

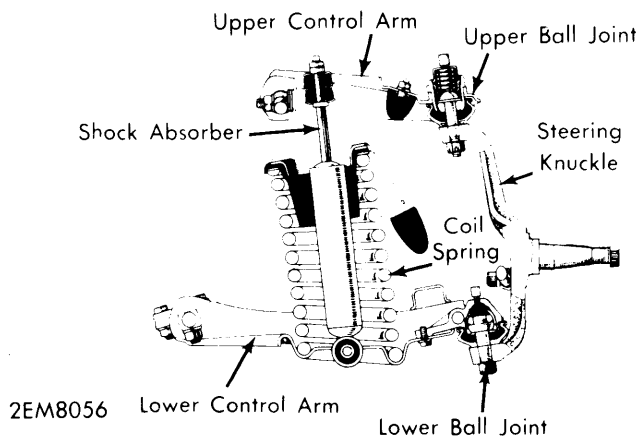
# Front Suspension

## TOYOTA CORONA, EXCEPT MARK II

Corona (Exc. Mark II)

### DESCRIPTION

Independent front suspension with coil springs. Wheel is supported by steering knuckle mounted between upper and lower control arms by means of ball joints. Upper control arm pivots on shaft bolted to suspension crossmember. Lower control arm pivots on shaft bolted to suspension crossmember. Coil springs fit in pockets built into suspension crossmember at top and in pockets built into lower control arms at bottom. Hydraulic shock absorbers mount between lower control arms at bottom and suspension crossmember at top and are inside coil springs. A stabilizer bar is mounted to chassis members and connected at ends to lower control arms.



TOYOTA CORONA FRONT SUSPENSION COMPONENTS

### 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** — Remove nuts from upper shock absorber stem. Remove bolts securing shock absorber to lower control arm and remove shock absorber from vehicle.

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

#### LOWER CONTROL ARM, COIL SPRING & BALL JOINT

**Removal** — Raise vehicle and place safety stands under body. Remove tire and wheel. Disconnect stabilizer bar from lower control arm. Remove shock absorber. Using a suitable spring compressor (09727-22011), compress coil spring until there is no pressure on lower control arm. Remove nut securing ball joint stud to steering knuckle. Using a suitable puller (09628-62010), separate ball joint from steering knuckle. Push down on control arm, release spring compressor and remove coil spring. Remove bolts securing control arm pivot shaft to suspension crossmember and remove control arm from vehicle. **NOTE** — *Ball joint can be removed from vehicle without removing control arm.* Remove bolts securing ball joint to control arm and separate ball joint from control arm. Unscrew bushings from control arm and remove pivot shaft.

**Installation** — Install bushings and pivot shaft into control arm. Tighten bushings securely. **NOTE** — *Make sure bushings are screwed in equal amounts on both sides.* Bolt pivot shaft to crossmember. Install coil spring and compress using a suitable spring compressor (09727-22011). Place ball joint in control arm and tighten bolts. **NOTE** — *Ball joint can be installed in control arm before control arm is fitted to vehicle.* Place ball joint stud in steering knuckle and tighten nut. Connect stabilizer bar to control arm. Remove spring compressor and install shock absorber. Install wheel and tire and lower vehicle. Check front wheel alignment. Thoroughly grease suspension components.

#### UPPER CONTROL ARM & BALL JOINT

**Removal** — Raise vehicle by jacking up under lower control arm. Place safety stands under body and leave jack under control arm. Remove wheel and tire. **NOTE** — *Ball joint can be removed with control arm in or out of vehicle.* Remove nut from upper ball joint stud and using a suitable puller (09628-62010), separate ball joint from steering knuckle. Note number and thickness of shims between pivot shaft and mount and remove bolts securing control arm pivot shaft to crossmember. Remove control arm from vehicle. Remove screw in bushings and pivot shaft from control arm. Using a suitable wrench (09628-22020), remove ball joint from control arm.

**Installation** — Install ball joint in control arm and tighten. Install bushings and pivot shaft in control arm. Tighten bushings ensuring they are screwed in equal amounts on both sides. Install dust cover on ball joint. Install control arm in vehicle with shims correctly positioned; tighten pivot shaft bolts. Install ball joint stud in steering knuckle and tighten nut. Install wheel and tire and lower vehicle. Thoroughly grease front suspension components and check front wheel alignment.

#### STEERING KNUCKLE

**Removal** — Raise vehicle by jacking up under lower control arm. Remove wheel and tire. Remove brake system components from steering knuckle. **NOTE** — *See appropriate story in BRAKE SYSTEMS Section for removal.* Detach tie rod end from steering knuckle using suitable tool (09628-62010). Remove nuts from upper and lower ball joint studs and using suitable puller (09628-62010), separate steering knuckle from ball joints. Remove steering knuckle from vehicle.

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

# Front Suspension

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## TOYOTA CORONA, EXCEPT MARK II (Cont.)

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Shock Absorber Mount	
Upper .....	18 (2.5)
Lower .....	14 (1.9)
Ball Joint Stud Nut	
Upper .....	35 (4.8)
Lower .....	58 (8.0)
Control Arm Bushings	
Upper .....	87 (12.0)
Lower .....	87 (12.0)
Control Arm Pivot Shaft-to-Crossmember	
Upper .....	38 (5.3)
Lower .....	38 (5.3)
Ball Joint-to-Lower Control Arm	
Large Bolt .....	71 (9.8)
Small Bolt .....	14 (1.9)