

C.A.T.S. Tuner ECM 2E Parameter List

(ECM Configuration File Version C)

ECM Switch Parameters

MAF Sensor Low Diagnostic (Error 101)
O2 Sensor Lean Diagnostic (Error 131)
O2 Sensor Rich Diagnostic (Error 132)
Knock Diagnostic (Error 325)
Vehicle Speed Diagnostic (Error 501)
EGR Solenoid 1 Diagnostic (Error 1403)
EGR Solenoid 2 Diagnostic (Error 1404)
EGR Solenoid 3 Diagnostic (Error 1405)
VATS Freq Diagnostic (Error 1626)
VATS Signal Diagnostic (Error 1629)
VATS Select (X = Enabled)
AIR Pump Option (X = Present)
Transmission Type (X = Manual)
Reset Intergrator on A.E. (X = Enabled)

ECM Constants

Spark Reference Angle
Maximum Spark Advance
Maximum Spark Retard
Max Knock Retard (Not In Power Enrich.)
Max Spark Retard (In Power Enrich.)
Knock Retard Enable RPM
Stoichiometric AFR
Fuel Injector Flow Rate
Minimum Base Pulse Width
Closed Loop Timer Cold/Warm Threshold
Cold Closed Loop Enable Timer
Warm Closed Loop Enable Timer
Closed Loop Enable RPM Threshold
Maximum BLM Value
Minimum BLM Value
Hot Open Loop Enable Coolant Temp.
Hot Open Loop Disable Coolant Temp.
Power Enrich Enable Delay
Accel Enrich Enable Positive Delta TPS
Accel Enrich Disable Negative Delta TPS
Decel Enlean Enable Negative Delta TPS
DFCO Enable RPM Threshold
DFCO Disable RPM Threshold
DFCO Disable Neg. RPM Change Threshold
DFCO Disable Upper TPS Threshold
DFCO Disable Lower Speed Threshold
IAC Motor Park Position
IAC Steps Added For P/N-Drive (A/C Off)
IAC Steps Added For P/N-Drive (A/C On)
Max. TPS For Closed Loop Idle RPM Cntrl.
Max Speed For Clsd. Lp. Idle RPM Control
Max Air Flow For Clsd. Lp. Idle Control
Idle Underspeed Error For Spark Advance
Idle Underspeed Spk Rtrd Gain (In Drive)
Idle Underspeed Sprk Rtrd Gain (In P/N)

Throttle Follower Enable %TPS Threshold
Throttle Follower Clear Neg Airflow Err
A/C Disable Engine Speed
A/C Re-Enable Engine Speed
Fan 1 On Coolant Temp. Threshold
Fan 1 Off Coolant Temp. Threshold
Fan 2 On Coolant Temp. Threshold
Fan 2 Off Coolant Temp. Threshold
Fan 1 Off Vehicle Speed Threshold
Fan 1 On Vehicle Speed Threshold
Fan 1 On A/C Pressure
Fan 1 Off A/C Pressure
Fan 2 On A/C Pressure
Fan 2 Off A/C Pressure
CAT Protect Mode Enable Coolant Temp.
Min. Air Temp To Enable A.I.R.
Max. Air Temp To Enable A.I.R.
Min. Coolant Temp To Enable A.I.R.
Max. Coolant Temp To Enable A.I.R.
Lower EGR Enable TPS Threshold
Lower EGR Disable TPS Threshold
Upper EGR Disable TPS Threshold
Upper EGR Enable TPS Threshold
Torque Management Enable RPM
Normal Kickdown Mode %TPS Enable Thresh.
Normal Kickdown Mode %TPS Disable Thresh
Hot Kickdown Mode %TPS Enable Thresh.
Hot Kickdown Mode %TPS Disable Thresh
Positive Delta TPS TCC Unlock Threshold
Negative Delta TPS TCC Unlock Threshold
TCC Delay Before Lock
TCC Release Rate, Pos. Delta TPS Unlock
TCC Initial Apply Duty Cycle
TCC Initial Release Duty Cycle
Shift Light On RPM
Shift Light High N/V Ratio - 2nd Gear
Shift Light Low N/V Ratio - 2nd Gear
Shift Light High N/V Ratio - 3rd Gear
Shift Light Low N/V Ratio - 3rd Gear
Shift Light High N/V Ratio - 4th Gear
Shift Light Low N/V Ratio - 4th Gear
Shift Light High N/V Ratio - 5th Gear
Shift Light Low N/V Ratio - 5th Gear
Shift Light On Min %TPS - 3rd Gear
Shift Light On Min RPM - 4th Gear
Shift Light On Min %TPS - 4th Gear
Shift Light On Min RPM - 1st Gear
Shift Light On Min %TPS - 1st Gear
Shift Light On Min RPM - 2nd Gear
Shift Light On Min %TPS - 2nd Gear
Shift Light On Min RPM - 3rd Gear
Road Speed Constant

