



# TECHNICAL NOTE

## Replacing pre-rotating ring gear screws

### COMPULSARY

#### Employed symbolic:

This note uses three levels of warnings: DANGER, CAUTION and NOTE, associating three colours red, yellow and grey. The meanings are as follows:

#### **DANGER**

Identifies an important instruction that, if not followed, can cause damages and accidents whose consequences can lead to serious physical injuries or even death.

#### **CAUTION**

Identifies an important instruction that, if not followed, can cause serious accidents or even physical injuries.

#### **IMPORTANT NOTE**

Underlines an instruction that, if not followed, can cause damages to the engine or the gyroplane, and can also lead to the suspension of warranty.

#### **REMARK**

Identifies practical information for a better use of the product.

During a revision of the document (for example Rev1), a vertical line in the left margin of the document shows a change in the text or in the illustration.

To ensure satisfactory results, the operator has to scrupulously respect the procedures written in this document, applying widely used methods and good common mechanical sense, all the time in the respect of its national regulations. All nylstop nuts unscrewed during the operations must be replaced with new ones.

DTA sas shall not be liable for the quality of the work done during the operations required by the present document.

## 1 - Information

- **Date** : May 28<sup>th</sup> 2018
- **Impacted aircrafts** : J-RO and XEELEEX from #001 till today and delivered rotor-head up till today
- **Application** : immediately
- **Motivation** :  
Following a faulty screw supply, some DG910-10 (Ring gear disk and pre-rotator ring gear) has been assembled with a wrong kind of screw. For safety reasons, the supplier advise the replacement of all potentially concerned screws (please report to "Impacted Aircraft" section above)
- **Object** :  
Replacement of the pre-rotating ring gear screws
- **Risks** :  
Screws can be overload and can lead to a major failure of the screw (breaking)

### CAUTION

Not respecting this instruction can cause serious accidents or even physical injuries

- **Labour (time needed : 15 min)**
  - ⇒ France : Maintenance can be done by the owner/pilot himself, if he has the technical capacities and knowledge, as well as the tooling and supplies required.
  - ⇒ Other countries : Please approach the local aviation authorities to conform to your specific regulations. Generally, maintenance is done by a certified mechanic.
- **DTA SAS reference documents:**
  - ⇒ Illustrated Parts Catalog J-RO Edition n°2 – Décembre 2015
  - ⇒ Maintenance Manual

## 2 - Supplies

- **Cost, availability, Information** :
  - ⇒ A screw kit will be sent on demand by DTA SAS. Other part prices, availability, eventual advice, are to be asked to DTA or their resellers

⇒ Costs linked to the immobilization of the machine and eventual loss of time and income, costs linked to telephone calls and delivery of parts, are not covered by this note and will neither be taken into account nor reimbursed by DTA.

➤ **Tooling :**

- ⇒ Torque wrench with appropriate end bit for FHC M5 screw
- ⇒ Stepladder

➤ **Lubricants/Threadlocker/diverse :**

- ⇒ Blue threadlocker LOCTITE 242 (only)

### 3 – Realization procedure

➤ **Safety procedures :** The gyroplane will be immobilized, engine OFF, general switch OFF.

➤ **Preparation :**

- ⇒ Ask for the screw kit at DTA sas

➤ **Operations :**

- ⇒ Loose each one of the 6 M5 screws on the outside of the diameter
- ⇒ Take out one screw and put it aside
- ⇒ Apply threadlocker on a new screw (sent by DTA) and screw it in place
- ⇒ Tightening torque : 6 Nm
- ⇒ Repeat operations on each one of the 6 concerned screws

➤ **Finition and controls :**

- ⇒ Check the tightening torque on the 6 replaced screws

