

**Equipment information**

**Equipment:** 00002201146  
**Type:** TBD12 620V  
**Output:** 0001304,0 kW  
**Speed:** 1650 1/min  
**Build date:** 07.10.1999  
**KLU-Number:**  
**ETL scope:** EU222495  
**MVS:** 721

**VKU date:** 17.12.1999  
**VKU' date:**  
**Commissioning date:** 27.06.2000  
**Begin of guarantee period:** 27.06.2000  
**Man. begin of guar. period:** no  
**End of guarantee period:**  
**ID maintenance contract:**  
**ID insurance contract:**  
**Guarantee package:** 24

## Assembly group directory

**Equipment:** 00002201146  
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CG	ETL-No.	Designation (en)	Designation (en)
<b>1</b>		<b>Crankcase</b>	
1	0508 1393	Crankc. end cover	Crankc. end cover
1	0508 1398	Engine mounting	Engine mounting
1	0508 5021	Tdc-pointer	Tdc-pointer
1	0508 5032	Cover	Cover
1	0508 5033	Cover	Cover
1	0508 5064	Cover	Cover
1	0508 5099	Cover	Cover
1	0508 5131	Crankcase	Crankcase
1	0508 5158	Disch./drain pipe	Disch./drain pipe
1	0508 5161	Piston cooling	Piston cooling
1	0508 5543	Crankcase breather	Crankcase breather
1	0508 5544	Crankcase breather	Crankcase breather
<b>2</b>		<b>Oil pan</b>	
2	0508 5326	Oil pan	Oil pan
2	0508 5500	Dipstick	Dipstick
<b>5</b>		<b>Crankshaft</b>	
5	0508 0852	Starter ring gear	Starter ring gear
5	0508 4062	Accessories	Accessories
5	0508 5000	Flywheel flange	Flywheel flange
5	0508 5004	Crankshaft access.	Crankshaft access.
5	0508 5005	Crankshaft access.	Crankshaft access.
5	0508 5006	Main bearing	Main bearing
5	0508 5132	Crankshaft	Crankshaft
5	0508 5160	Flywheel	Flywheel
<b>6</b>		<b>Connecting rod</b>	
6	0508 5083	Big end bearing	Big end bearing
6	0508 5401	Connecting rod	Connecting rod
<b>7</b>		<b>Piston</b>	
7	0508 5217	Piston	Piston
<b>8</b>		<b>Cylinder head</b>	
8	0508 1177	Valve mechan.cover	Valve mechan.cover
8	0508 2115	Regulator	Regulator
8	0508 3718	Control	Control
8	0508 4310	Cool.water passage	Cool.water passage
8	0508 5062	Installation parts	Installation parts
8	0508 5180	Cylinder head	Cylinder head
<b>9</b>		<b>Timing chest</b>	
9	0508 5022	Crankc. end cover	Crankc. end cover
9	0508 5050	Idler gear	Idler gear
9	0508 5056	Idler bearing	Idler bearing
9	0508 5058	Idler gear	Idler gear
9	0508 5086	Toothed gear	Toothed gear
9	0508 5091	Toothed gear	Toothed gear
<b>10</b>		<b>Camshaft</b>	
10	0508 5057	Support	Support
10	0508 5087	Toothed gear	Toothed gear
10	0508 5088	Fastenings	Fastenings
10	0508 5123	Camshaft	Camshaft
<b>11</b>		<b>Timing gears</b>	

