Crestline® Dampening System

Installation Instructions

Ryobi 2700, 2800, 3200, 3200E

Itek 950, 960, 975

Parent

ACCEL®
Graphic Systems

X88-30
3/98
Rev-A

GENERAL INFORMATION

ATTENTION CRESTLINE® DAMPENER OWNER!

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

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

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

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

YOUR AUTHORIZED CRESTLINE® DEALER IS:

_____

_____

_____

_____

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

_____

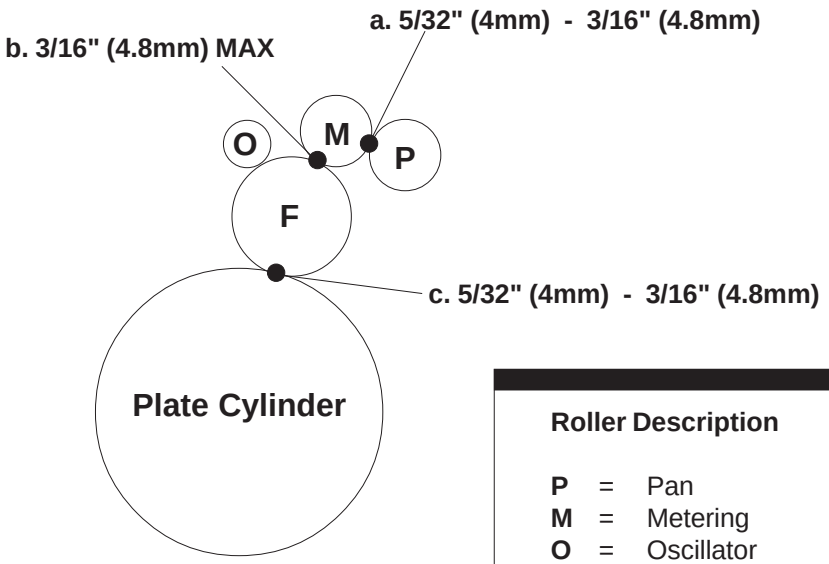
_____

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® AND ROLLER PRESSURES



Adjustments

a. Metering to Pan
b. Form to Metering
c. Form to Plate

Roller Description

P = Pan
M = Metering
O = Oscillator
F = Form

TERMINOLOGY

OPS	=	Operator's Side
NOPS	=	Non Operator's Side
Old Style	=	Presses with 4" Delivery Wheel
New Style	=	Presses with 7" Delivery Wheel

TECHNICAL ASSISTANCE

For technical assistant 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 accelgraphicsystems.com

GENERAL INFORMATION

REQUIRED TOOLS

1. Phillips Screwdriver
2. Standard Screwdriver
3. 3/32" Allen Wrench
4. 1/8" Allen Wrench
5. Snap Ring Remover
6. 7/16" Open End Wrench
7. 4 mm Allen Wrench
8. 5 mm Allen Wrench
9. 13 mm Open End Wrench
10. 1/8" Punch
11. Hammer For Use With Punch
12. Spring Hook Tool

PRE-INSTALLATION INSTRUCTIONS

PRE-INSTALLATION PROCEDURES AND HOW TO PARALLEL THE DAMPENER.

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 off in shipping.

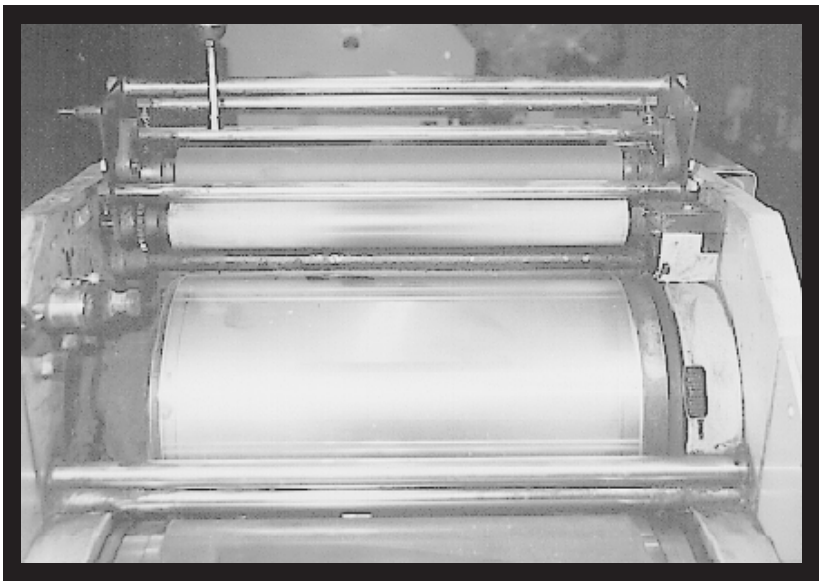
3. Check the dampener alignment by setting it on end on a flat surface as shown. (Cutter bed works best.) If dampener rocks, it needs to be realigned. Loosen tie bar bolt at OPS and allow the frames to align themselves on the flat surface. Retighten bolt Set ink form to vibrator pressure at 4mm.

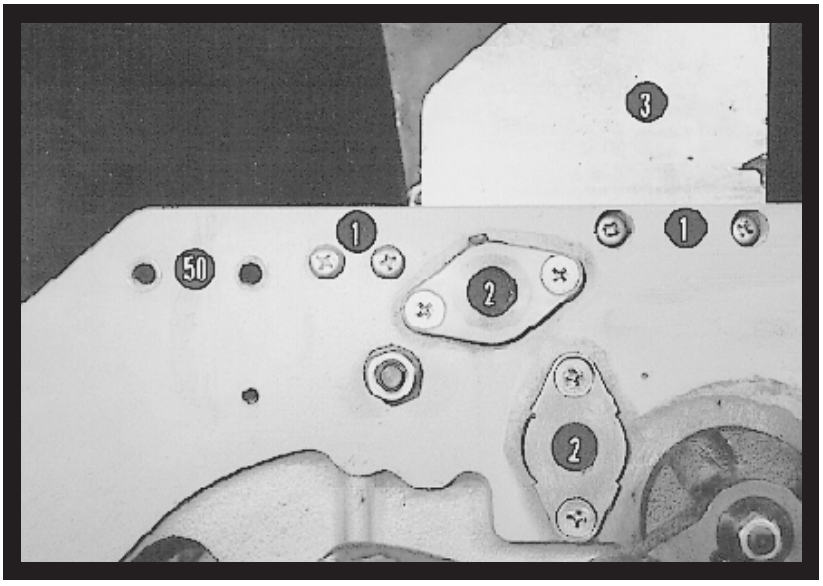
DISASSEMBLY

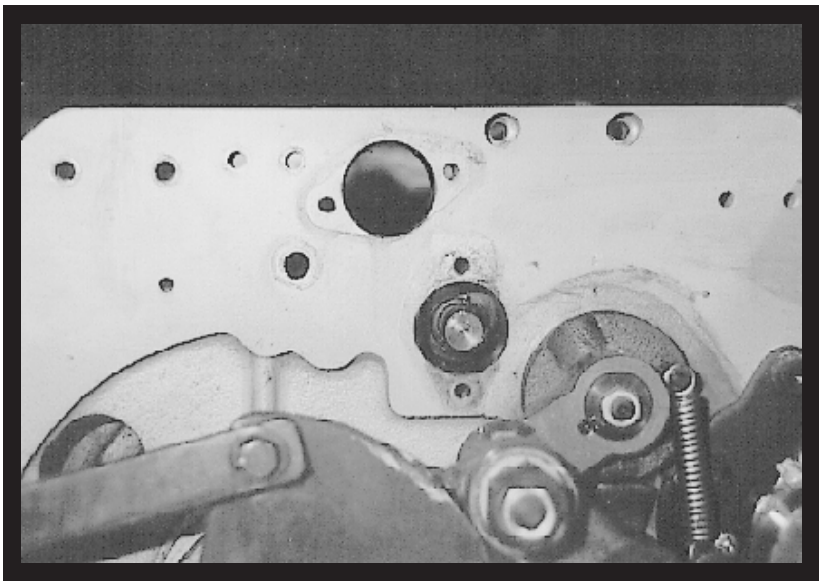
1 Remove dampener and inker guards. Save inker guard for reinstallation.

2 Remove operating handles from OPS. Remove side covers from OPS & NOPS.

3 Remove the small covers at the top of the dampener at the OPS & NOPS. Unhook the microswitch at NOPS.




3
1
1
50
2
2



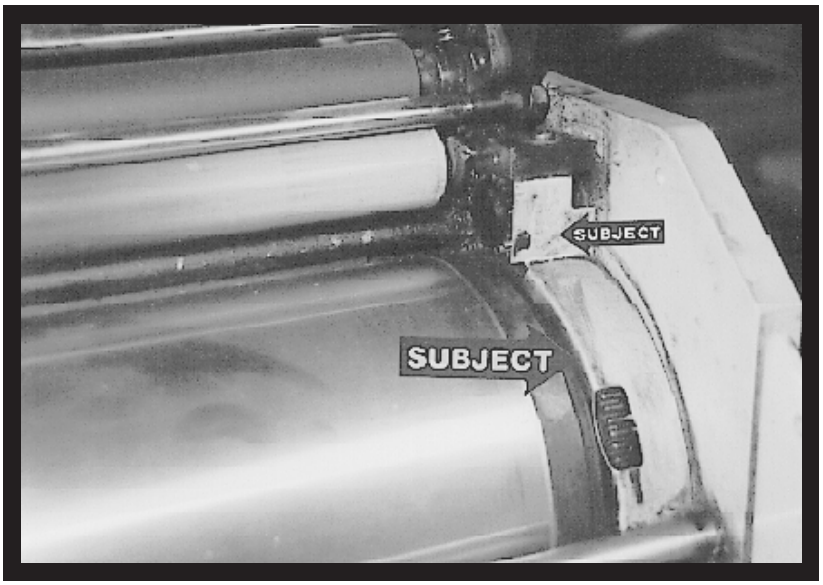
4 After completing the first 3 steps, the press should look like this. OPS to the left, NOPS to the right.

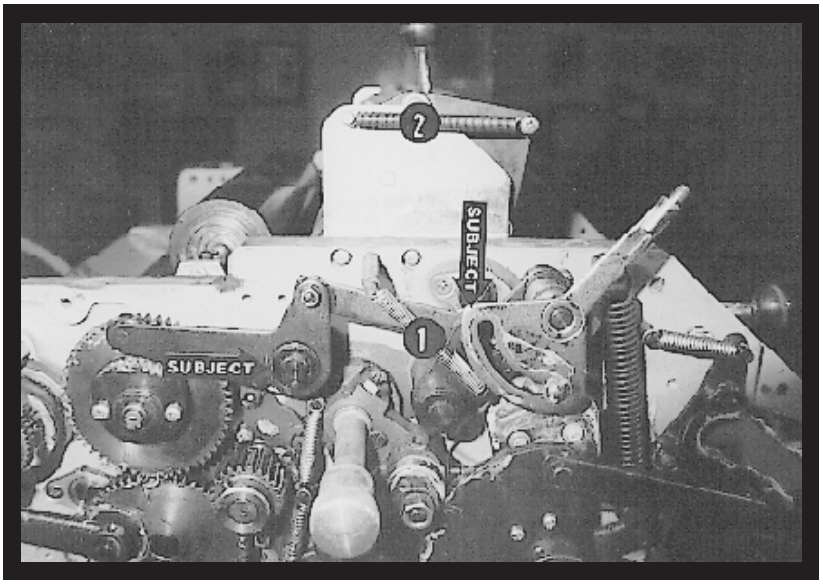
---

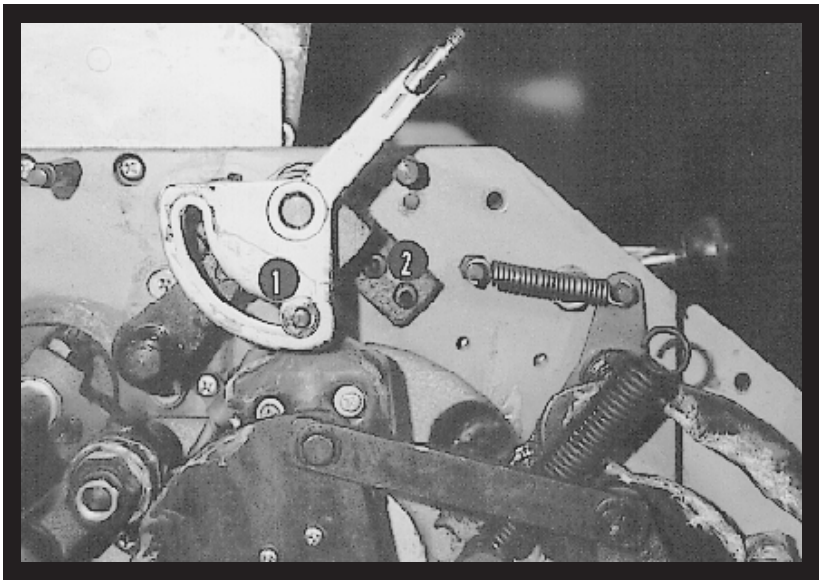
5 Remove the 4 machine screws located near the #1. There may also be 2 machine screws near the #50. Remove these also. Remove the countersunk screws and the bronze bushings (#2). Remove plate (#3).

---

6 The NOPS should look like this.


SUBJECT
SUBJECT


2
SUBJECT
1
SUBJECT


1
2

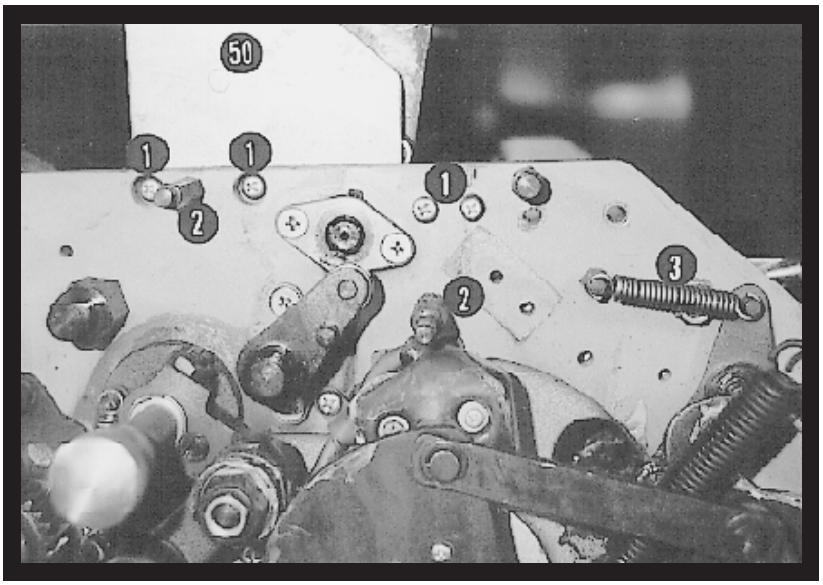
7 Remove plate cylinder guard (subject arrow). Remove vertical portion of gear guard and reinstall.

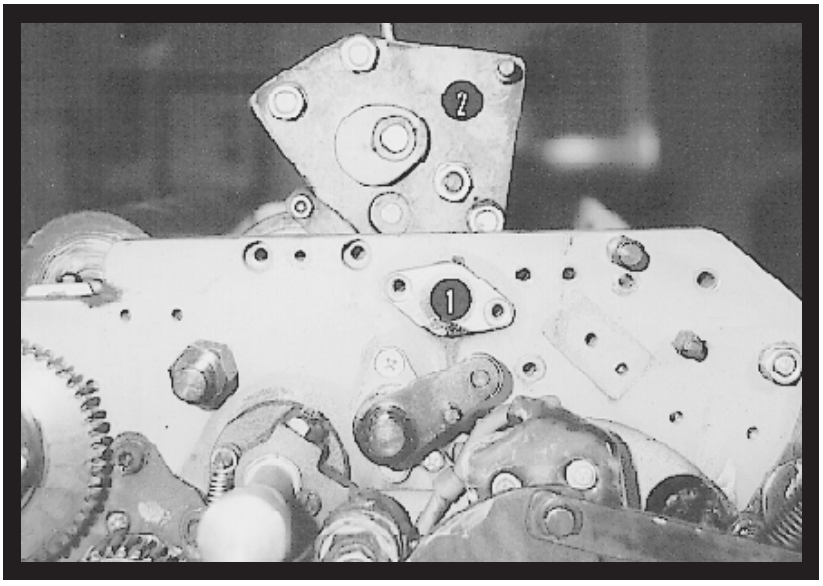
---

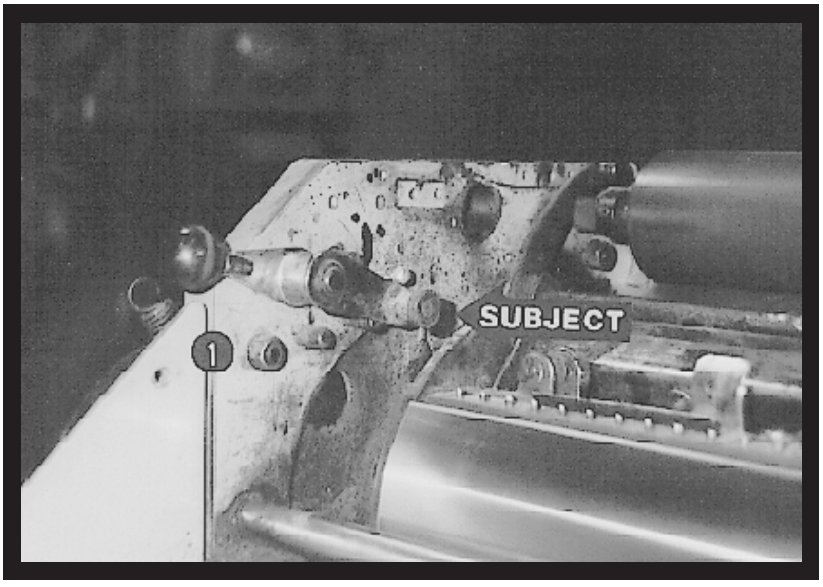
8 Remove springs (#1 & 2) at OPS. Remove "E" clips holding dampener arm linkage and pull arm off press. ("E" clips indicated by subject arrows.)

---

9 The OPS should now look like this. Remove the "E" clip holding the handle (#1) and the two cap head screws in the handle bracket (#2). The entire handle assembly can now be removed from the press.


50
1
1
1
2
2
3


2
1


SUBJECT
1

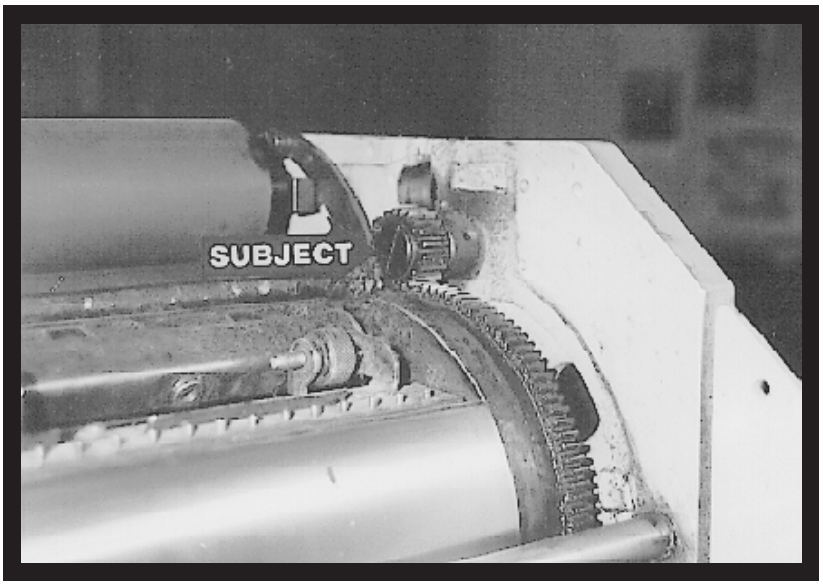
10 Remove the four machine screws (#1), two studs (#2) and spring (#3) from the OPS. Plate (#50) can now be removed.

