

FORD MOTOR CO. 4-WD COIL SPRING TYPE

F-150, 250, 350
U-150 (Bronco)

DESCRIPTION

Front suspension consists of a driving axle, two coil springs, two radius arms, a side strut bar and two hydraulic shock absorbers (some models may be equipped with optional dual quad shock absorbers). Radius arms attach to frame side rails and are clamped around axle housing. If vehicle is equipped with optional quad shock absorbers, the front clamp portion of the radius arm is also the lower shock mount.

Coil springs are mounted to radius arms directly over axle housing and to brackets attached to frame side rails. Standard equipment shock absorbers attach to frame side rails and radius arms behind coil spring. Optional dual quad shock absorbers mount in front of spring in same manner. The side strut bar, used to eliminate axle side movement, is attached to left frame rail and at right side of axle housing.

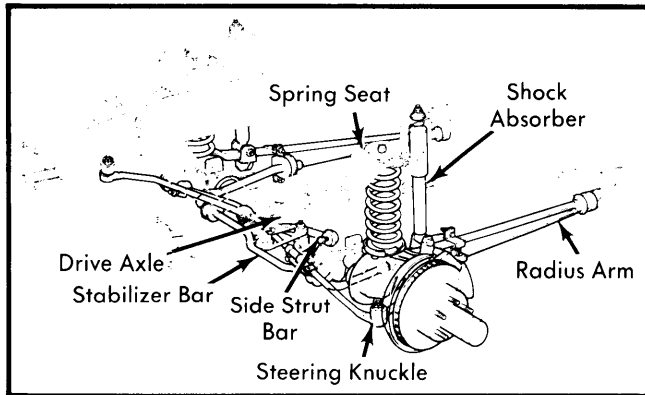


Fig. 1 Identification of Front Suspension Components F-150 and U-150 (Bronco)

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.

REMOVAL & INSTALLATION

COIL SPRING

Removal (F-150 & Bronco) — Raise vehicle. Remove shock absorber-to-lower bracket bolt and nut. Remove lower spring retainer nuts. Remove upper spring attaching screw and upper retainer. Place safety stands under frame side rails and lower axle enough to relieve tension on spring. Remove spring and lower retainer from vehicle.

Removal (F-250/350) — Raise vehicle until weight is off front spring, but wheels still touch ground. Support axle to prevent rotation. Disconnect lower shock absorber mounting and remove "U" bolts and spacer. Remove rear spring hanger bolt, nut connecting shackle and spring eye, and drive out shackle bolt. Remove spring.

Installation — To install, reverse removal procedure. Tighten nuts and bolts to specifications.

RADIUS ARM

Removal (F150 & Bronco Only) — Raise vehicle and place safety stands under frame side rails. Remove shock absorber attaching bolts and remove shock absorber from radius arm. Remove lower spring attaching bolt. Remove radius arm-to-frame bracket nut, and radius arm rear insulator. Lower axle and allow axle to move forward. Remove bolt and stud attaching radius arm to axle. Move axle forward and remove radius arm from axle. Pull radius arm from frame bracket.

Installation — Position washer and insulator on rear of radius arm and place radius arm into the frame bracket, loosely installing attaching nut. Position radius arm to axle. Install new bolts and stud and attach radius arm to axle. Position lower spring seat, insulator and retainer to spring and axle and attach. Tighten rear radius rod attaching nut. Install shock absorber and tighten nuts.

STEERING KNUCKLE

Removal & Installation — See *Steering Knuckles* in **DRIVE AXLE** Section for removal and installation.

DUAL SHOCK ABSORBERS

Removal — Remove self-locking nut, steel washer and rubber bushings from upper end of shock absorbers. Remove self-locking nut from lower end of shocks. Remove shock absorbers.

Installation — Replace rubber bushings when replacing shock absorbers. Place shock absorbers on mounting brackets with large diameter on top. Install bushings, steel washers and self-locking nuts and tighten.

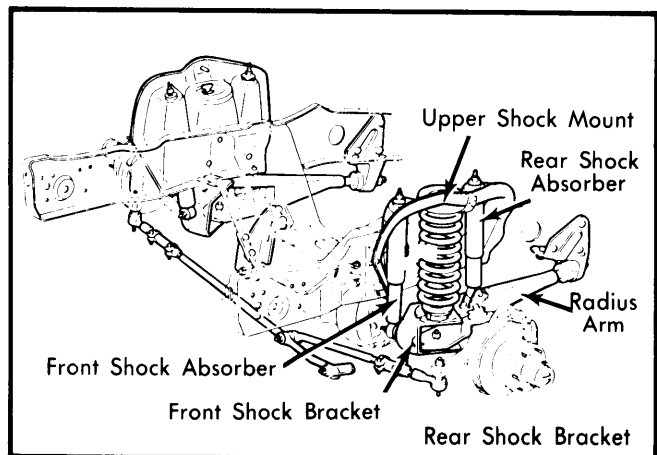


Fig. 2 Dual Quad Shock Absorber Components

STABILIZER BAR

Removal — 1) Remove nuts, bolts and washers connecting stabilizer bar to links. Remove nuts and bolts of stabilizer bar retainer. Remove stabilizer bar insulator assembly.

