# Optra® S Remanufacturing Instructions



Oasis Imaging Products, Inc. Technical Support: (888) 627-6555

#### **Reference Information:**

Regular Low Yield (7,500 Pages) - 1382620 Regular High Yield (17,600 Pages) -1382625 Prebate Low Yield (7,500 Pages) - 1382920 Prebate High Yield (17,600 Pages) -1382925

### **Recommended Tools:**

Spring Removal Hook Phillips Screwdriver Jewelers Screwdriver

#### **Disassembly Instructions:**

#### **Cartridge Shell**

- 1. Place cartridge on its top with the drum shutter away from you.
- 2. Unhook the springs from the left and right sides of the toner hopper (Fig. 1A).
- 3. Remove the developer roller drive gear (See Fig.1B).
- 4. Pry the sides of the cartridge shell outward to free the retaining pins on the left and right sides of the toner hopper (Figs. 2A & 2B).
- 5. Lift the toner hopper back and up to remove, then set aside.
- 6. Note the differences in the OPC gears (Fig. 3). The gear without the stem is the contact gear. With the OPC facing up and the stem gear on the left, remove the e-ring from the right side of the drum shaft. Now gently pull the drum shaft to the left until it is free of the cartridge. While the shaft is being removed, ensure the OPC does not move or get scratched. A flat, white mylar spacer bushing is located on the contact side of the OPC. Retain this spacer for use during reassembly. Clean, inspect and lubricate the OPC. Replace if necessary (Oasis Part #5088). Protect the OPC from light as it is photoconductive and can be damaged by overexposure to light. Also note (Fig. 3), some OPCs have a simple spring clutch which is designed to prevent the OPC from rotating backwards.
- 7. Locate and remove the two screws on the wiper blade (Fig. 4A). Invert the cartridge (right side up) to locate and remove the mylar strip across the top of the wiper blade (Fig. 4B). The mylar strip prevents leakage over the top of the wiper blade. Remove the wiper blade. Clean, inspect and lubricate the blade. Replace if necessary. Vacuum excess toner from the waste hopper carefully to avoid damaging the recovery blade. If removal of the recovery blade is required, lift one corner and slowly remove it from the surface of the waste hopper. Remove all residual adhesive from the surface area. To install a new recovery blade (Oasis part #884), peel the backing and apply it to the area ensuring there are no wrinkles or creases. Set the cartridge shell aside.

#### **Toner Hopper**

8. Place the toner hopper on the work surface with the developer roller toward you and the hopper plug to the left. Remove the doctor blade tension spring by pulling the two out swept arms away from the cartridge (Fig. 5A). Remove the developer roller contact from the cartridge by sliding it off to the left side



Optra "S" Cartridge



Figure 1A



Figure 1B



Figure 2A



Figure 2B

of the cartridge (Fig. 5B). Remove the developer roller retaining bushing by sliding it off to the left side of the cartridge (Fig. 5B). Remove the developer roller from the cartridge by lifting the left side slightly and pulling the roller to the left while gently rotating the roller back and forth until it is free. Retain the flat, white mylar spacers from each end of the roller for use during reassembly. Clean and inspect the roller.

- 9. In the development area, there are two black mylar strips behind and below the developer roller (Fig. 6). Inspect these strips carefully. If damaged, proceed to the "Inner / Outer Mylar" portion of these instructions. There is also a coarse foam delivery roller in the development area (Fig. 6). Gently blow off the roller with compressed air to remove residual toner.
- 10. Remove the hopper cap to clean the inside of the toner hopper. Use caution when vacuuming to avoid the agitator inside the toner hopper. There is a slotted wheel which partially obscures the hopper plug. This wheel is easily removed by pulling it off the cartridge (**NOTE:** Reach behind the wheel face with your finger tips to the center hub or the wheel face could snap).
- 11. Clean all electrical contacts with cotton swabs and alcohol and ensure all residual toner is removed prior to filling the toner hopper. A small amount of conductive grease (Oasis Part #592) should be applied to the ground contact inside the OPC and also on the developer roller contact previously removed. The doctor blade's metering edge should be thoroughly cleaned. Any toner remaining in this area could result in poor print quality.

#### Reassembly

- 12. Place the cartridge shell up-side-down on the work surface with the waste hopper away from you. Install the wiper blade and secure the two screws which hold it in place. Check the PCR shutter operation.
- 13. Insert the OPC shaft approximately 1/4 inch into the right side of the shell And place the flat, white mylar spacer over the end of the shaft (Fig. 7). Carefully place the OPC in the cartridge with the contact gear on the right side, then push the shaft fully through to the left side and replace the e-ring (Oasis Part #1196). Turn the cartridge back over. Apply a mylar strip over the top of the wiper blade and the cartridge to avoid leakage from the waste hopper (see fig. 4B).
- 14. Place the toner hopper on the work surface with the development chamber facing you. With a flat mylar spacer on each side, install the developer roller with keyed or "D" shaped shaft to the right. Replace the retaining bushing and the contact (see fig. 5B). Replace the doctor blade tension spring (see fig. 5A).
- 15. Fill the toner hopper with toner (Oasis Part #1428), then replace hopper cap. Replace the slotted wheel taking into account the position of the "D" shaped shaft on which it sits.
- 16. Place the cartridge shell up-side-down on the work surface with the waste hopper away from you. Secure the two long springs to the sides and out of the way of the toner hopper (Fig. 8).
- 17. Holding the toner hopper up-side-down, insert the cartridge guides (Fig. 9) into the guide tracks (Fig. 8) in the cartridge shell. When the guides are fully inserted, lower the toner hopper until the retaining pins are resting on the cartridge shell. Gently pry the sides of the shell outward until the retaining pins drop into the retaining slots in the cartridge shell. Secure the ends of the long springs to the left and right sides of the toner hopper. Replace the developer roller drive gear.



Figure 3



Figure 4A



Figure 4B



Figure 5A



Figure 5B



Figure 6

Lexmark® Optra "S" Remanufacturing Instructions...

## Inner/Outer Mylar and Developer Roller Saddles with the Developer Roller Previously Removed

In the development area, there are two black mylar strips behind and below The developer roller (see Fig. 6). Inspect these strips carefully. If damaged, peel them off the cartridge and remove any residual adhesive. Remove the backing from the replacement inner mylar (Oasis Part #886) and carefully apply it to the inner surface area. Next, remove the backing from the replacement outer mylar (Oasis Part #896) and carefully apply it to the outer surface area. In the development area, there are two white rubber saddles; one on each end (Fig. 10). If these channels are damaged or worn, toner leakage from the ends of the developer roller may occur.



Figure 7



Figure 8



Figure 9



Figure 10

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