

# **Crestline® Dampening System**

## **Installation Instructions**

**Hamada RS34 & VS34 Parent Unit**

**DU34 Upper Unit**

**For Presses Originally Equipped With**

**Integrated Dampeners**



*A Pamarco Technologies Inc. Company*

X88-112  
01/2001  
REV-A

# GENERAL INFORMATION

## **ATTENTION CRESTLINE® 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® DEALER IS:**

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### **THE SERIAL NUMBER OF YOUR CRESTLINE® DAMPENER(S) IS:**

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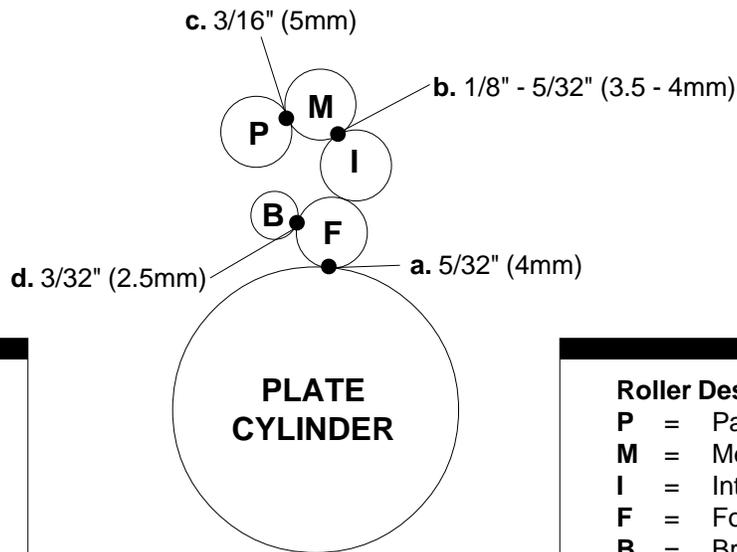
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## **SAFETY INFORMATION**

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

# GENERAL INFORMATION

## BASIC CONFIGURATION OF CRESTLINE®



Adjustments
a. Form to Plate
b. Metering to Intermediate
c. Metering to Pan
d. Bridge to Water Form

Roller Description
P = Pan
M = Metering
I = Intermediate
F = Form
B = Bridge

<b>TERMINOLOGY</b>	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](mailto:accel@dallas.net)  
WEB SITE [www.accelgraphicsystems.com](http://www.accelgraphicsystems.com)

Crestline® is covered by U.S. Patents and Patents Pending

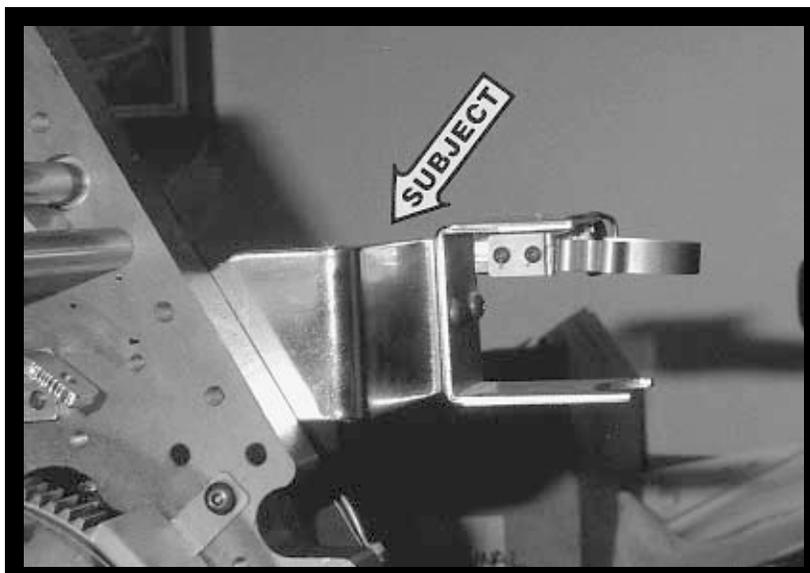
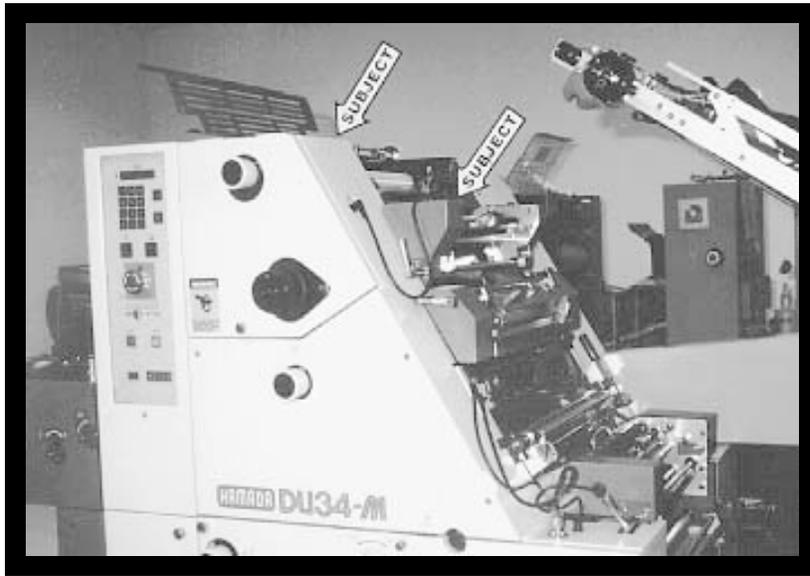
# GENERAL INFORMATION

## REQUIRED TOOLS

1. Phillips Screwdriver
2. Standard Screwdriver
3. 10 mm Open End
4. 13 mm Open End
5. 2.0 mm Allen Wrench
6. 2.5 mm Allen Wrench
7. 3 mm Allen Wrench
8. 4 mm Allen Wrench
9. 5 mm Allen Wrench
10. 8 mm Allen Wrench
11. 2.5 mm Punch
12. 3.0 mm Punch
13. 5.0 mm Punch
14. Hammer
15. Drill
16. 17/32 Drill Bit

# PRE-INSTALLATION INFORMATION

1. Cut the ties holding the rollers and examine rollers for gouges, scratches, or nicks.
2. Check box and parts board to make sure all pieces are present and nothing has broken in shipping.
3. Check the dampener for parallel. (Cutter bed works best.) If dampener rocks, it needs to be realigned. Loosen tie bar bolts at OPS and align the frames on the flat surface. Retighten bolts.



# DISASSEMBLY

**1**

Disconnect and remove plate inserter from DU34 parent, right hand subject arrow.

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**2**

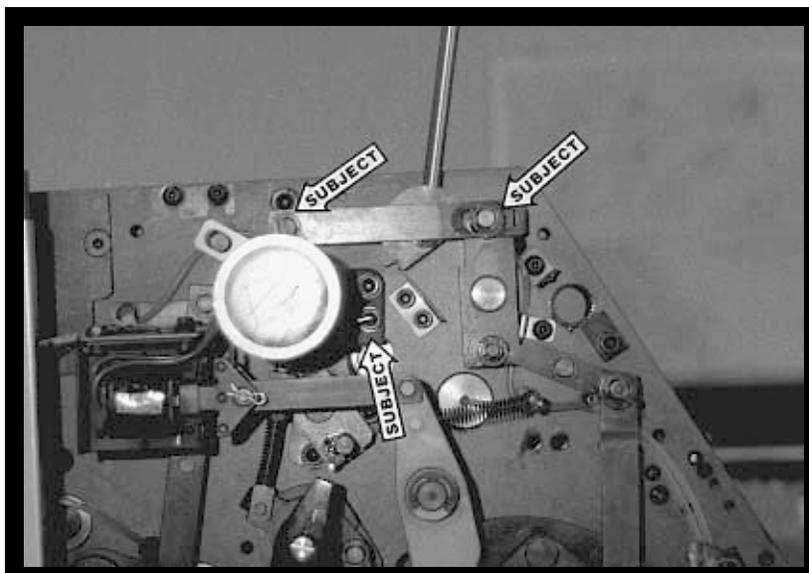
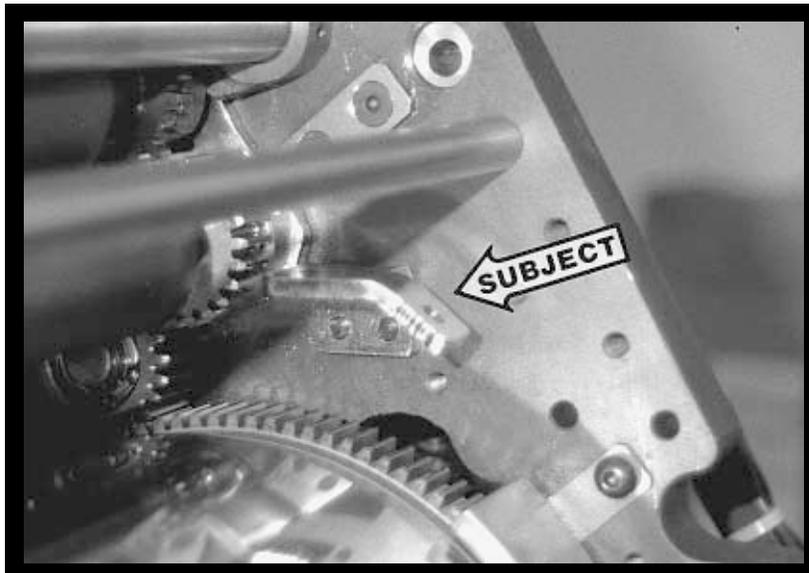
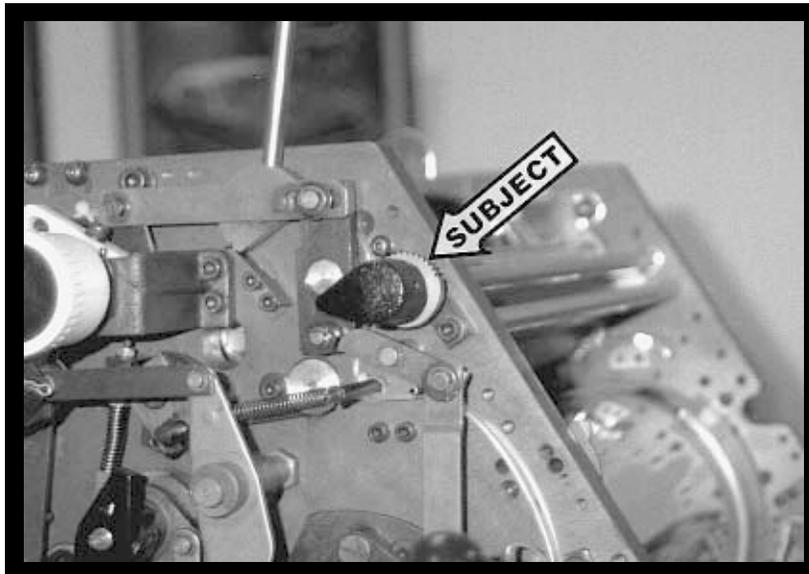
Remove side covers at OPS & NOPS, left hand subject arrow, in picture from step 1. Also, remove top inker guard and dampener/plate cylinder guard as well as their hinges. Save for reinstallation.

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**3**

Remove water pan and bottle bracket.

**7**



## DISASSEMBLY

**4**

Remove metering roller shaft and metering roller. Also remove spring plate and inner plates.

