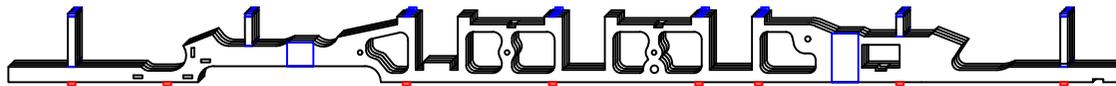
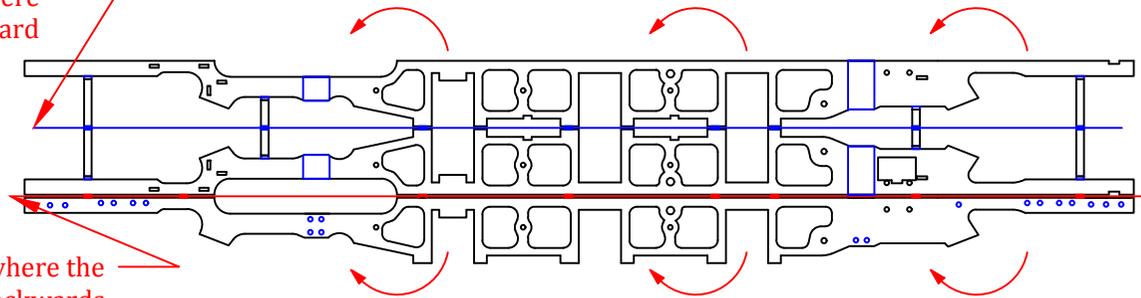


Alco chassis 1

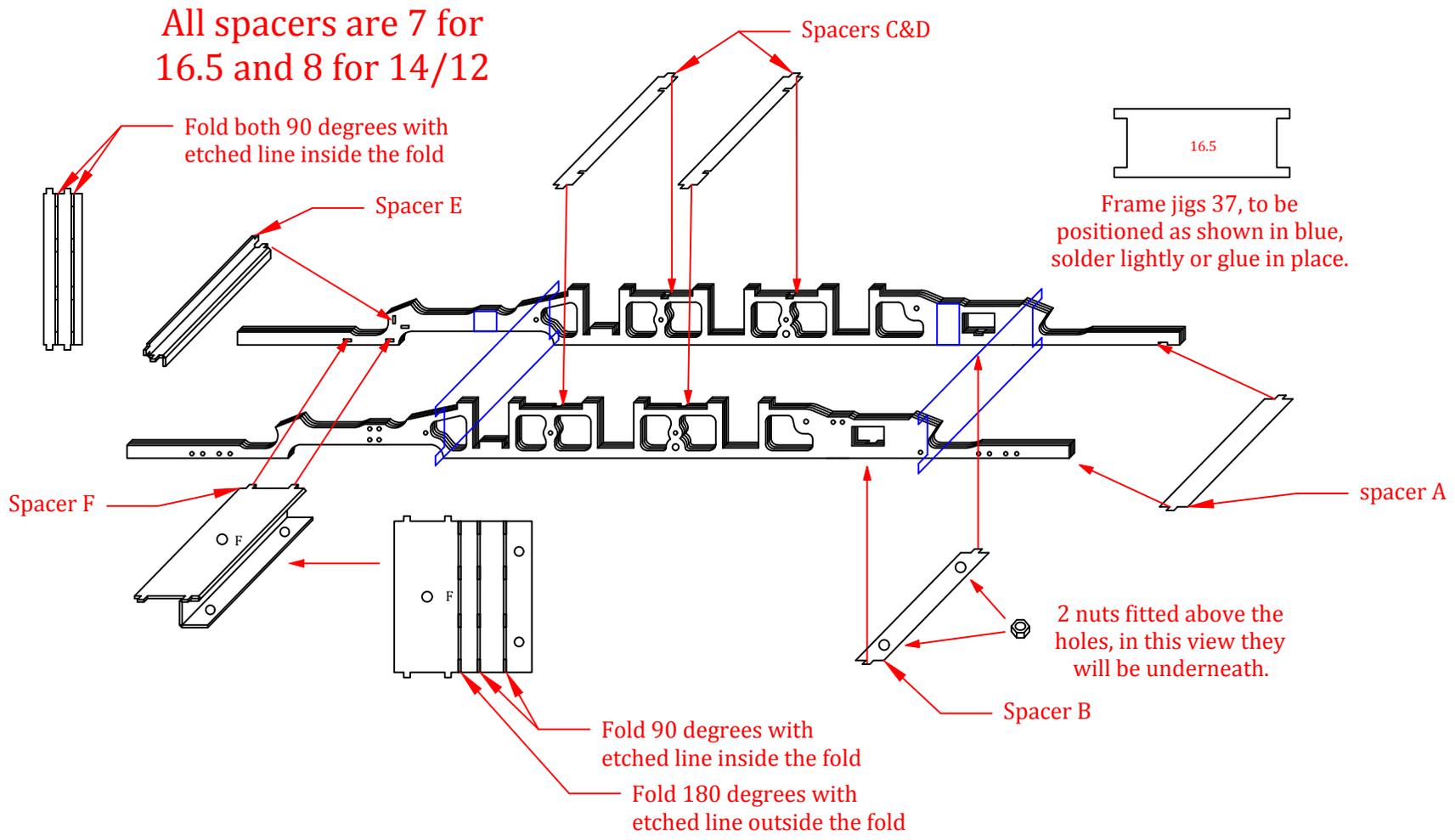
The blue line indicates where the top section folds forward

