

# **Crestline<sup>®</sup> Dampening System**

## **Installation Instructions**

### **Hamada RS34 & VS34 Satellite Unit**

For Presses Originally Equipped With  
Molleton Dampeners



## 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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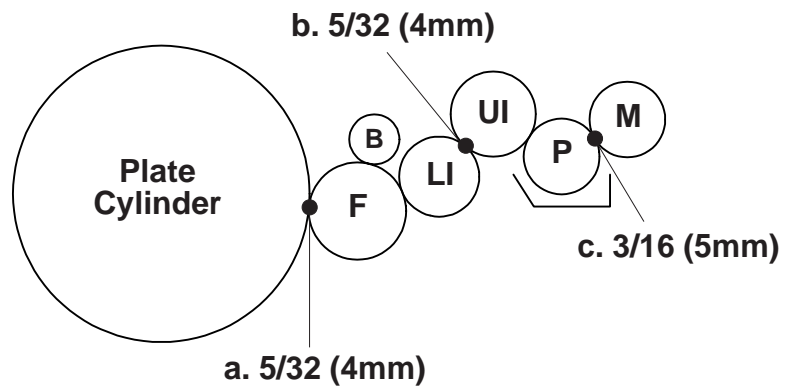
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### **SAFETY INFORMATION**

**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. Upper Intermediate to Lower Intermediate
- c. Metering to Pan

### Roller Descriptions

- F** = Form
- B** = Oscillator/Bridge
- LI** = Lower Intermediate
- UI** = Upper Intermediate
- P** = Pan
- M** = Metering

<b>TERMINOLOGY</b>	<b>OPS</b>	=	Operator's Side
	<b>NOPS</b>	=	Non Operator's Side

## TECHNICAL ASSISTANCE

For technical assistance during the installation, please contact:

### ACCEL GRAPHIC SYSTEMS

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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

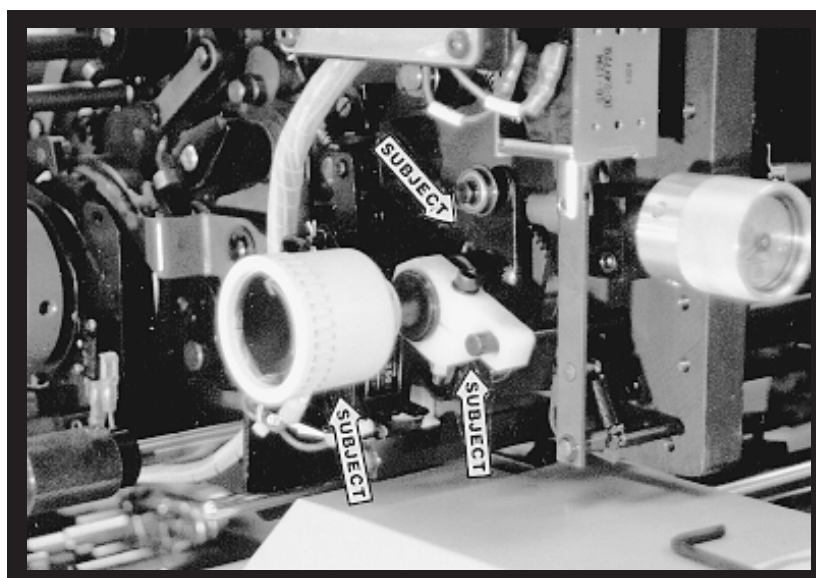
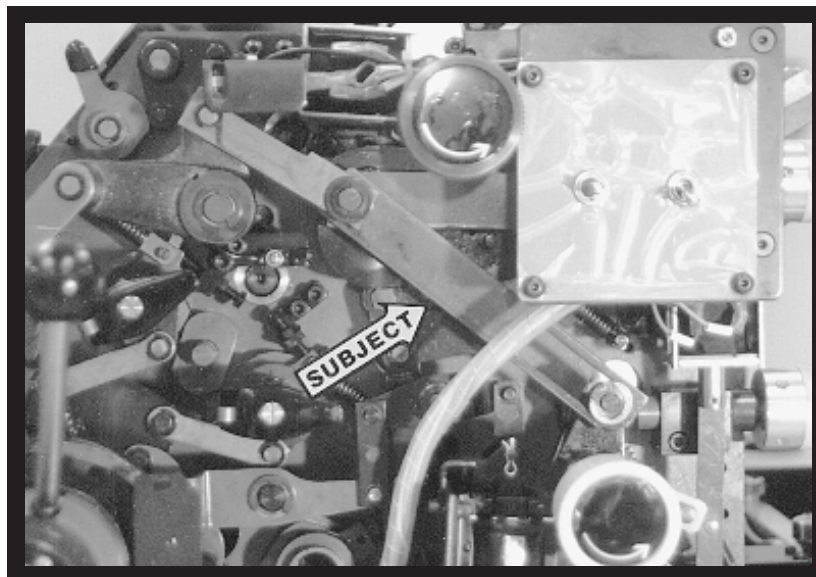
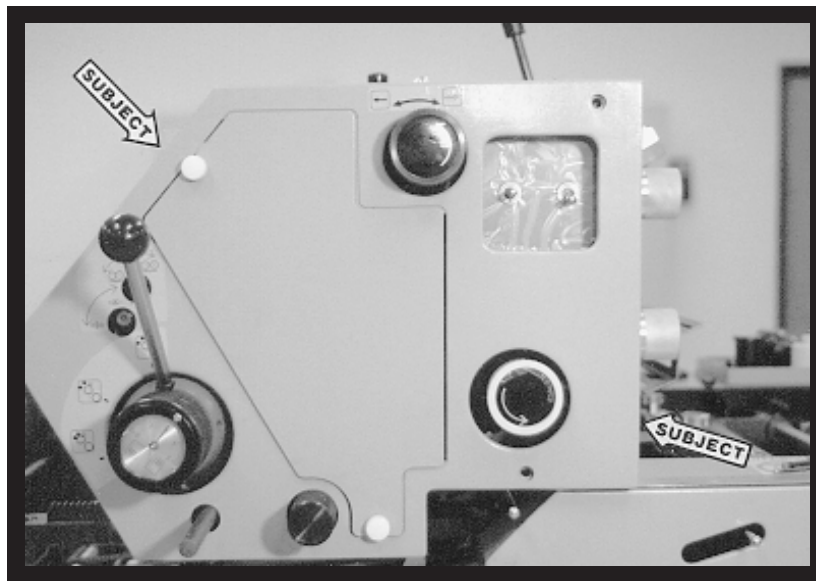
## GENERAL INFORMATION

### REQUIRED TOOLS

1. Phillips Screwdriver
2. Standard Screwdriver
3. 8 mm Open End
4. 10 mm Open End
5. 13 mm Open End
6. 17 mm Open End
7. 2.5 mm Allen Wrench
8. 3 mm Allen Wrench
9. 4 mm Allen Wrench
10. 5 mm Allen Wrench
11. 2.5 mm Punch
12. 3.0 mm Punch
13. 5.0 mm Punch
14. Hammer
15. Snap Ring Pliers

## 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. Re-tighten bolts.



# DISASSEMBLY

1

Remove all molleton rollers from the original dampener. Remove OPS & NOPS side covers (subject arrows).

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2

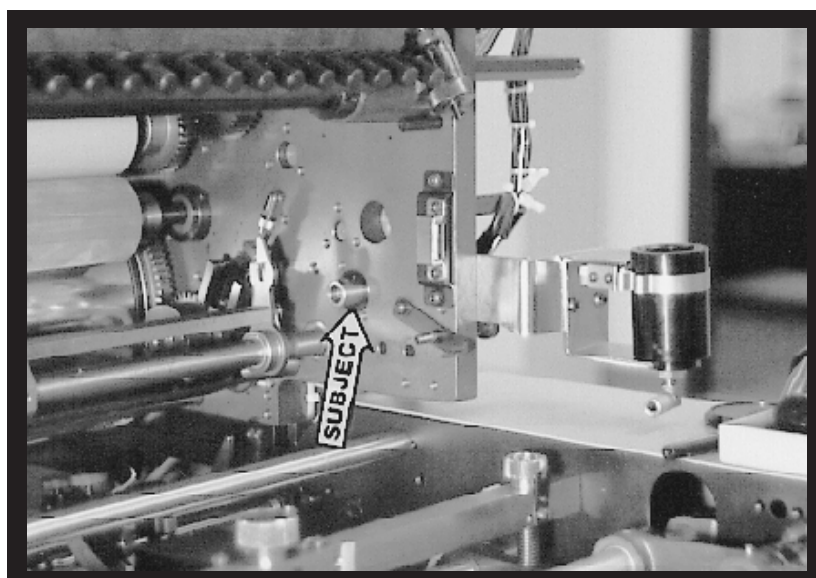
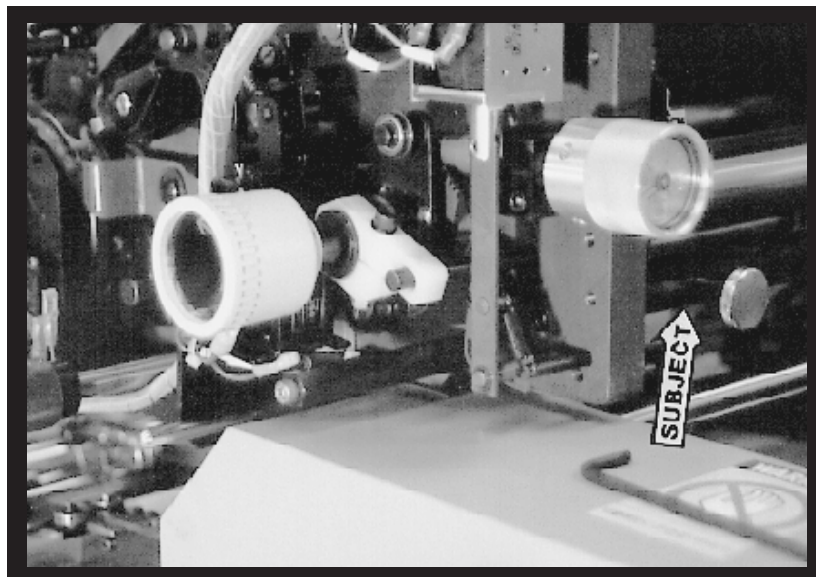
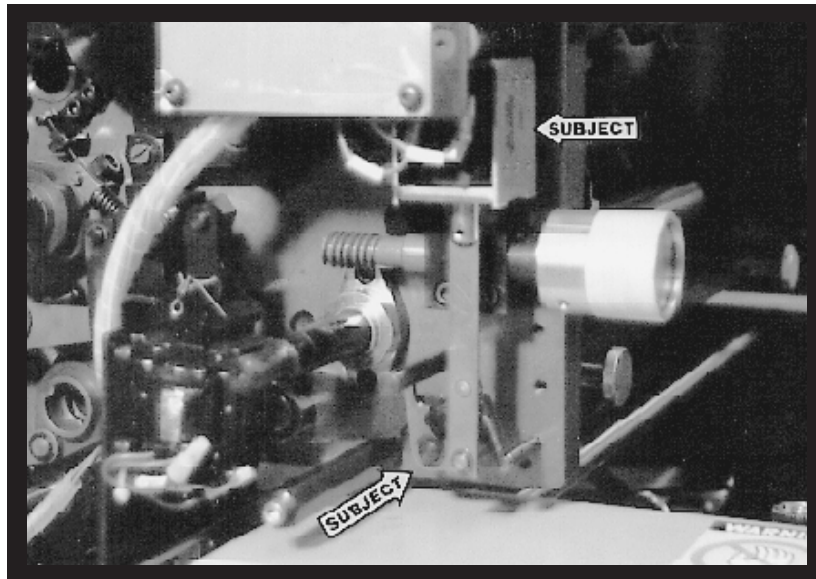
At OPS, remove water fountain roller drive arm (subject arrow) by removing E-rings at each end. The arm is located behind the ink fountain roller drive arm at one end. After removing water arm, remove the bronze bushing from the arm. Install this bushing as a spacer behind the ink fountain arm and reconnect using the original hardware.

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3

At OPS, remove the water fountain roller knob, E-rings, friction block & adjustment assembly (subject arrows).

7





## DISASSEMBLY

**4**

At OPS, remove water ductor lockout mechanism, including the solenoid and pivot arm (subject arrows).

