

Helpful Information on Direct Thermal Print Heads 081314

In general, the average life of a print head is approximately 2.4 million inches, but will vary depending on factors such as humidity, dust, heat, moisture and lack of proper maintenance. Routine cleaning will extend the life of a print head and maintain optimal print quality. *Many direct thermal printer manufacturers offer annual maintenance plans that can help cover parts and printer repairs. A standard printer warranty covers your printer for one year after the purchase date.*

The following is a list of items that adds to print head wear and tear:

- **Abrasion:** The process of wearing down the print head through friction caused by the passing thermal stock. A print head's protective coating will eventually wear off due to normal use regardless of maintenance and printing conditions.
- **Corrosion:** A gradual deterioration of the print head will occur because of using the wrong media, incorrect cleaning agents and contributing environmental factors.
- **Contamination:** Particles such as dust, dirt and inks can damage the print head.
- **Moisture:** Humid or damp environments will drastically reduce print head life.
- **Residue:** Inferior thermal stock, incorrect cleaning agents and security foils will cause buildup over time impacting print quality.
- **Dead Pixels:** Refers to sections on the print head that no longer heat up, causing the printer to no longer print on the affected areas.
- **Temperature:** Use the lowest print speed setting that produces acceptable results. Again, this helps reduce mechanical wear on the print head. Excessive heating and cooling of the print head dots will shorten the life of the print head.
- **Clean the platen.** Dust from paper can build up on the platen and print head in your thermal printer. Periodically clean the platen by carefully wiping it with a lint-free cloth treated with isopropyl alcohol.

Routine Maintenance will extend the life & improve print quality

- Cleaning frequency is dependent on the type of direct thermal printer, environment, and print volume. For moderate daily use, thermal printers should be cleaned two to three times per week, and daily if your stock is heavily used on coated paper or with color or security foils.
- Extreme caution should be taken when cleaning your print heads. All jewelry and sharp objects should be removed prior to working on thermal printers to prevent accidental damage. A scratched print head is impossible to repair and will mar the results of your printed ticket.
- Only approved cleaning solutions should be used. One such solvent is isopropyl alcohol that evaporates quickly without leaving residue.
- Thermal cleaning swabs are readily available and come pre-dipped in alcohol. Swabs are easy to use and can access most hard to reach parts. Gently rub the print head and rollers with the swab until all visible residue disappears.
- Compressed-air dusters can effectively remove dust and large particles from the printer.

Following basic maintenance procedures for direct thermal printers will extend the life of your printer. Please refer to your direct thermal printers' user manual for further details, instructions and recommendations.