



Subject: Findings from magnetos removed from N8495Z.

6/12/19

Met Eric Alleyne at Champion Aerospace's Liberty, SC facility. Retrieved (2) 6210 88080112 & 6210 88080097 from Josh Christopher. Mags were found visually acceptable for testing and input shafts rotated normally. Tested both mags on Champion production ATP test equipment tester set up for 6310 production mags; both mags failed testing and did not produce output until above 3,000 RPM.

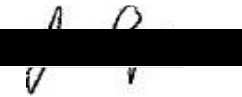
Mags were then opened up and a visual inspection was completed, no significant issues were noted during this inspection. Both mags contained Aero Accessories points and Condensers (PMA parts).

Internal inspection of 6210 88080112 revealed a 16 thousandths point gap at maximum point opening (normal allowed range of 8-12 thou) and 20.75 KOHms resistance on coil secondary (13-20.5 KOHms normal range). This mag failed visual inspection for both excessive point gap and coil secondary resistance.

Internal inspection of 6210 88080097 revealed 15 thousandths point gap at maximum point opening (normal allowed range of 8-12 thou) and 30 KOHms resistance on coil secondary (13-20.5 KOHms normal range). This mag failed visual inspection for both excessive point gap and coil secondary resistance.

Eric and I decided to reset internal timing and retest magnetos. Following retiming of E-gap both mags were again tested utilizing Champion production ATP test equipment tester set up for 6310 production mags; both mags again failed ATP testing requirements but passed several of the testing steps indicating significantly stronger output than initial testing, results follow:

88080112 passed all test requirements except 100% spark rate, including I/C, 475, 1,000, and 4050 RPM. 88080097. 88080097 again failed I/C, 475 and 1,000 RPM tests but did function acceptably at 4050 RPM. Neither of these mags were capable of supporting engine power development at all RPM ranges and would require complete overhaul to be acceptable to return to service.



Joe Logie

Technical Support Manager



Slick Piston Help Line 

Email: 

Web: www.championaerospace.com

SPARK ✶ IGNITE ✶ EXCITE

1230 Old Norris Rd • Liberty, SC • 26957