

7mm Scale Anchor Mount Tank Wagon Body Instructions

Notes

This set of instructions covers the 7'3"Ø (OC.71) and 6'7"Ø (OC.72) anchor mounted tank wagon body parts kits. They are designed to provide accurate bodies for use with Rumney Models 7mm anchor mount tank wagon chassis kits OB.71 and OB.74.



Anchor mounted tanks were introduced in the 1940s and continued to be built into the early 1960s. Indeed I believe that the last unfitted wagon built for use on the British Railways network was an anchor mounted tank wagon built for Berry Wiggins. They were built for various capacities and types of load with different tank diameters. Most common were 14T class A, 14T class B and 20T class B.

You can use these body parts in conjunction with the Rumney Models anchor mount wagon body chassis kits OB.71 (14T) and OB.74 (20T). The two underframe and two body kits can be combined to produce most of the fuel oil tanks built from around 1947 until the introduction of the 35T GLW vacuum braked tanks in the late 1950s. These are summarised as follows:

- **OB.71 + OC.71** 14T Class A Tanks 14T underframe + 7'3" tank
- **OB.71 + OC.72** 14T Class B Tanks 14T underframe + 6'7" tank
- **OB.74 + OC.71** 20T Class B Tanks 20T underframe + 7'3" tank

Essentially the two body parts kits contain the same things; some of these simply differed in details, mostly down to the difference in tank diameters, whilst others are down to variations in parts fitted to the prototypes. They both include tank formers for use with wrappers cut from 0.010" sheet, saddles and anchors, tank ends supports, ladders, walkways, drain valve parts for class B tanks and works plates. The walkways included with the 7'3"Ø parts (OC.71) are of the 3 support type with chequer plate tops; those included with the 6'7"Ø parts (OC.72) are of the 4 support type with mesh tops. The ladders are slightly different between the two kits as they include the type most common on those particular diameters of tanks. OC.72 includes parts for both 2" and 4" drain pipes as they did vary. OC.71 only includes parts for 4" drain pipes as these were what were fitted to the 20T class B tanks.

Read through the instructions first and familiarise yourself with the components. Drawings and photographs are included to attempt to make my waffle clearer. Note that all the photos are of the 4mm version so may not match the 7mm one exactly but suitably illustrate the item in question.

Please take note of the following:

- **All fold lines are through 90° with the fold line on the inside unless stated otherwise.**
- **Clean up any connecting tags before fitting a part except if noted in the instructions.**
 - **Check all holes before removing parts from the fret.**
 - **Check all slots before fitting any part.**

The drawing process for etching if you use a CAD program as I do is extremely accurate but the actual etching process itself not an exact science. If the fret is slightly over etched then there is no problem but if they are under etched then holes and slots will need enlarging. I find that this is easiest to do before removing parts from the fret. The hole sizes will be noted at the appropriate points in these instructions.

Materials list

Unless perusing a different path for the tank itself you will need some 0.010" sheet to form it.

Several sizes of wire are needed to build the body.

0.5mm - (Lots) Walkways, ladders, gland block flange plates

0.7mm - Saddles, screwdown valve wheel

1/32" - 2" drain pipes, 20T class B air vent

1.0mm - Alignment pins, 4" drain pipes

In addition you will need some tubing for the drain pipe if you are constructing a class B tank.

2.5mm x 1mm (4" drain pipe - some 14T, all 20T) - It's likely you'll need 2 telescoping tubes to do this; i.e. 2.5mm x 1.5mm and 1.5mm x 1mm.

1/16" x 1/32" (2" drain pipe - some 14T)

3/64 x 1/32" (or similar 20T class B air vent)

Eileen's Emporium is good source for these components and they do a mixed sizes pack of wire if you don't want to buy large quantities. Their details are as follows:

Eileen's Emporium
Unit 19.12 Highnam Business Centre
Newent Road
Gloucester
GL2 8DN
www.eileensemposium.com

OC.71 Parts List

Anchor Mountings

1 - Anchor mounting base	Sheet A
2 - Saddle base	Sheet A
3 - Saddle formers	Sheet A
4 - Saddle reinforcing ribs (3 lengths)	Sheet A
5 - Saddle front rib	Sheet A
6 - Tank seats for anchor	Sheet A
7 - Anchor supports	Sheet A
8 - Anchor	Sheet A
9 - Anchor detail overlay	Sheet A
10 - Anchor side reinforcing strip	Sheet A
11 - Tank end support base	Sheet A
12 - Tank end support sides	Sheet A
13 - Tank end support	Sheet A

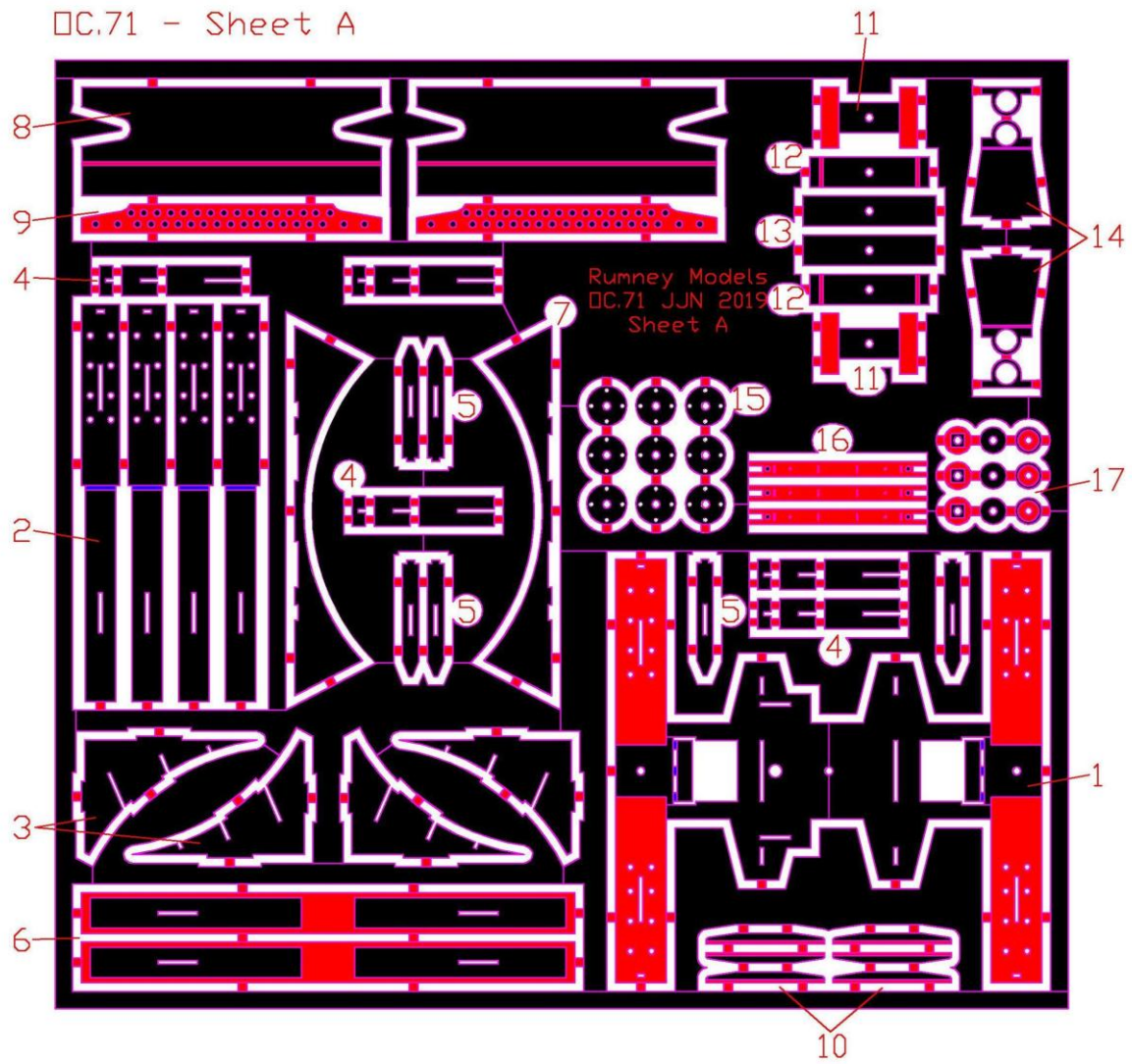
Class B Drain Valve Parts

14 - 4" Drain pipe bracket	Sheet A
15 - Gland block flanges	Sheet A
16 - 4" Drain pipe safety loops	Sheet A
16b - Additional drain pipe safety loop material	Sheet B
17 - 4" Drain pipe caps	Sheet A

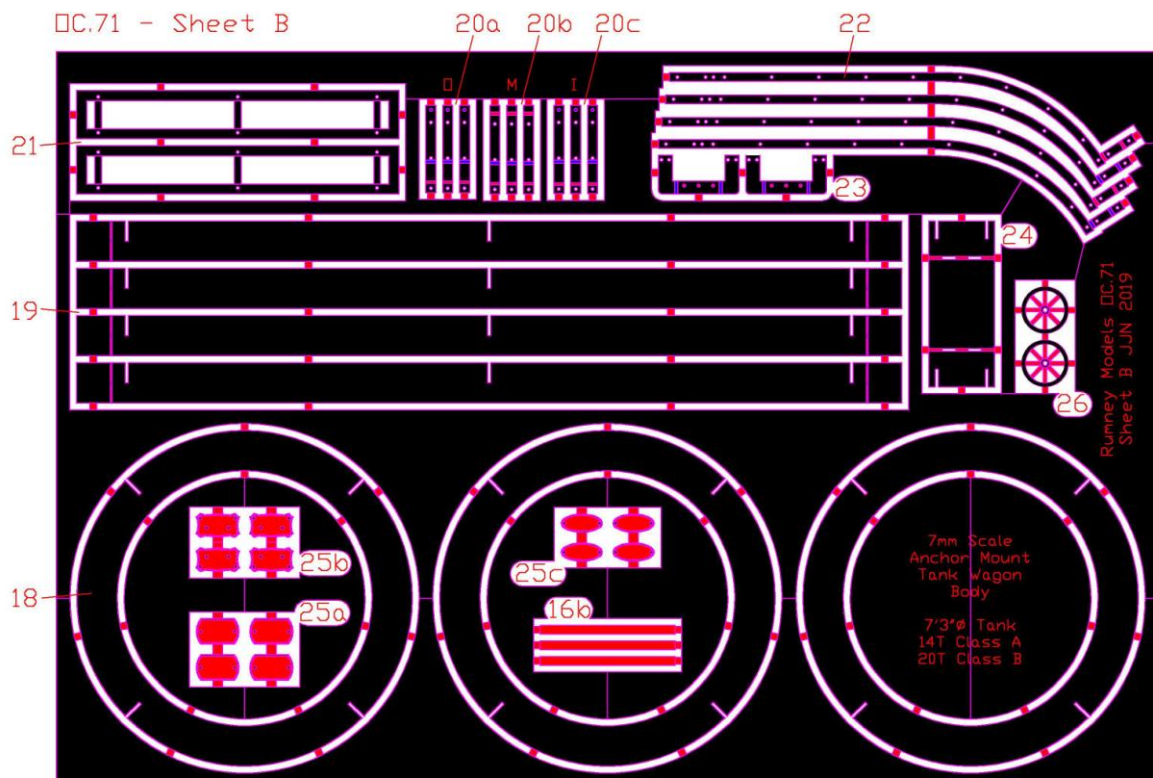
Tank Detailing

18 - Tank formers	Sheet B
19 - Tank former spacers	Sheet B
20a - Outer wrapper walkway support	Sheet B
20b - Manhole walkway support	Sheet B
20c - Inner wrapper walkway support	Sheet B
21 - Walkway base	Sheet B
22 - Ladder sides	Sheet B
23 - Ladder brackets	Sheet B
24 - Ladder jig	Sheet B
25a - Cambrian builder's plates	Sheet B
25b - Chas Roberts builder's plates	Sheet B
25c - Maclellan builder's plates	Sheet B
26 - Screwdown valve wheel	Sheet B

OC.71 - Sheet A



OC.71 - Sheet B



OC.72 Parts List

Anchor Mountings

1 - Anchor mounting base	Sheet A
2 - Saddle base	Sheet A
3 - Saddle formers	Sheet A
4 - Saddle reinforcing ribs (3 lengths)	Sheet A
5 - Saddle front rib	Sheet A
6 - Tank seats for anchor	Sheet A
7 - Anchor supports	Sheet A
8 - Anchor	Sheet A
9 - Anchor detail overlay	Sheet A
10 - Anchor side reinforcing strip	Sheet A
11 - Tank end support base	Sheet A
12 - Tank end support sides	Sheet A
13 - Tank end support	Sheet A

