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Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-4658; AD 82-20-01

Airworthiness Directives; BENDIX: Applies to Bendix Engine Products Division Magnetos
PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective June 14, 1983.

Regulatory Information

82-20-01 BENDIX: Amendment 39-4658. Applies to Bendix Engine Products Division magnetos with type designations listed below:

Compliance required within the next 10 hours of engine operation unless already accomplished for all affected impulse couplings having less than 300 operating hours. (Compliance with this AD is not required for magneto impulse couplings having more than 300 operating hours.)

S4LN-21/S4RN-21	Except Bendix Red Label magnetos above
S6LN-21/S6RN-21	Serial Nos. B-001171 or A297043
S6LN-23/S6RN-23	
S4LN-1225/S4RN-1225	Except Bendix Red Label magnetos above
S4LN-1225/S4RN-1227	Serial Nos. B-001162 or A297043
S6LN-1225/S6RN-1225	
S6LN-1227/S6RN	

1227	
S4LN-200 P/N 10-163005-7	Except Bendix Red Label magnetos above Serial Nos. B-001732 or A297043.
D4LN-2021/D4RN-2021 D4LN-2031/D4RN-2031 D4LN-2031/D4RN-2021 D6LN-2021/D6RN-2021 D4LN-2031/D4RN-2031 D6LN-2031/D6RN-2031	Except Bendix Red Label magnetos above Serial Nos. 35550
D4LN-3000/D6RN-3000	Except Bendix Red Label magnetos above Serial Nos. B-000249 or 5806.
All Blue Label impulse coupled magnetos of the above types.	Except Serial Nos. 8236001 and above.

To prevent failure of impulse coupling due to improperly heat treated (soft) flyweights resulting in engine damage or failure, accomplish the following: (Ref. Bendix Service Bulletin No. 623 dated September 1982.)

NOTE: The magneto should be removed from the engine only to the extent necessary to perform the inspection described herein. Depending on the engine application, it may not be necessary to remove the harness from the magneto for the inspection procedure.

NOTE: All magnetos with the impulse coupling recessed into the magneto flange must have the impulse coupling removed from the magneto to perform the inspection. This is a bench operation and will required the magneto to be completely removed from the engine and the harness removed from the magneto.

NOTE: Whenever an impulse coupling is removed from a magneto, it must be removed following the manufacturer's published procedures, paying strict attention to notes and conditions. Upon reassembly, the castellated nut securing the impulse coupling to the drive shaft must be torqued to 15-25 ft. lb. (Emergency AD 82-20-01 issued September 7, 1982, specified 18-28 ft. lb. torque. If compliance has already been accomplished based on AD 82-20-01, it is not necessary to retorque to 15-25 ft. lb.) The cotter pin, Bendix P/N 10-90751-18 removed during disassembly, must be discarded and replaced.

1. Remove the magneto from the engine in accordance with the engine/aircraft manufacturer's published instructions.

2. Place the magneto in a suitable work stand with the impulse coupling facing up.

3. Use finger pressure to push inward on the toe (see Figure 1) of each flyweight so that the flyweight heel protrudes outward.

4. Using a fine #1, double cut, 1/2-inch wide file at least 3/32-inch thick, pass the file across the heel of the flyweight attempting to remove material (see Figure 1). If the flyweight has been properly heat treated, the file will "glide" smoothly over the heel of the flyweight, removing no material. If the flyweight is not properly heat treated (soft), the file will not "glide" easily across the surface of the flyweight heel, and material will be removed.

5. If an improperly heat treated (soft) flyweight is found, immediately remove and replace the cam assembly and/or the impulse coupling assembly with an assembly meeting the requirements of this AD, following procedures in the magneto overhaul instructions, and

paying strict attention to notes and cautions.

6. Inspect the impulse coupling stop pins for wear and replace as necessary.

7. After flyweights have been identified, stop pins inspected, and the impulse coupling reinstalled on the magneto (if removed), identify the magneto by stamping a 1/16-inch letter "F" in the upper right corner of the identification plate to indicate that this AD and Bendix Service Bulletin No. 623 have been complied with.

8. Reinstall the magneto on the engine following the manufacturer's published procedures.

9. Make an appropriate engine logbook entry, recording magneto serial number to indicate that this AD and Bendix Service Bulletin No. 623 have been complied with.

10. Inspect all spare impulse coupling assemblies, cam assemblies, and magnetos following the same procedures described in Steps 3 and 4 of this AD. If both flyweights are found acceptable, identify the cam assembly by applying yellow dyken or yellow lacquer to the heel of each flyweight. Stamp "F" on data plate as described in Step 7.

11. An equivalent method of compliance with this AD may be used if approved by the Manager, New York Aircraft Certification Office, Federal Aviation Administration, 181 South Franklin Avenue, Room 202, Valley Stream, New York 11581.

This amendment becomes effective June 14, 1983, as to all persons except those to whom it was made immediately effective by priority mail, issued September 19, 1982.

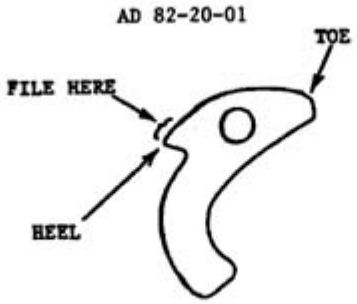

FIGURE 1

Footer Information

Comments