

DAIMLER

Shaping the Future of Transportation Today



Shaping Future Transportation.
CleanDrive Technologies.
A Daimler Initiative.



Robert Carrick
Sales Manager – Natural Gas
April 9, 2013

Customer Success



Customer Success



Pioneers in Natural Gas Market

Freightliner Trucks – The leader in natural gas deliveries of conventional heavy duty trucks: 50% market share in conventional products*

- More than 2000 natural gas-powered trucks and tractors since 2008, plus 565 more on order
- Only conventional OEM producing natural gas vehicles with full factory installation and warranty
- First to publicly demonstrate ISX12 G-powered vehicle
- First to drive a loaded heavy duty commercial truck cross-country on publicly available CNG



M2 112 NGs Delivered / Customer Experience

Vehicles delivered:

- DAIMLER has DELIVERED over 2000 NG Vehicles
- SEGMENTS:
 - LNG & CNG port tractors
 - LNG & CNG food delivery tractors
 - CNG regional haul tractors
 - CNG Refuse tractors
 - CNG Sewer trucks
 - CNG Gas Utility trucks
 - CNG Municipal Gov't trucks
- 565 on order, quotes out on 1000 more
- 550 LNG (PORTS) and 1450 CNG
- 900 Certified for 80K



What's Driving Natural Gas?

- Lower fuel costs and less price volatility than diesel fuel – quick payback
- Dependable spark ignition engine technology
- Simple after-treatment - **NO DPF, NO REGENS**
- No SCR required
- Reduced GHG emissions, 20% Average
- Noise reduction – ten (10) db reduction vs diesel
- Domestic fuel/energy security/NAFTA Jobs
- Renewable fuel technology advances
- Education- No longer mystery fuel
- Infrastructure is finally improving

CNG
LNG
Diesel



	Diesel	CNG
MPG	6.0	5.4
Miles/Year	80,000	80,000
Fuel Price	\$4.04	\$1.80*
Gallons/Year	13,333	14,815
Fuel Costs/Yr	\$53,867	\$26,618
Annual Fuel Savings	Yrs Payback @ \$40,000 Premium	
\$27,249	1.47	

Freightliner Experience: Full Factory Installation

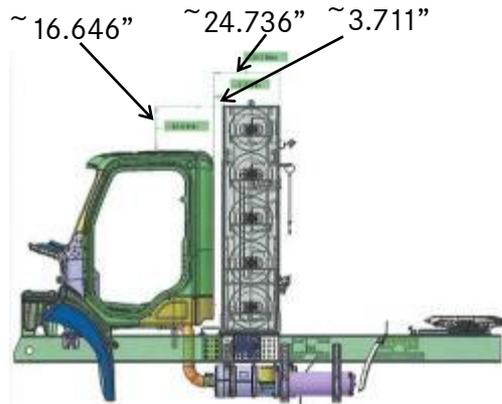
- All Freightliner M2 and 114SD natural gas trucks & tractors manufactured on the production line at Mt Holly, NC plant
 - ISL G and fuel tanks installed on the production line
 - Orders placed through same tool and process as diesel vehicles
 - **All** Natural Gas components factory installed and feature full factory warranty!
 - CNG compression station on site – tanks filled with fuel before shipment to customer
- Cascadia tractors will feature full factory installation of engine and tanks at official start of production at Cleveland, NC plant in 2013



Customer Purchase Process – Natural Gas

Research the Business Case; May be an 18 Month Process!

- FUEL – FUEL – FUEL – FUEL – FUEL – FUEL
- CNG or LNG?
- Planned Stations?
- Weight/length differences?
- Funding availability
- Service Availability?
- Shop Requirements
- Warranties
- Resale/Residuals
- Driver reactions and Training



Town of Smithtown (NY)



CUMMINS ISX12 - G

Freightliner Cascadia SOP Q3 2013

Target Markets

- Faster-Farther-Higher

Platform & Technology

- ISX11.9 base engine
- Spark-ignition with three way catalyst (TWC)
 - Same technology as ISL G
 - No DPF, SCR, or Regeneration
 - Operates on CNG or LNG
 - 400 HP/ 1450 Ft Lb Torque
 - Allison Automatic or Manual Transmissions
 - Engine Brake Available



Cascadia / ISX 12 G Rollout

- Three Units Presently in Test
- Five Regional CNG Demos to be Deployed in April
- Pre-Series Build Starting in April Based on Engine Availability (350 / 1450)
- Full Production September 2013 (400 / 1450)
- Launch Group One will include Work Spec with Allison Transmission
- Launch Group Two Will Include Manuals and Sleepers

FIRST EVER NATURAL GAS NORTH AMERICAN TRANSCONTINENTAL TRIP!



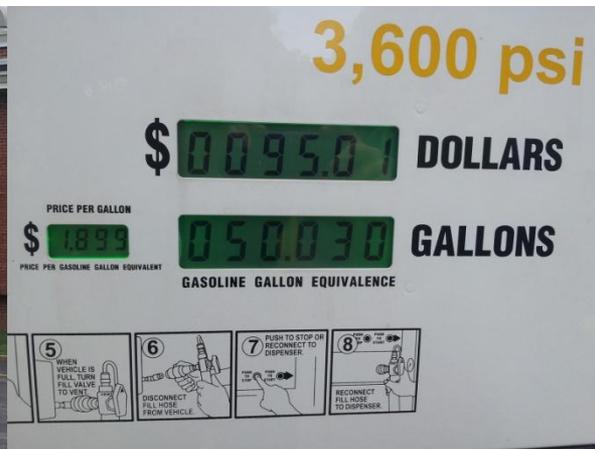
LA to DC on CNG Cross Country Tour Summary

- What: Drive Cascadia with ISX12 G from Long Beach, CA to Washington, DC
- When: Began following ACT Expo, which ended May 17, 2012. First stop on May 18. Tour ended at dealer meeting location in Washington May 24.
- Where: Four (4) stops between Long Beach and Washington:
 - Phoenix
 - OKC
 - Little Rock
 - Nashville



CNG Cross Country Tour – The Return Trip

- What: Drove Cascadia 113 with ISX12 G from Richmond, VA to Los Angeles, CA
- When: Began July 13, 2012 and concluded July 25, 2012 in Los Angeles, CA.
- Where: Tour traveled from Richmond up I-95 through DC, to I-70 west to Kansas City, up to Omaha and along I-80 corridor to Salt Lake City, then down I-15 to Los Angeles.
 - Three day stop at Cummins Indianapolis/Columbus, IN for testing purposes



The Next Generation: Filling The Gap

600 hp	
550 hp	
500 hp	
450 hp	ISX15G
400 hp	
350 hp	ISX 12 G
300 hp	
260 hp	ISL G
210-250 hp	ISB7G



Cummins Goes Big-Block on Natural Gas Engines

Cummins Inc. has begun development of a 15-liter heavy-duty, spark-ignited natural gas engine for on-highway applications.

The announcement was made at the Mid-America Trucking Show in Louisville today, and builds on the recent decision to produce a factory-built, dedicated natural gas version of the 12-liter ISX engine, the ISX12.



Shaping Future Transportation.
CleanDrive Technologies.
A Daimler Initiative.

