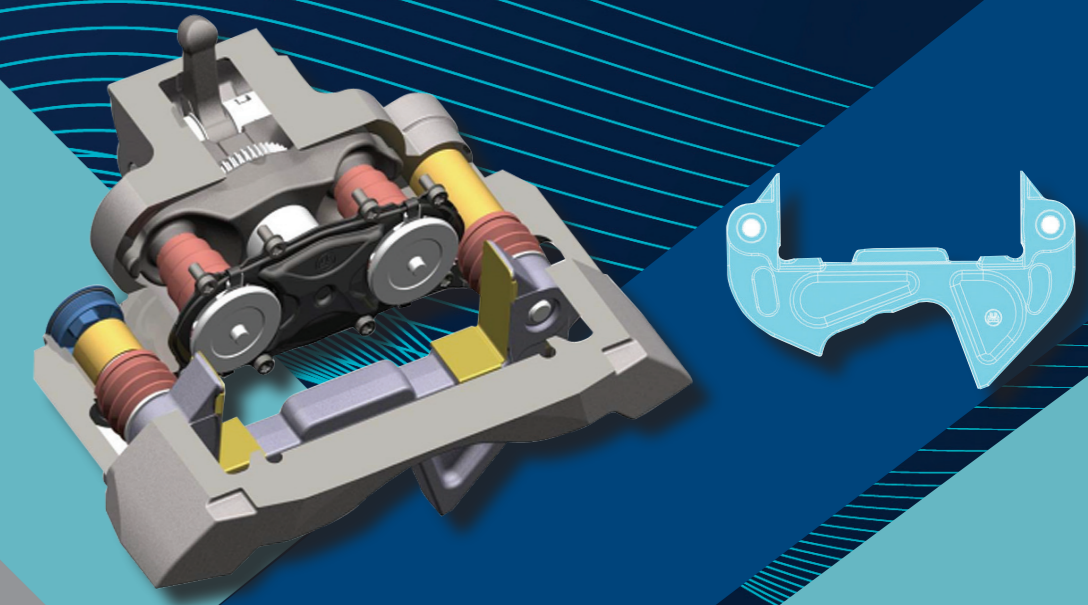




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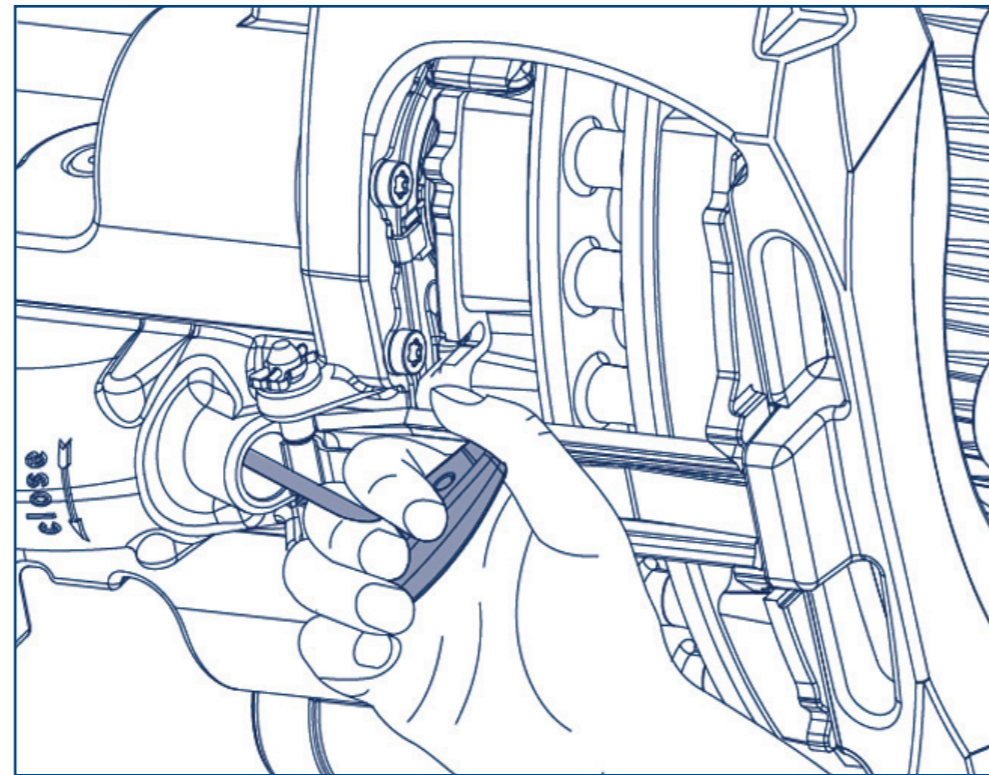
# Workshop Service – TSB Disc Caliper

