Rumney Models - Morton 10' Wagon Detailing Parts

Note: When I initially did this fret I subsequently discovered an issue with the GWR type ratchet brake lever guards (part 8). The fret has been revised to correct the error but for various reasons both types will remain in production. If you have one of the initial designs (these are dated 2018) then there should be a set of spare GWR lever guards included; you should use the lever guards (only) from this spares fret with the brackets and stays coming from the main etch.

This set of instructions covers Rumney Models etch B.114. This fret is designed to provide replacement parts to detail RTR and kit built wagons fitted with 10' Morton brakegear; principally with Bachmann and Parkside products in mind. There are sufficient parts for 2 wagons and the fret includes the following:

- Morton brake levers
- GWR & RCH brake lever guards and brackets to suit both Parkside and Bachmann solebars, along with stays.
- Replacement vees
- Tiebars
- Solebar detailing
- Lamp irons
- Vacuum pipe brackets
- Open wagon door springs
- Coupling hooks
- GWR & LMS/BR Instanter links

Some degree of fettling may be required to fit the parts depending on the origin of the wagon and the sizes of everything. If you are using Rumney Models underframes then this fret will be of little use as all the relevant parts are included.

Construction Notes

Read through the instructions first and familiarise yourself with the components. Drawings and photographs 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, especially on small detailing parts like these

Check all holes before removing parts from the fret. 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 the holes 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.

Materials list

A few different sizes of wire are needed to fix fixing items to the body. Eileen's Emporium are good source for these and they do a mixed sizes pack if you don't want to buy large quantities. You will need the following sizes:

0.31mm - Brake lever guards, lamp irons 0.4mm - Open wagon door springs

0.8mm - Brake cross shaft

Contact details are as follows:

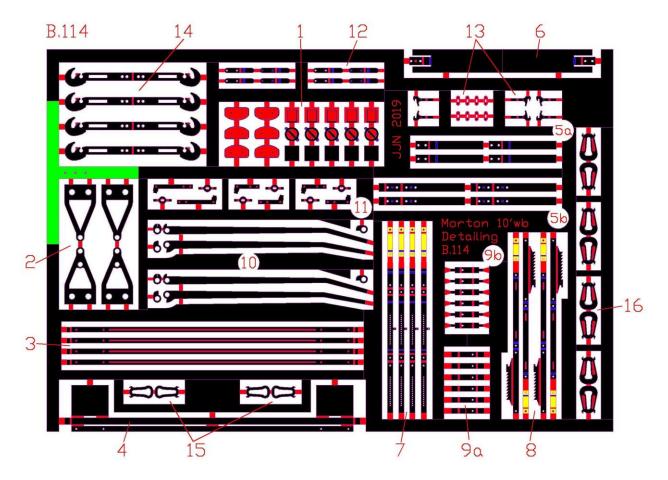
Eileen's Emporium (brass wire)
Unit 19.12 Highnam Business Centre
Newent Road
Gloucester
GL2 8DN
UK
www.eileensemporium.com

Rumney models also produces 18" vacuum cylinders (F.01) if you wish to add or replace the ones included.

Parts List

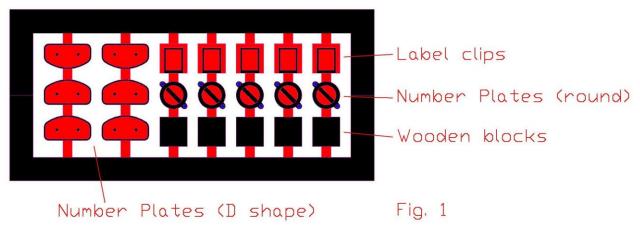
- 1 Solebar detailing
- 2 Vees
- 3 Tiebars
- 4 Tiebar drilling jig
- 5a Open wagon door springs (recessed type)
- 5a Open wagon door springs (bracketed type)
- 6 Open wagon door spring drilling jig
- 7 RCH pin type brake lever guards & stays (stays shaded yellow on parts diagram)
- 8 GWR ratchet type brake lever guards & stays (stays shaded yellow on parts diagram)
- 9a Lever guards brackets for Bachmann wagons (for parts 7 & 8)
- 9b Lever guards brackets for Parkside wagons (for parts 7 & 8)
- 10 Brake levers
- 11 Swan neck vacuum pipe brackets
- 12 Lamp irons
- 13 GWR van door catches & backing plates
- 14 Coupling hooks
- 15 GWR Instanter links
- 16 BR Instanter links

The area shaded green on the parts diagram is a drilling jig for the lamp irons.



