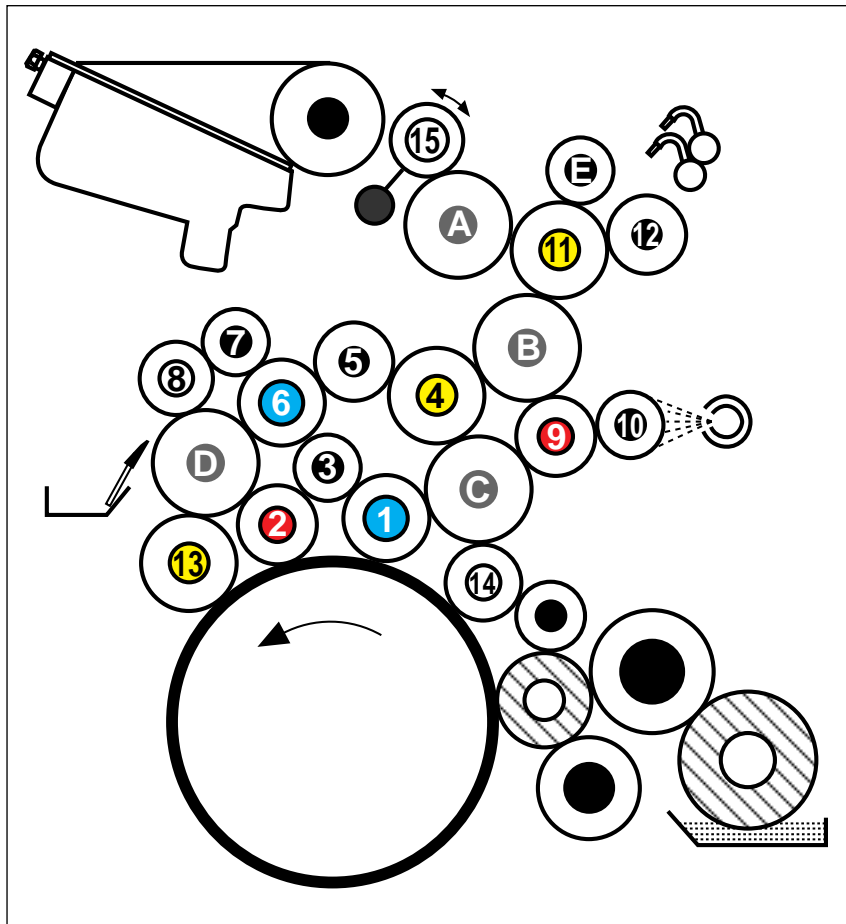


Heidelberg Speedmaster 102

Inserting and adjusting inking system



On all adjustments clockwise more contact.

Inserting and adjusting:

1. step: Insert rollers 1-12, put ink (yellow) on the rollers and let it distribute.

2. step: Adjust 1 to C = 4 mm, 2 to D = 4mm. Insert rollers 13 and 14 and adjust 13 to D = 4mm, 14 to C = 4 mm.

