

COVERSHEET

Planned document changes:

Briefly:

Move "ePS" to spare parts page. (EC214PS-EC233PS).

Add reference to T/R Sensors instead.

EC214S-EC233S without EC-Oil: use POS.30 (part of T/R sensors).

EC214S-EC233S with EC-Oil: use POS.31 (part of T/R Sensors).

ss9IQ: POS.12 with POS.17 replaced by 8001823.

ss9SQ: POS.16 with POS.17 replaced by 8001823 & DT bridge 1034439.

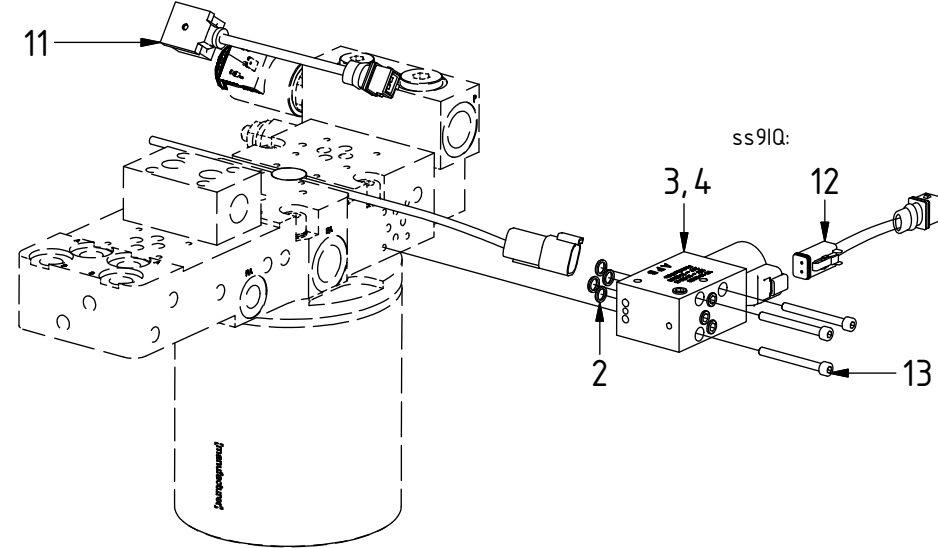
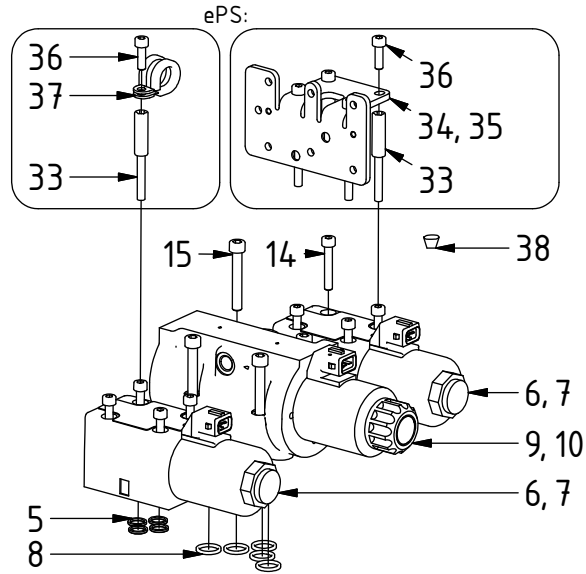
Replace 1pc of POS.36 to 611818. Torque: 8,1Nm.

Document changes:

Date:	Change:	Rev. after change:
2021-09-23	EC209 removed.	E
2021-04-26	Jumper for ss9SQ added.	D
2021-02-10	Photos updated.	C
2020-12-11	Missing torques added.	B
2020-11-11	Valves for EC209 added.	A
2020-08-28	New instruction.	-

Std Valves & cables - ss9 QSM

EC214, EC219, EC226, EC233



POS	DESCRIPTION	PART	QTY	COMMENTS
1	Std Valves & cables is applied alongside control system assembly			See "Control system" (hoses) (214, 219, 226, 233) QSM
2	O-ring 7,65x1,78	710960	4	
3	Directional valve NG4 IQS 24V DT	1042188	1	
4	Directional valve NG4 IQS 12V DT	1042045	1	
5	O-ring 9,25x1,78	710901	8	
6	Directional valve closed 24V	730110	2	(POS.5 included)
7	Directional valve closed 12V	730112	2	(POS.5 included)
8	Square ring 12,42x1,68 nbr	750704	5	
9	Directional valve closed NG10 24V	730341	1	(POS.8 included)
10	Directional valve closed NG10 12V	730342	1	(POS.8 included)
11	Adapter cabel-Hirschmann-Amp	302971	1	
12	Adapter cable DT-JT	1017478	1	
13	MC6S M5x50 12.9	610407	3	Torque: 9,7Nm
14	MC6S M5x30 12.9	610403	8	Torque: 9,7Nm
15	MC6S M6x40 12.9	610418	4	Torque: 17Nm
33	Valve spacer ePS	1034402	5	Torque: 9,7Nm. Replaces POS.14
34	Bracket ePS 214-233	1038119	1	For Topcon/LEICA/Novatron
35	Bracket ePS 214-233 (Trimble only)	1038117	1	For Trimble
36	MC6S M5x16 12.9	610401	5	Torque: 9,7Nm
37	Rubber steel clamp ø16	6000009	1	
38	Plastic plug (red) for valves	790156	8	

