Crestline® Altra Series™ Dampener

Installation Instructions

Ryobi 3302M

Itek 3985

A.B. Dick 9985

PRINTERS PARTS
800-543-1117 201-935-9595
fax 800-392-4072 201-935-5333
www.ppsnj.com

ACCEL®
Graphic Systems

X88-67
7/98
Rev-A

GENERAL INFORMATION

ATTENTION CRESTLINE® ALTRA™ SERIES DAMPENER OWNER!

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

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

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

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

YOUR AUTHORIZED CRESTLINE® ALTRA™ SERIES DEALER IS:

PRINTERS PARTS
800-543-1117 201-935-9595
fax 800-392-4072 201-935-5333
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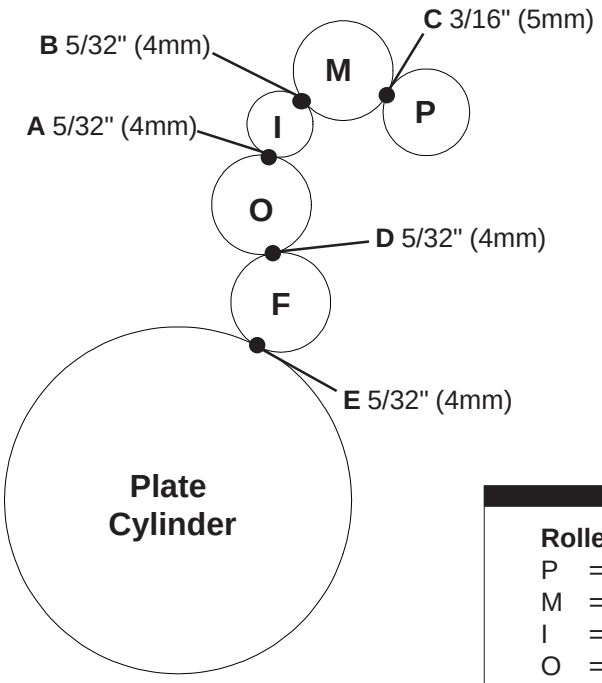
THE SERIAL NUMBER OF YOUR CRESTLINE® ALTRA™ SERIES DAMPENER(S) IS:

SAFETY INFORMATION

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

BASIC CONFIGURATION OF CRESTLINE® ALTRA™ SERIES



Adjustments
A. Intermediate to Oscillator
B. Metering to Intermediate
C. Metering to Pan
D. Oscillator to Form
E. Form to Plate

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

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

GENERAL INFORMATION

REQUIRED TOOLS

1. Phillips Screwdriver
2. Standard Screwdriver
3. 1/8" & 3/32" Allen
4. 2.5, 3, 4, 5, & 6 mm Allens
5. 8, 10, 13, & 17 mm Wrenches
6. 7/16" Open End Wrench
7. Vise Grips
8. 4 mm Punch
9. Brass Drift
10. 1/8" Punch
11. Hammer

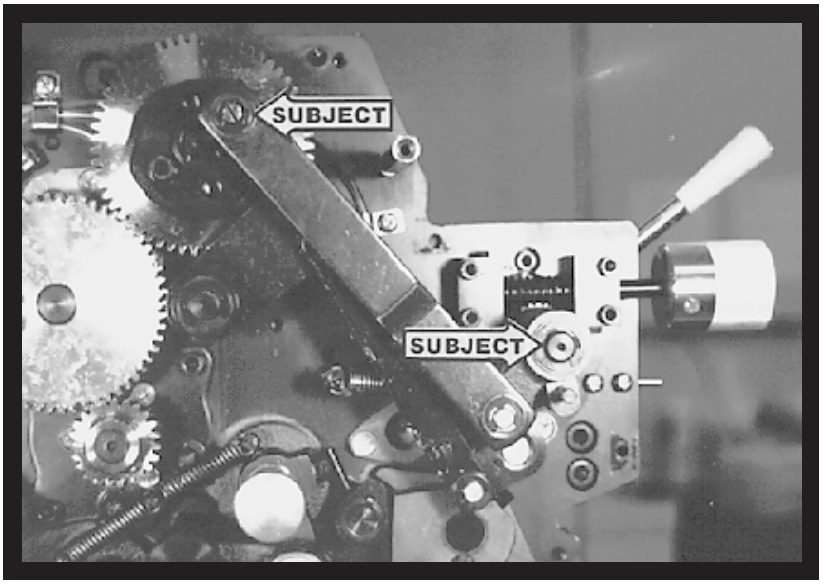
PRE-INSTALLATION INSTRUCTIONS

PRE-INSTALLATION PROCEDURES AND HOW TO PARALLEL THE DAMPENER.

1. Cut the ties holding the rollers and examine the rollers for gouges, scratches or nicks.

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

3. Check the dampener alignment by setting it on end on a flat surface such as a cutter bed. If dampener rocks, it needs to be realigned. Loosen the tie bar bolt and align the frames on the flat surface. Retighten bolt.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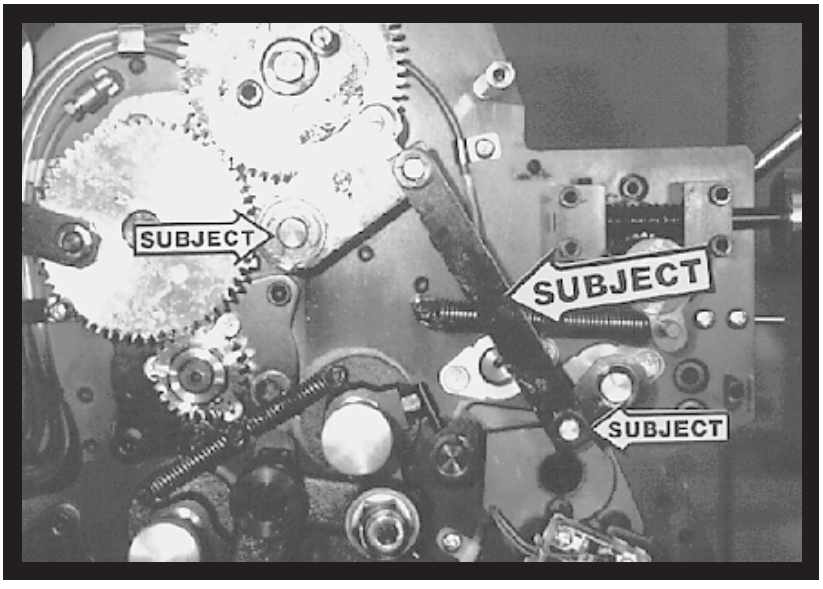
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DISASSEMBLY

1 Disconnect the press from the power supply. Remove inker guards on both printing units. Remove operating handles and upper side covers from OPS & NOPS sides of both printing heads. Remove the small covers over the water control mechanism OPS & NOPS. On older model presses, remove the gray plate that indicates the clicks in ratchet system. Remove the water tray and cloth covered rollers from both printing units.

---

2 At the OPS, remove "E" clips and washers (subject arrows) from stud and pull off the assembly held by these parts.

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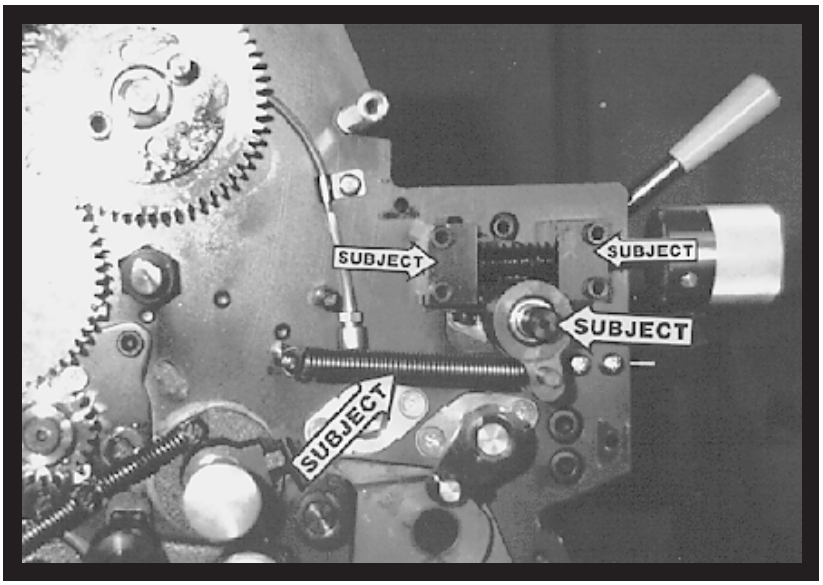
3 At the OPS, remove the spring behind the arm (large subject arrow, not visible in picture). Remove the "E" clips and washers (subject arrows) and pull the assembly off.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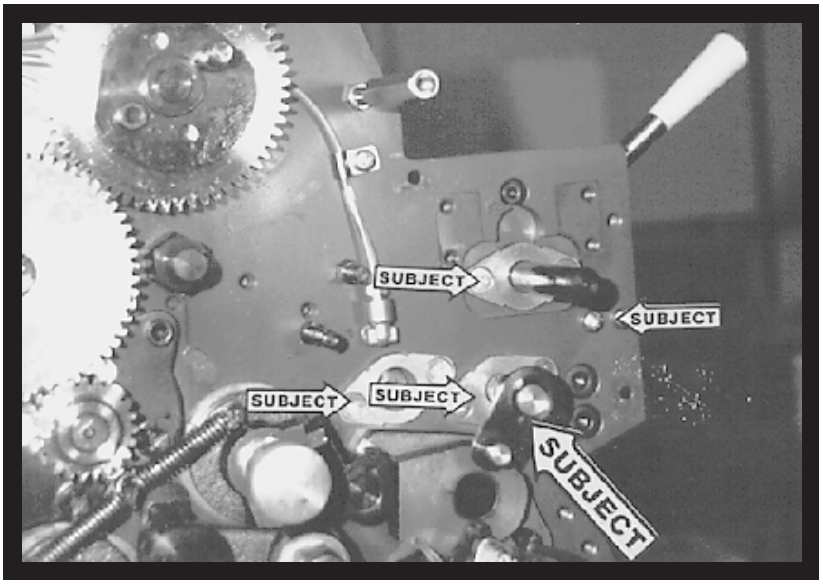
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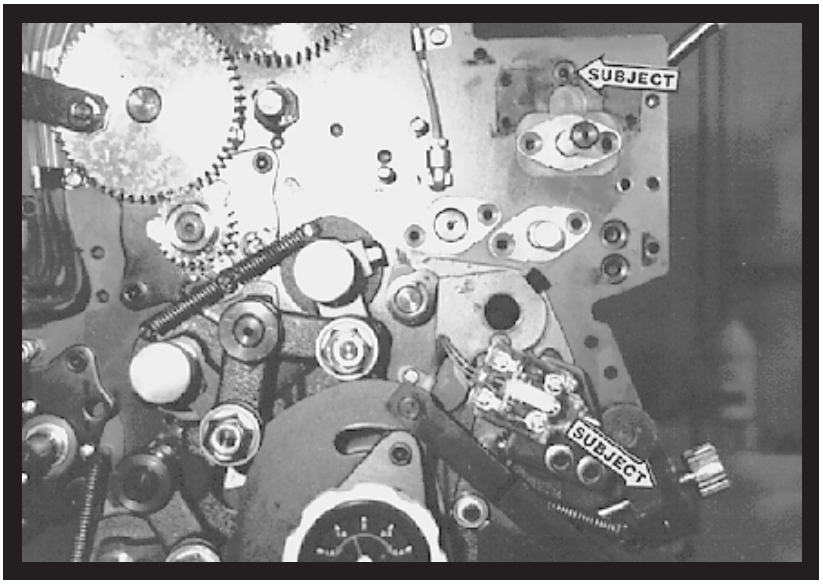
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4

At the OPS, remove the spring (#1), housing with clutch (#2), and infinite water control (#3, held on by 4 bolts) from the end of the water fountain roller shaft. (Older models have an arm and ratchet assembly with a gear. Remove these pieces if the press does not have the infinite water control. The gear has a set screw in it that needs to be loosened before you can remove it.)

