

C.A.T.S. Tuner PCM 31 Parameter List (ECM Configuration File Version U)

ECM Switch Parameters

Throttle Kicker Function (X = Enabled)
Synchronous Fuel at Idle (TBI)
CPI/PFI Fuel Mode (X = Enabled)
MAT Sensor Present
Crank Fuel To All Injectors Each Pulse
Canister Purge Logic (X = Enabled)
Manual/Auto Transmission (1 = Manual)
Linear/EVRV EGR (0 = EVRV)
Back Pressure EGR
Governor Option (X = Enabled)
VATS (X = Enabled)
Shift Light (X = Enabled)
O2 Sensor Diagnostic (Error 13)
Coolant Temp. High (Error 14)
Coolant Temp. Low (Error 15)
Vss PPM Diagnostic (Error 16)
TPS Sensor High Diagnostic (Error 21)
TPS Sensor Low Diagnostic (Error 22)
MAT Sensor Low Diagnostic (Error 23)
Vehicle Speed Diagnostic (Error 24)
MAT Sensor High Diagnostic (Error 25)
Trans Pressure Manifold Diag (Error 27)
Trans. Press Switch Diag. (Error 28)
Governor Diagnostic (Error 31)
EGR Diagnostic (Error 32)
MAP Sensor High Diagnostic (Error 33)
MAP Sensor Low Diagnostic (Error 34)
IAC Diagnostic (Error 35)
IAC TPS Kicker Diagnostic (Error 36)
Brake On Diagnostic (Error 37)
Brake Off Diagnostic (Error 38)
Cam Pulse Sensor Diagnostic (Error 41)
EST Montior Diagnostic (Error 42)
Knock System Diagnostic (Error 43)
O2 Sensor Lean Diagnostic (Error 44)
O2 Sensor Rich Diagnostic (Error 45)
VATS Diagnostic (Error 46)
EPROM Checksum Diagnostic (Error 51)
High System Voltage Long Diag (Error 52)
System Voltage High. Diag (Error 53)
Fuel Pump Relay Diagnostic (Error 54)
Trans. Temp High Diag. (Error 58)
Trans. Temp Low Diag. (Error 59)
Baro Pressure High Diag. (Error 63)
Baro Pressure Low Diag. (Error 64)
3->2 Shift Quad Driver Diag (Error 66)
TCC Quad Driver Diagnostic (Error 67)
Trans Slip Diagnostic (Error 68)
TCC On Diagnostic (Error 69)
Engine Speed Low Diag. (Error 71)
Output Speed Loss Diag. (Error 72)
Force Motor Current Diag. (Error 73)
Trans Turbine Speed Diag. (Error 74)

System Voltage High Diag. (Error 75)
MNP Switch Diagnostic (Error 77)
Transmission Hot Diag. (Error 79)
Quad Driver #1 Shift B Diag (Error 81)
Quad Driver #1 Shift A Diag (Error 82)
Quad Driver #1 Diagnostic (Error 83)
Undefined Ratio Diag. (Error 85)
Low Ratio Diagnostic (Error 86)
High Ratio Diagnostic (Error 87)
Max Adapt Long Shift Diag. (Error 89)

ECM Constants

Initial Spark Value
Fuel Cut Off RPM
Fuel Resume RPM
Fuel Cut Off RPM (Trans in Default Gear)
Fuel Resume RPM (Trans in Default Gear)
Fuel Cut off Speed
Fuel Resume Speed
Main Spark Bias
Coolant Comp. Spark Bias
MAT Correction Spark Bias
RPM To Bypass WOT Delay
WOT Delay
Max Vehicle Speed For Idle Fuel
Max Vehicle Speed For Idle Spark
Low Octane Spark Retard Enable Temp.
Max %TPS For Idle Fuel
Injector Flow Rate
Cylinder Volume
EGR On, TPS
EGR Off, TPS
EGR On, RPM
EGR Off, RPM
EGR On, Low MAP
EGR Off, Low MAP
EGR Off , High MAP
EGR On, High Map
Min. Vehicle Speed for EGR
EGR Diagnostic Min. Vehicle Speed
Max. RPM for BLM Enable
Minimum BLM
Maximum BLM
Minimum Integrator Value
Maximum Integrator Value
Closed Loop Enable Coolant Temp.
Cold Closed Loop Timer
Warm Closed Loop Timer
Hot Closed Loop Timer
Cold/Warm Closed Loop Temp Thresh.
Warm/Hot Closed Loop Temp Thresh.
Stoichiometric AFR
Slow O2 Filter For Idle
Fuel Prop. Duration Offset At Idle
Fuel Prop. Count Added At Idle
Throttle Kicker Disable %TPS Threshold
Throttle Kicker Disable Coolant Temp.
Throttle Kicker Disable Vehicle Speed
Throttle Kicker Disable RPM (In P/N)
Throttle Kicker Disable RPM (In Drive)

