

CHRYSLER CORP. COIL SPRING TYPE

Dodge, Plymouth

DESCRIPTION

Independent front suspension consists of upper and lower control arms, steering knuckles, coil springs, and hydraulic shock absorbers. Upper control arms are mounted to frame side rails, while lower control arms are mounted to crossmember. Steering knuckles are mounted between upper and lower control arms by conventional ball joints. Coil springs are mounted between seat in frame and lower control arm. Double-acting shock absorbers mount inside coil springs, and are fastened to lower control arms and frame.

ADJUSTMENT

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

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

WHEEL BEARING ADJUSTMENT

Van & 2WD Pickup Models

Tighten wheel bearing adjusting nut to 360-480 IN. Lbs. (40-53 N.m) while turning rotor. Back off adjusting nut to release all preload. Retighten nut finger tight. Free play should be .0001-.003" (.0025-.076 mm). Install nut lock and cotter pin. Coat grease cap lightly with grease and install.

4WD Pickup Models

Tighten inner lock nut to 50 ft. lbs. (68 N.m). Loosen lock nut and retighten to 30-40 ft. lbs. (41-54 N.m) while turning hub. Back off lock nut 135-150°. Install retaining washer (lock ring). Install and tighten outer lock nut to 50 ft. lbs. (70 N.m) for 44FBJ axle or 65 ft. lbs (88 N.m) for Model 60 front axle. End play should be within .001-.010" (.03-.25 mm).

BALL JOINT CHECKING

Ball joints are preloaded. If up and down movement exceeds .020" (.5 mm), replace ball joint.

REMOVAL & INSTALLATION

SHOCK ABSORBER

Removal

Raise and support vehicle. Turn wheels to allow best access to upper shock absorber mount. Remove upper mounting nut and retainer. Remove lower mounting bolts, and remove shock absorber from vehicle.

Installation

To install, fully extend shock absorber and reverse removal procedure.

COIL SPRING

Removal

1) Block brake pedal in up position. Raise vehicle and position safety stands under frame. Remove wheel and tire. Remove brake caliper retainer and anti-rattle spring. Remove caliper from disc by sliding out and away from disc. Hang caliper out of the way, but do not hang from brake line. Remove inboard brake shoe.

2) On Pick-up models, remove grease cap, cotter key, lock nut, adjusting washer and outer bearing. Carefully slide rotor from steering knuckle. Do not drag seal or inner bearing over steering knuckle threads. Remove splash shield.

3) Remove shock absorber and strut. Disconnect sway bar (if equipped). Install suitable spring compressor (DD-1278), tighten finger tight, then back off 1/2 turn.

4) Remove cotter keys and ball joint nuts. Install suitable ball joint breaker tool (C-3564-A). Turn threaded portion of tool to lock against lower stud. Spread tool enough to place lower stud under pressure, then stike steering knuckle with hammer to loosen stud.

5) Remove tool. Slowly loosen spring compressor until all tension is relieved from coil spring. Remove compressor and coil spring.

Installation

To install, reverse removal procedure. Tighten all nuts and bolts.

LOWER CONTROL ARM

Removal

Raise and support vehicle, and remove wheel. Remove coil spring as previously described. Remove lower control arm pivot, and remove lower control arm from vehicle.

Installation

To install, reverse removal procedure.

UPPER CONTROL ARM

Removal

1) Raise and support vehicle and remove wheel and tire. On Van models, block brake pedal in up position and remove brake caliper retainer and anti-rattle spring. Remove caliper from disc and hang out of the way. Do not hang from brake line. Remove inboard brake shoe.

2) On all models, remove shock absorber and install suitable spring compressor (DD-1278). Tighten finger tight and then back-off 1/2 turn. Remove cotter keys and ball joint nuts. Position suitable ball joint breaker tool (C-3564-A), with threaded portion of tool locking against upper stud.

3) Spread tool to place stud under pressure, then strike stud with hammer to loosen. Remove tool. Remove retaining bolts and control arm.