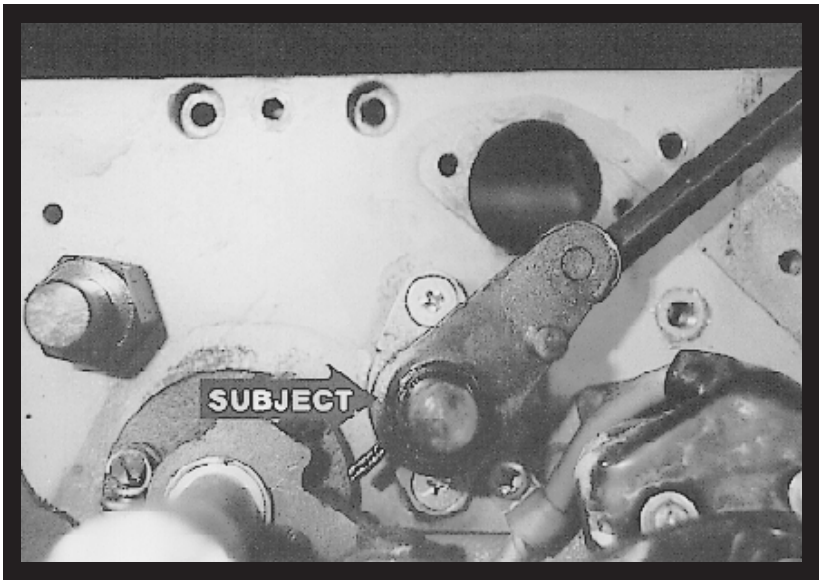
---

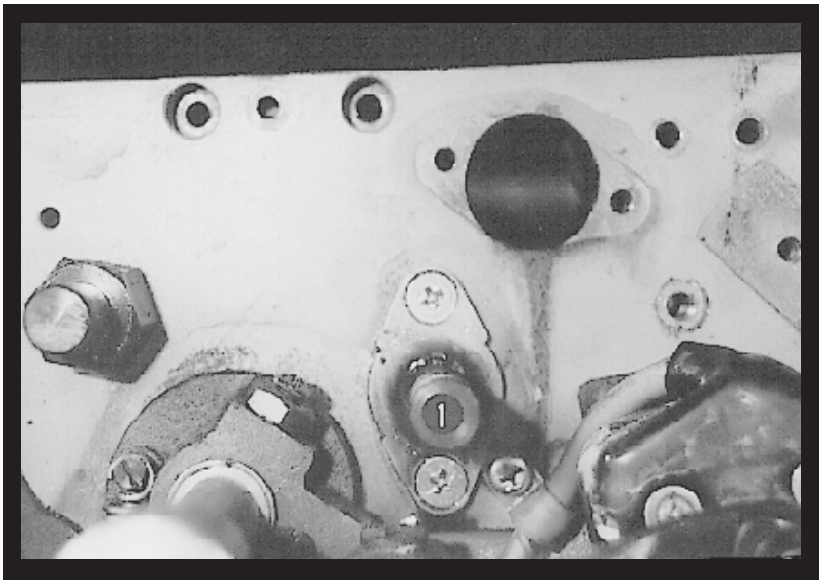
11 Remove countersunk screws and upper bronze bushing at OPS (#1). The main body of the dampener (#2) should lift out of the press.

---

12 If the plate clamp opening mechanism is located to the right side of #1 (as in picture), it must be removed. This is typical on older machines. Newer models have the plate clamp opening mechanism located lower on the press frame (about where the #1 appears in the photo). If that is the case, do not remove.


SUBJECT


SUBJECT


1

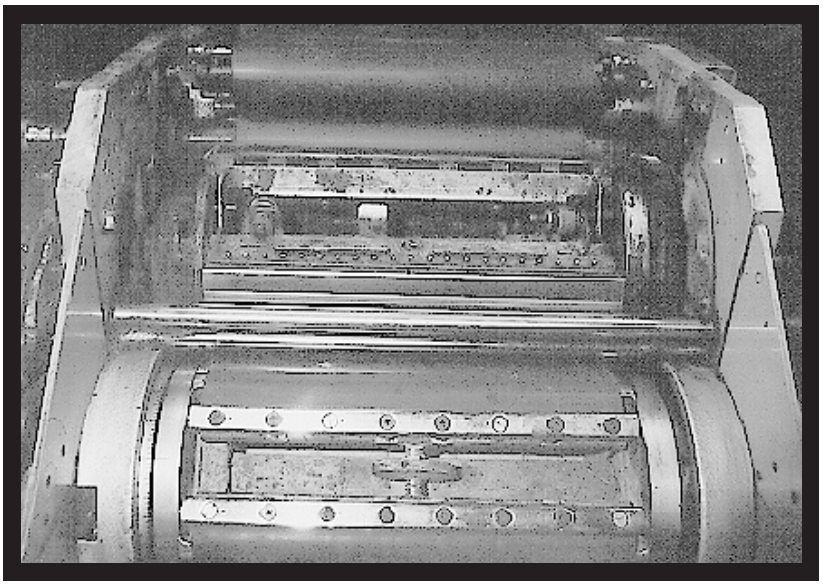
13 Remove the old dampener drive gear from the NOPS (subject arrow). Position the plate cylinder gap as shown to remove the gear.

---

14 Drive the pin out of the activating pawl at the OPS and remove the pawl (subject arrow).

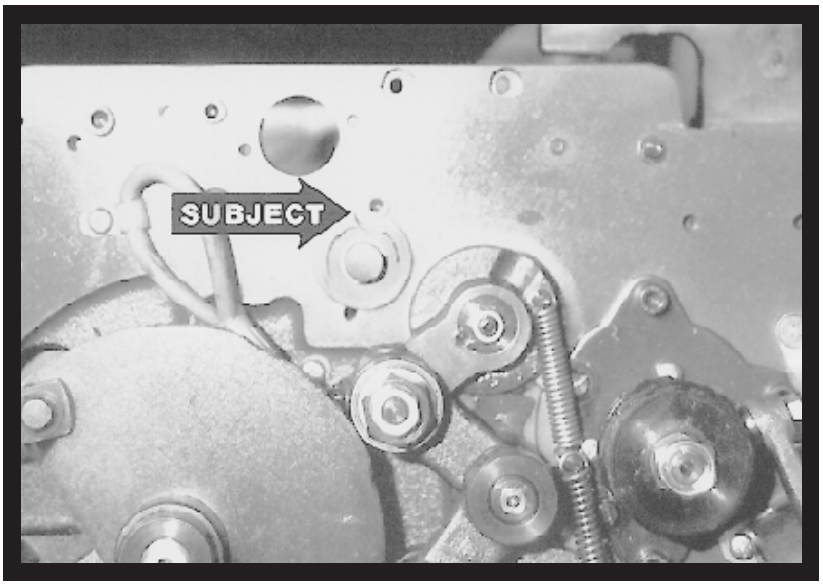
---

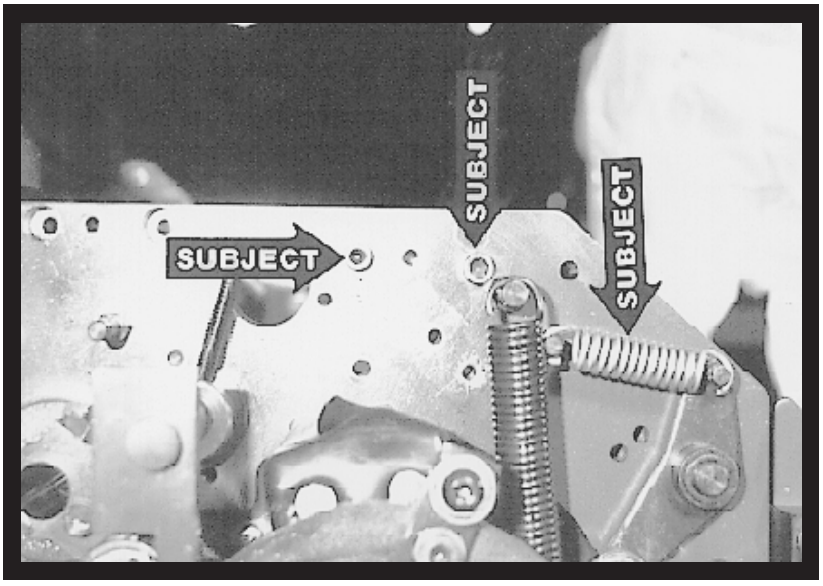
15 Remove countersunk screws and lower bronze bushing at OPS (#1). The dampener lift shaft can now be removed from the press. Unpin lift arm at OPS in order to remove on Itek 960, Ryobi 2800 models.

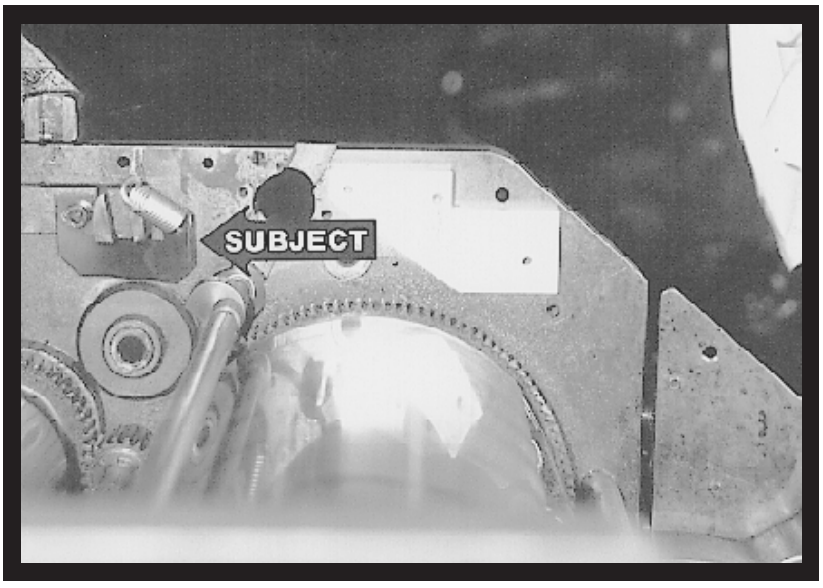


16 This is how a completed disassembly should look as viewed from the feed end of the press.

YOU ARE NOW READY TO INSTALL CRESTLINE®.


SUBJECT


SUBJECT
SUBJECT
SUBJECT


SUBJECT

1 Install lift shaft in the press frame hole where the eccentric lift shaft for the old dampener was. The shorter end of the shaft that extends beyond the lift cams goes to the NOPS side. The rounded portion of the lift cams should be facing up. Place the lift shaft collar over the end of the shaft and secure with a cap head bolt and washer (subject arrow).

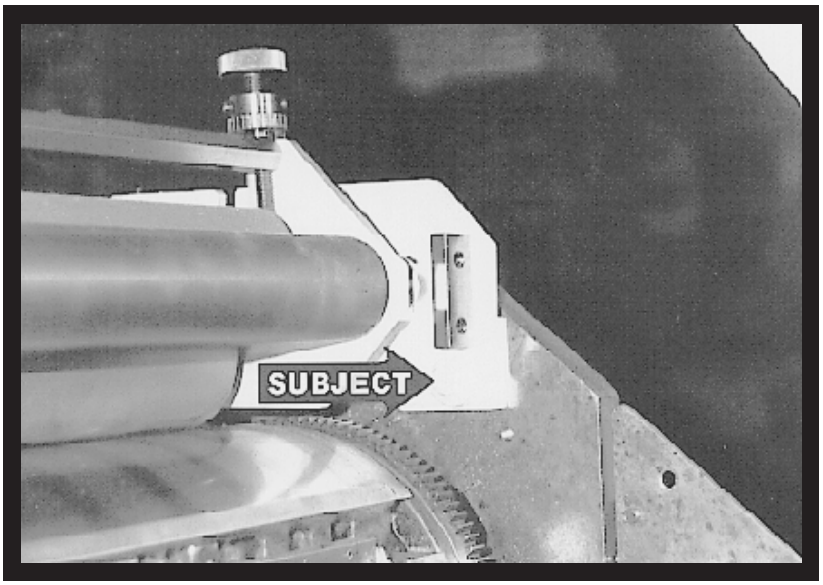
---

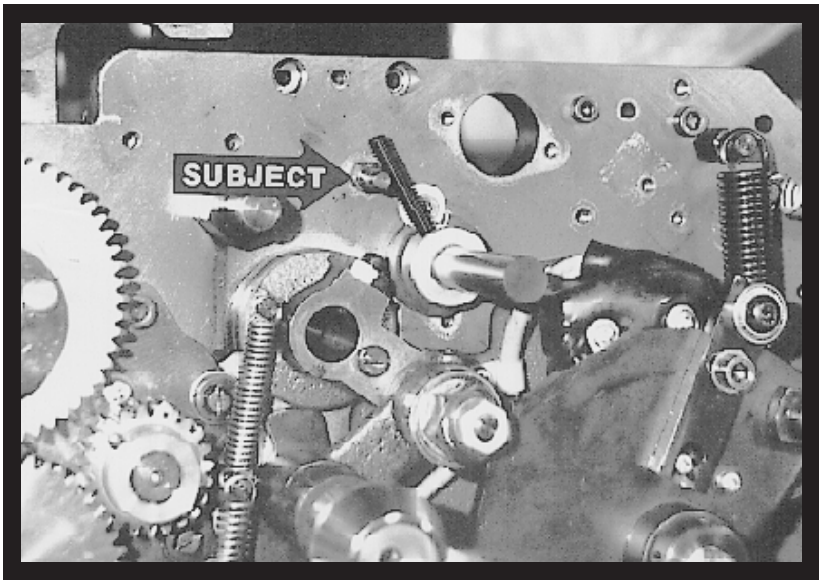
2 Install the mounting blocks at OPS & NOPS. The OPS block has an adjustment spool in it. The blocks are held in place by two cap head bolts (left and middle subject arrow). Press down on the blocks when tightening the bolts. Also install the new single lever spring at the OPS (right hand subject arrow). Refer to photo in following step which shows how mounting block is installed.

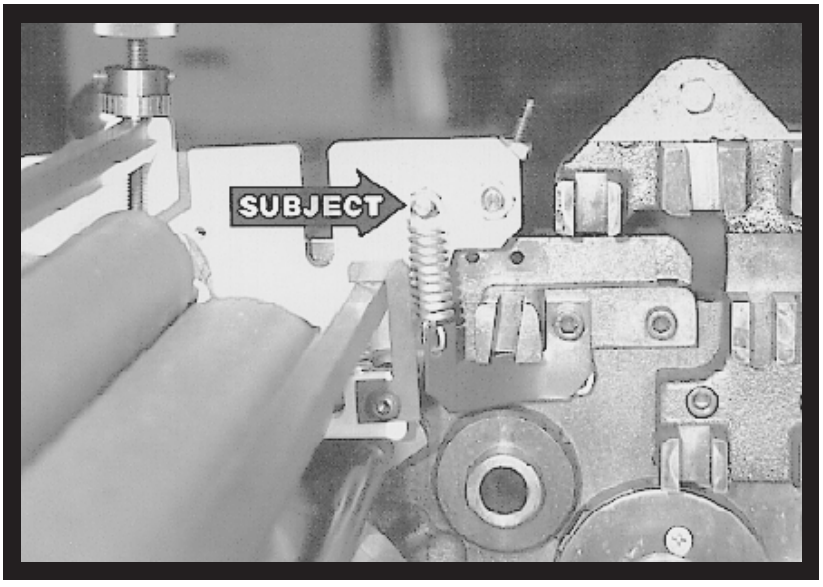
---

3 Install spring clip assembly, as shown, at both OPS & NOPS. The clips should be bent in toward the center of the press. Also, note the position of the lift shaft and mounting block which were installed in the previous steps.

Note: On older 2800's & 960's the oscillator block where the spring clamp mounts may have an angle cut in the top of the block. This cut is in the position where the water form adjustment is made. Cover the cut with the angle plates provided by Accel. Place the spring clip between the angle iron and oscillator block.


SUBJECT


SUBJECT


SUBJECT

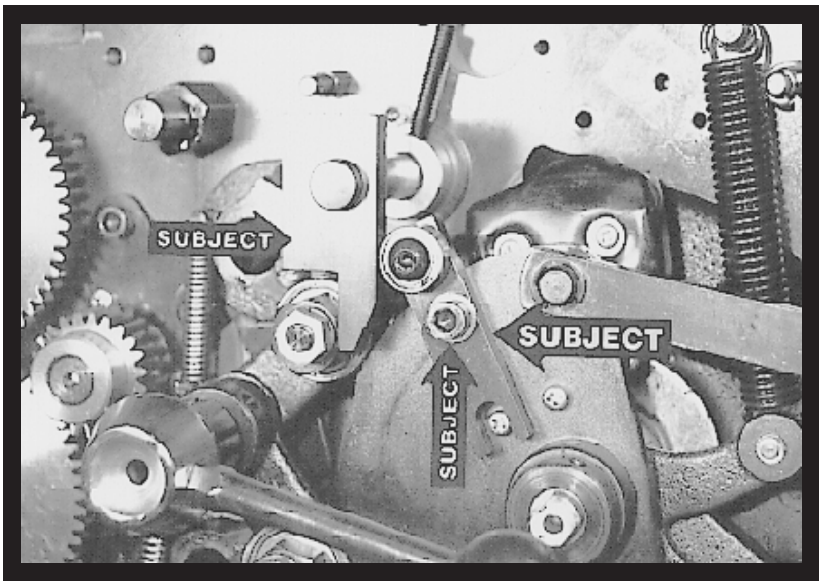
4 Slide the dampener between the mounting blocks and secure with mounting bolt (subject arrow). The washer goes to the OPS side. Loosen the adjustment spool in the OPS mounting block and push the dampener towards the NOPS. This takes any space differential between the frames. Retighten spool.

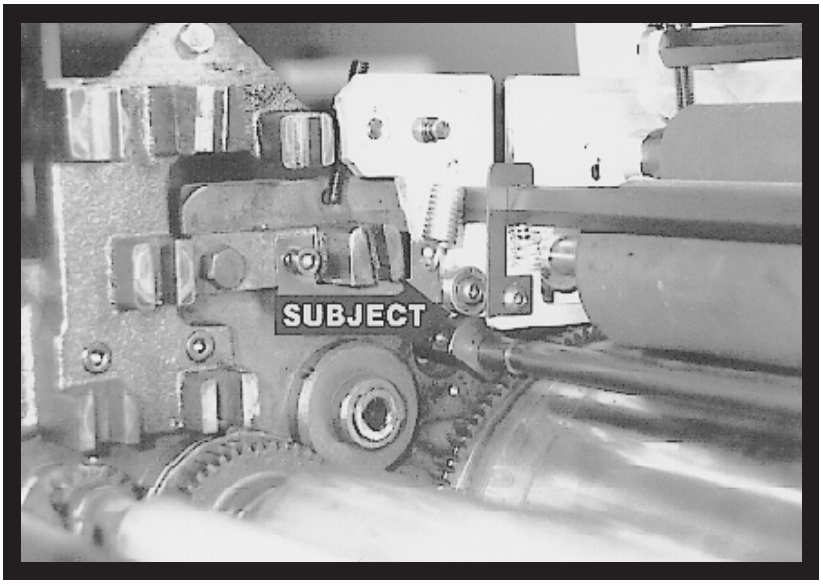
---

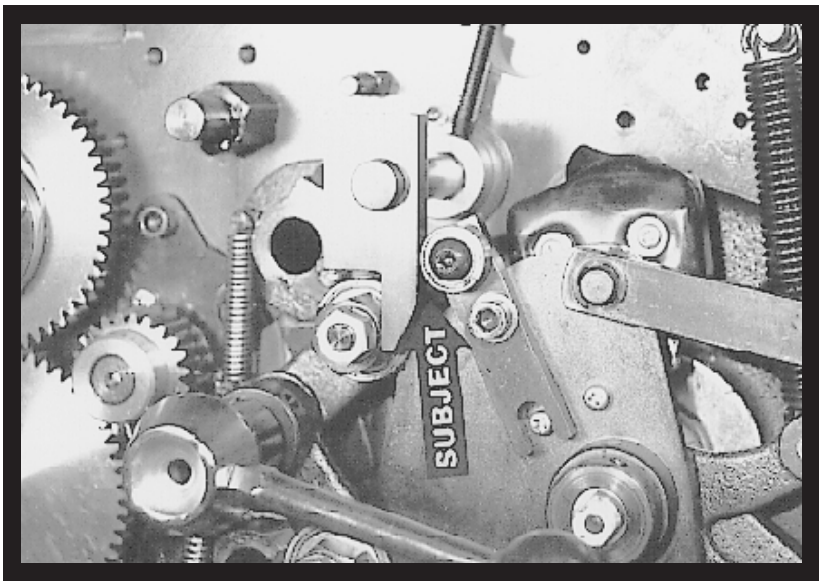
5 Move the lift shaft side to side until the lift cams are centered to the ball bearings mounted on the dampener frames. Install the set collars on the shaft, next to the lift shaft collars, to hold the side to side position. The collar with the long set screw (subject arrow) will go at the OPS.

---

6 Hook the spring to the stud (subject arrow) in the dampener frame at OPS & NOPS.


SUBJECT
SUBJECT
SUBJECT


SUBJECT


SUBJECT

7

Install the bearing block (right hand subject arrow) at OPS by removing the stud from the single lever detent cam (center subject arrow). The bearing block attaches where the stud was removed. Also, slip the lift arm (left hand subject arrow) over the lift shaft but do not tighten set screw. The block is slotted. Position the middle of the slot and tighten bolt.

