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