

Issues

**MANDATORY BULLETIN No. Harmony LSA-027a SR
SPORTSTAR-045a SR
SAFETY RELATED**

- 1. CONCERNING:** All airplanes: Harmony LSA
SportStar
equipped with 3-blade WarpDrive HPL propeller.
- 2. REASON:** Cracks were found on some propeller spinners during regular examinations.
- 3. REQUIRED ACTIONS:**
1. Visual examination of the propeller spinner condition.
 - a) Remove and check the propeller spinner in accordance with Work procedure, Section 1.3.1 and 1.3.2
 - If the interior and exterior of the spinner is without cracks, abrasions, paint damage and signs of delamination continue in accordance with instructions stated in Work procedure, Section 1.3.3.
 - If there are cracks, abrasions, paint damage, or signs of delamination found on the spinner, continue in accordance with instructions stated in Work procedure, Section 1.3.2. Contact the aircraft manufacturer to receive a new propeller spinner and backplate. Install the **new** propeller spinner and **new** propeller backplate in accordance with instructions stated in Work procedure, Section 1.3.4 and 1.3.5.
 2. Record the completion of the examination in the Aircraft Logbook.
- 4. LATEST DAY OF THE ACTION:** As the part of the pre-flight check.
- 5. CARRIED OUT BY:** Organization authorized for maintenance / repairs of this type of airplane or the relevant authorized person.
- 6. COSTS COVERED BY:** Operator / owner of the airplane.
- 7. NECESSARY MATERIAL:** In accordance with the bulletin text.
- 8. WORK PROCEDURE:** In accordance with the bulletin text.

9. APPENDICES: None.

Valid from: November 3rd, 2023

1. Work procedure

1.1 Necessary tools

Name	Designation	Quantity
Flat screwdriver		1 pc
Hex key	No. 6	1 pc
Torque wrench	5-30 Nm	1 pc
Cleaning agent	Technical benzine	
Lint-free cloth		

1.2 Necessary material (LSA-027A)

Name	Marking	Nomencl.	Quantity
Propeller spinner		090175	1 pc
Propeller backplate		090175	1 pc
Screw	M4 x 16	090175	9 pcs
Plastic washer	ø 4,3 mm	090175	9 pcs
Stainless steel lockwire	ø 0,5 mm	118899	1,5 m

Material shall be supplied by the airplane manufacturer.

1.3 Work procedure

- Examination of the propeller spinner condition

1.3.1 Propeller spinner removal.

- 1.3.1.1 Switch the electrical network off.
- 1.3.1.2 Remove the upper engine cowling. Disconnect the battery.
- 1.3.1.3 Remove the screws (7, Fig. 2) with washers (8) and remove the propeller spinner (2).

1.3.2 Visual examination of the propeller spinner condition

- 1.3.2.1 Carefully check the interior and exterior of the propeller spinner for cracks, abrasions, paint damage or signs of delamination.
 - No damage found on spinner during the examination – continue as per instructions 1.3.3. Propeller spinner installation.
 - Damage found on spinner during the examination – the aircraft can be operated without the propeller spinner. After receiving the **new** backplate and **new** spinner from the airplane manufacturer follow procedures 1.3.4 - Removal of the propeller backplate and 1.3.5 - Installation of the new propeller spinner and backplate.

- Examination with no damage found on the propeller spinner.

1.3.3 Propeller spinner installation.

- 1.3.3.1 Install the propeller spinner with screws (7, Fig. 2) and washers (8).
- 1.3.3.2 Connect the battery.
- 1.3.3.3 Install the engine upper cowling.

1.3.4 Propeller backplate removal.

- 1.3.4.1 Remove the lockwire from the bolt heads (4, Fig. 2).
- 1.3.4.2 Remove the nuts (5) with washers (6).
- 1.3.4.3 Remove the propeller (1) from the engine flange and remove the propeller backplate (3).
- 1.3.4.4 Remove the bolts (4) with washers (6) from the propeller hub.

