Trendsetter NEWS Narrow Format Option Upgrade

Internal document number: 719-00954A-A

Product

- Kodak® Trendsetter® NEWS™ platesetter

Machines affected

- Newspaper devices that require imaging of 276.2 mm wide plates for 44-in. web presses

Component Drum registration blocks

Background

Some new types of newspaper presses print on 44-in. wide web, which requires plates that are as small as 276 mm in subscan size. On standard Trendsetter NEWS platesetters, drum blocks 1 & 3 and 2 & 4 are spaced too far apart to accommodate these narrow plates.

Note: This document uses the term “registration blocks” instead of the less accurate term “registration pins,” but the two are synonymous.

Solution

Replace the drum registration blocks with new-style blocks that bring the location of blocks 1 & 2 and 3 & 4 closer together. See Appendix A for more information.

	Old Block Location	New Block Location
Block 1	222	236
Block 2	496	482
Block 3	664	678
Block 4	938	924

The narrow format upgrade uses the same mounting holes on the drum, but the blocks are shaped differently, so that the plate contact surface (“landing pad”) moves over. After the new registration blocks are installed, geometric correction (GC) needs to be adjusted.

Note: In case the device is connected to an automatic plate preloader, the preloader may also need modifications to accommodate the small plate format. Similarly, if a mechanical punch/bender is used, its registration points must be modified to match the new, narrow-format registration points on the Trendsetter NEWS device.

Prerequisites

- The service engineer must have adequate experience working on the registration blocks and performing geometric correction (GC) procedures.
- **GMCE:** Controlled Release 3.1 or higher
- **TMCE:** Controlled Release 5.0 Update 1 or higher and LDF 1.10

  LDF and GC Tool TIFF files available as a Zip archive, downloadable from Techplanet:

	TMCE Narrow Format Upgrade LDF File and GC Tool TIFFs http://techplanet.creo.com/output/computer_to_plate/trendsetter_2637/nav/proced.htm#upgrades) • **MPE:** Currently not supported • Service Shell Client version 3.6.x or higher for the GC Tool
Time required	Up to 8 hours, including correcting geometric correction

Parts required

Part Number	Part Name	Quantity
NA	Loctite® 242	
516-00037A	KIT,TOOLS,REG PIN ALIGNMENT,TS	1
512-00485A	**KIT,NARROW FORMAT UPGRADE,NWP**	**1**
This kit contains:		
512-00260A	KIT,CA06616,LE,CLAMP PIVOT SET,TS	1
252-17312B	FAB,HIGH REG,HOME	1
252-17325B	FAB,LOW REG,HOME	1
252-17326B	FAB,LOW REG,AWAY	1
252-17313B	FAB,HIGH REG,AWAY	1
52-4902	SCRW,M4*12,SOCK-CAP,LOW-HEAD,SS	4

Related Documents

Geometric Correction: Aligning Devices in the Field Using GC Tool (719-00961A)
http://techplanet.creo.com/output/computer_to_plate/trendsetter_2637/nav/base_3244_proced.htm#gc

Upgrade Procedure

Important: Read this entire document before starting the upgrade procedure

1. Use BART to make a backup of the current firmware parameters.
2. Using the Test Plot Applet (TPA) in Service Shell, image four reference plates using plot 100; one for every block set. Image these plots using plate sizes that are sitting on the following block sets:
   - One plate on blocks 1 & 2
   - One plate on blocks 1 & 3
   - One plate on blocks 1 & 4
   - One plate on blocks 3 & 4

   Process the plates, mark them with the corresponding block sets, and keep them in a safe location.

   These four plates are just for visual reference or in case the GC procedure described in the following steps fails.

3. If there is only one Trendsetter NEWS platesetter on site, skip to step 4 to create the master GC plots for the GC Tool.

   If the customer has more than one Trendsetter NEWS platesetter on site, skip to step 6 and use the other platesetter as the master device to perform GC after the registration block upgrade.

   Using TPA in Service Shell, image another four plates, one for every block set, using plot 100.

