Printer Parts

Paper support

Edge guides

Photo viewer screen

Memory card light

Memory card slots

Output tray

External drive port for camera or optional Bluetooth Adapter

Handle

Power inlet

Cartridge release lever

USB port for computer

Photo cartridge

Cartridge door

Displays optional settings menu

Power light

On button

Photo viewer screen

Selects layout of photos

On

Borderless
Border
Wallet
Mini-wallet

Menu

Layout

Select All

OK

Cancel

Open

Opens the output tray

Selects all photos for printing

Selects a menu or setting

Move through menus options

Stops printing or cancels settings

Starts printing

Accessories

Optional accessory	Part number
Epson® Bluetooth® Photo Print Adapter	C12C824383
Carrying Case	PMBAG06

Printer Specifications

Printing

Printing method	On-demand ink jet
Nozzle configuration	90 nozzles × 4 Colors: Yellow, Magenta, Cyan, Black
Print direction	Bidirectional with logic seeking
Control code	EPSON ESC/P® raster

Paper

Note: Since the quality of any particular brand or type of paper may be changed by the manufacturer at any time, Epson cannot guarantee the quality of any non-Epson brand or type of paper.

(Included in PictureMate 200 Series Print Pack)

Size	4 × 6 inches
Paper type	PictureMate® Pal Photo Paper (glossy or matte) Epson Premium Photo Paper Glossy

Caution: Don't load plain paper; this may cause damage to PictureMate Pal. Do not load curled or folded paper.

Photo Cartridge

(Included in PictureMate 200 Series Print Pack)

Colors	Black, Cyan, Magenta, and Yellow
Cartridge life	6 months at 77 °F (25 °C) after installation; 2 years from production date
Temperature	Storage: –4 to 104 °F (–20 to 40 °C) 1 month at 104 °F (40 °C) Freezing*: 5 °F (–15 °C)

*   Ink thaws and is usable after approximately 3 hours at 77 °F (25 °C).

Caution: To ensure good results, use a genuine Epson PictureMate 200 Series photo cartridge and do not refill it. Other products may cause damage to your printer not covered by Epson's warranty.

Do not use a photo cartridge if the date on the package has expired.

Do not leave a photo cartridge or PictureMate Pal exposed to heat or direct sunlight.

Do not attempt to refill the photo cartridge. This could result in ink spills or other damage to PictureMate Pal not covered by Epson's warranty.

Mechanical

Paper path	Sheet feeder, top entry
Sheet feeder capacity	20 sheets
Dimensions	Storage Width: 8.5 inches (215 mm) Depth: 6.0 inches (152 mm) Height: 5.7 inches (145 mm) Printing (with paper support and output tray open) Width: 8.5 inches (215 mm) Depth: 13.3 inches (339 mm) Height: 10.3 inches (262 mm)
Weight	5.3 lb (2.4 kg) without photo cartridge or AC adapter
Printable area	Border printing: 0.12 inch (3 mm) margin on all sides of the paper Borderless printing: no margins

Electrical

	120 V Model	220 V Model
Input voltage range	110 to 120 V	220 to 240 V
Rated current	0.3 A (max. 0.4 A)	0.15 A (max. 0.3 A)
Power consumption (approximate)		
Printing	10.0 W	10 W
Sleep mode	4.0 W	4.0 W
Powered off	0.2 W	0.3 W

Note: Check the label on the bottom of PictureMate Pal for voltage information.

AC Adapter

Model	A381H
Rated voltage	AC 100 to 240 V
Input voltage range	AC 90 to 264 V
Rated frequency	50 to 60 Hz
Input frequency range	49.5 to 60.5 Hz
Rated current	0.4 to 0.8 A
Rated electrical power	40 to 42 W
Output	DC 20 V, 1.68 A

Environmental

Temperature	Operation: 50 to 95 °F (10 to 35 °C) Storage: –4 to 140 °F (–20 to 60 °C) 1 month at 104 °F (40 °C)
Humidity	Operation: 20 to 80% RH Storage (in shipping container): 5 to 85% RH (without condensation)

