



STEPHEN JOHNSON MODELS
PO Box 31
RED ROCK 2450

Buffer springing kit Assembly instructions

This instruction sheet goes through the steps involved in fitting the SJM buffer springing kit to a wagon/carriage. This sheet uses the SJM BKD kit as an example.

The kit is comprised of four parts, cast brass sprue of buffers, phosphor bronze etched springs, small peg and a length of brass strip.

When added to a model this kit will allow the buffers to be compressed when the wagon/carriage navigates curves negating any chance of the rollingstock derailing due to buffer lock. It is highly recommended to spring buffers on hook drawn and close coupled rollingstock.

Recommended adhesives:

Superglue. To be used when fitting the etched spring to the head stock.

epoxy adhesive. An alternative to superglue for fixing the spring to the head stock, best when the spring needs to be modified when fitted (eg on SJM Thow cattle wagons).

1. Remove the buffers from the cast brass sprue (see picture 1). To avoid having the buffers bend when cutting them use a Dremel with a cutting disk to cut the tops of the shanks from the sprue. A pair of cutters can then be used to trim the head ends.
2. Drill the holes in the sole bar to accept the buffers, these need to be 1.0mm. The back end of the holes can also be opening up slightly larger drill. (see picture 2). Check that the buffers slide in the drilled holes freely.
3. Cut the brass strip into four small squares and in the centers drill a 0.8mm hole.

These squares are used as stoppers. (see picture 3)

4. Slide the stoppers over the ends of the buffers while they are fitted in the head stock. Set the distance the buffers need to sit out (6mm from the head of the head stock to buffer head works well). Once happy with the distance solder the stoppers in place, make sure not to hold the iron to the brass for too long or you may melt the head stock castings. (see picture 4).
5. Trim the buffer shanks flush with the brass stoppers and file them smooth.
6. Using either superglue or epoxy glue the center of the spring to the head stock, use the supplied peg to hold in place while the glue sets. Make sure you do not use too much glue or the spring will not function properly. (see picture 5)
7. Check that the buffers freely spring when compressed and released then fit to wagon/carriage.
8. Some kits may need modifications to allow the fitting on the springing kit. The SJM BKD for example needs some of the insides of the solebar and floor filed back so the springs can function. (see picture 6)
9. For the BKD the small right angle castings can have a notch down the centers filed into it to allow the tab at the top of the spring to fit down the gap created. This will give a larger surface of the spring to be glued to the model.

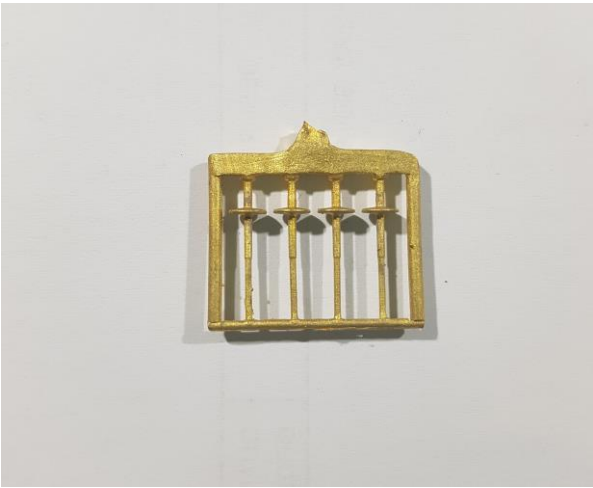


Figure 1, cast brass sprue



Figure 2, head stock showing drilled holes

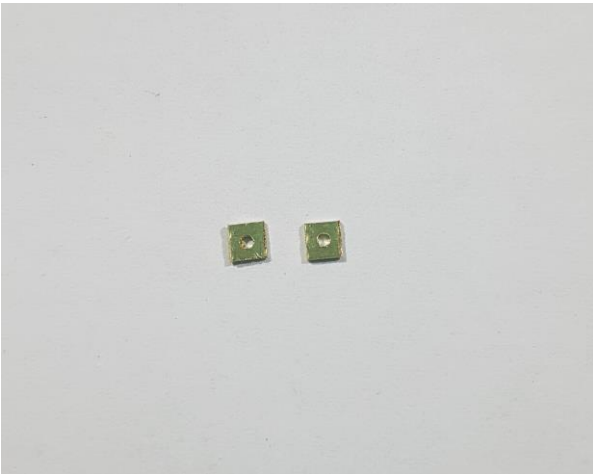


Figure 3, Brass stoppers



Figure 4, fitted buffers with stoppers soldered



Figure 5, peg holding spring in place while glue sets



Figure 6, insides of BKD solebars filed back for springing



Figure 7, right angle with notch filed out

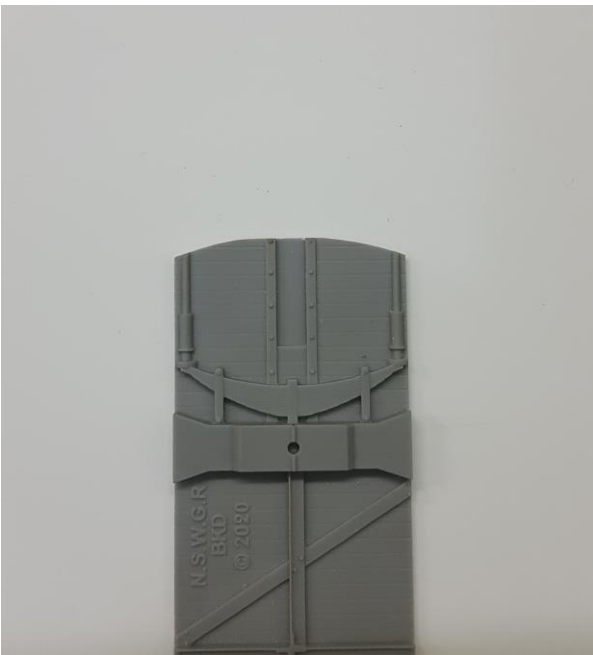


Figure 8, BKD floor modified for springing