Rumney Models Buffer Springing Mechanism Instructions

This set of instructions covers Rumney Models Buffer springing mechanisms B.93A and B.93B. They are specifically designed to be used with Rumney Models underframes and provide guitar wire leaf springing in place of coil springs fitted in the buffer housing. The difference between the two is the depth of the underframe they are intended for. B.93A is for use with 9" underframes and B.93B with 10" underframes. The Rumney Models kits that they are suitable for are outlined below.

B.93A 9" Buffer springing mechanism - Suitable for use with:

B.01-B.04, B.11-B.17, B.24-B.26, B.51-B.53, B.61

B.93B 10" Buffer springing mechanism - Suitable for use with:

B.06-B.09, B.21-B.23, B.27, B.54

Notes

Read through the instructions first and familiarise yourself with the components. Drawings and photographs taken during the construction of the test etches are included to attempt to make my waffle clearer.

All fold lines are through 90° with the fold line on the inside unless stated otherwise.

Everyone has their own soldering methods. I now use a temperature controlled soldering iron with predominantly 145° solder and La-Co paste flux. For a long time I used an Antex 18W soldering iron on virtually everything with few problems. A stronger flux, such as Carr's Black may be needed to solder the buffer retainers to the buffer shanks.

Spring Wire

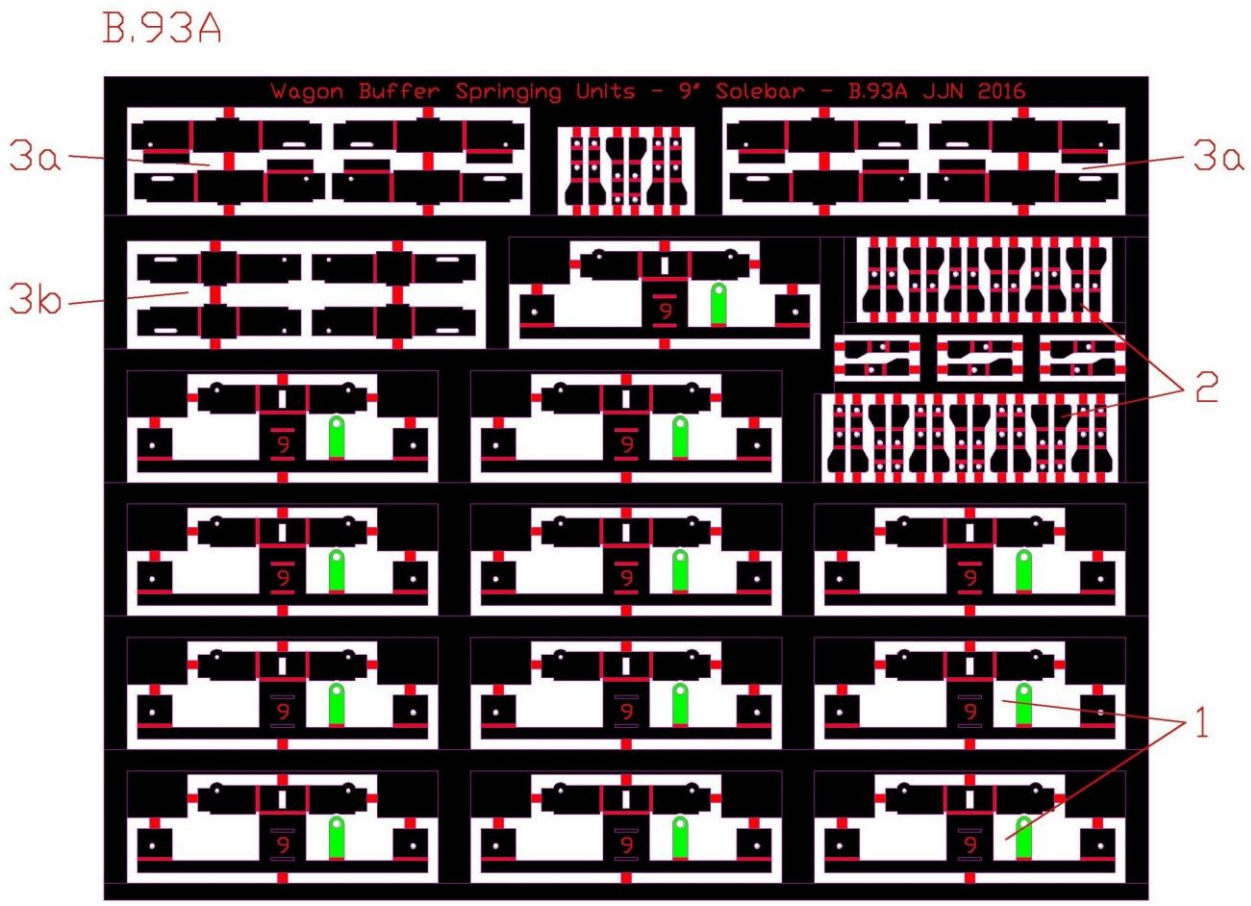
To be honest I'm not entirely sure what the ideal wire gauge will be. This will probably be arrived at through a process of trial and error. 0.011" seems like a good place to start and sufficient wire of this gauge has been included with the brass fret. It maybe that you personally want a harder or softer wire in which case simply replace with a heavier or lighter gauge of guitar wire. Be aware though that the spring rate will change rapidly with the change in gauge. If you fit something like 0.008" wire then there maybe virtually no springing effect, conversely if you fitted 0.015" you may find that you might as well have made the buffers rigid.