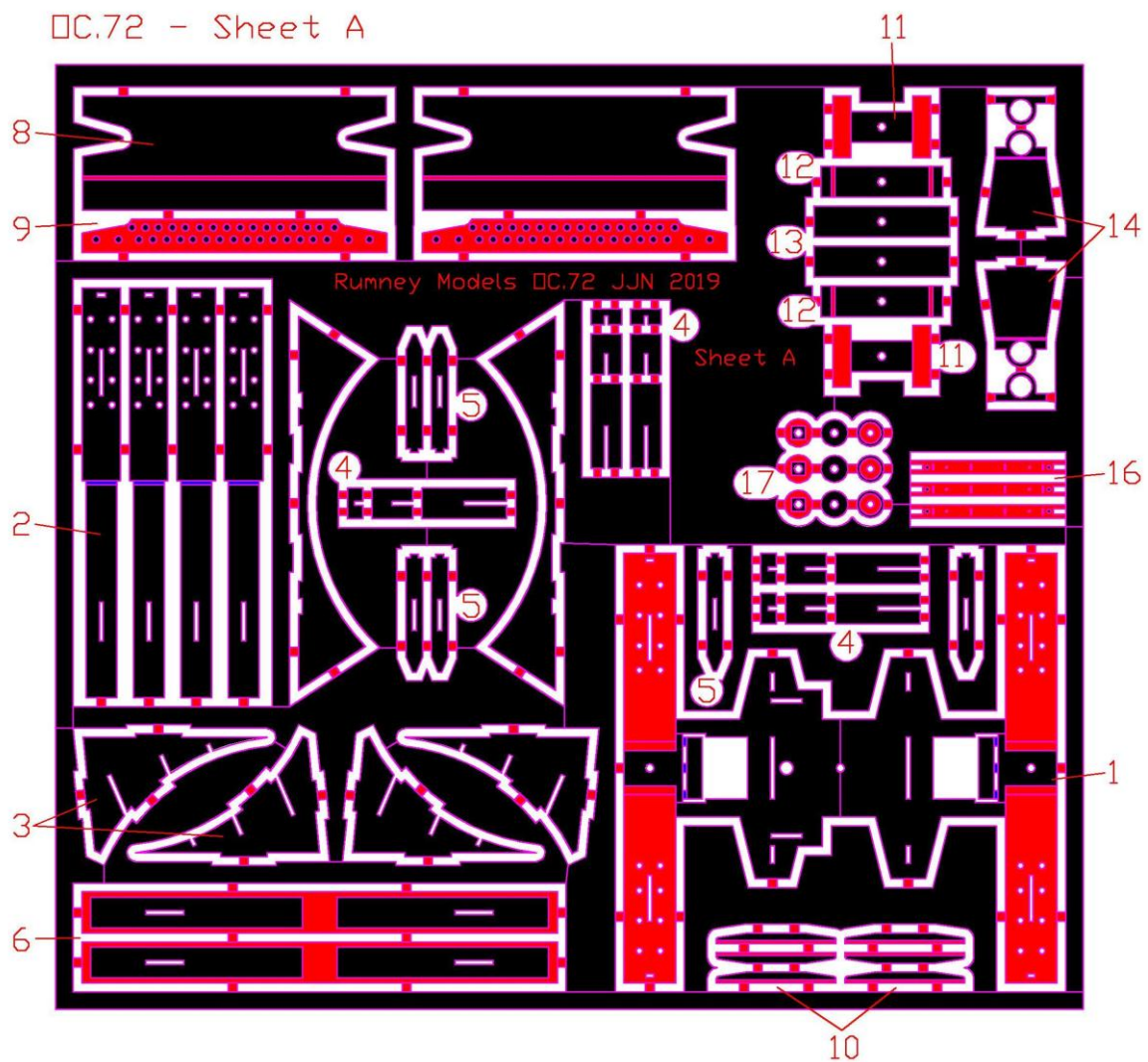
Class B Drain Valve Parts

14 - 4" Drain pipe bracket	Sheet A
14a - 2" Drain pipe bracket	Sheet C
15 - Gland block flanges	Sheet B
16 - 4" Drain pipe safety loops	Sheet A
16a - 2" Drain pipe safety loops	Sheet C
16b - Additional drain pipe safety loop material	Sheet B
17 - 4" Drain pipe caps	Sheet A
17a - 2" Drain pipe caps	Sheet C

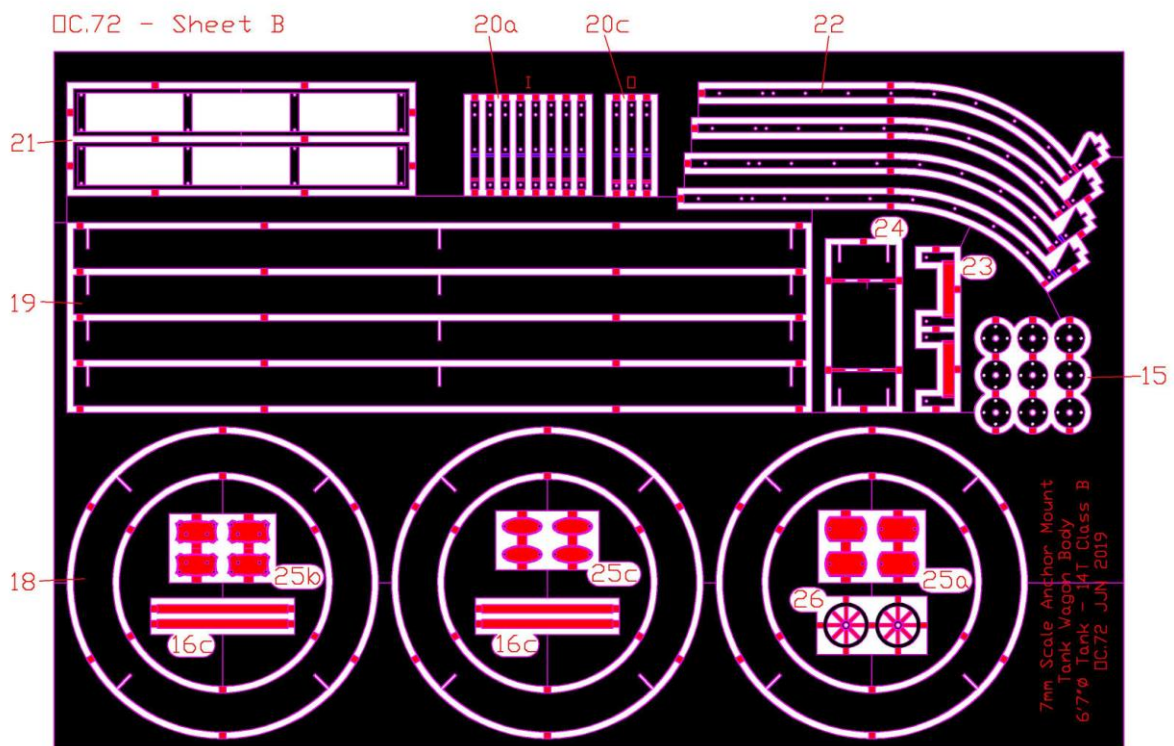
Tank Detailing

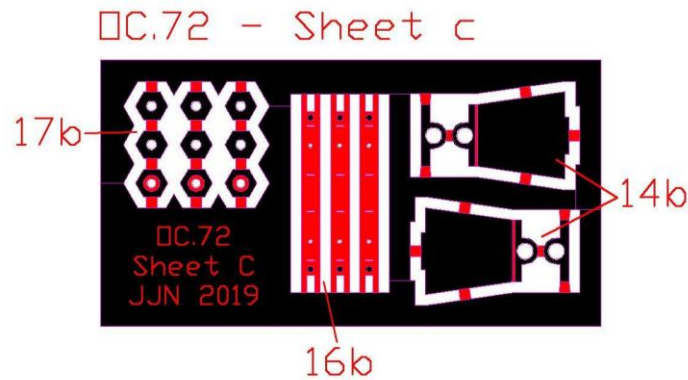
18 - Tank formers	Sheet B
19 - Tank former spacers	Sheet B
20a - Outer wrapper walkway support	Sheet B
20c - Inner wrapper walkway support	Sheet B
21 - Walkway base	Sheet B
22 - Ladder sides	Sheet B
23 - Ladder brackets	Sheet B
24 - Ladder jig	Sheet B
25a - Cambrian builder's plates	Sheet B
25b - Chas Roberts builder's plates	Sheet B
25c - Maclellan builder's plates	Sheet B
26 - Screwdown valve wheel	Sheet B

OC.72 - Sheet A



OC.72 - Sheet B





Tank

The tanks on these wagons are designed to use 0.010" sheet as wrappers around a frame made from the etched tank formers (18) and tank former spacers (19). There are three of each of the formers and spacers and they slot and tab together. Around this an inner wrapper will go the full length of the tank and an outer wrapper over the middle third. The joints in each of the wrappers are designed to lap over each other as per the prototype. Drawings for the wrappers can be found in the appendix sheets at the end of the instructions:

- Appendix A1 - 7'3" 14T Class A tanks - Offset manhole (Fina, Regent)
- Appendix A2 - 7'3" 14T Class A tanks - Central manhole (National Benzole, Benzole Producers)
- Appendix B - 7'3" 20T Class B tanks
- Appendix C - 6'7" 14T Class B tanks

Notes on tank wrapper drawings

The drawings can be printed off and used as templates rather than marking out all the dimensions; the hole sizes are noted. In all cases the walkways and ladders (when fitted) are symmetrical about the longitudinal line running along tank top. The pdfs should be at full size but there is a measurement line with which you can check this. Adjust if necessary.

Assembly

It should be a straight forward process to put the formers and spacers together using the slots provided. When doing so make sure that everything is square before you solder them together. Don't be tempted to leave out the centre former. I found when doing the 4mm version that you needed to apply some pressure in the middle of the tank in order to get the wrappers to sit down properly. If you don't have the centre former the tank will bow in the middle.

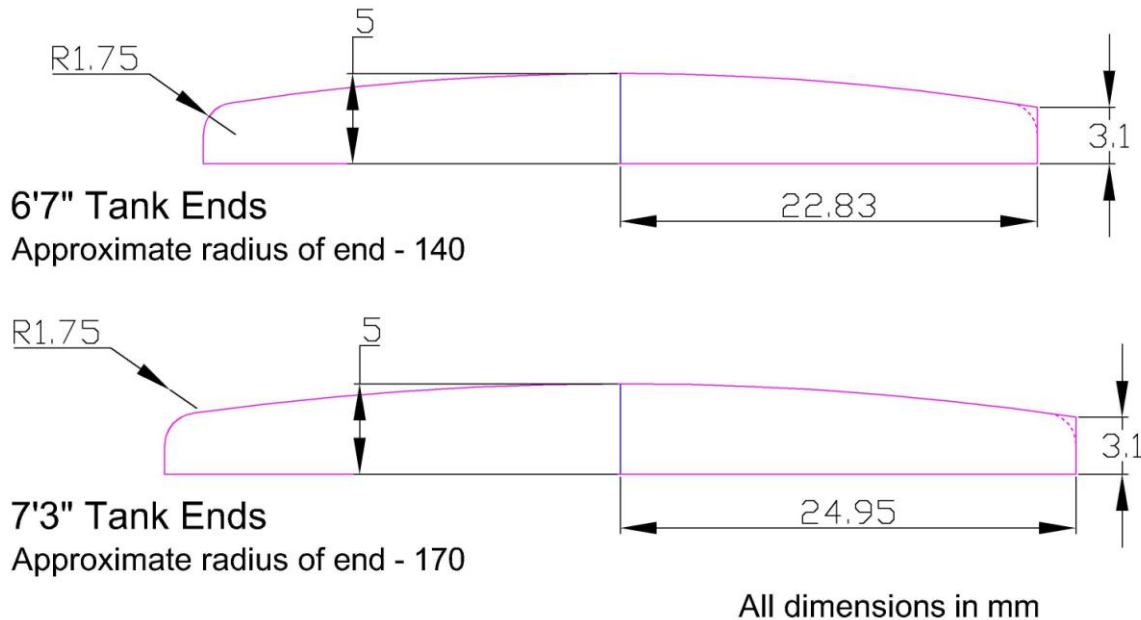
Due to an error on my part you will need to take 1.5mm off each end of the spacers on etch OC.71 for 20T class B tanks. If you wish to make a 14T class A tank using this same etch you will need to shorten them to the half etched marks in from each end.

Once the wrappers are formed they can be fitted to the frame. Start with the inner wrapper and solder tight to the frame along the joint. The outer wrapper can then go over the top of the inner wrapper. Note that the joints in the two wrappers are on opposite sides to each other.

The frame should be set in equally from each end. This means the ends of the spacers should be 1.5mm from the outside of the inner wrapper. I used a triangular jig made from plasticard to space them the correct distance. The vertices of the triangle sat beneath the three spacers.

Tank Ends

The following image gives the outer dimensions for the tank ends in case they are useful. All dimensions are in mm.



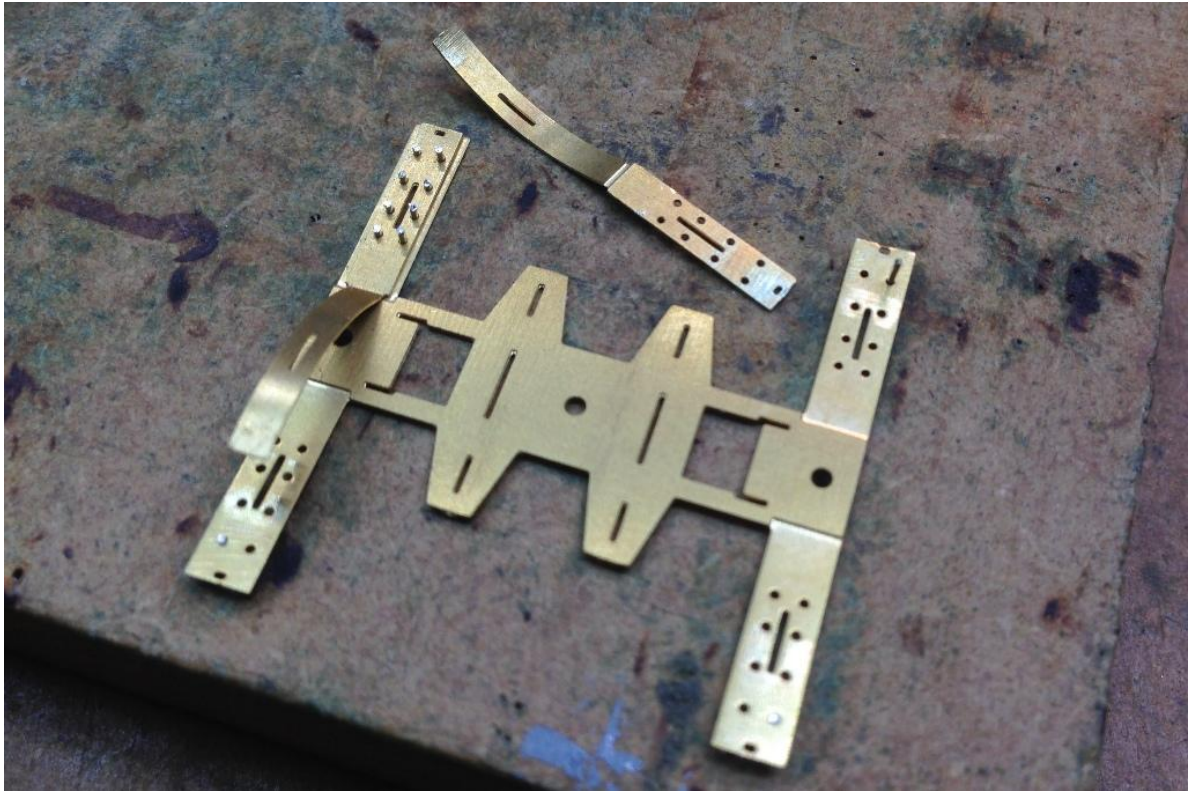
Leave final fitting and gluing of the tank ends until the model is ready for painting. It is useful to have access to the inside of the tank for adding ballast if you find it necessary.

