

## Service Bulletin

Affected propeller types: All NEUFORM-variable pitch-propellers  
(To propellers listed in the appendix, only measure a) applies)

Subject: Examination of the tightening torque of the flange bolts; retrofitting of shear pins to protect the bolts from shear- and bending force.

Reason: Possible rupture of flange bolts due to low tightening torque

Background: Transmission of the engine torque to the propeller is performed through friction locking (surface pressure) between hub and engine flange. With correct initial tension loading, the bolts are loaded lengthwise with no shear- and bending forces affecting them.

If the bolts are subject to insufficient initial tension, bending vibrations may act on them. Thus, it is of utmost importance, that correct initial tension is applied to the bolts. Mistakes at assembly and torque settlement effects may lead to insufficient initial tension.

To ensure additional safety in such cases, a shear-pin-structure will be added to the hub-flange-connection, which will, in case of insufficient initial tension, protect the bolts from bending vibrations.

## Measures:

- a) The current Operating manual will be replaced by the version dating 15.02.08. This Operation manual can be downloaded from our website at [www.neuform-propellers.com](http://www.neuform-propellers.com) -> Download or direct link:  
([http://www.neuform-composites.de/Pforte/Propeller\\_E/Download/download.html](http://www.neuform-composites.de/Pforte/Propeller_E/Download/download.html))
- b) The tightening torque of the bolts must be examined according to NEUFORM AA-08-01 work instructions. Should the tightening torque comply with the required value, further operating until implementation of measure d) is possible under consideration of the new operating manual. The continued operation until measure d) can be then considered as safe and has no further limitations.
- c) Should, as described in b), a low tightening torque be found, the bolts may have possibly suffered already and must be replaced prior to the next take off by new original NEUFORM-bolts. Such a replacement must be performed either at the NEUFORM-plant or by an authorised partner. The Re-mounting of the propeller will have to be performed in compliance with *Assembly- and Maintenance Manual V3-R2* not older than dating 15.02.08. It will be added to the delivery, but can be ordered separately and will be sent by post free of charge.
- d) Exchange of the spacers between hub and engine flange for an improved version including shear pins (only original NEUFORM-parts are permissible). Should no spacer have been assembled so far, a spacer with a thickness of 10 mm to hold the pins will be installed. The hub will be fitted with additional bore holes to hold the pins. This must be performed either at the NEUFORM-plant or by an authorised partner.

Compliance:

- Measure a): With immediate effect, the Operating Manual V3-R2 and the Assembly- and Maintenance Manual V3-R2, both dating 15.02.08, apply.
- Measure b): Prior to next flight
- Measure c): In case of insufficient tightening torque prior to next flight
- Measure d): Up to 31.05.08

Costs:

All parts needed within the conditions of this Service Bulletin will be supplied by NEUFORM free of charge.

Authorised Persons and Companies:

- Measure a): Pilot/Owner
- Measure b): Technical expert/owner
- Measure c) + d): An updated list of the companies authorised to perform measures c) and d) can be downloaded from our website at [neuform-propellers.com](http://www.neuform-propellers.com) -> downloads or direct link:  
([http://www.neuform-composites.de/Pforte/Propeller\\_E/Download/download.html](http://www.neuform-composites.de/Pforte/Propeller_E/Download/download.html))

Appendix

Exempted Serial Numbers:

To the following propellers, only measure a) applies:

- V3/R2/1982002
- V3/R2/49
- V3/R2/128
- V3/R2/132
- V3/R2/142
- V3/R2/143
- V3/R2/144
- V3/R2/145
- V3/R2/146
- V3/R2/147
- V3/R2/148
- V3/R2/149
- V3/R2/150
- V3/R2/151
- V3/R2/152
- V3/R2/153
- V3/R2/154
- V3/R2/155
- V3/R2/156



Where do I find the serial number?

To the following propellers, none of the above measures apply:

Serial Number: V3/R2/157 and later

Annex to NEUFORM TM-08-01 (non German registered aircraft only)

Feedback Template

To be returned to NEUFORM by fax, mail or e-Mail(Scan) as soon as the measures have been carried out. Thank you for you co-operation.

NEUFORM COMPOSITES GMBH & CO. KG, Ameke 63, 48317, Drensteinfurt, Germany  
 Fax-No.: +49-2387-94028  
 E-Mail: info@neuform-propellers.com

Measures a) and b) have been carried out\*

Propeller-Serial-No.:						
Bolt-Nr.:	1	2	3	4	5	6
Re-Set Angle [°]						
Aircraft Type						
Material of the Spinner Baseplate	Alu- minium		Carbon		Glass- fibre	

\_\_\_\_\_

Name of the Pilot/Owner/Technical Expert

\_\_\_\_\_

Date/Location/Signature

Measure c) and d) have been carried out\*

Propeller-Serial-No.: \_\_\_\_\_ Aircraft-Type: \_\_\_\_\_

\_\_\_\_\_

Name of Authorized Company

\_\_\_\_\_

Date/Location/Signature

\*)Remark: If the the measures are not done all at the same time, there are 2 submissions necessary.