

# Steering Gears & Linkage

## VOLKSWAGEN RABBIT, SCIROCCO RACK & PINION

Rabbit  
Scirocco

### DESCRIPTION

Vehicles are equipped with a rack and pinion steering gear. Attached to rack are two tie rods, the right tie rod is adjustable and the left tie rod is non-adjustable. If left tie rod is to be replaced, replacement tie rod (part no. 171 419 804) is adjustable.

### REMOVAL & INSTALLATION

**Removal** — Disconnect shift linkage bearing plate from rack housing. Loosen upper universal pinch bolt-to-steering column

shaft. Remove lower universal pinch bolt-to-pinion shaft. Disconnect lower universal joint from pinion shaft. Disconnect tie rod outer ends from steering linkage. Disconnect steering gear housing clamp bolts and remove steering gear, with tie rods, from vehicle.

**Installation** — When installing steering gear assembly, correctly align and insert pinion shaft with steering shaft lower universal joint before securing steering gear housing clamp bolts. Connect tie rod outer ends to steering linkage. Tighten upper and lower universal joint pinch bolts. Connect and adjust shift linkage bearing plate to gear housing.

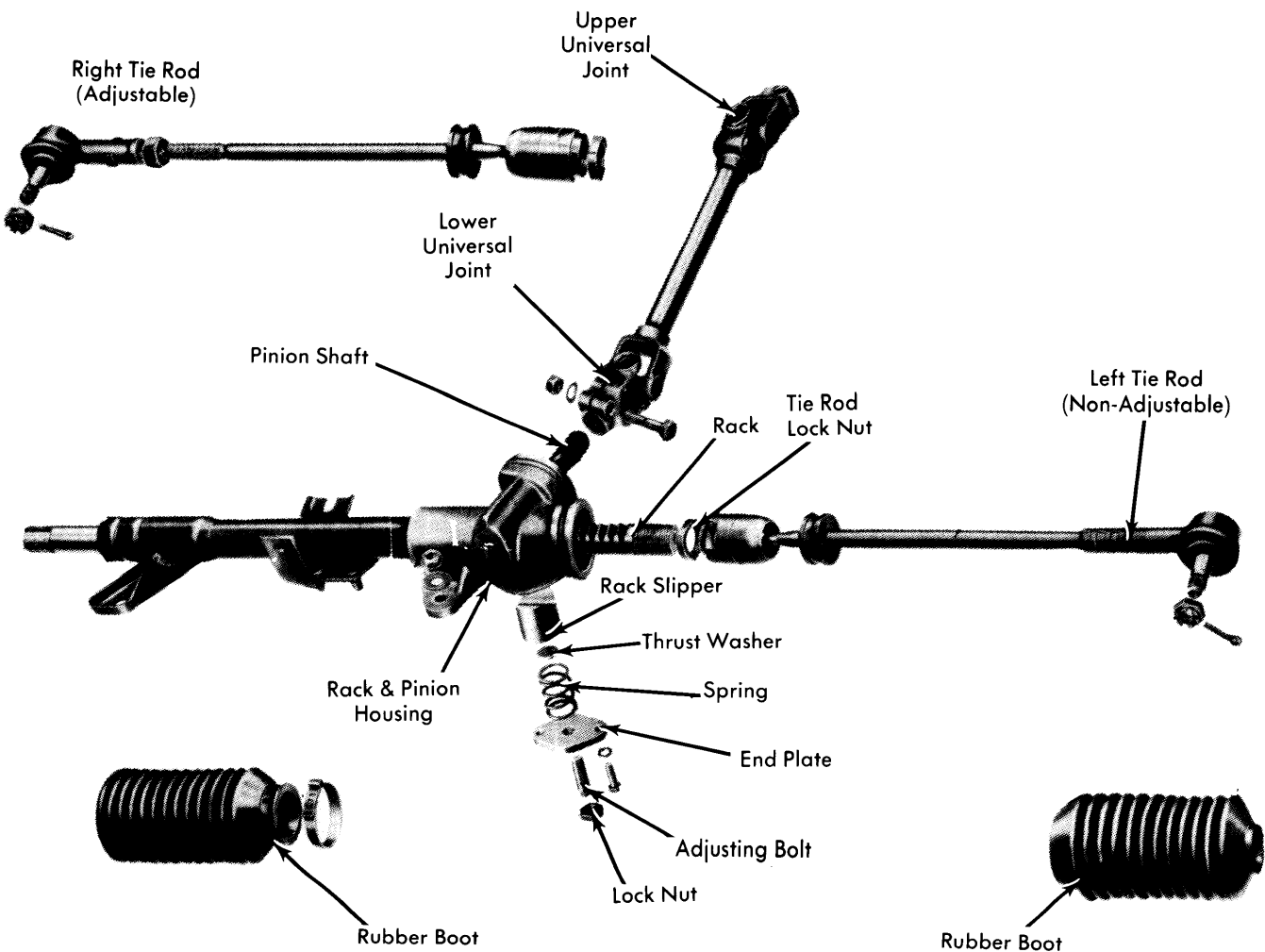


Fig. 1 Disassembled View of Steering Gear Assembly

## VOLKSWAGEN RABBIT, SCIROCO RACK & PINION (Cont.)

### ADJUSTMENT

#### RACK & TIE RODS

1) Center rack in housing so rack protrudes an equal amount from each end of housing (see Fig. 2). Screw tie rods onto rack (see Fig. 3) until dimension "b" is 2.64" (67 mm) for both tie rods. **NOTE** — Do not move rack from its centered position. With adjustment correct, secure tie rods with lock nuts and install rubber boots.

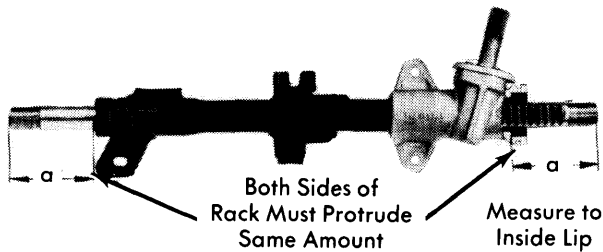


Fig. 2 Centering Rack in Steering Gear Housing

Measurement "b" Must be 2.64" (67 mm) on Both Ends of Gear Housing

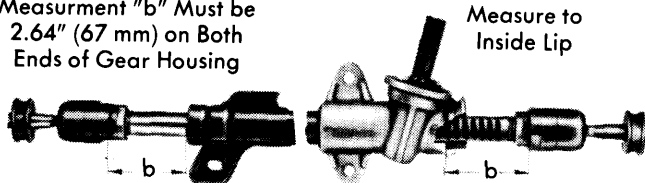
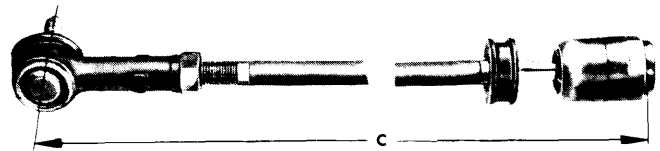


Fig. 3 Installation Adjustment of Tie Rods on Rack

2) If replacing the non-adjustable left tie rod with adjustable type (part no. 171 419 804), adjust tie rod length "c" (see Fig. 4) to 14.99" (381 mm). Then install as described in step 1).



Adjust Adjustable Tie Rod to a Length of 14.99" (381 mm)

Fig. 4 Adjustment of Replacement Tie Rod (Part No. 171 419 804)

#### PINION SHAFT

Loosen lock nut, then turn adjusting bolt until it just contacts thrust washer. Tighten lock nut.