

# Crestline<sup>®</sup> Altra Series<sup>™</sup> Dampening System

## Installation Instructions

Didde 8.5, 11, 17



*A Pamarco Technologies Inc. Company*

X88-91  
2624  
Rev-B  
01/2001

# 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 System's Dealers.

If the operating characteristics or the appearance of your product differs from those described in this manual, please contact your local Accel Graphic System's 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:

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

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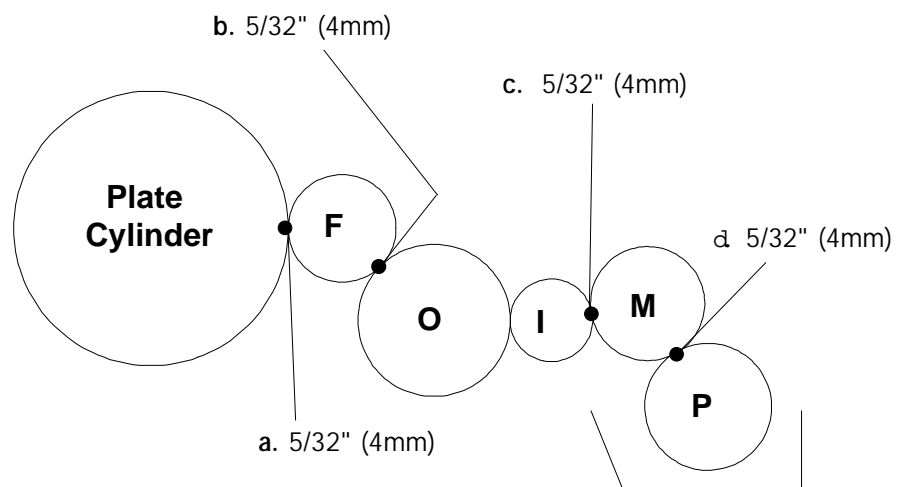
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**SAFETY  
INFORMATION**

**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.**

# GENERAL INFORMATION

## BASIC CONFIGURATION OF CRESTLINE® ALTRA SERIES™



MCP-53, 2-96

**Adjustments**  
**a.** Form to Plate  
**b.** Oscillator to Form  
**c.** Intermediate to Metering  
**d.** Pan to Metering

**Roller Description**  
**P** = Pan  
**M** = Metering  
**I** = Intermediate  
**O** = Oscillator  
**F** = Form

**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  
 (972) 484-6808  
 FAX (800) 365-6510  
 E-MAIL [accel@dallas.net](mailto:accel@dallas.net)  
 WEB SITE [www.accelgraphicsystems.com](http://www.accelgraphicsystems.com)

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

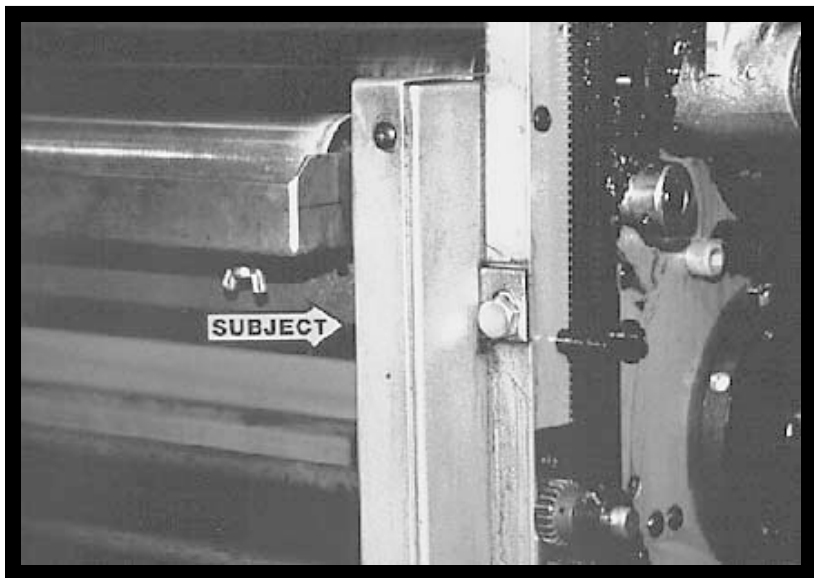
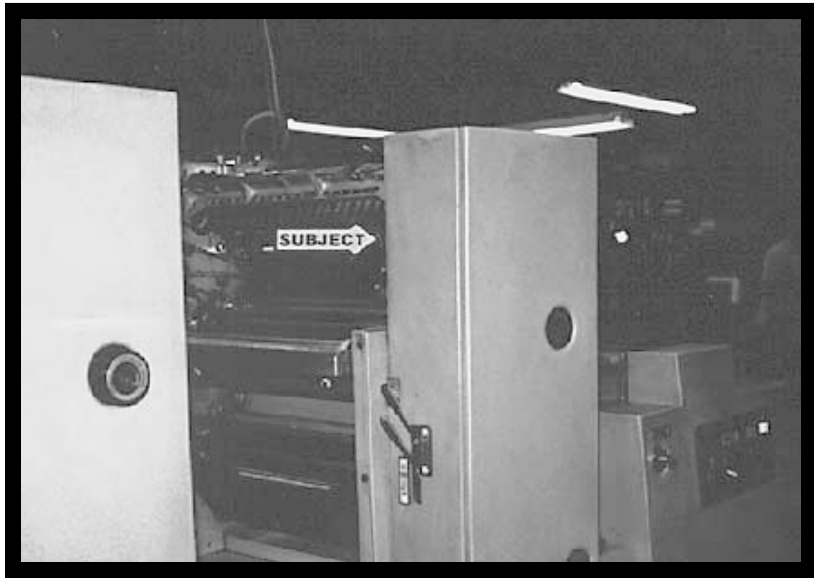
## GENERAL INFORMATION

### 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 ink form lever and water form levers (subject arrow).

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**2**

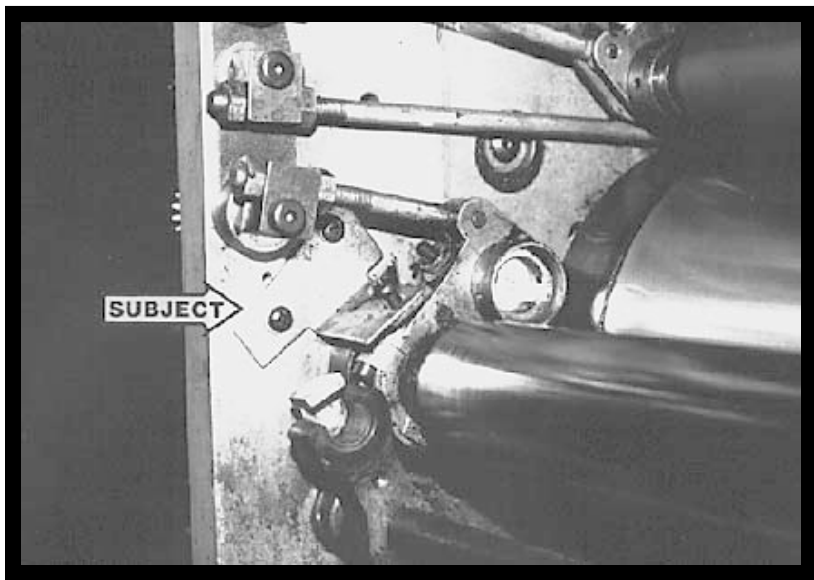
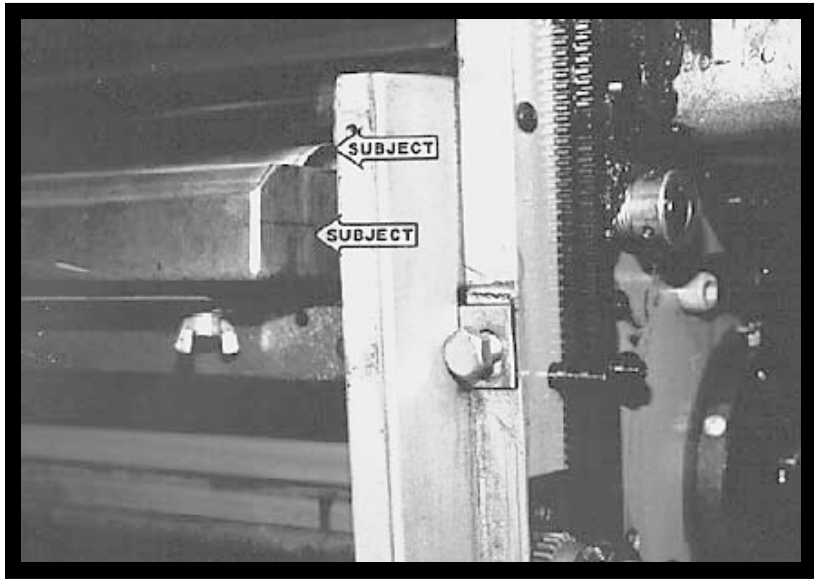
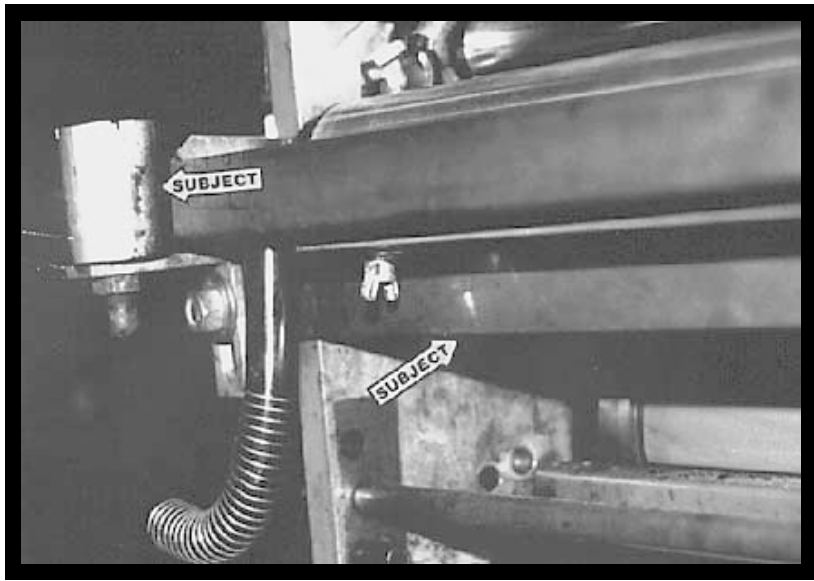
At the OPS & NOPS, remove press side covers (subject arrow). Cable guides from inside of press side covers must be disconnected before covers can be removed.

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**3**

Remove entire chain guard(subject arrow 2 pieces) at OPS.

**7**





## DISASSEMBLY

**4**

Remove water pan support bar (lower subject arrow) and water filler cup (upper subject arrow).

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**5**

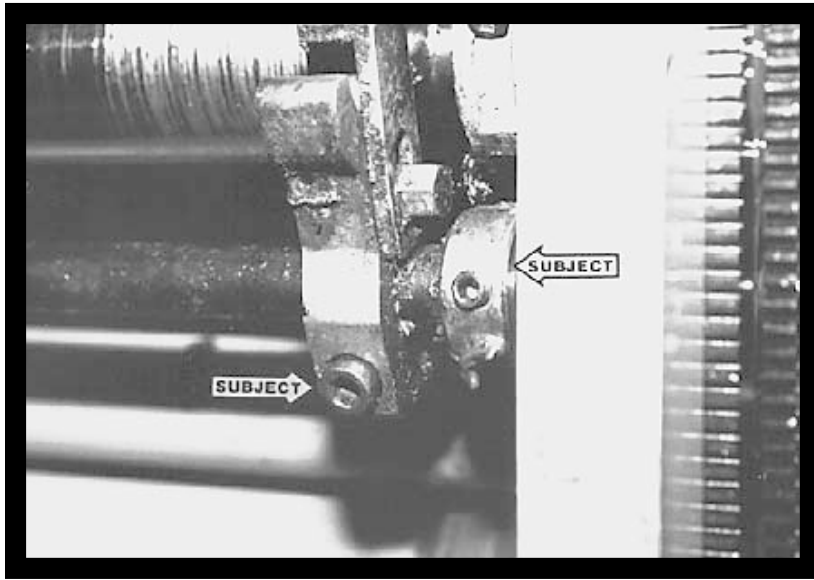
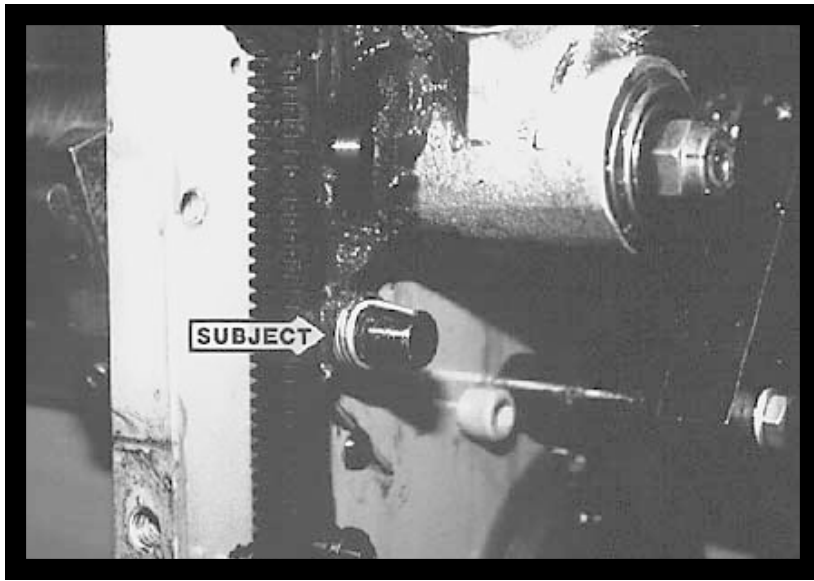
Remove water pan (lower subject arrow), pan roller (upper subject arrow) and drive chain. Drop the chain into the framework of the press. Also, remove the fuse from the fuse box related to dampener motor.

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**6**

At OPS & NOPS, remove small plates (subject arrow).

**9**



# DISASSEMBLY

**7**

At OPS remove set collar and spring (subject arrow) from ductor shaft.

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**8**

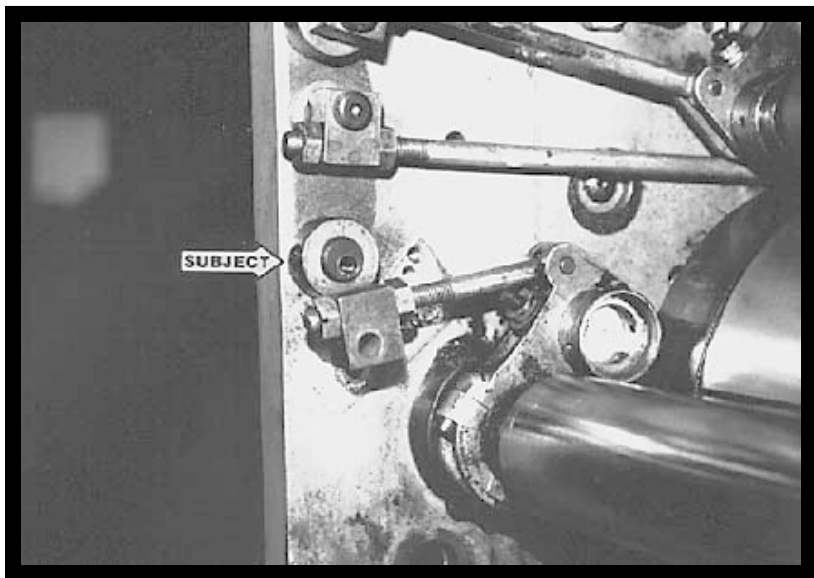
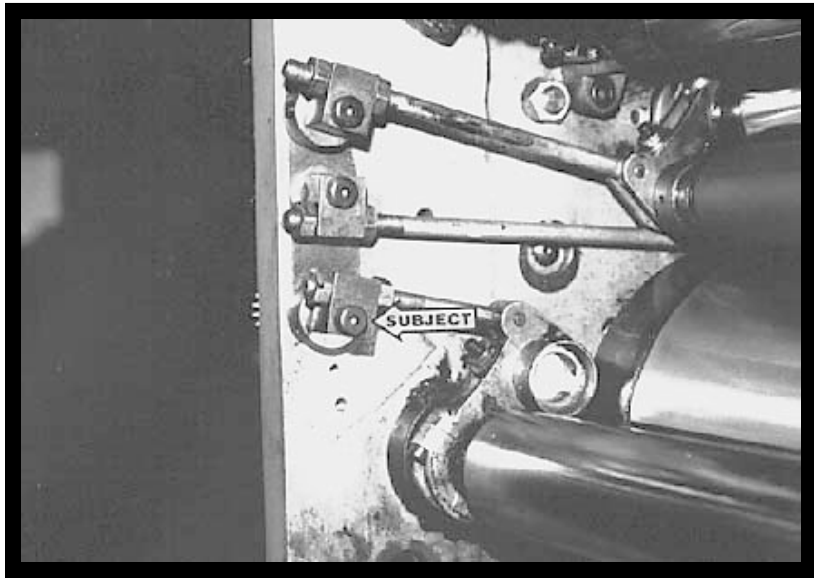
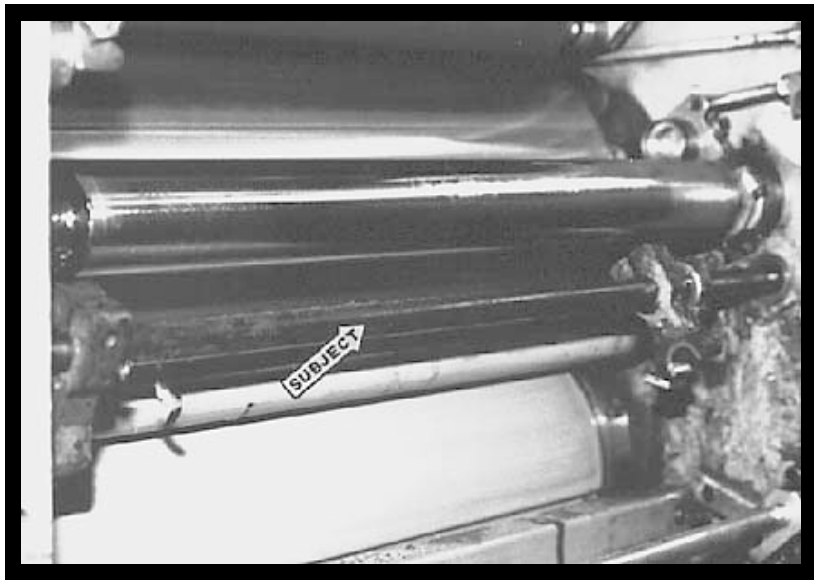
At OPS & NOPS, loosen ductor brackets (lower subject arrow) and set collars (upper subject arrow).

