

LEGACY KITS & COMPONENTS

- 0 Gauge -

LNER Class J69/1 “Buckjumper” Legacy Kit Body Assembly Instructions



This kit was first produced in 1991. It was an honest, best effort at the time and much appreciated by many satisfied modellers, many were newcomers to 0 Gauge..

Time passed and modellers expectations became more sophisticated along with the range of kits available. This legacy kit was retired from production for many years.

But now its back with a level of extra casting detail that modellers now expect for locos on their layouts. Instructions detail how legacy issues can be addressed with simple hand tools to get the best from the etched components.

We Are Confident Modellers Will Be Delighted With The Results

Parts Required To Complete

3 Sets 4', 10 Spoke Driving Wheels (Slater's Catalogue Numbers 7848NE)

Plunger Pickups if desired (Slater's Catalogue Number 7157)

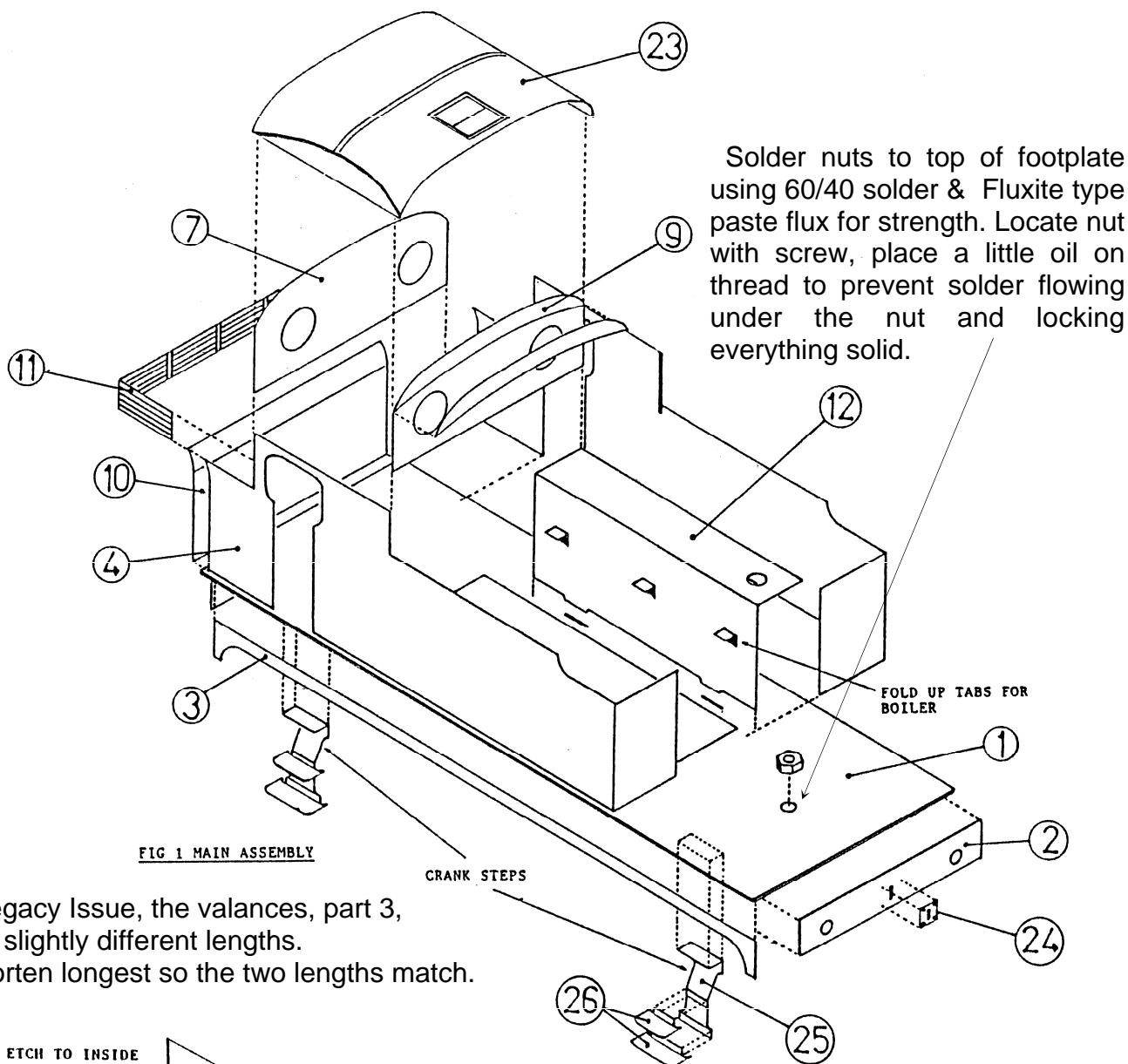
Available From Slater's Plastikard, Old Road, Darley Dale, Matlock
Derbyshire, DE4 2ER, Telephone 01629 734053.

1833 Motor and 40/1 Gear set, *available from Connoisseur Models.*

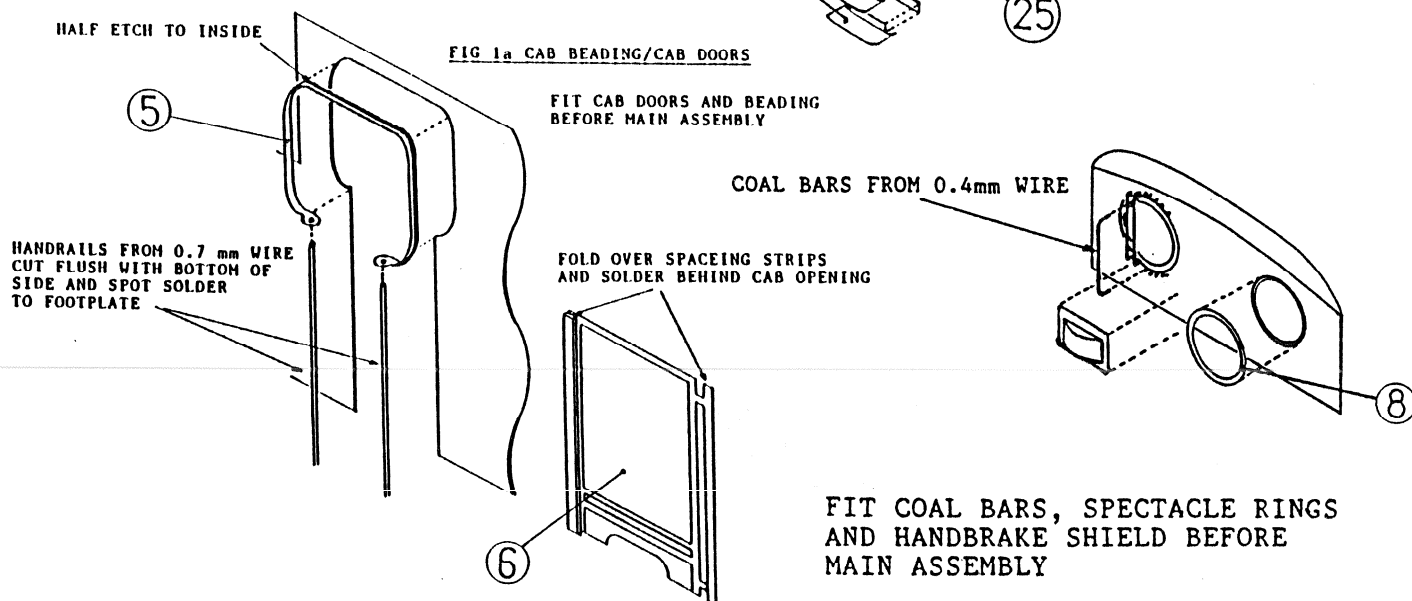
**Produced by Family McGeown, 1 Newton Cottages,
Nr Weobley, Herefordshire, HR4 8QX, Telephone 01544 318263**

Points to Note

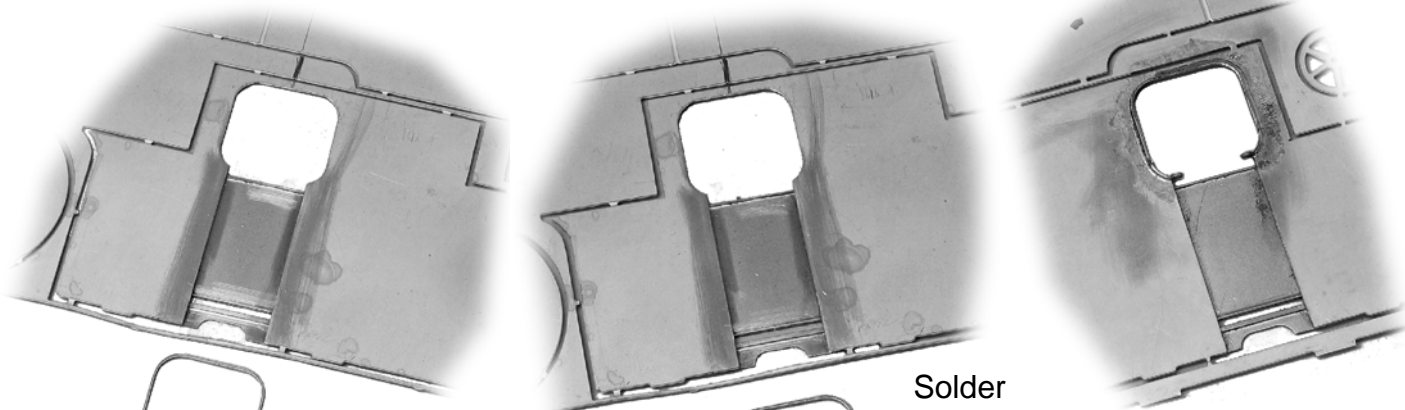
Parts are numbered in a logical assembly order. Tack solder a part in place, then adjust the next part to match. Some parts are designed oversize to be trimmed to size. Solder parts solid only when happy with positioning.



