

K - SENSOR RANGE CHARTS

1998 ENGINE PERFORMANCE General Motors Corp. - Sensor Operating Range Charts - 5.7L

INTRODUCTION

Sensor operating range information can help determine if a sensor is out of calibration. An out-of-calibration sensor may not set a trouble code, but it will cause driveability problems.

**NOTE:** Unless stated otherwise in test procedure, perform all voltage tests with a Digital Volt-Ohmmeter (DVOM) with a minimum 10-megohm input impedance.

ENGINE COOLANT TEMPERATURE SENSOR RESISTANCE TEST <sup>(1)</sup>

Temperature °F (°C)	Ohms
212 (100)	177
194 (90)	241
176 (80)	332
158 (70)	467
140 (60)	667
122 (50)	973
113 (45)	1188
104 (40)	1459
95 (35)	1802
86 (30)	2238
77 (25)	2796
68 (20)	3520
59 (15)	4450
50 (10)	5670
41 (5)	7280
32 (0)	9420
23 (-5)	12,300
14 (-10)	16,180
5 (-15)	21,450
-4 (-20)	28,680
-22 (-30)	52,700
-40 (-40)	100,700
(1) Measure resistance across sensor terminals.	

INTAKE AIR TEMPERATURE SENSOR RESISTANCE TEST <sup>(1)</sup>

Temperature °F (°C)	Ohms
212 (100)	177

194 (90)	241
176 (80)	332
158 (70)	467
140 (60)	667
122 (50)	973
113 (45)	1188
104 (40)	1459
95 (35)	1802
86 (30)	2238
77 (25)	2796
68 (20)	3520
59 (15)	4450
50 (10)	5670
41 (5)	7280
32 (0)	9420
23 (-5)	12,300
14 (-10)	16,180
5 (-15)	21,450
-4 (-20)	28,680
-22 (-30)	52,700
-40 (-40)	100,700
(1) Measure resistance across sensor terminals.	

### OXYGEN SENSOR VOLTAGE TEST <sup>(1)</sup>

Condition	Volts
Lean	0.1
Rich	1.0
(1) Measure voltage between O2S sensor ground and signal terminals at PCM.	

### TRANSAXLE FLUID TEMPERATURE SENSOR RESISTANCE TEST <sup>(1)</sup>

Temperature °F (°C)	Ohms
212 (100)	177
194 (90)	241
176 (80)	332
158 (70)	467
140 (60)	667
122 (50)	973
113 (45)	1188
104 (40)	1459

95 (35)	1802
86 (30)	2238
77 (25)	2796
68 (20)	3520
59 (15)	4450
50 (10)	5670
41 (5)	7280
32 (0)	9420
23 (-5)	12,300
14 (-10)	16,180
5 (-15)	21,450
-4 (-20)	28,680
-22 (-30)	52,700
-40 (-40)	100,700
(1) Measure resistance across sensor terminals.	