

# Steering Columns

## FORD MOTOR CO.

### All Models

### DESCRIPTION

Econoline, "F" models, and Bronco have steering columns with shift control rod within column tube. "P" models have shift control rod externally mounted. Directional signal switch and lever are only controls found mounted on or in column tube. There are no ignition switches or steering column locking devices. Columns are not collapsible.

### REMOVAL & INSTALLATION

#### "F" MODELS

**Removal** - 1) Position front wheels in straight ahead position and mark steering shaft flange-to-flexible coupling with chalk for reinstallation alignment. Remove steering wheel, then remove cover from instrument panel pad. Disconnect turn signal and back-up switch wires. Remove seal and toe-plate attaching screws from inner side of dash panel.

2) Disconnect shift rods at column shift levers. Remove steering column-to-lower bracket clamp, then remove lower bracket from outer side of dash panel by removing three attaching screws. Remove steering shaft flange-to-flexible coupling nuts. Remove column upper bracket-to-instrument panel screws, then remove steering column through dash panel opening toward inside of vehicle.

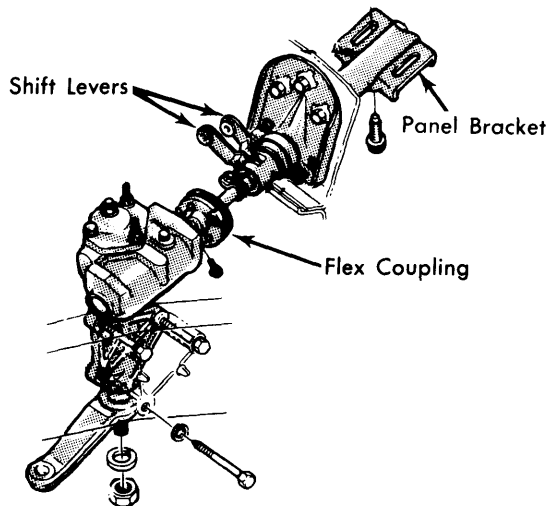


Fig. 1 "F" Models Steering Column Installation

**Installation** - 1) Position column in vehicle and loosely install two attaching screws retaining upper bracket to instrument panel. Align flexible coupling to steering shaft flange using chalk mark made upon removal and install attaching nuts. **NOTE** - Before tightening nuts make sure coupling pins are centrally located in steering shaft slots.

2) Move steering column up and down until flexible coupling and steering shaft axial planes are in alignment, then tighten upper bracket-to-instrument panel screws. Connect column shift levers to shift rods and wires to back-up switch and turn signal. Install toe-plate and seal to dash panel, then install cover to instrument panel.

3) Install steering wheel on shaft. Position lower support bracket on steering column and against dash panel, then install and tighten attaching screws. Install bracket clamp and tighten. Road test vehicle and recheck to ensure flexible coupling and steering shaft are in alignment with coupling pins centrally located in slots.

#### BRONCO

**Removal** - 1) Disconnect horn, turn signal and back-up light wires. Remove safety pad, horn ring, and their attaching screws. Remove steering wheel, then steering shaft-to-gear clamp retaining bolt and nut. Disconnect shift rods at column shift levers. Remove clamp retaining the column to support bracket on dash panel.

