

# FEDERAL AVIATION ADMINISTRATION AIRWORTHINESS DIRECTIVES SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

# **BIWEEKLY 2009-03**

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# SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;

### **Biweekly 2009-01**

2008-17-51		MD Helicopters, Inc	Rotorcraft: MD900
2008-26-01	S 2008-11-17	Air Tractor, Inc	See AD
2008-26-02	S 2006-06-51	General Electric Company	Engine: CT7-8A
2008-26-05		Bombardier-Rotax GmbH	Engine: 914 F
2008-26-10		Cessna	See AD
2008-26-11		Piper	See AD
2008-26-12		Aircraft Industries a.s	Sailplane: L 23 Super Blanik

#### **Biweekly 2009-02**

No Small Aircraft ADs were issued during Biweekly 2009-02.

### **Biweekly 2009-03**

2009-01-11	Turbomeca	Engine: Arriel 2B and 2B1
2009-02-02	Polskie Zaklady Lotnicze Spolka	PZL M26 01

2009-02-03 Lycoming Engines, SeeAD Engine: See AD



# AIRWORTHINESS DIRECTIVE

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**2009-01-11 Turbomeca:** Amendment 39-15790. Docket No. FAA-2008-0935; Directorate Identifier 2008-NE-28-AD.

#### **Effective Date**

(a) This airworthiness directive (AD) becomes effective February 27, 2009.

#### **Affected ADs**

(b) None.

## **Applicability**

(c) This AD applies to Turbomeca Arriel 2B and 2B1 turboshaft engines. These engines are installed on, but not limited to, Eurocopter France AS350B3 and EC130 B4 helicopters.

#### Reason

(d) European Aviation Safety Agency (EASA) AD No. 2008-0077, dated March 13, 2006 (and corrected May 6, 2008), states:

"Several cases of loss of internal components from the Hydro Mechanical Unit (HMU) low fuel pressure switch Hydra-Electric part number (P/N) 9 550 17 956 0 into the fuel system, have been reported on Arriel 2 engines. The loss of internal components from the low fuel pressure switch into the fuel system may lead to a rupture of the HP-LP pumps drive shaft shear pin, and thus to a possible uncommanded in-flight shutdown (IFSD). On a single-engine helicopter, an uncommanded IFSD results in an emergency autorotation landing and in certain conditions may lead to an accident. "We are issuing this AD to prevent forced autorotation landing, or an accident."

## **Actions and Compliance**

- (e) Unless already done, do the following actions.
- (1) No later than September 30, 2009, perform a one-time inspection of the HMU, using paragraph 2 of Turbomeca Mandatory Service Bulletin (MSB) No. 292 73 2826, dated March 13, 2008, to identify the low fuel pressure switch installed on the adjusted HMU.
- (2) If a Hydra-Electric low fuel pressure switch, part number (P/N) 9 550 17 956 0 is installed:
  - (i) Inspect the low fuel pressure switch and chamber of the HMU body.

- (ii) If any parts from the low fuel pressure switch are missing or found in the HMU chamber, replace the HMU with a new or overhauled HMU equipped with a serviceable low fuel pressure switch.
- (iii) If not, replace only the low fuel pressure switch with a serviceable low fuel pressure switch.
- (3) If a low fuel pressure switch other than a Hydra-Electric low fuel pressure switch, P/N 9 550 17 956 0 is installed, and that is the only type of low fuel pressure switch that has been installed since new, repair, or overhaul, no further action is required.
- (4) If a Hydra-Electric switch, P/N 9 550 17 956 0, has been or may have been installed previously, and the conditions of paragraph (e)(3) of this AD are not met:
  - (i) Inspect the chamber of the HMU body.
- (ii) If any parts are found in the HMU chamber, replace the HMU with a new or overhauled HMU equipped with a serviceable low fuel pressure switch.

### **Definition**

(f) For the purpose of this AD, a serviceable low fuel pressure switch is a switch that has a P/N other than P/N 9 550 17 956 0.

