FORD MOTOR CO. SINGLE ARM

Capri & Mustang
Cougar & Granada
Fairmont & Zephyr
Lincoln Continental
Thunderbird & XR7

DESCRIPTION

Front suspension is modified MacPherson strut type with coil spring located between lower control arm and No. 2 crossmember.

ADJUSTMENT

CASTER & CAMBER

See Caster and Camber Adjustments and Specifications in WHEEL ALIGNMENT Section.

RIDING HEIGHT

See Riding Height Adjustments in WHEEL ALIGNMENT Section.

FRONT WHEEL BEARINGS

Raise vehicle and remove wheel cover and grease cap. Remove cotter pin and locking nut. Loosen adjusting nut 3 turns and rock wheel, hub and rotor assembly in and out several times. Tighten adjusting nut to 17-25 ft. lbs. while rotating wheel assembly. Loosen lock nut ½ turn and tighten to 10-15 INCH Lbs. Reinstall locking nut on adjusting nut and insert new cotter pin.

BALL JOINT CHECKING

See Ball Joint Checking in WHEEL ALIGNMENT Section.

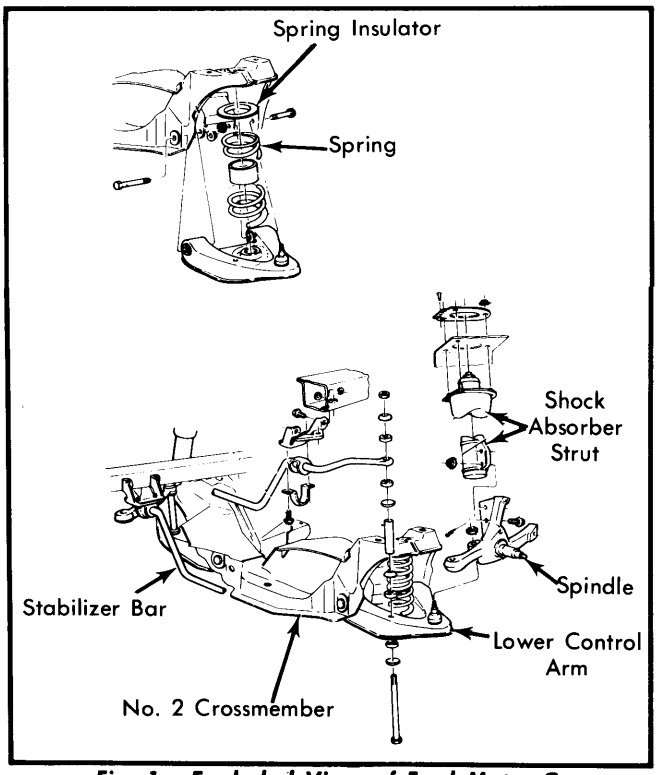

Fig. 1 Exploded View of Ford Motor Co. Single Arm Front Suspension Assembly

REMOVAL & INSTALLATION

BALL JOINTS

NOTE – *Ball joints and lower suspension arm bushings are not serviced separately and must be replaced as an assembly. Ball joint seals are replaceable.*

STABILIZER BAR BUSHING & INSULATOR

Removal – Raise vehicle and place support under lower arm. Disconnect each stabilizer link, insulator attaching clamps and remove bar assembly. Cut worn sleeves and insulators from stabilizer bar.

Installation – Lubricate necessary parts and install plastic sleeves with flange inboard. Slide insulators onto bar over sleeves. Be sure insulator is fully seated against flange. Use new attaching hardware and tighten bolts.

NOTE – *Use a soap based lubricant (D9AZ-19583-A or equivalent).*

LOWER CONTROL ARM

Removal – 1) Raise vehicle on hoist so that control arms hang free. Remove wheel and tire. Disconnect stabilizer bar link. Remove brake caliper, rotor and dust shield. Remove steering gear bolts and position out of way.

NOTE – *Removal of brake caliper, rotor and dust shield is not necessary on Lincoln Continental.*

2) Disconnect stabilizer bar link from control arm. Remove steering gear bolts and position gear out of way. Using spring compressor (T82P-5310-A or equivalent) place upper plate in position into spring pocket cavity on the crossmember. Hooks on plate should be facing center of vehicle.

3) Install compression rod into lower arm spring pocket hole, through coil spring and into upper plate. Install upper plate, lower ball nut, thrust washer, bearing and forcing nut onto compression rod. Tighten forcing nut until a drag is felt.

4) Remove suspension arm-to-crossmember nuts and bolts. The compression tool forcing nut may have to be slightly loosened or tightened for easy bolt removal. Loosen compression rod forcing nut until spring tension is relieved and remove forcing nut. Remove compression rod, coil spring and lower suspension arm.