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**9**

At NOPS, remove snap ring and remove linkage mechanism from ductor shaft.

**11**



## DISASSEMBLY

**10**

At NOPS, pull ductor shaft through press side frames, sliding off the ductor brackets and set collars.

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**11**

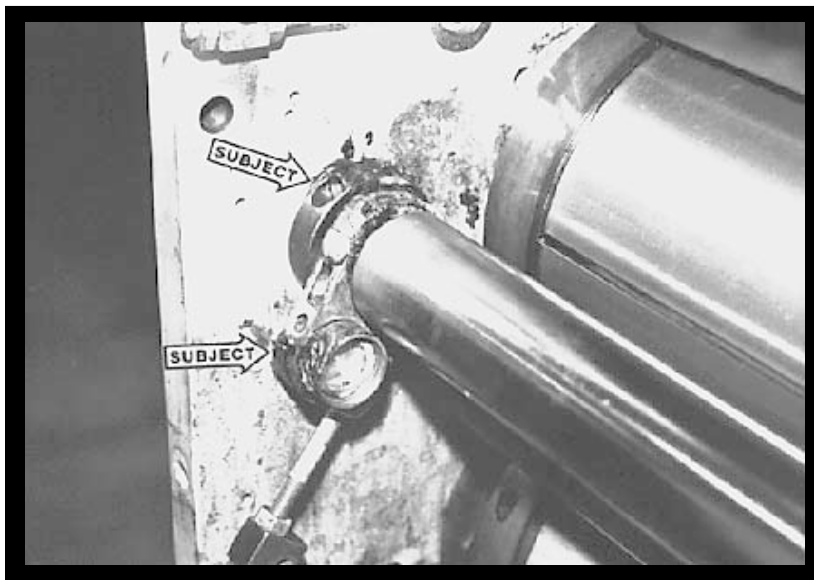
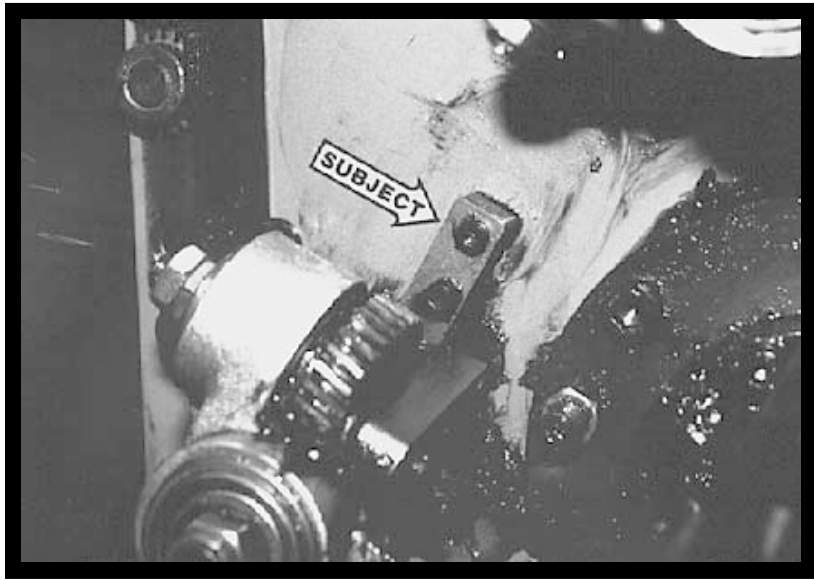
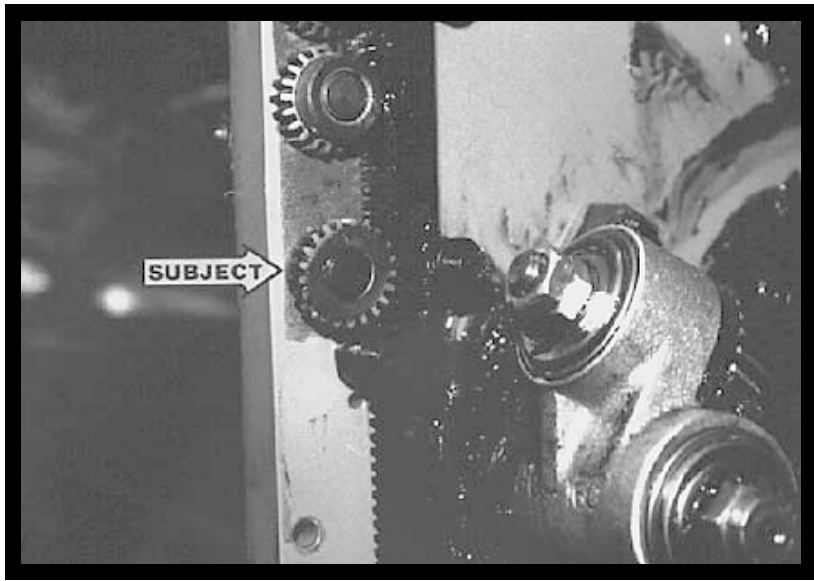
At OPS & NOPS, remove shoulder bolt (subject arrow) from water form adjustment arm. Save for reinstallation.

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**12**

At inside OPS & NOPS, remove set collars (subject arrow) from gear eccentric cam.

**13**



## DISASSEMBLY

**13**

At outside OPS & NOPS, remove eccentric gear (subject arrow).

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**14**

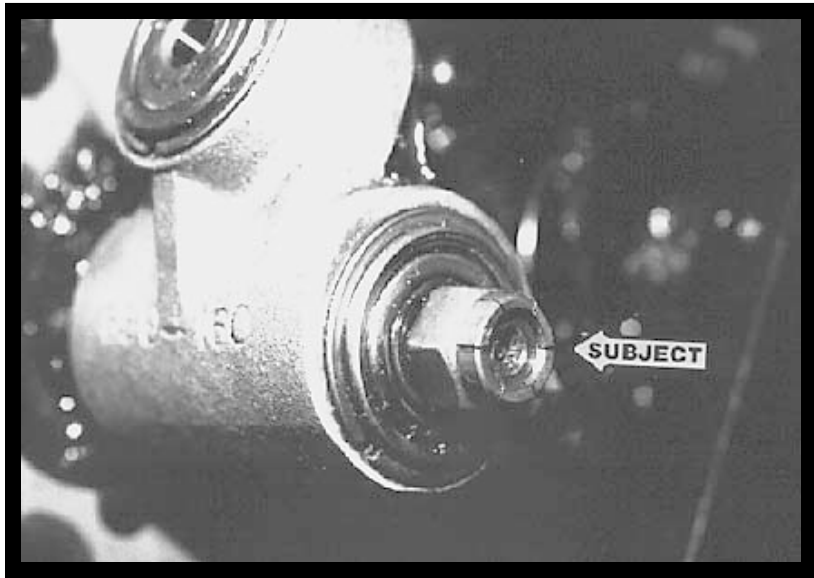
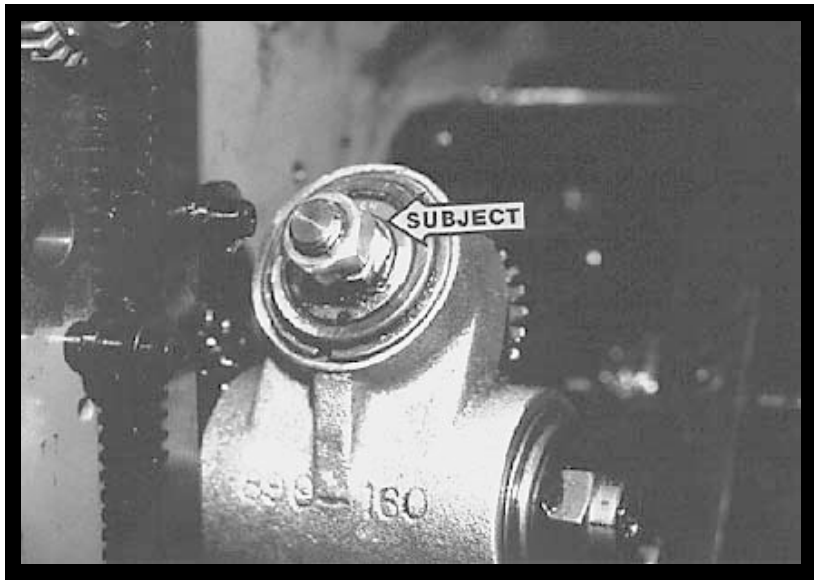
At OPS, remove oscillator linkage (subject arrow) from oscillator drive housing. Save linkage and screws for reinstallation.

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**15**

At OPS & NOPS, remove form roller housing (lower subject arrow) and split set collar (upper subject arrow) from stock oscillating roller. Save for reinstallation.

**15**





## DISASSEMBLY

**16**

Remove 2 jam nuts (subject arrow) from oscillator drive housing gear. The gear can now be removed. Save nuts for reinstallation.

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**17**

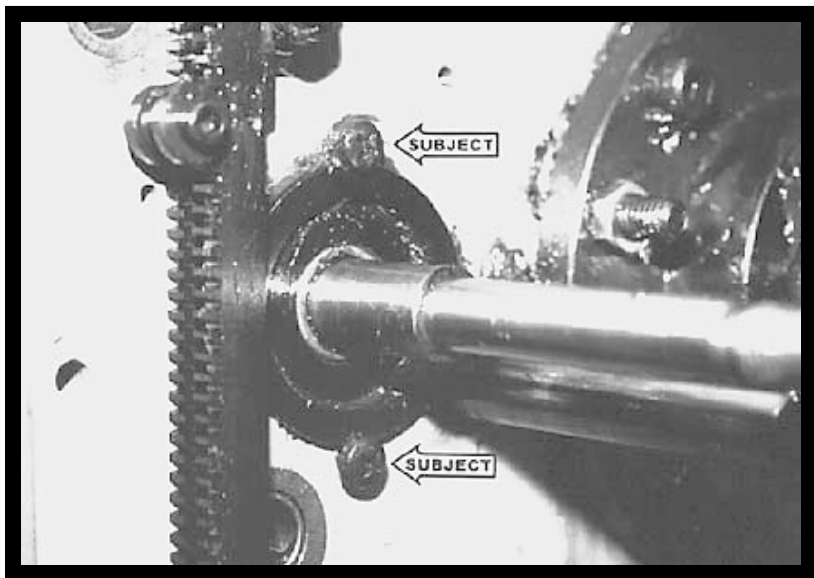
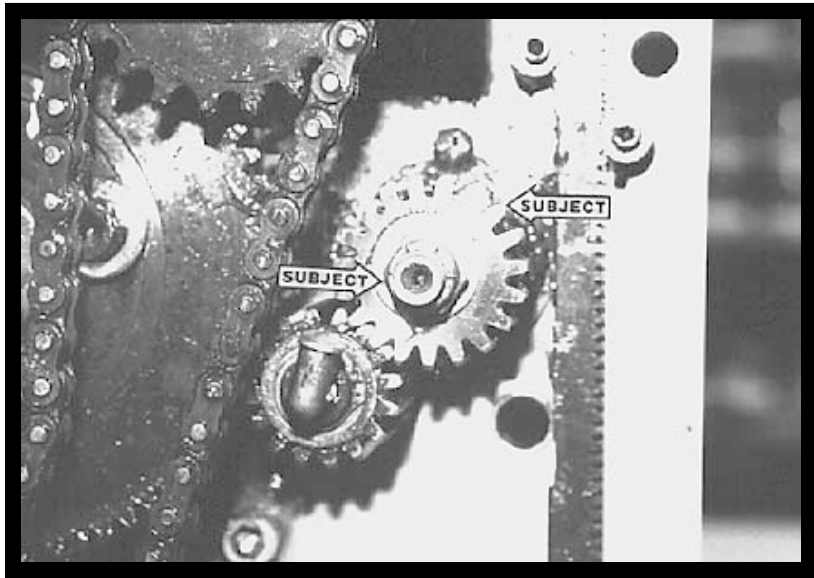
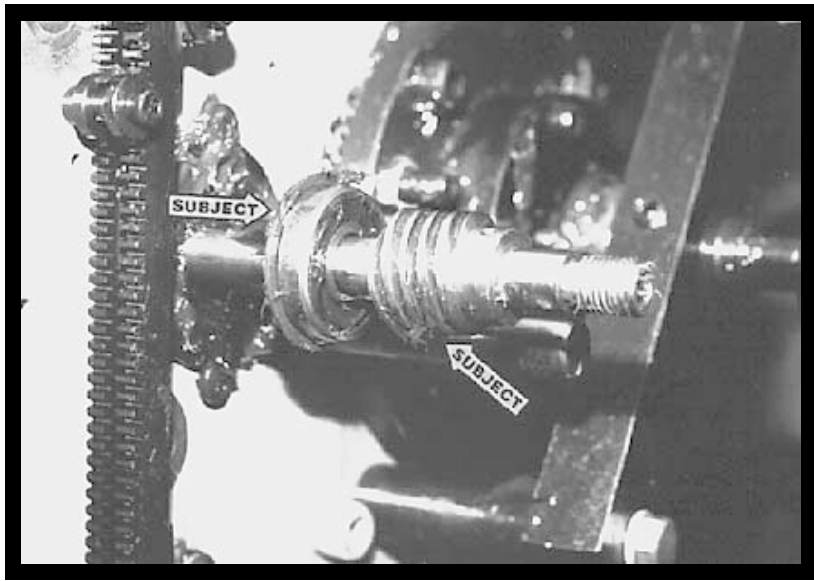
Remove nut (subject arrow) from end of oscillator and save for reinstallation. Remove oscillator drive housing at this time. Save for reinstallation.

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**18**

At OPS, remove roll pin (subject arrow) and loosen set screw on worm gear from oscillator shaft.

**17**



**19**

Remove worm gear (lower subject arrow) and bearing (upper subject arrow) from oscillator shaft. Save bearing for reinstallation.

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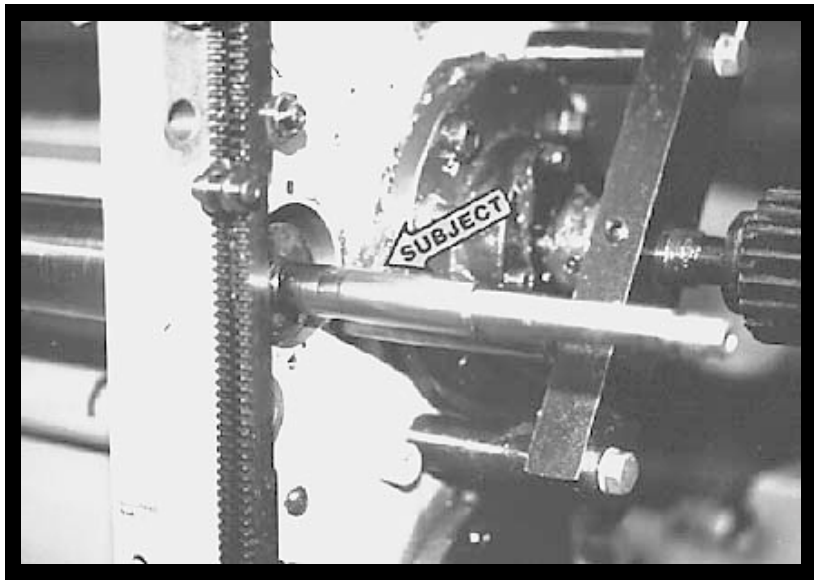
**20**

At NOPS, remove nut (lower subject arrow) & washer, gear (upper subject arrow) and key from oscillator shaft. Save for reinstallation.

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**21**

At OPS, remove retainer screws (marked by arrows) from oscillator housing and pull housing out. Save for reinstallation.



**22**

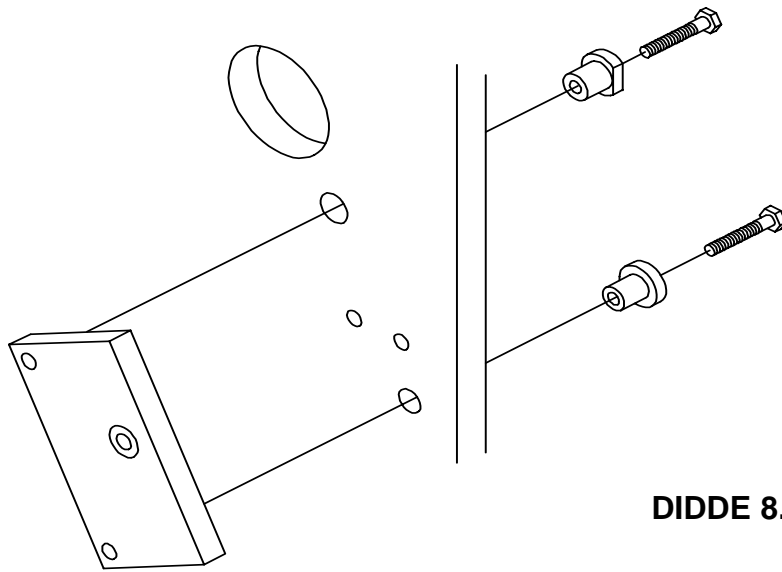
From the OPS, remove oscillator roller from press.

