

EC209 - Rotator frame

COVERSHEET

Planned document changes:

Briefly:

POS.6 will be replaced by 1077029. POS.26 will be replaced by 1078840.

POS.7 updated to 1079941.

POS.28 against frame replaced by 711403.

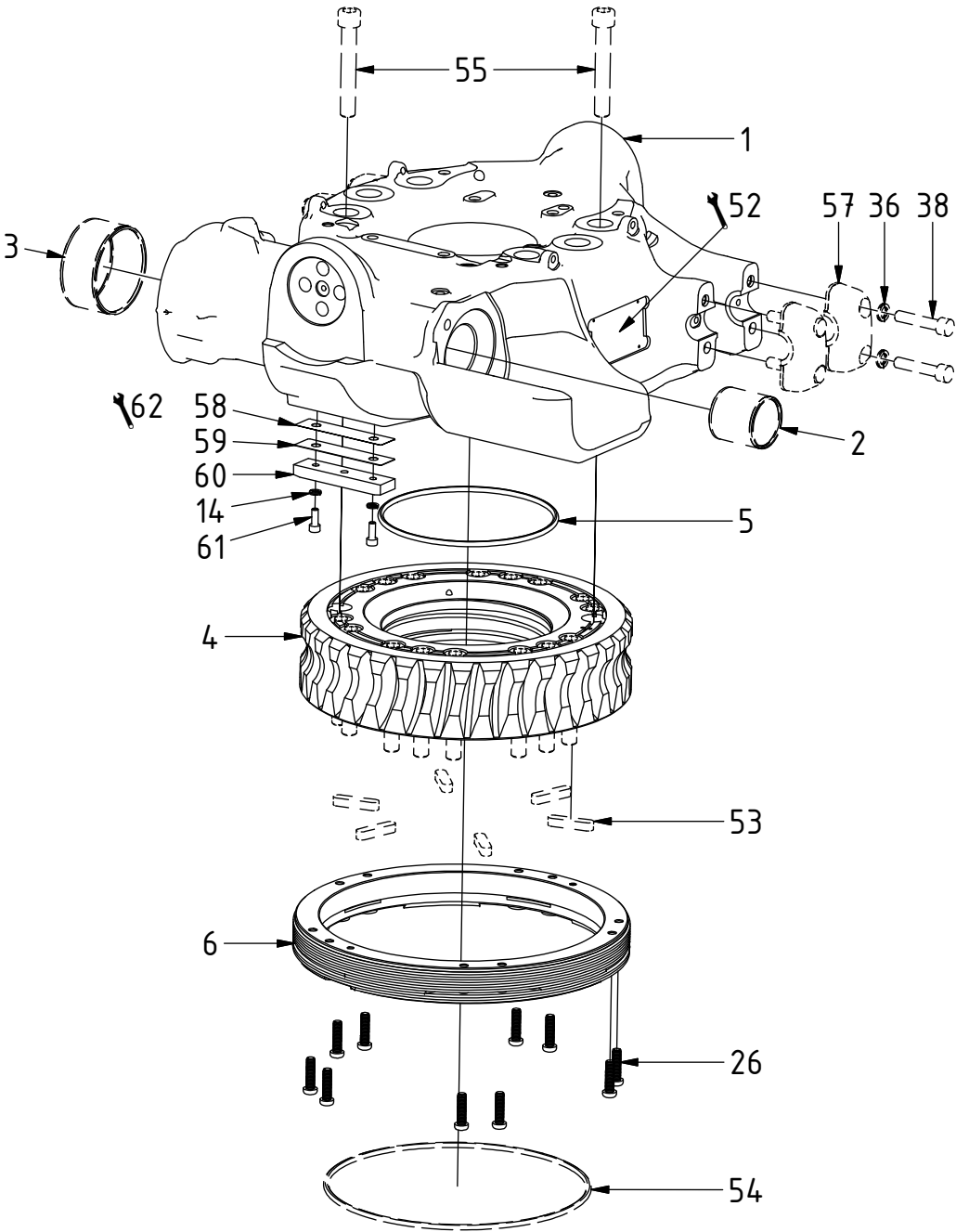
Remove instructions regarding QSM, replaced by EC209B.

