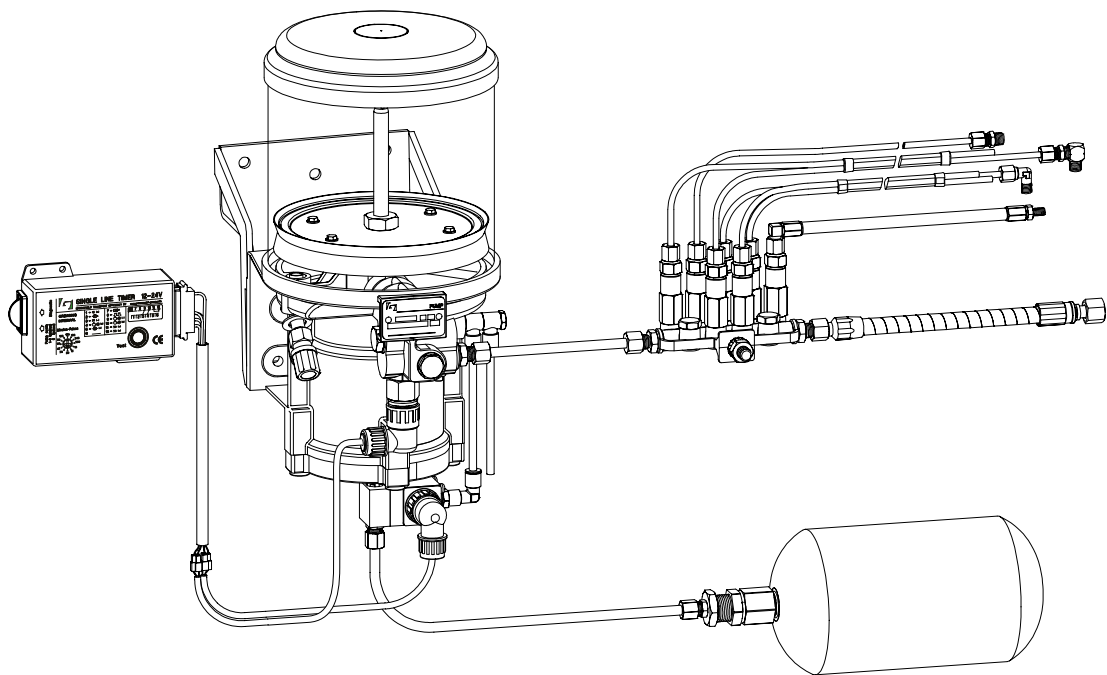


Parts Manual



Automatic SingleLine Greasing System

D000144R04



YOUR EFFICIENCY IS OUR CHALLENGE

All rights reserved. No part of this manual may be copied and/or published by means of printing, photocopying, microfilm or by any other means without prior written permission from Groeneveld. This applies also to the drawings and diagrams appended.

Groeneveld reserves the right to change parts at any time, without prior or direct notice to the customer. The contents of this manual may also be changed without prior notice.

This manual applies to the standard version of the product. Groeneveld cannot accept liability for any damage arising from the use of specifications other than that supplied.

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

Whilst this manual has been prepared with the greatest possible care Groeneveld cannot accept responsibility for any errors of the consequences of such errors.

TABLE OF CONTENTS

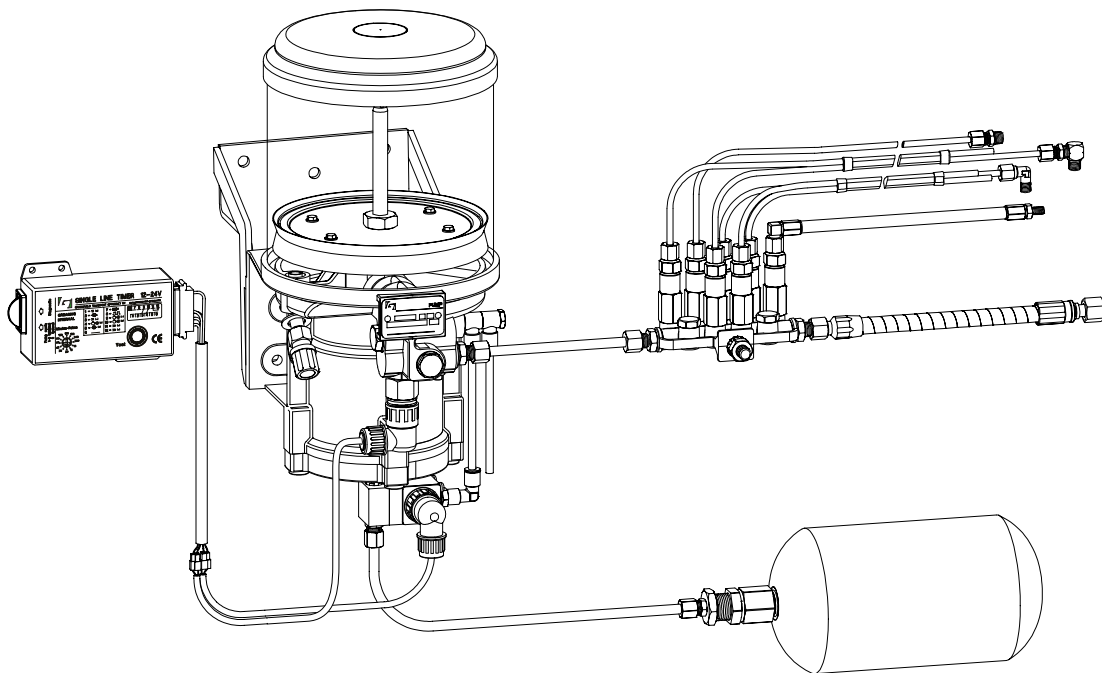
1. PUMPS ...	5
1.1 Pneumatic grease pumps 42cc	7
1.2 Optional parts	7
1.3 Pneumatic grease pumps 60cc	9
1.4 Optional parts	9
1.5 Pneumatic oil pumps 42cc	11
1.6 Optional parts	11
1.7 Electric piston grease pumps	13
1.8 Optional parts	13
1.9 Electric piston oil pumps	15
1.10 Optional parts	15
1.11 Electric gear grease pumps	17
1.12 Optional parts	17
1.13 Electric gear grease pumps with timer	19
1.14 Optional parts	19
2. CONTROL UNITS	21
2.1 Electronic timer	22
2.2 Pulse brake counter	23
2.3 Multi mode trailer timer	24
3. AIR CONNECTION PARTS	25
3.1 System with electronic timer	27
3.2 System with air/electronic pulse brake counter	29
4. DISTRIBUTION BLOCKS	31
4.1 Transport distribution blocks	32
4.2 Industrial distribution blocks	33
4.3 Welding plates for industrial distribution blocks	34
4.4 Shut-off plugs	34
4.5 Metering units for ø5mm tubes	35
4.6 Metering units for ø6mm tubes	36
5. DIAGNOSTIC TOOLS	37
5.1 Unigina diagnosis kit	39
5.2 Diagnosis kit SingleLine timer	41
6. INDEX	42

Release date: June 2015

Automatic SingleLine Greasing System

Release date: June 2015

1. PUMPS

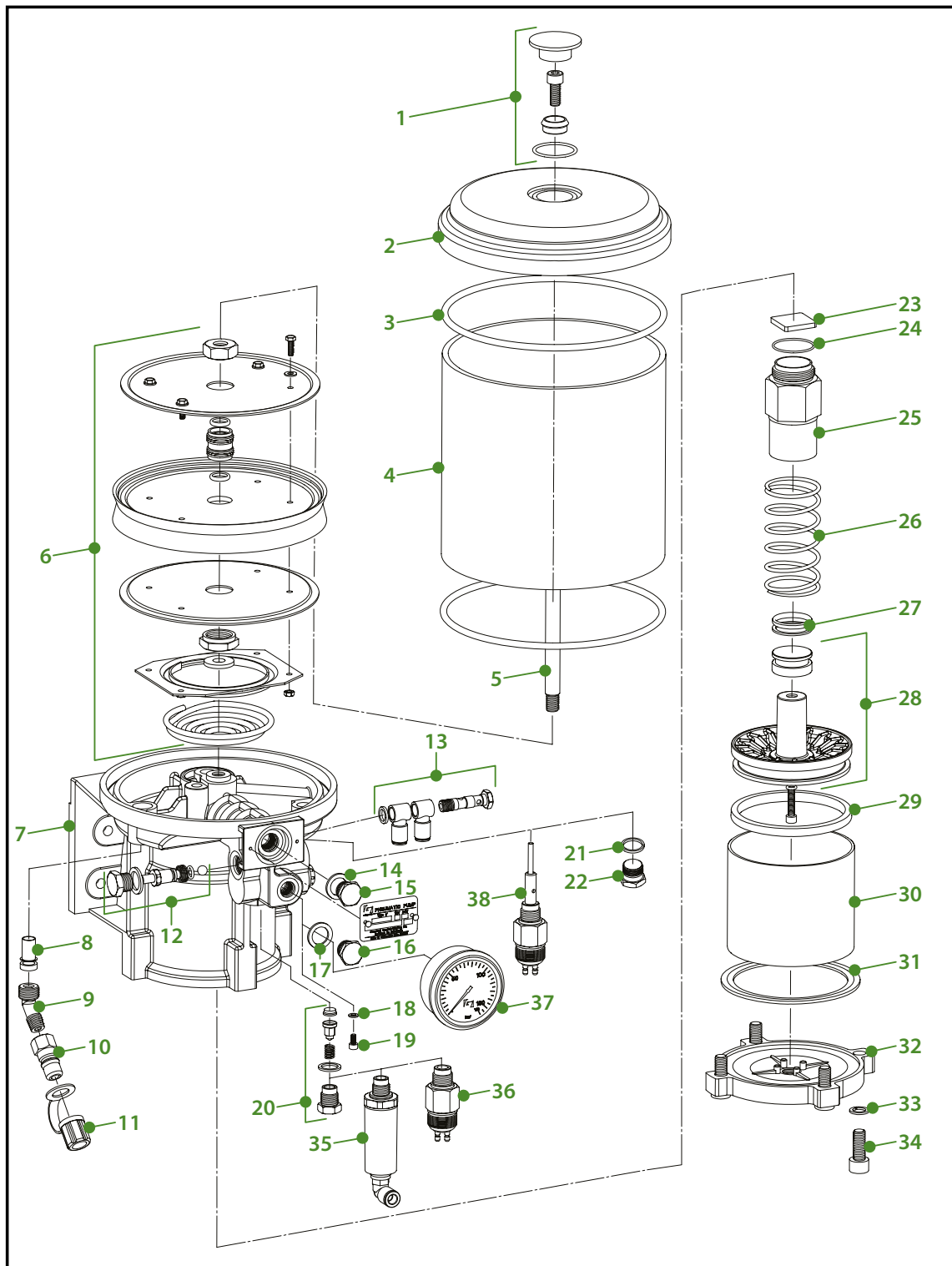


Release date: June 2015



YOUR EFFICIENCY IS OUR CHALLENGE

Automatic SingleLine Greasing System



Release date: June 2015

1.1 Pneumatic grease pumps 42cc

<i>P/n new</i>	<i>P/n old</i>	<i>Capacity reservoir</i>	<i>Grease delivery</i>	<i>Ratio</i>	<i>Maximum pressure</i>
F103160	36201	4 liters	42 cc / stroke	9 : 1	100 bar
F111140	68801	6 liters	42 cc / stroke	9 : 1	100 bar
F103544	35501	8 liters	42 cc / stroke	9 : 1	100 bar

