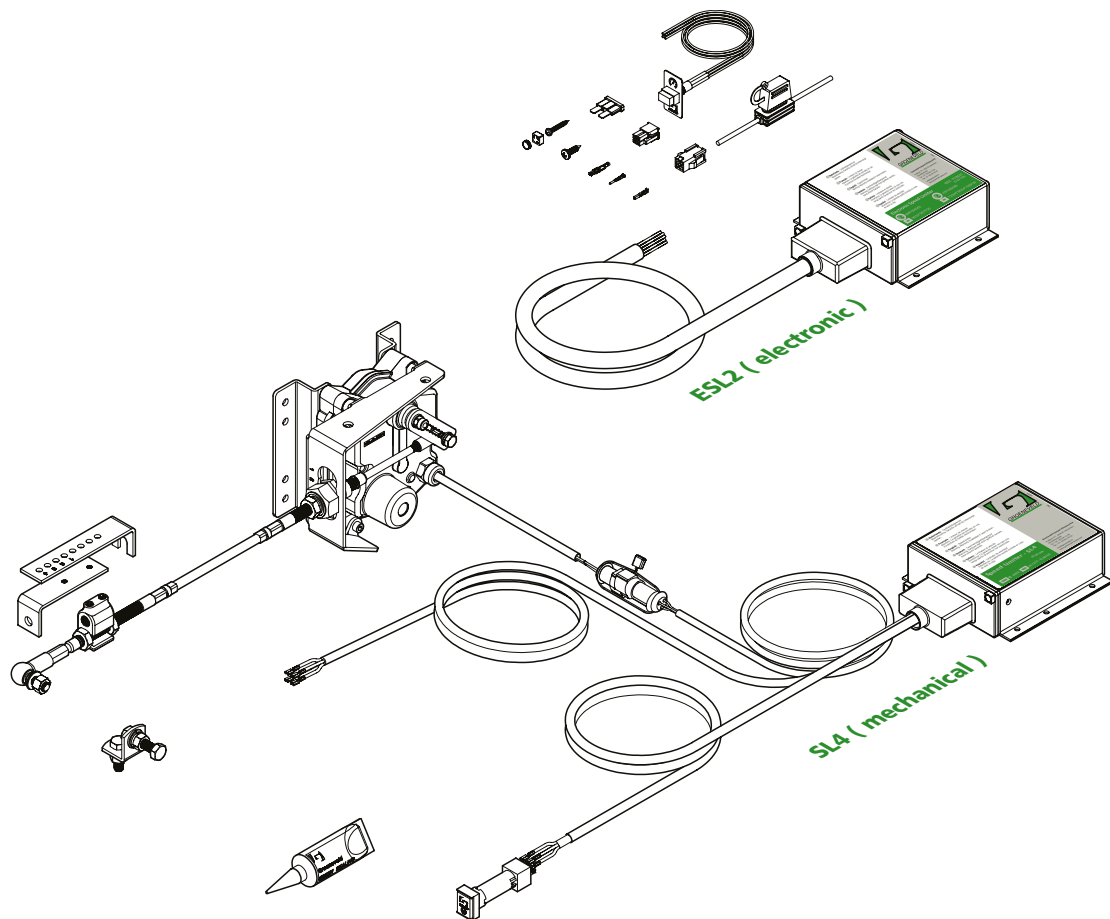


# Parts Manual



## SpeedLimiter

D000030R01



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You are requested to contact Groeneveld technical service for information concerning adjustment, maintenance work or repairs that is not described in this manual.

