

C.A.T.S. Tuner ECM 32 Parameter List

(ECM Configuration File Version AV)

ECM Switch Parameters

VATS Select
Base PW Calibration Method (X = Calc.)
Normally Open Fan Request Input
Manual/Auto Transmission, X = Manual
Overdrive Default Off/On (X = On)
Use TCC Output for Shift Light
No Ref. Pulse Diagnostic (Err 12)
O2 Sensor Diagnostic (Err 13)
CTS Sensor High Diagnostic (Err 14)
CTS Sensor Low Diagnostic (Err 15)
TPS Sensor High Diagnostic (Err 21)
TPS Sensor Low Diagnostic (Err 22)
MAT Sensor Low Diagnostic (Err 23)
Vehicle Speed Diagnostics (Err 24)
MAT Sensor High Diagnostic (Err 25)
EGR Diagnostics (Err 32)
MAF High Diagnostics (Err 33)
MAF Low Diagnostic (Err 34)
Burn Off Diagnostic (Err 36)
Cyl. Select Diagnostic (Err 41)
EST Monitor Diagnostic (Err 42)
Knock Diagnostics (Err 43)
O2 Sensor Lean Diagnostic (Err 44)
O2 Sensor Rich Diagnostic (Err 45)
VATS Diagnostics (Err 46)
Missing Cal Pack (Err 52)
Over Voltage Diagnostic (Err 53)
Fuel Pump Voltage (Err 54)

ECM Constants

Initial Spark Advance
Max Spark Advance
Cool. Comp. Spark Spark Bias
Highway Mode Spark Enable Coolant Temp.
Highway Mode Spark Max Load Threshold
Highway Mode Spark Enable RPM Treshold
Highway Mode Spark Enable Delay Time
Knock Retard Enable RPM Threhold
Knock Retard Enable MPH Threhold
Knock Retard Enable Cool. Temp. Thresh.
Max Knock Retard (Not in P.E.)
Default Knock Retard if MALF 43
Fuel Cut Off Vehicle Speed
Fuel Resume Vehicle Speed
Fuel Cut Off RPM
Fuel Resume RPM
Fan On Coolant Temp Threshold (A/C On)
Fan Off Coolant Temp Threshold (A/C On)
Fan On Coolant Temp Threshold (A/C Off)
Fan Off Coolant Temp Threshold (A/C Off)
Injector Flow Rate - Single Fire

Injector Flow Rate - Double Fire
Max Accel. Enrich. Async Pulse Width
Minimum Delta TPS For Accel. Enrich.
Minimum Delta LV8 For Accel. Enrich.
Closed Loop Fuel Enable Cool. Temp.
Hot O2 Timer
Warm O2 Timer
Cold O2 Timer
Maximum BLM Value
Minimum BLM Value
Min. Coolant Temp for BLM Update
Max. Coolant Temp for BLM Update
Fast O2 R/L Hysteresis
Fast O2 R/L Hysteresis - Air Diverted
Decel Enlean Enable Delta TPS Thresh.
Decel Enlean Enable Delta LV8 Thresh.
Decel Enlean BPW Multiplier
MAF High Diagnostic (Error 33) Threshold
EGR Off (%TPS)
EGR On (%TPS)
Min. MAT to Enable EGR
TCC Unlock Speed (Low Gears)
TCC Lock Speed (Low Gears)
TCC Unlock Speed (High Gears)
TCC Lock Speed (High Gears)
TCC Unlock Prevent/Auto O/D Engage Speed
TCC Enable Coolant Temp. Threshold
Min. Load Limit for TCC Lock, Low Speed
Min. Load Limit for TCC Lock, High Speed
TCC Min Load Limit Hysteresis
TCC Min Load Limit High/Low Speed Thresh
Shifter Kickdown Prevent RPM Threshold
TPS Kickdown/TCC Unlock Prevent -1st Gr.
TPS Kickdown/TCC Unlock Prevent-Not 1st
Idle Speed Adder in Park/Neutral
Idle Speed Adder for A/C On
IAC Startup Park Position
IAC Startup Delay Time
IAC Control Deadband RPM Error (in P/N)
IAC Control Deadband RPM Error (Drive)
IAC Steps added to Warm Park, A/C On
IAC Steps added for Cold Engine
IAC Gain Scalar for Prop & Deriv (P/N)
IAC RPM Rate Deadband, Idle Stability
DFCO Enable RPM Threshold
DFCO Disable RPM Threshold
DFCO Enable LV8 Threshold
DFCO Disable LV8 Threshold
DFCO Disable TPS Threshold
DFCO Disable MPH Threshold
DFCO Enable Cool Temp Threshold
DFCO Throttle Follower Default %TPS
DFCO Stall Saver T/F %TPS Correction
DFCO Stall Saver T/F %TPS Corr. Duration
DFCO Stall Saver Async Inj. Pulse Width
DFCO Stall Saver Async Inj. Pulses
Stall Saver Spark Correction Enable RPM
Stall Saver Spark Correction Disable RPM
Throttle Follower Step Period - in P/N
Throttle Follower Step Period - in Drive
T/F Step Period Correction Vs. Speed
T/F Step Period Correction in O/L Idle
Throttle Follower Slope Gain

