

COVERSHEET


Planned document changes:


Briefly:

No planned changes.

Document changes:

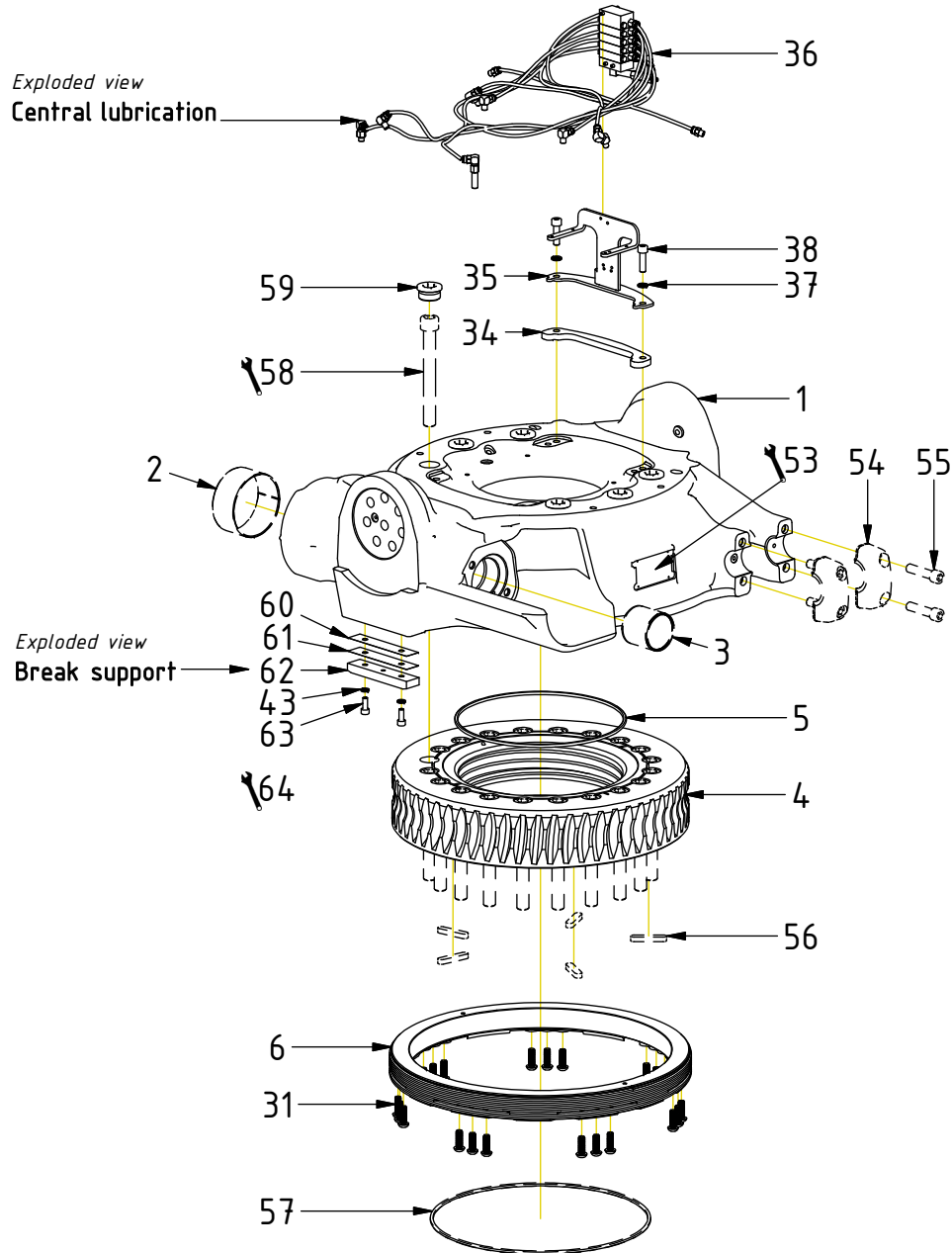
Date:	Change:	Rev. after change:
2023-06-02	Loxal added. O-ring for worm wheel updated.	M
2022-05-27	EC233S added. (EC233 with ePS2 compatible sensors)	L
2022-01-17	O-ring against motor added.	K
2021-05-31	Bearing ring updated.	J
2020-12-15	Screws updated to ZFSHL.	I
2019-10-28	Plug for end lock added.	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.

