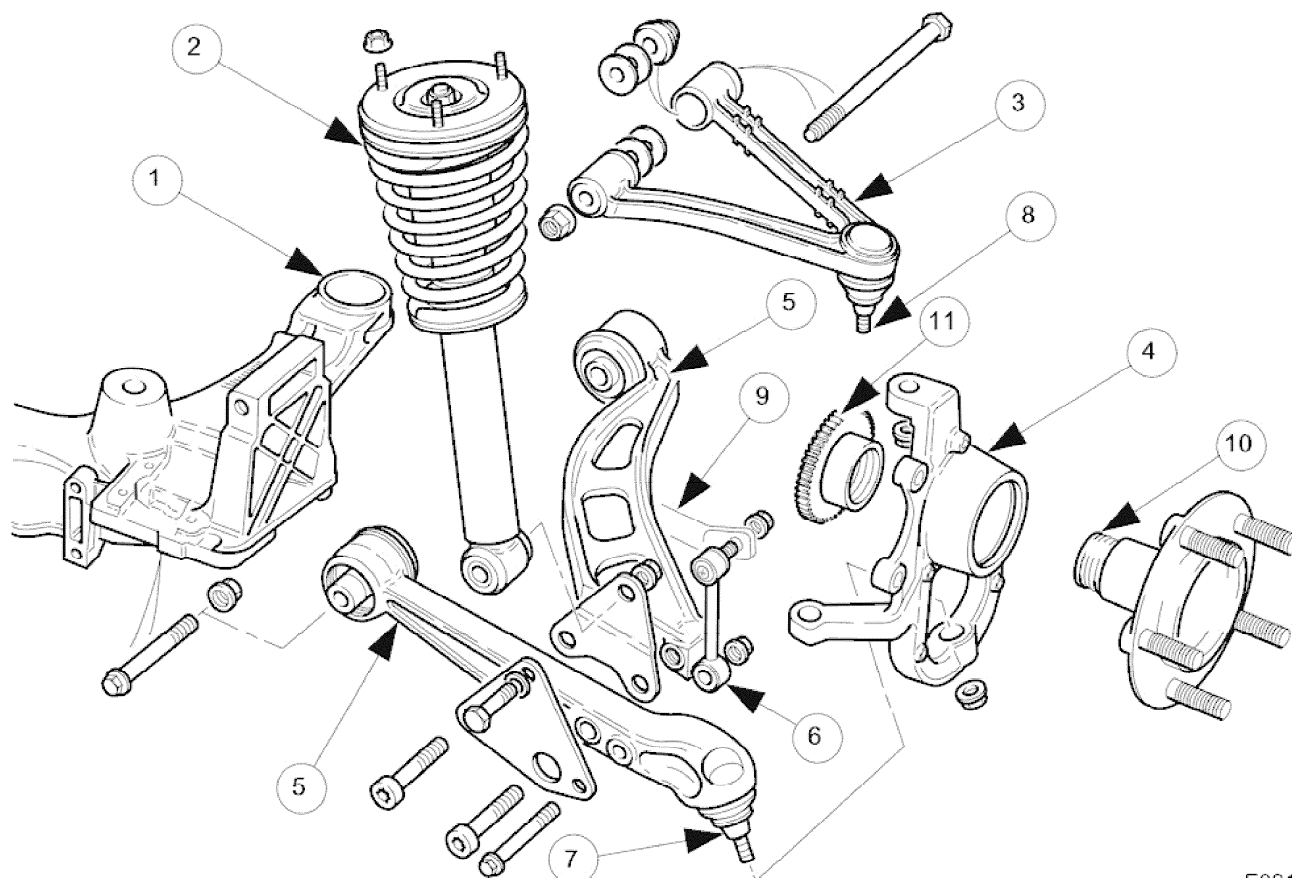


Front Suspension

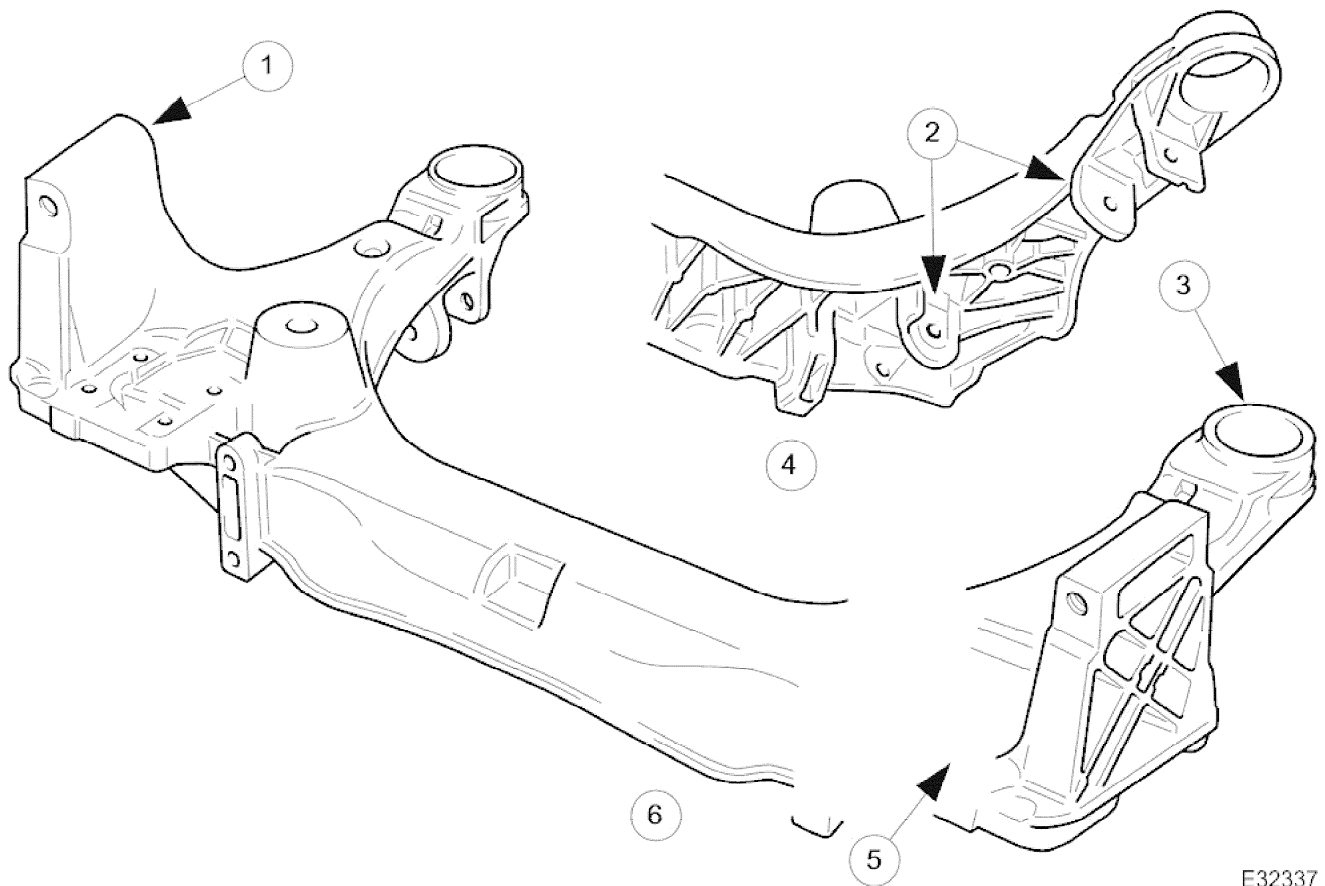
Front Suspension Components



E32168

Item	Description
1	Crossbeam
2	Shock Absorber and Spring Assembly
3	Upper Wishbone
4	Vertical Link
5	Lower Wishbone
6	Stabilizer Bar Link
7	Lower Ball Joint
8	Upper Ball Joint
9	Stabilizer Bar
10	Hub
11	Hub Rotor Nut

Crossbeam



E32337

Item	Description
1	Upper Wishbone Mounting
2	Lower Wishbone Mounting
3	Front Mounting Bush Location
4	Engine Mounting Location
5	Rear Mounting Location
6	Power Steering Rack Mounting



CAUTION:

Do not attempt to weld or repair the aluminum crossbeam. If it is damaged, a new one must be installed.



