

C.A.T.S. Tuner ECM 58A Parameter List

(ECM Configuration File Version AB)

ECM Switch Parameters

Limit Boost During First Accel
Two Atmosphere MAP Sensor
Vss Sensor (0 = Digital, X = Magnetic)
No Reference Pulse Diagnostic (Error 12)
O2 Sensor Diagnostic (Error 13)
CTS Sensor High Diag. (Error 14)
CTS Sensor Low Diag. (Error 15)
TPS Sensor High Diag. (Error 21)
TPS Sensor Low Diag. (Error 22)
MAT Sensor Low Diag. (Error 23)
Vss Diagnostic (Error 24)
MAT Sensor High Diag. (Error 25)
Wastegate Overboost Diagnostic (Err 31)
EVRV/EGR Diagnostic (Error 32)
MAP Sensor High Diagnostic (Error 33)
MAP Sensor Low Diagnostic (Error 34)
IAC Diagnostic (Error 35)
EST Monitor Diagnostic (Error 42)
ESC Diagnostic (Error 43)
O2 Sensor Lean Diagnostic (Error 44)
O2 Sensor Rich Diagnostic (Error 45)
EPROM Diagnostic (Error 51)
Battery Voltage High Diag. (Error 53)
ADU Diagnostic (Error 55)
Transmission Type (0 = Auto, X = Manual)
Knock Option Enabled
EVRV EGR Calculation Enabled

ECM Constants

Injector Flow Rate (Display)
Fuel Cutoff RPM
Fuel Resume RPM
Fuel Cutoff MAP
Fuel Resume MAP
Boost Disable Speed
Boost Resume Speed
Spark Reference Angle
Spark Time Domain Correction
Max Spark Advance Relative to Reference
Max Spark Retard Relative to Reference
Cool. Temp Spark Advance Table Bias
EGR Spark Advance Bias
Boost Spark Adv. Correction Table Bias
Extended Spark RPM Slope
Maximum RPM for Extended RPM Spark
Cylinders (128 = 4, 192 = 6, 0 = 8)
Minimum BLM Value
Maximum BLM Value
Minimum Integrator Value
Maximum Integrator Value
Fan Enable Vehicle Speed (Low)

Fan Enable Vehicle Speed (High)
Fan Enable Coolant Temperature (High)
Fan Enable Coolant Temperature (Low)
Hot Fan Enable Cool. Temp. (Low)
Hot Fan Enable Cool. Temp. (High)
Cold Fan Enable Cool. Temp. (Low)
Cold Fan Enable Cool. Temp. (High)
Cold Fan Enable MAT (Low)
Cold Fan Enable MAT (High)
Max. Fan On Time, Ignition Off
Min. Fan On Time, Ignition Off
Fan Timer Increment MAP Threshold
Fan Timer Decrement MAP Threshold
Wastegate Coolant Temp Threshold (Low)
Wastegate Coolant Temp Threshold (High)
Maximum Allowable Knock Retard
Min Coolant Temp. For Closed Loop
Cold Closed Loop Timer
Hot Closed Loop Timer
Power Enrich RPM Threshold, Low MPH
Power Enrich RPM Threshold, High MPH
P.E. Enable RPM High/Low MPH Thresh
Power Enrich Enable Primary MAP Thresh.
Power Enrich Enable Secondary MAP Thresh
Power Enrich Enable MAP Threshold
Power Enrich Enable MAP Thresh. Hyst.
Power Enrich Enable %TPS Threshold
Power Enrich Enable TPS Secondary Thresh
Power Enrich Enable %TPS Thresh. Hyst.
Power Enrich Enable Coolant Temp Thresh
High MPH P.E. AFR Correction
High MPH P.E. AFR Correction MPH Thresh.
Minimum Base Pulse Width
Minimum Base Pulse Width Hysteresis
Minimum Async Pulse Width
Maximum Async Pulse Width
TCC Coolant Temperature Threshold
TCC Coast Load Limits Hysteresis
TCC Coast Load Limit (Low MPH)
TCC Coast Load Limit (High MPH)
TCC Negative Delta TPS Unlock Limit
TCC Positive Delta TPS Unlock Limit
TCC MPH Upper Limit For Lock, 3rd Gear
TCC MPH Lower Limit For Unlock, 3rd Gear
Boost Reduction Retard Enable Threshold
Boost Reduction Retard Disable Threshold
Desired Boost Pressure Reduction Delta 1
Desired Boost Pressure Reduction Delta 2
Delay Time To Start Boost Reduction
Successive Power Ups with No MALF's
Road Speed Sensor Constant
Coolant Temp. Threshold for EGR Enable
Instrument Panel VSS Pulse Divisor
EGR On Vaccum Threshold
EGR Off Vaccum Threshold
EGR Air Flow Multiplier
IAC Initial Position Decay Multiplier
IAC Initial Position Decay Delay
DFCO Enable RPM
DFCO Disable RPM
DFCO Enable MAP Threshold
DFCO Multiplier Step Value
DFCO Min. Vehicle Speed

