

## HUB & STEERING KNUCKLE

**NOTE:** For component view, see [Fig. 1](#) -[Fig. 4](#) .

### Removal

1. Raise and support vehicle. Remove front wheel. Remove shock absorber. See [LOWER CONTROL ARM & BALL JOINT](#) . Remove hub grease cap. Remove ABS speed sensor and wire harness clamp from steering knuckle. Remove brakeline bracket from steering knuckle. Remove the bolt and separate the brake tube bracket from the steering knuckle. Using Special Tool (09023-00100), disconnect the brake tube from the front disc brake caliper assembly. Remove the bolt and separate the brake tube bracket from the steering knuckle. Remove the 2 bolts and front disc brake caliper assembly. Remove rotor.
2. On 4WD models, using a screwdriver and a hammer, remove the front axle hub grease cap. Remove the cotter pin and a lock cap. Remove the front axle hub nut. On all models, remove the nut and separate the stabilizer link assembly from the steering knuckle. Remove the cotter pin. Using Special Tool (09628-62011), separate the tie rod end sub-assembly from the steering knuckle.
3. Remove 2 lower ball joint bolts, and disconnect lower ball joint. Remove upper ball joint, cotter pin and retaining nut. Using ball joint separator, separate upper ball joint from knuckle. On 4WD models, using a plastic hammer, separate the front axle hub from the front drive shaft. Remove the front axle hub sub-assembly. On all models, remove steering knuckle with hub.

### Installation

To install, reverse removal procedure. Clean bolt threads. Tighten bolts and nuts to specification. See [TORQUE SPECIFICATIONS](#) . Depress brake pedal several times. Check front wheel alignment. Ensure ABS speed sensor has a good signal.

## LOWER CONTROL ARM & BALL JOINT

**NOTE:** For component view, see [Fig. 1](#) -[Fig. 4](#) .

**CAUTION:** Lower and bounce vehicle several times to stabilize suspension before tightening lower control arm shaft nut to specification.

### Removal

1. Raise and support vehicle. Remove front wheel. Remove shock absorber lower nut. Disconnect shock absorber from lower control arm. Remove 2 bolts from lower ball joint and separate from lower control arm.
2. Mark position of both adjuster cams for reassembly reference. Remove adjuster cams and control arm. Using a ball joint separator, separate lower ball joint from lower control arm.

### Installation

## 2004 Toyota 4Runner Sport

2003-04 SUSPENSION Front - 4Runner

1. Install lower control arm and adjuster cams. DO NOT tighten adjuster cam nuts at this time.
2. To complete installation, reverse removal procedure. Tighten nuts and bolts to specification. See **TORQUE SPECIFICATIONS** .
3. Lower and bounce vehicle several times to stabilize suspension. Align reference marks on adjustment cams. Tighten retaining nuts to specification. See **TORQUE SPECIFICATIONS** . Check wheel alignment. For 2003 models, see **SPECIFICATIONS & PROCEDURES** article in WHEEL ALIGNMENT. For 2004 models, see **SPECIFICATIONS & PROCEDURES** article in WHEEL ALIGNMENT.