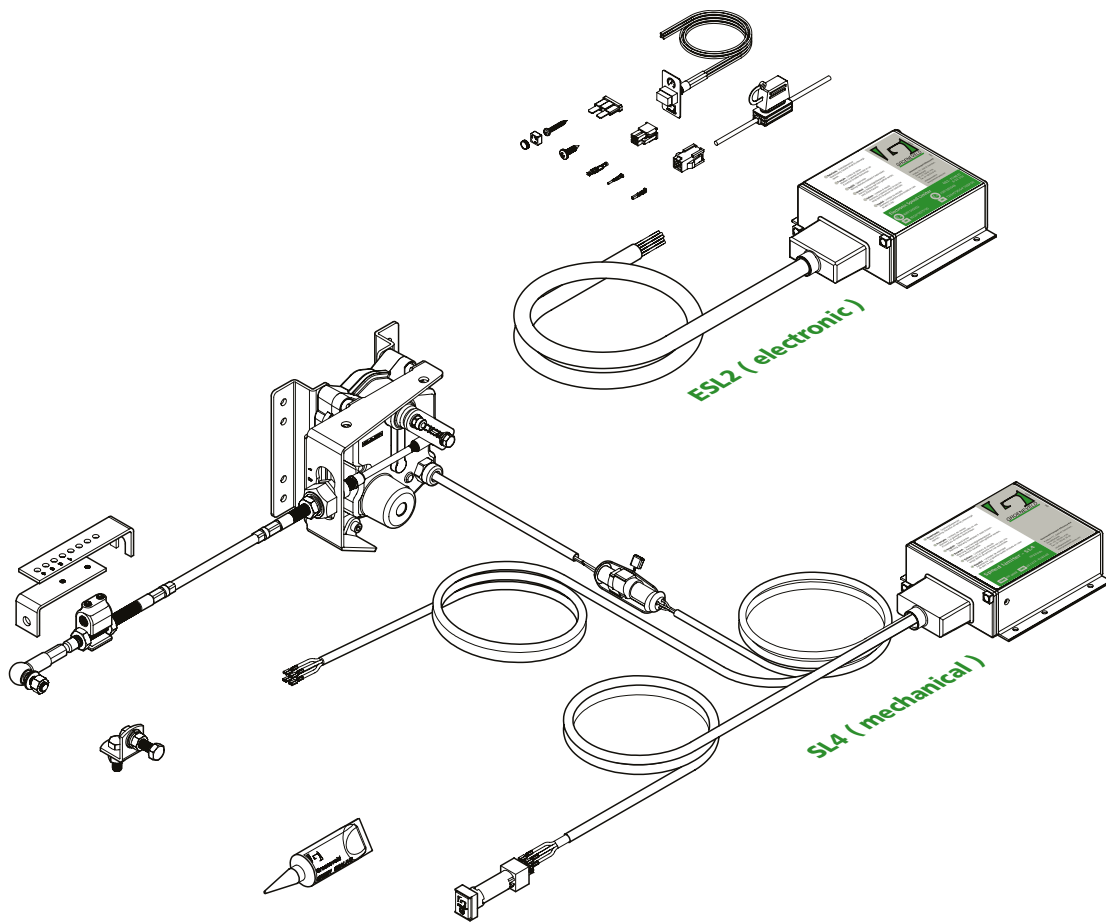
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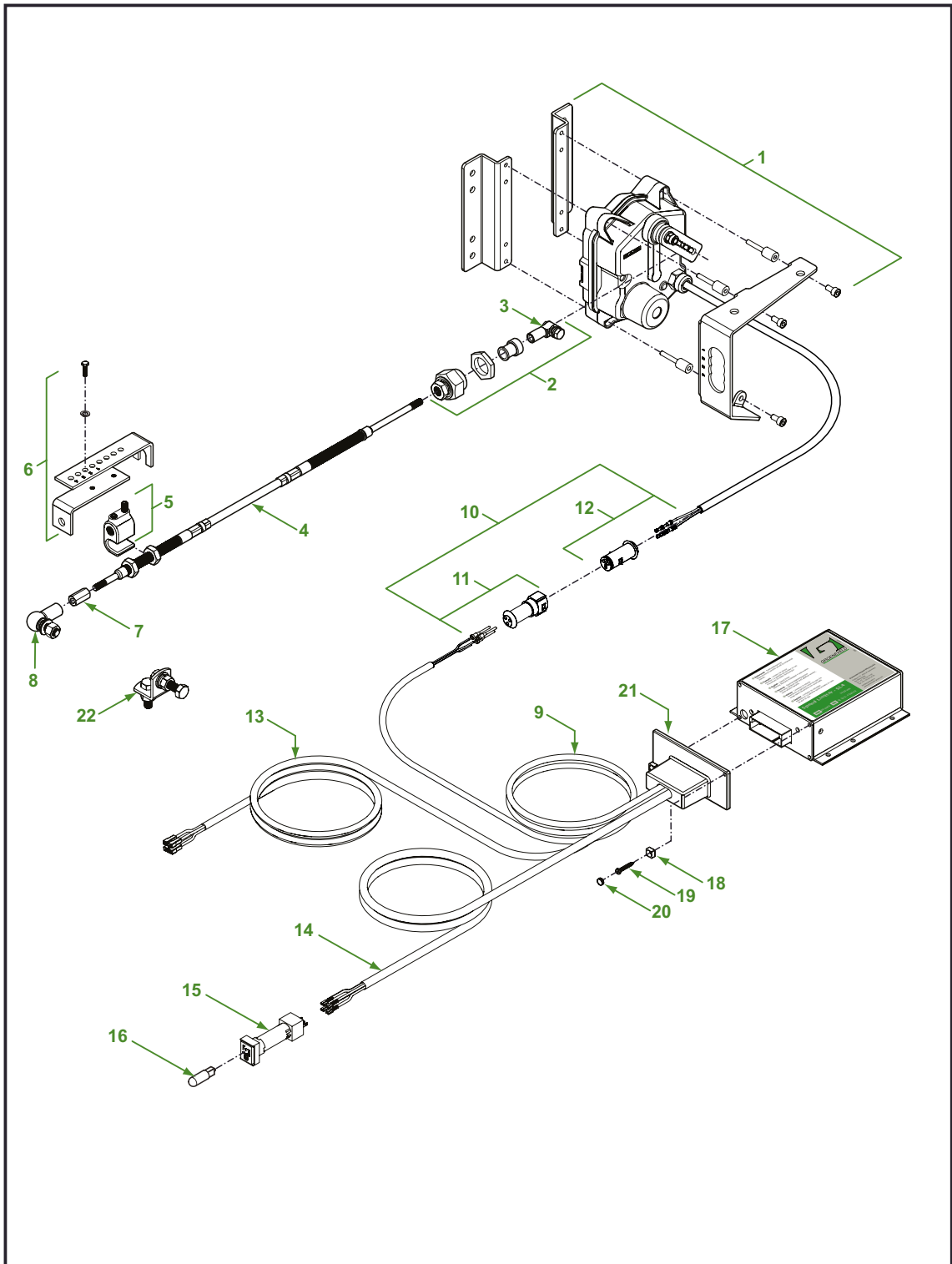
# 1. SL4 MECHANICAL SPEED LIMITER



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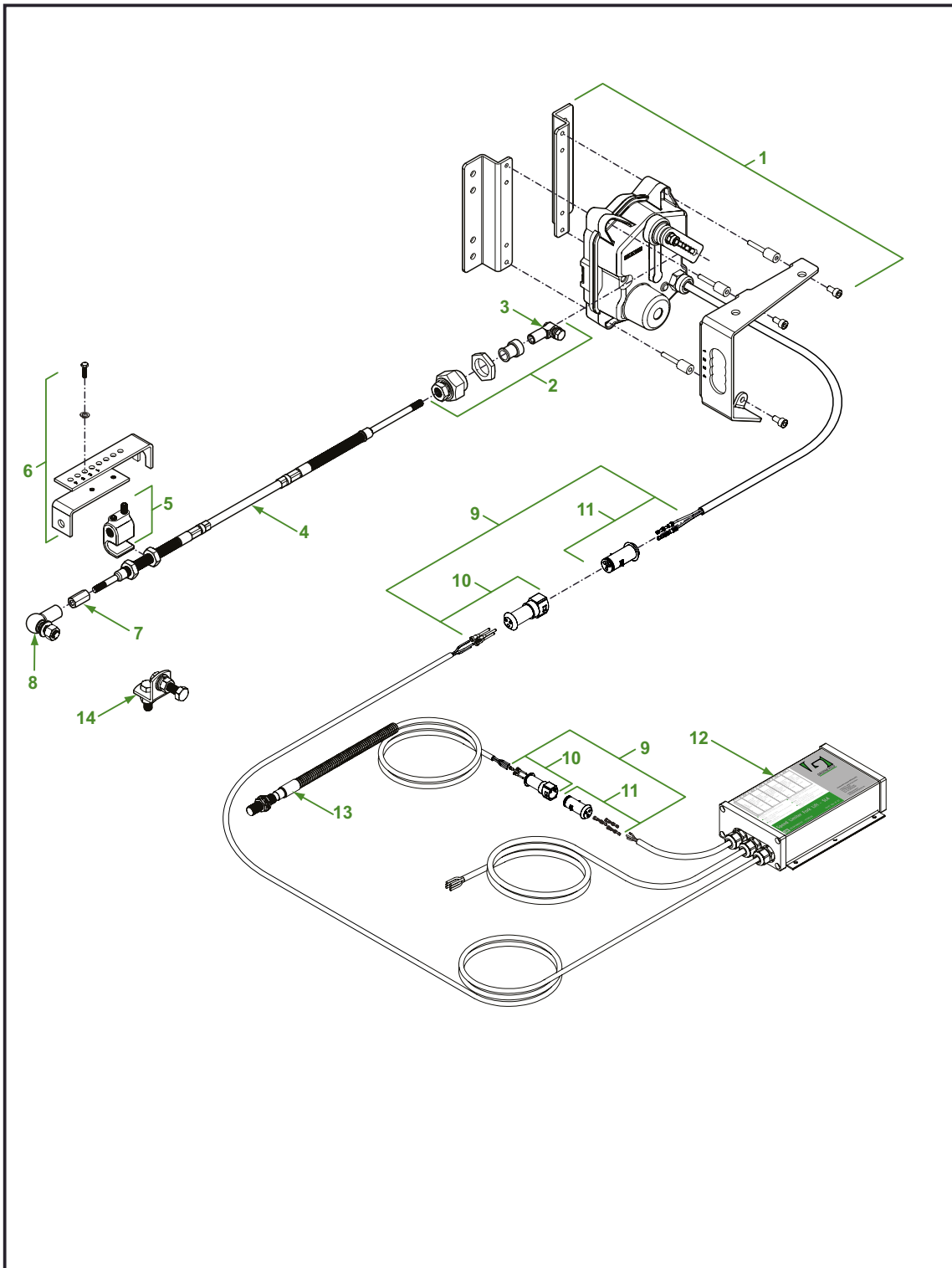
Release date: June 2015

