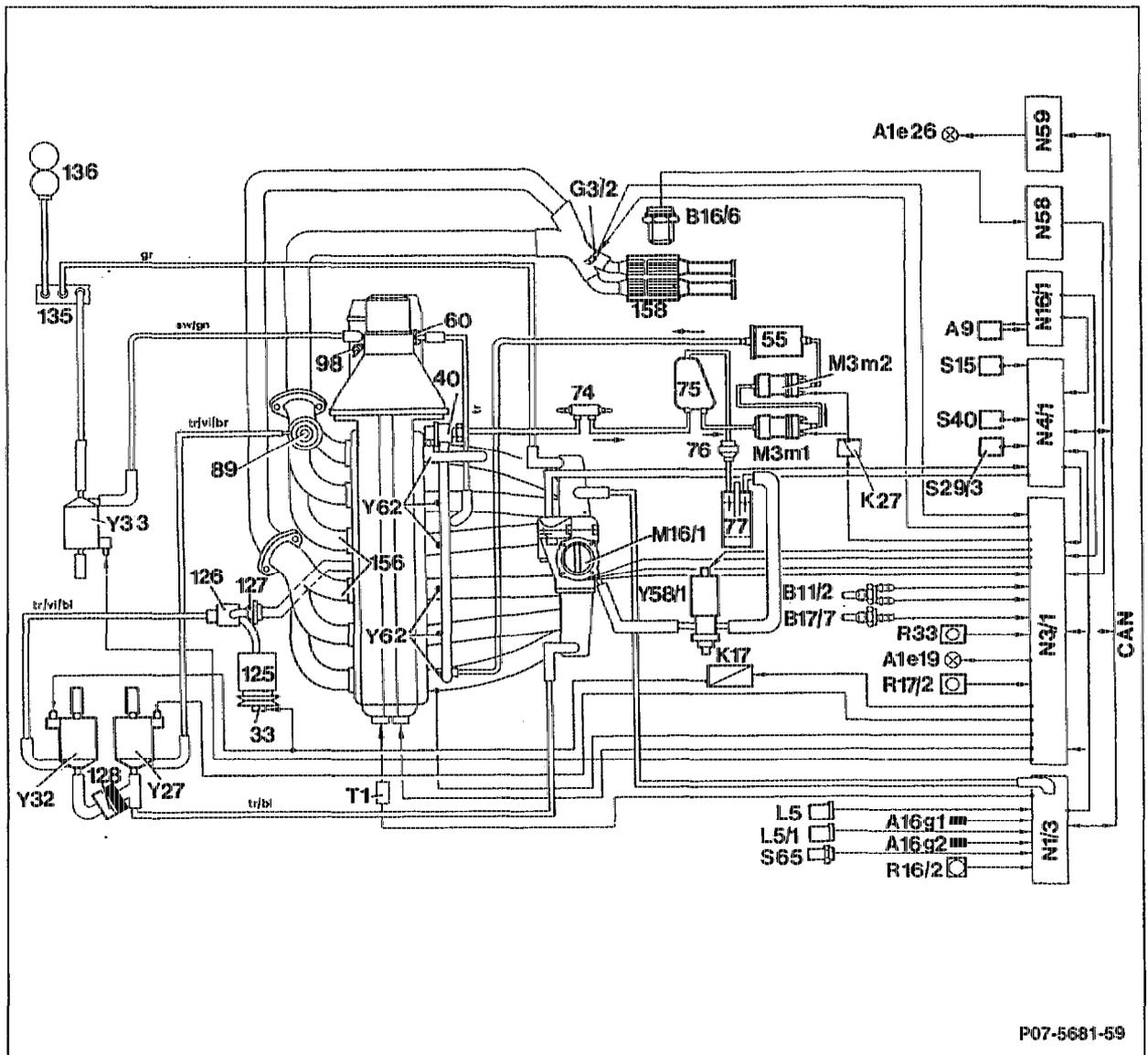


# 07.4-0010 Function diagram

