minitools

SEPDISP21B

Modification instructions

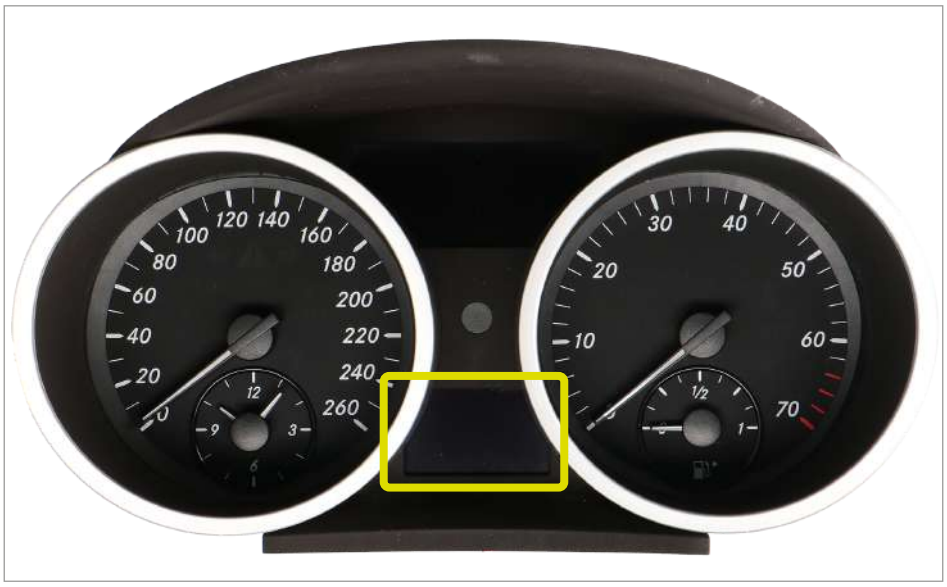
Vers. 4.0

www.minitools.com

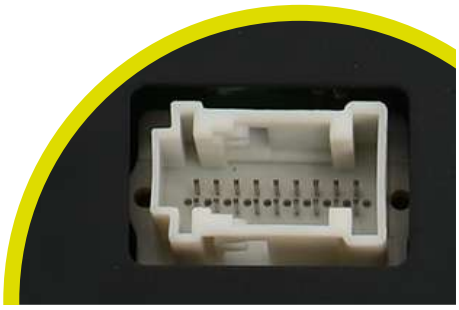
WARNING: This process is recommended only to expert and qualified staff.

THE FOLLOWING MODIFICATION IS NECESSARY FOR THE CORRECT FUNCTIONING OF SEPDISP21B DISPLAY *(pic. 1)*.

Replace the display in an ambient temperature of 25 °C.