Anchor Mountings - Saddle Unit

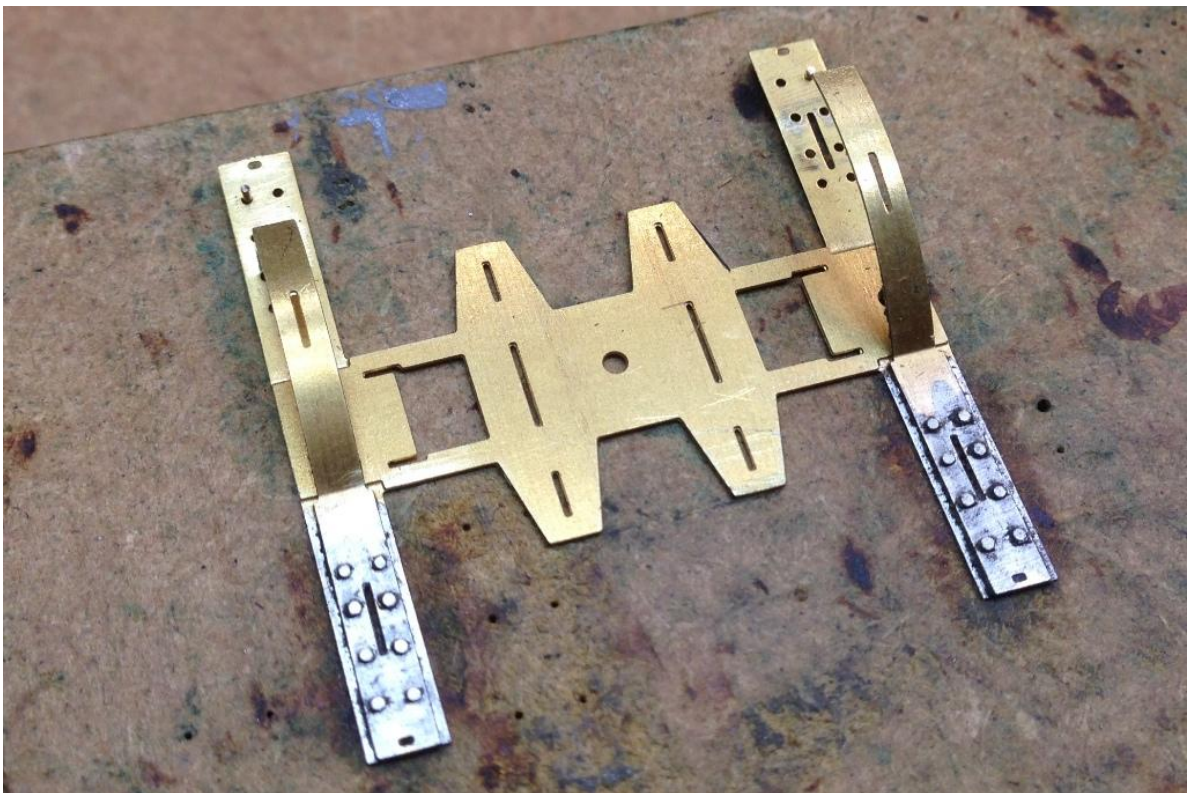
When making up the saddle units I construct them on a small sheet of mdf. The two layers that form the base are located together with the aid of bits of wire which will later be trimmed to resemble bolts. The mdf gives you a way of holding the wires until the base is all soldered together and also a convenient way of holding the whole assembly until the rest of construction is completed. This does mean that you ideally need to complete everything in one sitting though. There's no way you'll get the saddle unit back on the mdf once it's removed so in order to clean it properly it really needs to be finished. It took me about 2 hours to put a 4mm saddle unit together plus time to prepare the parts.

Use the anchor mounting base (1) as a jig to drill 32 0.5mm holes into a piece of scrap mdf or similar. Put one piece of 0.5mm wire into each set of 8 holes just to keep the anchor mounting base in place over the holes you've just drilled. See photo below.

There are four saddle bases (2) and each saddle base is made up of two parts about a central fold line. One part has 8 holes and two slots in and the other just a slot. The part with just a slot needs to be curved to roughly the radius of the tank. The inside of the curve should be on the side with the half etched fold line on. Locate one of the saddle bases in place on the anchor mounting base so that all the holes align and the fold line is towards the anchor mounting base and mdf. Fill the remaining 7 holes with short bits of 0.5mm wire. See photo below.



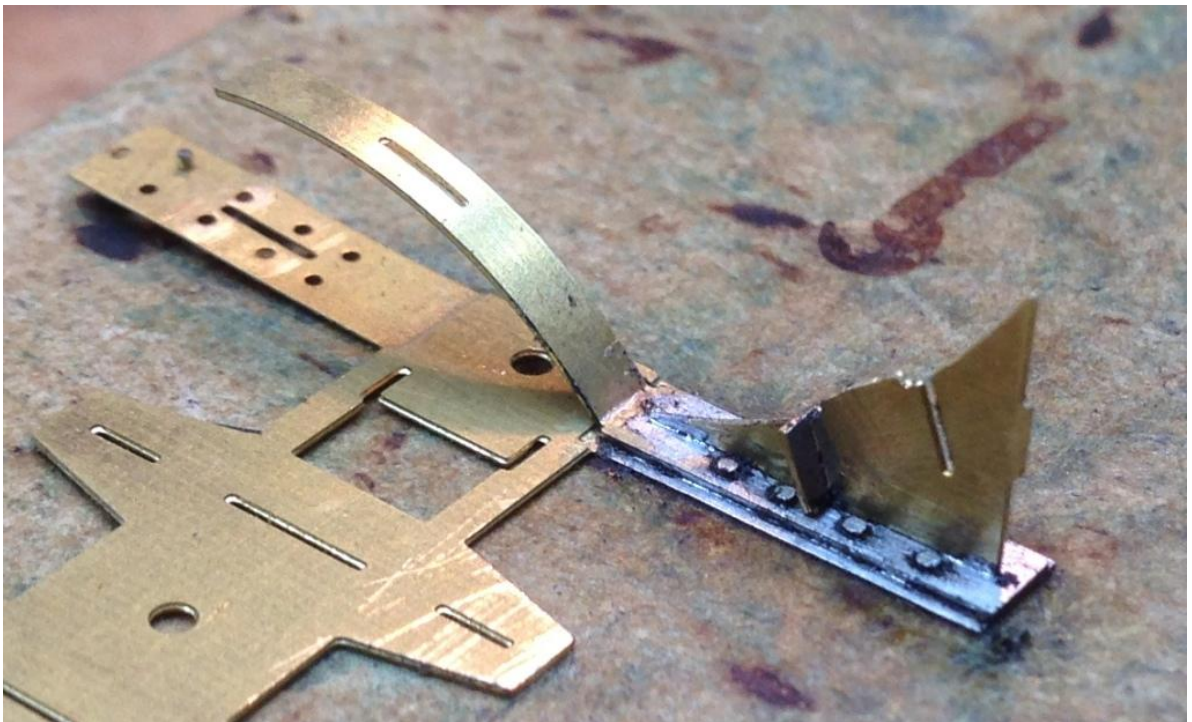
Solder the saddle base to the anchor mounting base making sure the 8 bits of wire are firmly solder in place as well. The wire can then be trimmed and filed back to resemble bolt heads. Repeat for another saddle base on the same side of the anchor mounting base as the first.



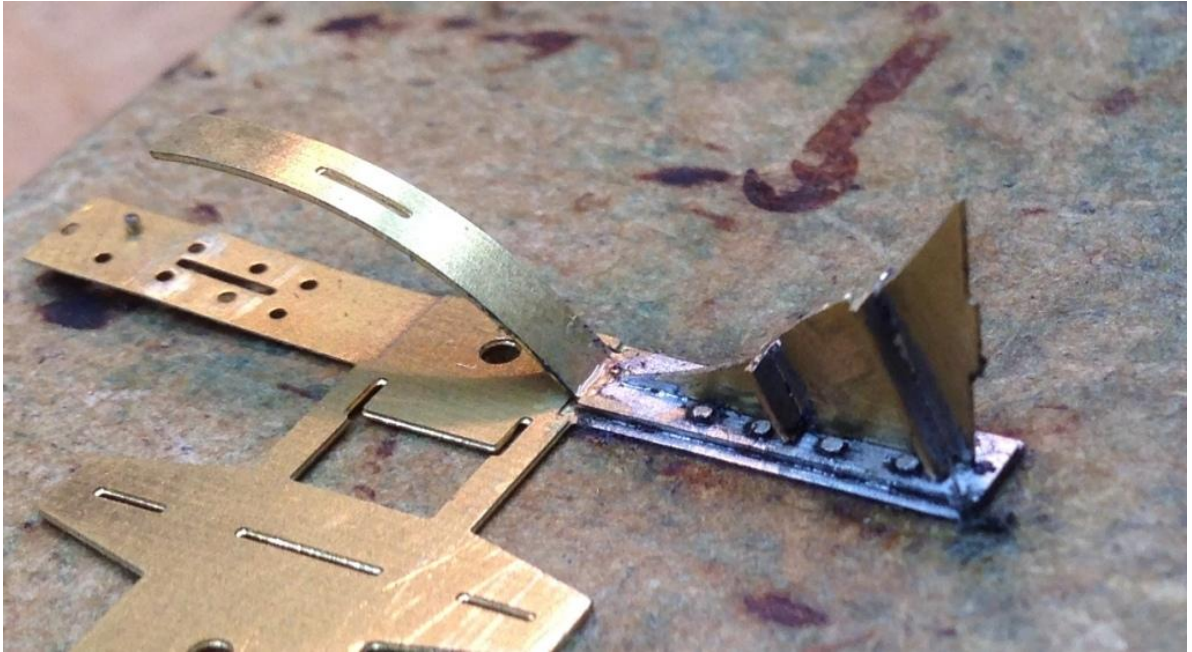
Take one of the saddle formers (3) and fit in place on the base using the tab and slot provided. The saddle former should be arranged as in the photo below. Note that the longer of the two straight sides of the triangle (the other is curved) goes against the base.



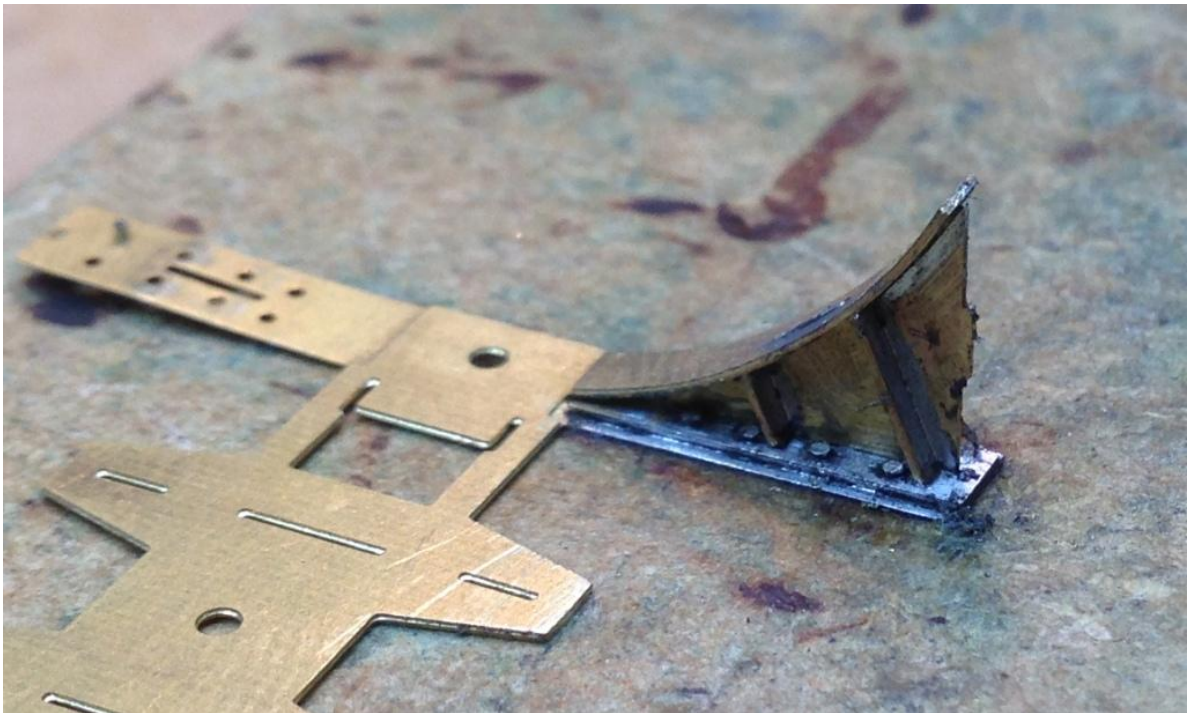
Next the saddle reinforcing ribs (4) need to be fitted in place. There are three different lengths with the shortest towards the middle of the base. The photos will only show two ribs as I figured the smallest one was too fiddly in 4mm. When fitting each of the ribs I filed the end without the slot to an angle to roughly match the inclination of the rib against the base. Start with the shortest rib and work outwards soldering them in place as you go.



When all three ribs have been fitted file the tops back to match the curve in the saddle former.



The curved part of the saddle base can now be folded over and up against the saddle former. Make sure that the curve in the saddle base matches that in the former. Use the slot and tab to help locate the base and solder together.



Take one of the saddle front ribs (5) and fit in place on the remaining free edge of the saddle former. There are slots and tabs in the base, former and front rib to assist. Flood the visible slot with solder and clean up with a file so that the slot becomes invisible.



Repeat for the other saddle that you've started. You can then fit the remaining two saddle bases in place in the other side of the anchor mounting base and repeat again until all four saddles are completed.



Next fit the two tank seats for anchors (6). There are slots in the anchor mounting base to locate them. You will need to be careful handling the seats as there isn't much material in the middle. Drill a couple of 1mm holes into the mdf using the holes between the saddles as a guide. Insert two short lengths of 1mm wire into these holes and solder to the base. The will be used to help locate the tank in place.



The base is now complete so it can carefully be removed from the piece of mdf: I used a small scalpel type chisel blade to gently ease it out. Once removed the wires will need to be trimmed flush; I used a piercing saw to remove most of the wire and then a file for the rest.



