The Zebra ZD500R does not require specific inlay placements, RFID power settings, or RFID program position settings. Its advanced RFID calibration capability automatically configures the optimal RFID settings. The calibration algorithm supports all inlay types and label sizes, from small on-pitch inlays to large shipping labels. Please see the ZD500R User’s Manual and RFID ZPL Programming Guide 3 for more details.

Best practices to consider when selecting RFID media for ZD500R:

- Inlays should be centered across the media width. The tolerance depends on the inlay type, but is typically not less than +/- 3mm. Some inlays will work reliably outside this tolerance.

- Short labels with a pitch of less than 1” (parameter ‘y’ in the diagram on the right) may require the printer to backfeed a short distance prior to encoding. If necessary, the RFID calibration algorithm will automatically select the backfeed distance.

- For labels longer than 1”, backfeed can be avoided by placing inlays 5-10 mm from the leading edge of the label (parameter ‘x’ in the diagram on the right).

- The RFID encoder is located in the center of the media path, directly behind the platen roller. The approximate location of the encode zone is shown below.

- Always test RFID media before purchasing a large quantity.

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**Parameter | Name | Definition**

| a (mm) | Inlay Center | Left liner edge to inlay center. |
| x (mm) | Inlay Position | Label Start to inlay antenna leading edge. |
| y (mm) | Inlay Pitch | Inlay antenna leading edge to inlay antenna leading edge. |