All consumer inkjet printers feature some form of a printer self-test or basic cartridge nozzle test. Most of the HP printer models include a cartridge health electrical test (i.e. 'Tap 41'). These tests can be used to also verify the printer's internal firmware is functioning properly.

The various HP diagnostic tests enclosed in the attachment below can help evaluate general ink cartridge performance\* **NOTE:** "Non-Genuine"/"Counterfeit" ink alert messages can be bypassed, however if "Incompatible Print Cartridge" / "Print Cartridge(s) Problem" / "Refer to printer documentation" / "Cartridge Error: Cartridge must be replaced" / "Cartridge in left or right slot is not intended for use in this printer" / "Replace Ink Cartridge" / "Ink Cartridge Failure" is displayed then the cartridge may be electrically damaged (internal micro-electronics). Remove and clean ink cartridge (or printhead) electrical contacts. Re-install and re-test printer using the suggested procedures provided.

HP Photosmart C4600-C4700 Bypass Instructions - Video Tags (HP 60s)

HP 60 Cartridge Error Bypass - HP Photosmart C4600 C4700 D110a Printer Models

HP Photosmart C4600 C4700 D110a Printers - HP 60 Cartridge Error Bypass

Description: As the electronics in the HP 60 ink cartridges and the printer communicate with each other, sometimes the printer will incorrectly identify an ink cartridge as empty or non-functional. These error messages can appear as PC screen messages, printer LCD display messages, or as blinking lights on the printer. Depending on your Photosmart C4600, C4700 and D110a series printer model and type of error condition, please review printer bypass/clear procedures as the button selections vary slightly between printer models. In many cases the ink cartridge may have internal electrical damage and may need to be replaced – refer to printer Tap 41 diagnostic test procedures for advanced cartridge health diagnosis.

A marginally performing HP 60 ink cartridge may produce the following severe cartridge error messages which do not allow printing:

- Incompatible Print Cartridges
- Print Cartridges Missing or Not Detected
- Cartridges Installed Incorrectly

Print Cartridges Problem

- Cartridge in slot on left/right is not intended for use in this product
- Cartridge not intended for use in this printer
  - Power 'On' light blinking

Tags: 60, 60XL, Color, Black, Cartridge, Problem, Error, Message, Failure, HP, Photosmart, C4600, C4610, C4635, C4640, C4650, C4670, C4673, C4680, C4683, C4685, C4688, C4690, C4700, C4740, C4750, C4780, C4783, C4785, C4788, C4793, C4795, C4798, C4799, D110a, Inkjet printer, HP, Incompatible Print Cartridges, Print Cartridges Missing, Not Detected, Installed Incorrectly, Not intended for use, In this product, in wrong slot, not printing, wont print, refill, blinking, light, lights, errors, ink, dead, cartridge, bad, support, help, refilled, Costco, Frys Electronics

# HP Photosmart C-Series Bypass / Clear / Reset Instructions - Inkjet Printer (HP74 HP75 HP74XL HP75XL)

Title: HP Photosmart 4200 4300 4400 4500 5200 5300 Printer Bypass / Clear Instructions

**Description:** As the electronics in the HP 74 & HP 75 ink cartridges and the printer communicate with each other, sometimes the printer will incorrectly identify an ink cartridge as empty or non-functional. These error messages can appear as PC screen messages, printer LCD display messages, or as blinking lights on the printer. Depending on your Photosmart C4xxx/C5xxx series printer model and type of error condition, please review printer bypass/clear procedures as the button selections vary slightly between printer models. In many cases the ink cartridge may have internal electrical damage and may need to be replaced – refer to printer Tap 41 diagnostic test procedures for advanced cartridge health diagnosis.

HP 74/75 ink cartridges which have been newly refilled and installed into the HP printer may produce the following 'printer shutdown' error messages:

- Incompatible Print Cartridges
- Print Cartridges Missing or Not Detected
- Cartridges Installed Incorrectly
- Refer to printer documentation

- Cartridge in slot on left/right is not intended for use in this product
- Cartridge not intended for use in this printer
- Low ink light blinking

**Tags:** HP, Incompatible Print Cartridges, Print Cartridges Missing, Not Detected, Cartridges, Installed Incorrectly, Cartridge in slot on left right, PhotoSmart, C4200, C4205, C4210, C4225, C4235, C4240, C4250, C4270, C4272, C4273, C4275, C4280, C4283, C4285, C4288, C4293, C4294, C4345, C4380, C4385, C4440, C4450, C4472, C4473, C4480, C4483, C4485, C5225, C5240, C5250, C5280, D5345, D5360, D5363, D5368, OfficeJet, J5730, J5740, J5750, J5780, J5785, J5788, J6410, J6413, J6415, J6450, J6480

### Clogged IPH Ink Cartridge Recovery Procedure HP Inkjet Printer

Title: Clogged Ink Cartridge Recovery (HP, Canon, Lexmark & Dell Integrated Cartridges)

**Description:** To help recover a severely clogged HP, Canon, Lexmark or Dell integrated ink cartridge that fails to print or is believed to have suffered prolonged cartridge printhead drying, perform the following procedure:

NOTE: This procedure assumes that the integrated ink cartridge has an adequate amount of ink inside and that the internal cartridge foam has not completely hardened due to cartridge age or prolonged exposure to the environment. This procedure is most effective on tri-color integrated ink cartridge recovery (i.e. dye-based inks).

To begin, obtain a flat bottomed container and water. Distilled or de-ionized water is suggested to prevent ink contamination. Heat water until hot and carefully pour into container. Immerse the bottom portion of the ink cartridge into the hot water for approximately 5 minutes. The hot water will help loosen up the dried ink which has formed inside the cartridge nozzle plate holes. Using a towel, gently blot nozzle plate to see if ink appears – this is commonly referred to as "stamping". For color cartridges, all 3 color bands should be vibrant and solid. If not, repeat the cleaning process again until ink is visible on towel during cartridge blotting. Once recovered, completely dry the outside of ink cartridge with a towel. Re-install cartridge into the printer and re-test.

**Tags:** Inkjet, cartridge, cartridges, ink, integrated, drops, ink drops, jetting, cleaning, printer, maintenance, service, printhead, image, quality, printing, HP, 15, 17, 21, 22, 23, 41, 45, 54, 56, 57, 58, 60, 61, 60xl, 61xl, 74, 75, 74XL, 75XL HP 92, HP 93, HP 94, HP 95, HP 96, HP 97, 98, 99, Canon, 210, 211, 210xl, 211xl, 240, 241, 30, 31, 40, 41, 50, 51, 3e, Canon, Lexmark 33, 34, 35, Lexmark, Dell, microelectronics, nozzle, jetting, jets, recovery, fix, correct, issue, no printing, how to clean

# HP 901 Checksum Code Bypass - Inkjet Printer

Title:

Video #16: HP 901 HP901 HP901XL Cartridge Error Bypass (Checksum code clear) Procedure – Incompatible Print Cartridges Video #17: HP Office int M500 M600 4500 Cartridge Error Bypass – HP901 HP 901 HP901XL Cartridge Errors

**Description:** Following a severe cartridge error message which prevents printing operations, to temporarily bypass a HP 901 black or color cartridge (or HP 901XL black cartridge) cartridge error, perform the cartridge error bypass (checksum code clear) procedure at the Officejet J4500, J4600 or 4500 series printer control panel. NOTE: Success will vary depending on cartridge's electrical health.

Error messages such as Incompatible Print Cartridges, Refer to device documentation to troubleshoot, Print Cartridges Error, Print Cartridges Missing or Not Detected, Cartridge in slot on left (or right) is not intended for use in this product, Refer to Printer Documentation or the exclamation light is blinking are considered more severe errors (i.e. no printing is allowed). It is possible to temporarily bypass a fatal cartridge error which will allow limited print operations by performing the cartridge error bypass (checksum code clear) procedure. Verify the cartridge(s) are thoroughly clean and firmly reseat cartridges before performing any advanced clears or tests, such as the Tap 41 (or Tap 10) diagnostic test. Verify ink cartridge's warranty expiration date (imprinted on front of ink cartridge) before refilling as the cartridge might be at risk for potential failure due to internal electrical damage. Visit Inkjet411.com for more information.

NOTE: After the HP 901 ink cartridges are refilled a variety of error messages may be observed at the printer and/or host computer. The printer will continue to attempt to communicate low ink warning messages during the life of the refilled ink cartridge – this is normal and nothing to be alarmed over. While the ink level cannot be tracked or reset in the HP Officejet J4500 thru J4600 and 4500 series printers, the majority, if not all, of these warning messages and/or steady indicator lights, may simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only.

**Tags:** Officejet, color, refill, J4524, J4525, J4535, J4680, J4680c J4540, J4550, J4580, J4585, J4640, J4660, J4680, J4680c, 4500, 4575, G510a, G510g, G510n, DeskJet P2500, HP, HP 901 refill, black, 901, 901XL, Incompatible Print Cartridges, Refer to device documentation, to troubleshoot, Print Cartridges Missing, Not Detected, cartridges problem, Installed Incorrectly, Not intended for use, In this product, Print cartridges in wrong slot, Print cartridge problem, not printing, HP ink refill, troubleshooting, no printing, help, errors, messages, blinking lights, ink, cartridge, reset

### HP21 / HP22 / HP27 & HP54 / HP56 / HP57 / HP58 Ink Refill & Cartridge Care Tips Inkjet Printer

HP 21 / HP22 / HP27 & HP 54 / HP56 / HP57 / HP58 Ink Refill & Cartridge Care Tin

**Description:** When using HP21 / HP22 / HP27 or HP 54 / HP56 / HP57 / HP58 refilled inkjet ink cartridges, it is suggested to adhere to these general guidelines to help minimize accidental cartridge damage. This includes cartridge transportation to and from a refill location, general cartridge and printer care, and print diagnosis and general ink cartridge recovery.

NOTE: After the HP 21/22/27 or HP 54/56/57/58 ink cartridges are refilled a variety of cartridge alerts may be observed at the printer and/or host computer. The printer will continue to attempt to communicate "low ink" warning messages during the life of the refilled ink cartridge -- this is COMPLETELY NORMAL and nothing to be alarmed over. While the ink level cannot be tracked or reset, the majority, if not all, of these warning messages and/or steady indicator lights, can simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only. Additional nuisance messages may also be observed following initial refilled cartridge installation including 'non-genuine ink/cartridge', 'depleted cartridge', 'refilled cartridge', 'counterfeit', etc. These alerts messages may be bypassed by selecting 'OK'/'Resume'/'Dismiss'.

**Tags:** HP, 21, 22, 27, 54, 56, 57, 58, color, black, ink, cartridge, refill, refilled, inkjet, printer, cartridges, error, Non Genuine, Cartridge, Used Print Cartridge, Low Ink, Deskjet, Officejet, warning, alert, message, printer, Incompatible Cartridges, Print Cartridges Missing, Not Detected, error, Printer, Problem, Installed Incorrectly, message, refilled, Depleted Cartridge Detected, Not intended for use, In this product, in wrong slot, not printing, ink out, will not print, troubleshooting, no printing, printer ink, support, blinking, LED, lights, ink cartridge, bad cartridge, service, support, help, Costco, Frys, Inkjet411

## HP 60-60XL (61/61XL) Ink Refill & Cartridge Care Tips Inkjet Printer

### Title:

HP 60 / HP 60XL (HP 61 / HP 61XL ) Ink Refill & Cartridge Care Tips – HP Deskjet / Photosmart Printers

**Description:** When using HP60 / HP60XL (HP61 / HP61XL) refilled inkjet ink cartridges, it is suggested to adhere to these general guidelines to help minimize accidental cartridge damage. This includes cartridge transportation to and from a refill location, general cartridge and printer care, and print diagnosis and general ink cartridge recovery.

NOTE: After the 60/60XL (61/61XL) ink cartridges are refilled a variety of cartridge alerts may be observed at the printer and/or host computer. The printer will continue to attempt to communicate "low ink" warning messages during the life of the refilled ink cartridge -- this is COMPLETELY NORMAL and nothing to be alarmed over. While the ink level cannot be tracked or reset, the majority, if not all, of these warning messages and/or steady indicator lights, can simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only. Additional nuisance messages may also be observed following initial refilled cartridge installation including 'non-genuine cartridge', 'depleted cartridge', 'refilled cartridge', 'counterfeit', etc. These alerts messages may be bypassed by selecting 'OK'/'Resume'/'Dismiss'.

**Tags:** HP, 60, 60XL, 61, 61XL, color, black, ink, cartridge, refill, refilled, inkjet, printer, cartridges, error, Non-Genuine Cartridge, Used Print Cartridge, Low Ink, Warning, Alert, message, printer, Incompatible Print Cartridges, Print Cartridges Missing, Not Detected, Tri-Color, Print, Cartridge Problem, Installed Incorrectly, Print cartridge, Refilled cartridge, Depleted Cartridge Detected, Not intended for use, In this product, in wrong slot, not printing, wont print, refilling, troubleshooting, no printing, printer ink, support, error, blinking lights, ink cartridge, bad cartridge, cartridge, service, support, help, Photosmart Express, cartridges refilled, Costco, Deskjet, Photosmart, Officejet, Pro, Costco, Frys,

# HP 60 / 61 Cartridge Refills HP Inkjet Printer

Title: HP 60 60XL 61 61XL Ink Cartridge Refills - Solving Errors & Warnings

**Description:** After the HP 60, 60XL, 61, or 61XL ink cartridges are refilled a variety of error messages may be displayed at the printer and/or host computer. The printer will continue to attempt to communicate low ink warning messages during the life of the refilled ink cartridge – this is normal and nothing to be alarmed over. With the majority of HP 60-61 ink series printer models, the ink level cannot be tracked or reset — however the majority, if not all, of these warning messages may simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only. NOTE: Error messages such as Incompatible Print Cartridges, Print Cartridges Error, Print Cartridges Missing or Not Detected, Cartridge in slot on left (or right) is not intended for use in this product, or Low Ink light is blinking are considered more severe errors (i.e. printer shutdown commands) and usually require the cartridge(s) to be firmly reseated or running of advanced internal diagnostics, such as the Tap 41 or Tap 10 diagnostic test. Verify ink cartridge's warranty expiration date before refilling as the cartridge might be at risk for potential failure due to internal electrical damage, or similar.

**Tags:** HP 60, HP 60XL, HP 61, HP 61XL, cartridge, refill, refilled, inkjet printer, cartridges error, Non-Genuine Cartridge, Used Print Cartridge, Low Ink Warning, HP printer, Incompatible Print Cartridges, Print Cartridges Missing, Not Detected, Tri-Color, Black Cartridge Problem, Installed Incorrectly, Print cartridge, Refilled cartridge, Depleted Cartridge Detected, Not intended for use, In this product, Print cartridges in wrong slot, Print cartridge problem, not printing, wont print, refilling, troubleshooting, no printing, Costco, Frys, printer ink, technology, refiller, need assistance, error messages, blinking lights, ink, ink cartridges, bad cartridges, cartridge, service, support, help, cartridges refilled, Costco, HP Deskjet, HP Photosmart, HP Officejet, HP Officejet Pro, HP Photosmart Express,

# HP Officejet OJ J5700 6400 Bypass/Clear Instructions (HP74 HP75) Inkjet Printer

Title: HP Officejet J5700 J6400 Printer - HP 74 HP75 Cartridge Error Bypass

**Description:** As the electronics in the HP 74-75 ink cartridges and the printer communicate with each other, sometimes the printer will incorrectly identify an ink cartridge as empty or non-functional. These error messages can appear as PC screen messages, printer LCD display messages, or blinking lights on the printer. Depending on your Officejet J5700 or OJ J6400 series printer model and type of error condition, please review printer bypass/clear procedures as the button selections vary slightly between printer models. In many cases the ink cartridge may have internal electrical damage and may need to be replaced – refer to printer Tap 41 diagnostic test procedures for advanced cartridge health diagnosis.

HP 74/75 ink cartridges which have been newly refilled and installed into the HP printer may produce the following 'printer shutdown' error messages:

- Incompatible Print Cartridges
- Print Cartridges Problem
- Print Cartridges Missing or Not Detected
- Cartridges Installed Incorrectly
- Refer to printer/device documentation
- Cartridge in slot on left/right is not intended for use in this product
- Cartridge not intended for use in this printer
- Exclamation light blinking

**Tags:** HP, OfficeJet, ink, bad, cartridge, refill, 74, 75, 74XL, 75XL, cartridges, J5730, J5740, J5750, J5780, J5785, J5785, J5788, J6410, J6413, J6415, J6450, J6480, Incompatible Print Cartridges, Refer to, device documentation, to troubleshoot, Print Cartridges Missing, Not Detected, Tri-Color, Black Cartridge Problem, Installed Incorrectly, Not intended for use, In this product, Print cartridges in wrong slot, Print cartridge problem, not printing, HP ink refill, troubleshooting, no printing, printer ink, refiller, help, errors, messages, blinking lights, color, black, refilled, wont print,

# HP 74 / 75XL Cartridge Refills Inkjet Printer

Title: HP 74 / HP75 and HP 74XL / 75XL Ink Cartridge Refills - Solving Errors & Warnings

**Description:** After the HP 74 / HP75 or HP 74XL / 75XL ink cartridges are refilled a variety of error messages may be observed at the printer and/or host computer. The printer will continue to attempt to communicate low ink warning messages during the life of the refilled ink cartridge – this is normal and nothing to be alarmed over. With the majority of HP74 HP75 ink series printer models, the ink level cannot be tracked or reset -- however the majority, if not all, of these warning messages and/or steady indicator lights, may simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only.

NOTE: Error messages such as Incompatible Print Cartridges, Print Cartridges Error, Print Cartridges Missing or Not Detected, Cartridge in slot on left (or right) is not intended for use in this product, Refer to Printer Documentation or Low Ink light is blinking are considered more severe errors (i.e. no printing is allowed) and usually require the cartridge(s) to be firmly reseated or running of advanced internal diagnostics, such as the Tap 41 or Tap 10 diagnostic test. Verify ink cartridge's warranty expiration date before refilling as the cartridge might be at risk for potential failure due to internal electrical damage.

**Tags:** HP 74, HP 75, HP 74XL, HP 75XL, cartridge, refill, refilled, inkjet printer, cartridges error, Non-Genuine Cartridge, Used Print Cartridge, Low Ink Warning, HP printer, Incompatible Print Cartridges, Print Cartridges Missing, Not Detected, Tri-Color, Black, Cartridge Problem, Installed Incorrectly, Print cartridge, Refilled cartridge, Depleted Cartridge Detected, Not intended for use, In this product, Print cartridges in wrong slot, HP Deskjet, HP Photosmart, HP Officejet, HP Officejet Pro, HP Photosmart Express, troubleshooting, no printing, Costco, Frys, printer ink, technology, refiller, need assistance, error messages, blinking lights, ink, ink cartridges, bad cartridges, cartridge, service, support, help, cartridges refilled,

### HP 60 HP60XL (HP74 / HP75 ) Ink Refill & Cartridge Care Tips Inkjet Printer

Title:

HP 74 / HP 75 (HP74XL / HP75XL) Ink Refill & Cartridge Care Tips – HP Photosmart / Officejet Printers

**Description:** When using HP74 HP75 (74XL/75XL) refilled inkjet ink cartridges, it is suggested to adhere to these general guidelines to help minimize accidental cartridge damage. This includes cartridge transportation to and from a refill location, general cartridge and printer care, and print diagnosis and general ink cartridge recovery.

NOTE: After the HP 74/75 (74XL/75XL) ink cartridges are refilled a variety of cartridge alerts may be observed at the printer and/or host computer. The printer will continue to attempt to communicate "low ink" warning messages during the life of the refilled ink cartridge -- this is COMPLETELY NORMAL and nothing to be alarmed over. While the ink level cannot be tracked or reset, the majority, if not all, of these warning messages and/or steady indicator lights, can simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only. Additional nuisance messages may also be observed following initial refilled cartridge installation including 'non-genuine ink/cartridge', 'depleted cartridge', 'refilled cartridge', 'counterfeit', etc. These alerts messages may be bypassed by selecting 'OK'/'Resume'/'Dismiss'.

**Tags:** HP, 74, 75, 74XL, 75XL, color, black, ink, cartridge, refill, refilled, inkjet, printer, cartridges, error, Non-Genuine Cartridge, Used Print Cartridge, Low Ink, Photosmart, Officejet, Warning, Alert, message, printer, Incompatible Print Cartridges, Print Cartridges Missing, Not Detected, Tri-Color, Print, Cartridge Problem, Installed Incorrectly, Print cartridge, refilled, Depleted Cartridge Detected, Not intended for use, In this product, in wrong slot, not printing, wont print, refilling, troubleshooting, no printing, printer ink, support, error, blinking lights, ink cartridge, bad cartridge, cartridge, service, support, help, Costco, Pro, Costco, Frys Electronics,

## HP 74 / 75XL Cartridge Refills HP Inkjet Printer

Title: HP 74/75 and HP 74XL/75XL Ink Cartridge Refills - Solving Errors & Warnings

**Description:** After the HP 74/75 or HP 74XL/75XL ink cartridges are refilled a variety of error messages may be observed at the printer and/or host computer. The printer will continue to attempt to communicate low ink warning messages during the life of the refilled ink cartridge – this is normal and nothing to be alarmed over. With the majority of HP 74-75 ink series printer models, the ink level cannot be tracked or reset -- however the majority, if not all, of these warning messages and/or steady indicator lights, may simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only.

NOTE: Error messages such as Incompatible Print Cartridges, Print Cartridges Error, Print Cartridges Missing or Not Detected, Cartridge in slot on left (or right) is not intended for use in this product, Refer to Printer Documentation or Low Ink light is blinking are considered more severe errors (i.e. no printing is allowed) and usually require the cartridge(s) to be firmly reseated or running of advanced internal diagnostics, such as the Tap 41 or Tap 10 diagnostic test. Verify ink cartridge's warranty expiration date before refilling as the cartridge might be at risk for potential failure due to internal electrical damage. **Tags:** HP 74, HP 75, HP 74XL, HP 75XL, cartridge, refill, refilled, inkjet printer, cartridges error, Non-Genuine Cartridge, Used Print Cartridge, Low Ink Warning, HP printer, Incompatible Print Cartridges, Print Cartridges Missing, Not Detected, Tri-Color, Black, Cartridge Problem, Installed Incorrectly, Print cartridge, Refilled cartridge, Depleted Cartridge Detected, Not intended for use, In this product, Print cartridges in wrong slot, HP Deskjet, HP Photosmart, HP Officejet, HP Officejet Pro, HP Photosmart Express, troubleshooting, no printing, Costco, Frys, printer ink, technology, refiller, need assistance, error messages, blinking lights, ink, ink cartridges, bad cartridges, cartridge, service, support, help, cartridges refilled,

## HP 60-60XL (74/75) Ink Refill & Cartridge Care Tips Inkjet Printer

Title:

HP 74/75 (74XL/75XL) Ink Refill & Cartridge Care Tips – HP Photosmart/Officejet Printers

**Description:** When using HP 74/75 (74XL/75XL) refilled inkjet ink cartridges, it is suggested to adhere to these general guidelines to help minimize accidental cartridge damage. This includes cartridge transportation to and from a refill location, general cartridge and printer care, and print diagnosis and general ink cartridge recovery.

NOTE: After the HP 74/75 (74XL/75XL) ink cartridges are refilled a variety of cartridge alerts may be observed at the printer and/or host computer. The printer will continue to attempt to communicate "low ink" warning messages during the life of the refilled ink cartridge -- this is COMPLETELY NORMAL and nothing to be alarmed over. While the ink level cannot be tracked or reset, the majority, if not all, of these warning messages and/or steady indicator lights, can simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only. Additional nuisance messages may also be observed following initial refilled cartridge installation including 'non-genuine ink/cartridge', 'depleted cartridge', 'refilled cartridge', 'counterfeit', etc. These alerts messages may be bypassed by selecting 'OK'/'Resume'/'Dismiss'.

**Tags:** HP, 74, 75, 74XL, 75XL, color, black, ink, cartridge, refill, refilled, inkjet, printer, cartridges, error, Non-Genuine Cartridge, Used Print Cartridge, Low Ink, Photosmart, Officejet, Warning, Alert, message, printer, Incompatible Print Cartridges, Print Cartridges Missing, Not Detected, Tri-Color, Print, Cartridge Problem, Installed Incorrectly, Print cartridge, refilled, Depleted Cartridge Detected, Not intended for use, In this product, in wrong slot, not printing, wont print, refilling, troubleshooting, no printing, printer ink, support, error, blinking lights, ink cartridge, bad cartridge, cartridge, service, support, help, Costco, Pro, Costco, Frys Electronics,

> HP92, HP93, HP94, HP95, HP96, HP97, HP98, HP99 Ink Cartridge Refills – Solving Errors Inkjet Printer

#### Title:

HP92, HP93, HP94, HP95, HP96, HP97, HP98, HP99 Ink Cartridge Refills– Solving Error Messages & Warnings Low Ink Warnings & Solving Errors – HP 92, 93, 94, 95, 96, 97, 98, 99 Ink Cartridges

**Description:** After the HP 92, 93, 94, 95, 96, 97, 98 or 99 ink cartridge is refilled a variety of cartridge alerts may be observed at the printer and/or host computer. The printer will continue to attempt to communicate "low ink" warning messages during the life of the refilled ink cartridge -- this is COMPLETELY NORMAL and nothing to be alarmed over. While the ink level cannot be tracked or reset, the majority, if not all, of these warning messages and/or steady indicator lights, can simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only. Additional nuisance messages may also be observed following initial refilled cartridge installation including 'non-genuine cartridge', 'depleted cartridge', 'refilled cartridge', 'counterfeit', etc. These alerts messages may also be bypassed by selecting 'OK'/'Resume'/'Dismiss'.

For severe cartridge error messages which prohibit printing it is suggested you run an internal self test print or the cartridge health diagnostic's Tap 41 test print to evaluate whether or not the ink cartridge is electrically damaged (i.e. internal micro-electronics). Please visit Inkjet411.com printer diagnostic support page.

**Tags:** HP, 92, 93, 94, 95, 96, 97, 98, 99, color, black, ink, cartridge, refill, refilled, cartridges, error, Non-Genuine Cartridge, Low Ink, Warning, incorrect, message, printer, Incompatible, Deskjet, Missing, Not Detected, PSC, Deskjet, Officejet, Photosmart, Cartridge Problem, remove and check cartridge, refused, wrong slot, Refilled, Depleted, Not intended for use, In this product, not printing, wont print, refilling, troubleshooting, no printing, support, error, blinking lights, ink cartridge, bad cartridge, cartridge, service, support, help, cartridges refilled,

## HP 92-99 Ink Refill & Cartridge Care Tips Inkjet Printer

### Title:

HP 92-99 Ink Refill & Cartridge Care Tips – HP Deskjet / Officejet / Photosmart

**Description:** When using HP92, HP93, HP94, HP95, HP96, HP97, HP98 or HP99 refilled inkjet ink cartridges, it is suggested to adhere to these general guidelines to help minimize accidental cartridge damage. This includes cartridge transportation to and from a refill location, general cartridge and printer care, and print diagnosis and general ink cartridge recovery.

NOTE: After the HP 92, 93, 94, 95, 96, 97, 98 or 99 ink cartridge is refilled a variety of cartridge alerts may be observed at the printer and/or host computer. The printer will continue to attempt to communicate "low ink" warning messages during the life of the refilled ink cartridge -- this is COMPLETELY NORMAL and nothing to be alarmed over. While the ink level cannot be tracked or reset, the majority, if not all, of these warning messages and/or steady indicator lights, can simply be ignored and the printer should continue to printer normally. Ink level warnings and indicators provide estimates for planning purposes only. Additional nuisance messages may also be observed following initial refilled cartridge installation including 'non-genuine cartridge', 'depleted cartridge', 'refilled cartridge', 'counterfeit', etc. These alerts messages may also be bypassed by selecting 'OK'/'Resume'/'Dismiss'.

**Tags:** HP, 92, 93, 94, 95, 96, 97, 98, 99, color, black, ink, cartridge, refill, refilled, cartridges, error, Non-Genuine Cartridge, Low Ink, Warning, incorrect, message, printer, Incompatible, Deskjet, Missing, Not Detected, Officejet, Photosmart, Cartridge Problem, remove and check cartridge, refused, wrong slot, Refilled, Depleted, Not intended for use, In this product, not printing, wont print, refilling, troubleshooting, no printing, support, error, blinking lights, ink cartridge, bad cartridge, cartridge, service, support, help, cartridges refilled,

### HP 564 Ink Cartridge Refilling & Care Tips Video Tags

#### Title:

HP 564 Ink Cartridge Refilling & Care Tips – HP Inkjet Printer Series

**Description:** When refilling and using HP 564 ink cartridges (tanks) in your inkjet printer, it is suggested to adhere to these general guidelines to help maximize print quality output and maintain a healthy printer to avoid problems.

**Tags:** HP, printer, ink, cartridge, tank, color, black, cyan, magenta, yellow, refill, 564, Deskjet, e-AiO, Photosmart, Plus, Touchsmart, refilled, C5300, C5324, C5370, C5373, C5380, C5383, C5388, C5390, C5393, C6300, C6324, C6340, C6350, C6375, C6380, C6383, C6388, B8550, D5400, D5445, D5460, D5463, D5468, D7560, B8550, B8553, B8558, 5510, 5511, 5512, 5514, 5515, 6510, 6512, 6515, 7510, 7515, Premium, C309c, C309a, C309n, C310a, C310b, C310c, C410a, 3520, 3521, 3522, 4620, 5520, 5524, 5525, 6520, 7520, 7525, C510, eStation, B209a, B210a, B210b, B210c, B210d, B210e, Inkjet411,

3210x

3310

3310xi

5510 e-All-in-One

5511 e-All-in-One

5512 e-All-in-One

5514 e-All-in-On

5515 e-All-in-One

5520 e-All-in-One

5522 e-All-in-One

5524 e-All-in-One

5525 e-All-in-One

6510 e-All-in-One

6512 e-All-in-One

6515 e-All-in-One

6520 e-All-in-One

6525 e-All-in-One

7150

7260

7260v

7260w

7350

7350v

7350w

7450

7450v

7450xi

7510 e-All-in-One

7515 e-All-in-One

7520 e-All-in-One

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quality and long term printer performance.

Tags: HP, printer, ink, cartridge, tank, color, black, cyan, magenta, yellow, refill, 564, 564, 920, 920XL, XL, Deskjet, e-AiO, Photosmart, Plus, Touchsmart, refilled, C5300, C5324, C5370, C5373, C5380, C5383, C5388, C5390, C5393, C6300, C6324, C6340, C6350, C6375, C6380, C6383, C6388, B8550, D5400, D5445, D5460, D5463, D5468, D7560, B8550, B8553, B8558, 5510, 5511, 5512, 5514, 5515, 6510, 6512, 6515, 7510, 7515, Premium, C309c, C309a, C309n, C310a, C310b, C310c, C410a, 3520, 3521, 3522, 4620, 5520, 5522, 5524, 5525, 6520, 7520, 7525, C510, eStation, B209a, B210a, B210b, B210c, B210d, B210e, 6500, 6500A, Inkjet411, help, support, how to, printhead, problem, issue, error, Costco, Frys, ASDA, refilling, color balance, issues, problems, missing color, photo black

## HP 901 Ink Refill & Cartridge Care Tips HP Inkjet Printer

*Title:* Video #19: HP 901 Ink Refill & Cartridge Care Tips **Description:** When using HP 901 refilled inkjet ink cartridges, it is suggested to adhere to these general guidelines to help minimize cartridge damage. This includes cartridge transportation to and from a refill location, general cartridge and printer care, and print diagnosis and recovery.

If your HP 901 ink cartridge experiences any of the following error messages

e audio track as HP 901 refill video http://www.youtube.com/watch?v=TrPSf9P8L10

HP 92-99 Ink Cartridge Refills-- Solving Error Messages & Warnings: (Primary) http://www.youtube.com/watch?v=OdjQxAQek\_4

Low Ink Warnings & Solving Errors - HP 92-99 Ink Cartridges: http://www.youtube.com/watch?v=8rII8clS958 HP 564 Ink Cartridge Refilling & Care Tips -- HP Inkjet Printer Series: (Primary) \*Same audio track as Primary IIT refill video (partial) http://www.youtube.com/watch?v=eyWRow75\_M4

HP 564/920 Refilled Ink Cartridges – Low Ink Warnings & Alerts: (Primary) \*Same audio track as Primary IIT refill video (partial) http://www.youtube.com/watch?v=QY8tWYQ0tA4

## HP 901s

HP Officejet J4500 J4600 4500 Cartridge Error Bypass - HP 901 Cartridge Errors: http://www.youtube.com/watch?v=I4-m\_RLdRE4

HP Officejet J4500 J4600 4500 Printers Tap 41 Diagnostics - HP 901 Incompatible Print Cartridges: <u>http://www.youtube.com/watch?v=S6uATgXxQIE</u>

HP 901 Ink Cartridge Error (Tap 41 Diagnostics Electrical Check) --Incompatible Print Cartridges: http://www.youtube.com/watch?v=KUytBUXd4Y4

HP 901 Ink Refilling & Cartridge Care Tips – Everything you need to know: (*Primary*) http://www.youtube.com/watch?v=jTtNj6rN4g4

HP 901 & 901XL Ink Cartridge Alerts – Low Ink Warnings: (secondary) http://www.youtube.com/watch?v=hzLM5mlkTt4

HP Officejet J4500 J4600 4500 Printers – HP 901 Low Ink Warnings: http://www.youtube.com/watch?v=EgFbsJv2ybY

 FULL:

 HP 901 & 901XL Ink Cartridge Errors – Solving Ink Cartridge Alerts and Warnings

 http://www.youtube.com/watch?v=KMRhmTJAcNg

HP Officejet J4500 J4600 4500 Printer Error Messages –HP 901 & 901XL Cartridges (primary) http://www.youtube.com/watch?v=RivHgvWCkJ8

HP 901 – Extended Self-Test (Tap 10): (Primary) http://www.youtube.com/watch?v=Jx6Dhf1QNzs
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# <u>3<sup>RD</sup> PARTY REQUEST TO LINK INJET411 PAGES</u> ISSUE UNRELATED TO REFILL

MORE INFO NEEDED

**REPLY DELAY** 

COMPATIBLE / RE-BRANDED INDIVIDUAL INK TANKS (ALL) - NOT SUPPORTED

NEW OR NON-CARTRIDGE SUPPORT

STORE LOCATION / SERVICES

LASER TONER / REMAN / COMPATIBLE / REBRANDED CARTRIDGES SUPPORTED?

SEVERE CARTRIDGE ERROR ALERTS / PRINTER LIGHTS BLINKING (GENERAL BLANKET RESPONSE)

**ERROR MESSAGES - REFUND** 

PRINTER REPLACEMENT (FAILED PRINTHEAD)

POOR PRINT QUALITY & LOW INK MESSAGES (IPH)

PRINT QUALITY (DEGRADED IQ / PQ / COLOR PERFORMANCE)

PRINTER WORKING - NO INK APPEARS ON PAPER [ IPH CARTRIDGE RECOVERY ]

HP PS C4200-C4500 & C5200-C5500 ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (74-75)

HP OJ J5700-J6400 ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (74/75)

HP Deskjet D4200-D4300 SERIES ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (74-75)

#### ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (901); OJ J4500, J4600 & 4500 Series)

PHOTOSMART C4600/4700/D110a ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (HP 60s)

DESKJET F2400/F4400/F4500 & F4200 ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (60)

DESKJET D2500/D2600 ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (HP 60s)

ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (61)

HP Officejet K60/K80xi ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (15, 23, 45, 78)

HP Deskjet 5000-5100-5500-5600-5800 (HP 56 / 57 / 58 )

#### <u>HP Deskjet 5440 & 6000, PSC 2335/2355, PS 2600/2610xi/2710 - NOT RECOGNIZING CARTRIDGE (92-98)</u> HP PSC 1610 - NOT RECOGNIZING CARTRIDGE (92-98)

SEVERE ERROR MESSAGES - HP 92-98 Rejection (> No Tap 41)

#### HP OFFICEJET 6210/6310/7210/7310/7410 ERRORS - NOT RECOGNIZING CARTRIDGE (95/98)

<u>HP PS 8049, 8050, 8100, 8150, 8400, 8450 (7800 & 7850?) - NOT RECOGNIZING CARTRIDGE (94-97)</u> HP DESKIFT D4100 SERIES - NOT RECOGNIZING CARTRIDGE (92-93)

#### HP PS C3110-C3194 --- NOT RECOGNIZING CARTRIDGE (92/93)

HP PS C4100 PRINTER SERIES --- NOT RECOGNIZING CARTRIDGE (92/93/95)

HP PSC 1503-1514 --- NOT RECOGNIZING CARTRIDGE (92/93)

## <u>HP OJ J3680/4215/4315/5610 -PSC1200-1300, D1300-D2300, PS 7960, Deskjet 3000 & F2200 Series –</u> CARTRIDGE ERRORS (21/22/27/28/56-58)

HP PSC 2175xi, 2210, 2400, 2410, 2500 - (HP 56/57 CARTRIDGE ERRORS)

CARTRIDGE SELF-DIAGNOSIS PERFORMED

LEXMARK – DELL PRINTING FAILURE

LOW INK MESSAGE (GENERAL)

LOW INK MESSAGE (Dell - Lexmark)

LOW INK MESSAGE (PRINTING NOT ALLOWED)

GENERAL 'LOW INK' OR 'NUISANCE MESSAGES' (CUSTOMER IS ALREADY AWARE)

CARTRIDGE ALIGNMENT

SLOW PRINTING / CAN'T COPY OR SCAN (IPH CARTRIDGES)

**CARTRIDGE EXPIRATION** 

CARTRIDGE REFILL 90 DAY "EXPIRATION"

CARTRIDGE LEAKING (ERROR MESSAGES & NO PRINTING)

CANON, EPSON, HP 02/88 -- RESETTABLE CARTRIDGE ERROR MESSAGES

EPSON UNRECOGNIZED CARTRIDGE ERROR

EPSON CARTRIDGE FAILURE – 2<sup>ND</sup> RESPONSE FOLLOW UP

"COMPATIBLE (RE-MAN)" IIT CARTRIDGE - CARTRIDGE ERROR MESSAGE

EPSON OR CANON IIT: "NON-GENUINE" & "UNRECOGNIZED CARTRIDGE" ALERT MESSAGES

HP 940/88 - PRINT QUALITY / POOR PRINTING / FADED TEXT / MISSING COLORS

HP 564 - PRINT QUALITY / POOR PRINTING / FADED TEXT / MISSING COLORS PRINTHEAD FLUSHING

HP 564 - POOR PRINT QUALITY (SEVERE) - PRINTHEAD CLEANING/REPLACEMENT

### HP 920 - PRINT QUALITY / POOR PRINTING / FADED TEXT / MISSING COLORS

<u>HP 920 – POOR PRINT QUALITY (SEVERE) / ONGOING COLOR SHIFT – PRINTHEAD CLEANING</u> <u>HP 920 – POOR PRINT QUALITY (SEVERE) – PRINTHEAD CLEANING/FLUSHING REPLACEMENT</u> HP 564/920 – POSSIBLE PRINTHEAD FAILURE HP 554 PRINTHEAD FAILURE ("INCOMPATIBLE PRINTHEAD") HP 02 -- CARTRIDGE PROBLEM -- MULTIPLE CARTRIDGES HP 02 -- PRINT QUALITY / POOR PRINTING / FADED TEXT / MISSING COLORS HP 02 -- EXPIRED INK / THE CARTRIDGE IS NOT INTENDED FOR THIS PRINTER... ERROR MESSAGES HP-CANON-EPSON IIT SYSTEMS - IDENTIFYING WHICH COLOR HAS RUN OUT HP 02 OVERALL PERFORMANCE CONCERNS -- INK MONITORING / POTENTIAL PRINTER DAMAGE CANON-EPSON IIT SYSTEMS - IDENTIFYING WHICH COLOR HAS RUN OUT EPSON ARTISAN (6-COLOR) PRINTERS - IDENTIFYING WHICH COLOR HAS RUN OUT CANON / EPSON -- MISSING COLORS OR POOR/INCONSISTENT PRINT QUALITY EPSON -- MISSING COLORS FOLLOWING REPEATED "HEAD CLEANING" EPSON -- MISSING COLORS FOLLOWING REPEATED "HEAD CLEANING" EPSON -- SEVERE PRINT QUALITY PROBLEM (MISSING COLOR/COLORS) QUESTIONING OF COLOR/INK PERFORMANCE (REFILL SERVICES -- QUALITY ASSURANCE) GREYSCALE PRINTING & COLOR USAGE REFILL FRIENDLY PRINTER MODELS HP 564 "Incompatible Older Generation Cartridge Installed" ERROR MESSAGE HP 564/920/940/88 "Incompatible Printhead" ("Cartridge", "Printhead" "Ink System Failure" errors) HP 564/920 - UNAUTHORIZED / FRAUD INK MESSAGE / LOW INK HP 940 - UNAUTHORIZED / FRAUD INK MESSAGE / LOW INK

CANON 30-241 ERROR MESSAGE (GENERAL)

#### CANON 210/211 240/241 -- ERROR MESSAGE / NO PRINTING

#### CANON 30-241 ERROR MESSAGE (ADVANCED - NO PRINTING ALLOWED)

HARD RESET

IIT Ink Shelf Life (NON FOAM) - HP88/940/932/933/950/951/02

HP OFFICEJET PRO K5xxx/Lxxx (HP 88s) – CARTRIDGE ERROR

HP OFFICEJET PRO Kxxx/Lxxx (HP 88s) - POOR PRINT QUALITY / IMPROPER OR MISSING COLORS

HP OFFICEJET PRO 8500A (HP 940s) – POWER OFF/CARTRIDGE ACCESS DOOR TRICK

HP OFFICEJET PRO 8500A (HP 940s) - "NO INK" / "MISSING OR DAMAGED" PRINTER ERROF

#### HP OFFICEJET PRO 8500/8500A (HP 940s) - CONFUSION OVER INK LOW AND CHIP REPLACEMENT

HP OFFICEJET PRO 8500/8500A (HP 940s) - PRINTHEAD FAILURE MESSAGE

HP 932/933 CARTRIDGE SWAP / ACTIVATION & LOW INK WARNINGS

HP 950/951 CARTRIDGE SWAP / ACTIVATION & LOW INK WARNINGS

HP 932/933 & 950/951: WHY 2<sup>ND</sup> SET OF CARTRIDGES MUST BE PURCHASED/OBTAINED

HP 932/933 & 950/951: "LOW INK" / "INK CARTRIDGES DEPLETED" MESSAGES

HP 932/933 & 950/951: "Black Cartridge Damaged" / "Ink Cartridge Failure"

HP 950/951 – POOR PRINT QUALITY (SEVERE) – PRINTHEAD CLEANING/FLUSHING/REPLACEMENT

# 3<sup>RD</sup> PARTY REQUEST TO LINK INJET411 PAGES

As several other vendors/companies are already providing links to our support site today, this is fine with us. Please note we have two sites at the moment, but will soon be expanding another into Mexico: USA: <a href="http://www.inkjet411.com">www.inkjet411.com</a>

Canada: <u>www.ca.inkjet411.com</u> (currently being developed for French-Canadian support...should be complete by X-mas 2013)

NOTE: the Inkjet411 support site is intended to primarily support customers for Costco USA/Canada/Mexico, Frys Electronics (all stores), Best Buy Canada (select stores) and many major Universities (USA/Canada). We also have refilling services in a few other smaller retail locations.

If you have any specific questions, please e-mail us at <a href="mailto:inkjet411help@gmail.com">inkjet411help@gmail.com</a> -Thank you

RME Inkjet411 Support

## ISSUE UNRELATED TO REFILL

Regarding your recent inquiry about refilling, your \_\_\_\_\_ issue is not related to your cartridge refill. You should consult your printer User Manual or printer manufacturer help site (or Fixya.com printer user help forum: <a href="http://www.fixya.com/">http://www.fixya.com/</a> )

Regarding your recent inquiry, it is suggested to consult your printer User Manual or printer manufacturer help site (or Fixya.com printer user help forum: http://www.fixya.com/ )

## MORE INFO NEEDED

Regarding your recent inquiry about refilling, we need more information from you before we can recommend a solution. Please describe your issue in more detail. Please let us know if the problem falls into one of these categories:

- 1) Low Ink Alert Message (low ink lights on/pop-up messages)....these are normal.
- 2) Nuisance Alert Messages (i.e. "counterfeit" / "fraud cartridge")....these are normal.

