

## PEUGEOT

504  
604

## DESCRIPTION

Brake system is hydraulically operated using a tandem master cylinder and power brake unit. All 604 models and 504 Sedans are equipped with 4-wheel disc brakes. The 504 Station Wagon is equipped with front disc/rear drum 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 on all models.

## ADJUSTMENT

## DISC PADS

Disc brakes are self-adjusting, therefore no adjustment in service is required.

## REAR BRAKE SHOES (STATION WAGON)

Raise and support rear of vehicle. To adjust, rotate front adjustment eccentric clockwise until wheel locks, then back off until wheel just turns freely. Repeat procedure for rear adjustment eccentric, but rotate the eccentric counterclockwise.

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

## PARKING BRAKE

**504 Sedan & 604** — Prior to adjusting parking brake, ensure brake system is bled, service brakes are properly adjusted and rear control levers are against nylon pads with parking brake fully released. Loosen lock nuts. Loosen threaded adjusters until rear control levers almost touch nylon pads. Tighten adjusters  $\frac{1}{2}$  turn and tighten lock nut. Ensure adjustment is equal at each threaded adjuster.

**504 Station Wagon** — Remove center console and fully release hand brake lever. Loosen lock nut at lever and tighten adjusting screw until wheels are locked with 4-7 notches of lever travel. Tighten lock nut and ensure wheels rotate freely with parking brake released.

## HYDRAULIC SYSTEM BLEEDING

Attach a bleed tube to bleeder screw and immerse opposite end of tube in a container partially filled with brake fluid. Pump brake pedal 2-3 times, keep pedal fully depressed, open bleed screw and exhaust air. Close bleeder screw and return brake pedal. Repeat operation until air bubbles are no longer seen in discharged fluid. Repeat procedure on remaining brake lines until air is bled from complete brake system.

## REMOVAL &amp; INSTALLATION

## FRONT DISC BRAKE PADS

**Removal (All Models)** — Raise and support vehicle under frame; remove tire and wheel. Disconnect pad wear electrical lead. Remove retaining spring and pins, then remove damper spring and brake pads.

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

**Installation** — Remove small amount of brake fluid from master cylinder reservoir. Using suitable tool, press piston into cylinder bore. Install pads and damper spring. Install retaining pins and clips. Bleed hydraulic system.

## FRONT DISC BRAKE CALIPER

**Removal (All Models)** — Raise and support vehicle under frame; remove tire and wheel. Disconnect electrical lead and remove disc pads. Remove flexible hydraulic line from caliper. Remove caliper mounting bolts and caliper.

**Installation** — Mount caliper and install mounting bolts with new lock washers coated with Loctite (or equivalent). Complete installation by reversing removal procedure and ensure hydraulic hose is not twisted. Bleed hydraulic system.

## FRONT DISC BRAKE ROTOR

**Removal** — Remove caliper mounting bolts and support out of way without disconnecting hydraulic line. Remove hub grease cap, adjusting nut, washer and outer wheel bearing. 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 WHEEL ALIGNMENT Section.

## REAR DISC BRAKE PADS

**Removal (504 Sedan & 604)** — Raise and support vehicle at jacking points; remove tire and wheel. Disconnect pad wear electrical lead. Remove the pad pin retaining bolt and return spring. Remove damper spring and pads.

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

**Installation** — Remove small amount of brake fluid from master cylinder reservoir. Using suitable piston tool, rotate piston clockwise  $\frac{1}{8}$  turn. Press piston into cylinder bore with suitable tool and return piston to original position by rotating counterclockwise  $\frac{1}{8}$  turn. Reverse removal procedure to install pads and ensure damper spring is installed with arrow (or hole) at the top. Bleed hydraulic system.

## REAR DISC BRAKE CALIPER

**Removal (504 Sedan & 604)** — Raise and support vehicle at jacking points; remove tire and wheel. Disconnect electrical lead and remove disc pads. Remove hydraulic line from caliper. Disconnect parking brake cable and casing from operating lever. Remove caliper mounting bolts and caliper.

**Installation** — Mount caliper and install mounting bolts with new lock washers coated with Loctite (or equivalent). Complete installation by reversing removal procedure. Bleed hydraulic system.

