

issues

MANDATORY BULLETIN No. EV97-043a
SPORTSTAR-044a
Harmony LSA-022a
SAFETY RELATED

- 1. CONCERNING TO:** All aircraft: Eurostar EV97
SportStar
Harmony LSA
equipped with brake calipers S5 10-05 01 / 02.
- 2. REASON:** When installing, replacing or repairing the brake caliper bodies, the brake caliper cuff may be fitted incorrectly, which may cause the brake system to malfunction.
- 3. REQUIRED ACTIONS:** 1. Install the brake caliper cuff stops with the new brake caliper cuffs as per the text of the bulletin.
2. Record the bulletin installation of the brake caliper cuff stop according to this bulletin in the Aircraft Logbook.
- 4. LATEST DAY OF THE ACTION:** Within 30 calendar days of the issue of this bulletin or at the next scheduled service inspection, whichever comes first.
- 5. CARRIED OUT BY:** Organization with authorization 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 text of the bulletin.
- 8. WORK PROCEDURE:** In accordance with the text of the bulletin.
- 9. APPENDICES:** None.

Valid from: 29. 05. 2023

**1. Work procedure****1.1 Necessary tools**

Name	Marking	Quantity
Wrench	No. 13	1 pc.
Wrench	No. 21	2 pcs.
Wrench	No. 22	2 pcs.
Hex wrench	No. 5	1 pc.
Hex wrench	No. 6	1 pc.
Flat screwdriver		1 pc.
Nippers		1 pc.
Stainless lockwire	ø 0,8 mm	
Cleaning agent	Benzine	
Lint free cloth		

1.2 Necessary material (LSA-022A)

Name	Marking	Nomencl.	Quantity
Cuff stop		S5 10-06 21	2 pcs.
Wire safety lock		S5 10-13 21	2 pcs.
Cuff 25x7.5	ČSN 02 9272	053831	2 pcs.
Cotter pin 4x40	ISO 1234	040351	2 pcs.
O - ring ø 25x2		059296	2 pcs.
Brake fluid	FMVSS 571.116 DOT 4 or DOT 3	097403	0,5 l
Material shall be supplied by the airplane manufacturer.			

1.3 Work procedure**1.3.1 Removing the brake and disassembling the brake caliper**

- 1.3.1.1 Lift the airplane.
- 1.3.1.2 Remove main wheel fairings.
- 1.3.1.3 Drain the brake fluid.
- 1.3.1.4 Remove the main wheels.
- 1.3.1.5 Disconnect the hose (9, Fig. 1) from the straight hose connection (5) by loosening the nut (11). Blind the hose.
- 1.3.1.6 Straighten one end of the wire safety lock (15) and slide the wire safety lock out.
- 1.3.1.7 Remove the pins (14) of the attachment of the brake shoes (13). Remove the brake caliper from the wheel.
- 1.3.1.8 Slide out the piston (4) along with the cuff (3) from the brake caliper body (1).
- 1.3.1.9 Remove the O-ring (7) from the brake caliper body (1).

1.3.2 Installation of the brake caliper cuff stops.

- 1.3.2.1 Perfectly clean all the parts and check for evident damage, wear and tear or corrosion before installation.
- 1.3.2.2 Insert the correctly oriented cuff stop (2, Fig. 2) and push it all the way to the bottom of brake caliper body (1).

1.3.2.3 Apply brake fluid onto the outer cylindrical circumference of the **new** cuff (3). Insert the **new** cuff (3) into the brake caliper body (1).

