



Your Current Vehicle: 2010 Dodge Ram 1500

Scan Tool Data - Powertrain Control Module (PCM) (NGC)

SCAN TOOL DATA - POWERTRAIN CONTROL MODULE (PCM) (NGC)

The following chart lists data values taken from the Scan Tool Powertrain Control Module (PCM) data list for the NGC controller. The values were taken at key on, engine off and at idle. The data is to be used for reference only.

The following data values were recorded under the following conditions unless otherwise specified:

- No DTCs set
- Key On, Engine Off values recorded at ambient air temperature.
- Engine at operating temperature.
- Vehicle in Park or Neutral
- A/C Off
- Speed Control Off
- Accessories Off
- Altitude at 55.7 meters (600 ft) above sea level

Some data values can vary as much as 20 percent due to the following:

- Vehicle age and wear
- Altitude

- Weather
- Ambient air temperature
- Engine, Transmission and other Vehicle Options
- Aftermarket Accessories

NOTE

There are footnotes located next to values in the data table to reference specific conditions or additional information. They are listed in detail after the data table.

Scan Tool Data - Powertrain Control Module (PCM) (NGC)

Data	Unit	Key On, Engine Off	Idle
Current Fuel Shutoff	—	ASD	None
SKIM/VRTA Has Completed	—	True	True
MAP Vacuum	in Hg	0.06	18.94
MAP Volts	Volts	4.2819 (1)	1.378 (1)
Barometric Pressure	in Hg	28.56 (1)	29.03 (1)
P-Ratio MAP/BARO	PRatio	1.0 (1)	0.3 (1)
Accelerator Pedal Position	%	0.0	0.0
APP1	Volts	0.4399	0.8896
APP2	Volts	0.2151	0.4497

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
TPS1 Minimum Volts	Volts	0.5209	0.124
TPS1 Volts	Volts	0.9138	0.6503
TPS2 Minimum Volts	Volts	4.4859	4.4933
TPS2 Volts	Volts	4.0821	4.3591
Desired TPS Position	Volts	0.3941	0.1391
Throttle Blade Position	%	8	3
ETC Directional Duty Cycle	%	-1.733- -2.09	-24.5 - -21.19
RPM vs Vehicle Speed Ratio	RPM/	255.0	255.0
Engine Speed	rpm	0	650
Target Idle Speed	rpm	720	648
Time from Start Run	second	0	Varies
Time Fuel System in Run Mode	second	0	Varies
Ignition Off Time	minute	869	4
Engine Runtime	second	0.0	0.0 to 655.3
Purge Duty Cycle	%	0.0	18 - 20

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
Desired Purge Current	mA	0.0	147.52
Actual Purge Current	mA	-0.977 - 1.954	148 - 150
Purge Airflow	g/s / kg/h	0.0	0.0801
Purge Mode	—	Off	Normal Flow
Purge Vapor Ratio	—	0.23	0.14
Purge Adaptive	—	0	-4.1 - -1.4
Actual Torque	Ft-Lbs / N*m	-61.47	-1.65 - -2.45
ETC Starter Inhibit	miles / km	2146.3041	Varies
EGR Sensed Volts	Volts	3.9691	3.9691
EGR Duty Cycle	%	0.0	1.001
EGR Flow	g/s / kg/h	0.0	0.0
Desired EGR Position	inch / mm	0.0	0.0
Actual EGR Position	inch / mm	0.0	0.01
Injector Pulse Width Cylinder 1	US	0.0	1950 - 2050
Injector Pulse Width Cylinder 2	US	0.0	1950 - 2050

