Vacra 9 madala: 1000 100E 101	024 8 424 026 4002 4005 W/440 and 40	02 400E D420		ACD 040 545 00 00
Years & models: 1992-1995 124.034 & 124.036, 1992-1995 W140, and 1993-1995 R129 The following live data parameters are available from vehicles with engines with LH fuel injection:				ASR = 013-545-39-32
·		<u> </u>	045 545 40 00	044 545 07 20
012-545-62-32	124-545-45-32	015-545-61-32	015-545-13-32	011-545-97-32
H-SFI (Fuel Injection)	EA/CC/ISC (E-GAS)	DI (EZL / Digital Ignition)	DM (Diagnostic Module)	BM (Basic Module)
Personality Key S-20	Personality Key S-21	Personality Key S-21	Personality Key S-20	Personality Key S-34
02 Sensor Voltage (mV)	Engine Speed (RPM)	Engine Speed (RPM)	Engine Speed (RPM)	Circuit 30 F2 (ok)
elf Adaptation CTP Idle - (kg/h)	LF Speed (MPH or KPH)	Engine Coolant Temp (°C or °F)	Absolute Intake Manifold Pressure	Circuit 30 F3 (ok)
elf Adaptation Lower Partial Load	LR Speed (MPH or KPH)	Intake Air Temperature (°C or °F)	Intake Air Temperature (°C or °F)	Circuit 30 F4 (ok)
elf Adaptation Upper Partial Load	Cruise Control Sw. S40 'D' (On/Off)	Barometric Pressure (mbar)	Engine Coolant Temp (°C or °F)	Circuit 30 LH1-SFI Unfused (ok)
2 Sensor (Lambda) Control (%)	Cruise Control Switch S40 'A' (On/Off)	Manifold Air Pressure Differential (mbar)	Vehicle Speed (MPH or KPH)	Kickdown Switch Voltage
attery Voltage (V)	Cruise Control Switch S40 'R' (On/Off)	Ignition Angle (°)		Circuit 15 Voltage
ngine Speed (RPM)	Cruise Control Switch S40 'O' (On/Off)	Catalyst Selected		Engine Speed (RPM)
asic Injection Duration (ms)	C.C. Switch S40 Safety Contact (On/Off)	Reference Resistor		Vehicle Speed (MPH or KPH)
jection Duration Correction (ms)	Potentiometer M16 / 1R2 (V)	Transmission Overload Protection Switch		Module Box Blower M2/2 (on/off)
ot Wire Air Mass (kg/h)	Reference Potentiometer M16 / 1R1 (V)	Battery Voltage (V)		A/C Compressor Signal (on/off)
ot Wire Voltage (V)	CTP (Idle) Switch S29/3 (On/Off)	Knock Control Act.		Electromagnetic Clutch A9K1 (on/off)
arometric Pressure (mbar)	Idle Speed Safety Switch M16 / 1S2 (On/Off)	Knock Ignition Angle Cylinder 1		Idle Speed Increase (on/off)
ngine Coolant Temp 1 (°C or °F)	Safety Contact Switch M16 / 1S1 (On/Off)	Knock Ignition Angle Cylinder 2		
ngine Coolant Temp 2 (°C or °F)	Safety Fuel Shut-Off (On/Off)	Knock Ignition Angle Cylinder 3		
fter Start Enrichment (Y/N)	A/C Compressor (On/Off)	Knock Ignition Angle Cylinder 4		
eceleration Shutoff (Y/N)	CTP (Idle) Increase (On/Off)	Knock Ignition Angle Cylinder 5		
ir Pump (On/Off)	Stop Lamp Switch N.O. Contact (On/Off)	Knock Ignition Angle Cylinder 6		Basic Module Actuator Tests:
amshaft timing (On/Off)	Stop Lamp Switch N.C. Contact (On/Off)	Knock Ignition Angle Cylinder 7		Module Box Blower Motor
ntake Air Temperature (°C or °F)	Trans. Range Selector Switch (P,R,N,D,S,L)	Knock Ignition Angle Cylinder 8		
TP (Idle) Recognition (On/Off)	CAN Transmission from EA/CC/ISC (ok)	Ignition Voltage Cylinder 1		
hrottle Valve Angle (°)	CAN Reception from ASR (ok)	Ignition Voltage Cylinder 2		
