CHRYSLER CORP.

All Models
(Exc. "M", "W", "AW" & "PW" Models)

NOTE – *Removal of tie rod ends from steering arm or center link by methods other than using tie rod end puller (C-3894-A) will damage tie rod end seal.*

Tie Rod Replacement – 1) Raise vehicle on hoist and remove cotter key and nut from tie rod end. Install puller (C-3894-A) and remove tie rod end from center link. Loosen sleeve clamping bolt and unscrew tie rod end.

2) Screw new tie rod end onto sleeve. Connect rod end to knuckle arm or center link and torque to specifications. Install cotter key. Lower vehicle and adjust toe-in. Position clamp on sleeve so that bolt is on the bottom, tighten bolt.

Ball Joints – Compression (tension) type lower ball joints are used on all models. Ball joints are of semi-permanent lubricated type except for vehicles used for off-highway operations. Lower ball joints should be replaced if axial end play exceeds .020".

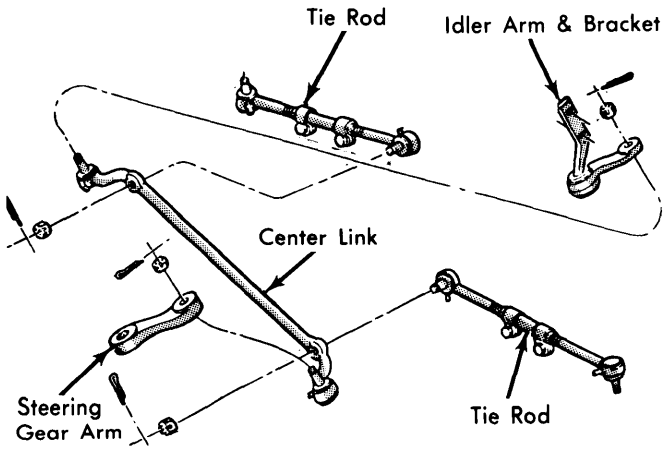

Fig. 1 Disassembled View of Steering Linkage for "D", "AD" and "PD" Models

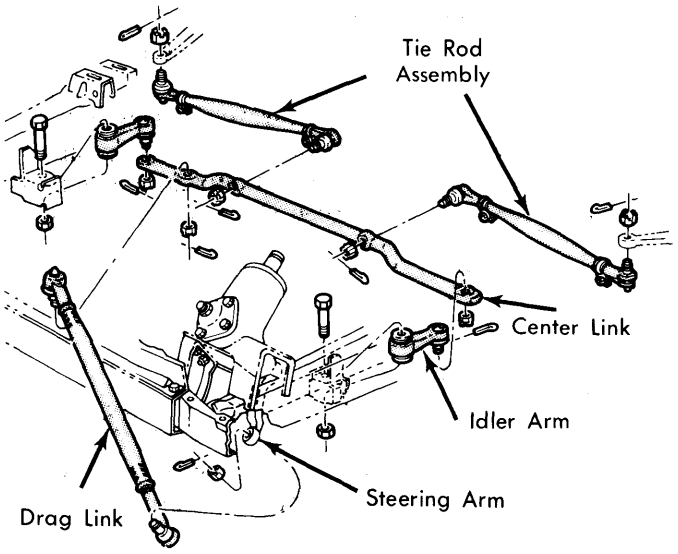

Fig. 2 Disassembled View of Steering Linkage for "B", "CB", "MB" and "PB" Models

"W", "AW" & "PW" Models

Ball Joints – Steering linkage ball joint service is same as on two-wheel drive vehicles. See *"D", "AD", "PD" Models in this article*. Servicing ball joints used on steering knuckles requires dismantling of knuckle. See *Open Steering Knuckles in this Section*.

Tie Rod Replacement – NOTE – *Removal of tie rod ends from steering arm or center link by methods other than using Special Tool C-3894-A will damage tie rod end seal.* Install suitable tie rod end puller (C-3894-A) and remove rod end by turning puiler screw. Before installing, replace any seals that are damaged or worn.

