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Samsung® 2250

Reference Info

The Samsung® ML-2250 was released in July 2004 and was targeted at home users and small business workgroup applications. There are four models of the ML-2250; the base ML-2250 model, the 2251N which is the same as the base model but it is network ready with no postscript option. The 2251NP is the same as the 2251N except it has the postscript option. The last model is the 2252W, which is the same as the 2251NP with wireless connectivity. Each printer ships with a 5,000 page standard cartridge.

Use of Compressed Air

As of April 28, 1971, the Occupational Safety & Health Administration (OSHA) Standard, 29 CFR 1910.242 paragraphs a & b for general industry requires effective chip guarding and personal protective equipment (PPE) when using compressed air. When cleaning residual toner particles from cartridges using a compressed air system, you must use air nozzles meeting OSHA requirements. Air nozzles that regulate air pressure to a maximum of 30 psi comply with this standard. Refer to the OSHA publication for any updates or changes that have occurred since the date noted above.

Use of Isopropyl Alcohol

For best results 91-99% Isopropyl Alcohol should be used for cleaning as directed in this instruction. 91% Isopropyl Alcohol is available at most major drug stores; 99% Isopropyl Alcohol is available through distributors of chemical products. Follow the Alcohol manufacturer's safety instructions.

Version 2 -July 2005
SYSTEM SUPPORT SERIES™

CARTRIDGE REMANUFACTURING INSTRUCTIONS FOR:

SAMSUNG® ML-2250; SCX-4720; XEROX® PHASER 3150; WORKCENTRE PE120 AND THE DELL® 1600

TABLE OF CONTENTS

GO TO WWW.SCC-INC.COM

For the latest cartridge information
Click on "Online Engine Center"

Other System Support Series™
documents available in
Adobe® Acrobat® format

QUESTIONS?

Please call one of our main numbers
and ask for your
Support Team Representative
or E-mail us at:

US AND CANADA
info@scc-inc.com

UK
info@scceurope.co.uk

Purpose of this SSS

The purpose of this SSS is to provide you a guide and the basic information needed to remanufacture a Samsung® ML-2250, SCX-4720, Xerox® Phaser 3150 and WorkCentre PE120, and the Dell® 1600. This SSS contains information about:

• Disassembling each section.

• Basic cleaning.

• Reassembling the cartridge.

Your cartridge might have been changed by the original equipment manufacturer (OEM) and include parts or features which are not described in this documentation. The documentation might be updated occasionally to include information about those changes, or technical updates might be available from the SCC Web site. Complete the following steps to check for updated documentation and technical updates:

Before you begin, read the entire SSS to familiarize yourself with the procedures and take notes.

Be sure to follow all necessary safety precautions while working with tools, and chemicals, such as toner and alcohol.

Illustrations

The illustrations and photos in this document might differ slightly from your cartridge. Every effort is made to include the most up to date photos and illustrations at the time of printing. However, the OEM may make changes which were not available
at the time of printing.

Safety

Statement 1:

⚠️

Always wear eye protection while operating
power tools.

Statement 2:

⚠️

Always wear eye protection and protective clothing while working
with toner and or other chemicals.

Statement 3:

⚠️

Do not swallow or ingest toner, isopropyl alcohol, toner dust, or
any chemicals or materials used in the process of remanufacturing
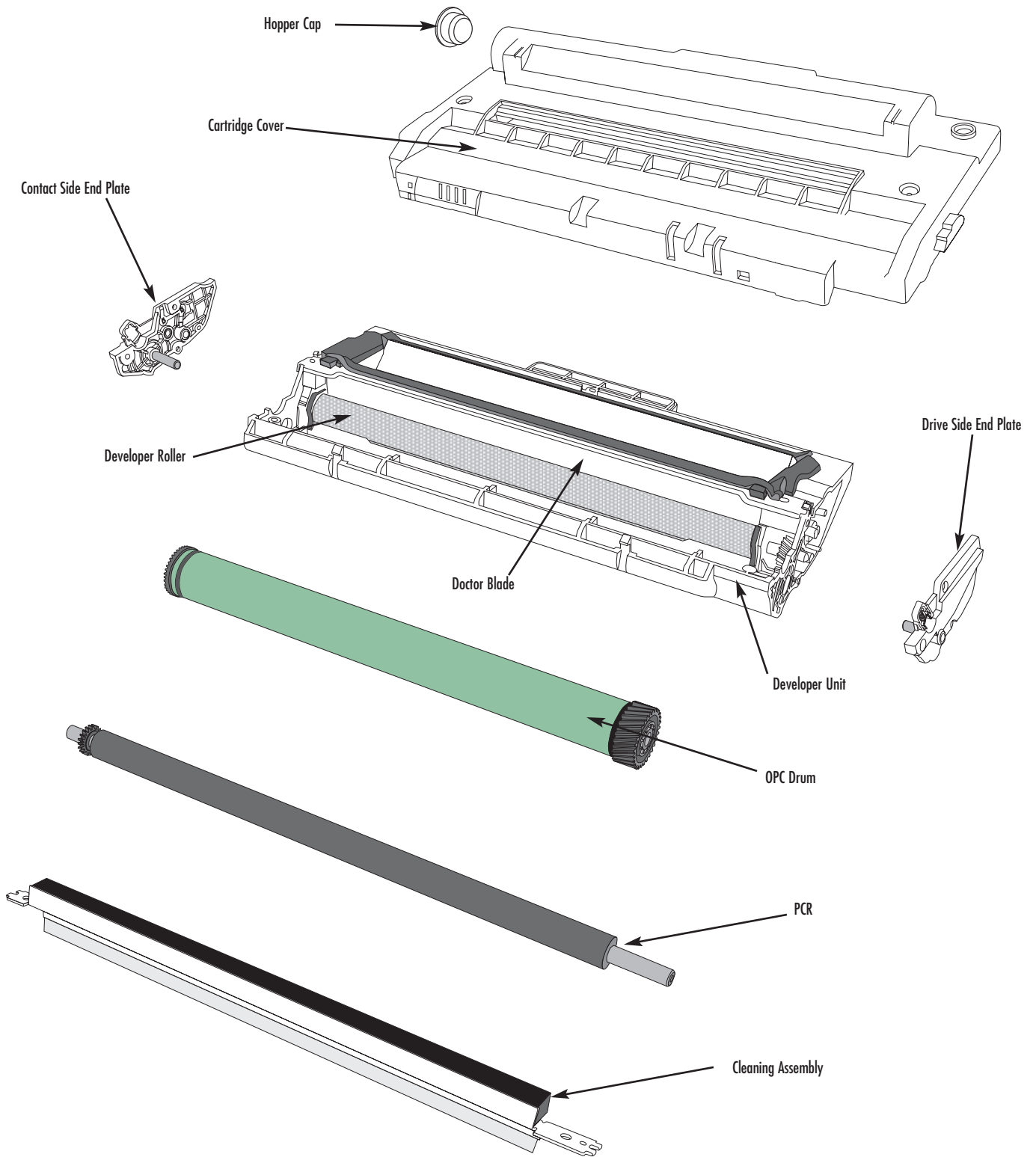
Needed Tools & Supplies

For Basic Remanufacturing:

- Phillips Screwdriver

- Needle nose Pliers

- Compressed Air for Cleaning

- 91%-99% Isopropyl Alcohol

- Lint-Free Foam Tip Swab (LFSWAB)

- Lint-Free Cleaning Cloth (LFCCLOTH)

- Small Flatblade Screwdriver

- Felt Foam Scraper (FSTOOL)

- Blade Installation Tool (IBMSBTOOL)

The following table is a summary of the Samsung® 2250 printer specifications. This information was obtained from the OEM's web site and is considered to be the most up to date information at the time of printing.

Printer Information	Samsung® 2250
Printer Introduction Price	$229
Processor	166 MHz
First page	10 seconds
Memory	16 MB to 144 MB
Duplex	Manual
Engine Information	
Print Resolution (dpi)	1200/1200
Print Speed (pages per minute)	22 ppm
Duty Cycle (pages per month)	30,000

Hopper Cap

Cartridge Cover

Contact Side End Plate

Drive Side End Plate

Developer Roller

Doctor Blade

Developer Unit

OPC Drum

PCR

Cleaning Assembly

Developer Unit Assembly
product wirelines

Separating the Cover from the Developer Unit

This section provides the information needed to separate the Cover from the Developer Unit. Before attempting to perform the following procedures, read the entire section carefully. Ensure that you follow all necessary safety precautions.

1. Remove the five screws from the top of the cartridge, as shown in Figure 1.

Remove 5 Screws
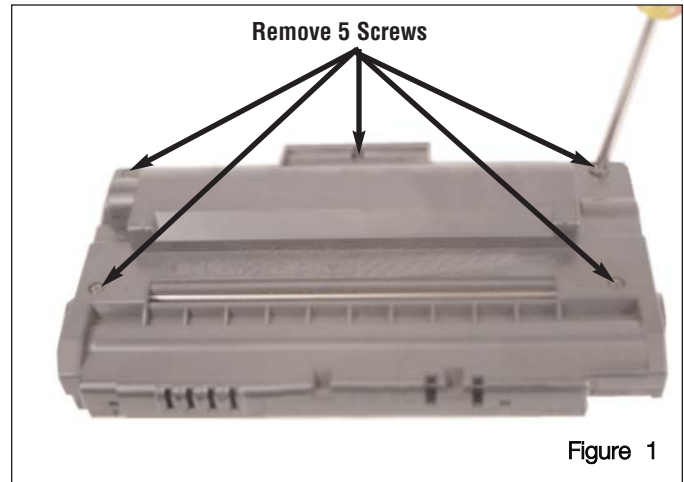
Figure 1

Remove the five screws from the top of the cartridge.

