



SAE 2009 **On-Board Diagnostics** Symposium

Update on Light and Heavy Duty Vehicle

September 22-24, 2009 • Indianapolis Marriott Downtown • Indianapolis, IN



General Service Issues for OBD

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What benefits OBD brings to the Service environment

- Significant increase in on-board diagnostics
 - Otherwise difficult to cost justify
 - Cooling system monitor, misfire monitor, etc
- Common diagnostics and electronic service tools
 - Across multiple engine programs.
 - Across the industry – OEM service dealer benefit



What issues we see with OBD in the Service environment

- System level faults difficult to diagnose (e.g. High Nox out)
- OBD fault states too complex
 - Pending / Confirmed / Permanent (17 states)
- MIL On for all faults – driving up repair costs
- Multi-trip diagnostics impact shop and customer
 - Difficult to reproduce monitor conditions
 - “MIL still On” when problem likely solved



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What we'd like to see changed

- Make OBD simple for technicians
- Component level malfunction detection
- Fault repair needs to be confirmed without operating the equipment.
- MIL categories and common fault code nomenclature
- World-wide common diagnostic strategy – align ARB/EPA with Euro