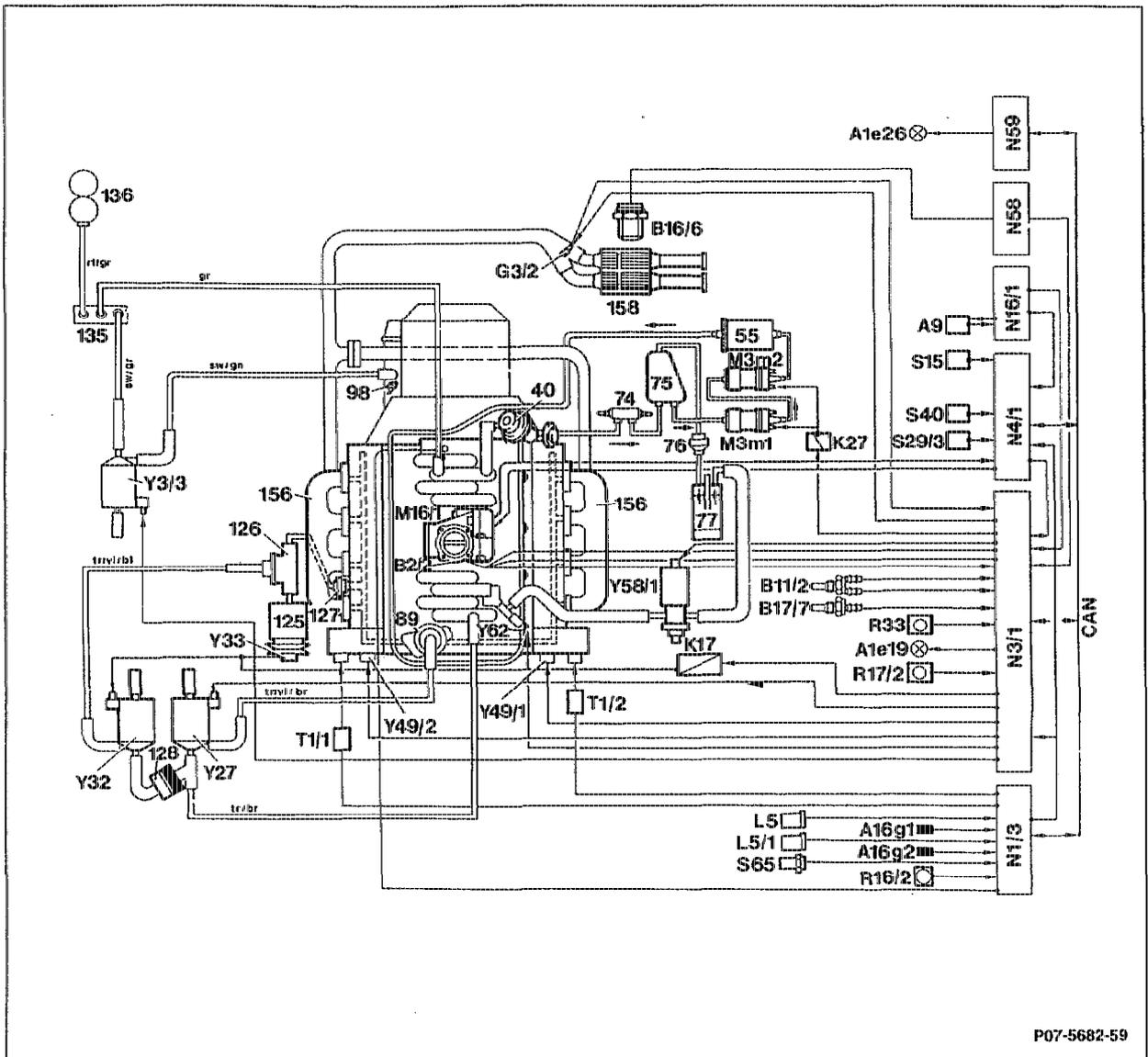
## A. Engine 104



Basic version, (J) and (USA)

