



E320TECH

Technical Instructions	Supplies		Tools	1
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**CORPORATE  
LOS ANGELES, USA**  
US 1 800 394.9900  
Int'l +1 818 837.8100  
FAX 1 800 394.9910  
Int'l +1 818 838.7047

**ATLANTA, USA**  
US 1 877 676.4223  
Int'l +1 770 516.9488  
FAX 1 877 337.7976  
Int'l +1 770 516.7794

**DALLAS, USA**  
US 1 877 499.4989  
Int'l +1 972 840.4989  
FAX 1 877 774.1750  
Int'l +1 972 840.1750

**MIAMI, USA**  
US 1 800 595.429  
Int'l +1 305 594.3396  
FAX 1 800 522.8640  
Int'l +1 305 594.3309

**NEW YORK, USA**  
US 1 800 431.7884  
Int'l +1 631 345.0121  
FAX 1 800 431.8812  
Int'l +1 631345.0690

**SANFORD, USA**  
US 1 800 786.9049  
Int'l +1 919 775.4584  
FAX 1 800 786.9049  
Int'l +1 919 775.4584

**TORONTO, CAN**  
CAN 1 877 848.0818  
Int'l +1 905 712.9501  
FAX 1 877 772.6773  
Int'l +1 905 712.9502

**BUENOS AIRES, ARG**  
ARG 0810 444.2656  
Int'l +011 4583.5900  
FAX +011 4584.3100

**MELBOURNE, AUS**  
AUS 1 800 003.100  
Int'l +62 03 9561.8102  
FAX 1 800 004.302  
Int'l +62 03 9561-7751

**SYDNEY, AUS**  
AUS 1 800 003.100  
Int'l +62 02 9648.2630  
FAX 1800 004.302  
Int'l +62 02 9548.2635

**MONTEVIDEO, URY**  
URY 02 902.7206  
Int'l +5982 900.8358  
FAX +5982 908.3816

**JOHANNESBURG, S.A.**  
S.A. +27 11 974.6155  
FAX +27 11 974.3593

High Yield Prebate Print Cartridge	<b>08A0478</b>
Standard Yield Prebate Print Cartridge	<b>08A0476</b>
High Yield Print Cartridge (Non- Prebate)	<b>08A0477</b>
Standard Yield Print Cartridge (Non-Prebate)	<b>08A0475</b>

Phillips Screwdriver
Flat Blade Screwdriver
Spring Hook
Cotton Swabs



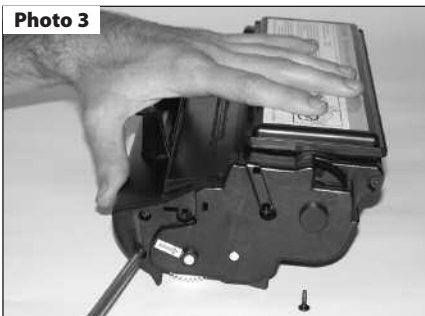
**Step 1**

Using a Philips screwdriver remove the three screws from the cartridge end cap on the contact side (The side with the chip). (See Photo 1)



**Step 2**

Using a knife cut the yellow sticker on the back of the cartridge voiding the cartridges' warranty. (See Photo 2)



**Step 3**

Carefully rotate the cartridge 180°. Remove the three screws from the end cap on the gear side of the cartridge. (See Photo 3)



**Step 4**

While holding the drum shutter up, slide the gear side end cap far enough to free the shutter guideposts from the cartridge end cap. (See Photo 4)

Photo 5

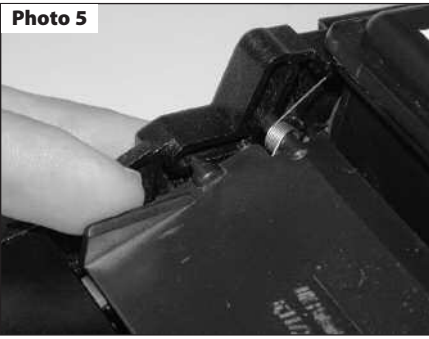
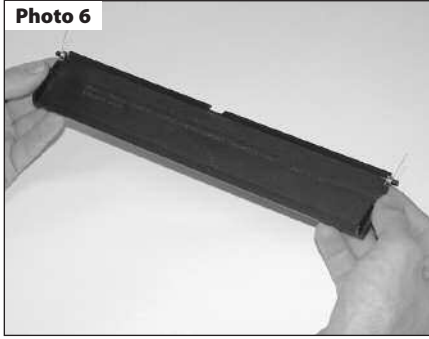


