EC233 - Rotator frame

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COVERSHEET

Planned document changes:

Breifly:
No planned changes.

Document changes:

Date:	Change:	Rev. after change:
2026-10-08	ECHF added to spare parts page.	Q
2025-03-13	Bearing ring updated. Nipple to frame added.	P
2024-05-16	Seal in end lock added.	O
2023-10-25	Screws for lubrication kit added.	N
2023-06-02	Loxeal added. O-ring for worm wheel updated.	M
2022-05-27	EC233S added. (EC233 with ePS2 compatible sensors)	L
2022-01-17	O-ring against motor added.	K
2021-05-31	Bearing ring updated.	J
2020-12-15	Screws updated to ZFSHL.	I
2019-10-28	Plug for end lock added.	H
2019-04-05	Part no for QSM hoses added.	G
2018-12-04	QSM added (also applicable for "Without swivel")	F
2018-07-02	Layout/irrelevant.	E
2018-06-19	Layout/irrelevant.	D
2018-03-19	New location for serial no.	C
2017-12-04	Details for end lock added.	B
2017-10-09	NL for clamping halves removed.	A
2017-08-03	New document.	-

Readers note:

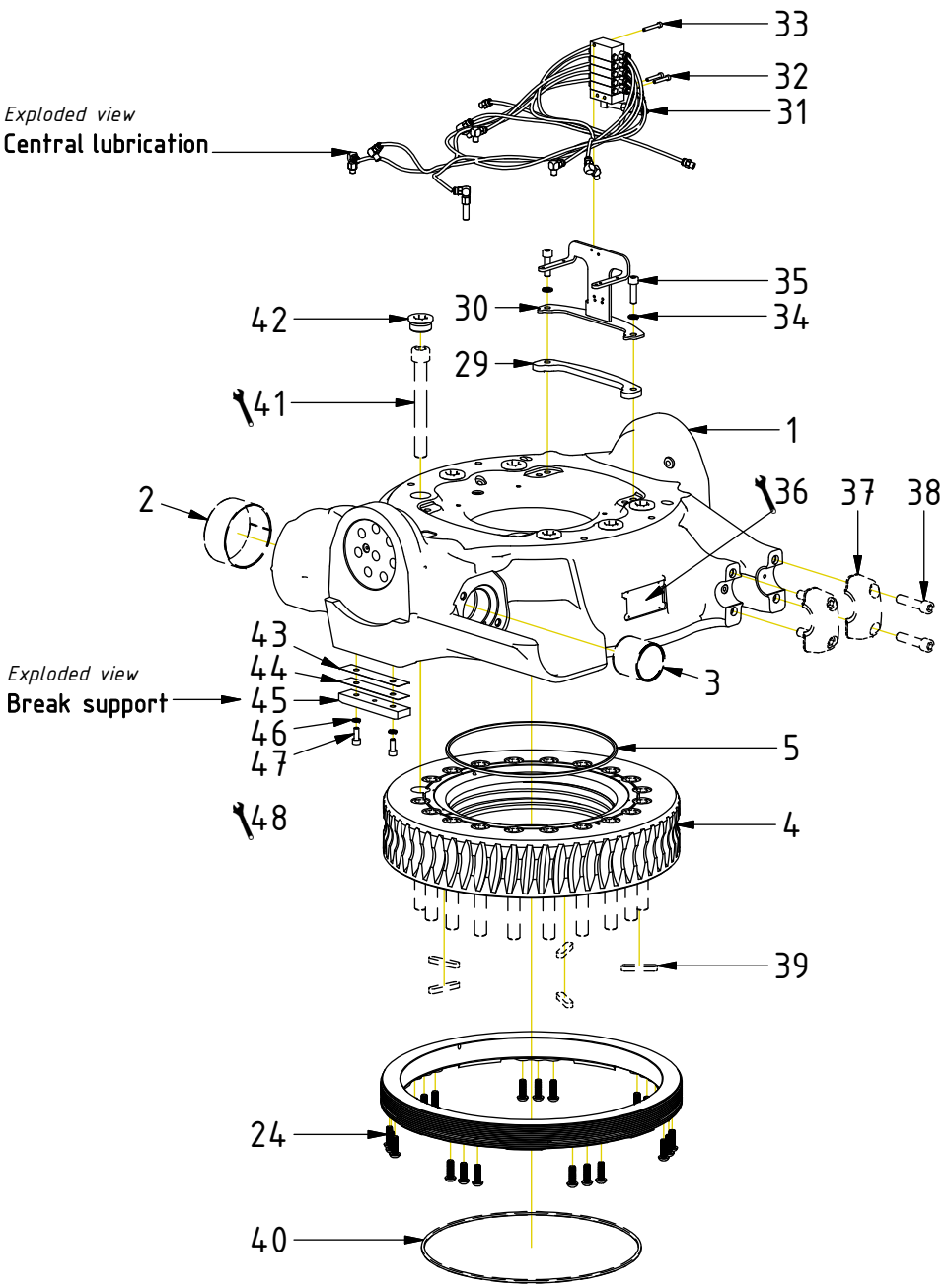
Indicates instruction.

