

**2017**

**EMISSION WARRANTIES FOR MTU  
ON-HIGHWAY APPLICATIONS**



*Power. Passion. Partnership.*

# 1 FEDERAL EMISSION CONTROL WARRANTY STATEMENT

## 1.1 Emissions Warranty

MTU America Inc. (MTU) warrants to the owner (“Owner”) of engines used in on-highway applications (“Engine”) built with standard exhaust emissions components, that the Engine (1) was designed, built and equipped so as to conform, at the time of sale, with applicable regulations of the U.S. (Federal) Environmental Protection Agency, and (2) is free from defects in material and workmanship which cause the Engine to fail to conform with those regulations for a period of 100,000 miles or five years of Engine operation, whichever occurs first (“Federal Emission Warranty Period”). Any component repaired or replaced under warranty is warranted for the remainder of said warranty period.

The Federal Emission Warranty Period shall begin on the date the Engine is delivered to the first retail purchaser or, if the Engine is first placed in service as a dealer demonstrator prior to sale at retail, on the date the Engine is first placed in such service.

## 1.2 MTU Responsibilities

1.2.1 *Covered Components:* The following components are covered by the Emissions Warranty set forth in Section 1.1.

### “Vehicle Emission Warrantable Components”\*

1. Air Handling System and Associated Plumbing
  - a. Ambient air temperature sensor
  - b. Fuel temperature sensor
2. Compressor Air System and Associated Plumbing
  - a. Air supply components and plumbing to the DEF (urea) system
3. Engine Electronic Components
  - a. Electrical harnesses providing battery power and electronic control signals to Engine and emissions control components, including datalinks
4. Exhaust system (prior to aftertreatment)
  - a. Exhaust gas piping from turbocharger out to the aftertreatment device
5. Exhaust Aftertreatment
  - a. DEF level sensor
  - b. DEF tank and lines
  - c. DEF tank/line heating elements
  - d. DEF tank temperature sensor
  - e. DEF tank heater coolant control valve
  - f. NO<sub>x</sub> sensor
  - g. Temperature sensor before SCR
  - h. Temperature sensor after SCR
  - i. Manifold air humidity sensor
  - j. Urea doser
  - k. Urea pump module
  - l. Dosing valve
  - m. DEF pressure regulator
  - n. SCR – Catalyst
  - o. Diesel Particulate Filter
  - p. Diesel Oxidation Catalyst

- q. Ammonia Oxidation Catalyst
- r. Soot Sensor
- 6. Vehicle Electronic Components
  - a. Vehicle control module (ADM) / MR2
  - b. SCR – Frame module
  - c. Inducement indicators:
    - (i) Diesel Exhaust Fluid (DEF)
    - (ii) Amber Warning Light (AWL)
    - (iii) Torque Limiter Active (LIM)

\* If equipped (Not all applications will have all components)

**“Engine Emission Warrantable Component List”\***

Air Temperature Sensor	Barometric Pressure Sensor
Calibration and Operating Software	Compressor Inlet Pressure Sensor
Compressor Inlet Temperature Sensor	Compressor Outlet Temperature Sensor
Coolant Temperature Sensors	Crankcase Breather
EGR Cold Pipe	EGR Delta P Sensor
EGR Cooler	EGR Mixer
EGR Hot Pipe	EGR Valve & Actuator
EGR Temperature Sensor	Engine Oil Temperature Sensor
Electronic Fuel Injector	Fuel Injector
Exhaust Manifold	Fuel Pressure Regulator
Fuel Metering Unit for HC Doser	Fuel Rail
Fuel Pump Assembly (Hi & Low Pressure)	HC Doser Unit
HC Doser Injector	Intake Manifold Pressure sensor
Intake Manifold	Intake Throttle Valve & Actuator
Intake Manifold Temperature Sensor	Intercooler Out Temperature Sensor
Intercooler Out Pressure Sensor	Oil Separator
Motor Control Module	Timing Reference Sensor
Oil Temperature Sensor	Turbo Compressor Wheel Speed Sensor
Timing Synchronous Sensor	Turbocompound
Turbocharger	Venturi Tube

\* If equipped (Not all applications will have all components)

- 1.2.2 During the Federal Emission Warranty Period, if a defect in material or workmanship of a Covered Component is found, MTU will provide through MTU or other MTU authorized facility, repair or replacement including:
- a) New, remanufactured or repaired components, approved pursuant to EPA regulations, required to correct the defect. Parts replaced under this warranty become property of MTU.
  - b) Reasonable diagnostic costs of any warranted part at no charge to the Owner.
  - c) Reasonable and customary labor during normal working hours, required to make the warranted repair. This includes labor to remove and install the Engine if necessary.

**1.3 Owner’s Responsibilities**

During the Federal Emission Warranty Period Owner is responsible for:

- A.) Costs to investigate conditions which are determined by MTU in the exercise of its reasonable discretion to be not caused by a defect in MTU material or workmanship.
- B.) Providing timely notice (within 30 days) of a warrantable failure and promptly making product available for repair.
- C.) Proper maintenance as required in the Operator's Manual and the Maintenance Booklet.

