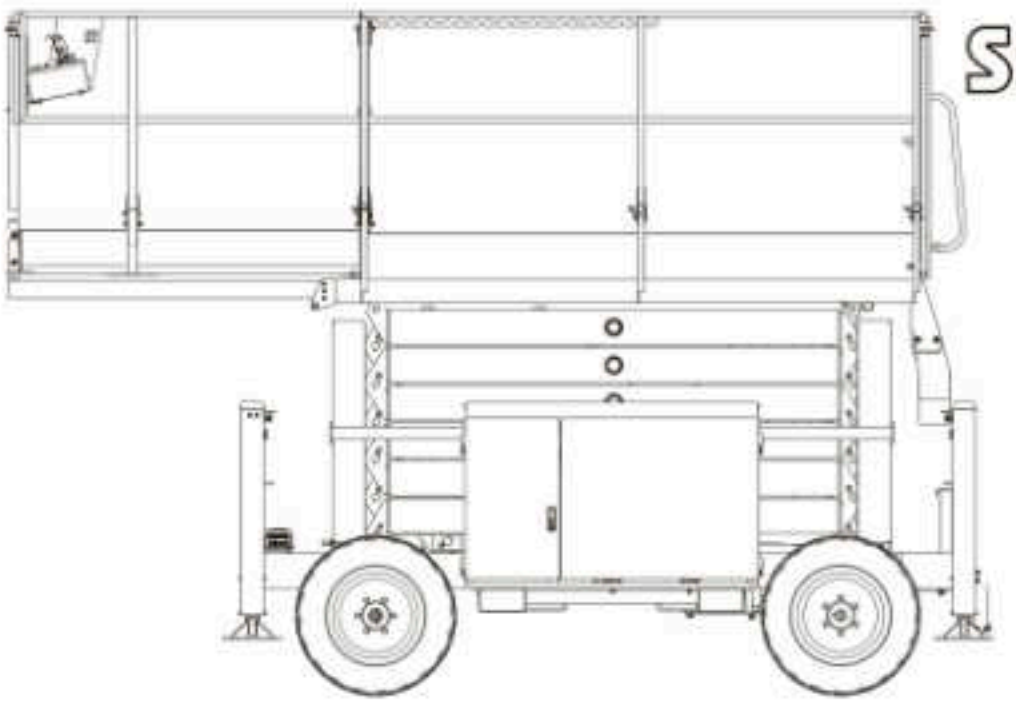
snorkel

S3970RT
S3370RT
S2770RT
S3970BE
S3370BE
S2770BE



Diesel
Bi-Energy 24V DC

REPAIR PARTS MANUAL

Part Number 1441817
June 2017 (Rev A)

Builders Machine

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Item	Part No.	Name	Qty	Uom
1	1843	DECAL - WARNING NZ ONLY	1	EA
3	969249	DECAL, STRIPE YE/BLK 2"	4m	A/R
4	12833-4	Decal, Serial Number Plate	1	EA
4	12833-4	Decal, Serial Number Plate	1	EA
4	12833-4	Decal, Serial Number Plate	1	EA
5	511099-000	Decal, Snorkel 150mm High	3	EA
6	13903-14	Decal, S2770RT	2	EA
6	13903-15	Decal, S3370RT	2	EA
6	13903-10	Decal, S3970RT	2	EA
7	11346-1	Decal, Rated Load S2770RT	1	EA
7	12699	Decal, Rated Load S3370RT	1	EA
7	12699-4	Decal, Rated Load S3970RT & S3970RTE	1	EA
8	0073298	DECAL- DANGER MACHINE TIPOVER	1	EA
9	451986	DECAL. DNGR DO NOT ALTER SW	1	EA
10	476706	Decal, Danger Explosive Fumes	2	EA
11	12574	Decal, Safety Checklist	1	EA
12	511101-000	Decal, Snorkel	2	EA
13	13839-01	Decal, Lower Control Box	1	EA
13	13839-02	Decal - Lower Control Box	1	EA
14	13839-03	Decal, Lower Control Box	1	EA
14	13839-04	Decal, Upper Control Box ANSI Petrol/LPG	1	EA
15	0102006	Decal Battery Disconnect	1	EA
16	60572-6	Decal, Diesel Fuel (On Fuel Tank)	1	EA
17	12753	Decal, Emergency Bleed Down	1	EA
18	12814	Decal, Hydraulic Fluid	1	EA
19	583656	Decal, Safety Prop Use	1	EA
20	969249	DECAL, STRIPE YE/BLK 2"	1	A/R