5

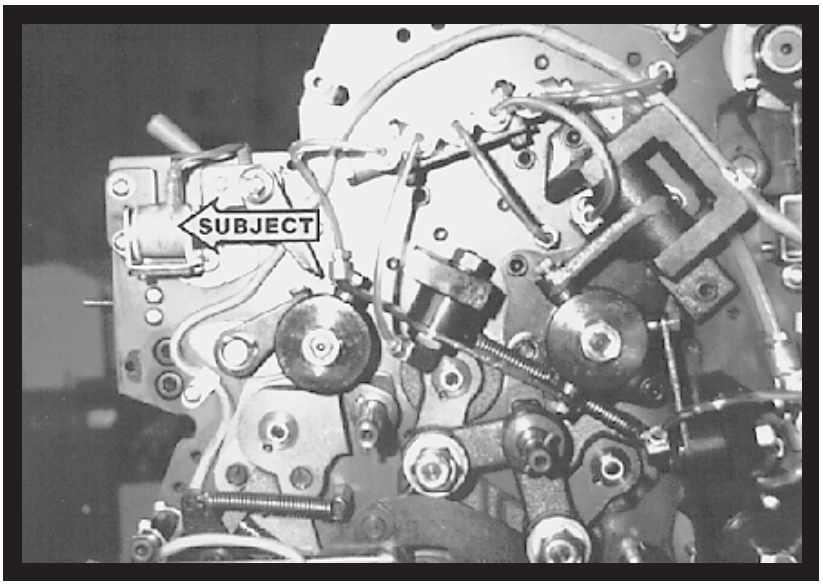
Drive the pin out of the arm (large subject arrow) and remove it. Remove all the screws indicated by the subject arrows. The arrows on the left indicate the housings for the metal rollers and ductor. The upper arrow, on the right, is the water pan block. These are at the OPS.

6

Remove the bolt from the wiper bar (upper subject arrow). These are located at the OPS. (On older models, the bolt holding the wiper bar is at the NOPS.) Remove the wiper bar.

OPTION: You can remove the small screw and clicker plate from the water form adjustment screw block (lower subject arrow) and replace it with the set screws #05-153025 provided by Accel. This will secure the form to plate setting once adjusted.

NOTE: This picture has the parts already removed.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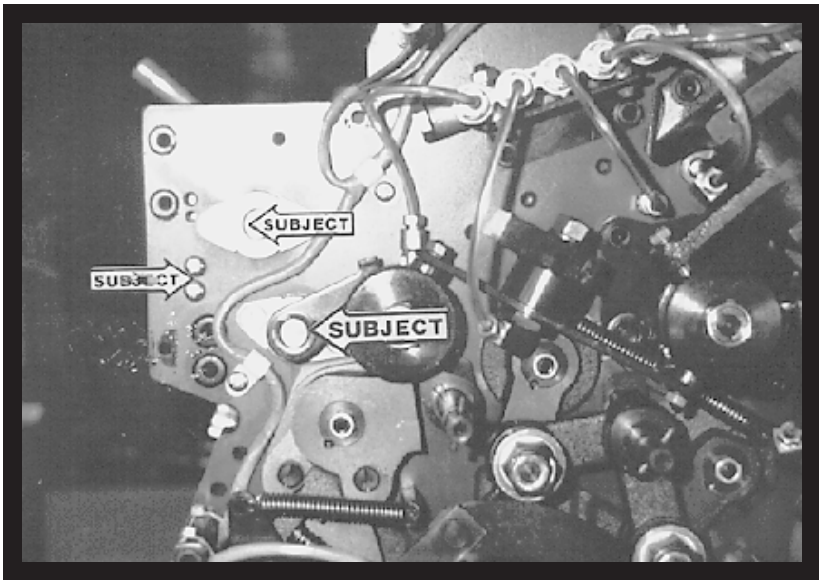
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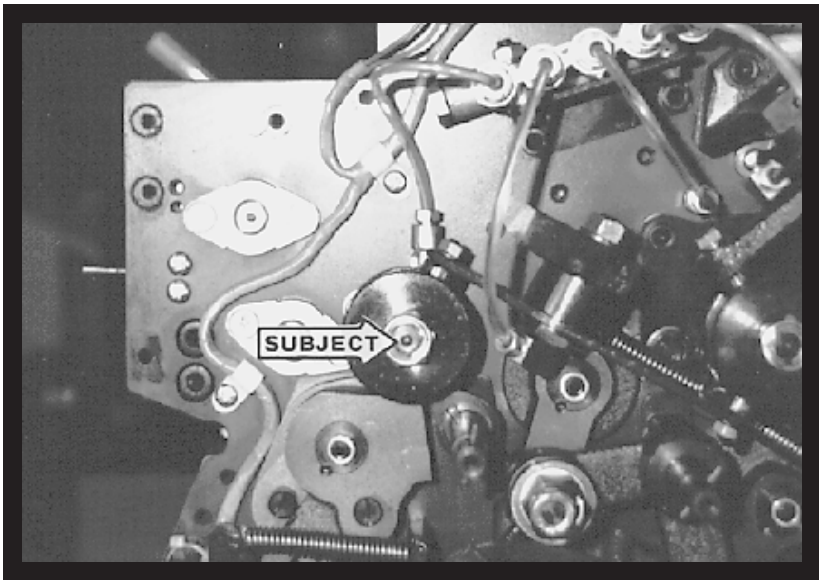
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7 Unhook the wires from the solenoid at NOPS (subject arrow) and remove the it from the press. 3 screws hold the solenoid. Each screw has a washer and a spacer. Be sure these parts do not fall in the press.

---

8 At the NOPS, drive the pin out and remove the arm (subject arrow at far right.) Remove the screws near the other subject arrows

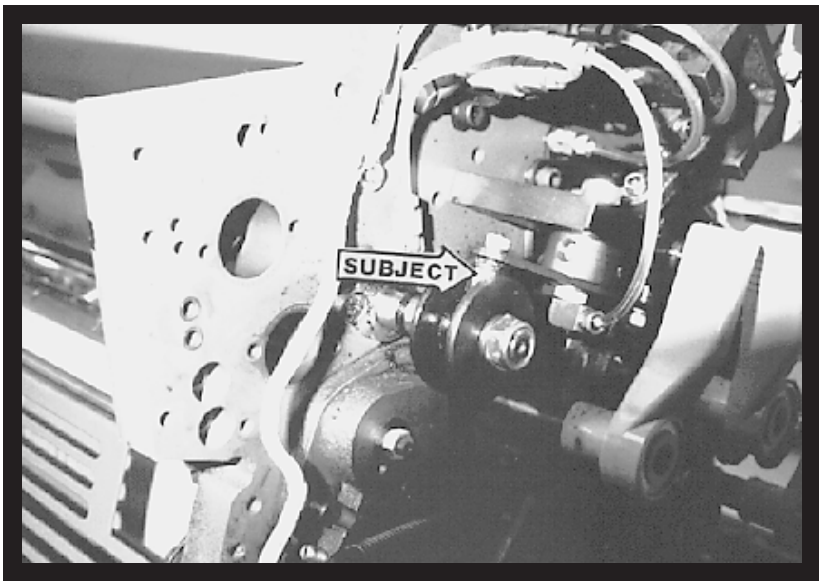
---

9 Remove the nut and spool from the end of the oscillator (subject arrow.) The easiest way to do this is:

1. Rotate the press, by hand, until the oscillator has moved all the way to the NOPS.

2. Remove the nut and lock washer from the end of the oscillator. Save for reinstallation.

3. Remove the oscillator bushing at the OPS and slide the oscillator roller by hand to the OPS. The spool will come off. Save all of the parts for reinstallation.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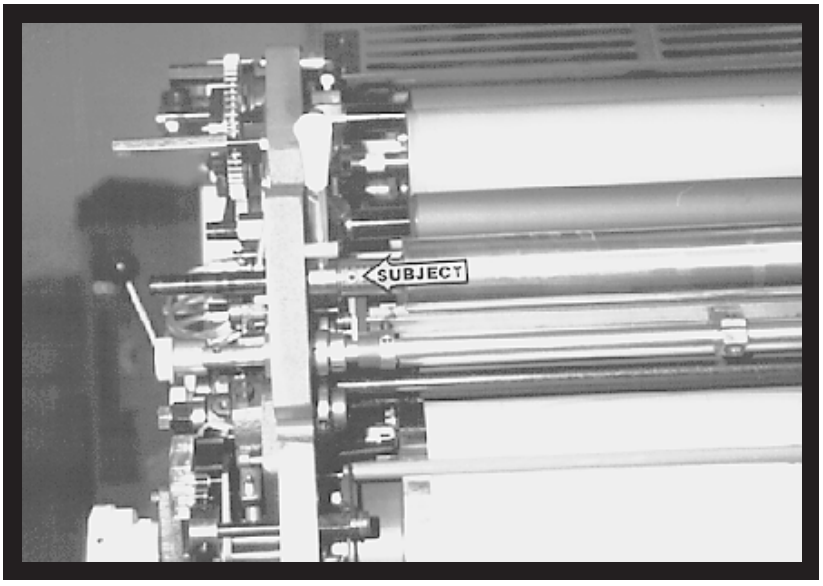
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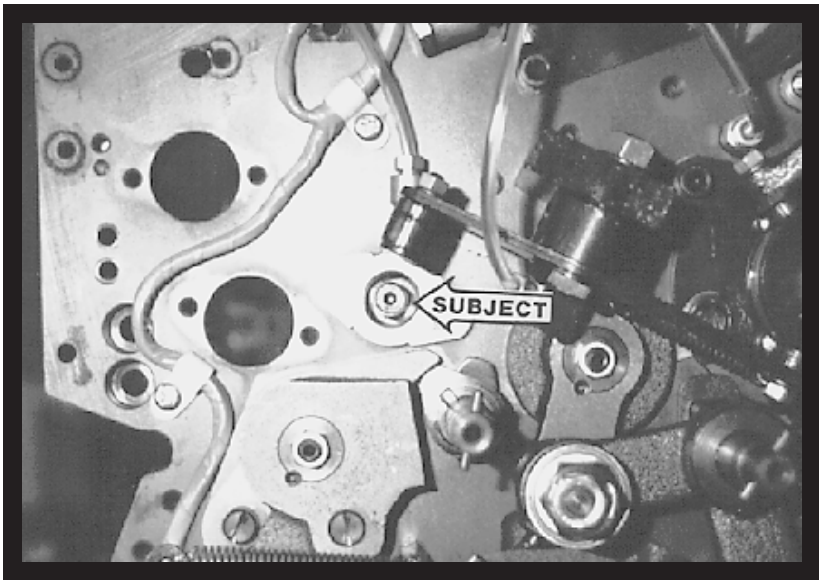
SUBJECT

10 Inspect cam follower for wear. If there is a substantial amount of wear, it should be replaced before installation of new oscillator roller.

---

11 Remove the cap screw (subject arrow) holding the two pieces of the water fountain roller together. Remove the bushings from the side frame holding the roller, slide the two pieces apart, and remove the pan roller and extension from the press.

NOTE: Older models may have a single piece fountain roller.