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**5**

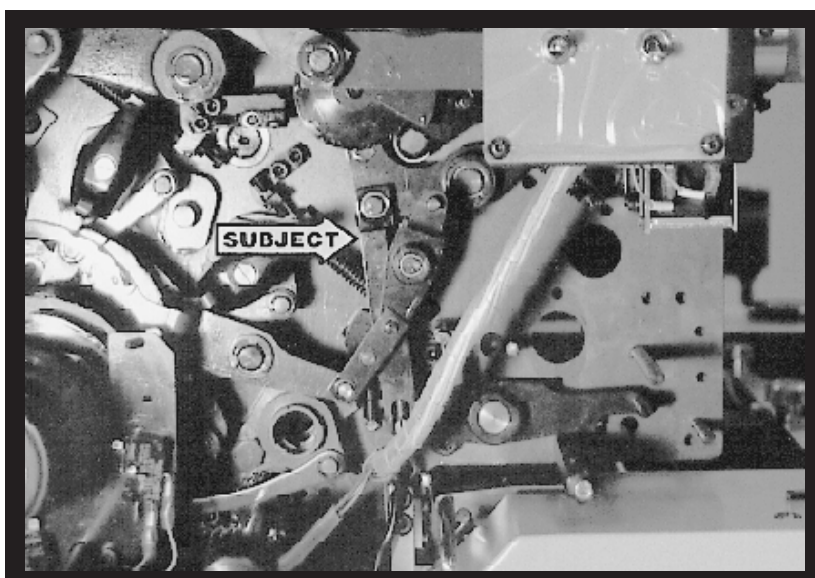
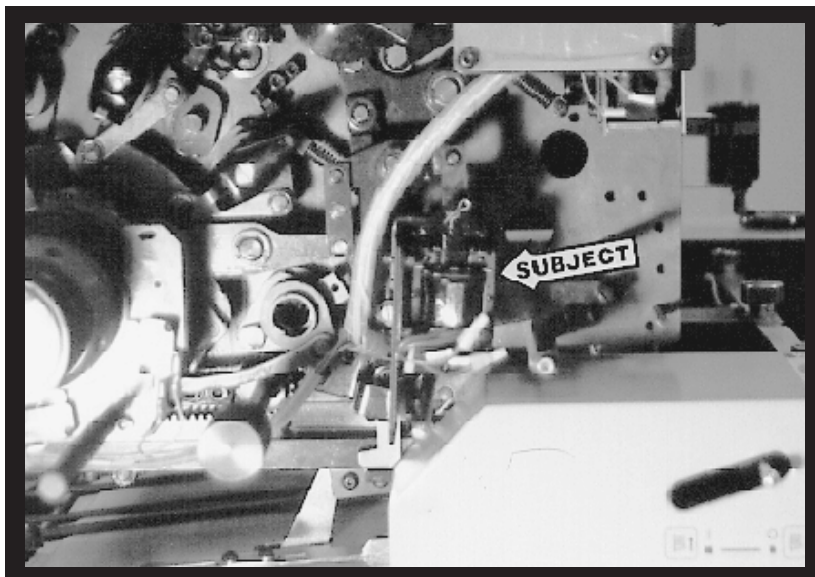
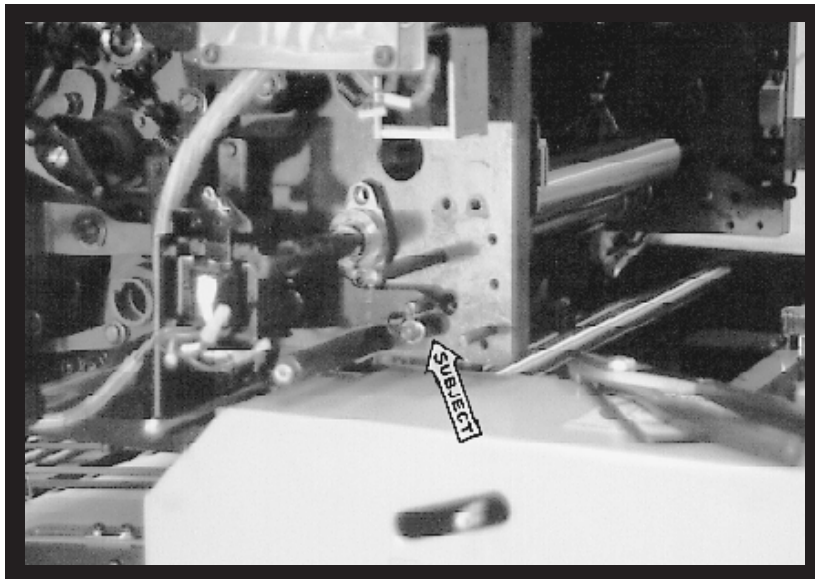
Remove press tie bar (subject arrow).

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**6**

At NOPS, remove cap screw on fountain roller bearing housing, pull bronze bushing out and remove the fountain roller (subject arrow).

**9**



## DISASSEMBLY

7

At OPS, punch out pin from water ductor lockout. Remove water adjustment knob and bronze fountain roller bushing (subject arrow).

8

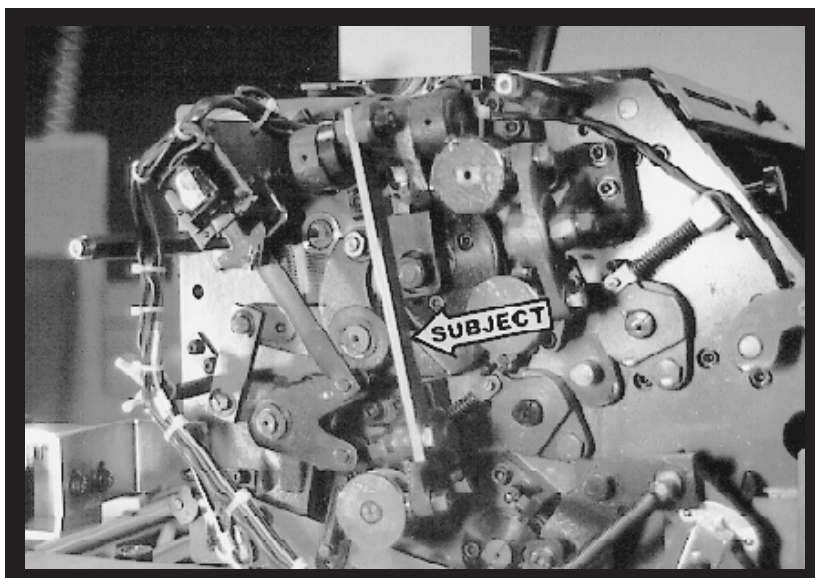
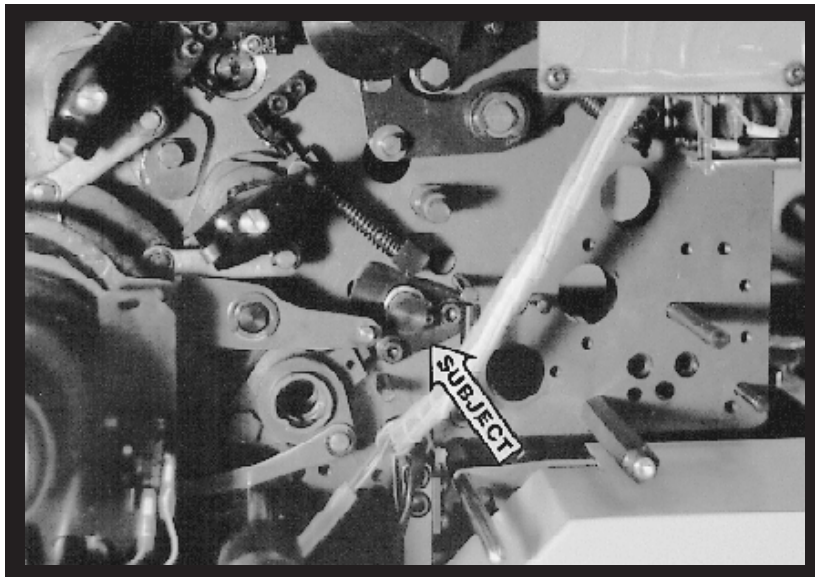
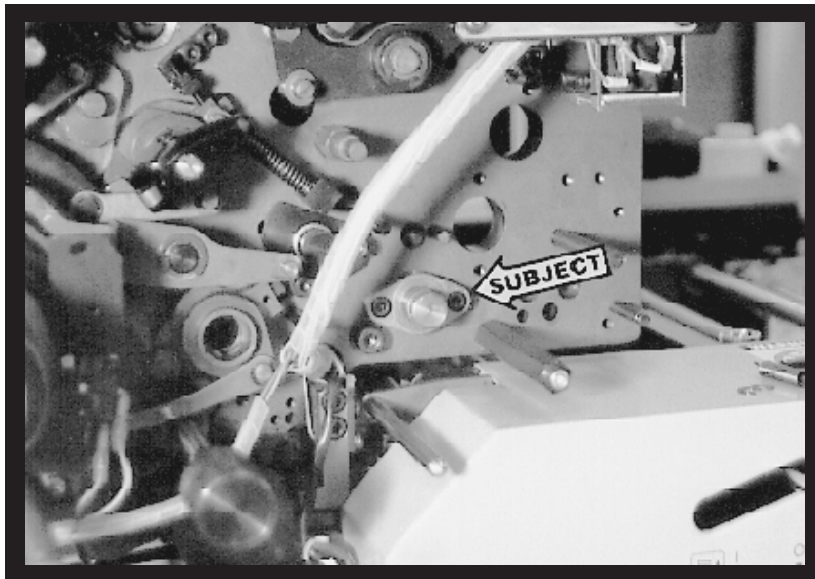
At OPS, temporarily remove the large solenoid and its attached linkage, letting the solenoid hand freely (subject arrow). Save the hardware for reinstallation.

**Note: This step is not absolutely necessary but it does make the next few steps a little easier.**

9

At OPS, remove water ductor linkage assembly (subject arrow). This is located behind the lockout linkage from the solenoid in the previous step.

11



## DISASSEMBLY

**10**

At OPS, remove ductor shaft bushing (subject arrow), loosen set collar on shaft and remove shaft from press. Remove bushing on NOPS.

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**11**

At OPS, remove snap ring (subject arrow) from water oscillator shaft and slide out. Remove bushing after shaft is gone and then punch out guide pin.

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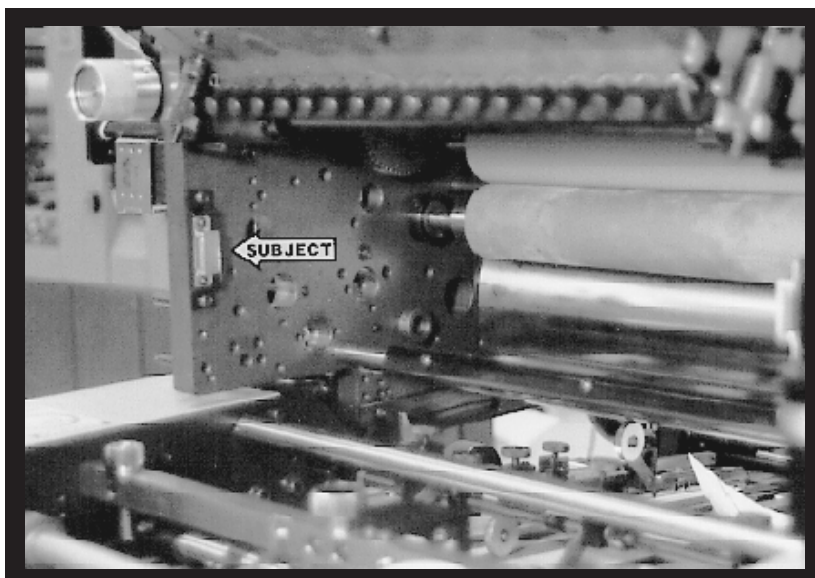
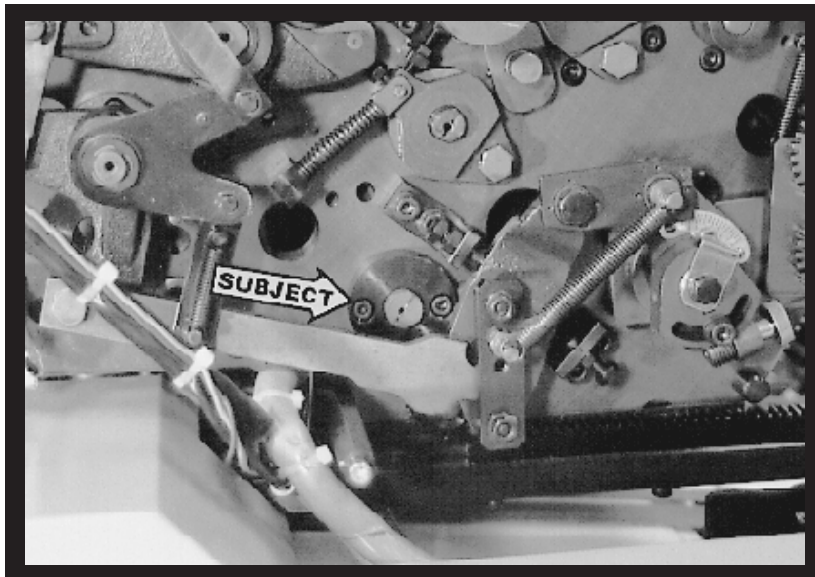
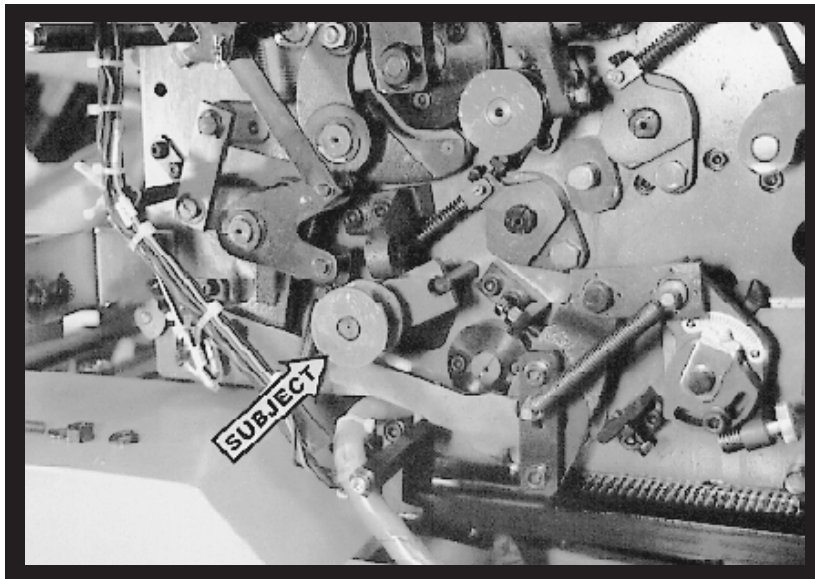
**12**

At NOPS, remove the water oscillator drive arm (subject arrow).