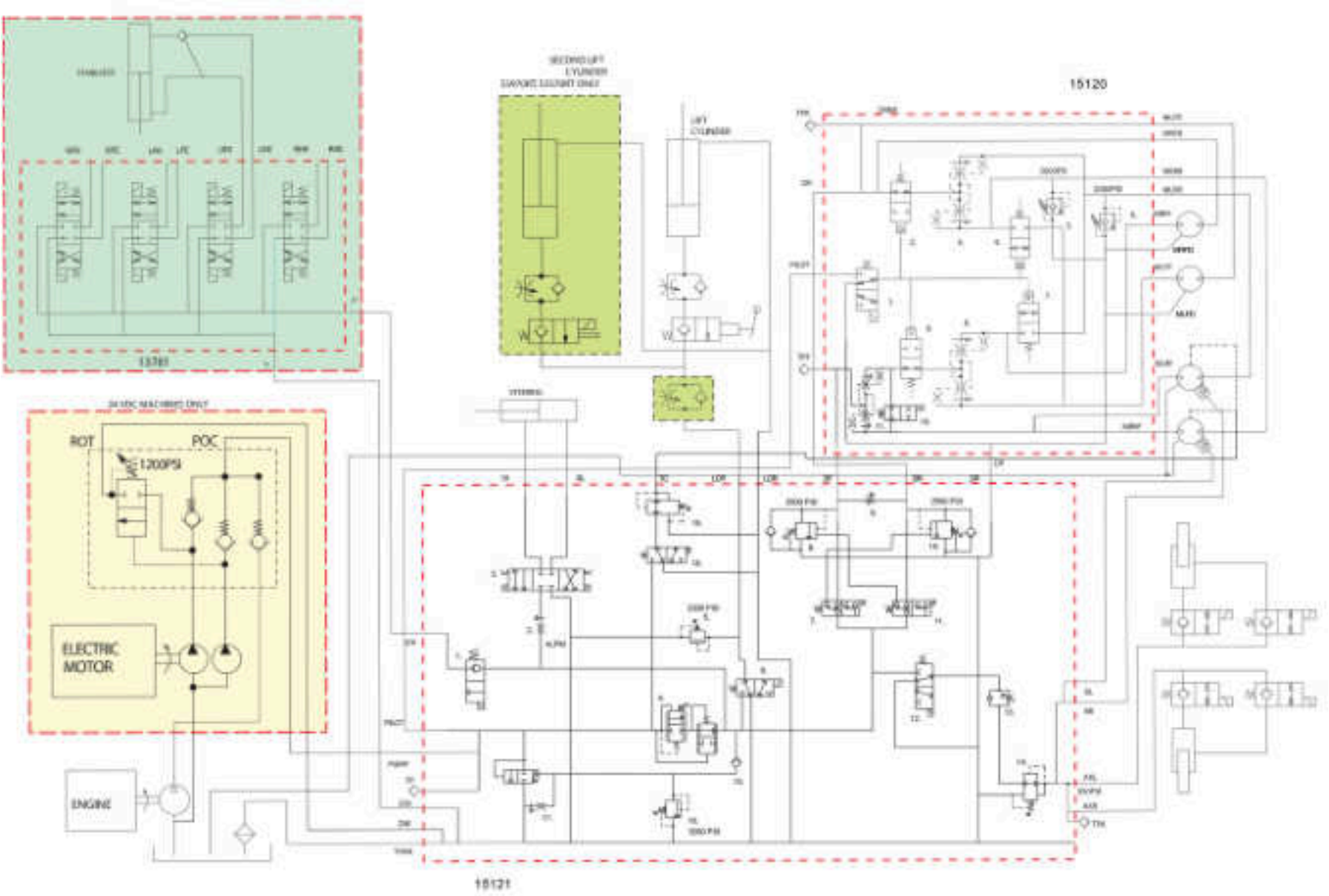
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Item	Part No.	Name	Qty	Uom
0	13811	Lower Control Box Assembly		EA
1	3040469	RELAY SPDT 12V 30AMP SONG	2	EA
2	2065-002	Plug In Relay Base	2	EA
3	510588-004	Washer, SteelFlatWasher DIN125C M4 ZincPlated	28	EA
4	FLWM0510CZ	WASHER FLAT M5 10.9 C	4	EA
5	3604-04012	Pan Head Screw	8	EA
6	3604-04025	Pan Head Screw	6	EA
7	3610-05020	Metric Bolt	4	EA
8	NL040710CZ	NUT HEX NL M4X0.7 10.9 C	14	EA
9	10114	Contact, NO - Telemac ZBE-101	5	EA
10	10118	Contact, NC - Telemec ZBE-102	4	EA
11	12536-3	LED - Green 12V M12	1	EA
12	12536-4	LED - Red, 12V M12	1	EA
13	12914-10	Collar	3	EA
14	12914-12	Push Button - 40mm, Red	1	EA
15	12914-13	Key Switch -1-(2)-3, 455 Key	1	EA
16	12914-17	Key Switch - (1) - (2) - (3), 421E Key	1	EA
17	303017028	TBM 21 500 312 REPLACEMENT BOARD	1	EA
18	13485-05	TRIONICS GP400C	1	EA
19	13810	Control Box Weld	1	EA
20	13810-5	Contorl Box - Face Panel	1	EA
21	13811-1	Foam Seal	1	EA
22	13839-01	Decal, Lower Control Box	1	EA
23	13926-1008	Screw, T25 - Pan Pozi, ZP	14	EA
24	514345-000	Gasket - EZCal Display	1	EA
25	3020015	SW TGL SPST (ON) OFF SEALED	3	EA
26	3020016	TOGGLE SWITCH ON/OFF/ON	1	EA