## SET PLAY AND CHECK ADJUSTMENT

1. Remove the plug.
2. Using a torque wrench (T25) depress the return spring and turn **CLOCKWISE** until it clicks 3 to 4 times.
3. Actuate the brake 5 to 10 times with a force of approximately 2 bar.
4. Push the sliding caliper in the axle direction. The play exhibited at this time must be between 0.7 and 1.3 mm.

**ADJUSTMENT IS CORRECT IF PLAY IS WITHIN THIS TOLERANCE.**

5. Reinsert the plug.



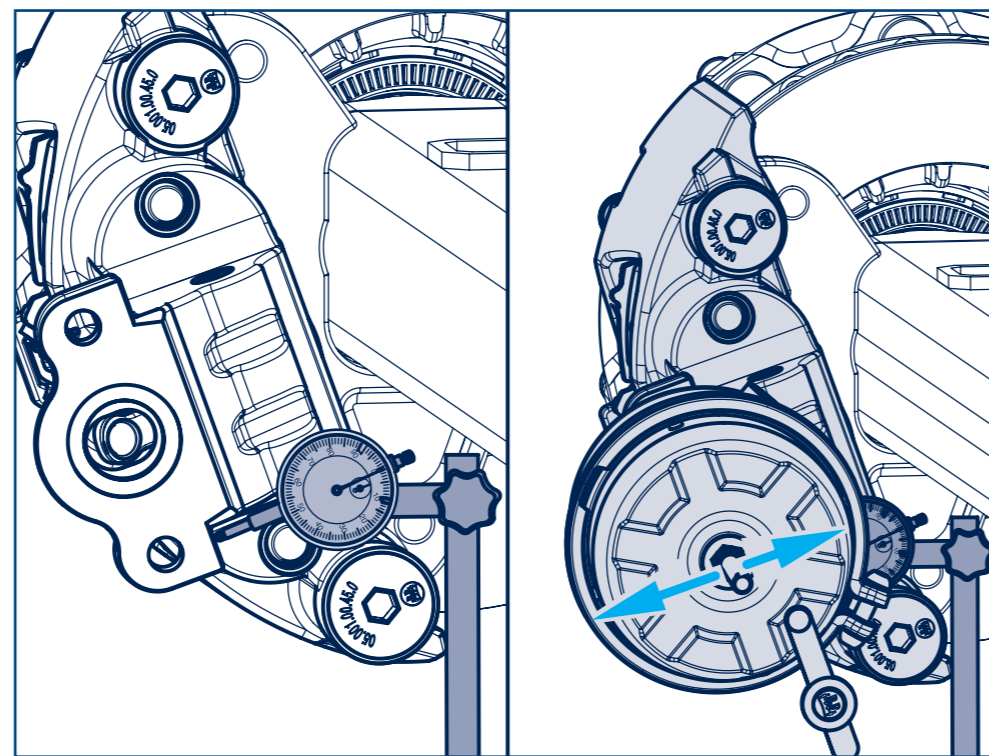
## CHECK BRAKE CALIPER BEARING PLAY

**INSPECTION – EVERY 6 MONTHS**

The lateral bearing play of the brake caliper guide pins can be checked using a dial gauge. Attach the dial gauge base to the axle beam and position the gauge facing the guide pin bearing on the lower edge of the cylinder mounting flange (see the picture).

Move the brake caliper from side to side radially from the centre of the axle (see the picture) and measure the total displacement.