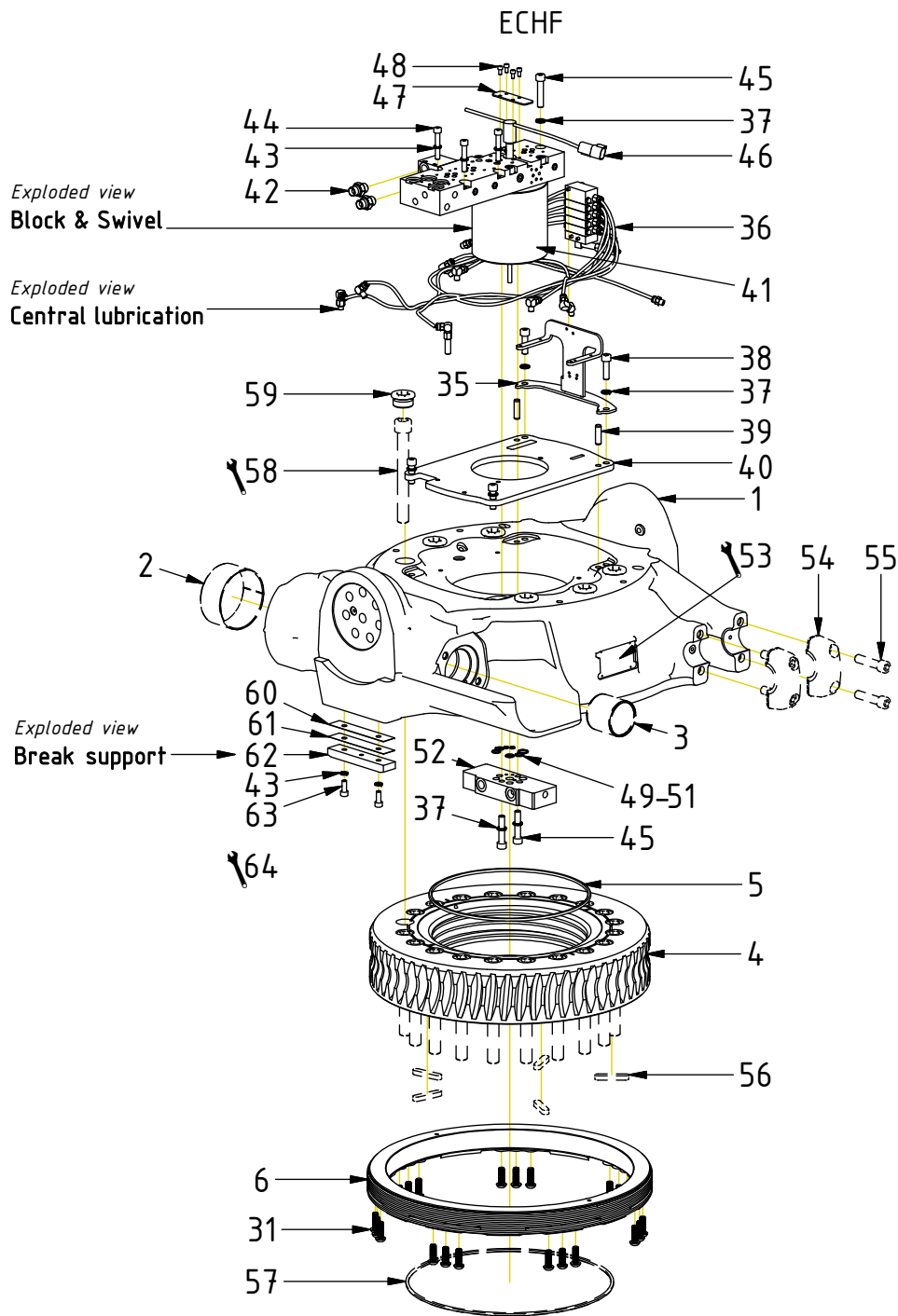
Dashed lines for overview, mounts
on other pages/assemblies.

