

Xerox® N24/32/40

Remanufacturing Instructions



This manual provides instructions for cleaning and replacement of parts. As more products and information become available, these instructions will be updated accordingly. Contact your SCC Sales Team or Technical Support for further updates.

About the Cartridge

There are two cartridge types based on this new Fuji-Xerox engine. The first type was released by Xerox in their Document Centre digital copier series and is also used in the Fuji-Xerox Able series printers in the Pacific rim. These instructions refer to the second type of this cartridge which was introduced in the Xerox N24/32 in 1997 and later in the N40 model. Since its original release in the N series, the Type 2 cartridge has gained considerable popularity with OEMs and is available in several different printers. Variations between cartridges appear in certain design features, including the presence and functionality of the smartchip.

The Type 1 cartridge has a 20,000 page yield rating and can be identified by the presence of a pull tab and a different OEM part number (113R120). The Type 2 cartridge (OEM part #113R173) has a 23,000 page yield rating, a slightly longer hopper section, and a small slot that is associated with the fuser door.

The new OEM cartridge ships with a black paper installed between the drum shutter and

the OPC drum. It is probable that this paper is present to prevent impact damage to the drum during shipping from the long, flexible drum shutter.

In our development testing, we have determined that the OPC drum, wiper blade, and doctor blade will most likely be single-cycle components. Additional testing will verify the component life of the PCR and mag roller.

Through our toner development process, we have found that a number of toners could potentially function in the N24 model, but may exhibit print defects in the N32 and N40 models. These defects include fuser offsetting, back-marking, and density issues. The backmarking defect seems to be unique to the N series printers. Basically, a hazy black band appears on the back of the page approximately 1-3/4" from the leading edge after the first page is printed. For further information on back-marking, refer to SCC Industry Alert #42, *Xerox N32/40 Exhibit Print Defects Not Found in N24 Model*.

The N24/32/40 features similar mag roller end magnets as the HP4000 and HP5000 cartridges.

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World Wide Web

www.scc-inc.com

Machine Compatibility

Printer Models

- N24
- N32
- N40

Copier Models -DocumentCentre™

- 220/230 Digital Copier
- 230LP
- 220/230 Digital Systems

Remanufacturing Information

Estimated Remanufacturing Time	25 minutes
Toner Weight	1064 grams
Toner Class	Magnetic, monocomponent
Recommended Test Machine	Xerox N32

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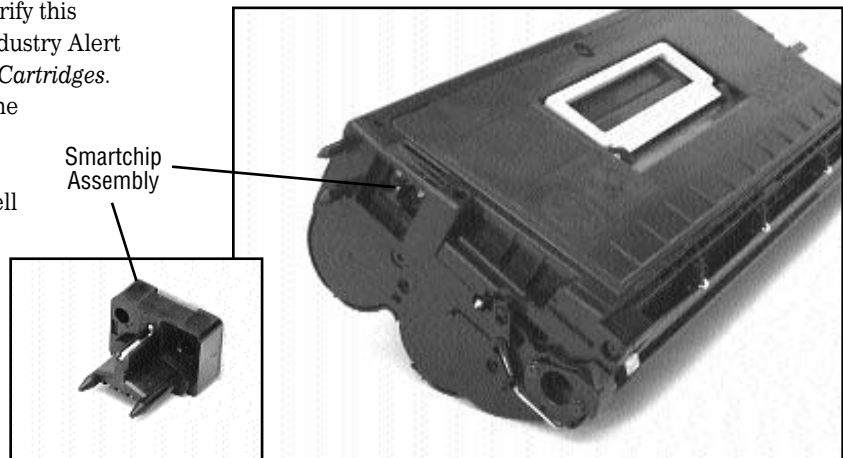
first edition

About the Toner Cartridge

However, the force of magnetic attraction is less than that of the HP4000 or HP5000 magnetic seals. The N series design entails a thin metal strip seated directly below the mag roller and a flexible magnet next to the strip. The flexible magnet provides the magnetism to attract toner to the strip and help prevent leakage out the side of the cartridge. Toner leakage has been observed from some new, out-of-box cartridges. It appears the leakage may be originating from more than one area of the hopper. Additional research is being conducted to verify this information. For further information, refer to SCC Industry Alert #45, *Toner Leakage From Xerox DocuPrint N24/32/40 Cartridges*.

