Kodak

ThermoFlex Wide II

Installation Procedure for Sleeve Options

Document Number
719-00353A-E

25 May 2007

Copyright 2007 Kodak. All rights reserved.

Revision History

Revision	Date	Author	Comments
1	Feb 2004	A.Blignaut	Document branched off from original installation doc.
2	Aug 2004	A.Blignaut	Base device install removed – referenced only.
A	Sept 2004	A.Blignaut / Z.Pfrimmer	Premounter installation updates.
B	Jan 2006	A.Blignaut / J.Funk	Multiple installation updates to reflect changes in production hub design and a new laser unit.
C	Mar 2006	D. Tatarin	Make various changes in order to ready machine for EP.
D	May 10, 2006	J. Funk	Changes regarding the redesign of the alignment jig.
E	May 25, 2007	J. Funk	Remove references to premounter.

Kodak

ThermoFlex Wide II
Installation Procedure for Sleeve Options

CONTENTS

Revision History i

1. Parts and Tools 1

2. Reference Documents 1

3. Inspecting the Crates 2

4. Finding the Arbor's Optimum Position 2

5. Installing the Production Hub 2
   - 5.1 Unpacking the Crate 3
   - 5.2 Aligning the Production Hub to the Device 3
   - 5.3 Mounting the Production Hub Base 6
   - 5.4 Assembling the Production Hub 8
   - 5.5 Adjusting the Production Hub 10

6. Appendix A – Interconnections 11

1. PARTS AND TOOLS

For tools and equipment needed to install the Kodak® ThermoFlex® Wide II output device, see the sheet only installation document. Table 1 below describes the tools and equipment needed to find the optimum arbor position, and to install the Production Hub. Finding the optimum arbor position is only required for field upgrades. For factory-configured sleeve machines, this has already been done.

Table 1: Tools required for production hub installation

Description	Usage	Quantity
516-00019B Production hub installation kit[1]	Production hub installation and alignment	1
Metric hex key set	General	1
Tape measure	Base mounting	1
Masonry drill (Hilti)	Base mounting	1
½-in. carbide masonry drill bit	Base mounting	4
Vacuum cleaner	Base mounting	1
Compressed air blow gun	Base mounting	1
Hammer	Base mounting	1
690-00114 Torque wrench preset to 80 N.m (supplied with sleeve machine)	Base mounting	1
Level	Production hub alignment	1
Grease (small tube)	Production hub installation	1

2. REFERENCE DOCUMENTS

This document must be used in addition to the **Installation Procedure** document for sheet-only devices. The documents listed below are for additional reference:

- ThermoFlex Wide II Sleeve Mode Operator Guide (part number 731-00155A)
- Installation Procedure - Sheet only Device (part number 725-00069A)
- Site Preparation Document (part number 725-00093A)
- Installation Test Procedure (part number 708-00069A)
- Finding the Arbor's Optimum Position

3. INSPECTING THE CRATES

When the crates arrive at the customer site, do the following:

1. Inspect all delivered crates and boxes. These will normally be located in the customer's loading dock area.
2. Check that all the shipped crates have been received.
3. If shock watches were mounted on the outside of any crates, check that they are white and not red.
4. Look for signs of damage from moisture, improper packing, tipping, dropping, stacking of crates, or any sign of mishandling. Record any problems immediately on the Installation Report form and report them to both Kodak and the delivery company.

4. FINDING THE ARBOR'S OPTIMUM POSITION

It is necessary to find the arbor's optimum position if the sleeve option installation is a field upgrade. Check all arbors shipped to the customer site for a tag attached to the index pin located on the headstock end of the arbor. If there is a tag, the procedure is required. See the *Reference Documents* section for a link to this procedure. If there is no tag, the procedure has already been done in the factory, and is not required.

5. INSTALLING THE PRODUCTION HUB

Once you have installed and leveled the ThermoFlex Wide II device, you will install the production hub unit and align it with reference to the device.