## 1.1 SL4 Speed Limiter standard

<i>P/N</i>	<i>Supply voltage</i>	<i>Description</i>	<i>Complete cable</i>
F175957	12Vdc	SL4 kit EFA	0.75 m
F175954	24Vdc	SL4 kit EFA	0.75 m
F175958	12Vdc	SL4 kit EFA	1 m
F175955	24Vdc	SL4 kit EFA	1 m
F175959	12Vdc	SL4 kit EFA	1.5 m
F175956	24Vdc	SL4 kit EFA	1.5 m

<i>Pos</i>	<i>P/N</i>	<i>Description</i>
1	F112765	Motor kit EFA 50 12Vdc
	F111193	Motor kit EFA 50 24Vdc
2	F117616	Push-pull cable clamping kit
3	F111124	Swivel rod end M6
4	F110809	Push-pull cable 0.75m
	F113378	Push-pull cable 1m
	F113379	Push-pull cable 1.5m
5	F111196	Cable block kit
6	F111171	Cable bracket kit
7	F110877	Hexagon connection nut M6x20
8	F112257	Balljoint M6 (o.d.) x M6 (i.d.)
	F110882	Balljoint M6 (o.d.) x M8 (i.d.)
9	F105987	Cable harness 2-core H70 \ EFA 15.5m
	F122952	Cable harness 2-core H70 \ EFA 20m
10	F122130	Complete connectors kit 3-core
11	F117859	Connector kit 3-core (female)
12	F121943	Connector kit 3-core (male)
13	F106363	Cable harness kit (included seal cap / F118971)
14	F106633	Cable harness ( for F112488 )
15	F112488	Speed-hold switch
16	F116127	Speed-hold lamp 24Vdc
17	F119358	Digital control unit
18	F101085	Sealing plug
19	F111201	Seal screw 3.5x12.7
20	F101086	Sealing bowl
21	F118971	Seal cap
22	F106139	Travel stop kit

Release date: June 2015



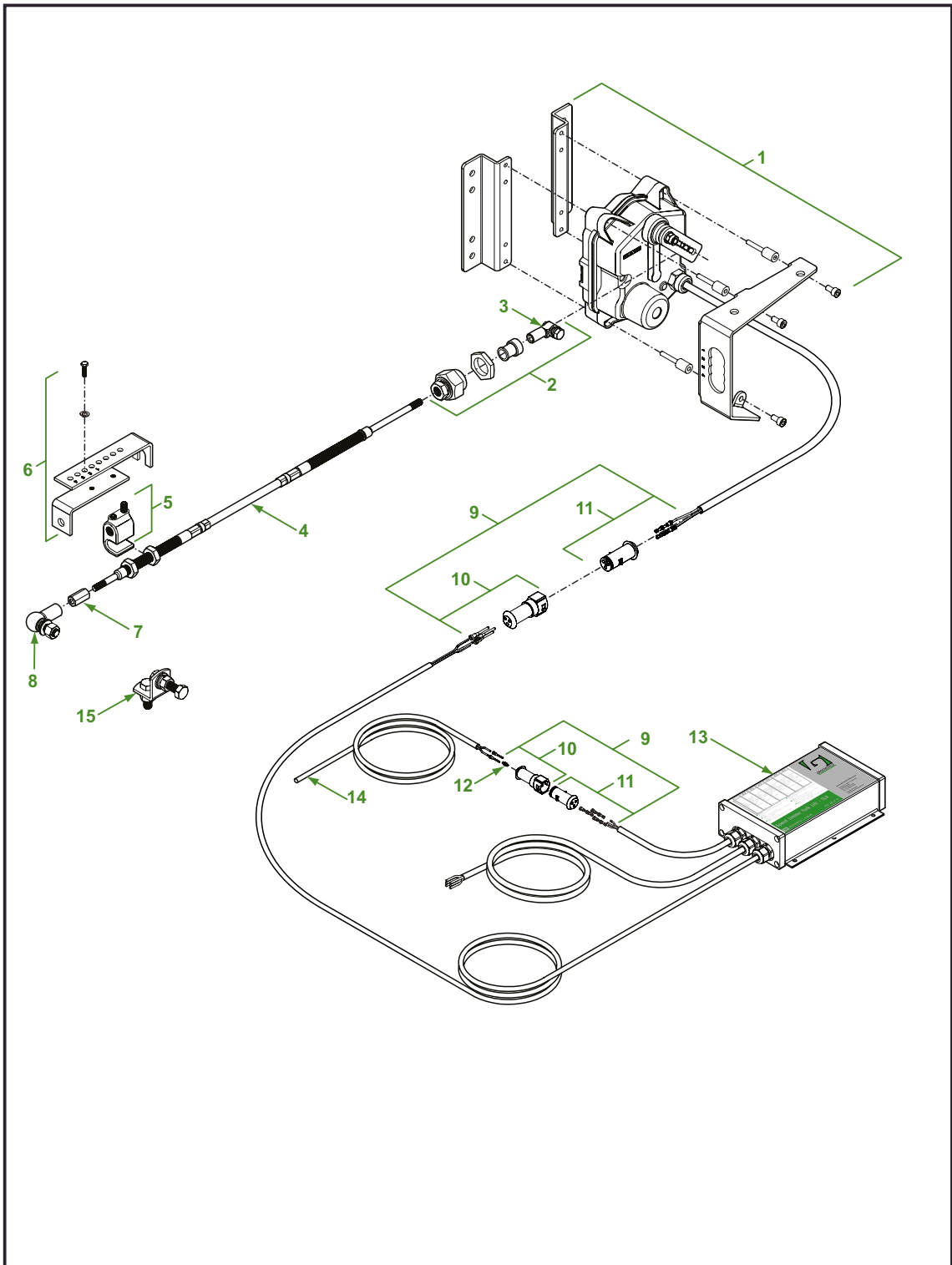
Release date: June 2015



## 1.2 SL4 Speed Limiter Forklift (IP67) with proximity sensor

<i>P/N</i>	<i>Supply voltage</i>	<i>Description</i>	<i>Complete cable</i>
F117614	12Vdc	Kit EFA Forklift	1 m
F117615	24Vdc	Kit EFA Forklift	1 m