Photo 6

**Step 5**

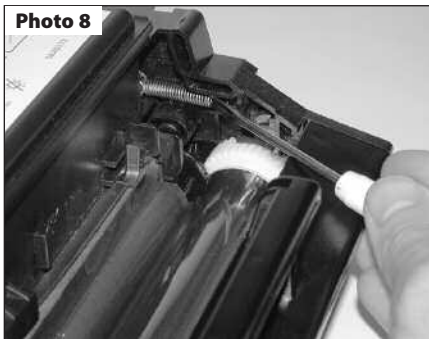
With the drum shutter free from the end cap on the gear side, remove the shutter from the contact end cap. (See Photo 5)

**NOTE:** Do not lose the tension springs that sit on each end of the drum shutter. (See Photo 6)

Photo 7



Photo 8

**Step 6**

Locate the two tension springs found inside the cartridge that hold the toner hopper against the drum. (See Photos 7 & 8) Using a spring hook release the tension springs from the end caps. (See Photos 9)

Photo 9

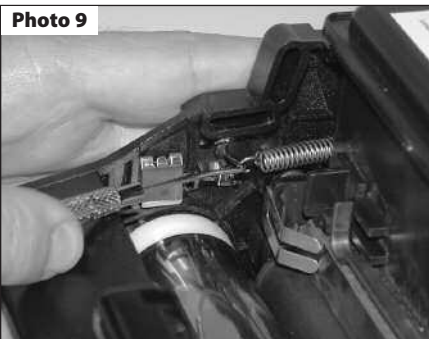
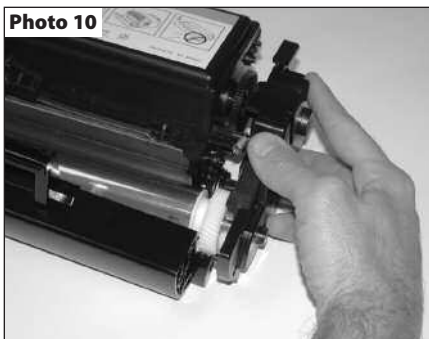


Photo 10

**Step 7**

Removing the cartridge end caps will cause the cartridge to fall apart. Carefully remove the end cap from the gear side of the cartridge. (See Photos 10)

Photo 11

**Step 8**

Remove the bar that holds the back of the two end caps securely against the toner hopper. (See Photo 11)

Photo 12

**Step 9**

While holding the drum gear, pull the drum off the axle on the contact side end cap. (See Photo 12)

Photo 13

**Step 10**

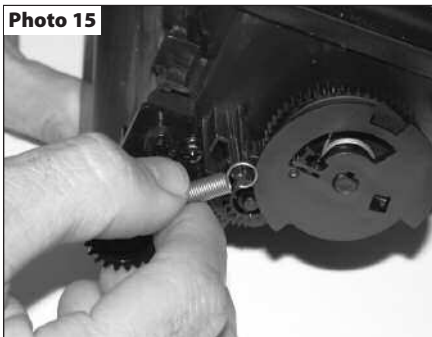
Remove the waste hopper from the contact end cap. (See Photo 13)

Photo 14

**Step 11**

Remove the contact end cap from the toner hopper. (See Photo 14)

Photo 15

**Step 12**

Remove the tension springs from the post on each end of the toner hopper. (See Photo 15)

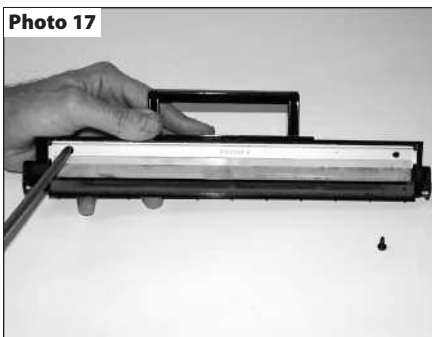
**NOTE:** The tension spring on the contact side of the toner hopper is smaller than the other spring. (See Photo 16) When reassembling the cartridge make sure the correct spring is used.

