

# C.A.T.S. Tuner ECM F0 Parameter List

## (ECM Configuration File Version U)

### ECM Switch Parameters

VATS Select (X =Enabled)  
Closed Throttle Spark Advance Enable  
No Reference Pulses (Error 12)  
Left O2 Sensor Diagnostic (Error 13)  
ECT Sensor High Diagnostic (Error 14)  
ECT Sensor Low Diagnostic (Error 15)  
DIS Fault Line Diagnostic (Error 16)  
TPS Sensor High Diagnostic (Error 21)  
TPS Sensor Low Diagnostic (Error 22)  
MAT Sensor Low Diagnostic (Error 23)  
Vehicle Speed Sensor Diag. (Error 24)  
MAT Sensor High Diagnostic (Error 25)  
CAM Diagnostic (Error 31)  
EGR Diagnostic (Error 32)  
MAP Sensor High Diagnostic (Error 33)  
MAP Sensor Low Diagnostic (Error 34)  
MAP Hose Disconnected Diag. (Error 35)  
DIS Fault Indicator (Error 36)  
Cylinder Select Diagnostic (Error 41)  
EST Monitor Diagnostic (Error 42)  
Knock Diagnostic (Error 43)  
Left O2 Sensor Lean Diag. (Error 44)  
Left O2 Sensor Rich Diag. (Error 45)  
VATS Diagnostic (Error 46)  
PROM Diagnostic (Error 51)  
Oil Temp. Low Diag. (Error 52)  
Over-Voltage Diag. (Error 53)  
Fuel Pump Voltage Diag. (Error 54)  
Fuel System Lean Diag. (Error 55)  
Oil Temp. High Diag. (Error 62)  
Port Throttle Vacuum Diag. (Error 56)  
Port Throttle System Diag. (Error 61)  
Right O2 Sensor Diag. (Error 63)  
Right O2 Sensor Lean Diag. (Error 64)  
Right O2 Sensor Rich Diag. (Error 65)  
Vallet Switch Diagnostic (Error 66)

### ECM Constants

Cylinder Volume  
Fuel Cutoff Speed  
Fuel Cutoff RPM  
Fuel Resume Speed  
Fuel Resume RPM  
Injector Flow Rate  
RPM Threshold To Enable CARS  
% TPS Threshold To Disable CARS  
Vehicle Speed Threshold To Disable CARS  
Vehicle Speed Threshold To Enable CARS  
Speed Threshold To Disable + Reset CARS  
Coolant Temp. Threshold To Enable CARS  
RPM/Speed Ratio Threshold For 1st Gear

Min. RPM/Speed Ratio For 4th Gear  
Max RPM/Speed Ratio For 4th Gear  
Fan 1 On Oil Temp. Threshold (Low RPM)  
Fan 1 On Oil Temp. Threshold (High RPM)  
Fan 1 Hysteresis for Oil Temp Thresh  
High RPM Threshold for Oil Temp Fan  
Fan 1 On Cool Temp, Low Speed, A/C On  
Fan 1 On Cool Temp, High Speed  
Fan 2 On Cool Temp, Low Speed, A/C On  
Fan 2 On Cool Temp, High Speed  
Fan 2 Disable Speed Threshold  
Fan Cool Temp High Speed Switch Point  
Fan Cool Temp Hysteresis Thresh, Low Spd  
Fan Cool Temp Hysteresis Thresh, Hi Spd  
Minimum MAP for Power Enrich (PE) Mode  
MAP Hysteresis for Power Enrich Disable  
TPS Hysteresis For Power Enrich Disable  
Maximum Knock Retard (Not In PE)  
%VE Table #1 Offset (Port Open)  
%VE Table #2 Offset (Port Open)  
%VE Table #1 Offset (Port Closed)  
%VE Table #2 Offset (Port Closed)  
Main Spark Bias (Closed Port)  
Main Spark Bias (Port Open)  
Cool. Temp. Compensation Spark Adv. Bias  
Closed Throttle Spark Advance  
O. L. %Change to F/A Ratio Vs Cool. Bias  
Closed Loop Enable Cool. Temp (Low MAT)  
Closed Loop Enable Cool. Temp (High MAT)  
Closed Loop MAT High/Low Threshold  
Secondary Inj. On Pulse Width Scalar  
Port Throt. To Secondary Inj. Delay  
Cool. Temp Port Throt. Disable Threshold  
Cool. Temp Port Throt. Enable Threshold  
Oil Temp Port Throt. Disable Threshold  
Oil Temp Port Throt. Enable Threshold  
Minimum MAP For EGR Enable  
MAP Threshold For EGR Disable  
Minimum %TPS For EGR Enable  
%TPS Threshold For EGR Disable  
Minimum RPM For EGR Enable  
RPM Threshold For EGR Disable  
Minimum Vehicle Speed For EGR Enable  
Minimum EGR Duty Cycle Threshold  
Minimum MAT For EGR Enable  
Maximum %TPS For EGR Enable  
Minimum Allowable BLM Value  
Maximum Allowable BLM Value  
BLM Update Enable Coolant Temp.  
BLM Update Disable Coolant Temp.  
Minimum Integrator Value  
Maximum Integrator Value  
Stoichiometric Air Fuel Ratio  
DFCO RPM Enable Threshold  
DFCO RPM Disable Threshold  
DFCO MAP Enable Threshold  
DFCO MAP Disable Threshold  
DFCO RPM Decrease Disable Threshold  
DFCO Enable TPS Threshold  
DFCO Disable TPS Threshold  
DFCO Enable Coolant Temp Threshold  
DFCO Enable Vehicle Speed Threshold  
Throt Follower Extend Decay Timer Adder