## REAR DISC BRAKE ROTOR

**Removal (504 Sedan & 604)** — 1) Disconnect hydraulic line retaining clip on control arm. Remove electrical lead and disc pads. Remove caliper mounting bolts and support caliper out

## PEUGEOT (Cont.)

of way without disconnecting hydraulic line. Remove axle shaft nut. Align bearing housing access hole and remove bearing housing bolts.

**2)** Remove shaft, hub and rotor as an assembly. Remove drive shaft from hub assembly with suitable puller. Mount hub assembly in a padded vise and install suitable extractor and remove bearing housing nut with a 35 mm socket. Install suitable 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. Mount hub and rotor assembly on bearing housing. Coat drive shaft splines with Molykote 321 (or equivalent) and install drive shaft in hub.

**2)** Mount shaft, hub and rotor assembly on vehicle. Install new washers coated with Loctite (or equivalent) on bearing housing bolts and tighten bolts. 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 (504 Station Wagon)** – Raise and support vehicle; remove tire and wheel. Slide brake drum off brake assembly. It may be necessary to neutralize brakes by removing backing plate plug and pushing hand brake lever off the seat.

**Installation** – To install, reverse removal procedure.

### REAR BRAKE SHOES

**Removal (504 Station Wagon)** – With brake drum removed, remove and discard hold down springs. Remove return springs, separate parking brake linkage from brake shoe and remove parking brake cable from brake lever. Remove brake shoes. Remove parking brake lever and strut from shoes.

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

### MASTER CYLINDER

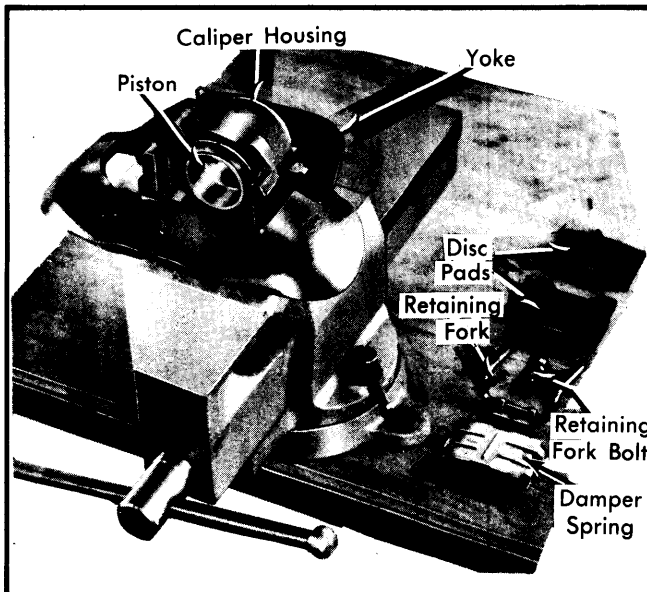
**Removal & Installation** – Using a siphon, drain brake fluid from master cylinder. Disconnect all hydraulic lines from master cylinder. Remove master cylinder-to-power brake unit attaching nuts and lift off master cylinder. To install, reverse removal procedure, fill master cylinder with new brake fluid and bleed hydraulic system.

## OVERHAUL

### FRONT DISC BRAKE CALIPER

**Disassembly** – Clamp caliper assembly in a soft-jawed vise and remove disc brake pads. Seat pistons in cylinder bore and remove thrust spring and yoke. Remove protector retaining clips and protectors. Force both pistons from cylinder bore and remove nylon spacer on yoke piston. Remove and discard piston seals.

**Cleaning & Inspection** – Clean all parts in denatured alcohol and check cylinder bore and pistons for wear, damage or scoring. If any defects are found, defective parts must be replaced. Replace piston seals during overhaul.



**Fig. 1 Disassembling Front Disc Brake Caliper**

**Reassembly** – Lubricate pistons and seals with suitable lubricant and install seals. Insert pistons in cylinder bore with nylon spacer seated against yoke piston. Install protectors and retaining clips (thin clip on rotor side). Coat yoke and caliper sliding parts with Molykote 321 (or equivalent) and install yoke and thrust spring. Seat pistons in cylinder bore and install disc pads.

### REAR DISC BRAKE CALIPER

**Disassembly** – **1)** Clamp caliper assembly in a soft-jawed vise and remove disc pads. Rotate piston clockwise  $\frac{1}{8}$  turn and seat piston assembly in cylinder bore. Remove thrust spring and yoke.

**2)** Remove parking brake lever return spring. Lift lever and remove nylon spacer. Remove protector retaining clips and protectors. Force piston assembly from cylinder bore. Remove and discard piston seals.

**Cleaning & Inspection** – 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. Separate piston assembly and inspect wear compensation assembly. Replace piston seals during overhaul.

**Reassembly** – **1)** Lubricate piston assembly and seals with suitable lubricant and install seals. Insert piston assembly from rear of cylinder assembly without damaging piston seals. Install protectors and retaining clips (thin clip on rotor side). Raise parking brake lever and install nylon spacer. Install return spring.

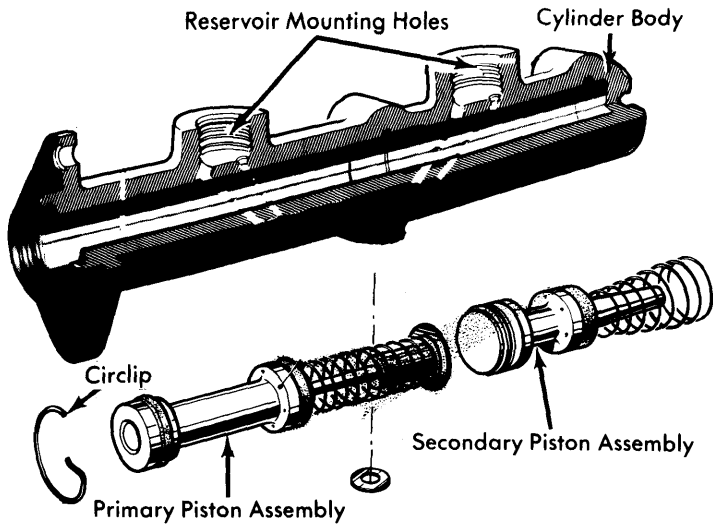
**2)** Coat yoke and caliper sliding parts with Molykote 321 (or equivalent) and install yoke and thrust spring. Seat piston assembly in caliper bore, then rotate piston assembly counter-clockwise to original position. Install disc pads.

# Brakes

## PEUGEOT (Cont.)

### MASTER CYLINDER

**Disassembly** — 1) Mount master cylinder in a soft jaw vise. On Lockheed master cylinders, remove reservoir attaching screw from inside each reservoir and separate each reservoir from master cylinder. On Teves master cylinders, separate reservoir from master cylinder by pulling it from sealing grommets, then remove grommets.



**Fig. 2 Sectional View of Master Cylinder Assembly**

2) 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.

**NOTE** — DO NOT disassemble piston assemblies; if piston or seals are damaged or worn, 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** — Reverse disassembly procedure and note the following: Coat all parts with clean brake fluid prior to reassembly. 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. (mkg)
Caliper Mounting Bolts	
Front .....	51 (7)
Rear .....	31 (4.3)
Retaining Fork Bolt .....	13 (1.8)
Hub-to-Rotor Bolts .....	36 (5)
Bearing Housing Nut .....	181 (25)
Bearing Housing Mounting Bolts .....	31 (4.3)
Rear Axle Shaft Nut .....	181 (25)

### DISC BRAKE ROTOR SPECIFICATIONS

Application	Disc Diameter In. (mm)	Lateral Runout In. (mm)	Parallelism In. (mm)	Original Thickness In. (mm)	Minimum Refinish Thickness In. (mm)	Discard Thickness In. (mm)
504 Models						
Front	.....	.003 (.07)	.0008 (.02)	.502 (12.75)	.443 (11.25)	.423 (10.75)
Rear (Sedan Only)	.....	.003 (.07)	.0008 (.02)	.473 (12.01)	.433 (11.00)	.413 (10.49)
604 Models						
Front	.....	.003 (.07)	.0008 (.02)	.787 (19.99)	.728 (18.49)	.719 (18.26)
Rear	.....	.02 (.51)	.0008 (.02)	.473 (12.01)	.433 (11.00)	.413 (10.49)

### BRAKE DRUM SPECIFICATIONS

Application	Drum Diameter In. (mm)	Original Diameter In. (mm)	Maximum Refinish Diameter In. (mm)	Discard Diameter In. (mm)
Station Wagon (Rear)	11.024 (280)	11.024 (280)	11.063 (281)	11.083 (281.5)