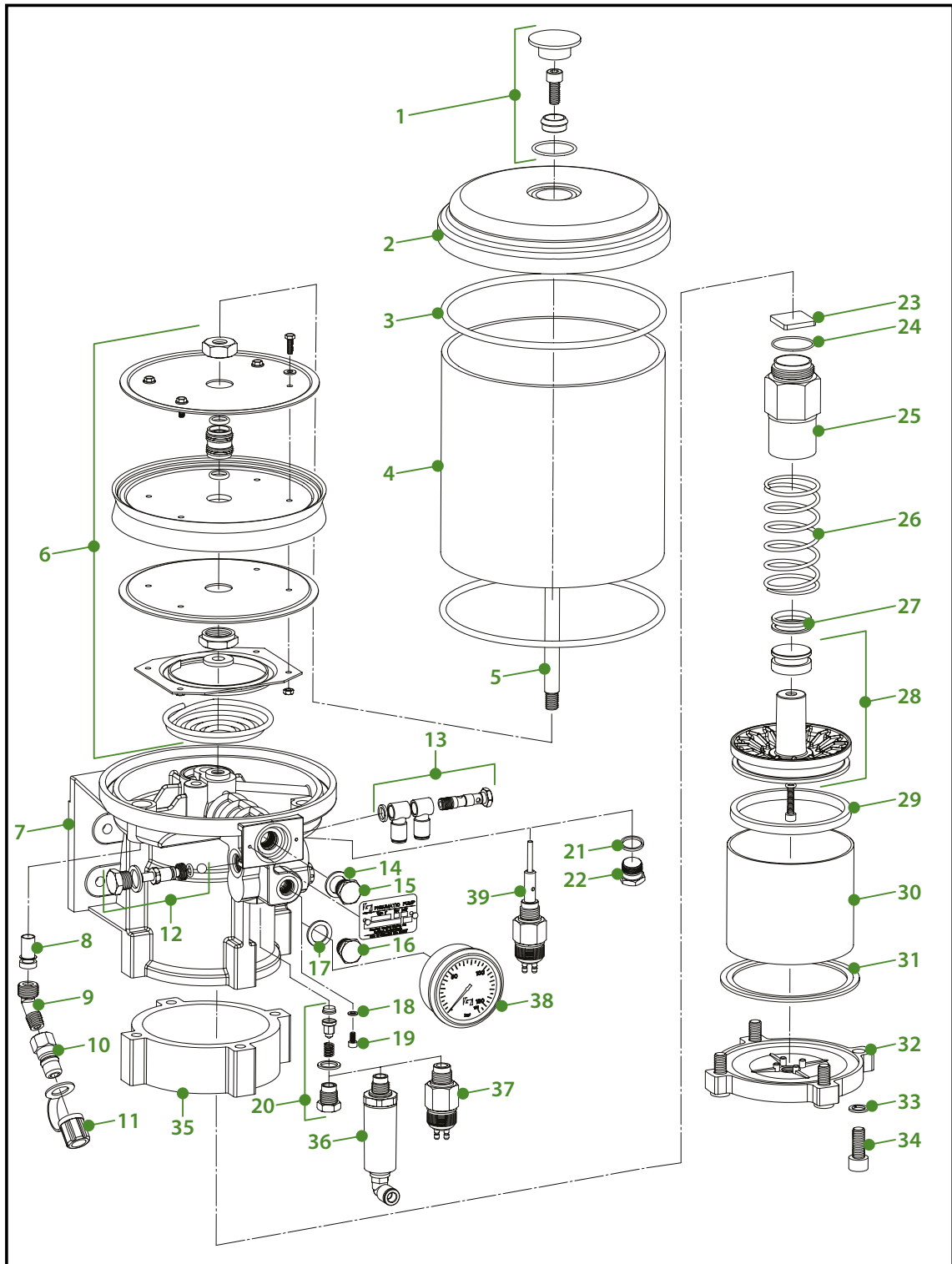
<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
1	F103643	59701	Reservoir bolt kit	16	F000686	32901	Plug
2	F103049	37501	Reservoir cover	17	F104436	83901	Sealing ring
3	F110151	30601	O-ring	18	F000714	40201	Sealing ring
4	F117084	37301	Reservoir 4 l	19	F000713	40101	Allen screw M4x48
	F111410	69201	Reservoir 6 l	20	F102975	34801	Check valve kit
	F172535	-	Reservoir 8 l + O-rings	21	F103059	55901	Sealing ring
5	F103045	39901	Guide pin 4 l	22	F103065	55801	Plug
	F111409	69301	Guide pin 6 l	23	F110895	30701	Non return valve
	F103545	41501	Guide pin 8 l	24	F100531	32501	O-ring
6	F115378	40501	Follower plate 4 l	25	F000263	35801	Piston housing 42cc
	F112269	69401	Follower plate 6/8 l	26	F000266	35701	Piston spring 42cc
7	F103183	34501	Pump body	27	F104654	35901	O-ring + retaining ring
8	F103005	34001	Grease filter kit	28	F102724	40701	Piston 42cc
9	F100057	33901	Adapter G3/8" - R1/4"	29	F102719	40901	Piston seal
10	F100056	02001	Quick connector	30	F113297	40601	Cylinder liner 42cc
11	F100258	03501	Dust cap	31	F103121	41001	Gasket
12	F110028	34901	Non return valve kit	32	F103064	41101	Bottom cover
13	F103823	19701	Banjo connector kit	33	F113427	330010	Lock washer M10
14	F104437	40401	Sealing ring	34	F122365	121025	Allen screw M10x25
15	F122279	40301	Plug				

1.2 Optional parts

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
35	F113059	26401	Warning device	37	F104544	16901	Manometer 0-150bar
36	F114697	68501	Pressure switch 40bar	38	F112409	90901	Low level switch kit

Release date: June 2015

Automatic SingleLine Greasing System



Release date: June 2015

1.3 Pneumatic grease pumps 60cc

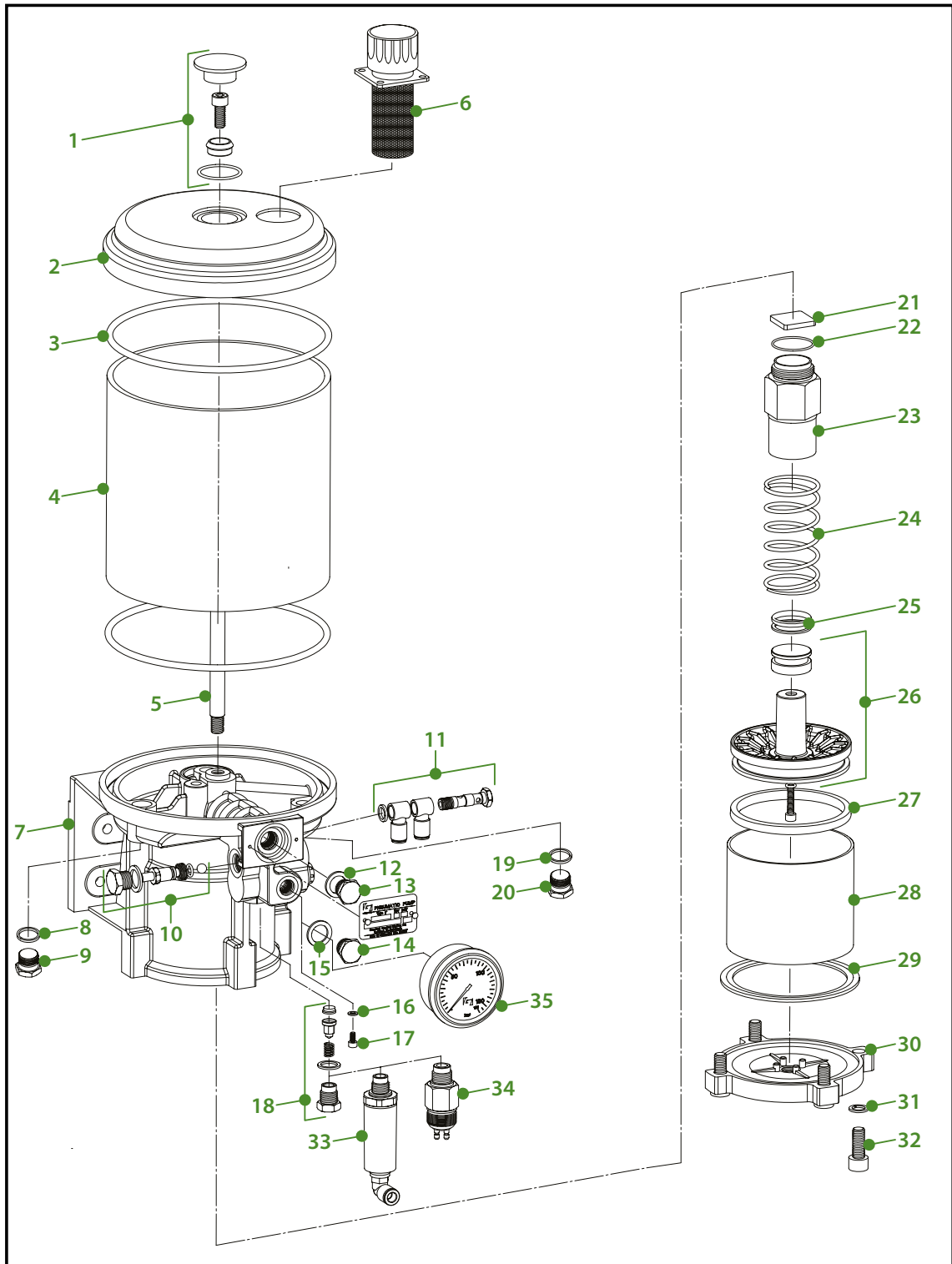
<i>P/n new</i>	<i>P/n old</i>	<i>Capacity reservoir</i>	<i>Grease delivery</i>	<i>Ratio</i>	<i>Maximum pressure</i>
F103336	37101	4 liters	60 cc / stroke	9 : 1	100 bar
F114016	43001	8 liters	60 cc / stroke	9 : 1	100 bar

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
1	F103643	59701	Reservoir bolt kit	17	F104436	83901	Sealing ring
2	F103049	37501	Reservoir cover	18	F000714	40201	Sealing ring
3	F110151	30601	O-ring	19	F000713	40101	Allen screw M4x48
4	F117084	37301	Reservoir 4 l	20	F102975	34801	Check valve kit
	F172535	-	Reservoir 8 l + O-rings	21	F103059	55901	Sealing ring
5	F103045	39901	Guide pin 4 l	22	F103065	55801	Plug
	F103545	41501	Guide pin 8 l	23	F110895	30701	Non return valve
6	F115378	40501	Follower plate 4 l	24	F100531	32501	O-ring
	F112269	69401	Follower plate 8 l	25	F103247	20522	Piston housing 60cc
7	F103183	34501	Pump body	26	F103250	48701	Piston spring 60cc
8	F103005	34001	Grease filter kit	27	F104654	35901	O-ring + retaining ring
9	F100057	33901	Adapter G3/8" - R1/4"	28	F111490	97501	Piston 60cc
10	F100056	02001	Quick connector	29	F102719	40901	Piston seal
11	F100258	03501	Dust cap	30	F103246	69701	Cylinder liner 60cc
12	F110028	34901	Non return valve kit	31	F103121	41001	Gasket
13	F103823	19701	Banjo connector kit	32	F103064	41101	Bottom cover
14	F104437	40401	Sealing ring	33	F113427	330010	Lock washer M10
15	F122279	40301	Plug	34	F103255	48801	Allen screw M10x65
16	F000686	32901	Plug	35	F103249	22522	Extension tube 60cc

1.4 Optional parts

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
36	F113059	26401	Warning device	38	F104544	16901	Manometer 0-150bar
37	F114697	68501	Pressure switch 40bar	39	F112409	90901	Low level switch kit

Automatic SingleLine Greasing System



Release date: June 2015

1.5 Pneumatic oil pumps 42cc

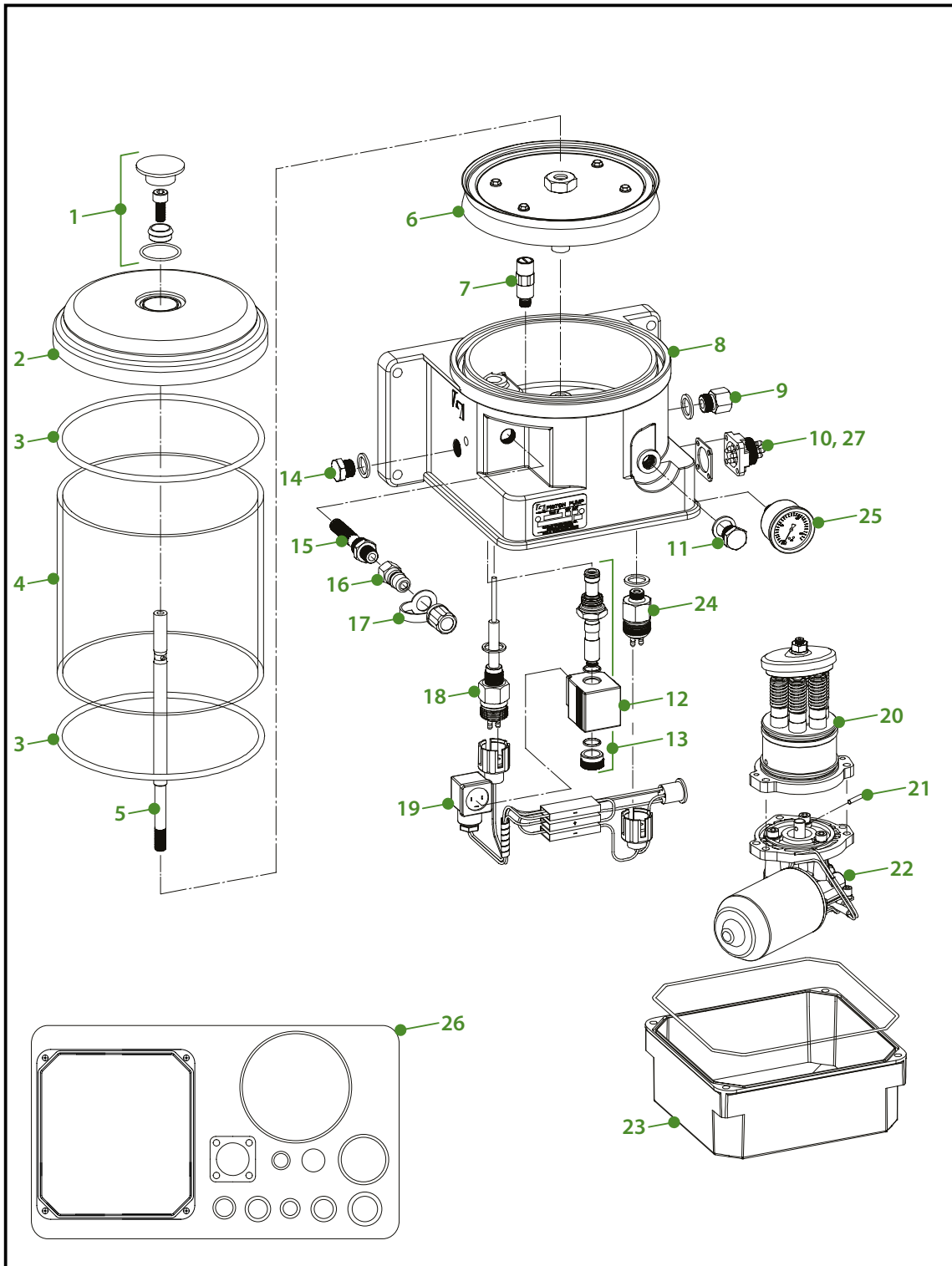
<i>P/n new</i>	<i>P/n old</i>	<i>Capacity reservoir</i>	<i>Grease delivery</i>	<i>Ratio</i>	<i>Maximum pressure</i>
F116318	00511	4 liters	42 cc / stroke	9 : 1	100 bar
F116319	06511	8 liters	42 cc / stroke	9 : 1	100 bar

