Crestline® Altra™ Series Dampener

Installation Instructions

Didde 175
GENERAL INFORMATION

ATTENTION
CRESTLINE®
ALTRA™ SERIES
DAMPENER
OWNER!

Accel Graphic Systems provides parts and service through its authorized distributors and dealers. Therefore, all requests for parts and service should be directed to your local dealer.

The philosophy of Accel Graphic Systems is to continually improve all of its products. Written notices of changes and improvements are sent to Accel Graphic Systems’ Dealers.

If the operating characteristics or the appearance of your product differs from those described in this manual, please contact your local Accel Graphic Systems Dealer for updated information and assistance.

Always update your dampener when improvements are made available, especially those related to safety.

Your authorized Crestline® Altra™ Series Dealer is:
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

The serial number of your Crestline® Altra™ Series Dampener(s) is:
________________________________________________________________________

SAFETY INFORMATION

FOR YOUR SAFETY, DO NOT DISENGAGE OR REMOVE ANY GUARDS FROM THE CRESTLINE® ALTRA™ SERIES DAMPENER. THE DAMPENER CONTAINS SOME INWARD ROTATING ROLLER NIPS THAT CAN CAUSE INJURY IF LEFT UNGUARDED.
BASIC CONFIGURATION OF CRESTLINE® ALTRA™ SERIES

Terminology

OPS = Operator's Side
NOPS = Non Operator's Side

TECHNICAL ASSISTANCE

For technical assistance during the installation, please contact:

ACCEL GRAPHIC SYSTEMS
11103 Indian Trail
Dallas, TX 75229
Phone (972) 484-6808
FAX (800) 365-6510
E-MAIL accel@dallas.net
WEB SITE www.accelgraphicsystems.com

Crestline® Altra™ Series is covered by U.S. Patents Pending
GENERAL INFORMATION

REQUIRED TOOLS

1. 3/32" Allen
2. 1/8" Allen
3. 5/32" Allen
4. 3/16" Allen
5. 1/8" Punch
6. 5/32" Punch
7. 3/16" Punch
8. 7/16" Wrench
9. 1/2" Wrench
10. 9/16" Wrench
11. Phillips Screwdriver
12. Gear Puller
13. Snap Ring Pliers
PRE-INSTALLATION INSTRUCTIONS

Check the box and parts boards to make sure all pieces are present and nothing has been damaged in shipment.
DISASSEMBLY

1. Remove the OPS and NOPS side covers. Remove the water form and ductor rollers. Remove water pan and bottle assembly. Remove the OPS and NOPS water pan mounting blocks (subject arrow NOPS shown).

2. At the NOPS, remove the pan roller drive sleeve (subject arrow) by loosening the set screw securing it to the pan roller.

3. At the OPS and NOPS, remove the pan roller bearing housing by removing the phillips head screws (subject arrows NOPS shown).
4 Remove the pan roller (subject arrow) from the press.

5 At the OPS, remove the drive arm, set collar and torsion spring from the end of the water ductor roller shaft (subject arrow).

6 At the OPS and NOPS loosen the ductor roller mounting brackets (right subject arrow, NOPS shown) and the set collar (left subject arrow). Thoroughly clean the ductor shaft and slide it out of the press. After shaft is out, tap out the bronze bushing at each side.
DISASSEMBLY

7 At the OPS, remove the phillips head screws (lower subject arrows) retaining the oscillator bearing housing. Remove the cap screws securing oscillator anchor block (upper subject arrow) and remove it from the press.

8 Remove the bolt on the end of the oscillator shaft that secures the oscillator drive mechanism to the oscillator. Remove the drive from the oscillator. It may be necessary to use a gear puller to remove the drive. Save the drive assembly for reassembly.

9 Using a 1/8" punch, remove the roll pin securing the worm (subject arrow) on the oscillator shaft. Remove the worm and ball bearing, saving ball bearing for reassembly.
DISASSEMBLY

10 At the NOPS, remove the button head bolt (subject arrow) securing the oscillator drive gear to the oscillator. Remove the gear and the woodruff key and save for reassembly.

11 Remove the oil filler and set collar (subject arrow) securing the oscillator idler gear on the NOPS. Remove the gear and save for reassembly.

12 At the NOPS, remove the three phillips head screws (subject arrows) securing the oscillator bearing housing.
At the OPS and NOPS, remove the shoulder bolts (subject arrow OPS shown) from water form block and save for reassembly.

At the OPS and NOPS, remove the snap rings (subject arrow OPS shown) from the bearing housings. Remove the housings from the press and save for reassembly.

With the housings removed, the water form hangers and spacers can be removed. Save these parts for reassembly. Remove the oscillator from the press.

