

MANDATORY BULLETIN No. SAFETY ALERT

EV97-028a SR SPORTSTAR – 030a SR SPORTSTAR MAX PTF-008a SR Harmony LSA-008a SR

1. CONCERNING:

All the aircraft of Eurostar, SportStar and Harmony types.

2. REASON:

Insufficient insertion of the wing flap drive pins into the guides in flaps can cause wear of the guides and subsequent problems in operation. In the extreme case the loss of flaps controllability can occur.

3. MEASURES:

 Check for sufficient insertion of the wing flap drive pins into the guides in flaps.

In the case of insufficient insertion of the pins, immediately contact the manufacturer in order to agree on next procedure.

- Insert sheet 4-B into the Maintenance Manual of the airplane. By this the check for insertion of the wing flap drive pins into flaps is added in the section of Periodical Inspections-Actions.
- 3. Record the bulletin implementation in the Aircraft Logbook.
- LATEST DATE OF ACTION:

Before the next take-off.

5. CARRIED OUT BY:

Airplane owner/ operator.

Eventual repair:

UL: person with appropriate experience

LSA: mechanic or A/P mechanic

6. COSTS COVERED BY:

The airplane owner/operator will cover the costs of condition inspection. The airplane manufacturer will send free of charge the parts necessary for repairing the condition.

NEEDED MATERIAL:

According to the bulletin text.

8. WORK PROCEDURE:

According to the bulletin text.

9. APPENDICES:

7.

Maintenance manual - sheet 4-B.

10. ELABORATED BY:

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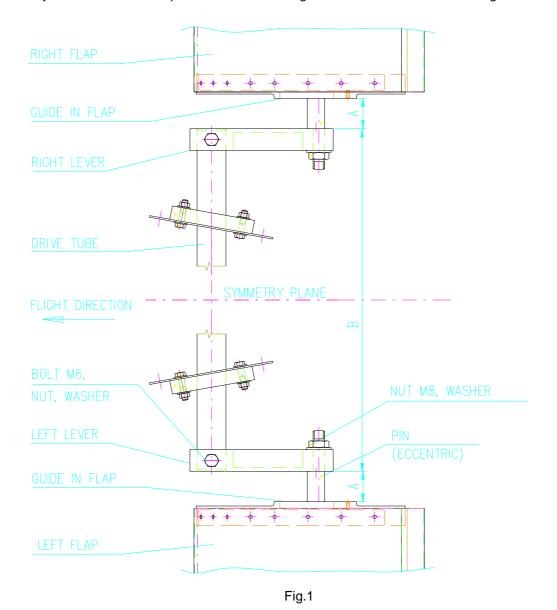
1. Procedure of work

1.1. Check of insertion of the flap drive pins into the flaps.

According to Fig. 1 check the play (clearance) between the drive lever with the pin and the nearest surface of the guide in the flap rib – **dimension A**. Check this play for each flap, always at full deflection of flap 50°.

Insertion of the pins is conforming if dimension A is smaller than 17 mm.

In this case just record the check performance according to the bulletin in the Aircraft Logbook.



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Fig. 2 – Measuring of dimension A at the left flap.

If the measured dimension A is bigger than 17 and smaller than 20 mm, continue according to point 1.2; if the measured dimension A is bigger than 20 mm, continue according to point 1.3.

1.2. Procedure for repair if dimension A is bigger than 17 and smaller than 20 mm

- 1. According to Fig. 3 mark the position of pin angular displacement (the pin is eccentric). Carry out the marking with an indelible felt-tip pen by means of marks located against each other on the pin and on the lever.
- 2. Release the nut securing the pin.
- 3. Unscrew the pin by 1 up to 2 turns. Be careful that the marks on the pin and on the lever are located against each other. By this the play between the pin offset and the lever is increased see Fig. 4. This play mustn't exceed the value of 3 mm.



Fig. 3 – Marking of pin angular displacement position

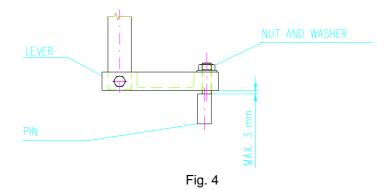
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- 4. Secure the pin in this position by tightening the nut.
- 5. Inform the manufacturer about the carried out repair.
- 6. Record the check performance according to the bulletin in the Aircraft Logbook.



1.3. Procedure for repair if dimension A is bigger than 20 mm.

1.3.1 Measuring of dimension B.

If measured dimension A is bigger than 20 mm, continue by measuring the distance between the outside edges of the left lever and the right lever with the pin – **dimension B** according to Fig. 5, 6, 7.



