

# TechLines

## Technical Information Sheet

B2

©1994 • Updated June 2011

*Changes in RED*

## Saddle Stitch Specifications

**PRIMA SB Model 360 with Prism Inkjet System Controller (2-up digest size available with 1/4" or 3/8" out or chop cut)**

**McCAIN 2100SD with Prism Inkjet System Controller**

**HARRIS 755 with Prism Inkjet System Controller (2-up digest size available with 1/4" or 3/8" out or chop cut)**

### **Speed/productivity are governed by:**

Number of pockets

Quality, consistency of forms.

Inconsistency in the individual parts – too small or absence of a lap, wrinkled spines, curled signatures – reduce productivity.

Weight of forms; stiffness of the piece is really the key here. 32 pages on offset or newsprint work the best.

Thin covers reduce binder speed. 8-to-10 point board stock covers are preferred.

Best productivity will be a book in the 8-3/8" x 10-7/8" format.

Complexity of packaging [projects requiring counted drop shipments, boxing, labeling, etc. ...] cause reduced speed in order for take-off personnel to maintain organization.

Silver or gold inked covers, or any other large solid coverage subject to easy scratching can cause problems. These covers should be varnished or aqueous coated if possible. Covers that are predominantly black or dark blue should be UV coated to prevent scratching. (Varnishing doesn't always prevent scratching on dark colors.)

### **In-line folding to qualify for letter-size postage rates available**

Saddle stitched pieces can be folded either parallel or perpendicular (which we prefer) to the bind edge.

- Fold dimension can not exceed 12".
- Maximum trim size before fold – 11-1/2" wide by 12" spine height.
- Minimum trim size before fold – 5" wide by 3" spine height.
- The stiffer the stock (ie. 50# offset), the better the fold
- Mailpieces of 24 pages have been performing the best.

If you are interested in this option, please request a sample. Making this additional fold does result in pushout and gussetting.

After folding, pieces can be outside-only inkjet addressed or paper labeled off-line.

## Bind-in Cards:

Cards should be designed or altered as needed to have the proper binding lap. Cards should also have the same head/foot trim as the text signatures and should jog to the head/foot. Jogging to this common point also assures that the caliper in the machine will sense if the card is in the finished product. *Our standard flatting is jogging to the foot.*

If card is set up with a high folio lap, the binder will not run efficiently and overall speed will be slowed due to having to use vacuum (air) to open the card up.

SINGLE INSERT CARD: To allow flexibility in scheduling, the card must be placed in the front half of the book with a 3-1/2" binding stub to the back. If card must be in the back half, it would be best to do a double card.

## Card Blower Attachments:

Used for inserting loose cards into books.

Two attachments can be used at the same time.

Card will be placed between signatures and cannot be placed next to the cover or at the exact center.

When jogging to the foot, the card will be placed in the back half of the printed piece. If inkjet addressing on the front cover, placement will be in the front half since we need to jog to the head.

Card is not calipered and is not 100% reliable.

Recommended stock weights: 70# offset minimum, 10pt maximum. 75# high bulk preferred.

Depending on size of the finished product, card should be at least 3" shorter than the spine dimension and 2" shorter than the face dimension. Maximum card size: 7" spine dimension, 6-1/2" face dimension. Minimum card size: 3-1/4" spine dimension, 4" face dimension.

## Technical requirements of our equipment and standard operating procedures

For these specifications, the "head" of a multiple page signature is the closed or even edge that is perpendicular to the bind edge. This is the consistent edge that all the printed forms that comprise a bound product will align to.

The standard flatting configuration of our web text signatures is with the *foot of the copy flat to the closed head of the signature* (jogging to the foot). All insert cards/envelopes will align at the bottom of the finished piece and the required 3/16" trim will be at the foot of the copy. Flatting dummies for page imposition are available on request. The general specifications provided below are based on jogging to the foot.