8

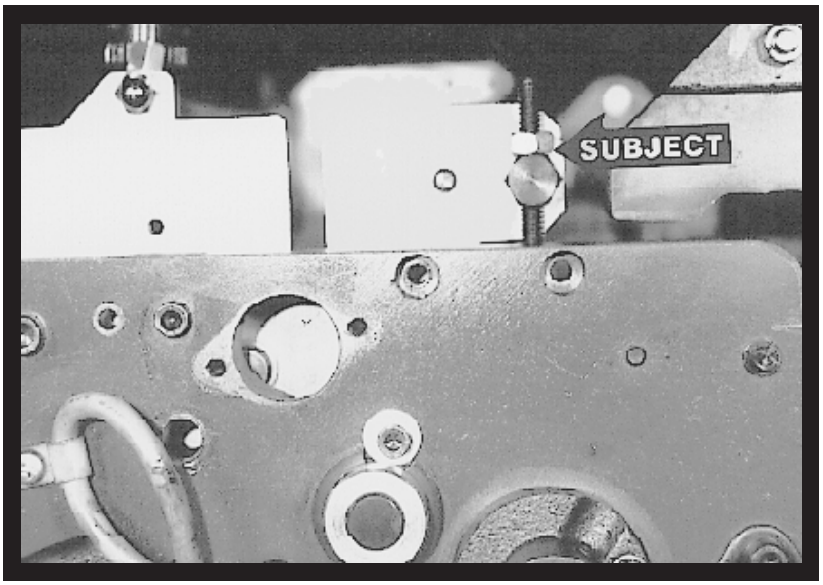
Set the dampener lift as follows:

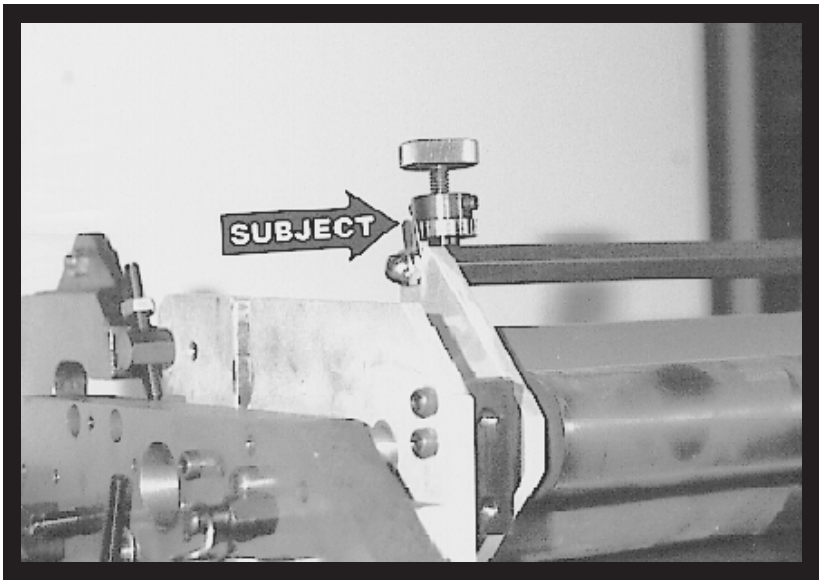
1. Place the single lever in the "water on" position. "Water on" will be the first position after the off position. The dampener and ink trains will drop together.
2. Rotate the lift shaft by hand until the cams are just touching the bearings on the dampener frame (subject arrow).
3. While holding the lift shaft in place, position the lift arm so it is touching the bearing on the bearing block and tighten set screw.
4. If necessary, reposition the set collar at the OPS of lift shaft so that the long set screw just rests against the spring stud. This acts as a stop so that the lift shaft does not rotate too far in the "water on" position.

9

Move the single lever handle back to the off position and the dampener should lift off the plate. The bearing block and lift arm should appear as shown. The dampener will be lifting about .040" - .050" off the plate cylinder. If necessary, reposition the bearing block to a different location along its slot to attain proper fit.

YOU ARE NOW READY TO MAKE FINAL ADJUSTMENTS


SUBJECT


SUBJECT

FINAL ADJUSTMENTS

1

Dab some ink on the dampener oscillator and turn the press on to distribute the ink among the rollers of the dampener. Mount a metal plate to the plate cylinder and drop the water form to the plate. The stripe should be an even 5/32" across the plate. Adjust by turning the screw on the outside of the dampener frame (subject arrow). Once an even stripe is obtained, lock the screw in place. Turning the screw down makes a thinner stripe and vice versa.

2

Adjust the metering pressure as follows:

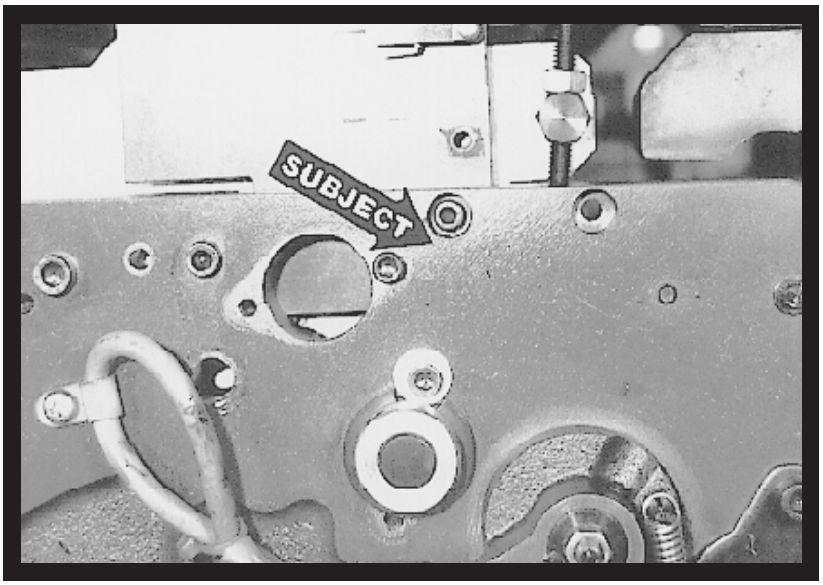
A. Turn the ratchet gear (subject arrow) down until it stops against the tie bar. It is not yet locked to the knurled knob.

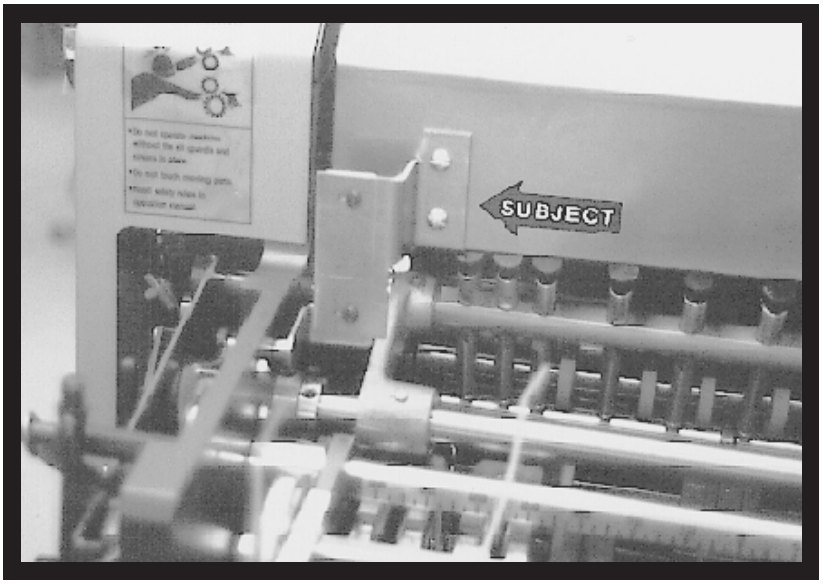
B. Turn both knurled knobs until the tip of the threaded portion touches the metering roller shaft housing. Then turn each screw 1/2 turn down.

C. Idle the press for 20 seconds and then shut it off.

D. Let the press sit for 30 seconds and rotate the press forward until the stripe between the metering and pan roller is visible. The stripe should be an even 5/32". It may be easier to see the stripe by gently rubbing a piece of coated stock on the stripe. The stripe will transfer to the stock. Measure between the two thick lines on the stock to check the stripe.

E. Adjust the screws to obtain the proper stripe (turning the screws down makes a wider stripe) When finished, lock ratchet gears to knurled knob by tightening set screws.


SUBJECT


SUBJECT


WARNING
SUBJECT

3

Install the guard as follows:

A. Mount the guard plate to the press frames. The plate with the microswitch goes to the NOPS. The bolt above subject arrow is a short bolt that threads into the plate. The bolt below the arrow is a long bolt, threaded through the press frame and into a clearance hole on the guard plate.

B. Slip dampener guard hinge pins through the holes nearest the delivery at OPS & NOPS (the longer pin goes to NOPS). Attach guard to hinge pins with provided bolts and washers, set side to side position and lock in place.

4

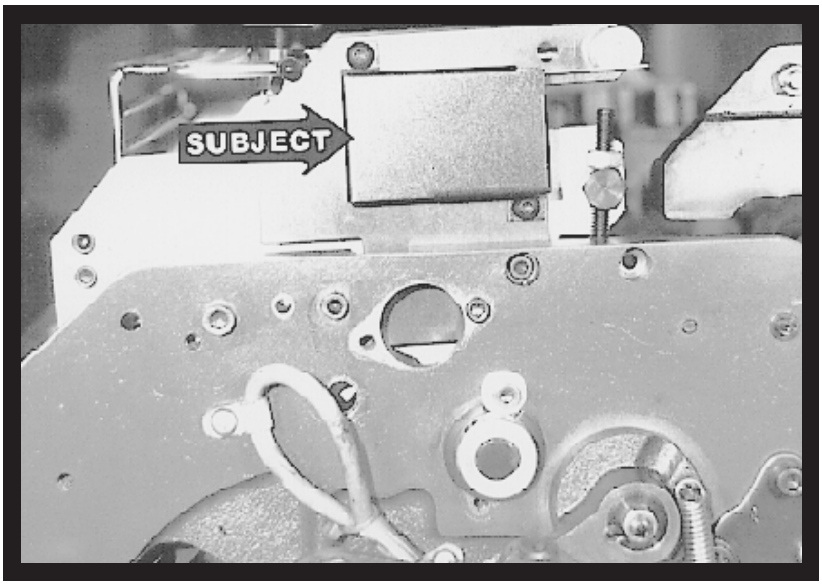
Installing plate guard on presses WITHOUT Townsend T-51®.

Supplied with the plate/blanket cylinder guard are adapter plates (subject arrow) for the NOPS & OPS. If your press does not have a T-51 color head, you must install these adapter plates to the bottom of the guard as shown and then bolt the Ryobi hinges to the adapter plates with provided screws.

5

Installing plate/blanket cylinder guard on presses WITH Townsend T-51®.

The adapter plates supplied with the plate/blanket cylinder guard are not required on those presses using a T-51 color head. Instead, remove the T-51 mounting brackets (subject arrow) from existing guard and bolt to the new plate/blanket guard as shown. This guard attaches to the T-51 blocks and activates the microswitch exactly as the original T-51 guard.


SUBJECT

FINAL ADJUSTMENTS

6

Attach microswitch trip cam to NOPS hinge pin. Attach the wires to the microswitch and attach the cover (subject arrow). Check to make sure the cam trips the switch.

The inker guard now snaps into the hole beside the dampener guard pins.

Replace side covers and handles at OPS & NOPS.

YOU ARE NOW READY TO PRINT.

START OF THE DAY

A. Make sure the oscillator 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® 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® 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" (4mm) to the plate.

B. Adjustments to the amount of water fed to the plate are made by the knurled knobs that apply pressure to the metering roller. The dampener has been set up for minimum water. To increase the water to the plate, turn the knurled knobs counterclockwise 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 wash-up mat to the press, or if using a wash-up attachment, a metal plate.
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 cylinder. Apply wash directly to the dampener only when necessary, or when using wash-up mats. If using a wash-up attachment, the dampener will, in general, pick up enough solution off the metal plate to clean itself.
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 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.

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

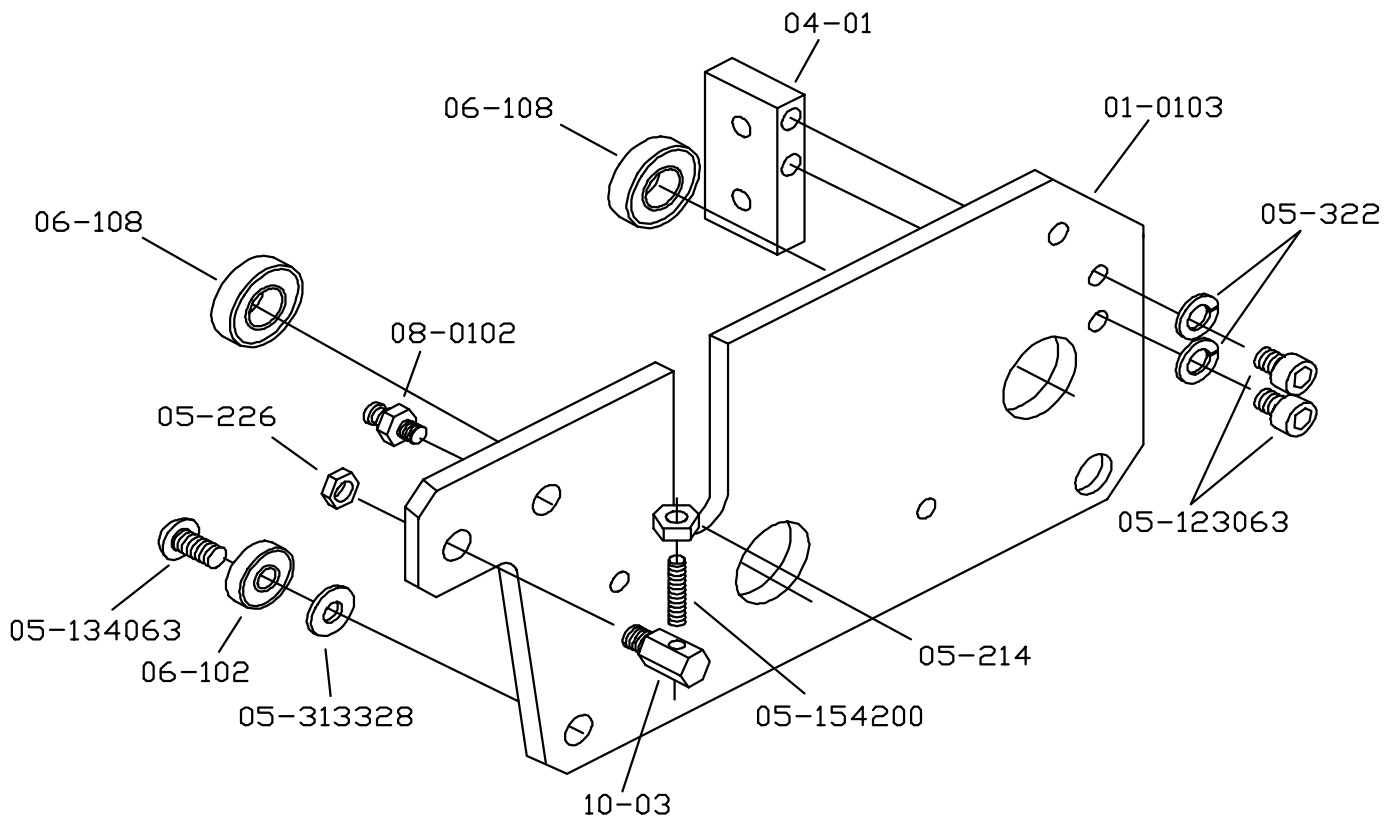
A. Place a small amount of grease on the gears once a month.

B. Inject grease into the oscillator grease fitting once a month.

CRESTLINE®
CLEANING & MAINTENANCE CHART

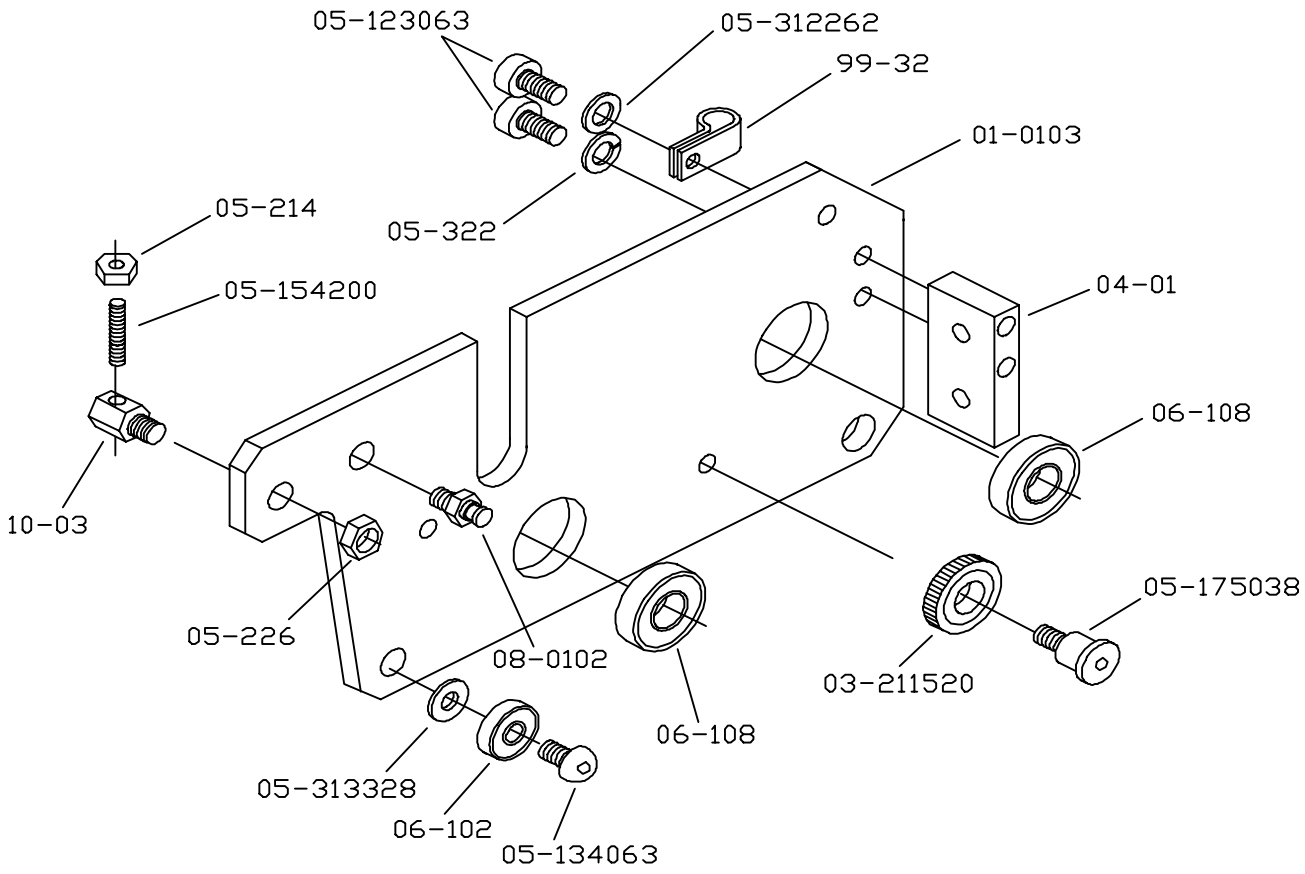
	Daily	Weekly	Bi-Weekly	Monthly
Wash Rollers	✓			
Deglaze Rollers				
Metal Plate Users			✓	
Silvermaster Plate Users			✓	
Electrostatic Plate Users		✓		
Grease Gears				✓
Inspect Ball Bearings				✓
Check Roller Pressures				✓
Check Roller Surfaces				✓