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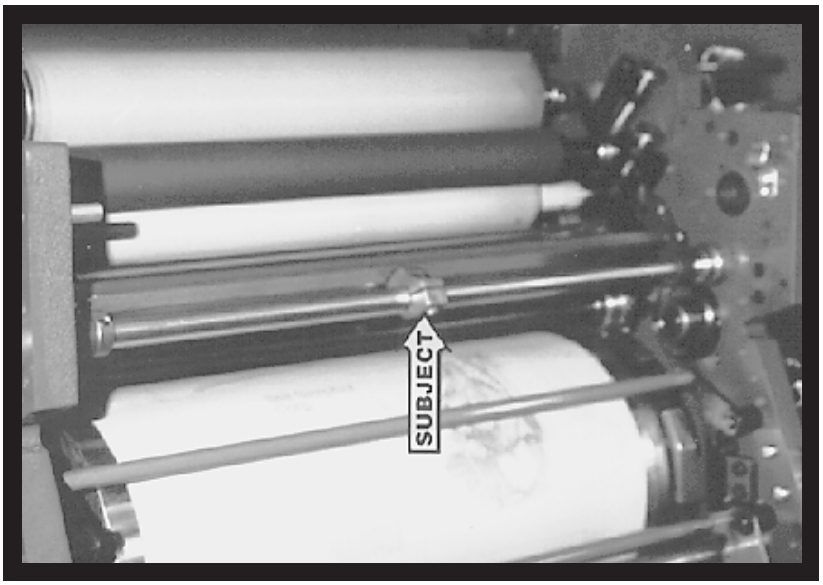
12 Remove the 2 screws and bushing (subject arrow) for the oscillator at the NOPS. Save for reinstallation. Slide the oscillator roller out of the press.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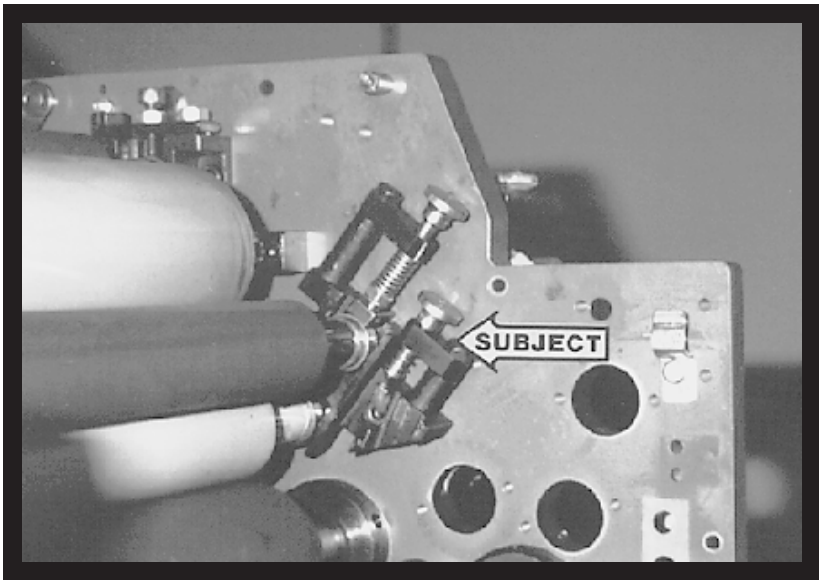
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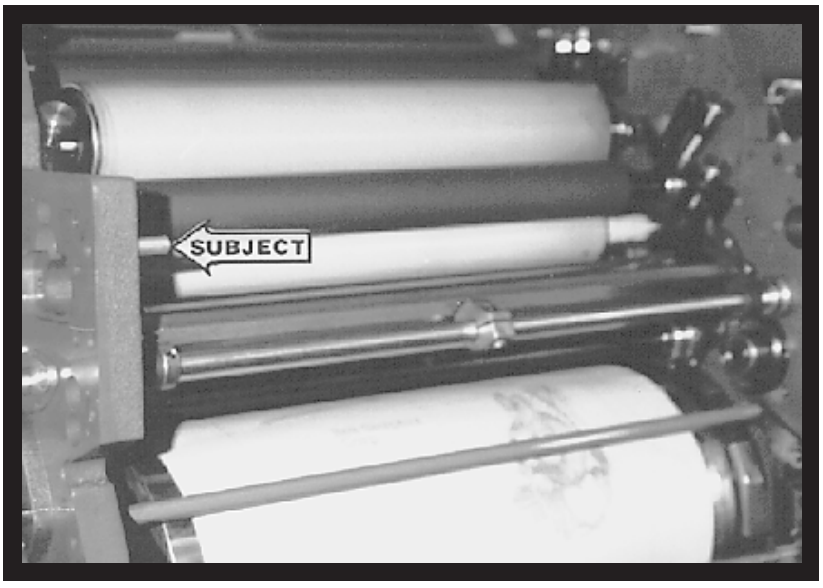
SUBJECT

13 The water ductor mechanism (subject arrow) has a series of set screws holding it to the shaft. Loosen all the set screws, including the one in the brass collar in the middle. Remove the bushings holding the shaft in the side frames. Gently tap the shaft towards the OPS until it clears the inside of the press frame. The entire assembly can be removed.

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14 Remove the bolt and spring loaded arm (subject arrow) at OPS & NOPS.

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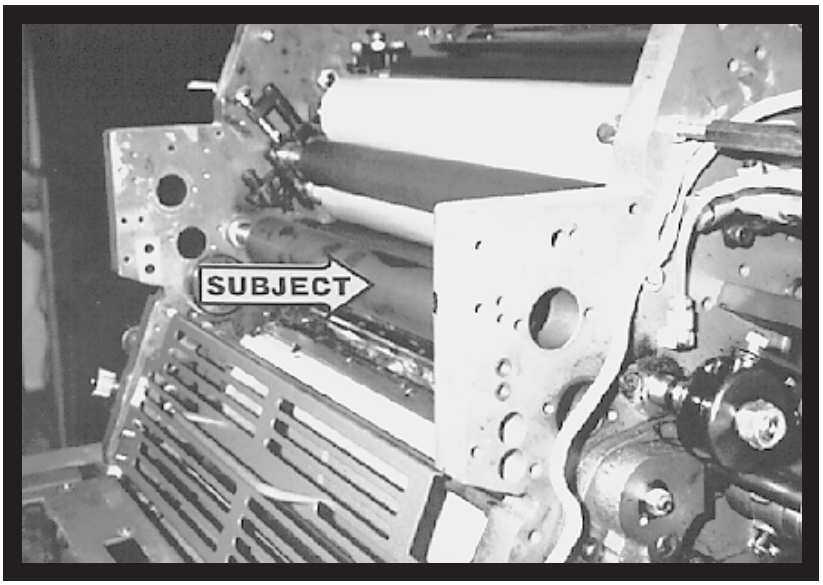
15 Remove the studs (subject arrow) from inside the press frame.

YOU ARE NOW READY TO INSTALL CRESTLINE® ALTRA™ SERIES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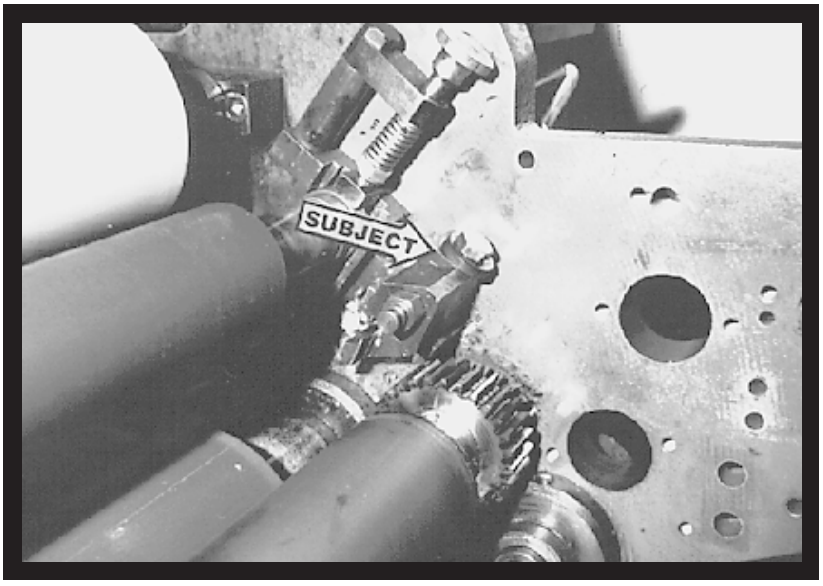
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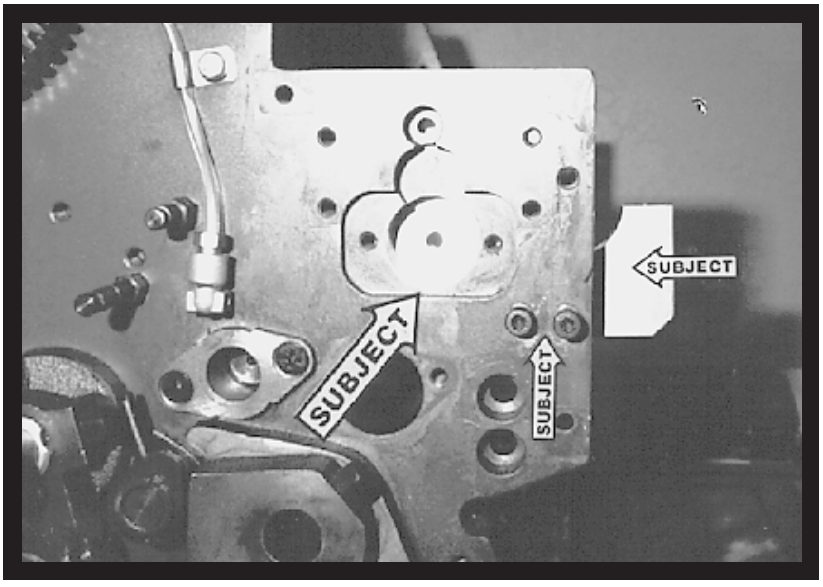
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1

Install the new form oscillator roller (X07-0431) provided by Accel. The easiest way to accomplish this is by following this order:

1. Place the roller in position with the gear on the NOPS.
2. Install the NOPS bushing that was previously removed.
3. Hold spool in position and slide the shaft all the way through the spool.
4. Install the OPS bushing assembly.
5. Install the jam nut and lock washer on the NOPS end of the oscillator shaft and fully tighten.

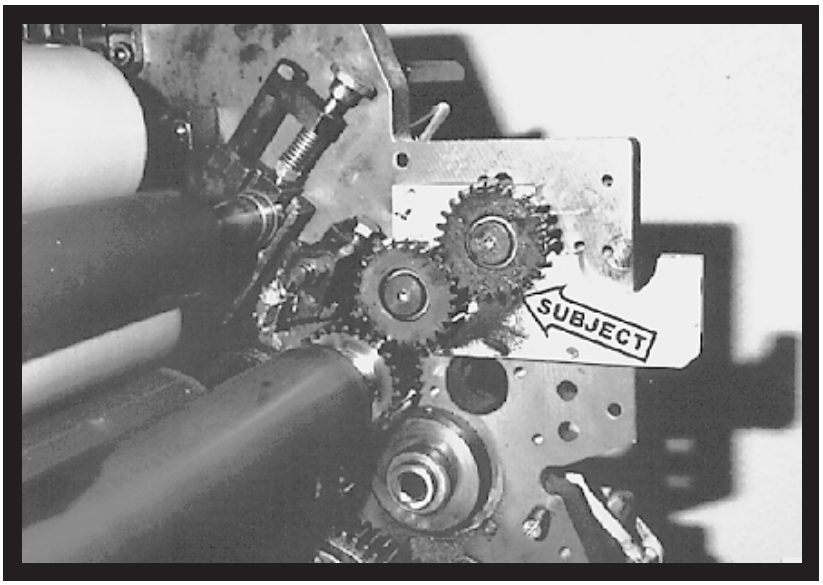
2

Install the stripe adjustment blocks (X10-36 & X10-35) provided. These have an OPS & NOPS side. When installed, it needs to be positioned so that the flat surface is facing up and level.

3

Install OPS & NOPS mounting plate. Use the large spools (X12-28) and cap head bolts & washers (X05-114138 & 05-313328) provided. On OPS, if there is a notched out cavity (large subject arrow) then use the spool (X12-27) with the flat portion facing towards the bottom. After mounting the spool use the second mounting bolt (X05-123113). Only one bolt is used per side.

NOTE: Remove the caps from the mounting block after installation. The center adjustment bolt is pre-set at the factory and should not need to be adjusted.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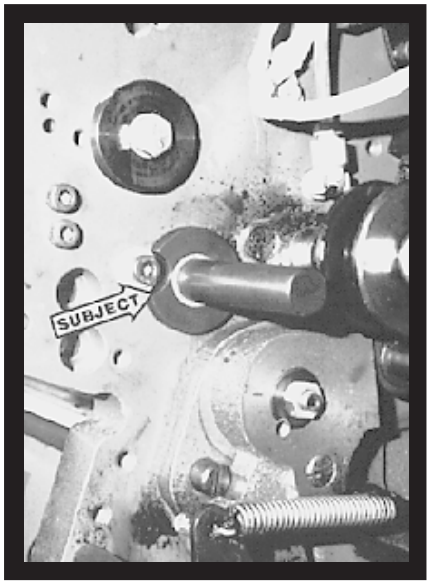
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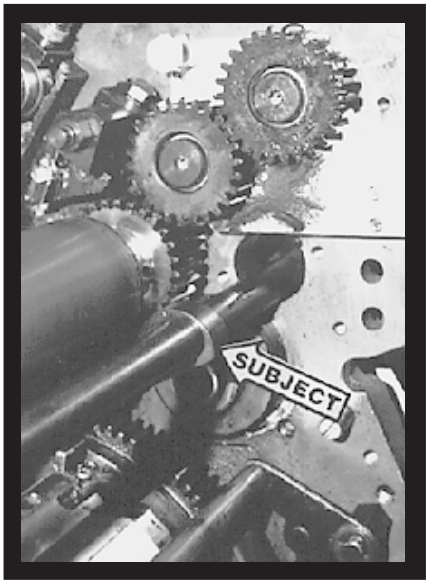
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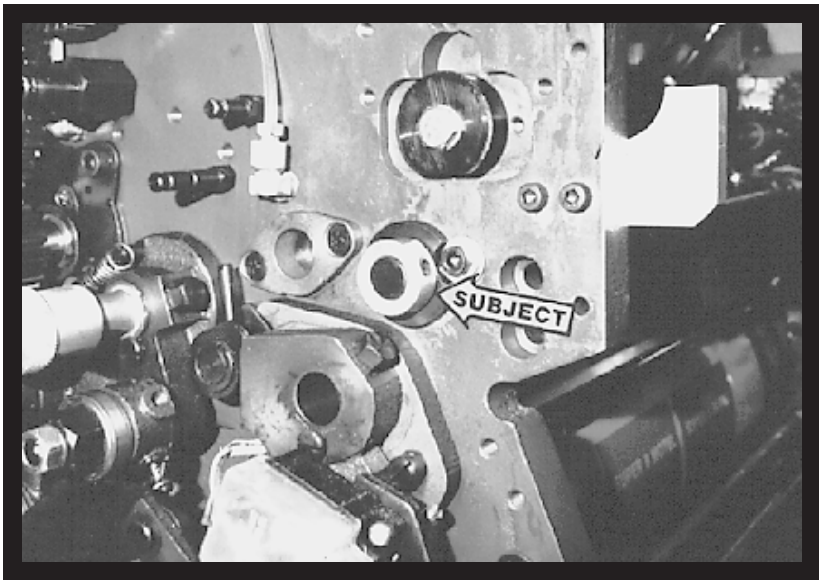
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4