   Do not process these plates.

   Mark the leading edge of each plate with the corresponding block sets and keep them in a safe and dark location. These four plates will be imaged a second time ("double-burned") after you changed the blocks to verify that the final GC matches the current GC.

   > **Note:** Certain media types (Kodak Thermal News, for example), have a latent image time of only ten minutes. This is the maximum time between imaging and processing before the image disappears.
   >
   > Such media types cannot be used for the "double-burn" GC method described in this procedure, because it takes longer than ten minutes to perform the registration block upgrade.
   >
   > If no other media type is available and there is only one platesetter available, you must perform the GC procedure manually, using the initial plot 100 images as a reference.

4. Refer to the procedure *Geometric Correction: Aligning Devices in the Field Using GC Tool* (719-00961A, http://techplanet.creo.com/output/computer_to_plate/trendsetter_2637/nav/base_3244_proced.htm#gc) to create the Master plots for the GC correction for every block set.

   - **GMCE:** Section 4.1
   - **TMCE:** Section 5.1 (For TMCE, use the TIFF files downloaded from Techplanet.)

   Because this is your last chance to create the master plots before changing the blocks, image three plates for every block set (12 plates in total).

   Do not process these plates.

   Mark the leading edge of each plate with the corresponding block sets and keep them in a safe and dark location. These four plates will be imaged a second time ("double-burned") after you changed the blocks to verify that the final GC matches the current GC.

5. Open the front door of the Trendsetter.

6. Using high-quality hex keys (no rounded tips), loosen the pivot block screws and remove all leading edge clamps from the drum. If the screws are too tight, heat up the screws (with a soldering iron, for example) to break the Loctite adhesive bond.

