

C.A.T.S. Tuner ECM 6E Parameter List

(ECM Configuration File Version AV)

ECM Switch Parameters

VATS Select, X = Enabled
Manual/Auto Transmission, X = Manual
Normally Open Fan Request Input
C.A.R.S. Select (X = Enabled)
Sliding Filter for Airflow, X = Enabled
Open Loop Purge
4th Gear Switch N.O.
TCC Control, (X = RPM else MPH)
Cansiter Purge when Output Energized
Unlock TCC in Decel Fuel C/O
TCC Locked Highway Spark Enable Check
4th Gear Highway Mode Spark Check
TCC/Shift Light Control (0 = TCC)
MAT Sensor Low Diagnostic (Error 23)
Veh. Speed Diag. (Err 24), X = Enabled
MAT Sensor High Diagnostic (Error 25)
EGR Diagnostic (Err 32), X = Enabled
MAF Sensor High (Err 33), X = Enabled
MAF Sensor Low (Err 34), X = Enabled
MAF Burnoff Diag. (Err 36), X = Enabled
Cylinder Select Diagnostic (Error 41)
Knock Diagnostic (Err 43), X = Enabled
O2 Sensor Lean Diagnostic (Error 44)
O2 Sensor Rich Diagnostic (Error 45)
VATS Diagnostic (Err 46), X = Enabled
Fuel Pump Voltage Diagnostic (Error 54)

ECM Constants

Initial Spark Advance
Cool Compensation Spark Table Bias
Min RPM for Highway Mode Spark
Load Value to Disable Highway Mode Spark
Min Coolant Temp for Highway Mode Spark
Highway Mode Spark Enable Delay
Max Spark Advance
Spark Advance Added in ALDL Mode
Stall Saver Spark Enable RPM Threshold 1
Stall Saver Spark Enable RPM Threshold 2
Stall Saver Spark Enable RPM Threshold 3
Stall Saver Spark Disable RPM Threshold
Fuel Cutoff Speed
Fuel Resume Speed
Fuel Cutoff Engine Speed
Fuel Resume Engine Speed
Injector Flow Rate, Single Fire
Injector Flow Rate, Double Fire
Display Injector Flow Rate
Stoichiometric Air Fuel Ratio
Hot O2 Closed Loop Timer
Warm O2 Closed Loop Timer
Cold O2 Closed Loop Timer

Closed Loop Fuel Enable Coolant Temp.
Minimum Delta TPS For Accel. Enrich.
Minimum Delta LV8 For Accel. Enrich.
Max Accel. Enrich. Async Pulse Width
DFCO Enable RPM Threshold
DFCO Disable RPM Threshold
DFCO Enable Load Threshold
DFCO Disable Load Threshold
Max. RPM Decrease/12.5ms To Stay In DFCO
DFCO Enable TPS Threshold
DFCO Disable Vss Threshold
DFCO Enable %TPS Threshold
Decel Enlean Enable Diff. TPS Threshold
Decel Enlean Enable Diff. Load Threshold
Decel Enlean BPW Factor (Low DRP's)
Decel Enlean BPW Factor (High DRP's)
Min Speed for Highway Mode Fuel
Load Value to Disable Highway Mode Fuel
Min Coolant Temp for Highway Mode Fuel
Highway Mode Fuel Enable Delay
Max Time in Highway Fuel Mode
Minimum BLM value
Maximum BLM value
Min. Coolant Temp for BLM Update
Max. Coolant Temp for BLM Update
BLM - Update Rate
BLM Update Cell Amount
BLM Update - Min Pos. Integrator Error
BLM Update - Min Neg. Integrator Error
Minimum Integrator Value
Maximum Integrator Value
Startup Enrichment Decay Rate
Min Coolant Temp. For High Temp P.E. AFR
Idle Speed Adder in Park/Neutral
Idle Speed Adder A/C On
IAC Startup Park Position
IAC Startup Delay Time
IAC Control Deadband RPM Error (in P/N)
IAC Control Deadband RPM Error (Drive)
IAC Learn - Min Coolant Temp
IAC Learn - Max Coolant Temp
EGR On, (TPS)
EGR Off, (TPS)
Min. MAT to Enable EGR
MAF High Diagnostic (Error 33) Threshold
TCC Unlock Speed (Low Gears)
TCC Lock Speed (Low Gears)
TCC Unlock Speed (High Gear)
TCC Lock Speed (High Gear)
TCC Unlock Prevention Speed
TCC Enable Coolant Temp. Threshold
Min. Load Limit for TCC Lock, Low Speed
Min. Load Limit for TCC Lock, High Speed
TCC Min Load Limit Hysteresis
TCC Min Load Limit High/Low Speed Thresh
Shift Light Enable Coolant Temp. Thresh.
Shift Light Enable Vehicle Speed Thresh.
Shift Light Enable %TPS Threshold
Shift Light Enable LV8 Threshold
Shift Light Enable RPM Threshold
Shift Light Disable RPM Threshold
Shift Light Force On RPM Threshold
Shift Light Force On Disable RPM Thresh