3) Severe Error Messages (i.e. Unrecognized cartridge" / Missing or Not Detected")......these are NOT normal.

- 4) Missing color or colors during printing
- 5) Poor print/color performance

In the interim, we suggest that you go to the "Solve My Problem" section of the Inkjet411 website: <u>http://www.inkjet411.com/</u> and select the appropriate ink series family and your printer model. Follow the suggestions shown, including cartridge/printer cleaning procedures and running applicable diagnostic printer tests.

### **REPLY DELAY**

We apologize for the delay in responding, but we experienced temporary system connectivity issues which have since been resolved.

## COMPATIBLE / RE-BRANDED INDIVIDUAL INK TANKS (ALL) -- NOT SUPPORTED

Regarding your recent inquiry about a cartridge error message associated with your **Epson/HP/Canon** series "compatible" ink cartridge, **Costco/Frys** do not support re-branded individual ink tank/cartridge refilling or smart chip programming.

NOTE: A compatible, remanufactured or re-branded ink cartridge can be problematic when installed into the printer following refilling. Compatible cartridges are typically purchased on-line or at select retailers (i.e. sold under a different label than the regular HP, Canon, Epson, Lexmark or Dell cartridge packaging) and is essentially a "remanufactured tank" of the original HP/Canon/Epson/Lexmark/Dell genuine ink cartridge. For the best refilling experience, only use genuine ink tanks.

The reason is that the compatible cartridge smart chip (which is attached to cartridge's base) comes from an unknown source and the **Costco/Frys** reprogramming tools do not have the ability to properly program the smart chip (i.e. was never tested/certified for re-branded ink tanks).

We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future (USING GENUINE/ORIGINAL OEM INK CARTRIDGES).

## NEW OR NON-CARTRIDGE SUPPORT

Regarding your recent inquiry about Brother ink cartridge refill services, unfortunately Costco nor Fry's Electronics do not support the Brother ink series. However, we are continually evaluating and introducing support on different cartridge types so you may want to check back later.

NOTE: The Costco/Fry's in-store representatives (at either Photo/Electronics support center) are trained to refill over 240 different ink cartridge types from most of the major printer manufacturers (i.e. HP, Epson, Canon, Lexmark and Dell) and can answer any additional questions you may have. It typically takes about an hour to complete the refill from the time you drop the cartridges off.

Costco's ink refill service website which includes supported cartridges and refill pricing information: http://www.costcoinkjetrefill.com/pricing

Fry's Electronics ink refill service information website: <a href="http://www.frys.com/ads/page51">http://www.frys.com/ads/page51</a>

Please let us know if you have any other questions. -Thank you Regarding your recent inquiry about refilling the **Canon 240/241** ink cartridges, currently these are not supported....however Costco USA, Costco Canada and Frys Electronics will begin supporting these cartridge sometime in the next 3 weeks.

We suggest you check either of the retailers listed above in the coming months to learn if the list has been expanded to include your cartridges. Costco's Site: <u>http://www.costcoinkjetrefill.com/pricing</u>

-Thank you

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Regarding your recent inquiry about refilling the Canon 240/241 ink cartridges, these are currently supported in 70+ Costco stores in South California, along with select beta sites in Illinois, New York and Florida.

However, the rest of Costco USA & Costco Canada stores will begin supporting them beginning in ~3 weeks - most should be on-line by mid September. Fry's Electronics (all 34 locations) will also be supporting the new cartridges; estimated launch date is approximately 3 months from now.

To find the nearest refill Costco store location and/or Costco pricing information, you can find this information at <a href="http://www.costcoinkjetrefill.com">http://www.costcoinkjetrefill.com</a>

Depending on the cartridge size (240, 240XL, 240XXL), prices will range between \$7 and \$13 at the stores listed above.

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We suggest you check with your local Costco Photo Center personnel - they should be able to tell you approx. when the new Canon 240/241 (and 240XL, 240XXL and 241XL) cartridge support will be up and on-line. Costco's Site will soon be updated to reflect the corresponding pricing: <a href="http://www.costcoinkjetrefill.com/pricing">http://www.costcoinkjetrefill.com/pricing</a>

-Thank you

## STORE LOCATION / SERVICES

Regarding your recent inquiry about refill services, just your bring your cartridges into any of our authorized refill center locations [Costco USA (most locations), Fry's Electronics (all), Costco Mexico and Canada (select stores)]. To find the nearest refill Costco store location, you can find this information at <u>http://www.costcoinkjetrefill.com</u>

The in-store representatives (at either Photo/Electronics support center) are trained to refill over 240 different ink cartridge types from all the major manufacturers (i.e. HP, Epson, Canon, Lexmark and Dell) and can answer any additional questions you may have. It typically takes about an hour to complete the refill from the time you drop the cartridges off.

Below is Costco's refill service website which includes supported cartridges and refill pricing information - new cartridges and pricing will be updated as they become available: <u>http://www.costcoinkjetrefill.com/pricing</u>

Let us know if you have any other questions. -Thank you

LASER TONER / REMAN / COMPATIBLE / REBRANDED CARTRIDGES SUPPORTED? Our service is limited to ink refilling of consumer desktop inkjet ink cartridges only and we do not include sales of remanufactured or compatible ink cartridges. To date, we provide ink cartridge refilling services for over 240 different ink cartridge types (HP, Canon, Epson, Dell, Lexmark).

Unfortunately, Costco and Fry's Electronics currently only provide ink cartridge refilling services (i.e. for consumer/desktop inkjet printer models)...however, there are numerous 'toner' refilling services (i.e. for laser printers) available in just about every major city in North America. We suggest you conduct an internet search for such services for your zip code.

Let us know if you have any other questions. -Thank you

SEVERE CARTRIDGE ERROR ALERTS /PRINTER LIGHTS BLINKING (GENERAL BLANKET RESPONSE) Regarding your recent inquiry about the cartridge error message, this is apparently an electrical connection issue between the printer and the cartridge. To ensure you have performed a full diagnosis, please go to the "Solve My Problem" page at <u>http://www.inkjet411.com/</u> and follow the error resolutions provided, even if your exact error message or cartridge is not listed.

Please note that many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. -Thank you

ERROR MESSAGES – REFUND [ FOLLOW-UP MESSAGE / DIAGNOSIS ALREADY PERFORMED ] Regarding your recent inquiry about the cartridge error message along with the diagnostic steps you've already taken (thank you), it sounds like your cartridge's internal micro-electronics have electrically failed and will need to be replaced. In some cases the ink cartridges just need to be FIRMLY re-seated into the carriage assembly (also check the cartridge restraining mechanism/arms if present – sometimes these mechanical restraints/arms become loose over time...please double-check these if applicable). Based on your feedback it sounds like you already reseated the cartridges several times though. We also suggest that you ensure BOTH carriage/flex cables (where the cartridge interfaces to the carriage inside the printer) and BOTH ink cartridge rear electrical contacts are thoroughly clean to rule out connectivity as root cause: <a href="http://inkjet411.com/?page\_id=1519">http://inkjet411.com/?page\_id=1519</a>

Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process (these same problems also occur with brand new ink cartridges from time to time). The "**Cartridge Problem**" error message is typically indicative of failed micro-electronics internal to the ink cartridge.

NOTE: It is also common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a faulty cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. This type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Typically the ink cartridge's nozzle plate suffers a break at one of the flexible circuit lines within the base of the cartridge nozzle plate...refer to photo at bottom of this page: <u>http://inkjet411.com/?page\_id=509</u>

The more severe printer error messages which result in non-permitted print operations, represent a very small percentage of the mass experience (for this cartridge family), so please consider the problem you encountered as being relatively rare with an ink cartridge that has only been filled once or twice (~1-2% range).

The integrated ink cartridge electrical wire runs, at rear and lower sides of the ink cartridge, are somewhat delicate and are susceptible to ink attack and subsequent internal electrical damage, which can lead to premature failures. In addition, the older the cartridge the higher the chance of an internal micro-electronic failure. It is discouraged to use old ink cartridges which have been left in a drawer as internal corrosion of the electrical wire runs can occur in a period of time.

If the ink cartridge has an expired warranty date (imprinted date on front of ink cartridge) then the cartridge age is typically over 2 years old and could be at significantly higher risk for potential failure when refilled.

However, if your printer works routinely after inserting a brand new ink cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

We trust this detailed technical information provides you some additional insight into the issue you have endured. If, at any point in the future, you would like information on more 'refill friendly' printer models

just let us know. Here is a sample of such models we support today: http://inkjet411.com/?page\_id=1991

-Thank you

The fact that you have experienced 2 cartridge failures in a row is either a coincidence, the ink cartridges are past their useful usage date (see NOTE below) or your printer is suffering intermittent connectivity issues.

As the cartridge's ink nozzle plate (i.e. bottom of ink cartridge) contains all of the micro-electronics, no damage can occur to the printer as a result of a cartridge 'short'. Assuming the printer's flexible printed circuit cables (inside the printer - where the ink cartridge mates to the printer) are thoroughly clean and not damaged, then the failures are limited to the ink cartridges themselves......this is the case most (i.e. 99.9%) of the time based on our observation of reported cartridge failure and or detection issues.

For reference, the following page provides a complete review of the majority of cartridge error messages and causes of failure that you may observe on your printer at one point or another: <a href="http://inkjet411.com/?page\_id=1216">http://inkjet411.com/?page\_id=1216</a> (HP 92-99)

NOTE: The more severe printer error messages which result in non-permitted print operations, represent a very small percentage of the mass experience (HP 93/95/97/99 cartridge family specific), so please consider the problem you encountered as being relatively rare (1-3% range). The HP 93/95/97/99 ink cartridge electrical wire runs, at rear and lower sides of the ink cartridge, are very delicate and are considered somewhat susceptible to ink attack and subsequent damage, which can lead to premature failures. In addition, the older the cartridge the higher the chance of an internal electrical failure. It is discouraged to use old ink cartridges which have been left in a drawer - internal corrosion of the electrical wire runs will occur. In some limited cases the ink cartridge(s) just needs to be FIRMLY reseated into the cartridge assembly. If the ink cartridge has an expired warranty date (imprinted date on front of ink cartridge) then the cartridge age is typically over 2 years old and could be at significantly higher risk for potential failure when refilled.

We trust this detailed technical information provides you some additional insight into the issue you have endured. If, at any point in the future, you would like information on more 'refill friendly' printer models just let us know.

PRINTER REPLACEMENT (FAILED PRINTHEAD/IPH DAMAGE CLAI This is quite unfortunate but also coincidental in our view. While policies do vary between different Costco stores (state to state), you could discuss with the lead store manager and request to fill out Costco's standard 'liability form'.

NOTE: You will need to supply images of the error images, along with images of your printer, when you fill out the Costco 'liability form' at Costco's Photo Dept. You will also need to bring in all the refilled ink cartridges that are involved in the claim. An approval is not our decision as you will first need to fill out the 'liability form' and then be approved by the local store manager along with the regional account manager.

## -Thank you

# POOR PRINT QUALITY & LOW INK MESSAGES (IPH)

Regarding your recent inquiry about the low ink message and the light text/partial fading during printing, our answers are provided below in two sections:

# DEGRADED IMAGE QUALITY

A. For the poor print quality problem (degraded image quality) you are observing, we suggest you first visit the "Print Quality" page of the "General Information" section of the Inkjet 411 website and follow the suggestions provided: <u>http://inkjet411.com/?page\_id=1432</u>

A. 1. Cartridge & Printer maintenance should also be evaluated - ensure both ink cartridges and flexible driver contact cables (where the cartridge interfaces to the carriage inside the printer) are thoroughly clean: <a href="http://inkjet411.com/?page\_id=1519">http://inkjet411.com/?page\_id=1519</a>

A.2. Perform a hot-water flush on the suspect ink cartridge, refer to video procedure here: <u>http://inkjet411.com/?page\_id=1519</u>

A.3. Run a quick test print to evaluate cartridge performance (i.e. 4-color test print): <u>http://inkjet411.com/?page\_id=146</u>

# LOW INK MESSAGES

B. "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for all integrated ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed.

As you just returned from the refill store, your ink cartridge(s) is full of ink - you may ignore low ink warnings (along with any other nuisance message) and print normally until you observe one of the colors to begin to fade.

B.1. The "low ink" or "no status" message typically occurs soon after a refill. It is a false signal, because the printer cannot recognize that the cartridge has been refilled. Your cartridge is not low on ink, and nothing is wrong with your refilled cartridge or printer. Unfortunately, you may also observe multiple 'nuisance alert' messages, these can be ignored as well. For more information on 'low ink' and 'nuisance messages' and what you should expect, please watch the video at the following link (HP 60 series): <a href="http://inkjet411.com/?page\_id=396">http://inkjet411.com/?page\_id=396</a> (HP 60/61 Low Ink)

B. 2. The ink level indicator cannot be manually re-set in the newer HP cartridges, thus making it not usable. However, losing this feature is not necessarily significant, because the ink level indicator usually has 20%-30% ink remaining when it shows "low on ink". Therefore, the warning has limited value, because customers who prematurely replace their cartridges when they see the "low ink" message are wasting a lot of residual ink. In order to use as much available ink as possible, many customers (not only those who refill their cartridges, but many who have not yet tried refilling) always ignore the ink level indicator "low" warning, and wait to replace/refill their cartridge until immediately after seeing ink begin to fade on their printouts. Many customers who disregard the low ink indicator keep a spare set of cartridges so that their printing productivity is not disrupted when the cartridge runs out of ink.

B. 3. If the cartridge completely runs out of ink and continues to be used when it is dry, this could damage the cartridge, so customers should promptly refill/replace their cartridge when the ink begins to fade. This fading process is gradual, so that you will have sufficient time to refill/replace the cartridge before the risk of empty cartridge printing. In summary, most refill customers agree that the huge savings of refilling is much greater than the potential loss of the low ink indicator feature.

C. Before you refill your next ink cartridge, please refer to this video which provides some helpful transportation tips to avoid any potential issues: <a href="http://inkjet411.com/?page\_id=1437">http://inkjet411.com/?page\_id=1437</a>

-Thank you

# PRINT QUALITY (DEGRADED IQ / PQ / COLOR PERFORMANCE)

Regarding your recent inquiry about the poor print quality problem (degraded image quality) you are experiencing, we suggest you first visit the "Print Quality" page of the "General Information" section of the Inkjet 411 website and follow the suggestions provided: <u>http://inkjet411.com/?page\_id=1432</u>

Run a quick printer 'self test' or Inkjet411 test print to evaluate cartridge performance (i.e. 4-color test print): <u>http://inkjet411.com/?page\_id=146</u>

Cartridge & Printer maintenance should also be evaluated - ensure both ink cartridges and flex cable contact surfaces (where the cartridge interfaces to the carriage inside the printer) are thoroughly clean: <a href="http://inkjet411.com/?page\_id=1519">http://inkjet411.com/?page\_id=1519</a>

1) Gently blot the cartridge Nozzle Plate with a damp lint-free towel/wipe – a small amount of ink should be dispensed, and be visible, on the towel (all 3 colors should be present for a Tricolor cartridge).

2) If no ink is dispersed from nozzle plate (i.e. visible on towel) or ink cartridge completely fails to print on paper after installed in printer, then more drastic cartridge and printer cleaning steps will likely need to be performed to recover ink cartridge (NOTE: foam inside cartridge can dry out and become very hard – the foam must be moist with ink to function correctly (i.e. ink flows and wets the nozzle plate). Refer to 'clogged ink cartridge recovery' video here: <a href="http://inkjet411.com/?page\_id=1519">http://inkjet411.com/?page\_id=1519</a>

Providing the ink cartridges are clean, the problem may be caused by a dirty wiper blade or poor seal in the service station (capping station where the ink cartridges park when not in use) and this is causing the poor jetting / print performance issue you are observing. Remove the ink cartridges and thoroughly clean the wipers and seals: <u>http://inkjet411.com/?page\_id=151</u>

If the issue continues then please refer to 'Troubleshooting' section on our website - the printer manufacturer websites are also provided here: <u>http://inkjet411.com/?page\_id=106</u>

### -Thank you

PRINTER WORKING - NO INK APPEARS ON PAPER [ IPH CARTRIDGE RECOVERY ] Based on your response it sounds like the ink cartridge is clogged and will need to be recovered; please follow these steps: <u>http://inkjet411.com/?page\_id=1519</u>

1) Gently blot the cartridge Nozzle Plate with a damp lint-free towel/wipe – a small amount of ink should be dispensed, and be visible, on the towel (all 3 colors should be present for a Tri-color cartridge).

2) If no ink is dispersed from nozzle plate (i.e. visible on towel) or ink cartridge completely fails to print on paper after installed in printer, then more drastic cartridge and printer cleaning steps will likely need to be performed to recover ink cartridge (NOTE: foam inside cartridge can dry out and become very hard – it must be moist to function correctly.

3) Immerse cartridge base (lower ¼ inch) in very hot, near boiling, distilled or de-ionized water for ~3-4 minutes (CAUTION!). Remove and blot cartridge nozzle plate to see if any ink is drawn out. If not repeat this step until some ink is dispensed and visible. Thoroughly dry ink cartridge surface with towel before reinstalling into printer. Refer to video here: <u>http://inkjet411.com/?page\_id=1519</u>

4) Ensure flexible cable contacts are thoroughly clean inside the printer. Clean printer carriage flexible cable contacts using isopropyl alcohol (99%) on damp cloth (or cotton swab). Remove all ink residue. IMPORTANT: Ensure NO fibers remain on contact surfaces.

Ensure cartridge and flexible cable contacts are thoroughly dry before re-installing ink cartridges into printer (suggested to wait up to 10 minutes).

To help rule out any other variables, please select "Solve My Problem" at the Inkjet411 website: <u>http://www.inkjet411.com/</u>

-Thank you

HP PS C4200-C4500 & C5200-C5500 ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (74-75) NOTE: For purposes of our communication please note that the HP 350/351 UK cartridges are the same as the HP 74/75 USA versions; all the features and functions discussed below will work on your printer as the printer platforms are identical.

Regarding your recent inquiry about the HP 75XL Tri-color cartridge error message ("cartridge in slot on left is not intended for use in this printer. Remove and replace") and inability to print with your HP PS C5550 printer, this type of error is normally associated to an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can (and frequently do!) occur with brand new ink cartridges.\* To help identify the root cause, and to confirm which of the two ink cartridges is causing the failure condition, please run the 'Tap 41' cartridge's electrical diagnostic test below (refer to C.)

VERY IMPORTANT. First verify the age of the ink cartridge(s)....look at imprinted date on front of ink cartridge. If this 'warranty expiration date' has expired, then potential internal electrical cartridge failures can (and frequently do) occur due to prolonged internal corrosion of cartridge micro-circuits, etc.

An internal electrical failure of a cartridge can be confirmed by performing the following steps which will help rule out other variables which could also be causing the issue.

A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

- B. Print Self Test Page:
- 1. Press and hold the CANCEL button.
- 2. Press the COLOR COPY button. Release both buttons.
- 3. The self test page should print. The printed pattern will verify printer is generally functional

--- The self test page is a 'forced' test print whether the ink cartridges are good or bad. Inspect color bars to verify proper nozzle/jetting health. If normal/regular printing is still not permitted then the problem is with either one, or both, of the ink cartridges. Activate Tap 41 test to confirm which cartridge is causing the issue.

C. Validate the cartridge's electrical health by running the 'Tap 41' diagnostics test. Refer to video procedure or .pdf document at the following links on how to activate and read the service test report: <a href="http://inkjet411.com/?page\_id=536">http://inkjet411.com/?page\_id=536</a>

- 1. Load Letter/A4-size paper into paper feed tray.
- 2. If any lights are blinking, first press Cancel to attempt to clear.
- 3. Press and HOLD the Cancel button, press Ok button once.
- 4. At 'Mfg Commands' menu, click Right Arrow once until 'uiaux service' menu is displayed.
- 5. At 'uiaux service' menu, click the Right Arrow until Special Reports menu is displayed.
- 6. Select Ok, then click Right Arrow until the 'print-mech button tap' menu is displayed.

7. Select Ok (Code = 0 will be displayed); click and hold Right Arrow until 'code = 41' is displayed. Use the Left Arrow if you need to decrease numerical count.

8. Select Ok. Within one minute the Tap 41 diagnostic test report should be initiated and print (whether ink cartridges are good or not, i.e. this is a forced print test). See following 4 paragraphs (or video) on how to interpret diagnostic report....

NOTE: You may also refer to this document for specific printer model 'Tap 41' diagnostic & 'Cartridge Error Bypass' step-by-step instructions: <u>http://inkjet411.retailinkjet.com/wp-</u> content/uploads/2013/04/HP-74-75-Problem-Resolution v10.pdf

--- Providing the color cartridge is partially functioning the Tap 41 diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health). A good HP 75/75XL color cartridge should display 600 good nozzles, while a good HP 74/74XL black ink cartridge should show 672 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to video on how to read the printout.

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink.

You can also test general printer performance by running the 'Tap 10' diagnostic test, use same procedure above and enter "code = 10". Both the 'Tap 41' and 'Tap 10' tests are 'forced print tests' – the printer will make every attempt to print the pattern whether the ink cartridges are good or bad...the patterns should be utilized to diagnose cartridge health. If 'regular' printing is still not possible then one or both of the ink cartridges is damaged.

NOTE: It is possible to 'temporarily' bypass the cartridge error message (for emergency printing purposes only), please refer to link above/below for video/documentation instructions: <a href="http://inkjet411.retailinkjet.com/wp-content/uploads/2013/04/HP-74-75-Problem-Resolution\_v10.pdf">http://inkjet411.retailinkjet.com/wp-content/uploads/2013/04/HP-74-75-Problem-Resolution\_v10.pdf</a>

However, if the cartridge is determined to be electrically damaged, largely dependent on the 'Tap 41' diagnostic test results, the cartridge will eventually need to be replaced with a new one. With a marginally performing ink cartridge, this typically results in allowing 1 entire print job to be printed at a time. If this does not permit any print operations then the cartridge has severe internal electrical damage and will need to be replaced.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Incompatible Print Cartridge(s)" / "Print Cartridge(s) Problem" / "Refer to printer documentation" / "Cartridge Error: Cartridge must be replaced" / "Cartridge in left/right slot is not intended for use in this printer" / "Now printing alignment page" error messages are typically indicative of failed micro-electronics internal to the ink cartridge(s). Also note that it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. Running the 'Tap 41' cartridge health diagnostics test will confirm the active electrical state of both cartridges.

Please note these types of failures are quite rare with an ink cartridge that that has only been refilled once or twice. For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: <a href="http://inkjet411.com/?page\_id=509">http://inkjet411.com/?page\_id=509</a>

However, if your printer works routinely after inserting a brand new HP75 (or HP75XL) ink cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

If you do decide to run the 'Tap 41' cartridge health diagnostics test mentioned above and have any questions about the printed test report, please relay the results to our team for failure confirmation (you should observe exactly 600 & 672 nozzles in the test report). For additional printer diagnostics information please visit: <u>http://inkjet411.com/?page\_id=1813</u>

Please let us know if you have any additional questions regarding procedures outlined above and/or questions relating to the provided technical information. Before refilling your next each cartridge please refer to the following video and proper handling and care of integrated ink cartridges: <a href="http://inkjet411.com/?page\_id=1437">http://inkjet411.com/?page\_id=1437</a>

-Thank you

### HP OJ J5700-J6400 ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (74-75)

NOTE: For purposes of our communication please note that the HP 350/351 UK cartridges are the same as the HP 74/75 USA versions; all the features and functions discussed below will work on your printer as the printer platforms are identical.

Regarding your recent inquiry about the **HP 75XL** cartridge error message ("xxx") and inability to print with your **HP OJ J5700 printer**, this type of error is normally associated to an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can (and frequently do) occur with brand new ink cartridges.\* To help identify the root cause, and to confirm/determine which of the two ink cartridges is causing the failure condition, please run the 'Tap 41' cartridge's electrical diagnostic test below (refer to C.) Please first verify the age of the ink cartridge(s)....look at imprinted date on front of ink cartridge. If this 'warranty expiration date' has expired, then potential internal electrical cartridge failures can occur due to internal corrosion, etc.

NOTE: As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this will place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): To see if your printer model supports this particular feature please refer to your printer's User Guide.

An internal electrical failure of a cartridge can be confirmed by performing the following steps which will help rule out other variables which could also be causing the issue.

- A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>
- B. Print Extended Self Test:
- 1. Press CANCEL + OK buttons at the same time.
- 2. The extended self test page should print.

--- Verify all colors and all stair-step nozzles are firing (i.e. no missing horizontal lines should be visible in the stair-step grid patterns). (NOTE: the self test page is a 'forced' test print whether the ink cartridges are good or bad). Inspect color bars to verify proper nozzle/jetting health. If normal/regular printing is still not permitted then the problem is with either one, or both, of the ink cartridges. Activate Tap 41 test to confirm which cartridge is causing the issue.

- C. Validate the cartridge's electrical health by running the 'Tap 41' diagnostics test. Refer to video procedure (or .pdf document) at the following links on how to activate and read the service test: <u>http://inkjet411.com/?page\_id=544</u>
  - **1.** Press the \* and # keys simultaneously.
  - 2. Enter 124 (or 123) at keypad.
  - **3.** Use the arrow keys to navigate to the System Menu. Select Ok.
  - Use the arrow keys to navigate to the 'print-mech tap test'. Select Ok. Should display 'code = 0'.
  - Use the arrow keys to enter 'code = 41' (or just enter 41 on keypad). Select Ok. The Tap 41 diagnostic test pattern should begin to print.

**NOTE 1:** <u>The 'Tap 10' (extended self test) can also be activated by pressing CANCEL + OK buttons</u> <u>at the same time.</u> <u>Whether ink cartridges are good or not, i.e. this is a forced print test). Refer</u> to following 4 paragraphs (or video) on how to interpret diagnostic report..... **NOTE 2:** You may also refer to this document for specific printer model 'Tap 41' diagnostic & 'Cartridge Error Bypass' step-by-step instructions: <u>http://inkjet411.retailinkjet.com/wp-content/uploads/2013/04/HP-74-75-Problem-Resolution\_v10.pdf</u>

--- Providing the color cartridge is partially functioning the Tap 41 diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health). A good HP 75/75XL color cartridge should display 600 good nozzles, while a good HP 74/74XL black ink cartridge should show 672 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to video on how to read the printout.

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink.

You can also test general printer performance by running the 'Tap 10' diagnostic test, use same procedure above and enter "code = 10". Both the 'Tap 41' and 'Tap 10' tests are 'forced print tests' – the printer will make every attempt to print the pattern whether the ink cartridges are good or bad...the patterns should be utilized to diagnose cartridge health. If 'regular' printing is still not possible then one or both of the ink cartridges is damaged.

NOTE 3: It is possible to 'temporarily' bypass the cartridge error message (for emergency printing purposes only), please refer to link above/below for video/documentation instructions. However, if the cartridge is determined to be electrically damaged, largely dependent on the 'Tap 41' diagnostic test results, the cartridge will eventually need to be replaced with a new one. With a marginally performing ink cartridge, this typically results in allowing 1 entire print job to be printed at a time. If this does not permit any print operations then the cartridge has severe internal electrical damage and will need to be replaced:

http://inkjet411.retailinkjet.com/wp-content/uploads/2013/04/HP-74-75-Problem-Resolution\_v10.pdf

D. Cartridge Error Bypass (Emergency Printing Only - <u>http://inkjet411.com/?page\_id=544</u>):

- 1. Press the \* and # keys simultaneously
- 2. Enter 123 (or 124) at keypad. The 'Underware' menu should be displayed.
- 3. Use the arrow keys to navigate to the Information Menu. Select Ok.

4. Use the arrow keys to navigate to the 'checksum for relock data input'. Select Ok. LCD should display a 5-digit number after a few seconds.

5. Attempt to send a print job to printer

NOTE: with a marginally performing ink cartridge, this typically results in allowing 1 entire print job to be printed at a time. If this does not permit any print operations then the cartridge has severe internal electrical damage and will need to be replaced. \*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The **"Incompatible Print Cartridge(s)"** / **"Print Cartridge(s) Problem"** / **"Refer to printer documentation"** / **"Cartridge Error: Cartridge must be replaced"** / **"Cartridge in left/right slot is not intended for use in this printer"** / **"Now printing alignment page"** error messages are typically indicative of failed micro-electronics internal to the ink cartridge(s). Also note that it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. Running the 'Tap 41' cartridge health diagnostics test will confirm the active state of both cartridges.

Please note these types of failures are quite rare with an ink cartridge that that has only been refilled once or twice. For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: http://inkjet411.com/?page\_id=509

However, if your printer works routinely after inserting a brand new HP 74 and/or HP 75 ink cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

If you do decide to run the 'Tap 41' cartridge health diagnostics test mentioned above and have any questions about the printed test report, please relay the results to our team for failure confirmation (you should observe exactly 600 & 672 nozzles in the test report). For additional printer diagnostics information please visit: <u>http://inkjet411.com/?page\_id=1813</u>

Please let us know if you have any additional questions regarding procedures outlined above and/or questions relating to the provided technical information. Before refilling your next each cartridge please refer to the following video and proper handling and care of integrated ink cartridges: <a href="http://inkjet411.com/?page\_id=1437">http://inkjet411.com/?page\_id=1437</a>

### -Thank you

## PHOTOSMART C4600/4700/D110a ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (HP 60s) Regarding your recent inquiry about the HP 60XL cartridge error message ("Incompatible Print Cartridges") and inability to print with your HP PHOTOSMART C4600 printer, this type of error is either an electrical connection issue between the printer and the cartridge, or more likely, an internal microelectronic failure inside one of the ink cartridges. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can (and frequently do) occur with brand new ink cartridges.\* To help identify the root cause please run the 'Tap 41' cartridge's electrical / diagnostic tests below (refer to B. and C), this will also identify which ink cartridge is causing the issue:

NOTE: "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for all newer HP integrated ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print

operations to proceed. The ink level monitoring feature cannot be reset (i.e. in the newer line of integrated ink cartridges, HP blows the ink monitoring resistors inside the cartridge the first time it is used - thus it is impossible to reset them). Printer nuisance messages may also be ignored: <a href="http://inkjet411.com/?page\_id=420">http://inkjet411.com/?page\_id=420</a>

Please first verify the age of the ink cartridge(s)....look at imprinted date on front of ink cartridge. If this 'warranty expiration date' has expired, then potential internal electrical cartridge failures can occur due to internal corrosion, etc.

A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

B. Validate the cartridge's electrical health by running the 'Tap 41' diagnostics test. Refer to DIAGNOSTIC TAP 41 video procedure at the following link on how to activate and read the service test: <u>http://inkjet411.com/?page\_id=434</u>

1. Using two fingers, gently tap the 'Return' and 'Home' keys on touchscreen until the 'Support' Menu is displayed (for example, press the button 3-4 times each in rapid & alternating succession).

2. At 'Support' menu, select the upper right button until the 'Reports Menu' is visible. Select OK.

3. Press upper right button until 'print mech button tap' menu is displayed.

4. Press OK, the 'code = 0' menu should be displayed.

5. Use arrows keys to change value to 'code = 41' (i.e. press and hold right arrow key). When 'code = 41', select 'OK'.

6. The diagnostic 'tap 41' test pattern should print.

--- Providing the color cartridge is partially functioning the Tap 41 diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health). A good HP 60/60XL color cartridge should display 1248 good nozzles, while a good HP 60/60XL black ink cartridge should show 336 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to video on how to read the printout. http://inkjet411.com/?page\_id=434

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink.

C. Print the Self Test Page:

1. Load plain white paper in the input tray.

2. Touch the lower-left corner of the control panel 4 times until Support Menu displays on the control panel, and then touch OK.

OTE: The OK button becomes visible when you access the Support Menu

3. Touch the Menu button next to Support in the upper-right corner of the control panel until Reports Menu displays, and then touch OK.

4. Touch the button in the upper-right corner of the control panel until Printer Status Report displays, and then touch OK. The self-test report should print.

---- If the self test page prints (illustrates that printer is functional) but normal/regular printing from the computer/host workstation is not permissible, then one of the ink cartridges likely has a problem and may need to be replaced. Evaluate test page to ensure all ink nozzles are firing from both ink cartridges; use to check color printing performance.

NOTE: It is possible to 'temporarily' bypass the cartridge error message (for emergency printing purposes only), please refer to link above for video/documentation instructions. However, if the cartridge is determined to be electrically damaged, largely dependent on the 'Tap 41' diagnostic test results, the cartridge will eventually need to be replaced with a new one.

You can also test general printer performance by running the 'Tap 10' diagnostic test, use same procedure above and enter "code = 10". Both the 'Tap 41' and 'Tap 10' tests are 'forced print tests' – the printer will make every attempt to print the pattern whether the ink cartridges are good or bad...the patterns should be utilized to diagnose cartridge health. If 'regular' printing is still not possible then one or both of the ink cartridges is damaged.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Incompatible Cartridge(s)" / "Print Cartridge(s) Problem" / "Refer to printer documentation" / "Cartridge Error: Cartridge must be replaced" / "Cartridge in left/right slot is not intended for use in this printer " or even "Now printing alignment page" error messages are typically indicative of failed micro-electronics internal to the ink cartridge(s). Also note that it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. Running the 'Tap 41' cartridge health diagnostics test will confirm the active state of both cartridges.

Please note these types of failures are quite rare with an ink cartridge that that has only been refilled once or twice. For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: <a href="http://inkjet411.com/?page\_id=415">http://inkjet411.com/?page\_id=415</a>

However, if your printer works routinely after inserting a brand new HP 60 (or 60XL) cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

If you do decide to run the 'Tap 41' cartridge health diagnostics test mentioned above and require assistance in interpreting the diagnostic test information, please relay the results to our team for failure confirmation. For advanced/complete HP printer diagnostics information please visit: <a href="http://inkjet411.com/?page\_id=1813">http://inkjet411.com/?page\_id=1813</a>

-Thank you

DESKJET F2400/F4400/F4500 & F4200 ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (HP 60s)

NOTE: For purposes of our communication please note that the HP300 UK cartridges are the same as the HP60 USA versions; all the features and functions discussed below will work on your printer as the printer platforms are identical.

Regarding your recent inquiry about the **HP 60** cartridge error message ("Incompatible Print Cartridges") and inability to print with your **HP Deskjet Fxxx printer**, this type of error is normally associated to an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can (and frequently do) occur with brand new ink cartridges.\* To help identify the root cause, please run the 'Tap 41' cartridge's electrical / diagnostic tests below (refer to B. and C), this will identify which ink cartridge is causing the issue:

NOTE: "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for all newer HP integrated ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. The ink level monitoring feature cannot be reset (i.e. in the newer line of integrated ink cartridges, HP blows the ink monitoring resistors inside the cartridge the first time it is used - thus it is impossible to reset them). Printer nuisance messages may also be ignored: <a href="http://inkjet411.com/?page\_id=420">http://inkjet411.com/?page\_id=420</a>

Please first verify the age of the ink cartridge(s)....look at imprinted date on front of ink cartridge. If this 'warranty expiration date' has expired, then potential internal electrical cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this might place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only):

An internal electrical failure of a cartridge can be confirmed by performing the following corrective/diagnostic steps:

- A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>
- B. Validate the cartridge's electrical health by running the 'Tap 41' diagnostics test. Refer to DIAGNOSTIC TAP 41 video procedure at the following link on how to activate and read the service test:

http://inkjet411.com/?page\_id=440 (HP 60 – Deskjet F2400/F4400/F4500 models)

- 1. While holding the Power button, press Cancel (X) button 4 times, then press the Color Copy button once.
- 2. Release the Power button.
- 3. The 'Tap 41' diagnostic test print should print.

## http://inkjet411.com/?page\_id=444 (HP 60 – Deskjet F4200 model)

- 1. While holding the Power button, press Cancel (X) button 4 times, then press the 'Resume' button once.
- 2. Release the Power button.
- 3. The 'Tap 41' diagnostic test print should print.

--- Providing the color cartridge is partially functioning the Tap 41 diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health). A good HP 60/60XL color cartridge should display 1248 good nozzles, while a good HP 60/60XL black ink cartridge should show 336 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to 2<sup>nd</sup> video on how to read the printout. <u>http://inkjet411.com/?page\_id=440</u> (HP 60 – Deskjet F2400/F4400/F4500 models) <u>http://inkjet411.com/?page\_id=444</u> (HP 60 – Deskjet F4200 model)

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink.

- C. Print the Self Test Page: <a href="http://inkjet411.com/?page\_id=579">http://inkjet411.com/?page\_id=579</a> (Deskjet D2500/D2600 series)
  - **1.** Press and HOLD the Power button, press the Cancel button. Release both buttons.
  - .....or....
  - 2. Press and HOLD the CANCEL button, press the COPY button once.
  - **3.** The self test page should print.

--- If the self test page prints (illustrates that printer is functional) but normal/regular printing from the computer/host workstation is not permissible, then one of the ink cartridges likely has a problem and may need to be replaced. Evaluate test page to ensure all ink nozzles are firing from both ink cartridges; use to check color printing performance.

NOTE: To our team's knowledge there is no 'cartridge error bypass' method available for the **HP Deskjet** printer model.

You can also test general printer performance by running the 'Tap 10' diagnostic test, use same procedure above except only press the CANCEL + COPY/RESUME buttons once each together. Both the 'Tap 41' and 'Tap 10' tests are 'forced print tests' – the printer will make every attempt to print the pattern whether the ink cartridges are good or bad...the patterns should be utilized to diagnose cartridge health. If 'regular' printing is still not possible then one or both of the ink cartridges is damaged. \*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The **"Incompatible Cartridge(s)"** / **"Print Cartridge(s) Problem"** / **"Refer to printer documentation"** / **"Cartridge Error: Cartridge must be replaced"** / **"Cartridge in left/right slot is not intended for use in this printer** " or even **"Now printing alignment page"** error messages are typically indicative of failed micro-electronics internal to the ink cartridge(s). Also note that it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. Running the 'Tap 41' cartridge health diagnostics test will confirm the active state of both cartridges.

Please note these types of failures are quite rare with an ink cartridge that that has only been refilled once or twice. For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: http://inkjet411.com/?page\_id=415

However, if your printer works routinely after inserting a brand new HP 60 (or 60XL) cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

If you do decide to run the 'Tap 41' cartridge health diagnostics test mentioned above and require assistance in interpreting the diagnostic test information, please relay the results to our team for failure confirmation. For advanced/complete HP printer diagnostics information please visit: <a href="http://inkjet411.com/?page\_id=1813">http://inkjet411.com/?page\_id=1813</a>

### -Thank you

DESKJET D2500/D2600 ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (HP 60s) Regarding your recent inquiry about the HP 60 (or 60XL) ink cartridge error message ("Incompatible Print Cartridges", or similar) and inability to print with your HP Deskjet D2545 printer, this type of error is normally associated to an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside one of the ink cartridges. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can (and frequently do) occur with brand new ink cartridges.\* To help identify the root cause, and to determine which cartridge is causing the error condition, please activate the self-test below (please refer to B.).

NOTE: "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for all newer HP integrated ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. The ink level monitoring feature cannot be reset (i.e. in the newer line of integrated ink cartridges, HP blows the ink monitoring resistors inside the cartridge the first time it is used - thus it is impossible to reset them). Printer nuisance messages may also be ignored: <a href="http://inkjet411.com/?page\_id=420">http://inkjet411.com/?page\_id=420</a>

Please first verify the age of the ink cartridge(s)....look at imprinted date on front of ink cartridge. If this 'warranty expiration date' has expired, then potential internal electrical cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this might place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): To confirm if this feature is supported on your particular printer model, please refer to your printer's User Guide.

An internal electrical failure of a cartridge can be confirmed by performing the following corrective/diagnostic steps:

A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

- B. Print the Self Test Page: <u>http://inkjet411.com/?page\_id=579</u>
- 1. Press and HOLD the Power button, press the Cancel button. Release both buttons.
- 2. The self test page should print.

---- If the self test page prints (illustrates that printer is functional) but normal/regular printing from the computer/host workstation is not permissible, then one of the ink cartridges likely has a problem and may need to be replaced. Evaluate test page to ensure all ink nozzles are firing from both ink cartridges; use to check color printing performance. A good HP 60/60XL color cartridge normally has 1248 good nozzles, while a good HP 60/60XL black ink cartridge has 336 functioning nozzles.

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the self test and the printer should print the self test print in black ink.

To help determine which cartridge is causing the problem:

- 1. Open the cartridge access door.
- 2. Remove either cartridge (not both).
- 3. Close the cartridge access door/cover.

-- If the computer message is Print Cartridge Error, then the print cartridge that is still in the printer is the problem cartridge. If the computer message is NOT Print Cartridge Error (instead, it says that the cartridge you have removed is ...Either missing, not detected, or incorrectly installed), then the cartridge you have removed is the problem cartridge. On some printer models, if you notice the blinking error lights stops blinking following a cartridge removal, then this is the defective cartridge. \*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Incompatible Cartridge(s)" / "Print Cartridge(s) Problem" / "Refer to printer documentation" / "Cartridge Error: Cartridge must be replaced" / "Cartridge in left/right slot is not intended for use in this printer " or even "Now printing alignment page" error messages are typically indicative of failed micro-electronics internal to the ink cartridge(s). Also note that it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note these types of failures are quite rare with an ink cartridge that that has only been refilled once or twice. For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: http://inkjet411.com/?page\_id=415

However, if your printer works routinely after inserting a brand new HP 60 (or 60XL) cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

For advanced HP printer diagnostics information please see our Diagnostics.pdf document at: http://inkjet411.com/?page\_id=1813 -Thank you

HP Deskjet D4200-D4300 SERIES ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (74-75) Regarding your recent inquiry about the HP 74XL black ink cartridge error message ("unrecognized cartridge", or similar ink lamp error indicators) and inability to print with your HP Deskjet D4360 printer, this type of error is normally associated to an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can (and frequently do) occur with brand new ink cartridges.\* To help identify the root cause and to confirm/validate the electrical health of both ink cartridges, please run the 'Tap 41' cartridge's electrical / diagnostic test below.

Please first verify the age of BOTH ink cartridges....look at imprinted date on front of ink cartridge. If this 'warranty expiration date' has expired, then potential internal electrical cartridge failures can occur due to internal corrosion, etc.

NOTE: As a temporary workaround (which is supported on most HP Deskjet printer models) remove one of the ink cartridges from the printer....this will place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): For more information, refer to your printer user guide.

An internal electrical failure of a cartridge can be confirmed by performing the following steps which will help rule out other variables which could also be causing the issue.

1) Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

2) Validate the cartridge's electrical health by running the 'Tap 41' diagnostics test. Refer to video procedure at the following link on how to activate and read the service test: <u>http://inkjet411.com/?page\_id=792</u> (HP 74/75 – Deskjet D4200/D4300 models)

a. If any lights are blinking, first press Cancel to attempt to clear.

b. Press and HOLD the Power button, press 'Cancel' button 4 times, then 'Resume' button (down arrow) once.

c. Release the Power button. The Tap 41 diagnostic test should print.

- Providing the color cartridge is partially functioning the Tap 41 diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health). A good HP 75/75XL color cartridge should display 600 good nozzles, while a good HP 74/74XL black ink cartridge should show 672 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to Photosmart C4200-C5200 'Tap 41' diagnostic test video at link above on how to read the printout.

If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink.

NOTE: To our team's knowledge there is no 'cartridge error bypass' method available for the HP Deskjet D4200/D4300 printer model series.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. Blinking ink lamp indicators (or Window's ink error messages) are typically indicative of failed micro-electronics internal to the ink cartridge(s). Also note that it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. Running the 'Tap 41' cartridge health diagnostics test will confirm the active state of both cartridges.

Please note these types of failures are quite rare with an ink cartridge that that has only been refilled once or twice. For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: <a href="http://inkjet411.com/?page\_id=509">http://inkjet411.com/?page\_id=509</a>

However, if your printer works routinely after inserting a brand new HP 74XL cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

If you do decide to run the 'Tap 41' cartridge health diagnostics test mentioned above and have any questions about the printed test report, please relay the results to our team for failure confirmation (you should observe exactly 600 & 672 nozzles in the test report). For additional printer diagnostics information please visit: <u>http://inkjet411.com/?page\_id=1813</u>

Please let us know if you have any additional questions regarding procedures outlined above and/or questions relating to the provided technical information. Before refilling your next each cartridge please refer to the following video and proper handling and care of integrated ink cartridges: <a href="http://inkjet411.com/?page\_id=1437">http://inkjet411.com/?page\_id=1437</a>

### -Thank you

## ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (901)

Regarding your recent inquiry about the **HP 901** cartridge error message ("Incompatible Print Cartridge") and inability to print with your **HP OJ J4550** printer, this type of error condition is either an electrical connection issue between the printer and the cartridge, or more likely, an internal microelectronic failure inside the HP 901 ink cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can (and frequently do) occur with brand new ink cartridges.\* To confirm root cause and check the internal electrical condition of both black and color ink cartridges, please execute the 'Tap 41' cartridge's electrical diagnostic test below (refer to procedure B).

