

CHRYSLER, DODGE, PLYMOUTH FRONT

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, 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 (Satellite, Coronet & 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.

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 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.

STABILIZER BAR

Removal (Satellite, Coronet & 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 sway 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

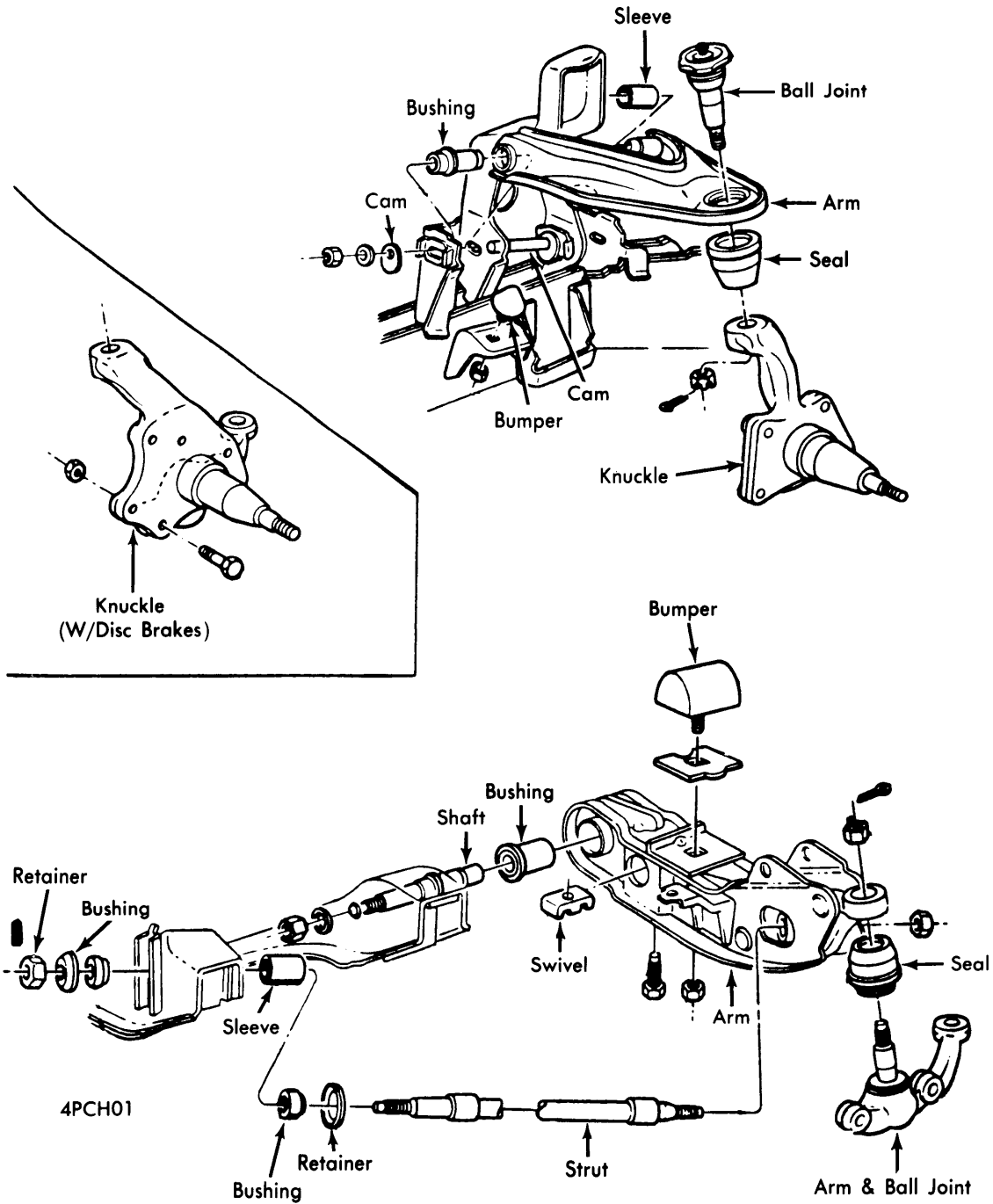
Removal (All Models Except Barracuda, Challenger, Dart & Valiant) – 1) Remove rebound jumper and raise vehicle on hoist to place front suspension in rebound. Place jack stands under front frame for additional support. Remove wheel and tire assembly, brake caliper (position to one side) and disconnect shock absorber lower bolt. Remove hub and rotor assembly, splash shield and lower shock mounting nut. Remove retainer and insulator, except on Satellite, Coronet and Charger models remove bolt and nut.

