

**Subject:** Fuel types

**Applicability:** All engine production series AE 50 R

**Reason:** Use of motor vehicle fuel types.

**Action:** Motor vehicle fuel types should only be used as an exception and while observing the following points.

**Reasons given:** Due to the exact specifications of AVGAS 100LL we may take it for granted that a very constant quality of this fuel type can be found worldwide. What is more AVGAS contains additives which prevent vapour lock.

As a general rule a rotary engine does not need any lead additives and moreover it is also tolerant with regard to slight deviations of the Octane rating.

The engine manufacturers Mid-West accomplish their 50 hours test runs for cost-saving reasons with these cheaper fuel types without any problems. Nevertheless we recommend to avoid if possible the use of motor vehicle fuel types for the above reasons given. Also the following reasons apply:

- a) Motor vehicle fuel types are subject to big quality differences and are not covered by comparable standards in the various countries.  
Therefore, the company Schleicher cannot give universally valid statements on certain fuel types.
- b) Measurements at carburettor engines with unchanged carburettor adjustment have demonstrated that the exhaust temperature is distinctly increased when using motor vehicle fuel types as compared to the use of AVGAS. Since the standard factory adjustment is done with AVGAS for all the carburettor engines, the carburettor must be re-adjusted when using motor vehicle fuel types.

If the use of motor vehicle fuel types cannot be avoided, then in any case the carburettor adjustment should be changed. This of course does not apply to the fuel-injected engines (as e.g. for the ASH 25 Mi). Furthermore you should pay attention to use the premium-grade fuel types only.

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By order.

(M. Heide)