

Arrow  
Colt

## ARROW & COLT

stabilizer. Next, lift off strut bar after noting position of all washers and bushings.

### DESCRIPTION

Strut type suspension consists of a vertically mounted strut assembly, lower control arm, and stabilizer bar. Strut assembly is mounted to top of fender panel by a thrust bearing. Strut assembly mounts at bottom to steering arm and pivots in ball joint. Strut components are: shock absorber built into strut outer tube, coil spring around outside of strut tube, and wheel spindle integral with bottom of strut tube. A stabilizer bar is attached to front chassis members and at ends to lower control arms.

### ADJUSTMENT

#### WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See *Wheel Alignment Specifications & Procedures* in **WHEEL ALIGNMENT** Section.

#### WHEEL BEARING ADJUSTMENT

See *Wheel Bearing Adjustment* in **WHEEL ALIGNMENT** Section.

#### BALL JOINT CHECKING

See *Ball Joint Checking* in **WHEEL ALIGNMENT** Section.

## REMOVAL & INSTALLATION

### STABILIZER & STRUT BAR

**Removal, Arrow Only** — Raise and support vehicle on safety stands. Disconnect stabilizer and strut bars from mounting on lower control arm. Remove strut bracket from body mounting position. Remove stabilizer bracket on each side and take off

**Installation** — To install, reverse removal procedure and note the following: Make sure distance between strut bar end and lock nut is 3.1" (78.7 mm). Install strut bar bushing with convex surface to front side.

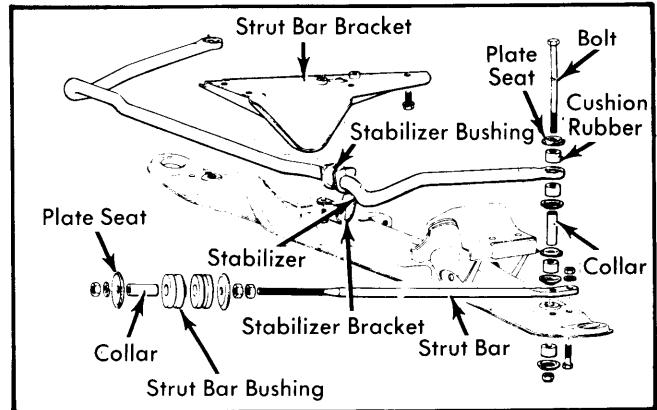


Fig. 1 Exploded View of Arrow Strut and Stabilizer Bars

### LOWER CONTROL ARM

**Removal** — Raise vehicle and place safety stands under chassis members. Remove tire and wheel. Disconnect stabilizer bar from lower control arm. Remove three bolts retaining strut assembly to steering arm. Remove nut from ball joint stud and using a suitable puller (CT-1104), separate steering arm from ball joint. Remove bolts retaining control arm pivot shaft to crossmember and remove control arm from vehicle.