Please first verify the age of the ink cartridge(s)....look at imprinted date on front of ink cartridge(s). If the 'warranty expiration date' has expired, then potential internal electrical cartridge failures can occur due to internal corrosion, etc.

An internal electrical failure of a cartridge can be confirmed by performing the following steps which will help rule out other variables which could also be causing the issue.

- A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>
- 3. Validate the cartridge's electrical health by running the 'Tap 41' diagnostics test. Refer to 2<sup>nd</sup> video procedure at the following link on how to activate and read the service test: http://inkjet411.com/?page\_id=620
  - **a.** Load Letter/A4-size paper into paper feed tray.
  - b. If any lights are blinking, first press Cancel to attempt to clear.
  - **c.** Press the \* and # keys simultaneously.
  - d. Enter 124 at keypad. The 'Underware' menu should be displayed.
  - e. Use the arrow keys to navigate to the System Menu. Select Ok.
  - **f.** Use the arrow keys to navigate to the 'print-mech tap test'. Select Ok. Should display "code = 0".
  - g. Use the arrow keys to enter "code = 41" (or just enter 41 on keypad). Select Ok. The Tap 41 diagnostic test pattern prints.

--- Providing the HP 901 (or 901XL) color cartridge is partially functioning the Tap 41 diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health – the printer will attempt to print the diagnostic test print). A good HP 901 color cartridge should display 1248 good nozzles, while a good HP 901/901XL black ink cartridge should show 336 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to 2nd video on how to read the diagnostic test print: <u>http://inkjet411.com/?page\_id=620</u>

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink.

NOTE: It is possible to 'temporarily' bypass the cartridge error message (for emergency printing purposes only), please refer to link below (see 3<sup>rd</sup> video): <u>http://inkjet411.com/?page\_id=620</u> However, if the cartridge is determined to be electrically damaged, largely dependent on the 'Tap 41' diagnostic test results, the cartridge will eventually need to be replaced with a new one.

You can also test general printer performance by running the 'Tap 10' diagnostic test, use same procedure above and enter "code = 10". Both the 'Tap 41' and 'Tap 10' tests are 'forced print tests' – the printer will make every attempt to print the pattern whether the ink cartridges are good or bad...the patterns should be utilized to diagnose cartridge health. If 'regular' printing is still not possible then one or both of the ink cartridges is damaged.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The **"Incompatible Cartridge(s)**" / **"Print Cartridge(s) Problem" / "Refer to printer documentation" / "Cartridge Error: Cartridge must be replaced" / "Cartridge in left/right slot is not intended for use in this printer"** error messages along with the **'Blinking Exclamation Light'** are typically indicative of failed micro-electronics internal to the HP 901 ink cartridge(s). Also note that it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. Running the 'Tap 41' cartridge health diagnostics test will confirm the active state of both cartridges.

Please note these types of failures are quite rare with an ink cartridge that that has only been refilled once or twice. For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: http://inkjet411.com/?page\_id=596
However, if your printer works routinely after inserting a brand new HP 901 cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

If you do decide to run the 'Tap 41' cartridge health diagnostics test mentioned above, please relay the results to our team for failure confirmation should you have any questions about interpreting the test report. For additional printer diagnostics information please visit: <u>http://inkjet411.com/?page\_id=1813</u>

Please let us know if you have any further questions on this or any of the technical information provided above.

-Thank you

HP Deskjet 5440 & 6000, PSC 2335/2355/2600/2610xi/2710 - NOT RECOGNIZING CARTRIDGE (92-98) Regarding your recent inquiry about the **HP 96** cartridge error message and inability to print with your **HP Deskjet 6988** printer, this type of error is normally associated to an electrical connection issue between the cartridge and carriage flex cables, or even more likely, an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; this same type of failure can also (and frequently do!) occur with brand new ink cartridge\*. Let's run a few checks to check the electrical state of both ink cartridges and validate an internal micro-electronic failure of the ink cartridge or cartridges....

Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this may place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): For more information, refer to your printer's User Guide to see if this feature is supported for your printer model.

Please perform the following corrective/diagnostic printer checks:

A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

B. Perform either of the 3 service diagnostic tests (one of these procedures should provide you direct service menu access into your printer model):

B.1. Perform Tap 41 Cartridge Health Diagnostics Test: [HP Deskjet 5440]

http://inkjet411.com/?page\_id=1741 (refer to 2nd video to understand how to read the printed pattern)

**1.** Turn the printer on.

- 2. Press and hold the POWER button.
- **3.** Press the RESUME button four times.
- **4.** Release the POWER button.

B. Perform Tap 41 Cartridge Health Diagnostics Test: [HP Deskjet 6800/6900/9800]

http://inkjet411.com/?page\_id=1741 (refer to 2nd video to understand how to read the printed pattern)

- **1.** With printer power on, press and hold the POWER button.
- 2. Press the Cancel (X) button four (4) times.
- **3.** Press the RESUME button (Down Arrow) once.
- **4.** Release the POWER button.
- 5. The Diagnostic Test Report should print.
- B.1. Perform Tap 41 Cartridge Health Diagnostics Test: [Possibly HP PS C2600.??]
  - 1. Load Letter/A4-size paper into paper feed tray.
  - 2. Press and HOLD the Cancel button, press Ok button once.
  - **3.** At 'Mfg Commands' menu, click Right Arrow until 'uiaux service' menu is displayed.
  - 4. At 'uiaux service' menu, click the Right Arrow until Special Reports menu is displayed.
  - 5. Select Ok, then click Right Arrow until the 'print-mech button tap' menu is displayed.
  - Select Ok (Code = 0 will be displayed); click and hold Right Arrow until code = 41' is displayed. Use the Left Arrow if you need to decrease numerical count.
  - 7. Select Ok. Within one minute the Tap 41 diagnostic test pattern should be initiated and print (whether ink cartridges are good or not, i.e. this is a forced print test). Refer to 2nd video at following link on how to interpret the diagnostic test report: <u>http://inkjet411.com/?page\_id=1741</u>

NOTE: If access code '41' does not yield a test print, then enter "code = 43").

B.2. Perform Tap 41 Cartridge Health Diagnostics Test: [PSC 2335/2350/2355xi/ (94-97)]

- 1. Press \* and # keys at same time (you may observe "Enter special key combo")
- 2. Enter '123' (or 124) using number keys.
- 3. Using left/right arrow keys, navigate to Special Reports. Select Enter.
- 4. Using left/right arrow keys, navigate to Extended Self Test.
  - a. Select Enter to print test print evaluate test print.
- 5. Access 'Special Reports' menu again, using left/right arrow keys, navigate to 'print-mech button tap' menu.
- 6. Select Ok ('code = 0' will be displayed); click and hold Right Arrow until 'code = 41' is displayed.
- Select Ok. Within one minute the Tap 41 diagnostic test pattern should be initiated and print. Refer to 2nd video at following link on how to interpret the diagnostic test report: <u>http://inkjet411.com/?page\_id=1741</u>

**NOTE:** If access code '41' does not yield a test print, then enter "code = 43").

B. Perform Tap 41 Cartridge Health Diagnostics Test (select printer models only): Press and HOLD the CANCEL (X) button.

- 1. Depress the COLOR COPY button four (4) times, then...
- 2. Depress the SCAN (START SCAN) button three (3) times.
- 3. Release the CANCEL (X) button. The test prints.

--- A good HP 93/95/97/99 color cartridge should display 600 good nozzles, while a good HP 92/94/96/98 black ink cartridge should show 672 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to 2<sup>nd</sup> video on how to read the printout: <u>http://inkjet411.com/?page\_id=1741</u>

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink (special "ink back-up mode").

C. Print Self-Test Page (varies by printer model – attempt Procedures A thru C below):

Deskjet 5440 Self-Test Page:

- 1. Turn the printer on.
- 2. Press and hold the RESUME button until the printer starts printing.
- **3.** Release the RESUME button.

### Procedure A:

- 1. Press and hold the CANCEL button.
- 2. Press the COLOR COPY button. Release both buttons.
- **3.** The self test prints. The printed pattern will verify printer is generally functional. Inspect color bars to verify proper nozzle/jetting health.

### Procedure B:

1. Press the Setup button, select Print Report and select Self-Test Report

## Procedure C:

- 1. Make sure the printer is on and loaded with unused, plain, white paper.
- 2. Press Setup. The Setup Menu appears.
- 3. Press the Down-arrow button to select the Print Report Menu, and then press OK. The Self-Test Report option displays.
- 4. Press OK to print the self-test report.

5. Evaluate test pattern. The color stair-step patterns at top-left are printed by the color cartridge. The black stair-step pattern at top-right is printed by the black cartridge.

-- If the Self Test Page prints ok then the printer is functioning correctly and the problem is with the ink cartridges - replace the suspect ink cartridge and retest. Refer to 2nd video procedure at the following link on how to read the Tap 10 test (NOTE: the HP 74/75 cartridges are electrically identical to the HP 92 thru 98 cartridges): <u>http://inkjet411.com/?page\_id=579</u>

## [Keypad equipped printer models]

NOTE: It is possible to 'temporarily' bypass the cartridge error message (for emergency printing purposes only), please refer to link below (see 3<sup>rd</sup> video): <u>http://inkjet411.com/?page\_id=620</u> However, if the cartridge is determined to be electrically damaged, largely dependent on the 'Tap 41' diagnostic test results, the cartridge will eventually need to be replaced with a new one.

Cartridge Error Bypass (procedure has not been validated): [PSC 2335 thru 2710]

- 1. Press \* and # keys at same time.
- 2. You will see the following message "Enter special key combo", then
- 3. Enter "123" (or 124)
- 4. Using left/right arrow keys, navigate to Special Reports. Select OK/Enter.
- 5. Press the right arrow until you find "Print Cartridges", click OK

If there is a print job in the queue, it may begin printing. Results will vary depending on severity of cartridge's electrical state.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Incompatible Print Cartridge" / "Print Cartridge(s) Problem" / "Check Print Cartridge" / "Remove and check cartridge on right" / "Refer to printer documentation" / "Incorrect Cartridge: Black print cartridge inserted now is not intended for use in this printer" / "Cartridge Not Intended For Use In This Printer" / "Print cartridge in right stall not supported" error message is typically indicative of failed micro-electronics internal to the ink cartridge(s). In addition, It is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see picture at bottom of this page: <u>http://inkjet411.com/?page\_id=1216</u>

However, if your printer works routinely after inserting a brand new cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know the age of the cartridge and if the diagnostic procedures were able to confirm the cartridge(s) electrical condition.

-Thank you

## HP PSC 1610 - NOT RECOGNIZING CARTRIDGE (92-98)

Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

B. Print the 'Tap 41/43' Cartridge Health Diagnostics Test Report:

- 1. Depress BOTH arrow keys simultaneously.
- 2. Press the Left arrow key.
- **3.** Select the OK key.
- 4. Press the Right arrow key. The "Underware" menu should be displayed.
- 5. Press the right arrow key until the 'print-mech button tap' menu is displayed.
- 6. Select Ok (Code = 0 will be displayed); click and hold Right Arrow until code = 41' is displayed. Use the Left Arrow if you need to decrease numerical count.
- 7. Select Ok. Within one minute the Tap 41 diagnostic test pattern should be initiated and print (whether ink cartridges are good or not, i.e. this is a forced print test). Refer to 2nd video at following link on how to interpret the diagnostic test report: http://inkjet411.com/?page\_id=1741

**NOTE:** If access code '41' does not yield a test print, then try and enter "code = 43").

--- A good HP 93/95/97/99 color cartridge should display 600 good nozzles, while a good HP 92/94/96/98 black ink cartridge should show 672 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to 2<sup>nd</sup> video on how to read the printout: <u>http://inkjet411.com/?page\_id=1741</u>

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink (special "ink back-up mode").

## D. Print Self-Test Page:

- 1. Ensure letter size paper is loaded.
- 2. Press Setup until Print Report appears on the display.
- 3. Select OK.
- 4. Press OK again. The self-test page should attempt to print.

-- If the Self Test Page prints ok then the printer is functioning correctly and the problem is with the ink cartridges - replace the suspect ink cartridge and retest. Refer to 2nd video procedure at the following link on how to read the Tap 10 test (NOTE: the HP 74/75 cartridges are electrically identical to the HP 92 thru 98 cartridges): <u>http://inkjet411.com/?page\_id=579</u>

It may be possible to 'temporarily' bypass the cartridge error messages for emergency printing purposes only or you can also try and reset the printer to see if the error condition clears. Refer to procedures below.

- E. Cartridge Error Bypass Procedure (this procedure has not yet been validated):
  - **1.** Depress BOTH arrow keys simultaneously.
  - 2. Press the Left arrow key.
  - 3. Select the OK key.
  - 4. Press the Left arrow key. The "Service" menu should be displayed (or Press Right arrow key and enter the 'Underware' menu)
  - 5. Navigate until you locate the 'Checksum' menu. Select OK.
  - 6. Press Cancel 2-3 times to exit menu from service menus.
  - 7. Attempt to send a print job to the printer. If successful, please note this action typically only allows 1 single print job to come thru at a time with each 'Checksum' clearing action.
  - F. Printer Reset:

1. Unplug the power cord.

2. Press and hold the OK and CANCEL buttons on the front panel keypad.

3. While still holding the buttons, plug the power cord back in. Continue to hold the buttons for two seconds, and then release both buttons.

4. After a few seconds, the screen will display the message "Deriv Clear" confirming that the reset is done.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Incompatible Print Cartridge" / "Print Cartridge(s) Problem" / "Check Print Cartridge" / "Remove and check cartridge on left (right)" / "Refer to printer documentation" / "Incorrect Cartridge: Black print cartridge inserted now is not intended for use in this printer" / "Cartridge Not Intended For Use In This Printer" / "Print cartridge in right stall not supported" error message is typically indicative of failed micro-electronics internal to the ink cartridge(s). In addition, It is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see picture at bottom of this page: <u>http://inkjet411.com/?page\_id=1216</u>

However, if your printer works routinely after inserting a brand HP new cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know the age of the cartridge and if the diagnostic procedures were able to confirm the cartridge(s) electrical condition.

## ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (61)

NOTE: For purposes of our communication please note that the HP 301 UK cartridges are the same as the HP 61 USA versions; all the features and functions discussed below will work on your printer as the printer platforms are identical.

Regarding your recent inquiry about the HP 61 cartridge error message and inability to print to your HP Deskjet 3050 printer, this type of problem is normally an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside one of the HP61 ink cartridges. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges<sup>\*</sup>. To determine which cartridge is causing

the error condition and to check the electrical health of both ink cartridges, please run the 'Tap 41' diagnostic test below....

Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

An internal electrical failure of a cartridge can be confirmed by performing the following steps which will help rule out other variables which could also be causing the issue.

- A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>
- B. Validate the cartridge's electrical health by running the 'Tap 41' diagnostics test (refer to 2<sup>nd</sup> video at the following link so you understand how to analyze the test print): <u>http://inkjet411.com/?page\_id=1476</u>
  - **1.** Turn printer Power ON; wait 15 seconds for printer to fully energize.
  - 2. PRESS AND HOLD the Power Button
  - **3.** Press the Cancel (X) button 4 times
  - **4.** Press the Scan button once
  - 5. Release the Power button. The Tap 41 test report should print within 30 seconds.

## [HP Deskjet 1000 Series Only:]

B. Validate the cartridge's electrical health by running the 'Tap 41' diagnostics test (refer to video so you understand how to analyze the test print): <u>http://inkjet411.com/?page\_id=1476</u>

- 1. PRESS AND HOLD the Power Button
- 2. Open and close the 'Cartridge Access' door four (4) times.
- 3. Release the Power button
- C. Perform 'Tap 10' Internal Self Test: [HP Deskjet 2000-3050]
  - **1.** Press and hold the Power button, and then press the Cancel button once.
  - 2. Release the buttons. The 10-tap test prints.
  - **3.** Review test pattern; ensure all colors are firing. A missing block or blocks within the nozzle stair step pattern indicates a misfiring ink nozzle. Perform cartridge cleaning to correct.

-- Providing the color cartridge is partially functioning the Tap 41 diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health. A good HP 61/61XL color cartridge should display 612 good nozzles, while a good HP 61/61XL black ink cartridge should show 336 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. --- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink. <u>Both the 'Tap 41' and 'Tap 10' tests are 'forced</u> print tests' – the printer will make every attempt to print the pattern whether the ink cartridges are good or bad...the patterns should be utilized to diagnose cartridge health. If 'regular' printing is still not possible then one (or both) of the ink cartridges is damaged.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The **"Incompatible Cartridge(s)**" / **"Print Cartridge(s) Problem - Refer to printer documentation."** error message is typically indicative of failed micro-electronics internal to the ink cartridge(s). Also, it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. Running the 'Tap 41' cartridge health diagnostics test will confirm the active state of both cartridges.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: <a href="http://inkjet411.com/?page\_id=415">http://inkjet411.com/?page\_id=415</a>

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this will place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only). To see if this feature is supported with your printer model, please refer to your printer's User Guide.

If your printer works routinely after inserting a brand new cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

### -Thank you

HP Officejet K60/K80xi ERROR MESSAGES - NOT RECOGNIZING CARTRIDGE (15, 23, 45, 78) Regarding your recent inquiry about the HP 45/78 cartridge error messages ("Remove and check black cartridge" and "Remove and check color cartridge") and inability to print with your HP Officjet K80xi printer, this type of problem is either an electrical connection issue between the printer and the cartridge, or more likely based on the reported cartridges errors, very likely internal micro-electronic failures inside the cartridges themselves. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; in fact these same types of failures can occur with brand new ink cartridges.\* Please verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a possible temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this will place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): To see if this feature is supported on your printer please refer to your printer's User Guide.

To confirm a cartridge electrical failure, please eliminate all other variables which may be causing the issue:

1) Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

Officejet and LX, Officejet 300 series, 700 series, T series, D series, K series, G series, V series, 4100 series, 5100 series, 6100 series, 7100 series (*HP 45/78 ink cartridges*)

## 2) Perform Self Test Print:

http://h10025.www1.hp.com/ewfrf/wc/document?cc=us&lc=en&dlc=en&docname=bpu00734

- 1. On the front panel of the product, press Menu (or Setup).
- 2. Press the Right Arrow until Print Reports displays, and then press Enter, Start, or OK.
- 3. Press the Right Arrow until Self-Test Report displays, and then press Enter, Start, or OK.

3) Perform Printer Error Reset:

- 1. Open the printer/cover as if replacing the cartridge and allow the carriage assembly to move to the cartridges access/loading position.
- 2. Unplug the power cable from the rear of printer and close the printer's cover.
- 3. While depressing the power button, plug in the power cable. Keep the power button pressed for about 10-15 seconds, allowing the error flag to reset.
- After printer powers on, cycle printer power once again and allow printer to fully initialize (may take ~5 minutes for the message/error condition to disappear).
  NOTE: If ink cartridge error persists then replace ink cartridge.

3) Verify HP 15 ink cartridge's electrical health. To check ink cartridge's electrical health, please activate the Printer Diagnostic test (*HP Deskjet 842c*):

- 1. Turn the printer on.
- 2. Press and hold the POWER button.
- 3. Press the RESUME button four times.
- 4. Release the POWER button.

3) Print a HP Self-Test Report (older HP printer models) – click here for instructions/sample prints: http://h10025.www1.hp.com/ewfrf/wc/document?cc=us&lc=en&dlc=en&docname=bpu00734

4) Verify the cartridge's warranty expiration date (imprinted on front of ink cartridge) to see if it still covered under warranty. If out of warranty, then the cartridge has a significantly higher chance of failure due to age and internal microelectronic corrosion.

http://h10025.www1.hp.com/ewfrf/wc/document?docname=c00206040&tmp\_task=prodinfoCategory &lc=en&dlc=en&cc=us&lang=en

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Incompatible Cartridge(s)", "Print Cartridge(s) Problem", "Incorrect Print Cartridge at least one of the print cartridges currently installed is not intended for use in this printer", "Check and Remove Cartridge", error message is typically indicative of failed micro-electronics internal to the ink cartridge(s). As well, it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: <a href="http://inkjet411.com/?page\_id=1802">http://inkjet411.com/?page\_id=1802</a>

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice.

Now, if your printer works routinely after inserting a brand new HP45 and/or HP78 cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

-Thank you

HP 56 / 57/ 58 Ink Cartridge Errors -- Deskjet 5000-5100-5500-5600-5800:

Regarding your recent inquiry about the HP 57 (or 58) color cartridge error message ("Print Cartridge Not intended for use in this printer") and inability to print with your HP Deskjet 5160 printer, this type of problem is either an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges<sup>\*</sup>.

NOTE: To help confirm which ink cartridge is causing the issue, typically you would first remove the right ink cartridge first to see if the ink error indicator extinguishes, if the light stops blinking then you have identified the damaged cartridge. If not, then the left cartridge is causing the issue.

Please verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this will place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): For more information, refer to your printer user guide.

To confirm a cartridge electrical failure, please eliminate all other variables which may be causing the issue:

1) Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

2) Perform the following printer 'service' tests....in particular, please perform the 'Tap 43' diagnostic test in C. below: <a href="http://inkjet411.com/?page\_id=2358">http://inkjet411.com/?page\_id=2358</a>

A. Running a sample page:

- 1. Turn the printer on.
- 2. Press and hold the RESUME button until the printer starts printing.
- 3. Release the RESUME button.

B. Running a self-test:

- 1. Turn the printer on.
- 2. Press and hold the POWER button.
- 3. Press the RESUME button four times (4X).
- 4. Release the POWER button.

C. Activate 'Tap 43' Cartridge Health Diagnostics: <u>http://inkjet411.com/?page\_id=2358</u>

NOTE: You must first stop the blinking ink error light by pressing the Cancel button. You may need to remove one of the ink cartridges first in order to do this before you can proceed, then re-install cartridge just prior to commencing the diagnostic test.

- 1. To begin, Press and HOLD the Power Button.
- 2. Press the Cancel (X) button 4 times, then...
- 3. Press the Resume/Down Arrow button 3 times.
- 4. Release the Power button; the Tap 43 report will print. See video:

http://inkjet411.com/?page\_id=2358

NOTE 1: The Tap 43 test report will be printed using the black ink cartridge by default; if a blank page appears then remove the black ink cartridge from the printer and repeat steps; report will be printed using the Color cartridge. This can also help you isolate the problem to one of the ink cartridges. The 'Current' error message should state 'None', however if you any other message then either the ink cartridge is incorrectly seated in the carriage assembly or a severe cartridge error condition is present and the ink cartridge may need to be replaced.

5. The Left and Right 'Status' columns should state 'Okay'. If not, then the respective ink cartridge may be electrically damaged and may need to be replaced.

6. If 'TSR Shorted' states anything other than 'No', then the respective ink cartridge is electrically damaged and will need to be replaced.

7. If diagnostic test data information is satisfactory, then confirm all 4 colors are firing properly by inspecting the printed stair-step patterns.

NOTE 2: Ideally, a good Color cartridge will display 300 nozzles (for example, check the printed 10 x 10 stair step patterns for each of the 3 colors), while a good Black cartridge will display 416 nozzles (for example, check the printed 26 x 16 stair-step pattern).

NOTE 3: Ensure the top cover is closed and that the interlock switch at top-right side is properly closing the circuit – you may need to depress with a small pencil to ensure this is not causing a false error condition.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Print Cartridge Not intended for use in this printer" / "Cartridge Error - Cartridge not right for this printer" error message is typically indicative of failed micro-electronics internal to the ink cartridge(s). As well, it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice.

Now, if your printer works routinely after inserting a brand new cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

-Thank you

SEVERE ERROR MESSAGES - HP 92-98 Rejection (> No Tap 41)

Regarding your recent inquiry about the HP 92 cartridge error message ("cartridge is not intended for use in this printer") and inability to print to your HP PS C4180 printer, this type of problem is either an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges<sup>\*</sup>.

Please verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this will place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): For more information, refer to your printer user guide.

An internal electrical failure of a cartridge can be confirmed by performing the following steps which can help rule out other variables which could also be causing the issue.

- A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>
- B. Depending on the cartridge's electrical state you might be able to run a cartridge health diagnostics test-refer to the Inkjet411 HP printer diagnostic's support document for your printer model: <u>http://inkjet411.com/?page\_id=1813</u>

For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: <a href="http://inkjet411.com/?page\_id=1216">http://inkjet411.com/?page\_id=1216</a>

NOTE: Unfortunately, we do not have a cartridge error bypass procedure or cartridge health diagnostics print instructions for your printer model.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. Severe cartridge error messages which prevent printing are typically indicative of failed micro-electronics internal to the ink cartridge(s). In addition, it is equally common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice.

However, if your printer works routinely after inserting a new cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

-Thank you

## HP OFFICEJET 6210/6310/7210/7310/7410 ERRORS - NOT RECOGNIZING CARTRIDGE (95/98) HP PSC 2610xi?

Yes, we completely agree....that HP ink cartridge error message is very misleading!!

Regarding your recent inquiry about the HP 98 cartridge error message and inability to print to your HP OJ 7210 printer, this type of problem is normally associated to an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; this same failure can occur with a brand new ink cartridge\*. While there are workarounds available, they are considered temporary in nature (and do not always work). Please execute the 'Tap 41' Diagnostics Test Report below to confirm which cartridge is actually causing the issue and to check the cartridge's overall electrical health (refer to Procedure C. below):

Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

An internal electrical failure of a cartridge can be confirmed by performing the following steps which will help rule out other variables which could also be causing the issue.

- A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>
- B. Verify the carriage clip (metal restraining band) for the black cartridge stall is installed/present (if applicable for your printer model)....remove the color cartridge and look at the color clip/stall position for a direct comparison. If the carriage restraining clip is missing then you have a mechanical failure of the printer. Check your user manual.
- C. You can confirm the black and color ink cartridge's electrical health by running the 'Tap 41' diagnostics test: NOTE: SERVICE MENU ACCESS IS SLIGHTLY DIFFERENT FOR OJ 6310 MODEL, YOU WILL NEED TO EXPLORE THRU MENUS TO FIND THE 'print mech button tap' MENU.
  - a. Load Letter/A4-size paper into paper feed tray.
  - **b.** Press the \* and # keys simultaneously.
  - **c.** Enter 124 (or 123 on some models) at keypad. The 'Underware xxxx' menu should be displayed (or 'Support xxxx' menu).

- **d.** Use the arrow keys to navigate to the System Menu (on certain Officejet models you may need to go to 'Reports Menu'). Select Ok.
- e. Use the arrow keys to navigate to the "print-mech button tap" menu. Select Ok. LCD screen should display "code = 0".
- f. Use the arrow keys to enter "code = 41" (or just enter 41 on keypad). Select Ok. The Tap 41 diagnostic test pattern should begin to print. Refer to 2<sup>nd</sup> video at link below on how to analyze the printed diagnostic pattern.

**NOTE:** If nothing prints, then try entering 'code=43' (select OJ printer models leverage different test codes). **REFERENCE:** Tap 41 Diagnostics [HP Deskjet 6900 -use HP 93 thru 97 cartridges]: <u>http://inkjet411.com/?page\_id=1741</u>

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). A good HP 93/95/97 color cartridge should display 600 good nozzles, while a good HP 92/94/96/98 black ink cartridge should show 672 good nozzles. You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to video above on how to read the printout.

You can also test general printer performance by running the 'Tap 10' diagnostic test, use same procedure above and enter "code = 10". Both the 'Tap 41' and 'Tap 10' tests are 'forced print tests' – the printer will make every attempt to print the pattern whether the ink cartridges are good or bad...the patterns should be utilized to diagnose cartridge health. If 'regular' printing is still not possible then one or both of the ink cartridges is damaged.

### CARTRIDGE ERROR BYPASS PROCEDURE:

It is possible to 'temporarily' bypass the cartridge error message (for emergency printing purposes only -REFER TO 3RD VIDEO). However, if the cartridge is determined to be electrically damaged it will eventually need to be replaced with a new one. <u>http://inkjet411.com/?page\_id=544</u>

**NOTE:** There are 2 main branches under the service menu, so finding the 'CHECKSUM' menu for your particular printer model may involve some exploring thru the various menus....

- 1. Press the \* and # keys simultaneously.
- 2. Enter 123 (or 124, or 1234) at keypad. The 'Underware' menu should be displayed.
- 3. Use the arrow keys to navigate to the Information Menu. Select Ok.
- 4. Use the arrow keys to navigate to the 'checksum for relock data input' (or simply 'checksum'). Select Ok. LCD should display a 5-digit number after a few seconds.
- 5. Press Cancel several times to completely exit out of service menu.
- 6. Attempt to send a print job to printer.
  - **NOTE:** with a marginally performing ink cartridge, this typically results in allowing 1 entire print job to be printed at a time. If this does not permit any print operations then the cartridge has internal microelectronic damage and will need to be replaced.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The **"Incompatible Cartridge(s)**" / **"Print Cartridge(s) Problem", "Refer to printer documentation", "Cartridge is not intended for use in this printer" / "Remove and check color/black cartridge"** error messages are typically indicative of failed micro-electronics internal to the ink cartridge(s). Also, it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. Running the 'Tap 41' cartridge health diagnostics test will confirm the active state of both cartridges.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see picture at bottom of this page: <a href="http://inkjet411.com/?page\_id=1216">http://inkjet411.com/?page\_id=1216</a>

However, if your printer works routinely after inserting a brand new cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if the above test procedure was successful and able to provide any clarity on the HP 95/98 cartridge issue.

-Thank you

### HP PS C3110-C3194 --- NOT RECOGNIZING CARTRIDGE (92/93)

Regarding your recent inquiry about the HP 92/93 cartridge error message ("Check print cartridge") and inability to print to your HP Photosmart C3150, this type of problem is normally associated to an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can (and frequently do!!) occur with brand new ink cartridges<sup>\*</sup>. We suggest you perform the procedures outlined below to either determine which cartridge is causing the issue or to confirm an internal micro-electronic failure of the suspect ink cartridge.

Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

An internal electrical failure of a cartridge can be confirmed by performing the following steps which will help rule out other variables which could also be causing the issue:

To help determine/confirm which cartridge is causing the problem:

- 1. Open the cartridge access door.
- 2. Remove either cartridge (not both).
- 3. Close the cartridge access door.

-- If the computer message is Print Cartridge Error, then the print cartridge that is still in the printer is the problem cartridge. If the computer message is NOT Print Cartridge Error (instead, it says that the cartridge you have removed is ...Either missing, not detected, or incorrectly installed), then the cartridge you have removed is the problem cartridge. On some printer models, if you notice the blinking error lights stops blinking following a cartridge removal, then this is the defective cartridge.

This type of problem (i.e. "E" / 'Blinking Error Lights') is typically an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges\*. At the moment, we suggest you attempt to clean all electrical contacts and then run the internal self-test to confirm the type of electrical failure:

A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

- B. Internal Self Test Print:
- 1. Press and HOLD the CANCEL (X) button
- 2. Depress the COLOR COPY button

The diagnostic test page should print.

--- Understand that the 'self-test print' is a "forced print"...the printer will attempt to print it whether the cartridges are good or bad.....if the diagnostic test page prints, but normal printing is still not permitted, then the suspect ink cartridge is likely electrically degraded or damaged internally since the self-test print is the only print the printer will yield.

- C. Print the Demo Print:
- 1. Press and HOLD the CANCEL (X) button
- 2. Depress the COPIES button once.

Print should attempt to print the demo print (photo of dog and boy).

If the printer attempts to print the Self Test Page or Demo Print then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). A good HP 93/95/97 color cartridge should display 600 good nozzles (3 stair-step color grid patterns), while a good HP 92/94/96/98 black ink cartridge should show 672 good nozzles (large stair-step black grid pattern). If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced.

NOTE: Unfortunately, there is no cartridge error bypass available for this model series (HP Photosmart C3110, C3125, C3135, C3140, C3150, C3170, C3173, C3175, C3180, C3183, C3188, C3190, C3193, C3194 All-in-One). This printer line is 'extremely sensitive to electrical performance of the ink cartridges... both ink cartridges have to be in perfect electrical working order to allow any printing.

For reference, the following link contains a video about HP low ink, nuisance and severe cartridge error messages. <u>http://inkjet411.com/?page\_id=1261</u>

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Check print cartridge" error message is typically indicative of failed micro-electronics internal to the ink cartridge(s). It is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see picture at bottom of this page: <u>http://inkjet411.com/?page\_id=1216</u>

Now, if your printer works routinely after inserting a brand new HP 92/93 cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if the above test procedure was successful and able to provide any clarity on the HP 92/93 cartridge issue. We apologize for the inconvenience.

### -Thank you

Successful printing of the test page illustrates that the printer itself is fully operational. If you printed the Tap 41 print, does the test show exactly 600 good nozzles? If not, then the HP93 cartridge is bad. See video for reference: http://inkjet411.com/?page\_id=1741

A good HP 93/95/97 color cartridge should display 600 good nozzles, while a good HP 92/94/96/98 black ink cartridge should show 672 good nozzles.

Unfortunately it sounds like the HP93 ink cartridge is electrically damaged (an internal micro-electronic failure)...not sure what else we can tell you at this point.

You can return to Costco and they will refund your money. Just let them know you troubleshot the problem via the Inkjet411 rep and we confirmed root cause of failure.

In the meantime, you can print using just one (black) cartridge in the printer (called the 'single cartridge print mode')...it will allow print jobs to be processed via the computer only however.

We sincerely apologize for the inconvenience. -Thank you

## HP PS C4100 PRINTER SERIES --- NOT RECOGNIZING CARTRIDGE (92/93/95)

Regarding your recent inquiry about the HP 95 Tri-color ink cartridge error message ("Incompatible Print Cartridge", or similar) and inability to print with your HP PS C4180 printer, this type of error appears to an internal micro-electronic failure inside the cartridge itself - unfortunately the Costco electrical cartridge tester does not screen cartridges for everything, your printer is much more sensitive in this respect. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; this same type of failure can also occur with brand new ink cartridge\*. Let's run a few checks to check the electrical state of both ink cartridges and validate an internal micro-electronic failure of the ink cartridge....

Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer...this may place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): For more information, refer to your printer's User Guide to see if this feature is supported for your printer model.

Please perform the following corrective/diagnostic printer checks:

A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u> (it sounds like you already did this, so you may disregard).

B. Perform Tap 41 Cartridge Health Diagnostics Test:

- 1. Press and HOLD the 'LEFT ARROW' button.
- 2. Press the 'Setup' button. Release both buttons. The 'Mfg Commands' menu should be displayed.
- 3. At 'Mfg Commands' menu, click Right Arrow once until 'uiaux service' menu is displayed.
- 4. At 'uiaux service' menu, click the Right Arrow until 'Special Reports' menu is displayed.
- 5. Select Ok. Click Right Arrow until the 'print-mech button tap' menu is displayed.
- 6. Select Ok. ('code = 0' will be displayed); click and hold Right Arrow until 'code = 41' is displayed.

7. Select Ok. The test page prints. Refer to 2nd video at following link on how to interpret the diagnostic test report: http://inkiet411.com/?page\_id=1741

NOTE 1: If access code '41' does not yield a test print, then enter "code = 43").

--- A good HP 93/95/97/99 color cartridge should display 600 good nozzles, while a good HP 92/94/96/98 black ink cartridge should show 672 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to 2nd video on how to read the printout: <u>http://inkjet411.com/?page\_id=1741</u>

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the tri-color ink cartridge is either empty, clogged or severely electrically damaged (black ink cartridge is not used). You can remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink (special "ink back-up mode").

C. Perform Self Test Page

1. Press and hold the CANCEL button.

2. Press the COLOR COPY button. Release both buttons.

3. The self test prints. The printed pattern will verify printer is generally functional. Inspect color bars to verify proper nozzle/jetting health.

-- Inspect printed nozzle stair step patterns - verify all ink nozzles are properly firing. Generally, if the Self Test Page prints ok then the printer is functioning correctly and the problem is with the ink cartridges - replace the suspect ink cartridge and retest. Refer to 2nd video procedure at the following link on how to read the Self Test page test (NOTE: HP74/75 cartridges are electrically identical to the HP92 thru 98 cartridges).

http://inkjet411.com/?page\_id=579

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. A blinking 'Check Print Cartridge' error light or "Incompatible Print Cartridge" / "Print Cartridge(s) Problem" / "Check Print Cartridge" / "Remove and check cartridge on right" / "Refer to printer documentation" / "Incorrect Cartridge: Black(Tri-color) print cartridge inserted now is not intended for use in this printer" / "Cartridge Not Intended For Use In This Printer" / "Print cartridge in right stall not supported" error messages are typically indicative of failed micro-electronics internal to the ink cartridge(s). In addition, It is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see picture at bottom of this page: <u>http://inkjet411.com/?page\_id=1216</u>

However, if your printer works routinely after inserting a brand new HP95 color ink cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know the age of the cartridge and if the diagnostic procedures were able to confirm the cartridge(s) electrical condition. -Thank you

HP PSC 1503-1514 --- NOT RECOGNIZING CARTRIDGE (92/93)

Regarding your recent inquiry about the HP 92 cartridge error message ("Check print cartridge", blinking error lights, etc.) and inability to print to your HP PSC 1510 printer, it sounds like either....

1) The new HP92 cartridge is bad....or

2) The color ink cartridge (HP93?) could be causing the problem.

To help determine which cartridge is causing the problem:

1. Open the cartridge access door.

2. Remove either cartridge (not both).

3. Close the cartridge access door.

-- If the computer message is Print Cartridge Error, then the print cartridge that is still in the printer is the problem cartridge. If the computer message is NOT Print Cartridge Error (instead, it says that the cartridge you have removed is ...Either missing, not detected, or incorrectly installed), then the cartridge you have removed is the problem cartridge. On some printer models, if you notice the blinking error lights stops blinking following a cartridge removal, then this is the defective cartridge.

This type of problem is an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges<sup>\*</sup>. At the moment, we suggest you attempt to clean all electrical contacts and then run the internal self-test to confirm the type of electrical failure:

A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

B. Print the Internal Self Test Page:

- 1. Press and HOLD the CANCEL (X) button
- 2. Depress the COLOR COPY button.
- 3. The diagnostic test page should print.

--- Understand that the 'self-test print' is a "forced print"...the printer will attempt to print it whether the cartridges are good or bad.....if the diagnostic test page prints, but normal printing is still not permitted, then the suspect ink cartridge is electrically degraded/damaged since the self-test print is the only print the printer will yield.

---- If the printer attempts to print the diagnostic test pattern (1 page) then the printer is generally considered operational and functional, if nothing is printed, but the printer attempts to print the pattern, then the ink cartridges are either empty, clogged or severely electrically damaged. A good HP

93/95/97 color cartridge has 600 ink nozzles, while a good HP 92/94/96/98 black ink cartridge has 672 ink nozzles.

NOTE: Unfortunately, there is no cartridge error bypass available for this printer model series.

As a temporary workaround (or if you are unable to determine which cartridge is causing the issue) remove one of the ink cartridges from the printer....this might place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): For more information, refer to your printer's User Guide to see if this mode is supported.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Check print cartridge", blinking error lights, etc. are typically indicative of failed micro-electronics internal to the ink cartridge(s). It is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see picture at bottom of this page: http://inkjet411.com/?page\_id=1216

Now, if your printer works routinely after inserting a brand new HP 92 and/or HP93 cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if the above test procedure was successful and able to provide any clarity on the HP 92/93 (?) cartridge issue. We apologize for the inconvenience.

## -Thank you

HP PS 8049, 8050, 8100, 8150, 8400, 8450 (7800 & 7850?)- NOT RECOGNIZING CARTRIDGE (94-97) Regarding your recent inquiry about the HP94 or HP95 cartridge error message ("???") and inability to print to your HP PS 7850 printer, this type of problem could be an electrical connection issue between the printer and one of the ink cartridges, or more likely, there is an internal micro-electronic failure inside one of the ink cartridges. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges.\* To determine which cartridge is causing the issue and/or to confirm an electrical problem with one of the ink cartridges (or possibly both which is 'very' rare), please perform both the Internal Self-Test page along with the Pen Electrical tests (diagnostics) to evaluate the electrical condition of both ink cartridges.... Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer...this should place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only). Please refer to your printer's User Guide to see if this feature is supported on your printer model. http://h10032.www1.hp.com/ctg/Manual/c00458612.pdf (7000 series)

- A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <a href="http://inkjet411.com/?page\_id=1519">http://inkjet411.com/?page\_id=1519</a>
- B. Perform Printer Self-Test Page:

7000 Printer Series:

- 1. Press and hold the OK button, and then press the Left Arrow button once.
- 2. Release the buttons. The internal test page prints.

8000 Printer Series:

- 1. Press CANCEL and SAVE simultaneously (SAVE is the left-most button before POWER on/off.)
- 2. Using left/right arrow keys, navigate to 'pen electrical test'.
- 3. Select Enter to print test evaluate nozzle test pattern.

-- If the printer prints the self test page then this demonstrates the printer is generally functional and that the problem is likely with one of the ink cartridges. Please note this is a 'forced' service test...the printer will attempt to print the test page whether the cartridges are good or bad. If the Self-Test page can be successfully printed but regular/normal printing cannot, then one of the ink cartridges is likely internally damaged. Remove and replace suspect cartridge to confirm.

C. Perform Cartridge Diagnostics tests using either C.1 or C.2 procedure below (varies by printer model):

#### C.1. Tap 41/43 Diagnostics Test:

- 1. To enter the Manufacturing Tests menu, press the 3 small, round buttons on the front panel simultaneously for >5secs: 'OK', 'CANCEL', & 'SELECT PHOTOS' (or 'Print Photos')
- 2. Using left/right arrow keys, navigate to Special Reports (or System Menu). Select Enter.
- 3. Navigate to 'print-mech button tap' menu.
- 4. Select Ok ('code = 0' will be displayed); click and hold Right Arrow until 'code = 41' (or attempt 'code = 43' if nothing prints using '41') is displayed.
- 5. Select Ok. Within one minute the Tap 41 (or 43) diagnostic test pattern should be initiated and print. Refer to video to help evaluate test pattern. Refer to 2nd video for guidance on how to read the diagnostic test pattern: <u>http://inkjet411.com/?page\_id=1741</u>

**NOTE 1:** A good HP 93/95/97/99 color cartridge should display 600 good nozzles, while a good HP 92/94/96/98 black ink cartridge should show 672 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. For reference only, refer to the following HP Deskjet video which shows how to read the HP 93-97 ink cartridge diagnostic test print: <u>http://inkjet411.com/?page\_id=1741</u> (refer to 2<sup>nd</sup> video)

#### C.2. Pen Electrical / Error Bypass Procedure:

- 1. To enter the Manufacturing Tests menu, press the 3 small, round buttons on the front panel simultaneously for >5secs: 'OK', 'CANCEL', & 'SELECT PHOTOS' (or 'Print Photos')
- 2. Using left/right arrow keys, navigate to Reports Menu (or System Menu). Select 'pen electrical test'.
- 3. Select Level 1, 2, or 3. Enter to print test evaluate nozzle electrical test print.

**NOTE 2:** Pen recovery level 1, 2 or 3 clears cartridge errors, unblocking the printer to permit you to print the TEST PAGE with the normal MENU / TOOLS /PRINT TEST PAGE choice to aid in printer evaluation.

**NOTE 3:** Cartridge Error Bypass Message (Emergency Printing only): The Pen Recovery Level 1 clears cartridge errors and permits you to print the TEST PAGE with the normal MENU / TOOLS / PRINT TEST PAGE choice.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The **"Incompatible Print Cartridges" / "Check print cartridge" / "Color cartridge is not compatible. Use appropriate HP cartridge"** error messages are typically indicative of failed micro-electronics internal to the ink cartridge(s). It is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see bottom image at this page: <u>http://inkjet411.com/?page\_id=1216</u>

Now, if your printer works routinely after inserting a brand new cartridge in it, you should discuss the possibility of a refund with your local Costco (for the ink refill purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if you have any questions on the technical information provided above. -Thank you

### HP DESKJET D4100 SERIES - NOT RECOGNIZING CARTRIDGE (92-93)

Regarding your recent inquiry about the HP92/93 cartridge error message ("???") and inability to print to your HP DESKJET 4160 printer, this type of problem could be an electrical connection issue between the printer and one of the ink cartridges, or more likely, there is an internal micro-electronic failure inside one of the ink cartridges. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges.\* To determine which cartridge is causing the issue and/or to confirm an electrical problem with one of the ink cartridges (or both cartridges which is 'very' rare), please perform both the Internal Self-Test page along with the Cartridge Health diagnostics 'Tap 41' test to evaluate the electrical condition of both ink cartridges....

Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this should place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only). If you do not have a replacement cartridge, you can still print in ink backup mode. Simply remove the problem cartridge, and print with the remaining cartridge.

- 1. If you remove the tri-color cartridge, printouts will be in grayscale.
- 2. If you remove the black or photo cartridge, the product prints slowly and the colors in the printouts might differ.

Resolutions/Diagnostic Tests:

- A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>
- B. Perform Extended Self-Test (see 2<sup>nd</sup> video for REFENCE ONLY: <u>http://inkjet411.com/?page\_id=792</u>):
- 1. Make sure plain white paper is loaded in the product.
- 2. Press and hold the Power button.
- 3. Press the Photosmart Essential button, and then release both buttons. NOTE: The self-test prints. Review test pattern; ensure all colors are firing. A missing horizontal line within the nozzle stair step pattern indicates a misfiring ink nozzle. Perform cartridge cleaning to correct.
- C. Perform Cartridge Health Diagnostics Test ('Tap 41') refer to 2<sup>nd</sup> video: <u>http://inkjet411.com/?page\_id=1741</u>
- 1. Turn the printer on.
- 2. Press and hold the 'POWER' button.
- **3.** Press the 'Cancel' (**X**) button four (4) times.
- **4.** Press the 'RESUME' button (Down Arrow) once.
- 5. Release the POWER button.
- 6. The Tap 41 diagnostics page prints.

**NOTE:** A good HP 93/95/97 color cartridge should display 600 good nozzles, while a good HP 92/94/96/98 black ink cartridge should show 672 good nozzles. On some models you may remove the tri-color cartridge, reactivate the tap 41 test and the printer will print the diagnostic test print in black ink.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. It is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see bottom image at this page: http://inkjet411.com/?page\_id=1216

Now, if your printer works routinely after inserting a brand new HP93 cartridge in it, you should discuss the possibility of a refund with your local Costco (for the ink refill purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if you have any questions on the technical information provided above. -Thank you

# HP OFFICEJET J3680/4215/4315/5610, PSC 1300-1400, D1300-D2300, Deskjet 3000 and F2200 Series – CARTRIDGE ERRORS (21/22/27/28/56-58)

Regarding your recent inquiry about the HP 27 cartridge error message and inability to print with your HP OJ 3680/4315, this type of problem is typically an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. To be clear, the error message language that HP chose for this kind of error is confusing...the cartridge is correct for you model. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges\*. Let's first run a few checks to see which ink cartridge is causing the issue and to validate if an electrical failure of the ink cartridge has occurred....please refer to Procedure B. below....

Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this may place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): To confirm if your printer supports this feature, please refer to your printer user guide. This may also help you determine which cartridge is causing the issue. To completely rule out connectivity issues, we suggest you follow perform the following...depending on your printer model, please attempt either procedure B.1 and/or B.2 - please advise if either do not work for your printer model:

A. Clean cartridge/printer electrical contacts. Also inspect printer's internal carriage flex cables for surface damage (i.e. burn marks) or an uneven contact surface (by which the cartridge's rear electrical contacts mates with).

http://inkjet411.com/?page\_id=1519

**B.** Perform either of the 'B' procedures below as steps vary by printer model:

B.1. Perform Tap 43 test: [most Officejet printer models with keypads]

- 1. Press \* and # keys at same time
- 2. Enter 1234 (or 124)

3. Using left/right arrow keys, navigate to Special Reports/Reports Menu (.....or 'System Menu' / 'Information Menu' if Reports Menu is not available). Select Enter.

4. Using left/right arrow keys, navigate to 'Extended Self Test'.

5. Select Enter to print test print - evaluate test print. If excessive nozzles are missing from the stair step pattern, then perform cartridge cleaning to correct.

6. Using left/right arrow keys, navigate to 'print-mech button tap' menu.

7. Select Ok ('code = 0' will be displayed); click and hold Right Arrow until 'code = 43' is displayed. NOTE: enter 'code = 41' if 'code =43' does not activate the diagnostic print report.

8. Select Ok. Within one minute the Tap 43/41 diagnostic test pattern should be initiated and print. The test page prints.

## B.2. Diagnostic Self-Test Page: [HP OJ 5600, OJ J3600?]

- 1. Press the Setup Button located on the bottom center of the control panel, beneath the LED readout.
- 2. Press 2 to select "Print Reports"
- 3. Press 6 to select "Self-Test Report" on the number keypad
- 4. Examine the resulting self-test page that prints. There should be lines extending all the way across the page in black, yellow, cyan and magenta. A missing black line indicates a problem with the black or photo cartridge. Faded, streaked or missing lines in the other colors indicates a problem with the color ink cartridge. Refer to video at link below to help evaluate test pattern.

B.3. Deskjet D1300, D1400, D2300, F300 series printers (*HP 21/22 Cartridges*) Printer self-test:

- 1. Turn the printer on.
- 2. Press and hold down the Power button.

- 3. While holding down the Power button, open and shut the lid of the printer four times.
- 4. Release the Power button. The self-test prints.
- 5. Review test pattern; ensure all colors are firing. A missing horizontal line within the nozzle stair step pattern indicates a misfiring ink nozzle. Perform cartridge cleaning to correct.

**NOTE:** When running the test on an HP Deskjet D2300/D2400 series printer it may be helpful to use a pen or pencil to hold down the Power button.

B.4. PSC 1200, 1310, 1315, 1340, 1350 Printer series (HP 27, 28, 56, 57 ink cartridges) Self Test Report:

- 1. Load plain, white paper into the paper tray.
- 2. Press and hold the Cancel button, and then press the Start Copy Color button.
- 3. The product prints a self-test report.

--- Examine the resulting self-test page that prints. There should be lines extending all the way across the page in black, yellow, cyan and magenta. A missing black line indicates a problem with the black or photo cartridge. Faded, streaked or missing lines in the other colors indicates a problem with the color ink cartridge. Refer to video at link below to help evaluate test pattern.

NOTE: A good HP 56 black cartridge should display 416 good nozzles, while a good HP 57/58 color ink cartridge should show 300 good nozzles.

REFERENCE: [HP Deskjet 5650 -use HP 56/57/58 cartridges]: http://inkjet411.com/?page\_id=2358

B.5. PSC 1400 series printers (*HP 21/22 Cartridges*) Self Test Report:

- 1. Load plain, white paper into the paper tray.
- 2. Press and hold the Cancel button, and then press the Start Copy Color button.
- 3. The self-test report should print.

If the self test page prints then this illustrates that the printer is functional and the problem is likely limited to either one of the ink cartridges. There should be lines extending across the page in black, yellow, cyan and magenta. A missing black line indicates a problem with the black or photo cartridge. Faded, streaked or missing lines in the other colors indicates a problem with the color ink cartridge.

To determine which cartridge is causing the problem:

- 1. Open the cartridge access door.
- 2. Remove either cartridge (not both).
- 3. Close the cartridge access door.

-- If the computer message is Print Cartridge Error , then the print cartridge that is still in the printer is the problem cartridge. If the computer message is NOT Print Cartridge Error (instead, it says that the cartridge you have removed is ...Either missing, not detected, or incorrectly installed), then the cartridge you have removed is the problem cartridge.

B.6. Deskjet F2200 Printer series (HP 21/22 ink cartridges)

Print Self-Test Page:

- **1.** Press the Setup or Menu button until Print Report appears in the display then press Enter.
- 2. Press the Setup or Menu button until Self-Test appears in the display, and then press Enter.

3. Review test pattern; ensure all 4 colors are firing. A missing horizontal line within the nozzle stair step pattern indicates a misfiring ink nozzle. If the test page prints (or attempts to print a blank page) but normal printing is still not possible then the printer is functionally ok; the ink cartridge is damaged and will need to be replaced.

**NOTE 1:** A good HP 21 black cartridge should have 416 good nozzles (26 x 16 stair-step pattern), while a good HP 22 color ink cartridge should have 300 good nozzles (100 for each color, 10x10 stair-step pattern).

NOTE 2: Reference Video: http://inkjet411.com/?page\_id=2358

B.7. Photosmart 7960 (HP 56/57/58 ink cartridges)

- 1. Ensure that the memory card has been removed from the memory card slot.
- 2. Make sure plain paper is loaded in the In Tray.
- **3.** Press the Menu button.
- 4. Press the Up/Down arrow button to display the Tools menu. Then press the OK button.
- 5. Press the Down arrow button to highlight Print a Test Page. Then press the OK button.

---- If the self test page prints then this illustrates that the printer is functional and the problem is likely limited to either one of the ink cartridges. There should be lines extending across the page in black, yellow, cyan and magenta. A missing black line indicates a problem with the black or photo cartridge. Faded, streaked or missing lines in the other colors indicates a problem with the color ink cartridge.

**NOTE:** Ideally, a good Color cartridge will have/display 300 nozzles (for example, check the printed 10 x 10 stair step patterns for each of the 3 colors), while a good Black cartridge will have/display 416 nozzles (for example, check the printed 26 x 16 stair-step pattern).

Cartridge Health Diagnostics Test (Pen Tests).......(SERVICE MENU ACCESS VALIDATION STILL REQUIRED!)

- To enter the Manufacturing Tests menu, press the 3 small, round buttons on the front panel simultaneously for >5secs: 'OK', 'CANCEL', & 'PRINTS' (???)
- 2. Using left/right arrow keys, navigate to Special Reports (or System Menu). Select Enter.
- 3. Navigate to 'print-mech button tap' menu.
- Select Ok ('code = 0' will be displayed); click and hold Right Arrow until 'code = 41' (or attempt 'code = 43' if nothing prints using '41') is displayed.
- Select Ok. Within one minute the Tap 41 (or 43) diagnostic test pattern should be initiated and print. Refer to video to help evaluate test pattern: <u>http://inkjet411.com/?page\_id=2358</u>

**NOTE:** The Tap 41/43 test report will be printed using the black ink cartridge by default; if a blank page appears then remove the black ink cartridge from the printer and repeat steps; report will be printed using the Color cartridge. This can also help you isolate the problem to one of the ink cartridges. The 'Current' error message should state 'None', however if you any other message then either the ink cartridge is incorrectly seated in the carriage assembly or a severe cartridge error condition is present and the ink cartridge may need to be replaced.

B.8. Deskjet 3000 series (HP 27/28 ink cartridges) Print Self-Test Page:

- 1. Turn the printer on.
- 2. Press and hold down the POWER button.

- 3. Open and close the top cover four times.
- 4. Release the POWER button.

NOTE: When running the test on the HP Deskjet 3600-3800 series printers it may be helpful to use a pen or pencil to hold down the Power button.

--- A good HP 27 black cartridge should have 416 good nozzles (26 x 16 stair-step pattern), while a good HP 28 color ink cartridge should have 300 good nozzles (100 for each color, 10x10 stair-step pattern).

---- If the self test page prints then this illustrates that the printer is functional and the problem is likely limited to either one of the ink cartridges. There should be lines extending across the page in black, yellow, cyan and magenta. A missing black line indicates a problem with the black or photo cartridge. Faded, streaked or missing lines in the other colors indicates a problem with the color ink cartridge.

To determine which cartridge is causing the problem:

- 1. Open the cartridge access door.
- 2. Remove either cartridge (not both).
- 3. Close the cartridge access door.

-- If the computer message is Print Cartridge Error , then the print cartridge that is still in the printer is the problem cartridge. If the computer message is NOT Print Cartridge Error (instead, it says that the cartridge you have removed is ...Either missing, not detected, or incorrectly installed), then the cartridge you have removed is the problem cartridge.

---- Providing the color cartridge is partially functioning, the diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health). A good HP 21/27/56 black cartridge should display 416 good nozzles (26x16 grid), while a good HP 22/28/57/58 color ink cartridge should show 300 good nozzles (10x10 color grid). For reference, please refer to video at link below to help evaluate test pattern. [NOTE: HP 56/57/58 and HP21/22 cartridges are electrically similar]: http://inkjet411.com/?page\_id=2358

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The **"Wrong Cartridge Type/Installed" / "Print cartridge is not compatible with this device" / "Cartridge Error" / "Print Cartridge Error" / 'blinking lights"** alert/error message is typically indicative of failed micro-electronics internal to the ink cartridge(s). Also note that it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see bottom image at this page: http://inkjet411.com/?page\_id=1216

However, if your printer works routinely after inserting a brand new cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refill purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if you have any questions on the technical information provided above. -Thank you

## HP PSC 2175xi, 2210, 2400, 2410, 2500 - (HP 56/57 CARTRIDGE ERRORS)

Regarding your recent inquiry about the HP 56 cartridge error message and inability to print with your HP PSC 2410 printer, this type of problem is typically an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges<sup>\*</sup>. Let's first run a few checks to validate an electrical failure of the ink cartridge....

Please first verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer...this may place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): To confirm if your printer supports this feature, please refer to your printer's User Guide. This may also help you determine which cartridge is causing the issue.

To help determine/confirm which cartridge is causing the problem:

- 1. Open the cartridge access door.
- 2. Remove either cartridge (not both).
- 3. Close the cartridge access door.

-- If the computer message is Print Cartridge Error, then the print cartridge that is still in the printer is the problem cartridge. If the computer message is NOT Print Cartridge Error (instead, it says that the cartridge you have removed is ...Either missing, not detected, or incorrectly installed), then the cartridge you have removed is the problem cartridge.

To completely rule out connectivity issues, we suggest you follow perform the following...depending on your printer model, please attempt either procedure B.1 and/or B.2 - please advise if either do not work for your printer model:

A. Clean cartridge/printer electrical contacts. Also inspect printer's internal carriage flex cables for surface damage (i.e. burn marks) or an uneven contact surface (by which the cartridge's rear electrical contacts mates with). <u>http://inkjet411.com/?page\_id=1519</u>

B. Perform either of the 'B' procedures below - please note that steps may vary by printer model:

B.1. Self Test Print:

1. From the front panel, press Setup, press 1, and then press 4.

2. Refer to test print sample at HP's website to evaluate your test print. Inspect nozzle test pattern; missing bars or lines in the stair-step pattern represent an ink clog, a mis-firing nozzle or a damaged ink nozzle.

NOTE: A good HP 56 black cartridge should have 432 good nozzles, while a good HP 57/58 color ink cartridge should have 300 good nozzles.

http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?objectID=c00048607

B.2. Tap 41/43 Cartridge Diagnostics (validation required):

1. Press \* and # keys at same time

2. Enter 124 (or 1234)

3. Using left/right arrow keys, navigate to either System Menu or Special Reports menu. Select Enter.

4. Select Ok, then click Right Arrow until the 'print-mech button tap' menu is displayed.

5. Select Ok ('code = 0' will be displayed); click and hold Right Arrow until 'code = 43' is displayed. Use the Left Arrow if you need to decrease numerical count.

6. Select Ok. The test page prints. NOTE: If the test page does not print, then try and enter 'code = 41'.

7. Select Enter to print test print. REFERENCE VIDEO: <u>http://inkjet411.com/?page\_id=2358</u>

--- Providing the color cartridge is partially functioning, the diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health). A good HP 21/27/56 black cartridge should display 416 good nozzles (26x16 grid), while a good HP 22/28/57/58 color ink cartridge should show 300 good nozzles (10x10 color grid). For reference, please refer to video at link below to help evaluate test pattern. [NOTE: HP 56/57/58 and HP21/22 cartridges are electrically similar]: <a href="http://inkjet411.com/?page\_id=2358">http://inkjet411.com/?page\_id=2358</a>

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The "Wrong Cartridge Type/Installed" / "Print cartridge is not compatible with this device" / "Cartridge Error" / "Print Cartridge Error" / 'blinking lights" alert/error message is typically indicative of failed micro-electronics internal to the ink cartridge(s). Also note that it is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Severe cartridge errors are primarily caused by an electrical breakdown at the cartridge's nozzle

plate. Ink penetration or corrosion into the nozzle plate will cause a failure of the tiny micro-electronics resulting in a variety of different error messages being displayed – see bottom image at this page: <a href="http://inkjet411.com/?page\_id=1216">http://inkjet411.com/?page\_id=1216</a>

However, if your printer works routinely after inserting a brand new HP56 cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refill purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

### -Thank you

## CARTRIDGE SELF-DIAGNOSIS PERFORMED

Regarding your recent self-diagnosis of the HP XXX cartridge using the cartridge clear/bypass procedure, it appears the ink cartridge is internally damaged. Based on the steps you followed it appears you performed everything correctly. An electronic failure of the cartridge would be unrelated to the ink cartridge refill process; these same failures can occur with brand new ink cartridges\*

Once you reach the checksum menu (with 5-digit number displayed), you should be able to send one (1) print job thru successfully at that point in time. If the same printer/cartridge error returns, or a new blocking error message is then displayed, then the ink cartridge is likely internally damaged (micro-electronics) and will need to be replaced with a new one.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. The **"Incompatible Cartridge(s)"** / **"Print Cartridge(s) Problem - Refer to printer documentation."** error message is typically indicative of failed micro-electronics internal to the ink cartridge(s). It is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. Running the 'Tap 41' cartridge health diagnostics test will confirm the active state of both cartridges. Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice.

For reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: <a href="http://inkjet411.com/?page\_id=415">http://inkjet411.com/?page\_id=415</a> (60/61s)

However, if your printer works routinely after inserting a brand new cartridge in it, you should discuss the possibility of a refund with your local Costco. We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if you have any further questions on this...we apologize for the inconvenience this has caused you.

- Thank you

## ++CARTRIDGE SELF-DIAGNOSIS PERFORMED (74/75 System)

Regarding your recent self-diagnosis of the HP 74/75 cartridge using the cartridge clear/bypass procedure, it appears the ink cartridge is internally damaged, particularly since you are seeing the "Incompatible Print Cartridge" error message ----- this is typically indicative of failed micro-electronics internal to the ink cartridge(s). It is common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a marginally performing cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors.

As a temporary workaround, or if you are unable to determine which cartridge is causing the issue, remove one of the ink cartridges from the printer....this will place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): For more information, refer to your printer user guide.

Running the 'Tap 41' cartridge health diagnostics test will confirm the active state of both cartridges - see video here: <u>http://inkjet411.com/?page\_id=792</u>

>> Providing the color cartridge is partially functioning the Tap 41 diagnostic test print will be printed (this is a forced service print test which is mainly used for the evaluation of ink cartridge electrical health. A good HP 75/75XL color cartridge should display 600 good nozzles, while a good HP 74/74XL black ink cartridge should show 672 good nozzles. If the results yield anything different then the ink cartridge is likely damaged and will need to be replaced. Refer to video on how to read the printout.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. Please note this type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. These same failures can occur with brand new ink cartridges.

For additional reference, the following page provides a complete review of the majority of cartridge error messages you may observe on your printer at one point or another: <u>http://inkjet411.</u> com/?page\_id=509

However, if your printer works routinely after inserting a brand new 74/75 cartridge in it, you should discuss the possibility of a refund with your local Costco. We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if you have any further questions on this...we apologize for the inconvenience this has caused you.

- Thank you

LEXMARK – DELL PRINTING FAILURE

Regarding your recent inquiry about the **Dell** ink cartridge error message ("Alignment problem, remove tape from cartridges or check troubleshooting") and inability to print to your **Dell V305 printer**. Based on your reported problem description, this type of problem is normally associated to an electrical connection issue between the printer and the cartridge, or more likely, an internal micro-electronic failure inside the cartridge itself. The failure is unrelated to the ink cartridge refill process\*. An internal electrical failure of a cartridge can be confirmed by performing the following steps which can help rule out other variables which may be causing the issue:

A. Ensure BOTH carriage/flex cables and BOTH ink cartridge contacts are thoroughly clean before proceeding: <u>http://inkjet411.com/?page\_id=1519</u>

NOTE: "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for all integrated ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. Your printer/computer may display an ink alert message, such as "non-genuine cartridge". Press proceed/continue/accept/yes/OK to dismiss this prompt. After refills, the printer cannot track the ink level. The ink level indicator will falsely signal empty. In many cases, additional nuisance messages may also appear – this is normal. Bypass all low ink warnings and nuisance alert messages.

Now, if printing is still prohibited, then is it likely an internal micro-electronic failure inside the cartridge. These types of failures are relatively rare (i.e. 1-2 out of every hundred cartridges which get refilled).

\*Many cartridges eventually do encounter problems or internal electrical failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. If both ink cartridges are older than 2 years old then they are beyond their usable life (ink corrosion on contacts, or nozzle plate contact points, ultimately leads to internal micro-electronic failure of the cartridge).

However, if your printer works routinely after inserting a brand new cartridge in it, you should discuss the possibility of a refund with your local Costco (for refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

-Thank you

### LOW INK MESSAGE (GENERAL)

Regarding your recent inquiry about the low ink message, please note that "Empty" and "Low Ink" alerts are <u>COMPLETELY NORMAL</u> for all newer **HP** integrated ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. The ink level monitoring feature cannot be reset (i.e. in the newer line of integrated ink cartridges, HP blows the ink monitoring resistors inside the cartridge the first time it is used - thus it is impossible to reset them).
As you just returned from the refill store, your ink cartridge(s) is full of ink - you may ignore low ink warnings (along with any other nuisance message) and print normally until you observe one of the colors to begin to fade.

As soon as you observe one of the 4 colors "drop out" [i.e. Black cartridge or Tri-color (cyan/magenta/yellow) cartridge], then it's time to refill the respective ink cartridge. To help determine if all 4 colors are firing properly we suggest you run our 4-color CMYK test print...open and print our standard 4-color test file: <u>http://inkjet411.retailinkjet.com/wp-content/uploads/2013/02/4-Color-Test-Print\_CMYK\_sm.pdf</u>

**NOTE:** It is possible to reset the HP 15, 17, 23, 41, 45, 78 ink cartridges – click here for more information: <u>http://inkjet411.com/?page\_id=1419</u>

It is possible to reset the HP 21/22/27/28/56/57/58 ink cartridges – click here for more information: <a href="http://inkjet411.com/?page\_id=1915">http://inkjet411.com/?page\_id=1915</a>

In many cases nuisance alert messages may also be displayed, including 'counterfeit cartridge' or 'nongenuine ink cartridge'...these are normal nuisance alerts that can just be ignored by pressing continue/dismiss/Ok. We suggest you select 'OK' (or similar) at the printer's control panel up to 6 times to ensure all nuisance errors are cleared. You should then be able to continue with print operations until the print quality begins to fade.

The "low ink" or "no status" message typically occurs soon after a refill. It is a false signal, because the printer cannot recognize that the cartridge has been refilled. Your cartridge is not low on ink, and nothing is wrong with your refilled cartridge or printer. Unfortunately, you may also observe multiple 'nuisance alert' messages, these can be ignored as well. For more information on 'low ink' and 'nuisance messages' and what you should expect, please visit: <a href="http://inkjet411.com/?page\_id=396">http://inkjet411.com/?page\_id=396</a> (HP 60/61 Low Ink) <a href="http://inkjet411.com/?page\_id=420">http://inkjet411.com/?page\_id=420</a> (HP 60/61 Nuisance Messages) <a href="http://inkjet411.com/?page\_id=517">http://inkjet411.com/?page\_id=517</a> (HP 74/75 Low Ink) <a href="http://inkjet411.com/?page\_id=523">http://inkjet411.com/?page\_id=523</a> (HP 74/75 Nuisance Messages) <a href="http://inkjet411.com/?page\_id=598">http://inkjet411.com/?page\_id=598</a> (HP 901 Low Ink) <a href="http://inkjet411.com/?page\_id=613">http://inkjet411.com/?page\_id=598</a> (HP 901 Nuisance Messages) <a href="http://inkjet411.com/?page\_id=1216">http://inkjet411.com/?page\_id=1216</a> (HP 92-99 Cartridge Errors) <a href="http://inkjet411.com/?page\_id=1261">http://inkjet411.com/?page\_id=1261</a> (HP 92-99 Nuisance Messages) <a href="http://inkjet411.com/?page\_id=1261">http://inkjet411.com/?page\_id=1261</a> (HP 92-99 Nuisance Messages)

# **ADDITIONAL NOTES:**

The ink level indicator cannot be manually re-set in the newer HP cartridges, thus making it not usable. HP leverages 'fusible links' in the nozzle plate (base of ink cartridge) which physically blows the resistors as the original ink is consumed...thus resetting the ink cartridge's ink level monitoring capability is simply not possible. The ink tracking feature is only available with a brand new ink cartridge. However, losing this feature is not necessarily significant, because the ink level indicator usually has 20%-30% ink remaining when it shows "low on ink". Therefore, the warning has limited value, because customers who prematurely replace their cartridges when they see the "low ink" message are wasting a lot of residual ink. In order to use as much available ink as possible, many customers (not only those who refill their cartridges, but many who have not yet tried refilling) always ignore the ink level indicator "low" warning, and wait to replace/refill their cartridge until immediately after seeing ink begin to fade on their printouts. Many customers who disregard the low ink indicator keep a spare set of cartridges so that their printing productivity is not disrupted when the cartridge runs out of ink.

If the cartridge completely runs out of ink and continues to be used when it is dry, this could damage the cartridge, so customers should promptly refill/replace their cartridge when the ink begins to fade. This fading process is gradual, so that you will have sufficient time to refill/replace the cartridge before the risk of empty cartridge printing. In summary, most refill customers agree that the huge savings of refilling is much greater than the potential loss of the low ink indicator feature.

Before you refill your next ink cartridge, please refer to this video which provides some helpful transportation tips to avoid any potential issues: <a href="http://inkjet411.com/?page\_id=1437">http://inkjet411.com/?page\_id=1437</a>

We hope this provides you with a thorough explanation as to why ink level monitoring is not available when using refilled ink cartridges.

-Thank you

If, after bypassing 'ink low alerts' messages, the printer will still not print, then this might be an electrical issue with the cartridge or printer itself. Please refer to "Troubleshooting" if this is the case.

# LOW INK MESSAGE (Dell - Lexmark)

Regarding your recent inquiry about the Dell/Lexmark cartridge(s) low ink message, please note that "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for all newer integrated ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. The ink level monitoring feature cannot be reset (i.e. in the newer line of integrated ink cartridges, Lexmark physically blows the ink monitoring resistors inside the cartridge the first time it is used - thus it is impossible to reset them). Only brand new ink cartridges provide ink level monitoring.

As you just returned from the refill store, your ink cartridge(s) is full of ink - you may ignore low ink warnings (along with any other nuisance message) and print normally until you observe one of the colors to begin to fade.

The "low ink" or "no status" message typically occurs soon after a refill. It is a false signal, because the printer cannot recognize that the cartridge has been refilled. Your cartridge is not low on ink, and nothing is wrong with your refilled cartridge or printer. Unfortunately, you may also observe multiple

'nuisance alert' messages, these can be ignored as well. For more information on 'low ink' and 'nuisance messages' and what you should expect, please visit: <u>http://inkjet411.com/?page\_id=396</u> (HP 60/61 Low Ink Messages)

Alternative Procedure - Low Ink Warning Bypass:

It may be possible to disable all printer warning messages by disabling ALL communication from the printer back to your PC. To disable ALL communication from your printer to your PC, do the following:

From the WINDOWS<sup>™</sup> START Menu, Click on "Settings → Printers" RIGHT CLICK on your Printer Model, and Select "Properties" From the Properties Menu, Click on the "Ports" Tab Un-Select the Box that reads: "Enable Bi-Directional Support" Click "APPLY" then click "OK" to exit NOTE: This operation will disable ALL COMMUNICATION being sent from your printer to your PC, including paper out, paper jams, low on ink, etc. For All-in-One printers, this will ALSO DISABLE CERTAIN OTHER FUNCTIONALITY SUCH AS SCANNING. This operation can be reversed by repeating these steps and checking the "Enable Bi-Directional Support" Box.

#### ADDITIONAL LOW INK WARNING INFORMATION:

The ink level indicator cannot be manually re-set in the newer cartridges, thus making it not usable. The ink tracking feature is only available with a brand new ink cartridge.

However, losing this feature is not necessarily significant, because the ink level indicator usually has 20%-30% ink remaining when it shows "low on ink". Therefore, the warning has limited value, because customers who prematurely replace their cartridges when they see the "low ink" message are wasting a lot of residual ink. In order to use as much available ink as possible, many customers (not only those who refill their cartridges, but many who have not yet tried refilling) always ignore the ink level indicator "low" warning, and wait to replace/refill their cartridge until immediately after seeing ink begin to fade on their printouts. Many customers who disregard the low ink indicator keep a spare set of cartridges so that their printing productivity is not disrupted when the cartridge runs out of ink.

If the cartridge completely runs out of ink and continues to be used when it is dry, this could damage the cartridge, so customers should promptly refill/replace their cartridge when the ink begins to fade. This fading process is gradual, so that you will have sufficient time to refill/replace the cartridge before the risk of empty cartridge printing. In summary, most refill customers agree that the huge savings of refilling is much greater than the potential loss of the low ink indicator feature.

Before you refill your next ink cartridge, please refer to this video which provides some helpful transportation tips to avoid any potential issues: http://inkiet411.com/?page\_id=1437 We hope this provides you with a thorough explanation as to why ink level monitoring is not available when using refilled ink cartridges.

-Thank you

### LOW INK MESSAGE (PRINTING NOT ALLOWED)

Regarding your recent inquiry about the 'counterfeit cartridge' alert. Please note that "Ink Low", 'Nongenuine ink cartridge' & 'Counterfeit' messages alerts are COMPLETELY NORMAL for all newer HP integrated ink cartridges which have been refilled! While at first this may be considered an unusual workflow, it does allow print operations to proceed.

These are normal nuisance alerts that can just be ignored by pressing continue/dismiss/Ok. You should be able to continue with print operations until the print quality begins to fade.

The "low ink" or "no status" message typically occurs soon after a refill. It is a false signal, because the printer cannot recognize that the cartridge has been refilled. Your cartridge is not low on ink, and nothing is wrong with your refilled cartridge or printer. Unfortunately, you may also observe multiple 'nuisance alert' messages, these can be ignored as well. For more information on 'low ink' and 'nuisance messages' and what you should expect, please visit: <u>http://inkjet411.com/?page\_id=396</u> (HP 60/61 Low Ink) <u>http://inkjet411.com/?page\_id=420</u> (HP 60/61 Nuisance Messages) <u>http://inkjet411.com/?page\_id=517</u> (HP 74/75 Low Ink) <u>http://inkjet411.com/?page\_id=523</u> (HP 74/75 Nuisance Messages)

However, if the 'low ink' / 'nuisance messages' cannot be bypassed, there could be another issue. It is suggested that you select 'OK' at the printer's control panel, up to six times to see if the impending errors (hang) is cleared. Other potential issues can be verified by going to the "Solve My Problem" section of the Inkjet411 website: http://www.inkjet411.com/ and select the HP **60/61** ink series family and your printer model - follow the suggestions shown, including cartridge/printer cleaning procedures and by running the diagnostic tests.

Before you refill your next ink cartridge, please refer to this video which provides some helpful transportation tips to avoid any potential issues: http://inkiet411.com/?page\_id=1437

Thank you

# CARTRIDGE ALIGNMENT

Regarding your recent inquiry about cartridge alignment following a refill, after inserting the cartridge into the printer, the printer/cartridge system should follow the same alignment procedure as for an original cartridge. It is suggested you perform the alignment at the printer's control panel and that you may have to depress the 'OK' (or Copy/Resume) button up to 6 times in order to initiate the alignment. For more information, please visit the "Nuisance Messages" page of your particular ink series section of the Inkjet411 website: <u>http://www.inkjet411.com/</u>

If you continue to encounter alignment issues, then this is probably an electrical connection issue between the printer and the cartridge (or an internal micro-electronic failure of the integrated ink cartridge or built-in printhead). To help rule out other variables, please select "Solve My Problem" at the Inkjet411 website: <u>http://www.inkjet411.com/</u>

Follow the error message instructions shown, even if your exact error message is not listed. Please note that many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. Replacement of the cartridge or printhead may be required.

# SLOW PRINTING / CAN'T COPY OR SCAN (IPH CARTRIDGES)

Regarding your recent inquiry about 'slow printing'/'failure to copy' following the cartridge refill, after inserting the cartridge into the printer, the printer/cartridge system should follow the same start-up and alignment procedure as for an original cartridge. From your description it sounds like a connectivity issue between the ink cartridge and the printer control board, we suggest you perform a thorough cleaning:

http://inkjet411.com/?page\_id=1296

Please verify the age of the ink cartridge(s)....look at imprinted date on front (or rear) of ink cartridge. If the 'warranty expiration date' has expired, then potential internal electrical cartridge failures can occur due to internal corrosion, etc.

If you continue to encounter slow printing or other functional printer issues, we suggest you perform a printer reset, refer to your printer's user manual, Fixya.com support site or our suggestions on the following Inkjet411 support page: <u>http://inkjet411.com/?page\_id=1008</u> (HP 92-98) http://inkjet411.com/?page\_id=644 (HP 15.58)

If the slow printing/failure to copy problem persists, then this is probably an electrical connection issue between the printer and the cartridge (or more likely an internal micro-electronic failure of the integrated ink cartridge). Replacing the ink cartridge(s) will provide a definitive determination if this is the case. To help rule out additional variables, please select "Solve My Problem" at the Inkjet411 website: http://www.inkjet411.com/

Please note that many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. Replacement of the cartridge may be required.

#### GENERAL 'LOW INK' OR 'NUISANCE MESSAGES' (CUSTOMER IS ALREADY AWARE)

With respect to the 'ink low' and/or 'nuisance error' messages, this is normal with refilled ink cartridges. Please visit the following pages on general HP "Nuisance Messages"; please watch the education video on 'Low Ink Warnings' provided:

http://inkjet411.com/?page\_id=420 (60/61 Nuisance) http://inkjet411.com/?page\_id=396 (60/61 Low Ink Alerts)

#### **CARTRIDGE EXPIRATION**

Regarding your recent inquiry about cartridge expiration dates, consult your printer manual or fixya.com for suggested instructions on how to reset the cartridges. Then you should proceed using the cartridge, because it should work routinely.

# CARTRIDGE REFILL 90 DAY "EXPIRATION"

Regarding your recent inquiry about the 90-day cartridge refill expiration dates, these dates are the official instructions for integrated ink cartridges (i.e. those typically found in 2-cartridge printer models and that feature an electronic nozzle plate attached to base of ink cartridge). If you can comply with using the cartridge within the 90 day window, you will be assured of standard quality. If you have recently discovered you are beyond the 90 day period, you should proceed with using the cartridge, because it may work routinely.

# CARTRIDGE LEAKING (ERROR MESSAGES & NO PRINTING)

Regarding your recent inquiry about the HP 56 cartridge error message and inability to print with your HP Deskjet 5510, it sounds like the cartridge's nozzle plate has suffered 'delamination' and this is why you are observing ink leaking at base of cartridge. The cartridge will likely be non-functional in this condition and will need to be replaced with a new one\*. Furthermore, the leaking has probably already lead to an internal micro-electronic failure inside the cartridge. Inspect base of ink cartridge for cracks or breaks – refer to last photo at the following link: <u>http://inkjet411.com/?page\_id=415</u>

Please verify the age of the ink cartridge(s)....look at imprinted date on front (or back) of ink cartridge. If this 'warranty expiration date' has expired, then potential cartridge failures can occur due to internal corrosion, etc.

As a temporary workaround, remove the suspect ink cartridge from the printer, and apply printer power. This should place the printer into the 'single cartridge printer mode'....print jobs may then be executed from the computer (only): For more information, refer to your printer user guide.

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process. Refilled 'compatible' ink cartridges are typically on their 3rd life of usage, or more...reliability of a compatible ink cartridge is therefore an unknown variable. Thank you

### CANON, EPSON, HP 02/88 -- RESETTABLE CARTRIDGE ERROR MESSAGES

Regarding your recent inquiry about the Epson/Canon/HP cartridge error message associated with your Canon/Epson/HP printer, the cartridge probably has a defective chip which was mis-programmed during the refill process. We suggest you take the suspect ink cartridge back to Costco and request they either re-program the chip (or replace it) since it is not being recognized....however, let's run just a few simple checks first to screen out all variables.

Remove the ink cartridge from the printer and carefully inspect the small chip on the bottom/rear side of ink cartridge - ensure there is no ink residue on gold contact surfaces. Clean contact surface with an isopropyl alcohol dampened lint-free towel or cloth. Refer to picture at following Inkjet411 site link: <u>http://inkjet411.com/?page\_id=35\_</u> (HP 02) <u>http://inkjet411.com/?page\_id=973\_</u> (HP 88) <u>http://inkjet411.com/?page\_id=1939</u> (Epson)

Please confirm if this is just a nuisance/annoyance alert (i.e. "non-genuine" cartridge ) vs. an actual 'unrecognized cartridge' alert (i.e. Red X's on printer display / Windows pop-up message). Please visit the following Inkjet411 support page which will help you delineate the difference: <a href="http://inkjet411.com/?page\_id=73">http://inkjet411.com/?page\_id=73</a> (Epson)

http://inkjet411.com/?page\_id=1537\_(Canon)

http://inkjet411.com/?page\_id=1372\_(HP 02)

http://inkjet411.com/?page\_id=973 (HP 88)

On some Epson printer models you may need to scroll thru the menu options (i.e. right arrow key) to help determine which specific ink cartridge is actually causing the 'Unrecognized Cartridge' error condition. You only need to replace the actual cartridge which is causing the issue.

Otherwise, we suggest you bring the cartridge, or cartridges, back to the Costco Photo Department and have it re-programmed (or replaced as applicable). Also, have it weighed at the Costco Photo Department to ensure that it was properly filled.

If this does not remedy the problem, then we suggest you remove the ink cartridge and thoroughly inspect the PRINTHEAD's electrical contact points for ink residue, etc. Reinstall cartridge(s) and test. <a href="http://inkjet411.com/?page\_id=35">http://inkjet411.com/?page\_id=35</a> (HP02 main page) <a href="http://inkjet411.com/?page\_id=973">http://inkjet411.com/?page\_id=973</a> (HP88 main page)

Worst case scenario, the PRINTHEAD may be defective, or at end of life, but typically you will receive and 'Ink System Failure' or 'Replace Printhead' message (or similar) when this type of electronic assembly failure occurs. Refer to video at following link which illustrates how the PRINTHEAD (or PRINTHEADS) function in the printer: <u>http://inkjet411.com/?page\_id=2054</u> We apologize for the inconvenience in advance. Please let us know if chip re-programming/replacement does not correct the printer/cartridge issue.

-Thank you

\*While the HP 02 permanent printhead is rated for ~20,000 pages, the average life is typically less than 10,000 pages due to infrequent use and age of electrical components. This is just part of the natural degradation of this printer writing system over time & with usage (i.e. image content/print density). The printhead is the core electronic engine behind firing the drops onto the paper...not the ink cartridges (these are just plastic ink holding tanks).

You can verify PRINTHEAD electrical performance by running the Tap 41 diagnostic test from the Service Menu – depending on your printer model, two procedures are provided here (see Advanced HP Printer Diagnostics): <u>http://inkjet411.com/?page\_id=1372</u>

Emergency Canon MX700 Ink Tank Level Reset Procedure (CLI-8 & PG-5):

Return printer to "factory mode". There are some interesting settings in here, but I'm not sure of what everything does, so be careful with them. This works temporarily (as it seems to reset after a few days), and does not permanently disable ink level detection (as it correctly showed full ink after replacing it):

- 1. Unplug the printer.
- 2. Press and hold the Power button while plugging the printer back in.
- 3. Continue to hold the Power button and press the Reset button twice.
- 4. Let go of the Power button and wait 10 seconds. It will eventually show the number 1 on the LCD.
- 5. Once the printer also shows "Idle" on the screen, cycle through the settings with the left and right arrow buttons until you see "USER MODE POWER OFF". Press the OK button.
- 6. You should now be able to print or scan.

# EPSON UNRECOGNIZED CARTRIDGE ERROR

Regarding your recent inquiry about the Epson T126 cartridge error message ("Cartridge Not Recognized", "Replace Cartridge" or similar) associated with your Epson NX430 printer, the cartridge probably has a mis-programmed smart chip during the refill process. Refill operators utilize smart chip re-programming equipment; in rare cases during the re-programming which typically yields a green light to show success, it does not always result in correct smart chip reprogramming. In this case, they may have forgot to re-program the entire set of tanks. Unfortunately there is nothing you can do from home....the chip(s) need to be re-programmed at the store. We suggest you return to the store and request the operators to re-program and check the weight of all cartridges.

OTHER POSSIBLE CAUSES OF FAILURE:

1) Either the external chip or internal ink sensor is electrically bad (the internal ink sensor detects if cartridge is really out of ink). If you program the cartridges a 2<sup>nd</sup> time and the "replace cartridge" messages, or similar persist, then this is the likely cause and the cartridge will need to be replaced.

2) Ink cartridge may not be filled properly – your refiller would need to weigh cartridge to verify. If the ink sensor does not see ink in the printer it does not matter how many times you reset the tank.

3) The chip resetter (at refill store) has an issue – if we suspect this is an issue we would contact the store directly. Please disregard for now.

Now, you indicated that you attempted some troubleshooting steps. Please quickly double-check a few additional items from the checklist below before returning to store:

1) Confirm if this is just a nuisance/annoyance alert (i.e. "non-genuine" cartridge ) vs. an actual 'unrecognized cartridge' alert (i.e. Red X's on printer display / Windows pop-up message). Please visit the following Inkjet411 support page which will help you delineate the difference: <a href="http://inkjet411.com/?page\_id=73">http://inkjet411.com/?page\_id=73</a>

2) On some Epson printer models you may need to scroll thru the menu options AT THE PRINTER'S CONTROL MENU (i.e. right arrow key) to help determine which specific ink cartridge is actually causing the 'Unrecognized Cartridge' error condition. On the other hand, for general 'non-genuine' cartridge alerts, typically you can bypass these errors by clicking thru the acknowledgement prompts or via the arrow keys: <u>http://inkjet411.com/?page\_id=1939</u>

3) We suggest you remove all the ink cartridges, inspect the smart-chips condition (on rear side) and ensure there are no cuts/gashes or ink residue present on the micro-chip surfaces. To be sure we suggest you clean the micro-chip surfaces; click here to see 2 different pictures of this along with cleaning instructions: <u>http://inkjet411.com/?page\_id=1939</u>

4) If an 'unrecognized' cartridge alert message, or similar, continues to be observed and cannot be bypassed, we suggest you bring the cartridge, or cartridges, back to the Costco Photo Department and have it re-programmed. Also, have them check it to ensure that it was properly filled.

5) If the error continues (following ink tank re-programming a 2nd time), then we suggest you install a new genuine Epson ink cartridge into the printer to verify the permanent PRINTHEAD is functioning ok. Here is how the PRINTHEAD works: <u>http://inkjet411.com/?page\_id=2054</u>

**NOTE:** Following refilled cartridge installation, your printer/computer may display an ink alert message such as "non-genuine cartridge" or "you have not installed genuine Epson ink cartridges" – these are COMPLETELY NORMAL alerts when using refilled ink cartridges. Press proceed/continue/accept/yes/OK to dismiss the prompt. In some cases you may have to scroll over using the arrow keys to dismiss the

alerts. Additional alerts may be displayed the first time you go to print or copy – dismiss the alerts accordingly to resume normal print operations. For more information on Epson ink cartridge alert messages please visit: <u>http://inkjet411.com/?page\_id=1939</u>

Please let us know if the 2<sup>nd</sup> chip re-programming does not solve the issue - we apologize for the inconvenience in advance.

We sincerely apologize for the major inconvenience here; we are currently checking with the store to see if their Epson re-programming tool is functioning correctly. We will advise as soon as we hear back. -Thank you

NOTE 2: If, after replacing the cartridge, or cartridges, with brand new Epson Original ink cartridges, correct the problem, then you may have a defective cartridge (internal ink level monitoring circuit), unrelated to the refilled cartridges. If, after replacing the cartridge, or cartridges, with brand new Epson Original ink cartridges, does NOT correct the problem, then you may have a defective problem, then you may have a ferminal ink cartridges. If, after replacing the cartridge, or cartridges, with brand new Epson Original ink cartridges, does NOT correct the problem, then you may have a defective PRINTHEAD (i.e. permanent electrical sub-assembly which the cartridges plug into).