CAUTION:

Do not use the crossbeam as a jacking point, as damage can occur to the crossbeam, steering rack and brake pipes.

The crossbeam is a lightweight aluminum casting which is bolted at four points to the vehicle's longitudinal members, through metal-to-rubber bonded mountings. Bushes which are pressed into the crossbeam are used at the front, and mountings which are bolted to the crossbeam are used at the rear.

Wishbone Assemblies

Both upper and lower wishbone assemblies are attached to the crossbeam by fulcrum bolts. The upper wishbone is a single-piece steel forging, which is fitted with a press-fit ball joint, and two slipflex bushes to each arm. A single fulcrum bolt attaches the upper wishbone to the crossbeam. Shims installed with the upper fulcrum bolt are used to adjust the caster setting.

The wide-base lower wishbone comprises two steel forged arms bolted together. The front wishbone arm is tapped to accept the two bolts which secure the two wishbone arms together. Additionally the two bolts also

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secure the shock absorber mounting brackets to the wishbone. Each lower wishbone arm is fitted with a metal-to-rubber bonded fulcrum bush which is attached to the crossbeam by an independent fulcrum bolt. The rear wishbone arm has a press fit ball joint installed.

The camber setting is adjusted by rotating the lower-wishbone rear fulcrum bolt, which has an eccentric shaft. However, in some markets the eccentric bolt is not fitted and the original fulcrum bolt has to be substituted with an eccentric bolt to enable adjustment. The eccentric bolt is supplied by Jaguar Cars Ltd.

Stabilizer Bar

The stabilizer bar, is attached to the crossbeam in two positions by rubber bushes and clamps. The outer ends of the stabilizer bar are attached to links which are connected the lower wishbones. The stabilizer bar provides the required stiffness to prevent excessive body roll and fore-and-aft motion.

Vertical link

The vertical link swivels on the upper and lower wishbones via the ball joints, and carries the

- hub,
- cartridge wheel bearing - which is greased for life, has integral seals, and is non-adjustable,
- hub rotor nut (hub nut and ABS rotor combined),
- wheel speed sensor,
- brake caliper,
- and brake disc and shield.

The position of the vertical link is determined by the movement of the steering rack, which is connected to the vertical link's integral steering arm by the tie-rod-end.

Shock absorber and spring assembly

The shock absorber and spring is a coaxial assembly, installed between the lower wishbone and vehicle body. The top spring mounting is attached to the vehicle's inner fender and the shock absorber is attached to a bracket on the lower wishbone. The spring is compressed between the upper mounting and the lower spring pan which is held in position by a circlip attached to the shock absorber.

Springs come in various ratings depending on the vehicle's suspension specification. The suspension specification also determines the number of packers fitted between the lower spring pan and the spring.

Shock absorbers and CATS (adaptive damping): see section 204-03 Description and Operation.

Enhanced Handling Pack

An optional enhanced handling pack, which can be either factory or dealer installed, is available for XK coupe vehicles fitted with adaptive damping only. If the handling pack is installed the high performance Brembo brakes and special wheels must also be installed, refer to the Description and Operation sections in <<206-03>> and <<204-04>> for information. The handling packs consist of special:

- Coil springs.
- Shock absorbers.
- Adaptive Damping Control Module (ADCM)
- Increased diameter, front stabilizer bar.
- Reduced diameter, rear stabilizer bar.
- Steering rack.
- Power steering control module.