Next, remove the lower casting that the arm was attached to by removing the two cap head bolts.

**13**





## DISASSEMBLY

**13**

At NOPS, punch out guide pin on water oscillator housing. Then, punch out small roll pin on spool and guide block (subject arrow), remove shaft and bushing from press.

**Note: casting is not removed in this picture.**

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**14**

At NOPS, remove set screw in eccentric housing and remove eccentric, water form drive gear and housing (subject arrow).

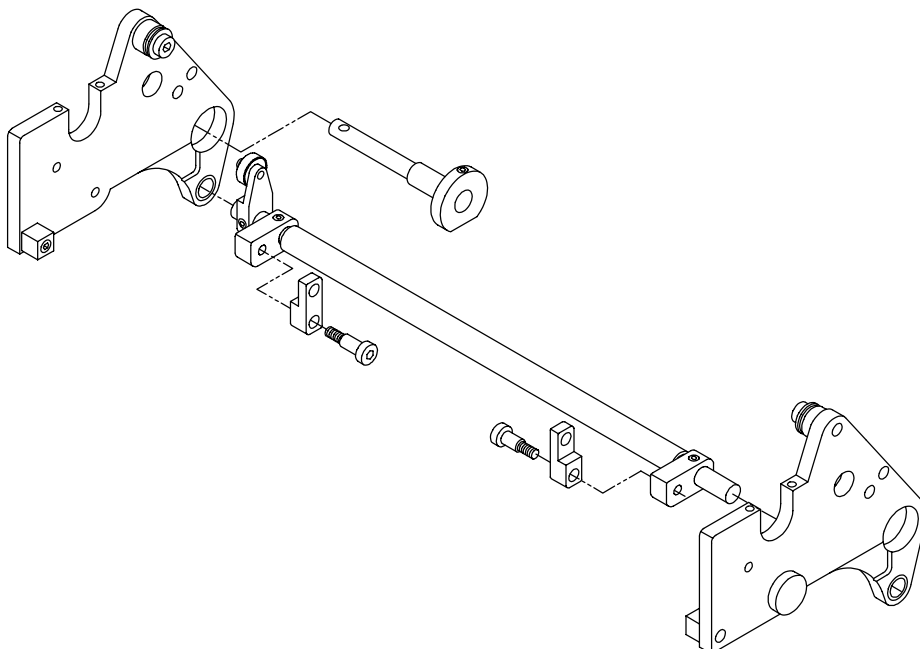
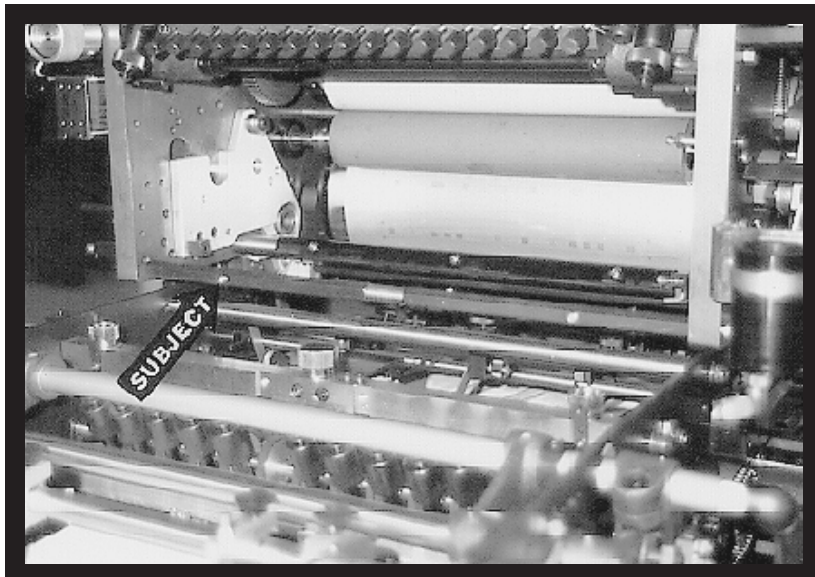
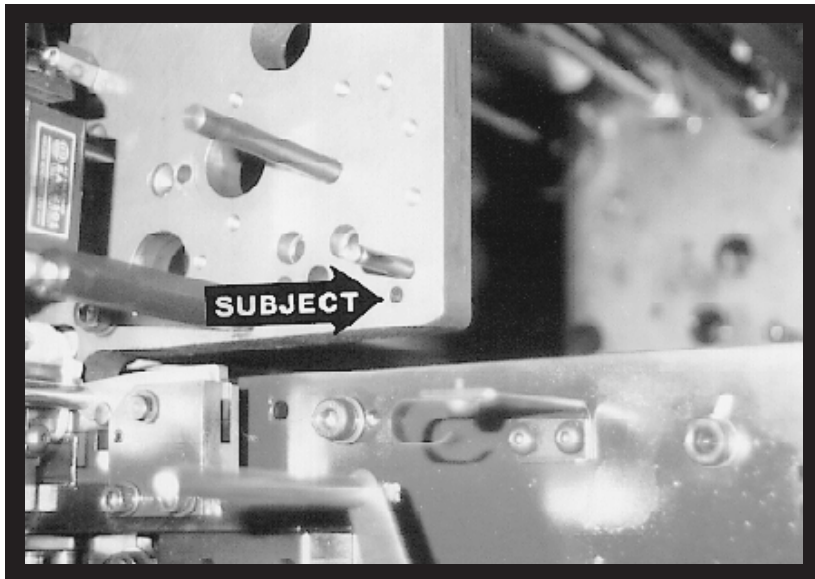
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**15**

At OPS & NOPS, remove safety cover magnet brackets (subject arrows).

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

**15**





# INSTALLATION

**1**

Drill out threaded hole (subject arrow) at OPS & NOPS with 7/32" or 5mm drill bit.

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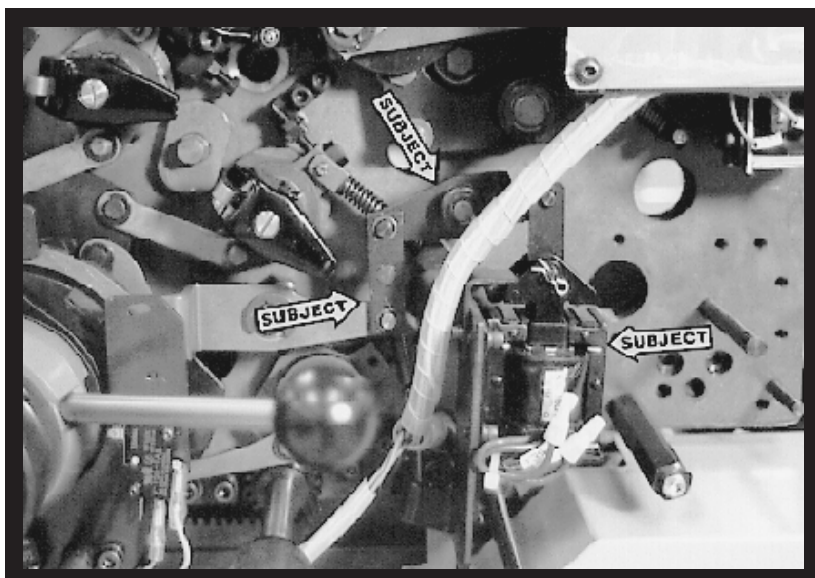
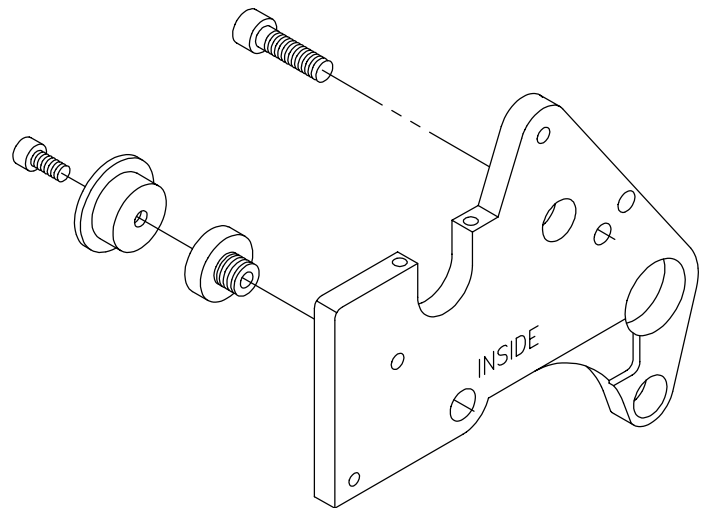
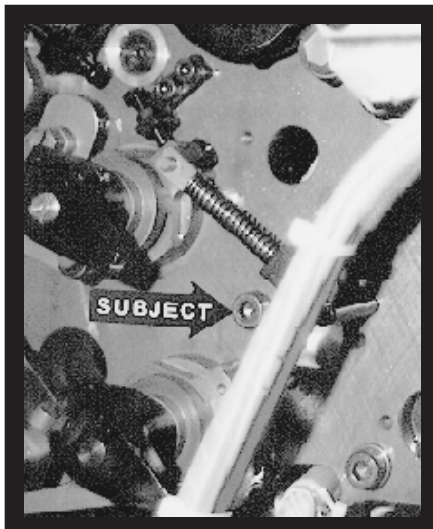
**2**

Install tie bar (subject arrow) into holes drilled out in previous step. Note the position of the tapped holes in the tie bar. These will be used to mount the water pan.

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**3**

Assemble mounting frame for installation into the press (see drawing on opposite page).



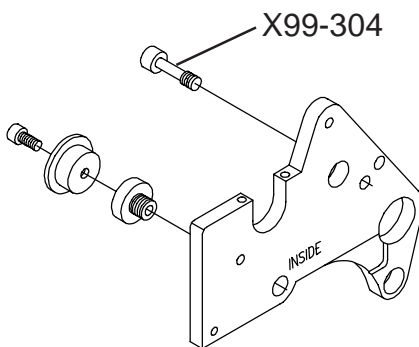
## INSTALLATION

4

Place assembled mounting frame in press with holes in mounting plate fitting over the water form roller shaft housing (subject arrow). Locator pins in frame fits through the original water ductor shaft holes.

5

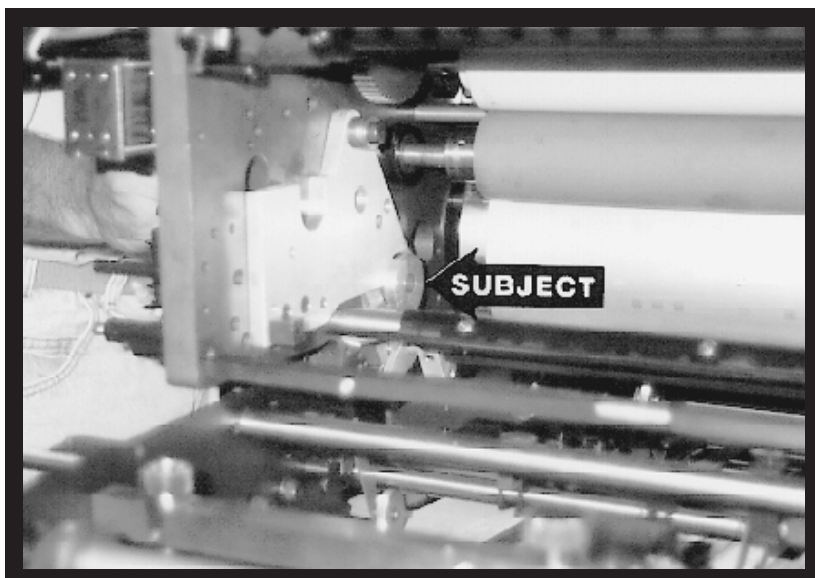
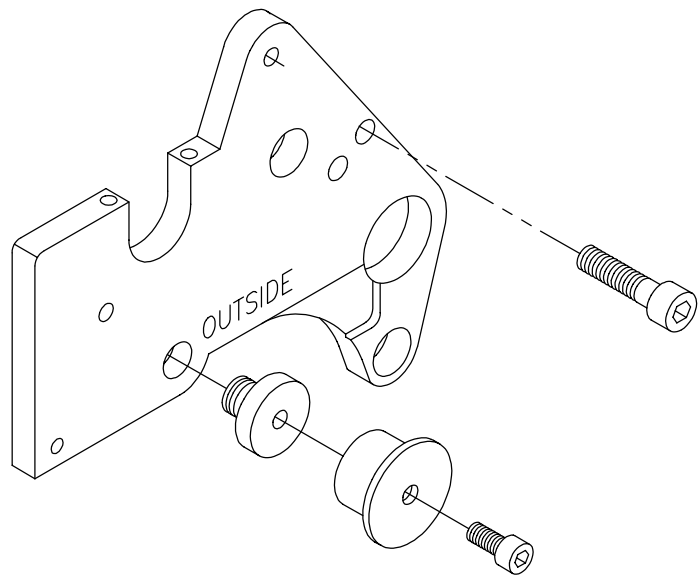
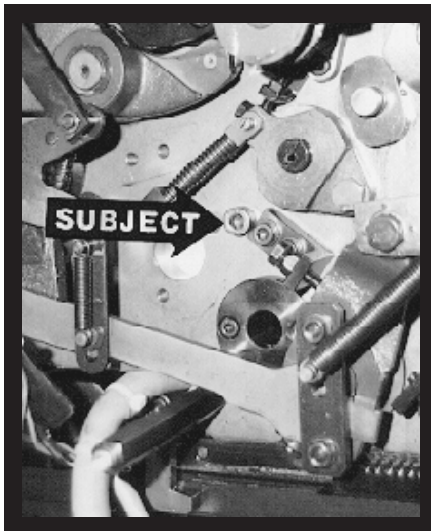
Secure mounting frame at OPS with large flanged spool and M8 bolt (subject arrow).