RY280



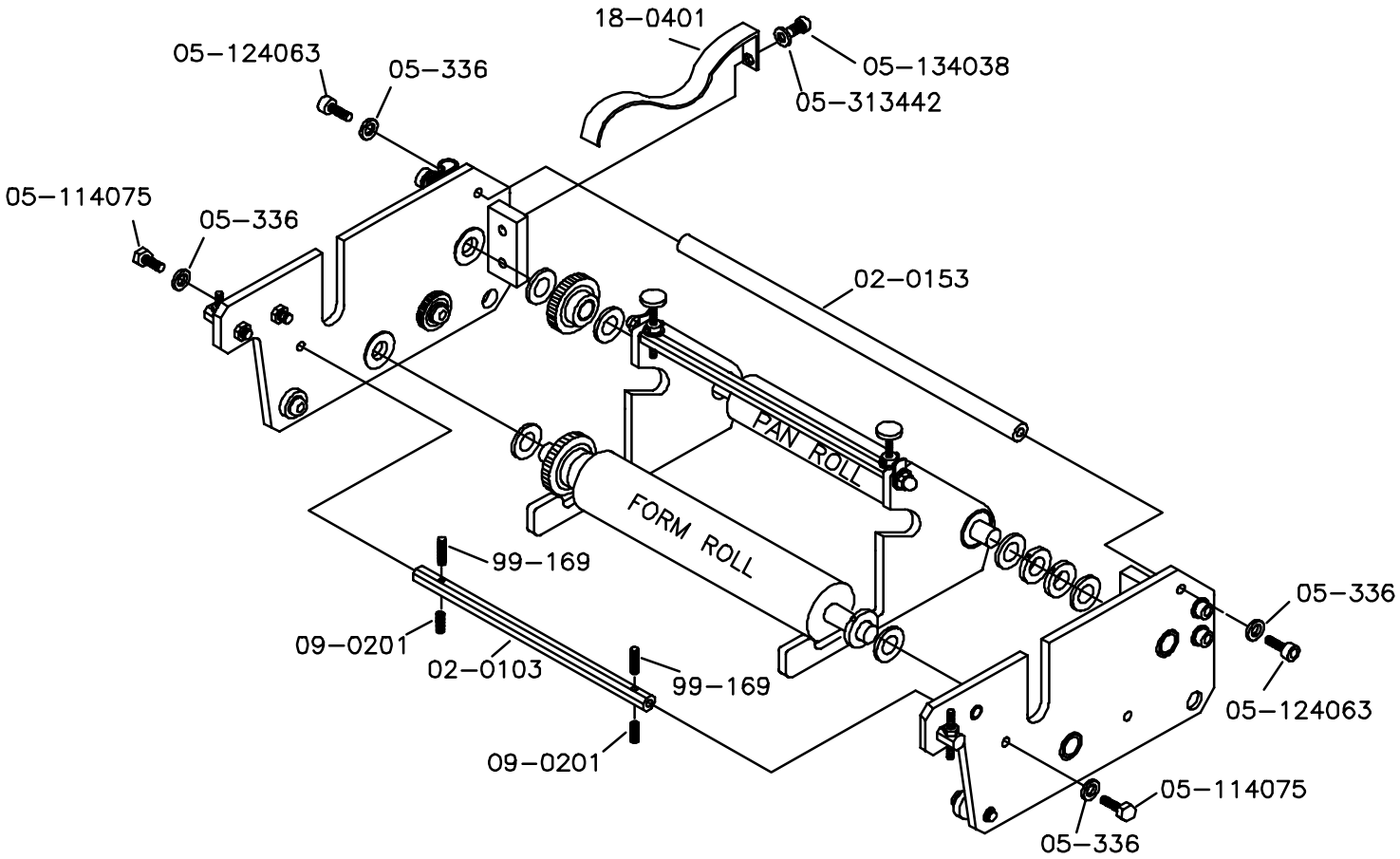
R282, 8-96

RY280

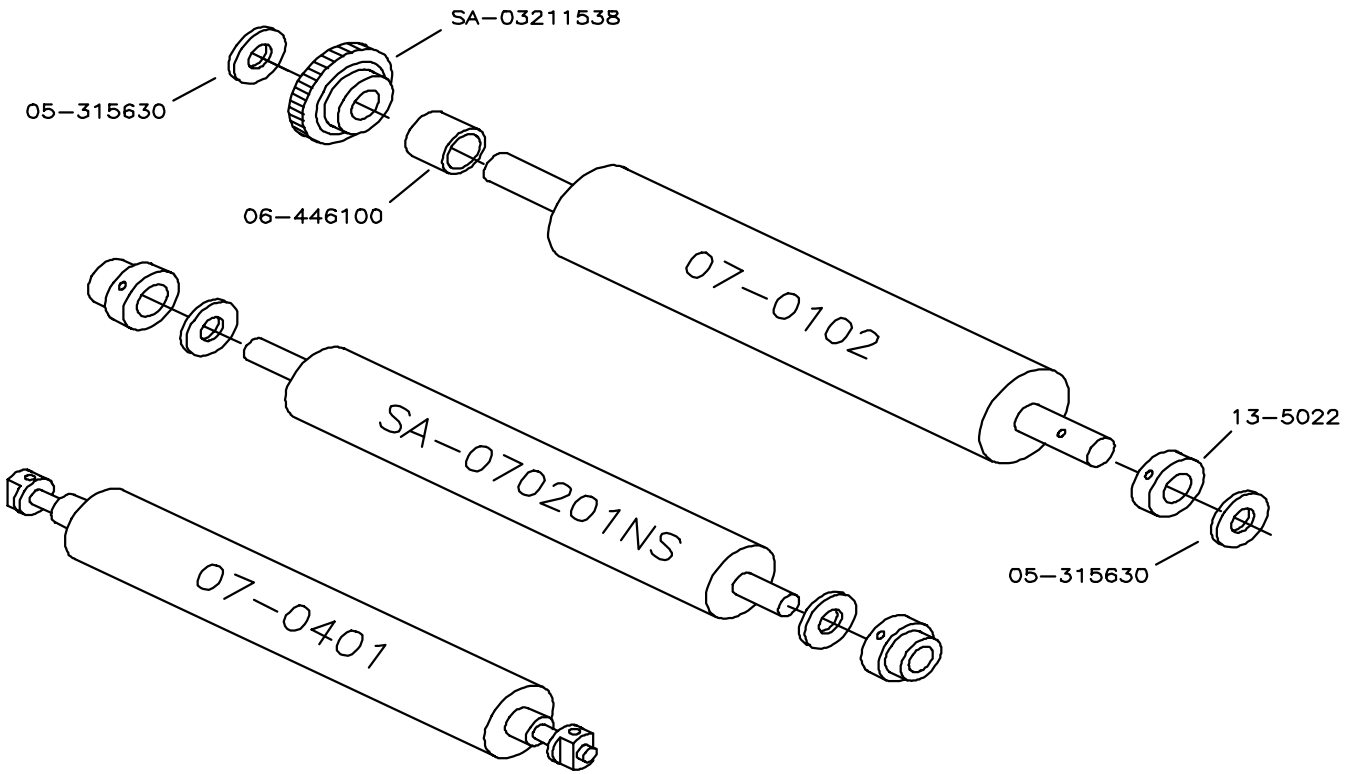


R281, 8-96

RY280

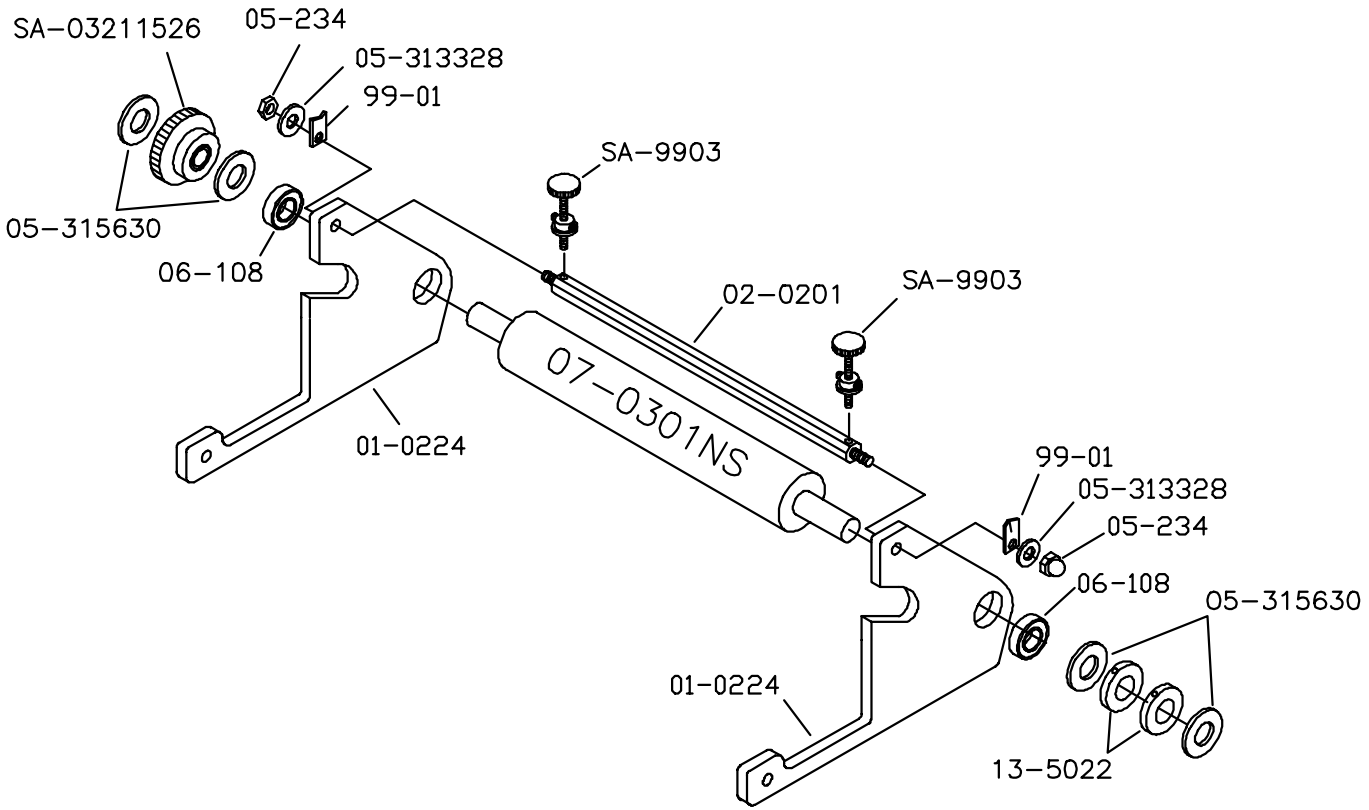

18–0401
05–124063
05–336
05–134038
05–313442
05–114075
05–336
02–0153
PAN ROLL
FORM ROLL
99–169
09–0201
02–0103
99–169
09–0201
05–336
05–124063
05–114075
05–336
R285, 8–96

RY280

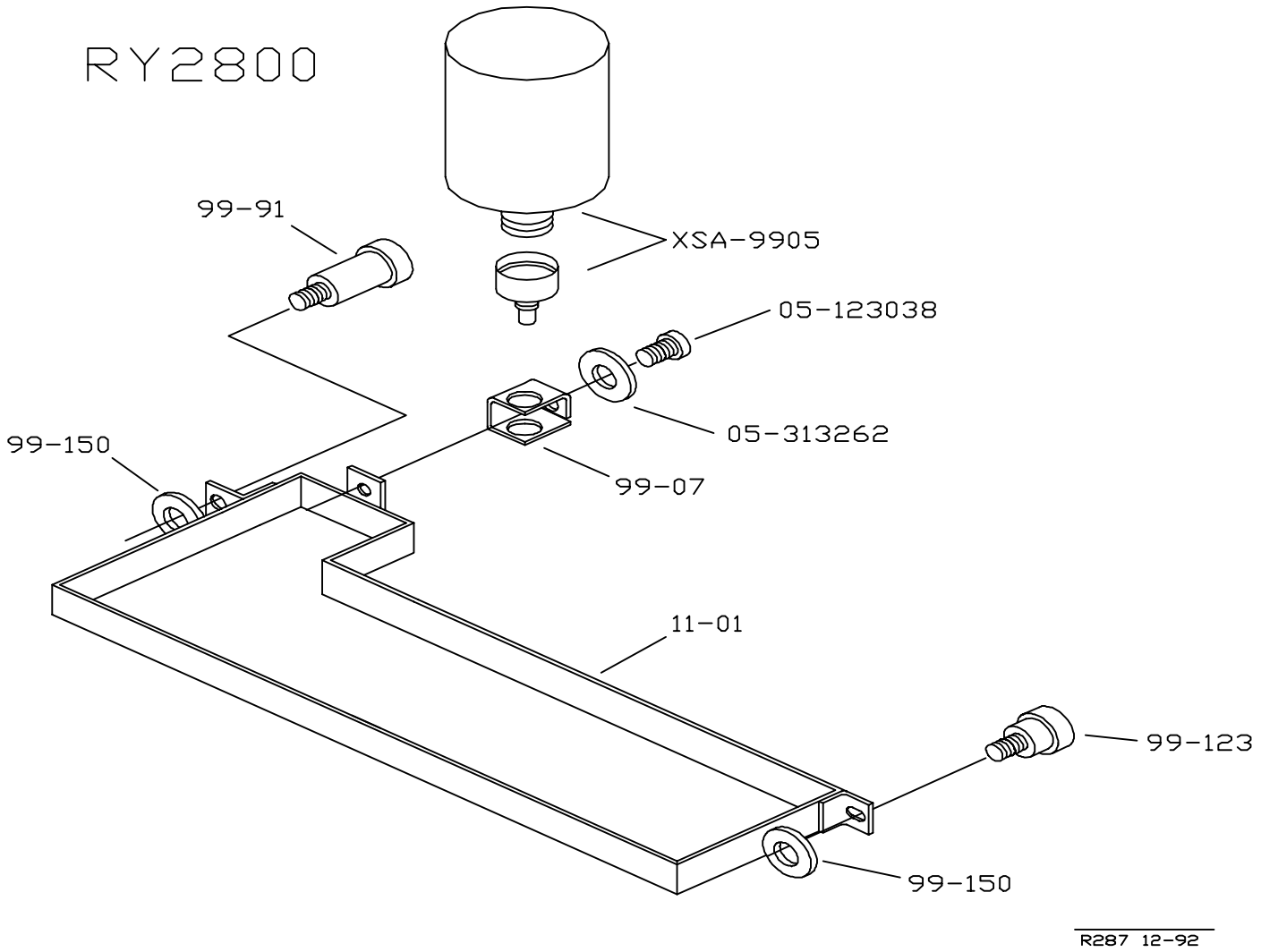


R284, 8–96

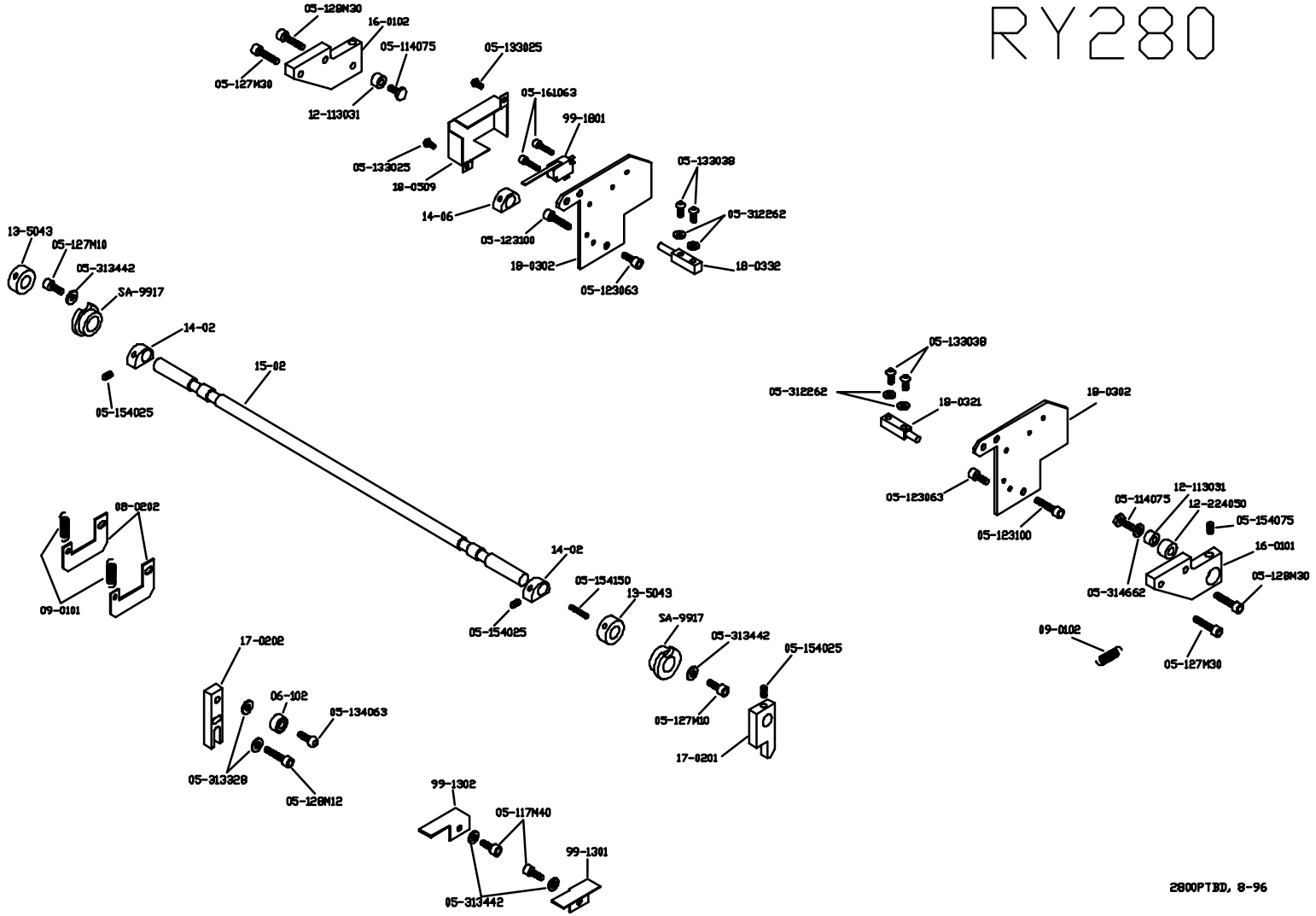
RY280



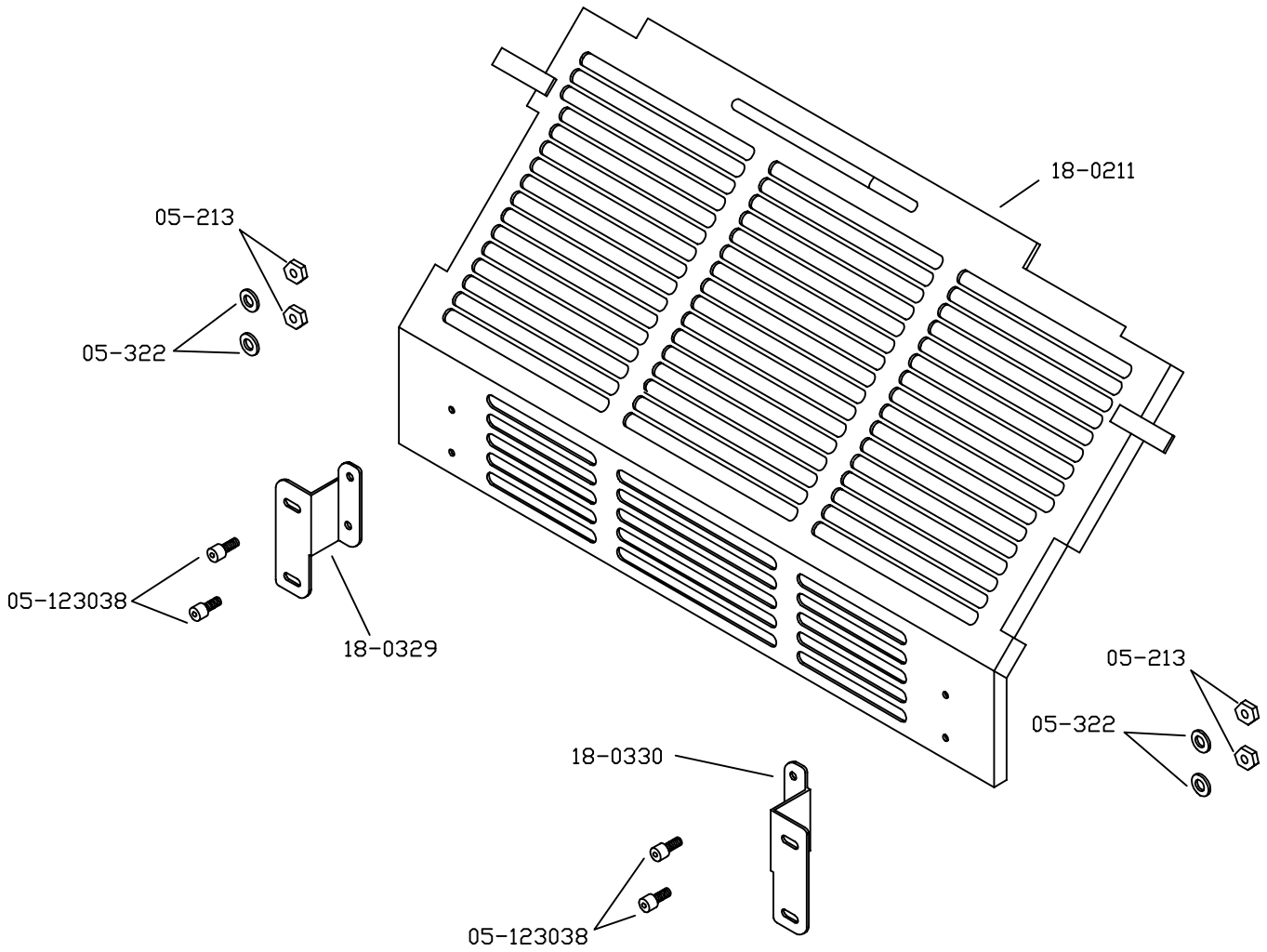
R283, 8-96


RY2800
99-91
XSA-9905
05-123038
05-313262
99-150
99-07
11-01
99-123
99-150
R287 12-92

RY280

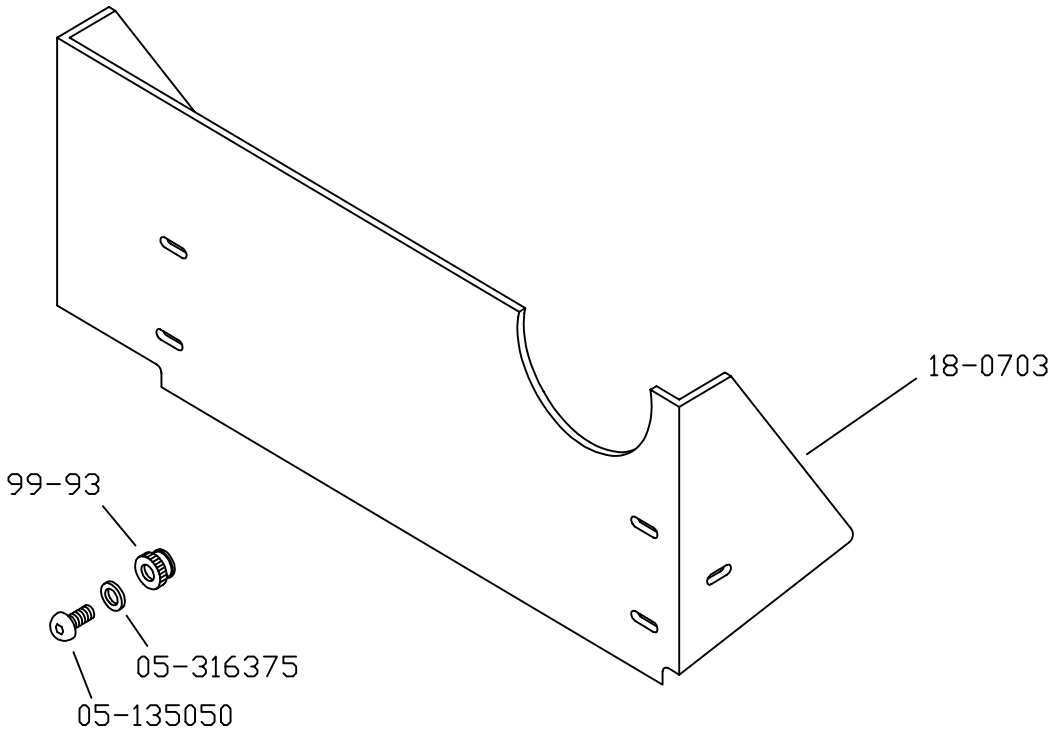

05-128M30
16-0102
05-127M30
05-114075
12-113031
05-133025
05-161063
99-1801
05-133025
18-0509
14-06
05-123100
18-0302
05-123063
05-133038
05-312262
18-0332
13-5043
05-127M10
05-313442
SA-9917
14-02
15-02
05-154025
05-133038
05-312262
18-0321
18-0302
05-123063
05-123100
12-113031
05-114075
12-224050
05-154075
16-0101
05-314662
05-128M30
05-127M30
09-0102
08-0202
09-0101
14-02
05-154025
05-154150
13-5043
SA-9917
05-313442
05-154025
05-127M10
17-0201
17-0202
06-102
05-134063
05-313328
05-128M12
99-1302
05-117M40
99-1301
05-313442
2800PTBD, 8-96