Picture 1



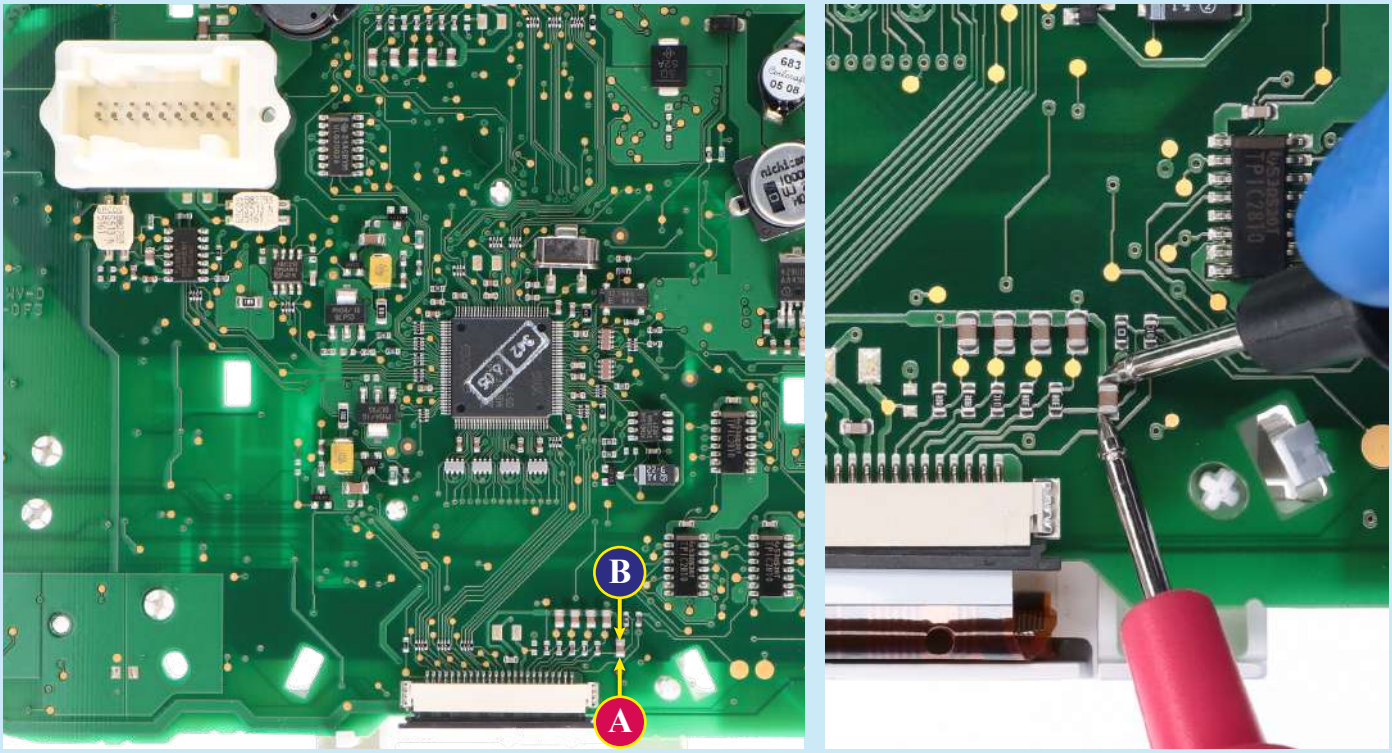
Picture 2

To adjust SEPDISP21B display voltage:

After replacing the LCD, **switch on the cluster:** white connector *(pic. 2)* pin no. 1 negative, pin no. 5 and pin no. 6 positive. **Measure the voltage** between **A and B points** as in *picture 3*.

- If the voltage measured is between 11.98V and 12.02V, no modification is necessary;
- If the voltage detected is instead lower than 11.98V or higher than 12.02V, it is necessary to do the modification described in the following paragraph "**EEPROM MODIFICATION**".

Measuring display voltage



Picture 3

EEPROM MODIFICATION

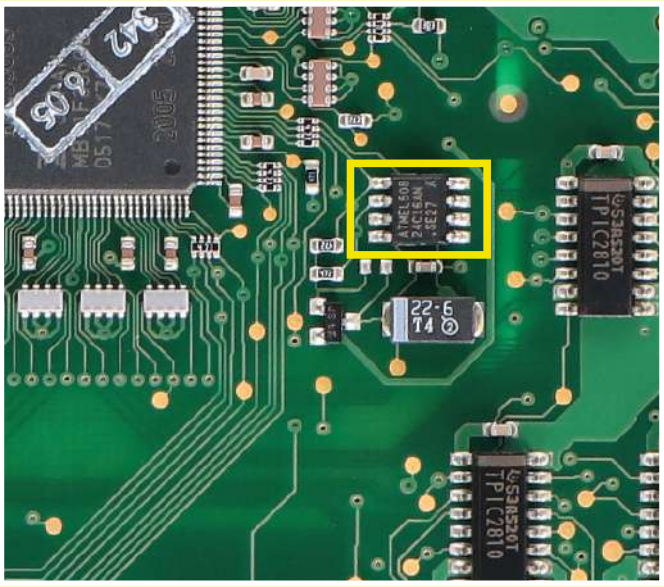
NOTE: *For this modification it is necessary to* ***use an EEPROM programmer.***
We recommend our ***SEP-EECLIP.***

• First, set the programmer reading in **hexadecimal (HEX).**

• Desolder and make a backup of the **24C16** EEPROM *(shown in picture 4)*

• To reach a voltage close to 12.00V act on **02D8 location**

Please note that **decreasing this location by 1 HEX unit,** the **variation will be + 0.016V**, or vice versa.



Picture 4

If not familiar with hexadecimal calculation, it is possibile to use the calculation tool in the box below, simply typing in the values.

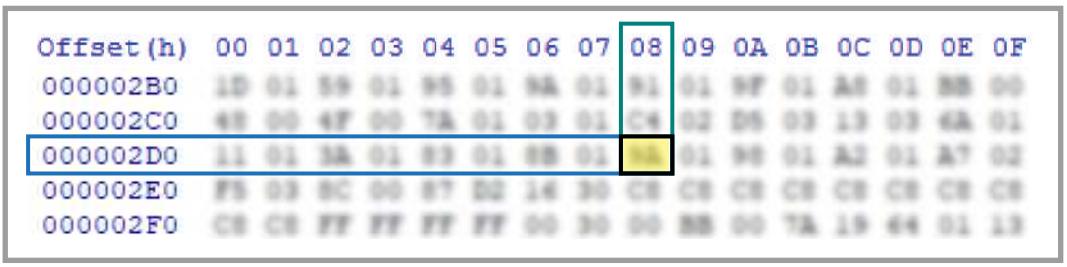
CALCULATION OF THE NEW VALUE OF THE LOCATION

• *Type in the HEX value of 02D8 location**

• *Type in the value of voltage measured between A and B points (use a period as decimal separator, e.g. 12.76)*

• *New value to type in 02D8 location.*

**How to identify 028D8 location value on the EEPROM programmer*



Once these modifications have been done, **measure again the voltage** between **A and B points** and check that it actually is between 11.98V and 12.02V.
If not, increase or decrease the location until the value is as close as possible to the right range.