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Item	Part No.	Name	Qty	Uom
	3040473	HARNESS AND COIL 12VDC SIZE-8#8-32 STUD	1	EA
22	HH0610P88CZ055	HHCS M6X1 P 8.8 C 55	1	EA
23	5560341	WSHR STAR .250 EXT TOOTH	1	EA
24	1442116	HARNESS, HITRQ SHIFT	1	EA
25	1442117	WIRE ASSY, 12L, BLK	1	EA
26	1442118	WIRE ASSY, 20L WHT	1	EA
27	1442119	WIRE ASSY, AMP TO RNG, WHT	1	EA
28	104769-000	FTG, 4MORFF X 4MORFF X 4MORFF UTEE	1	EA
29	104770-017	HOSE-4 ORFF STR-4 ORFF STR-300	4	EA
30	106925-033	-4 ORFF STR-4 ORFF STR-3000PSI	2	EA
31	104770-010	HOSE-4 ORFF STR-4 ORFF STR-300	1	EA
32	5093012	CLP CUSH 1.75 VINYL COATED	2	EA
33	056059-065	BLT HEXSETSCREW SIN933 M8 X 65MM 8.8 ZP	2	EA
34	NL081210CZ	NUT HEX NL M8X1.25 10.9 C	2	EA
35	239326	SW TGL SPDT ON-OFF-ON	1	EA
36	3049814	LOCK WEDGE 12-PIN DEUTSCH PLUG	1	EA
37	100432-004	FTG, 4MORFF X 6MORB	1	EA
38	6019421	ASSY 4WD MANIFOLD	1	EA
39	100434-002	FITTING, 4MORFF X 4MORB 90 DEG	1	EA
40	1442215-1	ASSY, WHEEL/TIRE RH SXX70 NM	1	EA
41	509787-000	O-RING FOR DRIVE MOTORS 6mm ID x 2mm section	2	EA
42	0260099	O-RING .103 X 4.737 FKM/VITON,75D	2	EA