If a brake caliper bearing play exceeds 1.5 mm, the brake caliper guide pins and bushes must be replaced

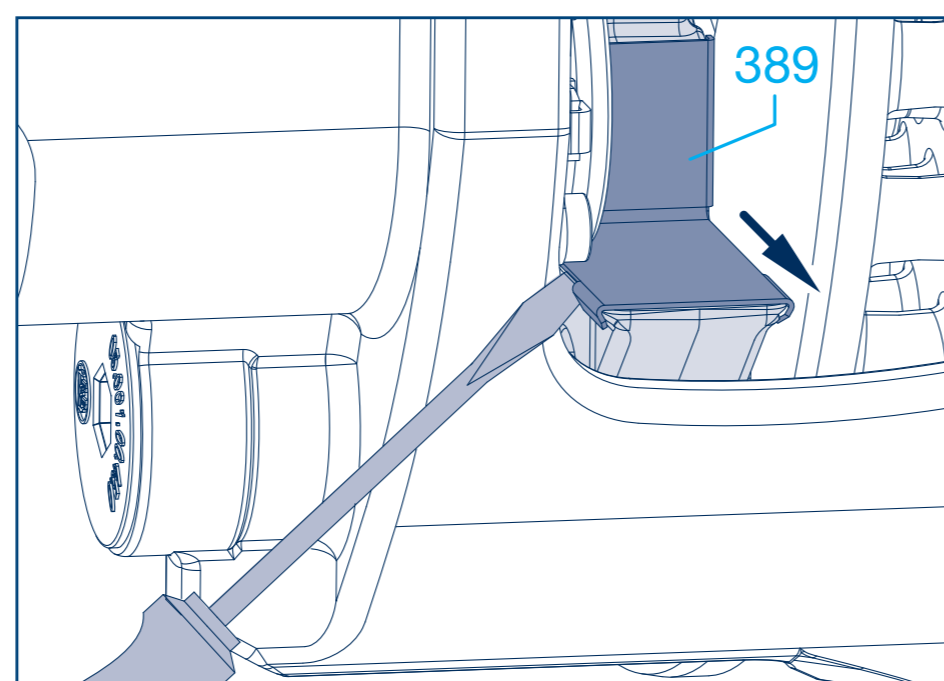


## WEAR PLATES

When removing or replacing brake pads it is important to follow the instruction below.

Remove both wear plates (389) from the brake anchor plate, clean the housing, and insert new wear plates.

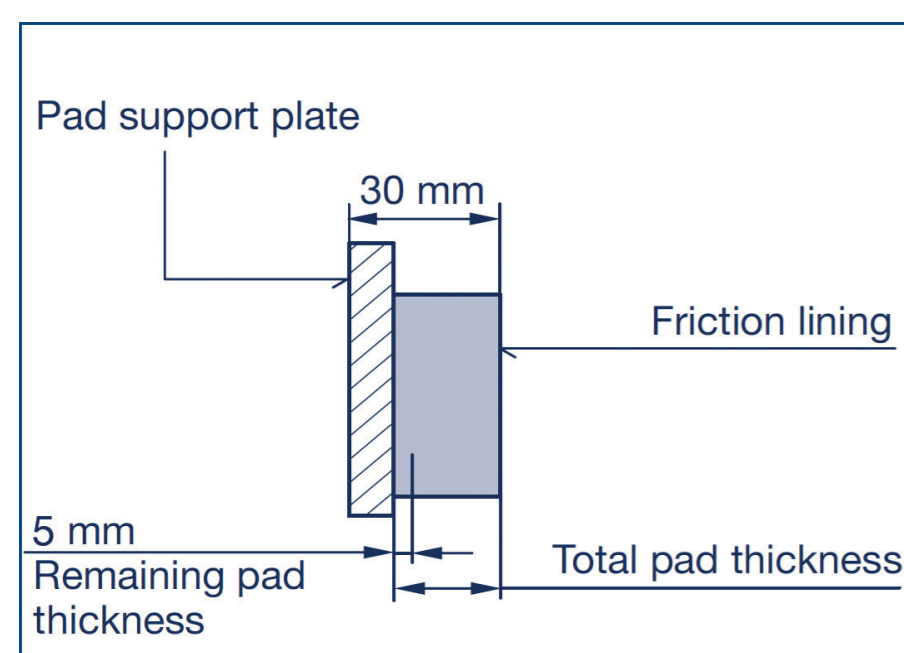
The wear plates must be greased on the rear side with BPW ECO-Li Plus grease.



