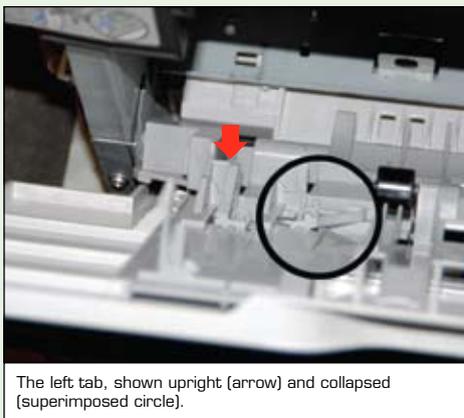


# THIS MONTH, from the TECH FILES of Liberty Parts Team...

## Start-up Paper Jams in the 3500/3550/3700



Tabs and levers, all in correct, upright positions. If the jam release levers are left down after pulling out paper, the circled tabs push up them back up, unless the tabs are collapsed. In that case, the lowered levers will result in a startup jam, a very common and confusing error.



The left tab, shown upright (arrow) and collapsed (superimposed circle).

jam-release levers, which correspond with tabs on the rear door. Moving the levers down releases the pressure between the fuser rollers, so that jammed paper can be easily pulled out of the fuser. Moving them simultaneously moves a sensor flag, which will trigger a startup paper jam in order to prevent printing in this unready state.

The tabs on the door should prevent all this by automatically pushing the levers up when the door is closed. Unfortunately, it is possible to fold these tabs down, defeating their purpose! What would seem the unlikely situation of having both the fuser levers and

the tabs in the down position is actually the number one cause of false warranty returns (what we call "NPF" – "no problem found") on this fuser. If you get a "13.20 paper jam" after installing a fuser or clearing jammed paper, check the position of the green levers before concluding that the fuser is bad.

*What would seem the unlikely situation of having both the fuser levers and the tabs in the down position is actually the number one cause of false warranty returns on this fuser.*

### The Startup Jam Shortcut

On all printers, paper jam errors at power-up are a sensor issue. Either there is paper present at one of the jam sensors, or one of those sensors is malfunctioning. It is usually necessary to inspect each sensor until you find the problem, and some printers prompt the user to check a set sequence of doors, one-by-one. The Color LaserJet 3500/3550/3700 Series prompts the user in this way. However, there is a far better way to proceed.

In its Diagnostics menu, selecting "Paper Path Sensors" or "Manual Sensor Test" will produce on the display a row of letters with a row of numbers beneath it. A sample display ("Paper Path Sensors" from a 3700 with one paper cassette) would be:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0	0	0	1		0	0	0	0	0	0	0			

The letters represent sensors and are identified in the manual. The numbers represent the current state of the corresponding sensor: 1= paper present at that sensor; 0=no paper present; Empty=sensor either

doesn't exist in this printer, or is irrelevant to this test. To illustrate these points, consider sensors C, D, and E in the above example. These are, respectively, the "paper out" sensors for Tray 1 (the manual tray), Tray 2 (the standard cassette), and the Optional Tray 3. In this printer, Tray 1 was empty (0), Tray 2 had paper in it (1), and there was no Tray 3 (no number).

Only six of the sensors are paper jam sensors. They are:

Letter	Ref. Des.	Sensor Name
A	PS9	Reversed paper sensor (3700 only)
B	PS10	Duplexing feed paper sensor (3700)
F	PS4	Registration paper sensor
G	PS6	Fixing front paper sensor
H	PS7	Fixing delivery paper sensor
I	PS8	Face-down delivery paper sensor

Note that sensors A and B are in the duplexing path, and are present only on the 3700. Sensors F, G, H, and I are common to all. If any of these shows a "1" when you run the diagnostic, you have found the problem. It only remains to find and check the appropriate sensor. Sensors A, B, and F may require some disassembly of the printer, and it is best to consult the service manual on these. The other three are easily accessible: PS6 is located on the floor of the printer, in front of the fuser; PS7 is on the back of the fuser; and PS8 is in the delivery area, above the fuser. To access PS6, open the front door and remove the toner cartridges; to access the other two, open the rear doors.

— Dennis Kosterman