

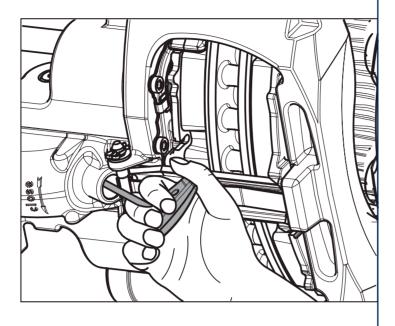
## WORKSHOP SERVICE GUIDE

# ECO DSC TSB Caliper

## SET PLAY & CHECK ADJUSTMENT

#### 1. Remove the plug.

- 2. Using a torgue 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. Forcefully 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.

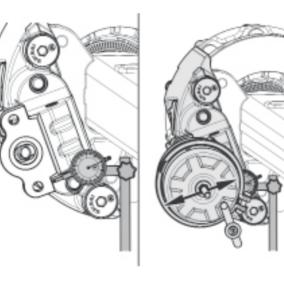


## CHECK CALIPER BEARING PLAY

#### WE RECOMMEND THIS INSPECTION IS CARRIED OUT 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 long guide pin bearing on the lower edge of the cylinder mounting flange (see the picture).

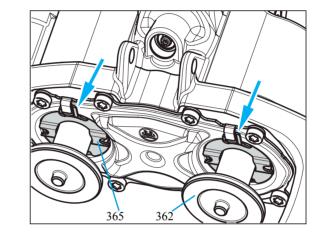
Move the brake caliper from side to side radially from the centre of the axle (see the picture) and measure the total displacement. If the total amount measured on the gauge exceeds 1.5 mm then the caliper guide pins and bushes must be replaced.



#### CHECK COURSES DIRT SEALS AT THE TAPPETS

At every brake lining replacement, latest annually in Europe - every six months in use outside of Europe.

- \* Prevent the vehicle from rolling away.
- Release the service and parking brakes.
- \* See workshop manual ECO Disc for information on how to remove the brake pads. The service brake and spring actuator must be released.
- \* Unscew the tappets (362) beyond the adjuster (min 30mm) until the coarse dirt seals (365) are plainly visible.
- \* Ensure proper seating (visual inspection).



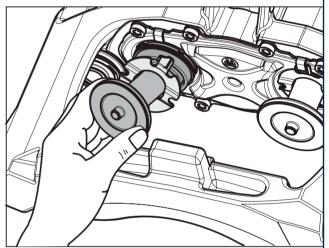
#### Repair quide:

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

30 mm

- \* 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 the new parts are installed.

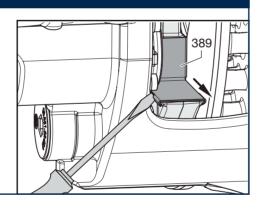
See workshop manual ECO Disc for information on how to replace the bellows.



## WEAR SHIMS

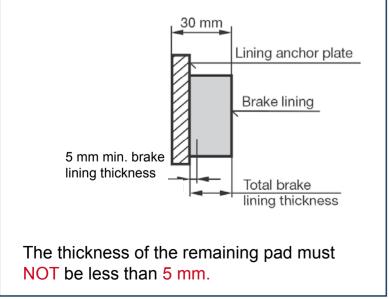
When removing or replacing the brake pads it is important to follow the instruction below.

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



#### **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.



## CONDITION OF THE BRAKE DISC

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 45 mm wearing edge 37 mm instruction is 30 mm 4 mm not adhered to, there is a danger that braking performance could be seriously reduced.

### BRAKE PAD EDGE DEGRADATION

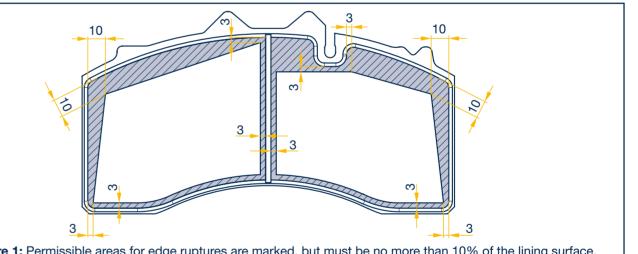


Figure 1: Permissible areas for edge ruptures are marked, but must be no more than 10% of the lining surface.

Some edge degradation on the brake pads is allowable, however the pad 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. Please contact BPW Customer Services Department for advice -

0116 281 6199.

Covers can be installed during routine servicing or inspection of the disc brakes. The minimum wear thickness for the brake pad is 5 mm.

FOR MORE DETAILED INFORMATION PLEASE REFER TO THE BPW MAINTENANCE INSTRUCTION BOOK WHICH IS AVAILABLE FOR DOWNLOAD: http://www.bpw.co.uk/technical.htm

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