



## VW Golf 4, Bora, Sharan, Passat B5

### Washer fluid low level indication

One reason for the illumination of the low level indication lamp can be to high a concentration of anti-freeze or the use of distilled water.

A level-indicator sensor with pins (see picture) measures the resistance of the fluid. The resistance rises with the proportion of anti-freeze. If the resistance rises about 200KOhm the warning light illuminates. The water part must always be more than 25%. Distilled water also has a high electrical resistance and can induce some malfunctions therefore, it may not be used.



Liquit	Mixture	Anti-Freeze to	Resistance
Water	undiluted	0°C	172 kO
Ethanol	undiluted	- 70°C	▶ 8
distilled Water-Ethanol	1:1	- 35°C	▶ 8
Ethanol-Water	5:1	- 55°C	200 kO
	2:1	- 40 °C	130 kO
	1:1	- 35 °C	105 kO
	1:2	- 16°C	100 kO
	1:3	- 8°C	110 kO

all results approx.