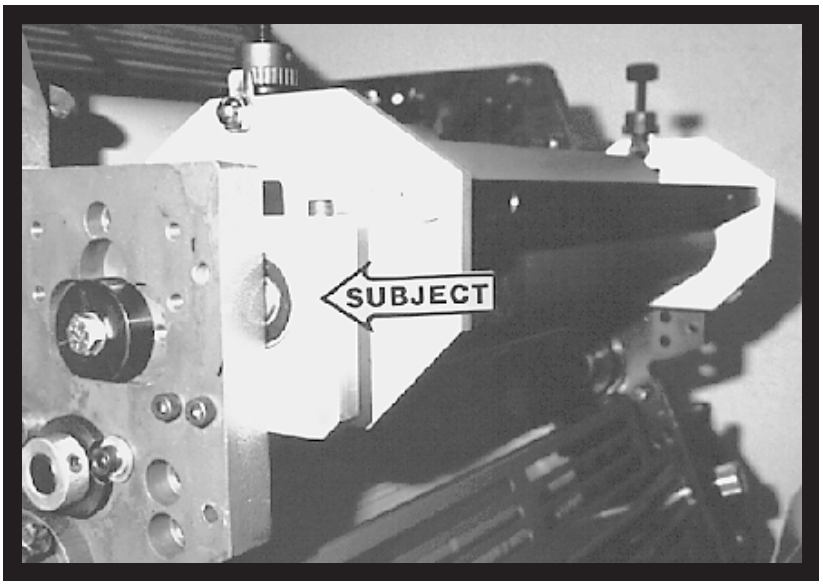
Temporarily reconnect press to power supply. Make sure any loose parts or tools are clear for operation. Jog press and observe mesh between the gear on the oscillator roller and the mounting gear on the NOPS mounting plate. A whining sound generally indicates that the gear mesh is too loose. A grinding sound indicates that the gear mesh is too tight. Adjust if necessary by loosening plate mounting bolts, repositioning and then retightening.

5

Install lift shaft (X15-18) into press with the longest portion that extends past cams to the NOPS (left hand picture). At OPS & NOPS, install the lift shaft housings (X99-17) with the notched portion aligned with the mounting hole (right hand picture). Use the cap head bolts (X05-127M12) and washers (X05-313442) provided to secure the housings to the frame.

6

At OPS & NOPS, slip the thin brass washer (X05-315630) and then the set collar (X13-5038) over the end of the lift shaft. Position shaft so that the end if flush with the set collar on OPS. Finger tighten only at this time.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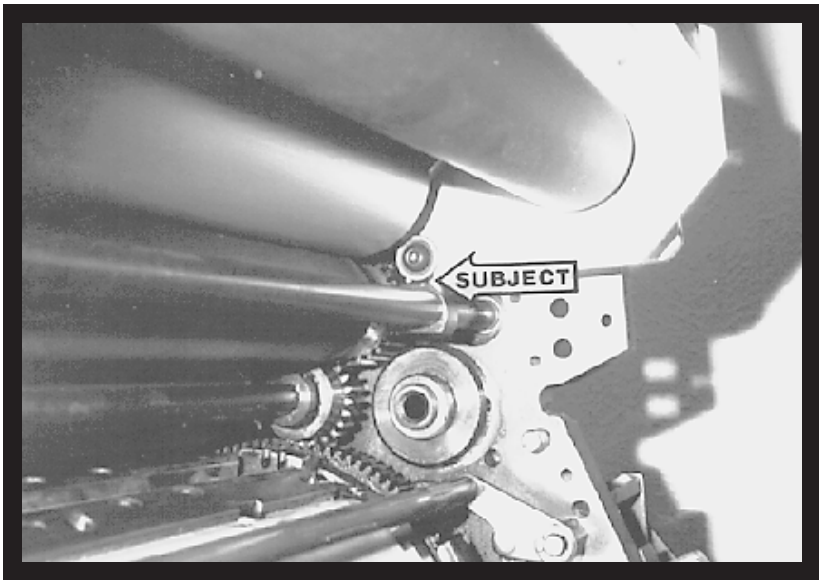
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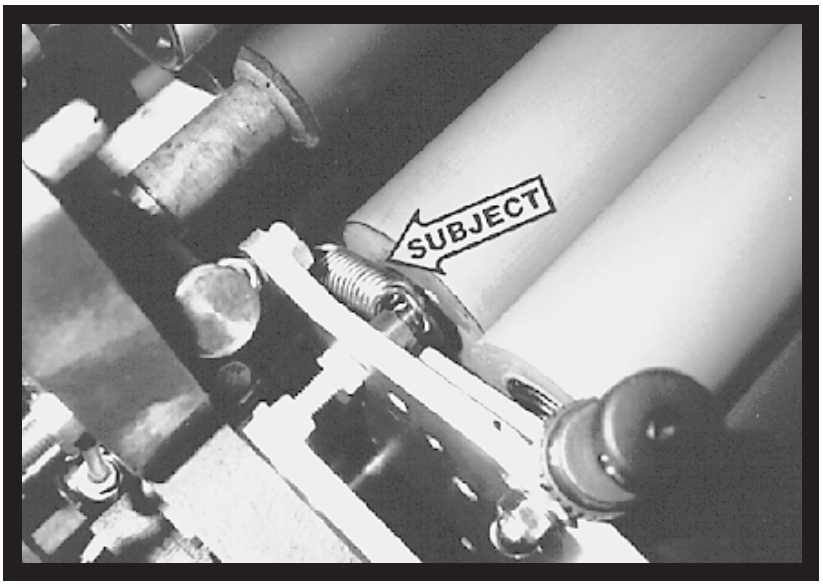
SUBJECT

7 Place the dampener in the press as shown. The ball bearings on the end of the pan roller shaft should sit in the notches of the mounting plates. Position the dampener evenly, side to side. Install the caps of the mounting brackets with the cap head bolts provided. Adjust nylon screws (X05-118M25P) on the side of the dampener frame until they contact the mounting plate without binding the dampener and lock into position with the nylon nut (X05-218P).

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8 Observe the position of the cams on the lift shaft. These cams should line up with the ball bearings on the dampener and not touch the dampener frames. If the cams are not centered then loosen the set collars and center. Fully tighten the set collars at this time.

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9 Install the extension springs (X09-0102) on the OPS & NOPS. It connects on the spring stud on the dampener and the spring stud on the stripe adjustment blocks installed in step #2.


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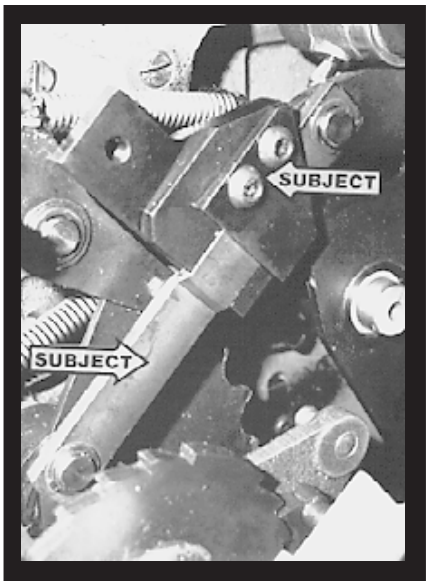
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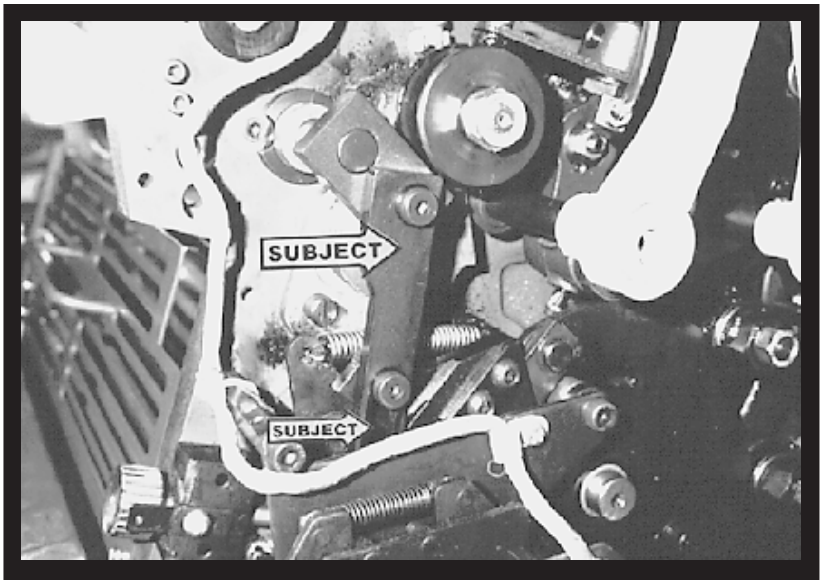
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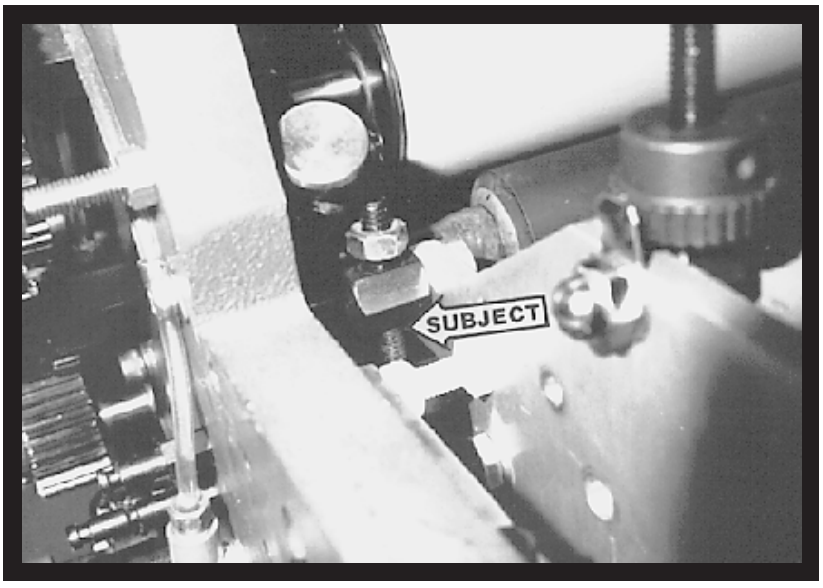
SUBJECT

10 Slip the control block (X17-0303) over the end of the lift shaft (left hand picture) but do not tighten the set screws at this time. With the 2 button head screws (X05-134025) (upper subject arrow) just threaded into the lower clamp block (X17-0108), slip the block over the activation linkage (lower subject arrow). It is grooved to clamp over the link (as shown). Push the lower clamp block down until it stops against the bend in the link and fully tighten the button head screws.

NOTE: Picture is shown with additional parts removed for viewing. It is not necessary to remove these parts in the installation.

---

11 Install the activation link (X17-0505) (upper subject arrow) provided by Accel. The link is mounted with a cap head bolt (05-173125) on top and bottom. However, the slotted portion (lower subject arrow) of the link should be in the lower mounting hole.