**Note:** Accel provides a modified M8 mounting bolt as well as the above. If you are unable to get a proper form to plate stripe in the final adjustment section, then replace the M8 bolt above with the new modified M8 bolt (Accel part no. X99-304). See Technical Bulletin dated 1-7-97.

6

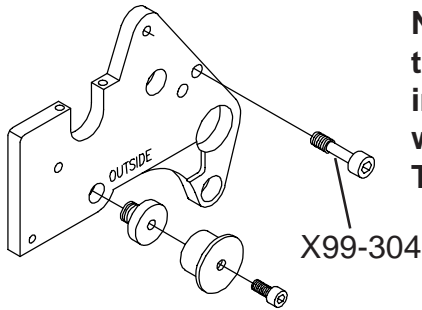
Reinstall lockout assembly, including solenoid, as shown (subject arrow).



# INSTALLATION

7

Secure mounting frame at NOPS with small flanged spool and M8 bolt (subject arrow). After both frames are installed check to make sure the lift shaft rotates freely. Adjust frames as necessary.



**Note:** Accel provides a modified M8 mounting bolt as well as the above. If you are unable to get a proper form to plate stripe in the final adjustment section, then replace the M8 bolt above with the new modified M8 bolt (Accel part no. X99-304). See Technical Bulletin dated 1-7-97.

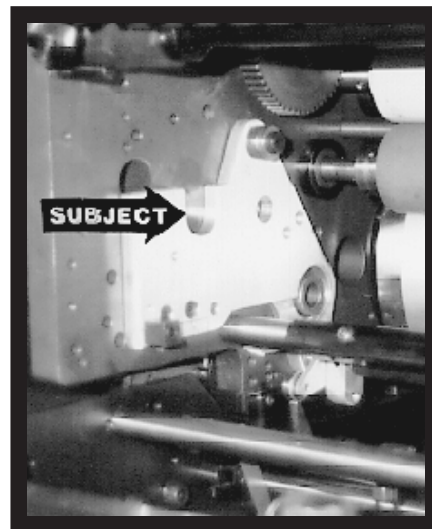
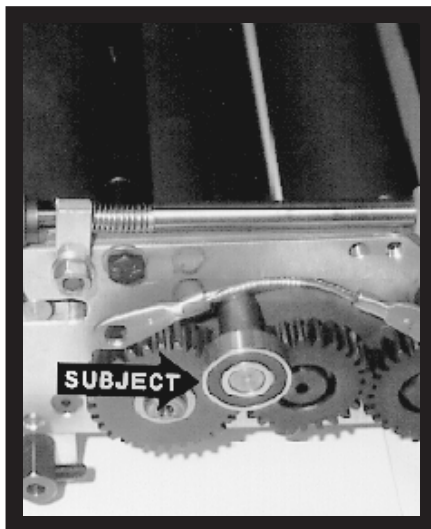
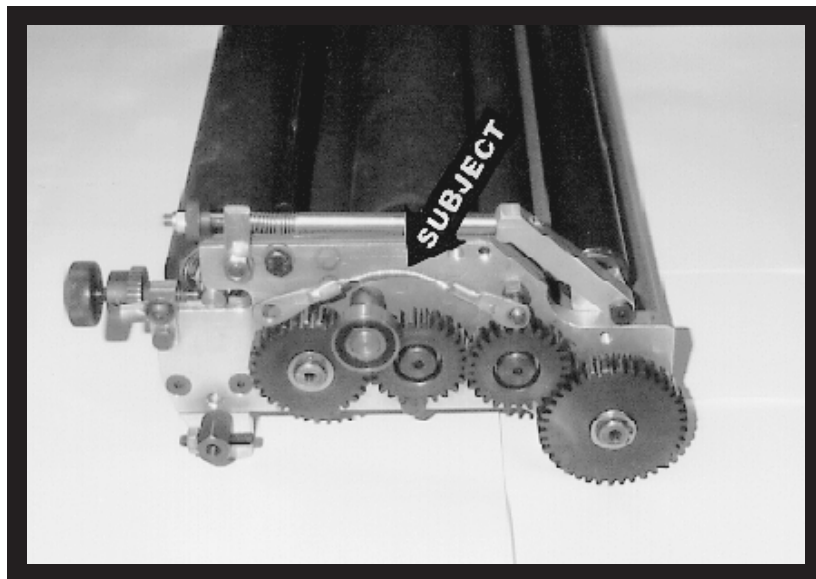
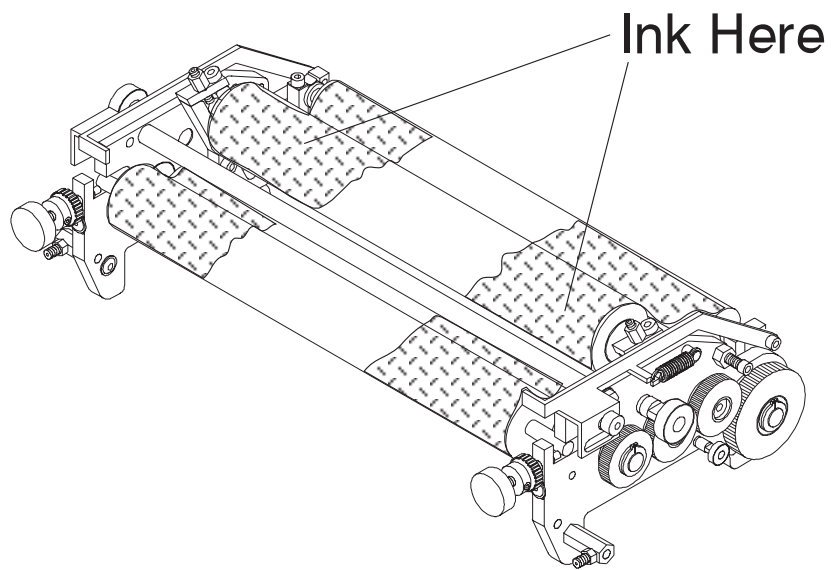
8

Remove knob from the original water form roller shaft.

9

Insert lift cam assembly at the OPS (subject arrow), through the original water form housing. Match the dimple in the shaft with the set screw in the knob. Tighten set screw into dimple.

**Note:** The dimple in the shaft aligns with the set screw in the cam inside the press.



10

Turn knob until it snaps into place (as it would if the original water form was in position). Activate single lever to make sure the lift cam is turning. When installed properly, the set screw in the cam is facing almost straight up when the single lever is in the "off" position.

### **OPTIONAL SHORTCUT**

Check dampener for square on cutter bed or flat surface. Apply ink to left and right third of oscillator roller, leaving center third clean (see drawing). Roll dampener by hand to smooth ink. You can adjust all the roller stripes on the table where it is easier to see, rather than when it is in the press. See Final Adjustments section for roller setting instructions. After setting stripes, return to Installation step 11.

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11

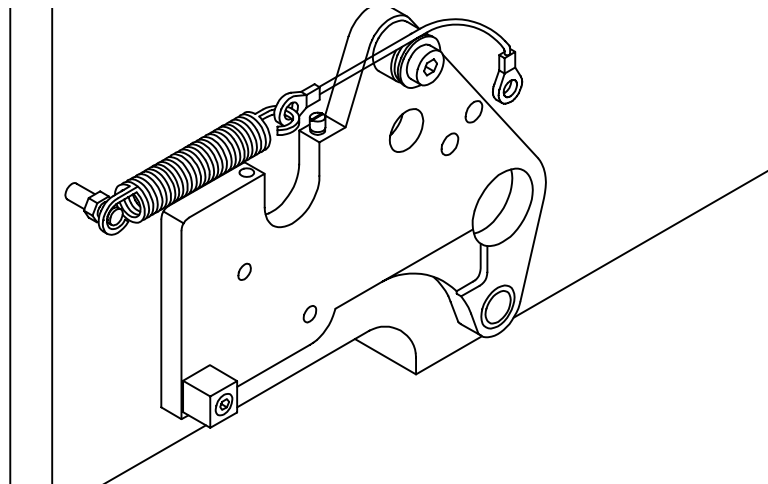
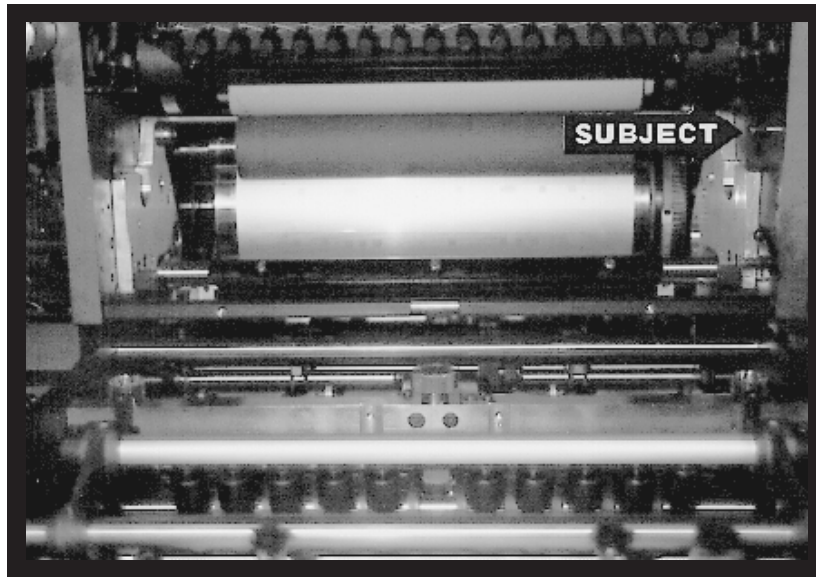
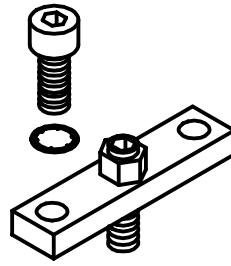
Make sure cable is attached as shown (subject arrow) and hanging loosely over the pivot studs.

**NOTE: Be sure that the bridge roller is locked in the unbridged position.**

12

Place single lever into the "Ink On" position and put dampener in the press so the bearings (subject arrow, left hand picture) rest in the mounting frame cradles (subject arrow, right hand picture).







# INSTALLATION

**13**

Install bearing caps to hold dampener in place (subject arrow).

**Do not adjust the center screw in the middle of the cap, it is preset for the proper tension at the factory.**

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**14**

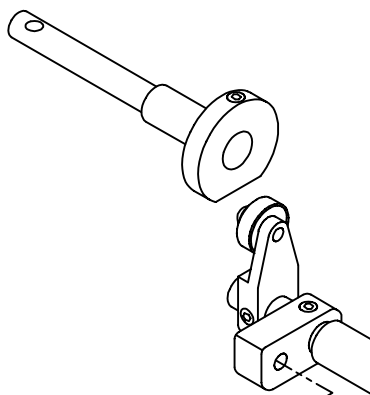
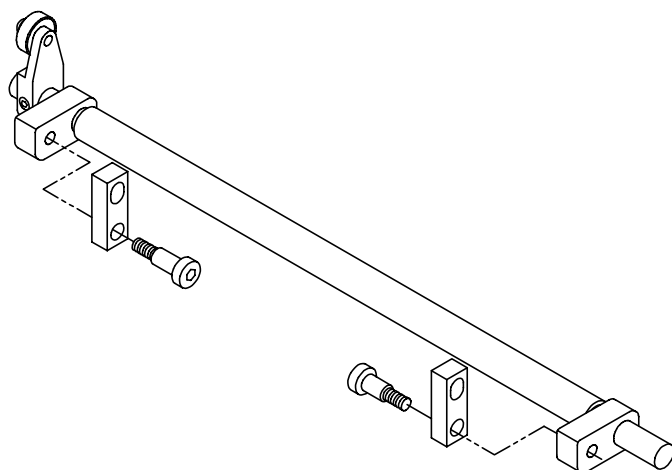
Install spring studs in satellite head frame (subject arrow).

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**15**

Place cables over brass pulleys. Attach springs to cables & studs, making sure cable is in the groove of the brass pulleys.

**25**



**16**

Rotate head using manual knob to check gear mesh between the form gear and plate cylinder gear.

