

C.A.T.S. Tuner TCM 1A Parameter List (ECM Configuration File Version A)

ECM Switch Parameters

Output Speed Low Diag. (Error 24)
Trans Press Switch Diag. (Error 28)
Brake On Diag. (Error 37)
Brake Off Diag. (Error 38)
System Voltage High Diag. (Error 53)
Trans Temp High Diag. (Error 58)
Overdrive Diag. (Error 68)
TCC On Diag. (Error 69)
Engine Speed Low Diag. (Error 71)
Output Speed Loss Diag. (Error 72)
Trans Temp Low Diag. (Error 59)
Force Motor Current Diag. (Error 73)
Input Speed Sensor Diag. (Error 74)
System Voltage Low Diag. (Error 75)
Transmission Hot Diag. (Error 79)
Quad Driver 1 Shift B Diag. (Error 81)
Quad Driver 1 Shift A Diag. (Error 82)
Quad Driver 1 Diag. (Error 83)
Undefined Ratio Diag (Error 85)
Low Ratio Diag. (Error 86)
High Ratio Diag. (Error 87)
Manual Mode Enable (X = Disabled)
Downshift Turns Off TCC (X = Yes)
Rapid TPS Decr. Turns Off TCC (X = Yes)
Very Low TPS Turns Off TCC (X = Yes)
Hot Trans.Turns Off TCC (X = Yes)
Cold Trans.Turns Off TCC (X = Yes)
Cold EngineTurns Off TCC (X = Yes)
Gradual TCC Release (X = Enabled)
Auto Detect Vss Sensor Type
Vss Sensor Type (0 = Magnetic X = DRA)
Input Speed Sensor on Turbine

ECM Constants

Mechanical 1st Gear Ratio
Mechanical 2nd Gear Ratio
Mechanical 3rd Gear Ratio
Mechanical 4th Gear Ratio
Mechanical Reverse Gear Ratio
Kickdown Mode Enable %TPS Threshold
Kickdown Mode Disable %TPS Threshold
Low PRNDL Upshift Speed Threshold
Low PRNDL Downshift Speed Threshold
Drive2 PRNDL Upshift Speed Threshold
Drive2 PRNDL Downshift Speed Threshold
Manual Mode 2->3 Shift Speed Threshold
Manual Mode 3->2 Shift Speed Threshold
Manual Mode 3->4 Shift Speed Threshold
Manual Mode 4->3 Shift Speed Threshold
Pressure Reduction for 1->3 Upshift
1->3 Upshift Pressure Reduction Time

Pressure Reduction for 1->4 Upshift
1->4 Upshift Pressure Reduction Time
Pressure Reduction for 2->4 Upshift
2->4 Upshift Pressure Reduction Time
Garage/Normal Shift Speed Thresh (P/N)
Garage/Normal Shift Speed Thresh (Drive)
Garage/Normal Shift Press Delta (P/N)
Garage/Normal Shift Press Delta (Drive)
Garage/Normal Shift Press Delta (Rev)
Lower Adaptive Learn Trans Temp Thresh.
Upper Adaptive Learn Trans Temp. Thresh.
Adaptive Learn Modifier Lower Limit
Adaptive Learn Modifier Upper Limit
Hot Transmission Enable Temp. Threshold
Hot Transmission Disable Temp. Threshold
TCC Enable Coolant Temp. Threshold
TCC Disable Coolant Temp. Threshold
TCC Enable Cold Trans. Temp. Threshold
TCC Disable Cold Trans. Temp. Threshold
TCC Enable Hot Trans. Temp. Threshold
TCC Disable Hot Trans. Temp. Threshold
TCC Disable TPS Threshold - Low MPH
TCC Disable TPS Threshold - High MPH
Min TPS to Enable TCC - Low MPH
Min TPS to Enable TCC - High MPH
Low-High MPH Thresh. for TCC TPS Limits
High-Low MPH Thresh. for TCC TPS Limits
Low Neg. Delta %TPS TCC Release Thresh.
Low Neg. Delta %TPS TCC Release Time
High Neg. Delta %TPS TCC Release Thresh.
High Neg. Delta %TPS TCC Release Time
Downshift TCC Release Time
Max Time Between Engine Pulses
Engine Pulses Per Revolution
Input Speed Cal Pulses Per Revolution
Max Time Between Trans Input Pulses
Output Shaft Pulses Per Revolution
Max Time Between Trans Output Pulses
Output Speed/Vehicle Speed Ratio
Overdrive Ratio
PROM ID

Tables

ECM Switch Table
ECM Constant Table
Normal Mode Main Line Pressure 0 - 64 MPH
Normal Mode Main Line Pressure 64 - 128 MPH
Main Line Pressure Vs. TPS Vs. Trans. Temp. (2nd)
Main Line Pressure Vs. TPS Vs. Trans. Temp. (3rd)
Main Line Pressure Vs. TPS Vs. Trans. Temp. (4th)
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
Pressure Correction for A/C On Vs. Gear
Slip PTS Term Vs. MPH Vs. Gear
Adaptive Pressure Modifier Vs. Shift Time Error
Adaptive Cell TPS Boundaries
Adaptive Learn TPS Limits Vs. Gear
Normal Mode Upshift/Downshift Vs. MPH Vs. TPS

Desired Shift Time (sec) Vs. %TPS Vs. Gear
Kickdown Up/Down Shift Points
Hot Kickdown Up/Down Shift Points
Shift Ratio Threshold vs Shift
Gear Ratio Limits For Error Diagnostics 85 86 & 87
Garage Shift Press Vs Trans Temp Vs Input Spd -Drv
Garage Shift Press Vs Trans Temp Vs Input Spd -Rev
Rolling Garage Shift Press (psi) Vs. MPH Vs %TPS
Norm Mode Torque Converter Release MPH Vs. TPS
Norm. Mode Torque Converter Apply MPH Vs. TPS
Hot Mode Torque Converter Release MPH Vs. TPS
Hot Mode Torque Converter Apply MPH Vs. TPS
TCC Apply/Release Speed at WOT Vs. Gear
TCC Hot Apply/Release Speed at WOT Vs. Gear
TCC Release Rate Vs. %TPS
TCC Apply Operating Point Vs. %TPS
TCC Release Operating Point Vs. %TPS
Operating Point Multiplier Vs. Pressure
TCC Max Time in Release Before Slip Vs. %TPS
TCC Max Time in Release After Slip Vs. %TPS
TCC Apply Rate Vs. %TPS
Minimum TCC Duty Cycle Vs. Torque Pressure
Maximum TCC Duty Cycle Vs. Torque Pressure
Force Motor Current Vs Press Vs Trans Temp + Chng
Force Motor Current Vs Press Vs Trans Temp - Chng