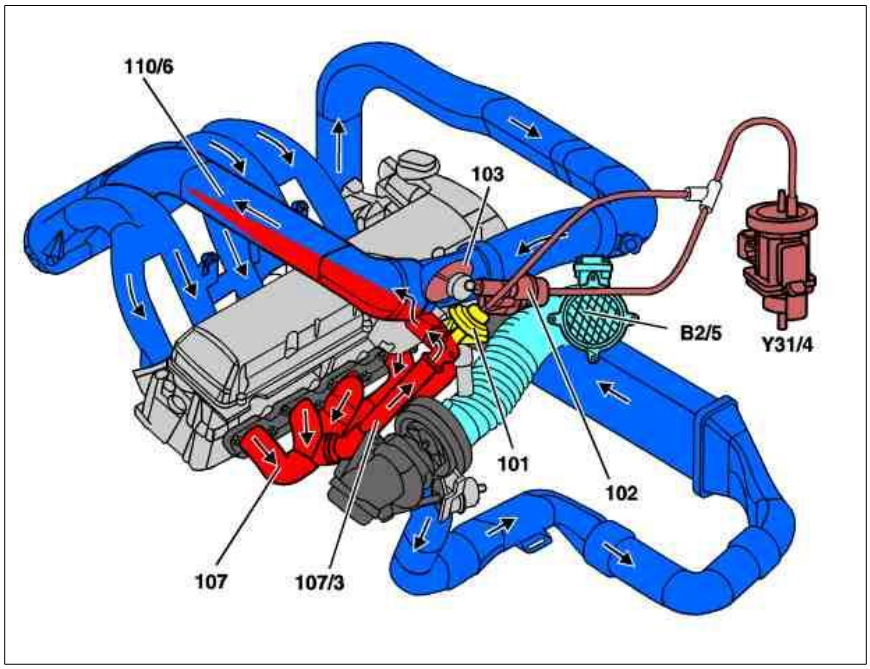
ENGINE 602.982 in MODEL 210.017 /217 /617

up to engine end no.:
016 839 (with manual transmission)
014 488 (with automatic transmission)

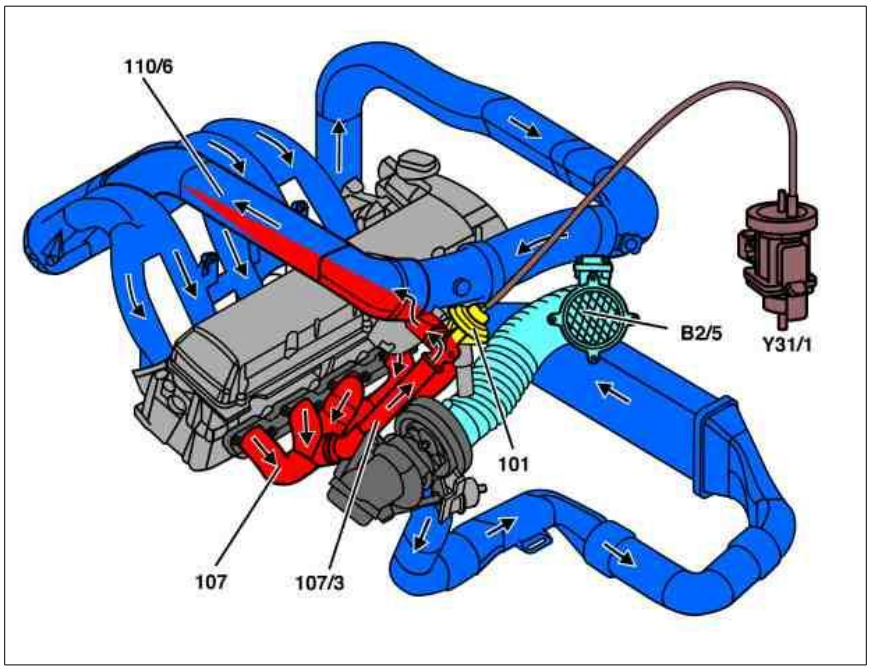
101	*EGR valve*
102	*Pressure regulating flap vacuum unit*
103	*Pressure regulating flap*
107	*Exhaust manifold*
107/3	*Corrugated pipe*
110/6	*Charge air pipe*
B2/5	*Hot film mass air flow sensor*
Y31/4	*EGR/pressure regulating flap vacuum transducer*



P14.20-0211-76

as of engine end no.:
016 840 (with manual transmission)
014 489 (with autoamtic transmission)