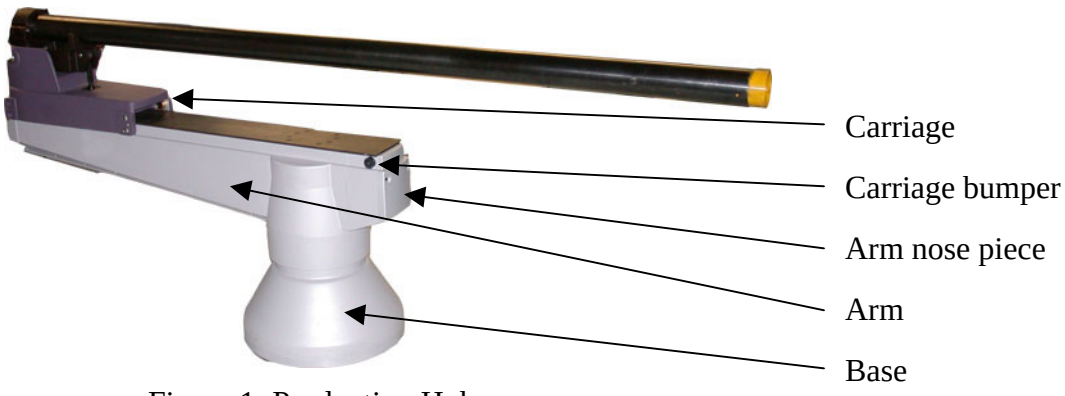


Figure 1: Production Hub

5.1 Unpacking the Crate

1. Remove the top and sides of the crate and remove the cross support beams.
2. Remove the support bracket that holds the arm in place.
3. Remove the arm nosepiece using a 3-mm hex key.
4. Remove the two circular carriage bumpers found at the front of the arm. Place the M5 screws, and bumpers aside.
5. With the aid of an assistant, release the carriage brake, slide the carriage off the arm, and put it in a safe location (see Figure 10 for carriage brake operation).
6. Lift the arm off of the production hub base (one person lifts each end of the arm). Rotating back and forth while lifting upward will make this easier.
7. Remove the production hub base from the crate.
8. Inspect all components for damage and report any damage on the Installation Report form.

5.2 Aligning the Production Hub to the Device

Note: Before you can install and adjust the production hub, you must have installed and leveled the ThermoFlex Wide II, and it must be turned on and fully operational. The drum must be in the imaging position for this part of the procedure.

WARNING: When using the laser unit to align the production hub, do not look directly into the laser beam. Do not remove the filter attached to the laser unit.

1. Open the top front cover of the ThermoFlex Wide II device.
2. Position the production hub base on the tailstock side of the device. The distance between the production hub center and the side of the closest device side panel is 1452 mm (57 in.) ± 15 mm (5/8 in.).
3. Remove the drum vacuum hose by removing the three M4 screws that hold it in place.

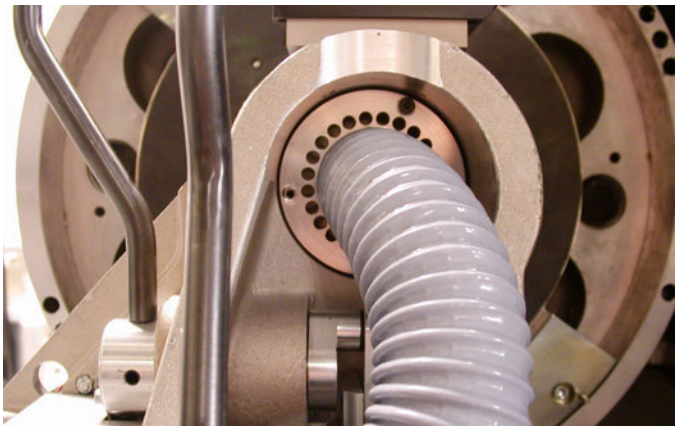


Figure 2: Removing the drum vacuum hose

4. Clean any debris from the vacuum opening and slide the alignment jig shaft through the vacuum opening and into the end of the drum pin. Push the alignment jig shaft in until it stops.

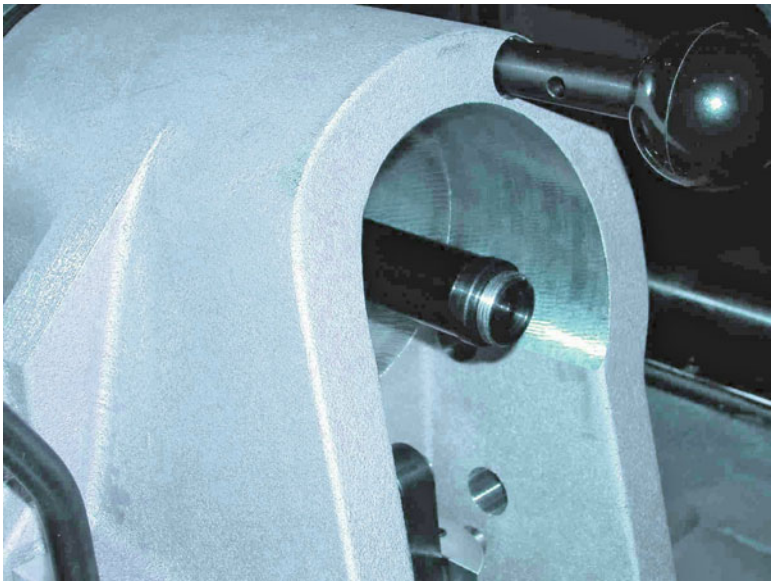


Figure 3: Hub alignment jig in tailstock

5. Screw the laser unit onto the shaft. Make sure the battery is in the correct orientation by checking for the laser beam.