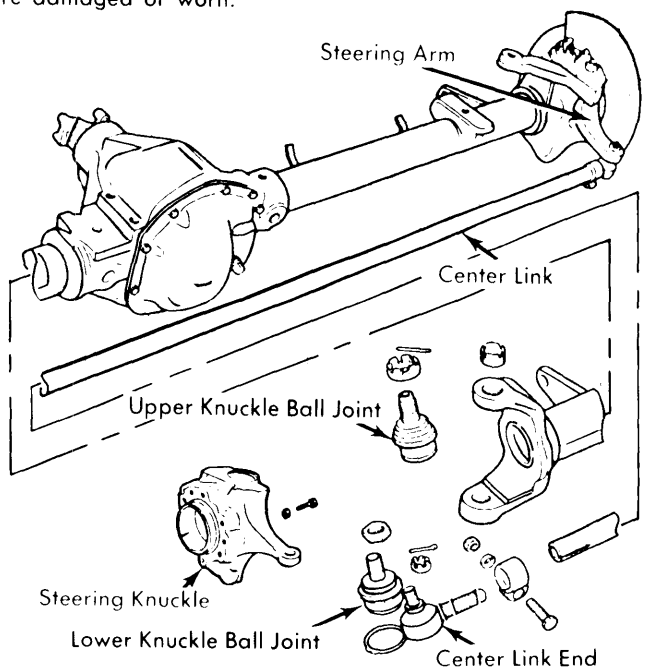

Fig. 3 4WD Steering Linkage Assembly (W100 is Model Shown)

Drag Link – Drag link must be installed to steering knuckle arm with short half ("A") attaching to knuckle arm.

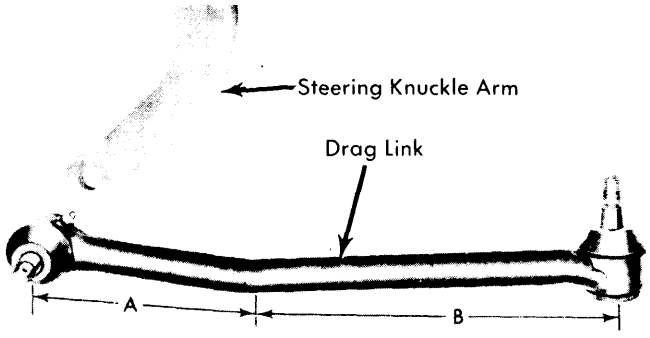

Fig. 4 Correctly Installing Drag Link for "W", "AW" and "PW" Models.

"M" Models

Servicing Components – Front axle assembly may be divided into four subassemblies: "I" beam axle, steering knuckles, steering linkage, and brake assemblies. It is not necessary to remove complete assembly to service steering linkage.

CHRYSLER CORP (Cont.)