Represents Hose.

Dashed lines for overview, mounts on other pages/assemblies.

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POS	DESCRIPTION	PART	QTY	COMMENTS
1	Rotator frame EC233	1042814	1	(POS.2-3 incl.)
2	Bushing WB802 105/110x50	6000105	1	
3	Bushing WB802 60/65x60	630301	1	
4	Worm Wheel EC233	1039142	1	
5	O-ring 279,2x5,7	7001664	1	
6	Bearing ring EC233 V2	1076774	1	
24	Screw TX50 M10x30 FZB 10.9	6000119	21	Torque: 65Nm Tighten in cross pattern
29	Spacer central lubrication EC233	1050379	1	
30	Mounting plate lube. ECHF/QSM	1040022	1	
31	Lubrication kit	1083302	1	
32	Screw MC6S M5x30 12.9	610403	2	
33	Screw MC6S M5x35 12.9	610404	1	
34	Washer NL 10mm	611041	2	
35	Screw MC6S M10x35 12.9	610494	2	Torque: 79Nm
36	Punch serial no into rotator frame			
37	Clamping half Complete	1040020	4	Part of top part
38	Screw MC6S M14x60 12.9 ZFSHL	6000160	8	Part of top part. Torque: 217Nm
39	Feather Key	650103	5	Part of quick hitch
40	O-ring 359,3x5,7	710924	1	Part of quick hitch
41	Bolts depends on quick hitch		20	See "Quick hitch"
42	Pipe plug M36x2	650408	6	
43	Shim supporting plate 0,1mm	1023344	1	
44	Shim supporting plate 0,3mm	1023447	1	
45	Supporting plate	1023292	1	
46	Washer NL 8mm	611040	2	
47	Screw MC6S M8x20 12.9 ZFSHL	6000157	2	
48	Break play: 0,8mm - 1,0mm			Assy. between frame & quick hitch

