

# **HUDSWELL CLARKE 0-6-0DM KIT**

Thank you for purchasing one of our kits! We really hope you enjoy building it. If you have any queries please do get in contact: <a href="mailwaymanianet@gmail.com">railwaymanianet@gmail.com</a>

We would love to see your completed models so please do send us your photos and videos!

#### RECOMMENDED TOOLS

Flush cutters or snips

Scalpel or modelling knife (recommend a Swann-Morton knife) - always use sharp blades Files - Jewellers files of differing shapes are useful

Pin vice drill for opening out handrail holes - drill sizes 0.45-0.55mm and 0.8 to 1mm Pair of pliers for bending handrails

Wet and dry sandpaper

#### RECOMMENDED MATERIALS

Cyanoacrylate/Super Glue - recommend high viscosity so it doesn't run everywhere Roket card glue or similar - for attaching bits like the chimney (in case you need to remove it again)

Deluxe Materials Glue 'n Glaze - useful for glazing the cab windows after painting and weathering

Filler primer (aerosol cans available from Halfords, eBay etc.) - use in ventilated areas with a mask

Squadron green putty or other filler material

#### NOTES AND ADVICE

The kit is designed to fit the late Bachmann 03 chassis with the 6-pin decoder. We are checking to see if it will fit the newest version with the NEXT18 decoder as this may involve moving the chip.

It is comprised of three main components:

Running board, cab, bonnet.

It is recommended to prep and paint these components before fixing them all together. The running board may be quite flexible during assembly - don't worry! When the other components are attached, they will give it rigidity.

The kit is 3D printed in resin. This material retains good detail but can be quite brittle so please do take care when handling it as it will snap under pressure. The running board and steps are at the most risk as they are thin.

If a part has arrived bent we recommend warming the part up by submerging it in hot water, applying gentle pressure and allowing it to cool whilst held in the preferred shape. Running boards often appear curved along their length, this is due to how thin they are, assembly onto the other main components and chassis normally rectifies this without the need for bending it into shape.

# **THANKS**

This kit was designed by Adam White, to whom I am very grateful. Adam also designed the Avonside B4 kit and this one is assembled in a very similar way.

**SECTION PAGE Prototype Variations** 3 3 DCC Fitting **PREPARATION** Internal braces 4 Supports and flash Handrail holes Preparation and paint Accessories **ASSEMBLY Bonnet** 5 Notes on pre-assembling handrails 6 Cab 6 Running board 7 9 Assembling the main components Internal braces 10 Air tanks/sandboxes 10 Mounting the body to the chassis 11

# **MODELLING PROTOTYPES - VARIATIONS**

Hudswell Clarke not only supplied different prime movers in their 0-6-0DMs, they also had a multitude of variations in cab styles, hood length, access doors, etc.

Depending on the kit you purchased, different variants may be possible.

The British Rail versions were classed D2/7, examples of this class included Nos. 11116, 11119, 11146 or 11148.

MAIN DIFFERENCES	BR D2/7	Industrial Short Hood V.1
Cab Roof	Curved	Peaked
Cab Side Windows	Two, sliding half	Single
Cab Door	Windowed	Plain
Cab Rear	Bunker'	Flat
Steps	Front and rear, enclosed	Rear only, open
Hood side doors	Flat	Vented
Badge	No headlight	Cyclops headlight
Buffers	Oval	Round

# **DCC FITTING**

Space is at a premium inside the loco, but we have found that a Gaugemaster Ruby DCC93 decoder can be fitted without modification due to its small size.

#### **BEFORE PAINT**

#### **INTERNAL BRACES**

The body and cab are fitted with strengthening braces inside. These are to prevent the components 'splaying' as they cure. They must be left attached until the bonnet and cab are glued to the running board.

#### **SUPPORTS AND FLASH**

Use a modelling knife with a sharp blade (recommend a Swann-Morton) to slice the remaining 'nubs' of the 3D printing supports off as flush as you can get them, then sand or file the surface flat.

#### **HANDRAIL HOLES**

Holes for handrails have been printed as part of the model. However, due to the small size, they may have been clogged with excess resin and require drilling out, we recommend doing this even if the holes appear clear, the recommended tool is a pin vice drill.

Handrail mounting holes should be opened out to .45-0.55mm for handrails mounted directly to the body, and 0.8mm-1 mm for the handrail knobs.