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CG	ETL-No.	Designation (en)	Designation (en)
11	0508 5092	Valve drive	Valve drive
<b>14</b>		<b>Lube oil pump</b>	
14	0508 2121	Installation parts	Installation parts
14	0508 5122	Lubricat. oil pump	Lubricat. oil pump
<b>15</b>		<b>Lube oil/-cooler</b>	
15	0508 5036	Oil filter	Oil filter
15	0508 5045	Bracket	Bracket
15	0508 5046	Bracket	Bracket
15	0508 5053	Blank flange	Blank flange
15	0508 5067	Oil centrifuge	Oil centrifuge
15	0508 5139	Oil cooler	Oil cooler
<b>16</b>		<b>Oil pipes</b>	
16	0508 5001	Lubricat. oil line	Lubricat. oil line
16	0508 5015	Pressure oil line	Pressure oil line
16	0508 5042	Manifold	Manifold
16	0508 5051	Oil line	Oil line
16	0508 5052	Oil line	Oil line
16	0508 5077	Oil line	Oil line
16	0508 5078	Oil line	Oil line
16	0508 5093	Oil line	Oil line
16	0508 5129	Oil suction line	Oil suction line
16	0508 5174	Oil drain pipe	Oil drain pipe
16	0508 5178	Oil line	Oil line
16	0508 5324	Oil line	Oil line
16	0508 5325	Press.relief valve	Press.relief valve
16	0508 5370	Blanking parts	Blanking parts
16	0508 5372	Priming set assy	Priming set assy
16	0508 5520	Oil line	Oil line
16	0508 5522	Oil line	Oil line
<b>17</b>		<b>Injection pump</b>	
17	0508 1246	Indicator	Indicator
17	0508 2218	Fastenings	Fastenings
17	0508 4168	Fuel inject. pump	Fuel inject. pump
17	0508 5089	Limit stop	Limit stop
<b>18</b>		<b>Injection pump drive</b>	
18	0508 5314	Inject. pump drive	Inject. pump drive
<b>19</b>		<b>Injector</b>	
19	0508 2165	Clamping yoke	Clamping yoke
19	0508 2166	Installation parts	Installation parts
19	0508 5094	Fuel injector	Fuel injector
<b>20</b>		<b>Fuel filter</b>	
20	0508 5136	Fuel pump	Fuel pump
20	0508 5512	Fastenings	Fastenings
20	0508 5554	Fuel filter	Fuel filter
<b>21</b>		<b>Fuel pipes/fuel tank</b>	
21	0508 5128	Fuel line	Fuel line
21	0508 5177	High pressure pipe	High pressure pipe
21	0508 5200	Accessories	Accessories
21	0508 5348	Fuel line	Fuel line
21	0508 5517	Manifold	Manifold
21	0508 5518	Distributor panel	Distributor panel

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CG	ETL-No.	Designation (en)	Designation (en)
21	0508 5523	Fuel line	Fuel line
21	0508 5524	Fuel line	Fuel line
21	0508 5528	Fuel pump	Fuel pump
<b>22</b>		<b>Suction pipe/air cleaner</b>	
22	0508 5545	Filter housing	Filter housing
22	0508 9170	Service gauge	Service gauge
<b>27</b>		<b>Speed control</b>	
27	0508 3643	Controller	Controller
27	0508 5170	Governor drive	Governor drive
27	0508 5171	Regulator	Regulator
<b>34</b>		<b>Vibration damper</b>	
34	0508 5125	Fastenings	Fastenings
34	0508 5137	Vibration damper	Vibration damper
<b>36</b>		<b>Water cooler</b>	
36	0508 5103	Stack.plate cooler	Stack.plate cooler
36	0508 5345	Bracket	Bracket
<b>37</b>		<b>Cooling water pump</b>	
37	0508 5024	Cooling water pump	Cooling water pump
37	0508 5025	Cooling water pump	Cooling water pump
37	0508 5049	Raw water pump	Raw water pump
37	0508 5108	Cooling water pump	Cooling water pump
37	0508 5109	Cooling water pump	Cooling water pump
<b>38</b>		<b>Water pipes</b>	
38	0508 2417	Breather line	Breather line
38	0508 4160	Accessories	Accessories
38	0508 5031	Accessories	Accessories
38	0508 5047	Cooling water line	Cooling water line
38	0508 5081	Raw water line	Raw water line
38	0508 5095	Cooling water line	Cooling water line
38	0508 5096	Cooling water line	Cooling water line
38	0508 5097	Cooling water line	Cooling water line
38	0508 5105	Bracket	Bracket
38	0508 5147	Raw water line	Raw water line
38	0508 5149	Cooling water line	Cooling water line
38	0508 5159	Accessories	Accessories
38	0508 5173	Raw water line	Raw water line
38	0508 5226	Cooling water line	Cooling water line
38	0508 5335	Temper. controller	Temper. controller
38	0508 5349	Raw water line	Raw water line
38	0508 5504	Raw water line	Raw water line
38	0508 5553	Cooling water line	Cooling water line
<b>41</b>		<b>Exhaust manifold</b>	
41	0508 3244	Exhaust manifold	Exhaust manifold
41	0508 4036	Exhaust pipe	Exhaust pipe
41	0508 4037	Exhaust pipe	Exhaust pipe
41	0508 4142	Compensator	Compensator
<b>43</b>		<b>Turbocharger</b>	
43	0508 3286	Accessories	Accessories
43	0508 5206	Turbocharger	Turbocharger
<b>44</b>		<b>Alternator/starter motor</b>	

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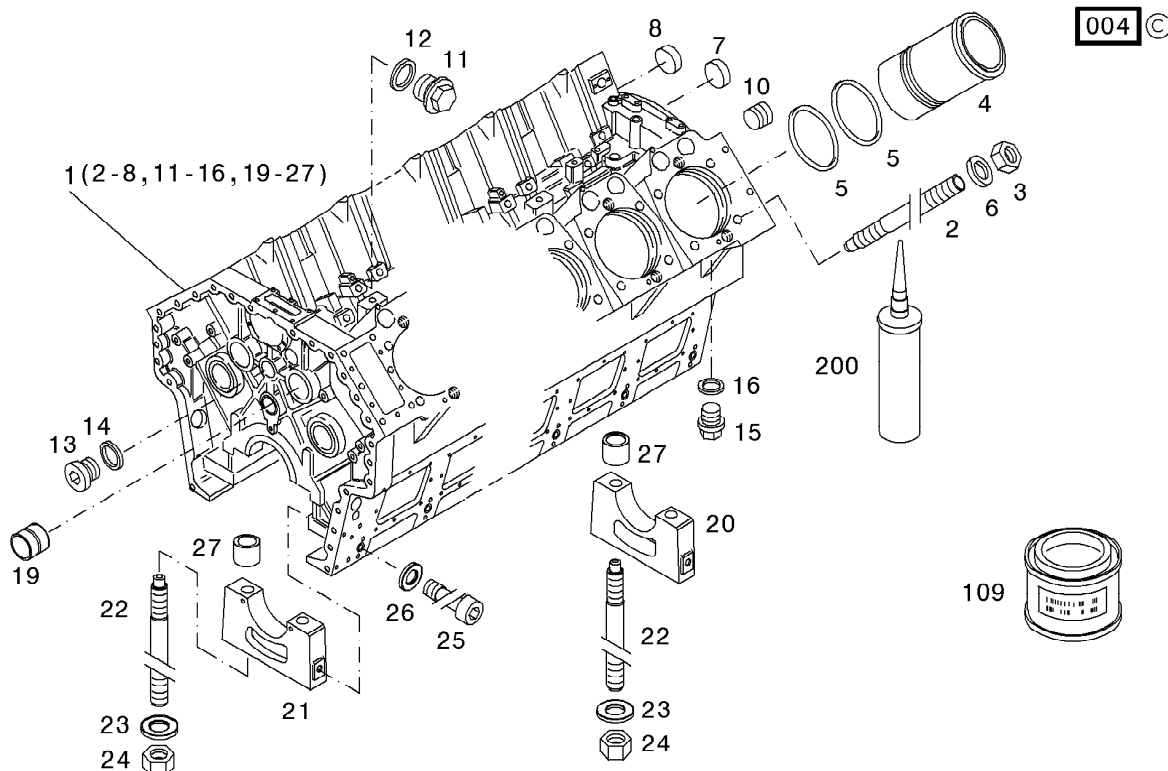
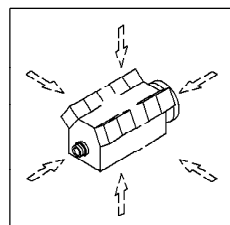
CG	ETL-No.	Designation (en)	Designation (en)
44	0506 8469	Generator	Generator
44	0508 0848	Starter motor	Starter motor
44	0508 5028	Bracket	Bracket
44	0508 5235	Driving parts	Driving parts
<b>48</b>		<b>Electrical accessories</b>	
48	0508 2234	Flow switch	Flow switch
48	0508 2506	Flow switch	Flow switch
48	0508 5154	Monitoring	Monitoring
48	0508 5175	Cable terminal box	Cable terminal box
48	0508 5197	Cabling	Cabling
48	0508 5237	Switch mounting	Switch mounting
48	0508 5241	Switch mounting	Switch mounting
48	0508 5252	Cabling	Cabling
48	0508 5301	Tacho-generator	Tacho-generator
48	0508 5541	Resist.thermometer	Resist.thermometer
48	0509 6055	Resist.thermometer	Resist.thermometer
<b>56</b>		<b>Engine shutdown</b>	
56	0508 1249	Magnet/solenoid	Magnet/solenoid
<b>57</b>		<b>V-belt guard</b>	
57	0508 5289	Protection	Protection
<b>58</b>		<b>Intercooler</b>	
58	0508 3008	Fastenings	Fastenings
58	0508 3248	Cover	Cover
58	0508 5017	Radiator bracket	Radiator bracket
58	0508 5018	Radiator bracket	Radiator bracket
58	0508 5145	Cover	Cover
58	0508 5146	Cover	Cover
58	0508 5199	Breather line	Breather line
<b>69</b>			
69	0508 3167	Turn-over gear	Turn-over gear
<b>87</b>		<b>Charge air pipe</b>	
87	0508 2251	Bush	Bush
87	0508 2252	Cover	Cover
87	0508 2282	Bush	Bush
87	0508 2485	Cover	Cover
87	0508 2950	Air guidance	Air guidance
87	0508 2951	Air guidance	Air guidance
87	0508 3028	Charge air pipe	Charge air pipe
87	0508 5130	Intake manifold	Intake manifold
<b>90</b>		<b>Set of parts</b>	
90	0508 5903	Gasket set	Gasket set
90	0508 5908	Gasket set	Gasket set

ETL no.: 0508 5131 Crankcase

Constr. Group: 01

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ETL scope: EU222495

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Speed: 1650 1/min



Item	Material	Kit	MS	VS	Quant	Unit	Ord	Designation (en)	Designation (en)	Remark
1	12302012				1	ST		Crankcase	Crankcase	WITH ITEM.... (2-8,11-16,19-27)
2	12303038	Kit !			48	ST		Stud	Stud	
3	01176614				48	ST		Hexagon nut	Hexagon nut	
4	12302057	Kit !	90	90	12	ST		Cylinder liner	Cylinder liner	
5	12027235	Kit !	10	10	24	ST		O-ring	O-ring	
6	01176709				48	ST		Plain washer	Plain washer	
7	01165835				2	ST		Core hole plug	Core hole plug	
8	01165841				3	ST		Core hole plug	Core hole plug	
10	01102140		20	20	2	ST		Screw plug	Screw plug	
11	01152105		20	20	56	ST		Screw plug	Screw plug	
12	01102146	Kit !			56	ST		Sealing ring	Sealing ring	
13	01139505				1	ST		Screw plug	Screw plug	
14	01118841				1	ST		Sealing ring	Sealing ring	
15	01110445				3	ST		Screw plug	Screw plug	
16	01124011				3	ST		Sealing ring	Sealing ring	
19	12027574	Kit !			14	ST		Bearing bush	Bearing bush	
20	12302052				6	ST		Bearing cap	Bearing cap	
21	12302053				1	ST		Bearing cap	Bearing cap	
22	12302024	Kit !			14	ST		Stud	Stud	
23	12302064	Kit !			14	ST		Plain washer	Plain washer	
24	01181415	Kit !			14	ST		Hexagon nut	Hexagon nut	
25	01180087				14	ST		Cheese head screw	Cheese head screw	
26	12302015				14	ST		Plain washer	Plain washer	
27	12302014				14	ST		Bush	Bush	

## Materials order list

Order:

User:

Date of maintenance measure:

Customer:

Reference:

Equipment: 00002201146

Date/Time: 2020.05.01 18:55:49

EL-ID: \_620D; EL-No.: 09999998

Equipment: 00002201146

Engine type: TBD12 620V

Materials for maintenance measure:

E10 -- Initial maintenance

E23 -- maintenance work as per plan

E25 -- maintenance work as per plan

E30 -- inspection

E40 -- 1st extended inspection

E50 -- 2nd extended inspection

E60 -- intermediate overhaul

E70 -- major overhaul

KT (eFHa) -- classification parts (cabotage, main engine)

KT (uFHa) -- classification parts (ocean navigation, main engine)

KT (uFHi) -- classification parts (ocean navigation, auxiliary engine)

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	3	0111 8760			0,004	0,012			Sealing ring	0508 5326	2	13	E10	_620D	0020001	3
0002000	12	1203 2892			0,038	0,456			Gasket	0508 1177	8	5	E10	_620D	0080016	12
0003000	1	0117 6793			0,005	0,005			O-seal	0508 5067	15	11	E10	_620D	0150001	1
0004000	1	0117 6796			0,005	0,005			O-seal	0508 5067	15	12	E10	_620D	0150002	1
0005000	1	1202 8214	20	20	0,083	0,083			Sealing sleeve	0508 5067	15	13	E10	_620D	0150003	1
0006000	2	1203 1812	20	20	1,450	2,900			Micro cartridge	0508 5036	15	8	E10	_620D	0150004	2
0007000	2	1203 1817			0,014	0,028			Sealing ring	0508 5036	15	4	E10	_620D	0150005	2
0008000	2	1203 1814			0,718	1,436			Strainer	0508 5036	15	7	E10	_620D	0150006	2
0009000	2	1203 1818			0,001	0,002			O-seal	0508 5036	15	6	E10	_620D	0150007	2
0010000	1	1230 3447			7,200	7,200			Air filter	0508 5545	22	1	E10	_620D	0220001	1
0011000	3	0111 8760			0,004	0,012			Sealing ring	0508 5326	2	13	E23	_620D	0020001	3
0012000	1	0117 6793			0,005	0,005			O-seal	0508 5067	15	11	E23	_620D	0150001	1
0013000	1	0117 6796			0,005	0,005			O-seal	0508 5067	15	12	E23	_620D	0150002	1
0014000	1	1202 8214	20	20	0,083	0,083			Sealing sleeve	0508 5067	15	13	E23	_620D	0150003	1
0015000	2	1203 1812	20	20	1,450	2,900			Micro cartridge	0508 5036	15	8	E23	_620D	0150004	2
0016000	2	1203 1817			0,014	0,028			Sealing ring	0508 5036	15	4	E23	_620D	0150005	2
0017000	2	1203 1814			0,718	1,436			Strainer	0508 5036	15	7	E23	_620D	0150006	2
0018000	2	1203 1818			0,001	0,002			O-seal	0508 5036	15	6	E23	_620D	0150007	2