

AUDI FOX

Fox

DESCRIPTION

Audi Fox is front wheel drive with independent strut type front suspension. Axles are supported by lower control arms, vertically mounted strut assemblies, and a stabilizer bar. Strut assemblies consist of double action shock absorbers with coil springs mounted over the outside. The top part of strut is attached to the inner fender panel and the lower portion is attached directly to steering knuckle. Tie rods are connected to supports under coil springs. Stabilizer bar is connected to lower control arms at each end and to crossmember below engine.

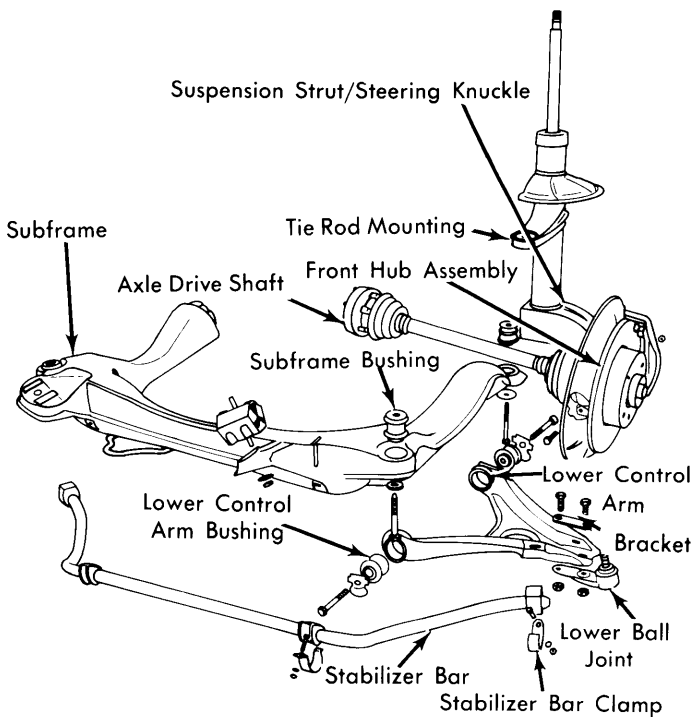


Fig. 1 Exploded View of Audi Fox Front Suspension Components

ADJUSTMENT

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See Wheel Alignment Specifications & 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

STRUT ASSEMBLY

Removal – 1) Remove brake caliper mounting bolts. Remove bolt mounting steering knuckle to ball joint.

2) Remove cotter pin and nut mounting tie rod end to suspension strut. Press out ball joint.

3) Loosen brake fluid line clamp. Swing caliper over to control arm and support there.

4) Scribe alignment marks on ball joint mount bracket near nuts. Remove nuts.

5) Remove 2 upper mounting nuts inside engine compartment. Pull coil spring downward.

6) Separate axle drive shaft from steering knuckle/suspension strut:

a. Remove axle shaft nut.

b. Remove socket head bolts at transaxle.

NOTE – If work is being done on right side, exhaust pipe must be separated from manifold and bracket on transmission.

c. Pry axle drive shaft out of transaxle and place on transaxle case.

d. Put steering in locked position. Pull drive shaft out of steering knuckle.