#### PREP AND PAINT

As with any 3D printed kit, the sanding and painting is the most important stage to get right. One of the reasons for splitting the model into separate sections was to make it easier to prepare for paint. 3D printing tends to have layers and **these need to be sanded and filled** in order to get a smooth surface.

The knack is to use a bit of **filler primer** and sanding (using **fine wet-and-dry sandpaper**), but not too much, so as to fill and smooth the layers but also not lose the rivets and other small details.

Be careful around the front grille - it may be best to mask this area off while using filler primer to avoid filling the grille holes with paint.

#### **ACCESSORIES**

Each accessory pack includes:

-Buffers x 4 -Sandboxes x 2 -Chimney -Horn -Toolboxes -Air tanks x 2 -Handrail knobs (WD short type) x 28 (BR) x 20 (industrial)

-.45mm Handrail Wire -10BA countersunk bolts and nuts x 2

-Cab interior/Motor Cover -Dummy coupling hooks x 2

Accessories differ in detail depending on the kit but the fitment is the same.

The printed accessories are supplied on a 'float' with support material included. To remove the support material, we recommend using some snips to slice the supports and then the scalpel/modelling knife to cut off the 'nubs' left over from the supports.

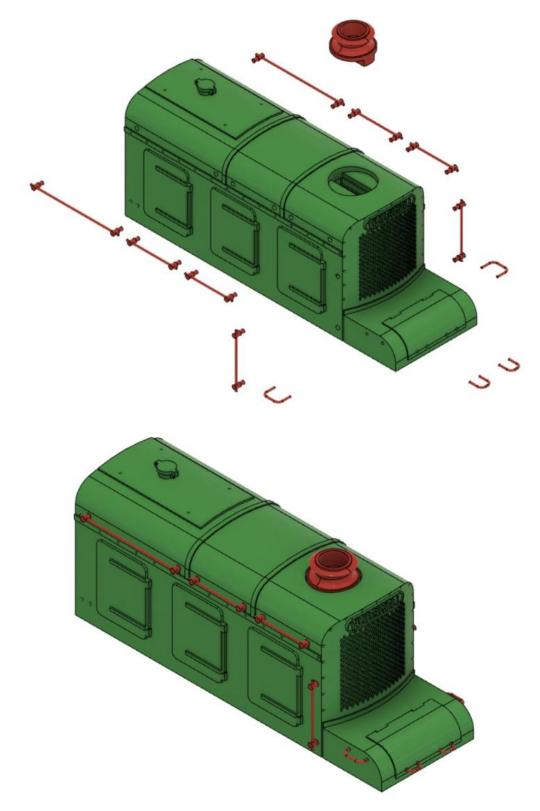
## **ASSEMBLY**

Once everything is painted, it's time to put the loco together!

#### **BONNET**

Note smaller U-shaped handrails will require .45mm holes whereas the handrail knobs require a larger drill bit.

Please note: Images show BR variant, number and position of handrail knobs may vary/



#### **NOTES ON PRE-ASSEMBLING HANDRAILS**

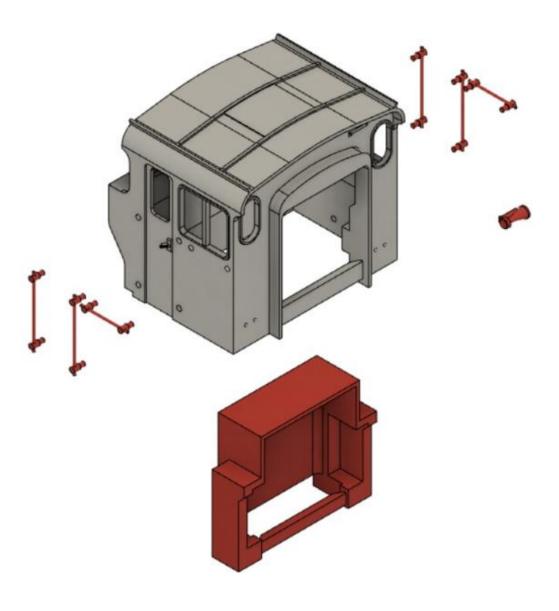
Cut the hand rail roughly to length, thread one hand rail knob on and glue into place. Thread the other knobs on and add bluetack or tape to the end of the handrail to stop them falling off.