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
1	F103643	59701	Reservoir bolt kit	16	F000714	40201	Sealing ring
2	F114709	-	Reservoir cover	17	F000713	40101	Allen screw M4x48
3	F110151	30601	O-ring	18	F102975	34801	Check valve kit
4	F103061	-	Reservoir 4 l	19	F103059	55901	Sealing ring
	F172535	-	Reservoir 8 l + O-rings	20	F103065	55801	Plug
5	F116323	-	Guide pin 4 l	21	F116326	-	Non return valve
	F116330	-	Guide pin 8 l	22	F100531	32501	O-ring
6	F114708	07202	Oil plug	23	F000263	35801	Piston housing 42cc
7	F103183	34501	Pump body	24	F000266	35701	Piston spring 42cc
8	F100049	-	Sealing ring	25	F104654	35901	O-ring + retaining ring
9	F116327	-	Plug	26	F102724	40701	Piston 42cc
10	F110028	34901	Non return valve kit	27	F102719	40901	Piston seal
11	F103823	19701	Banjo connector kit	28	F113297	40601	Cylinder liner 42cc
12	F104437	40401	Sealing ring	29	F103121	41001	Gasket
13	F122279	40301	Plug	30	F103064	41101	Bottom cover
14	F000686	32901	Plug	31	F113427	330010	Lock washer M10
15	F104436	83901	Sealing ring	32	F122365	121025	Allen screw M10x25

1.6 Optional parts

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
33	F113059	26401	Warning device	35	F104544	16901	Manometer 0-150bar
34	F114697	68501	Pressure switch 40bar				

Automatic SingleLine Greasing System



Release date: June 2015

1.7 Electric piston grease pumps

<i>P/n new</i>	<i>P/n old</i>	<i>Supply voltage</i>	<i>Capacity reservoir</i>	<i>Grease delivery</i>	<i>Maximum pressure</i>
F111561	31522	12 Vdc	4 liters	25 cc / minute	100 bar
F110712	21422	12 Vdc	4 liters	50 cc / minute	100 bar
F110082	16022	12 Vdc	8 liters	50 cc / minute	100 bar
F110084	16222	24 Vdc	4 liters	25 cc / minute	100 bar
F110083	16122	24 Vdc	8 liters	25 cc / minute	100 bar

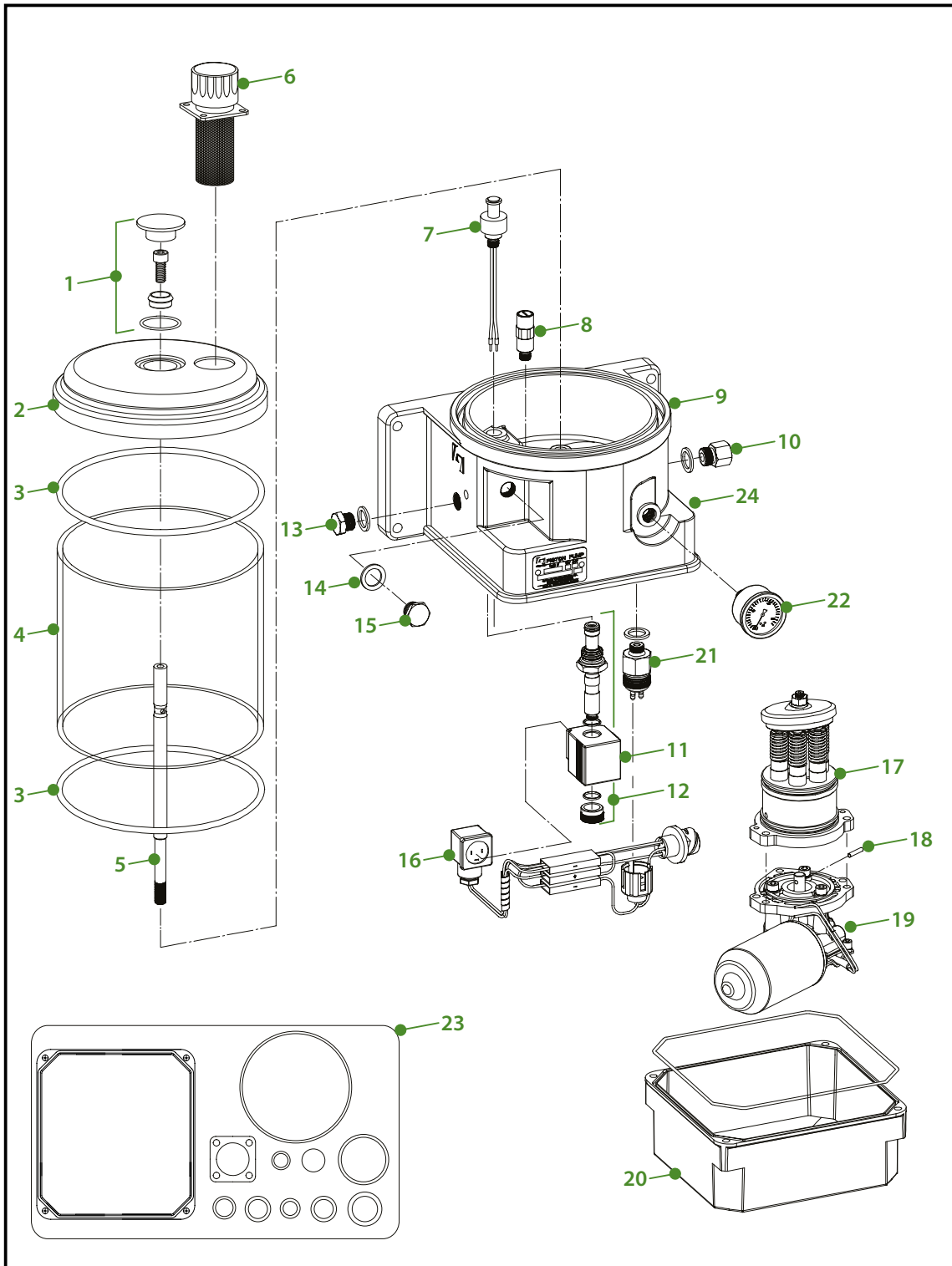
<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
1	F103643	59701	Reservoir bolt kit		F112021	84401	Valve kit 24Vdc (<'04)
2	F103049	37501	Reservoir cover		F120387	-	Valve kit 24Vdc (->'04)
3	F110151	30601	O-ring	14	F103646	59901	Plug + O-ring M16x1.5
4	F117084	37301	Reservoir 4 l	15	F112018	85101	Grease strainer kit
	F172535	-	Reservoir 8 l + O-rings	16	F100056	02001	Quick connector
5	F110111	85401	Guide pin 4 l	17	F100258	03501	Dust cap
	F110080	85501	Guide pin 8 l	18	F112019	84101	Low level switch
6	F112030	85201	Follower plate 4 l	19	F112025	-	Cable harness 3-core
	F112031	85301	Follower plate 8 l		F112024	85601	Cable harness 4-core
7	F112017	84201	Relief valve 100bar	20	F112023	85801	Piston pump unit
8	F104419	85901	Pump body (<'04)	21	F110064	84701	Security pin
	F118888	-	Pump body (->'04)	22	F112028	84901	Motor 12V/14rpm/25cc
9	F104803	64901	Adapter M16-1/4"		F112026	84801	Motor 12V/28rpm/50cc
10	F104794	64801	Connector 4-core M24		F112027	85001	Motor 24V/14rpm/25cc
11	F103649	63901	Plug + O-ring G1/4"	23	F114871	86001	Bottom cover
12	F112034	84501	Coil 12 Vdc	24	F114698	59822	Pressure switch 70bar
	F112033	84601	Coil 24 Vdc	25	F103155	54101	Manometer 0-150bar
13	F112022	84301	Valve kit 12Vdc (<'04)	26	F111717	86201	Gasket kit
	F120388	-	Valve kit 12Vdc (->'04)				

1.8 Optional parts

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
27	F105097	53601	Cable harness 3-core / M24 / 7.5 m
	F105182	58301	Cable harness 4-core / M24 / 7.5 m
	F177826	-	Cable harness 4-core / M24 / 15 m

Release date: June 2015

Automatic SingleLine Greasing System



Release date: June 2015

1.9 Electric piston oil pumps

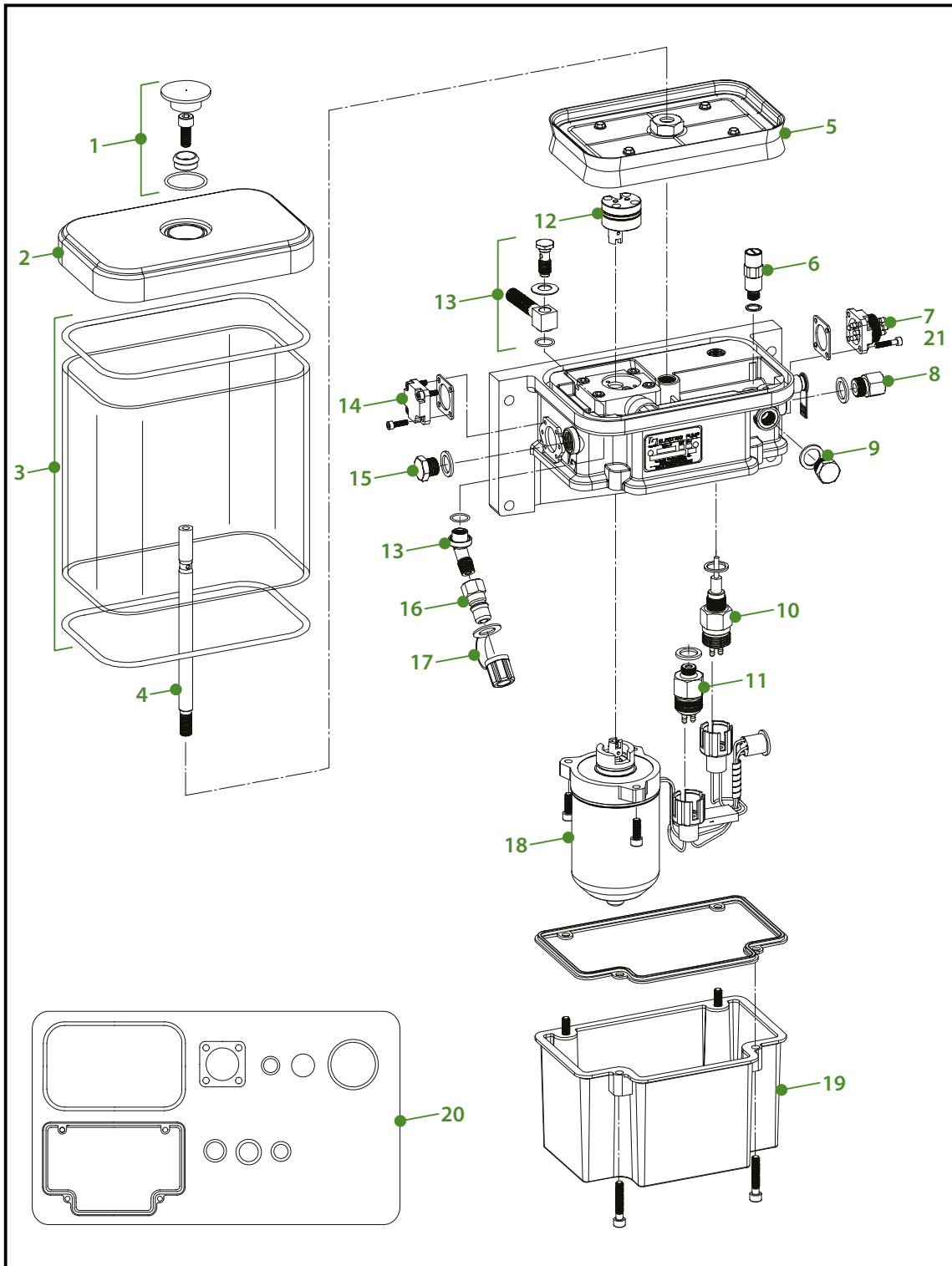
<i>P/n new</i>	<i>P/n old</i>	<i>Supply voltage</i>	<i>Capacity reservoir</i>	<i>Grease delivery</i>	<i>Maximum pressure</i>
F114705	61522	24 Vdc	4 liters	50 cc / minute	100 bar
F172672	-	24 Vdc	8 liters	50 cc / minute	100 bar

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
1	F103643	59701	Reservoir bolt kit	12	F120387	-	Valve kit 24Vdc
2	F114709	-	Reservoir cover	13	F103646	59901	Plug + O-ring M16x1.5
3	F110151	30601	O-ring	14	F103059	55901	Sealing ring
4	F103061	-	Reservoir 4 l	15	F103065	55801	Plug
	F172535	-	Reservoir 8 l + O-rings	16	F114712	-	Cable harness 8-core
5	F114707	-	Guide pin 4 l	17	F112023	85801	Piston pump unit
	F118699	-	Guide pin 8 l	18	F110064	84701	Security pin
6	F114708	07202	Oil plug	19	F110106	86601	Motor 24V/28rpm/50cc
7	F114715		Level sensor	20	F114871	86001	Bottom cover
8	F112017	84201	Relief valve 100bar	21	F114698	59822	Pressure switch 70bar
9	F118888	-	Pump body	22	F103155	54101	Manometer 0-150bar
10	F104803	64901	Adapter M16-1/4"	23	F111717	86201	Gasket kit
11	F112033	84601	Coil 24 Vdc				

1.10 Optional parts

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
24	F107899	00217	Cable harness 7 m / ADR

Automatic SingleLine Greasing System



Release date: June 2015

1.11 Electric gear grease pumps

<i>P/n new</i>	<i>P/n old</i>	<i>Supply voltage</i>	<i>Capacity reservoir</i>	<i>Grease delivery</i>	<i>Maximum pressure</i>
F103384	53001	12 Vdc	2.9 liters	120cc / minute	55 bar
F117676 ¹⁾	53101	12 Vdc	2.9 liters	120cc / minute	55 bar
F103041	50101	24 Vdc	2.1 liters	120cc / minute	55 bar
F103382	52201	24 Vdc	2.9 liters	120cc / minute	55 bar
F103398 ¹⁾	52301	24 Vdc	2.9 liters	120cc / minute	55 bar