Regarding your recent inquiry about the **Epson T125** cartridge error message associated with your Epson NX625 printer, based on the observed 'Red X' on the display, it sounds like the cartridge probably has a defective chip which was mis-programmed during the refill process.

#### OTHER POSSIBLE CAUSES OF FAILURE:

1) Either the external chip or internal ink sensor is electrically bad (the internal ink sensor detects if cartridge is really out of ink)

2) Ink cartridge may not be filled properly – refiller would need to weigh cartridge to verify. If the ink sensor does not see ink in the printer it does not matter how many times you reset the tank.
 3) The chip resetter (at refill store) has an issue – if we suspect this is an issue we contact the store directly.

On some Epson AiO printer models you may need to scroll thru the menu options (i.e. right arrow key) to help determine which specific ink cartridge is actually causing the 'Unrecognized Cartridge' error condition and/or to bypass the nuisance messages/prompts. On the other hand, for general 'non-genuine' cartridge alerts, typically you can bypass these errors by clicking thru the acknowledgement prompts or via the arrow keys.

If an 'unrecognized' cartridge alert message (i.e. Red X), or similar, is observed and cannot be bypassed, we suggest you bring the YELLOW cartridge back to the Costco Photo Department and have it reprogrammed.

Please visit the following Inkjet411 support page which will help you understand the various caveats and messages you will see at the printer when using refilled Epson cartridges: <a href="http://inkjet411.com/?page\_id=73">http://inkjet411.com/?page\_id=73</a>

We sincerely apologize for the inconvenience in advance. -Thank you

EPSON CARTRIDGE FAILURE – 2<sup>ND</sup> RESPONSE FOLLOW UP First of all, out team extends an apology over the ongoing ink cartridge issue.

We suggest you remove the suspect ink cartridge(s), inspect the smart-chips condition (on rear side) and ensure there are no cuts/gashes or ink residue present on the micro-chip surfaces. Clean dirty micro-chip surfaces if present; click here to see 2 different pictures of this along with cleaning instructions: <a href="http://inkjet411.com/?page\_id=1939">http://inkjet411.com/?page\_id=1939</a>

If you have already returned from Costco a 2nd time (2nd attempt at chip reprogramming) and the cartridge is still not recognized, then the cartridge's internal ink low/empty detection circuit is likely defective and the cartridge will need to be replaced with a new one. Unfortunately there is no way for the operator to screen the cartridge for this unusual type of failure condition (it is quite rare).

There is an outside chance that the Epson chip resetter could be defective, but then we would have observed many customers from the same refill store reporting the same issue - if you had other cartridges refilled successfully, then this will rule out the chip resetter as the cause of failure.

We suggest you install a new original/genuine Epson ink cartridge to eliminate the suspect refilled ink cartridge as the failure variable......this will also rule-out the printer's built-in PRINTHEAD as being the cause of failure. We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

NOTE: If the problem occurs with a new original/genuine cartridge, then you may have a defective PRINTHEAD in the printer (worst case scenario), unrelated to the refilled cartridges. Unfortunately this electronic assembly is 'not easily' customer replaceable....here's just a glance of what's involved (3<sup>rd</sup> party video): <u>http://www.youtube.com/watch?v=9D2uYopOrll</u>

Epson WF 610 Usage/Cleaning Tips from Epson:

http://www.epson.com/cgi-

bin/Store/support/supDetail.jsp?BV\_UseBVCookie=yes&infoType=Videos&oid=130786&prodoid=63084 540

# Epson WF 520 Cleaning Tips from Epson: http://link.brightcove.com/services/player/bcpid744308446001?bckey=AQ~~,AAAAFIvhCZk~,7xyzJ\_9\_m 5HJqr6zOExbqAEPUb91B 5&bctid=929694625001

We apologize for the inconvenience this has caused you. Please let us know if you have any further questions on this issue.

-Thank you

# EPSON - SEVERE PRINT QUALITY PROBLEM (MISSING COLOR/COLORS)

Regarding your recent inquiry about the Epson T125 black ink cartridge and severe print performance issue you are currently observing with your Epson Workforce 325 printer, we suggest you perform a PRINTHEAD wetting, please refer to instructions below.

If, after activating the 'Printhead Cleaning' routine 2 times in a row in accordance with Inkjet411 suggestions: <u>http://inkjet411.com/?page\_id=73</u> along with manufacturer's suggested printer cleaning procedures, blank pages are observed or output print quality is extremely poor (for example, you observe several missing colors in the Self Test page where otherwise all colors should normally be present with no visible streaking), then the printhead may have partially dried out and a water flush may be necessary to help recover the ink system.\* For reference, here is how this is done on 100+ popular HP printer models since it commonly occurs and ink system recovery is usually successful (see video): <u>http://inkjet411.com/?page\_id=2412</u>

Unfortunately, since the Epson PRINTHEAD is not customer removable, we need to take a different approach here:

- A. PRINTHEAD Water Drip/Soak:
  - 1. Remove suspect color cartridge if unknown, then remove all cartridges.
  - 2. Gently slide a paper towel under the PRINTHEAD/CARRIAGE assembly.
  - 3. You'll see a round mesh ink port where ink flows into the PRINTHEAD.
  - 4. Thoroughly dampen the ink port with 1-2 teaspoons of distilled water (use an eye-dropper or syringe works best; pour or drip water directly into ink port). NOTE: Use of a syringe works best by forcing water into port.
  - 5. Reinstall ink cartridge(s).
  - 6. Remove paper towel from beneath PRINTHEAD/CARRIAGE assembly
  - 7. Activate the 'Clean Printhead' routine once to see if the respective color(s) begins to flow.
  - 8. If not, repeat steps 4-7 again.

It is fairly common for Epson printheads to dry out and suffer degraded/missing colors in printed output but an ink system recovery is possible using the suggested procedure above.



\*Typically the printhead should not reach it's end-of-life until after a minimum of 8 or more complete sets of cartridge changes; Epson Workforce/WF PRO models typically have a higher print page throughput average, but this is not always the case. While some printheads may last 15,000+ pages others may only last 3000 pages, actual results will vary. The printhead will eventually fail in time due to an internal micro-electronics failure, due to the following leading factors: general customer print usage and printer care, printer duty cycle (i.e. # pages printed per month), printing frequency (i.e. time between each print job), print mode (i.e. draft vs. normal) and content printed (i.e. photos vs plain pages) and color mode (black and white only vs. color/greyscale printing). Paper types used (i.e. plain paper, photo papers & matte/heavy bond papers) and paper edge curl (due to age in printer or low relative humidity) can also quickly lead to premature printhead failures due to physical 'head strikes' of the paper edges making repeated contact with the printhead nozzle plate.

NOTE: In the event of a failed printhead (flagged by a printer error such as "Replace Printhead", etc., unfortunately the electronic PRINTHEAD assembly is 'not easily' customer replaceable....here's just a glance of what's involved (3<sup>rd</sup> party video): <u>http://www.youtube.com/watch?v=9D2uYopOrll</u>

We apologize for the inconvenience this has caused you. Please let us know if you cannot recover or have any further questions on the current issue. -Thank you

#### "COMPATBILE" IIT CARTRIDGE - CARTRIDGE ERROR MESSAGE

Regarding your recent inquiry about a cartridge error message associated with your **Epson T098** cartridge, you stated that the ink cartridge was 'compatible' - just so you are aware, **Costco** only provides refilling services for genuine **Epson** ink tanks for reprogramming (there is far too much variability with compatible/remanufactured or rebranded ink tanks - see NOTE below for more information on this). Now, if this is truly a compatible ink cartridge, there is no guarantee of cartridge smart chip reprogramming success. If you only have original/genuine ink tanks (i.e. with manufacturer's logo/artwork), then please disregard.

NOTE: A compatible, remanufactured or re-branded ink cartridge can be problematic when installed into the printer following refilling. Compatible cartridges are typically purchased on-line or at select retailers (i.e. sold under a different label than the regular HP, Canon, Epson, Lexmark or Dell cartridge packaging) and is essentially a "remanufactured tank (aka..." It's a remanufactured tank") of the original HP/Canon/Epson/Lexmark/Dell genuine ink cartridge. For the best refilling experience, only use original/genuine ink tanks.

Based on your reported error/problem description, the cartridge probably has a defective chip which was mis-programmed during the refill process. Let's first confirm if one (1) or all cartridges are registering as empty (i.e. Red X's on printer display / Windows pop-up message). Please visit the following Inkjet411 support page which will help you further determine this: <u>http://inkjet411.com/?page\_id=73</u> (Epson)

NOTE 2: On some Epson printer models you may need to scroll thru the menu options (i.e. right arrow key) to help determine which specific ink cartridge is actually causing the 'Unrecognized Cartridge' error condition. You only need to replace the actual cartridge which is causing the issue.

Once you have determined the suspect cartridge(s), we suggest you bring the cartridge, or cartridges, back to the Costco Photo Department and have it re-programmed. Also, have it weighed at the Costco Photo Department to ensure that it was properly filled.

If this does not remedy the problem, then you may have a defective print head in the printer (worst case scenario), unrelated to the refilled cartridges.

We apologize for the inconvenience in advance. Thank you

EPSON OR CANON IIT: "NON-GENUINE" & "UNRECOGNIZED CARTRIDGE" ALERT MESSAGES Regarding your recent inquiry about the printer alert messages, please note that "non-genuine ink" messages are completely normal. You can dismiss this message by pressing 'OK', 'Proceed', 'Continue', etc. on your computer or printer display. However, if you receive other messages (i.e. "Unrecognized Cartridge", Red X's, etc.) and printing is not permitted, then that particular ink cartridge probably has a mis-programmed chip during the refill process.

If this is the first time you have refilled an ink cartridge, please be aware that 'multiple' non-genuine ink alert messages will be displayed...often you will need to navigate thru the menu (i.e. click right arrow button) etc. to move thru the prompts. Select 'OK', 'Dismiss' or 'Continue' to bypass these alerts. As well, additional alert messages may be displayed the first time you go to print or copy a document. Once again, dismiss the 'non-genuine' prompts. For more information on this, please click here: <a href="http://inkjet411.com/?page\_id=73">http://inkjet411.com/?page\_id=73</a> (Epson tanks)

For "Unrecognized Cartridge" and similar alert messages where printing is not permitted please identify the respective cartridge and return it to the photo center for reprogramming. Also, have them check the cartridge to ensure is has been properly filled.

NOTE: On some printer models you may need to scroll thru the menu options (i.e. right arrow key, etc.) to help determine which specific ink cartridge is actually causing the 'Unrecognized Cartridge' error condition. You only need to replace the actual cartridge which is causing the issue. <a href="http://inkjet411.com/?page\_id=1689">http://inkjet411.com/?page\_id=1689</a> (Epson Advanced)

If this does not remedy the problem, then you may have a defective print head in the printer (worst case scenario!), unrelated to the refilled cartridges.

Thank you.

# HP 940/88 - PRINT QUALITY / POOR PRINTING / FADED TEXT / MISSING COLORS

Regarding your recent inquiry about the HP 940/88 cartridge print quality problems, let's first make sure that the printer is firing all 4 tanks correctly. Based on your problem description, it sounds like there is an air bubble in one of the printer ink lines, so you should perform a "Clean PrintHead" procedure from your printer control panel.

NOTE: If one or more the colors were previously dry fired during printing (i.e. if you continued printing using only a few colors to one, air may have been accidently ingested into the ink lines between the cartridge(s) and PRINTHEAD. To recover from this problem, you may have to run the "Clean Printhead" procedure 2-3 times.

Then to verify the lines are clear and working correctly, print the "INK RECOVERY TEST PRINT" from our Test Prints page: <u>http://inkjet411.com/?page\_id=146</u>

Then we suggest you run the self-test print (under maintenance/tools menu), this will verify nozzle performance and that each color is firing a solid band of color.

We also suggest that you thoroughly review the steps outlined on our support page, including printhead removal/printer cleaning and service station cleaning. It is suggested you refer to printer manufacturer instructions first as the Inkjet411 procedures are provided for general guidance purposes only. A dirty service station can cause poor image quality and/or ink cross-contamination between different colors. http://inkjet411.com/?page\_id=1457 (940 main page) http://inkjet411.com/?page\_id=973 (88 main page)

If this still does not address the problem, we suggest you return the cartridges to the Costco Photo Department to get them weighed to ensure that were properly filled.

If this does not remedy the problem, then you may have a defective print head in the printer (worst case scenario), unrelated to the refilled cartridges. This electronic assembly (either the Yellow/Black printhead or Cyan/Magenta printhead, depending on which color is providing the issue) is available from HP.com.

**NOTE:** The HP 88 printer models have two (2) electronic printheads (responsible for pulling ink from the ink cartridges and then firing the ink droplets onto the paper). One for Yellow/Black colors, the other for Cyan/Magenta colors. Either will eventually fail depending on print usage type and printer duty cycle (i.e. rated for ~41,500 printed pages). Here is a video on how the PRINTHEAD(S) function in the printer: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

**NOTE:** The HP 940 printer models have two (2) electronic printheads (responsible for pulling ink from the ink cartridges and then firing the ink droplets onto the paper). One for Yellow/Black colors, the other for Cyan/Magenta colors. Either will eventually fail depending on print usage type and printer duty cycle

(i.e. rated for ~30,000 printed pages). Here is a video on how the PRINTHEAD(S) function in the printer: <u>http://inkjet411.com/?page\_id=2054</u>

# -Thank you

HP 564 - PRINT QUALITY / POOR PRINTING / FADED TEXT / MISSING COLORS\_\_PRINTHEAD FLUSHING Regarding your recent inquiry about the HP 564XL cartridge print quality problems (fade - no ink hitting the paper) with your **HP Photosmart 7515** printer, let's see if we can recover the ink system by performing the steps outlined below:

NOTE: 'LOW INK' or 'EMPTY INK' messages, "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for all HP 564 (or 564XL) ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. Only brand new ink cartridges support ink level monitoring. Please watch video at the following link which explains normal operation when using refilled ink cartridges: <u>http://inkjet411.com/?page\_id=2317</u>

Based on your problem description, it sounds like there are numerous air bubbles in the printer ink lines, so you should perform a "Clean PrintHead" procedure from your printer control panel 'TOOLS MENU', once or twice. To avoid wasting too much ink right out the gate, we suggest you FIRST REVIEW all procedures below, along with the video at the following link, and then perform the tasks described below to recover the ink system: <u>http://inkjet411.com/?page\_id=1983</u>

A complete lack of printing is typically not a single cartridge problem, but is either the fluids interface into the PRINTHEAD\* (foam connections are dry), electrical connectivity or an electrical failure of the PRINTHEAD itself. Please follow the steps at the following link to eliminate all variables: <a href="http://inkjet411.com/?page\_id=1451">http://inkjet411.com/?page\_id=1451</a>

NOTE 1: If one or more the colors were previously dry fired during printing (i.e. if you continued printing using only a few colors, then down to one, air may have been accidently ingested into the ink lines between the cartridge(s) and PRINTHEAD. To recover from this problem, you may have to run the "Clean Printhead" procedure 2 or 3 times. Please watch the video on the HP 564 support page which describes some of the issues you could encounter: <a href="http://inkjet411.com/?page\_id=1983">http://inkjet411.com/?page\_id=1983</a>

To verify the lines are clear and working correctly, print the "INK RECOVERY TEST PRINT" from our Test Prints page (or the Print Quality Report from your printer's Tools menu): <u>http://inkjet411.</u> <a href="https://inkjet411.com/?page\_id=146">http://inkjet411.com/?page\_id=146</a>

If the problem persists, then you'll need to review the steps outlined on our support page, including printhead removal/printer cleaning and service station cleaning. It is suggested you refer to printer manufacturer instructions first as the Inkjet411 procedures are provided for general guidance purposes only.

If this does not remedy the problem, then you may have an unseated PRINTHEAD or dirty PRINTHEAD electrical contacts (connects to the carriage assembly); it is suggested to thoroughly clean Printhead electrical contacts and carriage contacts (inside printer): <u>http://inkjet411.com/?page\_id=1925</u>

- a. Remove all 4/5 ink cartridges, then remove the internal PRINTHEAD and thoroughly clean rear electrical contacts and carriage electrical contacts.
- b. Inspect ink foam ports to see if they are 'wet with ink'...this will confirm whether ink is being pulled into the PRINTHEAD or not.
- c. If the ink foam ports are completely dry (no significant amount of ink present when blotted with a paper towel, etc.), then the PRINTHEAD is likely considered too dry to support proper ink flow and subsequent printing operations. Refer to PRINTHEAD removal process at HP.com (link down below) or at the following Inkjet411 link to provide general guidance: <u>http://inkjet411.com/?page\_id=1451</u>
- d. <u>Re-install PRINTHEAD\* and Retest.</u>

If the missing colors/poor image quality problem still cannot be corrected, then the PRINTHEAD may be completely/partially dry and may need to be flushed with warm water (if removable!) – see video here: <a href="http://inkjet411.com/?page\_id=2412">http://inkjet411.com/?page\_id=2412</a>

Removable PRINTHEAD Flushing Steps:

- **a.** Remove all ink cartridges from the printer.
- **b.** Remove the printhead in most cases you will need to pull up on the lever at right side of carriage assembly to unlock the printhead. Lift printhead straight up to remove.
- **c.** Over a sink, run warm tap water directly into the 4 (or 5) ink ports for approximately 2 minutes this will effectively saturate the foam ports and blow ink out/thru the nozzle plate bottom.
- **d.** Using a lint-free towel, remove water from rear/bottom electrical contacts. Ensure printhead electrical contacts and exposed surfaces are fully dry.
- e. Install the printhead into the printer. You may observe a "Replace Printhead message" so you will need to cycle printer power by turning printer off and then on to clear the error.
- **f.** Install ink cartridges and retest printer. You should observe a New PRINTHEAD alert message followed by an approx. 4-minute preparation countdown prompt.
- **g.** If permissible, activate the 'Clean Printhead'. This can be done from the printer's control panel or software printer driver (for example, by selecting 'Tools' 'Clean Printhead', or similar).
- h. If you have reached this point of the troubleshooting and all the previous troubleshooting steps did not work, then the printhead could be electrically damaged or at end of life\* and may need to be replaced. To check the electrical state of the HP564 printhead, perform the PRINTHEAD Health Diagnostics Test procedure (*refer to Diagnostic's pdf file at link below, refer to your printer model for specific testing instructions: <u>http://inkjet411.com/?page\_id=1813</u>)*

---- If you perform the printhead flush we suggest you return to Costco and request a free refill (all cartridges) since a large quantity (i.e. >20%) of ink will be consumed whenever the printhead is removed and reinstalled into the printer as the ink system needs to full reprime and recharge. We apologize for the inconvenience here.

Non-removable PRINTHEAD Flushing Steps:

- a. Remove suspect ink cartridge(s).
- **b.** Take a damp towel and repeatedly blot/saturate the respective color ink port with water (distilled water is recommended). Ink should be visible (fully saturated) on towel.
- c. Place a paper towel under the PRINTHEAD assembly.
- **d.** You'll see a round mesh ink port where ink flows into the PRINTHEAD.
- e. Thoroughly dampen the ink port with 0.5 to 1 teaspoon of distilled water (use an eye-dropper, small spoon, or similar pour or drip water directly into the ink port).
- f. Remove towel from below PRINTHEAD.
- g. Reinstall ink cartridge(s).
- **h.** Activate the 'Clean Printhead' routine once or twice (2X) to see if the respective color(s) has recovered.

Worst case scenario the PRINTHEAD may simply be damaged or at end-of-life and may require replacement, but usually you will see error messages like "Incompatible Printhead" or "Ink Delivery System Failure" when this occurs. Please note that a failure of the PRINTHEAD is unrelated to the refilled cartridges as the PRINTHEAD will eventually fail in time\*. For more information on the how the PRINTHEAD works, watch the video here: <u>http://inkjet411.com/?page\_id=1983</u>

NOTE 2: A dirty service station can cause poor image quality and/or ink cross-contamination between different colors. <u>http://inkjet411.com/?page\_id=1451</u> (564 service station cleaning)

\* The HP 564 printer models have an electronic PRINTHEAD (customer replaceable) within the base of the carriage assembly (responsible for pulling ink from the 4 (or 5) ink cartridges and then firing the ink droplets onto the paper) – these will eventually fail depending on print usage type and printer duty cycle (i.e. rated for max. of ~12,000 printed pages over life, but the average PRINTHEAD life under typical consumer printing conditions is more in the neighborhood of ~6000+ pages, or approximately 7-8 sets of ink cartridges). The Print Quality Report reveals total number of pages printed. <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

For information on HP 564 refilling tips please watch the video here: <u>http://inkjet411.com/?page\_id=1983</u>

Please review all steps and let us know if you have any further questions... -Thank you

# HP 920 - PRINT QUALITY / POOR PRINTING / FADED TEXT / MISSING COLORS

Regarding your recent inquiry about the HP 920 cartridge print quality/missing color issue in your Officejet 6500 printer, please note this type of problem is common and is completely recoverable. Based on your problem description, it sounds like there is an air bubble in one of the printer ink lines or a portion of the PRINTHEAD\* is dry, so you should perform a "Clean PrintHead" procedure from your printer control panel (i.e. select 'Tools' - 'Clean Printhead', or similar), you may need to perform it twice (2X) to recover the ink system. If this doesn't work you may wish to jump straight to procedure E. Please read thru all the checks below prior to beginning:

NOTE: If one or more the colors were previously dry fired during printing (i.e. if you continued printing using only a few colors to one, air may have been accidently ingested into the ink lines between the cartridge(s) and PRINTHEAD\*. To recover from this problem, you may have to run the "Clean Printhead" procedure 2-3 times: <a href="http://inkjet411.com/?page\_id=1589">http://inkjet411.com/?page\_id=1589</a>

- A. Watch the video on the HP 920 support page which describes some of the common issues you may encounter with refilled ink cartridges: <u>http://inkjet411.com/?page\_id=1983</u>
  - Please note that poor print problems are somewhat common and is completely recoverable in most cases.
- **B.** Then to verify the lines are clear and working correctly, print the "INK RECOVERY TEST PRINT" from our Test Prints page: <u>http://inkjet411.com/?page\_id=146</u>
- C. Then we suggest you run the self-test print (under maintenance/tools menu), this will verify nozzle performance and that each color is firing a solid band of color (i.e. you should not see any bands or missing lines in the pattern). This is also a good test to help isolate which color (or portion of the electronic PRINTHEAD\*) may be causing the issue.
- D. If a problem persists (poor print quality/missing colors, etc.), then we suggest that you thoroughly review the steps outlined on our HP 920 support pages, including PRINTHEAD\* removal/printer cleaning and service station cleaning. It is suggested you refer to printer manufacturer instructions first as the Inkjet411 procedures are provided for general guidance purposes only. Please note that a dirty service station can also cause poor image quality and/or ink cross-contamination or bleed between different colors: http://inkiet411.com/?page\_id=1495
- E. If the poor/degraded print quality problem still cannot be corrected, then the PRINTHEAD may be dry and may need to be flushed. Refer to PRINTHEAD flushing video procedure at the following link or refer to steps below: <u>http://inkjet411.com/?page\_id=2412</u>
  - **1.** Remove all ink cartridges from the printer.
  - 2. Remove the printhead in most cases you will need to pull up on the lever at right side of carriage assembly to unlock the printhead. Lift printhead straight up to remove.
  - **3.** Over a sink, run warm tap water directly into the 4 ink ports for approximately 2 minutes this will effectively saturate the foam ports and blow ink out/thru the nozzle plate bottom.
  - **4.** Using a lint-free towel, remove water from rear/bottom electrical contacts. Ensure printhead electrical contacts and exposed surfaces are fully dry.

- 5. Install the printhead into the printer. You may observe a "Replace Printhead message" so you will need to cycle printer power by turning printer off and then on to clear the error.
- 6. Install ink cartridges and retest printer. You should observe a New PRINTHEAD alert message followed by an approx. 4-minute preparation countdown prompt.
- If permissible, activate the 'Clean Printhead'. This can be done from the printer's control panel or software printer driver (for example, by selecting 'Tools' – 'Clean Printhead', or similar).
- F. To perform advanced PRINTHEAD diagnosis please visit our 'HP Printer Diagnostic Test' page: <u>http://inkjet411.com/?page\_id=1813</u>

\*The HP 920 printer models have an electronic PRINTHEAD (customer replaceable) within the base of the carriage assembly (responsible for pulling ink from the 4 ink cartridges and then firing the ink droplets onto the paper) – the PRINTHEAD will eventually fail over time depending on printed content, frequency of printing and printer duty cycle (i.e. rated for max. of ~15,000 printed pages over life, but the average throughput is more in the neighborhood of ~9000 pages). Video of how the PRINTHEAD functions: http://inkjet411.com/?page\_id=2054

**NOTE:** "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for HP 920 ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. Only brand new ink cartridges support ink level monitoring. For "Low Ink", "Unauthorized ink", "Non-HP ink", "Fraud", "Counterfeit ink" or similar messages, you may ignore/dismiss this message by pressing 'OK' once for each cartridge, so that the printer resumes its normal operation. We suggest you do this at the printer's control panel immediately following ink cartridge(s) installation.

For information on HP 920 refilling tips please watch the video here: <a href="http://inkjet411.com/?page\_id=1983">http://inkjet411.com/?page\_id=1983</a>

We trust this helps remedy and/or explain the issue your Officejet printer is currently experiencing. Please let us know if you have any questions regarding the technical information provided above. -Thank you

HP 920 – POOR PRINT QUALITY (SEVERE) / ONGOING COLOR SHIFT – PRINTHEAD TESTING/CLEANING Thank you for adhering to the suggestions our team provided. Based on your latest feedback, are you saying that the color black is not printing black, but instead a 'grey' color tone, or similar? Since you just performed a flush on the PRINTHEAD, a diluted black color should be initially expected. We suggest you perform a 'Clean Printhead' from the printer's control panel menu to see if the color density improves. Refer to video: <u>http://inkjet411.com/?page\_id=1983</u>

If this is the case, there could be several causes for the composite greyscale print color you are observing. Let's run a few additional checks to make sure everything is in working order:

A. Initiate the 'Print Quality Report' and evaluate:

- 1. Load Letter or A4, unused, plain white paper into the input tray.
- 2. On the product control panel, touch the Right Arrow to display the second navigation screen.
- 3. Touch the Setup icon. The Setup Menu displays.
- 4. Touch the Down Arrow, and then touch Reports.
- 5. Touch Print Quality Report. The print quality diagnostic report prints.
- 6. Verify each color is solid and dense with no visible streaking.

7. Perform a 'Clean Printhead' from the printer's control panel menu if print quality issues persist or if you observe a color shift as there could be an air bubble between the cartridge and PRINTHEAD. Refer to video: <u>http://inkjet411.com/?page\_id=1983</u>

B. Conduct 'Tap 41' PRINTHEAD Health Diagnostics Test:

- 1. Load Letter/A4-size paper into paper feed tray.
- 2. Press the \* and # keys simultaneously.
- 3. Enter 124 at keypad. The 'Underware' menu should be displayed.
- 4. Use the arrow keys to navigate to the System Menu. Select Ok.
- 5. The 'print-mech button tap' menu should be displayed.
- 6. Select Ok. Screen should display "code = 0".
- 7. Use the arrow keys to enter "code = 41" (or just enter 41 on keypad). Select Ok. The Tap 41 diagnostic test pattern prints.

NOTE: The Tap 10 self-test print may also be initiated via 'code = 10' (use to verify ink nozzle performance)

8. Check the 4th line at the top of the printed report; an electrically good/stable PRINTHEAD will state "Pen Status: Pen OK"......if any other message is displayed then the PRINTHEAD may have failed and may need to be replaced.

C. Clean printer's service station - see link for cleaning instructions.

NOTE: A dirty service station can cause cross-contamination between the colors: http://inkiet411.com/2nage\_id=1495

D. If the color shift / color intensity issue only occurs with printed content from your computer, etc...then the printer driver settings may be set to either 'draft mode' or 'greyscale', etc.. Click here for more information: <a href="http://inkjet411.com/?page\_id=1432">http://inkjet411.com/?page\_id=1432</a>

E. Perform a 'Clean Printhead' from the printer's control panel menu if print quality issues persist or if you observe a color shift as there could still be an air bubble in the ink cartridge(s), or between the cartridge(s) and PRINTHEAD. Refer to video: <u>http://inkjet411.com/?page\_id=1983</u>

F. Return HP920/920XL black ink cartridge to your refiller store and ask them to refill it since the ink cartridge color continues to produce a color shift in printed output.

G. Worst case scenario the PRINTHEAD\* may simply be damaged or at end-of-life and may require replacement, but usually you will see error messages like "Incompatible Printhead" or "Ink Delivery System Failure" when this occurs. Please note that failure of the printhead is unrelated to the refilled cartridges as the PRINTHEAD will eventually fail in time\*.

**NOTE:** To perform additional HP920 PRINTHEAD\* diagnosis, please visit our 'HP Printer Diagnostic Test' page: <u>http://inkjet411.com/?page\_id=1813</u>

\*The HP 920 ink-series printer models have an electronic PRINTHEAD (customer replaceable) within the base of the carriage assembly (responsible for pulling ink from the 4 ink cartridges and then firing the ink droplets onto the paper) – the PRINTHEAD will eventually fail over time depending on printed content, frequency of printing and printer duty cycle (i.e. rated for max. of ~15,000 printed pages over life, but the average throughput is more in the neighborhood of ~9000 pages). http://inkjet411.com/?page\_id=2054

Please advise following the above round of additional tests. -Thank you

HP 564 – POOR PRINT QUALITY (SEVERE) – PRINTHEAD CLEANING/REPLACEMENT Providing you have already adhered to the general guidance outlined on the 'HP 564 Cartridge Errors' page, it sounds like ink is not being properly delivered into and/or fired thru the PRINTHEAD assembly, which is leading to the poor image quality, or lack thereof, you are observing\*. http://inkjet411.com/?page\_id=1925

To verify the PRINTHEAD is ok, please activate the 'Tap 41' PRINTHEAD Health Diagnostics: 1. Access the Service Menu (several different methods depending on printer model); th

Support/Manufacturing' menu (or similar) will be displayed if entry is successful

a. Press 'Return' and 'Home' buttons in an alternating sequence (i.e. 4-5 times) This is a bit tricky. See 3rd video here for guidance: <u>http://inkjet411.com/?page\_id=434</u>

.....or.....

b. Press 'Down' arrow, press 'Cancel', then press the 'Return' button:

2. At the 'Support' menu, use arrow key to navigate to the 'Service Menu', press Ok.

3. Use arrow keys to advance to the 'Special Reports' Menu. Select OK.

4. Use arrow keys to advance to the 'print mech button tap' menu. Select Ok.

5. 'Code = 0' will be displayed. Use arrows keys to change value to '41' (i.e. press and hold right arrow key).

6. When 'code = 41', select 'OK'. The 'Tap 41' diagnostic test pattern will print.

7. Check the 4th line at the top of the printed report; an electrically good/stable PRINTHEAD will state "Pen Status: Pen OK"......if any other message is displayed then the PRINTHEAD has likely failed, or has marginal electrical performance issues, and may need to be replaced. Re-seat PRINTHEAD and repeat 'Tap 41' test to verify connectivity is not the issue.

Do you happen to know if you have exceeded 4000 printed pages to date? The HP PS 6525 is a relatively new printer model, so we suspect this is probably not the case.....(At the 'Maintenance' menu you can print the Print Quality Diagnostic Report; in the lower-center portion of the report refer to #7: Total Pages Printed: XXXX)

Is the printer still under the 1 year warranty?....you may have a defective PRINTHEAD, so 'the printer' should be covered.

Now, we are not completely convinced the current printer issue can be fully resolved by just installing new/fully loaded ink tanks (following numerous cleaning actions with no resolve). Assuming you are not observing any PRINTHEAD error messages (see NOTE below, i.e. "Incompatible Printhead"), then the PRINTHEAD is either severely clogged with ink residue or the ink port(s) are completely dry (i.e. the foam pads that you can see in the bottom when you remove one of the ink cartridges from the carriage assembly). The ink ports can easily dry out if the printer is rarely used, a color has been depleted for awhile or if cartridges are not installed for long periods of time. Suggested next steps:

1) Remove all 4/5 ink cartridges, then remove the internal PRINTHEAD and thoroughly clean rear electrical contacts and carriage electrical contacts. Inspect ink foam ports to see if they are 'wet with ink'...this will confirm whether ink is being pulled into the PRINTHEAD or not. If the ink foam ports are completely dry (no significant amount of ink present when blotted with a paper towel, etc.), then the PRINTHEAD is likely considered too dry to support proper ink flow and subsequent printing operations. Refer to PRINTHEAD removal process at HP.com (link down below) or at the following Inkjet411 link to provide general guidance: <a href="http://inkjet411.com/?page\_id=1451">http://inkjet411.com/?page\_id=1451</a>

2) If after thorough electrical contact cleaning the problem persists, you may need to replace the PRINTHEAD ASSEMBLY (i.e. get from HP or Amazon), however, as a last ditch effort, you might want to perform a hot water flush on the PRINTHEAD.

- i. Remove all ink cartridges from the printer.
- j. Remove the printhead in most cases you will need to pull up on the lever at right side of carriage assembly to unlock the printhead. Lift printhead straight up to remove.
- **k.** Over a sink, run warm tap water directly into the 4 (or 5) ink ports for approximately 2 minutes this will effectively saturate the foam ports and blow ink out/thru the nozzle plate bottom.
- Using a lint-free towel, remove water from rear/bottom electrical contacts. Ensure printhead electrical contacts and exposed surfaces are fully dry.
- m. Install the printhead into the printer. You may observe a "Replace Printhead message" so you will need to cycle printer power by turning printer off and then on to clear the error.
- **n.** Install ink cartridges and retest printer. You should observe a New PRINTHEAD alert message followed by an approx. 4-minute preparation countdown prompt.
- **o.** If permissible, activate the 'Clean Printhead'. This can be done from the printer's control panel or software printer driver (for example, by selecting 'Tools' 'Clean Printhead', or similar).
- p. If you have reached this point of the troubleshooting and all the previous troubleshooting steps did not work, then the printhead is likely damaged or at end of life\* and may need to be

replaced. To check the electrical state of the HP920 printhead, perform the following PRINTHEAD Health Diagnostics Test procedure.

- 3) Conduct 'Tap 41' PRINTHEAD Health Diagnostics Test:
  - a. Load Letter/A4-size paper into paper feed tray.
  - b. Press the \* and # keys simultaneously.
  - c. Enter 124 at keypad. The 'Underware' menu should be displayed.
  - d. Use the arrow keys to navigate to the System Menu. Select Ok.
  - e. The 'print-mech button tap' menu should be displayed.
  - f. Select Ok. Screen should display "code = 0".
  - g. Use the arrow keys to enter "code = 41" (or just enter 41 on keypad). Select Ok. The Tap 41 diagnostic test pattern prints.
    - NOTE: The Tap 10 self-test print may also be initiated via 'code = 10' (use to verify ink nozzle performance)
  - Check the 4th line at the top of the printed report; an electrically good/stable
    PRINTHEAD will state "Pen Status: Pen OK"......if any other message is displayed then the PRINTHEAD may have failed and may need to be replaced.

# 3) Replace the PRINTHEAD (it is suggested to refer to HP's Procedure) http://h10025.www1.hp.com/ewfrf/wc/document?docname=c01643079&lc=en&cc=us&dlc=en

4) As an outside chance, the internal suction pump might be faulty = new printer unfortunately. Best to troubleshoot this with HP personnel if that is the case. Run a 'Tap 21' test (using same/1st procedure provided above to test).

\*Ink cartridges are merely plastic holding tanks for the ink....other than connecting and being recognized by the printhead, there isn't really anything that can go wrong here (Costco ink formulations and HP ink formulations are 'very' similar, both are based on a dye ink based formulation, so this is not a significant contributor toward this type of condition based on our internal testing).

\*Typically the printhead should not reach its end-of-life until after a minimum of 8 or more complete sets of cartridge changes; officejet models typically have a higher print page throughput average, but this is not always the case. While some printheads may last 15,000+ pages others may only last 1000 pages, actual results will vary. The printhead will eventually fail in time due to an internal micro-electronics failure, due to the following leading factors: adverse customer printer usage/ care, printer duty cycle (i.e. # pages printed per month), printing frequency (i.e. time between each print job), print mode (i.e. draft vs. normal) and content printed (i.e. photos vs plain pages) and color mode (black and white only vs. color/greyscale printing). Paper types used (i.e. plain paper, photo papers & matte/heavy bond papers) and paper edge curl (i.e. duration in printer and/or exposure to low relative humidity) can also quickly lead to premature printhead failures due to physical 'head strikes' of the paper edges making repeated contact with the printhead nozzle plate surfaces.

NOTE: For more severe PRINTER error messages which prevent printing altogether [i.e. "Incompatible Printhead" or "Ink System Failure"] this is typical of failed micro-electronics within the PRINTHEAD assembly (nothing to do with the HP 564 refilled ink cartridges). The PRINTHEAD assembly is a separate electronic unit in which the cartridges plug into and feed ink to and is essentially the heart of the printing system. For reference, here is how the PRINTHEAD works: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

#### -Thank you.

HP 920 – POOR PRINT QUALITY (SEVERE) – PRINTHEAD CLEANING/FLUSHING REPLACEMENT Regarding your HP920 cartridge usage inquiry and observed missing colors/degraded print quality in your HP OJ 6500A printer output, given the steps that you have taken up to this point, we are not completely convinced the current printer issue can be resolved by just installing new/fully loaded ink cartridges [i.e. and/or by following numerous 'Clean Printhead' actions with no resolve - thank you for first attempting these procedures as the 'Clean Printhead' action (2-3 times) typically recovers the ink system]\*.

Providing you have already adhered to the general guidance outlined on the 'HP 920 Cartridge Errors' page, it sounds like ink is not being properly delivered into and/or fired thru the PRINTHEAD\*\* assembly, which is leading to the poor image quality, or lack thereof, you are observing. Review the suggested steps up to this point to ensure we have not overlooked anything: http://inkjet411.com/?page\_id=1925

Assuming you are not observing any PRINTHEAD<sup>\*\*</sup> error messages (see NOTE below, i.e. "Incompatible Printhead"), then the PRINTHEAD is either severely clogged with ink residue or the ink port(s) are completely/partially dried out (i.e. the foam pads that you can see in the bottom of the PRINTHEAD when you remove one of the ink cartridges from the carriage). The ink ports can easily dry out if the printer is rarely used, a color has been depleted for a while or if cartridges are not installed for long periods of time.

Please review steps 1 thru 4 below prior to beginning so you fully understand the suggested 'next steps' from our team:

1) Remove all 4 ink cartridges, then remove the internal PRINTHEAD\*\* and thoroughly clean rear electrical contacts and carriage electrical contacts. Inspect ink foam ports to see if they are 'wet with ink'...this will confirm whether ink is being pulled into the PRINTHEAD or not. If the ink foam ports are completely dry (no significant amount of ink present when blotted with a paper towel, etc.), then the PRINTHEAD is likely considered too dry to support proper ink flow and subsequent printing operations. Refer to PRINTHEAD removal process at HP.com (link down below) or at the following Inkjet411 link to provide general guidance: <a href="http://inkjet411.com/?page\_id=1495">http://inkjet411.com/?page\_id=1495</a>

2) While the PRINTHEAD is removed, perform a hot water flush on the PRINTHEAD assembly (this is not approved by HP....they will just tell you to replace the PRINTHEAD (~\$75):

Flushing Procedure: <u>http://inkjet411.com/?page\_id=2412</u>

- a. Remove all ink cartridges from the printer.
- b. Remove the printhead in most cases you will need to pull up on the lever at right side of carriage assembly to unlock the printhead. Lift printhead straight up to remove.
- c. Over a sink, run warm tap water directly into the 4 ink ports for approximately 2 minutes this will effectively saturate the foam ports and blow ink out/thru the nozzle plate bottom.
- d. Using a lint-free towel, remove water from rear/bottom electrical contacts. Ensure printhead electrical contacts and exposed surfaces are fully dry.
- e. Install the printhead into the printer. You may observe a "Replace Printhead message" so you will need to cycle printer power by turning printer off and then on to clear the error.
- f. Install ink cartridges and retest printer. You should observe a New PRINTHEAD alert message followed by an approx. 4-minute preparation countdown prompt.
- g. If permissible, activate the 'Clean Printhead'. This can be done from the printer's control panel or software printer driver (for example, by selecting 'Tools' 'Clean Printhead', or similar).
- h. If you have reached this point of the troubleshooting and all the previous troubleshooting steps did not work, then the printhead is likely damaged or at end of life\* and may need to be replaced. To check the electrical state of the HP920 printhead, perform the following PRINTHEAD Health Diagnostics Test procedure.

3) You can verify the HP920 PRINTHEAD's electrical performance by activating the PRINTHEAD Health Diagnostics Test Report (NOTE: only applicable to printer models with keypad, i.e. 1-9):

- a. Load Letter/A4-size paper into paper feed tray.
- **b.** Press the \* and # keys simultaneously.
- c. Enter 123 (or 124) at keypad. The 'Support xxxxxx' menu should be displayed.
- **d.** Use the arrow keys to navigate to the Reports Menu. Select Ok.
- e. Use the arrow keys to navigate to the 'print-mech button tap' menu.
- **f.** Select Ok. Screen should display "code = 0".
- g. Use the arrow keys to enter "code = 43" (or just enter 43 on keypad). Select Ok. The Tap 41 diagnostic test pattern prints.

**NOTE 1:** On newer printer models you may need to input 'code = 41'.

**NOTE 2:** The Tap 10 self-test print (or extended self-test) also be initiated via 'code = 10' (use to verify color output and general ink nozzle performance)

- h. Check the 4th line at the top of the printed report; an electrically good/stable PRINTHEAD will state "Pen Status: Pen OK"......if any other message is displayed then the PRINTHEAD may have failed and may need to be replaced.
- Re-seat the PRINTHEAD and repeat 'Tap 43' test to verify connectivity is not the issue. Refer to HP.com for PRINTHEAD removal procedures or general instructions here: <u>http://inkjet411.com/?page\_id=1495</u>

4) As an outside chance, the internal suction pump might be faulty = new printer unfortunately. Best to troubleshoot this with HP personnel if that is the case. You could run a 'Tap 21' test (using procedure similar to 'Tap 41' test, except enter 'code = 21').

\*Ink cartridges are merely plastic holding tanks for the ink....other than connecting and being recognized by the printhead, there isn't really anything that can go wrong here (Costco ink formulations and HP ink formulations are 'very' similar, both are based on a dye ink based formulation, so this is not a significant contributor toward this type of condition based on our internal longevity testing). Printing frequently, perhaps once or twice a week, is one of the best ways to maintain your printer's overall PRINTHEAD health. Here is a video of how the PRINTHEAD functions in the printer: <u>http://inkjet411.com/?page\_id=2054</u>

\*\*The HP 920 ink-series printer models have an electronic PRINTHEAD within the base of the carriage assembly (responsible for pulling ink from the 4 ink cartridges and then firing the ink droplets onto the paper) – these will eventually fail depending on printed content, frequency of printing and printer duty cycle (i.e. HP rates them with a duty cycle of "up to 1000 pages a month", which translated is ~15,000 printed pages maximum over life, but the typical/average life is closer to ~12,000 pages). http://inkjet411.com/?page\_id=2054

NOTE: For more severe PRINTER error messages which prevent printing altogether [i.e. "Incompatible Printhead", "Replace PRINTHEAD" or "Ink System Failure"] this is typical of failed micro-electronics within the PRINTHEAD assembly (nothing to do with the HP 920 refilled ink cartridges). The PRINTHEAD assembly is a separate electronic unit in which the cartridges plug into and feed ink to and is essentially the heart of the printing system. For reference, here is how the PRINTHEAD works: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

# -Thank you.

# HP 564/920 – POSSIBLE PRINTHEAD FAILURE

Regarding your recent inquiry about the HP 564/920 cartridge print quality problems and the repeated attempts to 'recover' the ink system, it sounds like the PRINTHEAD assembly (in base of printer) may be causing the issue. If determined to be a failure, it is unrelated to the refilled ink cartridges as all printheads will eventually fail over time\*.