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
Injector Pulse Width Cylinder 3	US	0.0	1950 - 2050
Injector Pulse Width Cylinder 4	US	0.0	1950 - 2050
Injector Pulse Width Cylinder 5	US	0.0	1950 - 2050
Injector Pulse Width Cylinder 6	US	0.0	1950 - 2050
Injector Pulse Width Cylinder 7 (9)	US	0.0	1950 - 2050
Injector Pulse Width Cylinder 8 (9)	US	0.0	1950 - 2050
Cranking Injector Pulse Width	US	0.0	25504
1/1 O2 Sensor Level	—	Low	Low/High (2)
2/1 O2 Sensor Level	—	Low	Low/High (2)
1/1 O2 Goal (0-1)	Volts	0.0	0.41
2/1 O2 Goal (0-1)	Volts	0.0	0.45
1/1 O2 Volts (0-1)	Volts	2.49	0.08 - 0.85 (3)
1/1 O2 Sensor Volts	Volts	5.0004	2.6 - 3.3
1/2 O2 Volts (0-1)	Volts	2.49	0.75
1/2 O2 Sensor Volts	Volts	5.0004	3.275 (4)

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
2/1 O2 Volts (0-1)	Volts	2.49	0.08 - 0.85 (3)
2/1 O2 Sensor Volts	Volts	5.0004	2.6 - 3.3
2/2 O2 Volts (0-1)	Volts	2.49	0.75
2/2 O2 Sensor Volts	Volts	5.0004	3.275 (4)
1/1 O2 Fuel Feedback	—	Open	Closed
2/1 O2 Fuel Feedback	—	Open	Closed
1/1 O2 Heater Temp	C / F	699.8	1250.0
1/2 O2 Heater Temp	C / F	771.8	1250.0
2/1 O2 Heater Temp	C / F	708.8	1250.0
2/2 O2 Heater Temp	C / F	780.6	1250.0
1/1 Short Term ADAP	%	0.0	-3.5 - 0.2
2/1 Short Term ADAP	%	0.0	-3.5 - 1.0
1/1 Long Term ADAP	%	-0.6	-0.6
2/1 Long Term ADAP	%	-0.2	-0.2
Closed Loop Timer	second	12.6	0.0

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
Current ADAP Cell ID	—	24	24
Engine Coolant Temp	C / F	73.4	199.4
Engine Coolant Temp Volt	Volts	3.6856	0.8701
Intake Air Temp Deg	C / F	73.4 (5)	80.6 (5)
Intake Air Temp Deg Volt	Volts	3.4265 (5)	3.4705 (5)
Ambient Temp	C / F	73.4	71.6
Fuel Level Percent	%	80(6)	80(6)
Fuel Tank Vapor Volume	Gallon / Liters	5.125 (7)	5.125 (7)
Fuel Tank Size	Gallon / Liters	20.5 (8)	20.5 (8)
Fuel Level Sensor #1 Volts	Volts	0.65 (6)	0.65 (6)
Ambient Temp Voltage	Volts	3.14	3.14
CAT Modeled Temp	C / F	-83.2	834.8
OIL PRESS SW	—	Closed	Open
Voltage Sense	Volts	12.29	14.0
Target Charging Voltage	Volts	14.143	14.267

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
Generator Duty Cycle	% DC	0.0	55.0
Mass Airflow	g/s / kg/h	3.43	4.192 - 4.229
Knock Sensor 1 Volts	Volts	0.0	0.2465
ST Knock Retard	degree / Grad	0.0	0.0
Base Spark	degree / Grad	-55.0	-37.0
Spark Advance	Engine	0.0	7.5 - 12.5
ESIM Switch	—	Open	Closed
AC Hi-Side Pressure	psi / kpa	83.3	77.2
AC Hi-Side Voltage	Volts	0.92	0.88
PCM Odometer	miles / km	Varies	Varies
Vehicle Speed	MPH / km/hr	0.0	0.0
Cam Sync State	—	Out of Sync	In Sync
Crank Signal Missing	—	False	False
Crank Sync State	—	Out of Sync	In Sync
Crank System Fault and in Limp-Home Mode	—	False	False