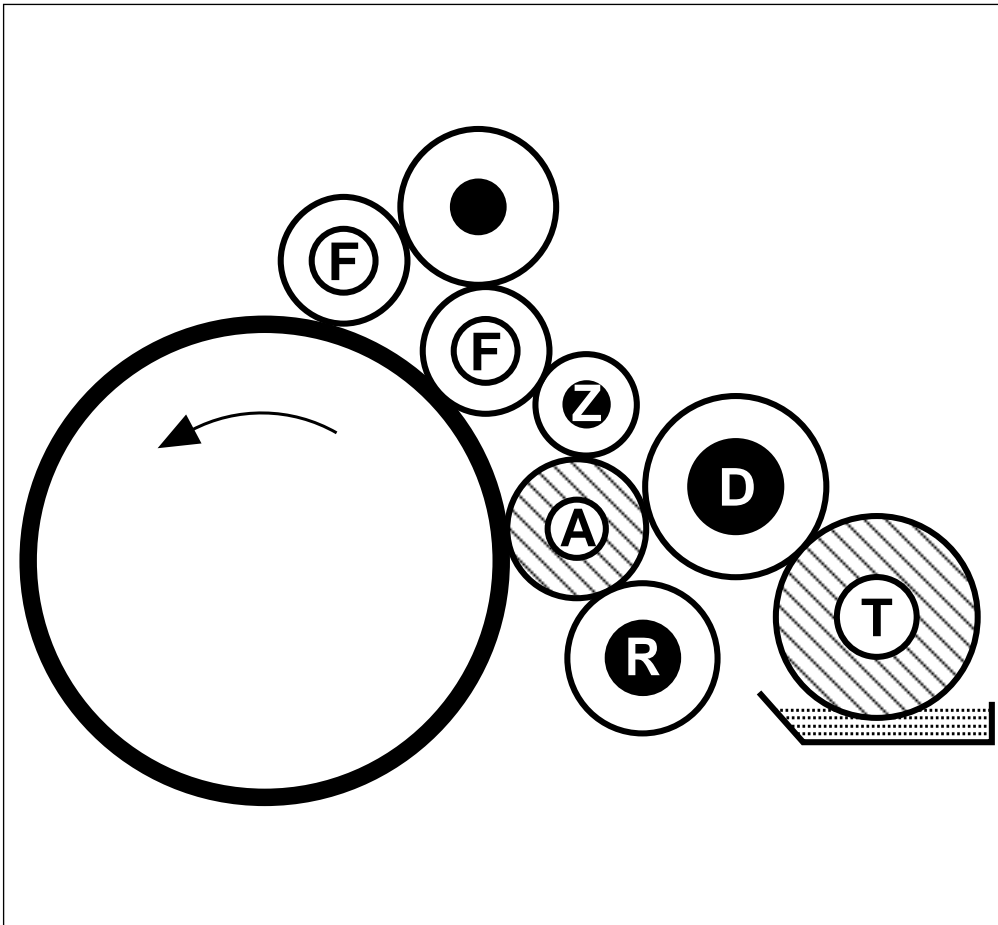
Rollers 3 - 8 need no adjustment.

3. step: Adjust 9 to B = 4 mm and 10 to 9 = 4-5 mm, then adjust 12 to 11 = 4-5 mm and put E on contact to 11.

4. step: Insert roller 15 and adjust 15 to duct = 4 mm, then 15 to A = 4 mm (spring tension, adjustable if needed).

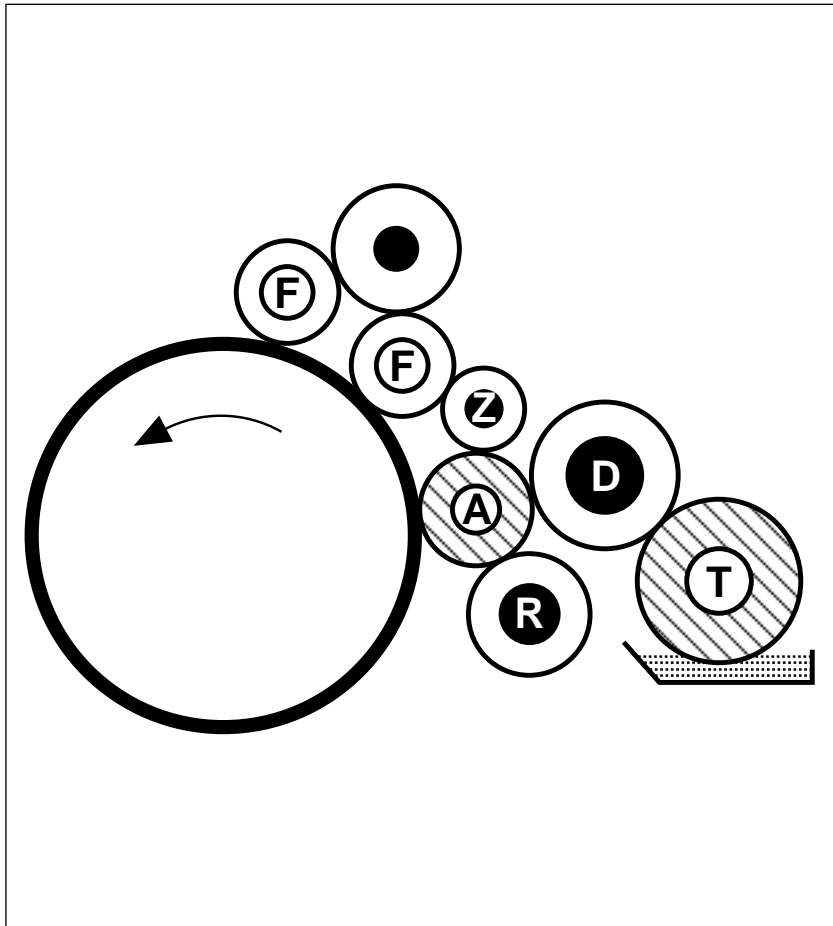
5. step: Adjust ink form rollers to the plate. Ink form rollers to plate = 3-4 mm. (diagonal register on 0.00 mm)

