

April 2, 2013

Tried and True - Yellow and Black Goes Green

Carolina Thomas Bus Buzz # 109



Dear Tom,

Tried and True - Yellow and Black Goes Green

The latest update on the EPA's emissions technologies

For the past several years, we have informed you about the specific EPA emissions path Thomas Built Buses was taking for all buses equipped with diesel engines, namely, SCR-DEF (Diesel Exhaust Fluid) technology. In retrospect, this decision has proven to be the correct decision. School districts operating Thomas Saf-T-Liner C2 buses equipped with SCR-DEF engines are now experiencing the best fuel economy and the lowest cost of operation of any emissions system currently in use.



At the beginning, when manufacturers were making the critical decision about which of the competing emission systems to invest in, there was a flood of negative information disseminated to customers about the anticipated problems and concerns associated with SCR-DEF technology. Previous experience with SCR-DEF in other countries and applications had proven to us that these concerns were simply unfounded. Additionally, we did not see the purported advantages of investing in more EGR technology. With this in mind, we stayed true to the advice of our manufacturer Thomas Built Buses and chose to go with SCR-DEF technology.

To date, we are happy to report that SCR-DEF technology has performed extremely well in actual operation and has proven that ours was the right decision.

We are now hearing that other manufacturers are planning to switch to SCR-DEF technology because of its success and possibly due to continuing problems with EGR technology. We have even heard reports that these manufacturers are planning to switch to the same engines Thomas uses, or at least to the same or similar SCR-DEF emissions system. While we cannot know for certain how these reports will play out - time will tell - we can have confidence in our initial recommendation to invest in SCR-DEF technology in the face of its detractors, and in our commitment to you, our customers. You stuck with us, we delivered on our commitment to you, and together we succeeded. So to you - our loyal customers - we gratefully say, "Thank You" for your confidence in us.

The following information about SCR-DEF technology and other "green" efforts is further validation that the yellow and black Thomas school bus is really "green".

- The Thomas Saf-T-Liner C2 with a Cummins ISB 220 HP engine fully meets 2013 EPA Emissions **with absolutely NO emission credits** including NOx ratings of .20 g/bhp-hr.
- The Thomas Saf-T-Liner C2 with a Cummins ISB 220 HP engine meets the *GHG14 regulation without requiring customers to have vehicle speed limiters (VSL) or automatic engine shutdowns (AES). This regulation starts in 2014 and we already comply.
- Thomas Built Buses is the first school bus manufacturing facility that is 100% landfill free. All byproducts of manufacturing your Thomas bus are 100% recycled. This reduced waste to a landfill by approximately 1200 lbs. per bus. This is an incredible effort!
- Thomas Built Buses uses solar energy in their manufacturing facility and provides excess power generated back to the local power grid.
- Thomas produces alternative energy style vehicles in Propane, CNG, and regenerative hybrids in addition to the cleanest and most fuel economical Type C available in the industry, the Saf-T-Liner C2.

[Customer testimonial videos](#) and [additional information](#) about SCR-DEF technology are available on our website.

Thanks again for your loyal support and for being a valued Carolina Thomas customer.

Sincerely,

Buzz and all my Tried and True Friends at Carolina Thomas

**GHG14 is a mandatory CO2 emissions regulation that starts in 2014. The EPA's aim is to reduce greenhouse gas emissions while improving fuel economy. Input factors include aerodynamics, tires, speed limiters, idle shutdown features, and weight reduction.*