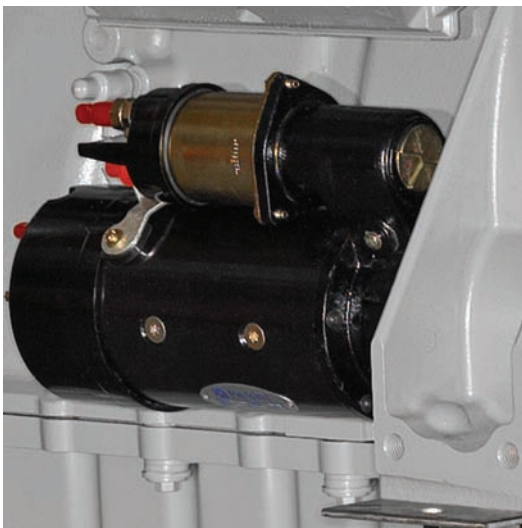




2000 Series



The heart of every...
great machine

2000 Series range overview

The Perkins 2000 Series is a range of 13, 15 and 18 litre diesel engines providing prime and standby power from 300-700 kVA at 1500 rpm, and 275-600 kWe at 1800 rpm. They have been developed to meet the tough demands of the power generation industry, and are uncompromising in the reliability and superior performance they offer to our customers.

The success of the 2000 Series reflects Perkins commitment to develop a power solution which meets the requirements of our customers and the needs of the environment. These turbocharged, air-to-air charge-cooled units offer exceptional fuel consumption, low emissions and excellent service access features, delivered in a compact size.

Our customers require a big return on investment when they purchase Perkins engines. This is reflected in the care package and support we offer them through our Global Product Support network. It gives our customers complete peace of mind knowing their engines are maintained to the highest standards by our engine experts - wherever they are located in the world.

By listening to our customers, Perkins continues to build on its global reputation as a market leader for the provision of diesel engines to the power generation industry.



Economic, durable, clean operation



Product features

- In-line 6 cylinder
- Turbocharged, air-to-air charge-cooled
- Available as either ElectropaK or Fan-to-Flywheel specification
- Mechanically actuated, electronically controlled unit injectors (MEUI system) with full-authority electronic control giving governing to ISO 8528 class G3
- 'Ecoplus' fuel filters with replaceable elements and primary water/fuel separator
- 'Ecoplus' oil filter with integral oil cooler and filter header
- Gear driven coolant pump, engine-mounted belt-driven fan and mounted air filter designed for ambient conditions up to 50°C
- Available in 50 Hz and 60 Hz variants
- Developed using the latest engineering techniques and finite element analysis
- Mechanically operated unit fuel injectors with advanced electronic control give exceptional, low fuel consumption
- High compression ratio gives clean, rapid starting in all conditions
- Exceptional power to weight ratio and compact size gives optimum power density for ease of installation and cost effective transportation
- Excellent service access for ease of maintenance

2206A/C/D

- 250 to 450 kVA
- 13 litre

Emissions

- 'A' Unregulated
- 'C' EU2007 Stage 2 certified / 1/2 TA Luft capable
- 'D' EPA Tier III certified

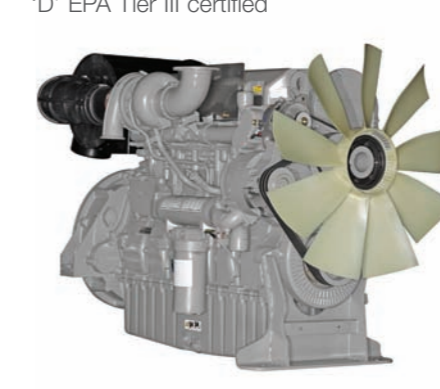


2506A/C/D

- 350 to 687 kVA
- 15 litre

Emissions

- 'A' Unregulated
- 'C' EU2007 Stage 2 certified / 1/2 TA Luft capable, or EPA Tier II certified
- 'D' EPA Tier III certified



2806A/C

- 450 to 750 kVA
- 18 litre

Emissions

- 'A' Unregulated
- 'C' EU2007 Stage 2 certified / 1/2 TA Luft capable, or EPA Tier II certified



Customer benefits

Power

Single-piece cast iron cylinder head features four valves-per-cylinder, with a centrally located unit injector for improved volumetric efficiency and reduced emissions. Variable injection timing and duration reduce emissions and optimise load acceptance and fuel consumption.