QSM



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	1061931	1	
31	Screw TX50 M10x30 FZB 10.9	6000119	21	Torque: 65Nm
34	Spacer central lubrication EC233	1050379	1	
35	Mounting plate lube. ECHF/QSM	1040022	1	
36	Lubrication kit	1040866	1	
37	Washer NL 10mm	611041	2	QTY: 7 for ECHF
38	Screw MC6S M10x35 12.9	610494	2	QTY: 4 for ECHF. Torque: 79Nm
43	Washer NL 8mm	611040	2	QTY: 5 for ECHF
53	Punch serial no into rotator frame			
54	Clamping half Complete	1040020	4	Part of top part
55	Screw MC6S M14x60 12.9 ZFSHL	6000160	8	Part of top part. Torque: 217Nm
56	Feather Key	650103	5	Part of quick hitch
57	O-ring 359,3x5,7	710924	1	Part of quick hitch
58	Bolts depends on quick hitch		20	See "Quick hitch"
59	Pipe plug M36x2	650408	6	
60	Shim supporting plate 0,1mm	1023344	1	
61	Shim supporting plate 0,3mm	1023447	1	
62	Supporting plate	1023292	1	
63	Screw MC6S M8x20 12.9 ZFSHL	6000157	2	
64	Break play: 0,8mm - 1,0mm			Assy. between frame & quick hitch