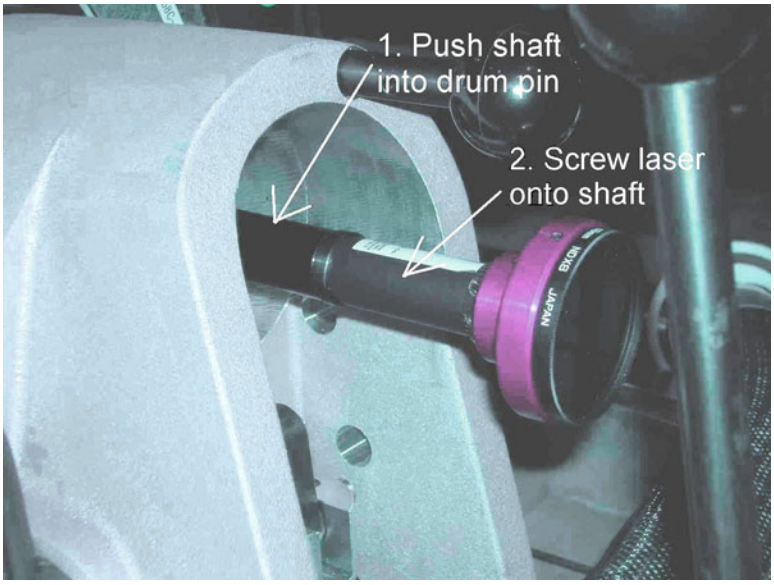


Figure 4: Laser jig in tailstock

6. Mount the laser target on the production hub base with the target facing the laser unit on the device.

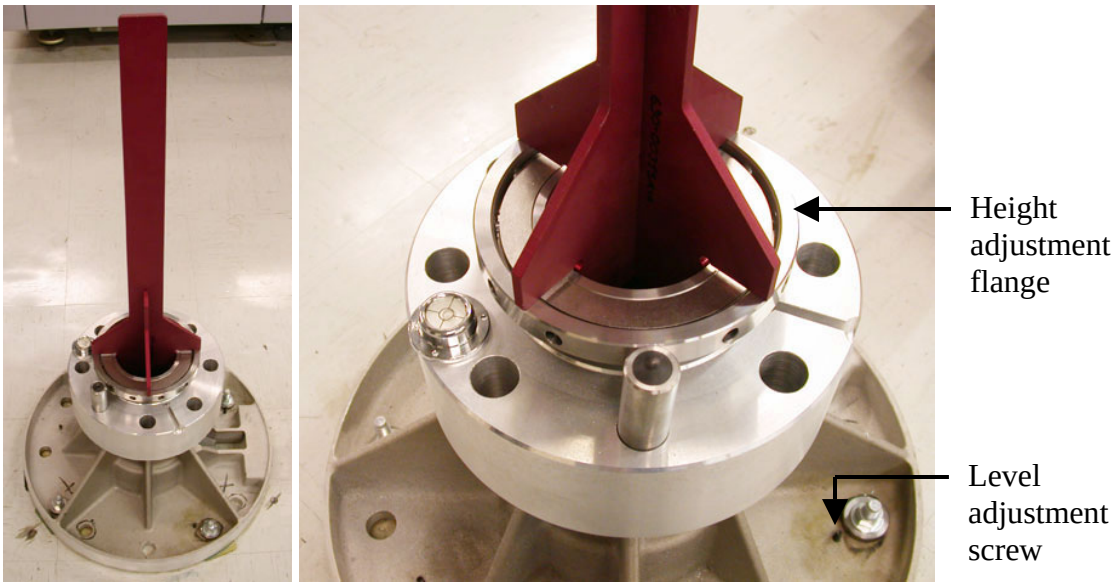


Figure 5: Mounting the laser target

7. Move the base so that the laser dot is near the target. Re-check the distance between the two devices.
8. Turn the drum brake override switch to **On**.
9. Rotate the drum by hand until the laser dot is at the highest point when it arcs.
10. Place the small round level on the production hub base. Adjust the level adjustment set screws to level the base. See Figure 5.
11. Move the base so that the laser dot is on the vertical line of the target. Recheck the base level.



