INSTALLATION INSTRUCTIONS

COMPU-FIRE® Model VW - 1
Part # 21100
ELECTRONIC IGNITION MODULE
for
Bosch 009 & 050 Distributors

READ THESE INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION

VERIFY THE CONTENTS OF THE SYSTEM. It should contain the following:

Compu-Fire Control Module (CFCM)
Plastic Trigger Rotor
Hardware kit:
a. 4 X 8 mm Socket Head Screw
b. 3 mm Allen Wrench
c. 2 ea. Fully Insulated Female Spade Terminals

CAUTION

MAKE SURE THE IGNITION SWITCH IS OFF!! The wire from the ignition switch to the ignition coil primary terminal is NOT fused in many applications. If this wire is allowed to touch vehicle or engine ground, with the ignition switch on, it can cause a direct short on the battery possibly causing permanent damage to the vehicle wiring and a fire. Engine Electronics, Inc. assumes no liability for damage caused from this occurrence or due to any faults in the existing vehicle wiring.

WARNING: PUT TRANSMISSION IN NEUTRAL OR PARK, SET EMERGENCY BRAKE AND BLOCK WHEELS.

INSTALLATION:

Refer to Fig.# 1.

1. Disconnect the wire (1) from the negative (-) coil primary terminal that goes to distributor.

2. Remove the distributor cap (2).

3. Move the rotor back and forth to insure that the advance mechanism is operating freely.

4. Remove the rotor (3).

5. Remove the points (4) and condenser/terminal assembly (5). Do not reinstall condenser screw. It will interfere with the advance weights.

Refer to Fig.# 2.

6. Install the Compu-Fire ignition module (6). Route the Red and Black wires (7) through the square hole in the distributor body and pull them through the hole as you locate the ignition module onto the breaker plate.

7. Install the Compu-Fire trigger rotor (9). Carefully press the rotor down onto the distributor cam and rotate it back and forth until you feel it "locate" onto the cam. Use the distributor rotor (3) as a tool to fully seat the Compu-Fire rotor onto the distributor cam.

8. NOTE: THE SQUARE PLASTIC GROMMET HAS THE FLANGE REMOVED ON ONE EDGE. THIS EDGE MUST BE LOCATED UP IN THE DIRECTION OF THE DISTRIBUTOR CAP TO AVOID INTERFERENCE WITH THE DISTRIBUTOR CAP WHEN IT IS INSTALLED. Thread the square plastic grommet (10) over the black and red wires from the ignition module and push it into the square hole in the distributor housing. Form the wires in the distributor housing so that they do not interfere with the rotor.

9. Install the distributor cap.

Refer to Fig.# 3.

10. The RED wire connects to the positive (+) primary coil terminal. This is the terminal that has the wire from the ignition switch on it (Bosch terminal 15).

11. The BLACK wire connects to the negative (-) coil terminal. This is the terminal that the original points wire was connected to (Bosch terminal 1).

12. Cut the RED and BLACK wires to length. Crimp on the fully insulated female spade terminals supplied and attach to the coil spade terminals. VERY IMPORTANT!! THE TERMINALS MUST BE CRIMPED WITH A PROPER CRIMPING TOOL. POORLY CRIMPED TERMINALS WILL CAUSE ERRATIC IGNITION PERFORMANCE.

13. The Compu-Fire ignition system is compatible with conventional electronic tachometers. The tach lead remains connected to the negative (-) coil terminal.

14. If the engine was already properly timed, the timing will be close enough to start the engine.

15. MAKE SURE the transmission is in neutral and the emergency brake is on. Start the engine and set the timing in the conventional manner.

TROUBLE SHOOTING

DO NOT check to see if system is firing by disconnecting a spark plug wire and holding it next to ground. The high voltage created by this procedure stresses the insulation at the coil AND IS DANGEROUS!

