

Perkins Engines Company Limited Liability Under Warranty

Scope of Warranty

Perkins, at its sole discretion will, by repair or replacement, remedy any failure of an engine which is due to a defect in the workmanship or materials. Perkins will accept responsibility for reasonable travel, labor and material costs that are applied when effecting such remedy. All warrantable repairs must be carried out by an authorized Perkins outlet using trained technicians and Genuine Perkins replacement parts.

Engine(s) or components supplied as replacements under warranty will assume the identity of the engine or part being replaced at the time of original failure and therefore will assume any residual warranty term. Any engine or component replaced shall be disposed of in accordance with directions given by Perkins or in accordance with any applicable local laws.

The warranty extends to the costs of engine removal and re-installation in approved applications and will be subject to repair time limitations which can be found in the Warranty Manual Supplement along with specific Repair Time Schedules (RTS) by product range.

Warranty Periods on New Engines

Constant Speed (Electric Power Generation)			
Application	Product Series	Duration	Majors Components
Prime Power	400	12 Months	24 Months
	1000		
	1100		
	1200		
	1300 EDI		
	1500		
	1700		
	2200		
	2300		
	2400		
	2500		
	2800		
	5000*		
Standby Only	All Series**	500 hours per year	36 Months

Constant or Variable Speed				
Application	Product Series	Duration	Majors Components	
All Other Applications excluding Electric Power Generation	1100 A	12 Months	36 Months	
	400	24 Months or 2000 hrs		
	1700			
	2000			
	800	24 Months or 3000 hrs		
	854			
	904			
	1100			
1200				

Warranty hours in the first year are unlimited

*In cases where the total use of the engine does not exceed 6000 hours in the first year the engine warranty will be extended into a second year and shall last until the end of the second year or until total use reaches 6000 hours whichever occurs first for more detail, please see Warranty Supplement

** Standby only in cases where the total use of engines is restricted to 500 hours or less per annum, the engine warranty will extend into the following year (maximum 3 years)

Product Group 1 – Constant or Variable Speed

This warranty applies to:

Electric Power (EP) engines Prime use only

- Phaser / 1000 Series New 1000 Series 400 Series 1100 Series 1300 Edi Series 1600 Series 1500 Series 2200 Series 2300 Series 2400 Series 2500 Series 2800 Series 4000* Series diesel and spark ignited engines, 5000 Series engines*

Variable speed engines

- 1100A Series

Warranty Duration

Commencing on the date of delivery of new engines to the first user, the duration of the engine warranty shall be for a period of 12 months.

Note: *For 4000/5000 Series Commencing on the date of delivery of new engines to the first user, the duration of the engine warranty shall be for a period of 24 months or 6000 hours, whichever occurs first.

Major Components

The following major components shall be covered for 24 months from date of delivery of the engine to the first user, without hours limitation: cylinder block casting, cylinder head casting, crankshaft (excluding bearings), camshaft and connecting rods.

Low Usage Warranty

In cases where the total use of the engine is restricted to 500 hours or less per annum, the engine warranty will be extended into a third year and shall last until the end of the third year or until total use reaches 1500 hours, whichever is the first to occur.

Product Group 2 – Constant or Variable Speed

This warranty applies to:

Variable speed engines

- 400 Series 800 Series 854 Series 904 Series 1100 Series 1200 Series, 1700 Series, 2000 Series

Constant speed engines (Standby only – see low usage)

- 400 Series 1100 Series 1200 Series

Warranty Duration

Commencing on the date of delivery of new engines to the first user, (i) the duration of the engine warranty shall be for a period of up to 24 months or for a number of warranted hours of operation (detailed below), which ever expires first, and (ii) in cases where the total use of the engine exceeds the number of warranted hours within the first 12 month period, the engine warranty will expire at the end of the first year.

- 400, 1700 and 2000 Series engines are warranted for 2000 hours
- 800 Series, 854 Series, 904 Series, 1100 Series, & 1200 Series are warranted for 3000 hours.

Low Usage Warranty

In cases where the total use of engines is restricted to 500 hours or less per annum, the engine warranty will be extended into a third year and shall last until the end of the third year or until total use reaches 1500 hours, whichever is the first to occur.

