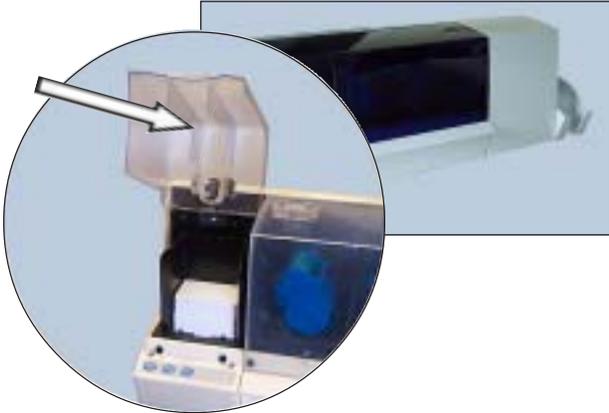


Section 2
Media Handling

Loading cards

When loading cards, open ONLY the hopper cover, left. (If you open the main cover, the interlock switch disables the printer, resulting in a start-up delay after the cover is closed.)



Plastic cards attract dust and dirt. Keep them clean! Handle them by the edges and avoid touching the surfaces. Do not use cards that are dirty or have been dropped on the floor.

- 2 Place the weight on top of the card stack.



- 1 Card orientation in the hopper: the **back side** of the card faces **up**, and the **mag stripe** of the card is to the **front** of the printer.



If there is no mag stripe, and if there is pre-printed information on the card, your system administrator will tell you which edge of the card goes to the front.

Load the magazine a few cards at a time, holding the cards by the edges as shown. Don't try to load an entire pack at one time, because that would mean handling the upper and lower surfaces - see **STOP**, above right.



HOT LOADING

You can load cards while the printer is powered up and operating. If there are no cards left in the hopper, close the hopper cover then wait until the printer has completed its current print job and returned the truck to its home position under the hopper.

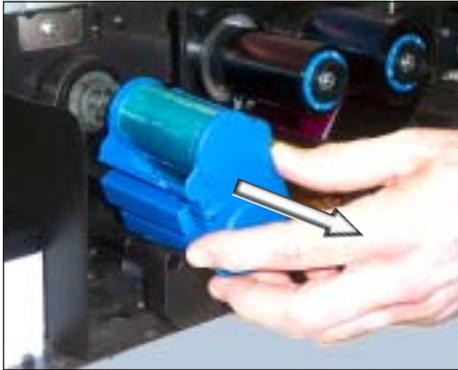
When the hopper cover is open, the truck can not drive to its home position.

Loading the cleaning cassette

Before being printed, each surface of the card is cleaned by a soft tacky roller that is itself cleaned periodically by adhesive tape in the cleaning cassette. Typically, the roller is cleaned every 10 cards. The printer driver software allows the card count to be modified.

When the cleaning cassette is exhausted, a warning message appears on the monitor, and the MEDIA light on the printer turns on.

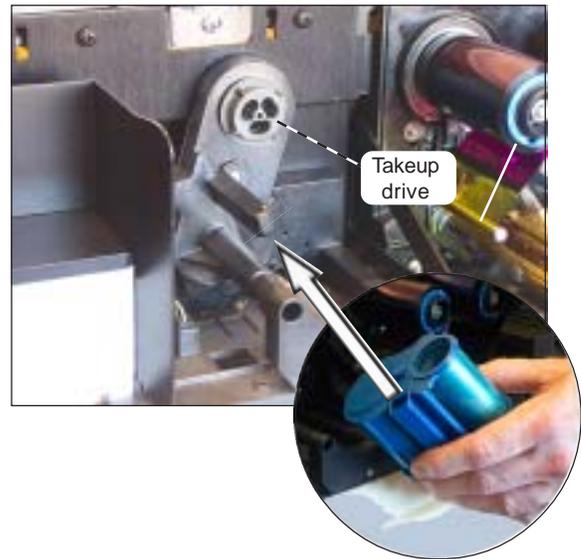
Open the main cover of the printer, then remove the spent cleaning cassette by pulling it toward you.



Remove the protective foil from the replacement cleaning cassette.



Install a fresh cleaning cassette by locating the rectangular pin on the cleaning mechanism in the receptacle on the cassette. Push the cassette gently home, ensuring that the internal grooves on the upper spool engage the teeth on the takeup drive.



Why 10 cards is the normal clean frequency

If the cleaning system is activated every 10 cards, the cleaning cassette contains sufficient tape for 3,000 cards. This matches the other components of the standard Zebra media pack (3,000 cards, 3,000 color ribbon images).

In dusty environments, clean the roller more frequently. The driver allows you to select any frequency from 1 card to 20 cards.

