

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

## (ECM Configuration File Version A)

### ECM Switch Parameters

Enable AFR table Lookup  
TBI / PFI Option (X = TBI)  
# Cylinders Select MSB  
# Cylinders Select LSB  
O2 Sensor Open (Error 13)  
High Engine Temp. (Error 14)  
Low Engine Temp. (Error 15)  
TPS Sensor High (Error 21)  
TPS Sensor Low (Error 22)  
MAT Sensor Low (Error 23)  
Vss Sensor Diagnostic (Error 24)  
MAT Sensor High (Error 25)  
MAP Sensor High (Error 33)  
MAP Sensor Low (Error 34)  
IAC Motor Error (Error 35)  
EST Failure (Error 41)  
Bypass Circuit Failure (Error 42)  
Knock Sensor Diagnostic (Error 43)  
O2 Sensor Lean Diagnostic (Error 44)  
O2 Sensor Rich Diagnostic (Error 45)  
System Voltage High (Error 52)  
System Voltage High (Error 53)  
Battery Voltage Unstable (Error 54)  
A/D Conversion Error (Error 55)

### ECM Constants

Spark Reference Angle  
Maximum Spark Advance  
Knock Retard Enable Coolant Temp.  
Fan 1 On Coolant Temp. Threshold  
Fan 1 Off Coolant Temp. Threshold  
Fan 2 On Coolant Temp. Threshold  
Fan 2 Off Coolant Temp. Threshold  
Coolant Temp Compensation Spark Bias  
Fuel Cutoff Engine Speed  
Fuel Resume Engine Speed  
Fuel Cutoff Vehicle Speed  
Fuel Resume Vehicle Speed  
Max Knock Spark Retard  
VE Table Filter Coefficient (At Idle)  
RPM Threshold For VE Filtering  
Main Spark Extended Slope (Deg/1000 RPM)  
Min. RPM To Enable Knock Retard  
Max. RPM To Enable Knock Retard  
Max. Cool. Temp. For Cold AFR Table  
Open Loop Fuel Enable Cool. Temp.  
Stoichiometric AFR  
Base Pulse Constant  
Min. Allowable BLM  
Max. Allowable BLM  
Accel. Enrich Enable Delta TPS

Accel Enrich Delta TPS Multiplier  
Decel Enlean Enable Delta TPS  
Decel Enlean Delta TPS Multiplier  
Decel Enlean Decay Factor  
DFCO Enable RPM  
DFCO Disable RPM  
DFCO Enable Speed  
DFCO Enable TPS  
DFCO Enable Coolant Temp.  
Initial IAC Motor Position (A/C Off)  
Added Initial IAC Position Steps, A/C On  
Vehicle Speed Sensor Calibration  
TCC Enable Coolant Temp.  
RPM/Vss Ratio for 1st Gear  
RPM/Vss Ratio for 2nd Gear  
RPM/Vss Ratio for 3rd Gear  
RPM/Vss Ratio for 4th Gear  
RPM/Vss Ratio for 5th Gear  
Minimum RPM for 1 -> 2 Shift  
Minimum RPM for 2 -> 3 Shift  
Minimum RPM for 3 -> 4 Shift  
Minimum RPM for 4 -> 5 Shift  
Maximum MAP for 1 -> 2 Shift  
Maximum MAP for 2 -> 3 Shift  
Maximum MAP for 3 -> 4 Shift  
Maximum MAP for 4 -> 5 Shift  
Max Allowable MAP- DTC 33  
High MAP Diag. TPS Enable Threshold

## **Tables**

ECM Switch Table  
ECM Constant Table  
Main Spark Advance Vs. RPM Vs. MAP  
Coolant Temp. Compensation Spark Advance  
EGR Spark Advance Vs. RPM Vs. Vacuum  
Idle Spark Advance Vs. MAP  
Knock Attack Rate Vs. RPM (Deg/msec)  
Knock Recovery Rate Vs. RPM (%/sec)  
Volumetric Efficiency Vs. RPM Vs. MAP  
Cold Engine AFR Vs Coolant Temp. Vs MAP  
Idle AFR Vs. Coolant Temperature  
Open Loop AFR Vs. RPM Vs. MAP  
Injector Offset Vs. Battery Voltage  
IAC Motor Steps Vs. Coolant Temp.  
Target Idle RPM Vs. Battery Voltage (in Drive)  
Target Idle RPM Vs. Battery Voltage (in P/N)  
Target Idle RPM Vs. Battery Voltage (Manual Trans)  
Target Idle RPM Correction Vs. Coolant Temp.  
TCC Upper Load Upper Limit vs Vss  
TCC Lower Load Upper Limit vs Vss, (Low Gears)