

## **Tachometric Relay**

. This relay was used on Bosch LE Systems on vehicles such as GMH JD Camira, VK Commodore, Ford XE Falcon, BMW, Citroen, Volvo, Peugeot and many other European makes.

In brief the tachometric relay is used to supply battery voltage to the entire EFI system and it does this via two different methods. Initially when the engine is cranking, supply voltage from the starter circuit is used to energise the relay. When the engine is running the relay contacts are held closed by sufficient primary ignition signal pulses delivered directly from the ignition coil negative terminal. Having the relay energised in this way also acts as a safety precaution because if the engine stops, the fuel pump and EFI system power supply would then be turned off.

The tachometric relay consists of seven terminals, which are connected as follows:

### **Relay Pin 30 – Battery supply**

Connect to battery positive usually via a fusible link. This circuit should have battery voltage at all times.

### **Relay Pin 15 – Ignition supply**

Connected to ignition key on circuit. This circuit should have 10-12 volts whenever the ignition is on.

### **Relay Pin 1 – Ignition coil signal**

Connected to the ignition coil negative terminal and is used to hold the relay contacts closed when the engine is running.

### **Relay Pin 50 – Starter signal**

Connected to the starter circuit and is used to energise the relay when cranking. Should have 10-12 volts when the starter is engaged.

### **Relay Pin 31 – Relay earth**

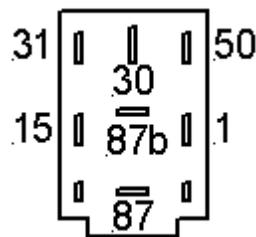
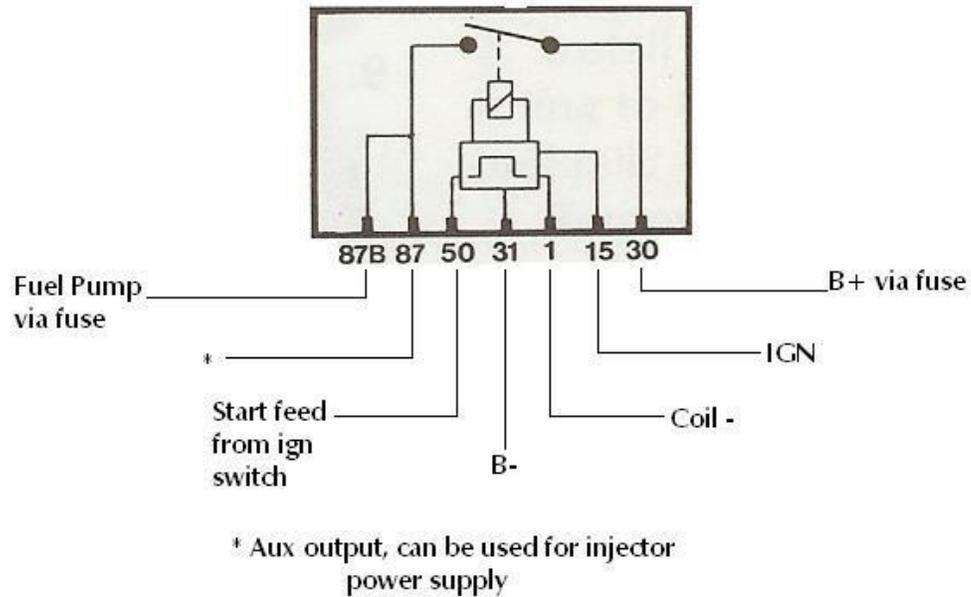
Connected to ground and voltage should be less than 0.3 volts at all times; with a resistance to ground of less than 5 ohms.

### **Relay Pin 87 – Power supply to EFI system**

Connected to all EFI related components, which require a 12 volt, supply. Whilst cranking or running, battery voltage should be present. This terminal can also be used to power ignition coil. When the engine is stopped, power to the coil is removed.

### **Relay Pin 87b – Power supply to fuel pump**

Connected to the positive terminal of the fuel pump. With the engine cranking and running, battery voltage should be present. running, battery voltage should be present.



Top View of Socket  
Or  
Pins facing upwards view of relay

A suitable donor relay can be obtained from a JD Camira with L Jet injection. The relay is located on LHS front of the engine bay. The relay is mounted under Coolant bottle bolt. Get the socket and wiring tail as well.

