



AVIA PROPELLER Ltd.

Beranových 666, 199 00 Praha – Letňany
Czech Republic

Tel. : (+420) 296 336 530
Fax.: (+420) 296 336 519
E-mail.: sales@aviapropeller.cz
http : //www.aviapropeller.cz

MANDATORY BULLETIN

No. V 510/2a

Refers to: All propellers of type version V 510.

Reason: Technical publication revision: „Operator’s, Installation and Maintenance Manual - V 510 Propeller” P/N 068-8912.7.

Measures: The propeller user ensures so that presented manual has been used in effective condition in accordance with List of Effective Pages mentioned in latest revision of the manual.

Revision No.	Publication	Publication No.	Publication date
4	Operator’s, Installation and Maintenance Manual V 510 Propeller	068-8912.7	June 30, 1988
The pages furnished herewith are intended either to replace, add to, or delete pages in the basic manual.			
Previous revisions to this manual		This revision consist of: -	
Bulletin No.	V 510/9b	Bulletin No.	V 510/2a
Revision No.	1	Revision No.	4
Date of new pages issue	20. 3. 1998	Date of new pages issue	10. 3. 2003
List of Amendments	Part 061	List of Amendments	Part 061
List of Effective Pages	Page 1 Pages 1-6	List of Effective Pages	Page 4 Pages 1,2,6
Bulletin No.	V 510/11b		
Revision No.	2		
Date of new pages issue	30. 6. 1999		
List of Amendments	Part 061		
List of Effective Pages	Page 1 Pages 1,2,4,5		
Bulletin No.	V 510/1a		
Revision No.	3		
Date of new pages issue	1. 3. 2001		
List of Amendments	Part 061		
List of Effective Pages	Page 2,3 Pages 1-6		

To be carried out: By the user.

Costs: Covered by user.

Material: New pages enclosed to this bulletin.

Bulletin effective: By the date of approval.

Date: June 11, 2003

Zbyněk Tvrdík
Chief Designer

Igor Brunclík
General Director

From the technical point of view approved by CAA TI CZ.



OPERATOR´S, INSTALLATION AND MAINTENANCE MANUAL

V 510

PROPELLER

P/N 068-8912.7

Edition July 30, 1988

Civil Aviation Authority CZ approved

Revision: June, 2003

Manufacturer:

**Avia Propeller Ltd.
Beranových 666
199 00 Praha - Letňany
Czech Republic**

**Tel.: (+420) 296 336 530
Fax.: (+420) 296 336 519
E-mail: sales@aviapropeller.cz
<http://www.aviapropeller.cz>**



LIST OF AMENDMENTS (Continued)

No. of amend.	Bulletin No.	Date of new pages issue	No. of chapter which the amendment concerns	Date of putting-down Signature
4	V 510/2a	10. 6. 2003	Front page 061 List of Amendments page 4 061 List of Effective Pages page 1,2,6 061-00-10 page 502 061-20-01 page 523	

061

List of Amendments
 Page 4
 10. 6. 2003



LIST OF EFFECTIVE PAGES

<u>CHAPTER/ SECTION</u>	<u>PAGE</u>	<u>DATE</u>	<u>CHAPTER/ SECTION</u>	<u>PAGE</u>	<u>DATE</u>
<u>061 PROPELLER</u>			<u>061-00-00</u>		
Airworthiness			General	1	15. 11. 1999
Limitations	1	1. 03. 2001		2	15. 11. 1999
	2	1. 03. 2001	<u>061-00-10</u>		
	3	1. 03. 2001	<u>PROPELLER</u>		
Airworthiness			<u>UNIT</u>		
Limitations			Contents	1	15. 11. 1999
Valid for				2	31. 03. 1992
Canada Only	1	1. 03. 2001	Specification		
	2	1. 03. 2001	and Function	0-i	15. 11. 1999
	3	1. 03. 2001		1	30. 07. 1988
List of				2	30. 07. 1988
Amendments	1	30. 06. 1999		3	30. 07. 1988
	2	1. 03. 2001		4	30. 07. 1988
	3	1. 03. 2001		5	30. 07. 1988
	4	10. 06. 2003		6	30. 07. 1988
List of				7	30. 07. 1988
Effective	1	10. 06. 2003		8	30. 07. 1988
Pages	2	10. 06. 2003		9	30. 07. 1988
	3	1. 03. 2001		10	30. 07. 1988
	4	1. 03. 2001		11	30. 07. 1988
	5	1. 03. 2001		12	30. 07. 1988
	6	10. 06. 2003		13	30. 07. 1988
Table of				14	30. 07. 1988
Contents	1	15. 11. 1999		15	30. 07. 1988
				16	30. 07. 1988
				17/1	31. 03. 1992
<u>061-00</u>				17/2	31. 03. 1992
<u>PROPELLER</u>				17/3	31. 03. 1992
<u>UNIT</u>				17/4	31. 03. 1992
<u>SYSTEM</u>			Trouble-shooting		
061-00-00				100-i	15. 11. 1999
GENERAL				101	30. 07. 1988
				102	30. 07. 1988
				103	30. 07. 1988
				104	30. 07. 1988



