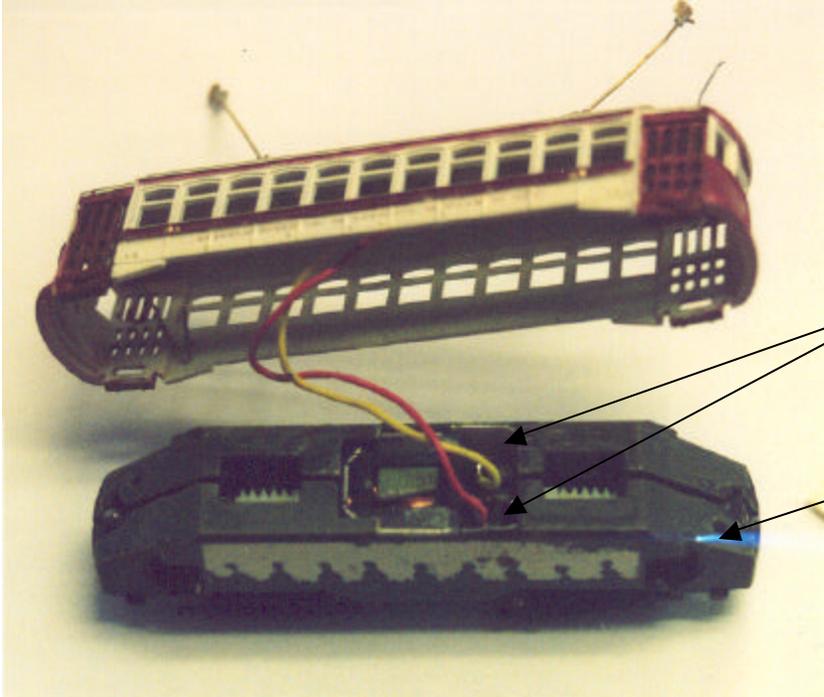


Converting the Bachmann trolley to live overhead

Start by taking off the shell. Then remove the plastic poles from the Bachmann shell – these should simply pull off or possibly by pushed out from inside the shell.

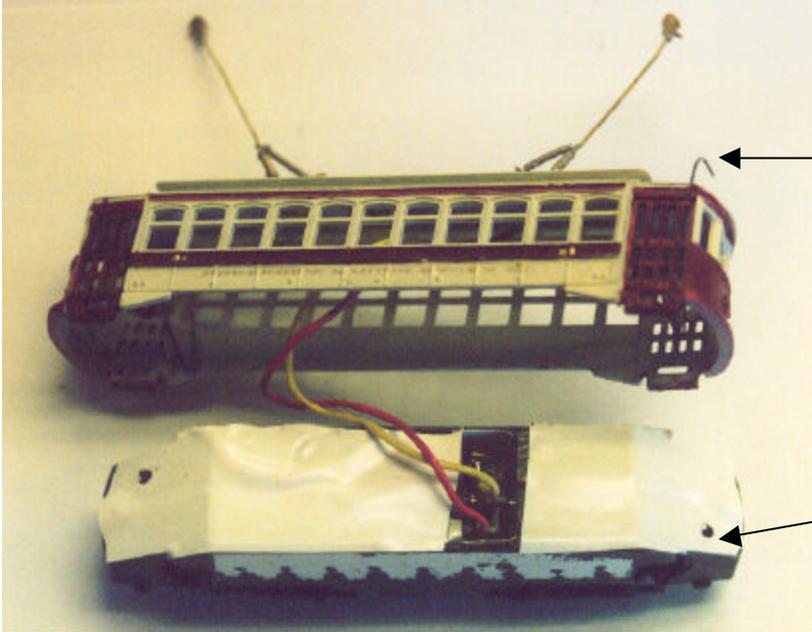
Next remove the screws holding the two chassis halves together. Make sure you don't lose any small parts (insulators, nuts, etc.). At this point inspect the crown gears on the trucks for cracks (common). If cracked replace them! Note the end of the motor that contacts the chassis halves and mark the chassis. Make sure you mark both halves of the chassis. Using a saw, file, Dremel tool, etc remove material from the chassis. Make sure you keep the motor away from this process as little bits of metal can work their way back into the motor if you are not careful! Once you have removed a bit of the chassis material, test fit the motor and check for continuity. Continue removing material until there is no continuity between motor and chassis halves.



Remove material here

Drill here & other end of other half of chassis

Using two pieces of 22ga (or 24ga) wire, solder one wire to each motor contact and other ends of wires to trolley poles. Make sure poles rotate freely. Make sure solder joints on motor don't touch chassis. Reassemble the chassis. Use electrical tape to isolate the top of the chassis.



Piano wire hook

Make hole in tape for drilled holes

Slip the shell onto the chassis, but not all the way. With your small drill bit, come from underneath the chassis and extend the small holes up through the roof. Using two pieces of piano wire (one for each end), bend back a section about 1/4" long. This should make a very tight V shape. Stick this through the bottom of the chassis so the bottom of the V is down and the long end of the wire is sticking through the roof. Make the bottom of the V flush with the bottom of the chassis (or up to 1/8" inside the hole). Cut the piano wire about 1/8" above the top of the clerestory roof line and bend a small curve in each one to act as a hook for the poles on the roof.

When the poles are in the hooks, the circuit is completed to the motor. When one pole is up the car travels in one direction, when the other pole is up it travels in the other direction – no need to switch the polarity on the throttle... If you don't want this feature, then simply isolate only one side of the chassis from the motor and wire both trolley poles to the one isolated motor side.



Final look of trolley