



Continental Motors Corporation

1470 ALGONQUIN

Detroit 14, Mich., U.S.A.

October 1, 1949

Professor R. E. Kehoe
Kettering Laboratory
University of Cincinnati
Cincinnati, Ohio.

Dear Professor Kehoe:

We are working on a small aircooled engine program with one of the U. S. Government Departments in which they have requested information on methods to prevent harmful effects due to the exhaust gases when these engines operate in normally ventilated quarters. The engine in question will use gasoline fuel having 2.5 to 3 CC of Ethyl fluid per gallon. The engine is of the two-cycle type and has a displacement of only 0.5 cu. in. and will operate at about 7000 RPM.

This subject was discussed with Mr. Earl Bartholomew and he suggested that we write to you. Accordingly, we are listing the questions and we would appreciate any information which you can supply us on each item.

- (1) What procedure is available to suppress the harmful effects of the exhaust gases due to (a) the carbon monoxide in the exhaust, and (b) the lead compound in the exhaust?

An additive to the fuel is acceptable if a suitable and reliable one is available.

- (2) What percent by volume of carbon monoxide is permissible in a normally ventilated room before it becomes dangerous?
- (3) From your experience with small two-cycle engines what percent of carbon monoxide can be expected in the exhaust gases?

In addition, any other information which you can supply on this subject will be welcome.

Thank you for your kind consideration of this request.

Very truly yours.