Emissions Warranty

Various government agencies including United States Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) require Perkins to provide emissions warranty to end users. Perkins must warrant that the engine is designed, built and equipped so as to conform at the time of sale with applicable regulations and be free from defects in materials and workmanship for a defined period of years or hours of operation, whichever occurs first (Emission Warranty).

Information concerning the Emission Warranty is provided in the Perkins supplements warranty section:

Emission Warranty does not cover, new Re-man, dealer rebuild or dealer exchange engines.

Warranty will not be offered for emission (EPA/CARB) compliant engines in certain territories where engines are operated outside of our recommendations. Refer to the table in the Perkins Warranty supplement for more information.

Emissions Warranty Periods

If your engine is certified as:	And its maximum power is:		And its rated speed is:	Then its warranty period is (whichever occurs first):
Variable speed or constant speed	kW < 19	HP < 25	Any speed	1,500 hours or two years
Constant speed	19 ≤ kW < 37	25 ≤ HP < 50	3,000 rpm or higher	1,500 hours or two years
Constant speed	19 ≤ kW < 37	25 ≤ HP < 50	Less than 3,000 rpm	3,000 hours or five years
Variable speed	19 ≤ kW < 37	25 ≤ HP < 50	Any speed	3,000 hours or five years
Variable speed or constant speed	kW ≥ 37	HP > 50	Any speed	3,000 hours or five years

Emissions Warranty Applies if:

- The engine is operating in the United States and Canada, with mandated Ultra Low Sulphur Diesel
- The failure is due to a defect in material or workmanship of a emission-related Perkins component. The cause of the failure must be determined, and this may require disassembling of the failed part in the same manner as is required under Standard Warranty.
- The engine or identified emissions component is less than X years old and has less than X hours of operation as defined in the table in the Perkins Warranty Supplement

Emissions Regulatory Countries

New engine warranty for the 1200 series & 854 series is only offered in the below territories

Japan	Austria	Bulgaria	Belgium	Cyprus	Czech Republic
France	Germany	Greece	Hungary	Ireland	Italy
Malta	Netherlands	Poland	Portugal	Romania	Slovakia
Israel	Sweden	Croatia	United Kingdom	Turkey	Norway
Denmark	Estonia	Finland	Latvia	Lithuania	Luxembourg
Slovenia	Spain	Switzerland	Iceland	Lichtenstein	North America

*For specific customers additional warranty support will be provided based on meeting Tier IV requirements in countries not listed.

Limitations and Exclusions

Under the terms and conditions of the warranty policy, Perkins will not be liable for:

- Any accessories or proprietary equipment not originally fitted or approved in writing for fitment by Perkins.
- Any engine used without the prior written approval from Perkins for a purpose for which it was not originally intended
- Any engine or part, which in the opinion of Perkins has been altered, used, maintained, serviced or stored incorrectly or contrary to the Company's recommendations.
- Any engine or part from which the Perkins' part number or component markings have been removed, altered or tampered.
- Engine damage resulting from the acidic corrosion of engine components resulting from poor oil maintenance or as a direct result of operating on gaseous fuels outside the limits as stated in the most recent version of the Perkins 4000 Series Gas Specifications Limits Engines News publication
- The costs of normal maintenance or regular interval servicing of the engine.
- Expenses included but not limited to: towing, carriage, subsistence, overtime premiums, owners own labor charges, administration charges, hire of special or loan equipment
- Component parts that are considered by Perkins to be consumable items as identified in the Perkins user handbook. Except where component part replacement is necessary as a result of a failure and at a time when the owner could not reasonably be expected to pay for the item
- Gradual reduction in operating performance commensurate with the age, kilometers covered or operating hours, including but not limited to, gradual loss of engine compression or gradual increase in oil consumption due to normal operating functions
- Perkins is not responsible for damages to parts, fixtures, housings, attachments, and accessory items that are not part of the engine (including any products of other manufacturers packaged and sold by Perkins. Notwithstanding the foregoing, Perkins will cover damages to other engine components proximately caused by a failure under this warranty of any warranted part.