Please note that the Inkjet411 team receives this same type of problem about every 2 days. The issue is normally recoverable by performing the following 'aggressive' ink system recovery steps:

- Remove all 4 ink cartridges and PRINTHEAD from printer. Clean PRINTHEAD's rear electrical copper contacts and interfacing carriage electrical copper contacts: <u>http://inkjet411.com/?page\_id=1451</u>
- 2. Perform hot water flush on printhead (distilled water is recommended, though tap water may be used since this is more of a 'last ditch effort': <u>http://inkjet411.com/?page\_id=2412</u>

- 3. Perform 'Clean Printhead' 3X (3 times) from the printer's control panel (all tanks will need to be at least 40% full of ink for success) see video instruction: <u>http://inkjet411.com/?page\_id=1925</u>
- Print the 'Ink Recovery Test Print' 2X (twice) to blow ink thru all ink nozzles and ensure print quality is satisfactory: <u>http://inkjet411.retailinkjet.com/wp-content/uploads/2013/02/Test-</u> <u>Print\_CMYK.pdf</u>
- 5. Printer should now be good-to-go. If printing partially recovers, perform Step 3 again (once or twice).
- 6. If not, then replace PRINTHEAD (covered under HP warranty for 1-year), otherwise get a new assembly on Amazon.com for ~\$55)

At this point we can only suggest that you thoroughly review the steps outlined, including printhead removal and cleaning and thorough service station cleaning. It is suggested you refer to printer manufacturer instructions first as the Inkjet411 procedures are provided for general informational purposes only.

**NOTE:** A dirty service station can cause poor image quality and/or ink cross-contamination between different colors: <a href="http://inkjet411.retailinkjet.com/?page\_id=1495">http://inkjet411.retailinkjet.com/?page\_id=1495</a>

If, after following the steps above, this does not remedy the problem, then you may have an electrically defective print head in the printer and it may need to be replaced with a new one.

You can verify the HP564 PRINTHEAD's electrical performance by running the Tap 41 Cartridge Health Diagnostics test: [PhotoSmart Premium C309c, C309a, C309n, C310a, C310b, C310c, C410a, Touchsmart Web, PhotoSmart Premium Web C309n]

**NOTE:** If this service menu access procedure does not work then refer to 'Photosmart Plus B series' printers – refer to Diagnostics document here: <u>http://inkjet411.com/?page\_id=1813</u>

Tap 41 **PRINTHEAD** Health Diagnostics:

 Using two fingers, gently tap the 'Return' and 'Home' keys on touchscreen until the Engineering Menu is displayed (for example, press the button 3-4 times each in alternating succession). Using arrow keys navigate to Service Menu.



- 2. .....or if a keypad is available: Press \* and # keys simultaneously. Service Menu should be displayed.
- **3.** Use arrow keys to advance to the Special Reports Menu. Select OK.
- 4. Use arrow keys to advance to the 'print mech button tap' menu. Select Ok.
- 5. 'Code = 0' will be displayed. Use arrows keys to change value to '41' (i.e. press and hold right arrow key).
- 6. When 'code = 41', select 'OK'. The diagnostic test pattern will print.
  - **NOTE:** The Tap 10 self-test print may also be initiated via 'code = 10' (use to verify all nozzles are firing)
- 7. Check the 4<sup>th</sup> line at the top of the printed report; an electrically good/stable PRINTHEAD will state "Pen OK"......if any other message is displayed then the PRINTHEAD has likely failed and may need to be replaced. Re-seat PRINTHEAD and repeat 'Tap 41' test to verify connectivity is not the issue.

You can verify the HP920 PRINTHEAD's electrical performance by running the Tap 43 Cartridge Health Diagnostics test (NOTE: only applicable to printer models with keypad, i.e. 1-9):

1. Load Letter/A4-size paper into paper feed tray.

- 2. Press the \* and # keys simultaneously.
- 3. Enter 123 (or 124) at keypad. The 'Support xxxxxxx' menu should be displayed.
- 4. Use the arrow keys to navigate to the Reports Menu. Select Ok.
- 5. Use the arrow keys to navigate to the 'print-mech button tap' menu.
- 7. Select Ok. Screen should display "code = 0".

8. Use the arrow keys to enter "code = 43" (or just enter 43 on keypad). Select Ok. The Tap 43 diagnostic test pattern prints.

**NOTE 1:** On newer printer models you may need to input 'code = 41'.

**NOTE 2:** The Tap 10 self-test print (or extended self-test) also be initiated via 'code = 10' (use to verify color output and general ink nozzle performance)

9. Check the 4th line at the top of the printed report; an electrically good/stable PRINTHEAD will state **"Pen Status: Pen OK"**......if any other message is displayed then the PRINTHEAD may have failed and may need to be replaced.

9. Re-seat the PRINTHEAD and repeat 'Tap 43' test to verify connectivity is not the issue. Refer to HP.com for PRINTHEAD removal procedures or general instructions here:

# http://inkjet411.com/?page\_id=1495

\*The HP 564 ink-series printer models have an electronic PRINTHEAD within the base of the carriage assembly [responsible for pulling ink from the 4 (or 5) ink cartridges and then firing the ink droplets onto the paper] – this assembly will eventually fail depending on printed content, frequency of printing and printer duty cycle (i.e. HP rates them with a duty cycle of "up to 1000 pages a month", which translated is ~12,000 printed pages maximum over life, but the typical/average life is closer to ~6000 pages). http://inkjet411.com/?page\_id=2054

\*The HP 920 ink-series printer models have an electronic PRINTHEAD within the base of the carriage assembly (responsible for pulling ink from the 4 ink cartridges and then firing the ink droplets onto the paper) – these will eventually fail depending on printed content, frequency of printing and printer duty cycle (i.e. HP rates them with a duty cycle of "up to 1000 pages a month", which translated is ~15,000 printed pages maximum over life, but the typical/average life is closer to ~9,000 pages). http://inkjet411.com/?page\_id=2054

# -Thank you

# HP 564 PRINTHEAD FAILURE ("INCOMPATIBLE PRINTHEAD")

Regarding your recent inquiry about the HP 564 ink-series printer system error message ("Incompatible Printhead") associated with your HP Photosmart Premium C309a printer, this is either an electrical connectivity issue (between Printhead and Carriage Assembly) or an internal electrical failure of the PRINTHEAD assembly\*. The issue may be recoverable by performing the following steps:

1. Remove all 4 ink cartridges and PRINTHEAD from printer. Using a water-dampened (distilled water recommended) lint free towel, thoroughly clean PRINTHEAD's rear electrical copper contacts and

interfacing carriage electrical copper contacts. Ensure no ink residue or towel fibers remain following cleaning. Re-install PRINTHEAD and all ink cartridges, retest: <u>http://inkjet411.com/?page\_id=1451</u>

2. If the 'Incompatible Printhead' error condition remains, attempt to perform the 'Tap 41' diagnostic test below to check the printhead's electrical health:

NOTE: If the service menu access procedure below does not work then see 'Photosmart Plus B series' printers – refer to Diagnostics document (pdf file) here: <u>http://inkjet411.com/?page\_id=1813</u>

Tap 41 PRINTHEAD Health Diagnostics:

a. Using two fingers, gently tap the 'Return' and 'Home' keys on touchscreen until the Engineering Menu is displayed (for example, press the button 3-4 times each in alternating succession). Using arrow keys navigate to Service Menu.

b. .....or if a keypad is available: Press \* and # keys simultaneously. Service Menu should be displayed.

c. Use arrow keys to advance to the Special Reports Menu. Select OK.

d. Use arrow keys to advance to the 'print mech button tap' menu. Select Ok.

e. 'Code = 0' will be displayed. Use arrows keys to change value to '41' (i.e. press and hold right arrow key).

f. When 'code = 41', select 'OK'. The diagnostic test pattern will print.

NOTE: The Tap 10 self-test print may also be initiated via 'code = 10' (use to verify all nozzles are firing)

g. Check the 4th line at the top of the printed report; an electrically good/stable PRINTHEAD will state "Pen OK"......if any other message is displayed then the PRINTHEAD has likely failed and may need to be replaced.

h. Re-seat PRINTHEAD and repeat 'Tap 41' test to check electrical performance.

3) If, after following the steps above, this does not remedy the problem, then you may have an electrically defective PRINTHEAD\* in the printer and it may need to be replaced with a new one. The PRINTHEAD is normally covered under HP warranty for 1-year, otherwise you can obtain a new PRINTHEAD assembly (note that printhead prices will range between \$50 and \$90 - it suggested to only purchase a new OEM/HP printhead assembly).

\*The HP 564 ink-series printer models have an electronic PRINTHEAD within the base of the carriage assembly [responsible for pulling ink from the 4 (or 5) ink cartridges and then firing the ink droplets onto the paper] – this assembly will eventually fail. Rate of failure largely depends on printed content, frequency of printing and printer duty cycle (i.e. HP rates them to a duty cycle of "up to 1000 pages a month", which translated is ~12,000 printed pages maximum over printer life, but the typical/average printhead life is closer to ~8000 pages). A failure of the PRINTHEAD is unrelated to the ink refill process or use of refilled ink cartridges and normally occurs in time with all semi-permanent printhead-based printer models. For information on how the printhead functions, watch this video: http://inkjet411.com/?page\_id=2054

#### -Thank you

### HP 02 – CARTRIDGE PROBLEM ERROR – MULTIPLE CARTRIDGES

Regarding your recent inquiry about the HPO2 cartridge error messages ("Cartridge Problem; The following cartridge appears to be missing or damaged") associated with your HP PS C7100 printer, it sounds like either the refill operator forgot to replace all the smart chips (attached to bottom of each ink cartridge) or the permanent built-in printhead has suffered an electrical failure. We first suggest you take your cartridges back to Costco and request they either re-program the chip (or replace them) since none are being recognized....however, let's run just a few simple checks first to screen out all variables, including PRINTHEAD electrical performance (if possible to perform)....

A. Remove the ink cartridge from the printer and carefully inspect the small chip on the bottom/rear side of ink cartridge - ensure there is no ink residue on gold contact surfaces. Clean with an isopropyl dampened lint free clean, as necessary. Refer to picture at following Inkjet411 site link: <a href="http://inkjet411.com/?page\_id=35">http://inkjet411.com/?page\_id=35</a>

....or....

refer to instructions at HP.com:

http://h10025.www1.hp.com/ewfrf/wc/document?docname=c01135910&cc=no&dlc=no&lang=no&lc= en&printable=no&product=3315742&rule=4205

B. Verify you are NOT using HPO2 ink cartridges with the following serial numbers (these are 'one time use only cartridges' that are intended to be used once during the initial printer setup – you will need to dispose them as they can no longer be used): C9338, C9339, C9340, C9341, C9357, C9358

For more information from HP on this:

http://h10025.www1.hp.com/ewfrf/wc/document?docname=c01135910&cc=no&dlc=no&lang=no&lc= en&printable=no&product=3315742&rule=4205

C. To verify overall printer performance and to check the electrical health of the built-in PRINTHEAD (i.e. run the 'Tap 43' diagnostic test) please refer to the applicable video procedure\* <u>http://inkjet411.com/?page\_id=2377</u> (Printers without 1-9 keypad) http://inkjet411.com/?page\_id=2391 (Printers with 1-9 keypad)

D. If the cartridge chip has been replaced/reprogrammed (i.e. a 2nd time), then this ink cartridge alert may be a printer defect and not a cartridge issue. It is suggested to reset the printer by:

- 1) Printers with 1-9 keypad
- a. Unplug the power cable from the back of printer.
- b. Hold down number 9 & # keys, plug in the power and turn the printer on.
- c. The printer will reset itself.

- 2) Printers without 1-9 keypad:
- a. Turn off the HP All-in-One by pressing the On button.
- b. Unplug the power cord from the back of the HP All-in-One.
- c. Plug the power cord back into the HP All-in-One.
- d. Turn on the HP All-in-One by pressing the On button.
- e. Check the printer for the error message. If the error message still displays, go to the next step.

E. If an error condition persists then we suggest that you thoroughly review the steps outlined on our HP 02 support page: <u>http://inkjet411.com/?page\_id=35</u>

F. Refer to the HP Printer Diagnostic's document (PDF file) at the following link for more advanced diagnostic tests for your specific printer model: <u>http://inkjet411.com/?page\_id=1813</u>

G. If the PRINTHEAD is ok (pending the results of the 'Tap 43' test performed above) and this still does not provide clarity to the issue or remedy the problem, then you may need to replace the suspect ink cartridge(s) with a brand new HP ink cartridge to rule out the cartridge/chip as a contributing variable.

\*The HP 02 ink-series printer models have an electronic PRINTHEAD within the base of the carriage assembly (responsible for pulling ink from the 4 ink cartridges and then firing the ink droplets onto the paper) – the HP 02 PRINTHEAD typically has a maximum life of approximately 40,000 pages (~30,000 page average). Unfortunately, the permanent PRINTHEAD is not replaceable - here is how it functions: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

If, after performing the suggested procedures above, you still have not reached resolution please let us know.

-Thank you

# HP 02 - PRINT QUALITY / POOR PRINTING / FADED TEXT / MISSING COLORS

Regarding your recent inquiry about the HP 02 cartridge print quality/missing color issue in your HP Photosmart C6180 printer, let's first make sure that the printer is firing all 6 cartridges correctly. Based on your problem description, it sounds like there either an air bubble in one of the printer ink lines or a portion of the PRINTHEAD\* could be dry, so you should first perform a "Clean PrintHead" procedure from your printer's 'TOOLS' button on the control panel.

NOTE: If one or more the colors were previously dry fired during printing (i.e. if you continued printing using only a few colors to one, air may have been accidently ingested into the ink lines between the cartridge(s) and PRINTHEAD. To recover from this problem, you may have to run the "Clean Printhead" procedure 2-3 times. Depending on your printer model, refer to the applicable video procedure: <a href="http://inkjet411.com/?page\_id=2377">http://inkjet411.com/?page\_id=2377</a> (Printers without 1-9 keypad)

However, if you have already attempted to clean the printhead and one or more colors are missing, then it is suggested to run the 'Tap 43' printer diagnostic test to ensure the built-in PRINTHEAD (inside the printer) is functioning properly\*

http://www.youtube.com/watch?v=X8Hr5YgSqT4 (Printers without 1-9 keypad) http://www.youtube.com/watch?v=kEfCWJMpfZ8 (Printers with 1-9 keypad)

Refer to the HP Printer Diagnostic's document (PDF file) at the following link for advanced diagnostic tests for your printer model: <u>http://inkjet411.com/?page\_id=1813</u>

To completely verify the ink lines are clear and working correctly, print the "INK RECOVERY TEST PRINT" from our Test Prints page (intense color drop pattern): <u>http://inkjet411.com/?page\_id=146</u> As an option (to help conserve ink), you could just run the Self-Test Report (under 'PRINT REPORT' menu), this will verify nozzle performance and that each color is firing a solid band of color (i.e. you should not see any bands or missing lines in the pattern). This is also a good test to help isolate which color (or portion of the electronic PRINTHEAD\*) may be causing the issue.

If a problem persists (poor print quality/nozzle misfiring/missing colors, etc.), then we suggest that you thoroughly review the steps outlined on our HP 02 support pages, including printer cleaning and service station cleaning. It is suggested you refer to printer manufacturer instructions first as the Inkjet411 procedures are provided for informational purposes only. A dirty service station can cause poor image quality and/or ink cross-contamination between different colors. http://inkjet411.com/?page\_\_\_id=35\_\_\_ (HP 02 main page)

If this does not remedy the problem, then you may have a defective PRINTHEAD\* in the printer (worst case scenario), unrelated to the refilled cartridges.

\*The HP 02 ink series printer models have an electronic PRINTHEAD within the base of the carriage assembly (responsible for pulling ink from the 4 ink cartridges and then firing the ink droplets onto the paper) – the HP 02 PRINTHEAD typically has a maximum life of approximately 40,000 pages (~30,000 page average). Unfortunately, the permanent PRINTHEAD is not replaceable. http://inkjet411.com/?page\_id=2054

We trust this helps explain the issue your printer is currently experiencing. Thank you

HP 02 – EXPIRED INK / THE CARTRIDGE IS NOT INTENDED FOR THIS PRINTER...ERROR MESSAGES Regarding your recent inquiry about the HP 02 cartridge error message ("EXPIRED INK" / "THE CARTRIDGE IS NOT INTENDED FOR THIS PRINTER") in your HP Photosmart C6180 printer, based on your problem description, this could be either cartridge's smart chip is improperly programmed, the chip has expired (25 month life!), startup cartridges are installed in the printer or there is poor connectivity between the ink cartridge and the printer. Verify none of the ink cartridges have "expired ink":

1) Check your printer software's 'Device Information' (...the full driver package needs to be

installed to view this). The installation and expiration dates for each cartridge should be displayed.

2) Return the ink cartridge to your refill center for reprogramming (or chip replacement).

NOTE: An 'Expired Ink' message cannot be bypassed nor can you switch into a different print mode (i.e. black/greyscale, etc.). Light Cyan and Light Magenta colors are typically not used for plain paper printing and will last much longer (i.e. 4-5X) than the 4 primary colors (CMYK).

If you receive the 'CARTRIDGE NOT INTENDED FOR USE IN THIS PRINTER' / 'INCORRECT INK CARTRIDGES INSTALLED' error messages, please verify you are not using HP02 ink cartridges with the following serial numbers (these are 'one time use only cartridges' that are intended to be used once during the initial printer setup – you will need to dispose them as they can no longer be used): C9338, C9339, C9340, C9341, C9357, C9358

For more information from HP on this:

http://h10025.www1.hp.com/ewfrf/wc/document?docname=c01135910&cc=no&dlc=no&lang=no&lc=en&printa ble=no&product=3315742&rule=4205

If the cartridge chip has been replaced/reprogrammed (i.e. a 2<sup>nd</sup> time), then this ink level alert may be a printer defect and not a cartridge issue. It is suggested to reset the printer by:

- 1) Printers with 1-9 keypad
  - a. Unplug the power cable from the back of printer.
  - **b.** Hold down number **9** & **#** keys, plug in the power and turn the printer on.
  - **c.** The printer will reset itself.
- 2) Printers without 1-9 keypad:
  - **a.** Turn off the HP All-in-One by pressing the On button.
  - **b.** Unplug the power cord from the back of the HP All-in-One.
  - **c.** Plug the power cord back into the HP All-in-One.
  - **d.** Turn on the HP All-in-One by pressing the On button.
  - e. Check the printer for the error message. If the error message still displays, go to the next step.

If the problem still cannot be corrected, then remove and thoroughly clean the smart chip surfaces on the rear side of each ink cartridge. Instructions can be found here: <u>http://h10025.www1.hp.com/ewfrf/wc/document?docname=c01135910&cc=no&dlc=no&lang=no&lc</u> If an error condition persists then we suggest that you thoroughly review the steps outlined on our HP 02 support page: <u>http://inkjet411.com/?page\_id=35</u>

To verify overall printer performance and to check the electrical health of the built-in PRINTHEAD (i.e. run the 'Tap 43' diagnostic test) please refer to the applicable video procedure\* <u>http://inkjet411.com/?page\_id=2377\_(Printers without 1-9 keypad)</u> <u>http://inkjet411.com/?page\_id=2391\_(Printers with 1-9 keypad)</u>

Refer to the HP Printer Diagnostic's document (PDF file) at the following link for more advanced diagnostic tests for your specific printer model: <u>http://inkjet411.com/?page\_id=1813</u>

If the PRINTHEAD is ok (pending the results of the 'Tap 43' test performed above) and this still does not provide clarity to the issue or remedy the problem, then you may need to replace the suspect ink cartridge(s) with a brand new HP ink cartridge to rule out the cartridge/chip as a contributing variable.

\*The HP 02 ink series printer models have an electronic PRINTHEAD within the base of the carriage assembly (responsible for pulling ink from the 4 ink cartridges and then firing the ink droplets onto the paper) – the HP 02 PRINTHEAD typically has a maximum life of approximately 40,000 pages (~30,000 page average). Unfortunately, the permanent PRINTHEAD is not replaceable. http://inkjet411.com/?page\_id=2054

If, after performing the suggested procedures above, you still have not reached resolution please let us know.

-Thank you

HP-CANON-EPSON IIT SYSTEMS - IDENTIFYING WHICH COLOR HAS RUN OUT

Regarding your recent inquiry about how to identify which color has run out, use the following suggestions in sequence until you are able to identify the empty color:

1) Generate a Print Quality Test Page from your printer control panel; a faded color band indicates empty.

2) To distinguish between a black and photo black cartridge, print a text document and/or a photo. Faded black in a text document indicates the black cartridge is empty; faded black in a photo indicates the photo black cartridge is empty.

3) To distinguish between cyan, yellow, and magenta, click on the "Test Print" menu button at the left of the home page of <a href="http://www.inkjet411.com">www.inkjet411.com</a> Select and download the appropriate file(s): <a href="http://inkjet411.com/?page\_id=146">http://inkjet411.com/?page\_id=146</a>

Print the test page(s). A faded color band indicates empty.

EPSON ARTISAN (6-COLOR) PRINTERS - IDENTIFYING WHICH COLOR HAS RUN OUT / POOR QUALITY Regarding your recent inquiry about 1) the change of magenta to purple color and 2) the ink empty out message (which color?), we should first determine which color is presently causing the no printing messages to appear. As the Artisan is a 6-color printer system, be advised you have 2 Magentas and 2 Cyans, one regular and one "light" on each. You should be able to go into the printer's maintenance/tools menu to identify which color is giving the current problem. You may need to replace that particular color (please note that Costco does not refill Light Cyan nor Light Magenta cartridges).

If they were a recent purchase, accompanied by an "Unrecognized Cartridge" message, return the cartridge to the refill store to have the cartridge re-programmed.

If this does not remedy the problem, then you may have a defective print head in the printer (worst case scenario), unrelated to the refilled cartridges. The printhead is a separate electronic assembly (which the cartridges are installed into) and is responsible for firing the ink drops onto the paper. Over time and based on usage this assembly will eventually fail.

I would also check your user's manual to see if there are any procedures on cleaning the service station/capping station assembly (this is where the carriage/cartridges 'park' when not in use). A dirty service station can cause all kinds of improper color output problems (assuming the printhead is working correctly of course). See video on how the PRINTHEAD works: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

NOTES: To determine which color has run out, use the following suggestions in sequence until you are able to identify the empty color: 1) Generate a Print Quality Test Page from your printer control panel; a faded color band indicates empty. 2) To distinguish between a black and photo black cartridge, print a text document and/or a photo. Faded black in a text document indicates the black cartridge is empty; faded black in a photo indicates the photo black cartridge is empty. 3) To distinguish between cyan, yellow, and magenta, or Light Cyan/Light Magenta click here: http://inkiet411.com/?page\_id=146

Print the "6-color" test print. A faded/missing color band indicates empty.

CANON / EPSON - MISSING COLORS OR POOR/INCONSISTENT PRINT QUALITY Regarding your recent inquiry about the poor print quality/lack of printing performance, please perform the following steps (if you have already performed a step, please continue to the next one in order shown):

Go into the printer's maintenance/tools menu and print a print quality test (i.e. heading cleaning, nozzle test or similar) to help identify which color (of number of colors) is impacted. NOTES: To determine which color has run out, use the following suggestions in sequence until you are able to identify the empty color: 1) Generate a Print Quality Test Page from your printer control panel; a faded color band indicates empty. 2) To distinguish between a black and photo black cartridge, print a text document and/or a photo. Faded black in a text document indicates the black cartridge is empty; faded black in a photo indicates the photo black cartridge is empty. 3) To distinguish between
cyan, yellow, and magenta click here: <u>http://inkjet411.com/?page\_id=146</u> A faded or missing color band indicates empty.

- At the printer's control panel under the 'Maintenance' or 'Tools' menu, activate a 'CLEANING' or 'HEAD CLEANING' to prime the ink system. Then Run the Inkjet411 'Ink Recovery Test Print' from our Test Prints page to verify all colors are firing properly (all printers also provide some form of a Self Test page): <u>http://inkjet411.com/?page\_id=146</u>
- 3. Check your user's manual to see if there are any procedures on cleaning the service station/capping station assembly (this is where the carriage/cartridges 'park' when not in use). A dirty service station can cause all kinds of improper color output problems (assuming the printhead is working correctly of course). NOTE: May not be applicable for your model depending on the printer design.
- 4. The Ink Absorber, if applicable depending on print model, may also be full which could also cause printing related issues (typically an error code will be displayed when the ink absorber is full)...here is a customer/yahoo response on this particular issue: <u>http://answers.yahoo.com/question/index?qid=20130523085451AAE1TqW</u>
- Refer to our print quality support page to ensure other variables are not causing the issue such as printer driver settings or operating system device conflict, etc: <u>http://inkjet411.com/?page\_id=1432</u>
- 6. If this does not remedy the problem, then one or more of the ink ports may be dry within the PRINTHEAD assembly (the ink cartridges physically connect to this electronic assembly). We suggest you either remove the printhead and perform a hot water flush for 2 minutes or using an eye-dropper, or similar, drip 4-5 mls of distilled water into the respective color ink port. 3<sup>rd</sup> party solutions for reference: http://www.youtube.com/watch2y=EL8OaEV/wsEs\_(Canon)

http://www.youtube.com/watch?v=7L8Qarvwses (Canon) http://www.youtube.com/watch?v=ZheZf-vdho8 (Canon Printhead removal / water flush) http://www.youtube.com/watch?v=3kKULRjqaLg (Epson #1) http://www.youtube.com/watch?v=i78Tu3RVO3s (Epson #2)

7. If the problem persists, then you may have a damaged PRINTHEAD (worst case scenario), unrelated to the refilled cartridges. The printhead is a separate electronic assembly (which the cartridges are installed into) and is responsible for firing the ink drops onto the paper. Over time and based on usage this assembly will eventually fail (typically lasts ~5000 printed pages on avg). Refer to video on how the PRINTHEAD functions: <u>http://inkjet411.com/?page\_id=2054</u>

Please advise if the above suggestions do not help remedy the current issue. -Thank you

# EPSON - MISSING COLORS FOLLOWING REPEATED "HEAD CLEANING"

Regarding your recent inquiry about the T127 cartridges poor print quality (lack of yellow printing), be advised that Epson printer systems are notorious for getting dried ink nozzles and/or dried PRINTHEAD ink ports. Often the ink cartridge only has to be uninstalled for less than 8 hours and dried ink (ink starvation) issues can easily occur. You indicated that you already recovered the black ink by performing the 'head cleaning' twice, this is a sure sign that the PRINTHEAD has suffered prolonged drying and is the likely culprit which is still causing the yellow ink starvation.

Please perform the following steps - A. thru C:

A. At the printer's control panel under the 'Maintenance' or 'Tools' menu, activate the 'HEAD CLEANING' 2-3 times to fully re-prime the ink system until the Yellow recovers. Retest by printing a self-test page to verify all colors are firing properly. We also provide a more intense 'Ink Recovery Test Print' on our Inkjet411 Test Prints page: <a href="http://inkjet411.com/?page\_id=146">http://inkjet411.com/?page\_id=146</a> > If all colors do not recover then proceed to Step B.

B. If this does not remedy the yellow starvation issue, then the yellow ink port may be partially dry within the PRINTHEAD assembly (the ink cartridges physically connect to this electronic assembly). We suggest you 'wet' the PRINTHEAD INK PORT. Using an eye-dropper, or similar, drip ~5-6 milliliters (or approx. 1 teaspoon) of distilled water into the respective YELLOW ink port. Re-install ink cartridge and perform a 'Head Cleaning' to flush the water out & re-prime yellow ink line. Refer to video on how the PRINTHEAD functions: http://inkjet411.com/?page\_id=2054

Additional 3rd party PRINTHEAD recovery solutions for reference: <u>http://www.youtube.com/watch?v=3kKULRjqaLg</u> (Epson #1) <u>http://www.youtube.com/watch?v=i78Tu3RVO3s</u> (Epson #2)

C. Return to Costco and get all your ink tanks (CMYK) refilled, at no charge, following the PRINTHEAD cleaning since you lost so much ink from the 4+ 'Head Cleaning' actions (typically ~8% per cleaning action) - just tell them an Inkjet411 representative sent you. If you have any troubles with this we will contact the regional account manager whom will contact the store directly for authorization. NOTE: Cartridges may be rejected for refilling if each cartridge ink level is not below 25%.

Please advise if the above suggestions do not help remedy the current issue. We apologize for the major inconvenience this has caused you.

# QUESTIONING OF COLOR/INK PERFORMANCE (REFILL SERVICES - QUALITY ASSURANCE)

Regarding your recent inquiry about the **HP 920** cartridge color print quality problems, specifically color matching, customer feedback has been extremely favorable to date. The inks (within the ink refill system) are closely matched across several manufacturers and provide satisfactory color performance from in-house testing performed. While not an exact color match to the HP 920 CMY inks, they have

been tested for general color appeal and comparison performance; passing all quality performance expectations. Many customers (i.e. in the tens of thousands) are quite pleased with Costco's HP 920 ink refill service since inception.

As far a general color print performance, there are other things which could be causing the Cyan issue you are seeing.

1) Run a self test print (under tools/maintenance menu) to ensure all magenta (and cyan & yellow) ink nozzles are firing. We would be very interested in receiving a .pdf of the self-test print (or one of our Test Prints) to evaluate your Cyan ink color performance...is it possible to mail an electronic file to us via the 'Contact Us' form?

2) There could be an air bubble in the printer ink lines, so you should perform a "Clean PrintHead" procedure (I suggest Level 2 'Deep Clean' if available in your printer's control panel); you may also print one of our 'heavier' 4-color test prints from our Test Prints page, there is a link from our main page: <a href="http://www.inkjet411.com/">http://www.inkjet411.com/</a>

3) Clean service station wipers/pad.

3) If this does not remedy the problem, then you may have a defective print head in the printer, unrelated to the refilled cartridges (the printhead is the electronic assembly which actually fires the ink onto the paper - the part will eventually fail under moderate printing workflow conditions in time - I believe it is rated for ~12,000 pages maximum). http://inkjet411.com/?page\_id=2054

### HP 920 support page: http://inkjet411.com/?page\_id=856

If that does not fix the problem, you should return the cartridges to the Costco Photo Department to get them refilled (they will perform a full ink evacuation and refill, so the cyan ink will be 'effectively' new).

Regarding your inquiry of the Canon CLI-8 ink cartridges and the observed color shift in your Canon 9000 Pro Mark II printer, the Costco refill inks are closely matched to the Canon OEM inks and provide satisfactory color performance from in-house testing performed (at least in all A4 printers evaluated). While not an exact color formulation match to the Canon CLI-8 CMYK inks, they have been tested for general color appeal and comparison performance - passing all quality performance expectations in A4 printers.

However, since you are using a B-Size printer, and effectively merging 4 refill ink colors (CMYK) with the 4 OEM inks (LcLmRG), color stability can shift slightly. The only way to overcome this is to re-profile for the new color set (i.e. using a grey color balance target and each type of photo media).

REFERENCE: Canon 9000 Pro Mark II printer Ink Spec Page:

http://www.usa.canon.com/cusa/consumer/products/printers\_multifunction/professional\_photo\_inkje t\_printers/pixma\_pro9000\_mark\_ii#SuppliesAndAccessories

Now, as far a general color print performance, there are other things which could be causing the color shift issue you are seeing.....several items to verify:

 Run a self test print (under tools/maintenance menu) to ensure all ink nozzles are firing.
 If self-test has poor print quality (streaking/missing colors, etc.), there could be an air bubble between one of the ink cartridges and printhead, so you should perform a "Head Cleaning" / "Cleaning" procedure in your printer's control panel.

3) To validate proper output print performance, run a printer self test or select the 6-color test print from our 'Test Prints' page:

4) Clean service station wipers/pad (only if printer is >2+ years of age).

If this does not remedy the problem, then the refill vs. OEM ink formulation differences, albeit ever so slight, could be causing the color shift issue you are currently observing....and hence, the refill is unfortunately incompatible.

Please advise following the suggested testing prescribed above. -Thank you

Regarding your inquiry over Epson smart chip reprogramming, this is nothing to be concerned over. Epson smart chip tanks are reprogrammed immediately following the refill by Costco photo center personnel. The refill cartridge will behave just like an Epson genuine ink tank once installed.

Assuming that you may have not utilized ink refill services before, you should be aware that the Inkjet411.com sitelet is for post-sales issues only, so we cover the gamut of any and all issues that could possibly arise. Nothing to be initially alarmed over. Problems with post-fill Epson issues is quite rare; when customers run into an issue it is typically just a smart chip mis-programming issue by the respective store. If it ever occurs, you just need to return that particular ink cartridge to Costco and they will reprogram it for you. In addition, refill ink formulations and color output are quite comparable to Epson quality - side by side comparison studies have yielded quite favorable reviews to date.

### -Thank you

### CANON / EPSON CLOGGING ISSUES

Regarding your recent inquiry about the Canon CLI-8 and PGI-5 cartridge color print quality problems in your MP600 printer and the type of ink used...the colorants are all dye-based formulas (i.e. water based dye to be specific). We never see issues with dye-based formulas (Canon OEM or remanufactured tanks made in the USA/Europe, unless you are using compatible cartridges from China which are known to have select 'chemicals' which can be harmful to the removable PRINTHEAD assembly.

With respect to color matching and general print performance, customer feedback has been extremely favorable to date. The inks (within the ink refill system) are closely matched across several manufacturers and provide satisfactory color performance from in-house testing performed. While not an exact color match to the Canon OEM inks, they have been tested for general color appeal, compatibility and comparison performance -- passing all quality performance expectations. Many

customers (i.e. in the tens of thousands) are quite pleased with Costco's Canon ink refill service since inception.

As far a general printer performance, there are other things which could be causing the current/ongoing clogging issue:

1) As this printer writing system is ~5-6 years old, we suspect your PRINTHEAD (which can be removed and flushed with water or 3rd party cleaning fluid) is likely nearing it's end of life (usually around 6-8,000 pages). It may need to be replaced.

2) There could be trapped particulates inside the printhead, so you should perform a 'flush' on the head either using our procedure or a 3rd party procedure. Here is how we advise customers to do it on the HP564/920 systems today: <a href="http://inkjet411.com/?page\_id=2412">http://inkjet411.com/?page\_id=2412</a>

3) A dirty service station/wiper assembly can interfere with printed output; clean service station wipers/pad - refer to your User's Manual.

4) If this does not remedy the problem, then you may have a defective print head in the printer, unrelated to the refilled cartridges (the printhead is the electronic assembly which actually fires the ink onto the paper - the part will eventually fail under moderate printing workflow conditions in time - I believe it is rated for ~12,000 pages maximum, but most customers only see half of that, on average). http://inkjet411.com/?page\_id=2054

Please let us know if you have any questions regarding the technical information provided. -Thank you

HP 02 OVERALL PERFORMANCE CONCERNS – INK MONITORING / POTENTIAL PRINTER DAMAGE Regarding your recent inquiry about the HP 02 cartridge ink expiration (ink level monitoring) and ink formulation/potential printer damage concerns, allow me to answer your questions in two parts:

A. With respect to ink level monitoring, Costco physically replaced the smart chips on each HP 02 cartridge/tank that you took in for refill...so the ink counting should be fairly accurate. However, depending on the HP printer model, the firmware can sometimes begin flagging 'ink low/warning' messages as soon 1/3rd of the ink has been used - most manufacturer inkjet printer models wait until the tank is 70-80% empty. Also, with HP 02 ink refills, you have up to 1 year to install and use.

B. With respect to ink formulation and potential damage to your built-in printhead. As far as ink color matching, customer feedback to date has been extremely favorable. The Costco HP inks are closely matched across several manufacturers/platform lines and provide satisfactory color performance from in-house testing performed. While not an 'exact' chemistry/color match to the HP 02 colorants, they have been tested for printer reliability, color appeal and print comparison performance; passing all quality performance expectations. Many customers (i.e. in the tens of thousands) are quite pleased with

Costco's HP 02 ink refill service since inception 3-4 years ago. We have not observed any PRINTHEAD failures\* which were caused by the subtle formulation introduction.

\* The electronic PRINTHEAD, which the ink cartridges plug into within carriage, is responsible for pulling ink from the 6 ink cartridges and firing ink drops onto the page, will eventually fail over time. This is primarily based on a combination of total printed pages (rated duty cycle) vs. image content and printing frequency. Dry firing, where one particular color is not printing, can significantly increase the chances of a permanent PRINTHEAD failure. The HP 02 PRINTHEAD typically has a maximum life of approximately 15,000 pages (~7,500 page average). Unfortunately, we do not believe the PRINTHEAD can be purchased separately anymore since this printer platform was initially sold into market between 2005 and 2008. http://inkjet411.com/?page\_id=2054

Please let me know if this answers your questions and/or if you have any additional concerns. -Thank you

# **GREYSCALE PRINTING & COLOR USAGE**

Regarding your recent inquiry about the color usage during greyscale printing. Unfortunately, with many of the newer printer models & printer drivers, printing in greyscale actually consumes more color ink than normal draft printing. If you wish to save on color ink, it is suggested to do one of the following as available in your specific printer driver/software:

- Print in Normal Draft mode (or super draft if available), plain paper.
- Print in Black & White mode only\*, plain paper.
- For internet page printing, print using CleanPrint (3<sup>rd</sup> party software for printing most internetbased content from all major internet browsers. NOTE: not affiliated with Inkjet411): <u>http://www.formatdynamics.com/cleanprint-4-0/</u>

\* Most printer models will still consume a small percentage of color ink due to normal ink/printer maintenance, such as between job 'spitting'. The purpose is to ensure the printhead is maintained to avoid clogging.

Please let me know if you have any further questions on this. Thank you

### **REFILL FRIENDLY PRINTER MODELS**

Regarding your question over refill friendly printer models, it really depends on how much you print.

If you print less than 2 pages per week, or so, you are way better off sticking with an integrated printer system (i.e. 2-cartridge printers from HP or Canon) as the printer will only use a little bit of ink at a time (mainly for printing). These types of printer systems do not invoke between job spitting, meaning your cartridges can last 6 months to a year with limited printing (per above).

However, if you print 5-10 pages every week, or more on average, then it is suggested to migrate to an individual ink tank printer model (i.e. 4, 5 or 6 cartridges are installed into the printer). These types of printer systems do invoke between job 'spitting' and many have time based cleaning routines to protect the health of the electronic printhead (which the cartridges are installed into/connected to) – this can add up to a lot of ink over time if you are not printing a lot to offset the delta. The exception is the HP Officejet Pro printer models (i.e. 8500/8500A/8600/8700s, etc.) – these have an electronic eye built-in to the printer which helps maximize ink efficiency by only performing spit routines when it notices misfiring ink jets. How the Printhead Works: <u>http://inkjet411.com/?page\_id=2054</u>

Most of the older Canon individual ink tank printer models (i.e. for example those that use Canon 220/221 or 225/226 ink cartridges) seem to have one of the best refill friendly track records...ink level monitoring is restored since the ink chips are reset and customer satisfaction has been quite high to date.

Any of the HP printer models which use HP 564, 920, 932/933, 940, or 950/951 cartridges also have a very high reliability rating, though you will lose ink level monitoring when using refilled ink cartridges (so you'll receive ink low messages here and there - you just ignore them until print quality begins to fade). NOTE: For all HP564 ink-series printer models it is suggested you leave the printer on as much as possible since turning the printer off and on will 'suck' a small percentage of ink (i.e. this 'ink maintenance' action protects/wets the replaceable PRINTHEAD). Most of the new HP's printers, i.e. those sold at Costco or Best Buy, use either HP564, HP932/933 or HP950/951 ink cartridges.

Epson printers which use T124-T127 ink cartridges are also considered quite friendly as the chips are reset and ink level monitoring is restored, just like the Canons. However, since many use pigmented inks which have a tendency to clog if not used, you will need to be printing on a frequent basis (like every 2 days or so).

Kodak ink cartridges (i.e. #10s or #30s) are not refilled to our knowledge by any of the refillers in the marketplace.

-Thank you

### IPH PRINTER PROBLEMS – MOVE OVER TO REFILL FRIENDLY PRINTER MODELS

Regarding your inquiry, our bottom line suggestion is to move over to a more refill friendly printer model (SEE REFILL FRIENDLY PRINTER MODEL SUGGESTIONS DOWN BELOW). Allow me to explain why.....

Most IPH ink cartridges (i.e. all 2-cartridge printer models) eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process (these same problems also occur with brand new ink cartridges from time to time). You indicated you have an HP Photosmart C4680, you should be aware that this particular AiO printer is 'extremely sensitive' to any minor electrical fluctuations within the ink cartridge(s)...based on our Q1 2013 internal testing with HP60 ink cartridges which were returned for failures (i.e. "Cartridge Problem"

/ "Incompatible Cartridge" ink alert errors, etc), these same cartridges performed satisfactory in several other printer models which use HP60 cartridges.

Now, generally the more severe printer error messages which result in non-permitted print operations, represent a very small percentage of the mass experience (for this cartridge family), so please consider the problem you previously encountered as being relatively rare with an ink cartridge that has only been filled once or twice (~1-2% failure range).

The integrated ink cartridge electrical wire runs, at rear and lower sides of the ink cartridge, are somewhat delicate and are susceptible to ink attack and subsequent internal electrical damage, which can lead to premature failures. In addition, the older the cartridge the higher the chance of an internal micro-electronic failure. It is discouraged to use old ink cartridges which have been left in a drawer as internal corrosion of the electrical wire runs can occur in a period of time. If the ink cartridge has an expired warranty date (imprinted date on front of ink cartridge) then the cartridge age is typically over 2 years old and could be at significantly higher risk for potential failure when refilled.

NOTE: It is also common to have a marginally performing ink cartridge (which was performing ok before) in the adjacent slot (i.e. color), then when a faulty cartridge is installed into the other slot (i.e. black), both of the ink cartridge(s) then get flagged with electrical errors. This type of failure is quite rare with an ink cartridge that that has only been refilled once or twice. Typically the ink cartridge's nozzle plate suffers a break at one of the flexible circuit lines within the base of the cartridge nozzle plate...refer to photo at bottom of this page: http://inkjet411.com/?page\_id=509

### **REFILL FRIENDLY PRINTER MODELS:**

With respect to refill friendly printer models, it really depends on how much you print.

If you print less than 2 pages per week, or so, you are way better off sticking with an integrated printer system (i.e. 2-cartridge printers from HP or Canon) as the printer will only use a little bit of ink at a time (mainly for printing). These types of printer systems do not invoke between job spitting, meaning your cartridges can last 6 months to a year with limited printing (per above). Withstanding the HP Photosmart C4600 and C4700 All-In-One (AiO) printer series have been found to be a bit finicky if a cartridge has marginal electrical performance.

However, if you print 5-10 pages every week, or more on average, then it is suggested to migrate to an individual ink tank printer model (i.e. 4, 5 or 6 cartridges are installed into the printer). These types of printer systems do invoke between job 'spitting' and many have time based cleaning routines to protect the health of the electronic printhead (which the cartridges are installed into/connected to) – this can add up to a lot of ink over time if you are not printing a lot to offset the delta. The exception is the HP Officejet Pro printer models (i.e. 8500/8500A/8600/8700s, etc.) – these have an electronic eye built-in to the printer which helps maximize ink efficiency by only performing spit routines when it notices misfiring ink jets. How the Printhead Works: <u>http://inkjet411.com/?page\_id=2054</u>

Most of the older Canon individual ink tank printer models (i.e. for example those that use Canon 220/221 or 225/226 ink cartridges) seem to have one of the best refill friendly track records...ink level monitoring is restored since the ink chips are reset and customer satisfaction has been quite high to date.

Any of the HP printer models which use HP 564, 920, 932/933, 940, or 950/951 cartridges also have a very high reliability rating, though you will lose ink level monitoring when using refilled ink cartridges (so you'll receive ink low messages here and there - you just ignore them until print quality begins to fade). NOTE: For all HP564 ink-series printer models it is suggested you leave the printer on as much as possible since turning the printer off and on will 'suck' a small percentage of ink (i.e. this 'ink maintenance' action protects/wets the replaceable PRINTHEAD). Most of the new HP's printers, i.e. those sold at Costco or Best Buy, use either HP564, HP932/933 or HP950/951 ink cartridges.

Epson printers which use T124-T127 ink cartridges are also considered quite friendly as the chips are reset and ink level monitoring is restored, just like the Canons. However, since many use pigmented inks which have a tendency to clog if not used, you will need to be printing on a frequent basis (like every 2 days or so).

We trust the provided information above has thoroughly answered your question. -Thank you

HP 564 "Incompatible Older Generation Cartridge Installed" ERROR MESSAGE Regarding your recent inquiry about the HP 564 cartridge error ("Incompatible Older Generation Cartridge Installed") which is preventing printing, unfortunately your ink cartridge was likely manufactured before Sept 2010 and is incompatible with the newer line of HP Photosmart and Deskjet printer models. You will need to obtain a new ink cartridge manufactured after September 2010 (all cartridges at retail should now be >July 2012).

