

# V 500A PARTS CATALOGUE



PROPELLER  
V 500A, V 500A/1690



AVIA PROPELLER, s.r.o.  
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P/N 060-8922.7

Issue: December 2007  
Revision: February 2009

**CURRENT STATUS OF PAGES AS OF:**

THE ORIGINAL DATE OF THIS PUBLICATION IS DECEMBER 2007  
 INSERT LATEST PAGES DESTROY SUPERSEDED PAGES

TYP: V 500A

PAGE STATUS	PAGE STATUS
<p>Revision No.R-101/07 December 2007                      Pages: all</p> <p>Revision No.R-135/08 December 2008                      Pages: 1, 2, 9</p> <p>Revision No.R-7/09 January 2009                      Pages: 1, 2, 19</p> <p>Revision No.R-23/09 February 2009                      Pages: 1, 2, 19, 29, 31</p>	

## **INTRODUCTION**

This V 500A propeller Parts Catalogue is intended for ordering spare parts. Together with V 500A propeller Operator's, Installation and Maintenance Manual, this catalogue provides a better understanding of the structural design, function and assembly of this propeller.

The spare parts mentioned in this catalogue will enable the customer to perform the repairs according to the Operator's, Installation and Maintenance Manual .

The parts which are recommended for repairs, have the notation "O" in the column "SEP" (separately for sale for each customer). The parts without any notation are not to be ordered.

The tools and accessories used for medium and propeller repairs together with technical documentation of the V 500A propeller are also included in this catalogue.

Orders for spare parts are to be addressed to:

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<http://www.aviapropeller.cz>

When placing an order, the following must be stated:

- 1) propeller S/N, for which the part is needed;
- 2) part S/N and description according to this catalogue;
- 3) number of parts;
- 4) S/N of original part, if it exists.

Example:

- 1) Propeller S/N: 12060800
- 2) Part S/N and description: 053-1000, Propeller blade
- 3) Number of parts: Set of 2 blades
- 4) S/N of original parts: 4388, 4393

AVIA PROPELLER Ltd.

**CONTENT**

<u>Section</u>	<u>Page</u>
Introduction . . . . .	3
Content . . . . .	4
Blank Page . . . . .	5
Propeller Unit VJ 5.500A .. . . .	6
Group: 0. Hydraulic Propeller . . . . .	8
1. Propeller Blade . . . . .	10
2. Propeller Hub . . . . .	12
21. Hub Complete . . . . .	14
21.1 Tube Assy . . . . .	16
22. Blade Bearing . . . . .	18
23. Piston Assy . . . . .	20
7. Transport Box . . . . .	22
8.1. Assembly Tools . . . . .	25
8.2. Accessories . . . . .	26
8.3. Technical and Operational Documentation . . . . .	27
Numerical Index . . . . .	28

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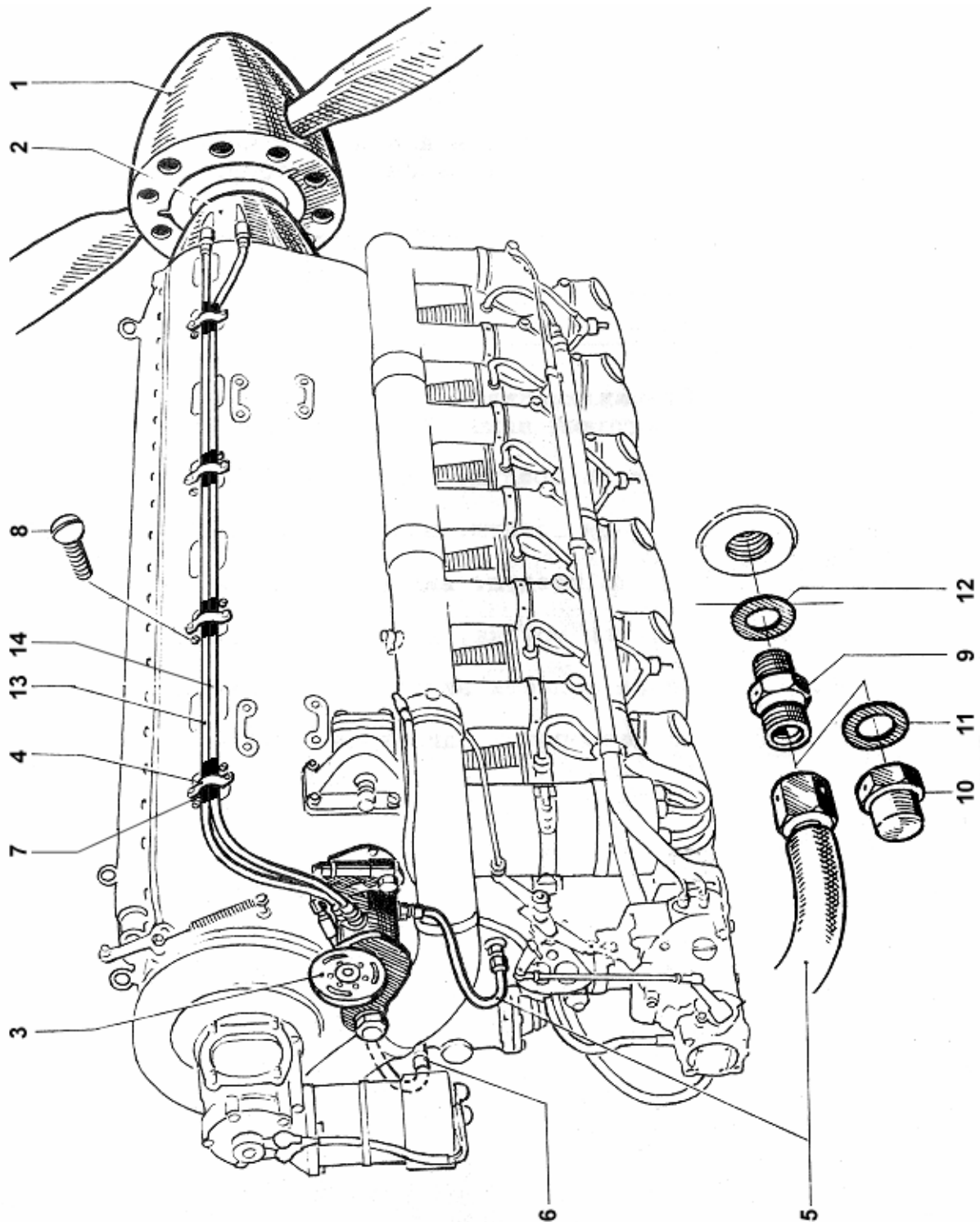