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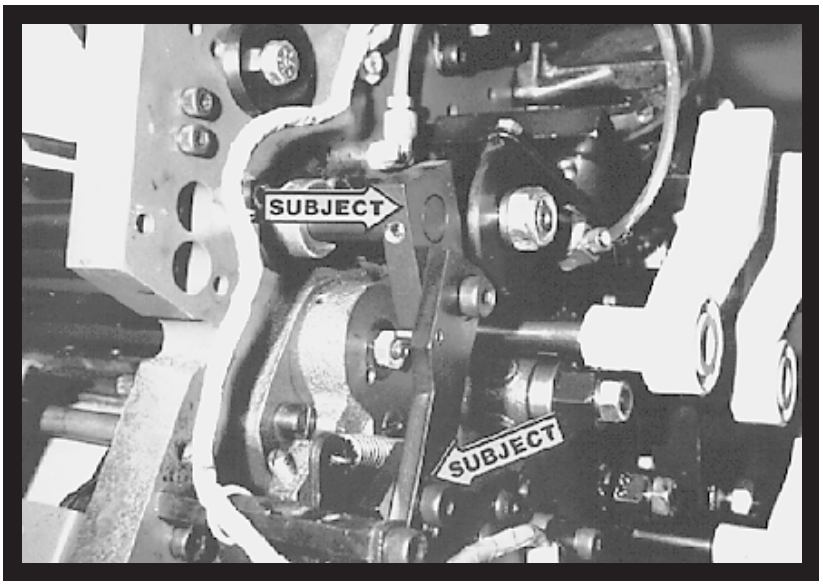
12 Temporarily replace the single lever. Run the set screws on top of the dampener up until they no longer touch the blocks in the water on position.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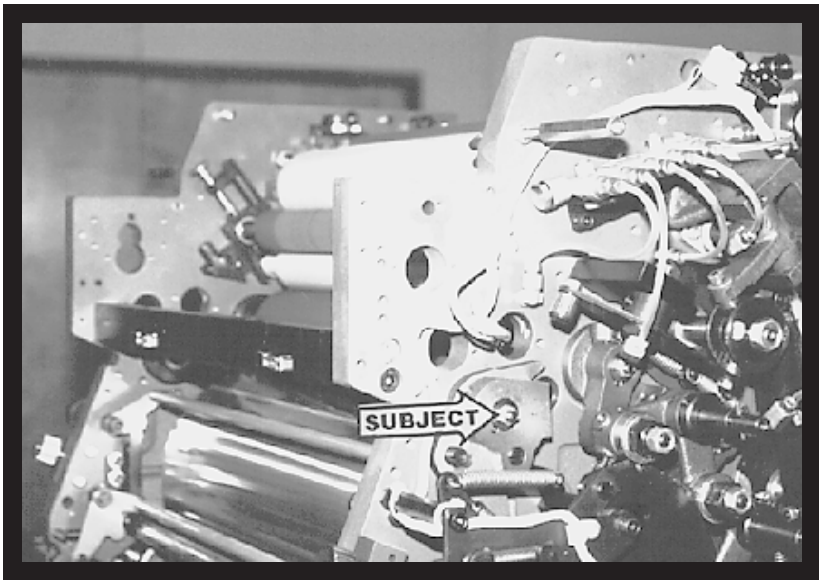
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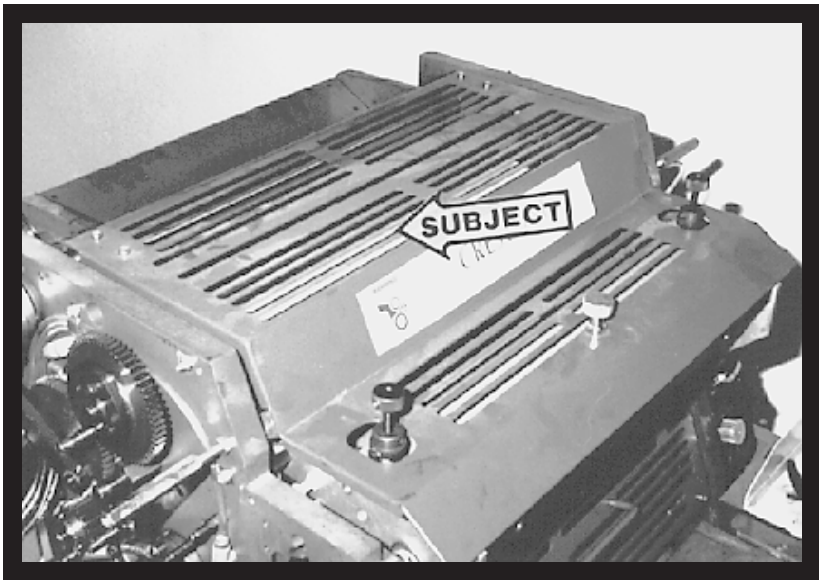
SUBJECT

13 With the single lever in the "WATER ON" position, rotate the lift shaft up until it contacts the lift cams on the dampener. Rotate the control block (upper subject arrow) clockwise so that the activation link (lower subject arrow) is topped out in the lower slot. Tighten the set screws in the control block in this position making sure that it is flush with the outside edge of the lift shaft.

NOTE: When the linkage is set correctly, the dampener's intermediate and oscillator rollers will separate when the single lever is returned to the "OFF" position.

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14 Install the new water form roller (X07-0135) provided by Accel. Use the original form roller shaft. Check the end play of the roller in the night latch position and adjust if necessary.

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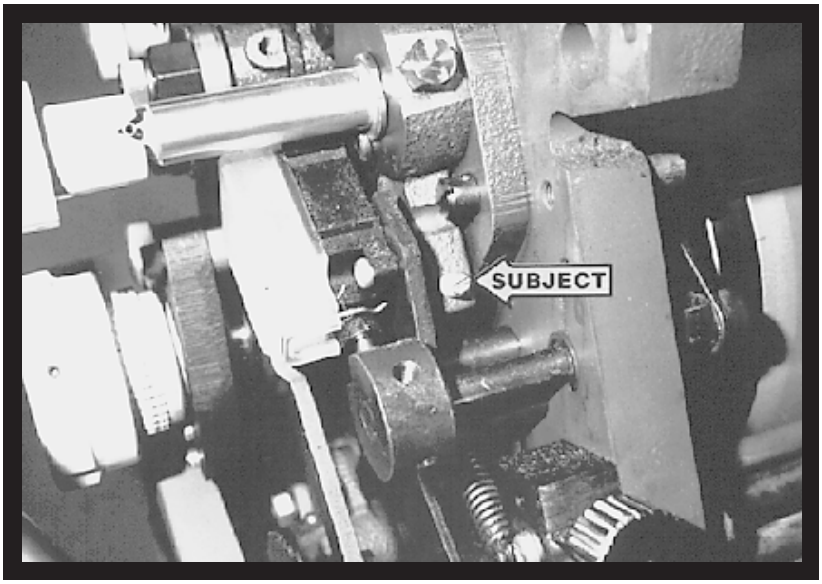
15 Replace both of the inker guards with the new ones provided by Accel (X18-0132).

YOU ARE NOW READY TO MAKE THE FINAL ADJUSTMENTS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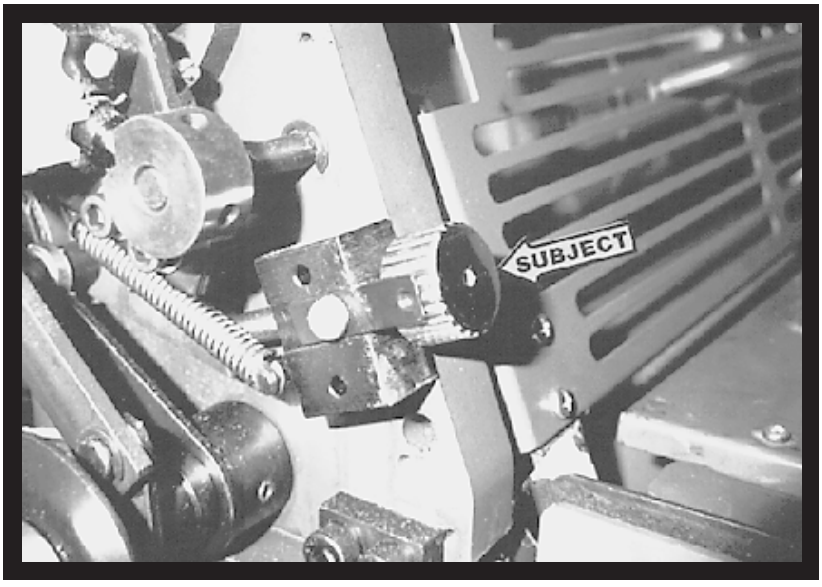
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FINAL ADJUSTMENTS

1

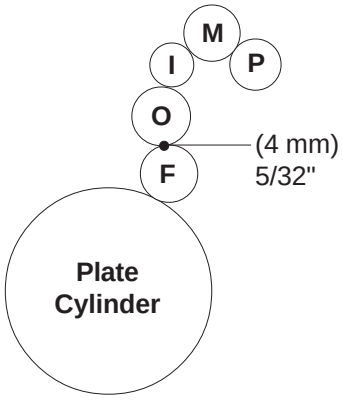
INK UP THE DAMPENER

Make sure the dampener is in the "OFF" position. Apply a small amount of ink on the dampener oscillator roller only. Turn on the press and run for 30-40 seconds and allow the ink to mill. Only the oscillator and form roller will ink up at this time.

2

OSCILLATOR TO FORM ROLLER PRESSURE

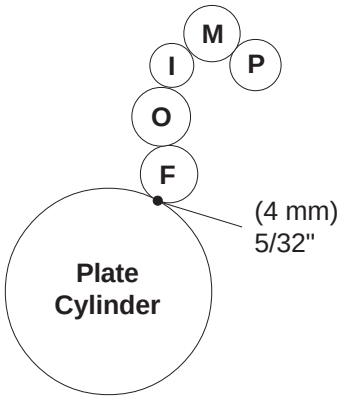
After the press sits still for 15-20 seconds, jog the press forward slightly while looking at the form roller. A stripe or bead line should appear on the form roller which was created by the oscillator. This stripe should be 5/32" (4mm) wide. To adjust, turn the long slotted screw (subject arrow) clockwise to increase the stripe at both OPS & NOPS. Refer to the Ryobi manual for this adjustment if necessary as it is the same as the original dampener.

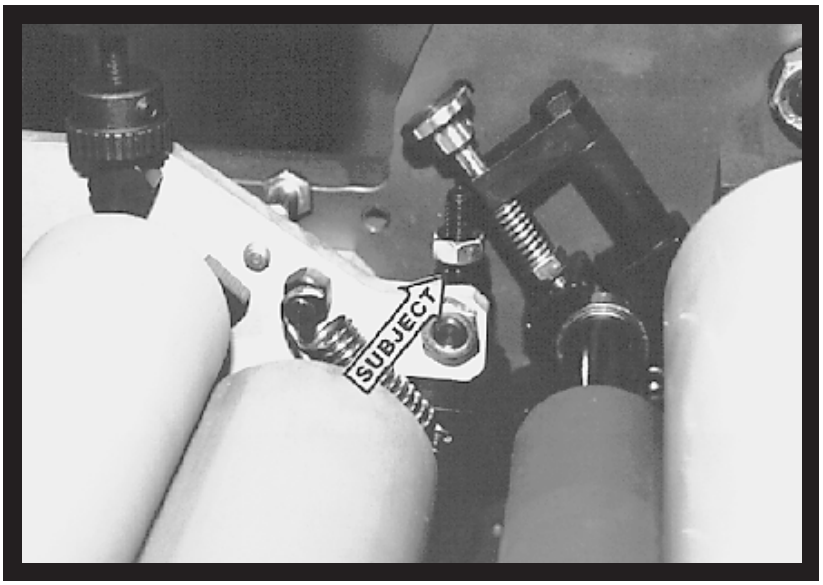


3

FORM ROLLER TO PLATE CYLINDER PRESSURE

Drop the dampener form roller down to the plate and back to "OFF" again. This will leave a stripe on the plate which should be 5/32" (4mm). This stripe is adjusted exactly as the original dampener by turning the adjustment knobs. To increase pressure at both OPS and NOPS, turn the adjustment knobs counterclockwise.

