C.A.T.S. Tuner ECM_1D Parameter List
(ECM Configuration File Version G)

ECM Switch Parameters

Knock Diagnostic, Error 43 (X=Enabled)
Speed Speed Diagnostic, Error 24
EGR Diagnostic, Error 32
MPH Fuel Cutoff Limit (0 = RPM)
Highway Mode Fuel (X = Enabled)
Analog / Digital MAF Sensor (X = Analog)
Simultaneous/Sequential Inj. (X=Simul.)
PWM Wastegate Control (X=Enabled)
Water Injection Option (X=Enabled)

ECM Constants

Number of Cylinders
Fuel Cutoff RPM
Fuel Resume RPM
Fan On Coolant Temp.
Max Speed for Fan On
Highway Mode Spark Load Value Threshold
P.E. Spark Adv. Enable TPS Threshold
Knock Retard Enable Coolant Temp
Coolant Compensation Spark Bias
Injector Flow Rate
Highway Mode Air Fuel Ratio
Closed Loop Enable Cool. Temp Threshold
Cold Closed Loop Fuel Timer
Warm Closed Loop Fuel Timer
Cold/Warm Closed Loop Timer Threshold
Block Learn Enable Min. Coolant Temp.
Block Learn Enable Max. Coolant Temp.
Block Learn Enable Min. Load Value
BLM Cell RPM Boundary Hysteresis
BLM Cell Load Boundary Hysteresis
Minimum BLM
Maximum BLM
Minimum Integrator Value
Maximum Integrator Value
Stoichiometric Air Fuel Ratio
Minimum BPW
Minimum Async BPW
Closed Loop Wastegate Control Min. RPM
Wastegate Duty Cycle Reduction Step Size
Wastegate Duty Cycle Increase Step Size
Time Between Wastegate D.C. Updates
3rd Gear Boost Scalar
4th Gear Boost Scalar
Boost Reduction Knock Retard Threshold
Idle Fuel Mode Maximum Speed
Open Loop Idle AFR, Low Coolant Temp.
Open Loop Idle AFR, High Coolant Temp.
Idle AFR High/Low Cool. Temp. Threshold
Idle Speed Offset for A/C On
IAC Maximum %TPS

IAC Maximum Vehicle Speed
Max IAC RPM Adjust Rate
IAC Steps Added for Power Steering
IAC Steps Added for Power Steer, A/C On
Throttle Follower Slope Gain
Throttle Follower Max Steps (Drive)
Throttle Follower Scalar in P/N
Inverse Throttle Follower P/N Gain
Throttle Follower to IAC PID Delay
Throttle Follower Offset - Man. Trans.
A/C Clutch Disable TPS Threshold
Water Injection Max On Time
Water Inj. Enable Coolant Temp Threshold
Water Inj. Enable Load Value Threshold
Water Inj. Enable % TPS Threshold
EGR On, %TPS
EGR Off, %TPS
CCP Enable Coolant Temp. Threshold
TCC Lock Minimum TPS, 3rd Gear
TCC Lock Minimum TPS, 4th Gear
TCC Lock Min. Speed - 3rd Gear
TCC Lock Min. Speed - 4th Gear
TCC Unlock Speed - 3rd Gear
TCC Unlock Speed - 4th Gear
TCC Enable Coolant Temp. Threshold
TCC Unlock Prevention RPM
PROM ID

Tables

ECM Switch Table
ECM Constant Table
Main Spark Table Vs. Load Vs. RPM
Cool. Comp. Spark Advance Vs. Load Vs. Cool. Temp.
Power Enrichment Spark Vs RPM Vs Load
Highway Mode Spark Advance Vs. Load
Start Up Spark Advance Vs. Coolant Temp.
Startup Spark Advance Decay Rate Vs. Cool. Temp.
Startup Spark Advance Decay Delay Vs. Cool. Temp.
TCC Locked Spark Retard Vs. Load Vs. RPM
Knock Retard Attack Rate Vs. RPM (Deg/msec)
Knock Retard Recovery Rate Vs. RPM (%/sec)
Crank Pulse Width Vs. Coolant Temp.
Crank PW Multiplier Vs. Dist. Reference Pulses
Crank Fuel PW Multiplier Vs. %TPS
Cold Engine %AFR Change Vs Load
Cold Engine %AFR Change Vs Coolant Temp
Startup %Change to AFR Vs. Coolant Temp.
Startup AFR Decay Multiplier Vs. Coolant Temp.
Startup AFR Decay Delay Vs. Coolant Temp.
BLM Cell RPM Boundaries
BLM Cell Load Boundaries
Power Enrichment Enable TPS Threshold Vs. RPM
Power Enrichment AFR Vs. Coolant Temp.
Power Enrichment Fuel Trim Vs. RPM
Power Enrichment Fuel Trim Vs. %TPS
Accel. Enrich. Async PW Multiplier Vs. RPM
Accel. Enrich. Async PW Multiplier Vs. Diff. Load
Diff. Load A.E. Async PW Correction Vs. Cool Temp
A. E. Diff Load Decay Rate Mult. Vs. Coolant Temp.
Accel. Enrich. Diff. TPS Multiplier Vs. Cool Temp

Diff TPS A. E. Decay Rate Mult. Vs. Coolant Temp.
Maximum Accel. Enrich PW Vs. Coolant Temp.
Injector Offset Vs Battery Voltage
Low Pulse Width Injector Offset Vs. PW
Fuel Pump Compensation Vs. Battery Voltage
Wastgate % Duty Cycle Vs. RPM
Wastegate Duty Cycle Vs. Load
Maximum Air Flow Vs. RPM
Target Idle RPM Vs. Coolant Temp.
IAC Park Down Steps Vs. Coolant Temp.
EGR % Duty Cycle Vs. Load Vs. RPM
MAF Vs. Count (1)
MAF Vs. Count (2)
MAF Vs. Count (3)
MAF Vs. Count (4)
MAF Vs. Count (5)
MAF Vs. Count (6)
TCC Load Limit Upper Threshold Vs. MPH (3rd Gear)
TCC Load Limit Lower Threshold Vs. MPH (3rd Gear)
TCC Load Limit Upper Threshold Vs. MPH (4th Gear)
TCC Load Limit Lower Threshold Vs. MPH (4th Gear)