

Troubleshooting Thermal Printer Issues

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
ADHESIVE OOZE CAUSES PRINTER JAMS AND CONTAMINATION	Labels are rewound too tightly.	Rewind labels looser on the next run.
	Labels are releasing and contaminating printer with adhesive.	Add a "clean release coating" on the back of the liner to help prevent the labels from picking off.
	Adhesive is incorrect.	Look for alternative adhesives such as an adhesive with a lower coat weight.
	Dies are dull or worn.	Make sure the dies used in converting are sharp and well maintained.
	Storage temperatures exceed storage specs.	Make sure the labels are stored properly. Ideal conditions are 72° F with 50% RH. Hot storage conditions can cause ooze.
THE IMAGE IS TOO LIGHT OR FADES QUICKLY	The image isn't fully developed due to an incorrect darkness setting for the substrate.	Increase the printer's heat setting for the substrate used.
	The print speed is too fast for the label substrate.	Decrease the printer speed.
	The image has been exposed to a chemical or UV light.	If chemicals are the issue, a different material or coating might solve the problem.
	Labels have been stored for too long.	Use new labels if current ones are more than six months old.
	The print head and/or drive roller is dirty.	Clean the print head and drive roller according to manufacturer's instructions.
IMAGES APPEAR SMEARED (PARTICULARLY BARCODES)	Heat levels of print head are too high.	Reduce the print head's temperature setting.
	The print speed is too fast.	Decrease the printer speed.
	Print orientation of 90° to 270° is causing bleeding of edges.	Reorient the text of barcode to 0° to 180° to avoid feathering or bleeding.
STREAKS APPEAR IN THE PRINTED TEXT OR IMAGE	Substrate coating is poor or defective.	Replace substrates with a new roll or try a different type.
	Print head components are dirty.	Clean the print head according to manufacturer's instructions.
VOID OR DEAD SPOTS APPEAR IN TEXT OR IMAGE	Preprinted ink is picking up from the media.	Print preprinted information with heat-resistant ink.
	Non-functioning print head pins are causing white lines in text or image.	Clean the print head according to manufacturer's instructions. If that does not work, replace the print head.
BARCODES ARE NOT SCANNING RELIABLY	The image isn't fully developed.	Decrease the printer speed, increase the print head temperature or a combination of both.
	The image is overdeveloped if the bars look fuzzy.	Cut back the print head heat or increase the speed of the printer.
	The print head is damaged or contaminated.	Clean the print head properly. The print head should be cleaned after every roll of labels or after every ribbon change. If the problem persists, install a new print head.
	Bars have poor edge definition.	Reduce print speed. Try to position the barcodes so they run "picket fence"-style through the printer.
	Print contrast is incorrect due to a label substrate that is too dark.	Substitute label substrate with a lighter-colored stock.
LABELS WON'T DISPENSE PROPERLY FROM AFFIXING DEVICE	Die cuts are too deep; the adhesive gets under the silicone on the liner and doesn't allow the label to release.	Make sure the die manufacturer knows the labels are to be auto-affixed. The manufacturer will produce die accordingly.
	The label's backing liner is cut improperly.	Consider using film liners. They are more forgiving with respect to die cutting and work well in high-speed affixing scenarios.
	The force required to release the label from the liner is too high.	Communicate with the material supplier the make and model of the label affixing device. The supplier might need to tailor the liner release to the device.
	The "peel" plate on the affixing device is dull or worn.	Make sure the plate is sharp and in proper working condition.
	Tension is inappropriate for labels.	Adjust the web tension on the affixing device.
PRINTER CONTINUES TO STALL OR FAILS TO PRINT	Substrates are improperly loaded.	Reload the substrate correctly.
	The label gap sensor is not reading the media; this is common if the media is too opaque.	Recalibrate the sensor according to the manufacturer's instruction manual.
PRINT HEAD FAILS PREMATURELY	Thermal stress is excessive.	Adjust the heat setting so it is as low as possible, while it still allows the printer to produce a quality image.
	Pressure of the print head is too high.	Adjust the print head pressure or switch to a thinner media.
	Substrate surface is uneven.	Change substrate roll to avoid abrasion of the print head.
	Routine print head maintenance has not been performed.	Clean all components of the print head and printer according to manufacturer's instructions.