CHRYSLER CORP. REAR WHEEL DRIVE

Cordoba — **Imperial**
Diplomat — **Mirada**
Gran Fury — **New Yorker**

DESCRIPTION

All models use independent torsion bar ball joint type suspensions. A transverse torsion bar is mounted between outboard ends of lower control arms and forward portion of the suspension crossmember. Lower control arms are attached to crossmember with steering knuckle connected between control arms. Shock absorber is mounted on lower control arm. A sway bar is used which also functions as a strut rod.

ADJUSTMENT

CASTER & CAMBER

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

RIDING HEIGHT

See Riding Height Adjustments and Specifications in WHEEL ALIGNMENT Section.

FRONT WHEEL BEARINGS

Tighten adjusting nut to 240-300 INCH Lbs. while turning wheel. Stop rotation and back off adjusting nut 1/4 turn to release preload. Finger tighten adjusting nut while rotating wheel. Position locking nut over adjusting nut and install cotter pin. Adjustment should provide .001-.003" end play.

BALL JOINT CHECKING

See Ball Joint Checking in WHEEL ALIGNMENT Section.

REMOVAL & INSTALLATION

TORSION BAR

Removal – 1) Raise vehicle and support on hoist so that suspension is in full rebound. Release load on both torsion bars by turning anchor adjusting bolt in crossmember counterclockwise. Remove adjusting bolt and raise lower control arms until clearance between frame member and torsion bar (at jounce bumper) is 2 7/8". Support in this position.

2) Disconnect sway bar from control arm. Remove two bolts attaching torsion bar end bushing to control arm. Remove two bolts attaching torsion bar pivot cushion bushing to crossmember and remove torsion bar with anchor assembly. Carefully separate anchor from torsion bar.

Installation – 1) Carefully slide balloon seal over end of torsion bar with cupped end toward hex. Coat hex end bar with high mileage lubricant and install bar hex into anchor bracket. With bar in horizontal position, ears of bracket should be nearly straight up. Position swivel into anchor bracket ears. Install anchor bracket into crossmember anchor retainer and install adjusting bolt and bearing. Install bolts attaching pivot cushion bushing to crossmember and tighten finger tight.

2) With lower control arms at same height as during removal, install bolts attaching torsion bar bushing to lower control arms. Be sure that anchor bracket is fully seated in crossmember. Install friction plates between crossmember and pivot cushion bushing with open end of slot to rear and bottomed out on bolt. Tighten bolts. Position balloon seal over anchor and connect sway bar to control arm using new bolt. Load torsion bar by turning adjusting bolt clockwise. Lower vehicle and adjust front suspension height.

STEERING KNUCKLE

Removal – Raise and support front of vehicle with safety stands placed under lower control arms, then remove wheel. Remove disc brake adaptor mounting bolts and support adaptor and caliper out of way with wire. Remove hub and disc assembly, then remove brake splash shield. Loosen bolts attaching steering arm to knuckle. Separate upper ball joint from steering knuckle. Remove steering arm-to-knuckle attaching bolts and separate upper control arm from knuckle, then lift knuckle from vehicle.

Installation – To install steering knuckle, reverse removal procedure and note the following: Tighten all nuts and bolts to specified torque value. After installation of hub and disc assembly, adjust front wheel bearings.

SWAY BAR

Removal – Raise vehicle and release load on torsion bars by turning adjusting bolts counterclockwise. Raise lower control arm until clearance between frame member and torsion bar (at jounce bumper) is 2 7/8". Support control arm in this position during entire removal and installation process. Remove sway bar to torsion bar attaching bolts, retainer, cushions and sleeve. Remove retainer assembly strap bolts and retainer straps. Remove sway bar.

Installation – To install, reverse removal procedure. Install new bolts through sway bar retainer, cushions and sleeve. Load torsion bar before lowering vehicle, and adjust vehicle height.