Fig. 1. Propeller Unit VJ 5.500A

**PROPELLER UNIT VJ 5.500A**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
1	060-0000	Hydraulic Propeller	o	1	
1	060-0000.1	Hydraulic Propeller	o		1
2	(P 7900.01)	Pressure Oil Distributor	o	(2)	
2	LUN 7902	Pressure Oil Distributor	o	1	1
3	LUN 7810.01	Propeller Governor	o	1	1
4	VJ 6.506.1	Oil Pipe Console	o	4	3
5	6x200 THT Ostrava	Hose	o	1	1
6	6x470 THT Ostrava	Hose	o	1	1
7	060-0002	Hose	o	8	6
8	M 5x16 ČSN 02 1155.44	Screw	o	8	6
9	6 ČSN 13 7854.41	Socket	o	1	1
10	M 14x1,5 ČSN 13 7968.41	Closing Nut	o	1	1
11	14x18 ČSN 02 9310.3	Sealing Ring	o	1	1
12	12x16 ČSN 02 9310.3	Sealing Ring	o	1	1
13	C 142.6950-04.00	Low Pitch Tube	o	1	
13	060-0010.7	Low Pitch Tube	o		1
14	C 142.6950-05.00	High Pitch Tube	o	1	
14	060-0020.7	Hugh Pitch Tube	o		1
15	Z 43.7800-10.00	Governor Lever	o		1

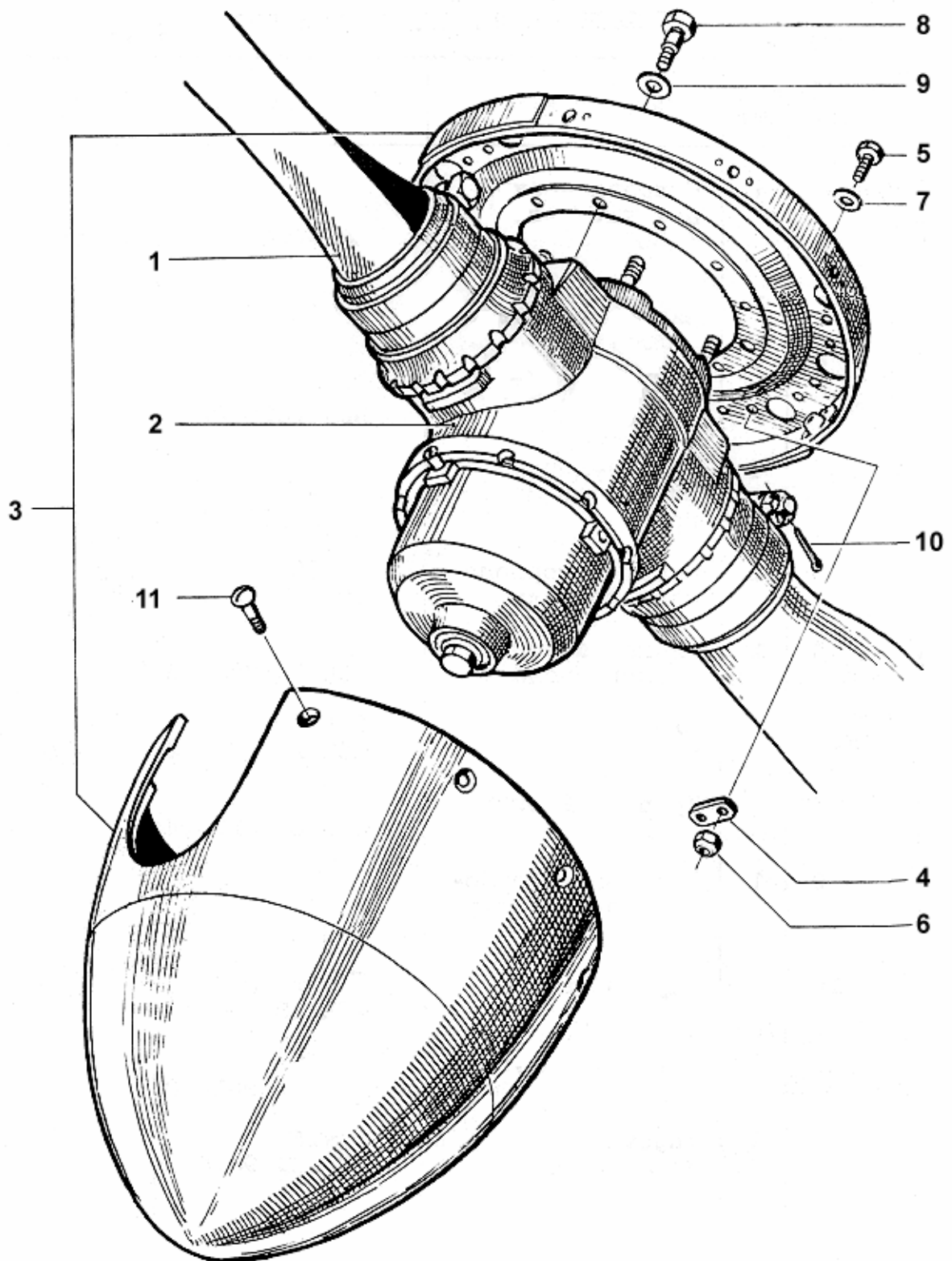


Fig. 2. Hydraulic Propeller



**HYDRAULIC PROPELLER**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
	060-0000	Hydraulic Propeller		1	
	060-0000.1	Hydraulic Propeller			1
1	053-1000/79	Propeller Blade (set)	o	2	
1	V 410-1	Propeller Blade (set)	o		2
2	060-2000	Propeller Hub	o	1	1
3	060-4000	Propeller spinner	o	1	1
4	LN - 6011 LN - 6012 LN - 6013 LN - 6014	Balance Washer	o	A	A
5	M 5x12 ČSN 02 1103.44 M 5x16 ČSN 02 1103.44 M 5x18 ČSN 02 1103.44	Screw	o	A	A
6	M 5 ONL 3240	Selflocking Nut	o	A	A
7	5,3 ČSN 02 1701.14	Washer	o	A	A
8	V 503-0005	Screw	o	4	4
9	V 503-0006	Washer	o	4	4
10	3,2x25 ČSN 02 1781.02	Cotter Pin	o	2	2
11	V 506-4002	Screw	o	10	10