#### **FAA AD Difference**

(g) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) and/ or service information, by not referencing the P/Ns of the serviceable low fuel pressure switch, and, defining a serviceable low fuel pressure switch, for the purpose of this AD.

### **Alternative Methods of Compliance (AMOCs)**

(h) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

#### **Related Information**

- (i) Refer to MCAI EASA AD 2008-0077, dated April 28, 2008 (and corrected May 6, 2008), for related information.
- (j) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238-7199, for more information about this AD.

#### **Material Incorporated by Reference**

- (k) You must use Turbomeca Mandatory Service Bulletin No. 292 73 2826, dated March 13, 2008, to do the low fuel pressure switch installation inspection required by this AD.
- (1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

- (2) For service information identified in this AD, contact Turbomeca, 40220 Tarnos, France; telephone (33) 05 59 74 40 00; fax (33) 05 59 74 45 15.
- (3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Burlington, Massachusetts, on December 30, 2008. Peter A. White, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.



# AIRWORTHINESS DIRECTIVE

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**2009-02-02 Polskie Zaklady Lotnicze Spolka zo.o:** Amendment 39-15792; Docket No. FAA-2009-0010; Directorate Identifier 2009-CE-001-AD.

#### **Effective Date**

(a) This airworthiness directive (AD) becomes effective February 12, 2009.

#### **Affected ADs**

(b) None.

## **Applicability**

(c) This AD applies to Models PZL M26 01 airplanes, serial numbers 1APP01-01 and 1AP002-01 through 1AP002-06, certificated in any category.

## Subject

(d) Air Transport Association of America (ATA) Code 27: Flight Controls.

#### Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

"A detailed inspection in a M26 airplane revealed a significant chafing of the aileron control cable against the wing rib in the fuselage-to-wing area of transition and an abnormal wearing of pulleys' gorges as well."

"Such damage can only be evidenced on control cables which travel in pulleys either limited in rotation or seized."

"If left uncorrected, this condition, which could also occur on the elevator or rudder control system, could lead to loss of one or more primary flight controls and consequent reduced controllability of the airplane."

"For the reason stated above, this Airworthiness Directive requires a detailed inspection of flight controls and the correction of any discrepancy that could be found as a result of the inspection."

#### **Actions and Compliance**

- (f) Unless already done, do the following actions.
- (1) Before further flight, after the effective date of this AD, inspect the airplane's flight control systems as instructed in paragraph III.A. of Polskie Zaklady Lotnicze Spolka zo.o. (PZL) Service Bulletin No. E/62.020/2008, dated October 30, 2008.
- (2) If in the inspection required in paragraph (f)(1) of this AD any damage is found on the pulleys and cables of the aileron control system, before further flight, repair the damage as instructed in paragraph III.B. of PZL Service Bulletin No. E/62.020/2008, dated October 30, 2008.
- (3) If in the inspection required in paragraph (f)(1) of this AD any damage is found on the flight control systems other than the pulleys and cables of the aileron control system, before further flight, repair the damage with an FAA-approved repair solution (see paragraph (g)(2) of this AD).

#### **FAA AD Differences**

Note: This AD differs from the MCAI and/or service information as follows: No differences.

#### **Other FAA AD Provisions**

- (g) The following provisions also apply to this AD:
- (1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.
- (3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

#### **Related Information**

(h) Refer to European Aviation Safety Agency (EASA) AD No. 2008-0220, dated December 19, 2008, and Polskie Zaklady Lotnicze Spolka zo.o. (PZL) Service Bulletin No. E/62.020/2008, dated October 30, 2008, for related information.

