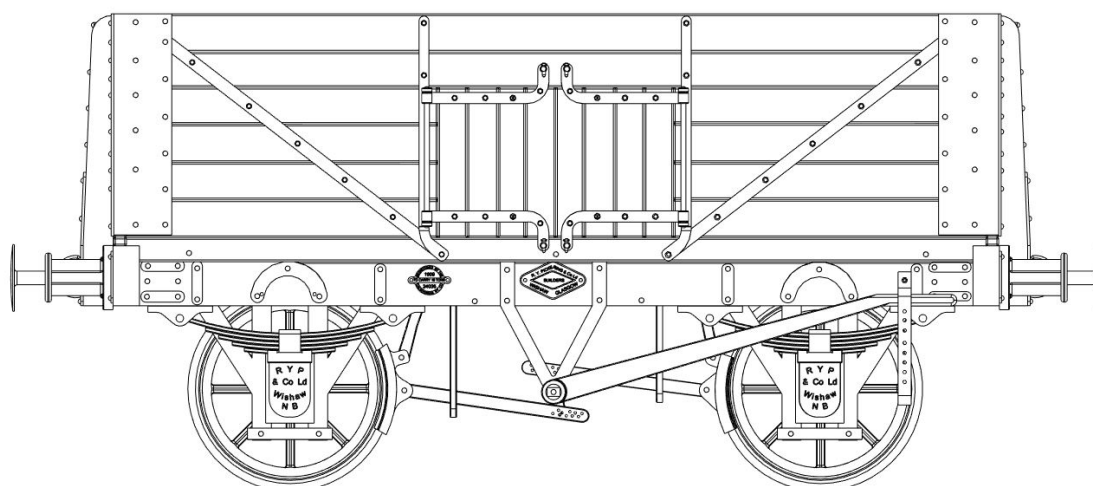


## Scottish Wagon Works

### 10 ton R. Y. Pickering Private Owner Wagon – Circa 1909



The model is based on the Caledonian Railway Association (CRA) Drawing No. 44, of William Duncan's Wagon No.1.

6 plank fixed ends with 'Scottish' pattern cupboard doors.

Wooden underframe, with wood end stations.

Braking on two wheels one side only.

Built by R. Y. Pickering in 1909 and registered with the Caledonian Railway as No. 24036.

#### Livery

The body and solebars were Dark Red Oxide, with plain white lettering and running gear painted black.

A Photograph is available in the HMRS Collection ref RYP 868.

**Suggested parts needed to complete:**

- 3ft 8 Split Spoke Wheels and bearings. Slaters, Peco / Parkside etc. are suitable.
- Couplings of your choice – a cosmetic coupling is supplied, but not recommended to be used for pulling.
- Paint

**Construction - general:**

These kits are printed to order using 3D resin. The part colour varies depending on the resin type and colour available at the time of printing.

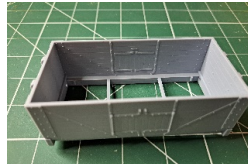




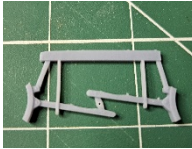



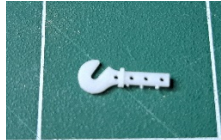
All parts have been removed from the supports – but will need cleaning up.


The parts are brittle so take care when filing.

It is advisable to use a dust mask when filing these models.

A slow setting cyano-acrylate adhesive such as Zap-a-Gap is suggested for general assembly.

## Supplied parts

Part Number	Description	Quantity	
SW 700	15ft 6 plank Fixed End body	1	
SW 706	15ft 6 plank Fixed End Floor	1	
SW 701	Buffer Head	4	
SW 703	2 Fin Buffer Shank	4	
SW 705	Leaf Spring	4	
SW 708	Axle guard or W iron	4	
SW 712	RYP Type 13 axle box cover	4	
SW 707	Morton 9' wb single side dual brake assy	1	
SW 709	V hanger	1	
SW 710	Brake Lever	1	
SW 711	Brake lever guide	1	
HR 15	Coupling Hook	2	

SW 713	RYP and Registration Plates	2 + 2	
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In addition, 0.6mm brass wire and 0.4mm soft wire is for the brake and hand rail included.

