Spirit Tattoo Papers

Over Burning/ Heat/Humidity - Manufacturing Anomaly Resolved

The manufacturer of Spirit Tattoo Paper, Spirit Tattoo Products USA, have confirmed between 2019 and June 2021 a 'variation' to the standard Spirit Paper formula was supplied which is highly sensitive to both heat and humidity, causing the wax resin layer to soften.

Where Spirit Tattoo Paper temperature exceeds 37.8°C (100°F), or paper is exposure to humidity, the wax coating will soften causing the stencil integrity to vary from standard. Where papers are not subjected to heat/humidity, the variation may not be noticed.

The variation paper is not suitable for use with a Thermal-Copier and requires replacement with new paper stock to operate normally. The softer wax resin layer will react abnormally to the IR Lamp of a Thermal-Copier causing melting/ over burning/ poor quality results. The machine remains suitable for use and contains no mechanical fault.

• Paper subjected to max temperature may no longer be suitable for use without over burning anomaly.

• Just a single short exposure of temperature/humidity may cause damage.

The variation of Spirit Paper formula is best labeled an 'anomaly', as the variation is something that deviates from what is standard, normal or expected - this is the first know problem that requires replacement of the Spirit Paper stock.

Spirit Tattoo Products have confirmed the variation issue has been resolved.

The anomaly is not visible before use. There are no visible signs of exposure to humidity or hea
to either the carton or paper. Testing is the only method of detection.

- Sheets towards middle of cartons have shown to be less affected.
- Different sheets within a single carton will react differently one may work, the next not.
- There is no heat/humidity exposure device built into the product or packaging.
- Not all batches may be affected.
- Batches manufactured between 2019 and June 2021 are expected to be variations.
- Serial number prior to 'XXX J21' are a suspected variation.
- Batch Numbers are located at the head of each sheet



Visible only after use

Batch Numbers

NEHOC Australia Pty Ltd

Paper which has not been subjected to heat/humidity will not react and remains suitable for use. Variation Spirit Paper that has reacted to heat or humidity is labeled by NEHOC as 'gone off' with reference to the wax resin layer and the unsuitability of use with a Thermal-Copier machine.

The variation from standard causes over burning and poor quality results by means of:

- Unwanted areas or whole sheets burning when no artwork is present.
- Thickening of artwork and lines with a loss of quality and definition.
- Areas behind designs burning (pictured left)/ lines/ unwanted areas.

Testing Spirit Tattoo Paper

Basic Test

A Thermal-Copier machine transfers only the design onto Spirit Paper, leaving the unwanted areas blank, giving you a normal transfer copy with just your design right?

- If there's no design or artwork, nothing should image the IR Lamp only reacts with artwork.
- 1. Set the Thermal-Copier to a setting of 5, approx. in the middle of the speed range.
- 2. Run a blank carrier through the machine to pre-warm the Heat Lamp.
- 3. Now place a blank piece of the Spirit Tattoo Paper into the carrier.
- 4. Remember to remove the protective sheet as you would normally make a copy.
- 5. Run the carrier through the machine and open to view the test result.

Resolving Spirit Paper Issues

Where any image has transferred line/ dark patch/ spots and the paper shows any sign of a wax layer ink transfer, the Spirit Paper has 'gone off'.

It is not the machine overheating or operating incorrectly, it is the paper variation at fault.

You have just demonstrated your machine is working normally by turning on and creating an image, the Spirit Paper however is a variation as no image should appear with no artwork.

Variation Paper Replacement

Spirit Tattoo Products USA have an confirmed an ongoing commitment to support customers with the variation formula unable to achieve suitable results in a Thermal-Copier machine. Exchange or replacement paper options may be available in this instance. As the variation in the Spirit Paper can not be see before use and may not affect all batches. You may be required to perform the simple test above prior to your place of purchase offering a solution to your imaging issues.

NEHOC do not service/replace Spirit Papers, only A4 Thermal-Copier machine parts/faults, we can not replace Spirit Paper.

Contact your Spirit Tattoo Paper place of purchase for all support/ replacement.

IR Lamp Levels - Old V's New

Customers using a new Thermal-Copier have experienced over burning of faulty Spirit Papers immediately (even on fastest speed setting), however in many instances where an old model remains in use at the studio (or 3M/ VistaFax model), the old machine results display less (or no faults) in the variation paper.

This fact also had us confused and complicated discovering the variations cause, testing and using Spirit Paper without fault have revealed some answers.

Is a new Thermal-Copier machine faulty?? No. The change in manufacture of the Spirit Paper remains the reason for loss of quality. Spirit Paper without the over burning variation is imaged normally in either a new or old machine.

Older Thermal-Copiers in general are operating at a lower IR heat output using an old lamp that may be dusty/ marked/ etc. This is why over time you will slow the use of the machine down for the same result.

• When new you may be running at 10 or 9, after some years you are down to 7 or 6.

From testing, where a new IR Lamp is placed into an older machine (which now operates at same IR level as a new machine) the same over burning fault is revealed in the paper at all speed levels.

When Spirit Paper without the variation of formula/ anomaly is used, Thermal-Copier machines operate normally.

Machine Adjustments

Q) Can the machine speed be adjusted to work with the variation paper?

A) No. The great thing about Thermal-Copier machines is the ongoing day to day reliability and the same results. There is noting in the machine that can be adjusted/ increased/ decreased to change the operation to adjust to the anomaly.

- The variation paper needs to be replaced.
- Any attempted changes would then need to be reversed with new paper stocks.

Storage of Spirit Tattoo Paper

Spirit Paper is a thermally reactive product and has always required storage away from heat and humidity. The high sensitivity of the variation batches has caused issue at lower standard temperatures than normal and demonstrated correct ongoing storage of Spirit Paper is now a requirement all customers must observe.

There remains no formal storage declaration on packaging or product, however the manufacturer Spirit Tattoo Products USA, advise 'Over the life of the product, the ink layers have always been affected by heat and humidity'. This is confirmation correct storage must now be mandatory to maintain suitability of usage for all papers without the variation.

Where Spirit Tattoo Paper must be stored below 37.8°C (100°F) and away from high humidity. Where Spirit Paper has exceeded this temperature or been subjected to humidity, the wax layer will soften and the paper integrity is lost. The paper has 'gone off'.

As with variation paper, normal standard Spirit Papers are tested using the simply blank paper test detailed on page 1. Where a design is present on a blank sheet run through a Thermal-Copier, the paper (standard or variation) has been exposed to adverse heat/humidity and lost suitability of usage with the Thermal-Copier requiring replacement.

Machine Help

The variation paper has been the cause of almost every customer machine issue over the past 18 months - it took a long time to understand and discover the variation existed and why Thermal-Copier machines were over burning papers.

If you have performed the basic blank paper test and believe machine remains at fault, or needs repair under warranty, support and help for your Thermal-Copier is always available.

Contact NEHOC Australia by e-mail or phone (02) 9979 9700 and speak to a service technician who can assist.

Returning for Service

Should a machine return be required, it is a 2 step process:

- 1. Complete the Pre-Inspection Form and return to NEHOC (this has all your contact details and machine condition).
- 2. After processing the pre-inspection form into our system, a Return Authorisation Number (RAN) is generated and return details issued to you for the service.
- RAN process ensures fast turn around time on receipt of your machine.
- Any return without both Pre-inspection Form and RAN will not be opened or serviced.
- A warranty repair must be established prior to return or standard service costs are charged.



NARRABEEN NSW 2101, Australia

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