Engine 104.980/981 CFI from start of production

Engine		104.980/981
CFI system designation		5.2
On-off ratio/DTC readout (CFI)		
On-off ratio readout with ignition: **ON**		
Engine coolant temperature >80°C	%	50
Engine coolant temperature <70°C	%	30
DTC readout, engine at closed throttle		1 [1]
Current at EHA		
Ignition: **ON**	mA	20
After start enrichment and warmup		
After start enrichment at +20 °C engine coolant temperature	mA	1 – 3; >0 to <8 sec.
Warmup base value at+20°C engine coolant temperature	mA	0 – 1; >12 to 120 sec.
Engine coolant temperature +80°C	mA	readout oscillates
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	2 – 4
Deceleration fuel shut off	approx. mA	–40

[1] For test conditions refer to Diagnostic Manual, Engine Vol. 2.

Engine 104.980/981 CFI from start of production

Engine		104.980/981
CFI system designation		5.2
Ignition timing and dwell		
Engine speed	rpm	650–750
Ignition timing with vacuum	BTDC	6 – 10
Engine speed	rpm	3200
Ignition timing with vacuum	BTDC	34 – 38
Ignition timing without vacuum	BTDC	21 – 25
Dwell	∡°	24 – 53
Dwell	%	40 – 88

Reference Resistor (DI)

Engine	Model	MB Part No.	Ignition adjustment ° CA	Resistance Ω/kΩ
104.980/981	124/129	015 545 67 28	0	2.4 kΩ

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

Engine 104.980/981 CFI from start of production

Engine		104.980/981	
CFI system designation		5.2	
Closed throttle (idle)			
Selector lever position/Transmission range		P/N	D
Engine oil temperature	°C approx.	80	80
Closed throttle (idle) speed	rpm	650 – 750	<700
Control range	mA	600±50	<600
On-off ratio readout during **deceleration fuel shut-off**	%	95	
Engine coolant temperature	°C	–30 to +25	
Closed throttle warm-up speed	rpm	1100±30	
Engine coolant temperature	°C	>+25 to +80	
Closed throttle warm-up speed	rpm	declines continuously to 700±50	
Vacuum	mbar	500 – 650	
Lambda control	ontrol range %	50±20 [2]	

[2] This value must be measured at idle and at 2500 rpm with the purge line disconnected and plugged.

Engine 104.980/981 CFI from start of production

Engine		104.980/981
CFI system designation		5.2
Engine systems control module (ESCM)		
Cut off speed	rpm	7000±50
Kickdown, automatic transmission	rpm	6700±50

Engine		104.980/981
CFI system designation		5.2
Engine performance [4]		
Engine speed	rpm	5500
Output, manual transmission, 3rd gear, Model 129	hp	176 ⚠
Output, 4-speed AT, transmission range 3, Model 124	hp	158
Output, 5-speed AT, transmission range 3, Model 129	hp	166

[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)