2) Remove coil spring and lower spring seat. Remove stabilizer bar mounting bracket attaching stud and bracket. Remove stabilizer bar.

Front Suspension

FORD MOTOR CO. 4-WD COIL SPRING TYPE (Cont.)

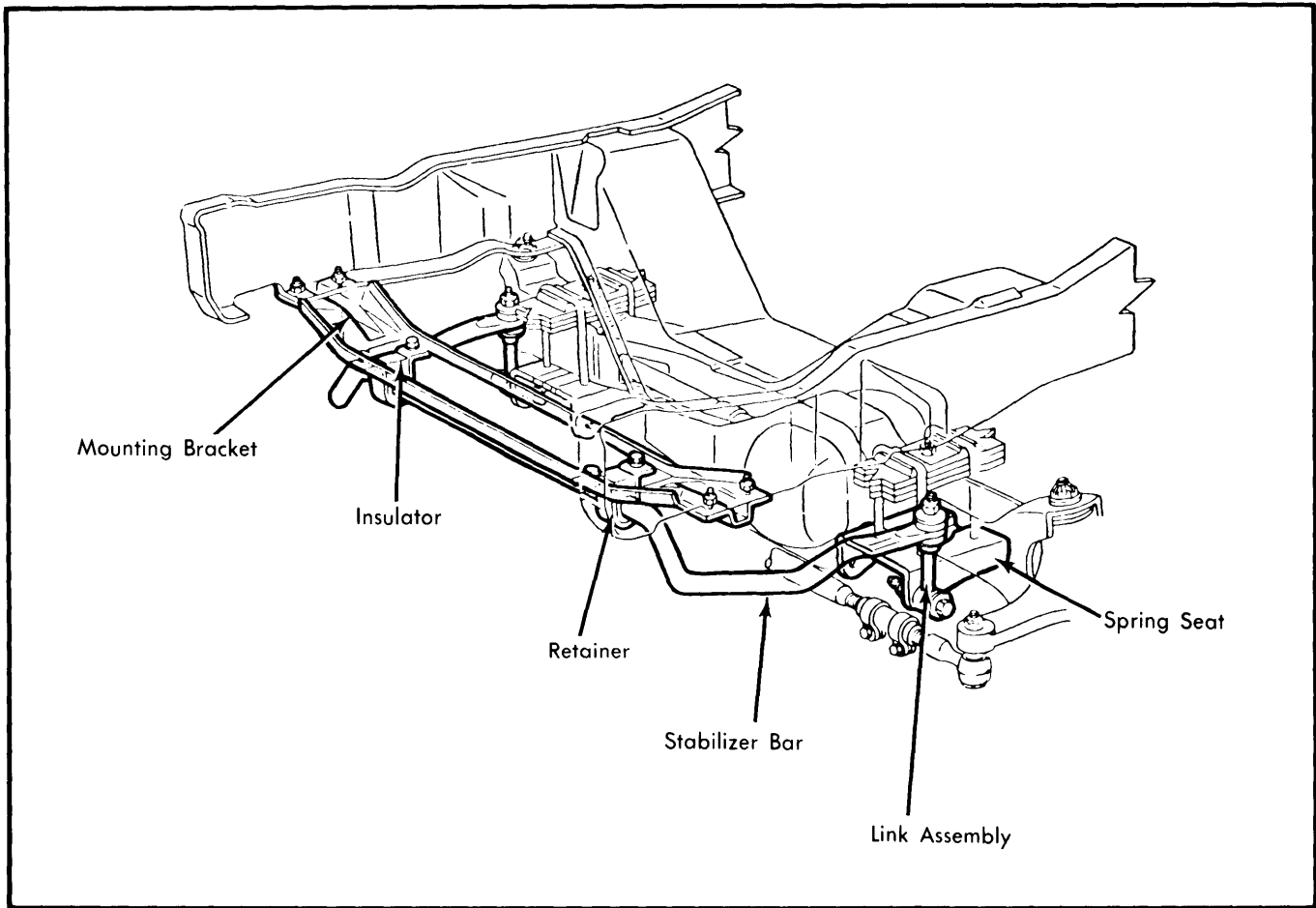


Fig. 3 F250/350 Stabilizer Bar Assembly – (Other Models Similar)

Installation – 1) Loosely assemble the entire assembly with both links outboard of the stabilizer bar. Pull stabilizer bar rearward and install bar ends to the links and install link bolts with threads pointing outward.

2) Install link-to-stabilizer bar washers and tighten retaining nuts. Tighten stabilizer bar-to-frame mounting nuts while pushing bar forward to swing the links away from the axle mounting brackets.

3) Ensure that stabilizer bar insulators are properly seated and that bar is centered in vehicle. On models with quad shocks, disconnect forward shock at lower attachment to facilitate link assembly installation. Reinstall shock after stabilizer bar system is installed.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Upper Spring Retainer	13-18
Lower Spring Retainer	30-70
Radius Arm-to-Bracket	80-120
Shock Absorber Mounting Bolt	
Lower	40-60
Upper	15-25
Radius Arm-to-Axle	
Upper Stud	240-260
Lower Bolt	320-340
Radius Arm Bracket-to-Axle Screws	20-26
Stabilizer Bar-to-Frame	27-37
Stabilizer Bar Retaining Nuts	48-65