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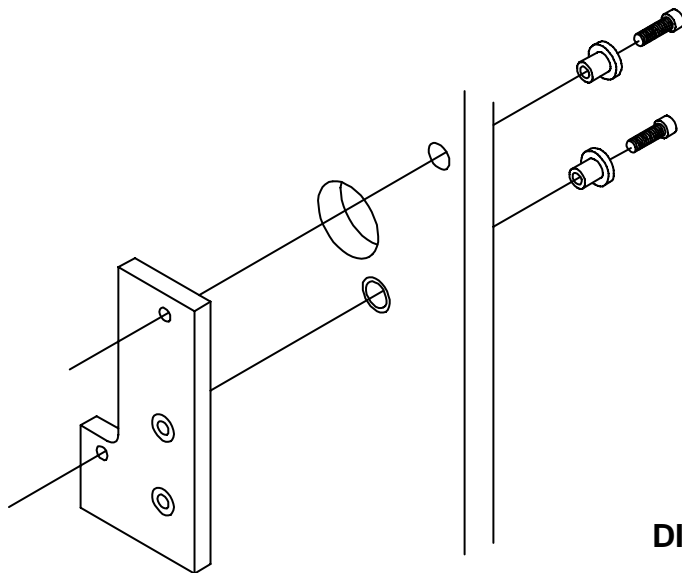
**23**

Prior to installation of Crestline® Altra Series™, inspect the water form roller housing removed in step 15. The bearing retainer cup should rotate freely when lock nut is loosened. If it does not, please disassemble and deburr as necessary.

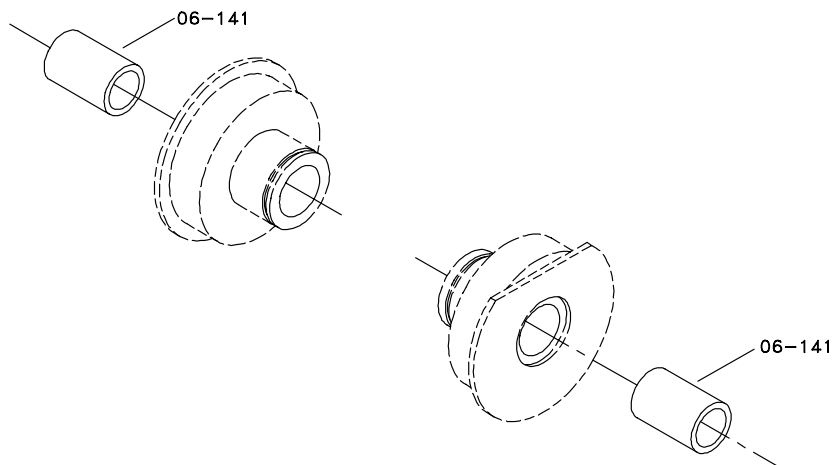
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**DIDDE 8.5 ONLY**



**DIDDE 11 ONLY**



**1**

## **THIS STEP FOR DIDDE 8.5 ONLY:**

Remove the mounting spool and two 1/4-20 x 1 3/4 hex head bolts from one of the dampener frame assemblies. Using this hardware and the provided spool secure the provided drill fixture plate to the inside of the OPS press frame as shown in the diagram. Mount the fixture so that the side of the fixture with the stamped letter "O" is visible. Use the provided F drill bit (.257 dia.) to bore a hole through the press frame. Repeat this procedure for the NOPS press frame except when you mount the fixture do so with the stamped letter "N" visible.

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**2**

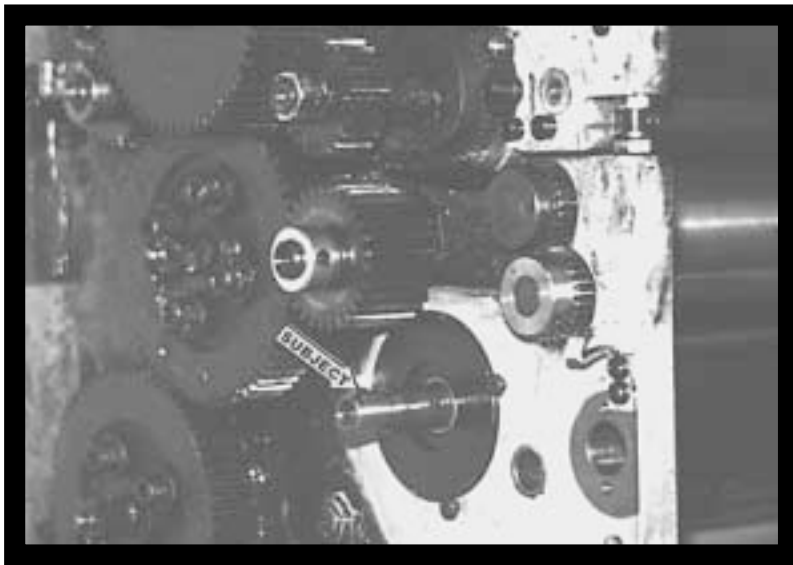
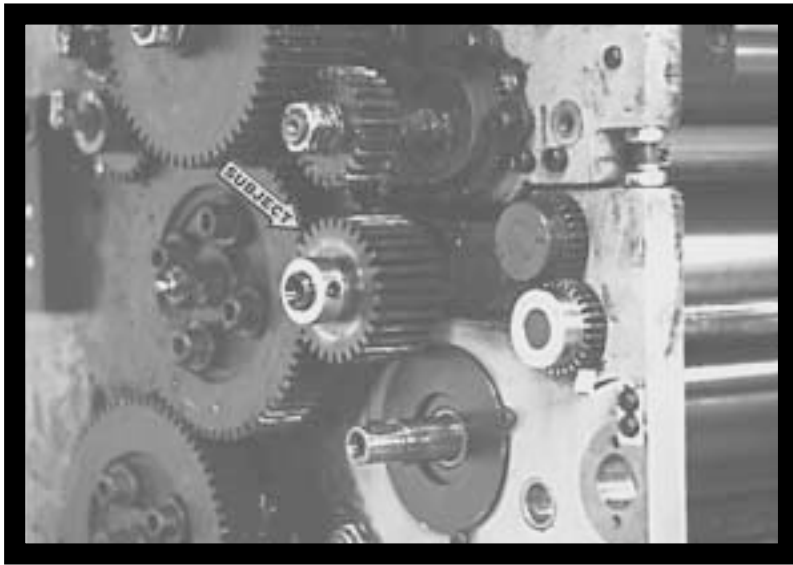
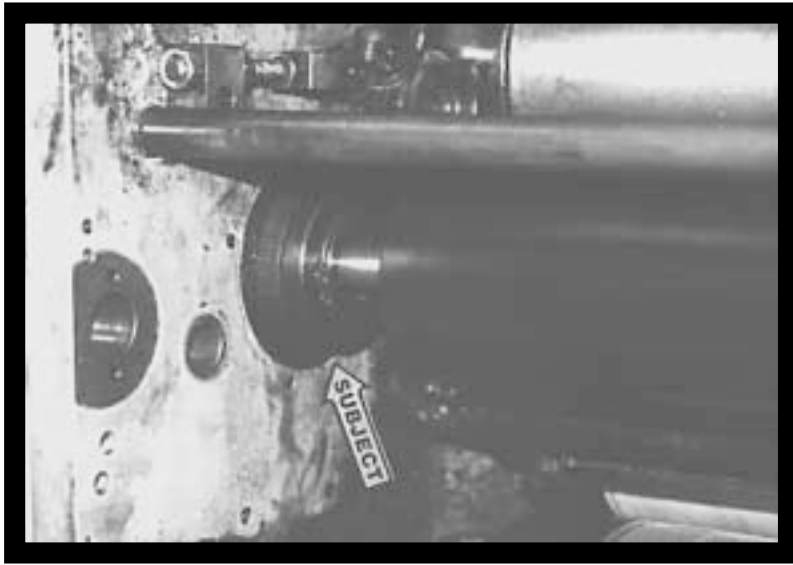
## **THIS STEP FOR DIDDE 11 ONLY:**

Using the provided spools and hardware secure the provided drill fixture to the inside of the OPS press frame as shown in the diagram. The lower mounting hole for the drill fixture utilizes the old ductor shaft hole in the press frame. The upper hole will align with the hole in the press frame used for the water form adjustment eccentric. After securing the fixture to the press use the provided F drill bit (.257 dia.) to bore two holes in the press frame. Repeat this procedure for the NOPS press frame.

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**3**

Replace the bushings in the oscillator housing with the new ones provided.





# INSTALLATION

**4**

Install the Crestline® Altra Series™ oscillator roller 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.

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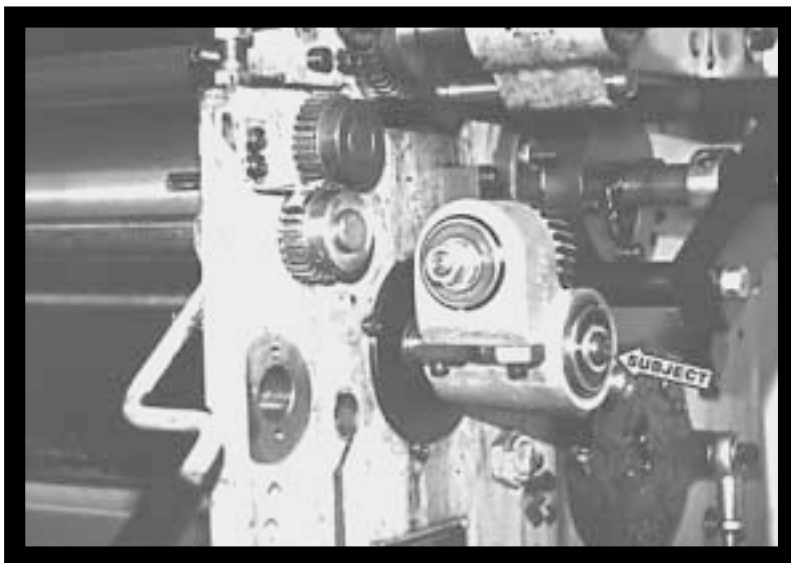
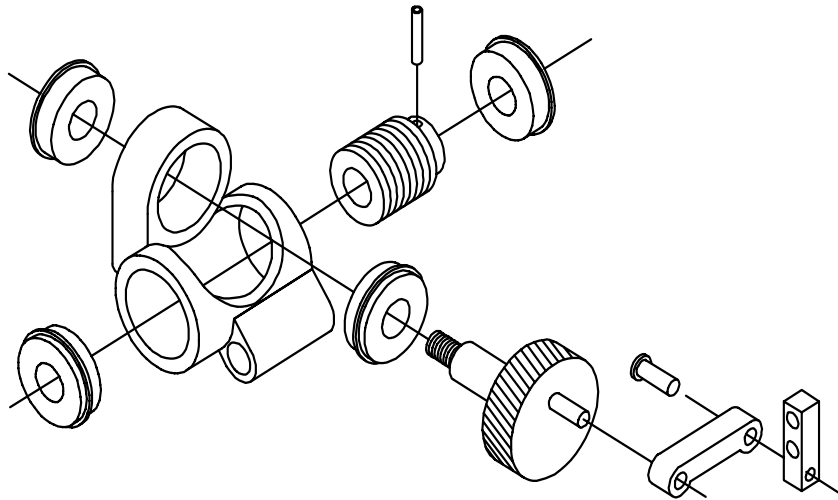
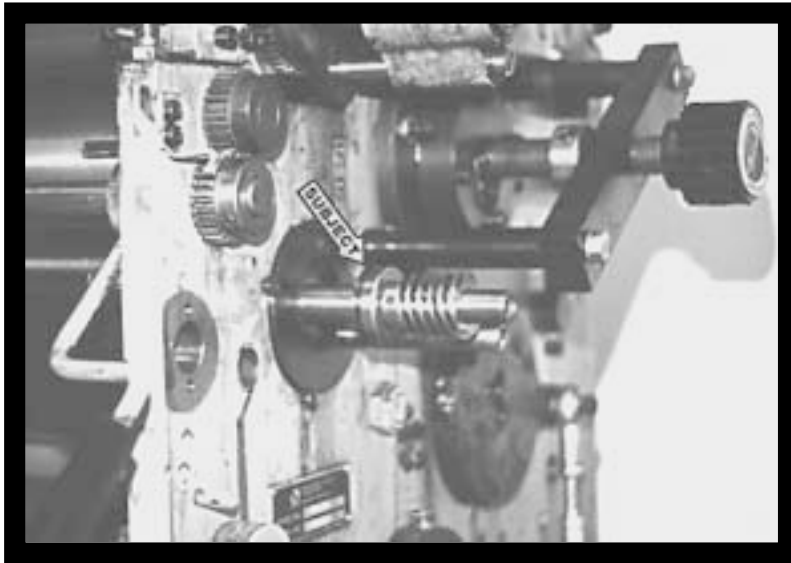
**5**

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.

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**6**

Reinstall the oscillator drive gear, using the original hardware that was removed in disassembly step 20.



7

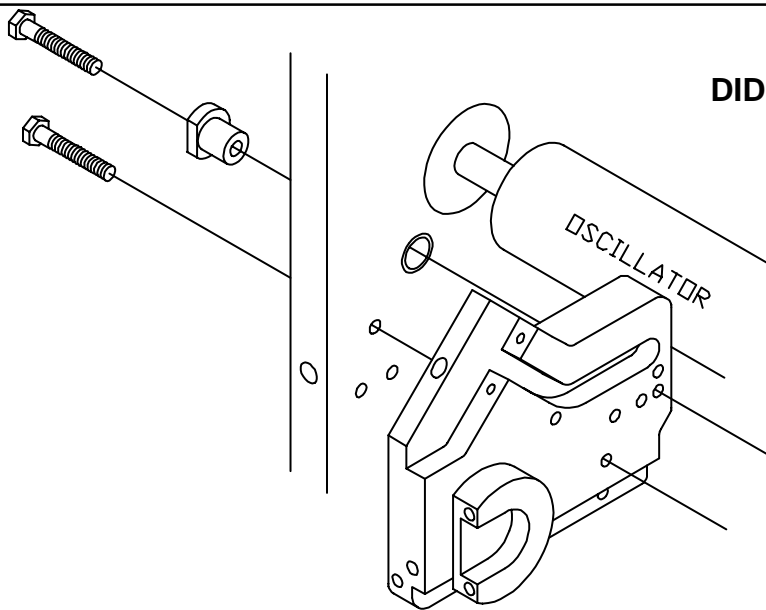
At the OPS, first install the supplied new replacement bearing (subject arrow) and then the new worm on the oscillator roller journal. The retaining ring on the bearing goes toward the press frame. Install the supplied roll pin through the worm to secure it to the journal.

8

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.**

9

Install the oscillation drive assembly on the oscillator journal. Make sure the bearing, installed in step 7, is seated in the housing before securing the drive assembly.



DIDDE 8.5 ONLY

**10**

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.

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**11**

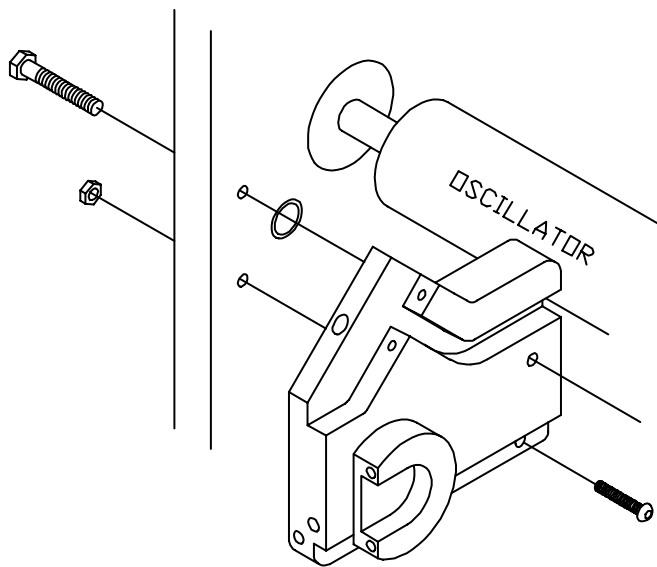
Install the new water form roller into the original form hangers.

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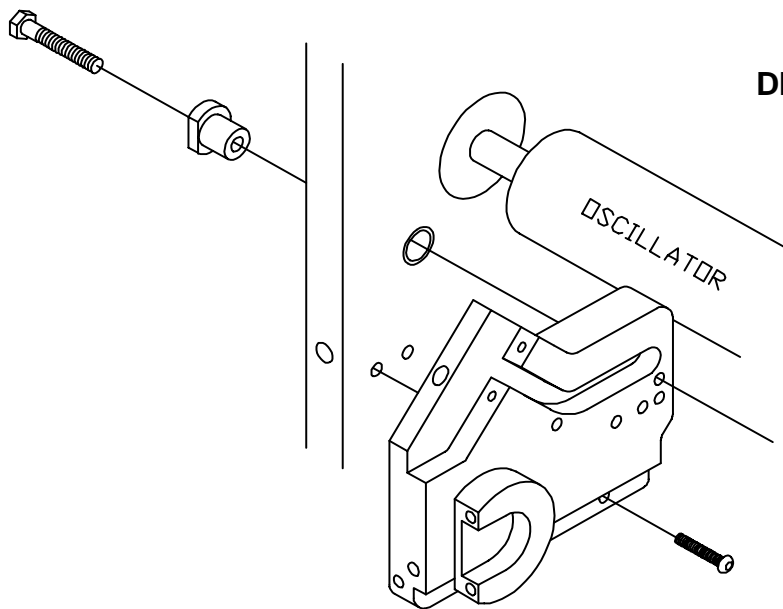
**12**

**THIS STEP FOR DIDDE 8.5 ONLY:**

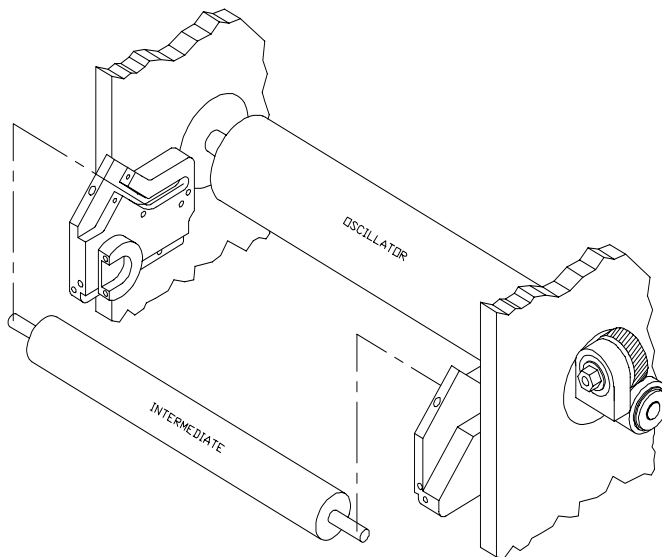
Install the NOPS dampener frame assy. using the provided hardware as shown in the diagram. Repeat this procedure for the OPS frame.