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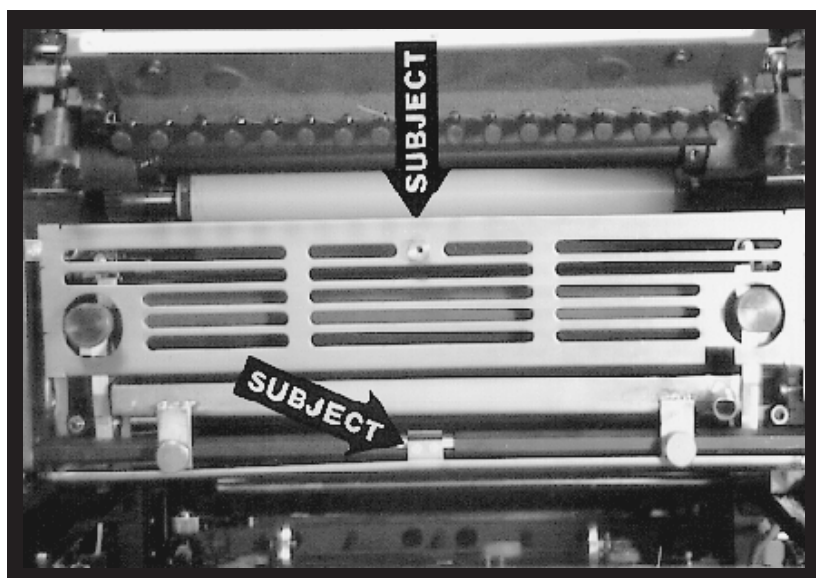
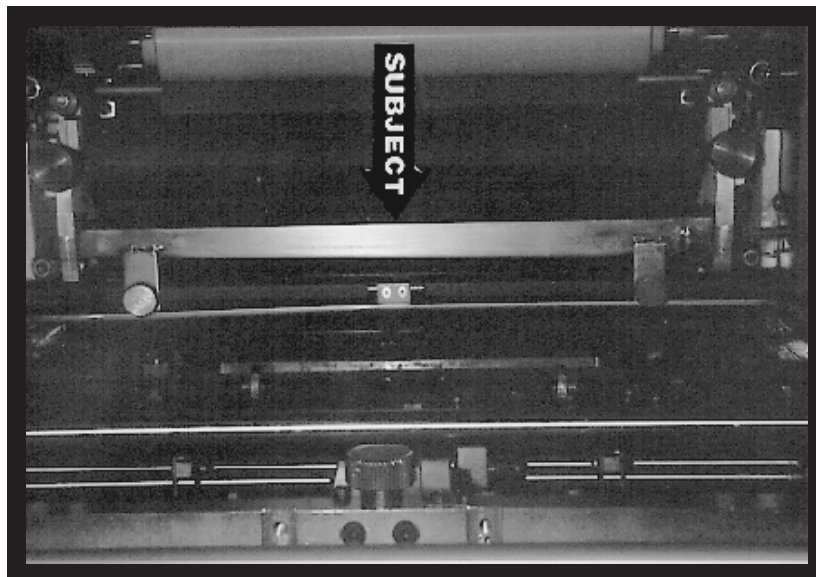
**17**

Install connecting links between the lift arms on lift shaft and pins on the dampener. Note, the links have a hole on one end and a slot on the other end. The end with the hole attaches to the lift arms using the provided shoulder bolts. Tighten fully.

---

**18**

Put single lever in "Ink On" position. By hand, push down on the lift arms on the lift shaft so that the slots on the connecting link top out on the pins on the dampener frame. Rotate the lift arm until the set screw lines up with the flat on the lift shaft and the bearing is touching the flat of the cam. Tighten the set screw. The arm should also be centered within the relief cut portion of the lift shaft.



## INSTALLATION

**19**

The previous step automatically sets the proper lifting of the dampener. The form roller generally separates from the plate no more than .60" (1.5mm).

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**20**

Attach water pan and check water level. Rotate the tie bar if the pan itself is not level.

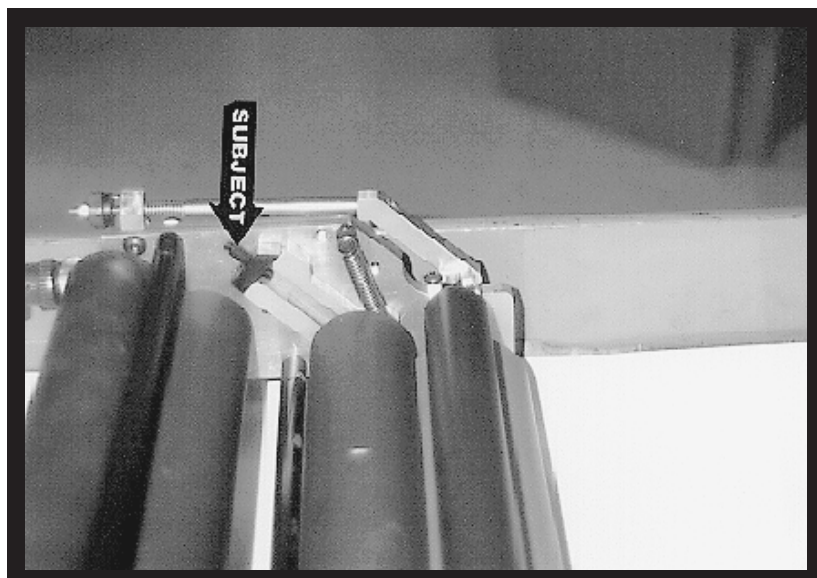
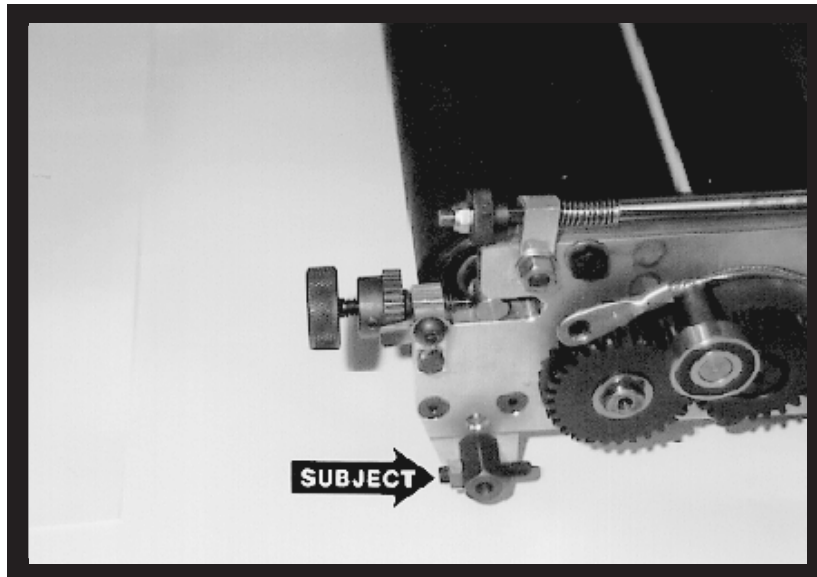
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**21**

Slide in drip tray and mount new guard (guard mounts in the same manner as the old one).

**You are now ready to make final adjustments.**

**29**



# FINAL ADJUSTMENTS

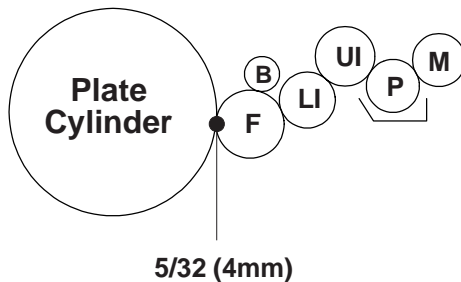
1

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.

2

## 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 in decreases the stripe.** Lock in place using lock nut.

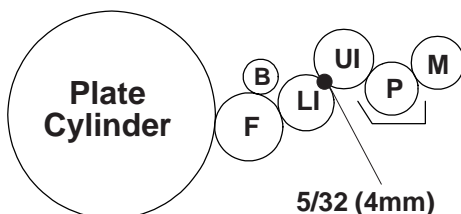


**Note: if you are unable to achieve a parallel stripe, refer to steps #5 and #7 in the installation section of this manual. Additional information is also available in the Technical Bulletin from Accel dated 1-7-97.**

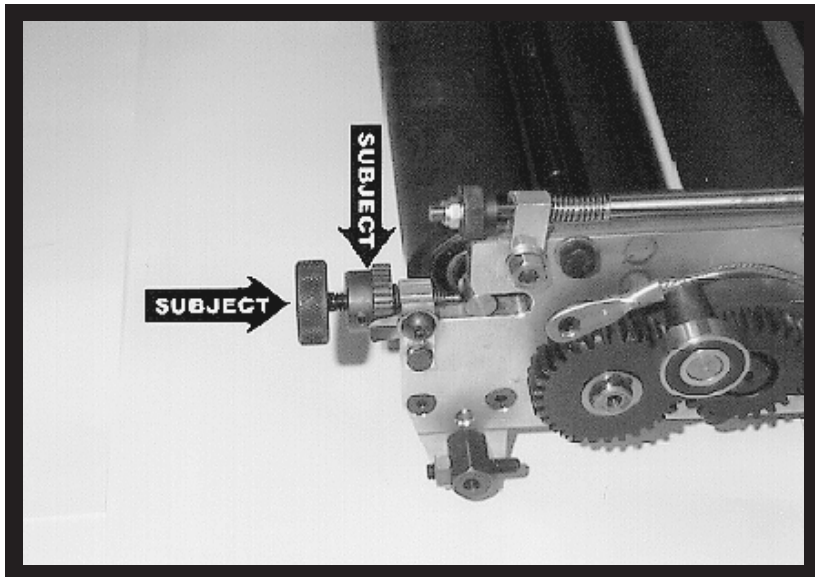
3

## Upper Intermediate to Lower Intermediate

Check the stripe between the upper intermediate & lower 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  $5/32"$  (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.





## FINAL ADJUSTMENTS

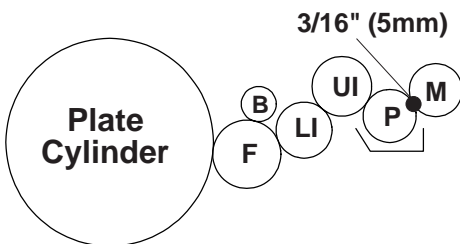
4

### Upper Intermediate to Pan

This pressure is set automatically when setting the intermediate to form in step 3.

5

### Metering to Pan



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

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

6

### Bridge to Water Form

Pressure between the bridge roller and water form is spring loaded and preset at factory.

### Water Pan Level

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 pulling back and up on the bridge roller bracket to allow the roller to move toward the inker. To disengage, pull back and then down until the bracket notch rest on the shoulder bolt.
- 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" 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 feed 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

Periodic deglazing of water-soluble contaminants will be necessary with the Crestline®. 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. Always follow deglazing with straight water and then roller wash. Accel offers a product called **COMPOUND X** that we recommend for deglazing our system. Contact your dealer or Accel for more information.

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### OILING AND GREASING THE DAMPENER

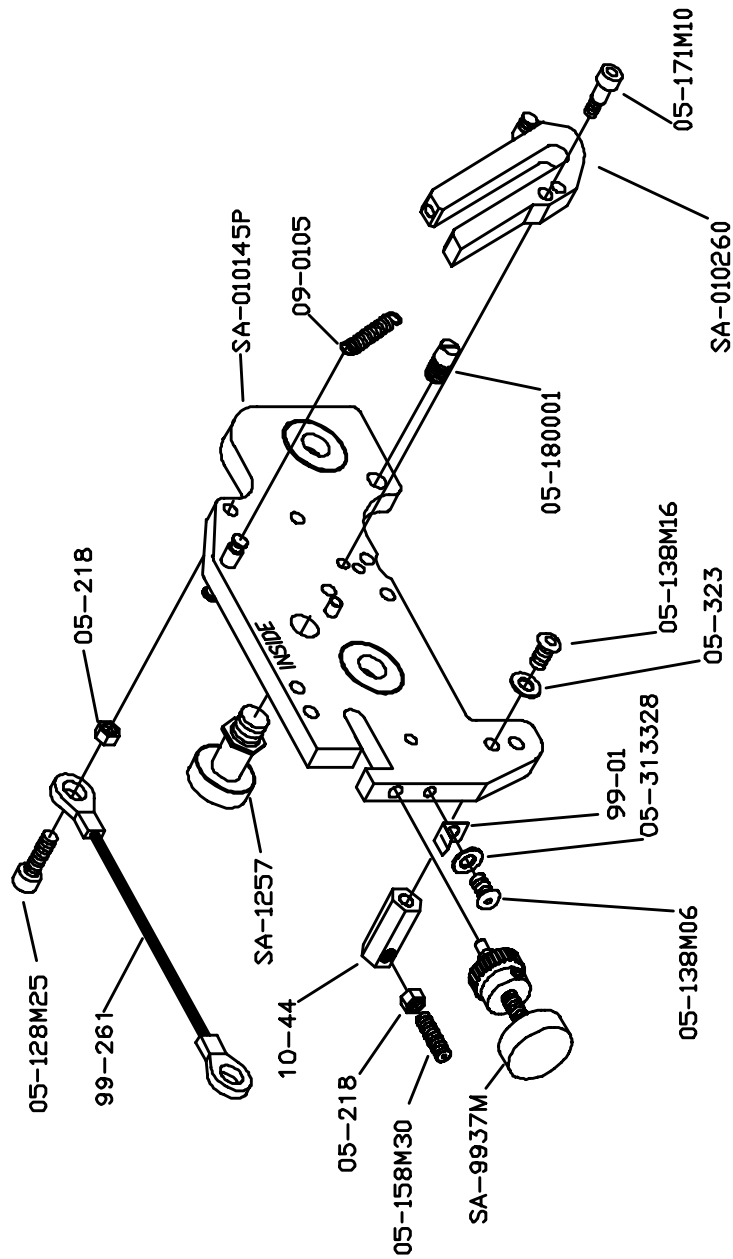
- A. Place a small amount of grease on the gears once a month.
- B. Inject grease into the oscillator grease fitting once a month.

