

## PEUGEOT

504  
604

### DESCRIPTION

An independent, strut front suspension is used. Wheels are supported by steering knuckles that are attached to vertical strut assemblies. Lower control arms are attached to bottom of steering knuckles by ball joints. Inner ends of control arms pivot on front crossmember. Attached to lower control arms are strut rods that run rearward to mounting points on back crossmember. Top of vertical strut assemblies are attached to inner fender panels. Coil springs fit into spring seats attached to strut assemblies. Hydraulic shock absorbers are built into strut assemblies. A stabilizer bar is mounted to frame and connected at ends to lower control arm.

### ADJUSTMENT

#### WHEEL ALIGNMENT SPECIFICATIONS & ADJUSTMENTS

See *Wheel Alignment Specifications and Adjustments* in *WHEEL ALIGNMENT* Section.

#### FRONT WHEEL BEARINGS

See *Front Wheel Bearing Adjustment* in *WHEEL ALIGNMENT* Section.

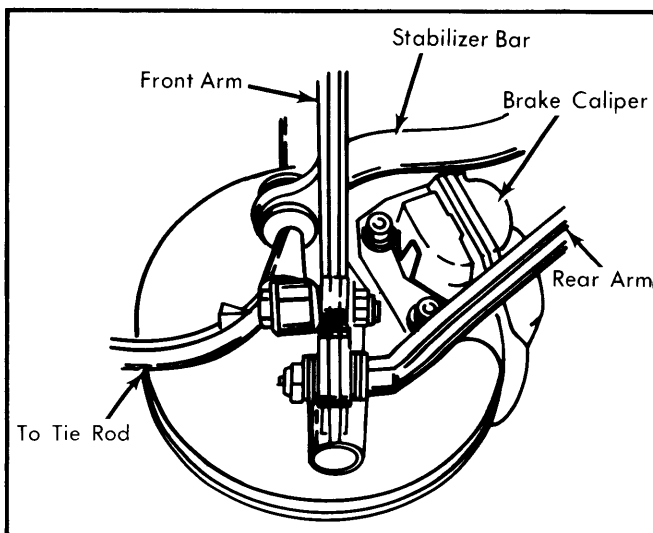
#### BALL JOINT CHECKING

See *Ball Joint Checking* in *WHEEL ALIGNMENT* Section.

### REMOVAL & INSTALLATION

#### FRONT STRUT ASSEMBLY

**Removal** - 1) Raise vehicle and place safety stands under front crossmember. Remove wheel. Remove brake caliper and suspend with a wire from underbody. **DO NOT** disconnect hydraulic line.



**Fig. 1 Components That Must be Disconnected to Remove Strut Assembly**

2) Separate tie rod from steering arm. Disconnect stabilizer bar at mounting on control arm. Remove control arm pivot bolt nut and tap bolt out. Remove nut mounting strut rod to control arm.

3) Take up weight of vehicle with a floor jack. Remove the 3 bolts mounting strut to inner fender panel. Make sure to disconnect ground wire. Support suspension and slowly lower jack with components to floor.

**Disassembly, 504 Only** - 1) Place strut horizontally in vise. Fit spring compressor over coil spring and compress enough to unseat spring.

2) Hold shock absorber piston rod and remove top nut. Slowly release tension on coil spring. Remove upper spring seat assembly and coil spring.

3) Measure coil spring free length and length under a load:

#### Coil Spring Specifications

Application	Free Length In. (mm)	Load Length 701 lbs. (318 kg)
Saloon <sup>⓪</sup>		
1 Red, 1 Green Stripe.....	19.7.....	8.86-9.1
	(500).....	225-230
1 White, 1 Green Stripe.....	19.7.....	8.86-9.25
	(500).....	(230-235)
Coupes & Convertibles		
1 Red, 1 Yellow Stripe.....	16.8.....	8.42-8.66
	(426.5).....	(214-220)
1 Green, 1 Blue Stripe.....	16.8.....	8.66-8.82
	(426.5).....	(220-224)

⓪ - From 504 A01, A02, A03.

② - From 504 B02, C02.

4) Remove rubber boot from shock absorber rod. Suspend strut assembly vertically in vise. Remove shock absorber mounting nut. Pull up slowly on piston rod and remove entire assembly.

5) Disassemble following components from piston rod:

- Support cup with rod seal.
- Thrust washer and upper spring.
- Bushing "O" ring.