Max. Throttle Follower Steps - in Drive
P/N Throttle Follower Multiplier
Closed Loop Idle Enable Vehicle Speed
Throttle Follower Adder - Vehicle Moving
AIR Control Enable Coolant Temp.
Shift Light Enable Coolant Temp. Thresh.
Shift Light Enable Vehicle Speed Thresh.
Shift Light Enable %TPS Threshold
Shift Light Enable LV8 Threshold
Shift Light Enable RPM Threshold
Shift Light Disable RPM Threshold
Shift Light Force On RPM Threshold
Shift Light Force On Disable RPM Thresh
Number of Cylinders
Display Injector Flow Rate

Tables

ECM Switch Table
ECM Constant Table
Main Spark Advance Vs. RPM Vs. Load
Cool. Comp. Spark Adv. Vs. RPM Vs. Cool. Temp.
Highway Mode Spark Advance Vs. Load
Startup Spark Advance Vs. Startup Cool. Temp.
Startup Spark Advance Decay Delay Vs Startup Cool.
Startup Spark Adv. Decay Period Vs. Startup Cool.
Startup Spark Adv. Decay Step Vs. Startup Cool.
Knock Retard Attack Rate Vs. RPM
Knock Retard Recovery Rate Vs. RPM
Max Knock Retard in WOT
WOT %Change To Fuel/Air Ratio Vs. Coolant Temp.
WOT %Change To Fuel/Air Ratio Vs. RPM
%TPS To Enable WOT Vs RPM
Open Loop Fuel/Air Ratio %Change Vs. Coolant Temp.
Open Loop Fuel/Air Ratio %Change Vs. Load
Startup Fuel/Air Ratio %Change Vs. Coolant Temp.
Warm IAC Park (Steps) Vs. Coolant Temp.
Desired Idle Speed vs Coolant Temp.
Mass Air Flow Table #1
Mass Air Flow Table #2
Mass Air Flow Table #3
Mass Air Flow Table #4
Mass Air Flow Table #5
Mass Air Flow Table #6
Max. Air Flow Vs. RPM
BPW Fuel Table Vs Load Vs RPM
Injector PW Correction Vs. Battery Voltage
Accel. Enrich %BPW Factor Vs Async Pulse
No. of Accel Enrich Async Pulses Vs. Coolant Temp.
Accel. Enrich. Async Factor Vs. Coolant Temp.
LV8 Accel. Enrich. Factor Vs. Delta LV8
LV8 Accel Enrich Coolant Factor Vs. Coolant Temp.
LV8 Accel. Enrich. Decay Rate Vs. Coolant Temp.
Crank Fuel Pulse Width Vs. Coolant Temp.
Crank Fuel Multiplier Vs. Reference Pulses
Crank Fuel Pulse Width Multiplier Vs. TPS
BLM Cell RPM Boundaries
BLM Cell MAF Boundaries
Fast O2 Rich/Lean Threshold Vs. MAF
Rich/Lean O2 Count Offset Vs. Coolant Temp.
Upper Zero Error Reference for Slow O2 R/L Vs. MAF

Lower Zero Error Reference for Slow O2 R/L Vs. MAF
Fan PWM Duty Cycle Vs. Coolant Temp.
EGR % Duty Cycle Vs. LV8 Vs. RPM
TCC Unlock %TPS (Not In 4th) Vs. MPH
TCC Lock %TPS (Not In 4th) Vs MPH
TCC Unlock %TPS (In 4th) Vs MPH
TCC Lock %TPS (In 4th) Vs MPH
Shift Light On %TPS Threshold Vs. RPM
Shift Light Off %TPS Threshold Vs. RPM
Shift Light On Delay Time Vs. %TPS