



Far left
Vivarais *locotracteur* X and *fourgon de secours* 19 at Le Cheylard dépôt on 9th July 1962.
Photo: Jean-Louis Rochaix, BVA postcard 672.08.

Left
Vivarais *locotracteur* Y in 1988.
Photo: Jacques Poré.

Jacques Poré shows how he assembled a small diesel locomotive from a Miniatrains kit.
Photographs by the author.

CFD *locotracteur X*

A diesel built on the frames of steam loco

It is always exciting to find a new brand. Miniatrains already offers several rolling stock kits in HOm, some also available for HOe. **https://miniatrains-modeles.com**

The models are 3D-printed using high-quality resin specifically designed to produce fine, robust, and durable prints. The 3D-printing is very precise (3-micron layers). The build quality is excellent, with a body that is practically a single piece which requires very little cleaning up.

The prototype

Built by the Chemin de Fer Départementaux at Montmirail workshops in 1948 on the chassis of CFD Yonne 0-6-2T No.23 (Saint-Léonard 726 of 1887), works number 107A.

Length: 6.3m
Weight: 16t
Engine: Willème F8M 517P, eight cylinder in-line, 180 hp
Maximum speed: 45km/h

It was delivered to the Vivarais network for hauling and shunting freight wagons. When that system closed, it was transferred to the CFV preservation group, where it remains in service. It has been slightly modified over the years.

The model

The Miniatrains model represents the CFD *locotracteur* X without the box added later to the right of the long hood.

To test these new products, and to expand my metre gauge fleet with a versatile little engine, I assembled *locotracteur* X but painted it in the red of the similar Vivarais Y rather than the rather original green.

A few detail parts complete the body – horn, lights, simple buffers, and loop-type buffers/couplings. A small rectangle of clear acetate is supplied for the windows, which the modeller has to cut out – the most fiddly part of the process.

Mechanism

The chassis is not included and Miniatrains recommend a Tillig HOm 0-6-0T Neustadt No.1 (ref.02913) – a reflection of the real situation! This model is easy to find, and a second-hand or even damaged example might be usable as long as the mechanism is sound.

A Hornby TT British class 08 diesel shunter could also be suitable (with outside frames and simple coupling rods), and need less modification. No doubt there are other possibilities.





Far left
The kit as supplied.

Left
The suggested source of the mechanism – a Tillig 0-6-0T.

Building this model was quite easy and enjoyable. There was very little work to be done on the body itself as supplied. The surface finish is extremely fine. After checking the surfaces and lightly deburring where necessary, primarily the underside of the side frames and crossbeams, and also a few areas for fitting the glazing, the body simply needs to be primed, and painted. Body assembly consists only of fitting the horn and the buffers, then cutting and (after painting) installing the glazing.

The main task involves adapting the model used for the chassis: dismantling the body, removing the headlight wiring, and most of the motion, retaining only the coupling rods.

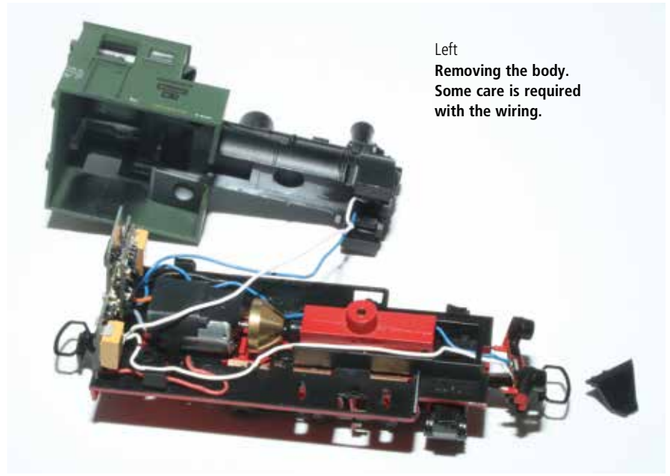
With the resin body, the assembled model is – in my opinion – too light for good traction and reliable current collection, so I added ballast on top of the chassis as well as under the long hood.

I installed the supplied buffers while keeping the original couplings in place at both ends for practical use on the layout.

This makes up into a really nice little machine, with flawless operation, which is to be expected of the Tillig chassis.

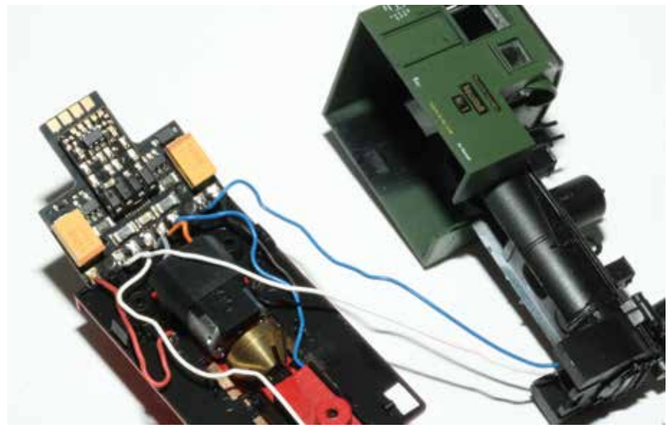
Required

0.5mm diameter nickel-silver wire for the handrails.
Lead weights – cut from 1mm thick sheet.
Headlight circuit – piece of perforated track board and two 2.2kΩ resistors, or CDF end-of-train signal circuit (unfortunately no longer available)
Four Marshall headlights equipped with LEDs from REE.
Small gauge electrical wire (LEDs have low power consumption).



Left
Removing the body. Some care is required with the wiring.

Below
Removing the main circuit board, which includes the rear lighting. Unfortunately it was too large to be re-used within the body of the kit. I took care to make a note of all the wiring.





Above
The front headlight assembly is also not suitable for re-use in this project and must be carefully disconnected.

Below **The chassis stripped ready for use.**



Right
The 3-D printed resin body is rather light, so to improve adhesion and contact I added as much weight as possible inside the large bonnet and on top of the motor.









Above, left and right
The body test fitted to the mechanism. Note the cylinder covers have now been removed.

Left and right
The body primed.

Below left
The cab masked to prevent ingress of body colour.

Below right
The body spray painted.







Below and below right **The yellow details (radiator grille and buffer beams) were carefully painted by hand.**







Left
Marshall lamps with LEDs from REE.

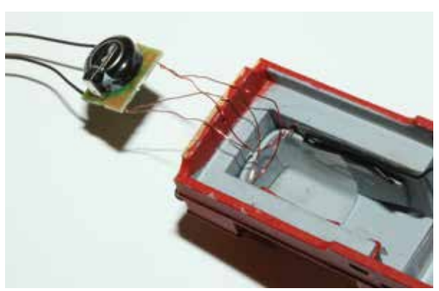
Right
Front lamps fitted.

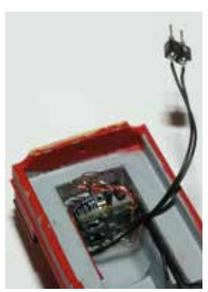


Below
I planned to use a light circuit from CDF which I had in stock and connected it to the LED leads ...

Below
... but found it took up too much space in the bonnet.

Left
So I made my own circuit with some perforated strip board and two 2.2kΩ resistors, which fits neatly over the motor.











Above, left and right **Painted and assembled.**

Below, left and right **After some moderate weathering, mainly with powders.**