Memory Card Slots

Card slots	CF Type II card slot	Compatible with "CF+ and CompactFlash™ Specification 1.4"
	Sony Memory Stick®/ MemoryStick PRO™/ Duo (requires adapter) card slot	Compatible with "Memory Stick Standard version 1.3" Compatible with "Memory Stick Standard Memory Stick PRO Format Specifications version 1.0"
	SD™ (Secure Digital)/ MMC™ (MultiMediaCard™) card slot	Compatible with "SD Memory Card Specifications / PART1. Physical Layer Specification Version 2.0" Compatible with "MultiMediaCard Standard"
	xD-Picture Card™ slot	Compatible with "xD-Picture Card Card Specification Version 1.20 Type M Card/Type H Card"
Voltage requirements	3.3 V Maximum current is 500 mA	

Computer USB Interface

Connectivity	Universal Serial Bus Specifications Revision 2.0 Universal Serial Bus Specifications Revision 1.1
Bit rate	480 Mbps (High speed device)
Connector type	USB Series B
Data Encoding	NRZI
Recommended cable length	Less than 6 feet (1.8 meters)

External Device Interface

| Connectivity	Universal Serial Bus Specifications Revision 1.1*
Bit rate	12 Mbps (Full speed device)
Connector type	USB Series A
Data Encoding	NRZI
Recommended cable length	Less than 6 feet (1.8 meters)

* Not all USB devices are supported.

Safety Approvals

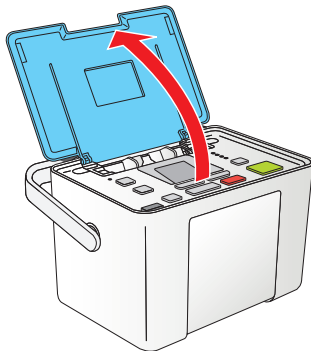| Safety	UL 60950-1 CSA C22.2 No. 60950-1
EMC	FCC part 15 Subpart B class B CSA C108.8 Class B

Loading Paper

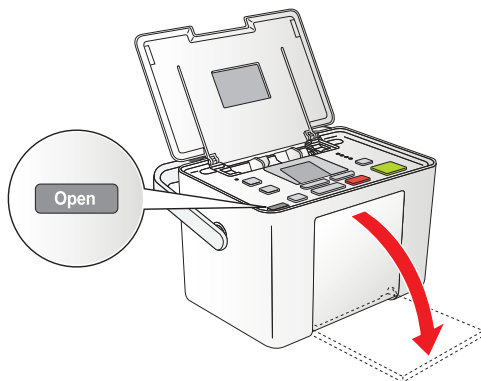**Caution:** Don't load plain paper or you may damage PictureMate Pal.

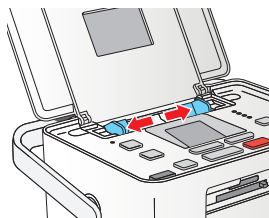1. Move the handle to the back.
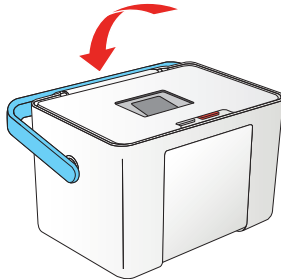
2. Open the paper support.

3. Firmly press the Open button to open the output tray.

Open

4. Slide the edge guides outward.

5. Create a stack of up to 20 sheets of paper and separate the sheets slightly by fanning them.

6. Place your paper into the slot between the edge guides with the glossy or whiter side up. Slide the edge guides inward slightly.

Load glossy or whiter side up

Make sure paper stack is beneath arrow on edge guides
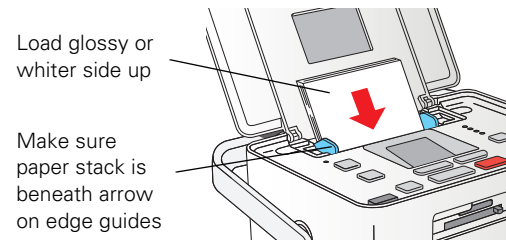
Note: Load a maximum of 20 sheets at one time. Make sure paper is glossy or whiter side up to prevent smearing.

Store any unused paper in the original package and keep it flat in a dry area to prevent curling.

Note: When you need more paper, order a PictureMate 200 Series Print Pack.

Printing

PictureMate Pal can print photos from these devices:

❏ Your digital camera's memory card (as described here)

❏ A PictBridge®- or USB-DIRECT PRINT™-enabled digital camera

❏ A Bluetooth-enabled device (requires an optional Epson Bluetooth Photo Print adapter, part number C12C824383)

❏ Your computer

See the *Basics* book or the on-screen *User's Guide* for instructions on printing from connected devices.