Figure 6: Aligning the production hub base

12. Adjust the production hub height adjustment flange until the laser dot is centered around the target x-hairs when the drum is turned.

13. Check that the distance between the base and the device is still correct, and that the base is still level. Adjust if necessary.

14. Mark the floor around the production hub base and mark any four equally spaced mounting holes for drilling.

5.3 Mounting the Production Hub Base

The production hub base is mounted onto the concrete floor with four concrete anchor bolts (Hilti ½ in. x 5½ in. long thread Kwik Bolt II). Use an industrial hammer drill (such as a Hilti) and a ½ in. masonry drill bit to drill the holes.

1. Place the supplied drill bushing in the base hole and drill through the hole in the drill-bushing into the concrete floor. The holes must be 70-100 mm (2-3/4 - 3½ in.) deep.

2. To minimize dust, ask an assistant to hold a vacuum cleaner nozzle at the drill bit while drilling.

3. Use compressed air to blow all the dust from the holes.

4. Insert the bolts into the holes in the concrete and tap them down to the bottom of the hole with a hammer.

5. Put a washer and nut onto each bolt and finger tighten the nuts.

6. Slide shims under the base at each bolt to fill the gap between the floor and the base.



Figure 7: Leveling the base with shims

7. Back off the level adjustment set screws.

8. Tighten the bolts systematically to 80 Nm (60 ft-lbs) using the torque wrench supplied with the device and the deep socket provided in the production hub installation kit. Re-check the level and add shims if necessary.

9. Install the production hub base skirt.

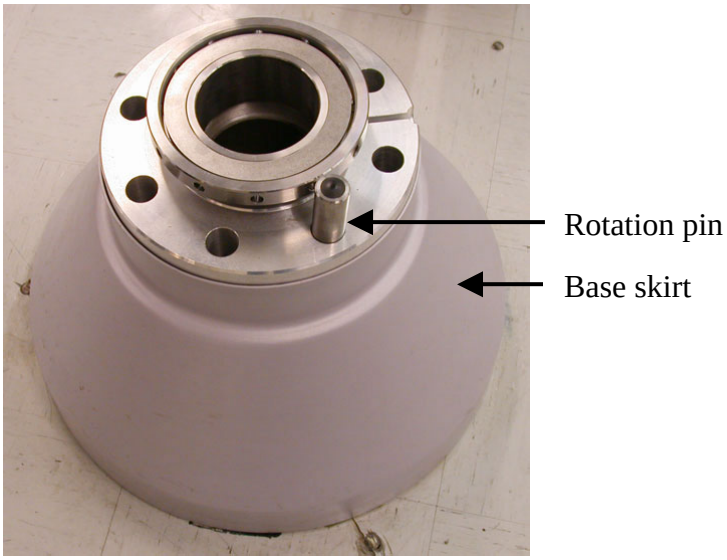


Figure 8: Installing the base skirt

10. If the base skirt has an access hole cover, install it.

5.4 Assembling the Production Hub

The production hub is heavy and awkward to lift, so you will need a helper to install it.

1. Verify that the shaft has a coating of grease. If the shaft does not, apply a coating of grease.
2. Lower the shaft of the production hub arm into the base until it is all the way down.



Figure 9: Installing the production hub arm

3. Remove the support leg at the end of the arm.
4. A rotation pin restricts the production hub arm's rotation—see Figure 8. Test the rotation of the arm so that it has the desired arc for sleeve loading and unloading. Lift the arm up and move the rotation pin as needed.
5. With a helper, slide the carriage (handle-side first) onto the arm. When sliding the carriage on, you must pull the brake handle on the underside of the carriage. Once the carriage is on the arm, you can release the handle.



Figure 10: Installing the carriage

6. Reinstall the carriage bumpers.

7. Check that the carriage rolls freely along the arm when the brake is disengaged and that it does not move when the brake handle is released.

