

PDF MODELS - LEANNE



Thank you for buying this Loco kit. Please read all the instructions before assembly.

All 3D printed parts will need either filling with paints and rubbing down with “wet & dry”, or by covering with a specialist resin coat. One of our customers covers the printed parts with paper with very good results!

Certain tools will be necessary, screw drivers, pliers, tweezers, Allen keys, etc.

Another very useful tool is a tapered reamer!

TAKE CARE WITH THE REAMER - MAKE A SMALL CUT, TRY, AND CUT AGAIN.

Good results can be obtained from good rattle spray paints, Halfords is a very good source.

CHASSIS

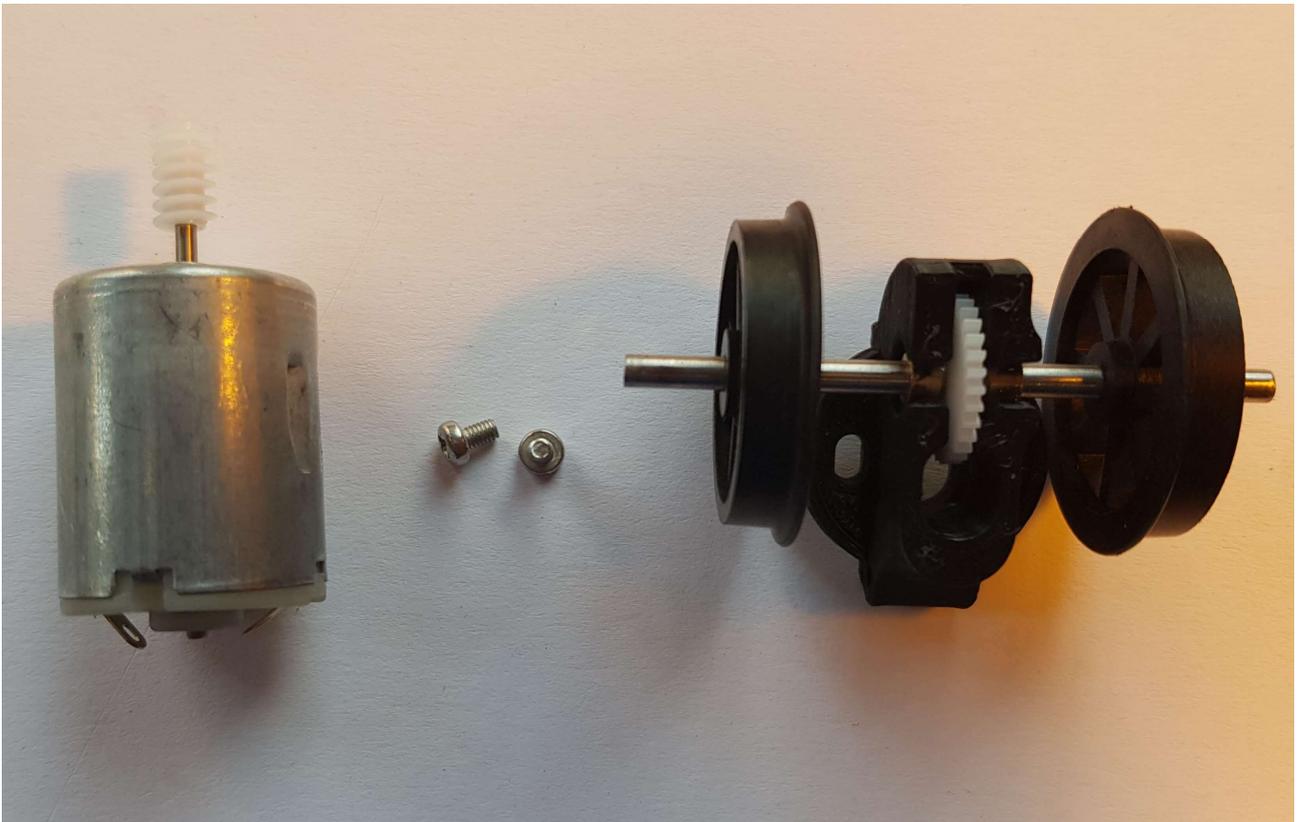
The chassis is built up from a combination of laser cut acrylic sheet and 3D printed parts. The whole assembly is secured with nuts & screws and can be assembled and disassembled to allow for painting and maintenance.

The acrylic parts will require preparation before painting, a rub with “wet & dry” will create a key for the primer.

