ROUSH CLEANTECH

Liquid Propane Autogas

Product Introduction & Overview

Enterprise Brand Portfolio

ROUSH Industries
OEM manufacturing, engineering, prototyping and design

Roush Fenway Racing
Dominant NASCAR Sprint Cup racing team

ROUSH Performance
Industry leading high performance vehicles

ROUSH CleanTech
Propane autogas powered commercial vehicles.

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Markets We Serve

Transportation

- Ford
- Chrysler
- GM
- Toyota
- Honda
- Hyundai
- Isuzu
- Volkswagon
- EcoMotors
- VPG
- Navistar
- Blue Bird

Defense

- Navistar Defense
- BAE Systems
- AM General
- General Dynamics
- SAIC
- Textron
- FAAC
- US Army/TARDEC
- Oskosh Defense
- Hardwire
- Astradyne

Entertainment

- Disney
- Universal Studios
- Disneyland Paris
- Universal Studios Orlando
- Hong Kong Disneyland
- Disney California Adventure
- Universal Studios Singapore
- The Henry Ford

Motorsports

- Ford
- 3M
- Aflac
- Crown Royal
- UPS
- Scotts
- Kellogg
- Valvoline
- Coca-cola
- Fastenal

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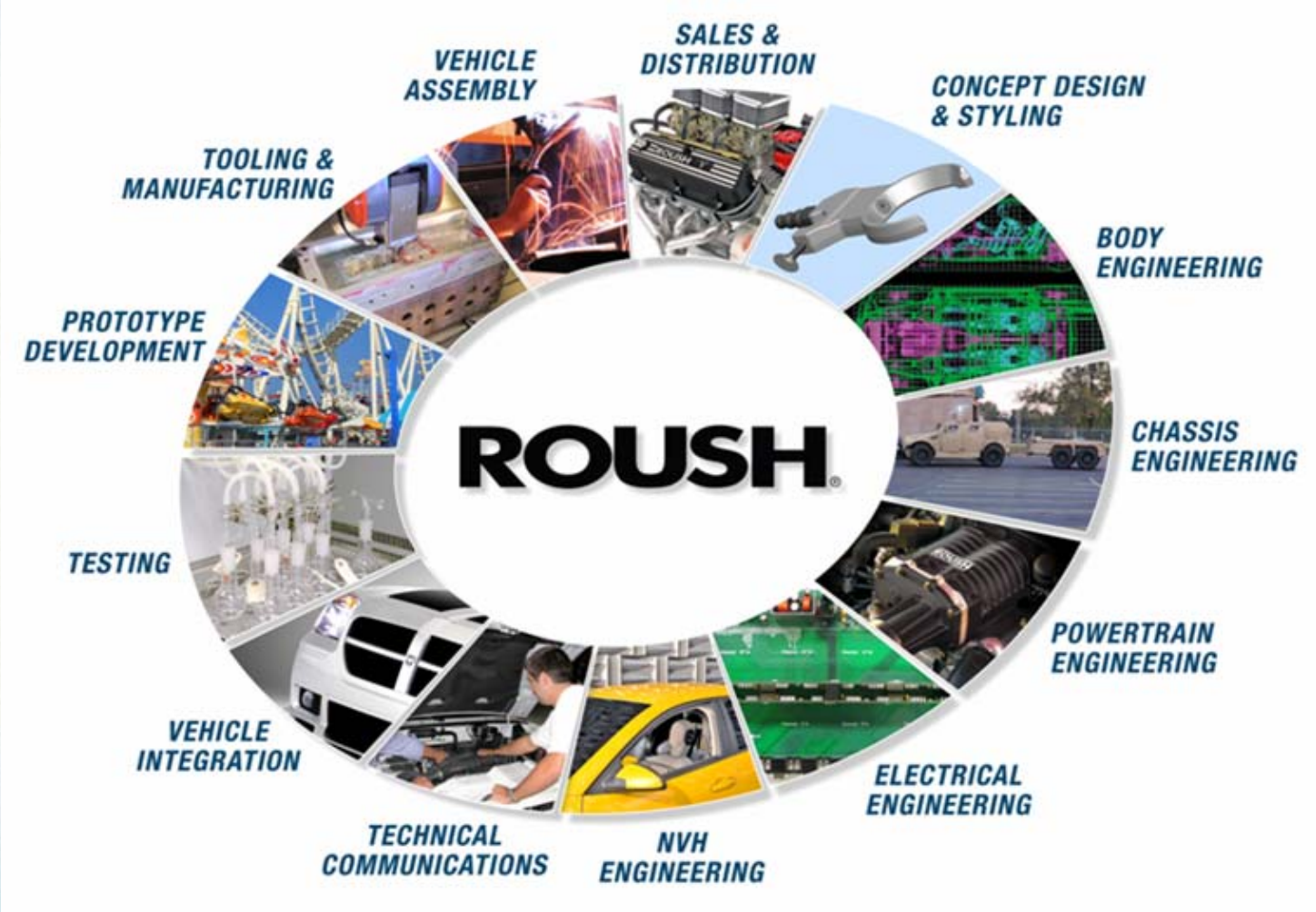
Wheel of Capability



