

**Fig. 48 Checking the upper ball joint**

- Using a large chisel, cut off the head of each rivet and drive them from the arm.
- Place a jack under the lower arm and raise the arm to compress the coil spring.
- Remove the cotter pin and attaching nut from the ball joint stud.
- Using a ball joint removal tool, loosen the ball joint stud from the spindle and remove the ball joint from the arm.

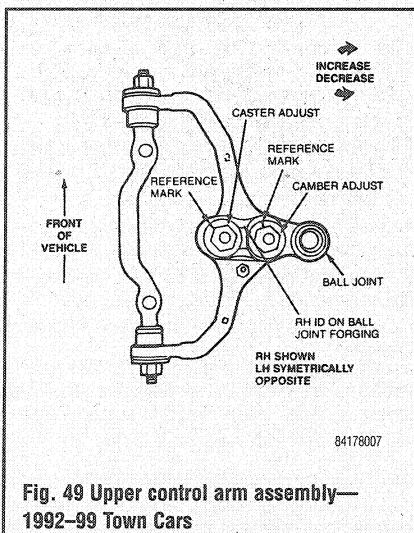
**To install:**

- Clean all metal burrs from the arm and install the new ball joint, using the service part nuts and bolts to attach the ball joint. Do not attempt to rivet the ball joint once it has been removed.
- Install the ball joint stud into the spindle. Tighten the ball joint-to-upper spindle nut to 60–90 ft. lbs. (81–122 Nm). Continue to tighten until the slot for the cotter pin is aligned. Install a new cotter pin.
- Install the wheel and tire assembly and lower the vehicle. Check front end alignment.

**1992–00 Vehicles**

♦ See Figure 49

- Raise and safely support the vehicle with safety stands under the frame behind the lower arm. Remove the wheel and tire assembly.
- Position a floor jack under the lower arm at the lower ball joint area. The floor jack will support the spring load on the lower arm.



**Fig. 49 Upper control arm assembly—1992–99 Town Cars**

- Remove the retaining nut and pinch bolt from the upper ball joint stud.
- Mark the position of the alignment cams. When replacing the ball joint this will approximate the current alignment.
- Remove the 2 nuts retaining the ball joint to the upper arm. Remove the ball joint and spread the slot with a suitable prybar to separate the ball joint stud from the spindle.

**To install:**

➡ **The upper ball joints differ from side to side. Be sure to use the proper ball joint on each side.**

- Position the ball joint on the upper arm and insert the ball stud into the spindle.
- Install the pinch bolt and retaining nut. Tighten to 67 ft. lbs. (92 Nm).
- Install the alignment cams to the approximate position at removal. If not marked, install in neutral position.
- Install the 2 nuts attaching the ball joint to the arm. Hold the cams and tighten the nuts to 90–109 ft. lbs. (122–149 Nm) on 1992 vehicles or 107–129 ft. lbs. (145–175 Nm) on 1999–99 Town Cars.
- Remove the floor jack from the lower arm and install the wheel and tire assembly. Remove the safety stands and lower the vehicle.
- Check and adjust the front end alignment.

## Lower Ball Joint

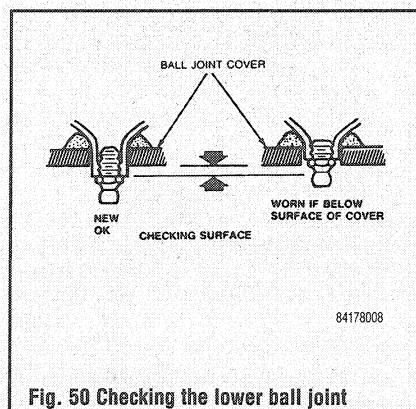
### INSPECTION

♦ See Figure 50

- Support the vehicle in normal driving position with ball joints loaded.
- Wipe the grease fitting and ball joint cover checking surface clean. The checking surface is the round boss into which the grease fitting is threaded.
- The checking surface should project outside the cover. If the checking surface is inside the cover, replace the lower control arm assembly.

### REMOVAL & INSTALLATION

The ball joint is an integral part of the lower control arm. If the ball joint is defective, the entire lower control arm must be replaced.



**Fig. 50 Checking the lower ball joint**

## Stabilizer Bar

### REMOVAL & INSTALLATION

- Raise the front of the vehicle and place jack-stands under the lower control arms.
- On 1988–91 vehicles, remove the link nuts and disconnect the stabilizer bar from the links.
- On 1992–00 vehicles, remove the retaining nuts from the pinch bolts at the spindles. Spread the slots in the spindles with a prybar to free the ball studs. Be careful not to damage the ball joint stud seal.
- Remove the stabilizer bar brackets from the frame and remove the stabilizer bar. If worn, cut the insulators from the stabilizer bar.
- On 1992–00 vehicles, remove the retaining nuts from the ball joint studs at the end of the bar. Use removal tool 3290-D or equivalent to separate the links from the ends of the stabilizer bar.

**To install:**

- Coat the necessary parts of the stabilizer bar with rubber lubricant. Slide new insulators onto the stabilizer bar.
- On 1992–00 vehicles, install the ball joint links into the ends of the bar with the retaining nuts. Tighten to 30–40 ft. lbs. (40–55 Nm).
- On 1988–91 vehicles, attach the ends of the stabilizer bar to the lower control arm with new nuts and links. Tighten the nuts to 9–15 ft. lbs. (12–20 Nm). Install the insulator brackets and tighten the bolts to 14–26 ft. lbs. (19–35 Nm).
- On 1992–00 vehicles, position the bar under the vehicle and engage the upper ball joint links to the spindles. Install the insulator brackets with the retaining nuts. Tighten the pinch bolts and nuts at the spindles to 30–40 ft. lbs. (40–55 Nm). Tighten the bracket-to-frame nuts to 44–59 ft. lbs. (59–81 Nm).

## Upper Control Arm

### REMOVAL & INSTALLATION

**1988–91 Town Car**

- Raise and safely support the vehicle on safety stands positioned on the frame just behind the lower arm. Remove the wheel and tire assembly.
- Remove the cotter pin from the upper ball joint stud nut. Loosen the nut a few turns but do not remove.
- Install ball joint press T57P-3006-B or equivalent, between the upper and lower ball joint studs with the adapter screw on top.

➡ **This tool should be seated firmly against the ends of both studs, not against the nuts or lower stud cotter pin.**

- With a wrench, turn the adapter screw until the tool places the stud under compression. Tap the spindle near the upper stud with a hammer to loosen the stud in the spindle.

➡ **Do not loosen the stud from the spindle with tool pressure only. Do not contact the boot seal with the hammer.**

- Remove the tool from between the ball joint studs and place a floor jack under the lower arm.