The red line indicates where the bottom section folds backwards

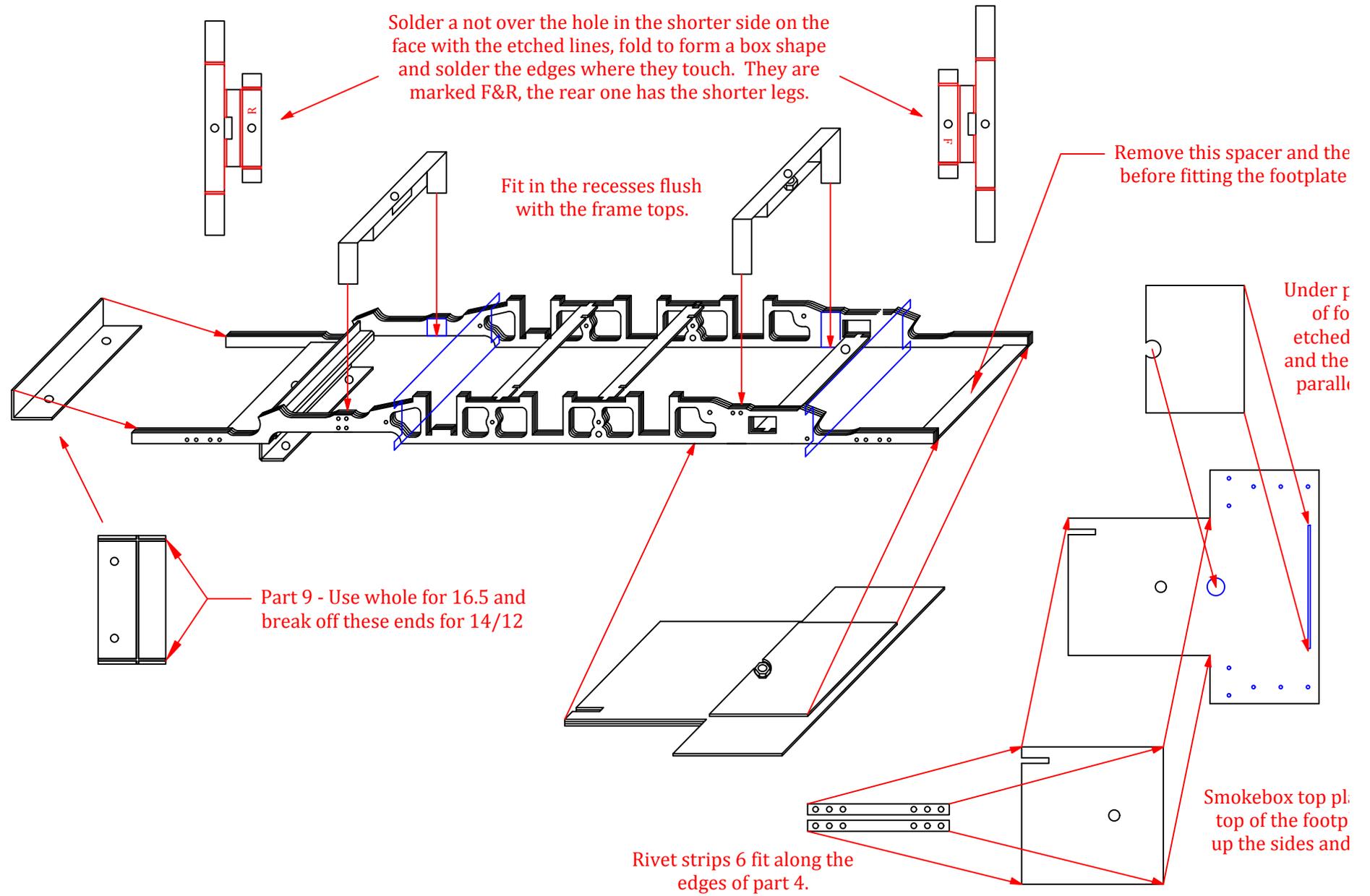


This is what it should look like after it is folded, this is the r/h frame upside down, the rivet detail is on the back in this view. Solder anywhere where there are no slots to fill up with solder. The stand up fold aids can be broken off after soldering and the tabs filed off.