Package size

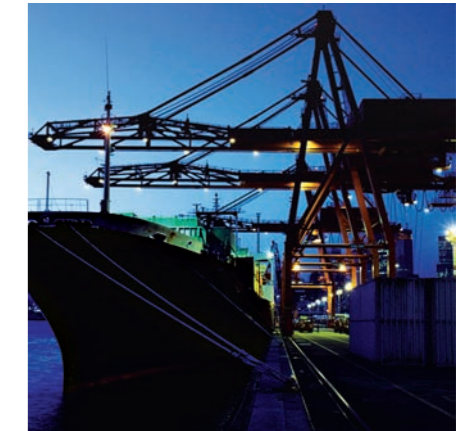
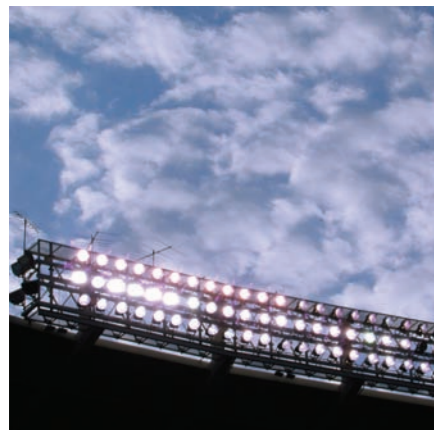
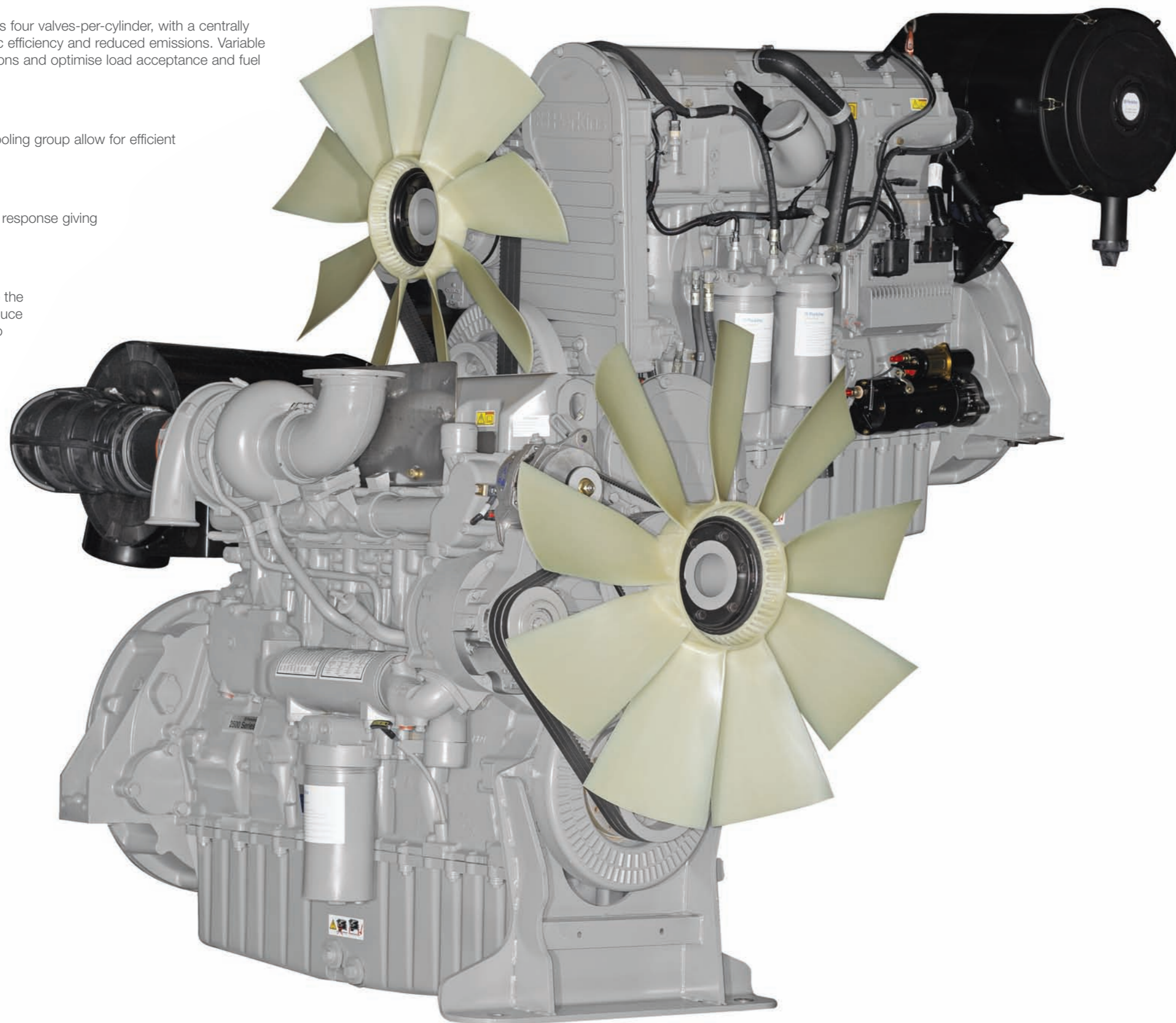
ElectropaK specifications with optimised cooling group allow for efficient packaging in customer application.

