

C.A.T.S. Tuner ECM DA2 Parameter List

(ECM Configuration File Version BA)

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. Spd)
Fuel Resume, 1st Gear (Eng Speed)
Fuel Resume, 2nd Gear (Eng Speed)
Fuel Resume, 3rd -> 6th Gear (Eng Spd)
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 (Drive)
Throt. Follow Extend Decay Timer (P/N)
Throt Follower Extend Decay Timer Adder
Throttle Follower Slope Gain
Throttle Follower Max. Steps
EGR Off, (TPS)
EGR On, (TPS)
EGR Low RPM Window, Off RPM
EGR Low RPM Window, On RPM
EGR High RPM Window, Off RPM
EGR High RPM Window, On RPM
EGR Low MAP Window, Off (MAP)
EGR Low MAP Window, On (MAP)
EGR High MAP Window, Off (MAP)
EGR High MAP Window, On (MAP)
EGR On, Vehicle Speed
EGR Off, Vehicle Speed
EGR Enable Cool. Temp. Threshold
Min. Cool. Temp. for Closed Loop
Min Cool Temp for Closed Loop, Cold MAT
Cool Thresh For HighTemp PE TPS Thresh.
MAP Threshold To Enable Power Enrichment
Air Injector Enable Cool Temp Threshold
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
Idle RPM Adder, A/C On
IAC Default Keep Alive Min Position
IAC Minimum Keep Alive Min Position
IAC Maximum Keep Alive Min Position
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
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 Gears)
TCC Unlock Prevention Speed Threshold
Road Speed Constant
Instrument Panel VSS Pulse Divisor
C.A.R.S. Enable Coolant Temp. Threshold
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
Max Knock Retard in Power Enrich Vs. RPM
Max Knock Retard Vs. MAP
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.
TPS Threshold Vs. RPM For PE, (Hi Cool)
PE % Change to Fuel/Air Ratio Vs. Coolant Temp.
PE % Change to Fuel/Air Ratio Vs. RPM
Open Loop %Change to Fuel/Air Ratio Vs. Cool. Temp
Open Loop %Change To Fuel/Air Ratio Vs. MAP
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
DFCO Enable TPS Threshold Vs. RPM
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
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 Drive)
Target Idle RPM Vs. Coolant Temp. (In P/N)
IAC Warm Park Position Vs Coolant Temp.
Idle Speed Timeout IAC Steps Vs. Coolant Temp.
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)