# CLEANING & MAINTENANCE

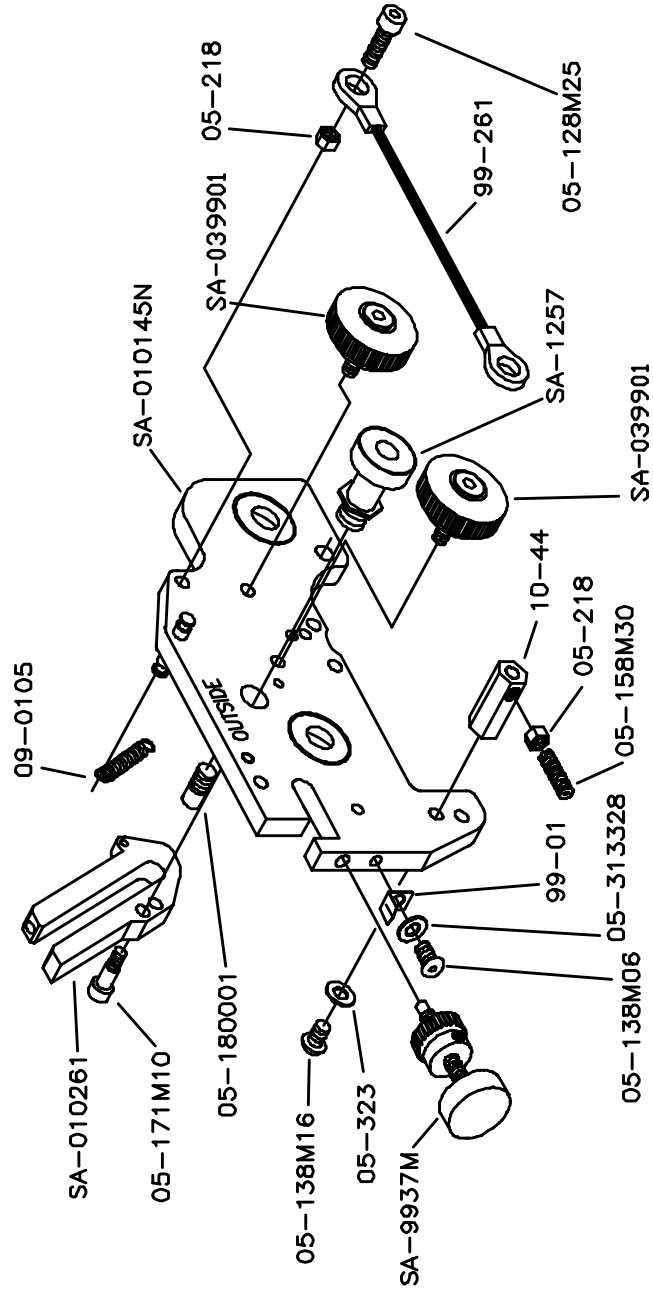
## CRESTLINE® CLEANING & MAINTENANCE CHART

	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 OPS  
HAMADA RS/VS 34 SATELLITE