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15131 - Hose Kit, Base, SR V7 Rev B				
13/02/2018				
Snorkel Hose		Colour ID		Hose Use: Fitting A — Fitting B
Part Number	Rev	Colour 1	Colour 2	
15131-01	A	Red	Yellow	Steer Right: Main Manifold SR → Steer Cyl Extend
15131-02	A	Red	Green	Steer Left: Main Manifold SL → Steer Cyl Retract
15131-03	A	Red	—	Drive Forward: Main Manifold DF → 4WD Manifold DF
15131-04	A	Blue	—	Drive Reverse: Main Manifold DR → 4WD Manifold DR
15193-01	B	Red	White	Motor RR Drain: T → Motor RR Case Drain
15193-02	B	Orange	White	Motor LR Drain: T → Motor LR Case Drain
15131-07	B	Yellow	White	Motor LF Drain: 4WD Manifold MLFD → Motor LF Case Drain
15131-06	B	Green	White	Motor RF Drain: 4WD Manifold MRFD → Motor RF Case Drain
15131-09	A	Blue	White	Motor RR LR common drain T → Tank return
15193-03	A	Red	Red	Motor RR CW (Fwd): 4WD Manifold MRRF → Motor RR Port A
15193-04	A	Red	Blue	Motor RR CCW (Rev): 4WD Manifold MRRR → Motor RR Port B
15193-05	A	Orange	Red	Motor LR CW (Rev): 4WD Manifold MLRR → Motor LR Port A
15193-06	A	Orange	Blue	Motor LR CCW (Fwd): 4WD Manifold MLRF → Motor LR Port B
15131-14	A	Yellow	Red	Motor LF CW (Rev): 4WD Manifold MLFR → Motor LF Port A
15131-15	A	Yellow	Blue	Motor LF CCW (Fwd): 4WD Manifold MLFF → Motor LF Port B
15131-16	A	Green	Red	Motor RF CW (Fwd): 4WD Manifold MRFF → Motor RF Port A
15131-17	A	Green	Blue	Motor RF CCW (Rev): 4WD Manifold MRFR → Motor RF Port B
15131-18	A	Red	Orange	4WD Block Pilot: Main Manifold Pilot → 4WD Block Pilot
15131-19	A	Red	Black	4WD Manifold Return: Main Manifold DP → 4WD Manifold DP
15193-07	A	Red	—	Motor RR Brake: Main Manifold BR → RR Motor Brake
15193-08	A	Orange	—	Motor LR Brake: Main Manifold BL → LR Motor Brake
15131-22	A	Green	—	Lock Left Axle: Main Manifold AXL → LH Axle Cyl
15131-23	A	Black	—	Lock Right Axle: Main Manifold AXR → RH Axle Cyl
15193-09	A	White	Green	Torque Mode: T → Motor RR Torque Port
15193-10	A	White	Orange	Torque Mode: T → Motor LR Torque Port
15131-28	A	White	Black	Torque Mode: Main Manifold TC → T
13764-01	A	Red	Yellow	Stab RR Extend: Stab Manifold RRE → Stab Cyl RR Extend
13764-02	A	Red	Green	Stab RR Retract: Stab Manifold RRR → Stab Cyl RR Retract
13764-03	A	Orange	Yellow	Stab LR Extend: Stab Manifold LRE → Stab Cyl LR Extend
13764-04	A	Orange	Green	Stab LR Retract: Stab Manifold LRR → Stab Cyl LR Retract
13764-05	A	Yellow	Yellow	Stab LF Extend: Stab Manifold LFE → Stab Cyl LF Extend
13764-06	A	Yellow	Green	Stab LF Retract: Stab Manifold LFR → Stab Cyl LF Retract
13764-07	A	Green	Yellow	Stab RF Extend: Stab Manifold RFE → Stab Cyl RF Extend
13764-08	A	Green	Green	Stab RF Retract: Stab Manifold RFR → Stab Cyl RF Retract
13764-09	A	—	—	Stab Manifold Pressure: Main Manifold STP → Stab Manifold P
13764-10	A	—	—	Stab Manifold Return: Main Mainfold STR → Stab Manifold R