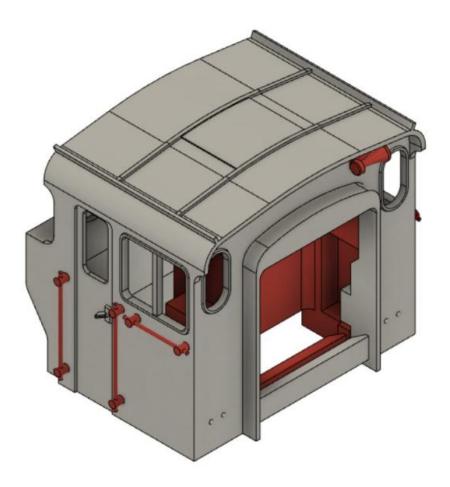
Offer the assembly up to the loco and locate all the handrail knobs, glue the knobs onto the handrail and once dry remove from the loco body to be painted separately, or fix into place to paint with the body.

#### **CAB**

Due to the way the motor fits in, the cab details are sparse on this kit. All that is required inside the cab is to paint it and fit the motor blanking plate, whilst on the exterior the horn and handrails require fitting.

Please note: Images show BR variant, number and position of handrail knobs may vary/





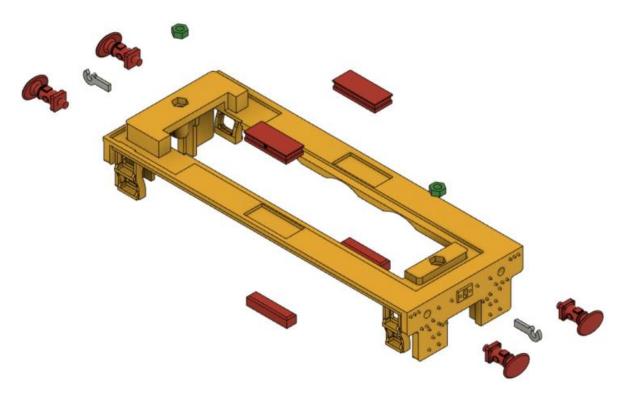
# **RUNNING BOARD**

Fit the buffers, coupling hooks, and toolboxes to the running board.

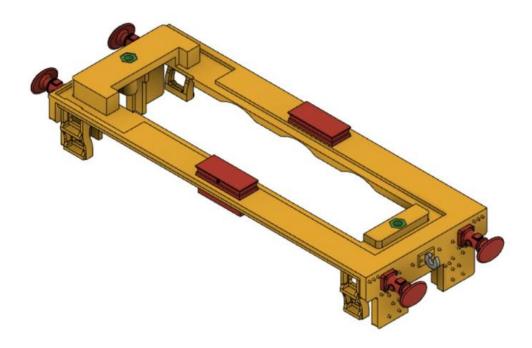
BEFORE gluing the nuts into place, you will need to cut the 10BA bolts down to about 10mms, we recommend a small hacksaw for this purpose.

Wind the nut on to the bolt past the cutting point, THEN cut the bolt, then wind the nut off. This helps avoid damaging the threads so much you can't get the nut on.

Once this is done, the nuts can be glued into their slots. Don't get glue in the threads!

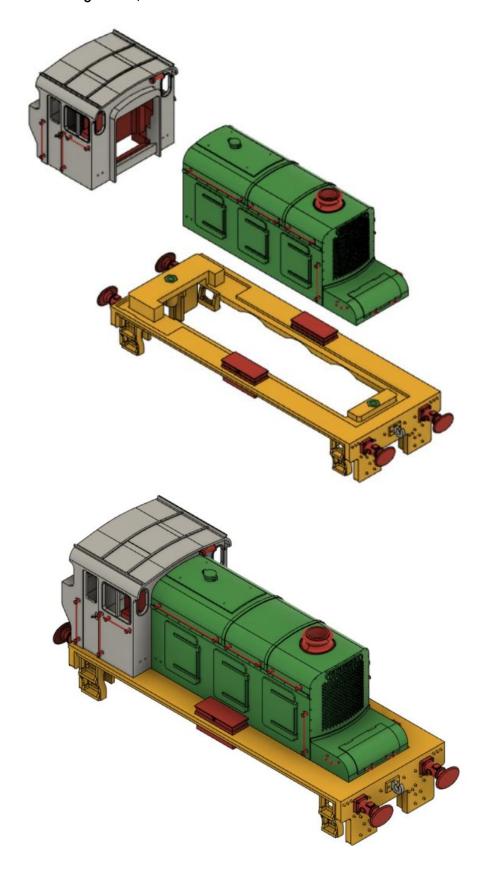


The toolboxes have a top and bottom half which sandwich the running board.