<i>Pos</i>	<i>P/N</i>	<i>Description</i>
1	F112765	Motor kit EFA 50 12Vdc
	F111193	Motor kit EFA 50 24Vdc
2	F117616	Push-pull cable clamping kit
3	F111124	Swivel rod end M6
4	F110809	Push-pull cable 0.75m
	F113378	Push-pull cable 1m
	F113379	Push-pull cable 1.5m
5	F111196	Cable block kit
6	F111171	Cable bracket kit
7	F110877	Hexagon connection nut M6x20
8	F112257	Balljoint M6(o.d.)xM6(i.d.)
	F110882	Balljoint M6 (o.d.) x M8 (i.d.)
9	F122130	Complete connectors kit 3-core
10	F117859	Connector kit 3-core (female)
11	F121943	Connector kit 3-core (male)
12	F117613	Digital control unit forklift
13	F117231	Proximity sensor with cable M12x1
	F207595	Proximity sensor N.O. 10mm/M18
	F207596	Connection cable for prox switch F207595
14	F106139	Travel stop kit



Release date: June 2015

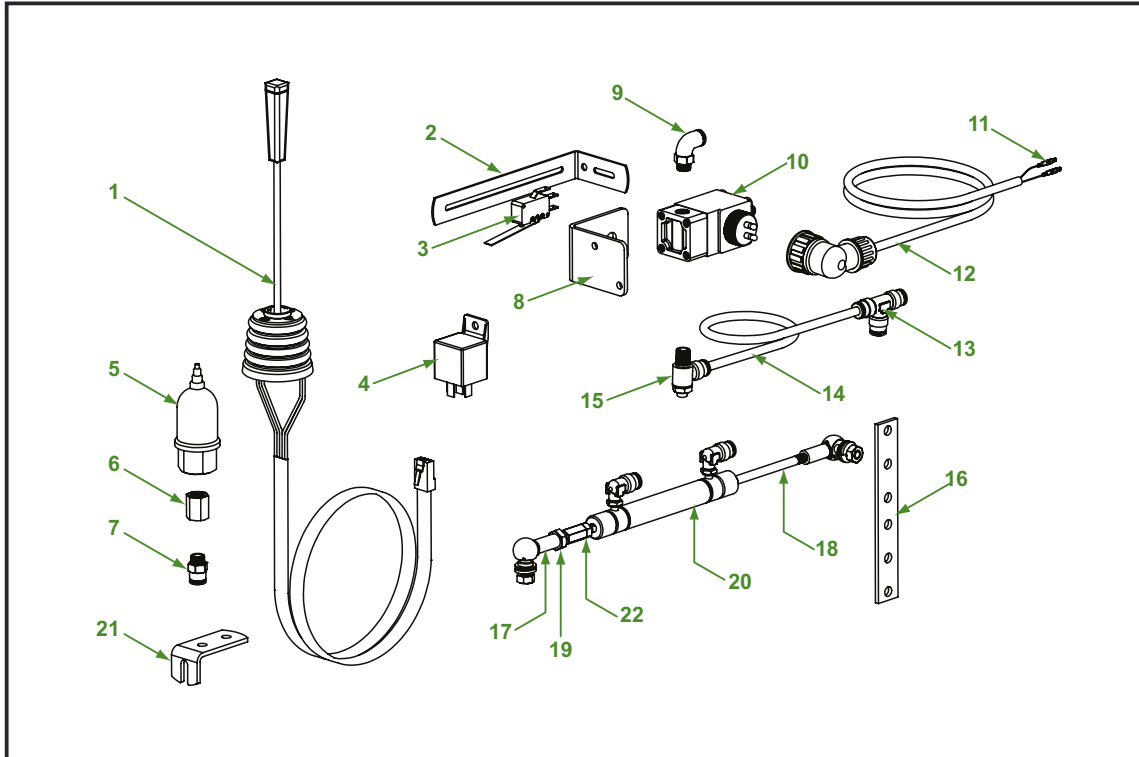
### 1.3 SL4 Speed Limiter Forklift (IP67) without proximity sensor

<i>P/N</i>	<i>Supply voltage</i>	<i>Description</i>	<i>Complete cable</i>
F178527	12Vdc	kit EFA Forklift	1 m
F178528	24Vdc	kit EFA Forklift	1 m

<i>Pos</i>	<i>P/N</i>	<i>Description</i>
1	F112765	Motor kit EFA 50 12Vdc
	F111193	Motor kit EFA 50 24Vdc
2	F117616	Push-pull cable clamping kit
3	F111124	Swivel rod end M6
4	F110809	Push-pull cable 0.75m
	F113378	Push-pull cable 1m
	F113379	Push-pull cable 1.5m
5	F111196	Cable block kit
6	F111171	Cable bracket kit
7	F110877	Hexagon connection nut M6x20
8	F112257	Balljoint M6 (o.d.) x M6 (i.d.)
	F110882	Balljoint M6 (o.d.) x M8 (i.d.)
9	F122130	Connector kit 3-core (male/female)
10	F117859	Connector kit 3-core (female)
11	F121943	Connector kit 3-core (male)
12	F112745	Econoseal blind plug
13	F117613	Digital control unit forklift
14	F120587	Complete cable connector 2m
	F207595	Proximity sensor N.O. 10mm/M18
	F207596	Connection cable for prox switch F207595
15	F106139	Travel stop kit