Any failure to meet its obligations hereunder which is due to circumstances beyond its reasonable control including but not limited to industrial disputes, fire, severe weather conditions, government decisions, materials shortage, power or machinery breakdown or failure or war.

Perkins reserve the right to refuse Warranty policy for reasons including, but not limited, to force majeure, but also due to environmental hazard, local or political upheaval or owing to Perkins' to its ultimate holding company's policies. In such cases where the warranty policy is refused, alternative product support agreements must be sought that meet the warranty terms of the product concerned without undue personal safety undermined.

From April 1st, 2010, Perkins will exclude Warranty for newly manufactured engines in some territories identified in the Warranty Supplement section.

Proprietary Equipment Warranty

The standard Warranty process covers all proprietary equipment sourced and fitted by Perkins prior to dispatch, except the fuel injection pump (FIP). For further information on the complete fuel injection pump warranty process, see the Warranty Manual Supplement.

Rotating Electrical Components - Alternators and Starter Motors

The standard Warranty period for rotating electrical components across all engine ranges shall be for a period of 12 months from date of delivery of the engine to the first user.

Aftermarket Parts Warranty

Genuine Perkins new and exchange ("Aftermarket Parts") parts are subject to a 12-month warranty from the date of purchase from the Perkins Distributor/ OEM Dealer.

Warranty on Aftermarket Parts which are supplied by Perkins free of charge, are for the residual period of warranty. A warranty claim involving a replacement Aftermarket Part will only be honored where the part has been fitted and failed in service on the specified engine. Perkins reserve the right to request a copy of the customer sale invoice to support the warranty claim submission.

Perkins reserves the right to refuse Aftermarket Parts Warranty for any nonapproved repairs.

Shelf-Life Warranty

Perkins would prefer that storage over 12 months from the date of dispatch is not encouraged and where it is unavoidable Perkins recommends that engines are checked and serviced in accordance with the storage procedures below.

Perkins reserves the right to refuse claims arising from storage related influences, such as poor storage practice or long shelf-life (over 12 months) for failure to fuel injection equipment, seals, hoses, belts, water pumps, compressors, radiators and electrical items. Perkins shelf life is dependent on dispatch date. Refer to the Warranty Manual Supplement for further information

For engines dispatched after April 1st, 2011, the standard warranty policy allows for a maximum shelf life of 48 months before sale to the first end-user. The new product warranty period shall start no later than 48 months from the dispatch date from the Perkins factory. This is the date as shown on the Perkins on-line PTMI system.

Engines dispatched after April 1st, 2011 and are not put into service within 4 years will no longer be considered for warranty.

Protection of Engines and Parts

All engines and parts are carefully sealed and protected against rust or corrosion before dispatch and are crated, cradled or packed in accordance with accepted commercial standards.

It is the responsibility of the Equipment Manufacturer or Engine Distributor to carefully inspect for damage and / or shortages and to maintain the properly sealed condition and to provide suitable storage until the equipment, engine or part is delivered to the first user.

Storage Procedure

Perkins requires that engines stored after factory dispatch are thoroughly checked, maintained and serviced in accordance with the storage procedures listed in the respective engine Operation and Maintenance Manual and Warranty Manual Supplement ("Perkins Storage Procedures").

Perkins reserve the right to refuse Warranty resulting from storage which is not in accordance with Perkins Storage Procedures and guidelines including but not limited to: poor storage practice, prolonged shelf-life over the advised period causing failures to include but not limited to the following – fuel injection equipment, seals, hoses, belts, water pumps, compressors, radiators and electrical components. Perkins reserve the right to refuse Warranty for engines in service that have, in Perkins' sole opinion not been subject to Perkins Storage Procedures.