Lost comment that should be recovered to POS.26: tighten in cross pattern.

Document changes:

Date:	Change:	Rev. after change:
2022-05-30	O-ring for worm wheel and o-ring against hitch updated.	X
2022-01-28	Rotation play updated.	V
2021-11-16	Details for end lock added.	U
2021-05-27	O-ring against motor added. Layout structure updated.	T
2020-12-01	Bearing ring updated.	S
2020-06-18	Instructions for EC209U added.	R
2023-11-15	Worm wheel, frame & lubrication replaced. Spacer added.	Q
2020-05-07	QSM adapter corrected.	P
2020-02-07	Instructions for QSM added.	O
2019-03-11	Screws for central lubrication dosing block updated.	N
2018-09-27	New photos.	M
2018-08-09	QTY for washers corrected.	L
2018-07-02	Bearing ring adjustment changed from 2 to 3cm.	K
2018-06-26	Layout/irrelevant.	J
2017-12-20	Rotation play corrected.	I
2017-10-16	MACS sensor replaced, new distance 3mm.	H
2017-05-05	Adapters for hoses replaced. Coversheet added.	G

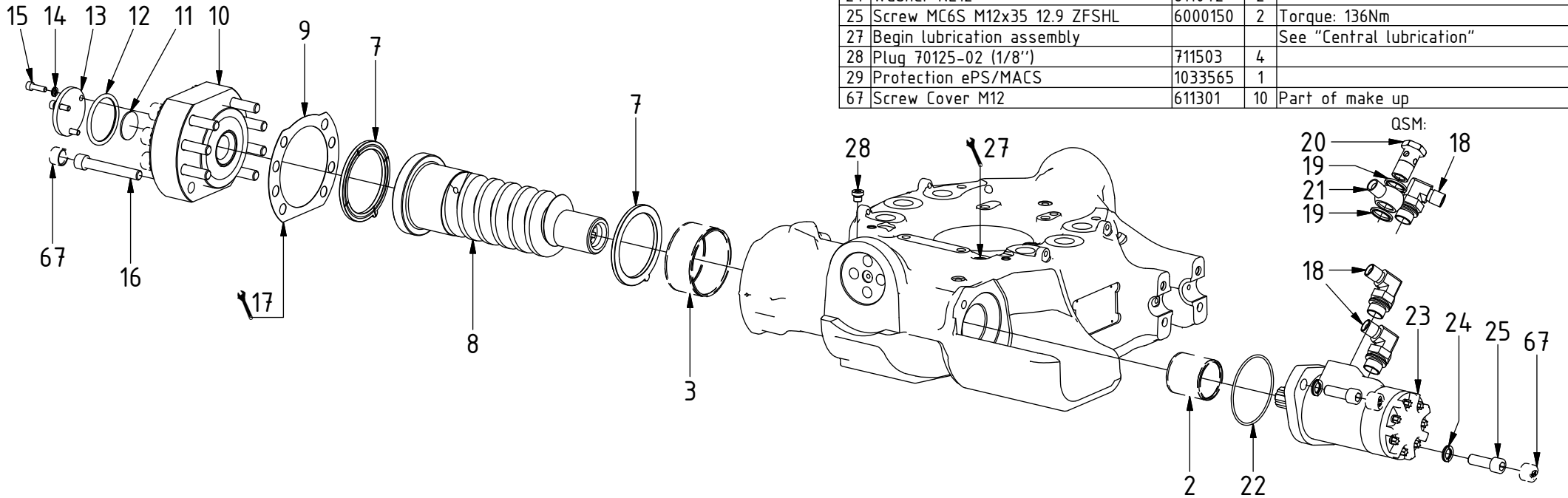
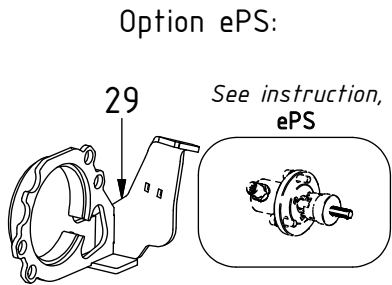
EC209 - Rotator frame