2. Using a small flatblade screwdriver release the four clips (two in the front and two in the back) that secure the two sections together, as shown in Figure 2a and 2b.

Release the 2 clips on Front

Figure 2a

Release the 2 clips on Back

Figure 2b

Release the four clips that secure the two sections together

3. Remove the top of the cartridge, be careful not to spill the remaining toner from the cartridge; As shown in Figure 3.

Lift off the Cover

Figure 3

Lift off the top of the cartridge.

Disassembling the Developer Unit

This section provides the information needed to disassemble the Developer Unit of the cartridge. At this point you should have separated the cover from the Developer Unit as described earlier in this SSS™. For information on separating the two sections see "*Separating the Cover from the Developer Unit*" on page 1. Before attempting to perform the following procedures, read the entire section carefully. Ensure that you follow all necessary safety precautions.

Note: Dump remaining toner from the Developer Unit before continuing the remanufacturing process.

1. Remove the Contact Side End Plate.

    a. Using a phillips screwdriver, remove the four screws from the Contact Side End Plate, see Figure 4.

    b. Remove the Contact Side End Plate from the cartridge.

Remove the four screws from the Contact Side End Plate
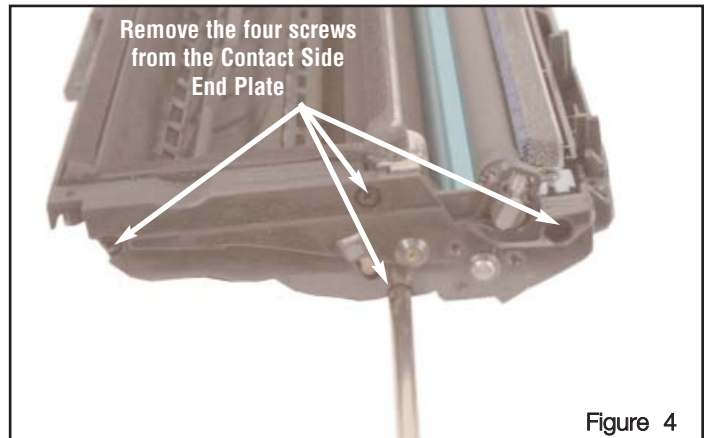
Figure 4

Using a phillips screwdriver remove the four screws in the Contact End Plate.

2. Remove the Drive Side End Plate.

    a. Using a phillips screwdriver, remove the four screws from the Drive Side End Plate.

    b. Remove the Drive Side End Plate from the cartridge.

Remove the four screws from the Drive Side End Plate
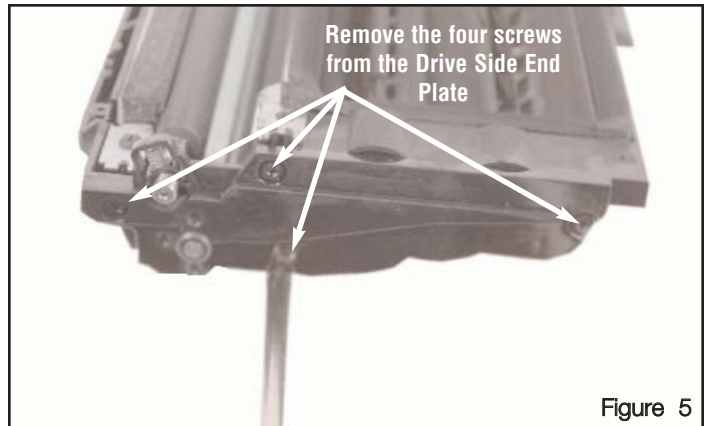
Figure 5

Using a phillips screwdriver remove the four screws in the Drive Side End Plate.

