



EASA Safety Information Bulletin

SIB No.: 2011-02
Issued: 18 March 2011

Subject: **ATR Main Landing Gear (MLG) Shock Absorbers – Cross Locking Bolt of the Attachment Pin**

Ref. Publication: Messier-Dowty (M-D) Component Maintenance Manual (CMM) for MLG leg Structures:

CMM 32-18-28 Rev.8
CMM 32-18-30 Rev.7
CMM 32-18-34 Rev.6
CMM 32-18-45 Rev.4
CMM 32-18-63 Rev.4

M-D Service Bulletin (SB) 631-32-190 dated 12 July 2006.

Applicability: ATR 42 and ATR 72 aeroplanes, all models, all serial numbers.

Description: In 2005, an ATR aeroplane experienced a case of migration, and subsequent rupture, of the main landing gear shock absorber attachment pin. The investigation revealed that the migration of the pin was due to the absence of the locking bolt. EASA issued Emergency Airworthiness Directive (AD) [2006-0216-E](#) to address and correct this unsafe condition.

That AD required a one-time inspection of the locking pin and announced that a specific warning would be added in each related MLG CMM to avoid forgetting the installation of the locking bolt after maintenance actions performed in repair shop.

Recently, one operator reported that during a routine inspection, the shock absorber was found migrated from the MLG barrel assembly location. The report highlighted that the locking bolt which secures the shock absorber hinge pin was missing. Further investigation revealed that the locking bolt was not installed during barrel assembly replacement, despite the specific caution incorporated in the CMM.

This SIB is issued to draw the attention of owners, operators and maintenance organisations of ATR aeroplanes, to the

need of strictly following the instructions provided in the applicable M-D CMM and of installing the locking bolt, thereby preventing partial loosening of the shock absorber at the upper attachment hinge.

For information only, see the detailed figure in Appendix 1 of this SIB. However, for every specific ATR 42 / ATR 72 aeroplane model, reference should be made to the applicable M-D CMM as listed on page 1 of this SIB.

Recommendations: EASA recommends the following actions:

- MLG barrel replacement should only be performed in an approved repair shop.
- The latest issue (revision) of any applicable CMM should be used to accomplish MLG maintenance.
- Local Instruction Cards used in the repair shop should be updated to correspond with the applicable CMM build-up instructions.
- The repair shop should confirm the presence of the locking bolt of the shock absorber upper attachment pin in accordance with the instructions of MD SB 631-32-190.

Contact:

For further information contact the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu.

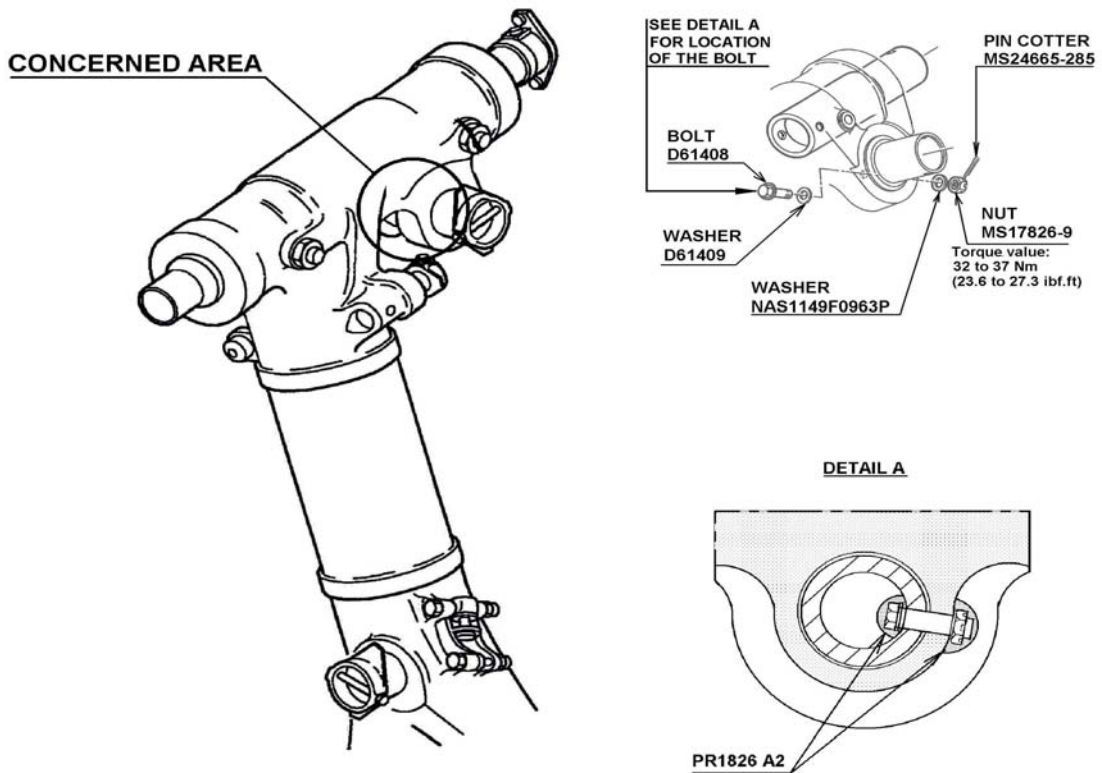
The publications referenced in this SIB can be obtained upon request from ATR - GIE Avions de Transport Régional, Continued Airworthiness Service.

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The referenced M-D SB can be downloaded (only registered users) from the [Messier-Dowty website](#).

Appendix 1

MLG leg structure of ATR72 - ALL MODELS



Note: This figure is an example and is provided for information only; for every specific aeroplane installation, reference should be made to the applicable M-D CMM as listed on page 1 of this SIB