

# PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

## CAA-AD-107/2002

Nahrazuje CAA-AD-T-095/2002

Datum vydání: 20. listopadu 2002

## MOTOR - UPEVNŮVACÍ ŠROUBY POHONU KLIKOVÉHO HŘÍDELE – KONTROLA/VÝMĚNA

Týká se motorů AEIO-540, IO-540, LTIO-540, O-540 a TIO-540 vyrobených firmou Textron Lycoming, vybavených upevňovacími šrouby pohonu klikového hřídele katalogového čísla P/N STD-2209 jak je blíže uvedeno v části „Applicability“ FAA AD 2002-23-06 (příloha tohoto PZZ).

**Důvod vydání:** zabránit úplné ztrátě výkonu motoru a následnému vynucenému přistání letounu.

**Datum účinnosti:** ihned po obdržení

**Provést v termínech:** Jak je popsáno v FAA AD 2002-23-06 od data účinnosti tohoto PZZ.

**Postup provedení prací:** Dle FAA AD 2002-23-06.

*Poznámky: Provedení tohoto PZZ musí být zapsáno do motorové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL sekce technická – Ing. Beneš. Pokud to vyžaduje povaha tohoto PZZ, musí být zapracován do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě FAA AD 2002-23-06, který nahrazuje FAA E AD 2002-20-51.*

**Ing. Pavel MATOUŠEK**  
ředitel sekce technické

**2002-23-06 Textron Lycoming:** Amendment 39-12950. Docket 2002-NE-31-AD. Supersedes emergency AD 2002-20-51.

*Applicability:* This airworthiness directive (AD) is applicable to all Textron Lycoming AEIO-540, IO-540, LTIO-540, O-540, and TIO-540 series reciprocating engines with crankshaft gear retaining bolts, part number (P/N) STD-2209 installed, except O-540-F series engines to which AD 99-03-05 applies and on which the bolt has not been subsequently replaced with a bolt other than one included in gear bolt replacement kit 05K19987, and engines with single-drive dual magnetos. These engines are installed on, but not limited to the following aircraft:

Aero Commander. (500), (500-B), (500-E), (500-U)
Aero Mercantil. Gavilan
Aerofab. Renegade 250
Bellanca Aircraft. Aries T-250
Britten-Norman. (BN-2)
Cessna Aircraft. Skylane C-182, Stationair C-206, Turbo Skylane T182T, Turbo Stationair T-206
Christen. Pitts (S-2S), (S-2B)
Commander Aircraft. 114TC, 114B
DeHavilland. (DH-114-2X)
Dornier. (DO-28-B1)
Evangel-Air.
Extra-Flugzeugbau. Extra 300.
Found Bros. (FBA-2C), Centennial (100)
Gippsland. GA-200.
Helio. Military (H-250).

King Engineering. Angel.
Maule. MT-7-260, M-7-260, MX-7-235, MT-7-235, M7-235, Star
Rocket (MX-7-235), Super Rocket (M-6-235), Super Std. Rocket (M-7-235).
Mooney Aircraft. "TLS" M20M.
Moravan. Zlin-50L
Pilatus Britten-Norman. Islander (BN-2A-26), Islander (BN-2A-27), Islander II (BN-2B-26), Islander (BN-2A-21), Trislander (BN-2A-Mark III- 2), Islander (BN-2B).
Piper Aircraft. 700P Aerostar, Aerostar 600A, Aerostar 601B, Aerostar 601P, Apache (PA-23 "235"), Aztec (PA-23 "250"), Aztec (PA-23 "250"), Comanche (PA-24 "250"), Comanche (PA-24 "260"), Aztec F, Aztec C (PA-23 "250"), Cherokee (PA-24 "250"), Cherokee (PA-28 "235"), Cherokee Six (PA-32 "260"), Cherokee Six (PA-32-300). "LANCE", Comanche (PA-24 "150"), Comanche (PA-24 "250"), Comanche (PA-24), Comanche (PA-24 "260"), Comanche 260, Mirage (PA-46-350P), Navajo (PA-31), Navajo (PA-31-300), Navy Aztec (PA-23 "250"), Pawnee (PA-24 "235"), Pawnee (PA-25 "260"), Saratoga (PA-32-300), Brave 300, Sequoia 602P, T-1020, T35, Turbo Aztec (PA-23-250), Turbo Saratoga TC (PA-32-301T)
S.O.C.A.T.A. Rallye 235CA., Rallye 235GT, Rallye 235C, TB-20

**Note 1:** This AD applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (h) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

*Compliance:* Compliance with this AD is required as indicated, unless already done.

