SERVICE INFORMATION LETTER



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SERVICE INFORMATION LETTER NO. SILD42L-005

NOTE: Service Information Letters (SIL) are used only:

- 1. To distribute information from Diamond Aircraft Industries (DAI) to our customers.
- 2. To distribute applicable information/documents from our suppliers to our customers with additional information.

NOTE: Typically there is no revision service for SILs. Each new information or change will be sent along with a new SIL.

1. TECHNICAL DETAILS

1.1 Aircraft Affected

All DA42 L360 aircraft.

1.2 Subject

EASA Airworthiness Directive No. 2012-0174.

ATA-Code: 32-10.

1.3 Reason

The EASA has issued Airworthiness Directive No. 2012-0174 mandating modification of the main landing gear damper in reference to Diamond Aircraft Mandatory Service Bulletins MSB 42-095 or MSB 42NG-026.

1.4 Information

For detailed technical information refer to EASA Airworthiness Directive No. 2012-0174 which is applicable without any further additions or restrictions.

2. OTHERS

EASA Airworthiness Directive No. 2012-0174 is attached to this Service Information Letter.

If in doubt, contact DAI or your local authorized Diamond Service Center.

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To obtain satisfactory results, procedures specified in this service information letter must be accomplished in accordance with accepted methods and current government regulations. Diamond Aircraft Industries Inc. cannot be responsible for the quality of work performed in accomplishing the requirements of this service information letter. Diamond Aircraft reserves the right to void continued warranty coverage in the area affected by this service information letter if it is not incorporated. If you no longer own the aircraft to which this service information letter applies, please forward it to the current owner and send the name of the current owner to Diamond Aircraft Industries Inc. at the address below.

Diamond Aircraft Industries Inc. 1560 Crumlin Sideroad, London, Ontario, Canada N5V 1S2

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EASA AD No.: 2012-0174

AD No.: 2012-0174 Date: 04 September 2012 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.

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].

Design Approval Holder's Name: Diamond Aircraft Industries GmbH		Type/Model designation(s): DA 42 aeroplanes
TCDS Numbers:	EASA.A.005 and EASA.A.513	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 32	Landing Gear – Main Landing Gear Shock Absorbers – Modification / Replacement	
Manufacturer(s):	Diamond Aircraft Industries GmbH (Austria), and Diamond Aircraft Industries Inc. (Canada)	
Applicability:	DA 42 and DA 42 NG aeroplanes, all serial numbers (s/n); and DA 42 M and DA 42 M-NG aeroplanes (both Normal and Restricted category), all s/n.	
Reason:	An incident was reported where a Diamond DA 42 experienced main landing gear (MLG) extension problems during approach, with the left hand (LH) MLG not down. An uneventful landing was made with minor damage to the aeroplane and no injuries to occupants.	
	Subsequent investigation results showed that the affected MLG leg shock absorber, P/N D60-3277-10-00, had overextended, resulting in the MLG being jammed in the gear bay. The overextension had been caused by a retaining nu in the MLG shock absorber which had loosened itself during operation.	
	This condition, if not corrected, could inhibit proper extension of the MLG, possibly resulting in damage to the aeroplane and injury to occupants.	
	Prompted by the reported event, Diamond Aircraft Industries (DAI) published Recommended Service Bulletin (RSB) 42-089 / RSB 42NG-017 which includes Working Instruction (WI) WI-RSB-089 / WI-RSB 42NG-017 (published as a single document) to recommend operators to modify the affected dampers to P/N D60-3277-10-00_01 standard, which incorporates installation of a new retaining nut and a new seal system for the MLG damper that is more durable and can withstand a greater temperature range.	
	Since that RSB was issued, further analysis has shown that the risk of a MLG failing to extend is greater than was initially determined. Consequently, DAI	

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	issued Mandatory Service Bulletin MSB 42-095 / MSB 42NG-026 to alert aeroplane owners and operators accordingly. The new MSB contains the same instructions as the earlier RSB, but is no longer 'at owner's discretion'.	
	For the reasons described above, this AD requires modification of the affected MLG leg shock absorber, P/N D60-3277-10-00. This AD also prohibits installation of unmodified P/N D60-3277-10-00 MLG leg shock absorbers.	
Effective Date:	18 September 2012	
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:	
	(1) Within 200 flight hours or 12 months, whichever occurs first after the effective date of this AD, modify the LH and right hand (RH) MLG leg shock absorbers P/N D60-3277-10-00 (no P/N change necessary) in accordance with the instructions of DAI MSB 42-095 / MSB 42NG-026, or replace each MLG leg shock absorber P/N D60-3277-10-00 with a modified unit, having P/N D60-3277-10-00_01.	
	(2) Modification of an aeroplane in accordance with the instructions of DAI RSB 42-089 / RSB 42NG-017 (or later revision) is acceptable to comply with the requirement of paragraph (1) of this AD.	
	(3) For an aeroplane that must comply with paragraph (1) of this AD:	
	After modification of the aeroplane, do not install a MLG leg shock absorber P/N D60-3277-10-00 on that aeroplane, unless the shock absorber has been modified in accordance with the instructions of DAI MSB 42-095 / MSB 42NG-026, or in accordance with the instructions of DAI RSB 42-089 / RSB 42NG-017.	
	(4) For an aeroplane that has P/N D60-3277-10-00_01 MLG leg shock absorbers installed on both LH and RH sides:	
	From the effective date of this AD, do not install a MLG leg shock absorber P/N D60-3277-10-00 on that aeroplane, unless the shock absorber has been modified in accordance with the instructions of DAI MSB 42-095 / MSB 42NG-026, or in accordance with the instructions of DAI RSB 42-089 / RSB 42NG-017.	
Ref. Publications:	DAI RSB 42-089 / RSB 42NG-017 dated 06 October 2010, or RSB 42-089/1 / RSB 42NG-017/1 dated 19 April 2011	
	DAI WI-RSB 42-089 / WI-RSB 42NG-017 dated 06 October 2010.	
	DAI MSB 42-095 / MSB 42NG-026 dated 11 November 2011.	
	DAI WI-RSB 42-095 / WI-RSB 42NG-026 dated 11 November 2011.	
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.	
Remarks:	 If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 	
	 This AD was posted on 03 August 2012 as PAD 12-102 for consultation until 31 August 2012. No comments were received during the consultation period. 	
	 Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu. 	
	 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 office@diamond-air.at. 	