

# C.A.T.S. Tuner ECM DA3 Parameter List

## (ECM Configuration File Version BE)

### ECM Switch Parameters

Auto Trans (TCC = O, Manual = X)  
C.A.R.S. Select (X = Enabled)  
Reverse Inhibit (X = Enabled)  
VATS Select (X = Enabled)  
Data Stream Fuel Enable (X = Enabled)  
Left O2 Sensor Diagnostic (Error 13)  
VSS Diagnostic (Error 24)  
QDM #1 Diagnostic (Error 26)  
QDM #2 Diagnostic (Error 27)  
QDM #3 Diagnostic (Error 28)  
EGR Diagnostic (Error 32)  
MAP High Diagnostic (Error 33)  
MAP Low Diagnostic (Error 34)  
EST Grounded 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)  
Oil Temp Sensor Low (Error 52)  
Oil Temp Sensor High (Error 62)  
Right O2 Sensor Diagnostic (Error 63)  
Right O2 Sensor Lean Diag. (Error 64)  
Right O2 Sensor Rich Diag. (Error 65)  
A/C Press. Sensor Fail (Error 66)  
A/C Press. Sensor Degraded (Error 67)  
A/C Relay Shorted (Error 68)  
A/C Clutch Circuit Open (Error 69)  
A/C Evap. Temp. Sensor Fail (Error 71)

### ECM Constants

Fuel Cutoff Speed  
Fuel Resume Speed  
Fuel Cutoff, 1st Gear (Eng Speed)  
Fuel Cutoff, 2nd Gear (Eng Speed)  
Fuel Cutoff, 3rd -> 6th Gear (Eng Speed)  
Fuel Resume, 1st Gear (Eng Speed)  
Fuel Resume, 2nd Gear (Eng Speed)  
Fuel Resume, 3rd -> 6th Gear (Eng Speed)  
Fan 1 On Coolant Temp, Low MPH  
Fan 1 On Coolant Temp, High MPH  
Fan 2 On Coolant Temp, Low MPH  
Fan 2 On Coolant Temp, High MPH  
Fan Low MPH Hysteresis  
Fan High MPH Hysteresis  
Fan Low/High MPH Threshold  
Injector Flow Rate  
Display Injector Flow Rate  
Cylinder Volume  
Maximum Spark Advance  
Knock Retard Enable RPM  
Knock Retard Enable Speed

Knock Retard Enable Coolant Temp.  
Low Octane ESC Retard Enable MAP  
Low Oct ESC Retard Disable Delta MAP  
Low Oct ESC Retard Enable Knock Retard  
Low Oct ESC Retard Increase Step Size  
Low Oct ESC Retard Decrease Step Size  
Throt. Follow Extend Decay Timer (P/N)  
Throt. Follow Extend Decay Timer (Drive)  
Throt Follower Extend Decay Timer Adder  
Throttle Follower Slope Gain  
Throttle Follower Max. Steps  
EGR Off, (TPS)  
EGR On, (TPS)  
EGR Off, (Low RPM Window)  
EGR On, (Low RPM Window)  
EGR Off, (High RPM Window)  
EGR On, (High RPM Window)  
EGR Off, (Low MAP Window)  
EGR On, (Low MAP Window)  
EGR Off, (High MAP Window)  
EGR On, (High MAP Window)  
EGR On, Vehicle Speed  
EGR Off, Vehicle Speed  
EGR Enable Cool. Temp. Threshold  
Air Injector Enable Cool Temp Threshold  
Cool Thresh For HighTemp PE TPS Thresh.  
MAP Threshold To Enable Power Enrichment  
Min. Cool. Temp. for Closed Loop  
Min Cool Temp for Closed Loop, Cold MAT  
Minimum BLM Value  
Maximum BLM Value  
Min Coolant Temp for BLM Update  
Max. Coolant Temp. for BLM Update  
Min. MAP for BLM Update  
Minimum Integrator Value  
Maximum Integrator Value  
Stoichiometric AFR  
Fast O2 Rich/Lean Threshold Hysteresis  
Cold Closed Loop Timer Threshold  
Hot Closed Loop Timer Threshold  
Minimum Injector Pulse Width  
Default Injector Pulse Width  
Accel Enrich TPS Filter Coefficient  
Min. Async Pulse Width  
Max. Async Pulse Width  
DFCO Enable RPM Threshold  
DFCO Disable RPM Threshold  
DFCO Enable MAP Threshold  
DFCO Disable MAP Threshold  
DFCO Disable RPM Decrease Threshold  
DFCO Enable Coolant Temp. Threshold  
DFCO Enable TPS Threshold Hysteresis  
DFCO Enable MPH Threshold  
Idle RPM Adder, A/C On  
IAC Default Keep Alive Min Position  
IAC Minimum Keep Alive Min Position  
IAC Maximum Keep Alive Min Position  
Baro Update RPM Threshold  
Canister Purge Enable MAP Threshold  
Canister Purge Enable TPS Threshold  
CAT Protect Enable Coolant Temp.  
TCC Lock Speed (Low Gears)  
TCC Unlock Speed (Low Gears)