/OT (Full Load) Recognition (On/Off)	CAN Reception from LH-SFI (ok)	Ignition Voltage Cylinder 3		
GR (On/Off)	CAN Reception from DI (ok)	Ignition Voltage Cylinder 4		
uel Pump (On/Off)	` ` `	Ignition Voltage Cylinder 5		LH Injection Actuator Tests:
anister Purge Duty Cycle (%)		Ignition Voltage Cylinder 6		Seconday Air Injection
ehicle Speed (MPH or KPH)		Ignition Voltage Cylinder 7		EGR
vlinder Shut-Off 1 (Y/N)		Ignition Voltage Cylinder 8		Adjustable Camshaft Timing 1
ylinder Shut-Off 2 (Y/N)		Combustion Time Cylinder 1		Adjustable Camshaft Timing 2
ylinder Shut-Off 3 (Y/N)		Combustion Time Cylinder 2		Injector #1
ylinder Shut-Off 4 (Y/N)		Combustion Time Cylinder 3		Injector #2
ylinder Shut-Off 5 (Y/N)		Combustion Time Cylinder 4		Injector #3
ylinder Shut-Off 6 (Y/N)		Combustion Time Cylinder 5		Injector #4
ylinder Shut-Off 7 (Y/N)		Combustion Time Cylinder 6		Injector #5
ylinder Shut-Off 8 (Y/N)		Combustion Time Cylinder 7		Injector #6
H-SFI Reference Resistor		Combustion Time Cylinder 8		Injector #7
ircuit 50 (On/Off)		CAN Transmission from DI (ok)		Injector #8
afety Fuel Shut-Off (On/Off)		CAN Reception from LH-SFI (ok)		Purging
AN Reception from DI (ok)		CAN Reception from ASR (ok)		Upshift Delay
AN Reception from EA/CC/ISC (ok)		CAN Reception from EA/CC/ISC (ok)		Burnoff Control

Years & models:					
1993-1995 124.028, .032, .052, .066	, .092 with 2.8L or 3.2L engine (all ha	ve HFM-SFI injection)			
1994-1996 W202 with 2.8L engine a					
1996 W210 with 3.2L engine and HF					
The following live data parameters are available from vehicles with M104.9xx inline 6-cylinder					
engines with HFM fuel injection:					
	T. T	I			

HFM-SFI (Fuel Injection)	DM (Diagnostic Module)	EA/CC/ISC (E-GAS)
O2 Sensor 1 Voltage (mV)	Engine Speed (RPM)	No communication
O2 Sensor (Lambda) Control (%)	Absolute Intake Manifold Pressure	Snap-On software error - requires custom
Self Adaptation Factor Lower Partial Load	Intake Air Temperature (°C or °F)	wiring to communicate, scanner is looking
Self Adaptation Factor Upper Partial Load	Engine Coolant Temp (°C or °F)	at the wrong signal line from the adapter.
Air Mass (kg/h)	Vehicle Speed (MPH or KPH)	With the modified wiring it will work fine.
After Start Enrichment (On/Off)		
Engine Coolant Temp (°C or °F)		
Air Pump (On/Off)		
Engine Speed (RPM)		
Nominal Engine Speed (RPM)		
Intake Manifold Switchover Valve (on/off)		
Throttle Valve Angle (°)		
CTP (Idle) Contact (On/Off)		
WOT (Full Load) Contact (On/Off)		
Deceleration Shutoff (On/Off)		
Intake Air Temperature (°C or °F)		HFM Actuator Tests:
Injection Duration (ms)		Camshaft
Camshaft Solenoid (On/Off)		EGR
Self-Adaptation Idle Speed Air (kg/h)		Air Pump
Ignition Angle (°)		Injector Cylinder #1
AC Compressor (On/Off)		Injector Cylinder #2
Reference Resistor		Injector Cylinder #3
Starter Signal Circuit 50 (On/Off)		Injector Cylinder #4
Selector Lever Position (P, R, N, D, S, L)		Injector Cylinder #5
Vehicle Speed (MPH or KPH)		Injector Cylinder #6
Warm-Up		Purging