

Modification of SmartBank Standard to SmartBank Advanced

Completely disconnect SmartBank from the system before attempting to carry out this modification. You will almost certainly destroy it if you do not.

SmartBank Standard can be fully modified to a SmartBank Advanced. This is a complete modification in that once carried out, the SmartBank operates exactly the same as a SmartBank Advanced. Even to the extent that SmartGauge will auto-detect a SmartBank Advanced as being connected as opposed to a SmartBank Standard.

It is a very simple modification that disables the internal control circuitry of the SmartBank and passes over full control to SmartGauge.

Note that once this modification is carried out SmartBank Standard becomes a SmartBank Advanced and therefore will not operate at all without SmartGauge.

4 components need to be removed from the PCB, 2 components changed, and a wire link added. It is not a complicated modification but unless you are used to working on small printed circuit boards you stand a very good chance of destroying SmartBank. This, of course, will not be covered by the warranty.

If you are at all unsure of your abilities to carry out the modification take to the unit to a local TV or Hi Fi repair shop along with this document. It should take a competent engineer or technician less than 30 minutes to read this section and do the job.

Refer to the diagram headed "SmartBank modification".

Your circuit board may not look identical to this as there have been several different revisions of the SmartBank PCB however the modification remains identical.

On the left you will see R1 and R2. These need to be removed. Using a small pair of wire cutters simply snip both ends and remove them. Make sure nothing is left that may cause a short circuit with any adjacent components or pads.

At the bottom you will see D8 and D9. These also need to be removed.

Once these 4 components have been removed it is necessary to install a wire link between the 2 pads where the left hand end of D8 and D9 were previously situated. See the magnified image below the PCB.

An alternative to this, for the technically dextrous, is to snip the right hand ends of D8 and D9, twist them together so that the left hand ends twist round each other, solder the resultant twisted joint, then snip off the rest of D8 and D9. This is the method we use. And it is very quick.

Finally locate R15 and R30. Check the value of these components. If they are not 10K replace them. Whatever value they are at present, they need to both be 10K at the end of the modification..

That is it. SmartBank Standard is now a SmartBank Advanced.

If you only perform a part of this modification then the results are totally unpredictable and undocumented.

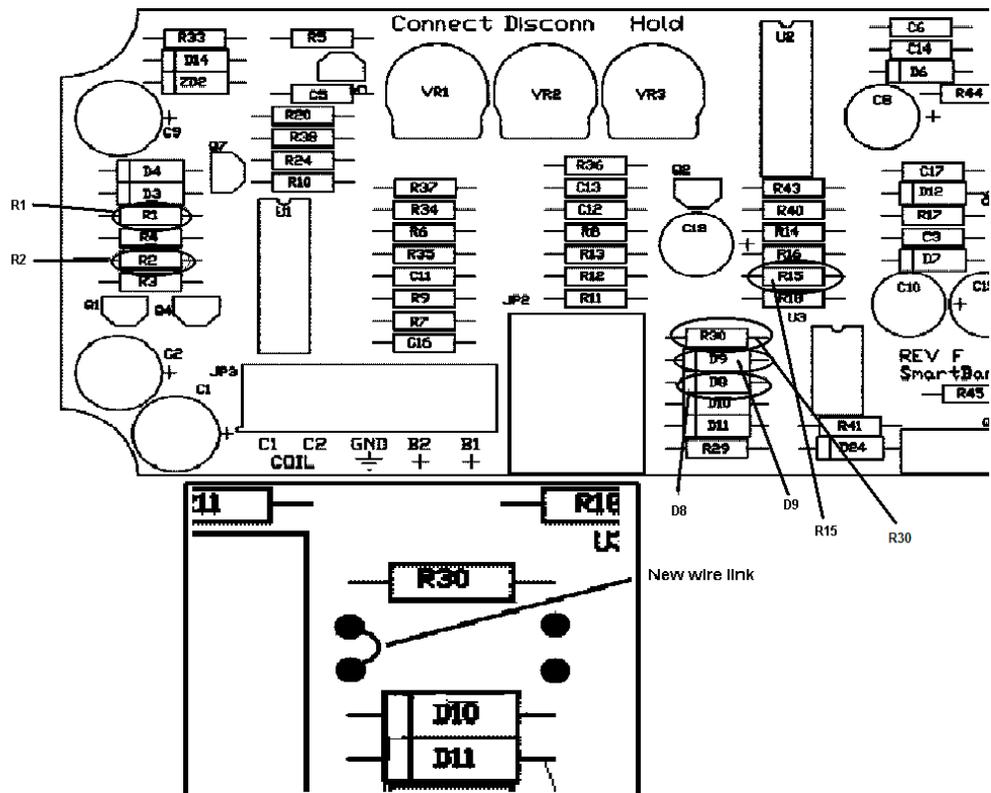
If at any future time you wish to turn your new SmartBank Advanced back into a SmartBank Standard. You will need to remove the wire link and reinstall the 4 components. Don't try to use the old removed components. They are probably damaged now and literally cost pence each.

D8 and D9 have the part number 1N4148.
 R1 and R2 are 178K, metal film. 0.6 watt, 1% resistors.
 R15 and R30 can remain as 10K resistors.
 All components are freely available from almost any electronic component supplier.

If you require this modification to be carried out but are unable to do it yourself and cannot find anyone capable of doing it then send the unit back to your dealer and request they do it for you.

Any damage as a result of inexperienced attempts at this modification will void the warranty.

SmartBank Modification



www.smartgauge.co.uk

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