Fig. 5 – Measuring of dimension B

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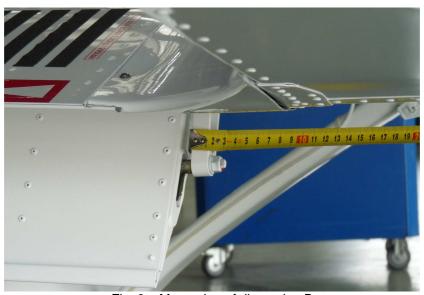


Fig. 6 - Measuring of dimension B



Fig. 7 - Measuring of dimension B

1.3.2 Informing the manufacturer.

Immediately contact the manufacturer and inform him about the measured values of dimensions **A** and **B**. Provide the manufacturer also with the photo of the lever with the pin at the end and inform whether the lever has the stiffening rib on the edge or in the middle.

The manufacturer will subsequently determine the procedure for repairing the nonconforming condition (e.g. by referring to the appropriate point of the bulletin), eventually will send the parts needed for the repair as soon as possible.

Don't continue operation before making repair according to the manufacturer's instructions.

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Fig. 8 – Total view of left flap control

1.3.3 Procedure for repair if the lever has the stiffening rib on the edge.

- 1. Remove the bolt M6 with the nut and the washer fastening the lever with the pin at the end of the flap drive tube.
- 2. By shifting the lever on the tube towards the fuselage, push out the pin from the flap.
- 3. Turn the flap slightly and remove the lever (with the pin) from the tube.
- 4. Mark the position of angular displacement of each pin according to Fig. 3. Carry out marking by means of an indelible felt-tip pen, by marks located against each other on the pin and on the lever.
 - Mark the pin also by position of its location (the pin on the left side by letter L, the pin on the right side by letter R) so that that they cannot be confused.
- 5. Remove the pin from the lever. It will not be reinstalled.
- 6. Mark the new pin by means of an indelible felt-tip pen by the mark located identically with the removed pin. Carry out this marking very accurately.
- 7. Put the new strap, pos. 2, on the new pin, pos. 3, according to Fig. 9.
- 8. Fully screw the pin along with the strap into the lever and set the strap to the appropriate position.
 - In accordance with the holes in the strap make the holes of 5.0-5.1 mm diameter for the bolts, pos. 4, in the lever and the strap. Use the bit of 3.5 mm diameter for drilling the parts together.
 - Connect the strap with the lever by means of bolts, pos. 4, nuts, pos.5 and washers, pos.6.
- 9. Put the original nut with the washer on the pin. Set the pin to position so that it has the mark against the mark on the lever. Secure it in this position by tightening the nut.

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- 10. Put the modified lever onto the tube, turn it to position, shift it towards the flap and insert the pin into the flap.
- 11. Attach the lever to the tube by the original bolt M6 and by the original nut with the washer
- 12. Subsequently record the check performance according to the bulletin in the Aircraft Logbook.

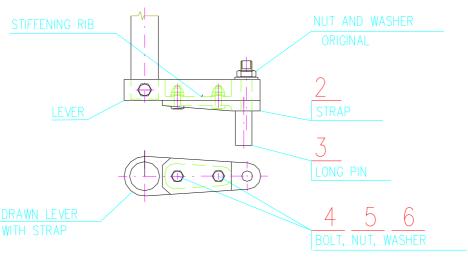


Fig. 9

1.3.4 Procedure for repair if the lever has the stiffening rib in the middle.

- 1. Remove the bolt M6 with the nut and the washer fastening the lever with the pin at the end of the flap drive tube.
- 2. By shifting the lever on the tube towards the fuselage push out the pin from the flap.
- 3. Turn the flap slightly and remove the lever (with the pin) from the tube.
- 4. Mark the position of angular displacement of each pin according to Fig. 3. Carry out marking by means of an indelible felt-tip pen, by marks located against each other on the pin and on the lever.
 - Mark the pin also by position of its location (the pin on the left side by letter L, the pin on the right side by letter R) so that they cannot be confused.
- 5. Remove the pin from the lever. It will not be reinstalled.
- 6. Mark the new pin by means of an indelible felt-tip pen by the mark located identically with the removed pin. Carry out this marking very accurately.
- 7. Put the new strap, pos. 7, on the new pin, pos. 3, according to Fig. 10.
- 8. Fully screw the pin along with the strap into the lever and set the strap to the appropriate position.
 - In accordance with the holes in the strap make the holes of 5.0 5.1 mm diameter for the bolts, pos. 4. Use the bit of 3.5 mm diameter for drilling the parts together. Connect the strap with the lever by means of bolts, pos. 8, with nuts, pos. 5 and washers, pos. 6.
- 9. Put the original nut with the washer on the pin. Set the pin to position so that it has the mark against the mark on the lever. Secure it in this position by tightening the nut.
- 10. Put the modified lever onto the tube, turn it to position, shift it towards the flap and insert the pin into the flap.

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- 11. Attach the lever to the tube by the original bolt M6 and by the original nut with the washer.
- 12. Subsequently record the check performance according to the bulletin in the Aircraft Logbook.