DFCO Enable %TPS Threshold
Fuel Quality Test Enable Coolant Temp
Fuel Quality Test Enable MAP
Fuel Quality Test Enable RPM
Fuel Quality Test Disable RPM

Tables

ECM Switch Table
ECM Constant Table
Main Spark Advance Vs. RPM Vs. MAP
Cool. Temp. Compensation Spark Vs. MAP
EGR Spark Advance Vs. %EGR
Power Enrichment Spark Advance Vs. RPM
Start Up Spark Advance Vs. Coolant Temp.
Spark Adv. Correction For Premium Fuel Vs. MAP
Boost Spark Advance Correction Vs. MAT Vs. Boost
Knock Retard Attack Rate Vs. RPM
Knock Retard Recovery Rate Vs. RPM
Idle Overspeed Spark Retard Vs. RPM Error
Idle Underspeed Spark Retard Vs. RPM Error
% Volumetric Efficiency Vs. RPM Vs. MAP
%Vol. Efficiency Vs. RPM Vs. MAP (Closed Throttle)
% Volumetric Efficiency Adder Vs. RPM
Desired Boost Pressure Vs. RPM Vs. TPS
Target Idle RPM Vs, Coolant Temp. (In Drive)
Target Idle RPM Vs, Coolant Temp. (Park/Neut)
IAC Initial Motor Position Vs. Coolant Temp.
IAC Initial Position Decay Interval Vs. Cool Temp.
Power Enrichment Air Fuel Ratio Vs. RPM
Accel. Enrichment Vs. Differential MAP
Accel. Enrichment Vs. Differential TPS
Accel Enrich Multiplier Vs. Coolant Temp.
Accel. Enrichment Multiplier Vs. RPM
Injector PW Compensation Vs. Battery Voltage
Initial Value of Wastegate Duty Cycle Vs. %TPS
Turbo Transport Lag Coefficient Vs. MAP
Turbo Transport Lag Coefficient Vs. RPM
Base Pulse Constant Vs. Desired %EGR
Decel Enlean Coolant Factor Vs. Cool. Temp.
Decel Enlean MAP Contribution Vs Delta MAP
Decel Enlean TPS Contribution Vs Delta TPS
Decel Enleanment Multiplier Vs. MAP
Crank AFR Vs. Coolant Temp.
Cold Engine AFR Vs. Coolant Temp. Vs. MAP
Cold Engine AFR Vs. Coolant Temp, Closed Throt.
BPW Boost Multiplier Vs. MAP
BPW Altitude Correction Factor Vs. Baro Vs. MAP
Altitude Compensation Factor Vs. Baro
A/F Slow Trim Logic Low O2 Threshold Vs. MAP
A/F Slow Trim Logic High O2 Threshold Vs. MAP
EGR Duty Cycle Vs. Normalized EGR Valve Flow
Desired %EGR Vs. Vacuum Vs. RPM
EGR Flow Pressure Compensation Vs. Pressure
TCC Lower Load Limit Vs. MPH, 3rd Gear
TCC Upper Load Limit Vs. MPH, 3rd Gear
Fan On Timer Negative Correction Vs. MAT
Fan On Timer Positive Correction Vs. MAT