



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-1052; Directorate Identifier 2012-CE-014-AD;]**

**RIN 2120-AA64**

**Airworthiness Directives; Cessna Aircraft Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to supersede an existing airworthiness directive (AD) that applies to certain Cessna Aircraft Company (Cessna) Models 172R, 172S, 182S, 182T, T182T, 206H, and T206H airplanes. The existing AD currently requires an inspection of the engine oil pressure switch and, if applicable, replacement of the engine oil pressure switch. Since we issued that AD, we have received new reports of internal failure of the engine oil pressure switch, which could result in complete loss of engine oil with consequent partial or complete loss of engine power or fire. This proposed AD would increase the applicability of the AD and place a life-limit of 3,000 hours time-in-service on the engine oil pressure switch, requiring replacement when the engine oil pressure switch reaches its life limit. We are proposing this AD to correct the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, Kansas 67277; telephone: (316) 517-5800; fax (316) 942-9006; Internet: [www.cessna.com/customer-service/technical-publications.html](http://www.cessna.com/customer-service/technical-publications.html). You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Jeff Janusz, Sr. Propulsion Engineer, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Wichita, KS 67209; phone: (316) 946-4148; fax: (316) 946-4107; email: [jeff.janusz@faa.gov](mailto:jeff.janusz@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section.

Include “Docket No. FAA-2012-1052; Directorate Identifier 2012-CE-014-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

On February 11, 2000, we issued AD 2000-04-01, amendment 39-11583 (65 FR 8649, February 22, 2000), for certain Cessna Aircraft Company Models 172R, 172S, 182S, 206H, and T206H airplanes. That AD requires inspection of the engine oil pressure switch to determine if the engine oil pressure switch is part-number (P/N) 77041 or P/N 83278 and replacement of any P/N 77041 engine oil pressure switch with a P/N 83278 engine oil pressure switch. That AD resulted from reports of failure of the engine oil pressure switch diaphragm. We issued that AD to prevent loss of engine oil through the failure of the engine oil pressure switch diaphragm, which could result in partial or complete loss of engine power.

### **Actions Since Existing AD Was Issued**

Since we issued AD 2000-04-01, amendment 39-11583 (65 FR 8649, February 22, 2000), we have received new reports of internal failure of the engine oil pressure switch, which could result in complete loss of engine oil with consequent partial or complete loss of engine power or fire.

### **Relevant Service Information**

We reviewed Cessna Service Bulletin 07-79-01, dated January 29, 2007. The service information describes procedures for replacement of the engine oil pressure switch.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

### **Proposed AD Requirements**

This proposed AD would retain none of the requirements of AD 2000-04-01, amendment 39-11583 (65 FR 8649, February 22, 2000). This proposed AD would increase the applicability statement of the existing AD and require an inspection of the engine oil pressure switch with replacement of the engine oil pressure switch when it reaches its life limit of 3,000 hours time-in-service. We are proposing this AD to correct the unsafe condition on these products.

### **Differences Between the Proposed AD and the Service Information**

Applicability in this proposed AD has been expanded to include additional airplane serial numbers.

### **Costs of Compliance**

We estimate that this proposed AD affects 6,155 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

### Estimated costs

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspection of the airplane or engine records	.5 work-hour X \$85 per hour = \$42.50	Not applicable	\$42.50	\$261,587.50
Inspection of the engine oil pressure switch installation	.5 work-hour X \$85 per hour = \$42.50	Not applicable	\$42.50	\$261,587.50
Removal and replacement of the engine oil pressure switch and logbook entry	.5 work-hour X \$85 per hour = \$42.50	\$54	\$96.50	\$593,957.50

#### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2000-04-01, Amendment 39-11583 (65 FR 8649, February 22, 2000), and adding the following new AD:

**Cessna Aircraft Company:** Docket No. FAA-2012-1052; Directorate Identifier 2012-CE-014-AD.

**(a) Comments Due Date**

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

This AD supersedes AD 2000-04-01, Amendment 39-11583 (65 FR 8649, February 22, 2000).