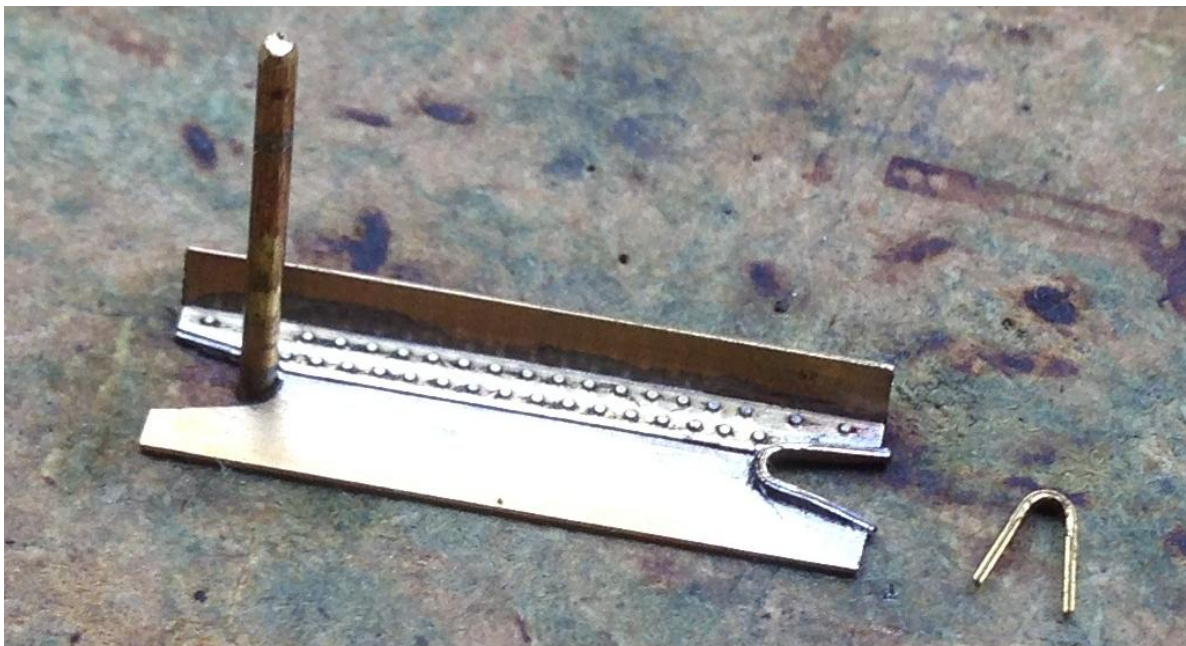
Anchor Mountings - Anchors

There are three parts that make up each of the two anchors; the anchor (8), anchor detail overlay (9) and anchor side reinforcing strip (10).

Remove the anchor (8) from the fret and fold so that the inner angle is at about 115° . This can be tweaked a little when fitting to the wagon so don't worry too much about being exact. Remove the anchor detail overlay and solder in place against the short part of the anchor.



Remove the anchor side reinforcing strip (10). Note that on one of the long sides there is a taper at each end. This edge without the taper goes up against the anchor. Bend the reinforcing strip to shape before fitting. I found it useful to hold the anchor against a piece of 1mm rod inserted into a piece of scrap wood just to stop it from moving about. Solder in place and clean up the ends.



Repeat for the other side and then the other anchor. If using a metal tank the anchors can be soldered in place. I fitted the tank to the underframe and hold it in place with some elastic bands while putting the anchors in position and soldering in place.

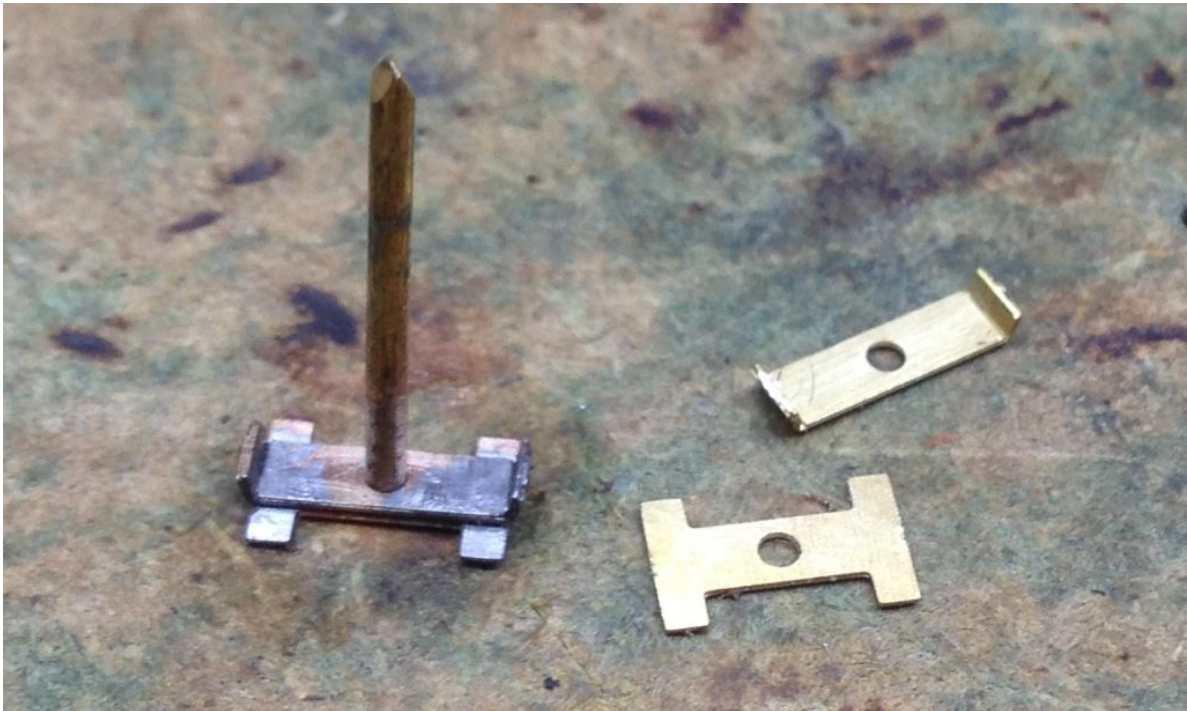


Tank End Supports

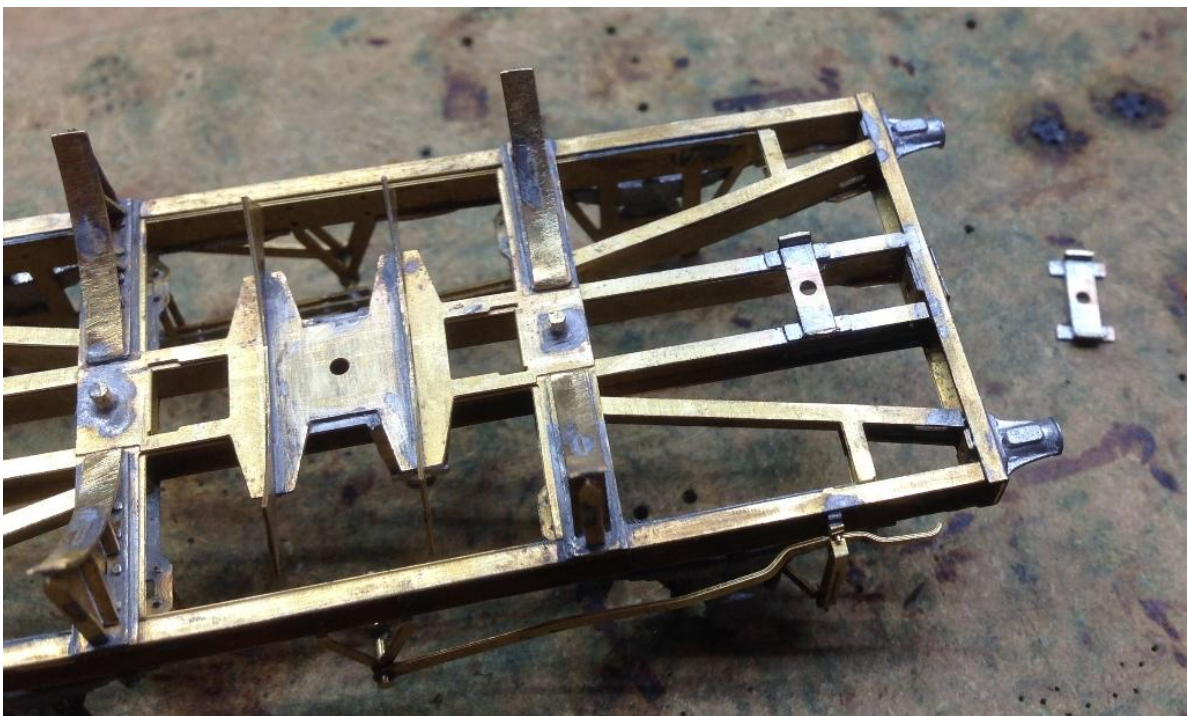
At both ends of the tank are small supports. These supports are made of three parts: Tank end support base (11), tank end support sides (12) and tank end support (13). I arranged the supports so that the tanks end support part (13) is attached to the tank and the other two parts to the chassis. I used holes etched in the tank wrapper to help locate everything. These are included on the tank wrapper drawings.



Remove the tank end support base (11) and tank end support sides (12). Fold the ends of the tank end support sides to something like 120° (they can be tweaked when fitted). Use a length of 1mm rod inserted into piece of scrap wood or mdf to locate the two parts and solder together. The parts should be arranged as in the photo below. There are two half etched areas on the base part which help locate the part on the underframe; these should go away from the sides part.



I used a tapered reamer to locate the tank support base/side parts on the tank and fitted the tank in place on the underframe to help locate things. The tank support base/sides were then soldered to the underframe.



Class B Drain Pipe

As stated in my preamble drain pipes for class B tanks were either 4" or 2" (inside) diameter. All 20T tanks had 4" pipes but the 14T class B tanks seemed to be a mixture. The National Benzole 14T class B tanks were definitely 2" but others seemed to be 4". Whatever the diameter the arrangement was the same and is nicely illustrated in the following photo.



I arranged the drain pipes on mine to be made from 3 lengths of tube. These were located together along with the gland blocks using a length of rod. Diameters for these are as follows:

- 4" pipe - 2.5mm x 1.5mm and 1.5mm x 1mm tubes, 1mm rod
- 2" pipe - 1/16" x 1/32" tube, 1mm and 1/32" rod

The 2" version is a bit of a faff as the holes in the flanges and drain cap are etched for 1mm. Ideally the tube should be 1/16" OD and 1mm ID using 1mm rod to link everything but I have yet to find such a size! You may want to use 1mm rod with the drain caps and open out the tube at the ends of the pipes to a depth of a couple of mm take them. Likewise a piece of 2.5mm OD and 1mm ID tube would be great for the 4" version but you may need to telescope two tubes to get the necessary hole diameter.

The three lengths of tube should be one at 22mm long and two at 7mm long. The piece of rod used to join everything together should be about 42mm long.

First you need to make up drain pipe brackets (14 - 4" and 14a - 2" (OC.72 only)). Unlike the 4mm one below there is a tab at the top which fits into the anchor mounting base. There is a small fold line just above the hole for the drain pipe. The part needs to be folded about this line by about 10° with the fold line on the inside. The area around the hole for the drain pipe then needs to be folded double with the smaller part on the opposite side to the fold line and two parts soldered together. Fold the two parts about the small connecting tab.



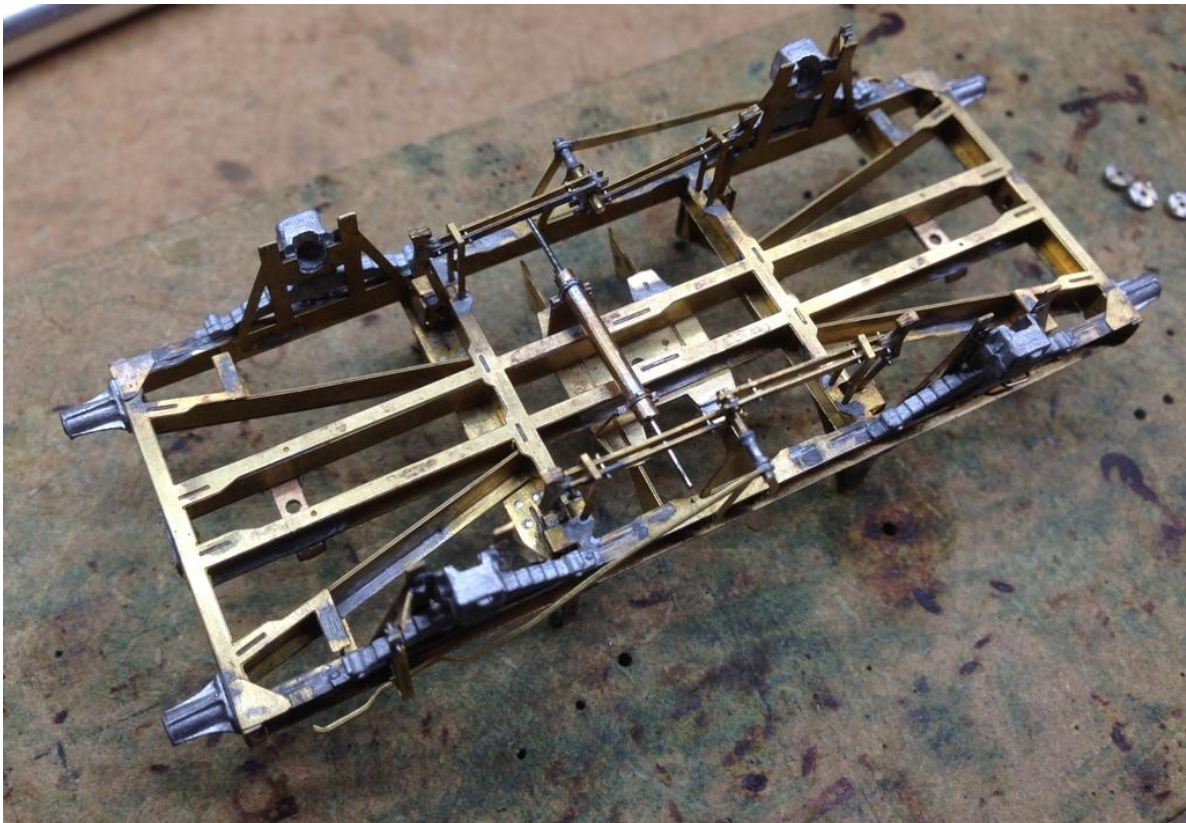
Next make up the four gland block flanges. These need to be double thickness and have wire soldered in place to represent the bolts connecting them.



