DYNA 3000
DIGITAL PERFORMANCE IGNITION
KIT No. D3K7-6
1990-2001 YAMAHA VMAX 1200

INSTALLATION INSTRUCTIONS

1. LOCATE THE STOCK IGNITION MODULE - Remove the airbox cover with the ignition key, then remove left upper engine cover (snorkel). The stock module is lying flat, just below the stock gauges. The gauges can be unbolted to allow easier access to the ignition mounting screws. The module can then be removed from the bike.

2. SET THE ADVANCE AND REV LIMIT MODES USING THE DIP SWITCHES - Start by selecting ADVANCE MODE #1 and a REV LIMIT of 9500. These settings are identical to stock, and will give you a good baseline to start with. Advance curve #2 and curve #3 has increased midrange and top-end advance, which will pep up a stock motor with more power in the cruising rpm range. Putting a jet kit in the carb will wake up the motor even more. With a jet kit, you may be able to run curve #4 or #5 for even more power. But don’t try these more aggressive curves without a jetting change and premium fuel. See: THE ADVANCE CURVES for more information. NOTE: Do not exceed 10,000 rpm on a stock Vmax without aftermarket valve springs.

3. MOUNT THE DYNA 3000 IGNITION – Mount the DYNA 3000 in the stock location as if it were the stock ignition.

4. START THE BIKE – Before installing the airbox covers, this is a good time to start the bike to make sure everything is working properly. Turn the ignition key on. You should be able to see red LED on the DYNA 3000 module flash once when the ignition key is turned on. If you don’t see the diagnostic LED flash once, check your connections, engine stop switch, and/or the battery voltage.

5. REPLACE THE COVERS. Your installation is complete. If you have any trouble starting the bike, inspect all wiring connections.

THE ADVANCE CURVES
The DYNA 3000 ignition for the Yamaha Vmax has eight built-in advance curves. Curve#1 is identical to the stock curve, however you may notice an increase in fuel mileage, and slightly faster idle. Curve #2 is very similar to the stock curve, except the timing is slightly increased in the midrange and on the top end for stronger over-rev. Curve 2 is a good starting point if you are not sure what your engine will like best. Curves 3 through 5 rise aggressively in the mid rpm range to give you better mid range power. Most engines will work best with one of these curves. Curves 6 and 7 are more conservative.
curves, which rise more slowly across the rpm range. These curves are more appropriate for high revving, high compression engines which would detonate with too much low-end advance. These curves are for extreme engines only. If your engine does not experience detonation with curves 1 through 5 then stay with them. If you do have a detonation problem try curves 6 and 7. Curve 8 is a retard curve for nitrous or blower applications. The best way to optimize ignition timing is by putting your bike on a rear wheel dyno at a local shop to see which settings make the best horsepower.

Each advance setting utilizes the Manifold Absolute Pressure sensor (MAP) for part throttle increased advance (see the dashed line on the IGNITION CURVES chart). The MAP SENSOR vacuum line must be connected to CYL#2 (front left intake port).

THE STATUS LED
The red STATUS LED located on the back of the DYNA 3000 is useful for giving you diagnostic information about the operation of your ignition. When you first apply power to the DYNA 3000 module, the STATUS LED will flash once, indicating the module is on. This is a good verification that your power wiring and ignition switches are working. The RED STATUS LED will then flash each time the magnetic pickup senses the engine rotating. This function will allow you to see that the DYNA 3000 module is communicating with the stock pickup. With the ignition ON and the engine NOT running, the STATUS LED will show the operation of the MAP Sensor. When vacuum is applied, the STATUS LED will illuminate, indicating the MAP sensor input is working. Best mileage will be achieved when the MAP sensor is installed and operating properly, allowing maximum ignition timing during part throttle acceleration (see Ignition Curves Graph).
NOTE - DASHED LINE INDICATES PART THROTTLE CURVE WHEN USING MAP SENSOR
Example: All Dip Switches OFF (Down) = 8500 RPM Limit, Advance Curve Selected.