Release date: June 2015

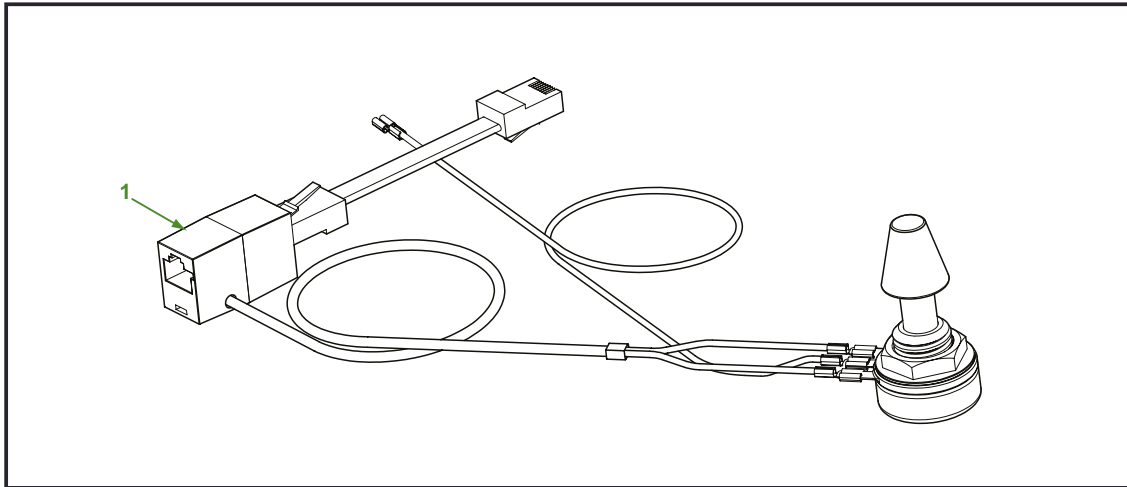
1.4 SL4 Cruise control parts



Pos	P/N	Description
1	F111510	Cruise controlle handle
2	F111502	Mounting bracket micro switch
3	F111503	Micro-switch
4	F111533	Relay 24Vdc 5-polig
5	F111427	Air pressure switch
6	F111493	Socket G1/8"xG1/8"
7	F100233	Straight push-in coupling ø6-R1/8"
8	F111480	Bracket for Solenoid
9	F111484	Elbow push-in coupling ø6-1/8"
10	F102816	Solenoid 12Vdc
	F102815	Solenoid 24Vdc
11	F104579	Junior contact pin 0.5-1.5 ø
12	F107895	Pressure switch cable 8m
13	F111494	Coupling equal T 3xø6
14	F120820	Air tube ø6 PA
15	F121905	Banjo control valve push-in ø6-R1/8"
16	F111482	Setup mounting bracket
17	F111483	Ball joint M6(o.d.)xM6(i.d.)
18	F111481	Threaded stud M6x100-160
19	F105077	Adapter M8 (o.d.) xM6 (i.d.)
20	F111632	Air cilinder kit
21	F102046	Setup 44x25L (6.5x8.5-11)
22	F110877	Hexagon connection nut M6x20

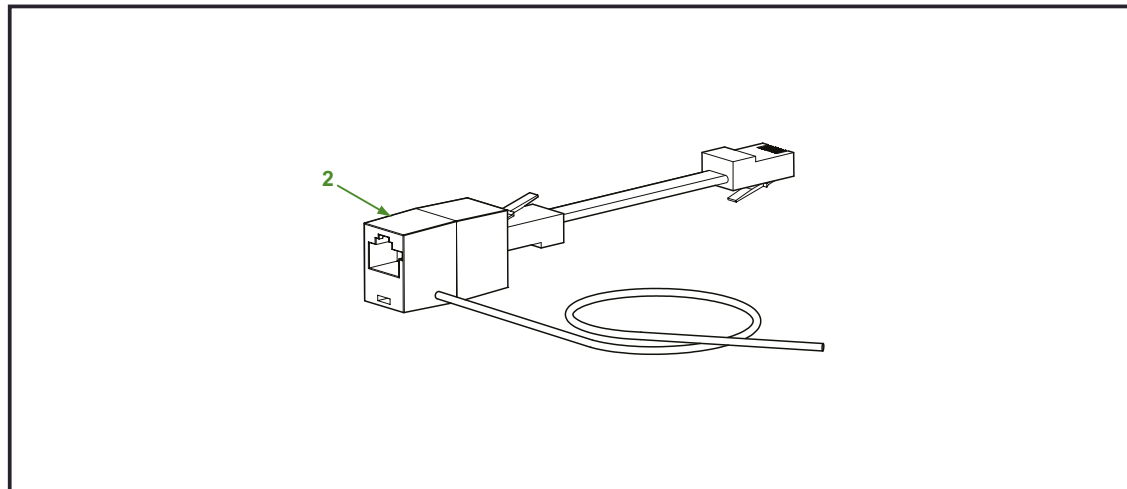
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**1.5 SL4 PTO**



Pos	P/N	Description
1	F107759	Extension kit variable for PTO(max. RPM adjustment)

**1.6 SL4 Second speed**

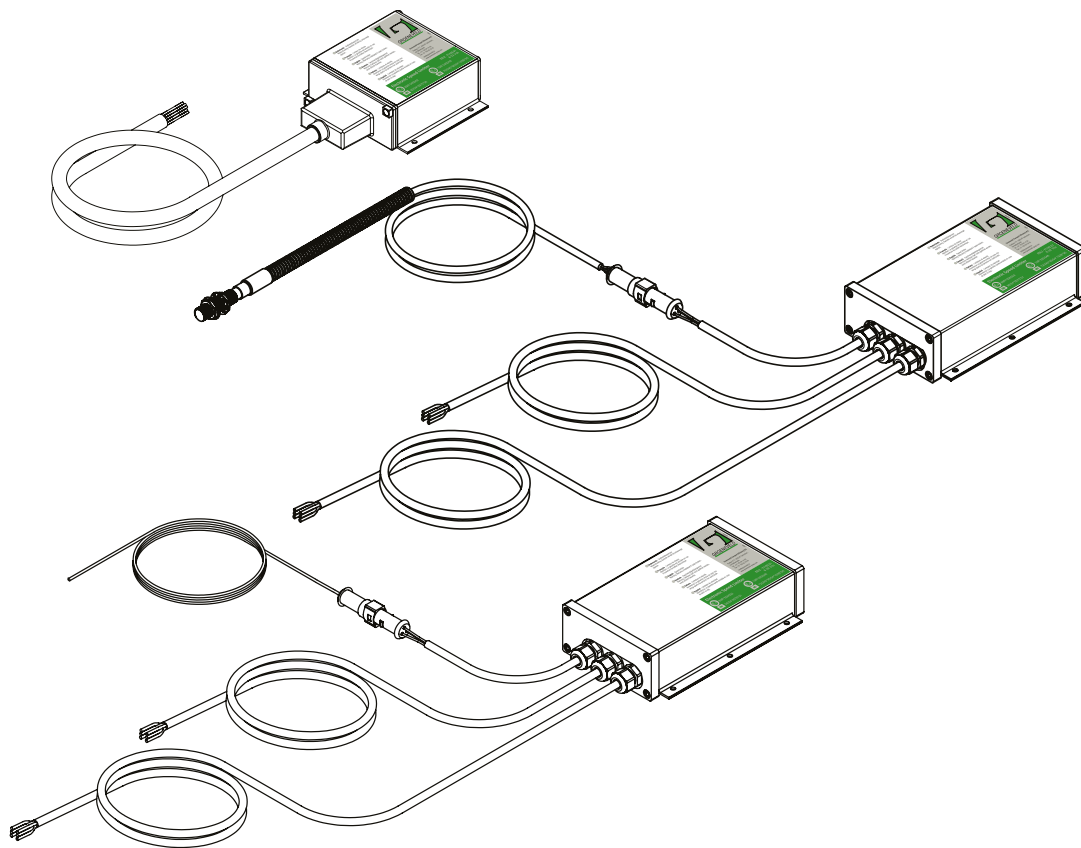


Pos	P/N	Description
2	F106876	Adapter modular (second and speed)

