SERVICE BULLETIN No. 0017

Date. 15th May 1987. Page 1 of 2

SOLAR WINGS HAVE CLASSIFIED THIS BULLETIN AS COMPULSORY.

SUBJECT: Propeller Attachment on Rotax 462 Liquid Cooled Engines.

MODELS AFFECTED:	SERIAL Nos AFFECTED
PEGASUS FLASH 2 (LIQUID COOLED)	ALL SERIAL No.s
PEGASUS XL-R (LIQUID COOLED)	"

COMPLIANCE TIME: Before next flight.

PURPOSE: A Pegasus Flash 2 operator recently had the propeller bolts shear on his aircraft. It appears that during the normal checks the nylocks used for locking the bolts were tightened instead of the bolt itself, which in fact threads into the prop flange. However, it also is apparent that after initial torque setting of these bolts there may be a tendancy for for the wood to compress and therefore a more frequent inspection should take place until the modification outlined below is implemented.

INSTRUCTIONS PRIOR TO IMPLEMENTATION OF MOD:

1. Check that the propeller retention bolts are undamaged.
2. Replace any damaged bolts, fit and tighten into the driving flange to a new torque setting of 12 ft lbs.
3. Fit and tighten the washer and nylock.
4. After 1 hours engine time, slacken and then re-tighten the bolts to 12 ft lbs torque.
5. Although the operators manual advises that the propeller fasteners are checked for tightness every 10 hours. This does not over-rule the preflight and post flight checks also advised.

INSTRUCTIONS FOR IMPLEMENTATION OF MOD:

1. Remove propeller.
2. Drill out the 8mm threaded holes in the propeller driving flange to a clearance of 8.1 mm.
3. Drill out the bolt holes in the propeller to a clearance of 8.1mm.
4. Fit the propeller and tighten to 12 ft lbs. torque the new 8mm bolts and nylocks as outlined in Drawing SW-67003 attached to this bulletin.
5. After 1 hours engine time, slacken and then re-tighten the bolts to 12 ft lbs torque.
6. Although the operators manual advises that the propeller fasteners are checked for tightness every 10 hours. This does not over-rule the preflight and post flight checks also advised.

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MATERIAL REQUIRED:

6 off	8mm x 100 Bolts.	Solar Part No.	SWF 1010
12 off	8mm Washers.	Solar Part No.	SWF 1011
6 off	8mm Nylocks.	Solar Part No.	SWF 1012

SPECIAL TOOLS REQUIRED: Torque wrench of appropriate size and range.

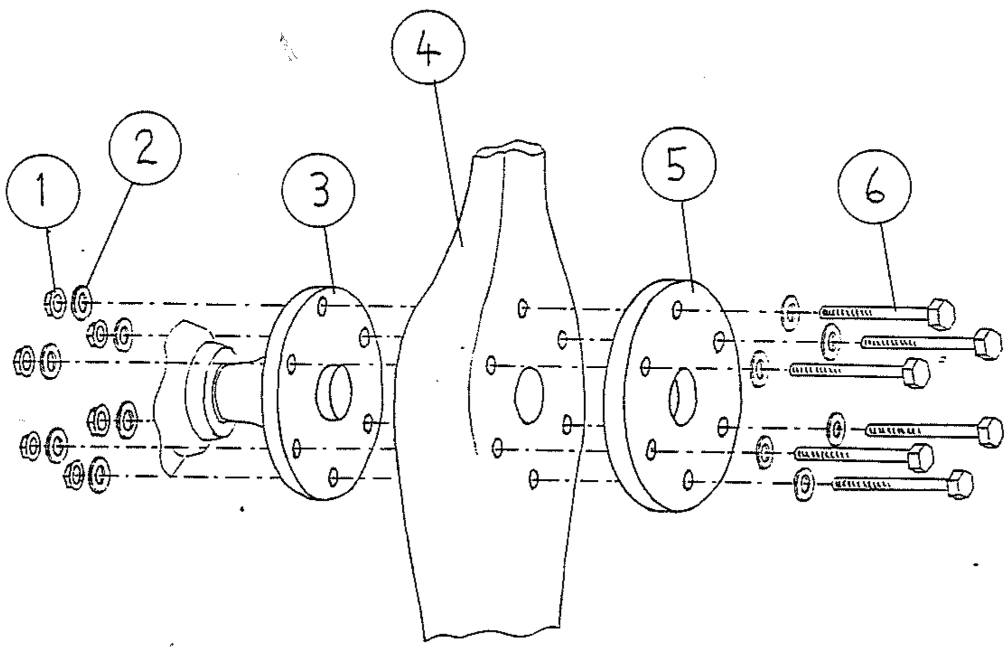
AVAILABILITY OF PARTS AND SPECIAL TOOLS: Ex-Factory.

