

Front Suspension

CHRYSLER CORP. COIL SPRING TYPE

Dodge
Plymouth

NOTE — Some models use other units. See Chrysler Corp. Leaf Spring Type in this Section.

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 remove shock absorber-to-control arm attaching bolts. Remove shock absorber from vehicle.

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

COIL SPRING

Removal — Block brake pedal in up position. Raise vehicle and position safety stands under frame. Remove wheel and tire. Remove brake caliper and position a piece of wood between brake pads to prevent fluid leak. Remove caliper but do not allow to hang from brake line. Remove rotor and splash shield. Remove shock absorber, disconnect sway bar link and remove strut. Install a suitable spring compressor tool (DD-1278). Tighten tool finger tight then back off 1/2 turn. Remove cotter pins and ball joint nuts. Install a suitable ball joint breaker tool (C3456-A or C-3456-U). Spread tool enough to place lower stud under pressure and strike steering knuckle at lower stud with a hammer. Remove breaker tool and slowly loosen compressor tool. Remove spring compressor and 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 — Raise and support vehicle under frame, and remove wheel. Remove shock absorber from vehicle. Using suitable spring compressor tool (DD-1278), compress coil spring. Remove cotter pin and nut from upper ball joint, and position suitable separator tool (C-3564-U) on vehicle. Tighten separator until upper ball joint stud is under pressure, then tap on steering knuckle to loosen stud from knuckle. Remove separator tool, and remove upper control arm-to-frame attaching bolts. Remove control arm from vehicle.

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 lower control arm, and remove wheel. Remove cotter pin and nut from ball joint stud, and install suitable separator tool (C-3564-U) between upper and lower ball joint studs. Tighten tool to free upper ball joint stud from steering knuckle. Using suitable removal tool (C-3561), unscrew ball joint from control arm.

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

STEERING KNUCKLE

Removal — Raise and support vehicle under lower control arm, and remove wheel. Disconnect tie rod end at steering knuckle. See *Steering Linkage* in **STEERING** Section. Remove brake drum, and brake backing plate. 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.

CHRYSLER CORP. COIL SPRING TYPE (Cont.)

TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs.
Upper Control Arm (Eccentric) Bolt	70
Lower Control Arm-To-Crossmember	
5/8" Bolt	215
3/4" Bolt	225
Upper Ball Joint Nut	135
Upper Joint-to-Control Arm	125
Lower Ball Joint Nut	
1 1/16" Nut	135
3/4" Nut	175
Front Strut Bolt	85
Rear Strut Nut	52
Upper Shock Absorber Mount	25
Lower Shock Absorber Mount	200 INCH

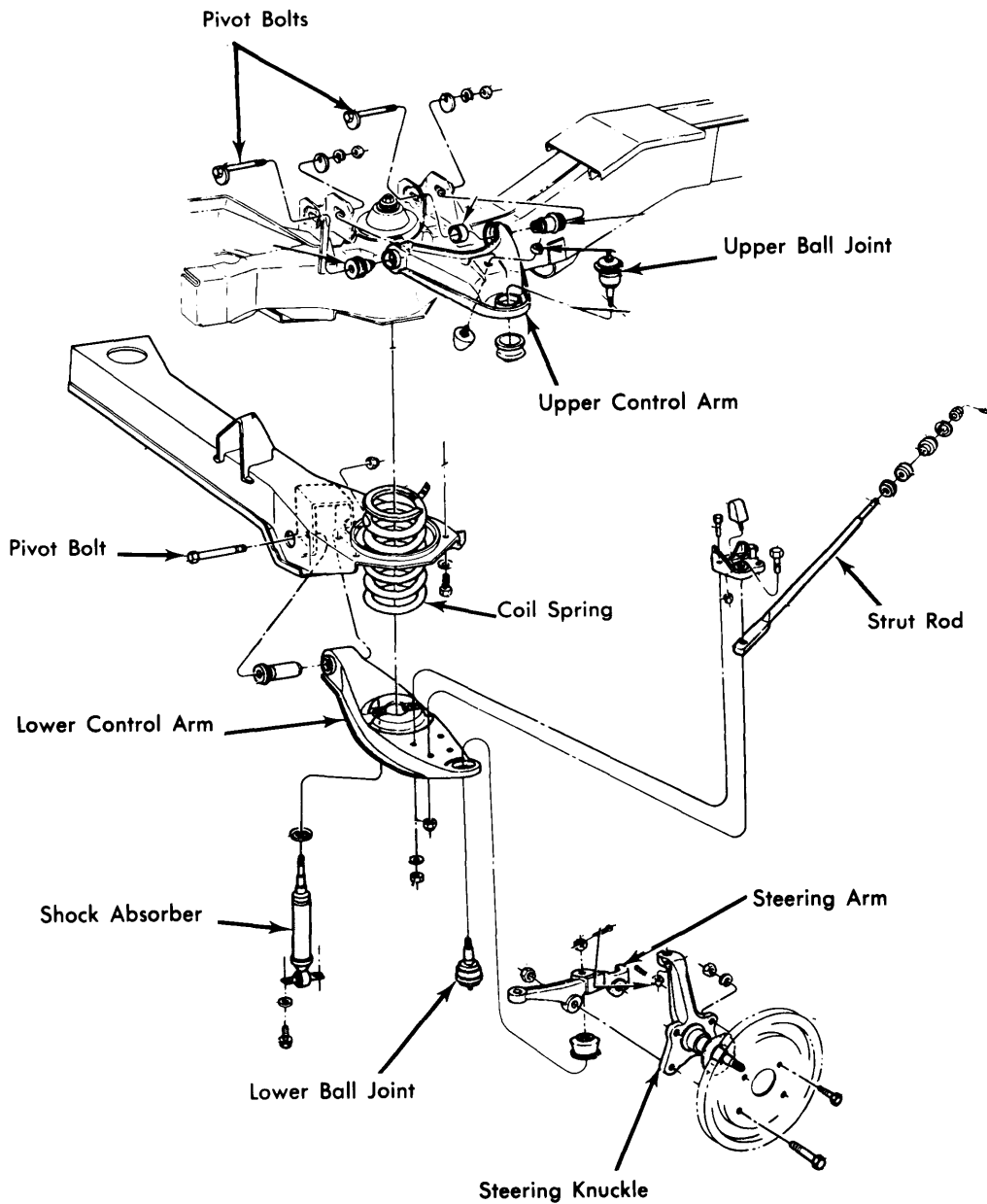


Fig. 1 Exploded View of Front Suspension Assembly