## Instructions

Prepare the printed parts – this should only need the vestigial support pips removing from the underside of the body and other parts, any minor flash removing with a scalpel or needle file. UV resin dust is an irritant so be careful.

The headstock holes for the buffers have been opened out to 3.3mm.

Axle guard bearing apertures have been opened out to 2.4mm, which will suit Slaters and Parkside / Peco bearings. Dapol bearings are 3.2mm in diameter, the holes can be opened up, but I recommend doing this in less 0.5mm increments using drill in a pin vice.



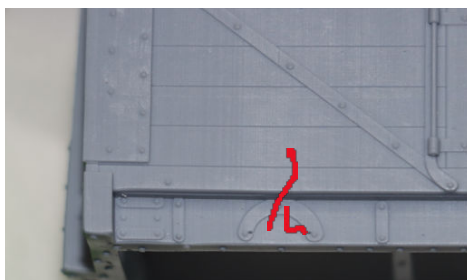
*Figure 1 Axle guard with Slaters bearing.*



*Figure 2 Axle guard modified to suit with Dapol bearing.*

## Body

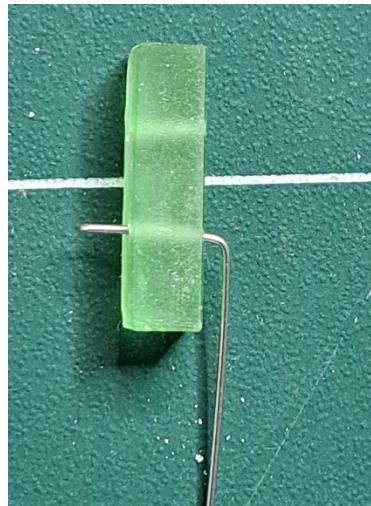
On the left hand end of each side, two holes need to be drilled for the handle.



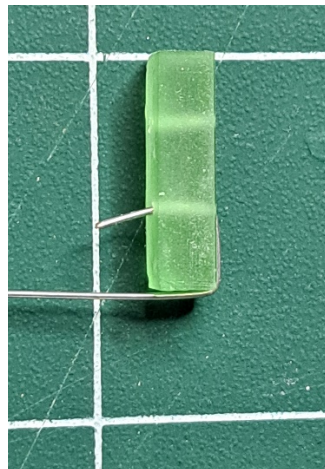
0.6mm wire and 0.4mm wire is provided

Use a drill to suit the wire selected – the 0.4mm wire is finer but easily deformed, the 0.6mm brass wire is sturdier.

A bending jig has been included.



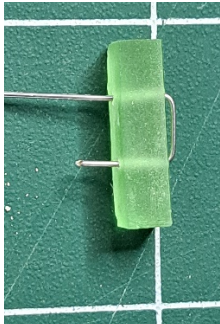
Insert the wire into the hole furthest from the end of the jig, and bend through 90 degrees.



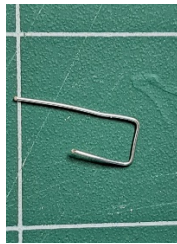
Bend the wire through 90 degrees across the bottom edge.

Straighten the legs if required.

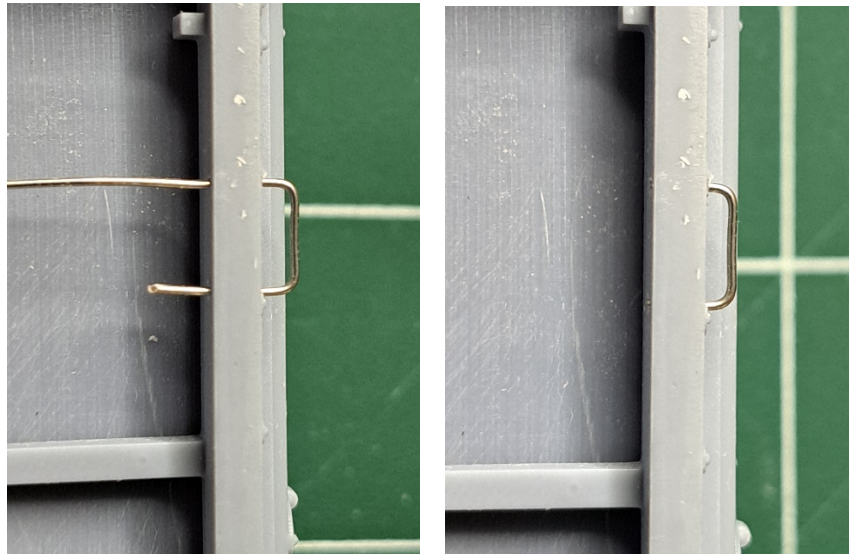
Insert both legs into the holes.