Legacy Issue, the valances, part 3, are slightly different lengths. Shorten longest so the two lengths match.



With cab/tank sides retained in main etch remove footstep parts out of doorway. Then solder doors solid behind doorway.



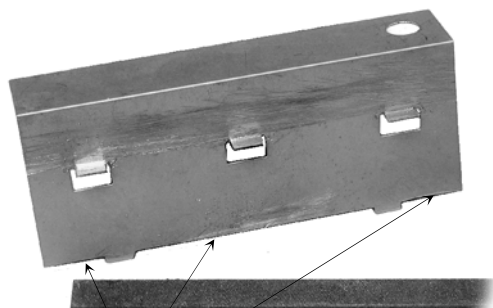
Mark centre point of cab opening and cab beading.

Form top bends of beading first and check for fit, then form bottom bends and again check for fit.

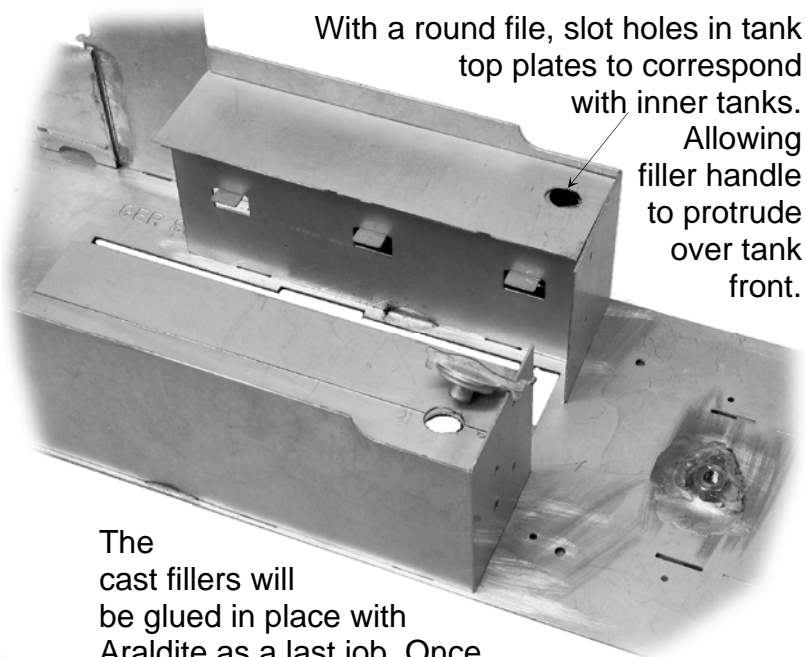
Solder beading into position starting at top and flashing solder generously around the outside surface. Scrape excess solder off to give a clean and gap free finish.

Fit cab/tank sides to footplate ensuring they are exactly opposite each other. There are etched location marks at bunker and use an engineers square to align tank fronts. Push tabs against outside of slots.

Legacy Issues to Address

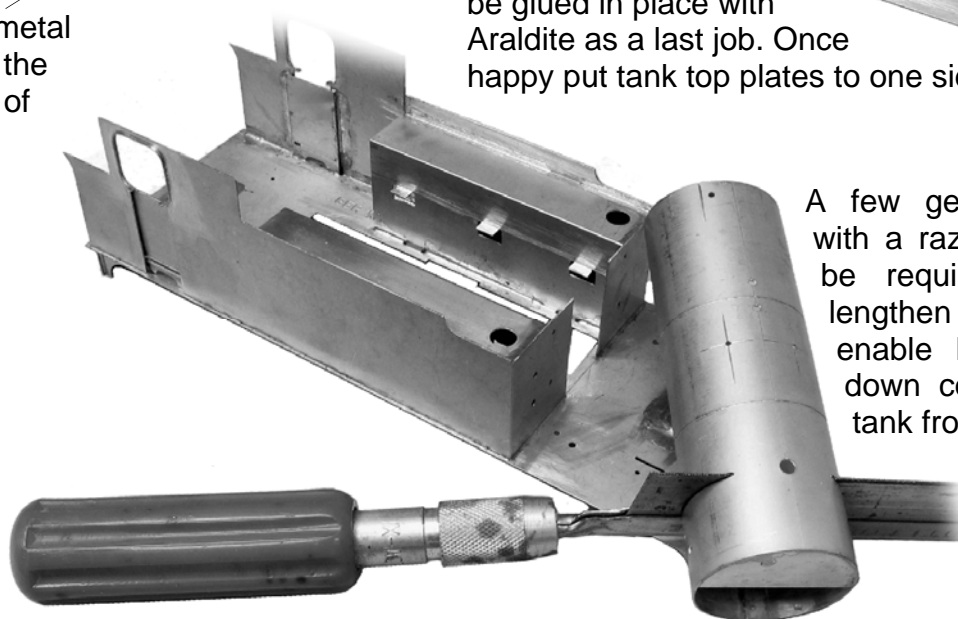


File about a metal thickness off the bottom edge of inner tanks.

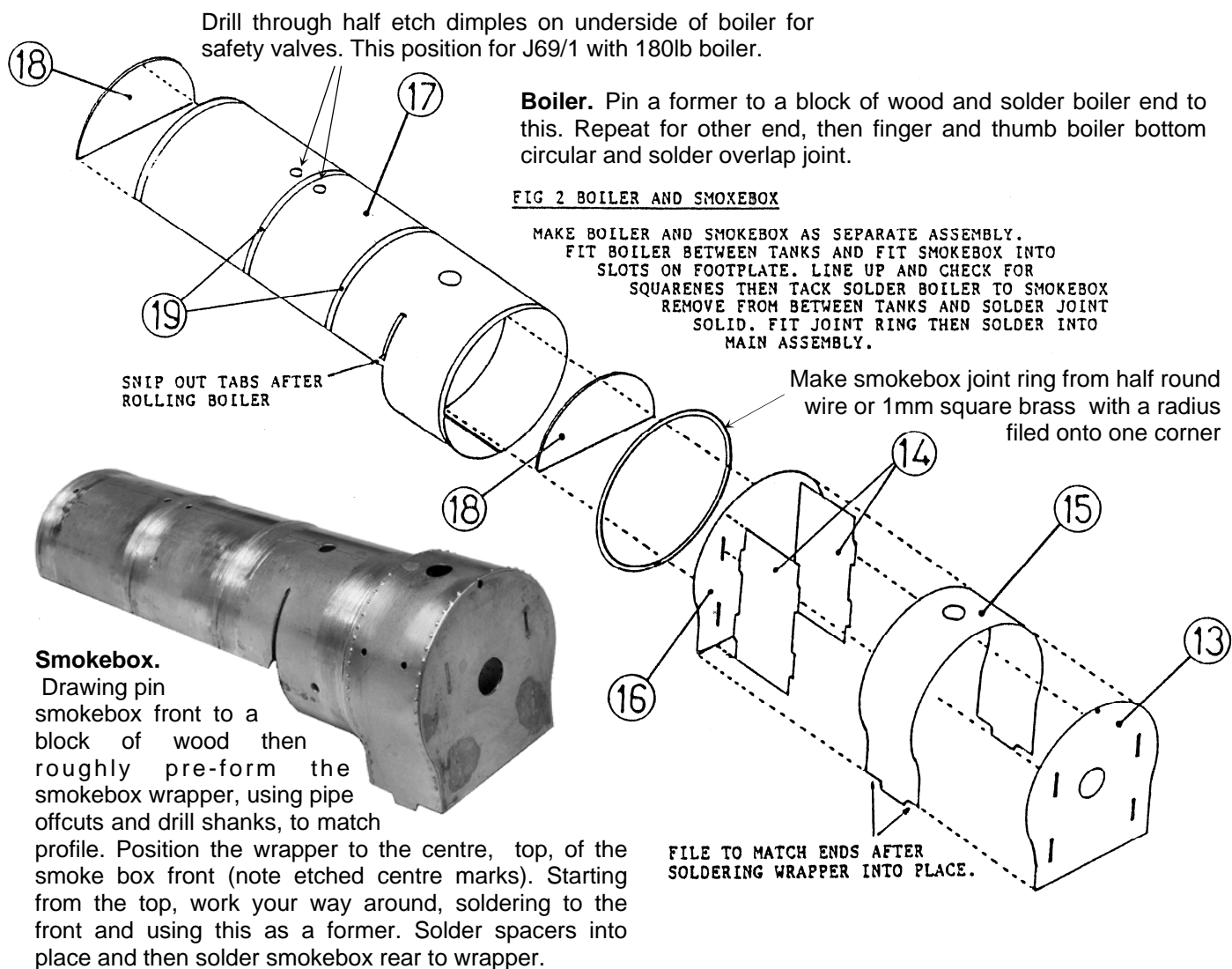


With a round file, slot holes in tank top plates to correspond with inner tanks. Allowing filler handle to protrude over tank front.

