

CHRYSLER CORP.

Chrysler & Imperial
Dodge, All Models
Plymouth, All Models

DESCRIPTION

Ball joint independent type suspension with torsion bar front springs. Torsion bar is mounted between lower control arm and frame rear crossmember. Upper and lower control arms are attached to crossmember with steering knuckle connected between control arms. Shock absorber is mounted on lower control arm. Strut rod is mounted on lower control arm and sway bar is used on all models.

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

See *Wheel Bearing Adjustment in WHEEL ALIGNMENT Section.*

BALL JOINT CHECKING

See *Ball Joint Checking in WHEEL ALIGNMENT Section.*

REMOVAL & INSTALLATION

TORSION BAR

Removal — Remove upper control arm rebound rubber and raise vehicle on hoist (placing front suspension in rebound). Release load from torsion bar by turning anchor adjust bolt, in lower control arm, counterclockwise and remove lock ring from anchor at rear of bar. Remove automatic transmission torque shaft on all models (except Monaco, Gran Fury, Chrysler and Imperial) with manual transmission. Install suitable tool (C-3728) to remove torsion bar. *NOTE* — Place tool toward rear of bar to allow sufficient room for striking pad of tool. Remove tool and slide torsion bar out through rear anchor, using care not to damage balloon seal. *NOTE* — Torsion bars are not interchangeable side for side. The bars are marked either "R" or "L".

Installation — Reverse removal procedure while noting following: Cupped end of balloon seal faces rear of torsion bar. Position lip of balloon seal in groove of anchor. Coat both ends of torsion bar and pack annular openings in rear anchor with suitable high mileage lubricant.

TORSION BAR ISOLATOR

Removal (Fury, Coronet, Cordoba & Charger) — Raise and support vehicle so that suspension is in full rebound. Turn adjusting bolts counterclockwise until all load is removed from torsion bars. Remove lock rings from rear anchors and one bolt from each side attaching torsion bar isolator assembly to crossmember brackets. Remove torsion bar crossmember isolator assembly.

Installation — To install, reverse removal procedure, taking care not to damage or displace balloon seals.

STEERING KNUCKLE

Removal — Remove upper control arm rebound bumper and raise vehicle so suspension is in full rebound. Remove wheel and tire assembly. On models with disc brakes, remove brake caliper at torque plate adapter and position to one side. Remove hub and disc or drum assembly. Remove brake splash shield. Remove all load from torsion bar by turning adjusting bolt counterclockwise. Remove upper ball joint from steering knuckle by removing cotter key and nut. Install suitable tool (C-3564A) on Gran Fury, Monaco, Chrysler and Imperial to force ball joint stud from knuckle. On all other models, install suitable tool (C-3711) to force ball joint stud from knuckle. Remove bolts attaching steering arm to knuckle and separate upper control arm from knuckle. Remove steering knuckle from vehicle.

Installation — Place knuckle on brake support and install upper mounting bolts and nuts finger tight, position arm on knuckle and install mounting bolts and nuts finger tight. Install upper ball joint stud and tighten nuts to specification.

SWAY BAR

Removal (Fury, Coronet, Cordoba & Charger) — Raise and support vehicle so that suspension is in full rebound. Remove one wheel and remove bolts on each end of sway bar strut clamp. Remove bolts securing frame link strap to retainer link on each side of sway bar and remove bar by pulling through crossmember.

Installation — To install, reverse removal procedure.

Removal (All Other Models) — Raise vehicle on hoist to place front suspension in full rebound. Turn front wheels to extreme right or left. Remove upper bolts, retainers and insulators from both sides of bar. On Dart and Valiant models, remove link bolt, retainers and insulators. Remove screws securing retainers to bar bushings at frame and remove retainers. Remove sway bar by moving it in one direction, then reverse to clear lower control arm strut, then move bar clear of frame in direction wheels are turned.

Installation — To install, reverse removal procedure.