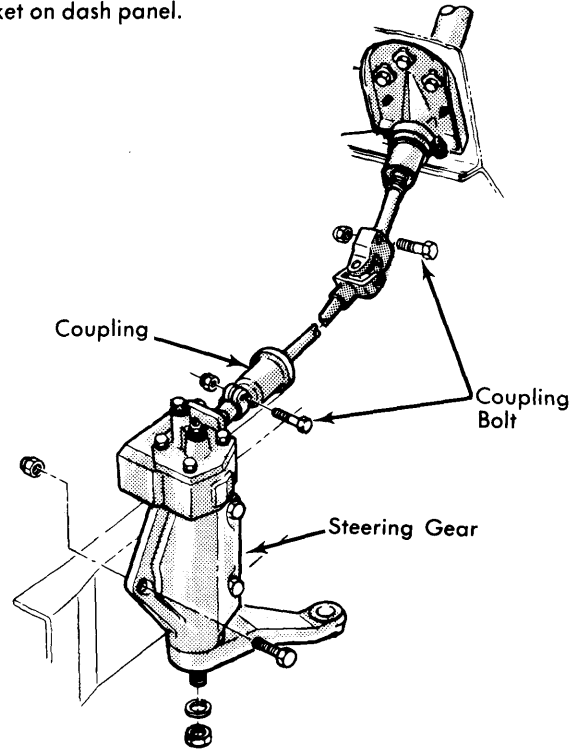


Fig. 2 Bronco Steering Column Installation

2) Remove trim cover attaching screws and trim cover. Remove column-to-upper support bracket attaching bolts, then remove bolts securing upper support bracket to gain clearance for column removal. Remove plate and dust seal assembly, and remove steering column from vehicle.

**Installation** - 1) Install column through opening in instrument and dash panels and align flex coupling to gear. Position column to upper support bracket and tighten attaching bolts. Install clamp retaining bolt and tighten. Install plate and dust seal assembly to dash panel.

2) Position column support bracket against dash panel and on column, then install and tighten bolts. Install and tighten support bracket clamp. Slide telescoping intermediate steering shaft up or down until flexible coupling and steering shaft axial planes are in alignment. Connect shift rods to shift levers and install new retainer clips.

3) Install trim cover on instrument panel and steering wheel on steering shaft. Install horn pad and connect turn signal wire

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and back-up switch wire. Road test vehicle and recheck alignment of flexible coupling and steering shaft.

### "P" MODELS

**Removal** - 1) Disconnect horn, turn signal, and back-up wires. Remove steering wheel. Disconnect shift rods at column shift levers. Disconnect steering column from steering gear.

2) Remove two clamp bolts and nuts which retain column to instrument panel bracket. Remove eight screws attaching the four plates and gaskets to floor pan. Lift steering column out of vehicle.

**Installation** - Position column in vehicle and attach column to steering gear. Install eight screws to plates and gaskets at floor pan. Install two bolts and nuts that attach steering column to instrument panel bracket. Connect shift rods to column shift levers. Install steering wheel and connect horn, turn signal and back-up light wires.

### ECONOLINE

**Removal** - 1) Position front wheels in straight ahead position and mark steering shaft flange-to-flexible coupling with chalk for reinstallation alignment. Remove steering wheel,

then remove cover from instrument panel pad. Disconnect shift rods at column shift levers, back-up switch wire and ignition switch wire connector.

2) Remove steering shaft flange-to-flexible coupling nuts. Remove three attaching bolts for column opening cover plate and seal assembly-to-inner side of dash panel. Loosen lower clamp bolt for steering column. Remove upper bracket-to-brake support bracket attaching bolts, then remove column through dash panel and into vehicle.

**Installation** - 1) Position column in vehicle and loosely install two bolts securing column upper bracket to brake support bracket. Align flexible coupling to steering shaft flange using chalk mark made upon removal and install attaching nuts. *NOTE* - Before tightening nuts make sure coupling pins are centrally located in steering shaft slots.

2) Pull steering column upward until flexible coupling is in a position between flat and concaved upward  $\frac{3}{32}$ ", then tighten upper bracket-to-brake support bracket bolts. Connect shift levers to shift rods. Position cover plate and seal assembly against dash panel and tighten bolts so seal is not distorted. Position clamp against cover plate so window in clamp engages tab on column and tighten clamp bolt. Connect ignition wire connector wire and back-up switch wire. Install instrument panel cover and steering wheel. Road test vehicle and recheck to ensure coupling pins are centrally located in slots of flexible coupling.