**(c) Applicability**

This AD applies to Cessna Aircraft Company Models 172R, serial numbers (S/N) 17280001 through 17281622; 172S, S/N 172S8001 through 172S11244; 182S, S/N 18280001 through 18280944; 182T, S/N 18280945 through 18282356; T182T, S/N T18208001 through T18209096; 206H, S/N 20608001 through 20608350; and T206H, S/N T20608001 through T20609079; certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 7931, Engine Oil Pressure.

**(e) Unsafe Condition**

This AD was prompted by new reports of internal failure of the engine oil pressure switch, which could result in complete loss of engine oil with consequent partial or complete loss of engine power or fire. We are issuing this AD to place a life-limit on the engine oil pressure switch after which replacement would be required.

**(f) Compliance**

Comply with this AD within the compliance times specified, following Cessna Service Bulletin SB 07-79-01, dated January 29, 2007, unless already done.

**(g) Actions**

(1) At the next scheduled oil change, annual inspection, or 100-hour inspection after the effective date of this AD, whichever occurs later, but in no case later than 12 months after the effective date of this AD, inspect the engine oil pressure switch to determine if it is part-number (P/N) 77041 or P/N 83278.

(2) If after the inspection required in paragraph (g)(1) of this AD, P/N 77041 engine oil pressure switch is installed, before further flight, replace the engine oil pressure switch with a new, zero time, P/N 83278 engine oil pressure switch. Record the engine oil pressure switch part number, date, and airplane hours TIS in the airplane log book. The recorded engine oil pressure switch TIS will be used as the benchmark for calculation of the 3,000 hour TIS limit on the engine oil pressure switch.

(3) After the effective date of this AD, do not install a P/ N 77041 engine oil pressure switch on any affected airplane.

(4) If after the inspection required in paragraph (g)(1) of this AD it is confirmed that P/N 83278 engine oil pressure switch is installed, through inspection of the airplane or engine logbooks determine the TIS of the engine oil pressure switch.

(5) If after the inspection required in paragraph (g)(1) of this AD you cannot positively identify the hours TIS on the P/N 83278 engine oil pressure switch, before further flight, replace the engine oil pressure switch with a new, zero time, P/N 83278 engine oil pressure switch. Record the engine oil pressure switch part number, date, and airplane hours in the airplane log book. The recorded engine oil pressure switch TIS will be used as the benchmark for calculation of the 3,000 hour TIS limit on the engine oil pressure switch.

(6) When the engine oil pressure switch is at or greater than 3,000 hours TIS or within 50 hours TIS after the effective date of this AD, whichever occurs later, and repetitively thereafter at intervals not to exceed 3,000 hours TIS on the P/N 83278 engine

oil pressure switch, replace it with a new, zero time, P/N 83278 engine oil pressure switch. Record the engine oil pressure switch part number, date, and airplane hours in the airplane log book. The recorded engine oil pressure switch TIS will be used as the benchmark for calculation of the 3,000 hour TIS limit on the engine oil pressure switch.

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

(1) The Manager, Wichita Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) 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.

**(i) Related Information**

(1) For more information about this AD, contact Jeff Janusz, Sr. Propulsion Engineer, Wichita ACO, FAA, 1801 Airport Road, Wichita, KS 67209 phone: (316) 946-4148; fax: (316) 946-4107; email: jeff.janusz@faa.gov.

(2) For service information identified in this AD, contact Cessna Aircraft Company, Product Support, P.O. Box 7706, Wichita, Kansas 67277; telephone: (316) 517-5800; fax (316) 942-9006; Internet: [www.cessna.com/customer-service/technical-publications.html](http://www.cessna.com/customer-service/technical-publications.html) . You may review copies of the referenced service

information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Issued in Kansas City, Missouri, on September 26, 2012.

Earl Lawrence,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-24207 Filed 10/01/2012 at 8:45 am; Publication Date: 10/02/2012]