# AUTOTECH

# **Installation Instructions**

sport tuning

**PART NUMBER: 10.215.200K** 

DESCRIPTION: ELECTRONIC POWER MODULE FOR KE-JETRONIC VW'S

NOTE: The Autotech Power Module is a 50 state legal device under C.A.R.B. E.O.#D-375.

## **TOOLS REQUIRED:**

#### PARTS LIST:

10mm socket wrench Screwdriver (1) Power Module unit with complete harness

(1) Wire splicetap

We have found that, although KE-Jetronic VW's in stock form are provided with sufficient amounts of fuel for normal driving, these cars are running considerably leaner than the *ideal air/fuel ratio* that produces maximum horsepower. The Power module allows the engine to run much closer to this ideal ratio. This is why even stock engines can benefit from the Power Module. The biggest gains to be had though, are on modified engines. They use much more air, and thus have more potential for gaining power from fuel enrichment.

This electronic device is designed for use on all four cylinder Volkswagens that use Bosch KE Jetronic fuel injection. It measures two basic parameters: throttle position (full throttle), and engine speed. The device's output is bridged into the car's fuel injection system via the control pressure actuator (E.H.A.). The output signals from the power module change the current loads to the fuel distributor, thus changing the amount of fuel sent to each of the injectors.

The Power Module's ability to "think" is what makes it different from other enrichment devices on the market. This allows your fuel injection to function as if it were unmodified during normal use. This is especially important during cold start operations and in highway cruising. The Power Module is not "on" all the time, it engages only when conditions find it necessary.

## **PROCEDURE:**

- 1. Make sure that the car's ignition is OFF.
- 2. Attach the single black wire lead to engine ground. The best place to attach it is on the driver's side of the cylinder head where the coolant flange bolts to the engine. There should already be a number of wires attached to the stud there. Just remove the nut and fasten the ring connector to the stud. In the event that this attachment point is not usable or accessible (e.g. Fox models), connection directly to the negative terminal of the battery is also acceptable
- 3. Next, attach the wires to the coil. The Power Module's coil wires are terminated with female spade connectors. The **GREEN** wire goes to the negative (-) terminal of the coil, and the **RED** wire goes to the positive (+). If your coil does not have spade type connectors, or if your coil terminals are full, we have supplied two ring adapters that may be used to make these connections easier.

# PROCEDURE (cont.):

- 4. Disconnect the original two prong connector from the control pressure actuator (E.H.A.) on the side of the fuel distributor. Plug in the power Module's identical connector (female) onto the E.H.A. in its place.
- 5. Plug the vehicle's original female connector into the Power Module's male plug.
- 6. Locate your car's full throttle microswitch on the throttle body. Of the three wires leading from the microswitch, find the full throttle return wire. On Golf models it should be violet, Jettas and 16V Sciroccos should be blue. This is the wire that you will need to tap into with the splicetap.
- 7. Once the splicetap is attached, plug the Power Module's violet wire into it. This is how the Power Module senses full throttle engagement.
- 8. Next, is the adjustment of the "peak current" setting. This adjustment is made via a rotary switch located on the front of the Power Module. Below are the recommended settings for an array of vehicles. There are eight positions on the switch, but the eighth position is **not** used on this device. The **left** most position is POSITION 1 (counter-clockwise until you reach the stop).

NOTE: Autotech offers a special check harness for checking E.H.A. milliamps with or without the Power Module installed. It adapts your digital mutimeter to your car's E.H.A. without cutting any wires. Call for further information.

9. Although it is not required, it is recommended that the Power Module be placed underneath the rain catch tray (atop the firewall) so that it is protected from weather and abuse. Be careful though, not to allow any of the wires to be pinched when the hood is closed! If you're mounting the Power Module in the engine compartment, be sure that it is **not** too close to any hot engine components.

SWITCH POSITION 1 2 3 4 5 6 7 PEAK CURRENT (mA) 15.2 16.5 17.8 19.9 21.4 22.2 23

SWITCH POSITIONS START CLOCKWISE FROM LEFT- #1 IS LEFT MOST POSITION

POSITION 1 For stock Fox models.

POSITION 2 For Fox or stock Golf/Jetta low compression engines.

POSITION 3 For stock 8-valve GTI/GLI using catalyst exhausts.

POSITION 4 As above or with non-cat exhausts.

POSITION 5 For 8-valve motors with bolt-on modifications, such as cam, exhaust, etc., and stock 16-valve engines.

POSITION 6 For large displacement 8-valve engines and slightly modified 16-valve engines.

POSITION 7 For 16-valve engines with extensive modifications, such as camshafts with sport exhausts. 2-liter 16V's should use this position as well.