UPPER CONTROL ARM

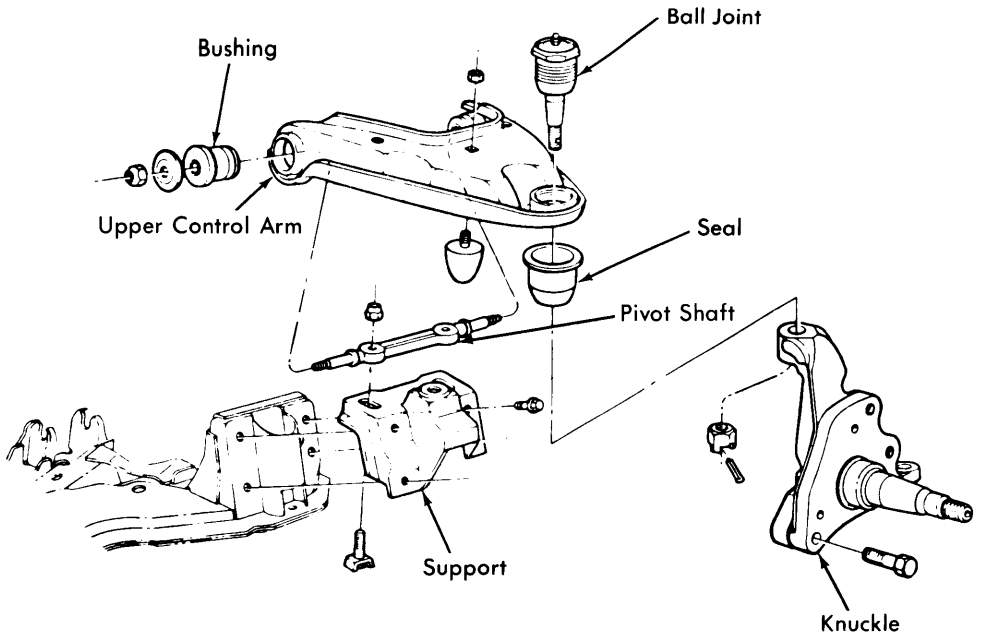
Removal – Raise front of vehicle with hand jack and place jack stand under lower control arm, then remove wheel and tire assembly. Remove brake caliper if necessary for clearance. Remove stud nuts from upper and lower ball joints. Using suitable tool (C-3564A), pull ball joint stud from control arm using sharp hammer blows on steering knuckle boss to help remove stud. Scribe a line on support bracket along pivot shaft to assist in installation. Remove tool and upper ball joint from steering knuckle. Remove pivot shaft nut and bolts from upper control arm. Lift control arm away from support bracket and remove from vehicle.

Installation – To install, reverse removal procedure and tighten all nuts and bolts to specification.

LOWER CONTROL ARM & SHAFT

Removal – 1) Raise vehicle and remove wheel and tire. Remove brake caliper retaining screws, clips and anti-rattle springs. Remove caliper and suspend out of way. Remove shock absorber lower nut, retainer and insulator. Remove hub and rotor assembly along with splash shield. Release load on both torsion bars by turning anchor adjusting bolts counterclockwise.

CHRYSLER CORP. REAR WHEEL DRIVE (Cont.)



