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## **RPM SENSOR – REPLACEMENT**

Replacement of the RPM sensor in Mercury, Pegasus, Olympus, Titan, Nike and Lynx follows similar procedures, the clearance between the face of the sensor and the edge of the compressor blades is important for each turbine. No special tools are needed, except for metric feeler gauges and a hexagon wrench for the M2 or M3 bolts (Nike & Lynx).

The clearance between the sensor & the edge of the compressor blades should be as follows:

Mercury (HP) <u>0.15\*</u> - 0.20 mm, Pegasus (HP), Olympus (HP), Titan, Nike and Lynx 0.20 - <u>0.25\*</u> mm. (\* preferable sensor distance to compressor blade)

- **Step 1:** Remove the old RPM sensor by loosening the two M2/M3 bolts in the mounting block, and pull the sensor out of the mounting block.
- Step 2: Insert the new RPM sensor through the hole in the mounting block and the hole in the inlet, until it is flush with the inside surface of the inlet. Tighten the M2/M3 bolts a little.
- Step 3: The edge of all the compressor blades are machined only in front with the RPM sensor hole in the inlet and the measurement of the gap between the sensor and the blades must be made at this point, with the feeler gauge at 90° to the face of the compressor blades. Using a metric feeler gauge, measure the space between the front face of the RPM sensor and the machined part of the compressor blades, checking all compressor blades. The feeler gauge should be a tight fit. If the gap is too big, then gently push the RPM sensor inwards until the required gap is achieved. Be careful not to damage the front of the sensor with the feeler gauge.



Picture shows feeler gauge in place.

- Step 4: When the gap is correct, tighten the two M2/M3 bolts with a torque of 24Ncm for M2 bolts and 60Ncm for M3 bolts. Do NOT use Loctite™ or equivalent on these bolts, otherwise it will be impossible to remove them in the future.
- **Step 5:** If you have an EDT and a version 1 or 2 ECU, you can connect the sensor to the ECU RPM input and spin the compressor to check that the RPM sensor is working.

If you have any problems understanding these instructions, then please email or call AMT Netherlands.