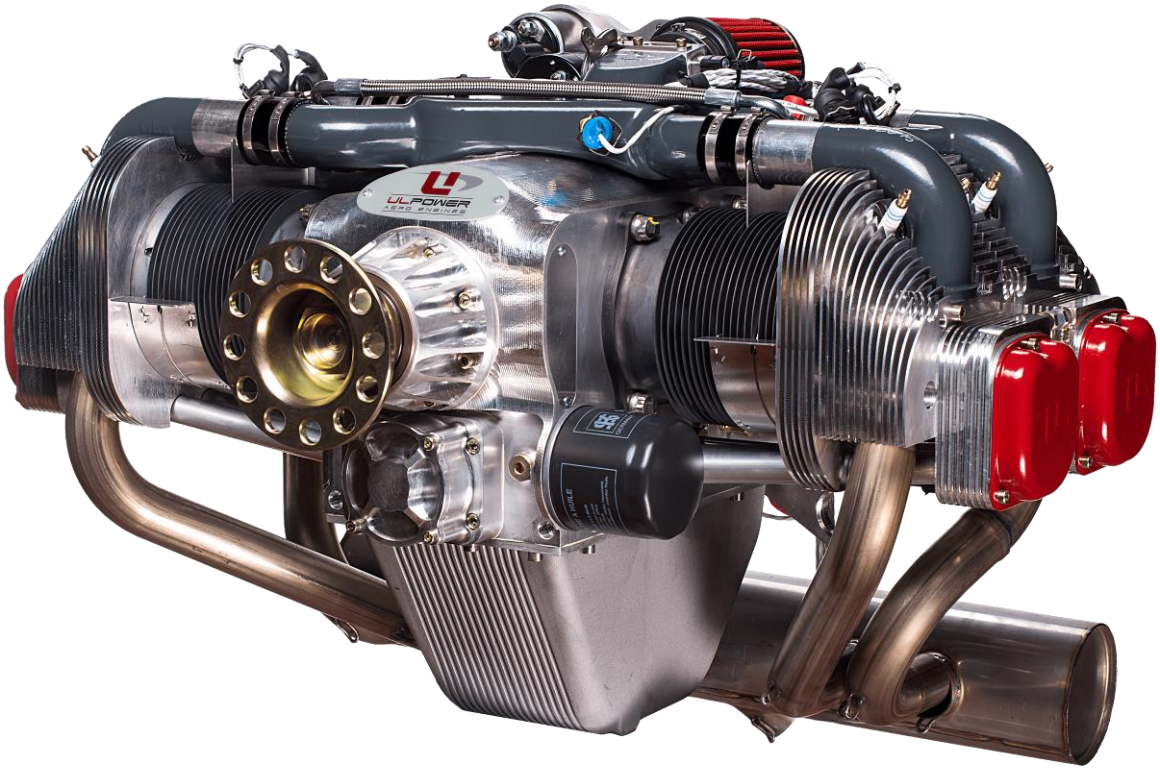
ULPOWER
AERO ENGINES

Illustrated Parts Catalogue



UL350iS
AERO ENGINE

M0110: IPC 350 Revision No : 20

Date: 2025-04-30

Please fill in your engine and aircraft details for further reference:

Engine Serial No. : .....

Aircraft type : .....

Model : .....

Serial No. : .....

Registration : .....

Introduction

Remarks

The illustrations in this Illustrated Parts Catalogue show the typical construction. They may not represent in full detail or the exact shape of the parts which have the same or similar function.

Modifications

All efforts are made to ensure the accuracy of this Illustrated Parts Catalogue at the time of publication. ULPower, however, maintains a policy of continuous improvement of its products without imposing upon itself any obligation to install them on its products previously manufactured.

ULPower reserves the right at any time to discontinue or change specifications, designs, features, models or equipment without incurring obligation.

Engine serial number

On all enquiries or spare parts orders, always indicate the engine serial number, as the manufacturer makes modifications to the engine for further development.

The engine serial number is located at the front left side of the crankcase (above oil filter).

Structure

Each section of this Illustrated Parts Catalogue starts with an exploded view or assembly drawing on the left side. The corresponding heading and the listing of the parts is on the right side and the following pages.

For each assembly drawing the right number of parts is listed in the relevant column. Because an engine can contain multiple times the illustrated assembly or a part can be used in several different applications, the total number of parts per engine is also given.

Generally all fasteners are tightened with a torque wrench. The "Notes" column indicates the appropriate torque or refers to extra information at the end of the section.

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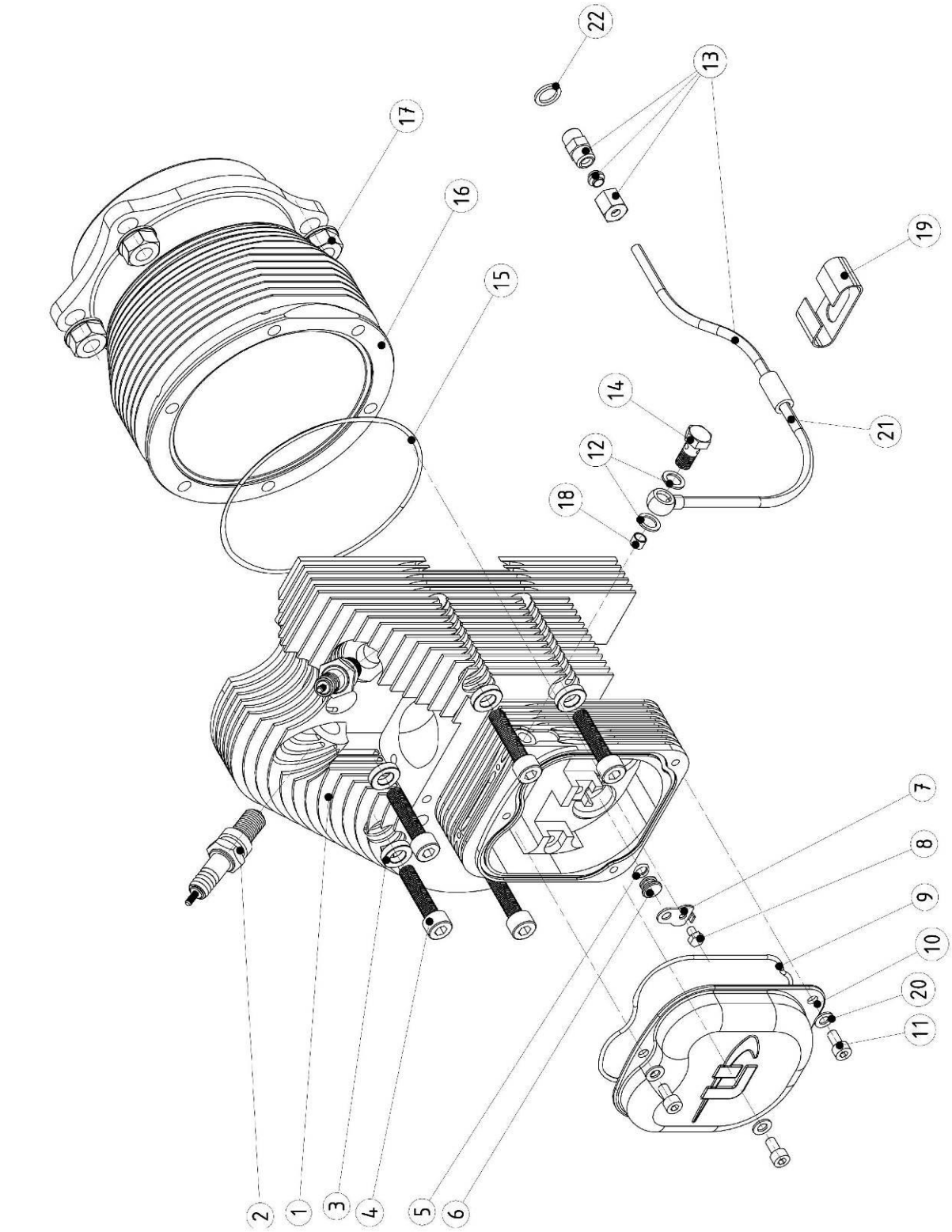
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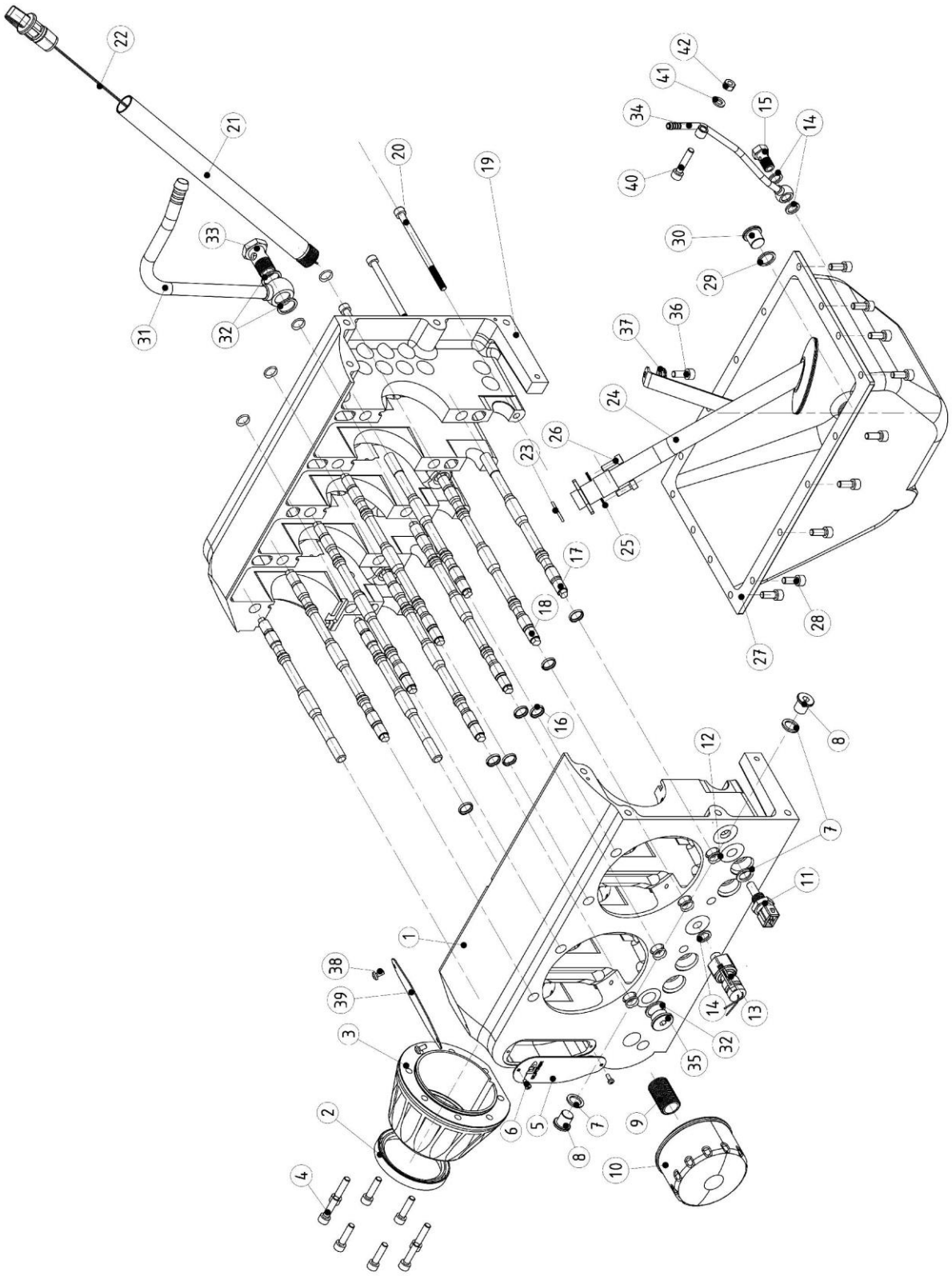
Cylinder Head and Cylinder