Heidelberg Speedmaster Alcolor dampening system



- T** Water pan roller
(rubber, crown ground)
- D** Metering roller
(chromium-plated)
- Z** Intermediate roller
(Rilsan)
- A** Dampening form roller
(rubber)
- R** Dampening distributor
cylinder
(chromium-plated,
not removeable)
- F** 1. and 2. ink form roller

Heidelberg Speedmaster 102 Alcolor dampening system (Vario) 5.98

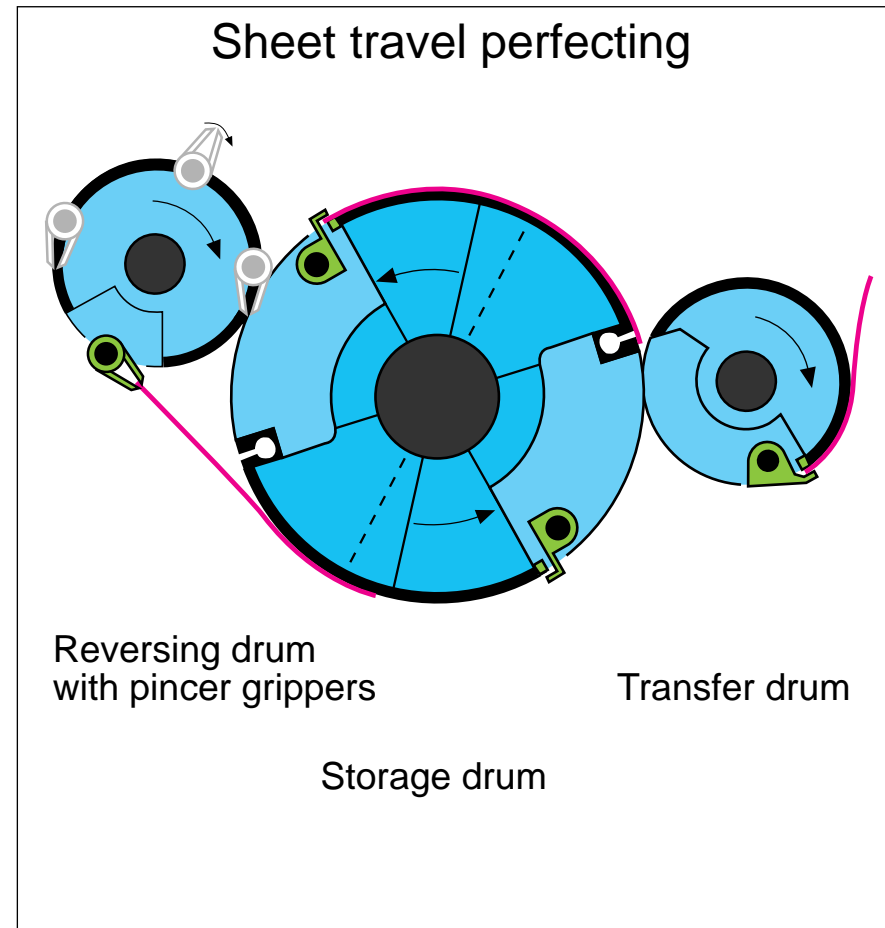
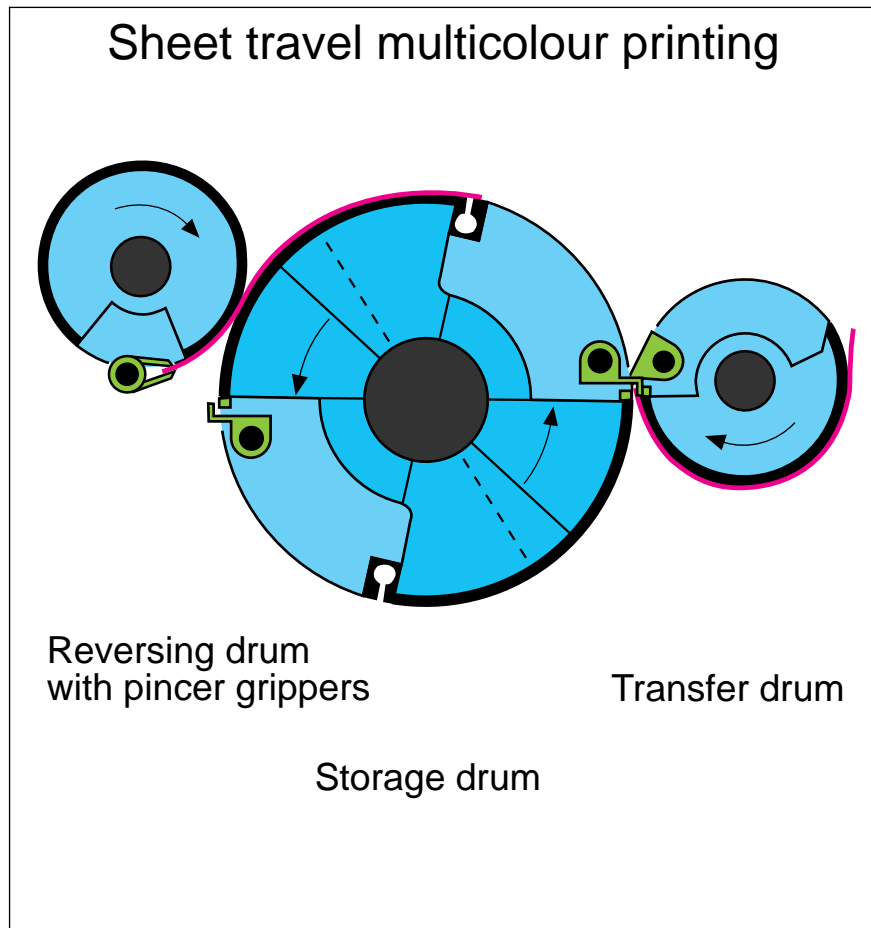


The adjustment of the Alcolor has to be done by means of two paper slips, O.S. and D.S. a broad slip to the rubber roller and a narrow slip as a feeler gauge to the steel roller. Turn all adjustment screws only clockwise in order to eliminate the slackness of the screws.

- ink form rollers are adjusted
- plate on the plate cylinder
- diagonal register zero
- no separation activated
- vario off

- step 1:** Insert **A**. Adjust **A to R** with paper slips O.S. and D.S. ,after parallel light contact + 1 1/2 turns (V. 2 5) clockwise. check adjustment later with ink. **A to R = 6 mm.** (For Vario 8mm)
- step 2:** Adjust **A to the plate** with paper slips on contact, check later with ink **A to the plate = 5 mm.**
- step 3:** Engage **F** and **A** to the plate, now **insert Z**. Adjust **Z to A** with paper slips on light contact + 1/2 turn clockwise (3-4 mm) and lock counter nuts.
- step 4:** **F** and **A** engaged to the plate, turn the spring rods to the stops + 1/2 turn and counter lock, then disengage **F** and **A** from the plate.
- step 5:** **Insert D and T plus water pan.** Adjust **D to T** on light contact + 1/2 turn clockwise and counter lock (fine adjustment if necessary when starting production).
- step 6:** Adjust **D to A** on light contact + 1 1/2 turns (check with ink = 6 mm).
- step 7:** Check first ink form roller (**F**) and **A** to the plate. If the intermediate roller (**Z**) has been engaged or disengaged from the inking unit, check the first ink form roller again.

