

Crestline® Dampening System

Installation Instructions

Townsend T-51® Color Head For
Ryobi 2800, 3200, 3200MCD
Itek 960, 975, 985
Stationary & Swing Away® Models

ACCEL ®
Graphic Systems

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:

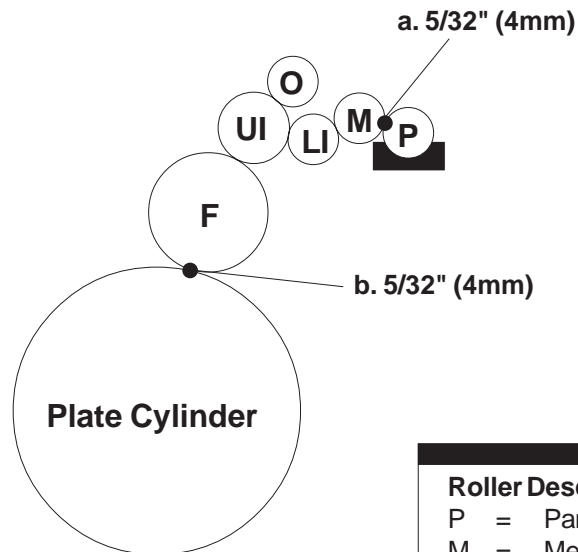
THE SERIAL NUMBER OF YOUR CRESTLINE® DAMPENER(S) IS:

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. Pan to Metering
- b. Form to Plate

Roller Description

- P = Pan
- M = Metering
- UI = Upper Intermediate
- LI = Lower Intermediate
- O = Oscillator
- F = Form

TERMINOLOGY

OPS = Operator's Side

NOPS = Non Operator's Side

TECHNICAL ASSISTANCE

For technical assistance during the installation, please contact:

ACCEL GRAPHIC SYSTEMS

11103 Indian Trail

Dallas, TX 75229

PHONE (972) 484-6808

FAX (800) 365-6510

E-Mail accel@dallas.net

WEB SITE www.accelgraphicsystems.com

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

GENERAL INFORMATION

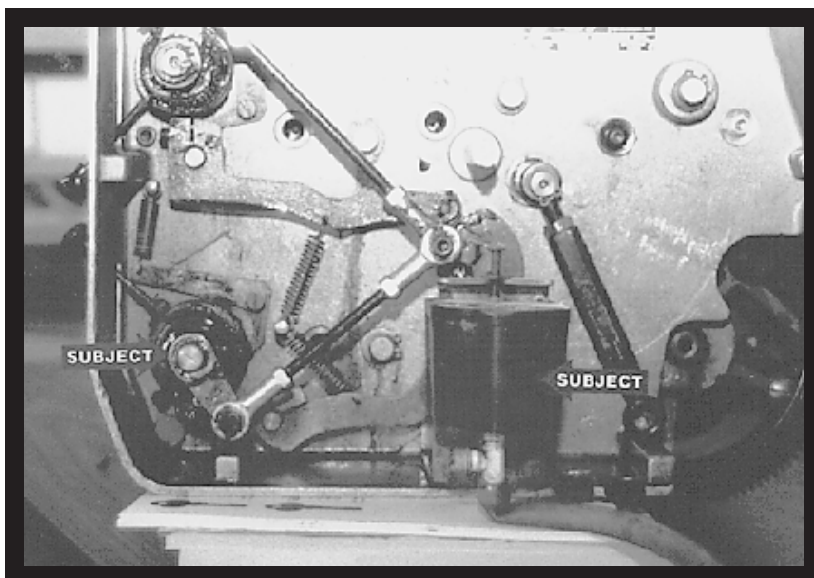
REQUIRED TOOLS

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.



DISASSEMBLY

1

Remove water form, plastic water oscillator and water ductor from T-Head. Remove side covers from both frames.

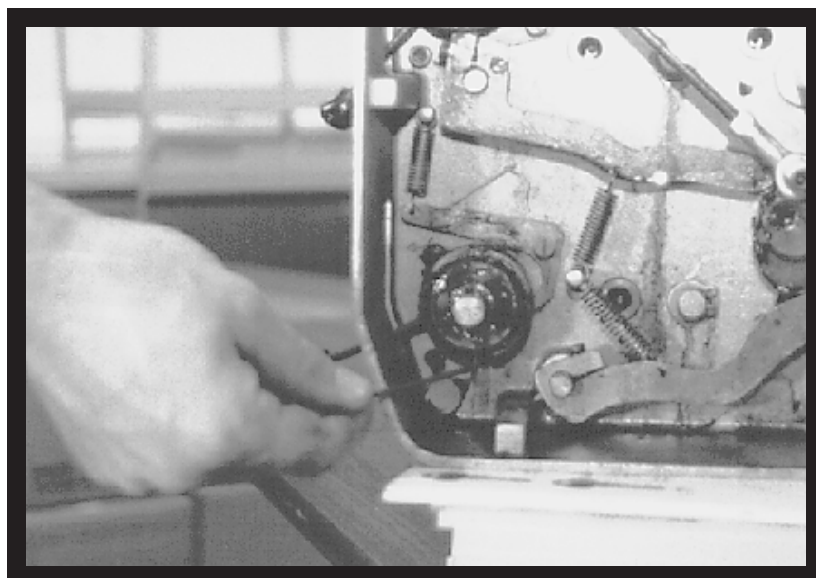
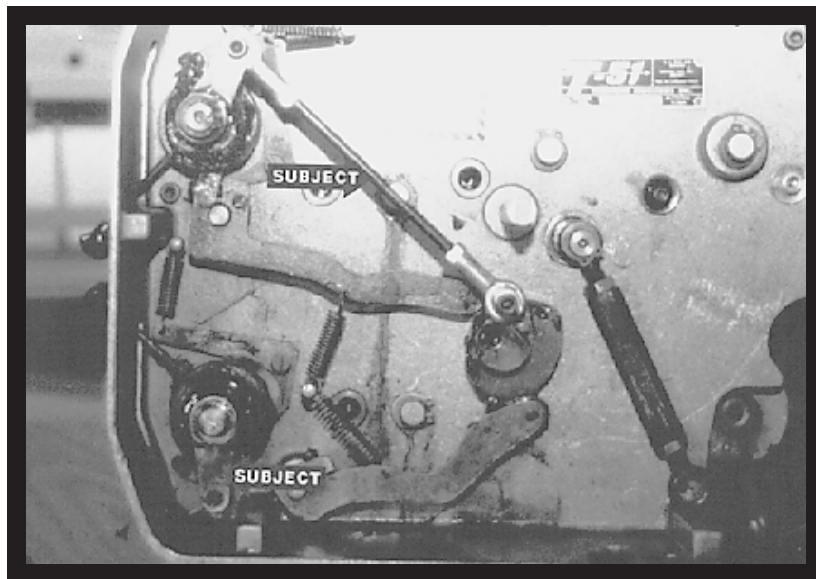
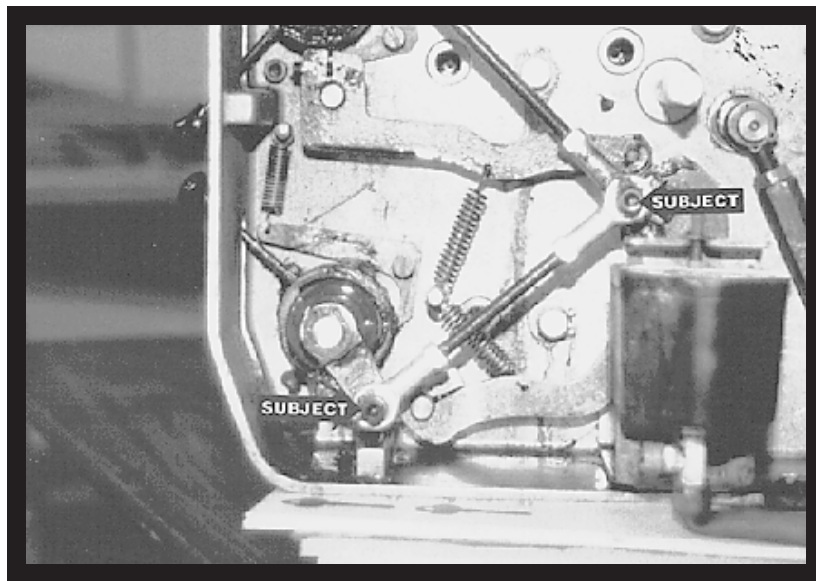
2

Disconnect water hose and remove water pan.

3

Remove water filler assembly and save for reinstallation (right hand subject arrow). Remove snap ring from pan roller ratchet assembly (left hand subject arrow).

7



DISASSEMBLY

4

Remove water pan roller connecting link by removing 2 Allen head cap screws (subject arrow).

5

Reconnect ink fountain roller link in original position (upper subject arrow). Use the spacer provided to take the place of the water pan roller link removed in previous step.

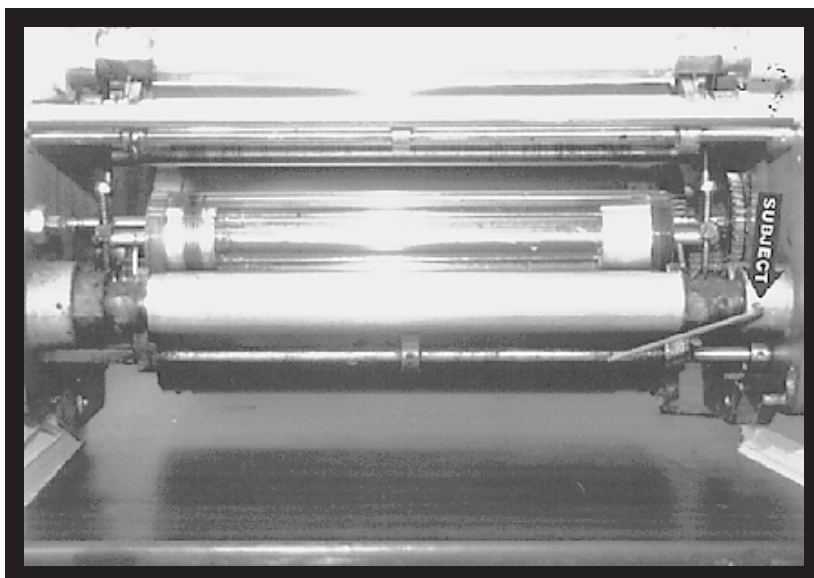
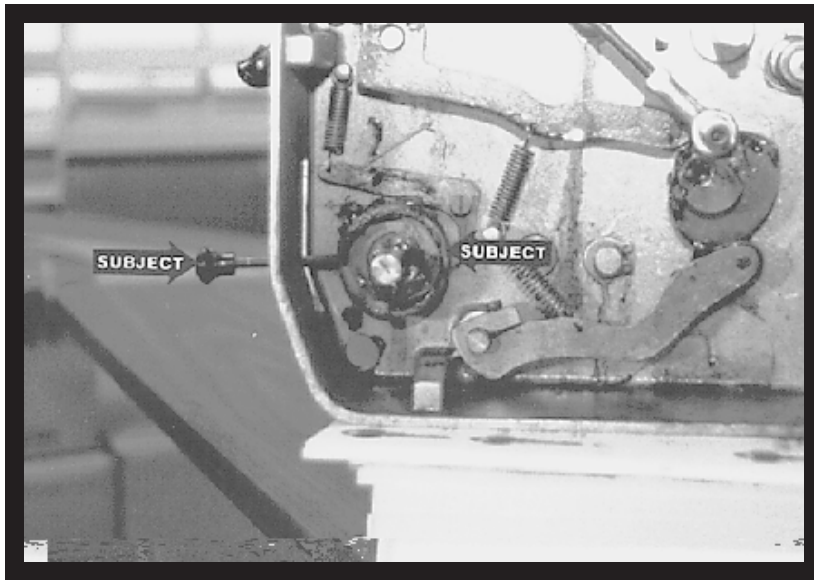
NOTE: It is possible to position ink fountain roller link in the wrong position when reconnecting. Please observe photo for proper connection.

Remove arm (lower subject arrow) on water pan roller mechanism.

6

Remove pan roller ratchet wheel by positioning the wheel to access the set screw from underneath.

9



DISASSEMBLY

7

Remove water adjustment lever by unscrewing (left hand subject arrow). Then pull remainder of ratchet assembly off from the shaft of the pan roller (right hand subject arrow).

8

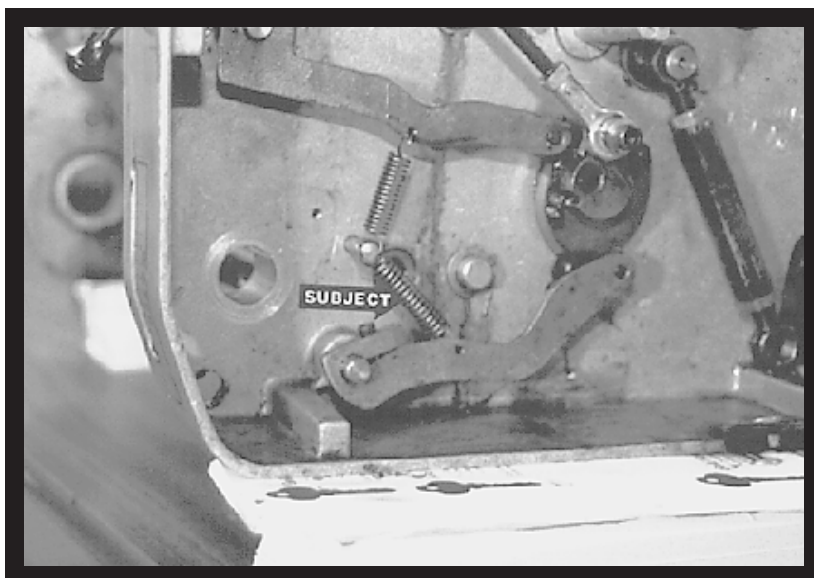
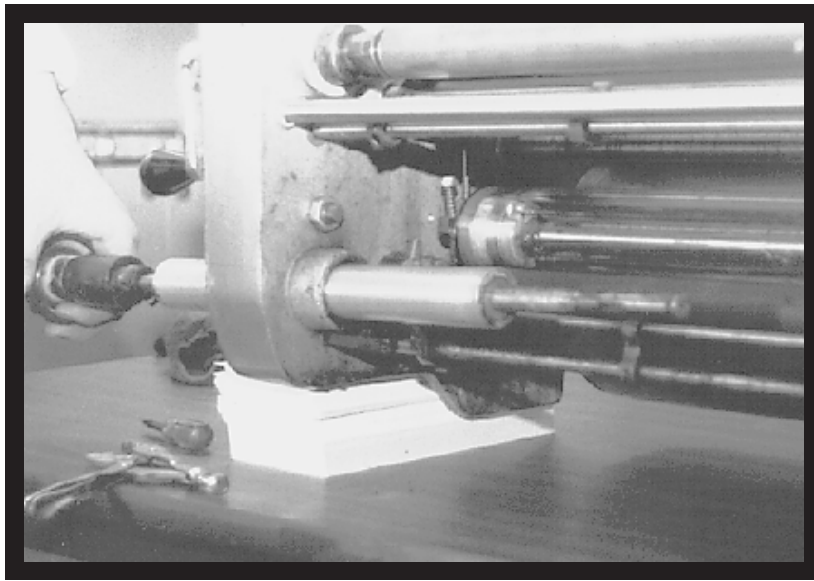
Remove spring loaded pawl (subject arrow) from T-head frame.

9

Remove pan roller end bushings by removing the set screws in either end of the casting as shown. Save set screws for reinstallation.

NOTE: Bushing may need to be tapped out with a hammer and punch.

11



DISASSEMBLY

10

Remove pan roller assembly by pulling out from operator side.

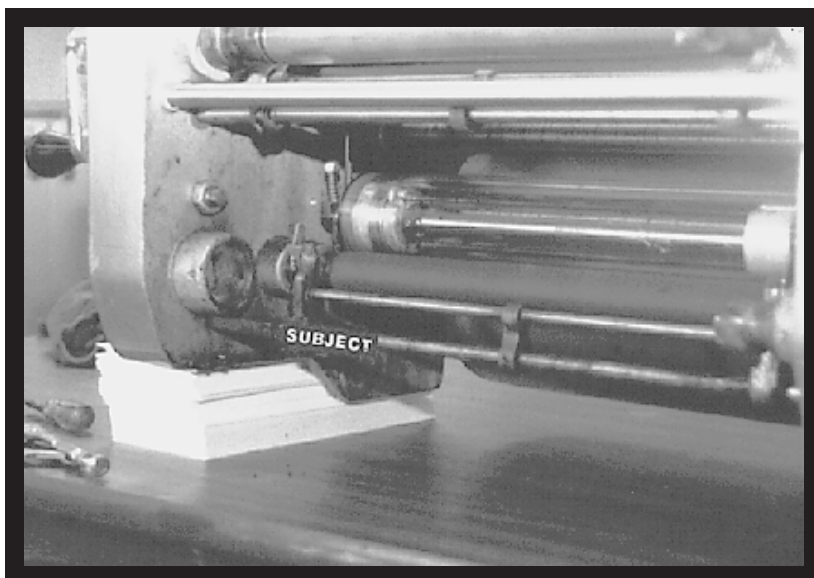
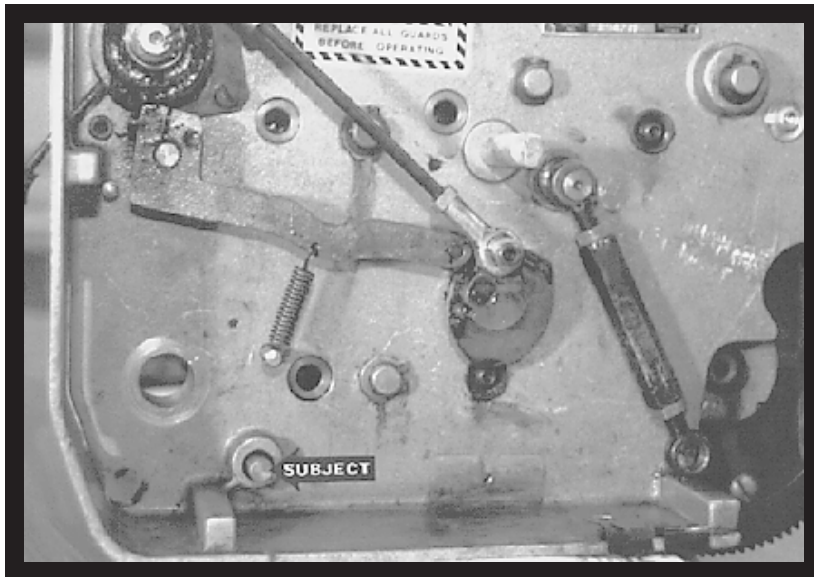
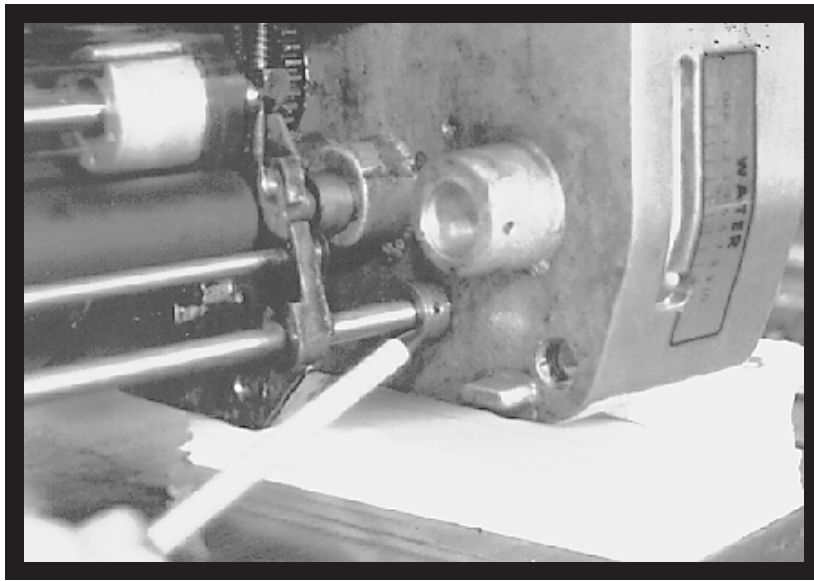
11

After pan roller and bushings are removed, Thoroughly clean bushing hole and surrounding areas of the side frame castings.