DIDDE 11 ONLY



DIDDE 17 ONLY



DIDUC23, 3-96

**13**

**THIS STEP FOR DIDDE 11 ONLY:**

Install the NOPS dampener frame assy. using the provided hardware as shown in the diagram. Repeat this procedure for the OPS frame.

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**14**

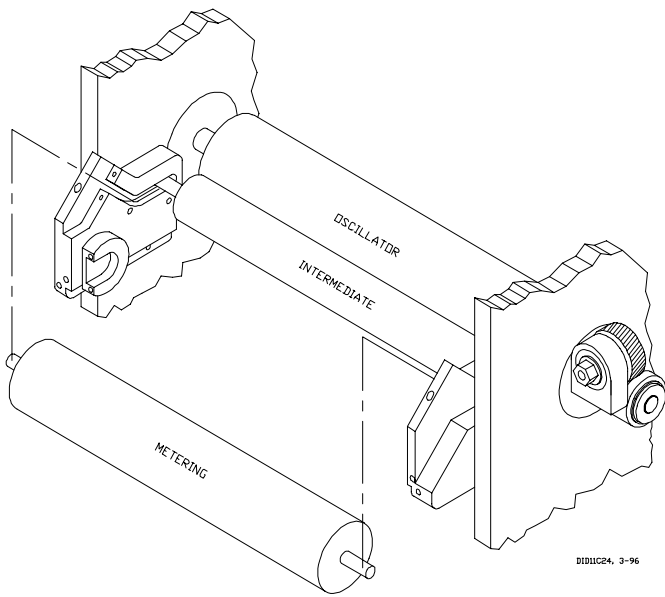
**THIS STEP FOR DIDDE 17 ONLY:**

Install the NOPS dampener frame assy. using the provided hardware as shown in the diagram. Repeat this procedure for the OPS frame.

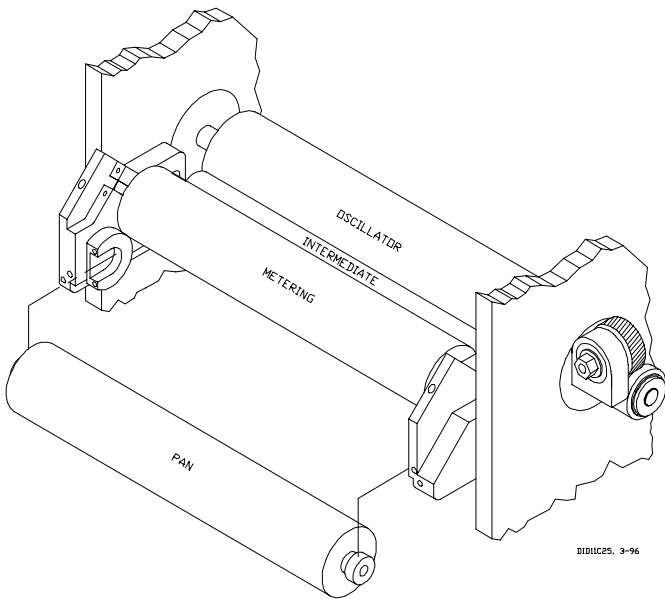
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**15**

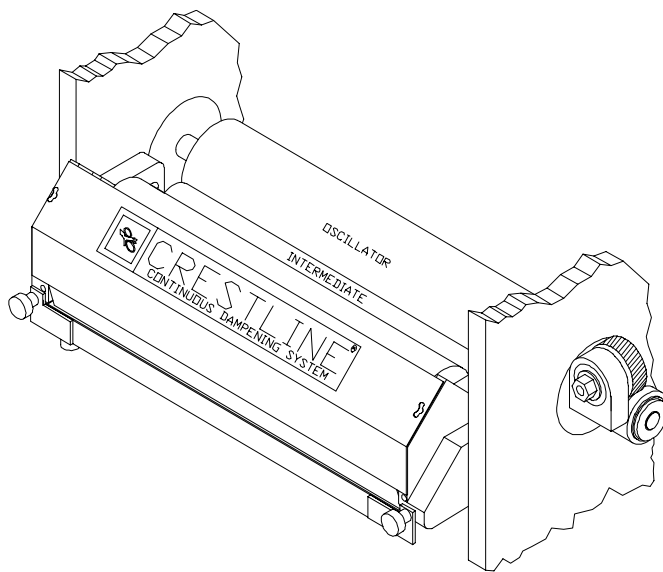
Insert the intermediate roller (the smaller of the two shafted rollers) into the slots in the frames and up against oscillator. The pin in the collar at the NOPS should be facing the open end of the slot. Loosen the set screw in all three collars on the roller shaft. Slide the shaft as far to the OPS 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.



DD11G24, 3-96



DD11G25, 3-96



DD11G26, 3-96



**16**

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.

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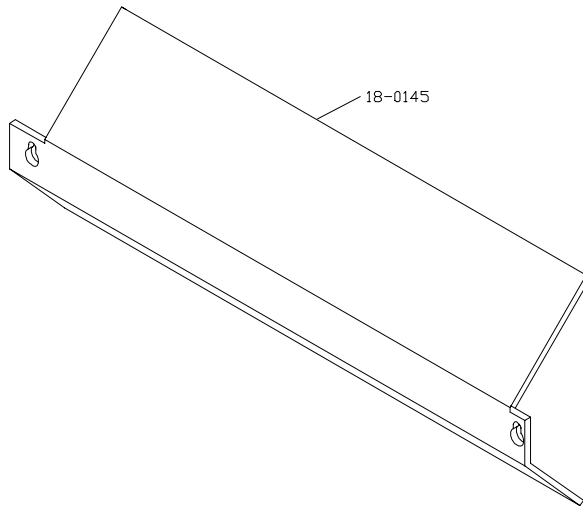
**17**

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.

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**18**

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



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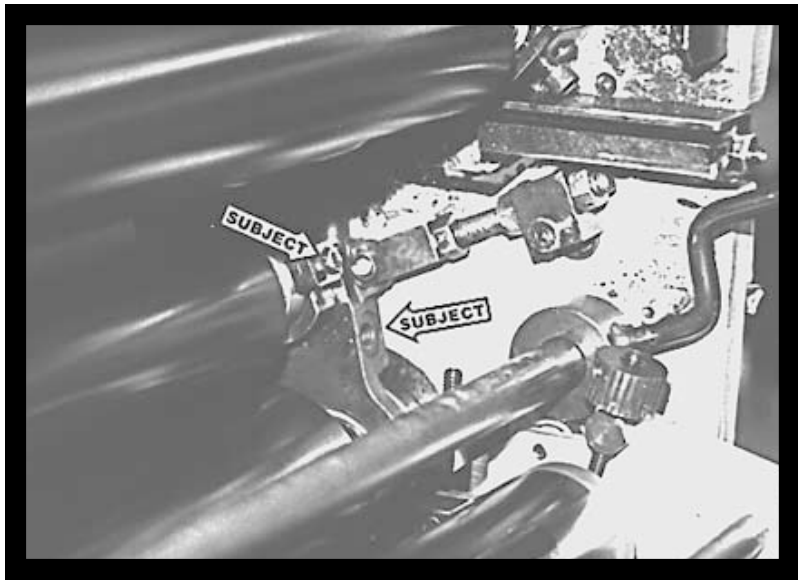
**19**

Replace the original plastic safety cover with the new one provided. Transfer the original hardware to the new guard.

**YOU ARE NOW READY TO MAKE FINAL ADJUSTMENTS**

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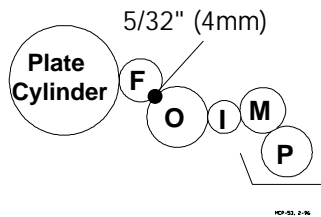
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# FINAL ADJUSTMENTS

## 1

### OSCILLATOR TO FORM ROLLER PRESSURE

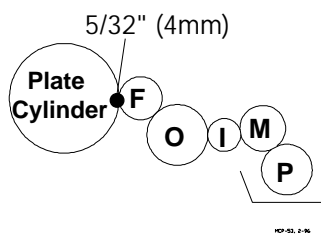


Raise the water form control handle to the OFF position. Dab some ink on the water form roller and slowly run the press for 30-40 seconds to distribute (only if the form and oscillator will ink up at this time). Turn the press off and wait for 15-20 seconds before jogging the press forward enough to 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  $5/32$ "

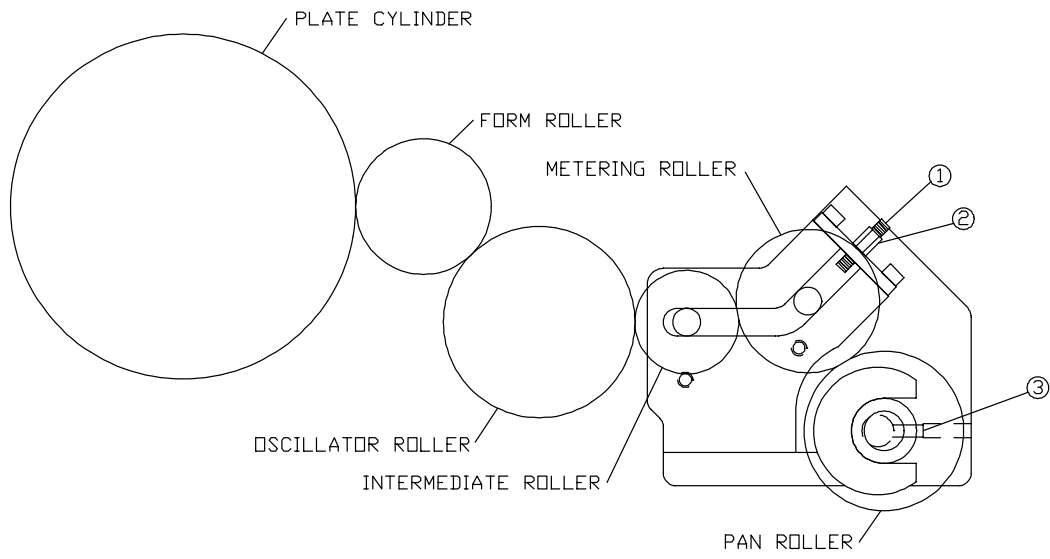
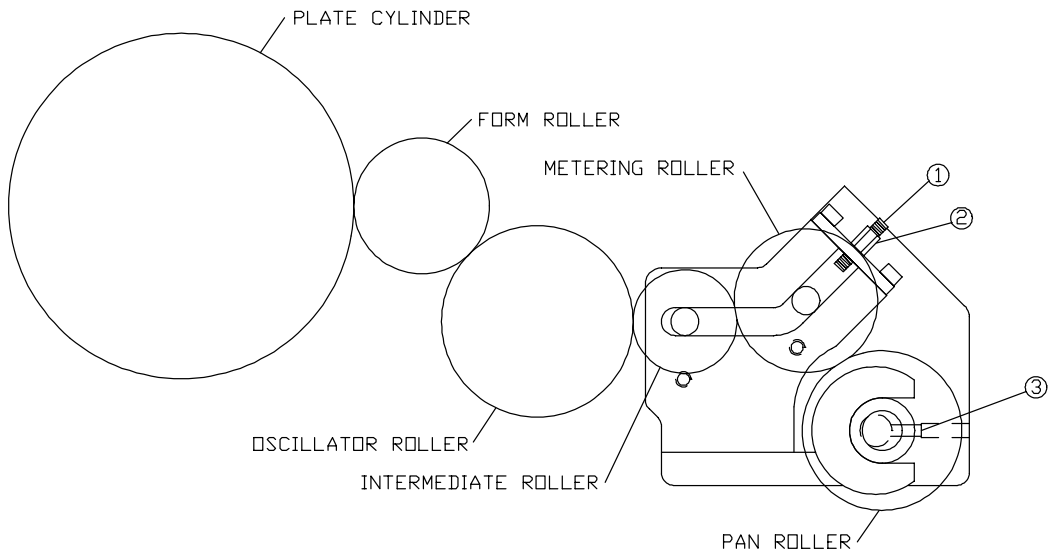
allen wrench inserted into the bearing cap screw (lower subject arrow) rotate the bearing cups as necessary to obtain the proper stripe. After obtaining the correct stripe, retighten the allen nuts. Recheck the stripe and repeat the adjustment if necessary.

## 2

### FORM ROLLER TO PLATE CYLINDER PRESSURE



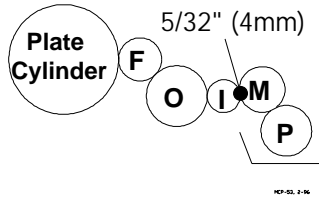
With a properly packed plate mounted on the plate cylinder, lower the water form control handle to the ON position. After a few seconds, raise the handle to the OFF position. Jog the press slightly backwards and observe the stripe on the plate. The correct stripe will be  $5/32$ " (4mm) wide and parallel 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

## 3

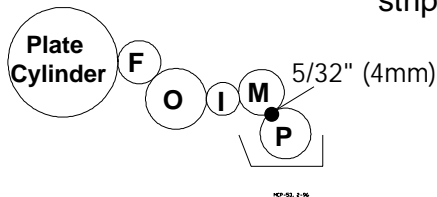
### INTERMEDIATE TO METERING ROLLER PRESSURE



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.

## 4

### 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.

## 5

### 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.

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### 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.



# CLEANING & 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.

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## 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.

## CLEANING & MAINTENANCE

### 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.

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### OILING AND GREASING THE DAMPENER

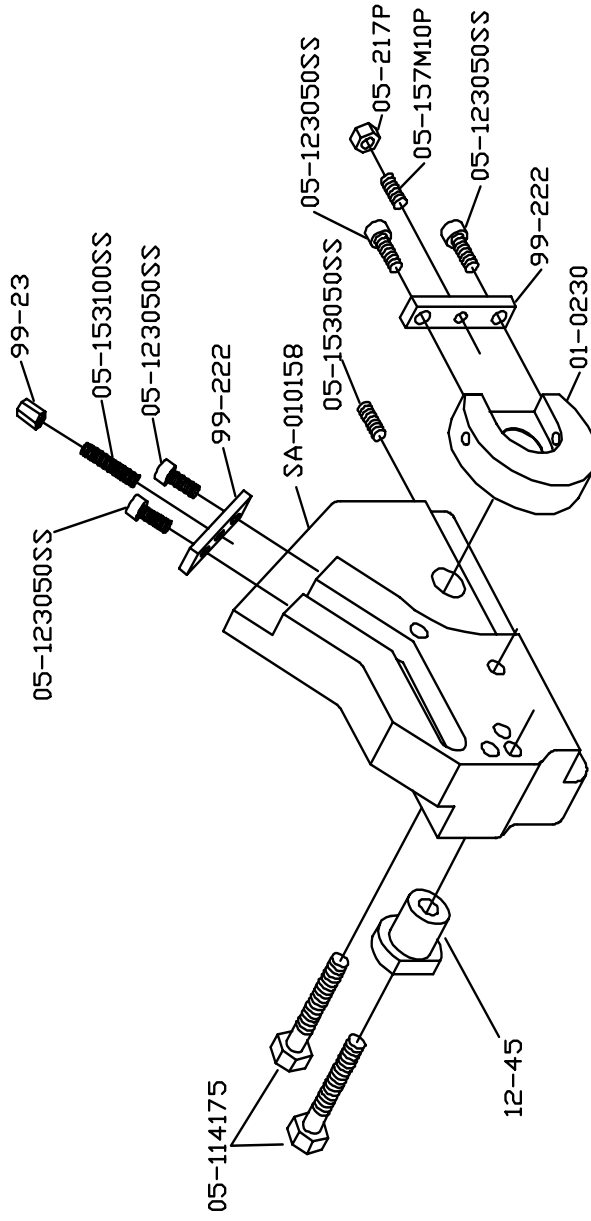
- A. Place a small amount of grease on the gears once a month.
- B. Inject grease into the oscillator worm drive once a month.