2) Remove strut bar attaching bolts from lower control arm. Remove sway bar lower retainer bolt, retainer and insulator from lower control arm on all models except Satellite, Coronet and Charger. Remove automatic transmission gear shift torque shaft assembly from Satellite, Coronet and Charger models.

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.

Front & Rear Suspension

CHRYSLER, DODGE, PLYMOUTH FRONT (Cont.)

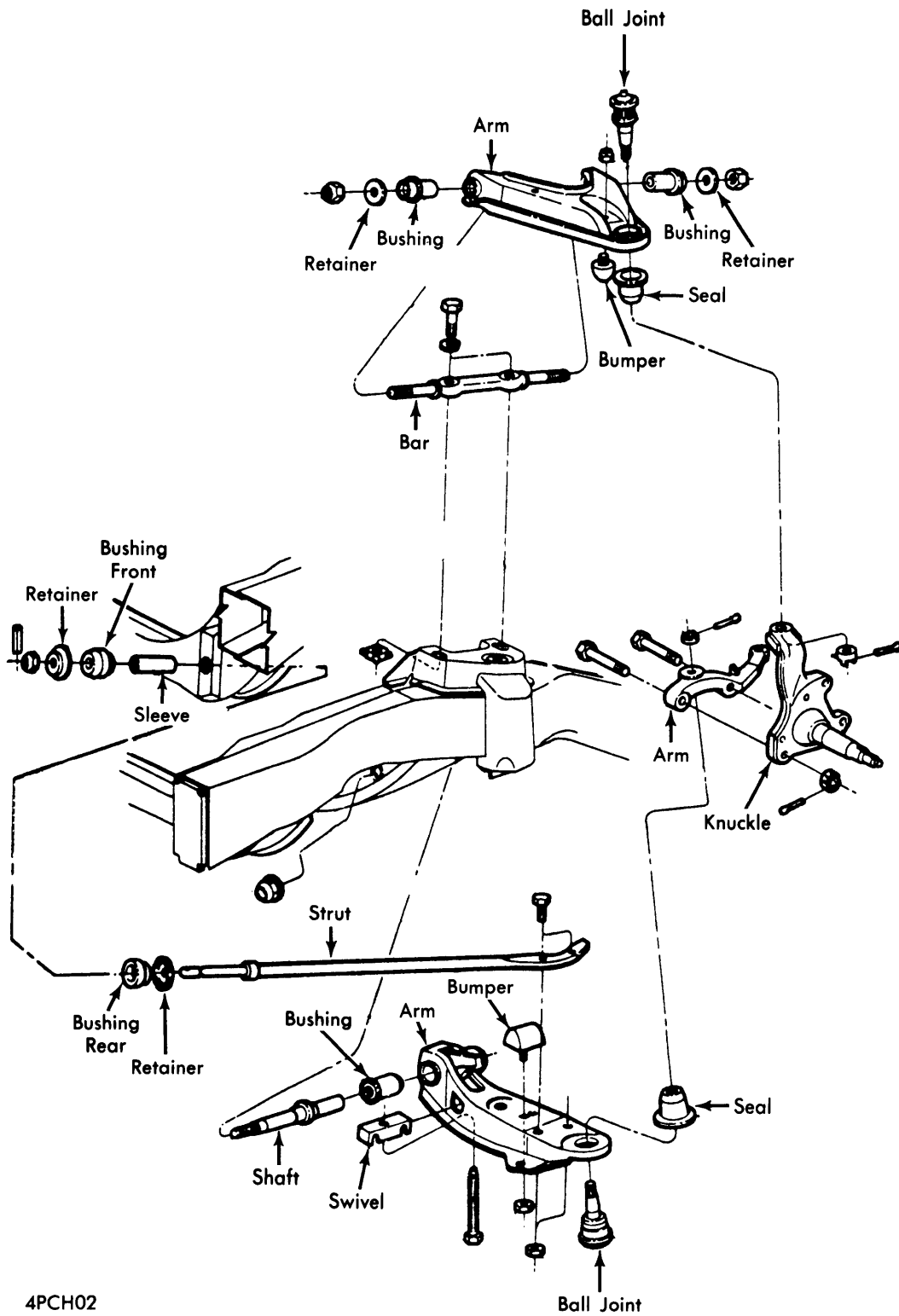


**FRONT SUSPENSION (TYPICAL)
DART, VALIANT, BARRACUDA & CHALLENGER**

Front & Rear Suspension

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CHRYSLER, DODGE, PLYMOUTH FRONT (Cont.)