The cast fillers will be glued in place with Araldite as a last job. Once happy put tank top plates to one side.

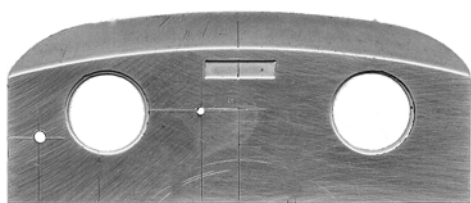


A few gentle strokes with a razor saw may be required to just lengthen slots to enable boiler to sit down correctly over tank fronts.

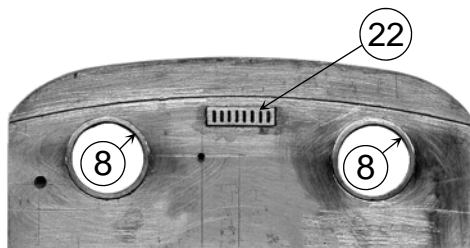


Legacy Issue

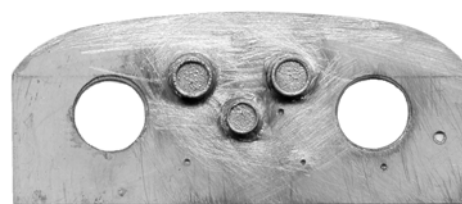
On prototype J69/1 locos a ejector pipe and whistle rod passed through the cab front. It may be easier to drill holes with the cab front flat or you may wish to not bother with holes and just terminate the wire and rod by spot soldering to the cab front after main assembly.



I would recommend drilling holes for brake ejector pipe and whistle now.



It may be a good idea to fit the rest of the cab front etched components and cast gauges before soldering solid between cab sides.



You can cut out this illustration (just check it has not distorted in size with photocopying) and use as a template.

Legacy Issue

When these components were originally produced the priority was attractive price and this was determined by the amount of etched material used. Everything had to fit onto a maximum $\frac{1}{2}$ sheet (12" x 18") brass and $\frac{1}{3}$ nickel silver. When this was used up something had to be omitted, small locos, 0-4-0 etc, had some cab interior detail larger ones like this got an empty cab.

Back then if a loco had brake blocks it was considered super detailed and cab interior was for showcase models. To address this I have produced cast components to provide a basic interior as would be expected for a layout loco today.

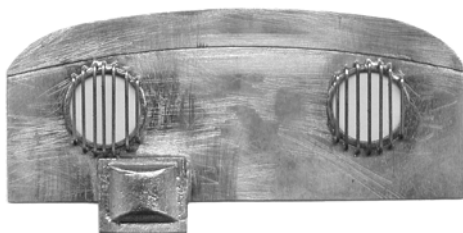
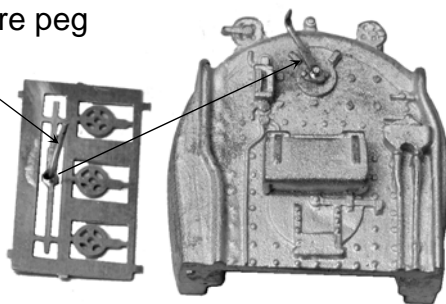
Now I am not a skilled pattern maker but I can fabricate and improvise. So I produced these cab components using etchings and castings from other kits in my range. These were joined and thickened up for reliable casting using Araldite PCB overlays and Milliput. This works fairly well but there is a degree of distortion and bubbling in the mould cavity under the heat and pressure of vulcanised mould making.

So first clean and square up components using a course file and 60 grit Carborundum paper. Then with everything accessible, trial fit and adjust for easy assembly.

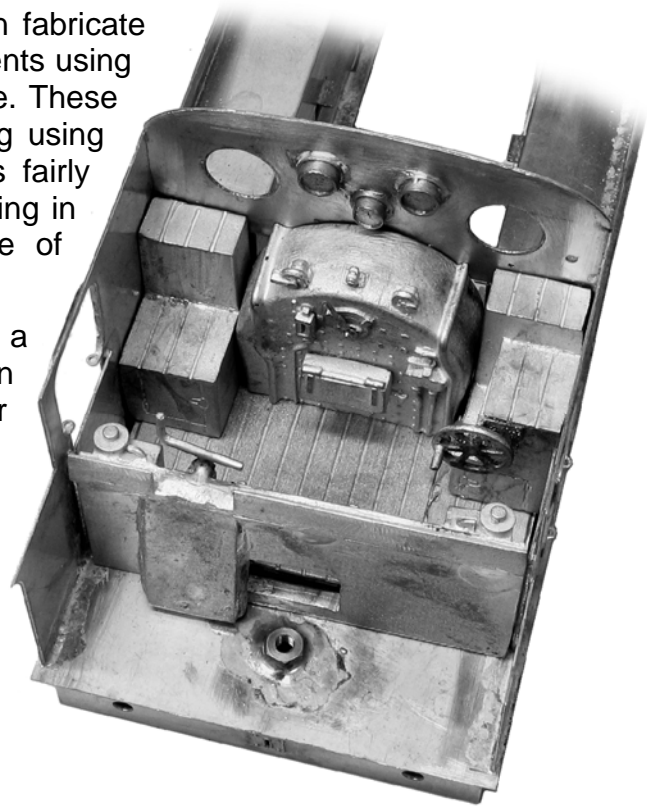
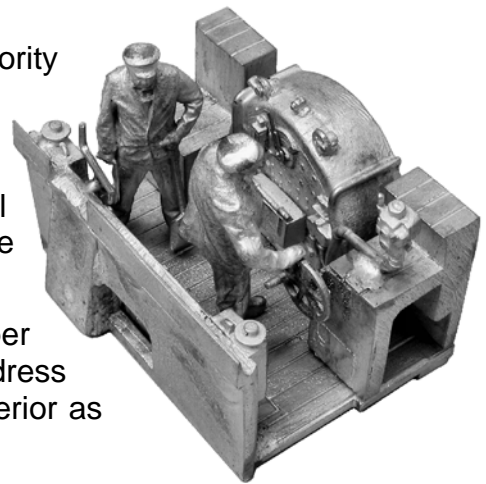
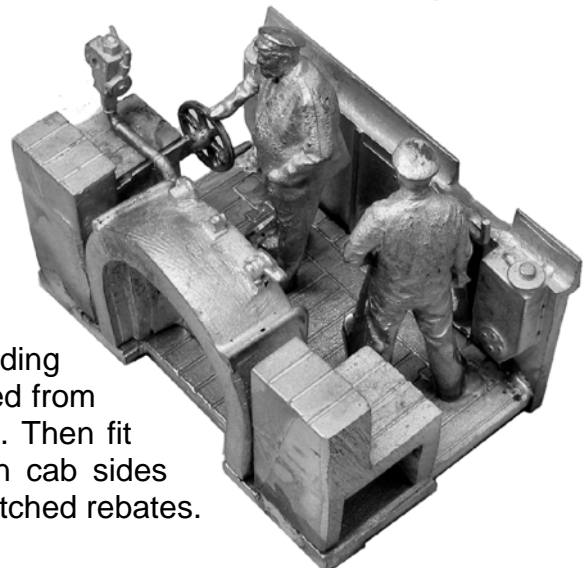
Components can be fitted after fitting cab back or painted separately and glued into position as a final operation.

My preference is to low melt solder into place most components but to paint separately and glue into place, backhead, brake valve and crew.

Solder 0.7mm wire peg then trim and form regulator.



