8-18 SUSPENSION AND STEERING

8. Install the top bushing, washer, and retaining nut. Tighten to 14–26 ft. lbs. (19–35 Nm).

⇒Check the rubber sleeve on the shock absorber to be sure it is not wrapped up. To assist in identifying wrap-up during installation, a white stripe is on the rubber sleeve and on the shock absorber body. The stripes should align. To correct a wrap-up condition, loosen the upper shock retaining nut and turn the shock to align the stripes. Retighten the retaining nut.

- 9. Connect the air line to the shock absorber by pushing in on the retainer ring and installing the air line.
- 10. Connect the height sensor connecting link and lower the vehicle.

TESTING

Except Air Shock Absorbers

- 1. Remove the shock absorber from the vehicle.
- Extend the shock absorber fully while it is right side up, as installed in the vehicle. Then turn it upside down and fully compress it. Repeat this procedure at least 3 times to make sure any trapped air has been expelled.
- 3. Place the shock absorber right side up in a vise and hand stroke the shock absorber. Check the shock absorber insulators for damage and wear.
- 4. If the shock absorber is properly primed, in its installed position, and there is a lag or a skip occurring near mid-stroke of the shaft reverse travel direction, the shock absorber must be replaced.
- 5. Replace the shock absorber if there is any seizing during the shaft full travel, except at either end of the travel.
- 6. Replace the shock absorber if upon the shaft fast, reverse stroke, there is any noise encountered other than a faint swish, such as a clicking sound.
- 7. If there are excessive fluid leaks, and the shock absorber action remains erratic after purging air, replace the shock absorber.

Control Arms

REMOVAL & INSTALLATION

Upper Control-Arm

⇒If one upper control arm requires replacement, also replace the upper control arm on the other side of the vehicle. If both upper arms are to be replaced, remove and install one at a time to prevent the axle from rolling

or slipping sideways. If both upper control arms and both lower control arms are to be removed at the same time, remove both coil or air springs, as detailed in this Section.

- 1. If equipped, turn the air suspension switch **OFF**.
- 2. Raise the vehicle and support the frame side rails with jack stands.
- 3. Support the rear axle under the differential pinion nose as wheel as under the axle.
- Unsnap the parking brake cable from the upper arm retainer. If equipped, disconnect the height sensor from the ball stud on the left upper control arm.
- 5. Remove and discard the nut and bolt retaining the upper arm to the axle housing. Disconnect the arm from the housing.
- 6. Remove and discard the nut and bolt retaining the upper arm to the frame bracket and remove the arm.

To install:

- Hold the upper arm in place on the front arm bracket and install a new retaining bolt and self-locking nut. Do not tighten at this time.
- 8. Secure the upper arm to the axle housing with new retaining bolts and nuts. The bolts must be pointed toward the front of the vehicle.
- Raise the suspension with a jack until the upper arm rear pivot hole is in position with the hole in the axle bushing. Install a new pivot bolt and nut with the nut facing inboard.
- 10. Tighten the upper arm-to-axle pivot bolts to 103–132 ft. lbs. (140–180 Nm) and upper arm-to-frame pivot bolts to 119–149 ft. lbs. (162–203 Nm).
- 11. Snap the parking brake cable into the upper arm retainer. Connect the height sensor to the ball stud on the left upper arm, if equipped.
- 12. Remove the supports from the frame and axle and lower the vehicle. If equipped, turn the air suspension switch **ON**.

Lower Control Arm

ment, also replace the lower control arm on the other side of the vehicle. If both upper control arms and both lower control arms are to be removed at the same time, remove both coil or air springs, as detailed in this Section.

- 1. If equipped, turn the air suspension switch **OFF**.
- Mark the rear shock absorber tube relative to the protective sleeve with the vehicle in the normal ride height position.
- Raise the vehicle and support the frame side rails with jack stands. Allow the axle housing to

hang with the shock absorbers fully extended to relieve spring pressure.

- 4. Remove the stabilizer bar, if equipped.
- 5. Support the axle with jack stands under the differential pinion nose as well as under the axle.
- 6. Remove and discard the lower arm pivot bolts and nuts and remove the lower arm.

To install:

- 7. Position the lower arm to the frame bracket and axle. Install new bolts and nuts with the nuts facing outboard.
- 8. Raise the axle to the normal ride height position, compressing the shock absorbers to the marks made during the removal procedure. Tighten the lower arm-to-axle pivot bolt to 103–132 ft. lbs. (140–180 Nm) and lower arm-to-frame pivot bolt to 119–149 ft. lbs. (162–203 Nm).
 - 9. Install the stabilizer bar, if equipped.
- Remove the jack stands and lower the vehicle. If equipped, turn the air suspension switch ON.

Stabilizer Bar

REMOVAL & INSTALLATION

- If equipped, turn the air suspension switch OFF.
- Raise the vehicle and support the frame side rails with jack stands. Allow the axle housing to hang with the shock absorbers fully extended.
- 3. On 1988–91 vehicles, remove the bolts, nuts and spacers retaining the stabilizer bar to the lower control arms and remove the stabilizer bar. Discard the bolts and nuts.
- 4. On 1992–99 vehicles, disconnect the stabilizer bar arms from the links. Remove the bolts and brackets retaining the stabilizer bar to the rear axle and remove the stabilizer bar.

To install:

- 5. On 1988–91 vehicles, align the 4 holes in the stabilizer bar with the holes in the lower control arms. Install the color coded end of the bar on the right side of the vehicle. Install 4 new bolts and nuts and the existing spacers. Tighten to 70–92 ft. lbs. (95–125 Nm).
- 6. On 1992–99 vehicles, install 2 brackets onto the stabilizer bar insulators and hook both brackets into the T-slot of the rear axle bracket. Install the retaining bolts and tighten to 16–21 ft. lbs. (21–29 Nm). Connect the stabilizer bar eyes to the links using insulators, nuts and washers. Tighten to 13–17 ft. lbs. (17–23 Nm).
- 7. Remove the jack stands and lower the vehicle. If equipped, turn the air suspension switch **ON**.

STEERING

Steering Wheel

REMOVAL & INSTALLATION

1988 -89 Vehicles

- 1. Disconnect the negative battery cable.
- 2. Remove the horn pad and cover assembly. Disconnect the horn electrical connector.
- Disconnect the cruise control switch electrical connector, if equipped.
- 4. Remove and discard the steering wheel bolt. Remove the steering wheel using a suitable puller.
- Do not use a knock-off type steering wheel puller or strike the retaining bolt with a hammer. This could cause damage to the steering shaft bearing.

To install:

- Align the index marks on the steering wheel and shaft and install the steering wheel.
- 6. Install a new steering wheel retaining bolt and tighten to 30–35 ft. lbs. (41–47 Nm).
- 7. Connect the cruise control electrical connector, if equipped.
- 8. Connect the horn electrical connector and install the horn pad and cover.
 - 9. Connect the negative battery cable.