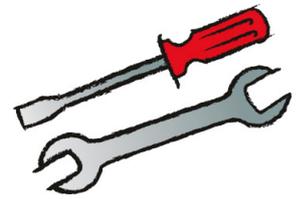




Das Original

TSI 04/10



Tips from the gasket expert

Engine failure – is the cylinder head gasket to blame?

Gas blow-by on the metal layer gasket

Metaloflex®

Failure due to pressure build-up in the cooling system

Damage symptoms:

Clear linear impressions can be seen in the area of the water ducts. These come from the cylinder head sealing surfaces and run in the direction of the combustion chamber. The water passages have an obvious light coloration.



Cause:

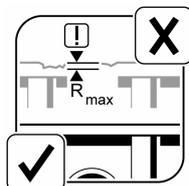
The surface structure of the cylinder head was machined either insufficiently or not at all, resulting in the blow-by of combustion gases into the cooling circuit and overheating (pressure build-up).

Other possible causes:

- The air was not removed entirely from the cooling system so the coolant did not circulate.
- Cooling circuit was interrupted (water pump, thermostat, fan).
- High exhaust back pressure caused engine to overheat (e.g. defective catalytic converter).

Measures:

Check the condition of the sealing surfaces very closely before installation and ensure that the cylinder head is. If necessary resurfacing by a specialist.



Para-meters	Metal/soft-material	Multi-layer metal	Metal-elastomer
R_z	15 - 20 μm	11 μm	11 - 20 μm
R_{max}	20 - 25 μm	15 μm	15 - 20 μm
W_t		8-10 μm	