

## **Head Alignment**

Proper alignment of the print heads is essential for printing quality models. You should check the alignment of the print heads...

- once a month.
- after replacing one or more heads.
- if model quality is not acceptable even after running the Head Cleaning wizard.

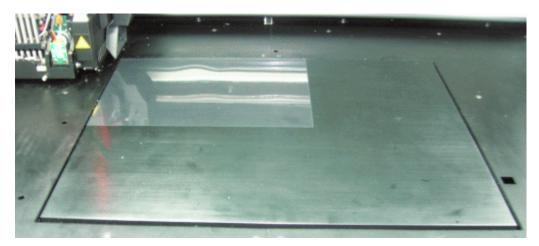
This procedure takes about 20 minutes. Before beginning, prepare:

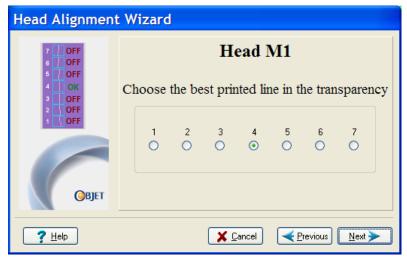
- a transparency sheet, A-4 or Letter size
- any type of sticky tape, to fasten the transparency sheet to the build tray



**Placing the Transparency on the Tray** 

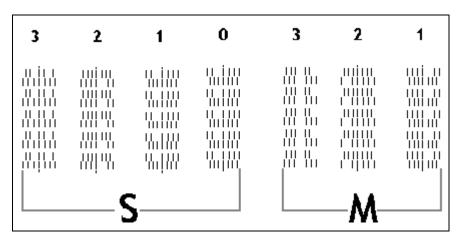
Make sure that the transparency sheet is lying flat, and tape it to the tray.





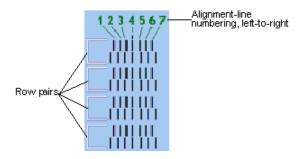
## **Inspecting the Transparency**

The transparency sheet is printed with sets of vertical lines in seven columns, each showing the results from a different print head.



- The three columns on the right were printed by the heads used for applying model material when producing models. From right to left, the columns represent heads M1, M2, M3, respectively. (There is no column for head M0 because its alignment is used as a reference for aligning all other heads(.
- The four columns of lines on the left were printed by the heads used for applying support material. The columns represent heads S3, S2, S1 and S0, respectively.

For each column of lines, use a magnifying glass or loupe to inspect pairs of consecutive rows printed on the transparency to see where the vertical lines align.



**Note**: It does not matter which pair of lines you inspect, since they were all printed by the same head. Choose a pair of clearly printed lines for the inspection. (Since some nozzles may not print clearly, you may have to inspect several pairs of lines to properly evaluate the alignment(.

Optimum head alignment is shown when the fourth lines in the upper and lower rows are aligned, as in the figure above. In the example shown, no change to the head alignment is necessary. If other lines in the set are aligned, you need to change the alignment of that head.

In the head-alignment screen, select the number that indicates which lines align in the upper and lower rows of a pair on the transparency (counting from the left) for this print head.

**Note**: Because the alignment of the fourth lines is optimum, the number "4" is selected, by default, in the wizard screen. This does not change the head alignment. If you select other numbers, the wizard adjusts the head alignment, accordingly.



## **Updating System Parameters**

- To make the alignment changes in the printer, make sure that Yes is selected, and click Next.
- To recheck the alignment test results before making the alignment changes in the printer, click **Previous**.
- If you do not want to make alignment changes in the printer at this time, select No and click Next.



## **Repeating the Test**

• If the most closely aligned vertical lines for a print head were at either extreme - the first or seventh lines -choose **Yes** to run the head-alignment wizard again.

The transparency test will show if the heads are now properly aligned. If necessary, you can "fine tune" the alignment .

If the vertical lines for the print heads were not aligned at either extreme, choose **No** to close the wizard.