RYOBI 2800



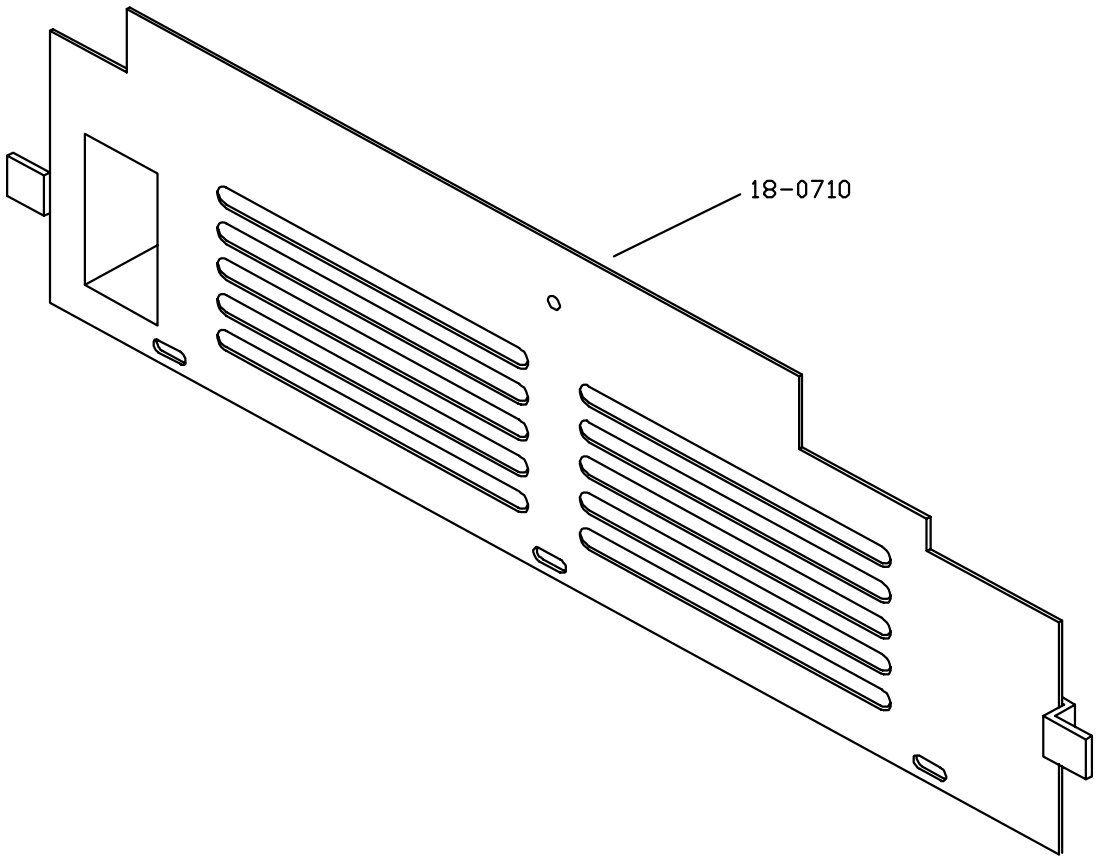
2800 MTG

SA-180703 T-HEAD PACKAGE, RYOBI 2800



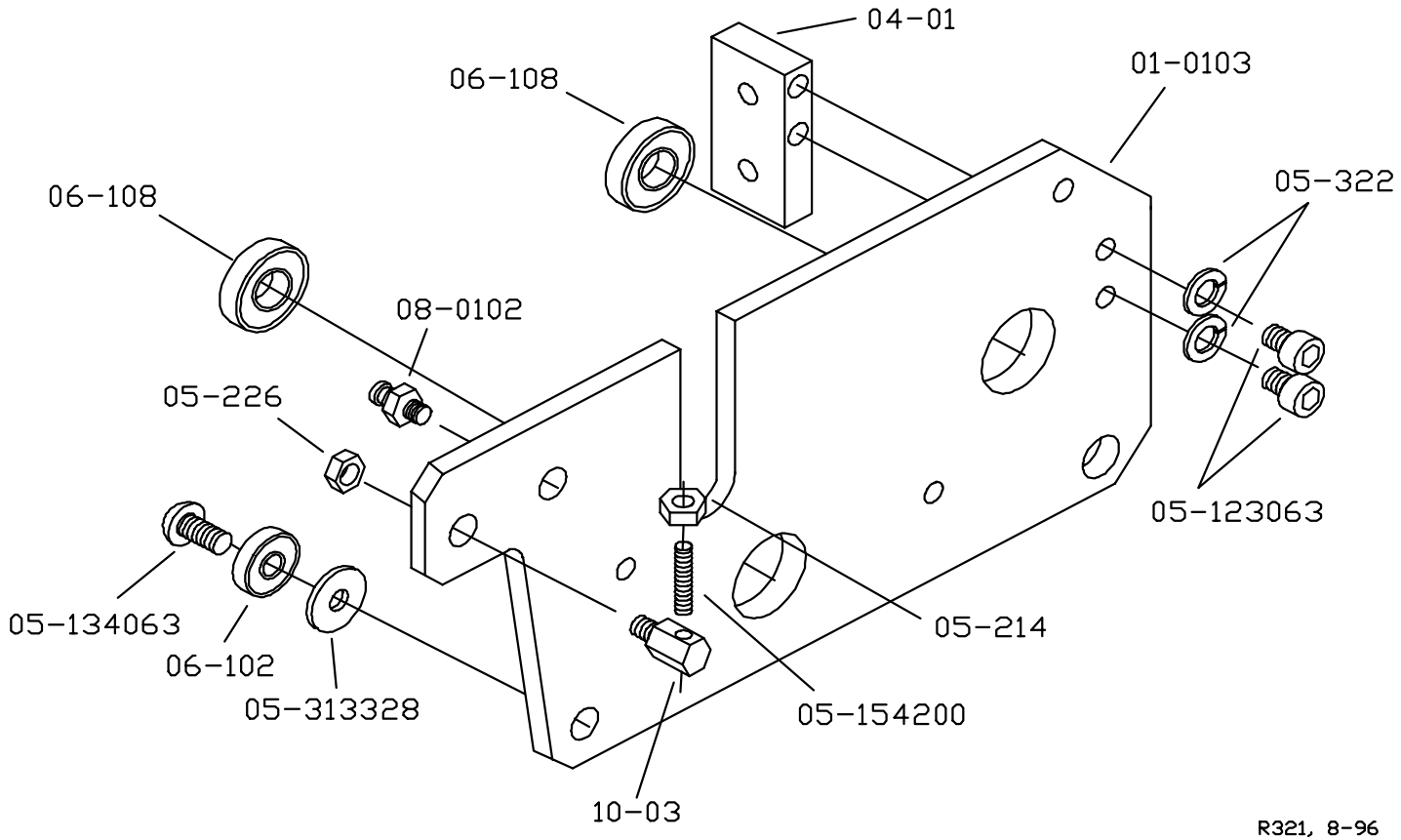
SA180703

RY2800 SUPER -T GUARD

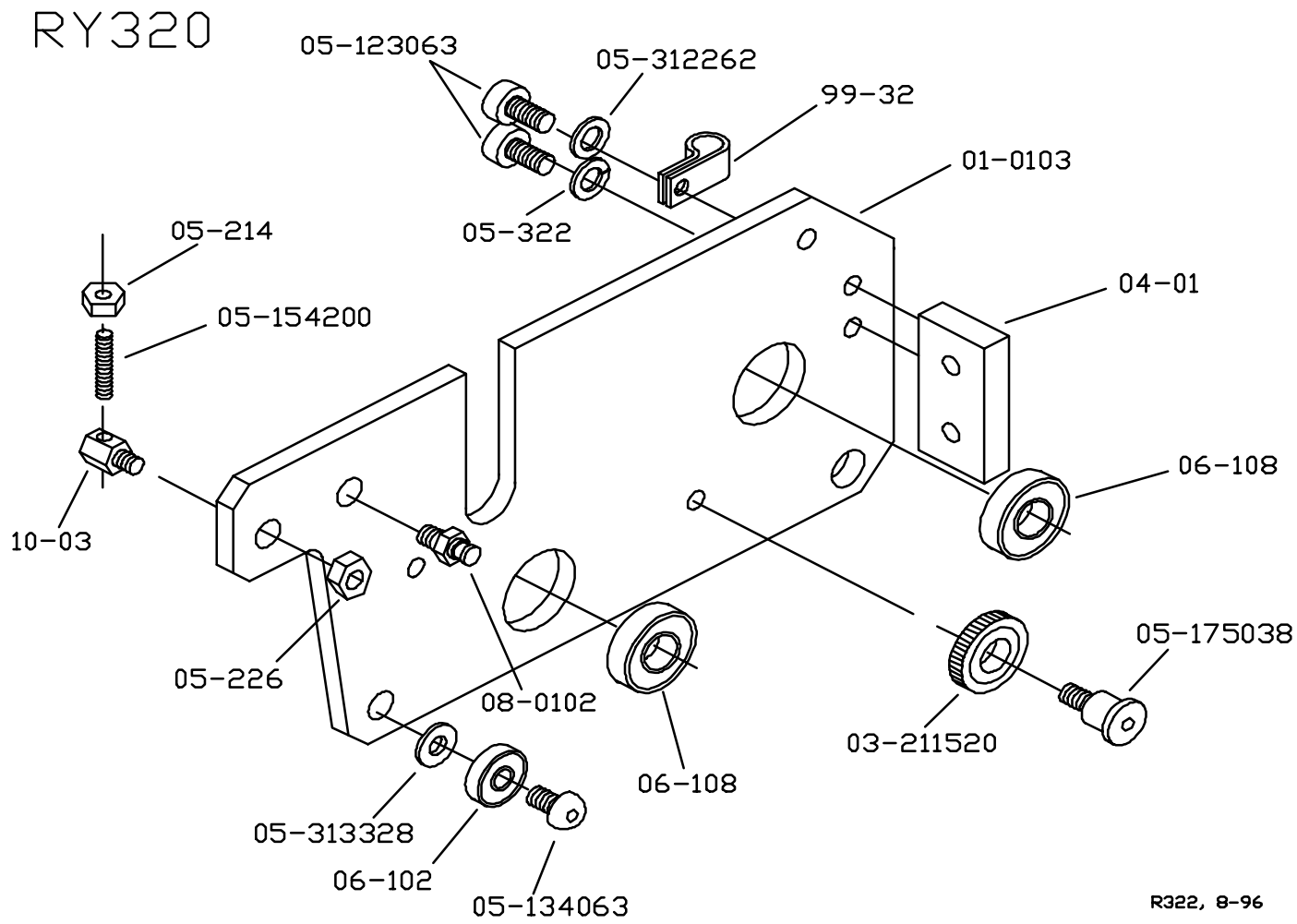


R2814 5-29-96

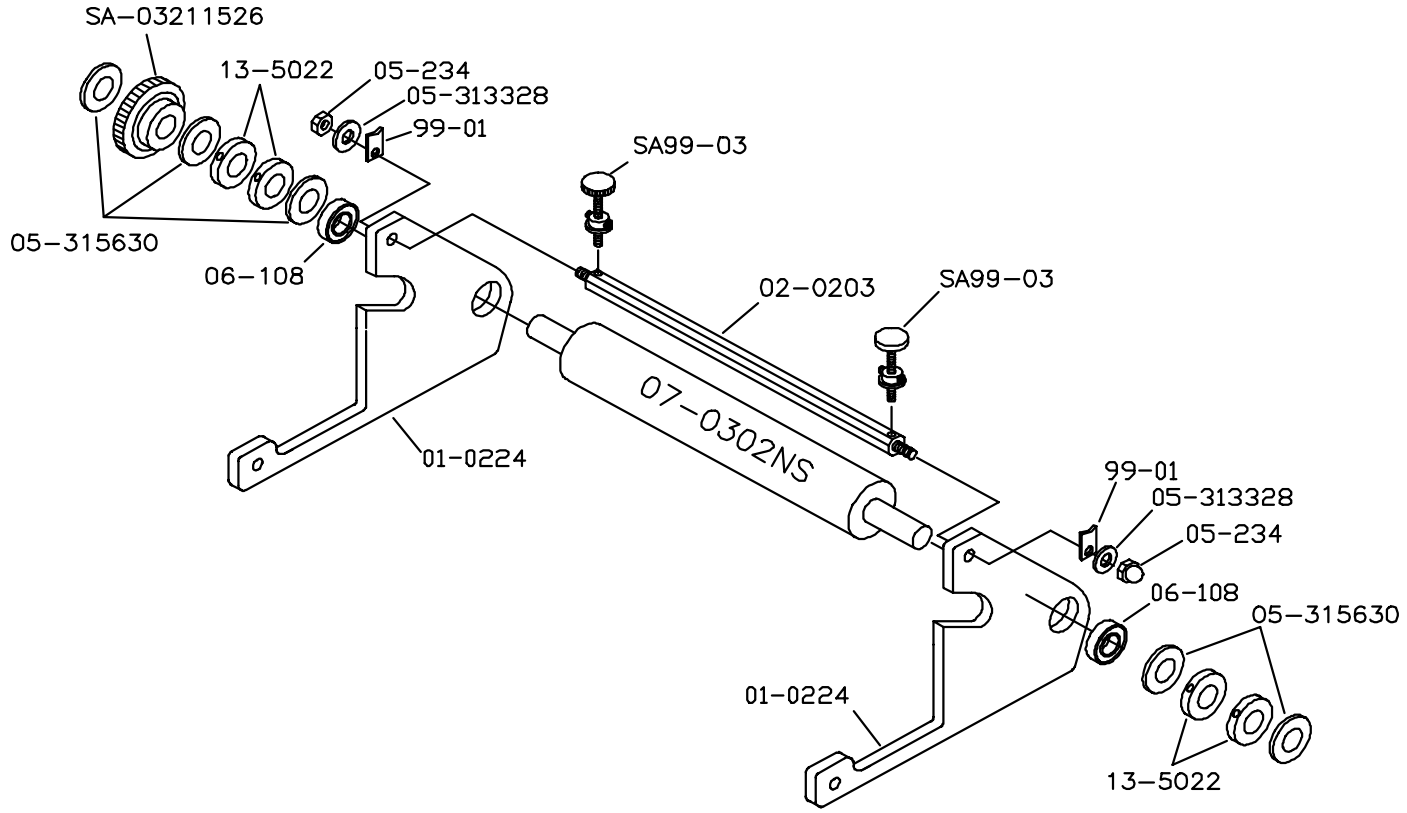
RY320



R321, 8-96

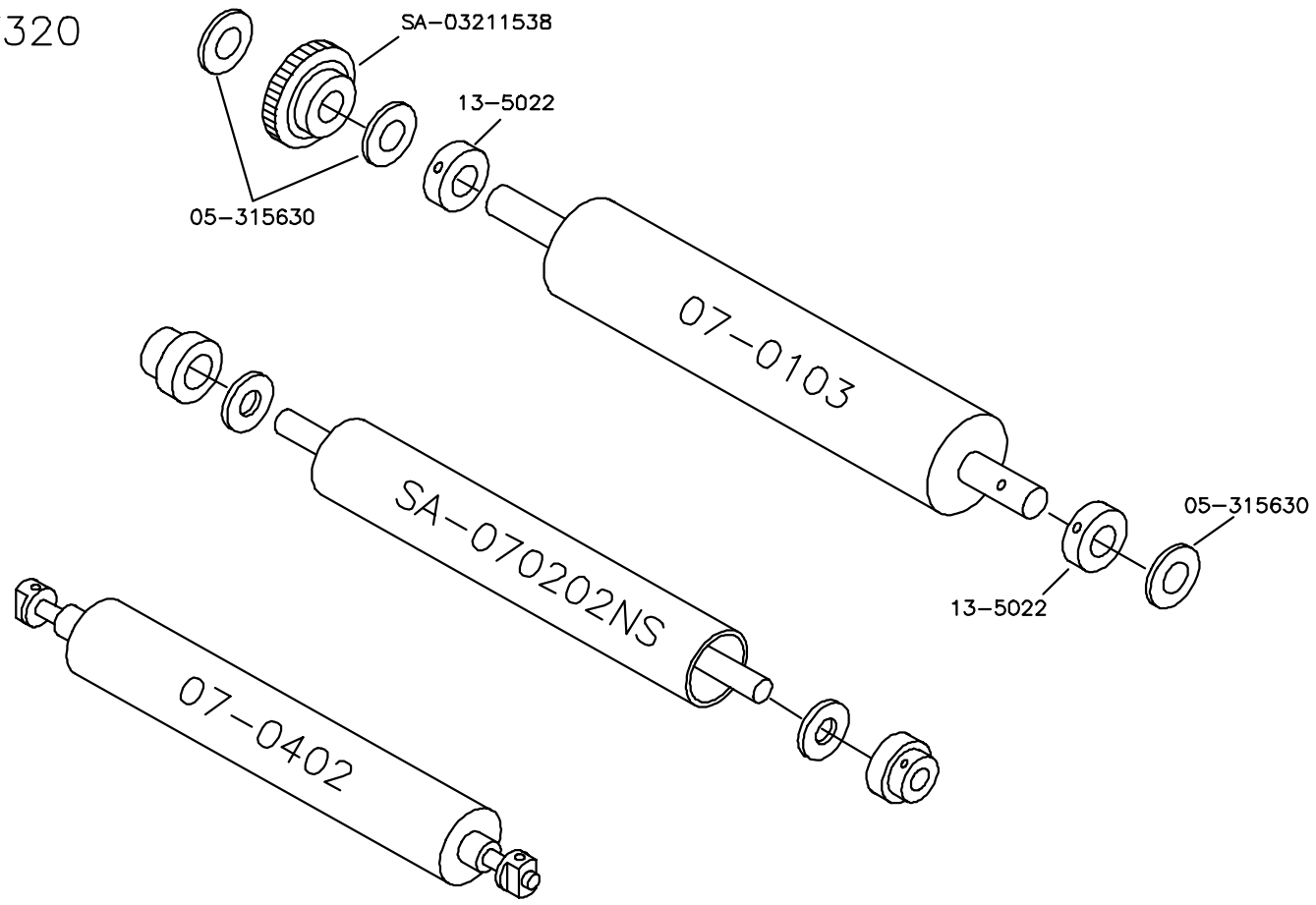

RY320
05-123063
05-312262
99-32
01-0103
05-214
05-322
04-01
05-154200
06-108
10-03
05-226
08-0102
05-175038
03-211520
06-108
05-313328
06-102
05-134063
R322, 8-96