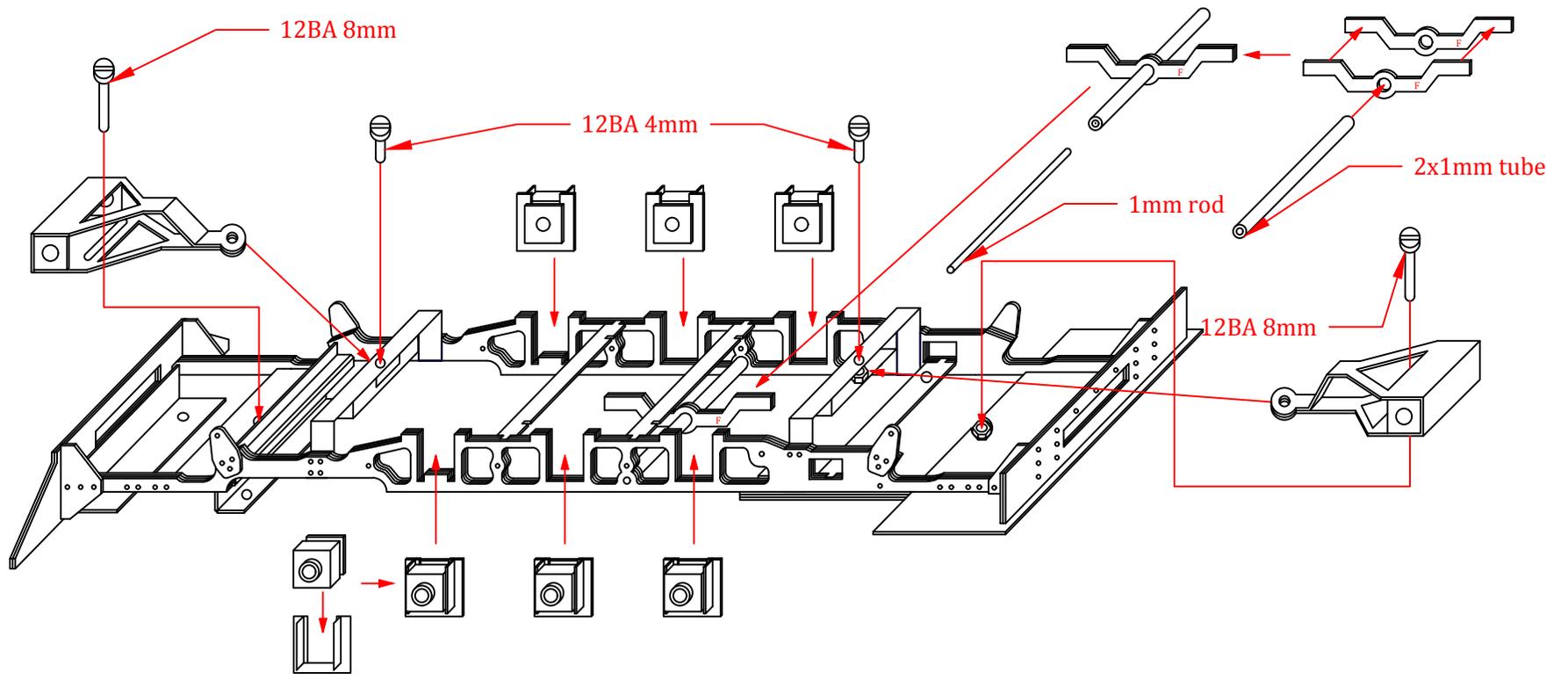
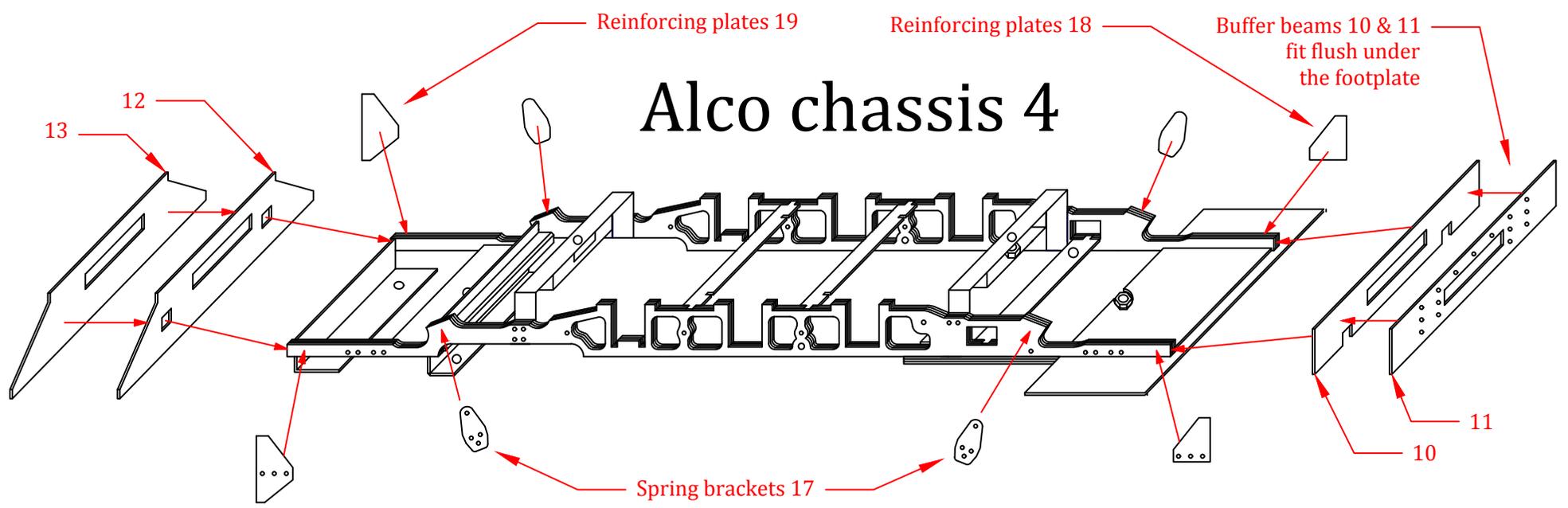
Alco chassis 2



