

Service Information No. 10/05

Date: 01.08.2005

Governor Drive Evaluation of the Operating Pattern

M 43

In some cases the gears of the governor drive on the M43 engine are showing hard running patterns which are similar on the in-line and V-engines.

Due to the design of the gear drive such running patterns may already occur after a short time. They are the result of a normal, only temporary running-in behaviour and attributable to two technical facts:

- The two mating gears have a different hardness.
- The backlash tolerances create slightly different conditions.

These running patterns are produced as the gears adapt themselves with respect to each other. This process comes to a standstill latest after one year. Referred to the technical design of the drive mechanism, the forces to be transmitted are to be considered as low. Therefore, such running patterns are merely the result of an adaptation and not a symptom of overload or even damages.

The following photos show normal, perfect governor drives of different engines at different running hours. The adaptation process can be recognized on all of these pictures.

Slightly palpable running patterns on the gear flanks as shown by all the following photos are totally harmless and permissible.

No replacement is required in such cases as shown on the pictures.

Should you have further questions, please contact your dealer.

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Figure 1
In-line engine M 43
after 1,000 operating hrs.

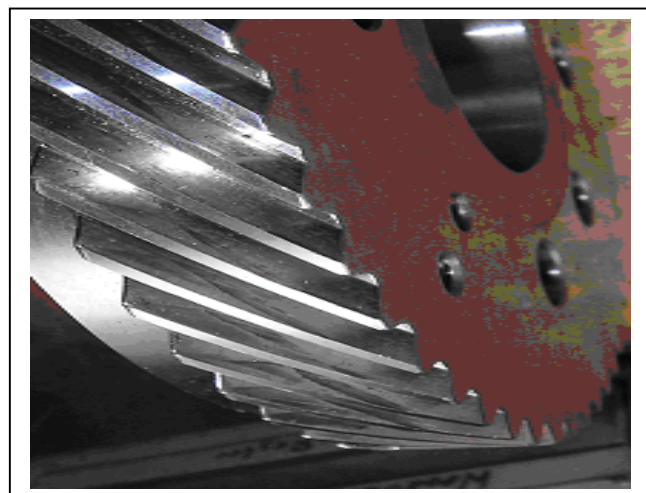


Figure 2
In-line engine M 43
after 7,500 operating hrs.

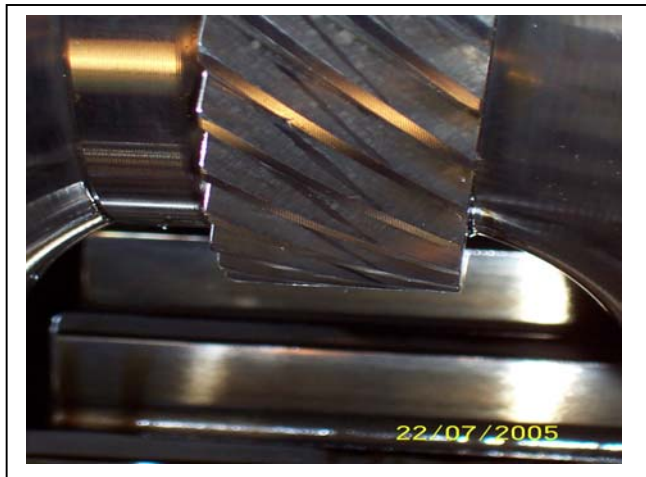


Figure 3
In-line engine M 43
after 21,000 operating hrs.

Photos 1 to 3 show normal, perfect running patterns of governor drives at different running hours. The adaptation can be clearly recognized. Slightly palpable running patterns on the gear flanks are totally harmless and permissible. No replacement is required.

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Figure 4
V-engine M 43
after 1,500 operating hrs.

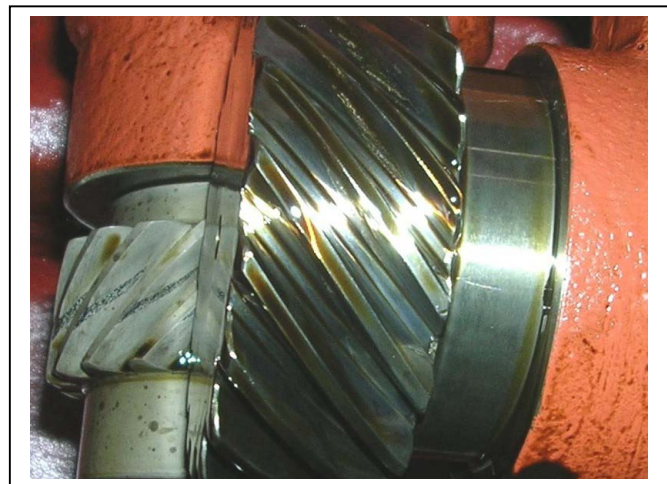


Figure 5
V-engine M 43
after 5,500 operating hrs.

Photos 4 to 5 show normal, perfect running patterns of governor drives at different running hours. The adaptation can be clearly recognized. Slightly palpable running patterns on the gear flanks are totally harmless and permissible. No replacement is required.