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**5**

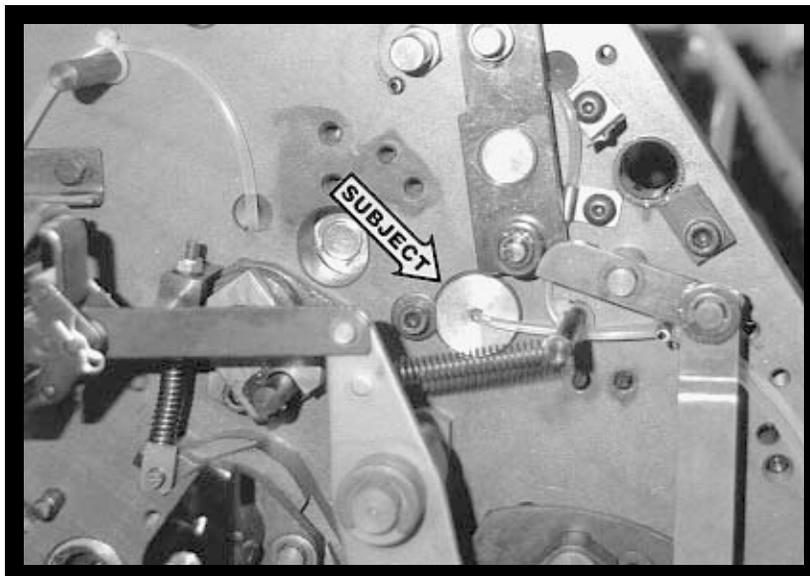
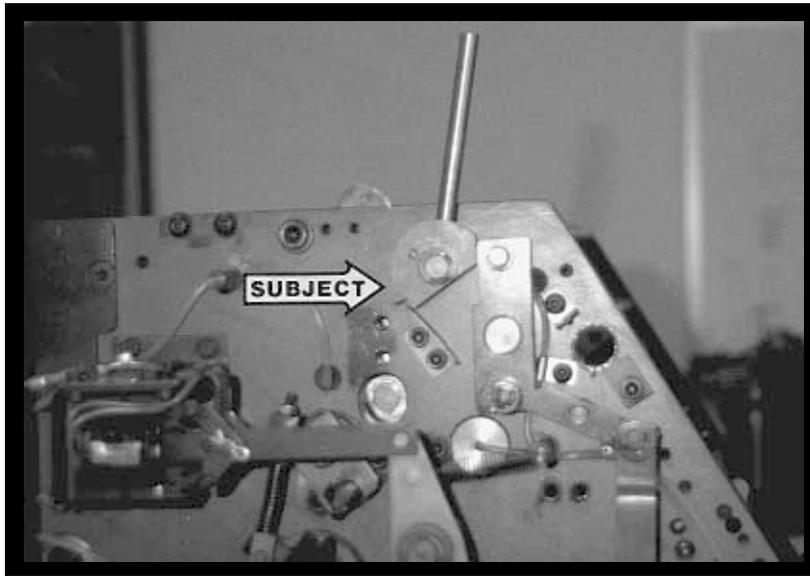
Remove water pan mounting brackets at OPS & NOPS.

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**6**

Remove E-rings (outer subject arrows) and cap screws (middle arrow) and remove water adjustment mechanism, including spring and rocker arm.

**9**



# DISASSEMBLY

**7**

Remove lock-out cam and spring plate.

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**8**

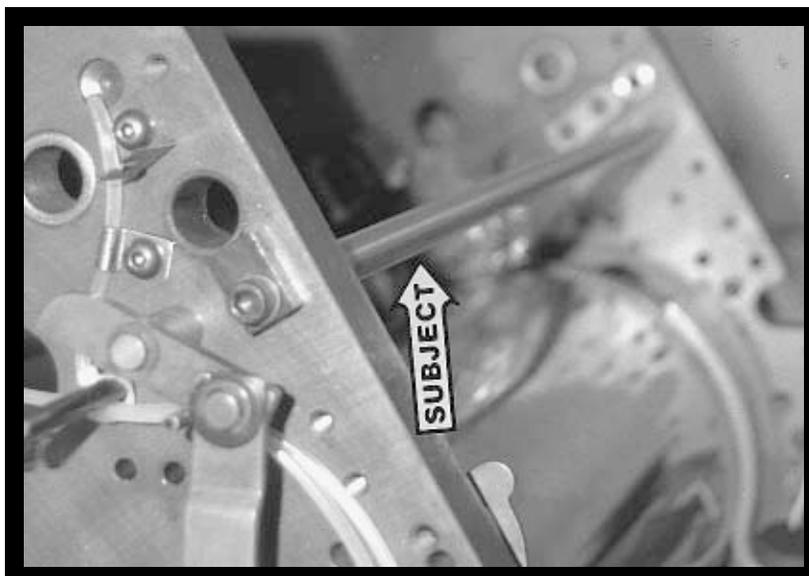
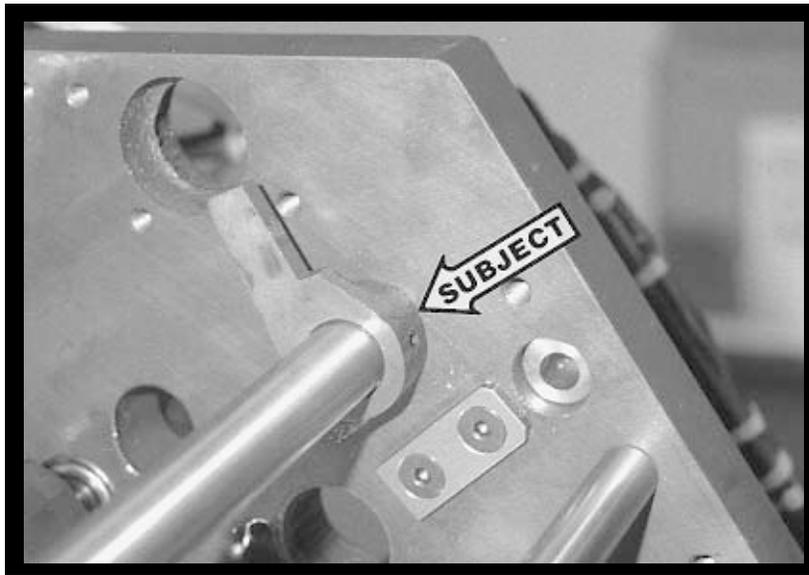
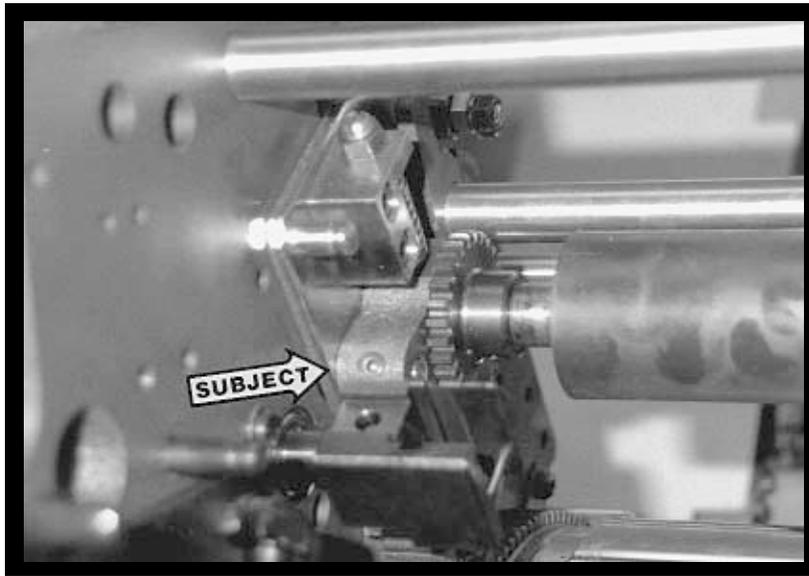
Remove large oscillator roller.

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**9**

Remove bushing at OPS & NOPS and lift pan roller out of press.

**11**



## DISASSEMBLY

**10**

Loosen set screw in transfer roller housing and push pins out of press. Then remove remaining transfer roller mechanism. Knock out large spring pins toward the delivery end of press.

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**11**

Remove lock-out shaft by removing roll pins from inner arms at OPS & NOPS, and pulling out shaft.

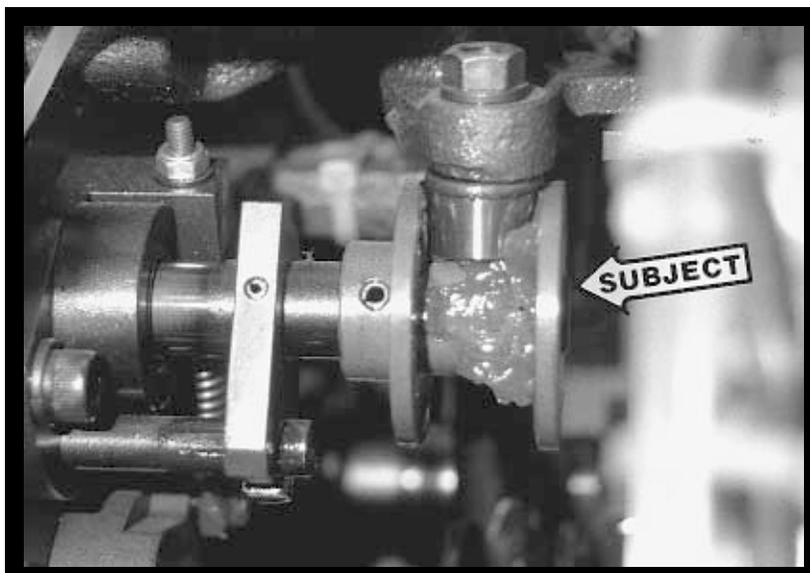
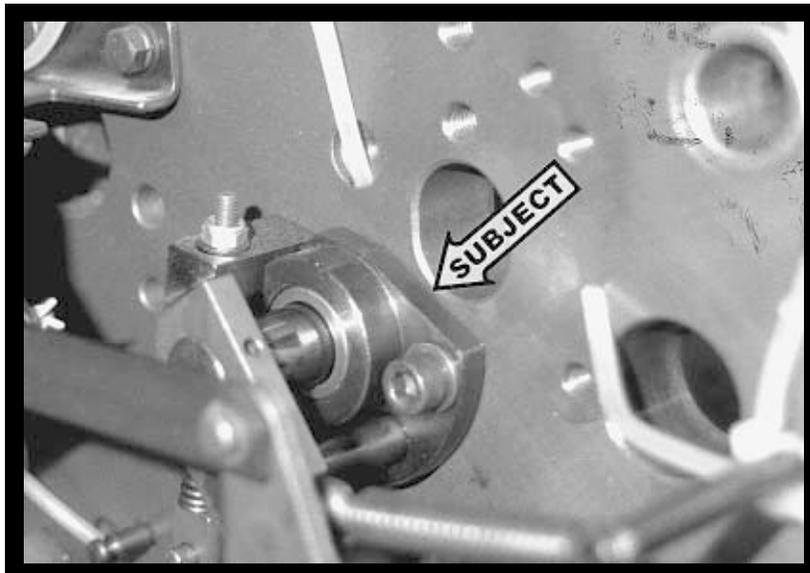
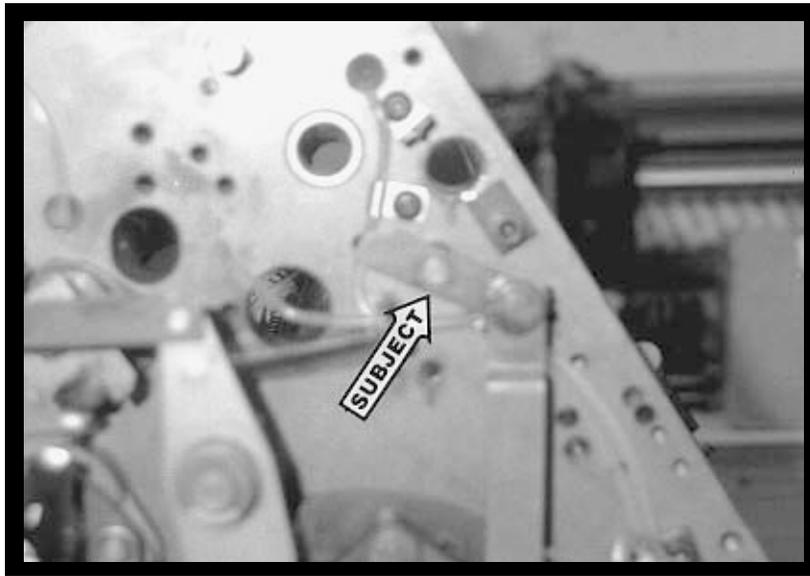
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**12**

Remove small tie bar.

Remove spring and spring pin. **SAVE** the spring for re-installation.

**13**



**13**

Remove small link and knock out stud pin.

