

# Front Suspension

## FORD MOTOR CO. LEAF SPRING TYPE

Ford — P-350

### DESCRIPTION

Front suspension on 2-Wheel drive vehicles utilizes a reverse Elliot type axle mounted to frame by semi-elliptical leaf springs. Steering knuckles are mounted to axle by constant diameter, solid kingpins. Both Delrin and bronze bushings are pressed into steering knuckle to provide bearing surfaces for kingpins. A thrust bearing is installed between each steering knuckle and axle end to support load on axle. Hydraulic, double-action shock absorbers are mounted between axle and frame to dampen road shock.

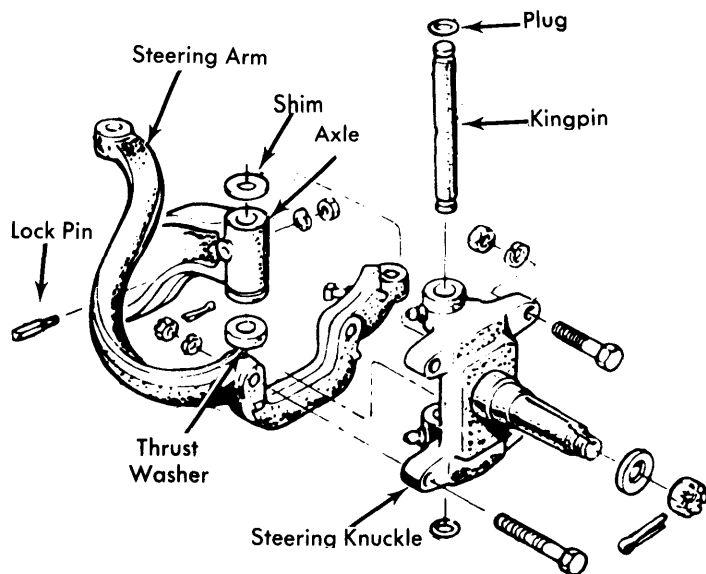


Fig. 1 Identification of Front Axle Details

### ADJUSTMENT

#### STEERING STOP SCREW

See *Steering Stop Screw* in *STEERING* Section.

#### 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

#### 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. Remove steering arm from steering knuckle. Remove kingpin locking pin, and remove retainer from top of steering knuckle. Drive kingpin out from top of axle, and remove steering knuckle from vehicle.

**Installation** — Install new kingpin retainer in groove at top of kingpin, and drive kingpin into steering knuckle and axle until retainer is seated against top of 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 new retainer in groove at bottom of kingpin. Install brake backing plate, brake drum and hub assembly, and wheel on vehicle. Tighten all nuts and bolts.

#### KINGPIN BUSHINGS

**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 (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.

### TIGHTENING SPECIFICATIONS

| Application                                  | Ft. Lbs. |
|--|----------|
| Brake Backing Plate-to-Steering Knuckle..... | 70-85    |
| Kingpin Locking Pin .....                    | 25-30    |
| Steering Arm-to-Steering Knuckle.....        | 165      |