

Product Installation Study

PowerTracker® Digital Power Filter

Project Information

Project Name:	DPF Installation Study
Evaluating Organization:	Les Olson Company 3244 South 300 West Salt Lake City, UT 84115
Project Leader:	Adam Goodman Sr. Program Manager

Adam Goodman Sr. Program Manager EFI Electronics, Inc.

Document Information

Written By: File Name: Date: Adam Goodman DPFStudy-LO.doc 8/5/03

This report relates only to the items defined above which were tested. This report shall not be reproduced, except in full and with the written approval of EFI Electronics Corporation.

EFI Electronics Corporation 16640 SW 72nd Avenue Portland, OR 97224 (800) 317-5205



Product Installation Study PowerTracker Digital Power Filter

Executive Summary

Electronic equipment of all types suffer damage and disruption due to powerline disturbances. This fact is unchallenged throughout the electronics industry yet it is very difficult to quantify the costs associated with downtime, parts replacement and service calls for various types of electronic equipment. In an attempt to quantify the effect of the EFI Digital Power Filter (DPF) on the operation of digital copiers, EFI Electronics Corporation conducted an installation study to compare the frequency of copier malfunction and damage requiring a service call between digital copiers installed without DPF protection verses copiers protected by a DPF.

The results of the 9 month study of 40 installations determined a 37% reduction in service calls when protecting the copier with the DPF.

Background

Les Olson Company, an authorized dealer for Sharp copiers located in Salt Lake City, Utah monitored 40 copiers, 20 of which were not protected by a DPF and 20 of which were protected by a DPF. The non-protected and protected copiers were similar equipment installed in similar environments.

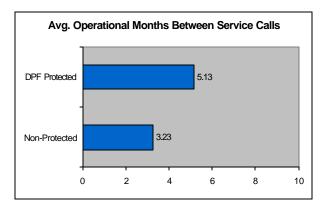
The copiers were monitored between 8/13/2002 and 6/30/2003. The combined number of months that the non-protected copiers were monitored was 181 months, while the protected copiers were installed and monitored a total of 205 combined months.

Data Results

The 20 copiers that were not protected by a DPF experienced 56 service calls, while the 20 copiers that were protected by a DPF experienced 40.

This means that the copiers that were not protected by the DPF operated an average of 3.23 months without a service call while the copiers that were protected averaged 5.13 months without a service call.

EFI Electronics Corporation 16640 SW 72nd Avenue Portland, OR 97224 (800) 317-5205





Product Installation Study PowerTracker Digital Power Filter

Conclusion

The copiers that were not protected by a DPF were serviced a total of 56 times during the 181 combined months that the copiers were installed, for an average of 3.23 months between service calls. This equates to each copier being serviced 3.71 times a year.

The copiers that were protected by a DPF were serviced a total of 40 times during the 205 combined months that the copiers were installed, for an average of 5.125 months between service calls. This equates to each copier being serviced 2.34 times a year.

	Copy Machines	Number of Service Calls	Copier Combined Operation Months	Operational Months between Service Call	Service Calls per Year
Non –	20	56	181	3.23	3.71
Protected					
DPF	20	40	205	5.13	2.34
Protected					

Service Calls per Year By protecting the copier with a DPF, **DPF** Protected 2.34 Les Olson Company decreased service calls by 37% and eliminated 1.37 service calls for each DPF 3.71 Non-Protected protected copier. 0 1 2 3 4 5

Business Impact

Installing the DPF has a significant impact on service contract profitability through decreased service calls. Installing the DPF on a copier for 3 years would eliminate 4 service calls and installing the DPF for 5 years would eliminate 7 service calls.

EFI Electronics Corporation 16640 SW 72nd Avenue Portland, OR 97224 (800) 317-5205

Extrapolated Service Calls Savings		
3 Year	5 Year Installation	
Installation		
4 Service Calls	7 Service Calls	