Checking the Print Head Nozzles

If you find that the printout is unexpectedly faint or that dots are missing, you may be able to identify the problem by checking the print head nozzles.

You can check the print head nozzles from your computer by using the Nozzle Check utility or from the product by using the buttons.

Using the Nozzle Check utility for Windows

Follow the steps below to use the Nozzle Check utility.

- 1 Make sure that no warnings or errors are indicated in the control panel.
- Make sure that A4-size paper is loaded in the rear paper feed.
- Right-click the product icon on the taskbar, then select **Nozzle Check**.

If the product icon does not appear, refer to the following section to add the icon.

- → "From the shortcut icon on the taskbar" on page 27
- Follow the on-screen instructions.

Using the Nozzle Check utility for Mac OS X

Follow the steps below to use the Nozzle Check utility.

- Make sure that no warnings or errors are indicated in the control panel.
- Make sure that A4-size paper is loaded in the rear paper feed.
- Access the Epson Printer Utility 4.

 → "Accessing the printer driver for Mac OS X" on page 27
- Click the **Nozzle Check** icon.
- Follow the on-screen instructions.

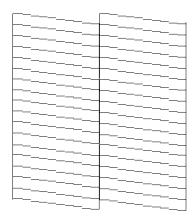
Using the control panel

Follow the steps below to check the print head nozzles using the product control panel.

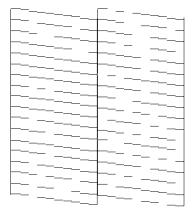
- Make sure that no warnings or errors are indicated in the control panel.
- Make sure that A4-size paper is loaded in the rear paper feed.
- 3 Press **₹** to display the menus.
- Select Maintenance.
- Select **Nozzle Check** and follow the instructions in the LCD screen to print a nozzle check pattern.

Below are two sample nozzle check patterns.

Compare the quality of the printed check page with the sample shown below. If there are no print quality problems, such as gaps or missing segments in the test lines, the print head is fine.



If any segment of the printed lines is missing, as shown below, this could mean a clogged ink nozzle or a misaligned print head.



- → "Cleaning the Print Head" on page 67
- → "Aligning the Print Head" on page 68

Cleaning the Print Head

If you find that the printout is unexpectedly faint or that dots are missing, you may be able to solve these problems by cleaning the print head, which ensures that the nozzles are delivering ink properly.

You can clean the print head from your computer using the Head Cleaning utility in the printer driver or from the product by using the buttons.



Important:

Do not open the scanner unit or turn off the product during head cleaning. If the head cleaning is incomplete, you may not be able to print.

Note:

- ☐ Because print head cleaning uses some ink, clean the print head only if quality declines; for example, if the printout is blurry or scuffed.
- ☐ *Use the Nozzle Check utility first to confirm that the print head needs to be cleaned. This saves ink.*
- ☐ When ink is low you may not be able to clean the print head. Refill the ink tank first.
- ☐ If print quality has not improved after repeating this procedure about three times, use the Power Ink Flushing utility.
 - **→** "Replacing Ink inside the Ink Tube" on page 70
- To maintain print quality, we recommend printing a few pages on a regular basis.

Using the Head Cleaning utility for Windows

Follow the steps below to clean the print head using the Head Cleaning utility.

- Make sure that the transportation lock is set to the unlocked (Printing) position.
- Make sure that no warnings or errors are indicated in the control panel.
- Right-click the product icon on the taskbar, then select **Head Cleaning**.

If the product icon does not appear, refer to the following section to add the icon.

- → "From the shortcut icon on the taskbar" on page 27
- Follow the on-screen instructions.

Using the Head Cleaning utility for Mac OS X

Follow the steps below to clean the print head using the Head Cleaning utility.

Make sure that the transportation lock is set to the unlocked (Printing) position.

- Make sure that no warnings or errors are indicated in the control panel.
- Access the Epson Printer Utility 4.

 → "Accessing the printer driver for Mac OS X" on page 27
- Click the **Head Cleaning** icon.
- Follow the on-screen instructions.

Using the control panel

Follow the steps below to clean the print head using the product control panel.

- Make sure that the transportation lock is set to the unlocked (Printing) position.
- Make sure that no warnings or errors are indicated in the control panel.
- Press **₹** to display the menus.
- A Select Maintenance.
- Select Head Cleaning.
- Follow the instructions on the LCD screen to continue.