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**14**

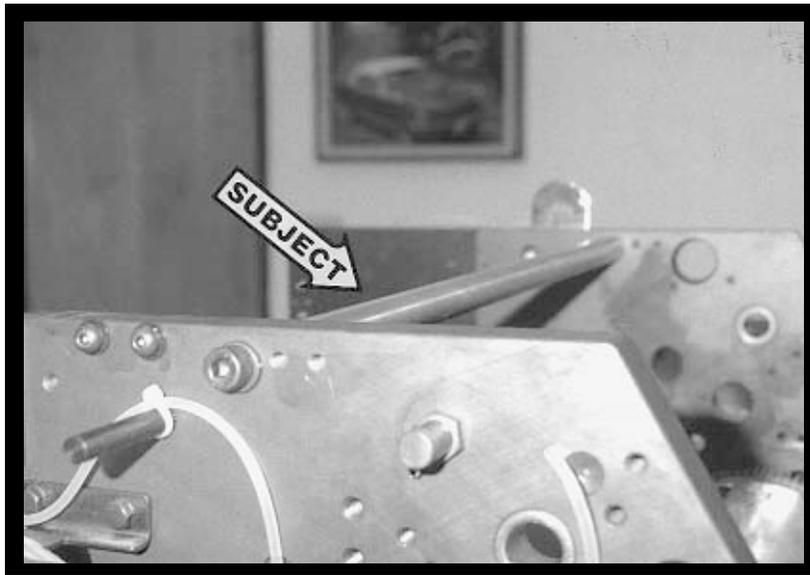
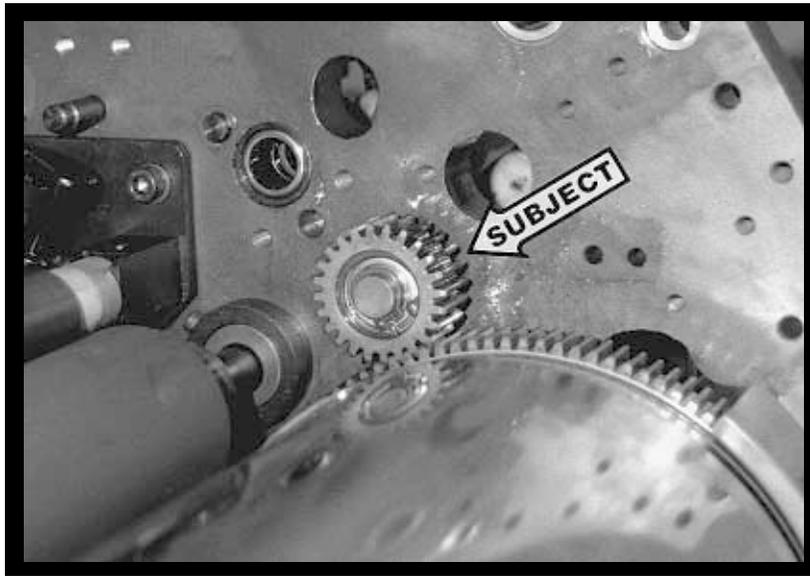
At OPS, remove oscillator mechanism by knocking out small roll pin in spool and block, and pulling out journal. Remove housing by removing cap screws.

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**15**

At NOPS, remove oscillator mechanism by knocking out roll pin in spool and block, and pulling out journal. Remove housing by removing cap screws.

**15**



**16**

Remove idler gear and stud at NOPS.

Be sure you have knocked out spring pins at OPS and NOPS.

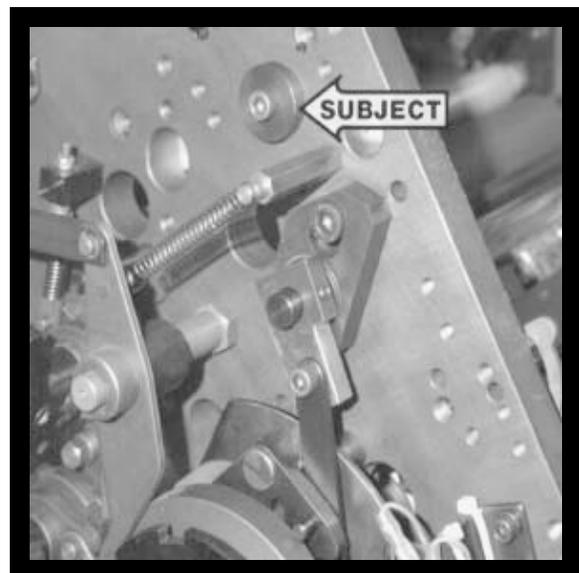
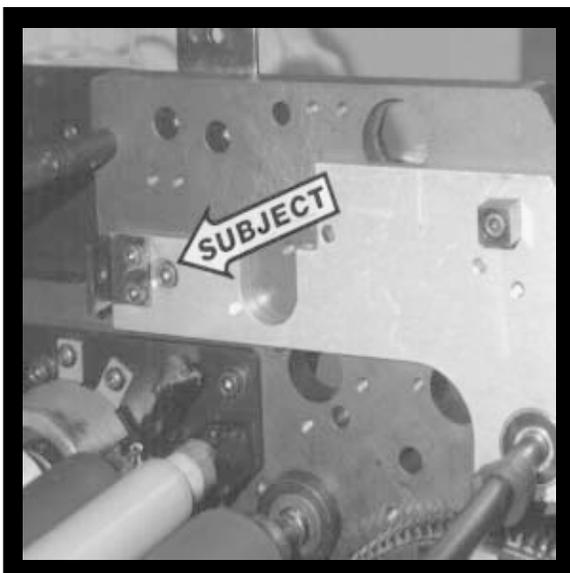
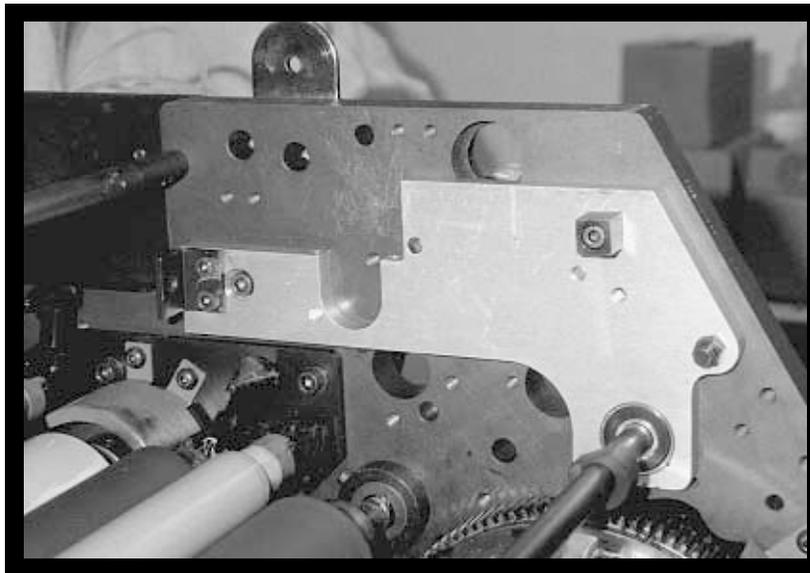
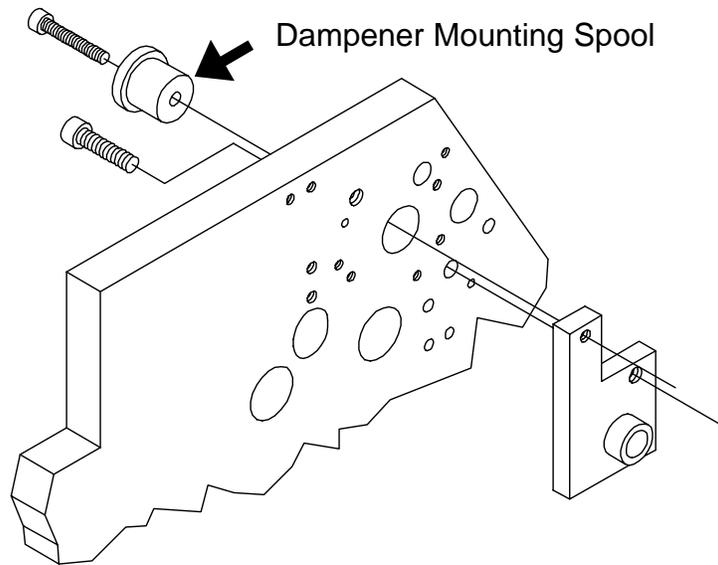
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**17**

Remove large tie bar.

**You are now ready to install Crestline®.**

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# INSTALLATION

**1**

At OPS, install drill fixture, drill hole using a 17/32" drill bit, and remove.

If you have any pins still in the frame that does not permit you to install the drill fixture then remove them at this time.

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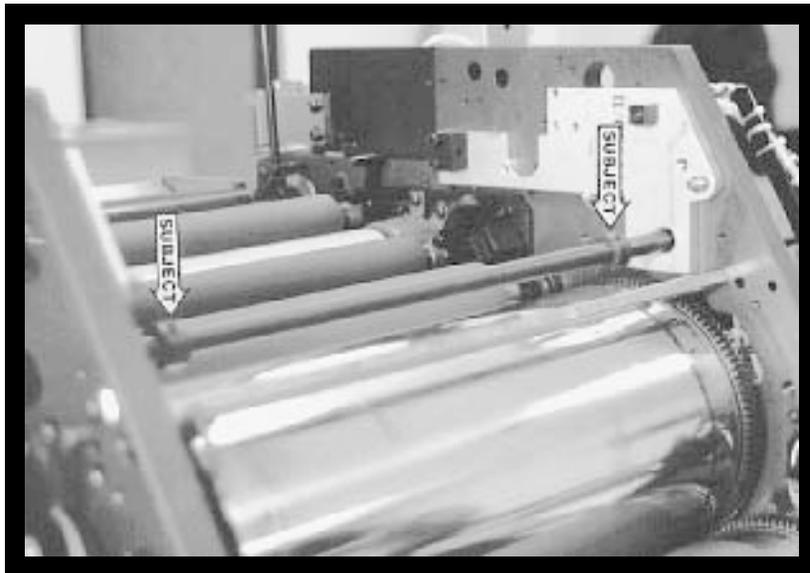
**2**

Install mounting frames at OPS & NOPS as shown.

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**3**

Secure the frames to the press with the provided M6 socket head cap screws. The longer screws use flanged spools through the frame with bolts on outside. The shorter screws bolt through the mounting frame, into the press frame from the inside.



**4**

Insert actuation shaft halfway through the press frame, undercut on the shaft to the OPS.

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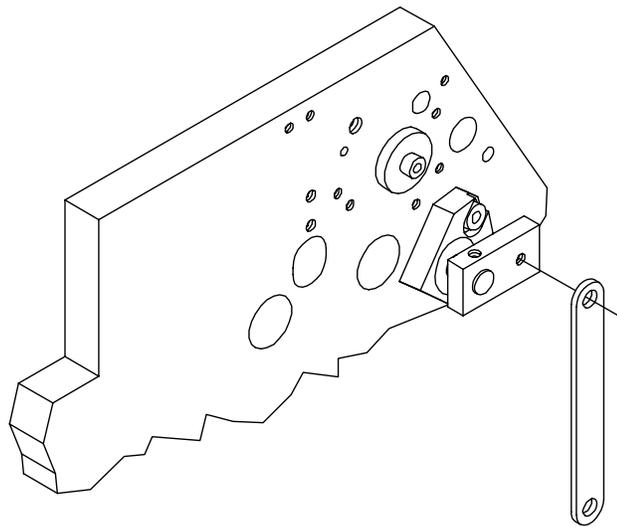
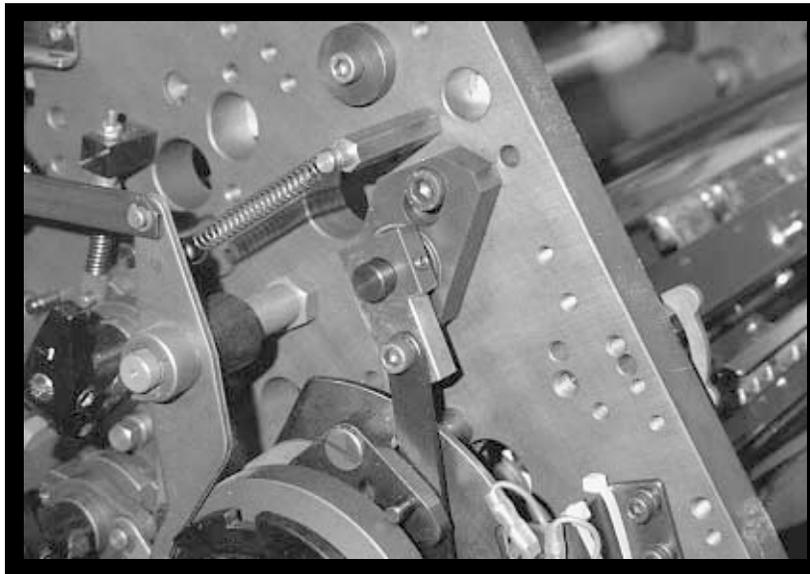
**5**

Slide collar, then lift cams, on shaft and align the threads in the cam with the dimples on the shaft. Make sure both cams are facing the same direction with the flats pointing towards the floor (subject arrow). Slide the shaft all the way through the press until it bottoms out on NOPS.