Loading the color ribbon

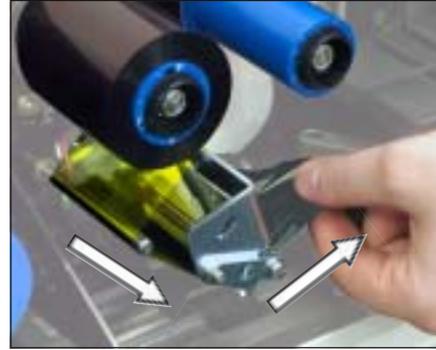
When the color ribbon is exhausted, a warning message appears on the monitor, and the MEDIA light on the printer turns on.

Opening of the main cover elevates the printhead for easy ribbon loading.



P640i color ribbon, left, and empty core, right. The flange end with internal grooves goes to the back.

- 1 Install an empty ribbon core on the right (takeup) arbor. Push the core back as far as it will go, making sure the internal grooves on the core engage the teeth on the takeup arbor. **NOTE:** The supply arbor rotates freely, the takeup arbor does **not**.
- 2 Install the fresh color ribbon on the left (supply) arbor, with the free end of the ribbon coming from the roll pointing **down** to your **right**. Make sure the internal grooves on the core engage the teeth on the supply arbor. **Keep the adhesive label for later use.**
- 3 Bring the free end of the ribbon to the left, over the round guide bar, then down to the right under the printhead.



Are **both** the new ribbon and takeup cores fully home on the arbors, as far back as they will go? You should hear a click.

- 4 Pull out more ribbon, then bring the free end of the ribbon up to the right of the takeup core. With the ribbon centered on the takeup core, attach its free end to core with Scotch tape or the adhesive label that came with the fresh roll. Take up slack by reversing the supply roll (don't try to rotate the takeup arbor).



MAKE SURE the ribbon is **between** the arms of the ribbon sensor left of the printhead.

- 5 Close the printer cover, then press the RIBBON button to initialize the color ribbon. If the MEDIA light fails to go out, check the ribbon sensor.

Color ribbon wrinkling and "fold-over" can seriously affect print quality. Unless you are sure the ribbon is installed properly, proceed to Step 6.

- 6 Re-open the printer cover to inspect the ribbon path for wrinkles and folds. Correct if necessary, then close the cover.

Laminating station

When either of the laminate cassettes is empty, a warning message appears on the monitor, and the MEDIA light on the printer turns on.



When loading or unloading laminate cassettes, stay away from nearby heated rollers.

Overlay laminates come in three widths ...

- For the front (**UPPER**) of the card, **full width**, plain or with special graphics.
Full width = 2" (51 mm)
- For the back (**LOWER**) of the card, **partial width** if there is a writable signature panel or mag stripe, otherwise full width. Usually, there are no graphics on the lower laminate:
Partial width, signature panel = 1.66" (42 mm)
Partial width, mag stripe = 1.3" (33 mm)



Laminate cassettes ...

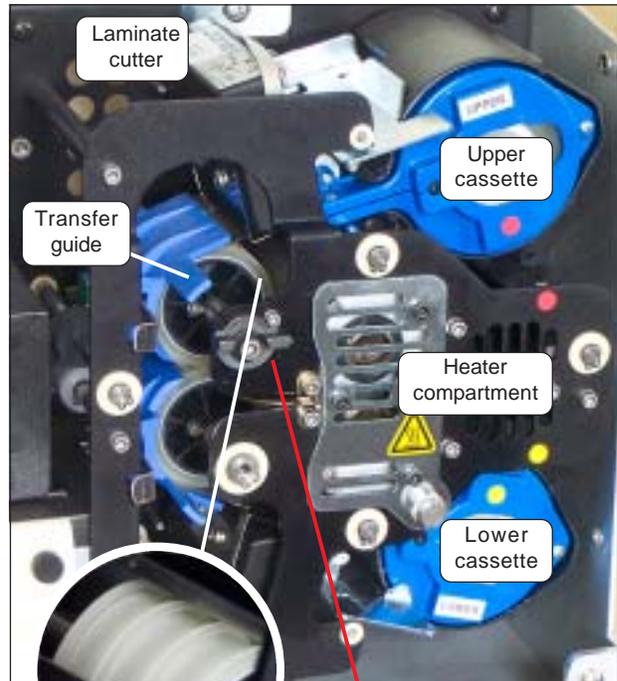
The upper and lower cassettes are mirror images, almost identical twins. This can be confusing if you don't follow the procedure outlined in this guide. The cassettes are differentiated by color-coded dots:

Red = UPPER **Yellow** = LOWER



Main components of the laminating system

The laminating system comprises two separate independent units, one for the front of the card, one for the back.