# CLEANING & MAINTENANCE

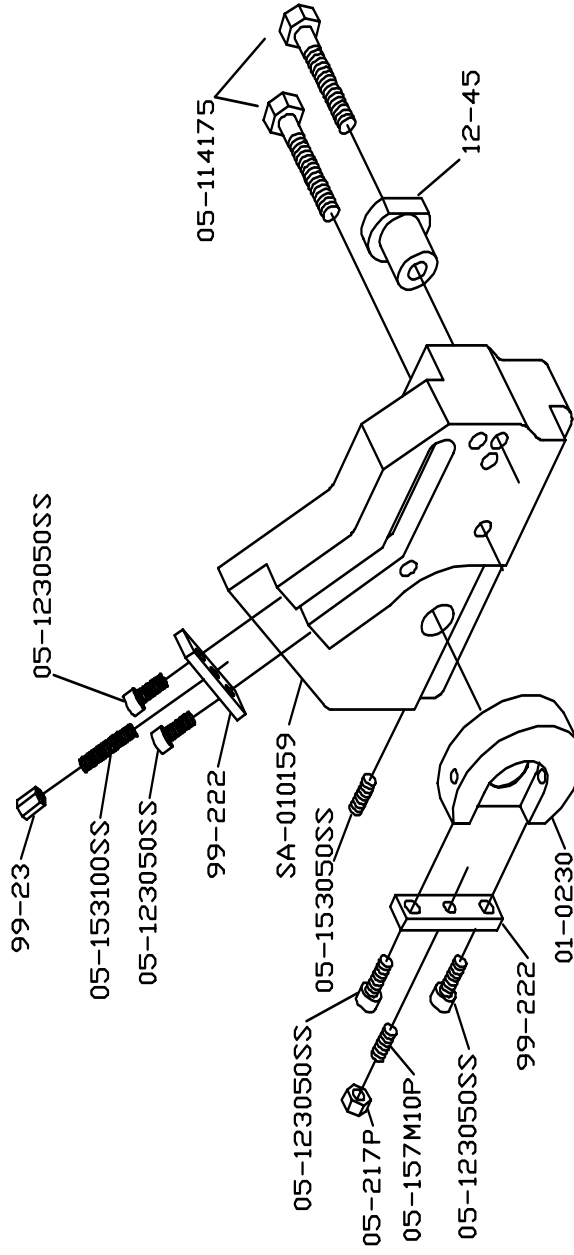
## CRESTLINE® ALTRA SERIES™ CLEANING & MAINTENANCE CHART

	Daily	Weekly	Bi-Weekly	Monthly
Wash Rollers	✓			
Deglaze Rollers				
Metal Plate Users			✓	
Silvermaster Plate Users			✓	
Electrostatic Plate Users		✓		
Grease Gears				✓
Inspect Ball Bearings				✓
Check Roller Pressures				✓
Check Roller Surfaces				✓

