

Action code: WHEN CONVENIENT

**PMI sensor calibration requirements**

SL2019-672/CHSO  
June 2019

**Concerns**

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

**Summary**

High-quality pressure measurements can be ensured by calibrating the sensors in accordance with the proper requirements and recommendations.

Dear Sir or Madam

This Service Letter specifies the IMO requirements and manufacturer recommendations regarding calibration of the PMI pressure sensors, the calibration sensors, and the calibration box for engines in service. High quality measurements will be ensured by following the requirements and recommendations listed in this letter.

Yours faithfully



**Michael Petersen**  
Vice President  
PrimeServ Two-stroke

**Stig Holm**  
Senior Manager  
Technical Service



**Head office (& po. address) PrimeServ  
MAN Energy Solutions**  
Tegholmegade 41  
2450 Copenhagen SV  
Denmark  
Phone: +45 33 85 11 00  
Fax: +45 33 85 10 30  
info-cph@man-es.com  
www.man-es.com



**Production**  
Tegholmegade 35  
2450 Copenhagen SV  
Denmark  
Phone: +45 33 85 11 00  
Fax: +45 33 85 10 17  
manufacturing-dk@man-es.com

**Forwarding & Receiving**  
Tegholmegade 35  
2450 Copenhagen SV  
Denmark  
Phone: +45 33 85 11 00  
Fax: +45 33 85 10 16  
shipping-cph@man-es.com

**MAN Energy Solutions**  
Branch of MAN Energy Solutions  
SE, Germany  
CVR No.: 31611792  
Head office: Tegholmegade 41  
2450 Copenhagen SV, Denmark  
German Reg.No.: HRB 22056  
Amtsgericht Augsburg

**Calibration interval**

IMO requirements: IMO Marpol Annex VI, NO<sub>x</sub> Technical code, App. 4, §1.3.2. Calibration.

	Sensor type	Calibration interval	Calibration certificate	Identification (for reference only)
<b>IMO requirements</b>	Fixed pressure sensor	12 months* (verification every 6 months is recommended)	No	
	PMI offline pressure sensor	12 months	Yes	
<b>Manufacturer's recommendations</b>	Calibration sensor	5 years	Yes	
	Calibration box	5 years	Yes	

\* Traceable calibration on the engine by using the PMI calibration sensor. New certificate not required.

**Fixed pressure sensor**

The fixed sensors are used for engine performance measurements, PMI Auto-tuning, which is initially calibrated when the system is commissioned.

In service, the fixed sensors are calibrated on the engine using the calibration sensor and the calibration box. Re-calibration must be performed at least once every 12 months. However, it is recommended to check the fixed sensor calibration more frequently, e.g. every 6 months.

Note: Do not blow through before connecting the calibration sensor. The high temperatures seen during blow through are known to damage the fixed sensors.

Our Service Letter SL2016-621 Lifetime of Fixed Cylinder Pressure Sensors provides more information about precautionary measures and maintenance of the sensors.

**PMI offline pressure sensor**

PMI offline sensors are used for engine performance measurements. Re-calibration must be performed at least once every 12 months at an approved calibration center and according to the manufacturer's specifications.

The sensor should be calibrated together with the PMI calibration box and the connection cable.

**Calibration sensor and calibration box**

The calibration sensor is a certified, traceable calibrated sensor which is accompanied by a calibration certificate. The calibration sensor and the calibration box must be recalibrated minimum every 5 years at an approved calibration center and according to the manufacturer's specifications.

The calibration sensor should be calibrated together with the calibration box and the connection cable.

The calibration sensor is dedicated to the calibration of the fixed pressure sensors only. Using the sensor for any other purpose, such as frequently performing a manual engine performance measurement, will cause the calibration certificate to expire after 12 months in service.

For calibration or repair of the sensor and calibration box, or for general questions regarding this Service Letter, please contact MAN PrimeServ at:

[CalibrationService-CPH@man-es.com](mailto:CalibrationService-CPH@man-es.com)