3. Grasp the PCR by the metal shafts. Lift out of the cartridge and place on a dry, lint free cloth; see Figure 6. Clean with a dry, lint free cloth dampened with water.
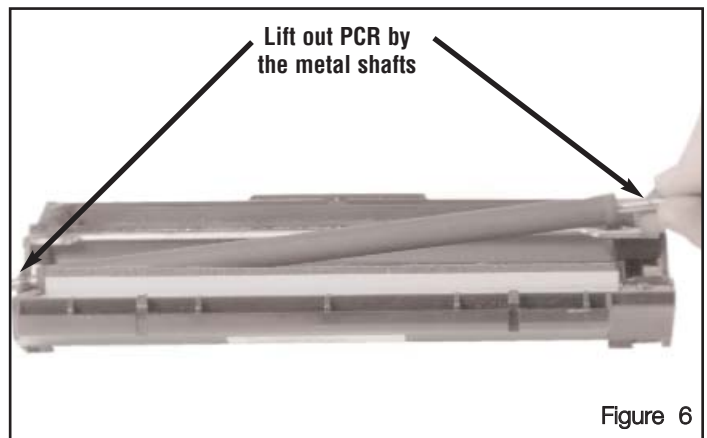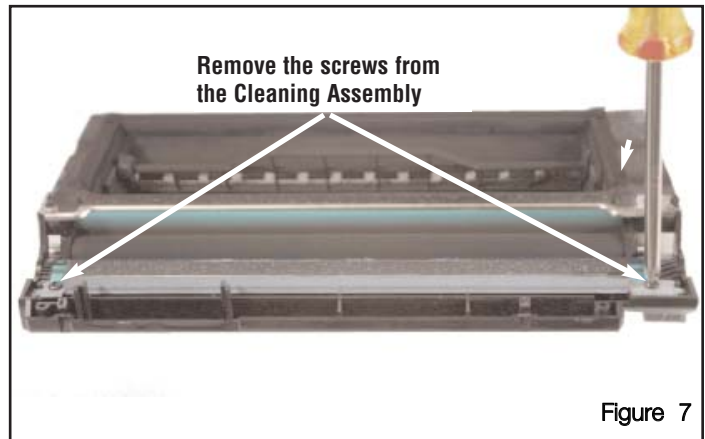

Lift out PCR by the metal shafts

Figure 6

Remove the PCR from the cartridge.

4. Remove the two phillips screws from the Cleaning Assembly; then, lift the Cleaning Assembly from the cartridge by the metal ends, see Figure 7. Fluff the Cleaning Assembly with dry filtered compressed air.

Remove the screws from the Cleaning Assembly

Figure 7

Remove the two phillips screws from the Cleaning Assembly, then remove from the cartridge.

5. Grasp the Drum by the gears, and lift out of the cartridge as shown in Figure 8.

Lift the Drum out of the Developer Unit

Figure 8

Lift the Drum from the Developer Unit

6. There are seven gears under the Drive Side End Plate, see Figure 9. Remove each gear from the Developer Unit.

Seven Gears
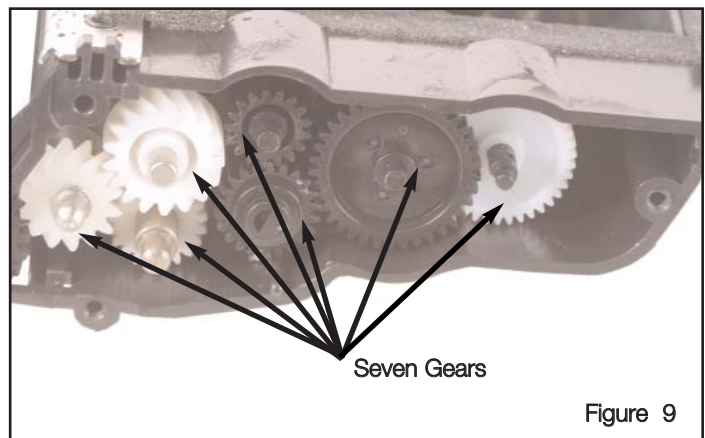
Figure 9

Remove the seven gears from the drive side.

Disassembling the Developer Unit

7. There are two washers under the gears, note the location of each washer and remove from the Developer Unit, see Figure 10.

Two Washers
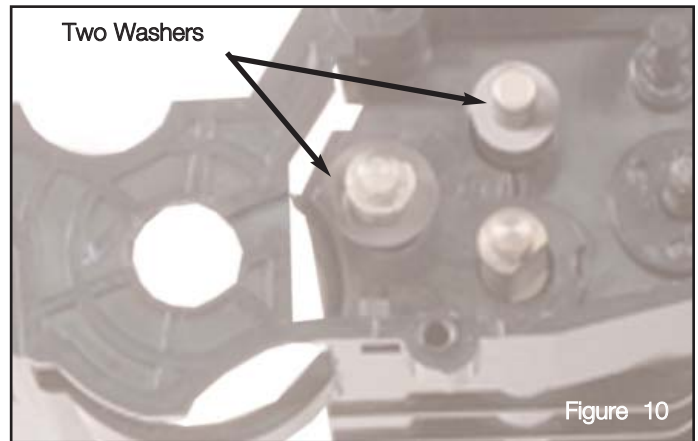
Figure 10

Remove the two washers from the drive side.