SIDE FRAME ASSEMBLY-OPS  
DIDDE 8.5

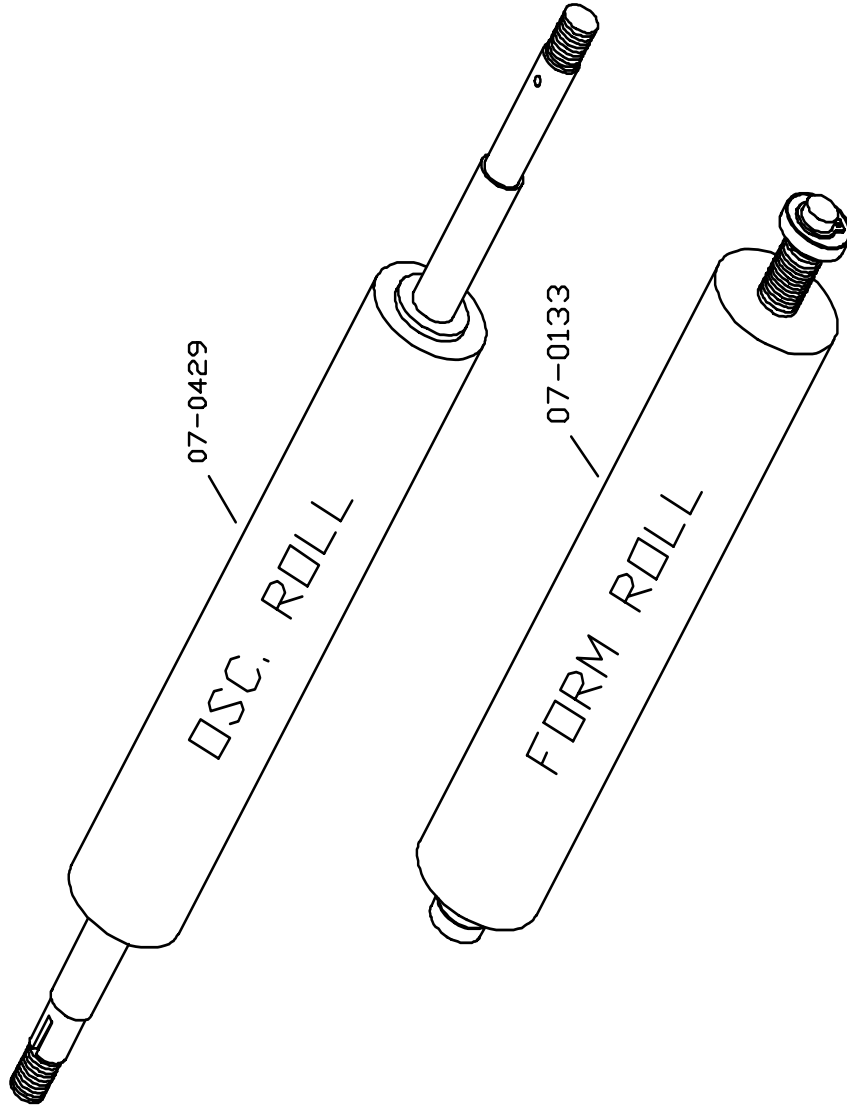


SIDE FRAME ASSEMBLY-NOPS  
 DIDDE 8.5

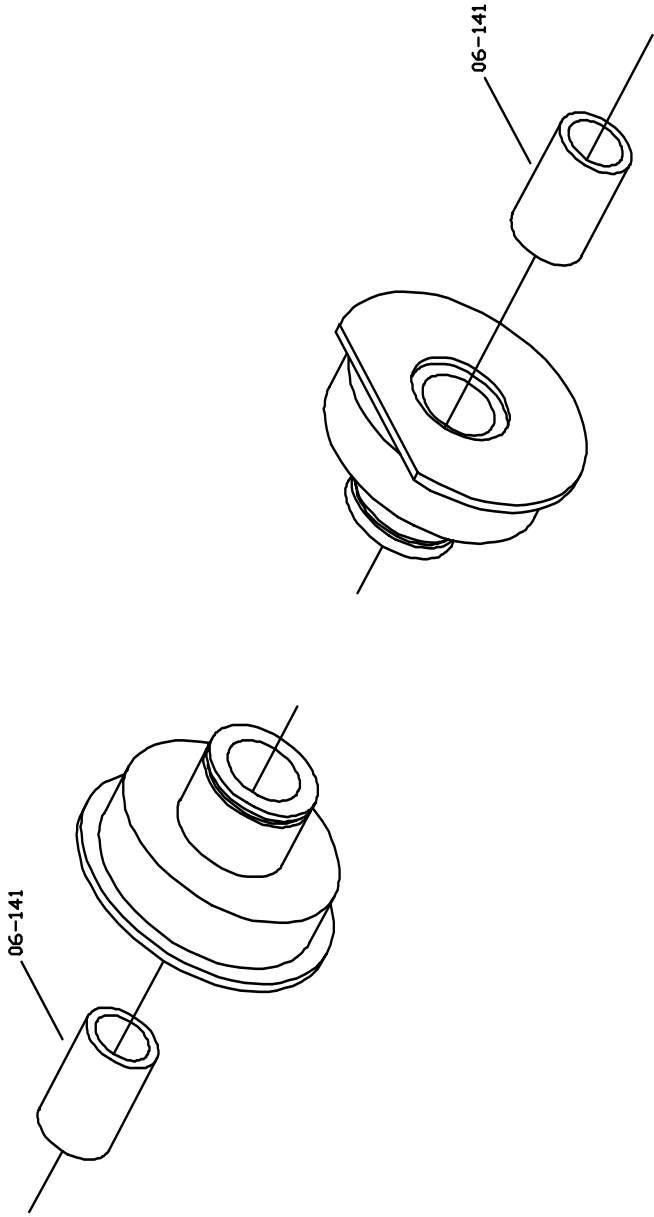


DID85C02, 4-30-98

OSCILLATOR AND FORM ROLLERS  
DIDDE 8.5

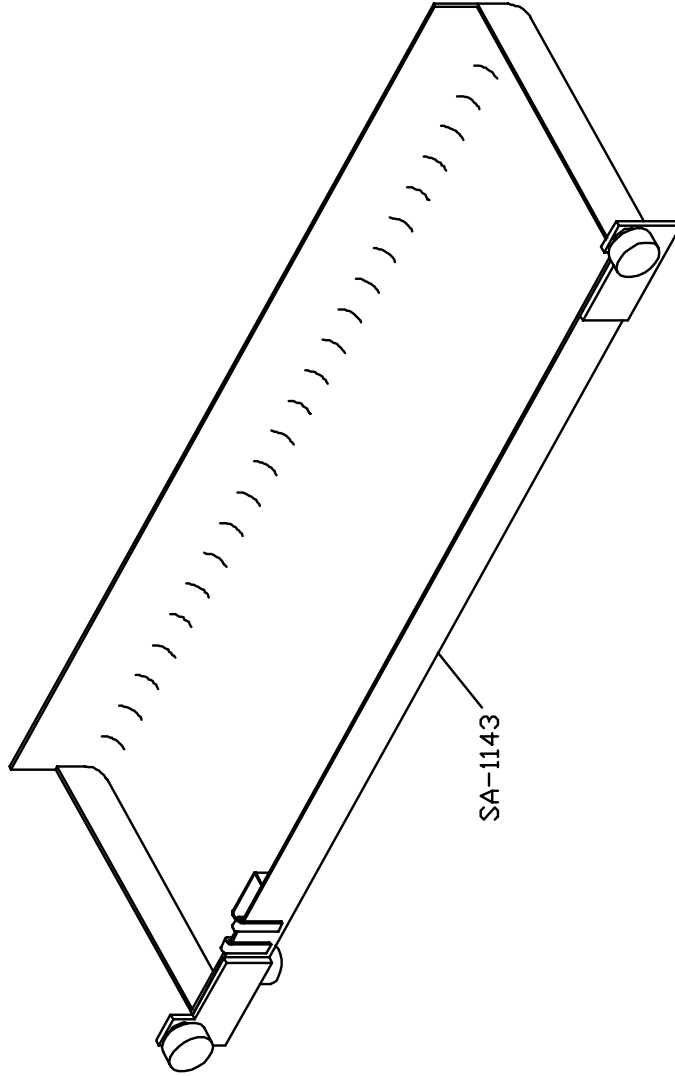


OSCILLATOR BUSHINGS  
DIDDE 8.5



DIDDE 8.5C04, 4-2-98

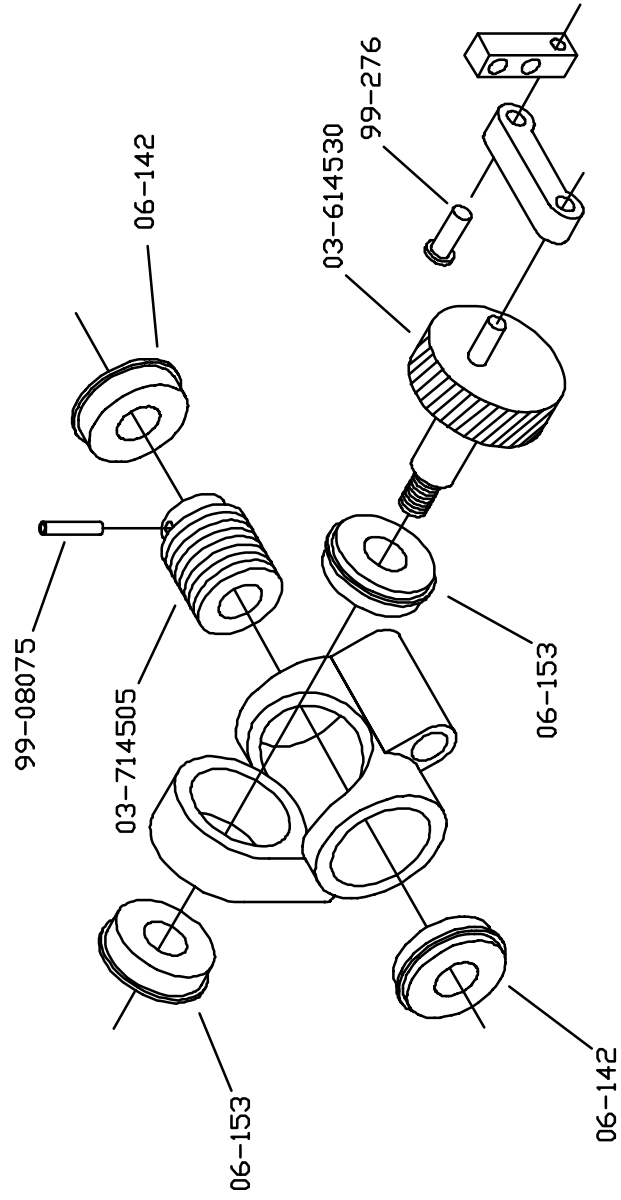
WATER PAN ASSEMBLY  
DIDDE 8.5



DIDDE.5C05, 4-2-98

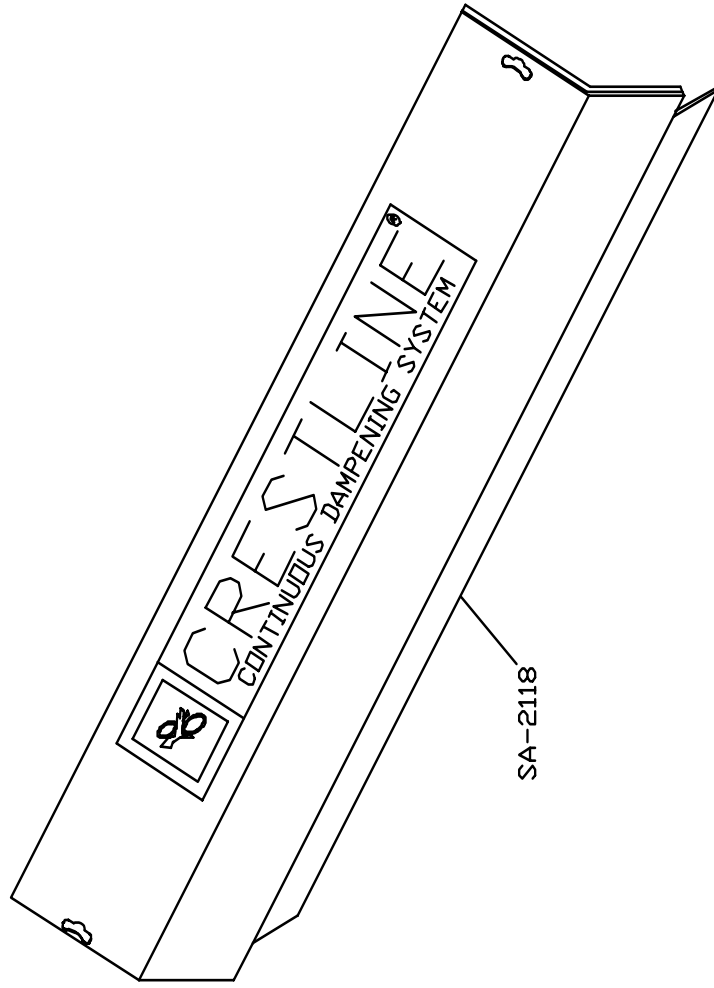


OSCILLATOR GEAR ASSEMBLY  
DIDDE 8.5



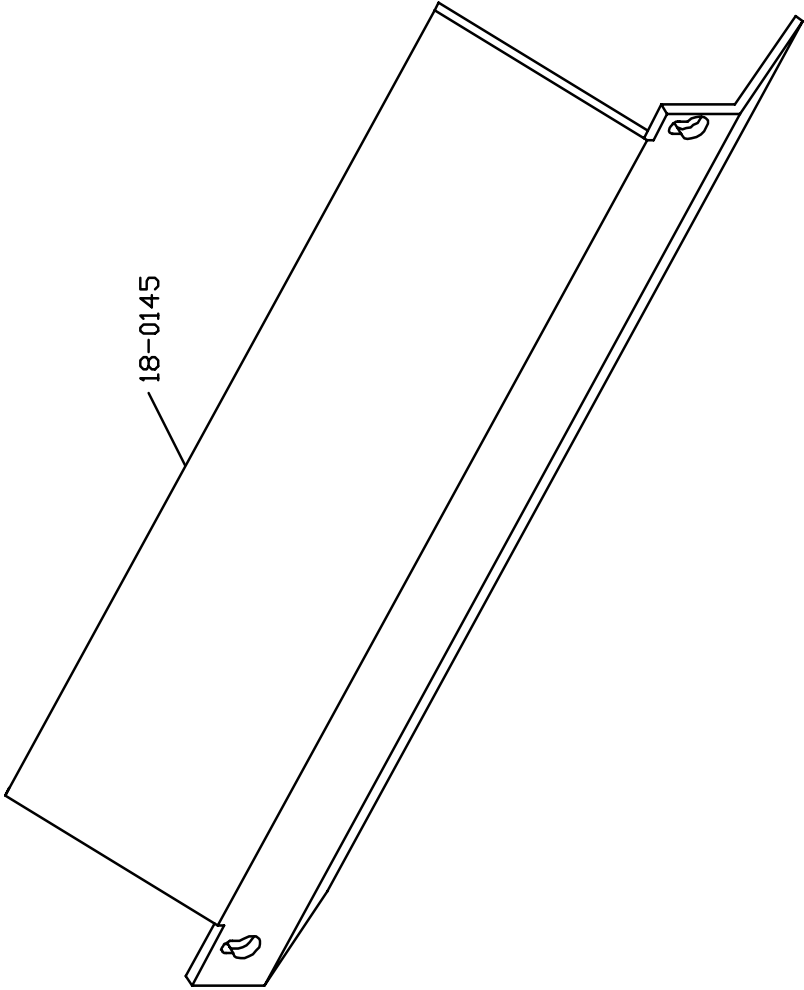
DIDDE 8.5C06, 4-2-98

SHIELD ASSEMBLY  
DIDDE 8.5



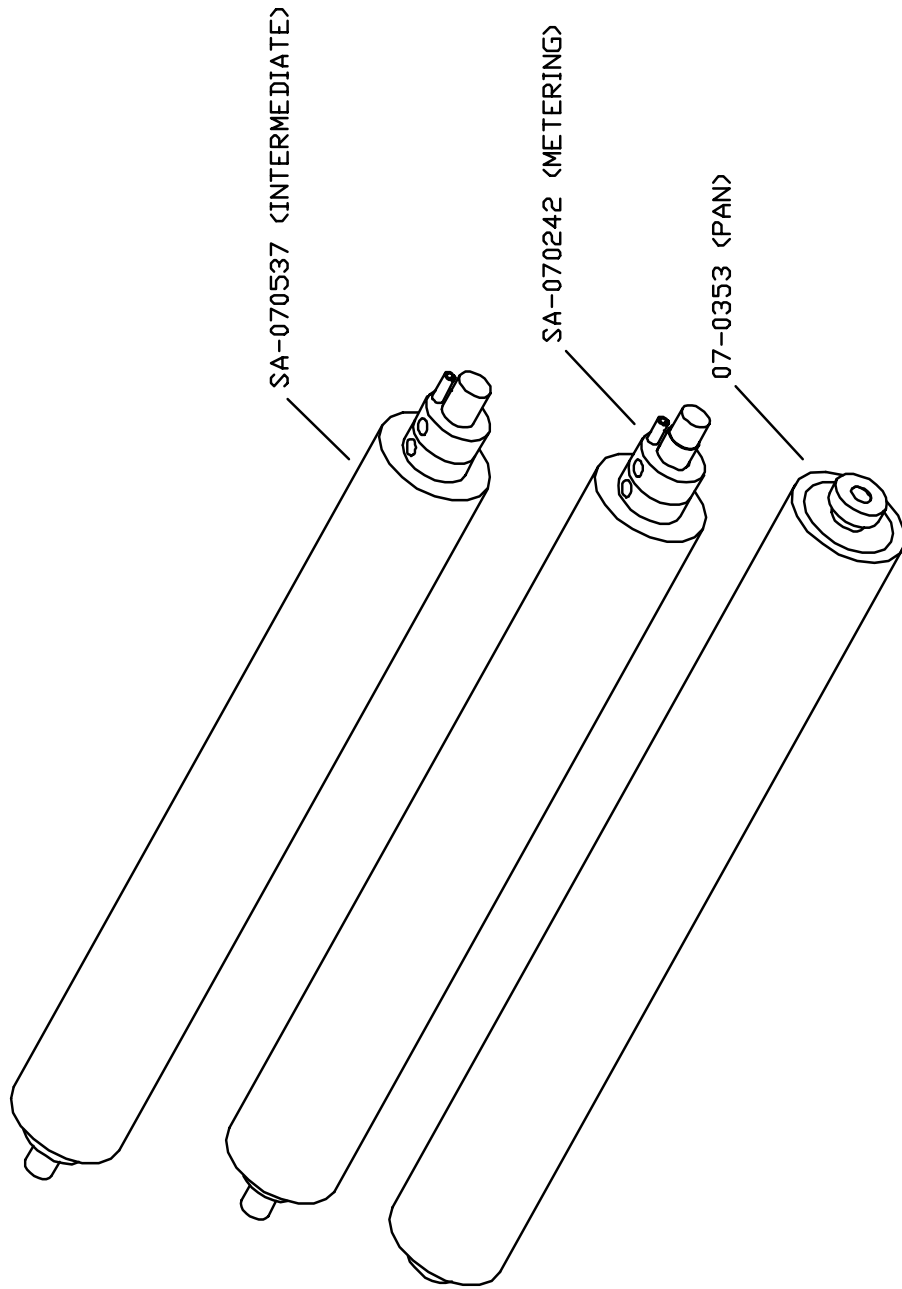
DID8.5C07, 4-2-98

DAMPENER GUARD  
DIDDE 8.5



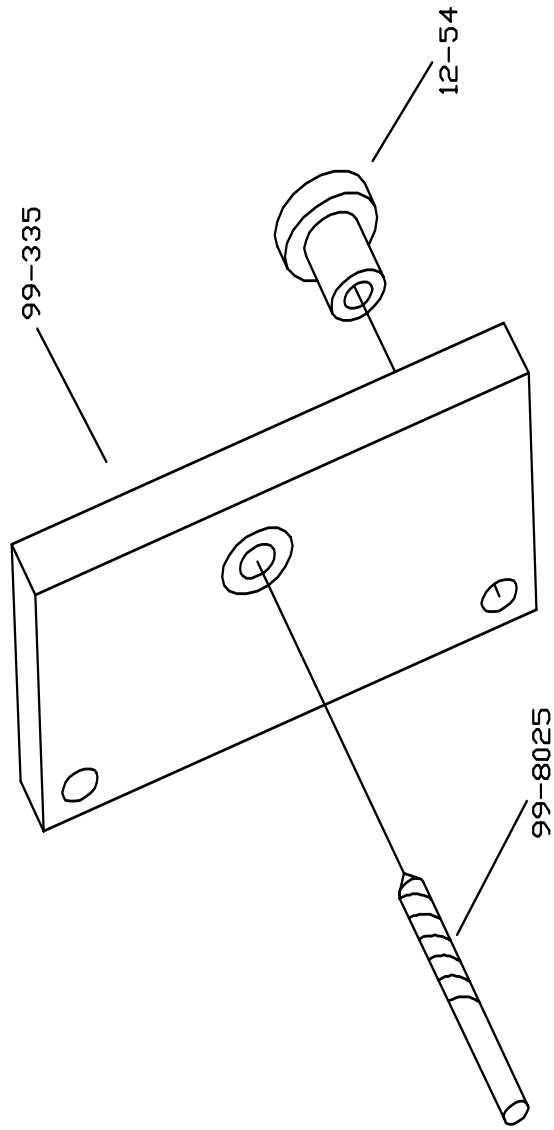
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METERING/INTERMEDIATE/PAN ROLLERS  
DIDDE 8.5



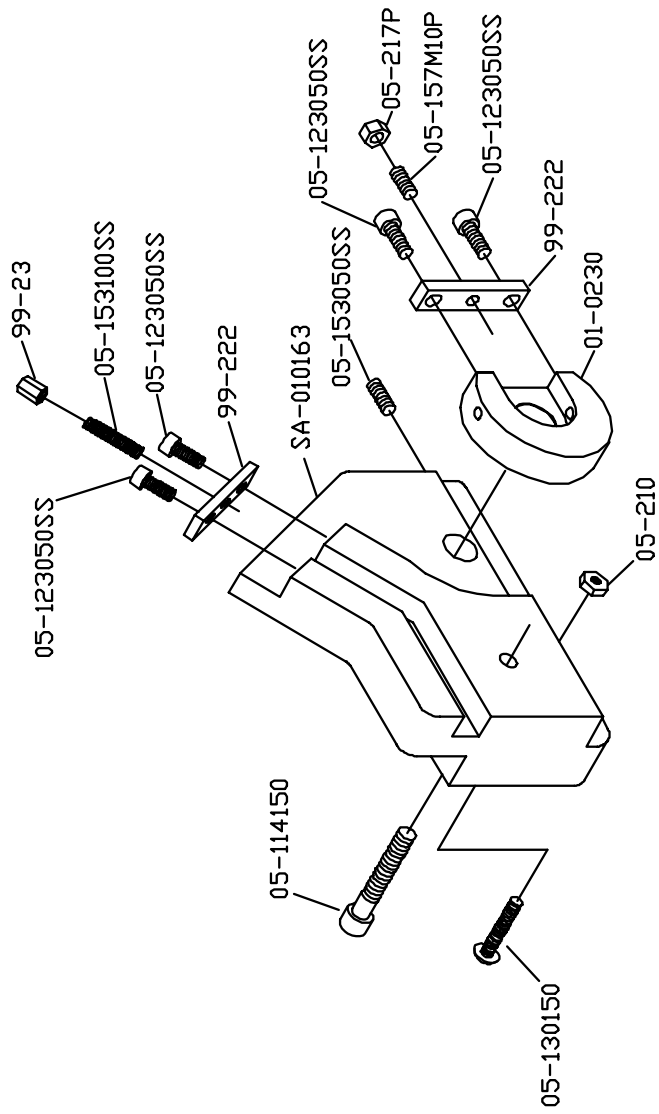
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DRILL FIXTURE  
DIDDE 8.5

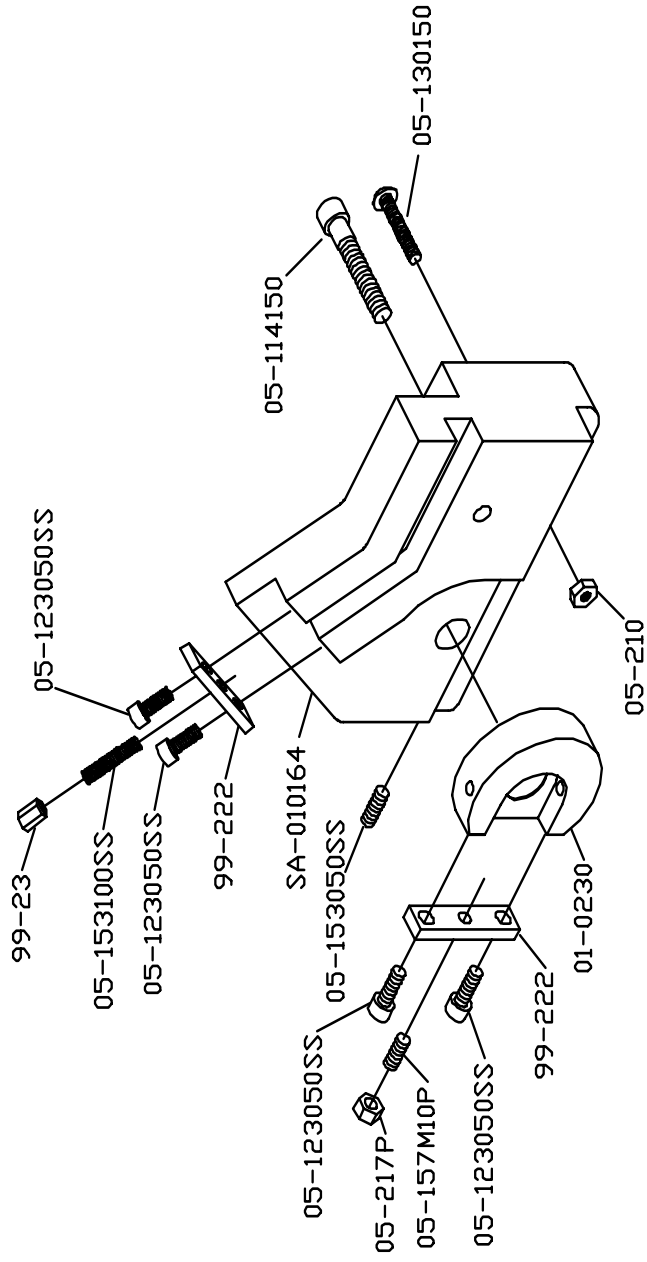


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SIDE FRAME ASSEMBLY-OPS  
DIDDE 11

