

(a) Effective Date

This airworthiness directive (AD) is effective September 14, 2026.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Lycoming Engines Model O-235, -A, -AP, -B, -BP, -C, -C1, -C1A, -C1B, -C1C, -C2A, -C2B, -C2C, -E1, -E1B, -E2A, -E2B, -F1, -F1B, -F2A, -F2B, -G1, -G1B, O-235-G2A, O-235-G2B, O-235-H2C, O-235-J2A, O-235-J2B, O-235-K2A, O-235-K2B, -K2C, -L2A, -L2C, -M1, -M2C, -M3C, -N2A, -N2C, -P1, -P2A, -P2C, and -P3C; O-540-A1A, -A1A5, -A1B5, -A1C5, -A1D, -A1D5, -A2B, -A3D5, -A4A5, -A4B5, -A4C5, -A4D5, -A4E5, -B1A5, -B1B5, -B1D5, -B2A5, -B2B5, -B2C5, -B4A5, -B4B5, -D1A5, -E4A5, -E4B5, -E4C5, -F1A5, -F1B5, -G1A5, -G2A5, -H1A5, -H1A5D, -H1B5D, -H2A5, -H2A5D, -H2B5D, -J1A5D, -J1B5D, -J1C5D, -J1D5D, -J2A5D, -J2B5D, -J2C5D, -J2D5D, -J3A5, -J3A5D, -J3C5D, and -L3C5D; IO-540-A1A5, -AA1A5, -AA1B5, -AB1A5, -AE1A5, -AC1A5, -AF1A5, -B1B5, -AG1A5, -B1A5, -B1C5, -C1B5, -C1C5, -C2C, -C4B5, -C4B5D, -C4C5, -C4D5, -C4D5D, -D4A5, -D4B5, -D4C5, -E1A5, -E1B5, -E1C5, -G1A5, -G1B5, -G1C5, -G1D5, -G1E5, -G1F5, -J4A5, -K1A5, -K1A5D, -K1B5, -K1B5D, -K1C5, -K1D5, -K1E5, -K1E5D, -K1F5, -K1F5D, -K1G5, -K1G5D, -K1H5, -K1J5, -K1J5D, -K1K5, -K2A5, -L1A5, -L1A5D, -L1B5D, -L1C5, -M1A5, -M1A5D, -M1B5D, -M1C5, -M2A5D, -N1A5, -P1A5, -R1A5, -S1A5, -T4A5D, -T4B5, -T4B5D, -T4C5D, -U1A5D, -U1B5D, -V4A5, -V4A5D, -W1A5, -W1A5D, and -W3A5D engines with a serial number listed in Table 2 or Table 3 of Lycoming Mandatory Service Bulletin No. (MSB) 667A, dated March 12, 2026 (Lycoming MSB 667A), and an installed piston pin having part number (P/N) LW-13445 with an FAA Form 8130-3 from the original equipment manufacturer for production dated between January 7, 2021 to December 15, 2025. If the production date on the FAA Form 8130-3 cannot be determined, or if the FAA Form 8130-3 is not available, this AD is applicable.

(d) Subject

Joint Aircraft System Component (JASC) Code 8530, Reciprocating Engine Cylinder Section.

(e) Unsafe Condition

This AD was prompted by reports from Lycoming of metal particulates found in the engine oil during oil change and two non-detectable engine failures. The FAA is issuing this AD to prevent failure of the piston pin. The unsafe condition, if not addressed, could result in engine failure, loss of thrust control, in-flight shutdown, damage to the airplane, and loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Definitions

(1) For the purpose of this AD, a “part eligible for installation” is one of the following:

(i) A piston pin that does not have P/N LW-13445.

(ii) A piston pin having P/N LW-13445 with an FAA Form 8130-3 from the original equipment manufacturer for production that is not dated between January 7, 2021 to December 15, 2025.

(2) For the purpose of this AD, an “affected piston pin” is a piston pin having P/N LW-13445 and one of the following:

(i) An FAA Form 8130-3 from the original equipment manufacturer for production dated between January 7, 2021 to December 15, 2025.

(ii) An FAA Form 8130-3 from the original equipment manufacturer for which the production date on the Form 8130-3 cannot be determined.

(iii) An FAA Form 8130-3 that is not available.

(h) Required Actions

(1) For all affected engines, perform an oil change and visual inspection of the engine oil filter, oil pressure screen, and oil suction screen for metal particulates as follows:

Note 1 to paragraph (h)(1): Guidance for engine oil filter, oil pressure screen, and oil suction screen inspection instructions and identification of metallic solids may be found in Lycoming MSB No. 480F, dated May 25, 2017.

(i) For engines listed in Table 3 of Lycoming MSB 667A with greater than 150 total hours time-in-service (TIS) since installation of the affected piston pins: before further flight.

(ii) For all other affected engines: if an oil change has not been performed within the last 10 hours TIS, then within 5 hours TIS after the effective date of this AD.

(2) At the applicable compliance time required in paragraph (h)(2)(i), (ii), or (iii) of this AD, replace any affected piston pin with a part eligible for installation in accordance with the Required Action of Lycoming MSB 667A, as applicable to engine model.

(i) For engines where metal particulates were found during the oil change and inspection required by paragraph (h)(1)(i) or (ii) of this AD: before further flight.

(ii) For engines where metal particulates were not found during the oil change and inspection required by paragraph (h)(1)(i) or (ii) of this AD and with a serial number listed in Table 2 of Lycoming MSB 667A: at the next maintenance event requiring the removal of a cylinder assembly with an affected piston pin, or at the next engine overhaul not to exceed the time between overhaul specified in Lycoming Service Instruction No. 1009BE, dated April 24, 2020, whichever occurs first after the effective date of this AD.

(iii) For engines where metal particulates were not found during the oil change and inspection required by paragraph (h)(1)(i) or (ii) of this AD and with a serial number listed in Table 3 of Lycoming MSB 667A that have 150 hours total TIS or less since installation of the affected pins: within 25 hours TIS after the effective date of this AD but before or upon reaching 150 total hours TIS since installation of the affected piston pins.

(i) Installation Prohibition

After the effective date of this AD, do not install an affected piston pin as defined in paragraph (g)(2) of this AD, on any engine.

(j) No Return of Parts

Although the service material specifies returning certain parts to the manufacturer, this AD does not include those requirements.

(k) Special Flight Permits

(1) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 for the replacement requirements of this AD provided no metal particulates are found during the inspection required by this AD.

(2) Special flight permits, as described in 14 CFR 21.197 and 21.199, are not allowed for the visual inspection of the engine oil filter, oil pressure screen, and oil suction screen for metal particulates requirement of this AD.

(l) Alternative Methods of Compliance (AMOCs)

The Manager, East Certification Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the East Certification Branch, send it to the attention of the person identified in paragraph (m)(1) of this AD and email to: AMOC@faa.gov . Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(m) Additional Information

(1) For more information about this AD, contact Ramanpreet Singh, Aviation Safety Engineer, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: (516) 228-7300; email: ECB-COS@faa.gov.

(2) Material identified in this AD that is not incorporated by reference is available at the address specified in paragraph (n)(3) of this AD.

(n) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Lycoming Mandatory Service Bulletin No. 667A, dated March 12, 2026.

(ii) Lycoming Service Instruction No. 1009BE, dated April 24, 2020.

(3) For Lycoming material identified in this AD, contact Lycoming Engines, 652 Oliver Street, Williamsport, PA 17701; phone: (800) 258-3279; website: [lycoming.com/contact/knowledge-base/publications](https://www.lycoming.com/contact/knowledge-base/publications).

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.