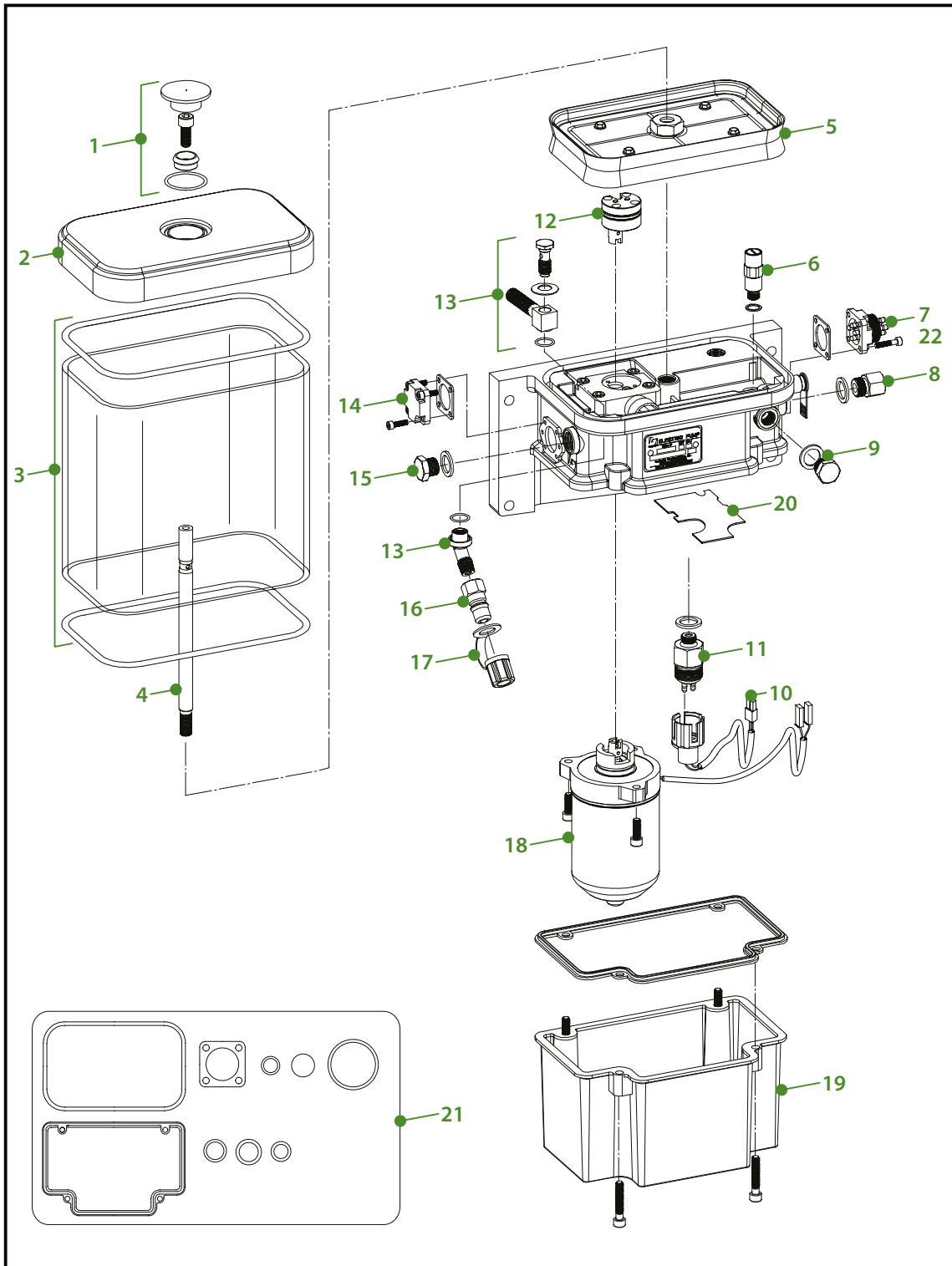
¹⁾ Pump with low level switch and 4-core M24 connector.

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
1	F103643	59701	Reservoir bolt kit	11	F104059	65901	Pressure switch 30bar
2	F104467	64201	Cover + O-ring	12	F113884	92301	Gear pump unit
3	F104007	64101	Reservoir 2.1 liter	13	F103642	59801	Grease strainer kit
	F104466	64001	Reservoir 2.9 liter	14	F104795	64501	Connector plate
4	F103296	58001	Guide pin 2.1 l	15	F103646	59901	Plug + O-ring M16x1.5
	F103372	57901	Guide pin 2.9 l	16	F100056	02001	Quick connector
5	F115379	57601	Follower plate	17	F100258	03501	Dust cap
6	F104005	64401	Relief valve 50 bar	18	F116437	15311	Motor 12Vdc / 3-pins
7	F104793	64701	Connector 3-core M24		F117677	-	Motor 12Vdc / 4-pins
	F104794	64801	Connector 4-core M24		F104055	02911	Motor 24Vdc / 3-pins
8	F104802	65801	Adapter M16-ø8mm		F110837	-	Motor 24Vdc / 4-pins
	F104803	64901	Adapter M16-1/4"	19	F104003	64301	Bottom cover
9	F103649	63901	Plug + O-ring G1/4"	20	F104811	66101	Gasket kit
10	F104810	66001	Low level switch				

1.12 Optional parts

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
21	F105097	53601	Cable harness 3-core / M24 / 7.5 m
	F105182	58301	Cable harness 4-core / M24 / 7.5 m
	F177826	-	Cable harness 4-core / M24 / 15 m

Automatic SingleLine Greasing System



Release date: June 2015

1.13 Electric gear grease pumps with timer

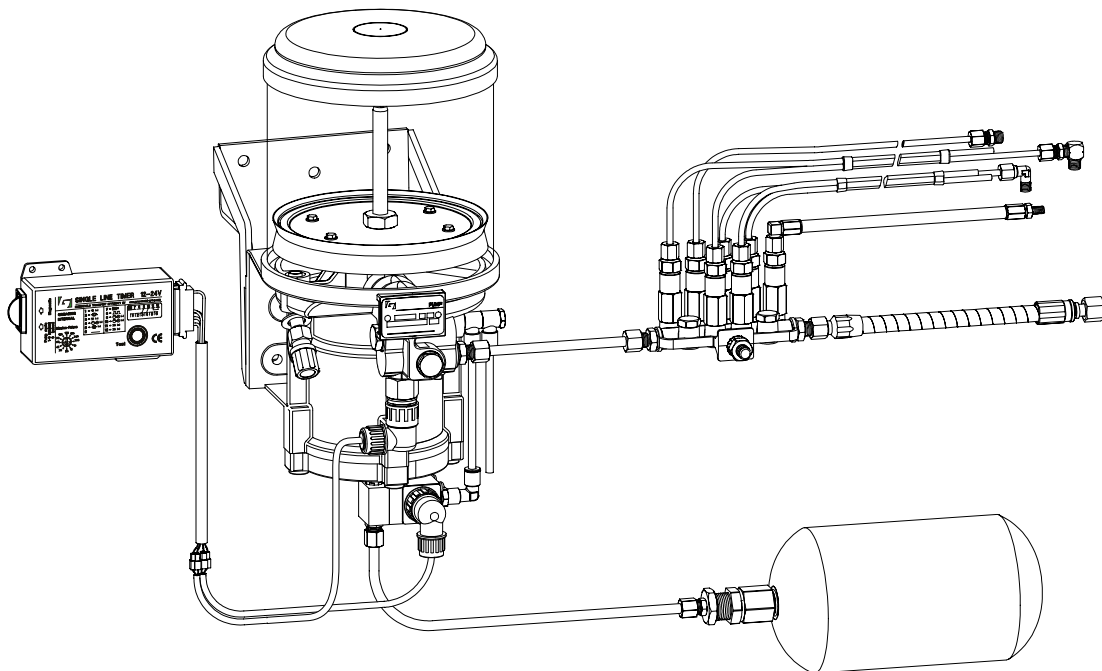
<i>P/n new</i>	<i>P/n old</i>	<i>Supply voltage</i>	<i>Capacity reservoir</i>	<i>Grease delivery</i>	<i>Maximum pressure</i>
F177824	-	24 Vdc	2.1 liters	80cc / minute	55 bar
F130840	-	24 Vdc	2.9 liters	120cc / minute	55 bar

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
1	F103643	59701	Reservoir bolt kit	12	F113884	92301	Gear pump unit
2	F104467	64201	Cover + O-ring	13	F103642	59801	Grease strainer kit
3	F104466	64001	Reservoir 2.9 liter	14	F104795	64501	Connector plate
4	F103372	57901	Guide pin 2.9 l	15	F103646	59901	Plug + O-ring M16x1.5
5	F115379	57601	Follower plate	16	F100056	02001	Quick connector
6	F104005	64401	Relief valve 50 bar	17	F100258	03501	Dust cap
7	F110815	47501	Connector 4-core	18	F129878	-	Motor 24Vdc
8	F104802	65801	Adapter M16-ø8mm	19	F104003	64301	Bottom cover
9	F103649	63901	Plug + O-ring G1/4"	20	F116842	06311	Timer 24 Vdc
10	F114748	-	Cable pressure switch	21	F104811	66101	Gasket kit
11	F104059	65901	Pressure switch 30bar				

1.14 Optional parts

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
22	F105182	58301	Cable harness 4-core / M24 / 7.5 m
	F177826	-	Cable harness 4-core / M24 / 15 m

2. CONTROL UNITS

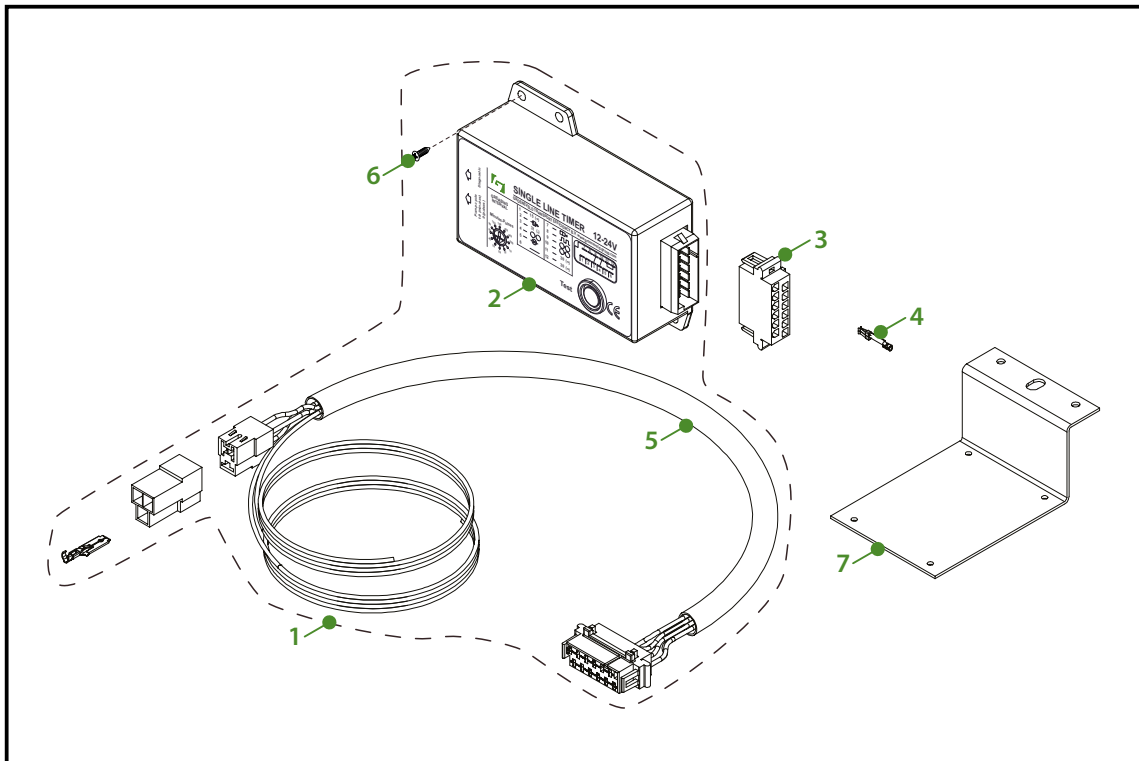


Release date: June 2015



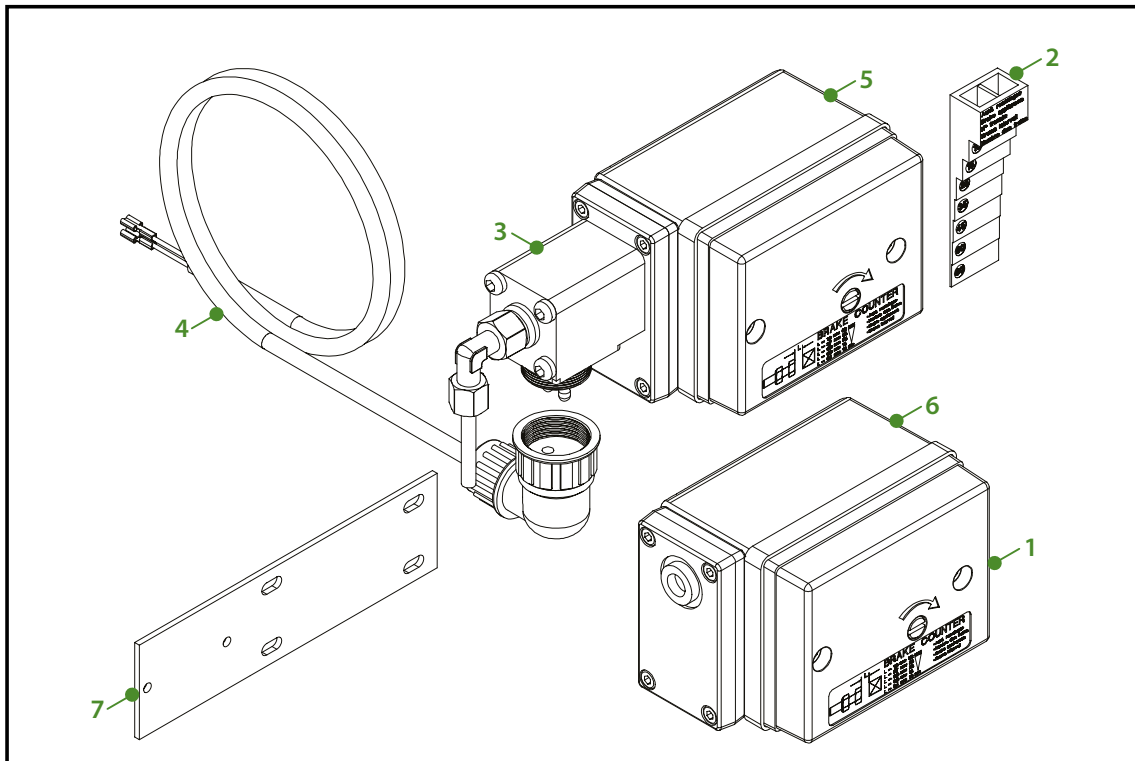
YOUR EFFICIENCY IS OUR CHALLENGE

2.1 Electronic timer



Pos	P/n new	P/n old	Description
1	F214375	-	General SingleLine timer kit
2	F125639	-	Timer 12-24Vdc / cycle time 1-9 min. / interval range 10 - 300 min.
3	F104581	07701	Connector 12-core
4	F104579	07801	Junior contact 0.5 - 1.5mm ²
5	F111299	68901	Cable harness 1.4 m
	F207682	-	Cable harness 3 m
6	F100354	023595	Tapping screw 3.5 x 9.5mm

