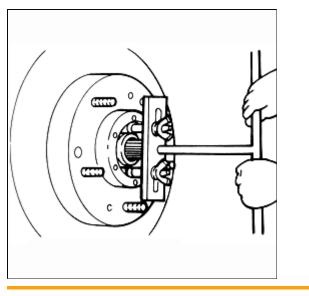
## **INSPECTION**

#### Wheel Bearings

To inspect wheel bearings, the free wheel hub must first be removed. Refer to "Free Wheel Hub" in this section. 1. Removetwo bolts and remove brake caliper from brake rotor. Tie caliper to vehicle frame with wire.



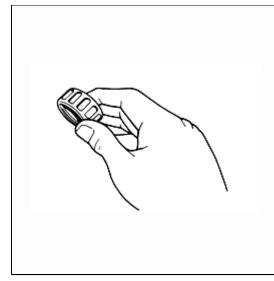
- 2. Mount dial indicator with plunger zeroed against brake rotor at 4.7 inch (12 cm) from rotor center.
- 3. Turn rotor and read dial indicator for runout dimension.



Runout not to exceed 0.004 inch (0.10 mm)

# **Steering Knuckle**

1. Inspect bearing for wear or damage.



2. Inspect steering knuckle for wear or damage.