CAUTION

THE SUPPLIED NEW PROPELLER SPINNER AND NEW PROPELLER BACKPLATE SET IS UNIQUE AND NOT INTERCHANGABLE.

1.3.5 New propeller spinner and new propeller backplate installation.

- 1.3.5.1 Thoroughly clean the flange of the engine and the propeller.
- 1.3.5.2 Install the bolts (4, Fig. 2) with washers (6) on the propeller hub; put the propeller backplate (3) on the bolts.
- 1.3.5.3 Put the propeller (1) on the engine flange (9); put the washers (6) on the bolts (4) and install the nuts (5).
- 1.3.5.4 Tighten the nuts (5, Fig. 2) in the sequence as shown in Fig. 3 with a torque 20,34 Nm (15 ft-lb).
- 1.3.5.5 Safety the bolt heads (4, Fig. 2) in pairs with the lockwire in accordance with AC 43-13.
- 1.3.5.6 Put the **new** spinner (2) to the **new** backplate (3) in the position marked by red dots on the circumference (see Fig. 1). **Never install the spinner in other position.**
- 1.3.5.7 Attach the spinner with the screws (7, Fig. 2) with washers (8).
- 1.3.5.8 Connect the battery.
- 1.3.5.9 Install the upper engine cowling.
- 1.3.5.10 Do the propeller test in accordance with Operation & Installation Manual 3-Blade HPL.