Min Canister Purge Duty Cycle (Low TPS)
Canister Purge - Coolant Temp. Enable
Canister Purge - Vehicle Speed Enable
Canister Purge - TPS Enable
Canister Purge - Vehicle Speed Disable
Canister Purge - TPS Disable
AIR Divert Enable Coolant Temp.
AIR Divert O2 mV Rich/Lean Thresh Reduc.
Default MAF Maximum %TPS Value
Default MAF IAC Scale Factor
Minimum Default MAF Value
Number of Cylinders
PROM ID

Tables

ECM Switch Table
ECM Constant Table
Main Spark Advance Vs. RPM Vs. Load
Cool Compensation Spark Vs. Load Vs. Cool. Temp.
Spark Advance In Power Enrich. Vs. RPM
Knock Attack Rate Vs. RPM (Deg/msec)
Knock Recovery Rate Vs. RPM (%/sec)
Maximum Knock Retard Vs RPM In P.E.
Maximum Knock Retard Vs Load, (Not In P. E.)
Highway Mode Spark Advance Vs. Load
Start Up Spark Advance Vs. Coolant Temp.
%TPS To Enable Power Enrich. Vs RPM (Normal)
%TPS To Enable Power Enrich Vs RPM (Hot)
P. E. %ChangeTo Fuel/Air Ratio Vs Coolant Temp.
P. E. %Change To Fuel/Air Ratio Vs RPM
Open Loop Fuel/Air Ratio %Change Vs.Load
Open Loop Fuel/Air Ratio %Change Vs. Coolant Temp.
Startup Fuel/Air Ratio %Change Vs. Coolant Temp.
Startup Enrich Decay Amount Vs. Startup Cool Temp.
Startup Enrich Decay Delay Vs. Startup Cool Temp.
Highway Mode AFR Vs. Load
Injector Pulse Width Correction vs Battery Voltage
Low Pulse Width Injector Offset Vs. BPW
Accel. Enrich %BPW Factor Vs Async Pulse
No. of Accel Enrich Async Pulses Vs. Coolant Temp.
Accel. Enrich. Async Factor Vs. Coolant Temp.
LV8 Accel. Enrich. Factor Vs. Delta LV8
LV8 Accel Enrich Coolant Factor Vs. Coolant Temp.
LV8 Accel. Enrich. Decay Rate Vs. Coolant Temp.
Crank Fuel Pulse Width Vs. Coolant Temp.
Crank Fuel Pulse Width Multiplier Vs. TPS
Crank Fuel PW Multiplier Vs. Ref. Pulses (1-16)
Crank Fuel PW Multiplier Vs. Ref. Pulses (>17)
BLM Cell RPM Boundaries
BLM Cell MAF Boundaries
Fast O2 Rich/Lean Threshold Vs. MAF
Rich/Lean O2 Count Offset Vs. Coolant Temp.
Warm IAC Park (Steps) vs Coolant
Desired Idle Speed vs Coolant Temp.
EGR % Duty Cycle Vs. LV8 Vs. RPM
EGR Duty Cycle Multiplier Vs. Coolant Temp.
Fan Control Coolant Temperatures
Mass Air Flow 1
Mass Air Flow 2
Mass Air Flow 3

Mass Air Flow 4

Mass Air Flow 5

Mass Air Flow 6

Maximum Mass Air Flow Vs. RPM, (Diag)

Default MAF Value per %TPS Vs. RPM

TCC Lower Load Limit Vs. Speed (High Gear)

TCC Upper Load Limit Vs. Speed (High Gear)

TCC Lower Load Limit Vs. Speed (Low Gears)

TCC Upper Load Limit Vs. Speed (Low Gears)

Shift Light On %TPS Threshold Vs. RPM

Shift Light Off %TPS Threshold Vs. RPM

Shift Light On Delay Time Vs. %TPS

Upper Zero Error Reference for Slow O2 R/L Vs. MAF

Lower Zero Error Reference for Slow O2 R/L Vs. MAF