

1971-72 PLYMOUTH CRICKET

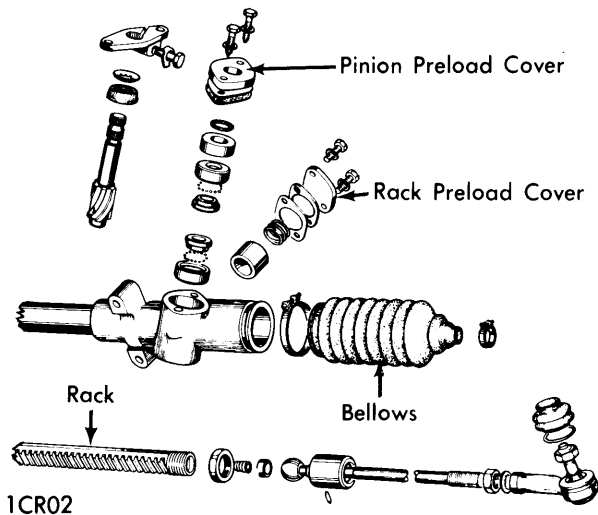
Plymouth Cricket (1971-72)

DESCRIPTION

Steering gear is of rack and pinion type. Steering wheel movements are transmitted by steering column through intermediate shaft and flexible coupling to helical pinion. Pinion rotation moves rack laterally and tie rods transmit movement to steering arms, changing road wheel direction. Two different type gears are used: Burman and Cam Gears. Both units are interchangeable as complete units, but not individual components. Design of rack provides for two adjustments: Rack damper adjustment and pinion bearing preload adjustment.

ADJUSTMENT

NOTE — Both adjustments (rack damper and pinion bearing preload) are made during the same operation, with steering gear out of vehicle.



**CRICKET STEERING RACK ASSEMBLY
(BURMAN GEAR)**

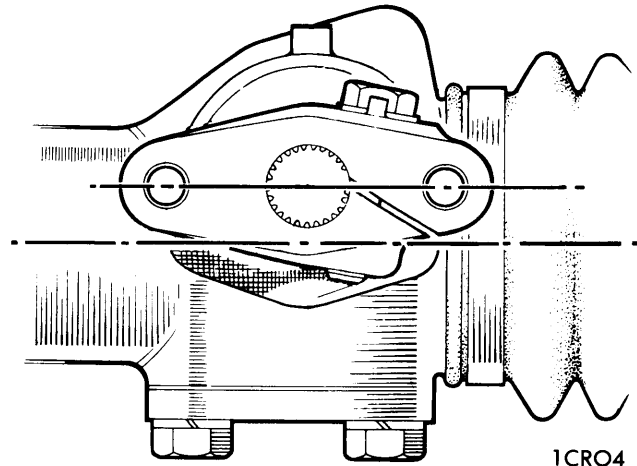
Burman Gears — 1) Place steering rack in padded vise with pinion in horizontal position. Remove rack preload cover, shim pack, gasket, spring, and slipper. Remove coupling flange from pinion. Pry dust seal retainer off pinion and remove seal.

2) Separate pinion bearing preload cover, shim pack and gasket from housing. Install pinion cover plate loosely, without shims or gaskets. Tighten bolts evenly until plate contacts bearing.

3) Measure (with feeler gauge) gap between cover plate and gear housing. Assemble a shim pack (with two gaskets) .002-.004" smaller than the measurement. Install shim pack, put sealer on cover bolts and tighten to specification.

4) Push slipper to bottom of slipper bore. Install cover plate and measure distance between bottom of plate and housing face. Assemble a shim pack .004-.006" greater than measurement. Place spring in slipper recess. Install cover plate and shim pack, using sealer on bolt threads. Torque to specification.

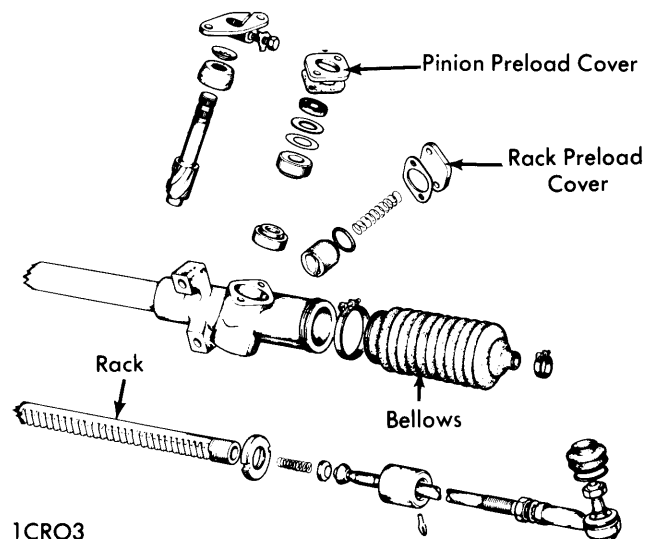
5) Replace pinion dust seal. Install coupling flange to pinion spline, parallel to center line of rack. See illustration. Torque bolt to specification. Bolt flexible coupling to flange and measure starting torque (using pull scale). Suitable torque is 7-12 INCH lbs.



ALIGNING COUPLING FLANGE TO PINION

CAM GEARS — Adjustments is made in same sequence as for Burman gears, with the following exceptions:

When measuring bearing preload, replace cover **with** shim. Make up shim pack .001-.003" smaller than measurement. Do not replace slipper cover plate for rack damper adjustment. Measure distance between base of recess in slipper and steering gear housing face. To this dimension, add a shim pack .002-.005" greater than measurement.



**CRICKET STEERING RACK ASSEMBLY
(CAM GEAR)**

Steering Gears & Linkage

1971-72 PLYMOUTH CRICKET (Cont.)

TIGHTENING SPECIFICATIONS

| Application | Ft. Lbs. |
|--|----------|
| Steering Rack-to-Crossmember | 18 |
| Steering Wheel Nut..... | 32 |
| Intermediate Shaft-to-Column..... | 15 |
| Flexible Coupling-to-Intermediate Shaft..... | 15 |
| Flexible Coupling-to-Pinion Flange..... | 15 |
| Pinion Flange Bolt | 10-15 |
| Pinion Cover Bolts | |
| Burman Gear..... | 6-8 |
| Cam Gear | 12-15 |
| Slipper Cover Bolt..... | 6-8 |
| Tie Rod End-to-Steering Arm..... | 32 |
| Tie Rod Lock Nut..... | 30 |