

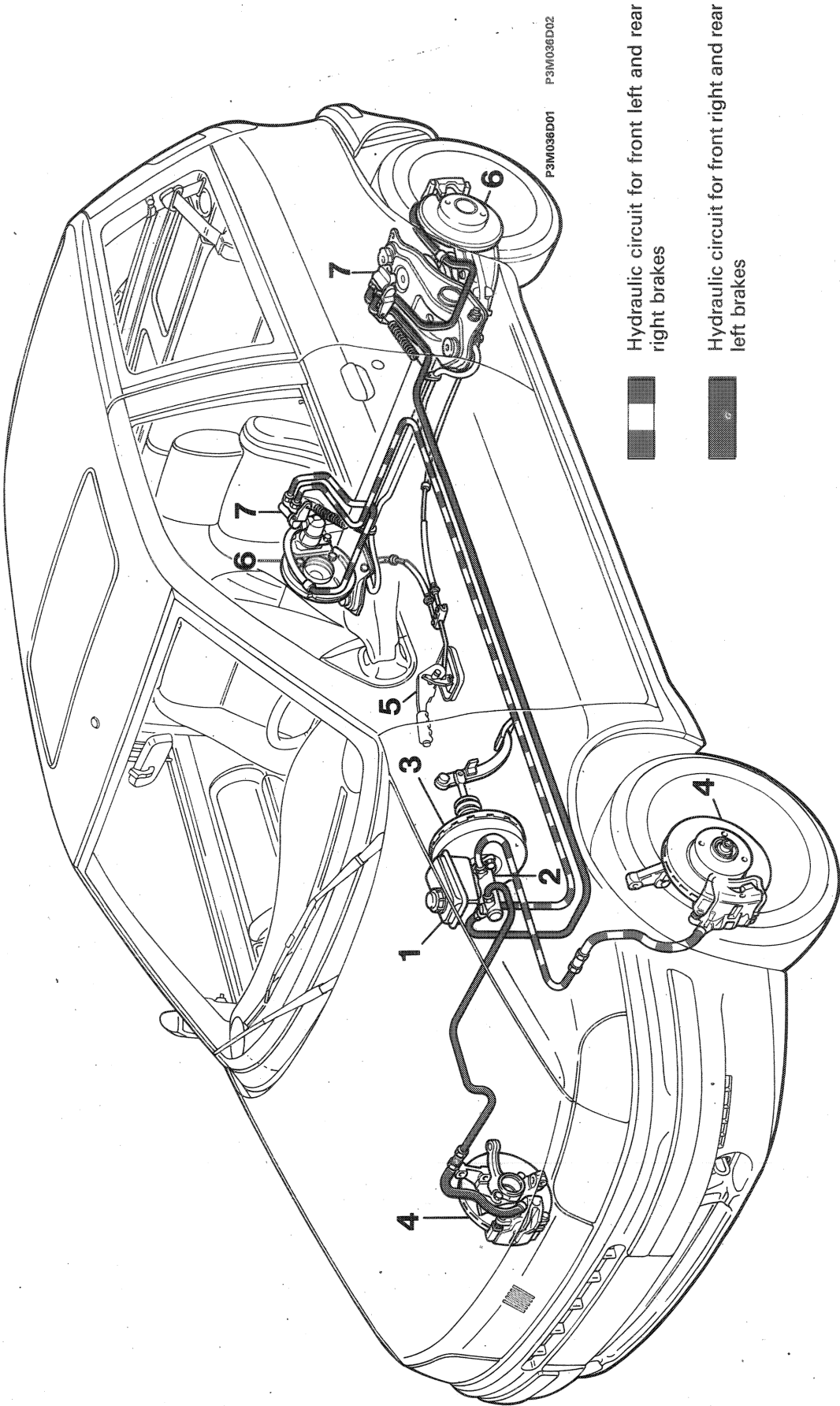
# PUNTO eMANUAL

Braking System

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33.

