

# **TOOL TIPS**















# **Upper Ball Joint Socket**

- 1. With the upper control arm still attached to the body and the ball stud removed from the steering knuckle, place the ball joint socket on the joint and remove by turning counter clockwise. Helpful Hint: Cleaning and soaking with penetrating oil will assist in removing the ball joint out.
- 2. To install the new ball joint, simply thread the ball joint in with the use of the socket.

#### **Torsion Bar Remover** & Installer

- 1. To remove the torsion bar, first remove the retaining clip at the rear of the torsion bar where it fits from body. into the body.
- 2. Clamp the tool onto the torsion bar (about in the middle).
- 3. Use a hammer to tap on the tool, tapping toward the rear of the car. The torsion bar will move slowly out of the lower control arm. Be certain that all tension is off of the torsion bar prior to the above removal procedure.
- 4. To install the torsion bar, insert the torsion bar into the torsion bar socket in the body.
- 5. Place the hex part of the torsion bar into the lower control arm.
- 6. Attach the tool to the torsion bar and tap with a hammer toward the front of the car until the torsion bar is fully seated in the lower control arm.
- 7. Replace retaining clip at back of torsion bar.

#### **Upper Control Arm Bushing** Remover & Installer

- 1. To remove the bushing, remove upper control arm
- 2. Place cup of tool outside of control arm, over the bushing.
- 3. Place the threaded rod through the cup and the bushing.
- 4. Place the nut and washer on the threaded rod at the top of the cup.
- 5. Place nut, washer and 1" diameter tube on the inside of the bushing.
- 6. Tighten the nuts, which will pull out the bushing.
- 7. To install the new bushing, place large cup on the inside of the control arm with the threaded rod through the large cup with the nut and washer on top of the large cup.
- 8. With the threaded rod through the control arm, place new bushing on the threaded rod and align the bushing to the hole in the control arm.
- 9. Place the small cup over the threaded rod and the large end of the bushing and install the nut and washer. Tighten nuts to press the bushing into the control arm.

#### **Lower Control Arm Pivot Remover**

- 1. Thread the coupler to the end of the control arm pivot and thread the 1/3-13 threaded rod into the other end of the coupler.
- 2. Slide the long barrel over the control arm pivot making sure the threaded rod comes out the hole in the top of the barrel.
- 3. Place the washer and nut on the threaded rod and tighten until it pulls the control arm pivot out.

## **Lower Ball Joint** Stud Remover

- 1. Remove the lower ball joint stud nut.
- 2. Place the tool over the ball joint kunckle so the large bolt with the recessed face is over the stud
- 3. Tighten the large bolt until it forces out the ball joint stud.

### **Upper Ball Joint** Stud Remover

- 1. Remove the nut from the upper ball joint, and place tool with the bolt head against the upper ball joint stud. (The other end of the tool will fit on the lower ball joint stud nut.)
- 2. Place pressure on the upper ball joint stud by turning the bolt counter clockwise.
- 3. With pressure on the stud, hit the steering knuckle with a hammer. The stud will then pop out. (It may take several tries in some cases.)



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