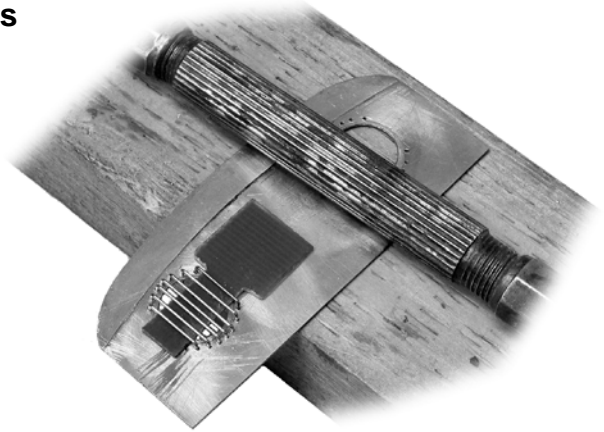
Fit cab back components including coal bars fabricated from 0.5mm brass wire. Then fit cab back between cab sides locating into half etched rebates.



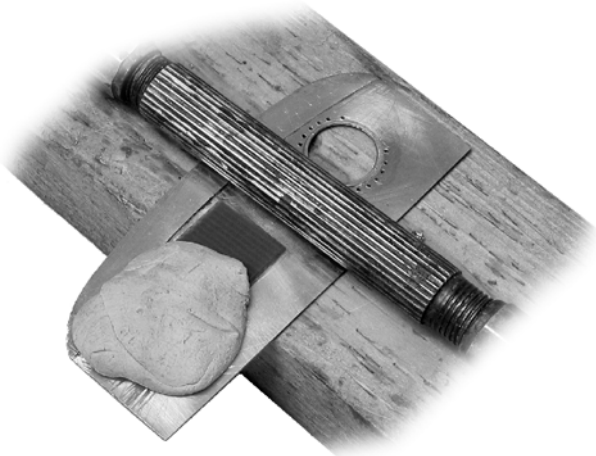
Useful Technique for Fitting Coal Bars



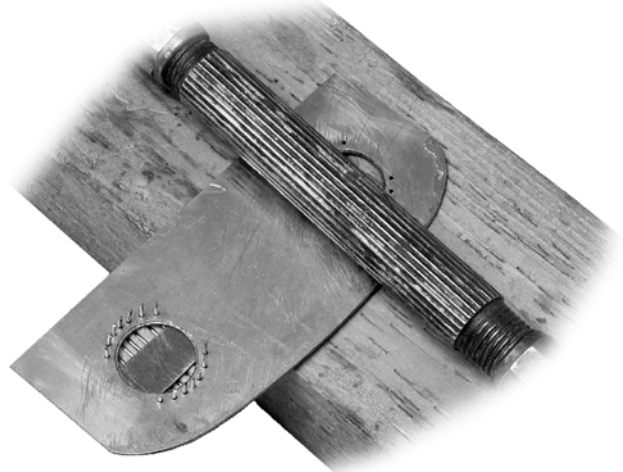
Clear all holes with $\varnothing 0.5\text{mm}$ drill. Bend up coal bars and fit loose into holes.



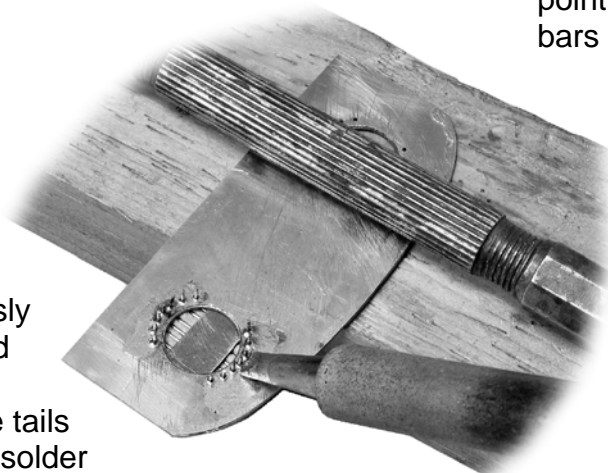
Slide a thin packing strip (about 0.7mm thick and non metallic so you don't solder everything solid) underneath the bars.



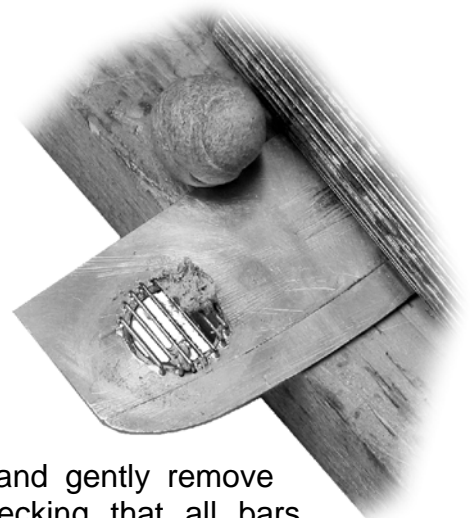
Thumb Blu-Tack over the bars.



Turn over and adjust wire tails with a knife point so that they are all upright and the bars are evenly spaced.



Generously apply liquid flux and solder wire tails by flowing solder over the brass surface and gently touching each tail with the iron tip.

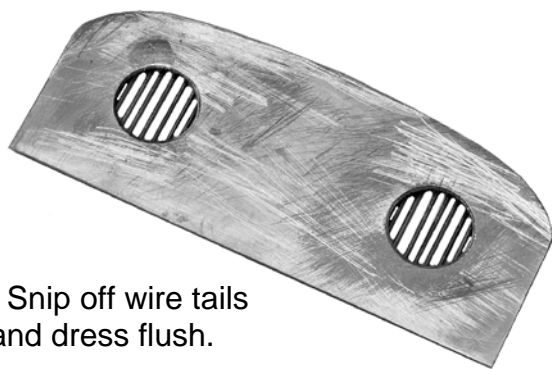


Turn over and gently remove Blu-Tack checking that all bars are firmly fixed. Gently retouch from the rear any joint that is not secure. You will probably find Blu-Tack has melted around some bars so roll a ball of fresh Blu-Tack.

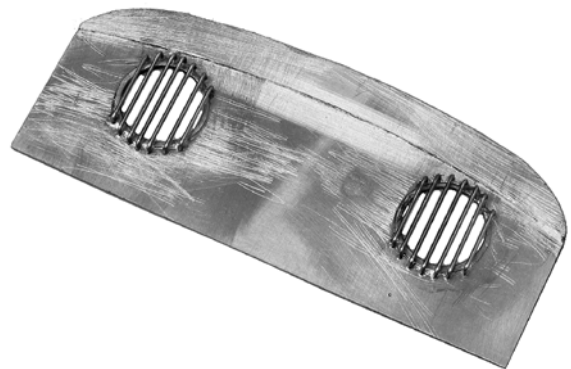
Use this ball to lift off the melted Blu-Tack.



Continue rolling and dabbing with this ball until the bars are clean.



Snip off wire tails and dress flush.



Legacy Issue

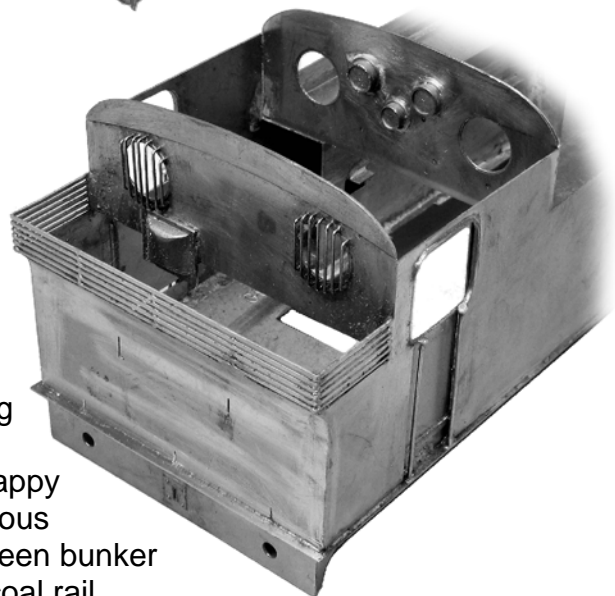
I put an half etched panel at the top of the bunker rear to make forming the top curve easier. This worked but leaves the top edge vulnerable to damage. So fit rear, note etched rebates in sides and soldering solid.

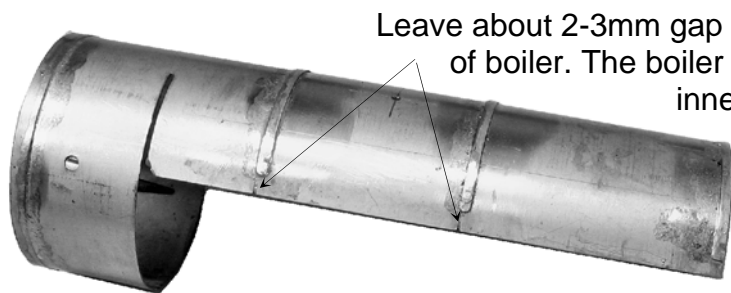


Then lightly clip a strip of scrap etch (you could use 0.9mm wire) along the inside of the top edge. Gently flow a generous amount of solder underneath to secure and fill the curved gap underneath the strip.



Then fit coal rails by first spot soldering into position. Then when happy gently flow a generous amount of solder between bunker top edge and bottom coal rail.



