



2010 43QGP Allegro Bus

2/23/2011, v1 1/7/2014

SIXTH coach modification v1- **REPLACING G4 HALOGEN LAMPS WITH LED G4 LAMPS.** The 2010 43QGP Allegro Bus has 63 G4 Halogen lamps installed in various parts of the ceiling. Each one of those lamps consumes 800mA of current, making the current load 50.4 Amps when every lamp is turned ON. We replaced 47 of those most used 63 lamps with the LED G4 version sold by Dallas at 3H electronics. When the same 63 lamps are turned ON after the 47 lamps were replaced with LED G4 the power consumption is 20.3 Amp hrs instead of the 50.4 Amp hrs before. That is a power savings of 30 amps per hour at 12 volts. A picture of the new LED G4 lamp unit is below.



However, as with everything there is no free lunch, somebody pays. Each of these LED G4 lamps cost \$ 7.00 plus 8.5% tax, our cost to replace 47 of those G4 Halogen lamps was \$ 356.96.

22 LED G4 lamps are installed in the living room ceiling and they are usually all ON at the same time, the power savings in those lamps alone save us 14 Amps when they are turned ON.

The light different between the two lamps is very subtle, the LED - G4 lamp is slightly more yellow/green while the G4 – Halogen is more pink/rose in color, the Halogen lamp has more light output but the LED is easier on my eyes.



Two rows of our living room ceiling LED – G4 lamps.