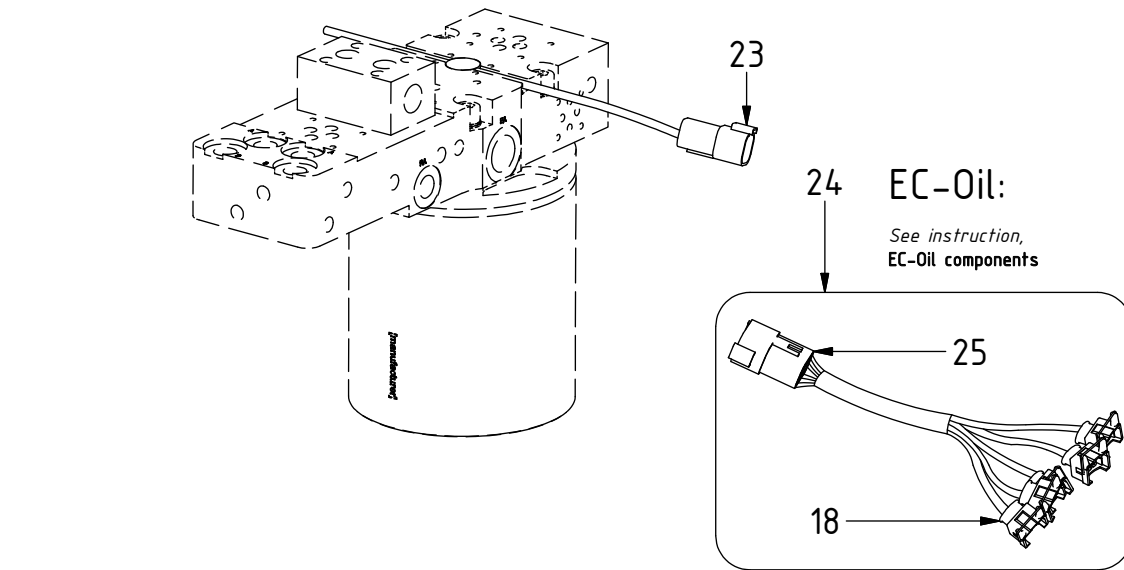
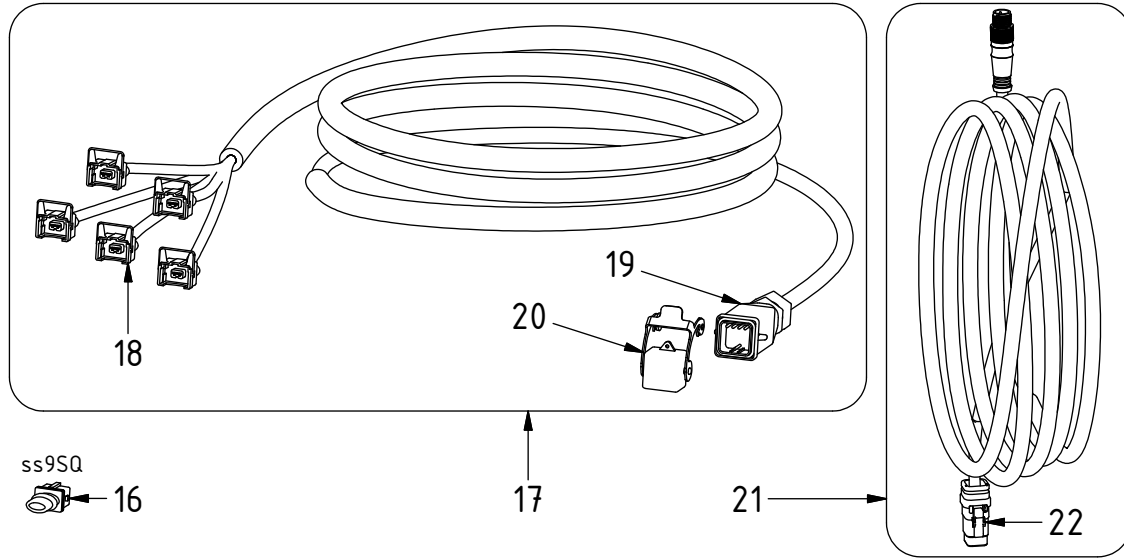
POS in order of assembly