Engines Installed in Parked / Stationary Equipment

At the end of each and every three-month storage period:

- Carefully check all drive belts, paying particular attention to the point where the straight run of the belt starts to bend around the pulley. Check the vee groove in the pulley for corrosion.
- Check the level of coolant (must be anti-freeze inhibited).
- Check the level of oil in the sump on the dipstick
- **Note:** The lubricating oil and fully primed filter must be replaced with oil to the listed specification every twelve months, even though the oil has not been used. Oil left standing in an engine will oxidize and can be contaminated by condensation within the crankcase.
- Turn the engine on the starter motor until oil pressure is built up. (Where practicable, this should initially be done by hand to prevent tearing the seals). Then run the engine at a fast idle speed (suggest 1000/1500 rev/min) until normal operating temperature is registered.
 - Check the oil pressure.
 - Check for oil, fuel and coolant leaks.
 - For 400 series engines, if the engine is installed in parked / stationary equipment for six months or more, the fuel injection pump linkage needs to be lubricated.
 - Follow the procedure in below to lubricate the fuel injection pump linkage.
 - Remove the fuel shutoff solenoid. Refer to Disassembly and Assembly, 'Fuel Shutoff Solenoid – Remove and Install' for the correct procedure.
 - Spray the fuel control rack with Ambersil 40+ (or equivalent) lubricant.
 - Use a suitable magnet to operate the fuel control rack. The operation of the fuel control rack will disperse the lubricant.
 - **Note:** If the fuel control rack does not move freely, then the fuel injection pump should be replaced. Refer to Disassembly and Assembly, 'Fuel Injection Pump - Remove and Install' for the correct procedure.
 - Install the fuel shutoff solenoid. Refer to Disassembly and Assembly, 'Fuel Shutoff Solenoid - Remove and Install' for the correct procedure.

Floor Stock Engines

All floor stock engines should be stored under cover in dry factory conditions and not subjected to extreme variations in temperature and humidity (failure to do so may render warranty void).

At the end of each and every three-month storage period:

- For 1100 Series three and four cylinder engines fitted with a fuel priming pump; check that the fuel priming pump is operating correctly. Follow the instructions in Perkins Service Bulletin 1100 Series number 82.

At the end of each and every six-month storage period:

- Carefully check all drive belts, paying particular attention to the point where the straight run of the belt starts to bend around the pulley. Check the vee groove in the pulley for corrosion.
- Remove the rocker cover and examine valve caps, rocker shaft, etc. for signs of corrosion. Spray with preservative oil (see below) before replacing cover.
- Remove atomizers (**Caution: for 1100 and 400 Series engines, DO NOT remove the injectors, remove instead the glow plugs**) and with the pistons at BDC, spray up to 20 cc of preservative oil (see below) around each cylinder. For 400 Series engines, only spray up to 3 cc of preservative oil around each cylinder. DO NOT allow oil to collect in the swirl chambers of DI engine pistons.

- For 400 series engines, if the engine is stored for six months or more, the fuel injection pump linkage needs to be lubricated. Follow the procedure in below to lubricate the fuel injection pump linkage.
 1. Remove the fuel shutoff solenoid. Refer to Disassembly and Assembly, 'Fuel Shutoff Solenoid – Remove and Install' for the correct procedure.
 2. Spray the fuel control rack with Ambersil 40+ (or equivalent) lubricant.
 3. Use a suitable magnet to operate the fuel control rack. The operation of the fuel control rack will disperse the lubricant.

Note: If the fuel control rack does not move freely, then the fuel injection pump should be replaced. Refer to Disassembly and Assembly, 'Fuel Injection Pump - Remove and Install' for the correct procedure.
 4. Install the fuel shutoff solenoid. Refer to Disassembly and Assembly, 'Fuel Shutoff Solenoid - Remove and Install' for the correct procedure.
- **Note:** We recommend rust preventative oils to the specification PX-4, Defence Standard 80-34/1. Crodafluid P11 or Larnal (lanolin-based oils) are applicable.
- Rotate the crankshaft by hand to circulate deposits over cylinder bore surfaces. If a belt driven water pump is fitted, rotate it by hand to ensure that the seal is free.
- Check that existing preservation of all external surfaces is sound and complete, paying particular attention to crankshaft lip seal surfaces, re-preserve as necessary.
- Ensure that all open aperture protective covers (air intake, exhaust manifolds, etc.) are securely positioned.
- Distributors are reminded of their responsibility to make their customers aware of this storage procedure, to ensure that any engine subsequently subjected to long storage is protected in accordance with Perkins recommendations.