Release date: June 2015



## 2. ESL2 ELECTRONIC SPEED LIMITER

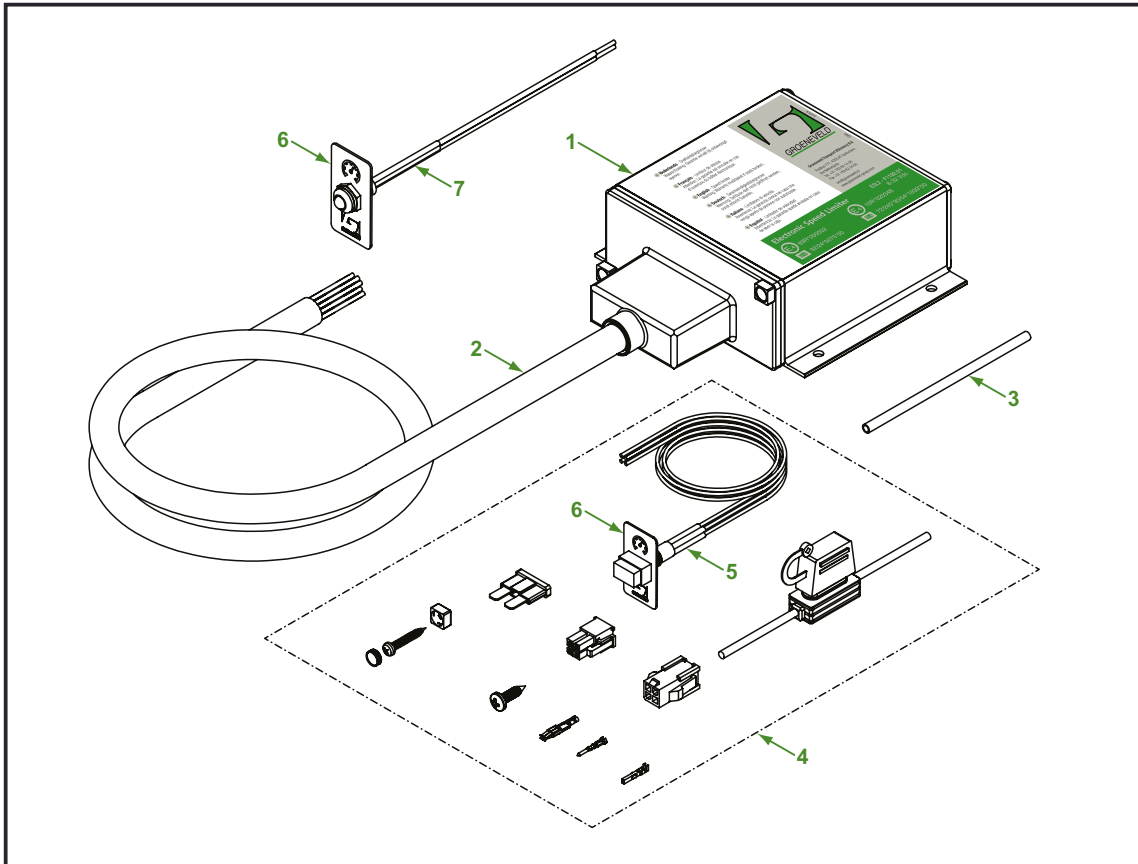


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**2.1 ESL2 Electronic Speed Limiter standard**



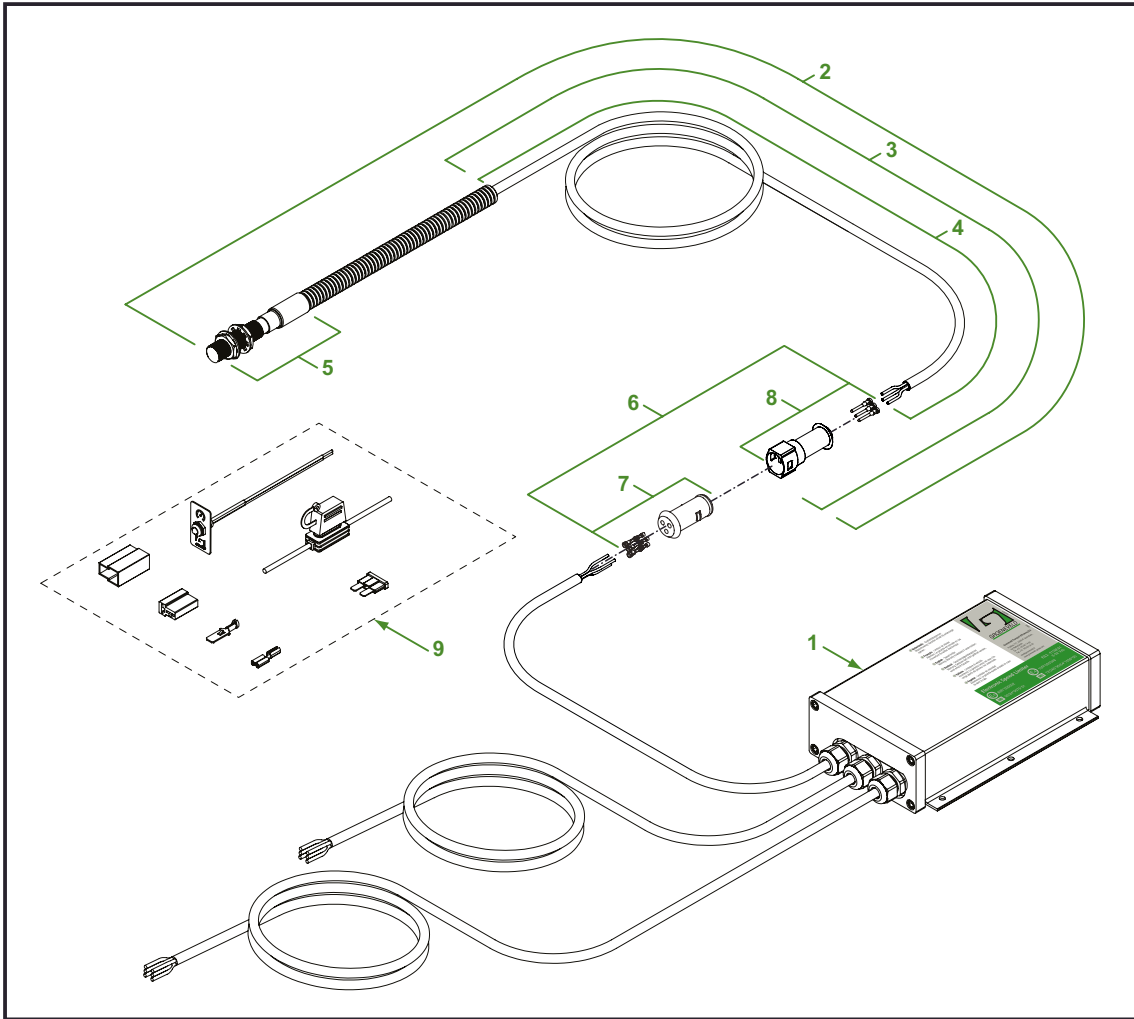
<i>P/N</i>	<i>Description</i>
F175922	ESL2 standard kit

