

Subject Adjustment of headheight for PW2000 produced for Halm and other potential users of 0,2 – 0,3mm plates.	Instruction no.:	10049089
	QC-note no.:	
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1.0 Scope:

Adjustment of headheight for PW2000 for printing on 0,2 – 0,3mm plates especially Halm.

2.0 Extent and limitation:

After adjusting the headheight it is necessary to perform a bidirectional adjustment as well. This is not possible in the production as the printer has not been charged with ink. This procedure therefore is the responsibility of the technician who installs the printer.

3.0 Responsibility: Production

4.0 References: Epson Service Manual

5.0 Definitions:

6.0 Instruction:

General precatations:

- When adjusting head height using feeler gauges, be extremely careful not to scratch the head faceplate with the tip of the gauge.
- Make sure that oil or other residues are wiped off the gauges as not to contaminate the head.
- Always check the platen gap by inspecting the position of the “Bushing Shaft Rear” ‘sprocket’. The PG is not constant set neither when powering off nor at power on.

6.1 Power printer off and remove any plates from the printer.

Open the top cover and put a suitable object e.g. paperpiece into the top cover sensor slot to keep the sensor turned on.



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Power printer on in “maintenance mode 2”. The maintenance mode 2 is selected by switching power ON while pushing the:
[Paper Source (◀)], [Paper Feed (▲)], [Paper Feed (▼)] buttons.

Loosen the two screws that secure the “Bushing Shaft Rear”

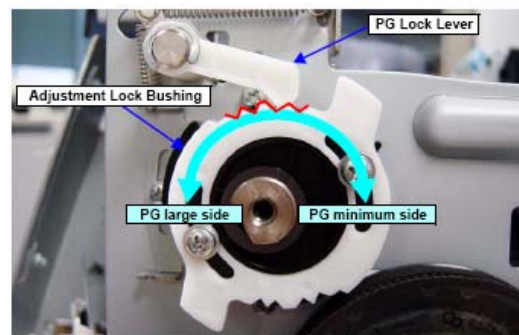
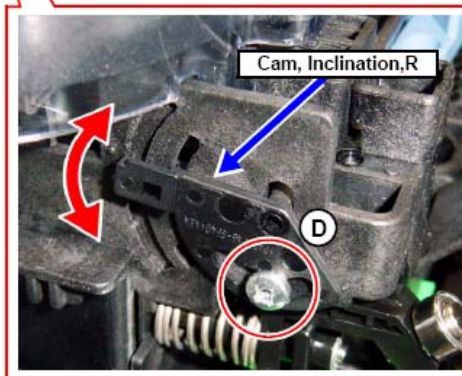
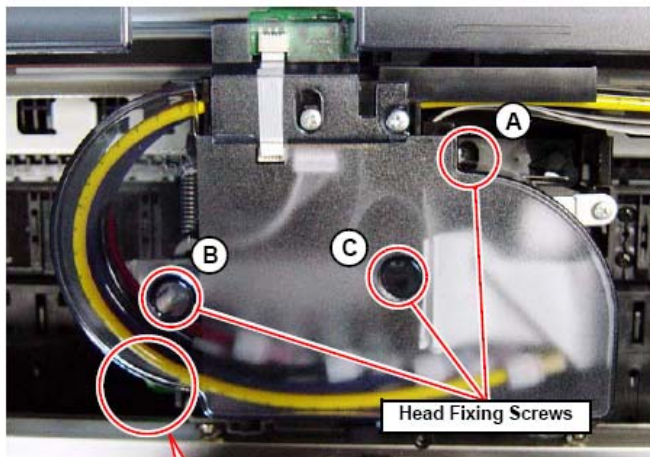


Figure 2-23. PG Setting Positions

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Loosen the 4 screws: A, B, C, D.



Select "SELF TESTING" -> "Adjustment" -> "PG Adj"

Select "Start"

Wait until printer has initialized and detected origin.

