

The Total Alternative Fuel Solution







- Headquartered in Georgetown, Texas with plants in Michigan and Texas
- Established in 1993
- Manufacturer of motor fuel dispensers and fueling infrastructure - LPG & E85
- Owns or franchises 34 fueling locations in California, Arizona, Texas and Colorado
- Develop liquid propane fuel injection engine systems
- Bi-fuel propane engine integrator





Provides a Complete Alternative Fuel Solution

Fueling

Fueling Infrastructure

•CFT LPG Skid Pack •CFT Dispensers

Engines

- Vehicle Fuel Systems
 - •BB Vision Bus
 - •6L LPI
 - •Bi fuel conversions

Fleet Support

- Fuel Management
 - CFT Pro Manager
 - Warranty & Service







Headlines

- "Gasoline Prices Soar"
- "Citing high earnings, Congress considers passing a tax on 'windfall' profits of oil companies"
- "President calls for a 'massive increase' in domestic production of ethanol"





ALL of these headlines are from the...



1970's





Where are we headed?







Where others already are...







Propane as an Autogas??

Clean, available and economical, propane is the most widely used alternative fuel in the world, with over 14.5 million vehicles currently operating on propane AutoGas.





Infrastructure Overview









Electronic Dispensers

- High frame, Commercial Style
- Key pad for secure self serve
- Attractive retail design
- Fully electronic dispenser
- Nozzle boot handle actuation
- Tri-pod safety control
- Retail Displays:
 - Total Sale Volume Price per gallon







Retail Self-Serve Dispensers

- Fully functional printer/card reader
- Retail design
- High frame, Commercial Style
- Gilbarco / Dresser Wayne gliders
- Nozzle boot with handle actuation
- Complete Retail Displays:
 - Total Sale
 - Volume
 - Price per gallon
- 12-18' hose with breakaway
- Tri-pod safety system







Fuel Management

- •Site controller and mgmt software
- •State of the art software in-dispenser
- Corporate Fleet cards
- •All major credit cards-MC/VISA/AMEX
- Clean Fuel USA cards
- •Complete reporting capabilities
- •Web based interface
- Track tank inventory levels
- •Centralized product, price, tax control
- •Multiple price and customer levels





Refueling Skid Systems

- Complete storage and pumping unit
- Includes storage tank, secured accessories, electrical control panel
- High flow rate valves, pump/motor and piping







Refueling Skid Systems

Designed for autogas specifications with 15 years of field use
Meets and exceeds all National safety requirements







Engine Overview









LPI Engine Systems

Complete, fully integrated propane fueling system







The LPI System

- Clean-Low Emission
- Simple Design
- Economical
- Superior Performance
- Safe & Supported











LPI offers:

Clean – Low Emissions

16% reduction in Carbon Dioxide

AutoGas offers:

28% reduction in Carbon Monoxide

35.6% reduction in Hydrocarbons

3.7% reduction in NOx

| <u>2010</u> | NOx Only |
|---|----------|
| EPA & CARB – Diesel Standard | 0.2 |
| EPA & CARB – Gasoline Standard | 0.2 |
| 6.0L Certification Level | 0.154 |
| -Certified with EPA & CAPB at Zero Particulate Matter | |

-Certified with EPA & CARB at Zero Particulate Matter -No need for DPF, Cooled EGR or SCR Systems





Simple Design

- Direct replacement of the OEM gasoline fuel system.
 - Sequential Port Injected
 - Utilizes the General Motors Engine Control Unit
- Developed & Certified by CFUSA at Millbrook Proving Grounds, Ltd (owned by GM Holdings U.K).
- Approximately 40,000 systems operating Worldwide





Quality Components



MULTI-VALVE Increased Fuel Flow Rates

40.5 Usable Gallons

Replaces OEM Gasoline Tank Using the Same Space







FUEL INJECTOR

Fast Open timeShort pulse widthReduced leak rate



"LPI Delivers Propane to the Intake Port as a Liquid"

Benefit:

- Vaporization occurs at the intake port, cooling the air/fuel charge and increasing air/fuel density providing power better than the gasoline engine equivalent.
- Vaporization creates a cooling effect reducing valve and upper cylinder temperatures and prolonging engine life.





"LPI utilizes bottom feed injector design"

Benefit:

- Provides a self cleaning and purging action.
- Reduces contaminant build up.
- Improves the service life of the injectors.
- Maintains fuel economy, performance and low emissions.
- Provides quiet operation.





