

Std Valves & cables - ss10 QSM

COVERSHEET



Planned document changes:

Breifly:

ePS, DC2 (with or without ECO): replace POS.41 with 8000783. Add 8000784.
ePS, ss10(SVAB): replace POS.49 with 8000784, still in use with ECO. Replace 50 with 8000824.
ePS, ss10(SVAB) with ECO: replace POS.56 with 8000825.

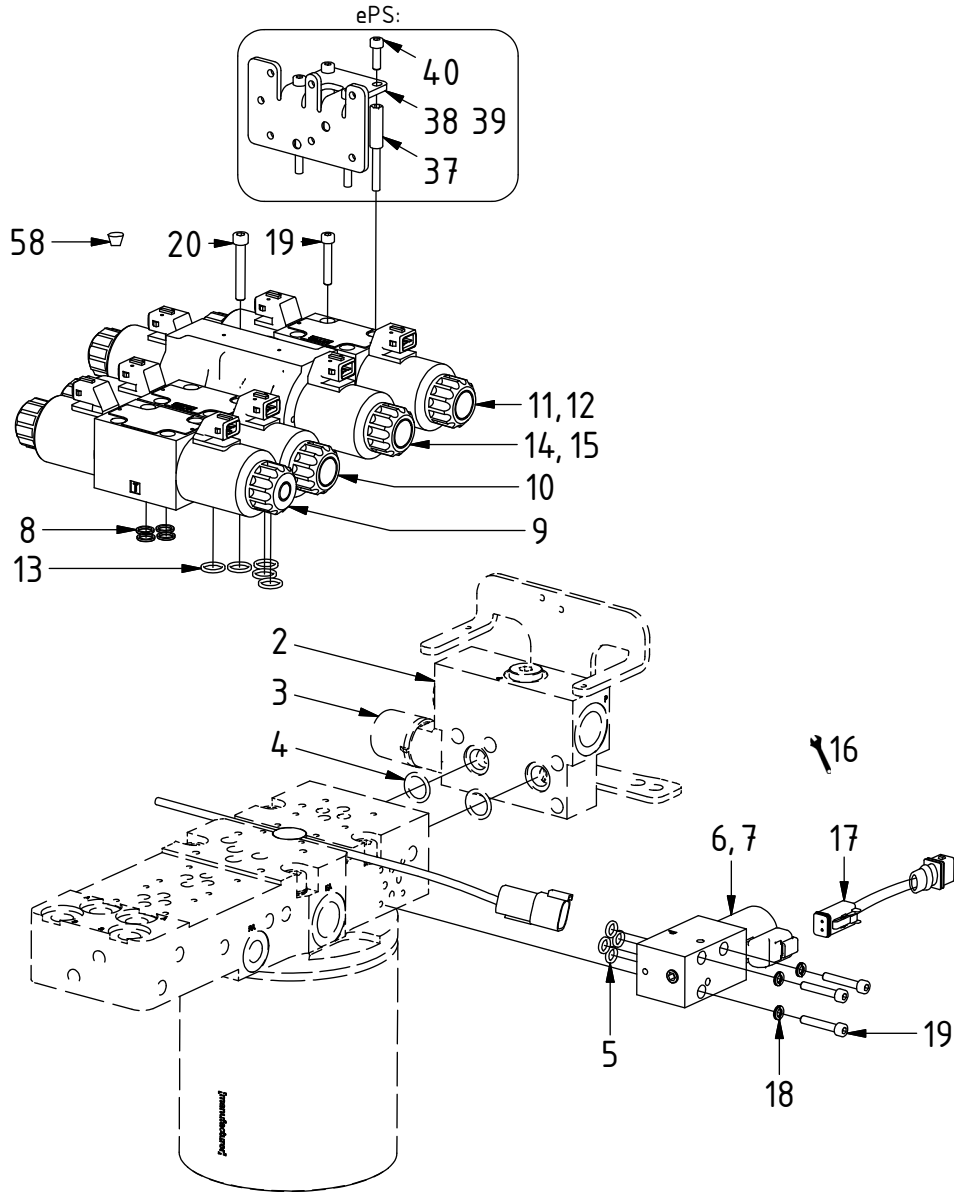
Document changes:

Date:	Change:	Rev. after change:
2019-08-14	New instruction.	-

Std Valves & cables - ss10 QSM

EC214, EC219, EC226, EC233

POS in order of assembly



POS	DESCRIPTION	PART	QTY	COMMENTS
1	Std Valves & cables is applied alongside control system assembly			See "Control system" (hoses) (EC214, EC219, EC226, EC233) QSM
2	Connection block P reducer Compl.	1027363	1	(POS.3 included)
3	Pressure reduction valve VRN2-10	730326	1	
4	O-ring 15,54x2,62	712423	2	
5	O-ring square 7,66x1,68	7000579	4	
6	Directional valve NG4 IQS 12V DT	1042047	1	(POS.5 included)
7	Directional valve NG4 IQS 24V DT	1042190	1	(POS.5 included)
8	O-ring 9,25x1,78	710901	12	
9	Directional valve prop 12V open T	7000092	1	(POS.8 included)
10	Directional valve prop 12V	730190	1	
11	Directional valve NG6 12V	730101	1	(POS.8 included)
12	Directional valve NG6 24V	730103	1	(POS.8 included)
13	O-ring square 12,42x1,68	750704	5	
14	Directional valve NG10 12V	730340	1	(POS.13 included)
15	Directional valve NG10 24V	730339	1	(POS.13 included)
16	For connecting QSC			See p.14 (only affects DC2 assy.)
17	Adapter cable DT-JT	1017478	1	
18	Washer NL 5mm	611038	3	
19	MC6S M5x30 12.9	610403	15	Torque: 9,7Nm
20	MC6S M6x40 12.9	610418	4	Torque: 17Nm
37	Valve spacer ePS	1034402	4	
38	Bracket ePS	1038119	1	For Topcon/LEICA/Novatron
39	Bracket ePS (Trimble only)	1038117	1	For Trimble
40	MC6S M5x16 12.9	610401	4	Torque: 9,7Nm
58	Plastic plug (red) for valves	790156	12	

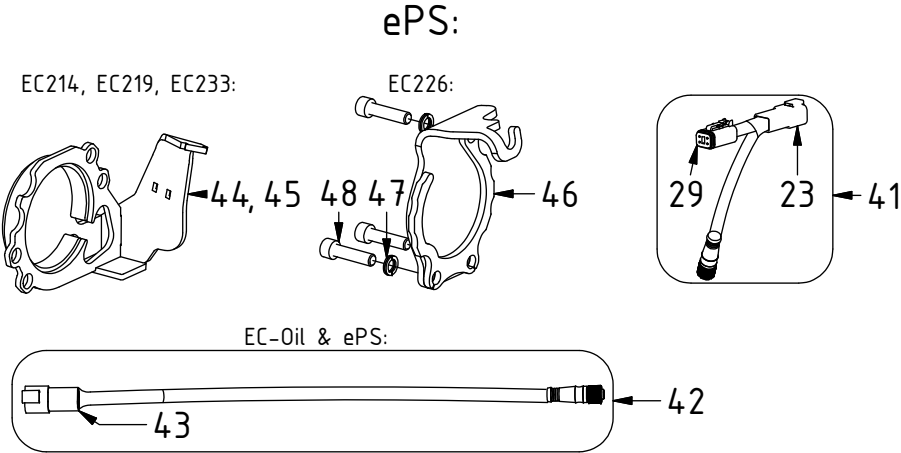
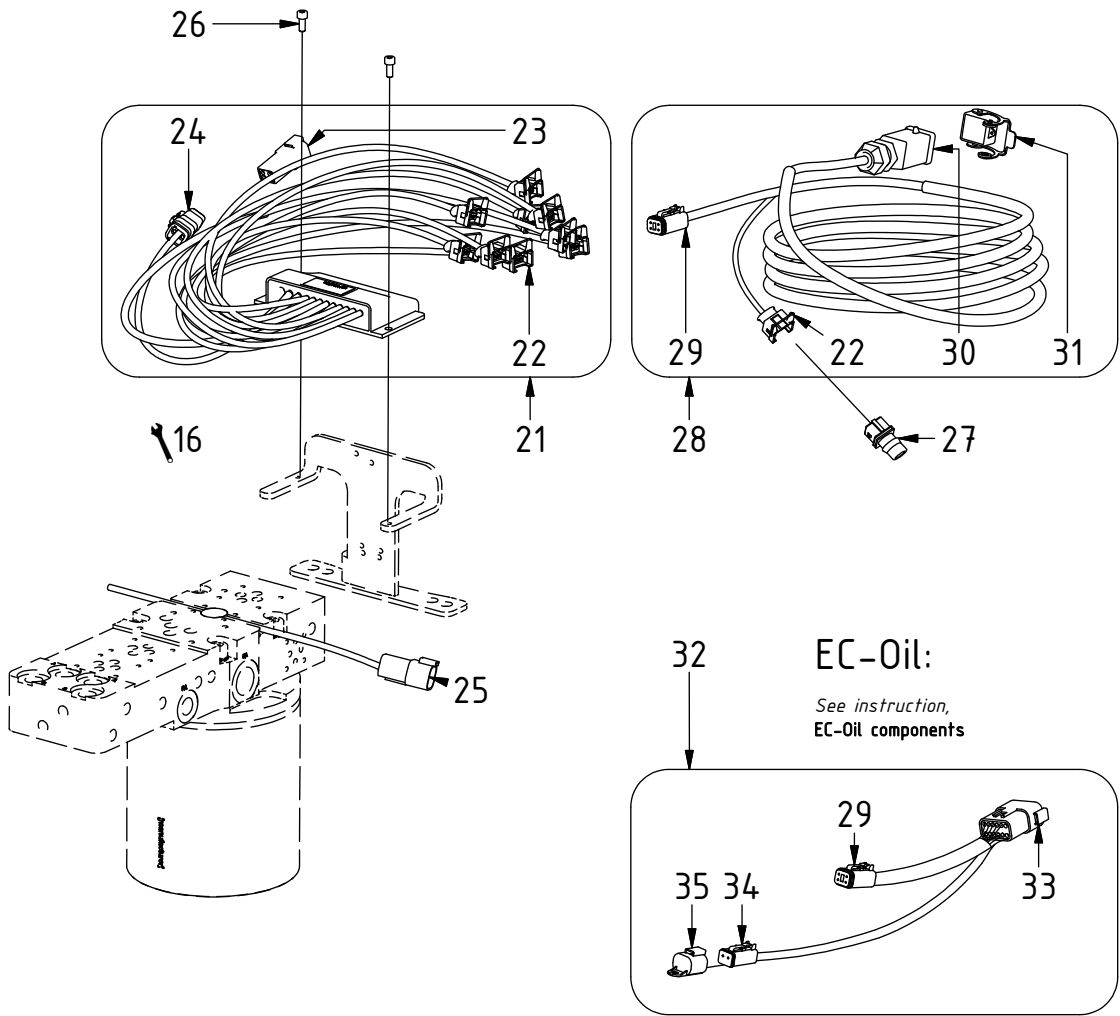
Std Valves & cables - ss10 QSM