7. Close the front door of the Trendsetter and move the drum to 5 degrees.

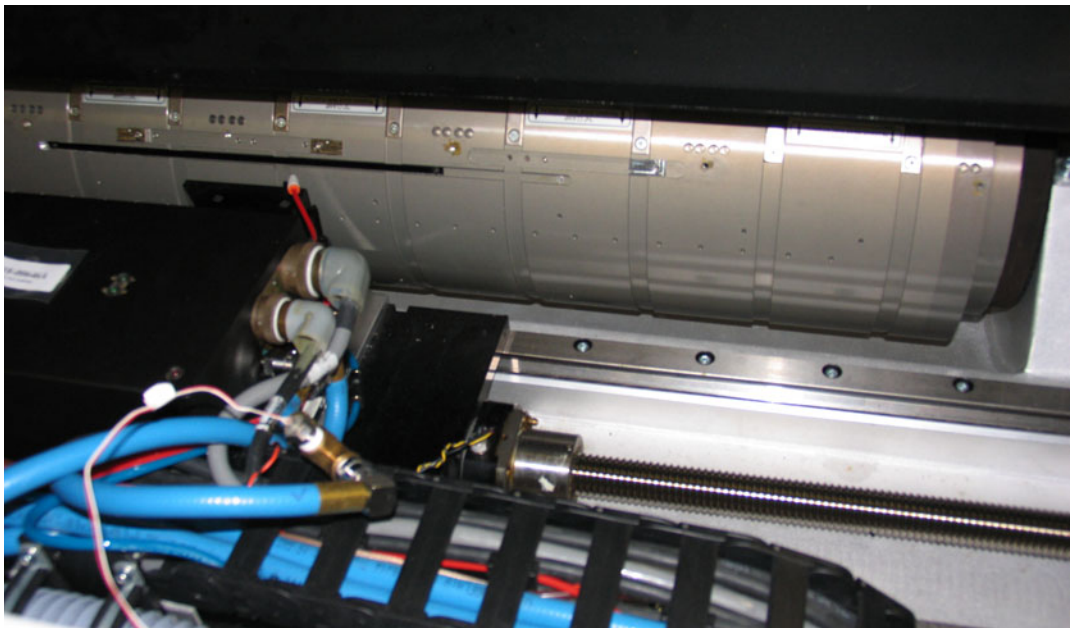
   `drum move 5`

8. Using your service key, turn the safety interlock override (SIO) switch to the Interlock Override position.

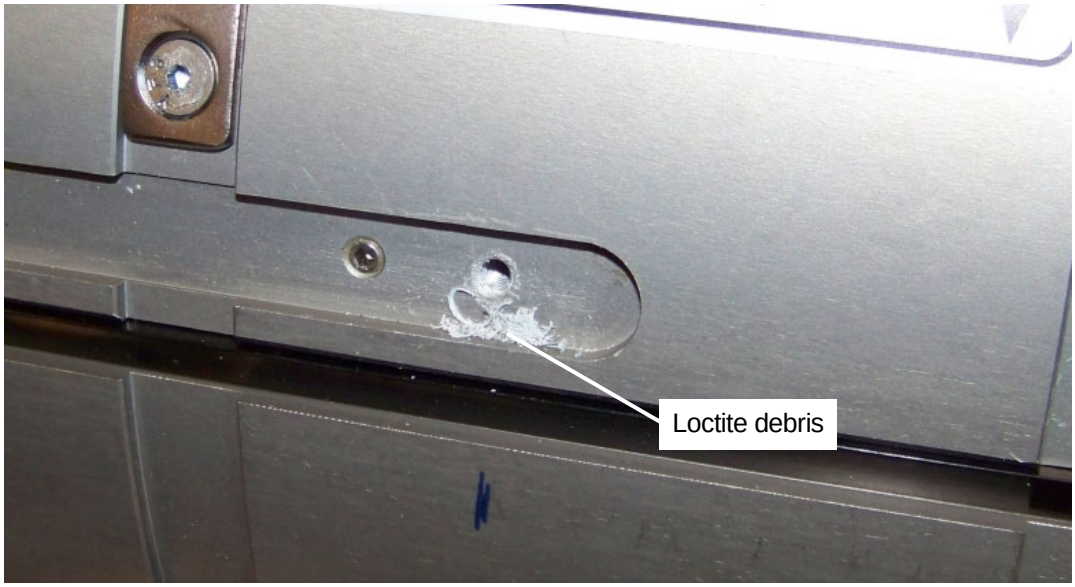
9. Block the drum with a piece of foam and idle the drum (**`drum idle`**) to prevent oscillation caused by the drum amp trying to hold the position.

10. Lower the unload table (**`table down`**) and remove both shoulder panels.

11. Raise the unload table (**`table up`**) and remove the black panel to gain access to the thermal head area.



12. Install and align the new registration blocks onto the drum, one at a time:
    a. Using good quality hex keys (no rounded tip) remove block 1 (closest to the home side of the drum).
    b. Clean any Loctite debris caused by removing the old block from the drum groove.