Of considerable importance to remanufacturers, the N24/32/40 cartridge features a smartchip assembly mounted in a recess on one end of the cartridge. The assembly contains several resistors and diodes, as well as an electronic chip. The smartchip assembly does not make any electrical connection with any circuitry inside the cartridge. The chip has a four-pin connector that interfaces with a receptacle in the printer.

The chip has to be installed for the cartridge to be recognized by the printer. It also prevents the remanufacturing of the cartridge unless the chip is reprogrammed or replaced. The release of a replacement chip is eminent.



Tools and Supplies You Will Need:

- Phillips Screwdriver
- Needlenose Pliers
- Lint-Free Cleaning ClothLFCCLOTH
- 91-99% Isopropyl Alcohol(See below)
- Compressed Air for Cleaning(See below)

Use of Isopropyl Alcohol

For best results, we recommend using ONLY 91-99% for cleaning as directed in these instructions. 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.

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.



Disassembly Instructions

1. Separate the hopper and the waste bin.

Lay the cartridge flat. Using a pair of needlenose pliers, remove the two cartridge pins from each side of the cartridge (FIG 1).



FIG 1

Remove the waste bin section by pulling straight up with the handle (FIG 2).



FIG 2

2. Remove the OPC drum.

Using a Phillips screwdriver, remove the two screws on the drum spur gear axle (FIG 3).

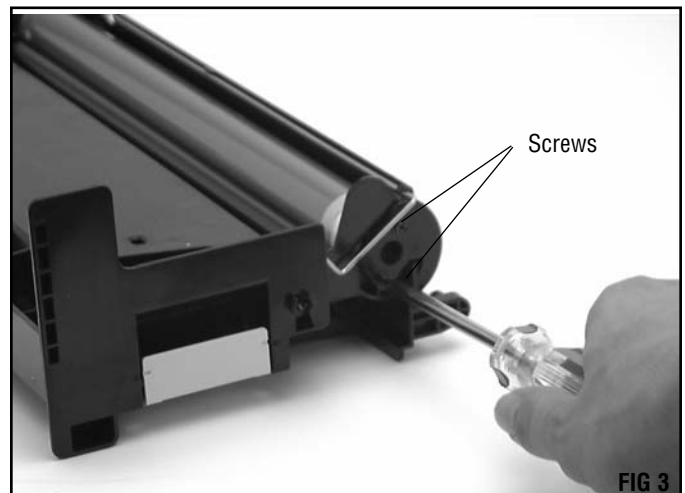
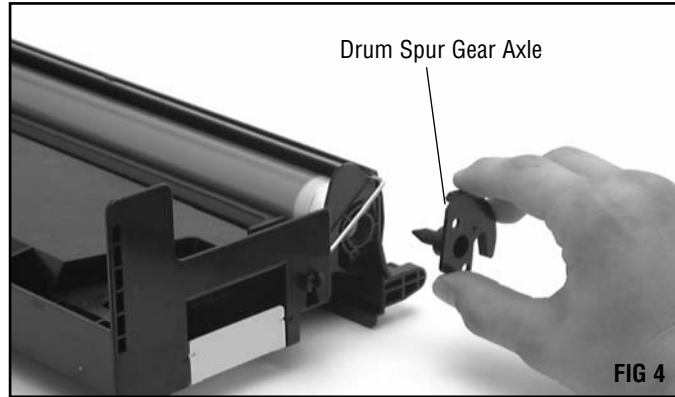