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
Cam Crank Difference	degree / Grad	1.2	1.9
Brake Switch Filtered Switch State	—	Off	Off
Brake Switch 2 Filtered Switch State	—	Off	Off
Park Neutral Switch Filtered Switch State	—	On	On
AC Select Switch Filtered Switch State	—	Off	Off
AC Request Switch Filtered Switch State	—	Off	Off
Act AC Clutch Relay	—	Off	Off
AC Output Current	Amps	0.0	0.0
ASD Sense Switch Filtered Switch State	—	Off	Off
Desired ASD Relay	—	Off	On
MTV Output State	—	Deenergized	Deenergized
MTV PWM Feedback	%	49	49
SRV Output State	—	Deenergized	Deenergized
SRV PWM Feedback	%	49	49
Fuel Pump Relay	—	Off	On

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
Ignition Start Switch Filtered Switch State	—	Off	On
Ignition Run/Start Switch Filtered Switch State	—	On	On
Desired Malfunction Lamp	—	On	Off
S/C Switch Voltage	Volts	4.55	4.55
S/C Switch Voltage 2	Volts	4.55	4.55
Cruise Lamp Status	—	Off	Off
S/C Working Status	—	Off	Off
S/C Denied Status	—	Allowed	Allowed
S/C Disenable Reason	—	Cruise Off	Remain Enable
S/C Disengage Reason	—	Disengage Due To	Speed Sensor
S/C Switch State 1	—	Open (Switch	Open (Switch
S/C Switch State 2	—	Open (Switch	Open (Switch
EATX Limp-In Status	—	Not Set	Not Set
Turbine Speed	rpm	0	607-615
Transfer Speed	rpm	0	0

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
Output Speed	rpm	0	0
Torque Converter Slip	rpm	0	28-41
Converter Clutch State	—	TCC Unlock	TCC Unlock
Calculate Trans Oil Temp	—	False	True
Trans Oil Temp	C / F	-3.0	104.53
Trans Temperature Voltage	Volts	2.86	2.75
LR Pressure Switch	—	Open	Closed
2-4 Pressure Switch	—	Open	Open
OD Pressure Switch	—	Open	Open
LC Pressure Switch	—	Open	Open
DC Pressure Switch	—	Open	Open
Pressure Switch Error Counter	—	0	0
OD Lockout Switch	—	Open	Open
Autostick Upshift	—	False	False
Autostick Downshift	—	False	False

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
Autostick Gear Position	—	No Display	No Display
PRNDL Display	—	Park	Park
T41/C1 Switch	—	Closed	Closed
T42/C2 Switch	—	Closed	Closed
T3/C3 Switch	—	Closed	Closed
T1/C4 Switch	—	Open	Open
Line Pressure Sensor	Volts	0.469	2.265 - 2.325
Actual Line Pressure Sensor 1	psi / kpa	0.0	124.0 - 127.0
Desired Line Pressure	psi / kpa	135.0	135.0
LR Clutch Fill Volume Index	—	35	35
LC Clutch Fill Volume Index	—	18	18
DC 1-2 Shift Fill Volume Index	—	28	28
2-4 or 2C Clutch Fill Volume Index	—	27	27
UD Clutch Fill Volume Index	—	25	25
OD Clutch Fill Volume Index	—	78	78

Scan Tool Data - Powertrain Control Module (PCM) (NGC)			
Data	Unit	Key On, Engine Off	Idle
Present Gear	—	Neutral	Neutral
Target Gear	—	Neutral	Neutral

Footnotes

1. Value may vary due to altitude and weather.
2. O2 Sensor will toggle from Low to High every few seconds.
3. Pre-catalyst O2 Sensors will toggle from 0.0 volt to 1.0 volt when operating in closed loop.
4. Post-catalyst O2 Sensors should remain near a fixed value.
5. Value may vary due to ambient air temperature.
6. Value will change due to fuel level change. Voltage will increase as available fuel decreases.
7. Will vary due to fuel level and ambient air temperature.
8. Can be different due to vehicle option.
9. Value is application specific.