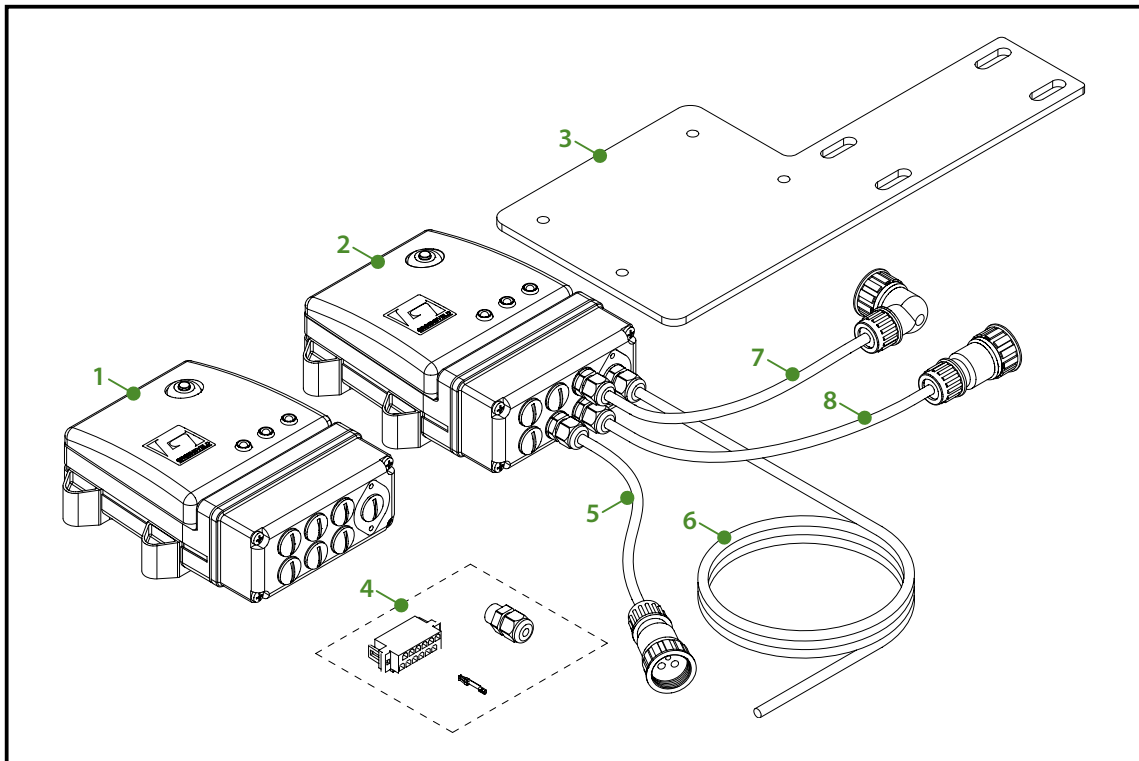
2.2 Pulse brake counter



Pos	P/n new	P/n old	Description
1	F111768	45601	Pulse brake counter cover kit
2	F100088	08201	Pulse brake counter adjusting gauge
3	F103346	08101	Pulse brake counter solenoid 24 Vdc
4	F107895	04812	Cable harness 2-core / M24 / 8 meter
	F107894	04912	Cable harness 2-core / M24 / 15 meter
5	F100186	00301	Electric pulse brake counter 24 Vdc
6	F100187	07401	Pneumatic pulse brake counter
7	F104610	18108	Bracket, L=272mm
	F102173	06108	Bracket, L=340mm

Release date: June 2015

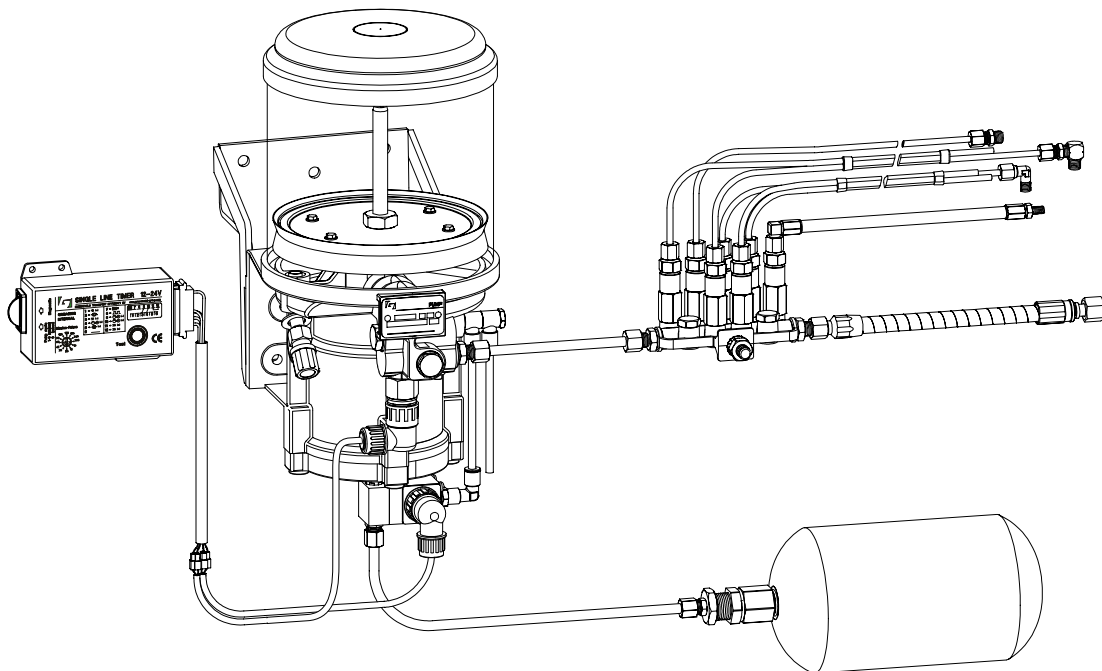
2.3 Multi mode trailer timer



Pos	P/n new	P/n old	Description
1	F120496	-	Multi mode trailer timer
2	F122299	-	Multi mode trailer timer including cables
3	F195731	-	Bracket
4	F121810	-	Connection kit
5	F127447	-	Cable low level switch 0.6 meter
6	F122186	-	Cable power supply 15 meter
7	F122188	-	Cable solenoid 0.3 meter
8	F122187	-	Cable pressure switch 0.5 meter