Component List

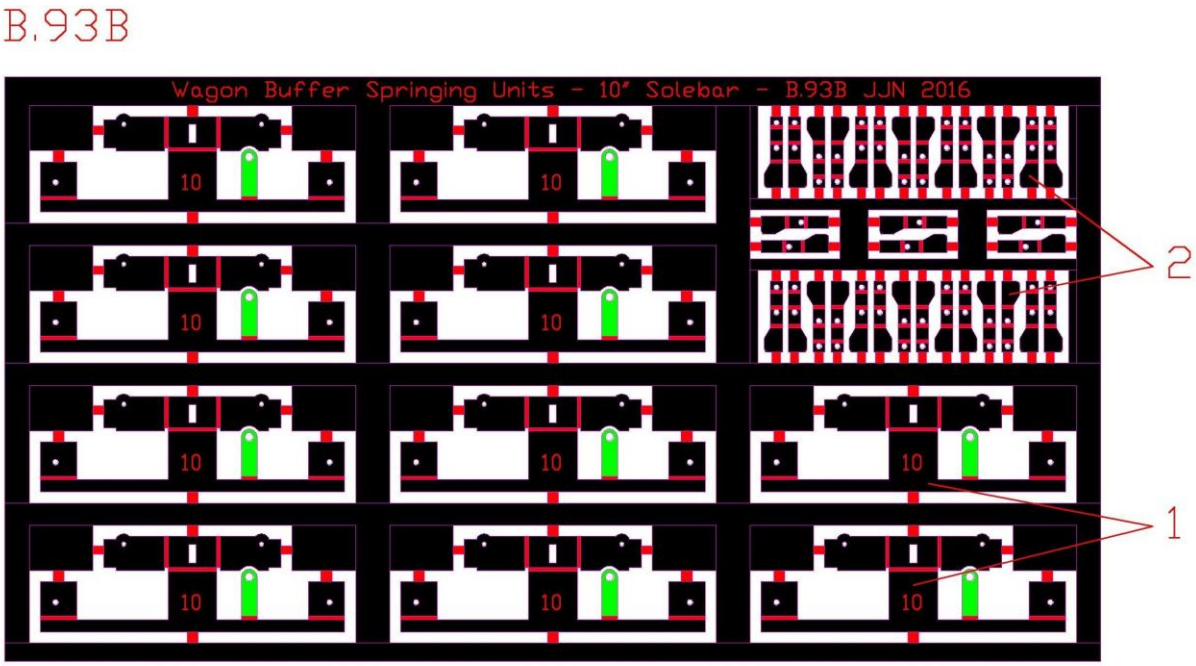
1 - Springing mechanism
2 - Buffer retainers
3a - Shock absorbing wagon spring brackets - Pre-1939 RCH type underframes (Rumney Models kits B.12 and B.52)
3b - Shock absorbing wagon spring brackets - Post-1939 RCH type underframes (Rumney Models kits B.11, B.51 and B.61)

3a and 3b replace the parts in Rumney Models underframe kits labelled 'shock absorbing wagon end bracing'.

