

## Maintenance schedule VN/93

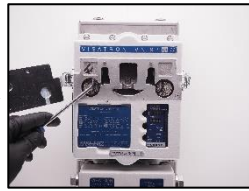
**NOTE: All maintenance steps should be performed while engine is stopped!**

Procedure no:	What to do:	Interval & Part kit to be used:
Procedure 1	<ul style="list-style-type: none"> <li>Check the negative pressure with u-tube manometer or digital manometer. Adjust if necessary! Setting level is 55.00 – 65.00 mmWC!</li> <li>Replace the sintered bronze air filter/fresh air filter in the measuring head.</li> <li>Clean both infrared sensor glasses in the measuring head with cotton pins and cleaning fluid.</li> <li>Perform functional test with test glass kit.</li> </ul>	<p>Every 3 months or 2 000 engine running hours – <b><u>whatever comes first!</u></b></p> <p><b>Kits to be used:</b>            Filter kit VN/93 – P/n.: 151490BU</p> <p>Cleaning kit – P/n.: 151482</p> <p>Test glass kit – P/n.: 11072</p>
Procedure 2	<ul style="list-style-type: none"> <li>Replace filter in pressure regulator.</li> </ul> <p><b>If you have a water separator:</b></p> <ul style="list-style-type: none"> <li>Replace filter cartridge of water separator.</li> </ul>	<p>Every 6 months or 4 000 engine running hours – <b><u>whatever comes first!</u></b></p> <p>Filter cartridge – P/n.: 273119</p>
Procedure 3	<ul style="list-style-type: none"> <li>Replace complete service kit on OMD. Clean the inside &amp; outside of base plate.</li> <li>Check suspension on vibration plate – replace if necessary!</li> <li>Check performance of pressure regulator- replace parts if necessary!</li> <li>Clean suction pipes/ pipe system and siphon blocks with compressed air!</li> <li>Check scavenging air outlet behind the control cover manually (low-right) by feeling the air stream.</li> </ul>	<p>Every 12 months or 8 000 engine running hours – <b><u>whatever comes first!</u></b></p> <p><b>Yearly maintenance kit for:</b>            VN 115/93 – P/n.: 100153-151489            VN 116/93 – P/n.: 100154-151487            VN 215/93 – P/n.: 100155-151488</p> <p>Mounting system – P/n.: 10991</p>
Procedure 4	<ul style="list-style-type: none"> <li><b>Authorized service personnel will perform an inspection of complete OMD installation. Condition of main parts to be checked and replaced if necessary!</b></li> </ul> <p>For authorized service contact:  <b>epp@epp.no or phone: +47 92 46 32 20!</b></p>	<p>Every 24 months or 16 000 engine running hours – <b><u>whatever comes first!</u></b></p> <p><b>Yearly maintenance kit for:</b>            VN 115/93 – P/n.: 100153-151489            VN 116/93 – P/n.: 100154-151487            VN 215/93 – P/n.: 100155-151488</p> <p>Mounting system – P/n.: 10991</p> <p>Cleaning kit – P/n.: 151482</p> <p>Smoke test kit – P/n.: 151780</p>
Procedure 5	<ul style="list-style-type: none"> <li><b>Authorized service personnel will perform an inspection of complete OMD installation. Condition of main parts to be checked and replaced if necessary!</b></li> </ul> <p>For authorized service contact:  <b>epp@epp.no or phone: +47 92 46 32 20!</b></p>	<p>Every 48 months or 32 000 engine running hours – <b><u>whatever comes first!</u></b></p> <p><b>Yearly maintenance kit for:</b>            VN 115/93 – P/n.: 100153-151489            VN 116/93 – P/n.: 100154-151487            VN 215/93 – P/n.: 100155-151488</p> <p>Mounting system – P/n.: 10991</p> <p>Cleaning kit – P/n.: 151482</p> <p>Smoke test kit – P/n.: 151780</p> <p><b>Exchange oil mist detector components for:</b>            VN 115/93 –            P/n.: 11200EXP   P/n.: 11201EXP            VN 116/93 –            P/n.: 11400EXP   P/n.: 11401EXP            VN 215/93 –            P/n.: 10900EXP   P/n.: 10901EXP</p>

### Procedure 1:



**1.** Check the negative pressure with a u-tube manometer. Adjust if necessary! Setting level is 55.00 – 65.00 mmWC!



**2.** Replace the sintered bronze air filter/fresh air filter.



**3.** Clean the fresh air bones in the measuring head. Use the cleaning needle.



**4.** Clean the infrared sensor glasses at the left and the right side inside the measuring head. Use cotton sticks and cleaning fluid.

### Procedure 2:



**1.** Close the air pressure.



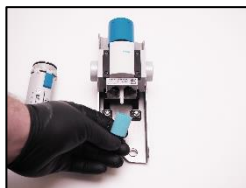
**2.** Hold the filter cage in one hand and pull the blue tab down horizontally with your thumb.



**3.** Turn the filter cage clockwise and pull out downwards.



**4.** Unscrew the black plastic disc and remove the dirty filter.



**5.** Screw in the new filter counter clockwise and make sure that it is aligned for installation.



**6.** Reinstall the filter cage.



**7.** Install the quick connection.



**8.** Fill in slacked water in the u-tube manometer.



**9.** To the middle line.



**10.** Install the u-tube manometer.

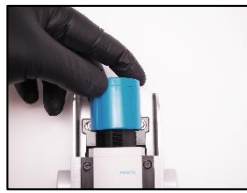


**11.** Adjust the air pressure to 55.00 – 65.00 mmWC!



**12.** Disconnect the u-tube manometer and install the plug for inspection cover.

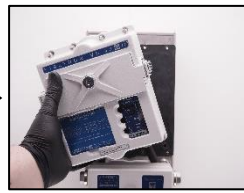
**Procedure 3:**



**1.** Stop the engine and reduce the incoming air pressure.



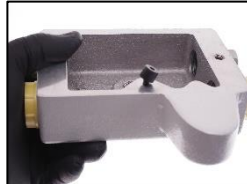
**2.** Disconnect the RESET connector.



**3.** Dismount the measuring head.



**4.** Disconnect the connection case.



**5.** Change the small seal.



**6.** Change the valve box seal.



**7.** Reconnect the connection case to the base plate.



**8.** Unscrew the vibration plate.



**9.** Replace the mounting system.



**10.** Replace the flexible bellows.



**11.** Install the new vibration plate to the base plate.



**12.** Reinstall the measuring head at the vibration plate.



**13.** Open the inspection cover.



**14.** Change the scavenging air filter.



**15.** Change the seal for inspection cover.



**16.** Clean the infrared sensor glasses with cotton sticks and cleaning fluid.



**17.** Clean the bores with cleaning needle.



**18.** Change the screw plug seal 1/4" for inspection cover.



**19.** Close inspection cover.



**20.** Unscrew the plugs at the connection case.



**21.** Change the screw plug seal 1/2".



**22.** Check the heating element if it is hot. If cold - replace!



**23.** Check all leaders in the main socket. If bad condition - replace!

**Procedure 4:**

**Authorized service personnel will perform an inspection of complete OMD installation. Condition of main parts to be checked and replaced if necessary!**

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**Procedure 5:**

**Authorized service personnel will perform an inspection of complete OMD installation. Condition of main parts to be checked and replaced if necessary!**

*Recommendation: If authorized service personnel are unable to be used for various reasons, exchange unit set can be replaced. If this option has been performed, please notify us at [epp@epp.no](mailto:epp@epp.no).*

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