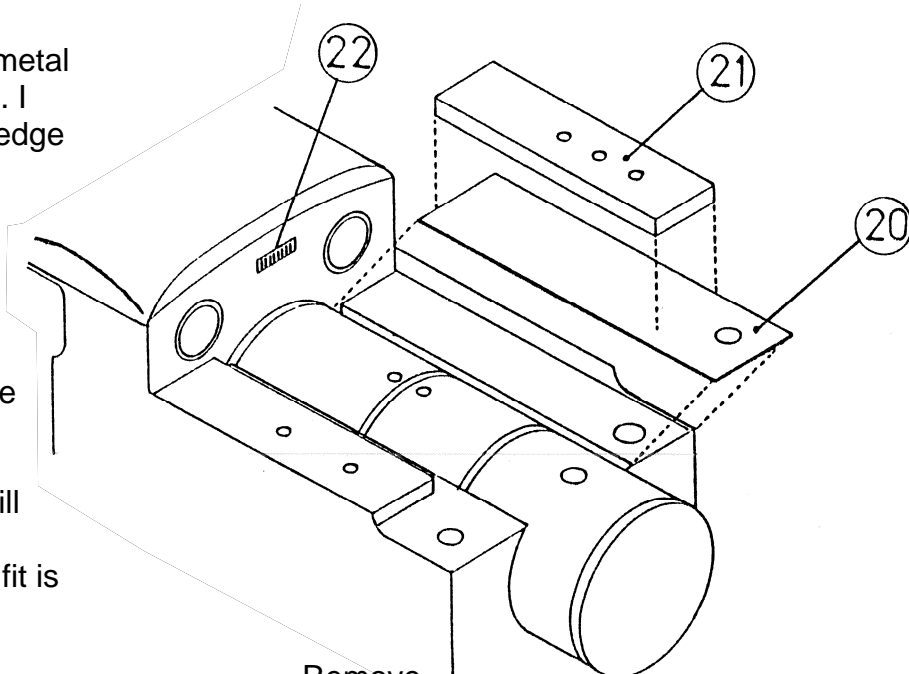


Leave about 2-3mm gap between ends of boiler bands and edge of boiler. The boiler should then slip snugly down between inner tanks.

There are two etched guide lines to help position central boiler bands. fit bands on the cab side of these lines. Then solder smokebox and boiler together (see page X).

Legacy Issue

I did not make allowance for metal thickness on many of the parts. I produced them to the edge to edge overall dimension taken off the drawing rather than trying to calculate and subtract an allowance. In my inexperience I reckoned you could file a bit off but its not so easy to add a bit on. If you scribe a light guide line its fairly easy to clamp in vice jaws just above this line and file down. The vice jaws will help maintain a straight edge. Repeat if required until a snug fit is achieved.

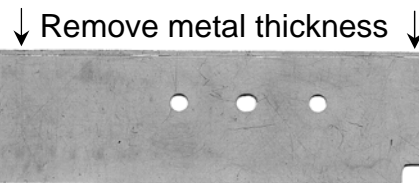


Remove about half metal thickness →

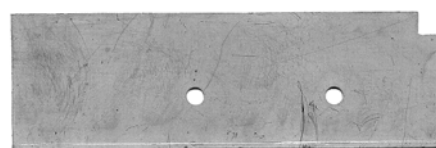


← Remove about half metal thickness

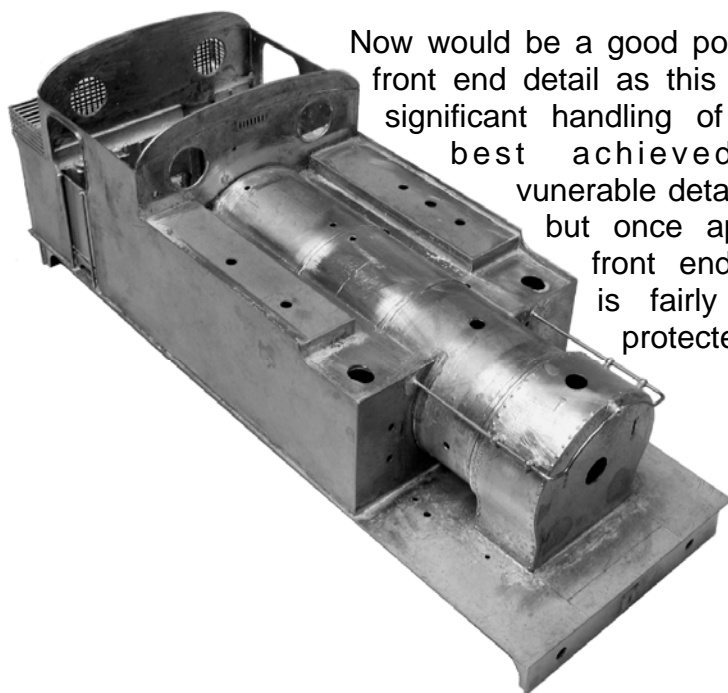
↑ Remove 1-2 metal thickness ↑



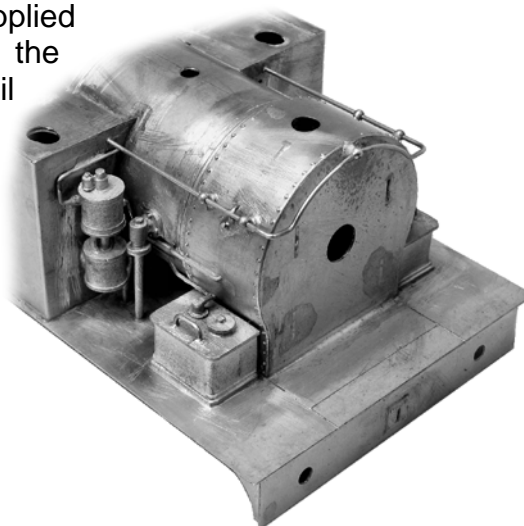
↓ Remove metal thickness ↓

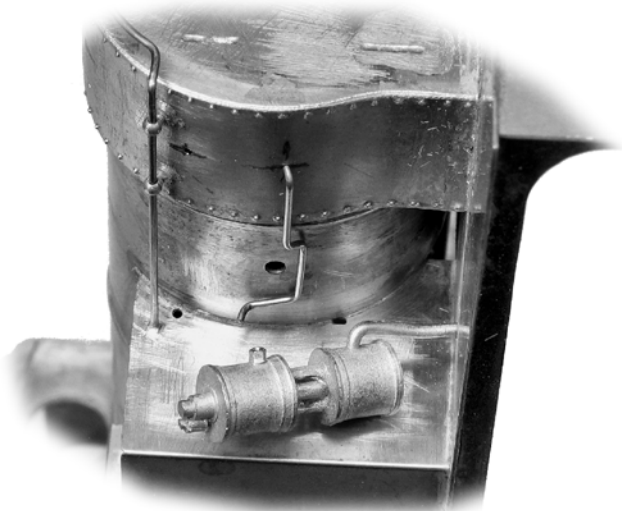


↑ Remove metal thickness ↑



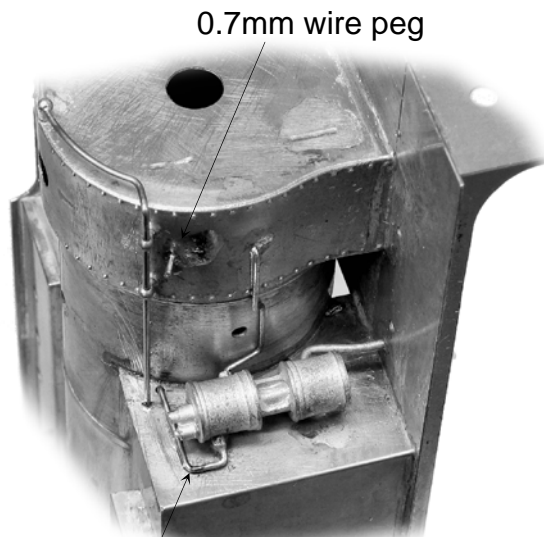
Now would be a good point to apply front end detail as this will require significant handling of the body, best achieved before vunerable detail is applied but once applied the front end detail is fairly well protected.





Drill 0.75mm pipe location holes in pump and smokebox. Form up pipe work from 22swg soft wire. Fit together and then solder pump to tank front.