40	Diaphragm pressure regulator	M3m1	Fuel pump 1
55	Fuel filter	M3m2	Fuel pump 2
74	Fuel cooler	M16/1	Electronic accelerator pedal (EFP) actuator
75	Fuel tank	N3/1	EZL ignition control unit
76	Vent valve	N3/1	Air hot wire (LH) control unit
77	Activated charcoal filter	N4/1	Electronic accelerator pedal (EFP) control unit
89	Exhaust gas recirculation valve <sup>3)</sup>	N4/3	Tempomat cruise control/idle speed control unit
98	Vacuum element (shift point retard) <sup>1)</sup>	N16/1	Base module (GM)
125	Air pump <sup>1)</sup>	N58	Catalytic converter overheating control unit <sup>6)</sup>
126	Air shutoff valve <sup>1)</sup>	N59	Diagnostic module <sup>4)</sup>
127	Non-return valve (injected air) <sup>1)</sup>	R16/2	EZL resistance trimming coupling
128	Non-return valve (vacuum)	R17/2	Air hot wire resistance trimming plug <sup>5)</sup>
135	Non-return valve (vacuum supply)	R33	CO potentiometer, additive performance map adjustment <sup>2)</sup>
136	Vacuum reservoir	S15	Transmission mode switch (2nd mode)
156	Exhaust manifold	S29/3	Idle speed contact switch
158	Catalytic converter	S40	Tempomat cruise control switch
A1e19	Catalytic converter overheating warning lamp <sup>6)</sup>	T1	Ignition coil
A1e26	CHECK ENGINE warning lamp <sup>7)</sup>	Y3/3	Shift point retard switchover valve <sup>1)</sup>
A9	A/C compressor	Y27	ARF switchover valve <sup>3)</sup>
A16g1	Knock sensor 1	Y32	Air pump switchover valve <sup>1)</sup>
A16g2	Knock sensor 2	Y33	Air pump electromagnetic clutch <sup>1)</sup>
B2/2	Air mass sensor with hot wire	Y49	Camshaft timing actuator
B11/2	Coolant temperature sensor	Y58/1	Regeneration switchover valve
B16/6	KAT thermocouple <sup>6)</sup>	Y62	Fuel injection valves
B17/7	Intake air temperature sensor		
G3/2	Heated oxygen sensor	1)	Only for vehicles with KAT
K17	Air injection relay <sup>1)</sup>	2)	Only for vehicles without KAT
K27	Fuel pump relay	3)	Only (J) (USA)
L5	Crankshaft position sensor	4)	Only California
L5/1	Camshaft position sensor	5)	Except (USA)
		6)	Only (J)
		7)	Only (USA)

## B. Engine 119



Basic version, (J) and (USA)

40	Diaphragm pressure regulator	L5	Crankshaft position sensor
55	Fuel filter	L5/1	Camshaft position sensor
74	Fuel cooler	M3m1	Fuel pump 1
75	Fuel tank	M3m2	Fuel pump 2
76	Vent valve	N1/3	EZL ignition control unit
77	Activated charcoal filter	N3/1	Air hot wire (LH) control unit
89	Exhaust gas recirculation valve <sup>3)</sup>	N4/1	Electronic accelerator pedal (EFP) control unit
98	Shift point retard vacuum element <sup>1)</sup>	N16/1	Base module (GM)
125	Air pump <sup>1)</sup>	N58	Catalytic converter overheating control unit <sup>5)</sup>
126	Air shutoff valve <sup>1)</sup>	N59	Diagnostic module <sup>4)</sup>
127	Non-return valve (injected air) <sup>1)</sup>	R16/2	EZL resistance trimming coupling
128	Non-return valve (vacuum)	R17/2	Air hot wire resistance trimming plug <sup>5)</sup>
135	Non-return valve (vacuum supply)	R33	CO potentiometer, additive performance map adjustment <sup>2)</sup>
136	Vacuum reservoir	S15	Transmission mode switch (2nd mode)
156	Exhaust manifold	S29/3	Idle speed contact switch
158	Catalytic converter	S40	Tempomat cruise control switch
A1e19	Catalytic converter heating warning lamp <sup>6)</sup>	T1/1	Ignition coil 1
A1e26	CHECK ENGINE warning lamp <sup>7)</sup>	T1/2	Ignition coil 2
A9	A/C compressor	Y3/3	Shift point retard switchover valve <sup>1)</sup>
A16g1	Knock sensor 1	Y27	ARF switchover valve <sup>3)</sup>
A16g2	Knock sensor 2	Y32	Air pump switchover valve <sup>1)</sup>
B2/2	Air mass sensor with hot wire	Y33	Air pump electromagnetic clutch <sup>1)</sup>
B11/2	Coolant temperature sensor	Y49/1	Left camshaft timing actuator
B16/6	KAT thermocouple <sup>6)</sup>	Y49/2	Right camshaft timing actuator
B17/7	Intake air temperature sensor	Y58/1	Regeneration switchover valve
G3/2	Heated oxygen sensor	Y62	Fuel injection valves
K17	Air injection relay <sup>1)</sup>		
K27	Fuel pump relay		