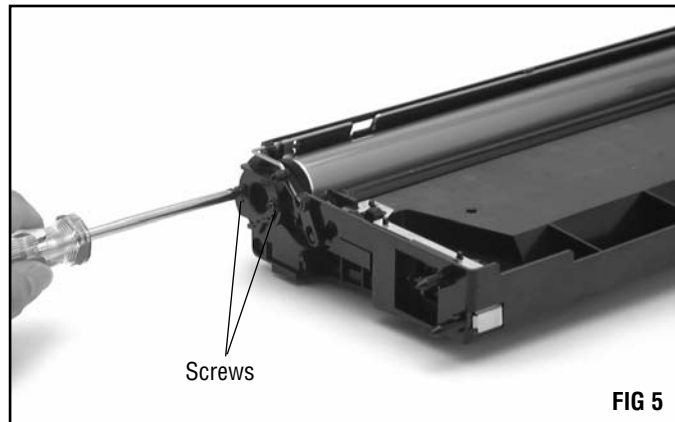
FIG 3

Disassembly Instructions

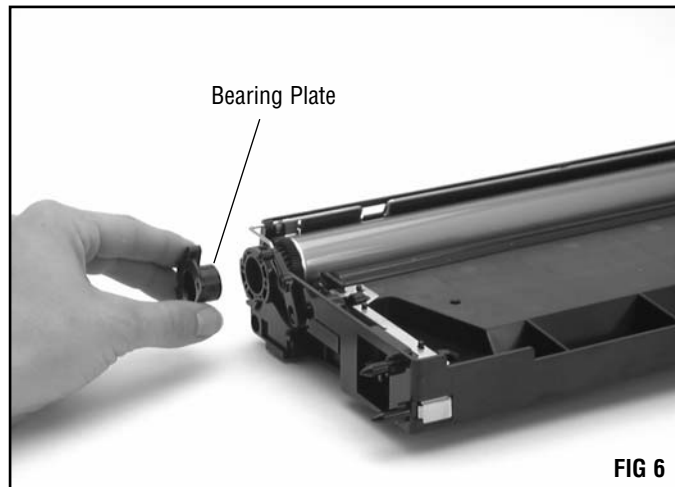
Remove the drum spur gear axle (FIG 4).



Using Phillips screwdriver, remove the two screws on the bearing plate (FIG 5).



Remove the bearing plate by pulling it straight and outward from the cartridge (FIG 6).



Remove the drum by holding onto the gears (FIG 7). If you plan to reuse the drum, place it in an area that is protected from light and impact damage.



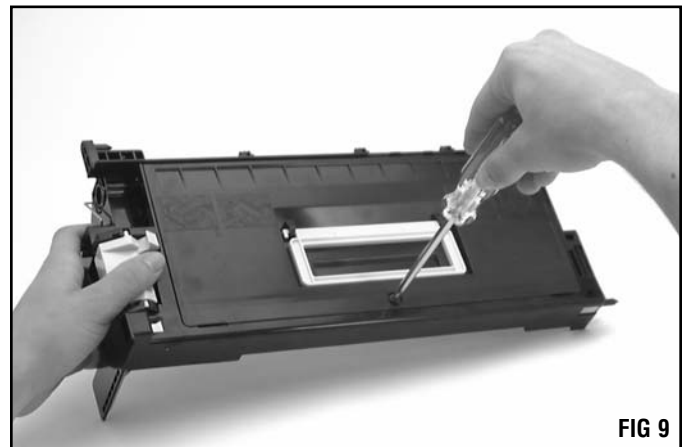
3. Remove the PCR.

Hold onto the PCR's axle and remove it straight out from the saddles (FIG 8).