## BRAKE PAD THICKNESS

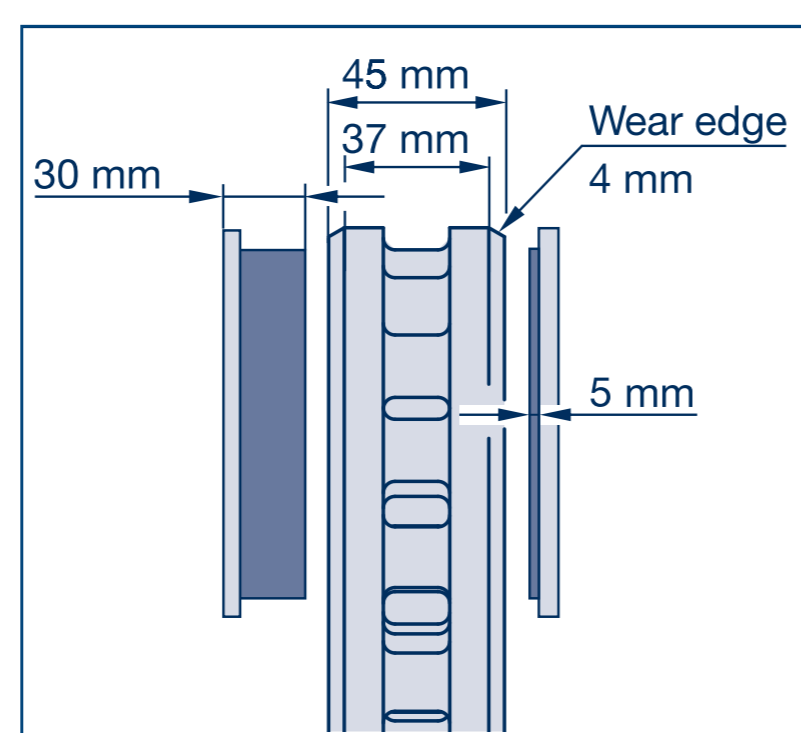
The brake pad thickness must be checked regularly e.g. during the tyre inflation pressure check.

The intervals must not be more than 3 months



The thickness of the remaining pad must **NOT** be less than **5 mm**.

## BRAKE DISC CONDITION



All new brake discs are 45 mm thick.

Providing continuous cracks are not apparent, minimum brake disc thickness is 37 mm.