LIST OF EFFECTIVE PAGES (Continued)

<u>CHAPTER/ SECTION</u>	<u>PAGE</u>	<u>DATE</u>	<u>CHAPTER/ SECTION</u>	<u>PAGE</u>	<u>DATE</u>	
061-00-10	105	30. 07. 1988	061-00-10	519	30. 07. 1988	
	106	30. 07. 1988		520	30. 07. 1988	
	107	30. 07. 1988		521	30. 07. 1988	
	108	30. 07. 1988		522	30. 07. 1988	
	109	30. 07. 1988		523	30. 07. 1988	
	110	30. 07. 1988		525	30. 07. 1988	
Servicing in Operation	300-i	15. 11. 1999		526	30. 07. 1988	
	301	30. 07. 1988		527	30. 07. 1988	
	302	20. 03. 1998		531	30. 07. 1988	
	303	30. 07. 1988		532	30. 07. 1988	
	304	30. 07. 1988		533	30. 07. 1988	
	305	30. 07. 1988		534	30. 07. 1988	
	306	30. 07. 1988		537	30. 07. 1988	
	307	30. 07. 1988		538	30. 07. 1988	
	309	30. 07. 1988		539	30. 07. 1988	
	310	30. 07. 1988		540	30. 07. 1988	
	311	30. 07. 1988		541	30. 07. 1988	
	312	30. 07. 1988		542	30. 07. 1988	
	313	30. 07. 1988		543	30. 07. 1988	
	314	30. 07. 1988		545	30. 07. 1988	
	317	30. 07. 1988		546	30. 07. 1988	
	318	30. 07. 1988		547	30. 07. 1988	
	321	30. 07. 1988		548	30. 07. 1988	
322	30. 07. 1988		549	30. 07. 1988		
Adjustment- Testing	500-i	15. 11. 1999		550	30. 07. 1988	
	501	10. 11. 2000		551	30. 07. 1988	
	502	10. 06. 2003		552	30. 07. 1988	
	503	10. 11. 2000		Inspection- Checking	600-i	15. 11. 1999
	504	10. 11. 2000			601	30. 07. 1988
	507	30. 07. 1988			602	30. 07. 1988
	508	20. 03. 1998			603	30. 07. 1988
	509	30. 07. 1988			607	30. 07. 1988
	513	30. 07. 1988			608	30. 07. 1988
	514	30. 07. 1988			609	30. 07. 1988
			611		30. 07. 1988	
			612		30. 07. 1988	

061

List of Effective Pages

Page 2

10. 6. 2003



LIST OF EFFECTIVE PAGES (Continued)

