



MANDATORY BULLETIN

MB number : L 33/008a

Concerning: L 33 S/N 930101 - 930205, 940206 - 940308, 940310 - 940316, 950318 -

950401, 960402 - 960404, 950405 - 950406, 960407 - 960408, 960410

Reason: Exchange of wing main hinges.

To be carried out at the latest by: After Bulletin receipt, at the latest by 1 500 flight

hours.

To be carried out by: Service group LET, a.s. or authorized repaired shop.

Costs to be covered by: Material and work to be covered by the manufacturer, remaining

costs to be covered by the operator.

Necessary material to be supplied by: LET, a.s. Kunovice, Czech Republic.

Bulletin becomes effective: Upon delivery of the Bulletin to operator.

Man-hours: 35 Man-hours.

Total number of sheets: 7

Fridrich

manufacturer

Engineering data contained in this Bulletin is CAI Approved.

Date: January 20, 1998

A. WORK PROCEDURE

Dismantling of the original hinges

- 1. Dismantle the wings from the aeroplane, place them in a support having leading edge downwards.
- 2. Drill out 5 pieces of rivets, 3 mm in dia, from the hinge and spar web using a drill of 3.1 mm in dia.

Dismantle split pins and nuts from the 16 bolts attaching the hinge. Knock bolts out and take the hinge out from the wing.

II. Modification of Right Wing Spar

1. Measure out and scribe a recess of lower flange plate according to Dwg. No.G 095 063 N view P; mill out the flange plate with technical milling cutter in a drilling machine according to the scribing, file it off, clean it with fine emery cloth.

<u>Note</u>: When modificating the flange plate it is possible to place the wing in a support with the trailing edge downwards - don't support it under the aileron!

<u>Notice</u>: The flange plate part parallel to the spar web, web and splices must not be mechanically damaged during the modification.

- 2. Paint the modified spar areas with reactive primer 1 x S 2003/0600 and aluminium paint 1 x C 2001/9110.
- 3. Insert a new hinge, 6008 002N, in the right spar. Modify 4 duraluminium splices by marking (with pencil) and filing so that they fit to the hinge by the hole surface. Check the splices matching by several inserting of the hinge into the spar. Clean the processed area with emery cloth No.400, paint with a paint according to article 2 of this section.

Note: Left wing spar is not being modified.

<u>Notice</u>: The flange plates and spar webs must be not damaged during the splice modification.

III. Mounting of New Hinge G008 001N, G008 002N

1. Clean the spar in area of hinge off all impurities, clean the hinge, insert it in the spar and set it to holes, 6 mm in dia, in the spar by knocking (hinge setting - hole 22H7 in dia on the wing lower part).

<u>Notice</u>: When setting the hinge use wooden mallet or steel hammer through wooden splice. In no case the strokes must be carried out directly by steel hammer or through any steel splice.

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2. Set the spar hinge on the original holes, 6 mm in dia, in the flange plates and splices as accurately as possible using locating pins 5.7, 5.8, 5.9 and 6 mm in dia. Using a grinding machine round off an edge of cylinder part in front of hinge on a half of original bolts, 6 mm in dia. Lock the hinge with these modified bolts, 4 + 4 always in each

flange plate through 1 hole. Start with the first hole from the hinge eye. Lock the bolts with the original nuts having washers, tighten them up. Adhere to the bolt lengths.

IV. Reaming of Holes

1. Set the wing in a support having its trailing edge down - don't support underneath the aileron!

Ream 8 free holes to 6, 6.1 and 6.2 mm in dia by hand or by electrical or air reaming machine, than to 6.3 and 6.4H7 in dia only by hand. When reaming grease reamers with oil diluted with illuminating oil in ratio 2: 1.

If front guide of the first reamer, 6 mm in dia, don't pass through some of holes, first of all ream this hole with the reamer of 5.9 mm in dia.

Clean the reamed holes, check them with inspection pins - pin having 6.42 mm in dia must not pass through the hole. The hole must be smooth without skip transitions between individual materials.

Insert new bolts, 6.4 mm in dia, in holes, lock them with new washers and nuts. Tighten slightly the nuts, do not use split pin. Before the inserting grease slightly the bolt shanks with grease CIATIM 201.

<u>Notice</u>: If some of holes remain without reaming (for aeroplanes of 1st series) it is possible to make rereaming to 6.6 or 6.8 mm in dia after consultation with calculation and design department of production plant.

- 2. Dismantle tack bolts, 6 mm in dia, ream the remaining holes according to article 1 of this section. Clean the spar and hinge off chips and oil.
- 3. Set the wing in the support having its leading edge down, tighten all nuts with moment OF 7^{+1} Nm, then to the hole, lock with split pins.

V. Riveting of Web with Hinge, Matching of Holes

- 1. Drill 5 diameters OF 3.1 mm in the hinge according to holes, 3.1 mm in dia, in the spar web; redrill them to 3.6 mm in dia, deburr them, rivet them with 5 rivets 5DuK 3.5 x 8P (locking heads from the hinge side).
- 2. File metal sheet of the spar web according to hole, 17 mm in dia, in the hinge G008 001N, deburr it. Do not file the hole in the hinge. Clean the spar and hinge, paint the filed areas with $1 \times S = 2003/0600$, $1 \times C = 2004/9110$.

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VI. Modification of Bracket in Fuselage

- 1. Scribe modification of bracket of wing technological pin (bracket having hole 16 mm in dia for locking of left wing when it is in contact with fuselage) according to Dwg. No. G095 063N. Modify the bracket with technical milling cutter in drilling machine according to the scribing, file it, deburr it.
- 2. Measure out and mark hole centre for rivet, drill hole of 3.1 mm in dia, deburr it, rivet with 1 rivet 5 DuK 3 x 9P.
- 3. Clean fillings and chips in hole area of modification by means of vacuum cleaner, paint the filed areas with $1 \times S 2003/0600$, $1 \times C 2001/9110$.