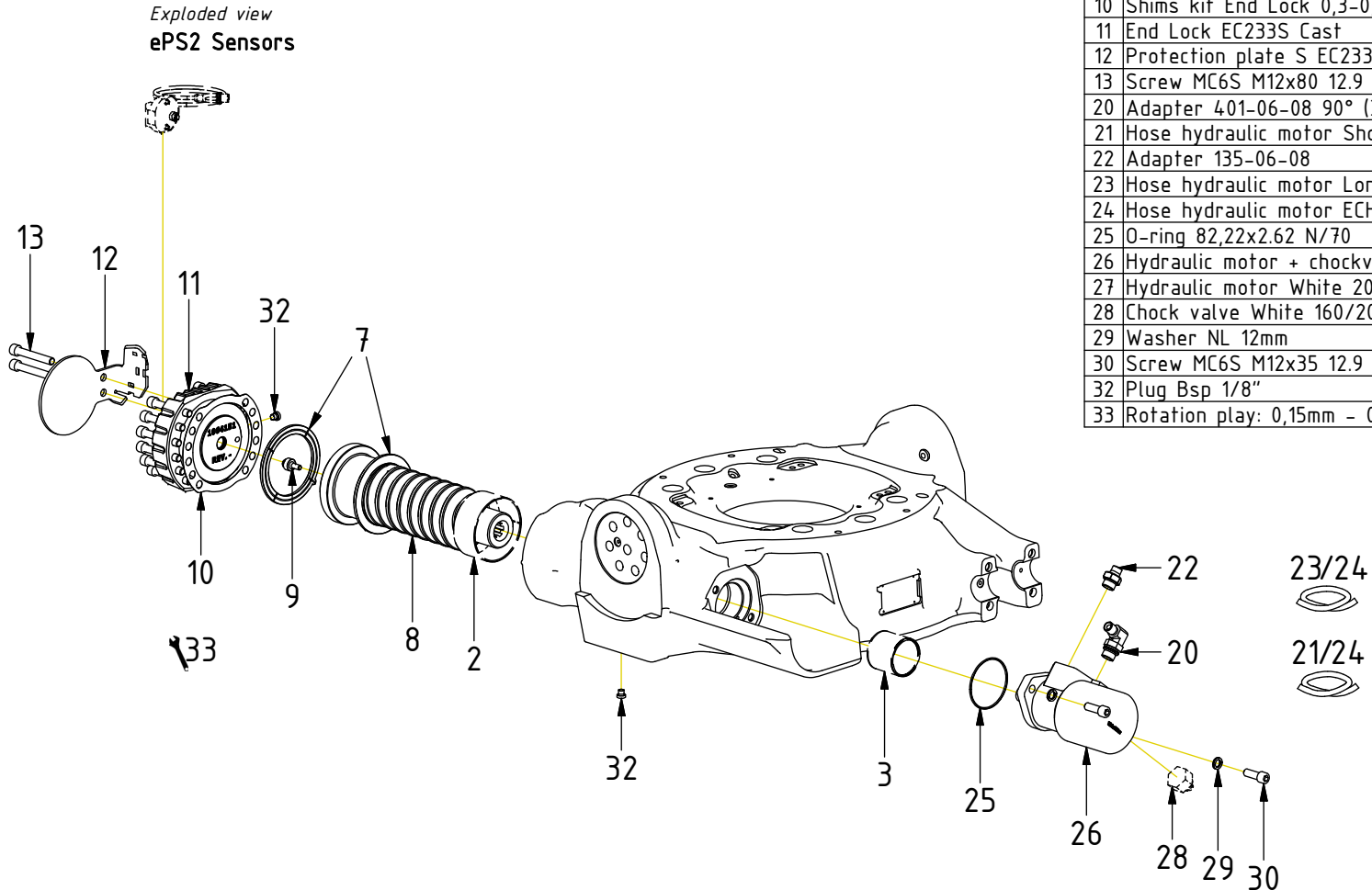
POS in order of assembly



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	1061931	1	
31	Screw TX50 M10x30 FZB 10.9	6000119	21	Torque: 65Nm
35	Mounting plate lube. ECHF/QSM	1040022	1	
36	Lubrication kit	1040866	1	
37	Washer NL 10mm	611041	2	QTY: 7 for ECHF
38	Screw MC6S M10x35 12.9	610494	2	QTY: 4 for ECHF. Torque: 79Nm
39	Cylindrical pin	1015672	2	
40	Valve plate ECHF	1039803	1	
41	Valve bl. & Swivl for slipping Compl.	1027386	1	
42	Adapter 136-06-06 (3/8")	710106	2	
43	Washer NL 8mm	611040	2	QTY: 5 for ECHF
44	Screw MC6S 8x50 12.9	610439	3	
45	Screw MC6S M10x50 12.9 ZFSHL	611515	3	
46	Kit slip ring ECHF DTM	1030298	1	For QS. See "Slip rings"
47	Cover plate slip ring	1026200	1	
48	Screw MC6S M5x10 12.9	610594	4	
49	O-ring 6,07x1,78	712422	2	
50	O-ring 12,42x1,78	710973	4	
51	O-ring 15,6x1,78	710912	1	
52	Connection block ECHF	1028391	1	Guide with spring pin from swivel
53	Punch serial no into rotator frame			
54	Clamping half Complete	1040020	4	Part of top part
55	Screw MC6S M14x60 12.9 ZFSHL	6000160	8	Part of top part. Torque: 217Nm
56	Feather Key	650103	5	Part of quick hitch
57	O-ring 359,3x5,7	710924	1	Part of quick hitch
58	Bolts depends on quick hitch		20	See "Quick hitch"
59	Pipe plug M36x2	650408	6	
60	Shim supporting plate 0,1mm	1023344	1	
61	Shim supporting plate 0,3mm	1023447	1	
62	Supporting plate	1023292	1	
63	Screw MC6S M8x20 12.9 ZFSHL	6000157	2	
64	Break play: 0,8mm - 1,0mm			Assy. between frame & quick hitch