EFFECTIVITY DATE: Immediate

SUMMARY:

(i) If in doubt contact your nearest dealer or phone Solar Wings Direct on: **Marlborough (0672) 54414/53598**

(ii) If you are no longer in possession of the affected aircraft, please send details of change of ownership to the factory and forward this information to the current owner.



ASSEMBLY PROCESS:

1. BOLTS SHOULD BE PROGRESSIVELY TORQUED USING THE SEQUENCE OF TIGHTENING OUTLINED BELOW.

2. THE ASSEMBLER SELECTS THE FIRST BOLT TO BE TIGHTENED. THIS BOLT BECOMES BOLT No. 1.

3. THE REMAINING BOLTS ARE NUMBERED FROM 2 TO 6 IN A CLOCKWISE DIRECTION.

4. UPON COMPLETION OF THE TWO STAGES OF TIGHTENING, THE TIGHTENING SEQUENCE MAY NEED TO BE REPEATED SEVERAL TIMES UNTIL A STABLE TORQUE SETTING IS ACHIEVED.

5. THE TORQUE SETTINGS SHOULD BE CHECKED AFTER THE INITIAL ENGINE RUN-UP AND AFTER THE RUNNING IN PERIOD (OR 1 HOURS OPERATION IF THE ENGINE HAS BEEN PREVIOUSLY RUN-IN). THEREAFTER REFER TO THE OPERATORS MANUAL FOR FREQUENCY OF PERIODIC CHECKS.

6. DURING MAINTAINENCE CHECKS THE PROPELLER BOLTS SHOULD BE INITIALLY SLACKENED BEFORE BEING RE-TORQUED.

7. SHOULD IT BE NECESSARY, WASHERS ARE TO BE USED TO PACK THE NYLOCK NUT AND PREVENT THE GRIP LENGTH OF THE BOLT PROJECTING BEYOND THE GEAR BOX PROPELLER FLANGE.

TORQUE SETTING.	TIGHTENING SEQUENCE.
INITIAL= 9 ft.lbs. :	1. 4. 2. 5. 3. 6.
FINAL = 12 ft.lbs. :	1. 4. 2. 5. 3. 6.

OP CODE	TIME(MINS)
TOT OP TIME PER COMP	
NO PER A/C	
TOT OP TIME PER A/C	
SET UP TIME	
TOT TIME PER A/C	

ITEM	DRWG No./PART No	DESCRIPTION	QTY
1	SWF-1012	M8 NYLOC NUT	6
2	SWF-1011	M8 FORM B WASHER	12
3	N/A	G.BOX PROPELLER FLANGE	1
4	SW-86004	PROPELLER	1
5	ROTAX No. 827830	PROPELLER BACKING PLATE	1
6	SWF-1010	M8x100mm BOLT (GL=76)	6

NO	REVISION	DATE

SOLAR WINGS

PROPELLER ASSEMBLY

DRAWN	TRACED	CHECKED	TOL:-	DATE	SCALE
AWH		[signature]		18 MAY 87	NTS

DRAWING No. SW-87003

APPROVED BY: [signature]