Item	Part No.	Description	Parts in assembly	Note
1		Cylinder Head Assembly	1	
	BE012512	Cylinder Head Right	0	
	BE012513	Cylinder Head Left	1	
	E035001	Valve Guide	2	
	E034501	Exhaust Valve Seat	1	
	E034502	Inlet Valve Seat	1	
2	E070502	Spark Plug	2	21 Nm (1)
3	E012504	Cylinder Head Washer	6	
4	F0408035	Socket Cap Screw - M8x1x35 - 12.9 Steel	6	36 Nm (1)
5	S1006015	O-Ring Viton 6x1.5	1	
6	E012505	Cylinder Head Plug	1	
7	E012503	Locking plate M4 bolt	1	
8	F1004006	Hexagon head screw M4x6 - 8.8 Steel - Zinc Plated	1	1.5 Nm
9	S1100020	O-Ring Viton 99x2	1	
10	E012506	Valve Cover	1	
11	F0105016	Socket Cap Screw - M5x16 - 8.8 Steel - Yellow Passivated	3	6 Nm
12	S3081210	Copper Sealing Ring ø8x12x1	2	
13	BE041505	Cylinder Head Oil Line Left Assembly	1	6 Nm
	BE041506	Cylinder Head Oil Line Right Assembly	0	
14	F2520800	Banjo Bolt M8x1	1	8 Nm
15	E013001	Cylinder Gasket	1	(4)
16	BE012004	Cylinder	1	(5)
17	E011003	Flanged Nut M10x1	4	36 Nm
18	E012511	Cylinder Head Oil Filter	1	
19	E012530	Bracket oil line	1	
20	F2110050	Nordlock washer M5	3	
21	F2550013	Cloth braided hose Ø5,5 x Ø10,5	1	
22	S3101415	Copper ring Ø10x14x15	1	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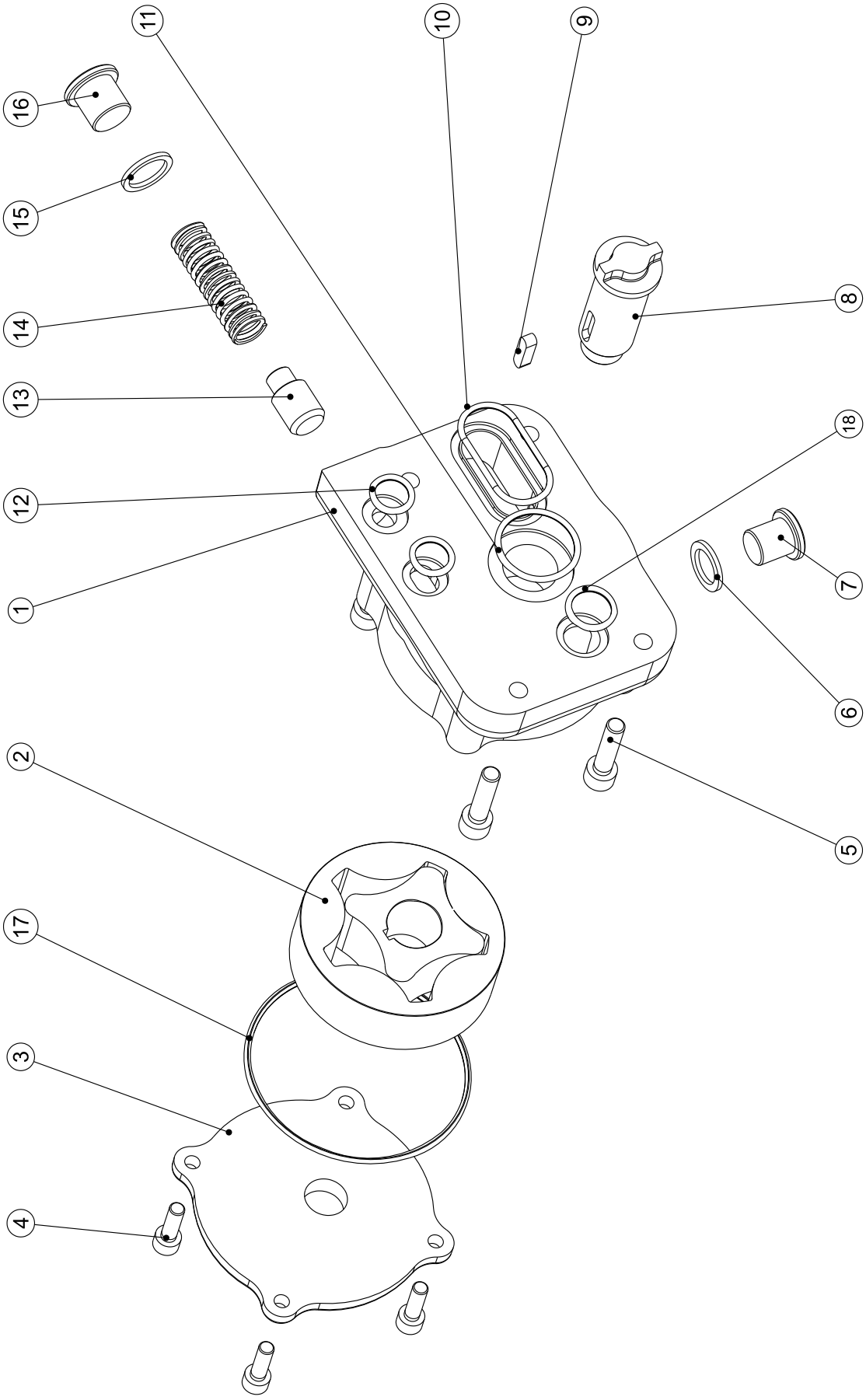
Crankcase, Oil Sump and Dipstick

Item	Part No.	Description	Parts in assembly	Note
1	BE010502	Crankcase Left	1	(7)
2	S2607510	Oil Seal Viton 60x75x10 GR	1	(5)
3	BE010509	Thrust Bearing Mount	1	(7)
4	F0106025	Socket Cap Screw - M6x25 - 8.8 Steel - Yellow Passivated	8	10 Nm
5	E010508	Engine Model Number Plate	1	
6	F3503008	Button Head Socket Cap Screw - M3x8 - 10.9 Steel - Zinc Plated	2	1.5 Nm
7	S3121715	Copper Sealing Ring ø12x17x1.5	3	
8	F4621215	Hexagon Socket Screw Plug - M12x1.5	2	25 Nm (2)
9	E042006	Oil Filter Screw M20x1.5	1	
10	E042010	Oil Filter	1	15 Nm (3)
11	E081516	Oil Temperature Sensor	1	20 Nm
12	S1011015	O-Ring Viton ø11x1.5	8	
13	E081507	Oil pressure sensor	1	12 Nm
14	S3101415	Copper Sealing Ring ø10x14x1.5	3	
15	F2521000	Banjo Bolt M10x1 L =25	1	10 Nm
16	S1012020	O-Ring Viton ø12x2	7	(3)
17	E011002	Stud Short	4	(1)
18	E011001	Stud Long	6	
19	BE010501	Crankcase Right	1	
20	F0206100	Socket Cap Screw - M6x100 - 8.8 Steel - Zinc Plated	4	10 Nm
21	E043003	Dipstick Tube	1	(6)
22	E043004	Dipstick	1	
23	S1018010	O-Ring Viton ø18x1	1	
24	BE044501	Oil Pickup Tube with Filter	1	
25	F2110050	NordLock Washer M5	2	
26	F0105016	Socket Cap Screw - M5x16 - 8.8 Steel - Yellow Passivated	2	6 Nm
27	E041002F	Oil Sump	1	(7)
28	F0106016	Socket Cap Screw - M6x16 - 8.8 Steel - Yellow Passivated	16	10 Nm
29	S3142015	Copper Sealing Ring ø14x20x1.5	1	
30	E041020	Carter plug magnet M14x1,5	1	25 Nm
31	E043510	Oil breather tube	1	
32	S3162215	Copper sealing ring ø16x22x1.5	3	
33	F2521615	Banjo bolt M16x1.5	1	25Nm
34	E043511	Oil return tube sump	1	
35	E041015	Plug 5/8 -18UNF	1	
36	F0106016	Socket cap screw M6x16 – 8.8 Steel - Yellow Passivated	1	10 Nm
37	F2110060	Nordlock Washer M6	1	
38	F0904008	Hex socket button head cap screw M4x8 – 10.9 Zn	2	
39	M900016	Logoplaatje	1	
40	F0206028	Socket Cap Screw M6x28 – 8,8 Zn	1	
41	F2110060	Nordlock Washer M6	1	
42	F5001060	Hexagon Nut M6 - Zn	1	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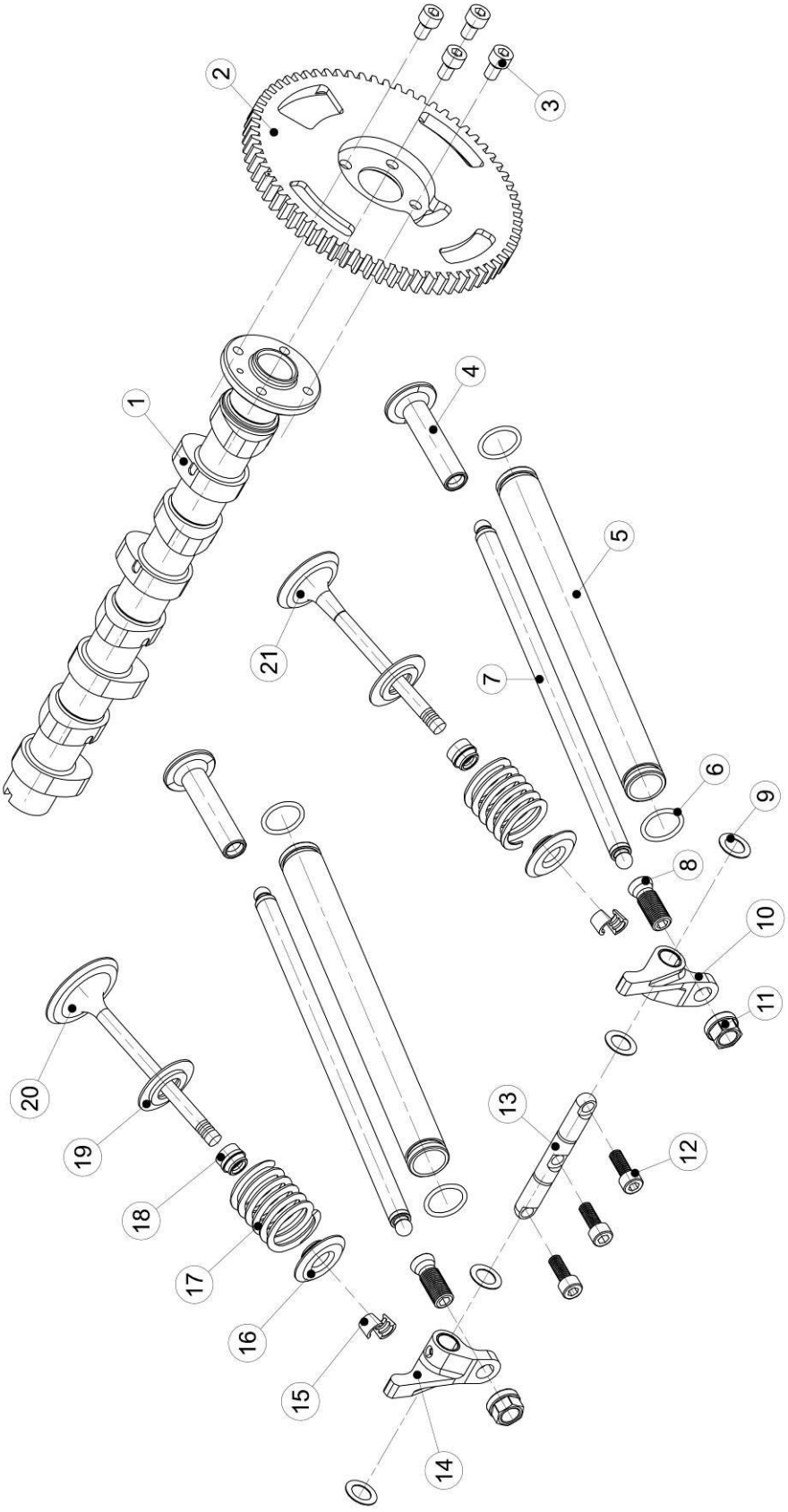
Oil Pump Assembly: BE040515