DIAGRAM OF HYDRAULIC BRAKE CIRCUIT AND MECHANICAL HANDBRAKE LINKAGE



1. Brake fluid reservoir

2. Master cylinder for front and rear wheel brake circuit

3. Vacuum servo unit

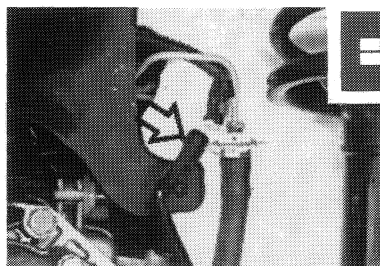
4. Front disc brakes
5. Handbrake lever

6. Rear drum brakes

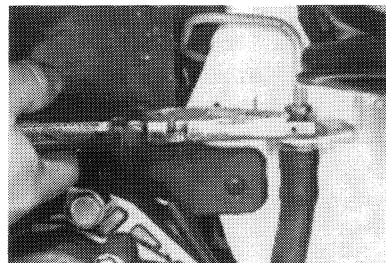
7. Load proportioning valves for rear wheels

#### DISMANTLING-FITTING

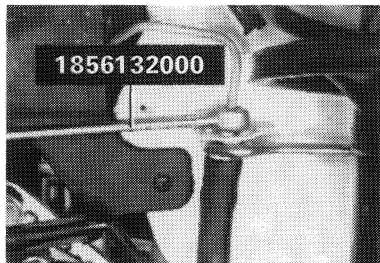
Dismantling-fitting brake hose and electrical connector for brake pad wear sensor



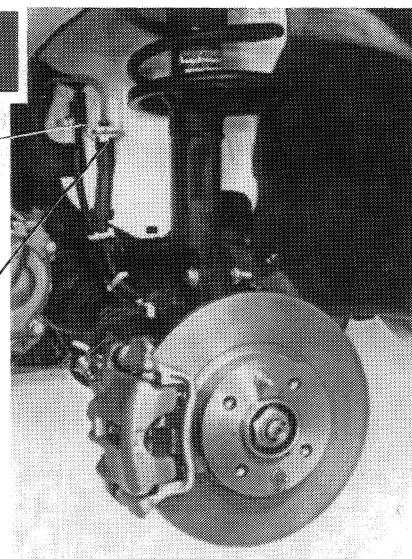
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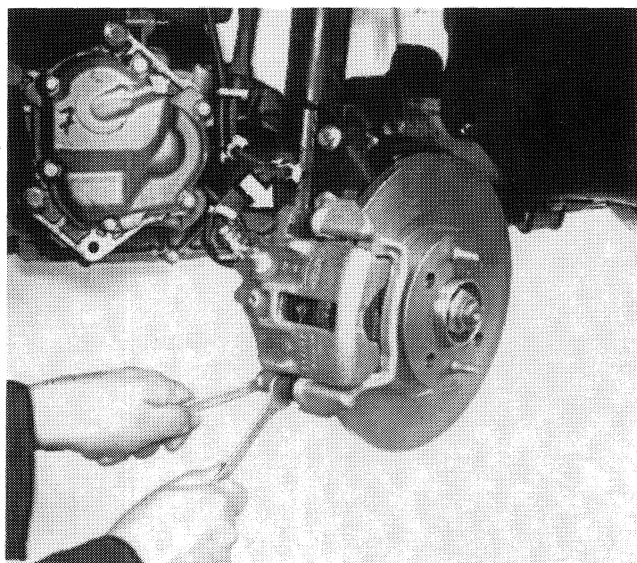
P3M017D02



P3M017D03



P3M017D04

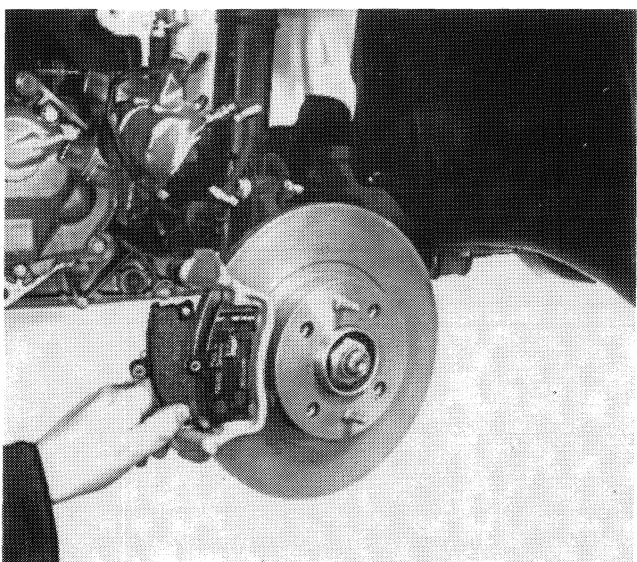


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#### Dismantling-fitting brake caliper