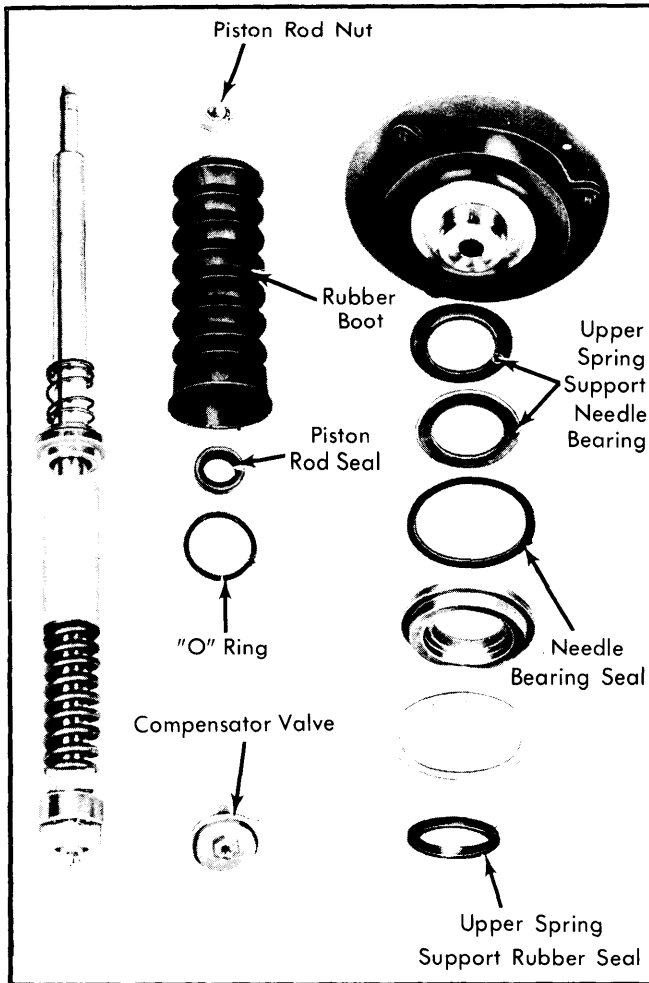
6) Pry bumper and lower spring seat off strut housing. Take strut housing from vise and drain hydraulic fluid. Unscrew strut housing and remove compensator valve.

**Inspection** - Clean all components. Make sure that all components shown in *Fig. 2* are replaced during each overhaul.

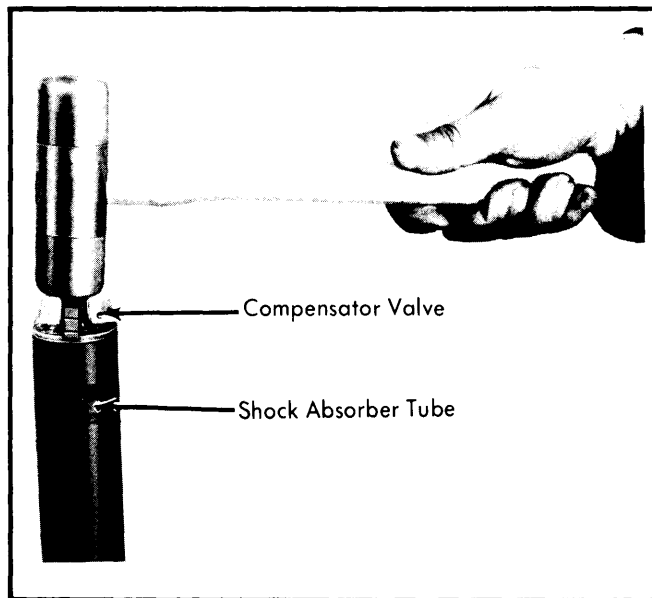
**Reassembly** - 1) Place strut vertically in vise. Install recoil bumper with lower spring seat.

2) Install compensator valve to shock absorber tube by lightly tapping into position. Blow off valve and shock absorber tube with compressed air.

## PEUGEOT (Cont.)



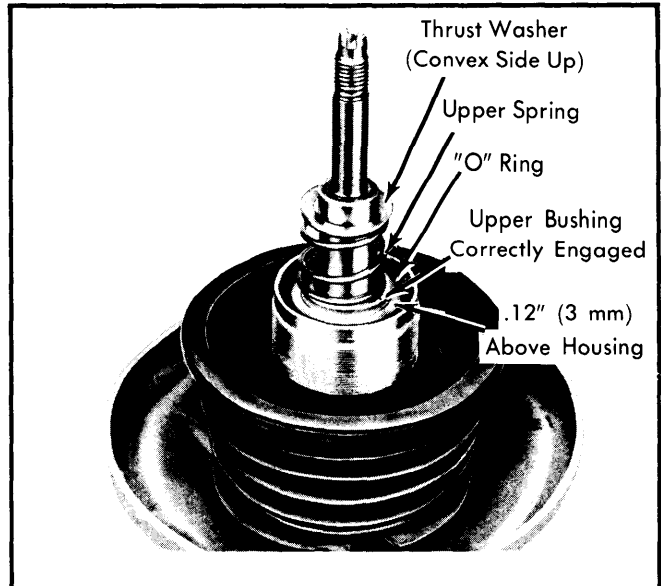
**Fig. 2 Components That Must be Replaced**