RY320



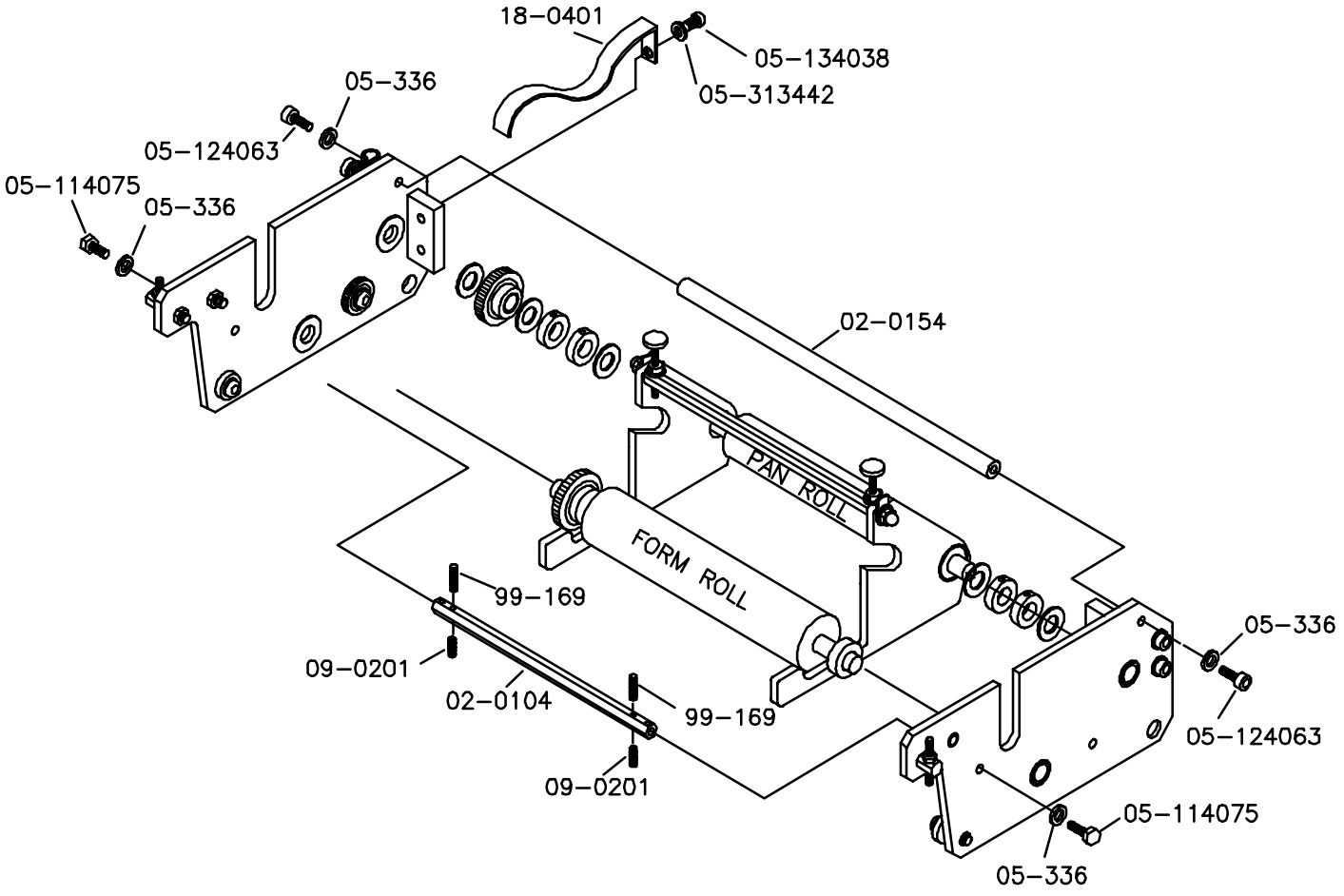
R323, 8-96

RY320

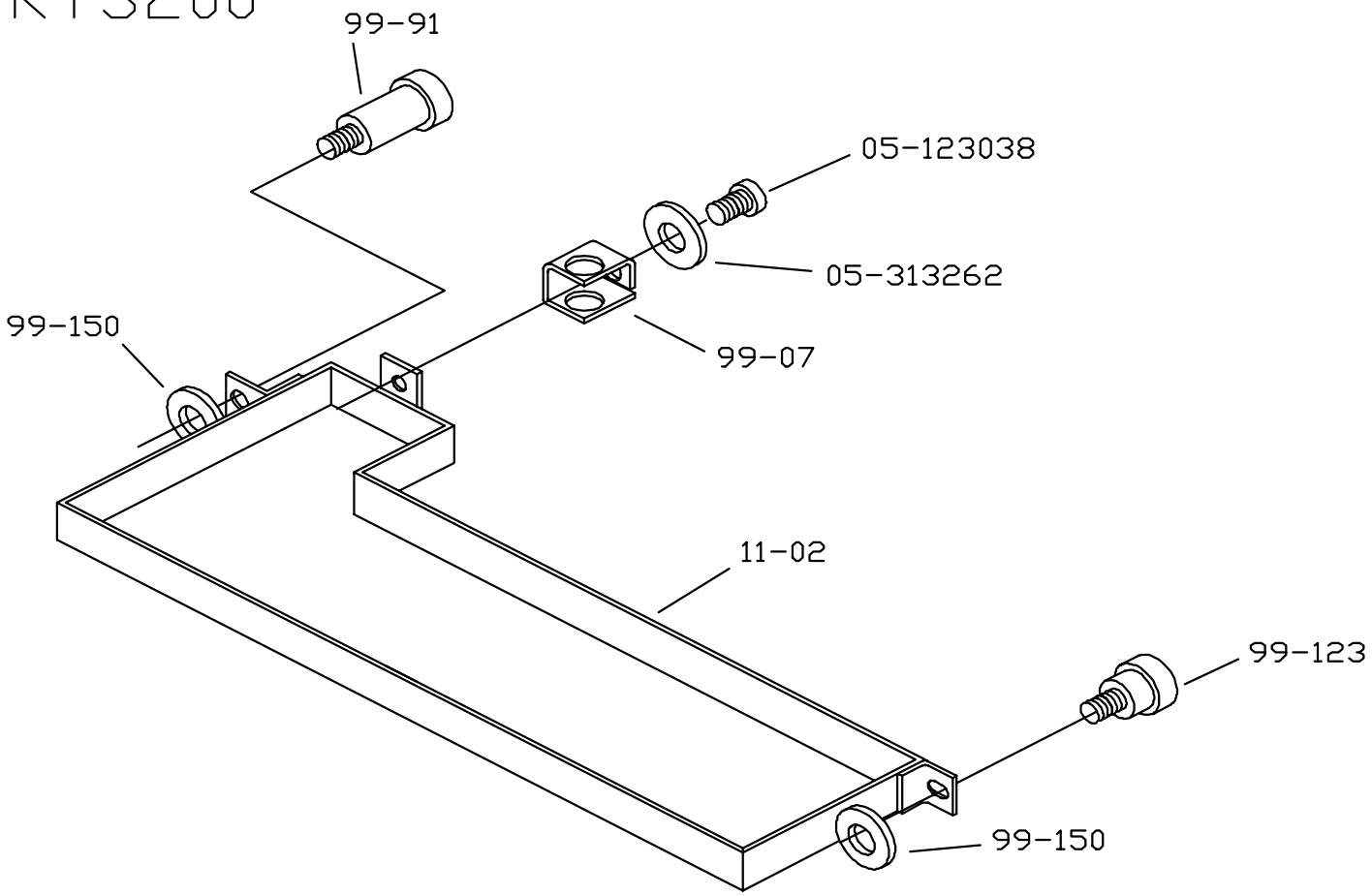


R324, 8-96

RY320

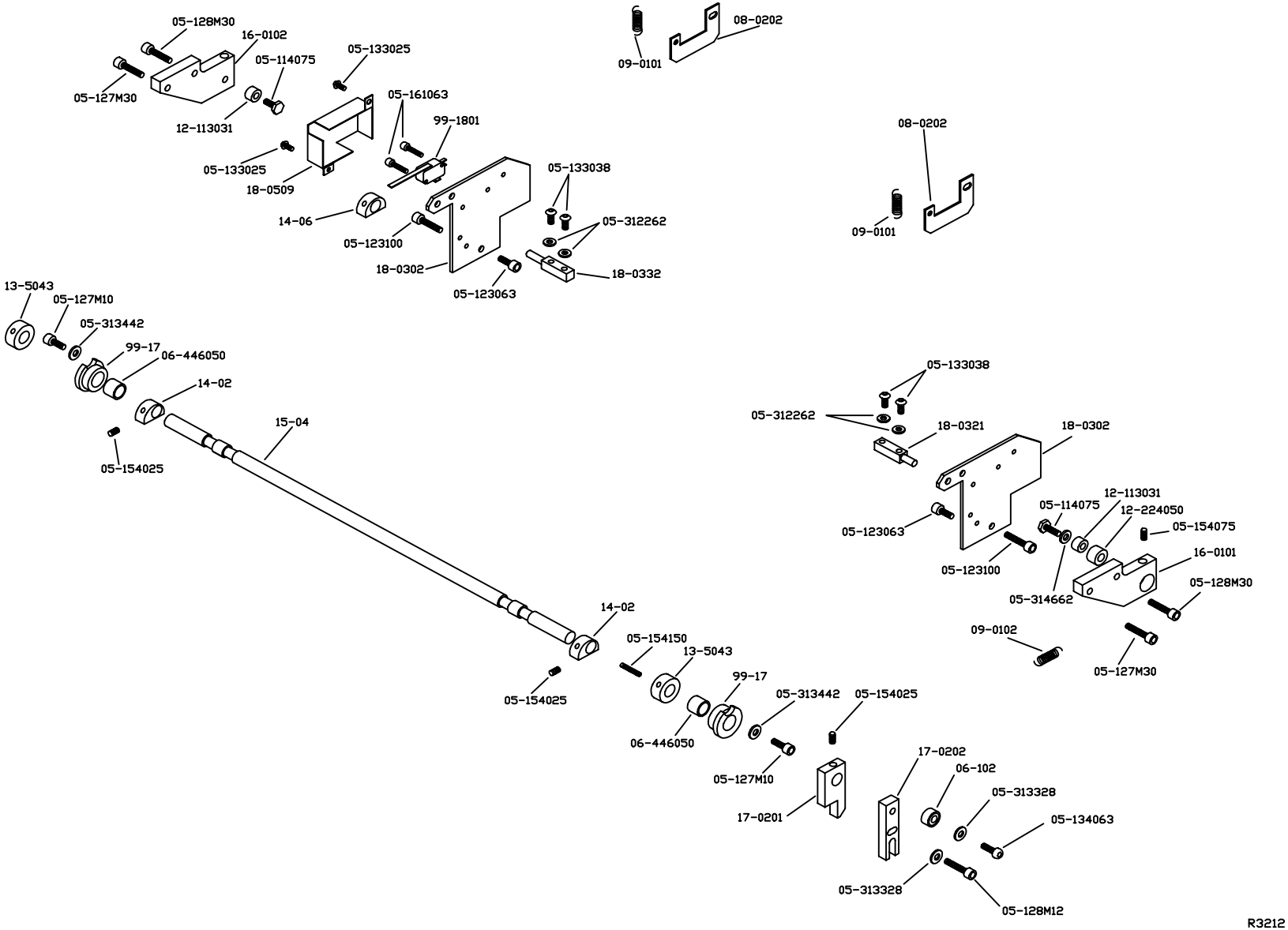

18–0401
05–134038
05–313442
05–336
05–124063
05–114075
05–336
02–0154
PAN ROLL
FORM ROLL
99–169
09–0201
02–0104
99–169
09–0201
05–336
05–124063
05–114075
05–336
R325, 8–96

RY3200

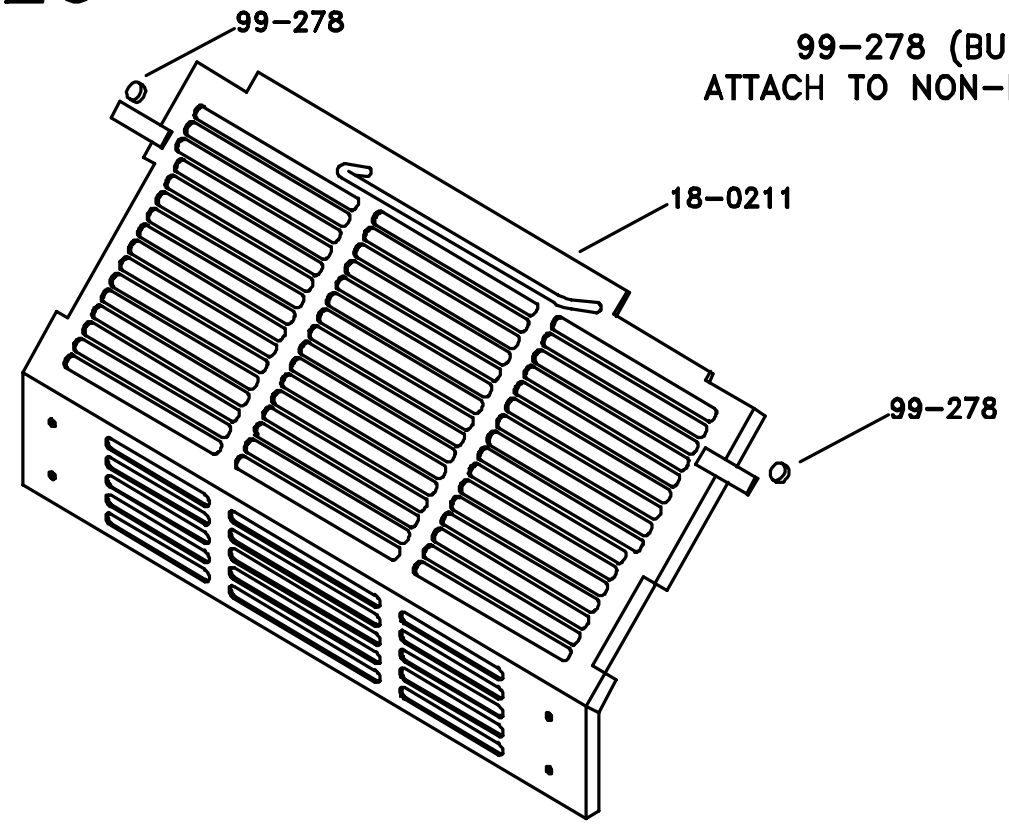


R327, 12-92

RYOBI 3200


05-128M30
16-0102
05-127M30
05-114075
12-113031
05-133025
05-161063
99-1801
05-133025
18-0509
14-06
05-123100
18-0302
05-123063
05-133038
05-312262
18-0332
09-0101
08-0202
09-0101
08-0202
13-5043
05-127M10
05-313442
99-17
06-446050
14-02
05-154025
15-04
14-02
05-154025
05-154150
13-5043
99-17
06-446050
05-313442
05-154025
05-127M10
17-0201
17-0202
06-102
05-313328
05-134063
05-313328
05-128M12
05-133038
05-312262
18-0321
18-0302
05-123063
05-123100
12-113031
05-114075
12-224050
05-154075
16-0101
05-314662
05-128M30
09-0102
05-127M30
R3212

