

C.A.T.S. Tuner ECM 5C Parameter List

(ECM Configuration File Version A)

ECM Switch Parameters

Magnetic Speed Sensor Installed
Transmission Type (X = Manual)
Launch Mode Spark Option (X = Enabled)
Idle Spark if TCC Locked (X=Disabled)
Use BLM in PE Mode if > 128
O2 Sensor Diagnostic (Error 13)
Vehicle Speed Diagnostic (Error 24)
MAT Sensor Low Diagnostic (Error 23)
MAT Sensor High Diagnostic (Error 25)
EGR Diagnostic (Error 32)
MAP Sensor High Diagnostic (Error 33)
MAP Sensor Low Diagnostic (Error 34)
EST Monitor Diagnostic (Error 42)
O2 Sensor Lean Diagnostic (Error 44)
O2 Sensor Rich Diagnostic (Error 45)

ECM Constants

Spark Reference Angle
Max Spark Advance Relative to TDC
Max Spark Retard Rel. to TDC (no knock)
Max Spark Retard Rel. to TDC (Knock)
Launch Mode Spark Disable Speed
Burst Knock Retard Enable Cool Temp
Burst Knock Retard Max TPS
Max Knock Retard in Power Enrich.
Knock Retard Enable Coolant Temp.
WOT Knock Retard %TPS Threshold
Base Cool. Adv. Correction Table Bias
MAT Spark Advance Table Bias
TCC/Launch Mode Spark Bias
Accel Enrich Enable Delta MAP Threshold
AE TPS Theshold for 2X Delta MAP Thres.
Accel Enrich Enable Delta TPS Threshold
Closed Loop Enable Coolant Temp.
Warm/Cold C/L Timer Threshold
Cold Closed Loop Timer
Warm Closed Loop Timer
Open Loop To Closed Loop Upper O2 Thresh
Open Loop To Closed Loop Lower O2 Thresh
Closed Loop To Open Loop Upper O2 Thresh
Closed Loop To Open Loop Lower O2 Thresh
BLM Cell RPM Boundary Hysteresis
BLM Cell MAP Boundary Hysteresis
BLM Learn Enable Coolant Temp Threshold
Maximum BLM Value
Minimum BLM Value
Base Pulse Constant
Sync Fuel Injector Delay Factor
Maximum Async Injector Pulse Width
Minimum Async Injector Pulse Width
Clear Flood %TPS Threshold

Decel Fuel C/O RPM Enable
Decel Fuel C/O Disable RPM
Decel Fuel C/O MAP Enable
Decel Fuel C/O Disable MAP
DFCO Disable MPH Threshold
DFCO Enable MPH Threshold
Decel Enlean Enable RPM Threshold
Decel Enlean Enable Delta %TPS Threshold
Decel Enlean Enable Delta MAP Threshold
Decel Enlean Decay Rate
Fuel Cutoff Vehicle Speed
Fuel Resume Vehicle Speed
Fuel Cut Off Engine Speed
Fuel Resume Engine Speed
Stoichiometric Air Fuel Ratio
PE Delay Hi/Lo Baro. Threshold
PE Delay Bypass RPM Threshold
High RPM Open Loop Enable RPM
Low RPM Open Loop Enable RPM
Min Cool Temp for Stoichiometric AFR
Max Startup Temp for Crank AFR 2X Mod
Max Startup Temp for Crank AFR Lean Bias
A/C Disable %TPS Threshold
A/C Disable Coolant Temp.
Low Fan On Coolant Temp.
Low Fan Off Coolant Temp.
High Fan On Coolant Temp.
High Fan Off Coolant Temp.
TCC Force Lock Vehicle Speed
TCC Unlock Negative Delta %TPS Threshold
TCC Enable Speed, A/C Off
TCC Enable Speed, A/C On
TCC Unlock Positive Delta %TPS Threshold
TCC Disable Speed
TCC Unlock Prevent RPM
Shift Light Enable Cool. Temp. Threshold
Shift Light On RPM Threshold
Shift Light On Delay Time
Shift Light Max On Time
IAC Park Position
P/N to Drive Anticipate IAC Steps (Hot)
P/N to Drive Anticipate IAC Steps (Cold)
Fan Anticipate IAC Step Adder
Instrument Panel VSS Pulse Divisor
Road Speed Constant

