DYNA 2000 IGNITION
KAWASAKI VULCAN 1500A
(TWIN CARB)
INSTALLATION INSTRUCTIONS

1. REMOVE SEAT – Release the key lock seat latch located at the left rear of the seat and remove the seat.

2. REMOVE RIGHT BODY SIDE COVER – This is the cover located just below the seat on the right side of the bike. Remove the Philips screw retaining the cover and gently pull off the cover.

3. REMOVE THE STOCK IGNITOR BOX – The igniter box is located under the right body side cover. Remove the two bolts retaining the igniter box. Unplug the two harness plugs and the vacuum hose from the igniter box and remove the box from the bike.

4. MATE THE DYNA 2000 MODULE TO ITS HARNESS – Locate the DYNA 2000 ignition module in your kit and the included main wiring harness. Plug the harness into the DYNA 2000 module. Position the DYNA 2000 module in the area where the stock igniter box was mounted.

5. PLUG THE DYNA 2000 HARNESS INTO THE BIKE HARNESS – Plug the six-position connector of the DYNA 2000 harness into the mating six-position connector that went to the stock igniter box. Plug the four-position connector of the DYNA 2000 harness into the mating four-position connector that went to the stock igniter box.

6. TACH OUTPUT – A tach output wire is available on the DYNA 2000 module. This is the 2 inch long green wire on the DYNA 2000 harness. This is a one pulse per revolution tach pulse that can be used to drive an aftermarket tachometer if one is added to the bike.

7. VACUUM SENSOR – The DYNA 2000 ignition can be used with a vacuum sensor to provide load compensation to the ignition curves. If a vacuum sensor is not used, simply plug the vacuum line that went to the stock igniter box. Without a vacuum sensor, the DYNA 2000 will always run using the power portion of the selected advance curve. This will provide maximum performance at all times. If you wish to use a vacuum sensor, you can plug the vacuum sensor included with this kit into the vacuum line that went to the stock igniter box. Then plug the wires of the vacuum sensor into the TPS input plug on the DYNA 2000 harness (SEE WIRING DIAGRAM). Using the vacuum sensor will cause a more advanced ignition curve to be used during light throttle conditions. This will tend to improve fuel economy during cruise conditions.

8. MOUNT THE DYNA 2000 MODULE TO THE BIKE – Using the included mounting plate attached to the DYNA 2000 module, bolt the DYNA 2000 module to the bike using the bolts that held the stock igniter box. Mount the DYNA 2000 module such that the adjustment knobs are at the top of the module after installation.

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9. SET THE ADVANCE AND REV LIMIT MODES – Locate the two knobs on the end of the DYNA 2000 module. Start by selecting ADVANCE MODE #3 and a REV LIMIT of 6000. These settings will give you a good baseline to start with. Advance curve #3 will give you a little more advance on the top end and a little more advance in the mid range cruising speeds than the stock module. This should pep up a stock motor with from 10% to 20% 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 #2 or #1 for even more power. But don’t try these more aggressive curves without a jetting change and premium fuel.

10. START THE BIKE – This is a good time to start the bike to make sure everything is working properly. You should notice that the bike starts better than with the stock. The DYNA 2000 ignition requires much fewer rotations of the engine to start than the stock ignition.

11. REPLACE THE RIGHT BODY SIDE COVER

12. REPLACE THE SEAT

Your installation should be complete. If you have any trouble starting the bike, inspect all wiring connections. You should be able to see the LED on the DYNA 2000 module blink when the ignition key is turned on. If you don’t, check your RUN/STOP switch and/or the battery voltage.

THE ADVANCE CURVES

The DYNA 2000 ignition for the Kawasaki Vulcan has ten built-in advance curves. There are five curves which rise aggressively in the mid rpm range to give you better mid range power. These are curves 1 through 5. These curves give you a choice of final timing from 40 degrees with curve 1 to 32 degrees with curve 5. Most engines will work best with one of these curves. Curve 4 is most similar to the stock curve. Curve 3 is a good starting point if you are not sure what your engine will like best. The best way to optimize ignition timing is by putting your bike on a rear wheel dyno to see which curve makes the best horsepower. Curves 6 through 10 are more conservative curves, which rise more slowly across the rpm range. These curves are more appropriate for high revving, high compression engines that 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 through 10.

STATUS LED

There is a STATUS LED located between the mode knobs on the DYNA 2000 module. This LED is useful for giving you some diagnostic information about the operation of your ignition. The STATUS LED has two functions. When you first apply power to the DYNA 2000 module, the STATUS LED will blink indicating the module is on. This is a good verification that your power wiring and ignition switch are working. When the engine is cranking or running, the STATUS LED will pulse each time a signal is received from one of the magnetic pickups located in your engine. This function will allow you to see that the DYNA 2000 module is communicating with the pickups.
NOTE - DASHED LINES INDICATE LIGHT THROTTLE CURVE WHEN USING TPS OR VACUUM SENSOR.