

August 2, 2017

DRY AIR PUMP EVALUATION (JUNE 31, 2017)

AIRCRAFT – PA34-200T

PUMPS - AA3215CC, S/N ??ML15 Date of manufacture Unknown (possible October of 2016)
AA442CW-6, S/N N58317 Date of manufacture February 23, 2009

AA442CW-6, S/N N58317 –

- 1) Drive end mounting flange broken off. Large amount of dirt debris on outside of pump



- 2) 3/4-inch outlet hose attached to a 5/8-inch fitting.



3) Disassembled, found rotor broken. Vanes are worn well beyond its service limits.



4) Powdery aluminum corrosion found on the ID of stator bore and section of the carbon rotor. The corrosion is from a liquid of some type accumulating inside the pump.

NOTE: The clumpy powdery residue found on the bore and carbon in the pump indicates that the pump was in-operable at time of impact.



AA3215CC S/N ??ML15 –

S/N may possibly be 10BML15 manufactured in October 2016

1) No external damage. Large amount of dirt debris on outside of pump. Fittings damaged from impact.



2) Disassembled, found rotor and vanes broken. No FOD found in the pumping chamber. Appears Rotor and two vanes were destroyed by impact.



3) Disassembled drive end found trace amount of oil on the internal drive assembly and at the shear coupler location. End of bushing was sheared off. Possible damage from impact