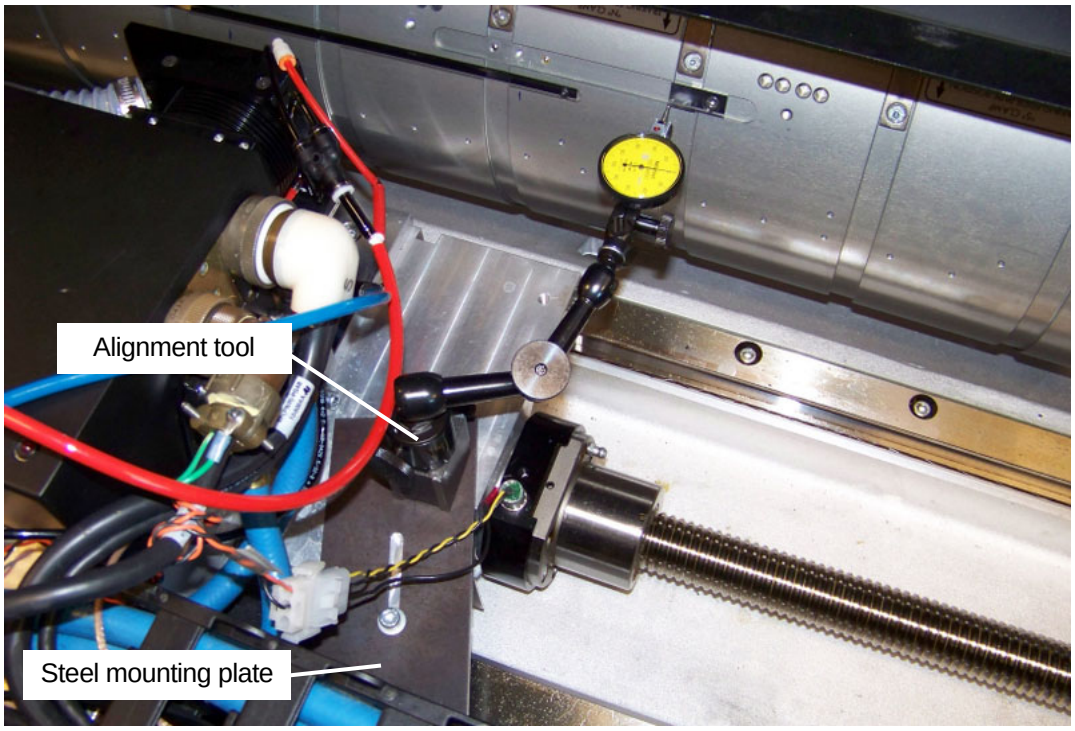
    c. Install the replacement block in the same hole as was used for original block.

       Mount the new blocks so that the landing pads of blocks 1 & 2 and blocks 3 & 4 are closer together. As a result, the distance between blocks 2 & 3 will be larger than before. See appendix A.

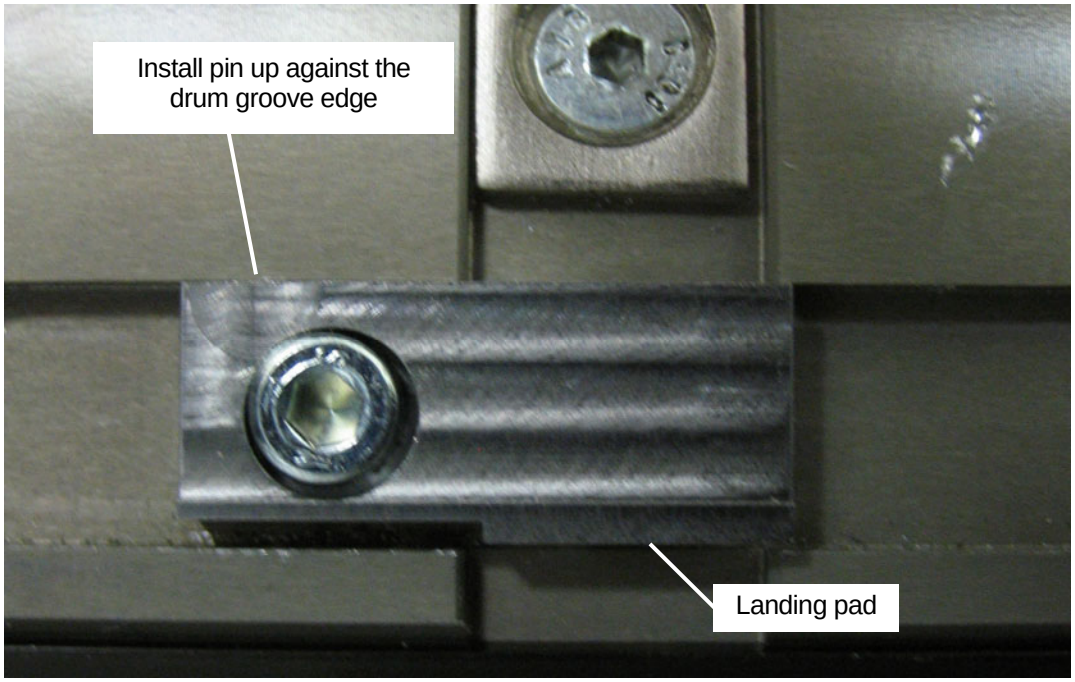
    d. Set up the alignment tool so that you can measure the flatness of the registration block's landing pad.