<u>Notice</u>: Prior to beginning of the bracket modification fill all the pervasions in floor with textile rests so that fillings getting in the fuselage structure is prevented.

VII. Wing Contact with Fuselage

- 1. Carry out check contact of the wing with fuselage, lock with new pins upper one 20 mm in dia, lower one 22 mm in dia. Check a clearance between wings and fuselage, set up the possibly increased clearance with thicker distance packing pieces in the fuselage attachment.
- 2. If it is not possible to slide some of the wing pins in, exchange the distance packing pieces on the fuselage right attachment, if need be on the right ones as well as the left ones, for the thinner ones so that there is no clearance between the wings and fuselage during contact and locking of the both pins.
- 3. Rewrite the thickness of the exchanged distance packing pieces in the glider levelling protocol stating date and signature.

VIII. Set and level the glider in accordance with levelling protocol

B. MATERIAL NECESSARY FOR MODIFICATION OF ONE AEROPLANE

Pos. Note	Unit	Quanti	ty Name	Dwg. No.	
1,	pcs	1	Fittings - Eye	G008 001N	
2,	pcs	1	Fittings - Fork	G008 002N	
4.	pcs	32	Split Pin 1.6x14	ČSN 021781.047	3610 1614
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	5.	pcs	32	Circular Packing Piece 6.4	ČSN 021702.14	3555 1006
		•		Circular Packing Piece 6.4		
	6.	pcs	32	Nut M6	ČSN 021413.44	3333 4006
H	7.	pcs	8	Bolt	G095 064N	
		pcs	2	Bolt	G095 076N	
		pcs	2	Bolt	G095 077N	
	8.	pcs	8	Bolt	G095 065N	
		pcs	2	Bolt	G095 078N	
		pcs	2	Bolt	G095 079N	
	9.	pcs	16	Bolt	G095 066N	
		pcs	2	Bolt	G095 080N	
		pcs	2	Bolt	G095 081N	
	10.	pcs	2	Distance Packing Piece	G010 022N	
	11.	pcs	2	Distance Packing Piece	G010 023N	
	12,	pcs	2	Distance Packing Piece	G010 024N	
	13.	pcs	2	Distance Packing Piece	G010 025N	
	14.	pcs	2	Distance Packing Piece	G010 026N	
	15.	pcs	2	Distance Packing Piece	G010 027N	
	16.	pcs	2	Distance Packing Piece	G010 028N	
	17.	pcs	2	Distance Packing Piece	G010 029N	
	18.	pcs	2	Distance Packing Piece	G010 030N	
	19.	pcs	2	Distance Packing Piece	G010 031N	
	20,	pcs	2	Distance Packing Piece	G010 032N	
	21.	pcs	2	Distance Packing Piece	G010 033N	
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701.	pcs	10	Button-head Rivet 3.5x8	ČSN 022302.5	3519 3508
702.	pcs	1	Button-head Rivet 3x9	ČSN 022301.5	3519 0309
710.	pcs	1	Wing Pin	G010 130N	
711.	pcs	1	Wing Ping	G010 131N	
712.	kg	0.010	Paint S2003/0660	ČSN 673903	8256 0366
713.	kg	0.010	Enamel C2001/9110	ČSN 674451	8228 0191
714.	kg	0.010	Instrument Grease CIATIM 201	G 6267-74	8215 1002
715.	m^2	0.250	White "Molino" 140		8300 1393
716.	kg	0.150	Car Motor Oil M9A	ČSN 656638	8214 1009
717.	1	0.075	Illuminating Oil PS2	ČSN 656572	8213 7102
718.	pcs	0.250	Emery Cloth A4 400	KATAL 482	8205 9748
719.	pcs	0.150	Painting Brush 8/75	ČSN 233710	8901 0008

C. ILLUSTRATIONS

Not affected.

D. ADDITIONAL DOCUMENTATION

Drawing G095 063N

E. TOOLING REQUIRED

Drill, 3.1 in dia ČSN 221121 Hand electrical drilling machine Technical conical milling cutter Riveting hammer ARAS COPCO RRH 04P

- * Riveting die 2233/146-3.5-35
- * Riveting die 2233/146-3-35

Vacuum cleaner

Riveting holder (50x50x50)

Round file

Air reamer MR-8U

Ratchet brace 2490/29, /28

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Emery cloth No. 400 Flat file				
Brush, 8 in dia ČSN 233	3710			
Wooden mallet * Technological pins 5	7, 5.8, 5.9, 6 in dia 123-	513-7721		
1.1	1, 133-244-13119	713-7721		
	1, 133-244-13118			
1	133-244-13117 a, 123-244-7703			
I .	i, 123-244-7703			
6.3 in dia	1, 123 244-7713			
1	ı, 123-244-7714 ı, 123-244-7715			
1	i, 123-244-7716			
6.7 in dia	, 123-244-7717			
I .	, 123-244-7718			
* Check pin 6.4 in dia	PN 253340.4			
6.42 in dia				
Reamer wrench				
Spanner 9 x 10 GOLA 6 Torque-limiting wrench				
Spanner BELZER 9 mm				
Steel rule				
Items marked with * wil repair shop which will ca		lider manufacturer by the	authorized	
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F. SPARE PARTS IN O	PERATION			
	hinges and connecting p	ER BULLETIN IMPLEM ins according to MB L 33 ce.		
	1			
Date :		Carried out by:		
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I. ACCOMPANYING	DOCUMENTATION			
Flight Manual - Not a				
Maintenance Manual -	Chapter 2.1 SERVICE	LIFE		
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