Make sure your image files meet these requirements:

❏ JPEG files or uncompressed Tiff files only

❏ Resolutions ranging from 80 × 80 to 9200 × 9200 pixels

Note: PictureMate Pal supports Exif Print image enhancement features. See your camera manual to see if this feature is included on your camera.

PictureMate Pal does not support progressive-scan JPEG or RAW images.

PictureMate recognizes and prints the first 999 photos on your memory card or device.

Inserting a Memory Card

1. Press the I/⏻ On button to turn on PictureMate Pal.

2. Firmly press the Open button to open the output tray.
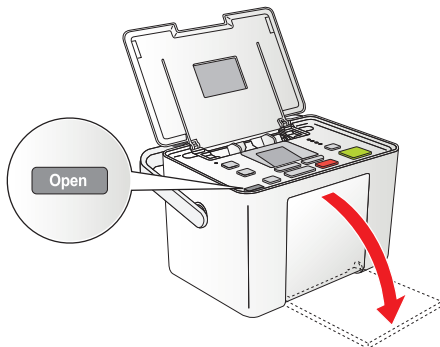
3. Insert the memory card into the correct slot, as shown. Insert just one card at a time.

Memory card light
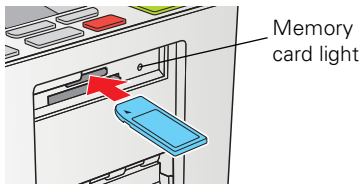
Top slot:
SD and SDHC™
miniSD™ and miniSDHC *
microSD and microSDHC *
MMC (MultiMediaCard)
xD-Picture Card
xD-Picture Card (Type M and Type H)
Sony Memory Stick
Memory Stick Duo *
Memory Stick PRO™
Memory Stick PRO Duo™ *
MagicGate Memory Stick
MagicGate Memory Stick Duo

* Requires adapter
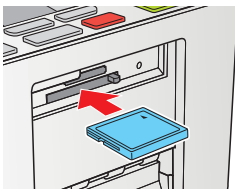
Bottom slot:
Microdrive™
CompactFlash (Type I and II)

Note: PictureMate Pal can't read multiple cards at once.

4. Push the card in carefully until it stops (it won't go in all the way).

    When the card is in, the memory card light comes on.

Removing a Memory Card

When you are ready to remove a memory card, make sure the memory card light is not flashing.

Caution: Do not remove a card while the memory card light is flashing; you may lose photos on your card.

To remove a card from the top slot, push in the card and release it, then pull it straight out of the slot.
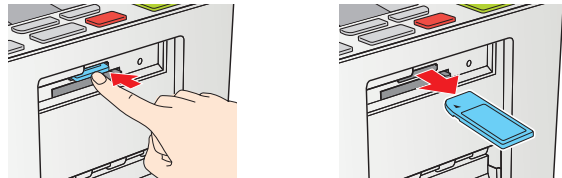
To remove a card from the bottom slot, push in and release the card release button so it pops out. Then push in the button again to eject your card and pull it straight out of the slot.
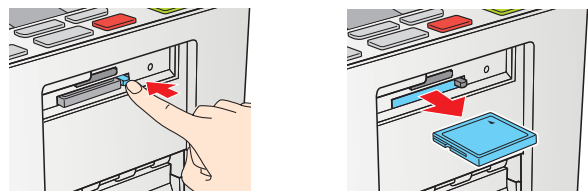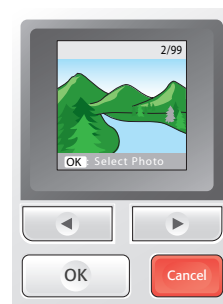

Saving Power

When PictureMate Pal is not in use, the photo viewer screen goes dark after 13 minutes. Press any button to turn it back on.

Choosing Photos to Print

PictureMate Pal's photo viewer screen makes it easy to select the photos you want to print.

Note: If you see a Paper out message, load more paper and press OK to continue printing. To cancel printing, press Cancel.

Printing All Photos

1. Press the ▣ Select All button.

2. To print more than one copy of each photo, press ◀ or ▶ to select the number of copies (up to 999).

    You can also press Menu to adjust settings or print a proof sheet containing thumbnail images of all your photos.