Use one of the flanges (15) to drill four holes into a scrap piece of wood or mdf. Insert four short lengths of 0.5mm wire into these holes and then solder two flanges to these four pieces of wire. Trim the wire to resemble bolts. Repeat for the other three.



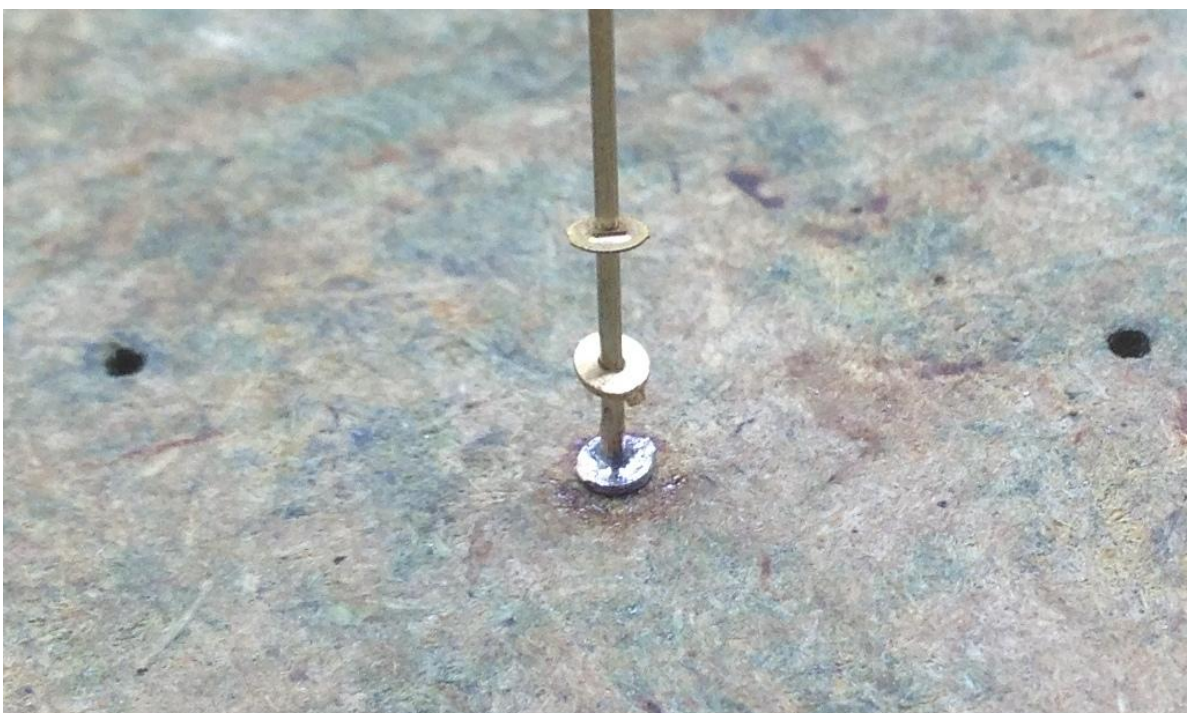
Next fit the drain pipe brackets. These should be arranged so that the brackets are angled outwards slightly and the area around the pipe perpendicular to the underframe. There are slots in the anchor mountings base to accept the brackets. Next the longer length of tube needs to be soldered to the brackets. This should be done so that it is as central as possible. To do this on mine I cut two further lengths of tube to stand in for the gland blocks (4.5mm in 7mm scale) and assembled everything; three lengths of tube, flanges and stand in gland blocks to get the long length of tube as central as possible and then soldered it in place. Don't worry about fixing in place the rod that connects everything at the moment. It makes life easier when finally fitting everything for it not to be fixed.



Next make up the safety loops (16 - 4" or 16a - 2" (OC.72 only)). These should be folded up as per the photo below about the small etched slots. Note that there are rivets etched at the ends which need to end up on the inside of the top corners. Insert a piece of 0.4mm wire through the two holes (opening them out if necessary) and solder in place. Trim the wire so that it is flush on the outside. These can then be soldered to the solebar so that the drain pipe passes through them. See prototype photo at the beginning of the section.



Lastly make up the drain caps (17 - 4" and 17a - 2" (OC.72 only)). Use a short length of 1mm rod inserted into a piece of scrap wood to align the three parts of each drain cap. For both versions the part with the half etched circular area should be placed on the rod first so that the half etched area is facing towards the wood (the drain pipe will locate into this). Next put the full thickness part in place on the rod (if you are making a 2" drain pipe this means both remaining parts). Finally if you are making the 4" version the final part with the rectangle should be placed so that the rectangle is facing away from the other parts. Solder everything together.



Trim the rod so that there is about 1mm extending beyond the end with the rectangle (4") or plain (2") end and 2mm at the other end with the circular recess.

Before fitting everything you will also need to drill out the 3D printed gland blocks to take the rod that links everything together. Use a sharp drill and be careful the drill doesn't go off at an angle as the prints are very soft.

Final assembly can now take place. I fitted the rod through the central bit of tube along with the flanges and gland blocks either side (arranged as per the prototype photo at the beginning of the section). I then superglued everything in place one piece at a time, making sure the rod was as central as possible. Next the two outer bits of tubing were fitted and finally the drain caps. You can make a representation of the safety chain for the drain caps if you wish.

Walkways

There are two types of walkways depending on the etch that you have. For 7'3" tanks there is a three support chequer plate walkway and for 6'7" tanks a four support meshed walkway. They both work the same way; a base (frame) and supports (legs) which are located together using pins and a separate layer for the mesh or chequer plate. I used wire pins to locate the walkways on my etched tank and I will assume that you will follow a similar path so the instructions are written as such. The 4mm version of the walkways, especially the meshed 4 support version, is very flimsy. The 7mm version should be more robust but I would still recommend pinning everything to the tank if at all possible as it will make it more secure. The tank wrapper drawings show locating points for the walkway supports (where appropriate).

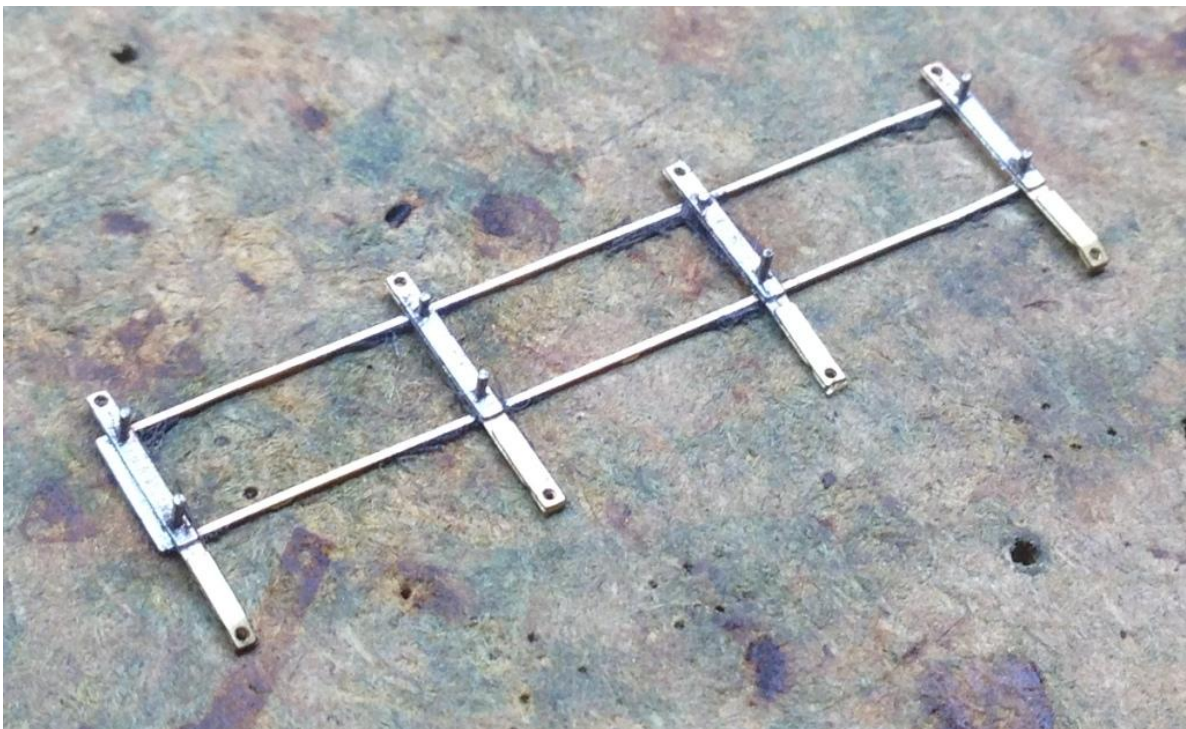
The photos show the four support version but it's the same method for the three support ones.

There are two slightly different length supports depending on where on the tank they locate. Those marked on the fret with an I are for the inner, full length wrapper; those with an O are for the outer and smaller, central wrapper. Some of the supports on the 7'3" body etches (OC.71) are marked with an M. These are the supports that are fitted in line with the manhole; they fix to the manhole at the top rather than the tank.

Firstly you need to make a jig to assemble the base and supports with. Use one of the walkway bases (21) to drill eight holes into a piece of scrap wood or mdf. Fit short lengths of 0.5mm wire through the base and into the holes. These will provide location points for the supports.



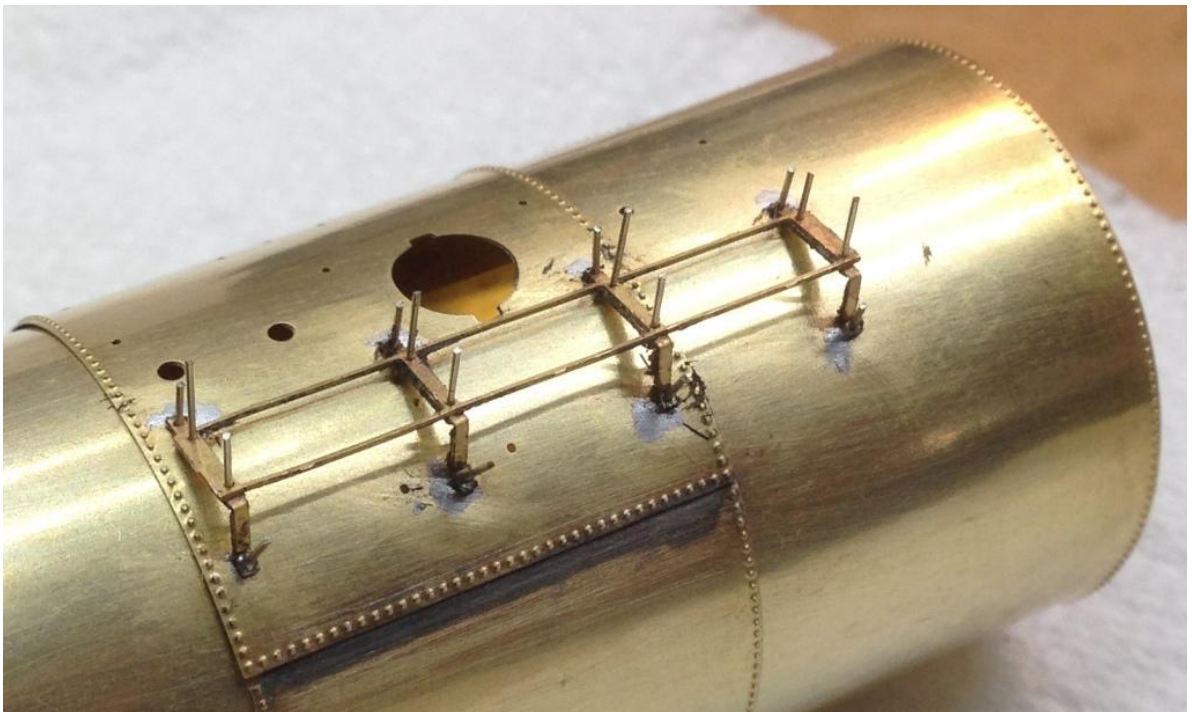
Next fit the supports in place. Make sure they are all the same way around and that the fold line nearest the centre is visible. The supports will fold away from the base about this line. Make sure the outer wrapper walkway supports (20a - marked with an O) are where they need to be and the inner wrapper walkway supports (20c - marked with an I) are at the correct ends. For the 7'3" tanks make sure the manhole walkway support (20b) are in the middle. Solder the supports in place.



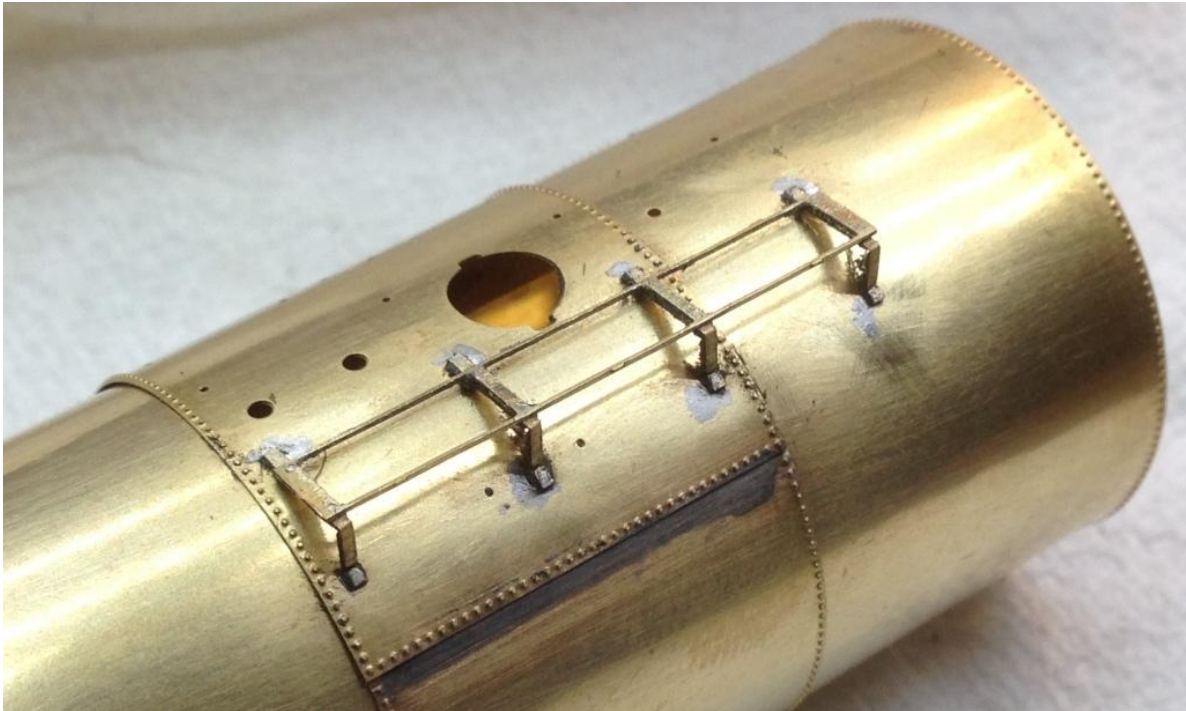
File the visible ends of wire flush with the supports then drill eight more holes in the wood using the other holes in the supports as a jig. Insert short lengths of 0.5mm wire into them and solder in place.