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Alt Fuels Experience…

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Liquid Propane Autogas

- Light & medium duty Ford trucks & vans, school bus.
- Factory Ford warranty maintained.
- No loss of HP / torque / towing capacity.
- Serviceable with existing diagnostic equipment.
- EPA & CARB Certified.

Ford F-53 / F-59 | Ford E-150/250/350/450 | Ford F-250/350 | Ford F-450/550 | Ford F-650 | Blue Bird Vision | Micro Bird G5

ROUSH CleanTech

- Founded in 2010.
- Dedicated to developing quality alternative fuel solutions.
- Propane autogas focus.
- EPA and CARB certification ability.
- Platform customization to suit customer needs.
- Reduces operating costs, carbon footprint.
- OEM support through Ford and BPN dealers.
- Creating opportunities for partner companies.
- Using American fuel and American technology.

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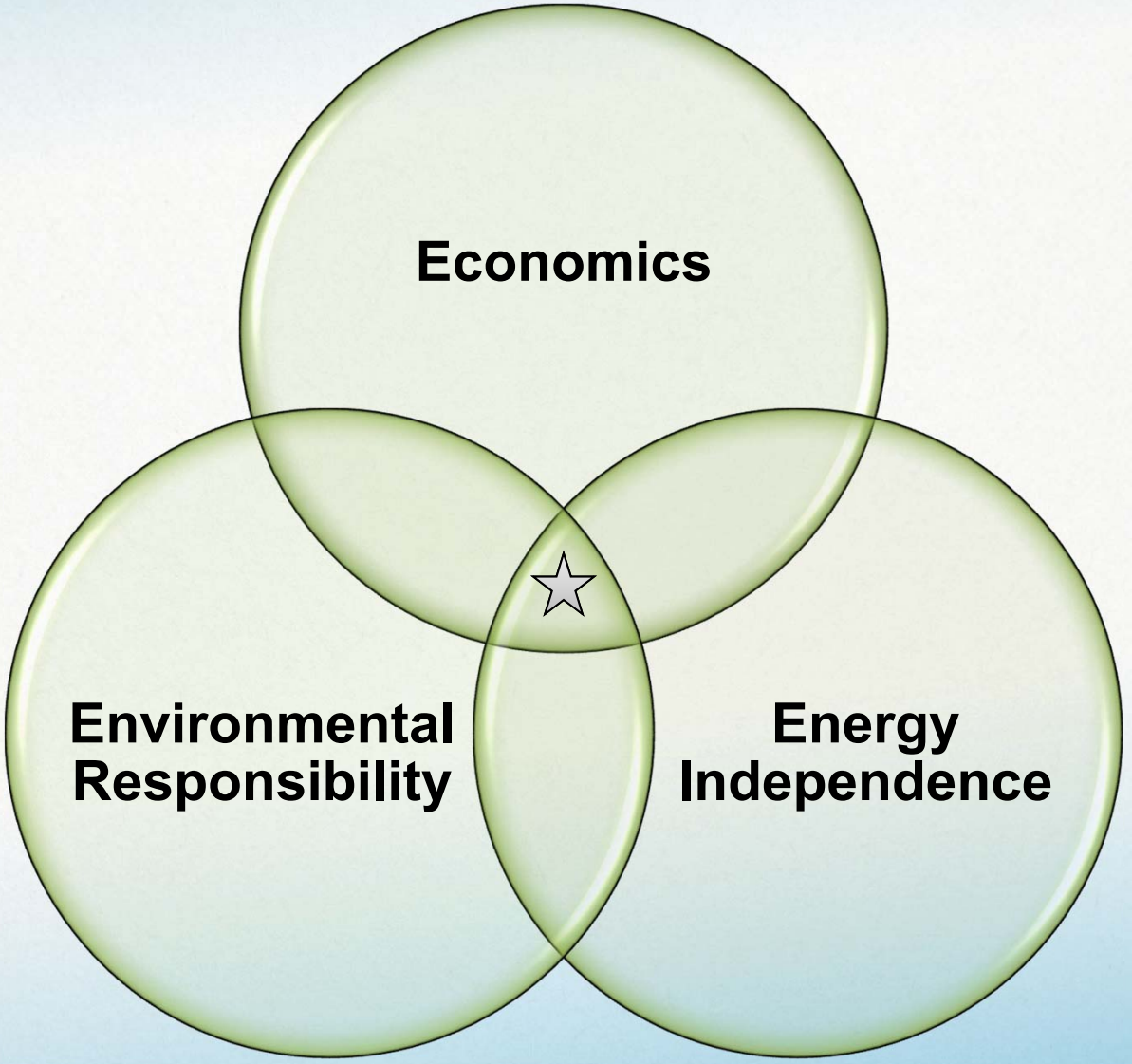
Factors for Alt Fuel Analysis