12

Remove spring (subject arrow) and loosen cap head Allen screw enough to remove arm from water ductor shaft.

13



DISASSEMBLY

13

Loosen set collar on water ductor cross shaft (pointer). Slide ductor shaft all the way NOPS. Use provided punch and remove ductor shaft oilite bushing on OPS. You will need to punch the bushing from the outside in. Slide ductor shaft backward toward OPS through hole that contained the removed bushing until the NOPS side of the shaft clears the side frame. This will allow you to remove the water ductor shaft assembly from the press.

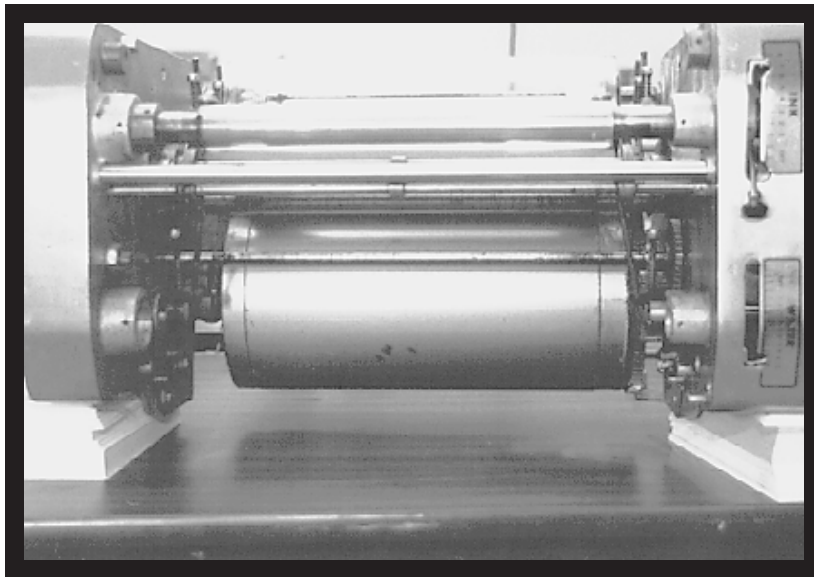
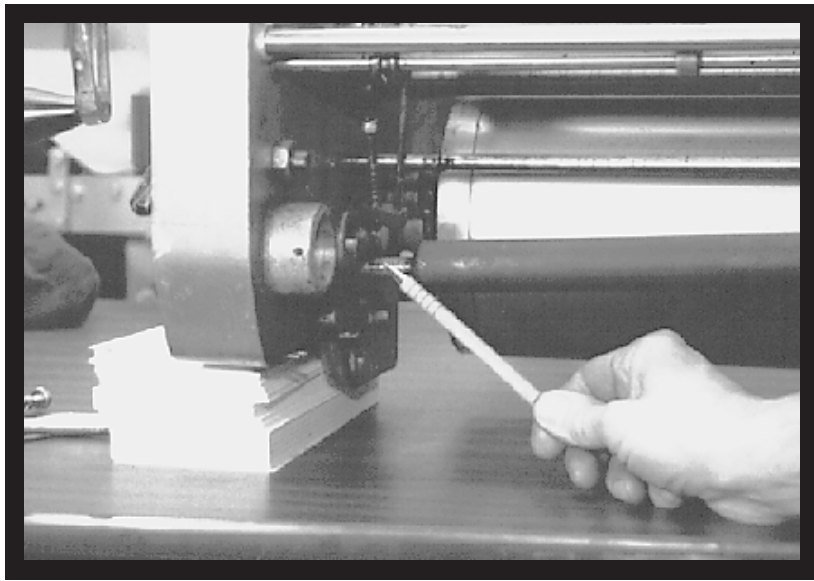
14

Remove water ductor bushing on NOPS using the punch (subject arrow) used in previous step. Punch the bushing from the outside in.

15

Remove water pan stop (subject arrow) by removing Allen head screw.

15

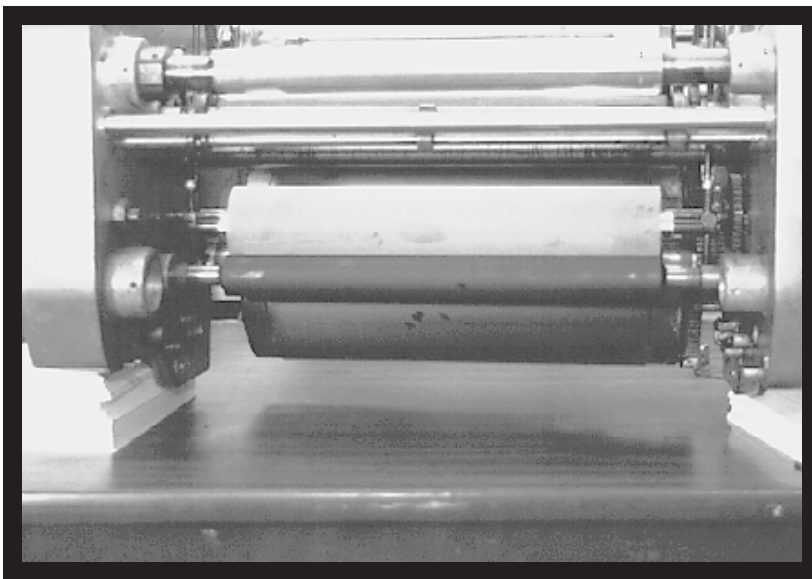
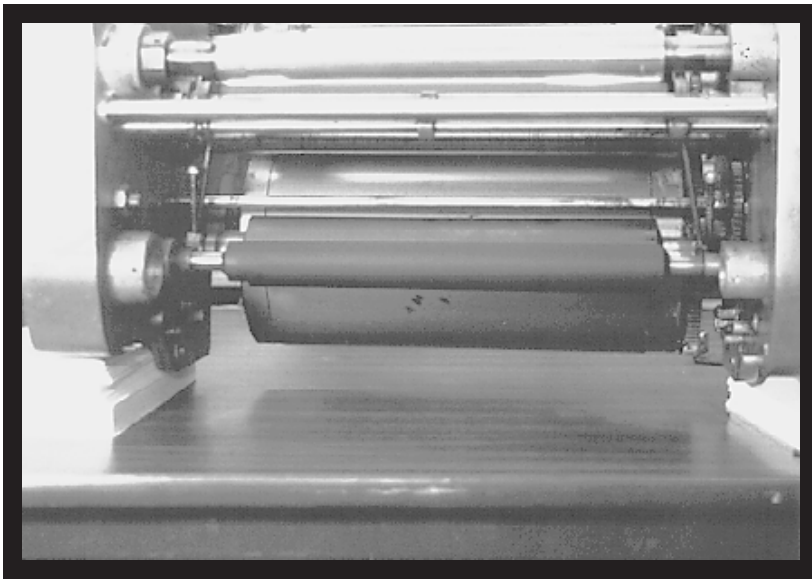
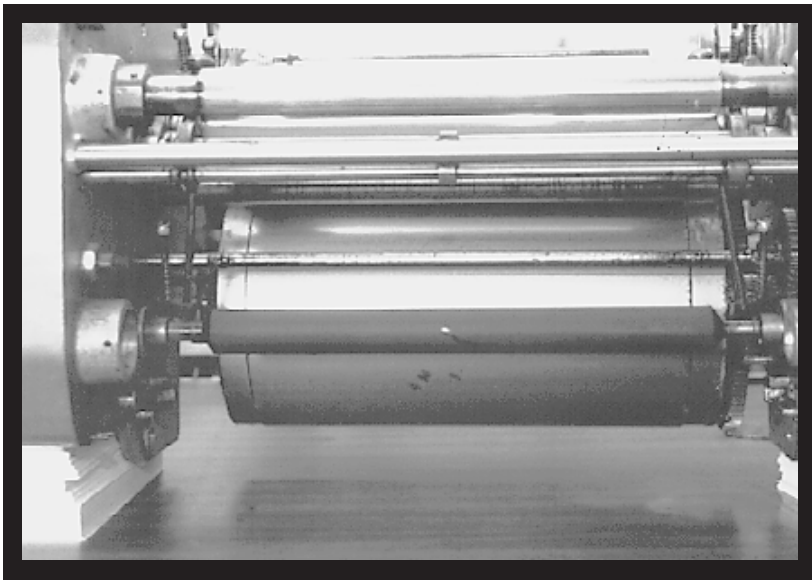


16

Remove water transfer roller by loosening the set screw on the OPS only of the side frame caster (pointer). Slide ball bearing housing towards the outside operator side frame. This will allow you to remove the roller.

17

This is how the T-Head should look after everything has been removed.



INSTALLATION

1

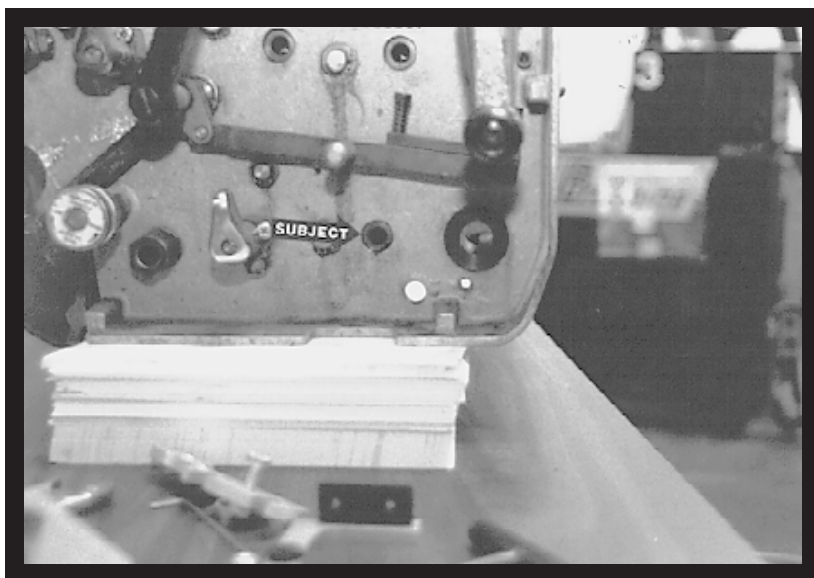
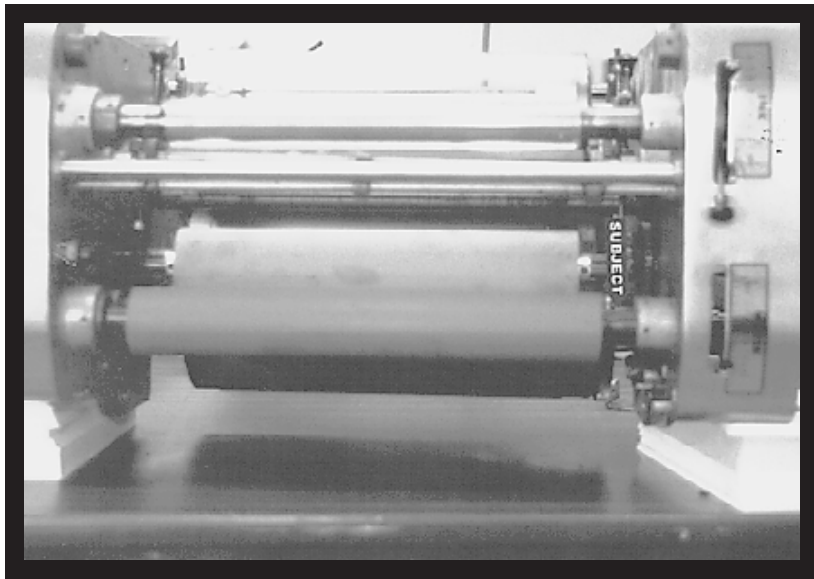
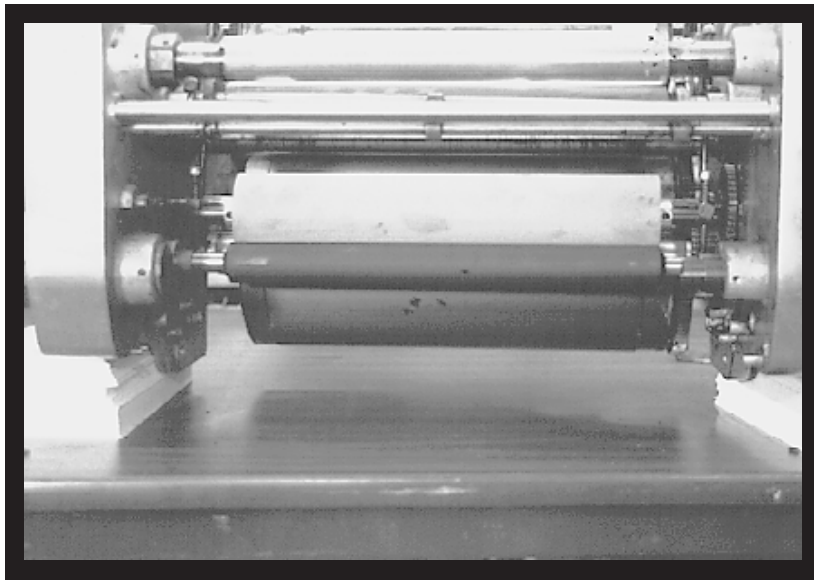
Install new lower intermediate provided. Before tightening set screw, make sure transfer roller is centered relative to water form roller. If necessary, loosen the NOPS set screw that holds the ball bearing housing, reposition the transfer roller, and retighten both OPS & NOPS set screws after butting housings against transfer roller. Make sure roller spins freely.

2

Install new water form roller using water form shaft assembly removed and saved during disassembly.

3

Install upper intermediate roller provided in place of plastic oscillating roller removed in the first step of disassembly. Loosen set collars on either side of the roller and center rubber roller relative to transfer roller installed in the previous step.



INSTALLATION

4

Install spools in water pan roller housing. The large spool goes on the OPS and the smaller on the NOPS. **NOTE: If there are burrs or sharp edges inside the side frame casting, use a rat tailed file or emery cloth to smooth out. DO NOT FORCE THE SPOOLS INTO THE HOLES if the burrs are present.**

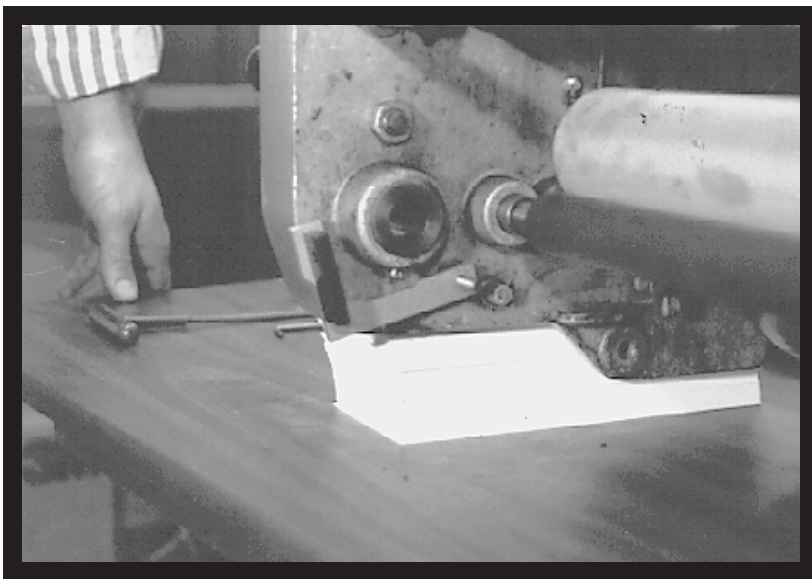
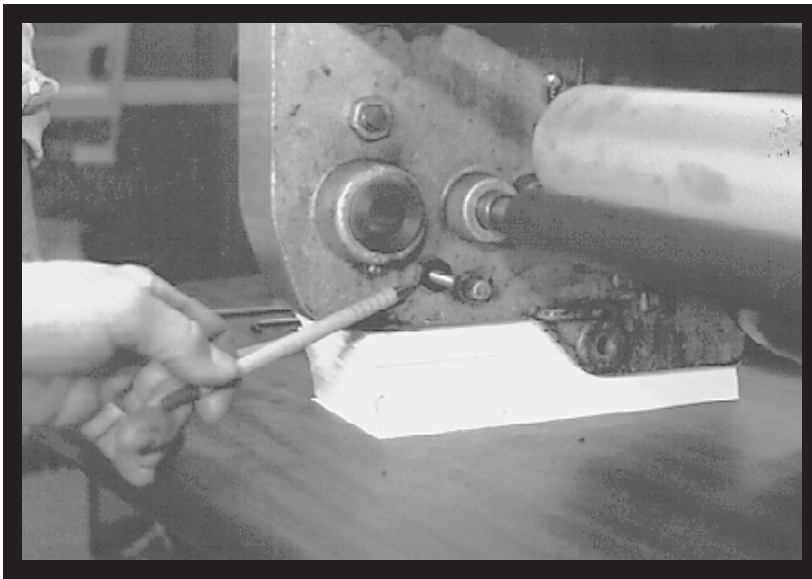
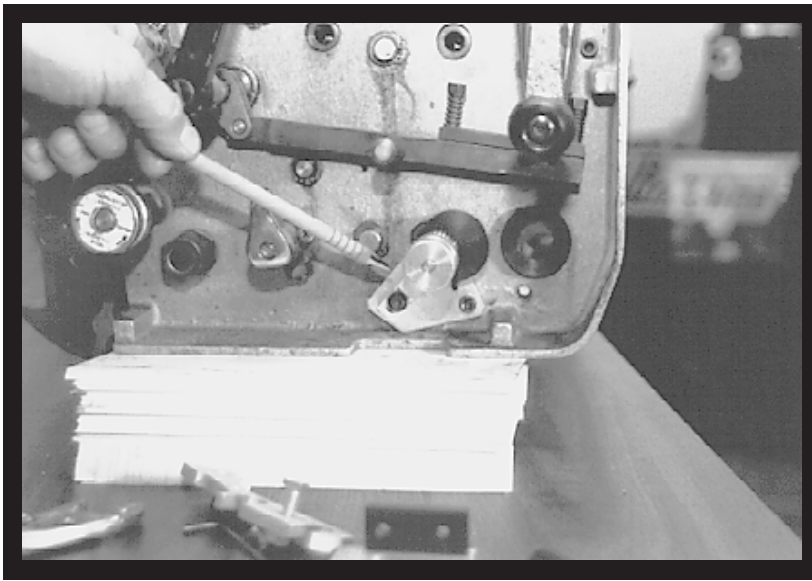
Flange on larger spool (OPS) goes to the outside of the frame. The undercut end of the smaller spool (NOPS) will point toward the inside of the frame. Reinstall set screws removed in disassembly step 11 and on OPS side spool only, push spool all the way in and tighten set screw. **DO NOT TIGHTEN NOPS AT THIS TIME.**

5

Take new pan roller and insert new pan roller shaft through bushing on OPS side and then through roller until the aluminum arm stops against the flanged OPS bushing. This is similar to installing water or ink form roller. Then slide NOPS bushing until it stops against roller on NOPS side (subject arrow). Tighten set screw in side frame housing to hold bushing in place. After this is set, temporarily remove the shaft and pan roller from the machine.

