

ENGINE PERFORMANCE

Engine Controls and Fuel - 6.2L (LT1) - Specifications - Corvette

SPECIFICATIONS

TEMPERATURE VERSUS RESISTANCE - INTAKE AIR TEMPERATURE SENSOR

Temperature Versus Resistance - Intake Air Temperature Sensor

Temperature C°/F°	Resistance Minimum Ohms	Resistance Maximum Ohms
Hitachi Intake Air Temperature (IAT) Sensor		
-40/-40	37, 527	49, 882
-20/-4	13, 110	16, 329
-10/14	8, 145	9, 851
0/32	5, 205	6, 122
20/68	2, 298	2, 570
25/77	1, 900	2, 100
40/104	1, 073	1, 226
60/140	537	639
80/176	289	356
100/212	165	210
120/248	99	129
140/284	62	83
150/302	49	67

TEMPERATURE VERSUS RESISTANCE

Temperature Versus Resistance

°C	°F	Sensor Resistance
Temperature vs Resistance Values (Approximate)		
100	212	155
90	194	208
80	176	283
70	158	392
60	140	552
50	122	793
45	113	958
40	104	1165
35	95	1425
30	86	1755
25	77	2176

20	68	2717
15	59	3428
10	50	4356
5	41	5578
0	32	7198
-5	23	9362
-10	14	12278
-15	5	16229
-20	-4	21653
-30	-22	39631
-40	-40	75532

ALTITUDE VERSUS BAROMETRIC PRESSURE

Altitude Versus Barometric Pressure

Altitude Measured in Meters (m)	Altitude Measured in Feet (ft)	Barometric Pressure Measured in Kilopascals (kPa)	Barometric Pressure Measured in Pounds 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

Ignition System Specifications

Application	Specification
Ignition Type	Individual Ignition Coils

Firing Order	1-8-7-2-6-5-4-3
Spark Plug Wire Resistance	170-220 ohms per 25.4 mm (1.0 in)
Spark Plug Torque	Refer to Fastener Tightening Specifications
Spark Plug Gap	Refer to Engine Mechanical Specifications
Spark Plug Type	Refer to Electronic Parts Catalog

ADHESIVES, FLUIDS, LUBRICANTS AND SEALERS

Adhesives, Fluids, Lubricants and Sealers

Application	Type of Material	GM Part Number
Anti-Seize Compound	Lubricant	GM P/N 88862477 (Canadian P/N 88862478)
Camshaft Gear Access Hole Plug	Sealant	GM P/N 12346004 (Canadian P/N 10953480)
Coolant Temperature Sensor Threads	Sealant	GM P/N 12346004 (Canadian P/N 10953480)
Fuel Injection Fuel Rail Bolts	Sealant	GM P/N 12345382 (Canadian P/N 10953489)
Intake Air Temperature Sensor Threads	Sealant	GM P/N 12346004 (Canadian P/N 10953480)
Top Engine Cleaner	Cleaner	GM P/N 1052626 (Canadian P/N 993026)

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

Application	Specifications	
	Metric	English
Accelerator Control Assembly to Floor Fasteners	20 N.m	15 lb ft
Camshaft Position (CMP) Sensor Bolt	25 N.m	18 lb ft
Crankshaft Position (CKP) Sensor Bolt	25 N.m	18 lb ft
Engine Coolant Temperature (ECT) Sensor	20 N.m	15 lb ft
EVAP Canister Bracket Bolt	7 N.m	62 lb in

Fuel and EVAP Pipe Retainer Nut	6 N.m	53 lb in
Fuel Crossover Hose Clamps	4 N.m	35 lb in
Fuel Filter and Fuel Pressure Regulator Bracket Nut	5 N.m	44 lb in
Fuel Pipe Assembly Clip Nuts	3 N.m	27 lb in
Fuel Rail Attaching Bolts	10 N.m	89 lb in
Fuel Tank Fill and Vent Pipe Bolts	3 N.m	22 lb in
Fuel Tank Fill Hose Clamp	4 N.m	35 lb in
Fuel Tank Fill Pipe Ground Strap Bolt	8 N.m	71 lb in
Fuel Tank Shield Mount Bolt	25 N.m	18 lb in
Fuel Tank Shield Nut	12 N.m	106 lb in
Fuel Tank Strap and Shield Bolts	25 N.m	18 lb ft
Heated Oxygen Sensor (HO2S)	41 N.m	30 lb ft
Ignition Coil Harness Mounting Bolt	12 N.m	106 lb in
Ignition Coil Mounting Bolts	12 N.m	106 lb in
Knock Sensor (KS)	20 N.m	15 lb ft
PCV Hose Assembly Mounting Cable Nut	12 N.m	106 lb in
Powertrain Control Module (PCM) Electrical Connector Fasteners	8 N.m	70 lb in
Powertrain Control Module (PCM) Retaining Fastener	2 N.m	17 lb in
Secondary Air Injection (AIR) Check Valves	23 N.m	17 lb ft
Secondary Air Injection (AIR) Check Valve to the AIR Pipe	23 N.m	17 lb ft
Secondary Air Injection (AIR) Pipe to Exhaust Manifold Bolts	20 N.m	15 lb ft
Secondary Air Injection (AIR) Pump to Bracket	9 N.m	80 lb in
Secondary Air Injection (AIR) Solenoid Valve Retaining Nut	7 N.m	62 lb in
Spark Plug	15 N.m	11 lb ft
Spark Plug in New Cylinder Head	20 N.m	15 lb ft
Tank Crossover Hose Clamp	4 N.m	35 lb in
Throttle Actuator Control (TAC) Module to PCM Bracket	2 N.m	17 lb in
Throttle Actuator Control (TAC) Module to PCM Bracket Fasteners	2 N.m	17 lb in
Throttle Body Attaching Bolts	10 N.m	89 lb in