Solebar Detailing

There are several parts for detailing the solebar (1). These include 2 types of number plate, label clips and wooden blocks. I'm not entirely sure what the purpose of the later item was but they were quiet common, see Fig. 1 below.



These can be removed from the fret, tidied up and trimmed if necessary and glued in place. Refer to a picture of your prototype for the positions of these things on the underframe as they did vary, even within the same diagram.

Vees

Replacement Morton Vees (2) are included should you wish to use them. Make sure that the holes can accept 0.8mm wire and remove from the fret. I'd suggest using the brakegear to set the vees rather than gluing the vees in place and trying to reposition the brakegear. Note that there is a correct side in relation to the way the push rod are orientated and the pushrods should be a mirror of each other across the wagons. This is not always the case on RTR models so perhaps this would be a good opportunity to correct them if they are wrong.

If you wish to fit the brake cross shaft at this stage then do so but make sure that it extends about 0.75mm form each of the vees. Note that if you want to fit Rumney Models vacuum cylinders you will need to thread the actuators on at this stage.



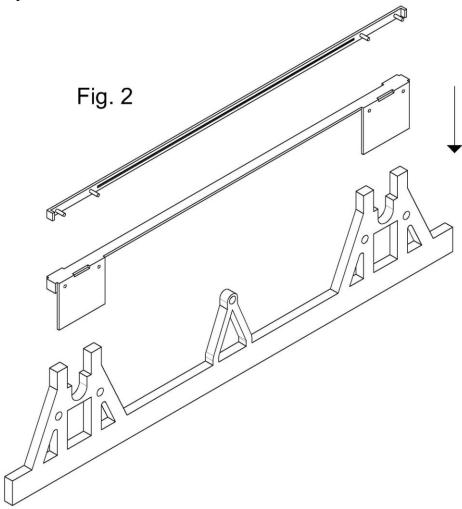


Tiebars

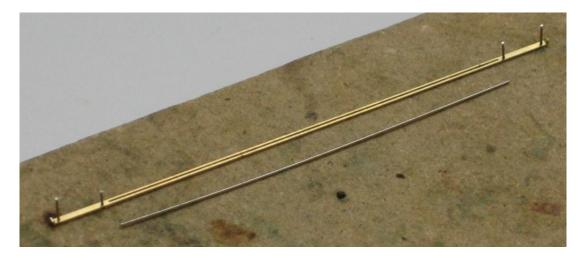
Replacement tie bars (3) are included on the fret. If your Morton brake wagon is unfitted then chances are it had individual keeps on each axleguard and so these parts are not necessary. If your wagon is vacuum braked then you'll need tiebars and these can be used in place of the overly thick plastic ones.

You can press out the four half etched rivets on each tie bar to represent the fixing bolts if you wish however I dislike replying on glued joints between plastic and metal components especially with something as vulnerable as a tie bar. I would recommend drilling out the half etched holes and using 0.31mm wire soldered in place to act as pins which can locate into holes drilled in the plastic axleguards using the tie bar drilling jig (4). Tie bars are also fragile things so I have included a half etched slot on them into which a length of 0.31mm wire can be soldered. This makes them much stronger and wire is virtually invisible.

Remove the plastic keeps/tiebars from the axleguards. Fold up the drilling jig and then fit onto the underframe. Use a 0.31mm drill to drill four holes using the jig to locate them through the plastic axleguards. Repeat for the other side.