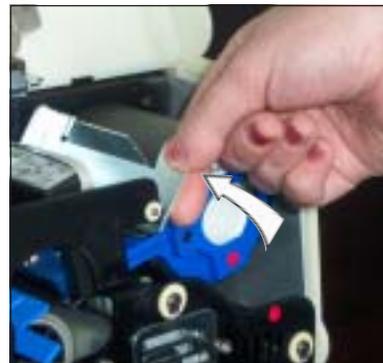


Transfer roller

Transfer toggle Must be set to **RUN** (horizontal) for normal operation. Rotate the toggle to open the rollers for jam clearance.

Removing the cassettes

- 1 Open the latch plate by flipping it to the **full vertical** position, until you feel some resistance. Turn the UPPER latch counterclockwise, the LOWER clockwise.



If either of the latch plates is opened, even unintentionally, the cassette affected must be removed and the laminate reeled in, see page 2-6.

Laminating station *continued*

Removing the cassettes *continued*

- 2 Grasp the cassette and pull it straight toward you, clear of the printer.



- 3 Open the cassette, like a clam shell, by separating its two halves. Grasp the two halves firmly with the fingers, then pull. **Do NOT use tools** to pry it apart.



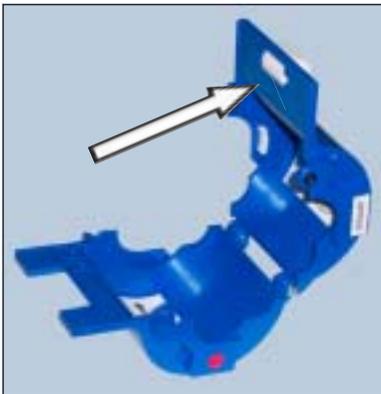
If you feel resistance when removing the cassette, the laminate has likely run out, leaving one end attached to the core and the other end under the cutter. Keep tugging on cassette, which will come free with a short tail of laminate.

Remove the transfer guide, see page 2-6, to be sure there are no scraps of laminate remaining.

Loading the cassettes

STOP You need partial width laminate for the LOWER cassette if there is a mag stripe or signature stripe on the card

- 1 Discard the spent core. Hold the open cassette with its cavities toward you, white idler wheel to the top.



- 2 Place a roll of laminate in the cassette so that it feeds from the bottom of the roll, **UP** and **OUT** to the front. Pull out an inch or two of laminate.



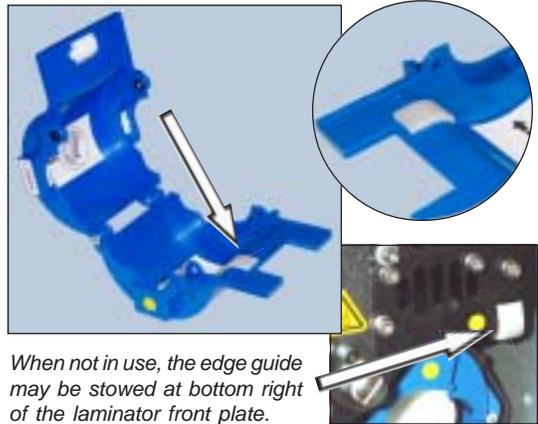
Upper cassette
with full width laminate



Lower cassette
with partial width laminate



If the lower cassette is intended for partial width laminate, it will have an edge guide to keep the laminate on track. Make sure it is in the correct position (one of two) for the partial width laminate you are using.



When not in use, the edge guide may be stowed at bottom right of the laminator front plate.

- 3 Close the cassette, then pull out a little more laminate. If it suddenly stops, resisting further pulling, a spring detent on the cassette, photo below, has snagged a notch on the end of the core. This means that the core was installed the **wrong way round**. If you follow the installation diagram on the inside of the cassette this won't happen!



Loading the cassettes *continued*

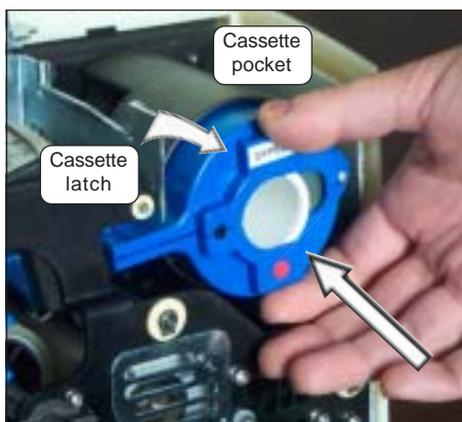
4 With the white roller **up** and pointing to your **left**, rotate the core counter clockwise to reel in the laminate. Stop when the end of the laminate is even with the lips of the cassette - **no overhang**, but make sure it is not clear of the white roller (otherwise it won't feed).

 If the end of the laminate is crinkled or uneven, cut it as square as you can with scissors, then reel it in.



