

BMW

320i
530i
630CSi

DESCRIPTION

Independent type rear suspension with rear struts. Semi-trailing control arms pivot on crossmember and are integral with axle shaft bearing housing. Shock absorber (strut assembly) mounts to purchase on top of control arm and to body. A stabilizer bar is attached to each trailing arm and at two points on crossmember.

ADJUSTMENTS

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

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

REMOVAL & INSTALLATION

STRUT ASSEMBLIES (SHOCK ABSORBERS)

Removal — Raise vehicle and support with safety stands. Remove tire. Place a jack under control arm. Disconnect shock absorber at lower mount on control arm. From top end of shock absorber, remove centering shell and mounting nuts. Remove shock absorber complete with spring assembly.

Disassembly & Reassembly — Using a spring compressor, collapse spring and remove centering shell. Remove coil spring and boot. Pull retainer and auxiliary spring off shock absorber. Inspect spring and boot for wear and replace any parts found defective. To reassemble, reverse disassembly procedure and ensure coil spring is properly aligned before releasing spring compressor. Vent opening on auxiliary spring faces inside retainer.

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

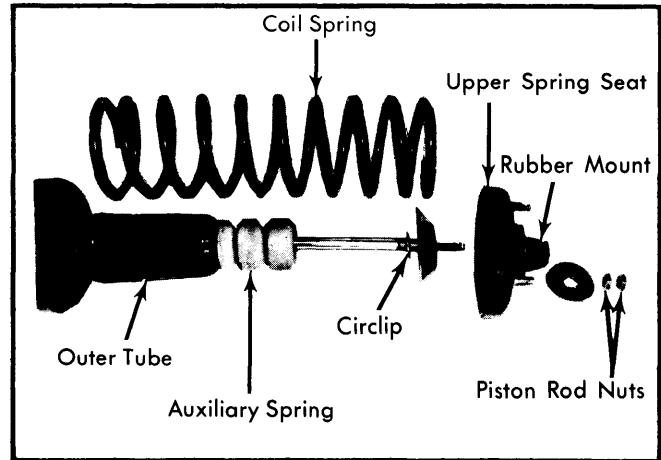


Fig. 2 Exploded View of BMW Rear Suspension Strut Assembly — 320i Shown

SEMI-TRAILING CONTROL ARM

Removal — 1) Raise vehicle and place on safety stands. Remove tire and wheel. Remove parking brake lever. Disconnect and plug brake fluid line at union bracket; plug openings. Disconnect brake pad wear sensor from right trailing arm, if equipped.

2) Remove stabilizer bar from control arm. Remove strut assembly (shock absorber) from vehicle. Disconnect axle drive shaft from bearing carrier. Place jack under control arm. Remove trailing arm pivot bolts at crossmember and lower arm to ground.

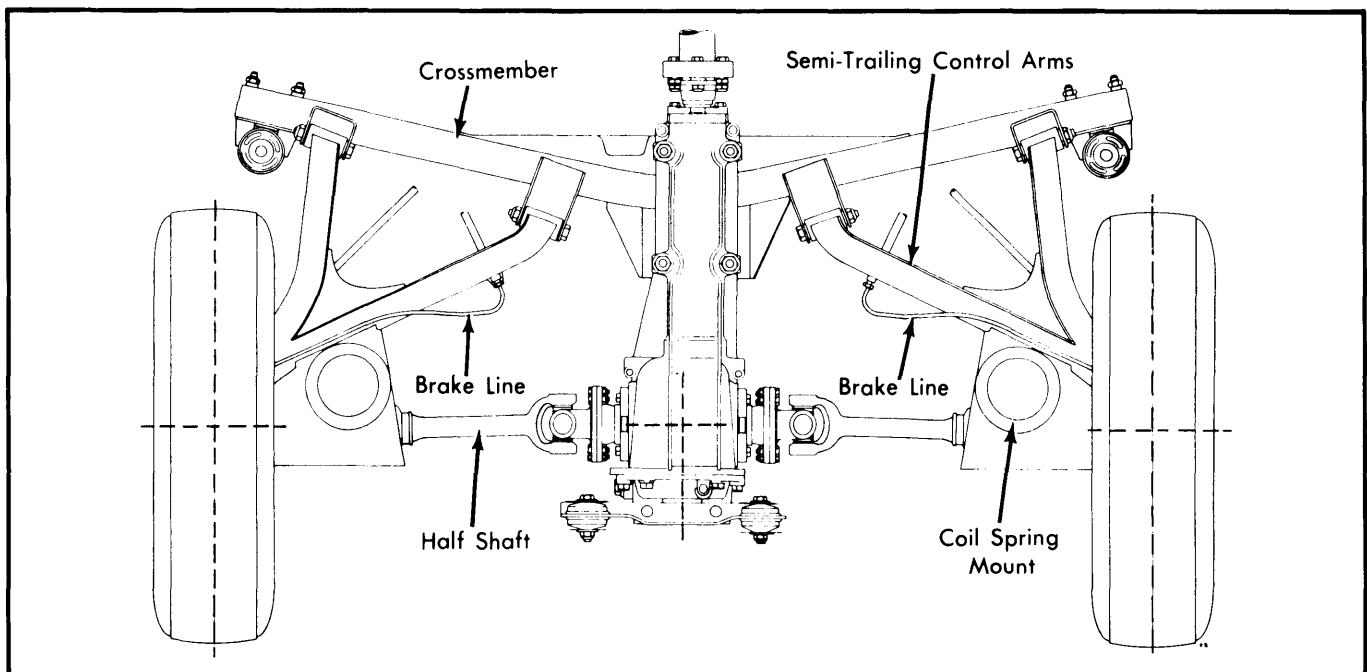


Fig. 1 Overhead View of BMW Rear Suspension

Rear Suspension

BMW (Cont.)

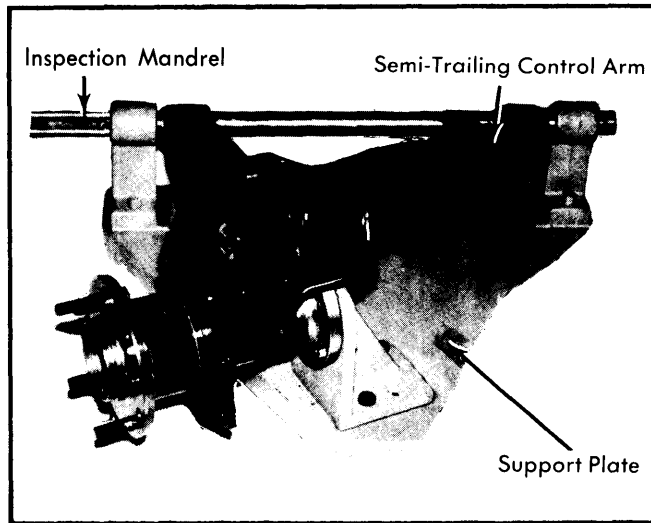


Fig. 3 Trailing Arm Fitted to Support Plate to Check Alignment

Inspection – 1) Visually inspect bushing and replace those that have deteriorated. Before pressing out worn bushings, cut

off collar. When pressing in new bushings lubricate them with oil. Note that collared edge faces out.

2) Check trailing arm alignment. Place arm in support plate. See Fig. 3. Slide inspection mandrel through control arm to crossmember mounting bushings bores (bushings removed). If control arm is out of alignment it can be straightened if there is no other damage to arm.

Installation – To install, reverse removal procedure and tighten all nuts and bolt. Bleed and adjust brakes.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Bottom Strut Mounting	
320i.....	36-39 (4.9-5.4)
530i and 630CSi.....	87-94 (12-13)
Upper Strut-to-Body	18-20 (2.5-2.8)
Trailing Arm-to-Crossmember	
320i.....	58-65 (8.1-9.0)
530i and 630CSi.....	49-54 (6.7-7.5)