6

Install spool into hole in OPS frame where oilite bushing removed in disassembly step #13 was (subject arrow).



INSTALLATION

7

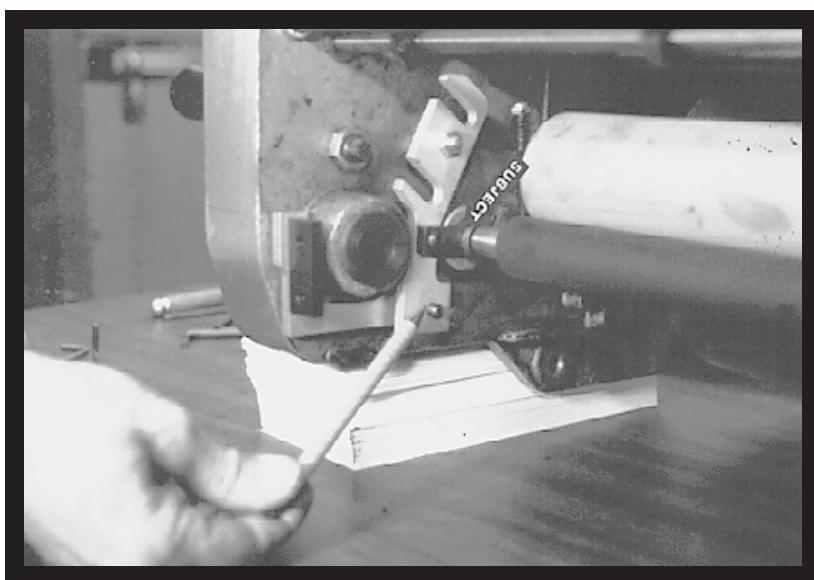
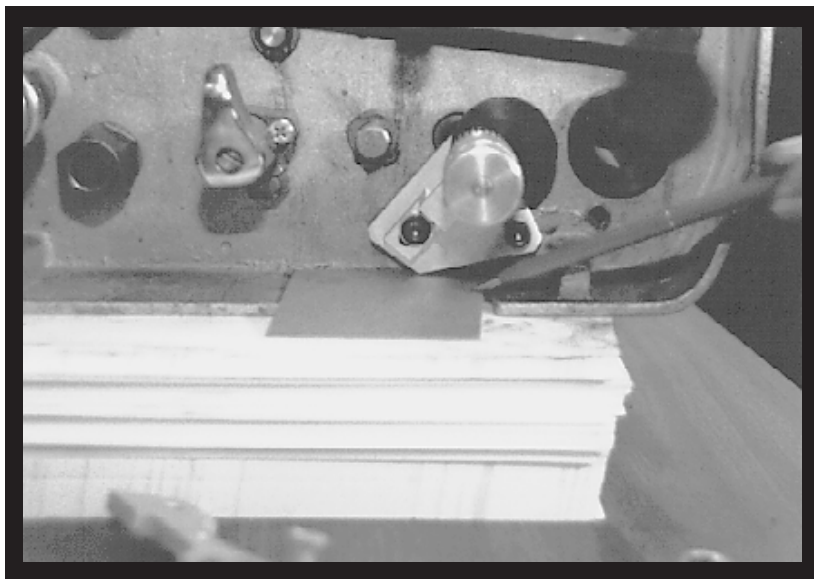
Install clicker assembly as shown. Slip cap head Allen screw through the clicker assembly and spool installed in previous step.

8

On inside of OPS frame, slip a black washer over screw installed in previous step.

9

Slide the OPS "L" shaped water pan mounting block over screw installed in step 7. Spin the hex nut over the screw and finger tighten against water pan block.





10

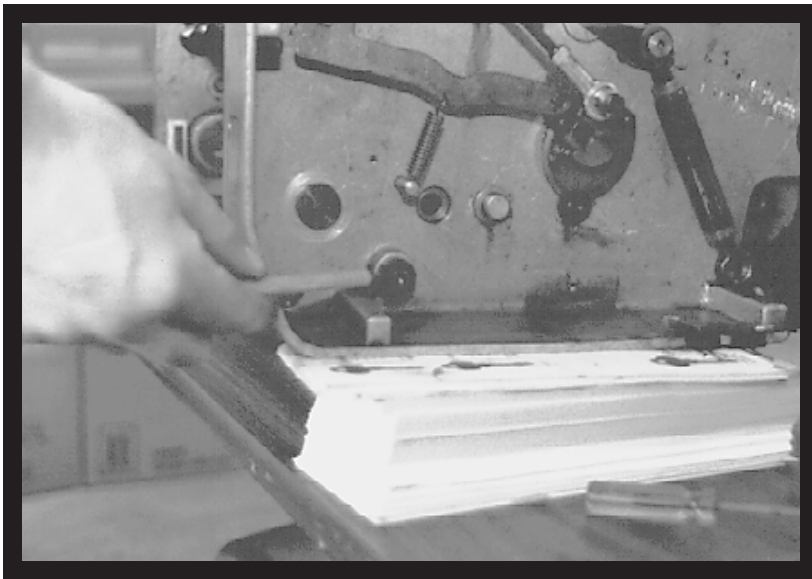
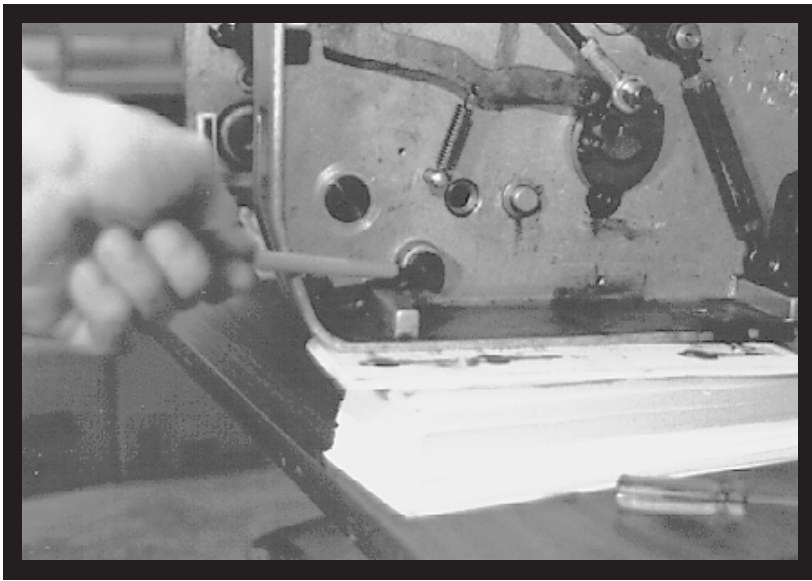
Move the water pan block until it is parallel with the bottom of the T-51 side frame casting.

11

Now fully tighten the hex nut making sure the clicker assembly in the outside of frame tightens flat against the frame casting. There is a small radius on the outside of the frame casting that can cause the clicker assembly to twist. If it helps, insert 2-3 pieces of chip board underneath clicker plate assembly and horizontal portion of frame casting (subject arrow).

12

Slip the OPS side dual slot hanger (with small mounting hole) over the bolt and against the nut installed in previous step. Push arm forward until black block rests against transfer roller bearing housing (subject arrow). Fully tighten nut against the hanger.



INSTALLATION

13

Insert flanged spool (flange to outside) into the hole that previously contained the water ductor shaft bushing on NOPS.

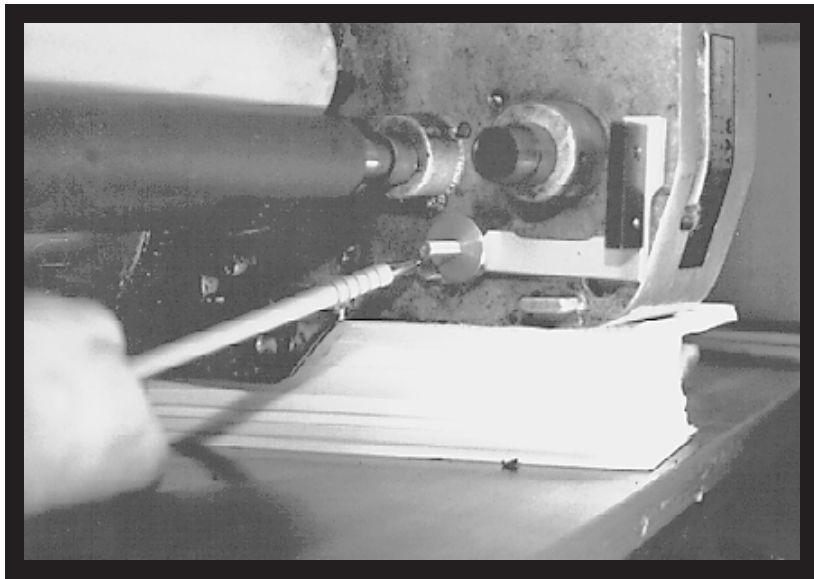
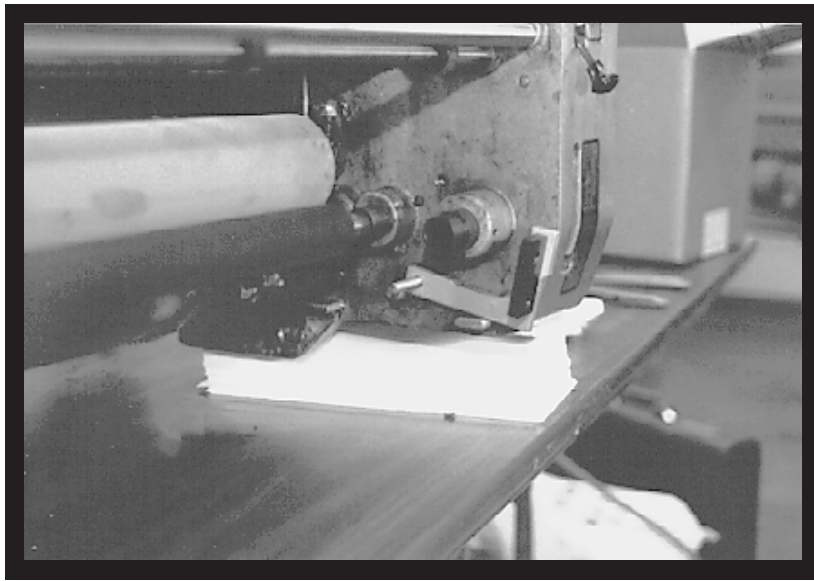
14

Insert cap head Allen bolt through the flanged side of the spool.

15

On the inside of the NOPS side frame, slip black washer over the bolt installed in the previous step.

27



INSTALLATION

16

Slip the "L" shaped NOPS water pan mounting block over the bolt and washer previously installed.

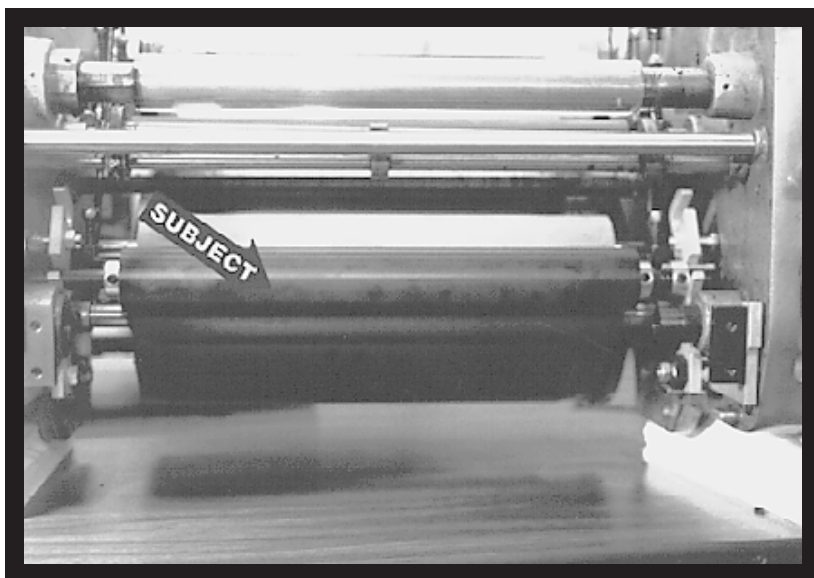
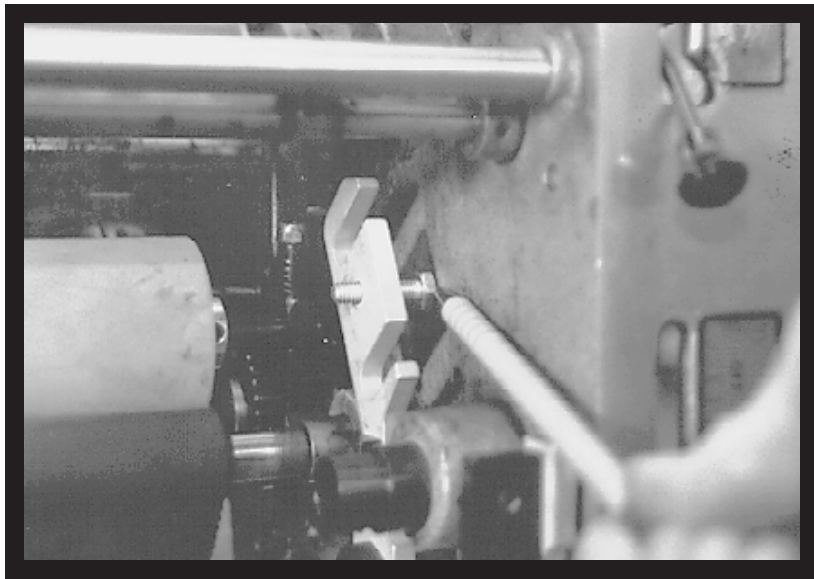
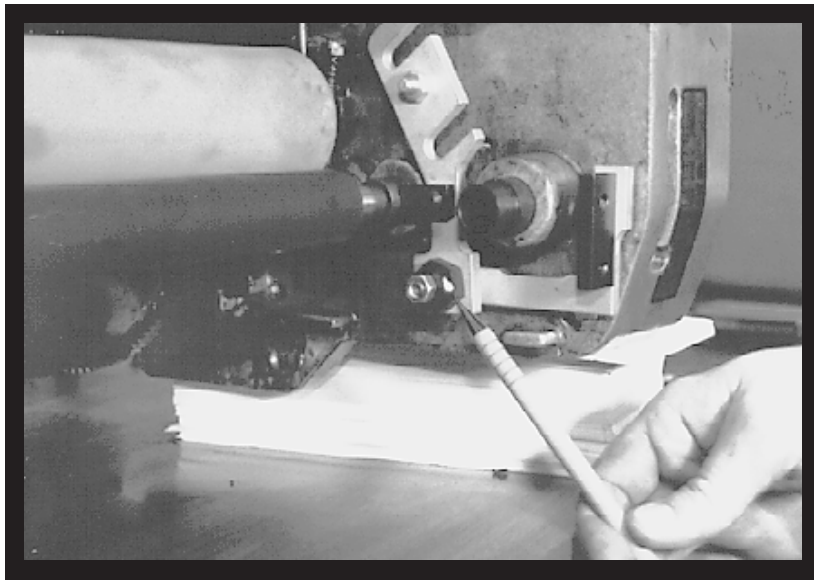
17

Spin threaded spacer (provided) onto the bolt and against "L" shaped block. A flat portion of the spacer will pass beside a pin protruding from the side frame. Adjust the water pan mounting block so that it is level with the bottom of the NOPS side frame. Fully tighten bolt.

18

Slip the hexagonal eccentric through the large hole in the NOPS dual slot hanger and slide this assembly over the bolt installed in the previous step. Spin a nut onto the end of the bolt and finger tighten against the eccentric.