DC2

EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
16	For connecting QSC			See p.14 (only affects DC2 assy.)
21	Tiltrotator module DC2 Q-Safe	842137	1	
22	Connector JT	810218	9	
23	Connector Deutsch DT04-4P	820108	1	
24	Connector Deutsch DTM06-6S	8000053	1	
25	Q-Safe connector			
26	MC6S M5x12 12.9	6000077	2	
27	Plug JT	1045154	1	Plug JT connector
28	Aggregate cable DC2 Complete QSC	8000175	1	
29	Deutsch 4way female	820218	3	
30	ILME contact 12P DC2 Complete	841192	1	
31	ILME cover 12P contact with jumper	810208	1	
32	Adapter cable ECO W DC2 DTM	1048529	1	For EC-Oil. Replace POS.28
33	Connector Deutsch DTM04-12P	8000177	1	
34	Connector Deutsch DT06-2S	820219	1	
35	Protection plug DT	8000086	1	Plug DT connector
41	Adapter cable DC2 ePS	842173	1	Between POS.21 & 28 / 32 for ECO
42	Cable Tilt angle sensor ECO W DC2	1048530	1	For EC-Oil with ePS
43	Deutsch housing 6 way male pin	810649	3	
44	Protection ePS/MACS EC214-EC219	1033565	1	
45	Protection ePS/MACS EC233	1040940	1	
46	Protection ePS/MACS EC226	1016554	1	
47	Washer NL10	611041	3	
48	MC6S M10x40 12.9	610453	3	

POS in order of assembly



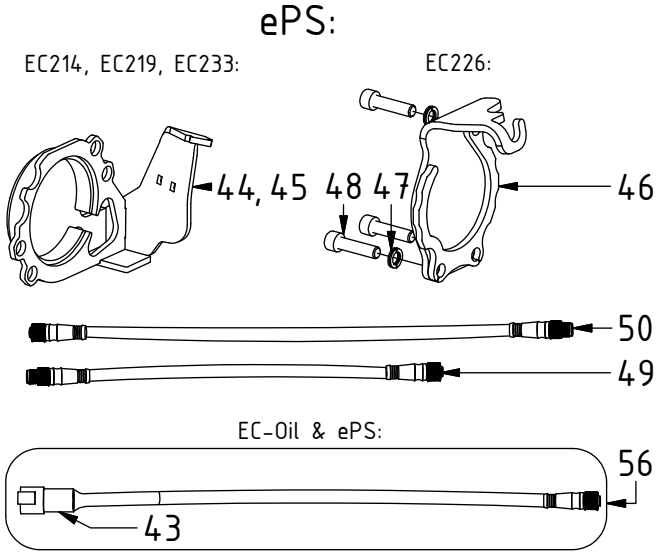
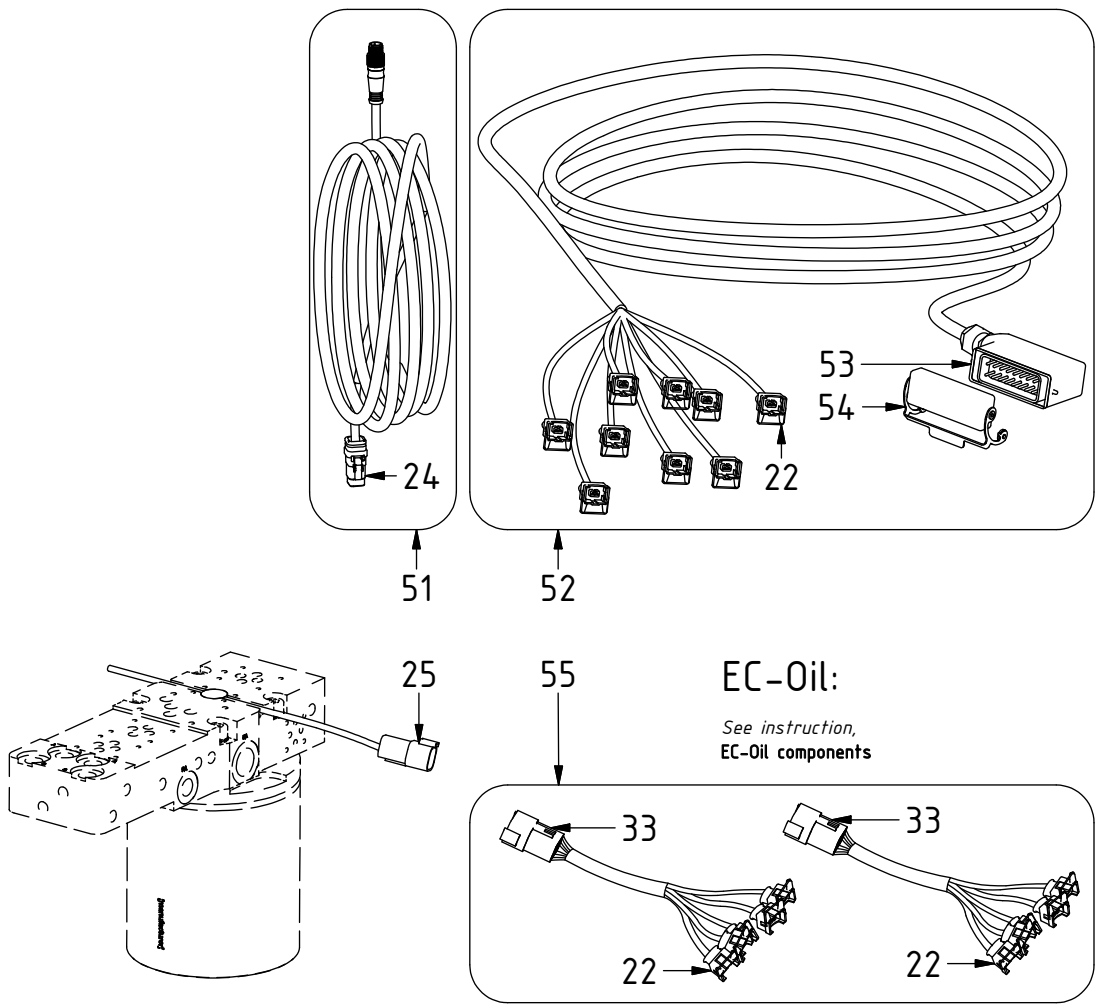
Std Valves & cables - ss10 QSM

ss10 (SVAB)

EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
22	Connector JT	810218	9	
24	Connector Deutsch DTM06-6S	8000053	1	
25	Q-Safe connector			Attach to POS.51 or See EC-Oil comp.
33	Connector Deutsch DTM04-12P	8000177	1	
43	Deutsch housing 6 way male pin	810649	3	
44	Protection ePS/MACS EC214-EC219	1033565	1	
45	Protection ePS/MACS EC233	1040940	1	
47	Washer NL10	611041	3	
48	MC6S M10x40 12.9	610453	3	
49	Adap. cable SVAB ePS rot. sensor	842188	1	
50	Agg. cable SVAB ePS rot. sensor	842187	1	
51	Cable QS QLM tiltrotator SVAB	842148	1	
52	Aggregate cable SVAB Complete	1015196	1	
53	ILME contact 16P Complete	810203	1	
54	ILME cover 16P contact with jumper	810235	1	
55	Adapter cable ECO (DTM) SVAB	1029599	2	For EC-Oil. Replace POS.51-52
56	Adapter cable ePS ECO W SVAB	1042245	1	For EC-Oil ePS. Replace POS.49-50

POS in order of assembly



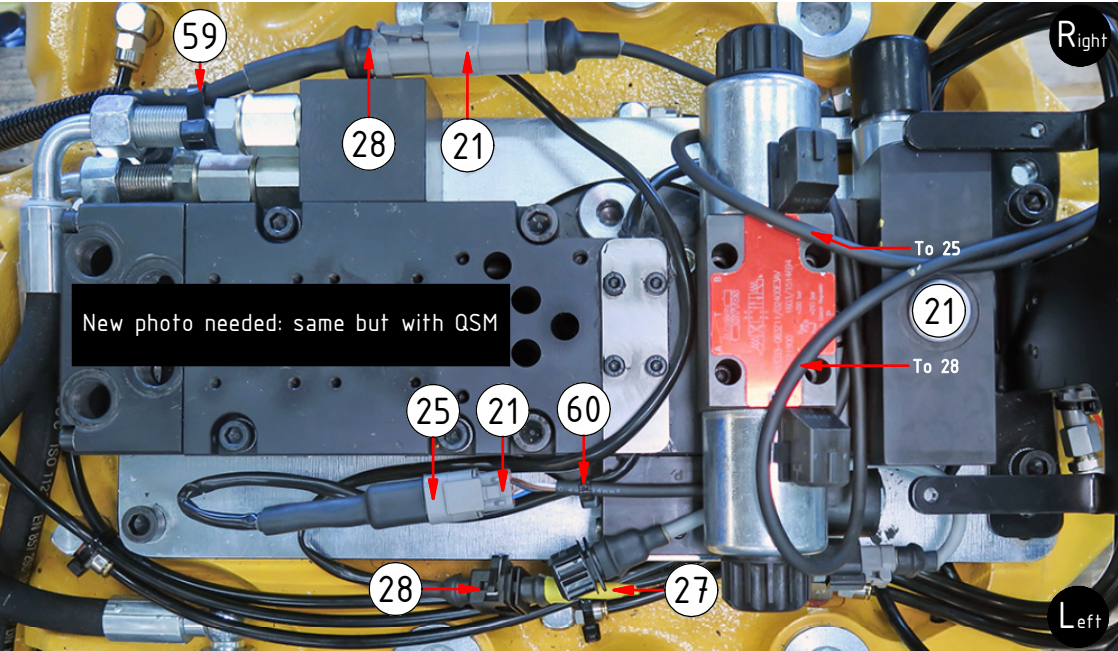
Std Valves & cables - ss10 QSM

DC2
Std

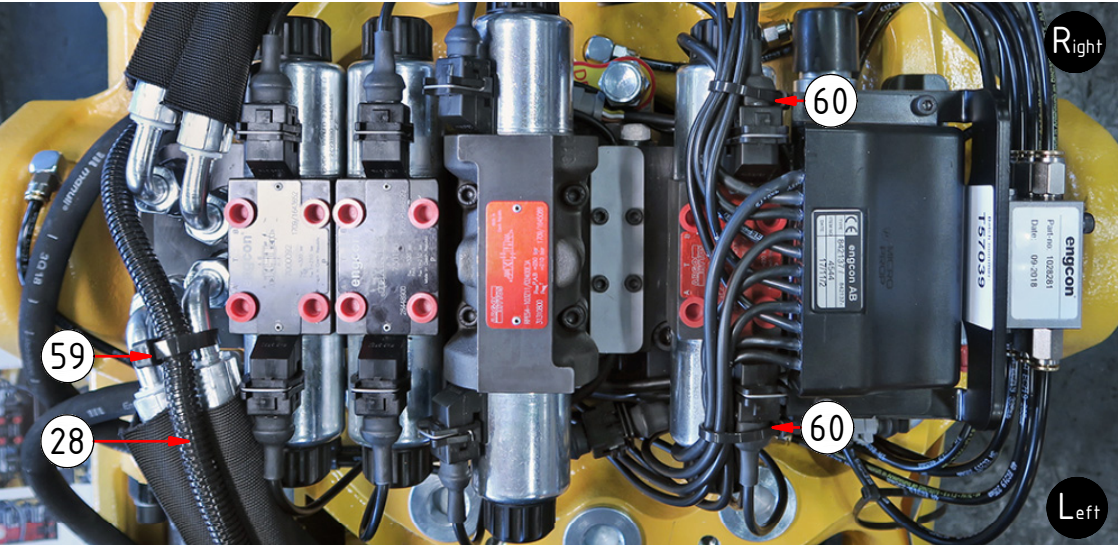
EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
16	For connecting QSC			See p.14 (only affects DC2 assy.)
21	Tiltrotator module DC2 Q-Safe	842137	1	
25	Q-Safe connector			
27	Plug JT	1045154	1	Plug JT connector
28	Aggregate cable DC2 Complete QSC	8000175	1	
59	Cable tie 7,8x360	1021587	1	
60	Cable tie 4,8x360	1021586	1	

