

## PEUGEOT

504, 505, & 604

### DESCRIPTION

Brake system is hydraulically-operated, using a tandem master cylinder and power brake unit. The 504 is equipped with sliding-yoke, front disc brakes and rear drum brakes. All other models are equipped with 4-wheel, sliding-yoke, disc brakes.

All models are equipped with a load-actuated compensator to provide equal fluid distribution to front and rear brakes. Parking brake is cable-operated at rear wheels.

### ADJUSTMENT

#### REAR DRUM BRAKE SHOES

1) Raise and support rear of vehicle. To adjust, rotate front adjustment eccentric clockwise until wheel locks, then back off until wheel just turns freely.

2) Repeat procedure for rear adjustment eccentric, but rotate the eccentric counterclockwise.

**NOTE:** Do not alter the adjustment of brake pedal.

#### PARKING BRAKE

504

1) Remove center console and raise and support vehicle. Fully release parking brake lever.

2) Loosen lock nut at lever and tighten adjusting screw until wheels are locked with 4-7 notches of lever travel.

3) Tighten lock nut and ensure wheels rotate freely with parking brake fully released.

#### All Other Models

Parking brake is self-adjusting and requires no in-service adjustment. Normal lever travel should be 7-13 notches.

#### BRAKE WARNING LIGHT

1) A warning light is mounted on instrument panel. Light will glow to indicate that disc brake pads need replacing, parking brake is engaged, brake fluid is low or malfunction exists in brake system.

2) Light should glow when parking brake lever is pulled 1 notch and go off when lever is fully released (ignition on). To check circuit warning sensor, release parking brake (ignition on) and ensure light is off.

3) Open bleed screw on 1 wheel and depress brake pedal; light should glow. Close bleed screw and replenish brake fluid.

### REMOVAL & INSTALLATION

#### DISC BRAKE PADS

**CAUTION:** Peugeot uses brake calipers from various manufacturers. Removal and Overhaul procedures may vary slightly. Brake pads and calipers MUST match for each axle application.

#### Removal

1) Raise and support vehicle under frame. Remove tire and wheel. Disconnect pad wear indicator electrical lead.

2) Remove retaining spring and pins, then remove damper spring and brake pads.

**NOTE:** Manufacturer recommends applying Permatex "High Tack" adhesive to back portion of brake pads prior to installation.

#### Installation

1) Remove small amount of brake fluid from master cylinder reservoir. Press piston into cylinder bore.

2) On rear calipers, rotate piston clockwise 1/8 turn before pressing into cylinder. After piston is seated in bore of rear caliper, return piston to original position by rotating counterclockwise 1/8 turn.

3) On all calipers, install brake pads and damper spring. Damper spring of rear caliper MUST be installed with arrow (or hole) at top. On all brake calipers, reconnect pad wear indicator. Bleed hydraulic system.

#### DISC BRAKE CALIPER

##### Removal

1) Raise and support vehicle. Remove tire and wheel. Remove brake pads as previously described. Remove and plug hydraulic line from caliper.

2) On rear caliper, disconnect parking brake cable and casing from operating lever. On all calipers, remove mounting bolts and remove caliper assembly.

##### Installation

1) Mount caliper and install mounting bolts with new lock washers coated with Loctite (or equivalent).

2) Reverse removal procedure to complete installation and ensure brake hose is not twisted. Bleed hydraulic system.

#### FRONT DISC BRAKE ROTOR

##### Removal

1) Remove caliper mounting bolts and support out of way without disconnecting hydraulic line. Remove hub grease cap, adjusting nut, washer and outer wheel bearing.

2) Remove hub and rotor assembly from spindle. Separate hub and rotor by removing attaching bolts and washers from rear of hub.

##### Installation

Apply Loctite (or equivalent) to new lock washers and tighten hub-to-rotor bolts. Complete installation by reversing removal procedure and adjust wheel bearings. See *Wheel Bearing Adjustment in SUSPENSION Section*.

#### REAR DISC BRAKE ROTOR

##### Removal

1) Disconnect hydraulic line retaining clip on control arm. Remove pad electrical lead and brake pads.

2) Remove caliper mounting bolts and support caliper out of way without disconnecting hydraulic line. Remove axle shaft nut.

3) Align bearing housing access hole and remove bearing housing bolts. Remove shaft, hub and rotor as an assembly.

# Brakes

## PEUGEOT (Cont.)

4) Remove drive shaft from hub assembly with puller. Mount hub assembly in a padded vise and install extractor. Remove bearing housing nut with a 35 mm socket.

5) Install extractor and thrust pad and remove bearing housing. Remove hub-to-rotor bolts and separate assembly.

### Installation

1) Apply Loctite (or equivalent) to new lock washers and tighten hub-to-rotor bolts. Install bearing housing nut to bearing housing and tighten nut.

2) Mount hub and rotor assembly on bearing housing. Coat drive shaft splines with Molykote 321 (or equivalent) and install drive shaft in hub.

3) Mount shaft, hub and rotor assembly on vehicle. Install new washers coated with Loctite (or equivalent) on bearing housing bolts and tighten bolts.