3. Press Layout to select the layout of your photos on the paper. See "Choosing a Layout" for details.

    🟢 ▣ Borderless
    ⚫ ▣ Border
    ⚫ ▣ Wallet
    ⚫ ▣ Mini-wallet

    Layout
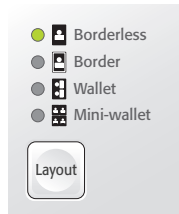
4. Press ▱ Print.

5. Press ◀ or ▶ to review your photos on the Print Preview screen.

    Note: To change the number of copies for individual photos, press Cancel, press ◀ or ▶ to select the photo, then press OK to increase or Cancel to decrease the number of copies.

6. Press ▱ Print to start printing.

Printing Selected Photos

1. Press ◀ or ▶ to view the photo you want to print.

2. Press OK to select it.

3. To print more than one copy of the photo, press OK to increase the number of copies (up to 999). Press Cancel to decrease the number.

4. Repeat step 1 through step 3 for each photo you want to print.

    You can also press Menu to adjust settings if necessary.

5. Press Layout to select the layout of your photos on the paper. See "Choosing a Layout" for details.

6. Press ▱ Print.

7. Press ◀ or ▶ to review your photos on the Print Preview screen.

8. Press ▱ Print to start printing.

Printing Camera-Selected DPOF Photos

If your camera supports DPOF™ (Digital Print Order Format), you can use it to pre-select the photos and copies you want to print.

See your camera manual to choose photos for printing with DPOF, then insert your memory card in PictureMate Pal. You see this symbol on the screen:

1. Press Layout to select the layout of your photos on the paper. See "Choosing a Layout" for details.

   You can also press Menu to adjust settings if necessary.

2. Press ▱ Print to print your pre-selected photos.

Note: If your camera supports PictBridge or USB DIRECT-PRINT printing, you can connect it to PictureMate Pal and use the camera to control printing. See the *Basics* book for more information.

Choosing a Layout

Note: This feature does not change your original digital photo file; it affects only your prints.

Press the Layout button to print your photos at the full 4 × 6 size—with or without borders—or print 2 wallet or 4 mini-wallet size photos per sheet.

🟢 ▣ Borderless
⚫ ▣ Border
⚫ ▣ Wallet
⚫ ▣ Mini-wallet

Layout
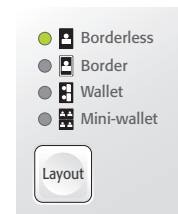
You can also print proof sheets containing thumbnail images of all your photos using the Menu button. Each proof sheet contains 20 images and their file names.

Note: When you print without borders, your images are automatically expanded. To control the amount of expansion, press the Menu button and select Borderless Exp. See the *Basics* book for details.

1. Select the photos and number of copies you want to print.

2. To print 4 × 6-inch, wallet, or mini-wallet size photos, press Layout to select the layout of your photos on the paper.

    To print a proof sheet of all your photos, press Menu, press ◀ or ▶ to highlight Proof Sheet, and press OK.

3. Press ▱ Print.

4. Press ◄ or ▶ to review your photos on the Print Preview screen.

> **Note:** If you are printing portrait-oriented photos, they may appear to be rotated, but they will print correctly.

5. Press ⬚ **Print** to start printing.

Printing Photos in Black and White or Sepia

Note: This feature does not change your original digital photo file; it affects only your prints.

You can print your photo in black and white or in a sepia tone even when the original is in color. Your original image is not changed.

Note: A sepia print has a brownish, old-fashioned photo look.

1. Press **Menu**.

2. Press ◄ or ▶ to highlight **Color Effect** and press **OK**.

3. Press ◄ or ▶ to select **Black & White** or **Sepia**, and press **OK**.

The color effect you select will be applied to all photos until you go back to the Color Effect menu and select a different setting.

4. Press **OK**. You see your photo with the color effect you selected.
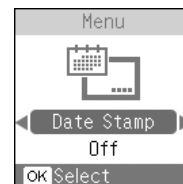
Including the Date on Your Print

Note: This feature does not change your original digital photo file; it affects only your prints.

You can include the date your photo was originally taken on the corner of your print.

Note: The date comes from your camera, not from the printer. If the date is incorrect, adjust the date setting on your camera. The date does not appear on photos printed using the Mini-wallet layout setting.