Carefully remove the walkways from the piece of wood. The supports can be folded down next to the base and then at the outer ends to match the tank. See the picture below. Fit in place on the tank using the holes drilled to locate them and solder in place.



All the visible bits of wire can then be trimmed and filed flush.



Repeat for the other side remembering that this walkway will be a mirror of the first so the supports will need to be arranged so that they are facing the opposite way to the first one on the wood.

Finally fit the walkway tops to the frame. For the meshed walkways this is simple enough but for the chequer plate version you will need to score and bend them 0.9mm in from one of the long sides. Note that there is a correct long side to do this on. If you look closely you should make out 9 circles that represent the bolts used to fix the real things in place. These are offset towards one of the long sides and you should score and bend on the other one.

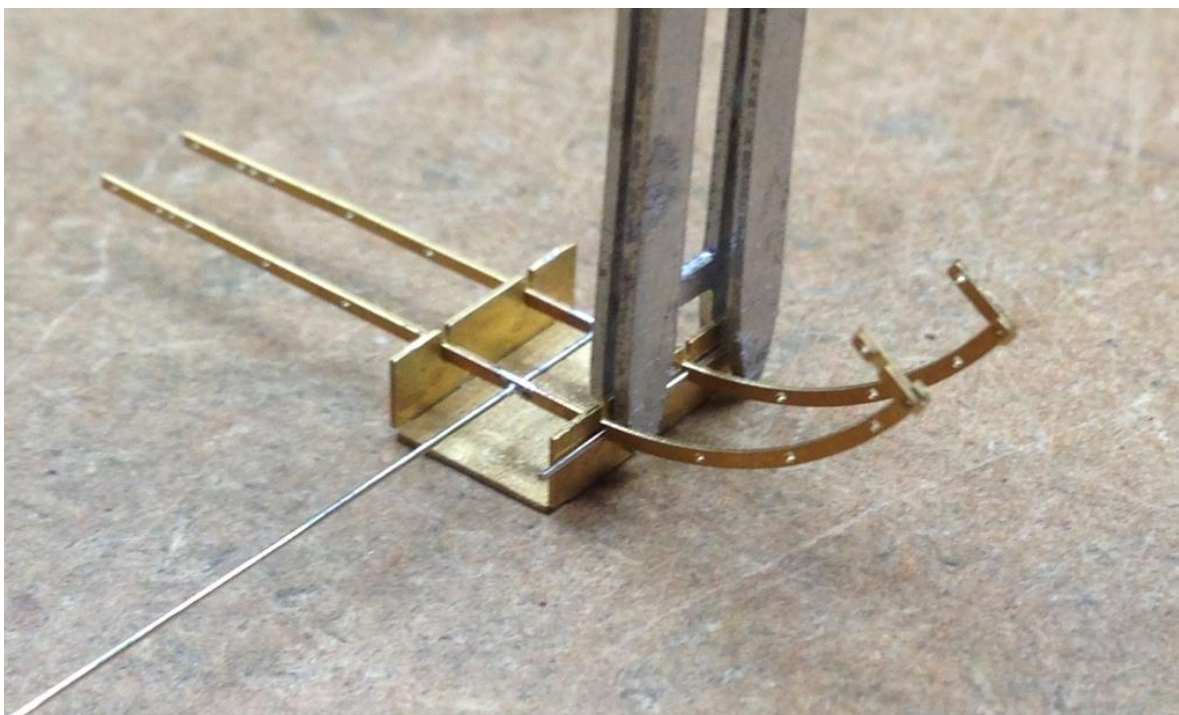
Ladders

There are two types of ladder depending on which etch you have. The type included is the most common found on that size of tank. They consist of ladder sides (22) through which 0.5mm wires are inserted to form the rungs. Ladder brackets (23) are included for fixing to the solebar and a ladder jig (24) is provided to hold the sides parallel when assembling them. Fig. 1 below gives the generally arrangement of the two types and you should consult this as you go along. The photos show the 4mm version of the ladder included with OC.71 but the type included with OC.72 is assembled in much the same way.

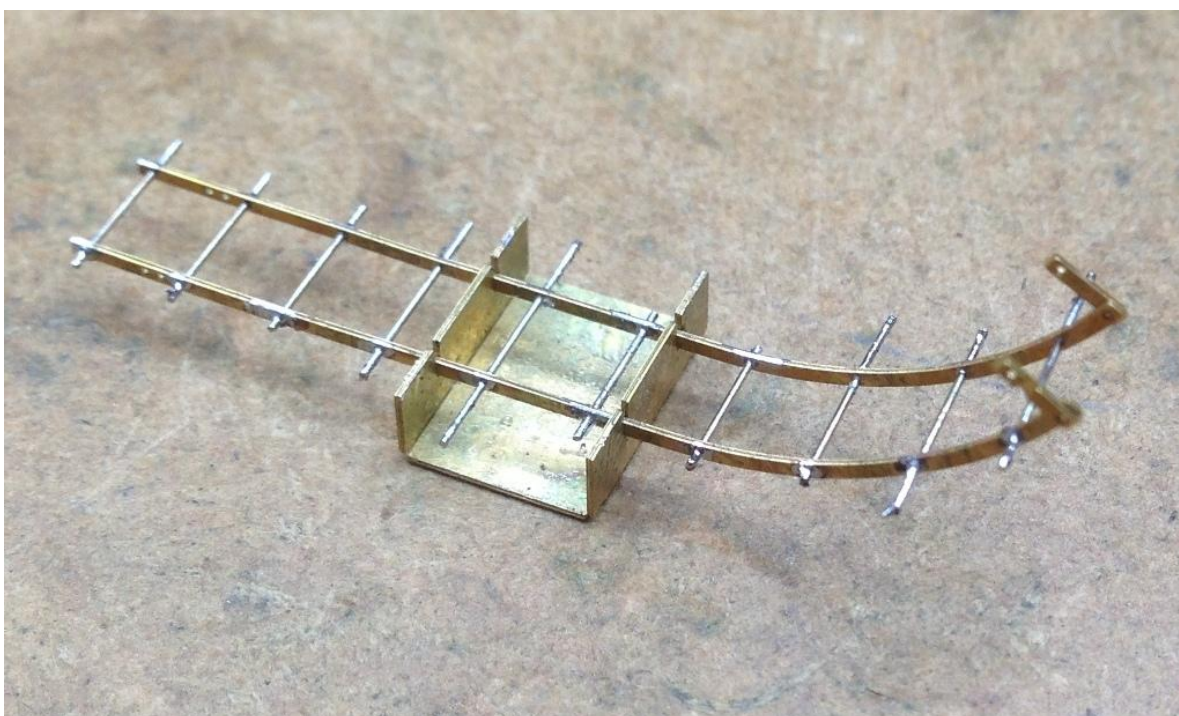
Make sure that the ladders (22) and associated brackets (23) can accept 0.5mm wire and then remove from the fret along with the ladder assembly jig (24). Fold up the ladder assembly jig into a channel and make sure that the slots for the sides can accept the sides. If it can't use a piece of scrap etch to open out the slots.

Fold over the little brackets on the tops of the ladders so that the fold is through 180° with the fold line on the outside. See photo below and Fig. 1. Insert the two sides into the jig so that these little brackets at the top are on the outside of the ladders. Insert a couple of lengths of wire into two sets of holes and use a clip or tweezers to hold one of the wires against the side of the jig and the other wire is arranged as in the photo below.

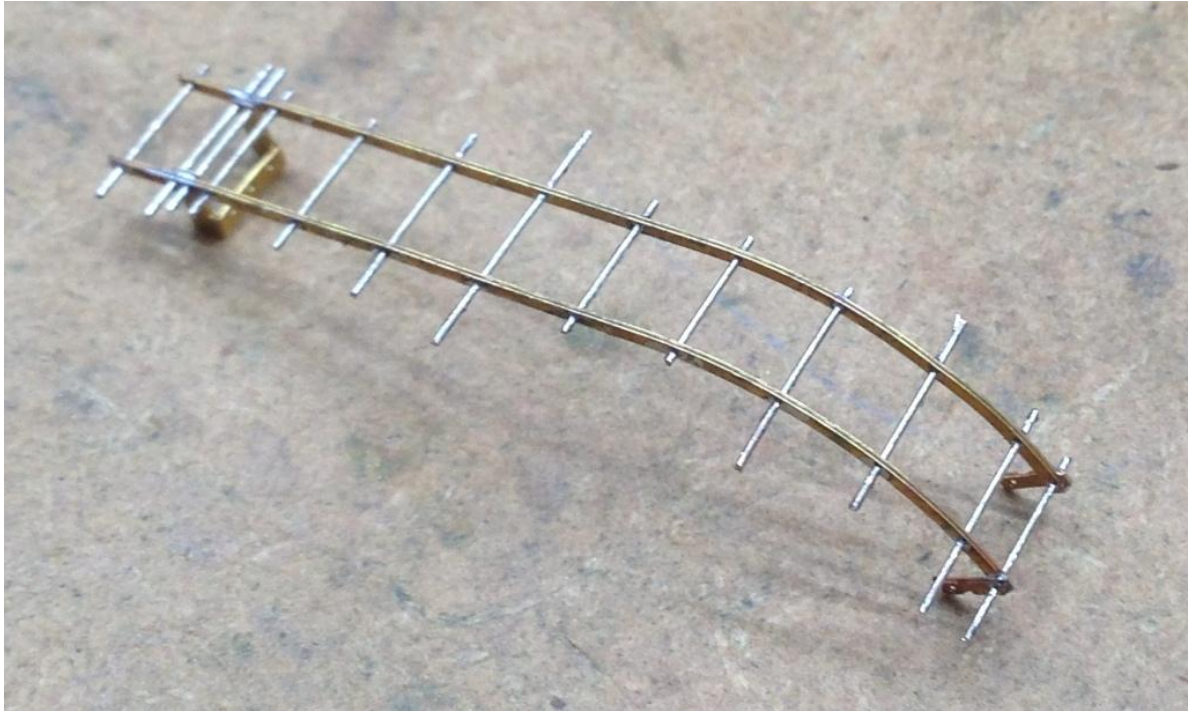
Take care to make sure that the sides are sitting properly in the slots and the clamped wire is hard up against the jig as this will ensure everything is square. Solder the wire between the two sides of the jig in place.



You can now fit and solder all the remaining rungs in place.



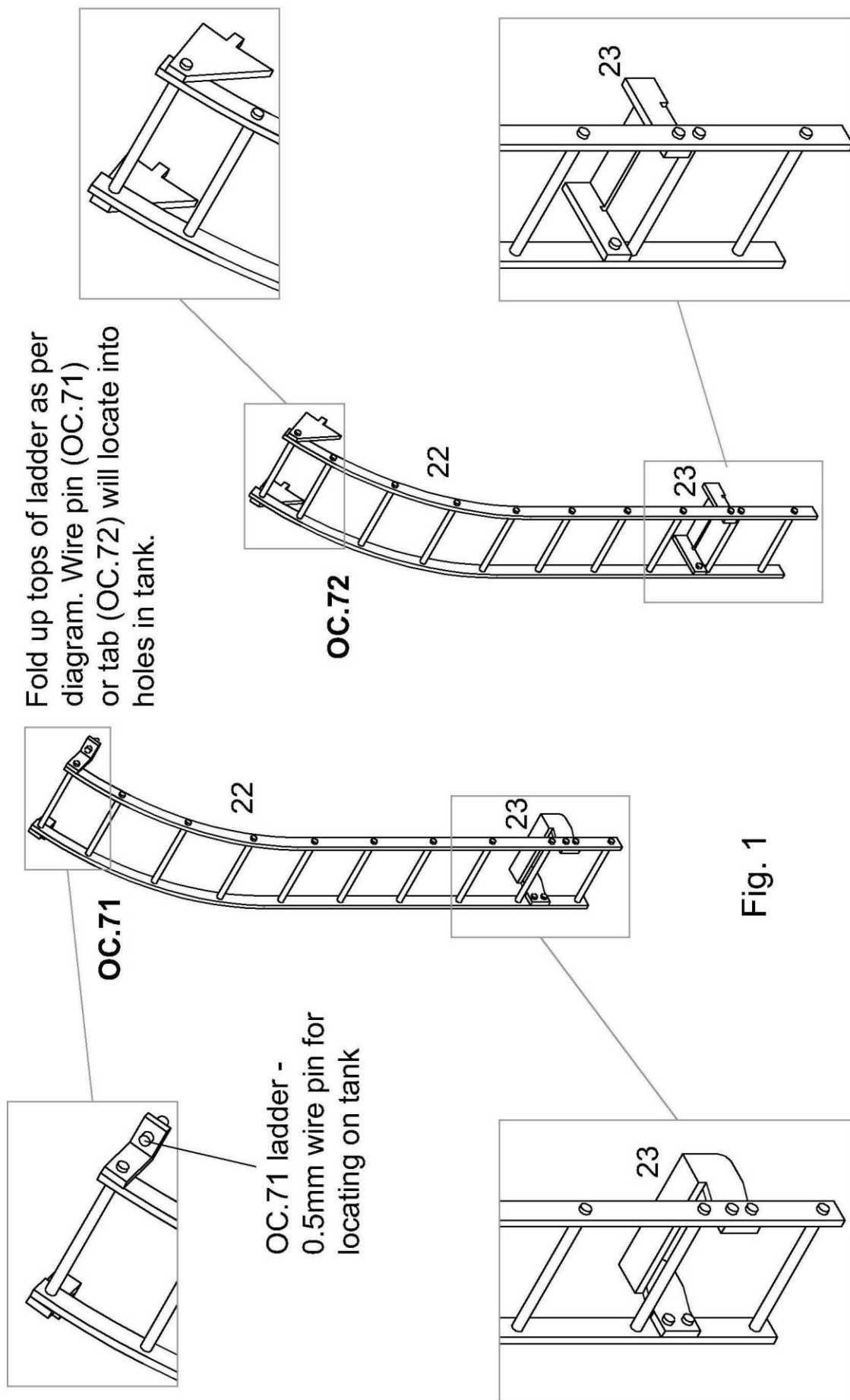
Next fit and solder in wire through the top set of holes and fit the ladder brackets in place using lengths of wire.



