1965-74 FORD MOTOR CO. 2-WD COIL SPRING TYPE

Ford (1965-74)

NOTE — Some models use other units. See Ford 4-WD Coil Spring Type, and Ford Leaf Spring Type in this Section.

DESCRIPTION

Front suspension consists of two "I-Beam" reverse Elliot type axles, mounted to a frame pivot bracket at one end, and to the steering knuckle and a radius arm at the other end. Steering knuckle is mounted to the axle by solid, constant diameter kingpin. Either Delrin or bronze bushings are pressed into steering knuckles to provide bearing surfaces for kingpin. Radius arm runs rearward from axle and is attached to a bracket, mounted to frame side rail, at the rear. Coil spring is seated on top of radius arm at bottom of spring, and in a bracket mounted to frame at the top. Hydraulic, double-action shock absorber is mounted between frame and radius arm to dampen road shock.

ADJUSTMENT

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See Wheel Alignment Specifications & Procedures in WHEEL ALIGNMENT Section.

WHEEL BEARING ADJUSTMENT

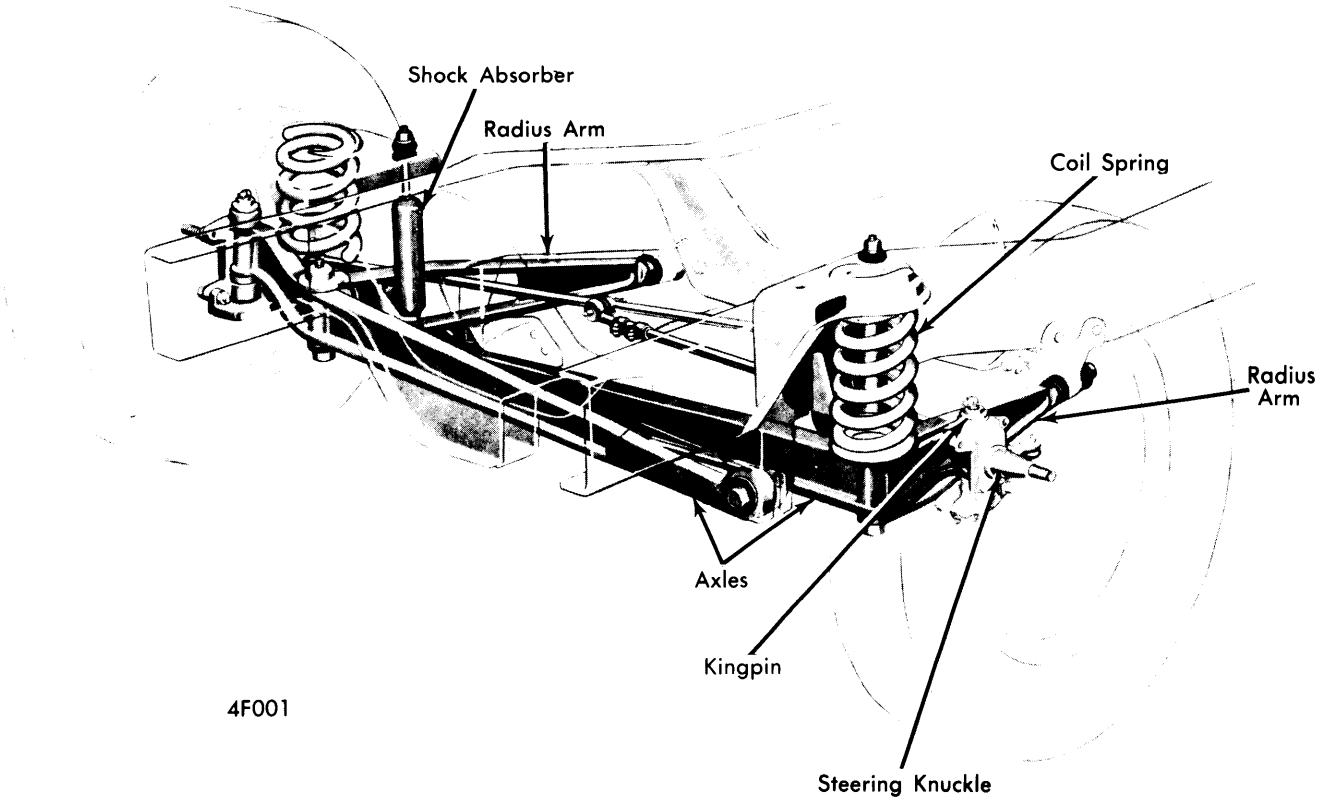
See Wheel Bearing Adjustment in WHEEL ALIGHMENT Section.