1. Press **Menu**.

2. Press ◄ or ▶ to highlight **Date Stamp** and press **OK**.

3. Press ◄ or ▶ to select **On** and press **OK**.

Enhancing Photos

Note: This feature does not change your original digital photo file; it affects only your prints.

PictureMate Pal lets you correct photos that are too dark, too light, or backlit with the **PhotoEnhance**™ feature. This setting improves your photos' colors and increases contrast and sharpness.

1. Press **Menu**.

2. Press ◄ or ▶ to highlight **Color Effect** and press **OK**.

3. Press ◄ or ▶ to select **PhotoEnhance** and press **OK**.
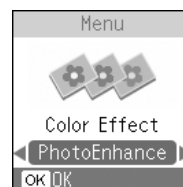
Note: If you see a color cast in the gray areas of color photos, select **None** as the Color Effect setting. Depending on your photo, you may get different results using PhotoEnhance in your computer software.

Storing and Displaying PictureMate Pal Prints

Photos printed on PictureMate Pal photo paper are beautiful, long-lasting images. Follow these guidelines to make sure they will look great for generations.

Storing Your Prints

❏ Do not rub the printed side of the photo.

❏ Do not stack photos with the printed sides touching.

Displaying Your Prints

❏ Let prints sit for 24 hours before framing.

❏ To ensure prints will last as long as possible, display them under glass or in photo albums.

❏ Keep prints out of the sun to help prevent fading.

Storing Unused Paper

Return unused paper to the original package. Store paper flat to prevent curling, and keep it away from extreme temperatures, high humidity, and bright light.

Checking the Print Pack Status

You can check the Print Pack status any time PictureMate Pal is not printing.

1. Press **Menu**.

2. Press ◀ or ▶ to highlight **PrintPk Status** and press **OK**. You see the status displayed on the photo viewer screen.
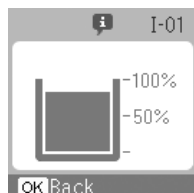
3. Press **Cancel** to exit.

Note: If the screen displays a **Print Pack low** message, you should buy a new PictureMate 200 Series Print Pack.

Replacing the Print Pack

When PictureMate Pal needs a new Print Pack, you see a message on the photo viewer screen.

The PictureMate 200 Series Print Pack contains a new photo cartridge and photo paper.

Tip: If you see a replacement message while printing, you can replace the Print Pack and continue the current print job. Just replace it without turning off and unplugging PictureMate Pal.

Caution: Do not attempt to refill the photo cartridge. This could result in ink spills or other damage to PictureMate Pal not covered by Epson's warranty.

To ensure good results, use a genuine PictureMate 200 Series photo cartridge and do not refill it. Other products may cause ink spills or other damage to your printer not covered by Epson's warranty.

Buying a PictureMate 200 Series Print Pack

The PictureMate 200 Series Print Pack has everything you need to print in one box: photo paper and a photo cartridge.

The following Print Packs are available:

Print Pack contents	Part number	Supported PictureMate models
Glossy photo paper (150 sheets) and photo cartridge	T5846	PictureMate Pal and all other PictureMate 200 Series models
Matte photo paper (100 sheets) and photo cartridge	T5845-M	

Note: If you need more paper for any reason, use Epson Premium Photo Paper Glossy, borderless 4 × 6 inch size.

You can buy a PictureMate 200 Series Print Pack wherever PictureMate Pal is sold or from retailers that sell printer supplies.

You can also buy a Print Pack and other PictureMate Pal accessories from an Epson authorized reseller. To find the nearest reseller, call 800-GO-EPSON (800-463-7766). Or you can purchase online at www.epsonstore.com (U.S. sales) or www.epson.ca (Canadian sales).

Note: Use your photo cartridge within six months of installing it and before the expiration date on the package.

Removing and Installing a Photo Cartridge

Make sure you have a new PictureMate 200 Series Print Pack before you remove the old photo cartridge. Once you remove the cartridge, you must install the new one right away.