With wire toughing the workbench, press down on the jig. This will produce a nice corner.



Insert the handle into the body to give the desired position – the handle should not protrude beyond the wagon side. The cut flush with the inside of the sole bar.



These can be glued in place, or removed and refitted after painting – allows easier access to paint the solebar iron work.

Check the fit of the floor to the inside of the body sides, a light sanding may be required.

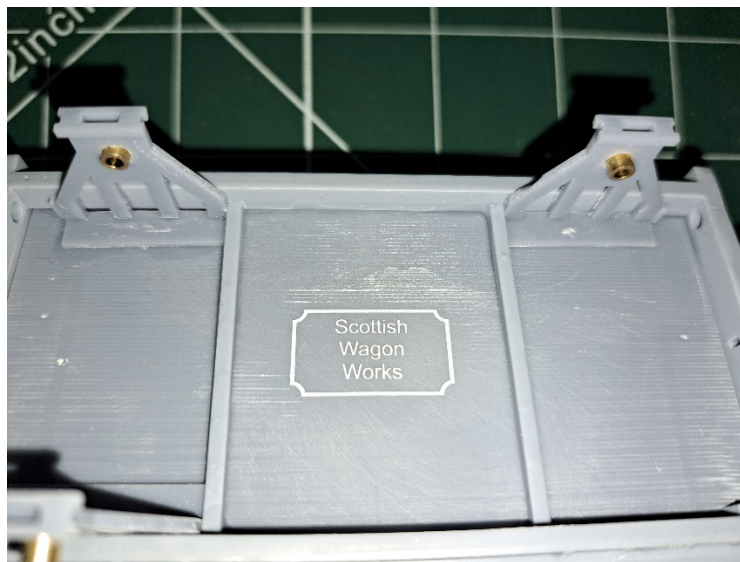
Ensure the floor is snug to the solebars with no gaps.



Glue in place.

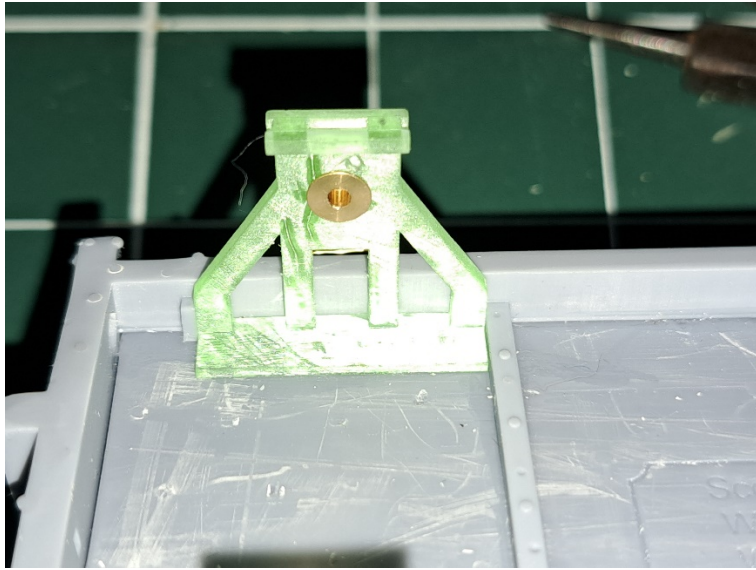
Clean up the Axle guard bases and check for fit on the floor.

Fit the bearings into the Axle guard, then secure each Axle guard in position.