Load acceptance

High efficiency turbochargers provide rapid response giving excellent load acceptance characteristics.

Noise

The use of composites on components like the sump, top cover, and timing gear cover reduce the noise signature of the engine whilst also helping to reduce overall engine weight.



Engine protection

Ecoplus filters with reusable canisters and replaceable biodegradable elements allow for clean, easy maintenance, whilst improving engine protection and allowing for longer oil change intervals with a low environmental impact.

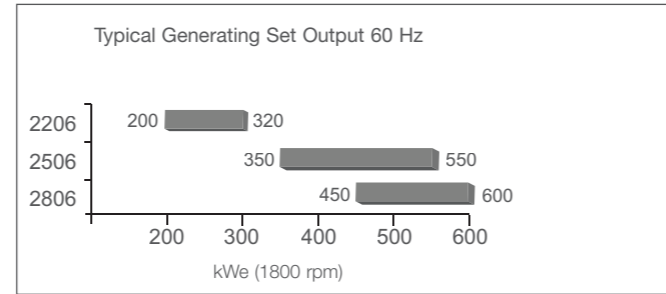
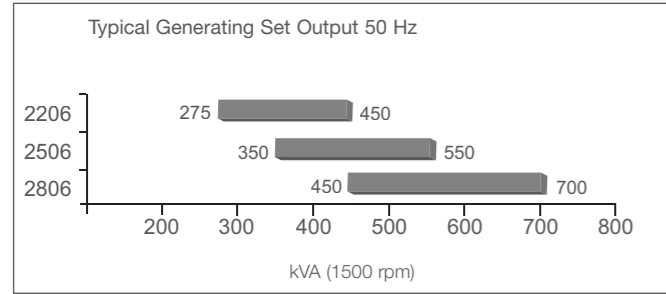
Engine control

Full authority electronic control providing governing to ISO 8528-5 class G3, TIPSS data link and full engine protection.

Worldwide power solution

Perkins product support ensures engine expertise is available throughout the world and around the clock. Surpassing customer's needs and keeping Perkins powered machines productive.

Engine power range



Engine ratings

50Hz 1500 rpm	Baseload		Prime		Standby	
	kWe	kVA	kWe	kVA	kWe	kVA
2206A-E13TAG2*	220	275	280	350	320	400
2206A-E13TAG3*	240	300	320	400	360	450
2206C-E13TAG2*	220	275	280	350	320	400
2206C-E13TAG3*	240	300	320	400	360	450
2506A-E15TAG1*	280	350	364	455	400	500
2506A-E15TAG2*	320	400	400	500	440	550
2506C-E15TAG1*	280	350	364	455	400	500
2506C-E15TAG2*	320	400	400	500	440	550
2806A-E18TAG1A	360	450	480	600	528	660
2806A-E18TAG2	400	500	520	650	560	700
2806C-E18TAG1A	360	450	473	591	520	650