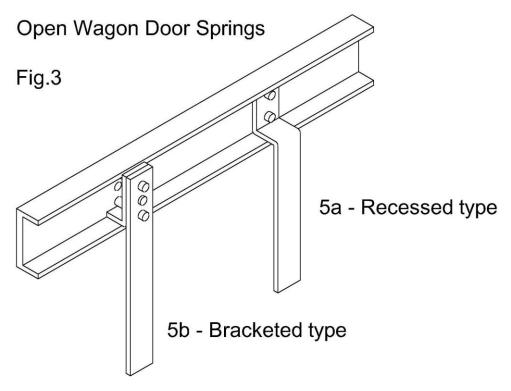
Drill two pairs of 0.3mm holes into a piece of scrap wood. Fold up the end of the tie bar and thread short lengths of 0.31mm wire through the tie bars locating into the holes in the wood. These can then be soldered in place and then filled back to represent bolt heads. You will need to make sure there is at least 0.75mm of wire projecting from the back of the tiebars to locate on the axleguards. Whilst you are at it solder a length of 0.31mm wire into the slot to reinforce them.



Once painted the tie bars can be glued in place using the holes to locate them. This will create a strong joint which will remain intact in general use.

Open Wagon Door Springs

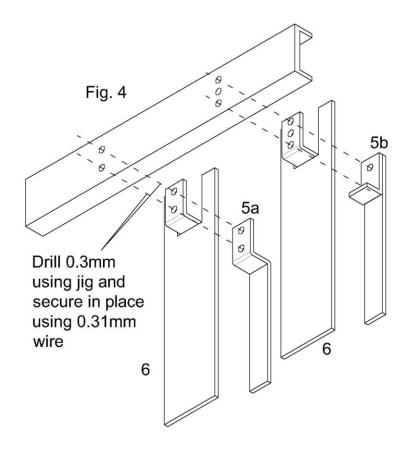
There are two sets of open wagon door springs on the fret; one for recessed types (5a) as you might find on GWR open wagons and one for bracketed types (5b) as you might find on later LMS or BR wagons. Given how vulnerable they are these should be pinned as well as glued in place. A drilling jig (6) is included to help with this. Fig. 3 shows what the two types of door springs should look like when finished.



Make sure you have the correct end of the drilling jig (6) for your chosen type of door spring (the end for the bracketed type has 3 holes in) and then use the jig to drill 0.4mm holes into the solebar of the wagon. There should be bang plates on the doors of the wagons to protect the planking when the door hits the spring and the holes should be sited directly under these.

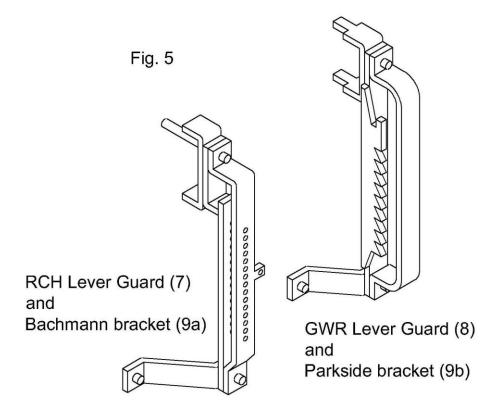
If you are constructing a recessed type remove from the fret and fold up. Reinforce the fold lines with solder. Use the door spring to drill a pair of holes into a scrap piece of wood and then use these two holes to hold short lengths of 0.4mm wire. Locate the door springs onto the pieces of wire and solder them together. Trim the wire to represent bolt heads. The door spring can then be glued in place with the pins locating in the holes in the solebar.

If you are constructing a bracketed type remove from the fret and press out the half etched rivet in between the two holes if required. There are two fold lines on each spring, one on each side of the two holes. The fold line with the short length of door spring on the outside should be folded through 90° with the fold line on the inside and the fold line with the long length of door spring on the outside should be folded through 180° with the fold line on the outside. Reinforce the fold lines with solder. Use the door spring to drill a pair of holes into a scrap piece of wood and then use these two holes to hold short lengths of 0.4mm wire. Locate the door springs onto the pieces of wire and solder them together. Trim the wire to represent bolt heads. The door spring can then be glued in place with the pins locating in the holes in the solebar.