REMOVAL & INSTALLATION

STEERING KNUCKLE

Removal — Raise and support vehicle under front axle. Remove wheel, brake drum (or disc), and wheel bearings as an assembly. Remove brake backing plate, and support to prevent damage to brake hose. On vehicles with removable steering arm, remove steering arm from knuckle. On all others, disconnect steering linkage at steering knuckle. Remove kingpin locking pin, and remove upper and lower kingpin plugs and/or retainers. Drive kingpin out from top of axle, and remove steering knuckle from vehicle.

Installation — Drive kingpin into steering knuckle and axle from top of axle, making sure thrust bearing is in position between lower part of axle and steering knuckle. *CAUTION — Be sure locking pin notch in kingpin is aligned with locking pin hole in axle.* Install new locking pin in axle, and install kingpin plugs and/or retainers. Install brake backing plate, brake drum and hub assembly, and wheel on vehicle. Tighten all nuts and bolts.



FRONT SUSPENSION ASSEMBLY

1965-74 FORD MOTOR CO. 2-WD COIL SPRING TYPE (Cont.)

KINGPIN REPLACEMENT

Removal – *NOTE – Delrin bushings do not require special tools for removal or installation, and should not be reamed.* Remove steering knuckle from vehicle as previously described. Drive bushing out of bore in steering knuckle, using a tool slightly smaller in diameter than bore in steering knuckle. Clean bores in steering knuckle, and make sure lubrication grooves in knuckle are not plugged.

Installation – Position bushing in steering knuckle bore, making sure lubrication hole in bushing is aligned with lubrication fitting in steering knuckle, and open end of oil groove is toward axle. Using a driver which pilots in bushing, drive bushing into place in knuckle (Delrin bushings can be forced into place by hand). Ream bronze bushings until inside diameter of bushing is .001-.003" larger than outside diameter of kingpin. Clean all metal shavings from bushing after reaming. Lubricate bushing and kingpin, and install steering knuckle on vehicle as previously described. Install shims between top of axle and steering knuckle, to obtain .003-.010" axle-to-knuckle clearance.

FRONT AXLE

Removal (1965) – Raise and support front of vehicle under frame, and remove wheel. Place a jack under axle to be removed, and raise axle until there is slight tension on spring. Remove steering knuckle from vehicle as previously described. Disconnect shock absorber at radius arm. Lower axle to relieve tension on spring, and remove spring from vehicle. Disconnect radius arm at axle, and remove axle-to-frame attaching bolt. Remove axle from vehicle.

Removal (1966-74) – Raise and support vehicle under frame, and remove wheel. Place a jack under axle to be removed, and raise axle until there is light tension on spring. Remove steering knuckle as previously described. Disconnect shock absorber from radius arm, and remove rebound bracket. Remove lower spring retainer attaching nut, and remove retainer from vehicle. Lower axle to relieve tension on spring, and remove lower spring seat. Disconnect radius arm at axle, and remove axle-to-frame attaching bolt. Remove axle from vehicle.

Installation (All Models) – To install, reverse removal procedure, tighten all nuts and bolts, and check wheel alignment.

COIL SPRING

Removal – Raise and support vehicle under frame, and position a jack under front axle to maintain tension on spring. Disconnect shock absorber at radius arm, and remove rebound bracket. Remove upper spring retainer (if equipped), and remove nut from lower spring retainer (if equipped). Lower axle to relieve tension on coil spring, and remove spring from vehicle.

Installation – Position spring and lower spring retainer on spring seat of axle, and raise axle, until spring is seated in upper spring seat. Place upper spring retainer in position at top of spring and install upper and lower spring retainer attaching nuts. Connect shock absorber to radius arm, and tighten all nuts and bolts.

RADIUS ARM

Removal – Raise and support vehicle under frame. Remove coil spring as previously described. Disconnect tie rod end at steering arm, using suitable tool (3290-C). Remove lower spring seat from radius arm, and remove radius arm-to-axle attaching bolt. Remove cotter pin and nut from rear end of radius arm, and remove radius arm from vehicle. Remove inner bushing from radius arm.

Installation – To install, reverse removal procedure, tighten all nuts and bolts, and check wheel alignment.

TIGHTENING SPECIFICATIONS

Application	Ft.Lbs.
Rebound Bracket-to-Frame	20-30
Spring Seat-to-Frame	30-70
Pivot Bracket-to-Frame	30-70
Axle-to-Pivot Bracket	120-150
Radius Arm-to-Frame Bracket	80-120
Radius Arm Bracket-to-Frame	35-50
Radius Arm-to-Axle	
100,200,250 Series	180-220
300,350 Series	350-500
Upper Spring Retainer	15-25
Kingpin Locking Pin	40-55
Shock Absorber Lower	40-60
Upper (E Models)	15-20
Upper (All Others)	15-25