Trim and file flush the wire for the rungs and trim and file the wire used for the brackets so that they represent bolts.

For the ladders included with OC.71 fold down the ends of the small brackets at the top (there are fold lines here) and solder two lengths of wire in place in the remaining two holes. These will locate the ladder onto the tank. I find that drilling a couple of holes into the edge of a piece of wood to hold the wires is useful. The wire should be trimmed flush on the inner part of the angle.





The ladders can be located in place using holes drilled into the tank. Location points for these are included on the tank wrapper drawings.

You may want to leave final fitting of the ladders until everything is painted as it will be easier to paint and especially letter the tank with them off.

Builder's Plates

There are three types of builder's plates included: Cambrian (25a), Chas Roberts (25b) and Maclellan (25c). An appropriate pair should be fitted to the middle of the anchor on each side.

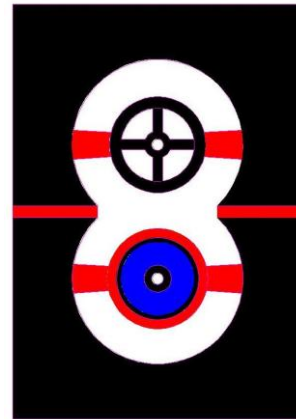
Screwdown Valve Wheel

An etched valve wheel has been provided for the screwdown valve. There is a spigot on the printed screwdown valve onto which the wheel locates. You may need to open out the hole in the wheel a little to get it to fit.

Steam Manifold Wheel (20T class B tanks)

These weren't included on the main frets (I forgot) and have been included separately. There are two parts to the wheel and they can be soldered together whilst still attached to the fret by folding the fret in the middle so that the fold is through 180° with the fold line on the outside.

Solder a short length of 0.5mm wire in place in the hole. Use this to pin the wheel in place on the steam heat manifold.



Notes on 3D prints

The 3D prints as supplied may require a little cleaning up. Files and emery paper are good tools for this. Some of the prints are supplied on a base to make the printing process easier. When removing items from their base use a piercing saw; don't use a blade as you may crack the resin. Indeed it is generally not a good idea to use blades on these sorts of 3D prints. Holes are likely to be a little undersize. Use a sharp drill to open them out. Be careful when drilling as the resin is quite soft and drills can easily wander.

For 20T class B tanks the steam manifold will require a length of 0.5mm wire inserting and bending into a U shape to insert into holes in the tank. The holes for the wire are at 10.75mm centres. The following picture shows the manifold in place on the end of an Air Ministry tank wagon. On 20T class B wagons the wheel is usually at the top.



Painting

I use Halfords grey primer in a tin through an airbrush with cellulose thinners to prime just about everything, including plastic bodies and 3D prints. The primer is synthetic and has no adverse effects on the types of plastics used on RTR railway models and kits. The cellulose thinners used evaporate so quickly that they don't have time to attack the plastic. You can then put your choice of paint over the top including cellulose. Don't use the red oxide in a tin on plastic though as it won't adhere and the paint will just come off.

Notes on weighting

The suspension on the underframe is designed to work optimally under the loads set out in the chassis instructions. The best place for any additional ballast is of course in the tank body.

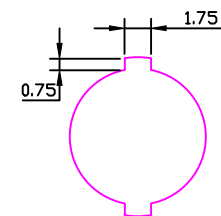
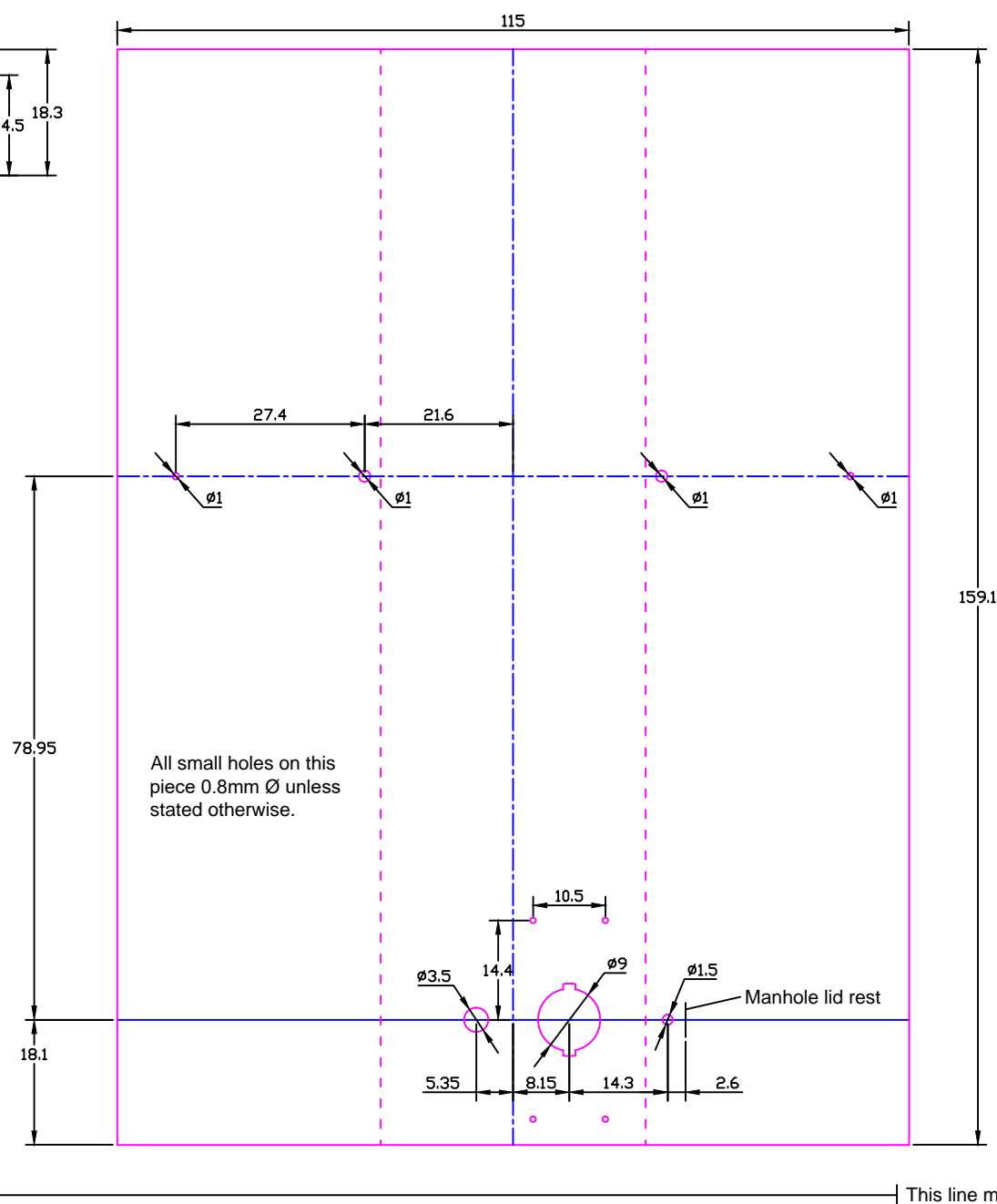
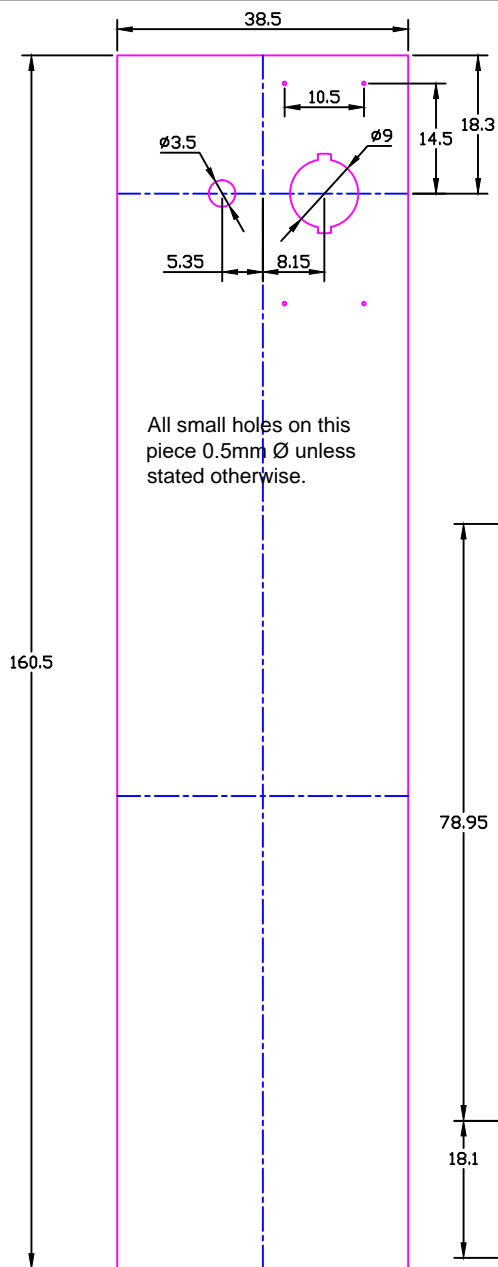
Finally

My thanks to David Long for some of the photos used to illustrate these instructions.

Last but certainly not least if you haven't come across the wonderful resource for BR wagon photos that is Paul Bartlett's website then I would thoroughly recommend a visit to:

<http://paulbartlett.zenfolio.com/>

Justin Newitt - June 2019



Manhole detail

Notes

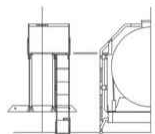
14T Class A with offset manhole and no walkways. Examples built for:

- Fina
- Regent
- Manhole offset from tank centre by 8.15mm
- Ladders (when fitted) symmetrical about tank top and centred on manhole
- Regent wagons had ladder, Fina wagons didn't (at least when new).

Holes for fittings:

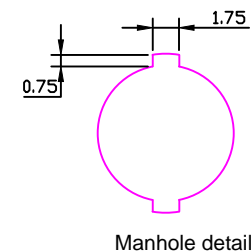
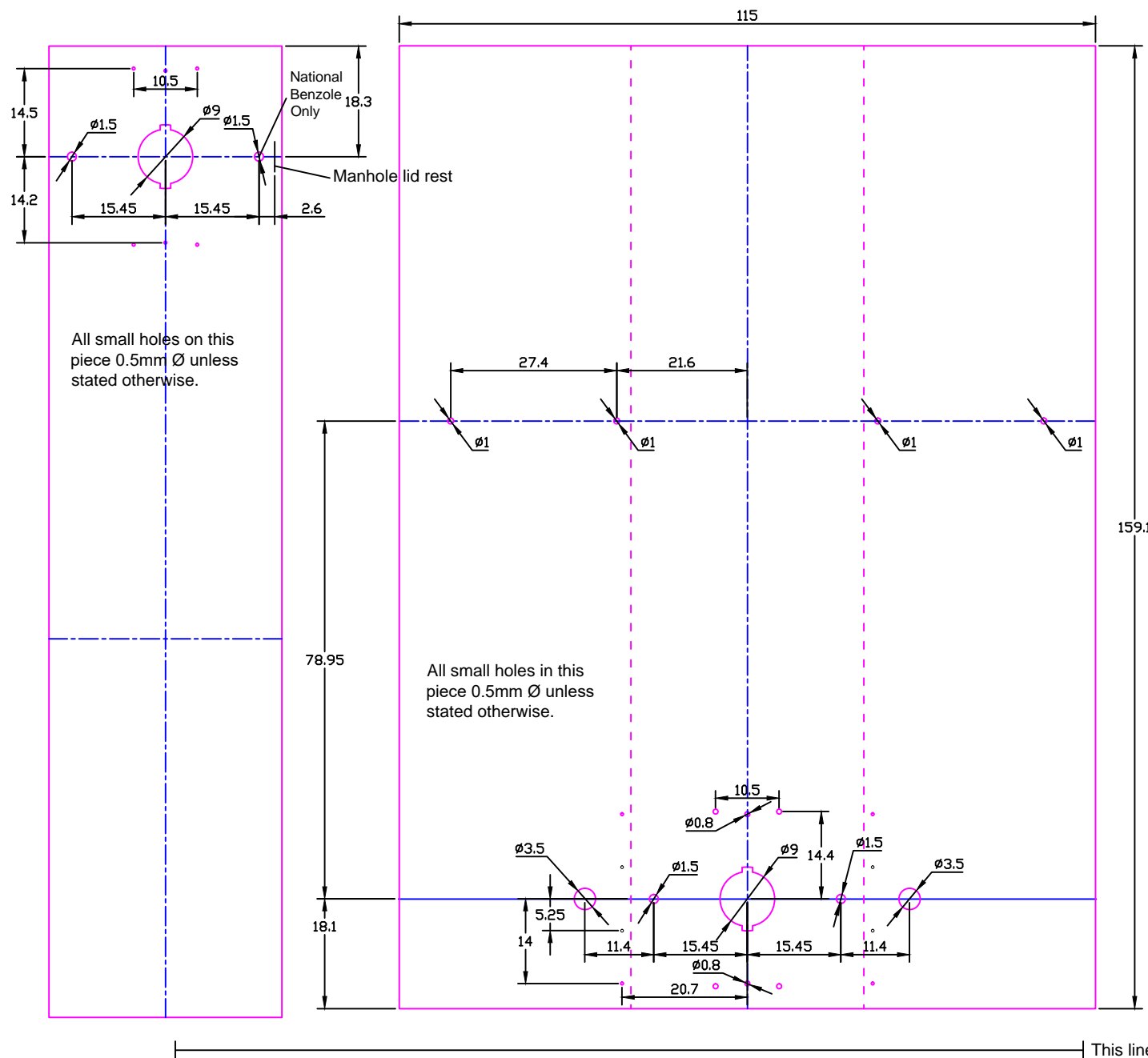
- Manhole Ø9
- Siphon Block Ø3.5
- Air Vent Ø1.5

All dimensions in mm



Rumney Models

7mm Anchor Mount Tank Wagon Body Instructions - Appendix A1
7'3" 14T Class A Tank Wrapper - Fina, Regent
JJN 2019



Notes

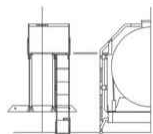
14T Class A with manholes centred on the wagon and walkways. Examples built for:

- National Benzole
- Benzole Producers
- Manhole centred on wagon
- Ladders (when fitted) and walkways symmetrical about tank top and centred on manhole
- Benzole Producers wagons had ladders, National Benzole wagons didn't.