<i>Pos</i>	<i>P/N</i>	<i>Description</i>
1	F120124	Electronic box ESL2
2	F175923	Cable harness ESL2
3	F119140	Heat shrink tubing 3.2/1.6
4	F175943	Fitting kit ESL2
5	F175939	Speedhold switch EDC ESL2
6	F170518	Indication plate SL EDC
7	F105891	LED yellow

Release date: June 2015



2.2 ESL2 Electronic Speed Limiter (IP67)

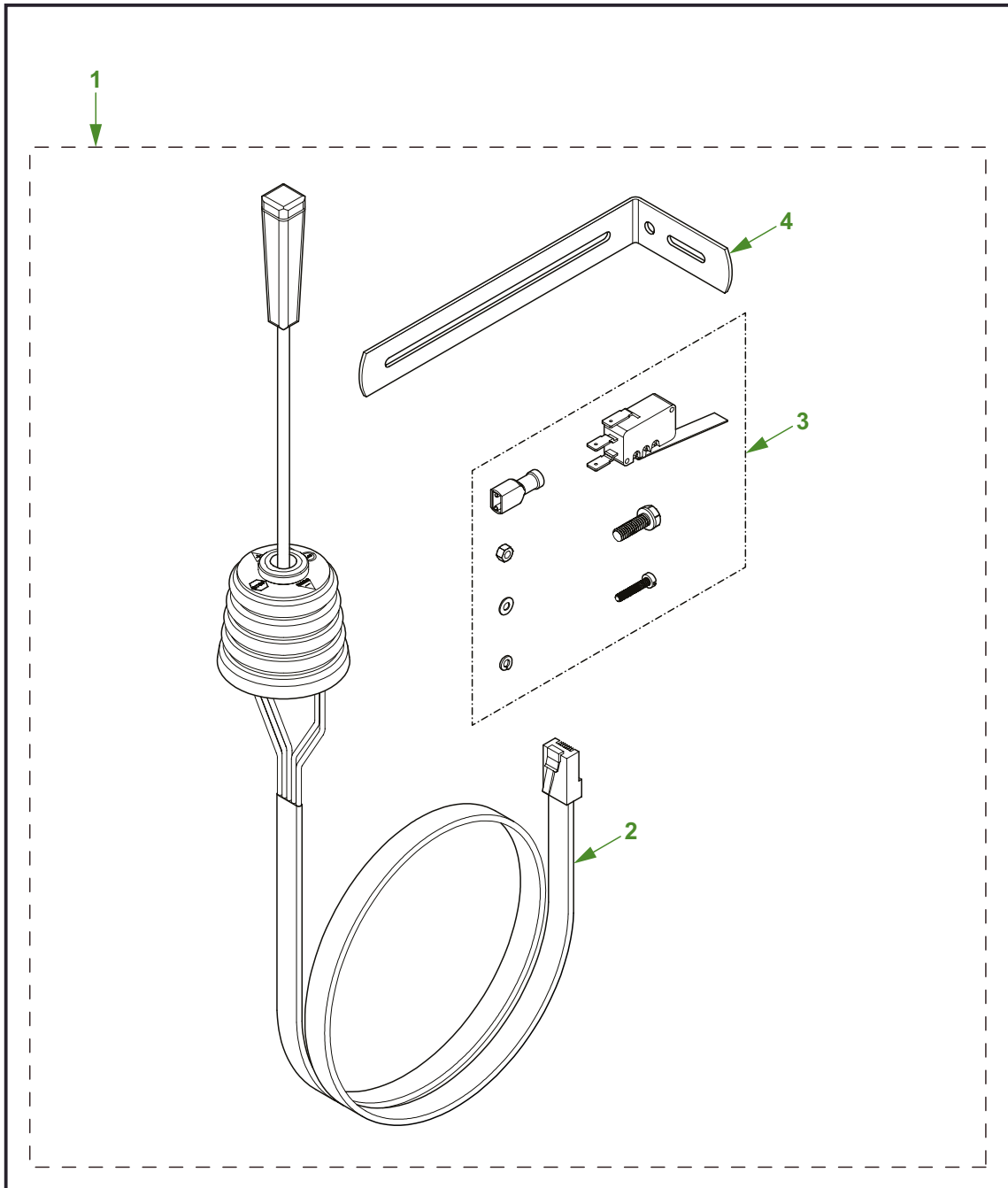


P/N	Description
F121595	ESL2 IP67 with proximity switch F117231 (kit)
F176981	ESL2 IP67 without proximity switch (kit)

Pos	P/N	Description
1	F119682	Electronic box ESL2 IP67
2	F117231	Proximity sensor cable M12x1
3	F120587	Complete cable connector 2m
4	F207596	Connection cable for proximity sensor F207595
5	F207595	Proximity sensor N.O. 10mm/M18
6	F122130	Complete connectors kit 3-core
7	F121943	Connector kit 3-core ( male )
8	F117859	Connector kit 3-core ( female )
9	F121578	Fitting kit ESL2 IP67

