Rebuilding the ASF Assy

The sheet feeder's moving parts can lose their smooth action over time. Disassembling and lubricating them can return the machine to an operational condition.

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INTRODUCTION

This guide will show you how to remove the "ASF Assy" (automatic sheet feeder?) from the printer, and disassemble it sufficiently to lubricate the moving parts. It will not tell you how to remove the housing; which will be left for other guides.

todo: create guides for the prerequisites and add them to the prerequisites list.

TOOLS:

- Phillips #2 Screwdriver (1)
- Flathead Screwdriver (1)
- Small Needle Nose Pliers (1)
- Tweezers (1)
- Q-Tips (1)
- Distilled Water (1)
- lubricating oil (1)
- Spring Hook (1)
- Isopropyl Alcohol (1)
Step 1 — previous steps

- remove the rear housing
- remove the side panels
- remove the upper housing

Step 2 — Overview

- This is the "ASF Assy" which we will be removing.

- I have separated the "Panel FFC" (control panel) from the upper housing and reattached it to the printer for testing purposes.
Step 3 — Bracket removal overview

- Our first task is to remove the metal brackets which hold the Guide Roller in place.
  - metal brackets
  - Guide Roller

Step 4 — Unscrew the Guide Roller brackets.

- Note the vertical position of the screws holding the metal brackets. They move up and down to adjust the position of the Guide Roller. Mine were in the highest position, which puts the least amount of pressure on the Guide Roller.

- Remove the screws.
Step 5 — Disengage brackets from the Roller Guide

- Gently pull on the Roller Guide to release the metal bracket from the shaft.
- Tilt the metal bracket sideways and off of the cam.

Step 6 — Free bracket from Print Assembly

- Because the Roller Guide flexes slightly, you can now shift the metal bracket toward the rear of the printer, to disengage it from the carriage assembly.
- (needs new picture)
Step 7 — Remove Roller Guide brackets

- Rotate the metal bracket upward around the Roller Guide and remove it.
- (needs another picture)

Step 8 — Right side disconnects

- Disconnect the sheet feeder motor at the relay connector and unroute the relay wire from the 'ASF Assy'.
  - The release tab for the relay connector is on the motor side of the connector.
- Separate the sheet feeder motor ground wire from the chassis ground.
  - I like to put the grounding screw back to keep it from getting lost.
Step 9 — Left side disconnects

- Disconnect the FFC (flat flexible cable) (which links the main board to the relay board) at CN1
- Disconnect the Paper Edge sensor at CN2
- Disconnect the APG (automatic paper guide?) sensors at CN4 and CN5.
- Disconnect the FFC which links the Paper Feed Encoder to the relay board at CN6. The Paper Feed Encoder's FFC is also tacked to the Sheet Feeder by double sided tape. Carefully separate the cable from the Sheet Feeder's frame.
- Deroute the red & black APG motor wires from the ASF (automatic sheet feeder) housing.
- Deroute the Flat Flexible Cables from the groove in the Automatic Sheet Feeder housing.
Step 10 — Remove 3 screws

- Remove right side screws.
- Remove left side screw.

⚠️ todo: update left side picture to show correct disassembly state.

Step 11 — Remove the Sheet Feeder

- Hold the Sheet Feeder here and lift it free.

⚠️ Because many of these printers were used in semi-professional settings, they were often modified. This one has a waste ink tank, bypassing the waste ink pads and the associated end-of-life error.
Congratulations, you just saved a 700$ printer.