

FUEL INJECTOR, LOCATION/TASK/DESIGN/FUNCTION - GF07.03-P-5004

Fuel injector, location/task/design/function - GF07.03-P-5004F

ENGINE 104 (except 104.98)

ENGINE 111

ENGINE 112 (except 112.96)

ENGINE 113 (except 113.99)

ENGINE 119 (except 119.96)

ENGINE 120

ENGINE 137

Structure (the engines shown are engines 119, 120) 3 Magnet coil

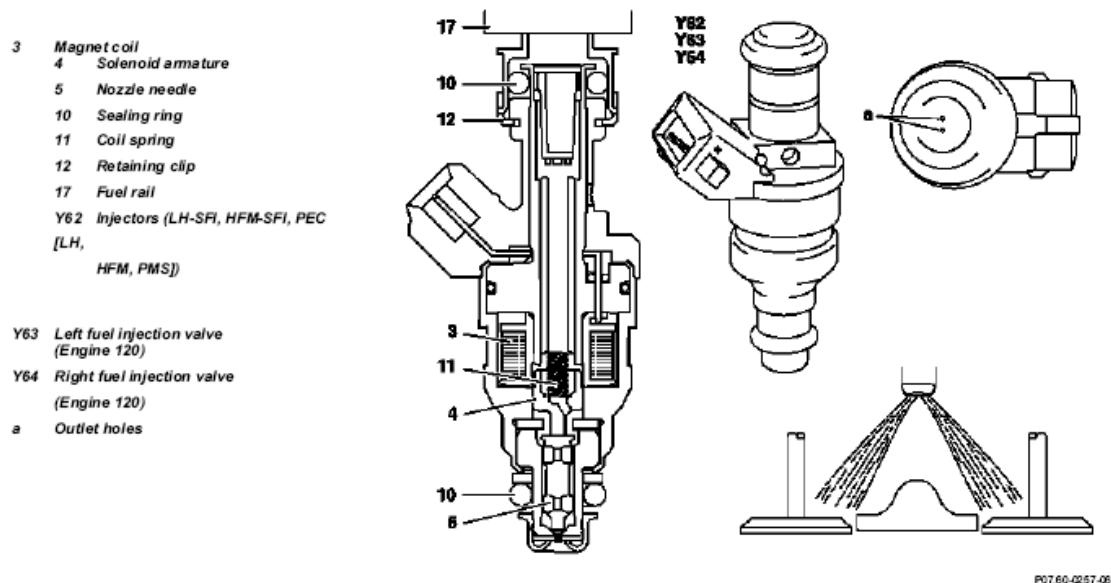


Fig. 1: Identifying Fuel Injector Function - Shown Are Engines 119, 120
Courtesy of MERCEDES-BENZ USA

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The diameter and number of the outlet bore holes are adjusted to the fuel requirements of the engine.

	Fuel injector, location	At cylinder head	
	Fuel injector, task	Spraying the fuel onto the	

2006 Mercedes-Benz SL500

ENGINE PERFORMANCE Mixture Formation - Basic Knowledge - 230 Chassis

		injectors in the form a finely atomized spray	
	Fuel injection valve structure/function	When energizing the magnet coil (3) the nozzle needle (5) is lifted above the solenoid armature (4) against the coil spring (11) by approx. 0.1 mm and the fuel flows out of the holes. Actuation of the fuel injection valves occurs over correspondingly long earth impulses from the engine control unit, power supply from terminal 87.	

Fuel injection valve, location/task/design/function - GF07.03-P-5004KE

ENGINE 113.990 /991 /992 /993 /995

Fuel injection valves

Y62



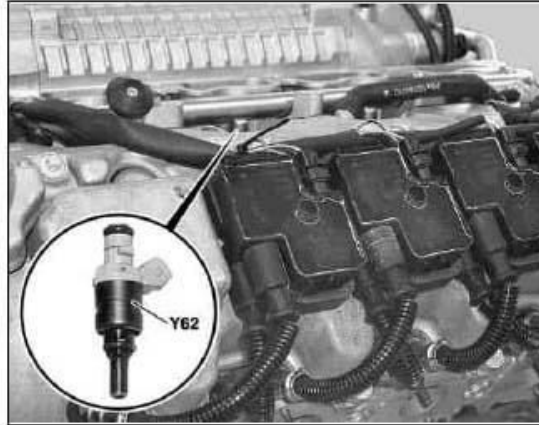
P07.03-2071-02

Fig. 2: Identifying Fuel Injection Valve - Y62
Courtesy of MERCEDES-BENZ USA

	Fuel injection valve, location		GF07.03-P-5004-01AM
	Fuel injection valve, task	The fuel injection valves inject finely atomized fuel into the intake valves.	
	Fuel injector, design		GF07.03-P-5004-03KE

Fuel injector, location - GF07.03-P-5004-01AM

Y62 Injectors (LH-SFI, HFM-SFI, PEC (LH, HFM, PMS))



P07.03-2073-11

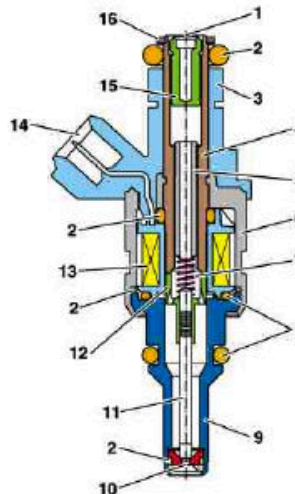
Fig. 3: Identifying Fuel Injector - Y62
Courtesy of MERCEDES-BENZ USA