Tables

ECM Switch Table
ECM Constant Table
Main Spark Advance Vs. RPM Vs. Load
Launch Mode Spark Advance Vs. RPM Vs. Load
Base Cool Temp Spark Advance Compensation Vs Load
EGR Spark Advance Vs RPM Vs Load

MAT Spark Advance Correction Vs. Load
TCC Locked Spark Advance Vs RPM Vs Load
Spark Retard Vs. RPM Vs. Excess Torque
Knock Retard Attack Rate Vs. RPM
Knock Retard Recovery Rate Vs. RPM
Spark Advance/Retard Vs. Time in P. E.
Power Enrich. Spark Advance Trim Vs. RPM
Power Enrich. Spark Retard Trim Vs. RPM
Fuel Cutoff/Resume Vehicle Speeds (MPH) Vs. Gear
Fuel Cutoff / Resume RPM Limits Vs. Gear
Open Loop AFR Vs. Load Vs. RPM
BLM Cell RPM Boundaries
BLM Cell MAF Boundaries
Injector Offset Vs. Battery Voltage
Crank Fuel Pulse Width Vs. Coolant Temp.
Crank Fuel Pulse Width Multiplier Vs. % TPS
Crank Fuel Enleanment Multiplier Vs. RPM
Crank Fuel BPW % Enleanment Vs. Load
Power Enrich. TPS Threshold Vs. RPM
Power Enrich. AFR Vs. Coolant Temp.
Engine %Efficiency Vs. RPM Vs. AFR
Power Enrichment Trim Vs. RPM
Accel. Enrich. BPW Multiplier Vs. Delta TPS
DTPS Accel. Enrich. Mult. Vs. Cool. Temp. In Drive
DTPS Accel. Enrich. Mult. Vs. Cool. Temp. In P/N
Delta TPS Accel. Enrich. Mult. Vs. Air Temp.
Delta TPS Accel. Enrich. Mult. Vs. Vehicle Speed
Delta TPS Decel Enlean Factor Vs. Delta TPS
Delta TPS Decel Enlean Factor Vs. Ref. Pulses
MAF Vs. Output Frequency Table 1
MAF Vs. Output Frequency Table 2
MAF Vs. Output Frequency Table 3
MAF Vs. Output Frequency Table 4
MAF Vs. Output Frequency Table 5
MAF Vs. Output Frequency Table 6
MAF Vs. Output Frequency Table 7
MAF Vs. Output Frequency Table 8
IAC Motor Park Position Vs. Load
Idle Speed Vs. Coolant Temp. (In Drive)
Idle Speed Vs. Coolant Temp. (In P/N)
Idle Speed Offset for A/C Vs. MAT
Command Air Flow Vs. RPM Vs. Gear
Throttle Follower Gain Vs. Vehicle Speed
Max Throttle Follower Steps Vs. Vehicle Speed
EGR Actuator Position (%Stroke) Vs. RPM Vs. Load
Normal Mode MPH Shift Points Vs. % TPS
Sport Mode MPH Shift Points Vs. % TPS
Cruise Mode MPH Shift Points Vs. % TPS
Hot Mode MPH Shift Points Vs. % TPS
Normal Kickdown RPM Shift Points
Hot Kickdown RPM Shift Points
Maximum Turbine Torque Vs. RPM, 1 -> 2 Upshift
Maximum Turbine Torque Vs. RPM, 2 -> 3 Upshift
Maximum Turbine Torque Vs. RPM, 3 -> 4 Upshift
TCC Lock Speed Vs. % TPS, Normal Mode, 3rd Gear
TCC Lock Speed Vs. % TPS, Cruise Mode, 3rd Gear
TCC Lock Speed Vs. % TPS, Normal Mode, 4th Gear
TCC Lock Speed Vs. % TPS, Cruise Mode, 4th Gear
TCC Unlock Speed Vs. % TPS, Normal Mode, 3rd Gear
TCC Unlock Speed Vs. % TPS, Cruise Mode, 3rd Gear
TCC Unlock Speed Vs. % TPS, Normal Mode, 4th Gear
TCC Unlock Speed Vs. % TPS, Cruise Mode, 4th Gear
TCC Lock Speed Vs. % TPS, Hot Mode, 3rd Gear

TCC Lock Speed Vs. % TPS, Hot Mode, 4th Gear
TCC Unlock Speed Vs. % TPS, Hot Mode, 3rd Gear
TCC Unlock Speed Vs. % TPS, Hot Mode, 4th Gear
TCC %D.C. Apply Rate Vs. %TPS Vs. Gear
TCC %D.C. Release Rate Vs. %TPS Vs. Mode