4. Remove the top plate.

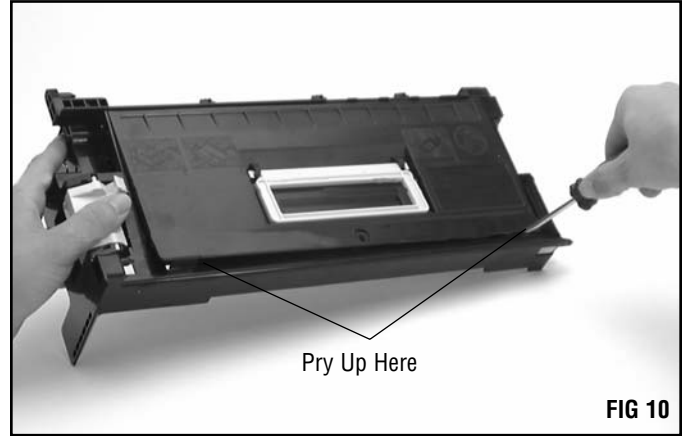
At the angle shown, lightly tap the cartridge in order to settle the toner to the lower part of the waste bin. Hold the cartridge at the same angle and remove the one screw that holds the top plate in place (FIG 9).



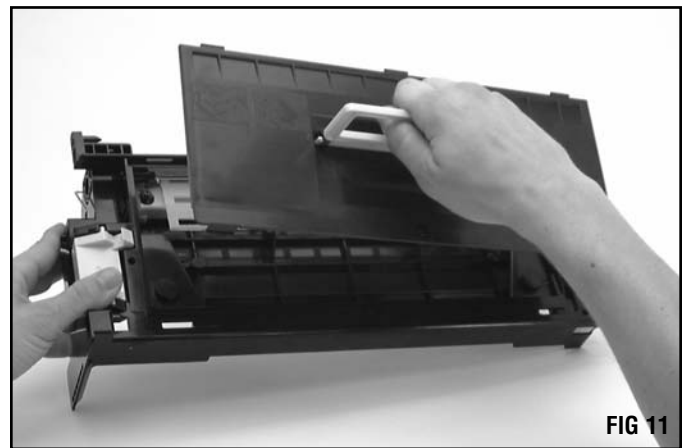
NOTE It's important to hold the cartridge in the angle shown. If this is not done, then an extra amount of toner will leak out of the waste bin when removing the cover.

Disassembly Instructions

Using flathead screwdriver, pry the cover up in the two places shown in order to release the clips securing the cover (FIG 10).



Lift the cover from the waste bin and set it aside (FIG 11).

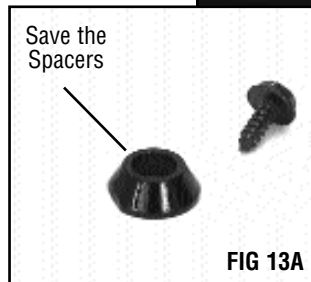
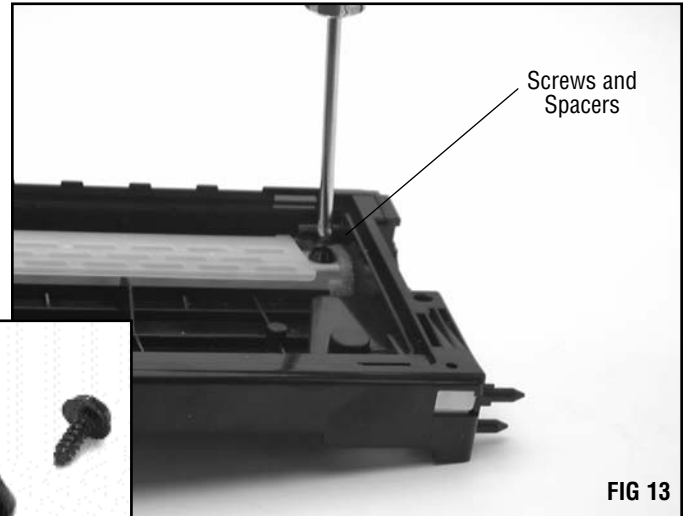


Use compressed air and thoroughly clean the waste bin section (FIG 12).

