

C.A.T.S. Tuner PCM V6 Parameter List

(ECM Configuration File Version K)

ECM Switch Parameters

VATS Select (X = active)
Electric Fan Option
A/C Pressure Transducer Present
Lean Cruise Option
Manual Transmission
Manual Shift Logic
Gradual TCC Release
TCC Off If Cold Engine
TCC Off If Cold Trans
TCC On If Hot Trans
TCC Off If Very Low TPS
TCC Off If Rapid TPS Decrease
TCC Off On Downshift
TCC Off On Upshift
Left O2 Sensor Diag. (Error 13)
Engine Cool. Temp. High (Error 14)
Engine Cool. Temp. Low (Error 15)
System Voltage Low Diag. (Error 16)
Cam Sensor Error Diag. (Error 17)
TPS Sensor High Diagnostic (Error 21)
TPS Sensor Low Diagnostic (Error 22)
IAT Sensor Low Diagnostic (Error 23)
Vehicle Speed Sensor Diag. (Error 24)
IAT Sensor High Diagnostic (Error 25)
Trans Press. Switch Ckt Diag. (Error 28)
MAP Sensor High (Error 33)
MAP Sensor Low (Error 34)
Idle Speed Error Diagnostic (Error 35)
24x Signal Error Diag. (Error 36)
TCC Brake Switch Error Diag. (Error 37)
Clutch Switch Diagnostic (Error 39)
EST Error Diag. (Error 41)
EST Bypass Error Diag. (Error 42)
Knock Sensor Diagnostic (Error 43)
Left O2 Sensor Lean Diag. (Error 44)
Left O2 Sensor Rich Diag. (Error 45)
Passkey II Error Diag. (Error 46)
PROM Error Diag. (Error 51)
System Voltage High Diag. (Error 53)
Fuel Pump Voltage Low Diag. (Error 54)
TFT Sensor Ckt. High Diag. (Error 58)
TFT Sensor Ckt. Low Diag. (Error 59)
A/C Refrigerant Low Diag. (Error 61)
Left O2 Sensor Diag. (Error 63)
Right O2 Sensor Lean Diag. (Error 64)
Right O2 Sensor Rich Diag. (Error 65)
A/C Pressure Sensor Low Diag. (Error 66)
A/C Press Sensor Error Diag (Error 67)
A/C Relay Shorted Diagnostic (Error 68)
A/C Relay Open Diagnostic (Error 69)
A/C Pressure Sensor High Diag (Error 70)
A/C Evap. Temp. Low Diag. (Error 71)
A/C Evap. Temp. High Diag. (Error 73)
VSS Ckt. Signal Error Diag. (Error 72)
EGR Solenoid 1 Diag. (Error 75)
EGR Solenoid 2 Diag. (Error 76)
EGR Solenoid 3 Diag. (Error 77)
Trans. Fluid Overtemp. Diag. (Error 79)
Trans. Component Error Diag. (Error 80)

IC 3x Signal Error Diag. (Error 82)
PROM Error Diagnostic (Error 85)
A/D Error Diagnostic (Error 86)
EEPROM Error Diagnostic (Error 87)
TCC Error Diagnostic (Error 90)
PCS Circuit Diagnostic (Error 93)
Trans Sys Voltage Low Diag. (Error 96)
Invalid PCM Program 1 Diag. (Error 98)
Invalid PCM Program 2 Diag. (Error 99)

ECM Constants

Fuel Cutoff Vehicle Speed
Fuel Resume Vehicle Speed
Fuel Cutoff RPM
Fuel Resume RPM
Fuel Cutoff RPM (P/N)
Fuel Resume RPM (P/N)
Fan 1 Enable Coolant Temp.
Fan 1 Disable Coolant Temp.
Fan 2 Enable Coolant Temp.
Fan 2 Disable Coolant Temp.
Idle Spark Enable TPS Threshold
Idle Spark Disable TPS Threshold
Idle Spark Enable Speed Threshold
Idle Spark Disable Speed Threshold
Spark Reference Angle
Initial Spark Advance
Main Spark Extended RPM Limit
Extended RPM Spark Advance Slope
Max Spark Advance
Max Spark Retard
ECT Spark Correction Disable ECT
ECT Spark Correction Enable ECT
Highway Spark/Lean Cruise Disable MAP
Highway Spark/Lean Cruise Enable ECT
Highway Spark/Lean Cruise Enable RPM
Knock Retard Enable RPM Threshold
Knock Retard Enable Coolant Temp.
Launch Mode Disable Speed
Launch Mode Enable Delta TPS
Launch Mode Enable Delta MAP
Launch Mode Continue Delta MAP
Launch Mode Disable Neg. Delta TPS
Launch Mode Enable Max Time
Launch Mode Knock Attack Rate Mult.
Stoichiometric AFR
Maximum Allowable AFR
Power Enrich TPS Enable Hysteresis
Lean Cruise Enable Speed
Lean Cruise Disable Speed
Lean Cruise AFR
Choke AFR Correction Disable TPS
Maximum Integrator Value
Minimum Integrator Value
Maximum BLM Value
Minimum BLM Value
Upper O2 Sensor Closed Loop Threshold
Lower O2 Sensor Closed Loop Threshold
Short DCFO Enable Speed
Short DCFO Disable Speed
Long DCFO Enable Speed
Long DCFO Disable Speed
Clear Flood Enable TPS
Number of Cylinders
A.I.R. Enable Coolant Temp. Threshold
CCP Enable Coolant Temp Threshold
Digital EGR Enable RPM