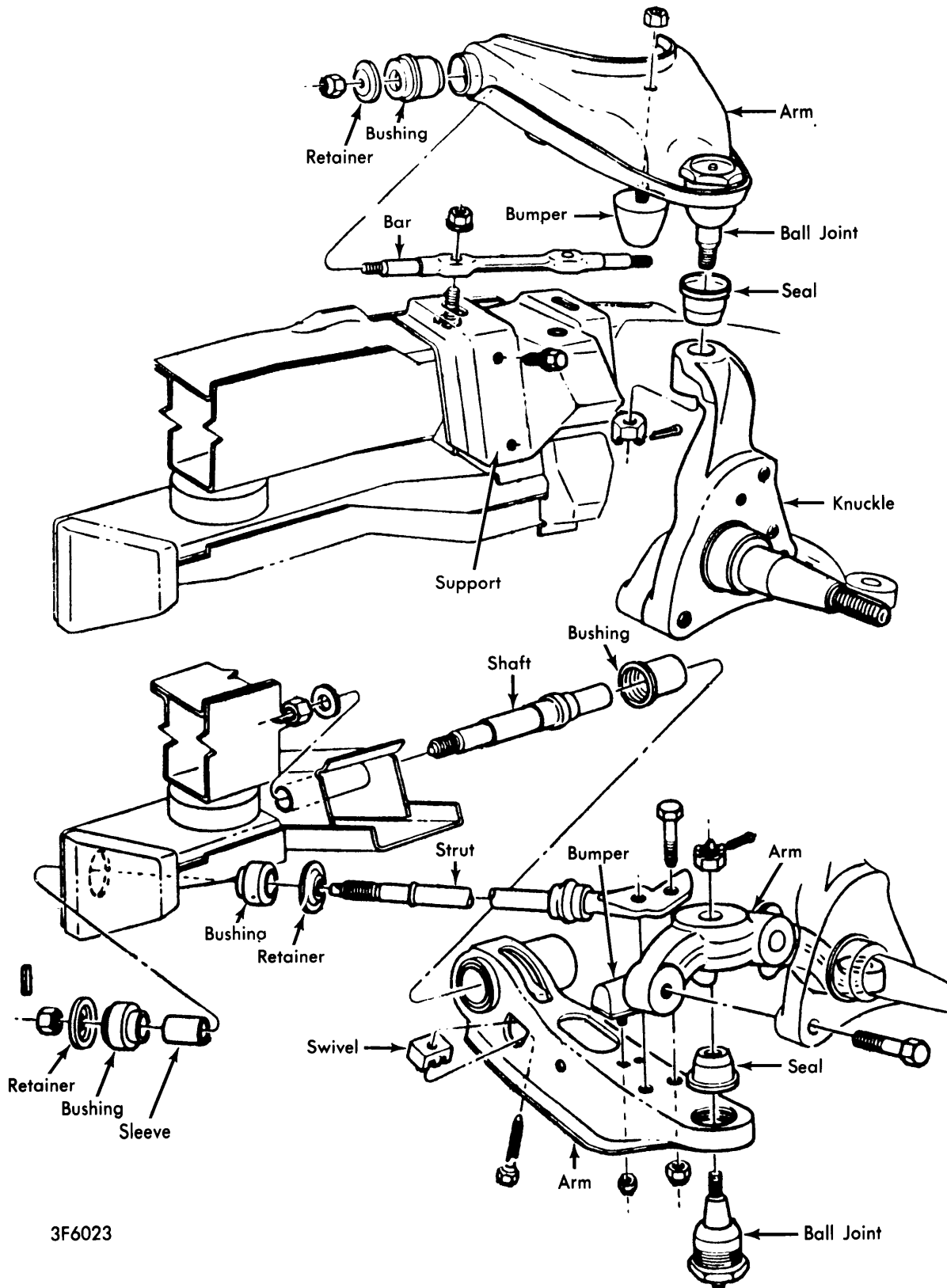


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**FRONT SUSPENSION (TYPICAL)
FURY, MONACO, CHRYSLER & IMPERIAL**

Front & Rear Suspension

CHRYSLER, DODGE, PLYMOUTH FRONT (Cont.)



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**FRONT SUSPENSION (TYPICAL)
SATELLITE, CORONET & CHARGER**

CHRYSLER, DODGE, PLYMOUTH FRONT (Cont.)

Removal (Barracuda, Challenger, Dart & Valiant) – Raise and support vehicle so suspension is in full rebound. Remove wheel, tire and brake assembly. Remove lower shock absorber bolt and position shock out of way. Remove torsion bar from control arm and tie rod end from steering knuckle using suitable tool (C-3894A). Remove sway bar and ball joint stud from lower control arm. Remove strut spring pin, front nut and bushing retainer from front crossmember. Remove nut from lower control arm and shaft. Tap end of lower control arm and shaft and remove. **NOTE** – Remove lower control arm, shaft and strut as an assembly.

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

Barracuda, Challenger, 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 procedure.

UPPER BALL JOINT

Ball joint can be removed from upper control arm after lower control arm is supported as close to wheel as possible. 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. Use suitable tool (C-3564A or C-3711) and strike with hammer to loosen stud. Remove tool and disengage upper ball joint from knuckle. Remove cams and cam bolts or pivot shaft nuts and bolts from upper control arm. Lift upper control arm away from support bracket and remove from vehicle.