29



19

Push hanger forward until black block rests against the transfer roller bearing housing. Adjust eccentric until the high side of the lobe faces directly out of the machine. (There will be a yellow dot denoting this side of the cam). The flat side will be approximately parallel with the edge of the dual slot hanger. Snug nut against eccentric with wrench but **DO NOT FULLY TIGHTEN AT THIS TIME.**

20

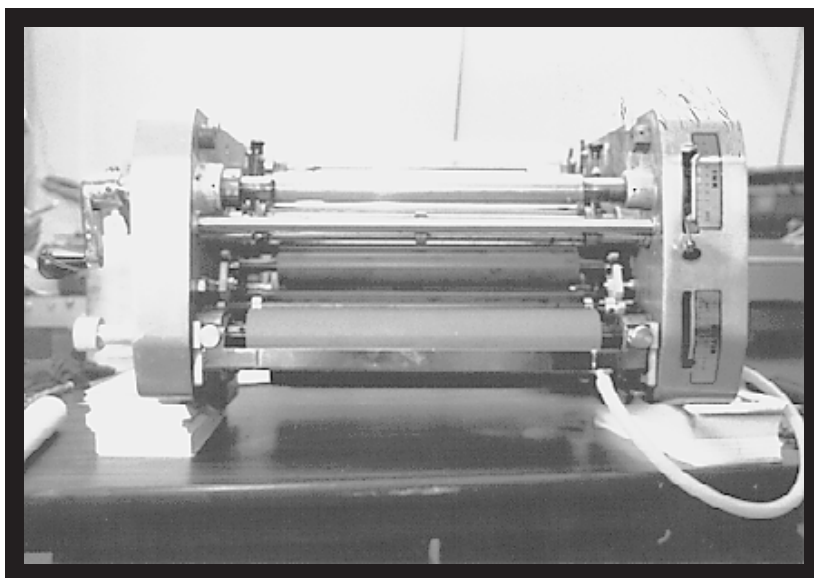
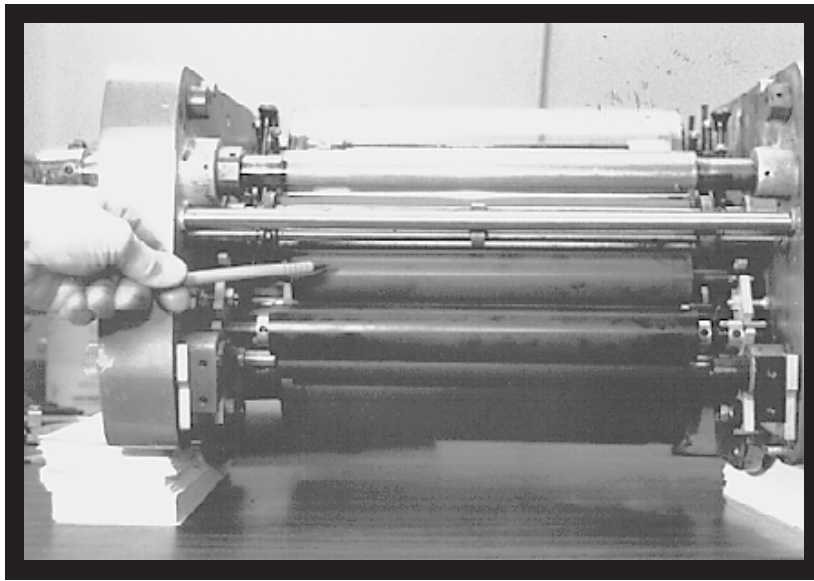
On each dual slot hanger you will find bolts whose heads point out toward each frame. Remove nuts from these bolts. Turn each bolt with fingers until its head contacts the frame. **DO NOT apply unnecessary pressure and cause hanger to warp.** Reinstall lock nuts and tighten.

21

Install metering roller onto lower slot of hanger.

IF SHAFT HAS 4 COLLARS, loosen all collars and center shaft relative to hanger brackets. Push standard outside collar against OPS hanger and tighten. Push roll pin collar against NOPS hanger and tighten. Center metering roller relative to transfer roller and tighten inner collars against metering roller.

IF SHAFT HAS 3 COLLARS, loosen all collars and slide shaft all the way to OPS. Next push collar containing roll pin against NOPS hanger and tighten. Center the metering roller relative to transfer roller and tighten remaining collars against metering roller.



22

Install oscillator into upper slot in hangers with the set screws in the black collars facing up. Adjust collars so that there is an equal distance on both sides between the inside of the collar and the edge of the scroll shaft. You should have no more than .020 inches of end play. This will prevent wear on the hanger.

23

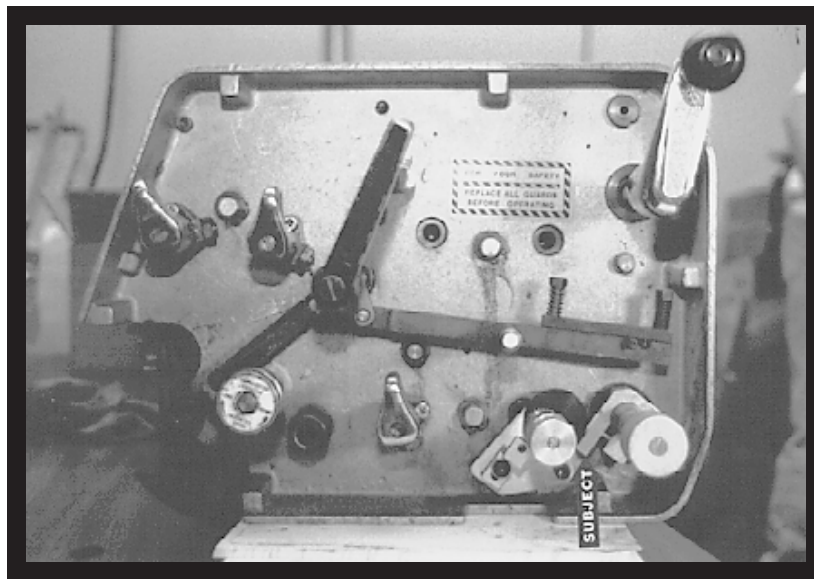
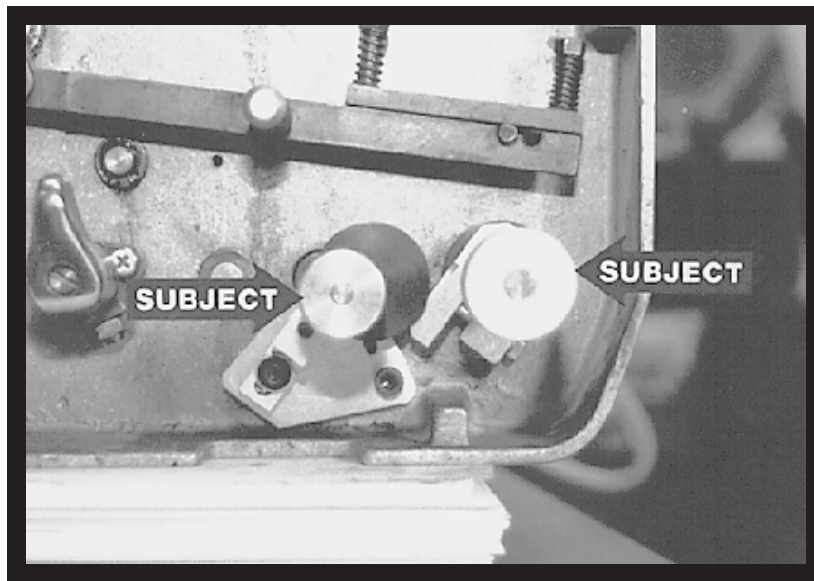
Reinstall water filler removed in disassembly step 3.

24

Reinstall pan roller and shaft and bolt up the water pan. Install hose and cut to desired length (usually about 14").

YOU ARE NOW READY TO MAKE FINAL ADJUSTMENTS.

33



FINAL ADJUSTMENTS

1

PAN ROLLER PARALLEL ADJUSTMENT

Loosen lock knob and rotate ratchet mechanism clockwise until the black eccentric stops against the pin, then tighten knob (left hand subject arrow). Next, slowly rotate pan roll shaft (right hand subject arrow) counterclockwise while watching how the gap between the pan roller and metering roller closes. If one end of the pan roller contacts the metering roller before the other, then the pan roller must be paralleled to the metering roller. To do this, adjust the black eccentric (with yellow dot) on the hanger bracket. Turning the eccentric clockwise will lower the metering roller on the NOPS, turning it counterclockwise will raise it. Always remember to keep the hanger bracket pushed all the way against the transfer roller bearing housing when adjusting eccentric. After approximate parallel has been obtained, tighten nut against eccentric.

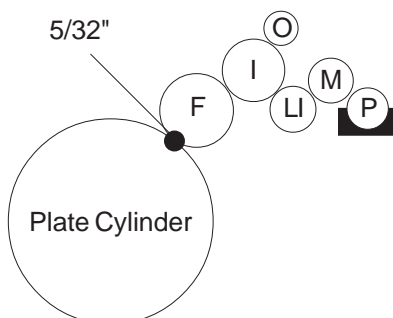
2

Turn the pan roller shaft counterclockwise until you can feel pressure being applied between the pan and metering rollers. While holding the roller in this position, loosen aluminum arm on the pan roller shaft and push against the eccentric on the ratchet mechanism. Make sure the cutout on the arm fits behind the flange of the ratchet eccentric. In this position, retighten bolt to clamp arm to pan roller shaft.

3

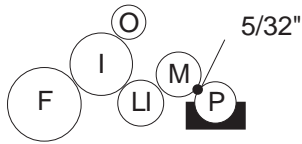
FORM ROLLER TO PLATE CYLINDER PRESSURE

Ink up the T-51 system. Apply a small amount of ink directly to the dampener oscillator. Idle the press for about 1 minute while watching roller operation in the dampening system. If everything appears to be normal, proceed to setting the stripe from the water form roller to the plate. This is done in the exact same manner as prior to installing Crestline. The stripe should measure $5/32"$. Use the stripe gauge provided to check this.



FINAL ADJUSTMENTS

4



PAN TO METERING ROLLER PRESSURE

Now proceed to set the pressure between the pan and metering rollers in the dampener. After the press sits still for 20-30 seconds, you will be able to bring up a stripe on the pan roller by bumping the press forward with the hand wheel. First, make sure the stripe is straight. If not, this means further adjustment of the hanger eccentric is necessary (refer to step 1). If the stripe is straight, check its measurement with the gauge. It should be $5/32"$. If not, loosen the aluminum arm on the pan roller shaft and turn it clockwise to decrease the stripe and vice versa. After the proper strip has been obtained, retighten arm against eccentric.

5

WATER LEVEL

After roller pressures are set, check the water level in the pan. It should be approximately half way up in the pan. If you see a ring of water on each end of the pan roller while the press is running, the water level is sufficiently high. Water level is adjusted by the thumb screw located on the filler assembly.

Always check to see that the ink form pressures as well as plate cylinder to blanket cylinder pressure is set to Townsend specifications. This is necessary for proper dampener performance.

Replace side covers. It will be necessary to notch OPS cover to clear new dampener knobs.

6

FOR SWING AWAY MODELS ONLY

If necessary, 2 cap screws with jam nuts have been provided to replace the existing ones on the T-51 Swing Away arm. To see if you need to replace them, swing the arm in as if you were going to remove the color head from the press (the Crestline water pan must be in place). If the bolts or nuts currently on the arm hit the water pan or water bolts, replace them with the ones provided.

YOU ARE NOW READY TO PRINT.

BASIC OPERATION

START OF DAY

- A. Make sure rollers are secure in their proper position.
 - B. Turn knurled knob on ratchet assembly clockwise until it stops.
 - C. Before adding water, ink up the dampener. This is done either by applying a small amount of ink directly to the dampener oscillator, or by dropping both water and ink from rollers to the plate and allowing the dampener to ink up from the plate.
 - D. Place water bottle in bracket. Accel recommends using the proper fountain solution formulated for the specific plate type being run on the press.
-

RUNNING DURING THE DAY

- A. In general, the Crestline Dampener should not have to be adjusted from job to job. The form roller setting should never be changed unless it has deviated from the factory specification of 5/32" to the plate.
- B. If necessary, the amount of water fed to the plate can be adjusted by turning the knurled ratchet knob. You are running minimum water with the knob turned fully clockwise. If you need more water, loosen the lock knob, turn the ratchet assembly counterclockwise one "click" at a time until proper moisture is achieved, then retighten lock knob. Make sure the arm on the pan roller shaft follows the black eccentric on the ratchet assembly. If necessary, turn the knurled knob on the pan roller shaft until the aluminum arm stops against the eccentric.

CLEANING & MAINTENANCE

WASH UPS DURING THE DAY

1. Remove bottle and drain the excess water from the pan.
 2. Mount a cleanup mat to the press.
 3. Turn on the press and squirt a small amount of press wash on the ink rollers and dampener oscillator, Avoid excessive application of wash to the dampener or most of it will end up in the water pan. Do not use and extremely fast drying wash on the dampener as this can damage soft rubber. Fast drying washes should only be used on blankets.
 4. Drop both the dampener and ink forms to the clean up mat.
 5. Remove water pan and clean any solution left in it.
 6. Be sure to wipe excess clean up solution from the ends of the dampener metering and pan rollers.
-

END OF THE DAY

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 knob counterclockwise and relieve pressure between the metering and pan rollers.
3. Remove and excess wash that may remain on the dampener metering and pan rollers.

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.

OILING AND GREASING THE DAMPENER

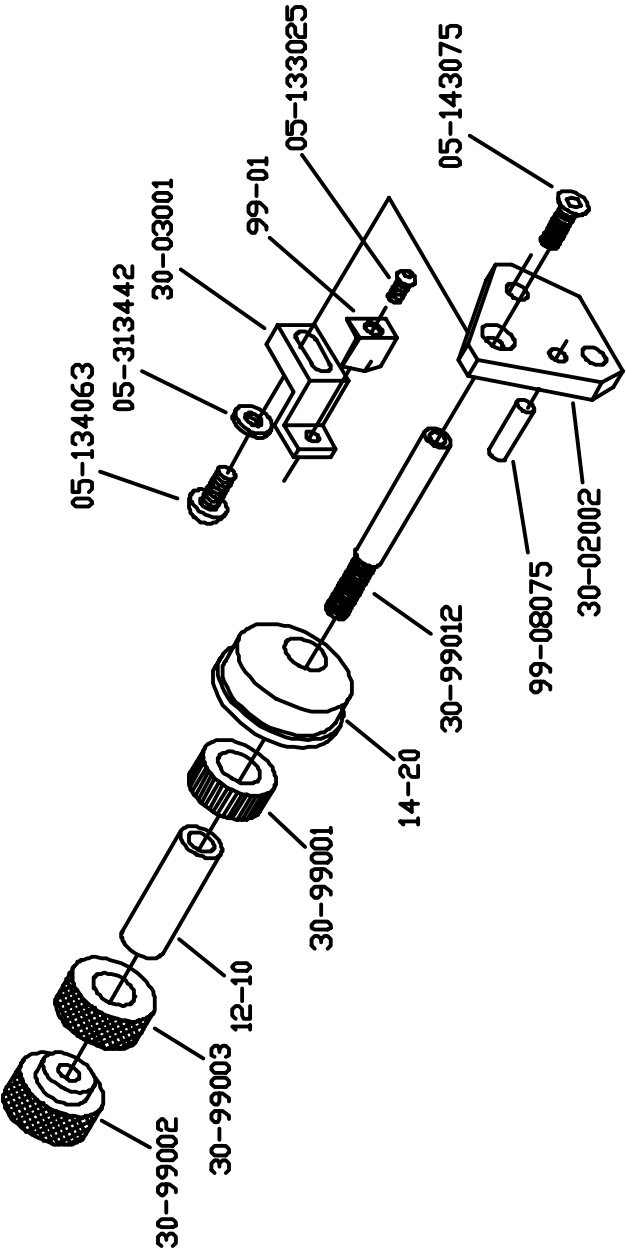
- A. Place a small amount of grease on the gears once a month.
- B. Inject grease into the oscillator grease fitting once a month.