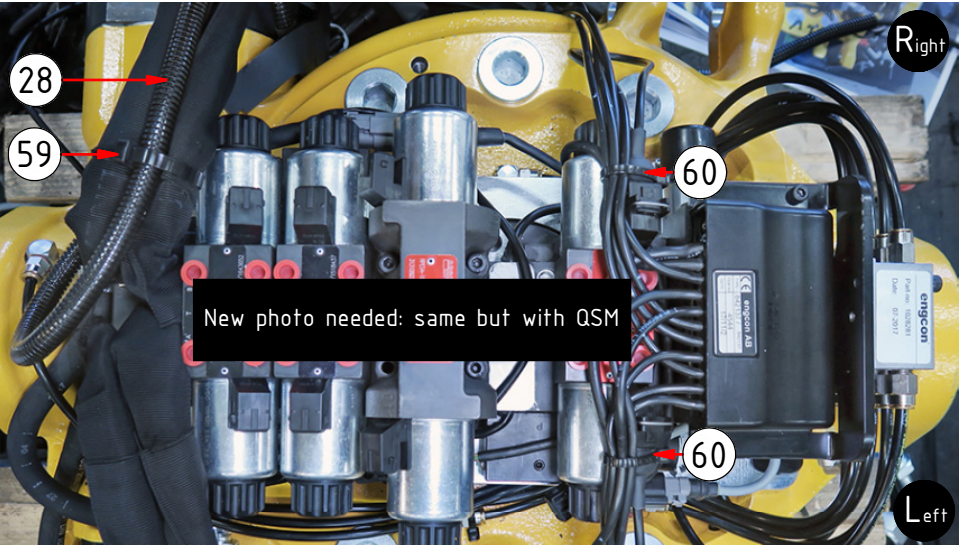
Cables/connectors:



Cables left (std)



Cables right (option)



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

See instruction,
EC-Oil components

DC2
Top EC-Oil Lubrication

EC214, EC219, EC226, EC233

POS

DESCRIPTION

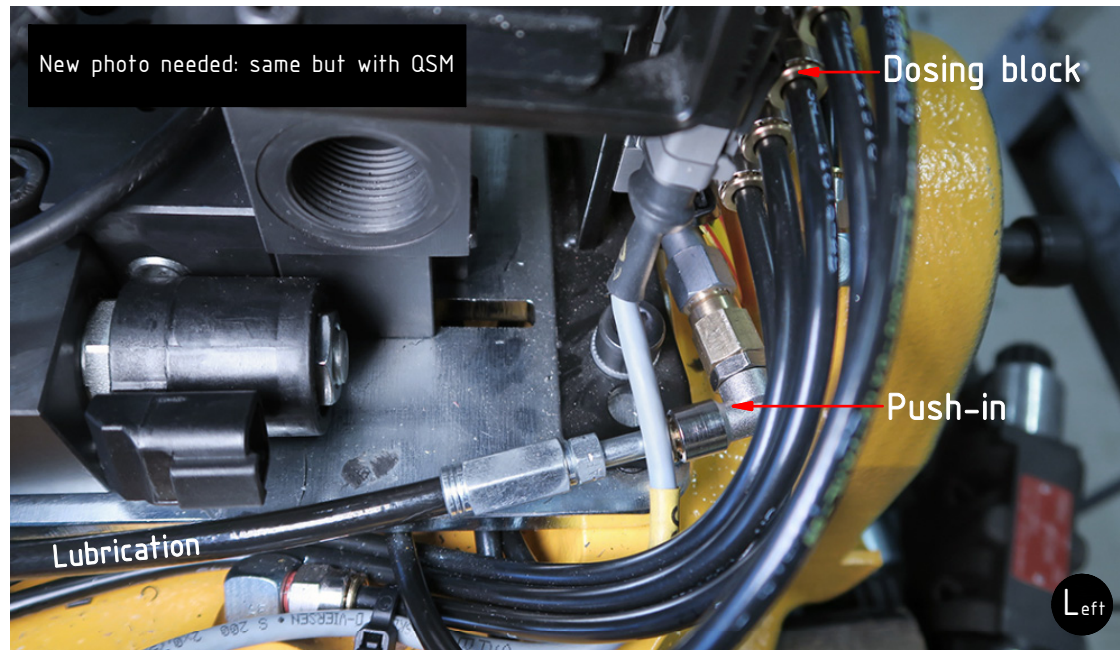
PART

QTY

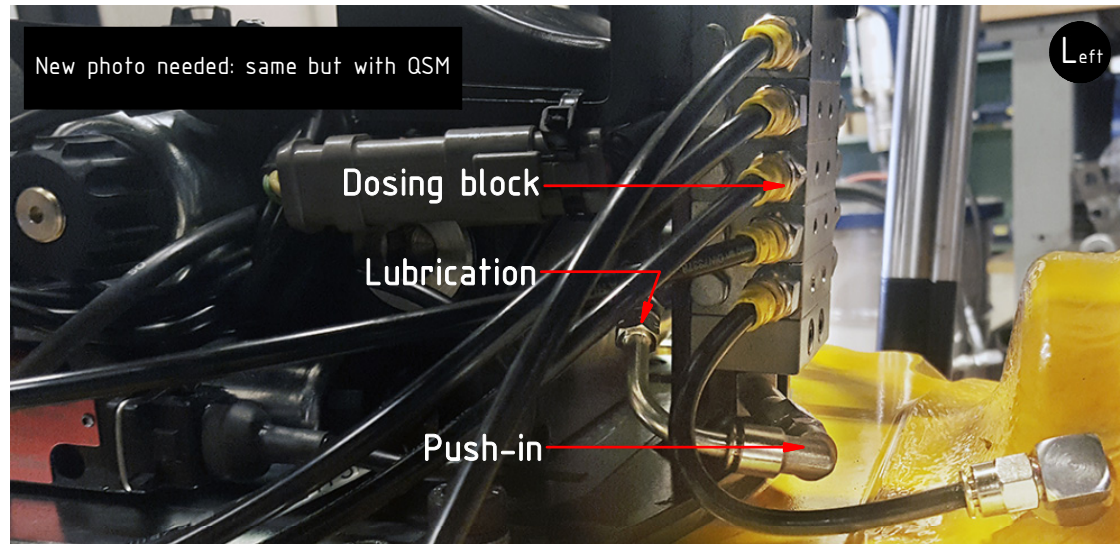
COMMENTS

POS in order of assembly

Lubrication EC214-EC226:



Lubrication EC233:



Continue to page 7 for EC-Oil cables & connectors.

Std Valves & cables - ss10 QSM

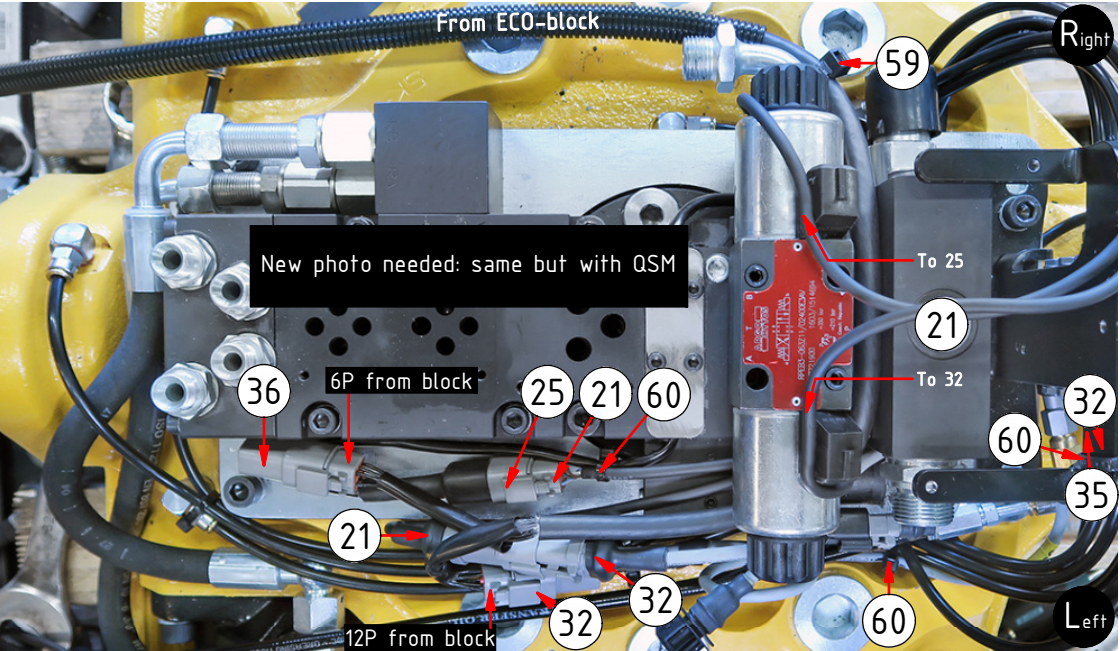
See instruction,
EC-Oil components

DC2
Top EC-Oil

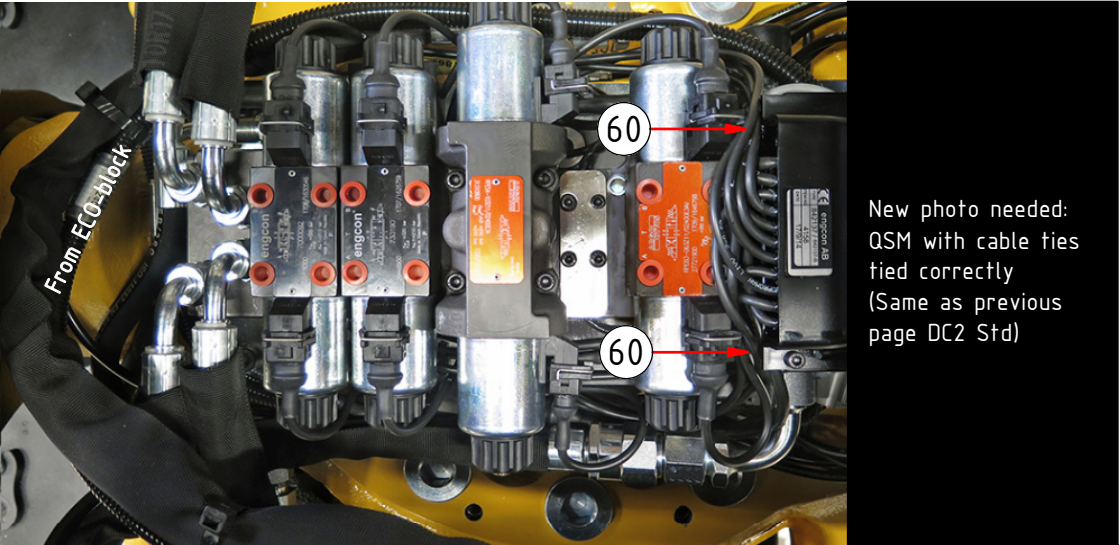
EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
21	Tiltrotator module DC2 Q-Safe	842137	1	
25	Q-Safe connector			
32	Adapter cable ECO W DC2 DTM	1048529	1	For EC-Oil. Replace POS.28
35	Protection plug DT	8000086	1	Plug DT connector
36	Protection plug DTM	8000090	1	
41	Adapter cable DC2 ePS	842173	1	Between POS.21 & 32
42	Cable Tilt angle sensor ECO W DC2	1048530	1	For EC-Oil with ePS
59	Cable tie 7,8x360	1021587	1	
60	Cable tie 4,8x360	1021586	1	

