

Document/File name MODTTT031E.doc	Document Type Internal/External	Revision 1
First Revision, Sign and Date Lan 2006-09-05	Updated Revision, Sign and Date	Document Status and Sign Approved by Bln
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Document and Product Description

Modification to adapt older TTT031 displayunits to the VGX sensor

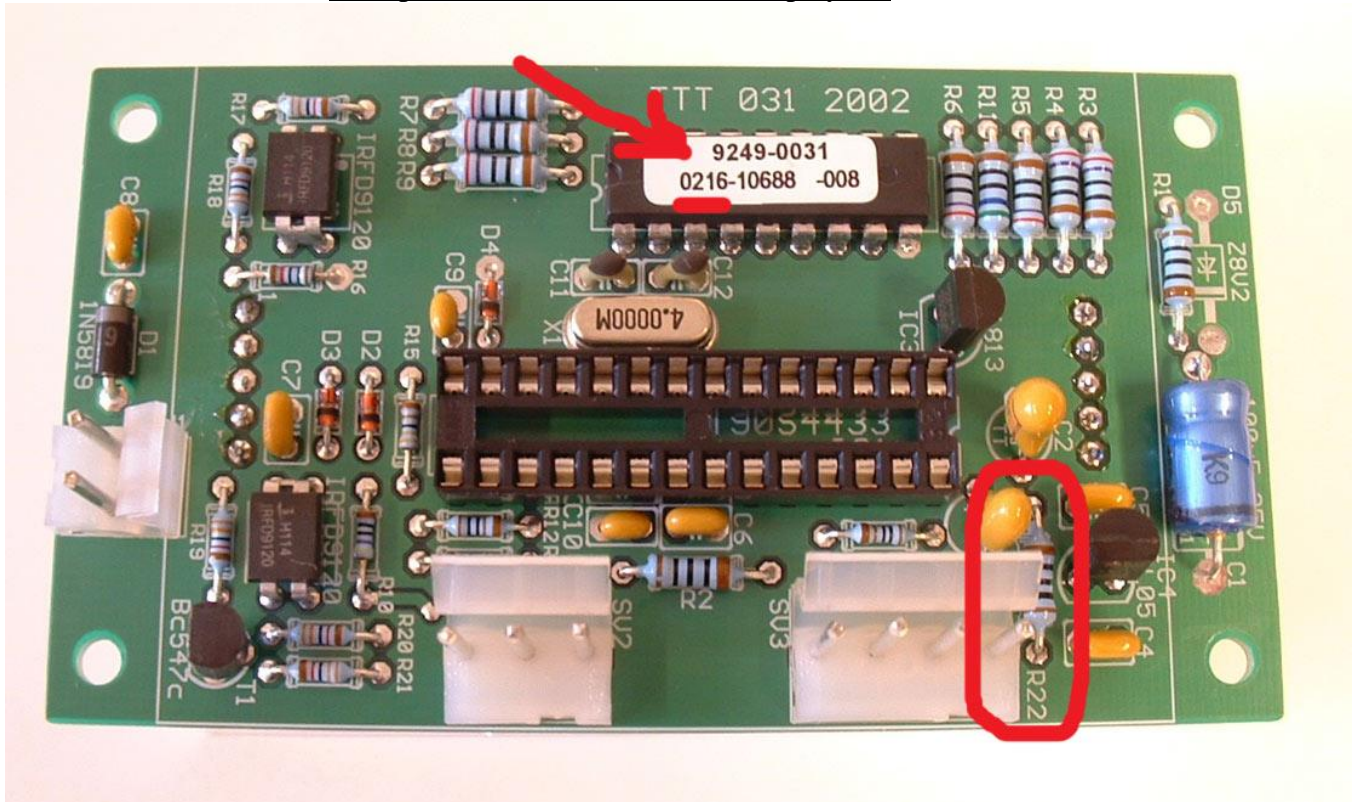
When (and Why) do I need to modify the TTT031 Unit?

The contactless sensor VGX needs a higher voltage than the older potentiometer. TTT031 display units manufactured before 2006 needs to be modified.

When the unit is manufactured can be checked on the label which is placed on the componentside. The first four digits shows the manufacturing year and week.

- The following example shows manufacturing year is 2002 and week 16. Since this is earlier than 2006 the unit needs to be modified to adapt to the VGX sensor. The modification consists of soldering a 10 ohm resistor parallel to the existing "R22" on the pc board. After the modification the unit can handle both the older potentiometer as well as the VGX contactless sensor.

