



OIL SOLUTIONS

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**"For All Your Hydraulic Needs"**

# **Repair Instruction**

## **Orbital Motor OMSU**



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# Chapter

# 1

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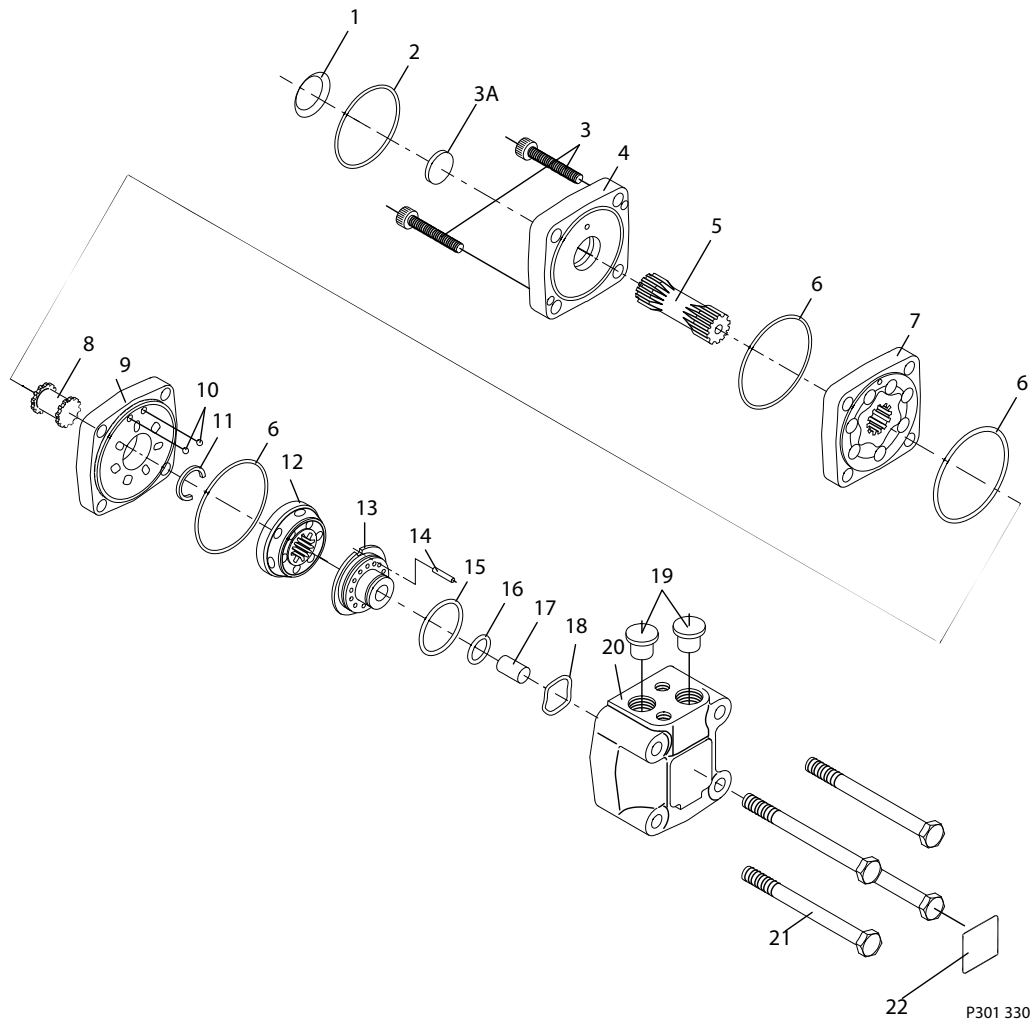
## Exploded view OMSU

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### Topics:

- [Exploded view OMSU Series 3](#)

# Exploded view OMSU Series 3



P301 330

Tightening torque: 

Item 3: 5 N•m [45 lbf•in]

Item 21: 65 - 70 N•m [575 - 620 lbf•in]

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# Chapter

# 2

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## Spare parts list

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Topics:

- [Spare parts list](#)