       Mount the supplied steel plate onto the aluminum carriage plate using one of the threaded holes, so it can hold the magnetic base of the alignment tool.

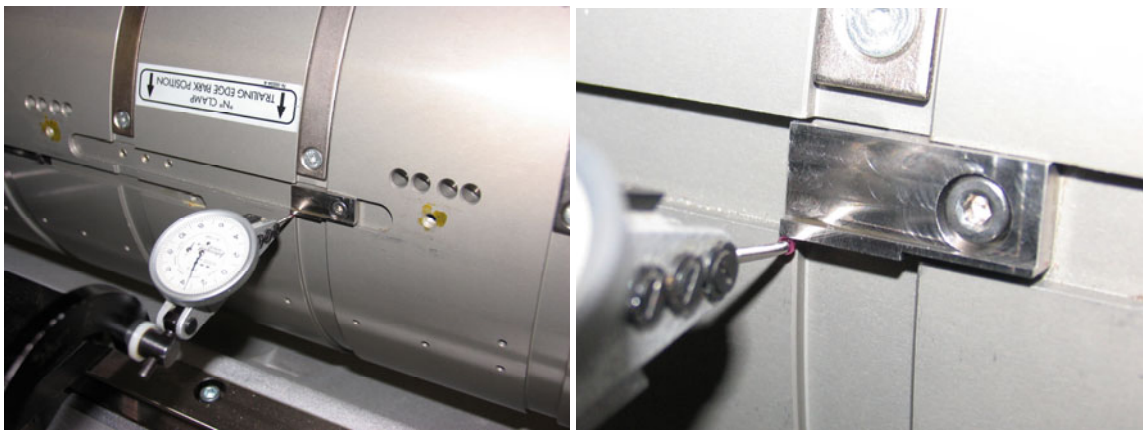
If you need more space, turn off the device and move the (or remove, if necessary) the thermal imaging head.



e. Replace block 1 with 252-17312B FAB,HIGH REG,HOME. Looking from the back of the machine, the landing pad will be facing down. Apply a drop of Loctite 242 to the screw thread. Push the block all the way up in the drum groove while tightening the screw.

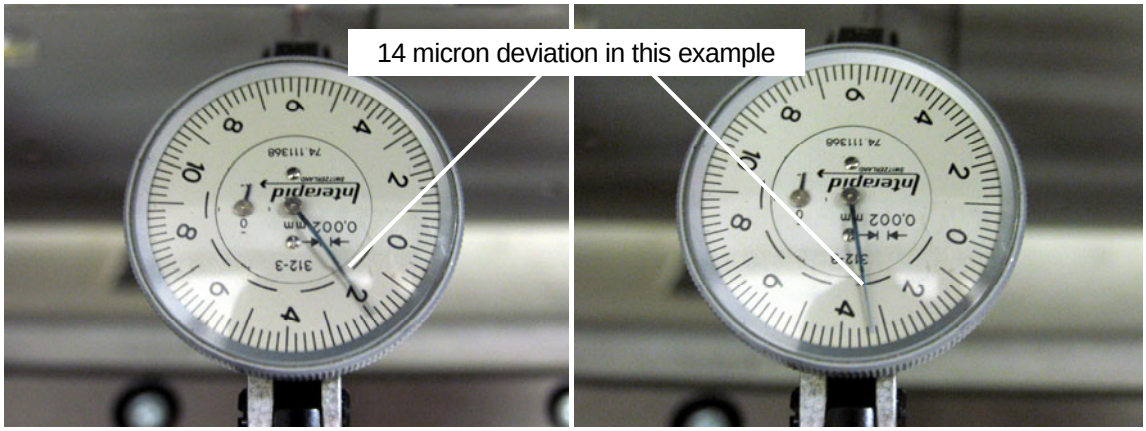


f. Turn the ballscrew by hand to move the carriage and set up the alignment tool so that the needle tip touches the landing pad of the registration block. Looking from the back of the machine, this is the underside of the block.



g. Move the carriage and alignment tool so that the needle travels from one end of the landing pad to the other. Watch the dial on the gauge. The maximum allowed deviation is 25 microns.

