World War 1 MKIV Tank

Designed by Stuart Reid
Manufactured & Sold by Hobby Holidays

This is part of the designer range of kits from Hobby Holidays. These kits are by some of the latest designers from the UK and around the world, and manufactured and packaged by Hobby Holidays.

These set of notes are a sort of review done during my build of the kit, and are extra to the designers original set included in the kit as a CD with pictures I have taken during assembly. The beauty of getting them on a CD (and now on the website) is you can Zoom in to see the detail without the loss of detail from printing.
There are also photos of the etch

Phil Atkinson – Hobby Holidays.

Further Info:-
29 pictures inc some close up of a MK IV Tank
http://www.aeroscale.co.uk/modules.php?op=modload&name=Sections&file=index&req=viewarticle&artid=3236
Osprey did a book for the MKIV Tank No 133

The only extras required except the obvious of paint and solder etc is some tube for the guns if fitted, wire for handles, and some nuts to suit.

A lot of the parts can be soldered using a resistance soldering unit (RSU) in fact some of the parts will be better done with an RSU to save on the cleaning off of excess solder, but this is not essential.

It is recommended that a lot of the folds are done with folding bars or a "Hold & Fold". Due to fold line being close to edges and half etched areas, clamping is essential and/or scratch or scrawk deeper grooves before bending.

I found cutting the tabs a little tricky due to the need for tabs to be located on already ½ etched areas. I found using a small chisel with a sharp tap on a hard surface (Formica worktop) with the ½ etch uppermost, the best method for this kit.

There are rivets in various places and should be pushed out, before any further folding or soldering. Then be careful when forming to shape not to push rivets back in again (cardboard from cornflake packets are useful for this). I would suggest a decent rivet tool.

"Slot and Tab" is used quite a lot in this kit which helps the assembly quite a lot but it has its drawbacks. The etching process just like any other process has a tolerance due to metal thickness, the chemicals used all in relation to the time in the bath. The results of this could be the tab will not fit in the slot as the slot is too narrow. My solution to this is to get an fairly old flat needle file and grind off 1 face of one side. (Keep dipping water to keep cool or you

will soften the file) Grind until it fits in the slot and file each side if the slot by drawing the file back and forth.

I have tried to write these notes in a similar order to the original designers so you can read them in parallel. However with hindsight there are some parts are that are either easier to fit at different times or easier to position at the correct angle/place at a later time, hence why these notes say at various times "don't fit now".

FUEL TANK – PARTS 7 & 15
Half etched lines are on the outside of the folds for this fuel tank. – I found the tabs on the back too wide to fit in the slots in the tank body, so I bent them back and fitted it later when the position was more obvious. See photo's 1,2 &3.

PART 5 Fold over back on itself where the line of slots are. Gently squash with fine pointed pliers. Lightly solder, clean off folded tabs. Form into a rectangle. Note from the photo's 4,5 & 6. what details are inside and outside. Solder open joint. Make sure the tabs fit slots in **4** but don't solder on yet.

PARTS 7 & 40 Push out rivets, fold down sides then front and finally the short back section. Before soldering make sure tabs fit into slots. Any gaps I filled with 0.5 mm wire. Solder the joints. Bend the small tab at the end of the hinges to push through the slots and solder. File bottom face to fit flush with the tank top **4** . I did not fit this till later as the tabs did not fit and it seemed a little too long. See Photo's 7,8 & 9.

PARTS 26 & 27 Fold down the side of **27** to make the vents, fold tight, as narrow as possible. The long tab goes at the bottom. Fold **26** around **27**,making sure the tabs still fit into **4**.the back of the main body top. Finally fold over top tab of **26** at about 30 degrees to match side and solder. Again don't solder to **4** yet See Photo 10 & 12

PART 4 Push all rivets out. Solder on **26/27** while flat. Fit but **don't solder 5**. Bend rear section as shown then solder part **5** from underside using tabs Photos 11,12 & 13

PART 41 Using some 0.5 mm wire fit the 2 handles to the small access doors inside where parts **5** fits. Fit hinges **41** with the 2 hinge/tabs through the 2 slots from underneath. I found it necessary to file the centre slot a little deeper to allow the 2 tabs to push through a little further. Solder lightly from underneath and push hinges flat to access door. Photo 12 & 13.