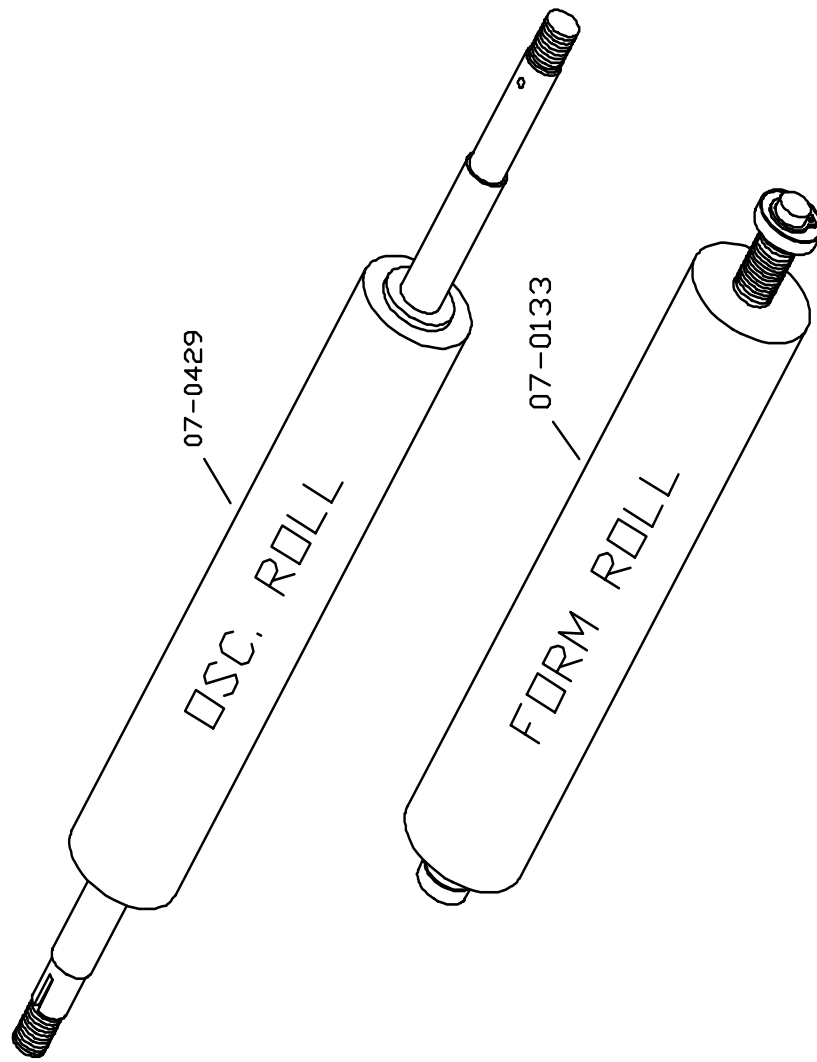


SIDE FRAME ASSEMBLY-NDPS  
DIDDE 11



DID11C02, 4-15-97

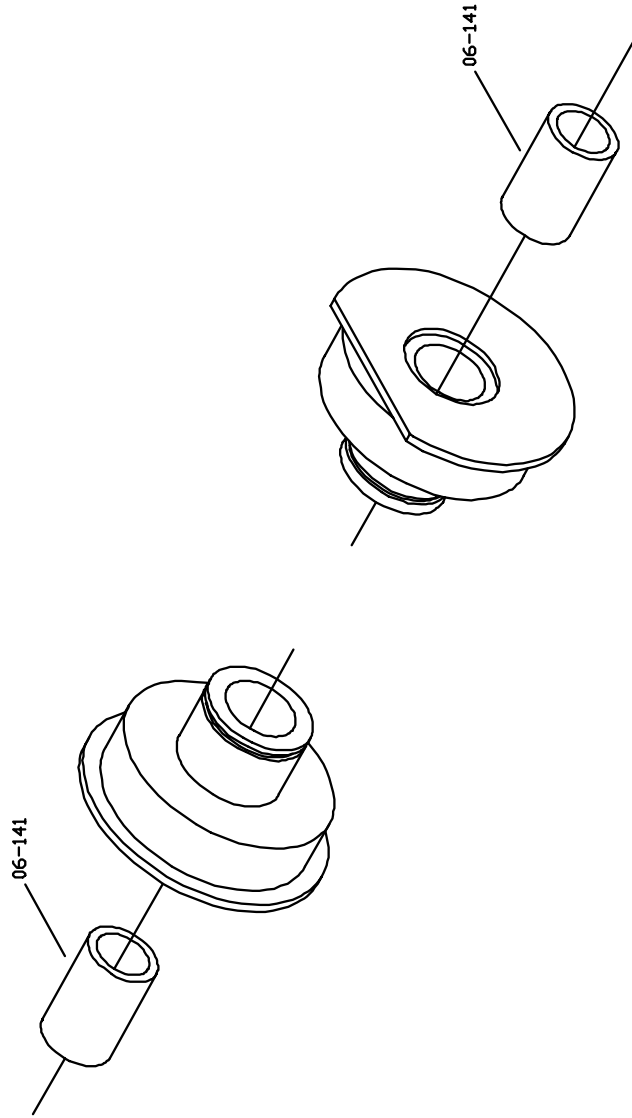
OSCILLATOR AND FORM ROLLERS  
DIDDE 11



DID11C03, 4-15-97

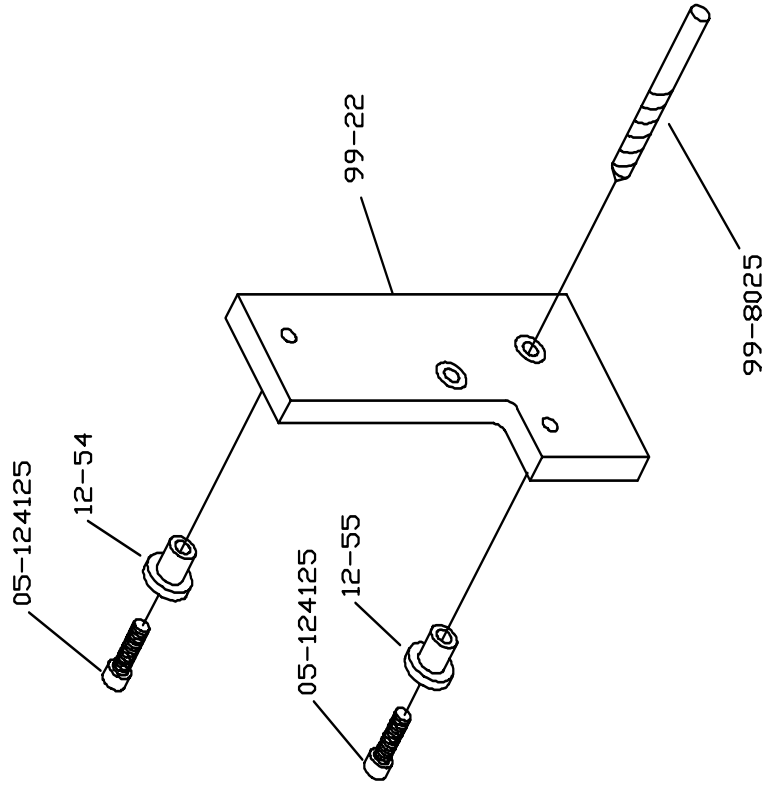


OSCILLATOR BUSHINGS  
DIDDE 11

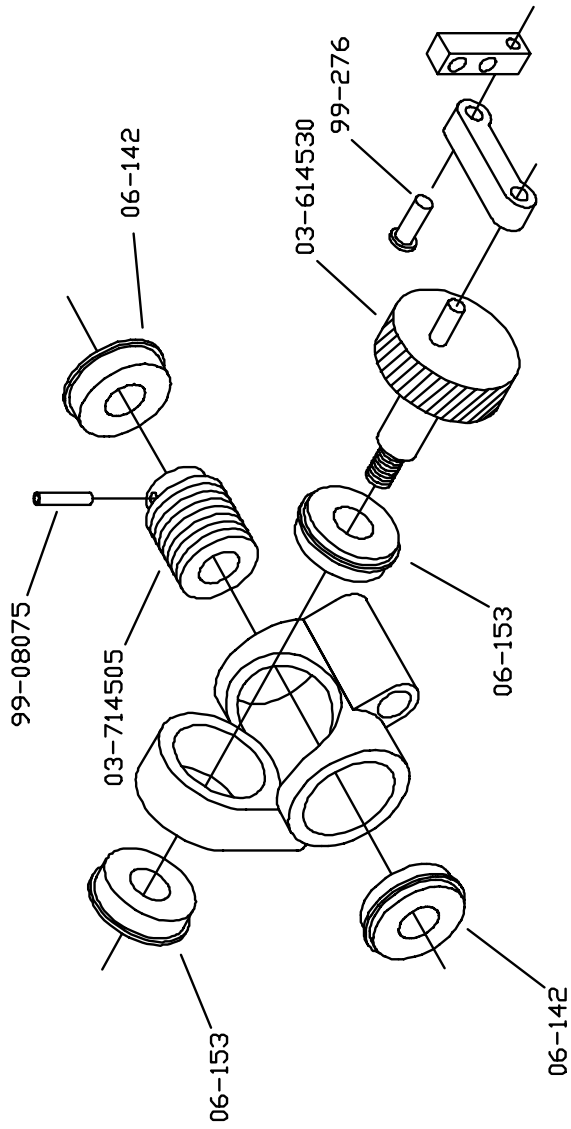


DID11C04, 4-15-97

DRILL GUIDE ASSEMBLY  
DIDDE 11

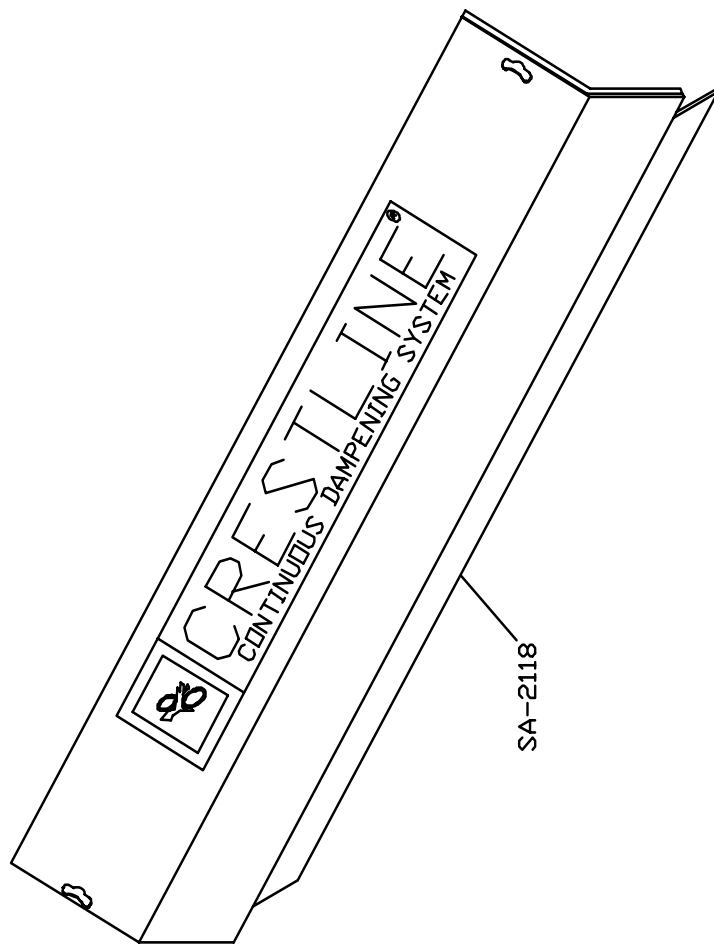


OSCILLATOR GEAR ASSEMBLY  
DIDDE 11

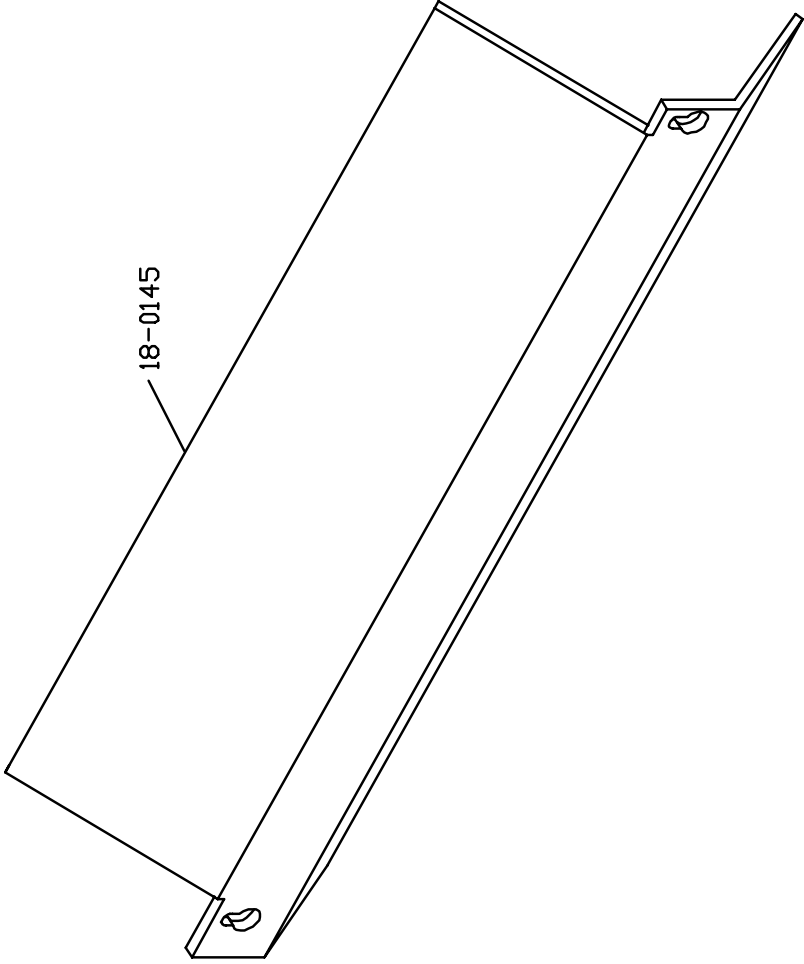


DIDDE 11, 1-12-98

SHIELD ASSEMBLY  
DIDDE 11

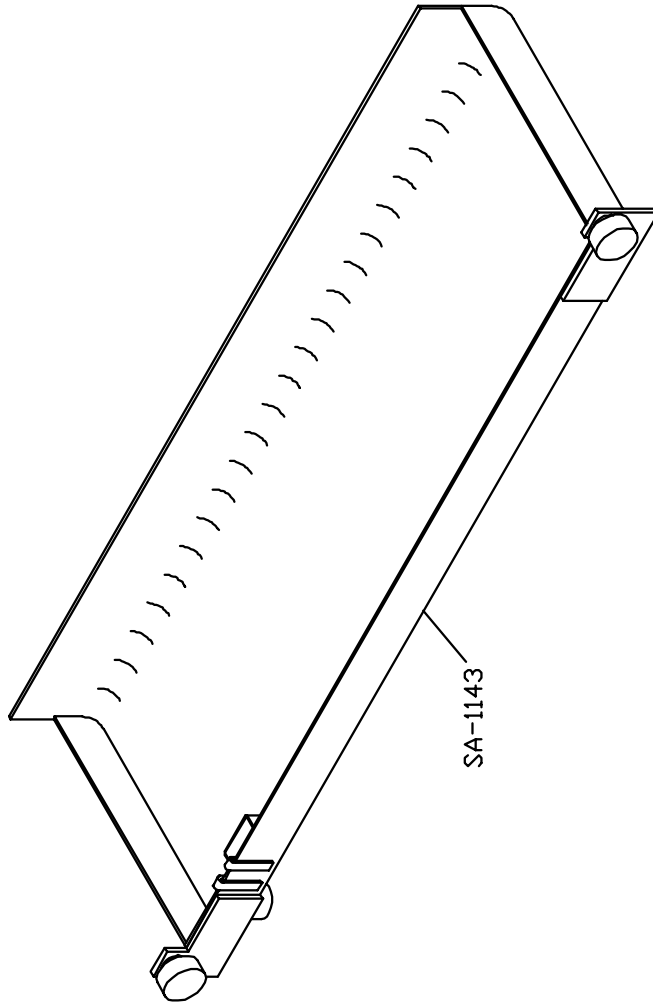


DAMPENER GUARD  
DIDDE 11



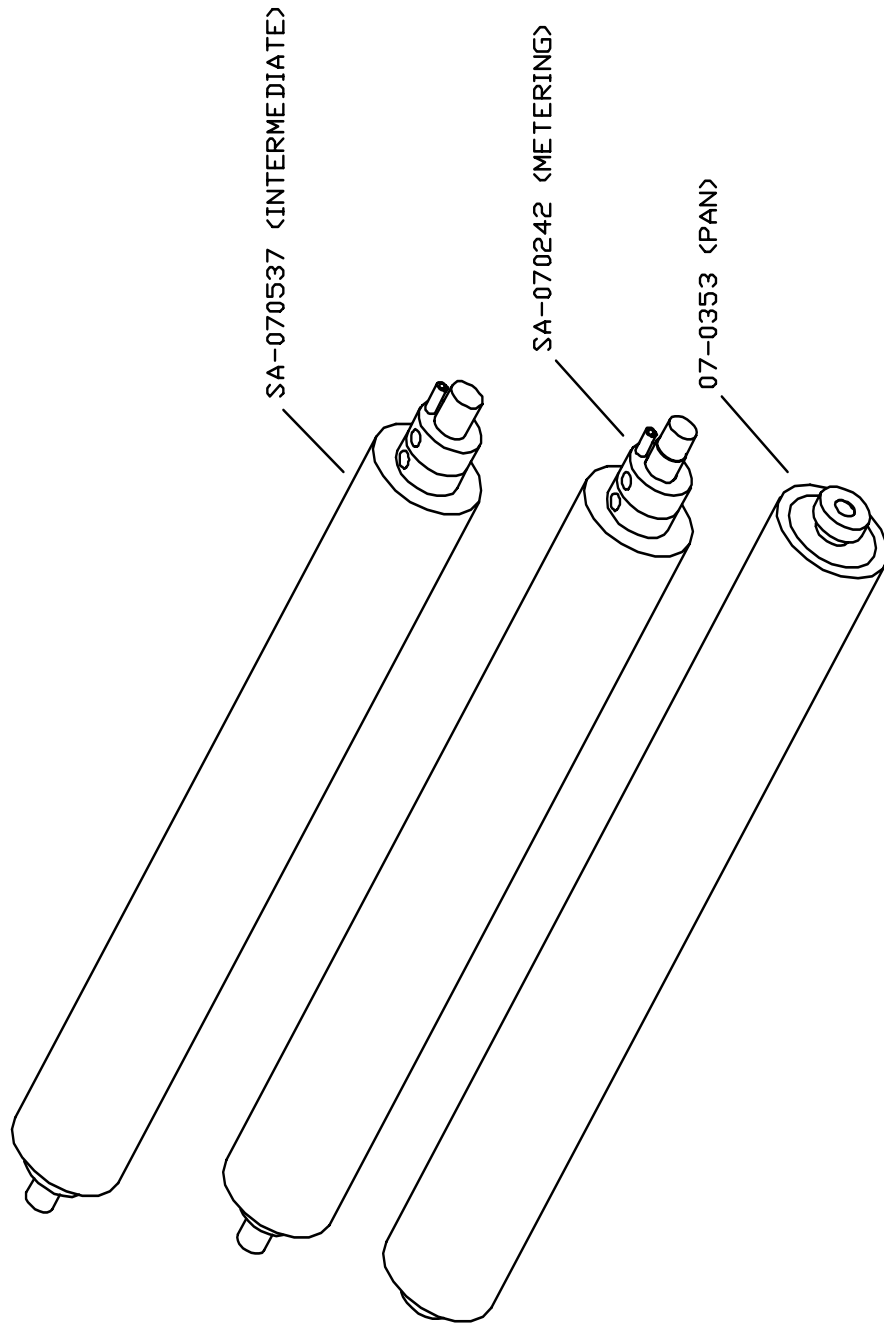
DID11C08, 4-17-97

WATER PAN ASSEMBLY  
DIDDE 11



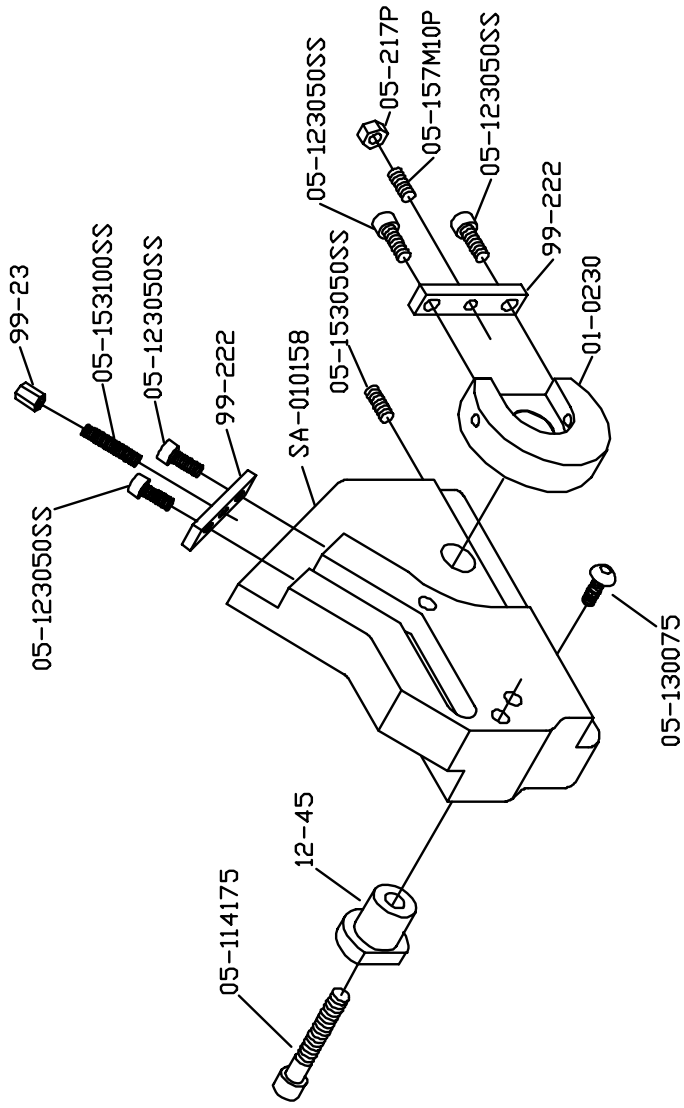
DIDDE 11, 4-15-97

METERING/INTERMEDIATE/PAN ROLLERS  
DIDDE 11



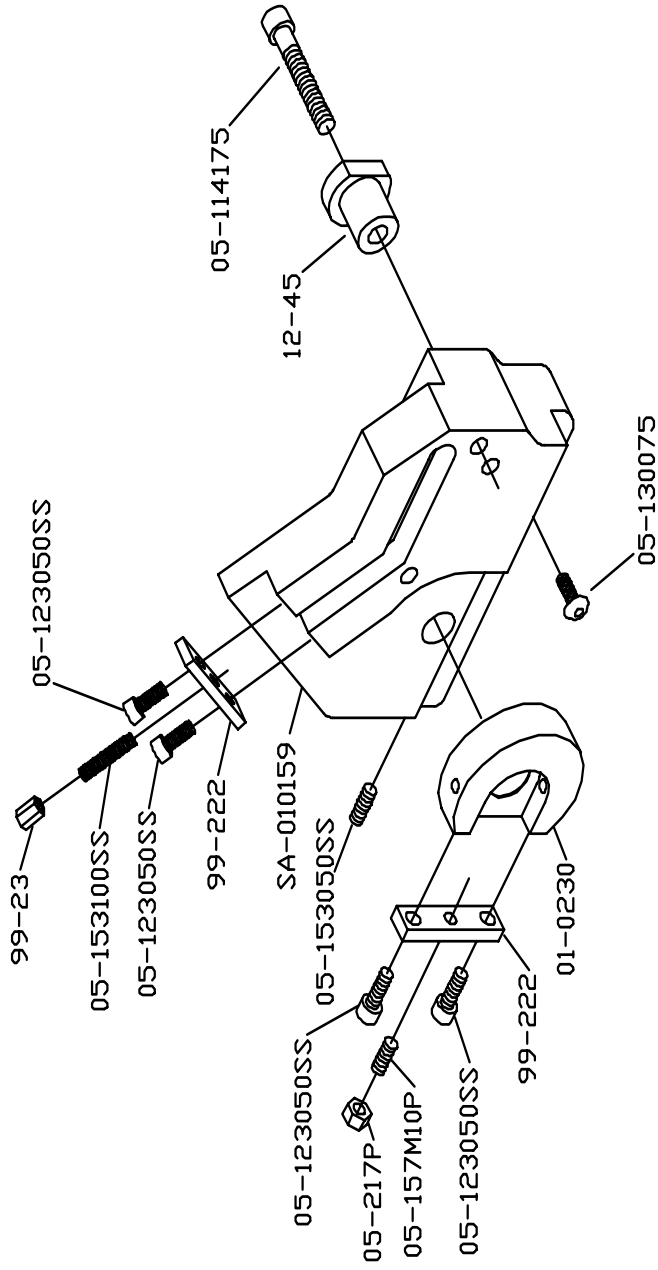
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SIDE FRAME ASSEMBLY-OPS  
DIDDE 17



