Diagnostics > Real Time Data > Watch & Record > Groups

1. Clutch
   1. Clutch pedal position sensor A/D
   2. Clutch pedal full applied Pos
   3. Clutch pedal released position
   4. Clutch Pedal Displacement
2. Cooling
   1. Engine coolant temperature
   2. Catalyst temp bank 1 sensor 1
   3. Catalyst temp bank 2 sensor 1
   4. **Ambient air temperature**
   5. Estimated engine oil temperature
   6. Power-up eng coolant temp
   7. Crank angle error attempts
   8. Cooling fan PWM duty cycle
   9. Engine oil temp from sensor
   10. Actual fan speed
   11. Desired fan speed
   12. Percent fan commanded
3. Cylinder
   1. Cylinder mode highest peak
   2. Cylinder 5 history counter
   3. Cylinder 6 history counter
   4. Cylinder 7 history counter
   5. Cylinder 8 history counter
   6. Cylinder 1 history counter
   7. Cylinder 2 history counter
   8. Cylinder 3 history counter
   9. Cylinder 4 history counter
   10. Distance cylinders deactivated
   11. Distance cylinders activated
   12. Displacement on Demand
4. Electrical
   1. Control module voltage
   2. Run/Crank voltage
   3. Powertrain relay voltage
   4. Reference voltage A
   5. Reference voltage B
5. Emissions
   1. EGR desired pintle lift
   2. EGR Error
   3. EGR pintle position A/D
   4. EGR actual pintle lift
   5. EGR duty cycle
   6. EGR closed valve pintle position
   7. EGR flow test trip sample
   8. Emissions warm up counter
   9. Non emissions warm up counter
   10. Exhaust cam duty cycle bank 1
   11. Exhaust cam duty cycle bank 2
   12. Exhaust cam angle bank 1
   13. Exhaust cam angle bank 2
   14. Exhaust cam angle desired bank 1
   15. Exhaust cam angle desired bank 2
   16. Exhaust cam angle error bank 1
   17. Exhaust cam angle error bank 2
   18. Exhaust cam angle position pulse bank 1
   19. Exhaust cam angle position pulse bank 2
6. Engine
   1. Calculated engine load
   2. Engine run time
   3. Absolute engine load
   4. Engine oil pressure A/D
   5. Engine load
   6. Engine run time
   7. Engine off time
   8. Engine oil pressure
   9. Predicted engine oil pressure
   10. Filtered engine oil weighted resid.
7. Fuel
   1. Short term fuel trim bank 1
   2. **Long term fuel trim bank 1**
   3. Sort term fuel trim bank 2
   4. **Long term fuel trim bank 2**
   5. Total fuel level percentage
   6. Fuel tank vapor pressure
   7. **Equivalence ratio**
   8. Alcohol fuel percentage
   9. Fuel tank vapor pressure A/D
   10. Fuel level sensor A/D
   11. Fuel pump duty cycle
   12. Fuel trim cell
   13. Fuel tank rated capacity
   14. Total fuel volume
   15. Fuel lvl sensor A/D second tank
   16. Fuel composition sensor freq
   17. Fuel tank vapor temp
   18. Variable speed fuel pump diag
   19. Fuel level sensor power on time
   20. Filtered short term fuel trim bank 1
   21. Filtered short term fuel trim bank 2
   22. Filtered long term fuel trim bank 1
   23. Filtered long term fuel trim bank 2
   24. Filtered non purge L/T fuel trim bank 1
   25. Filtered non purge L/T fuel trim bank 2
   26. Long term fuel trim rich threshold
   27. Non purge L/T fuel trim rich thresh
   28. Long term fuel trim lean threshold
   29. Fuel pressure
8. Ignition
   1. **Spark Advance**
   2. Torque management spark retard
   3. High sided cool rat. Ignition off time
9. Intake
   1. Intake manifold Abs pressure
   2. **Intake air temperature**
   3. **MAF sensor mass airflow**
   4. Barometric pressure
   5. Oxygen sensor bank 1 sensor 1
   6. Oxygen sensor bank 1 sensor 2
   7. Oxygen sensor bank 2 sensor 1
   8. Oxygen sensor bank 2 sensor 2
   9. Brake booster vac pressure A/D
   10. Speed density mass airflow
   11. Fuel injector pulse width bank 1
   12. Fuel injector pulse width bank 2
   13. **Mass airflow sensor frequency**
   14. Corrected mass airflow
   15. Filtered MAF residual
   16. Oxygen sensor Htr bank 1 sensor 1
   17. Oxygen sensor Htr bank 2 sensor 1
   18. Oxygen sensor Htr bank 1 sensor 1
   19. Oxygen sensor Htr bank 1 sensor 2
   20. Oxygen sensor Htr bank 2 sensor 1
   21. Oxygen sensor Htr bank 2 sensor 2
   22. Brake booster vacuum press
   23. Secondary air inject sys error bank 1
   24. Secondary air inject sys error bank 2
   25. Secondary air inject normalized sys bank 1
   26. Secondary air inject normalized sys bank 2
   27. Secondary air inject system bank 1
   28. Secondary air inject system bank 2
   29. Secondary air inject syst press A/D bank 1
   30. Secondary air inject syst press A/D bank 2
   31. Minimum intake air temp