Release date: June 2015

3. AIR CONNECTION PARTS

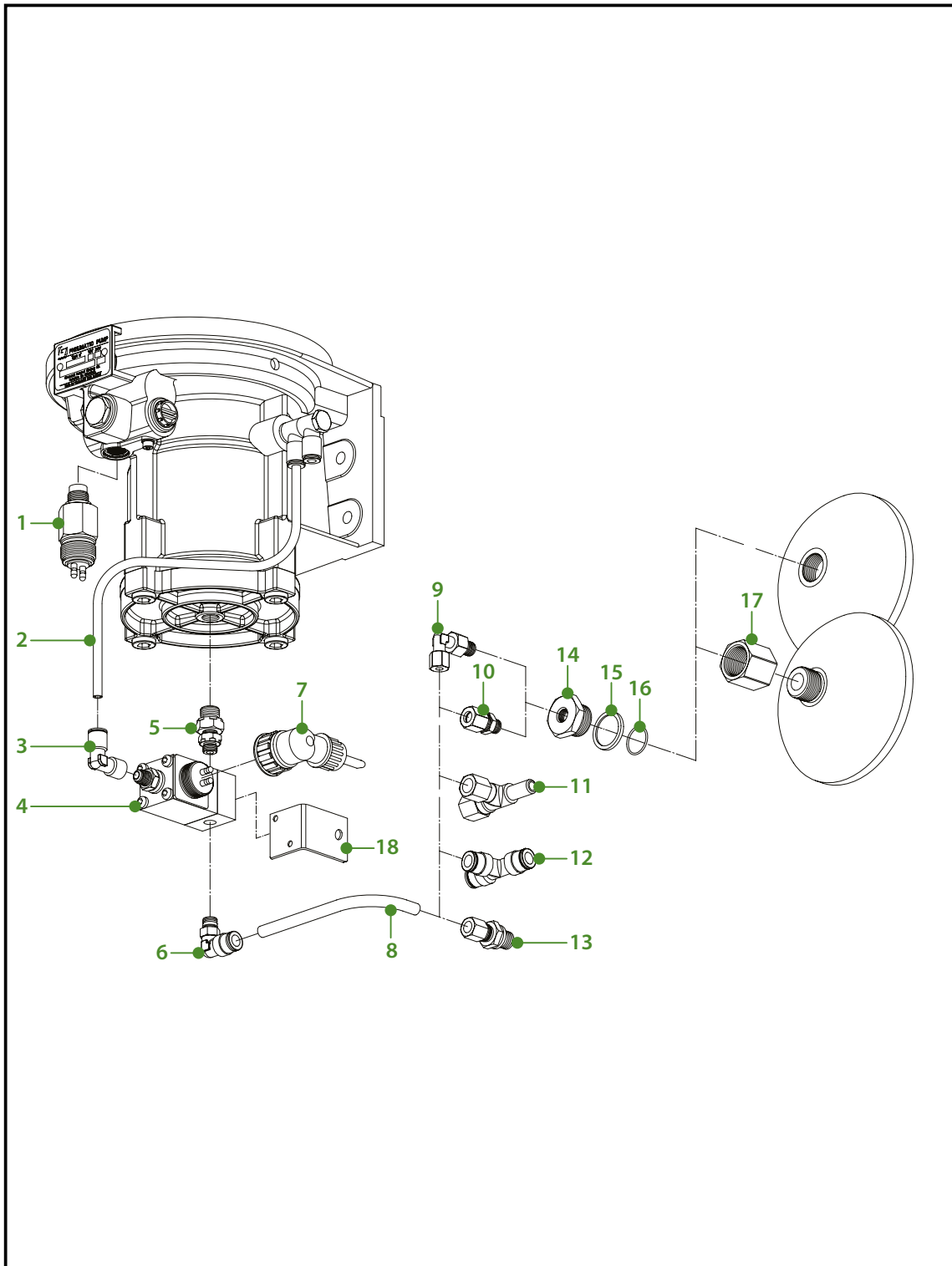


Release date: June 2015



YOUR EFFICIENCY IS OUR CHALLENGE

Automatic SingleLine Greasing System

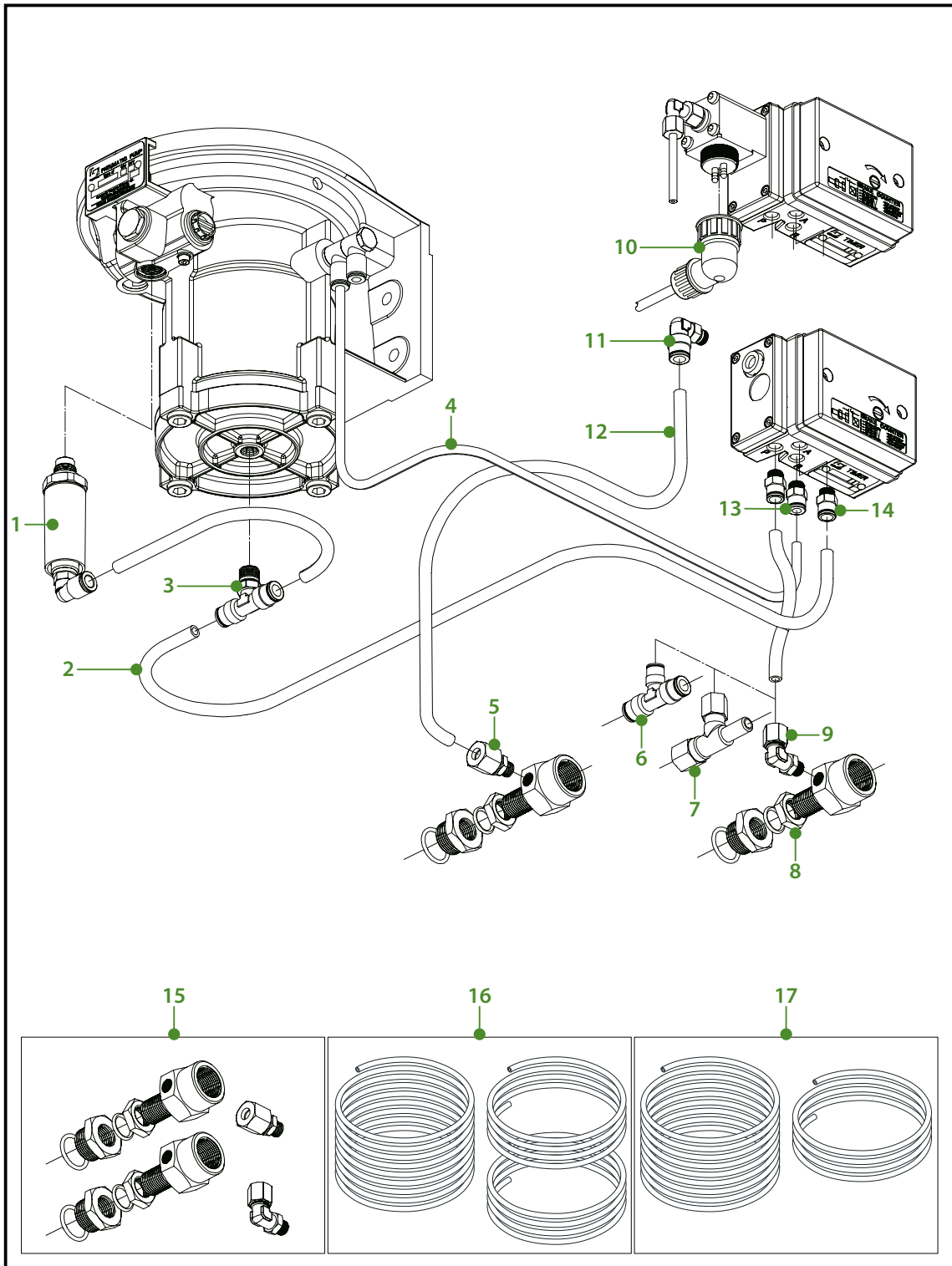


Release date: June 2015

3.1 System with electronic timer

Pos	P/n new	P/n old	Description
1	F114697	68501	Pressure switch 40 bar
2	F120820	19301	Air PA tube ø6mm x 1mm per meter
3	F102826	19101	Female stud elbow ø6mm - G1/8" (push-in)
4	F102816	18408	Solenoid 12 Vdc
	F102815	18308	Solenoid 24 Vdc
5	F114472	12801	Hex adapter G1/4" - G1/8"
6	F110141	49101	Male stud elbow ø5/16 - G1/8" (push-in)
7	F110143	69001	Cable harness pressure switch / solenoid 10 meter
	F113265	93201	Cable harness pressure switch / solenoid 15 meter
	F112040	69601	Cable harness pressure switch / solenoid 10 meter / ADR
	F601986	-	Cable harness pressure switch / solenoid / low level switch 15 meter
8	F104597	-	Air PA tube red ø5/16 x 5mm per 4 meter
	F115950	-	Air PA tube red ø5/16 x 5mm per 6 meter
9	F000042	11301	Male stud elbow ø5/16 - G1/8"
10	F000598	11401	Male stud coupling ø5/16 - R1/8"
11	F104545	10208	Adjustable L-coupling P8 - ø8mm - ø8mm
	F104531	11708	Adjustable L-coupling p10 - ø8mm - ø10mm
12	F172036	07804	T-coupling ø8mm (push-in)
13	F104522	-	Male stud coupling ø8mm - M12x1.5
	F104802	65801	Male stud coupling ø8mm - M16x1.5
14	F000224	06408	Reducing adapter M22x1.5 - G1/8"
15	F101082	06608	O-ring ø22mm (copper)
16	F101047	06708	O-ring ø22mm (rubber)
17	F104503	07608	Socket adapter M22x1.5

Automatic SingleLine Greasing System

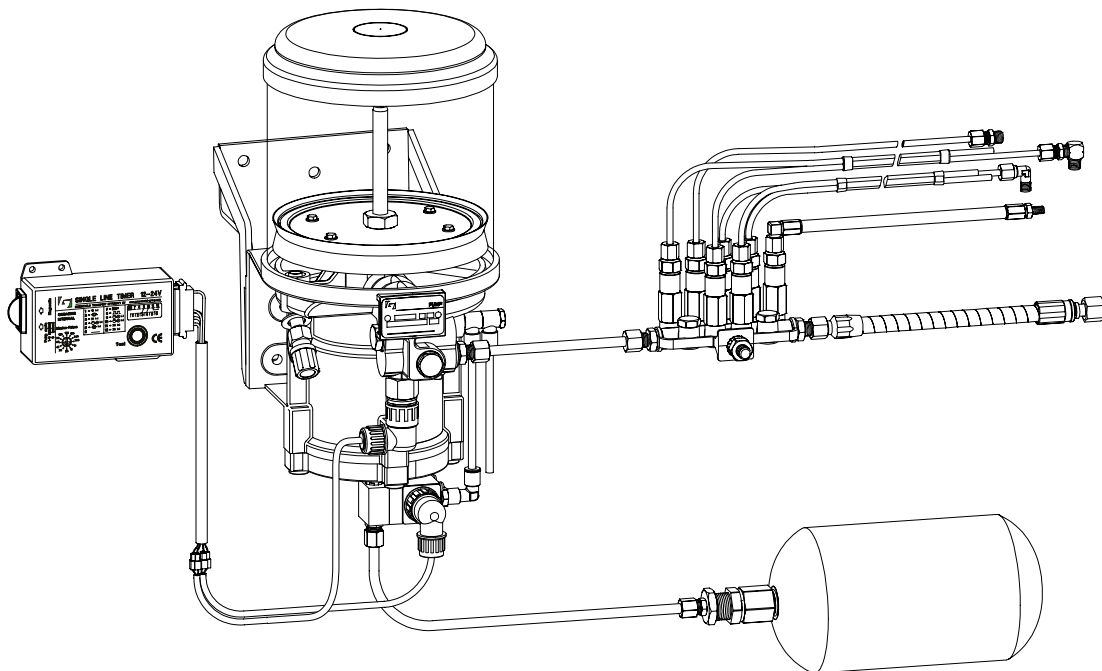


Release date: June 2015

3.2 System with air/electronic pulse brake counter

Pos	P/n new	P/n old	Description
1	F113059	26401	Pressure warning device
2	F104597	-	Air PA tube red ø5/16 x 5mm per 4 meter
	F115950	-	Air PA tube red ø5/16 x 5mm per 6 meter
3	F110136	66901	T-male stud coupling ø8mm - G1/4" - ø8mm (push-in)
4	F120820	19301	Air PA tube ø6mm x 1mm per meter
5	F110435	22901	Male stud coupling ø8mm - G1/8" with restriction
6	F172036	07804	T-coupling ø8mm (push-in)
7	F104532	09608	Adjustable L-coupling p10 - ø8mm - ø10mm
8	F113879	10412	Air connection kit M16 - M22
9	F000042	11301	Male stud elbow ø5/16 - G1/8"
10	F107894	04912	Cable harness 2-core / 15 m
11	F110141	49101	Male stud elbow ø5/16 - G1/8" (push-in)
12	F175265	-	Air PA tube yellow ø5/16 x 5mm per 6 meter
13	F100233	19401	Male stud coupling ø6mm - G1/8" (push-in)
14	F110133	66801	Male stud coupling ø8mm - G1/8" (push-in)
15	F213428	-	Air connection kit (1 x F000042 & 1 x F110435 & 2 x F113879)
16	F213430	-	Trailer kit air & main line tubes (15 meter F115990 & 6 meter F115950 & 6 meter F175265)
17	F213431	-	Truck kit air & main line tubes (15 meter F115990 & 6 meter F115950)
	F214376	-	Truck kit air & main line tubes (6 meter F116141 & 4 meter F104597)

4. DISTRIBUTION BLOCKS

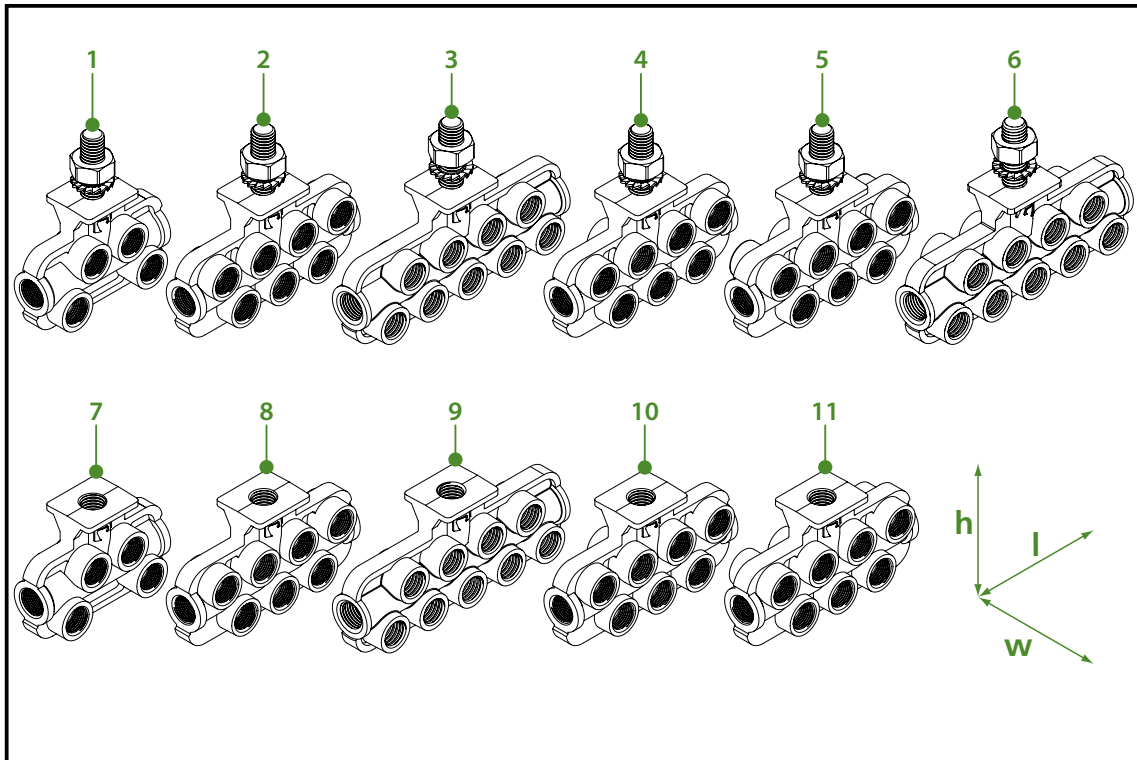


Release date: June 2015



YOUR EFFICIENCY IS OUR CHALLENGE

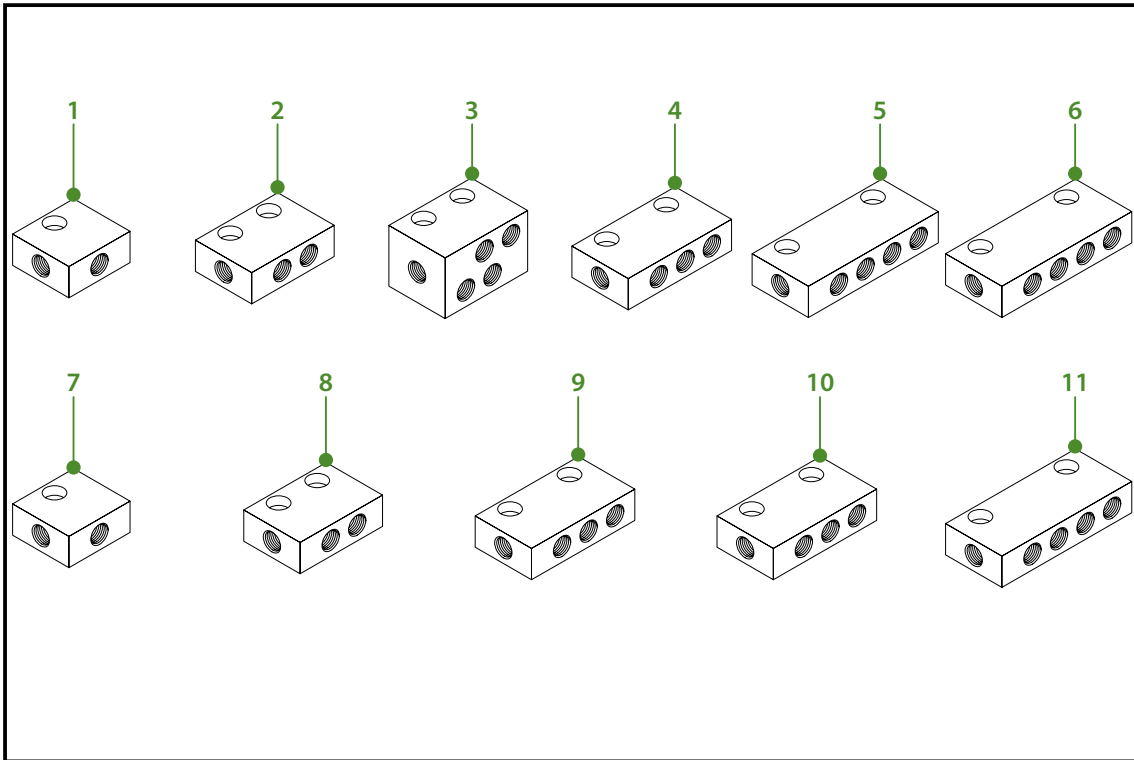
4.1 Transport distribution blocks



Pos.	P/n new	P/n old	Description	Size (lxwxh)	Material
1	F110010	06801	4-port block inclusive stud	74x25x85	brass
2	F110011	06901	7-port block inclusive stud	96x25x85	brass
3	F110012	07101	9-port block inclusive stud	118x25x85	brass
4	F110013	07201	12-port block inclusive stud	96x25x85	brass
5	F111751	77001	14-port block inclusive stud	96x25x85	brass
6	F121663	-	18-port block inclusive stud	118x25x85	brass
7	F104408	46001	4-port block exclusive stud	74x25x53	brass
8	F104409	46101	7-port block exclusive stud	96x25x53	brass
9	F104410	46201	9-port block exclusive stud	118x25x85	brass
10	F104411	46301	12-port block exclusive stud	96x25x85	brass
11	F112296	00811	14-port block exclusive stud	96x25x85	brass