A - as required

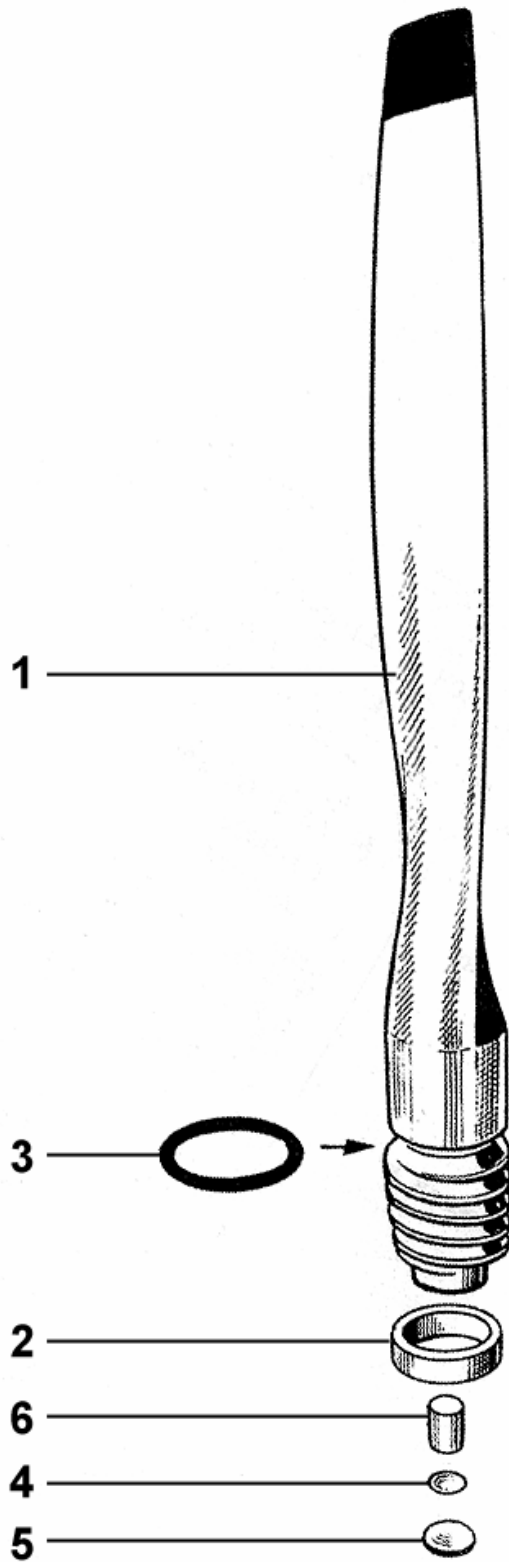


Fig. 3. Propeller Blade

**PROPELLER BLADE**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
	053-1000	Propeller Blade (2pcs in the set)	o	1	
	V 410-1	Propeller Blade (2pcs in the set)	o		1
1	053-1001.7	Propeller Blade Left-hand	o	1	
1	V 410-1001	Propeller Blade Left-hand	o		1
2	V 410-1002	Collar		1	1
3	66x56 ČSN 02 9280	O-Ring	o	1	1
4	15 ČSN 30 1392.2	Sheet Metal Plug		A	A
5	20 ČSN 30 1399.2	Sheet Metal Plug		A	A
6		Lead Ø15x10		A	A

