



SEPDISP13

Modification instructions

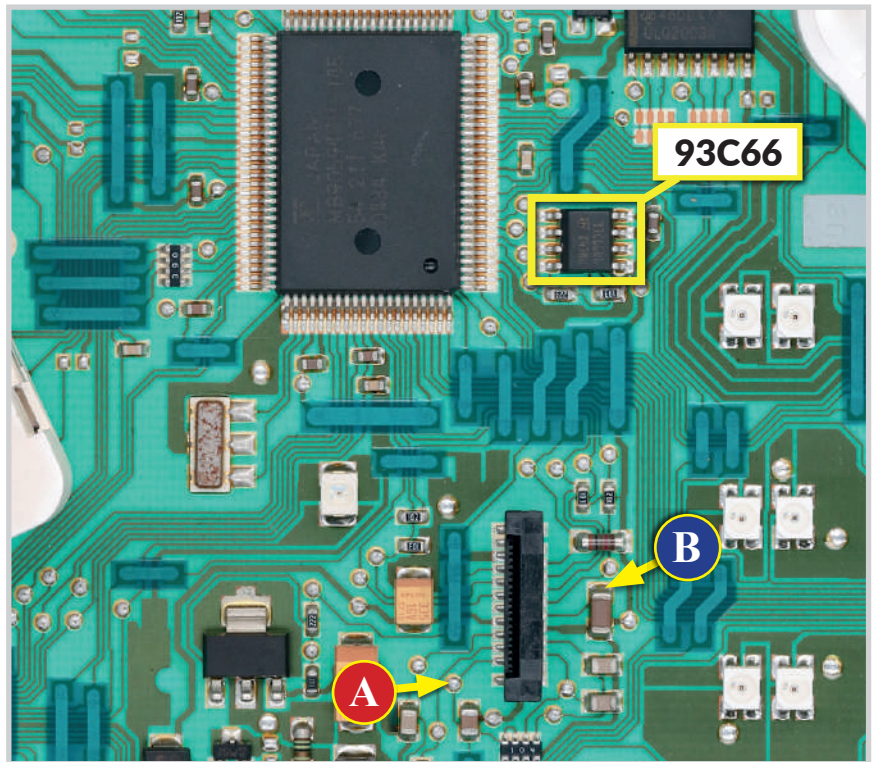
Ver. 3.0



ATTENZIONE: THIS PROCESS IS RECOMMENDED ONLY TO EXPERT AND QUALIFIED STAFF.

THE FOLLOWING MODIFICATION IS NECESSARY FOR THE CORRECT FUNCTIONING OF SEPDISP13 DISPLAY.

- Replace the display in an ambient temperature of 25 °C.
- After replacing the LCD, **switch on the cluster** (pin no. 16 positive, pin no. 18 negative) and measure the voltage between A and B points (Pic.1).
- If the **voltage** measured is **between 6.3V and 6.4V**, **no modification is necessary**;
- If the **voltage** detected is **instead lower than 6.3V or higher than 6.4V**, it is necessary to do the **modification** described in the following paragraph "EEPROM MODIFICATION".



Pic. 1

EEPROM MODIFICATION

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

- De-solder the EEPROM 93C66 located on the PCB (Pic. 1);
 - First, set the programmer reading in hexadecimal (HEX).
- ATTENTION:** make a backup of the EEPROM, before the modification.

- To reach a voltage between 6.3V and 6.4V, identify the **0122, 0123, 0124, 0125, 0126 and 0127 locations and modify their values:** increasing or decreasing the 6 values by 1 HEX unit, the **variation** will be **+/- 0.10 V**.

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

VERIFICATION

Once these operations have been done, solder back the **93C66 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 6.3V and 6.4V** has actually been reached. If not, decrease or increase the values of the locations until the voltage is between that range.

CALCULATION OF THE NEW VALUES OF THE LOCATIONS

• Type in the value of the voltage measured between point A and B (pic. 1) (use a period as decimal separator, e.g. 6.8)

0122 LOCATION

• Type in the HEX value of 0122 location*

• new value to type in 0122 location

0123 LOCATION

• Type in the HEX value of 0123 location*

• new value to type in 0123 location

0124 LOCATION

• Type in the HEX value of 0124 location*

• new value to type in 0124 location

0125 LOCATION

• Type in the HEX value of 0125 location*

• new value to type in 0125 location

0126 LOCATION

• Type in the HEX value of 0126 location*

• new value to type in 0126 location

0127 LOCATION

• Type in the HEX value of 0127 location*

• new value to type in 0127 location

*How to identify 0122, 0123, 0124, 0125, 0126 and 0127 locations values on the EEPROM

Offset(h)	00	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F
00000110	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
00000120	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
00000130	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF