

C.A.T.S. Tuner ECM F1 Parameter List

(ECM Configuration File Version F)

ECM Switch Parameters

EGR Option (X = Enabled)
ECM Fan Control Option (X = Enabled)
VATS Option (X = Enabled)
O2 Sensor Diagnostic (Error 13)
MAT Sensor Low Diagnostic (Error 23)
Vehicle Speed Diagnostic (Error 24)
MAT Sensor High Diagnostic (Error 25)
EGR Diagnostic (Error 32)
MAP Sensor High Diagnostic (Error 33)
MAP Sensor Low Diagnostic (Error 34)
O2 Sensor Lean Diagnostic (Error 44)
O2 Sensor Rich Diagnostic (Error 45)
VATS Fuel Cutoff (Error 71)
VATS Data Loss (Error 72)

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)
Main Spark Advance Table Bias
Base Cool. Adv. Correction Table Bias
MAT Spark Advance Table Bias
Launch Mode Spark Enable Delta TPS
Launch Mode Spark Enable Delta MAP
Launch Mode Spark Disable Speed
Launch Mode Disable RPM
Launch Mode Disable Speed
Max Knock Retard in Power Enrich.
Knock Retard Enable Coolant Temp.
Accel Enrich Enable Delta MAP Threshold
AE TPS Theshold for 2X Delta MAP Thres.
Accel Enrich Enable Delta TPS Threshold
PE Delay Hi/Lo Baro. Threshold
PE Delay Bypass RPM Threshold
Warm/Cold C/L Timer Threshold
Hot/Warm C/L Timer Threshold
Cold Closed Loop Timer
Warm Closed Loop Timer
Hot Closed Loop Timer
High RPM Open Loop Enable RPM
High RPM Open Loop Disable RPM
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
Maximum Async Injector Pulse Width
Minimum Async Injector Pulse Width
Clear Flood %TPS Threshold
DFCO Enable Coolant Temp.
Decel Fuel C/O High RPM Enable
Decel Fuel C/O High RPM Disable
Decel Fuel C/O Low RPM Enable
Decel Fuel C/O Low RPM Disable
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
Min. Inj. Pulse Width for Double Fire
Max. Inj. Pulse Width for Single Fire
Min RPM to Stay in Single Fire Mode
Min RPM to Enable Single Fire Mode
Stoichiometric Air Fuel Ratio
Max Startup Temp for Crank AFR 2X Mod
Max Startup Temp for Crank AFR Lean Bias
Zero Spark Advance Enable RPM
Zero Spark Advance Enable RPM (in P/N)
Zero Spark Advance Enable Speed
Fuel Cutoff RPM #1
Fuel Cutoff RPM #2
Fuel Resume RPM
Fuel Cutoff Vehicle Speed
Fuel Resume Vehicle Speed
A/C Disable %TPS Threshold
A/C Disable Coolant Temp.
A/C Re-Enable 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 Re-Enable Vehicle Speed
TCC Unlock Negative Delta %TPS Threshold
TCC Enable Speed, A/C Off, Low MAT
TCC Enable Speed, A/C On, Low MAT
TCC Disable Speed, A/C On, Low MAT
TCC Disable Speed, A/C Off, Low MAT
TCC Enable Speed, A/C Off, High MAT
TCC Enable Speed, A/C On, High MAT
TCC Disable Speed, A/C Off, High MAT
TCC Disable Speed, A/C On, High MAT
TCC High/Low MAT Threshold
Shift Light Enable Cool. Temp. Threshold
Shift Light On RPM Threshold
Shift Light On Delay Time
Shift Light Max On Time
IAC Park Position
Low Fan Anticipate IAC Step Adder
High Fan Anticipate IAC Step Adder
EGR Disable RPM
EGR Enable RPM
EGR Disable Vehicle Speed
EGR Enable Vehicle Speed
EGR Disable Coolant Temp.

EGR Enable Coolant Temp.

Tables

ECM Switch Table
ECM Constant Table
Main Spark Advance Vs. RPM Vs. Load
Extended Main Spark Advance Vs. RPM Vs. Load
Idle Spark Advance Vs. MAP
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
EGR Spark Correction Vs RPM Vs Vacuum
Knock Retard Attack Rate Vs. RPM (not in WOT)
Knock Retard Attack Rate Vs. RPM (in WOT)
Knock Retard Recovery Rate Vs. RPM (not in WOT)
Knock Retard Recovery Rate Vs. RPM (in WOT)
Max Knock Retard Vs. Vacuum (not in P.E.)
Closed Loop Enable Cool Temp Vs Startup Cool Temp
Volumetric Efficiency Vs RPM Vs MAP - Double Fire
Volumetric Efficiency Vs. RPM Vs MAP - Single Fire
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 Delta TPS Factor Vs. Vacuum
Accel Enrich Multiplier Vs. Speed
Accel Enrich Temperature Correction Vs. Cool. Temp
Accel Enrich MAT Correction Vs. MAT
BLM Cell RPM Boundaries
BLM Cell MAP Boundaries
Injector PW Offset Vs. Battery Voltage Vs. Mode
Injector PW Correction Vs. Battery Voltage
BPW EGR Correction Vs. Flow Vs. Baro
Power Enrich. AFR Vs. Coolant Temp.
Power Enrich AFR Multiplier Vs. RPM
Power Enrich Mode Enable TPS Vs. RPM
Power Enrich Mode Delay Time Vs. Baro
Power Enrich Delay Bypass TPS Vs. Baro
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. No. 2X Pulses
Crank AFR Vs. Startup Coolant Temp.
Crank AFR Lean Bias Vs. Crank RPM
Crank AFR TPS Mult. Correction Vs. Startup Cool.
Crank AFR Multiplier Vs. TPS
Choke AFR Mod Vs. Startup Cool Vs Stage-Drive
Eng Runtime for Choke AFR Mod Vs Start Cool-Drive
Choke AFR Mod Vs. Startup Cool Vs Stage-P/N
Eng Runtime for Choke AFR Mod Vs Startup Cool-P/N
Cold AFR Correction Vs. MAP
Cold AFR Vs Coolant Temp. (at Idle)
Cold AFR Vs Coolant Temp.
Target Idle RPM Vs. Coolant Temp.
Target Idle Adder Vs. Coolant Temp (in P/N)
Target Idle Kickdown Correct. Vs Startup Cool -Drv
Target Idle Kickdown Correct. Vs Startup Cool -P/N

Max Throttle Follower Bias Vs. RPM (in Drive)
Max Throttle Follower Bias Vs. RPM (in P/N)
IAC Position Temp. Offset Vs. Cool. Temp. (P/N)
IAC Position Temp. Offset Vs. Cool. Temp. (Drive)
IAC Position Modifier Vs. Idle RPM Error (A/C off)
IAC Position Modifier Vs. Idle RPM Error (A/C on)
IAC Kickdown Steps Vs. Startup Cool Vs Eng Runtime
Secondary Fuel Cutoff RPM Limits
EGR Enable %TPS Threshold Vs. RPM
EGR Disable %TPS Threshold Vs. RPM
TCC Lower Load Limit Vs. Speed - Normal Mode
TCC Upper Load Limit Vs. Speed - Normal Mode
TCC Lower Load Limit Vs. Speed - Cruise Mode
TCC Upper Load Limit Vs. Speed - Cruise Mode
Shift Light Enable RPM Vs. Gear Vs. Cool Temp
Shift Light RPM/MPH Ratio Vs. Gear