A - as required

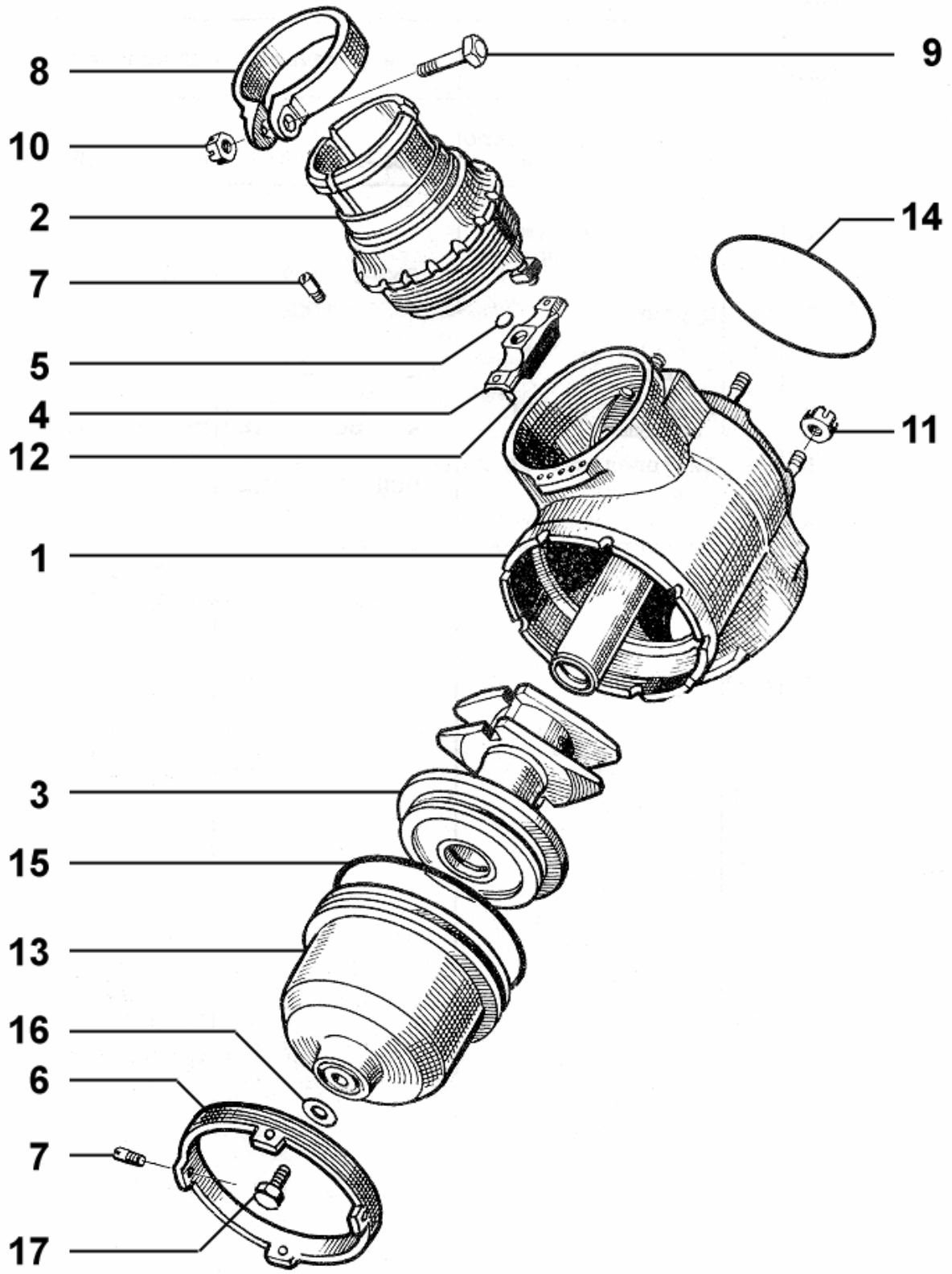


Fig. 4. Propeller Hub

**PROPELLER HUB**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
	060-2000	Propeller Hub		1	1
1	060-2100	Hub Complete		1	1
2	053-2200	Blade Bearing		2	2
3	060-2300	Piston Assy		1	1
4	V 506-2001	Fork Guide		2	2
5	V 506-2002	Support		2	2
6	V 506-2003	Cylinder Screw		1	1
7	V 506-2004	Screw		3	3
8	V 503-2005	Clamp		2	2
9	V 506-2006	Clamp Bolt		2	2
10	V 506-2007	Clamp Nut		2	2
11	060-0001	Nut		6	6
12	4x10 ČSN 02 2150.1	Pin		4	4
13	060-2001	Cylinder		1	1
14	V 415.1-10.06.1	O-Ring		1	1
15	V 506-3204	O-Ring		1	1
16	10x14 ČSN 02 9310.3	Sealing Ring		1	1
17	M 10x1 ONL 3818.3	Plug		1	1

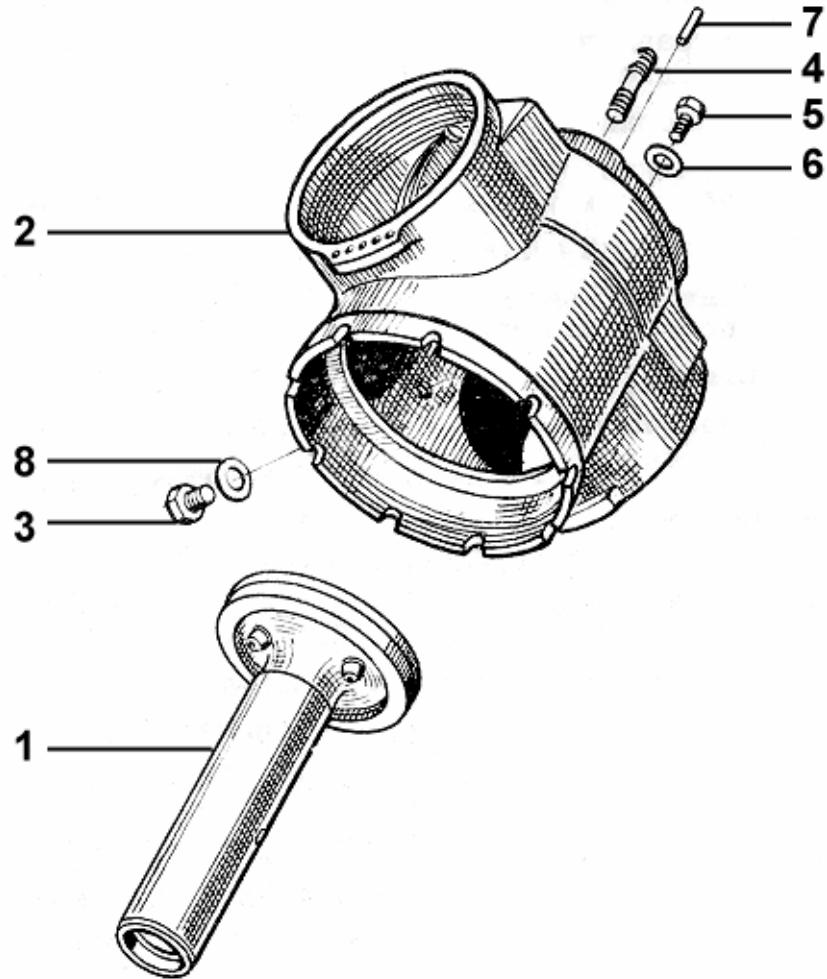


Fig. 5. Hub Complete

**HUB COMPLETE**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
	060-2100	Hub Complete		1	1
1	060-2110	Tube Assy		1	1
2	V 503-2101	Propeller hub		1	1
3	V 503-2103	Closing Screw		1	1
4	060-2102	Screw		6	6
5	M 6x16 ČSN 02 1208.54	Screw		6	6
6	ISO7090-6-200HV-B4L	Washer		6	6
7	ISO2338-4m6x10-St	Pin		1	1
8	10x14 ČSN 02 9310.3	Sealing Ring		1	1