If you have any questions regarding your warranty rights and responsibilities or the location of the nearest authorized dealer or distributor, you should contact MTU Service-Desk at 1-248-560-8200.

#### **1.4 Limitations**

MTU is not responsible for resulting damages to an emission-related component resulting from:

- A.) Any application or installation MTU deems improper;
- B.) The replacement of non-warranted maintenance parts;
- C.) Attachments, accessory items or parts not sold nor approved by MTU;
- D.) Improper Engine maintenance or repair and also Engine abuse;
- E.) Conditions resulting from tampering, misuse, improper adjustment, alteration, accident, failure to use specified fuel or nonperformance of maintenance services;
- F.) Consequential damages such as loss of time, inconvenience, economic loss, loss of use of the Engine or vehicle;
- G.) Any Engine in a vehicle on which odometer has been changed so that the mileage cannot be readily determined;
- H.) Periodic maintenance of the Particulate Filter (cleaning).

This warranty is in addition to the MTU Limited Warranty, applicable to the relevant Engine. Remedies under this warranty are limited to the provisions of material and service as specified herein. MTU is not responsible for incidental or consequential damages. This warranty applies only to Engines that are covered by a certificate of conformity according to the provisions of EPA.

## 2 CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT

### YOUR WARRANTY RIGHTS AND OBLIGATIONS

The California Air Resources Board (CARB) and MTU America Inc. (MTU) are pleased to explain the emission control system warranty on your engine used in on-highway applications ("Engine"). In California, new motor vehicles must be designed, built and equipped to meet the State's stringent anti-smog standards. MTU must warrant the emission control system on your Engine for the periods of the time listed below provided there has been no abuse, neglect or improper maintenance of your Engine.

Your emission control system may include parts such as the fuel injection system and the air induction system. Also included may be hoses, belts, connectors and other emission related assemblies.

Where a warrantable condition exists, MTU will repair your Engine at no cost to you, including diagnosis (if diagnostic work is performed at an MTU authorized dealer), parts and labor.

#### 2.1 Manufacturer's Warranty Coverage

The Engine is warranted for 5 years of Engine operation or 100,000 miles, whichever occurs first, from the date the Engine is delivered to an ultimate purchaser or, if the Engine is first placed in service as a dealer demonstrator prior to sale at retail, on the date the Engine is first placed in such service. In the absence of a device to measure hours of use, that Engine shall be warranted for a period of 5 years. If any emission-related part on your Engine is defective, the part and any other damaged part, whose damage is proximately caused by a failure under warranty of any warranted part, will be repaired or replaced by MTU.

#### 2.2 Owner's Warranty Responsibilities

- As the Engine owner, you are responsible for the performance of the required maintenance listed in your Owner's Manual and Maintenance Book. MTU recommends that you retain all receipts covering maintenance on your Engine, but MTU cannot deny warranty solely for the lack of receipts.
- As the Engine owner, you should however be aware that MTU may deny you warranty coverage if your Engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.
- Your Engine is designed to operate on fuel specified in your Operator's Manual and Maintenance Book only. Use of any other fuel may result in your Engine no longer operating in compliance with California's emissions requirements.
- You are responsible for initiating the warranty process. CARB suggests that you present your Engine to a MTU dealer or distributor as soon as a problem exists. The warranty repairs should be completed by the dealer or distributor as expeditiously as possible.

If you have any questions regarding your warranty rights and responsibilities or the location of the nearest authorized dealer or distributor, you should contact **MTU Service-Desk** at 1-248-560-8200 or the **California Air Resources Board** at: State of California Air Resources Board/Mobile Source Operations Division/9528 Telstar Ave./El Monte, California 91731. Please note: The emission control system warranty only applies to Engines that are covered by an Executive Order according to the provisions of California Air Resources Board (CARB).

#### 2.3 Warranty Coverage

MTU warrants to the original and each subsequent owner of an Engine certified for sale and registered in the State of California, that the Engine was designed, built and equipped so as to conform at the time of sale with the applicable regulations adopted by the Federal Environmental Protection Agency and the California Air Resources Board.

If an emission-related warranted part fails during the period of warranty coverage, the part shall be repaired or replaced by MTU at no charge to the owner at a MTU authorized dealer or distributor. Any such part repaired or replaced during the warranty shall be warranted for the remaining warranty period. The owner shall not be charged for diagnostic labor which leads to the determination that a warranted part is in fact defective, provided that such diagnostic work is performed at an authorized MTU dealer or distributor.

If a warranted part fails because of a defect, MTU will repair or replace it at any authorized MTU dealer or distributor. Any other parts damaged by the failure under warranty of a warranted part will also be repaired or replaced at no charge to the owner.

