

Engine 102.985 CFI from 09/88 to 08/89

Engine	102.985
CFI system designation	3/3.5
On-off ratio/DTC readout (CFI) On-off ratio readout with ignition: ON	
Engine coolant temperature >80°C	% 70 (Federal) 85 (California)
Engine coolant temperature <70°C	% -
Current at EHA	
Ignition: ON	mA 20
After start enrichment and warmup	
After start enrichment at +20 °C engine coolant temperature	mA 13 – 19
Warmup base value at +20°C engine coolant temperature	mA 3 – 9
Engine coolant temperature +80°C	mA 0±3
Enrichment during acceleration and at +20°C engine coolant temperature	mA >15
Engine at operating temperature	
Part load mixture correction	mA readout oscillates
Wide open throttle enrichment at 2000 rpm	mA 7 – 9
Deceleration fuel shut off	approx. mA -60 (Bosch CFI control module)
Deceleration fuel shut off	approx. mA -50 (VDO CFI control module)

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Ignition timing and dwell	
Closed throttle (idle) speed	rpm 700 – 800
Ignition timing with vacuum	BTDC 8 – 12
Engine speed	rpm 3200
Ignition timing with vacuum	BTDC 39 – 43
Ignition timing without vacuum	BTDC 23 – 27
Dwell	∠° 27 – 54
Dwell	% 30 – 60

Reference Resistor (DI)


Engine	Model	MB Part No.	Ignition adjustment ° CA	Resistance Ω/kΩ
102.985	201	000 540 24 81	0	750 Ω

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


Engine 102.985 CFI up to 08/88

Engine	102.985	
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Closed throttle (idle)		
Selector lever position/Transmission range	P/N	D
Engine oil temperature °C approx.	80	80
Closed throttle (idle) speed rpm	700 – 800	<750
Control range %	43±7	<43
Control range °	38±7	–
On-off ratio readout during deceleration fuel shut off	%	50 (Bosch CFI control module)
On-off ratio readout during deceleration fuel shut off	%	95 (VDO CFI control module)
Vacuum mbar	550 – 650	
Lambda control control range %	50±10	

5) Disconnect oxygen sensor connector. Read control value (Volt). Readout must not oscillate. Reconnect oxygen sensor connector, readout oscillates. Test value must not deviate more than ±0.8 Volt from the control value.

Engine	102.985	
CFI system designation	3	
Engine performance 4)		
Engine speed rpm	5000	
Output, manual transmission, 3rd gear hp	96	
Output, 4-speed AT, transmission range 3 hp	94	

4) 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)