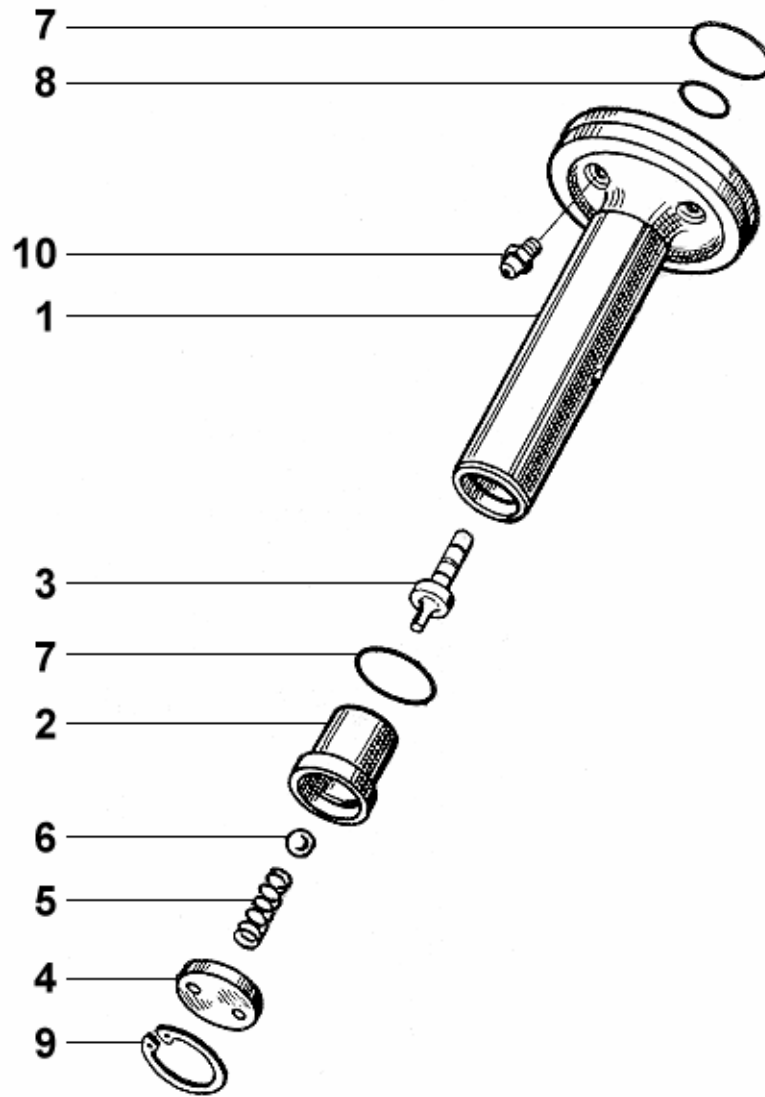


Fig. 6. Tube Assy



**TUBE ASSY**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
	060-2110	Tube Assy		1	1
1	060-2120	Tube		1	1
2	060-2111	Valve Body		1	1
3	060-2112	Slide Valve		1	1
4	060-2113	Support		1	1
5	V 506-3004	Spring		1	1
6	ISO3290-10-G10	Ball		1	1
7	LN-6054	O-Ring		2	2
8	LN-6057	O-Ring		1	1
9	25 ČSN 02 2931	Retaining Ring		1	1
10	M6 ČSN 23 1476	Lubricating Plug		3	3