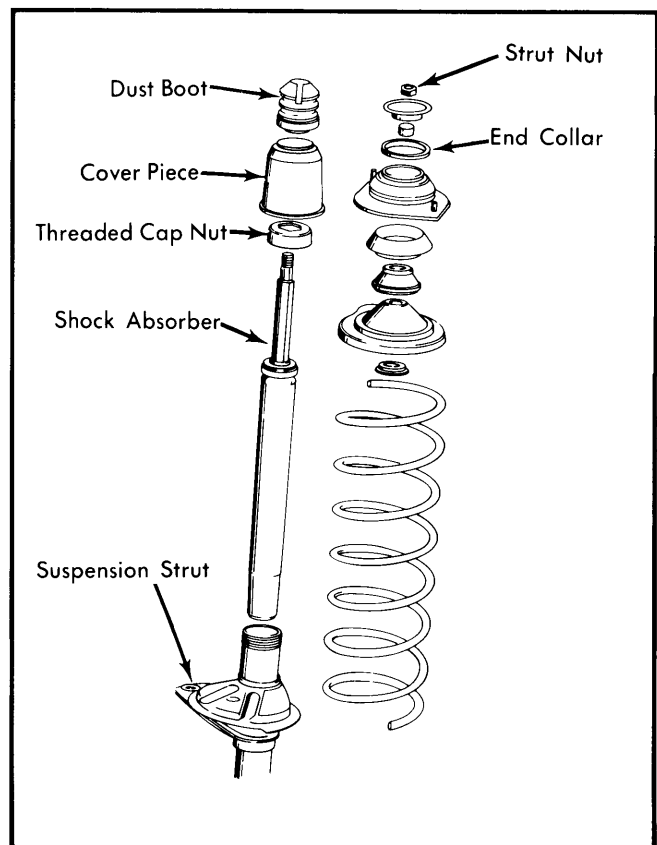


Fig. 2 Exploded View of Front Suspension Strut Assembly

Front Suspension

AUDI FOX (Cont.)

Shock Absorber Replacement — 1) Slightly collapse and secure coil spring. Remove strut end nut (piston rod). Slowly release spring pressure. Remove coil spring assembly.

2) Clamp steering knuckle end of strut in a vise. Remove boot and cover piece. Remove threaded cap nut (turn counter-clockwise) from strut tube.

3) Refit strut nut. Place open end wrench under strut nut on shock absorber and tap on wrench to pull shock absorber out of strut tube.

4) Select new shock absorber. Guide shock absorber into strut tube. Fully seat shock absorber but do not force into place with a hammer. Tighten mounting (cap) nut.

5) Fit cover piece and dust boot. Refit coil spring assembly. With shock absorber piston rod pulled out as far as necessary and held with pliers, tighten strut nut.

NOTE — If coil spring is replaced both sides do not have to be changed at same time.

NOTE — Entire subframe assembly can be removed as long as engine/transaxle assembly is suitably supported in vehicle. Audi recommends use of tool 10-222 to retain components that remain in vehicle. Tool mounts on each inner fender panel and attaches at a point to engine.

Installation — To install, reverse removal procedure and note:

- Use new nut and bolt when installing steering knuckle to ball joint.

LOWER CONTROL ARM

Removal — 1) Raise vehicle. Support on safety stands.

2) Disconnect stabilizer bar from lower control arm. Support strut assembly.

3) Loosen lower control arm mounting bolts. Remove axle drive shaft, if necessary.

4) Index mark ball joint-nuts and bracket. Remove ball joint mounting nuts, bolts and bracket. Separate ball joint from strut.

5) Remove mounting bolts at crossmember.

Bushing Replacement — 1) Check control arm bushings. If bushings are worn they must be replaced.

2) Fit control arm to press and force bushing out.

3) Select new bushing. Coat outer surface of bushing with brake paste. Support control arm. Force new bushing into control arm with press.

Installation — To install lower control arm, reverse removal procedure and note:

- If ball joint is not replaced at this time, make sure alignment marks made on ball joint nuts and bracket match before tightening nuts.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Axle Nut	137 (19)
Lower Control Arm-to-Crossmember	33 (5)
Upper Strut Assembly-to-Body	16 (2.2)
Stabilizer Bar-to-Crossmember	7 (.9)
Lower Control Arm-to-Steering Knuckle	16 (2.2)
Piston Rod Nut	43 (6)
Brake Caliper-to-Steering Knuckle	43 (6)
Brake Disc Guard-to-Steering Knuckle	7 (.9)
Lower Control Arm	
Joint-to-Lower Control Arm	47 (7)
Stabilizer Bar-to-Lower Control Arm	7 (.9)
Strut Cap Nut	⓪87 (12.0)
Suspension Strut Nut.....	43 (6.0)

① — Plus 36 ft. lbs. (5 mkg).