CLEANING & MAINTENANCE

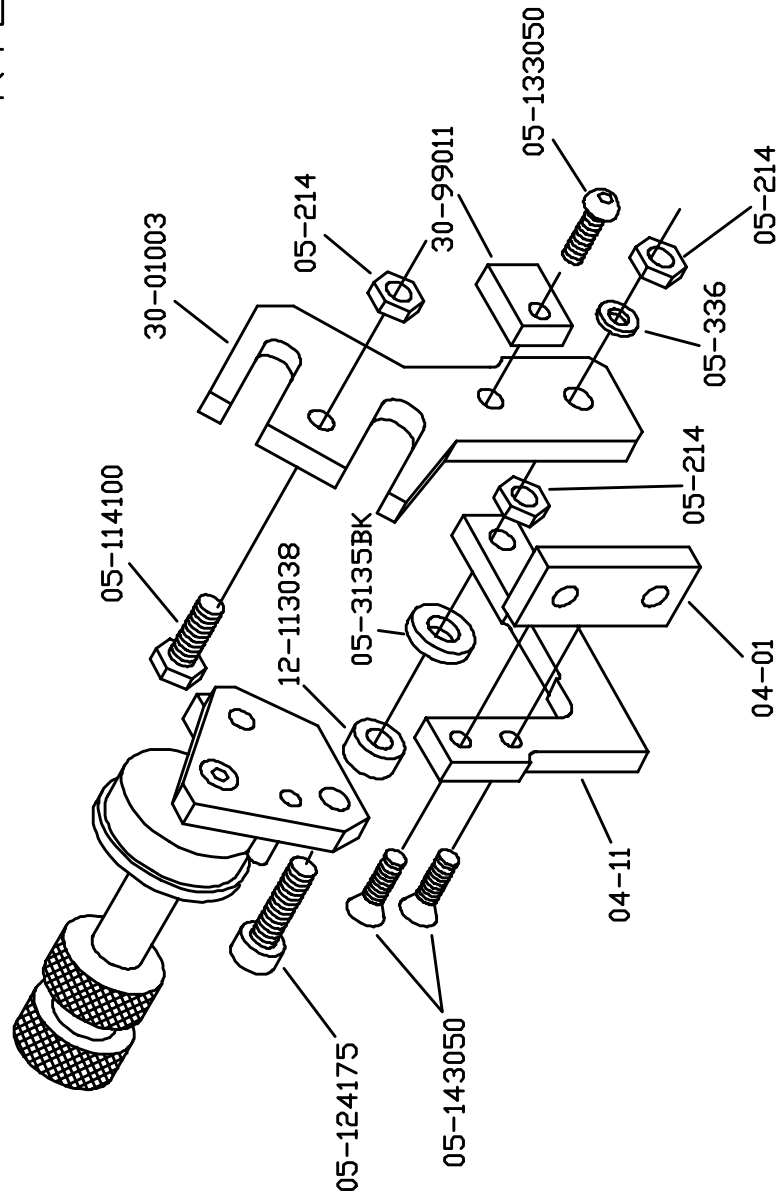
CRESTLINE® CLEANING & MAINTENANCE CHART

	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				✓

RY280TH

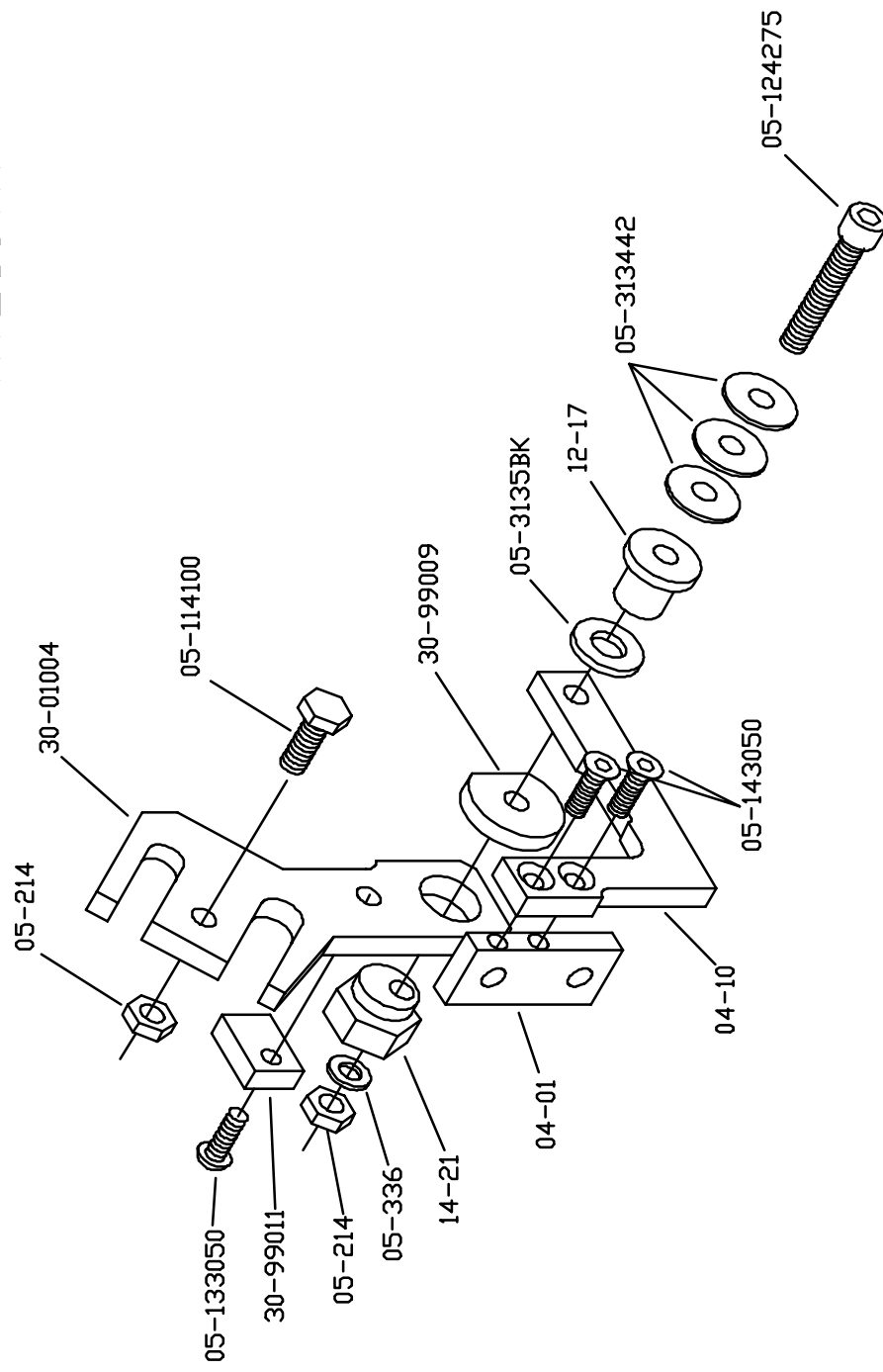


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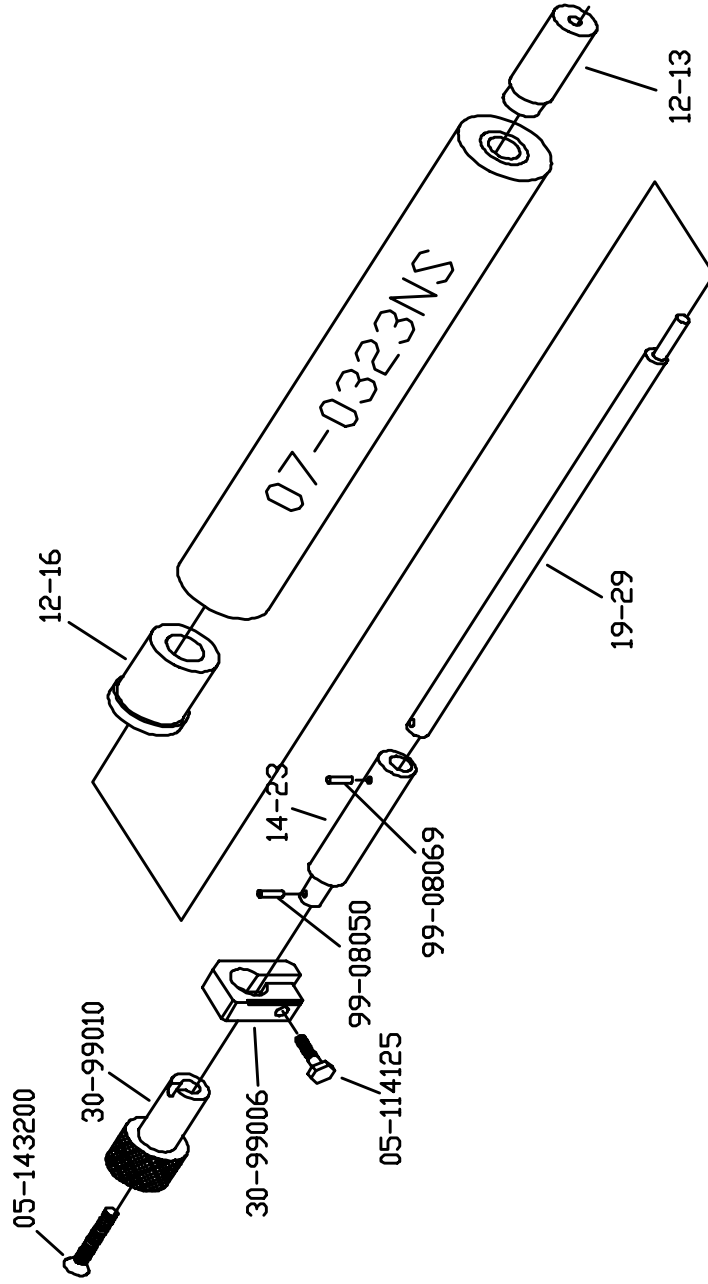
RTM1-1, 8-96