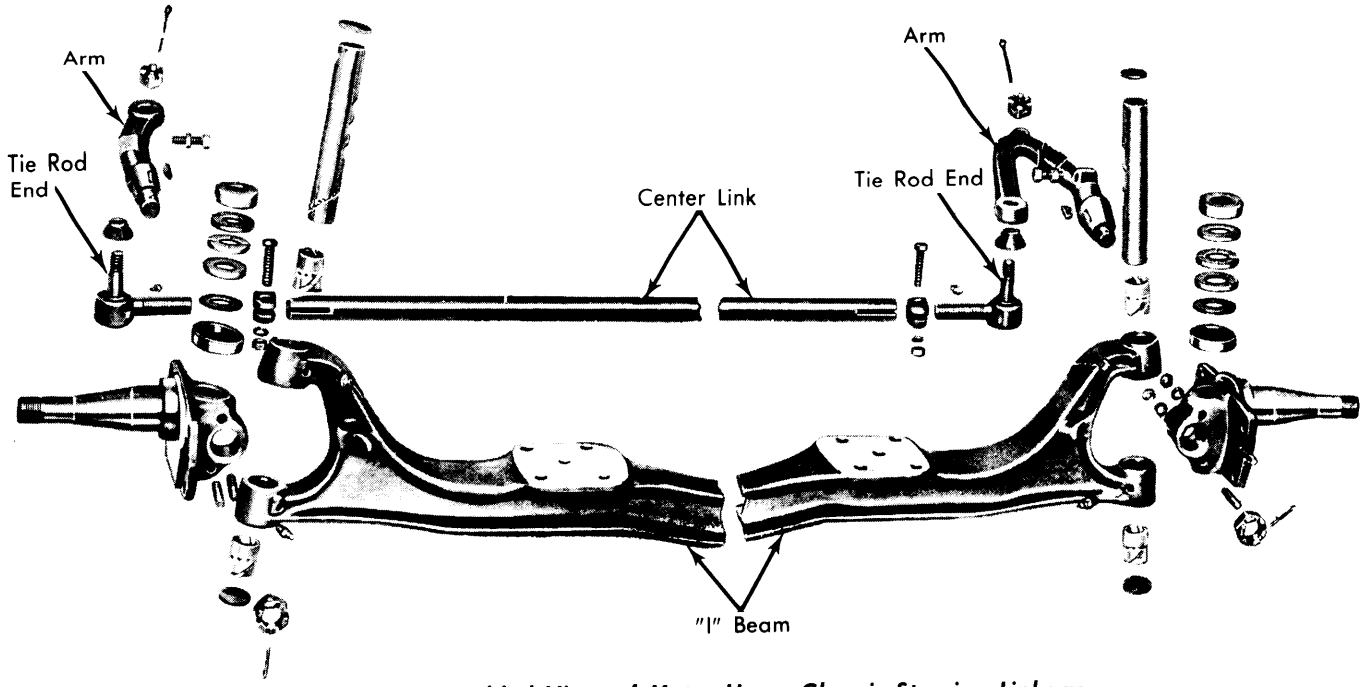

Fig. 5 Disassembled View of Motor Home Chassis Steering Linkage (Linkage for Elliot Type Axle Shown)

FORD MOTOR CO.

All Models

Tie Rod & Link Replacement – 1) Replace drag link or connecting rods if ball studs are excessively loose, components are bent or threads are stripped. Never try to straighten drag link or connecting rods.

2) 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 connecting rod ball studs from steering arm and pitman arm.

3) Remove cotter pin and nut from left connecting rod. Remove ball stud from steering arm. Loosen clamp bolts on adjustment sleeve. Unscrew left and right connecting rods from adjustment sleeve.

4) Lubricate threads of new connecting rods. Screw into adjusting sleeve approximately same distance as old connecting rods. Make sure of correct position of adjusting sleeve clamps. *See Fig. 2.*

5) Install drag link in position. Tighten nuts and install cotter pins. Install conneting rods and adjusting sleeve in position. Tighten nuts and install cotter pins. Check vehicle toe-in and adjust as necessary.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Steering Gear-to-Frame	65
Pitman Arm-to-Steering Gear	170-230
Drag Link Studs (E100-E350)	50-75
Spindle Connecting Rod Studs	60-70
Rod Clamps	
F100-250	35-45
F350	40-60
"E" Models	29-41

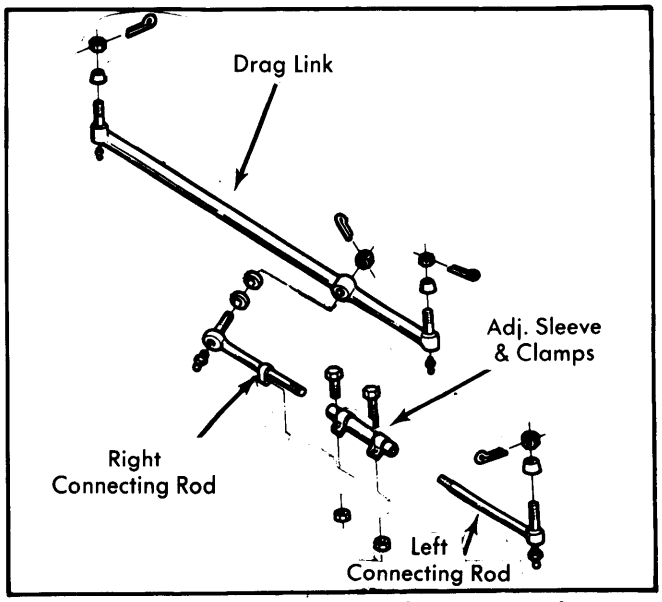

Fig. 1 Disassembled View of Steering Linkage (E100-350, F100-350)