With Dapol bearings



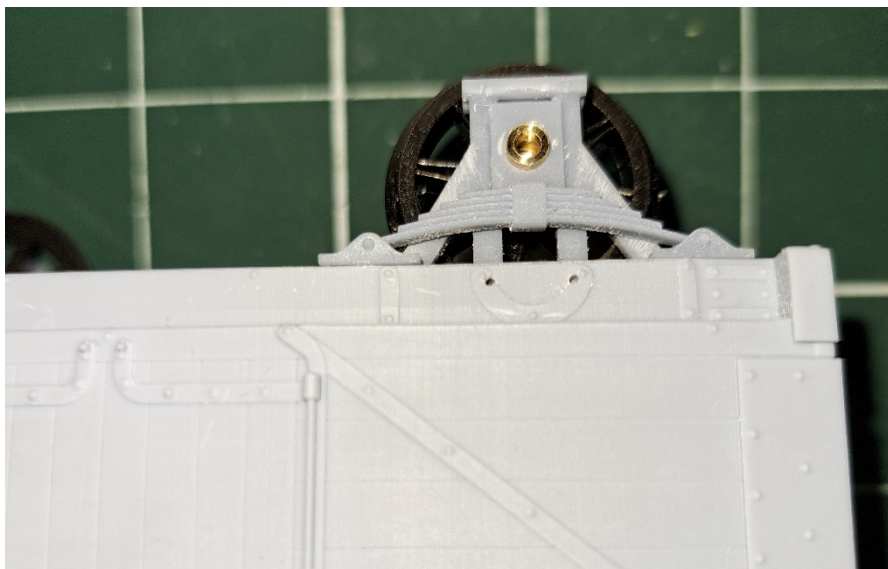


With Slaters bearing fitted

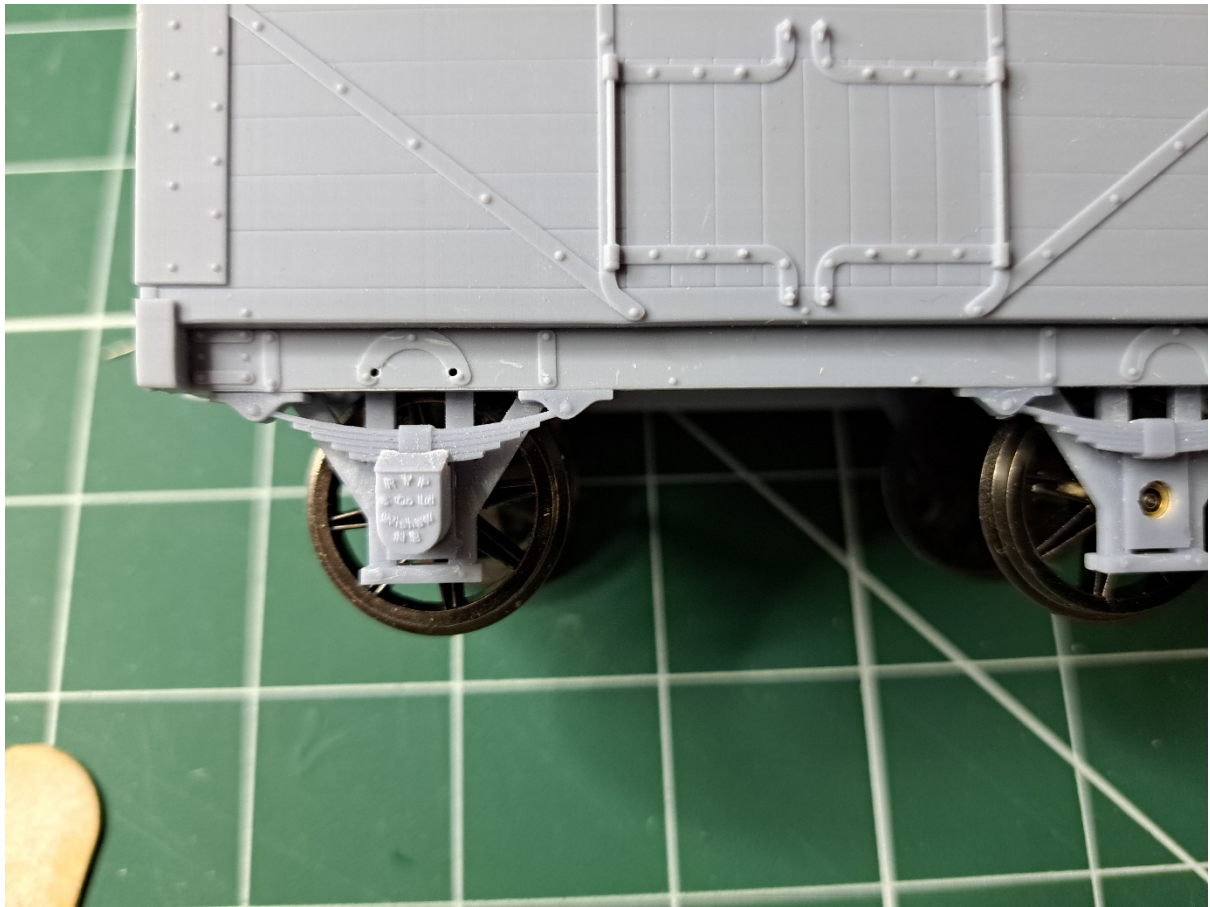
Fit the wheels – the Axle guards will need to be prized apart to get the wheels in. A more flexible resin is used for the Axle guards, but be gentle.