8. Open the swivel clamp on the carriage and install a shell shaft.

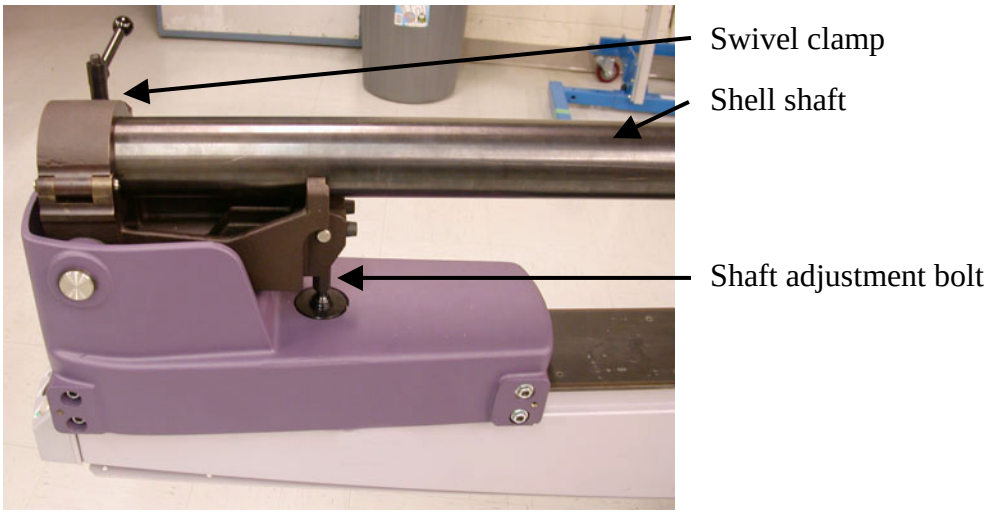


Figure 11: Installing a shell shaft

9. Place a level on top of the shell shaft and adjust the shaft adjustment bolt so that the processor shaft is horizontal.

10. Open the device's tailstock so that the arbor is no longer supported. Slide the shell shaft close to the end of the arbor. The arbor must not have a shell mounted when this operation is carried out.

11. If the height of the arbor and the shaft are not the same, adjust the production hub arm height through the access slot in the back of the base. A special handle is supplied to make this adjustment.



Figure 12: Adjusting the production hub arm height

5.5 Adjusting the Production Hub

1. On the ThermoFlex Wide II device, lower the drum and install and arbor in its place. See the **Operator Guide** for instructions on how to do this.
2. Slide a shell onto the shell support shaft on the production hub.
3. Align the shell support shaft with the arbor, move the carriage forward until the shell shaft locates on the arbor, and slide the shell onto the arbor.

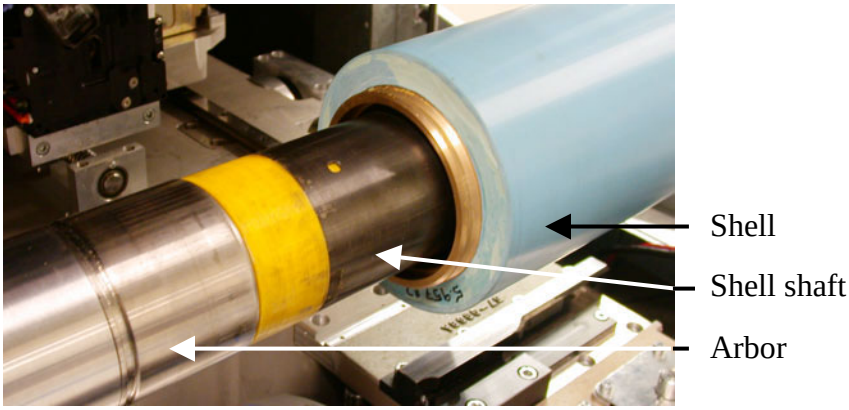


Figure 13: Aligning the shell shaft and arbor

4. Tighten the hydraulic clamp screw on the arbor.

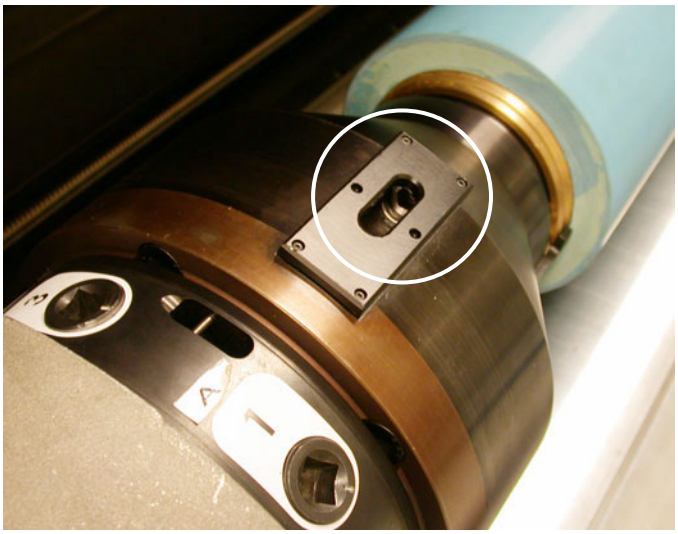


Figure 14: Tightening the hydraulic screw

5. The arbor will droop slightly with the weight of the shell. It may be necessary to realign the height of the arm.

6. APPENDIX A – INTERCONNECTIONS