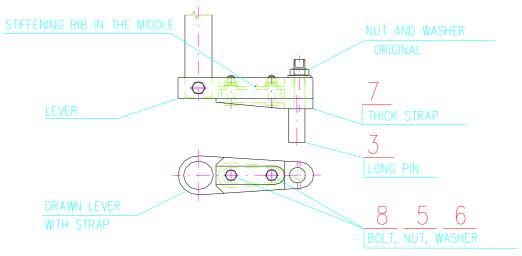


Fig. 10

2. Material necessary for repair according to point 1.3

The indicated quantity is for the repair of the left or right flap drive. For the repair of both flaps the quantity must be doubled. This material is issued by E097Z954 change in the assembly Dwg. No. E4 99-00 01.

Position	Name	Dwg/Standard/	Nomencl.	Quantity	Repair acc. to point
1.	-	-	-	-	-
2.	Strap	E4 99-01 21		1 pc	1.3.3
3.	Long pin	E4 99-02 21		1 pc	1.3.3 and 1.3.4
4.	Bolt	M5x14 ONL 3120.24	019279	2 pcs	1.3.3
5.	Nut	M5 DIN 980V	033855	2 pcs	1.3.3 and 1.3.4
6.	Washer	5 DIN 7980	037153	2 pcs	1.3.3 and 1.3.4
7.	Thick strap	E4 99-03 21		1 pc	1.3.4
8.	Bolt .	M5x20 ONL 3120.14	016030	2 pcs	1.3.4

3. Influence on aircraft documentation

3.1 Accompanying technical documentation

3.1.1 Flight Manual Not affected.

3.1.2 Maintenance Manual

Insert the attached sheet 4-B at the end of chapter 4.

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3.2 Operating technical documents

After implementation of the bulletin, the authorized person will carry out the record in the Aircraft Logbook:

"The check of insertion of flap drive pins into flaps was carried out according to the Mandatory Bulletin No." and will add date and his/her signature.

In the case when the repair was made according to points 1.2. or 1.3 of the bulletin, add this text in the record: "Including the repair according to point..."

4. Influence on weight and balancing

Not affected

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AIRCRAFT MAINTENANCE AND INSPECTION PROCEDURES

Periodical Inspections Checklist

Type – all models:	S/N.:	Hours flown:	Date of inspection:
	Registration:	No. of Takeoffs:	
EV-97 EUROSTAR SPORTSTAR SPORTSTAR MAX PTF HARMONY LSA			

	l —	Inspection ☑ Tick off performed inspection			Inspected
Event description	after the first 25 hrs.	every 50	100	out by:	by:
Flap		1113.	1113.		
Check of sufficient insertion of pins of wing flaps drive into the flaps.					
Check the play between the drive lever with the pin and the nearest area of the guide in the flap rib. Check this play for the left flap and for the right flap, always at the full flap deflection (deflection of 50°). The play mustn't exceed the value of 17 mm. In the case when this value is exceeded, it is necessary to carry out the repair according to an appropriate bulletin (EV97-028a_SR, SPORTSTAR-030a_SR, SPORTSTAR MAX PTF-008a_SR or HARMONY LSA-008a SR).			X		
	Flap Check of sufficient insertion of pins of wing flaps drive into the flaps. Check the play between the drive lever with the pin and the nearest area of the guide in the flap rib. Check this play for the left flap and for the right flap, always at the full flap deflection (deflection of 50°). The play mustn't exceed the value of 17 mm. In the case when this value is exceeded, it is necessary to carry out the repair according to an appropriate bulletin (EV97-028a_SR, SPORTSTAR-030a_SR, SPORTSTAR MAX PTF-008a_SR or	Event description Flap Check of sufficient insertion of pins of wing flaps drive into the flaps. Check the play between the drive lever with the pin and the nearest area of the guide in the flap rib. Check this play for the left flap and for the right flap, always at the full flap deflection (deflection of 50°). The play mustn't exceed the value of 17 mm. In the case when this value is exceeded, it is necessary to carry out the repair according to an appropriate bulletin (EV97-028a_SR, SPORTSTAR-030a_SR, SPORTSTAR MAX PTF-008a_SR or	Event description Event description Flap Check of sufficient insertion of pins of wing flaps drive into the flaps. Check the play between the drive lever with the pin and the nearest area of the guide in the flap rib. Check this play for the left flap and for the right flap, always at the full flap deflection (deflection of 50°). The play mustn't exceed the value of 17 mm. In the case when this value is exceeded, it is necessary to carry out the repair according to an appropriate bulletin (EV97-028a_SR, SPORTSTAR-030a_SR, SPORTSTAR MAX PTF-008a_SR or	Event description Event description Event description Tick off performed inspection after the first every 50 hrs. Flap Check of sufficient insertion of pins of wing flaps drive into the flaps. Check the play between the drive lever with the pin and the nearest area of the guide in the flap rib. Check this play for the left flap and for the right flap, always at the full flap deflection (deflection of 50°). The play mustn't exceed the value of 17 mm. In the case when this value is exceeded, it is necessary to carry out the repair according to an appropriate bulletin (EV97-028a_SR, SPORTSTAR-030a_SR, SPORTSTAR MAX PTF-008a_SR or	Event description Tick off performed inspection after the first 25 hrs. 25 hrs. 50 100 hrs. 25 hrs. 100 hrs. 25 hrs.

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