Holes for fittings:

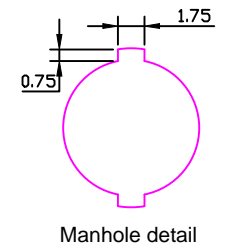
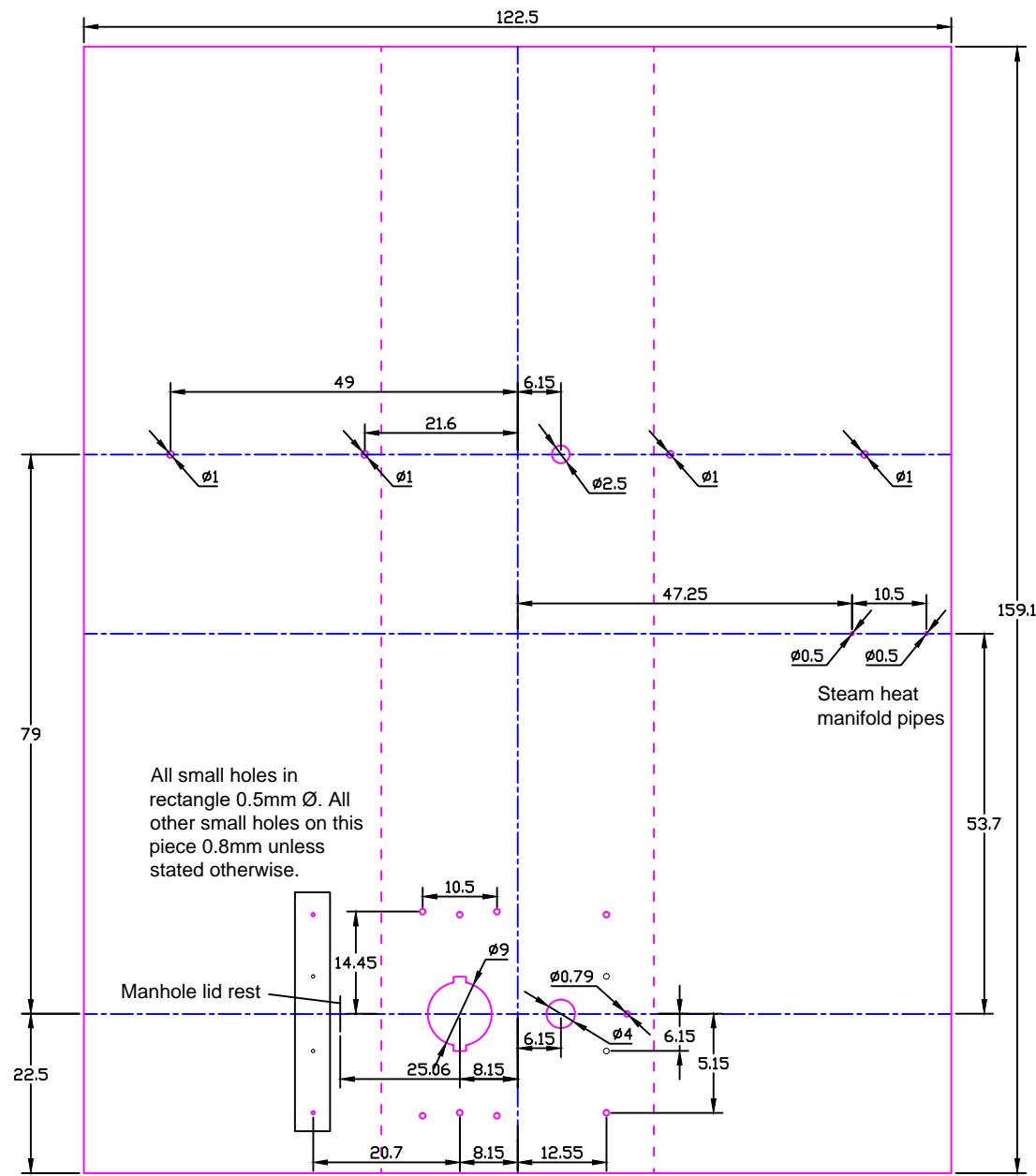
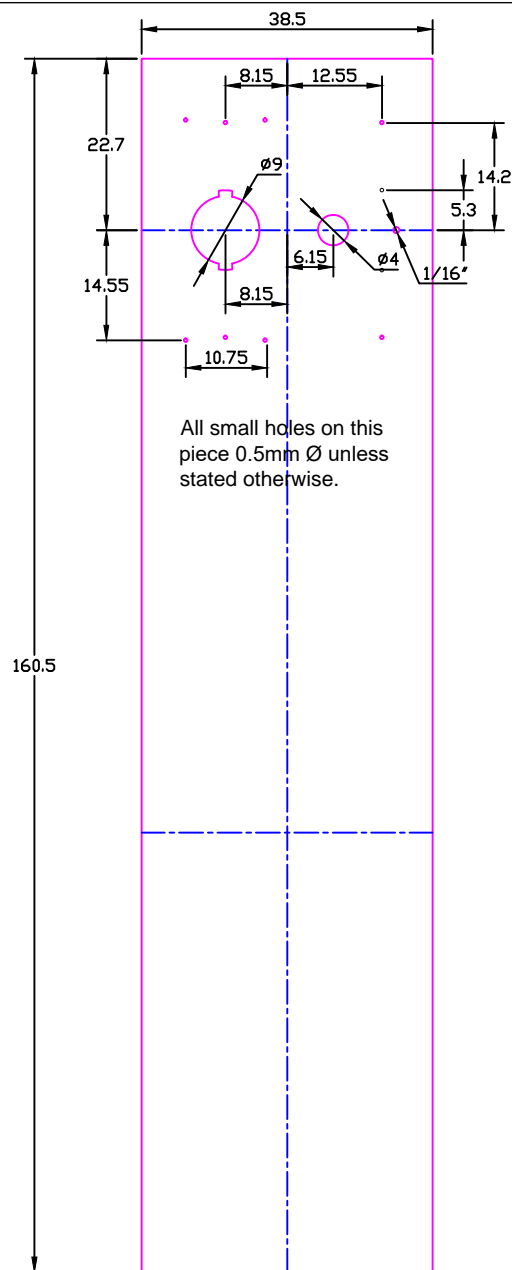
- Manhole Ø9
- Siphon Block Ø3.5
- Air Vent Ø1.5

All dimensions in mm



Rumney Models

7mm Anchor Mount Tank Wagon Body Instructions - Appendix A1
7'3" 14T Class A Tank Wrapper - National Benzole, Benzole Producers
JJN 2019



Notes

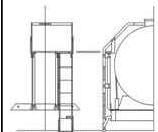
20T Class B with ladders and walkways. Examples built for various companies including:

- SMBP
- ESSO
- Briggs Dundee
- Lobitos
- Mobil
- Manhole offset from tank centre by 8.15mm
- Ladders and walkways symmetrical about tank top and centred on manhole
- 4" Drain Pipe

Holes for fittings:

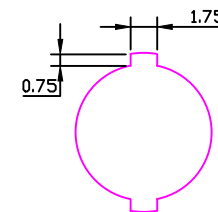
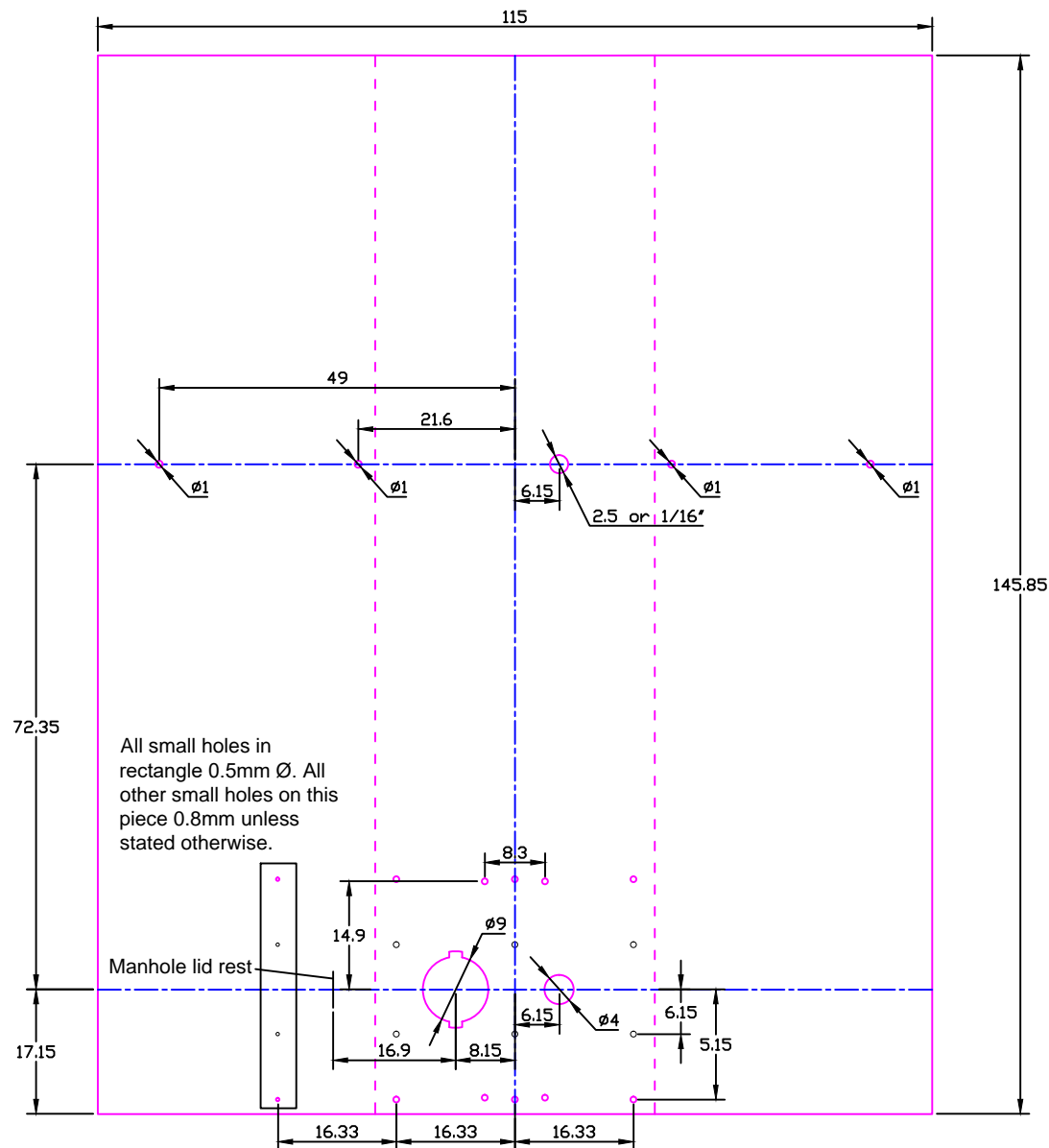
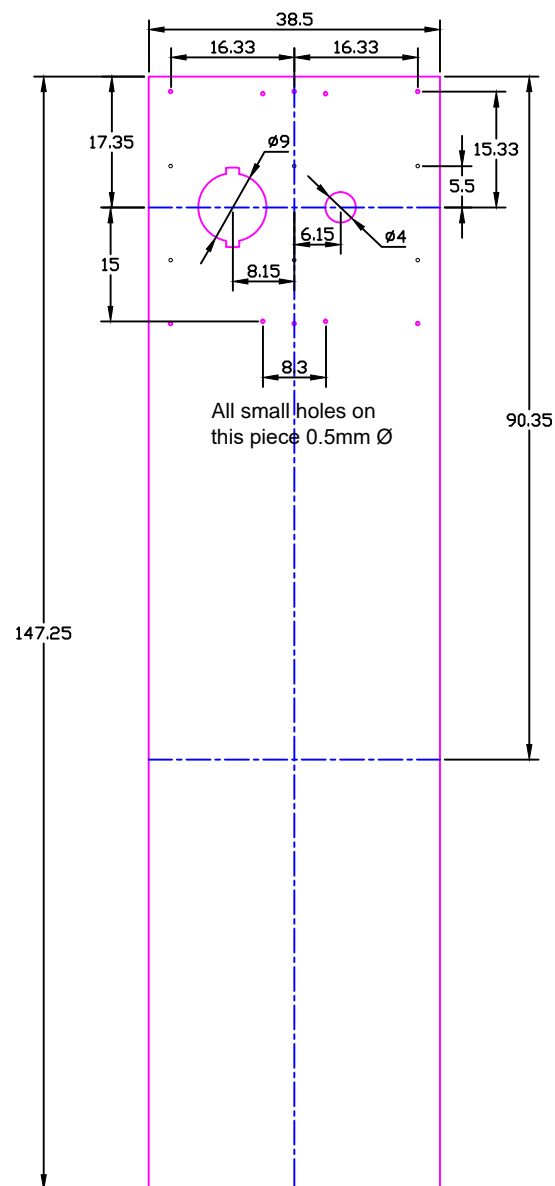
- Manhole $\phi 9$
- Screwdown Valve $\phi 4$
- Air Vent $\phi 0.79$ (1/32")

All dimensions in mm



Rumney Models

7mm Anchor Mount Tank Wagon Body Instructions - Appendix B
7'3" 20T Class B Tank Wrapper
JJN 2019



All dimensions in mm