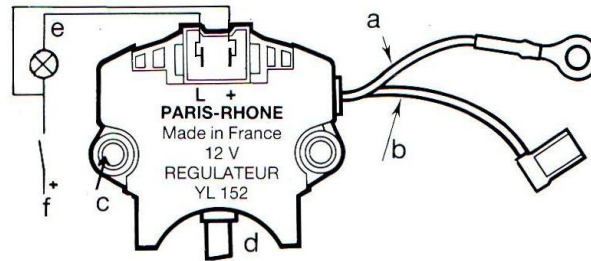


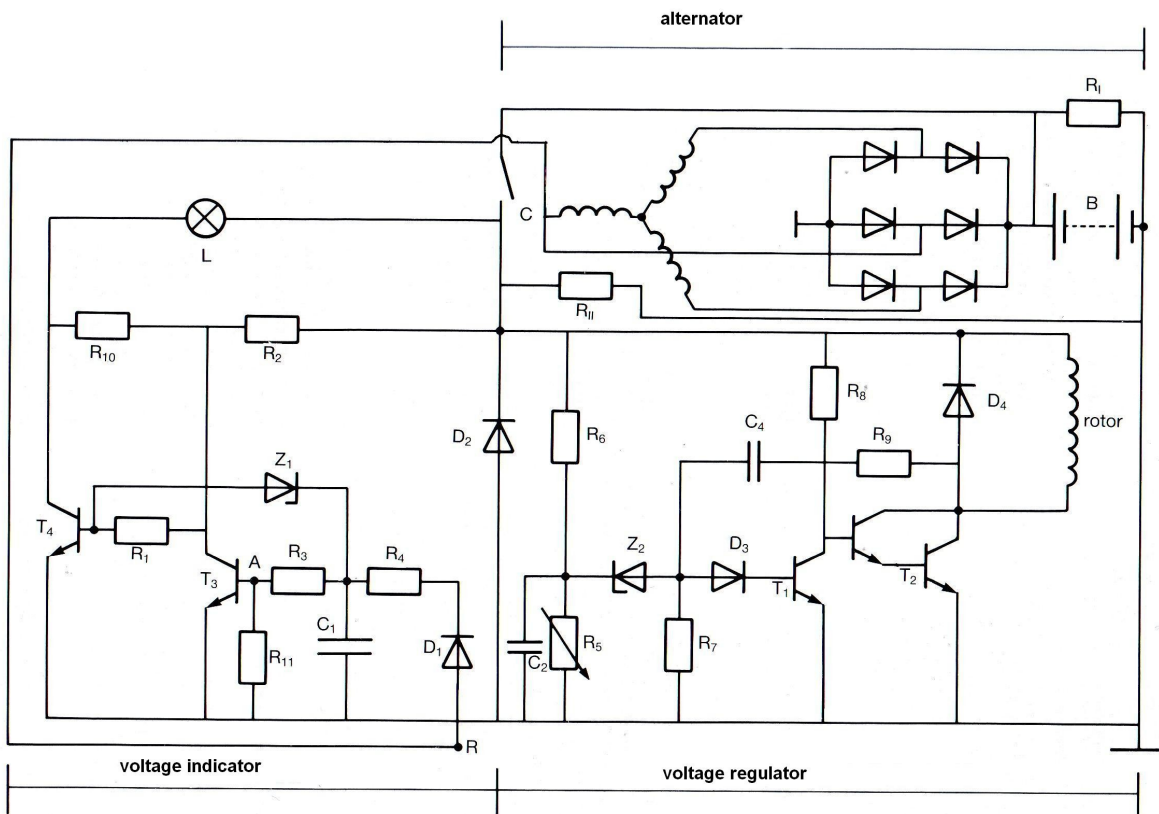
Figure 1 shows us a voltage regulator with a built-in voltage indicator. This is an older system but it gives us a good idea of how the voltage indicator and regulator work.

The voltage indicator lamp (e) switches on below a voltage of 12 V and above a voltage of 16 V. Fig. 2 shows us the electrical circuit. The voltage regulator (or voltage stabilizer) keeps the voltage at 15 V (voltage values are rounded off).



- a Yellow wire + alternator
- b Blue wire phase connection
- c Ground connection
- d Brushes (rotor connection)
- e Indicator lamp
- f Ignition switch

Fig. 1 The ParisRhone voltage regulator with a built-in voltage indicator



Paris Rhone Voltage regulator

Fig. 2

How to test the Paris Rhone voltage regulator on the workbench:

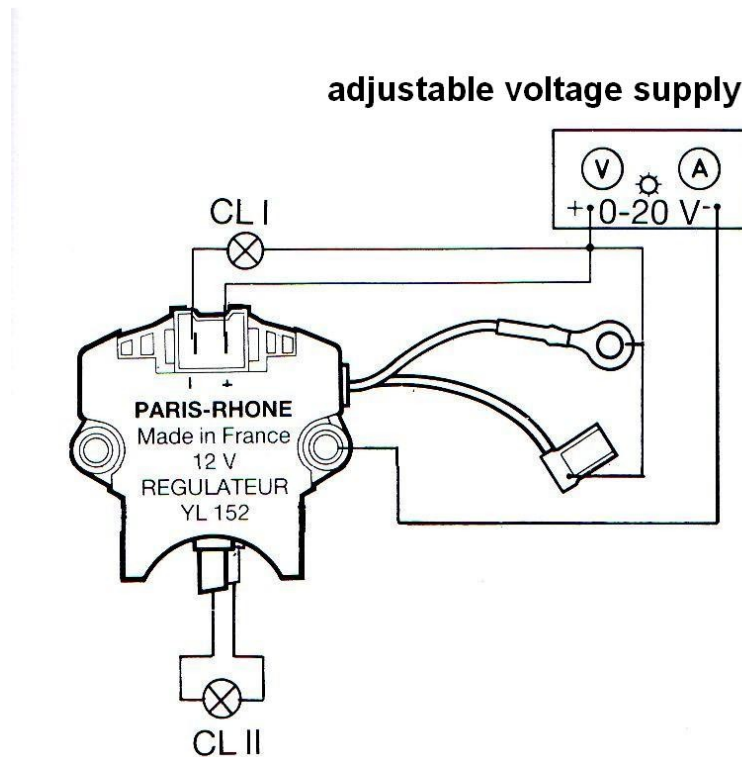


Fig. 3 Testing the voltage regulator on the workbench. An indicator lamp, CLII, is fitted instead of the rotor coil.

What will the CL1 and CL2 lamps do when we slowly increase the voltage supply from zero to 18 Volts? Assume that the voltage regulator is working properly. Use:

- Indicator lamp (CL) = off
- Indicator lamp = on
- Indicator lamp = lights up

Voltage (V)	CL1 (indicator lamp)	CL2 (rotor coil)
0		
2		
4		
6		
8		
10		
12		
13		
14		
15		
16		
17		
18		