



Technical Report #28

Recommendations for the installation of hydraulic lifters

Technical Report

Purpose

To inform AJUSA customers about the recommendations to follow after installing new hydraulic lifters in engine.

Description

Sometimes, when hydraulic lifters are replaced, at the very beginning you may hear a noise caused by one or several of them. It is a particular sound and the reason is because of a complete or partial unload of oil over a lifter.

When we say a lifter is unloaded, it is because the high pressure chamber of the lifter has air inside. As the air is compressible, it allows the piston sinking to the maximum and makes noise when reach this position.



Ajusa supplies all hydraulic lifters loaded with high quality oil to avoid this; nevertheless it is usual that they may be unloaded because of storage or assembly.

If one or several lifters are unloaded, you will hear a noise at the start of the engine. This noise will last more or less depending on the lifter capacity to receive the load of oil, which depends on the general conditions of the engine and more specifically on:

- *Engine oil level.*
- *Quality and type of oil used in engine.*
- *Condition of oil pipes.*
- *Condition of the oil pump.*

Once the above points have been checked, there is a series of recommendations to ease the load of the lifter at the first engine start after its assembly in case of noise:

- *Keep the engine idle for 5 minutes.*
- *If noise continues, accelerate to 2000 rpm for 3 minutes.*
- *Keep engine idle for 30 seconds.*
- *If noise continues accelerate again to 2000 rpm for 3 minutes.*
- *Keep engine idle for 30 seconds.*
- *In case noise continues, repeat this operation 4 times more.*