If necessary, loosen the screw and adjust the registration block until the flatness of the landing pad is within 25 microns from end to end.

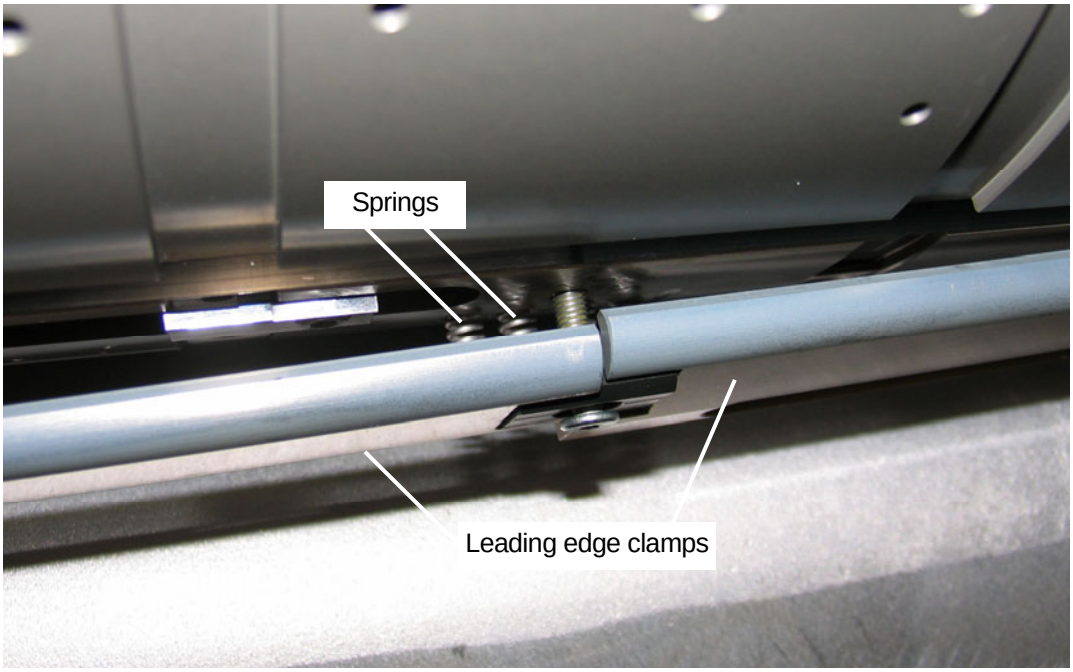


h. Tighten the screw down hard.

13. Repeat step 12, sub-steps a–h, for the remaining blocks.
    a. Replace block 2 with 252-17325B FAB,LOW REG,HOME.
    b. Replace block 3 with 252-17326B FAB,LOW REG,AWAY.
    c. Replace block 4 with 252-17313B FAB,HIGH REG,AWAY.
14. From the front of the device, reinstall the leading edge clamps using the new pivot blocks and screws provided with the kit. If the new pivot block screws do not have Loctite pre-applied, apply Loctite 242.

    Using a torque wrench, tighten the screws to 2.6 N·m.

15. Make sure all springs are seated properly and all leading edge clamps open and close smoothly.



16. Reinstall the panels to close the Trendsetter.
17. **For GMCE devices:**

    Enable the option for the new offset blocks in the firmware:

    ```
    access enable
    option offset-pins enable
    reset
    ```

    For TMCE devices:

    a. Manually enter the following parameters in the firmware:

    ```
    set gc pinloc 1 236
    set gc pinloc 2 482
    set gc pinloc 3 678
    set gc pinloc 4 924
    set gc sscansizemax 1 450
    set gc sscansizemax 2 722
    ```

    b. Go to **<system drive>:\Creo\FeatureLicensing\Database** and rename the file **ctp_trendsetter_news_ver1.cdf.xml** to **ctp_trendsetter_news_ver1.cdf.xml.bck**.

    c. Copy the file **ctp_trendsetter_news_ver1_MCE.cdf.xml** to the current folder.

    d. Reboot the workstation.