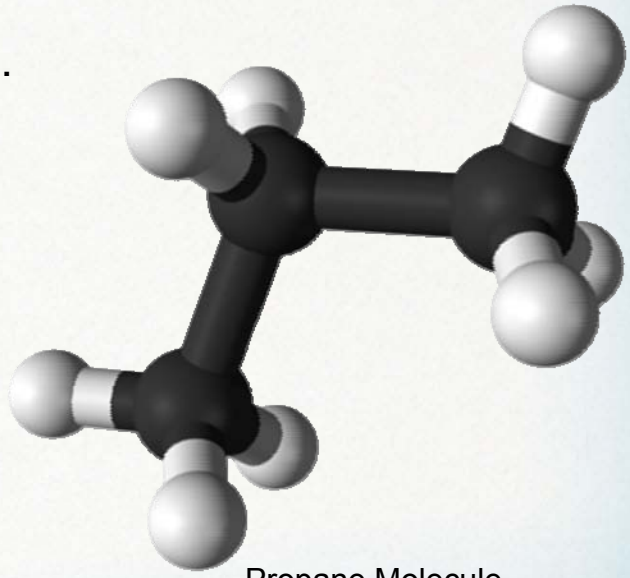


What is Propane Autogas?

- **Clean:**
  - 24% reduction in Greenhouse Gas (GHG) emissions.
  - 20% reduction in Nitrogen Oxide (NOx) emissions.
  - 60% reduction in Carbon Monoxide (CO) emissions.

- **Domestic:**
  - 90% of propane used in U.S. comes from U.S.
  - 7% of propane used in U.S. comes from Canada.

- **Abundant:**
  - Most refueling infrastructure of any alternative fuel.
  - Major natural gas shale found in northeast U.S.
  - Powers over 17 million vehicles worldwide.



Propane Molecule
(C_3H_8)

- **Safe:**
  - Low pressure (~ 200 psi).
  - Narrow flammability range.
  - Fuel tanks are 20 times more puncture resistant than gasoline.

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Product Overview – Vans & Wagons

Ford E-450 DRW Cutaway

Model Years: 2009 – 2015

Engine Size: 6.8L V10 (2V)

Applications: 156” or 176” wheelbase
Stretched Chassis
5-speed auto transmission

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Tank Size: Aft-Axle: 41 usable gallons

Technical Specs: EPA and CARB approved
GVWR: < 14,500 lbs.
Requires “91G” gaseous fuels prep package.