Aligning the Print Head

If you notice a misalignment of vertical lines or horizontal banding, you may be able to solve this problem by using the Print Head Alignment utility in your printer driver or by using the product buttons.

Refer to the appropriate section below.

Note:

Do not press ♥ to cancel printing while printing a test pattern with the Print Head Alignment utility.

Using the Print Head Alignment utility for Windows

Follow the steps below to align the print head using the Print Head Alignment utility.

Make sure that no warnings or errors are indicated in the control panel.

- Make sure A4-size paper is loaded in the rear paper feed.
- Right-click the product icon on the taskbar, then select **Print Head Alignment**.

If the product icon does not appear, refer to the following section to add the icon.

- → "From the shortcut icon on the taskbar" on page 27
- Follow the on-screen instructions to align the print head.

Using the Print Head Alignment utility for Mac OS X

Follow the steps below to align the print head using the Print Head Alignment utility.

- Make sure that no warnings or errors are indicated in the control panel.
- Make sure A4-size paper is loaded in the rear paper feed.
- Access the Epson Printer Utility 4.

 → "Accessing the printer driver for Mac OS X" on page 27
- Click the **Print Head Alignment** icon.
- Follow the on-screen instructions to align the print head.

Using the control panel

Follow the steps below to align the print head using the product control panel.

- 1 Make sure that no warnings or errors are indicated in the control panel.
- Make sure that A4-size paper is loaded in the rear paper feed.
- Press Æ to display the menus.
- Select Maintenance.
- Select **Head Alignment** and follow the instructions in the LCD screen to print the patterns.

Find the most solid pattern in each of #1 to #4 groups.



- Enter the pattern number for the most solid pattern in #1 group.
- Repeat step 7 for the other groups (#2 to #4).
- Finish aligning the print head.

Replacing Ink inside the Ink Tube

If print quality has not improved even after running Head Cleaning several times, you may need to replace the ink inside the ink tube to solve the problem.

The Power Ink Flushing utility allows you to replace all of the ink inside the ink tube.



Important:

This function consumes a lot of ink. Before using this function, make sure there is enough ink in the product's ink tank. *If there is not enough ink, refill the ink tank.*

Note:

- ☐ This function consumes a lot of ink. We only recommend using this function after running Head Cleaning several
- This function effects the service life of the ink pads. Ink pads reach their capacity earlier by running this function. Contact Epson Support to request replacement before the end of their service life. When the ink pads are at the end of their service life, the product stops and Epson support is required to continue printing.
- After using the Power Ink Flushing utility, run the nozzle check again and repeat head cleaning if necessary. If print quality has still not improved, turn the product off and wait for at least six hours. If you still cannot solve the problem after trying all of the methods above, contact Epson support.

Using the Power Ink Flushing utility for Windows

Follow the steps below to use the Power Ink Flushing utility.

- Make sure that the transportation lock is set to the unlocked (Printing) position.
- Make sure that no warnings or errors are indicated in the control panel.

- Access the printer driver.
 - → "Accessing the printer driver for Windows" on page 29
- Click the **Maintenance** tab, then click the **Power Ink Flushing** button.
- Follow the on-screen instructions.

Using the Power Ink Flushing utility for Mac OS X

Follow the steps below to use the Power Ink Flushing utility.

- Make sure that the transportation lock is set to the unlocked (Printing) position.
- Make sure that no warnings or errors are indicated in the control panel.
- Access the Epson Printer Utility 4.
 - → "Accessing the printer driver for Mac OS X" on page 30
- Click the **Power Ink Flushing** icon.
- Follow the on-screen instructions.

Using the control panel

Follow the steps below to use the Power Ink Flushing function.

- Make sure that the transportation lock is set to the unlocked (Printing) position.
- Make sure that no warnings or errors are indicated in the control panel.
- 3 Turn off the product.
- While holding down ⊗ and 3, press ७ to turn on the product.
- When the product turns on, release both the buttons.
- 6 Follow the instructions in the LCD screen.

Saving Power

The LCD screen turns black or turns off automatically if no operations are performed for a set period.

You can adjust the time before power management is applied. Any increase will affect the product's energy efficiency. Please consider the environment before making any change.

Follow the steps below to adjust the time.

For Windows

- 1 Access the printer settings.
 - → "Accessing the printer driver for Windows" on page 26
- Click the Maintenance tab, and then click the Printer and Option Information button.
- Select **Off**, **30 minutes**, **1 hour**, **2 hours**, **4 hours**, **8 hours**, or **12 hours** as the Power Off Timer setting. Then click the **Send** button.
- Select **3 minutes**, **5 minutes**, or **10 minutes** as the Sleep Timer setting. Then click the **Send** button.
- Click the **OK** button.