Item	Part No.	Description	Parts in assembly	Note
1	BE040510	Oil Pump Housing	1	(7)
2	BE040514	Oil Pump Rotor Set	1	
3	E040509	Oil Pump Cover	1	
4	F0105016	Socket Cap Screw - M5x16 - 8.8 Steel - Yellow Passivated	4	6 Nm
5	F0106025	Socket Cap Screw - M6x25 - 8.8 Steel - Yellow Passivated	4	10 Nm
6	S3121715	Copper Sealing Ring ø12x17x1.5	1	
7	F4621215	Hexagon Socket Screw Plug - M12x1.5	1	25 Nm
8	BE040513	Oil Pump Shaft	1	
9	F1704020	Parallel Key 4x4x20	1	
10	S1030020	O-Ring Viton ø30x2	1	
11	S1024020	O-Ring Viton ø24x2	1	
12	S1011020	O-Ring Viton ø11x2	2	
13	BE040516	Plunjer oil pump B25	1	
14	E040506	Pressure Relief Spring	1	
15	S3162015	Copper Sealing Ring ø16x20x1.5	1	
16	F4621615	Hexagon Socket Screw Plug - M16x1.5	1	25 Nm
17	S1070020	O-ring Viton 70x2	1	
18	S1013020	O-ring Viton 13x2	1	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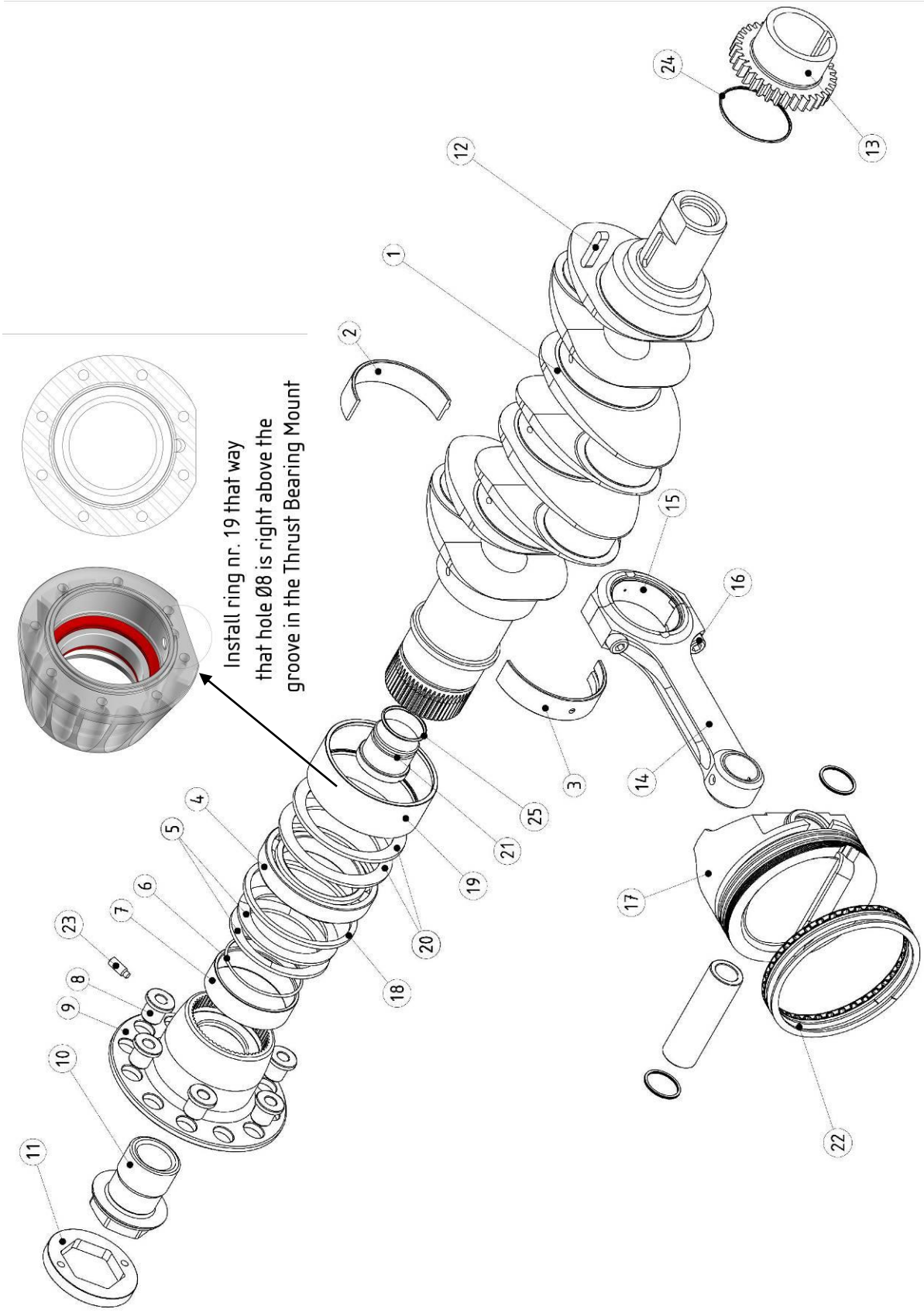
Camshaft and Valve Train

Item	Part No.	Description	Parts in assembly	Note
1	E030502	Camshaft 350i	1	
2	E031001	Camshaft Gear	1	
3	F0306010	Socket Cap Screw - M6x10 - 12.9 Steel	4	18 Nm (2)
4	E031501	Cam Follower	2	
5	BE041501	Oil Return Tube	2	
6	S1017020	O-Ring Viton ø17x2	4	(3)
7	BE032005	Push Rod	2	
8	E032505	Tappet Adjusting Screw	2	
9	F2311016	Shim Ring 0.5mm - ø10x16	4	
10	E032506	Rocker Tappet Right	1	
11	E011003	Flanged Nut M10x1	2	20 Nm
12	F0306016	Socket Cap Screw - M6x16 - 12.9 Steel	3	12 Nm (2)
13	E032504	Rocker Shaft	1	
14	E032507	Rocker Tappet Left	1	
15	E034003	Collet Valve Spring Lock	4	
16	E034002	Valve Spring Retainer Top	2	
17	E033501	Valve Spring	2	
18	E035501	Valve Stem Seal	2	
19	E034001	Valve Spring Retainer Bottom	2	
20	E033002	Inlet Valve	1	
21	E033001	Exhaust Valve	1	


Install ring nr. 19 that way
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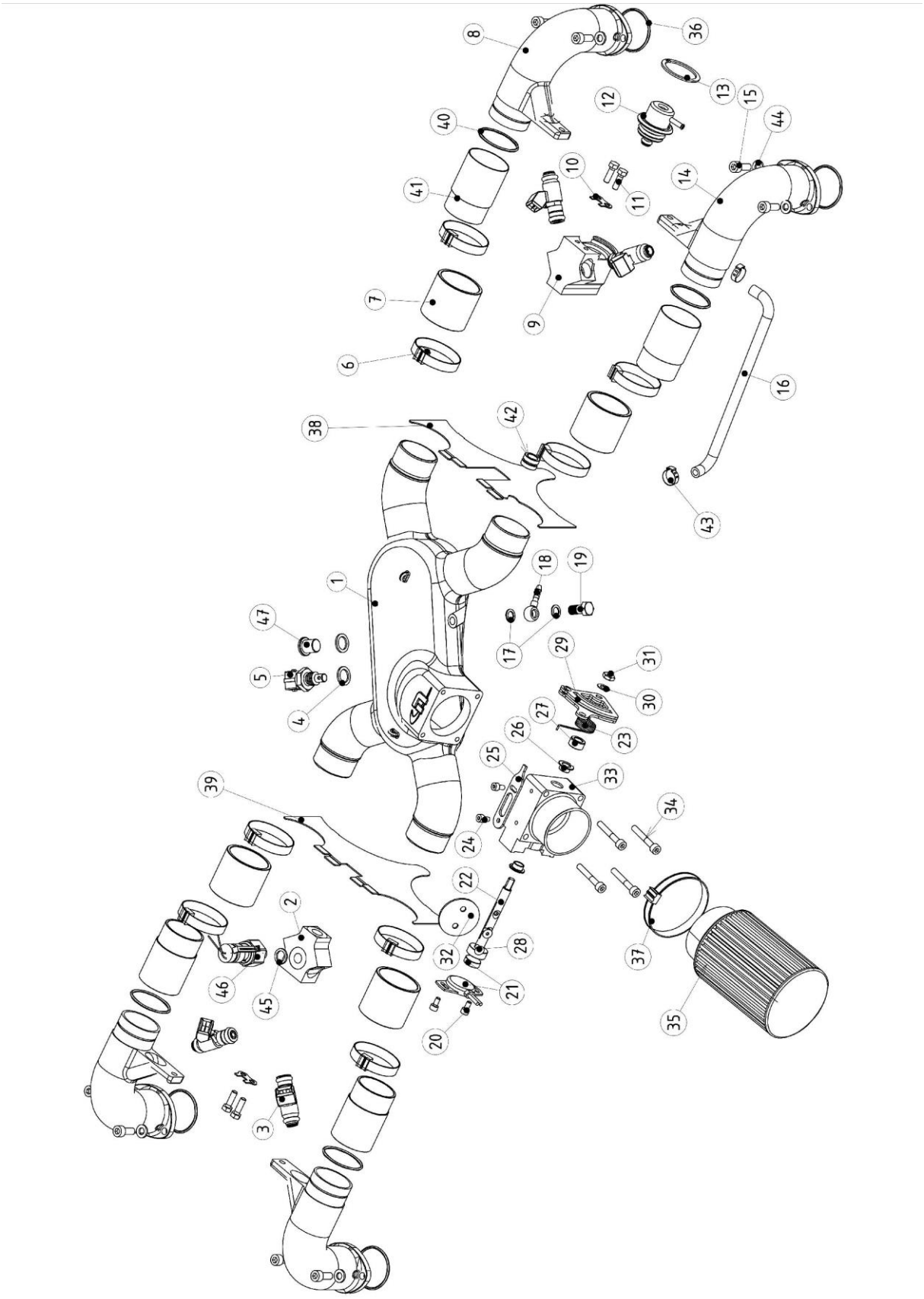
Crankshaft, Conrod and Piston