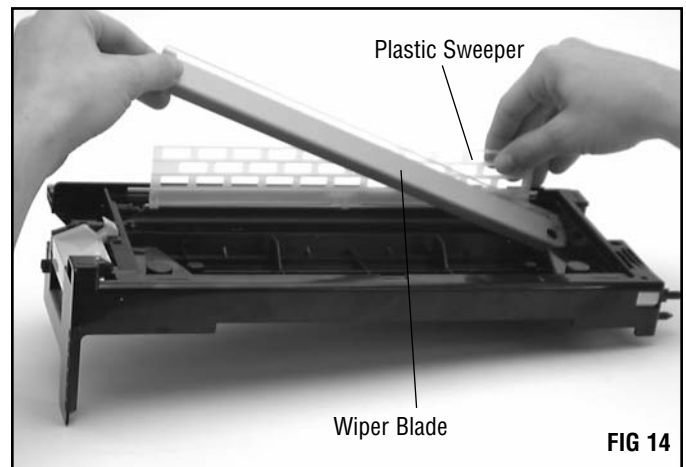


5. Remove the wiper blade.

Remove the two screws and the spacers that secure the wiper blade (FIG 13). Save the spacers for reassembly (FIG 13A).

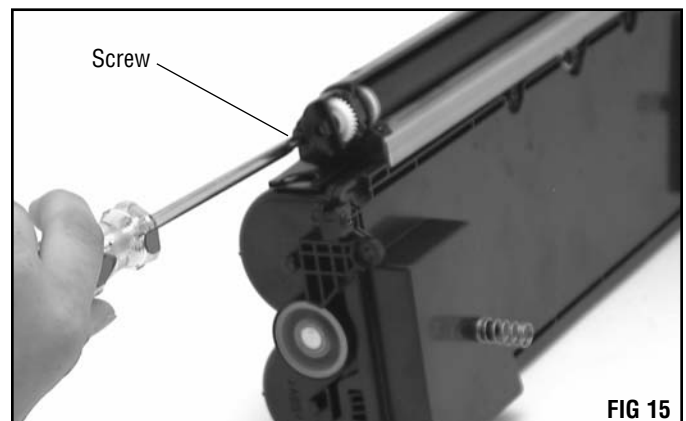


Carefully lift the plastic sweeper and remove the wiper blade (FIG 14).



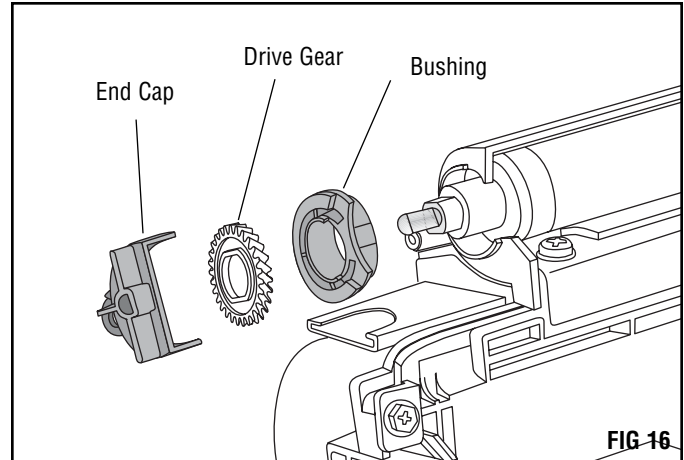
6. Remove the mag roller.

Remove the one screw that secures the mag roller end cap (FIG 15).



Disassembly Instructions

Remove the mag roller end cap, drive gear and bushing and set them to the side (FIG 16).