POS in order of assembly

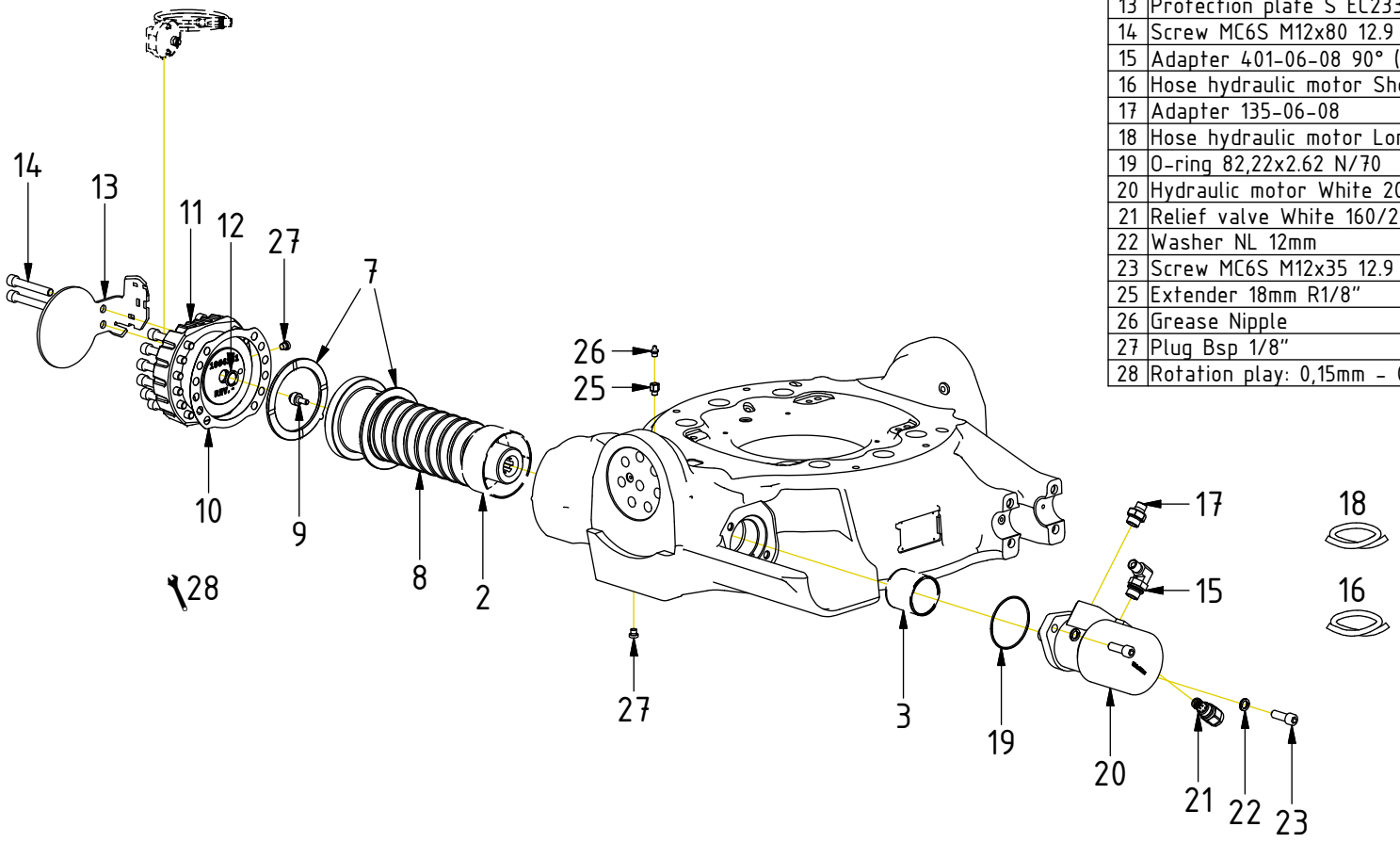
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EC233S:

Exploded view

ePS2 Sensors



POS	DESCRIPTION	PART	QTY	COMMENTS
2	Bushing WB802 105/110x50	6000105	1	
3	Bushing WB802 60/65x60	630301	1	
7	Axialbricka EC233	1039899	2	Face groove toward worm screw
8	Worm Screw EC233	1039334	1	
9	Magnet Spacer Worm Screw	1062693	1	Loxeal 83-52. Torque: 20Nm
10	Shims kit End Lock 0,3-0,4-0,5mm	1073356	1	
11	End Lock EC233S Cast	1065887	1	(POS.12 incl.)
12	Seal end lock 20x27.5x3.2	1063616	1	
13	Protection plate S EC233	1064168	1	
14	Screw MC6S M12x80 12.9 ZFSHL	6000148	12	Torque: 136Nm
15	Adapter 401-06-08 90° (3/8''-1/2'')	710157	1	
16	Hose hydraulic motor Short QSM	7000903	1	Part of quick hitch assy.
17	Adapter 135-06-08	710122	1	
18	Hose hydraulic motor Long QSM	7000451	1	Part of quick hitch assy.
19	O-ring 82,22x2.62 N/70	7000920	1	
20	Hydraulic motor White 200cc	7001807	1	
21	Relief valve White 160/200cc	7001647	1	Torque: 55Nm. Assy. before motor
22	Washer NL 12mm	611042	2	
23	Screw MC6S M12x35 12.9 ZFSHL	6000150	2	Torque: 136Nm
25	Extender 18mm R1/8"	712216	1	
26	Grease Nipple	711403	1	
27	Plug Bsp 1/8"	711503	2	
28	Rotation play: 0,15mm - 0,25mm			Note rotation play on module card