### **Material Incorporated by Reference**

- (i) You must use Polskie Zaklady Lotnicze Spolka zo.o. (PZL) Service Bulletin No. E/62.020/2008, dated October 30, 2008, to do the actions required by this AD, unless the AD specifies otherwise.
- (1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) For service information identified in this AD, contact Polskie Zaklady Lotnicze Sp. z.o.o., ul. Wojska Polskiego 3, 39-300 Mielec, Poland; telephone: +48 17 788 7574; fax: +48 17 788 6365; e-mail: pzl@pzlmielec.com.pl; Internet: http://www.pzlmielec.pl/biuletyn/E62-020-2008\_e.pdf.
- (3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.
- (4) You may also review copies of the service information incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

Issued in Kansas City, Missouri on January 8, 2009. John R. Colomy, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.



# AIRWORTHINESS DIRECTIVE

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**2009-02-03 Precision Airmotive LLC and Bendix:** Amendment 39-15793. Docket No. FAA-2008-0420; Directorate Identifier 2008-NE-10-AD.

#### **Effective Date**

(a) This airworthiness directive (AD) becomes effective February 9, 2009.

#### **Affected ADs**

(b) This AD supersedes AD 2008-08-14, Amendment 39-15466.

# **Applicability**

- (c) This AD applies to the following reciprocating engines with a Precision Airmotive LLC, RSA-5 or RSA-10 series, or Bendix, RSA-5 or RSA-10 series, fuel injection servo, having a servo plug gasket, part number (P/N) 365533, that was installed under the fuel injection servo plug, P/N 383493, on or after August 22, 2006:
- (1) Lycoming Engines IO, (L)IO, TIO, (L)TIO, AEIO, AIO, IGO, IVO, and HIO series reciprocating engines.
  - (2) Teledyne Continental Motors LTSIO-360-RB and TSIO-360-RB reciprocating engines.
  - (3) Superior Air Parts, Inc. IO-360 series reciprocating engines.
- (d) This AD also applies to any other Precision Airmotive LLC RSA-5 or RSA-10 series, or Bendix, RSA-5 or RSA-10 series, fuel injection servo:
- (1) That was received for installation on an engine on or after August 22, 2006 without a P/N 2577258 gasket and it does not have a letter "G" on the fuel injection servo plug, P/N 383493; or
  - (2) Any fuel injection servo that the installation history is not known.

#### **Unsafe Condition**

(e) This AD results from Precision Airmotive LLC introducing the installation of a new improved servo plug gasket, P/N 2577258, to the affected Precision Airmotive LLC RSA-5 and RSA-10 series, and Bendix, RSA-5 and RSA-10 series, fuel injection servos. We are issuing this AD to prevent a lean running engine, which could result in a substantial loss of engine power and subsequent loss of control of the airplane.

### **Compliance**

(f) You are responsible for having the actions required by this AD performed before further flight, unless the actions have already been done.

## **Initial Inspection**

- (g) Before further flight, inspect the fuel injection servo plug, P/N 383493, for looseness, by attempting to turn it by hand, while being careful not to damage the safety wire or seal. If the plug moves, it is loose.
  - (h) If the plug is not loose, go to paragraph (j) of this AD.
  - (i) If the plug is loose, do the following:
- (1) Carefully cut and remove the safety wire that spans between the servo plug and regulator cover only.
- (2) Remove the servo plug and gasket, P/N 365533, that is behind the plug. The gasket may be slightly stuck to the regulator cover.
- (3) Examine the threads on the servo plug and regulator cover for damage. Threads should be smooth and consistent, with no burrs or chips. The servo plug outer diameter threads should also measure within 0.7419-0.7500-inch.
- (4) If the threads on either the servo plug or the regulator cover are damaged, or do not measure within the limits in paragraph (i)(3) of this AD, the servo is not eligible for any installation and must be replaced before further flight.
  - (5) Replace the gasket, P/N 365533, with a new improved gasket, P/N 2577258.
- (6) While the hex plug is removed, stamp or scribe the letter "G" onto the face of the hex plug. Information on stamping or scribing can be found in Precision Airmotive LLC Mandatory Service Bulletin (MSB) No. PRS-107 Revision 4, dated July 16, 2008.
- (7) When reassembling, do not install any servo plug or regulator cover that is not eligible for installation. Install a new gasket, P/N 2577258, onto the servo plug and reassemble the servo plug to the regulator cover.
- (8) Torque the servo plug to a new, higher torque of 90-100 in-lbs, to maintain the proper clamp-up force between the plug and cover.
- (9) Safety wire the servo plug with 0.015 thru 0.025 inch diameter wire to the regulator cover screws. Information on properly safety wiring the plug can be found in Precision Airmotive LLC MSB No. PRS-107, Revision 4, dated July 16, 2008.
  - (10) Inspect all other safety wire on the servo. Replace any that are damaged.