Std Valves & cables - ss9 QSM

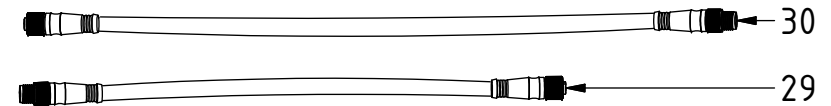
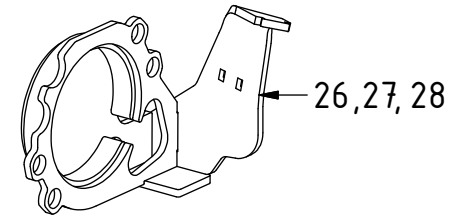
EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
16	Jumper JT Lock valve	1018662	1	Plug JT connector "1" for ss9SQ
17	Aggregate cable ss9-2 Dump Comp.	1032909	1	
18	Connector JT	810218	5	
19	ILME contact Male 12P Complete	841192	1	
20	ILME cover 12P contact with jumper	810208	1	
21	Cable QS QLM tiltrotator ss9-2	842148	1	
22	Connector Deutsch DTM06-6S	8000053	1	
23	Q-Safe connector		1	Attach POS.21 or See EC-Oil comp.
24	Adapter cable ECO (DTM) ss9-2	1029599	1	For EC-Oil. Replace POS.17 & 21
25	Connector Deutsch DTM04-12P	8000177	1	
26	Protection ePS/MACS EC214-EC219	1033565	1	
27	Protection ePS EC226 V2	1055677	1	
28	Protection ePS/MACS EC233	1040940	1	
29	Adapter cable ePS rotation sensor	8000784	1	
30	Agg. cable ePS w. 120 ohm termin.	8000824	1	
31	Ad.cable ePS ECOW w. 120 ohm ter.	8000825	1	For EC-Oil ePS. Replace POS.30
32	Connector Deutsch DTM04-6P	8000054	1	

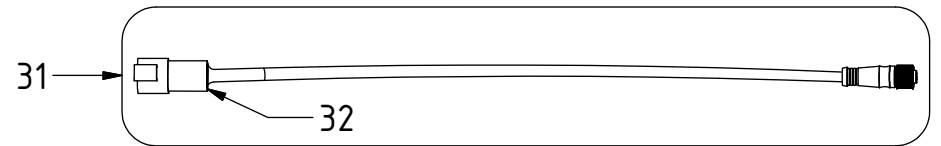
POS in order of assembly



ePS:



EC-Oil & ePS:



Std Valves & cables - ss9 QSM

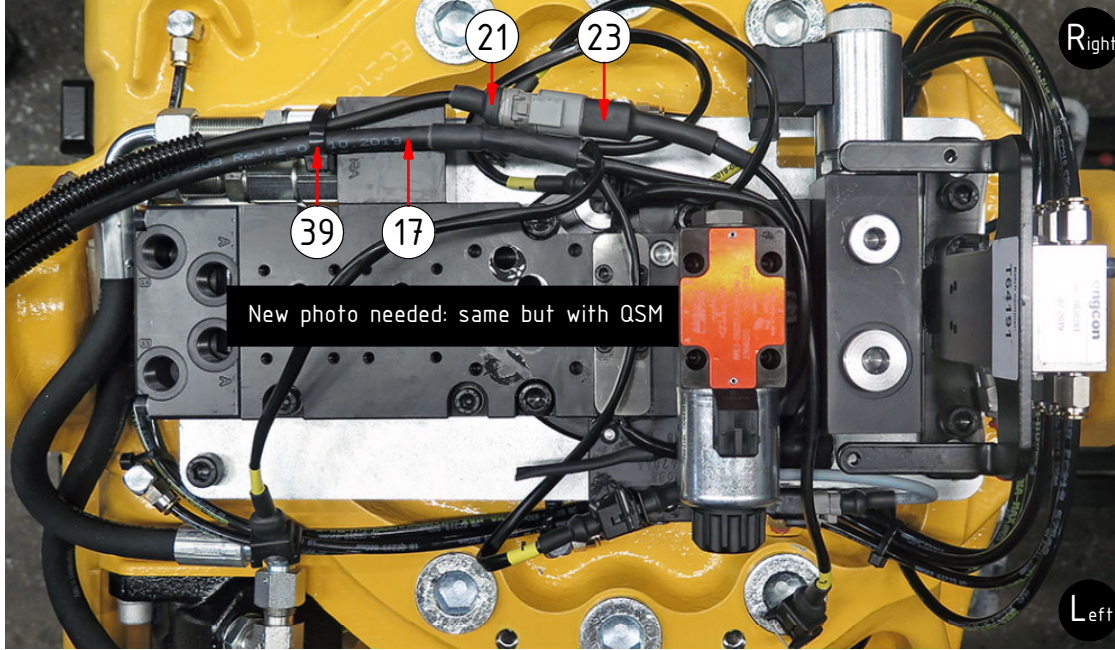
EC214, EC219, EC226, EC233

ss9
Std

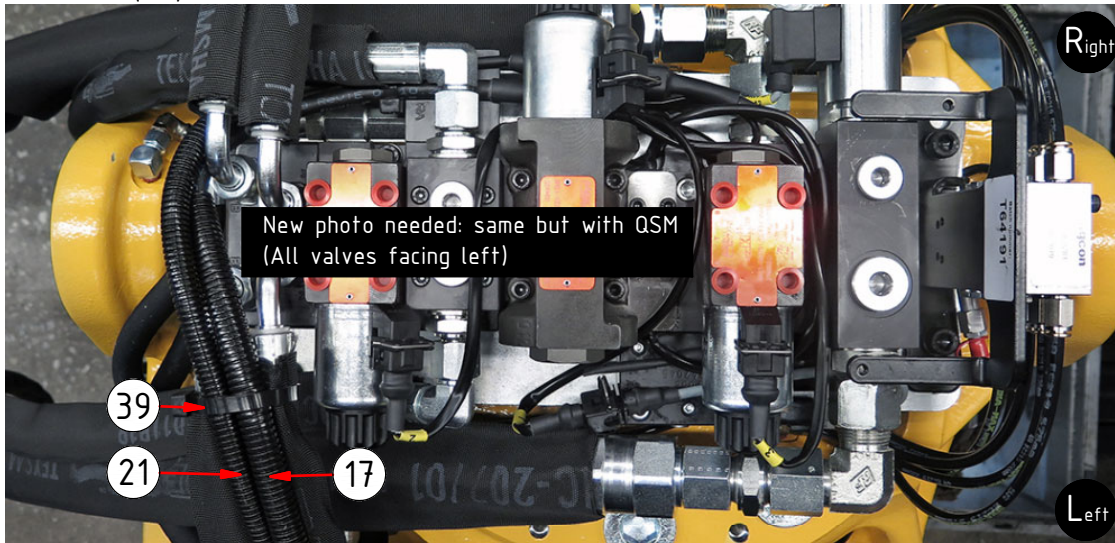
POS	DESCRIPTION	PART	QTY	COMMENTS
17	Aggregate cable ss9-2 Dump Comp.	1032909	1	
21	Cable QS QLM tiltrotator ss9-2	842148	1	
23	Q-Safe connector		1	Attach POS.21 or See EC-Oil comp.
39	Cable tie 7,8x360	1021587	1	

POS in order of assembly

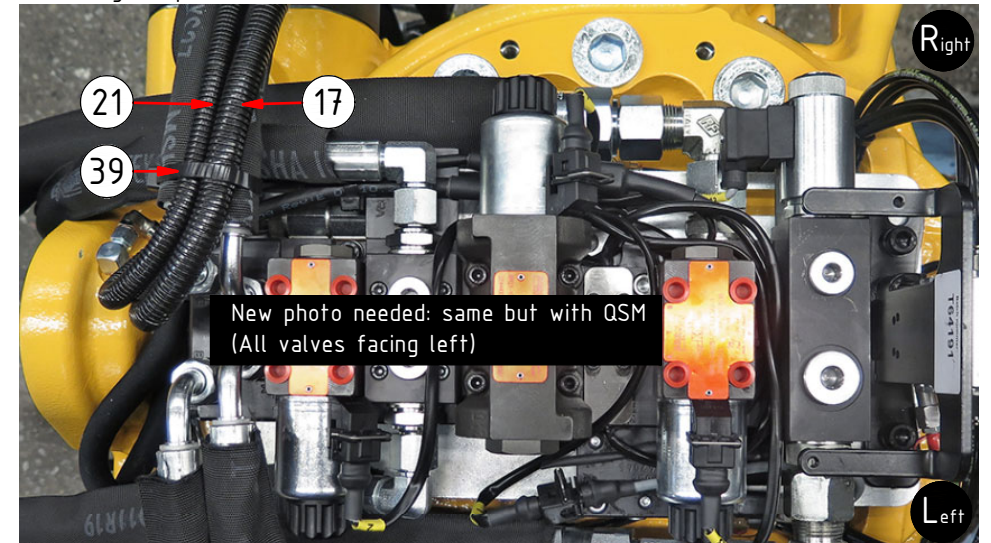
Cables/connectors:



Cables left (std)



Cables right (option)



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

Std Valves & cables - ss9 QSM

See instruction,
EC-Oil components

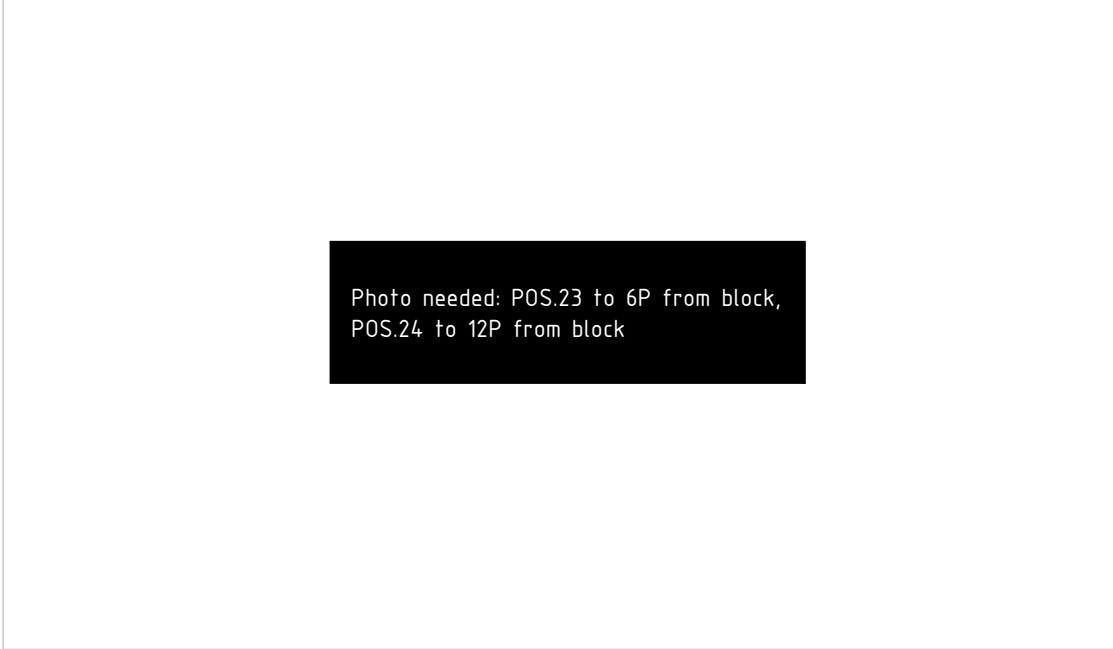
ss9IQ
Top EC-Oil

EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
23	Q-Safe connector		1	Attach POS.21 or See EC-Oil comp.
24	Adapter cable ECO (DTM) ss9-2	1029599	1	For EC-Oil. Replace POS.17 & 21
29	Adapter cable ePS rotation sensor	8000784	1	
31	Ad.cable ePS ECOW w. 120 ohm ter.	8000825	1	For EC-Oil ePS. Replace POS.30
39	Cable tie 7,8x360	1021587	1	
40	Cable tie 4,8x360	1021586	1	

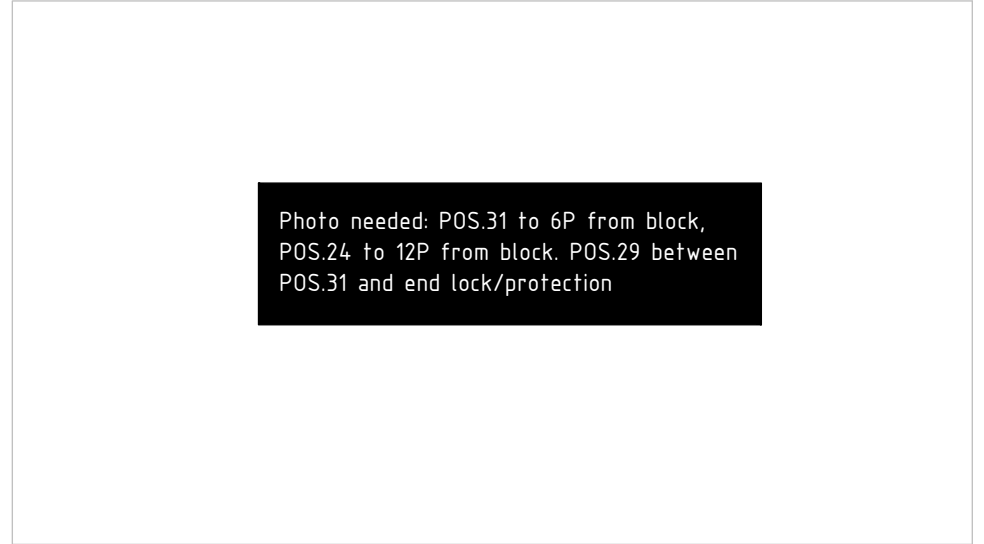
POS in order of assembly

Cables/connectors:

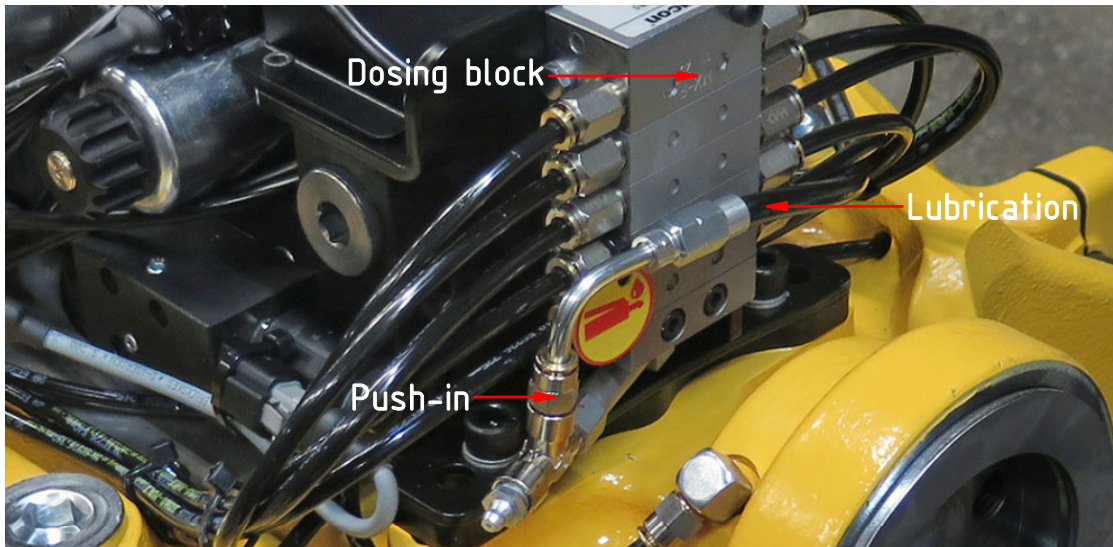


Top EC-Oil & ePS:

Cables/connectors:



Lubrication:



Std Valves & cables - ss9 QSM

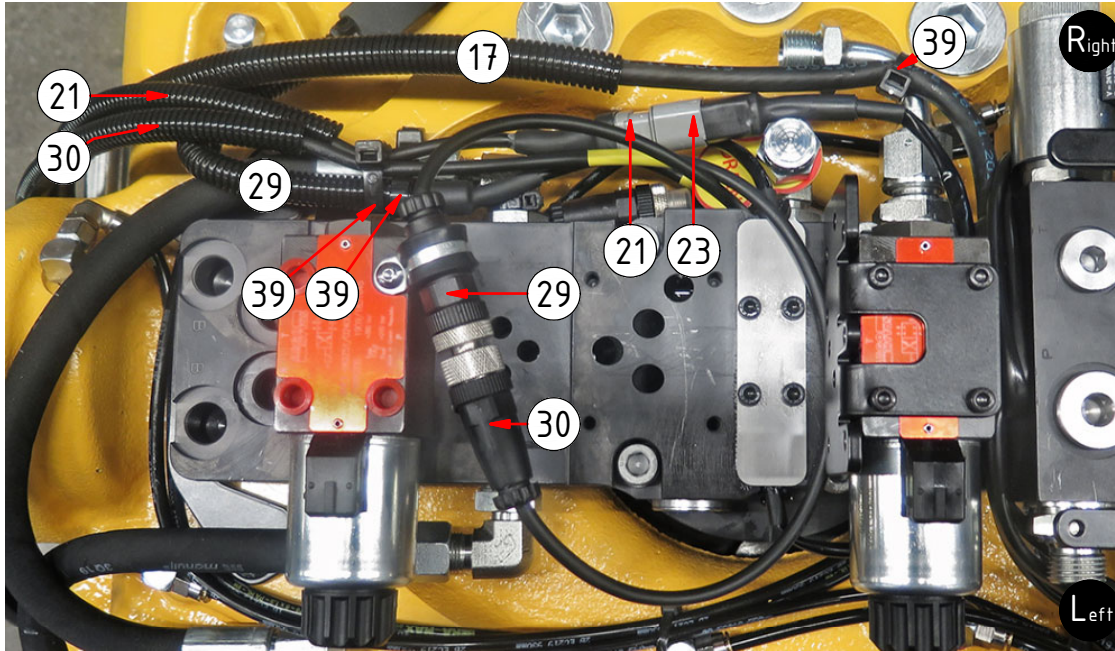
EC214, EC219, EC226, EC233

ss9
ePS

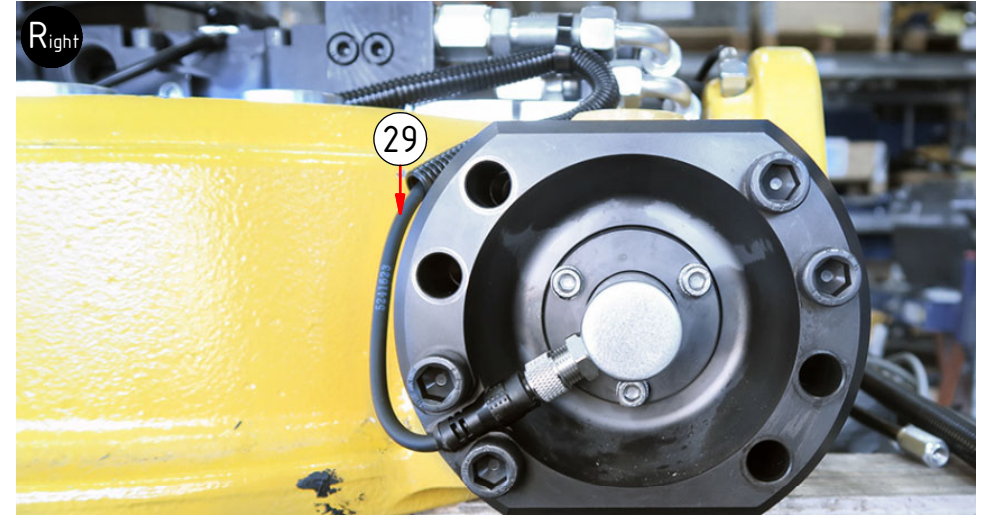
POS	DESCRIPTION	PART	QTY	COMMENTS
17	Aggregate cable ss9-2 Dump Comp.	1032909	1	
21	Cable QS QLM tiltrotator ss9-2	842148	1	
23	Q-Safe connector		1	Attach POS.21 or See EC-Oil comp.
29	Adapter cable ePS rotation sensor	8000784	1	
30	Agg. cable ePS w. 120 ohm termin.	8000824	1	
39	Cable tie 7,8x360	1021587	1	
40	Cable tie 4,8x360	1021586	1	

