

C.A.T.S. Tuner PCM 85 Parameter List

(ECM Configuration File Version AN)

ECM Switch Parameters

Auto / Manual Transmission (X = Manual)
Electronic Governor Option (X = Enabled)
EGR RPM/MAP Select (X=RPM)
Governor Diagnostic (Error 31)
Fuel Pump Relay Diagnostic (Error 54)
O2 Sensor Diagnostic (Error 13)
Coolant Temp. High (Error 14)
Coolant Temp. Low (Error 15)
MAP Sensor High Diagnostic (Error 33)
ESC Diagnostic (Error 43)
MAP Sensor Low Diagnostic (Error 34)
EST Montior Diagnostic (Error 42)
TPS Sensor High Diagnostic (Error 21)
Vehicle Speed Diagnostic (Error 24)
TPS Sensor Low Diagnostic (Error 22)
Trans. Temp High Diag. (Error 58)
ADU Diagnostic (Error 55)
Trans. Press Switch Diag. (Error 28)
High Ratio Diagnostic (Error 87)
Trans. Temp Low Diag. (Error 59)
Force Motor Current Diag. (Error 73)
Overdrive Diagnostic (Error 68)
Quad Driver #1 Shift B Diag (Error 81)
TCC On Diagnostic (Error 69)
Engine Speed Low Diag. (Error 71)
System Voltage High Diag. (Error 53)
Output Speed Loss Diag. (Error 72)
Quad Driver #1 Shift A Diag (Error 82)
Input Speed Sensor Diag. (Error 74)
Transmission Hot Diag. (Error 79)
Quad Driver #1 Diagnostic (Error 83)
O2 Lean Diagnostic (Error 44)
O2 Rich Diagnostic (Error 45)
EGR Diagnostic (Error 32)
Undefined Ratio Diag. (Error 85)
Low Ratio Diagnostic (Error 86)
Max Adapt Long Shift Diag. (Error 89)

ECM Constants

Fuel Cut Off Engine Speed
Fuel Resume Engine Speed
Initial Spark Advance
Main Spark Bias
Cool Compensation Spark Advance Bias
Maximum Spark Advance
Maximum Spark Retard
Min. Cool. Temp. to Enable Spark Retard
Bypass WOT Delay, (Eng Speed)
Wide Open Throttle Delay
Base Pulse Width Constant
Number of Cylinders

Decel Enleanment Delta MAP Factor
EGR On, (TPS)
EGR Off, (TPS)
EGR On (Eng Speed)
EGR Off, (Eng. Speed)
Low MAP EGR On
Low MAP EGR Off
EGR Off, (MAP)
EGR On, (MAP)
Min. Coolant Temp. To Enable EGR
Maximum RPM To Enable Block Learn
Minimum MAP To Enable Block Learn
Maximum MAP To Enable Block Learn
Force Open Loop Fuel For Idle, (Speed)
Force Open Loop Fuel For Idle, (TPS)
Open Loop Idle Fuel Enable RPM Threshold
Open Loop Idle Fuel Disable RPM Thresh.
Open Loop Idle Fuel Enable Delay Timer
Max. AFR For 1st Time Open Loop Idle
Maximum Open Loop Idle AFR
Min. Coolant to Enable Closed Loop Fuel
Closed Lp Timer Enable (Cold/Warm Eng.)
Closed Lp Enable Timer, (Cold Eng)
Closed Lp Enable Timer (Warm Eng.)
Accel 'Pump Shot' For IAC At Idle
Minimum BLM Value
Maximum BLM Value
Minimum Integrator Value
Maximum Integrator Value
Async To Sync Fuel MAP Threshold
Async To Sync Fuel RPM Threshold
Sync To Async Fuel MAP Threshold
Sync To Async Fuel RPM Threshold
Async-->Sync BPW (Min)
Maximum Async Injector Pulse Width
Minimum Async Injector Pulse Width
Delta O2 Volt Window for Fast Rich/Lean
Error Thresh. for Integration Correction
Rich O2 Sensor Voltage At Idle
Lean O2 Sensor Voltage At Idle
Mean R/L O2 Sensor Voltage At Idle
Proportional Gain Flow Factor at Idle
Proportional Duration Offset at Idle
Integrator Delay Bias at Idle
Positive Error Scale Factor
Error Correction Factor at Idle
IAC Park To Run Position Decay Delay
%TPS Threshold For Closed Throttle
Time Treshold To Enable IAC Kickdown
Desired Governor RPM
Low Governor Disable RPM
Desired Governor Vehicle Speed
Governor Disable Speed Hysteresis
Governor Light On RPM Threshold
Governor Overspeed Fuel Cutoff RPM
Governor Overspeed Fuel Resume RPM
Governor Overspeed Fuel Cutoff Speed
Governor Overspeed Fuel Resume Speed
Mechanical 1st Gear Ratio
Mechanical 2nd Gear Ratio
Mechanical 3rd Gear Ratio
Kickdown Mode Enable %TPS Threshold
Kickdown Mode Disable %TPS Threshold

