

Instructions

Art-Nr: 7024 Railbus-motor coach lighting white

Art-Nr: 7034 Railbus-motor coach lighting yellow

1. These parts are not suitable for small children. There is a danger of swallowing.
2. The product version 7024 can be seen in figure 1. These instructions are part of the product. Please retain them well. Do not worry about the yellow component having a white, transparent LED, and the white component having an orange LED. Even if letting the white component shine, it appears a bit odd. Only inside the body and behind the light conductor, the white light appears as supposed with a cast of yellow.
3. This component is designed for voltages up to 10 Volt. The component can not be used on digital trains. Only employ the component for its intended usage. Incorrect application and overvoltage can destroy the product. We do not assume any liability for any damages caused by incorrect usage.
4. All the parts of the component are firmly soldered. The small LEDs sticking out in front are the most damageable part of the whole circuit. Please do not try to pick and handle them with any tools, avoid any impacts and do not get it jammed in the body. If you find any of the soldering points damaged, do not try to resolder them yourself. The small LEDs are extremely sensitive to heat. Soldering for too long or at too high temperatures will destroy the LEDs. If anything of the component is damaged, better contact your local dealer, he might be able to help.
5. These lighting electronics will only work if the original lighting has been working before. If the original bulb has not been working before, you should first repair your locomotive. Try with another bulb. You won't need it anymore in the locomotive afterwards, but you can use it for a different purpose afterwards. It is absolutely necessary to do a function test of the locomotive to make sure the original locomotive lighting is working correctly. Only then you can be sure that the new lighting electronics consisting of the two small electronic components will be working correctly as well.
6. For the installation of the electronics, remove the body.
7. Remove the original lamp by holding the bulb and pulling it out to the front. The easiest way to do this is with the help of some tweezers.
8. Now take the electronic component out of its package. The black condenser is pointing upwards, the LEDs into running direction. Now insert the component from above into the socket where the bulb has been before, figure 2. Push the component carefully from above until it sits on the transparent plastic and is held at its back by the two current collectors. Take care that the component sits way in the back in the vertical slot. If this is not the case, take it out and try again. Contrary to the original bulb, when using the new electronic component the lower slot remains vacant. Do not try to force in the component, some parts are very likely to break. In the end, the component should be in a horizontal position and it is important that it has been pushed way into the back, figure 3.
9. Now do a function test by putting the locomotive on the tracks and letting it run into both directions. The LEDs should be shining in both running directions. If everything works fine, you can put your locomotive back together again.

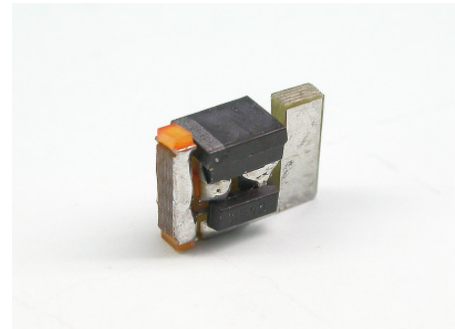


figure 1: The component railbus-motor coach lighting

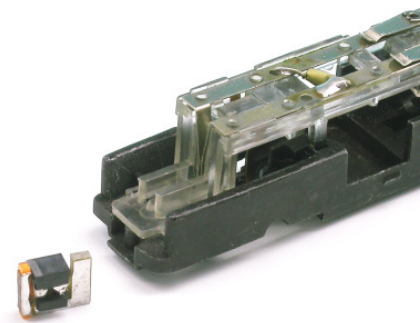


figure 2: Installation of the component

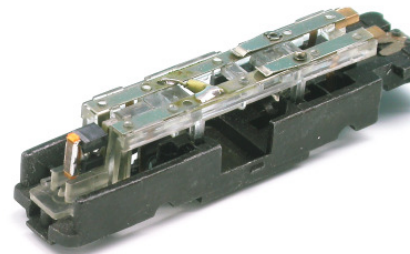


figure 3: Correct position: The component pushed in completely.

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10. Carefully put the body back on. Watch out that no part gets jammed and that the body closes completely. Check again that the body stays on tight and the undercarriage can not fall out.
11. A last function test now shows the terrific improvement. Almost independently from the running voltage, the lights at the outside of the locomotive body now are shining brightly and in an enjoyable color. Additionally the LEDs also disperse a little light to the inside, so that here you have some extra lighting as well.
12. The only requirement for the new lighting electronics is the use of a pulse-modulated or pulse-width-modulated running controller, as nowadays is used everywhere in the Z-model world. You will get another specially nice effect when using our controller, since thanks to an additional function it still lets the lights shine when the train is standing.
13. If the white light appears too yellowish, you can wipe away the orange coloring with some nitro dilution. The light then gets whiter, but still stays without any bluish cast. If at some locomotives the upper head light appears too bright, you can cover the upper LED carefully with a black Edding 400 pen. If this gets too dark, you can simply remove the black color again with some thinner. But be careful, because by doing this, you easily remove the orange coloring as we.., then you have the lower lights in a yellowish color, and the upper light in pure white. Read more about this under the point "Tips and tricks" at www.z-hightech.de.
14. We are proud that with our new Z-model train technique we have come another step closer to the original trains.
15. High Tech Modellbahnen manufactures its products with the greatest possible care. We issue a guarantee and warranty according to legal regulation. Should you find any new product you just bought defective, please contact your local dealer.
16. It can always happen that something gets damaged by inappropriate use or simply breaks. Since the parts are very small, it is not advisable trying to repair broken parts by yourself. Please contact your local dealer who might be able to save them instead of a self-repairing try that might end up in a total economic loss.

Now enjoy your new locomotive lighting and always have fun with your model trains.

*High Tech Modellbahnen
97456 Hambach
www.z-hightech.de*