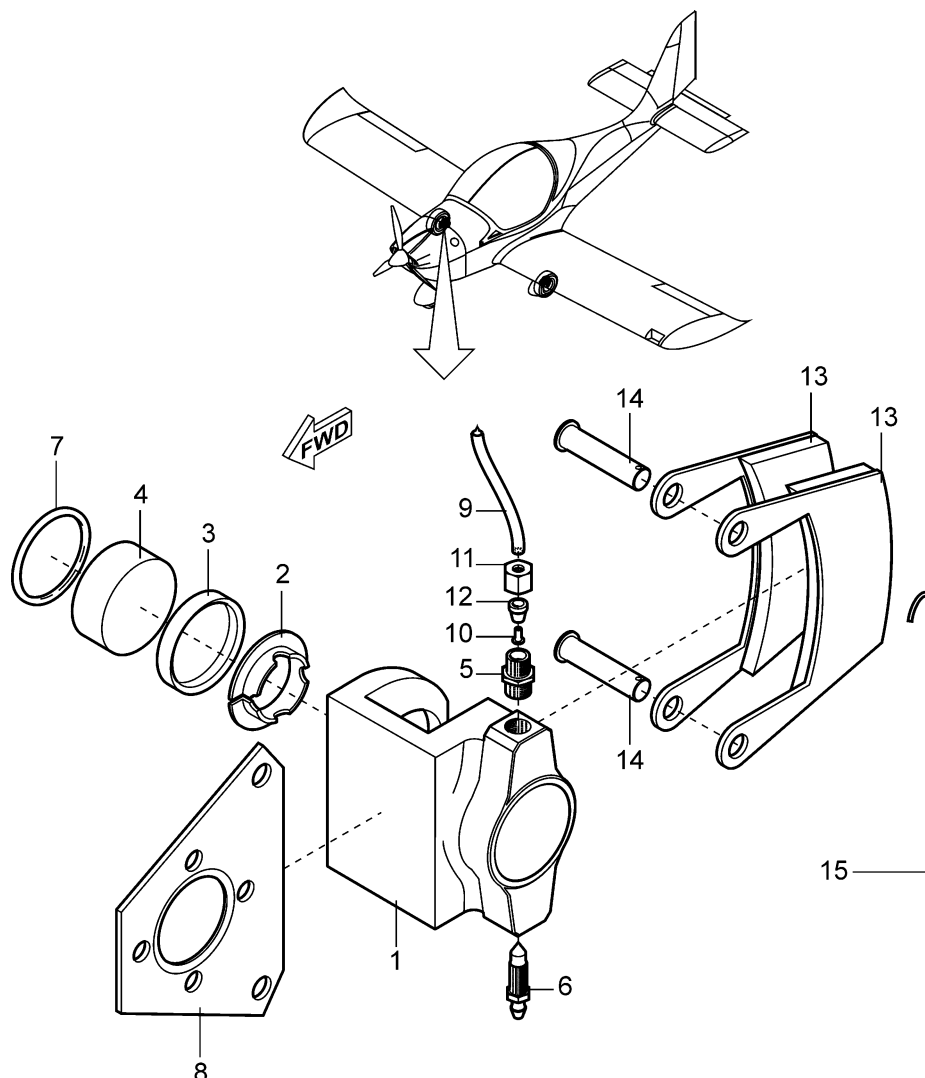


Fig. 1 – S5 10-05 01/02 brake

Legend to Fig. 1

1	Brake caliper body S5 10-05 01/02	9	Brake hose
2	Cuff stop	10	Tube rivet
3	Cuff	11	Swivel nut
4	Piston	12	Sealing cone
5	Straight hose connection	13	Brake shoe
6	Bleeding screw M6x1	14	Pin
7	O-ring $\varnothing 25 \times 2$	15	Wire safety lock
8	Brake holder		

1.3.2.4 Apply brake fluid onto the **new** O-ring (7). Insert the **new** O-ring (7) into the groove in the brake caliper body (1).



- 1.3.2.5 Insert the piston (4) into the brake caliper body (1) without force.
1.3.2.6 Place the brake disc and the brake shoes (13, Fig. 1) into the brake caliper body (1).
1.3.2.7 Place the brake holder (8) between the brake shoes (13) and insert the pins (14) into the corresponding holes.