1. Make sure PictureMate Pal is on but not printing.

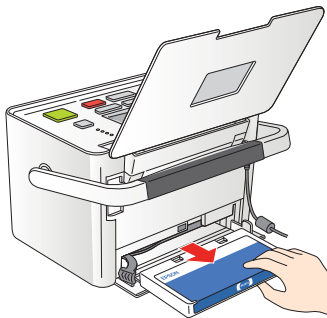2. Open the cartridge door on the back of PictureMate Pal.
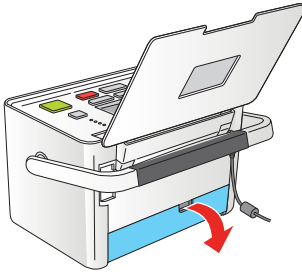
3. Slide the cartridge lever left, to the Release position.
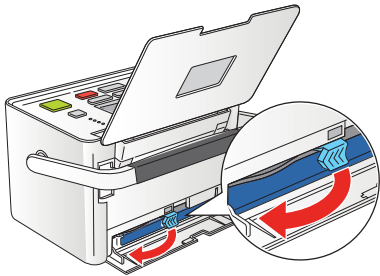
Caution: Do not try to pull out the cartridge without moving the lever.

4. Pull out the cartridge and dispose of it properly. (For appropriate disposal, check local resources for recycling guidelines.)

**Warning:** Keep photo cartridges out of the reach of children and do not drink the ink.

If ink gets on your hands, wash them thoroughly with soap and water. If ink gets in your eyes, flush them thoroughly with water. If discomfort or vision problems continue after flushing, see a doctor immediately.

5. Remove the new photo cartridge from its package.

Don't touch the green chip
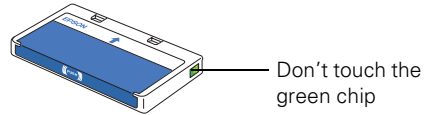
Caution: Don't touch the small green circuit board. Install the photo cartridge immediately after you remove it from its package. If you leave a cartridge unpacked for a long time before using it, normal printing may not be possible.

6. Slide the cartridge straight into the slot, label side up, until it clicks in place.
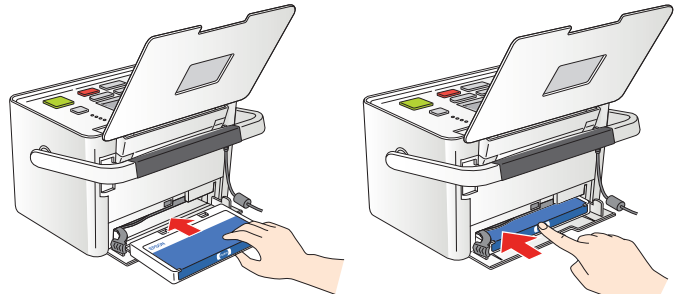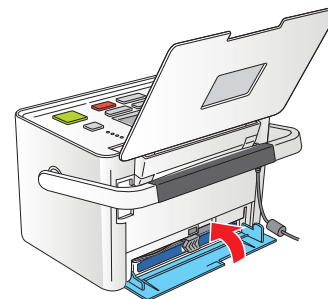

Note: The cartridge won't go in all the way. You need to use the cartridge lever to lock it in place.

7. Slide the lever all the way right, to the Lock position.
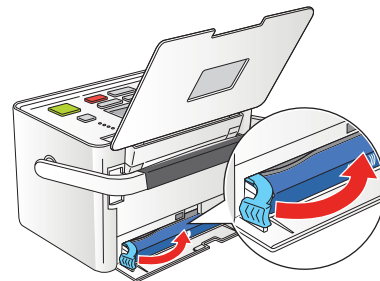
Caution: If the cartridge is not inserted correctly, PictureMate Pal will not be able to print.

8. Close the cartridge door all the way.

PictureMate Pal starts charging and displays a message.

9. When it's finished charging, press OK.
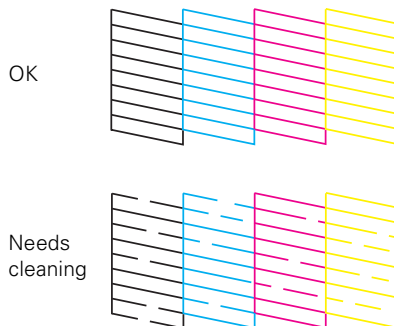
Cleaning the Print Head

If your print quality is not as good as it used to be—if photos are too light, are missing colors, or have lines running through them—PictureMate Pal's print head may need cleaning. Follow the steps below to clean the print head.