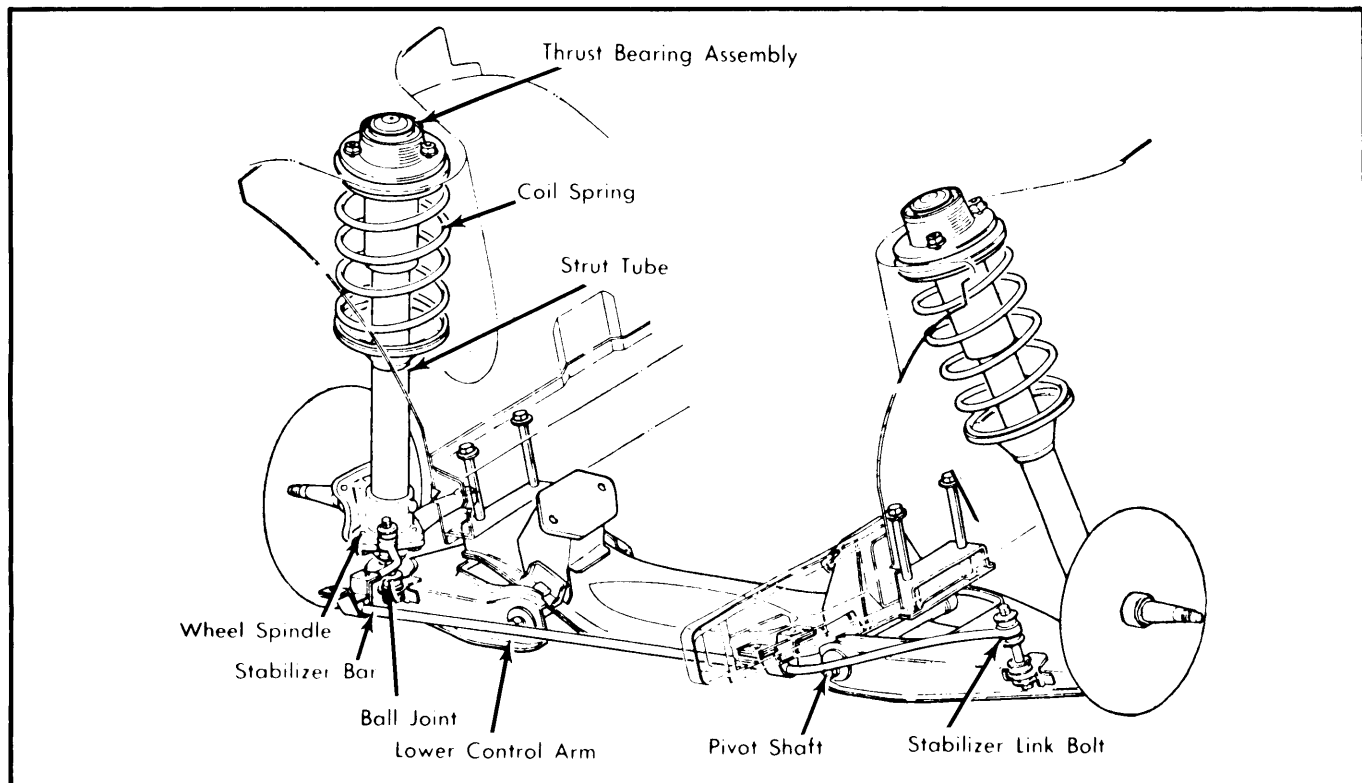


Fig. 2 Arrow and Colt Front Suspension Assembly

# Front Suspension

## ARROW & COLT (Cont.)

**Disassembly** — Remove bolts and washers from both ends of pivot shaft. Using a suitable adapter, press pivot shaft along with rear bushing out of control arm. Remove rubber stopper and press out front bushing. Remove cover over ball joint stud by prying around edges with a screwdriver. Using a suitable adapter, press ball joint out of control arm.

**Assembly** — 1) Bushings are not reusable once they have been removed and must be replaced. Check pivot shaft, ball joint and control arm for wear or distortion. Press front bushing with pivot shaft into control arm. Install spreader CT-1114B (or equivalent), between rear branches of control arm and press in rear bushing.

2) Install pivot shaft bolts and new washers, but **DO NOT** tighten until weight is on front wheels. Using a press, force ball joint into control arm. Ball joint cover must be replaced when removed. Fill with grease and with a press, force cover over ball joint.

**Installation** — To install lower control arm, reverse removal procedure and note the following: Make sure chamfered side of special mounting nut is facing rounded surface of bracket.