Throt. Follow Extend Decay Timer  
A/C Disable TPS Threshold  
A/C Disable Coolant Temp. Threshold  
A/C Disable Oil Temp. Threshold  
A/C Enable Oil Temp Threshold Hysteresis  
A/C Disable Speed Threshold  
A/C Disable RPM Threshold  
Minimum Counts for Valet Switch Open  
Minimum Counts for Valet Switch Closed  
Road Speed Constant  
Instrument Panel VSS Pulse Divisor  
Program ID

## **Tables**

ECM Switch Table  
ECM Constant Table  
Spark Advance #1 Vs. RPM Vs. Load (Port Closed)  
Spark Advance #2 Vs. RPM Vs. Load (Port Closed)  
Spark Advance #1 Vs. RPM Vs. Load (Port Open)  
Spark Advance #2 Vs. RPM Vs. Load (Port Open)  
Coolant Temp. Compensation Spark Advance Vs MAP  
Spark Retard Vs. MAT  
% Vol. Efficiency #1 Vs. RPM Vs. MAP (Port Open)  
% Vol. Efficiency #2 Vs. RPM Vs. MAP (Port Open)  
% Vol. Efficiency #1 Vs. RPM Vs. MAP (Port Closed)  
% Vol. Efficiency #2 Vs. RPM Vs. MAP (Port Closed)  
Port Throttle Opening Point Vs. RPM  
Port Throttle Closing Point Vs. RPM  
Target Idle RPM Vs. Coolant Temp.  
IAC Position Vs. Coolant Temp.  
Max. Throttle Follower Steps Vs. Vehicle Speed  
TPS Threshold For Power Enrichment Vs RPM  
PE %Change to Fuel/Air Ratio Vs. Coolant Temp.  
PE % Change to Fuel/Air Ratio Vs. RPM  
Injector PW Correction Vs. Battery Voltage  
Open Loop %Change To Fuel /Air Ratio Vs Cool Temp  
Open Loop %Change To Fuel/Air Ratio Vs MAP  
Maximum Knock Retard Vs. RPM (in PE)  
Knock Retard Attack Rate Vs. RPM (Deg/msec)  
Knock Retard Recovery Rate Vs. RPM (%/sec)  
Accel Enrichment Factor Vs. Differential MAP  
Accel Enrichment Trim Correction Vs. Coolant Temp.  
Accel Enrichment Trim Correction Vs. MAT  
Accel Enrichment Decay Delay Vs. Coolant Temp.  
EGR Base Duty Cycle Vs. RPM Vs. MAP  
EGR Gain Factor Vs. Coolant Temperature  
EGR Gain Factor Vs. Baro Vs. MAP  
BLM Cell RPM Boundaries  
BLM Cell MAP Boundaries