

Job ref.	E10	E20	E25	E30	E40	E50	E60	E70	CG	Description	Action	Jobcard
	50*	500	1000	2000	4000	8000	16000	32000				
1			x	x	x	x	x	x	01	Crankcase breathing	Clean	3-1-1
2							x	x	01	All cylinder units (cylinder liners, pistons, big end bearing, valves, valve gears)	Check / service	3-2-3
3								x	04	Cylinder liner	Renew	-
4							x	x	05	Main and thrust bearings	Renew	2-7-1
5								x	05	Crankshaft rot.shaft lip seal	Renew	-
6								x	07	Piston	Renew	-
7	x								08	Screw connection charge air line cylinder head	Retighten	-
8	x		x	x	x				08	Inlet and outlet valve clearance	Check	1-1-1
9				x	x				08	Endoscope check of cylinder head and cylinder liner	Check	1-1-4
10						x	x	x	08	Inlet and outlet valves	Service	1-7-1
11								x	09	Timing chest	Check	-
12								x	10	Camshaft	Renew	-
13								x	10	Camshaft bearing	Renew	4-1-1
14								x	14	Lube oil pump	Renew	-
15	x	x	x	x	x	x	x	x	15	Lubrication oil	Renew	8-2-2
16	x	x	x	x	x	x	x	x	15	Oil filters	Service	8-10-1
17	x	x	x	x	x	x	x	x	15	Centrifugal filter	Service	8-13-1
18						x	x	x	15	Water and oil sides of oil cooler	Clean	8-8-1
19					x	x	x	x	17	Injection timing	Check	7-6-1
20					x	x	x	x	17	Drive coupling low pressure fuel feed pump	Check	7-11-1
21							x	x	17	Injection pump	Service	7-4-2
22								x	17	Injection pump	Renew	-
23	x	x	x						19	Retighten injector clamps	Retighten	7-7-1
24				x	x	x			19	Injection valves	Check	7-8-1
25							x	x	19	Injection valves	Service	7-9-1
26		x	x	x	x	x	x	x	20	Fuel filter	Service	7-10-1
27	x	x	x	x	x	x	x	x	22	Air filter	Service	6-3-11
28		x	x	x	x	x			27	Control motor speed governor	Check	-
29				x	x	x	x	x	27	Control linkage: Check setting	Check	5-4-14
30							x	x	27	Speed governor	Service	-
31		x	x	x	x	x	x	x	30	Dirt collector before air starter	Clean	-
32						x	x	x	30	Air starting valves	Service	1-11-1
33		x	x	x	x	x	x	x	30	Dirt collector in compressed air pipe	Clean	10-3-2
34						x	x	x	30	Rotary starting air distributor	Check	10-2-1
35							x	x	30	Air starter	Service	10-2-2
36					x				32	Visual inspection of compressed air container, at least every 2 years	Check	-
37						x	x	x	32	Carry out pressure test on compressed air container, at least every 4 years	Check	-
38			x	x	x	x	x	x	34	Rubber damper	Check	12-1-2
39						x	x	x	34	Viscosity damper (renew every 4 years in the case of less than 4000 operating hours/year)	Renew	12-1-1
40							x	x	34	Leaf spring damper	Service	12-1-4
41					x	x	x	x	36	Mounted heat exchanger	Service	9-10-1
42					x	x	x	x	36	Honeycomb radiator	Clean	-
43						x			36	Cooling water thermostat	Check	9-8-1
44							x	x	36	Cooling water thermostat (+ check housing)	Renew	9-8-1
45		x	x	x	x	x	x	x	37	Condition of cooling water	Check	Section 4.4
46		x	x	x	x				37	Raw water pump	Lubricate	9-7-4
47						x	x		37	Raw water pump	Service	9-7-4
48						x	x		37	Cooling water pump	Service	9-7-1/2/3
49								x	37	Cooling water pump	Renew	-
50								x	37	Raw water pump	Renew	-
51	x	x	x	x	x	x	x	x	38	Raw water filter	Clean	-
52				x	x	x	x	x	38	Preheating system	Check	9-9-1
53					x	x	x	x	38	Integrated fittings and control elements of cooling water system	Service	-
54					x	x			38	Raw water thermostat	Check	-
55						x	x	x	38	Raw water thermostat	Renew	-
56						x	x	x	43	Exhaust turbocharger	Service	6-6-1
57		x	x	x	x	x	x	x	44	Battery charge	Check	13-4-1
58		x	x	x	x	x	x	x	44	Alternator V-belts	Check	-
59				x	x	x	x	x	44	Starter	Check	13-3-1
60				x	x	x	x	x	44	Alternator	Service	13-2-1
61	x		x	x	x	x	x	x	46	Engine alignment and elastic mounting	Check	3-7-1
62		x	x	x	x	x	x	x	48	Monitoring and shut down units	Check	11-1-1/2/3/21 / 11-3-1 / 11-7-1
63		x	x	x	x	x	x	x	48	Cable for chafe marks	Check	-
64				x	x	x	x	x	52	Flexible coupling	Check	2-17-1
65					x				58	Water-side of charge air cooler (in the case of raw water cooling)	Clean	6-4-1
66						x	x	x	58	Charge air cooler water side and air side	Clean	6-4-1/2
67	x								99	External screw connections, hoses and seals	Check	-

Maintenance schedule for 604B engines with more than 2000 running hours per year

* Initial maintenance jobs 50 operating hours after commissioning of new or generally overhauled engines

Always check manual for special jobs

No	50*	E10 1/2 year	E20 1 year	E30 2 years	E40 4 years	E50 8 years	E60 16 years	E70	BG	Description	Action	Jobcard
1			x	x	x	x	x		01	Crankcase breathing	Clean	3-1-1
2						x	x		01	All cylinder units (cylinder liners, pistons, big end bearing, valves, valve gears)	Check / service	3-2-3
3								x	04	Cylinder liner	Renew	-
4						x			05	Main and thrust bearings	Renew	2-7-1
5							x		05	Crankshaft rot.shaft lip seal	Renew	-
6								x	07	Piston	Renew	-
7	x								08	Screw connection charge air line cylinder head	Retighten	-
8	x	x	x	x					08	Inlet and outlet valve clearance	Check	1-1-1
9			x	x					08	Endoscope check of cylinder head and cylinder liner	Check	1-1-4
10					x				08	Inlet and outlet valves	Service	1-7-1
11							x		09	Timing chest	Check	-
12								x	10	Camshaft	Renew	-
13							x		10	Camshaft bearing	Renew	4-1-1
14								x	14	Lube oil pump	Renew	-
15	x	x	x	x	x	x	x	x	15	Lubrication oil	Renew	8-2-2
16	x	x	x	x	x	x	x	x	15	Oil filters (at least every 500 running hrs)	Service	8-10-1
17	x	x	x	x	x	x	x	x	15	Centrifugal filter (at least every 500 running hrs)	Service	8-13-1
18					x	x	x	x	15	Water and oil sides of oil cooler	Clean	8-8-1
19				x	x	x	x	x	17	Injection timing	Check	7-6-1
20				x	x	x	x	x	17	Drive coupling low pressure fuel feed pump	Check	7-11-1
21						x	x	x	17	Injection pump	Service	7-4-2
22								x	17	Injection pump	Renew	-
23	x	x							19	Retighten injector clamps	Retighten	7-7-1
24			x	x	x				19	Injection valves	Check	7-8-1
25						x	x		19	Injection valves	Service	7-9-1
26		x	x	x	x	x	x	x	20	Fuel filter (at least every 500 running hrs)	Service	7-10-1
27	x	x	x	x	x	x	x	x	22	Air filter	Service	6-3-11
28		x	x	x	x				27	Control motor speed governor	Check	-
29			x	x	x	x	x		27	Control linkage: Check setting	Check	5-4-14
30						x	x		27	Speed governor	Service	-
31		x	x	x	x	x	x	x	30	Dirt collector before air starter	Clean	-
32					x	x	x		30	Air starting valves	Service	1-11-1
33		x	x	x	x	x	x		30	Dirt collector in compressed air pipe	Clean	10-3-2
34					x	x	x		30	Rotary starting air distributor	Check	10-2-1
35						x	x		30	Air starter	Service	10-2-2
36				x					32	Visual inspection of compressed air container, at least every 2 years	Check	-
37					x	x	x		32	Carry out pressure test on compressed air container, at least every 4 years	Check	-
38		x	x	x	x	x	x		34	Rubber damper	Check	12-1-2
39					x	x	x		34	Viscosity damper (renew every 4 years in the case of less than 4000 operating hours/year)	Renew	12-1-1
40						x	x		34	Leaf spring damper	Service	12-1-4
41				x	x	x	x		36	Mounted heat exchanger	Service	9-10-1
42				x	x	x	x		36	Honeycomb radiator	Clean	-
43					x				36	Cooling water thermostat	Check	9-8-1
44						x	x		36	Cooling water thermostat (+ check housing)	Renew	9-8-1
45		x	x	x	x	x	x		37	Condition of cooling water	Check	Section 4.4
46		x	x	x					37	Raw water pump (at least every 500 running hours)	Lubricate	9-7-4
47					x	x			37	Raw water pump	Service	9-7-4
48					x	x			37	Cooling water pump	Service	9-7-1/2/3
49							x		37	Cooling water pump	Renew	-
50							x		37	Raw water pump	Renew	-
51	x	x	x	x	x	x	x	x	38	Raw water filter	Clean	-
52			x	x	x	x	x		38	Preheating system	Check	9-9-1
53					x	x	x		38	Integrated fittings and control elements of coolingwater system	Service	-
54				x	x				38	Raw water thermostat	Check	-
55						x	x		38	Raw water thermostat	Renew	-
56					x	x	x		43	Exhaust turbocharger	Service	6-6-1
57		x	x	x	x	x	x		44	Battery charge	Check	13-4-1
58		x	x	x	x	x	x		44	Alternator V-belts	Check	-
59			x	x	x	x	x		44	Starter	Check	13-3-1
60			x	x	x	x	x		44	Alternator	Service	13-2-1
61	x		x	x	x	x	x		46	Engine alignment and elastic mounting	Check	3-7-1
62		x	x	x	x	x	x		48	Monitoring and shut down units	Check	11-1-1/2/3/21 / 11-3-1 / 11-7-1
63		x	x	x	x	x	x		48	Cable for chafe marks	Check	-
64			x	x	x	x	x		52	Flexible coupling	Check	2-17-1
65				x					58	Water-side of charge air cooler (in the case of raw water cooling)	Clean	6-4-1
66					x	x	x		58	Charge air cooler water side and air side	Clean	6-4-1/2
67	x								99	External screw connections, hoses and seals	Check	-

Maintenance schedule for 604B engines which are running between 300 and 2000 hours per year

* Initial maintenance jobs 50 operating hours after commissioning of new or generally overhauled engines

Always check manual for special jobs

No	50*	E10 1 year	E20 2 years	E30 6 years	E40 16 years	E70 16 years	BG	Description	Action	Jobcard
1			x	x	x		01	Crankcase breathing	Clean	3-1-1
2						x	01	All cylinder units (cylinder liners, pistons, big end bearing, valves, valve gears)	Check / service	3-2-3
3						x	04	Cylinder liner	Renew	-
4						x	05	Main and thrust bearings	Renew	2-7-1
5						x	05	Crankshaft rot.shaft lip seal	Renew	-
6						x	07	Piston	Renew	-
7	x						08	Screw connection charge air line cylinder head	Retighten	-
8	x		x	x			08	Inlet and outlet valve clearance	Check	1-1-1
9			x	x			08	Endoscope check of cylinder head and cylinder liner	Check	1-1-4
10							08	Inlet and outlet valves	Service	1-7-1
11						x	09	Timing chest	Check	-
12						x	10	Camshaft	Renew	-
13						x	10	Camshaft bearing	Renew	4-1-1
14						x	14	Lube oil pump	Renew	-
15	x	x	x	x	x	x	15	Lubrication oil	Renew	8-2-2
16	x	x	x	x	x	x	15	Oil filters (at least every 500 running hrs)	Service	8-10-1
17	x	x	x	x	x	x	15	Centrifugal filter (at least every 500 running hrs)	Service	8-13-1
18				x	x	x	15	Water and oil sides of oil cooler	Clean	8-8-1
19				x	x	x	17	Injection timing	Check	7-6-1
20						x	17	Drive coupling low pressure fuel feed pump	Check	7-11-1
21						x	17	Injection pump	Service	7-4-2
22						x	17	Injection pump	Renew	-
23	x						19	Retighten injector clamps	Retighten	7-7-1
24			x	x			19	Injection valves	Check	7-8-1
25						x	19	Injection valves	Service	7-9-1
26		x	x	x	x	x	20	Fuel filter (at least every 500 running hrs)	Service	7-10-1
27	x	x	x	x	x	x	22	Air filter	Service	6-3-11
28		x	x	x			27	Control motor speed governor	Check	-
29				x	x	x	27	Control linkage: Check setting	Check	5-4-14
30						x	27	Speed governor	Service	-
31		x	x	x	x	x	30	Dirt collector before air starter	Clean	-
32						x	30	Air starting valves	Service	1-11-1
33		x	x	x	x	x	30	Dirt collector in compressed air pipe	Clean	10-3-2
34		x	x	x	x	x	30	Rotary starting air distributor	Check	10-2-1
35						x	30	Air starter	Service	10-2-2
36			x	x			32	Visual inspection of compressed air container, at least every 2 years	Check	-
37			x	x	x		32	Carry out pressure test on compressed air container, at least every 4 years	Check	-
38		x	x	x	x		34	Rubber damper	Check	12-1-2
39			x	x	x		34	Viscosity damper (renew every 4 years in the case of less than 4000 operating hours/year)	Renew	12-1-1
40						x	34	Leaf spring damper	Service	12-1-4
41				x	x	x	36	Mounted heat exchanger	Service	9-10-1
42				x	x	x	36	Honeycomb radiator	Clean	-
43		x	x	x			36	Cooling water thermostat	Check	9-8-1
44						x	36	Cooling water thermostat (+ check housing)	Renew	9-8-1
45		x	x	x	x	x	37	Condition of cooling water	Check	Section 4.4
46		x	x				37	Raw water pump (at least every 500 running hours)	Lubricate	9-7-4
47				x			37	Raw water pump	Service	9-7-4
48				x			37	Cooling water pump	Service	9-7-1/2/3
49						x	37	Cooling water pump	Renew	-
50						x	37	Raw water pump	Renew	-
51	x	x	x	x	x	x	38	Raw water filter	Clean	-
52		x	x	x	x	x	38	Preheating system	Check	9-9-1
53				x	x		38	Integrated fittings and control elements of coolingwater system	Service	-
54		x	x	x			38	Raw water thermostat	Check	-
55						x	38	Raw water thermostat	Renew	-
56				x	x		43	Exhaust turbocharger	Service	6-6-1
57		x	x	x	x	x	44	Battery charge	Check	13-4-1
58		x	x	x	x	x	44	Alternator V-belts	Check	-
59		x	x	x	x	x	44	Starter	Check	13-3-1
60		x	x	x	x	x	44	Alternator	Service	13-2-1
61	x		x	x	x	x	46	Engine alignment and elastic mounting (also from generator)	Check	3-7-1
62		x	x	x	x	x	48	Monitoring and shut down units	Check	11-1-1/2/3/21 / 11-3-1 / 11-7-1
63		x	x	x	x	x	48	Cable for chafe marks	Check	-
64			x	x	x		52	Flexible coupling	Check	2-17-1
65			x				58	Water-side of charge air cooler (in the case of raw water cooling)	Clean	6-4-1
66				x	x		58	Charge air cooler water side and air side	Clean	6-4-1/2
67	x						99	External screw connections, hoses and seals	Check	-
68		x	x	x	x	x	99	Test run of engine paint	Check	-
69		x	x	x	x	x	00	Linkage of intake and discharge air louvres	Check	-

Maintenance schedule for 604B engines which are < 300 hours per year

* Initial maintenance jobs 50 operating hours after commissioning of new or generally overhauled engines

Always check manual for special jobs