Item	Part No.	Description	Parts in assembly	Note
1	BE020502	Crankshaft	1	
 2 3	BE022005	Crankshaft Bearing Set (contains piece 2, 3) Crankshaft Bearing Half 1 Crankshaft Bearing Half 1	5	
4	E022001	Thrust Bearing	1	
5	E021502	Thrust Bearing Disc Spring	2	
6	S1052020	O-Ring Viton ø50x1.78	1	
7	E021504	Thrust Bearing Retention Ring	1	
8	E023004	Prop Flange Drive Lug ø14	6	
9	E022501 E022505 E022506 E022504	Propeller Flange L = 55 (Standard) Propeller Flange L = 90 Propeller Flange L = 35 Propeller Flange L = 110	1	
10	E023001	Prop Flange Bolt	1	300Nm (1)
11	E022510	Locking propellor flange bolt	1	
12	F1706030	Parallel Key 6x6x30	1	
13	E021001	Crankshaft Gear	1	
14	BE023506	Connecting Rod Assembly	4	
15	E022004	Connecting rod bearing set (2)	4	
16	F0408035	Socket Cap Screw - M8x1x35 - 12.9 Steel	8	36 Nm (2+4)
17	E024009 E024008	Piston -18cc (“I” engines) Piston -7cc (“iS” engines)	 1	
18	E021506	Thrust Bearing Disc	1	
19	E021515	Thrust Bearing Retention Ring Outer	1	
20	E021510	Thrust Bearing Disc Spring Outer	2	
21	E020512	Oil Stop Crankshaft Front	1	(9)
22	E024010	Piston ring set	4	
23	F1306012	hexagon socket set screw M6x12	1	10 Nm
24	S1047017	O-ring Viton 47.35 x1.78	1	
25	S1028020	O-ring Viton Ø28x2	1	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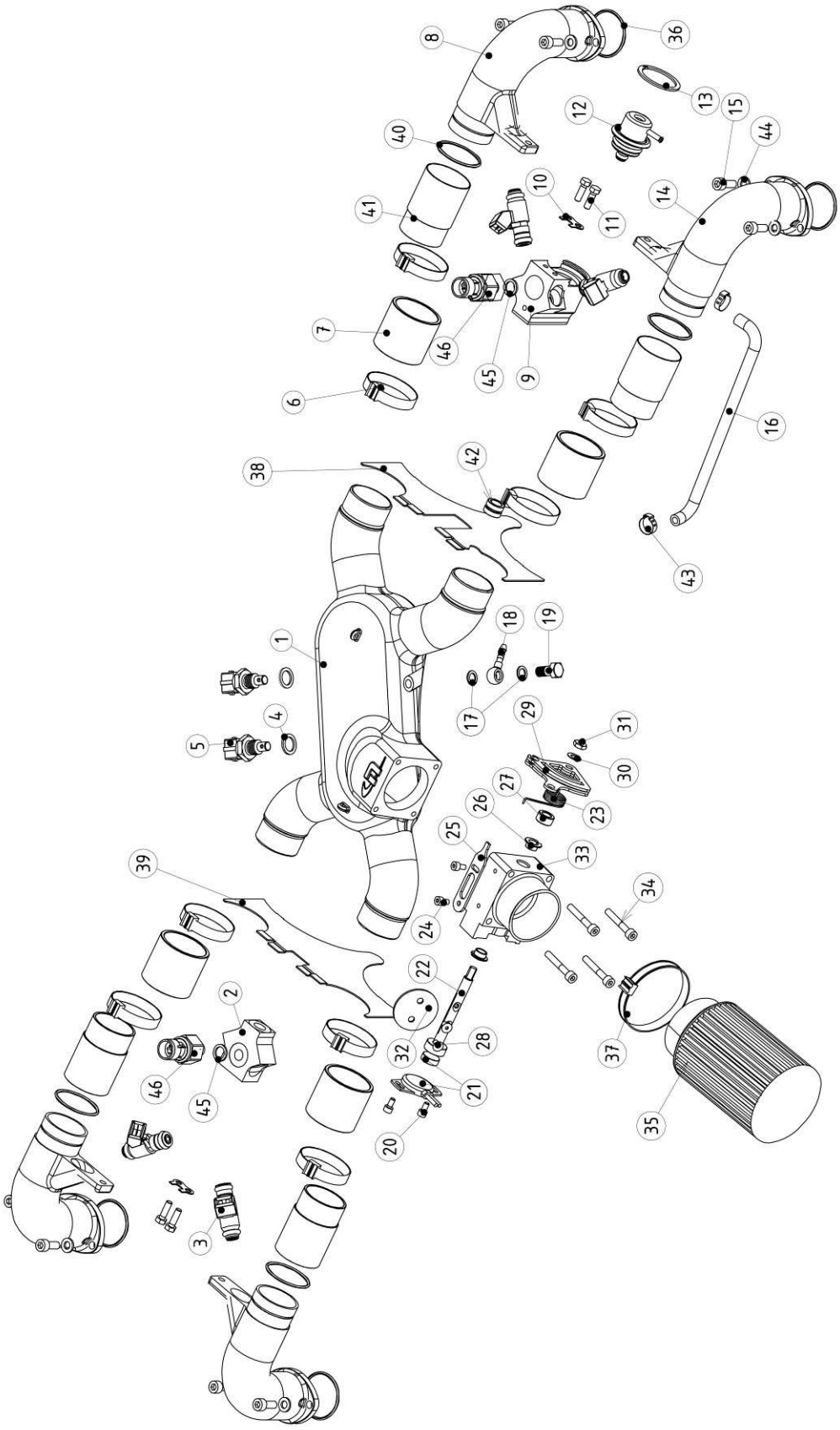
Inlet Manifold, Injectors and Throttle (Single ECU)

Item	Part No.	Description	Parts in assembly	Note
1	E061510	Inlet Collector	1	
2	E061504	Injector + Sensor Holder	1	
	E061506	Injector Holder (Forced Cooling)	1	
3	E062501	Injector	4	(3)
4	S3121715	Copper Sealing Ring ø12x17x1.5	1	
5	E081515	Air Temperature Sensor	1	20 Nm
6	F2580001	Hose Clamp single use ø47	8	
7	E061511	Rubber Hose 38x3x38	4	
8	E061509	Inlet Tube Right	2	
9	E061513	Injector + Fuel Pressure Regulator Holder / Bypass (Single ECU)	1	
10	E061512	Injector Holder Lock Plate	2	
11	F1005016	Hex Head Screw - M5x16 - 8.8 Steel - Yellow Passivated	4	6 Nm
12	E064501	Fuel Pressure Regulator - 3bar	1	(3)
13	F1600036	Retaining Ring - bore 36mm	1	
14	E061508	Inlet Tube Left	2	
15	F0106016	Socket Cap Screw - M6x16 - 8.8 Steel - Yellow Passivated	8	10 Nm (2)
16	F2550006	Fuel Pressure Regulator Hose (ø4.5x9.5 x 16cm)	0,3	
17	S3081210	Copper Sealing Ring ø8x12x1	2	
18	F2510708	Banjo Eye M8/Ø5	1	
19	F2520800	Banjo Bolt M8x1	1	6 Nm
	SUE060520	Throttle assy *hall (Contains piece 20 - 33)*		
20	*F3604010*	*Flanged Button Head Socket Cap Screw - M4x10 - Zinc Plated*	2	
21	*E081519*	*Double TPS Hall*	1	
22	*E060541*	*Throttle shaft D38 Hall Sensor*	1	
23	*E060542*	*Throttle bushing Hall Sensor*	1	
24	*F0104008*	*Socket Cap Screw - M4x8 - 8.8 Steel - Yellow Passivated*	2	2 Nm
25	*E060506*	*Throttle Lever Stop*	1	
26	*B2200001*	*Flanged Bushing 8x10x5.5*	2	
27	*E060511*	*Throttle lever spring*	1	
28	*F3503008*	*Button head socket cap screw - M3x8 - 10.9 Steel - Zinc Plated*	2	3 Nm
29	*E060543*	*Throttle lever out plate hall sensor*	1	
29	*E060544*	*Lever middle plate hall Sensor*	1	
29	*E060545*	*Lever inner plate hall sensor*	1	
30	*SE061513*	*Locking plate throttle shaft*	1	
31	*F5001060*	*Hex nut M6 -Zn*	1	
32	*E060505*	*Throttle Plate D38*	1	
33	*E060546*	*Throttle Housing D38 Hall Sensor*	1	(7)
34	F0105035	Socket Cap Screw - M5x35 - 8.8 Steel - Yellow Passivated	4	6 Nm
35	E062001	Inlet Air Filter	1	
36	S1036020	O – Ring Viton 36 x 2	4	
37	F2580005	Hose clamp single use ø63	1	
38	E012510	Baffle right	1	
39	E012509	Baffle left	1	

Item	Part No.	Description	Parts in assembly	Note
40	S1035012	O – Ring 35 x 1,2	4	
41	BE061515	Inlet extension tube	4	
42	E012517	Protection hose Fp-regulator	1	
43	F2580002	Hose clamp single use Ø10	2	
44	F2110060	Nordlock washer M6	8	
45	S3101415	Copper sealing ring d10xD14x1.5	1	
46	E081507	Fuel pressure sensor	1	12 Nm
47	F4621215	Hexagon Socket Cap Screw Plug – M12x1.5	1	20Nm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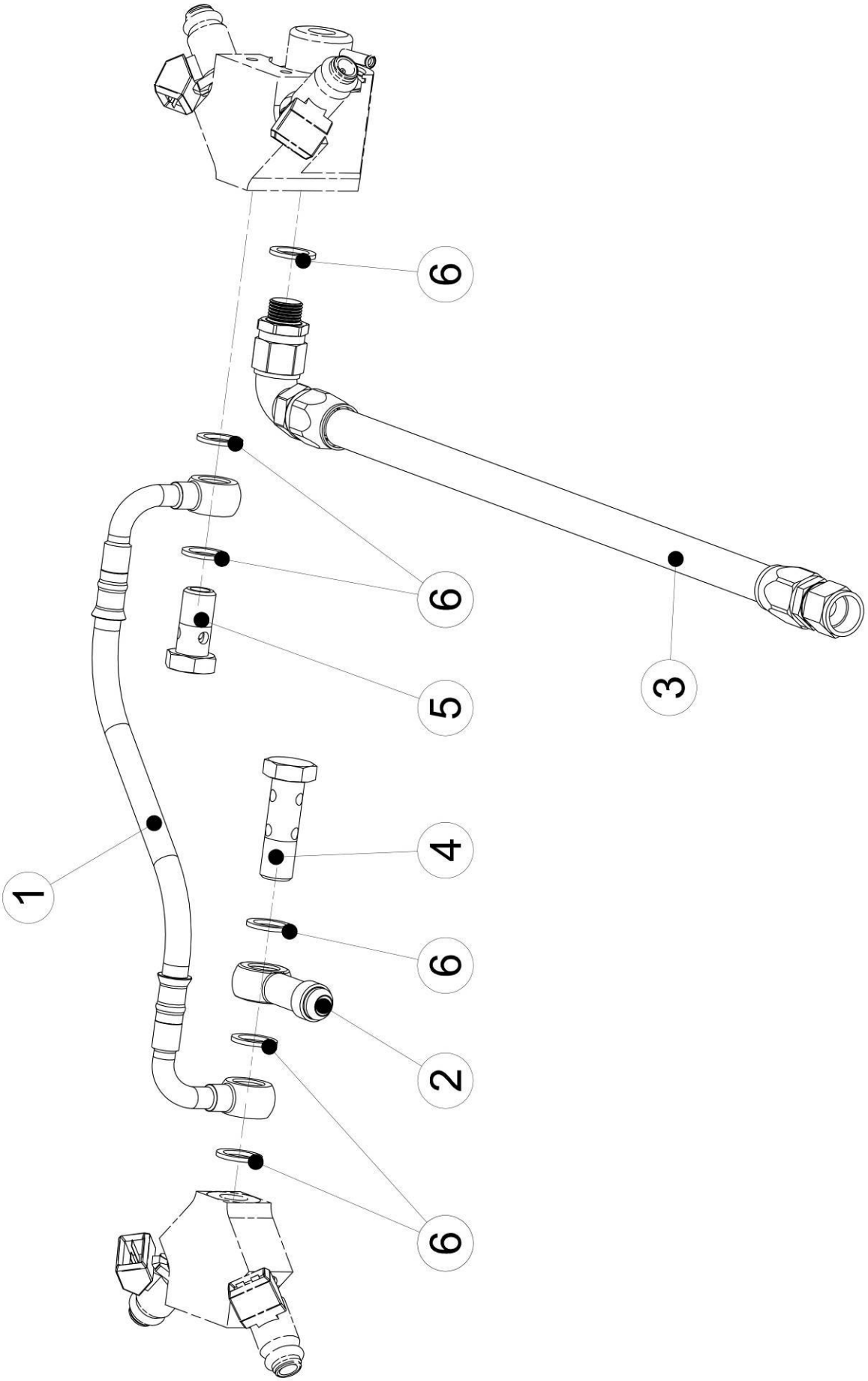
Inlet Manifold, Injectors and Throttle (Double ECU)

