

VOLVO 164

164

DESCRIPTION

Independent type front suspension with coil springs. Wheel is supported by steering knuckle mounted between upper and lower control arms by means of ball joints. Both upper and lower control arms pivot on shafts connected to frame. Coil springs fit into pockets built into lower control arms. Hydraulic shock absorbers are mounted between lower control arms and frame and are located inside coil springs. A stabilizer bar (if equipped), is mounted to frame and connect at ends to lower control arms.

ADJUSTMENT

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See *Wheel Alignment Specifications & Procedures* in *WHEEL ALIGNMENT* Section.

WHEEL BEARING ADJUSTMENT

See *Front Wheel Bearings* in *WHEEL ALIGNMENT* Section.

BALL JOINT CHECKING

See *Ball Joint Checking* in *WHEEL ALIGNMENT* Section.

REMOVAL & INSTALLATION

SHOCK ABSORBERS

Removal — Remove upper nut, washer and rubber bushing of shock absorber. Remove two attaching screws from underside of lower control arm and remove shock absorber.

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

UPPER CONTROL ARM & BALL JOINT

Removal — Raise and support vehicle, then remove wheel and tire. Loosen upper ball joint attaching nut and tap steering knuckle until ball joint pin loosens from knuckle. Remove ball joint attaching nut and separate ball joint from steering knuckle. Remove screws securing upper control arm pivot shaft and remove control arm. **NOTE** — Do not lose shims. Press out ball joint from control arm using suitable press (SVO 2699) and sleeve (SVO 5020). Remove control arm pivot shaft with upper control arm suitably supported. If pivot shaft bushings are excessively worn, press out and install new ones.

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

LOWER CONTROL ARM, COIL SPRING & BALL JOINT

Removal — Raise and support vehicle then remove wheel and tire. Remove shock absorbers and disconnect tie rod. Loosen clamp on brake hoses then disconnect stabilizer bar. Place jack under lower control arm and raise control arm. Loosen nut securing ball joint and tap steering knuckle until ball joint pin loosens from steering knuckle. Remove nut from ball joint and disconnect ball joint from steering knuckle. Slowly lower jack under control arm and remove coil spring. Remove nuts securing lower control arm pivot shaft and remove control arm. Remove ball joint from control arm using a suitable press (SVO 2699) and sleeve (SVO 2700).

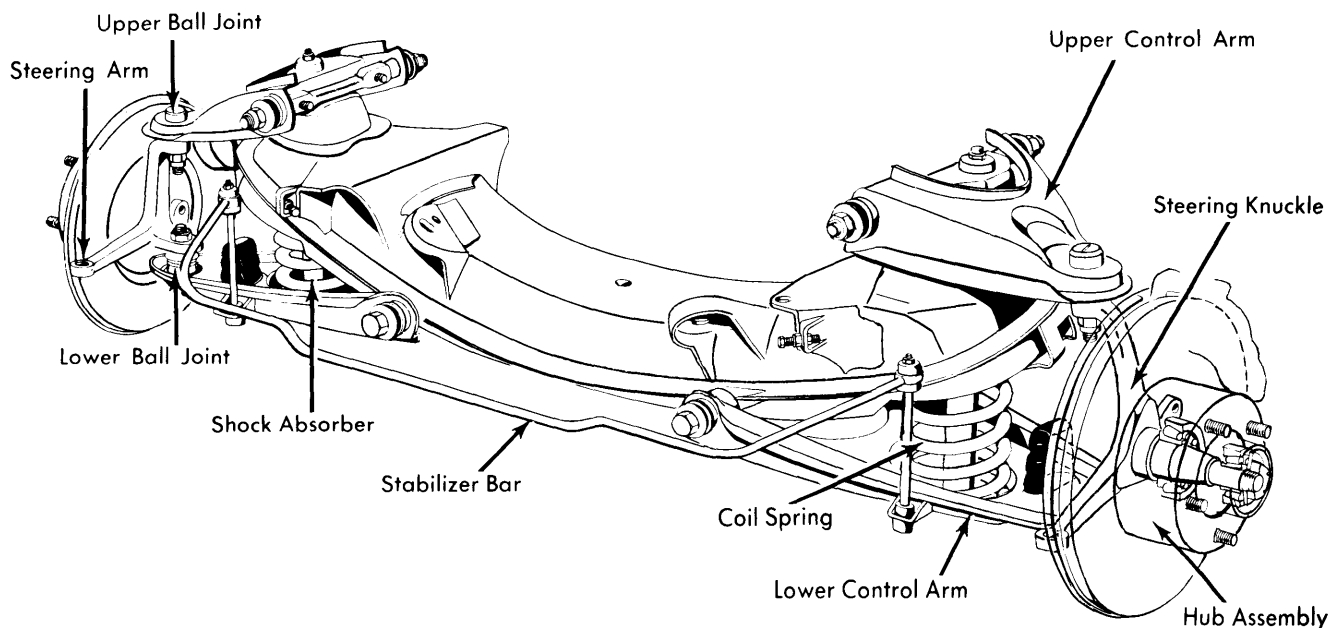


Fig. 1 Volvo 164 Front Suspension Assembly

Front Suspension

VOLVO 164 (Cont.)

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

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STEERING KNUCKLE

Removal — Raise and support vehicle, then remove wheel and tire. Remove front brake caliper and position to one side. Remove brake hub and components. Disconnect tie rod from steering knuckle. Loosen nuts for upper and lower ball joints. Tap steering knuckle until ball joint pin loosens from knuckle, then remove nut. Remove ball joints from knuckle, and knuckle from vehicle.

TIGHTENING SPECIFICATIONS	
Application	Ft. Lbs. (mkg)
Upper Control Arm Shaft Nut	45(6.2)
Lower Control Arm Shaft Nut	45(6.2)
Upper Ball Joint Nut	65(9.0)
Lower Ball Joint Nut	80(11.0)
Tie Rod Lock Nut	60(8.3)