18. When more than one Trendsetter NEWS platesetter are available on-site, create the master GC plot on the other device, as described in *Geometric Correction: Aligning Devices in the Field Using GC Tool* (719-00961A)
19. Initialize the device and refer to the *Geometric Correction: Aligning Devices in the Field Using GC Tool* procedure (Section 4.2 for GMCE or Section 5.2 for TMCE) to create the secondary plots for the GC

correction for every block set. Use only one master plate per block set for this step. Save the other copies for later.

20. Refer to section 4.3 in *Geometric Correction: Aligning Devices in the Field Using GC Tool* to calculate the new GC values.

Testing the GC Setup

1. Check the `media invert` setting if you changed it for the GC plots.
2. Using the TPA in Service Shell, double-burn the four plot 100 plates (one for each block set) that you made before installing the new drum blocks. Process the plates.
3. Check to verify that the position of the image on the plate corresponds with the original image position within 20 microns.
4. If the GC does not match the original GC within spec, image another plot 100 GC plot with the current GC settings on top of another master GC plot for every block set (recall that you created three copies of the master GC plot in step 4 on page 3).
5. Repeat steps 2 and 3, above.
6. If the result is still not within spec, you will have to do the final GC adjustments by manual measuring.
7. Use a felt marker to fill in the appropriate check box on the ECO 100-label on the back of the Trendsetter:
   - GMCE TS NEWS: # 7
   - TMCE TS NEWS: # 35

Final Steps

1. If the customer uses a mechanical, edge-registering punch/bender, ensure that the registration points on the punch/bender match the new registration points used by the Trendsetter NEWS output device. See the *Trendsetter NEWS Family Site Preparation Guide* (707-00595A) for more information.
2. If the Trendsetter NEWS device is fed by an automatic plate preloader (NELA PL-T, for example), ensure that the preloader trolley is set up so that plates are properly positioned in the load bay. See the *Trendsetter NEWS Family Site Preparation Guide* (707-00595A) for more information.
3. Return the registration block alignment tool kit (516-00037A) to service stock.