Max. Throttle Follower TPS Value, In P/N
Max. Throttle Follower TPS, In Drive
Normal Kickdown 1 -> 2 Shift
Normal Kickdown 2 -> 3 Shift
Normal Kickdown 3 -> 4 Shift
Kick Down, Upper Qualifier TPS
Kick Down, Lower Qualifier TPS
Number of Cylinders
RPM/VSS Ratio
Speed Sensor Pulses Per Revolution
PROM ID

Tables

ECM Switch Table
ECM Constant Table
Main Spark Vs. RPM Vs. MAP - Open Throttle
Main Spark Vs. RPM Vs. MAP - Closed Throttle
Base ECT Spark Adv. Correction Vs. Vacuum Vs. ECT
Base MAT Spark Adv. Correction Vs. Vacuum Vs. MAT
MAT Spark Correction Multiplier Vs MAP (Neg Corr.)
MAT Spark Correction Multiplier Vs MAP (Pos Corr.)
Power Enrichment Spark Correction Vs. RPM
Max. Knock Retard Vs. RPM (in P.E.)
Max. Knock Retard Vs. MAP
Vol. Efficiency. Vs. RPM Vs. MAP - Open Throttle
Vol. Efficiency. Vs. RPM Vs. MAP - Closed Throttle
Intermediate Charge Temp. Multiplier Vs. Airflow
Charge Temperature Vs. Intermediate Charge Temp.
Power Enrich Enable TPS Vs. RPM
Fast Power Enrich Enable TPS Vs. RPM
Power Enrich Air Fuel Ratio Vs. RPM
Accel Enrich Delta TPS P.W. Adder Vs. Delta TPS
Accel Enrich Delta MAP P.W. Adder Vs. Delta MAP
A. E. Delta TPS P.W. Adder Multiplier Vs. ECT
A. E. Delta TPS P.W. Adder Multiplier Vs. MAT
A. E. Delta MAP P.W. Adder Multiplier Vs. ECT
A. E. Delta MAP P.W. Adder Multiplier Vs. RPM
Open Loop AFR Vs. Coolant Temp. Vs. MAP
AFR At Startup (Choke)
Startup BPW Vs. Coolant Temp.
Proportional Value Vs. O2 Error
Proportional Value Offset Vs. Air Flow
Integrator Delay Vs. Air Flow
Integrator Delay Mult. Vs. O2 Error
Proportional Flow Gain Multiplier Vs. MAP Vs. RPM
Slow O2 Time Constant Vs. Air Flow
Mean Rich/Lean O2 Voltage Threshold Vs. Air Flow
Rich O2 Voltage Threshold Vs. Air Flow
Lean O2 Voltage Threshold Vs. Air Flow
BLM Cell RPM Boundaries
BLM Cell MAP Boundaries
Target Idle Vs. Cool. Temp. Park/Neut. - A/C Off
Target Idle Vs. Cool. Temp. Park/Neut. - A/C On
Target Idle Vs. Cool. Temp. In Drive - A/C Off
Target Idle Vs. Cool. Temp. In Drive - A/C On
Idle Overspeed Spark Retard Vs. RPM Error
Idle Overspeed Spark Retard Multiplier Vs. MAP
Idle Underspeed Spark Retard Vs. RPM Error
Idle Underspeed Spark Retard Multiplier Vs. MAP
Throttle Follower Gain Factor Vs. Coolant Temp.

Throttle Follower Gain Factor Vs. RPM
Throttle Follower TPS Delay Time Vs. Speed
Throttle Follower TPS Filter Coefficient Vs. Speed
Min. Throttle Follower TPS Value Vs. Coolant Temp.
Transmission Main Line Pressure (0 - 64 MPH)
Transmission Main Line Pressure (64 - 128 MPH)
Normal Shift Speed Vs. Shift Vs. %TPS
Normal Kick Down Shift Speed Vs. Shift
Torque Converter Release MPH Vs. TPS
Torque Converter Engage MPH Vs. TPS
Line Pressure Mod. Vs. Current Gear Vs. TPS
Line Pressure Mod. In WOT Vs. RPM
Down Shift Pressure Mod. 2 -> 1 Vs. MPH
Down Shift Pressure Mod. 3 -> 2 Vs. MPH
Down Shift Pressure Mod. 4 -> 3 Vs. MPH