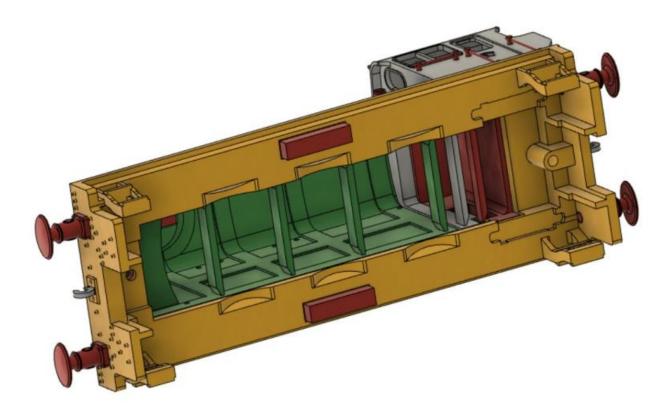
## **ASSEMBLING THE MAIN COMPONENTS**

Glue the cab to the running board, then the bonnet.



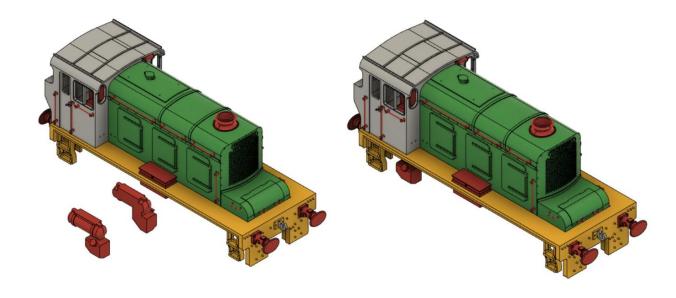
### **INTERNAL BRACES**

Once the bonnet and cab are attached, then the internal braces can be removed. Take care not to cut the body and risk cracking it, the braces can always be filed back if the stubs are too long.



## **AIR TANKS/SANDBOXES**

These are mounted to the underside of the running board in the slots provided.

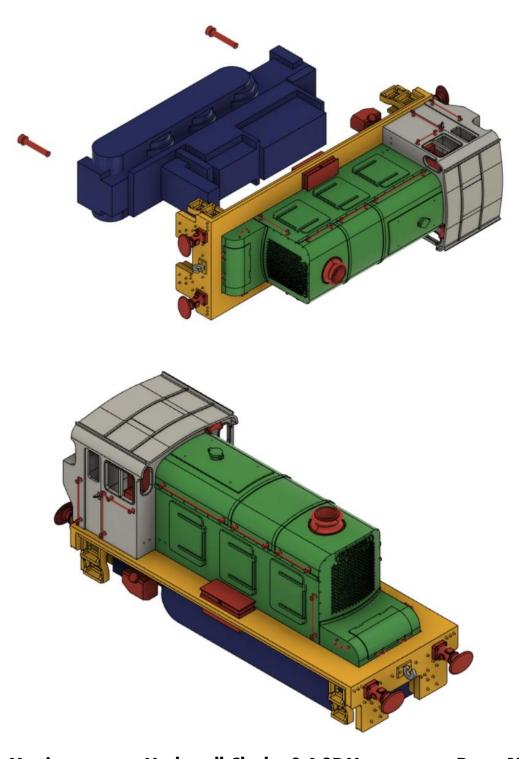


#### MOUNTING THE BODY TO THE CHASSIS

No modification to the chassis is necessary. The kit uses the same mounting holes. The 10BA bolts will go through the chassis and into the nuts to hold the body on. WARNING: The bolts will be too long to begin with. If you tighten them down without cutting them down, they will damage the bodywork, especially the gearbox cover at the front.

You will need to cut the 10BA bolts down to length, we recommend a small hacksaw for this purpose.

Wind the nut on to the bolt past the cutting point, THEN cut the bolt, then wind the nut off. This helps avoid damaging the threads so much you can't get the nut on.



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