

## Equipment information

**Equipment:** 00000078281  
**Type:** F 2L1011F  
**Output:** 0000021,0 kW  
**Speed:** 2800 1/min  
**Build date:** 01.05.1995  
**KLU-Number:** 2500 1100/00  
**ETL scope:** EU253436  
**MVS:** 042

**VKU date:** 01.05.1995

**VKU' date:**

**Commissioning date:**

**Begin of guarantee period:**

**Man. begin of guar. period:** no

**End of guarantee period:**

**ID maintenance contract:**

**ID insurance contract:**

**Guarantee package:**

## Assembly group directory

<b>Equipment:</b>	00000078281	<b>Engine type:</b>	F 2L1011F
<b>Output:</b>	0000021,0 kW	<b>Speed:</b>	2800 1/min
<b>ETL scope:</b>	EU253436		

CG	ETL-No.	Designation (en)	Designation (en)
<b>1</b>		<b>Crankcase</b>	
1	0505 1009	Rear end cover	Rear end cover
1	0506 7706	Cap	Cap
1	0506 8042	Crankcase	Crankcase
1	0506 8064	Dipstick	Dipstick
<b>2</b>		<b>Oil pan</b>	
2	0506 8057	Oil pan	Oil pan
<b>5</b>		<b>Crankshaft</b>	
5	0505 1003	Crankshaft	Crankshaft
5	0505 1751	Accessories	Accessories
5	0505 1752	Power take-off	Power take-off
5	0506 8075	Flywheel	Flywheel
<b>6</b>		<b>Connecting rod</b>	
6	0506 8010	Connecting rod	Connecting rod
<b>7</b>		<b>Piston</b>	
7	0506 8009	Piston	Piston
<b>8</b>		<b>Cylinder head</b>	
8	0506 7612	Filler cap	Filler cap
8	0506 8052	Cylinder head	Cylinder head
8	0506 8101	Valve mechan.cover	Valve mechan.cover
8	0506 8102	Fastenings	Fastenings
<b>10</b>		<b>Camshaft</b>	
10	0506 7701	Camshaft drive	Camshaft drive
10	0506 7704	Fastenings	Fastenings
10	0506 8066	Camshaft	Camshaft
10	0506 8128	Protection hood	Protection hood
<b>11</b>		<b>Timing gears</b>	
11	0505 1930	Rocker arm bracket	Rocker arm bracket
11	0506 7617	Valve drive	Valve drive
<b>14</b>		<b>Lube oil pump</b>	
14	0506 8087	Lubricat. oil pump	Lubricat. oil pump
<b>15</b>		<b>Lube oil/-cooler</b>	
15	0506 4400	Lubric. oil filter	Lubric. oil filter
15	0506 8022	Fastenings	Fastenings
15	0506 8043	Oil cooler	Oil cooler
<b>16</b>		<b>Oil pipes</b>	
16	0506 7624	Press.relief valve	Press.relief valve
16	0506 8062	Oil suction line	Oil suction line
<b>17</b>		<b>Injection pump</b>	
17	0506 7639	Screw plug	Screw plug
17	0506 7640	Fastenings	Fastenings
17	0506 7641	Fuel inject. pump	Fuel inject. pump
<b>19</b>		<b>Injector</b>	
19	0506 8001	Fuel injector	Fuel injector
<b>20</b>		<b>Fuel filter</b>	
20	0504 2000	Filter cartridge	Filter cartridge
20	0506 7638	Fuel supply pump	Fuel supply pump
20	0506 8026	Bracket	Bracket

<b>Equipment:</b>	00000078281	<b>Engine type:</b>	F 2L1011F
<b>Output:</b>	0000021,0 kW	<b>Speed:</b>	2800 1/min
<b>ETL scope:</b>	EU253436		