Installation

To install, reverse removal procedure. Do not tighten control arm pivot bolts until vehicle weight is supported by front suspension. Check wheel alignment.

LOWER BALL JOINT

Removal

With lower control arm removed, remove ball joint seal. Press out ball joint using a suitable tool (C-4212).

NOTE: On some models it may be possible to remove ball joint with control arm still in vehicle, but disconnected from steering knuckle and with coil spring removed.

Installation

Using removal tool, press ball joint into control arm. Install seal with driver (C-4034). Install control arm.

Front Suspension

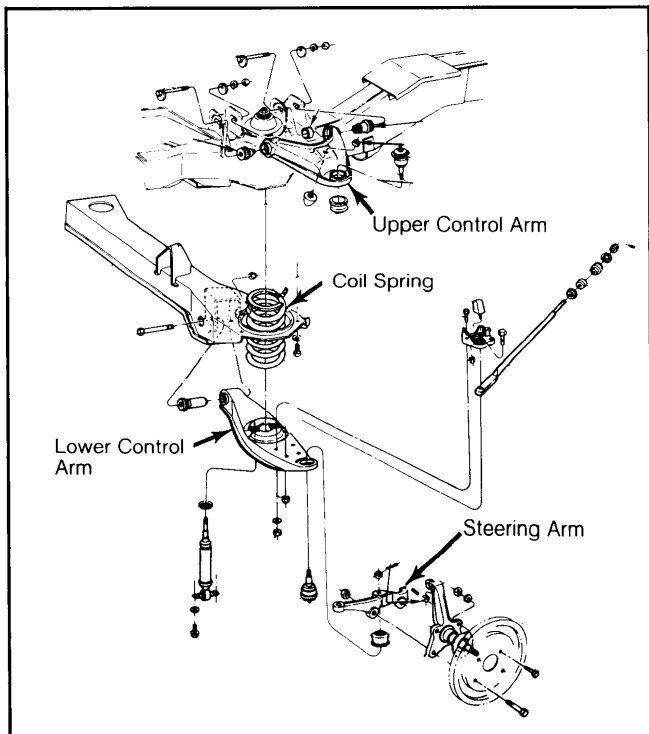
CHRYSLER CORP. COIL SPRING TYPE (Cont.)

UPPER BALL JOINT

Removal

Raise and support vehicle under outer end of lower control arm. Remove wheel and tire. Remove ball joint nuts. Using ball joint breaker tool (C-3564-A), free upper ball joint. Using tool C-3561, unscrew ball joint from control arm.

Fig. 1: Exploded View of Front Suspension Assembly



Installation

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

STEERING KNUCKLE

Removal

1) Block brake pedal in up position. Raise vehicle and remove wheel and tire assembly. Remove caliper retainer and anti-rattle spring assemblies. Remove caliper and hang out of way. Do not let caliper hang by hydraulic line.

2) Remove rotor and bearings. Place jack under outer end of lower control arm. Disconnect tie rod at steering knuckle. See *Steering Linkage in STEERING Section*. Separate ball joint studs from steering knuckle as previously described. Remove steering knuckle from vehicle.

Installation

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

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N.m)
Upper Ball Joint Nut	
D350	50 (68)
All Other Models	100 (136)
Upper Joint-to-Control Arm	125 (170)
Lower Ball Joint Nut	
1/16" Nut	135 (183)
3/4" Nut	175 (237)
Front Strut Bolt	
D150/450	175 (237)
All Other Models	135 (183)
Rear Strut Nut	
D150/450	85 (115)
All Other Models	52 (70)
Upper Shock Absorber Mount	125 (34)
Lower Shock Absorber Mount	
All Exc. 4WD	17 (23)
All 4WD	55 (75)
Upper Control Arm (Eccentric) Bolt	70 (95)
Lower Control Arm-to-Crossmember	
Van	175 (237)
All Other Models	210 (285)

¹ - On W150/250 with 44FBJ Axle and W250/350 with 60 Axle, torque to 55 ft. lbs. (75 N.m).