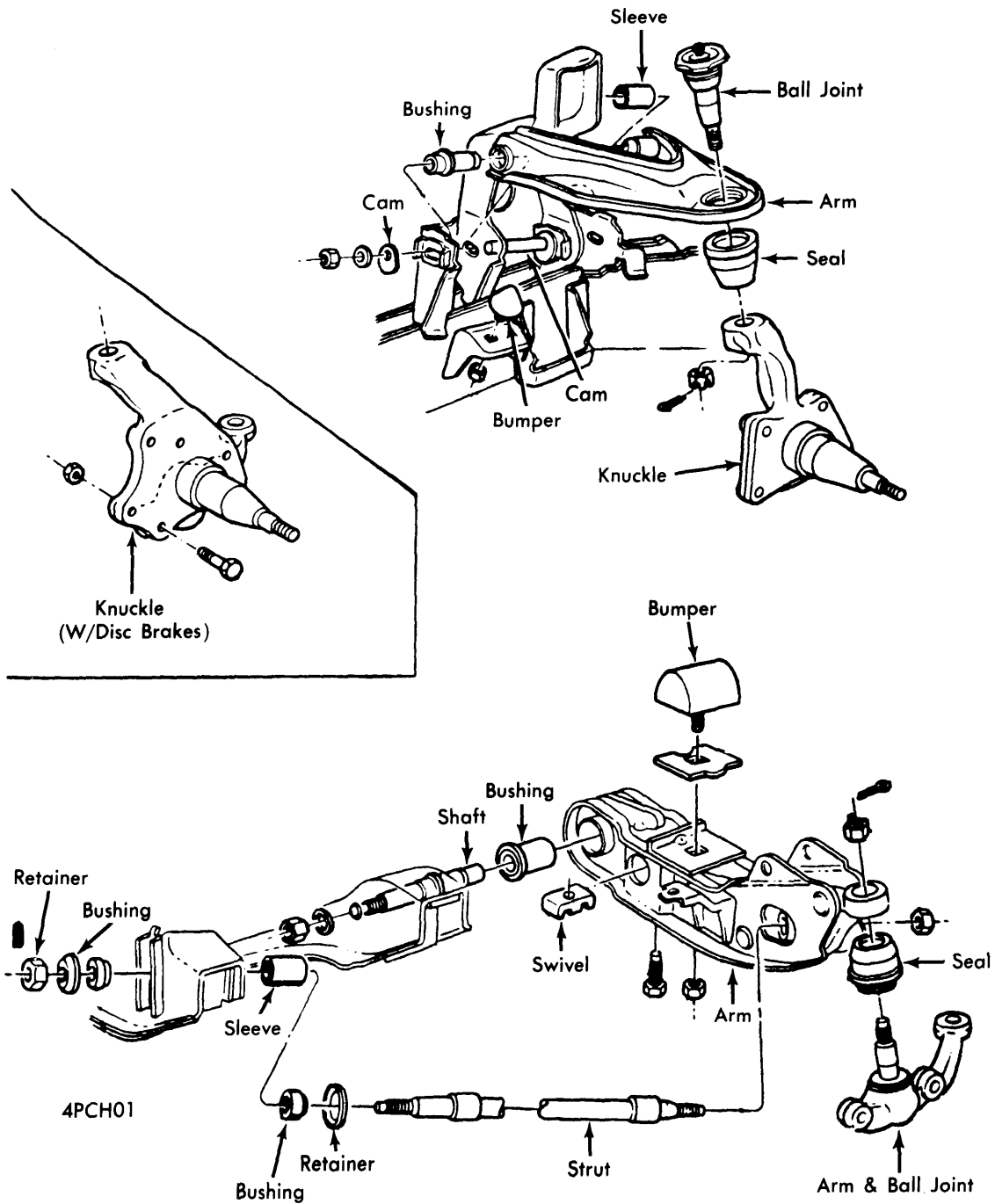
LOWER CONTROL ARM & SHAFT

Removal (All Models Except Dart & Valiant - 1) Remove rebound bumper and raise vehicle on hoist to place front suspension in rebound. Place jack stands under front frame for additional support. Remove wheel and tire assembly, brake caliper (position to one side) and remove shock absorber lower bolt. Remove hub and rotor assembly, splash shield and lower shock mounting nut. Remove retainer and insulator on Monaco, Gran Fury, Chrysler and Imperial models. Remove bolt and nut on Fury, Coronet, Cordoba and Charger models.

