

1997-2002 HONDA VALKYRIE 1500 - DYNA 3000/F6 IGNITION

INSTALLATION & TUNING INSTRUCTIONS

1) REMOVE THE STOCK IGNITOR BOX – The stock ignitor box is located under the seat, behind the side cover, just behind the coolant tank reservoir. Remove the seat using the ignition key in the keyhole near the fuel petcock. Remove the left side cover by pulling it from the rubber mounted tab, the cover is hinged near the keyhole also. Remove the 10mm bolt retaining the coolant reservoir. Move the reservoir out of the way, it is not necessary to remove the coolant hoses. Pull the rubber ignition mounting sleeve from the mounting posts. Finally, unplug the ignitor connector by depressing the center clips firmly and remove the box from the bike.

2) INSTALL THE DYNA 3000 MODULE – Install the stock rubber mounting sleeve onto the connector end of the Dyna3000. Plug the Dyna3000 module into the factory harness. Position the DYNA 3000 module in the area where the stock ignitor box was mounted. Mount the ignition with the connector pointing down, and the switches/LED pointing up.

3) SET THE ADVANCE AND REV LIMIT MODES – Locate the two knobs on the end of the DYNA 3000 module. Start by selecting ADVANCE MODE #1 and a REV LIMIT of 7250 RPM. These settings are identical to stock. See ADVANCE CURVES below for additional settings.

4) START THE BIKE – This is a good time to start the bike to make sure everything is working properly. Turn the key on and you should see the STATUS LED blink once, indicating the unit is ON and ready to go. If the LED stays ON, see STATUS LED below for other LED functions. If the LED does not turn on, check the ignition connector, ignition switch and engine run/stop switch. If you have any trouble starting the bike, inspect all wiring connections including the terminals in the back of the harness connector. The LED should blink when the engine is cranking. If LED does not blink while engine is cranking, the crank speed is too low, or there is a malfunction in the stock pickups.

5) REPLACE THE SEAT – Replace the coolant reservoir, side cover and seat. Your installation is complete.

THE ADVANCE CURVES:

The DYNA 3000 ignition for the Honda Valkyrie has ten built-in advance curves. Curves 1, 2 and 3 are most similar to the stock advance curve. Curves 1 through 5 should work best with a totally stock bike. If you add a jet kit and a new exhaust you should be able to run curves 6 or 7 for best power. Curves 5, 6, 7 and 8 all have much more initial timing advance than the stock ignition. When using these radically advanced curves, watch and listen for signs of detonation, premium fuel maybe necessary.

ENGINE COOLANT TEMPERATURE COMPENSATION:

The Valkyrie uses an engine coolant temperature (ECT) sensor to advance the timing during cold starts. The Dyna 3000 also uses this temp sensor for advancing the timing when the engine is cold. When the coolant temp reaches 160°F, the sensor will be around 580ohms, and the Dyna 3000 will no longer add additional advance. Like the stock ignitor, no additional advance occurs below 800rpm or above 3500rpm, cold or hot. Until the ECT gets to 160°F, the stock curve (Curve #1) is used. If the rpm gets above 3500, the selected curve takes over.

NITROUS/BLOWER RETARD MODE:

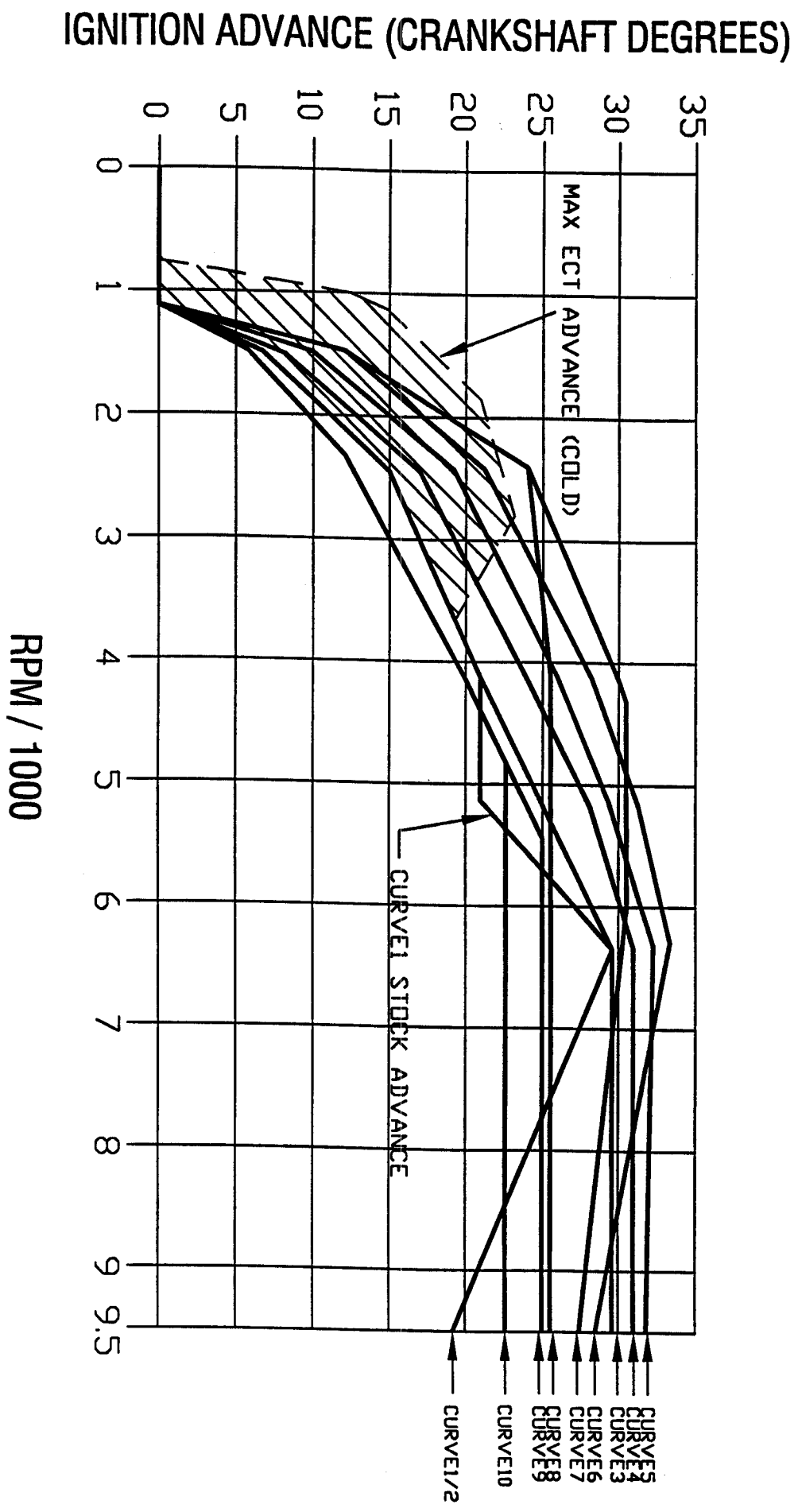
An ignition retard feature (up to 10°) is available for blower or nitrous applications. This feature is first programmed, then activated by grounding the white wire anytime retard is needed. To program the amount of retard (1° to 10°), first turn the ignition key off. Then, move the REV-LIMIT knob to the "PROG" position. Then, turn the ADVANCE MODE knob to the number of degrees retard (1 to 10) that will be subtracted when the white wire is grounded. Now, turn the ignition key on, the bike ****WILL NOT RUN****, instead the STATUS LED will flash the corresponding number of degrees of retard. This number is permanently stored in EEPROM memory. Finally, turn the ignition key off again, then turn the REV-LIMIT knob to the desired rev-limiting value, and turn the ADVANCE KNOB to the desired curve during normal operation. This completes the programming of the retard value. The ignition will use the selected Advance Curve (1-10 switch setting) until the white wire is grounded. When the wire is grounded, the amount of retard will be subtracted from the Advance curve setting. The default retard value is 10°. The retard mode can be used full-time to create a custom advance curve.

STATUS LED:

There is a STATUS LED located between the mode knobs on the DYNA 3000 module. This LED is useful for giving you some diagnostic information about the operation of your ignition. The STATUS LED has multiple functions. When you first apply power to the DYNA 3000 module, the STATUS LED will blink indicating the module is on. This is a good verification that your power wiring and ignition switch is working. With the KEY ON, and the engine not running, the LED will report the function of the Retard (white) wire when it is grounded. The ignition will also report the combined operation of the Sidestand switch and Neutral position switch. Finally, when the engine is cranking or running, the STATUS LED will pulse each time a signal is received from the magnetic pickups located in your engine. This function will allow you to see that the DYNA 3000 module is communicating with the stock pickups.

NOTE: MUST USE SUPPRESSION CORE IGNITION WIRES. USE FACTORY WIRES (with the factory RESISTOR CAPS) OR AFTERMARKET SUPPRESSION WIRES. COILS MUST BE IN THE 2.2-3.0 OHM RANGE.

DYNA3000/F6 IGNITION CURVES



HONDA VALKYRIE STANDARD & TOURER

DYNATEK

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TITLE HONDA VALKYRIE GL1500C & CT

DATE	MODEL	REV
10-23-01	HONDA VALKYRIE 1500	D