

# C.A.T.S. Tuner ECM 50 Parameter List

## (ECM Configuration File Version A)

### ECM Switch Parameters

Use BLM in PE Mode if > 128  
Init BLM Values to 128 at Startup  
Idle BLM Cell Option  
Magnetic Speed Sensor Installed  
Calculate MPG Option  
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)  
EST Monitor Diagnostic (Error 42)  
O2 Sensor Lean Diagnostic (Error 44)  
O2 Sensor Rich Diagnostic (Error 45)  
Fuel Pump Voltage Diagnostic (Error 54)

### ECM Constants

Spark Reference Angle  
Max RPM for Extended RPM Spark  
Extended Spark RPM Slope  
Base Cool. Adv. Correction Table Bias  
MAT Spark Advance Table Bias  
Number of Cylinders  
Maximum Spark Adv. Relative to Reference  
Max Spark Retard Relative to Reference  
Time Out Spark Decay Scale Factor  
Launch Mode Spark High/Low RPM Threshold  
Launch Spark Mode 1 Enable Delta TPS  
Launch Mode 2 Enable Delta TPS, Startup  
Launch Spark Mode 2 Enable Delta TPS  
Launch Spark Mode 1 Enable MPH Limit  
Launch Spark Mode 2 Enable MPH Limit  
Launch Spark Mode 1 Enable RPM Limit  
Launch Spark Mode 2 Enable RPM Limit  
Launch Mode Spark Upper Cool Temp Limit  
Excessive RPM Retard Enable Cool. Temp.  
Fuel Cut Off Engine Speed  
Fuel Resume Engine Speed  
Base Pulse Constant  
PE Delay Bypass RPM Threshold  
PE Delay Hi/Lo Cool Temp Threshold  
PE Delay Hi/Lo Baro. Threshold  
Cold PE Adjust Cool. Temp. Threshold  
Cold Temp PE AFR Correction  
Accel Enrich Enable Delta MAP Threshold  
AE TPS Theshold for 2X Delta MAP Thres.  
Accel Enrich Enable Delta TPS Threshold  
Warm/Cold C/L Timer Threshold  
Warm Closed Loop Timer  
Cold Closed Loop Timer

Closed Loop Enable Coolant Temp.  
BLM Learn Enable Min MAP Threshold  
BLM Learn Enable Max MAP Threshold  
BLM Idle Cell %TPS Cell Boundary  
BLM Cell RPM Boundary Hysteresis  
BLM Cell TPS Boundary Hysteresis  
BLM Cell MAP Boundary Hysteresis  
Maximum BLM Value  
Minimum BLM Value  
Closed Loop To Open Loop Upper O2 Thresh  
Closed Loop To Open Loop Lower O2 Thresh  
Open Loop To Closed Loop Upper O2 Thresh  
Open Loop To Closed Loop Lower O2 Thresh  
Stoichiometric Air Fuel Ratio  
Clear Flood %TPS Threshold  
Min Base Pulse High Hysteresis  
Min Base Pulse Low Hysteresis  
Maximum Async Injector Pulse Width  
Minimum Async Injector Pulse Width  
C/L Decel Enlean Enable MAP Threshold  
C/L Decel Enlean Enable RPM Threshold  
Decel Enlean Enable Speed  
Decel Enlean Disable Speed  
Decel Enlean Enable Delta %TPS Threshold  
Decel Enlean Enable Delta MAP 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 Low MPH Threshold  
DFCO Spark Retard  
A/C Disable Coolant Temp.  
A/C Disable %TPS Threshold  
Fan On Coolant Temp.  
IAC Fan On Anticipate Offset  
IAC Park Position  
Idle Speed Increase for A/C On  
Decay Delay of Fan On Anticipate Steps  
P/N to Drive Anticipate IAC Steps  
TCC Enable Coolant Temp. Threshold  
TCC Unlock Negative Delta %TPS Threshold  
TCC Unlock Positive Delta %TPS Threshold  
TCC Enable Speed, A/C Off  
TCC Disable Speed, A/C Off  
TCC Enable Speed, A/C On  
TCC Disable Speed, A/C On  
Shift Light Enable Cool. Temp. Threshold  
Shift Light On RPM Threshold  
Shift Light On Delay Time  
Shift Light Max On Time  
EGR %TPS Disable Threshold  
EGR %TPS Enable Threshold  
Instrument Panel VSS Pulse Divisor  
Road Speed Constant

