Champion Slick Magneto Service Bulletins

In the last 90 days, Champion Aerospace has issued two Service Bulletins (SB’s) that “probably” affect your magnetos. I purposely chose the word “probably” as the models and serial number ranges affected by these two service bulletins spans a period of almost 10 years. The two SB’s I am referring to are SB1-15A and SB1-19.

I have attached, or provided links to, service bulletins SB1-15A and SB1-19 so that you can read them in their entirety and determine if your magneto(s) is within the affected model and S/N range.

The purpose of this blog is to summarize these SB’s and explain what your options are for compliance.

SB1-15A

This is effectively an update to SB1-15, issued on 7/02/15, and an expansion of the S/N range.

Champion Aerospace has identified a possible condition in the distributor gear assemblies of 4300 series magnetos that can lead to decreased service life due to distributor gears exhibiting loosening of the electrode finger. It is essential to have the distributor gear inspected within the next 50 hours of operation to determine if replacement is necessary. Some magnetos that have been recently serviced by QAA may not need replacement gears. A visual inspection is required to determine if the correct gear is installed.

Compliance options are as follows:

1) Send the affected magneto to the Champion Aerospace factory. Champion will return the magneto, SB complaint, at no-charge, to include return freight.
2) Send the affected magneto to QAA, as Champion’s Factory Authorized Service Center. QAA will replace the affected gear assembly for a cost of $95.00. Magneto will ship the same day it was received and an “inspected” 8130 will be issued for compliant magnetos, or a “repaired” 8130 for magnetos requiring gear replacement detailing SB compliance.
3) Send the affected magneto to QAA, as Champion’s Factory Authorized Service Center, for a 500-hour inspection/repair. All applicable SB’s will be accomplished at no additional charge. QAA will issue a “repaired” 8130 detailing SB compliance.
4) Send the affected magneto to QAA, as Champion’s Factory Authorized Service Center, for a “Rebuild”. All applicable SB’s will be accomplished at no additional charge. QAA will issue a “rebuilt” (or “overhauled” for EASA customers) 8130 detailing SB compliance.
SB1-19

This SB is concerned with the “movement” of stop pins and requires periodic inspections to ensure that no movement has occurred.

Compliance is simply measuring and recording stop pin heights to confirm they remain within the limits of the SB.

Champion Aerospace has received limited reports in which impulse coupling stop pins have moved relative to the factory placement within the magneto frame of Slick 4300 and 6300 series magnetos, with one report of a stop pin coming completely out. A loose stop pin could potentially enter the gear train of the engine, resulting in damage to the gear train, damage to engine accessories and could ultimately cause catastrophic engine failure.

Inspection of the affected magneto models for movement of impulse coupling stop pin is required at the next convenient maintenance interval, not to exceed the next 100 hours or 400 hours Time in Service (TIS), and every 500 hours thereafter.

Compliance options are as follows:

1) Self-compliance- make a log book entry of the findings.
2) Send the affected magneto to QAA, as Champion’s Factory Authorized Service Center. QAA will verify the stop pin height is within limits. Magneto will ship the same day it was received and a “inspected” 8130 will be issued detailing SB compliance. The charge for this service is $45.00.
3) Send the affected magneto to QAA, as Champion’s Factory Authorized Service Center, for a 500-hour inspection/repair. All applicable SB’s will be accomplished at no additional charge. QAA will issue a “repaired” 8130 detailing SB compliance.
4) Send the affected magneto to QAA, as Champion's Factory Authorized Service Center, for a “Rebuild”. All applicable SB’s will be accomplished at no additional charge. QAA will issue a “rebuilt” (or “overhauled” for EASA customers) 8130 detailing SB compliance.

Should options 2-4 be chosen, QAA will work with you to manage the warranty submittal process with Champion Aerospace and issue credit when applicable.