

TECH TIP - Paper JAMS

How to Solve Paper Jams

There are five factors play a significant role in most paper jams:

- Obstructions in the paper path
- Misalignment of the paper path
- Incorrect paper is being used
- An Inoperable document cutter or damaged cutter blades being used
- Customer pulls the paper before the printer is done printing or cutting

Obstructions in the paper path: If the paper cannot smoothly travel its designed course through the printer system, then you will probably experience some type of jamming problem. Anything that physically impedes smooth paper travel in a printer system is called an obstruction, and obstructions will typically result in a paper jam.

A common obstruction issue involves printer paper making contact with an enclosure in which the printer is housed. Printer enclosures, such as a kiosk system, provide an opening for the paper from the printer to pass through so the customer may remove the document. If the printer and enclosure opening are not aligned correctly, the paper may bump into or rub against the edge of the enclosure and cause a jam. Therefore, careful consideration must be given to the printer / enclosure design to eliminate printer jams due to obstructions.

Also, if your printer has a Document Presenter option, then you <u>MUST</u> allow enough space below the presenter section so that the paper loop, which will form below the presenter, does not contact <u>anything</u>.

Misalignment of the paper path: All Telpar printer systems provide a means to hold a supply of paper within the printer. The paper support mechanism within the printer usually consists of a removable or fixed paper spindle, which connects to the printer chassis and supports a paper roll. Telpar printer systems are designed to keep the paper path aligned with the printer / cutter mechanism's entry-way when the printers' built-in paper support system is properly used. Correct alignment requires that the horizontal <u>distance</u> <u>between the paper edge</u> anywhere along its path of travel <u>and a fixed reference</u> parallel to the paper edge <u>does not change</u> (usually small tolerances are acceptable).

Kiosk designs, or other custom printer enclosure designs, often require a method of supporting the paper supply outside of the printer system. In this case, the design no longer uses the printer's internal paper support, but relies on a support mechanism external to the printer. Many paper jamming problems associated with an external paper support design are due to misalignment issues where the external paper support mechanism is not perfectly aligned with the printer at the onset or eventually goes out of alignment over time. Therefore, careful consideration must be given to the design of an external paper support mechanism to eliminate printer jams due to misalignment.

Incorrect paper is being used: Simply put, if the paper being used in the printer system does not match the stated paper specification for that printer, you increase the probability of paper jams during operation. For example, paper that is slightly too thick, too wide, not wide enough, etc, may not feed through the printer straight or smoothly. Reference the user manual for your printer to determine the correct paper specification or Telpar paper part number for your printer.

Inoperable document cutter or damaged cutter blades: If the cutter blades do not fully open to allow the paper to freely pass from the printer mechanism through the cutter section, then the probability of a paper jam is near 100% (assume you're going to have a jam!). Usually if the cutter blades cannot open or close all of the way, the printer will report that a cutter error has occurred, or at least report that a general error has occurred. By the time the printer reports a problem due to a cutter fault, however, a significant paper jam may have already developed.

Some reasons for the cutter blade not fully opening or closing during a printing process are due to a faulty sensor / switch assembly in the cutter section, a component failure on the control board related to cutter operation, or perhaps a bur or other physical defect on the cutter blade(s) which does not allow one blade to move freely past the other. Dull blades may also cause a problem if they can not completely cut the paper across its entire width (or if they can not cut the paper at all!).

If, after clearing one jam, future jams frequently occur, check the cutter section for residual paper cuttings which may be blocking the cutter pathway and clear them out of the way.

<u>NOTE</u>: FOR MAXIMUM SAFETY, ALWAYS SWITCH OFF POWER TO THE PRINTER WHEN HANDELING A CUTTER MECHANISM! NEVER TRY TO PRY THE CUTTER BLADES APART – YOU MAY DAMAGE THE CUTTER!

As always, Telpar Technical Support is always available for technical advice, or the printer can be returned to Telpar for repair (RMA Return).

Customer pulls the paper before the printer is done printing or cutting: If the customer is allowed to make physical contact with the document exiting the printer while printing is in process, there is always the possibility that the customer's interaction may be disruptive enough to cause a paper jam. This often occurs if the customer yanks or pulls the exiting document before the printing / cutting process is complete. Therefore, careful consideration must be given to the printer / enclosure design to prevent paper jams due to customer interaction.

Many Telpar thermal printers offer a presenter option which is designed to prevent the customer from having access to the document until the document has been fully printed and cut. *After* the printing process has been completed, the presenter mechanism presents the document to the customer. Please contact Telpar sales for more information regarding the presenter option.