POS in order of assembly

EC233S



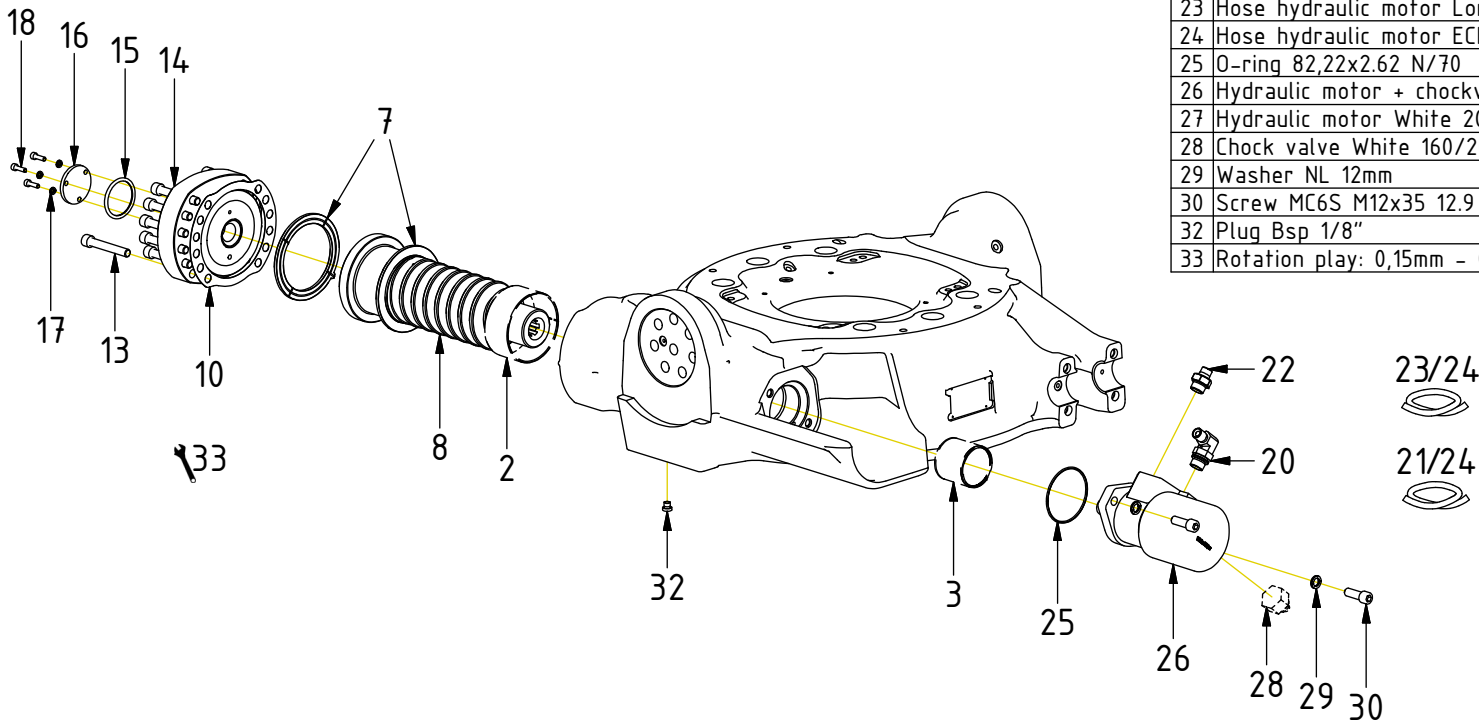
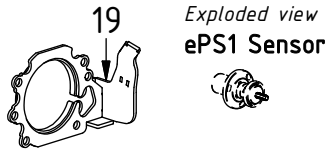
POS	DESCRIPTION	PART	QTY	COMMENTS
2	Bushing WB802 105/110x50	6000105	1	
3	Bushing WB802 60/65x60	630301	1	
7	Axialbricka EC233	1039899	2	Face groove toward worm screw
8	Worm Screw EC233	1039334	1	
9	Magnet Spacer Worm Screw	1062693	1	Loxéal 83-52. Torque: 20Nm
10	Shims kit End Lock 0,3-0,4-0,5mm	1073356	1	
11	End Lock EC233S Cast	1065887	1	
12	Protection plate S EC233	1064168	1	
13	Screw MC6S M12x80 12.9 ZFSL	6000148	12	Torque: 136Nm
20	Adapter 401-06-08 90° (3/8"-1/2")	710157	1	
21	Hose hydraulic motor Short QSM	7000903	1	Part of quick hitch
22	Adapter 135-06-08	710122	1	
23	Hose hydraulic motor Long QSM	7000451	1	Part of quick hitch
24	Hose hydraulic motor ECHF	7000451	2	
25	O-ring 82,22x2.62 N/70	7000920	1	
26	Hydraulic motor + chockvalve	1022288	1	(POS.27-28 incl.)
27	Hydraulic motor White 200cc	720124	1	
28	Chock valve White 160/200cc	1044091	1	Torque: 77Nm. Assy. before motor
29	Washer NL 12mm	611042	2	
30	Screw MC6S M12x35 12.9 ZFSL	6000150	2	Torque: 136Nm
32	Plug Bsp 1/8"	711503	1	QTY: 2 for EC233S
33	Rotation play: 0,15mm - 0,25mm			Note rotation play on module card