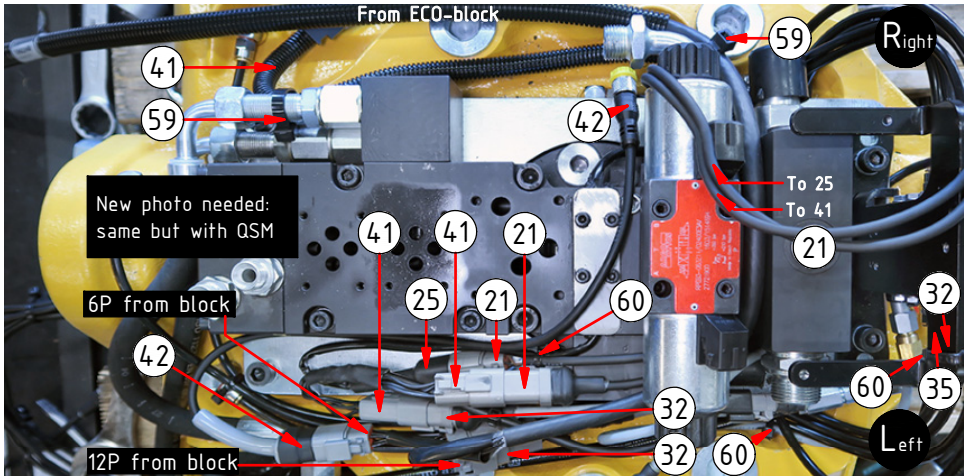
Cables/connectors:



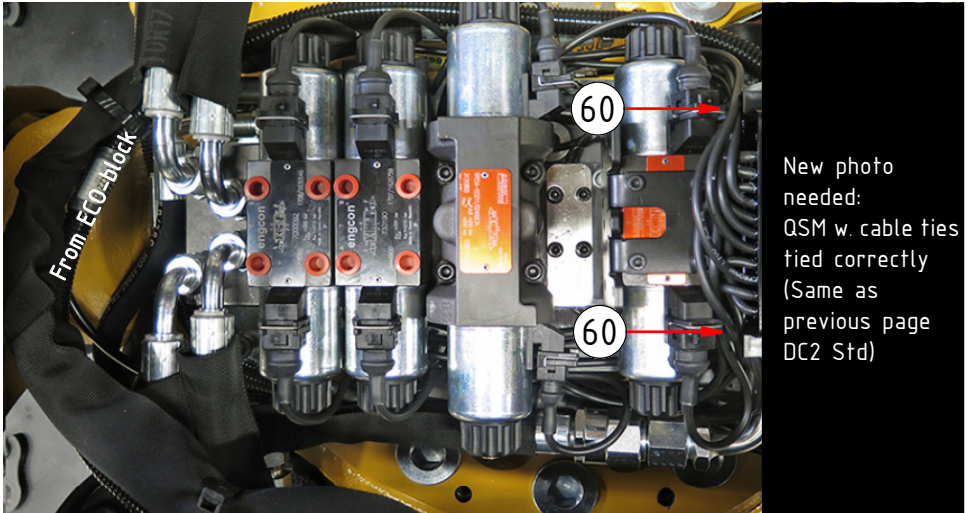
Cables:



Cables/connectors:
Top EC-Oil & ePS:



Cables:



Continue to page 8 for ePS sensor connection.

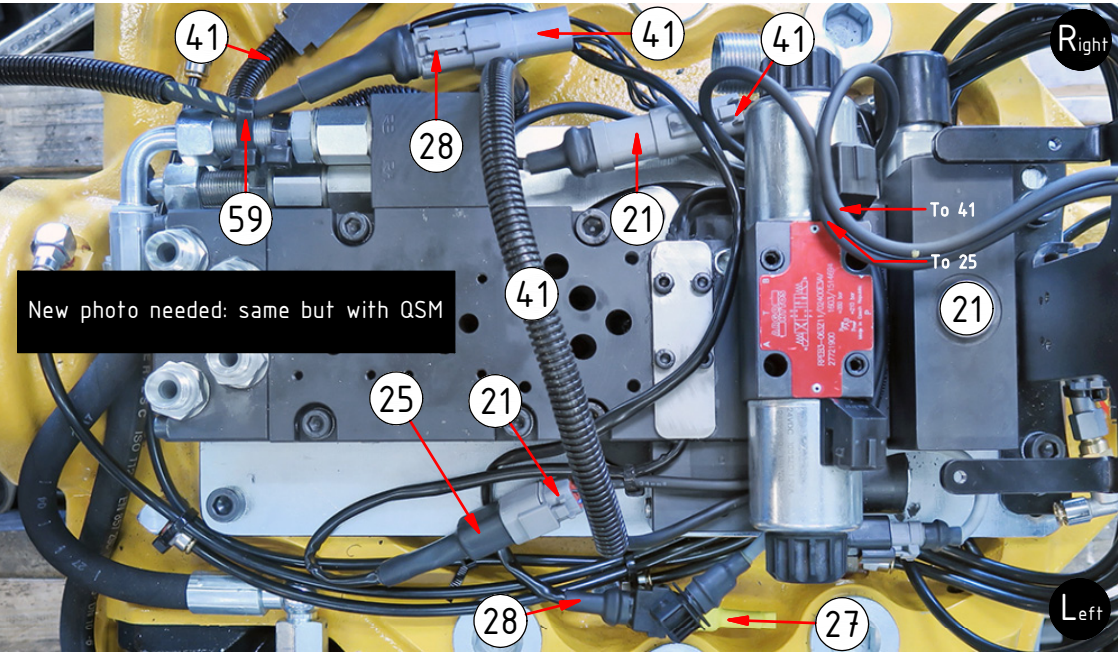
Std Valves & cables - ss10 QSM

DC2
ePS

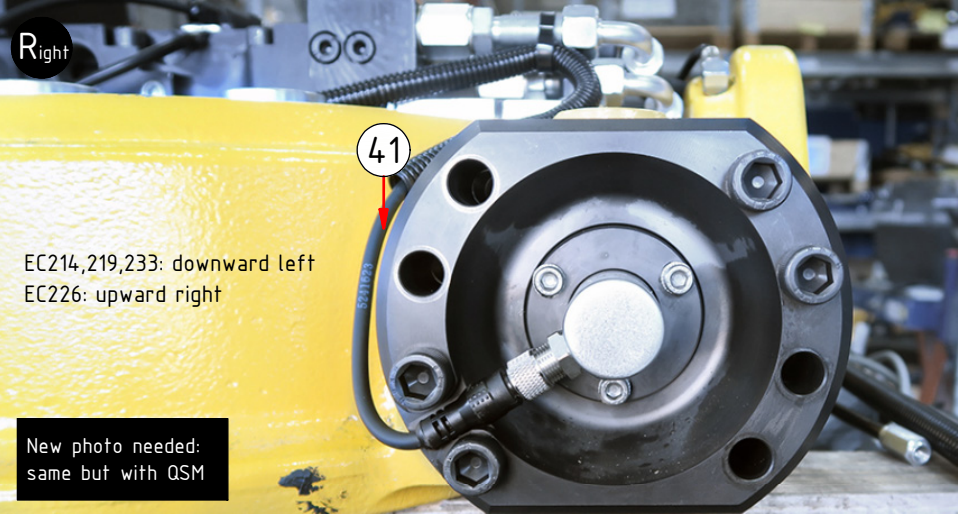
EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
21	Tiltrotator module DC2 Q-Safe	842137	1	
25	Q-Safe connector			
27	Plug JT	1045154	1	Plug JT connector
28	Aggregate cable DC2 Complete QSC	8000175	1	
41	Adapter cable DC2 ePS	842173	1	
59	Cable tie 7,8x360	1021587	1	
60	Cable tie 4,8x360	1021586	1	

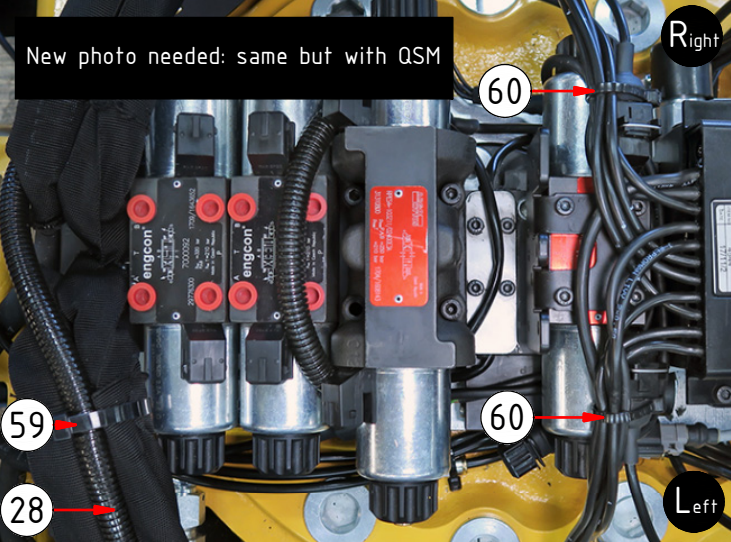
Cables/connectors:



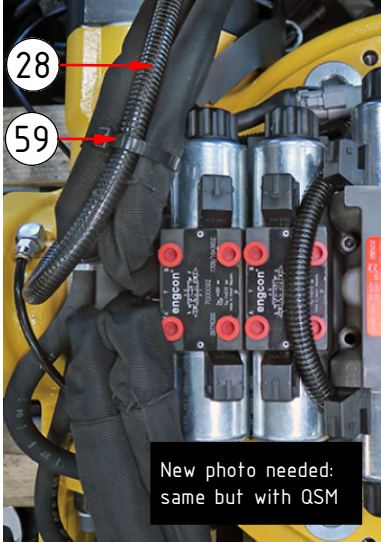
Sensor connection:



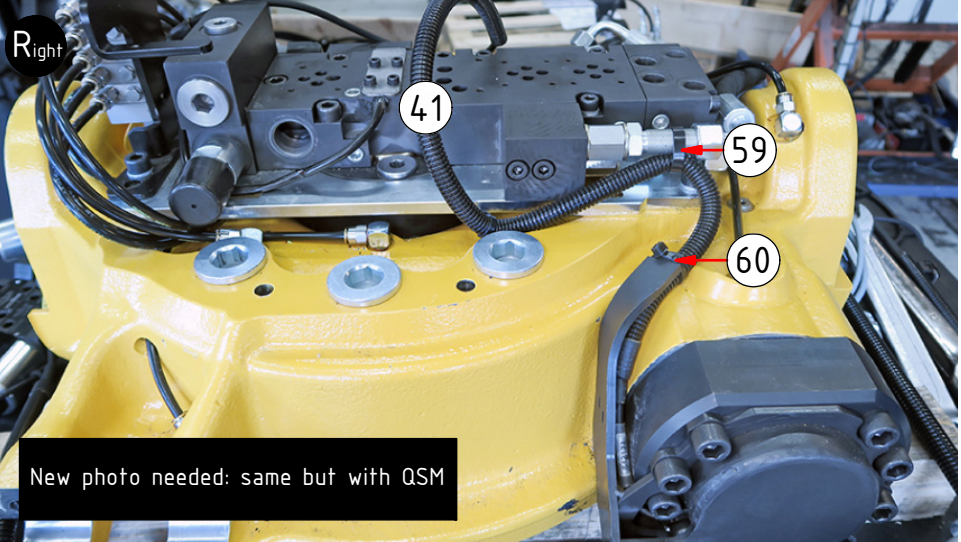
Cables left (std)



Cables right (option)



Sensor cable:



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

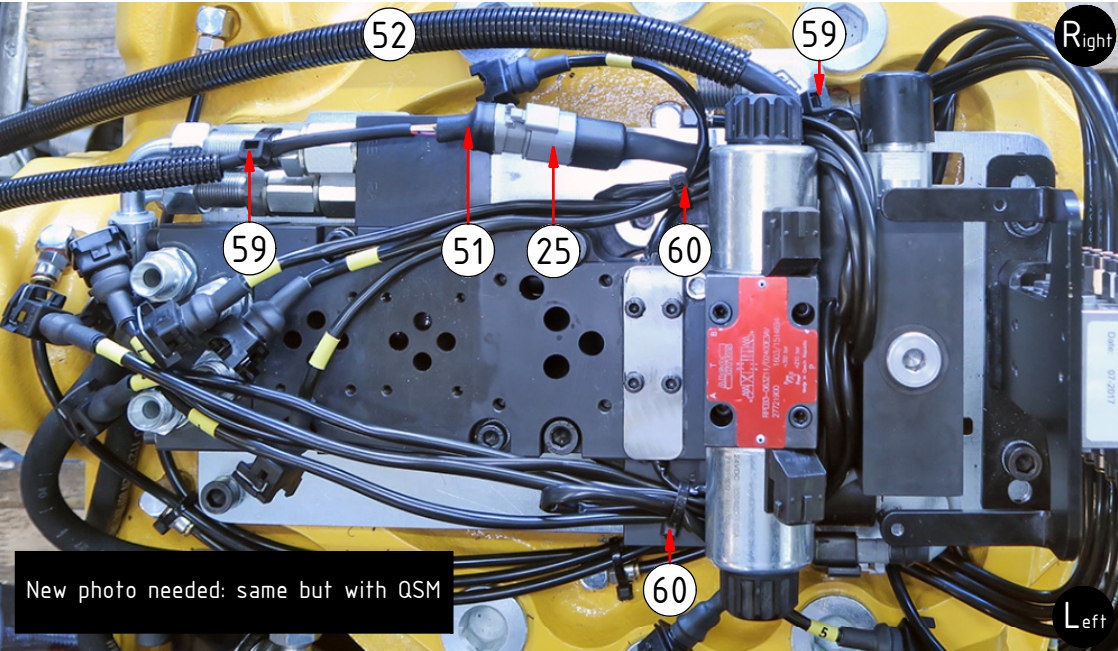
Std Valves & cables - ss10 QSM

EC214, EC219, EC226, EC233

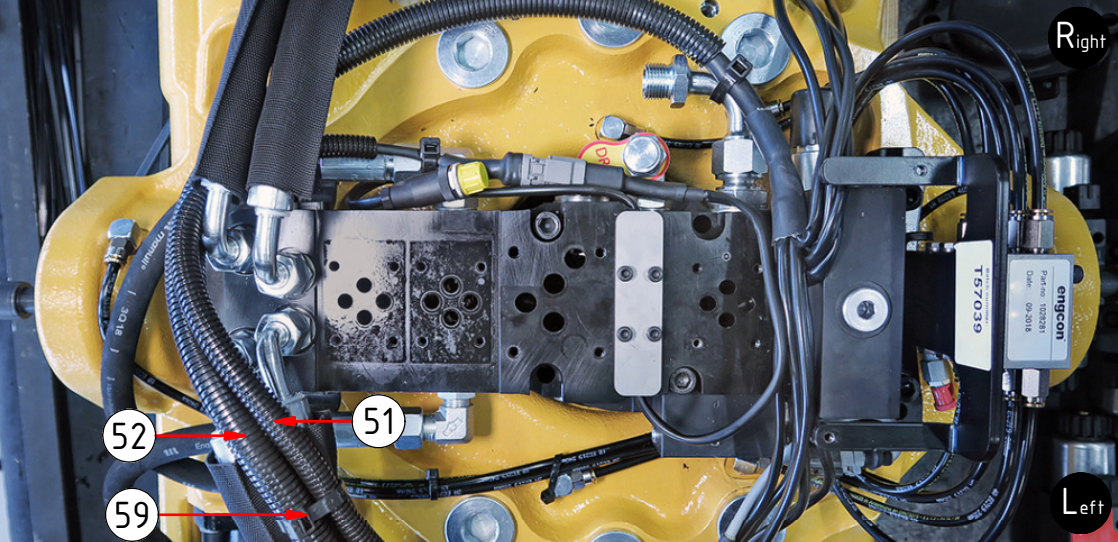
ss10 (SVAB)
Std

POS	DESCRIPTION	PART	QTY	COMMENTS
25	Q-Safe connector			
51	Cable QS QLM tiltrotator SVAB	842148	1	
52	Aggregate cable SVAB Complete	1015196	1	
59	Cable tie 7,8x360	1021587	1	
60	Cable tie 4,8x360	1021586	1	

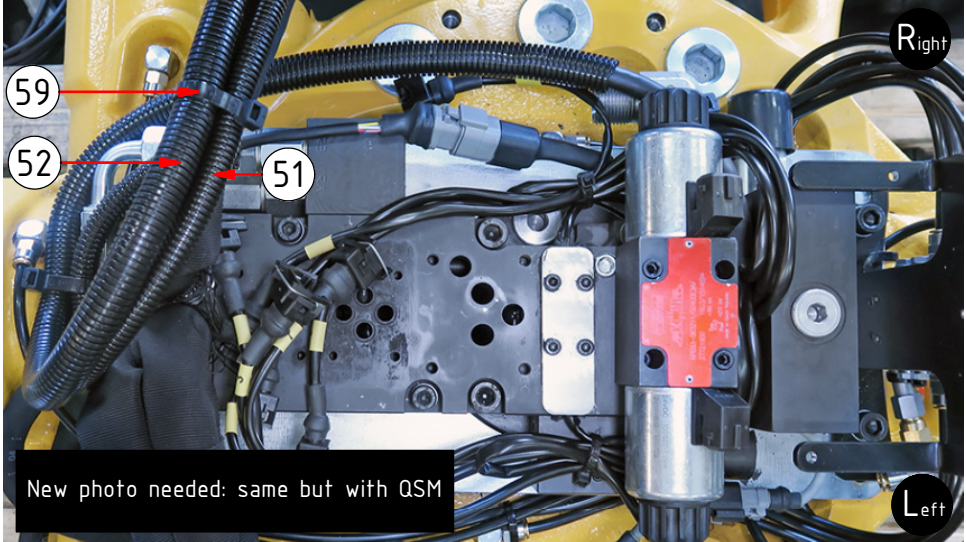
Cables/connectors:



Cables left (std)



Cables right (option)



