CHRYSLER CORP. FRONT WHEEL DRIVE

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

No lubrication or adjustment is necessary for permanently sealed front bearings. Replace hub nuts and washers when removed as they are not reusable. Tighten new nuts to 185 ft. lbs. Install new bearings any time hub is removed.

BALL JOINT CHECKING

See Ball Joint Checking in WHEEL ALIGNMENT Section.

REMOVAL & INSTALLATION

CONTROL ARM

Removal – **1)** Raise vehicle and remove front inner pivot through bolt. Remove rear stub strut nut, retainer and bushings. Remove ball joint-to-steering knuckle clamp bolt. Separate ball joint 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.

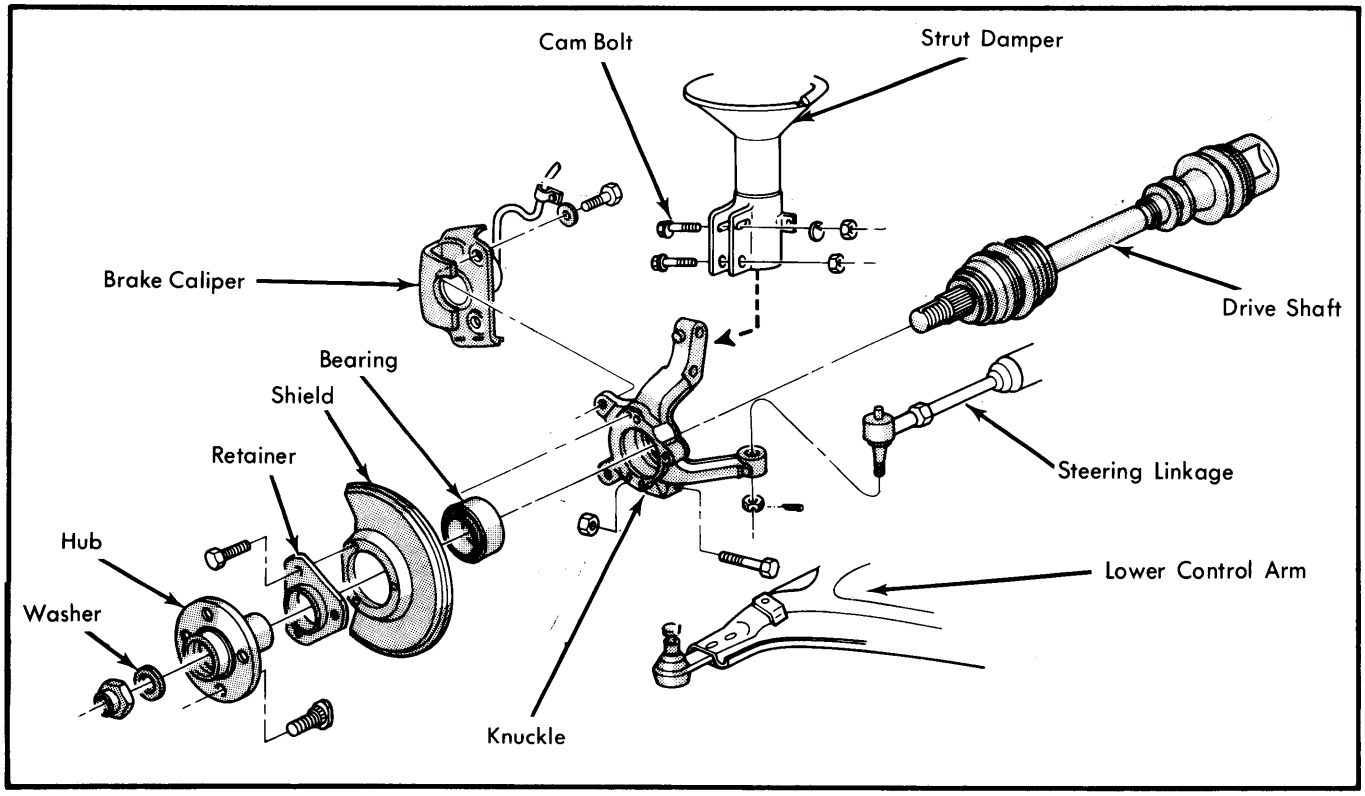

Fig. 1 Chrysler Front Wheel Drive Strut Damper Assembly

CHRYSLER CORP. FRONT WHEEL DRIVE (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 ball joints are pressed into the lower control arm. If the ball joint can be moved by grasping the grease fitting and twisting, it should be replaced. Replacement is made by pressing the old ball joint out, and pressing a new one in.

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 – Position crossmember bushings on bar with curved surface up and split to front. Set upper clamps on top of crossmember bushings, lift bar assembly into crossmember and install lower bolts and clamps. Position retainers at control arms, insert bolts, and install nuts. With lower control arms raised to design height, tighten bolts.

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). Hold strut rod and remove strut rod nut. 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.

Reassembly – Install bumper dust shield assembly to strut rod. Install spring seat, retainer, bearing, spacer and mount assembly. Install rebound bumper, retainer and rod nut. Position upper spring retainer alignment notch parallel to damper lower attaching brackets. Using suitable tool (L-4558), tighten rod nut before releasing spring compressor. Remove spring compressor.

Installation – To install strut, reverse removal procedure.

WHEEL BEARINGS

Removal – **1)** Remove steering knuckle and separate from hub with hub remover (L-4539). To separate, place washer and thrust button on hub. Back out retainer screw to hub as far as possible. Position tool and install 2 screws firmly into tapped brake adaption extensions and 1 screw into retaining screw threads. Tighten press screw to remove hub through bearing.

NOTE – *Bearing inner races will separate, and outboard race will stay on hub.*

2) Remove bearing outer race from hub using hub remover thrust button and puller (L-4534). Remove bearing retainer. Carefully pry seal from machined recess in knuckle. Press bearing out of knuckle with a $1\frac{3}{8}$" socket. Discard bearing.

Installation – **1)** Press new bearing into knuckle with installer tool (L-4463). Press bearing on outer race only. Install bearing retainer. Tighten retaining screws. Press bearing into hub with socket. Push against bearing inner race only.

2) Position new seal in recess and assembly installer tool (C-4698). Position tool head for installation and install seal. Lubricate full circumfrence of the seal and wear sleeve with multi-purpose grease. Install knuckle to suspension.

TIGHTENING SPECIFICATION

Application	Ft. Lbs. (N·m)
Strut Rod Nut	60 (82)
Strut-to-Steering Knuckle	45 (61)
Ball Joint Clamp Bolt	50 (68)
Caliper Mounting Bolt	85 (116)
Control Arm Mounting Bolt	105 (143)
Stabilizer Bar	22 (30)
Tie Rod End	35 (48)