Photo 16

**Step 13**

Using a Philips screwdriver remove the two screws holding the wiper blade to the waste hopper. (See Photo 17) Remove the wiper blade.

Photo 17

**Step 14**

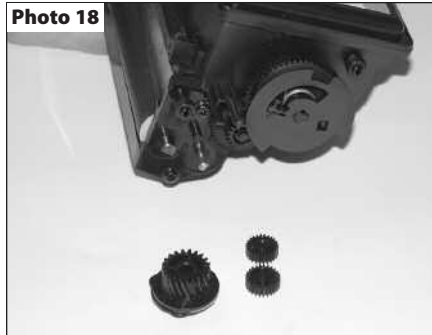
Using dry compressed air or a vacuum, clean the waste toner from the hopper.

**NOTE:** Due to the location of the waste hopper inside the printer toner may be clump inside the hopper. Use a screwdriver to scrap the clumped toner from the hopper.

**Step 15**

Remove the coupling gear and the two small gears next to the coupling gear. (See Photo 18)

Photo 18

**Step 16**

Remove the screw that holds the doctor bar tension spring holder. (See Photo 19) Remove the tension spring.

Photo 19



Need help with a particular remanufacturing problem?

Call the Technical Resource Center from  
8am - 5pm PST: 800 394.9900

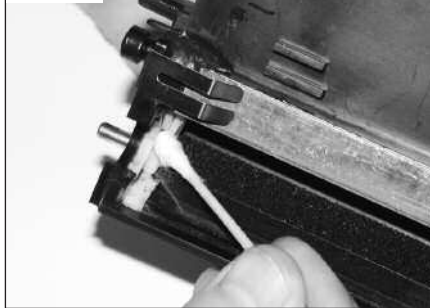
**Step 17**

Remove the toner hopper retaining blade from the outside of the hopper. (See Photo 20)

**NOTE:** This step can be skipped, however, reinstalling the developer roller with the toner hopper retaining blade in place is difficult.

**Photo 20****Step 18**

Using a small flat blade screwdriver pry out the developer roller bushing. (See Photo 21)

**Photo 21****Photo 22****Photo 23****Photo 24****Photo 25****Photo 26****Step 19**

Lift out the developer roller and remove the roller from the gear side of the hopper. (See Photo 22)

**Step 20**

Remove the white shims from the ends of the developer roller. Clean the roller using a lint free cloth and water. Let the roller dry completely before reinstalling the roller into the cartridge.

**Step 21**

Remove the toner hopper fill plug.

**Step 22**

Clean the toner hopper using dry compressed air or a vacuum.

**Step 23**

Clean the doctor bar using a cotton swab and Acetone. (See Photo 23)

**Step 24**

Using cotton swabs clean the developer roller rubber seals on the ends of the toner hopper. (See Photo 24)

**Chip Removal:****Step 1**

Release the two clips that hold the chip in place. (See Photo 25)

**Step 2**

Using a small flat blade screwdriver pry the chip out of the end cap. (See Photo 26)



**PRINTER MODEL COMPATIBILITY**

PRINTER MODEL	OEM NUMBER
IBM Infoprint 1116	28P2406/12/14/20
Lexmark E320	08A4075/6/7/8
Lexmark E322	80A4075/6/7/8
Lexmark E322n	80A4075/6/7/8
Lexmark E322tn	80A4075/6/7/8
Source Technologies 9116 (MICR)	STI-204500