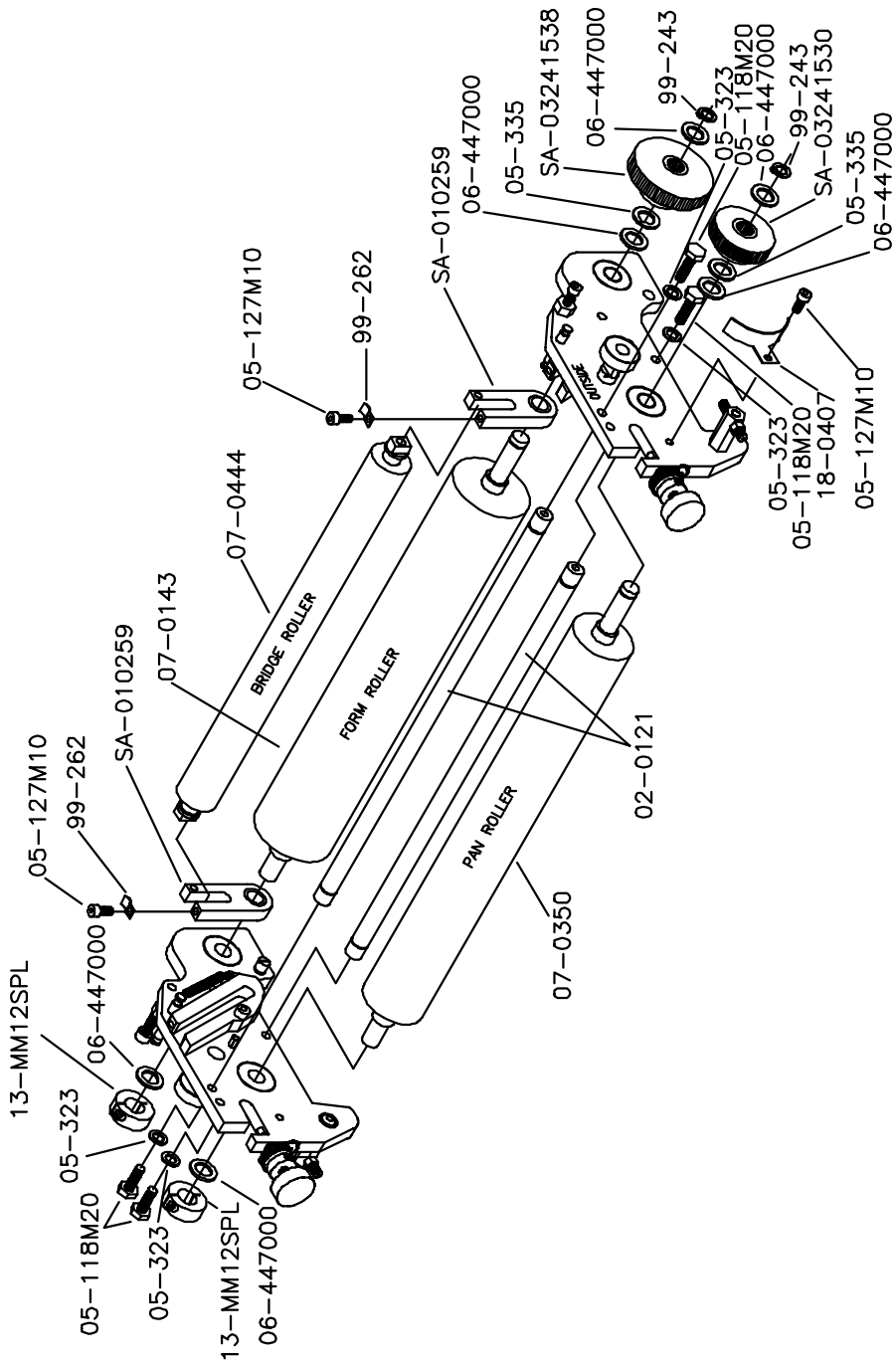


SIDE FRAME ASSEMBLY NOPS  
HAMADA RS/VS 34 SATELLITE



RS34SC02, 8-20-97

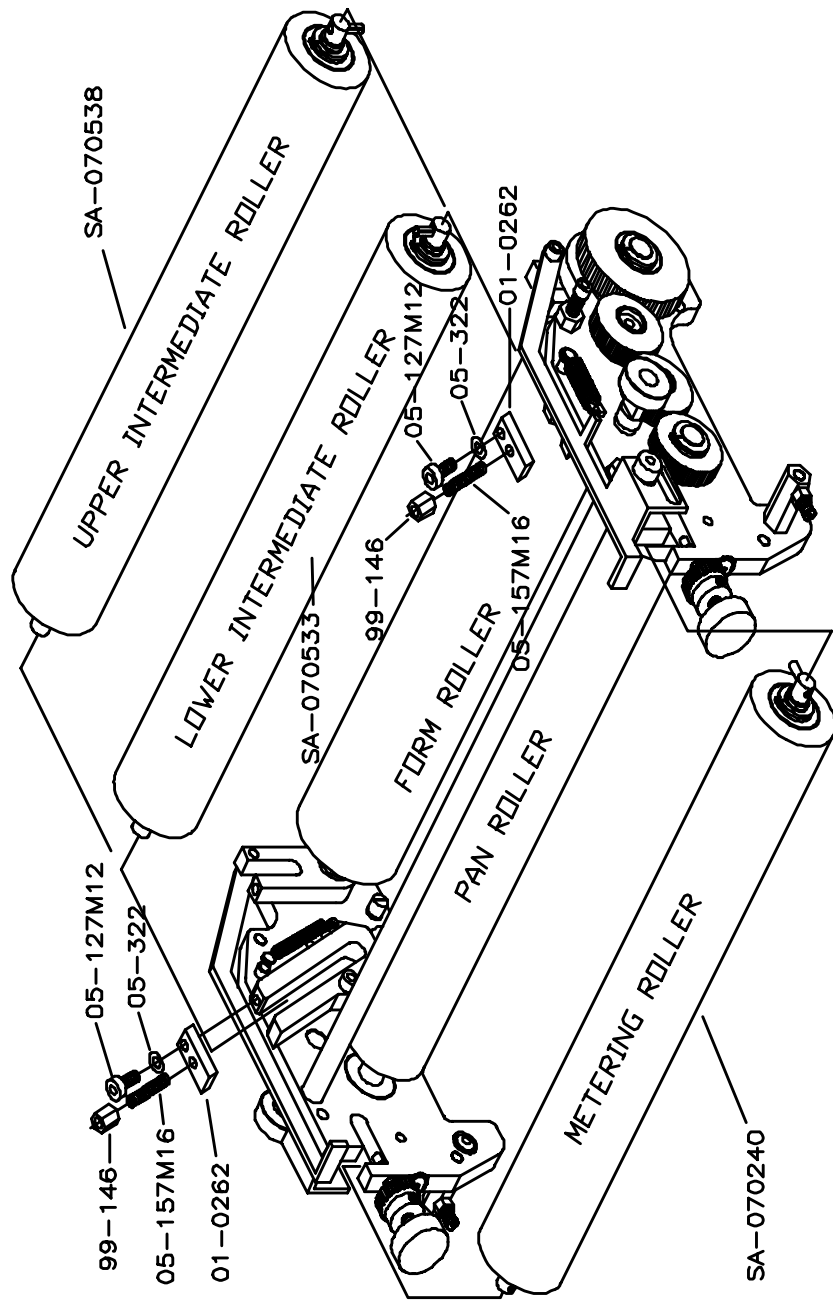
DAMPENER ASSEMBLY  
RS/V5 34 SATELLITE



RS34SC03, 7-9-98

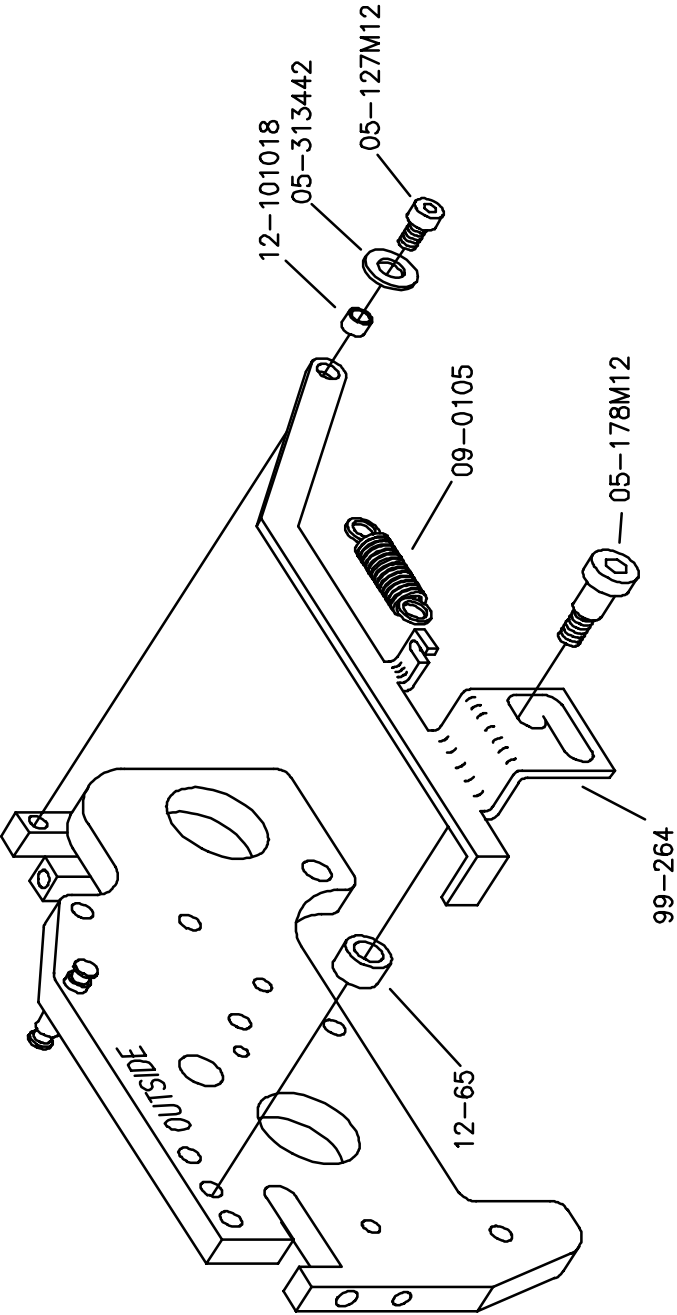


INTERMEDIATE/METERING ROLLERS  
HAMADA RS/VS 34 SATELLITE



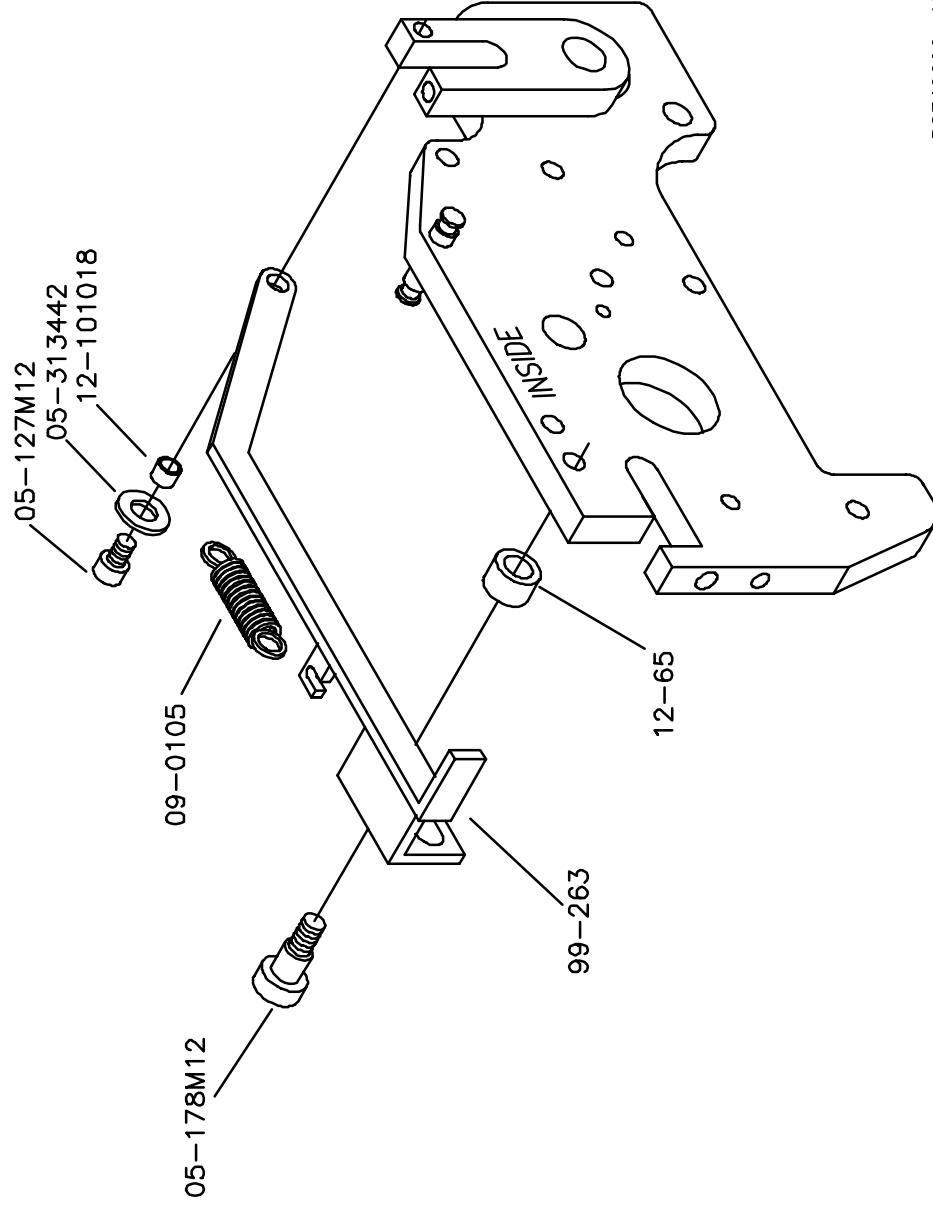
RS34SC04, 11-10-97

BRIDGE ROLLER ARM ASSEMBLY- NOPS  
HAMADA RS/VS 34 SATELLITE



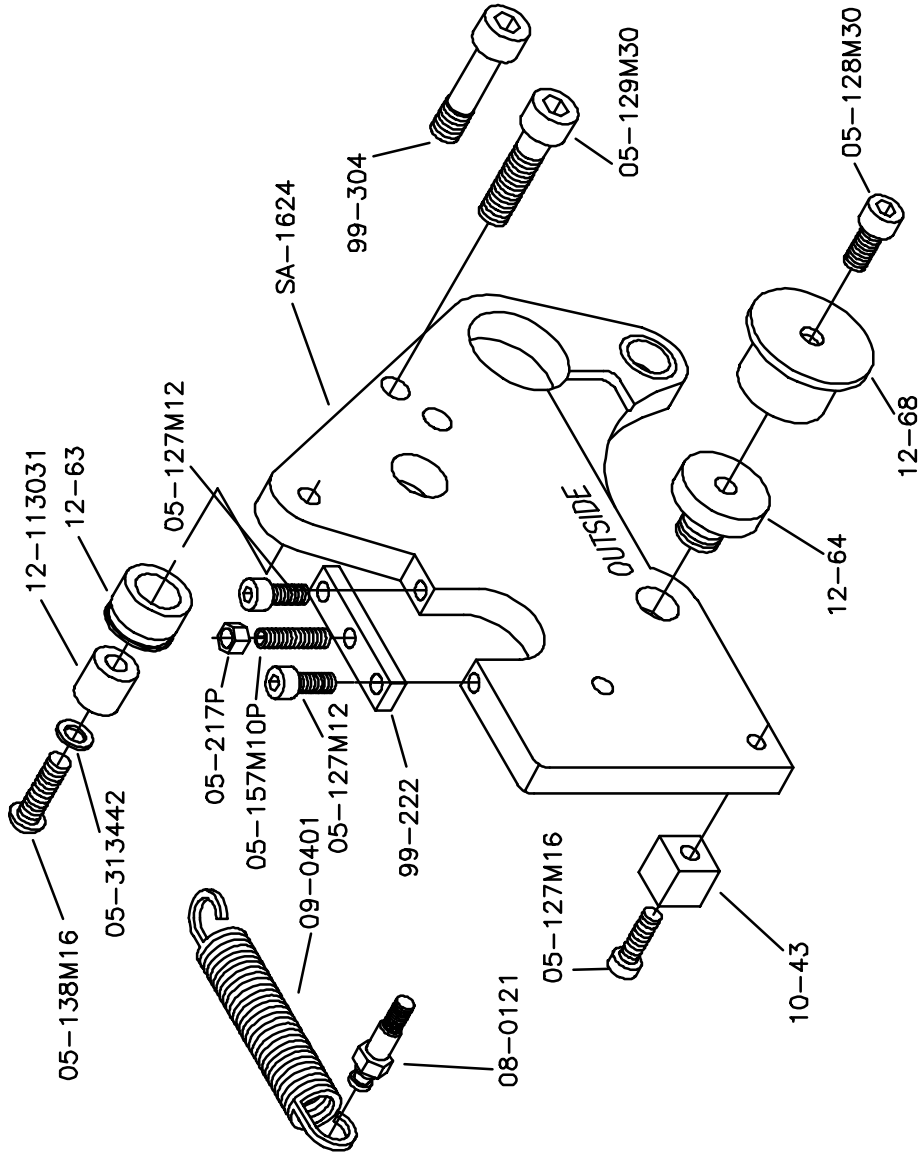
RS34SC05, 12-29-97

BRIDGE ROLL ARM ASSEMBLY-OPS  
HAMADA RS/VS 34 SATELLITE



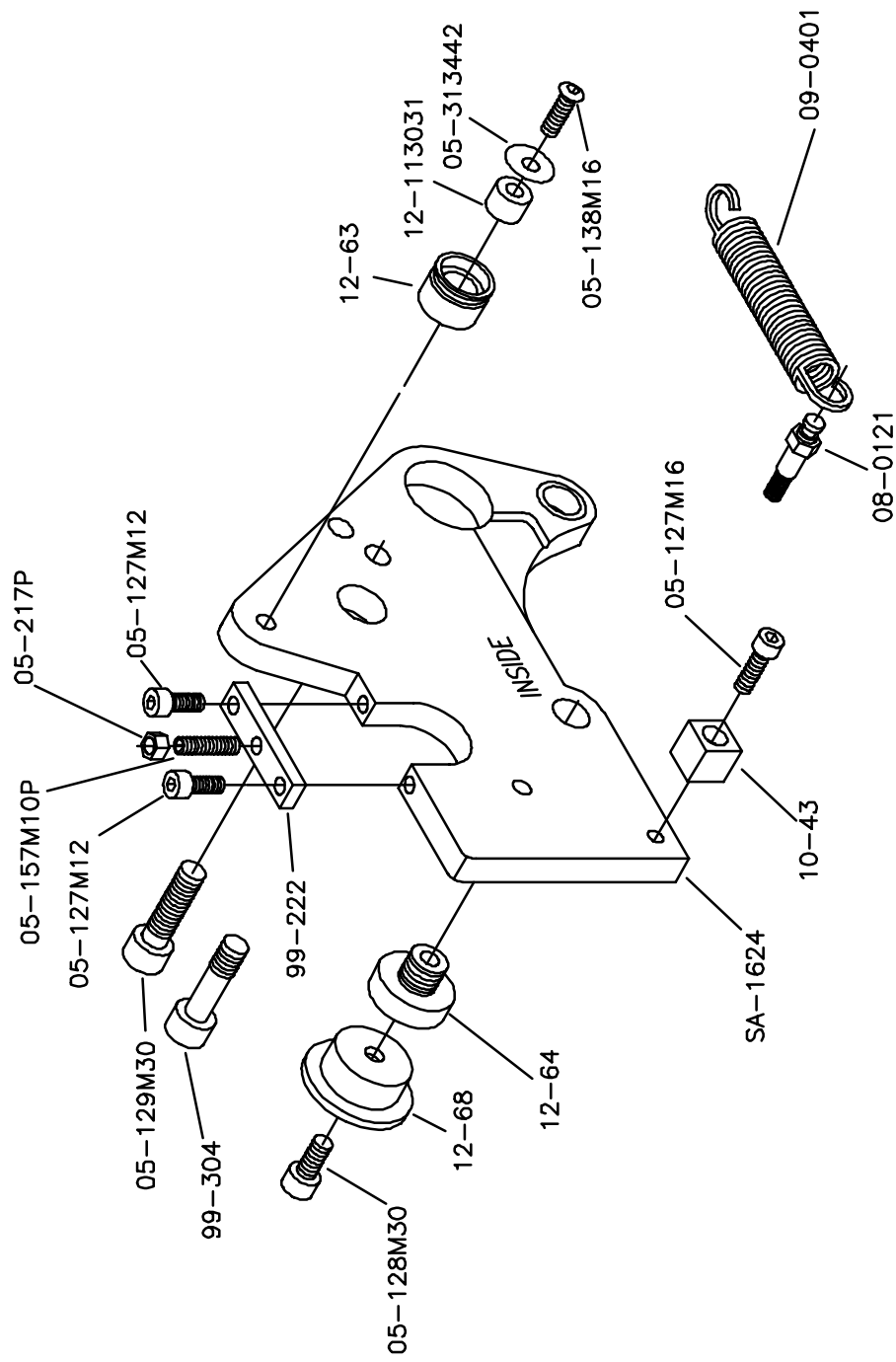
RS34SC06, 12-29-97

MOUNTING FRAME ASSEMBLY—NOPS  
HAMADA RS/VS 34 SATELLITE



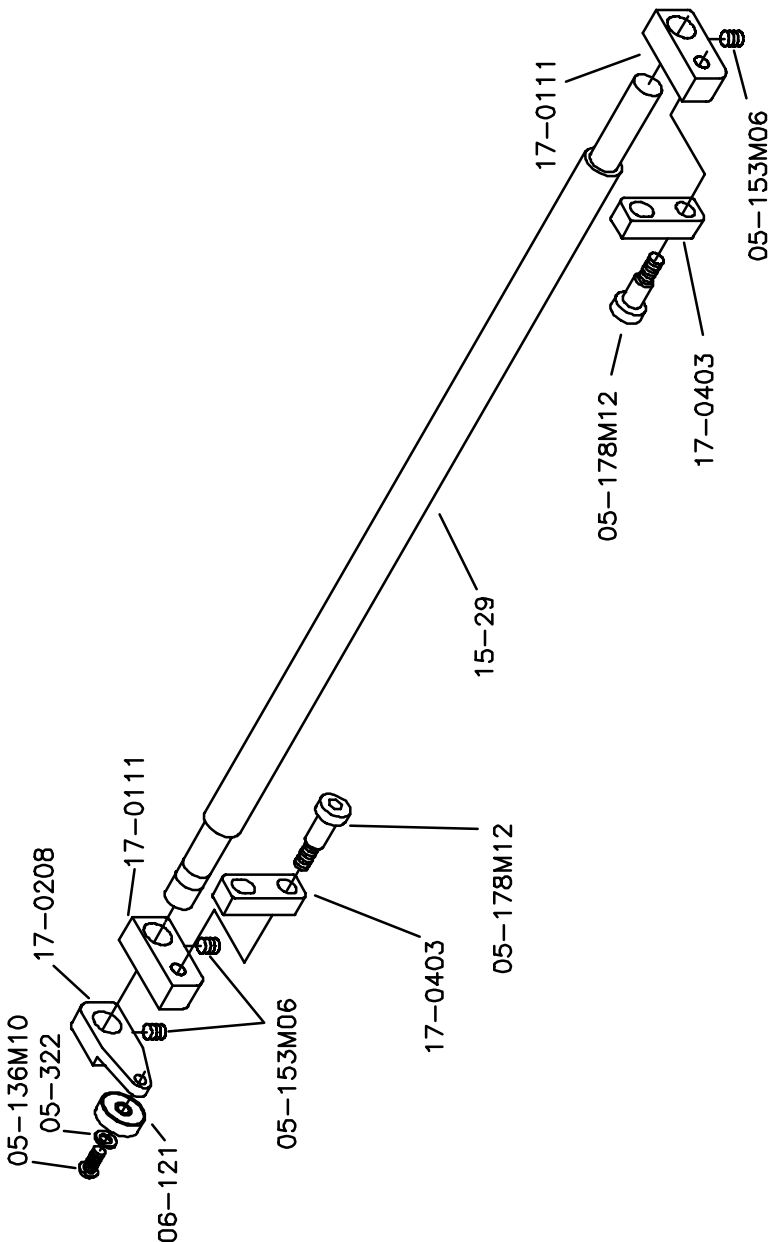
RS34SC07, 3-19-97

MOUNTING FRAME ASSEMBLY-DPS  