2) Remove strut bar attaching bolts from lower control arm. Remove sway bar lower retainer bolt, retainer and insulator from lower control arm on Monaco, Gran Fury, Chrysler and Imperial models only. Remove automatic transmission gear shift torque shaft assembly from Fury, Coronet, Cordoba and Charger models only.

Front Suspension

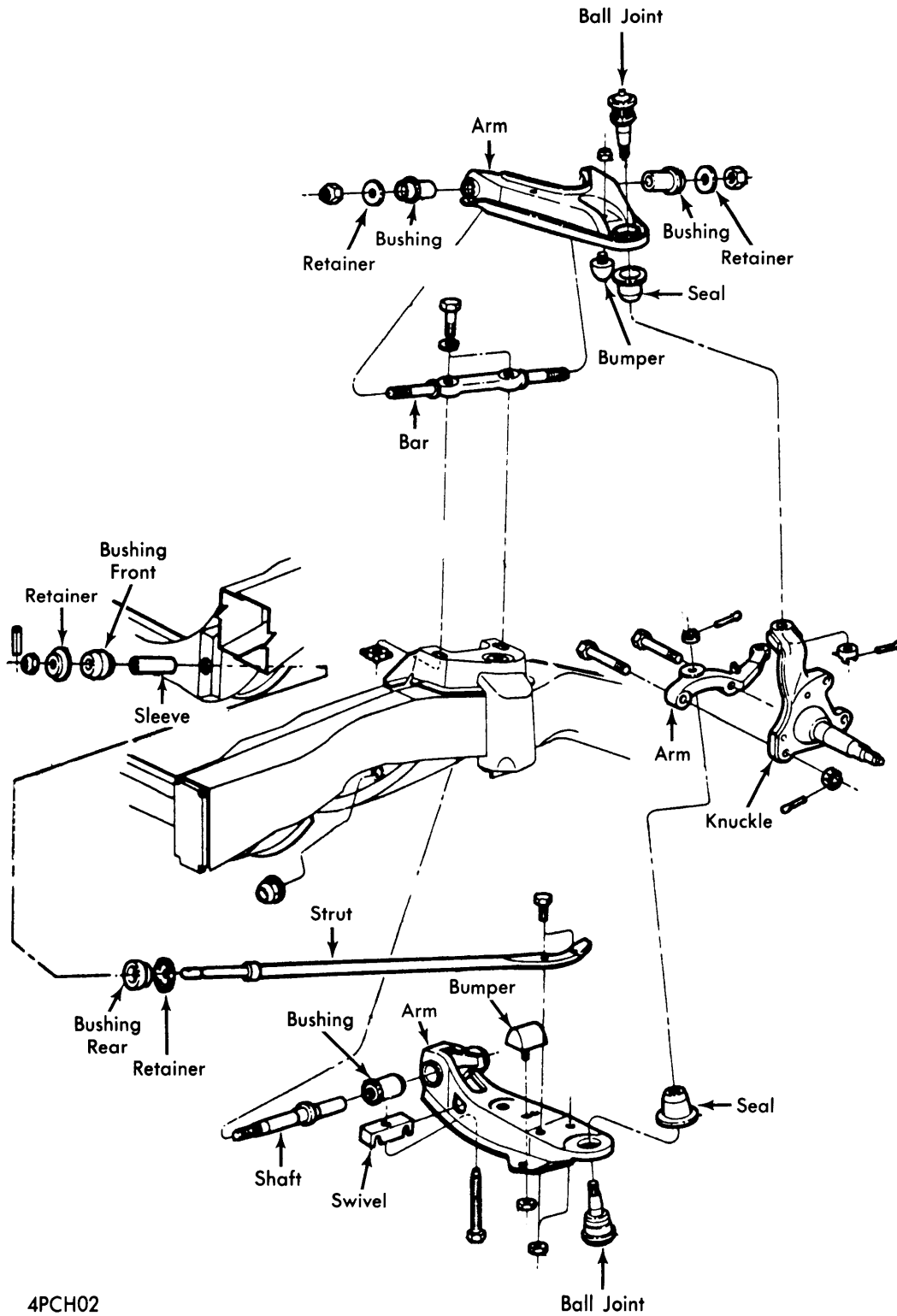
CHRYSLER CORP. (Cont.)