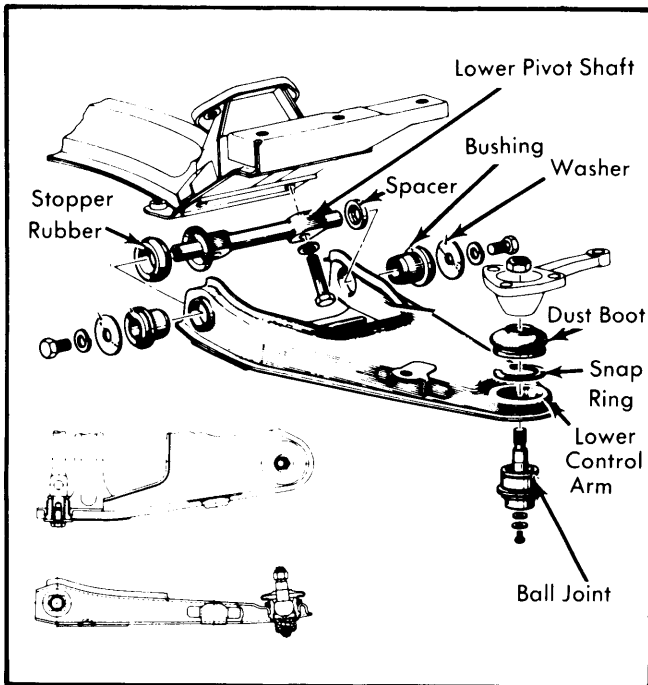


Fig. 3 Exploded View of Lower Control Arm

### STRUT ASSEMBLY

**Removal** — Raise vehicle and place safety stands under chassis members. Disconnect strut assembly from lower control arm as previously outlined. Remove brake caliper and hub. Remove dust cover and disc brake adapter. Remove three bolts retaining strut assembly to fender panel and remove strut assembly from vehicle.

**Disassembly** — 1) Secure strut assembly in vise and remove small dust cover in middle of thrust bearing assembly. Compress spring using tool CT-1105 (or equivalent) and remove

nut retaining thrust bearing. Remove thrust bearing, coil spring, upper spring seat, and rubber bumper.

2) Hold strut assembly vertical in vise and use wrench CT01112 (or equivalent) to remove shock absorber seal. Push piston rod to lowest position and drain oil. Remove "O" ring from top of strut tube and drain piston rod assembly and guide up and out of tube. Remove guide from piston rod and rod from cylinder.

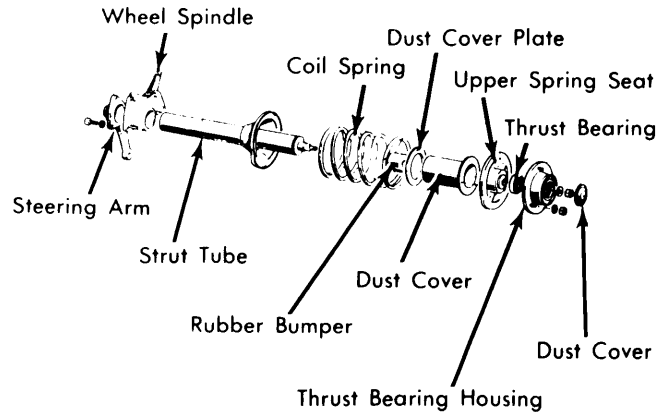


Fig. 4 Exploded View of Suspension Strut Assembly

**Reassembly** — 1) Thoroughly clean all components and check for wear or distortion. Coat piston rod with shock absorber oil and install in cylinder. Insert cylinder and piston rod in strut tube. Push piston rod to bottom of stroke and fill cylinder with 10 ounces of shock absorber oil. Slowly move piston rod up and down until air is removed from cylinder.

2) Install guide over cylinder and push down until it contacts upper edge of cylinder. Install "O" ring between guide and strut tube. **NOTE** — Always use new "O" ring when removed. Using seal guide CT-1111B (or equivalent), slide shock absorber seal over piston rod and tighten until edge of seal nut touches strut tube. **NOTE** — Always use new seal when removed.

3) Compress spring and install over strut tube. Pull piston rod to end of travel and slide on rubber bumper. Install upper spring seat, thrust bearing and nut, and tighten temporarily. Make sure spring is seated and release tool. Using holding tool CT-1112 (or equivalent), hold upper spring seat and tighten piston rod nut.

**Installation** — To install, reverse removal procedure and tighten all nuts and bolts.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Steering Knuckle-to-Ball Joint.....	29-43 (4.0-5.9)
Strut-to-Steering Knuckle .....	36-43 (4.0-5.9)
Lower Control Arm Pivot Shaft Nut .....	43-51 (5.9-7.1)
Stabilizer Bar Bolt.....	22-25 (3.0-3.5)
Steering Knuckle-to-Tie Rod .....	29-36 (4.0-5.0)
Strut-to-Lower Control Arm.....	36-43 (4.0-5.9)
Caliper Mounting Bolt.....	51-65 (3.5-9.0)