



Compliant to Tier 3 / Stage IIIA emissions, the 1106D-E66TA is the latest addition to the common platform concept of 1100 Series diesel engines. Assembled on a new high technology production line, this ultra-clean engine will provide a superior replacement for the 1106C-E60TA Tier 2 / Stage II engine. Frequent computerised checks during the production process ensure high build quality excellence is maintained.

The new engine boasts considerable increases to delivered power, torque and noise reduction. These have been achieved through changes to the manifold and combustion areas, turbocharger geometry, increased cylinder displacement and significantly, the inclusion of a high pressure, common rail fuel system. This new engine incorporates proven components of Caterpillar ACERT™ technology.

Focusing on the common platform theme, changes to engine envelope dimensions and connection points have been kept to a minimum. Design consideration has also been incorporated to facilitate the next emissions change to Tier 4 / Stage IIIB.



# 1100 Series 1106D-E66TA

89-186 kW/119-250 bhp

#### Powered by your Needs

The Perkins 1106D-E66TA delivers up to 186 kW (250 bhp) and over 1000 Nm (770 lb-ft) of torque, providing greater productivity through an improved power to weight ratio. The availability of a large range of build options enables the product to be tailored to specific customer needs. Options include a new SAE B PTO, providing up to 63 kW (85 hp).

# State of the Art Design

The 1106D utilises proven components of Caterpillar ACERT™ technology. This provides excellent fuel economy and low heat rejection, allowing customers to use a more compact cooling group.

#### Worldwide Power Solution

The 1106D has been designed to be worldwide fuel tolerant, including kerosene, jet aviation fuel and 5% biofuel (RME). Options are available to meet local market needs.

#### Reduced Noise

The 1106D has been designed to take noise out at the source. Engine sound levels have been reduced up to 5dB(A). The benefits can be seen throughout the speed range in both objective and subjective sound assessments. The 1106D operates under 88dB(A) at full load\*.

#### Low Installation Costs

The Perkins 1106D is a new addition to the Perkins common platform of engines, maintaining the same package size and variety of hook-up points as the Tier 2 / Stage II 1106C-E60TA. This commonality reduces the cost impact for the customer during the change over process.

### World Class Product Support

At Perkins we are constantly researching, developing and investing in our products and services. Total worldwide support is provided through a global network of distributors and service outlets, providing access to over 50,000 parts and exchange units 24 hours a day, 365 days a year. This support is enhanced by the TIPSS (The Integrated Parts and Service System). TIPSS enables customers to electronically specify and order parts as well as service 1106D engines with online guides and service tools.

#### **Lower Operating Costs**

The 1106D maintains Tier 2 / Stage II fuel economy. This will allow many customers to keep existing fuel tanks, avoiding the need for costly redesign. Service intervals are set at 500 hours as standard and Perkins provides comprehensive warranty cover for two years (up to 3000 hours), with three years on major engine components. A low usage warranty package is also available.

### Long Term Power Solution

The 1106D range has been designed to fully comply with stringent EPA Tier 3 / EU Stage IIIA emissions regulations, providing an emissions compliant power solution for the future.

\*Average sound pressure levels derived from ISO 6778:1995

# 1100 Series 1106D-E66TA

## **Engine Options**

- Engine ratings
- SAE B PTO Drive
- Timing case and gear driven auxiliaries
- Flywheel housings
- Flywheel and starter rings
- Oil filter positions -
- Adapter plates
- Starter motors
- Fan drives and locations
- Sound isolated lubricating oil sumps
- Lubricating oil filters and breathers
- Front-end drives
- Alternators
- Belt driven auxiliaries
- Induction manifolds

Exhaust manifolds				
Fuel filter positions	89 (119)	2200	545	1400
Cold start aids	95 (128)	2200	587	1400
Engine mountings	108 (145)	2200	651	1400
Power and torque curve tailoring	116 (155)	2200	683	1400
Cooling packs	129 (173)	2200	695	1400
Control panel	130 (174)	2500	695	1400
Air compressor	136 (182)	2200	802	1400
	140 (188)	2200	890	1400
	144 (193)	2200	846	1400
eneral Data	146 (196)	2200	872	1400
CITCI ai Dala	151 (202)	1800	922	1400

### Ge

Number of cylinders Vertical in-line 6 cylinder Bore and stroke 105 mm x 127 mm

Displacement 6.6 litres

Turbocharged air-to-air aftercooling Aspiration

Cycle 4 stroke Combustion system Direct injection Compression ratio 16.2:1

Rotation Anti-clockwise viewed on flywheel

Cooling system Liquid

Dimensions Length 929 mm

> Width 668 mm Height 797 mm

Dry weight 506 kg

Final weight and dimensions will depend on completed specification

Perfomance Data (bhp)	Rev/min	Torque Nm	Peak Torque Rev/min
89 (119)	2200	545	1400
95 (128)	2200	587	1400
108 (145)	2200	651	1400
116 (155)	2200	683	1400
129 (173)	2200	695	1400
130 (174)	2500	695	1400
136 (182)	2200	802	1400
140 (188)	2200	890	1400
144 (193)	2200	846	1400
146 (196)	2200	872	1400
151 (202)	1800	922	1400
151 (202)	2200	922	1400
158 (212)	2200	932	1400
168 (225)	2200	986	1400
176 (236)	2200	951	1500
186 (249)	2200	1050	1400
205 (275)*	2200	950	1400
>205 (>275)**	2900	952	1400



Perkins Engines Company Limited

Peterborough PE1 5NA United Kingdom Telephone +44 (0)1733 583000 Fax +44 (0)1733 582240

www.perkins.com

Distributed by

All information in this document is substantially correct at time of printing and may be altered subsequently Publication No.1794/05/09 Produced in England ©2005 Perkins Engines Company Limited