Fuel injector, function - GF07.03-P-5004-02KE

- 1 Fuel pressure fitting
- 2 Sealing ring (O-ring)
- 3 Fuel connector to fuel rail
- 4 Internal transfer tube
- 5 Adjusting sleeve
- 6 Housing
- 7 Coil spring
- 10 Outlet hole
- 11 Nozzle needle
- 12 Armature
- 13 Solenoid winding
- 14 Electrical connection
- 15 Filter
- 16 Plastic washer

Y62 Fuel injection valves

Y62



P07.03-2049-82

Fig. 4: Identifying Fuel Injection Design
Courtesy of MERCEDES-BENZ USA

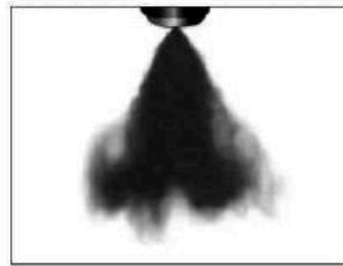
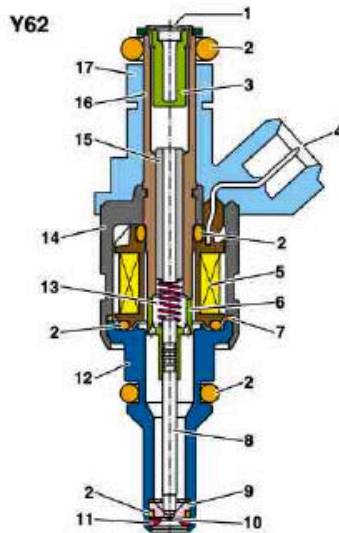
If solenoid winding (13) is energized, the nozzle needle (11) is raised by the solenoid armature (12) about 0.1 mm against the force of the coil spring (7).

The fuel escapes through an outlet hole (10) and is sprayed onto the intake valves in a finely atomized spray.

The fuel injection valves (Y62) are actuated accordingly through electrical ground pulses by the ME-SFI [ME] control unit (N3/10). The voltage supply takes place from "circuit 87 M".

Fuel injector, design - GF07.03-P-5004-03KE

- 1 Fuel pressure fitting
- 2 Sealing ring (O-ring)
- 3 Filter
- 4 Electrical connection
- 5 Solenoid winding
- 6 Armature
- 7 Spacer ring
- 8 Nozzle needle
- 9 Nozzle needle seat
- 10 Outlet hole
- 11 Outlet washer
- 12 Valve body
- 13 Coil spring
- 14 Housing
- 15 Adjusting sleeve
- 16 Internal transfer tube
- 17 Fuel-distribution rail connector



P07.03-2055-78

Fig. 5: Identifying Fuel Injection Design
Courtesy of MERCEDES-BENZ USA

Fuel injector, location/task/design/function - GF07.03-P-5004M

ENGINE 275.950 in MODEL 215, 220

ENGINE 275.951 in MODEL 230

ENGINE 275.953 in MODEL 216, 221

ENGINE 275.954 in MODEL 230

ENGINE 275.980 in MODEL 215, 220

ENGINE 275.981 in MODEL 230

ENGINE 275.982 in MODEL 216, 221

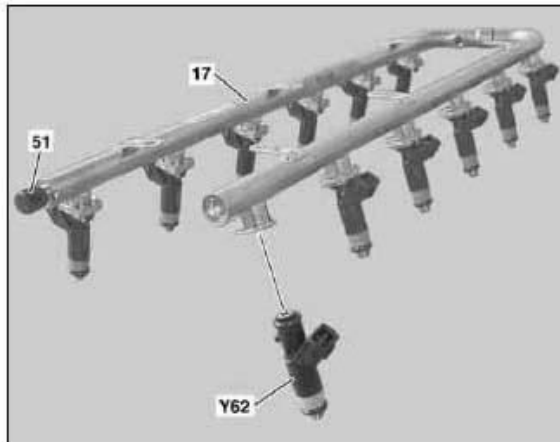
ENGINE 285.950 in MODEL 240

ENGINE 285.980 in MODEL 240

2006 Mercedes-Benz SL500

ENGINE PERFORMANCE Mixture Formation - Basic Knowledge - 230 Chassis

Fuel rail
Pressure gauge connection
Injectors (LH-SFI, HFM-SFI, PEC (LH, HFM, PMS))



P07.03-2126-11

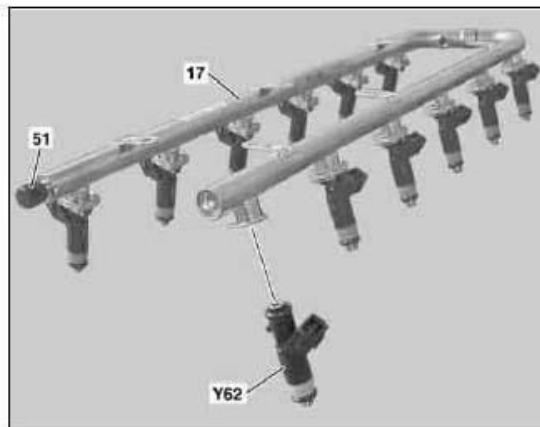
Fig. 6: Identifying Fuel Injector Location
Courtesy of MERCEDES-BENZ USA

	Fuel injector, location		GF07.03-P-5004-01M
	Fuel injector, task	Spraying the fuel onto the injectors in the form a finely atomized spray	
	Fuel injector, design		GF07.03-P-5004-03M
	Fuel injector, function		GF07.03-P-5004-02M

Fuel injection valve location - GF07.03-P-5004-01M

The fuel injection valves are mounted between fuel distribution tube and cylinder head.

17 Fuel rail
51 Pressure gauge connection
Y62 Fuel injection valves



P07.03-2126-11

Fig. 7: Identifying Fuel Injection Valve Location
Courtesy of MERCEDES-BENZ USA

Fuel injector, function - GF07.03-P-5004-02M