Now fit the leaf springs – you may get a better fit if you file off the leaf wrap on the rear of the spring. Only apply glue to the leaf spring mount / solebar, not on the Axle guard.

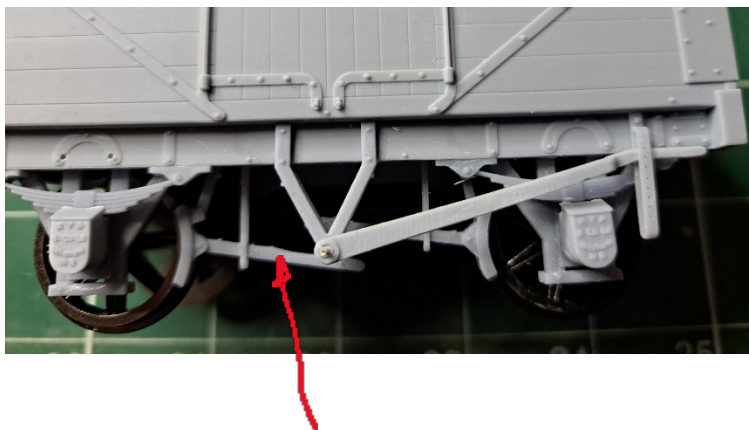


Fit the Axle box covers.



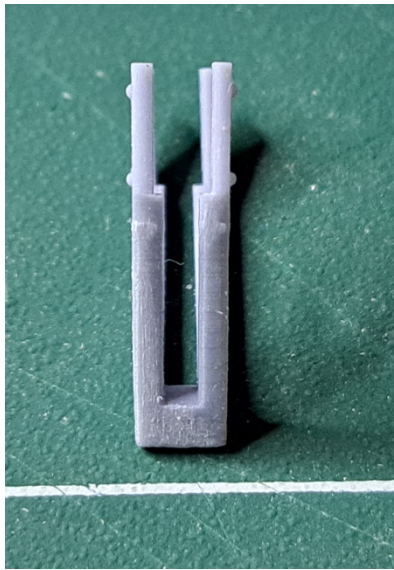
### Brakes

The brake assembly fits the wheels, so if fitted as is will act as a brake. Fettle the brake shoes until the wheels spin freely with minimum gap. Fit the assembly and secure in place. Ensure the left hand brake shoe is the lower actuator lever.



