



Subject: Cylinder head

Affected engine models: All engine models:

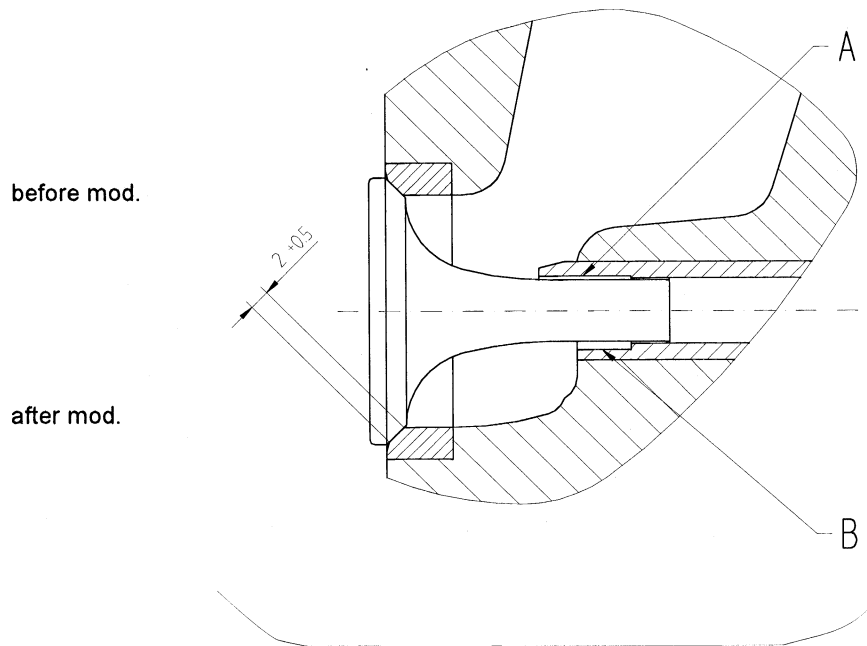
L 1700
L 2000

Background Information:

Due to changing fuel recipes, problems with burnt exhaust valves were observed. An investigation showed that increased combustion deposits are responsible for the problem. This has been reported from other engine manufacturers as well. The deposits lead to valve sticking in the lower countersunk area of the exhaust valve guides (see section A in the sketch below). The time span until problems occur depends on the type of aircraft, the condition of the cooling baffles, operating mode of the aircraft, the fuel brand and the engine oil used. Specific brands of fuels cannot be recommended, because their recipes may change locally. The frequency of occurrence is higher with engines which are stressed higher than normal.

Priority: within the next 100 hrs of operation

Compliance: The exhaust valve guides are milled until flush with the material of the exhaust port. The remaining rest of the countersunk area is enlarged to 9.5 mm diameter. The bottom of the countersink must be perpendicular to the main bore with a sharp edge. This way the ring area around the valve stem is enlarged and the shoulder at the end of the countersink will prevent deposits from entering the valve guide bore. In addition to this measure the width of the sealing face on the valve seat is cut to a width of 2 mm. This should contribute to a reduction of the valve temperature. Replace exhaust valves with new ones. Check condition of cooling baffles and replace if necessary.





Cylinder heads, which bear the following serial numbers, or which have been installed after 01.01. 1994 resp. have been repaired after this date, are modified already. The serial numbers are stamped into the cylinderhead next to the exhaust flange (to the side of the valve cover) and always start with „0“

061	01348	03468	06985	07598
0111	01465	03470	06987	07614
0290	01466	04241	07038	07619
0350	01565	04760	07054	07633
0360	01568	04761	07110	07765
0498	01709	05630	07289	07766
0499	01723	05869	07290	07790
0566	01846	05947	07348	07817
0573	01895	05958	07374	07865
0601	02101	06711	07412	07866
0689	02425	06729	07413	07935 - 07961
0755	02474	06813	07485	07965 - 07976
0756	02477	06815	07486	07978 - 07996
0799	02488	06819	07492	07998 - 08083
01133	02607	06826	07588	08136 and over

Authorization: The work described herein may only be performed by the manufacturer or by authorized workshops

This document has been translated to the best of our knowledge. In case of doubt however only the german original shall be considered authoritative.

LBA approved:



[Handwritten signature]

23. Nov. 1994

Bearb.: Stolinski

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