The display shows "PG Offset *XX", XX is the actual working setting.

Unlock the head and move it out so that the head height can be measured from the printing plane.

Make sure the paper release lever is in the position "secured". The lever is moved towards the front of the printer with the operator panel.

If the lever is not in the right position or if the printer cannot initialize the error message

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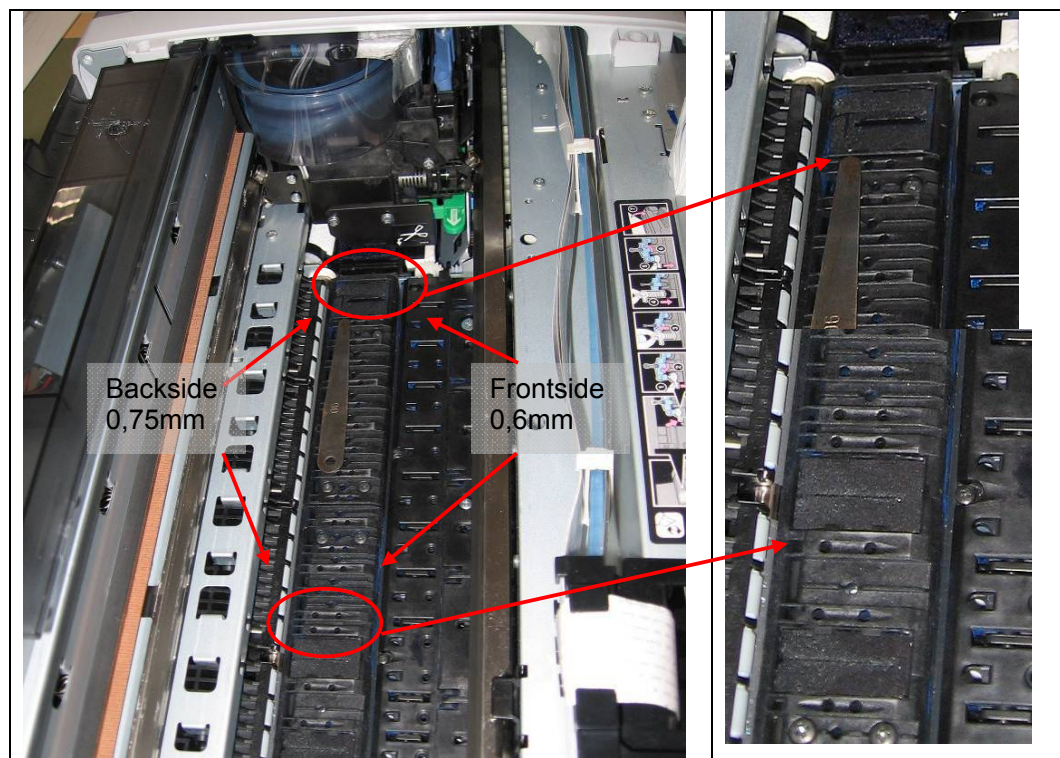
“Can’t exe” is displayed. If the reason cannot be found then try to start the printer in normal user mode: Power the printer off and on again using only the power button. In this case a more explaining error message is normally displayed.

Adjust the head height. By pressing the arrow up (▲) the height is increased. Note that the height can only be adjusted upwards. To decrease the height press arrow left (◀) and enter the “PG Adj.” menu again. This will reset the head height to the lowest possible again.

Adjust the angle of the head by moving the “Lever, Cam”.

Head height and angle should be adjusted in such a way that the distance at the back of the head to the printing plane is 0,75mm and the distance 0,6mm at the front. The feeler gauge blade should have total clearance i.e. not touching the head at all.

Measure exactly at the 4 points as marked on this picture.