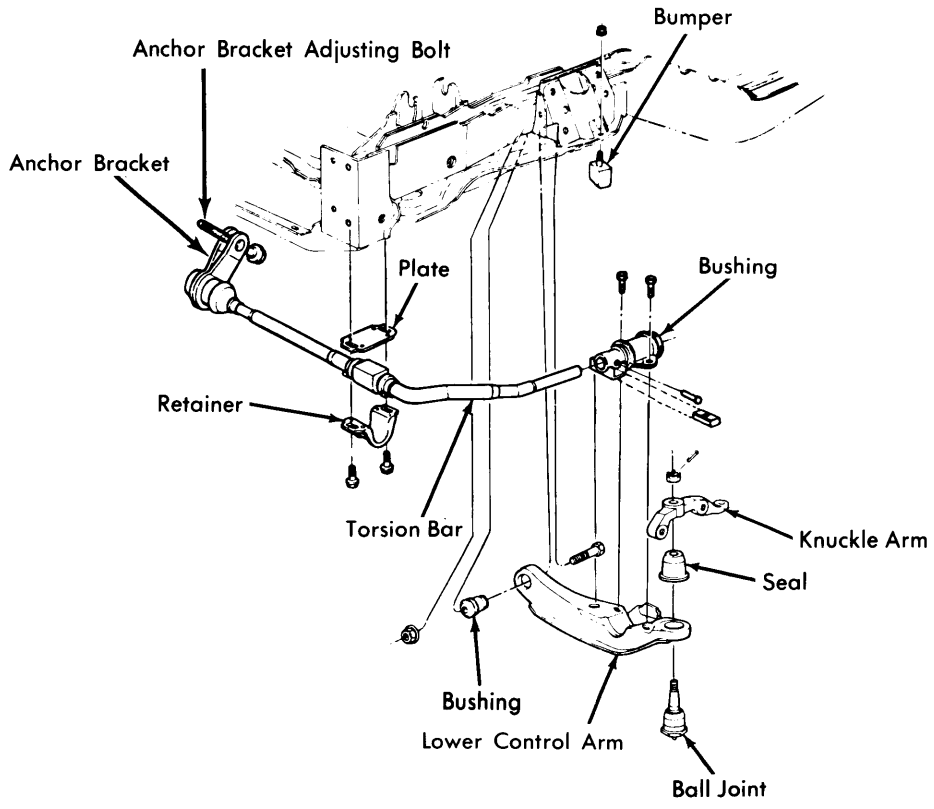


Fig. 1 Exploded View of Chrysler Corp. Front Suspension (Rear Wheel Drive Models)

CHRYSLER CORP. REAR WHEEL DRIVE (Cont.)

NOTE – *Release tension on both torsion bars even if only one control arm is being removed because of sway bar reaction from opposite torsion bar.*

2) Raise lower control arm until clearance between frame member (at jounce bumper) and torsion bar bushing is 2⅞". Support control arm at this "design height" and remove two bolts attaching torsion bar end bushing to lower control arm. Separate lower ball joint from knuckle using suitable tool (C-3564-A). Remove lower control arm pivot bolt and lower control arm.

Bushing Service – Remove and install pivot bushing and new bushing using tool C-4383 (or equivalent).

Installation – To install, reverse removal procedure.

NOTE – *Do not tighten lower control arm nut until full weight of vehicle is on wheels.*

UPPER BALL JOINT

Removal – Ball joint can be removed from upper control arm after lower control arm is supported as close to wheel as possible. Remove upper ball joint using removal tools (C-3651 or C-3560). Always replace balloon seals after removal.

Installation – When installing ball joint, be sure ball joint threads squarely engage threads of upper control arm. Position new seal over ball joint stud, and install using adapter (C-4039 or C-4034).

LOWER BALL JOINT

Removal – **1)** Remove rebound bumper and raise vehicle on hoist to place suspension in full rebound. Place safety stands under front frame for additional support. Remove wheel and tire and caliper assembly. Remove hub and rotor, splash shield, lower shock mounting nut, retainer and insulator or bolt and nuts.

2) Unload torsion bar. Remove upper and lower ball joint stud nuts and use suitable tool (C-3564A) to break lower ball joint loose. Use suitable tool (C-4212) to press ball joint from lower control arm.

Bushing Service – Place control arm in a vise and remove pivot bar nuts and bushing retainers. Bolt suitable support tool (C-4258-1) to pivot bar, then place suitable puller tool (C-4253-2) over end of pivot bar and reinstall pivot bar nuts. Snug bolts against arm, then screw bolts equally until bushing is free in arm. Remove tools and bushing. To install new bushing, press in using suitable tool (C-4253-8 or 4253-7).

Installation – To install, reverse removal procedure and replace seal if necessary. When installing ball joint use ball joint installation tool (C-4039 and C-4212).

WHEEL BEARINGS

Removal – Raise and support vehicle with front wheels off ground. Remove wheel and tire. Remove grease cap, cotter pin, nut lock, and bearing adjusting nut. Remove disc brake sliding caliper retaining clips and anti-rattle springs. Slowly slide caliper assembly away from brake disc and support caliper housing on steering knuckle. Remove thrust washer and outer bearing cone. Slide wheel hub and disc assembly off the spindle. Carefully drive out inner seal and remove bearing cone with ¾" diameter non-metallic rod.

Installation – If cup is damaged, install new cup. Force grease between all rollers and case of bearing. Apply a small amount of grease to hub cavity. Install inner cone and new seal with lip of seal facing inward. Using seal installer (C-4210), position seal flush with end of hub. Clean spindle and apply a light coat of grease to polished surfaces. Install hub and braking disc assembly to spindle and install bearing outer cone, thrust washer and adjusting nut. Adjust bearing and reverse removal procedure.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N·m)
Ball Joint-to-Upper Control Arm	125 (170)
Ball Joint-to-Stud Nut	100 (136)
Upper Control Arm Adjusting Bolt	150 (204)
Lower Arm Pivot Shaft	75 (102)
Steering Knuckle Bolts	160 (218)
Rebound Bumper	17 (23)
Idler Arm	70 (95)
Tie Rod End	40 (54)
Tie Rod Sleeve Clamp	12 (16)
Upper Shock Mount	25 (34)
Lower Shock Mount	34 (48)