13765 - Hose Kit, Control Cabinet, SR V4 Rev A				
22/05/2014				
Snorkel Hose		Colour ID		Hose Use: Fitting A — Fitting B
Part Number	Rev	Colour 1	Colour 2	
13765-01	A	—	—	Main Manifold Return: Main Manifold Tank → Oil Filter
13765-02	A	—	—	Filter Return: Oil Filter → Hydraulic Oil Tank

13766 - Hose Kit, Engine, Kubota D902, SR V4 Rev A				
22/05/2014				
Snorkel Hose		Colour ID		Hose Use: Fitting A — Fitting B
Part Number	Rev	Colour 1	Colour 2	
13766-01	A	Orange	—	Pump Pressure: Main Manifold Pump → Pump Pressure Port
13766-02	A	—	—	Suction Line: Pump Suction Port → Hydraulic Oil Tank

13767 - Hose Kit, Stack (33 & 30), SR V4 Rev A				
22/05/2014				
Snorkel Hose		Colour ID		Hose Use: Fitting A — Fitting B
Part Number	Rev	Colour 1	Colour 2	
13767-01	A	Yellow	—	Raise Stack: Main Manifold LCP → Raise Stack Tee
13767-02	A	White	Yellow	Upper Lift Cyl Extend: Raise Stack Tee → Upper Lift Cyl Extend
13767-03	A	Black	Yellow	Lower Lift Cyl Extend: Raise Stack Tee → Lower Lift Cyl Extend
13767-04	A	White	—	Lift Cyl Drain: Main Manifold LCR → Drain Stack Tee
13767-05	A	White	White	Upper Lift Cyl Drain: Drain Stack Tee → Upper Lift Cyl Drain
13767-06	A	Black	White	Lower Lift Cyl Drain: Drain Stack Tee → Lower Lift Cyl Drain

13768 - Hose Kit, Stack (33 & 27), SR V4 Rev A				
22/05/2014				
Snorkel Hose		Colour ID		Hose Use: Fitting A — Fitting B
Part Number	Rev	Colour 1	Colour 2	
13768-02	A	Black	Yellow	Raise Stack: Main Manifold LCP → Lift Cyl Extend
13768-01	A	Black	White	Lift Cyl Drain: Main Manifold LCR → Lift Cyl Drain

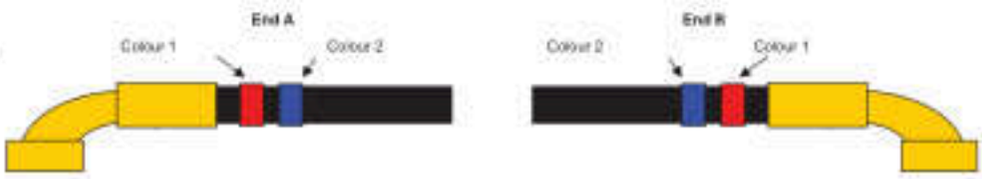
13769 - Hose Kit, Electric 24V Bi Energy, SR V4 Rev A				
Snorkel Hose		Colour ID		Hose Use: Fitting A — Fitting B
Part Number	Rev	Colour 1	Colour 2	
13769-01	A	Part# both ends		Unloader Return: Unloader Valve ROT → Main Manifold DMI
13769-02	A	Part# both ends		Unloader Pressure Out: Unloader Valve POC → Main Manifold PUMP
13769-03	A	Part# both ends		Suction Hose: Tank to Suction Tee

