Little 4 wheel loco

This is the setup I am using for my little two axle four wheel loco. As you can see I have no bridge rectifiers on the train itself as there was no room for anything.

I ran the pickup wires from the train to a full wave bridge rectifier in the wagon. I also have a second full wave bridge rectifier in the wagon for the pickups on the wagon. The only reason I am using two pickups in the wagon as I am using the axles and bogie frame for the contact point. The bogies are insulated from the body and each other.

The left hand wheels are isolated from the right ones on the axle. As you can see in the wiring diagram I am only using two pickup points and this works fine. One is on the left hand front the other is on the right hand rear but you can set it up to suit your model. Just remember the MIB dimensions.

My axle spacing’s on the loco are approximately 22mm centres. From the rear axle of the loco to first axle on wagon is approx 70mm. The axle spacing’s on the wagon are approx 23mm centres.

The inner most axle centres on the two bogies are approx 25mm apart.

I do not have to apply any temporary power to the MIB block with this setup. You only have to supply power to certain sections of the MIB Block if you intend to put all electrics on train only. The reason for the drawings of axle spacing’s was to create an isolation block with measurements that would cover the scales each side of HO Scale trains including HO. Also it is the smallest dimension isolation block design I could come up with that takes up little room. You have to use two isolation blocks in a loop with a cross over point as in my track layout. This train is a HO Scale lifelike train and the wagon is all brass. The wagon is 95mm long by 32mm wide by 27mm high at highest point. I had to arrange everything a few times to get it all to fit. There is no sound etc on my train; I just wanted it to be able to go in any direction on the track without any turn table. You can run as many trains as you like on this setup at the same time with everyone driving their own particular train.

The other idea for the isolation block and rectifier fitment was to help create a standard that if you went this way, than everyone would be set up to run on everyone else’s track without any complications. I have tested all the spacing’s I have listed in the other document (RC HO TRAIN SPECS) and they all work fine.
Multisection Isolation Block (MIB)

4 Momentary on switches used to momentarily supply power to isolated sections on the MIB. As diagram suggests the last isolated section is not connected. They are connected in series so that switch 1 has to be activated before switch 2 will become active and so on. This is an example only of different available switches.

The MIB is designed to suit gauges from 9mm to 16.5mm track.

The MIB’s Standard Length Dimensions and Spacings
THIS IS MY TRACK LAYOUT WITH THE TWO MIBS IN PLACE

MIB BLOCKS, Isolation blocks.

positive DC

negative DC