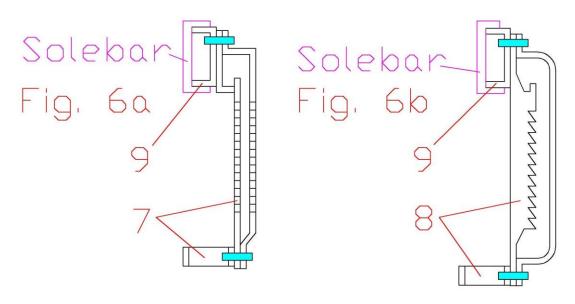


Brake Levers & Lever Guards

There are two different types of lever guard included; a standard RCH pin type (7) and a GWR ratchet type (8) both with their own stays (the stays are shaded yellow on the parts diagram). There are also two types of lever guard brackets; one for Bachmann wagons (9a) and one for Parkside or similar (9b) wagons. The brackets are interchangeable with the lever guards.



To assemble the laver guards make sure that the holes in your chosen brake lever guards and stays (7 or 8) and the appropriate lever guard brackets (9a or 9b) can accept 0.31mm wire and remove from the fret. Separate the lever guard from the stay (the stay is the part shaded yellow on the parts diagram. Fold the lever guard along with the lever guard bracket referring to Fig. 6a for the pin type or Fig. 6b for the GWR type. There are half etched slots on the ratchet type lever guard which pinpoint and aid the forming of the curved bends that are on the prototype. Solder the lever guard and bracket together using 0.31mm wire to align them. Trim the wire on both the front and back to represent a bolt except if using the Bachmann bracket when the wire on the back will need to be left long. Press out the half etched rivet on the brake lever guard stays and fold both ends through about 30°. The stay can then be pinned and soldered to the bottom of, and at right angles to, the lever guard using 0.31mm wire and any excess trimmed off. The whole assembly can then be located on the solebar and glued in place.



Brake levers

If you haven't already done so when dealing with the vees, fashion a brake cross shaft from 0.8mm wire and glue into place between the vees. You should leave around 0.75mm of wire projecting from the vee on each side.

Make sure the holes in the brake levers (10) and the cams can accept 0.8mm wire. The levers and cams can then be removed from the fret but note that the connecting tab between the non-Morton lever and cam should be left intact. Once removed from the fret the connecting tab between the cam and the non-Morton brake lever can be folded through 180° with the fold line on the outside. Solder a short length of 0.8mm wire through the hole in the Morton cam brake lever. This will locate into the top hole on the appropriate vee. I use a hole drilled into a piece of scrap wood to aid doing this. Once soldered in place trim the wire and file so the end is flat.



The brake levers then need to be bent up as per the prototype clearing the axleboxes and then cranked for the handle. Check on the model and adjust until you are happy with the shape. Once you are happy with the shape the brake levers can be glued in place. Glue the Morton cam into place in the lower hole on the appropriate vee. Also see the prototype photos on page 4.

Swan neck vacuum pipe brackets

Several sets of swan neck vacuum pipe brackets (10) are included. There are some with short brackets and some with long. Check your prototype for the type you might need.

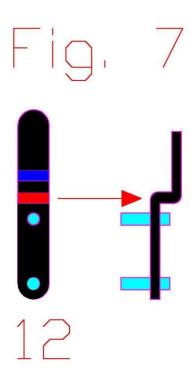
These are quite distinctive and come in two parts. There is a bracket which attaches to the solebar and a round head that has 'tails' that fold up. They are quite vulnerable and I would suggest using 0.31mm wire to pin them to the headstock by using one of the brackets as a guide to drill a pair of holes into a scrap piece of wood. The half etched rivets can then be drilled out and short lengths of 0.31mm wire soldered to the bracket using the jig just created to hold the wire. The wire can then be cleaned up to resemble bolt heads. Use one of the brackets to drill receiving holes into the headstock. Alternatively you can simply push out the rivets and glue in place without the pins.