   32. Intake cam duty cycle bank 1
   33. Intake cam duty cycle bank 2
   34. Oxygen sensor Htr bank 2 sensor 2
   35. Oxygen sensor Htr bank 1 sensor 2
   36. Intake cam angle bank 1
   37. Intake cam angle bank 2
   38. Intake cam angle desired bank 1
   39. Intake cam angle desired bank 2
   40. Intake cam angle error bank 1
   41. Intake cam angle error bank 2
   42. Intake cam position pulse bank 1
   43. Intake cam position pulse bank 2
   44. Intake manifold Abs pressure A/D
   45. Intake manifold vacuum press
   46. Supercharger inlet Abs press
   47. Supercharger inlet Abs press A/D
   48. Supercharger inlet vacuum press
   49. Power-up intake air temp
   50. Intake air temp 2
   51. Barometric pressure A/D
   52. Intake manifold tuning vane pos D/C
   53. Supercharger boost solenoid D/C
10. Miscellaneous
    1. Distance w/malfunc ind. ON
    2. Canister purge duty cycle
    3. Warm up cyc since code clear
    4. Distance since code clear
    5. Air cond refrigerant high side press A/D
    6. Generator F-Trmnl duty cycle
    7. Crank position sensor pulse
    8. Primary cam pos sensor
    9. Crankshaft re-synch
    10. Revolution mode balanced time
    11. Distance since code clear
    12. Distance at first failure
    13. Distance at last failure
    14. Failure record fail counter
    15. Failure record pass counter
    16. Failure record not run counter
    17. Crank position low res prd
    18. Prev crank position low res prd
    19. Generator L-Terminal duty cycle
    20. Filtered MAP Model 1 residual
    21. Filtered MAP Model 2 residual
    22. Autolearn counter
    23. Autolearn delay timer
    24. Tool learn delay timer
    25. Immobilizer pre release
    26. Air cond refrigerant high side press
    27. Accelerator effective position
    28. Evap tank vacuum filtered
    29. PCM running reset address
11. Misfire
    1. Misfire catalyst pass history
    2. Misfire Catalyst fail history
    3. Misfire catalyst exceedences
    4. Misfire emission exceedences
    5. Max misfire catalyst exceedences
    6. Max misfire emission exceedences
    7. Knock retard
    8. Cylinder mode misfire threshold
    9. Misfire delay counter
    10. Cylinder 5 misfire counter
    11. Cylinder 6 misfire counter
    12. Cylinder 7 misfire counter
    13. Cylinder 8 misfire counter
    14. Misfire abnormal speed ratio
    15. Misfire catalyst failure
    16. Max misfire catalyst failure
    17. Misfire emission failure
    18. Max misfire emission failure
    19. Total misfire counter
    20. Cylinder 2 misfire counter
    21. Cylinder 1 misfire counter
    22. Cylinder 3 misfire counter
    23. Cylinder 4 misfire counter
    24. Misfire emission fail history
    25. Misfire emission pass history
    26. Revolution mode misfire threshold
    27. Misfire engine cycle counter
    28. **Total knock spark retard**
    29. Misfire diagnostic engine speed
    30. Misfire diagnostic engine load
12. Performance
    1. **Engine speed**
    2. Vehicle speed
    3. Requested torque input
    4. Delivered torque output
    5. Primary cam pos sensor
    6. Crank pos sensor medium res engine speed
    7. Engine actual steady state torque
13. Status
    1. Freeze frame diag trouble code
    2. Remaining distance to enable engine off natural vacuum service bay test
    3. Remaining engine run time to enable engine off natural vacuum service bay test
    4. PCM running reset status – processor #1
14. Throttle
    1. Absolute throttle position
    2. Relative throttle position
    3. Absolute throttle position B
    4. Accelerator pedal position D
    5. Accelerator pedal position E
    6. **Commanded throttle position**
    7. Desired idle engine speed
    8. Arbitrated accelerator pedal position
    9. Arbitrated throttle position
    10. Accelerator pedal pos sensor 1
    11. Accelerator pedal pos sensor 2
    12. Throttle position sensor 1
    13. Throttle position sensor 2
    14. Throttle position sensor 2 A/D
    15. Throttle position sensor 1 A/D
    16. Accelerator pedal pos sen 2 A/D
    17. Accelerator pedal pos sen 1 A/D
    18. Desired throttle position
    19. Accelerator pedal position
    20. Throttle pos sensor 1 learned min
    21. Throttle pos sensor 2 learned min
    22. Throttle actuator duty cycle
    23. Filtered throttle pos residual
    24. Maximum throttle position
15. Transmission
    1. Transmission oil temp
    2. Transmission output speed
    3. Transfer case ratio
16. Unselect all Pids
17. Watch & record