

Rear Suspension

AUDI

**Fox
5000**

DESCRIPTION

Suspension on all Audi models consists of coil springs, shock absorbers, transverse rod and trailing arms. Some design differences occur between models.

On Fox Wagon and 5000 models, rear suspension arrangement is illustrated in Fig. 1. On these models, coil spring is mounted directly on rear axle and shock absorber is mounted separately. On Fox Wagon, transverse rod mounts diagonally in front of axle beam. On 5000, it mounts behind axle beam. Also on 5000, top end of shock absorber is a stud-type mount and incorporates a rubber damper assembly.

On Fox Sedan models, coil spring and shock absorber are combined into a single, strut-type assembly. A transverse rod is also used and mounts diagonally in front of axle beam. Fig. 2.

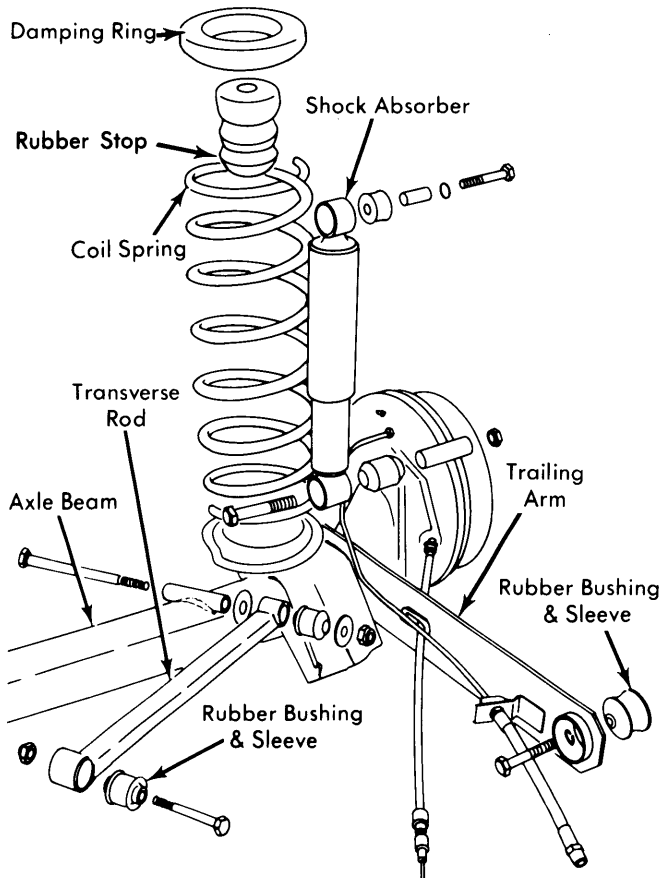


Fig. 1 Exploded View of Audi Fox Wagon Rear Suspension. 5000 Models Similar. See Text for Differences

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.

REMOVAL & INSTALLATION

REAR AXLE ASSEMBLY

Removal, Fox - 1) Raise vehicle and place supports under frame. Remove nuts from parking brake linkage equalizer line. Force parking brake plastic cable guide bushing from clip. Pry down and unhook muffler from front bracket. Separate all brake cables from body holders.

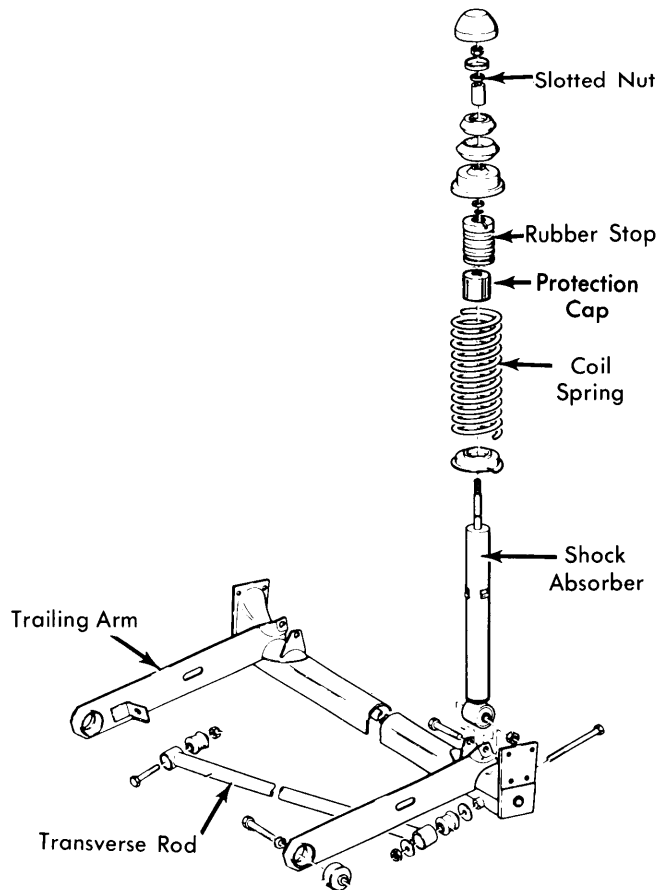


Fig. 2 Exploded View of Audi Fox Sedan Rear Suspension

2) Detach brake hoses and plug openings. Using a jack, raise axle slightly. Unhook muffler at rear. Disconnect transverse rod. Disconnect lower end of shock absorber.

3) Slowly lower rear axle assembly from vehicle, watching coil springs while lowering.

Bushing Replacement, Fox - Place trailing arm in press and force bushings from arm. Reverse process to install new bushings. Make sure new bushings are installed with slots positioned horizontally in trailing arm.

Installation, Fox - 1) To install rear axle, reverse removal procedure and note the following: Make sure trailing arm bushings are free of tension when installed. Before tightening trailing arm bolts insure arms are in middle of moving range.

AUDI (Cont.)

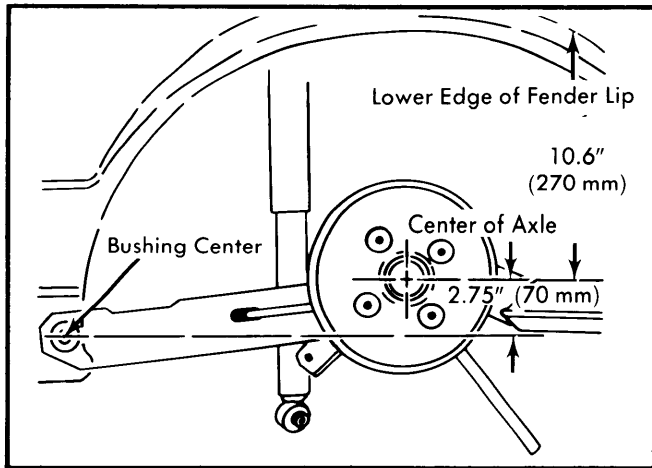


Fig. 3 Measurement Points for Installing Fox Wagon Rear Axle Beam

2) On Fox Wagon models, lift axle beam until center of axle is 2.75" (70 mm) higher than center of bushing in trailing arm. Fig. 2. Check distance from axle center to lower edge of fender lip. Distance should be 10.6" (270 mm). Tighten mounting bolts only after axle is located with measurements set as described.

Removal, 5000 - 1) Loosen, but do not remove wheel bolts. Raise and support vehicle. Remove bolt from transverse rod at axle mounting. Detach right brake hose at coupling with steel tubing. Plug openings.

2) Detach brake pressure regulator spring (hooked to lower mounting bolt of shock absorber). Detach left brake hose at connection with tubing and plug openings.

3) Remove right fuel tank retaining strap. Remove parking brake cable from guide on fuel tank. Loosen left side parking brake cable bolt. Loosen parking brake adjusting nut and disconnect parking brake cable.

4) Remove rear mounting for exhaust system. Lower vehicle to ground. Remove both shock absorber top nuts. Using frame jack, raise vehicle slowly until coil spring can be removed from axle mountings. Remove rear wheels.

5) Remove trailing arm mounting bolts, with rear axle suitably supported on a jack. While slowly lowering axle assembly from vehicle, guide parking brake cable over exhaust pipe.

Installation, 5000 - 1) Raise vehicle and position rear axle in vehicle. Install and lightly tighten trailing arm mounting bolts. Install both rear wheels and lower vehicle to ground.

2) Position rubber damper rings on coil springs, jack up vehicle body, position springs and slowly lower body to hold springs (3 persons may be required to perform this step).

3) Tighten shock absorber top mounting nuts. Raise vehicle and check position of coil springs. If necessary, turn springs in mounting to correct their positions.

4) With vehicle resting on ground, tighten trailing arm bolts. Install transverse rod, brake hoses, spring for brake pressure regulator and fuel tank retaining strap.

5) Bleed brake system, attach and adjust parking brake cable.

TRANSVERSE ROD

Removal, All Models - Raise and support vehicle. Remove nuts from transverse rod bolts and tap bolts out of holes. Inspect bushings and sleeves for wear and replace if necessary.

Installation, All Models - To install, reverse removal procedure.

SHOCK ABSORBERS

Removal, All Models - 1) On Fox Sedan models, remove rear seat cushion, locate and bend up tabs holding rear seat back in place. Remove rear seat back to gain access to top shock absorber mounting nut. Remove nut.

2) On Fox Wagon models, raise vehicle and remove lower shock absorber mounting first (it may not be necessary to raise vehicle to gain access).

3) On 5000 models, keep vehicle resting on ground at all times and remove top shock absorber mounting.

4) On all models, remove upper or lower shock absorber mounting not previously removed. On Fox Sedan models, raise vehicle to relieve spring pressure. On all models, remove shock absorber from vehicle.

Installation, All Models - To install, reverse removal procedure. Be sure, on Fox Wagon models, to install upper bolt before attaching lower mounting.

NOTE - When installing shock absorber on Fox Sedan models, be sure top protection cap is properly installed. A missing or misaligned cap will allow dirt and water to enter shock absorber and cause damage.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Shock Absorbers	
Fox Wagon	
Upper & Lower	43 (6.0)
Fox Sedan	
Upper	21 (3.0)
Lower	43 (6.0)
5000	
Upper	14 (2.0)
Lower	40 (5.5)
Transverse Rod	
Fox (All)	50 (7.0)
5000	65 (9.0)
Trailing Arm	
Fox (All)	43 (6.0)
5000	
M10 Bolt	51 (7.0)
M12 Bolt	69 (9.5)