## **Tables**

ECM Switch Table  
ECM Constant Table  
Main Spark Advance Vs. RPM Vs. Load  
Base Cool. Adv. Correction Vs. Load Vs. Cool. Temp

MAT Spark Advance Correction  
EGR Spark Correction Vs RPM Vs Vacuum  
Power Enrich. Spark Advance Vs. RPM  
Launch Mode Spark Correction Vs. Mode Vs. RPM  
Launch Spark Multiplier Vs. Coolant Temp.  
Spark Retard Vs. Excessive RPM  
Highway Mode Spark Advance Vs. Vacuum  
Spark Timeout vs Coolant Temp.  
Spark Time Out Decay Delay Vs. Coolant Temp.  
Spark Time Out Decay Mult. Vs. Coolant Temp.  
Volumetric Efficiency Vs. RPM Vs. MAP  
Volumetric Efficiency Adder Vs. RPM  
BLM Cell RPM Boundaries  
BLM Cell MAP Boundaries  
Power Enrich. AFR Vs. RPM  
Power Enrich Enable Delay Vs. Baro Vs. Cool. Temp.  
TPS Threshold For Power Enrich. Vs RPM  
Accel Enrich Delta MAP Factor Vs. %TPS  
Accel Enrich Delta MAP PW Adder Vs. Delta MAP  
Accel Enrich Delta TPS PW Factor Vs Delta TPS  
Accel Enrich Vehicle Speed Multiplier Vs. MPH  
Accel Enrich Temperature Correction Vs. Cool. Temp  
Accel Enrich Temp Correction Vs Startup Cool. Temp  
Async Fuel PW Multiplier Vs. RPM  
Injector PW Correction Vs. Battery Voltage  
Decel. Enlean Coolant Factor Vs. Coolant Temp.  
Decel Enlean Delta TPS BPW Factor Vs. Delta TPS  
Cold Engine AFR Correction Vs. Vacuum  
Cold Engine AFR Correction Vs. Coolant Temp.  
Start Up AFR Correction Vs. Coolant Temp.  
Start Up Enrich Decay Multiplier Vs. Coolant Temp.  
Start Up Enrich Decay Delay Vs. Coolant Temp.  
Crank BPW Multiplier Vs. TPS  
Crank AFR Vs. Coolant Temp.  
Sync Fuel Delay Factor Vs. RPM Vs. %TPS  
Rich O2 Threshold Vs. Flow  
Lean O2 Threshold Vs. Flow  
Mean Rich/Lean Threshold Vs. Flow  
Cold Park to Drive AFR Correction Vs. Cool. Temp.  
Cold Park to Drive AFR Corr. Delay Vs. Cool. Temp.  
Cold Start Fuel Multiplier Vs. RPM  
IAC Position Offset Vs. Coolant Temp.  
Target Idle RPM Vs. Coolant Temp.  
Idle RPM Correction in Park Vs. Coolant Temp.  
IAC Position Adjustment for A/C Vs. Baro  
IAC Position Adjustment for A/C Vs. Ambient Temp.  
IAC Position Adjustment for A/C Vs. MAT  
Shift Light Enable RPM Vs. Gear  
Shift Light RPM/MPH Ratio Vs. Gear  
TCC Lower Load Limit Vs. Speed  
TCC Upper Load Limit Vs. Speed  
EGR Constant Vs. Vacuum Vs. Airflow