*The bolts securing the caliper case are self-locking and must be renewed whenever they are slackened or unscrewed*

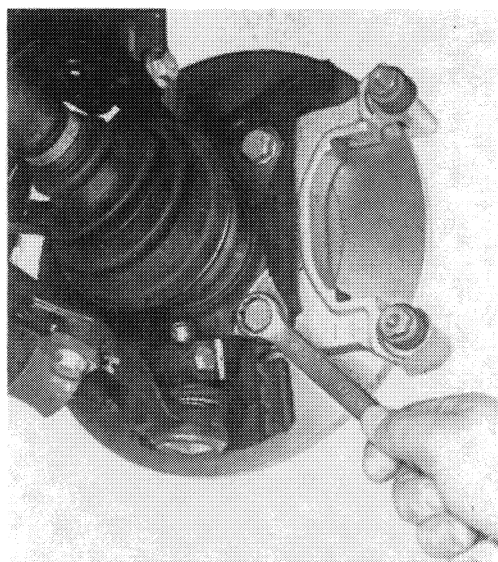


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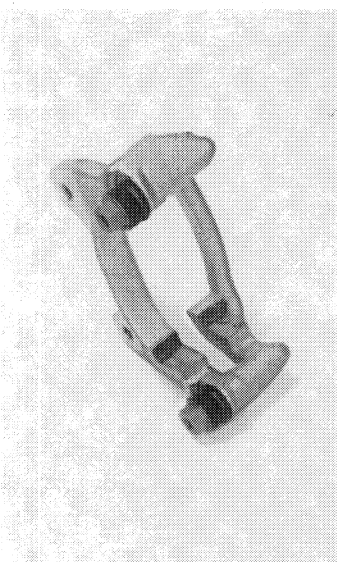


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#### Dismantling-fitting brake pads



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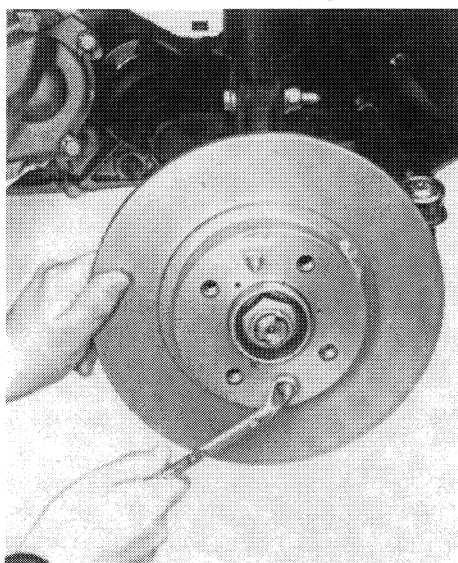
P3M018D02



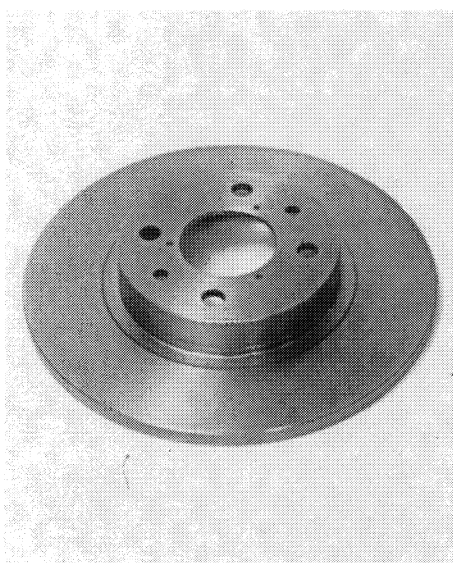
#### Removing-refitting caliper mounting bracket



*Before refitting the caliper mounting bracket, check the rubber gaiters for damage and renew them if necessary*