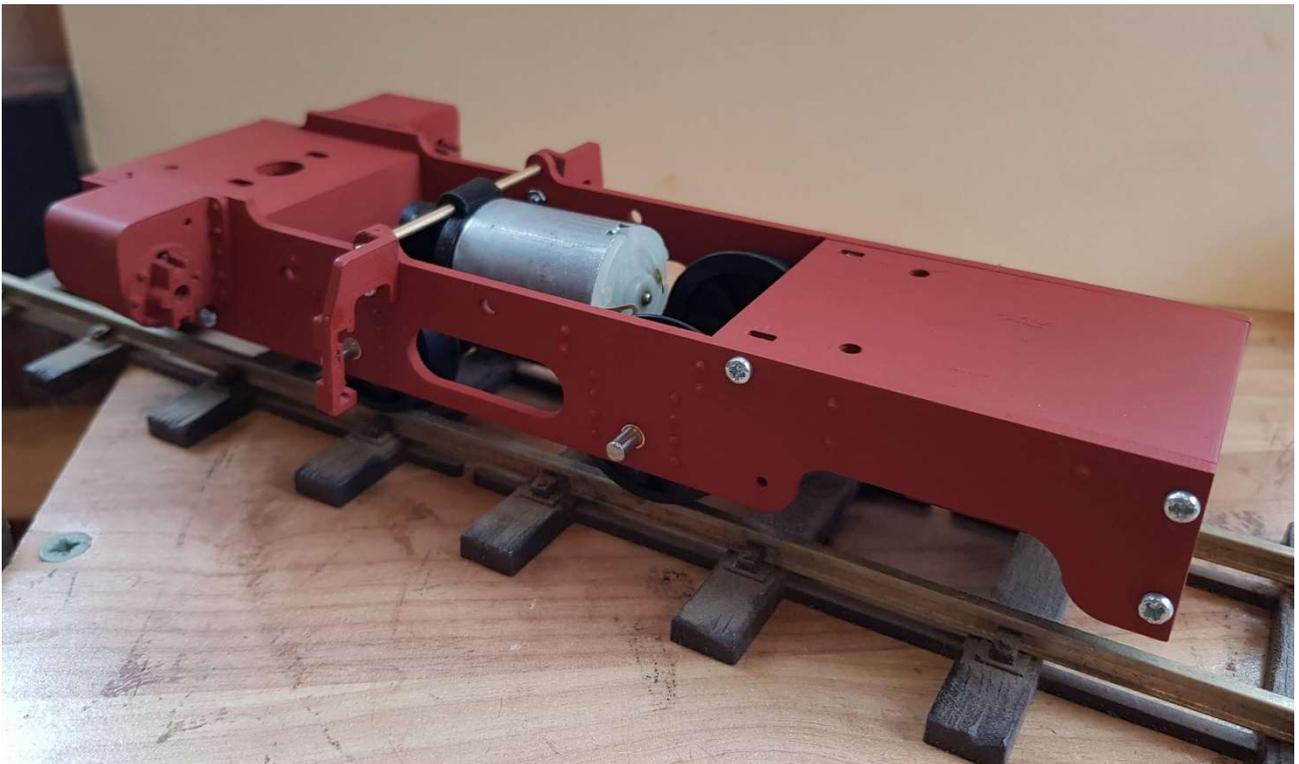
Ensure that two bushes are placed onto the drive axle before the wheels are pressed onto the axles, the “back to back” should be 28mm. These bushes are pushed into the gearbox. The motor is screwed to the gearbox, the worm will need to be pressed onto the motor shaft.

The axle bushes are pressed into the frames from the outside, open the holes with the reamer if necessary?

Secure one of the frames to the front and rear spacers, the axles & wheel assembly may now be located into the axle bushes and the other frame fitted over the top.



The motor & gearbox. Note the bushes in place in the gearbox that must be fitted to the axles before pressing on the wheels.

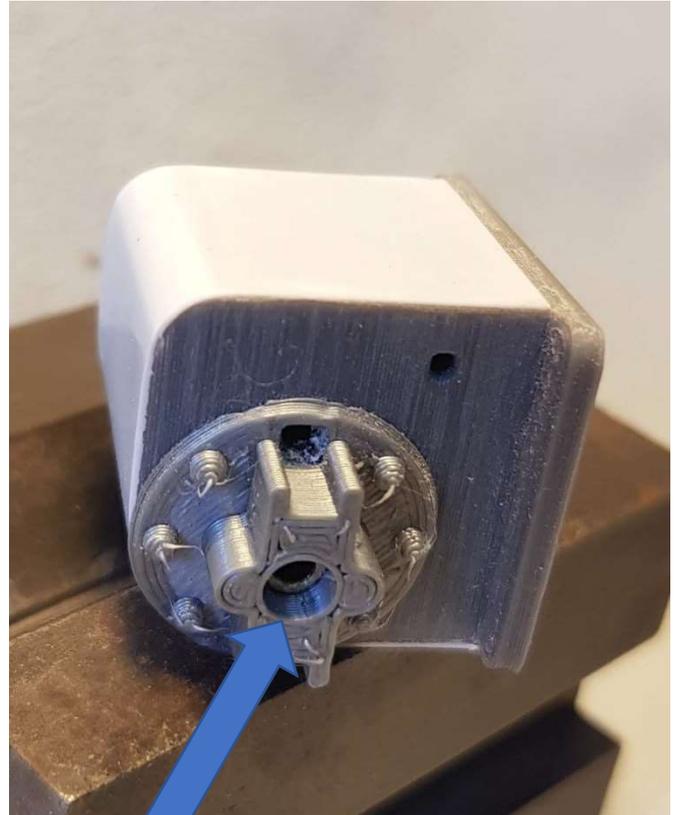


The chassis assembly. Note the motor driving the front wheelset and the securing brass rod that passes through the frames, gearbox and motion bracket. The cylinders have also been attached using Allen head screws from the rear side of the frames.