Refer to HP's website for more information on this change: http://h10025.www1.hp.com/ewfrf/wc/document?docname=c02435884&lc=en&cc=us&dlc=en

You should discuss the possibility of a refill refund with your local Costco stating that an Inkjet411 representative verified the HP564 ink tank version/date was not compatible with your printer model. We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please watch video at the following link which explains typical printer operations when using refilled HP564 ink cartridges: <u>http://inkjet411.com/?page\_id=2317</u>

Please let us know if you have any further questions on this. - Thank you

HP 564/920/940 "Incompatible Printhead" (or "Cartridge Error", "Printhead installed is not intended for use in this printer", or "is damaged", or "Ink System Failure" message) Regarding your recent inquiry about the HP 920 cartridge error which is preventing printing....let's run thru a quick checklist to ensure we cover all variables which could be causing the issue: 1) If you received an "Unauthorized ink", "non-HP ink", "counterfeit ink" or similar message, you can simply ignore/dismiss these messages by pressing 'OK' once for each cartridge, so that the printer resumes its normal operation. NOTE: Receiving these kinds of ongoing alert messages is COMPLETELY NORMAL when using refilled ink cartridges. Refer to NOTE 2 below for more information. Refilling the ink cartridges does not include reprogramming of the ink cartridges, so this will not be a factor. <u>http://inkjet411.com/?page\_id=1407</u> (564s)

<u>http://inkjet411.com/?page\_id=1589</u> (920s)

2) Remove ink cartridge and inspect for smart chip surface – check for scratches or ink residue. See pictures of cartridge chips at following link for reference (see 'Abnormal Cartridge Errors'): <a href="http://inkjet411.com/?page\_id=1925">http://inkjet411.com/?page\_id=1925</a>

3) Perform a Printer Reset:

HP OJ 6500 Printer Reset:

- **a.** Ensure printer is powered ON.
- **b.** While the printer is Turned ON, unplug the power cord from the back of the printer. This should turn OFF your Officejet 6500.
- **c.** Connect the power cord back into the printer while pressing the "#" and "6" keys on the keypads of your printer.
- **d.** Wait until the screen turns black before release the keys. Your printer should turn ON by itself. If not, press the power button to turn ON the printer.
- e. The printer should now start to do the a Semi-Full Reset on your printer. Wait until it finishes the whole process and settles down.

HP OJ6500A/7500A Printer Reset:

- a. At Touchscreen, using two fingers, quickly press the 'OK' & 'Return' buttons in a quick alternating method (*refer to video link below which 'generally' illustrates how to perform this*):
- **b.** After a few seconds the Support Menu should be displayed.
- c. Navigate to Semi-Full (or Full Reset) and reset the printer.
- d. Send Test Page to test.

REFERENCE ONLY [ HP PS C4600 - Tap 41 Diagnostic Procedure – REFER TO 3<sup>rd</sup> video]: <u>http://inkjet411.com/?page\_id=434</u>

### HP Officejet 7000 Printer Reset:

http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?lang=en&cc=us&taskId=110&pro dSeriesId=3882903&prodTypeId=18972&objectID=c01759607

- a. Press the Power button to turn the product off.
- **b.** Disconnect the power cord from the back of the product.
- c. Wait 30 seconds.
- d. Reconnect the power cord to the back of the product.
- e. Press the Power button to turn the product on.

3) For more severe HP 920 cartridge error messages which prevent printing [i.e. Incompatible Printhead" or Ink System Failure] is typical of failed micro-electronics within the PRINTHEAD assembly\*. To verify PRINTHEAD electrical function, conduct the 'Tap 41' diagnostic test:

- **a.** Load Letter/A4-size paper into paper feed tray.
- **b.** Press the \* and # keys simultaneously.
- c. Enter 124 at keypad. The 'Underware' menu should be displayed.
- d. Use the arrow keys to navigate to the System Menu. Select Ok.
- e. The 'print-mech button tap' menu should be displayed.
- **f.** Select Ok. Screen should display "code = 0".
- g. Use the arrow keys to enter "code = 41" (or just enter 41 on keypad). Select Ok. The Tap 41 diagnostic test pattern prints.

NOTE: The Tap 10 self-test print may also be initiated via 'code = 10' (use to verify ink nozzle performance) Check the 4<sup>th</sup> line at the top of the printed report; an electrically good/stable PRINTHEAD will state **"Pen Status:** Pen OK".......if any other message is displayed then the PRINTHEAD may have failed and may need to be replaced.

\* Failure of the PRINTHEAD has nothing to do with refilled ink cartridges; the PRINTHEAD assembly is a separate electronic unit in which the cartridges plug into and feed ink into. Refer to NOTE below.

4) To rule out printer/cartridge connectivity (assembly interface/connection) issues please ensure you have followed all steps on the Inkjet411 support page - this includes PRINTHEAD removal and thorough cleaning of the electrical surfaces on the PRINTHEAD and on the CARRIAGE ASSEMLBY: <u>http://inkjet411.com/?page\_id=1451</u> (564 PH Removal-Cleaning) <u>http://inkjet411.com/?page\_id=1495</u> (920 PH Removal-Cleaning)

5) If this does not remedy the problem, then you may have a defective PRINTHEAD in the printer (worst case scenario), unrelated to the refilled cartridges.\*\*

**NOTE 1:** The HP **564** printer models have an electronic PRINTHEAD within the base of the carriage assembly (responsible for pulling ink from the 4 (or 5) ink cartridges and then firing the ink droplets onto the paper) – these will eventually fail depending on print usage type and printer duty cycle (i.e. rated for ~8,000 printed pages over life, but the consumer average is typically closer ~6,000 pages). The printhead is replaceable and can be ordered directly from HP.com. For information on how the PRINTHEAD functions, please watch the following video: http://inkjet411.com/?page\_id=2054

**NOTE 1:** The HP 920 / 920XL ink-series printer models have an electronic PRINTHEAD within the base of the carriage assembly (responsible for pulling ink from the 4 ink cartridges and then firing the ink droplets onto the paper) – this electronic assembly will eventually fail depending on print usage type and printer duty cycle (i.e. rated for ~12,000 printed pages over life, but the average throughput is closer to 6,000 to 7,500 pages). The printhead is replaceable and can be ordered directly from HP.com. For information on how the PRINTHEAD functions, please watch the following video: <u>http://inkjet411.com/?page\_id=2054</u>

**NOTE 1:** The HP 88 printer models have two (2) electronic PRINTHEADS (responsible for pulling ink from the ink cartridges and then firing the ink droplets onto the paper). One for Yellow/Black, the other for Cyan/Magenta colors. Either will eventually fail depending on print usage type and printer duty cycle (i.e. rated for ~ 41,500 maximum printed pages). http://inkjet411.com/?page\_id=2054

**NOTE 1:** The HP 940 printer models have two (2) electronic PRINTHEADS (responsible for pulling ink from the ink cartridges and then firing the ink droplets onto the paper). One for Yellow/Black, the other for Cyan/Magenta colors. Either PRINTHEAD will eventually fail depending on print usage type and printer duty cycle (i.e. rated for ~20,000 maximum printed pages). http://inkjet411.retailinkjet.com/?page\_id=2054

**NOTE 2:** HP does not allow an automatic reset of the HP 564 / 564XL / HP 920 / 920XL electronic chip on the cartridge after a refill, so the ink level indicator is sending a false message that the ink level is low. Your cartridge is not low on ink, and nothing is wrong with your printer or cartridges. The ink level indicator usually cannot be manually re-set, so the ink level indicator is often not usable. However, losing this feature is not necessarily significant, because the ink level indicator usually has substantial usable ink remaining when it shows "low on ink". If you observe "Unauthorized ink", "non-HP ink", "counterfeit ink" or similar messages, you may ignore/dismiss this message by pressing 'OK' once for each cartridge, so that the printer resumes its normal operation.

\*\*Typically the printhead should not reach it's end-of-life until after a minimum of 8 or more complete sets of cartridge changes; officejet models typically have a higher print page throughput average, but this is not always the case. While some printheads may last 15,000+ pages others may only last 1000 pages, actual results will vary. The printhead will eventually fail in time due to an internal micro-electronics failure, due to the following leading factors: general customer print usage and printer care, printer duty cycle (i.e. # pages printed per month), printing frequency (i.e. time between each print job), print mode (i.e. draft vs. normal) and content printed (i.e. photos vs plain pages) and color mode (black and white only vs. color/greyscale printing). Paper types used (i.e. plain paper, photo papers & matte/heavy bond papers) and paper edge curl (i.e. duration in printer and/or exposure to low relative humidity) can also quickly lead to premature printhead failures due to physical 'head strikes' of the paper edges making repeated contact with the printhead nozzle plate surfaces.

### -Thank you

# HP 564/920 - UNAUTHORIZED / FRAUD INK MESSAGE / LOW INK

Regarding your recent inquiry about the HP **564/920** cartridge's 'LOW INK' or 'EMPTY INK' messages, "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for all HP **564/920** ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. The ink level monitoring feature cannot be reset since only brand new HP ink cartridges support ink level monitoring.

As you just returned from the refill store, your ink cartridge(s) is full of ink - you may ignore low ink warnings (along with any other nuisance message) and print normally until you observe one of the colors to begin to fade.

Please watch video at the following link which explains normal operation when using refilled ink cartridges:

http://inkjet411.com/?page\_id=2317\_

NOTE 1: In addition to "Low Ink" alerts, for "Unauthorized ink", "Non-HP ink", "Fraud", "Counterfeit ink" or similar messages, you may ignore/dismiss this message by pressing 'OK' once for each cartridge, so that the printer resumes its normal operation. We suggest you do this at the printer's control panel immediately following ink cartridge(s) installation. For more information on this, please visit: <u>http://inkjet411.com/?page\_id=1925</u> (564/920 cartridge errors page) <u>http://inkjet411.com/?page\_id=856</u> (564/920 main page)

Now, if you observe missing colors or poor image quality then air may have been accidently ingested into the ink lines between the cartridge(s) and PRINTHEAD. To recover from this problem, you will have to run the "Clean Printhead" procedure 1-2 times to recover the ink system. Watch the video on the HP support page which describes some of the common issues you may encounter with refilled ink cartridges. This type of problem is common and completely recoverable. <u>http://inkjet411.com/?page\_id=1407</u> (564 Tips page) <u>http://inkjet411.com/?page\_id=1589</u> (920 Tips page)

There is no 'lock-out' feature on the **HP 564/920** ink series printer models to our knowledge...you should be able to resume normal printer operations. If not, please let us know the 'exact language' of the error message you are observing and for which ink cartridge (Cyan, Magenta, Yellow, Black, or Photo Black if applicable).

**NOTE 2:** HP does not allow an automatic reset of the electronic chip on the cartridge after a refill, so the ink level indicator is sending a false message that the ink level is low. Your cartridge is not low on ink, and nothing is wrong with your printer or cartridges. The ink level indicator usually cannot be manually re-set, so the ink level indicator is often not usable. For more information on this, click here: <a href="http://inkjet411.com/?page\_id=1925">http://inkjet411.com/?page\_id=1925</a> (564 cartridge errors page)

However, losing this feature is not necessarily significant, because the ink level indicator usually has substantial usable ink remaining when it shows "low on ink". Therefore, the warning has limited value, because customers who prematurely replace their cartridges when they see the "low ink" message are wasting a lot of residual ink. In order to use as much available ink as possible, many customers (not only those who refill their cartridges, but many who have not yet tried refilling) always ignore the ink level indicator "low" warning, and wait to replace or refill the cartridge until immediately after seeing ink begin to fade on their printouts.

Many customers who disregard the low ink indicator keep a spare set of cartridges so that their printing productivity is not disrupted when the cartridge runs out of ink. If the cartridge completely runs out of ink and continues to be used when it is dry, this could damage the cartridge, so customers should promptly refill their cartridge when the ink begins to fade. This fading process is gradual, so that you will have sufficient time to refill the cartridge before the risk of empty cartridge printing. In summary, most refill customers agree that the huge savings of refilling is much greater than the potential loss of the low ink indicator feature.

On the other hand, if you observe Red X's (i.e. "unrecognized cartridge"/ "incompatible printhead"/ "ink system has failed") on your printer display panel or Window's popup, then this is a different type of error (i.e. possible cartridge connection issue or failure of permanent printhead assembly). For advanced printer diagnostics, please refer to .pdf file at the following link: <a href="http://inkjet411.com/?page\_id=1813">http://inkjet411.com/?page\_id=1813</a>

To provide additional insight on how the semi-permanent PRINTHEAD works in your printer, please refer to video at the following support page: <u>http://inkjet411.com/?page\_id=2054</u>

Please advise if a no-printing error condition persists. -Thank you

### HP 940 - UNAUTHORIZED / FRAUD INK MESSAGE / LOW INK

Regarding your recent inquiry about the HP 940XL cartridge's 'LOW INK' or 'EMPTY INK' messages, "Empty" and "Low Ink" alerts are COMPLETELY NORMAL for all HP 940 / 940XL ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. The ink level monitoring feature cannot be reset since only brand new HP ink cartridges support ink level monitoring.

As you just returned from the refill store, your ink cartridge(s) is full of ink - you may ignore low ink warnings (along with any other nuisance message) and print normally until you observe one of the colors to begin to fade. When you do observe print fade, run a quick 'test print' (from printer's menu), to see which color is out and then bring that cartridge, or cartridges, in for refilling.

Please watch video at the following link which explains normal operation when using refilled ink cartridges: <u>http://inkjet411.com/?page\_id=2317</u>

NOTE 1: In addition to "Low Ink" alerts, for "Unauthorized ink", "Non-HP ink", "Fraud", "Counterfeit ink" or similar messages, you may ignore/dismiss this message by pressing 'OK' once for each cartridge, so that the printer resumes its normal operation. We suggest you do this at the printer's control panel immediately following ink cartridge(s) installation. For more information on this, please visit: <a href="http://inkjet411.com/?page\_id=1423">http://inkjet411.com/?page\_id=1423</a>

Now, if you observe missing colors or poor image quality then air may have been accidentally ingested into the ink lines between the cartridge(s) and PRINTHEAD. To recover from this problem, you will have to run the "Clean Printhead" procedure 1-2 times to recover the ink system. Watch the video on the HP support page which describes some of the common issues you may encounter with refilled ink cartridges. This type of problem is common and completely recoverable. http://inkjet411.com/?page\_id=1457

There is no 'lock-out' feature on the HP 940 ink series printer models to our knowledge...you should be able to resume normal printer operations. If not, please let us know the 'exact language' of the error message you are observing and for which ink cartridge (Cyan, Magenta, Yellow, Black).

NOTE 2: HP does not allow an automatic reset of the electronic chip on the cartridge after a refill, so the ink level indicator is sending a false message that the ink level is low. Your cartridge is not low on ink, and nothing is wrong with your printer or cartridges. The ink level indicator usually cannot be manually re-set, so the ink level indicator is often not usable. For more information on this, click here: <a href="http://inkjet411.com/?page\_id=1423">http://inkjet411.com/?page\_id=1423</a>

However, losing this feature is not necessarily significant, because the ink level indicator usually has substantial usable ink remaining when it shows "low on ink". Therefore, the warning has limited value, because customers who prematurely replace their cartridges when they see the "low ink" message are wasting a lot of residual ink. In order to use as much available ink as possible, many customers (not only those who refill their cartridges, but many who have not yet tried refilling) always ignore the ink level indicator "low" warning, and wait to replace or refill the cartridge until immediately after seeing ink begin to fade on their printouts.

Many customers who disregard the low ink indicator keep a spare set of cartridges so that their printing productivity is not disrupted when the cartridge runs out of ink. If the cartridge completely runs out of ink and continues to be used when it is dry, this could damage the cartridge, so customers should promptly refill their cartridge when the ink begins to fade. This fading process is gradual, so that you will have sufficient time to refill the cartridge before the risk of empty cartridge printing. In summary, most refill customers agree that the huge savings of refilling is much greater than the potential loss of the low ink indicator feature.

On the other hand, if you observe Red X's (i.e. "unrecognized cartridge"/ "incompatible printhead"/ "ink system has failed") on your printer display panel or Window's popup, then this is a different type of error (i.e. possible cartridge connection issue or failure of permanent printhead assembly). For advanced printer diagnostics, please refer to .pdf file at the following link: http://inkjet411.com/?page\_id=1813

To provide additional insight on how the semi-permanent PRINTHEAD works in your printer, please refer to video at the following support page: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

-Thank you

CANON 30-241 ERROR MESSAGE (GENERAL) Canon PIXMA MP240, MP250, MP260, MP270, MP280, MP480, MP490, MP495 Regarding your recent inquiry about the refilled Canon **PGI-40** black ink cartridge ink alert/error condition, you will need to reset the cartridge low ink level monitoring in order to clear the ink level alarm condition<sup>\*</sup>. However, if you can still print at the moment, then you may need to wait until the "Ink Has Run Out" message, or similar, appears....then you can go ahead and perform the printer reset as described below.

We suggest you first attempt the basic/universal ink level reset procedures before attempting any of the more advanced procedures provided on the Inkjet411 site:

A. Standard Ink Level Reset Procedure (printers without LCD display):

[Refer to the 1<sup>st</sup> support video: <u>http://inkjet411.com/?page\_id=62]</u>

1) At computer screen message, select 'Stop'/'Reset', 'OK', or 'Resume'.

....or....

2) Select 'Stop'/'Reset', 'OK' or the 'Resume' button (triangle symbol inside of a circle) on your printer for 5-8 seconds:

- Printing may continue under the 'ink out' condition.

B. Standard Ink Level Reset Procedure (printers with LCD display):

[Refer to the 2<sup>nd</sup> support video: <u>http://inkjet411.com/?page\_id=62 ]</u>

1) Install cartridge and start print job.

2) After first message appears, click 'OK' to continue. Printer should start printing.

3) If second message appears and printer's LCD screen displays error code "E", then DO NOT click 'CANCEL PRINTING'.

4) Press and hold down 'Stop'/'Reset' button (triangle-circle icon) on your printer for 5-8 seconds. Printer should start printing.

If you are able to produce a self test print, this is good since it illustrates that the cartridges are electrically stable...if you observe any 'E' or 'V' error states (i.e. E13 or V162 for example), this may indicate there is possibly an internal electrical problem with one of the ink cartridges. Refer to your user guide if E/V error messages are displayed.

\*If, after following the suggested ink monitoring/level reset procedures, you still have an error condition which prohibits regular printing, then the ink cartridge probably has internal electrical damage (microelectronics failure); such a failure is unrelated to the ink cartridge refilling process. Typically, when the cartridge fails the problem is 'masked' by the ink out/empty condition so it can be difficult to distinguish between the two. Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process (i.e. typically ~2 years from original manufacturing date). Refer to picture at bottom of this page: http://inkiet411.com/?page\_id=1533 **NOTE:** Additional 'printer reset' procedures are provided on Inkjet411 (*see SUPPORT DOCUMENTATION* - CANON RESET METHODS pdf document): <u>http://inkjet411.com/?page\_id=62</u>

However, if your printer works routinely after inserting a brand new PGI-40 ink cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). If this turns out to be the case, then we regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if you have any questions regarding the technical information provided herein. -Thank you

# ALREADY ATTEMPTED THE BASIC CANON RESET

Regarding your recent inquiry about the refilled Canon PGI-40 (or CLI-41?) ink cartridge ink alert/error condition with your MP470 printer, if after following the suggested ink monitoring/level reset procedures (below), you still have an error condition which prohibits regular printing, then one of the ink cartridges probably has internal electrical damage (micro-electronics failure)\*; such a failure is unrelated to the ink cartridge refilling process. Typically, when the cartridge fails the problem is 'masked' by the ink out/empty condition so it can be difficult to distinguish between the two. Question: can you identify which ink cartridge is causing the issue?

Normally you would reset the cartridge low ink level monitoring in order to clear the ink level alarm condition using the procedures below (sounds like you already tried this). However, if you can still print at the moment, then you may need to wait until the "Ink Has Run Out" message, or similar, appears....then you can go ahead and perform the printer reset as described below.

We suggest you first attempt the basic/universal ink level reset procedures before attempting any of the more advanced procedures provided on the Inkjet411 site:

A. Standard Ink Level Reset Procedure (printers without LCD display):

[ Refer to the 1st support video: <u>http://inkjet411.com/?page\_id=62</u> ]

1) At computer screen message, select 'Stop'/'Reset', 'OK', or 'Resume'.

....or...

2) Select 'Stop'/'Reset', 'OK' or the 'Resume' button (triangle symbol inside of a circle) on your printer for 5-8 seconds:

- Printing may continue under the 'ink out' condition.

B. Standard Ink Level Reset Procedure (printers with LCD display):

[Refer to the 2nd support video: <a href="http://inkjet411.com/?page\_id=62">http://inkjet411.com/?page\_id=62</a>]

1) Install cartridge and start print job.

2) After first message appears, click 'OK' to continue. Printer should start printing.

3) If second message appears and printer's LCD screen displays error code "E", then DO NOT click 'CANCEL PRINTING'.

4) Press and hold down 'Stop'/'Reset' button (triangle-circle icon) on your printer for 5-8 seconds. Printer should start printing. If you are able to produce a self test print, this is good since it illustrates that the cartridges are electrically stable...if you observe any 'E' or 'V' error states (i.e. E13 or V162 for example), this may indicate there is possibly an internal electrical problem with one of the ink cartridges. Refer to your user guide if E/V error messages are displayed.

NOTE: There are additional 'reset' procedures provided on Inkjet411 (see SUPPORT DOCUMENTATION - CANON RESET METHODS pdf document): <u>http://inkjet411.com/?page\_id=62</u>

\*Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process (i.e. typically ~2 years from original manufacturing date). Refer to picture at bottom of this page: <u>http://inkjet411.com/?page\_id=1533</u>

However, if your printer works routinely after inserting a brand new PGI-40 or CLI-41 ink cartridge in it, you should discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). If this turns out to be the case, then we regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if you have any questions regarding the technical information provided herein. -Thank you

#### B. Canon Ink Level Reset Procedure #2:

NOTE: Canon "iP" Printer Model Series Only, PIXMA ip2700, PIXMA iP2702

- 6. Press and Hold the Resume (triangle-circle) button
- 7. Press and Hold the Power Button; hold both buttons for 5 seconds
- 8. Release the Resume (triangle-circle) button.
- **9.** Press the Resume button 5 times.
- **10.** Release the Power button. The blinking ink level/power light should go steady after a few seconds.
  - Printing may continue under the 'ink out' condition.

# Canon PIXMA MX320, MX330, MX340, MX350, MX360, MX410, MX420 Printer Models A. Printers connected to Win Vista/XP Computer:

- 1. Install refilled cartridges into printer ("Ink Has Run Out" message is displayed)
- 2. Open Properties in "Printers" from "Start Bar"-"Settings" on left lower corner.
- 3. Open "Advance".
- 4. Uncheck "Enable advanced printing features".
- 5. Apply and close.

6. Hold "Stop" button on MX330 printer for 10-20 seconds. The "Ink Has Run Out" message will disappear.

- 7. Open "Properties" in "Printers" again as in Step 2.
- 8. Check "Enable advance printing features" to reset counter.

9. Printer should work again with refilled ink cartridge.

- **B.** Canon Pixma MP/MX/MG Series Printer & Ink Counter Reset Procedure:
- 1. Press the power button to turn off the printer.
- 2. Hold the "Stop/Reset" button while pushing the power button. While still holding down the power button, release the "Stop/Reset" button and then push it twice in a row.
- 3. Wait approximately 20 to 30 seconds until the LED shows 0.
- 4. Push the "Stop/Reset" button four times in a row.
- 5. Push the power button twice.
- 6. Turn off the printer by pushing the power button one more time. The printer is now reset.

# **Canon MP Models**

A. Canon Ink Level Reset Procedure.

NOTE: Most MP200 thru MP400 Series Printer Models

- **10.** Turn off the Canon MP printer and unplug it from the outlet.
- **11.** Press the "On/Off" button while you plug the cable back in.
- **12.** Hit the "Stop/Reset" button two times while holding down the "On/Off" button, then let go of the "On/Off" button. This puts the printer into factory mode.
- **13.** Hit the right arrow button until you see "Shipping Mode 3" on the LCD display. Hit "OK" to select it.
- 14. Hit the "Stop/Reset" button when you see a message that says "Without Cleaning." This tells the Canon printer to print out a test page.
- **15.** Lift up the Canon MP 470 printer cover and wait for the cartridges to move to the left. Then unplug the printer from the outlet.
- 16. Lift out both ink cartridges and close the cover.
- **17.** Plug the power cable back in and hit the "On/Off" button.
- **18.** Place the ink cartridges back inside once you see a message that says "Replace Cartridges." Wait a few minutes for the printer to recognize the cartridges before trying to print.
- **B.** Canon MP Printers Universal MP Printer Reset Procedure:

NOTE: Canon MP140 thru MP830 Printer Models with 'Tools' button

- **11.** Turn ON the printer.
- **12.** Press and Hold the "Reset button" on the printer.
- **13.** While pressing the "Reset button", press and hold the "Color Start" button.
- **14.** Wait for 5 seconds.
- 15. Release the "Color Start" button, and then release the "Reset Button".
- **16.** Wait until the printer starts to configure itself. This should take approximately around 20 seconds.
- **17.** The no. "1" should be on the display, press and hold the "Tool" button and the letter "A" should now be on the display.
- **18.** While pressing on the "Tool" button, press and hold the "Reset button".

- **19.** Wait until there are no more blinking lights on the printer.
- 20. Release the "Tool" button, and then release the "Reset Button".
- C. Canon MP Ink Level Reset Procedure Safe Factory Reset Method:
  - NOTE: Canon MP Series Printer Models that feature a screen display
  - **14.** Disconnect power from printer (unplug cable).
  - 15. Press and hold the power button while connecting the power outlet back.
  - **16.** While still holding down the power button, press the reset button twice (red circle with a triangle)
  - **17.** Release the power button
  - **18.** The printer takes about 10 seconds to show the number 0.
  - **19.** Press + to change the value from 0 to 1.
  - 20. When this value is 1, press color button; this will light up two leds.
  - **21.** One is for plain paper and the other for photo paper. At this point is feed the printer with paper.
  - **22.** Press the power button twice and the printer will print a test page (if it doesn't print by itself, then press the "color" button once and the test sheet will print).
  - 23. When the test page is printed the value in the display returns to zero.
  - 24. Open the printer/cartridge access cover (not the scanner cover) and remove the refilled ink cartridges. With the printer still open, disconnect power from printer (unplug cable).
  - 25. Close the lid and turn on the printer.
  - Following printer power up, open cover/cartridge access cover and reinstall the refilled ink cartridges.
- A. Canon MX310 Ink Level Reset Procedure #1 (Canon 40/41 ink cartridges)
  - 8. Power off printer
  - 9. Hold RESUME button then press and hold POWER, the beeper will sound once.
  - **10.** Hold POWER and release RESUME
  - 11. Press RESUME twice
  - 12. Release POWER button
  - 13. When the indicator lights steady, press RESUME three (3) times. The indicator should be orange.
  - **14.** Press POWER (to lock data)
- B. Canon MX310 Ink Level Reset Procedure #2 (Canon 40/41 ink cartridges)
- 1. Power off the printer.
- 2. Holding the stop/reset button, press and hold power button also. Hold both buttons together for 5 secs.
- 3. Still holding the power button, release the stop/reset button, then press the stop/reset button twice.
- 4. Release power button (the screen should now say 'Service Mode').
- 5. Wait until the power button lights steady green, then press the stop/reset button three times with a 3 sec space between each press. On the 3rd press the indicator should turn steady orange.
- 6. Press the power button once, (the orange light should go off).

7. Open the printer and remove both cartridges. Wait for 20 seconds. Replace the cartridges and close printer. Wait for 30 seconds.

8. Press the power button, and wait until printer has shut down.

9. Press power button to power up. The printer will feed one piece of paper, then ask you to set the language.

10. The ink counter should now be reset.

- I. Canon MX310 Ink Level Reset Procedure #3 (Canon 40/41 ink cartridges)
  - 15. Power off the printer
  - **16.** Hold the stop/reset button then press and hold power (for 5 secs)
  - **17.** Hold Power and release the stop/reset button
  - 18. Press the stop/reset button twice
  - **19.** Release power button
  - **20.** Wait until the power button lights a steady/still green, press the stop/reset button three times with a 3 sec space between each press.
  - 21. On the 3rd press the indicator should be orange.
  - **22.** Press the power button to set data
  - 23. To set data remove cartridges then replace; allow printer to sit idle for 20 or 30 secs
  - 24. Press the power button again to shut down
  - **25.** Then press power button to power up.
  - **26.** The printer will feed one piece of paper through
  - **27.** Then set language and country.
  - 28. Then ink should be reset.

NOTE: Here is a 3<sup>rd</sup> party site which provides reset solutions by printer model: http://resetprinters.com/how-to-reset-canon-mp-series-printers-and-fix-common-errors/

If you still have an error condition which prohibits printing, then the ink cartridge probably has internal electrical damage (micro-electronics failure); such a failure is unrelated to the ink cartridge refilling process. Typically, when the cartridge fails the problem is 'masked' by the ink out/empty condition so it can be difficult to distinguish between the two. Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process (i.e. typically ~2 years from original manufacturing date). Refer to picture at bottom of this page: <a href="http://inkjet411.com/?page\_id=1533">http://inkjet411.com/?page\_id=1533</a>

Please advise if the error condition persists. Thank you

\*210/211 Systems = Canon PIXMA MP240, MP250, MP260, MP270, MP280, MP480, MP490, MP495, MX320, MX330, MX340, MX350, MX360, MX410, MX420, ip2700, iP2702

# CANON 210/211 ERROR MESSAGE / NO PRINTING

**Basic Resets (A & B):** Canon PIXMA MP240, MP250, MP260, MP270, MP280, MP480, MP490, MP495 **Basic Reset Procedure (B):** Canon "iP" Printer Model Series, PIXMA ip2700, PIXMA iP2702 Advanced Resets (C & D): Canon PIXMA MX320, MX330, MX340, MX350, MX360, MX410, MX420 Printer Models

Regarding your recent inquiry about the Canon 210 (black)/211 (color) ink cartridge ink alert/error condition and the inability to print to your Canon MX340 printer, to reset the cartridge ink low/empty alert message condition, depending on your printer model, we suggest you follow the documented procedures below and/or provided on Inkjet411 at the following link. http://inkjet411.com/?page\_id=1765

Essentially, in most cases, all you need to do is press the 'Stop/Reset' button (triangle symbol inside of a circle) for 5-8 seconds and the ink error ("ink has run out", etc.) indicators should extinguish; two common reset procedures are provided below (please refer to both videos): <a href="http://inkjet411.com/?page\_id=1765">http://inkjet411.com/?page\_id=1765</a>

NOTE: If you are able to print the internal self test print, this will demonstrate that the ink cartridge is 'at least' partially functioning. If this is the case, then we suggest you continue printing until the software prompts you to press the 'Stop/Reset' button for >5 seconds. For poor print quality performance issues (as you indicated in your inquiry), we suggest you run a nozzle/cartridge clean test from your Canon software, followed by printing our 'Ink Recovery Test' print: <u>http://inkjet411.com/wp-</u>content/uploads/2013/02/Test-Print\_CMYK.pdf

To help reset the ink level monitoring feature, please attempt the following to rule out all variables: <u>1. To rule out connectivity issues, please ensure BOTH carriage/flex cables (point where the cartridge connects to carriage inside the printer) and BOTH ink cartridge rear electrical contact surfaces are thoroughly clean before proceeding: http://inkjet411.com/?page\_id=1519</u>

2. We suggest you first attempt the basic (universal) ink level reset procedures (A. and B. below) before attempting the more advanced procedures:

A. Canon BASIC Ink Level Reset Procedure: [refer to both videos here: http://inkjet411.com/?page\_id=1765]

- 5. Install cartridge and start print job.
- 6. After first message appears, click 'OK' to continue. Printer should start printing.
- 7. If second message appears and printer's LCD screen displays error code "E", then DO NOT click 'CANCEL PRINTING'.
- Press and hold down 'Stop'/'Reset' button (triangle-circle icon) on your printer for 5-8 seconds.
  Printer should start printing.

**B.** Canon Ink Level Reset Procedure #2 [primarily intended for Canon iP printer models]:

- 6. Press and Hold the Resume (triangle-circle) button
- 7. Press and Hold the Power Button; hold both buttons for 5 seconds

- 8. Release the Resume (triangle-circle) button.
- 9. Press the Resume button 5 times.
- 10. Release the Power button. The blinking ink level/power light should go steady after a few seconds.
- Printing may continue under the 'ink out' condition.

Providing none of the above procedures were successful, then you could attempt the various printer reset procedures at the following link (refer to .pdf SUPPORT DOCUMENTATION): <a href="http://inkjet411.com/?page\_id=62">http://inkjet411.com/?page\_id=62</a>

If you still have an error condition which prohibits computer/host based printing (or permit copy/scan functions), then the ink cartridge probably has internal electrical damage (micro-electronics failure); such a failure is unrelated to the ink cartridge refilling process. Typically, when the cartridge fails the problem is 'masked' by the ink out/empty condition so it can be difficult to distinguish between the two. Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process (i.e. typically ~2 years from original manufacturing date). Refer to picture at bottom of this page: <a href="http://inkjet411.com/?page\_id=1533">http://inkjet411.com/?page\_id=1533</a>

However, if your printer works routinely after inserting a new Canon 240 black (or 240XL/240XXL) or 241 (or 241 XL) color ink cartridge in it, you should discuss the possibility of a refund with your local Costco (for refilled cartridge purchase). We regret your inconvenience, and we hope that you will continue to consider the compelling value of inkjet refilling in the future.

Please let us know if you have any questions regarding the technical information provided above. -Thank you

# CANON 30-241 ERROR MESSAGE (ADVANCED – NO PRINTING ALLOWED) .....need to validate

Regarding your recent inquiry about the Canon 210XL ink cartridge ink alert/error condition, to reset the Canon 210/211 cartridge low ink alert message(s), depending on your printer model, we suggest you follow the documented procedures provided at the following link (see SUPPORT DOCUMENTATION - CANON RESET METHODS pdf document): http://inkiet411.com/?page\_id=1533

If you still have an error condition which prohibits printing, then the ink cartridge probably has internal electrical damage (micro-electronics failure); such a failure is unrelated to the ink cartridge refilling process. Typically, when the cartridge fails the problem is 'masked' by the ink out/empty condition so it can be difficult to distinguish between the two. Many cartridges eventually do encounter problems or failures, especially after their original ink is gone and they are re-used, and this is often unrelated to the refill process (i.e. typically ~2 years from original manufacturing date). Refer to picture at bottom of this page: <a href="http://inkjet411.com/?page\_id=1533">http://inkjet411.com/?page\_id=1533</a>

Service Menu Printer/Waste Reservoir Reset Procedure:

A. Pixma MP/MX/MG Series: Printer & Ink Counter Reset

a. Press the power button to turn off the printer.

b. Hold the "Stop/Reset" button while pushing the power button. While still holding down the power button, release the "Stop/Reset" button and then push it twice in a row.

c. Wait approximately 20 to 30 seconds until the LED shows 0.

d. Push the "Stop/Reset" button four (4) times in a row.

e. Push the power button twice.

f. Turn off the printer by pushing the power button one more time. The printer is now reset. Next, reset the cartridge ink counter:

a. Unplug the power and the USB cables from the printer.

b. Open the cartridge door and hold down the power button.

c. Reconnect the power cables while still holding down the power button.

d. Close the cartridge door and release the power button. The ink cartridge is now reset.

- Your printer should respond as normal.

B. For Printer Model: Canon S9000, S300, S400, i550, i560, i850, i860, i865, i9100, i9950, PIXMA iP3000:

1. Turn off printer

2. Hold down Resume button and press Power button.

3. Keep holding down Power button and let Resume button go.

4. Press Resume button 2 times then let BOTH buttons go.

5. Green lights will flash and then stop blinking.

6. When green lights are solid, press the Resume button 4 times.

7. Press the Power button and the printer should turn off, if not, press the Power button once more.

- Your printer should respond as normal.

2. Pixma iP/MP/MX/MG Series: Waste Ink Counter Reset

a. With the printer powered off but still connected to a power source, press the Power button while pressing and holding the Stop/ Reset button.

b. When the Power LED is lit, press the Stop/Reset button two (2) times while pressing and holding the Power button.

c. When releasing the Power button and the Stop / Reset button (regardless of order), the printer will move into a service mode (...waits for a menu selection)

d. When the LED lights green, press the Stop/Reset button the specified number of time(s) according to the function listed in the table below (each time the Stop/Reset button is pressed, the LED alternatively lights in orange and green, starting with orange)

- Your printer should respond as normal.

LED Function:

0 time Green - Power off 1 time Orange - Service pattern print 2 times Green - EEPROM print 3 times Orange - EEPROM reset 4 times Green - Waste ink counter reset 5 times Orange - Destination setting 6 times Green - Print head deep cleaning 11 times Orange - Button / LCD checking 12 or more times - Returns to a menu selection

CANON BLACK 225 VS. 226 (not yet linked) Regarding your question of Canon cartridges, 225 black vs. Canon 226, our answers are provided below:

> The Black 225 cartridge uses a pigment-based ink...this cartridge is primarily intended for document/text printing. Pigment based inks provide strong longevity / archivability and increase the black dot gain; this is especially important when printing small black text characters on the page - they must be rich so they are easily legible to the eye.

>> The Black 226 cartridge uses a dye-based ink formulation specific to photo printing (this is a Photo Black cartridge). Dye inks provide a greater amount of light to refract through the paper surface/inkjet medium and effectively increase the amount of reflected color to bounce back to the eye (commonly referred to as color 'pop', with respect to color appeal to the eyes. This ink formula is very effective for enhanced photo printing on photo inkjet papers.

### HARD RESET

Regarding your recent inquiry about the cartridge error message, you should try a hard reset: turn off the printer, unplug the power cable from the wall/strip power outlet, wait 30 seconds, then reconnect your power cable and turn the printer back on.

### IIT Ink Shelf Life (NON FOAM) - HP88/940/932/933/950/951/02

Regarding your inquiry over shelf life (i.e. 3-months of in-operation), the HP940 ink cartridges will be ok as these tanks do not have foam inside (ink is contained within a heavy duty foil bag)....typically these can be stored for at least a year without any problems (just keep them out of sunlight). Now, with respect to the PRINTHEAD (which there are 2 inside your HP OJPRO 8500 printer), they should automatically 'seal' when the printer is powered down. If you encounter a start-up issue after such a long period of time, such as missing colors/streaking, then you may need to run a 'PRIME' or 'PRINTHEAD CLEAN' to recover the system.

Please refer to our video on how the INK CARTRIDGES vs. PRINTHEADS interact: http://inkjet411.com/?page\_id=2054

#### -Thank you

HP OFFICEJET PRO 8500A (HP 940s) – POWER OFF/CARTRIDGE ACCESS DOOR TRICK With respect to the HP OJ PRO 8500A Plus workflow of having to power off the printer to get the printing/copying to function following the printer dropping into standby mode, this is indeed quite unusual. I suspect this might be a driver issue, and you may just need to reinstall your printer driver software.

However, before you do that, instead of powering off the printer on the next print job attempt, try opening and closing the cartridge access door....see if a print job comes thru. If it does, then this will confirm there is a probable printer driver 'hand-shaking' issue.

We also suggested you press and hold the reset button on the printer for five seconds...this will reset the cartridge's smart chip, and may correct the current 'interface' issue.

If the error continues, then we suggest you remove the refilled ink cartridge and inspect the smart chip contact surface (located in bottom/rear portion of cartridge). If there is any ink on the surface of the chip please clean thoroughly using isopropyl alcohol dampened lint-free towel, or similar.

### ADDITIONAL NOTES:

1) Printer nuisance messages, such as "counterfeit" / "non-genuine ink", are COMPLETELY NORMAL and should be expected when using HP 940 refilled ink cartridges.

A. If you observe an ink cartridge "expired ink" message then there is a trick to bypass this alert message, please click here for instructions: <u>http://inkjet411.com/?page\_id=1457</u>
 B.

Please let us know if the problem persists. -Thank you

# HP OFFICEJET PRO LXXX (HP 88s) – CARTRIDGE ERROR

Regarding your recent inquiry about a cartridge error message associated with your HP 88 refilled ink cartridge(s). The cartridge probably has a defective chip which was mis-programmed during the refill process. You should bring the cartridge back to the Costco Photo Department and have it reprogrammed. Also, have it weighed at the Costco Photo Department to ensure that it was properly filled.

OTHER CARTRIDGE RECOGNITION FAILURES/CAUSES: NOTE: --assumes chip has already been replaced---

The failure to recognize an ink cartridge(s) could either be a possible Cartridge connectivity, PRINTHEAD\* connectivity or an end-of-life PRINTHEAD issue. We suggest you remove all the ink cartridges and thoroughly clean BOTH PRINTHEADS manually along with cartridge chip contact surfaces (located on bottom-rear side of each ink cartridge). Clean all electrical contacts, including those inside the printer which mate to the PRINTHEADS. Reinstall both PRINTHEADS and cartridges and retest. You may refer to HP's 'manual' cleaning procedures here:

http://h20000.www2.hp.com/bizsupport/TechSupport/Document.jsp?lang=en&cc=us&taskId=125&pro dSeriesId=2511747&prodTypeId=18972&objectID=c00844045

Ensure an "expired ink cartridge" alert state is not causing the issue, refer to this page on how to check & bypass: <a href="http://inkjet411.com/?page\_id=1384">http://inkjet411.com/?page\_id=1384</a>

---- If you observe an "Expired xxxx ink cartridge" alert or message, this error may be bypassed by performing the following:

- a. Press and HOLD the Power button.
- b. Press Resume button 3 times.
- c. Release the Power button

If, following HP 88 cartridge re-programming and complete cartridge/printhead/printer manual electrical contact cleaning, the cartridge alert message(s) continue, then you may have a damaged PRINTHEAD\* (there are two printheads inside the printer) which may require re-priming or replacement depending on problem symptoms.

\* The HP 88 ink-series printer models have two electronic PRINTHEADS (each of these electronic devices are responsible for pulling ink from the ink cartridges and then firing the ink droplets onto the paper) – both PRINTHEADS will eventually fail depending on printed content, printer duty cycle (i.e. typically rated for ~41, 500 printed pages depending on image content & frequency of printing). The average inkjet printer can typically be refilled with ~20+ complete sets of ink cartridges over the life of the printhead, after which, either the Yellow/Black and/or Cyan/Magenta printhead may need to be replaced (available at HP.com). Refer to video on how the HP PRINTHEAD functions: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

When the PRINTHEAD electronically fails typically the printer will provide an alert message when this happens, but if a printhead has suffered a deprime (i.e. loss of ink/pressure which results in no printing of color), it is possible to recover the system using a 3<sup>rd</sup> party PRINTHEAD priming tool, such as this one: <a href="http://www.inkowl.com/?p=product&product=5035">http://www.inkowl.com/?p=product&product=5035</a>

Please let us know if you have any further questions or cannot reach resolution. -Thank you

Regarding your recent inquiry about an HP 88 black ink cartridge error message ("MISSING OR DAMAGED") associated with your HP 88 refilled ink cartridge, this is not the typical error message we normally see when a refilled ink cartridge that has a correctly installed and properly programmed smart chip. We suggest you verify that there is no ink residue on the surface of the smart chip (at rear/lower side of ink cartridge) – refer to 4<sup>th</sup> picture at the following link: <u>http://inkjet411.com/?page\_id=973</u> It is also possible that either of the PRINTHEADs may have poor connectivity with the rear electrical pad/interface. It is suggested that you attempt to re-seat (i.e. remove and re-install) the Yellow/Black printhead assembly. HP.com instructions can be found here.

http://h10025.www1.hp.com/ewfrf/wc/document?cc=us&lc=en&dlc=en&docname=c01289505

The inclusion of the statement "intended for single use only" is standard manufacturer language since HP does not refill or allow customers to reuse their tanks. The ink cartridge/tank is just a plastic body with an internal foil bag and ink port...nothing can really go bad. As long as the chip is re-programmed (or replaced) following each use you can use it over and over again. In addition, with the HP 88s, you can use the ink within a year following refill so there is no rush.