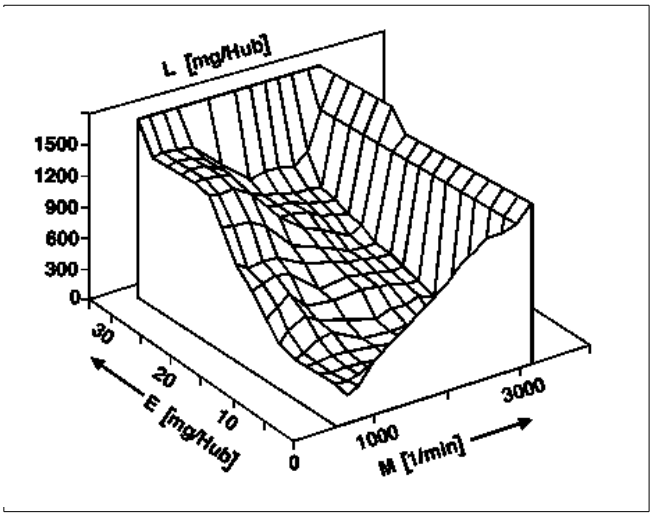
101	*EGR valve*
107	*Exhaust manifold*
107/3	*Corrugated tube*
110/6	*Charge air pipe*
B2/5	*Hot film mass air flow sensor*
Y31/1	*EGR vacuum transducer*



P14.20-0266-76

Map of air mass flow

E	*Injected quantity*
L	*Air mass*
M	*Engine speed*



P07.13-0392-11

Task

Reducing the oxides of nitrogen (NO_x), der Kohlenwasserstoffe the hydrocarbons (HC) und der Partikel and the paraticulates (PM).

Function

The exhaust gases are recirculated in line with the maps stored in the DFI control module (N3/8) as soon as the following points are met.

- Coolant temperature <95 °C
- Battery voltage 11-14 V
- Part load (quantity up to 35 mg/stroke)
- Intake air temperature 0-60 °C
- No inertia fuel shutoff activated
- At idle speed max. 60 sec. (afterrunning)
- Position sensor at CTP stop (0%)
- Engine speed 610-2900 rpm

The DFI control module (N3/8) controls the appropriate quantity of exhaust gases which are recirculated for the particular operating state by means of the air mass, on the basis of the signals supplied by the hot film mass air flow sensor (B2/5).

The quantity of exhaust gases recirculated is set in each operating point so as to achieve the maximum possible reduction of NO_x.

At idle speed, with accelerator not operated, exhaust gas recirculation remains actuated for up to 60 seconds.

Engines with pressure regulating flap: The EGR/pressure regulating flap vacuum transducer (Y31/4) is actuated at the ground side and controls the vacuum to the EGR valve (101) and to the pressure regulating flap vacuum unit (102).

The positioning forces of the EGR valve and pressure regulating flap vacuum unit are graduated in such a way that the EGR valve (101) is first of all opened fully as the vacuum of the EGR/pressure regulating flap vacuum transducer increases, and only then is the pressure regulating flap (103) increasingly closed.

Engines without pressure regulating flap: The EGR vacuum transducer (Y31/1) is actuated at the ground side and controls the vacuum to the EGR valve (101).

GF	Relay module (K40) position/task/design/ function	up to 02/97	GF07.13-P-3101H
GF	Fuse and relay module (K40/4) position/task/ function	as of 03/97	GF07.13-P-3141H
GF	DFI control module (N3/8) input signals/output signals/ position/task/function		GF07.13-P-3102C
GF	Coolant temperature sensor (B11) position/ task/design/function		GF07.04-P-5026C
GF	Crankshaft position sensor (L5/6) position/ task/design/function		GF07.04-P-4116H
GF	Accelerator pedal position sensor (R25/2) design/task/function		GF07.04-P-5029H
GF	Intake air temperature sensor (B17) position/ task/design/function		GF07.04-P-2100H
GF	Pressure sensor (B28) position/task/design/ function		GF07.04-P-5014H
GF	EGR/pressure regulating flap vacuum transducer (Y31/4) position/task/design/ function	up to engine end no.: 016 839 (with manual transmission) 014 488 (with automatic transmission)	GF07.17-P-3159H
GF	EGR vacuum transducer (Y31/1) position/task/ design/function	as of engine end no.: 016 840 (with manual transmission) 014 489 (with automatic transmission)	GF07.17-P-3157H
GF	Hot film mass air flow sensor (B2/5) position/ task/design/function		GF07.07-P-4118C
GF	(DI) quantity control task/design/function		GF07.13-P-3163AC

