Federal Emission Control Warranty

Caterpillar Inc. (Caterpillar) warrants to the ultimate purchaser and each subsequent purchaser that new nonroad diesel engines and stationary diesel engines less than 10 liters per cylinder operated and serviced in the United States and Canada, including all parts of their emission control systems ("emission related components"), are:

- 1. Designed, built, and equipped so as to conform, at the time of sale, with applicable emission standards prescribed by the United States Environmental Protection Agency (EPA) by way of regulation.
- 2. Free from defects in materials and workmanship in emission related components that can cause the engine to fail to conform to applicable emission standards for the warranty period.

Warranty Period

The warranty period shall be the period of years or hours of operation specified in the following table, whichever occurs first, after the engine is first placed into service.

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	Any speed	1,500 hours or two years
Constant speed	19 ≤ kW < 37	3,000 rpm or higher	1,500 hours or two years
Constant speed	19 ≤ kW < 37	Less than 3,000 rpm	3,000 hours or five years
Variable speed	19 ≤ kW < 37	Any speed	3,000 hours or five years
Variable speed or constant speed	kW ≥ 37	Any speed	3,000 hours or five years

Any warranted part that is scheduled for replacement as required maintenance is warranted for the period of time prior to the first scheduled replacement point for that part.

Any part repaired or replaced under warranty is warranted for the remainder of the warranty period.

Warranty Coverage

This Emission Control Warranty covers:

- All components whose failure would increase the engine's emissions of any pollutant, including any engine parts related to the following systems:
 - Air-induction system
 - 2. Fuel system
 - 3. Ignition system
 - 4. Exhaust gas recirculation systems
- The following parts are also covered:
 - Aftertreatment devices
 - 2. Crankcase ventilation valves
 - . Sensors
 - Electronic control units
- Components whose only purpose is to reduce emissions or whose failure will increase
 emissions without significantly degrading engine performance.
- Components from any other system developed to control emissions.

This Emission Control Warranty does not cover components whose failure would not increase the engine's emissions of any pollutant.

Caterpillar Responsibilities

During the warranty period, if a defect in materials or workmanship is found in an emission related component that can cause the engine to fail to conform to applicable emission standards, Caterpillar will provide the following at no charge through a Cat dealer or other source approved by Caterpillar:

- New, remanufactured, or repaired components (at Caterpillar's choice) required to correct the defect. Note: emission related components replaced under warranty become the property of Caterpillar.
- Reasonable or customary labor, during normal working hours, needed to correct the defect, including labor for removal and installation when necessary to make the repair.

In an emergency, repairs may be performed at any service establishment, or by the user. Caterpillar will reimburse the user for their expenses including diagnostic charges for such emergency repair. These expenses shall not exceed Caterpillar's suggested retail price for all warranted emission related components replaced, and labor charges based on Caterpillar's recommended time allowance for the warranty repair and the geographically appropriate hourly labor rate. An emission related component not being available within 30 days or a repair not being complete within 30 days constitutes an emergency.

User Responsibilities

During the warranty period the user is responsible for the following:

- Providing proof of date the engine was first placed into service.
- Parts shipping charges in excess of those that are usual and customary.
- Premium or overtime labor costs.
- Local taxes, if applicable.
- Costs to investigate complaints which are not caused by a defect in Caterpillar material or workmanship.
- Providing timely notice of a warrantable failure and promptly making the product available for repair. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.
- Presenting replaced emission related components and validated invoices at a place
 of business of a Cat[®] dealer or other source approved by Caterpillar, as a condition of
 reimbursement.
- Proper maintenance of the engine, at the owner's expense, including all recommended
 maintenance and fluid changes at scheduled intervals, and use of proper fuel, oil, lubricants,
 coolant, and filters. Caterpillar recommends that you retain all receipts and records covering
 the maintenance on your engine, but cannot deny warranty solely for the lack of receipts and
 records or for your failure to ensure the performance of all scheduled maintenance.

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any nonroad engine repair establishment or individual using certified nonroad engine parts. The user should ensure that such parts are equivalent in design and durability to genuine Cat parts. Use of non-genuine Cat parts does not invalidate the warranty. However, Caterpillar is not liable for parts that are not genuine Cat parts.