PART 47 Rear Door. Fold tabs to fit through slots in **4** and solder on. Photo 12

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PART 18 & 19 Drivers viewing flaps. When cutting out **18** the 2 hinges are very delicate. I used a gentle touch with a cutting disc to clean up. Fold up the long thin lip along the top half etch on the inside of the fold. Press out rivets on **19**. The tab should go into the slot on **18**, but I cut it off and soldered on by eye to the top and central**.** The delicate hinge plates are folded down and pushed into the corner**.** This 2 part assembly was soldered to **3**. I clamped in place and soldered from the back. I actually put them in the wrong place photo 14, please check photo's of the real thing.

PART 20 (tow hook) is pushed through the bottom slot (note angle) and soldered from the back. I suggest you don't fit this until just before fitting the bottom half of the main body **2**

The large hole in the centre of **3** is a gunport and part 56 should be soldered centrally from the rear. If you want to fit a gun a small section of tube can be fitted.

As per the instructions I made up the Track by folding over the treads with the strip down one side and then had the laborious task of soldering each one with at least 188 Deg C solder. Be very careful when cutting off the the side strip not to deform the track. Then file off the tabs and round off the treads with a file or emery cloth.

This is where I made up the sponsons, firstly by deciding whether you want to build your tank with Male or Female and with them in the wagon load position (ie Sponsons retracted) or in the normal usage position suitable for firing (or display) See photo 22,23 & 24.

I think the assembly of the guns and sponsons is quite straight forward by making up the pivoting gun assemblies, punching out the rivets on the sponsons folding up all angles and checking that they will fit into the openings before soldering on the inside making sure no solder obstructs the pivoting guns. I found all this rather tight.

TANK SIDES Push out all rivets and cut any parts. Fit parts **11 & 12** Track tensioners (2 sets for each side), one set inside, one set outside. (The extra parts can be found on the small extra etch). Note on the inside face there is a slot very close by, this need to be kept clear for the ends of the unditching beam.
Fold the very small lip (all around each of the sides) outwards. (so rises above the face seen) Take care not to bend the main sides. I bent the small lips using a pair of flat nose pliers (wide rather than pointed), bending 5 degrees at a time, gradually moving along the lip backwards and forwards bending it another 5 degrees or so until upright, then straighten it out and solder on the inside to strengthen the bend. At the sharp bends at the front and back of the tank, continue forming the lip around the curve from both sides and 2 ½ etched flaps can be soldered together.

The large flaps around the edge should be folded right back on themselves, to create a surface to solder the track to. Beware there is one large tag on the small lip that does not have an ½ etched line, by bending the other tabs over you can get a disc cutter in to cut off these tags.
I actually snapped them all off completely, to either solder back on or to replace completely with a 10mm wide strip of brass. I replaced mine as I was concerned that all the gaps between each flap would be visible, but I am no expert on the prototype.
The small lip can now be cleaned up.
On the top rear of the inner side, there is one tab not half etched. Once you have either broken off or bent back, the larger tabs you can easily cut off the offending tab with a cutting disc. See Photos 15 to 20

Within each of the inner sides are a number of flaps to fold up but not at this stage
The 4 with small holes in are for the female sponsons and I found them a little too long.
The rest are the equivalent to frame spacers but you must remove the etch tabs now before folding or they will cause problems later.

Make sure all the slots where tabs go thru are capable of taking the tabs.

If you can fit the sponsons through the openings in the tank sides now is the time to fold up the flaps and tank sides.

When folding the side up, you must score the fold-line as there are so many weak spots you will end up bending in the wrong places.

Take great care with Part **14** . Not only must it go the right way round front to back, but also top to bottom. Notice how cutouts in middle section are not in the same position on both sides.

Fold up the floor pan 2 and fit to 1 side with the tank top 4. This will give you the chance to see the correct angle for the tow hooks 20 to both 2 and 4.

Everything is now taking shape and the final fitting or the 2 sides and the top and bottom.

Once the 4 main parts are soldered together you can fit the tracks. As stated above I soldered a 10mm wide strip to the small lip all the way around each of the sides. Then the track can be soldered on starting underneath. My idea was to use an RSU to solder on the track but I found that the treads were coming unsoldered as I soldered the track down. Also you must start to solder on the track perfectly parallel to the sides or they will drift out as you wrap the track around the tank. For this reason I soldered it on by very small tac's with the intention of breaking these soldered joints as I worked my way round pushing the track up against the tank and making a proper joint and taking out any slack.

I think by this stage not only have you got the gist of how to put the rest together but can follow the rest of the designers instructions.