

Action code: WHEN CONVENIENT

MAN NO_x sensors

for SCR and EGR

SL2023-736/ARIN

June 2023

Concerns

Owners and operators of MAN B&W two-stroke marine combustion engines. Type: MC/MC-C, ME-B and ME/ME-C

Summary

This Service Letter clarifies potential warranty cases for Continental NO_x sensors.

Spare parts

For spare parts please contact:

PrimeServ-CPH@man-es.com

Dear Sir or Madam

MAN Energy Solutions uses Continental NO_x sensors for both SCR and EGR systems (O₂ sensors). Continental guarantees that their NO_x sensors have a lifetime of 2,000 hrs. After this point in time, Continental recommends exchanging the sensors.

For EGR, this means roughly three months of life expectancy, since the sensors are always ON.

Due to the short lifetime expectancy, the sensors are not part of the engine maker's warranty, but are considered to be a consumable. Any failure after 2,000 running hours of sensors purchased directly from MAN Energy Solutions (MAN ES) cannot be claimed against MAN ES, and we recommend keeping a stock of spare sensors on board each vessel. The expected shelf lifetime of a sensor is approx. two years.

More information is given on page 2.

Please direct any inquiries and questions to:

- Operation department: Operation2S@man-es.com, or
- PrimeServ Service department: dt-cph@man-es.com

Yours faithfully



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MAN ES has logged service experience indicating that the sensors may reach a lifetime of up to 4,000 hrs., and an extended test of the sensor lifetime is being set up. In addition, MAN ES is currently investigating various suppliers who may offer better lifetimes.

If you decide to continue using the sensors beyond 2,000 hrs., you must pay attention to the following indications of when the sensors need to be replaced, see Table 1. Note that the two sensors installed in a sensor set must always be exchanged in pairs.

Therefore, we always recommend to replace sensors with more running hours than the guaranteed lifetime, in particular before entering a Tier III area.

Please note that claims related to these sensors cannot be directed against MAN ES unless the sensors were purchased directly from MAN ES. However, if the sensors were in fact purchased from MAN ES, we do not cover claims where a sensor fails after more than 2,000 hrs. running time and/or where our specifications regarding the use of the sensors have not been followed.

SCR

Alarm	Description
Sensor not ready	If this alarm goes off repeatedly, it is a clear sign that the sensors need to be replaced.
NO _x sensor deviating	Change the sensors if they start drifting.
Signal supervision reaches 2,000 ppm	This is an indication that the sensor has reached its maximum display value and that it is no longer displaying the correct value.

EGR

Alarm	Description
Sensor not ready	If this alarm goes off repeatedly, it is a clear sign that the sensors need to be replaced.
O ₂ sensor deviating	Try recalibrating the O ₂ sensors. If the problem persists, replace the sensors.
O ₂ sensor out of range	Try recalibrating the O ₂ sensors. If the problem persists, replace the sensors.

Table 1 - NO_x sensor alarms for SCR and EGR