Perfecting Device for Convertible Heidelberger Offset Presses



Perfecting Device for Convertible Heidelberg Offset Presses

All Heidelberg multicolour presses, with exception of the Quickmaster and S-Offset, can on request, be equipped with one or two perfecting devices, depending on the press type, between the individual printing units. This permits simultaneous printing of both the front and reverse side of the sheet in one pass. The continuous development on convertible Heidelberg offset presses permits up to five colours in one pass on both sheet sides.

Sheet travel in multicolour printing

In multicolour straight printing and in perfecting, the sheet is taken up by the first transfer drum after printing and is passed on the double-diameter storage drum. This storage drum is equipped with two gripper systems. In multicolour printing the storage drum transfers the sheet by the front edge to the pincer grippers of the third drum (reversing drum). This, in turn, transfers it to the grippers of the impression cylinder of the next printing unit. All grippers pick up the sheet only by the front edge (leading).

Sheet travel in perfecting

As in straight printing the sheet is taken up after printing by the grippers of the first transfer drum and passed with the front edge in the grippers of the storage drum. The front edge of the sheet is not passed on the pincer grippers of the storage drum but is fed past the reversing drum until the sheet end is picked up by the pincer grippers. While the pincer grippers revolve by 180°, the storage drum grippers let go of the sheet leading edge. The pincer grippers now pass the reversed sheet by its original tail edge to the next impression cylinder to be printed on the reverse side. The double-diameter storage drum has, at each trailing edge, a bar with eccentric turning suckers. These pull the sheet smooth in a circumferential and in a lateral direction, to ensure that originally wavy stock lies flat on the storage drum before being reversed and transferred to the next printing unit in perfect register. In the case of narrow sheet sizes, suckers of the storage drum, not needed are to be switched off. The gap between impression cylinder and transfer drum can be altered by changing the packing height below the Superblue base blanket, or the alternative available structure chrome jacket.

Measuring method blanket and plate cylinder

Measuring plate and blanket underlay height

For exact measurement of both plate and blanket packing on the press, a special packing gauge is available. Such a packing gauge can be supplied as accessory equipment under parts number:

Packing gauge 09.465.000/1 K1 (metric system)
Packing gauge 09.465.100/1 K1 (inch system)