9” Buffer springing mechanism

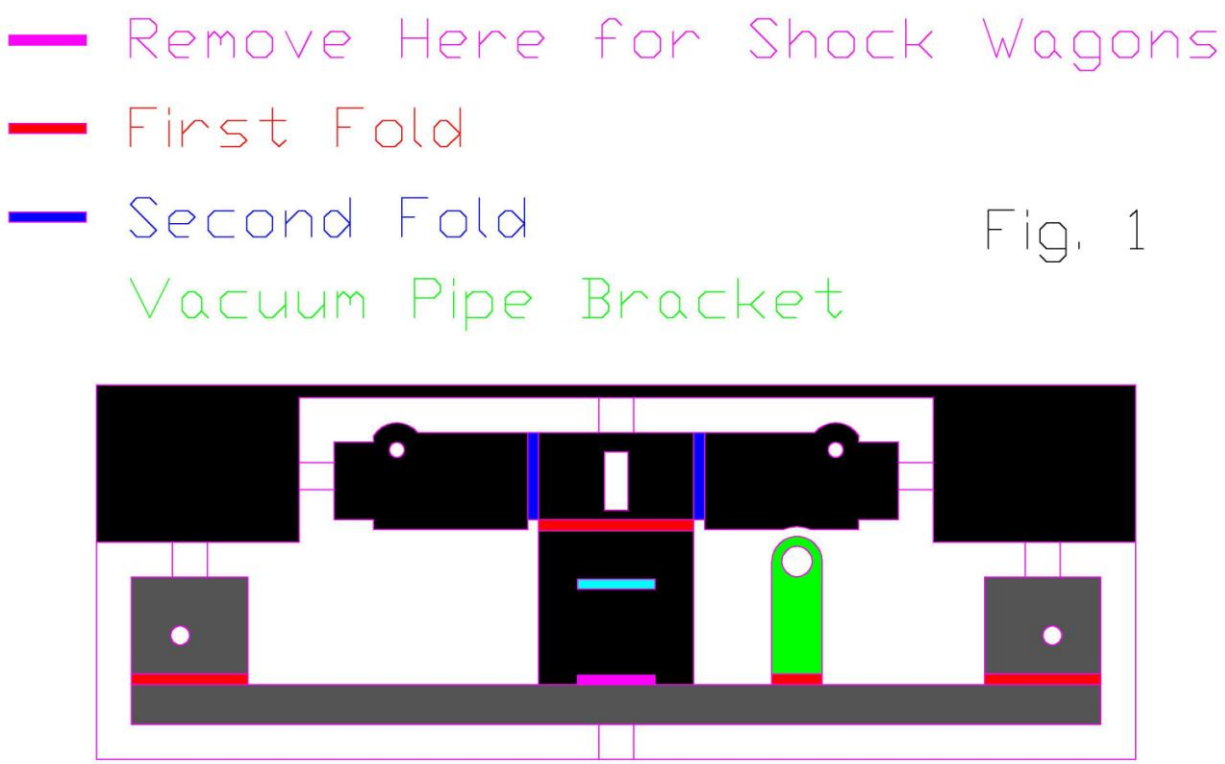


10” Buffer springing mechanism



Construction

Springing Mechanism



Refer to Fig.1 above.

Remove the springing mechanism (1) from the fret and clean up any connecting tabs.

The green part is a bracket for vacuum pipes made from wire. The diameter of the hole is drawn at 0.8mm. Remove for unfitted vehicles.

If using on a shock absorbing wagons cut at the yellow line and use the part in grey along with those intended for shock absorbing wagons (3a or 3b).

Being careful to make sure nothing is bent where it shouldn't be fold up along all the red lines.

When all are at 90° fold at the blue lines. Solder at the joints in the four sided 'box'.

Fit the unit to the chassis making sure the long straight edge is hard up against the headstock. Solder in place.

Buffer Retainers

See Fig. 2 below

To fit the buffer retainers (2), remove the part from the fret and check the fit of the buffer head shanks in the holes, adjust if necessary. Fold the buffer retainer at A only. Place the buffer head shank through the buffer casting on the wagon and then slide the retainer onto the shank though the holes. Hold the retainer with a pair of self closing tweezers and solder in place at B. Use very little flux or you may encounter problems with the shank rusting. Obviously you will need to arrange things so that the buffer head is the correct distance from the headstock (see below). Once the retainer is firmly soldered in place you can make the final fold at C.

Note that there is a correct side to fit the buffers. The edges marked with a * on Fig. 2 should face towards the solebars. This will prevent the buffer retainer from rotating sufficiently for the wire become disengaged.