Item	Part No.	Description	Parts in assembly	Note
1	E061510	Inlet Collector	1	
2	E061504	Injector + Sensor Holder	1	
	E061506	Injector Holder (Forced Cooling)	1	
3	E062501	Injector	4	(3)
4	S3121715	Copper Sealing Ring ø12x17x1.5	2	
5	E081515	Air Temperature Sensor	2	20 Nm
6	F2580001	Hose Clamp single use ø47	8	
7	E061511	Rubber Hose 38x3x38	4	
8	E061509	Inlet Tube Right	2	(7)
9	E061505	Injector + Fuel Pressure Regulator + sensor Holder / Bypass (Dual ECU)	1	
10	E061512	Injector Holder Lock Plate	2	
11	F1005016	Hex Head Screw - M5x16 - 8.8 Steel - Yellow Passivated	4	6 Nm
12	E064501	Fuel Pressure Regulator - 3bar	1	(3)
13	F1600036	Retaining Ring - bore 36mm	1	
14	E061508	Inlet Tube Left	2	
15	F0106016	Socket Cap Screw - M6x16 - 8.8 Steel - Yellow Passivated	8	10 Nm (2)
16	F2550006	Fuel Pressure Regulator Hose (ø4.5x9.5 x 16cm)	0,3	
17	S3081210	Copper Sealing Ring ø8x12x1	2	
18	F2510708	Banjo Eye M8/Ø5	1	
19	F2520800	Banjo Bolt M8x1	1	6 Nm
	SUE060520	Throttle assy *hall (Contains piece 20 - 33)*		
20	*F3604010*	*Flanged Button Head Socket Cap Screw - M4x10 - Zinc Plated*	2	
21	*E081519*	*Double TPS Hall*	1	
22	*E060541*	*Throttle shaft D38 Hall Sensor*	1	
23	*E060542*	*Throttle bushing Hall Sensor*	1	
24	*F0104008*	*Socket Cap Screw - M4x8 - 8.8 Steel - Yellow Passivated*	2	2 Nm
25	*E060506*	*Throttle Lever Stop*	1	
26	*B2200001*	*Flanged Bushing 8x10x5.5*	2	
27	*E060511*	*Throttle lever spring*	1	
28	*F3503008*	*Button head socket cap screw - M3x8 - 10.9 Steel - Zinc Plated*	2	3 Nm
29	*E060543*	*Throttle lever out plate hall sensor*	1	
29	*E060544*	*Lever middle plate hall Sensor*	1	
29	*E060545*	*Lever inner plate hall sensor*	1	
30	*SE061513*	*Locking plate throttle shaft*	1	
31	*F5001060*	*Hex nut M6 -Zn*	1	
32	*E060505*	*Throttle Plate D38*	1	
33	*E060546*	*Throttle Housing D38 Hall Sensor*	1	(7)
34	F0105035	Socket Cap Screw - M5x35 - 8.8 Steel - Yellow Passivated	4	6 Nm
35	E062001	Inlet Air Filter	1	
36	S1036020	O – Ring Viton 36 x 2	4	
37	F2580005	Hose clamp single use ø63,5	1	
38	E012510	Baffle right	1	
39	E012509	Baffle left	1	
40	S1035012	O – Ring 35 x 1,2	4	

Item	Part No.	Description	Parts in assembly	Note
41	BE061515	Inlet extension tube	4	
42	E012517	Protection hose Fp-regulator	1	
43	F2580002	Hose clamp single use Ø10	2	
44	F2110060	Nordlock washer M6	8	
45	S3101415	Copper sealing ring d10xD14x1.5	2	
46	E081507	Fuel pressure sensor	2	12 Nm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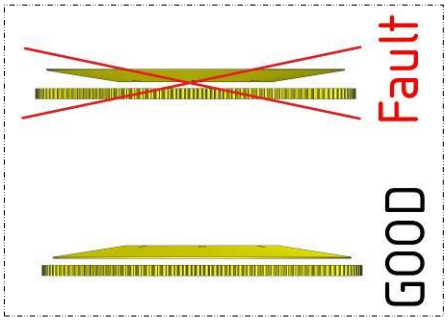
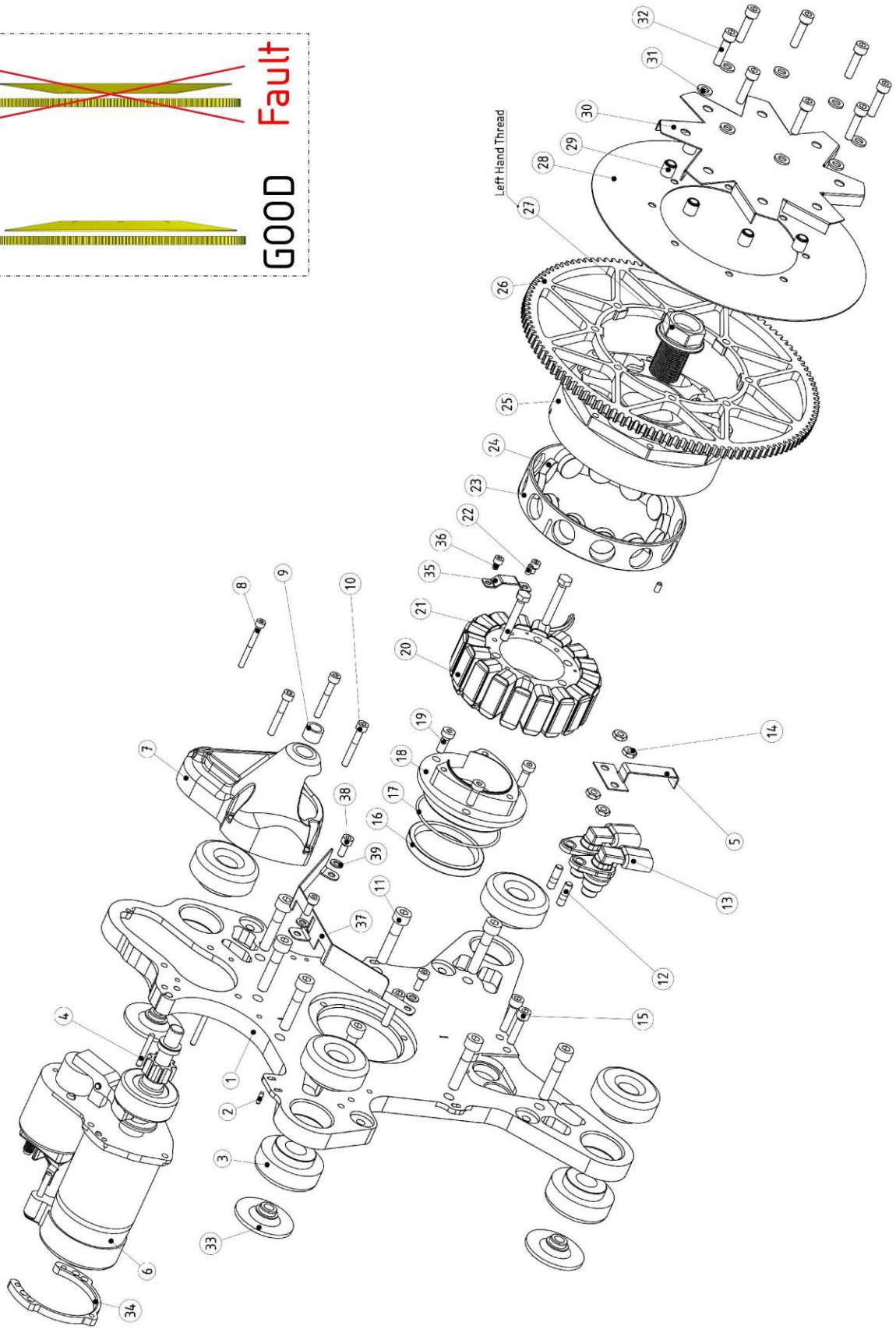
Fuel lines

Item	Part No.	Description	Parts in assembly	Note
1	E063013	Fuel line cross long	1	
2	F2510312	Banjo Eye M12 / 6JIC	1	
3	E063015	Fuel return line 3.5 – 5.2	1	
4	F2521210	Banjo bolt M12x1.5 Long	1	18 Nm
5	F2521200	Banjo bolt M12x1.5	2	18 Nm
6	S3121715	Copper sealing ring d12xD17x1.5	7	