Componentside of the TTT031 Displayunit

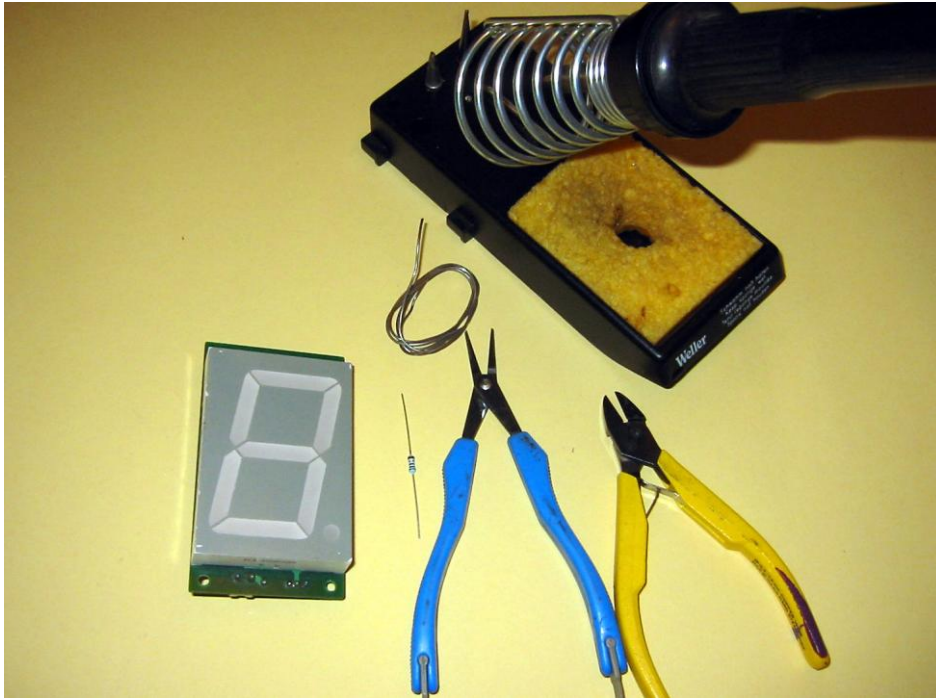




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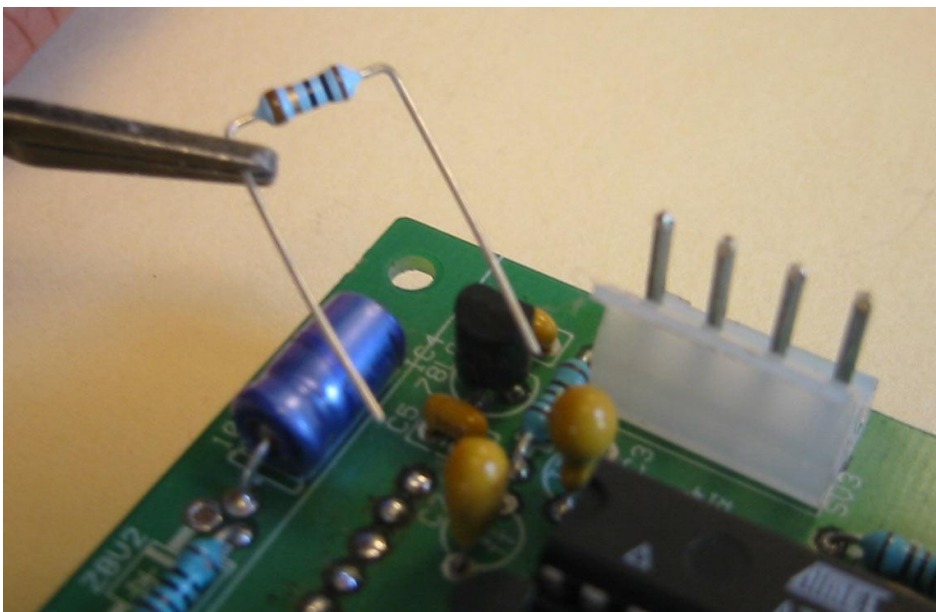
How to do it.

You need the following items. Resistor (10 ohm 0,6 W), side cutter, pliers, soldering iron and some soldering tin.



Start with forming the resistor.

