Dyna FS Ignition
DFS 7-13   2004+ Yamaha Rhino 660

CAUTION! 9,000 RPM LIMIT (stock ignition 7,700)
CAUTION! No Forward or Reverse vehicle speed limiter.

Congratulations on your purchase of a Dynatek ignition. Please take a moment to read these instructions completely before installing the ignition. The installation will only take a few minutes, but proper setup for your specific engine will take longer.

The DynaFS ignition was designed to work best with the stock coil, coil wire, plug cap, and spark plug. Use resistor type spark plugs ONLY. Use the stock resistor style spark plug cap.

This kit includes: DynaFS ignition and instruction sheet. This is a complete kit, and includes everything needed to install the ignition.

Installation

1) Turn ignition key off, and remove the battery negative (-) cable for safety. Locate the stock ignition box, it is under the front hood, next to the battery and mounted vertically.
2) Remove the screw that holds the ignition to the battery box.
3) Unplug the stock ignition, taking care not to damage the harness connectors. There is a small tab on the harness connectors that must be pushed in to unplug it. Remove the stock ignition from the vehicle. Keep the stock ignition in a safe place - it may be required for troubleshooting.
4) Plug the Dyna ignition in. Install the Dyna ignition in the factory location. Reconnect the battery terminal, make sure all fasteners are tight.

Calibration

The Dyna FS ignition is preprogrammed with a performance curve, based off of the stock curve. The final timing has been increased 4°, and has a faster transition to maximum advance.

NOTE - Use of this ignition may or may not require rejetting of the carburetor to supply more fuel to maximize performance gains. Idle speed may also need to be readjusted. If you are unsure of this tuning process, the services of a competent mechanic should be employed. Do not operate the engine in a lean condition for extended periods or damage may result.
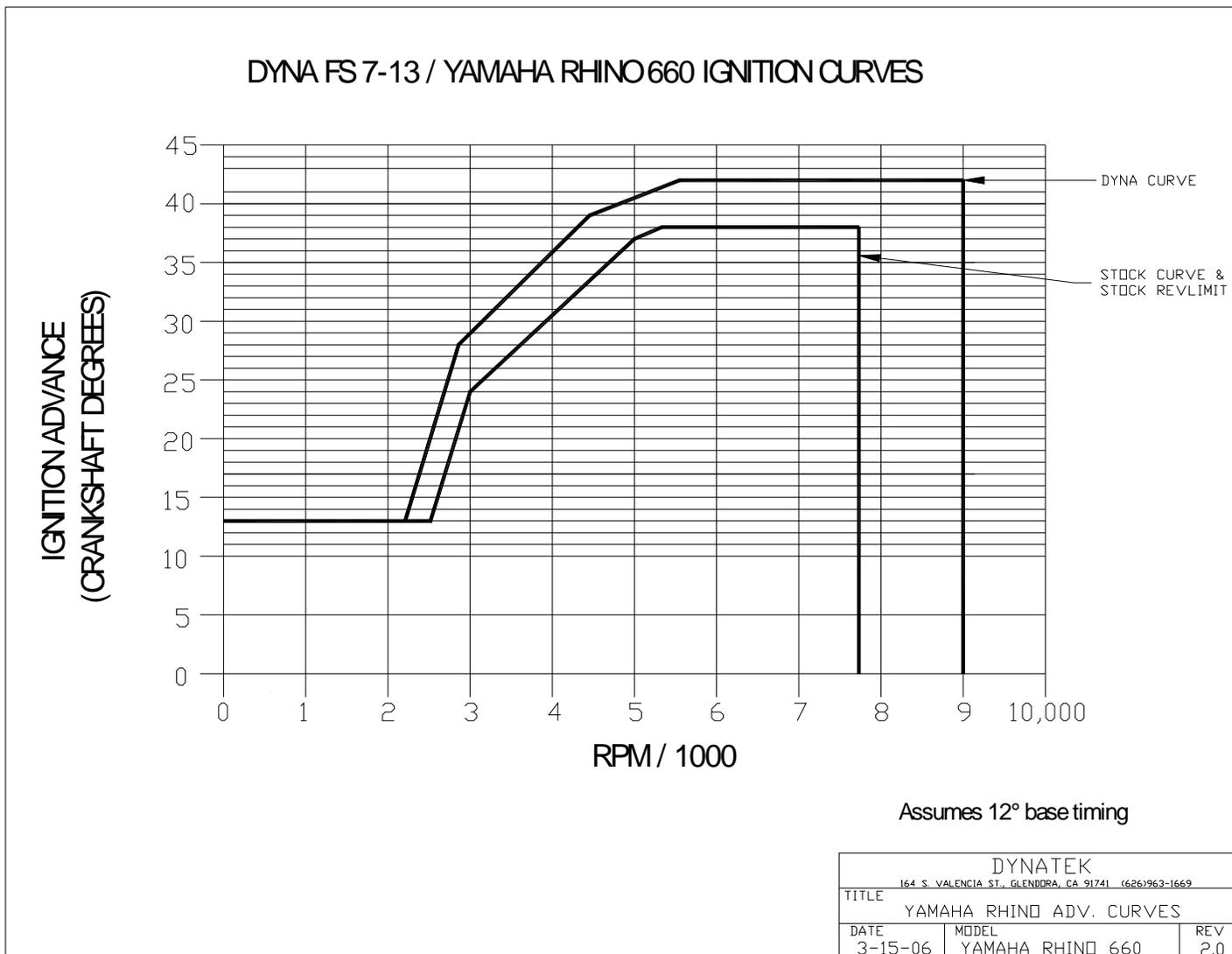
NOTE - The stock ignition has a 7,700 RPM rev limit. The DFS rev limit is pre-programmed to 9,000 RPM. Because the rev limit is so high, the performance limits of other engine parts (valvetrain or connecting rod for example) may be found. It may be necessary to replace these parts for best engine performance. Consult with an engine builder for answers on what works best for your engine.

Troubleshooting

Troubleshooting the Dyna ignition is simple. If the vehicle will not start or run at all, reinstall the stock ignition. If this fixes the problem, then the Dyna ignition should be returned to Dynatek for testing. If this does not fix the problem, then the problem is somewhere else on the vehicle. Follow the troubleshooting procedures outlined in your shop manual.

If the engine runs, but poorly, put the stock ignition back on the vehicle. If this fixes the problem, reinstall the Dyna ignition. If you are using non stock plug wires, plug cap, ignition coil, spark plug, or stator, replace them with OEM units.

If this doesn't fix the problem, the ignition should be returned for testing. If the problem persists when using the stock ignition then the problem is external to the Dyna ignition.

DYNA FS 7-13 / YAMAHA RHINO 660 IGNITION CURVES

Graph: IGNITION ADVANCE (CRANKSHAFT DEGREES) vs RPM / 1000

Y-axis: 0, 5, 10, 15, 20, 25, 30, 35, 40, 45

X-axis: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,000

DYNA CURVE

STOCK CURVE & STOCK REVLIMIT

Assumes 12° base timing

DYNATEK
164 S. VALENCIA ST., GLENDORA, CA 91741 (626)963-1669
TITLE
YAMAHA RHINO ADV. CURVES
DATE 3-15-06 | MODEL YAMAHA RHINO 660 | REV 2.0

WARNING:
Installation of a grounded tether kill switch to the ignition coil signal will damage the CDI and void the warranty.

12V DC-CDI (Yamaha Rhino 660): Use a <u>normally closed</u> tether kill switch connected in series with the +12V input to the ignition. When the tether is removed, it should disconnect the +12V power to the ignition. If a normally closed tether kill switch cannot be located, then a grounded tether can be used to ground the pickup signal (White with red stripe wire in the stock ignition harness)

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