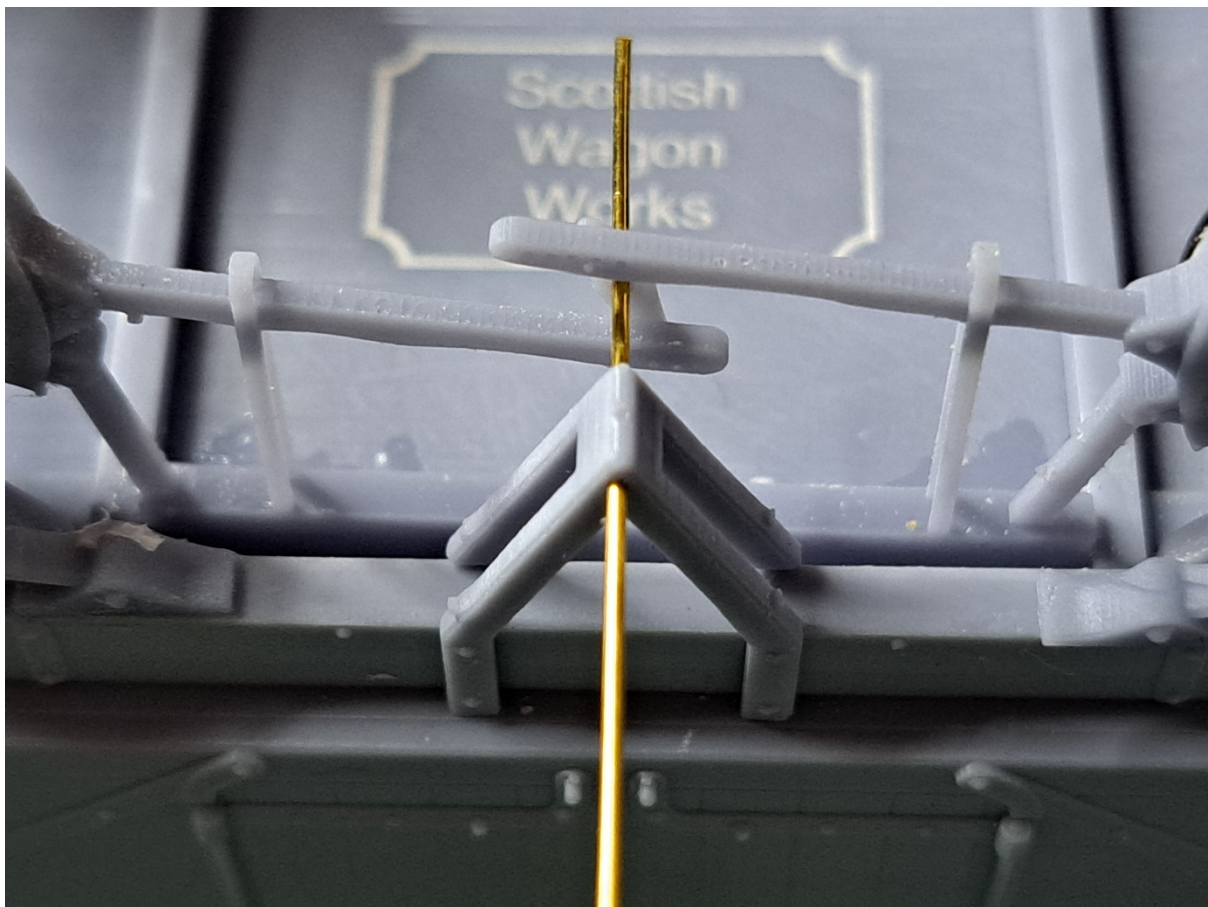
Cut a piece of 0.6mm brass approx. 20mm long.

The V hanger has a cut out that fits over the solebar.



Thread the wire through the hole in the V hanger and fit the V hanger to the solebar.

Align the V hanger with the pivot point on the brake assembly and push the wire through.



Glue the V hanger into position.

Adjust the wire position so only approx. 5 millimetres of wire extends beyond the rear of the brake assembly. Apply a small amount of glue to the rear of the wire and pull through another millimetre.

Prepare the brake lever and brake lever guide.  
Thread the brake lever onto the pivot wire.  
Insert the guide onto the handle



Adjust the Brake lever guide until it is in position then glue in place.  
At the pivot end of the brake lever move it away from the V hanger enough to allow a small amount of glue to be applied and push the lever back in contact with the V hanger. Trim the wire.

You can fit the Builders plate, Registration plate and buffers now or paint the model first then fit them.

