

Front Suspension

PEUGEOT

504, 505, 604

DESCRIPTION

An independent front suspension is used, with MacPherson type struts. Wheels are supported by steering knuckles that are attached to the strut assemblies. Lower control arms are attached to bottom of steering knuckles by lower ball joints.

Inner ends of control arms pivot on front crossmember. Attached to the lower control arms are strut rods that run forward to mounting points on front crossmember. The tops of vertical suspension strut assemblies are attached to inner fender panels.

Coil springs surround the strut assembly. Hydraulic shock absorbers are built into strut assemblies. A stabilizer bar is mounted to frame and connected at ends to lower control arm.

ADJUSTMENTS

WHEEL ALIGNMENT SPECIFICATIONS & ADJUSTMENTS

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

WHEEL BEARING

Raise vehicle and support with safety stands. Rotate wheel or hub and tighten spindle nut to 29 ft. lbs. (39 N.m) on 505 and 604 models, or 22 ft. lbs. (30 N.m) on 504 models. On all models, loosen spindle nut and retighten to 7 ft. lbs. (10 N.m).

BALL JOINT CHECKING

Information not available from manufacturer.

REMOVAL & INSTALLATION

WHEEL BEARING

Removal

1) Raise vehicle and support with safety stands. Remove wheel assembly. Remove brake cylinder and support out of the way.

2) Remove hub dust cap and nut. Remove wheel hub. If inner bearing remains on spindle, remove with puller as necessary.

3) On 504 models with angular contact ball bearings, remove hub nut "O" ring and wipe grease from hub. On all models, fit hub to press and remove inner bearing with grease seal. Remove outer bearing and press out outer race.

Installation

To install, reverse removal procedures. Use press to install inner bearing, both bearing races, and grease seal. Whenever a bearing is replaced, a new bearing race must be used. Always treat bearings and races as matched sets.

LOWER BALL JOINT

Removal

1) If ball joint assembly is removed, ball joint must be replaced with new assembly. With suspension strut assembly removed.

2) Install assembly in removal/installation clamp (8.0906H). Remove rear arm of front triangle arm using a puller.

3) Lift up and break off the 2 tabs at a 180° apart from each other on locking plate. Install removal/installer tool (8.0616F) on ball joint by tightening nut. Unscrew ball joint.

Installation

1) Lubricate threads of new ball joint assembly. Make certain that the locating tabs of the new lock tab are in place. Torque ball joint assembly to specifications.

2) Install the rear arm of the front triangle arm and torque to specifications. To complete installation, reverse removal procedures in Strut Assembly Removal.

STRUT ASSEMBLY

Removal

1) Raise vehicle and support with safety stands under front crossmember. Remove wheel assembly. Remove brake caliper and support out of the way.

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

3) Place a floor jack under steering knuckle and remove bolts retaining strut to inner fender panel. Hold spring by one coil and lower floor jack to remove strut assembly.

Disassembly

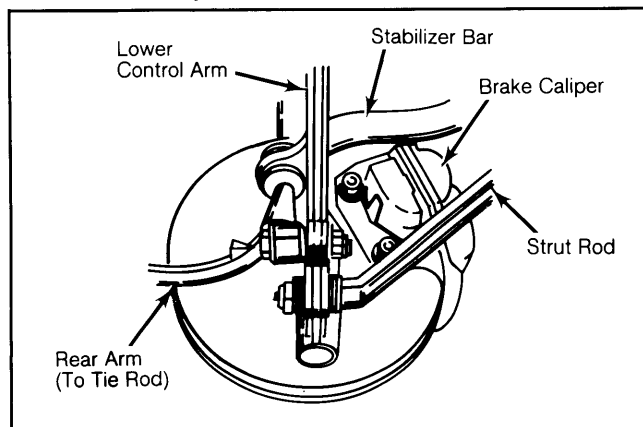
1) Install strut holder and spring compressor to strut assembly. Mount assembly horizontally in vise and compress spring enough to unseat it.

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

3) Mount strut assembly vertically in vise. Remove shock absorber gland nut. Pull up slowly on piston rod and remove piston rod assembly.

4) Remove support cup with rod seal, thrust washer, upper spring and bushing "O" ring from piston rod.

