

EASA	AIRWORTHINESS DIRECTIVE	
	<p>AD No.: 2012-0173</p> <p>Date: 03 September 2012</p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>	
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>		
<p>Design Approval Holder's Name: Diamond Aircraft Industries GmbH</p>		<p>Type/Model designation(s): HK 36 and DV 20 aeroplanes</p>
TCDS Number:	EASA A.065 and EASA A.439	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 27	Flight Controls – Elevator Control / Bell Crank Assembly – Replacement	
Manufacturer(s):	Hoffmann Aircraft GesmbH, HOAC Austria GesmbH, Diamond Aircraft Industries GmbH	
Applicability:	<p>HK 36 and HK 36 R aeroplanes, serial numbers 36.300 through 36.414, HK 36 TS aeroplanes, serial numbers 36.415 and 36.416, HK 36 TTS aeroplane, serial number 36.393, DV 20 aeroplanes, serial numbers 20003, 20005 through 20129.</p>	
Reason:	<p>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.</p> <p>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.</p> <p>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.</p> <p>To address this concern, Diamond Aircraft Industries (DAI) published Mandatory Service Bulletin (MSB) 36-108 and MSB 20-061/1 to improve the</p>	

	<p>affected elevator control joint by embodiment of new design which prevents elevator bell crank and push rod disconnection.</p> <p>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.</p>									
Effective Date:	17 September 2012									
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within 200 flight hours or 12 months whichever occurs first after the effective date of this AD, replace each elevator bell crank assembly with a serviceable part, having a Part Number (P/N) as listed in Table 1 of this AD, in accordance with the instructions of DAI MSB 36-108, or MSB 20-061/1, as applicable to the aeroplane type.</p> <p style="text-align: center;">Table 1</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Aeroplane</th> <th style="text-align: center;">Bell Crank P/N</th> <th style="text-align: center;">Bell Crank Mount P/N</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">HK 36, HK 36 R, HK 36 TS, and HK 36 TTS</td> <td style="text-align: center;">820-2730-12-00</td> <td style="text-align: center;">820-2730-11-00</td> </tr> <tr> <td style="text-align: center;">DV 20</td> <td style="text-align: center;">DV2-2730-12-00</td> <td style="text-align: center;">820-2730-11-00</td> </tr> </tbody> </table> <p>(2) From the effective date of this AD, do not install an elevator bell crank assembly on an aeroplane, unless the P/N is listed in Table 1 of this AD, as applicable to the aeroplane type.</p>	Aeroplane	Bell Crank P/N	Bell Crank Mount P/N	HK 36, HK 36 R, HK 36 TS, and HK 36 TTS	820-2730-12-00	820-2730-11-00	DV 20	DV2-2730-12-00	820-2730-11-00
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DV 20	DV2-2730-12-00	820-2730-11-00								
Ref. Publications:	<p>DAI MSB 36-108 dated 28 February 2012, DAI MSB 20-061/1 dated 28 February 2012.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>									
Remarks:	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 25 June 2012 as PAD 12-065 for consultation until 23 July 2012. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: Diamond Aircraft Industries GmbH, Austria. Telephone +43 2622 26700, Facsimile +43 2622 26780. E-mail: airworthiness@diamond-air.at. 									