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**6**

Install washer and snap ring at OPS. Push shaft to NOPS and push collar to OPS mounting frame, and tighten. Check that the two lift cams line up with lift bearings when the dampener is installed. Re-adjust then if necessary.



7

Install support block on actuating shaft and secure with an m8 screw.

Install the spring stud shown and re-attach spring.

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8

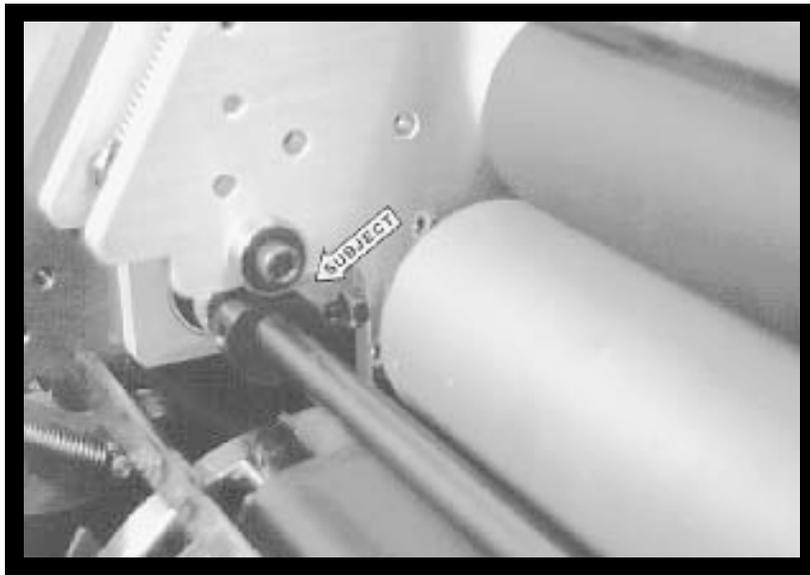
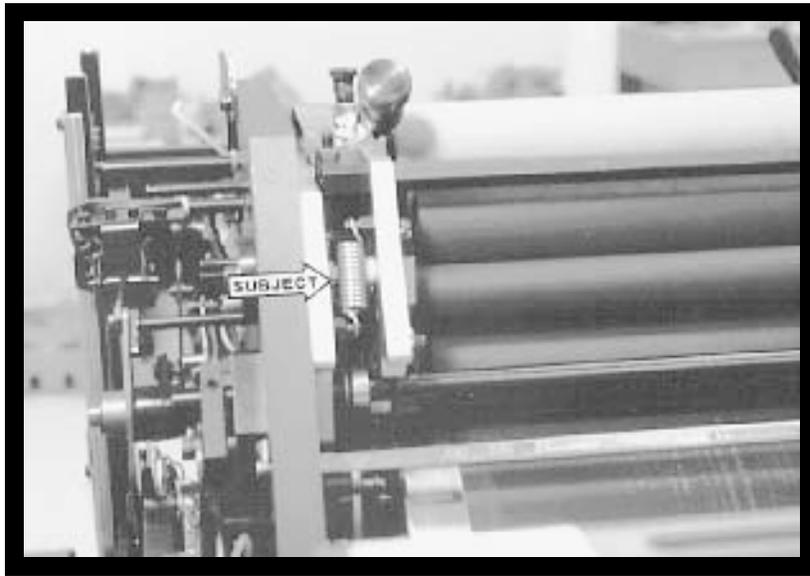
Replace existing water form link with new one. Slide control block on shaft and attach to link using m6 screw and spool. **Do not tighten set screw in control block. Final position of the cams is set later.**

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9

Drop dampener in place with the bearings on the end of the pivot studs fitting into the pockets on the mounting brackets. Attach bearing caps to mounting bracket.

**Note: the set screw in the center of the cap has been preset at factory. Do not adjust. Be sure that the bridge roller on the dampener is disengaged.**



**10**

Attach springs from stud on mounting frame to stud on dampener frame (subject arrow).

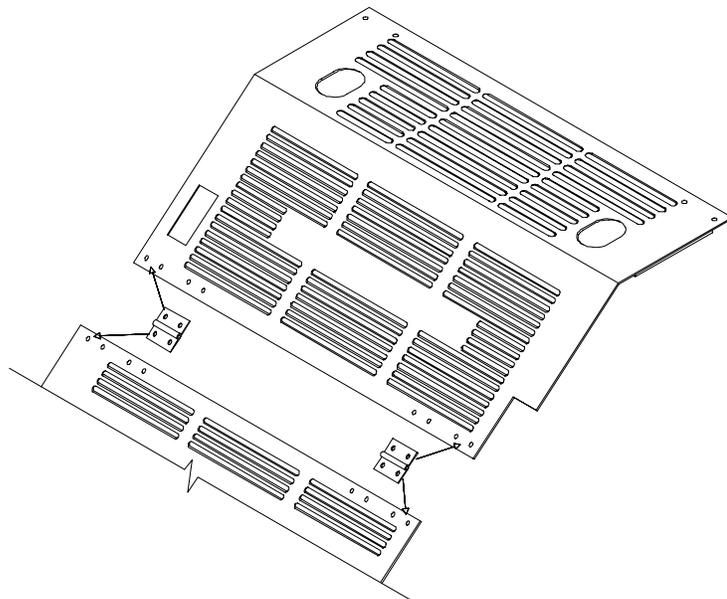
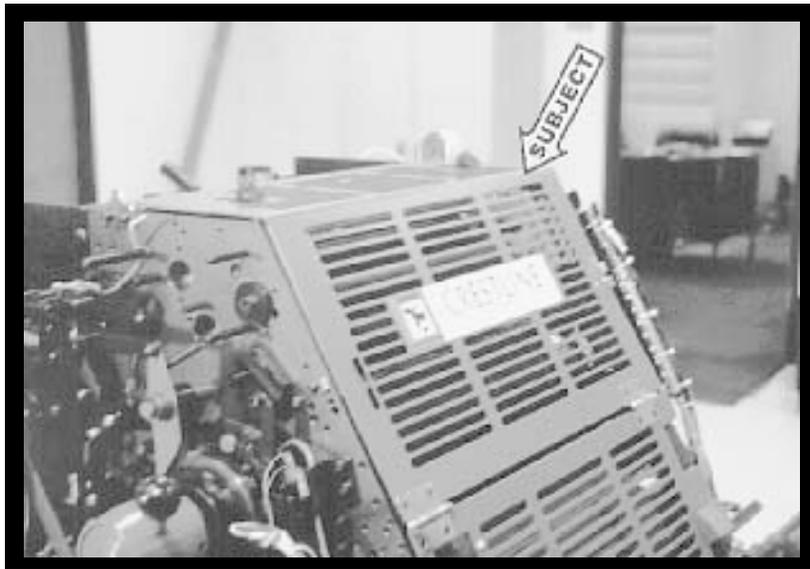
**11**

Position the lift cams as follows:

1. Place single lever in "Water On" position.
2. Rotate shaft so flats are pointing up, just under, but not touching the lift bearings on the dampener frame (subject arrow).
3. Holding this position, tighten set screw in control block into the undercut groove in lift shaft.
4. Return single lever to "Water Off" position. Cams should rotate up and lift the dampener off the plate cylinder.

**12**

Install new press tie bar using m5 socket cap screws and washers (subject arrow). *M5 Cap screws goes through a tapped m6 hole that is being used as a through hole.*



**13**

Install water pan. Install new bottle bracket provided. Attach existing bottle holder to the new bracket. Route water hose as illustrated.

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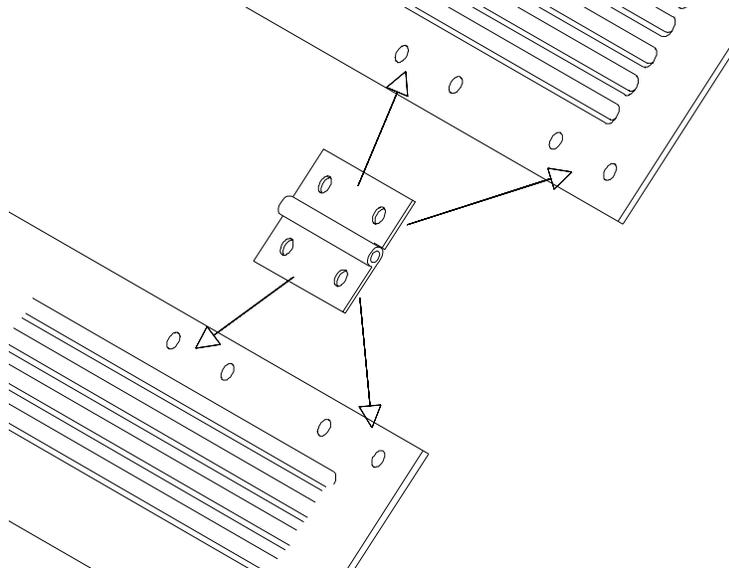
**14**

Install new guard in press as shown using original guard hardware and mounting brackets (subject arrow).

---

**15**

If the press is equipped with a satellite unit, remove the small guard attached to the original Hamada cylinder guard. Using the original hardware, reattach the small guard to the Accel dampener/cylinder guard. Originally, the hinges lined up with holes towards the outside edge of the guards (see illustration). However, Hamada has recently moved the hinges towards the center of the guard.

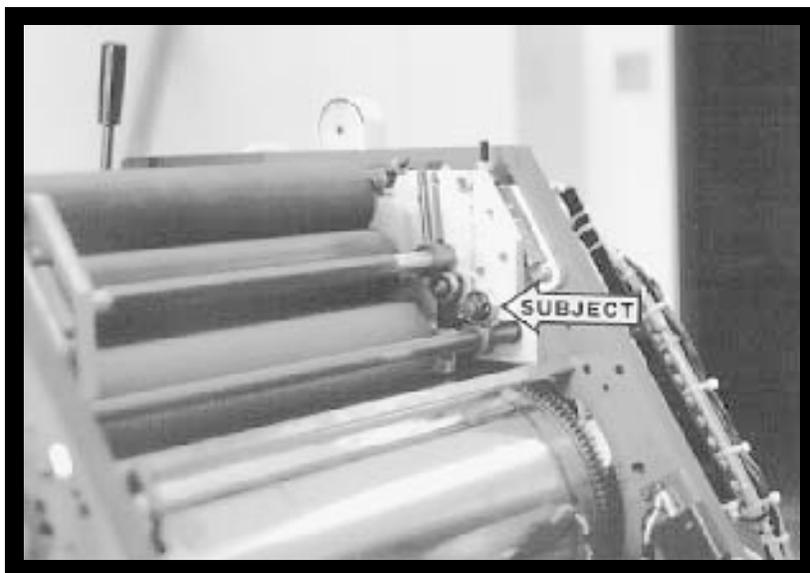
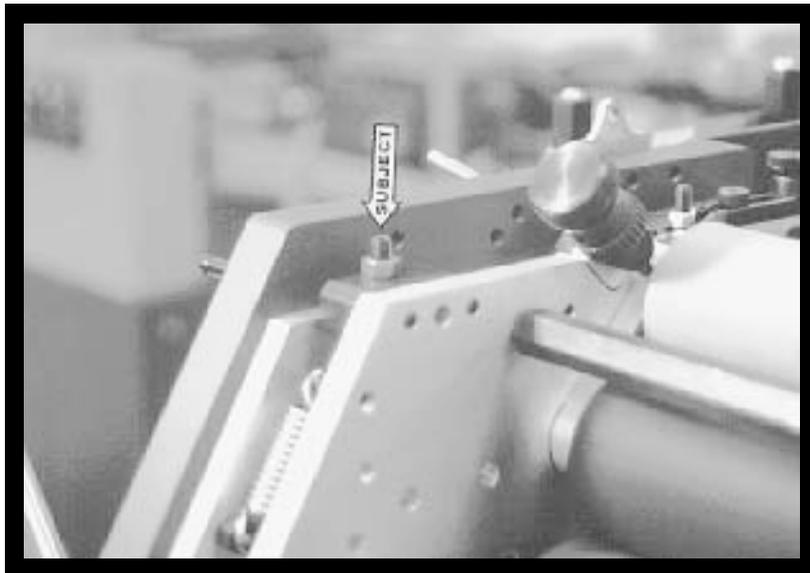


**16**

In order to accommodate both the old and new versions, additional holes have been added to the Accel dampener/cylinder guard. The guard has eight holes in it. Simply line up the proper hole positions with the small hinged guard from Hamada.

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# FINAL ADJUSTMENTS

1

Mount a metal plate on the plate cylinder. Dab ink on the dampener on a hard roller and turn the press by hand at first to distribute the ink. Slowly jog and run the press until the ink is distributed evenly on all the dampener rollers.