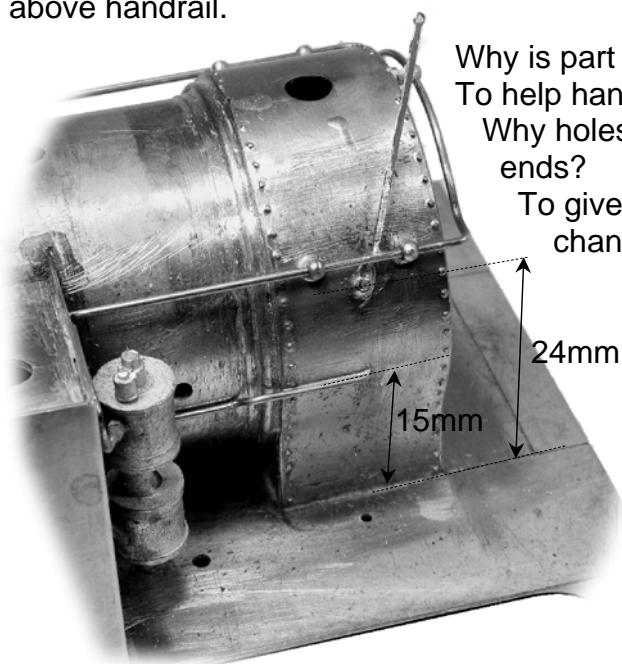
Blower valve, fit short length of wire into hole in smokebox to form peg. Fit the end of part 28, with 1mm set bent in, over this. Solder to peg and behind handrail. Cut off square just above handrail.



0.7mm wire peg

Fit top feed pipe

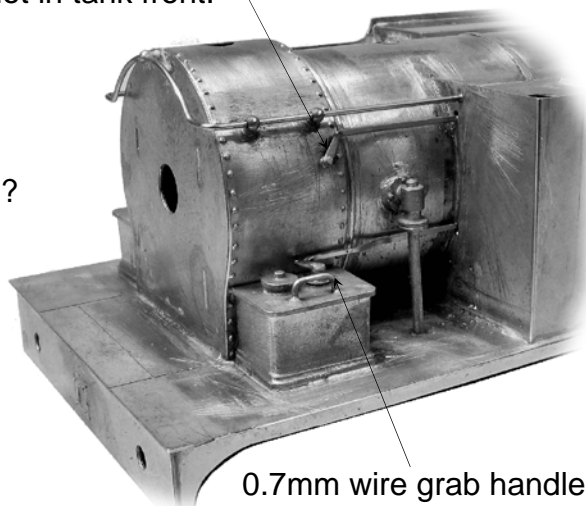
Condensing gear operating rod, (*next to part 28*), again fit over a wire peg and into slot in tank front.



Why is part 28 so long?
To help handling.
Why holes in both ends?
To give a second chance.

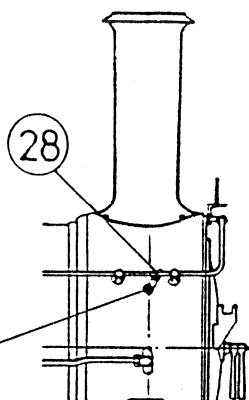
24mm

15mm



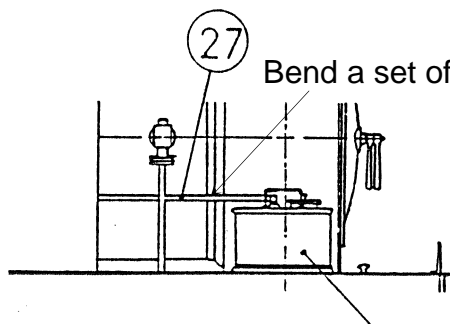
0.7mm wire grab handle.

Sandbox Operating Rods. Twist 90° just behind crank, bend a set of about 1.5mm to match step in at smokebox- boiler joint, thread over cast peg on sandbox and spot solder into slot in tank front.



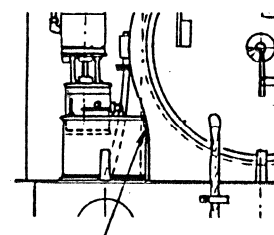
28

0.7mm wire



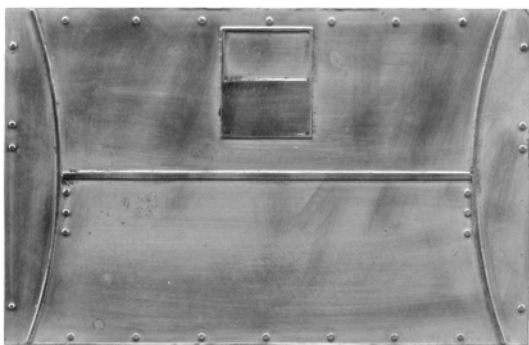
27

Bend a set of about 1.5mm here.



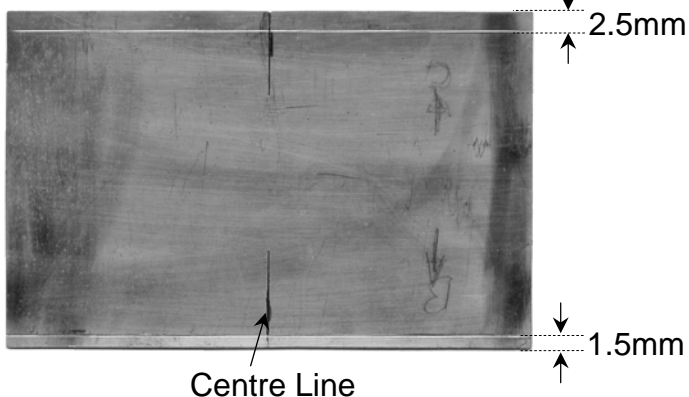
Sandboxes. File radius on rear to match smokebox curve.

Front/chimney edge, wider overhang



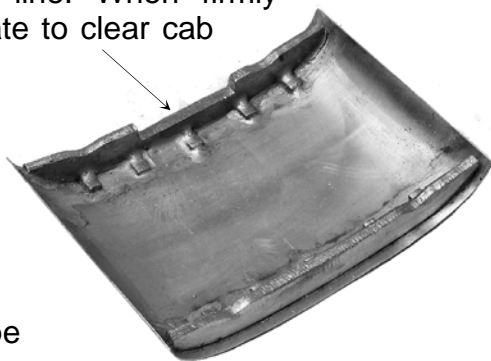
Rear/bunker edge, narrower overhang

Scribe guide lines on underside of roof



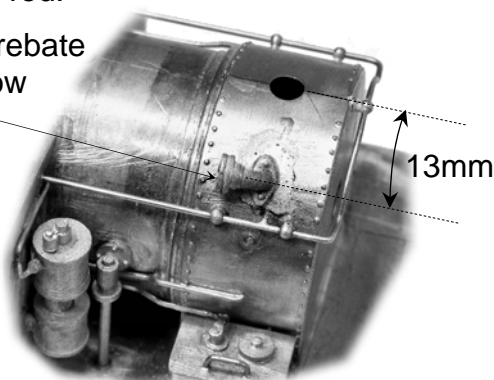
Legacy Issue

Originally the intention was to form the roof by working with finger and thumbs over several off cuts of different diameter tube (I started with 28mm water pipe and finished the tight edge radius over 11mm diameter brass tube). Once the roof matched the cab profile it was soldered permanently into position. But now we have a cab interior, a removable roof is a good idea so I have provided two cast profiles. Form roof to match as before, remove feet from one side for front and rear, solder to underside locating centre foot over marked centre line. When firmly fitted file a rebate to clear cab gauges.

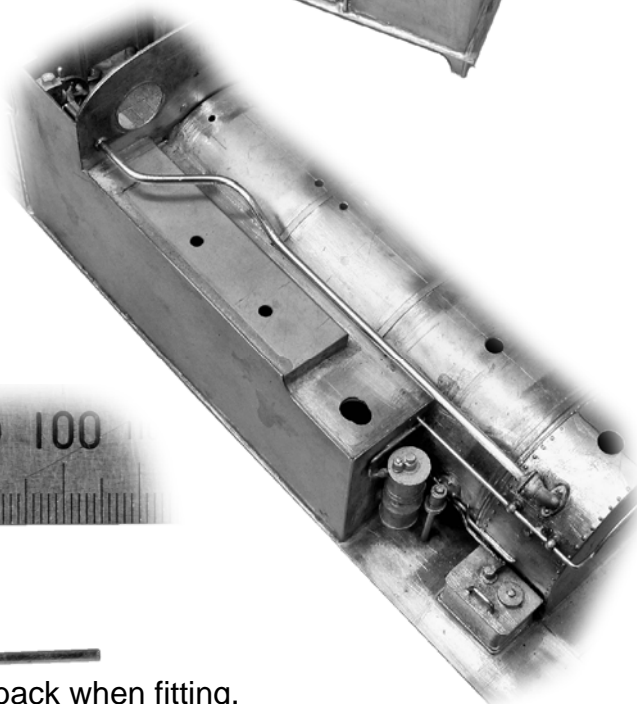


The vacuum brake ejector pipe is formed from 1.6mm brass rod.