CG	ETL-No.	Designation (en)	Designation (en)
<b>21</b>		<b>Fuel pipes/fuel tank</b>	
21	0506 7646	Fuel line	Fuel line
21	0506 7647	Fuel line	Fuel line
21	0506 7650	High pressure pipe	High pressure pipe
21	0506 8071	Fuel line	Fuel line
21	0506 8082	Overflow line	Overflow line
<b>22</b>		<b>Suction pipe/air cleaner</b>	
22	0505 1625	Air filter fitment	Air filter fitment
22	0506 3419	Blanking parts	Blanking parts
22	0506 4204	Intake manifold	Intake manifold
<b>27</b>		<b>Speed control</b>	
27	0506 8033	Front cover/govern	Front cover/govern
27	0506 8094	Control rod	Control rod
<b>33</b>		<b>Air compressor</b>	
33	0506 3919	Blanking parts	Blanking parts
<b>39</b>		<b>Cooling air blower</b>	
39	0505 1119	Tensioning pulley	Tensioning pulley
39	0506 3447	Narrow v-belt	Narrow v-belt
39	0506 7747	Blower jacket	Blower jacket
39	0506 8085	Cooling fan	Cooling fan
<b>40</b>		<b>Cooling air ducting</b>	
40	0506 7725	Air guidance	Air guidance
40	0506 8018	Air duct wall	Air duct wall
40	0506 8092	Air guide hood	Air guide hood
<b>41</b>		<b>Exhaust manifold</b>	
41	0506 4185	Exhaust manifold	Exhaust manifold
<b>44</b>		<b>Alternator/starter motor</b>	
44	0506 7714	Starter	Starter
44	0506 8014	Generator	Generator
<b>46</b>		<b>Engine mounting, rigid</b>	
46	0506 7382	Engine mounting	Engine mounting
<b>51</b>		<b>Measuring instruments</b>	
51	0506 7636	Oil pressur.switch	Oil pressur.switch
51	0506 7637	Temper.transmitter	Temper.transmitter
<b>52</b>		<b>Clutch</b>	
52	0505 1339	Connection housing	Connection housing
52	0505 1756	Cover plate	Cover plate
<b>56</b>		<b>Engine shutdown</b>	
56	0505 1617	Shutdown device	Shutdown device
<b>83</b>		<b>Hydraulic pump</b>	
83	0505 1717	Hydraulic pump	Hydraulic pump
83	0506 3377	Hydraulic pump	Hydraulic pump
83	0506 7539	Driving parts	Driving parts
<b>90</b>		<b>Set of parts</b>	
90	0506 8244	Supplem.gasket set	Supplem.gasket set
90	0506 8248	Gasket set	Gasket set

# Materials order list

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Order:  
User:  
Date of maintenance measure:

Customer:  
Reference:  
Equipment: 00000078281

Date/Time: 2020.10.06 10:49:21  
EL-ID: 1011F; EL-No.: 02977793  
Equipment: 00000078281  
Engine type: F 2L1011F  
Materials for maintenance measure:  
E30 -- inspection  
E60 -- intermediate overhaul  
E70 -- major overhaul  
RS E.ventil -- repair kit fuel injector  
RS Kurb.welle -- repair kit crankshaft  
RS Zyl.K -- repair kit cylinder head