Alco chassis 3

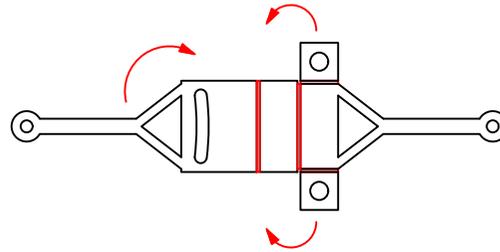
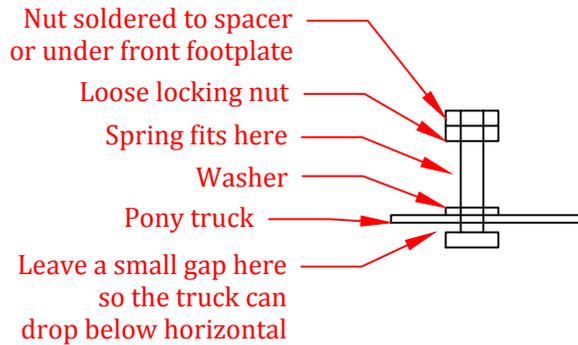


Alco chassis 4



Alco chassis 5

Pony trucks 14



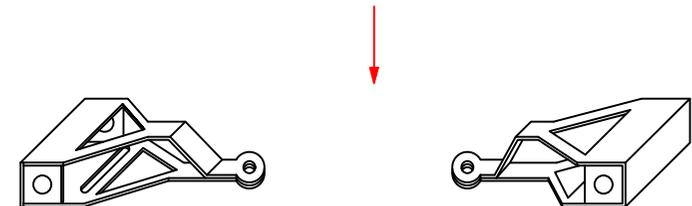
Solder bushes into the holes from the outside and fold the axle holders up, test with an axle for alignment. Fold the long end up twice to follow the shape until you get a shape like drawing A, solder where the parts touch.



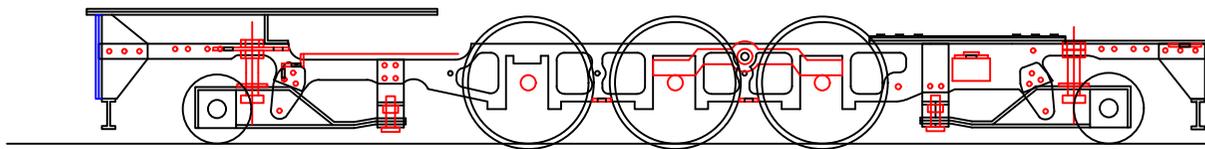
You should end up with these shapes.



Bend the longer leg to the shape shown so the pivot holes align, solder then bend a small kink in the double thickness part and you should end up with something like the above.