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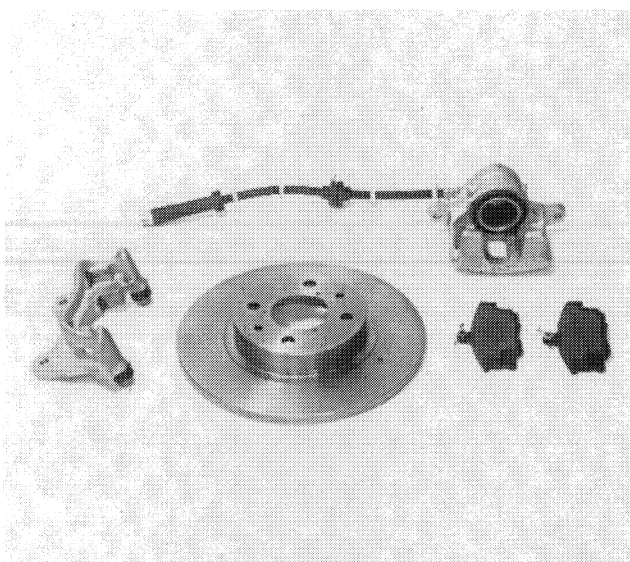


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#### Dismantling-fitting brake disc

When refitting, remove any traces of dust to ensure that the disc is perfectly perpendicular to the hub.



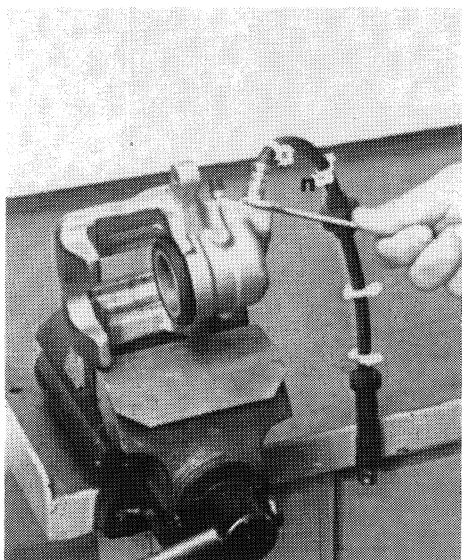
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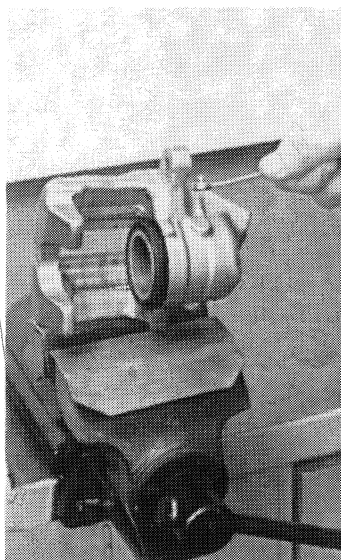
#### Components of the braking system



#### BRAKE CALIPER



P3M019D01



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**Dismantling - refitting hose connector and bleed screw**

**NOTE** *The hose should not be swollen or cracked, otherwise it must be renewed. It is advisable to renew both hoses.*



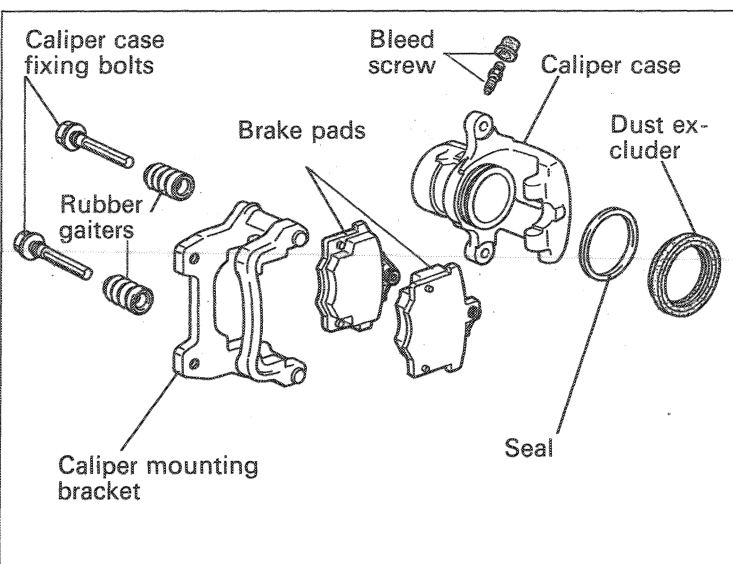
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P3M019D04

#### Dismantling piston and dust excluder

The piston is removed from the caliper case by directing a jet of compressed air in the brake fluid inlet hole.



