

JAGUAR

XJ6
XJ12
XJS

DESCRIPTION

Independent, coil spring type suspension. Outer bearing carrier and hub assembly is supported by control arms at bottom and utilizes drive axles as upper support. Suspension is controlled by two coil spring/shock absorber assemblies mounted at each rear wheel. Movement of lower control arms are controlled by radius arms connected to control arms at rear and to chassis members at front.

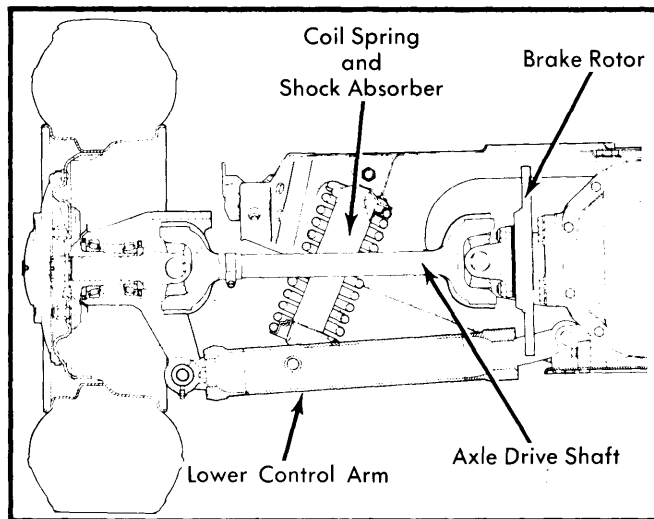


Fig. 1 Jaguar Rear Suspension Assembly

ADJUSTMENTS

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

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

REMOVAL & INSTALLATION

COIL SPRING & SHOCK ABSORBER

NOTE — Rear springs can be removed with rear suspension installed in vehicle.

Removal — Raise vehicle and support at lift points with jack stands. Position floor jack under control arm. Remove nut and bolt mounting top of shock absorbers to the suspension assembly crossmember. Remove washers and nuts securing shock absorbers to lower mounting. Using a drift, remove mounting piece. Withdraw shock absorber and coil spring assembly. Using a spring compressor, collapse spring until collets and spring seat can be removed. Release pressure and separate shock absorber from spring.

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

RADIUS ROD

Removal — 1) Raise and support vehicle on safety stands forward of radius rods. Remove tire and wheel. Remove bolt and spring washer securing safety strap to body. Remove lock wire and bolt securing radius rod to body, then remove safety strap.

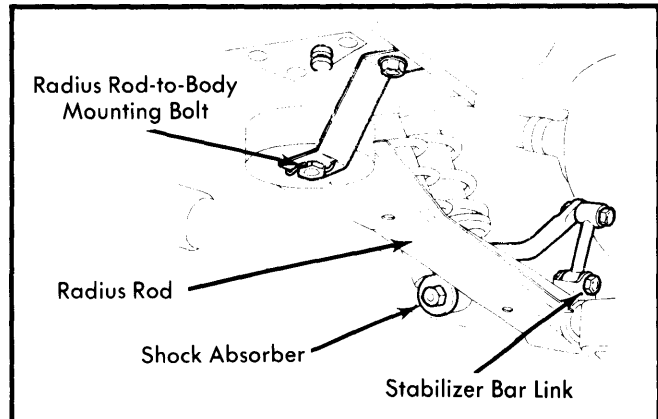


Fig. 2 Installed Position of Radius Rod

2) Remove forward lower shock absorber mounting pin. Using a punch, remove pin rearward. Bend tab washer and remove bolt mounting radius rod to control arm.

Installation — Replace any damaged radius rod bushings. When pressing bushings into radius rod, bushing should protrude from each side equal amounts. To install, reverse removal procedure.

REAR SUSPENSION ASSEMBLY

Removal — 1) Raise and support vehicle forward of radius rods. Remove tires and wheels. Place floor jack (with adaptor to hold suspension assembly) under rear suspension.

2) Disconnect intermediate exhaust pipes at both ends. On XJS models, remove rear mufflers.

3) On XJ12 and XJ6 models, remove intermediate exhaust pipe from vehicle. Block rear mufflers out of way.

4) Disconnect radius rod-to-body mounting hardware.

5) On XJS models, separate stabilizer bar from radius rods.

6) Separate brake line union from body bracket. Disconnect brake lines at flexible hoses and plug openings. Disconnect propeller shaft at differential. Lower shaft out of way.

7) Release parking brake. Separate actuating lever cable. Disconnect opposite side cable at trunnion and retain cable out of way.

8) On models equipped with overdrive units, disconnect speedometer and electrical wire.

9) On XJS models, remove bolts attaching suspension mounting rubbers to body.

Rear Suspension

JAGUAR (Cont.)

10) On XJ12 and XJ6 models, remove 8 self-locking nuts and bolts and 4 nuts keeping mounting brackets to body.

11) Lower suspension to ground and slide from vehicle. Guide intermediate exhaust pipe from suspension assembly.

Installation – Reverse removal steps and bleed brake system.