**FRONT SUSPENSION (TYPICAL)
DART & VALIANT**

Front Suspension

CHRYSLER CORP. (Cont.)

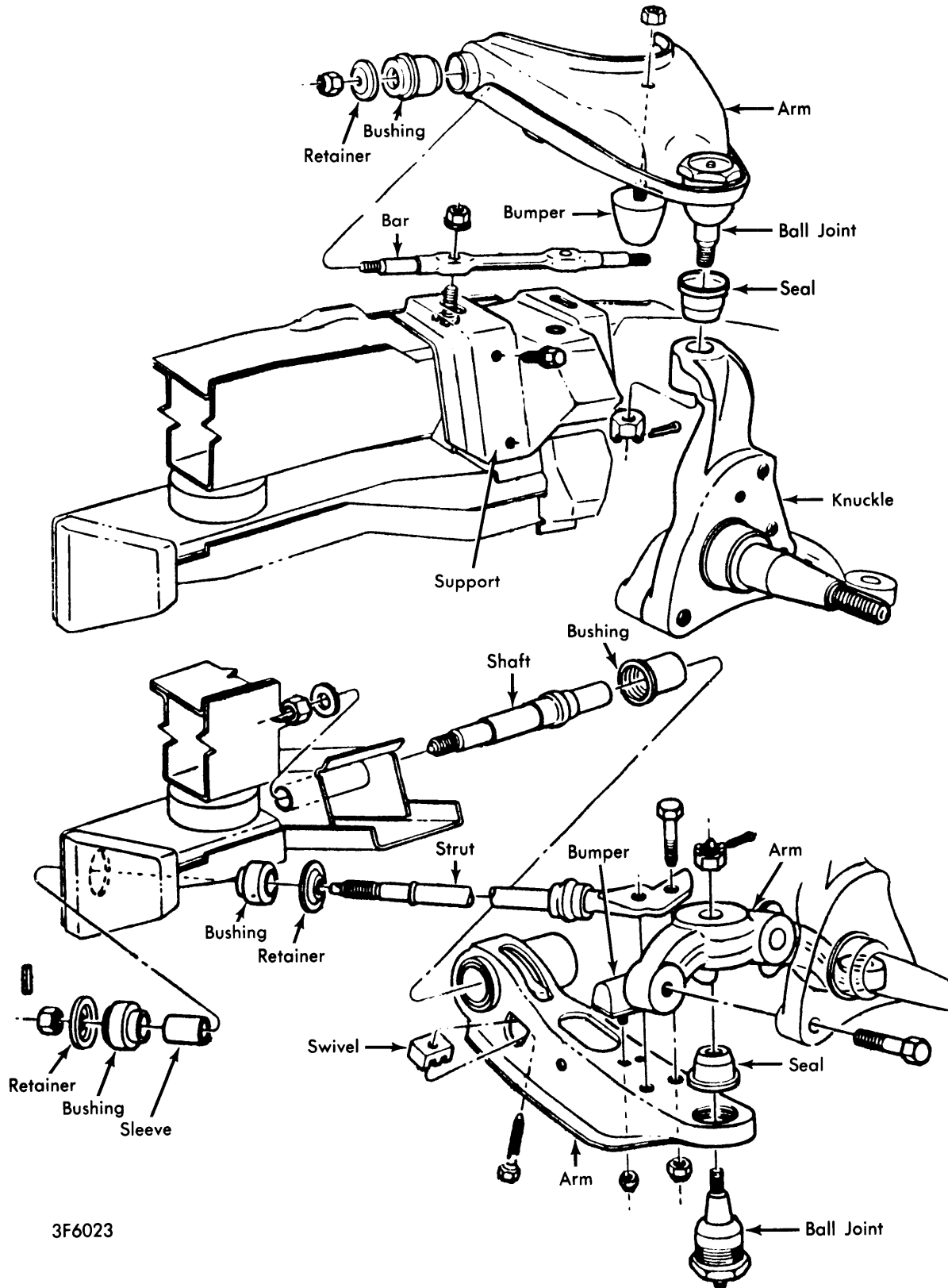


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**FRONT SUSPENSION (TYPICAL)
MONACO, GRAN FURY, CHRYSLER & IMPERIAL**

Front Suspension

CHRYSLER CORP. (Cont.)



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**FRONT SUSPENSION (TYPICAL)
FURY, CORONET, CORDOBA & CHARGER**

Front Suspension

CHRYSLER CORP. (Cont.)

3) Measure torsion bar anchor bolt depth into lower control arm and remove torsion bar, lower ball joint from knuckle arm and lower control arm shaft nut from control arm shaft. Push out shaft from crossmember and lower control arm and shaft as an assembly.

Bushing Service — Place control arm in vise and remove torsion bar adjusting bolt and swivel. Place control arm assembly in an arbor press with torsion bar hex opening up and with support around anchor on bottom end. Place a brass drift into hex opening and press shaft out of control arm. Bushing inner shell will remain on shaft. Cut and remove rubber part of bushing from control arm or shaft. Remove bushing outer shell by cutting with a chisel, using care not to cut into control arm. Remove bushing inner shell from shaft. To install new bushing, place bushing on shaft, flange end of bushing first. Press shaft into inner sleeve until bushing seats on shaft shoulder. Press shaft and bushing assembly into lower control arm using a suitable tool (C-3556) and an arbor press. Install torsion bar adjusting bolt and swivel.

Installation — To install, reverse removal procedure. *NOTE* — Do not tighten lower control arm nut until full weight of vehicle is on wheels.

LOWER CONTROL ARM & STRUT

