07.3-160 Checking constant delivery of fuel distributor

Job No. of flat rates or standard texts and flat rates data 07-1509.

Test values

Simulated operating condition	Air flow sensor plate fixed at approx, cc/min	Max. dissipation in cc/min
ldle	6	0.4
Partial load	30	4.0
Full load	100	10.0

Conventional Bosch testers and accessories

Designation	Order designation
Fuel distribution reference unit	KDJE 7455
Tester carriage ¹)	M 200/2 or KDJE 7470

1) If tester carriage is used for fuel distribution reference unit, an additional angle plate is required. The plate can be self-made or obtained from a Bosch representative.

Self-made tool



Contact bridge

Note

The fuel distribution reference unit is available for testing fuel distributor in vehicle. The unit serves to measure the individual amounts of fuel which the fuel distributor dispenses to the injection valves. Measurements are made with engine stopped. Operating conditions (idle, partial or full load) are simulated and set on air flow sensor plate by means of an adjusting device.



Testing

1 Set up fuel distribution reference unit horizontally adjacent to vehicle (tool or tester carriage).

2 Remove air cleaner.

3 Unscrew injection lines on fuel distributor and loosen at injection valves, unscrew if required.

4 Connect connecting lines of fuel distribution reference unit to fuel distributor (sequence according to Fig.) and plug fuel return line into filter neck of fuel tank.





A 8-cylinder engine B 6-cylinder engine

5 Clamp adjusting device for fixing air flow sensor plate to stop bracket of air funnel.



6 Switch on ignition.

On vehicles without safety switch, pull off fuel pump relay and bridge the two jacks. This will energize the fuel pump:

Prior to September 1981: jacks 1 and 2. Starting September 1981: jacks 7 and 8.

7 Deflect air flow sensor plate and push buttons 1 to 8 for venting unit individually for a short moment.

8 Keep one button pushed, deflect air flow sensor plate with adjusting device and fix at a flow rate of 6 cc/min (idle).

9 Push remaining buttons, read individual flow rates and enter on data sheet.

Note: Orders for data sheets, print No. 800.99.472.00 should be mailed by service establishments and representatives in the Federal Republic of Germany with punch cards to the "Drucksachen-Zentrallager" in Stuttgart-Untertürkheim, and by the general representative in export countries to VKT/LV, Stuttgart-Untertürkheim. Data sheets are supplied in blocks of 50 sheets each.

10 Calculate difference between lowest and highest flow rate and compare with tolerance value (refer to test values).

11 For partial and full load, fix air flow sensor plate as described under item 8 at a flow rate of 30 cc/min or 100 cc/min. Then also calculate difference between lowest and highest flow rate and compare with tolerance value.

12 If dispersion is outside teolerance, exchange fuel distributor.

13 Run engine and check all fuel connections for leaks.

14 Adjust idle speed (07.3-100).



