

**Engine 119.960 CFI since start of production**

Engine	119.960
CFI system designation	5.1
<b>On-off ratio/DTC readout (CFI)</b>	
On-off ratio readout with Ignition: <b>ON</b>	
Engine coolant temperature >80°C .....	% 50
Engine coolant temperature <70°C .....	% 30
On-off ratio readout during <b>deceleration fuel shut off</b> .....	% 95
DTC readout, engine at idle .....	1 <sup>1)</sup>
<b>Current at EHA</b>	
Ignition: <b>ON</b> .....	mA 75
After start enrichment and warm up	
After start enrichment at +20°C engine coolant temperature .....	mA 5 – 8; >0 to <15 sec.
Warm up base value at +20°C engine coolant temperature .....	mA 0; >120 sec. after start
Engine coolant temperature +80°C .....	mA Readout fluctuates
Enrichment during acceleration and at +20°C engine coolant temperature .....	mA >20
Engine at operating temperature	
Part load mixture correction .....	mA Readout fluctuates
Wide open throttle enrichment at 2000/rpm .....	mA 5 – 8
Deceleration fuel shut off .....	mA –40 to –60

1) For test conditions, see Diagnostic Manual, Engines Vol. 2.

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<b>Ignition timing and dwell</b>	
Engine speed (Idle) .....	rpm 600 – 750
Ignition timing with vacuum .....	°BTDC 14 – 18
Ignition timing without vacuum .....	° -1 to +3
Engine speed .....	rpm 3200
Ignition timing with vacuum .....	°BTDC 35 – 39
Ignition timing without vacuum .....	°BTDC -
Dwell (in distributor °) .....	◀° 27 – 54
Dwell %	30 – 60

**Reference Resistor (DI)**

Engine	Model	MB Part No.	Ignition adjustment ° CA	Resistance Ω/kΩ
119.960	129	015 545 67 28	0	2.4 kΩ

Note: If the reference resistor fails, then the ignition is retarded 3° at wide open throttle.

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<b>Closed throttle (idle)</b>		
Selector lever position/Transmission range .....	P/N	D
Engine oil temperature ..... °C approx.	80	80
Closed throttle (idle) speed ..... rpm	600 – 750	<650
Control range ..... mA	700 – 1000	<900
On-off ratio readout during <b>deceleration fuel shut off</b> ..... %	95	
Engine coolant temperature ..... °C	to 65	
Closed throttle warm-up speed ..... rpm	1000±100	
Engine coolant temperature ..... °C	>+30 to +80	
Closed throttle warm-up speed ..... rpm	declines continuously to 600 – 750	
Vacuum ..... mbar	550 – 650	
Lambda control ..... Control range %	50±20 <sup>2)</sup>	

<sup>2)</sup> This value must be measured at idle and at 2500 with the purge line disconnected and plugged.

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<b>Engine systems control module (ESCM)</b>	
Cut off speed .....	rpm 6000±50
Temporary max. engine speed .....	rpm 6300±50
Kickdown, automatic transmission .....	rpm 5850±50

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<b>Engine performance</b> <sup>4)</sup>	
Engine speed .....	rpm 5500
Output, 4-speed AT, transmission range 3 .....	hp 244
Ignition timing with premium unleaded gasoline .....	°CKA 18 – 22



<sup>4)</sup> These are minimum performance values. Do not exceed speed of 80 mph.

Check performance only at simulated engine coolant temperature of 80 °C (use 2 resistance substitution units)