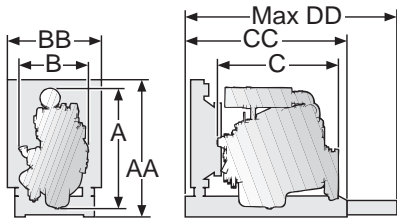


TD 1010 G

Genset Engine – Gen Pac

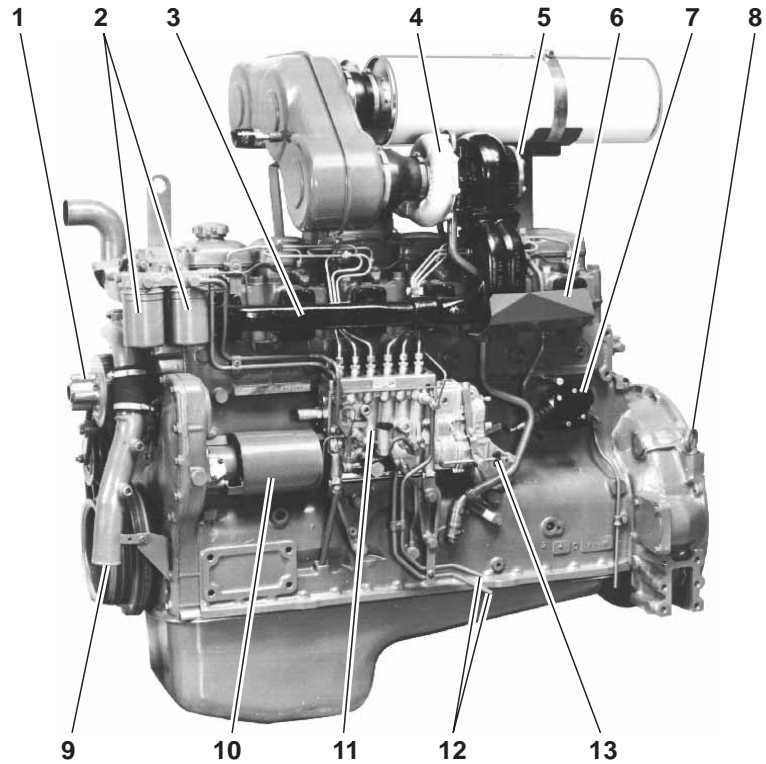
TD 1010 G

Turbocharged
 Diesel fuel
 Displacement indication (l)
 Generation
 Version
 Generator Drive



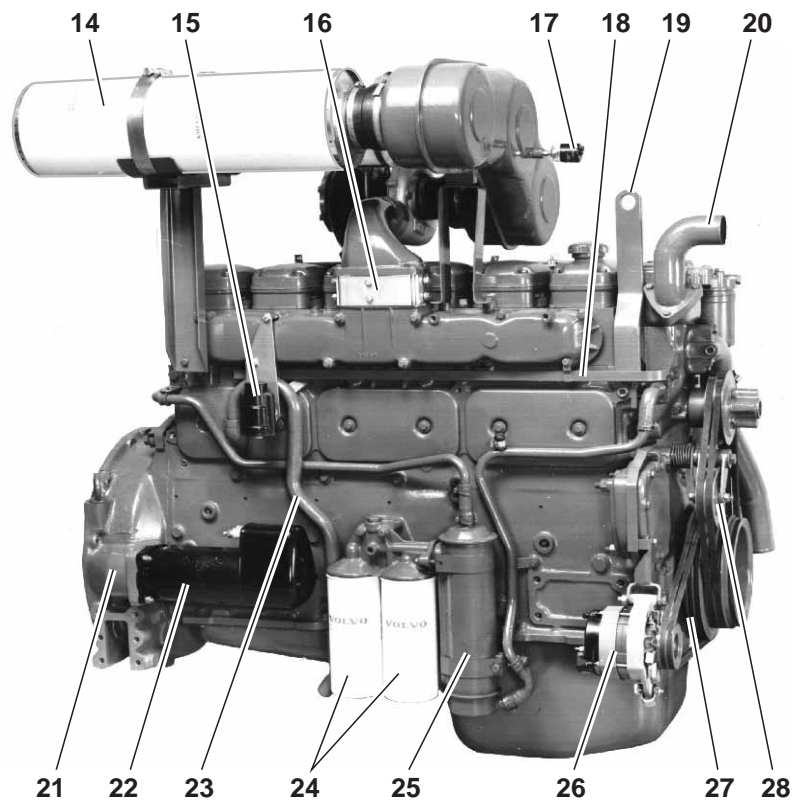
mm/in. AA = 1560/61.4
 A = 1478/58.2 BB = 1001/39.4
 B = 775/30.5 CC = 1890/74.4
 C = 1343/52.9 DD = 2846/112.0

Gen Pac – Genset Engine mounted on an expandable base frame. Complete unit with engine, radiator, radiator core guard, fan, fan and belt guard providing reduced delivery time and installation cost and simplified transportation.



TT080

1. Fan hub
2. Twin fuel filters
3. Air cooled exhaust manifold
4. Turbocharger
5. Connecting flange, exhaust line
6. Heat radiation, protection
7. Stop solenoid
8. Lift eyelet
9. Coolant pipe, inlet
10. Pump coupling guard
11. Injection pump
12. Fuel pipes for tank connection
13. Manual speed control
14. Double air filters of throw-away type
15. Relay for inlet manifold heater
16. Inlet manifold heater
17. Air restriction indicator
18. Cable iron
19. Lift eyelet
20. Coolant pipe, outlet
21. Flywheel housing SAE 1
22. Starter motor
23. Crankcase ventilation
24. Twin full flow oil filters
25. Oil cooler
26. Alternator
27. Vibration damper
28. Automatic belt tensioner



TT062

Technical data TD 1010 G

Volvo Penta reserves the right to make changes at any time, without notice, as to technical data, prices, materials, standard equipment, specifications and models, and to discontinue models.

