## **Engine Polygraph Warranty**

Predictive Fleet Technologies, Inc., (PFT) warranties the software will work as described. The warranty does not cover any problems with the Internet connection or your common-browser (Internet Explorer, Chrome, or FireFox) compliant workstation (desktop, laptop, or tablet). We will store your signatures, up to 10 Mb (typical values are under 200 Kb), and maintain them in a searchable and retrievable manner as described in the accompanying document. We use standard security, data and application backup & restore methods to protect your data investments from most natural and criminal events. If authorized users delete or change data, we cannot guarantee recovery.

The Engine Polygraph Assessment report automates many of the steps that a user would perform manually in interpreting a SenX waveform from an internal combustion engine. It requires a waveform of adequate strength and sample frequency generated by the customer's oscilloscope such that the analysis programs can detect meaningful information from the signal. Meaningful results occur only if the testing procedure is correctly followed; e.g., the connections of the cables are reliable, the equipment (oscilloscope, cables, sensors, etc.) works satisfactorily, and the oscilloscope parameters are set to reasonable values of duration (about 4 rotations of the engine crankcase), sampling at about 40kHz per channel). SSM Assessment request inputs must be accurate: the engine manufacturer and model must at least have the correct engine configuration & strokes per cycle and the approximate RPM input to the SSM application is assumed to be within +/- 10% of the actual value.

The Engine Angel Assessment is NOT designed to measure misfires due to conditions such as poor fuel or irregular ignition. The Engine Angel software is looking for defects that are measureable with each engine cycle (2- or 4-stroke).

The Assessment report uses advanced mathematical methods to classify the cylinder features extracted from the signatures: one from the exhaust and the other from the crankcase, usually via the oil dipstick tube. It is required that the oscilloscope channels are assigned correctly, in alignment with the connections and placement of the FirstLook® sensors. If the exhaust system has holes allowing exhaust to prematurely escape before reaching the sensor, or if particulate filters reduce or 'average' the pressure at the sensor to a very distorted level, meaningful results will not be achieved. Upon receiving a meaningful signature file, the Assessment report will display the results of a 'supervised learning' software to classify the condition of the engine's 'upper' and 'lower' components based on observation of many other engines. The measures of valve lash and valve seating condition are based on other methods. These classifications will likely improve over time and newer versions (as displayed on the report) will provide those improved results when available to you, the customer.

It is up to you to decide what action you should take based on the Assessment report. The recommendations we make are based on feedback from others' experiences. PFT is not liable for damages resulting from the implementations of such recommendations; we provide them to you for your judgment in decisions on what to do.

THERE IS NO WARRANTY OF MERCHANTABILITY. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION HEREIN. THERE ARE NO WARRANTIES EXPRESSED OR IMPLIED OR ANY AFFIRMATION OF FACT OR REPRESENTATION EXCEPT AS SET FORTH HEREIN.

## <u>REMEDY</u>

If you suspect that there has been an error in the storage, indexing, assessment or retrieval of your data, please contact us immediately at <a href="mailto:support@engineangel.com">support@engineangel.com</a> and/or contact us by phone: 1-844-ENGINE-4 (364-4634). We will work with you to understand what happened and what recovery plan we can put in place.

In no event shall PFT be liable for damages of any nature, including incidental or consequential damages, including but not limited to any damages resulting from non-conformity, defect in design or workmanship.

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