The Left Cylinder. Note the rear cylinder cover, the brass tube is just visible and has been pushed into the cylinder to much in this example! Also, this 3D print has been covered with very thin plastic!

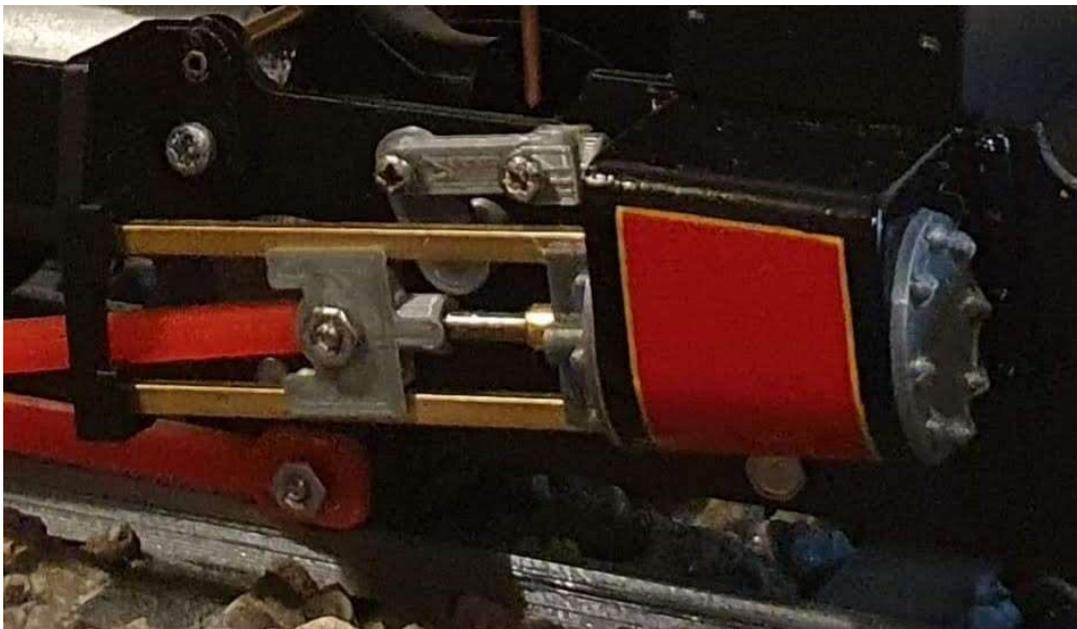
The brass tube should protrude the cover by approx. 1mm



The slide bars are pushed home into the cylinder block and held in place by the motion bracket. The cranks need a cheese head screw fitted from the rear and are secured to the axles by Allen grub screws, the cranks need to be a 90° to each side. This is a matter of trial and error and is usually the culprit of “tight spots” in the motion when complete.

Small brass bushes are fitted into the coupling rods (the rods that couple the two axles together) which in turn locate on the screw just fitted to the crank. (note – the brass bushes rotate in the printed rod)

The rods are held onto the crankpins by a small nut. The connecting rod (the rod that connects the wheel to the crosshead and cylinder) is screwed to the crosshead. The piston rod is a push fit into the crosshead.



BODY

The body consists of the boiler (smokebox, barrel & firebox) and is secured to the frame spacers under the smokebox and under the firebox, the barrel is captured between the two.

The cab is also secured under the rear frame spacer and is captured between the firebox and spacer. It is necessary to bring all these parts together at the same time.

The cab is best glued together on a flat surface (a mirror or piece of glass), using dichloromethane for the acrylic cab pieces or super glue.

There are many detail items supplied with the kit, including beading for the cab sides, angle pieces for under the cab, crank arms for the screw brake under the cab and reverser assembly.

There are three domes to mount on top of the boiler, the centre is the steam dome, while the two outside domes are sand pots (hence the lids). The sand pots would also have operating linkage and pipes to the wheels.

Boiler bands have also been provided along with handrails.

The chimney is cast from resin and uses the short brass tube. Clean the resin parts to fit the tube.

Rivet detail (supplied) can be added during construction. We have found the best time to add rivets head detail is after primer has been added. A little liquid poly cement is applied to the rear of the rivet (held with the point of a pin) while the rivet is placed in position. The primer can be marked with a pencil to guide placement.



Frames during riveting and cab in undercoat

Many thanks
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