If you continue to see Magenta problems/errors following the chip re-programming, then this could be a Cyan/Magenta PRINTHEAD issue (this is an electronic assembly which performs the actual 'firing' of drops onto the page). However, in most of these cases you would get either a PRINTHEAD failed/error type message or you would observe unrecoverable poor print quality. How the Printhead Works: http://inkjet411.com/?page\_id=2054

HP OFFICEJET PRO Kxxx/Lxxx (HP 88s) – POOR PRINT QUALITY / IMPROPER OR MISSING COLORS Regarding your recent inquiry about the HP88 poor print quality problems ("pink color output"), it sounds like the Cyan/Magenta OR Yellow/Black PRINTHEAD is causing the problem or there are air bubbles in the ink lines/PRINTHEAD assembly. We suggest you perform the following:

1. Activate a 'Clean Printhead' routine, 2 times, from your TOOLS/MAINTENANCE menu, to see if this corrects the problem. This action will perform a printhead prime and try to re-establish proper internal pressures.

2. To verify the lines are clear and working correctly, print the "INK RECOVERY TEST PRINT" from our Test Prints page: <u>http://inkjet411.com/?page\_id=146</u>

3. Run the self-test print (under maintenance/tools menu), this will verify nozzle performance and that each color is firing a solid band of color (i.e. you should not see any bands or missing lines in the pattern). This is also a good test to help isolate which color (or portion of the electronic PRINTHEAD\*) may be causing the issue.

4. It is also possible that either of the PRINTHEADs may have poor connectivity with the rear electrical pad/interface. It is suggested that you attempt to re-seat (i.e. remove and re-install) either the Cyan/Magenta or Yellow/Balck PRINTHEAD assembly. HP.com instructions can be found here. <a href="http://h10025.www1.hp.com/ewfrf/wc/document?cc=us&lc=en&dl

5. This could be a PRINTHEAD 'firing' or electronic failure issue (...electronic assembly which performs the actual 'firing' of drops onto the page)\*. However, in most of these cases you would get either a 'Printhead failed', 'Printhead missing, or 'Replace Printhead' alert message or you would observe

unrecoverable poor/severe print quality. Refer to video to see how the Printhead works: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

6. Check the 'WARRANTY ENDS' date on the PRINTHEADS\*. If either PRINTHEAD is expired then it may need to be replaced: For more information on this please visit:

http://h30434.www3.hp.com/t5/Ink-Toner-Cartridge-Printhead-Issues/Significance-of-quot-Warrantyends-quot-date-on-Officejet/td-p/1081607

\* The HP 88 ink-series printer models have two electronic PRINTHEADS (each of these electronic devices are responsible for pulling ink from the ink cartridges and then firing the ink droplets onto the paper) – both PRINTHEADS will eventually fail depending on printed content, printer duty cycle (i.e. typically rated for ~41, 500 printed pages depending on image content & frequency of printing). The average inkjet printer can typically be refilled with ~20+ complete sets of ink cartridges over the life of the printhead, after which, either the Yellow/Black and/or Cyan/Magenta printhead may need to be replaced (available at HP.com). Refer to video on how the HP PRINTHEAD functions: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

When the PRINTHEAD electronically fails typically the printer will provide an alert message when this happens, but if a printhead has suffered a deprime (i.e. loss of ink/pressure which results in no printing of color), it is possible to recover the system using a 3rd party PRINTHEAD priming tool, such as this one: <a href="http://www.inkowl.com/?p=product&product=5035">http://www.inkowl.com/?p=product&product=5035</a>

A PRINTHEAD "missing" / "damaged" / "problem" error has nothing to do with the HP88 refilled ink cartridges since these are just plastic tanks which hold ink - all ink formulations have been fully tested for compatibility with all HP printer systems. The timing of a printer/printhead failure is merely coincidental with respect to the use of refilled ink cartridges. Each PRINTHEAD is a complex electronic ink-firing assembly which sits directly behind the ink cartridges during the printer idle state; the cartridges plug into and feed ink to both the Yellow/Black PRINTHEAD and Cyan/Magenta PRINTHEAD.

7. If the above resolutions do not correct the issue, then replacement of the suspect PRINTHEAD may likely be required. As the refilled ink cartridge has nothing to do with the failure of the electronic PRINTHEAD assembly, printhead replacement cost is not covered. All printheads will eventually fail depending on printed content, usage and time via natural electronics degradation. The Inkjet411 test labs have never observed a correlation between a refilled HP88 cartridge and the failure of the HP88 PRINTHEAD assembly. We trust you clearly understand our position with respect to this type of microelectronics failure of a PRINTHEAD, should this turn out to be the root cause of failure.

8. If problem persists after following all suggestions above, then we suggest you discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase). We apologize for the inconvenience this may have caused you.

Please let us know if you have any further questions on the technical information provided. -Thank you HP OFFICEJET PRO 8500A (HP 940s) – "NO INK" / "MISSING OR DAMAGED" PRINTER ERROR Regarding your recent inquiry about the HP 940 ink cartridge error ("MISSING OR DAMAGED") which is preventing printing....let's run thru a quick checklist to ensure we cover everything: <u>http://inkjet411.com/?page\_id=1457</u>

# CLEARING AN INK ALERT/ERROR CONDITION:

1) Press and HOLD the printer's 'Reset/Resume' button for five (5) seconds...this will reset the HP 940 cartridge's smart chip, and may correct the current issue (primarily applies to 8500 models only).

2) If you received an "Unauthorized ink", "non-HP ink", "counterfeit ink" or similar message, you can simply ignore/dismiss these messages by pressing 'OK' once for each cartridge, so that the printer resumes its normal operation. Receiving these alert messages are COMPLETELY NORMAL when using refilled ink cartridges. Refilling the ink cartridges does not include reprogramming of the ink cartridges, so this is not a factor - see video: <u>http://inkjet411.com/?page\_id=2008</u>

3) If the error continues, then we suggest you remove the refilled ink cartridge and inspect the smart chip contact surface (located in bottom/rear portion of cartridge). If there is any ink on the surface of the chip please clean thoroughly using isopropyl alcohol dampened lint-free towel, or similar: <a href="http://inkjet411.com/?page\_id=1457">http://inkjet411.com/?page\_id=1457</a>

4) Open and close the cartridge access door - in the past we have observed firmware/communication issues which were caused by the interlocked cartridge access door.

# 5) Reset the printer (FULL-RESET PROCEDURE):

- a. Turn the printer off with the front panel button
- b. Disconnect the power cord from the product, and then wait 20 seconds.
- c. Press and hold # and 9 while reconnecting the power cord.

d. Wait 10 seconds, and then release both buttons. The product resets and prints an alignment page.

6) Ensure an "expired ink cartridge" alert state is not causing the issue, refer to this page on how to check & bypass: <u>http://inkjet411.com/?page\_id=1457</u>

---- If you observe an "Expired xxxx ink cartridge" alert or message, this error may be bypassed by performing the following:

- a. Press and HOLD the Power button.
- b. Press Resume button 3 times.
- c. Release the Power button

7) Ensure the cartridge actually has enough ink inside (there is an ink empty sensor in the base of the ink cartridge). While ink tracking is not available when using refilled ink cartridges, when the cartridge gets down to less than ~5% ink remaining, an 'out of ink' error condition will be communicated. If necessary, return to your refiller and have them weigh it to ensure it was properly refilled.

8) For more severe cartridge error messages which prevent printing [i.e. "The Following Printhead Appears to be Missing or Damaged' or 'The Following Printhead has a Problem'] are usually caused by failed micro-electronics within either of the PRINTHEAD assemblies (...which has nothing to do with the HP 940 refilled ink cartridges since these are just plastic tanks that hold ink). The printhead assembly is a separate electronic unit in which the cartridges plug into and feed ink to. Review HP.com PRINTHEAD removal/replacement procedures to see if this is causing the issue or refer to the bottom half of this page - you may need to re-seat both PRINTHEAD(S) - click here for instructions: <a href="http://inkjet411.com/?page\_id=1457">http://inkjet411.com/?page\_id=1457</a>

### How the Printhead Works: http://inkjet411.com/?page\_id=2054

9) If this does not remedy the problem, then you may have a defective PRINTHEAD in the printer (worst case scenario), unrelated to the refilled cartridges. Refer to HP.com for troubleshooting support. It is first suggested you remove either the Cyan/Magenta or Yellow/Black PRINTHEAD (depending on which one may be causing the error condition) and thoroughly clean the electrical contacts. Reinstall and test. In rare cases, re-priming or replacement of the PRINTHEAD will eventually be required.

NOTE 1: HP does not allow an automatic reset of the HP 940 electronic chip on the cartridge after a refill, so the ink level indicator is sending a false message that the ink level is low. Your cartridge is not low on ink, and nothing is wrong with your printer or cartridges. The ink level indicator usually cannot be manually re-set, so the ink level indicator is often not usable. However, losing this feature is not necessarily significant, because the ink level indicator usually has substantial usable ink remaining when it shows "low on ink". If you observe "Unauthorized ink", "non-HP ink", "counterfeit ink" or similar messages, you may ignore/dismiss this message by pressing 'OK' once for each cartridge, so that the printer resumes its normal operation.

NOTE 2: The HP 940 printer models have two electronic PRINTHEADS (each of these electronic devices are responsible for pulling ink from the ink cartridges and then firing the ink droplets onto the paper) – both PRINTHEADS will eventually fail depending on printed content, printer duty cycle (i.e. typically rated for ~30,000 printed pages depending on image content & frequency of printing). The average inkjet printer can typically be refilled with ~8+ complete sets of ink cartridges over the life of the printhead, after which, either the Yellow/Black and/or Cyan/Magenta printhead may need to be replaced (available at HP.com). Refer to video on how the HP PRINTHEAD functions: <a href="http://inkjet411.com/?page\_id=2054">http://inkjet411.com/?page\_id=2054</a>

NOTE 3: When the PRINTHEAD electronically fails typically the printer will provide an alert message when this happens, but if a printhead has suffered a deprime (i.e. loss of ink/pressure which results in no printing of color), it is possible to recover the system using a 3<sup>rd</sup> party PRINTHEAD priming tool, such as this one: <a href="http://www.inkowl.com/?p=product&product=5035">http://www.inkowl.com/?p=product&product=5035</a>

Please let us know if the problem persists.

### -Thank you

HP OFFICEJET PRO 8500/8500A (HP 940s) – CONFUSION OVER INK LOW AND CHIP REPLACEMENT Regarding your recent inquiry about the HP 940 cartridge low ink message, HP does not allow an automatic reset of the electronic chip on the cartridge after a refill, so the ink level indicator is sending a false message that the ink level is low. Your cartridge is not low on ink, and nothing is wrong with your printer or cartridges.

Your printer/computer will display "ink alert" message(s). Press 'OK' to dismiss this prompt. Additional alert messages, such as "non-genuine cartridge" or "fraud" may also be displayed. Press 'OK' or 'Dismiss' to bypass these prompts.

However, if you observe strange printer behavior or encounter 'unrecognized cartridge' or 'expired ink' alert messages, perform the following steps:

1) Press and HOLD the printer's 'Reset' button for five (5) seconds...this will reset the HP 940 cartridge's smart chip, and may correct the current issue.

2) For expired ink/cartridge error messages, please refer to the following information on how to bypass: http://inkjet411.com/?page\_id=1457

---- If you observe an "Expired xxxx ink cartridge" alert or message, this error may be bypassed by performing the following:

- a. Press and HOLD the Power button.
- b. Press Resume button 3 times.
- c. Release the Power button

**NOTE:** The only way to fully reset the ink level monitoring is to replace the chip, but Costco photo center personnel do not do this as it is not vital/required to support HP OJ PRO 8500 (or 8500A) printer operations. Since it is not essential to supporting printing operations, chip replacement is not included.

Now, since the ink level indicator is not re-set, it is not 'feature usable', meaning that you just need to ignore incoming 'ink low' alert messages as they appear. Continue to print until you notice a missing color, then replace that color (please see attached warning as a reminder).

However, losing this feature is not necessarily significant, because the ink level indicator usually has substantial usable ink remaining when it shows "low on ink". Therefore, the warning has limited value, because users who prematurely replace their cartridges when they see the "low ink" message are wasting a lot of residual ink. In order to use as much available ink as possible, many users (not only those who refill their cartridges, but many who have not yet tried refilling) always ignore the ink level indicator "low" warning, and wait to replace/refill their cartridge until immediately after seeing ink begin to fade on their printouts.

Many customers who disregard the low ink indicator keep a spare set of cartridges so that their printing productivity is not disrupted when the cartridge runs out of ink. If the cartridge completely runs out of ink and continues to be used when it is dry, this could damage the cartridge, so users should promptly refill/replace their cartridge when the ink begins to fade. This fading process is gradual, so that you will have sufficient time to refill/replace the cartridge before the risk of empty cartridge printing. In summary, most refill customers agree that the huge savings of refilling is much greater than the potential loss of the low ink indicator feature.

For more information on HP 940 cartridge 'Quick/Usage Tips', please refer to the following information on Inkjet411: <u>http://inkjet411.com/?page\_id=1423</u>

NOTE 1: The HP 940 printer models have two electronic PRINTHEADS (each of these electronic devices are responsible for pulling ink from the ink cartridges and then firing the ink droplets onto the paper) – both PRINTHEADS will eventually fail depending on printed content, printer duty cycle (i.e. typically rated for 30, 000+ printed pages depending on image content & frequency of printing). The average inkjet printer can typically be refilled with ~20+ complete sets of ink cartridges over the life of the printhead (warranted for only 650ml of ink however, or approximately 9 cartridge refills), after which, either the Yellow/Black and/or Cyan/Magenta printhead may need to be replaced (available at HP.com). Refer to video on how the HP PRINTHEAD functions: <u>http://inkjet411.com/?page\_id=2054</u>

When the PRINTHEAD electronically fails typically the printer will provide an alert message when this happens, but if a printhead has suffered a deprime (i.e. loss of ink/pressure which results in no printing of color), it is possible to recover the system using a 3<sup>rd</sup> party PRINTHEAD priming tool, such as this one: <a href="http://www.inkowl.com/?p=product&product=5035">http://www.inkowl.com/?p=product&product=5035</a>

We apologize if this HP 8500/8500A 'workflow caveat' caused you any confusion. -Thank you

HP OFFICEJET PRO 8500/8500A (HP 940s) – PRINTHEAD FAILURE MESSAGE Regarding your inquiry over HP940 refilled ink cartridges and the reported printer error message on your HP OJPRO 8500 printer ( "The Following Printhead Appears to be Missing or Damaged" / "The Following Printhead has a Problem"), please note this type of problem is usually severe in nature and is typically caused by failed micro-electronics within either of the two (2) PRINTHEAD assemblies.

A PRINTHEAD "missing" / "damaged" / "problem" error has nothing to do with the HP 940 refilled ink cartridges since these are just plastic tanks which hold ink - all ink formulations have been fully tested for compatibility with all HP printer systems. It has been our observation that HP OJPRO 8500/8500A printhead life does vary widely from printer to printer (anywhere from 1000 pages to 20,000+ pages!!). The timing of a printer/printhead failure is merely coincidental with with respect to the use of refilled ink cartridges. Each PRINTHEAD is a complex electronic ink-firing assembly which sits directly behind the ink cartridges during the printer idle state; the cartridges plug into and feed ink to both the Yellow/Black PRINTHEAD and Cyan/Magenta PRINTHEAD.\*

A. To help resolve the current printer alert state, we suggest you refer to the lower half of the following Inkjet411 support page. Remove all four (4) ink cartridges and both PRINTHEADs from the printer. Thoroughly clean the electrical contacts on one (or both) PRINTHEAD assemblies. Reinstall PRINTHEAD(s) and ink cartridges, and retest. <u>http://inkjet411.com/?page\_id=1457</u>

**NOTE:** Here are HP's steps for resolving, removing/replacing and cleaning the PRINTHEADs: <u>http://h10025.www1.hp.com/ewfrf/wc/document?cc=us&lc=en&docname=c01817398</u>

- B. Check the 'WARRANTY ENDS' date on the PRINTHEADS\*. If either are expired then they may need to be replaced: For more information on this please visit: <u>http://h30434.www3.hp.com/t5/Ink-Toner-Cartridge-Printhead-Issues/Significance-of-quot-</u>Warranty-ends-quot-date-on-Officejet/td-p/1081607
- **C.** If the above resolutions do not correct the issue, then replacement of the PRINTHEAD will likely be required. As the refilled ink cartridge has nothing to do with the failure of the electronic PRINTHEAD assembly, printhead replacement is not covered. All printheads will eventually fail depending on printed content, usage and time via natural electronics degradation. The Inkjet411 test labs have never observed a correlation between a refilled HP940 cartridge and the failure of the HP940 PRINTHEAD assembly. We trust you clearly understand our position with respect to this type of micro-electronics failure of a PRINTHEAD.\*
- **D.** We suggest you discuss the possibility of a refund with your local Costco (for the refilled cartridge purchase).

**NOTE:** If you DO NOT observe a PRINTHEAD alert or error message, but instead observe substandard print quality (or completely missing colors) and suspect the PRINTHEAD may be clogged, then you may want to consider flushing the PRINTHEAD using an advanced 3<sup>rd</sup> party procedure: <u>http://www.youtube.com/watch?v=y6YjL7mff5c&list=TLzK8FY3Lh\_iA</u>

\*The HP940 ink-series printer models have two removable/replaceable electronic PRINTHEADS (each of these electronic devices are responsible for pulling ink from the ink cartridges and then firing the ink droplets onto the paper) – both PRINTHEADS will eventually fail in time depending on printed content, printer duty cycle (i.e. typically rated for ~20,000+ printed pages depending on image content & frequency of printing). While some printheads may last 15,000+ pages others may only last 1000 pages, actual results will vary.

The printhead will eventually fail in time due to an internal micro-electronics failure, due to the following leading factors: natural electronic components degradation from liquids corrosion over time, printer duty cycle (i.e. # pages printed per month), printing frequency (i.e. time between each print job), print mode (i.e. draft vs. normal) and content printed (i.e. photos vs plain pages) and color mode (black

and white only vs. color/greyscale printing). Paper types used (i.e. plain paper, photo papers & matte/heavy bond papers) and paper edge curl (due to age in printer or low relative humidity) can also quickly lead to premature printhead failures due to physical 'head strikes' of the paper edges making repeated contact with the printhead nozzle plate.

The average inkjet printer can typically be refilled with ~8 to 20 complete sets of ink cartridges over the life of the printhead, after which, either the Yellow/Black and/or Cyan/Magenta printhead will eventually need to be replaced (available at HP.com). Based on HP.com's customer support forum, some HP940 PRINTHEADS have reportedly only functioned for 1100-2000 printed pages (with HP OEM inks), so reliability results do appear to vary widely.

Please refer to video on how the HP PRINTHEAD functions: <u>http://inkjet411.com/?page\_id=2054</u>

We suggest you contact HP for additional troubleshooting help. Replacement PRINTHEAD assemblies may be ordered from HP.com. -Thank you

\*Typically the printhead should not reach it's end-of-life until after a minimum of 8 or more complete sets of cartridge changes; officejet models typically have a higher print page throughput average, but this is not always the case. While some printheads may last 15,000+ pages others may only last 1000 pages, actual results will vary. The printhead will eventually fail in time due to an internal micro-electronics failure, due to the following leading factors: general customer print usage and printer care, printer duty cycle (i.e. # pages printed per month), printing frequency (i.e. time between each print job), print mode (i.e. draft vs. normal) and content printed (i.e. photos vs plain pages) and color mode (black and white only vs. color/greyscale printing). Paper types used (i.e. plain paper, photo papers & matte/heavy bond papers) and paper edge curl (due to age in printer or low relative humidity) can also quickly lead to premature printhead failures due to physical 'head strikes' of the paper edges making repeated contact with the printhead nozzle plate.

#### HP 932/933 CARTRIDGE SWAP / ACTIVATION & LOW INK WARNINGS

Regarding your HP933 ink cartridge refill inquiry and cartridge error "Depleted cartridges must be replaced"....you should have been advised that each color must be activated by inserting the spare into the printer for at least 30 seconds (i.e. you MUST have a complete set of spare cartridges to activate a full set of refilled ink cartridges - these can be empties, starters, or another set of tanks)...

Regarding your HP932/933 ink cartridge inquiry over 'low ink' messages, please note that "Depleted", "Refilled", and similar "Ink out" alerts are COMPLETELY NORMAL for HP 932/933 ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. Unfortunately you cannot bypass or correct these conditions as the embedded smart chips (at bottom of each ink cartridge) were not replaced during the refill process; there would be additional costs associated with chip replacement)...

Please watch this video which explains this further: http://inkjet411.com/?page\_id=1995

You may use either the HP 932/933 Setup Cartridges or the regular HP 932/933 [HP 932XL/HP 933XL] cartridges for activating the refilled 932/933 cartridges - you may cycle between each set or use one set thereafter. See our FAQs document here for complete ink cartridge usage information: <a href="http://inkjet411.com/?page\_id=913">http://inkjet411.com/?page\_id=913</a>

3 important usage caveats to be aware of:

1) Ensure that the refilled cartridges are not the ones you just took out of the printer - as long as you install one of the previously used (non-refilled ink cartridges, full or empty, doesn't matter) into the printer first, it immediately recognize this as a different cartridge. After ~30 seconds you can then remove the spare and install the refilled cartridge, it should then be activated & permitted for use.

2) Ensure you bypass the anticipated printer 'alerts' (i.e. "Counterfeit" and "Non-Genuine Ink") in the prescribed manner when the refilled cartridge(s) are first installed. Click here for more information on this: <a href="http://inkjet411.com/?page\_id=913">http://inkjet411.com/?page\_id=913</a>

>> IMPORTANT - Press 'No' when prompted with the following question: "Was this cartridge sold to you as a new genuine HP-branded cartridge that has not been previously used?

3) "Depleted", "Refilled", and similar "Ink out" alerts are COMPLETELY NORMAL for HP 932/933 ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. Spare cartridge refills have no expiration date.

If not already performed, we suggest you watch both of the following support videos: <a href="http://inkjet411.com/?page\_id=1991">http://inkjet411.com/?page\_id=1991</a>

NOTE: Attempting to refill ink cartridges before the 'ink out/empty' alert condition hits will actually work one time. Since the printer monitors ink usage/drop counts, it will display the 'Ink Sensor Warning' messages when it 'predicts' the cartridge should be out of ink, but these messages may be ignored and you can continue printing. Eventually the 'Cartridge(s) Depleted' alert message will be displayed when the cartridge truly is out of ink. After this the printer will not know what the level of the ink is. Watch this video which shows both of these alert messages: <u>http://inkjet411.com/?page\_id=1999</u>

Please let us know if you have any other questions. -Thank you
#### HP 950/951 CARTRIDGE SWAP / ACTIVATION & LOW INK WARNINGS

Regarding your HP950/951 ink cartridge refill inquiry and cartridge error "Depleted cartridges must be replaced"....you should have been advised that each color must be activated by inserting the spare into the printer for at least 30 seconds (i.e. you MUST have a complete set of spare cartridges to activate a full set of refilled ink cartridges - these can be empties, starters, or another set of tanks)...

#### Please watch this video which explains this further: <u>http://inkjet411.com/?page\_id=913</u>

**NOTE:** You can use either the HP 950/951 Setup Cartridges or the regular HP 950/951 [950XL/951XL] cartridges for activating the refilled 950/951 cartridges - you may cycle between each set or use one set thereafter. See our FAQs document here for complete usage information: http://inkjet411.com/?page\_id=1999

3 important usage caveats to be aware of:

1) Ensure that the refilled cartridges are not the ones you just took out of the printer - as long as you install one of the previously used (non-refilled ink cartridges, full or empty, doesn't matter) into the printer first, it immediately recognize this as a different cartridge. After ~30 seconds you can then remove the spare and install the refilled cartridge, it should then be activated & permitted for use.

2) Ensure you bypass the anticipated printer 'alerts' (i.e. "Counterfeit" and "Non-Genuine Ink") in the prescribed manner when the refilled cartridge(s) are first installed. Click here for more information on this: <u>http://inkjet411.com/?page\_id=913</u>

>> IMPORTANT - Press 'No' when prompted with the following question: "Was this cartridge sold to you as a new genuine HP-branded cartridge that has not been previously used?

3) "Depleted", "Refilled", and similar "Ink out" alerts are COMPLETELY NORMAL for HP 950/951 ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. Spare cartridge refills have no expiration date.

We suggest you watch the following videos: http://inkjet411.com/?page\_id=1991

NOTE: Attempting to refill ink cartridges before the 'ink out/empty' alert condition hits will actually work one time. Since the printer monitors ink usage/drop counts, it will display the 'Ink Sensor Warning' messages when it 'predicts' the cartridge should be out of ink, but these messages may be ignored and you can continue printing. Eventually the 'Cartridge(s) Depleted' alert message will be displayed when the cartridge truly is out of ink. After this the printer will not know what the level of the ink is. Watch this video which shows both of these alert messages: <u>http://inkjet411.com/?page\_id=1999</u>

Please let us know if you have any other questions.

-Thank you

HP 932/933 & 950/951: WHY 2<sup>ND</sup> SET OF CARTRIDGES MUST BE PURCHASED/OBTAINED Regarding your recent inquiry about the need to obtain a 2nd set of tanks to enable HP 950/951 refilled cartridges to work in your HP OJPRO 8600 printer, unfortunately, HP rejects ("locks-out") an empty cartridge that is removed from the printer (newer HP model series), refilled, and immediately put back in the printer. Since Costco does not replace the smart chip (at base of cartridge), the printer will recognize the previously installed cartridge as such and block it from working in the printer. But if a same color spare cartridge is put in the printer before inserting the refill (for ~30 seconds), then the refill works normally\*.

Besides, you would normally be purchasing new cartridges repeatedly if you did not decide to refill them. But with refilling you only buy once more to get the second set. Then these rotated cartridge sets can be inexpensively refilled indefinitely, never buying a full price new cartridge again. Please refer to the refill tips video(s) to familiarize yourself with the installation and usage when using refilled HP ink tanks: <a href="http://inkjet411.com/?page\_id=1991">http://inkjet411.com/?page\_id=1991</a>

\*A spare cartridge can be a setup, new, empty or refilled ink cartridge of the same type/color. Spare cartridge refills have no expiration date.

Each color must be activated by inserting the spare into the printer for at least 30 seconds (i.e. you MUST have a complete set of spare cartridges to activate a full set of refilled ink cartridges - these can be empties, starters, or another set of tanks)...

Please watch this video which explains this further: <a href="http://inkjet411.com/?page\_id=913">http://inkjet411.com/?page\_id=913</a>

**NOTE:** You can use either the Setup Cartridges or the regular cartridges for activating the refilled cartridges - you may cycle between each set or use one set thereafter. See our FAQs document here for complete usage information:

http://inkjet411.com/?page\_id=1999

3 important refill cartridge usage tips:

1) Ensure that the refilled cartridges are not the ones you just took out of the printer - as long as you install one of the previously used (non-refilled ink cartridges, full or empty, doesn't matter) into the printer first, it immediately recognize this as a different cartridge. After ~30 seconds you can then remove the spare and install the refilled cartridge, it should then be activated & permitted for use.

2) Ensure you bypass the anticipated printer 'alerts' (i.e. "Counterfeit" and "Non-Genuine Ink") in the prescribed manner when the refilled cartridge(s) are first installed. Click here for more information on this: <u>http://inkjet411.com/?page\_id=913</u>

3) "Depleted", "Refilled", and similar "Ink out" alerts are COMPLETELY NORMAL for refilled ink cartridges which have been refilled! While at first this may be an unusual workflow, it does allow print operations to proceed. Spare cartridge refills have no expiration date.

Cartridge Swap Requirement Information Disclosures:

- The ink refilling center attaches a 'yellow sticker' to each cartridge advising the need for a spare cartridge to enable refilled ink cartridge (i.e. "To Activate Refill, Spare Cartridges Needed").
- 2. The HP932/933/950/951 ink refill information card should have been included with your purchase.

NOTE 1: Accessing the printer's hidden 'support' menu and then going into the 'system configuration' menu to the 'ink initialization' menu and clearing it, it is possible to bypass the cartridge swap requirement. WARNING: When the ink status is cleared it treats the cartridges like brand new first time set up cartridges which goes through a lengthy printhead/cartridge priming sequence where the printer pulls ~3 grams of ink per cartridge, which is roughly 50% of total ink volume (i.e. standard size refilled cartridge). If you wish to proceed, you may refer to the HP Diagnostics file for complete service menu access instructions for your printer model: <a href="http://inkjet411.com/?page\_id=1813">http://inkjet411.com/?page\_id=1813</a>

NOTE 2: Attempting to refill ink cartridges before the 'ink out/empty' alert condition hits will actually work one time. Since the printer monitors ink usage/drop counts, it will display the 'Ink Sensor Warning' messages when it 'predicts' the cartridge should be out of ink, but these messages may be ignored and you can continue printing. Eventually the 'Cartridge(s) Depleted' alert message will be displayed when the cartridge truly is out of ink. After this the printer will not know what the level of the ink is. Watch this video which shows both of these alert messages: <u>http://inkjet411.com/?page\_id=1999</u>

Please let us know if you have any other questions. -Thank you

Ink

1) Press the 'Return' button at lower left of touchscreen a total of 4 times (please note the Return button will NOT be lit).



2) At 'support' menu, navigate to the 'system configuration' menu.

3) Navigate to the 'ink initialization' menu.

4) At Ink Initialization menu, select Set, Clear or Reset (varies by printer model)

**WARNING:** This will bypass the cartridge swap requirement. When the ink status is cleared it treats the cartridges like brand new first time set up cartridges which goes through a lengthy printhead/cartridge priming sequence where the printer pulls ~3 grams of ink per cartridge, which is roughly 50% of total ink volume (i.e. standard size refilled cartridge).

See HP Diagnostics file for complete service menu access instructions for your printer model: <u>http://inkjet411.com/?page\_id=1813</u>

#### HP 932/933 & 950/951: "LOW INK" / "INK CARTRIDGES DEPLETED" MESSAGES

Regarding your recent inquiry about low ink/depleted HP932/950 black ink cartridge error message(s), let's ensure that all steps have been completed properly when using refilled tanks. First and foremost, please understand that in order to use a refilled ink cartridge you need to first install another HP932 black ink cartridge in the printer for approx. 30 seconds (i.e. i.e. spare set must be available when using refilled ink cartridges), then you can install the newly refilled cartridge and it will be recognized by the printer. You can then bypass the various 'non-HP', 'counterfeit' alert messages - eventually you should be permitted to print using the black ink cartridge.

## Please refer to our FAQ document which covers everything: <u>http://inkjet411.retailinkjet.com/wp-</u> content/uploads/2013/05/HP-932-933-950-951-Spare-Cartridge-Swap FAQs v4.pdf

NOTE: "Depleted", "Refilled", and similar "Ink Low" alerts should be expected and are COMPLETELY NORMAL for ink cartridges which have been refilled! In addition, the ink level tracking feature will NOT be available - your ink cartridges are indeed full providing you just returned from the refill store. While at first this may be an unusual workflow, it does allow print operations to proceed. We suggest you watch the following videos so you completely understand what to expect when using refilled ink cartridges: <u>http://inkjet411.com/?page\_id=913</u>

#### **KEY REMINDERS:**

1) Ensure that the refilled cartridges are not the ones you just took out of the printer - as long as you install one of the previously used (non-refilled ink cartridges, full or empty, doesn't matter) into the printer first for approx. 30 seconds, it immediately recognize this as a different cartridge. After ~30 seconds you can then remove the spare and install the refilled cartridge, it should then be activated & permitted for use. If the ink cartridges are not rotated in this manner then the "Ink Cartridge Depleted" alert message will be encountered. Refer to page 3 in our FAQ document:

http://inkjet411.retailinkjet.com/wp-content/uploads/2013/05/HP-932-933-950-951-Spare-Cartridge-Swap FAQs v4.pdf 2) The "Ink Cartridge Depleted" message will be observed, and the printer will cease print operations, when an ink cartridge 'really is' out of ink. HP has small sensors which look into the bottom of the ink tank to ensure ink is present. Typically you will receive 'Low Ink Warning' messages just before this occurs. Please refer to page 6 in our FAQ support document: <u>http://inkjet411.retailinkjet.com/wp-content/uploads/2013/05/HP-932-933-950-951-Spare-Cartridge-Swap\_FAQs\_v4.pdf</u>

3) Ensure you bypass the anticipated printer 'alerts' (i.e. "Counterfeit" and "Non-Genuine Ink") in the prescribed manner when the refilled cartridge(s) are first installed. Click here for more information on this: <u>http://inkjet411.com/?page\_id=913</u>

>> IMPORTANT - Press 'No' when prompted with the following question: "Was this cartridge sold to you as a new genuine HP-branded cartridge that has not been previously used? If you accidentally select yes, then you will need to bypass a few additional alert message screen...not a big deal.

4) You may use either the HP 950/951 Setup Cartridges or the regular HP 950/951 [950XL/951XL] cartridges for activating the refilled 950/951 cartridges - you may cycle between each set or use one set thereafter. Spare cartridge refills have no expiration date.

See our FAQs document here for complete usage information: <u>http://inkjet411.com/?page\_id=1999</u>

4) You may use either the HP 932/933 Setup Cartridges or the regular HP 932/933 [932XL/933XL] cartridges for activating the refilled 932/933 cartridges - you may cycle between each set or use one set thereafter. Spare cartridge refills have no expiration date.

See our FAQs document here for complete usage information: http://inkjet411.com/?page\_id=1999

5) If you bring in an ink cartridge for 'topping off', in most cases, the refill store operator will weigh the ink cartridge to ensure it is not 'over' the acceptable weight limit - it is possible they will deny the refill request if considered too full (i.e. >25%-40% ink remaining). As the refill process typically involves a complete 'ink evacuation', cartridges with too much ink can be problematic for a satisfactory refill.

If the "Ink Cartridges Depleted" message persists then the ink cartridge may 'really' be out of ink - return to Costco and have them weigh and check as necessary.

NOTE: Attempting to refill ink cartridges before the 'ink out/empty' alert condition hits will actually work one time. Since the printer monitors ink usage/drop counts, it will display the 'Ink Sensor Warning' messages when it 'predicts' the cartridge should be out of ink, but these messages may be ignored and you can continue printing. Eventually the 'Cartridge(s) Depleted' alert message will be displayed when the cartridge truly is out of ink. After this the printer will not know what the level of the ink is. Watch this video which shows both of these alert messages: <u>http://inkjet411.com/?page\_id=1999</u>

Please let us know if you have any other questions. -Thank you

#### HP 932/933 & 950/951: "Black Cartridge Damaged" / "Ink Cartridge Failure"

Regarding your recent inquiry about the HP950 "Black Cartridge Damaged" / "Ink Cartridge Failure" alert message, this condition is most likely being caused by poor contact (i.e. electrical connectivity) between the ink cartridge's 'smart chip' and the carriage assembly (which the ink cartridge plugs into). Typically a 'Red X' will also be displayed on printer control panel LCD or Window's pop-up screen when this condition is present.

It is suggested you remove the respective ink cartridge from the printer and thoroughly clean the cartridge's smart chip electrical surface using an isopropyl dampened lint-free towel. Ensure no ink residue is present on surface of the chip. Refer to page 7 of the FAQs (Frequently Asked Questions) document at either of the links provided below:

#### http://inkjet411.com/?page\_id=1991

# http://inkjet411.retailinkjet.com/wp-content/uploads/2013/05/HP-932-933-950-951-Spare-Cartridge-Swap\_FAQs\_v4.pdf

Following cartridge 'smart chip' cleaning, please reinstall the ink cartridge and retest.

**NOTE:** Attempting to refill ink cartridges before the 'ink out/empty' alert condition hits will actually work one time. Since the printer monitors ink usage/drop counts, it will display the 'Ink Sensor Warning' messages when it 'predicts' the cartridge should be out of ink, but these messages may be ignored and you can continue printing. Eventually the 'Cartridge(s) Depleted' alert message will be displayed when the cartridge truly is out of ink. After this the printer will not know what the level of the ink is. Watch this video which shows both of these alert messages: <u>http://inkjet411.com/?page\_id=1999</u>

Please let us know if this does not remedy the current problem. -Thank you

HP932/933/950/951 "HP Protected Cartridge Installed. Replace Cartridge K" ALERT MESSAGE Regarding your recent inquiry about the HP950 "HP Protected Cartridge Installed. Replace Cartridge K" alert message, unfortunately this particular lock-out may have been initiated on your printer during initial printer/software installation. If you enabled 'HP Cartridge Protection' (within your printer software driver on your computer) this will lock your cartridges to your printer and may not allow a refilled cartridge to function....meaning the cartridge(s) cannot be used in any other printer (i.e. another similar printer model within your home/office or an identical replacement printer). It is therefore suggested you ensure this 'PROTECTION' feature disabled.

To ensure the 'Protection' feature is disabled in your printer driver, please refer to page 8 in our FAQ pdf file, the link is provided below.

http://inkjet411.com/?page\_id=1991

http://inkjet411.retailinkjet.com/wp-content/uploads/2013/05/HP-932-933-950-951-Spare-Cartridge-Swap\_FAQs\_v4.pdf

If the problem continues, then we need to verify a few things...

-- Is the HP950 cartridge yours (i.e. did you purchase it?) or did you obtain from elsewhere? They may have enabled the lockout feature for their entire set of ink cartridges on their printer, in which case, these cartridges will not work in your printer.

If the error condition cannot be reversed, since the lock-out data is written to the smart chip at base of the HP950 black ink cartridge, then you may need to discuss the possibility of a refund with Costco for the ink refill purchase.

Please let us know if this does not remedy the current problem. -Thank you

HP 950/951 – POOR PRINT QUALITY (SEVERE) – PRINTHEAD CLEANING/FLUSHING/REPLACEMENT Regarding your recent inquiry about the HP950/951 ink refill issue/question ("Ink head won't clean. What to do?"), what is the exact nature of the current problem you are experiencing?...perhaps poor image quality or missing color(s)?

If the current printer issue cannot be resolved by either activating the 'Clean Printhead' routine 2-3 times or by installing new/fully loaded ink tanks (following numerous cleaning actions with no resolve), and assuming you are NOT observing any PRINTHEAD error messages (see NOTE below, i.e. "Replace Printhead"), then the PRINTHEAD\* is either severely clogged with ink residue or the ink port(s) are completely dry (i.e. the foam pads that you can see in the bottom when you remove one of the ink cartridges from the carriage assembly). The ink ports can easily dry out if the printer is rarely used, a color has been depleted for awhile or if cartridges are not installed for long periods of time. Suggested next steps to recover the ink system:

#### 1) PERFORM PRINTHEAD DIAGNOSTIC TEST:

To verify the PRINTHEAD is ok, please activate the 'Tap 41' PRINTHEAD Health Diagnostics: (NOTE: applies to touchscreen printer models only):

- 1. Press 'Return' button (*lower left side*) four (4) times until 'Support' menu is displayed.
- 2. At 'Support' Menu, using the arrow key, navigate to the 'Service Menu', pre
- 3. Use arrow keys to advance to the 'Special Reports' Menu. Select OK.
- 4. Use arrow keys to advance to the 'print mech button tap' menu. Select Ok.
- 'code = 0' will be displayed. Use arrows keys to change value to '41' (i.e. press and hold right arrow key).
- 6. When 'Code = 41', select 'OK'. The diagnostic test pattern will print.

Check the 4<sup>th</sup> line at the top of the printed report; an electrically good/stable PRINTHEAD will state **"Pen Status: Pen OK"**......if any other message is displayed then the PRINTHEAD may have failed and may need to be replaced. Re-seat PRINTHEAD and/or clean rear electrical contacts and repeat 'Tap 41' test to verify connectivity is not the issue.



NOTE: Refer to our support document which includes more detailed diagnostic procedures: <a href="http://inkjet411.com/?page\_id=1813">http://inkjet411.com/?page\_id=1813</a>

2) If Pen is NOT ok.....Is your printer still under the 1 year warranty?....you may have a defective PRINTHEAD\* and it may need to be replaced....'the printer' should be covered in this case. You will need to discuss with HP.

## 3) MANUALLY CLEAN PRINTHEAD:

NOTE: you will need at least 30% of remaining ink, within each cartridge, to successfully perform this procedure

## http://h10025.www1.hp.com/ewfrf/wc/document?cc=us&lc=en&dlc=en&docname=c02871867

- 1) Remove all 4 ink cartridges.
- 2) Remove the internal PRINTHEAD and thoroughly clean rear electrical contacts and carriage electrical contacts.
- 3) Inspect ink foam ports to see if they are 'wet with ink'...this will confirm whether ink is being pulled into the PRINTHEAD or not. If the ink foam ports are completely dry (no significant amount of ink present when blotted with a paper towel, etc.), then the PRINTHEAD is likely considered too dry to support proper ink flow and subsequent printing operations.
- 4) Print the 'Print Quality Diagnostic Page' (also use to determine if print cartridge to printhead alignment is correct):
  - a. Press return arrow 4 times



- b. Press support menu
- c. Press right hand arrow 7 times to reports menu and press ok
- d. Press right hand arrow 2 times to Print Quality diagnostic report and press ok

## 4) FLUSH PRINTHEAD:

REFERENCE: HP 564/920 printhead water flushing procedure: <a href="http://inkjet411.com/?page\_id=2412">http://inkjet411.com/?page\_id=2412</a>

NOTE: you will need at least 30% of remaining ink, within each cartridge, to successfully perform this procedure

If after thorough electrical contact cleaning the problem persists, you may need to replace the PRINTHEAD ASSEMBLY (i.e. get from HP or Amazon), however, as a last ditch effort, you might want to perform a hot water flush on the PRINTHEAD.

- a. Remove all ink cartridges from the printer.
- b. Remove the printhead refer to instructions here: <u>http://h10025.www1.hp.com/ewfrf/wc/document?cc=us&lc=en&dlc=en&docname=c02871</u> <u>867</u>

- **c.** Over a sink, run warm tap water directly into the 4 ink ports for approximately 2 minutes this will effectively saturate the foam ports and blow ink out/thru the nozzle plate bottom.
- **d.** Using a lint-free towel, remove water from rear/bottom electrical contacts. Ensure printhead electrical contacts and exposed surfaces are fully dry.
- **e.** Install the printhead into the printer. You may observe a "Replace Printhead message" so you will need to cycle printer power by turning printer off and then on to clear the error.
- **f.** Install ink cartridges and retest printer. You should observe a New PRINTHEAD alert message followed by an approx. 4-minute preparation countdown prompt.
- **g.** Test printer output by activating an internal test print or print a test page from our 'Test Prints' page: <u>http://inkjet411.com/?page\_id=146</u>
- h. If you have reached this point of the troubleshooting and all the previous troubleshooting steps did not work, then the printhead is likely damaged or at end of life\* and may need to be replaced.

#### 5) REPLACE PRINTHEAD\*:

# Replace the PRINTHEAD (it is suggested to refer to HP's Procedure) http://h10025.www1.hp.com/ewfrf/wc/document?cc=us&lc=en&dlc=en&docname=c02871867

#### 6) OTHER PRINTER MALFUNCTION:

As an outside chance, the internal ink/suction pump could be faulty. Best to troubleshoot this type of problem directly with HP personnel if that is the case.

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\*Ink cartridges are merely plastic holding tanks for the ink...other than connecting and being recognized by the printhead, there isn't really anything that can go wrong here (our ink formulations and HP ink formulations are 'very' similar so this is not a significant contributor toward this type of condition based on our extensive internal benchmark testing).

Typically the printhead should not reach its end-of-life until after a minimum of 8 or more complete sets of cartridge changes; officejet models typically have a higher print page throughput average, but this is not always the case. While some printheads may last 12,000+ pages others may only last 2000 pages, your printer results will vary. The printhead will eventually fail in time due to an internal micro-electronics failure, due to the following leading factors: natural electronics degradation over time, printer duty cycle (i.e. # pages printed per month), printing frequency (i.e. time between each print job), print mode (i.e. draft vs. normal), image content printed (i.e. photos vs plain pages) and color mode (black and white only vs. color/greyscale printing).

Paper types used (i.e. plain paper, photo papers & matte/heavy bond papers) and paper edge curl (i.e. duration in printer and/or exposure to low relative humidity) can also quickly lead to premature printhead failures due to physical 'head strikes' of the paper edges making repeated contact with the printhead nozzle plate surfaces.

NOTE: For more severe PRINTER error messages which prevent printing altogether [i.e. "Replace Printhead", "Missing Printhead" or "Incompatible Printhead"] this is typical of failed micro-electronics within the PRINTHEAD assembly (nothing to do with the HP 950/951 refilled ink cartridges). The PRINTHEAD assembly is a separate electronic unit in which the cartridges plug into and feed ink to and is essentially the heart of the printing system. For reference, please refer to our video on how the PRINTHEAD works: <u>http://inkjet411.com/?page\_id=2054</u>