For Mac OS X

- Access the Epson Printer Utility 4.
 - → "Accessing the printer driver for Mac OS X" on page 27
- Click the **Printer Settings** button. The Printer Settings screen appears.
- Select Off, 30 minutes, 1 hour, 2 hours, 4 hours, 8 hours, or 12 hours as the Power Off Timer setting.
- Select **3 minutes**, **5 minutes**, or **10 minutes** as the Sleep Timer setting.
- Click the **Apply** button.

Using the control panel

- Select Maintenance.

- Select Power Off Timer.
- Select Off, 30minutes, 1h, 2h, 4h, 8h, or 12h.
- Select Sleep Timer.
- Select 3minutes, 5minutes, or 10minutes.

Checking the Number of Sheets of Paper Fed

You can check the number of sheets of paper fed from the printer driver.

Click the **Printer and Option Information** button on your printer driver's Maintenance window (for Windows) or on the Epson Printer Utility 4 (for Mac OS X).

Cleaning the Product

Cleaning the exterior of the product

To keep your product operating at its best, clean it thoroughly several times a year by using the following instructions.



Important:

Never use alcohol or thinner to clean the product. These chemicals can damage the product.

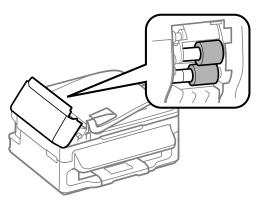
Note:

Close the paper support and the output tray when you are not using the product to protect the product from dust.

- ☐ Use a soft, dry, clean cloth to clean the LCD screen. Do not use liquid or chemical cleaners.
- Use a soft, dry, clean cloth to clean the surface of the scanner glass. If straight lines appear in the printout or the scanned data, clean the left side of the scanner glass carefully.



- If the glass surface is stained with grease or some other hard-to-remove material, use a small amount of glass cleaner and a soft cloth to remove it. Wipe off all remaining liquid.
- Open the ADF cover and use a soft, dry, clean cloth to clean the roller and the interior of the ADF.



- ☐ Do not press the surface of the scanner glass with any force.
- Be careful not to scratch or damage the surface of the scanner glass, and do not use a hard or abrasive brush to clean it. A damaged glass surface can decrease the scan quality.

Cleaning the interior of the product

To keep your print results at their best, clean the roller inside by using the following procedure.



Be careful not to touch the parts inside the product.

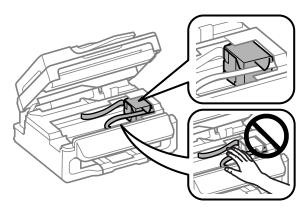
- 🚺 Important:
 - ☐ Be careful to keep water away from the electronic components.
 - □ *Do not spray the inside of the product with lubricants.*
 - Unsuitable oils can damage the mechanism. Contact your dealer or a qualified service person if lubrication is needed.
- Make sure that no warnings or errors are indicated in the control panel.
- Load several sheets of A4-size plain paper in the rear paper feed.
- Press ♦ to make a copy without placing a document on the scanner glass.
- Repeat step 4 until the paper is not smeared with ink.

Transporting the Product

If you move the product some distance, you need to prepare it for transportation in its original box or one of a similar size.

Important:

- When storing or transporting the product, avoid tilting it, placing it vertically, or turning it upside down; otherwise ink may leak.
- ☐ When storing or transporting the ink bottle after opening the sealed bottle, avoid temperature changes, impacts, shaking or tilting the bottle; otherwise ink may leak even if you tighten the cap on the bottle. Be sure to keep the ink bottle upright when tightening the cap, and take measures to prevent ink from leaking when you transport the bottle.
- Remove all paper from the rear paper feed and make sure the product is off.
- Close the paper support and the output tray.
- Open the scanner unit and make sure the print head is in the home position on the right.

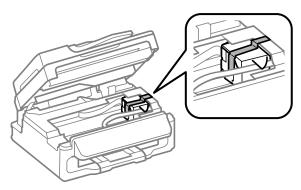


Note:

If the print head is not in the home position on the right, turn on the product and wait until the print head locks in the far right position. Then turn off the product.

Unplug the power cord from the outlet, then disconnect all cables from the product.

