

Track Pickups

Disconnecting the track pickups from your battery powered loco insures that you can run anywhere, on any track, along with other locos, of any kind. Your loco will be self propelled and free from any external control systems.

Track power requires a means of getting the power from the track to the motor inside the locomotive. Track Pickups may be in the form of bushings or brushes rubbing against the drives wheels, and/or sliders or skates dragging on the rail. There are usually multiple pickups points on the loco and perhaps some in the tender. All of the pickups on the left rail go to one side of the motor, and the right rail to the other side of the motor. There may be some switches or factory electronics in between.

Conversion to Battery Power requires two basic steps:

- 1) Locate direct connections to the motor to connect your new RailBoss
- 2) Disconnect/isolate the track pickups from the motor to avoid damage to the RailBoss

The track pickups are usually connected directly to the motor wiring inside the loco. Following the track pickup wiring will lead you to the motor wiring. In some cases, usually diesels, you can simply unplug or cut the wires to the track pickups. Removing the bottom plate of the motor block may give you access to physically remove the brushes and sliders.

After you have made the connections from the motor to the RailBoss M+,M- terminals, and you think you have isolated the track pickups, test the wiring with an ohmmeter. Check from the M+ terminal to every wheel on the loco, then M- to every wheel. Every reading should be an open circuit or greater than 100K ohms. If you have a short (near zero ohms), then you still have a connection somewhere.

What if I don't disconnect the track pickups?

Your new battery conversion will run just fine, as long as there is NO POWER on the track in any form. Any power on the track will damage the RailBoss. A track powered loco will have power on the rails from its power pack. Or another battery powered loco that also hasn't disconnected its track pickups will put also put power to the track.

So, if you want to run multiple battery powered trains on the same track, or run along with a track powered train, you must disconnect your track pickups to avoid damage to your RailBoss (or any other battery power control).