Idle Speed Correction for A/C On
A/C Disable TPS Threshold
A/C Disable RPM Threshold
Baro Update RPM Threshold
Kickdown Mode Enable TPS Threshold
Kickdown Mode Disable TPS Threshold
Cold Trans Mode Enable Temperature
Cold Trans Mode Disable Temperature
Hot Trans Mode Enable Temperature
Hot Trans Mode Disable Temperature
Maximum Line Pressure
Speed Pulses Per Driveshaft Revolution
Speedometer Scalar (Scan Tool)

Tables

ECM Switch Table
ECM Constant Table
Main Spark Advance Vs. RPM Vs. MAP
Spark Correction Vs. MAP Vs. Coolant Temp.
Spark Advance Correction vs IAT vs. MAP
EGR Spark Advance Correction Vs. % EGR
P.E. Spark Correction Vs. Time in P.E. Mode
Launch Mode Spark Advance Vs. RPM Vs. MAP
TCC Locked Spark Retard Vs. RPM Vs. MAP
Initial Time Out Spark Vs. Coolant Temp.
Time Out Spark Decay Vs. Startup Coolant Temp.
Highway Mode Spark Correction Vs. MAP
Quick Start Spark Advance Vs. RPM
Quick Start Spark Advance Correction Vs. ECT
Knock Retard Attack Rate Vs. RPM
Knock Retard Attack Rate Vs. RPM in P.E.
Maximum Knock Retard Vs. RPM
Maximum Knock Retard Vs. RPM in P.E.
Knock Retard Recovery Rate Vs. RPM
Knock Retard Recovery Rate Vs. RPM in P.E.
Desired Idle Speed Vs. Coolant Temp (In Drive)
Desired Idle Speed Vs. Coolant Temp (In P/N)
Anticipated A/C Load IAC Steps Vs. A/C Pressure
IAC Warm Park Position Vs. Coolant Temp.
IAC Startup Position Offset Vs. Coolant Temp.
Idle Spark Multiplier Vs. Coolant Temp.
Idle Spark Multiplier Vs. MAP
Idle Overspeed Spark Retard Vs. RPM Error
Idle Underspeed Spark Advance Vs. RPM Error
Max Throttle Follower Steps Vs. RPM
Max Throttle Follower Steps Vs. Vehicle Speed
Max Throttle Follower Steps Mult. Vs. Cool Temp
Volumetric Efficiency Vs. RPM Vs. Airflow
Volumetric Efficiency Vs. Airflow
Vol. Efficiency Correction vs. Computed AFR
Volumetric Efficiency Filter Coeff. vs. Airflow
Power Enrich Mode AFR Vs. RPM
Power Enrich Enable TPS Threshold. Vs. RPM
PE Enable TPS Correction Vs. ECT
PE Enable TPS Correction Vs. Baro
Open Loop Idle AFR Correction Vs. MAP
Open Loop AFR Vs. Coolant Temp. Vs. Map
Closed Throttle Open Loop AFR Vs. Coolant Temp.
Crank Fuel PW Vs. Coolant Temp.
Crank PW Multiplier Vs. RPM
Crank PW Multiplier Vs. TPS
Crank Fuel BPW Correction Vs. Ref. Pulses
BLM Cell RPM Boundaries
BLM Cell MAP Boundaries
Injector Offset Vs. Battery Voltage
Base Pulse Constant Multiplier vs Baro
Base Pulse Constant Multiplier Vs. MAP/Baro Ratio

Choke AFR Correction Vs. RPM
Choke AFR Correction Vs. Startup ECT
Choke AFR Correction Vs. ECT
EGR Duty Cycle Vs. MAP Vs. RPM
EGR Duty Cycle Multiplier Vs. Coolant Temp.
Kickdown Mode Upshift Speed
Kickdown Mode Downshift Speed
Kickdown Mode Shift RPM
Normal Mode Up/Down Shift Speed
Traction Control Mode Up/Down Shift Speed
Hot Mode Up/Down Shift Speed
Cruise Mode Up/Down Shift Speed
Cold Mode Shift Speed Modifier Vs. %TPS
TCC WOT Forced Lock Speed Threshold Vs. Gear
TCC Traction Ctrl Mode Release MPH Vs Gear Vs %TPS
TCC Normal Mode Release MPH Vs. Gear Vs. %TPS
TCC Cruise Mode Release MPH Vs. Gear Vs. %TPS
TCC Traction Ctrl Mode Engage MPH Vs Gear Vs %TPS
TCC Normal Mode Engage MPH Vs. Gear Vs. %TPS
TCC Cruise Mode Engage MPH Vs. Gear Vs. %TPS
Force Motor Current Vs Press Vs Trans Temp, + Chng
Force Motor Current Vs Press Vs Trans Temp, - Chng
Line Pressure Modifier In WOT Vs RPM
Garage Shift Press Vs Trans Temp Vs RPM - Drive
Garage Shift Press Vs Trans Temp Vs RPM - Reverse
Line Press Mod Vs. %TPS Vs Trans. Temp. - 2nd Gear
Line Press Mod Vs. %TPS Vs Trans. Temp. - 3rd Gear
Line Press Mod Vs. %TPS Vs Trans. Temp. - 4th Gear
Main Line Pressure 0 - 64 MPH
Main Line Pressure 64 - 128 MPH
Line Pressure Offset Vs %TPS Vs Gear
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 Press. Offset Vs %TPS Vs Gear - Traction Mode
Shift Time Vs. %TPS Vs. Shift, Normal, Low Alt.
Shift Time Vs. %TPS Vs. Shift, Normal, High Alt.
Shift Time Vs. %TPS Vs Shift - Traction - Low Alt.
Shift Time Vs. %TPS Vs Shift - Traction - Hi Alt.
Transmission Gear Ratio Vs. Gear