

# EGCR-2008

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## Advanced course

1. G3500 Cat Gas Engine:
  - G3500 Family Features
    - History of G3500 and Changes
    - Magneto Configuration
    - EIS Configuration
    - ADEM 3 Configuration
  - G3500 Arrangements and Ratings
  - G3500 Systems Operation
    - Systems Strategy-Magneto, EIS and A3
      - Ignition and Detonation Strategy
      - Sensors, Actuators and Controls
      - Fuel System
      - Turbocharger and Wastegate
      - Cooling System
    - Performance Adjustments
      - Valve Adjustments
      - Wastegate Adjustment
      - LE and LE AFR Setup
      - GERP-Gas Engine Rating Pro
  - Communication
    - DDT-Digital Diagnostic Tool
    - ET-Electronic Technician
  - Wiring
    - Schematics for Magneto, EIS and A3
  - Troubleshooting
    - Troubleshooting Manual Usage
  - Maintenance
    - Review of Operation and Maintenance Manual
    - Valve Lash Adjustment
    - Valve Stem Projection
2. G3600 Cat Gas Engine:
  - G3600 Family Features
    - History of G3600 and Changes
    - ESS Features
    - ADEM 3 Features
  - G3600 Arrangements and Ratings
  - G3600 Systems Operation
    - Systems Strategy
      - Ignition and Detonation Strategy
      - Sensors, Actuators and Controls
      - Turbocharger, Wastegate and Choke
      - Fuel Systems
      - Cooling System
    - Performance Adjustments
      - Valve Adjustments

- Wastegate Adjustment
- Proper Performance Setup
- Pre-Chamber Calibration
- GERP-Gas Engine Rating Pro
- Communication
  - DDT-Digital Diagnostic Tool
  - ET-Electronic Technician
- Wiring
  - Schematics for ESS and A3
- Troubleshooting
  - Troubleshooting Manual Usage
- Maintenance
  - Review of Operation and Maintenance Manual

**Optional Information-Subject to Class Request**

- 3. G3400 Cat Gas Engine:
  - G3400 Family Features
    - History of G3400 and Changes
    - Magneto Configuration
    - EIS Configuration
    - AFR Configuration
  - G3400 Arrangements and Ratings
  - G3400 Systems Operation
    - Systems Strategy
      - Ignition-Magneto, CDIS and EIS
      - EIS Detonation Strategy
      - Sensors, Actuators and Controls
      - Fuel Systems
      - Turbocharger and Wastegate
      - Cooling System
  - Performance Adjustments
    - Valve Adjustments
    - Wastegate Adjustment
    - Standard, LE, and LE AFR Setup
    - GERP-Gas Engine Rating Pro
  - Communication
    - DDT-Digital Diagnostic Tool
    - ET-Electronic Technician
  - Wiring
    - Schematics for Magneto, CDIS and EIS
  - Troubleshooting
    - Troubleshooting Manual Usage
  - Maintenance
    - Review of Operation and Maintenance Manual
    - Valve Lash Adjustment
    - Valve Stem Projection

**Instructor: Al Hunt**