Installation – To install, reverse removal procedure. Be sure spring pigtail is positioned between 2 holes in lower arm spring pocket. Use a jack to raise suspension arm to normal position before tightening attaching nuts.

COIL SPRING

Removal – 1) Raise vehicle on hoist so that control arms hang free. Remove tire and wheel assembly. Remove brake caliper and wire out of way. Use tie rod removal tool 3290C to remove tie rod from spindle.

2) Disconnect stabilizer bar link from control arm. Remove steering gear bolts and position gear out of way. Using spring compressor (T82P-5310-A or equivalent) place upper plate in position into spring pocket cavity on the crossmember. Hooks on plate should be facing center of vehicle.

FORD MOTOR CO. SINGLE ARM (Cont.)

3) Install compression rod into lower arm spring pocket hole, through coil spring and into upper plate. Install upper plate, lower ball nut, thrust washer, bearing and forcing nut onto compression rod. Tighten forcing nut until a drag is felt.

4) Remove suspension arm-to-crossmember nuts and bolts. The compression tool forcing nut may have to be tightened or loosened for easy bolt removal. Loosen compression rod forcing nut until spring tension is relieved and remove forcing nut. Remove compression rod and coil spring.

Installation – To install, reverse removal procedures. Be sure spring pigtail is positioned between 2 holes in lower arm spring pocket.

FRONT WHEEL SPINDLE

Removal – **1)** Raise vehicle and support with safety stands placed behind lower control arm at jacking pads. Remove wheel and tire. Remove brake caliper, rotor and dust shield. Remove stabilizer link from lower arm.

2) Remove tie rod end from spindle with puller. Remove cotter pin from ball joint stud nut, and loosen 1 or 2 turns. DO NOT remove the nut. Tap spindle with hammer to relieve ball stud pressure.

3) Place a jack under lower arm, compress spring and remove stud nut. Remove bolts attaching spindle to shock strut. Compress shock strut until sufficient clearance is obtained, then remove spindle assembly.

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

SHOCK STRUT

Removal – **1)** Place ignition key in unlock position. From inside engine compartment, remove strut-to-upper mount attaching bolt. A screwdriver in the slot will hold the rod still while removing the nut. Raise vehicle and place safety stands under frame jacking pads.

2) Remove wheel and tire. Remove brake caliper and move out of way. Remove lower 2 nuts and bolts holding strut to spindle. Lift strut up from spindle to compress rod, then pull down to remove strut.

NOTE – *On Lincoln Continental models, the strut should be held firmly in place during removal of spindle-to-strut bolt since gas pressure will cause strut to extend.*

Installation – **1)** With rod half extended, place rod through upper mount and hand start a new nut, engaging as many threads as possible. Extend the strut and position in the spindle. Install new lower mounting bolts and hand start nuts.

2) Tighten strut-to-upper mount bolt inside engine compartment. Lower vehicle and tighten lower mounting bolts. Raise suspension control arms and install brake caliper. Install wheel and tire and remove safety stands.

UPPER MOUNT

NOTE – *Procedure is for non-gas filled struts. On gas filled struts (Lincoln Continental models), remove struts and then upper mount assembly.*

Removal – **1)** Place ignition key in unlock position. Remove strut-to-upper mount attaching bolt inside engine compartment. Raise vehicle by lower control arms until it is just off the ground.

2) Remove wheel and tire. Push strut rod down through upper mount. Remove 3 upper mount retaining nuts and remove upper mount.

Installation – To install, reverse removal procedures.

WHEEL BEARINGS

Removal – **1)** Raise and support vehicle. Remove wheel from hub and rotor. Remove caliper from spindle and support with wire. Remove grease cap from hub. Remove cotter pin, nut lock, adjusting nut and flat washer from spindle. Remove outer bearing cone and roller assembly.

2) Pull hub and rotor off spindle. Using grease retainer remover (1175-A) remove and discard grease retainer. Remove inner bearing cone and roller assembly from the hub.

Installation – **1)** Thoroughly pack new bearing with grease. Place inner bearing cone and roller assembly in inner cup. Apply a light film of grease to lips of now grease retainer and install. Install hub and rotor assembly to spindle.

2) Install outer bearing cone, roller assembly and flat washer to spindle. Install adjusting nut finger tight. Adjust wheel bearings. Install caliper, wheel and tire. Lower vehicle.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N·m)
Lower Arm-to-Crossmember	215-260 (292-354)
Stabilizer Mounting Clamp-to-Bracket	25-30 (34-41)
Ball Joint-to-Spindle	80-120 (109-163)
Shock Strut	
Upper	60-75 (82-102)
Lower	150-180 (204-241)
Tie Rod End-to-Spindle	34-47 (46-64)
Steering Gear-to-Crossmember	90-100 (122-136)