

1970-71 VOLVO 164

Volvo 164 (1970-71)Ⓞ

Ⓞ — Some 1970-71 models are equipped with optional power steering. See appropriate article in this Section.

DESCRIPTION

STEERING GEARS

Steering gear is of cam and roller type. Steering cam is carried in roller bearings and pitman shaft in bushings.

STEERING LINKAGE

Steering linkage is composed of tie rod, steering rods, pitman arm and relay arm. Ball joints are plastic lined and require no lubrication.

ADJUSTMENT

NOTE — See overhaul procedure in this article.

REMOVAL & INSTALLATION

ALL MODELS (1970-72)

Removal — Raise front of vehicle. Remove pitman arm nut and lock washer. Using suitable tool, remove pitman arm. Loosen clamp bolt at steering shaft spline. Remove steering gear housing attaching bolts and move housing forward and out.

Installation — Reverse removal procedure. Tighten all nuts and bolts.

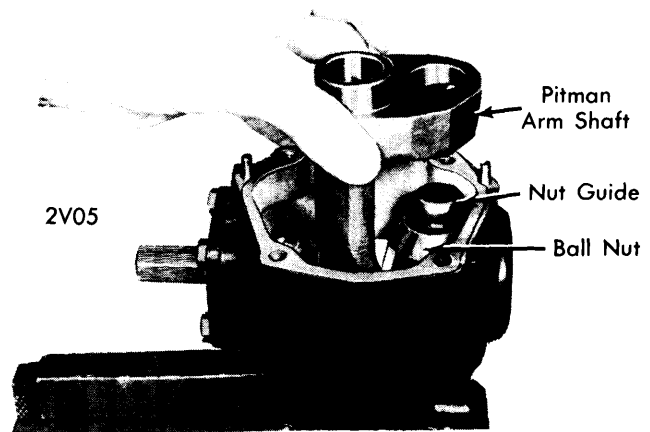
OVERHAUL

STEERING GEAR

Removal — 1) Remove stop plate, spacer, spring guide and springs, and cover from guide pins. Turn ball nut to end position, remove pitman arm shaft and nut guide.

2) Remove steering cam cover, retainer and shims. Extract steering cam, and bearings with ball nut screw. Remove bearings (10 balls, lower bearing; 13 balls, upper bearing). Remove 27 balls from ball nut. **CAUTION** — Balls of bearings and ball nut are not interchangeable. Do not mix. Transfer tube need not be removed.

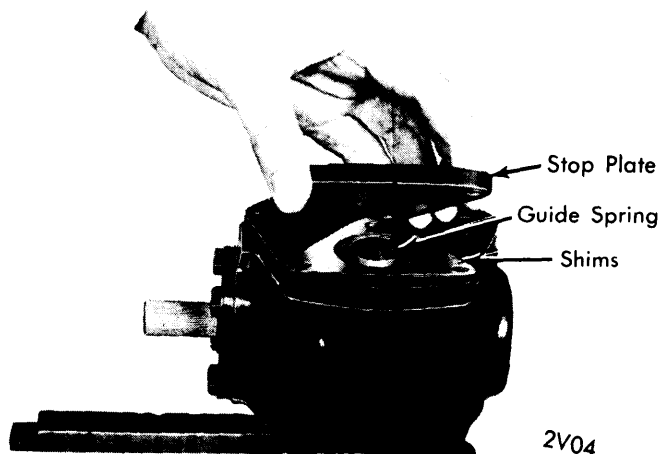
Inspection — Inspect all components for wear or damage. Replace parts as necessary. **NOTE** — Ball nut, steering cam, bearings and races must be replaced as complete units.



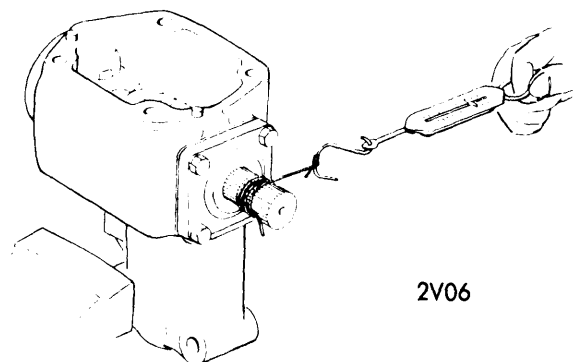
PITMAN SHAFT REMOVAL

Reassembly — 1) Coat loose balls with grease to assist in reassembly. Install lower bearing race with balls. Pack 27 balls into ball nut. Screw steering cam into ball nut ensuring a good fit. Install ball nut and steering cam into housing in lower bearing. Pack 13 balls into upper bearing and install over steering cam. Install oil seal in cover, then install cover, retainer, gasket and shims. Torque bolts to 12-15 ft. lbs.

2) Check tension with steering cam horizontal (2.0-4.0 INCH lbs.). The torque can be measured using a suitable spring scale (see illustration), reading should be 6-11 lbs. Add or remove shims or gaskets to adjust.



STOP PLATE REMOVAL



TORQUE CHECK

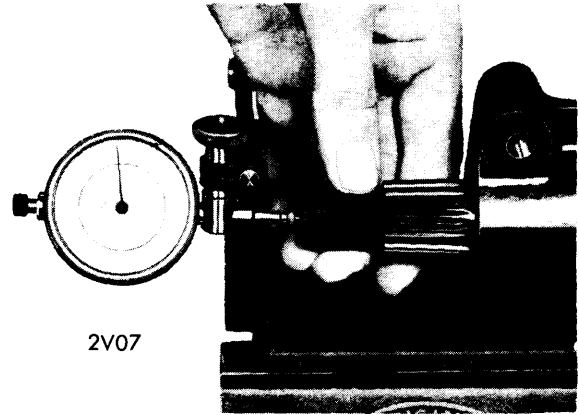
Steering Gears & Linkage

1970-71 VOLVO 164 (Cont.)

3) Turn steering cam so that ball nut is at lower end position. Install nut guide on ball nut. Lubricate oil seal and install pitman arm shaft. Turn ball nut to center position and install cover with gasket. Tighten bolts to 12-15 ft. lbs.

4) Place spring guide only in position, install stop plate, shims and gasket. Torque the three bolts to 12-15 ft. lbs., making sure some axial play is present. *NOTE* — Bearings may be damaged by lack of axial play. Using a suitable dial indicator, add or subtract shims as necessary to obtain .0010-.0030 INCH axial play.

5) Remove stop plate and spring guide, install springs and reinstall guide shims and plate. Fill steering gear with steering gear lubricant.



AXIAL PLAY CHECK