To prevent loss of all engine power and possible forced landing, do the following:

#### **Engines That Have Complied With Emergency AD 2002-20-51**

(a) For AEIO-540, LTIO-540, IO-540, O-540, and TIO-540 series engines that have complied with emergency AD 2002-20-51 by installing a bolt included in bolt replacement kit 05K19987, no further action is required.

(b) For AEIO-540, LTIO-540, IO-540, O-540, and TIO-540 series engines that have complied with emergency AD 2002-20-51 but did not install a bolt included in bolt replacement kit 05K19987, within 10 hours time-in-service or 10 days after the effective date of this AD, whichever is earlier, replace the crankshaft gear retaining bolt with a new bolt included in gear bolt replacement kit, 05K19987, supplied by Textron Lycoming. Information on replacing the retaining bolt may be found in Lycoming SB No. 554, dated September 30, 2002.

#### **Engines Listed by Serial Number (SN)**

(c) For AEIO-540, LTIO-540, IO-540, O-540, and TIO-540 engines with a single-drive dual magneto, and all O-540-F engines to which AD 99-03-05 applies and on which the bolt has not been subsequently replaced with a bolt other than one included in gear bolt replacement kit 05K19987, including any O-540-F engines that are listed by SN in Table 1 of Lycoming SB No. 554, dated September 30, 2002, no further action is required.

(d) Before further flight, for all other engines, replace the crankshaft gear retaining bolt with a new bolt included in gear bolt replacement kit, 05K19987, supplied by Textron Lycoming if your engine SN is listed in Table 1 of Lycoming SB No. 554, dated September 30, 2002. Information on replacing the retaining bolt may be found in Lycoming SB No. 554, dated September 30, 2002.

#### **Bolts That Have Been Replaced During Field Maintenance or Field Overhaul**

(e) Replace the crankshaft gear retaining bolt with a new bolt supplied as part of gear bolt replacement kit 05K19987, supplied by Textron Lycoming, within 10 hours time-in-service or 7 days after the effective date of this AD, whichever is earlier, if:

(1) The bolt on your O-540-F series was replaced after compliance with AD 99-03-05 with a bolt that was not included in bolt replacement kit 05K19987. Information on replacing the retaining bolt may be found in Lycoming SB No. 554, dated September 30, 2002.

(2) The bolt on your AEIO, LTIO, IO, O, or TIO-540 series engine was replaced during field maintenance or field overhaul between November 27, 1996 and the effective date of this AD, or if your engine was repaired between November 27, 1996 and November 10, 1998, at Lycoming. Information on replacing the retaining bolt may be found in Lycoming SB No. 554, dated September 30, 2002.

#### **Recording Gear Bolt Replacement Kit Number**

(f) After the effective date of this AD, record the number of the gear bolt replacement kit, 05K19987, in the engine records when recording compliance with this AD.

#### **Prohibition Against Installing Gear Retaining Bolts P/N STD-2209**

(g) After the effective date of this AD, do not install any crankshaft gear retaining bolt, P/N STD-2209, except one that is included in a Lycoming gear bolt replacement kit, 05K19987, onto any engine listed in this AD.

#### **Alternative Methods of Compliance**

(h) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York Aircraft Certification Office (NYACO). Operators must submit their requests through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, NYACO.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the NYACO.

#### **Special Flight Permits**

(i) Special flight permits may be issued in accordance with §§ 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be done.

#### **Documents That Have Been Incorporated by Reference**

(j) Engine serial numbers are listed in Table 1 of Lycoming Service Bulletin No. 554, dated September 30, 2002. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Lycoming, a Textron Company, 652 Oliver Street, Williamsport, PA 17701; telephone (570) 323-6181. This information may also be obtained electronically on "<http://www.lycoming.textron.com>". Copies may be inspected at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street NW., suite 700, Washington, DC.

#### **Effective Date**

(k) This amendment becomes effective November 19, 2002.