LPI - 6.0L Target Design Criteria VEHICLE CHARACTERISTICS

- Vehicle Range:
 - Minimum of 300 miles, at 80% of maximum load
- No Loss in Performance:
 - LPI Matches OEM Gasoline HP Rating & Torque Curve
- Safety Compliance:
 - In Accordance with FMVSS, CMVSS & NFPA 58
- Warranty:
 - Equal to original GM gasoline engine warranty
 - Extended Warranty Package TBA





LPI Economics



Propane fuel price reflects the VETC Tax Credits Prices will vary based on local conditions





LPI Economics

Soft Savings

- Because propane AutoGas is at a higher octane and cleaner burning fuel than gasoline...
 - Fleet Operators experience:
 - Less-frequent Oil Changes
 - Increased Engine Life
 - Lowered associated vehicle downtime
 - Decreased engine component wear





Economics...Tax Credits

Energy Act of 2005, Sec. 1341 (e) (H.R. 6) "New Qualified Alternative Fuel Motor Vehicle (QAFMV) Credit"

- Effective 1/1/2006 through 12/31/2010
 - 50% of the MSRP difference between a conventional gasoline or diesel powered vehicle and the "New Qualified Alternative Fuel Motor Vehicle"
- Plus:
 - 30% of the MSRP difference between a conventional gasoline or diesel powered vehicle and the "New Qualified Alternative Fuel Motor Vehicle" if the vehicle has a certificate of conformity under the Clean Air Act and meets or exceeds the most stringent standard available for certification under the Clean Air Act for that make and model year vehicle





Economics...Tax Credits

- Highway Act, Sec. 1113 :
 - "Volumetric Excise Tax Credit for Alternative Fuels"
 - Extension passed in House for 2010/Pending Senate approval
 - Applicable to sellers of LPG
 - \$0.50 per gallon credit
- Energy Act, Sec. 1342:

"Credit for Installation of Alternative Fuel Stations"

- Effective 12/31/2005 through 12/31/2010
- Provides a tax credit of up to 50% of the value
- LPG fueling station, up to \$50,000

*Contact your Tax Specialist for specifics on application of this tax credit





LPI Safety

- Fuel tank is made of 1/4" thick carbon steel.
- Tanks are 20 times more puncture resistant than a gasoline or diesel tank.
- Fuel flow is automatically shut-off in the event of a fuel line rupture.



• Critical valves are mounted below the tank shell perimeter providing superior protection from damage.





LPI Safety

- Propane has the most narrow flammability range of any fossil fuel.
- Propane requires an ignition source of 940 degrees F to ignite. In contrast, gasoline will ignite with an ignition source of only 430 to 500 degrees F.

Blue Bird Crash Test

- Angled side/rear impact
- 4,000 lbs at 40 mph
- 220 PSI Tank Pressure
- Zero Leakage
- No Pressure drop







LPI Service and Support

- Match OEM engine warranty 3 year / 100,000 Miles
- Technical training available
- Technical manuals and CD provided
- Technical service bulletins
- Technical assistance hotline
- 1-877-234-1722 Technical Support Line





Supported by our current Master Dealer & Service Provider Network





Sales & Service Regions

<u>Sales</u>

- 1. Jon Van Bogart
- 2. TBD
- 3. Mike Perticome
- 4. April Dents
- 5. Hector Lemus

Service

- 1. Arie Poldervaart
- 2. Brandon Thorn
- 3. Calvin Thorn
- 4. Wayne Moore
- 5. Mike Clymer







Over 1800 GM Vortec 8100 LPI in service

















Coming in the First Quarter 2010 GM 6.0L G4500 Cutaway Van & Workhorse W42 Walk in Van Applications









Coming in the Second Quarter 2010 GM 6.0L G3500 Cutaway Van, C2500/3500 HD Chassis Cab & Type A Collins School Bus













Coming in 2010 GM 2500/3500 Complete Van & Pick Up Truck & W Series Tilt Cab Truck













SEQUENT SYSTEM TECHNOLOGY

Common Rail - Multi-Port - Sequential - Injection - System









FUEL CHANGEOVER

SPECIFICALLY DESIGNED FOR DUAL-FUEL APPLICATIONS THE OEM INJECTORS ARE SHUT DOWN BY THE SEQUENT PLUG & DRIVE ECU

CONDITIONS THAT ALLOW CHANGEOVER:

- Temperature (engine coolant @ the alt fuel regulator)
- Time After Engine Start







Sequential Changeover







EPA Certified LPG Systems (various model years)

- 3.5L Chevrolet Impala
- 3.9L Chevrolet Impala
- 4.8L Chevrolet G-Van
- 4.8L GMC Savana
- 5.3L Chevrolet Silverado
- 5.3L Chevrolet Tahoe
- 5.3L GMC Sierra, Yukon
- 5.4L Ford F150
- 5.4L Ford Expedition
- 5.4L Lincoln Navigator
- 6L Chevrolet Silverado
- 6L Chevrolet Express
- 6L Chevrolet G-Van
- 6L GMC Sierra
- 6L GMC Savana







The Bottom Line

Propane has the Lowest Cost of Startup and Overall Operation of *any* Alternative Fuel

- Low "Upfront" Vehicle Cost
- Low "On Site" Fueling Cost
- Increased Engine Technology
- Abundant, Low Cost Fuel
- Domestic Fuel
- Reduced Emissions







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