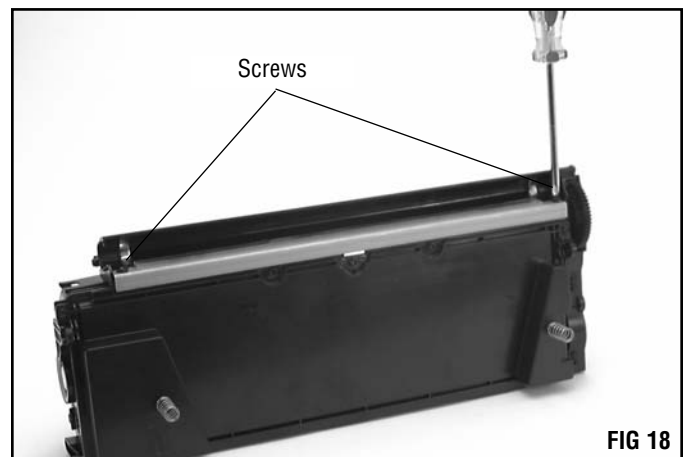


Hold on to the ends of the mag roller and remove it from the hopper (FIG 17). If you plan to reuse the mag roller, store it on a soft surface to prevent damage.



7. Remove the doctor blade.

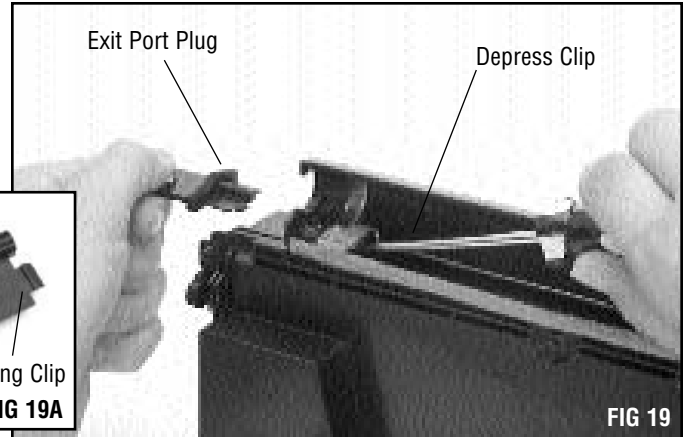
Remove the two screws that secure the doctor blade (FIG 18). Remove the doctor blade from the hopper.



NOTE In order to reseal the cartridge you must remove the exit port plug and the paddle bar.

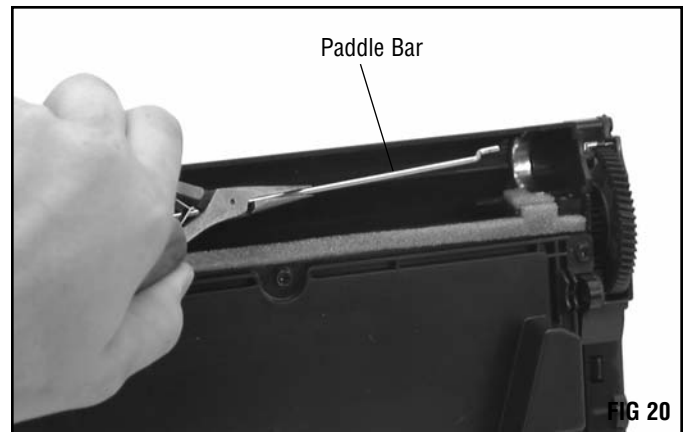
8. Remove the exit port plug.

Using a flathead screwdriver and depress the clip that holds the exit port plug in place (FIG 19). Pull the exit port plug from the hopper. The position of the clip is shown in FIG 19A.



9. Remove the paddle bar.

Using a pair of needlenose pliers, slide the paddle bar to the right and pull it out of the cartridge (FIG 20).



10. Clean the hopper.

Remove the hopper cap and dump the remaining toner from the hopper. Clean it thoroughly using dry, filtered compressed air (FIG 21).



11. Seal the hopper.

If you are planning to reseal the cartridge, do so now. A lay-in or gasket type seal is recommended.



Assembly Instructions

1. Install the toner paddle bar and exit port plug.

Using needlenose pliers, slide the left side of the toner paddle bar into the exit port and seat the right side in the paddle bar drive axle. Align the left side of the paddle bar with the shaft on the exit port plug and insert the plug into the hopper (FIG 22).



2. Install the mag roller.

To install the mag roller, place the right side in first, then lower the left side into the hopper (FIG 23).