Limitations

In addition to any other limitations stated herein, Caterpillar is not responsible for failures of emission related components due to:

- Any use or installation that Caterpillar judges improper.
- · Attachments, systems, accessories, components or parts not sold nor approved by Caterpillar.
- · Abuse, neglect, vandalism, or improper engine maintenance or repair, including the installation of parts or assembled components in contaminated systems.
- Fire, accident, acts of God or other events beyond the control of Caterpillar.
- User's delay in making the product available after being notified of a potential product problem.
- Unauthorized repairs or adjustments and unauthorized fuel setting changes.

Caterpillar is not responsible for damage 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 Caterpillar).

This Emission Control Warranty is in addition to Caterpillar's standard warranty, applicable to the nonroad or stationary diesel engine product involved. Caterpillar is not responsible for damages to other engine components caused by a failure of an emission related component, unless otherwise covered by standard warranty.

NEITHER THE FOREGOING EXPRESS WARRANTY NOR ANY OTHER WARRANTY BY CATERPILLAR, EXPRESS OR IMPLIED, IS APPLICABLE TO ANY ITEM CATERPILLAR SELLS THAT IS WARRANTED DIRECTLY TO THE USER BY ITS MANUFACTURER.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES, AS SPECIFIED HEREIN. CATERPILLAR IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Customer Assistance

Caterpillar aims to ensure that the Emission Control Warranty is properly administered. In the event that you do not receive the warranty service to which you believe you are entitled under the Emission Control Warranty, call or write:

Caterpillar Inc. Manager, Warranty Operations Peoria, IL 61629-1250 (309) 675-4037

Authorized dealers are recommended for major maintenance and repair work as they are staffed with trained personnel, proper tools, and are aware of the latest maintenance methods and procedures. Owners and others who desire to perform their own work should purchase a service manual and obtain current service information from their Cat dealer.

Emission Control Warranty for California

Caterpillar Inc. (Caterpillar) warrants to the ultimate purchaser and each subsequent purchaser that new nonroad diesel engines operated and serviced in the state of California, including all parts of their emission control systems ("emission related components"), are:

- Designed, built, and equipped so as to conform, at the time of sale, to all applicable regulations adopted by the California Air Resources Board (ARB).
- Free from defects in materials and workmanship which cause the failure of an emission related component to be identical in all material respects to the component as described in Caterpillar's application for certification for the warranty period.

Warranty Period

The warranty period shall be the period of years or hours of operation specified in the following table, whichever occurs first, after the date of delivery to the ultimate purchaser.

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	Any speed	1,500 hours or two years
Constant speed	19 ≤ kW < 37	3,000 rpm or higher	1,500 hours or two years
Constant speed	19 ≤ kW < 37	Less than 3,000 rpm	3,000 hours or five years
Variable speed	19 ≤ kW < 37	Any speed	3,000 hours or five years
Variable speed or constant speed	kW ≥ 37	Any speed	3,000 hours or five years

Any warranted part that is scheduled for replacement as required maintenance is warranted for the period of time prior to the first scheduled replacement point for that part.

Any part repaired or replaced under warranty is warranted for the remainder of the warranty period.

Warranty Coverage

This Emission Control Warranty covers:

- All components whose failure would increase the engine's emissions of any pollutant, including:
 - o Fuel Metering System
 - Fuel injection system
 - o Air Induction System
 - · Controlled hot air intake system
 - Intake manifold
 - Turbocharger systems
 - Charge air cooling systems
 - o Exhaust Gas Recirculation (EGR) System
 - EGR valve body
 - EGR rate feedback and control system
 - o Catalyst or Thermal Reactor System
 - Catalytic converter
 - · Exhaust manifold
 - o Particulate Controls
 - Traps, filters, precipitators, and any other device used to capture particulate emissions
 - · Regenerators, oxidizers, fuel additive devices, and any other device used to regenerate or aid in the regeneration of the particulate control device
 - Control device enclosures and manifolding
 - Smoke Puff Limiters
 - o Advanced Oxides of Nitrogen (NOx) Controls Selective Catalyst Reduction
 - Reductant (urea/fuel) containers/dispensing systems
 - o Positive Crankcase Ventilation (PCV) System

 - PCV valve
 - Oil filler can
 - o Miscellaneous Items Used in Above Systems
 - Vacuum, temperature, and time sensitive valves and switches · Electronic control units, sensors, solenoids, and wiring harnesses
 - Hoses, belts, connectors, assemblies, clamps, fittings, tubing, sealing gaskets or devices, and mounting hardware
 - Pulleys, belts and idlers
 - Emission control information labels

- Any other part with the primary purpose of reducing emissions or that can increase emissions during failure without significantly degrading engine performance
- Components from any other system developed to control emissions.
- Damages to other engine components caused by a failure under warranty of any warranted part.