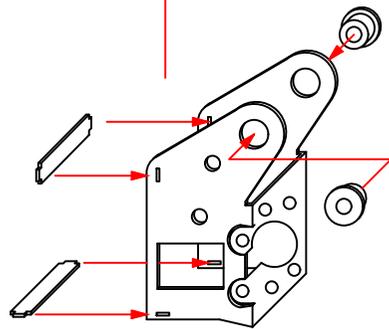
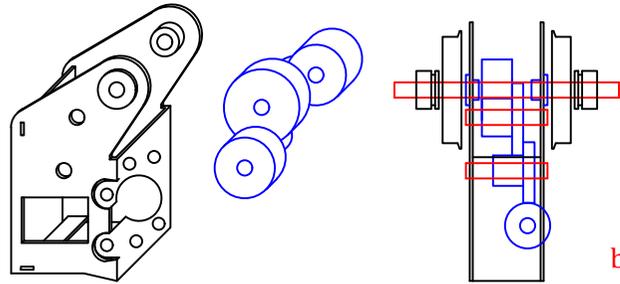


These are really hard to draw in isometric view and this is good enough for illustration purposes. The amount of kink required is best judged by fitting the ponies and looking at them from the side. the ponies should sit level if possible.

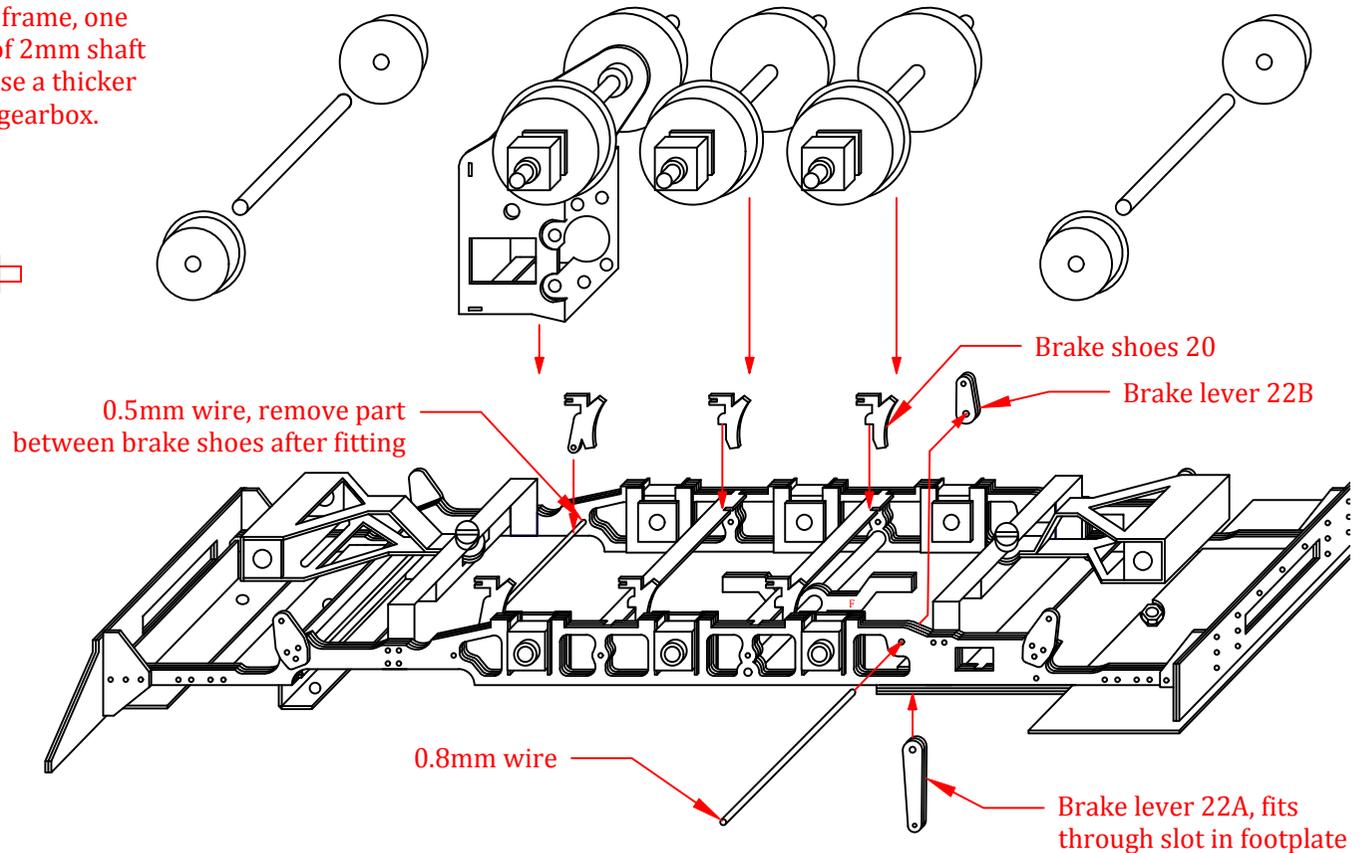


Alco chassis 6

This shows the layout of the gears, they do not need spacers as the stepped gears hold them all in place. If the smaller stepped gear is rubbing too much on the side frame, one washer can be added. Axles are short lengths of 2mm shaft that are secured with super glue at the ends, use a thicker glue as the thin one tends to get inside the gearbox.



