

## TECHNISCHE INFORMATION NR. SI 36-089

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## SERVICE INFORMATION NO. SI 36-089

**NOTE:** SI's are used only:  
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Typically there is no revision service for SI's. Each new information or change of that will be sent along with a new SI.

### I. TECHNISCHE ANGABEN

#### 1.1 Betroffene Flugzeuge:

HK 36 R  
S/N 36.300 bis 36.414

HK 36 TS S/N 36.415, 36.416  
HK 36 TTS S/N 36.393

#### 1.2 Gegenstand

FAA AD Nr. 2013-04-08  
ATA Code: 27-30

#### 1.3 Anlaß

Die FAA hat die Lufttüchtigkeitsanweisung Nr. 2013-04-08 veröffentlicht, welche den Austausch des Höhenrudermulenkhebels gegen ein verbessertes Design gemäß Diamond Aircraft Industries Service Bulletin MSB 36-108 vorschreibt.

### I. TECHNICAL DETAILS

#### 1.1 Airplanes affected:

HK 36 R  
S/N 36.300 through 36.414

HK 36 TS S/N 36.415, 36.416  
HK 36 TTS S/N 36.393

#### 1.2 Subject

FAA AD Nr. 2013-04-08  
ATA Code: 27-30

#### 1.3 Reason

The FAA has issued Airworthiness Directive No. 2013-04-08 mandating replacement of the elevator bell crank assembly with an improved design in reference to Diamond Aircraft Industries Mandatory Service Bulletin MSB 36-108.

#### **1.4 Information**

Weitere technische Informationen sind in der FAA Lufttüchtigkeitsanweisung Nr. 2013-04-08 enthalten, welche ohne weitere Ergänzungen und Einschränkungen anwendbar ist.

#### **II. SONSTIGES**

Die FAA Lufttüchtigkeitsanweisung Nr. 2013-04-08 liegt dieser Technischen Information bei.

Bei etwaigen Fragen kontaktieren Sie bitte Diamond Aircraft Industries GmbH.

#### **1.4 Information**

For detailed technical information refer to FAA Airworthiness Directive No. 2013-04-08 which is applicable without any further additions or restrictions.

#### **II. OTHER INFORMATION**

FAA Airworthiness Directive No. 2013-04-08 is attached to this Service Information.

In case of doubt contact Diamond Aircraft Industries GmbH.

[Federal Register Volume 78, Number 43 (Tuesday, March 5, 2013)]  
[Rules and Regulations]  
[Pages 14160-14162]  
From the Federal Register Online via the Government Printing Office [www.gpo.gov]  
[FR Doc No: 2013-04089]

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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2012-1172; Directorate Identifier 2012-CE-040-AD; Amendment 39-17365; AD 2013-04-08]**

**RIN 2120-AA64**

#### **Airworthiness Directives; Diamond Aircraft Industries GmbH Airplanes**

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

**ACTION:** Final rule.

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**SUMMARY:** We are adopting a new airworthiness directive (AD) for Diamond Aircraft Industries GmbH Model H-36, HK 36 R, HK 36 TS, and HK 36 TTS airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as installation of an unsuitable self-locking nut on the bell crank of the elevator push rod that can cause failure of the elevator, resulting in loss of control. We are issuing this AD to require actions to address the unsafe condition on these products.

**DATES:** This AD is effective April 9, 2013.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of April 9, 2013.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

For service information identified in this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Straße 5, A-2700 Wiener Neustadt, Austria, telephone: +43 2622 26700; fax: +43 2622 26780; email: [office@diamond-air.at](mailto:office@diamond-air.at); Internet: [www.diamond-air.at/hk36\\_super\\_dimona+M52087573ab0.html](http://www.diamond-air.at/hk36_super_dimona+M52087573ab0.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.

**FOR FURTHER INFORMATION CONTACT:** Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on November 5, 2012 (77 FR 66409). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

A HK 36 R aeroplane recently experienced an in-flight elevator control failure after take-off which resulted in an uncontrolled landing. The results of the subsequent investigation revealed that the elevator control rod had disconnected from the elevator bell crank in the tail section of the fuselage, as a result of installation of a non-suitable self-locking nut.