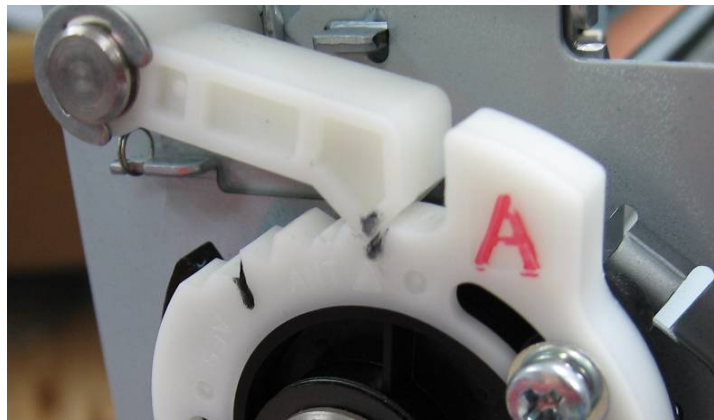
Note that by adjusting angle and head height it is possible to make the head rest on the printing plane! Always adjust the head height before so that the head is not resting

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on the printing plane!

Finalize the PG Adj. by pressing the arrow right / enter button. Display shows “Updating Param.”

Rotate the “Bushing Shaft Rear” manually so the “PG lock lever” matches the 0,7 mm setting. This setting is normally marked with a black dot. Then tighten the two screws.

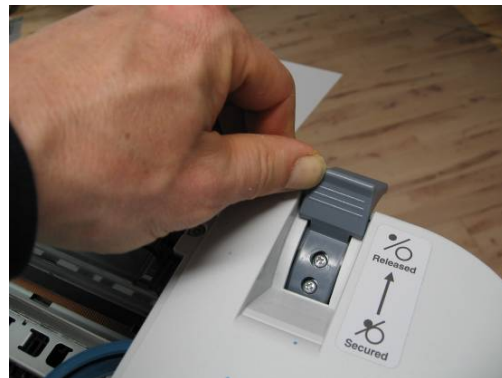


Finalize the head angle adjustment by tightening screws in order: D then A → B → C.

Note that the lever cam which is secured by the screw A sometimes moves very easily by itself, when the head is pushed or when tightening screw D.

Move the Carriage Unit to the home position.

Lift the paper release lever and release it again. (This will disengage the stepmotor so that the Bushing shaft can be manually turned.)



Wait until the printer stops, then power the printer off.

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Additional checking adjustment of headheight :

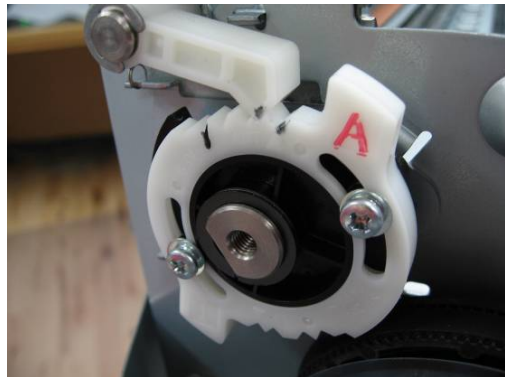
1. Check head height on the highest point of the printing plane by feeler gauges following way :
 - 0.75mm at the back and 0.6mm at the front of the head to the printing plane are not touching the head at all.
 - 0.8mm at the back and 0.65mm at the front of the head to the printing plane are touching very slightly the head – PERFECT ADJUSTMENT.
 - 0.85mm at the back and 0.7mm at the front of the head to the printing plane are touching very slightly the head – GOOD ADJUSTMENT.

2. If are not fulfilled criteria mentioned in previous point then repeat adjustment from item 6.1.

6.2 Load a 0,3 mm plate manually.

Carefully rotate the “Bushing Shaft Rear” so that it aligns with the 1,2 mm notch. This is the first notch after the 0,7mm notch mark.

Take care not to touch the encoder wheel!



Check that there is minimum 0,2 mm gap between the plate and the head. Especially at the back of the head. Also check at the middle and right side of the printer. Be careful not to press too hard on the feeler gauge as this will bend the plate.

7.0 Documentation:

None

7.1