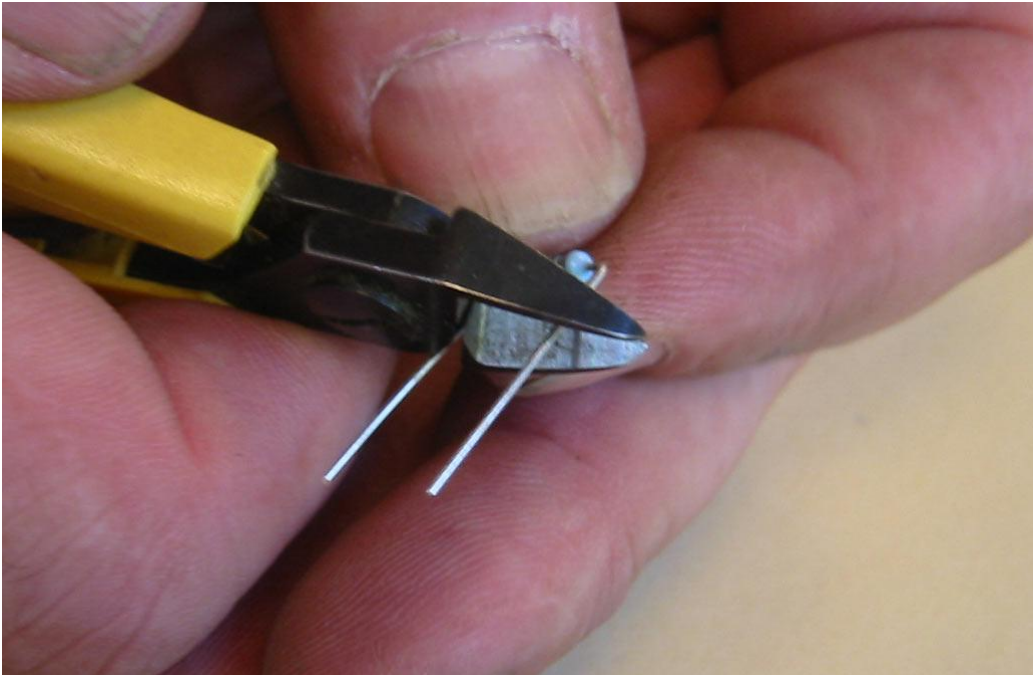
Bend the legs on the 10 ohms resistor so they become approximately 10 mm apart.



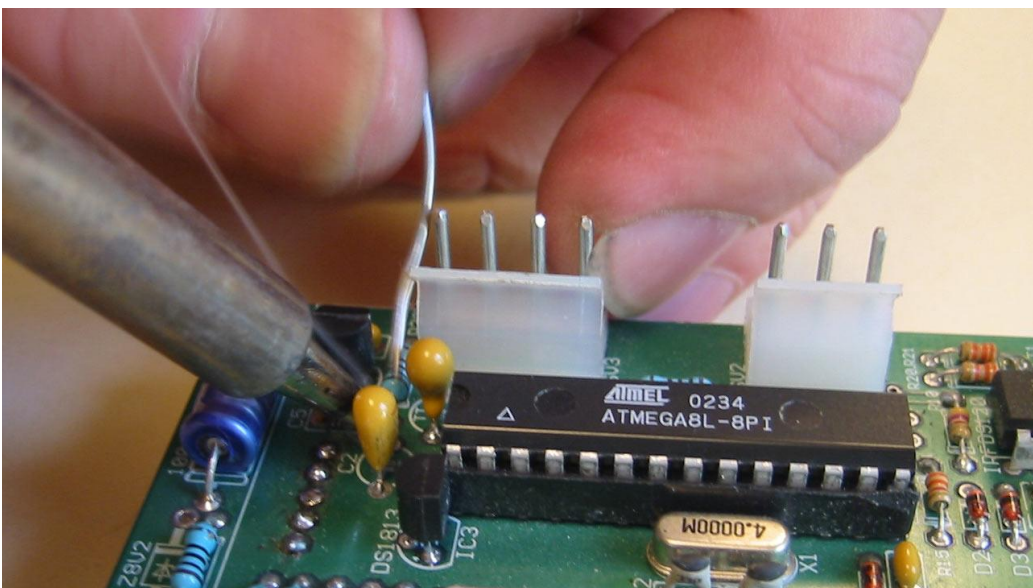
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Cut the legs on the resistor and pre-tin!

The legs should be approximately 4 mm each to fit on top of the "R22". Pre-tin the legs to make it easier to solder it onto the board.



