Subject: Spark plug LIMBACH LB-N 41.0  Part-Number: 170.123.103.000 and 
LIMBACH LB-L 41.0  Part-Number: 205.123.101.000

Affected Engines: Alle Motoren der Baureihen:

L 1700
L 2000
L 2400 E0, EB, EE

Background Information: Introduction of new spark plugs

Priority: without

Compliance: Other than the previously used spark plugs, the new type plugs do not have a metallic shielding (see top ill.). The new plugs also feature a different mass electrode. These have a helper electrode at the tip of the isolator (grey ring around the center electrode) as well as 3 short ground electrodes (see center ill.). During ignition the spark glides via the grey helper electrode at the tip of the isolator to finally jump to one or more of the three ground electrodes. The spark is now more forward in the combustion chamber to facilitate ignition and for a better flame propagation.

The electrode gap is not adjusted anymore on the new plugs. The factory adjustment may not be changed. Spark plug wear is not determined by erosion of the 3 ground electrodes. In use material is removed from the helper electrode (see bottom ill.). In extreme cases the helper electrode may be partially eroded.

These spark plugs also require a special ignition harness as detailed in Technical Bulletin 63, because of the missing shielding.

The quality of combustion may be evaluated as usual by looking at the spark plugs. A brown to light brown color of the isolator indicates correct adjustment of the carburetor. A light grey to white color indicates a lean mixture and a black isolator in turn indicates a too rich mixture. The color of the spark plug isolator is also an indicator for the combustion temperatures - light colors = high combustion temperature, dark colors = low combustion temperatures. The heat range of the spark plug is selected such that correct isolator color is automatically achieved if the carburetor is correctly adjusted.

Notice: This document has been translated to the best of our knowledge. In case of doubt, however, only the German original shall be considered as authoritative.