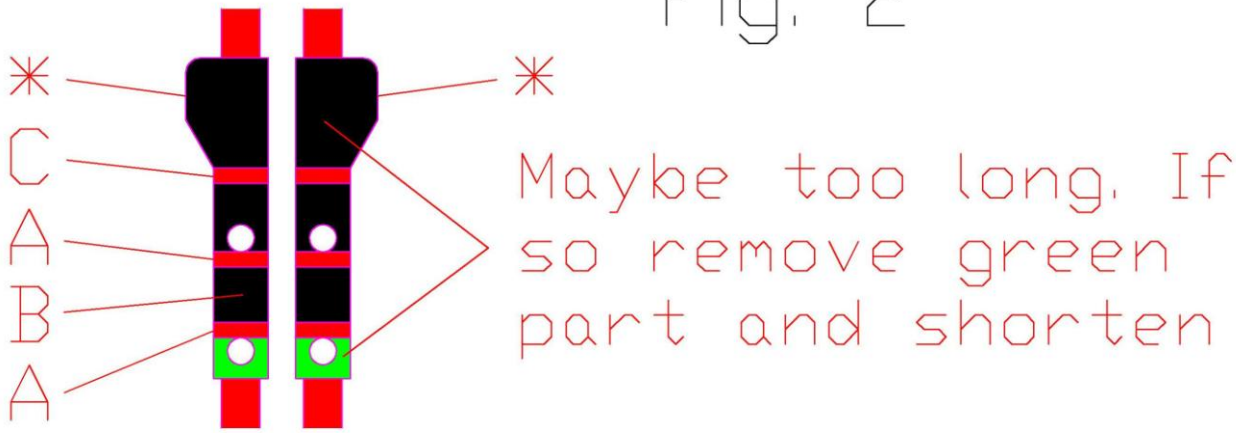
You will also note that there are some buffer retainers on the fret without the green part. These should be used if space is at a premium. Alternatively follow the instructions on Fig. 2.

Notes on Buffer lengths

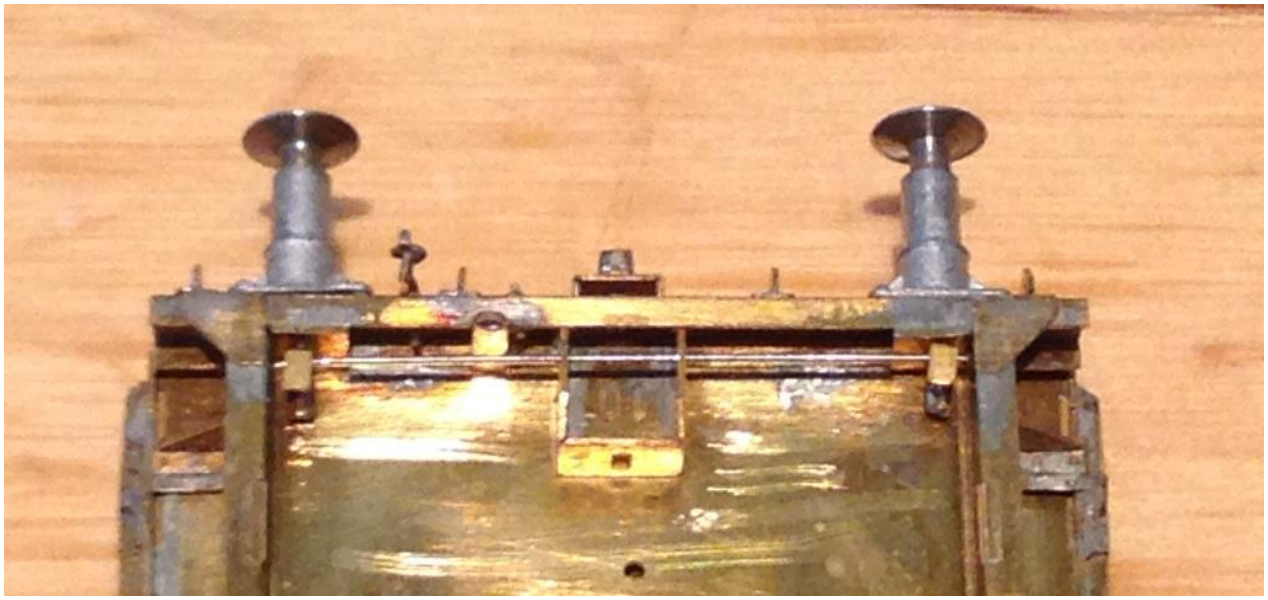
Buffer sizes are generally given by the distance form the buffer face to the headstock when uncompressed. So there is 1'6" between the buffer face and the headstock on a 1'6" buffer. The distances between buffer faces and the headstock on your model wagons should be as follows:

1'6" buffers - 6mm 1'8½" buffers - 6.8mm 2' buffers - 8mm

Fig. 2



The spring wire will need to be cut so that it is a whisker under 25mm and fits neatly between the insides of the solebars. Thread the wire through the two small holes in the springing mechanism and make sure it is bearing on the vertical part of the buffer retainers. If you want to change the wire for a heavier/lighter gauge simply remove and replace.



Justin Newitt 2016