Power Steering Stall Enable RPM Thresh.
Power Steering Stall Disable RPM Thresh.
TCC Enable Coolant Temp. Threshold
TCC Disable Coolant Temp. Threshold
TCC Enable Transmission Temp. Threshold
TCC Disable Transmission Temp. Threshold
Neg. Delta %TPS TCC Release Threshold
Delta %TPS TCC Off Time
Min TPS to Enable TCC - Low MPH
Min TPS to Enable TCC - High MPH
TCC Disable TPS Threshold - Low MPH
TCC Disable TPS Threshold - High MPH
TCC Disable Slip Threshold
TCC Re-Enable Slip Threshold
Low-High MPH Thresh. for TCC TPS Limits
High-Low MPH Thresh. for TCC TPS Limits
Lower Adaptive Learn Trans Temp Thresh.
Upper Adaptive Learn Trans Temp. Thresh.
MALF Error 68 Enable Trans Slip RPM
PROM ID

Tables

ECM Switch Table
ECM Constant Table
Main Spark Advance Vs. Load Vs. RPM
Cool Compensation Spark Advance Vs. Load
Power Enrichment Spark Vs. RPM
Start Up Spark Advance Vs. Coolant Temp.
Startup Spark Advance Decay Delay Vs. Coolant Temp
Startup Spark Advance Decay Factor Vs. Cool. Temp.
Knock Attack Rate Vs. RPM (Deg/msec)
Knock Recovery Rate Vs. RPM (%/sec)
Maximim Knock Retard Vs. RPM (in WOT)
Maximim Knock Retard Vs. MAP
EGR Spark Advance Correction
Volumetric Efficiency Vs. RPM Vs. Load
Base Pulse Constant Vs. % Avail. EGR Vs. Air Flow
Desired % EVRV Vs. MAP Vs. RPM
% Available EGR Vs. Vacuum Vs. EVRV % Duty Cycle
TPS Threshold Vs. RPM For WOT
TPS Threshold Vs. RPM For WOT, (Fast)
WOT Air Fuel Ratio Vs. RPM
Pump Shot Vs. Differential TPS
Pump Shot Vs. Differential MAP
Open Loop Air Fuel Ratio Vs. Coolant Temp.
Choke Enrichment Factor Vs. Coolant Temp.
Choke AFR Decay Multiplier Vs. Coolant Temp.
AFR Time Out Decay Rate Vs. Air Flow
Crank Air Fuel Ratio Vs. Coolant Temp.
Decel Enleanment Coolant Factor Vs. Coolant Temp.
IAC Steps Vs Coolant Temp.
Target Idle RPM Vs. Coolant Temp.
IAC Motor Reset Position Vs. Baro.
IAC Motor Power Steering Stall Offset Vs. Baro.
Integrator Delay 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
Slow O2 Filter Time Constant Vs. Air Flow
Proportional Counts Vs. Slow Filtered O2 Error

Prop. Term Duration Vs. Slow Filtered O2 Error
Proportional Duration Offset Vs. Air Flow
Proportional Gain Flow Factor Vs. Air Flow
Integrator Delay Multiplier Vs. Slow O2 Error
Main Line Pressure, 0 - 64 MPH
Main Line Pressure, 64 - 128 MPH
Normal Mode Upshift/Downshift Vs. MPH Vs. TPS
Kickdown Up/Down Shift Points
Performance Mode Upshift/Downshift Vs. MPH Vs. TPS
Torgue Converter Release MPH Vs. TPS
Torgue Converter Engage MPH Vs. TPS
TCC Apply Operating Point Vs. %TPS
TCC Release Operating Point Vs. %TPS
Minimum TCC Duty Cycle Vs. Torque Pressure
Line Pressure Modifier Vs. Gear Vs. TPS
Down Shift Pressure Modifier 2 -> 1 Vs. MPH
Down Shift Pressure Modifier 3 -> 2 Vs. MPH
Down Shift Pressure Modifier 4 -> 3 Vs. MPH
Line Pressure Modifier In WOT Vs. RPM
Desired Shift Time Vs. %TPS
Adaptive Pressure Modifier Vs. Shift Time Error
Gear Ratio Limits For Error Diagnostics 85, 86 & 87