



SEPDISP06

Modification instructions

Ver. 3.0



 **WARNING**

Our technicians, for illustrative purposes only, have made a video tutorial about how to replace the display and make the EEPROM modification. Click on <https://video.minitools.com/SEPDISP06-en> or scan the QR code to watch it.

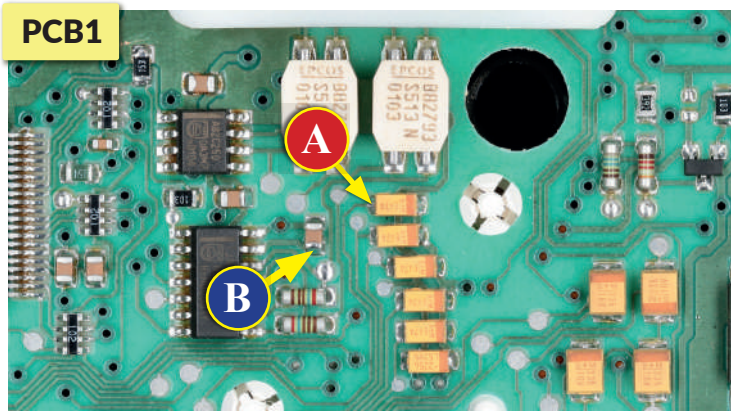
DON'T SKIP ANY STEP.



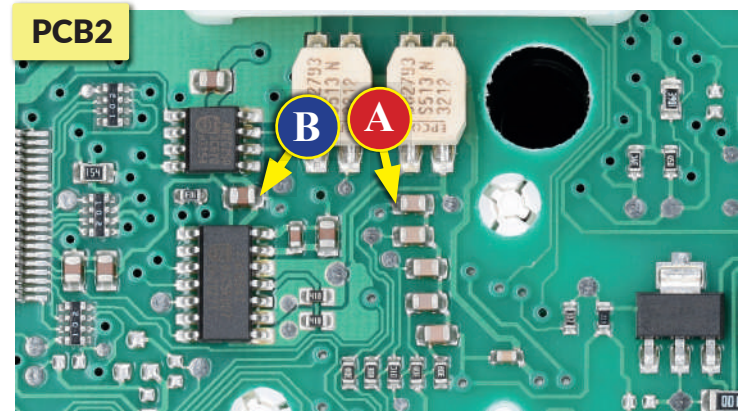
WARNING: This process is recommended only to expert and qualified staff

THE FOLLOWING MODIFICATION IS NECESSARY FOR THE CORRECT FUNCTIONING OF SEPDISP06 DISPLAY.

- Replace the display in an ambient temperature of 25 °C.
- After replacing the LCD, switch on the cluster (pin no. 1 negative, pin no. 5 and pin no. 6 positive).
- Identify the PCB of your dashboard (PCB1 or PCB2) and measure the voltage between A and B points.



Pic.1



Pic.2

- If the voltage measured is between 7.7V and 7.8V, no modification is necessary;
- If the voltage detected is instead lower than 7.7V or higher than 7.8V, it is necessary to do the modification described in the following paragraph "EEPROM MODIFICATION".

EEPROM MODIFICATION

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

- De-solder the 93C86 EEPROM from the PCB.
- Set the programmer reading in hexadecimal (HEX).

ATTENTION: make a backup of the EEPROM, before the modification.

- To reach a voltage between 7.7V and 7.8V, identify the 01E4, 01E5, 01E6 and 01E7 locations and modify their values: increasing or decreasing the 4 locations values by 1 HEX unit, the variation will be +/- 0.09 V.

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

Once these operations have been done, solder back the 93C86 EEPROM on the PCB, switch on the instrument cluster and check again the tension between points A and B.

Verify, then, if a voltage between 7.7V and 7.8V has actually been reached.

If not, decrease or increase the values of the locations until the voltage is between that range.

WARNING: if the VOLTAGE HAS NOT CHANGED at all after the EEPROM modification, CONTACT US.

CALCULATION OF THE NEW VALUES OF THE LOCATIONS

- Type in the value of the voltage measured between points A and B (pic. 1 or pic. 2) (use a period as decimal separator, e.g. 7.4)

01E4 LOCATION

- Type in the HEX value of 01E4 location*
- new value to type in 01E4 location

01E5 LOCATION

- Type in the HEX value of 01E5 location*
- new value to type in 01E5 location

01E6 LOCATION

- Type in the HEX value of 01E6 location*
- new value to type in 01E6 location

01E7 LOCATION

- Type in the HEX value of 01E7 location*
- new value to type in 01E7 location

*How to identify 01E4, 01E5, 01E6 and 01E7 locations values on the EEPROM

Offset (h)	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
000001D0	00	00	24	00	29	00	28	00	4A	00	00	00	00	00	00	00
000001E0	00	00	23	00	28	00	27	00	00	00	00	00	00	00	00	00
000001F0	12	34	00	00	75	00	00	00	00	00	00	00	00	00	00	00