Release date: June 2015

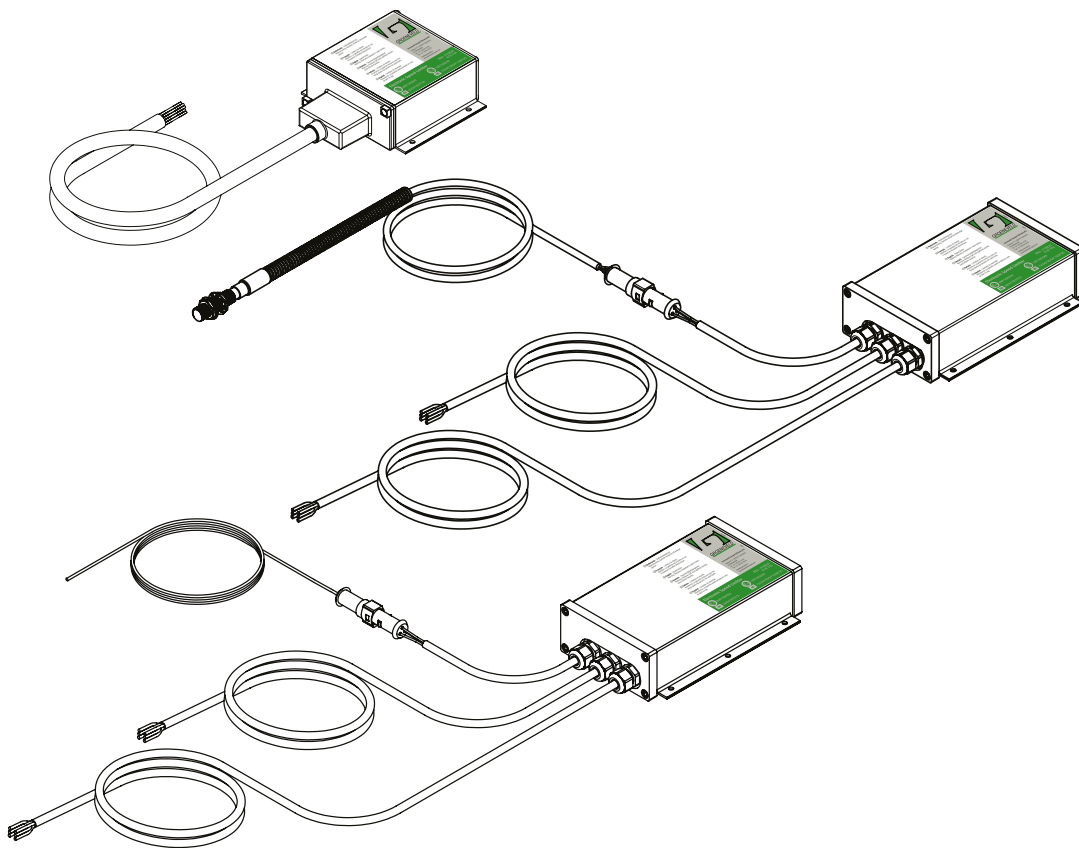
**2.3 ESL cruise control kit**



Pos	P/N	Description
	F171069	ESL cruise control kit
1	F111510	Cruise control handle
2	F117381	Cruise control EDC fittings kit
3	F111502	Mounting bracket micro switch

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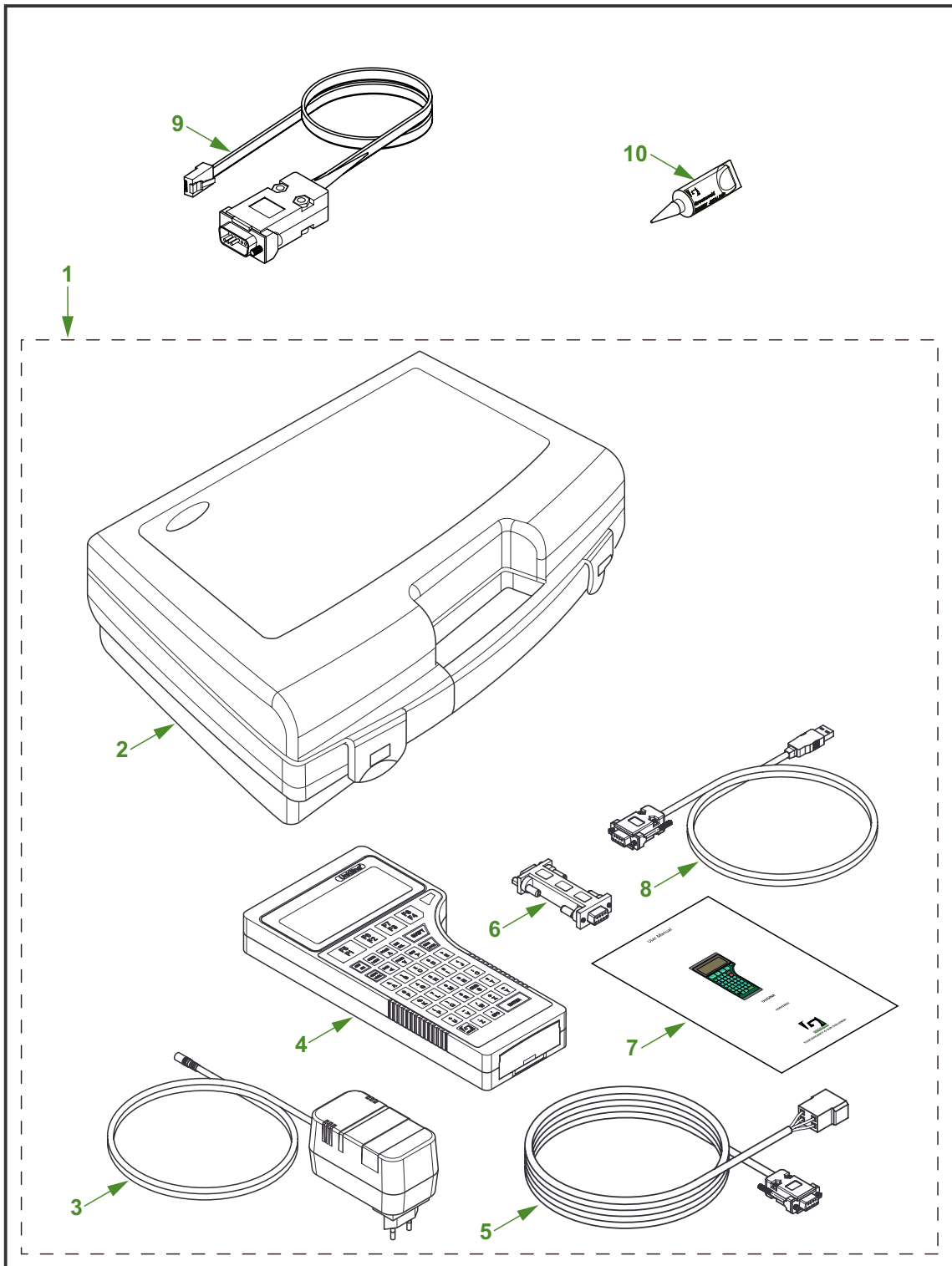
### 3. TOOLS



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### 3.1 Unigina diagnosis kit

<i>Pos</i>	<i>P/N</i>	<i>Description</i>
1	F121604	Unigina diagnosis kit
2	F121605	Box 320 x 280 x 120mm
3	F120537/1	Power supply 100 - 240 Vac -> 3 - 12 Vdc
4	F178644	Unigina
5	F121401	Cable harness
6	F205694	Converter RS232 male -> female DB9
7	F209432	Unigina manual
8	F203450	Cable harness USB A -> serial 9-pin
9	F121400	SpeedLimiter diagnosis cable
10	F111392	Tube seal paint (color green)
	F207763	Validation code ESL2 - SL4

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