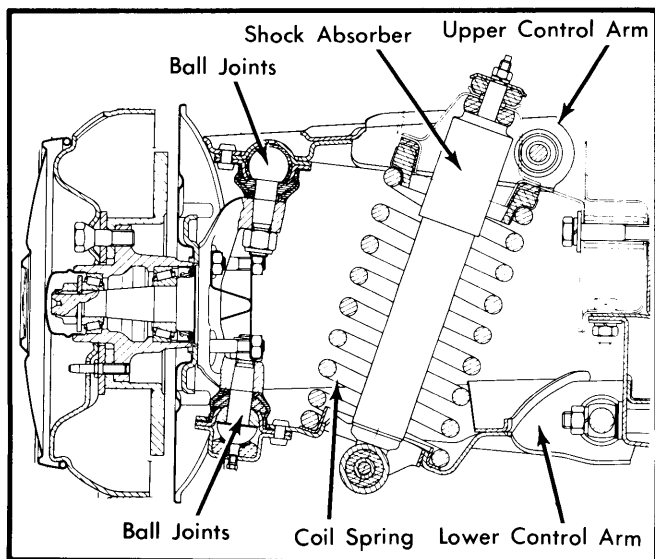


## FIAT SPIDER 2000

### DESCRIPTION

Independent wishbone type suspension with coil springs and telescopic, hydraulic, double-acting shock absorbers. Shock absorbers are mounted inside coil springs between upper and lower control arms. Control arms are connected to steering knuckle with ball joints.



**Fig. 1 Sectional View of Front Suspension Assembly**

### ADJUSTMENTS

#### WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See *Wheel Alignment Specifications and 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

#### FRONT SUSPENSION ASSEMBLY

**Removal** — 1) Raise and support vehicle. Place cross support over engine compartment and attach to engine. Remove wheels and shock absorbers. Compress coil spring with spring compressor to relieve tension from lower control arm.

2) Disconnect and cap brake lines. Using a puller, disconnect tie rod from steering knuckle arm. Remove pivot bolt and detach upper control arm from body. Remove nuts and bolts securing lower control arm to crossmember and remove suspension.

**Installation** — To install, reverse removal procedure. Tighten all nuts and bolts, bleed brakes and check wheel alignment.

#### STEERING KNUCKLE

**Removal** — 1) Raise and support vehicle. Remove wheel, brake caliper, brake disc and plate. Using suitable puller, remove front grease cap. Remove hub using puller A.47015 (or equivalent). Remove inner race from inside hub bearing with a puller. Remove arm from steering knuckle.

2) Remove nut attaching lower control arm to steering knuckle and place suitable tool (A.47042) between control ball joints, then remove lower ball joint. Remove nut attaching upper ball joint to steering knuckle. Separate upper ball joint from steering knuckle.

**Installation** — Inspect all parts for signs of wear or damage. To install, reverse removal procedure and tighten all nuts and bolts.

#### COIL SPRINGS

**Removal** — Raise and support vehicle so suspension hangs freely. Remove wheels and shock absorbers. Disconnect stabilizer bar from lower control arm. Support lower control arm with a jack and disconnect lower ball joint stud from steering knuckle. Install suitable spring compressor and rotate lower control arm down carefully. Coil spring may now be removed.

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

#### STABILIZER BAR

**Removal** — Remove front stabilizer bar by removing nuts and bolts securing bar to crossmember. Remove nuts and bolts attaching ends of stabilizer bar to lower control arms and remove stabilizer bar.

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

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Lower Control Arm Pin-to-Crossmember .....	43 (6.0)
Lower Control Arm-to-Crossmember .....	72 (10.0)
Upper Control Arm .....	65 (9.0)
Lower Shock Absorber .....	43 (6.0)
Steering Arm-to-Steering Knuckle .....	43 (6.0)
Brake Caliper .....	36 (5.0)
Crossmember-to-Side Member .....	69 (10.0)