

# Front Suspension

## TOYOTA CORONA

Corona

### DESCRIPTION

Front suspension is independent type. Wheel is supported by steering knuckle mounted by ball joints to upper and lower control arms. Upper control arm pivots on shaft bolted to upper frame member. Lower control arm pivots on shaft bolted to lower frame member. Shock absorbers attach at bottom to lower control arm, are surrounded by a coil spring and are bolted at top to body. A stabilizer bar is also used and attaches at each end to lower control arms and also to body brackets.

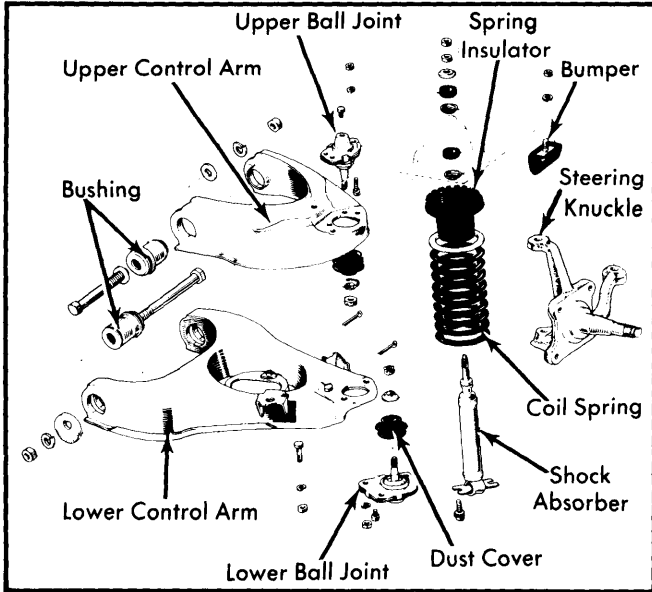


Fig. 1 Exploded View of Front Suspension Assy.

### 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

#### STEERING KNUCKLE

**Removal** – 1) Raise and support vehicle. Remove front wheel. Remove and suspend brake caliper out of way. Remove hub assembly. Remove backing plate.

2) Remove cotter pin and nut and separate tie rod end ball joint from steering knuckle.

3) Place jack under lower arm spring seat. Raise jack to compress coil spring. Remove cotter pins and nuts from upper and lower ball joints and detach ball joints from steering knuckle. Remove knuckle from vehicle.

**Installation** – To install, reverse removal procedure.

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

**Removal** – 1) Raise vehicle and place safety stands under body. Remove tire and wheel. Disconnect stabilizer bar from lower control arm. Remove shock absorber. Using a spring compressor, collapse coil spring until there is no pressure on lower control arm.

2) Remove nut securing ball joint stud to steering knuckle. Using a puller, separate ball joint from steering knuckle. Push down on control arm, release spring pressure, and remove coil spring. Remove bolts securing control arm pivot shaft to suspension crossmember and remove control arm from vehicle.

**Installation** – To install, reverse removal procedure, noting the following:

- Attach control arm to frame, installing cams in original positions, with nuts tightened only partially.
- Position coil spring in lower plate against stop.
- Attach coil spring compressor and collapse spring, jack up lower control arm and connect ball joint to steering knuckle.
- Lower vehicle to ground, bounce front end up and down, raise off of ground, and fully tighten lower arm-to-body nuts.
- Check front end alignment.

#### UPPER CONTROL ARM & BALL JOINT

**Removal** – 1) From inside engine compartment, remove upper control arm attaching nuts, but do not pull out bolts.

2) Raise and support vehicle, with jack placed under lower control arm. Remove front wheel.

**NOTE** – On vehicles with ESP, detach wire harness clamp from upper control arm.

3) Raise jack under control arm to compress coil spring. Remove ball joint nut, then use puller to separate ball joint from upper control arm.

**NOTE** – Safety wire steering knuckle to suspension so it does not drop and strain brake hose.

4) Remove bolts from upper control arm and pull arm from vehicle.

**Installation** – To install, reverse removal procedure and note the following:

- With upper arm-to-body nuts finger tight, lower vehicle to ground, bounce front end up and down, raise off of ground, and fully tighten arm-to-body nuts.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Upper Ball Joint-to-Knuckle .....	40-50 (5.5-7.0)
Lower Ball Joint-to-Knuckle .....	50-65 (7.0-9.0)
Upper Arm-to-Body .....	94-130 (13.0-18.0)
Lower Arm-to-Body .....	94-130 (13.0-18.0)
Wheel Nuts .....	65-87 (9.0-12.0)