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

POS in order of assembly

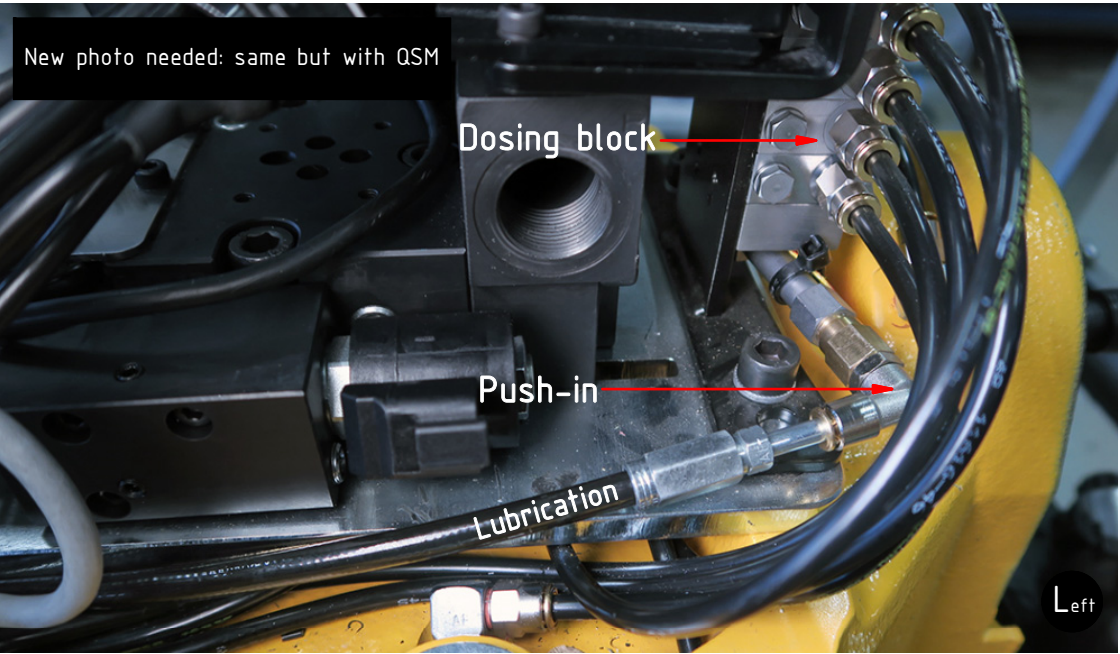
See instruction,
EC-Oil components

ss10 (SVAB)
Top EC-Oil Lubrication

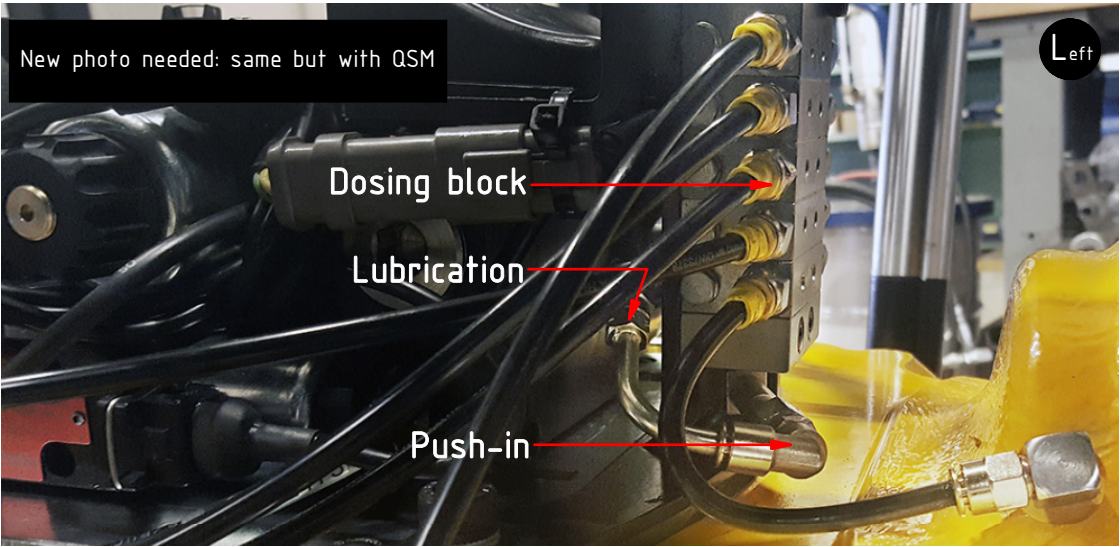
EC214, EC219, EC226, EC233	POS	DESCRIPTION	PART	QTY	COMMENTS
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POS in order of assembly

Lubrication EC214-EC226:



Lubrication EC233:



Continue to page 11 for EC-Oil cables & connectors.

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

Std Valves & cables - ss10 QSM

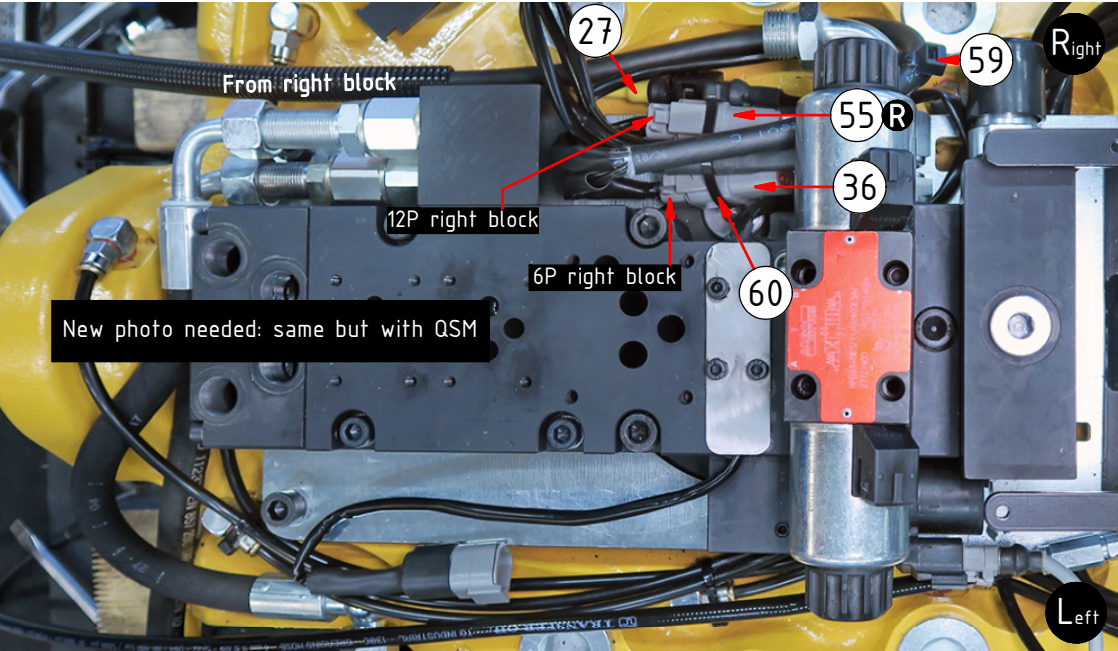
See instruction,
EC-Oil components

ss10 (SVAB)
Top EC-Oil

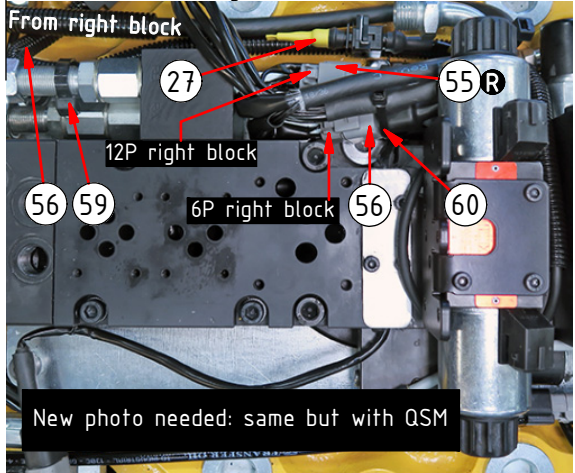
EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
25	Q-Safe connector			Attach to 6P from Left block
27	Plug JT	1045154	1	Plug JT connector "1" to Right
36	Protection plug DTM	8000090	1	No ePS: attach to 6P from Right block
55	Adapter cable ECO (DTM) SVAB	1029599	2	For EC-Oil. Replace POS.51-52
56	Adapter cable ePS ECO W SVAB	1042245	1	For EC-Oil ePS. Replace POS.49-50
59	Cable tie 7,8x360	1021587	1	
60	Cable tie 4,8x360	1021586	1	

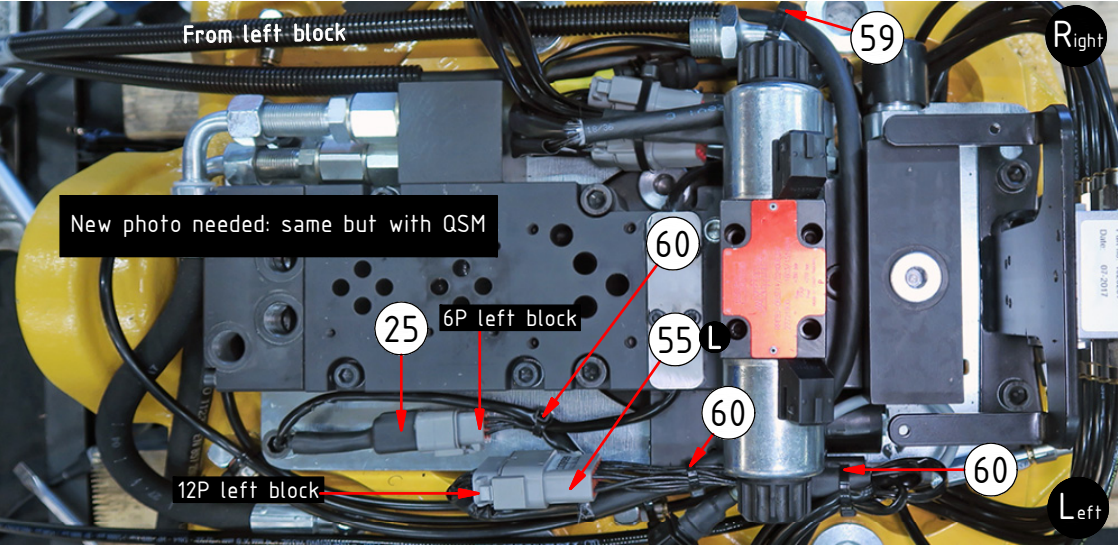
Cables/connectors, right block:



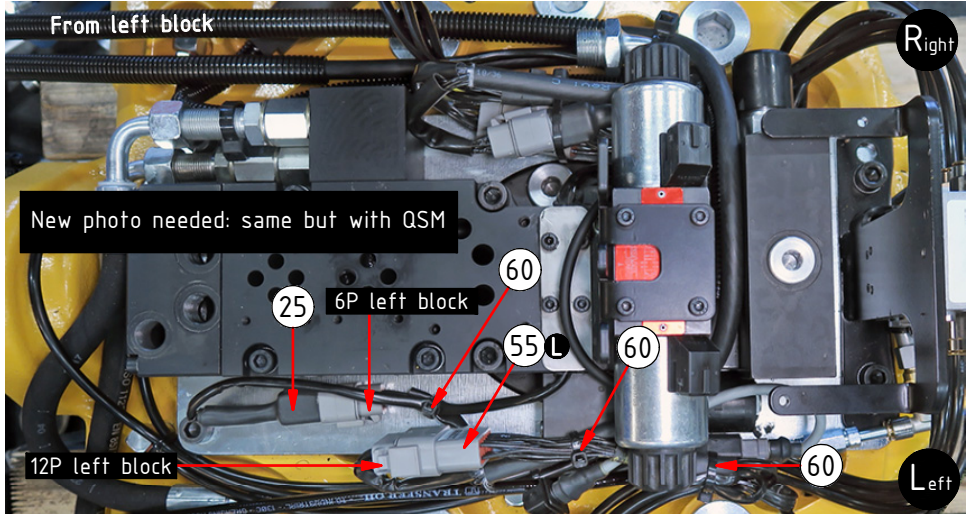
Cables/connectors, right block: Top EC-Oil & ePS:



Cables/connectors, left block:



Cables/connectors, left block:



Continue to page 12 for ePS sensor connection.