P3M019D05

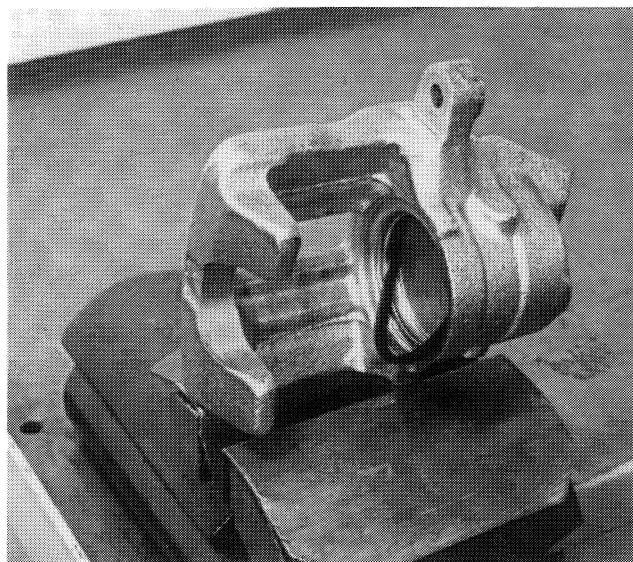


#### Checking components of the caliper assembly

The piston and caliper case must not show signs of friction or seizure, otherwise the caliper complete with piston must be renewed. The dust excluder and seal will always need to be renewed, and the also ensure that the bleed screw is not blocked.



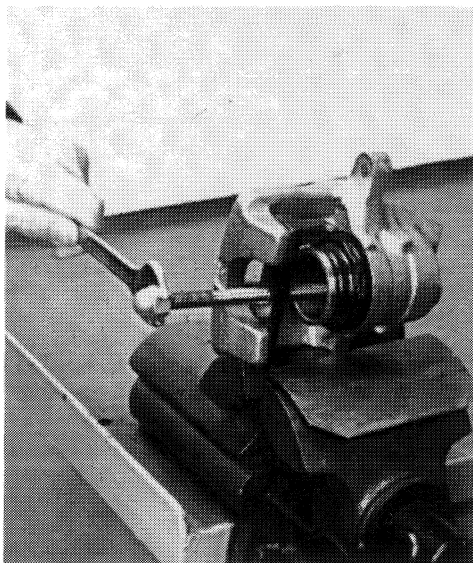
*To wash the metal parts, use a solution of hot water with FIAT LDC detergent*



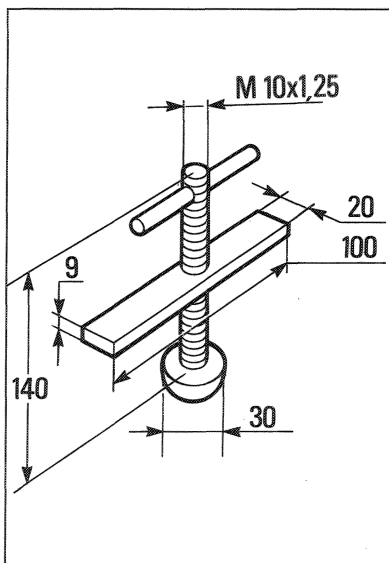
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#### Refitting seal on caliper case



P3M020D02



P3M015D05



#### Refitting piston and dust excluder



To fit the piston, it is advisable to use a tool with the shape and dimensions illustrated in the figure opposite.