TCC Lock Speed (High Gear)  
TCC Unlock Speed (High Gear)  
TCC Unlock Prevention Speed Threshold  
C.A.R.S. Enable Coolant Temp. Threshold  
Road Speed Constant  
Instrument Panel VSS Pulse Divisor  
Minimum 1st Gear RPM/Vss Ratio  
Minimum 4th Gear RPM/Vss Ratio  
Maximum 4th Gear RPM/Vss Ratio  
PROM ID

## **Tables**

ECM Switch Table  
ECM Constant Table  
Main Spark Advance Vs RPM Vs. Load  
Main Spark Advance Vs RPM Vs. Load, (EXT)  
Coolant Temp. Compensation Spark Vs. Load  
EGR Spark Correction Vs RPM Vs Vacuum  
Start Up Spark Advance Vs. Coolant Temp.  
Closed TPS Spark Advance Vs. RPM  
Traction Control Spark Retard Vs. RPM  
Maximum Knock Retard Vs. RPM (in P.E.)  
Maximum Knock Retard Vs. MAP (not in P.E.)  
Knock Retard Gain Factor Vs. RPM  
Knock Retard Recovery Factor Vs. RPM  
Low Octane ESC Base Retard Vs. RPM  
Low Octane ESC Retard Multiplier Vs. RPM  
Low Octane ESC Retard Multiplier Vs. MAP  
Volumetric Efficiency Vs. RPM Vs. MAP  
Volumetric Efficiency Vs. RPM Vs. MAP (EXT)  
Injector PW Correction Vs. Battery Voltage  
Low Pulse Width Injector Offset Adder Vs. BPW  
TPS Threshold Vs. RPM For Power Enrich. Mode  
TPS Threshold for PE Vs RPM, (High Cool.)  
PE %Change to Fuel/Air Ratio Vs. Cool. Temp.  
PE %Change to Fuel/Air Ratio Vs. RPM  
StartUp Enrichment Vs. Coolant Temp.  
Accel. Enrich. Vs. Differential TPS (Mult)  
Accel. Enrich. Vs. Coolant Temp. (Mult.)  
Accel Enrich Delta TPS PW Factor Vs Async Pulse  
Accel Enrich Delta MAP PW Multiplier Vs. Delta MAP  
Accel Enrich Delta MAP PW Mult. Vs. Coolant Temp.  
Accel Enrich Delta MAP PW Decay Factor Vs. Coolant  
Accel Enrich Delta MAP Enable Threshold Vs TPS  
Open Loop %Change to Fuel/Air Ratio Vs. Cool. Temp  
Open Loop %Change to Fuel/Air Ratio Vs. MAP  
BLM Cell RPM Boundaries  
BLM Cell MAP Boundaries  
Left Fast O2 Rich/Lean Threshold Vs. Air Flow  
Right Fast O2 Rich/Lean Threshold Vs. Air Flow  
Left Slow O2 Rich/Lean Thresholds Vs. Air Flow  
Right Slow O2 Rich/Lean Thresholds Vs. Air Flow  
Closed Loop Fuel Timer Vs Coolant Temp.  
MAT Compensation Counts Vs. MAT  
Inv. MAT Term Lookup Delta Multiplier Vs Airflow  
DFCO Enable TPS Threshold Vs. RPM  
Crank Fuel Pulse Width Vs. Coolant Temp.  
Crank Fuel PW Multiplier Vs. Ref. Pulses (1-16)  
Crank Fuel PW Multiplier Vs. Ref. Pulses (>17)  
Crank Fuel Delivery Delay Vs. MAT

Target Idle RPM Vs. Coolant Temp. (In P/N)  
Target Idle RPM Vs. Coolant Temp. (In Drive)  
IAC Warm Park Position Vs Coolant Temp.  
Idle Speed Timeout IAC Steps Vs. Coolant Temp.  
IAC Manual Throttle Follower Offset Vs. MPH  
Idle Spark Retard Vs. Idle Speed Error  
Idle Spark Advance Vs. Idle Speed Error  
TCC Lock/Unlock %TPS Vs. Speed (Low Gears)  
TCC Lock/Unlock %TPS Vs. Speed (High Gears)