

# Indium Soldering on Glass

## low melting point of solder alloy

### Indium Soldering on Glass Test Results

Dr. M. Pinsker  
BMW, EK-430  
Page 12

#### introduction

#### tests performed

#### summary of results

#### summary of results including VW data

#### proposed further steps, timeline

#### low melting point of solder alloy

Taking into account operation of the heaters, which creates additional heat inside the connectors due to the electrical load, even higher temperatures than mentioned on the last slide will be reached. The humid air often leads to fog on the inner surfaces of the car. De-fogging of the rear

window, which is crucial for the clear outside view of the driver and is thus a safety-relevant function, is usually done using the heater.

Activation of the heater also heats up the connectors to up to 50°C above the surface temperature of the glazing, which may reach 70 .. 80°C under real-life conditions in a very humid environment.

Hence, when the heater is activated in a humid environment for de-fogging of the rear window, the temperatures reached will by far exceed 110°C which are known to cause Antaya's solder alloy to fail.