1) Only on vehicles with KAT

2) Only on vehicles without KAT

3) Only  

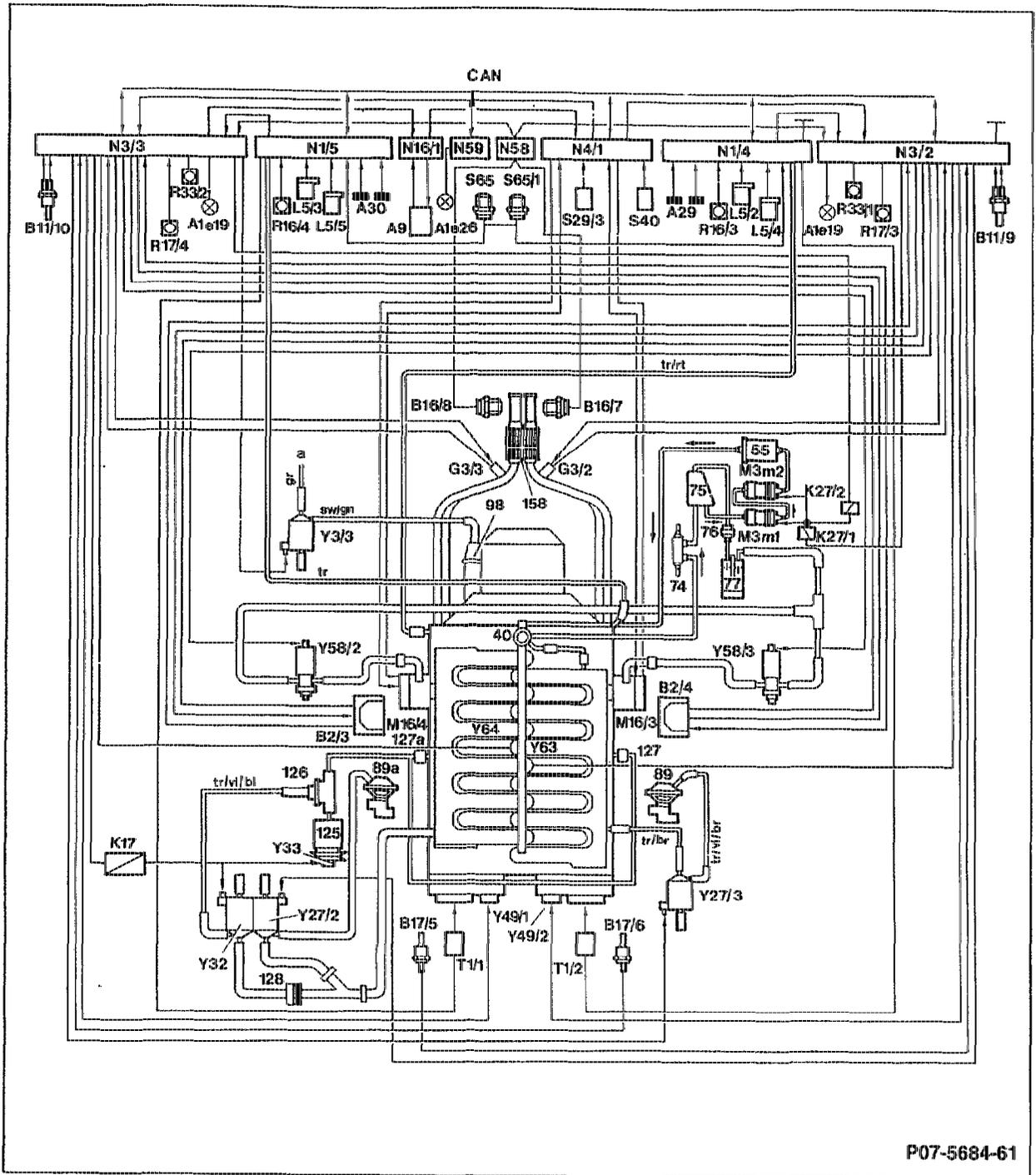
4) Only California

5) Except 

6) Only 

7) Only 

# C. Engine 120



Basic version, (J) and (USA)