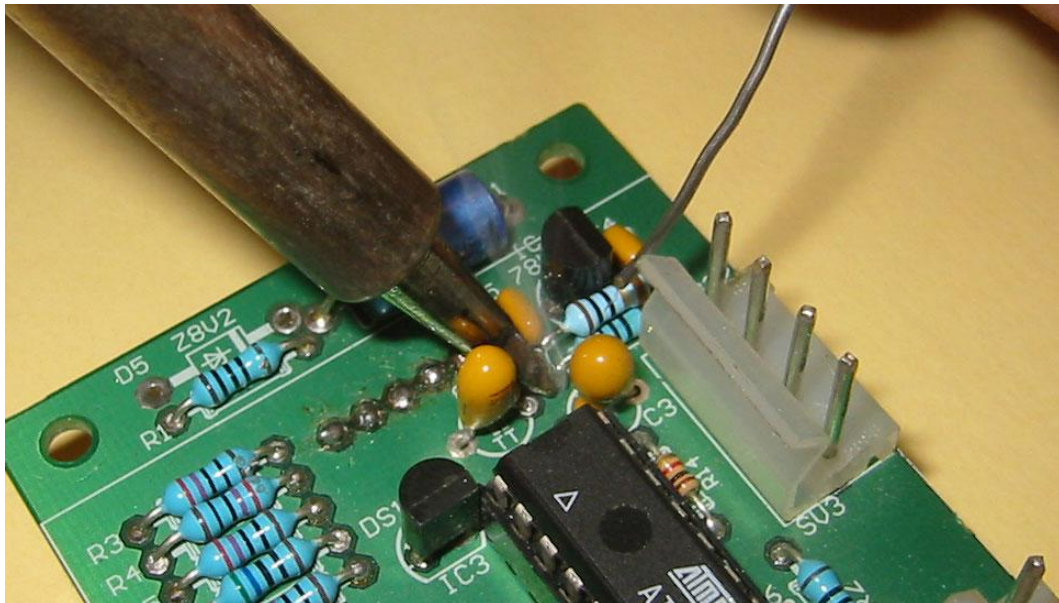
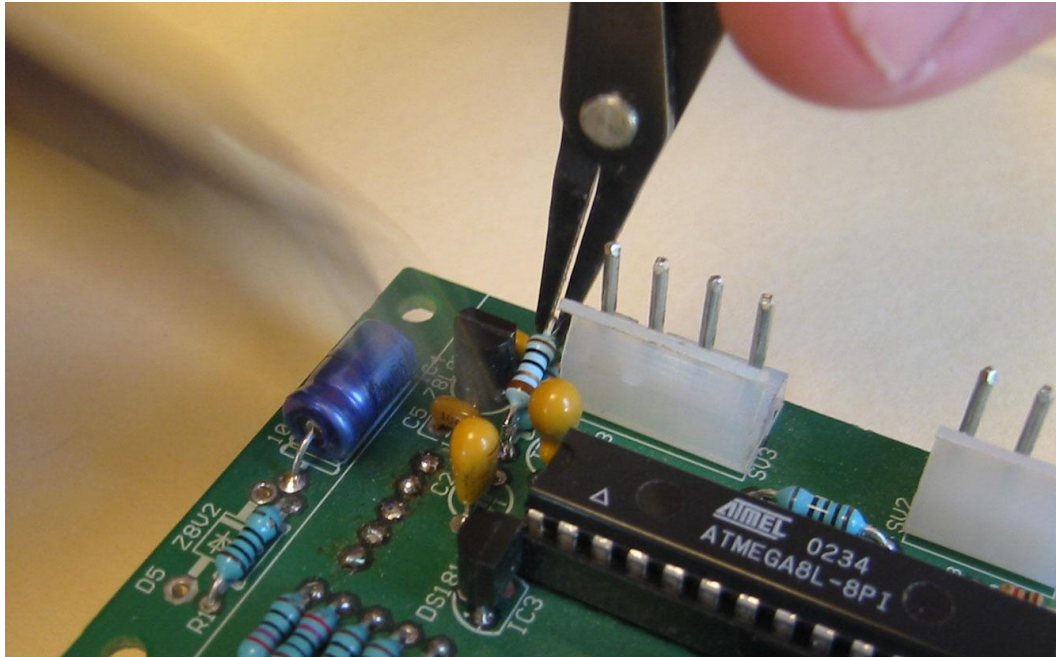
Pre-tin both the legs/solderingpads on the "R22" on the board.



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Solder the 10 ohms resistor on top of the R22.

Make sure that you don't damage the nearby components and that you don't heat to much, or to little!!!





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Check the result and make sure everything looks ok.
This is what it could look like after the modification is completed.

