Brake Discs

The outside diameter of the front wheel disc is 274, 5 mm (10, 81 in.) and rear wheel disc 285 mm (11, 22 in.). Factory new brake discs for front wheels have a thickness of 10, 5 - 10, 3 mm (. 413 - . 406 in.) and for rear wheels 10, 0 - 9, 8 mm (. 394 - . 386 in.). Slightly damaged or worn brake discs may be refinished providing that the disc thickness is not reduced by more than 0, 5 mm (. 020 in.).
The maximum permissible tolerance for thickness variations of the braking surfaces is 0, 03 mm (. 0012 in.) since otherwise the brake will tend to chatter.
The brake discs should be machined only if absolutely necessary. Linear grooves in the brake disc have no detrimental effects and it is, therefore, not necessary to refinish the surface.

Automatic Adjustment

The disc brake pads need not be adjusted (the hand brake is an exception) due to a built-in self-adjusting mechanism. The mechanism is contained within the pistons in the calipers and includes an arresting element which, in connection with a stud in the flange and cover housing, effects the automatic brake pad adjustement.

The self-adjusting device with its clearance provision cannot be modified or repaired. In the event that malfunctions occur, it will be necessary to replace the complete piston assembly.

Hand Brake

The hand brake is of the twin-servo type and provides good braking effect through high exploitation of the self-energizing forces. The pot-shaped part of the rear wheel discs serves as the brake drum; thus, the hand brake drum and the brake disc are one unit.
The brake linings are riveted to the brake shoes in the usual way. Only brake linings recommended by the Porsche Company may be utilized.
The hand brake is mechanically actuated and acts on rear wheels only. The hand brake and service brake systems are two completely separate systems.

Hand Brake Operating Principle

When the hand brake is pulled out, two brake shoes in each rear wheel are pressed against the drum part of the rear disc, the force being transmitted by brake cables and mechanical expanders. If the wheels turn forward or backward, a self-energizing effect is created by the action of the advancing primary shoe. Since the free-floating adjusting assembly serves as an anchoring point for both brake shoes, the anchoring force of the primary shoe provides additional forces for pressing the secondary brake shoe. As a result, the receding brake shoe is also activated and the braking effect equally good in both directions of rotation.

Specifications

Service brake
Effective braking area per wheel: front 52, 5 cm^2 (8. 14 sq. in.), rear 40, 0 cm^2 (6. 20 sq. in.)
Total effective braking area: 40, 0 cm^2 (28. 68 sq. in.)

Hand brake

Brake drum diameter:	180 mm (7, 1 in.)
Brake lining width:	30 mm (1, 18 in.)
Total effective braking area:	194 cm^2 (30, 1 sq. in.)