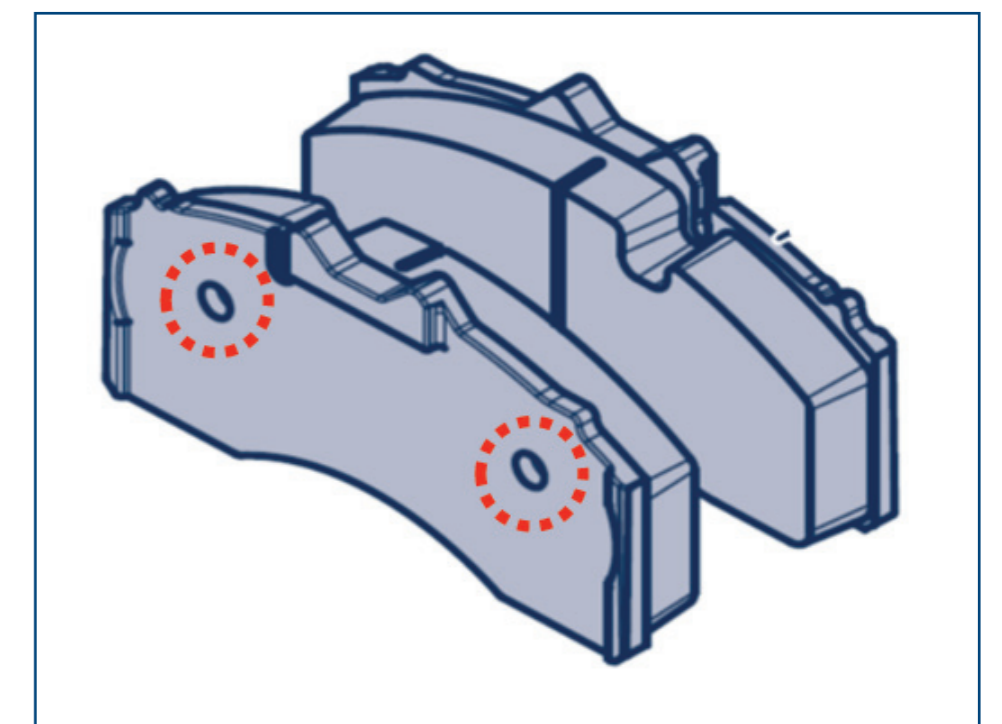
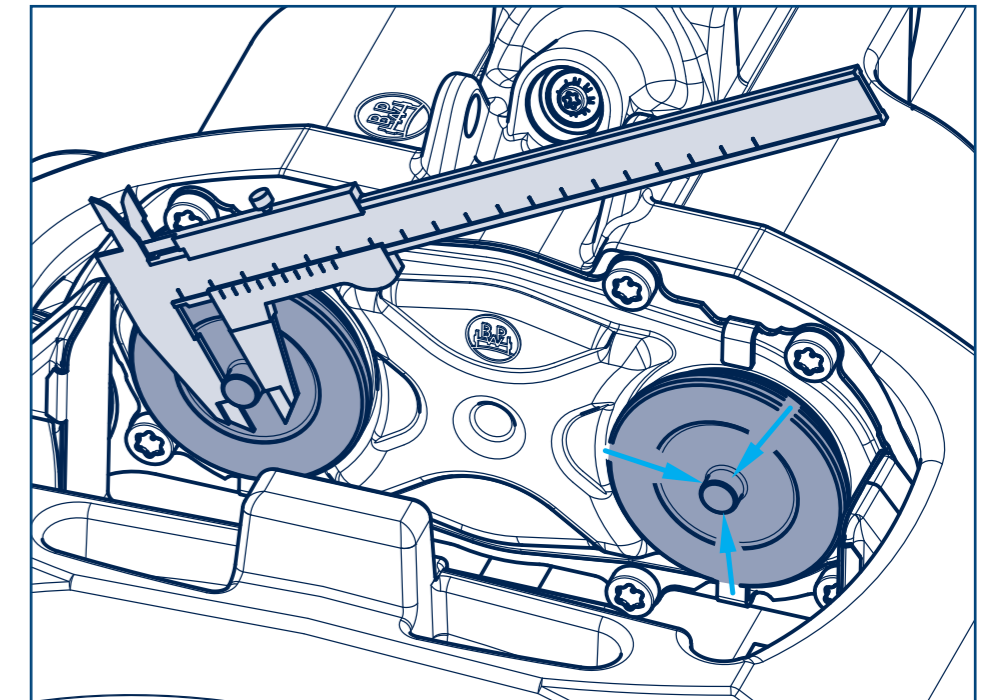
Brake discs should be replaced in pairs. Brake pads should also be replaced when new brake discs are fitted.

If this instruction is not adhered to, there is a danger that braking performance could be seriously reduced.

## CHECK COARSE DIRT SEALS AND TAPPETS

**INSPECTION – EVERY 6 MONTHS**

- Prevent the vehicle from rolling away.
- Release the parking and service brakes.
- See workshop manual ECO Disc for information on how to remove the brake pads. The service brake and spring actuator must be released.
- With a vernier gauge, measure the diameter of the concentric pin on the two tappets. When it reaches a minimum of 8 mm, change the tappets.
- With a vernier gauge, measure the diameter of the two tappet locating holes. When it reaches a maximum of 14 mm, swap the inner and outer brake pads before changing the brake pads.
- To change the tappets, see workshop manual ECO Disc.