POS	DESCRIPTION	PART	QTY	COMMENTS
1	Rotator frame v.2 EC209	1056657	1	(POS.2-3 included)
2	Bushing WB802 45/50x50	630102	1	
3	Bushing WB802 80/85x40	630103	1	
4	Worm wheel 18 holes	1054242	1	
5	O-ring 160x5	7001660	1	
6	Bearing ring	1061927	1	
14	Washer NL 6mm	611039	5	
26	Screw TX40 M8x30	612201	10	Torque: 34Nm
36	Washer NL10	611041	13	QTY: 11 for EC209U QTY: 8 part of top part assembly
38	Screw MC6S M10x50 12.9 Geomet	611515	9	QTY: 8 part of top part assembly Torque: 79Nm
52	Punch serial no into rotator frame			
53	Feather Key	650101	6	Part of quick hitch assembly
54	O-ring 242x5	7001663	1	Part of quick hitch assembly
55	Screw MC6S M14x90 12.9 ZFSL	6000158	18	Part of quick hitch assembly Torque: 217Nm
57	Clamping half Complete	1022942	4	Part of top part assembly
58	Supporting plate shim 0,1 mm	1055262	1	
59	Supporting plate shim 0,3mm	1055260	1	
60	Supporting Plate EC209	1055258	1	
61	Screw MC6S M6x16 12.9 ZFSL	6000017	2	
62	Assy. between frame and hitch			See "Break support"