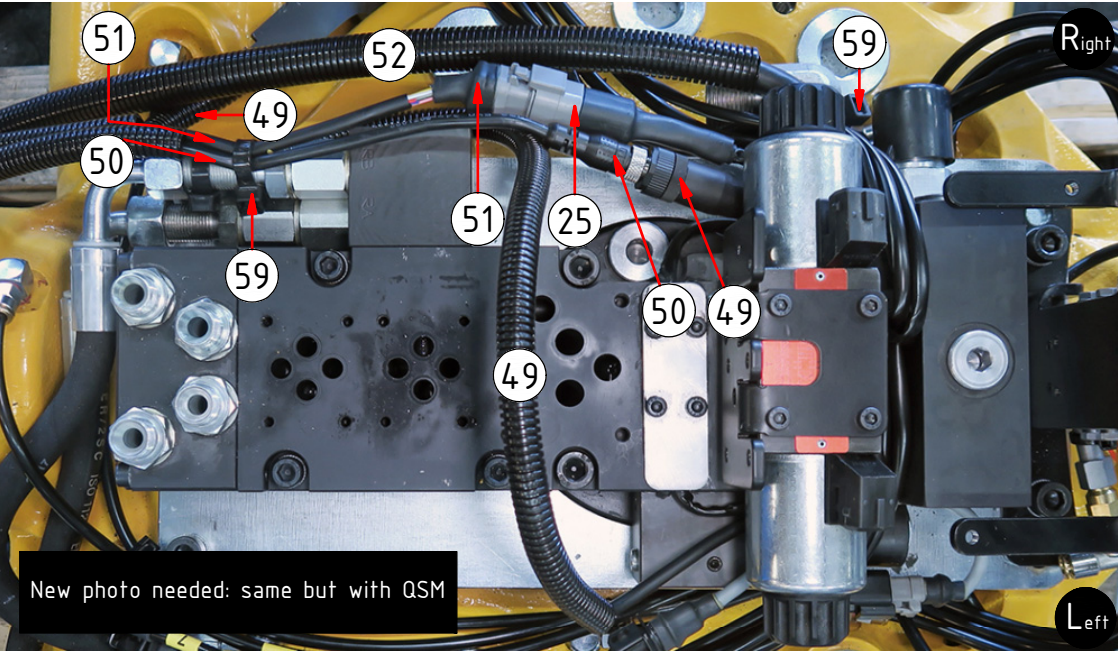
Std Valves & cables - ss10 QSM

ss10 (SVAB)
ePS

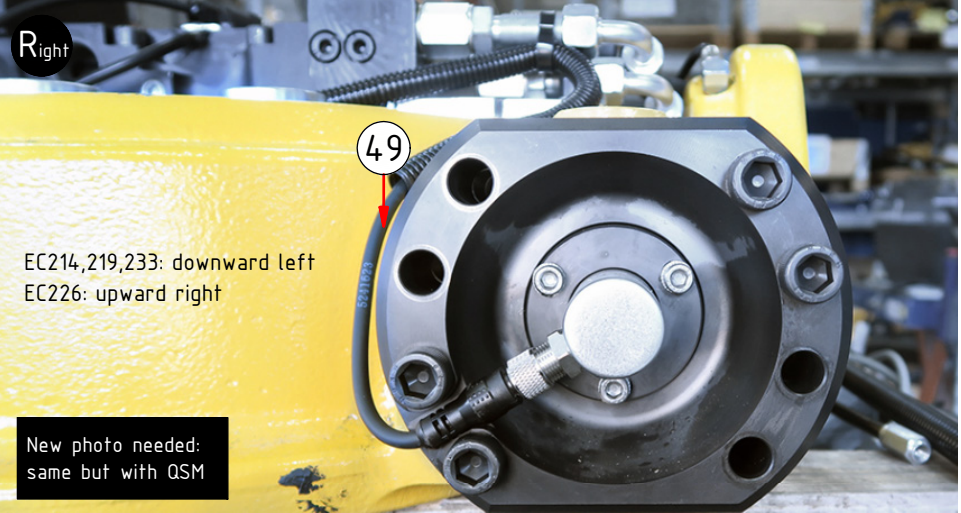
EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
25	Q-Safe connector			
49	Adap. cable SVAB ePS rot. sensor	842188	1	
50	Agg. cable SVAB ePS rot. sensor	842187	1	
51	Cable QS QLM tiltrotator SVAB	842148	1	
52	Aggregate cable SVAB Complete	1015196	1	
59	Cable tie 7,8x360	1021587	1	
60	Cable tie 4,8x360	1021586	1	

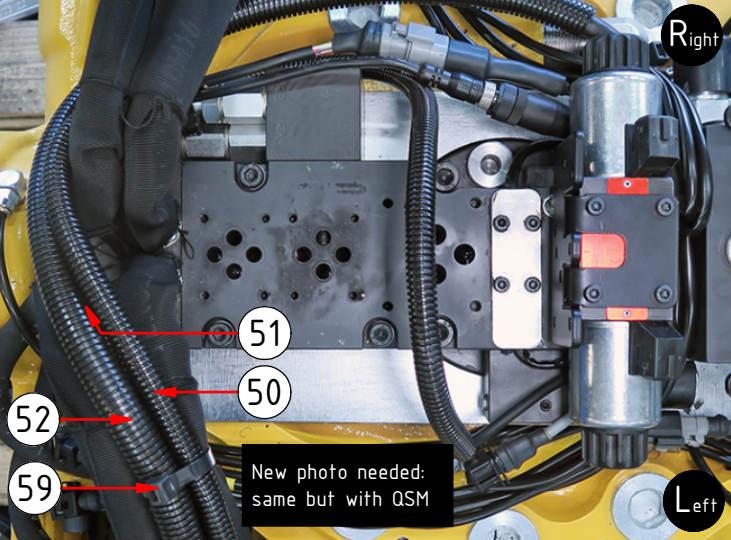
Cables/connectors:



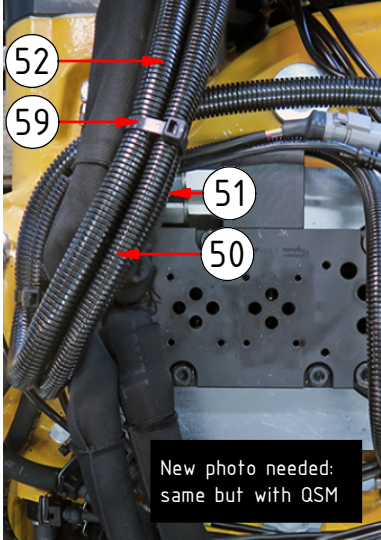
Sensor connection:



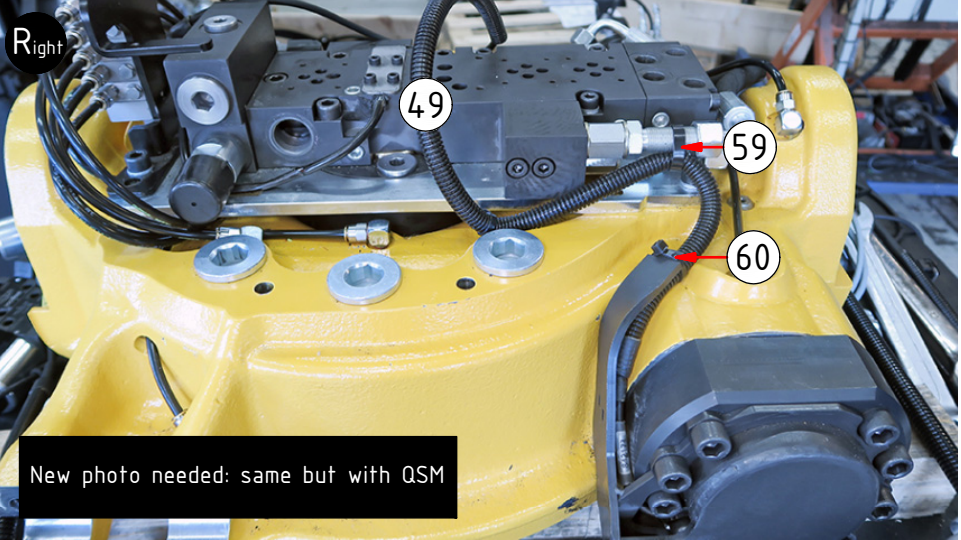
Cables left (std)



Cables right (option)



Sensor cable:

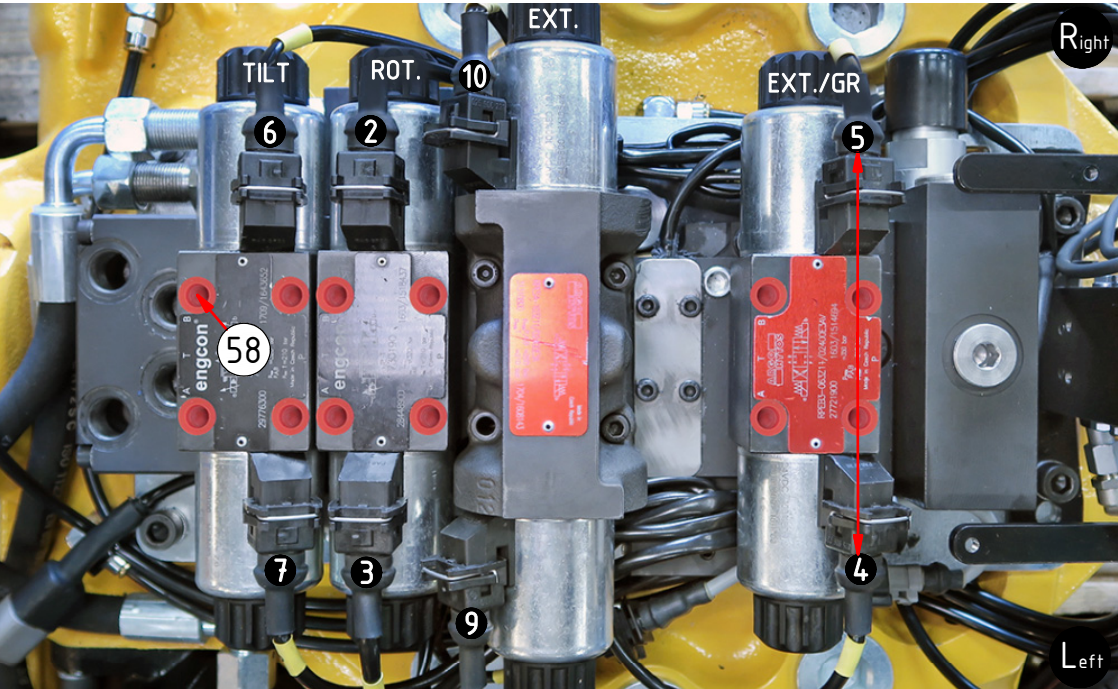


Dashed lines for overview, mounts on other pages/assemblies. indicates instruction. represents hose.

Std Valves & cables - ss10 QSM

DC2 & ss10 (SVAB)
Valve connections

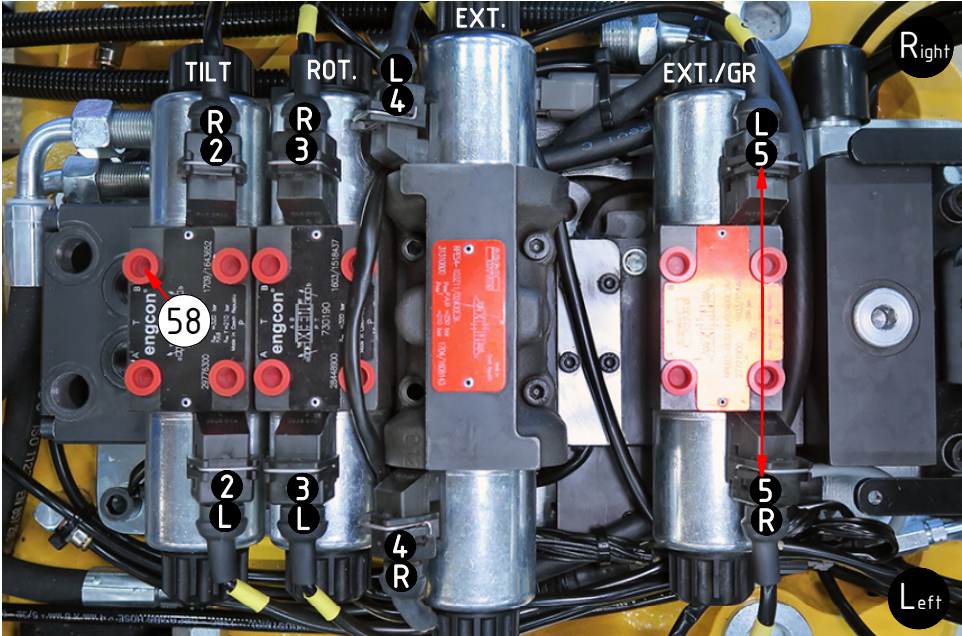
Std, ePS, DC2 Top EC-Oil
JT marked with numbers:



4 & 5 switches place when **NOT** equipped to hold a grab adapter or grab cassette.