Release date: June 2015

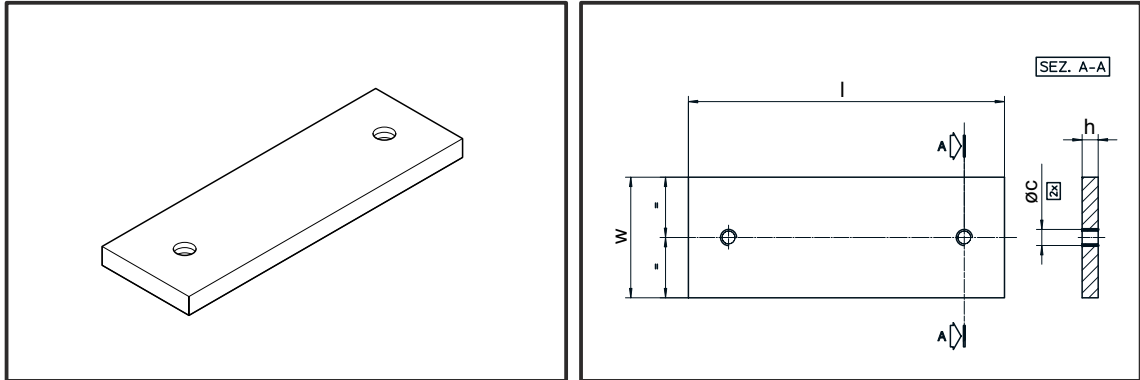
4.2 Industrial distribution blocks



Pos.	P/n new	P/n old	Description	Size (lxwxh)	Material
1	F110601	19622	1-port block	33x39.5x20	brass
2	F110602	18622	2-port block	55x39.5x20	brass
3	F110950	23622	2+2-port block	56.5x35x40	brass
4	F110604	18822	3+1-port block	75x39.5x20	brass
5	F110606	19722	4-port block	99x39.5x20	brass
6	F110605	19822	4+2-port block	99x39.5x20	brass
7	F000186	10502	1-port block	33x39.5x20	inox
8	F000185	10602	2-port block	55x39.5x20	inox
9	F000184	10702	3-port block	75x39.5x20	inox
10	F104095	18702	3+1-port block	75x39.5x20	inox
11	F104094	19402	4+2-port block	99x39.5x20	inox

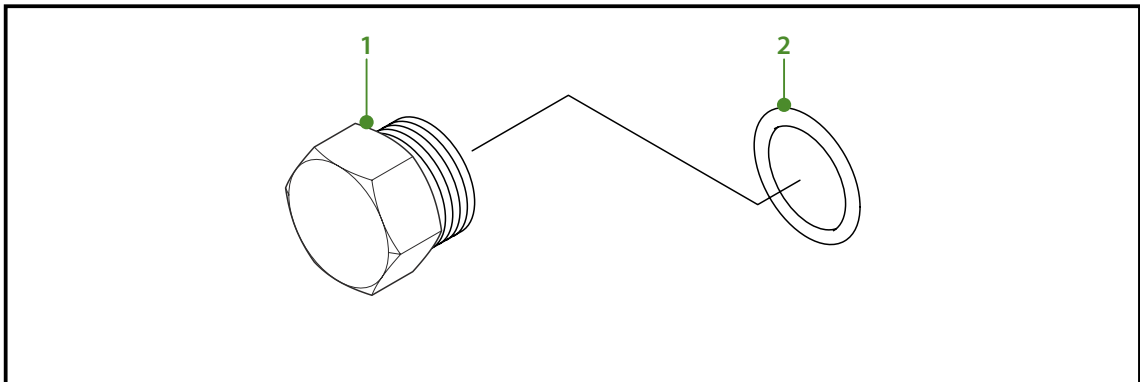
Release date: June 2015

4.3 Welding plates for industrial distribution blocks



<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>l</i>	<i>w</i>	<i>h</i>	<i>øc</i>	<i>Material</i>
F110251	10902	1-port block	34	40	6	M6x1	steel
F109256	11002	2 / 2+2-port block	56	40	6	M6x1	steel
F110250	11102	3 / 3+1-port block	80	40	6	M6x1	steel
F110248	11202	4 / 4+2-port block	101	40	6	M6x1	steel

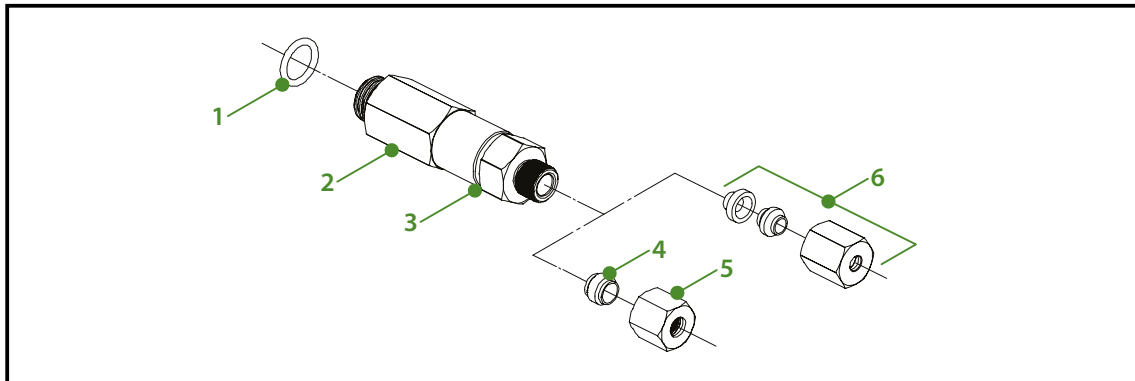
4.4 Shut-off plugs



<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>	<i>Material</i>
1	F102775	00901	Shut-off plug 1/2" - 24UNS	brass
	F101542	11302	Shut-off plug 1/2" - 24UNS	inox
2	F100495	12401	O-ring 9.25x1.78	rubber

Release date: June 2015

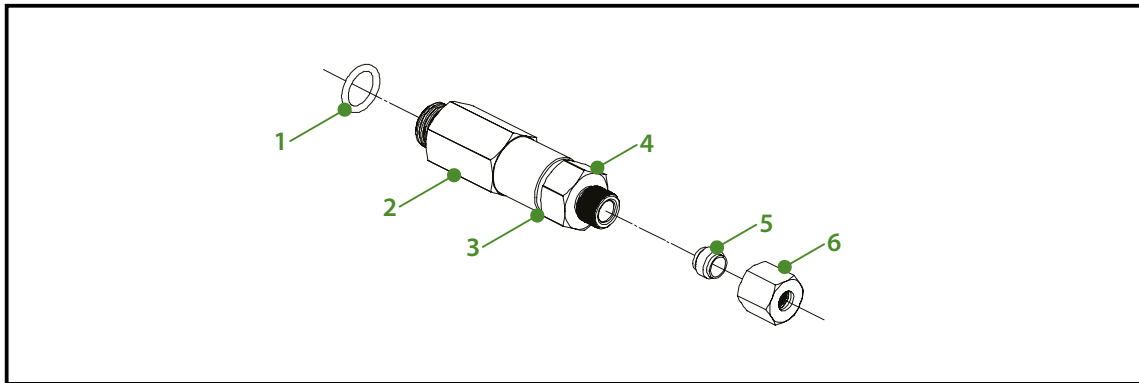
4.5 Metering units for ø5mm tubes



Pos	P/n new	P/n old	Description	Material
1	F100495	12401	O-ring 9.25x1.78	rubber
2	F100484	03001	Metering unit no.0 - 0.025cc/ø5mm	brass
	F101490	11502	Metering unit no.0 - 0.025cc/ø5mm	inox
	F100485	01001	Metering unit no.1 - 0.050cc/ø5mm	brass
	F101491	11602	Metering unit no.1 - 0.050cc/ø5mm	inox
	F100486	01101	Metering unit no.2 - 0.100cc/ø5mm	brass
	F101492	11702	Metering unit no.2 - 0.100cc/ø5mm	inox
	F103760	21902	Metering unit no.2 - 0.100cc/ø5mm/high temperature	brass
	F100487	01201	Metering unit no.3 - 0.150cc/ø5mm	brass
	F101493	11802	Metering unit no.3 - 0.150cc/ø5mm	inox
	F103761	22002	Metering unit no.3 - 0.150cc/ø5mm/high temperature	brass
	F100488	01301	Metering unit no.4 - 0.200cc/ø5mm	brass
	F101494	11902	Metering unit no.4 - 0.200cc/ø5mm	inox
	F111909	37822	Metering unit no.4 - 0.200cc/ø5mm/high temperature	brass
	F100489	01401	Metering unit no.5 - 0.250cc/ø5mm	brass
	F100490	01501	Metering unit no.6 - 0.300cc/ø5mm	brass
	F100491	01601	Metering unit no.7 - 0.250cc/ø5mm	brass
	F100492	01701	Metering unit no.8 - 0.400cc/ø5mm	brass
	F101495	12102	Metering unit no.8 - 0.400cc/ø5mm	inox
	F103762	22202	Metering unit no.8 - 0.400cc/ø5mm/high temperature	brass
	F103186	09601	Metering unit no.8.5 - 0.700cc/ø5mm	brass
	F000242	12402	Metering unit no.9 - 1.000cc/ø5mm	brass
	F101289	10002	Metering unit no.9 - 1.000cc/ø5mm	inox
3	F100500	03801	Distance ring 0.8 mm	brass
	F000035	09702	Distance ring 0.8 mm	inox
	F100501	08001	Distance ring 3.0 mm	brass
	F100502	03901	Distance ring 3.5 mm	brass
4	F000585	10801	Cutting ring ø5mm	brass
	F101374	41802	Cutting ring ø5mm	inox
5	F000584	10701	Nut ø5mm	brass
	F101373	41702	Nut ø5mm	inox
6	F104080	23601	Reducing kit ø5mm - ø1/8"	brass
	F104920	42701	Reducing kit ø5mm - ø4mm	brass

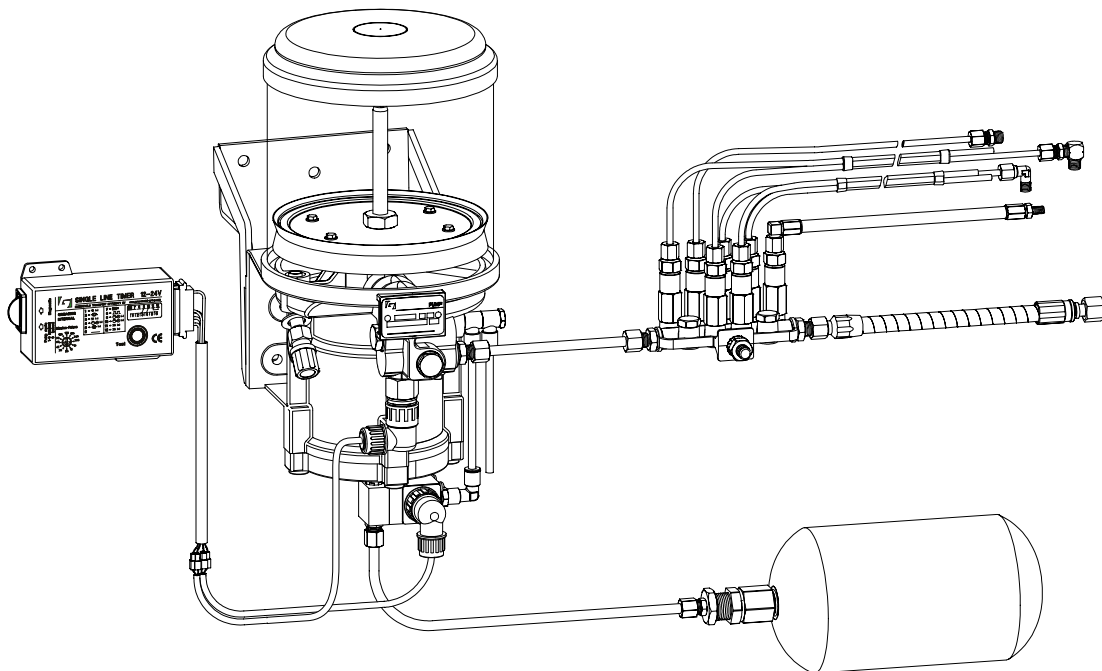
Release date: June 2015

4.6 Metering units for ø6mm tubes



Pos	P/n new	P/n old	Description	Material
1	F100495	12401	O-ring 2037 9.25x1.78	rubber
2	F116291	63022	Metering unit no.0 - 0.025cc/ø6mm	brass
	F114868	63122	Metering unit no.1 - 0.050cc/ø6mm	brass
	F116292	63222	Metering unit no.2 - 0.100cc/ø6mm	brass
	F116293	63322	Metering unit no.3 - 0.150cc/ø6mm	brass
	F116294	63422	Metering unit no.4 - 0.200cc/ø6mm	brass
	F114869	63522	Metering unit no.5 - 0.250cc/ø6mm	brass
	F116295	63622	Metering unit no.6 - 0.300cc/ø6mm	brass
	F116296	63722	Metering unit no.7 - 0.350cc/ø6mm	brass
	F116297	63822	Metering unit no.8 - 0.400cc/ø6mm	brass
	F116298	63922	Metering unit no.9 - 1.000cc/ø6mm	brass
3	F100500	03801	Distance ring 0.8 mm	brass
	F100501	08001	Distance ring 3.0 mm	brass
	F100502	03901	Distance ring 3.5 mm	brass
4	F113391	14302	Metering unit head ø6mm	brass
5	F000658	09808	Cutting ring ø6mm	brass
6	F101063	08908	Nut ø6mm	brass

