Dyna FS Ignition

DFS 7-16 2004+ Yamaha Raptor 350 ATV

2004 YFM350XS 2005 YFM350RT

CAUTION! NO RPM LIMIT (stock ignition does not have a rev-limit)

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 bike 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. Locate the stock ignition box, it is under the seat, next to the battery box. It is much easier to remove the battery to gain access to the ignition.
- 2) Remove the 10mm bolt that holds the ignition bracket to the bike.
- 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 bike. Keep the stock ignition in a safe place it may be required for troubleshooting.
- 4) Plug the Dyna ignition in. Bolt the Dyna ignition to the stock ignition mounting location. Install the battery, make sure terminals 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 3°, and has a faster transition to maximum advance.

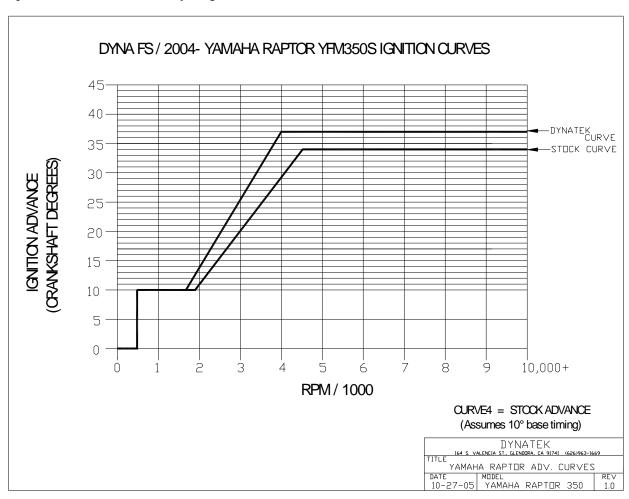
NOTE - Use of this ignition may or may not require rejetting of the carburetor to supply more fuel to maximize performance gains. Idle speed may also need to be readjusted. If you are unsure of this tuning process, the services of a competent mechanic should be employed. Do not operate the engine in a lean condition for extended periods or damage may result.

NOTE - The stock ignition does NOT have a rev limit. The stock engine has valve springs that rev-limit the engine to slightly more than 10,000 RPM. The DFS rev limit is pre-programmed to 15,000 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 bike 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 bike. Follow the troubleshooting procedures outlined in your bike shop manual.

If the bike runs, but poorly, put the stock ignition back on the bike. 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.



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 Raptor 350): 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)