RY280TH



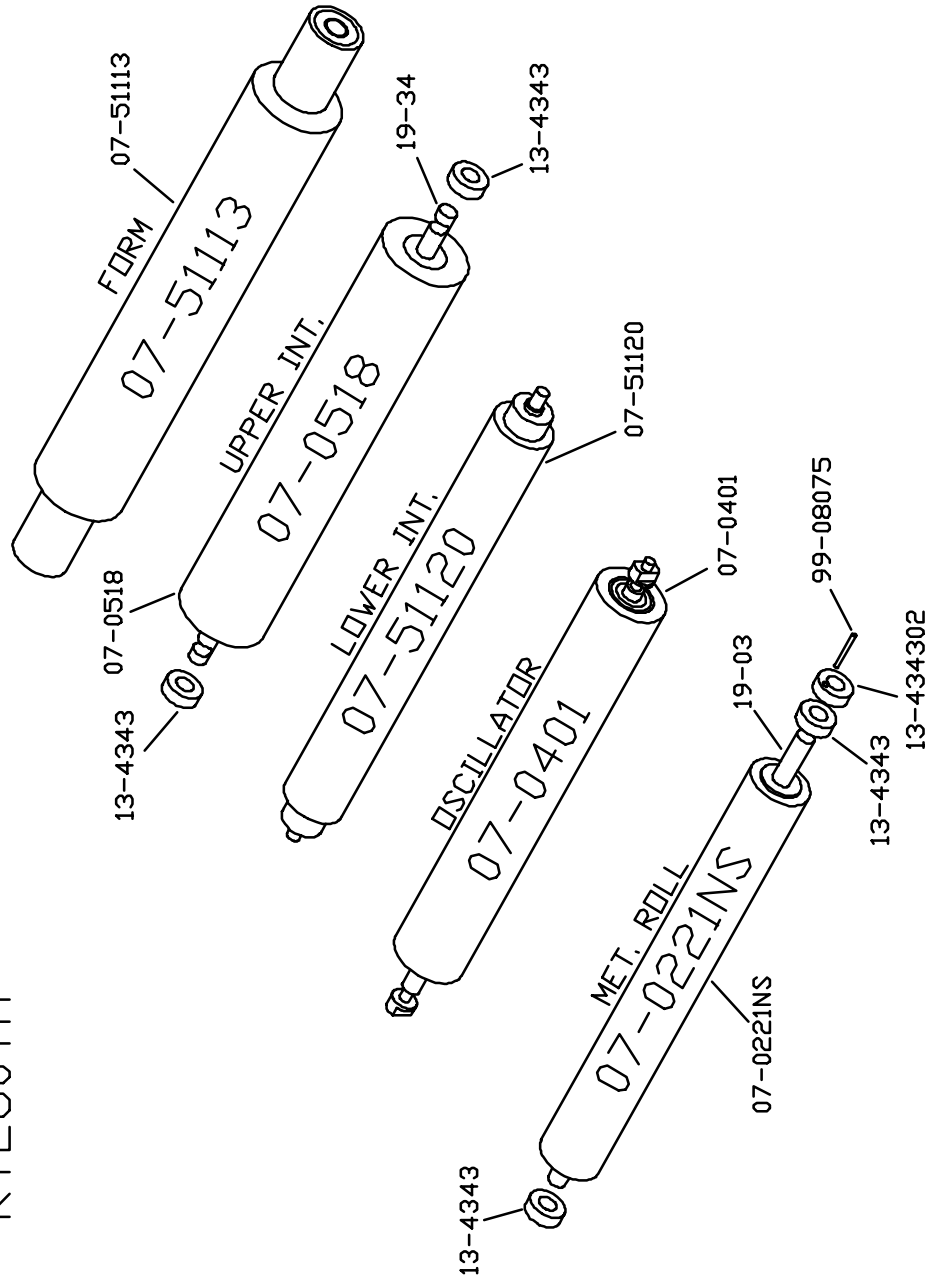
RTHE, 8-96

RY280TH

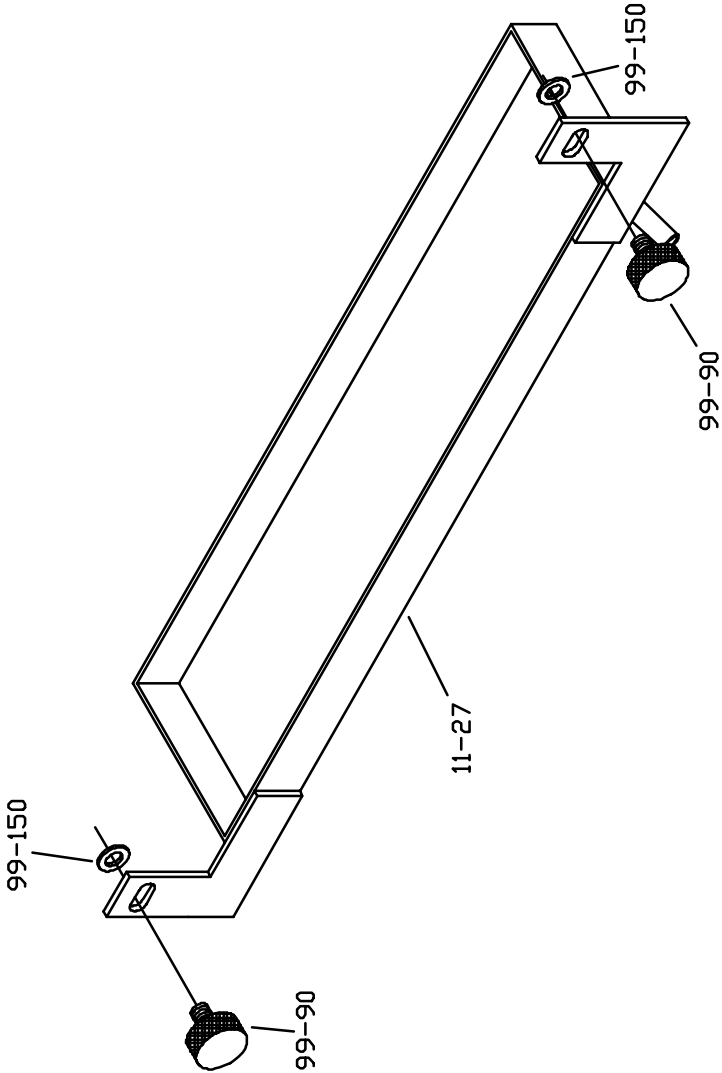


RTH13, 8-96

RY280TH

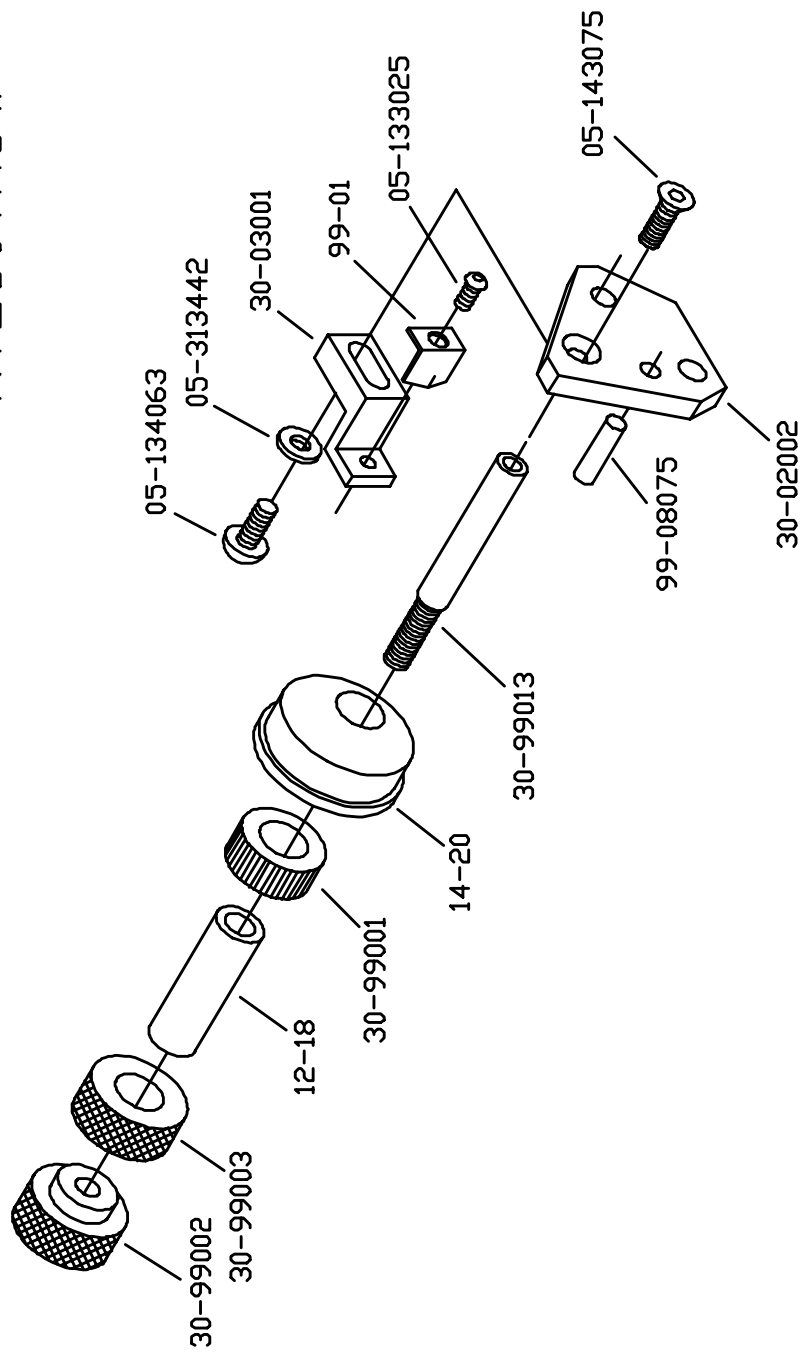


RYOBI 2800 STATIONARY



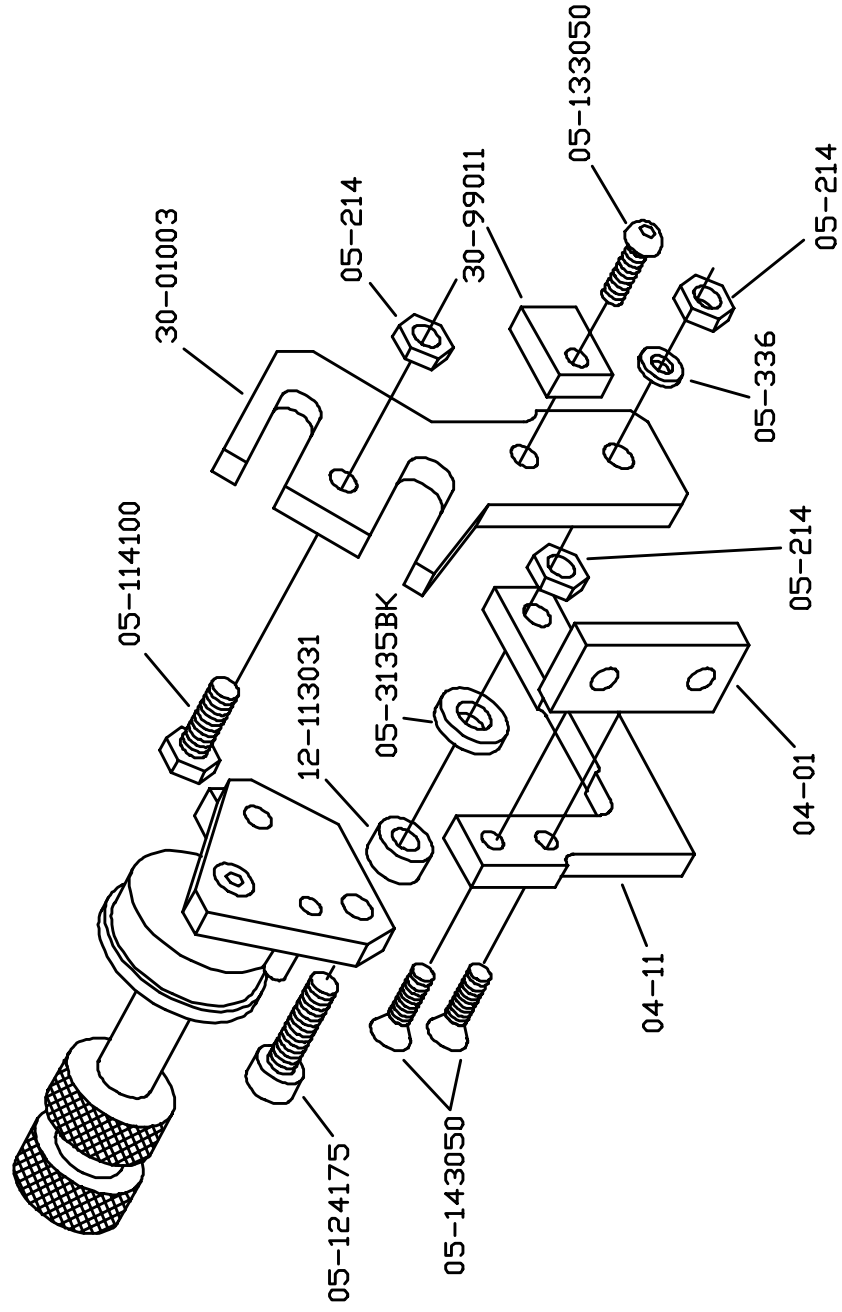
RTH4, 5/96

RY280THSW



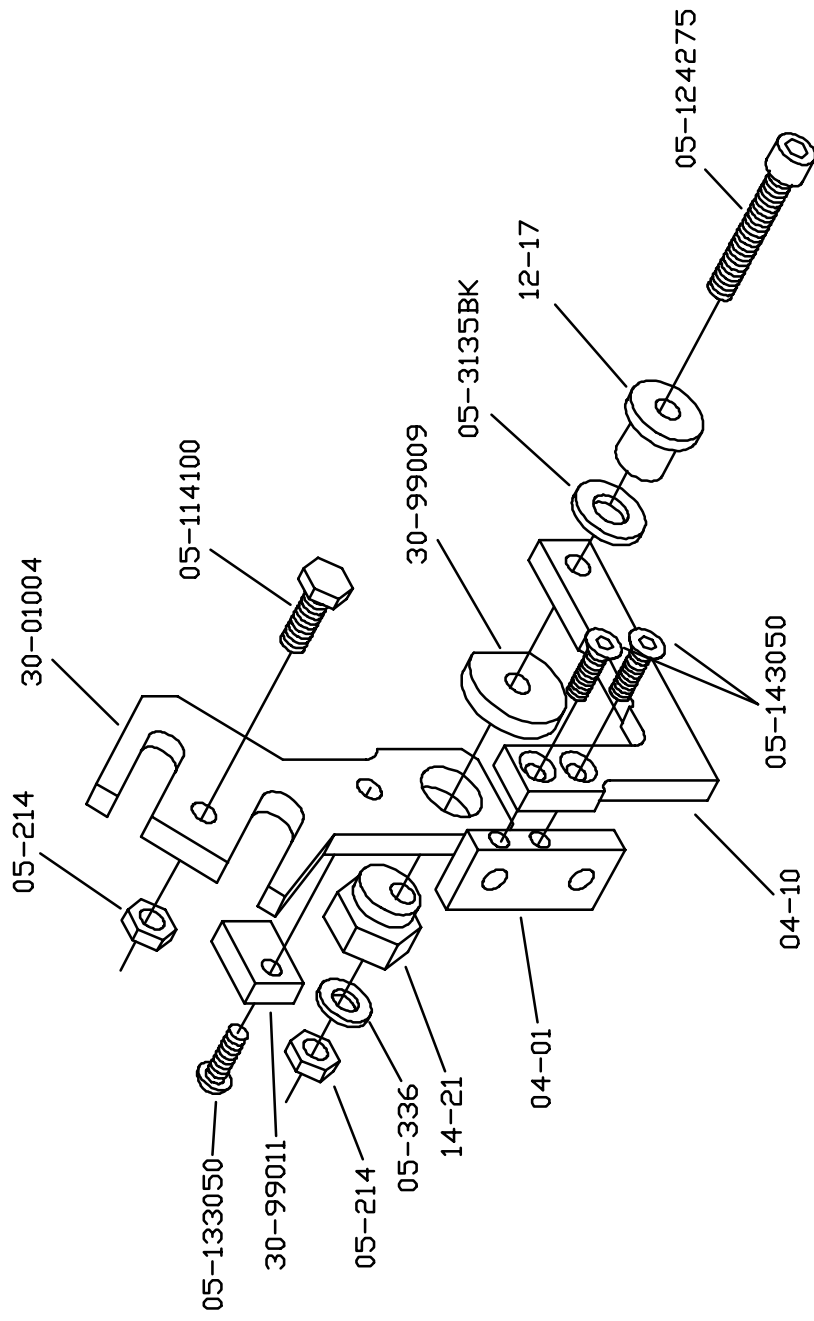
RTH6, 8-96

RY280THSW

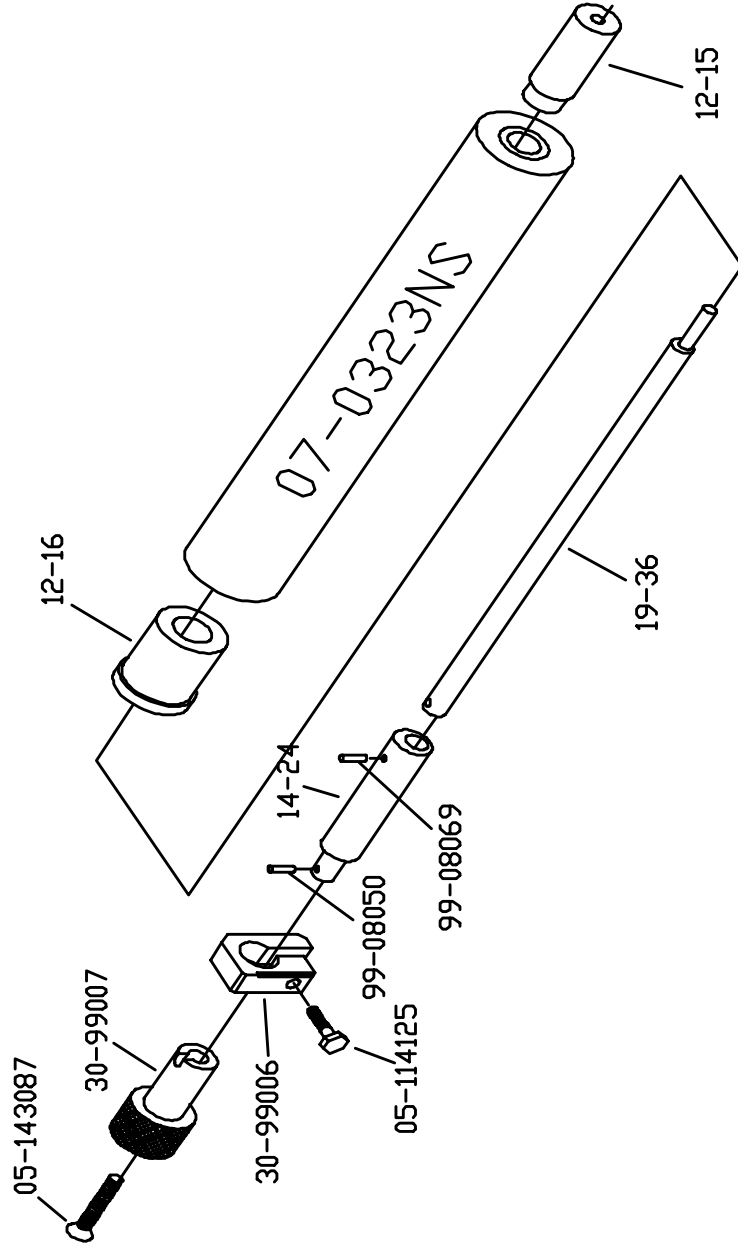


RTM6-1, 8-96

RY280THSW

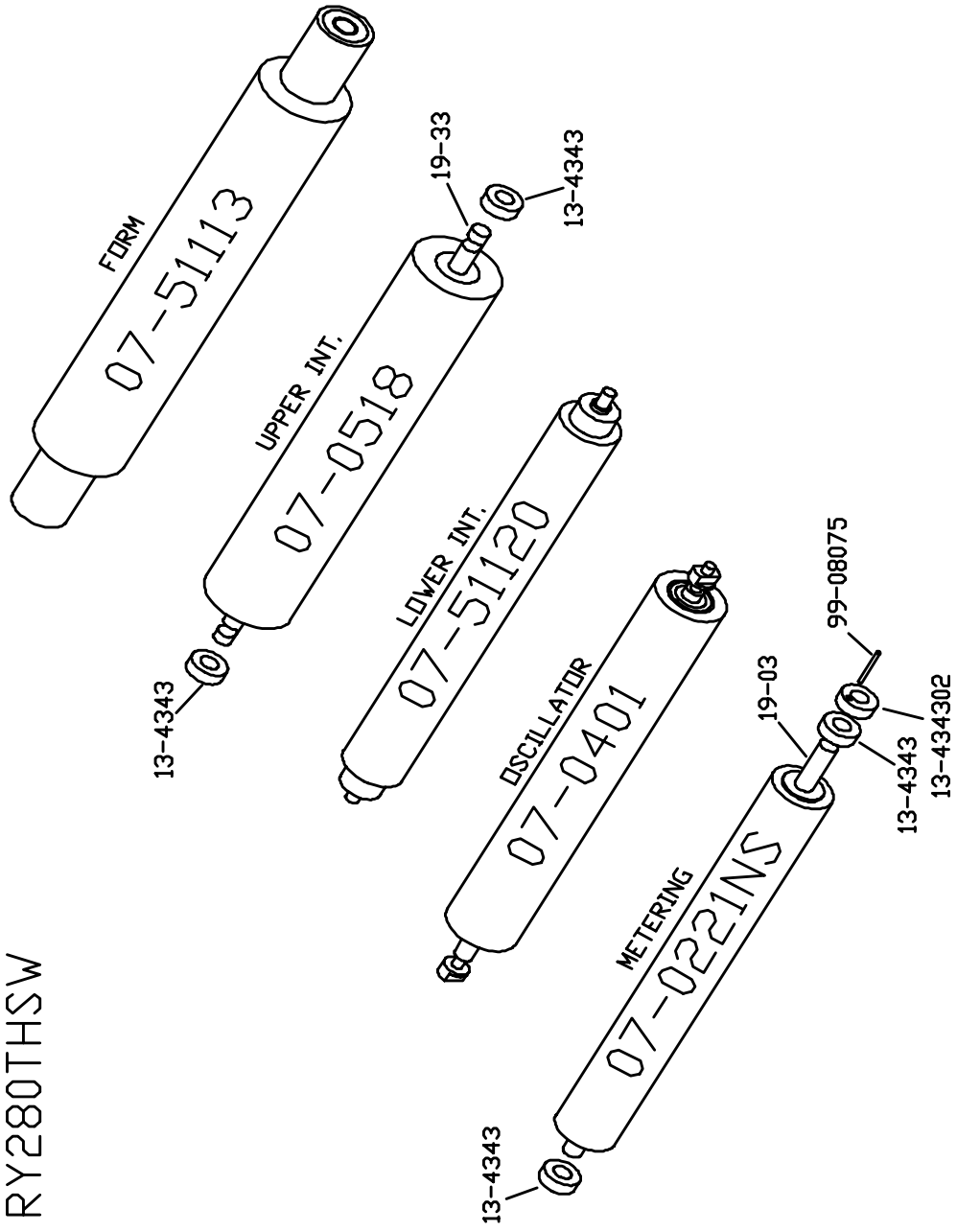


RY280THSW



