Replacing Brake Pads

General

Severity of use as well as road conditions are some of the wear factors for brake pads. Increased wear may be anticipated especially when driving over wet, dirty roads (winter-serviced), and as a result of hard use (generation of high temperatures).

The brake pad thickness should be visually checked during all service operations.

A clearance must exist between the cross-spring and the brake pad segment (see Fig. 7). The permissible wear tolerance is reached when the brake pad segment touches the cross-spring or if its thickness is reduced to 2 mm (5/64 or .079 in.).

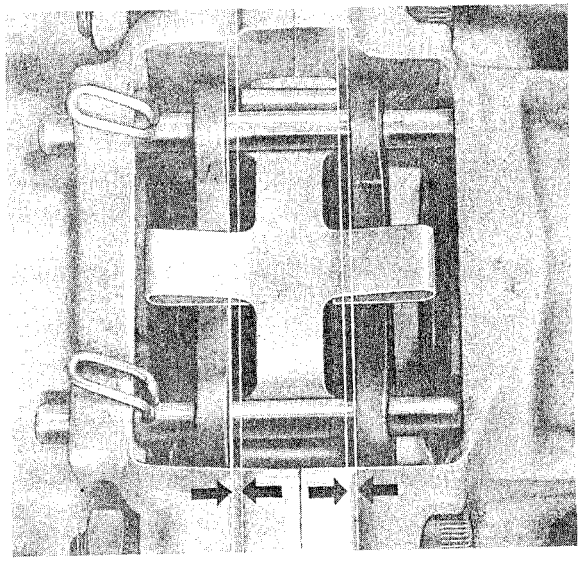

Fig. 7

The thickness of the brake pad segment at installation is about 15 mm (19/32 or .591 in.). Brake pad segments for the front and rear wheels differ in size and are, therefore, not interchangeable.

Two types of brake pads are available, that is, one type for normal use and the other for competition driving. The pads for competition use will wear slower but require higher pedal pressures. The brake pads are identified as to type by inscription on the pad plate. The designation "FE 4" is for competition brake pads and "TE 5" for normal brake pads.

The competition brake pads should be exchanged for normal brake pads at the beginning of the cold season. Only brake pads recommended by the Porsche Company may be utilized.

Same type of brake pads must be used on the front or the rear axle. Even though the brake pads can be replaced individually, we recommend that at least all brake pads of one particular axle are replaced at any one time.

Note:

Used brake pads must be marked prior to removal from the caliper to ensure proper reinstallation (in the original position). Used brake pads may not be interchanged or installed in different brake calipers.