Order Availability: Ford Ship Through
Conversion Kits

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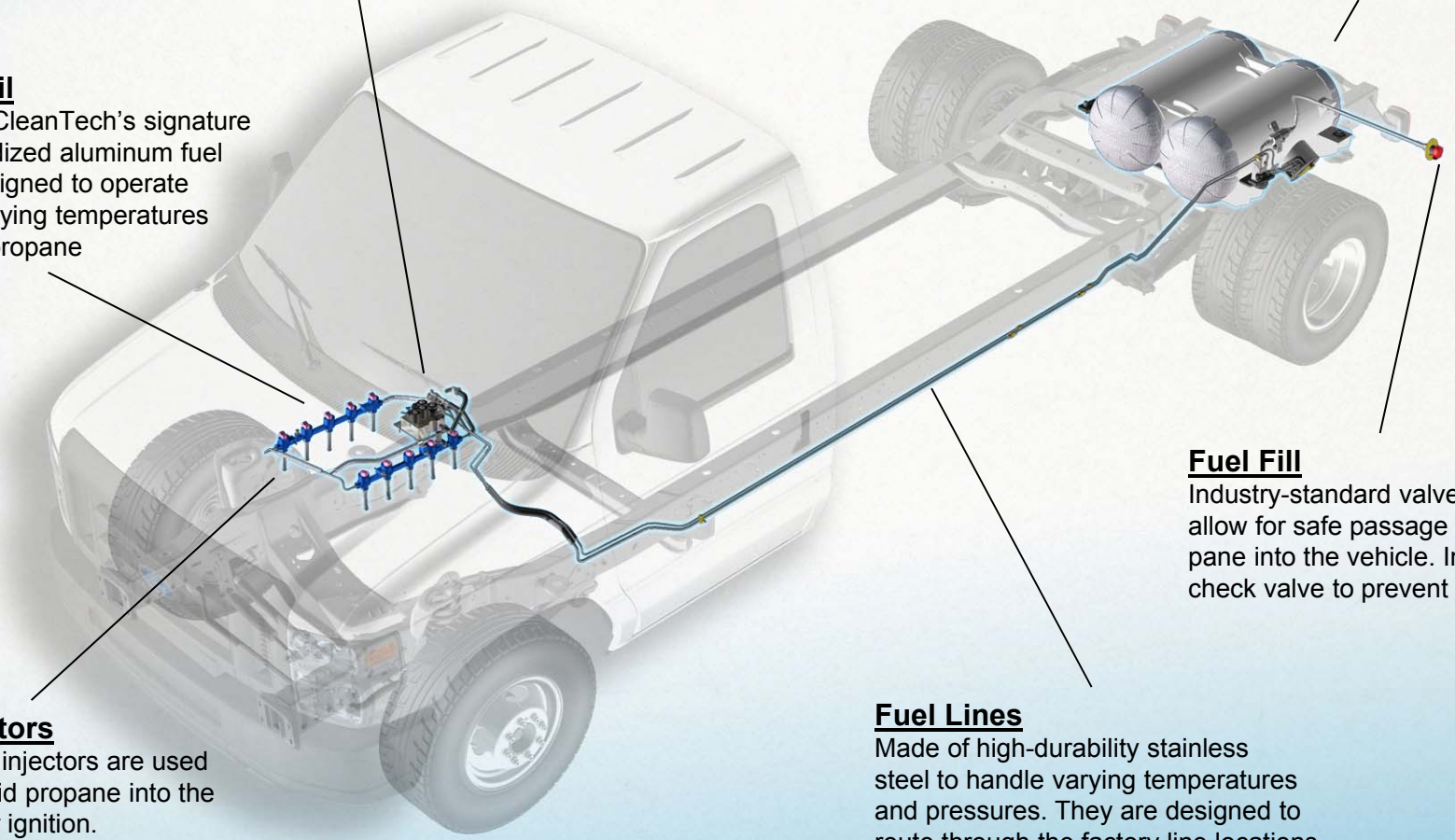
Ford E-450

FRPCM
The Fuel Rail Pressure Control Module ensures consistent vehicle performance and power on-demand.

Fuel Tank
The liquid propane autogas fuel tank meets all ASME certification standards, is 20 times more puncture resistant than gasoline tanks, and is built and assembled in the USA.

Fuel Rail
ROUSH CleanTech's signature blue anodized aluminum fuel rail is designed to operate under varying temperatures of liquid propane



Fuel Fill
Industry-standard valve designed to allow for safe passage of liquid propane into the vehicle. Includes a check valve to prevent fuel leaks.

Fuel Injectors
Special fuel injectors are used to inject liquid propane into the cylinders for ignition.

Fuel Lines
Made of high-durability stainless steel to handle varying temperatures and pressures. They are designed to route through the factory line locations.

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Ford QVM QUALIFIED VEHICLE MODIFIER

ROUSH CleanTech is a Ford QVM developer and installer of dedicated propane autogas fuel systems.

Organizations with QVM status from Ford create the engine calibration, complete the on-dynamometer calibration testing, comply with all Ford engineering requirements, and develop a vehicle component package.

