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Commercial Vehicles



BUILT
Ford
TOUGH



A Broad Commercial Portfolio For Broad Commercial Needs





Ford Commercial Vehicle Sustainability

- Concentrate our commercial vehicle efforts on four sustainable technologies:
 - CNG/LPG – Dedicated and Bi-Fuel
 - PHEV
 - HEV
 - Battery Electric Vehicles (BEV)
- Partner with proven reliable Up-Fitters for consistent vehicle quality and performance
- Release Up-Fitter guidelines to ensure the highest quality conversions and utility to our customers.
- Develop and produce OEM Prep packages suitable for up-fitting and maintain factory warranties for Ford provided components.










Ford's CNG Plans and Policies



- Provide a broad and complete portfolio of CNG prepped engines for commercial vehicle applications
- Build a network of Commercial Vehicle Up-fitters with the experience and competency to provide a “No Compromise” solution to CNG Fleet operators
- Use existing commercial equipment up-fitters and ship-through locations to provide conversion flexibility not possible from a single source or modifier
- Evolve our industry recognized QVM Program to work with Q185 compliant Up-Fitters providing technical requirements for engine conversions ensuring durability and reliability

Ford Commercial Vehicle Offerings



Commercial Vehicle Available or Planned Vehicle Offerings	Prepped Engine	Status
Transit Connect 	2.0L 2V	4Q 2010
E-Series Strip Chassis – Commercial 	5.4L 2V 6.8L 2V	3300+ built since 11/2009 800+ on order
E-Series Van/Wagon 	5.4L 2V 6.8L 2V	
E-Series Cutaway 	5.4L 2V 6.8L 2V	
Strip Chassis – Motor Home (F-53) 	6.8L 3V	3Q 2010
Strip Chassis – Commercial (F-59) 	6.8L 3V	3Q 2010
Super Duty Chassis Cab 	6.8L 3V	3Q 2010

More to come...



QVM Support (Qualified Vehicle Modifier)

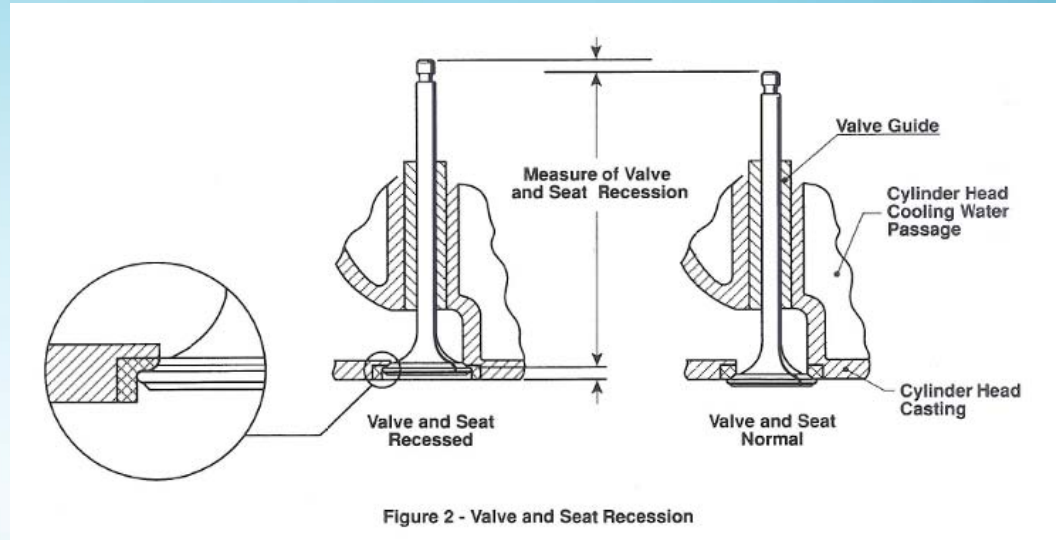


Figure 2 - Valve and Seat Recession

- Ford is offering a broad base of vehicles and powertrains that are prepped for CNG up-fit (includes premium valves, valve seats, and spark plugs to maintain high mileage durability)
- Qualified Vehicle Modifier (QVM) bulletin #Q-185 released in 11/2009 gave guidance on 5.4L 2V and 6.8L 2V E-Series and provides proper engine operating parameters to maintain Ford Engine Warranty
- Future additions to the Bulletin will include Transit Connect 2.0L, SuperDuty 6.8L 3V and more to come...
- QVM bulletin #Q-185 communicated on Ford's fleet website (www.fleet.ford.com/truckbbas/topics/qvmp.html), industry publications, at fleet events and tradeshow, and through Ford's marketing account managers.



QVM Q-185 Requirements



- Ford vehicles converted to CNG in accordance with Q-185 and supported by our QVM process will give fleet customers the confidence that Ford Motor Company stands behind the base engine warranty and that the converted vehicle has met requirements for emissions, safety, and durability.
- Requirements for conversion that must be demonstrated by the up-fitter
 - Vehicles must be ordered with the proper sales order code for gaseous fuel prepped engines
 - Modifier is responsible for warranty of the new CNG fuel system and has a service mechanism established
 - Vehicle modifier is responsible for US Federal, California, or Canadian exhaust and emissions requirements when converted to CNG
 - Modifier is responsible for applicable F/CMVSS requirements.
 - Modifier must provide information to the customer that explains CNG fuel system operation and maintenance, identify unique components associated with the CNG conversion, and provide proper contacts for parts and service of the CNG fuel system
 - New engine calibration must maintain engine operating limits specified (cylinder pressures; exhaust, valve, spark plug tip and piston temperatures; and engine speeds)



Future Planned Actions



- Continued development and release of new commercial vehicle offerings with prepped engines
- Established closer communication with and among Converters, Up-fitters and ship-through locations
- Dedicated resources for commercial vehicle development
- Monitor CNG industry growth and trends for potential OEM applications

Ford's Request to the Industry



- Volume commitments to specific models, powertrains and timing
- Endorsement of prepped engines and operating parameter requirements
- Industry support for prepped engine development programs
- Encourage participation in OEM guided quality programs (QVM)