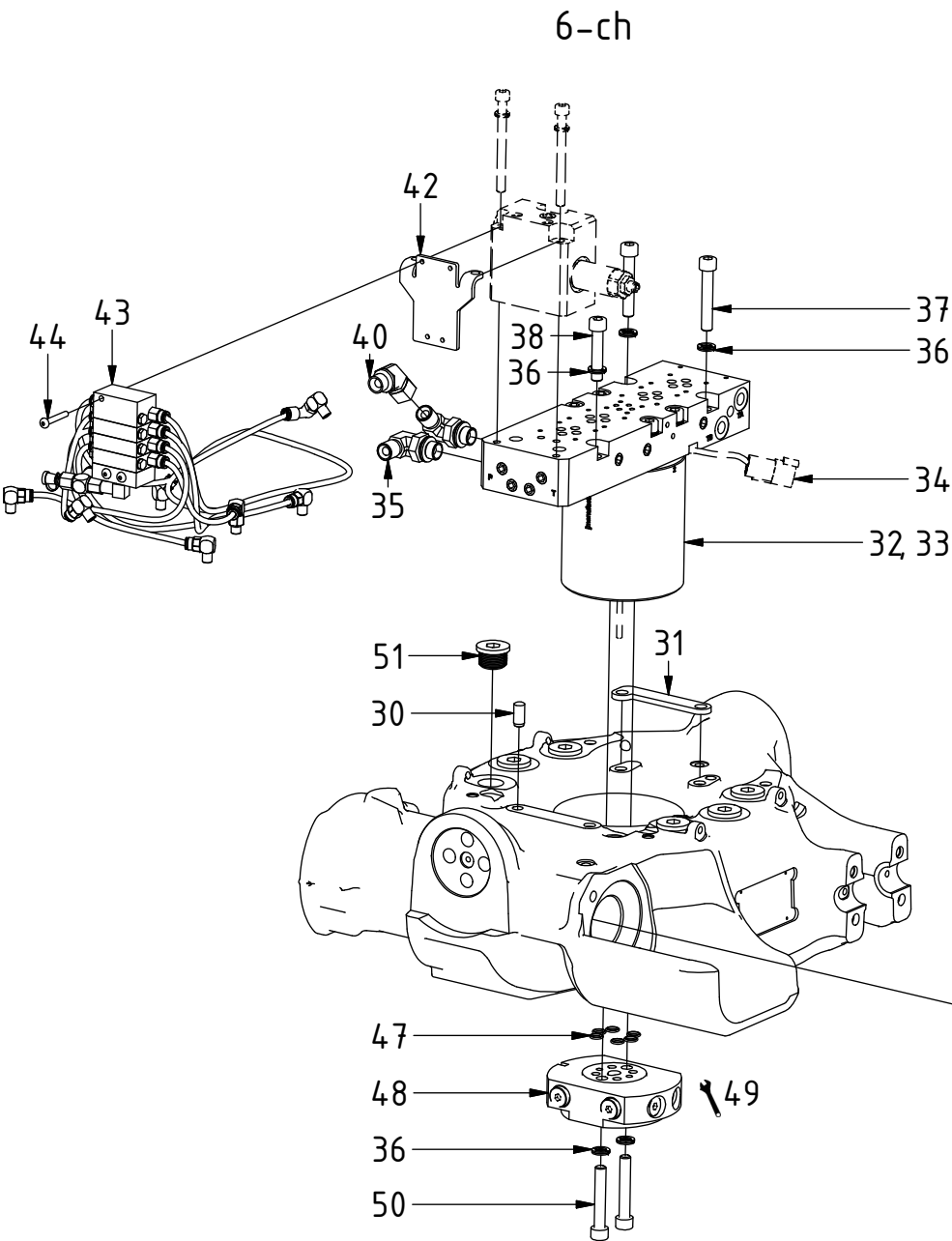
EC209 - Rotator frame

POS in order of assembly



POS	DESCRIPTION	PART	QTY	COMMENTS
2	Bushing WB802 45/50x50	630102	1	
3	Bushing WB802 80/85x40	630103	1	
7	Axial washer (with ear)	1010758	2	Face groove toward worm screw
8	Worm screw	1016453	1	
9	Shims kit End Lock 0,3-0,4-0,5 mm	1034434	1	(1016421, 1016422, 1016423 included)
10	End lock EC209/EC214/EC219	1016557	1	
11	Spacer Plate	1065370	1	
12	O-ring 27x5	7000485	1	
13	Cover, end lock ePS	1041613	1	
14	Washer NL 6mm	611039	5	
15	Screw MC6S M6x20 A4-80	611513	3	
16	Screw MC6S M12x80 12.9 ZFSHL	6000148	8	Torque: 136Nm
17	Rotation play: 0,12mm - 0,20mm			Note rotation play on module card
18	Adapter 401-06-08 90° (3/8"-1/2")	710157	2	QTY: 1 for QSM Assemble before motor
19	Washer GBR08 1/2	710704	2	
20	Banjo bolt 4451-08 (1/2")	710274	1	
21	Adapter 830-08-06 (1/2"-3/8")	710193	1	
22	O-ring 82,22x2.62 N/70	7000920	1	
23	Hydraulic motor CL131cc	720112	1	
24	Washer NL12	611042	2	
25	Screw MC6S M12x35 12.9 ZFSHL	6000150	2	Torque: 136Nm
27	Begin lubrication assembly			See "Central lubrication"
28	Plug 70125-02 (1/8")	711503	4	
29	Protection ePS/MACS	1033565	1	
67	Screw Cover M12	611301	10	Part of make up