No	Qty	Material	MS	VS	Weight	Total ..	Unit Price	Total Price	Designation	from ETL	AG	Item	Service	EL-ID	ID-No.	Quantity used
0001000	2	0111 8718			0,002	0,004			Sealing ring	0506 8057	2	2	E30	1011F	0020002	2
0002000	1	0117 4416			0,328	0,328			Spin-on oil filter	0506 4400	15	1	E30	1011F	0150001	1
0003000	2	0111 8718			0,002	0,004			Sealing ring	0506 8057	2	2	E60	1011F	0020002	2
0004000	1	0417 9845			0,025	0,025			Gasket	0506 8101	8	2	E60	1011F	0080004	1
0005000	1	0117 4416			0,328	0,328			Spin-on oil filter	0506 4400	15	1	E60	1011F	0150001	1
0006000	1	0117 4696			0,284	0,284			Spin-on fuel filt.	0504 2000	20	1	E60	1011F	0200003	1
0007000	1	0417 9928	90	90	0,045	0,045			Thermostat	0506 8042	1	18	E70	1011F	0010012	1
0008000	6	0210 8134			0,130	0,780			Hexagon bolt	0506 8042	1	16	E70	1011F	0010017	6
0009000	1	0417 8154			0,048	0,048			Wrapped bear. bush	0506 8042	1	3	E70	1011F	0010019	1
0010000	2	0417 8155			0,075	0,150			Wrapped bear. bush	0506 8042	1	2	E70	1011F	0010020	2
0011000	2	0417 9444			0,580	1,160			Cylinder liner	0506 8042	1	39	E70	1011F	0010031	2
0012000	1	0117 6179			0,009	0,009			Hose clip	0506 7706	1	2	E70	1011F	0010046	1
0013000	1	0417 8963	50	50	0,019	0,019			Dipstick	0506 8064	1	1	E70	1011F	0010049	1
0014000	2	0111 8718			0,002	0,004			Sealing ring	0506 8057	2	2	E70	1011F	0020002	2
0015000	3	0292 8957	90	90	0,119	0,357			Main bearing	0505 1003	5	2	E70	1011F	0050002	3
0016000	1	0292 8961			0,041	0,041			Thrust washer	0505 1003	5	3	E70	1011F	0050003	1
0017000	2	0292 8964	20	20	0,070	0,140			Big end bearing	0505 1003	5	4	E70	1011F	0050004	2
0018000	1	0210 8653			0,563	0,563			V-grooved pulley	0505 1752	5	1	E70	1011F	0050041	1
0019000	4	0417 8991	50	50	0,060	0,240			Big end bolt	0506 8010	6	2	E70	1011F	0060002	4
0020000	1	0417 8304			1,011	1,011			Piston	0506 8009	7	1	E70	1011F	0070001	1
0021000	2	0417 8305			1,013	2,026			Piston	0506 8009	7	8	E70	1011F	0070008	2
0022000	1	0417 8306			1,014	1,014			Piston	0506 8009	7	9	E70	1011F	0070009	1
0023000	1	0428 1390			0,030	0,030			Filler cap	0506 7612	8	1	E70	1011F	0080001	1
0024000	1	0417 9845			0,025	0,025			Gasket	0506 8101	8	2	E70	1011F	0080004	1