The subsequent design review of the affected elevator bell crank joint with elevator control rod identified that its current configuration has a failure potential when components such as thin self-securing nuts and bearings are aging and original clearance of the control system cannot be maintained in service. Both the designs of elevator bell crank and elevator control rod are installed in DV 20 aeroplanes.

This condition, if not corrected, could lead to further cases of elevator control failure, likely resulting in reduced control of the aeroplane, consequent damage to the aeroplane and injury to the occupants.

To address this concern, Diamond Aircraft Industries (DAI) published Mandatory Service Bulletin (MSB) 36-108 and MSB 20-061/1 to improve the affected elevator control joint by embodiment of new design which prevents elevator bell crank and push rod disconnection.

For reasons described above, this AD requires replacement of aeroplane elevator bell cranks with improved parts and prohibits installation of any previous design elevator bell crank.

### **Comments**

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 66409, November 5, 2012) or on the determination of the cost to the public.

### **Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting the AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 66409, November 5, 2012) for correcting the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 66409, November 5, 2012).

### **Costs of Compliance**

We estimate that this AD will affect 25 products of U.S. registry. We also estimate that it would take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$352 per product.

Based on these figures, we estimate the cost of this AD on U.S. operators to be \$13,050, or \$522 per product.

### **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 determined that this AD will not have federalism implications under Executive Order 13132. This AD will 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 this AD:

- (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.

### **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 the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

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

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

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 adding the following new AD:



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**2013-04-08 Diamond Aircraft Industries GmbH:** Amendment 39-17365; Docket No. FAA-2012-1172; Directorate Identifier 2012-CE-040-AD.

**(a) Effective Date**

This airworthiness directive (AD) becomes effective April 9, 2013.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the following Diamond Aircraft Industries GmbH models and serial number (S/N) airplanes, certificated in any category: H-36 and HK 36 R airplanes, S/Ns 36.300 through 36.414; HK 36 TS airplanes, S/Ns 36.415 and 36.416; and HK 36 TTS airplane, S/N 36.393.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as installation of an unsuitable self-locking nut on the bell crank of the elevator push rod that can cause failure of the elevator, resulting in loss of control. We are issuing this AD to prevent disconnection of the elevator bell crank and push rod.

**(f) Actions and Compliance**

Unless already done, do the following actions following Diamond Aircraft Industries GmbH Mandatory Service Bulletin MSB 36-108 and Diamond Aircraft Industries GmbH Work Instruction WI-MSB 36-108, both dated February 28, 2012:

(1) Within the next 200 hours time-in-service (TIS) after April 9, 2013 (the effective date of this AD) or within the next 12 months after April 9, 2013 (the effective date of this AD), whichever occurs first, replace each elevator bell crank assembly with part number (P/N) 820-2730-12-00, and replace each elevator bell crank mount with P/N 820-2730-11-00.

(2) After April 9, 2013 (the effective date of this AD), only install on the airplane elevator bell crank assemblies with P/N 820-2730-12-00 and elevator bell crank mounts with P/N 820-2730-11-00.

**(g) Other FAA AD Provisions**

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: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@faa.gov. 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, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

#### **(h) Related Information**

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2012-0173, dated September 3, 2012; Diamond Aircraft Industries GmbH Mandatory Service Bulletin MSB 36-108, dated February 28, 2012; and Diamond Aircraft Industries GmbH Work Instruction WI-MSB 36-108, dated February 28, 2012, for related information.

#### **(i) Material Incorporated by Reference**

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

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

(i) Diamond Aircraft Industries GmbH Mandatory Service Bulletin MSB 36-108, dated February 28, 2012.

(ii) Diamond Aircraft Industries GmbH Work Instruction WI-MSB 36-108, dated February 28, 2012.

(3) For Diamond Aircraft Industries GmbH service information identified in this AD, contact Diamond Aircraft Industries GmbH, N.A. Otto-Straße 5, A-2700 Wiener Neustadt, Austria, telephone: +43 2622 26700; fax: +43 2622 26780; email: office@diamond-air.at; Internet: [www.diamond-air.at/hk36\\_super\\_dimona+M52087573ab0.html](http://www.diamond-air.at/hk36_super_dimona+M52087573ab0.html).

(4) You may view this service information at 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.

(5) You may view this service information that is incorporated by reference 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 Kansas City, Missouri, on February 14, 2013.  
Earl Lawrence,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.