### **Repetitive Inspections**

(j) For servo plugs that passed inspection with a gasket, P/N 365533 installed, at every engine oil change or within every 50 hours of engine run time, whichever occurs first, repeat the inspection and remedial steps specified in paragraphs (g) through (i)(10) of this AD.

#### **Mandatory Terminating Action**

- (k) By December 31, 2009, as mandatory terminating action to the repetitive inspections required by this AD, replace all servo plug gaskets, P/N 365533 that are installed on servos affected by this AD, with gasket, P/N 2577258.
- (l) Use paragraphs (i)(1) through (i)(10) of this AD, to do the gasket replacements. Prohibition of Installing Gasket P/N 365533

(m) After the effective date of this AD, do not install gasket, P/N 365533, onto any fuel injection servo.

## **Identification of Servo Plug Gaskets**

- (n) Servo plug gaskets, P/N 365533, are identified as being made of either a paper or fiber material, impregnated with synthetic rubber. They are relatively flexible and have a rough surface.
- (o) Servo plug gaskets, P/N 2577258, are identified as being made of metal with a coating of synthetic rubber. They are relatively rigid and have a smooth surface.

### **Special Flight Permits Prohibited**

(p) Under 14 CFR part 39.23, we are prohibiting special flight permits.

### **Alternative Methods of Compliance**

(q) The Manager, Seattle Aircraft Certification Office, may approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

#### **Related Information**

- (r) For Precision Airmotive LLC, Richard Simonson, Aerospace Engineer, Propulsion Branch, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055; e-mail: Richard.simonson@faa.gov; telephone (425) 917-6507; fax (425) 917-6590.
- (s) For Lycoming Engines, Norm Perenson, Aerospace Engineer, New York Aircraft Certification Office, FAA, Engine & Propeller Directorate, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; e-mail: Norman.perenson@faa.gov; telephone (516) 228-7337; fax (516) 794-5531.
- (t) For Teledyne Continental Motors, Kevin Brane, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, Small Airplane Directorate, One Crown Center, 1895 Phoenix Blvd., Suite 450, Atlanta, GA 30349; e-mail: kevin.brane@faa.gov; telephone (770) 703-6063; fax (770) 703-6097.
- (u) For Superior Air Parts, Inc., Tausif Butt, Aerospace Engineer, Special Certification Office, FAA, Rotorcraft Directorate, Southwest Regional Headquarters, 2601 Meacham Blvd., Fort Worth, Texas 76137; e-mail: Tausif.butt@faa.gov; telephone (817) 222-5195; fax (817) 222-5785.
- (v) FAA Special Airworthiness Information Bulletin NE-09-04, dated January 9, 2009, also pertains to checking servo plugs for looseness on Precision Airmotive LLC RSA-5 and RSA-10 series, and Bendix RSA-5 and RSA-10 series, earlier produced fuel injection servos, not affected by this AD.

(w) Precision Airmotive LLC MSB No. PRS-107, Revision 4, dated July 16, 2008, also pertains to the subject of this AD. Contact Precision Airmotive LLC, 14800 40th Avenue, NE., Marysville, Washington 98271; telephone (360) 651-8282; http://www.precisionairmotive.com, for a copy of this MSB.

# **Material Incorporated by Reference**

(x) None.

Issued in Burlington, Massachusetts, on January 13, 2009. Peter A. White, Assistant Manager, Engine and Propeller Directorate, Aircraft Certification Service.