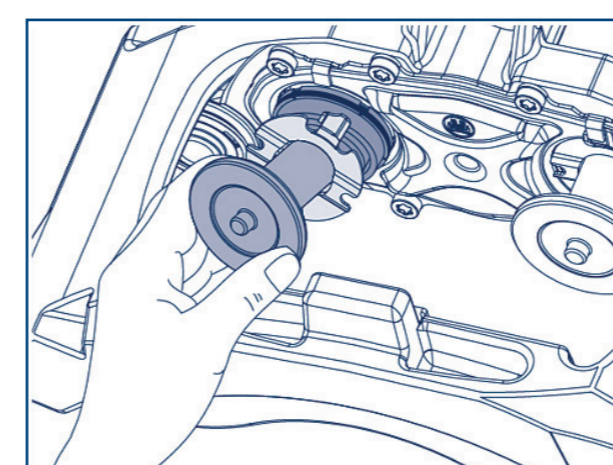
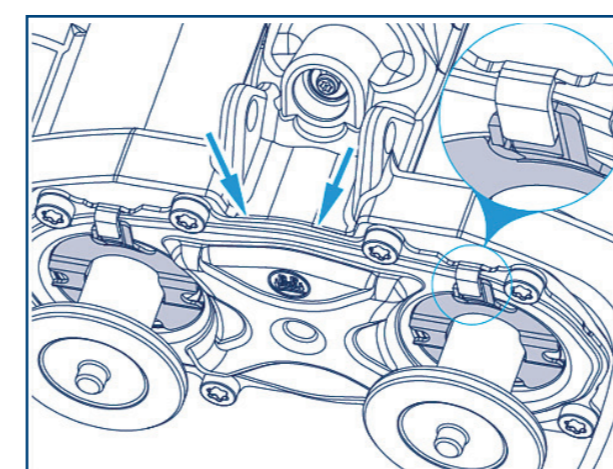
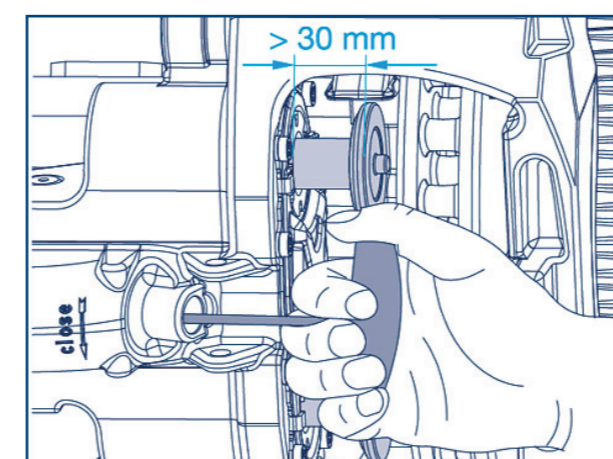


- Unscrew the tappets beyond the adjuster (min. 30 mm) until the coarse dirt seals are plainly visible. Ensure proper seating (visual inspection).

**NOTE:**

Penetrating dirt and damp cause corrosion and affect the operation of the clamping mechanism and adjustment.

- The bellows must be replaced if excessive heat damage or perishing is detected.
- Only BPW genuine parts should be used.
- The adjustment device must be checked for corrosion and ease of movement before new parts are installed.
- See workshop manual ECO Disc for information on how to replace the bellows.