LOWER CONTROL ARM

Removal – 1) Raise and support vehicle with stands placed ahead of radius rods. Remove tire and wheel.

2) Remove lock nut and drift out bearing carrier fulcrum shaft. Fit dummy shaft for support. Collect shims and oil seal retainers.

3) Lift bearing carrier up, clear of control arm. Keep in position with heavy wire attached to crossmember. On XJS, remove bolt mounting stabilizer bar link to radius rod and move link out of way. On all models, separate radius rod from body.

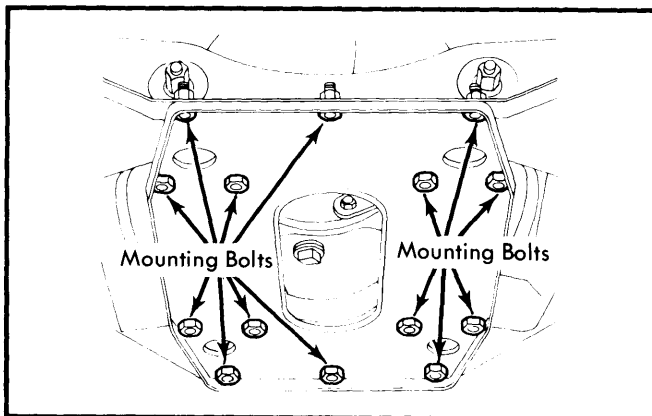


Fig. 3 Bolts and Setscrews Mounting Support Plate to Crossmember and Inner Fulcrum Brackets

4) Remove 14 bolts mounting support plate to crossmember and inner fulcrum brackets. Separate shock absorber at upper mount. Drift out pivot pin.

5) Separate inner fulcrum from control arm. Guide out control arm and radius rod.

Installation – 1) Smear bearing cage with grease and force bearing into lower control arm. Marking cast on bearing faces out. Insert bearing tube for other end and force in opposite end bearing. Repeat procedure for other boss.

2) Assemble radius rod to control arm. Lightly coat thrust washers, new oil seals and oil seal retainers with grease. Fit assemblies into place on control arm.

3) Insert control arm to inner fulcrum mounting bracket. Make sure radius rod bracket faces toward front of suspension.

4) Insert dummy shaft from each end to keep bearings positioned then locate control arm in bracket. Slip in fulcrum shaft while pushing out dummy shaft. Install lock nut.

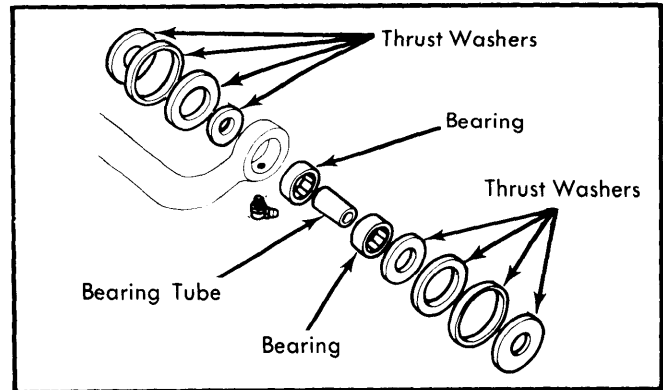


Fig. 4 Fulcrum Boss Assembly

5) To install remaining components, reverse removal procedure.

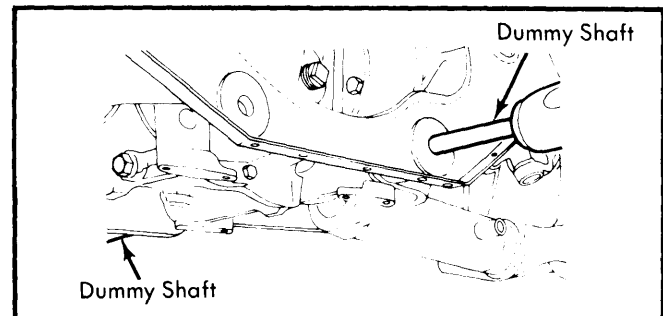


Fig. 5 Locating Control Arm in Mounting Bracket with Dummy Shafts

STABILIZER BAR & LINKS

Removal (XJS) – Raise vehicle and place on safety stands. Remove left rear wheel. Loosen exhaust pipe clamp nuts on right side forward of crossmember. Remove bolts mounting stabilizer bar to top of connecting links. Remove brackets mounting stabilizer bar to floorpan. Pull exhaust pipe apart. Maneuver stabilizer through left fender opening. Remove nuts and bolts mounting connecting link, then separate from radius rod.

Installation – To install stabilizer bar and connecting links, reverse removal procedure. Make sure exhaust system does not leak.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Radius Rod-to-Control Arm	60-70 (8.3-9.7)
Radius Rod-to-Body	40-45 (5.5-6.2)
Shock Absorbers	32-36 (4.4-5.0)
Support Plate-to-Crossmember and Inner Fulcrum Mounting	14-18 (1.9-2.5)
Inner Fulcrum Shaft	45-50 (6.2-6.9)
Stabilizer Bar Bracket-to-Body	14-18 (1.9-2.5)