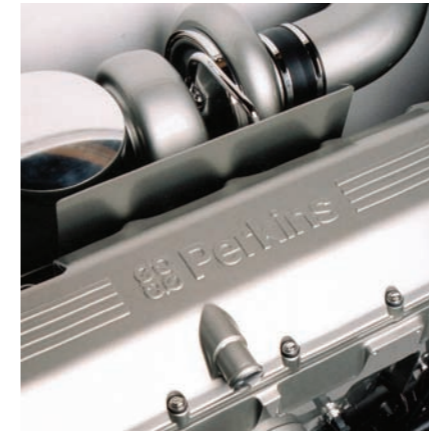
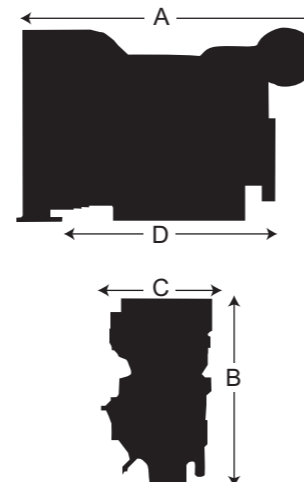
60Hz 1800 rpm	Baseload		Prime		Standby	
	kWe	kVA	kWe	kVA	kWe	kVA
2206A-E13TAG5*	200	250	256	320	280	350
2206A-E13TAG6*	220	275	280	350	320	400
2206D-E13TAG2*	200	250	256	320	280	350
2206D-E13TAG3*	220	275	280	350	320	400
2506A-E15TAG3*	350	438	410	513	450	563
2506A-E15TAG4*	400	500	455	569	500	625
2506C-E15TAG3*	400	500	455	569	500	625
2506C-E15TAG4**	-	-	-	-	550	687
2506D-E15TAG1*	350	437.5	400	500	450.4	563
2806A-E18TAG1A*	-	-	500	625	550	688
2806A-E18TAG3	450	562	550	688	600	750
2806C-E18TAG3	450	563	550	688	600	750

Notes

- * Baseload ratings are under development and will be available at a later date.
- ** Emergency Standby Power only.
- All ratings are for guidance only, please refer to the specific engine technical data sheet for final powers.
- All engines available as standard in ElectropaK specification including radiator, pipework, guards, belts, hoses and clamps.

General engine data

	2206	2506	2806
Configuration	In-line 6 cylinder	In-line 6 cylinder	In-line 6 cylinder
Cycle	4 stroke	4 stroke	4 stroke
Bore/Stroke	130/157 mm	137/171 mm	145/183 mm
Capacity	12.5 litres	15.2 litres	18.1 litres
Combustion system	Direct injection	Direct injection	Direct injection
Induction system	Turbocharged, air-to-air charge-cooled	Turbocharged, air-to-air charge-cooled	Turbocharged, air-to-air charge-cooled
Cooling system	Water-cooled	Water-cooled	Water-cooled
Length (A)	2440 mm	2657 mm	2545 mm
Height (B)	1617 mm	1718 mm	1807 mm
Width (C)	1120 mm	1120 mm	1536 mm
Length (D)			2050 mm



Standard specification

- Mounted air filter
- Mechanically actuated electronically controlled unit fuel injectors with full authority electronic control
- Governing to ISO 8528-5 class G3 with isochronous capability
- Replaceable 'Ecoplus' fuel filter elements with primary filter/water separator
- Fuel cooler
- Wet sump with filler and dipstick
- Full-flow replaceable 'Ecoplus' filter
- Gear-driven circulating water pump
- Mounted belt-driven pusher fan
- Radiator incorporating air-to-air charge cooler (supplied loose)
- System designed for ambients up to 50°C
- 24V starter motor and 24V 70 amp alternator with DC output
- ECM (Electronic Control Module) mounted on engine with wiring looms and sensors
- 3 level engine protection system
- High inertia flywheel
- Front engine mounting bracket
- User Handbook and Parts Manual
- Customer harness interface connector kit

Options

- Second electric starter motor
- Closed circuit breather (2500 Series)
- Immersion heaters 110V or 240V
- Additional speed sensor
- Coolant temperature switch/sender
- Oil pressure switch/sender
- 5 metre customer harness
- Fuel cooler (delete option)
- Air cleaner rain hood
- Gloss paint



Extended Service Contract (ESC)

Extended Service Contracts (ESC) protect you from the stress that unexpected repair work brings to your life by covering the costs of getting your engine up and running again. Unlike other extended warranties, Perkins Platinum ESC protects you against all component part failures.

Purchase peace of mind from only 13p / \$0.23 / €0.19 a day and let an ESC make your dreams a reality.



Saving you from unexpected repair bills

Why buy an Extended Service Contract?

- No surprises - Total protection from unexpected repair costs (parts, labour and travel)
- Enjoy longer lasting product support from Perkins global network
- Genuine Perkins parts ensure continued engine performance
- Highly trained technicians carry out all repairs
- Transferable coverage should you sell your machine

Cost effective comprehensive coverage

- Flexible coverage provides the right level of protection for your Perkins Engine
- Total cost management system
- Coverage can be extended to 2 years/1,000 hours right up to 5 years/8,000 hours
- You can buy an ESC at anytime during standard warranty – even the last day!