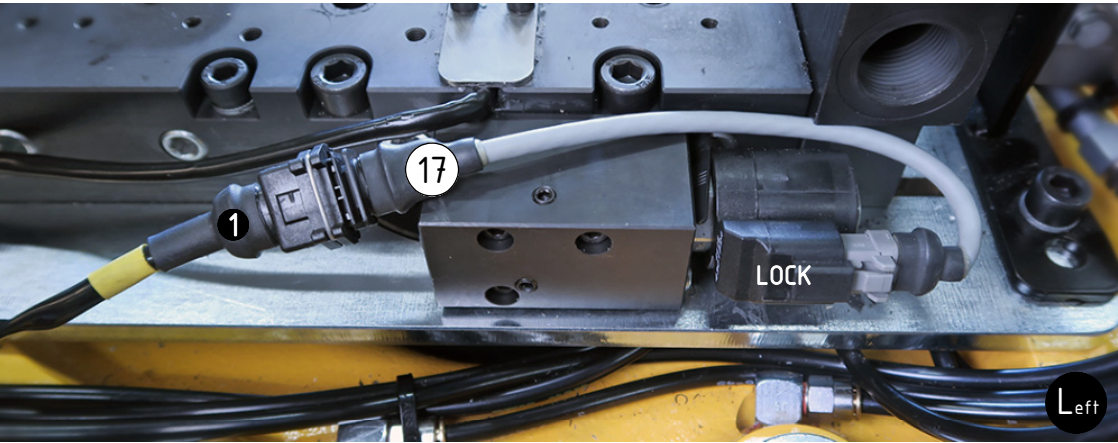
POS	DESCRIPTION	PART	QTY	COMMENTS
16	For connecting QSC			See p.14 (only affects DC2 assy.)
17	Adapter cable DT-JT	1017478	1	
58	Plastic plug (red) for valves	790156	12	

ss10 (SVAB) Top EC-Oil
JT marked with numbers:

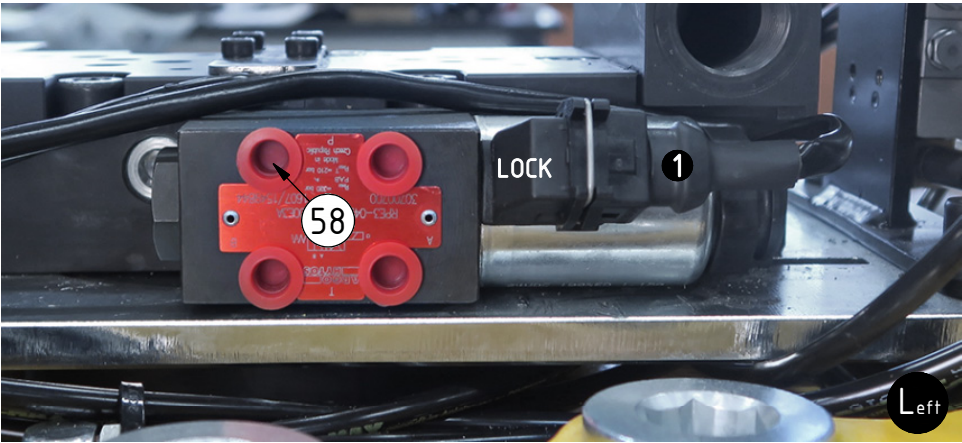


5 & 5 switches place when **NOT** equipped to hold a grab adapter or grab cassette.

Lock valve IQS DT:



Lock valve JT:



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

Std Valves & cables - ss10 QSM

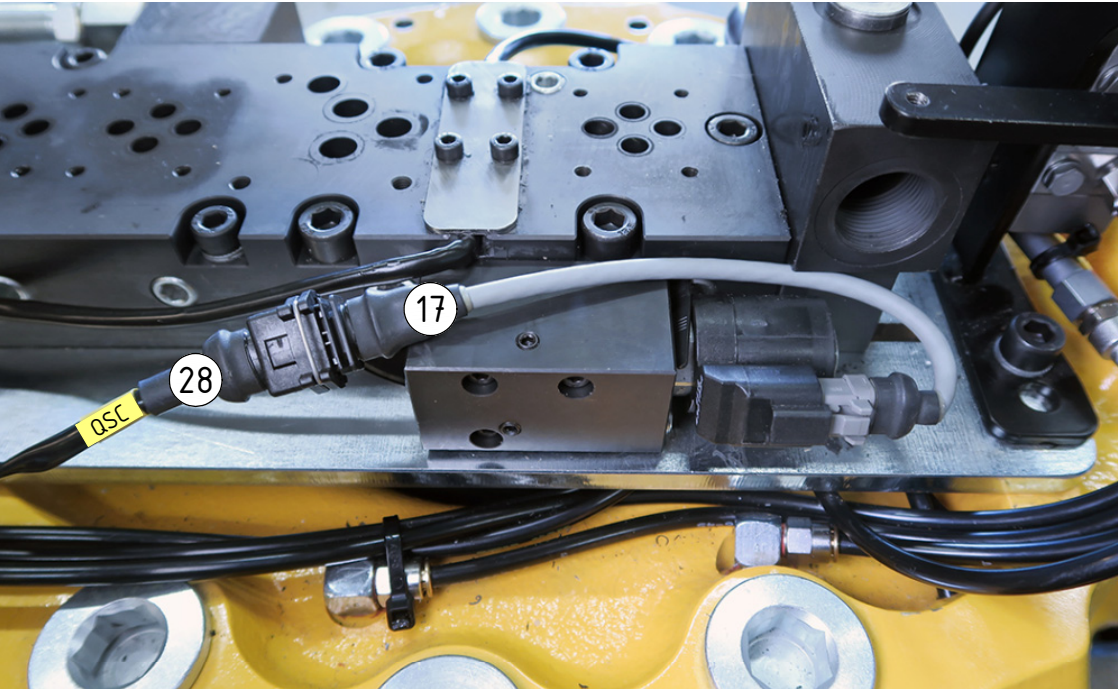
Connecting QSC DC2

EC214, EC219, EC226, EC233

POS	DESCRIPTION	PART	QTY	COMMENTS
17	Adapter cable DT-JT	1017478	1	
27	Plug JT	1045154	1	Plug JT connector
28	Aggregate cable DC2 Complete QSC	8000175	1	
32	Adapter cable ECO W DC2 DTM	1048529	1	For EC-Oil. Replace POS.28
35	Protection plug DT	8000086	1	Plug DT connector
57	Jumper JT QSC connected	1018662	1	Plug JT "1" when QSC is connected

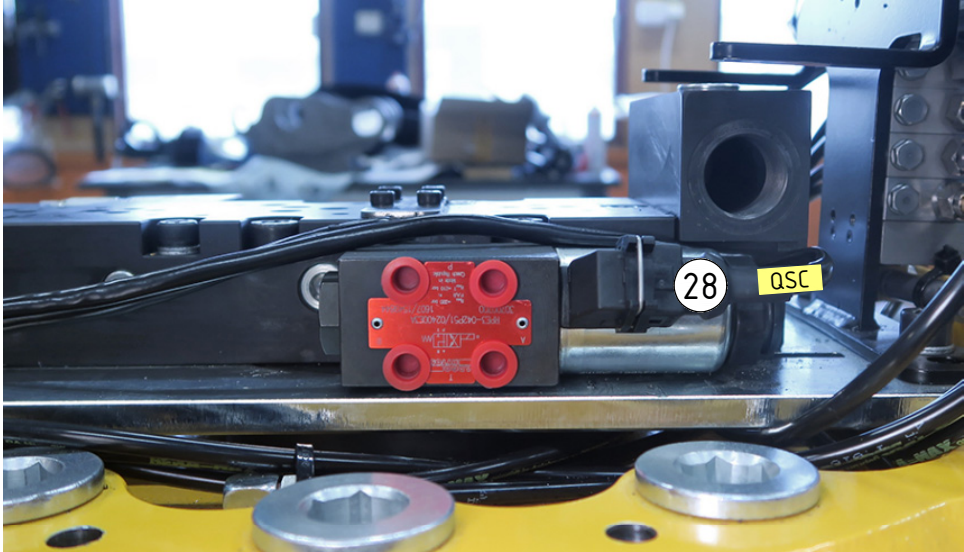
POS in order of assembly

Lock valve IQS DT:



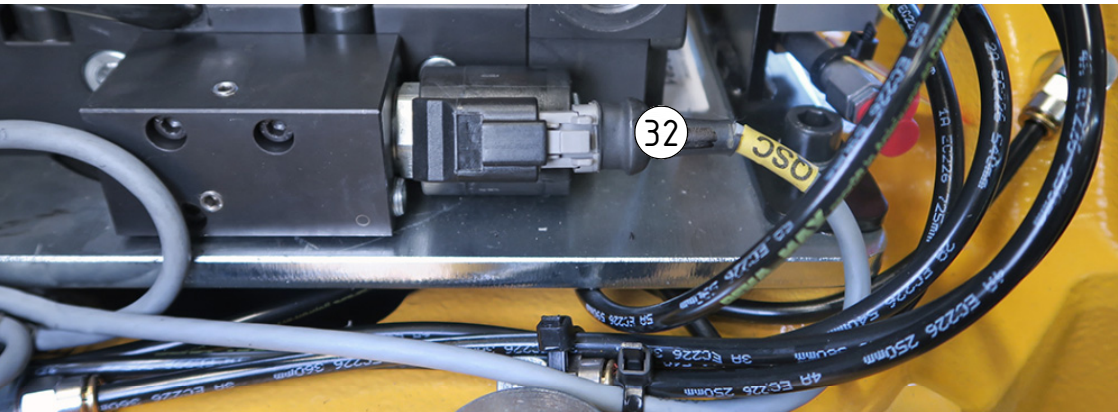
Jumper POS.57 on JT "1". POS.27 removed.

Lock valve JT:



Jumper POS.57 on JT "1". POS.27 removed.

Top EC-Oil
Lock valve IQS DT:



Jumper POS.57 on JT "1". POS.35 removed. POS.17 removed.