

1000 & 1100 Series with Electronic Ignition

Produced by Kemper en Van Twist Diesel B.V.

Based on the Perkins 1000 & 1100 Series diesel engines

1104-E44SI 1006-E6SI

67.7 kWm 2400 rev/min (LPG)

90.4 kWm 2600 rev/min (LPG)

The Perkins 1000 Series 6 cylinder gas engine range is now further extended with the addition of the 1104-E44SI. Both spark ignited engines are equipped with Electronic Ignition and specifically developed to operate using Liquid Petroleum Gas (LPG) or Compressed Natural Gas (CNG).

Sharing the same compact profile as the new 4 cylinder 1100 Series diesel engines, this latest addition inherits all the in-built reliability and durability of the range while operating quietly and cleanly on gas. The Perkins 1006-E6SI and 1104-E44SI are the ideal first choice for Materials Handling equipment manufacturers especially those requiring both diesel and LPG-fuelled options without additional installation costs. In addition, the inherent heavy-duty capability of the diesel engine provides total operating versatility to many other types of equipment. For stationary, mobile and even marine use the CNG engines are the reliable power source for many thousands of hours trouble free use.

Reliable power

Benefiting from the excellent Pedigree of Perkins 4 and 6 cylinder engines, the new 1104-E44SI offers inbuilt reliability and durability derived from the proven 1100 Series family of diesel engines.

The 1006-E6SI is lately equipped with the new Electronic Ignition providing even more reliability.



Production line

Quiet and clean

With the increasing sensitivity to environmental issues especially in the field of Material Handling in confined spaces, the Perkins Gas engine provides the low exhaust emissions expected of a gas fuelled engine and also benefits from the inherent quiet combustion process which reduces operating noise.

Cost efficient Installation

With its family derivation in the 1000 and 1100 Series diesel engine, the 1006-E6SI and 1104-E44SI provide a simple change-

over between diesel and gas installation, allowing the equipment manufacturer the possibility of offering alternatives without major installation design alterations.

Easy low cost maintenance

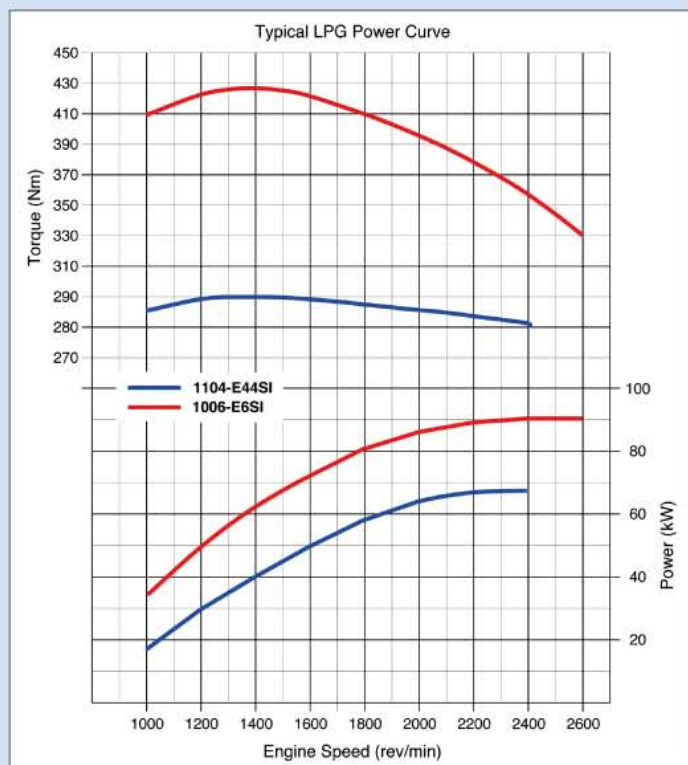
Quick easy and economical maintenance is made possible by the convenient positioning of service points for easy accessibility.

The new Electronic Ignition has improved the fuel consumption considerable and has reduced the number of serviceparts.

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Performance data	Gross intermittent	Speed rev/min
1104-E44SI		
Power (kW/hp)	67.7/92	2400
Torque (Nm)	290	1350
1006-E6SI		
Power (kW/hp)	90.4/123	2600
Torque (Nm)	426	1500

1000 & 1100 Series Gas Engines with Electronic Ignition



Engine Specification

The gas engines will be supplied as a built engine kit that includes manifolds but without a gas converter/regulator or carburettor. Kemper en Van Twist will support each new customer by the choice of a proprietary fuel management system. Individual engine specifications can be tailored exactly to an application need with choices from the following option groups:

- Flywheel
- Flywheel housing
- Starter motor
- Alternator
- Lubricating oil sump
- Lubricating oil filter
- Lubrication oil breather
- Front end drives
- Fans and extensions
- Fan drive
- Engine mountings



1104-E44SI



1006-E6SI

General Data

	1104-E44SI	1006-E6SI
Engine configuration	4 cyl. vertical inline	6 cyl. vertical inline
Aspiration	Natural	Natural
Combustion system	Spark ignited	Spark ignited
Ignition control (12V)	Gill	Gill
Ignition coils (12V)	Beru	Beru
Bore and stroke	105mm/127mm	100mm/127mm
Displacement	4.4 litres	6 litres
Compression ratio	Dependent on gas	Dependent on gas
Firing order	1.3.4.2	1.5.3.6.2.4
Rotation	Anticlockwise viewed on flywheel	Anticlockwise viewed on flywheel
Cooling system	Liquid	Liquid
Cooland capacity (engine only)	7 litres	14,9 litres
Engine Weight (dry, fan to flywheel)	340 kg	550 kg

Note: Engine weight is approximate. Total weight will depend on final specification.

Gaseous Emissions Perkins (LPG) vs Present and Future European Limits