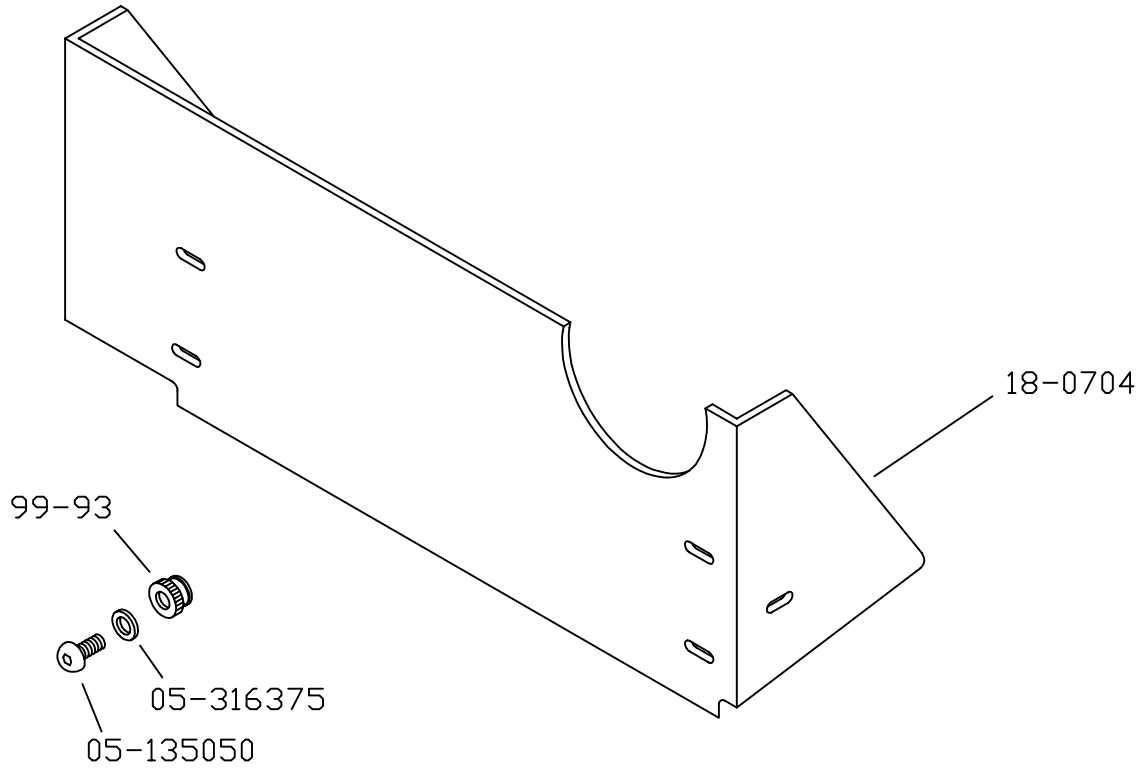
RY320



99-278 (BUMPERS)
ATTACH TO NON-HANDLE SIDE

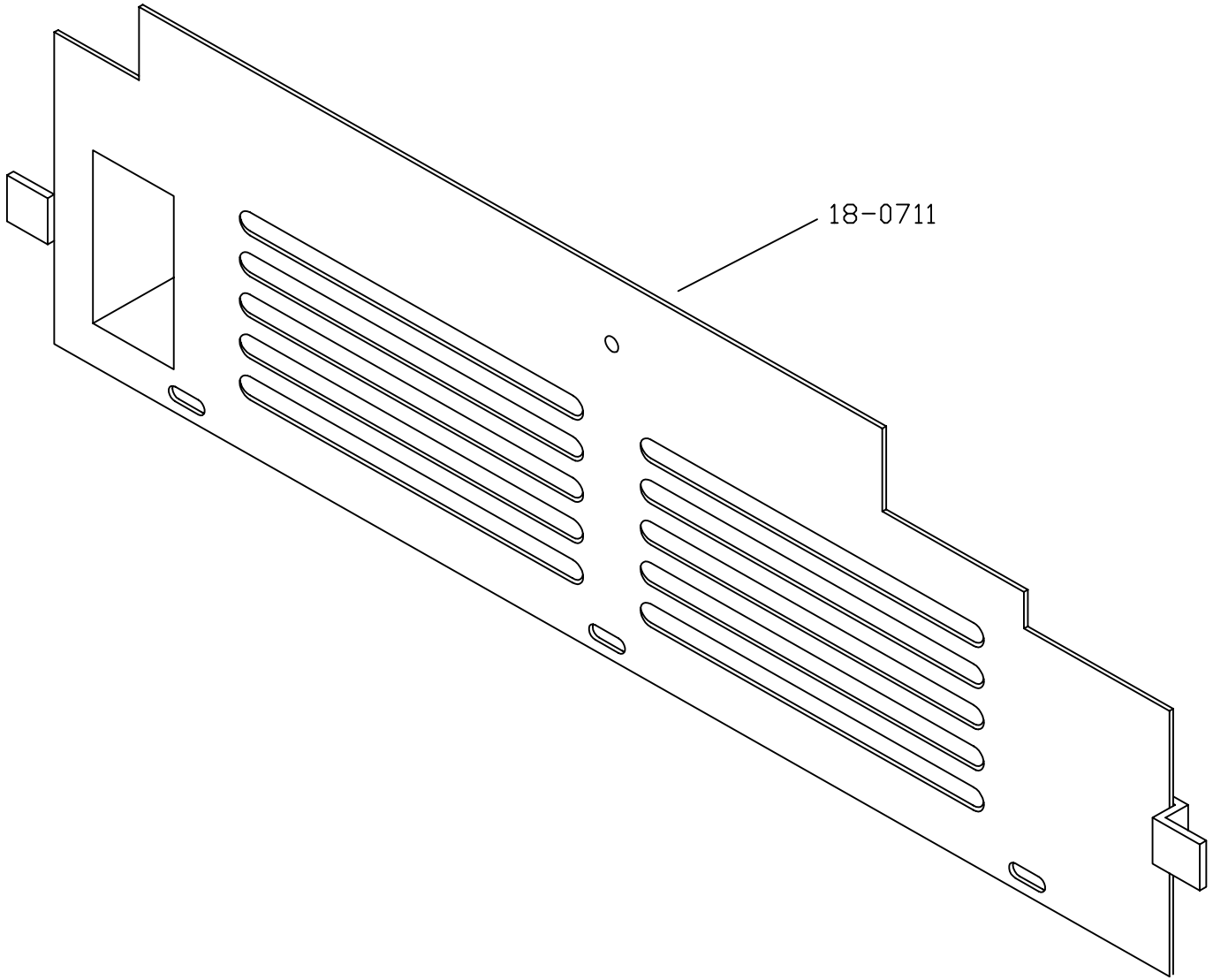
R3213, 10-97

SA-180704 T-HEAD PACKAGE, RYOBI 3200, 3200E



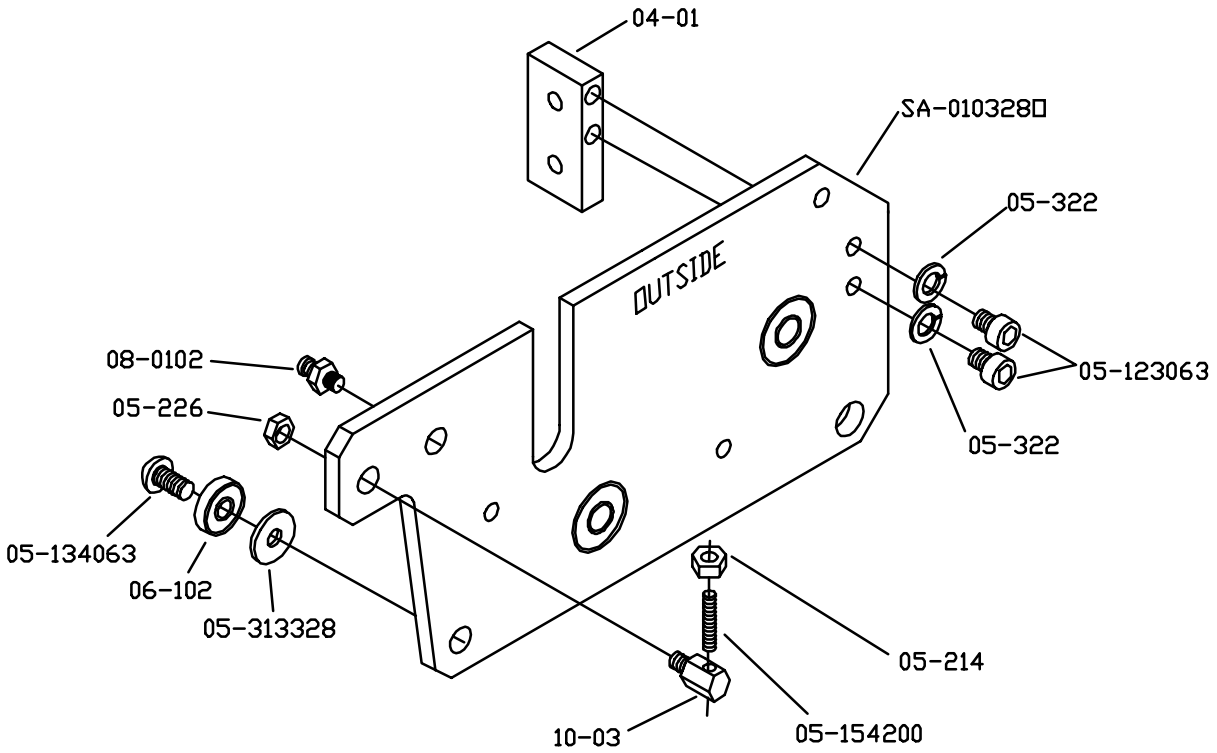
SA180704

RY3200, RY3200E SUPER T- GUARD



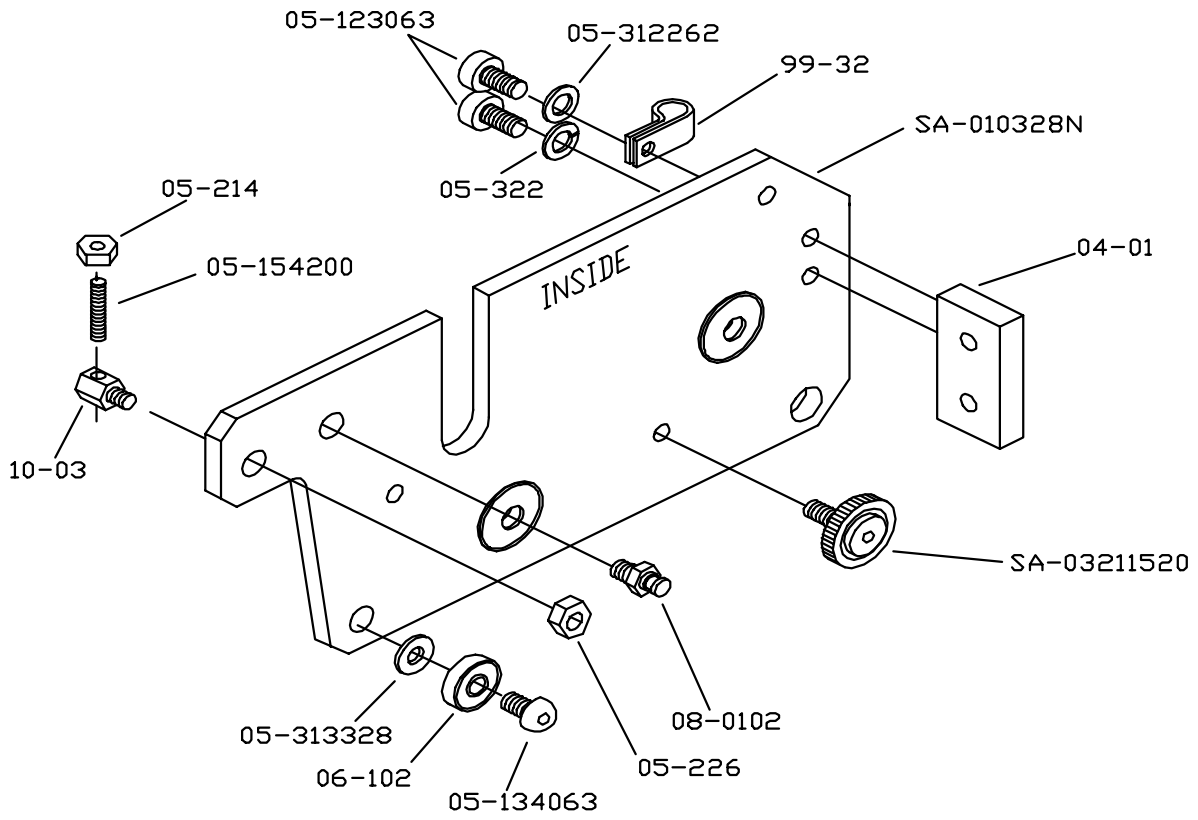
R3214, 6/96

SIDE FRAME ASSEMBLY □PS
RY□BI 3200ECD



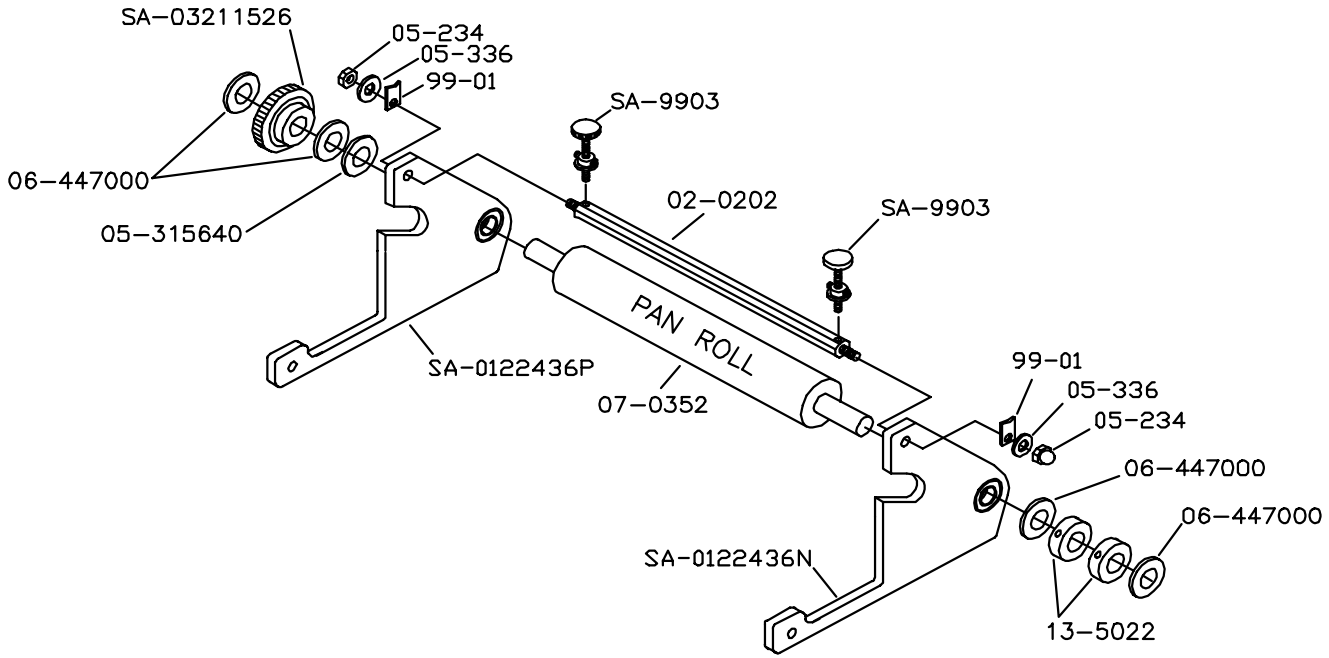
320EC01, 2-19-97

SIDE FRAME ASSEMBLY NOPS
RYOBI 3200ECD



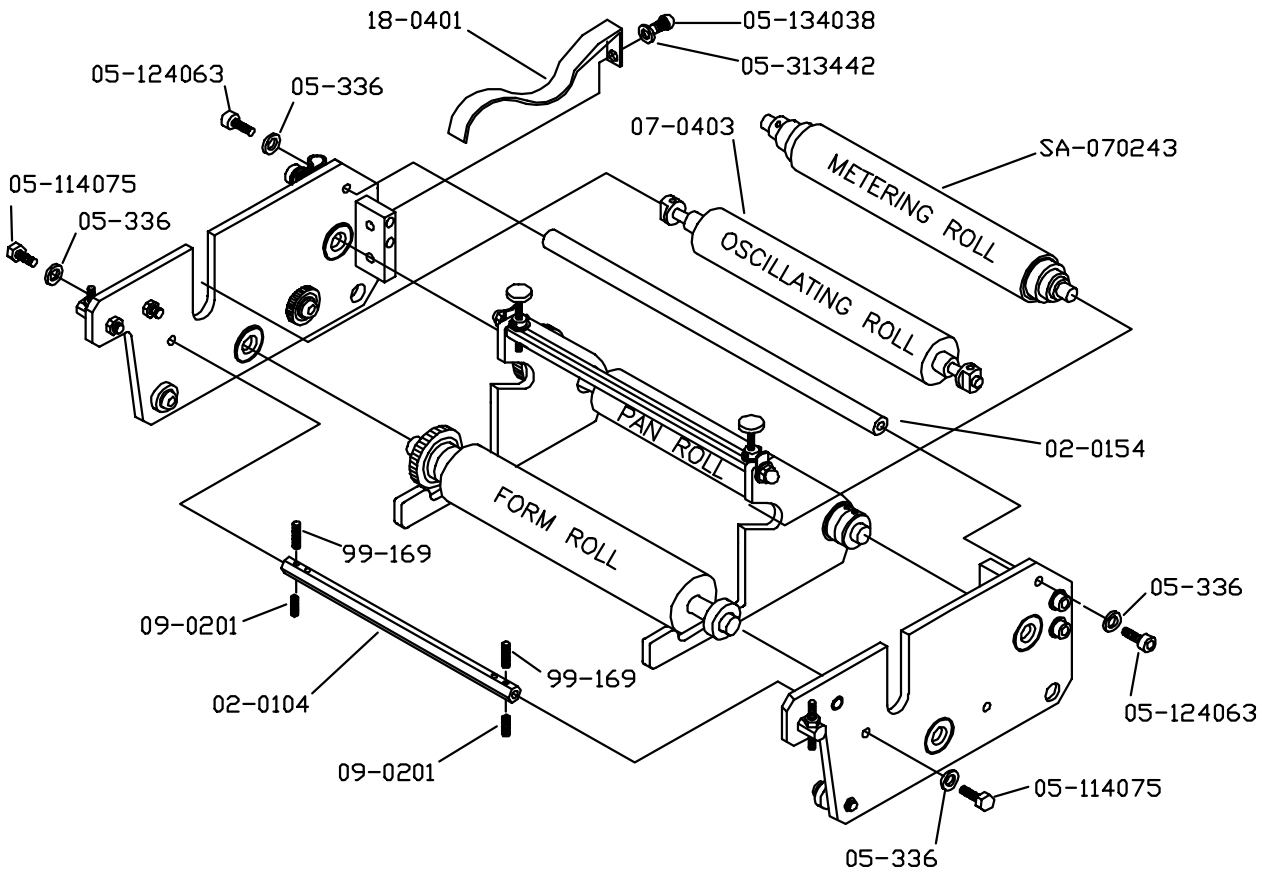
320EC03, 2-19-97

PAN ROLLER AND HANER ASSEMBLY
RYOBI 3200ECD



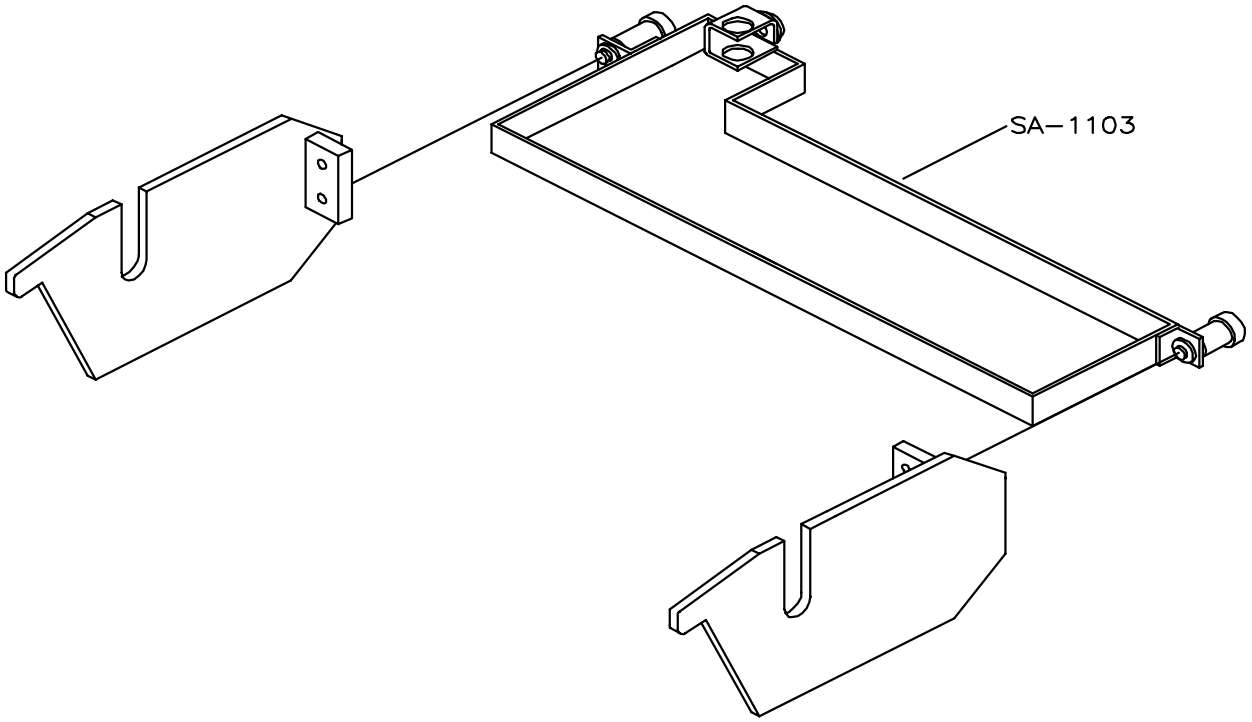
320EC05, 2-24-97

DAMPENER ASSEMBLY
RYOBI 3200ECD



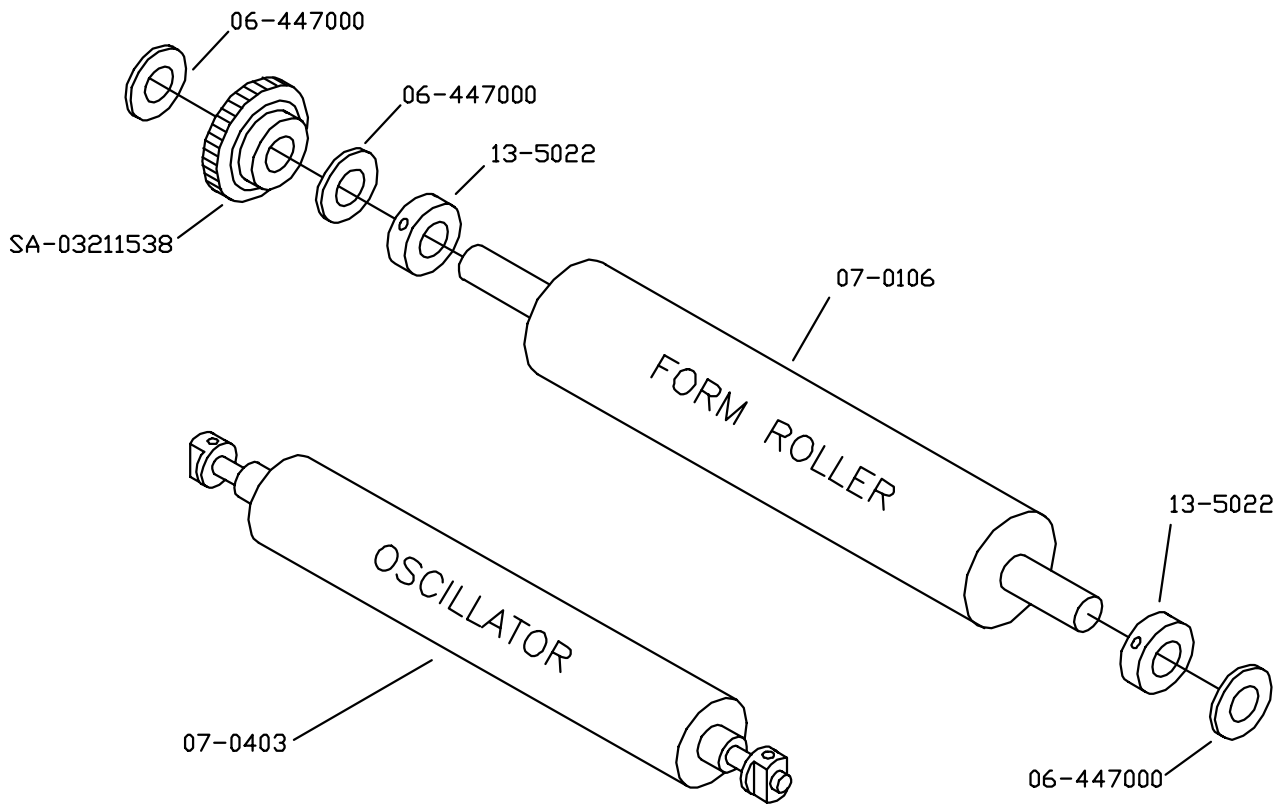
320EC06, 2-25-97

WATER PAN ASSEMBLY
RYOBI 3200ECD



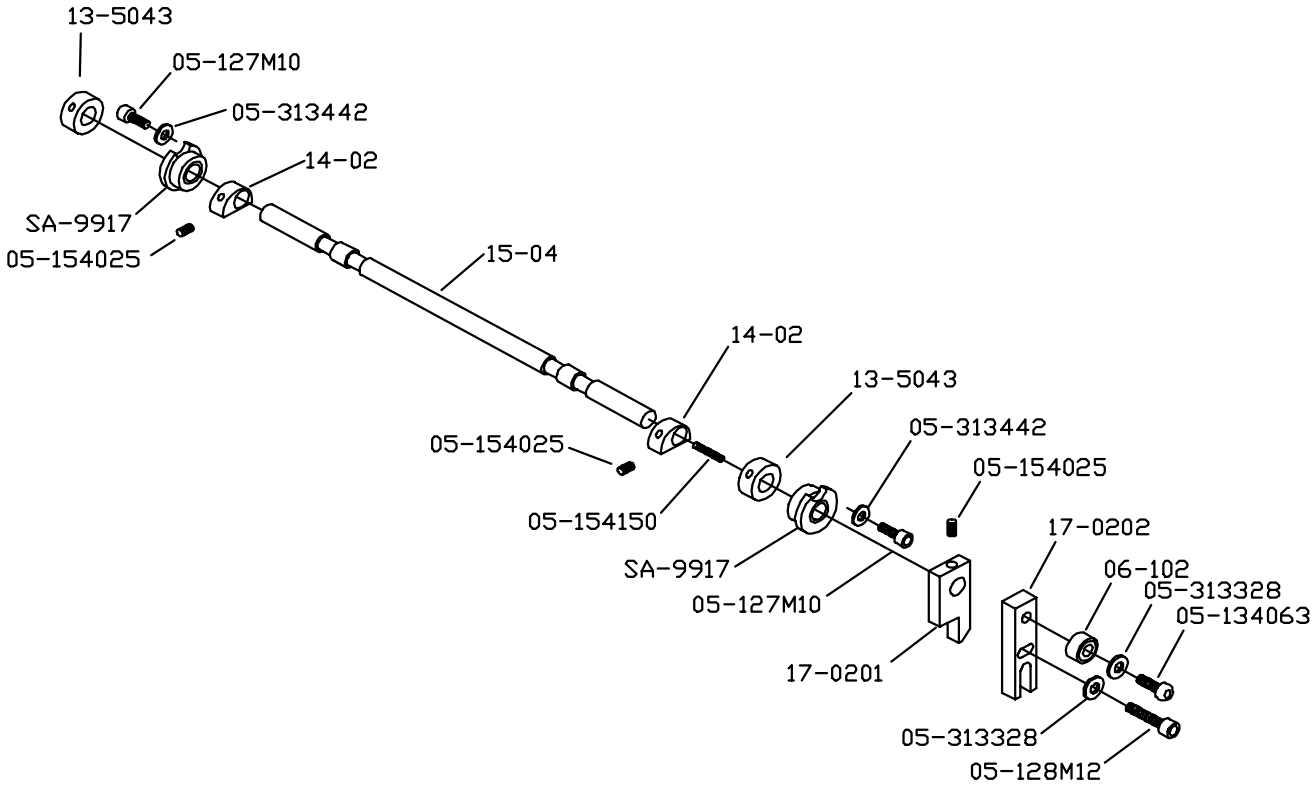
320EC07, 2–25–97

FORM AND OSCILLATOR ROLL ASSEMBLY
RYOBI 3200ECD



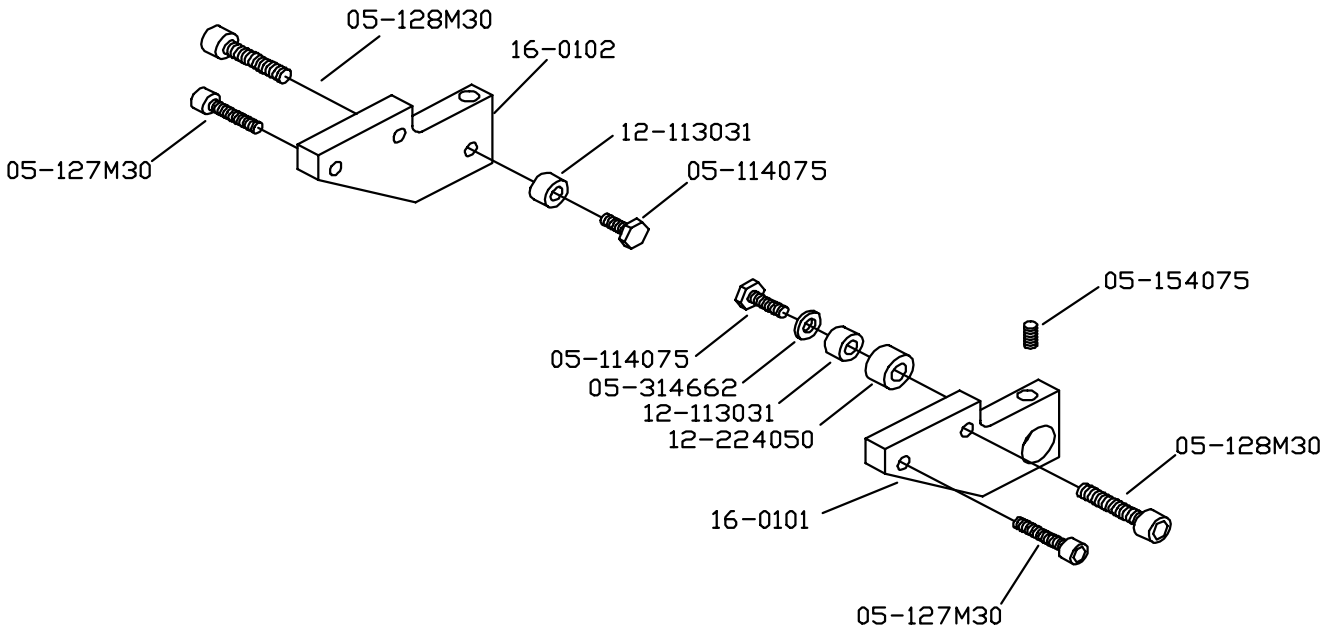
