

lbs. (59–63 Nm). Continue to tighten until the slot for the cotter pin is aligned. Install a new cotter pin.

15. Install the shock absorber and the jounce bumper.

16. Install the dust shield, rotor and caliper. Install the anti-lock brake sensor, if equipped.

17. On 1988–91 vehicles, position the stabilizer link to the lower control arm and install the link, bushing and retaining nut. Tighten to 9–15 ft. lbs. (12–20 Nm).

18. Install the wheel and tire assembly and lower the vehicle. With the vehicle supported on the wheels and tires at normal curb height, tighten the lower control arm-to-crossmember bolts to 109–140 ft. lbs. (148–190 Nm).

19. Check the front end alignment.

CONTROL ARM BUSHING REPLACEMENT

The control arm bushings are integral with the lower control arm. If the bushings are defective, the entire lower control arm must be replaced.

Spindle

REMOVAL & INSTALLATION

1. Raise and safely support the front of the vehicle securely on jackstands.

2. Position safety stands on the frame behind the lower control arms. Remove the wheel and tire assembly.

3. Remove the brake caliper and suspend with a length of wire; do not let the caliper hang by the brake hose. Remove the brake rotor and dust shield. Remove the anti-lock brake sensor, if equipped.

4. Disconnect the tie rod end from the spindle using removal tool 3290–D or equivalent.

5. On 1988–91 vehicles, proceed as follows:

a. Remove and discard the cotter pins from both ball joint studs and loosen the stud nuts 1–two turns. Do not remove the nuts at this time.

b. Position a suitable ball joint press tool between the upper and lower ball joint studs. Turn the tool with a wrench until the tool places the studs under compression.

c. Using a hammer sharply hit the spindle near the studs to loosen the studs from the spindle.

6. On 1992–00 vehicles, proceed as follows:

a. Remove and discard the cotter pin from the lower ball joint stud and loosen the stud nut 1–two turns. Do not remove the nut at this time.

b. Using a hammer sharply hit the spindle near the stud to loosen the stud from the spindle.

c. Remove the pinch bolts from the upper ball joint and stabilizer link ball joint at the spindle.

7. Position a floor jack under the lower control arm at the lower ball joint area, and raise the jack to support the lower arm.

➔ **The jack will support the spring load on the lower control arm.**

8. On 1988–91 vehicles, remove the upper and lower ball joint stud nuts and remove the spindle.

9. On 1992–00 vehicles, remove the lower ball joint stud nut. Pry the slots with a suitable prybar at

the upper ball joint and link ball joint to separate from the spindle. Remove the spindle.

To install:

10. On 1992–00 vehicles, position the spindle on the stabilizer bar upper ball joint stud. Install the pinch bolt and loosely install the nut.

11. Position the spindle on the lower ball joint stud and install the stud nut. Tighten the nut to 80–119 ft. lbs. (108–162 Nm). Continue to tighten the nut until a slot for the cotter pin is aligned. Install a new cotter pin.

12. Raise the lower arm and guide the upper ball joint stud into the spindle.

13. On 1988–91 vehicles, install the upper ball joint stud nut and tighten to 60–90 ft. lbs. (81–122 Nm). Continue to tighten the nut until a slot for the cotter pin is aligned. Install a new cotter pin.

14. On 1992–00 vehicles, install the upper ball joint stud pinch bolt and nut. Tighten the nut to 67 ft. lbs. (92 Nm). Tighten the stabilizer link to spindle pinch bolt nut to 30–50 ft. lbs. (40–55 Nm).

15. Connect the tie rod end to the spindle. Install the nut and tighten to 43–46 ft. lbs. (59–63 Nm). Continue to tighten the nut until the slot for the cotter pin is aligned with the cut in the bolt and install a new cotter pin.