Any warranted part, which is scheduled for replacement as required maintenance is warranted for the period of time prior to the first scheduled replacement point for that part. If replaced or repaired under warranty prior to the first scheduled replacement of that part, the new or repaired parts shall be warranted for the time remaining to the first scheduled replacement.

Any warranted parts scheduled only for the regular inspection in the written instructions shall be warranted for the warranty period defined in the above section. Any statement in the written instruction to repair or replace as necessary shall not reduce the warranty coverage. Any such part, repaired or replaced, under the warranty shall also be warranted for the remaining warranty period.

Any replacement part may be used in the performance of any maintenance or repairs. However, the manufacturer is not responsible for non-manufacturer parts.

## 2.4 Exclusions

This warranty does not cover:

- A.) Any application or installation MTU deems improper;
- B.) The replacement of non-warranted maintenance parts;
- C.) Attachments, accessory items or parts not sold nor approved by MTU;
- D.) Improper Engine maintenance or repair and also Engine abuse;
- E.) Conditions resulting from tampering, misuse, improper adjustment, alteration, accident, failure to use specified fuel or nonperformance of maintenance services;
- F.) Consequential damages such as loss of time, inconvenience, economic loss, loss of use of the Engine or vehicle;
- G.) Any Engine in a vehicle on which odometer has been changed so that the mileage cannot be readily determined;
- H.) Periodic maintenance of the Particulate Filter (cleaning).

This warranty is in addition to the MTU Limited Warranty, applicable to the relevant Engine. Remedies under this warranty are limited to the provisions of material and service as specified herein. MTU is not responsible for incidental or consequential damages. This warranty applies only to Engines that are covered by a certificate of conformity according to the provisions of EPA.

## 2.5 Warranted Parts

The following components are covered by the above warranty. Some scheduled maintenance is required (refer to the Owner's Emission Control Maintenance Service Chart):

### “Vehicle Emission Warrantable Components”\*

1. Air Handling System and Associated Plumbing
  - c. Ambient air temperature sensor
  - d. Fuel temperature sensor
2. Compressor Air System and Associated Plumbing
  - a. Air supply components and plumbing to the DEF (urea) system
3. Engine Electronic Components
  - a. Electrical harnesses providing battery power and electronic control signals to Engine and emissions control components, including datalinks
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  - a. Exhaust gas piping from turbocharger out to the aftertreatment device
5. Exhaust Aftertreatment
  - s. DEF level sensor

- t. DEF tank and lines
  - u. DEF tank/line heating elements
  - v. DEF tank temperature sensor
  - w. DEF tank heater coolant control valve
  - x. NO<sub>x</sub> sensor
  - y. Temperature sensor before SCR
  - z. Temperature sensor after SCR
  - aa. Manifold air humidity sensor
  - bb. Urea doser
  - cc. Urea pump module
  - dd. Dosing valve
  - ee. DEF pressure regulator
  - ff. SCR – Catalyst
  - gg. Diesel Particulate Filter
  - hh. Diesel Oxidation Catalyst
  - ii. Ammonia Oxidation Catalyst
  - jj. Soot Sensor
6. Vehicle Electronic Components
- d. Vehicle control module (ADM) / MR2
  - e. SCR – Frame module
  - f. Inducement indicators:
    - (iv) Diesel Exhaust Fluid (DEF)
    - (v) Amber Warning Light (AWL)
    - (vi) Torque Limiter Active (LIM)

\* If equipped (Not all applications will have all components)

**“Engine Emission Warrantable Component List”\***

- |  |                                      |
|--|--------------------------------------|
| Air Temperature Sensor                 | Barometric Pressure Sensor           |
| Calibration and Operating Software     | Compressor Inlet Pressure Sensor     |
| Compressor Inlet Temperature Sensor    | Compressor Outlet Temperature Sensor |
| Coolant Temperature Sensors            | Crankcase Breather                   |
| EGR Cold Pipe                          | EGR Delta P Sensor                   |
| EGR Cooler                             | EGR Mixer                            |
| EGR Hot Pipe                           | EGR Valve & Actuator                 |
| EGR Temperature Sensor                 | Engine Oil Temperature Sensor        |
| Electronic Fuel Injector               | Fuel Injector                        |
| Exhaust Manifold                       | Fuel Pressure Regulator              |
| Fuel Metering Unit for HC Doser        | Fuel Rail                            |
| Fuel Pump Assembly (Hi & Low Pressure) | HC Doser Unit                        |
| HC Doser Injector                      | Intake Manifold Pressure sensor      |
| Intake Manifold                        | Intake Throttle Valve & Actuator     |
| Intake Manifold Temperature Sensor     | Intercooler Out Temperature Sensor   |
| Intercooler Out Pressure Sensor        | Oil Separator                        |
| Motor Control Module                   | Timing Reference Sensor              |
| Oil Temperature Sensor                 | Turbo Compressor Wheel Speed Sensor  |
| Timing Synchronous Sensor              | Turbocompound                        |
| Turbocharger                           | Venturi Tube                         |

\* If equipped (Not all applications will have all components)