

2010 ENGINE PERFORMANCE

Engine Controls and Fuel - 2.2L or 2.4L - Equinox & Terrain

SPECIFICATIONS

TEMPERATURE VERSUS RESISTANCE

°C	°F	OHMS
Temperature vs Resistance Values (Approximate)		
150	302	47
140	284	60
130	266	77
120	248	100
110	230	132
100	212	177
90	194	241
80	176	332
70	158	467
60	140	667
50	122	973
45	113	1188
40	104	1459
35	95	1802
30	86	2238
25	77	2796
20	68	3520
15	59	4450
10	50	5670
5	41	7280
0	32	9420
-5	23	12300
-10	14	16180
-15	5	21450
-20	-4	28680
-30	-22	52700
-40	-40	100700

ALTITUDE VERSUS BAROMETRIC PRESSURE

Altitude Measured in	Altitude Measured in	Barometric Pressure Measured in	Barometric Pressure Measured in Pounds
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Meters (m)	Feet (ft)	Kilopascals (kPa)	Per Square Inch (psi)
Determine your altitude by contacting a local weather station or by using another reference source.			
4 267	14,000	56-64	8.1-9.3
3 962	13,000	58-66	8.4-9.6
3 658	12,000	61-69	8.8-10.0
3 353	11,000	64-72	9.3-10.4
3 048	10,000	66-74	9.6-10.7
2 743	9,000	69-77	10.0-11.2
2 438	8,000	71-79	10.3-11.5
2 134	7,000	74-82	10.7-11.9
1 829	6,000	77-85	11.2-12.3
1 524	5,000	80-88	11.6-12.8
1 219	4,000	83-91	12.0-13.2
914	3,000	87-95	12.6-13.8
610	2,000	90-98	13.1-14.2
305	1,000	94-102	13.6-14.8
0	0 Sea Level	96-104	13.9-15.1
-305	-1,000	101-105	14.6-15.2

IGNITION SYSTEM SPECIFICATIONS

Application	Specification	
	Metric	English
Ignition Type	Individual Ignition Coil/Module Assemblies	
Firing Order	1-3-4-2	
Spark Plug Torque	20 N.m	15 lb ft
Spark Plug Gap	1.0 mm	0.035 in

FASTENER TIGHTENING SPECIFICATIONS

Application	Specification	
	Metric	English
Accelerator Pedal Position (APP) Sensor Bolt	25 N.m	18 lb ft
Air Cleaner Bolt	10 N.m	89 lb in
Air Cleaner Outlet Duct Clamp	4 N.m	35 lb in
Camshaft Position (CMP) Actuator Solenoid Valve Bolt	10 N.m	89 lb in
Camshaft Position (CMP) Sensor Bolt	10 N.m	89 lb in
Crankshaft Position (CKP) Sensor Bolt	10 N.m	89 lb in
Engine Coolant Temperature (ECT) Sensor	22 N.m	16 lb ft
Evaporative Emission (EVAP) Canister Nut	9 N.m	80 lb in
Evaporative Emission (EVAP) Purge Solenoid Bracket Bolt	10 N.m	89 lb in

Fuel Fill Tube Clamp	5 N.m	44 lb in
Fuel Fill Tube Bracket Bolt	9 N.m	80 lb in
Fuel Injection Fuel Rail Pressure Sensor	32 N.m	24 lb ft
Fuel Injection Rail Fastener	25 N.m	18 lb ft
Fuel Pump Retaining Bolts	15 N.m	11 lb ft
Fuel Tank Strap Bolt	25 N.m	18 lb ft
Heated Oxygen Sensor (HO2S)	42 N.m	31 lb ft
Ignition Coil Bolt	10 N.m	89 lb in
Knock Sensor Bolt	23 N.m	17 lb ft
Left Rear Brake Line Fitting to Brake Crossover Pipe	18 N.m	13 lb ft
Mass Air Flow (MAF)/Intake Air Temperature Sensor Screw	4 N.m	35 lb in
Rear Exhaust Manifold Heat Shield Bolt	50 N.m	37 lb ft
Spark Plug	20 N.m	15 lb ft
Throttle Body Bolt	10 N.m	89 lb in

ADHESIVES, FLUIDS, LUBRICANTS, AND SEALERS

Application	Type of Material	GM Part Number	
		United States	Canada
All Purpose Parts Cleaner	Cleaner	12378553	88900920
Anti-Seize Compound	Lubricant	88862477	88862478
Coolant Temperature Sensor Threads	Sealant	12346004	10953480
Engine Oil	5W-30 Oil	12345610	993193
Fuel Injection Fuel Rail Bolts	Threadlock	12345382	10953489
Intake Air Temperature Sensor Threads	Sealant	12346004	10953480