- We prefer that multiple-page signatures be supplied with a closed head.
- If multiple-page signatures are supplied with an open head:
  - Consistency of the binding lap is **crucial**.
  - Lap **must** be at the back half of the signature.
- 1/4" minimum [preferred] to 1/2" maximum binding lap at the back half of the signature required on all materials that will feed through a pocket:
  - 8 page cover forms
  - 4 page cover forms if using an outer wrap for all or part of your job
  - Order forms/reply envelopes
  - Insert cards
  - Interior signatures

- ❑ Our standard trim at the closed head of a piece is a 3/16" foot trim. All individual parts must be setup to allow for this trim. If a card or envelope is shorter than the final trim and does not want to align to the bottom, this piece can be "down-headed" (positioned at 1" increments from the top) **only** if being placed in the centerspread. *Down-heading requires additional setup time, reduces binder speed and impacts scheduling.*
- ❑ A 1" trim is the maximum available on all four stitchers and allows for scheduling flexibility.
- ❑ If required, a face trim up to 2" is available on two stitchers.
- ❑ When jogging to the foot, our standard binder setup is for the binding lap to include the low page numbers. All insert cards/envelopes will align at the bottom of the finished piece.
- ❑ For inkjet addressing on the **front** cover, the copy must be flatted with the top of the copy to the closed head of the signature and the binding lap must include the high page numbers.
- ❑ It is best if all individual forms conform to a common size. For example, our untrimmed signature for an 8-3/8" x 10-7/8" finished size is 8-3/4" x 11-1/2". Insert cards, covers, outer wraps should not exceed these dimensions.
- ❑ If one form is wider than all other forms, this will cause inconsistent final trim since there is no common edge to work with in the trimmer.
- ❑ The maximum untrimmed gathered product for inkjetting is 12" x 20".
- ❑ The maximum untrimmed gathered product for non-inkjetting is 12-1/2" x 20".
- ❑ To assure fit in the trimmer, all individual parts should be nested together and then measured to ensure that maximum dimensions noted above are not exceeded.

**Some points to consider if your project reaches the maximum page counts listed on the next page:**

*Some splitting of the cover at the head or foot does occur due to the bulk of the piece.*

*Flatting, specifically left to right placement, and copy width must be adjusted to allow for pushout from the spine.*

*Cover stock weight should be increased as page counts increase. A lightweight (80# text weight) cover will not work well with a maximum page count product.*

*To ensure that the heads of signatures will open, it is best to increase head trim allowance to 5/16" or 3/8".*

## Maximum Page counts for Saddle Stitch projects

Max Page	Wt.	Grade	Stock	Brightness
88	70#		Uncoated Offset	84
96	33#		5pt Novel News	60
104	60#		Uncoated Offset	84
128	50#		Uncoated Offset	84
	42.5#		Opportunity Offset	83
	80#	#2 & #3	Coated Free Sheet (offset)	89/84
144	30#		Yellow Newsprint	60
152	70#	#2 & #3	Coated Free Sheet	89/84
	40#		Uncoated Offset	84
	35#		Ripon 80 Hi-Brite Groundwood	80
	35#		Ripon 70 Hi-Brite Groundwood	70
	30#		Newsprint	60
160	40#		Opaque Uncoated Offset	94
	60#	#2	Coated Free Sheet	89
	60#	#5	Coated Groundwood	72
176	27.7#		Newsprint	60
192	50#	#4 & #5	Coated Groundwood	
	24.6#		Newsprint	60
200	50#	#3	Coated Free Sheet	84
208	22.1#		White Directory	60
216	45#	#5	Coated Groundwood	76
	45#	#4	Coated Groundwood	80
224	45#	#3	Coated Free Sheet	84
232	22.1#		White Directory 40% PCW	84
240	40#	#4	Coated Groundwood	76
	40#	#5	Coated Groundwood	72
248	38#	#4	Coated Groundwood	76
256	36#	#5	Coated Groundwood	72
	36#	#4	Coated Groundwood	76
272	34#	#5	Coated Groundwood	72
288	32#	#5	Coated Groundwood	70
312	30#	#5	Coated Groundwood	72