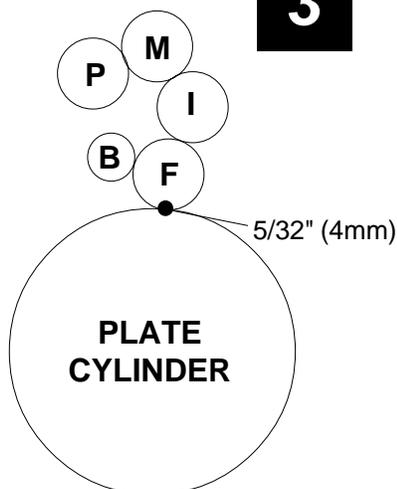
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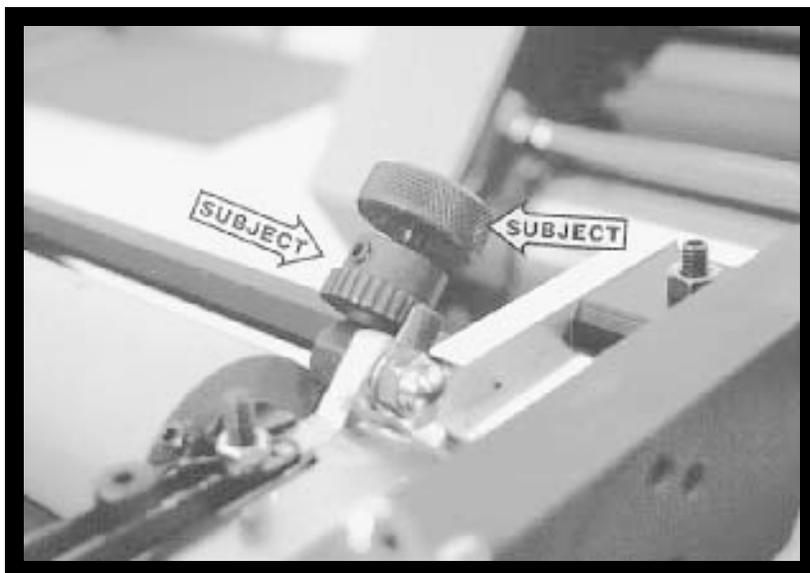
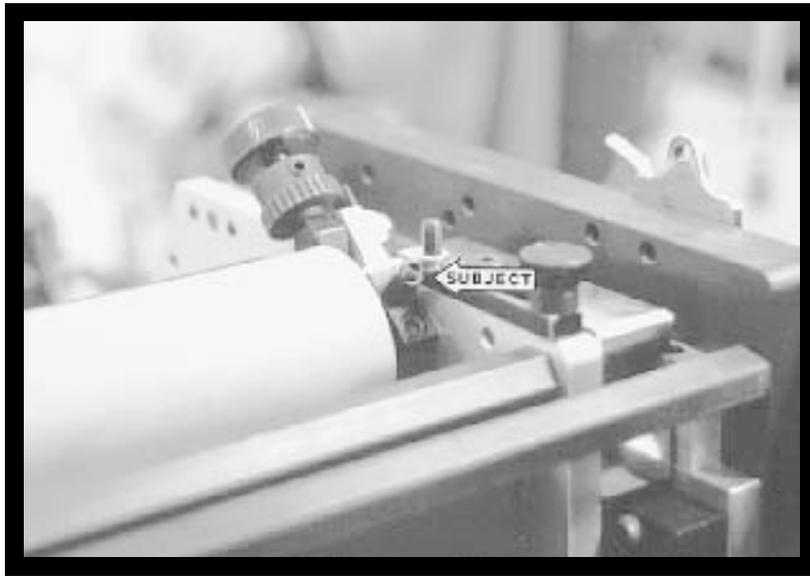
## Water Form to Plate

Drop the water form roller to the plate and check the stripe. It should be  $5/32$ " (4mm). Adjust the stripe using the stop screws on the dampener frame (subject arrow). **Turning the screw down decreases the stripe.** Lock in place using lock nut.

3

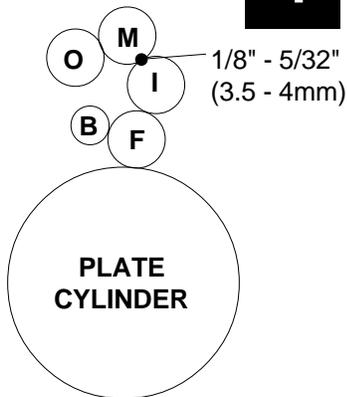
With the single lever in the "Off" position, adjust the amount of lift of the water form off the plate. Lift is adjusted by changing the position of the eccentric cams on the dampener frame (subject arrow). Adjust each eccentric until there is an even  $.050$  gap between the plate and form roller.





# FINAL ADJUSTMENTS

4



## Metering to Intermediate

Check the stripe between the metering and intermediate rollers by dropping the water form to the plate and rotating the press backwards. (Clutches prevent dampener from turning backwards with the water form off the plate. Dropping the form to the plate allows the ink to drive the unit backwards.)

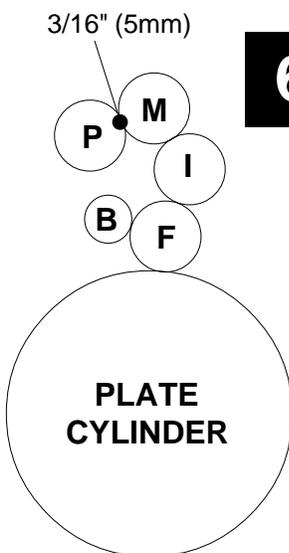
Stripe should be 1/8" - 5/32" (3.5mm - 4mm). Adjust by turning the screw on top of the hanger (subject arrow). **Turning the screw down increases the stripe.** Tighten lock nut when finished.

5

## Intermediate to Form

This pressure is set automatically when setting the metering to intermediate in set 4 above.

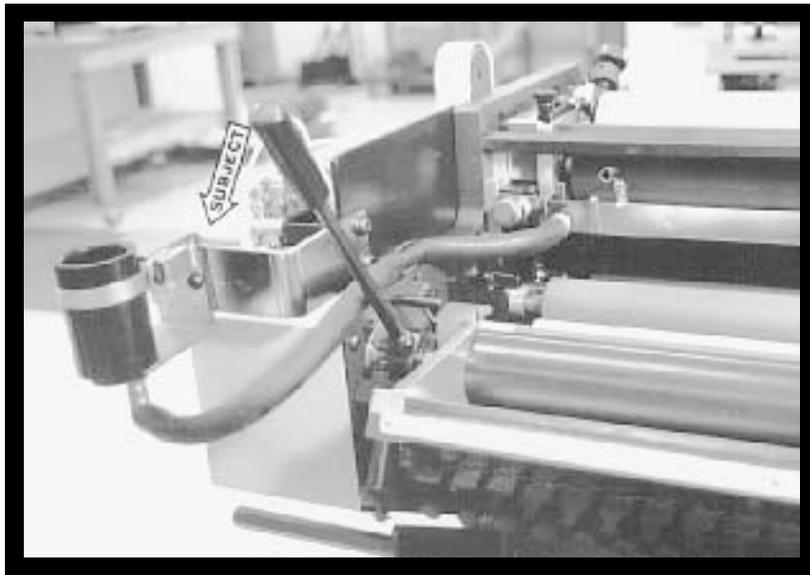
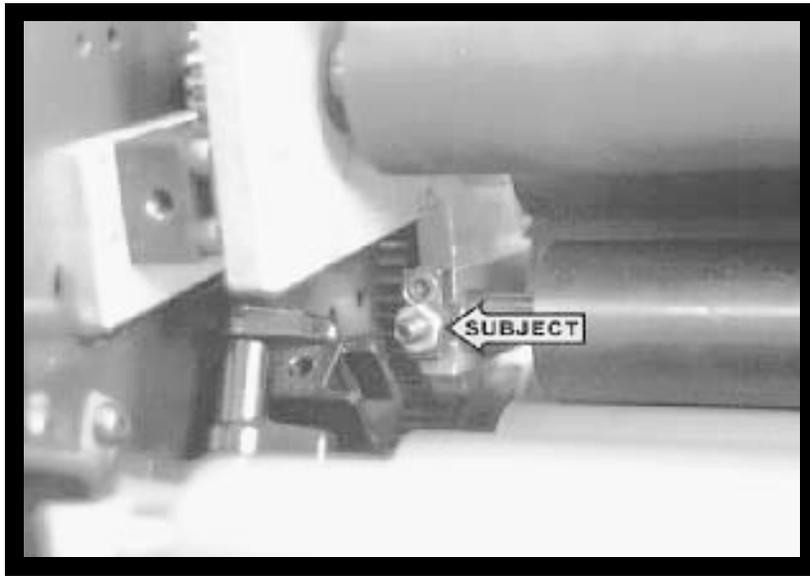
6



## Metering to Pan

Jog the press forward and observe the stripe on the pan roller. It should be 3/16" (4.5mm - 5mm). **Turn the knurled metering knobs (right subject arrow) clockwise to increase the stripe.**

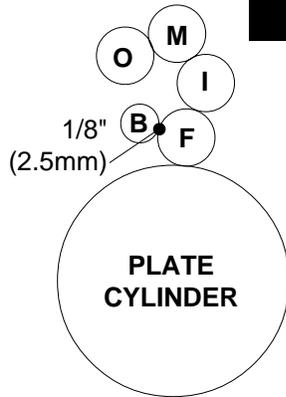
When the proper stripe has been obtained, spin the ratchet gears (left subject arrow) down until they bottom out on the stud and secure the ratchet gear to the knurled knobs with the set screws.



# FINAL ADJUSTMENTS

7

## Bridge to Water Form



Adjust the pressure by turning the adjusting screw (subject arrow) on the bridge roller cap. **Turning the screw in increases the stripe.** The stripe should be no more than 1/8" (2.5 mm) and even all the way across the roller. **Overpressuring the roller can cause the oscillating mechanism to fail.** Lock in place with lock nut.

The bridge roller is intended to make inking and washing up the dampener easier. See sections entitled "Start of Day" and "Wash Ups During The Day". The bridge should not be used during normal operation of the press.

8

Adjust water level in pan by raising or lowering the original water bottle mechanism.

## BASIC OPERATION

### START OF DAY

- A. Make sure all the rollers are in place.
- B. Spin knurled knobs until the ratchet stops.
- C. Mount plate to cylinder. Wipe down all plates before running. Pre-ink the Crestline® dampener before running the plates with an extremely light coverage of ink by *engaging the bridge roller*. Bridge roller engages by rotating the levers at the OPS & NOPS towards the delivery end of the press, dropping the bridge onto the ink form roller. Disengage by pulling back on the levers until bearing on bridge roller drops into detent.
- D. Place water bottle in bracket.

**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® 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" (4mm) to the plate.
- B. Adjustments to the amount of water fed to the plate are made by the knurled knobs that apply pressure to the metering roller. The dampener has been set up for minimum water. To increase the water to the plate, turn the knurled knobs counter clockwise 1 or 2 clicks at a time. This opens the gap between the metering and pan rollers and allows more water to the plate.
- 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. Remove bottle and drain the excess water from the pan.
2. Mount a metal plate to the press.
3. Turn on the press and squirt a small amount of press wash on the ink rollers.
4. Engage the bridge roller by rotating the levers at the OPS & NOPS towards the delivery end of the press, dropping the bridge onto the ink form roller.
5. Use wash up attachment as normal. When the press is clean disengage bridge roller by pulling back on the levers until bearing on bridge roller drops into detent.
6. Remove water pan and clean any solution left in it.
7. 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

1. Wash up press. Pay close attention to cleaning the ends of the pan and metering rollers that extend past the form rollers.
2. Spin the knurled knobs up until the metering roller can be removed.
3. Remove metering roller and wipe down thoroughly to remove any excess wash that may be on the roller.

## CLEANING & MAINTENANCE

### **DEGLAZING THE DAMPENER**

If you are running electrostatic masters on a daily basis, the dampener should be deglazed at least once a week with Accel's **Compound X**, deep cleaner and deglazer. If using other plate materials, this should be done every 2 - 4 weeks.

### **ACCEL RECOMMENDS AVOIDING DEGLAZERS CONTAINING PUMICE OR GRITTY SUBSTANCES.**

Avoid washes that are extremely fast drying. Crestline®'s form and pan rollers are made of relatively soft rubber and should not be subjected to harsh, fast drying washers, especially those containing acetone. Fast drying washes should be used for blankets only!