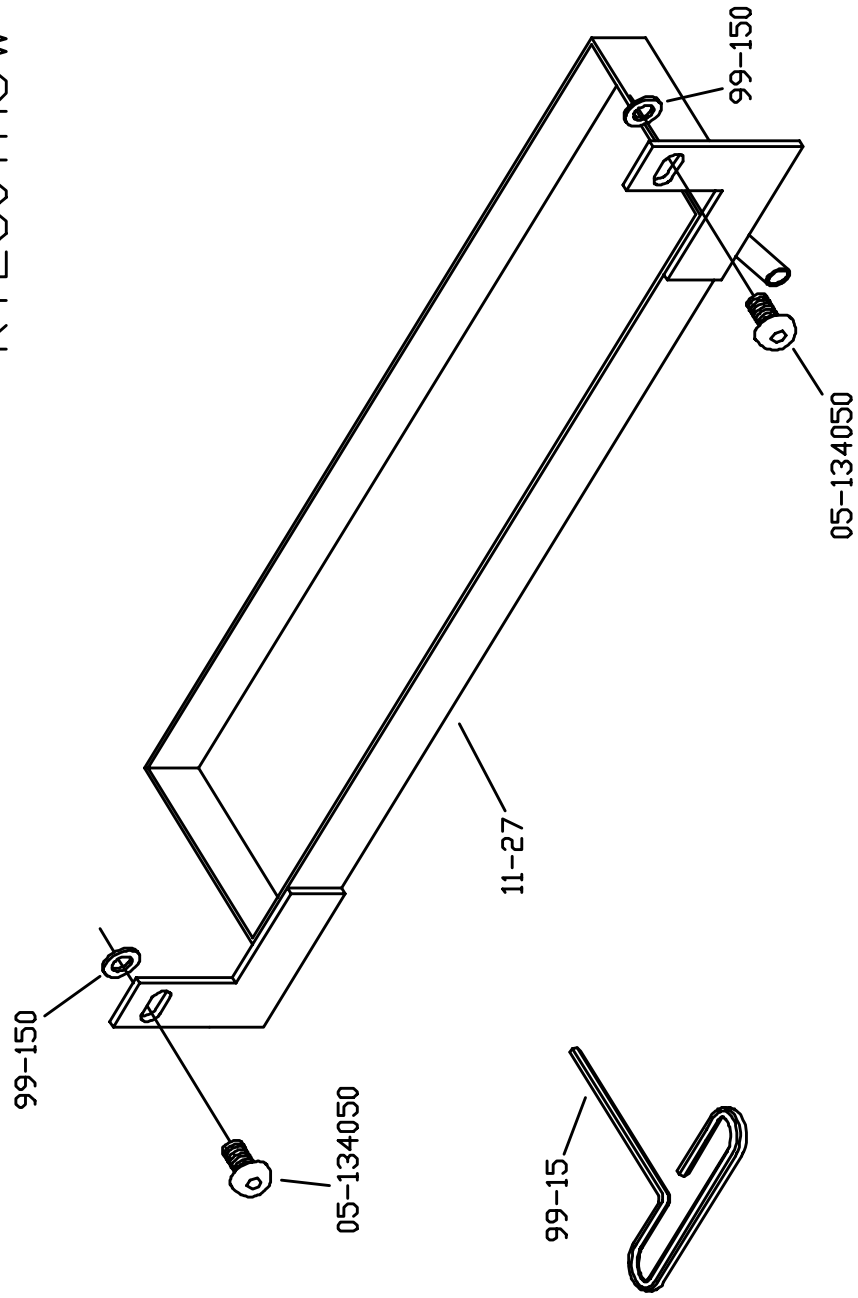
RTH8, 8-96

RY280THSW



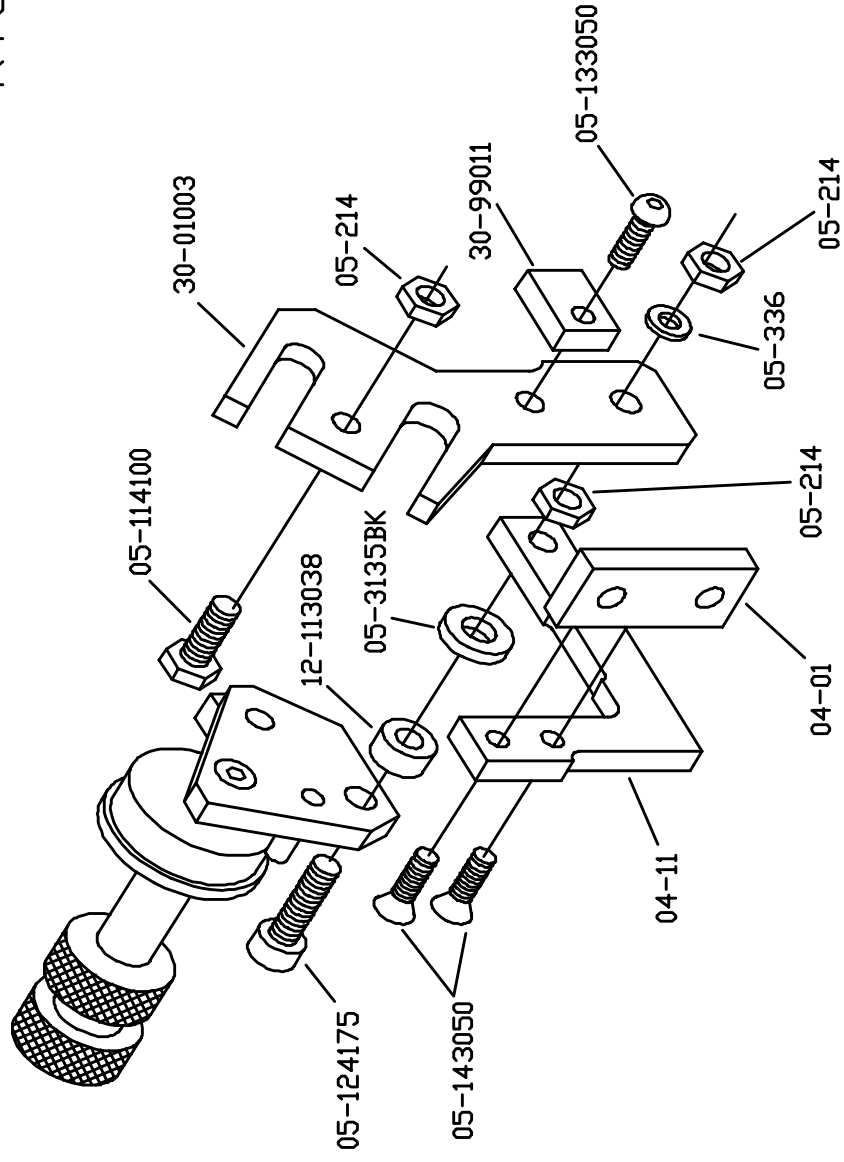
RTH10, 8-96

RY280THSW

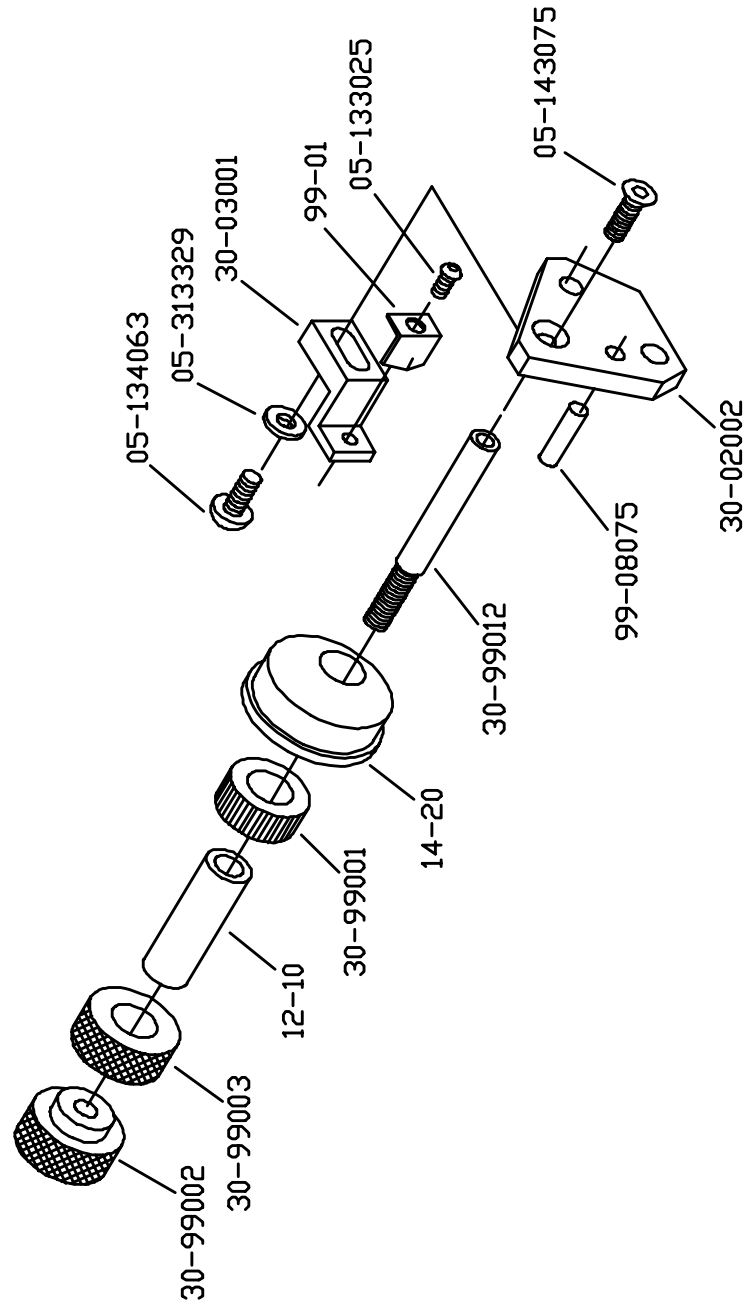


RTH9, 8-96

RY320TH

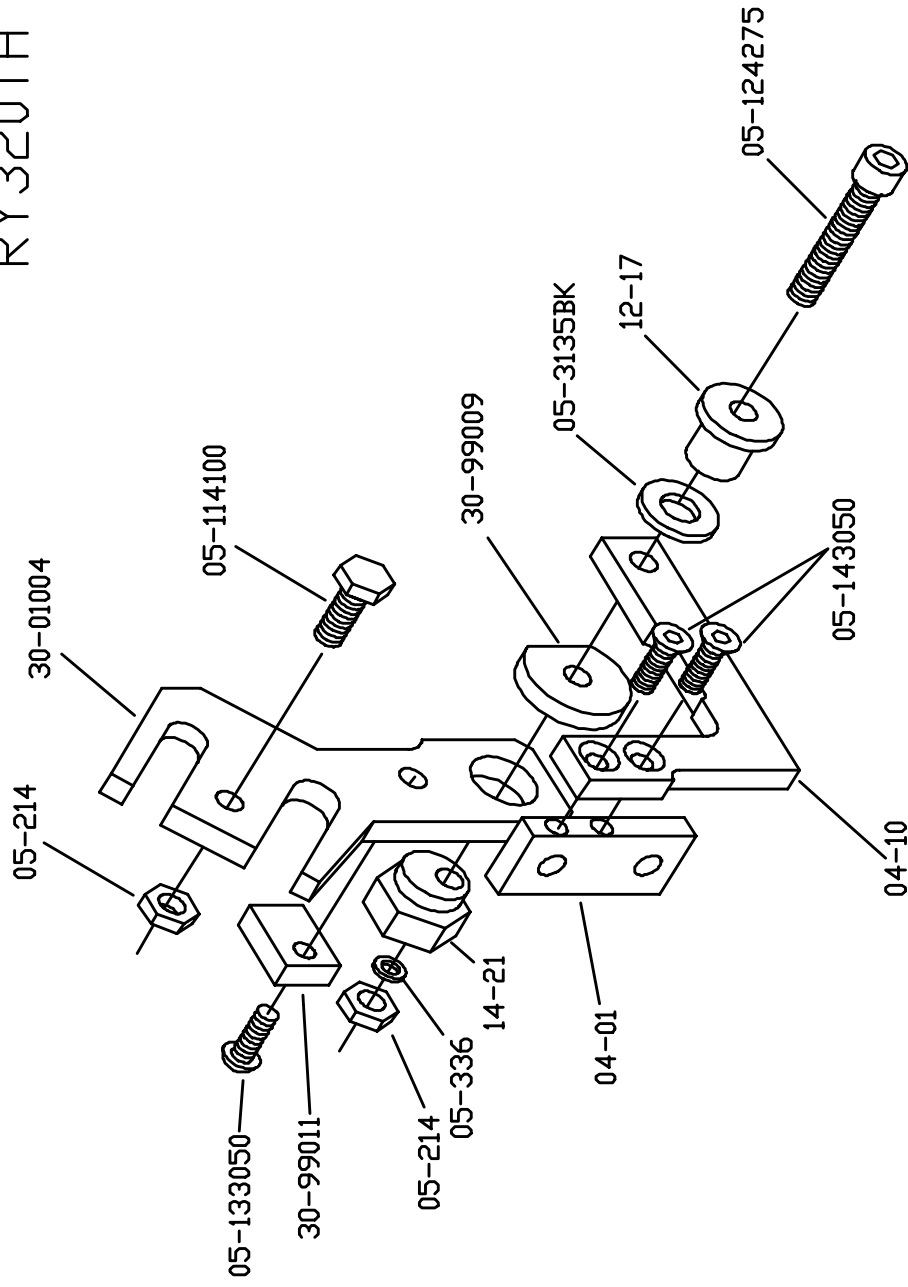


RY320TH

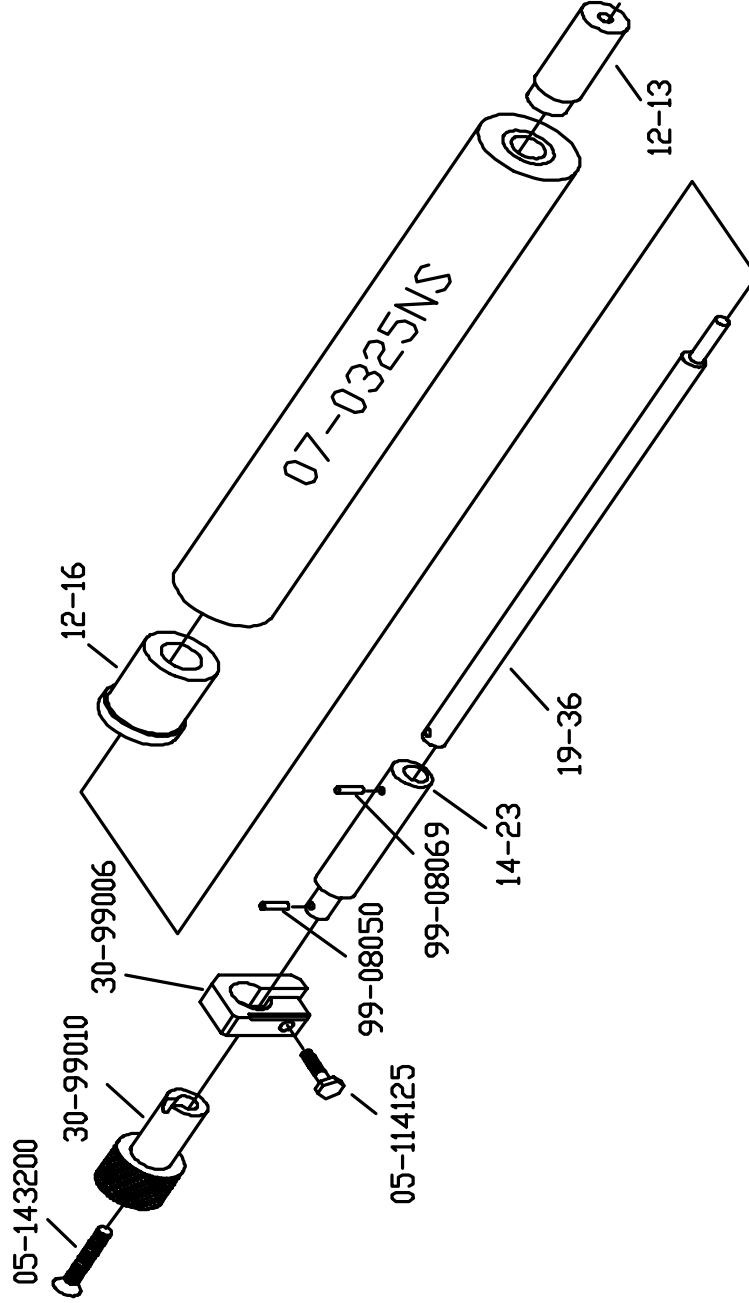


RTH11-1, 8-96

RY320TH

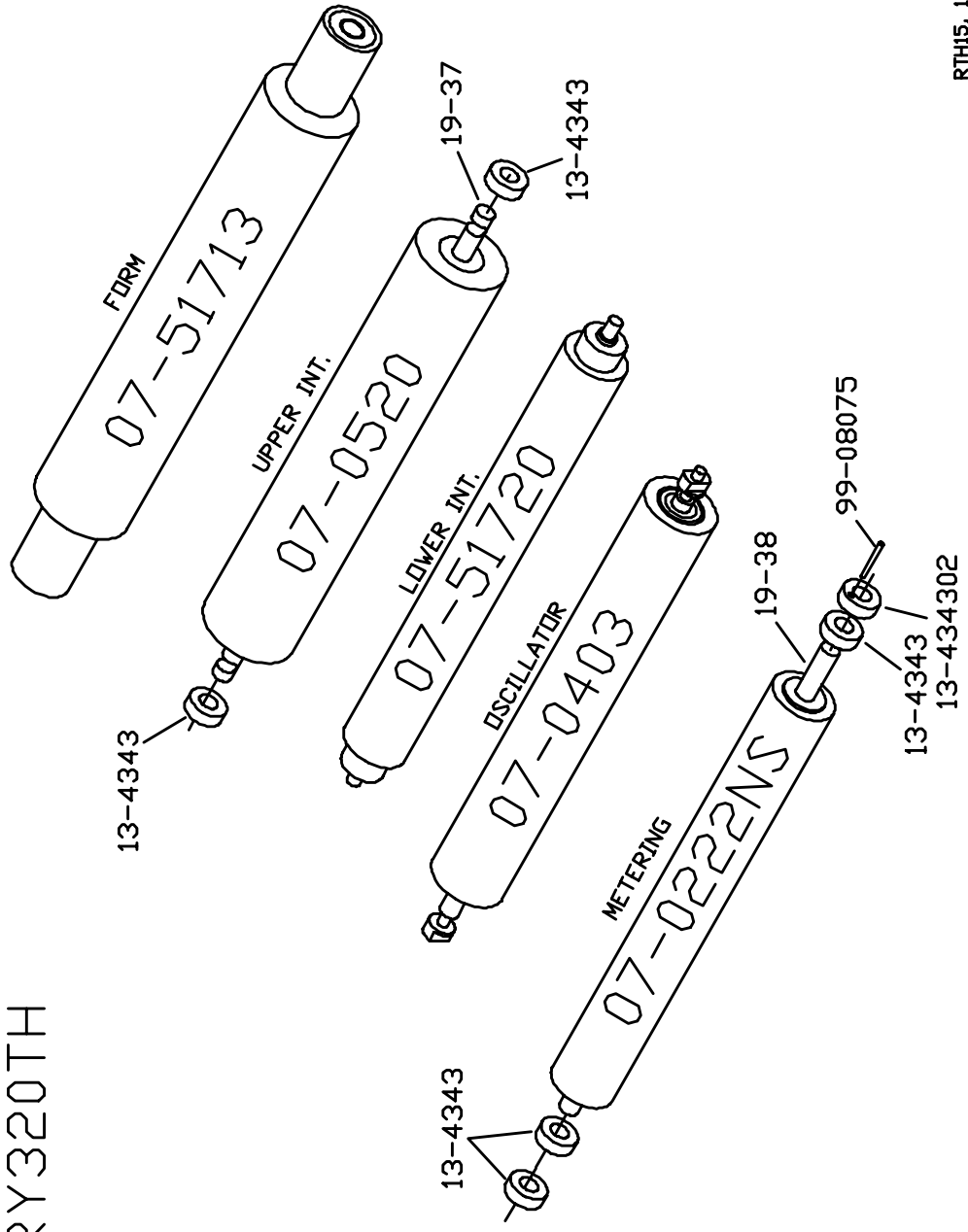


RY320TH



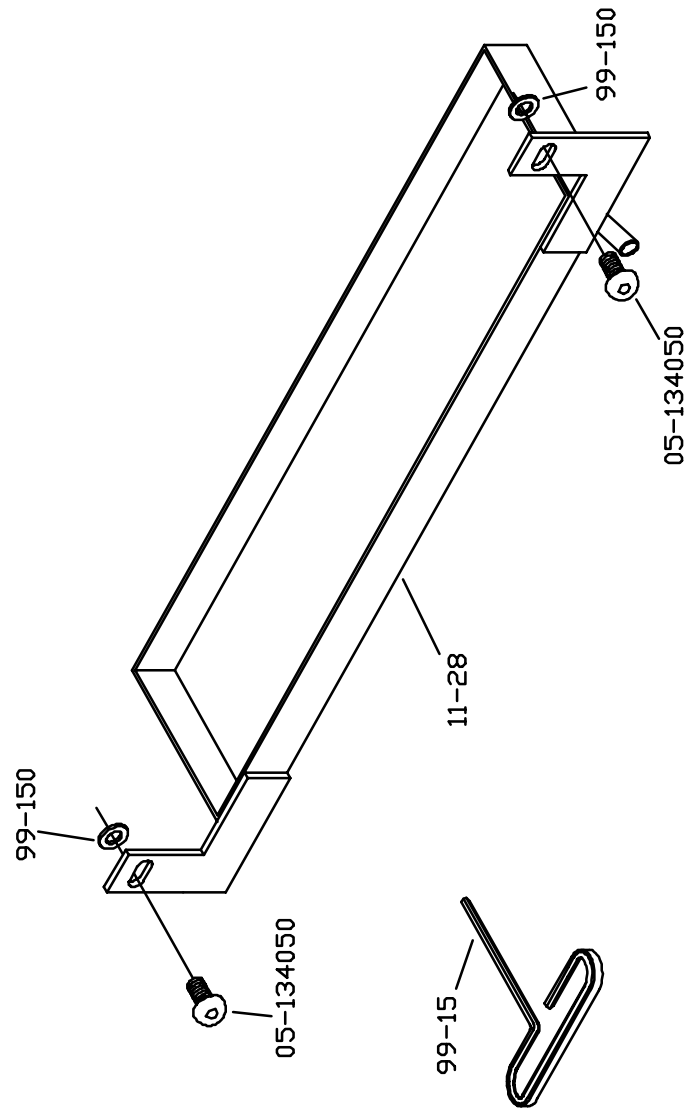
RT113, 8-96

RY320TH



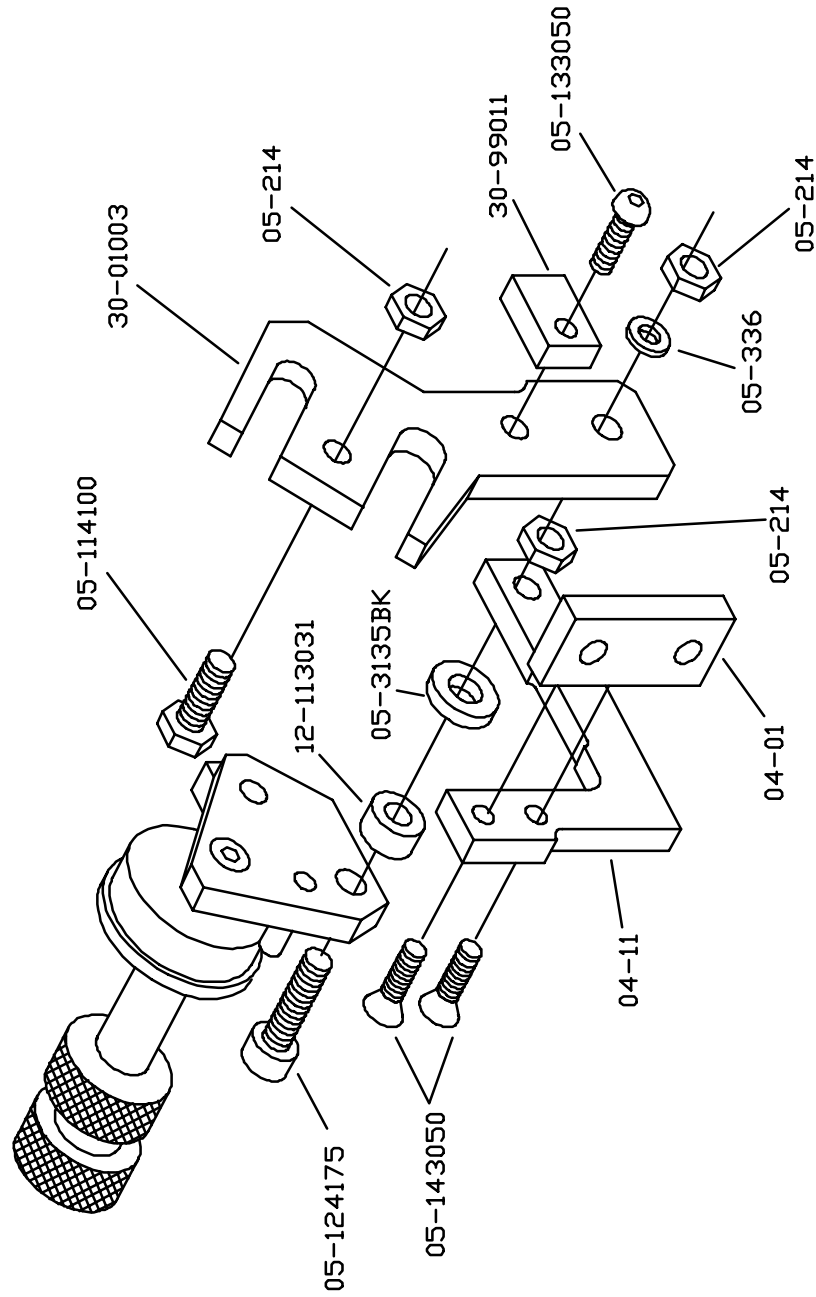