8. Clean the Developer Unit and the End Plates with dry, filtered compressed air as shown in Figure 11.

Clean Developer Unit

Clean end plates

Figure 11
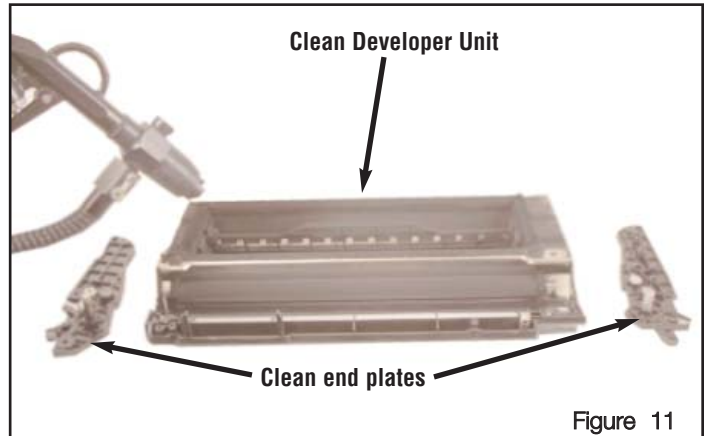
Clean the Developer Unit and End Plates with dry, filtered compressed air.

9. Remove the Drive Side Developer Roller Plate and the Developer Roller.

    a. Using a small flat blade screwdriver release the bottom tab on the Developer Roller Plate, as shown in Figure 12.

Bottom Tab

Screwdriver
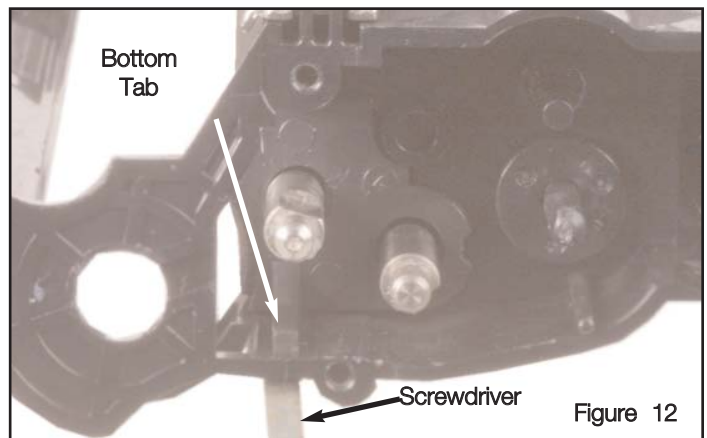
Figure 12

Release the bottom tab of the Developer Roller Plate.

b. Using a flat blade screwdriver release the tab on the top of the Developer Roller Plate. See Figure 13 for tab placement.

Release the top tab of the Developer Roller Plate.

c. Grasp the metal shaft of the Developer Roller and slide the Developer Roller and the plate out of the Developer Unit, as shown in Figure 14.

Slide out the Developer Roller and the Developer Roller Plate.

Note: Be sure not to lose the teflon and mylar washers on each end of the Developer Roller if replacing the Developer Roller.

Clean the Adder Roller with dry, filtered compressed air.

10. Inspect the Developer Roller Sealing Blade for wear, rips, waves, or kinks. If the Developer Roller Sealing Blade is damaged it will need to be replaced.

11. Remove the Developer Roller Sealing Blade. Using needlenose pliers slowly peel the Developer Roller Sealing Blade from the Developer Unit, as shown in Figure 15.
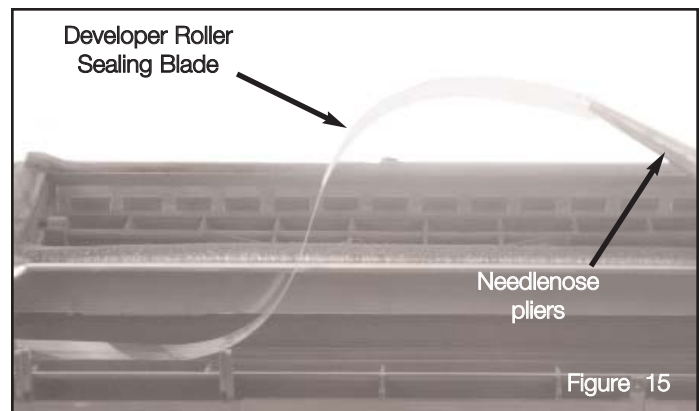
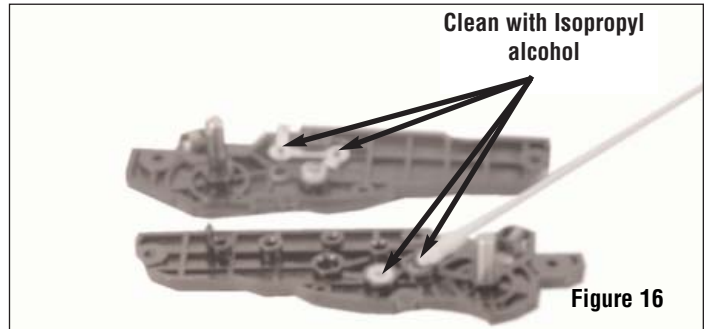*Peel away the damaged Developer Roller Sealing Blade.*