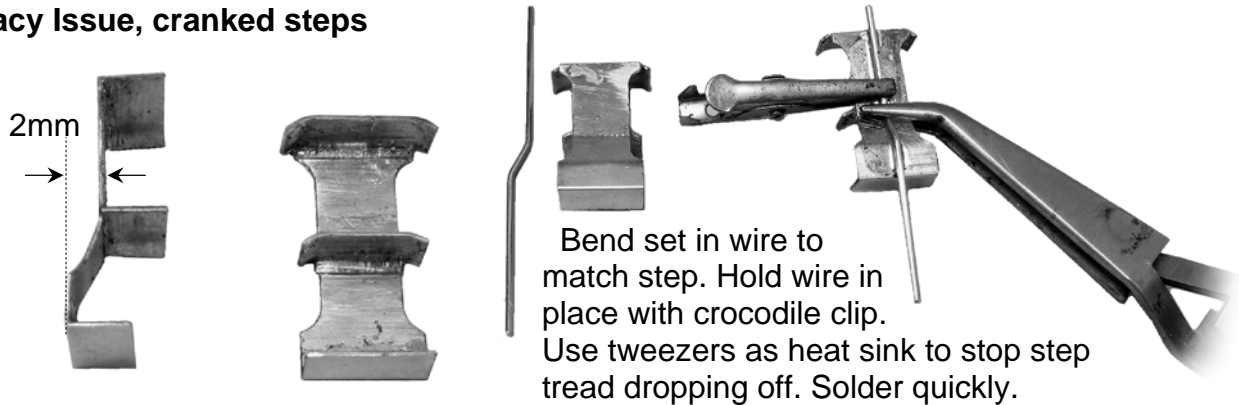
Drill 1.6mm rebate into cast elbow then fit to smoke box.



Use this as a rough guide for forming 1.6mm brass rod brake ejector pipe. Allow an extra few millimetres each end and trim back when fitting.



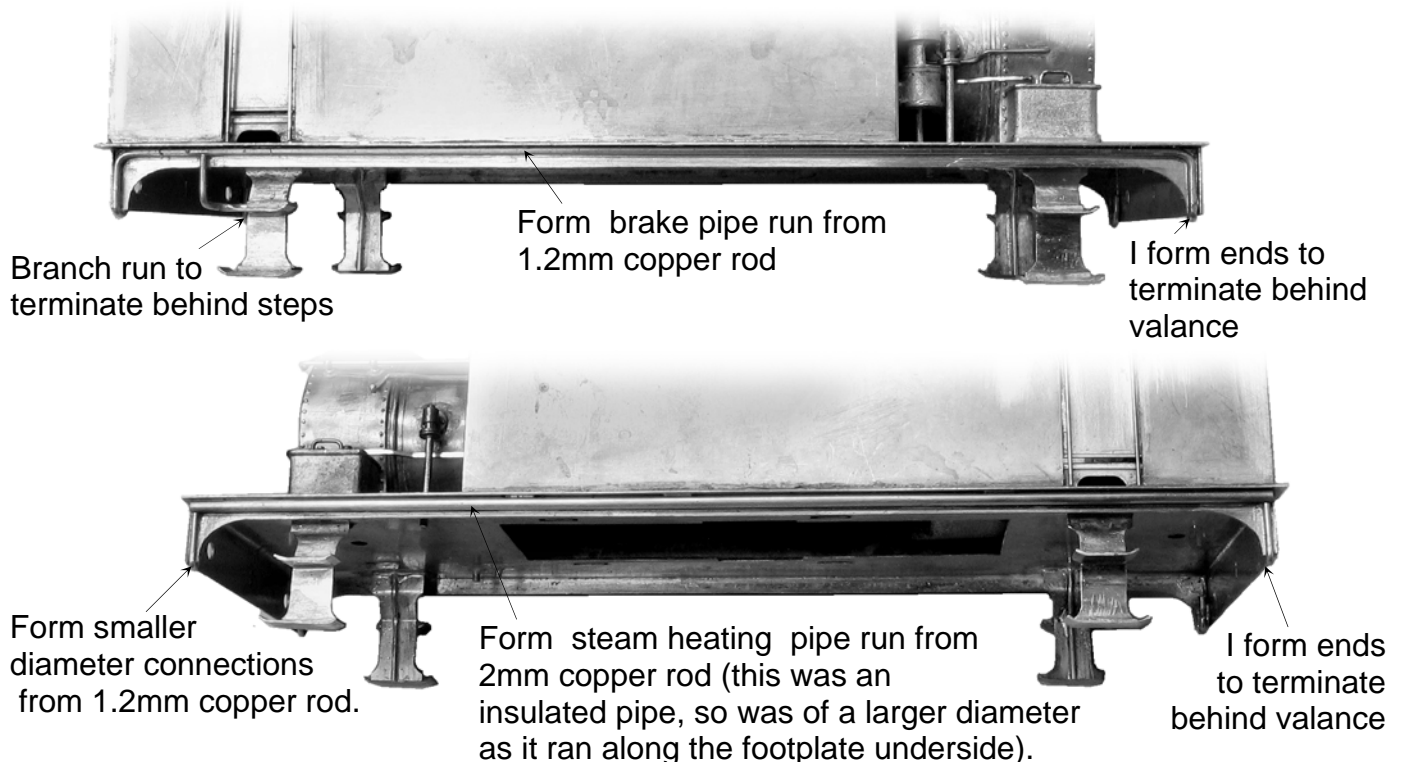
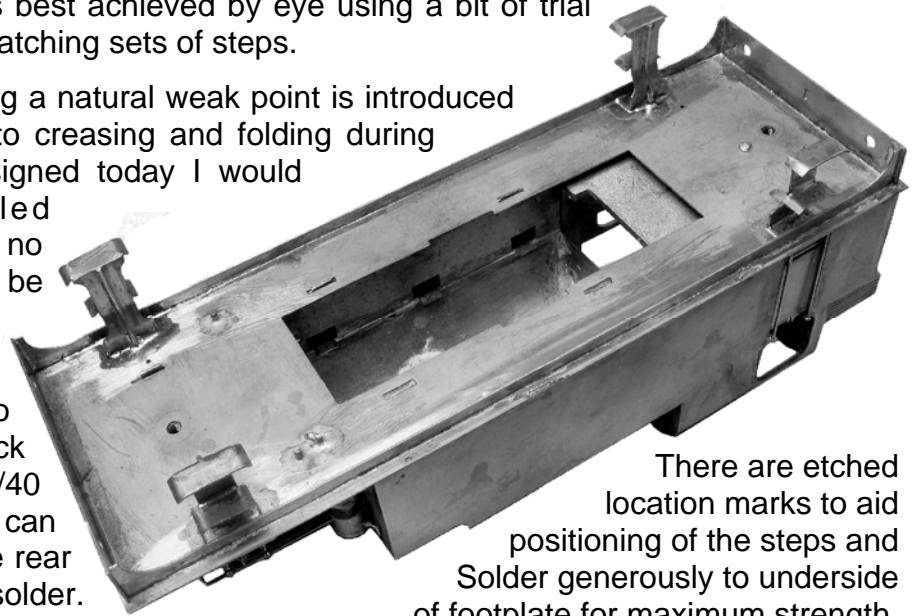
Legacy Issue, cranked steps



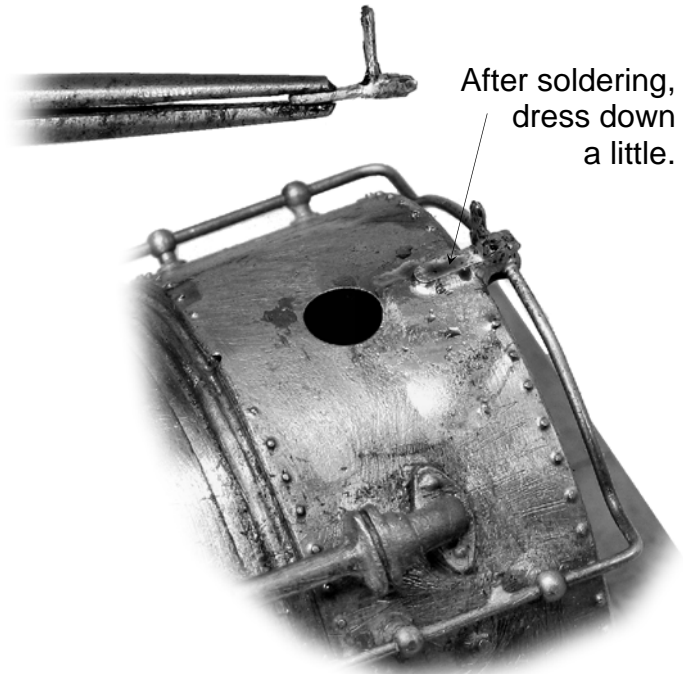
On the prototype J69/1 the step back plate was cranked/set out to correspond with the wider footplate (they came straight down on the narrower footplate J67). This is easily achieved on the assembled steps by gripping in long jawed pliers and bending with finger pressure. From experience the 2mm set out is best achieved by eye using a bit of trial and error until you have four matching sets of steps.