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### **OILING AND GREASING THE DAMPENER**

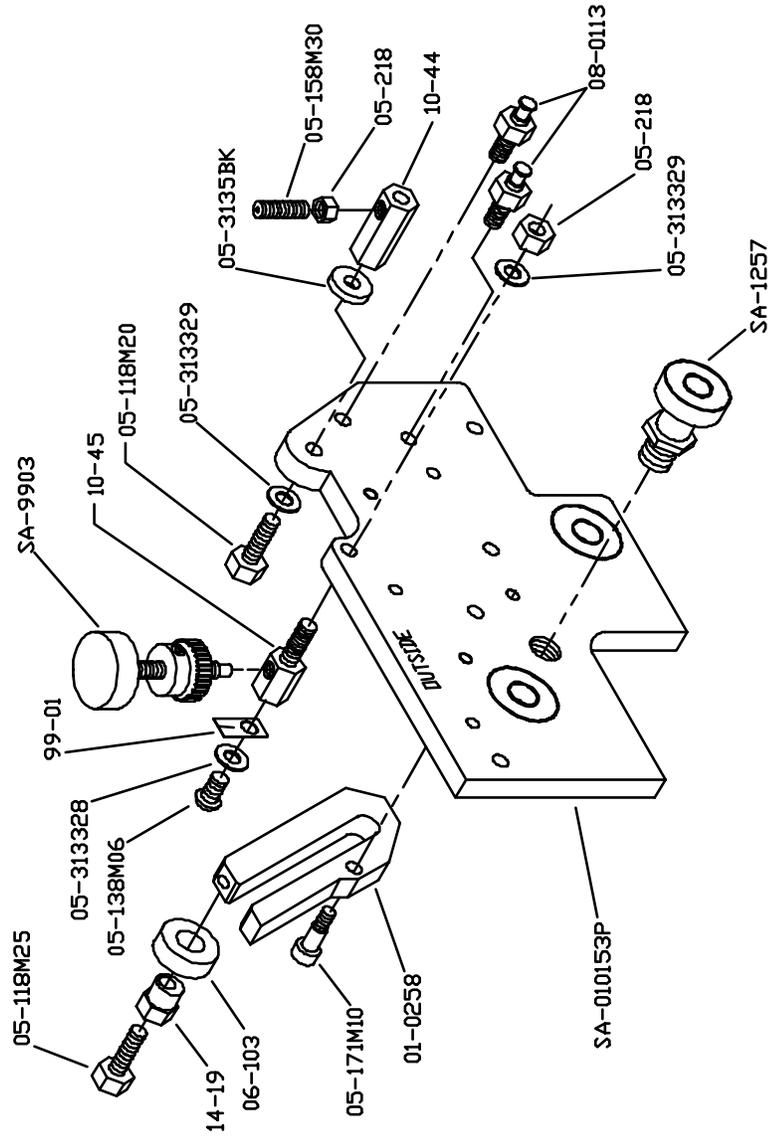
- A. Place a small amount of grease on the gears once a month.
- B. Inject grease into the oscillator grease fitting once a month.

# CLEANING & MAINTENANCE

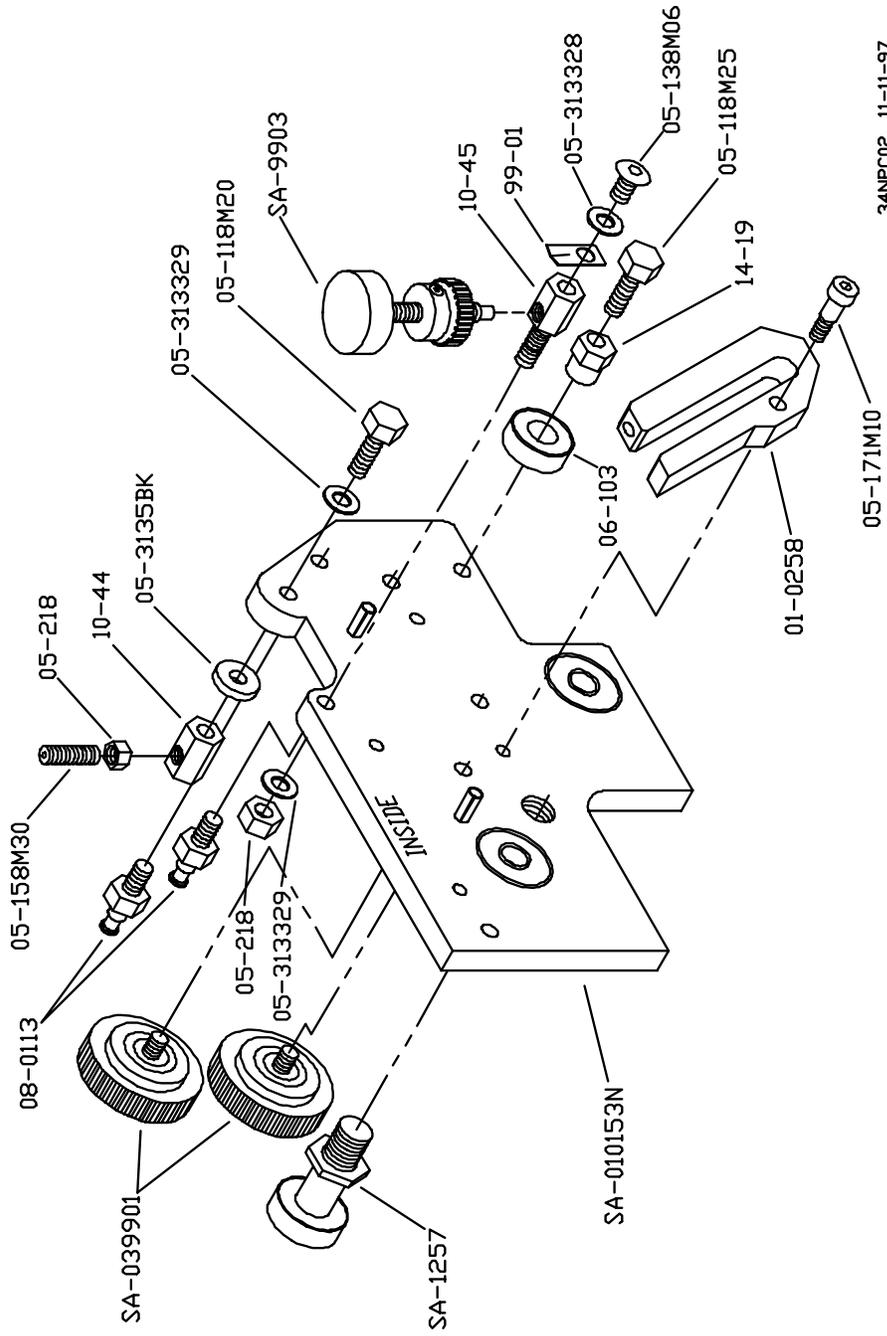
## CRESTLINE® CLEANING & MAINTENANCE CHART

	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-DPS  
HAMADA RS/V/S 34 PARENT