40	Diaphragm pressure regulator	N1/4	Left EZL ignition control unit
55	Fuel filter	N1/5	Right EZL ignition control unit
74	Fuel cooler	N3/2	Left hot wire (LH) control unit
75	Fuel tank	N3/3	Right hot wire (LH) control unit
76	Vent valve	N4/1	Electronic accelerator pedal (EFP) control unit
77	Activated charcoal filter	N16/1	Base module (GM)
89	Left exhaust gas recirculation valve for right bank of cylinders <sup>3)</sup>	N58/1	Left catalytic converter overheating control unit <sup>6)</sup>
89a	Right exhaust gas recirculation valve for left bank of cylinders <sup>3)</sup>	N58/2	Right catalytic converter overheating control unit <sup>6)</sup>
98	Shift point retard vacuum element	N59	Diagnostic module <sup>4)</sup>
125	Air pump <sup>1)</sup>	R16/3	Left EZL resistance trimming plug
126	Air shutoff valve <sup>1)</sup>	R16/4	Right EZL resistance trimming plug
127	Non-return valve (injected air) <sup>1)</sup>	R17/3	Left hot wire resistance trimming plug <sup>5)</sup>
127a	Non-return valve (injected air) <sup>1)</sup>	R17/4	Right hot wire resistance trimming plug <sup>5)</sup>
128	Non-return valve (vacuum)	R33/1	Left CO potentiometer, additive performance map adjustment <sup>2)</sup>
158	Catalytic converter	R33/2	Right CO potentiometer, additive performance map adjustment <sup>2)</sup>
A1e19	Catalytic converter overheating warning lamp <sup>6)</sup>	S29/3	Switch, accelerator pedal force recognition/idle speed contact switch
A1e26	CHECK ENGINE warning lamp <sup>7)</sup>	S40	Tempomat cruise control switch
A9	A/C compressor	S65	Transmission overload protection switch, brake band B1
A29g1	Left knock sensor 1	S65/1	Transmission overload protection switch, brake band B2
A29g2	Left knock sensor 2	T1/1	Ignition coil 1 (right bank of cylinders)
A30g1	Right knock sensor 1	T1/2	Ignition coil 2 (left bank of cylinders)
A30g2	Right knock sensor 2	Y3/3	Shift point retard switchover valve <sup>1)</sup>
B2/3	Left air mass sensor with hot wire	Y27/2	Left ARF switchover valve <sup>1 3)</sup>
B2/4	Right air mass sensor with hot wire	Y27/3	Right ARF switchover valve <sup>1 3)</sup>
B11/9	Left coolant temperature sensor	Y32	Air pump switchover valve <sup>1)</sup>
B11/10	Right coolant temperature sensor	Y33	Air pump electromagnetic clutch <sup>1)</sup>
B16/7	Left KAT thermocouple <sup>6)</sup>	Y49/1	Left camshaft timing actuator
B16/8	Right KAT thermocouple <sup>6)</sup>	Y49/2	Right camshaft timing actuator
B17/5	Left intake air temperature sensor	Y58/2	Right regeneration switchover valve
B17/6	Right intake air temperature sensor	Y58/3	Left regeneration switchover valve
G3/3	Left oxygen sensor	Y63	Left fuel injection valves
G3/4	Right oxygen sensor	Y64	Right fuel injection valves
K17	Air injection relay <sup>1)</sup>		
K27/1	Relay 1 for fuel pumps 1 and 2	1)	Only on vehicles with KAT
K27/2	Relay 2 for fuel pumps 1 and 2	2)	Only on vehicles without KAT
L5/2	Left camshaft position sensor	3)	Only (J) (USA)
L5/3	Right camshaft position sensor	4)	Only California
L5/4	Left crankshaft position sensor	5)	Except (USA)
L5/5	Right crankshaft position sensor	6)	Only (J)
M3m1	Fuel pump 1	7)	Only (USA)
M3m2	Fuel pump 2		
M16/3	Right electronic accelerator pedal (EFP) actuator, left cylinder block		
M16/4	Left electronic accelerator pedal (EFP) actuator, right cylinder block		