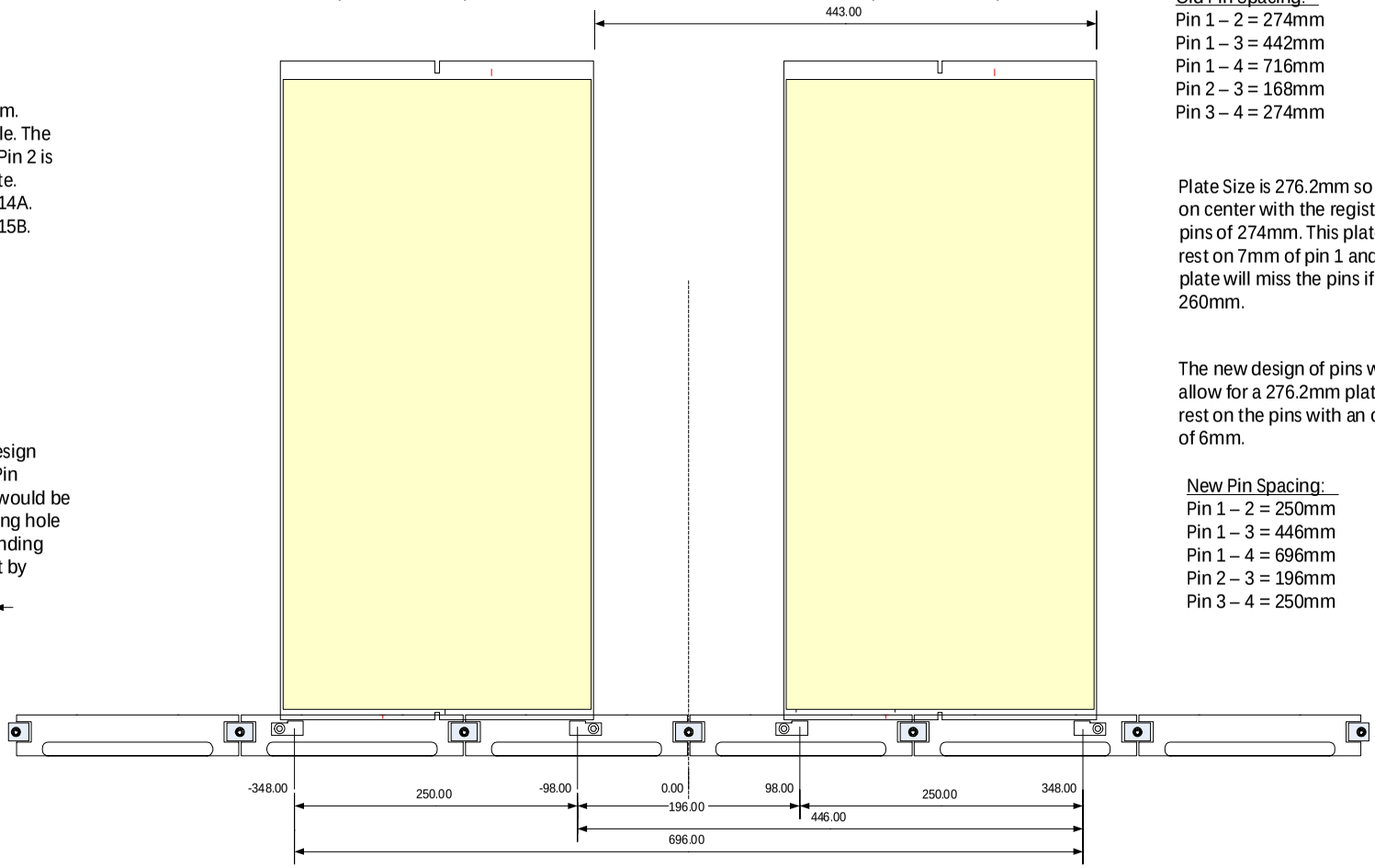
Technical contact	Frank van Eerdt
Date submitted	01 May 2008
Last updated	01 May 2008

Appendix A: Narrow Format Option Pin Layout

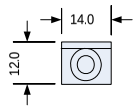
Plate Placement for 44in Web Cutdown

PLATE SIZE: 586.5MM X 276.2MM
(23" X 10.875")

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(23" X 10.875")

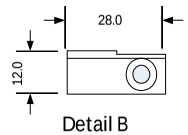


Registration pins used on ALL Trendsetters are 14mm X 12mm. There is a center mounting hole. The difference between Pin 1 and Pin 2 is 200um lower to rotate the plate.
The Pin 1 and 4 part # is 57-7514A.
The Pin 2 and 3 part # is 57-7515B.



Detail A

The Proposal is to make a design change to the Registration Pin length. The Pin Length size would be 28mm X 12mm. The mounting hole would stay the same. The landing pad for the plate would shift by 14mm



Detail B

Old Pin Spacing:
Pin 1 – 2 = 274mm
Pin 1 – 3 = 442mm
Pin 1 – 4 = 716mm
Pin 2 – 3 = 168mm
Pin 3 – 4 = 274mm

Plate Size is 276.2mm so it is on center with the registration pins of 274mm. This plate will rest on 7mm of pin 1 and 2. A plate will miss the pins if it is 260mm.

The new design of pins will allow for a 276.2mm plate to rest on the pins with an overlap of 6mm.

New Pin Spacing:
Pin 1 – 2 = 250mm
Pin 1 – 3 = 446mm
Pin 1 – 4 = 696mm
Pin 2 – 3 = 196mm
Pin 3 – 4 = 250mm