Subject: Transit Busses, Warranty, Hours of Operation

Main requests:

- 1. Extend warranty engine run hours from 3,000 hrs, to 9,000 for transit applications with extended warranty packages.
- 2. Require warranty service campaigns on shared sub systems between ISB and ISL engine platforms to apply to both equally.

Background:

There are currently only 2 diesel engines approved for transit bus applications in the state of California: Cummins ISL and Cummins ISB. The ISL is used in most standard 40' diesel buses in the state. The ISB used for some smaller 30' buses, and most hybrid diesel electric buses in the state. These engine platforms share many of the same sub-components including most of the after-treatment systems. In transit application engines tend to see a higher level of idle time as compare to other vocations. This is inherent to the stop and go nature of transit routes. This results in relatively few miles traveled per operational hour. In most cases transit engines reach the end of their warranty period via hours of operation limit.

Comments:

VTA, like many transit agencies, purchases extend warranties. VTA regularly see its extended warranty fall short of expectations when the Cummins technician reports that the engine has exceeded its operational hour limit of 3,000 hours. VTA has been unable to successfully change this limit via negotiations with Cummins. VTA requests that the hour limit be raised to 9,000 hours.

VTA runs a large fleet of hybrid buses, and is committed to transitioning its entire fleet to hybrid or full electric buses in the future. VTA operates both ISL and ISB engines of similar model years, and has seen various field service campaigns to make critical system improvements post vehicle delivery to both engines. On several occasions VTA has noted long term durability issues with sub-systems shared between the engine platform after-treatment systems. These issues are sometimes only addressed on the ISL platform. The most critical have been the EGC (Exhaust Gas Cooler) and the SCR (Selective Catalytic Reduction) campaigns. These systems have been replaced by Cummins for the ISL engines only with improved and more durable designs. VTA's ISB engines have nearly identical units as those replaced on the ISL engines (same size, connections, sensors, operational conditions etc). The older design based ISB units are regularly failing before their expected end of life. VTA requests sub-components shared across platforms be treated equally under field service retro-fits/warranty service.

Sincerely,
-Christian ReifVTA Bus Maintenance Engineering

PS Please note that my last of employment with VTA will be 6-29-18. If you have follow up questions after that date please direct them to Rocky Bal, or James Wilhelm at VTA.