For instructions on replacing the Doctor Blade, the Felts, and the Foams, please refer to SSS™ # 760.

Reassembling the Developer Unit

1. Using a cotton swab, clean the End Plates with 91-99% Isopropyl alcohol as shown in Figure 16.

Clean with Isopropyl alcohol

Figure 16

Clean PCR saddles and contacts with Isopropyl Alcohol.

2. Using a cotton swab, apply contact grease to the Drum, Adder Roller, and Developer Roller contacts; as well as the PCR saddle, see Figure 17.

Apply contact grease to the contacts and the PCR saddles

PCR Saddle

Contacts

Figure 17
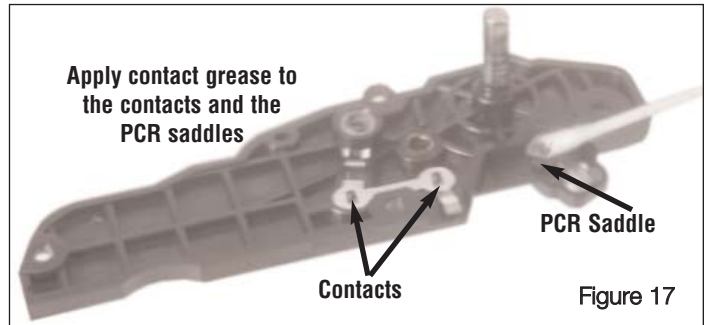
Apply contact grease to the End Plate contacts and PCR saddles.

3. Clean the Developer Roller Sealing Blade mounting surface with a cotton swab dampened with 91-99% Isopropyl alcohol. Install the new Developer Roller Sealing Blade using the IBMSBTOOL (For information on how to use the IBMSBTOOL please refer to SSS™ # 605). Align the edges of the Developer Roller Sealing Blade with the edges of the mounting surface, as shown in Figures 18a & 18b.

   Note: It may be easier to install the Sealing Blade with the Doctor Blade removed from the Developer Unit. For information on how to remove the Doctor Blade please refer to SSS™ #760 for complete instructions on replacing the Doctor Blade and the Felts and Foams.

Align with edge

Align with edge

Figure 18a
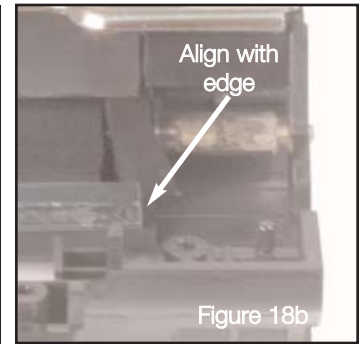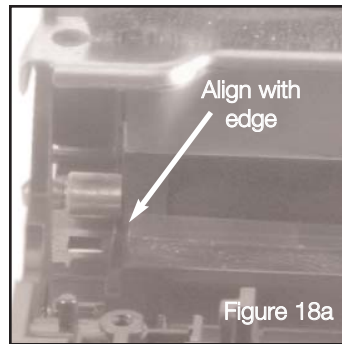
Figure 18b

Install the new Developer Roller Sealing Blade.

4. Attach the Developer Roller Plate to the Developer Roller and slide into the Developer Unit as shown in Figure 19a. Secure the Developer roller Plate by ensuring that the tabs on the top and bottom snap in to place, see Figure 19b.

**Figure 19a**

Plate Secured

Figure 19b
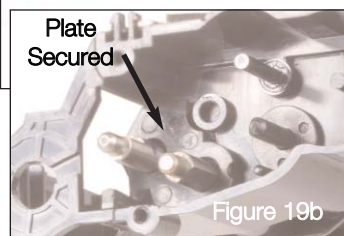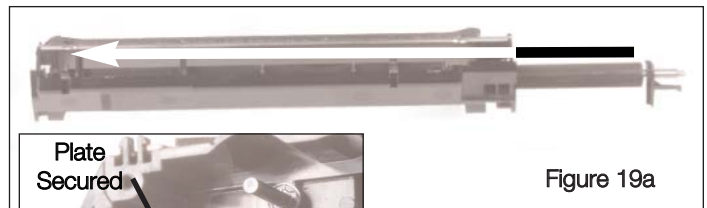
Reassembling the Developer Unit

4. Install the two washers in to place, as shown in Figure 20a, and apply Lubriplate # 105 to the gear shafts. Install the seven gears in to the drive side in the order shown in Figure 20b.

