

# Examination Summary

CEN14LA127  
Springfield, IL  
Piaggio P180 (N700FE)

June 12-13, 2014  
Hydraulic Power Package Examination  
Eaton Corporation (Aerospace Operations)  
Bedhampton, Hampshire  
England



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## Summary & Factual Information from Examination:

Hydraulic Power Package  
PPEV3-008-EA2A  
p/n: 520814  
s/n: G1240509

A teardown examination of the hydraulic pump package was completed at the manufacturer. The disassembly did not reveal any mechanical anomalies that would have resulted in a malfunction of the pump. There was no evidence of contamination within the hydraulic power pack. However, during removal of the actuator sleeve the stainless-steel threaded insert pulled-out with the threaded section of the actuator sleeve. A visual examination established that the threaded insert had jumped a thread and was deformed. Additionally, there was damage to the actuator sleeve thread and corresponding female thread in the valve plate subassembly. The actuator sleeve was a heavily-machined steel (S157 specification) component. Although the actuator sleeve had a similar material composition to the trapped particle that was recovered from the directional control valve, a further review did not identify a positive match between the particle and the materials used in the hydraulic pump package.

--- End of examination summary ---

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**Andrew Todd Fox**  
**National Transportation Safety Board**  
**Air Safety Investigator**