Measuring method blanket cylinder

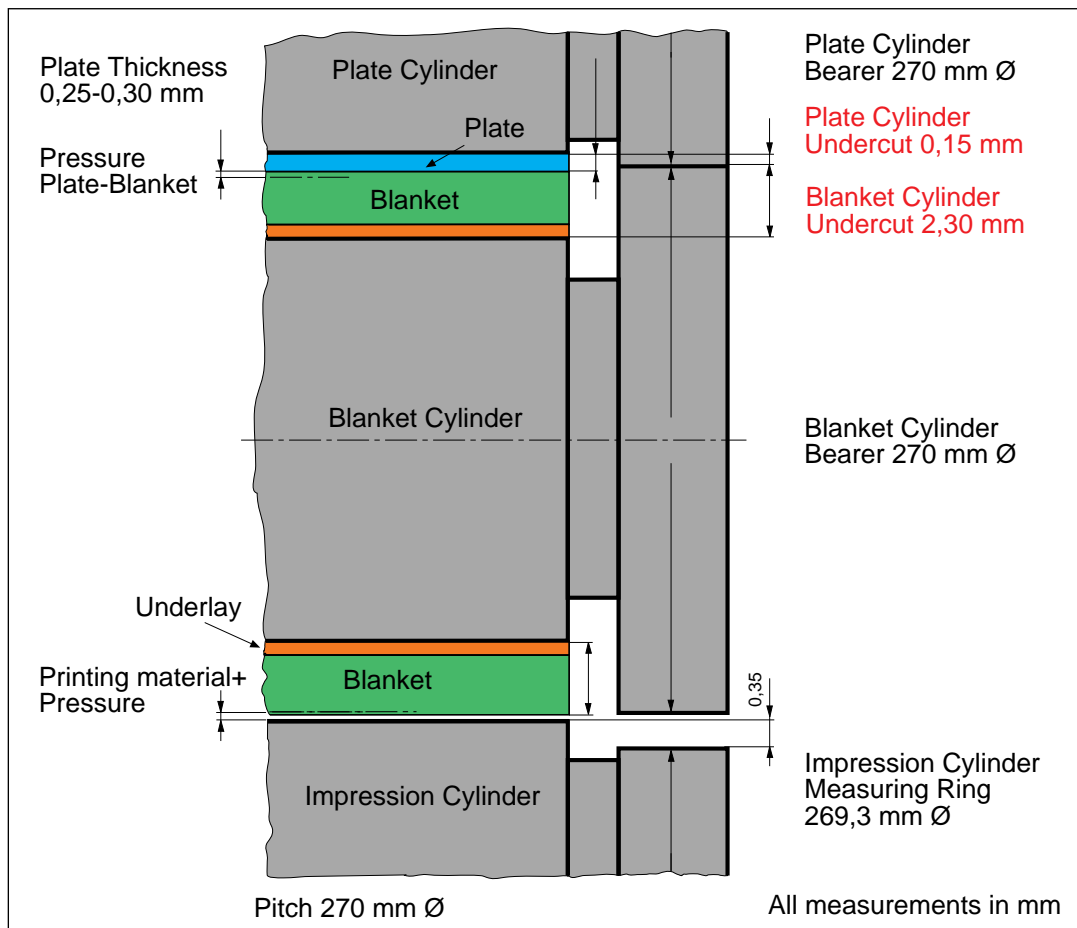
After mounting and tightening the blanket, the press should run on impression a short time as rubber blankets have the tendency to settle somewhat, the blanket must be re-tightened. To provide a more suitable surface for the gauge to slide on, a sheet of paper is first placed on the blanket, extending onto the cylinder bearers. The packing gauge must be placed onto the blanket cylinder parallel with the cylinder shaft, until the indicator pin of the exterior dial rests on the cylinder bearer. After the gauge is seated correctly on the cylinder, the three dials are turned to read "0". The gauge is then moved sideward until the indicator pin is positioned on the blanket surface.

Care must be taken that the dials immediately beside the red button have to indicate "0" again, otherwise the gauge was tilted or edged. The exterior dial will now show the packing height of the blanket in comparison to the bearers. After a few hundred impressions, the blanket must be retightened and its height rechecked. The reading on the dial could vary from the last result, in this case the packing must be increased if necessary.

Measuring method plate cylinder

The measuring method for the packing height of the plate cylinder is similar to the method of the blanket cylinder. A sheet of paper should be placed on the plate also to avoid damage to the plate surface. Retightening of the plate is not necessary. To make the reading more easy place the sheet of paper underneath the last ink form roller and engage the ink form rollers onto the plate. The sheet does not displace anymore.

Heidelberg Speedmaster SM 102 Cylinder Packings Autoplate



Calculation:

Plate thickness	+ 0,27 mm
Plate cylinder undercut	- 0,15 mm
<hr/>	
Plate above bearer	+ 0,12 mm

Blanket	+ 1,95 mm
Underlays	+ 0,35 mm
Blanket cylinder undercut	- 2,30 mm
<hr/>	
Blanket bearer height	0,00 mm

Plate above bearer	+ 0,12 mm
Blanket bearer height	0,00 mm
<hr/>	
Pressure plate-blanket	+ 0,12 mm

Blanket bearer height	0,00 mm
Printing material	+ 0,10 mm
Adjustment on the scale	+ 0,00 mm
<hr/>	
Pressure	+ 0,10 mm