Two
Washers

Figure 20a

3 1
4   7   6
2 5
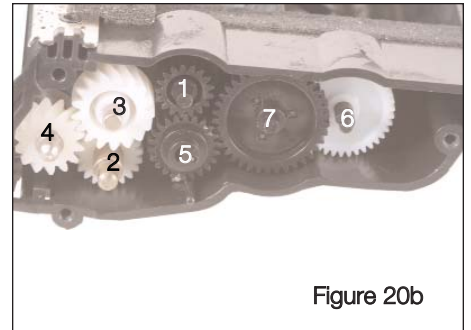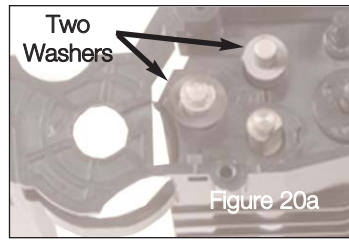
Figure 20b

5. Grasping the Drum by the gears, gently place the drum into the Developer Unit, as shown in Figure 21.

**Place the Drum gently into
the Developer unit**
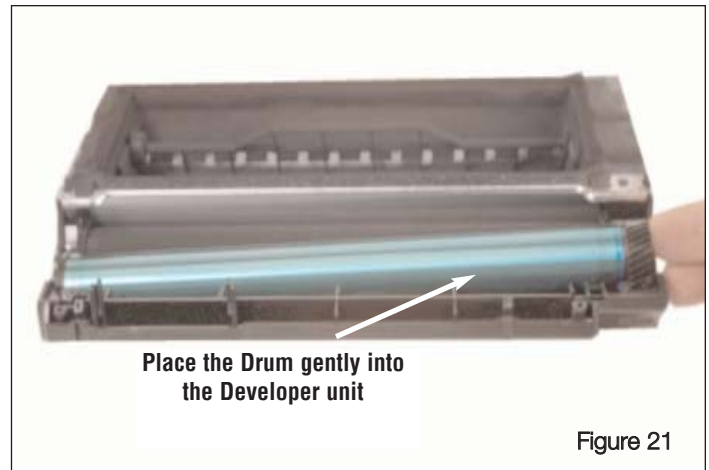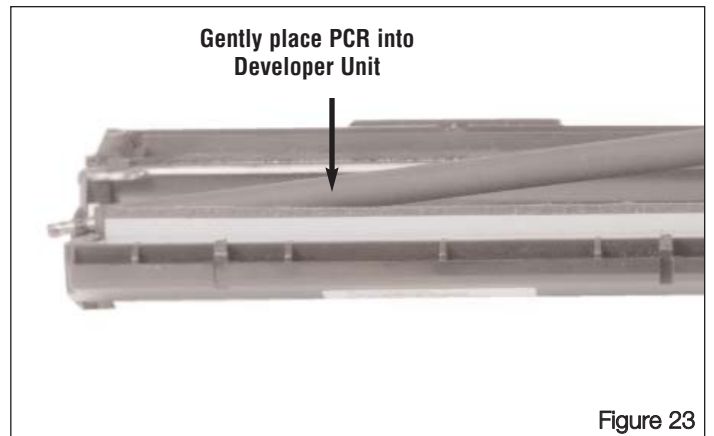
Figure 21

Place the drum into the Developer Unit

Reassembling the Developer Unit

4. Install the Cleaning Assembly, by attaching the two phillips screws, see Figure 22.

Secure Cleaning Assembly with two screws

Figure 22

Install the Cleaning Assembly.

5. Grasp the PCR by the metal shafts and place into the Developer Unit, as shown in Figure 23.

Gently place PCR into Developer Unit

Figure 23

Place the PCR into the Developer Unit.