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Savings Calculation

Capital Costs	Gasoline (6.8L V10)	Propane (6.8L V10)	Savings (Costs)
Total Bus Price	$75,000.00	$75,315.00	
ROUSH CleanTech Propane Conversion	$0.00	$15,995.00	
State or Federal Incentive (if applicable)	$0.00	$0.00	
Total Capital Savings (or Investment)	**$75,000.00**	**$91,310.00**	**($16,310.00)**
Operating Costs	**Gasoline (6.8L V10)**	**Propane (6.8L V10)**	**Savings (Costs)**
Total Vehicle Life (miles)	200,000	200,000	
Average Miles Per Gallon*	6.00	5.10	
Gallons of Fuel Over Lifetime	33,333	39,216	
Fuel Price (per gallon)**	$3.50	$1.50	
Fuel Tax Credit / Gallon	$0.00	$0.00	
Adjusted Fuel Price / Gallon	$3.50	$1.50	
Total Fuel Savings (or Costs)	**$116,666.67**	**$58,823.53**	**$57,843.14**
Miscellaneous Costs	**Gasoline (6.8L V10)**	**Propane (6.8L V10)**	**Savings (Costs)**
Maintenance Rate (per mile)***	$0.030	$0.015	
Maintenance Costs	$6,000.00	$3,000.00	
Fuel Loss From Pilferage / Theft	$0.00	$0.00	
Total Misc. Savings (or Costs)	**$6,000.00**	**$3,000.00**	**$3,000.00**
Gross Vehicle Lifetime Savings (Loss)			**$60,843.14**
Net Vehicle Lifetime Savings (Loss)			**$44,533.14**

Ford E-450
2015 (6.8L V10)

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Emissions Calculation

Emissions Reductions	Gasoline	Propane	Difference
Total Vehicle Life (miles)	200,000	200,000	
Average Miles per Gallon	6.00	5.10	
Gallons of Fuel Used Over Life of Vehicle	**33,333.33**	**39,215.69**	**(5,882.35)**
Carbon Mass per Gallon Fuel (lb. / gal.)	5.10	3.47	
Mass of CO_2 per Gallon Fuel (lb. / gal.)	18.70	12.72	
Total lbs. of CO2 Produced During Vehicle Life	**623,186.67**	**498,752.94**	**124,433.73**
Fewer lbs. of CO_2 Produced Using Propane Autogas			**124,434**

Ford E-450
2015 (6.8L V10)

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Flint Michigan MTA Monthly Mileage

# of Vehicles	Month		Monthly Miles	Monthly Gallons	Monthly Avg. MPG	Gallons Used	Yearly Avg. MPG	Miles Driven
72	Aug-13		221475	41518	5.34	212,159	5.38	1,142,418
72	Sep-13		223443	39487	5.66	251,646	5.43	1,365,861
72	Oct-13		266567	46802	5.69	298,448	5.47	1,632,428
73	Nov-13		258597	45766	5.65	344,214	5.49	1,891,025
73	Dec-13		251,041	44497	5.64	388,711	5.51	2,142,066
73	Jan-14		268086	46894	5.72	435,605	5.53	2,410,152
74	Feb-14		270858	47448	5.71	483,053	5.55	2,681,010
75	Mar-14		294203	50982	5.77	534,035	5.57	2,975,213
75	Apr-14		283822	49455	5.74	583,490	5.58	3,259,035
75	May-14		286995	48871	5.87	632,361	5.60	3,546,030
81	Jun-14		300926	51672	5.82	684,033	5.62	3,846,956
81	Jul-14		311,842	53330	5.84	737,364	5.64	4,158,798
84	Aug-14		311,672	53228	5.86	790,592	5.65	4,470,470
84	Sep-14		301,669	50948	5.92	841,540	5.67	4,772,139

Propane vs Diesel and Gasoline

		LPG		Diesel	Gasoline
Total Miles		4,158,798	equivalent	4,158,798	4,158,798
MPG		5.64		9.98	7.1
LPG used		737,364	projected	416,713	585,746
cost at $ 1.50		$1,106,046	$ 3.20 / gal	$1,333,816	$ 3.20/ gal $1,874,387
Total savings				$227,770	$768,341
PM savings	PM / 7,500 miles		PM / 4,000 miles		
	cost of $ 60 x 425	$25,500	cost of $ 133 x 744	98,952	$25,500
Total Cost		$1,131,546		$1,432,768	$1,899,887
Total Savings				$301,222	$768,387
Vehicle cost / mile		0.27		0.35	0.46
With a $ .50 rebate		0.18			

