

## FORD MOTOR CO.

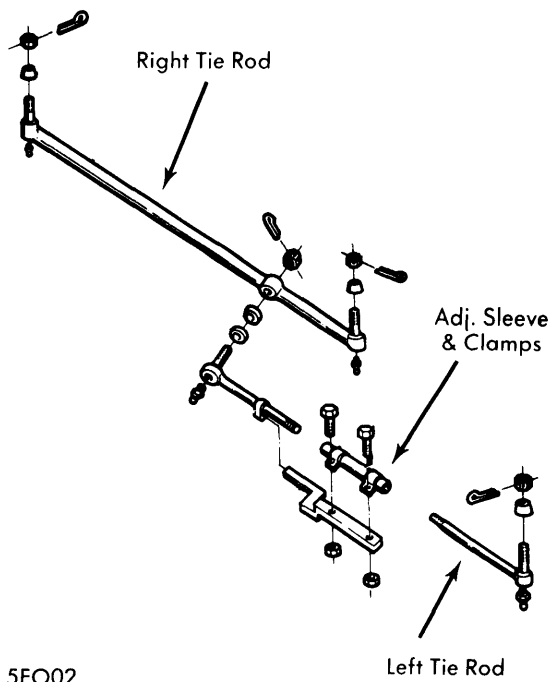
### "E" & "F" MODELS

**Drag Link Replacement** — Replace drag link if ball stud is excessively loose or if drag link is bent. Do not attempt to straighten bent drag link. Remove cotter pins and nuts from drag link, ball studs, and from right connecting rod ball stud. Remove right connecting rod ball stud from drag link. Remove drag link ball studs in spindle and pitman arm. To reassemble, reverse disassembly procedure.

**Tie Rod Replacement** — 1) Replace tie rod(s) if ball stud is excessively loose, if tie rod is bent, or if threads are stripped. Do not attempt to straighten bent tie rod. Remove cotter pin and nut from tie rod, then remove ball stud from mating part.

2) Loosen clamp bolt and turn rod out of adjustment sleeve. Lubricate threads of new tie rod, then turn it into adjustment sleeve to about same distance old rod was installed. This will approximate old toe-in setting. Install ball stud in mating part, tighten nut and install cotter pin.

3) Check toe-in and adjust if necessary. After adjusting toe-in, center adjustment sleeve clamps between locating nibs, position clamp flanges at their original angle, and tighten nuts. **NOTE** — Bolt heads must be on top and nuts on bottom.



MODELS "E" & "F" STEERING LINKAGE

### FOUR WHEEL DRIVE MODELS

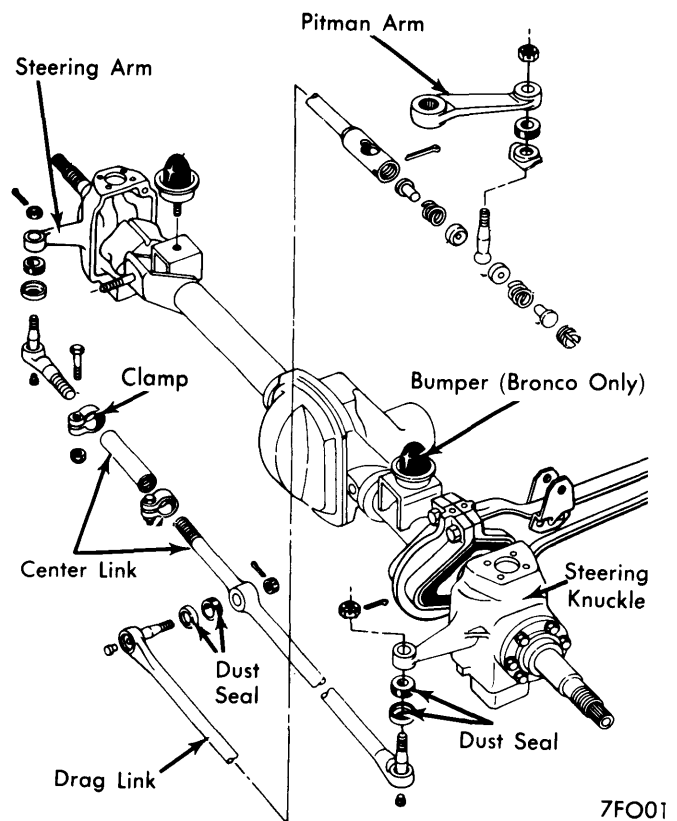
**Center Link Service** — 1) Raise vehicle on hoist and disconnect drag link from center link. Disconnect right then left center link ends from steering knuckle arms. Remove center link from vehicle and place in vise. Loosen center link end clamps