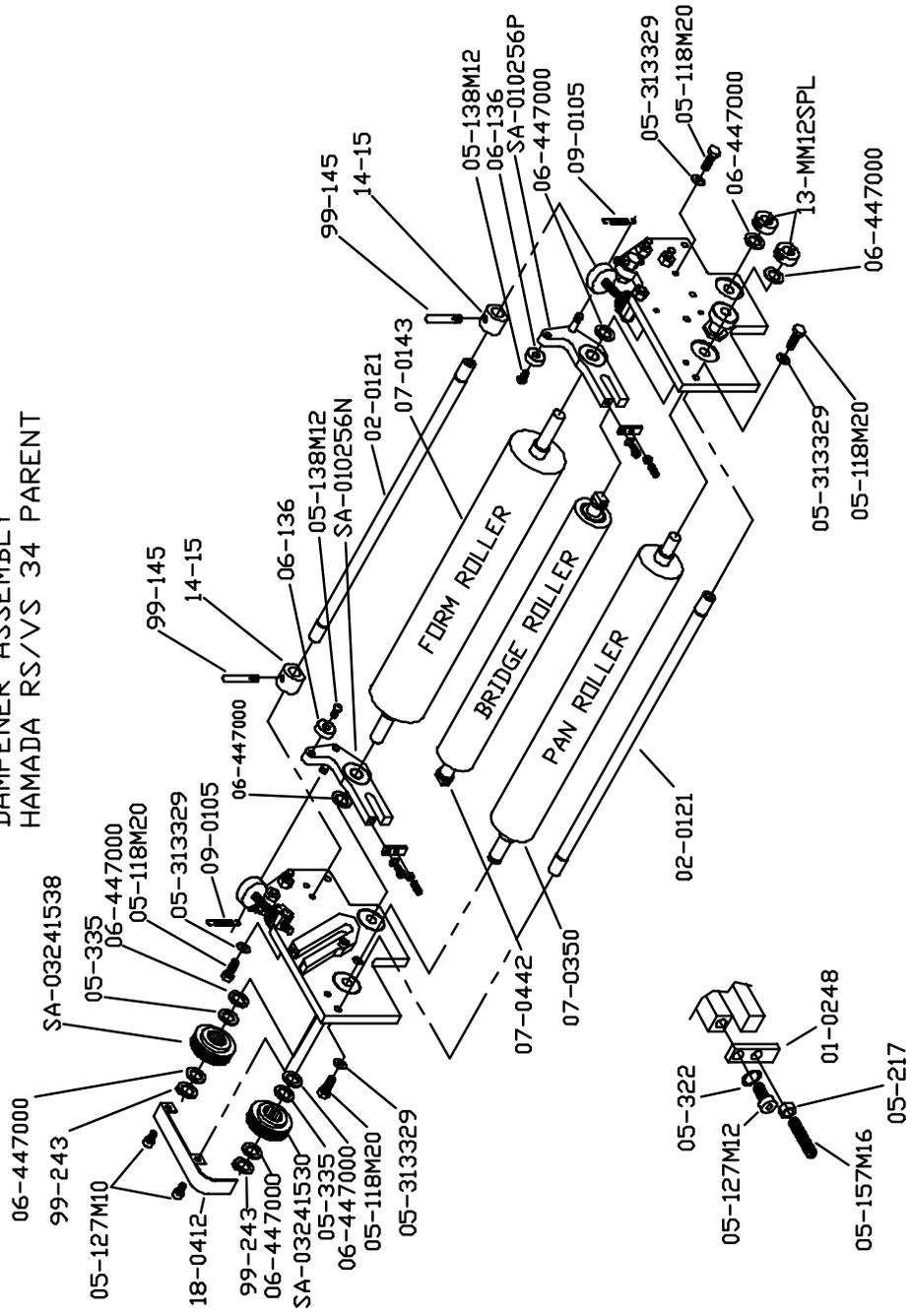


SIDE FRAME ASSEMBLY-NDPS  
 HAMADA RS/V5 34 PARENT

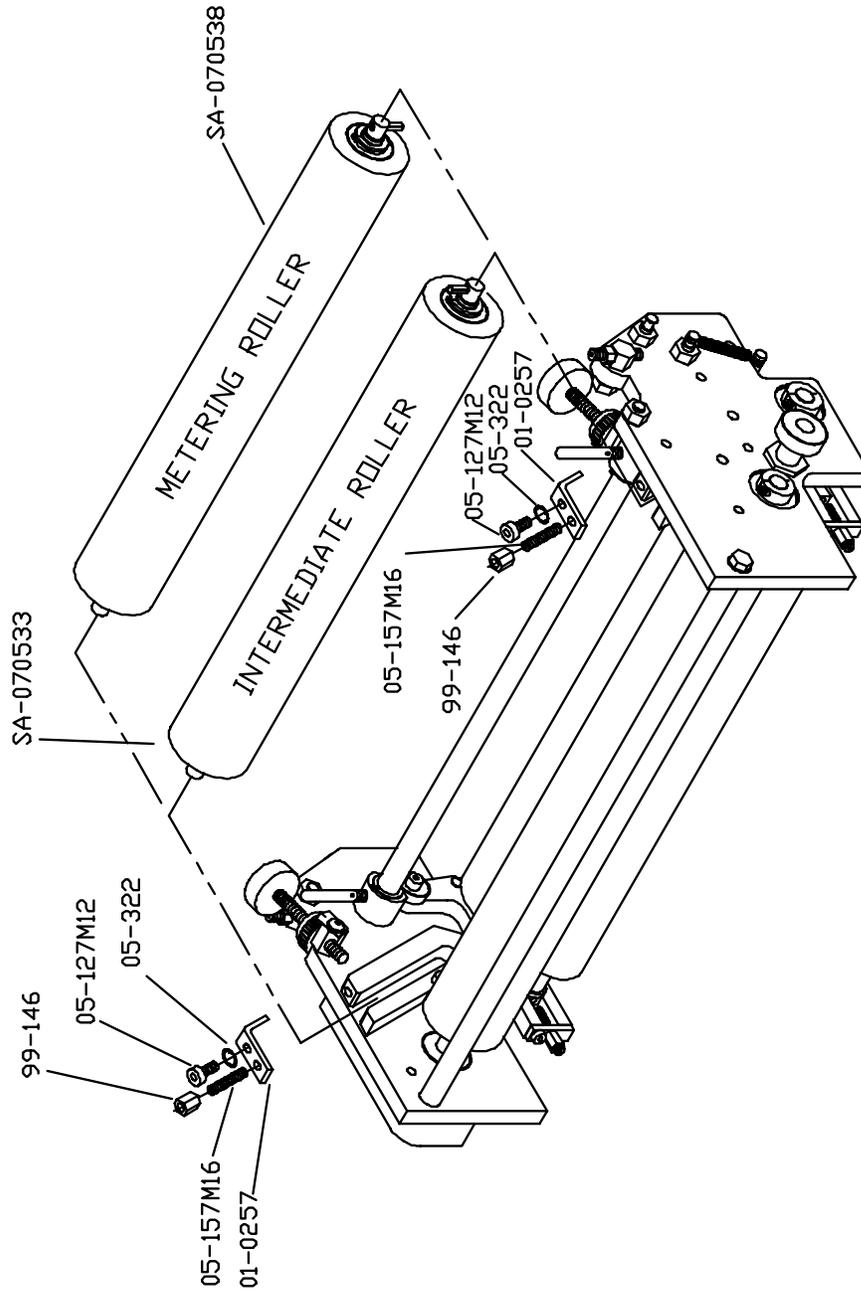


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DAMPENER ASSEMBLY  
HAMADA RS/V/S 34 PARENT