Tables

ECM Switch Table
ECM Constant Table
Main Spark Advance Vs. RPM Vs. Load
Power Enrich Spark Advance Vs. RPM Vs. Load
Base Cool. Adv. Correction Vs. Load Vs. Cool. Temp
Idle Base Cool. Adv. Correction Vs. Cool. Temp.
MAT Spark Adv. Correction Vs. MAT Vs. MAP
TCC/Launch Mode Spark Correction Vs. RPM Vs. MAP
Burst Knock Retard Enable Delta TPS Vs. BKR Level
Burst Knock Retard Multiplier Vs. Cool. Temp.
Burst Knock Retard Vs. BKR Level
Burst Knock Retard Recovery Time Vs. BKR Level
Knock Retard Attack Rate Vs. RPM

Knock Retard Recovery Rate Vs. RPM
Max Knock Retard Vs. Vacuum (not in P.E.)
Volumetric Efficiency Vs. RPM Vs. MAP
Volumetric Efficiency Vs. RPM Vs. MAP, Ext. RPM
Idle Volumetric Efficiency Vs. RPM Vs. MAP
Delta MAP Accel Enrich Multiplier Vs. %TPS
Accel Enrich Delta MAP Pulse Width Vs. Delta MAP
Accel Enrich Delta TPS Pulse Width Vs Delta TPS
Accel Enrich Multiplier Vs. Speed
Accel Enrich Temperature Correction Vs. Cool. Temp
Accel Enrich MAT Correction Vs. MAT
O2 Sensor Rich/Lean Threshold Vs. BLM Cell
BLM Cell RPM Boundaries
BLM Cell MAP Boundaries
Injector PW Offset Vs. Battery Voltage
Injector PW Correction Vs. Battery Voltage
Decel. Enlean Factor Vs. Coolant Temp.
Decel Enlean Disable High TPS Threshold Vs. RPM
Decel Enlean BPW % Reduction Vs. Delta %TPS
Crank AFR Multiplier Vs. Startup MAT
Crank AFR Multiplier Vs. No. 2X Pulses
Crank AFR Vs. Startup Coolant Temp.
Crank AFR Multiplier Vs. Crank RPM
Crank AFR TPS Mult. Correction Vs. Startup Cool.
Crank AFR Multiplier Vs. TPS
Cold AFR Vs Coolant Temp. (at Idle)
Cold AFR Vs Coolant Temp.
Power Enrich Mode Delay Time Vs. Baro
Power Enrich Delay Bypass TPS Vs. Baro
Power Enrich Mode Enable TPS Vs. RPM
Power Enrich. AFR Vs. Coolant Temp.
Power Enrich AFR Multiplier Vs. RPM
Eng Runtime for Choke AFR Mod Vs Start Cool-Drive
Eng Runtime for Choke AFR Mod Vs Startup Cool-P/N
Choke AFR Mod Vs. Startup Cool Vs Stage-Drive
Choke AFR Mod Vs. Startup Cool Vs Stage-P/N
Target Idle RPM Vs. Coolant Temp.
Target Idle Adder Vs. Coolant Temp (in P/N)
Max Throttle Follower Bias Vs. RPM
IAC Position Temperature Offset Vs. Cool. Temp.
IAC Position Modifier Vs. Idle RPM Error
IAC Kickdown Steps Vs. Startup Cool Vs Eng Runtime
TCC Lower Load Limit Vs. Speed
TCC Upper Load Limit Vs. Speed
Shift Light RPM/MPH Ratio Vs. Gear
Shift Light Enable RPM Vs. Gear Vs. Cool Temp