NO SPARK

?? Check to see that there is 12 volts present at the wire from the ignition switch (coil +) when the ignition switch is on.
?? Verify that the RED and BLACK wires to the coil are crimped properly and attached to the correct coil terminals (Fig.# 3).
?? With the ignition switch off, remove the distributor cap and check the air gap between the Compu-Fire module and rotor. The gap should be approximately .060". The gap must be between .030" and .100".

IGNITION MODULE TEST - Note: Do not turn the ignition switch on during this test and leave it on. Only turn it on long enough to observe the test light.

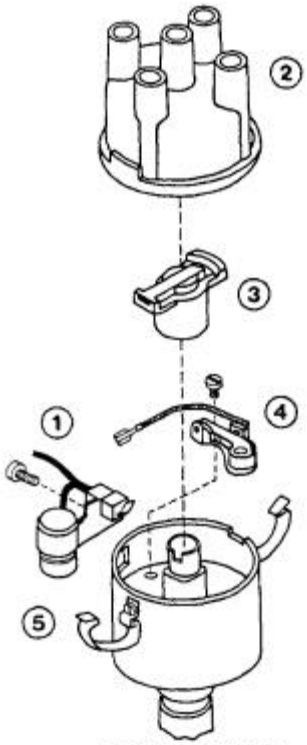
Disconnect the tach lead from the negative (-) coil terminal if applicable. Connect a 12V test light from the coil negative (-) terminal to engine ground. With the transmission in neutral and the emergency brake set turn the ignition switch on. The light should glow. If it does, the coil primary is OK and the ignition switch is wired properly. If it does not, move the test light to the coil positive (+) terminal. If it glows, the coil is defective. If it does not glow, check the wiring to the ignition switch etc.. With voltage on both sides of the coil with the ignition switch on reconnect the test light to the coil negative (-) terminal. Now crank the engine while observing the light. It should flash on and off as the engine rotates. If it flashes and there is still no spark at the plugs check the coil and plug

wires. If it does not flash and the trigger rotor is located properly the module could have been damaged by connecting the RED and BLACK wires improperly.

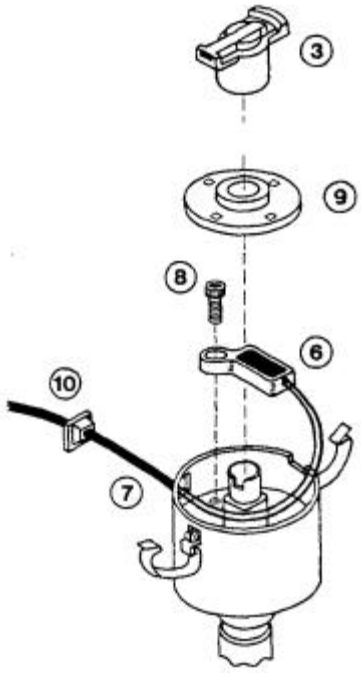
ADVANCE CURVE IS INCORRECT

?? The advance curve is determined by the advance weights in the distributor. If the advance curve is incorrect the advance mechanism in the distributor may be faulty OR the trigger rotor may be dragging against the CFCM.
?? Verify that the rotor is not dragging against the CFCM by visually inspecting the rotor and confirming the rotor location as per Fig.# 6. If this is OK, then the advance mechanism in the distributor will have to be corrected.

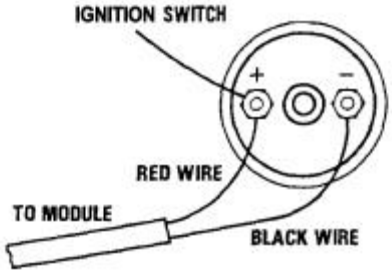
Not legal for sale or use in California on pollution controlled vehicles.



POINTS REMOVAL
FIGURE 1



COMPU-FIRE INSTALLATION
FIGURE 2



NOTE: BOSCH COIL
TERMINAL 1 IS –
TERMINAL 15 IS +

WIRE CONNECTIONS
FIGURE 3