4) Install axle nut and tighten. Mount caliper and install new washers coated with Loctite (or equivalent) on mounting bolts. Install brake pads.

### REAR BRAKE DRUM

#### Removal

1) Raise and support vehicle. Remove tire and wheel. Slide brake drum off brake assembly.

2) It may be necessary to neutralize brakes by removing backing plate plug and pushing parking brake lever off its seat.

#### Installation

To install, reverse removal procedure.

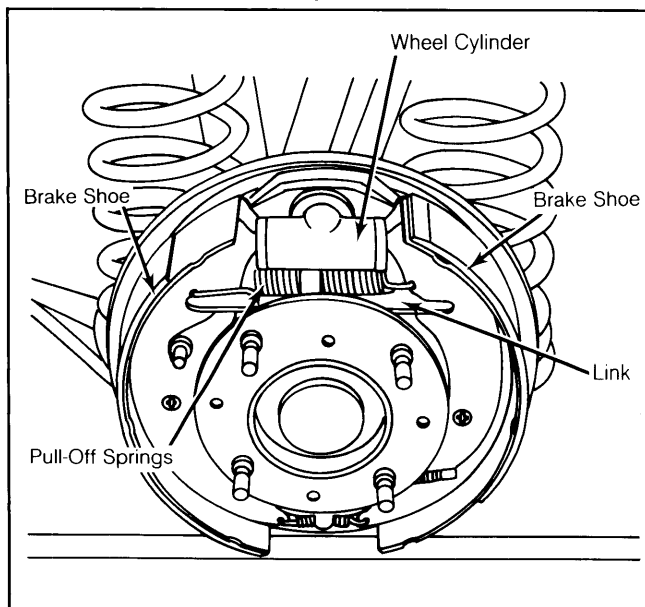
### REAR BRAKE SHOES

#### Removal

1) With brake drum removed, remove and discard hold down springs. Remove return springs, separate parking brake linkage from brake shoes.

2) Remove parking brake cable from operating lever. Remove brake shoes. Remove parking brake lever and strut from shoes.

**Fig. 1: Rear Brake Assembly for 504 Models**



Hold down springs should be replaced when performing rear brake service.

### Installation

To install, reverse removal procedure and note: Replace hold down springs during installation and ensure proper operation of parking brake.

### MASTER CYLINDER

#### Removal

1) Using a siphon, drain brake fluid from master cylinder. Disconnect all hydraulic lines from master cylinder.

2) Remove master cylinder-to-power brake unit attaching nuts and lift off master cylinder.

#### Installation

To install, reverse removal procedure, fill master cylinder with new brake fluid and bleed hydraulic system.

## OVERHAUL

### FRONT DISC BRAKE CALIPER

#### Disassembly

1) Clamp caliper assembly in a soft-jawed vise and remove brake pads. Seat pistons in cylinder bore and remove thrust spring and yoke. Remove protector retaining clips and protectors.

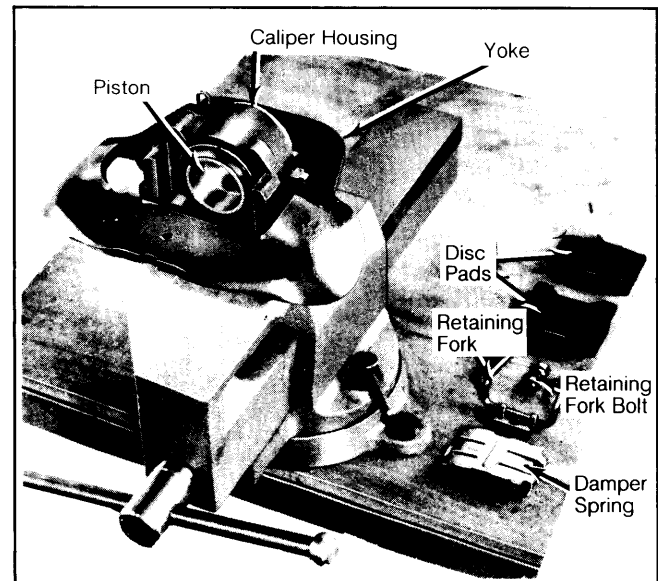
2) Remove both pistons from cylinder bore by applying compressed air to inlet port of caliper. Remove nylon spacer on yoke piston. Remove and discard piston seals.

#### Cleaning & Inspection

1) Clean all parts in denatured alcohol and check cylinder bore and pistons for wear, damage or scoring.

2) If any defects are found, defective parts must be replaced. Replace piston seals during overhaul.

**Fig. 2: Disassembling Front Disc Brake Caliper**



Always replace piston seals after disassembling brake caliper.

#### Reassembly

1) Lubricate pistons and seals with brake fluid and install seals. Insert pistons in cylinder bore with nylon

## PEUGEOT (Cont.)

spacer seated against yoke piston. Install protectors and retaining clips (thin clip on rotor side).

2) Coat yoke and caliper sliding parts with Molykote 321 (or equivalent) and install yoke and thrust spring. Seat pistons in cylinder bore and install brake pads.

