SOP Reference #: FINISHING006

Operation/Task:	Stitching Operations			Equipment:	Saddle Stitchers
Owner:	Finishing Manager	Date Created:	4/9/2015	Department:	Finishing
		Revision History:	See last page		

ALERTS (see below):   Critical Step ◆   Quality Check ☑   Tip ☺   Team Safety ✚

Purpose: This SOP/work instruction documents procedures for stitching operations.

Step #	Alerts	Step Description - "What to Do"	"How to Do it"	"Why to Do it"
1		See SOP FINISHING000 for all general finishing procedures		
2	◆	Set the machine for the operations required on the Job Ticket.	Possible operations are: • Gather • Stitch • Trim	All or some functions could be used to stitch a book.
3		Set the caliper (number of sheets per assembly)	Tear off a small portion of the product and place in caliper	The machine will detect and reject any product that does not match the thickness that has been set.
4	☑	Set and verify the over/under caliper.	Verification is by running an assembly short one sheet, and in excess one sheet. The over/under caliper should detect the error.	To make sure it has been set correctly
5		Set the tension on the trimmer belt.	Adjust as needed	Belt tension should be adjusted so that the printed products are not marked, but without slip.

6		Set trimmer knives to correct size per job ticket. Set the stitches.	Unless otherwise instructed, the standard is two (2) stitches ½ inches wide stitches, with the inner wire leg located approximately 25% of the spine length from each edge. Stitch legs should lay flat but not be driven into the product. Stitch legs should not overlap each other and not more than 1/16" away from each other. • Web Press printed jobs require operator to check centerspread of book for stitch strength, test 25 books during initial set-up and during continuity pulls. Strength test – with book open to centerspread, lift book up by centermost page and shake 3 times. If page falls out or becomes loose a 3rd stitch in the center will be required.	Web stock can be dry, and brittle compared to flat sheet stock. It is important to check stitch strength to ensure pages will not fall out.
7		Set/load the pockets, if applicable.	(Make sure all sigs head up). Tape corresponding signature on pocket table being used or hang above pocket on wire for Finishing Helpers reference. For variable data jobs, special care is to be taken to ensure the address panel is on the outside of the stitched piece.	Sigs need to be loaded in the proper page order
8	☑	Produce approximately 25 assemblies (books) to verify the quality and proper operation of the machine.	Verify the assemblies: • check stitches for alignment and quality • check face trim for bounce • check head & foot for alignment, signatures jogging properly and uneven trimming • check for marking from pockets, tucker blade, knives and belts. • Verify pagination against Dylux or Sample • Verify version • Verify Finish size During run, jog each lift and inspect for: • Aligned and proper stitches • Proper head trim • Square trimming • Inspect 4 sides of finished lift to ensure required size is fulfilled • Fan each lift to inspect accuracy of page position. Fan alternately gasping face and spine. • Marking from pockets, tucker blade, knives and belts	To meet client expectations

| 9 | | **CAMERA SYSTEM MAKE READY**

1. Select number of camera to be used (number of signatures in book)

2. Select main menu

3. Select start for learning/running

4. Setting consecutive errors | Cognex Camera System Verification (when applicable): Refer to the Cognex Camera System Work Instruction (WIcamera001) for detailed setup and operation steps.

• Select turn on camera
• Select new production
• Enter length of signatures
• Set main screen + or – tolerances for all cameras
• Set consecutive errors for individual camera. | To verify machine readiness and book assembly quality while ensuring that the Cognex Camera System accurately detects and rejects mis-feeds or signature errors. |

Notes:

The stitching machine to be used for the job is selected by the Finishing Lead or Manager based on availability and size.

Definitions:

Lift – convenient handful of material ranging from 1" – 5" tall.

Sig – book signature consisting of imposed pages on a single form

Revision History	Description of Changes	Requested by	Date
Rev 1	Revised SOP to new format.	Troy Bauer	4/9/15
Rev 2	Added Revision History table	Troy Bauer	8/1/16
Rev 3	Removed general SOPs tasks as they are now all defined in SOP FINISHING000. Clarified some verbiage.	Kathy Osterberg	6/18
Rev 4	Updated to current SOP format; branding updates: font, company name; grammar updates; Manager review – no changes	Kevin Washington Tom Wall	5/21
Rev 5	Updated inspection criteria to address NC from job 291643, 297480, trimming issues	Dean Milinkovich	9/21
Rev 6	Removed STP reference.	Dean Milinkovich	10/23
Rev 7	Added reference to Cognex Camera System Work Instruction (WIcamera001)	Jeff Storeby	12/25

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