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

See Wheel Bearing Adjustment in WHEEL ALIGNMENT Section.

BALL JOINT CHECKING

See Ball Joint Checking in WHEEL ALIGNMENT Section.

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 ½ 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 strike 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, and 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 bolt, and remove lower control arm from vehicle.

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

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 ½ 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 same tool as used for removal, press ball joint into control arm. Install seal using a suitable tool (C-4034). Install control arm as previously outlined.

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.

CHRYSLER CORP. COIL SPRING TYPE (Cont.)

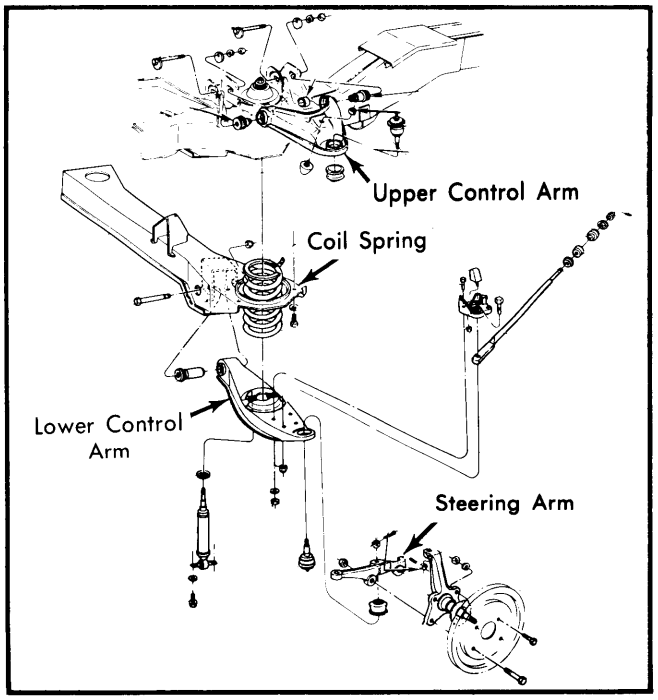

Fig. 1 Exploded View of Front Suspension Assembly

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

STEERING KNUCKLE

Removal – 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. 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.
Upper Ball Joint Nut	
D350	50
All Other Models	100
Upper Joint-to-Control Arm	125
Lower Ball Joint Nut	
1 1/16" Nut	135
3/4" Nut	175
Front Strut Bolt	
D150/450	175
All Other Models	135
Rear Strut Nut	
D150/450	85
All Other Models	52
Upper Shock Absorber Mount	①25
Lower Shock Absorber Mount	
All Exc. 4WD	17
All 4WD	55
Upper Control Arm (Eccentric) Bolt	70
Lower Control Arm-to-Crossmember	
"B", "CB", "MB", "PB"	175
All Other Models	210

① – On W150/250 with 44FBJ Axle and W250/350 with 60 Axle, torque is 55 ft. lbs.