Removal (Dart & Valiant) — **1)** Remove rebound bumper and raise vehicle on hoist to place front suspension in rebound. Place jack stands under front frame for additional support. Remove wheel and tire assembly and brake caliper (if equipped, position to one side). Remove hub and rotor or drum assembly. Remove shock absorber lower bolt and position shock out of way. Remove sway bar link (if equipped) from lower control arm.

2) Remove strut roll pin, nut, retainer and front bushing with sleeve from forward end of strut. Strut will remain attached to lower control arm when removed from vehicle. Measure torsion bar anchor bolt depth and remove torsion bar from control arm. Separate steering knuckle arm from tie rod end using suitable tool (C-3894-A). Remove lower ball joint stud with knuckle from lower control arm using suitable tool (C-3964). Remove control arm shaft nut and washer and remove control arm from vehicle.

Bushing Service — Place strut portion of control arm assembly in a vise and remove strut nut and strut. Remove torsion bar adjusting bolt and swivel. Place assembly in an arbor press with torsion bar hex opening up and with support under outer edge of control arm. Place a brass drift into hex opening and press shaft out of control arm. Bushing inner shell will remain on shaft. Cut and remove rubber portion of bushing from control arm shaft. Remove bushing outer shell by cutting with a chisel using care not to cut into control arm. Remove bushing inner shell from pivot shaft, cut if necessary. To install bushing, position on shaft with flange end of bushing first. Press shaft into inner sleeve until bushing seats on shaft shoulder. Press shaft and bushing assembly into lower control arm using a suitable tool (C-3848) and an arbor press. Reduce diameter of shaft shoulder, if necessary, to permit use of tool. Install torsion bar adjusting bolt and swivel. Install strut.