5. DIAGNOSTIC TOOLS

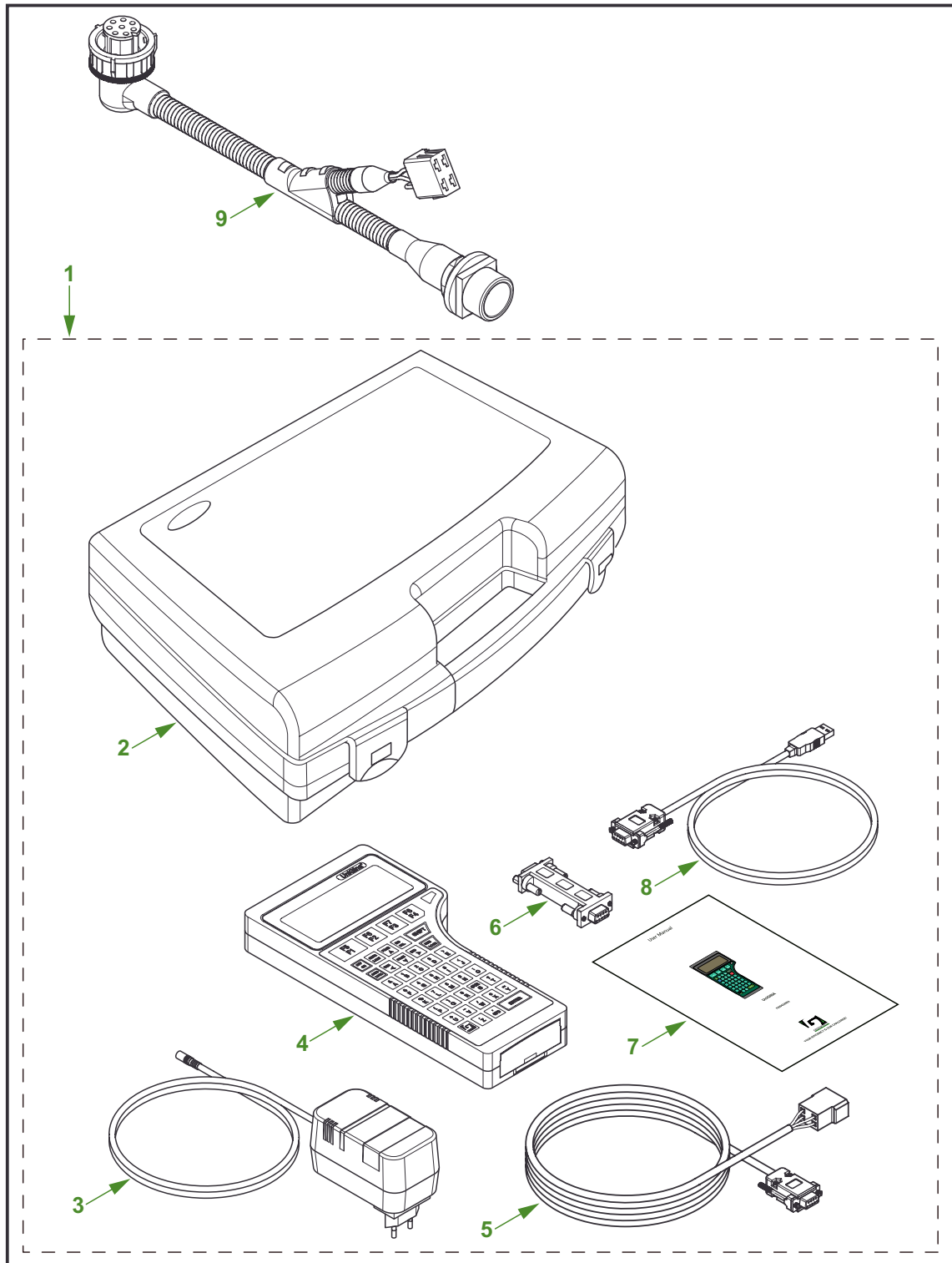


Release date: June 2015



YOUR EFFICIENCY IS OUR CHALLENGE

Automatic SingleLine Greasing System

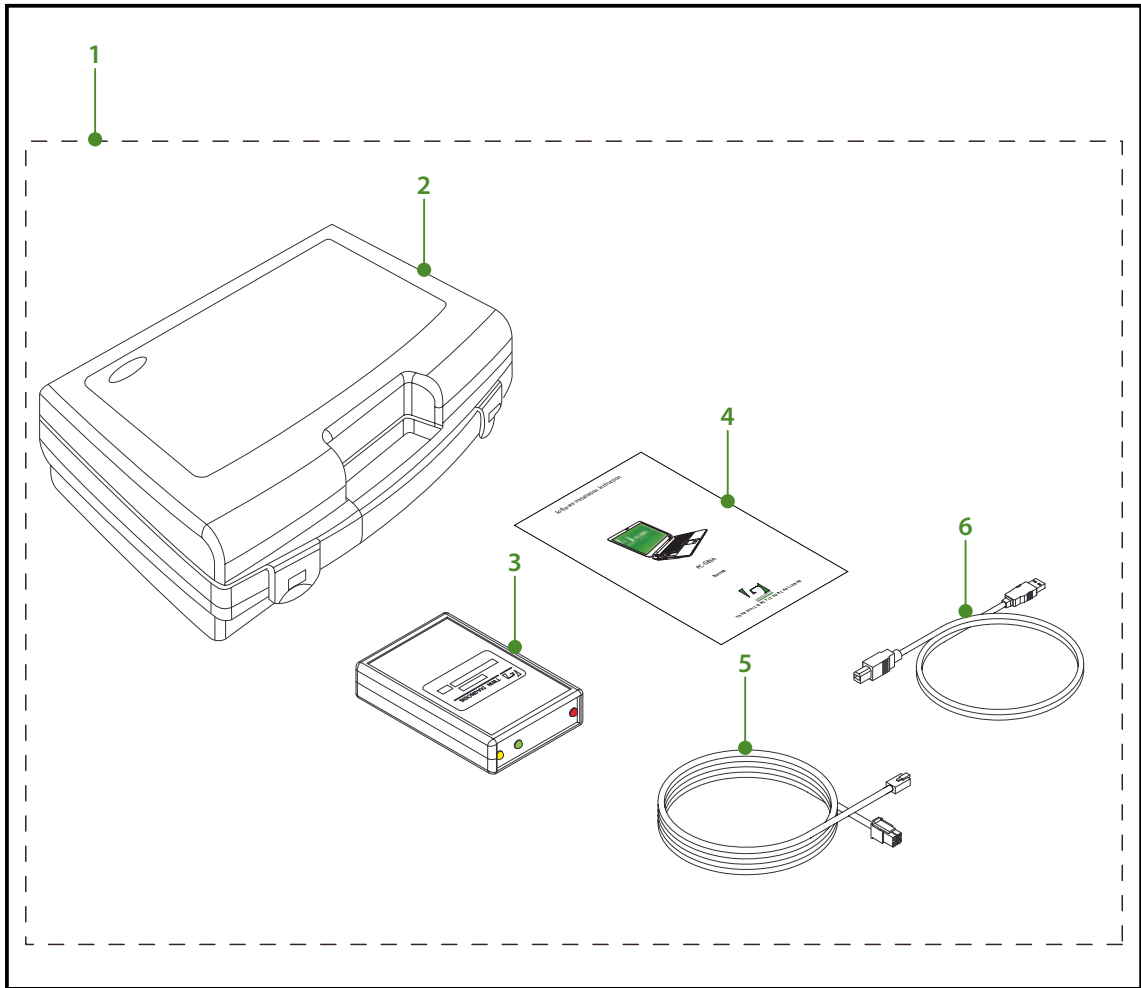


Release date: June 2015

5.1 Unigina diagnosis kit

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</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	F173755	-	Diagnosis cable (for internal timer)
	F207765	-	Validation code SingleLine

Automatic SingleLine Greasing System



Release date: June 2015

5.2 Diagnosis kit SingleLine timer

<i>Pos</i>	<i>P/n new</i>	<i>P/n old</i>	<i>Description</i>
1	F212144	-	Diagnosis kit SingleLine timer
2	F121605	-	Box 320 x 280 x 120mm
3	F124299	-	Diagnosis interface
4	F601748	-	PC-GINA Software Installation Instruction
5	F129757	-	Diagnosis cable 6 meter
6	F124309	-	USB diagnosis cable
	F601891		PC-GINA SingleLine license

6. INDEX

F000035.....	35	F102775.....	34
F000042.....	27, 29	F102815.....	27
F000184.....	33	F102816.....	27
F000185.....	33	F102826.....	27
F000186.....	33	F102975.....	7, 9, 11
F000224.....	27	F103005.....	7, 9
F000242.....	35	F103041.....	17
F000263.....	7, 11	F103045.....	7, 9
F000266.....	7, 11	F103049.....	7, 9, 13
F000584.....	35	F103059.....	7, 9, 11, 15
F000585.....	35	F103061.....	11, 15
F000598.....	27	F103064.....	7, 9, 11
F000658.....	36	F103065.....	7, 9, 11, 15
F000686.....	7, 9, 11	F103121.....	7, 9, 11
F000713.....	7, 9, 11	F103155.....	13, 15
F000714.....	7, 9, 11	F103160.....	7
F100049.....	11	F103183.....	7, 9, 11
F100056.....	7, 9, 13, 17, 19	F103186.....	35
F100057.....	7, 9	F103246.....	9
F100088.....	23	F103247.....	9
F100186.....	23	F103249.....	9
F100187.....	23	F103250.....	9
F100233.....	29	F103255.....	9
F100258.....	7, 9, 13, 17, 19	F103296.....	17
F100354.....	22	F103336.....	9
F100484.....	35	F103346.....	23
F100485.....	35	F103372.....	17, 19
F100486.....	35	F103382.....	17
F100487.....	35	F103384.....	17
F100488.....	35	F103398.....	17
F100489.....	35	F103544.....	7
F100490.....	35	F103545.....	7, 9
F100491.....	35	F103642.....	17, 19
F100492.....	35	F103643.....	7, 9, 11, 13, 15, 17, 19
F100495.....	34, 35, 36	F103646.....	13, 15, 17, 19
F100500.....	35, 36	F103649.....	13, 17, 19
F100501.....	35, 36	F103760.....	35
F100502.....	35, 36	F103761.....	35
F100531.....	7, 9, 11	F103762.....	35
F101047.....	27	F103823.....	7, 9, 11
F101063.....	36	F104003.....	17, 19
F101082.....	27	F104005.....	17, 19
F101289.....	35	F104007.....	17
F101373.....	35	F104055.....	17
F101374.....	35	F104059.....	17, 19
F101490.....	35	F104080.....	35
F101491.....	35	F104094.....	33
F101492.....	35	F104095.....	33
F101493.....	35	F104408.....	32
F101494.....	35	F104409.....	32
F101495.....	35	F104410.....	32
F101542.....	34	F104411.....	32
F102040.....		F104419.....	13
F102173.....	23	F104436.....	7, 9, 11
F102719.....	7, 9, 11	F104437.....	7, 9, 11
F102724.....	7, 11	F104466.....	17, 19

F104467.....	17, 19	F111299.....	22
F104503.....	27	F111409.....	7
F104522.....	27	F111410.....	7
F104531.....	27	F111480.....	
F104532.....	29	F111490.....	9
F104544.....	7, 9, 11	F111561.....	13
F104545.....	27	F111717.....	13, 15
F104579.....	22	F111751.....	32
F104581.....	22	F111768.....	23
F104597.....	27, 29	F111909.....	35
F104610.....	23	F112017.....	13, 15
F104654.....	7, 9, 11	F112018.....	13
F104793.....	17	F112019.....	13
F104794.....	13, 17	F112021.....	13
F104795.....	17, 19	F112022.....	13
F104802.....	17, 19, 27	F112023.....	13, 15
F104803.....	13, 15, 17	F112024.....	13
F104810.....	17	F112025.....	13
F104811.....	17, 19	F112026.....	13
F104920.....	35	F112027.....	13
F105097.....	13, 17	F112028.....	13
F105182.....	13, 17, 19	F112030.....	13
F107894.....	23, 29	F112031.....	13
F107895.....	23	F112033.....	13, 15
F107899.....	15	F112034.....	13
F109256.....	34	F112040.....	27
F110010.....	32	F112269.....	7, 9
F110011.....	32	F112296.....	32
F110012.....	32	F112409.....	7, 9
F110013.....	32	F113059.....	7, 9, 11, 29
F110028.....	7, 9, 11	F113265.....	27
F110064.....	13, 15	F113297.....	7, 11
F110080.....	13	F113391.....	36
F110082.....	13	F113427.....	7, 9, 11
F110083.....	13	F113879.....	29
F110084.....	13	F113884.....	17, 19
F110106.....	15	F114016.....	9
F110111.....	13	F114472.....	27
F110133.....	29	F114697.....	7, 9, 11, 27
F110136.....	29	F114698.....	13, 15
F110141.....	27, 29	F114705.....	15
F110143.....	27	F114707.....	15
F110151.....	7, 9, 11, 13, 15	F114708.....	11, 15
F110248.....	34	F114709.....	11, 15
F110250.....	34	F114712.....	15
F110251.....	34	F114715.....	15
F110435.....	29	F114748.....	19
F110601.....	33	F114868.....	36
F110602.....	33	F114869.....	36
F110604.....	33	F114871.....	13, 15
F110605.....	33	F115378.....	7, 9
F110606.....	33	F115379.....	17, 19
F110712.....	13	F115950.....	27, 29
F110815.....	19	F116291.....	36
F110837.....	17	F116292.....	36
F110895.....	7, 9	F116293.....	36
F110950.....	33	F116294.....	36
F111140.....	7	F116295.....	36

Release date: June 2015

Automatic SingleLine Greasing System

F116296.....	36	F214376.....	29
F116297.....	36	F601748.....	41
F116298.....	36	F601891.....	41
F116318.....	11	F601986.....	27
F116319.....	11		
F116323.....	11		
F116326.....	11		
F116327.....	11		
F116330.....	11		
F116437.....	17		
F116842.....	19		
F117084.....	7, 9, 13		
F117676.....	17		
F117677.....	17		
F118699.....	15		
F118888.....	13, 15		
F120387.....	13, 15		
F120388.....	13		
F120496.....	24		
F120537/1.....	39		
F120820.....	27, 29		
F121401.....	39		
F121604.....	39		
F121605.....	39, 41		
F121663.....	32		
F121810.....	24		
F122186.....	24		
F122187.....	24		
F122188.....	24		
F122279.....	7, 9, 11		
F122299.....	24		
F122365.....	7, 11		
F124299.....	41		
F124309.....	41		
F125639.....	22		
F127447.....	24		
F129757.....	41		
F129878.....	19		
F130840.....	19		
F172036.....	27, 29		
F172535.....	7, 9, 11, 13, 15		
F172672.....	15		
F173755.....	39		
F175265.....	29		
F177824.....	19		
F177826.....	13, 17, 19		
F178644.....	39		
F195731.....	24		
F203450.....	39		
F205694.....	39		
F207682.....	22		
F207765.....	39		
F209432.....	39		
F212144.....	41		
F213428.....	29		
F213430.....	29		
F213431.....	29		
F214375.....	22		

Release date: June 2015



www.groeneveld-group.com