6. Attach the Drive Side End Plate, to the Developer Unit and secure with four phillips screws, as shown in Figure 24.
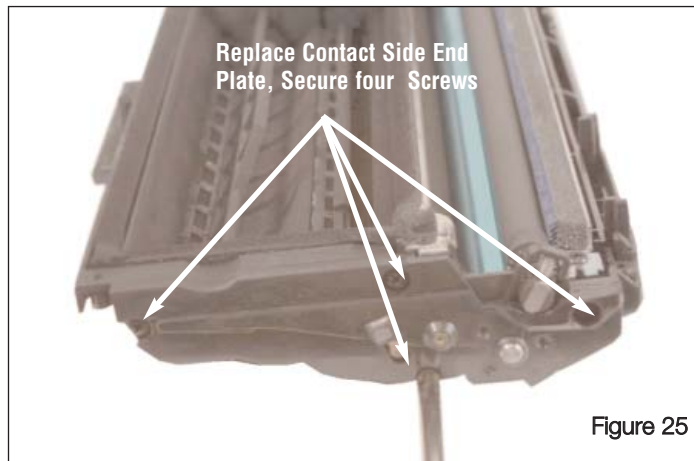

Attach End Plate and secure with four phillips screws
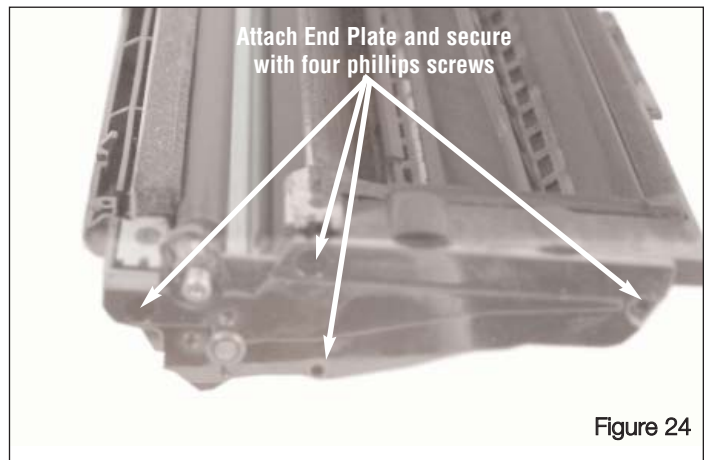
Figure 24

Attach the Drive Side End Plate to the Developer Unit.

Reassembling the Developer Unit

7. Attach the Contact Side End Plate, and secure with four phillips screws as shown in Figure 25.

8. For chip solution, please refer to SSS# 693.

Replace Contact Side End Plate, Secure four Screws

Figure 25

*Attach the contact side end plate, and secure with four screws*

Replacing the Cover

1. Push the Hopper cap out of the cover before attaching the cover to the Developer Unit.

2. Place the cover of the cartridge onto the Developer Unit and secure with the five phillips screws, see Figure 26. Be sure that each clip is latched before screws are installed.

Attach Cover and Secure with Five Screws
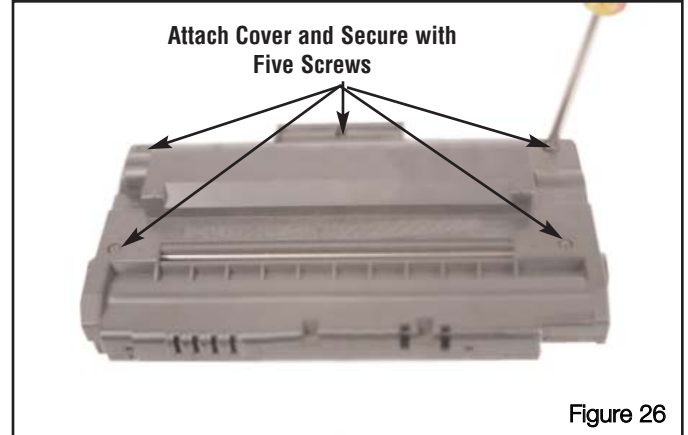
Figure 26

Replace the cover onto the Developer Unit.

3. Fill the cartridge with toner, as shown in Figure 27.

Fill with toner

Hopper Cap

Figure 27
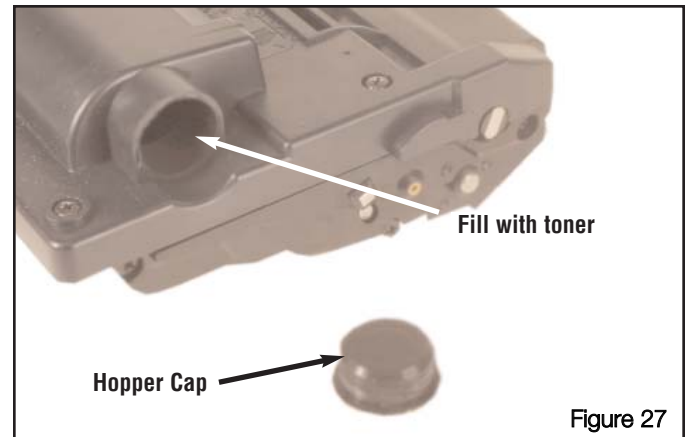
Fill cartridge with toner and install the hopper cap.

S T A T I C   C O N T R O L   C O M P O N E N T S ,   I N C .

MOVING AT THE SPEED OF NEW TECHNOLOGY

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