Note: If you see a **Print Pack low** message on the photo viewer, you can't clean the print head until you replace the Print Pack.

1. Load paper in PictureMate Pal so you can print a nozzle check pattern after cleaning the print head.

2. Press **Menu**.

3. Press ◄ or ► to highlight **Maintenance** and press **OK**.

4. Press ◄ or ► to select **Auto Cleaning** and press **OK**.

5. Press **OK** again to clean the print head. Cleaning takes about 60 seconds. PictureMate Pal makes some noise and you see a **Cleaning** message.

    When cleaning is complete, PictureMate Pal prints a nozzle check pattern.

6. Check the pattern to see if there are any gaps in the lines.

7. If there are no gaps, press **OK** to go back to the Maintenance menu.

    If there are gaps, press **Cancel** to clean the print head again. You may need to clean it two or three times before the nozzles are clean.

    If you don't see any improvement after cleaning three times, refer to the on-screen *User's Guide*.

    You can also turn PictureMate Pal off and wait overnight to allow any dried ink to soften. Then try cleaning the print head again.

Aligning the Print Head

If you have moved PictureMate Pal and the print quality is not as good as it used to be—if your prints look fuzzy or have light or dark lines running through them—you may need to align the print head.

1. Load paper in PictureMate Pal so you can print the head alignment pattern.

2. Press **Menu**.

3. Press ◄ or ► to highlight **Maintenance** and press **OK**.

4. Press ◄ or ► to select **Head Alignment** and press **OK**.

5. Press 🖶 **Print**. The following alignment pattern is printed:
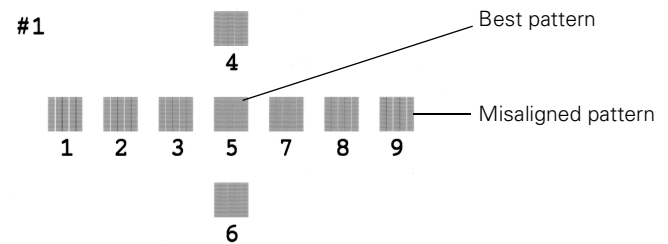
6. Look at the printed squares to determine which one is the most even, with no streaks or lines. (You may need to use a magnifying glass.)

7. Press ◄ or ► to highlight the number for the best square (**1** to **9**). Then press **OK**.

    PictureMate Pal aligns the print head and exits the Maintenance menu.

Note: The number that you enter becomes the default setting (#5) the next time you align the print head.

Taking PictureMate Pal With You

PictureMate Pal's handle makes it easy to carry short distances, or you can take it along in the optional carrying case (part number PMBAG06).

If PictureMate Pal is going to travel a longer distance, pack it carefully to protect it from damage.

Caution: Keep PictureMate Pal out of the sun and don't leave it in your car or other location where it can get too hot or too cold. Otherwise, PictureMate Pal may be damaged or ink may leak.

1. Press the I/⏻ On button to turn off PictureMate Pal.

2. Wait until the On light goes out, then unplug the power cord from the power outlet.

3. Remove all paper and printed photos.

4. Unplug the power cable and any connected USB cables from PictureMate Pal.

5. Close the paper support and output tray.
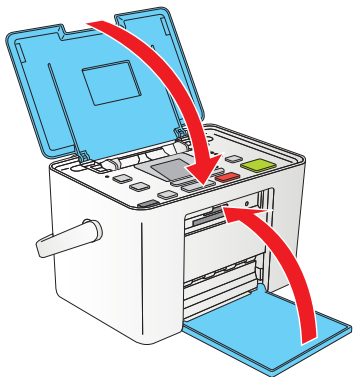
6. Pack PictureMate Pal in the box that it came in or in the optional carrying case. Place the power cable and adapter in the accessory box that came with PictureMate Pal and pack it with the PictureMate Pal.

Caution: Make sure the photo cartridge is installed. Do not remove the photo cartridge before transporting. Don't place PictureMate Pal on its side or upside down, or ink may leak.

Note: If your prints don't look as good after PictureMate Pal has been moved, try aligning the print head.

Related Documentation

CPD-21347	PictureMate Pal *Start Here*
CPD-21348	PictureMate Pal *Basics* book
CPD-21349	PictureMate Pal (PM 200) CD-ROM with on-screen *User's Guide*