



ANNOUNCING
Fuel and Lubricants Seminar for Independents
Gasoline Direct Injection Engines (GDI)
Monday 9/28 or Tuesday 9/29

We are excited to host a seminar focused on the three primary causes of drivability issues commonly associated with Gasoline Direct Injection (GDI) engines:

- Ethanol Fuel Issues
- Carbon Formation (Gasoline AND Oil Carbon)
- Oil and Piston Ring Deposits

The seminar will be conducted by Gary Smith, CEO of G.S.S. Enterprises. Gary is highly experienced in training technicians in identifying and solving engine and fuel systems problems.

Gary will help you understand how and why these deposits form so radically in GDI applications, and how *paying attention to the drive cycle of the customer* can be critical in managing maintenance and acceptable system performance.

- Learn how Ethanol fuels affect the injectors, high pressure pumps, lean codes (P0171/P0174) and common Ethanol-related failures in the GDI system.
- Learn how the carbon forms, *WHY* it forms so quickly in some vehicles and how to "see" this in the vehicle's DME/PCM Data stream.
- Discuss the effects of "Swirl and Tumble" in GDI combustion, how it affects drivability.
- Learn how Injector balance and spray pattern affects the catalytic converter efficiency (P0420/P0430), combustion efficiency (Misfire Codes) and how the DME/PCM manages inefficient injectors. (Rear Fuel Trim Authority and SOI)
- Learn how synthetic oil deposits can affect VANOS/VVT performance, and why most manufacturers are returning to a "reasonable" or "adjusted" oil change interval.
- Learn how VVT/VANOS/CCV (Closed Crankcase Ventilation) Systems and RING HEALTH are the biggest controllable factors in keeping these engines from "dirtying up" quickly, and how to apply some quick testing to confirm problems.
- Learn how oil system and piston ring cleanliness is the basis for a healthy GDI engine. These engines are usually "ultra-high" compression ratio engines, some HCCI GDI applications are as high as 18:1, (Average 11-14:1). Piston rings play *the most critical role* in oil and fuel control in all GDI applications.

This discussion looks outside the realm of mechanical/electrical diagnosis, and will help the tech to understand how the fuels and oil deposits can create significant movement in the OBDII Data, how deposits contribute to common DTCs and how to analyze this in the data stream.

Enrollment Information on Reverse

ENROLLMENT
Fuel and Lubricants Seminar for Independents
Gasoline Direct Injection Engines (GDI)

The seminar is designed primarily for technicians who want to improve their understanding of GDI engines and known drivability concerns. Service Managers and Service Advisors are also welcome.

Note: Same seminar both nights. Send half of your shop each night!

MONDAY 9/28

Location: Deposit Control Systems, 4 Green Mountain Drive, Cohoes, NY 12047

Time: 5:30 PM – Dinner Served

Seminar Length: 2 ½ Hours (Conclude at 8:30 PM)

TUESDAY 9/29

Location: Deposit Control Systems, 4 Green Mountain Drive, Cohoes, NY 12047

Time: 5:30 PM – Dinner Served

Seminar Length: 2 ½ Hours (Conclude at 8:30 PM)

NOTE: FIFTEEN (15) PARTICIPANTS LIMIT EACH NIGHT

COMPLETE ENROLLMENT

Check One: Monday 9/28 _____ OR Tuesday 9/29 _____

Name: _____

Contact Phone Number: _____ - _____ - _____

SUBMIT COMPLETED ENROLLMENT

- **By fax to 518/782-7984**
- **To your BG Salesman OR**
- **Call Marcie @ 518/782-7452 with your enrollment information**