POS in order of assembly

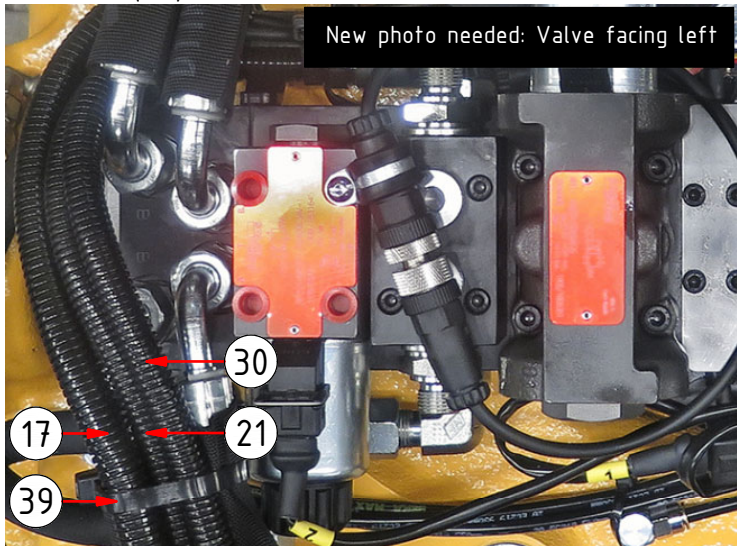
Cables/connectors:



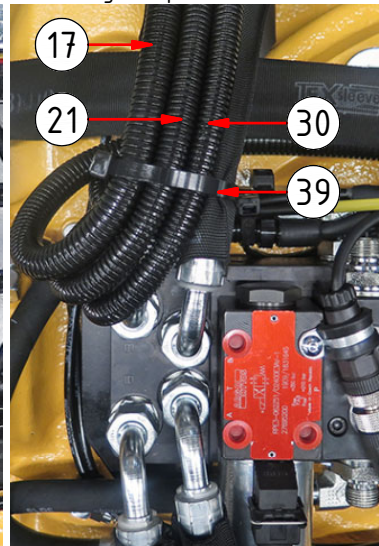
Sensor connection:



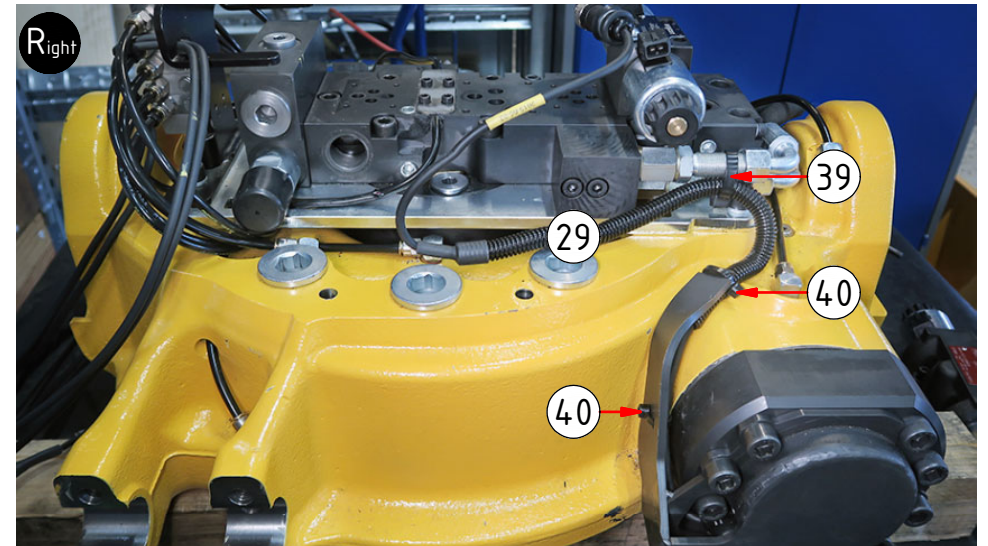
Cables left (std)



Cables right (option)



Sensor cable:



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

Std Valves & cables - ss9 QSM

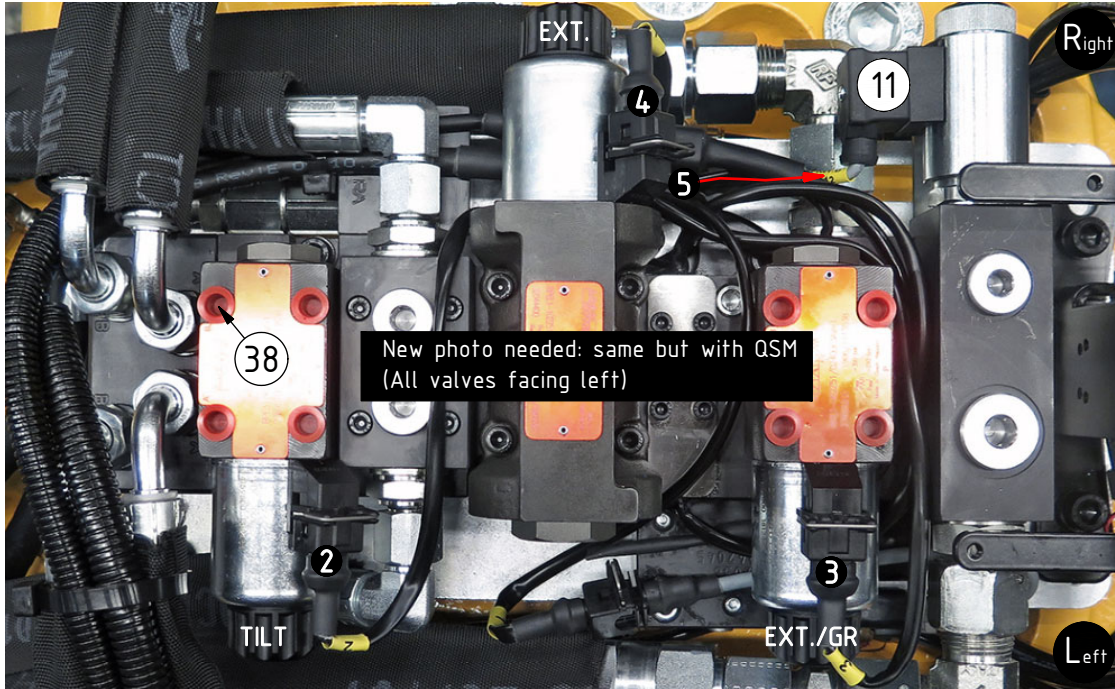
EC214, EC219, EC226, EC233

ss9
Valve connections

POS	DESCRIPTION	PART	QTY	COMMENTS
11	Adapter cabel-Hirschmann-Amp	302971	1	
12	Adapter cable DT-JT	1017478	1	
16	Jumper JT Lock valve	1018662	1	Plug JT connector "1" for ss9SQ
38	Plastic plug (red) for valves	790156	8	

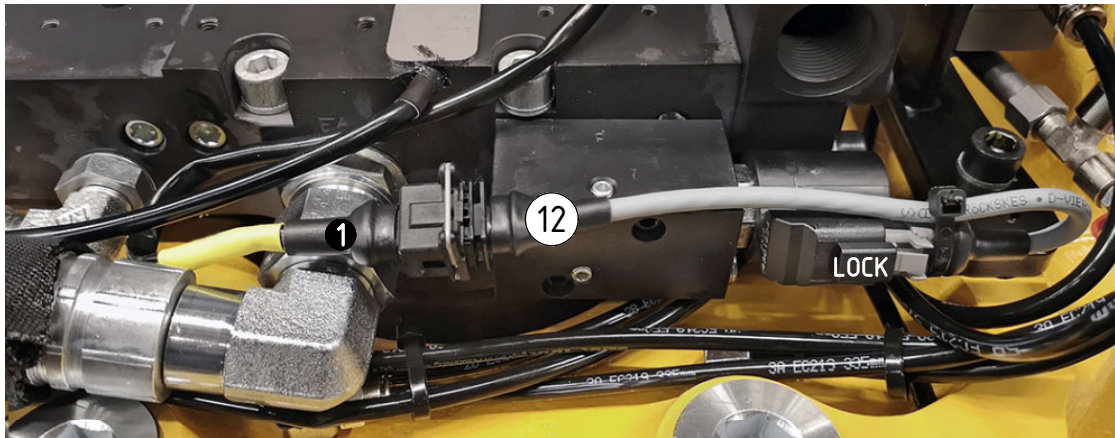
POS in order of assembly

JT marked with numbers:

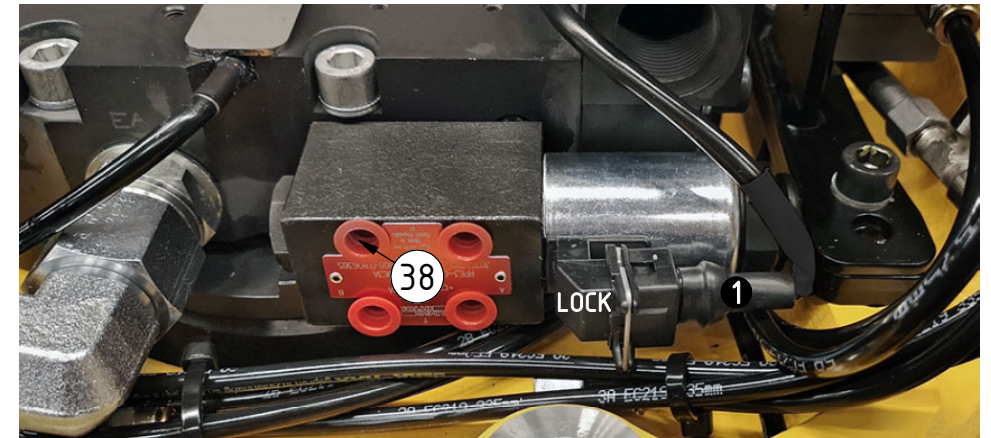


New photo needed: same but with QSM
(All valves facing left)

ss9IQ
Lock valve IQS DT:



ss9IQ
Lock valve JT:



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