

## CHRYSLER CORP. OMNI & HORIZON

Dodge Omni  
Plymouth Horizon

### REMOVAL & INSTALLATION

#### DESCRIPTION

The front suspension is MacPherson type with vertical shock absorbing struts. The struts attach to upper fender reinforcements and steering knuckle to provide upper steering knuckle position. Lower control arms attach outboard to steering knuckle and inboard to a crossmember through a ball joint to provide lower steering knuckle position. Working through a pivot bearing in upper retainer, the upper strut and steering knuckle turn as an assembly during steering maneuvers. Coil springs, positioned around struts, support system.

#### ADJUSTMENT

##### CASTER & CAMBER

See *Caster and Camber Adjustments and Specifications in WHEEL ALIGNMENT Section.*

##### FRONT WHEEL BEARINGS

See *Wheel Bearing Adjustment in WHEEL ALIGNMENT Section.*

##### BALL JOINT CHECKING

See *Ball Joint Checking in WHEEL ALIGNMENT Section.*

#### CONTROL ARM

**Removal** – 1) Raise vehicle and remove front inner pivot through bolt. Remove ball joint to steering knuckle clamp bolt and rear stub strut nut with retainer and bushing. Pry between ball stud retainer on knuckle and lower control arm to separate ball joint stud from steering knuckle.

**NOTE** – *If steering knuckle is pulled out from vehicle after release from ball joint, the inner constant velocity joint can separate.*

2) Remove sway bar to control arm nut and rotate control arm over sway bar. Remove bushing from rear stub strut along with sleeve and retainer.

**Inspection** – Inspect arm for distortion and check bushing for deterioration.

**Installation** – To install, reverse removal procedures. Control arm bolts must be tightened with suspension supporting vehicle.

#### STEERING KNUCKLE (INNER BEARING HOUSING)

**Removal** – 1) Loosen hub nut with vehicle on floor and with brakes applied. Raise vehicle and remove wheel and tire assembly. Remove hub nut and make sure splined drive shaft is free to separate from spline in hub during removal.