Lubricate the parts with brake fluid before final assembly



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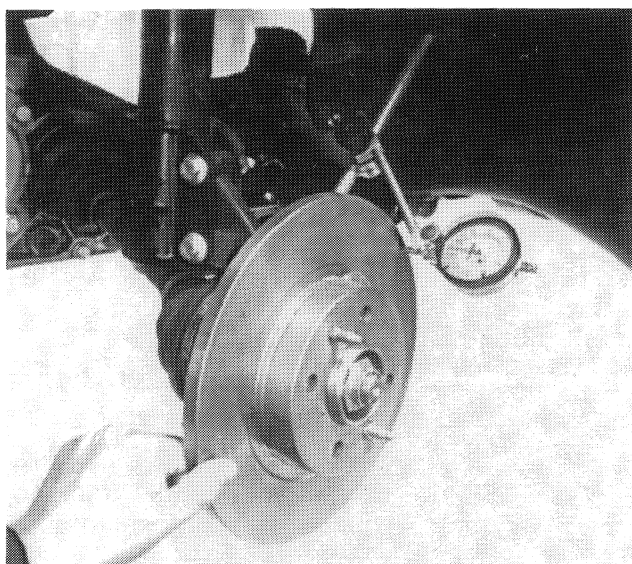


#### BRAKE DISCS



##### Checking and measuring disc

The minimum permissible thickness of the worn brake disc is 9.2 mm for the 1108 - 1242 SPI - 1242 MPI - 1697 TD engines and 18.2 mm for the 1372 turbo engine; if the thickness is less, the disc must be renewed. If the disc is damaged or deeply scored, the surfaces may be skimmed. After machining, the brake disc thickness must not be less than 9.55 mm for the 1108 - 1242 SPI - 1242 MPI - 1697 TD engines and 18.55 mm for the 1372 turbo engine.



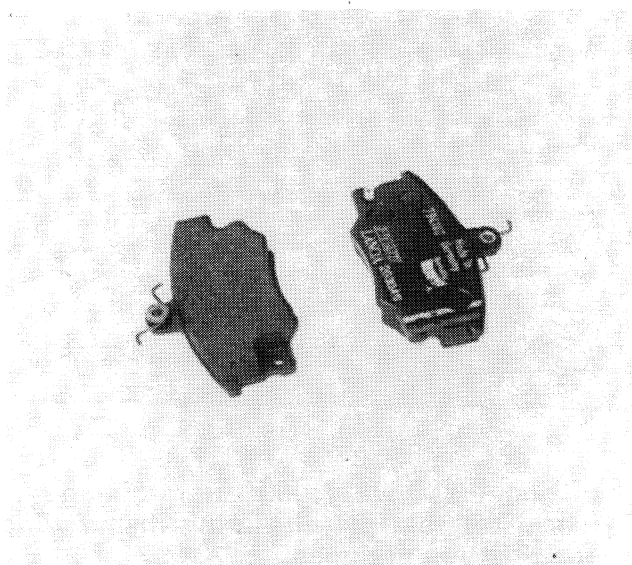
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#### Checking brake disc run-out in relation to axis of rotation

If only the brake pads need to be renewed, it is advisable to check that the run-out does not exceed 0.15 mm.

This measurement is taken 2 mm from the outer diameter of the disc.



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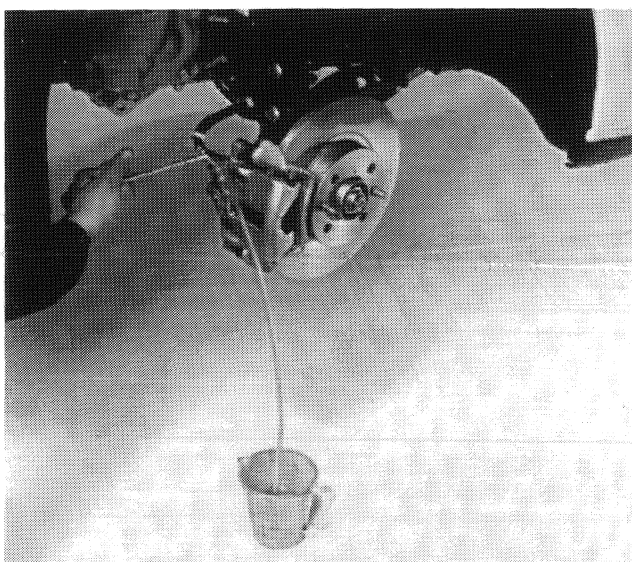


#### BRAKE PADS

#### Checking brake pads

The brake pads must be renewed if the thickness of the friction material is less than 1.5 mm.

Check that matching brake pads are fitted on each pair of wheels.



P3M021D03



#### BLEEDING

The old fluid should not be reused. Top up the level with fresh brake fluid.