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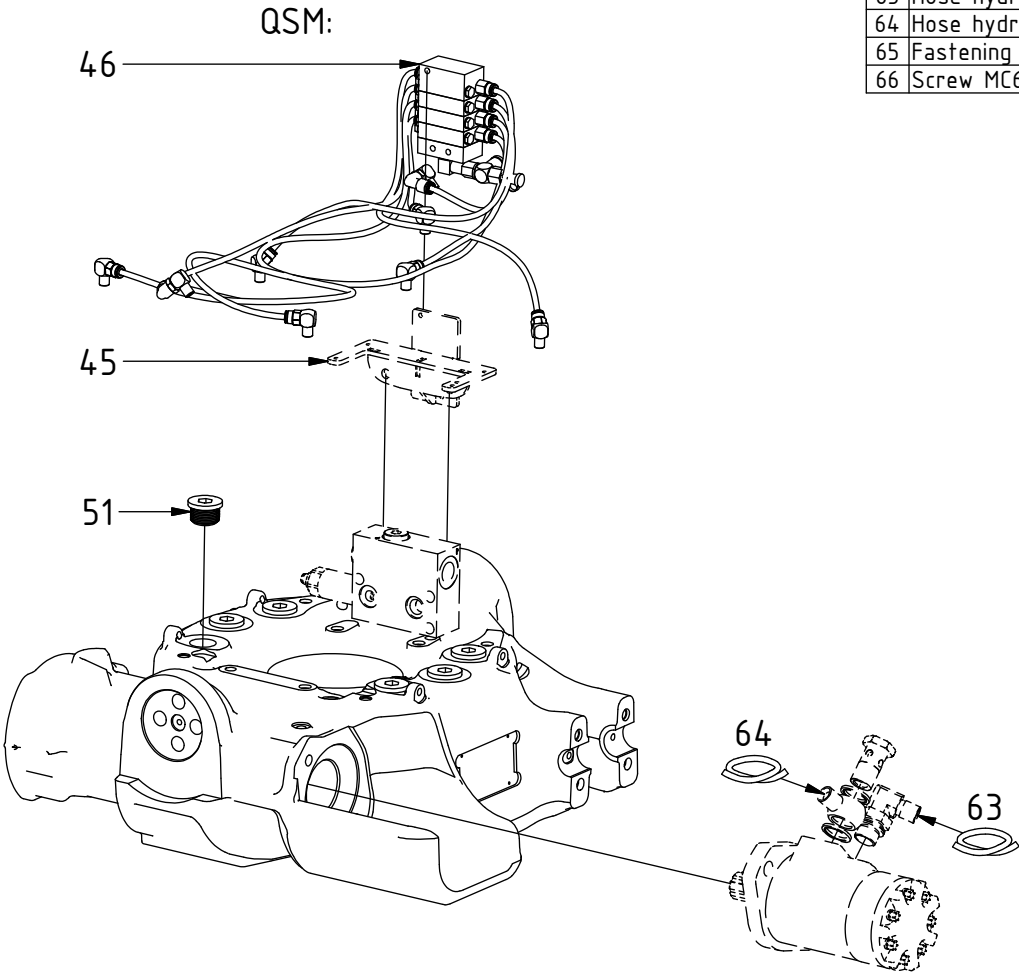
POS	DESCRIPTION	PART	QTY	COMMENTS
30	Cylindrical pin $\varnothing 10 \times 24$	1020539	1	
31	Spacer valve block EC209	1058993	1	
32	Valve block & Swivel Complete without slipring	1025501	1	See "Valve blocks & Swivels"
33	Valve block & Swivel Complete with slipring DTM	1030480	1	(POS.34 included) See "Valve blocks & Swivels"
34	Kit slip ring DTM	1032566	1	
35	Adapter 401-06-06 90° (3/8")	710152	2	Assemble before connecting valve block to rotator frame
36	Washer NL10	611041	13	QTY: 11 for EC209U QTY: 8 part of top part assembly
37	Screw MC6S M10x60 12.9 Geomet	611503	2	Torque: 79Nm
38	Screw MC6S M10x50 12.9 Geomet	611515	9	QTY: 8 part of top part assembly Torque: 79Nm
39	Hose hydraulic motor Long	742804	1	
40	Adapter 408-06-06	7000501	1	
41	Hose hydraulic motor Short	742805	1	
42	Mounting plate Central lubrication	1021695	1	
43	Lubrication kit Complete v.2	1059026	1	See "Central lubrication"
44	Screw K6S M5x35 10.9 untreated	6000231	3	
47	O-ring 9,25x1,78	710901	6	
48	Connection block EC209 for slipring	1025502	1	
49	Guide by number			"1" on swivel against "1" on block
50	Screw MC6S M10x60 12.9	610460	2	
51	Pipe Plug M26x1,5	650409	6	

POS in order of assembly

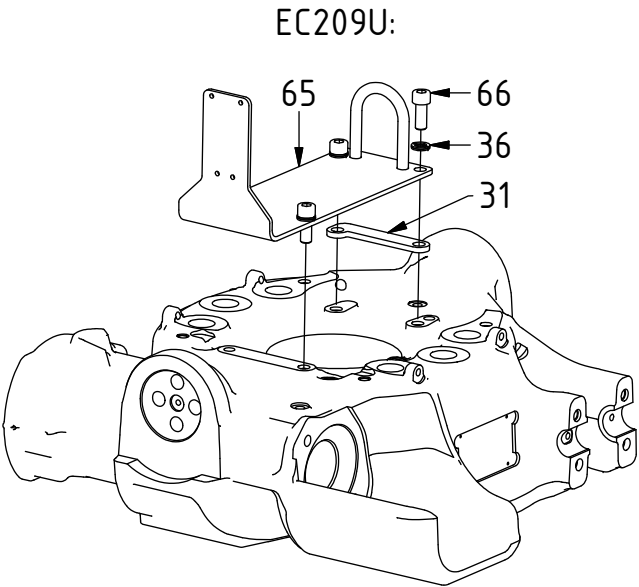
Dashed lines for overview, mounts on other pages/assemblies. indicates instruction. represents hose.