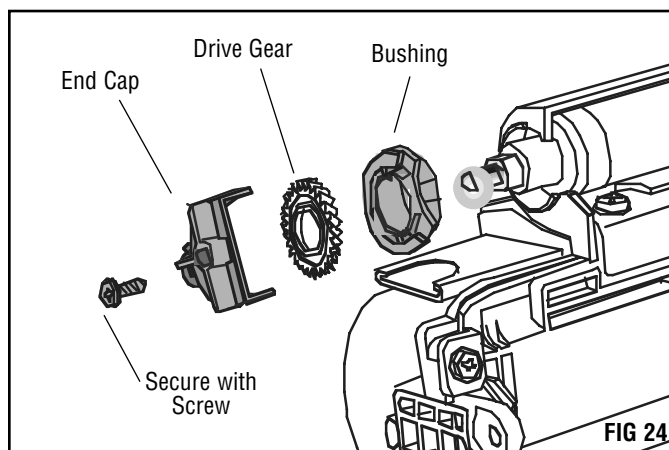


3. Install the mag roller bushing, drive gear and end cap.

Note that the axle on the mag roller is keyed and will fit in the end cap only one way. Secure the cap with one Phillips screw (FIG 24).

4. Fill hopper with toner.

Fill the hopper with the proper type and gram weight of toner and install the hopper cap.



5. Install the PCR

the PCR axles should be firmly installed in the PCR saddles. (Refer to FIG 8, page 5)

6. Install the drum.

Pad the coated area of the OPC drum with Kynar® lubricating powder and install the drum into the cartridge. (FIG 25).



FIG 25

7. Install the bearing plate and drum spur gear axle.

Install the bearing plate and the drum spur gear axle. Secure them with two screws on each side (FIG 26 & 27).

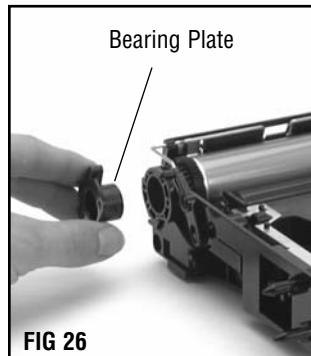


FIG 26



FIG 27

8. Reassemble the waste bin and the hopper.

Position the waste bin onto the hopper section (FIG 28).



FIG 28

Hold the sections together and install the cartridge pins in each side of the cartridge (FIG 29).

NOTE Do not tap the pin on the small helical gear side into the hopper past the tabs on the cartridge. This could cause the pin to become lodged in the cartridge.

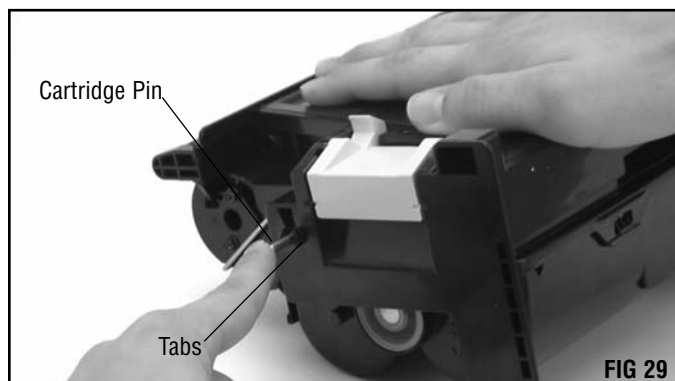


FIG 29



Imaging System Technology You Can Count On!

The development of cartridge imaging systems, such as the Xerox® N24/32/40, is the primary mission of our Imaging Labs. Through extensive testing and research, we develop the optimum combination of matched components for each cartridge system. Our engineering and manufacturing expertise provides us with total control in design, quality and development to produce products from the ground up. The result is a system of components that seamlessly work together in each cartridge application.

This dedication and commitment results in integrated cartridge systems that Static Control fully supports, allowing you to quickly attack new market opportunities with complete confidence in the reliability and performance of your cartridges.



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