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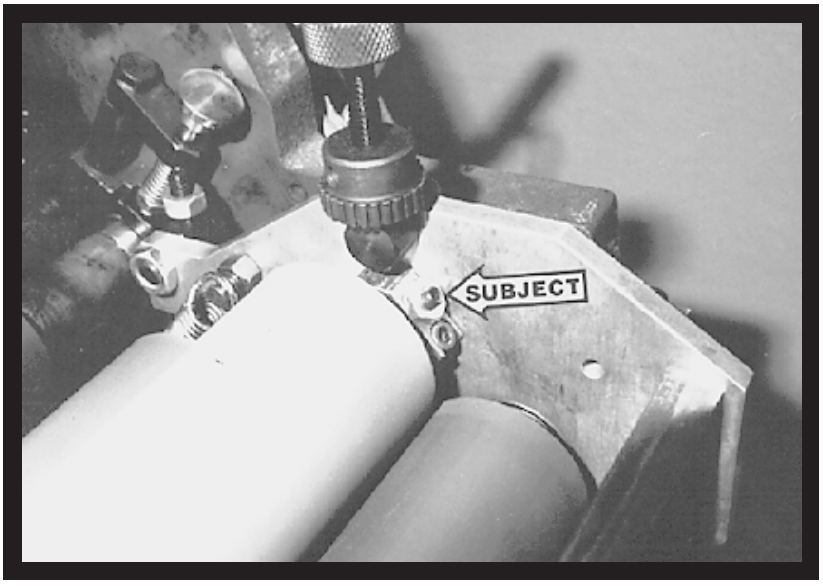
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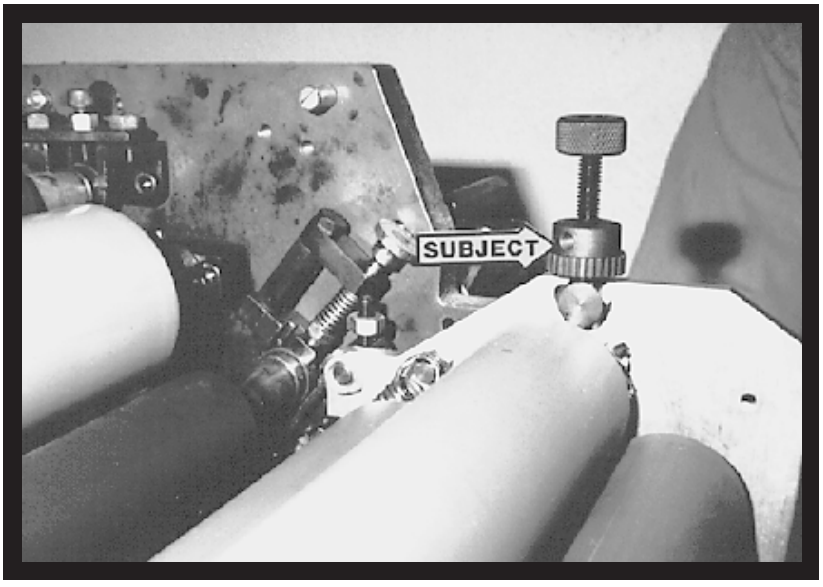
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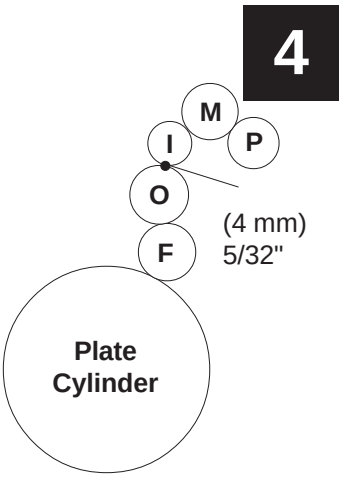
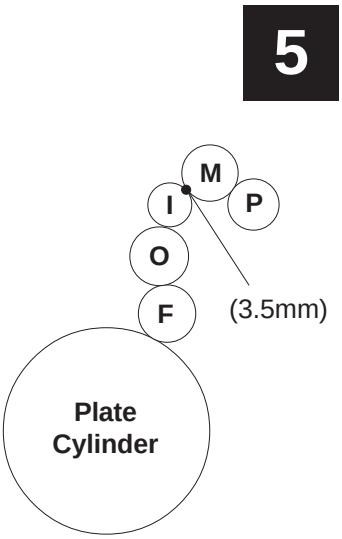


INTERMEDIATE TO OSCILLATOR ROLLER PRESSURE

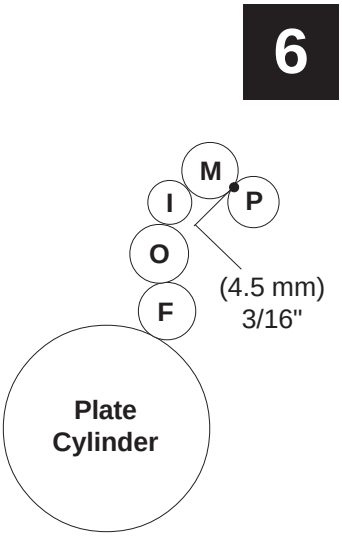
Temporarily remover the dampener metering roller by removing the lower cap head bolts and remove the cap on the metering roller retaining bracket. Drop the dampener down to the plate cylinder and back off. In addition to the form roller contacting the plate, the intermediate roller will drop down and contact the oscillator roller., Turn the intermediate roller around by hand to reveal the stripe which should be 5/32" (4mm). This pressure is adjusted by turning the set screw on the dampener frame. Turning the set screws down will decrease the stripe and vice versa. Tighten the lock nut after the proper stripe is obtained.



METERING TO INTERMEDIATE PRESSURE

Replace the dampener metering roller and fully tighten the cap head bolt on the retaining bracket. Now you can ink up the entire dampener and run in the ink until it is smooth. The proper pressure between these rollers is 3.5 mm. Adjustments are made by loosening the lock nut on top of the metering roller hanger and turning the set screw clockwise to increase the stripe and vice-versa. Tighten the lock nut once the proper stripe is obtained.

NOTE: In order to observe the stripe, it may be necessary to place the single lever in the "WATER ON" position and jog the press in reverse. You will then be able to observe the stripe on the metering roller.



MAXIMUM METERING TO PAN ROLLER PRESSURE

Turn the press on and run for 30-40 seconds to mill in the ink. Stop the press and allow it to sit still for 15-20 seconds. Jog the press forward and observe the stripe on the pan roller. It should be 3/16" (4.5mm). Turn the knurled metering knobs clockwise to increase the stripe and vice versa. When the proper stripe has been obtained, spin the rachet gears down until they bottom out on the stud and secure the rachet gear to the knurled knobs with set screws.

FINAL ADJUSTMENTS

7

WATER LEVEL IN PAN

Install the water pan and bottle. Set the water level in the pan by adjusting the bottle bracket. Raising the bracket will raise the pan level and vice versa. Water should be about half way up the pan.

8

Reinstall the covers on the press.

YOU ARE NOW READY TO PRINT.

START OF DAY

A. Make sure the form and metering rollers are in place.

B. Spin knurled knobs until the shoulder on the ratchet stops against the stud bar.

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. Dab the ink on the oscillator only.

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.

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 thefactory 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.

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. Drop both the dampener and ink forms to the plate. In general, the dampener will pick up enough roller wash off the plate to clean itself. Apply wash directly to the dampener only when necessary.
5. Use wash up attachment as normal. The plate cylinder is being used as a bridge between the dampener and inker. Solution transfers from the dampener to the plate, plate to inker, and inker to wash up attachment.
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.

END OF THE DAY

1. Wash up dampener. 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 2 full turns.

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. 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.

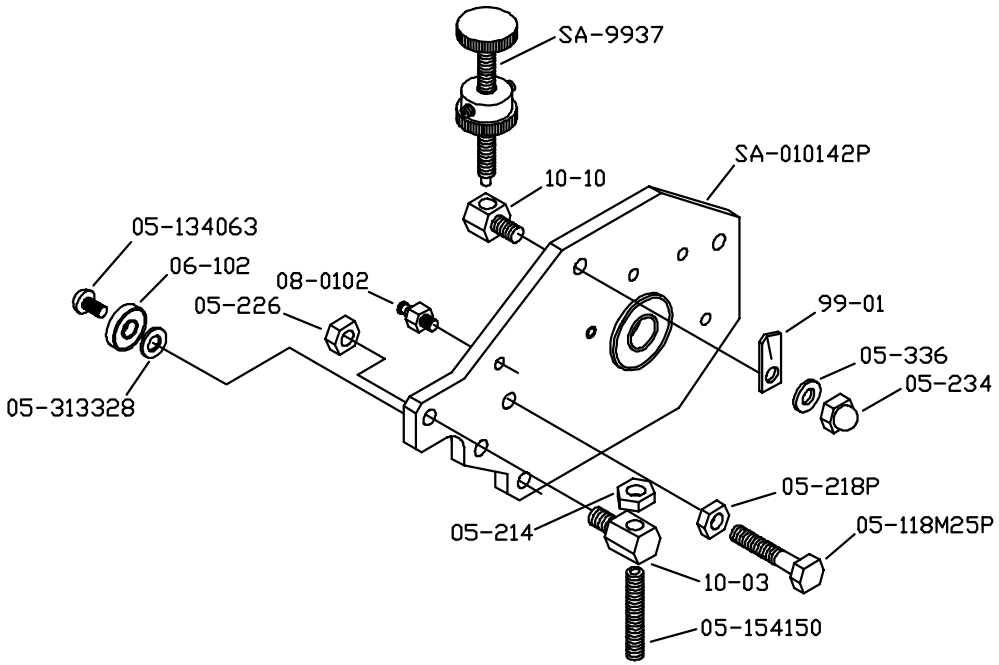
OILING AND GREASING THE DAMPENER

Place a small amount of grease on the gears once a month.

CRESTLINE® ALTRA™ SERIES
CLEANING & MAINTENANCE CHART

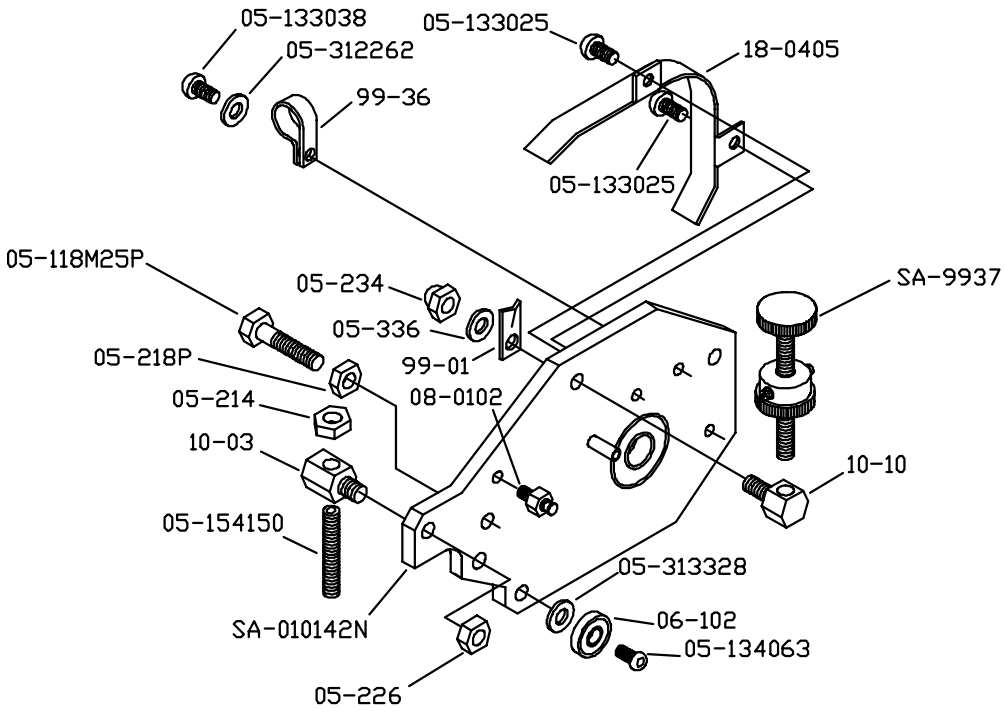
	Daily	Weekly	Bi-Weekly	Monthly
Wash Rollers	✓			
Deglaze Rollers				
Metal Plate Users			✓	
Silvermaster Plate Users			✓	
Electrostatic Plate Users		✓		
Grease Gears				✓
Inspect Ball Bearings				✓
Check Roller Pressures				✓
Check Roller Surfaces				✓