Installing the cassettes

1 Make sure the laminate is even with the lips of the cassette. Insert the cassette into its black molded pocket, then close the cassette latch (clockwise for the UPPER, counterclockwise for the LOWER).



2 Close the main cover. If there was a laminate error before you replaced the cassette, laminate will automatically feed from the just-loaded cassette, followed by a cutting action to free a "patch" of laminate onto the transfer roller. If laminate does not feed automatically, press the LAMINATE button.



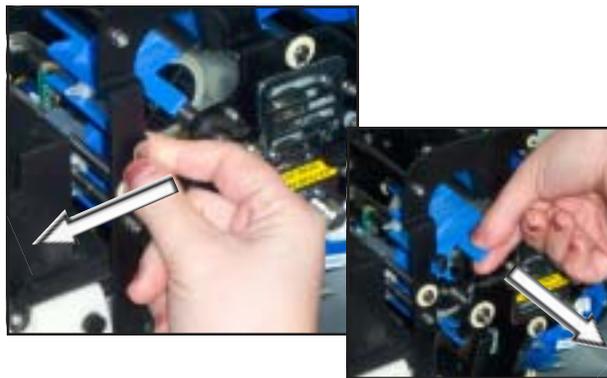
How square were those scissor cuts? If they were neat enough to pass for machine-made cuts, continue printing cards in the usual way. If not, don't waste a print cycle. Instead, remove the hand-cut patch(es) from the transfer roller(s) as follows.

Clearing procedures for the upper and lower channels are similar. The upper channel is shown here.

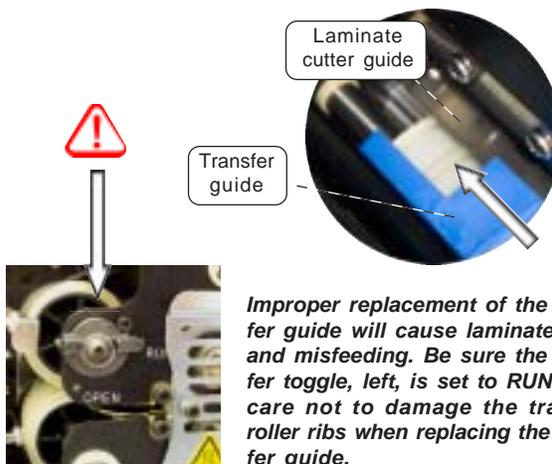
Removal of the Transfer Guide, right, gives access to the transfer roller.



3 Pull back the retaining spring, at the same time pulling the Transfer Guide straight out toward you.



4 Remove and discard the laminate patch on the transfer roller. **Never re-use!** Re-install the Transfer Guide with its **top edge above the laminate cutter guide**. It's easier if you pull back the retaining spring while re-inserting the guide, then release the spring as you push the guide into position (it will click into place, with its far leg against the back plate of the laminator). Press the LAMINATE button to load the transfer roller(s), see Step 2.

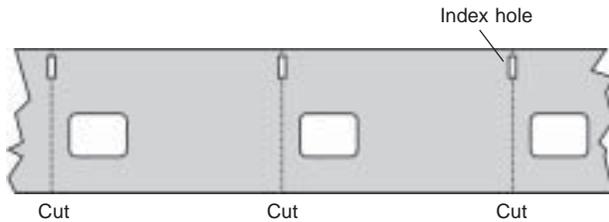


Improper replacement of the transfer guide will cause laminate skew and misfeeding. Be sure the transfer toggle, left, is set to RUN. Take care not to damage the transfer roller ribs when replacing the transfer guide.

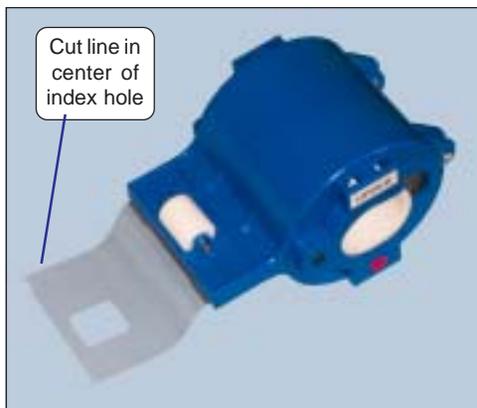
Laminating smart cards

The laminating patch on the top surface of a smart card has a rectangular aperture to expose the card's electrical contacts. In all other respects the laminating process for smart cards is the same as for ordinary cards.

The special laminate for the top cassette is punched with a repeated pattern:



The smaller hole is an index marker that tells the printer where to cut the laminate, **exactly** splitting the index hole (the printer driver allows adjustment of the cut location).



Loading procedure for smart card laminate is exactly the same as for standard laminate.