Gearbox 12, fold to shape and fit the two spacers and bushes in the outside.



0.5mm wire, remove part between brake shoes after fitting

Brake shoes 20

Brake lever 22B

0.8mm wire

Brake lever 22A, fits through slot in footplate

Brake pull beams 21, in 3 different gauges

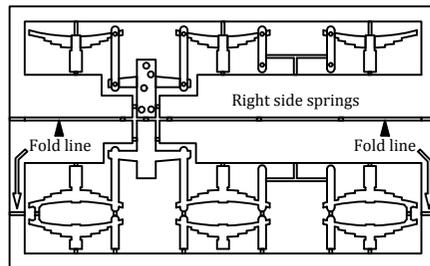
End of pull rod fits in hole in brake lever 22!

Make pull rods from 0.5mm wire

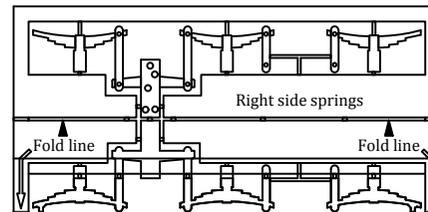
Ends of beams fit into slots in brake shoes

If you fit the beams and pull rods, the wheels will be trapped but the beams can be fitted with glue to make them removable if you wish. They will also be close to the pickups so care must be taken to avoid shorts. Since most of this will not be easily visible you could just fit three brake shoes and leave the rest off.

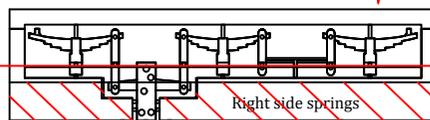
Alco chassis 7



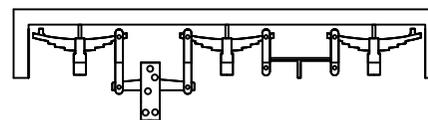
With this side facing you, fold the bottom section towards you at the lower fold line and fold it flat against the middle part.



You should now have something like this. Fold the double thickness part away from you at the top fold lines until it is flat against the back.