and remove link ends from tube. Clean and oil all threads on components that are to be reinstalled.

2) Install link ends into center link, but do not tighten clamps. Install dust seals on link ends and install center link in vehicle. Install center link end attaching nuts and tighten to specifications, then continue tightening until slots are aligned with hole in stud. Install cotter pins.

3) Install seals on drag link ball stud, and install drag link end onto center link. Tighten nut to specification and continue tightening until slots are aligned with hole in stud. Install cotter pin. Adjust tire pressures and lower vehicle. Check and adjust toe-in and tighten center link end clamps.

**NOTE** — If drag link, center link, or pitman arm should become bent, no attempt should be made to straighten them; replace them instead.



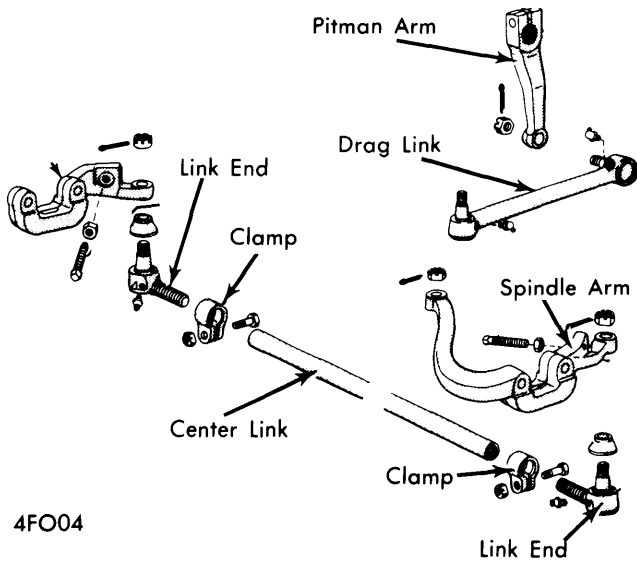
FOUR WHEEL DRIVE STEERING LINKAGE (TYPICAL)  
(F100 W/MAN. STEERING SHOWN)

### ALL MODELS W/STRAIGHT "I" BEAM AXLE

**Center Link End Replacement** — 1) Remove cotter pin and nut from link end ball stud. Remove ball stud from spindle arm. Loosen clamp and turn link end out of link. Lubricate threads of new link end and screw into link about same distance as old unit to approximate original toe-in setting.

# Steering Linkage

FORD MOTOR CO.(Cont.)



4FO04

STEERING LINKAGE W/STRAIGHT "I" BEAM AXLE

2) Install ball stud in spindle arm, tighten nut to specifications, and install cotter pin. Check toe-in and adjust as required. Check that link end clamps are  $\frac{3}{16}$ " from end of link with clamp bolt at right angles to slot in end of link. Check that clamp does not interfere with steering movement from full-left to full-right positions.

## TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Steering Gear-to-Frame .....	65
Pitman Arm-to-Steering Gear	
"E" & "F" (2WD) Models .....	170-230
Bronco & F100 (4WD) .....	105-135
"P" Models & F250 (4WD) .....	130-170
Drag Link Studs .....	50-75
Spindle Connecting Rod Studs .....	60-70
Rod Clamps	
F100-250 .....	35-45
F350 .....	40-60
"E" Models .....	29-41