Bushing Replacement – Bushings may be pressed out of control arm using suitable tools. When installing bushings, make sure new bushing is installed from outside of control arm until tapered part of bushing seats on control arm. **NOTE** – *Bushing must be installed squarely.*

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

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Ball Joint-to-Control Arm (Upper)	
Fury, Monaco, Chrysler & Imperial.....	150
All Others	125
Ball Joint Stud Nut (Upper)	
Fury, Monaco, Chrysler & Imperial.....	135
All Others	100
Ball Joint Stud Nut (Lower)	
Fury, Monaco, Chrysler & Imperial.....	135
All Others	100
Rebound Bumper	
All Models.....	17
Cam Bolt (Upper Control Arm)	
All Models.....	65
Pivot Shaft Bolt (Upper Control Arm)	
All Models.....	160
Pivot Shaft (Lower Arm)	
Fury, Monaco, Chrysler & Imperial.....	190
All Others	145
Steering Knuckle Bolts (Upper)	
Valiant & Dart.....	55
Steering Knuckle Bolts (Lower)	
All Models.....	160
Strut-to-Lower Control Arm	
Barracuda, Challenger, Dart & Valiant.....	105
All Others	95
Strut-to-Frame	
All Models.....	52
Isolator-to-Frame	
Coronet, Charger & Satellite	80
Sway Bar Link Nut	
Fury, Monaco, Chrysler & Imperial.....	30
All Others	8
Sway Bar-to-Frame	
All Models.....	17
Sway Bar-to-Strut	
Satellite, Coronet & Charger	30
Sway Bar Plate-to-Crossmember	
All Models.....	30
Idler Arm	
All Models.....	65
Tie Rod End	
All Models.....	40
Shock Absorber (Upper)	
All Models.....	25
Shock Absorber (Lower)	
Fury, Monaco, Chrysler & Imperial.....	35
All Others	50