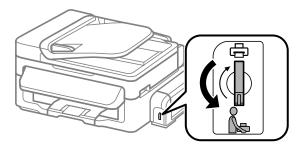
Secure the print head to the case with tape as shown, then close the scanner unit.



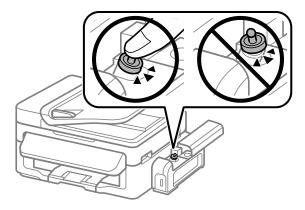
Note:

Do not place tape on the white flat cable inside the product.

6 Set the transportation lock to the locked (Transporting) position.



Make sure to install the cap onto the ink tank securely.



- Repack the product in the box, using the protective materials that came with it.
 - 🚺 Important:
 - ☐ Keep the product level during transport. Otherwise, ink may leak.
 - After you move it, remove the tape securing the print head, then set the transportation lock to the unlocked (Printing) position. If you notice a decline in print quality, run a cleaning cycle or align the print head.
 - ☐ Do not put opened ink bottles in the box with product.

Checking and Installing Your Software

Checking the software installed on your computer

To use the functions described in this User's Guide, you need to install the following software.

☐ Epson Driver and Utilities

☐ Epson Event Manager

Follow the steps below to check that the software is installed on your computer.

For Windows

Windows 7 and Vista: Click the start button and select Control Panel.

Windows XP: Click Start and select Control Panel.

Windows 7 and Vista: Click Uninstall a program from the Programs category.

Windows XP: Double-click the Add or Remove Programs icon.

3 Check the list of currently installed programs.

For Mac OS X

Double-click Macintosh HD.

Double-click the **Epson Software** folder in the Applications folder and check the contents.

Note:

- ☐ The Applications folder contains software provided by third parties.
- To check that the printer driver is installed, click **System Preferences** on the Apple menu and then click **Print & Scan** (for Mac OS X 10.7) or **Print & Fax** (for Mac OS X 10.6 or 10.5). Then locate your product in the Printers list box.

Installing the software

Insert the product software disk that came with your product and select the software you want to install on the Software Select screen.

Uninstalling Your Software

You may need to uninstall and then reinstall your software to solve certain problems or if you upgrade your operating system.

See the following section for information on determining what applications are installed.

→ "Checking the software installed on your computer" on page 77

For Windows

Note:

- ☐ For Windows 7 and Vista, you need an administrator account and password if you log on as a standard user.
- ☐ For Windows XP, you must log on to a Computer Administrator account.
- 1 Turn off the product.
- Disconnect the product's interface cable from your computer.
- 3 Do one of the following.

Windows 7 and Vista: Click the start button and select Control Panel.

Windows XP: Click Start and select Control Panel.

Do one of the following.

Windows 7 and Vista: Click Uninstall a program from the Programs category.

Windows XP: Double-click the Add or Remove Programs icon.

- Select the software you want to uninstall such as your product's driver and the application from the list displayed.
- Do one of the following.

Windows 7: Click Uninstall/Change or Uninstall.

Windows Vista: Click **Uninstall/Change** or **Uninstall**, and then click **Continue** in the User Account Control window.

Windows XP: Click Change/Remove or Remove.

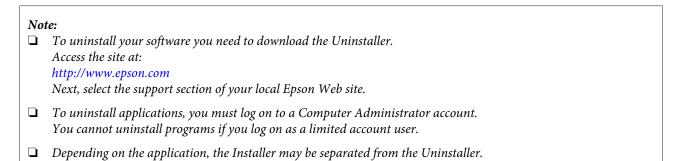
Note

If you chose to uninstall your product's printer driver in step 5, select the icon for your product and then click **OK**.

- When the confirmation window appears, click Yes or Next.
- Follow the on-screen instructions.

In some cases, a message may appear to prompt you to restart your computer. If so, make sure **I want to restart my computer now** is selected and click **Finish**.

For Mac OS X



- Quit all running applications.
- Double-click the **Uninstaller** icon in your Mac OS X hard drive.
- Select the check boxes for the software you want to uninstall, such as the printer driver and the application, from the list displayed.
- Click Uninstall.
- Follow the on-screen instructions.

If you cannot find the software you want to uninstall in the Uninstaller window, double-click the **Applications** folder in your Mac OS X hard drive, select the application you want to uninstall, and then drag it to the **Trash** icon.

Note:

If you uninstall the printer driver and the name of your product remains in the Print & Scan (for Mac OS X 10.7) or Print & Fax (for Mac OS X 10.6 or 10.5) window, select the name of your product and click the - **remove** button.