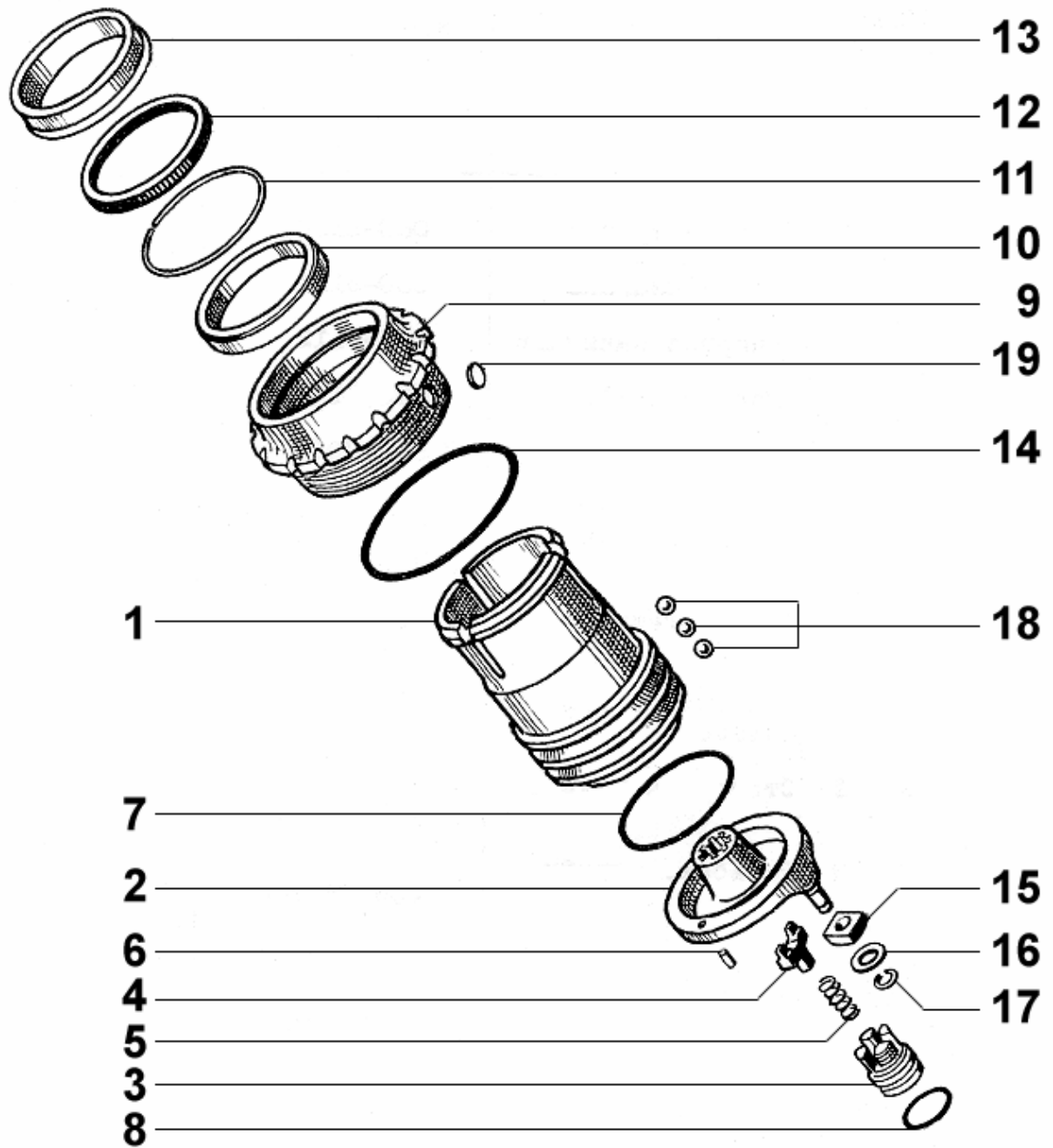


Fig. 7. Blade Bearing

**BLADE BEARING**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
	053-2200	Blade Bearing		1	1
	V 506-2210	Blade Bushing Assy		1	1
1	V 410-2211	Blade Bushing		1	1
or	300-194	Blade Bushing		1	1
2	V 506-2212 *	Flange		1	1
3	V 506-2213	Adjusting Screw		1	1
4	V 506-2214	Safety Lock		1	1
5	V 506-2215	Spring		1	1
6	V 506-2216 *	Pin		3	3
7	60,05x1,78-NBR70 *	O-Ring		1	1
8	17x2-NBR70	O-Ring		1	1
	053-2220	Outer Ring Assy		1	1
9	053-2221	Outer Ring		1	1
10	053-2222	Insert		1	1
11	90 ČSN 02 2925.2	Snap Ring		1	1
12	000-6087	Sealing		1	1
13	053-2201	Ring		1	1
14	106x2-NBR70	O-Ring		1	1
15	V 506-2204	Pitch Change Block		1	1
16	V 506-2205	Washer		1	1
17	DIN7993A-12	Snap Ring		1	1
18	ISO3290-7,938-G10	Ball		105	105
19	DIN470-10	Sheet Metal Plug		1	1

\* Only with blade bushing No.V410-2211

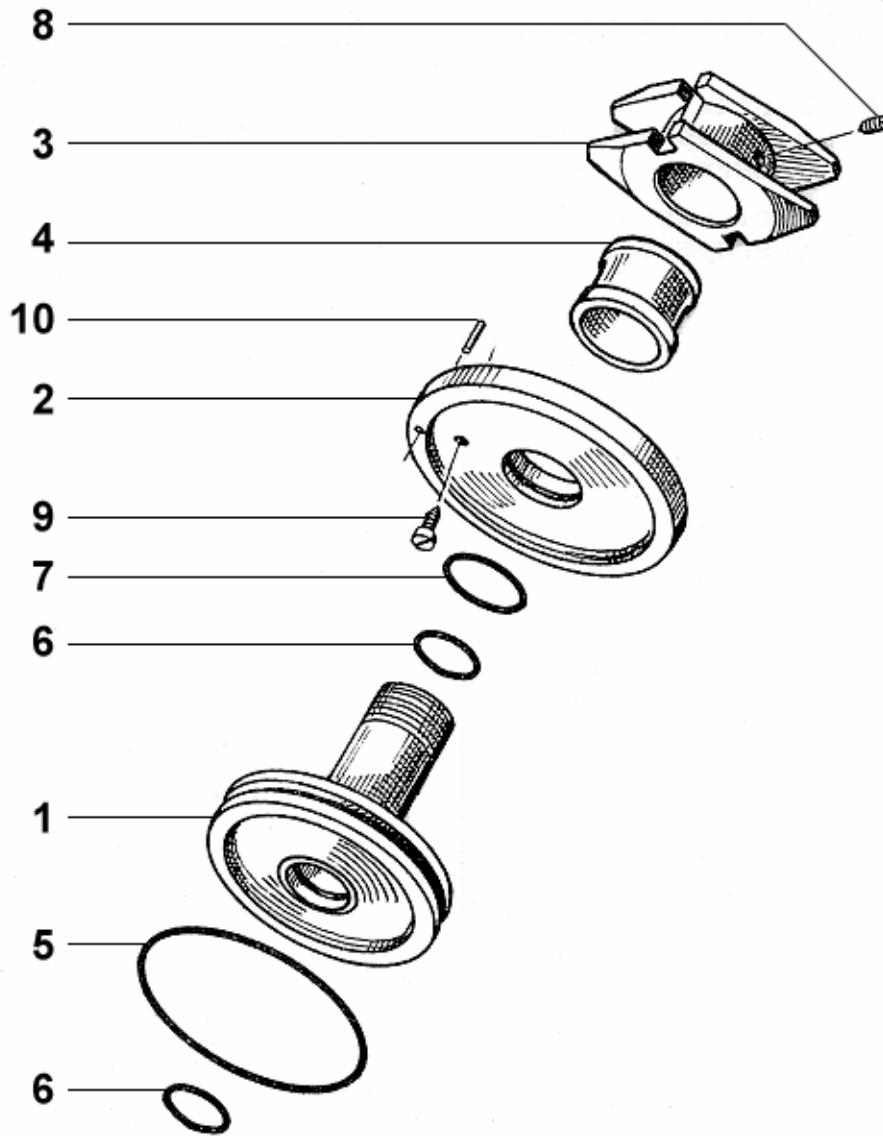


Fig. 8. Piston Assy

**PISTON ASSY**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
	060-2300	Piston Assy		1	1
1	060-2304	Piston		1	1
2	060-2301	Front Plate		1	1
3	060-2302	Fork		1	1
4	060-2303	Stop		1	1
5	V 506-3106	O-Ring		1	1
6	V 510-2108	O-Ring		2	2
7	V 750-RU-090	O-Ring		1	1
8	ISO7434-M5x8-14H	Setscrew		1	1
9	V 506-3108	Nozzle		1	1
10	ISO2338-4m6x12-St	Pin		1	1

