

Maintenance plan

for VISATRON

oil mist detectors:

Visatron series



**Safety for you
and your
engine!**

Recommended maintenance plan:

It is a good solution to maintain your Visatron oil mist detector system with a view to be precautionary in relation to technical problems. This eliminates the risk of downtime of the oil mist detector and the engine.

The recommended routine maintenance schedule can be followed as described below. Valid for gas operation with TPS turbo charger, stationary power plant application and marine engines.

Procedure no.	What to do:	Time period:
1	<ul style="list-style-type: none"> Check the negative pressure with u- tube manometer. Adjust if necessary! Setting level is 60,00 mm WC! Replace the sintered bronze air filter/ fresh air filter (P/n.: 10042) in the measuring head. Clean the fresh air bores in the measuring head. Use the cleaning needle (P/n.: 10135) Clean both infra-red sensor glasses in the measuring head with cotton pins and technical alcohol, and perform test with test plate kit (P/n.:11072) to check alarm signal functionality/ shut down function of the engine. 	Every month
2	<ul style="list-style-type: none"> Replace sintered bronze filter and o- ring in the pressure regulator (P/n.: 10002 & 10003). 	Every 4 month
3	<ul style="list-style-type: none"> Replace complete service kit on OMD. Clean the inside/ outside of the base plate. Check performance of pressure regulator- replace parts if necessary! Clean suction pipes/ pipe system and siphon blocks with compressed air! 	Every year!
4	<ul style="list-style-type: none"> Replace the measuring head. Use our Exchange Pool (ExP) for this procedure! Replace complete service kit on OMD. Clean the inside/ outside of the base plate. Check performance of pressure regulator- replace parts if necessary! Clean suction pipes/ pipe system and siphon blocks with compressed air! 	Every 4 years!

Valid for model:

VN 115/87	VN 115/87 EMC/CE	VN 115/87plus	VN 115/93
VN 116/87	VN 116/87 EMC/CE	VN 116/87plus	VN 116/93
VN 215/87	VN 215/87 EMC/CE	VN 215/87plus	VN 215/93



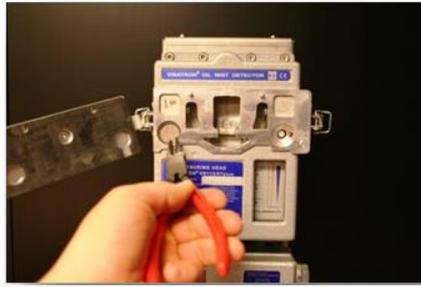
NOTE: All maintenance steps should be performed while engine is stopped!

How to do it:

Procedure 1:



Check the negative pressure with u- tube manometer. Adjust if necessary! Setting level is 60,00 mm WC!...



replace the sintered bronze air filter/ fresh air filter (P/n.:10042) ...

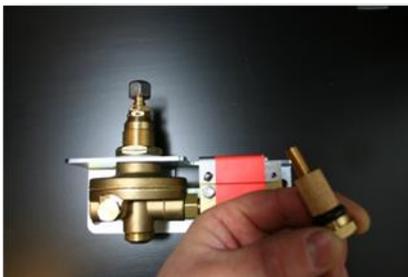


clean the fresh air bores in the measuring head



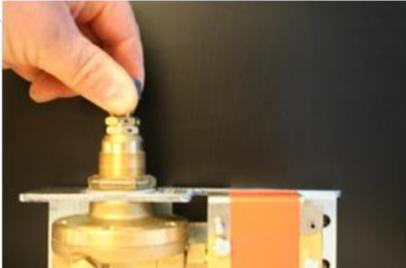
clean the infra- red sensor glasses at the left and the right side inside the measuring head. Use cotton stick (P/n.: 10036) and technical alcohol (P/n.:10035).

Procedure 2:



Replace sintered bronze filter and o- ring in the pressure regulator (P/n.: 10002 & 10003).

Procedure 3:



Stop the engine and reduce the incoming air pressure.... disconnect the RESET task connector...



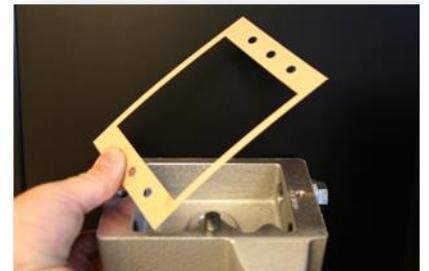
dismount the measuring head housing...



disconnect the connecting case... (10049)...



change the small seal (P/n.: 10206)



... change the valve box seal (P/n.:



disconnect the connector case on the base plate... mounting system (10019)...



unscrew the vibration plate...



change the upper & lower elastic (P/n.: 10018 &



change the flexible bellows (P/n.: 10023)...



