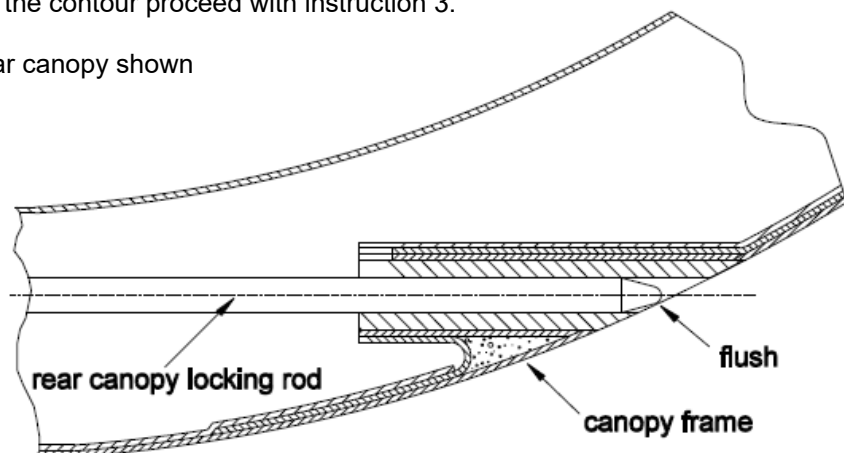




- Subject** : Canopy lock, rear locking rods, landing gear axles with cone clamping devices, manual revision
- Effectivity** type: DG-1000, DG-500
variants: DG-1000S and DG-1000T
DG-500 all ser. No.'s,
- Accomplishment** : Instructions 1, 2 and 4 latest prior to next take-off
Instructions 3 if a damage could be detected prior to next take-off
Instructions 5 prior to the next annual inspection , latest December 31. 2019
- Reason** : 1. DG-1000S and DG-1000T up to ser. No. 10-144 and all DG-500:
There have been occurrences where the rear locking rod of the canopy locking mechanism of the rear canopy have rotated out of the threads in the operating mechanism despite securing with Loctite and lock nut.
As the system is similar at the front canopy both canopies may be affected.
Note: From DG-1000 ser. No. 10-145 on the system was modified for other reasons but in a way which makes rotating out of the locking rods impossible.
Note: The canopy emergency release system was designed from the beginning in a way which makes rotating out of the locking rods impossible.
2. DG-500 and DG-1000s: The optional canopy warning of DG-500 and DG-1000S was not mentioned so far in the flight manuals. This will be amended now.
3. DG-1000S and DG-1000T ser.No. 10-133 up to ser.No. 10-267 versions with landing gear without nose wheel: One of the landing gear axles with cone clamping devices came loose. The tightening moments will be increased.
4. All DG-1000S, DG-1000T and all DG-500: Correction of detected manual errors.
- Instructions** : Instruction 1 – 3 DG-1000S and DG-1000T up to ser. No. 10-144 and all DG-500:
1. With each daily inspection: Check at front and rear canopy if the end of the rear locking rod doesn't protrude over the canopy frame contour with opening mechanism in fully open position. If the rod protrudes over the contour proceed with instruction 3.

Rear canopy shown





Instructions continued : 2. Prior to next take-off and then with each annual inspection: Check if the rear locking rods of front and rear canopy are screwed in tightly. To accomplish this close the locking mechanism with canopy open and try to rotate the locking rod using small pipe pliers and a piece of abrasive paper 240 grid around the rod to protect the rod from damage.

Caution: Don't rotate counter-clockwise, otherwise you may rotate the rod out of the thread and destroy the Loctite and lock nut securing.

If you are able to rotate the rod proceed with instruction 3.

3. Repair of the locking mechanism according to repair instruction No. RI-DG-05 if necessary.
4. DG-1000S and DG-1000T ser.No. 10-133 up tp ser.No. 10-267 versions with landing gear without nose wheel: The tightening moments of the nuts of the landing gear axles with cone clamping devices 10FW124 (see diagrams 7a resp. 20 section A-A) and 0FW127 (see diagrams 7a resp. 20 section B-B) should be checked and increased if too low. For correct tightening moments refer the new MM pages issued July 2019 (pages 4.9 resp. enclosure 1 page 7 DG-1000S, resp. enclosure 4 page 6 DG-1000T). To accomplish this you have to remove the baggage compartment floor and back wall. If one axle already moved outwards you have to loosen the nut, push in the axle and tighten the nut see above. If the axle rotates when tightening the nut hold the bolt head.
5. All DG-1000S and DG-1000T, all DG-500:
Manual revision: Exchange the following manual pages against new pages issued July 2019 marked with TN1000/42 resp. TN500/13. Respect the marked changes.
DG-500/22
FM: 0.1, 0.3, 0.4, 4.7, 4.8, 7.1, 7.10
DG-500 Trainer
FM: 0.1, 0.3, 0.4, 4.5, 4.6, 7.1, 7.10
DG-500/20
FM: 0.1, 0.3, 0.4, 4.7, 4.8, 7.1, 7.10
DG-500 Orion
FM: 0.2, 0.3, 0.4, 4.7, 4.8, 7.1, 7.10
MM DG-500 for DG-500/22, DG-500 Trainer, DG-500/20, DG-500 Orion: 0.1, 0.3, 0.4, 1.4, 1.12, 1.16, 2.1 – 2.4, 6.3, diagrams 9 and 9b
DG-500M
FM: 0.2, 0.3 - 0.5, 4.8 - 4.10, 7.1, 7.18
MM: 0.1, 0.4, 2.1, 2.1a
DG-500MB
FM: 0.2, 0.3, 0.5, 4.8, 4.9, 7.1, 7.19
MM: 0, 1a, 2, 4, 6, 34, 37, 92
DG-1000S
FM: 0.2a, 0.4, 0.5, 4.8, 4.9, 7.1, 7.13
MM: 0.3 - 0.6, 2.1, 2.2, 4.9, 6.3, Enclosure 1 page 7
DG-1000T
FM: 0.2 - 0.4, 2.6, 4.8
MM: 0.2 - 0.6, 1.14, 2.1, 2.2, 4.9, 6.3, diagrams 7, 7a, 20, , Enclosure 4 page 6

The technical content of this document is approved under the authority of DOA Ref. EASA.21J.530.



Material : Manual pages see above
: If necessary repair instruction No. RI-DG-05 with the material mentioned therein.

Weight and balance : influence negligible

Remarks : Instructions No. 1, 2, 4 and 5 may be executed by the pilot/owner himself.
The actions are to be inspected and released by the pilot/owner (according to MA. 801 (b) 3. for EASA registered aircraft).

Instructions No. 3

1. EASA registered aircraft: The pilot/owner is not allowed to perform the actions. The actions have to be performed and released according to M.A.801 (b) 1. or (c).
2. Non EASA registered aircraft: The actions have to be performed in a licensed workshop. All instructions are to be inspected and entered in the aircraft logs by a licensed inspector.

If you have any questions concerning this TN please contact DG
Flugzeugbau: Tel.: 0049 7251 3020-0, e-mail: dg@dg-flugzeugbau.de

Bruchsal, date:
11.09.2019

Author: Wilhelm Dirks

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under Approval No. 10070989.