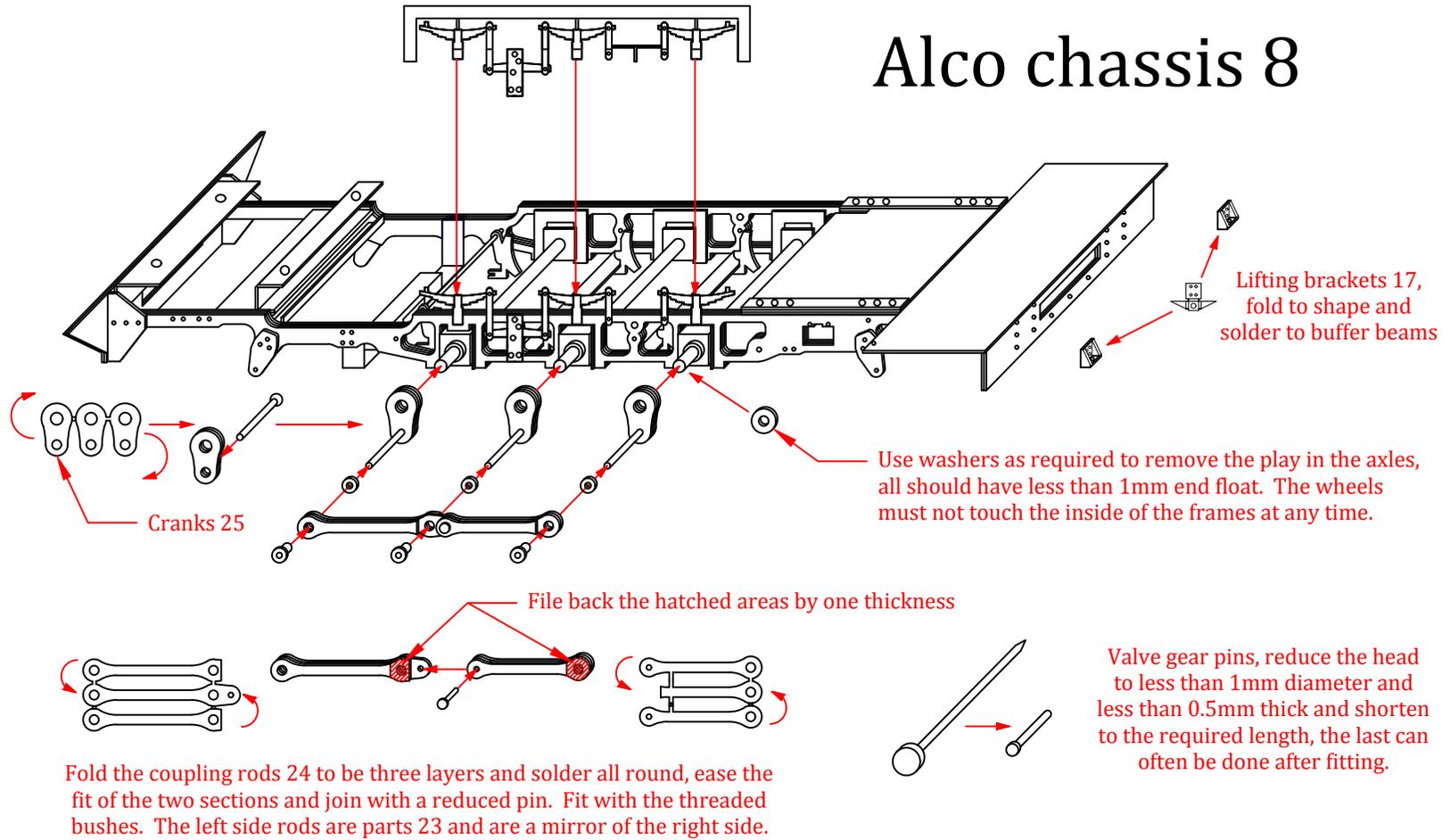


You should now have something like this. Solder the spring and lever sections together but none of the framework. Cut away the lower part of the outer frame below the red line, removing the parts with diagonal lines.