RYOBI 3302 OPS SIDE FRAME ASSEMBLY



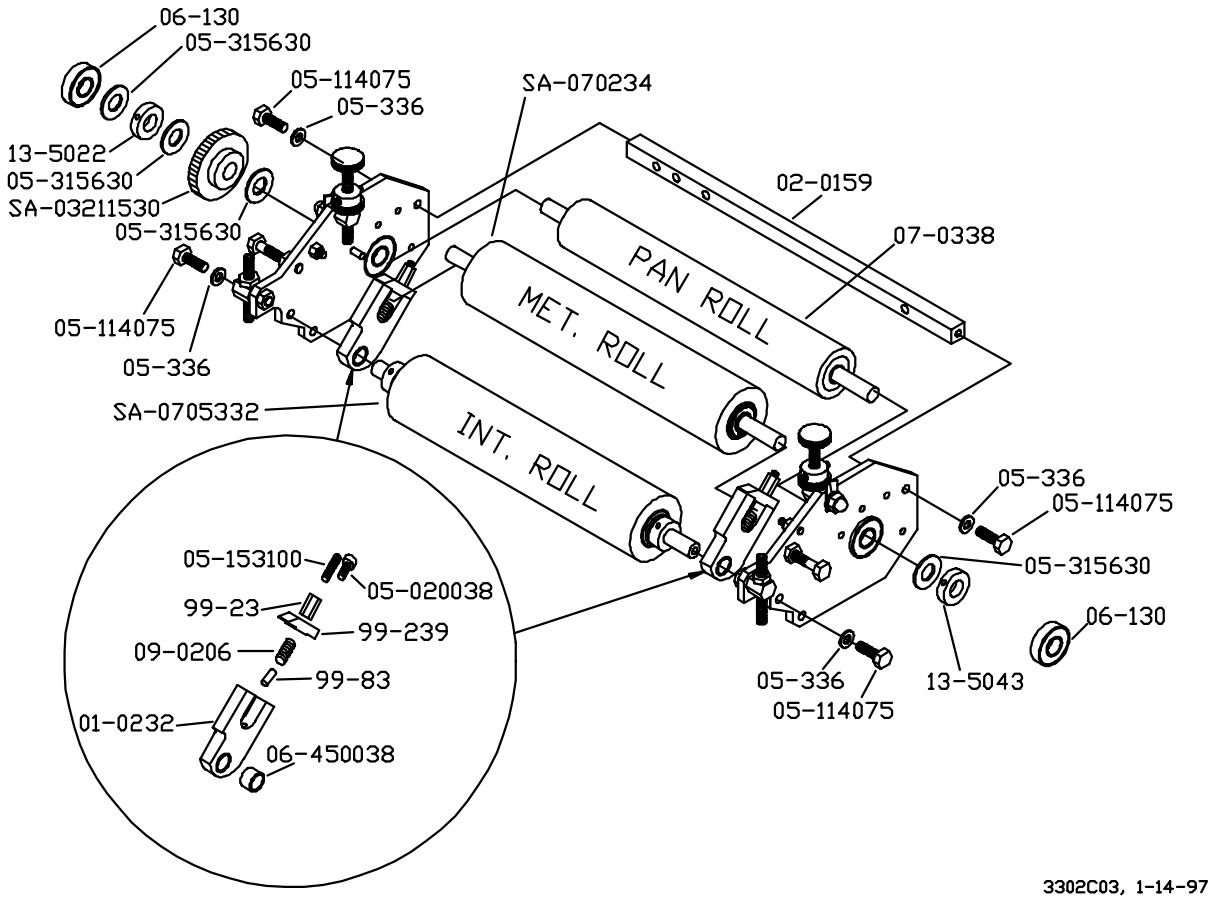
3302C01, 1-30-97

RYOBI 3302 NOPS SIDE FRAME ASSEMBLY



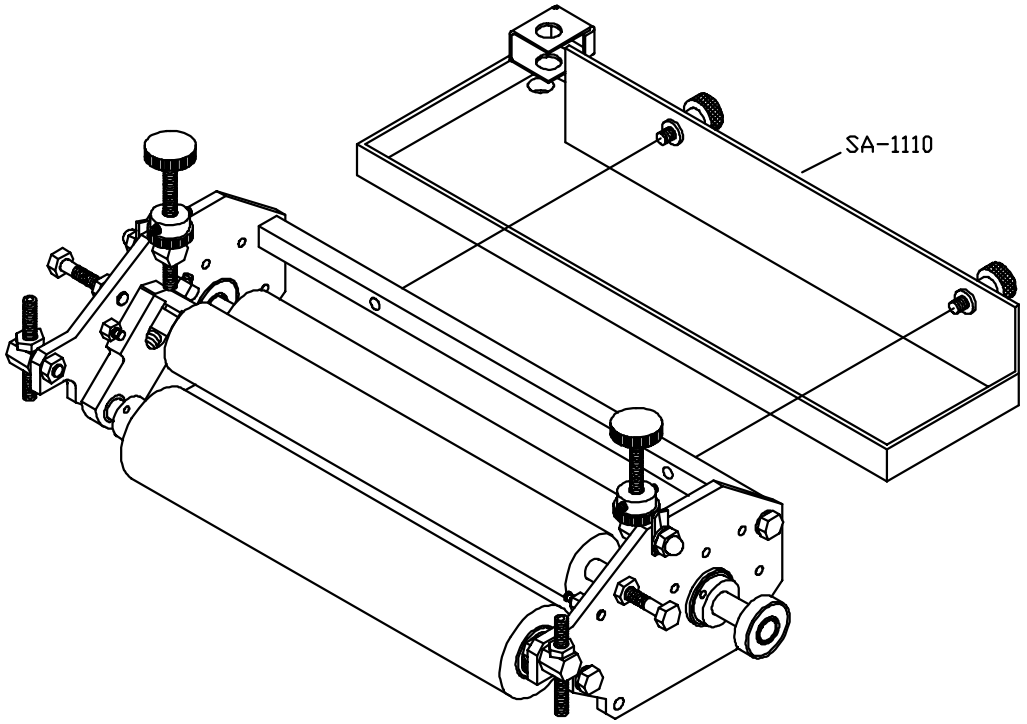
3302C02, 1-30-97

RYOBI 3302 DAMPENER ASSEMBLY



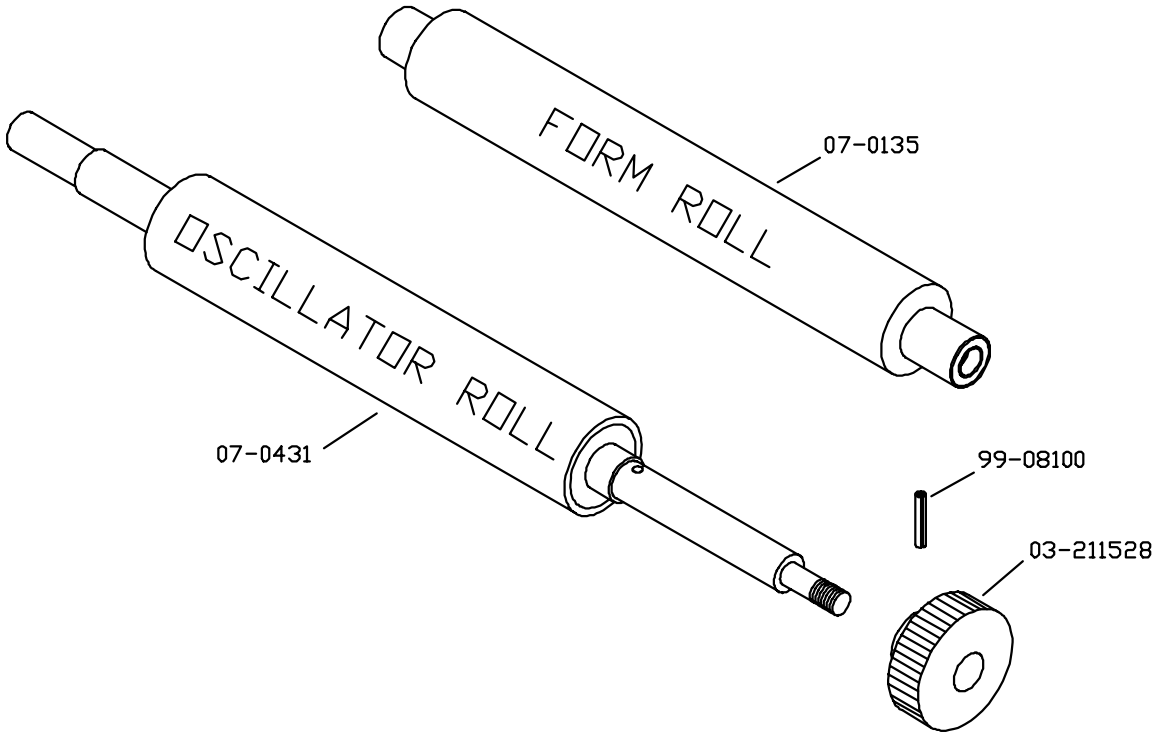
3302C03, 1-14-97

RYOBI 3302 WATER PAN ASSEMBLY



3302C04, 1-14-97

RYOBI 3302 FORM & OSCILLATOR ROLLER ASSY.'S



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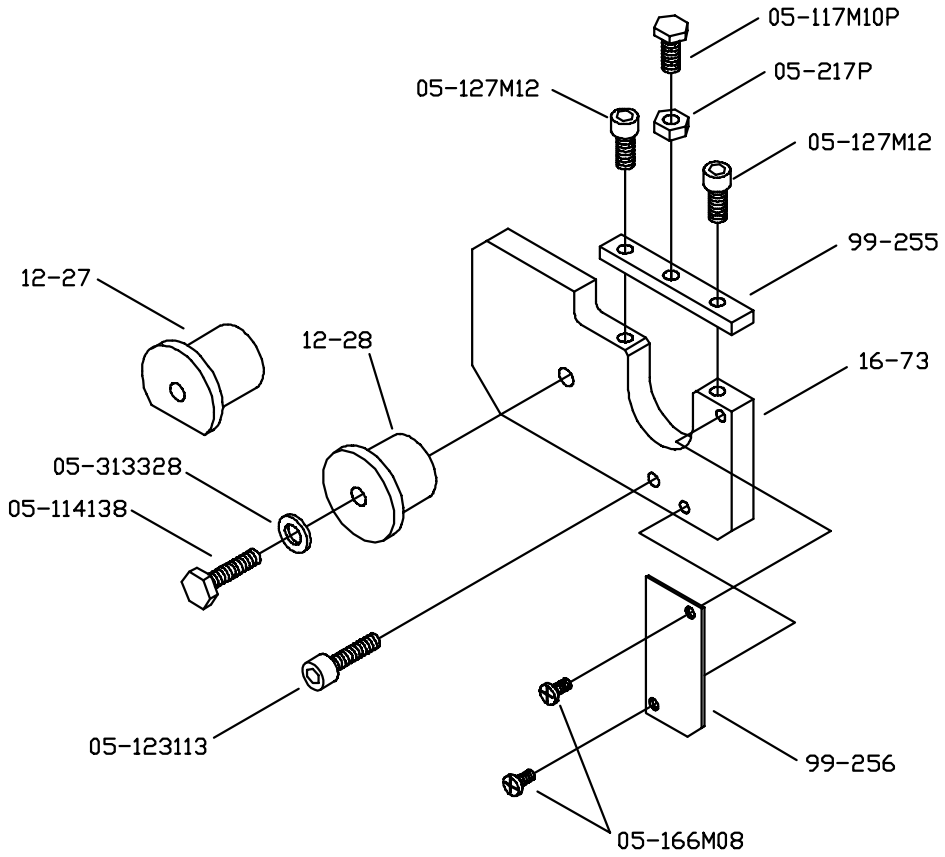
RYOBI 3302 OPS MOUNTING FRAME



