INSTRUCTIONS FOR USE M2R TEST AND DEMONSTRATION BENCH

You have purchased an M2R test bench and I hope you are satisfied with it. It is particularly suitable for testing locomotives, adjusting analog and digital equipment, but also for demonstration.

Warning : This device is not a toy, it is not suitable for a child under 12 years old because
_it can be connected to an electrical source,
_it is made up of moving parts that can be ingested.
This device must therefore be used under the supervision of an adult.

Implementation
_Position the test bench on a perfectly flat support: table, desk or worktop.
_Use on a clean and unobstructed surface.
_Put the 2 ends of the test bench flat: the 4 feet must touch the surface on which the bench rests.
_Check that all the rods of the carriages are resting on the 2 longitudinal axes.
_Put your electrical control (digital or analog) in neutral then connect it to your test bench.
_Position the locomotive on the test bench: each axle must rest on a trolley, if necessary problems could arise (poor electrical contact or derailment of the locomotive).
_ Once the locomotive is positioned, you can switch on the control box.
Now you can start using your M2R test bench.

Electrical connection between the control and the test bench
Model with hollow longitudinal rods (500mm rods):
connection can be made with banana plugs or crocodile clips.
Model with solid longitudinal rods (500mm rods):
the connection can be made with alligator clips, or by soldering the wires to the longitudinal rods, or by trapping the wires between the rods and one of the plastic brackets located at the end of the bench.

Storage
_Ideally, keep the packaging in which the test bench is provided, it protects against shocks.
_Store the test bench in a cool, dry place.

Maintenance
In use, the rollers can become dirty and alter the electrical contact between the rollers and the wheels which collect the current:
clean the rollers with a granular eraser (example eraser for rails) or fine-grained sandpaper,
then clean it all with a clean, dry brush.

Spare parts
The test bench is completely removable, so all parts can be replaced individually. You will find spare parts and additional trolleys on the website www.lehangaralocos.fr

Repair
The locomotive derails:
check that each axle is positioned on a trolley,
check that all the wheel flanges are positioned inside the rollers,
check that there is good lubrication between the axle and the roller (one micro drop per axle is more than enough),
if you still observe a derailment: go back to the “Implementation” chapter.
The locomotive does not start:
check that all the rods of the carriages (20mm rods) rest on the longitudinal axes (500mm rods),
check the connection between the bench and the electric control,
if the locomotive still does not start, go back to the “Start-up” chapter.
Squeaking noise
The axles are lubricated during assembly with a vegetable-based lubricant specially designed for the mechanisms. Over time, the axles may lose their lubrication and a squealing noise may appear.
You can remedy this simply by placing a micro drop of penetrating oil just at the junction between the axis and the brass roller. A plant-based silicone-free penetrating oil should be preferred, any other mechanical silicone-free penetrating oil will do the job well as well.
Caution: do not spill penetrating oil on the trolley. If this happens, be sure to wipe off the excess lubricant.

For any remark, suggestion, proposal for improvement, or simply to discuss between model makers, you can contact me on the site www.lehangaralocos.fr under Contact.