Assemble 26 & 28

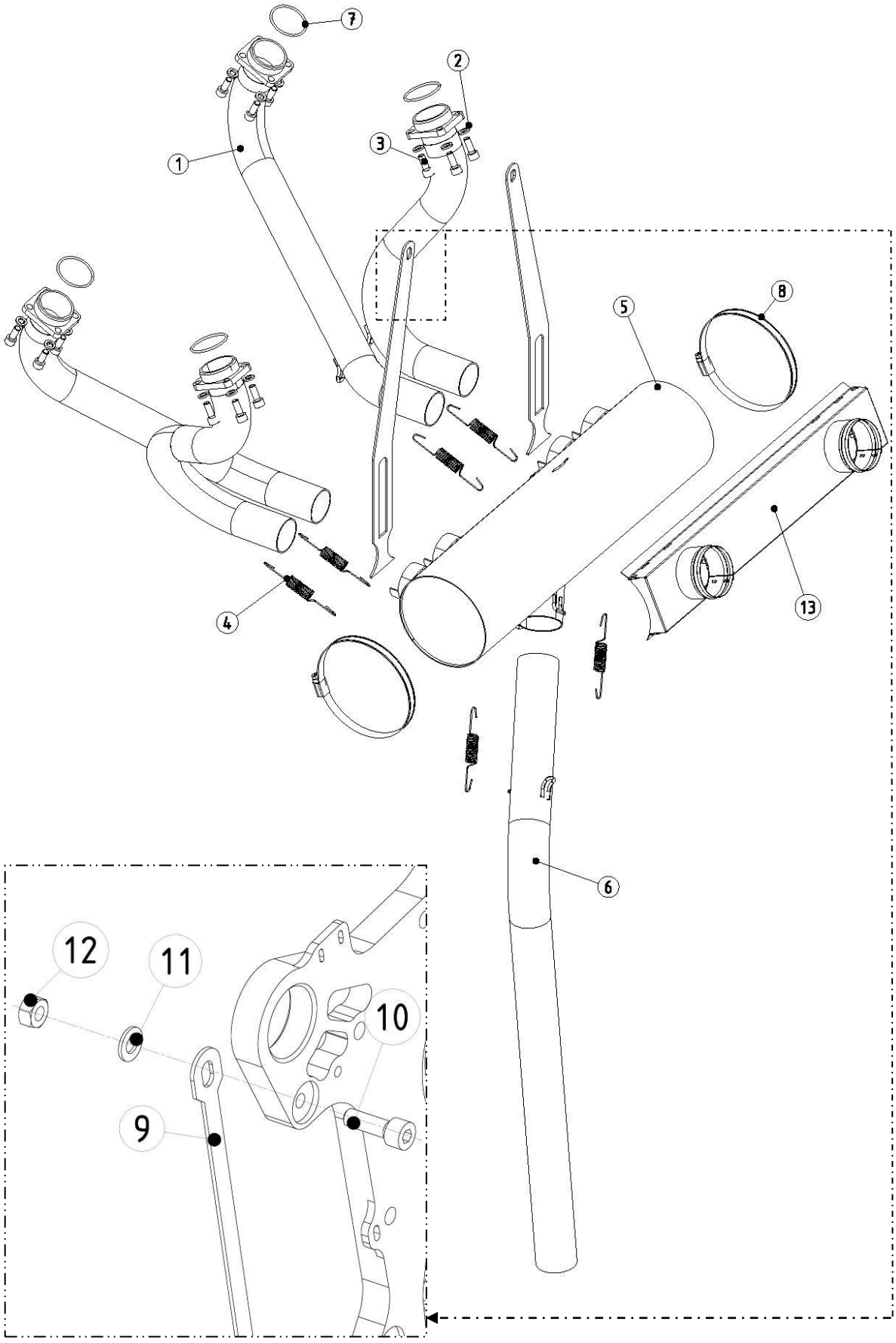




Engine Mount Plate, Starter and Alternator

Item	Part No.	Description	Parts in assembly	Note
1	E013506	Engine Mount Plate	1	(7)
2	F1803010	Parallel Pin 3x10	2	
3	E014002	Rubber Engine Mount	8	
4	F1804020	Parallel Pin 4x20	2	
5	E072001	Locking plate hall sensor	1	
6	E050501	Starter Engine	1	
7	E050503	Starter Cap	1	
8	F0104035	Socket Cap Screw - M4x35 - 8.8 Steel - Zinc Plated	1	3 Nm
9	B2100001	Bushing 12x14x10	1	
10	F0105030	Socket Cap Screw - M5x30 - 8.8 Steel - Yellow Passivated	3	6 Nm(2)
11	F0108040	Socket Cap Screw - M8x40 - 8.8 Steel - Yellow Passivated	8	25 Nm
12	F4106020	Stud - M6x20 - Yellow Passivated	2	(2)
13	E081503	Hall Sensor	2	(3)
14	F5103060	Prevailing torque type hexagon nut - M6 – Zinc plated	4	6 Nm
15	F0106025	Socket Cap Screw - M6x25 - 8.8 Steel - Yellow Passivated	2	10 Nm
16	S2506207	Oil Seal Viton 50x62x7 GR	1	
17	S1066020	O-Ring Viton ø66x2	1	
18	E051505	Alternator Stator Spacer	1	(7)
19	F0506016	Socket cap screw thin - M6x16 - 8.8 Steel – Zinc plated	3	10 Nm (7)
20	E052001	Alternator Stator + connector	1	
21	F0706040	Hexagon head screw - M6x40 - 8.8 Steel – Zinc plated	3	10 Nm
	SUE052000	Alternator rotor flange assembly *(Contains piece 22, 23, 24, 25)*	1	(8)
22	*F4510408*	*Hexagon Socket Set Screw (Flat Point) - M4*	2	
23	*E051502*	*Alternator Magnet Spacer Ring*	1	
24	*E052002*	*Alternator Magnet*	12	
25	*E052501*	*Alternator Rotor Flange*	1	
26	E051001	Starter Ring Gear	1	
27	E023002	Alternator Rotor Flange Bolt / Socket size 30mm	1	280 Nm (2)
	E052507	Alternator Fan Assembly *(Contains piece 28, 29 , 30)*	1	
28	*E052503*	*Alternator fan base*	1	
29	*E052504*	*Spacer alternator fan*	8	
30	*E052506*	*Alternator fan top*	1	
31	F2110060	NordLock Washer M6	8	
32	F0206028	Socket Cap Screw - M6x28 - 8.8 Steel – Zn	8	10 Nm
33	E013505	Engine Mount Washer	4	
34	E050504	starter fixing ring	1	
35	E013030	Bracket Alternator Guide	1	
36	F0104006	Socket Cap Screw M4x6 – 8,8 Yellow	2	

Item	Part No.	Description	Parts in assembly	Note
37	E013031	Alternator Protection plate	1	
38	F0105012	Socket cap screw M5x12 – 8.8 Steel yellow passivated	3	
39	F2110050	Nordlock Washer M5	3	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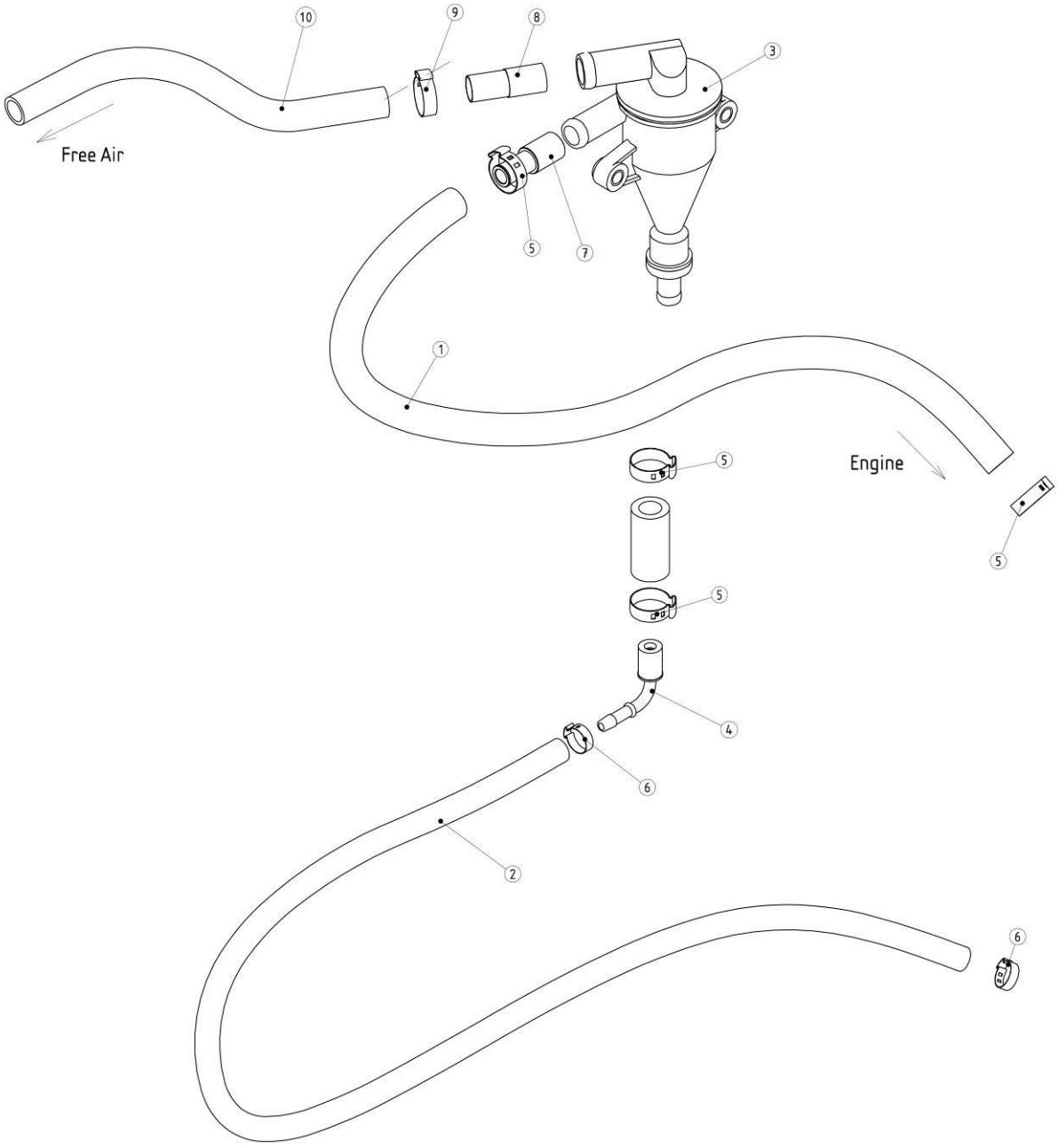
Exhaust System

Item	Part No.	Description	Parts in assembly	Note
1	BE091010	Stainless Steel Exhaust Tubes (set)	1	
2	F2110060	NordLock Washer M6	16	
3	F0106016	Socket Cap Screw - M6x16 - 8.8 Steel - Yellow Passivated	16	10 Nm (1)
4	E093001	Exhaust Spring	4	
5	BE091516 BE091515	Stainless Steel Muffler L=600 Stainless Steel Muffler L=480	1	
6	BE093506	Exhaust Tube	1	
7	E092002	Exhaust gasket ring Inox d32xD38x2.5	4	
8	F2580008	Hose clamp ø 90 – 110 / Stainless steel	2	
9	BE093005	Muffler bracket 3.5 – 5.2	2	
10	F0108025	Socket Cap Screw M8x25 -8,8 Steel Yellow Passivated	2	20 Nm
11	F2710008	Flat washer M8	2	
12	F5103080	Prevailing Hexagon nut all metal M8	2	
13	E092509	Muffler heating box (Optional)	1	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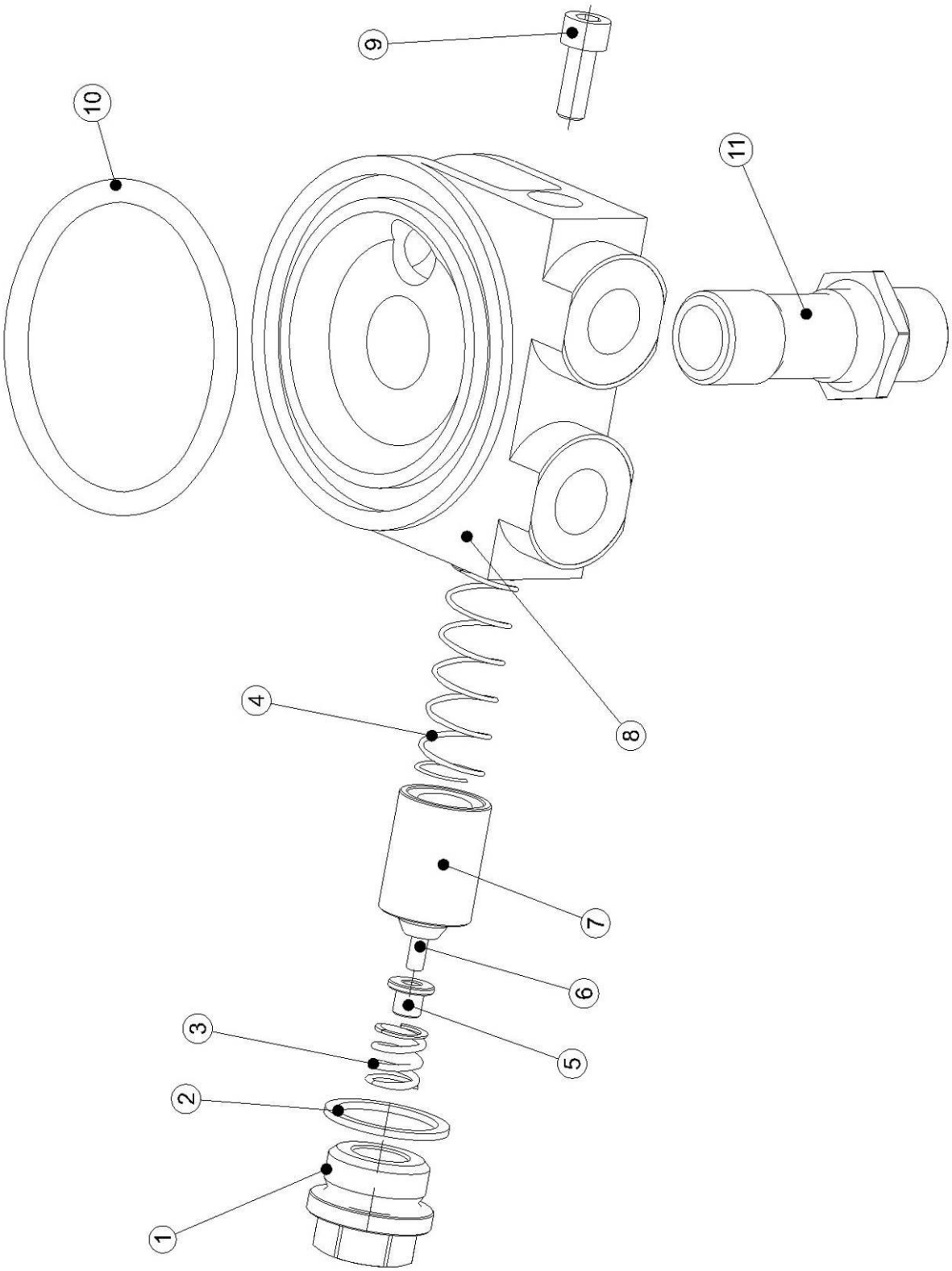
Breather and Oil/Air Separator