HAMADA RS/VS 34 SATELLITE

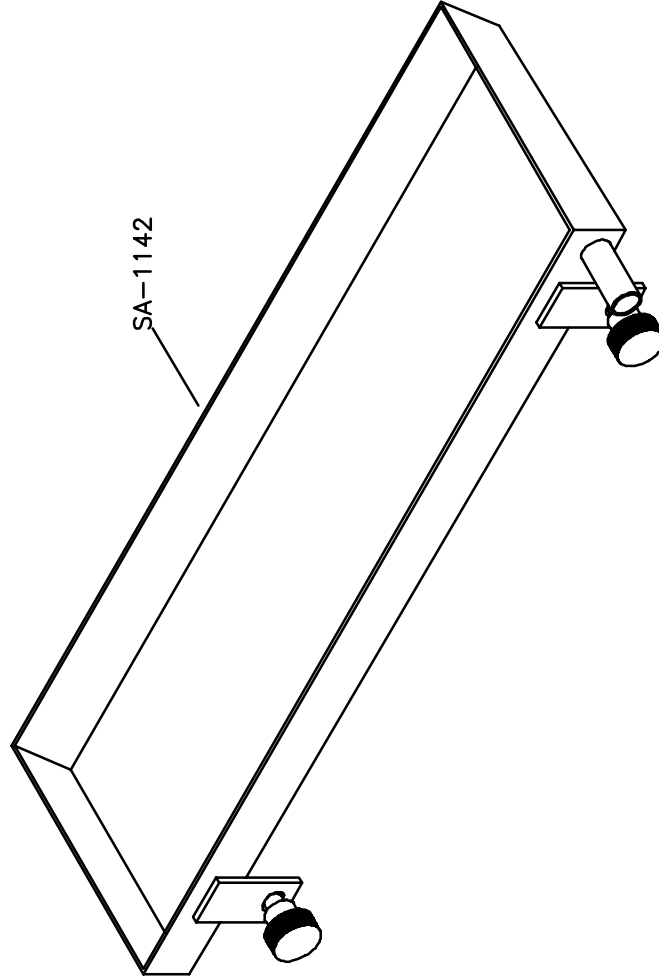


RS34SC08, 3-19-97

LIFT SHAFT ASSEMBLY  
HAMADA RS/VS 34 SATELLITE

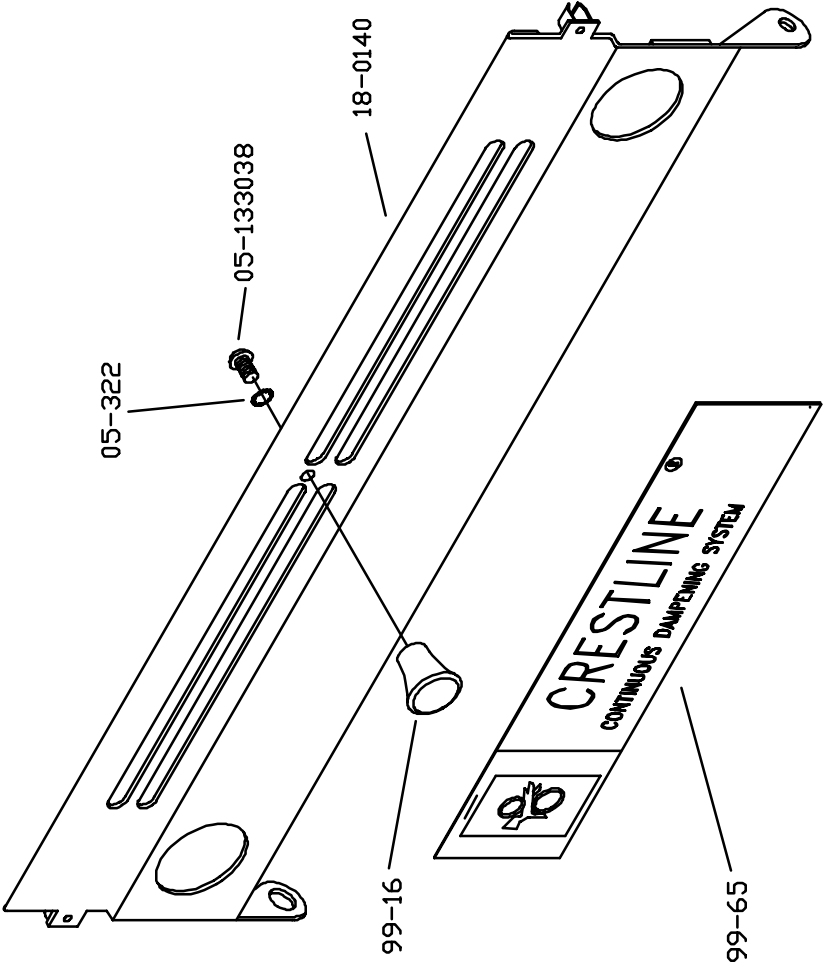


WATER PAN ASSEMBLY  
HAMADA RS/VS 34 SATELLITE



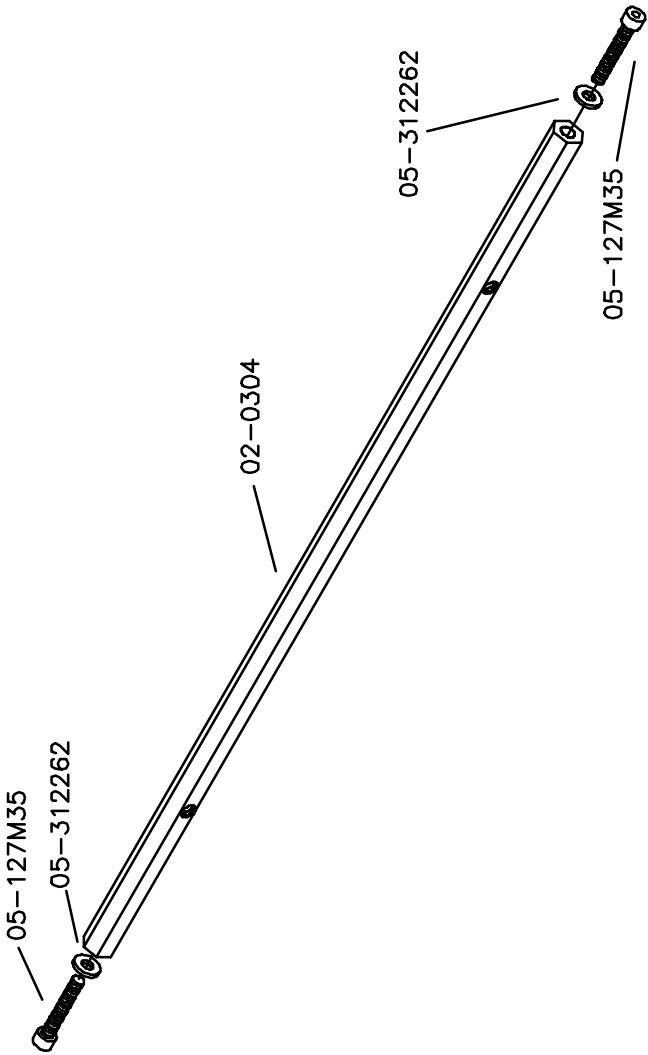
RS34SC11, 3-19-97

DAMPENER GUARD ASSEMBLY  
HAMADA RS/VS 34 SATELLITE



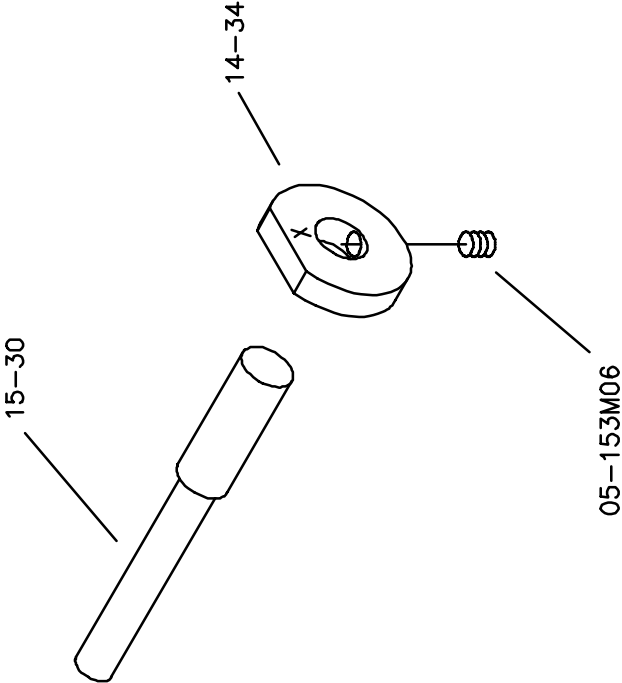


TIE BAR ASSEMBLY  
HAMADA RS/VS 34 SATELLITE

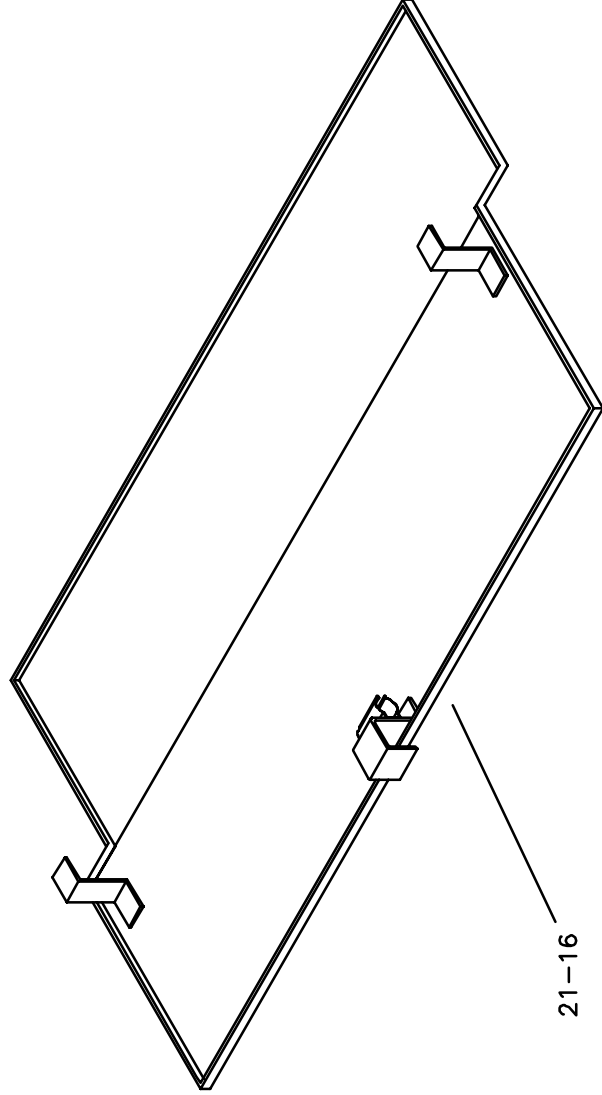


RS34SC13, 3-19-97

LIFT CAM ASSEMBLY  
HAMADA RS/VS 34 SATELLITE

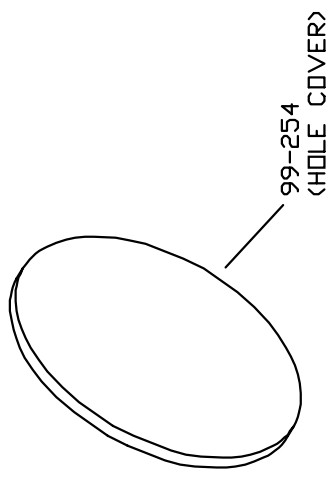


DRIP TRAY ASSEMBLY  
HAMADA RS/VS 34 SATELLITE



RS34SC15, 3-19-97

MISCELLANEOUS PARTS  
HAMADA RS/VS 34 INTEGRATED SATELLITE







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