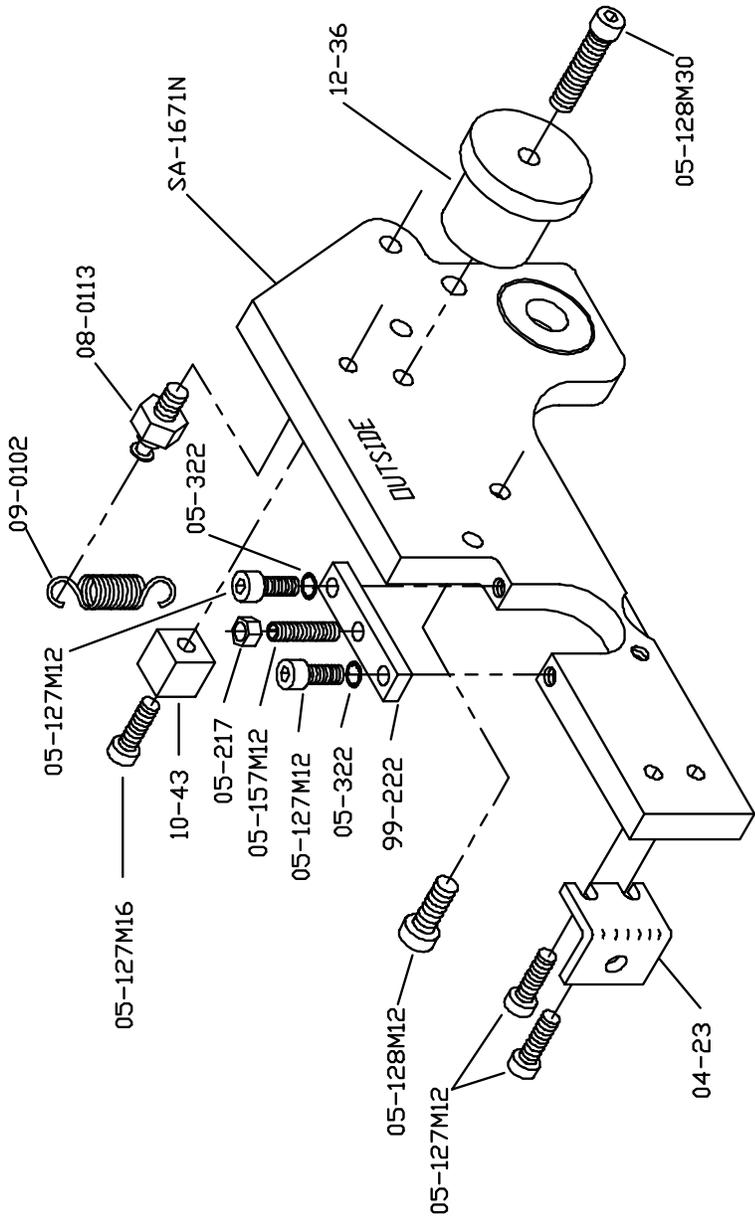


METERING AND INTERMEDIATE ROLLER ASSEMBLY  
HAMADA RS/V/S 34 PARENT

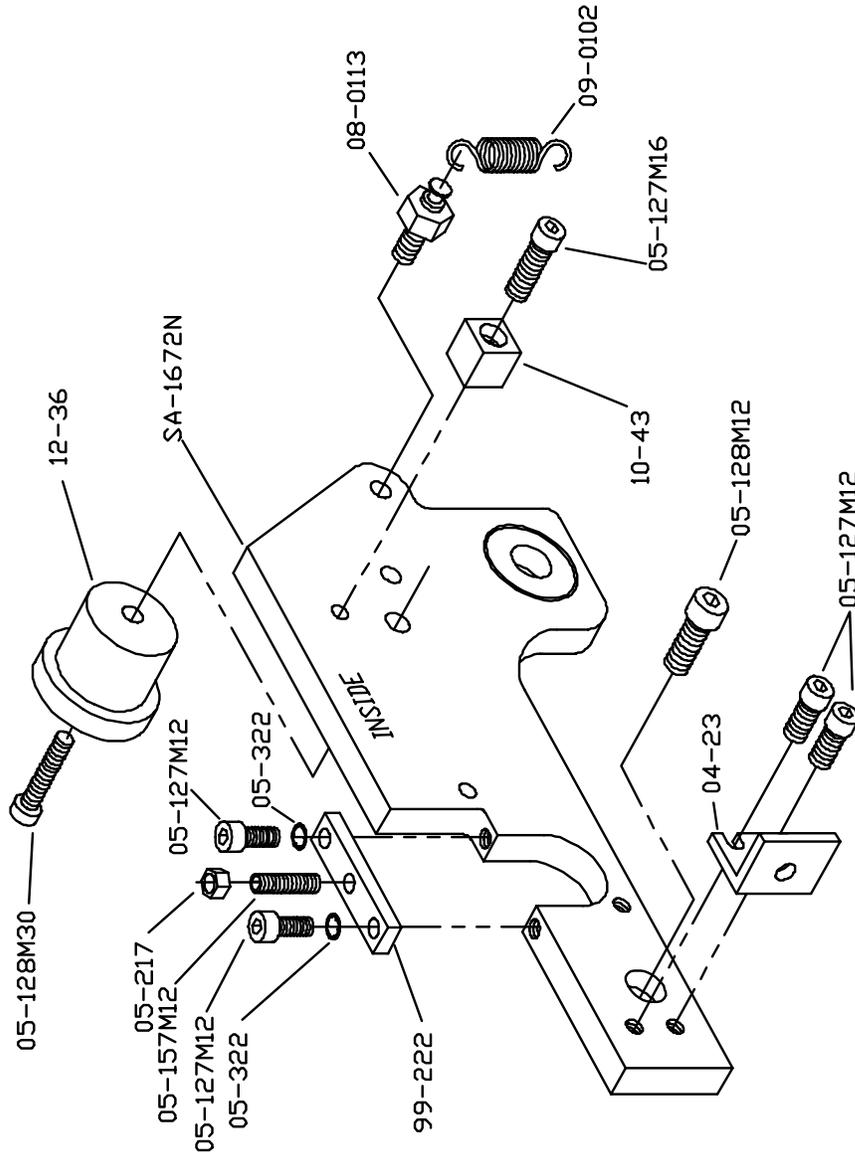


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MOUNTING FRAME ASSEMBLY-OPS  
HAMADA RS/V/S 34 PARENT INTEGRATED

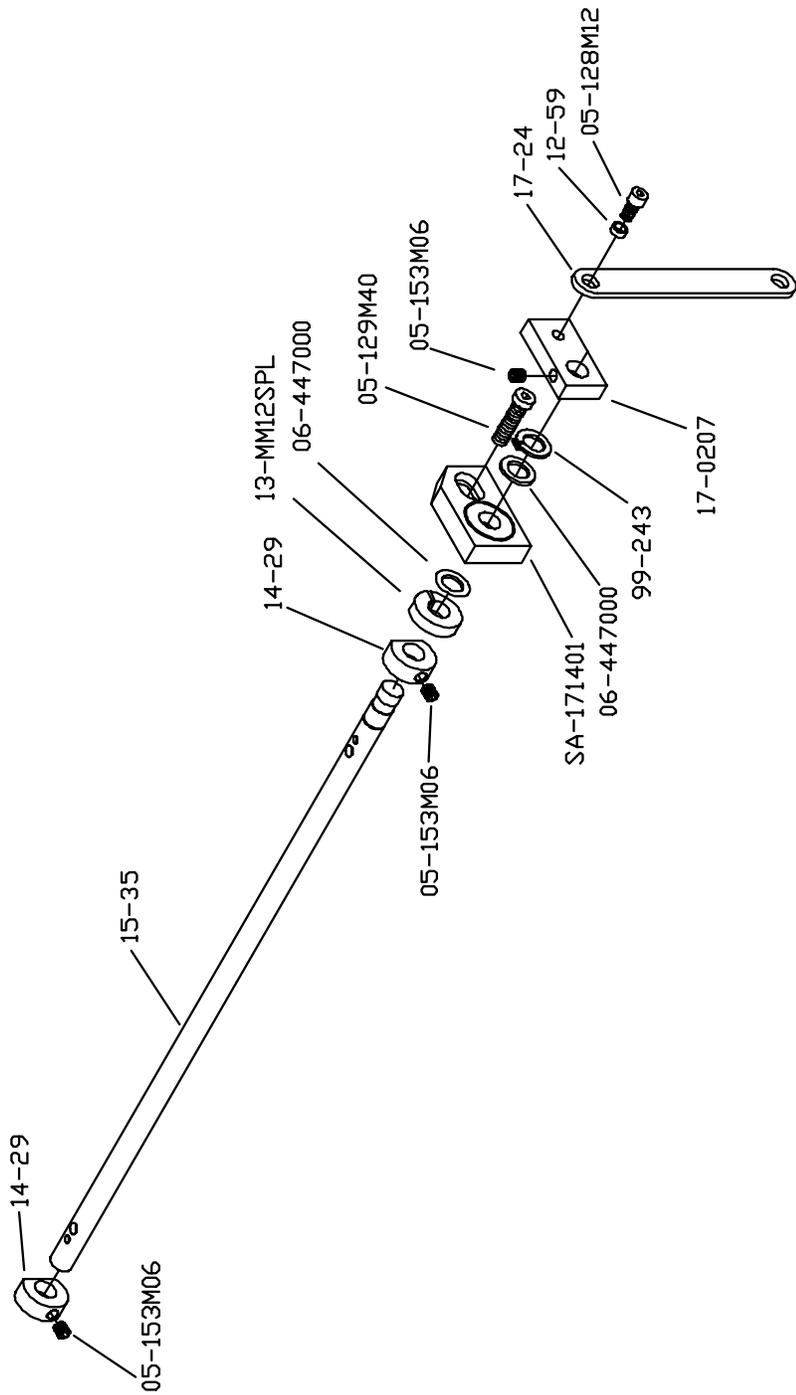


MOUNTING FRAME ASSEMBLY-NDPS  
 HAMADA RS/VS 34 PARENT INTEGRATED

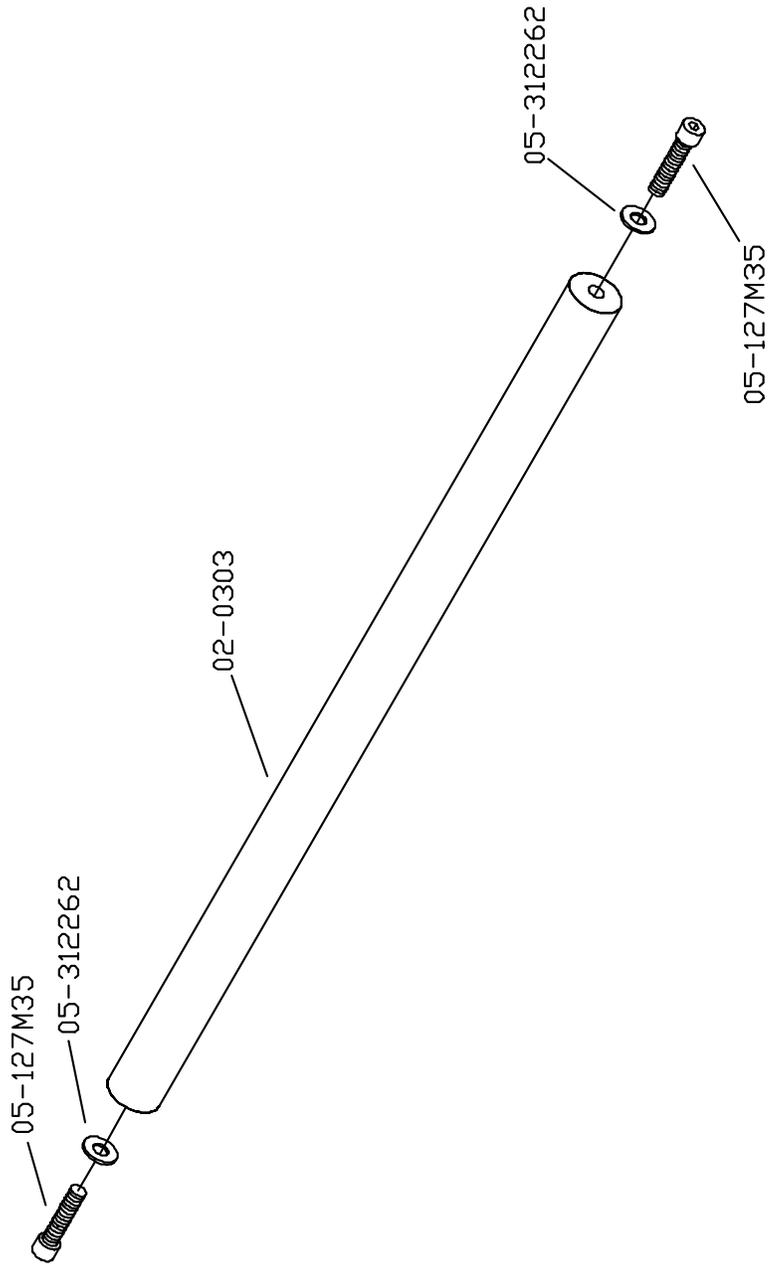


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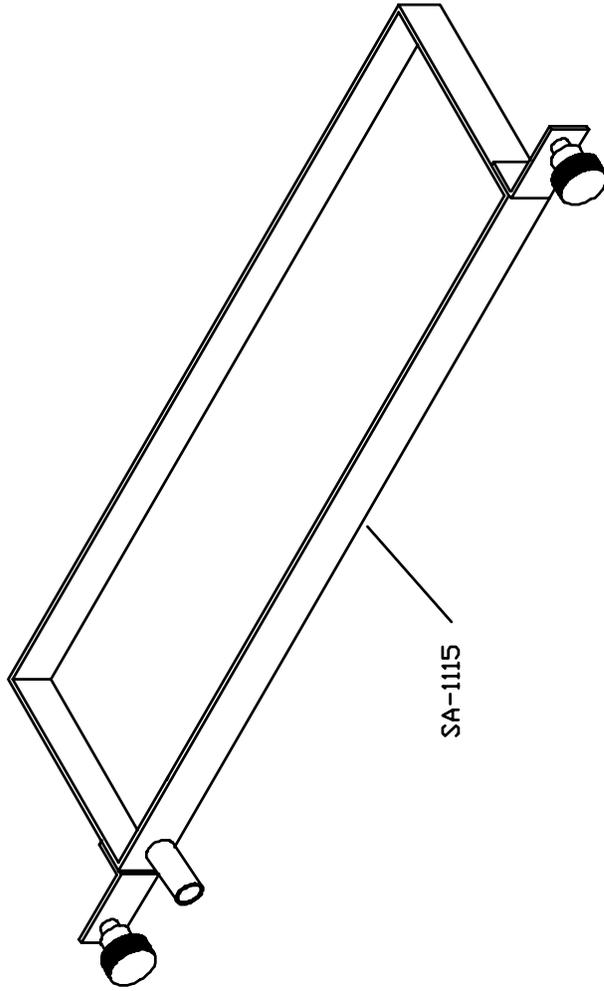
LIFT SHAFT ASSEMBLY  
HAMADA RS/V/S 34 INTEGRATED PARENT



TIE BAR ASSEMBLY  
HAMADA RS/VIS 34 PARENT

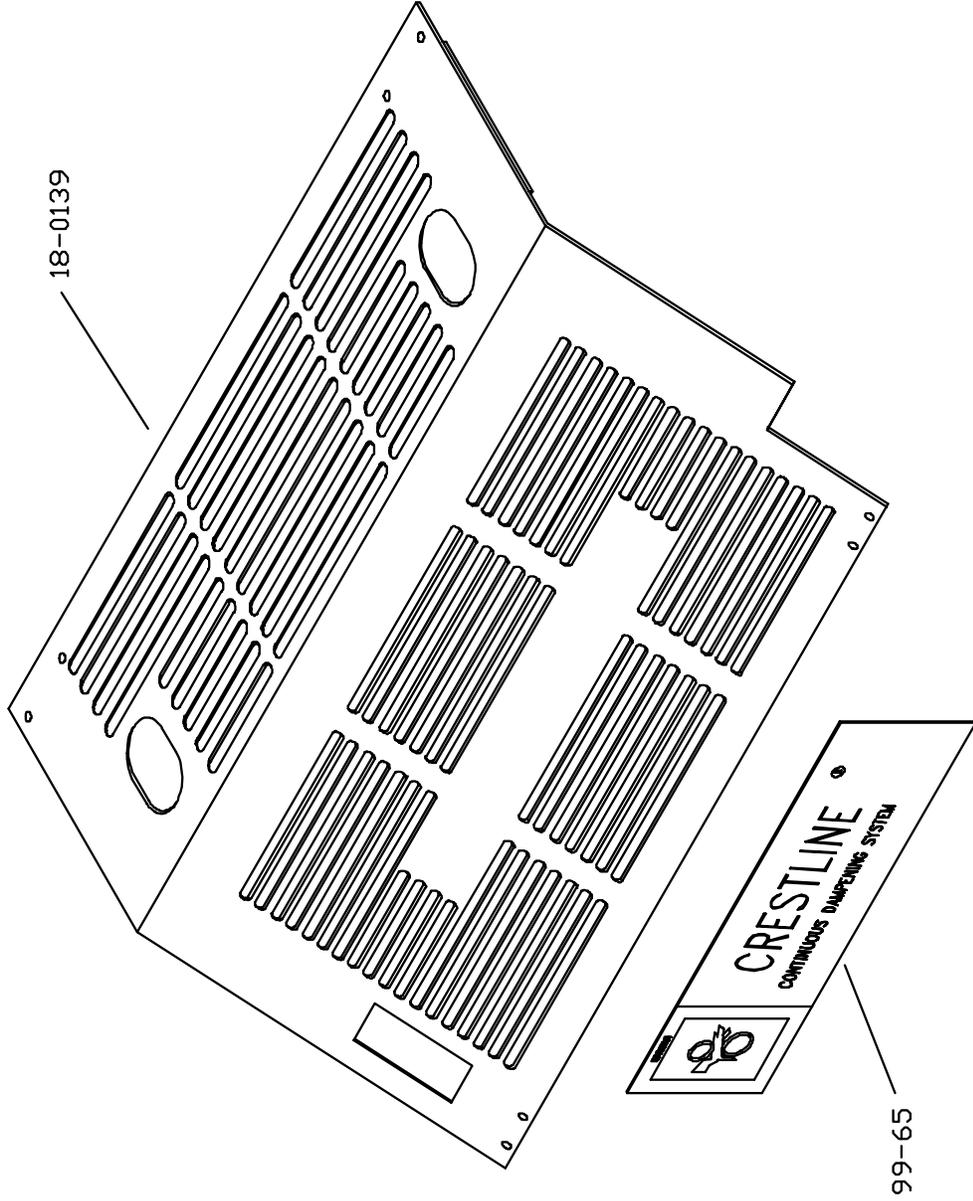


WATER PAN ASSEMBLED  
HAMADA RS/V/S 34 PARENT



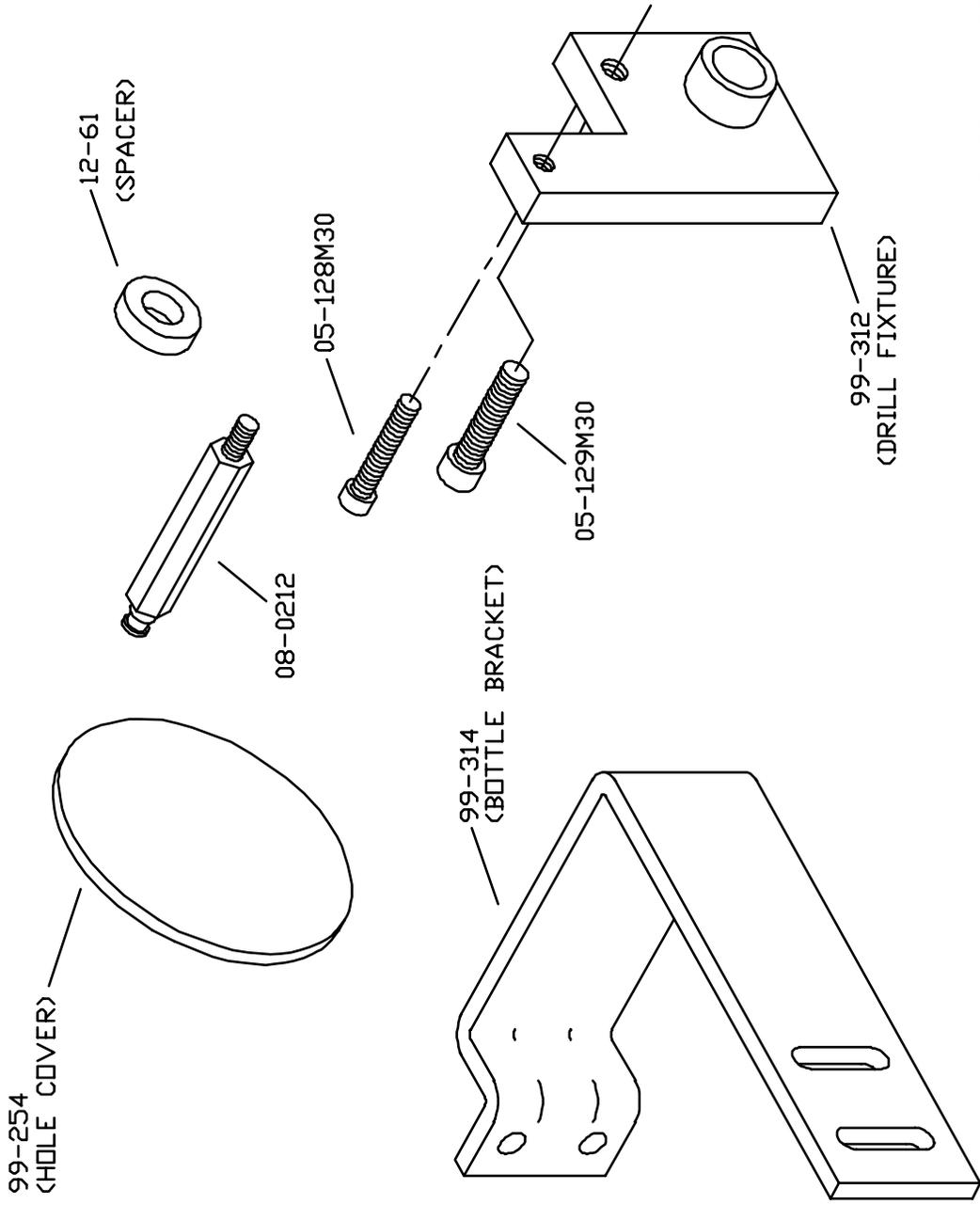
34NPC09, 11-11-97

DAMPENER GUARD ASSEMBLY  
HAMADA RS/V/S 34 PRAENT



34NFC10, 11-11-97

MISCELLANEOUS PARTS  
HAMADA RS/VS 34 INTERGRATED PARENT







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