<u>CHAPTER/ SECTION</u>	<u>PAGE</u>	<u>DATE</u>		<u>CHAPTER/ SECTION</u>	<u>PAGE</u>	<u>DATE</u>
061-20-01	514	30. 07. 1988		061-20-01	909	30. 07. 1988
	515	30. 07. 1988			910	30. 07. 1988
	516	30. 07. 1988		061-20-02		
	521	10. 11. 2000		EL-HYD. ACT.		
	522	10. 11. 2000		Specification-	0-i	15. 11. 1999
	523	10. 06. 2003		Function	1	30. 07. 1988
	524	10. 11. 2000			2	30. 07. 1988
Current					3	30. 07. 1988
Repairs	800-i	15. 11. 1999			4	30. 07. 1988
	801	30. 07. 1988		Trouble-shooting		
	803	30. 07. 1988			100-i	15. 11. 1999
	804	30. 07. 1988		Servicing in	101	30. 07. 1988
	807	30. 07. 1988		Operation		
	808	30. 07. 1988			300-i	15. 11. 1999
	811	30. 07. 1988		Installation-	301	30. 07. 1988
	812	30. 07. 1988		Removal		
	813	30. 07. 1988			400-i	15. 11. 1999
	814	30. 07. 1988			401	30. 07. 1988
	817	30. 07. 1988			402	30. 07. 1988
	818	30. 07. 1988			403	30. 07. 1988
	819	30. 07. 1988			404	30. 07. 1988
	823	30. 07. 1988			409	30. 07. 1988
	824	30. 07. 1988			410	30. 07. 1988
	825	30. 07. 1988			411	30. 07. 1988
	827	30. 07. 1988		Current	412	30. 07. 1988
	828	30. 07. 1988		Repairs		
	833	30. 07. 1988			800-i	15. 11. 1999
	834	30. 07. 1988			801	30. 07. 1988
	835	30. 07. 1988			805	30. 07. 1988
Storage				Storage	809	30. 07. 1988
Instructions	900-i	15. 11. 1999		Instructions		
	901	30. 07. 1988			900-i	15. 11. 1999
	902	30. 07. 1988			901	30. 07. 1988
	903	30. 07. 1988			905	30. 07. 1988
	904	30. 07. 1988			909	30. 07. 1988
	905	30. 07. 1988			913	30. 07. 1988
	907	30. 07. 1988			917	30. 07. 1988

061

List of Effective Pages

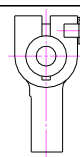
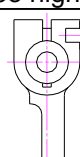
Page 6

10. 6. 2003

V 510
 MAINTENANCE MANUAL
 PROPELLER UNIT

Detail Steps/Work Items and Technical Requirements /TR/	Work to perform if TR are not Met
---------------------------------------------------------	-----------------------------------

Tab. 501 Constant „Z“

Governor type	Lever „Sv“ type	Constant „Z“ (for calculation of dimension „Y“)	Minimum Flight Angle [deg]
LUN 7816, LUN 7816.01	 P/N 1535-002	0,4	14°
		- 0,3	13°
		- 0,9	12°
		- 1,6	11°
		- 2,2	10°
Note: The Y value have to be higher or equal than 1,9 mm for the lever P/N 1535-002			
LUN 7816.02	 P/N 4-ROW.0101-01	3,4	14°
		2,7	13°
		2,1	12°
		1,4	11°
		0,8	10°

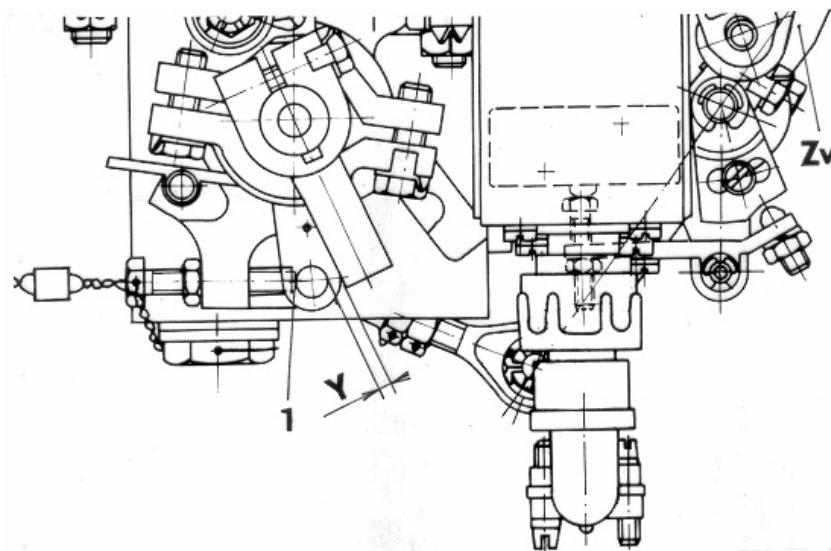


Fig.501 The „Y“ dimension Adjustment

5.5 Adjust the 32 element (length of rod): the clearance between the pin of 28 lever and „Sv“ 33 lever must correspond to the dimension „Y“. Check the clearance using the feeler gauges.