Remove the bracket from the fret. Twist the base through 90° so that the interface with the head faces away from the rivets. This bracket can then be soldered to the back of the head (the side with no half etched areas). It is easiest to do this while the head is still attached to the fret. There is a small slot to help provide a positive location. Once soldered in place the assembly can be removed from the fret and the 'tails' on the head folded out. If you're brave these fold lines can be reinforced by the use of a very small quantity of solder and a very quick soldering iron. Some step soldering might be a good idea but I haven't encountered many issues with just using 145° solder. Glue in place.



Lamp Irons

Standard lamp irons (12) are included. If you're after the LNE type then these are included on my general wagon detailing fret (B.108). These are included for fitting to either the wagon body or the headstock if required.



There are four pairs included, two with half etched holes for pressing out the bolt heads and two with the bolt holes etched out completely. I dislike relying on glued joints for these sorts of things on plastic bodies and so have included these for use with 0.31mm wire pins to provide a more positive location. I have also included a drilling jig which has the correct spacing for drilling holes in plastic bodies. This is the part shaded green in the parts diagram. Use a 0.3mm drill.

If you wish to use the half etched bolt type then press out the rivets whilst still in the fret and then remove and fold up and fix in place.

If using the pinned type then check that the holes will accept 0.31mm wire, remove from the fret and fold up. Two short lengths of 0.31mm wire can be soldered in the holes and then the lamp iron glued in place on the body having drilled receiving holes for them. Alternatively simply glue the wire and lamp iron in place at the same time without the solder

GWR Van Door Catches

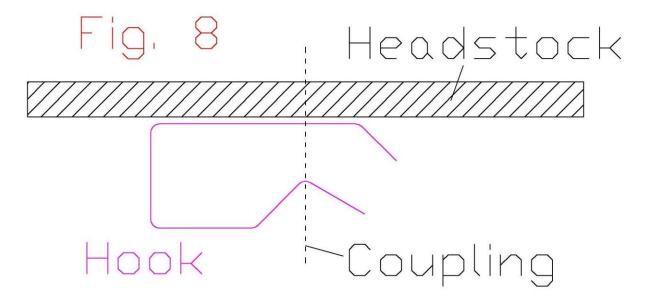
I've included GWR van door catches (13) as I had the artwork done from another project and it was requested. There are two parts to them; a hook and a backing plate. They can be located using a 0.5mm hole drilled into the body side and glued in place. You may wish to consider using a 0.5mm hole drilled into a scrap piece of wood to act as a jig for soldering the hook and backing plate together before fitting to the wagon.

The real things were designed to catch on the ends of the bottom set of door hinges. They should be placed equidistant from the outer edge of the door, on the opposite side of course.



Coupling Hooks

The coupling hooks (14) are designed to be folded double and soldered together. Once soldered together they can be dress to better represent a casting. There is a short slot through the tail as well as a couple of holes for arranging fixings. Masokits hooks, made from 0.015" steel piano wire or similar, are useful for retaining the coupling hooks through the slot. Fig. 8 below will give you an idea of how to bend them. Pinch the two long side of the Masokits hook together to get them through the slot and then tension will hold the coupling hook in place.



If you need Screw couplings then Rumney Models produces a fret (B.96).

Instanter Links

There are two types of Instanter links provided, a GWR type (15) and a BR one (16). In both cases they are designed to be folded double and soldered together to give a more prototypical thickness. The GWR ones can then be dressed with a file to better represent the rod that the real things were made from. Links to finish them off can currently be had from Brassmasters. Their contact details are as follows:

PO Box 1137 Sutton Coldfield West Midlands B76 1FU www.brassmasters.co.uk

Justin Newitt - March 2019