RTH15, 12-96

RYOBI 3200 STATIONARY

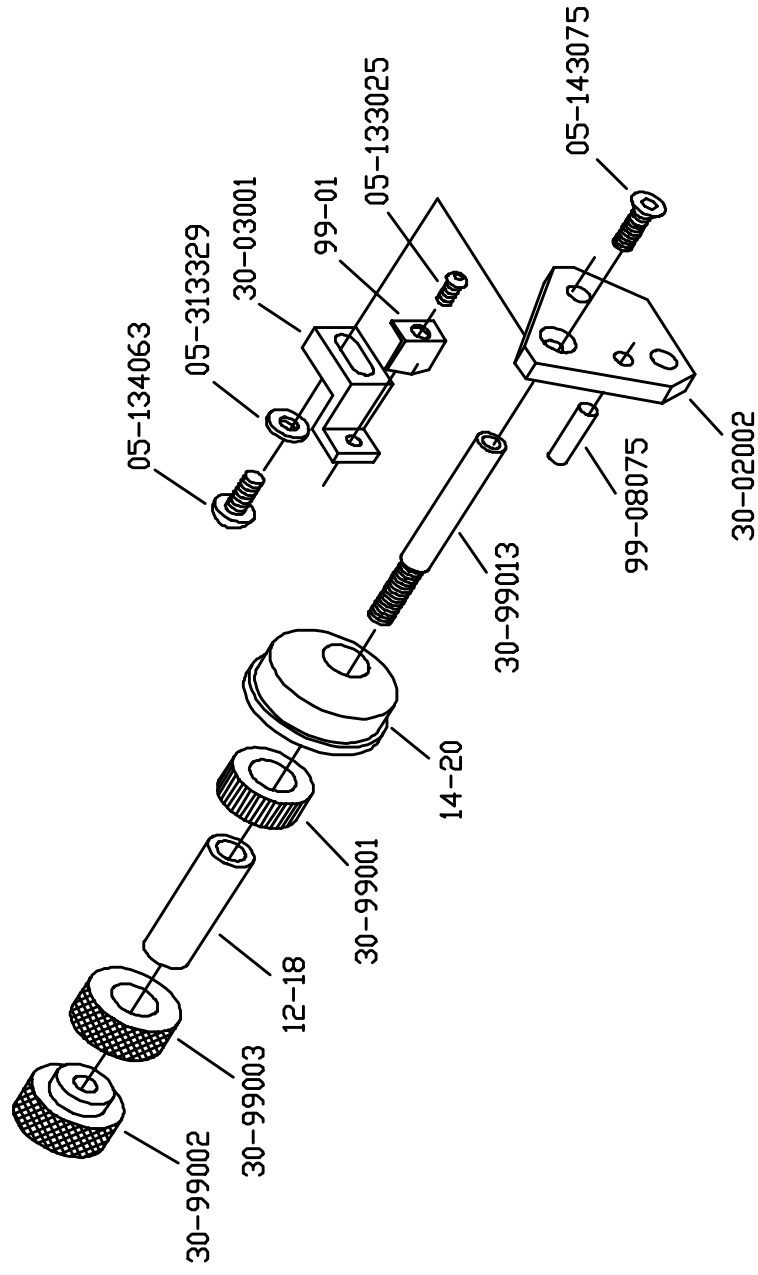


RTH21, 5/96

RY320THSW

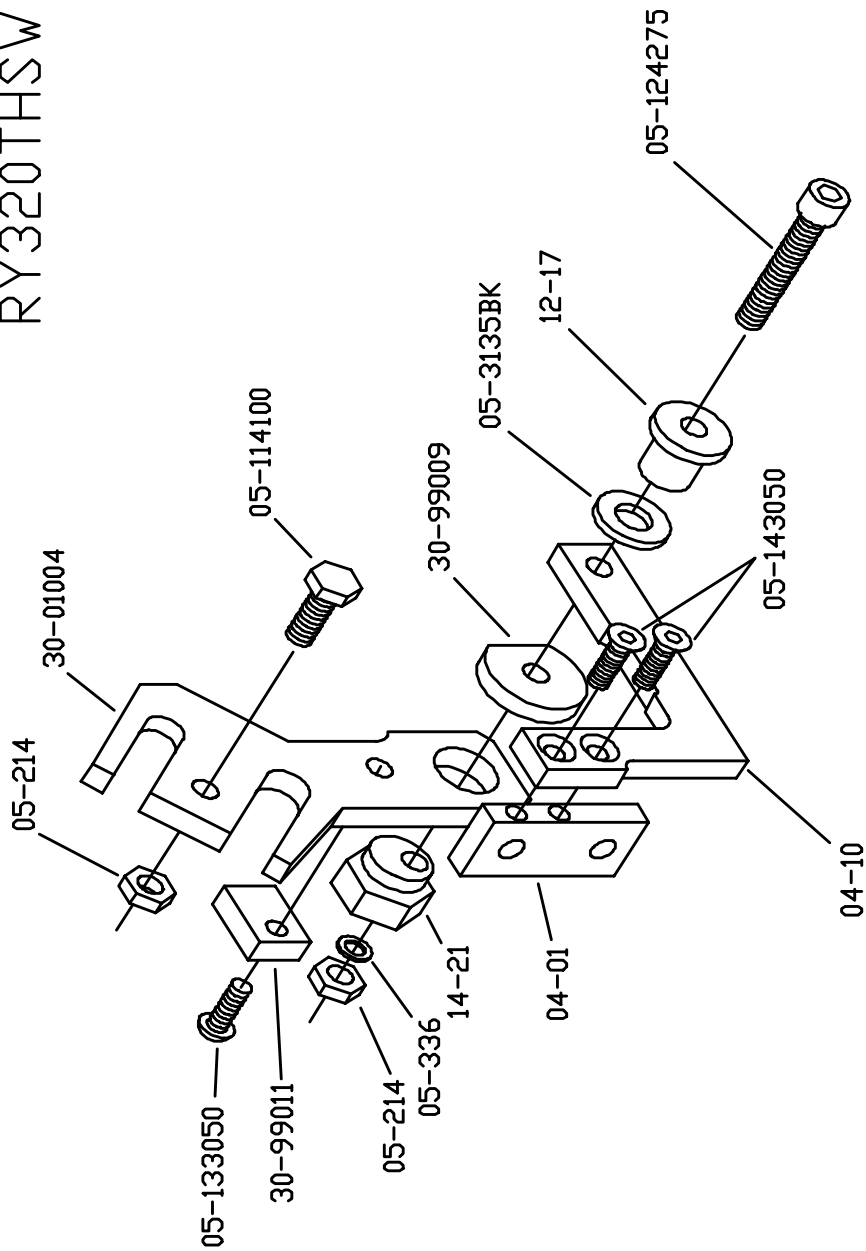


RY320THSW

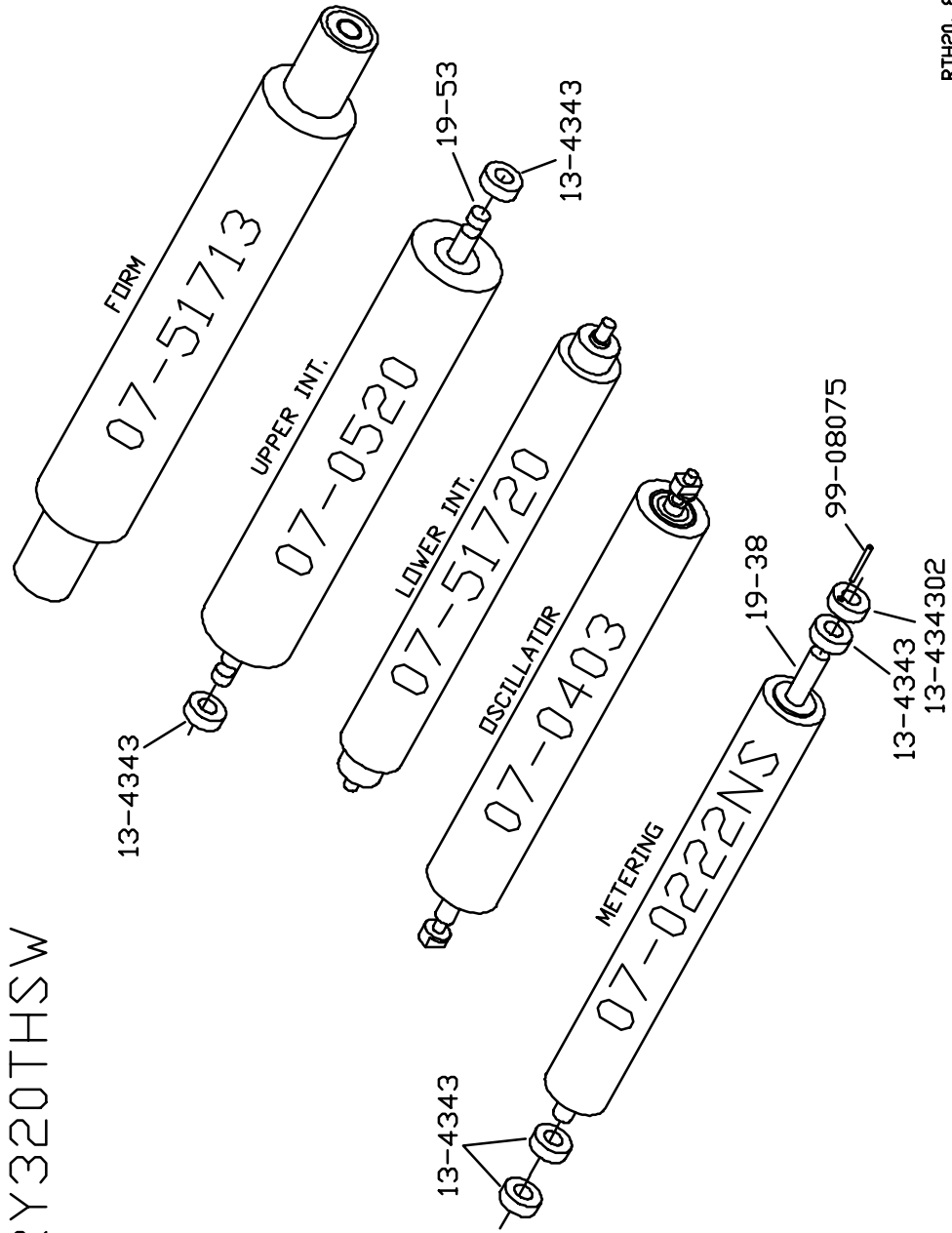


RTH16-1, 8-96

RY320THSW

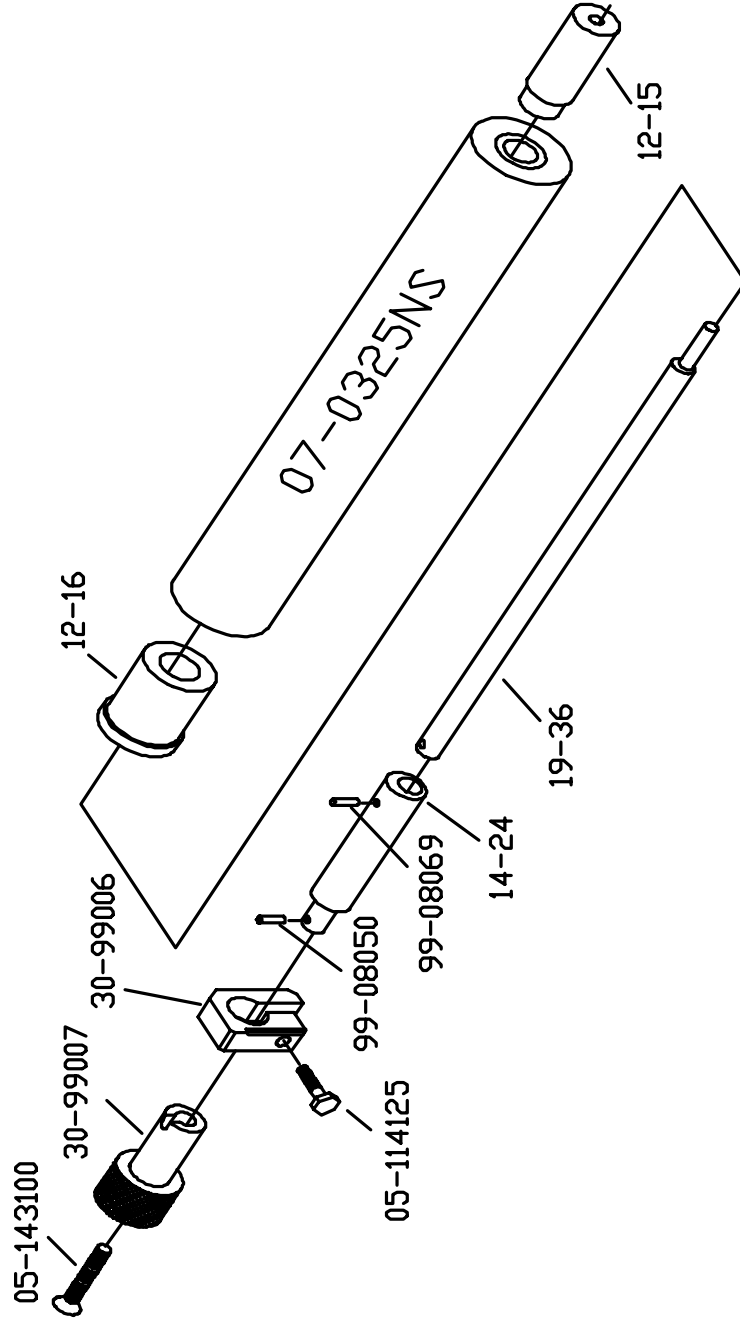


RY320THSW



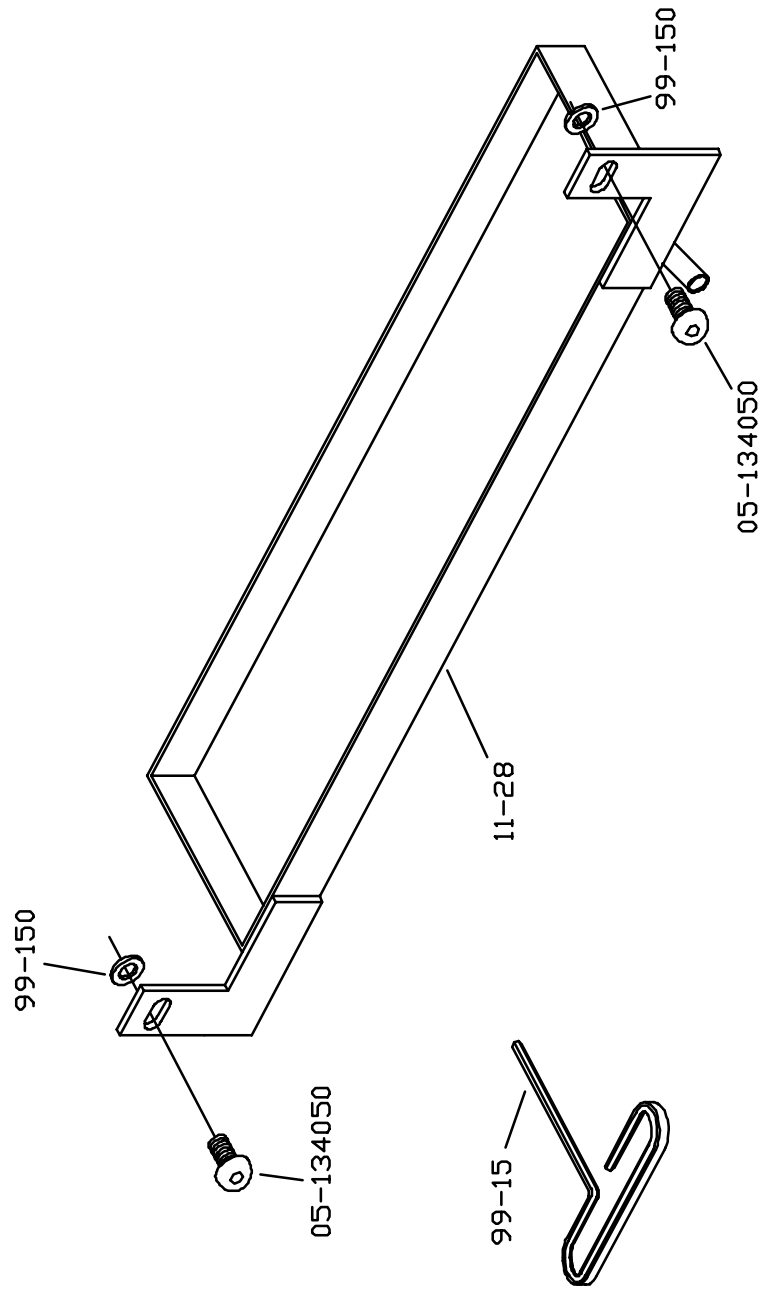
RTH20, 8-96

RY320THSW



RTU08, 8-96

RY320THSW



RT119, 8-96



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