## Minolta® SP-101. Epson® 7000/7500. NEC 90/95



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

**Reference Information:** OEM PN: **OEM Yield:** Minolta 1000/SP-101 0910-802 8,000 prints 8,000 prints Epson EPL-7000/7500/8000 S051009 NEC Silentwriter Models 90/95/95fx/97/97fx 20-055 8,000 prints

> Approximate Remanufacturing Time: 35 min.

Recommended Tools:

Small flat head screwdriver Phillips head screwdriver 3/16" diameter steel dowel (14"-16" length) Razor blade Pin puller

## **Operational Theory:**

The printer uses an electro-photographic process. The drum charge unit applies an even, negative electrostatic charge to the OPC surface. This negative charge dissipates in the areas where the laser beam touches the OPC surface. As a result, the OPC surface retains an electrostatic latent image. The negatively charged toner particles on the developer roller sleeve are transferred to the electrostatic image on the OPC surface. As the paper is fed between the OPC drum and transfer charger, a high uniform charge is applied to the back side of the paper. The negatively charged toner particles are attracted from the drum to the paper. After the transfer has occurred, the wiper blade scrapes off any toner remaining on the OPC surface. A waste toner collection auger then transports the toner into a waste toner box (capacity: 100g). The paper with the toner image passes between a heat and pressure roller where the toner is permanently adhered to the paper.

A toner empty sensor in the imaging cartridge signals the CPU in the printer; when the toner hopper is almost empty, the printer displays the message "OUT OF TONER" (EPL-7500) or "TONER LOW" (EPL-7000). The imaging cartridge has up to 25 prints remaining.

- 1. Cut the paper instruction label on the cartridge shell. Remove the two (2) screws securing the waste bin to the toner hopper (Fig. 1).
- Remove the plastic cover over the fill plug (1 screw). 2.
- Remove the large gear (1 screw). 3.
- 4. Remove the drum axle hubs (2 screws).
- Remove the toner hopper plug and clean the toner hopper. Make sure to 5. completely remove all old toner.
- 6. Remove the magnetic developer roller (2 black clips). Do not to touch the sleeve with bare hands and be careful not to scratch the surface of the sleeve. Use compressed air or a vacuum to remove residual toner from the sleeve. **Note:** Keep the air psi. low: too much air pressure may dent the sleeve.
- 7. Locate and clean the thick mylar strip. With a cotton swab, scrub the mylar strip edge to remove all old toner build up.
- 8. Install the magnetic roller in the toner hopper unit. Refill the toner hopper with new toner.
- Separate the waste bin and drum unit sections from cartridge cover (4 plastic 9. pins Figs. 2 & 3).



Figure 1



Figure 2



Figure 3

- 10. Remove the OPC drum. Clean, inspect, and lubricate the drum (with padding powder) and store in a dark place. Replace if necessary. If replacement is required, then perform the following to remove the OEM gears:
  - a. Insert a steel dowel through the non-contact gear and lightly tap the edge of the opposite gear until it becomes dislodged.
  - b. Perform step a. on the remaining gear.
- 11. Remove the wiper blade (2 pins, 1 spring). Clean, inspect, and lubricate the wiper blade (with padding powder). Replace if necessary.
- 12. Use compressed air or a vacuum to clean out the waste bin. Remove residual toner from the corona wire with a cotton swab and 99% IPA..
- 13. Install the wiper blade (2 pins, 1 spring).
- 14. Install the OPC drum. Do not fully insert the drum axle hubs until the two (2) screws securing the waste bin to the toner hopper are reinstalled.
- 15. Reattach the cartridge cover to the waste bin and drum unit (4 plastic pins).
- 16. Install the large gear (1 screw).
- 17. Install the plastic cover over the fill plug (1 screw).
- 18. Install the two (2) screws securing the waste bin to the toner hopper.