Item	Part No.	Description	Parts in assembly	Note
1	F2550009	Cloth Braided Hose ø12x17	1	
2	F2550007	*Rubber Hose Ø6x13.5 (125°C)*	1	
	E043500	Oil/Air separator assembly *(Contains piece 3,4,5,6,7,8)*		
3	*E043506*	*Oil/Air Separator (30°)*	1	
4	*E044003*	*Elbow connection oil return (assembly)*	1	
5	*F2580004*	*Hose clamp Ø20*	4	
6	*F2580003*	*Hose clamp Ø14.5*	2	
7	E043508	Reduction oil / air separator Ø15	1	
8	E043509	Reduction Oil/Air Separator Outlet	1	
9	F2580010	Hose Clamp Ø21	1	
10	F2550010	Cloth Braided Hose Ø15x20	1	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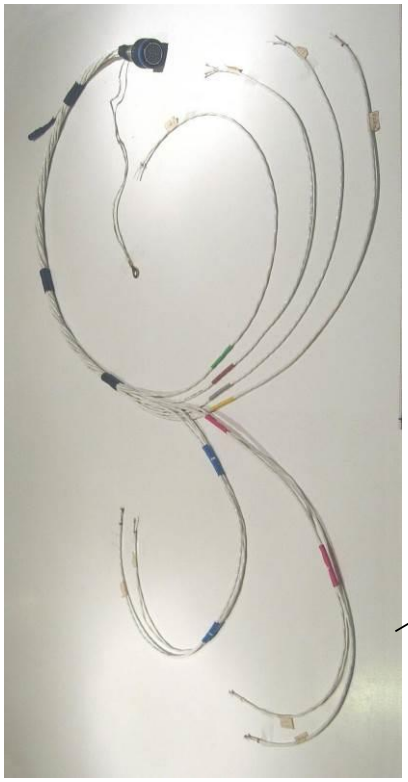
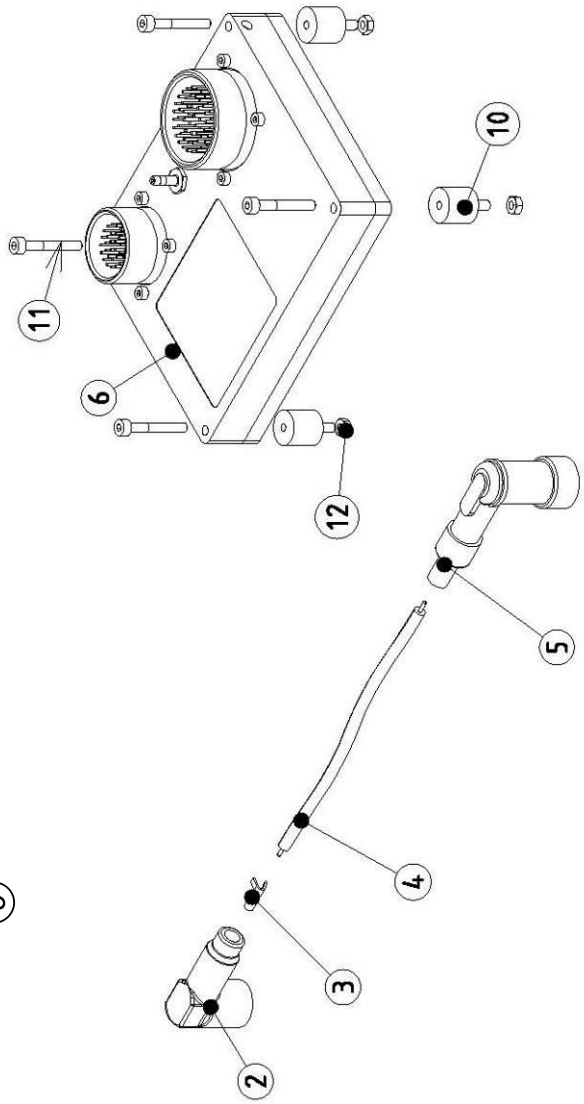
Oil Thermostat : E042515

Item	Part No.	Description	Parts in assembly	Note
1	E42520	Plug M22x1,5	1	20 Nm
2	S3222715	Copper sealing 22x27x1,5	1	(4)
3	F2010010	Spring VDSiCr Ø1,60x8,00x14.50 mm	1	
4	F2010020	Spring VDSiCr Ø1,4x14,00x46,50 mm	1	
5	E042540	Spring Holder	1	
6	E042501	Bimetal	1	
7	E042530	Bimetal Cover	1	
8	SE042510	Thermostat housing	1	
9	F0206025	Socket Cap Screw - M6x25 - 8.8 Steel	1	10 Nm
10	S1062050	O-Ring Viton Ø 62x5	1	
11	E042007	Oil filter adapter screw M20 x 1.5	1	20Nm

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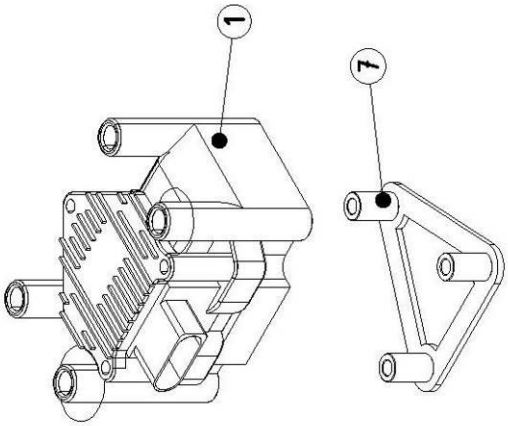
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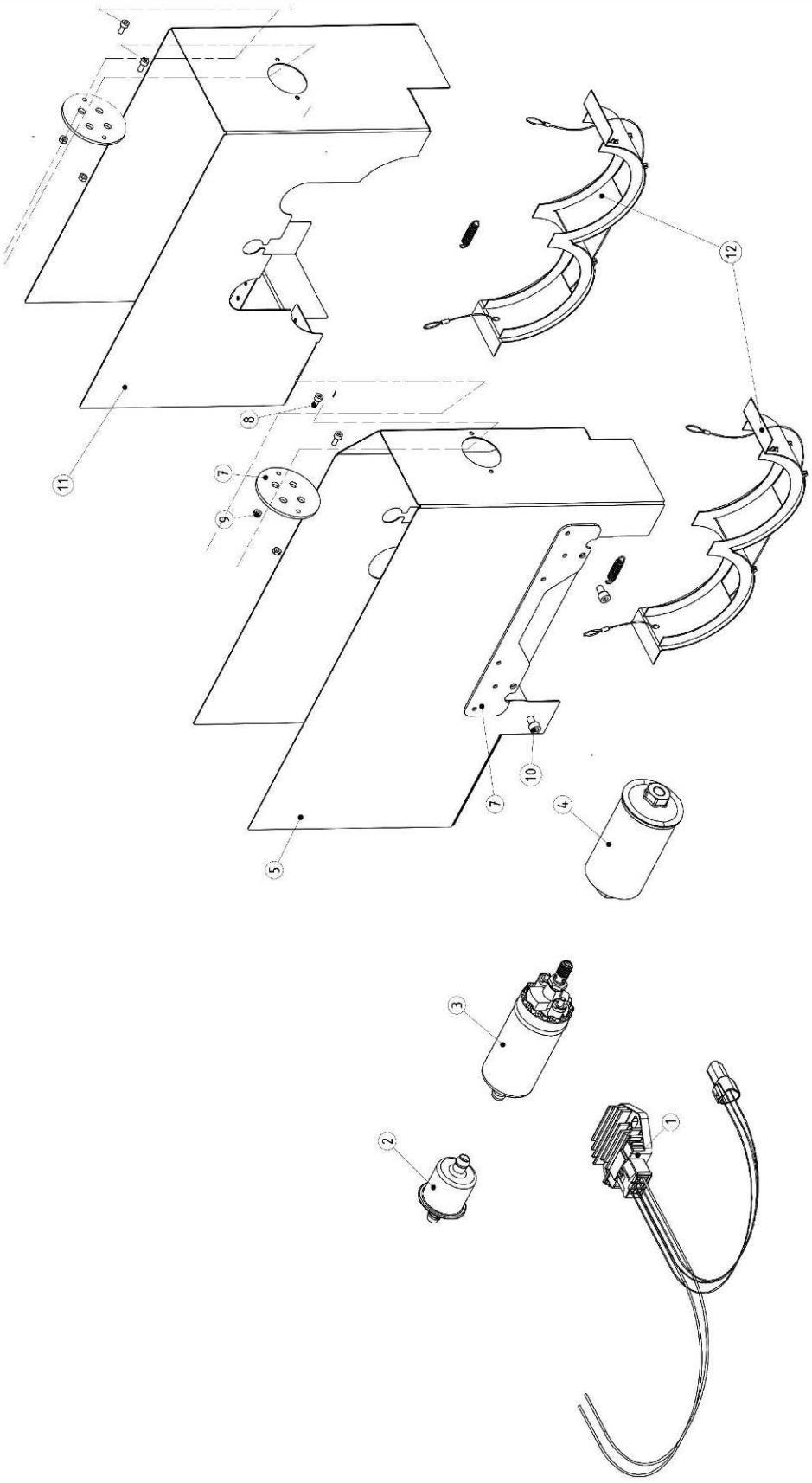
Ignition and Engine Control Unit