### REAR DISC BRAKE CALIPER

#### Disassembly

1) Clamp caliper assembly in a soft-jawed vise and remove brake pads. Rotate piston clockwise 1/8 turn and seat piston assembly in cylinder bore.

2) Remove thrust spring and yoke. Remove parking brake lever return spring. Lift lever and remove nylon spacer. Remove protector retaining clips and protectors.

3) Remove piston assembly from cylinder bore by applying compressed air to inlet port of caliper. Remove and discard piston seals.

#### Cleaning & Inspection

1) Clean all parts in denatured alcohol and check cylinder bore and piston assembly for wear or damage. If any defects are found, replace defective part.

2) Separate piston assembly and inspect wear compensation assembly. Replace piston seals during overhaul.

#### Reassembly

1) Lubricate piston assembly and seals with brake fluid and install seals. Insert piston assembly from rear of cylinder assembly without damaging piston seals.

2) Install protectors and retaining clips (thin clip on rotor side). Raise parking brake lever and install nylon spacer. Install return spring.

3) Coat yoke and caliper sliding parts with Molykote 321 (or equivalent) and install yoke and thrust spring.

4) Seat piston assembly in caliper bore, then rotate piston assembly counterclockwise to original position. Install brake pads.

### MASTER CYLINDER

#### Disassembly

1) Mount master cylinder in a soft-jawed vise. On Lockheed master cylinders, remove reservoir attaching screw from inside each reservoir and separate each reservoir from master cylinder.

2) On Teves master cylinders, separate reservoir from master cylinder by pulling it from sealing grommets. then remove grommets.

3) On all master cylinders, remove piston stop screw. Remove piston circlip and stop washer, then extract primary piston assembly. Using compressed air, force out secondary piston assembly.

Fig. 3: Sectional View of Master Cylinder Assembly

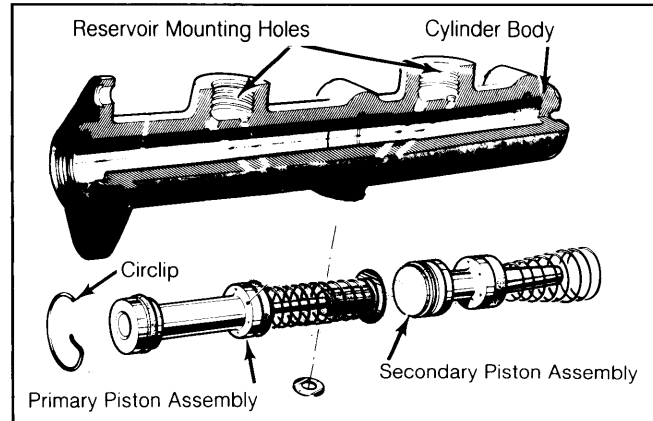


Illustration shows Teves master cylinder, Lockheed master cylinder is similar.

**NOTE:** DO NOT disassemble piston assemblies. If piston or seals are worn or damaged, replace both piston assemblies.

#### Cleaning & Inspection

Wash all parts in denatured alcohol and dry with compressed air. Inspect all parts for wear, scoring burrs or corrosion and replace as necessary.

**NOTE:** DO NOT polish cylinder bore with emery cloth.

#### Reassembly

1) Reverse disassembly procedure and note the following: Coat all parts with clean brake fluid prior to reassembly.

2) After reassembly is completed, push in primary piston several times and ensure it returns fully and smoothly to its stop each time.

### POWER BRAKE UNIT

**NOTE:** Power brake unit is serviced as an assembly only. Do not attempt to overhaul.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N.m)
Caliper Mounting Bolts	
Front .....	51 (69)
Rear .....	31 (42)
Retaining Fork Bolt .....	13 (18)
Hub-to-Rotor Bolts .....	36 (49)
Bearing Housing Mounting Bolts .....	31 (42)
Rear Axle Shaft Nut .....	181 (246)

### DRUM BRAKE SPECIFICATIONS

Application	Drum Diam. In. (mm)	Drum Width In. (mm)	Max. Drum Refinish Diam. In. (mm)	Brake Cyl. Diam. In. (mm)	Master Cyl. Diam. In. (mm)
504 Rear	11.00 (280)	.....	11.06 (281)	55/64 (22)	13/16 (22.6)

# Brakes

## PEUGEOT (Cont.)

### DISC BRAKE ROTOR SPECIFICATIONS

Application	Disc Diameter In. (mm)	Lateral Runout In. (mm)	Parallelism In. (mm)	Original Thickness In. (mm)	Min. Refinish Thickness In. (mm)	Discard Thickness In. (mm)
504 Front	.....	.003 (.07)	.0008 (.02)	.502 (12.75)	.443 (11.25)	.423 (10.75)
505 Front	.....	.003 (.07)	.0008 (.02)	.502 (12.75)	.443 (11.25)	.423 (10.75)
Rear	.....	.003 (.07)	.0008 (.02)	.472 (12.0)	.433 (11.0)	.413 (10.5)
604 Front	.....	.003 (.07)	.0008 (.02)	.787 (20.0)	.748 (19.0)	.709 (18.0)
Rear	.....	.003 (.07)	.0008 (.02)	.472 (12.0)	.433 (11.0)	.413 (10.5)