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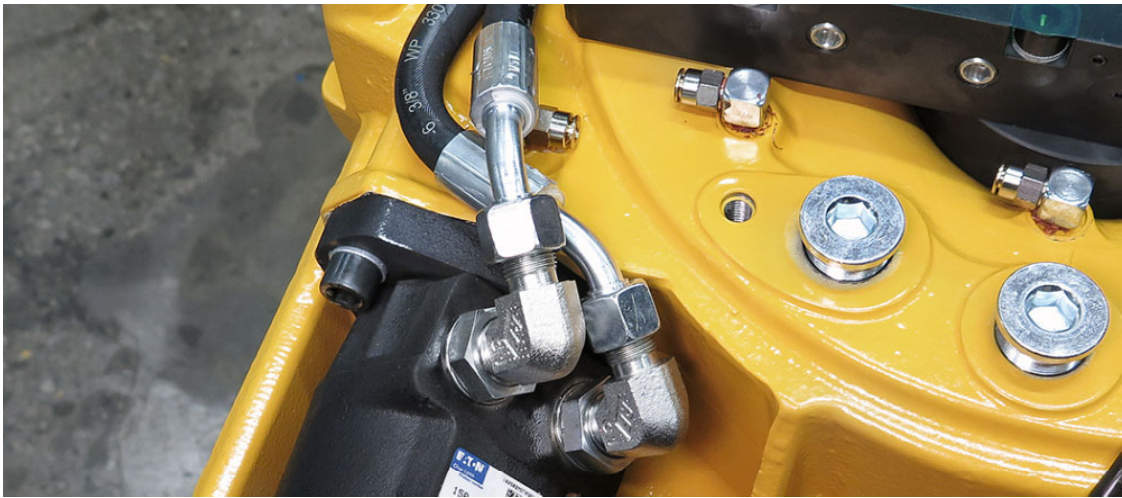
Without Swivel / QSM



POS	DESCRIPTION	PART	QTY	COMMENTS
31	Spacer valve block EC209	1058993	1	
36	Washer NL10	611041	13	QTY: 11 for EC209U QTY: 8 part of top part assembly
45	Mounting plate Central lub. QSM	1055574	1	Part of control system assembly
46	Lubrication kit QSM	1056598	1	See "Central lubrication"
51	Pipe Plug M26x1,5	650409	6	
63	Hose hydraulic motor Short QSM	7001306	1	Part of quick hitch assembly
64	Hose hydraulic motor Long QSM	7001307	1	Part of quick hitch assembly
65	Fastening plate EC209U	1039502	1	
66	Screw MC6S M10x25 12.9 ZFSL	6000195	3	