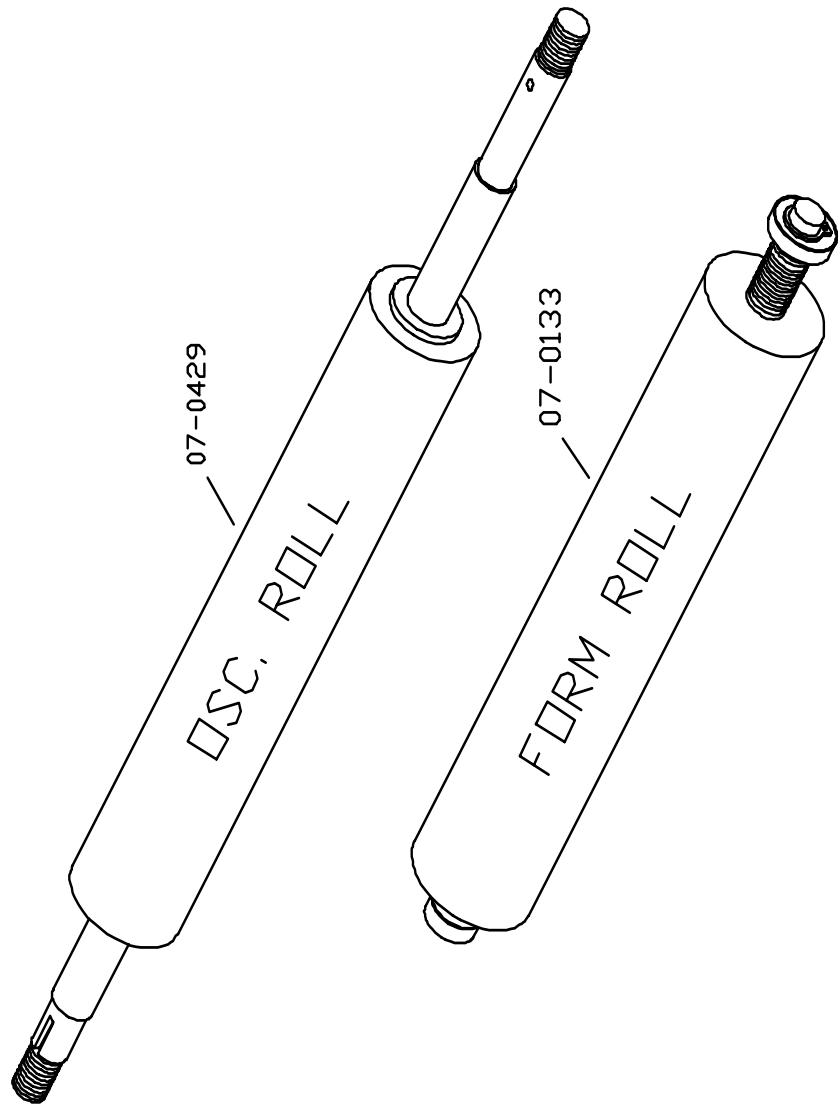


SIDE FRAME ASSEMBLY-NDPS  
DIDDE 17



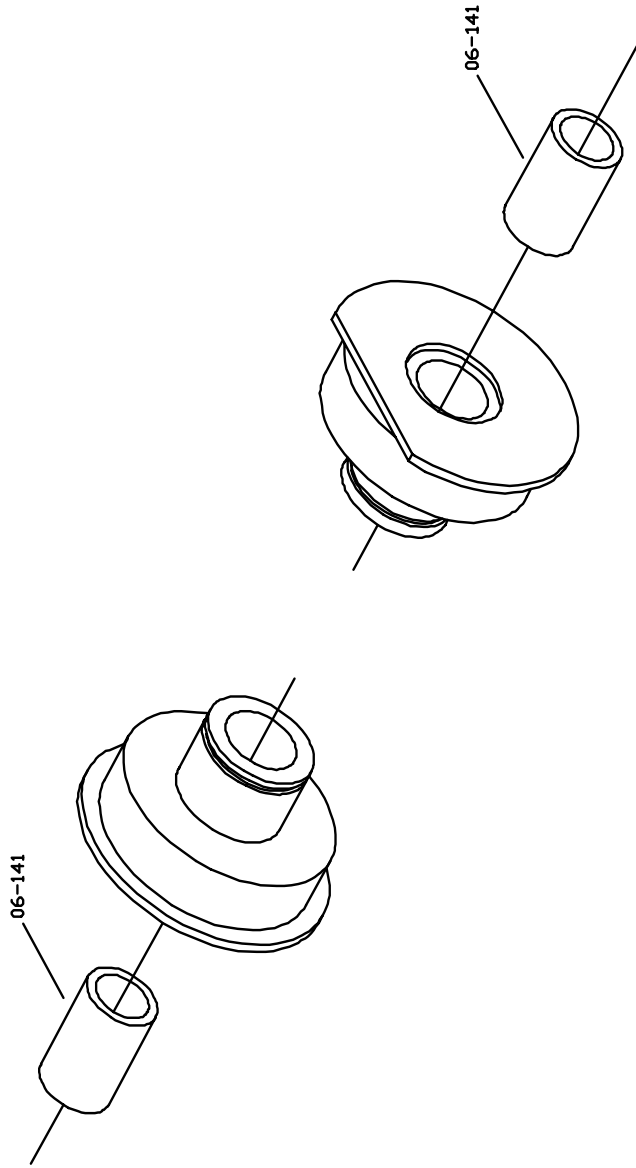
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OSCILLATOR AND FORM ROLLERS  
DIDDE 17



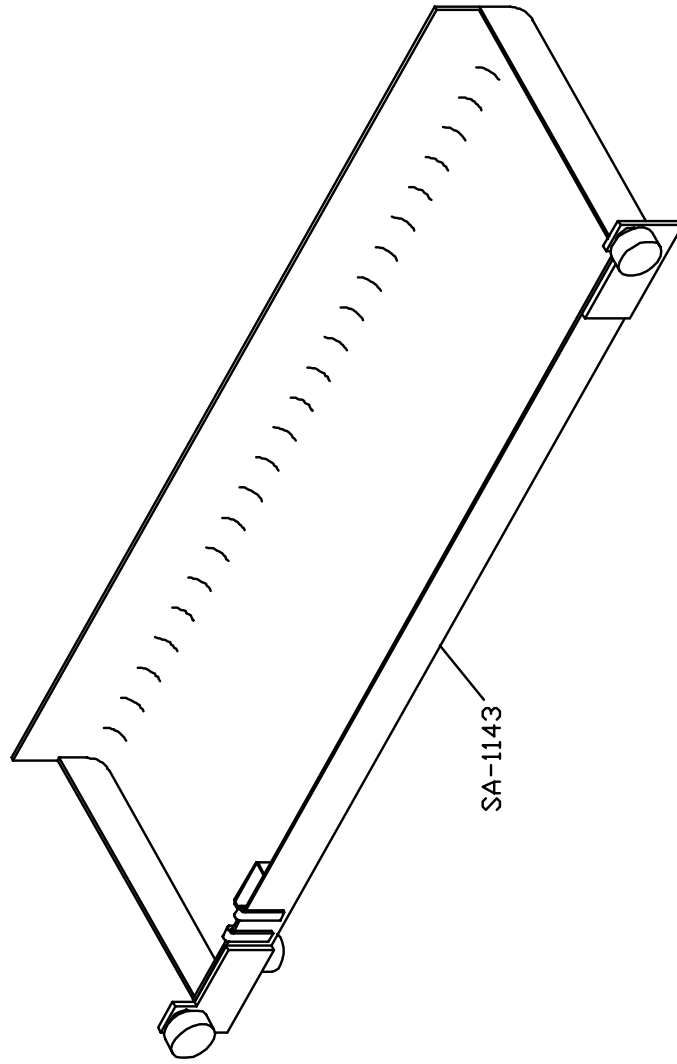
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OSCILLATOR BUSHINGS  
DIDDE 17



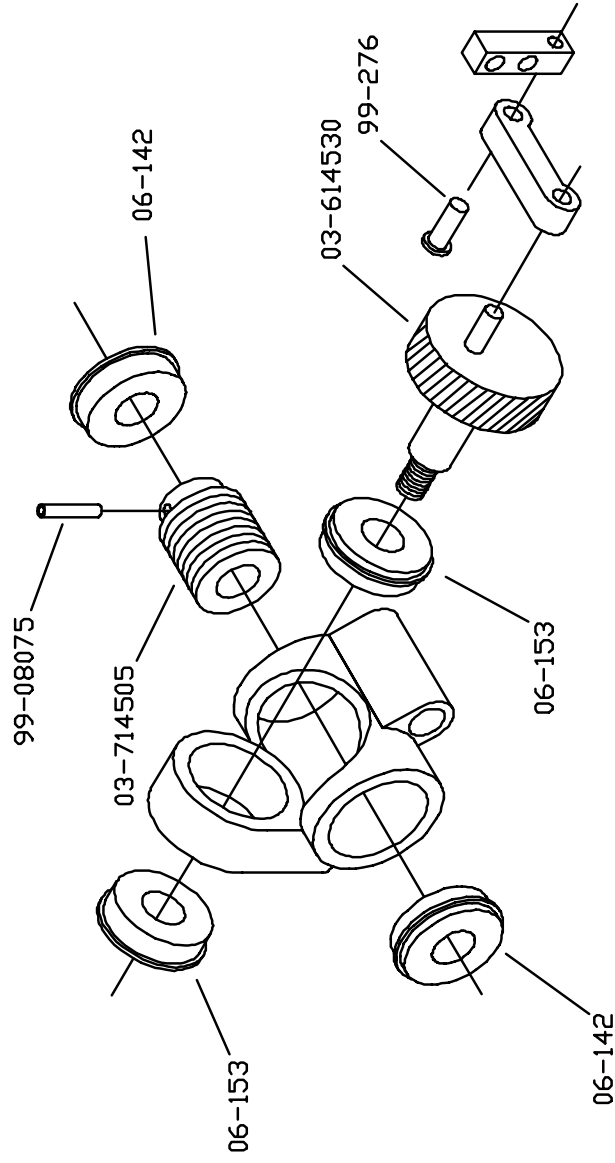
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WATER PAN ASSEMBLY  
DIDDE 17



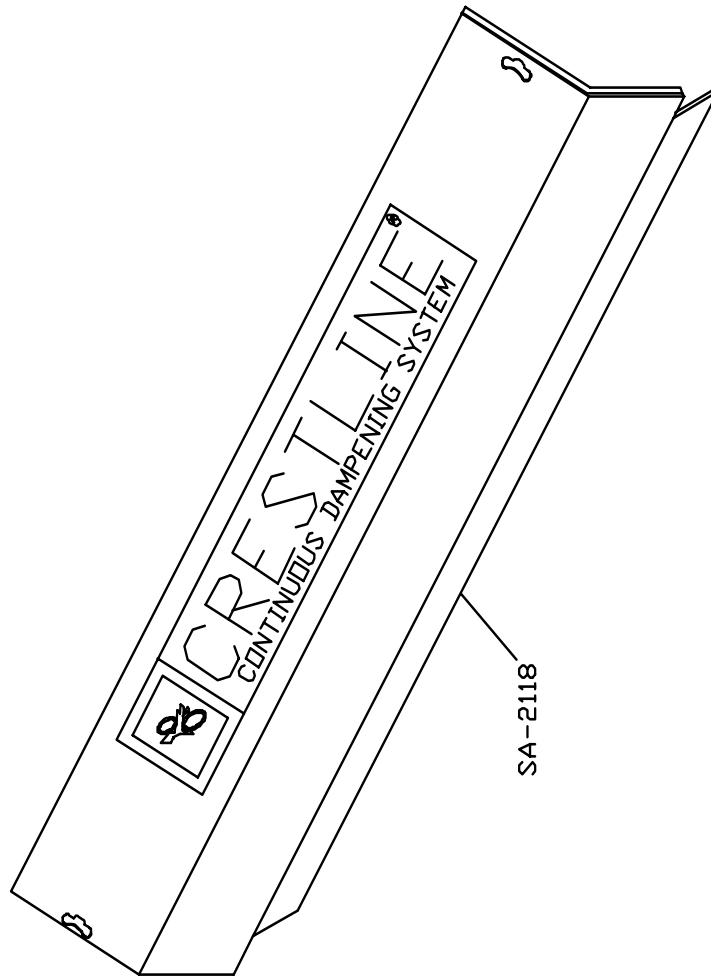
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OSCILLATOR GEAR ASSEMBLY  
DIDDE 17

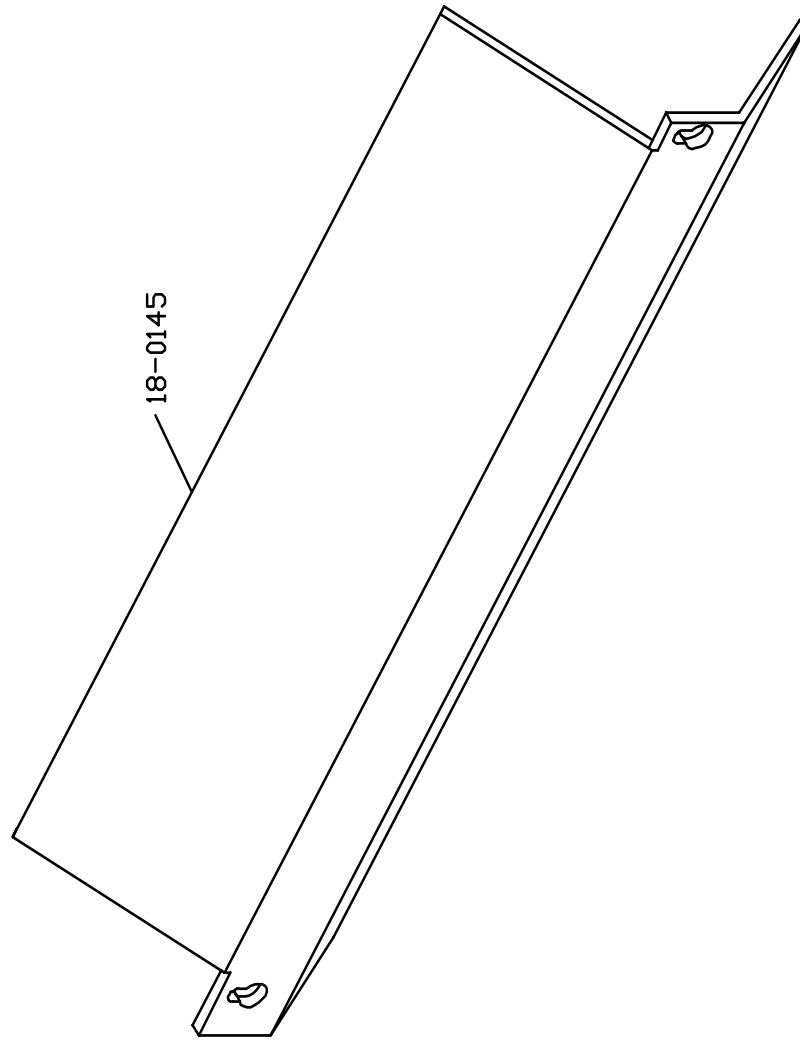


DID17C06, 1-12-98

SHIELD ASSEMBLY  
DIDDE 17

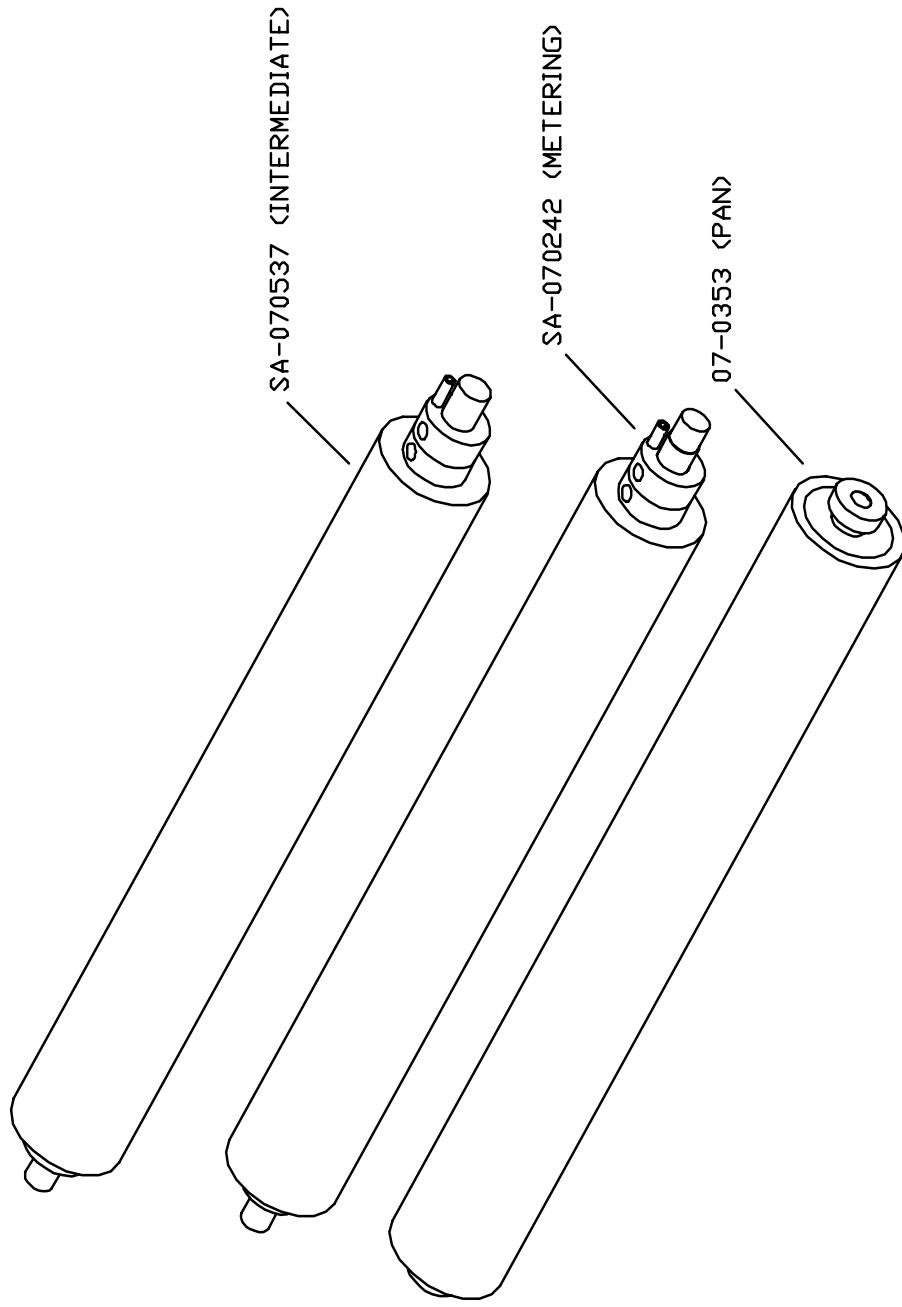


DAMPENER GUARD  
DIDDE 17



DID17C08, 4-17-97

METERING/INTERMEDIATE/PAN ROLLERS  
DIDDE 17



DID17C09, 4-15-97







*A Pamarco Technologies Inc. Company*

11103 Indian Trail, Dallas, TX 75229 Phone 972-484-6808, Fax 800-365-6510  
E-Mail [info@accel-us.com](mailto:info@accel-us.com), Web Site [www.accel-us.com](http://www.accel-us.com)