Platinum coverage

- Complete protection against all defective part failures
- Covers labour and travel costs
- Free software upgrades

Gold coverage

- Safeguards you against almost all part failures
- Covers labour and travel costs



Purchased in minutes, protected for years

Protecting you from unexpected costs

If the worst happened, would you have the money available to cover the cost of an unexpected failure? With an ESC you wouldn't need to worry.

Supporting you every step of the way

Each Perkins Distributor has highly trained and experienced Perkins Product Support Service Technicians, equipped and available around the clock to get your engine running again with the minimum of downtime. Buying an ESC means you get all this for free. No hassles. No worries. Job done.

How do I purchase an Extended Service Contract?

Quickly and simply. Contact your local Perkins Distributor now, and they can provide you with a quote in minutes. You can locate your nearest Perkins Distributor by visiting www.perkins.com

What's not covered by an ESC?

- The costs of normal maintenance or regular servicing of your Perkins engine
- Any accessories or proprietary equipment not fitted by Perkins
- Costs for the repair/replacement of any machine component that has failed as a consequence of a Perkins engine failure

For full details of all exclusions please contact your local Perkins Distributor.



Global Product Support

Wherever it is required in the world, Perkins product support is designed to keep a Perkins engine running. We recognise the importance of maximising engine productivity to fulfil our customer's needs, hence our goal to be the world leader in global product support for engines.

Our network are the engine experts when it comes to the full Perkins range. Perkins trained distributors have TIPSS (The Integrated Product Support Solution) suite of web enabled tools at their fingertips, providing them with the very latest, up-to-date real time information. So whether it's for parts identification and ordering, engine fault diagnosis or technical information, the Perkins distributor can complete the job to Perkins stringent standards, first time, worldwide.

From cradle to grave, Perkins has the solutions to meet customer needs. From standard maintenance, to comprehensive repair or complete overhaul, a cost effective solution is available whatever the age or condition of the Perkins engine. Perkins OE specification parts also come with a 12 month warranty, providing the best quality at the lowest possible cost.

Fully dedicated to looking for innovative solutions to industry issues, Perkins is working hard to ensure continuity of component supply. The exchange range offers remanufactured parts, giving good as new quality parts, from reworked core. A sustainable proposition, at the right price and all this with a reduced impact on the environment.



ESC

To give complete peace of mind to the machinery user, Perkins also offer Extended Service Contracts that take the worry out of engine ownership. Flexible coverage can be taken out for up to 8,000 hours of engine service, giving total protection against unexpected repair costs.

Ecoplus

Clean Change System Technology
Ecoplus exclusive design and construction provides an easy and cleaner solution for replacing filters. This unique filtration gives a higher performance solution which promotes better engine protection and lower running costs.

Oil Filtration

Ecoplus oil flow is the reverse of conventional spin-on or element filters. Dirt and abrasive particles are captured on the inside of the element ensuring:

- Canister remains clean
- Replacement and disposal of used filters is simple and hassle free
- Oil filtration to 35 microns

Ecoplus oil filtration system has a unique canister and filter head design incorporating:

- Drain plug - no spillage or mess
- Heavy duty construction - impact resistant
- Square drive 'cast in' - simple canister removal
- 'Quick lock' thread design - ensures the canister cannot be damaged or fitted incorrectly during element change
- Option of oil sampling valve

Fuel Filtration

- Ease of maintenance
- Low cost of ownership
- 500 hour standard service intervals

New acrylic beads
Eliminates pleat bunching to capture contaminates. This makes a significant contribution to the removal of more debris, the Ecoplus filters can be up to 66%* more effective at removing debris.



New non-metallic centre tube
30% stronger than metal tubing used in conventional filters. The risk of metal contaminates being introduced during the manufacturing process is removed. This subsequently stops damage to critical engine components.



New spiral roving
This unique feature eliminates 'pleat dancing' or flexing, resulting in a dramatic increase in filtration efficiency, helping to maximise engine life.



New moulded end cap
Filter pleats are actually moulded into the caps during manufacture. When hardened an impenetrable bond is formed, putting an end to leaks!



Perkins global product support is designed to enhance the customer experience of owning a Perkins powered machine. We deliver this through the quality of our distribution network, extensive global coverage and a range of Perkins supported OEM partnership options. So whether you are an end-user or an equipment manufacturer our engine expertise is essential to your success.

* The information in this publication came from testing randomly sampled Ecoplus and conventional filters. Test results are on file and certified to represent only the parts actually tested. Perkins implies nothing further, and no one should infer that these parts typify the makers overall production



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