May Edition of Natural Gas Engine Tech Talk

Jason's Tech Tips:

Engine Cylinder Liners

Over the years we have seen a number of times shops incorrectly identifying liners as scuffed, polished, worn, discolored, etc when attempting to troubleshoot other engine performance related symptoms. Usually this ends up becoming an expensive repair involving fully replacing the Pistons, Rings, and Liners, when there really isn't a need. The service engineering organization has put together a service bulletin to provide reuse guidelines for cylinder liners and supplements the information provided in the Service Manuals. Please review the new service bulletin with regards to liner reuse guidelines. You must be logged into QSOL to open the document, see QSOL log in Link Below

Top Two Most Frequent Questions:

Low fuel pressure and engine misfire, some of the possible causes for these complaints:

- 1. Low fuel pressure: The most common cause for low fuel pressure can simply be low fuel level, high pressure filter plugged up, or the fuel tank valves are not fully open.
- 2. Engine misfire: The most common cause is missed or extended spark plug replacement intervals, missed or extended overhead adjustments followed by not using Cummins genuine spark plugs, mis-gapped plugs, out of spec valve lash or finally fuel quality can cause misfire.

New this month:

Performance Engineering / Rear Axle Gearing Resource

Christian Chrzanowski is now available to you for rear axle gearing solutions with your renewable natural gas engine. Be prepared to provide Christian with: Engine model, vehicle application (regional haul, national, LTL, TL) average loaded GVW, transmission make and model, max road speed and gear down protection settings. (contact Christian at: christian.chrzanowski@cummins.com)

Cummins QuickServe Online

Cummins QSOL is a great technical resource available that provides information specific to your Cummins Engine, including: your Owners Manual, the Parts Catalog for your Engine Serial Number, and engine dataplate information for your engine and much more.

Click here to register. A limited version of QSOL is available to you free of charge

New Renewable Natural Gas Engine Resource Webpage:

Cummins has released a new Renewable Natural Gas Engine webpage featuring engine specifications, emission calculator, customer testimonial videos, engine and fuel technical documents, maintenance guidelines by engine. Click here to access the website.

Technical Resources:

Maintenance and Operation Quick Reference Guides:

B6.7N

L9N

ISX12N

Jason Bauer's Maintenance Tip Videos - Click Links Below

Maintenance Intervals

Natural Gas Engine Oil

Ignition Coil Maintenance

Fuel Filter Maintenance

Spark Plug Maintenance

Tips for Success

Minimum methane number requirement for Cummins Natural Gas Engines:

C Gas Plus, B Gas Plus, and L Gas Plus	65
ISL G, ISX12 G, ISB6.7 G, and all 2018 engines	

GHG Emissions Calculator

Fuel Quality Calculator

NOx Calculators

https://www.logisticsmiddleeast.com/supply-chain/31526-agility-carbon-measurement-tool-certified-by-the-carbon-trust

https://afleet-web.es.anl.gov/hdv-emissions-calculator/

Recommended Maximum GVW for Best Performance & Efficiency:

B6.7N	33,000lbs
L9N	66,000lbs
ISX12N	80,000lbs

CES 20092 Oil Provider Recommendations

For the latest list of recommended oil providers click <u>here</u>.