

EHA, O2 Sensor, ICV Duty Cycle Testing

Test	Condition	Measurement	Input	Results		Notes
				Spec	Actual	
O2 Sensor Testing						
Engine Idle	O2 Sensor disconnected	Potential diff.: Sensor - Ground	None		.85V	
RPM = 2500	O2 Sensor disconnected	Potential diff.: Sensor - Ground	None		.78V	
Engine Idle	O2 Sensor disconnected	Potential diff.: Sensor - Ground	Ground computer side of O2 Sensor		.82V	Simulate Too Lean condition
Engine Idle	O2 Sensor disconnected	Potential diff.: Sensor - Ground	Apply 1V to computer side of O2 Sensor		.78V drop to 0V & return to .78V	Too Rich Condition. Immediately ran poorly upon 1V input. Returned to normal operation upon removal of 1V input. (within 5sec)
EHA Testing						
KOEO	EHA wire harness disconnected from EHA.	EHA harness current (in series across female pins)	None	20mA	19.75mA	
Engine Idle	EHA wire harness disconnected from EHA.	EHA harness current (in series across female pins)	O2 Sensor disconnected	0mA	0mA	
Engine Idle	EHA wire harness disconnected from EHA.	EHA harness current (in series across female pins)	O2 Sensor disconnected. Ground computer side of O2 Sensor	12mA	13.69mA	Simulate Too Lean condition
Engine Idle	EHA wire harness disconnected from EHA.	EHA harness current (in series across female pins)	O2 Sensor disconnected. Apply 1V to computer side of O2 Sensor	-12mA	-10mA	Simulate Too Rich condition
ICV						
Engine Idle	ICV wire harness disconnected from ICV	ICV harness current (in series across female pins)	None	600 - 700mA	316mA	
Duty Cycle						
Engine Idle	82C Engine Temp	Potential diff. cycle: Sensor - Ground	None	45%	41 - 45%	these reflect duty cycle after completing all above tests
RPM = 2000	82C Engine Temp	Potential diff. cycle: Sensor - Ground	None	45%	42 - 49%	these reflect duty cycle after completing all above tests
Engine Idle	82C Engine Temp	Potential diff. cycle: Sensor - Ground	None	45%	46 - 50%	readjusted duty cycle
RPM = 2500	82C Engine Temp	Potential diff. cycle: Sensor - Ground	None	45%	48 - 52%	readjusted duty cycle