This completes the disassembly process. Thoroughly clean all parts saved for reassembly and check all mating parts (i.e. vibrator housing to form hangers) for excessive wear. Replace if necessary. This is important for proper operation of the new Crestline® Altra™ Series dampening system. Refer to your Didde parts guides for the correct part numbers. Also, clean the inside of the press frames around the dampener area.
1. Replace the bushings in the oscillator housing with the new ones (06-134) provided.

2. Install the Crestline® Altra™ Series oscillator roller (07-0434) in the same manner as the original. It is a good idea to leave the protective paper on the roller until the end of this step. Be sure to install the form roller hangers, spacers and snap rings (subject arrow) over the journals as they originally were before installing the bearing housings. Secure the housings to the press using the original phillips head screws. Leave the OPS side housing loose as it will need to be rotated later when installing the oscillation drive. Replacement bolts for each end of oscillator have been provided if needed.

3. Install the original oscillator idler gear (subject arrow) on the NOPS using the original thrust washer and set collar. Replace the oil filler (not shown in the photo) on the end of the shaft.
4. Install the supplied woodruff key (subject arrow) in the slot in the end of the NOPS oscillator journal. Install the oscillator drive gear using the new hardware.

5. At the OPS, first install the supplied new replacement bearing (#06-133, subject arrow) and then the new worm (#03-714510) on the oscillator roller journal. The retaining ring on the bearing goes toward the press frame. Install the supplied roll pin through the worm to secure it to the journal.

6. Remove the two nuts securing the worm gear in the oscillation drive housing. Remove the worm gear and the 3 bearings and replace them with the new ones provided. You must use the new worm gear as it is different from the original.
7. Install the oscillation drive assembly on the oscillator journal. Make sure the bearing, installed in step 4, is seated in the housing before securing the drive assembly to the oscillator using the new hardware (subject arrow).

8. Replace the pin in the block with the new one provided. Install the block and arm assembly (subject arrow) by first inserting the arm on the pin in the worm gear. The set screw holding the pin in the block goes toward the press frame. Rotate the assembly until the holes in the block line up with the holes in the press frame. Loosely install the bolts securing the block to the press frame. When everything is properly aligned, the vibrator will be easy to turn by hand and you can tighten the bolts.

   Install the new water form roller into the original form housing.

9. At the OPS, tap the lower water form lever stop pin (subject arrow) toward the outside of the press about 1/4" to allow for dampener frame clearance. Do not over-tap or the press cover will not close.
Using the supplied mounting spools and hardware, install the OPS and NOPS dampener frames as shown in the diagram. The mounting spools insert through the original pan roller and ductor shaft holes in the press frames. On machines with a 22” cutoff loosely secure the frames to the ductor shaft holes first, and then use the provided spools with the offset hole in the pan roller hole.

Insert the intermediate roller (the smaller of the two shafted rollers) into the slots in the frames and up against oscillator. The pin in the collar at the NOPS should be facing the open end of the slot. Loosen the set screw in all three collars on the roller shaft. Slide the shaft as far to the OPS as possible. Slide the pinned collar up against the NOPS frame and tighten. Next, center the roller relative to the water form roller and tighten the two remaining collars up against the roller to lock in place. To double check for correct position, jog the press while observing the stroke of the oscillator relative to both the water form and intermediate roller. Reposition the intermediate roller if necessary.

Install the metering roller similar to the intermediate roller in step 10. The pin in the NOPS collar, however, should be facing the closed end of the slot. Remove the end play in the shaft as in step 10 and center the metering roller to the intermediate roller.
INSTALLATION

13 Install the pan roller into the eccentric brackets. The shorter end will go to the OPS and the roller should be centered to the metering roller. Replace the bearing caps. Do not adjust the middle screw in the bearing cap, as this has been factory set for proper cap tension.

14 The water pan and shield attach as shown, however these should be left off until final roller settings are made.

YOU ARE NOW READY TO MAKE FINAL ADJUSTMENTS
FORM ROLLER TO PLATE CYLINDER PRESSURE

With a properly packed plate mounted on the plate cylinder, lower the water form control handle to the ON position. After a few seconds, raise the handle to the OFF position. Jog the press slightly backwards and observe the stripe on the plate. The correct stripe will be 5/32" (4mm) wide and parallel across the width of the plate. To adjust, loosen or tighten the lock nuts (subject arrows) on each side of the link blocks. When the correct stripe is obtained, ensure both lock nuts are tight. Recheck the stripe and repeat the adjustment if necessary.

OSCILLATOR TO FORM ROLLER PRESSURE

Raise the water form control handle to the OFF position. Dab some ink on the water form roller and slowly run the press for 30-40 seconds to distribute (only if the form and oscillator will ink up at this time). Turn the press off and wait for 15-20 seconds before jogging the press forward enough to observe the stripe between the water form and oscillator roller.

The correct stripe will be 5/32" (4mm) wide and parallel across the width of the roller.