POS in order of assembly

EC233/EC233PS

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	
10	Shims kit End Lock 0,3-0,4-0,5mm	1073356	1	
14	End lock EC233	1040901	1	
15	O-ring 27x5	7000485	1	
16	Cover End lock w/o ePS1	1041613	1	
17	Washer NL 6mm	611039	3	
18	Screw MC6S M6x20 A4-80	611513	3	
19	Protection ePS/MACS	1040940	1	For ePS1
20	Adapter 401-06-08 90° (3/8"-1/2")	710157	1	
21	Hose hydraulic motor Short QSM	7000903	1	Part of quick hitch
22	Adapter 135-06-08	710122	1	
23	Hose hydraulic motor Long QSM	7000451	1	Part of quick hitch
24	Hose hydraulic motor ECHF	7000451	2	
25	O-ring 82,22x2.62 N/70	7000920	1	
26	Hydraulic motor + chockvalve	1022288	1	(POS.27-28 incl.)
27	Hydraulic motor White 200cc	720124	1	
28	Chock valve White 160/200cc	1044091	1	Torque: 77Nm. Assy. before motor
29	Washer NL 12mm	611042	2	
30	Screw MC6S M12x35 12.9 ZFSL	6000150	2	Torque: 136Nm
32	Plug Bsp 1/8"	711503	1	QTY: 2 for EC233S
33	Rotation play: 0,15mm - 0,25mm			Note rotation play on module card

Option ePS:

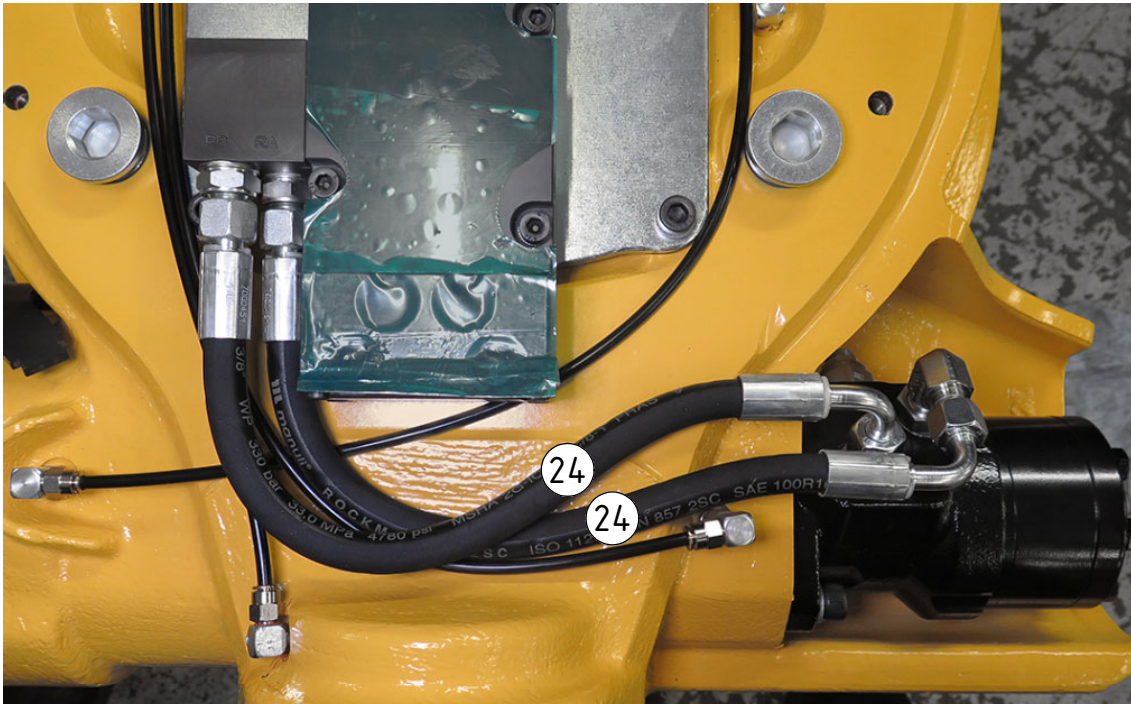


POS in order of assembly

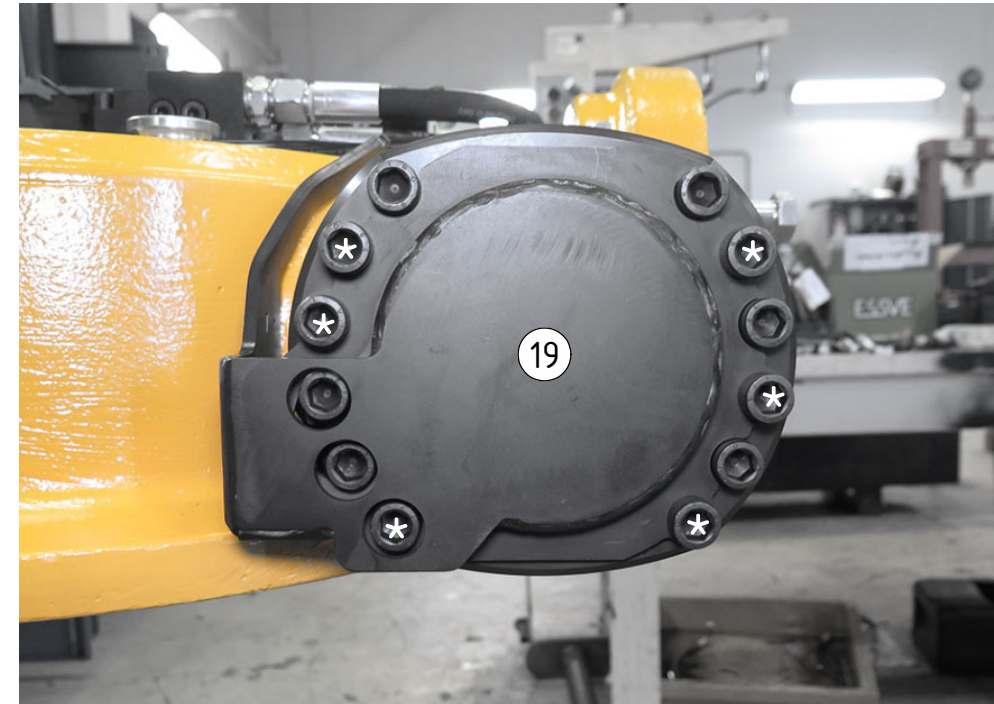
POS	DESCRIPTION	PART	QTY	COMMENTS
19	Protection ePS/MACS	1040940	1	For ePS1
21	Hose hydraulic motor Short QSM	7000903	1	Part of quick hitch
23	Hose hydraulic motor Long QSM	7000451	1	Part of quick hitch
24	Hose hydraulic motor ECHF	7000451	2	

POS in order of assembly

ECHF:



ePS1:



* No torque until control system assembly

SPARE PARTS

POS	DESCRIPTION	PART	QTY	COMMENTS
65	Serial number location			Current location found on p.2/3
66	MACS Magnet 8x5x3	6000047	1	Loctite 415. Harden 1 minute
67	MACS Inductive sensor M8	1043698	1	Distance 3mm. Nut torque: 3Nm
68	MACS Pipe plug M36/M8	650411	1	

POS in order of assembly