READING HOSE TAGS

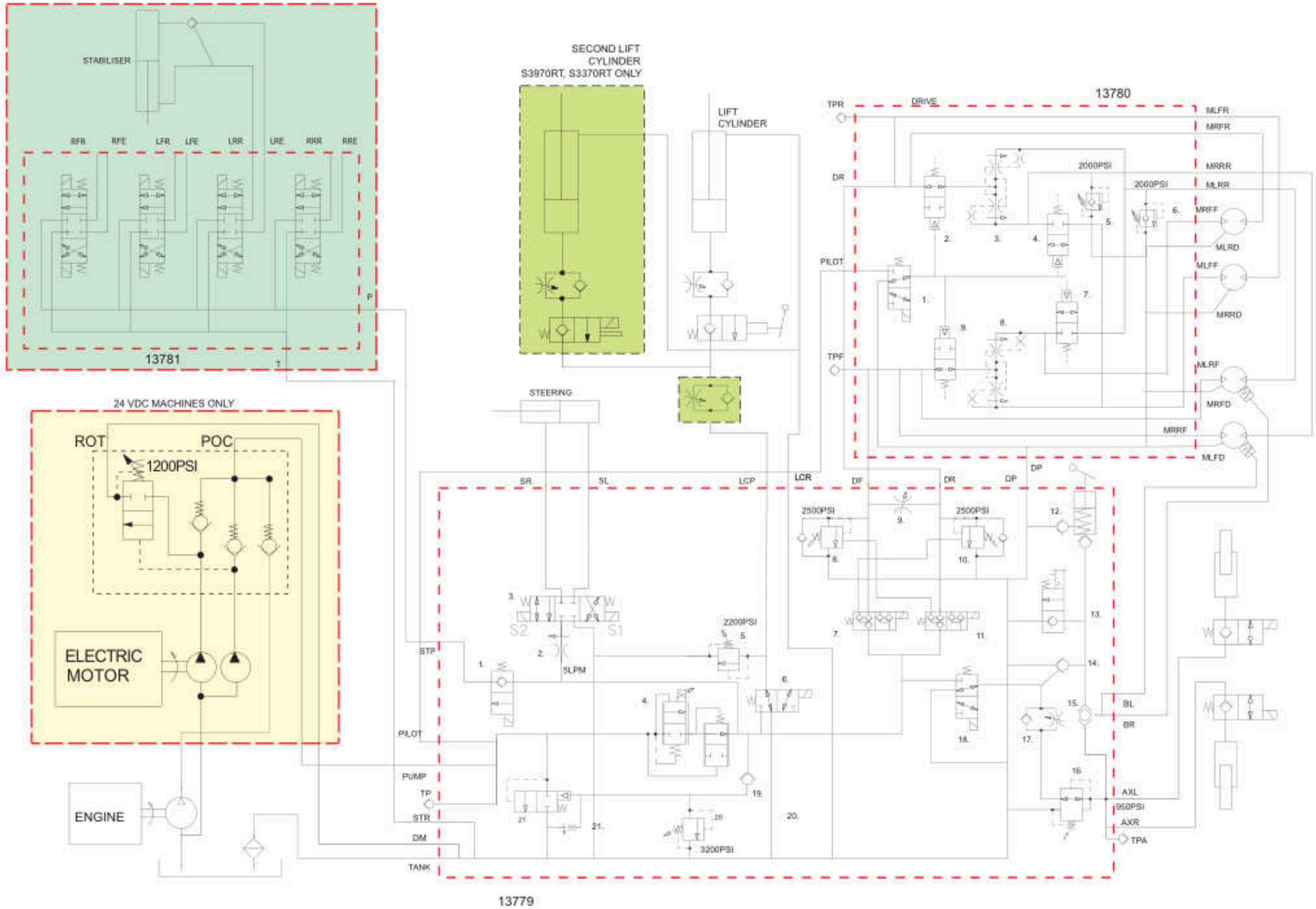
Hose tags are read from the fitting side of the hose inawards the hose.

As such colour 1 is the closest to the fitting, colour 2 the next colour then 3, 4 etc...

Hose tags need to be on both ends of the hose



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