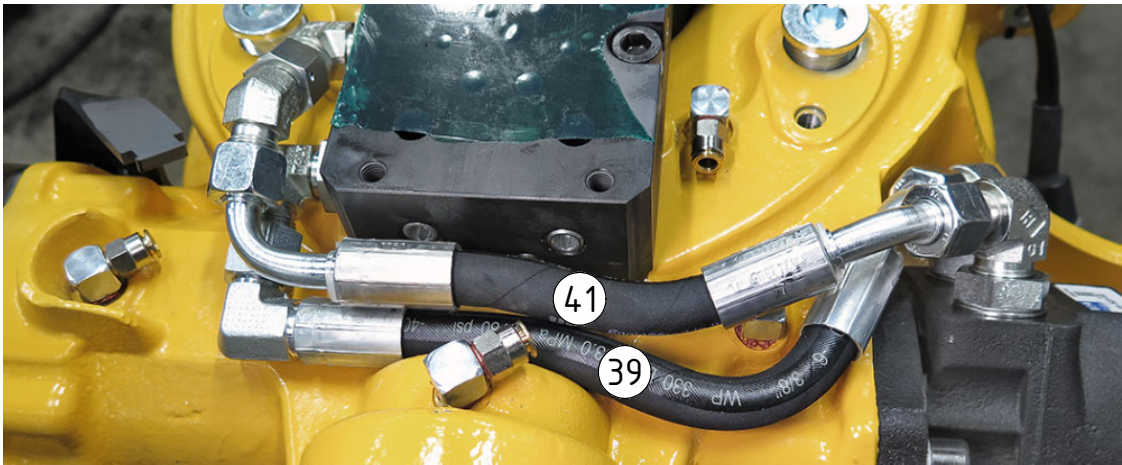


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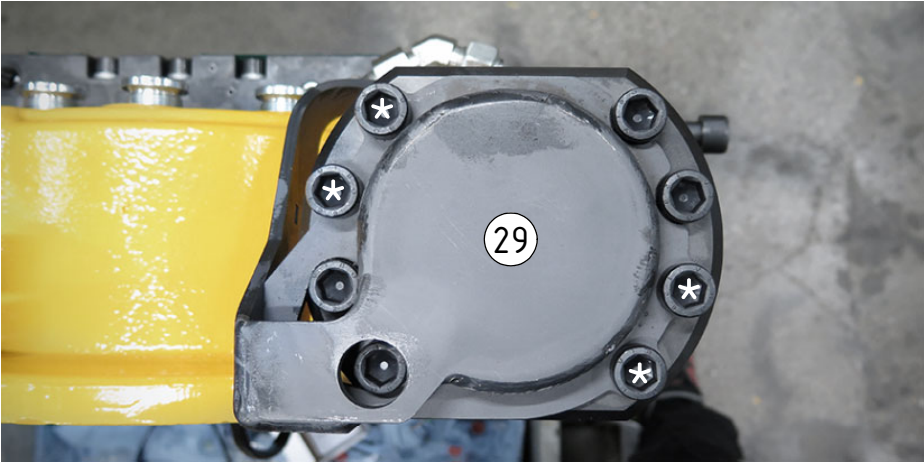


POS	DESCRIPTION	PART	QTY	COMMENTS
29	Protection ePS/MACS	1033565	1	
39	Hose hydraulic motor Long	742804	1	
41	Hose hydraulic motor Short	742805	1	
63	Hose hydraulic motor Short QSM	7001306	1	Part of quick hitch assembly
64	Hose hydraulic motor Long QSM	7001307	1	Part of quick hitch assembly

POS in order of assembly



Option ePS:



★No torque until control system assembly

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Related spare parts

POS	DESCRIPTION	PART	QTY	COMMENTS
1	Rotator frame v.2 EC209	1056657	1	(POS.2-3 included)
4	Worm wheel 18 holes	1054242	1	
10	End lock EC209/EC214/EC219	1016557	1	
40	Adapter 408-06-06	7000501	1	
43	Lubrication kit Complete v.2	1059026	1	See "Central lubrication"
68	End lock standard & MACS	1016415	1	Replaced by POS.10 from 2022-01 MACS: Replaces 1028628 from 16-10
69	Worm wheel 12 holes	1016452	1	Replaced by POS.4 from 2020-06
70	Lubrication kit Complete	1021742	1	Replaced by POS.43 from 2020-06
71	Adapter 401-04-04 90°	710151	4	Assemble before connecting valveblock to rotator frame
72	Adapter 45-06-06	710211	1	Replaced by POS.40 from 2017-04
73	Serial number location			Current location found on p.2
74	MACS Pipe Plug M26x1,5 MACS	1033702	1	
75	MACS Magnet 8x5x3	6000047	1	Loctite 415. Harden 1 minute
76	MACS Inductive sensor M8 PNP	1043698	1	Distance 3mm. Nut torque: 3Nm
77	MACS Inductive sensor M8-M12	1028045	1	Replaced by POS.76 from 2017-08 Distance 4mm. Nut torque: 3Nm