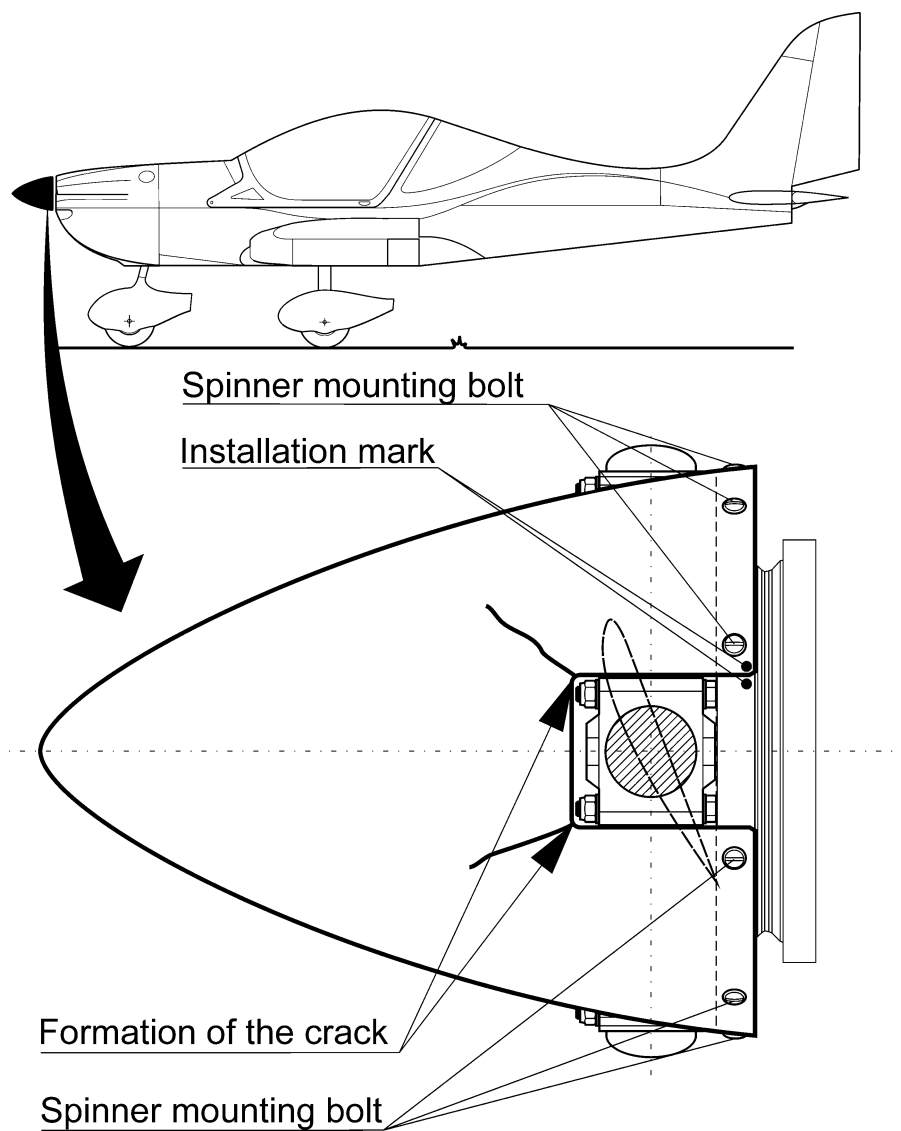


Fig. 1 – Visual examination of the propeller spinner exterior

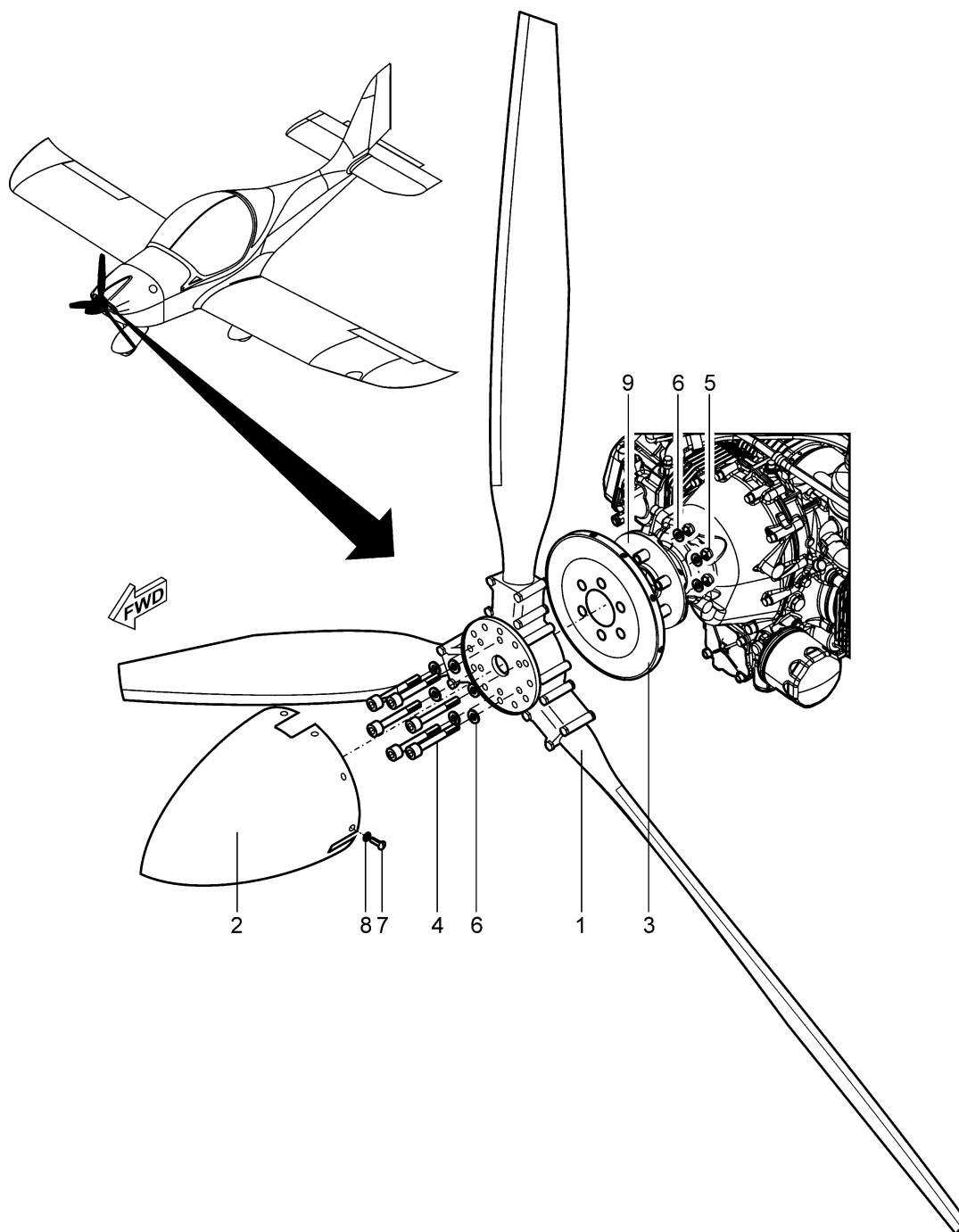


Fig. 2 –WarpDrive HPL propeller – removal / installation

Legend to Fig. 2

- | | | | |
|---|----------------------|---|----------------------|
| 1 | Propeller | 6 | Washer 8,4 (12 pcs.) |
| 2 | Propeller spinner | 7 | Screw M4x16 (9 pcs.) |
| 3 | Backplate | 8 | Washer 4,3 (9 pcs.) |
| 4 | Bolt M8x105 (6 pcs.) | 9 | Engine flange |
| 5 | Nut M8 (6 pcs.) | | |

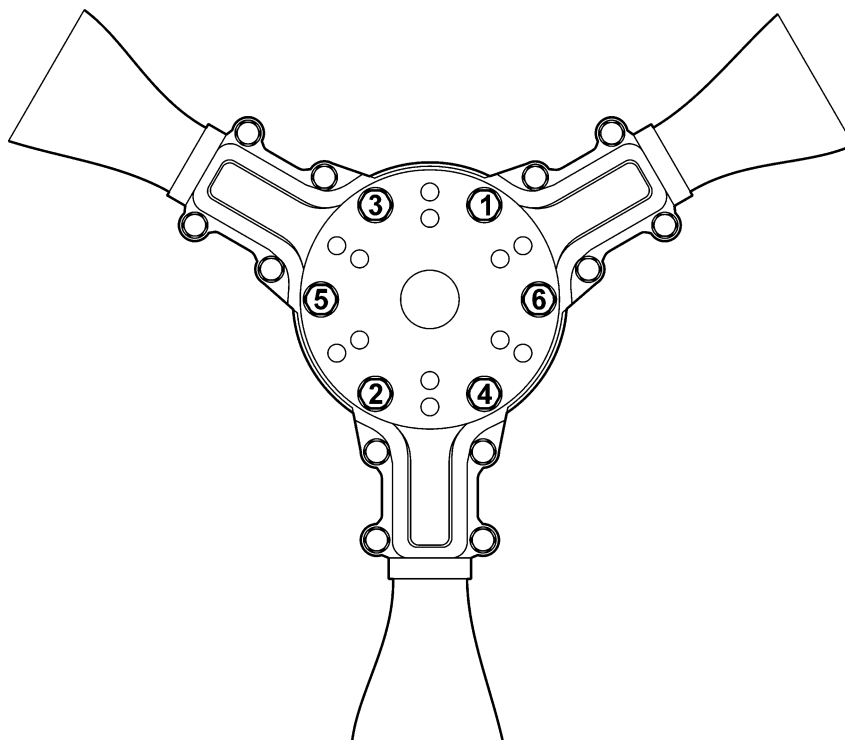


Fig. 3 – Bolt tightening sequence

2 Influence on airplane documentation

2.1 Accompanying technical documentation

Not affected.

2.2 Operation technical documentation

The authorized person will carry out the record in the Aircraft Logbook after bulletin implementation:

- „Removal of the propeller spinner was carried out in accordance with Mandatory Bulletin No. Harmony LSA-027 and SR_SPORTSTAR-045a SR“, and they will add the date and his signature.

and later on, after receiving the spare parts and after their subsequent installation the authorized person will carry out another record

- „Installation of the propeller spinner was carried out in accordance with Mandatory Bulletin No. Harmony LSA-027 and SR_SPORTSTAR-045a SR“, and they will add the date and his signature.

3 Influence on weight and balance

Not affected.