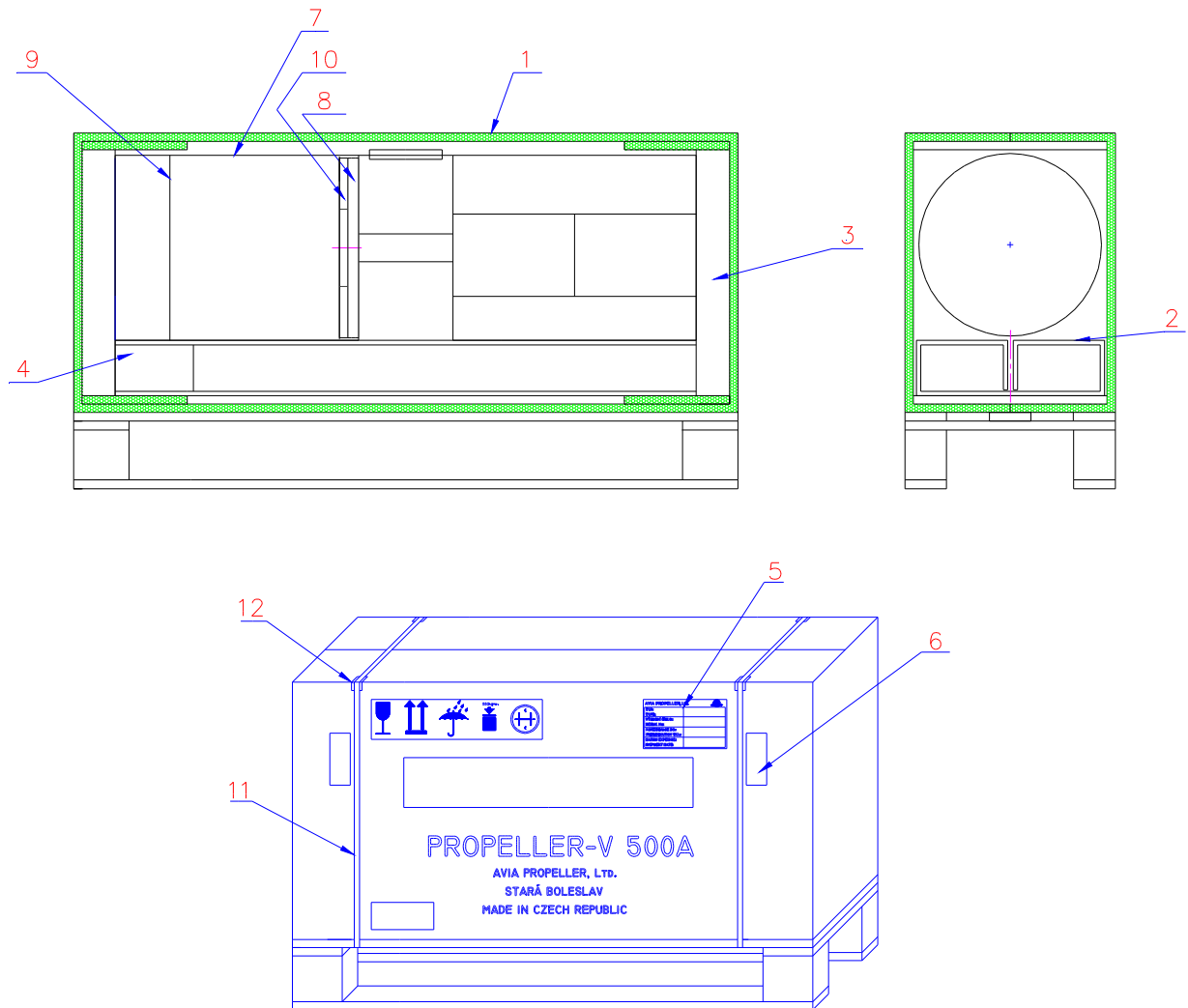


Fig. 9. Transport Box

**TRANSPORT BOX**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
	060-7100	Transport Box		1	1
1	060-7110	Box with Pallet		1	1
2	060-7101	Boards for the Blades		1	1
3	060-7102	Side Panel		2	2
4	060-7103	Blade Tips Protection		2	2
5	000-6146	Label		1	1
6		Handling Clips		4	4
7	V 410-7412	Box for the Propeller Hub		2	2
8	V 410-7413	Protective Frame of the Hub		1	1
9	V 410-7414	Centre Frame of the Spinner		1	1
10	V 503-7101	Frame		1	1
11		Tightening Tape		3	3
12		Protective Element		6	6

UNDONE



**ASSEMBLY TOOLS**

Table contains tools for maintenance of the propellers V500A in service.

Perform the maintenance and repairs according to operation manual to maintain the propeller airworthiness.


Accessories for additional maintenance are stated under group 8.2.