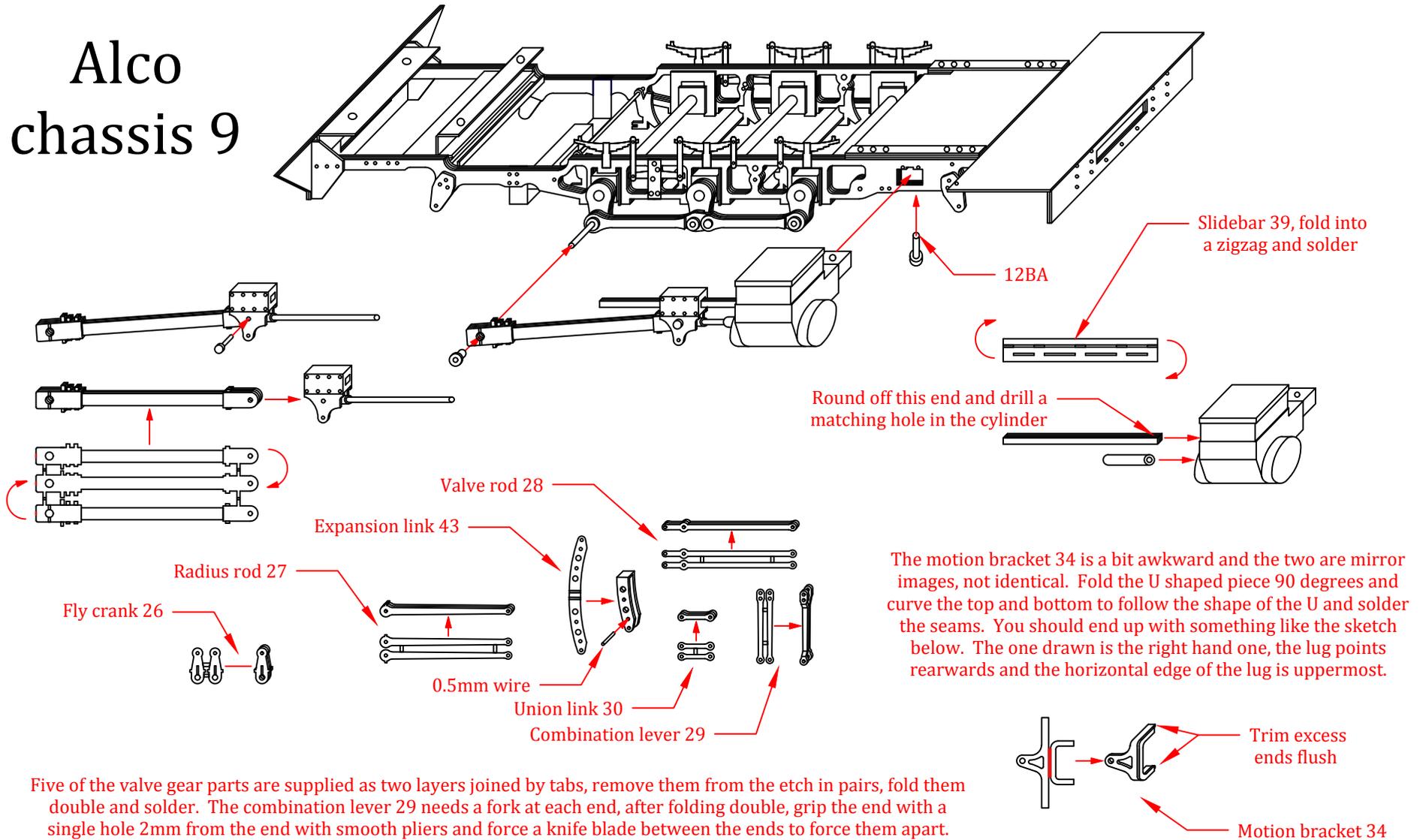


You should now have something like this. Note that there is a ledge built into the back that sits on the edge of the main frames, line up the center of the springs with the axles and solder in place, the rest of the framework is removed after fitting. This is the r/h set, the left is a mirror image and fits the same way.

Alco chassis 8

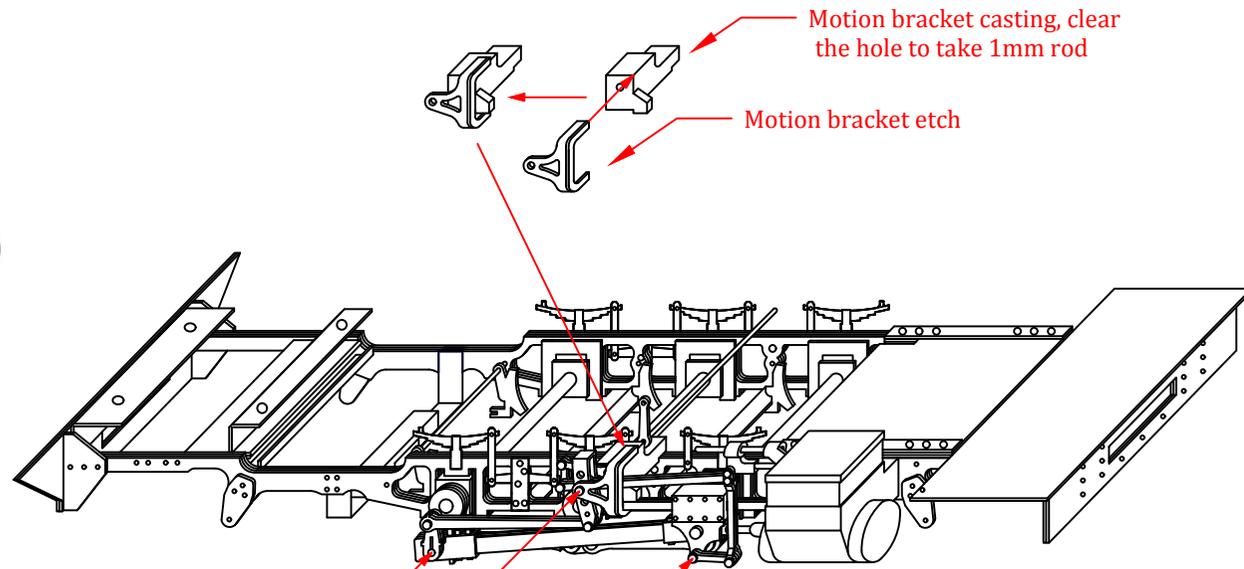


Alco chassis 9



Five of the valve gear parts are supplied as two layers joined by tabs, remove them from the etch in pairs, fold them double and solder. The combination lever 29 needs a fork at each end, after folding double, grip the end with a single hole 2mm from the end with smooth pliers and force a knife blade between the ends to force them apart. Repeat at the end with 2 holes but grip 3mm from the end. Solder the center part and form the forked ends with pliers. The expansion link 43 must be folded into a square U shape and wires soldered into the holes marked and filed flush. The gap between the two sides of the U must allow a double thickness rod to pass easily.

Alco chassis 10



Motion bracket casting, clear the hole to take 1mm rod

Motion bracket etch

Solder onto the remaining crankpin and file flush

This part fits into the hole in the rear of the cylinder, do not glue the spindle that runs through it

Lifting lever upper 33, right side only
Lifting lever lower 32
Lifting link 31

Slidebar 39

Valve spindle castings

0.7mm wire, through both sides under the boiler

These parts are used as single layers, they are cosmetic and do not move so can be soldered solid once fitted.

Trim the end of the slidebars to fit under the pad on the motion bracket. solder or glue in place once the chassis is running well.

