

## APPLICATIVE NOTES FOR INSTALLING TEMPERATURE SENSORS.

### ***Introduction***

This applicative note describes the procedure to follow for installing temperature sensors in the D2NA system (Production 1999-2000) and the NNA system (Production 1998-1999).

The LCD control units on which it is possible to view the temperatures once the sensor-probes are connected are those having software version **Rel.1.23** or later; for the previous versions an upgrade is provided.

### ***Installation on control unit 1998-1999 (NNA System)***



**Figure 1 " Five-key model 1998-1999 control units "**

For vehicles equipped with the type of control unit in Figure 1 (model 1998-1999 with five keys) the following steps must be taken:

- a- Remove the control unit from its housing (unscrew the four screws at the corners and disconnect the only connector present on the back of the panel);
- b- Check the software version of the control unit<sup>1</sup>. If it is earlier than Rel. 1.23, the chip needs to be upgraded to the later versions;
- c- Insert the temperature sensors into the appropriate connector on the back of the control unit panel. For this model the connector is the one shown in Figure 2;
- d- Position the opposite ends of the sensor at the two points where it is desired to read the temperatures. (Example: one external and one internal);
- e- Reinstall the control unit.

From this moment onward in the "Temperatures section" the temperatures of the environment in which the two sensors are located will be indicated.

Control unit model 1999-2000 shown in Figure 3 is completely compatible with control unit model 1998-1999.

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<sup>1</sup> Usually a label of the control unit software version is found above the black chip.

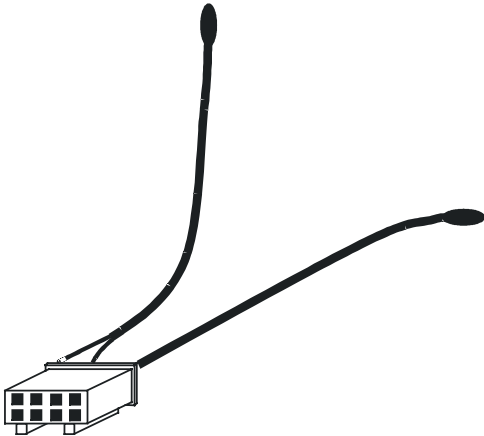


Figure 2 "Connector with two model 1998-1999 temperature sensors "

### **Installation on control unit 1999-2000 (D2NA System)**

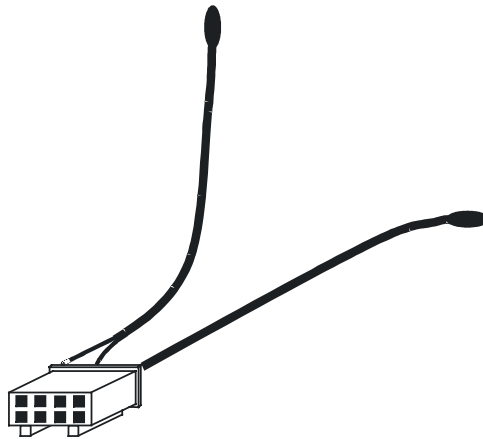


**Figure 3 "Nine-key 1999/2000 model control units"**

For vehicles equipped with the type of control unit in Figure 3 (model 1999-2000 with nine keys) the following steps must be taken:

- a- Remove the control unit from its housing (unscrew the four screws at the corners and disconnect the only connector present on the back of the panel)
- b- Insert the temperature sensors into the appropriate connector on the back of the control unit panel. For this model the connector is the one shown in Figure 2;
- c- Reinstall the control unit.

From this moment onward in the Temperatures section the temperatures of the environment in which the two sensors are located will be indicated.



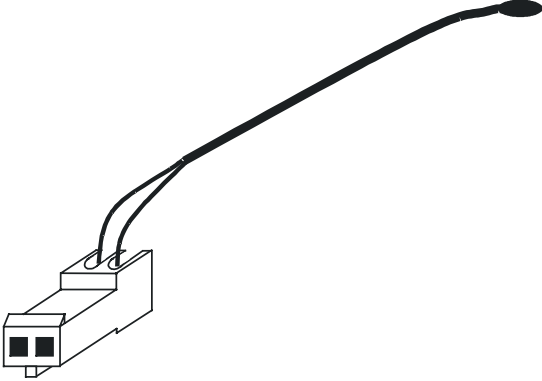


Figure 4 "Connector with two model 1999-2000 temperature sensors "

**NOTES**

If the control unit has the number CNND LCD-1.40-2799 or CNND LCD-1.41-2799, the temperature sensors each have a connector and can be mounted separately.