



X1R Global Sdn. Bhd. (905244-T)

To: All X-1R distributors **From:** Nigel (Mac) McKenzie

Cc: **Date:** 31st March 2011

Subject: Filters and centrifuges

The filtration of oil within an engine is an essential part of the operation of an engine and thus all engines have some form of oil filtration process that is designed to eliminate particulate contamination from the oil and thus avoid the build-up of an abrasive condition within the engine. Recently a number of car companies have introduced oil filters that will filter down to 1.8 microns. Additionally in larger industrial settings it is common for the oil to be circulated via a centrifuge in order to remove particulate contamination. Thus the question has been asked whether either of these levels of filtration will X-1R be removed or separated from the oil.

To put it simply this will not be an issue. Centrifuges in on-board systems and paper/metal style filters common in most smaller engines are used to separate any particulate matter and water from the engine oil. Centrifuging or filtering is a "physical" as opposed to "chemical" separation process. As X-1R engine treatment forms a completely homogeneous mixture (blend) with the engine oil it therefore cannot and will not be separated from it by simple physical separation processes.

Nigel McKenzie
March 31, 2011