ATTENTION: IS NOT PERMITTED TO TAKE DOWN THE ROD-ELEMENT 32, WHICH IS FITTED BY ONE END TO THE FOLLOWING LEVER AND BY THE OTHER END TO THE “Zv” LEVER

Test Equipment	Tools and Fixtures	Consumable Materials
----------------	--------------------	----------------------

V 510
 MAINTENANCE MANUAL
 LUN 7816-8 PROPELLER SPEED GOVERNOR

Detail Steps/Work Items and Technical Requirements /TR/	Work to perform if TR are not Met
---------------------------------------------------------	-----------------------------------

see state „A“ (Fig. 505).

- 5.3 Test again carefully the command of the microswitch and its correct function e.g. state “A” and “B”.

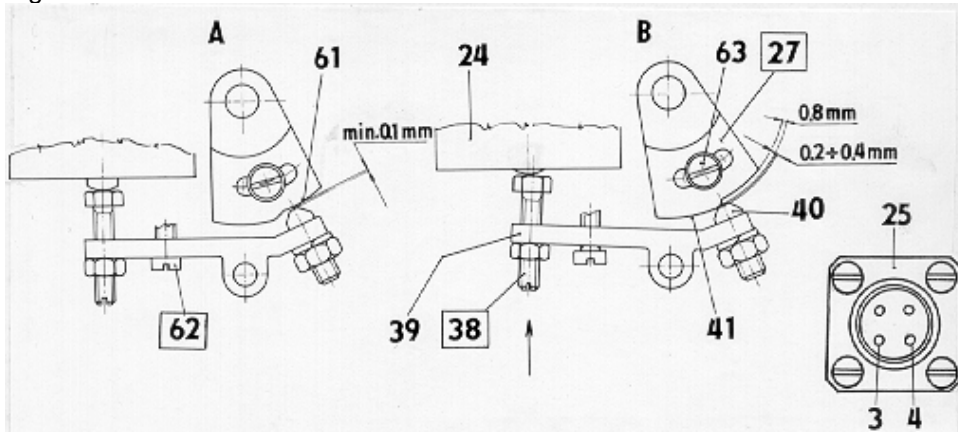
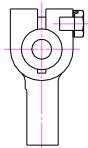
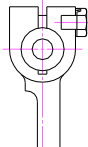


Fig.505 Adjustment of microswitch “V” by elements 38, 62 A 27 A - electrical circuit switched off B - electrical circuit switched on

- 5.4 Finally, adjust the instant of switching on the electrical circuit depending upon the shift out of the BETA carrier ring. Use the following method:
 Setting manually the blades at a suitable AL position shift out the BETA carrier ring 53 (Fig. 405) and adjust it to a distance according to Tab. 501 dependable the Propeller Speed Governor version installed. The instant of the switching on the electrical circuit is to be adjusted only by rotating the element 27 (cam) when releasing screw 63 (Fig. 505).

Tab.501 Adjustment of BETA signing connection

Governor type	Lever „Sv“ type	Blade setting at switching on	Corresponding BETA-ring protrusion	Minimum Flight Angle [deg]
LUN 7816 LUN 7816.01 LUN 7816.02	 P/N 1535-002	7°	13±0,1 mm	14°
		7°	13±0,1 mm	13°
	 P/N 4-ROW-0101-01	5°	14±0,1 mm	12°
		4°	15±0,1 mm	11°
		4°	15±0,1 mm	10°

Test Equipment	Tools and Fixtures	Consumable Materials
----------------	--------------------	----------------------

Effectivity: ALL