CHRYSLER CORP. IMPORTS – PICKUPS

Arrow Pickup
Ram-50 Pickup

DESCRIPTION

Independent front suspension with coil springs. Wheel is supported by steering knuckle mounted between upper and lower control arms by ball joints. Upper and lower control arms pivot on shafts connected to crossmember. The coil spring ends fit in pockets formed in crossmember and lower control arm. The shock absorber mounts between crossmember and lower control arm, inside the coil spring. A stabilizer bar and two strut bars mount to frame and connect to ends of lower control arms.

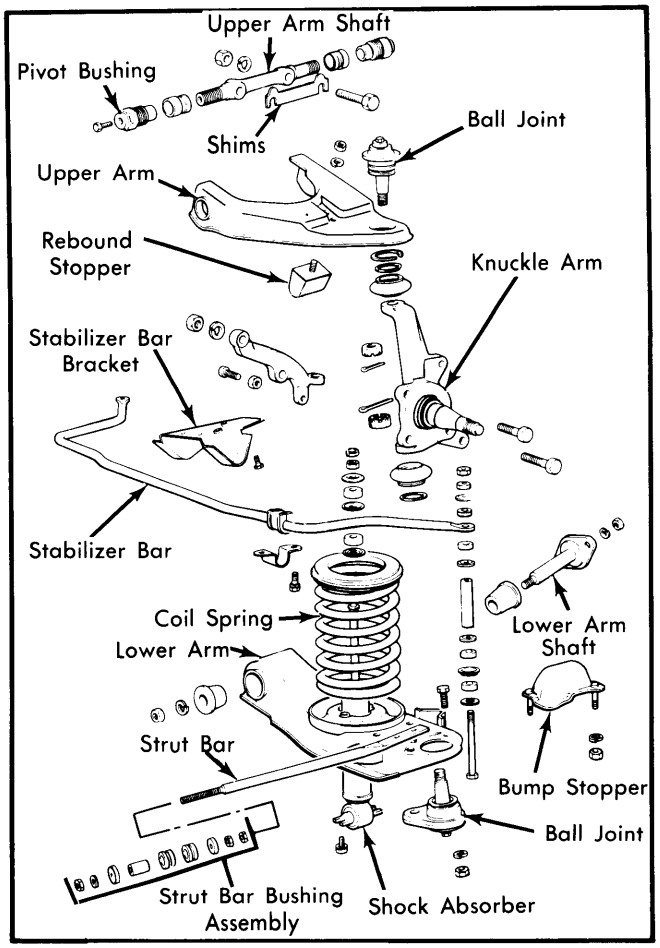

Fig. 1 Exploded View of Front Suspension Assembly

ADJUSTMENT

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See Wheel Alignment Specifications & Procedures in WHEEL ALIGNMENT Section.

WHEEL BEARING ADJUSTMENT

Tighten adjusting nut to 22 ft. lbs. (30 N·m) to seat bearings. Loosen nut and tighten to 6 ft. lbs. (8 N·m). Install cotter pin.

NOTE – *It is important that the adjusting nut be loosened not more than 30 to fit cotter pin.*

BALL JOINT CHECKING

With components removed from vehicle, check upper ball joint for starting torque and lower ball joint for axial play. Starting torque should be 7-30 INCH lbs. (.8-3.4 N·m). Axial play should be .02" (.5 mm) or less. Replace as needed.

REMOVAL & INSTALLATION

SHOCK ABSORBERS

Removal – Raise and support front of vehicle. Remove upper shock mounting nuts and bushings. Remove lower shock mounting bolts and remove shock absorber.

Installation – To install, reverse removal procedure.

WHEEL BEARINGS

Removal – Raise vehicle and remove wheel and tire. Remove caliper assembly and wire out of way. Remove rotor with hub. Remove bearings, clean grease from hub and with a drift, drive out bearing races. Oil seal will be removed with inner race.

Installation – Coat bearing race outer surface evenly with bearing grease. Drive race into place. Pack bearings, fill oil seal and coat inner surface of hub evenly with grease. Install bearings and drive oil seal into place. Be careful not to deform seal. Fill bearing dust cap with grease and install. Reverse removal procedure to complete installation.

STEERING KNUCKLE

Removal – 1) Raise and support front of vehicle. Remove wheel, brake assembly and hub.

2) Loosen nuts at forward end of strut bar, then disconnect it from control arm. Disconnect stabilizer bar from control arm. Remove shock absorber.

3) Using spring compressor, compress coil spring. Remove cotter pins and nuts from upper and lower ball joint studs. Use ball joint removal tool to disconnect ball joints from knuckle.

4) Loosen spring compressor slowly, and remove knuckle and coil spring.

Installation – To install, reverse removal procedure.

LOWER CONTROL ARM, COIL SPRING & BALL JOINT

Removal – 1) Raise and support front of vehicle. Loosen nuts at forward end of strut bar. Disconnect stabilizer bar and strut bar from control arm. Remove shock absorber.

2) Use coil spring compressor to compress coil spring. Remove cotter pin and nut from lower arm ball joint stud.

3) Use ball joint tool to disconnect lower ball joint from knuckle. Loosen coil spring compressor and remove coil spring.

4) Remove lower arm pivot shaft and remove lower control arm.

Inspection – Inspect arm, bushings and ball joint for wear or damage. Replace defective parts as necessary.

Installation – To install, reverse removal procedure noting the following: Install pivot shaft to crossmember and tighten

CHRYSLER CORP. IMPORTS – PICKUPS (Cont.)

bolts, leaving shaft nut loose. Tighten shaft nut to specifications after vehicle has been lowered to the ground. The distance from the forward end of the strut bar to the face of the rear adjusting nut is 3.9" (100 mm).

UPPER CONTROL ARM & BALL JOINT

Removal – 1) Raise and support front of vehicle. Remove wheel and shock absorber. Use a coil spring compressor to compress the coil spring.

2) Remove cotter pin and nut from upper ball joint. Using a ball joint tool, disconnect ball joint from knuckle.

3) Remove bolts attaching upper control arm shatt to crossmember. Remove upper control arm as an assembly.

Inspection – Inspect arm, bushings and ball joint for wear or damage. Replace parts as necessary.

Ball Joint Replacement – Ball joints are removed and installed with a press and suitable adapters. The ball joint requires a minimum press load 2200 lbs. (998 kg) for removal and an initial 1550 lbs. (703 kg) during installation. Final press load required to seat ball joint is 11,000 lbs. (4989 kg). Install a new snap ring and dust cover on ball joint.

Installation – To install, reverse removal procedure, noting the following: Reinstall camber shims in original location between upper arm shaft and crossmember. Check wheel alignment.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs (N•m)
Shock Absorber Mount Bolts	6-9 (8-12)
Shock Absorber Mount Nuts	9-13 (12-18)
Lower Arm Shaft Nut	40-54 (54-73)
Strut Bar Lock Nut	54-61 (73-83)
Ball Joint-to-Lower Arm	22-30 (30-41)
Upper Ball Joint-to-Knuckle	43-65 (59-88)
Lower Ball Joint-to-Knuckle	87-130 (118-177)
Upper Arm Pivot Bushing	181-253 (246-344)
Upper Arm Shaft-to-Crossmember	
Produced Before 1/81	40-54 (54-73)
Produced 1/81 and After	72-87 (100-118)
Strut Bar-to-Lower Arm	51-61 (69-83)