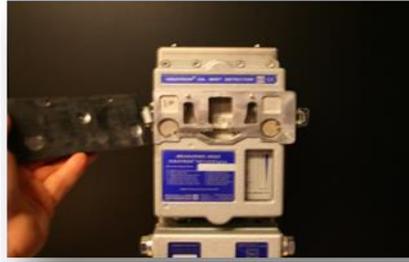
re-install the vibration plate to the base plate...



change the measuring head seal (P/n.: 10022)...



install the measuring head at the vibration plate... filter



open the inspection cover...



change the scavenging air

(P/n.: 10042)...



change the seal for inspection cover...

(P/n.: 10010/ 10166)



clean the infra- red sensor glasses with cotton sticks and alcohol...

(P.n.:10036 & 10035)



clean the bores with cleaning needle

(P/n.: 10135)...



change the screw plug seal 1/4" for inspection cover... connection case...

(P/n.: 10082)



close the inspection cover...



unscrew the plugs at the



change the screw plug seal 1/2" (P/n.: 10209)... replace (P/n.: 10033)



check the heating element if it is hot- if cold device- replace!...



check all leaders in the main connection socket... If bad condition-

Procedure 4:



Stop the engine, and replace the measuring head.
When starting up the OMD device, please check the
negative pressure and adjust if necessary!- see procedure no. 1.

How to test the device after maintenance is done:

	<p>ATTENTION! You will stop or slow down the engine during this test! ATTENTION! Before starting the on board test, execute procedure 1 and 2 of the Recommended Maintenance Routine. The pipe system has to be clean and if used-all siphons to be filled with oil.</p>
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What do you need to do the test:

To perform the functionality test, we offer you” Test plate-Kit for VN functional Test” with part no. 11072.

The kit consist of following parts:

A. Test plate

B. Test glass 10%



How to perform the test:

	<p>ATTENTION! You will stop or slow down the engine during this test!</p>
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Open the inspections cover on the measuring head...



the oil mist detector need to be in operation mode with negative pressure set to 60,00 mmWC. Place the test plate over the open chamber- the test plate will be sucked into position by the vacuum in the measuring head...



press the 10% glass into the test plate...



ensure that the glass plate is in straight vertical position !

	<p>CAUTION! The oil mist alarm will now be triggered, showing Alarm LED lighting up and the engine will be shutted down/ reducing the RPM!</p>
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Pos.	Product	P/n.:
1	Test plate- kit for VN functional test	11072

Important information when replacing measuring head:

Wire break resistance for oil mist alarm



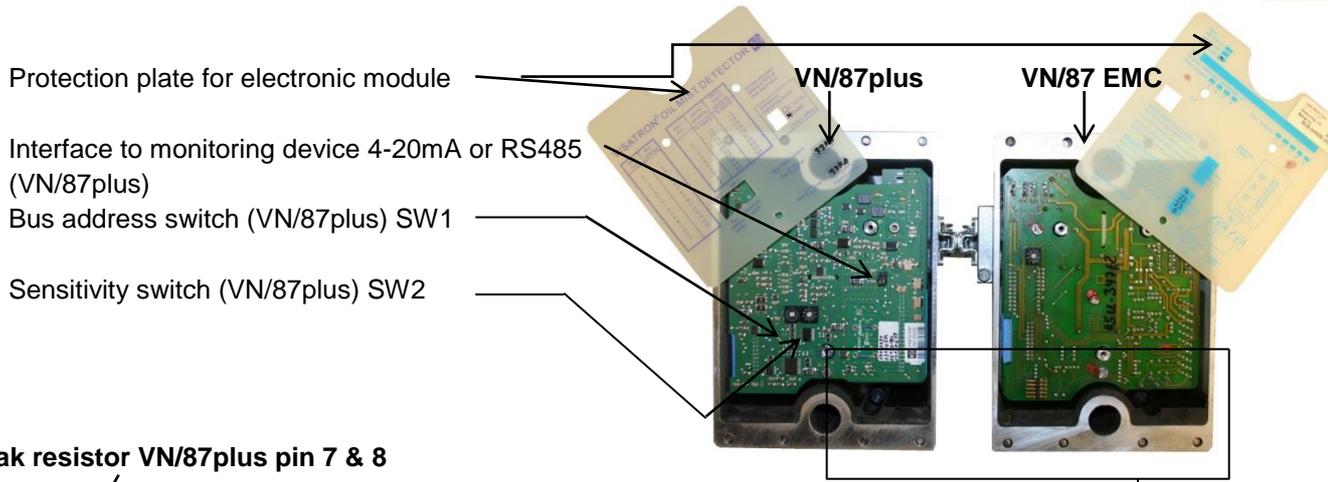
Important information:

All Visatron oil mist detectors are equipped with wire break resistance for oil mist alarm. The wire break resistance is a set resistance value for the oil mist alarm, and are connected between pin 7 & 8 and pin 15 & 16. It is important to ensure that the wire break resistance is correct according to the required resistance for the alarm shut down function of the engine. If the value is not correct according to required wire break resistance value (at the alarm shut down function panel)- this may lead to a situation where you get no shut down or reduced RPM of the engine during a real high oil mist level alarm situation!

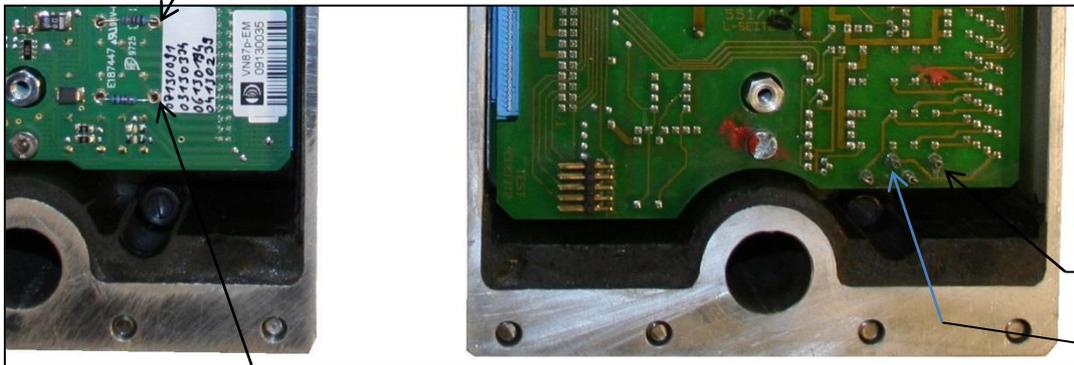
If you are replacing the complete oil mist detector or a measuring head with ex. an exchange unit- you always need to check the documented wire break resistance on the "old" device. When you have this information, you need to check that it is the same wire break resistance value on the new device before starting up the engine. If the wire break resistance is different between the devices, you can transfer the wire break resistances (2 pc. presented on the backside of the electronic module placed in the measuring head) from the "old" device to the new device. Always make a proper test of your system when replacing measuring head or complete oil mist detector!



Wire break description for VN/87 EMC & VN/87plus:



Wire break resistor VN/87plus pin 7 & 8



Wire break resistor VN/87plus pin 15 & 16

Wire break resistor R223- VN/87 pin 15 & 16

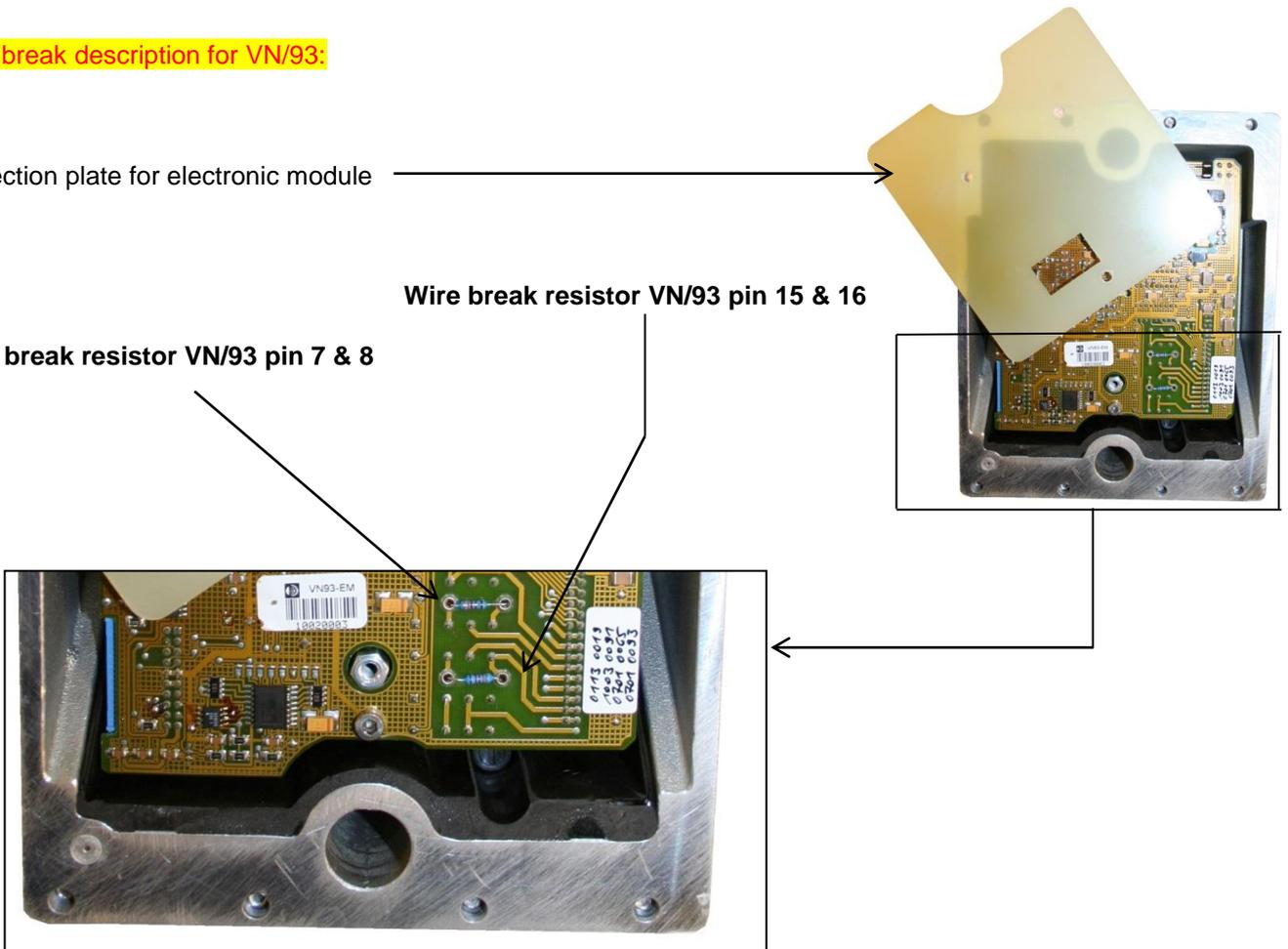
Wire break resistor R222- VN/87 pin 7 & 8

Wire break description for VN/93:

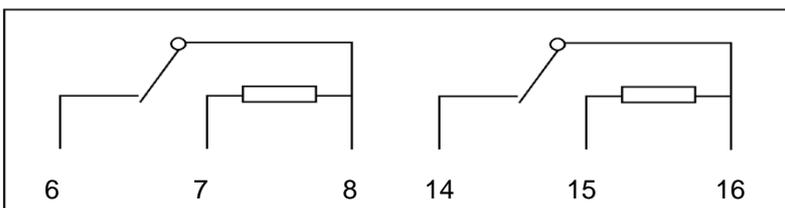
Protection plate for electronic module

Wire break resistor VN/93 pin 15 & 16

Wire break resistor VN/93 pin 7 & 8



Alarm diagram for VN/87 EMC, VN/87plus & VN/93:



Part numbers for wire break resistors:

Part no:	Value K ohm:	Other information:
100900-33,00K	33,00 K ohm	2 pc. per package incl. instruction fact sheet
100900-33,20K	33,20 K ohm	2 pc. per package incl. instruction fact sheet
100900- 24,90K	24,90 K ohm	2 pc. per package incl. instruction fact sheet
100900-10,00K	10,00 K ohm	2 pc. per package incl. instruction fact sheet
100900-3,30K	3,30 K ohm	2 pc. per package incl. instruction fact sheet

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- *Iceland*
- *Faroe Island*
- *Aaland Islands*
- *Greenland*
- *Estonia*
- *Latvia*
- *Lithuanian*



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