The Issue is that after bending a natural weak point is introduced and the steps are vulnerable to creasing and folding during rough handling. On a kit designed today I would probably provide profiled strengtheners for the rear but no problem as the same can be achieved with 0.9mm brass wire.

Its probably a good idea to solder step treads to step back using higher melting point 60/40 multicore solder. The wire can then be quickly soldered to the rear using lower temperature 145° solder.

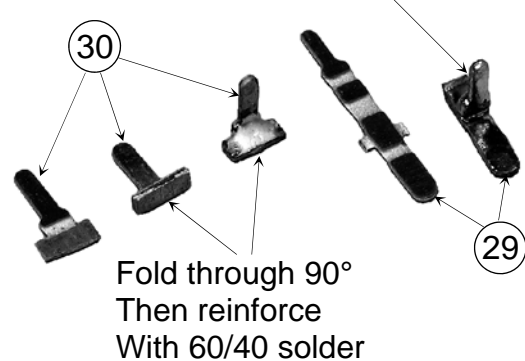


Fit lamp irons, destination board brackets and remaining castings. I would recommend working out a sequence that will allow the fitting of the largest/most robust components first (boiler fitting castings etc) and then working through to the more delicate components (lamp irons etc) as the amount of handling of the body assembly is reduced. The following assembly details are not shown in any recommended sequence. I glue the tank fillers into place last using Araldite.



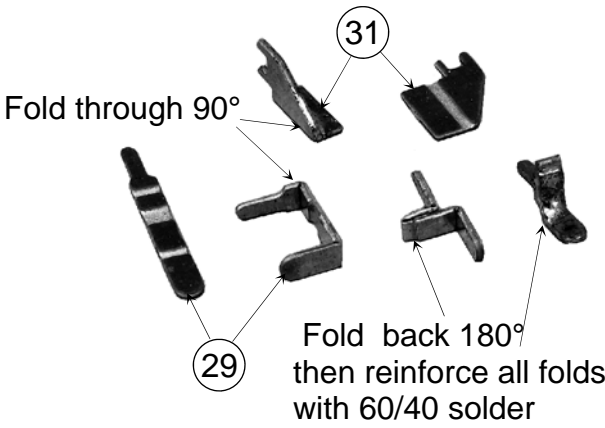
Front lamp irons

Fold through 90° then fold back through 180° to leave a flat base



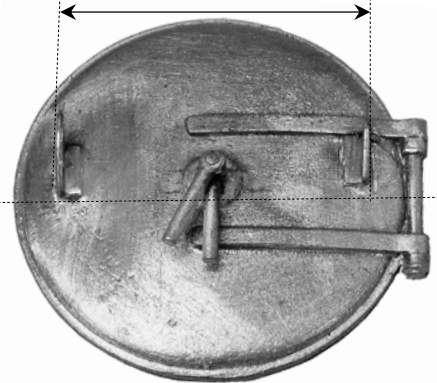
Position top lamp iron first and solder generously. A notch can then be cut/ scraped with a sharp scalpel blade into the underside of the chimney base so that the chimney will sit down level onto curved smokebox wrapper.

Rear lamp irons & destination board brackets

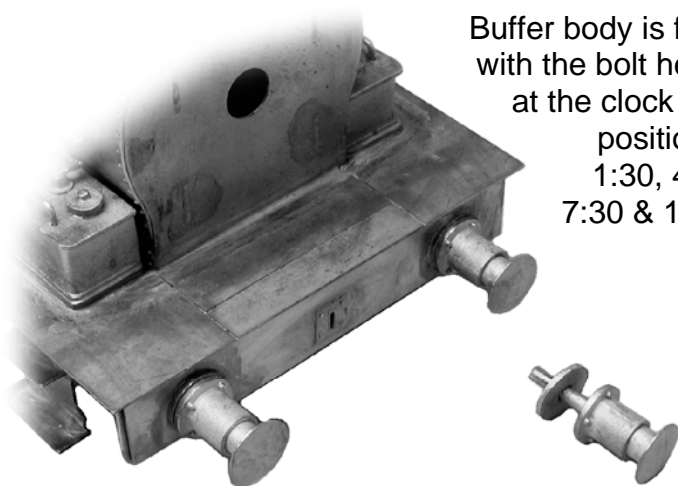
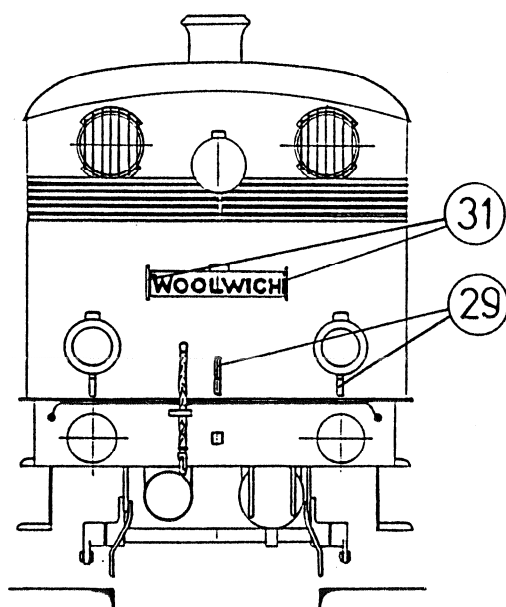
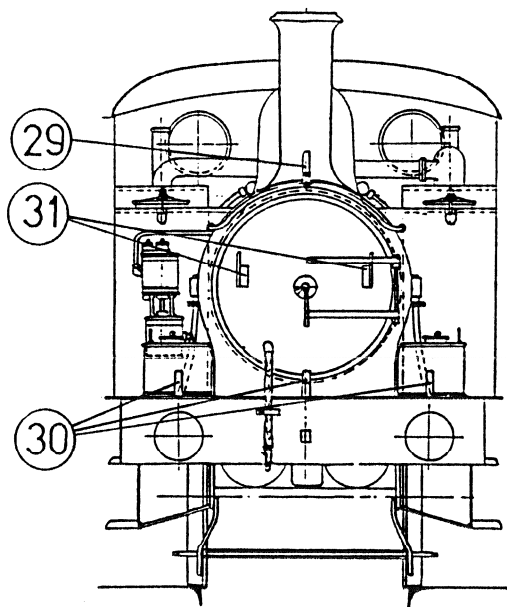


About 22mm between & No more than 23mm outside edges

About centre of door handle Hole.

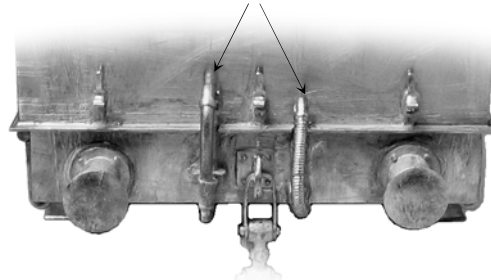


After fitting destination board brackets & locking handle I glue the door into place using Araldite.

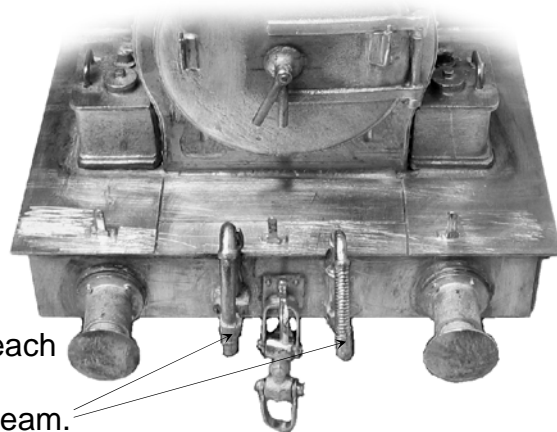
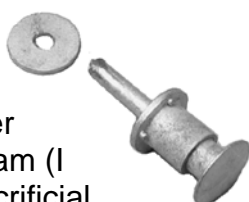


Buffer body is fitted with the bolt heads at the clock face position of 1:30, 4:30, 7:30 & 10:30

With a round file make semi circular rebates into footplate, centred 5.5mm each side of the coupling. These will locate the pipework and allow it to sit flat onto the buffer beam.



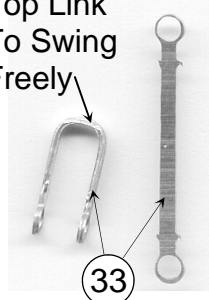
On prototype loco a wooden packing ring was fitted between buffer body and buffer beam (I believe this was sacrificial in the event of shunting mishaps).



Pipework positioned 5.5mm each side of coupling hook, same dimensions for bunker buffer beam.

Form up and file **Cosmetic Screw Coupling**

Top Link To Swing Freely



Solder together both halves of each hook and then using round-nosed pliers form the four links into U shapes. Dress the tops of two links with a file so that they will pivot freely in the slot in the hooks. Thread one of these links through the hook and spring the ends over the pegs on the cast centre. Then fit the bottom link. Then put to one side.