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/1690
1	V 506-7210	Wrench for Cylinder Screw		1	1
2	V 410-7204	Wrench for Clamp Bolt		1	1
3	V 506-7240	Wrench for Holding the Oil Distributor Flange		1	1
4	218-8110	Wrench for flange Nut		1	1
5	V 506-7250	Propeller Flange Puller		1	1
6	V 506-7206	Wrench for Governor mounting Nuts		1	1
7	218-8107	Wrench for Oil Distributor Nut		1	1
8	060-7203	Wrench for Propeller Mounting Nuts		1	1
9	V 506-7270	Mounting Tubes		2	2
10	V 410-7205	Mounting Tubes (Extension)		2	2
11	1,2x8x175 DIN 5265 Narex	Screwdriver for spinner Screws		1	1
12	060-7201	Puller		1	1
13	V 506-7300A	Tool Bag		1	1
14	TONA „UMO 20“	Torque Wrench		1	1
15	8 ČSN 23 0710	Wrench for Torque Wrench Adjustment		1	1
16	4 ČSN 23 0710	Wrench for adapters of torque wrench		1	1
17	073-7403	Extension		1	1
18	218-8115	for Installation of Bushing		2	2

**ACCESSORIES**

Cons. No.	Part number	Description	SEP	Quantity (pcs)	
				V 500A	V 500A/ 1690
1	073-7401	Wrench for preloading of blade bearing		1	1
2	073-7402	Adapter		1	1
3	053-7210	Wrench for Outer Ring		1	1
4	13-81-1913	Clamp Remover		1	1
5	TONA „UMO 10“	Torque Wrench		1	1
6	8 ČSN 23 0710	Wrench for Torque Wrench Adjustment		1	1
7	4 ČSN 23 0710	Wrench for adapters of torque wrench		1	1

**TECHNICAL AND OPERATIONAL DOCUMENTATION**

Cons. No.	Description	Illustration	No.
1	Operation, Installation and Maintenance Manual		060-8911.7 CZ 060-8912.7 ENG
2	Parts Catalogue		060-8921.7 CZ 060-8922.7 ENG

**NUMERICAL INDEX**

**INDEX OF SPARE PARTS ACCORDING TO PART NUMBERS**

Part Number	Number of Group	Ref. Number
000-6087	22	12
	8	6
6146	7	5
053-1000/79	0	1
	1	1-6
1001.7	1	1
2200	2	2
	22	1-8
2201	22	13
2220	22	9-19
2221	22	9
2222	22	10
7210	8.2	3
060-0000	—	1
	0	1-11
0000.1	—	1
	0	1-11
0001	2	11
	8	1
0002	—	7
0010.7	—	13
0020.7	—	14
2000	0	2
	2	1-17
2001	2	13
2100	2	1
	21	1-8
2102	21	4
2110	21	1
	21.1	1-10
2111	21.1	2
2112	21.1	3
2113	21.1	4
2120	21.1	1
2300	2	3
	23	1-10
2301	23	2
2302	23	3
2303	23	4
2304	23	1
4000	0	3
7100	7	1-12

Part Number	Number of Group	Ref. Number
060-7101	7	2
7102	7	3
7103	7	4
7110	7	1
7201	8.1	12
7203	8.1	8
8911.7	8.3	1
8912.7	8.3	1
8921.7	8.3	2
073-7401	8.2	1
7402	8.2	2
7403	8.1	17
218-8107	8.1	7
8110	8.1	4
8115	8.1	18
LN - 6011	0	4
6012	0	4
6013	0	4
6014	0	4
6054	21.1	7
60,05x1,78-NBR70	22	7
6057	21.1	8
17x2-NBR70	22	8
V 410 - 1	0	1
	1	1-6
1001	1	1
1002	1	2
2211	22	1
7204	8.1	2
7205	8.1	10
7412	7	7
7413	7	8
7414	7	9
V 415.1-10.06.1	2	14
	8	13
106x2-NBR70	22	14
V 503-0005	0	8
0006	0	9

Part Number	Number of Group	Ref. Number
V 503-2005	2	8
2101	21	2
2103	21	3
7101	7	10
V 506-2001	2	4
2002	2	5
2003	2	6
2004	2	7
2006	2	9
	8	9
2007	2	10
	8	10
2204	22	15
2205	22	16
2210	22	1-8
2212	22	2
2213	22	3
2214	22	4
2215	22	5
2216	22	6
3004	21.1	5
3106	23	5
	8	4
3108	23	9
3204	2	15
	8	3
4002	0	11
	8	2
7206	8.1	6
7210	8.1	1
7240	8.1	3
7250	8.1	5
7270	8.1	9
7300A	8.1	13
V 510-2108	23	6
	8	5
V 750-RU-090	23	7
VJ 6.506.1	—	4
ČSN 02 1103.44		
M 5x12	0	5
M 5x16	0	5

Part Number	Number of Group	Ref. Number
ČSN 02 1103.44		
M 5x18	0	5
ČSN 02 1155.44		
M 5x16	—	8
ISO7434-14H		
M 5x8	23	8
ČSN 02 1208.54		
M 6x16	21	5
ČSN 02 1701.14		
5,3	0	7
ISO7090-200HV-B4L		
6	21	6
ČSN 02 1781.02		
3,2x25	0	10
ČSN 02 2150.1		
4x10	2	12
ISO2338-4m6x10-St	21	7
ISO2338-4m6x12-St	23	10
DIN7993A		
12	22	17
ČSN 02 2925.2		
90	22	11
ČSN 02 2931		
25	21.1	9
ISO3290-G10		
7,938	22	18
10	21.1	6
ČSN 23 1476		
M 6	21.1	10
ČSN 02 9280		
66x56	1	3

Part Number	Number of Group	Ref. Number
ČSN 02 9310.3 10x14	2	16
	21	8
	8	7
12x16	—	12
14x18	—	11
ČSN 13 7854.41 6	—	9
ČSN 13 7968.41 M 14x1,5	—	10
ČSN 23 0710 4	8.1	16
	8.2	7
8	8.1	15
	8.2	6
ČSN 30 1392.2 15	1	4
ČSN 30 1399.2 20	1	5
DIN470-10	22	19
ČSN 42 6403 Ø 0,8 - 2000mm	8	12
LUN 7810.01	—	3
LUN 7902	—	2
MON 1818.2 6x200	—	
6x470	—	
ONL 3240 M 5	0	6
ONL 3818.3 M 10x1	2	17

Part Number	Number of Group	Ref. Number
ISO 1234-St-B4P 3,2x25	8	11
DIN 5265 Narex 1,2x8x175	8.1	11
PN 02 9280.2 66x56	8	8
P 7900.01	—	2
TONA „UMO 10“	8.2	5
TONA „UMO 20“	8.1	14
13-81-1913	8.2	4
C142.6950-04.00	—	13
C142.6950-05.00	—	14
Z 43.7800-10.00	—	15
300-194	22	1