## BRAKE PAD EDGE DEGRADATION

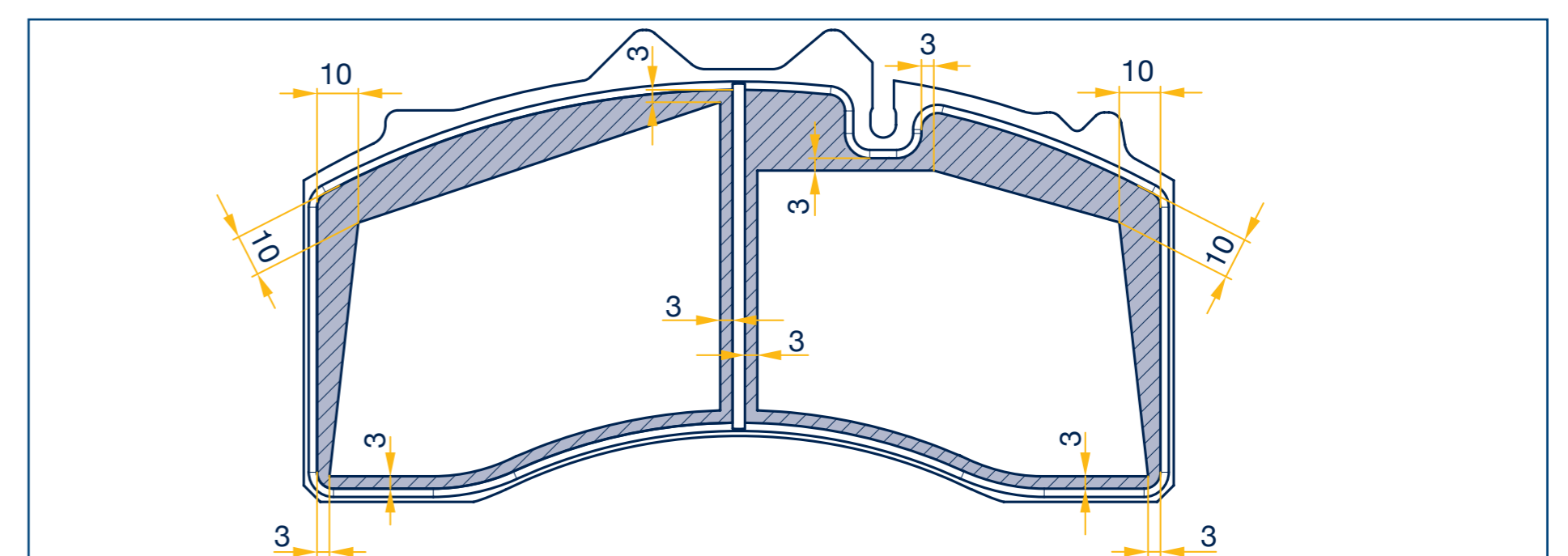
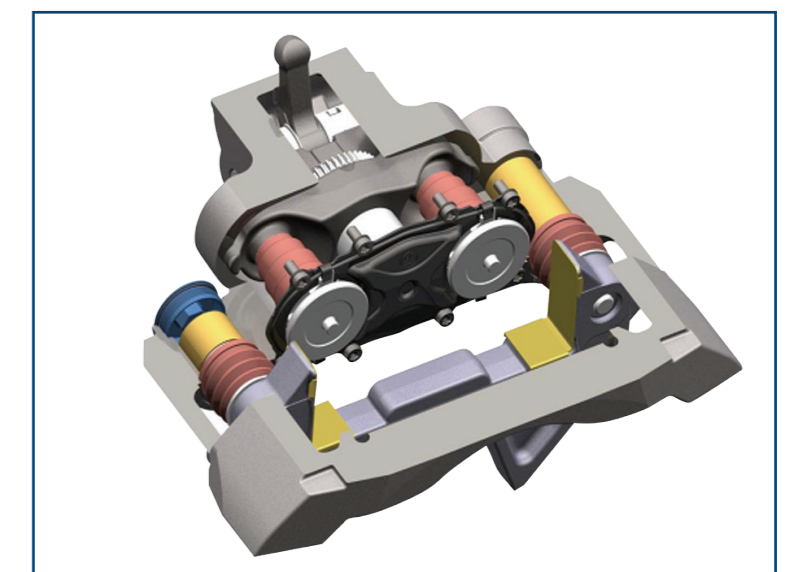


Figure 1: Permissible areas for edge ruptures are marked, but must be no more than 10% of the lining surface.

Some edge degradation on the brake pads is allowable, however the pads must be renewed if this exceeds the limits shown in the diagram (above) or accounts for more than 10% of the pad surface.

Edge degradation can be caused by the 'washing effect' that the front and lower edges of the brake pad are subject to during operation. Where this degradation is considered to be a problem, the effect can be minimised by the fitting of covers.

**THE MINIMUM WEAR THICKNESS FOR THE BRAKE PAD IS 5 MM.**



**IMPORTANT: THE TSB CALIPER IS NOT INTERCHANGEABLE WITH THE TS2 CALIPER.**

FOR MORE DETAILED INFORMATION PLEASE REFER TO THE BPW MAINTENANCE INSTRUCTION BOOK WHICH IS AVAILABLE TO DOWNLOAD: <https://www.bpw.co.za/support-service/support-downloads/workshop-manuals>

