VOIDS

If you see the work "VOID", or a cross-hatch pattern printed across your labels, you will need to perform a calibration.

> The default is to only allow Printers to print 3 VOIDS before pausing.

An RFID printer may mark a label as **VOID** when it encounters issues during the encoding or verification process of the RFID tag. Here are the main reasons this can happen:

RFID Chip Encoding Failure

- The printer tries to write data to the RFID chip, but the write operation fails.
- Causes:
  - Defective RFID chip.
  - Poor tag placement or misalignment.
  - Electrical interference.

RFID Chip Read Failure (Post-Write Verification)

- After encoding, the printer attempts to read back the tag to verify the data was written correctly.
- If the read fails or the data doesn't match, the printer voids the label.
- Common causes:
  - Weak tag signal.
  - Tag too far from the antenna in the printer.
  - Shielding or interference from surrounding materials.

Tag Not Detected

- The printer expects an RFID tag in a label but doesn't detect one.
- This happens when:
  - The label lacks an inlay (non-RFID label mistakenly loaded).
  - The inlay is out of position relative to the antenna.
  - The tag is outside of the printer’s RFID read/write field.

Dirty or Damaged Printhead or Antenna

- A dirty or misaligned antenna can lead to failed encoding.
- This sometimes triggers the VOID process, especially on sensitive settings.

Printer Settings or Configuration Issues

- Mismatched label size, tag type, or encoding format (e.g., wrong EPC scheme).
- Incorrect RFID calibration.
- GS1 SGTIN-96 format errors if strict compliance is required.

Firmware or Software Errors

- If the label format or encoding instruction sent to the printer is corrupted or incomplete, it may cause a void.
- Certain printers have logic to void tags if encoding instructions are incompatible.

Lock Status or Tamper Detection

- If the tag has been previously locked or has tamper detection enabled, the printer may not be able to encode it and will void the label.

If you're seeing excessive VOID tags, it's usually best to:

- Run a calibration on the printer.
- Check the **tag placement** and ensure that the sensors are in the correct position.
- Ensure the information being encoded does not exceed the tag's EPC memory bank
- **Zebra printers only:** Reset the printer to factory defaults.

Revision #4
Created 4 June 2025 02:18:13 by Stan Andrus
Updated 17 September 2025 16:29:52 by John LeBaron