To adjust, insert the allen wrench supplied with the press into the allen nut (right subject arrow) on each form roller bracket. Lightly tap the allen wrench to unlock the eccentric bearing cups. With a 5/32" allen wrench inserted into the bearing cap screw (lower subject arrow) rotate the bearing cups as necessary to obtain the proper stripe.

After obtaining the correct stripe, retighten the allen nuts. Recheck the stripe and repeat the adjustment if necessary.

FORM ROLLER TO PLATE CYLINDER PRESSURE

With a properly packed plate mounted on the plate cylinder, lower the water form control handle to the ON position. After a few seconds, raise the handle to the OFF position. Jog the press slightly backwards and observe the stripe on the plate. The correct stripe will be 5/32" (4mm) wide and parallel across the width of the plate. To adjust, loosen or tighten the lock nuts (subject arrows) on each side of the link blocks. When the correct stripe is obtained, ensure both lock nuts are tight. Recheck the stripe and repeat the adjustment if necessary.
FINAL ADJUSTMENTS

INTERMEDIATE TO METERING ROLLER PRESSURE

This pressure is adjusted by loosening the lock nut in the center of the cap (#2) and turning the set screw (#1). Turning the screw in will increase the stripe and vice-versa. Jog the press and observe the stripe between these two rollers. It should be 5/32" (4mm). Setting this stripe automatically sets the intermediate to oscillator pressure.

PAN ROLLER TO METERING ROLLER PRESSURE

This pressure is adjusted by loosening the set screw (#3) and rotating the pan roller eccentric brackets. Rotating the brackets toward the metering roller increases the stripe and vice-versa. This stripe should be 5/32" (4mm). Jog the press to check.

WATER LEVEL IN PAN

Attach the circulator filler pipe to the water pan and connect the feed line and valve. Connect the drain hose to the large pipe at the bottom of the pan. Insert the weir into the drain hole at the bottom of the pan. Shut off the feed valve completely and turn on the circulator pump. Slowly open the feed valve until fountain solution slowly flows from the end of the pipe. The weir will automatically control the water level inside the pan. Beware of adjusting the water feed too high as this will overflow the pan.

YOU ARE NOW READY TO PRINT
BASIC OPERATION

START OF DAY  

A. Make sure all rollers are in place.

B. Attach splash shield to the dampener.

C. Mount plate to cylinder. Wipe down all plates before running. Pre-ink the Crestline® Altra™ Series dampener before running the plates with an extremely light coverage of ink.

D. Adjust circulator flow to water pans.

NOTE: Accel recommends using the proper fountain solution for the plate material being run on the press. A good acid/gum etch should be used with metal plates.

RUNNING DURING THE DAY

A. In general, the Crestline® Altra™ Series Dampener should not have to be adjusted from job to job. The form roller setting should never be changed unless it has deviated from the factory specification of 5/32” to the plate.

B. Adjustment of the amount of water fed to the plate is made by altering the pan roller to metering roller pressure. Less pressure equals more water.

C. In general, more water will only be required when going from a metal plate to an electrostatic or silvermaster type plate.
Cleansing & Maintenance

**WASH UPS DURING THE DAY**

1. Shut off circulator and drain the excess water from the pan.

2. Mount cleanup mat to the press or if applicable, a wash-up attachment along with a metal plate to act as a bridge between dampener and inker.

3. Turn on the press and squirt a small amount of press wash on the ink and dampener rollers. (Squirt ink rollers only if using a wash-up attachment.)

4. Drop both the dampener and ink forms to the plate. If using an attachment, generally the dampener will pick up enough roller wash off the plate to clean itself, so apply wash directly to the dampener only when necessary.

5. Remove water pan and clean any solution left in it.

6. Be sure to wipe excess clean up solution from the ends of the dampener metering and pan rollers.

**END OF THE DAY**

Wash up dampener as described above. Pay close attention to cleaning the ends of the pan and metering rollers that extend past the form rollers.
DEGLAZING THE DAMPENER

Periodic deglazing of water-soluble contaminants will be necessary with the Crestline® Altra™ Series. Typically, once every 2-3 weeks will be sufficient, unless you are running electrostatic plates on a daily basis whereas deglazing should be performed weekly. A 50/50 solution of household ammonia and hot water can be used for deglazing purposes. If you prefer a commercially available deglazer, avoid those containing pumice or gritty substances. Accel offers a product called COMPOUND X which is what we recommend for deglazing our system. Contact your dealer or Accel for more information. Always follow deglazing with straight water and then roller wash.

OILING AND GREASING THE DAMPENER

A. Place a small amount of grease on the gears once a month.
B. Inject grease into the oscillator worm drive once a month.
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METERING/INTERMEDIATE/PAN ROLLERS
DIDDE 175

SA-070451 (INTERMEDIATE)

SA-070446 (METERING)

07-0359 (PAN)
SHIELD ASSEMBLY
DIDDE 175

CRESTLINE CONTINUOUS DAMPERING SYSTEM

SA-2121