16. Install the brake dust shield, caliper, rotor, and anti-lock brake sensor, if equipped.

17. Install the wheel and tire assembly and lower the vehicle.

18. Check the front end alignment.

Front Wheel Bearings

REPLACEMENT

1988–91 Vehicles

1. Raise and support the vehicle safely.

2. Remove the wheel and tire assembly and the disc brake caliper. Suspend the caliper with a length of wire; do not let it hang from the brake hose.

3. Pry off the dust cap. Tap out and discard the cotter pin. Remove the nut retainer.

4. Being careful not to drop the outer bearing, pull off the brake disc and wheel hub assembly.

5. Remove the inner grease seal using a pry-bar. Remove the inner wheel bearing.

6. Clean the wheel bearings with solvent and inspect them for pits, scratches, and excessive wear. Wipe all the old grease from the hub and inspect the bearing races (cups). If either bearings or races are damaged, the bearing races must be removed and the bearings and races replaced as an assembly.

7. If the bearings are to be replaced, drive out the races (cups) from the hub using a brass drift, or pull them from the hub using a puller.

8. Make sure the spindle, hub and bearing assemblies are clean before installation.

To install:

9. If the bearing races (cups) were removed, install new ones using a suitable bearing race installer. Pack the bearings with high-temperature wheel bearing grease using a bearing packer. If a packer is not available, work as much grease as possible between the rollers and cages using your hands.

10. Coat the inner surface of the hub and bearing races (cups) with grease.

11. Install the inner bearing in the hub. Using a seal installer, install a new grease seal into the hub. Lubricate the lip of the seal with grease.

12. Install the hub/disc assembly on the spindle, being careful not to damage the oil seal.

13. Install the outer bearing, washer, and spindle nut. Install the caliper and the wheel and tire assembly. Adjust the bearings as follows:

a. Loosen the adjusting nut three turns and rock the wheel in and out a few times to release the brake pads from the rotor.

b. While rotating the wheel and hub assembly in a counterclockwise direction, tighten the adjusting nut to 17–25 ft. lbs. (23–34 Nm).

c. Back off the adjusting nut ½ turn, then retighten to 10–28 inch lbs. (1.1–3.2 Nm).

d. Install the nut retainer and a new cotter pin. Replace the grease cap.

14. Lower the vehicle. Before driving the vehicle, pump the brake pedal several times to restore normal brake pedal travel.

1992–00 Vehicles

➔ See Figures 56, 57 and 58

1. Raise and safely support the vehicle.

Remove the wheel and tire assembly.

2. Remove and discard the grease cap from the hub.

3. Remove the brake caliper. Suspend the caliper with a length of wire; do not let it hang from the brake hose.

4. Remove the rotor. If the factory installed push on nuts are installed, remove them first.

5. Remove and discard the wheel hub nut.

6. Remove the hub and bearing assembly.

To install:

7. Install the hub and bearing assembly. Install a new wheel hub nut and tighten to 189–254 ft. lbs. (255–345 Nm).

8. Install the rotor and push on nuts, if equipped. Install a new grease cap.

9. Install the brake caliper.

10. Install the wheel and tire assembly and lower the vehicle.

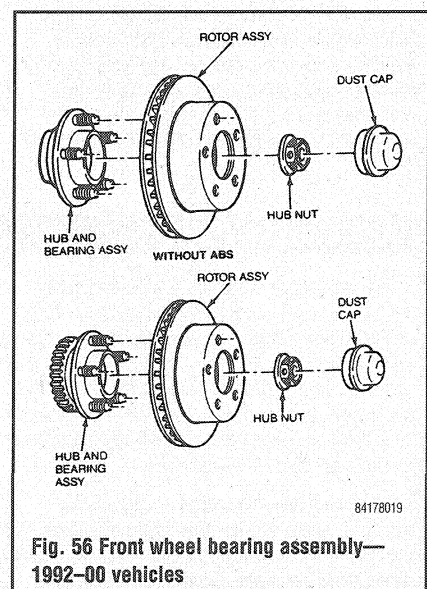


Fig. 56 Front wheel bearing assembly—1992–00 vehicles