Item	Part No.	Description	Parts in assembly	Note
1	E071001	Ignition Coil	1	
2	E071501	Ignition Coil Cover	1	
3	E071505	Copper Clamp (for Ignition Coil Cover)	1	
4	E071503	Ignition Lead Cable	1	
5	E071504	Spark Plug Cover	1	
6	E080612 E080613 E080617 E080607	Engine Control Unit 3.5i Engine Control Unit 3.5iS Engine Control Unit 3.5iF Engine Control Unit 3.5iHPS	1	
7	E071002	Ignition coil bracket	1	
8	E081006 E081007	ECU Wiring loom engine L = 1100 (Single ECU) ECU Wiring loom engine (Double ECU)	1	
9	SE081007 SE081009	ECU Wiring loom cockpit (4 + 6 cylinder) L =1000 (Single ECU) ECU Wiring loom cockpit (4 + 6 cylinder) L =1000 (Double ECU)	1	
10	F2641515	Silent bloc M4 type B - hoogte 15	4	
11	F0204030	Socket Cap screw M4x30-8,8 Steel Yellow Passivated	4	4Nm
12	F5102040	Prevailing hexagon nut M4	4	4Nm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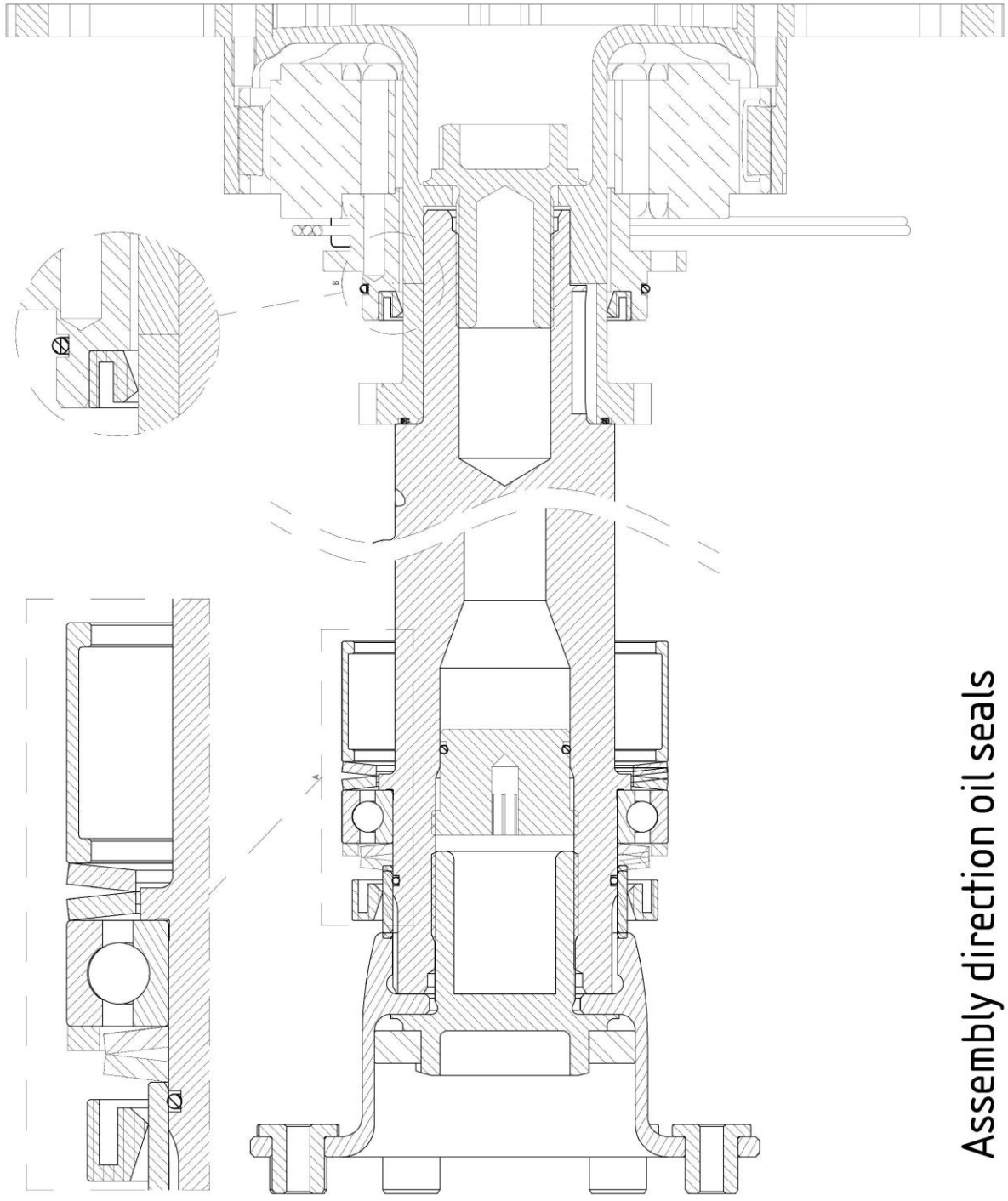
Accessories

Item	Part No.	Description	Parts in assembly	Note
1	E053005	Regulator +wires assembly	1	
2	E064003	Fuel Filter (Pre-filter)	1	
3	E063502	Fuel Pump	1	
4	E064001	Fuel Filter (Fine)	1	
		Assembly Cylinder Head Ram Air Box (Left)		
5	E012507	Cylinder Head Ram Air Box (Left)	1	
6	E012524	Reinforcing Rib	1	
7	E011503	Ignition Cable Grommet	2	
8	F0204010	Socket Cap screw M4x10 - 8.8 Zn	4	
9	F5102040	Prevailing Hexagon nut M4	4	
10	F0106016	Cap Screw M6x16-8-8 Steel Yellow Passivated	4	
		Assembly Cylinder Head Ram Air Box (Right)		
11	E012508	Cylinder Head Ram Air Box (Right)	1	
6	E012524	Reinforcing rib	1	
7	E011503	Ignition Cable Grommet	2	
8	F0204010	Cap screw M4x10 - 8.8 Zn	4	
9	F5102040	Prevailing Hexagon nut M4	4	
12	E013002	Cylinder baffle (E013005A + E013015A)	2	
		Cylinder baffle forced cooling (E013005A + E013010A)		
		Spring 1.0x8x35	2	
		Steel Cable	1	

Section of drawings



Notes

(1) Loctite 8009 (High Temperature Resistant Grease)
(2) Loctite 266 (Thread Locker)
(3) Engine Oil
(4) Replace When Removed
(5) Loctite 5910 (Quick Gasket)
(6) Loctite 577 (Thread Sealant)
(7) Elring No. 030.792 (Sealing Silicone)
(8) Loctite 573 (Flange Sealant)
(9) Loctite 542 (Thread Sealant)

Revision

Revision 8 (2015-12-15)

- **Inlet Manifold, injectors ad throttle** => "Single" AND "Double" ECU

  Item 6: Hose clamp Ø44 => Hose clamp Ø47
  Item 35: Hose clamp Ø62 => Hose clamp Ø63,5

- **Engine Mount Plate, starter and alternator**
  Item 33: Engine Mount Washer

- **Exhaust system**
  New clamping of the Muffler bracket

- **Breather and oil/air separator**
  Item 7: Reduction Oil/air separator

- **Oil thermostat**
  Item 2: copper sealing 22x28x1,5 => 22x27x1,5
  Item 10: S1052025 => S1062050

- **Igntion and engine control unit**
  Item 10: Silent bloc
  Item 11: Cap screw M4
  Item 12: Prevailing hexagon nut M4

- **Accesoires**
  Item 7, 14: Air box Left/right => Reinforcing rib + clips + Ignition cable grommet
  Item 13: Cap Screw M4x16-8-8 Yellow

Revision 9: (15-09-2016)

- Pg 4 and pg 5:Cinlinder head and cylinder => nr 21 (nordlock washer M5)
- Pg 14, and pg16: Inlet manifold, injectors and throttle = > nr 42 (Nordlock washer M6)
- Pg 18, and pg20: Inlet manifold, injectors and throttle = > nr 44 (Nordlock washer M6)
- Just used the partnumber. (no version)
- Pg 34/35: Nr 17: E013025 (Steel Cable)

Revision 10: (19-10-2017)

- Pg 34 and pg 35: Nr 17: E013025 (Steel Cable)

Revision 11: (01-06-2018)

- Pg 4-5: Nr. 22
- Pg 6-7: E081507 (oil/Fuel pressure sensor) (hose is deleted) / E081516 was E081501
- Pg 9: nr 16: E041040 was F4621615

- Pg 12-13: Nr 22.
- Pg14-15; 18-19: nr 2 Forced Cooling + sensor E081507 / E081515 was E081504
- Pg 24: Detail Montage E052503
- Pg 24 – 25: Nr19: Apply Sealing silicone / Nr22: Apply Loctite 527
- Pg 25: Nr 28: E052503 was E052505
- Pg 29: Nr 6: 1 => 2 st.
- Pg 33: E081002 => E081006 / E081005 => E081007 / SE081002 => SE081006 / SE081005 => SE081009
- Pg 34-35: Nr9: Clips deleted

Revision 12: (01-12-2018)

- Pg 15-16: Nr 20: SUE060510 was SUE060500
- Pg 33: Nr 6: (E080604 => E080612; E080605 => E080613; E080606 => E080617)
- Silicone 030.792 was 030.790

Revision 13 (2019-10-01)

- **Pg 12 en 13:** Nr 24 F1305016 was F1306016
- **Pg 14 en 15:** Nr 9 E0615013 was E061507
- **Pg 18 en 20:** Nr 9 E061505 was E061507 / nr 43 & 44: 2 parts
- **Pg 24 en 25:** Nr 8 F0104035 was F0104045 en Nr10 F0105030 was F0105035
- **Pg 34 en 35:** Nr 3 E053003 was E053002 (Rectifier / regulator connector and pins)

Revision 14 (2020-02-10)

Pg 6 en 7: Nr29 – 32 verwijderd: Nylon Cable Tie
Nr 40 – 42 Toegevoegd
Nr. 29: S3142015 was S3141815
Nr 32: S3162215 was S3162015

Pg 12 en 13: Nr25: O-ring Viton

Pg 14 en 15: Throttle assy SUE060520 was SUE060510 / E081819 was E081506 / E060546 was E060540

Pg 18 en 19: Throttle assy SUE060520 was SUE060510 / E081819 was E081506 / E060546 was E060540

Pg 24 en 25: Nr 34: E050504 (Starter fixing ring) /(2) bij nr 10

Nr 35 en 36 Bracket Alternator Guide

Pg 30 en 31: Nr 3: F2010010 was F2010002

Nr 4: F2010020 was F2010002

Pg 34 en 35: Nr 14: Spring 1.0x8x35 (F2010003) en Steel Cable (E013025) zit in assembly E013002

Revision 15 (2020-07-01)

Pg 12 en 13: Nr 17: E024009 was E024001 / E024008 was E024005
Pg 28 en 29: Nr 8 (E043509), 9 en 10 toegevoegd

Revision 16 (2021-06-01)

Pg 12-13 : Nr19 detail

Pg 24 -25 : Nr 14 (F5103060) 8Nm was 10Nm

Pg 34 -35 : Nr 2 was Nr 2 en 3 (Regulator + Wires assembly was Regulator + prewired connector)
E052003 verwijderd (Alternator Stator Connector & Pins)
Pg 37 : Detail bij Section of drawings

Revision 17 (2022 – 04 -01)

Pg 12 en 13: Nr 21 was E020510
Nr 24 F1306012 was F13005016
Nr 26: S1028020 (O-ring viton 28x2) toegevoegd
Oil Stop M24x1,5 verwijderd

Revision 18 (2023 – 06 -01)

Pg 4-5: O-ring Viton 105x2 (S1105020) verwijderd / Nr 22 Copper ring toegevoegd
Pg 6-7: Nr 16 S1012020 (O-Ring Viton ø12x2) was S1011020 (O-Ring Viton ø11x2)
Pg 37: Notes toegevoegd

Revision 19 (2024 – 02 -01)

Pg 14- 16: nr 40: S1035012 was S103510 (O-ring 35x1 word O-ring 35x1,2)

Pg 18- 20: nr 40: S1035012 was S103510 (O-ring 35x1 word O-ring 35x1,2)

Pg 24-26: Nr 14: 6Nm was 8Nm
Nr 37 – 39 toegevoegd (Alternator Protection Plate) (2de Pagina gestart => pg in vorige revisie kan gewijzigd zijn)

Pg 28-29: Nr 13: E092509 was E092502

Revision 20 (2025-04-30)

Pg 28-29: Nr 7: E092002 was E092001 (Exhaust gasket ring **Inox** d32xD38x2.5)