3302C06, 1-14-97

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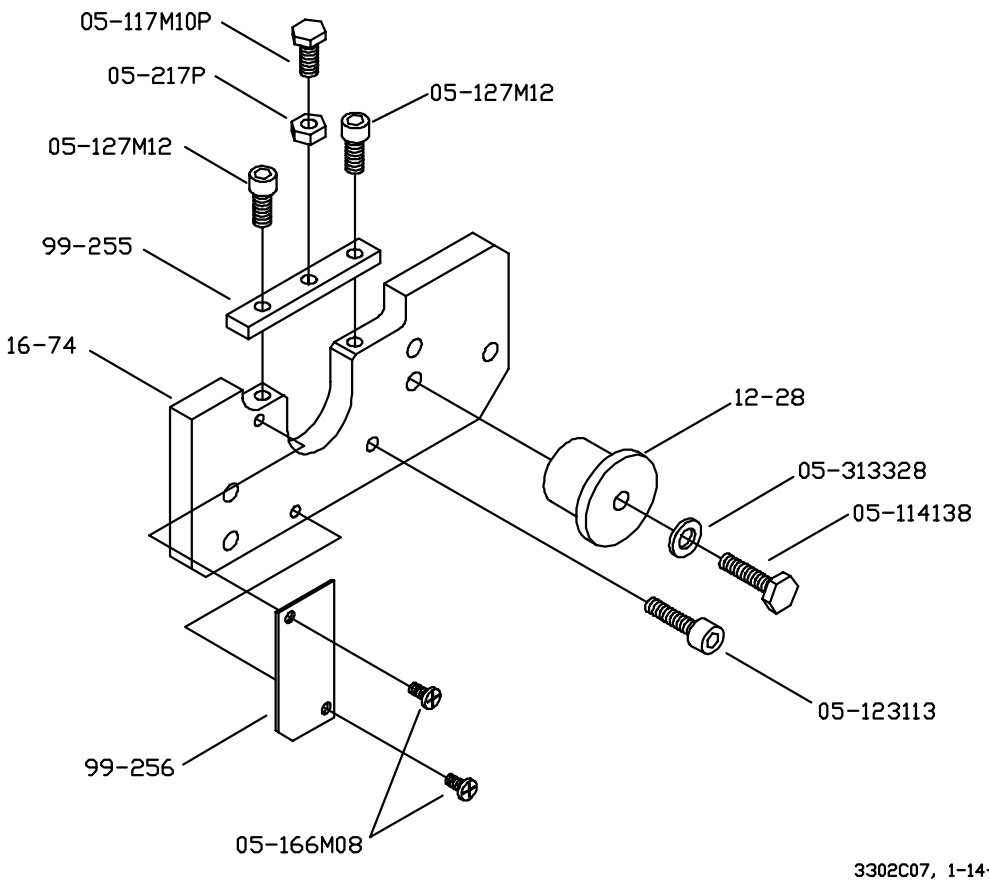
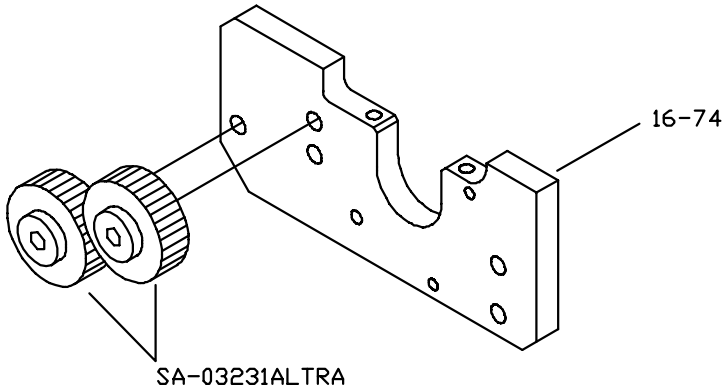


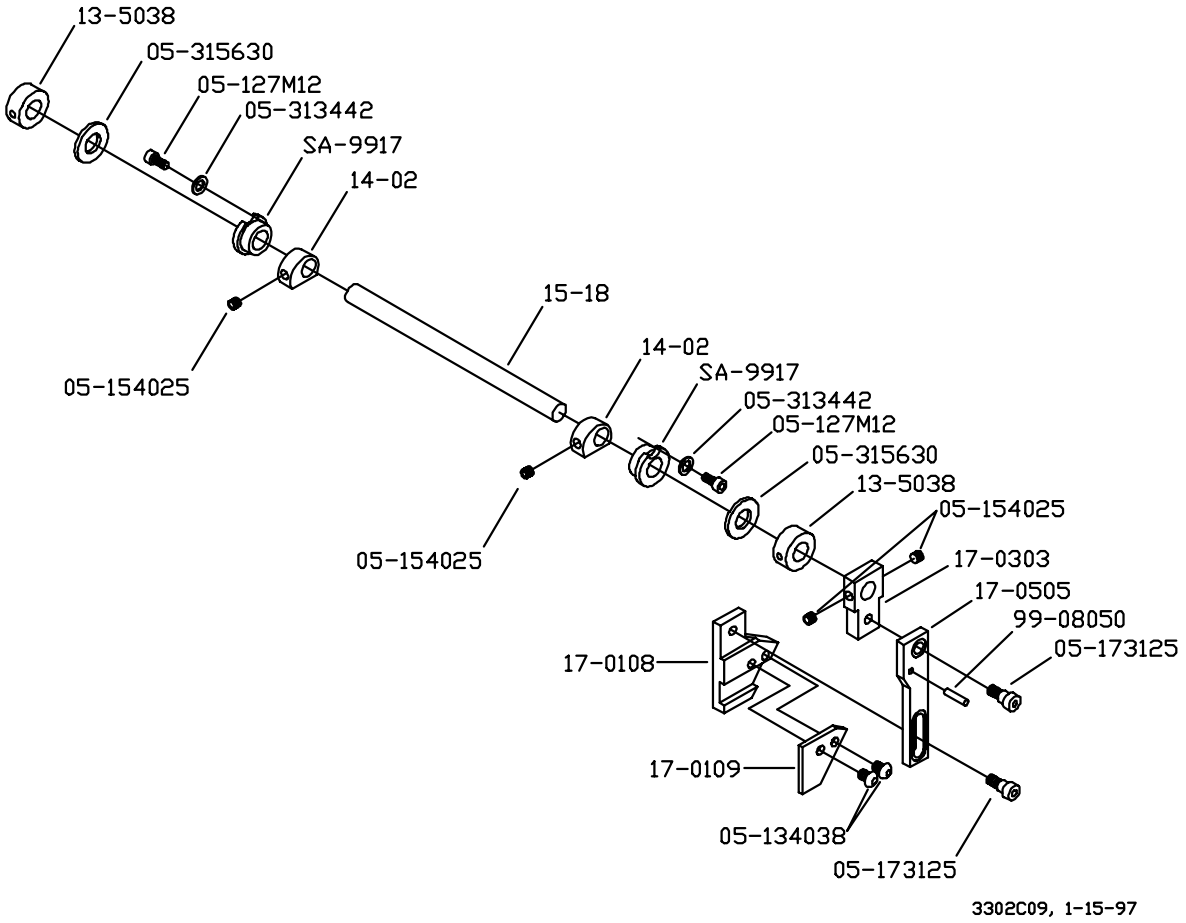
3302C07, 1-14-97

RYOBI 3302 IDLER GEARS

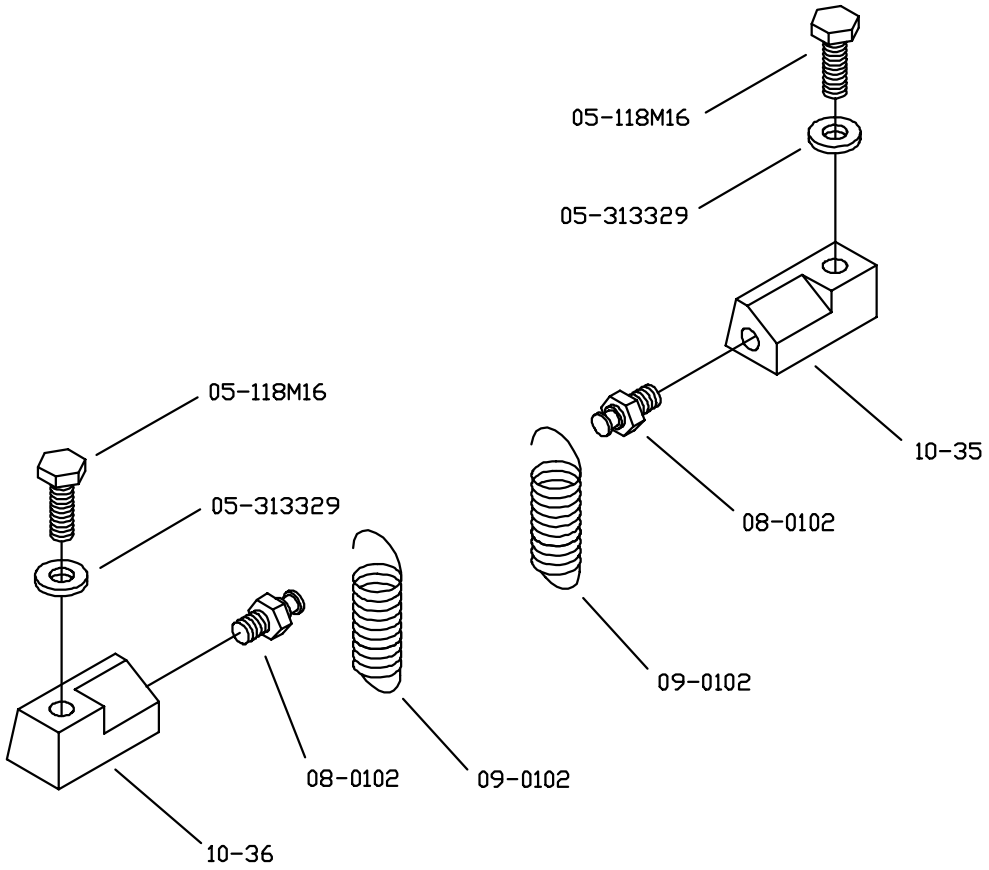


3302C08, 1-14-97

RYOBI 3302 ACTIVATION ASSEMBLY



RYOBI 3302 STRIPE ADJUST BLOCK ASSEMBLY



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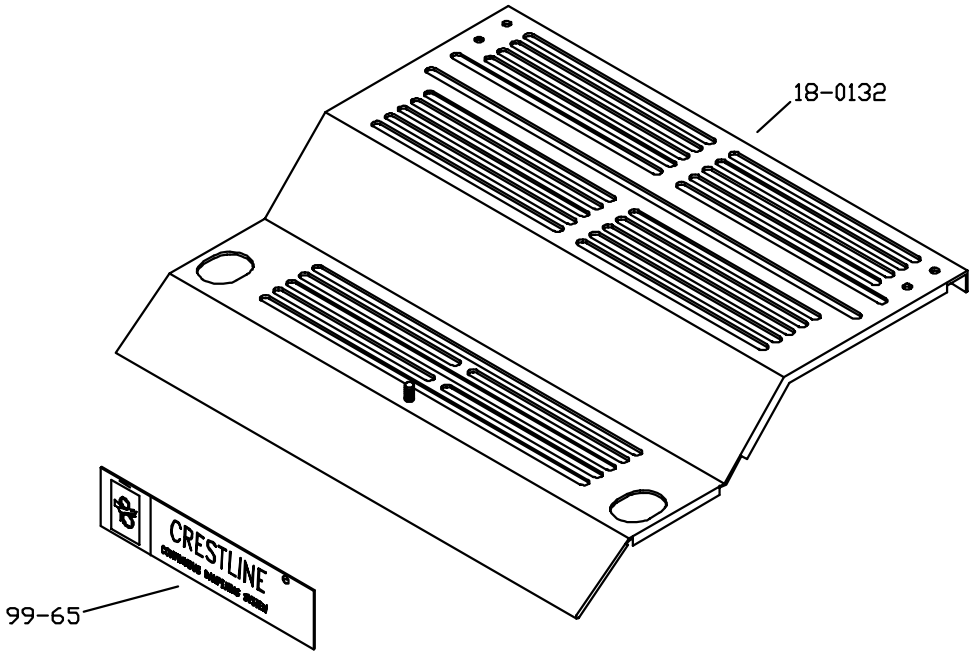
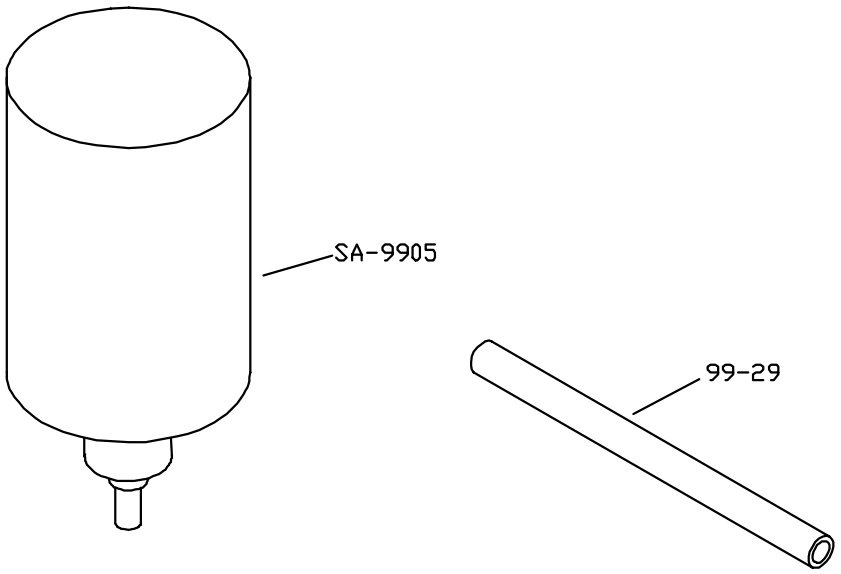
RY3320SC



3302C11, 3-6-97

RYOBI 3302 WATER BOTTLE/HOSE ASSEMBLY



3302C12, 1-16-97

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