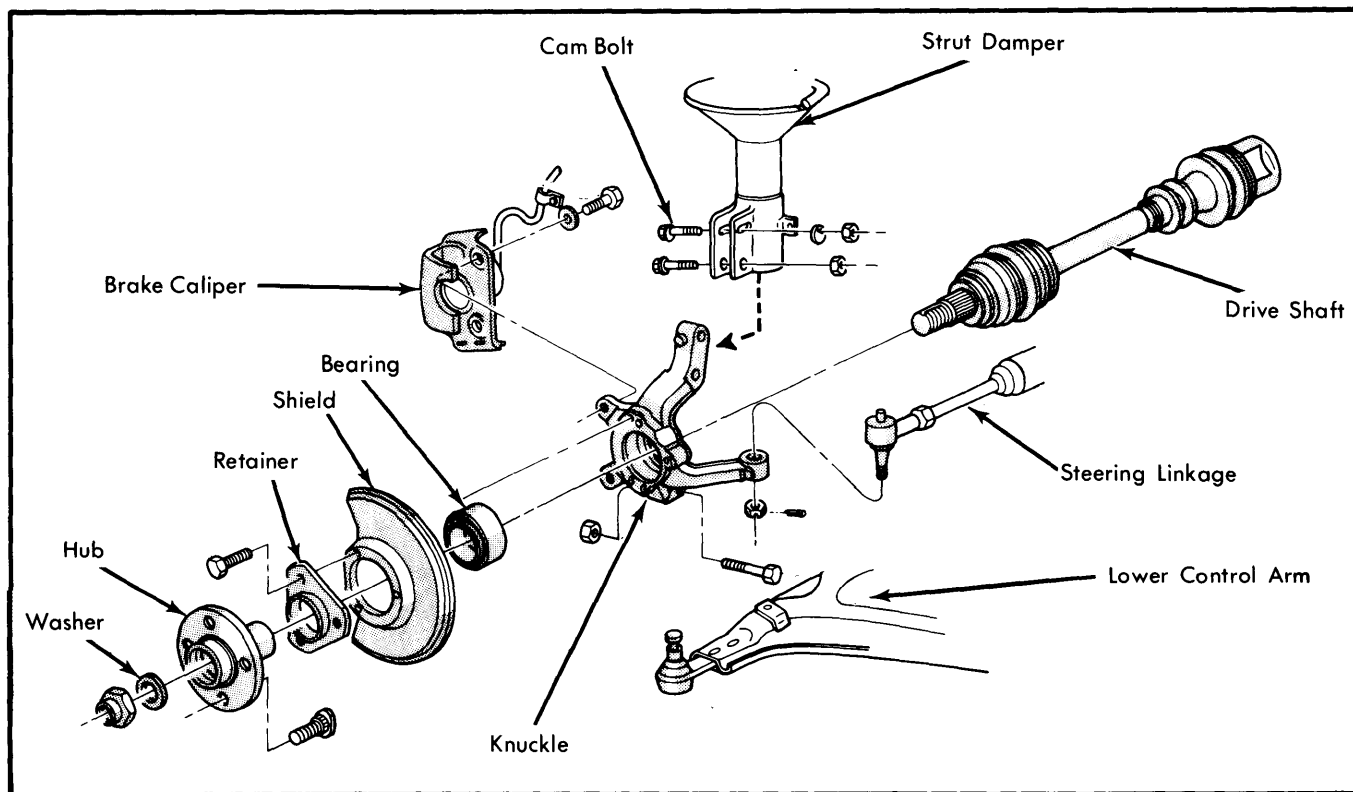


Fig. 1 Strut Damper Assembly (Omni & Horizon)

# Front Suspension

## CHRYSLER CORP. OMNI & HORIZON (Cont.)

**2)** Use tie rod removal tool C-3498-A to disconnect tie rods. Remove brake hose retaining clamp from strut damper. Remove ball joint clamp stud bolt and caliper adaptor screw. Remove caliper and rotor assembly. Mark camber position on upper cam adjusting bolt, then remove both bolts.

**3)** Remove knuckle from strut damper and off of ball joint stud. Be sure drive shaft is supported during removal of knuckle to prevent damage to constant velocity joints.

**Installation** — Reverse removal procedure to install. Tighten all bolts to specifications.

### BALL JOINT

The lower control ball joints are riveted to lower control arm and require no lubrication. Replacement is made by removing rivets and attaching new unit with special bolts.

### STABILIZER BAR

**Removal** — Raise vehicle and remove end bushing to control arm nut. Remove reinforcement plates. Remove bar to crossmember linkage and remove bar assembly from vehicle. Disassemble intermediate linkage from bar.

**Installation** — Loosely assemble intermediate links and straps to stabilizer bar. Place link ends through crossmember and install upper isolators, retainers and nuts. Position bar end bushing retainer studs through lower control arms and install reinforcement plate and nuts.

### STRUT ASSEMBLY

**NOTE** — Where reassembly includes use of original strut and knuckle, mark cam adjusting bolt.

**Removal** — Raise vehicle and remove wheel and tire. Remove cam adjusting bolt, through bolt and brake hose damper bracket retaining screw. Remove strut to fender shield mounting nut washer assemblies.

**Disassembly** — Compress coil spring with compression tool L-4514. Remove retainers and bushings. Remove coil spring. Spring must be reinstalled on same side of vehicle.

**Inspection** — Inspect all components for damage or excessive wear.

**Installation** — To install strut, reverse removal procedure.

TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs.
Strut Rod Nut .....	60
Strut-to-Steering Knuckle .....	90
Ball Joint Clamp Bolt .....	50
Ball Joint-to-Control Arm .....	60
Caliper Mounting Bolt .....	85
Control Arm Mounting Bolt .....	105
Stabilizer Bar .....	70
Tie Rod End .....	25