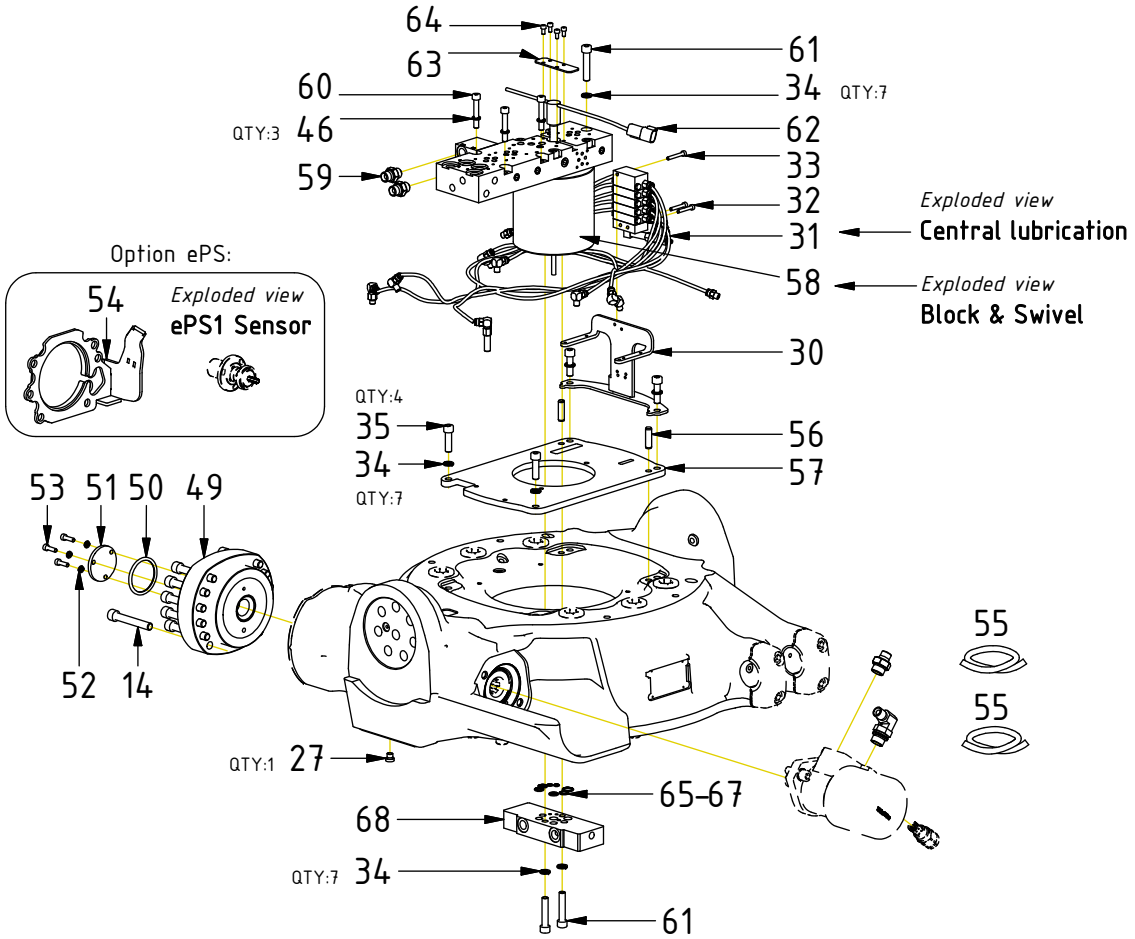
POS in order of assembly

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RELATED SPARE PARTS

EC233 ECHF



POS	DESCRIPTION	PART	QTY	COMMENTS
14	Screw MC6S M12x80 12.9 ZFSHL	6000148	12	Torque: 136Nm
27	Plug Bsp 1/8"	711503	2	
30	Mounting plate lube. ECHF/QSM	1040022	1	
31	Lubrication kit	1083302	1	
32	Screw MC6S M5x30 12.9	610403	2	
33	Screw MC6S M5x35 12.9	610404	1	
34	Washer NL 10mm	611041	2	
35	Screw MC6S M10x35 12.9	610494	2	Torque: 79Nm
46	Washer NL 8mm	611040	2	
49	End lock EC233	1040901	1	
50	O-ring 27x5	7000485	1	
51	Cover End lock w/o ePS1	1041613	1	
52	Washer NL 6mm	611039	3	
53	Screw MC6S M6x20 A4-80	611513	3	
54	Protection ePS/MACS	1040940	1	For ePS1
55	Hose hydraulic motor ECHF	7000451	2	
56	Cylindrical pin	1015672	2	
57	Valve plate ECHF	1039803	1	
58	Valve bl. & Swivl for slipring Compl.	1027386	1	
59	Adapter 136-06-06 (3/8")	710106	2	
60	Screw MC6S 8x50 12.9	610439	3	
61	Screw MC6S M10x50 12.9 ZFSHL	611515	3	
62	Kit slip ring ECHF DTM	1030298	1	For QS. See "Slip rings"
