

NATURAL GAS



## NATURAL GAS. FUEL YOUR FUTURE.

The use of natural gas-powered vehicles has grown in popularity in recent years. The cost of natural gas fuel is significantly lower than diesel fuel and lower emissions make the fuel more environmentally friendly. Domestic availability decreases our dependence on foreign resources. And the expanding natural gas infrastructure continues to make fueling more and more convenient. All of these factors have made natural gas an area of focus of Daimler, our parent company. Our corporate initiative, Shaping Future Transportation, fosters the development of new, sustainable technologies that will benefit the trucking industry and the communities we call home. That's what we call running smart.



*Run Smart™*



## RIDE WITH THE LEADER.

Freightliner has been building natural gas trucks since 2008. Our natural gas-powered Cascadia® model has proven its performance for a variety of applications, including local haul and regional distribution fleets. The fuel savings alone can make a significant impact on your

business. In most major markets, the availability of fuel makes route management easier than ever. Tractors can be fueled by liquefied natural gas (LNG) or compressed natural gas (CNG) depending on customer preference. CNG is also available for straight truck applications.

### POWER AND PERFORMANCE

The Cascadia is powered by a Cummins® Westport ISX12 G engine, which features horsepower and torque ratings up to 400 HP/1450 lb-ft. It offers stoichiometrically-cooled EGR combustion technology with spark ignition. Maintenance-free aftertreatment system with a three-way passive catalyst reduces complexity. Because it is a spark-ignited engine, it does not require diesel pilot injection, which means the Cascadia does not require diesel tanks and fuel.

### CUMMINS WESTPORT ISX12 G NATURAL GAS ENGINE

- › Uses stoichiometrically-cooled EGR combustion
- › EPA 2013 and CARB emissions standards compliant
- › Available with up to 400 HP, 1450 lb-ft torque
- › No SCR aftertreatment system required
- › Maintenance-free exhaust system
- › No DPF regeneration, cleaning or replacement
- › Spark ignited
- › Dedicated natural gas engine – no dual fuel
- › Reliable and durable
- › Highest power-to-weight ratio in its class
- › Optional engine brake available
- › Shares many components and parts with ISX diesel engine, renowned for its power
- › Domestic fuel source reduces dependence on foreign oil

### FACTORY-INSTALLED PEACE OF MIND

The Cascadia natural gas model features a factory-installed and warranty-covered natural gas engine, fuel tanks,\* and related components, including a standard methane detection system. The back-of-cab and rail mounted CNG tanks\* Freightliner installs at the factory are Type IV plastic composite tanks, wrapped in carbon fiber and feature an expected life span of 20 years.

The LNG tanks are constructed of stainless steel. Both the CNG and LNG tanks featured on Freightliner products meet or exceed all applicable safety standards. In the rare occurrence of a CNG tank puncture, the fuel will simply vent into the atmosphere, rather than pool on the ground.

### » CNG FUEL TANKS

- › 25-DGE (diesel gallon equivalent) tanks back of cab, up to four (100-DGE total)
- › Dual or single 40- or 45-DGE rail-mounted (90-DGE total)

### » LNG FUEL TANKS

- › Dual or single 150-gallon (70-DGE each) rail-mounted
- › Dual or single 119-gallon (55-DGE each) rail-mounted

*\*Factory-installed tanks available Q4 2013*