

Removal and Installation of Fuel Level Indicator

Job No.

47-2

On Models 180 to 220 SE the removal and installation procedures for the fuel level indicator are the same as on Model 190. Please note that the fuel level indicator should only be installed with the fuel-resistant sealing compound Teroson LB 1020/1 since all other sealing compounds are soluble in gasoline.

Note: On Models 190 SL, 220 a, and 220 S with reserve fuel line (without warning light) the fuel level indicator has only one electrical connection. On recent cars the float of the fuel level indicator has been made rattle-proof when the tank is completely full or completely empty.

Testing of Fuel Level Indicator

Job No.

47-3

Remove the fuel level indicator (see Job No. 47-2).

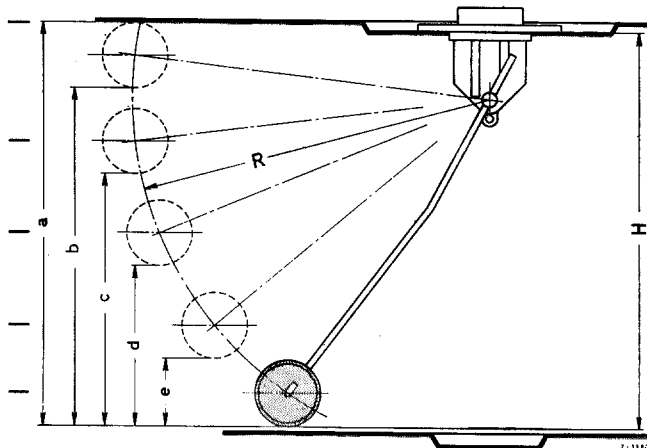


Fig. 47-3/1

Testing Procedure:

1. With the float lever swinging freely check the distance "H" from the lower edge of the float to the flange of the fuel level indicator. This distance should be on Models:

180, 180 a, 180 b, 180 D, 180 Db, 190 D, 190 Db, 219	(56 liters tank capacity) = 172 mm
190 SL, 220 a, and 220 S	(64 liters tank capacity) = 194 mm
220 SE	(60 liters tank capacity) = 179 mm

2. Check the length "R" of the fuel level indicator from center fulcrum to center float. It should measure on Models:

180, 180 a, 180 b, 180 D, 180 Db, 190 D, 190 Db, 219	R = 151 ± 2 mm
190 SL, 220 a, and 220 S	R = 175 ± 2 mm
220 SE	R = 159 ± 2 mm

3. Connect the fuel level indicator to a fuel gage via a battery. As an expedient, the fuel level indicator, which has been removed from the vehicle, can be reconnected to the cable sheaf of the tail light wiring harness and the function of the fuel level indicator can be checked in the individual float positions on the fuel gage of the instrument cluster.

	Float raised by mm			Level indicated by fuel gage	Tank contents liters			Test readings ohms		
	180, 180 a, 180 b, 180 D, 180 Db, 190 D, 190 Db, 219	190 SL 220 a 220 S	220 SE		180, 180 a, 180 b, 180 D, 180 Db, 190 D, 190 Db, 219	190 SL 220 a 220 S	220 SE	180, 180 a, 180 b, 180 D, 180 Db, 190 D, 190 Db, 219	190 SL 220 a 220 S	220 SE
Distance "b"	145	167	178	completely full	56	64	60	180+10	180+10	180+10
Distance "c"	114	123	141	$\frac{3}{4}$ full	42	48	45	157+5	147±5	143±5
Distance "d"	73	78	101	$\frac{1}{2}$ full	28	32	30	109±3	103±3	103±3
Distance "e"	33	33	58	$\frac{1}{4}$ full	14	16	15	60±3	54±3	54±3

Note: The fuel level indicator with the additional connection for the red warning light must be checked for contact transmission to the warning light. To do this let the float lever swing freely. With the float lever in this position the warning light must light up after a switch-on lag of 4–7 minutes. The delay in the lighting-up of the warning light is caused by two bi-metal springs built into the fuel gage. This delay is necessary in order to prevent the light from constantly flickering on and off when the reserve fuel level is reached, as a result of the movement of the gasoline when the car is in motion. Raise the float by 5–7 mm (this corresponds to 5–6 liters of reserve fuel) on Models 180, 180 a, 180 b, 180 D, 180 Db, 190 D, 190 Db, 219, and by 33–35 mm (this corresponds to 5.5 liters of reserve fuel) on Model 220 SE; in this position the warning light must no longer light up.

Job No.

47-4

Hints for Fault Tracing at Fuel Gage

The hints for tracing faults at the fuel gage on Models 180 to 220 SE correspond to those described for Model 190.

Job No.

47-5

Checking and Repair of Fuel Tank

On Models 180 to 220 SE the checking and repair procedures are the same as on Model 190.