**Fig. 3 How to Fit Compensating Valve to Shock Absorber Tube**

3) Fit shock absorber tube to strut housing. Fill shock absorber with 10 ozs. (300 cc) of ESSO Olefluid 40X. Slide piston rod assembly into shock absorber tube. Make sure upper bushing has .12" (3 mm) clearance with upper shock absorber housing.

4) Next, insert components shown in Fig. 4.

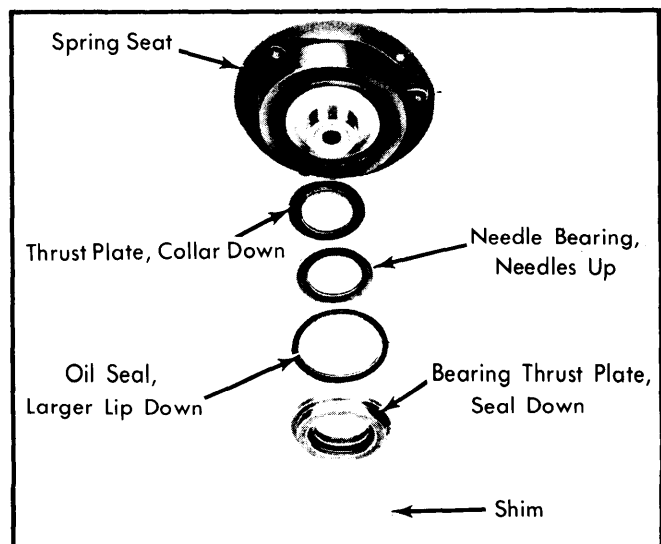


**Fig. 4 Components That Mount on Top of Shock Absorber Piston Rod**

5) Fit piston rod seal to cup. Place cup and seal over rod. Force assembly down until thrust washer engages spring. Tighten cap nut. Install rubber dust boot.

6) Fully extend piston rod and place holding clamp between bottom of dust boot and shock absorber cap nut. Place strut housing horizontally in vise.

7) Fit new seal to rebound buffer thrust ring. Reassemble upper spring seat components as shown in Fig. 5.



**Fig. 5 Assembly Order for Upper Spring Seat Components**

# Front Suspension

## PEUGEOT (Cont.)

**8)** Fit coil spring and upper spring seat. Tighten spring compressor enough to fit locking nut.

**Installation** – **1)** Place assembled suspension on floor jack and guide upper mountings into position. Hook up ground wire. Install 3 upper mounting nuts.

**2)** Fit thrust washer, cup, and bushing to strut rod. Slide strut rod into control arm. Fit bushing cup and new stop nut.

**3)** Insert pivot bolt with bolt head facing rearward into position between control arm and front crossmember. **DO NOT** tighten nut. Refit stabilizer bar (nut end nearest front) to control arm. Install new washer and nut but **DO NOT** tighten.

**4)** Connect tie rod-to-steering arm. Tighten nut. Clean brake disc and refit brake caliper. Tighten mounting bolts after placing a few drops of Loctite (or equivalent) on threads.

**5)** Refit wheel. Lower vehicle. Push in front suspension strut rod and tighten all nuts to final torque.

### STABILIZER BAR

**Removal** – With vehicle on ground, remove 2 bolts mounting stabilizer bar near front crossmember. Disconnect both links mounting stabilizer bar at connecting links. Guide bar from vehicle.

**Installation** – Fit cup, spacer and bushing to control link. Install stabilizer mounting bolts and spacers.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Vertical Strut-to-Fender .....	7.2 (1.0)
Control Arm-to-Strut Rod .....	33 (4.6)
Shock Absorber Piston Nut .....	33 (4.6)
Ball Joint-to-Control Arm .....	33 (4.6)
Ball Joint Sealing Nut .....	58 (8.0)
Control Arm Pivot Bolt .....	33 (4.6)
Wheel Nuts .....	43.5 (6.0)