General

In-line four-stroke diesel engine with direct injection

Turbocharged		Bore	120.65 mm / 4.75 in		
Number of cylinders	6	Stroke	140 mm / 5.51 in		
Displacement, total	9.60 liters / 586 in ³	Compression ratio	14.3:1		
Firing order	1-5-3-6-2-4	Dry weight, kg/lb Gen Pac	1230/2710	Engine only	990/2181
Rotation direction, anti-clockwise viewed towards flywheel		Wet weight, kg/lb Gen Pac	1280/2820	Engine only	1025/2258

TD 1010 G	Speed, rpm	1500	1800
Performance	Test no.	20000026	20000027
Prime Power with fan	kW / hp	176 / 239	196 / 261
Continuous Standby Power with fan	kW / hp	180 / 245	203 / 276
Maximum Standby Power with fan	kW / hp	198 / 269	223 / 303
Mean piston speed	m/s / ft/sec	7.0 / 23.0	8.4 / 27.6
Effective mean pressure at Prime Power	MPa / psi	1.52 / 220	1.40 / 204
Max combustion pressure at Prime Power	MPa / psi	12.5 / 1810	13.0 / 1890
Total mass moment of inertia, J (mR2)	kgm ² / lbft ²	2.54 / 60.3	

Lubrication system

Lubricating oil consumption at			
Prime Power	liter/h / US gal/h	0.12 / 0.032	0.14 / 0.037
Maximum Standby Power	liter/h / US gal/h	0.15 / 0.039	0.17 / 0.045
Oil system capacity including filters	liters	25	
Oil change interval			
CD oil quality	h	200	
VDS oil quality	h	400	

Fuel system

Specific fuel consumption at			
25% of Prime Power	g/kWh / lb/hph	245 / 0.392	260 / 0.416
50% of Prime Power	g/kWh / lb/hph	218 / 0.349	221 / 0.353
75% of Prime Power	g/kWh / lb/hph	209 / 0.334	211 / 0.337
100% of Prime Power	g/kWh / lb/hph	210 / 0.340	210 / 0.340
Specific fuel consumption at			
25% of Maximum Standby Power	g/kWh / lb/hph	241 / 0.391	246 / 0.399
50% of Maximum Standby Power	g/kWh / lb/hph	214 / 0.347	218 / 0.353
75% of Maximum Standby Power	g/kWh / lb/hph	209 / 0.339	210 / 0.340
100% of Maximum Standby Power	g/kWh / lb/hph	214 / 0.347	215 / 0.348

Intake and exhaust system

Air consumption at			
Prime Power (at 27 °C)	m ³ /min / cfm	12.5 / 427	15.5 / 547
Maximum Standby Power (at 27 °C)	m ³ /min / cfm	13.0 / 458	16.8 / 595
Max allowable air intake restriction	kPa / In wc	5 / 20.1	5 / 20.1
Heat rejection to exhaust at			
Prime Power	kW / BTU/min	163 / 9274	169 / 9610
Maximum Standby Power	kW / BTU/min	179 / 10200	208 / 11800
Exhaust gas temperature after turbine at			
Prime Power	°C / °F	570 / 1060	510 / 950
Maximum Standby Power	°C / °F	605 / 1120	560 / 1040
Max allowable back--pressure in exhaust line	kPa / In wc	5 / 20.1	7 / 28.1
Exhaust gas flow at			
Prime Power	m ³ /min / cfm	36.2 / 1277	44.0 / 1553
Maximum Standby Power	m ³ /min / cfm	40.1 / 1418	49.6 / 1753

Cooling system

Heat rejection radiation from engine at			
Prime Power	kW / BTU/min	14 / 797	16 / 906
Maximum Standby Power	kW / BTU/min	16 / 910	18 / 1020
Heat rejection to coolant at			
Prime Power	kW / BTU/min	107 / 6088	114 / 6460
Maximum Standby Power	kW / BTU/min	119 / 6770	135 / 7680
Fan power consumption	kW / hp	6 / 8	11 / 15

Power Standards

The engine performance corresponds to ISO 3046, BS 5514 and DIN 6271. The technical data applies to an engine without cooling fan and operating on a fuel with calorific value of 42.7 MJ/kg (18360 BTU/lb) and a density of 0.84 kg/litre (7.01 lb/US gal, 8.42 lb/imp gal), also where this involves a deviation from the standards. Power output guaranteed within 0 to +2 % at rated ambient conditions at delivery. Ratings are based on ISO 8528. Engine speed governing in accordance with ISO 3046/IV, class A1 and ISO 8528-5 G2 (G3 with electronic speed governor)

Rating Guidelines

PRIME POWER rating corresponds to ISO Standard Power for continuous operation. It is applicable for supplying electrical power at variable load for an unlimited number of hours instead of commercially purchased power. A 10 % overload capability is available for this rating. CONTINUOUS STANDBY POWER rating corresponds to ISO Power. It is applicable for supplying standby electrical power at variable load for an unlimited number of hours in the event of normal utility power failure. A 10 % overload capability is available for this rating. MAXIMUM STANDBY POWER rating corresponds to ISO Standard Fuel Stop Power. It is applicable for supplying standby electrical power at variable load in areas with well established electrical networks in the event of normal utility power failure. No overload capability is available for this rating.