320EC08, 2-25-97

LIFT SHAFT ASSEMBLY
RYOBI 3200ECD



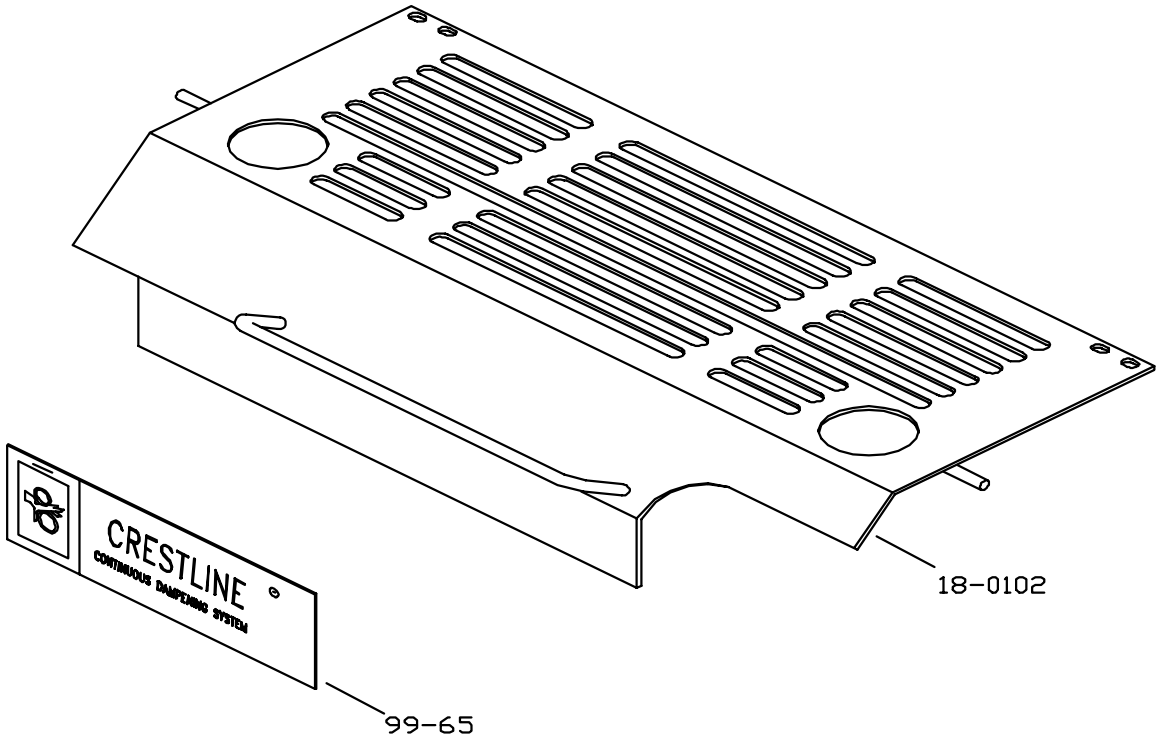
320EC09, 2-28-97

MOUNTING FRAME ASSEMBLY
RYOBI 3200ECD



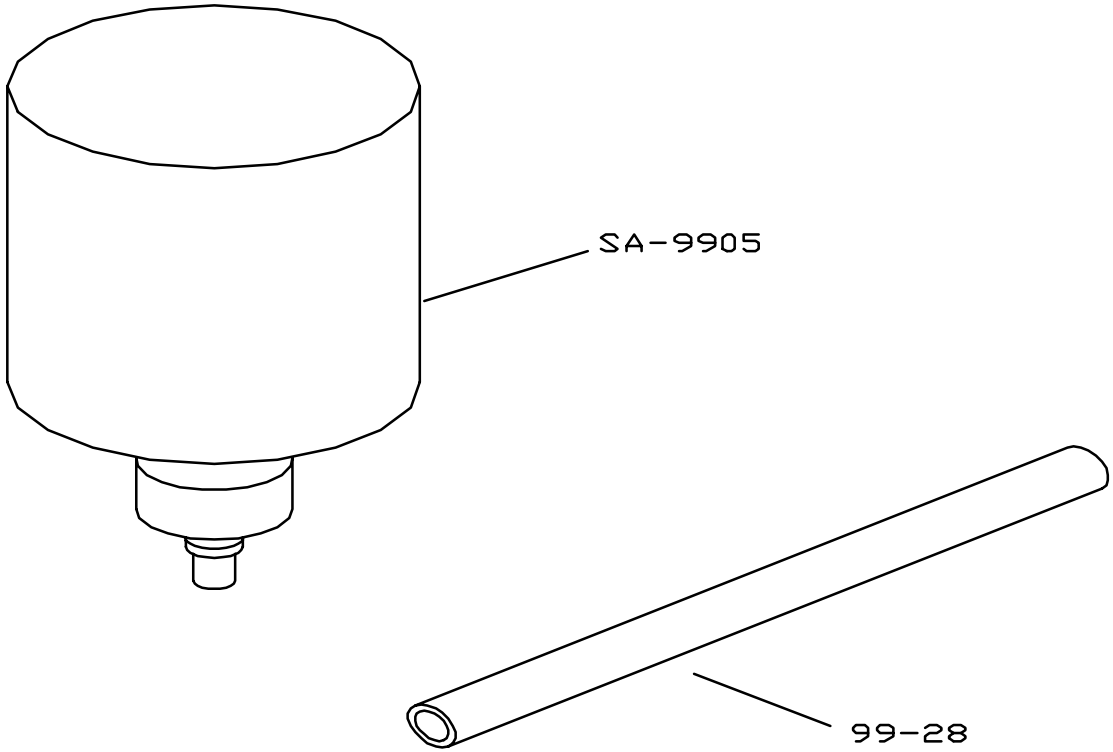
320EC12, 2-27-97

DAMPENER GUARD ASSEMBLY
RYOBI 3200ECD



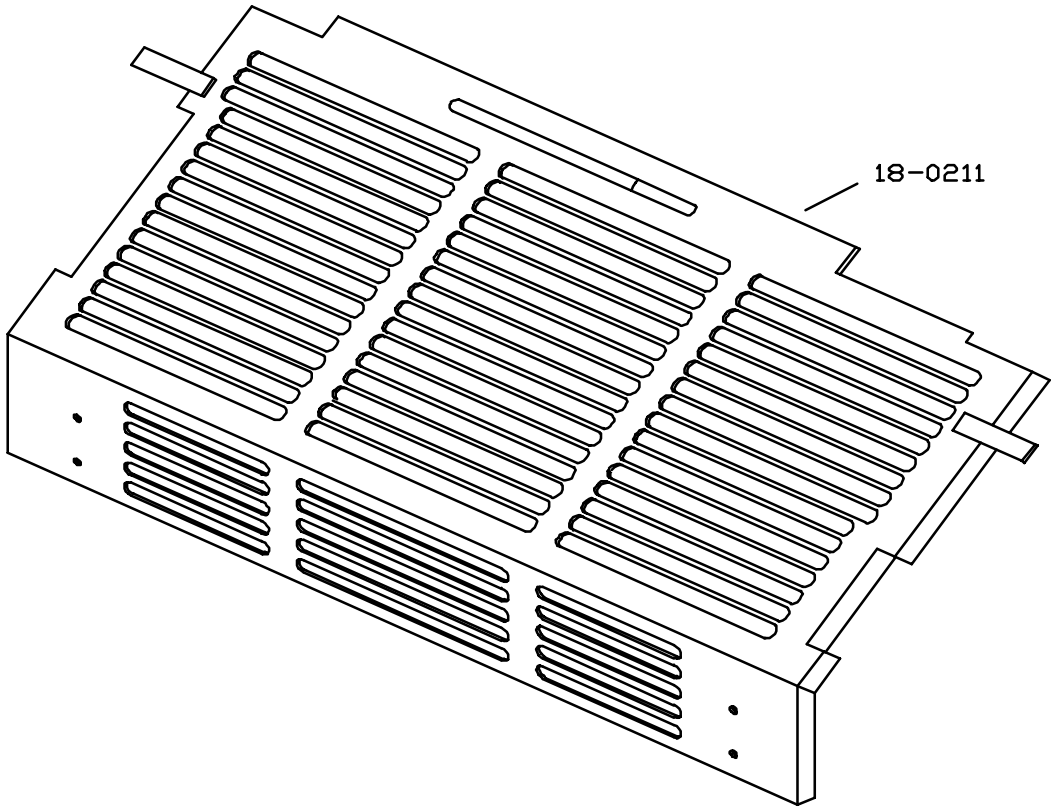
320EC13, 2-27-97

WATER BOTTLE ASSEMBLY
RYOBI 3200ECD



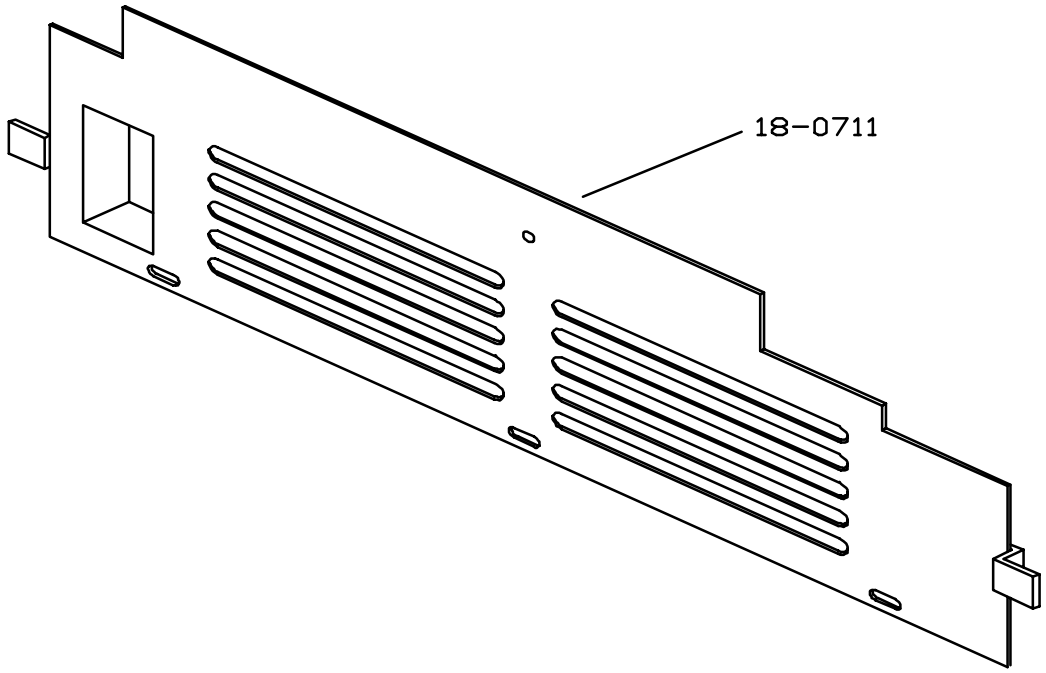
320EC14, 3-6-97

BLANKET CYLINDER GUARD ASSEMBLY
RYOBI 3200ECD



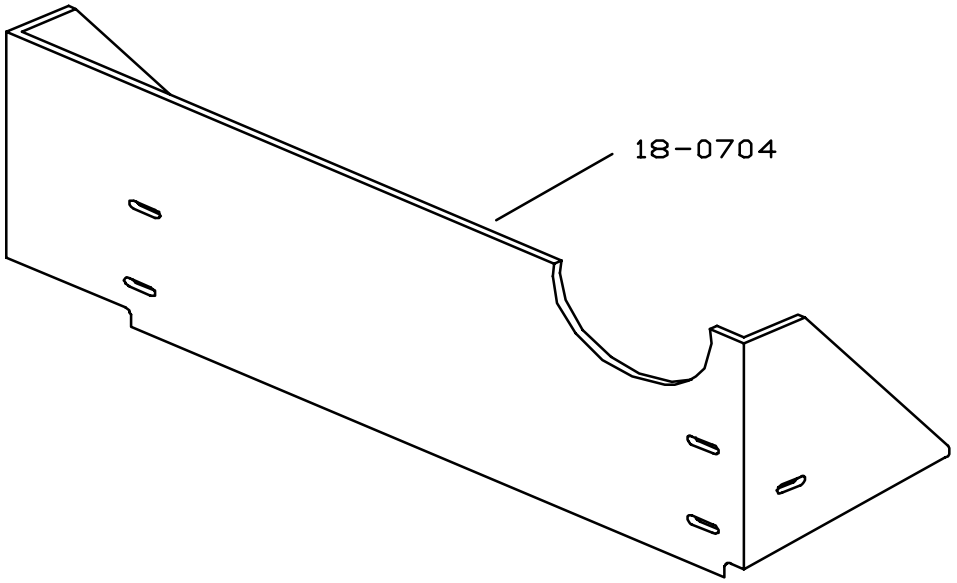
320EC15, 2-28-97

SUPER T-HEAD GUARD
RYOBI 3200ECD

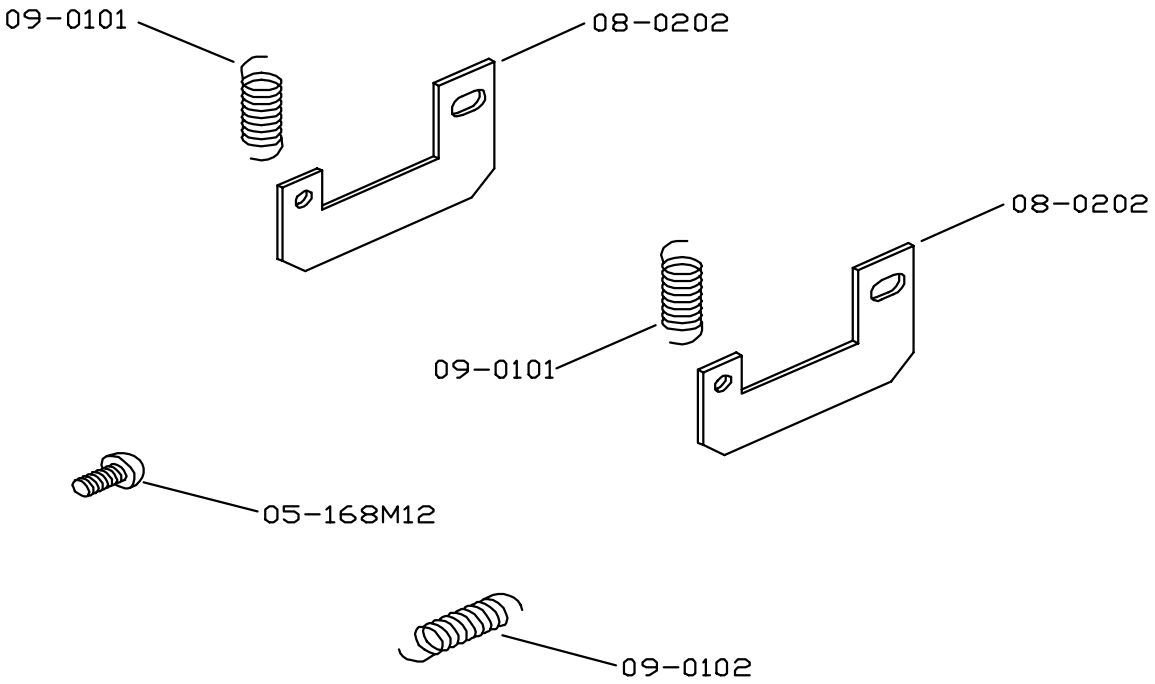


320EC16, 3-6-97

T-HEAD GUARD
RYOBI 3200ECD

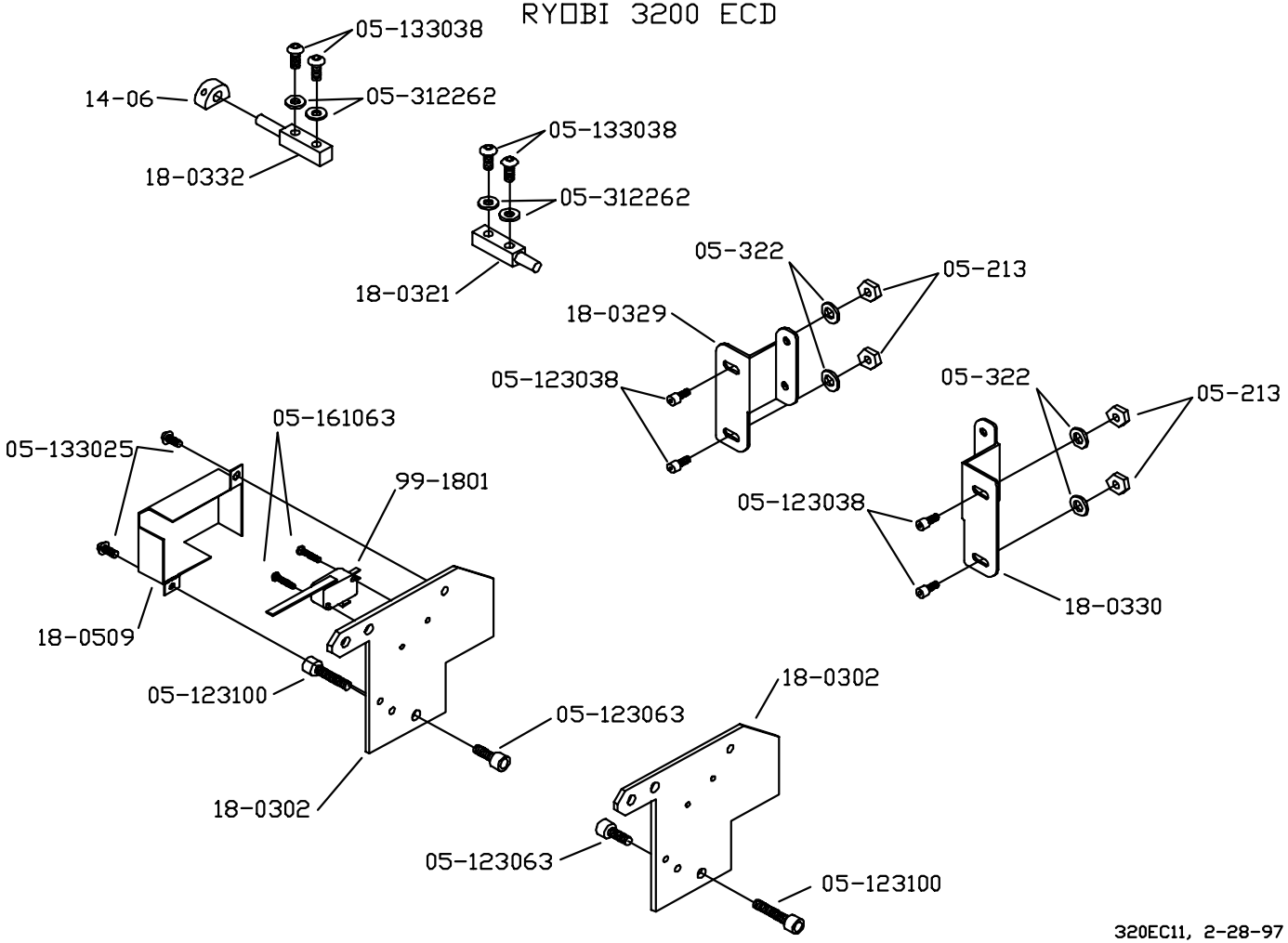


MISCELLANEOUS PARTS
RYOBI 3200ECD



320EC10, 2-28-97

MISCELLANEOUS GUARD PART
RYOBI 3200 ECD



11103 Indian Trail, Dallas, TX 75229 Phone 972-484-6808, Fax 800-365-6510
E-Mail accel@dallas.net, Web Site www.accelgraphicsystems.com