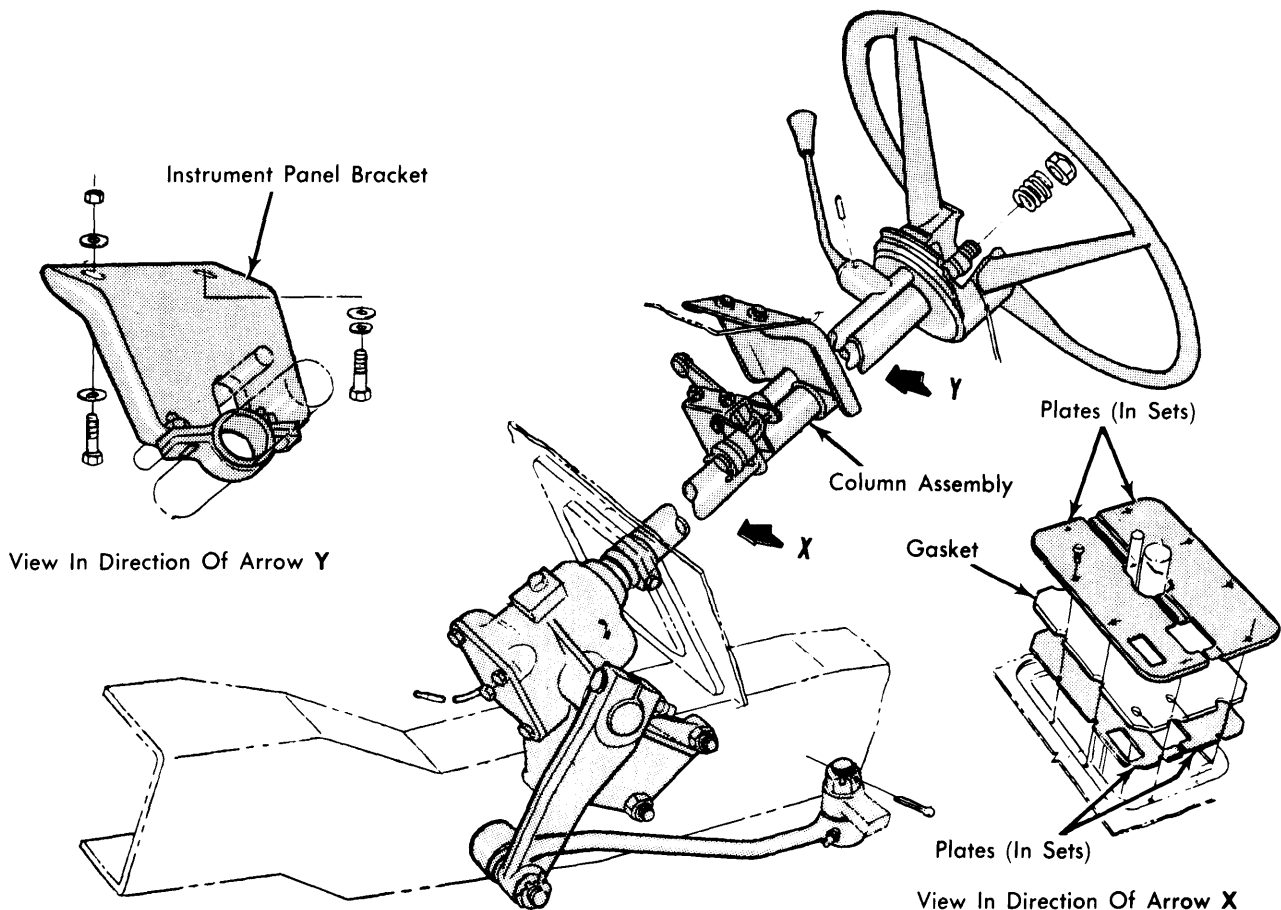


Fig. 3 "P" Models Steering Column Installation