

Summary of the NATT Grounding Plate in Aficio MP4500 Machines

SUBJECT: Grounding Plate Field Data

DATE: February 26, 2010



PROBLEM: Poor drum grounding.

CAUSE: The cause of this problem is the intermittent ground through the drum bearing, OEM # 08053441. As the bearing ages, the grounding wire within the bearing wears, which reduces contact for ground.

BACKGROUND INFORMATION: Symptoms of an intermittent ground may include: a dirty-running machine, fuser cleaning roller building up toner quickly, and premature drum wear due to residual charge left on the drum. These symptoms may result in reduced image quality and decreased efficiency of consumable parts.

Testing has shown that ground can float around 2.7 ohms without the grounding plate installed, yet it measured 0 ohms with the plate installed.

STUDY OF DRUM PERFORMANCE IN RELATION TO GROUNDING PLATE INSTALLATION:

NATT Part # 02037006

MIF Sample Size:	Machines in Field
Active Field Population AF350-MP4500	3693
Machines with Grounding Plate Installed	427
Model Sampled:	
Active Field Population MP4500	164
Machines with Grounding Plate Installed	60

	MP4500s Without Grounding Plate	MP4500s With Grounding Plate	
Clicks between calls	21,676	24,240	10.6% more with grounding plate installed
OEM Drum Yield at time of service call	54,059	98,640	45.2% higher yield on OEM drums with grounding plate installed
NATT Drum Yield at time of service call	80,721	95,966	15.9% higher yield on NATT drums with grounding plate installed

When excessive toner build up and premature drum wear occur due to a floating ground, image quality and clicks between calls are reduced. Most importantly, customer satisfaction decreases. By installing the NATT Grounding Plate, grounding issues are eliminated and clicks between calls increase.