RESOLVING THERMAL RIBBON PRINTING PROBLEMS

The intention of this guide is to help you identify and resolve printing issues relating to thermal transfer ribbon.

At times printing issues can be caused by one or more parts in the printing process. These parts include the hardware (printer), consumables (labels & thermal ribbon), and software (driver and printing application). When diagnosing problems, it can help to work through each part of the printing system one by one.

The printhead and platen rollers should be cleaned regularly to ensure consistent print and prolong the life of the printhead. Some printer manufacturers recommend this is done after each roll of labels using an ISO cleaning pen/wipes.

Ribbon Wrinkling

A wrinkle should be visible on the roll of used ribbon. There is often a gap in the printed image.

- Printhead may be misaligned, and pressure is not evenly distributed.
- Printhead pressure is too high, or the media (label material) is too thick.
- Ribbon is not feeding evenly from the supply roll.
- Printer heat/darkness setting may be too high.
- Ribbon rewind and/or unwind tension may be too high or too low.
- The ribbon may be too wide for the printer.
- Check the unused ribbon to ensure it does not have a wrinkle.

Ribbon breaking/snapping during printing

- Printhead pressure is too high, or the media (label material) is too thick.
- Ribbon is being obstructed. Check the feed path.
- Printer heat/darkness setting may be too high.
- Print method set to Direct Thermal instead of Thermal Transfer mode.
- Ribbon rewind and/or unwind tension may be too high or too low.

Ribbon sticking to the label

- Printer heat/darkness setting may be too high.
- Printhead pressure is too high, or the media (label material) is too thick.
- Print method set to Direct Thermal instead of Thermal Transfer mode.

Printed image is patchy or faint (barcode line not dark enough

- Printer heat/darkness setting may be too low.
- Printer speed is too fast.
- Printhead pressure is not high enough.
- Incorrect ribbon type/grade for label material.
- Printhead may be dirty.

Printed image is blotchy (barcode edges bleeding)

- Printer heat/darkness setting may be too high.
- Printer speed is too slow.

Consistent gaps in printed image

- Printhead dirty.
- Printhead element/elements failed.
- Platen roller cut or damaged.

Print smudging or rubbing off

- Incorrect ribbon type/grade for label material.
- Label material contaminated or has a non-printable/non-stampable coating.

Printer will not detect the ribbon (Ribbon encoder error)

- Ribbon sensor is faulty or has the wrong setting.
- Ribbon roll is finished.
- Ribbon not loaded in the printer correctly.

Printer doesn't stop at the end of a ribbon

- Ribbon sensor is faulty or has the wrong setting.
- Ribbon trailer may be incorrect for the specific printer (some printers need a reflective trailer).

We hope our guide helped you resolve your thermal printing problems!

If you need advice with your thermal ribbons, labels or printing, please get in touch. We're happy to help.

Remember you can purchase your ribbons online here

Tyrone

and the team at

ACCURATE LABELLING