Fig. 1: Components That Must be Disconnected Prior to Strut Assembly Removal



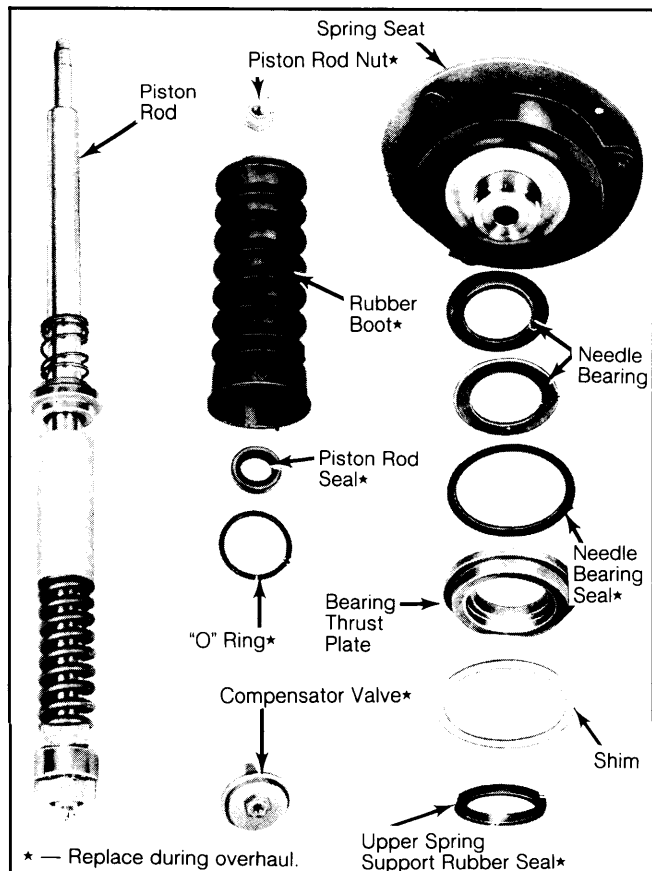
5) Pry bumper and lower spring seat off strut housing. Take strut housing from vise and drain hydraulic fluid. Unscrew strut housing and remove compensator valve.

PEUGEOT (Cont.)

Cleaning & Inspection

Clean and inspect all parts for wear or damage, replace defective parts. All components indicated in Figs. 2 and 3 must be replaced during overhaul.

Fig. 2: Peugeot 504 and 604 Strut Assembly and Spring Seat Components



Reassembly

1) Mount strut vertically in vise. Install recoil bumper with lower spring seat. Install compensator valve to shock absorber tube by lightly tapping with rubber mallet.

2) Blow off valve, shock absorber tube and shock absorber inner housing with compressed air. Fit shock absorber tube to strut housing. Fill shock absorber with 10 oz. (504 and 604) or 11 oz. (505) of Esso Oleofluid 40X (or equivalent).

3) Slowly insert piston rod assembly into shock absorber tube. Clearance between upper shock absorber housing and upper bushing must be .12" (3 mm).

4) Install new "O" Ring. Install upper spring and thrust washer (convex side up). Install new piston rod seal to cup. Position cup and seal over rod and force assembly down until thrust washer engages spring.

5) Tighten gland nut. Check rod rotation and operation. Install rubber dust boot. Fully extend piston rod and place holding clamp between bottom of dust boot and shock absorber cap nut.

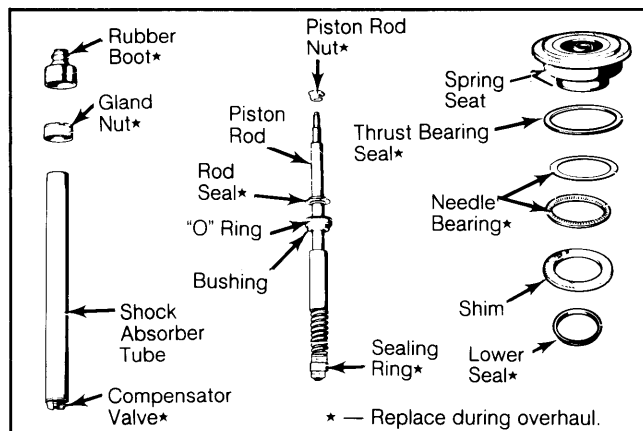
6) Place housing horizontally in vise. Fit new seal to bearing thrust plate. Reassembly upper spring seat components as shown in Figs. 2 and 3. Install coil spring and upper spring seat.

7) Install and tighten spring compressor until retainer and new locking nut can be installed. Tighten nut while holding rod.

Installation

1) Install assembled strut assembly by guiding into position while raising steering knuckle with floor jack. Install upper retaining bolts. Retainer must be parallel with centerline of vehicle.

Fig. 3: Peugeot 505 Strut Assembly and Spring Seat Components



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 lower control arm. Install new washer and nut but do not tighten.

4) Connect tie rod to rear arm and tighten nut. Clean brake disc and refit brake caliper. Tighten retaining bolts after placing few drops of Loctite (or equivalent) on washers.

5) Install wheel assembly and lower vehicle. Push in front suspension strut rod and tighten all nuts to final torque.

STABILIZER BAR

Removal

With vehicle resting on floor, remove 2 bolts retaining stabilizer bar near front crossmember. Disconnect both links mounting stabilizer bar at connecting links. Remove bar from vehicle.

Installation

Fit cup, spacer, and bushing to control link. Install stabilizer retaining bolts and spacers.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N.m)
Shock Absorber Piston Nut	33 (45)
Shock Absorber Housing Nut	58 (79)
Rear Arm-to-Control Arm Nut	33 (45)
Rear Arm-to-Tie Rod Nut	31 (42)
Strut Rod-to-Control Rod Nut	33 (45)
Stabilizer Bar-to-Control Arm	33 (45)
Control Arm Pivot Bolts	33 (45)
Ball Joint	123 (168)
Rear Arm-to-Triangle Arm	33 (45)