## Spare parts list

Pos.	Spare parts		Code no.	Numbers per motor
1	Seal ring		633B9023	1
2	O-ring	86 x 2 mm NBR	633B1145	1
3	Screw M5	OMSU 80 L = 40 mm	681X1511	2
		OMSU 100 L = 45 mm	681X1512	2
		OMSU 125 L = 50 mm	681X1702	2
		OMSU 160 L = 55 mm	681X9282	2
		OMSU 200 L = 60 mm	681X1703	2
3a	Spacer	Ø21 W = 8 mm	11086108	1
4	Intermediate plate spec.		11083105	1
5	Cardan shaft	OMS 80 L = 70 mm	11075495	1
		OMS 100 L = 73 mm	11077519	1
		OMS 125 L = 78 mm	11077838	1
		OMS 160 L = 84 mm	11075528	1
		OMS 200 L = 91 mm	11077921	1
6	O-Ring	82.5 X 2 mm NBR	633B1431	3
7	Gearwheel set	OMSU 80 W = 14 mm	151F1091	1
		OMSU 100 W = 17 mm	151F1092	1
		OMSU 125 W = 22 mm	151F1093	1
		OMSU 160 W = 28 mm	151F1094	1
		OMSU 200 W = 35 mm	151F1095	1
8	Valve drive		11030924	1
9	Channel plate		151F1822	1
10	Check valve ball	Ø 4.8 mm [3/16 in]	689X1005	2
11	Stop ring	Only OMSU 200	151F1542	1
12	Disc valve		151F1022	1

Pos.	Spare parts			Code no.	Numbers per motor
13	Balance plate			151F1738	1
14	Guide pin	∅ 5.0 mm	L = 14 mm	682L9105	1
15	O-Ring	45 X 2 mm NBR		633B1429	1
16	O-Ring	24 X 2 mm NBR		633B1428	1
17	Spacer			151F1449	1
18	Spring washer			684X0097	1
19	Seal plug	G 1/2"		633X0074	2
20	Valve housing			151F1803	1
21	Screw M10	OMSU 80	L = 120 mm	681X1349	4
		OMSU 100	L = 125 mm	681X0338	4
		OMSU 125	L = 130 mm	681X1350	4
		OMSU 160	L = 140 mm	681X1352	4
		OMSU 200	L = 140 mm	681X1352	4
22	Label				
A*	Set of seals items 1, 6, 15, 16			151F0103	
B*	Set of seals items 1, 2			151F1058	

\* By service please order both set of seals



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# Chapter

# 3

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## Dismantling - assembling

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**Topics:**

- *Dismantling*
  - *Assembling*
-

## Dismantling

Item	Part to remove	
21	Loosen M10 screw and remove OMSU-motor from counterpart	
3A	Remove spacer in counterpart	
3	Screw M5	
20	Valve housing	
12	Disc valve	
11	Stop ring	Only OMSU 200
9, 10	Channel plate with check ball	
8	Valve drive	
7	Gearwheel set	
5	Cardan shaft	
13	Balance plate	
17	Spacer	
18	Spring washer	

After dismantling, clean all parts in low aromatic kerosene.

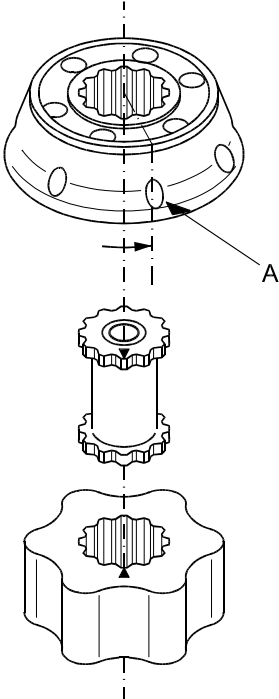
Examine the parts and exchange them if necessary

Renew all O-rings

Immediately before assembly, lubricate each part with hydraulic oil and grease rubber parts with vaseline.

## Assembling

Item	Part to assemble
	Use service tool 151M6543
4	Intermediate plate
6	O-ring
7	Gearwheel set
5	Cardan shaft
6	O-ring

Item	Part to assemble	
8	Valve drive  Mark the valve drive	 <p data-bbox="1101 1035 1187 1056">151-922.10</p>
9	Channel plate	
10	Ball X 2	
11	Stop ring	Only OMSU 200
12	Disc valve	See drawing for commutation of OMSU
17	Spacer into endcover	
18	Spring washer into endcover	
13, 15, 17	Balance plate with O-rings	
20	Endcover	
3	Screw M5	Tightening torque: 5 Nm
1, 2	Seal ring and O-ring	
3A	Mount spacer in counterpart  Mount OMSU-motor in counterpart	
21	M10 screw	Tightening torque: 65 - 70 Nm



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# Chapter

# 4

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## Assembling - special tools

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### Topics:

- *Special tools*
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## Special tools

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A: Holding tool for OMSU



F301 784

**Figure 1: A**