**FUTURE GRAPHICS PRODUCT LISTING**

Product	Description	Item Number	Pack Qty.
Cartridge Shipping Strap	Shipping Lock	E320LOCK	10
Cartridge Tech Guide	Remanufacturing Instructions	E320TECH	1
Cartridge Wrap	9.75 x 12.75 in Gray Open Cell Foam, Grabs Toner Leaked In Transit	FOAMWRAP10X13	10
Chip	Compatible Replacement	E320CHIP	1
Chip	Compatible Replacement - Works with IBM 1116 only	IBM1116CHIP	1
Doctor Bar	Two-Cycle, Double Edge. Flip Over For Second Cycle	LMKDRBAR	10
Doctor Bar	Prevents Dr. Bar Spring From Falling Out While Shipping Like OEM	LMKDRBARTAPE	100
Drum	Sinonar	E320SNR	5/50
Recovery Blade		E320RBLADEW	100
Retaining Blade	Toner, Inner	E320RBLADETI	100
Retaining Blade	Toner, Outer	E320RBLADETO	100
Toner	200 gm Bottle	E320TNR200	10
Toner	150 GM Bottle	E320TNR150	10
Toner	Bulk Bag, 22 lb Per-Fil - Box of 1, Sold per Box	E32010KG	1
Wiper Blade	Kuroki	E320WBLADEK	10/240

**Fax Numbers**

Los Angeles, USA US 1 800 394.9910 Int'l + 818 838.7047	Atlanta, USA US 1 877 337.7976 Int'l +1 770 516.7794	Dallas, USA US 1 877 744.1750 Int'l +1 972 840.1750	Miami, USA US 1 800 522.8640 Int'l +1 305 594.3309	New York, USA US 1 800 431.8812 Int'l +1 631 345.0690	Sanford, USA US 1 800 786.9049 Int'l +1 919 775.4584
Toronto, CAN CAN 1 877 772.6773 Int'l +1 905 712.9502	Sydney, AUS AUS 1 800 004.302 Int'l +62 02 9648.2635	Melbourne, AUS AUS 1 800 004.302 Int'l +62 03 9561.7751	Buenos Aires, ARG Int'l +011 4584.3100	Montevideo, URY Int'l +5982 908.3816	



In October of last year Lexmark released a series of printers all based around the same print engine. The Lexmark E320, E322 and E322n printers are all capable of printing up to 16 pages per minute and can print what Lexmark refers to as 1200 Image Quality resolution (not a true 1200 dpi). The main differences between the printers are the speed of the processor and the amount of memory that comes with the printer. The Lexmark E320 comes with a 67 MHz processor and 4 MB of memory standard, while the E322 and the E322n have a 133 MHz processor. The E322 comes with 8 MB of memory and the E322n with 16MB of memory.

All three machines ship with cartridges, however the cartridges are different depending on which machine is purchased. The E320 ships with a starter cartridge that yields

1,500 pages while both the E322 and E322n ship with a standard yield Prebate cartridge that prints 3,000 pages. Like other Lexmark machines, consumables can be purchased in both a standard yield 3,000 pages cartridge or a high yield 6,000 page cartridge and either can be purchased in the Lexmark standard Prebate and non-Prebate forms.

The cartridge chip located on the contact end cap works like the other killer chips found on the Lexmark Prebate cartridges. Once the cartridge is out of toner, the machine writes to the chip that it is out of toner and the information is then stored on the chip. If the cartridge is used again without replacing the chip the chip tells the machine it has already been used and is out of toner.

To successfully refill the Prebate cartridges the chips will have to be replaced.

## PROBLEMS AND SOLUTIONS

### **Problem #1:**

Light print on one side.

### **Solution #1:**

Check the tension spring on the side of the cartridge that is light. The spring could be stretched to a point to where it cannot apply the correct force to hold the developer roller against the drum.

### **Problem #2:**

Toner leaking from the toner hopper.

### **Solution #2:**

The toner hopper has two retaining blades that hold toner inside the hopper. Visually inspect the blades to make sure they are not wavy, nicked, or that the adhesive is not adhering to the hopper. If the blades are bad replace them. Also check the developer roller rubber seals on the ends of the toner hopper. These seals prevent toner from

migrating to the end of the developer roller. If these seals are dirty, toner may leak out the ends of the roller.

### **Problem #3**

Background or grainy print

### **Solution #3**

The tension spring on top of the doctor blade forces the bar down onto the developer roller. The pressure between the doctor bar and developer roller does two things, it ensures the toner on the developer roller is evenly distributed, and it helps charge the toner. If the tension spring is bent an excessive amount of toner is delivered to the developer roller. This undercharged toner has a grainy look to it as it passes between the developer roller and doctor bar. As a result the under charged toner will stick to the drum and cause backgrounding on the page. It will also cause the grayscale to have a grainy look to it.