

## CHRYSLER CORP. RACK & PINION

Dodge  
Aries  
Omni  
Rampage

Plymouth  
Horizon  
Reliant

### DESCRIPTION

Rack and pinion type gear is mounted on front frame crossmember behind drive axle. Rotary turning motion of the steering and pinion shaft is converted to transverse movement of the rack. Tie rods and tie rod ends transmit this movement to steering arms and wheels while at the same time accomodating suspension movement. Four complete turns are required for lock-to-lock travel. Gear is permanently factory lubricated and cannot be adjusted. Service is limited to replacement of outer tie rod ends or the bellows type oil seal boots. Complete replacement is required in event of malfunction.

### REMOVAL & INSTALLATION

#### OUTER TIE ROD

Remove cotter key and loosen attaching nut and jamb nut. Remove castellated nut and using suitable puller (C-3498-A), disconnect tie rod end from steering arm. Remove outer tie rod by unscrewing from inner rod. To install, reverse removal procedure and tighten castellated nut as specified. Adjust toe in by turning inner tie rod. Tighten jam nut and replace cotter key in castellated nut.

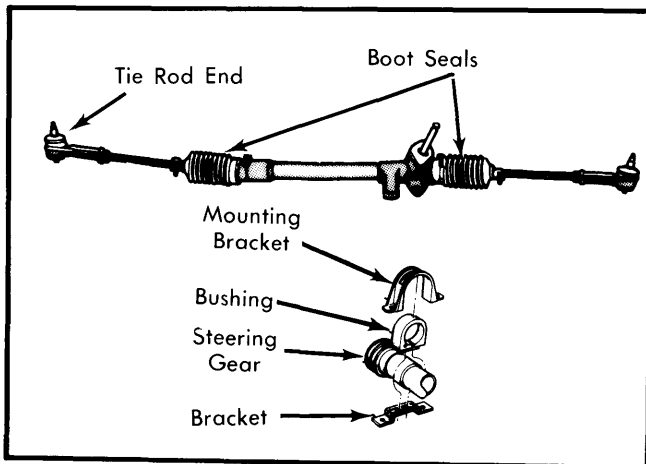


Fig. 1 Steering Gear and Mounting

#### BOOT SEAL

With tie rod end removed, remove jamb nut from inner rod. Use pliers to expand outer boot clamp and remove. Cut inner boot clamp with side cutters and discard. Remove boot. Install boot seal over lip of housing and replace inner and outer clamps.

**NOTE** — If lubricant has leaked from steering gear due to torn bellows, fill with ¼ pint of SAE 90 hypoid oil.

#### STEERING GEAR

**Removal** — 1) Remove front wheels and separate tie rod ends from steering knuckles. On Horizon and Omni, drive lower roll pin out of pinion shaft universal joint. On Aries and Reliant, remove steering column assembly. See *Collapsible Steering Columns* in this section. Note that lower universal joint is removed with steering gear.

2) On Horizon and Omni, support front suspension crossmember with a jack and remove 2 rear nuts attaching crossmember to frame. Loosen 2 front bolts and lower crossmember slightly for access to boot seal shields. On Aries and Reliant, remove all 4 front crossmember attaching bolts and lower crossmember with transmission jack so that steering gear can be removed from crossmember.

3) On all models, remove splash shields and boot seal shields. Remove bolts attaching gear to front suspension crossmember and remove gear from left side of vehicle.

**Installation** — To install, reverse removal procedure and note that master serrations are in line. Tighten mounting bolts as specified and adjust toe in.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N·m)
Tie Rod Ends .....	35 (47)
Tie Rod Jam Nuts .....	55 (75)
Mounting Bracket Bolts .....	29 (27)