Installation — To install, reverse removal procedure. *NOTE* — Do not tighten lower control arm nut until full weight of vehicle is on wheels.

LOWER BALL JOINT

Dart & Valiant — Ball joint is integral with steering knuckle arm and is replaced as a complete assembly. See *Ball Joint Checking* in WHEEL ALIGNMENT Section.

All Other Models — Remove rebound rubber and raise vehicle on hoist to place suspension in rebound. Place jack stands under front frame for additional support. Remove wheel, tire and brake assembly. Remove hub and rotor, splash shield, lower shock mounting nut, retainer and insulator or bolt and nuts. Unload torsion bar. Remove ball joint stud nut and use suitable tool (C-3564A or C-3711) to break ball joint loose. Use suitable tool (C-4212) to press ball joint from lower control arm. To install, reverse removal procedures and replace seal if necessary. When installing ball joint, use suitable ball joint installing tools (C-4039 or C-4034).

UPPER BALL JOINT

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 suitable tools (C-3561, C-3560 or C-3741). Always replace balloon seals after they have been removed. When installing ball joint, be sure ball joint threads squarely engage threads of upper control arms.

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 stud nuts from upper and lower ball joints. Using suitable tool (C-3564-A or C-3711), pull ball joint stud from control arm using sharp hammer blows on steering knuckle boss to help remove stud. Remove tool and disengage upper ball joint from knuckle. Remove cams and cam bolts or pivot shaft nut and bolts from upper control arm. Lift control arm away from support bracket and remove from vehicle.

Bushing Service — On all except Dart and Valiant models, place control arm in vise and bolt suitable support tool (C-4253-1) to pivot bar. Place suitable puller tool (C-4253-2) over end of pivot bar and reinstall nut. Snug bolts against arm, then screw bolts equally until bushing is free in arm. Remove tool and bushing. On Dart and Valiant models, place control arm in vise and press bushing out from inside using suitable tool (C-3710-A). To install new bushing, press in using suitable tool (C-4212 or C-3710-A). On Dart and Valiant models, ensure that tapered portion of bushing seats on control arm.

Installation — Reverse removal procedure and tighten all nuts and bolts.

CHRYSLER CORP. (Cont.)

TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs.
Ball Joint-To-Control Arm (Upper)	
Gran Fury, Monaco, Chrysler & Imperial	150
All Others	125
Ball Joint Stud Nut (Upper)	
Gran Fury, Monaco, Chrysler & Imperial	135
All Others	100
Ball Joint Stud Nut (Lower)	
Gran Fury, Monaco, Chrysler & Imperial	135
All Others	100
Rebound Bumper (All).....	17
Adjusting Bolt (Upper Control Arm)	
Dart & Valiant	70
All Others	15
Pivot Shaft (Lower)	
Dart & Valiant	145
All Others	190
Steering Knuckle Bolts (Upper)	
Dart & Valiant	55
Steering Knuckle Bolts (Lower - All).....	160
Strut-to-Lower Control Arm	
Dart & Valiant	105
All Others	95
Strut-to-Frame (All).....	52
Insulator-to-Frame	
Fury, Coronet, Cordoba & Charger	75
Sway Bar Strap Nut	
Dart & Valiant	17
All Others	30
Sway Bar Retainer Nut	
Gran Fury, Monaco, Chrysler & Imperial	17
All Others	8
Sway Bar Plate-to-Crossmember	
Dart & Valiant	30
Idler Arm (All).....	65
Tie Rod End (All).....	40
Tie Rod Sleeve Clamps (All)	13
Shock Absorber (Upper - All).....	25
Shock Absorber (Lower)	
Gran Fury, Monaco, Chrysler & Imperial	35
All Others	50