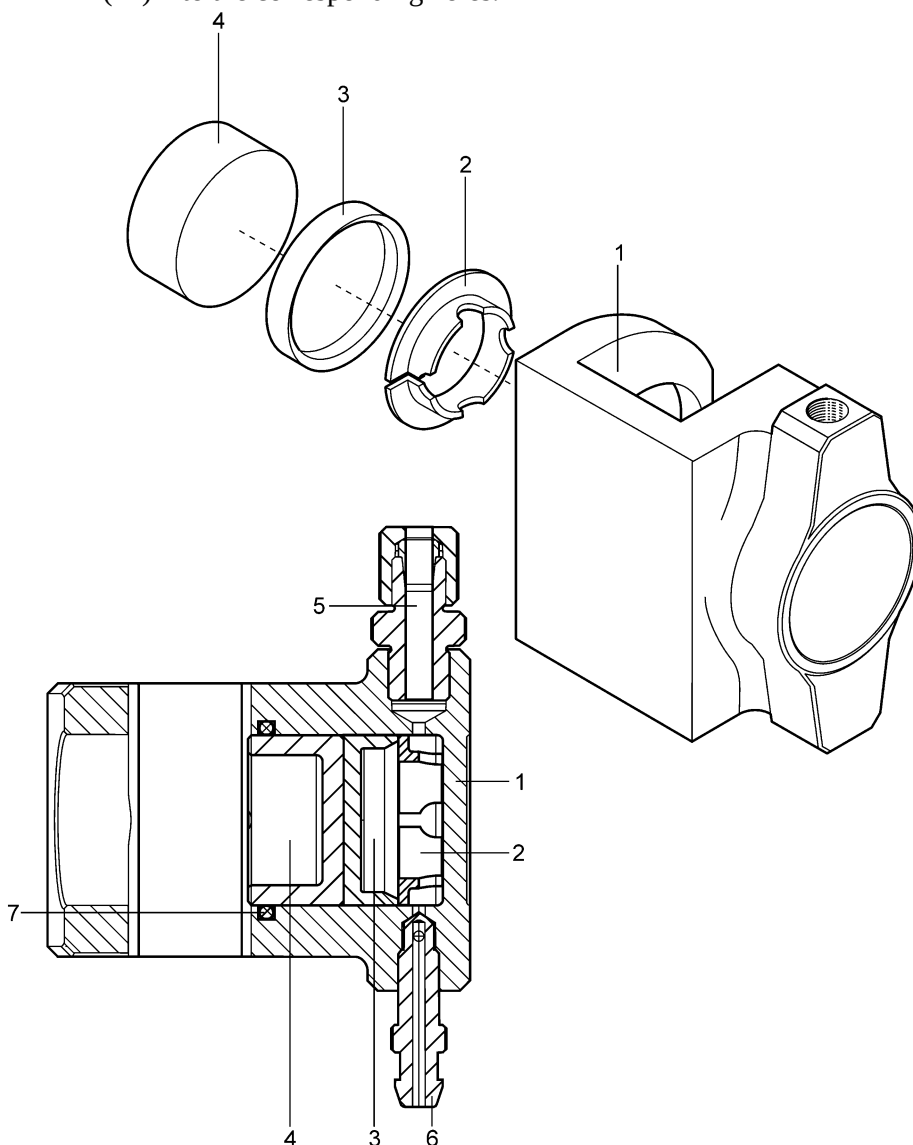


Fig. 2 –Installation of brake caliper cuff stop.

Legend to Fig. 2

- | | | | |
|---|-----------------------------------|---|---------------------------|
| 1 | Brake caliper body S5 10-05 01/02 | 5 | Straight hose connection |
| 2 | Cuff stop | 6 | Bleeding screw M6x1 |
| 3 | Cuff | 7 | O-ring $\varnothing$ 25x2 |
| 4 | Piston | | |

- 1.3.2.8 Insert the **new** wire safety lock (15) into the holes in the pins (14) and secure it by bending it.
1.3.2.9 Slide the brake assembly onto the main wheel axle and install it on the appropriate pins on the main wheel axle.

- 1.3.2.10 Install the main wheels.
- 1.3.2.11 Remove the plug from the hose (9).
- 1.3.2.12 Attach the straight connection (5) to the hose (9) with the pressed tube rivet (10) and the sealing cone (12) using the swivel nut (11).
- 1.3.2.13 Replenish brake fluid, bleed the brake circuit and do the function check and the leakage test.
- 1.3.2.14 Lower the airplane.

2. Influence on airplane documentation

2.1 Accompanying technical documentation

Not affected.

2.2 Operational technical documentation

The authorized person will carry out this record in the Aircraft Logbook after bulletin implementation: „**Installation of brake caliper cuff stops in brake caliper bodies S5 10-05 01 / 02 were carried out according to the Mandatory Bulletin No. Harmony LSA-022a, EV97 -043a, SPORTSTAR-044a** and add the date and his/her signature.

3. Influence on weight and balancing

Not affected.