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No	Qty	Material	MS	VS	Weight	Total ..	Unit Price	Total Price	Designation	from ETL	AG	Item	Service	EL-ID	ID-No.	Quantity used
0025000	6	0427 0815			0,175	1,050			Cylinder head bolt	0506 8102	8	1	E70	1011F	0080005	6
0026000	1	0417 8861	20	20	0,190	0,190			Cylind.head gasket	0506 8102	8	3	E70	1011F	0080006	1
0027000	2	0417 8862	20	20	0,193	0,386			Cylind.head gasket	0506 8102	8	4	E70	1011F	0080007	2
0028000	1	0417 8863	20	20	0,195	0,195			Cylind.head gasket	0506 8102	8	5	E70	1011F	0080008	1
0029000	1	0417 9684	90	90	16,582	16,582			Cylinder head	0506 8052	8	1	E70	1011F	0080014	1
0030000	1	0292 9902	90	90	0,583	0,583			Repair kit	0506 7701	10	10	E70	1011F	0100021	1
0031000	4	0417 8075			0,096	0,384			Valve tappet	0506 7617	11	2	E70	1011F	0110002	4
0032000	4	0210 9637			0,003	0,012			Hexagon nut	0505 1930	11	4	E70	1011F	0110003	4
0033000	4	0210 9636			0,014	0,056			Adjusting screw	0505 1930	11	3	E70	1011F	0110004	4
0034000	4	0110 7727			0,001	0,004			Circlip	0505 1930	11	1	E70	1011F	0110005	4
0035000	1	0417 8969	20	20	2,201	2,201			Lubricat. oil pump	0506 8087	14	1	E70	1011F	0140001	1
0036000	1	0117 4416			0,328	0,328			Spin-on oil filter	0506 4400	15	1	E70	1011F	0150001	1
0037000	1	0417 8125			0,812	0,812			Fuel inject. pump	0506 7641	17	1	E70	1011F	0170001	1
0038000	2	0417 8023			0,233	0,466			Fuel injector	0506 8001	19	1	E70	1011F	0190003	2
0039000	1	0117 4696			0,284	0,284			Spin-on fuel filt.	0504 2000	20	1	E70	1011F	0200003	1
0040000	1	0427 2616	20	20	0,313	0,313			Fuel supply pump	0506 7638	20	1	E70	1011F	0200005	1
0041000	2	0118 0014			0,003	0,006			Hose clip	0506 7646	21	2	E70	1011F	0210001	2
0042000	2	0118 0014			0,003	0,006			Hose clip	0506 7647	21	2	E70	1011F	0210001	2
0043000	1	0139 8209			0,090	0,090			Rubber hose	0506 7647	21	1	E70	1011F	0210002	1
0044000	1	0139 8209			0,090	0,090			Rubber hose	0506 7646	21	1	E70	1011F	0210003	1
0045000	1	0417 8358	90	90	0,048	0,048			Sectional rubber	0506 7646	21	3	E70	1011F	0210004	1
0046000	2	0417 9708	50	50	0,050	0,100			High pressure pipe	0506 7650	21	1	E70	1011F	0210041	2
0047000	1	0427 2687			0,128	0,128			Fuel line	0506 8071	21	1	E70	1011F	0210044	1
0048000	1	0417 8632			0,044	0,044			Overflow line	0506 8082	21	2	E70	1011F	0210049	1
0049000	2	0417 9708	50	50	0,050	0,100			High pressure pipe	0506 7650	21	1	E70	1011F	0210061	2
0050000	2	0417 9708	50	50	0,050	0,100			High pressure pipe	0506 7650	21	1	E70	1011F	0210081	2
0051000	1	0417 8572			0,006	0,006			Breather valve	0506 8033	27	49	E70	1011F	0270033	1
0052000	1	0417 9807			0,090	0,090			Control rod	0506 8094	27	1	E70	1011F	0270036	1
0053000	1	0417 0886			0,004	0,004			Compression spring	0506 8094	27	3	E70	1011F	0270038	1
0054000	1	0417 6260			0,176	0,176			V-grooved pulley	0506 8085	39	3	E70	1011F	0390016	1
0055000	1	0117 9565			0,075	0,075			Narrow v-belt	0506 3447	39	1	E70	1011F	0390020	1
0056000	1	0417 8197	90	90	1,045	1,045			Air duct rear wall	0506 8018	40	1	E70	1011F	0400003	1
0057000	4	0118 1005	90	90	0,025	0,100			Torx-head bolt	0506 4185	41	3	E70	1011F	0410044	4
0058000	3	0115 3346			0,010	0,030			Stud	0506 4185	41	4	E70	1011F	0410045	3
0059000	1	0118 0648	90	90	1000,0..	1000,0..			Generator	0506 8014	44	1	E70	1011F	0440001	1
0060000	1	0118 0180	20	20	5,994	5,994			Starter	0506 7714	44	1	E70	1011F	0440041	1
0061000	1	0224 9777			0,090	0,090			Rubber ring	0506 7382	46	5	E70	1011F	0460012	1
0062000	1	0117 8517	20	20	0,265	0,265			Angul.ball bearing	0506 7539	83	3	E70	1011F	0830006	1

# Materials order list

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No	Qty	Material	MS	VS	Weight	Total ..	Unit Price	Total Price	Designation	from ETL	AG	Item	Service	EL-ID	ID-No.	Quantity used
0063000	1	0110 7846			0,017	0,017			Circlip	0506 7539	83	4	E70	1011F	0830007	1
0064000	1	0417 4073	20	20	0,170	0,170			Toothed belt	0506 7539	83	10	E70	1011F	0830009	1
0065000	1	0292 9856	90	90	0,288	0,288			Gasket set	0506 8248	90	1	E70	1011F	0900001	1
0066000	1	0292 9852	90	90	0,130	0,130			Supplem.gasket set	0506 8244	90	1	E70	1011F	0900002	1
0067000	2	0417 8023			0,233	0,466			Fuel injector	0506 8001	19	1	RS E.ventil	1011F	0190003	2
0068000	2	0417 5610			0,001	0,002			Sealing ring	0506 8001	19	4	RS E.ventil	1011F	0190006	2
0069000	1	0417 5433	90	90	0,075	0,075			Rot.shaft lip seal	0505 1009	1	3	RS Kurb.w..	1011F	0010003	1
0070000	6	0210 8134			0,130	0,780			Hexagon bolt	0506 8042	1	16	RS Kurb.w..	1011F	0010017	6
0071000	3	0292 8957	90	90	0,119	0,357			Main bearing	0505 1003	5	2	RS Kurb.w..	1011F	0050002	3
0072000	1	0292 8961			0,041	0,041			Thrust washer	0505 1003	5	3	RS Kurb.w..	1011F	0050003	1
0073000	2	0292 8964	20	20	0,070	0,140			Big end bearing	0505 1003	5	4	RS Kurb.w..	1011F	0050004	2
0074000	4	0417 8991	50	50	0,060	0,240			Big end bolt	0506 8010	6	2	RS Kurb.w..	1011F	0060002	4
0075000	4	0210 8080			0,008	0,032			Nut	0506 8010	6	3	RS Kurb.w..	1011F	0060003	4
0076000	2	0210 8088			0,028	0,056			Big end bush	0506 8010	6	4	RS Kurb.w..	1011F	0060004	2
0077000	1	0292 9902	90	90	0,583	0,583			Repair kit	0506 7701	10	10	RS Kurb.w..	1011F	0100021	1
0078000	1	0417 8969	20	20	2,201	2,201			Lubricat. oil pump	0506 8087	14	1	RS Kurb.w..	1011F	0140001	1
0079000	1	0417 8989			0,003	0,003			Sealing ring	0506 8087	14	6	RS Kurb.w..	1011F	0140006	1
0080000	1	0417 5435			0,020	0,020			Rot.shaft lip seal	0506 8033	27	50	RS Kurb.w..	1011F	0270034	1
0081000	1	0417 5434			0,033	0,033			Rot.shaft lip seal	0506 8033	27	51	RS Kurb.w..	1011F	0270035	1
0082000	1	0417 9845			0,025	0,025			Gasket	0506 8101	8	2	RS Zyl.K	1011F	0080004	1
0083000	6	0427 0815			0,175	1,050			Cylinder head bolt	0506 8102	8	1	RS Zyl.K	1011F	0080005	6
0084000	1	0417 8861	20	20	0,190	0,190			Cylind.head gasket	0506 8102	8	3	RS Zyl.K	1011F	0080006	1
0085000	2	0417 8862	20	20	0,193	0,386			Cylind.head gasket	0506 8102	8	4	RS Zyl.K	1011F	0080007	2
0086000	1	0417 8863	20	20	0,195	0,195			Cylind.head gasket	0506 8102	8	5	RS Zyl.K	1011F	0080008	1
0087000	8	0210 8102			0,001	0,008			Valve collet	0506 8052	8	13	RS Zyl.K	1011F	0080010	8
0088000	4	0210 8098	50	50	0,023	0,092			Spring cap	0506 8052	8	12	RS Zyl.K	1011F	0080011	4
0089000	4	0417 9633			0,030	0,120			Compression spring	0506 8052	8	11	RS Zyl.K	1011F	0080012	4
0090000	4	0415 3728			0,002	0,008			Valve stem seal	0506 8052	8	10	RS Zyl.K	1011F	0080013	4
0091000	2	0417 8086	90	90	0,026	0,052			Valve seat insert	0506 8052	8	2	RS Zyl.K	1011F	0080015	2
0092000	2	0417 4858	50	50	0,025	0,050			Valve seat insert	0506 8052	8	3	RS Zyl.K	1011F	0080016	2
0093000	2	0417 0899	50	50	0,085	0,170			Exhaust valve	0506 8052	8	9	RS Zyl.K	1011F	0080017	2
0094000	2	0417 0898	20	20	0,095	0,190			Inlet valve	0506 8052	8	8	RS Zyl.K	1011F	0080018	2
0095000	4	0410 2120			0,004	0,016			Gasket	0506 4204	22	1	RS Zyl.K	1011F	0220005	4
0096000	2	0417 3862			0,013	0,026			Gasket	0506 4185	41	2	RS Zyl.K	1011F	0410042	2