Replacing Brake Pad Segments

1. Place car on stands and remove wheels.
2. Remove pin retaining clips.

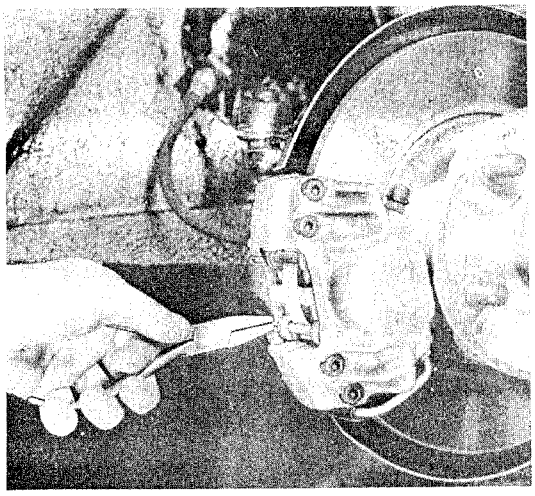

Fig. 8

3. Remove retaining pins (towards center of car) while depressing the cross-spring.

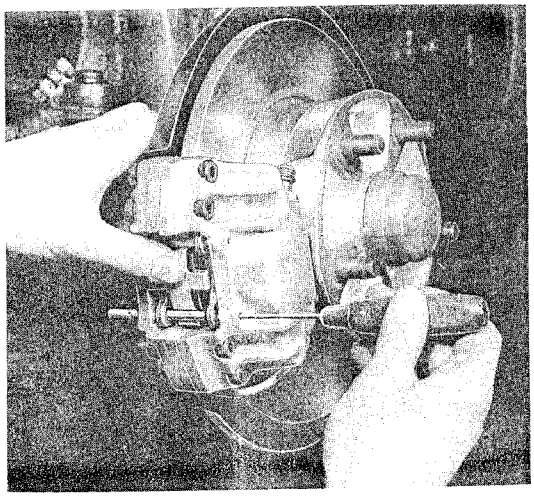

Fig. 9

4. Appropriately mark brake pad segments which may still be used.
5. Remove brake pad segments with a hook.

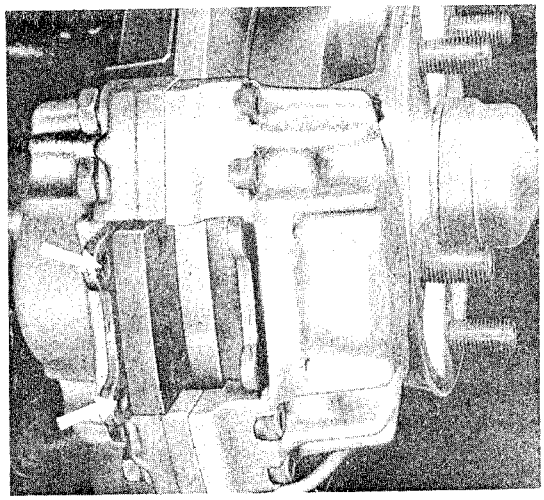

Fig. 10

6. Force pistons fully back by using the piston depressor (P 83); if not available, a piece of hardwood may be used for this purpose. Different tools may not be used due to the possibility of damaging the pistons or brake discs.

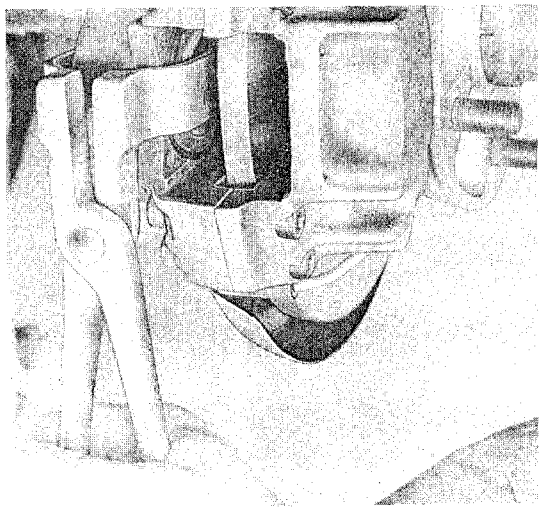

Fig. 11

Caution:

When the pistons are forced back, hydraulic brake fluid flows back into the reservoir. To prevent spillage, syphon the fluid out of the reservoir. The syphon or suction aid used must be clean and free of any substance other than hydraulic brake fluid.

7. Clean seating and supporting surfaces of brake pads within the respective wells. Do not use mineral solvents or sharp-edged metal tools; if necessary, alcohol may be used.

8. Check dust covers and clamping rings for serviceability. Hardened and porous dust covers must be replaced with new.

9. Clean brake discs with fine-grade emery cloth.

10. Install new brake pads in the housing wells and secure with retaining pins, cross-spring, and pin retaining clips; check pin retaining clips and replace if damaged or deformed in any way. The brake pad segments must freely move within their wells.

11. Repeat the above procedure on all other brake calipers.

Caution:

Before the car is driven, the brake pedal should be depressed a few times as far as is possible in order to bring the brake pistons and pads into their normal position. Afterwards check the level of hydraulic fluid in the reservoir.

Running-in Brake Pads

Factory new brake pads will lose their braking efficiency (fade) once, after installation, but this occurence will disappear after a running-in distance of about 125 miles (200 km). During the run-in period, the brakes should not be used hard at high speeds unless absolutely necessary since new brake pads must be run in at light pedal pressures applied at not too frequent intervals. It is only after the run-in period that the brakes become fully effective.