



652 Oliver Street  
 Williamsport, PA 17701 U.S.A.  
 Telephone +1 (877) 839-7878 (U.S. and Canada)  
 Telephone +1 (570) 327-7222 (International)  
 Fax +1 (570) 327-7101  
 Email [Technicalsupport@lycoming.com](mailto:Technicalsupport@lycoming.com)

# MANDATORY

# SERVICE BULLETIN

DATE: February 13, 2024

Service Bulletin No. 656  
 Engineering Aspects are  
 FAA Approved

**SUBJECT:** Replacement of 6-Cylinder Electronic Ignition System (EIS)  
**MODELS AFFECTED:** O-540-F1B5 and IO-540-AE1A5 engines equipped with EIS used in Robinson R44 applications.  
**TIME OF COMPLIANCE:** For Engines with the Original EIS: Before further flight for engines with more than 100 hours Time-In-Service on the EIS. For Engines with more than 50 hours, but less than 100 hours Time-In-Service on the EIS: Within the next 10 hours of operation. For Engines with a replacement EIS: Not to exceed 50 hours Time-In-Service on the EIS.

**NOTICE:** Incomplete review of all the information in this document can cause errors. Read the entire Service Bulletin to make sure you have a complete understanding of the requirements.

Lycoming has identified an internal wear issue with some EIS units used on 6-cylinder engines in rotary wing applications. This internal wear progresses over time and can lead to engine power fluctuations. This bulletin requires the replacement of EIS units in Robinson R44 model helicopters.

For O-540-F1B5 engines equipped with EIS P/N 66K6D3SN-02 and IO-540-AE1A5 engines equipped with EIS P/N 66K6D3SN-01, remove and replace the EIS units and Magneto Drive Cushions P/N 68H22624 (Qty.2) at 50-hour intervals in accordance with the latest revision of Lycoming Service Instruction No. 1569.

**Terminating action to the repetitive EIS replacement will be installing a Revision R (or later) EIS unit anticipated to be available in the second quarter of 2024.**

Using the phone numbers or email address listed in this bulletin, please contact Lycoming Engines Technical Support, and provide the following information. This information will be used to assist in tracking and future customer assistance.

- Engine Serial Number
- EIS Serial Number
- Engine/EIS hours at replacement.
- Aircraft Tail Number
- Aircraft Serial Number



ISSUED			REVISED			PAGE NO.	REVISION
MO	DAY	YEAR	MO	DAY	YEAR	1 of 2	-
02	13	24	--	--	--		

**Warranty Instructions and Replacement Parts for Engines/Parts Affected by Service Bulletin No. 656**

**NOTICE: To qualify for warranty, the removed EIS unit and drive cushions must be returned to Lycoming no later than 30 Days after receipt of the replacement EIS unit.**

1. Contact Lycoming Technical Support with the information from Page 1 to be assigned a Service Record Number (SR).
2. Contact an Authorized Lycoming Distributor to order a replacement EIS unit and replacement drive cushions (reference the assigned SR Number).
3. Upon receipt, complete the installation procedure in accordance with the latest revision of Lycoming Service Instruction No. 1569.
4. Through the same Authorized Lycoming Distributor, file a warranty claim for:
  - A. Reimbursement of the replacement parts.
  - B. Associated Standard, Non-Expedited Freight.
  - C. Removal and Reinstallation Labor in accordance with the current applicable Lycoming Warranty Policy and latest revision of Lycoming’s SSP-875 Removal and Installation Labor Allowance Guidebook.
  - D. Reference assigned SR Number in warranty claim.
5. Return the removed EIS and drive cushions directly to Lycoming Engines at the address below:  
Lycoming Engines  
652 Oliver Street  
Williamsport, PA 17701  
Attn: SB 656 EIS Returns

If you have any questions, contact Lycoming Technical Support by phone at 570-327-7222 or 877-839-7878 or by email to [Technicalsupport@lycoming.com](mailto:Technicalsupport@lycoming.com).

ISSUED			REVISED			PAGE NO.	REVISION	S.B. 656
MO	DAY	YEAR	MO	DAY	YEAR	2 of 2	-	
02	13	24	--	--	--			