MTA locked in our cost for 12 months 7/2014 - 7/2015 @ $ 1.349 / gallon

Vehicle cost / mile	0.24	current
With a $ .50 rebate	0.15	If Rebate is renewed

On-Site Refueling

Ford Michigan Assembly Plant (MI)

AmeriGas Propane Tank

Shell (AZ)


La Pine School District (OR)


ROUSH CleanTech (MI)

Heritage Propane Tank

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Flint MTA Fuel Site

Flint MTA Fuel Site

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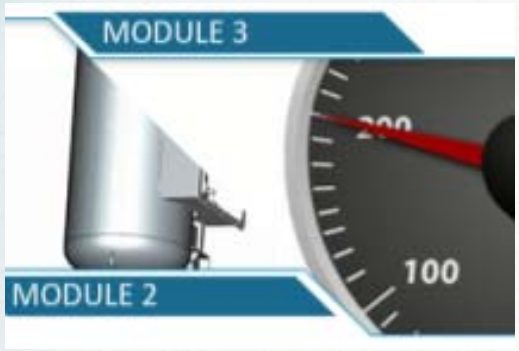
SERVICE & WARRANTY

Training, Basic Coverage
and Special Tools

Services

Product Training



Installation Support

Technical Hotline

Field Support

Warranty Support

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Warranty Claim Process and Procedures
For ROUSH CleanTech Authorized Service Centers

Warranty Claims Process:

1. Contact ROUSH CleanTech Warranty Department at 800.59.ROUSH(option 2, then option 3) to begin the resolution.
   - ROUSH CleanTech may assist in basic vehicle diagnostics to determine if the issue is related to the RO... Propane Autogas Fuel System.
2. If the vehicle concern is determined to be a ROUSH CleanTech covered component, please complete the ROUSH... Warranty Claim Form and fax it with a copy of the repair order.
   - Vehicle troubleshooting and diagnostics need to be performed as defined in the applicable ROUSH CleanTech Service and Diagnostic Manual prior to submitting the Warranty Claim Form.
   - All fields on the Warranty Claim Form are mandatory.
3. Diagnostic data, replacement part(s) and the repair procedure will be reviewed and confirmed by ROUSH CleanTech.
4. Once the repair is authorized by ROUSH CleanTech, you will receive the Warranty Claim Form back with a Warranty Authorization Number on the bottom.
5. Replacement parts will be shipped from ROUSH CleanTech directly to the authorized service center.

PLEASE NOTE: If additional work is necessary, you must receive authorization from ROUSH CleanTech prior to proceeding.

PLEASE NOTE: Any unauthorized work performed may not be covered by ROUSH CleanTech.

Warranty Parts Return Procedure:

- All defective part(s) must be returned to ROUSH CleanTech within 30 days of the warranty repair completion.
- If a Return Material Authorization (RMA) number and / or a return shipping label is not enclosed with replacement parts, please call 800.59.ROUSH(option 2, then option 3).
- Packing materials: Please use the same boxes or pallets that were used to ship the parts to you.
- Every part must be tagged individually with a part tag that includes the RMA number, last eight of the vehicle VIN number and the Warranty Authorization Number.
- All freight returns not using the provided ROUSH CleanTech return label will require you to contact ROUSH CleanTech Warranty at 800.59.ROUSH (option 2, then option 3) to schedule their pick up. You must have the ROUSH CleanTech Warranty Authorization Number available when calling.

Return Defective Part(s) to:

ROUSH CleanTech Parts Return
Attn: RMA# _____ (RMA will be included on packing slip)
12066 Market St.
Livonia, MI 48150

Field Data Analysis

Web-Based Training

Service Technician Course:

A. Propane as an Autogas.

B. Propane Autogas Fuel System Overview.

C. System Diagnostics.

D. Basic Warranty Information.

Service Manager/Advisor Course:

A. Propane as an Autogas.

B. Propane Autogas Fuel System Overview.

C. Detailed Warranty Process.

Limited Warranty

- Pre-titled vehicles:
  - Factory warranty maintained.
  - 5 year / 60,000 mile limited warranty.
- Post-titled vehicles:
  - Factory warranty maintained.
  - 12 month / 12,000 mile limited warranty.
- Limited warranty and policy manual.
- ROUSHcleantech.com/service

ROUSH CLEANTECH

Transit Customer Adoptions

SMART

RTA

King County METRO

BROWARD COUNTY FLORIDA

CARTS

MTA

THE COMET

Palm Tran

DART A Division of DelDOT DELAWARE TRANSIT CORPORATION

ROUSH CLEANTECH

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