This Emission Control Warranty does not cover components whose failure would not increase the engine's emissions of any pollutant

Caterpillar Responsibilities

During the warranty period, if a defect in materials or workmanship is found which causes the failure of an emission related component to be identical in all material respects to the component as described in Caterpillar's application for certification, Caterpillar will provide the following at no charge through a Cat dealer or other source approved by Caterpillar:

- New, remanufactured, or repaired components (at Caterpillar's choice) required to correct the defect. Note: emission related components replaced under warranty become the property of Caterpillar.
- Reasonable or customary labor, during normal working hours, needed to correct the defect, including labor for removal and installation when necessary to make the repair

In an emergency, repairs may be performed at any service establishment, or by the user. Caterpillar will reimburse the user for their expenses including diagnostic charges for such emergency repair These expenses shall not exceed Caterpillar's suggested retail price for all warranted emission related components replaced, and labor charges based on Caterpillar's recommended time allowance for the warranty repair and the geographically appropriate hourly labor rate. An emission related component not being available within 30 days or a repair not being complete within 30 days constitutes an emergency.

User Responsibilities

During the warranty period the user is responsible for the following:

- Providing proof of delivery date to the ultimate purchaser.
- Parts shipping charges in excess of those that are usual and customary.
- Premium or overtime labor costs.
- Local taxes, if applicable,
- Costs to investigate complaints which are not caused by a defect in Caterpillar material or workmanship.
- Providing timely notice of a warrantable failure and promptly making the product available for repair. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days
- Presenting replaced emission related components and validated invoices at a place of business of a Cat dealer or other source approved by Caterpillar, as a condition of reimbursement
- Proper maintenance of the engine, at the owner's expense, including all recommended maintenance and fluid changes at scheduled intervals, and use of proper fuel, oil, lubricants, coolant, and filters. Caterpillar recommends that you retain all receipts and records covering the maintenance on your engine, but cannot deny warranty solely for the lack of receipts and records or for your failure to ensure the performance of all scheduled maintenance.

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any nonroad engine repair establishment or individual using certified nonroad engine parts. The user should ensure that such parts are equivalent in design and durability to genuine Cat parts. Use of nongenuine Cat parts does not invalidate the warranty. However, Caterpillar is not liable for parts that are not genuine Cat parts.

Limitations

In addition to any other limitations stated herein. Caterpillar is not responsible for failures of emission related components due to

- Any use or installation that Caterpillar judges improper.
- Attachments, systems, accessories, components or parts not sold nor approved by Caterpillar.
- The use of add-on or modified parts that are not exempted by the ARB
- Abuse, neglect, vandalism, or improper engine maintenance or repair, including the installation of parts or assembled components in contaminated systems.
- Fire, accident, acts of God or other events beyond the control of Caterpillar.
- User's delay in making the product available after being notified of a potential product problem.
- Unauthorized repairs or adjustments and unauthorized fuel setting changes.

Caterpillar 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 Caterpillar).

This warranty is in addition to Caterpillar's standard warranty, applicable to the nonroad diesel engine product involved.

NEITHER THE FOREGOING EXPRESS WARRANTY NOR ANY OTHER WARRANTY BY CATERPILLAR, EXPRESS OR IMPLIED, IS APPLICABLE TO ANY ITEM CATERPILLAR SELLS THAT IS WARRANTED DIRECTLY TO THE USER BY ITS MANUFACTURER.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES, AS SPECIFIED HEREIN. CATERPILLAR IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Customer Assistance

Caterpillar aims to ensure that the Emission Control Systems Warranty is properly administered. In the event that you do not receive the warranty service to which you believe you are entitled under the Emission Control Systems Warranty, call or write:

Manager, Warranty Operations Peoria, IL 61629-1250 (309) 675-4037

Authorized dealers are recommended for major maintenance and repair work as they are staffed with trained personnel, proper tools, and are aware of the latest maintenance methods and procedures Owners and others who desire to perform their own work should purchase a service manual and obtain current service information from their Cat dealer.