63	Cover plate slip ring	1026200	1	
64	Screw MC6S M5x10 12.9	610594	4	
65	O-ring 6,07x1,78	712422	2	
66	O-ring 12,42x1,78	710973	4	
67	O-ring 15,6x1,78	710912	1	
68	Connection block ECHF	1028391	1	Guide with spring pin from swivel

POS in order of assembly

Parts history on p.5

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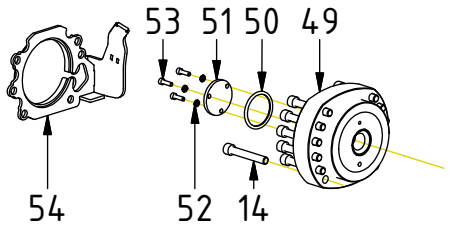
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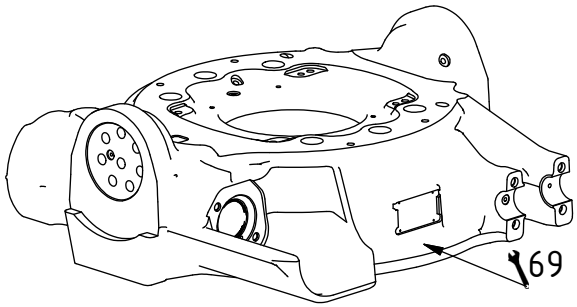
RELATED SPARE PARTS

POS	DESCRIPTION	PART	QTY	COMMENTS
14	Screw MC6S M12x80 12.9 ZFSHL	6000148	12	Torque: 136Nm
49	End lock EC233	1040901	1	
50	O-ring 27x5	7000485	1	
51	Cover End lock w/o ePS1	1041613	1	
52	Washer NL 6mm	611039	3	
53	Screw MC6S M6x20 A4-80	611513	3	
54	Protection ePS/MACS	1040940	1	For ePS1
69	Serial number location			Current location found on p.2
70	MACS Magnet 8x5x3	6000047	1	Loctite 415. Harden 1 minute
71	MACS Inductive sensor M8	1043698	1	Distance 3mm. Nut torque: 3Nm
72	MACS Pipe plug M36/M8	650411	1	

POS in order of assembly

Used on QSM until 2022-04:





MACS:

