

GREEN POWER PERKINS DIESEL ENGINE

1500 RPM	Type GP180P
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The Engine with integrated water cooling

Engine: 1106A-70TAG3

Technical description

- Optimized cast iron cylinder block with optimum distribution of forces
- Piston cooling for low piston temperature and reduced ring temperature
- Powerful but 7 litre naturally aspirated 6 cylinder compact Engine
- Crankshaft hardened bearing surfaces and fillets for moderate on main and big end bearings
- Keystone top compression rings for long service life
- Replaceable valve guides and valve seats
- Thermostatically controlled system with gear driven circulation pump
- Lift eyelets
- High inertia flywheel to SAE J620
- Flywheel for flexible coupling and friction clutch
- Front engine mounting brackets

Benefits

- Low noise emission, cost savings as no noise attenuation measures are required
- Long service intervals: 1000 hour oil change intervals and low fuel consumption bring savings in Operating costs
- Low installation costs
- Excellent load takeover characteristics ensure prompt power supply
- Combined oil cooling and lubrication prevents corrosion and cavitation
- High reliability and durability together with reduced maintenance requirement and wear parts

Fuel System

- Mechanically governed cassette type fuel injection pump
- Split element fuel filter

Oil System

- Spin-on full flow lub oil filter
- Wet steel sump with filler and dipstick

Control Panel

Manual or Automatic start control panel

- 12 volt Electronic shut Off Solenoid(ESOS) energised to run
- 12 volt starter motor and 12 volt 15 amp alternator with DC output
- Glow plug cold start aid and heater/starter switch
- Oil pressure and coolant temperature switches

Rating Table : The Genset 1106A-70TAG3 Engine.

Engine type	1106A-70TAG3	
Speed	min ⁻¹ rpm	1500
Frequency	Hz	50
Engine Power		
Prime power (PRP)	kVA kW	180 144
Limited time running power (LTP)	kVA kW	200 160
Fuel consumption		
110 % Load	l/hr	43.2
100 % Load	l/hr	39.8
75 % Load	l/hr	30.7
50 % Load	l/hr	19.6

PRP* kVA/KW :

Prime power is available for an unlimited number of annual hours in variable load application. A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

LTP** kVA/KW :

The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

Scope of supply :

The engine and alternator are mounted together forming a rigid monoblock, the shoulders are connected by inflexible disc connection. The mono-block is mounted on a steel base frame through silent blocks. The base frame is including a fuel tank. Starting is electric and it contains a battery. The generator monitoring system consists of a control module.

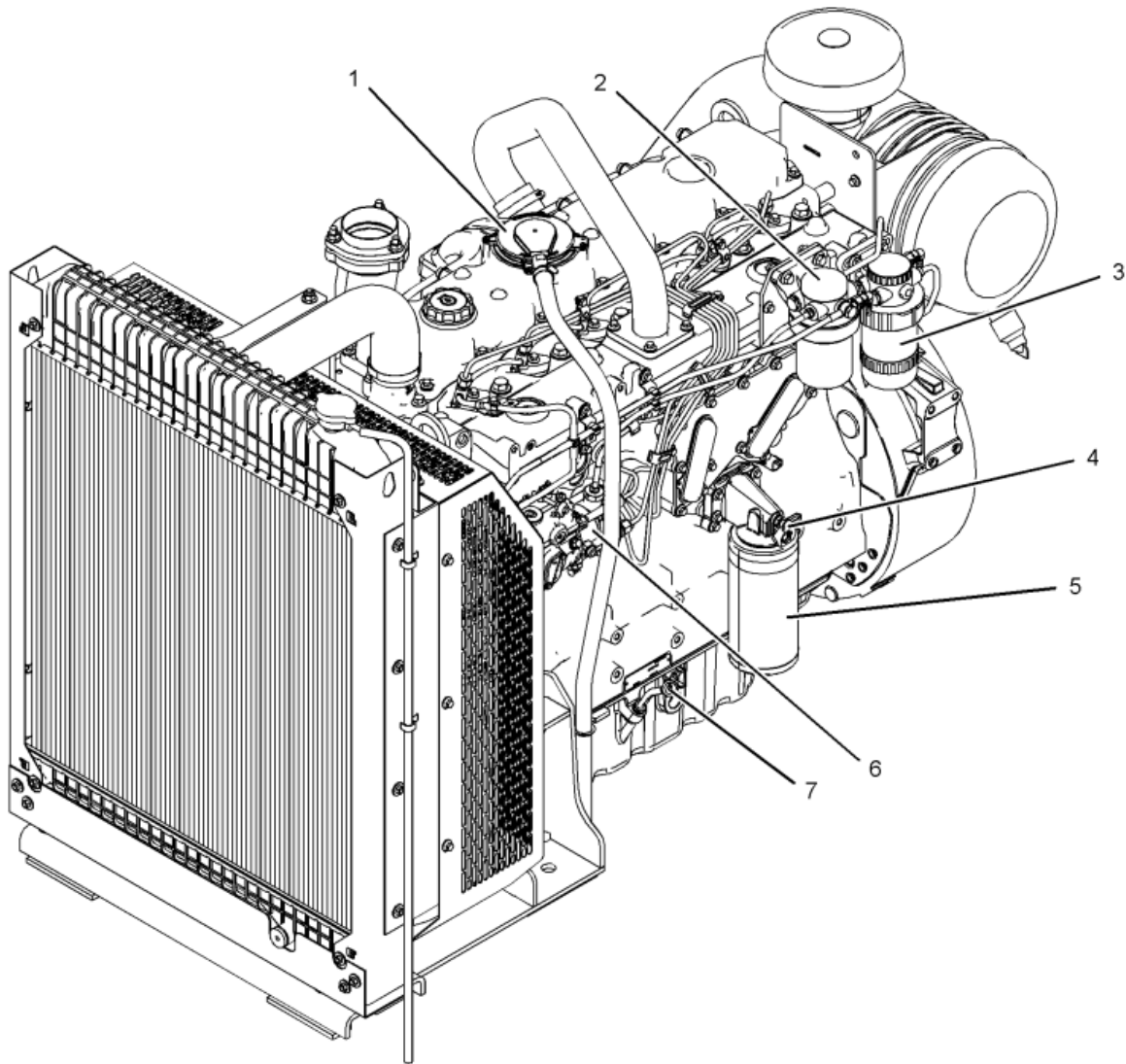
Technical Data

Engine type	1106A-70TAG3		
Numer of cylinder	6		
Bore x Stroke	mm	105 x 135	
Displacement	l	7.0	
Compression ratio	16:1		
Engine Power PRP	KW	144	
Engine Power LTP	KW	160	
Cooling Type	water		
Injection Type	Indirect		
Dry weight	Kg	788	
Max. exhaust backpressure	kPa	6	
Max standby power at rated RPM	KW/HP	144/200	
Coolant capacity	Litres	21	
Battery	Ah	250	
Oil Tank capacity	Litres	16.5	
Exhaust gas flow	m ³ /min	31.6	
Exhaust gas Temperature	°C	485	

Dimensions

Engine type		Length	Width	Height
1106A-70TAG3	mm	1763	756	1142

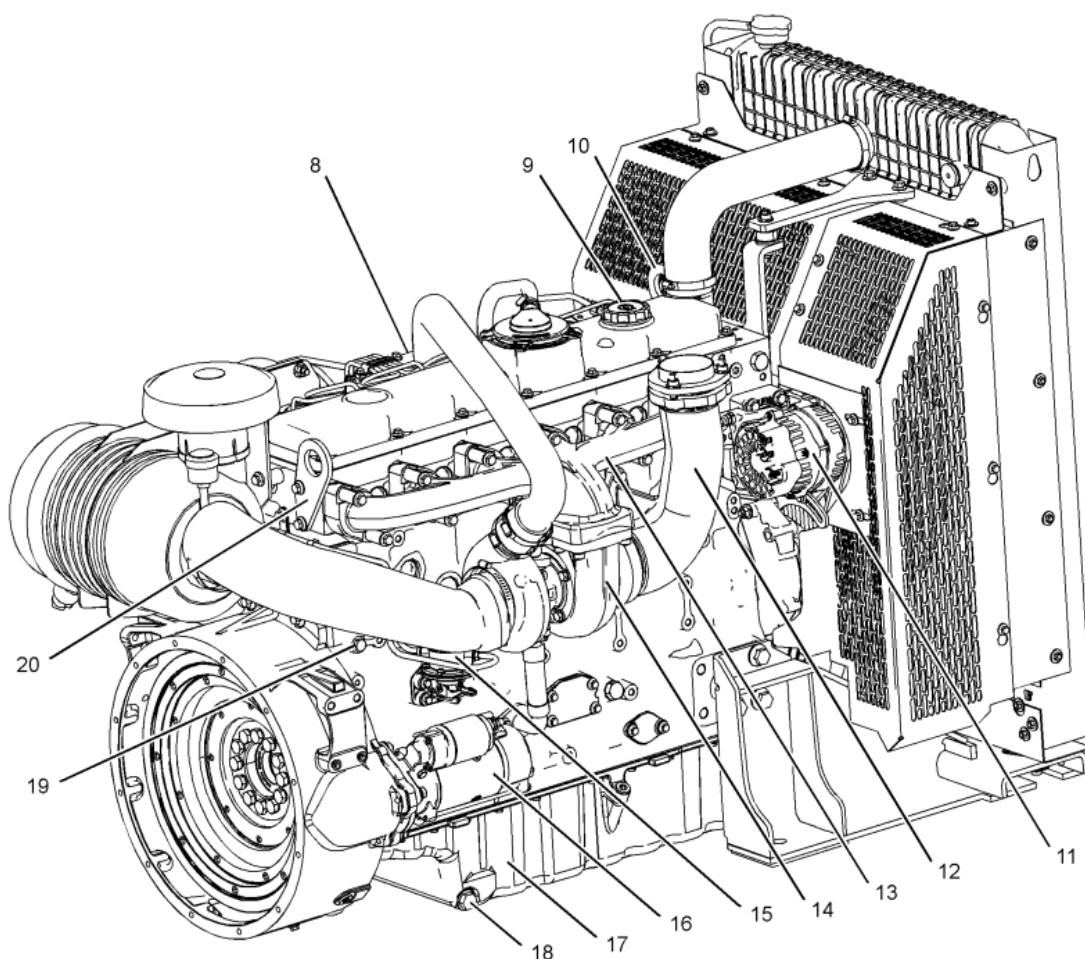
Engine Illustration



Engine Description

1106A-70TAG3

- 1 Crankcase breather
- 2 Secondary fuel filters
- 3 Primary fuel filter
- 4 Oil sampling valve
- 5 Oil filter
- 6 Fuel injection pump
- 7 Oil gauge (dipstick)



Engine Description

1106A-70TAG3

- 8 Air intake
- 9 Oil filler
- 10 Front lifting eye
- 11 Alternator
- 12 Exhaust elbow
- 13 Exhaust manifold
- 14 Turbocharger
- 15 Fuel priming pump
- 16 Starting motor
- 17 Oil pan
- 18 Drain plug (oil)
- 19 Drain plug (coolant)
- 20 Rear lifting eye