

Dyna FS Ignition

1997-2002 YFM350X Yamaha Warrior

DFS7-9P for 1997-2002 WARRIOR ONLY

Congratulations on your purchase of a Dyna 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. The increase in spark energy from using the DynaFS ignition is enough so that adding any of these will not improve performance, and can cause problems. Use resistor type spark plugs ONLY. Use the stock resistor style spark plug cap.

This kit includes: DynaFS ignition, Curve Selector Switch, 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 above the rear swingarm.
- 2) Remove the two 10mm bolts that hold the ignition 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) Place the Dyna ignition in the factory bracket, and bolt it to the stock ignition mounting location. Plug the Dyna ignition in. Plug in the Curve Selector Switch.
- 5) Mount switch in desired location. You may want to mount it so that it is easily accessible for initial tuning. Do not cut or lengthen the wires!

Calibration

The Dyna FS ignition is preprogrammed with 4 timing curves. The curves are selected by the curve selector switch. Removing the switch will cause the ignition to default to the curve in position 4 (labeled stock on the curve switch) which is the stock timing curve.

Curve 4 is identical to the curve that came with the stock ignition module. Due to improved microprocessor control and significantly higher spark energy, the performance of this curve will be enhanced. A quicker throttle response and increased power over stock is still achieved with the stock ignition curve. For the other 3 timing curves, see the attached chart for the timing information.

Use of this ignition may require rejetting of the carburetor to supply more fuel to maximize performance gains. If you are unsure of this tuning process, the services of a competent mechanic should be employed. Curve 4, the stock curve, is least likely to require any sort of jetting adjustment. Using the other curves may result in a lean misfire condition at high RPMs when the jetting is not properly set. Do not operate the engine in a lean condition for extended periods or damage may result.

This ignition will also allow the engine to rev to a higher RPM than what it has before. At these high RPMs, the performance limits of other engine parts (valvetrain 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.

Programmable ignitions

Lap-top/PC Programmable versions (suffixed with a P in the part number) require a separate programming kit to reprogram them. It is not supplied with the ignition. If the programmable ignition was not purchased directly from Dynatek, the dealer may have programmed a custom set of ignition curves. The dealer should be consulted with any questions regarding the curves that are programmed into the ignition.

The Park Brake switch limiting RPM is programmable and can be rewired to a separate clutch switch for a "two step/low side" launch limiter. Ground the Green/Yellow park switch wire to activate.

Programmable ignitions are shipped with additional leads coming out of the ignition. These leads allow the ignition to control other features. To program these features, follow the instructions in the programming kit.

PURPLE – Ignition kill, ground this wire for shift kill or security.

GREEN – Tachometer output, for a standard 12v, two pulse per rev aftermarket tach.

WHITE – Optional 2-amp switch to ground, referenced as "Power Jet" in PC Software.

BLUE – Optional 2-amp switch to ground, referenced as "Power Valve" in PC Software.

The White & Blue 2-amp switches can be used to activate a solenoid or relay. Connect the relay with hot +12v wired to one side of the relay coil, and the other side connected to White or Blue. When the rpm activates the switch, it will be grounded inside the ignition box, causing current to flow through the relay coil. DO NOT connect any device which requires more than 2 Amps (Amps=Volts/Resistance).

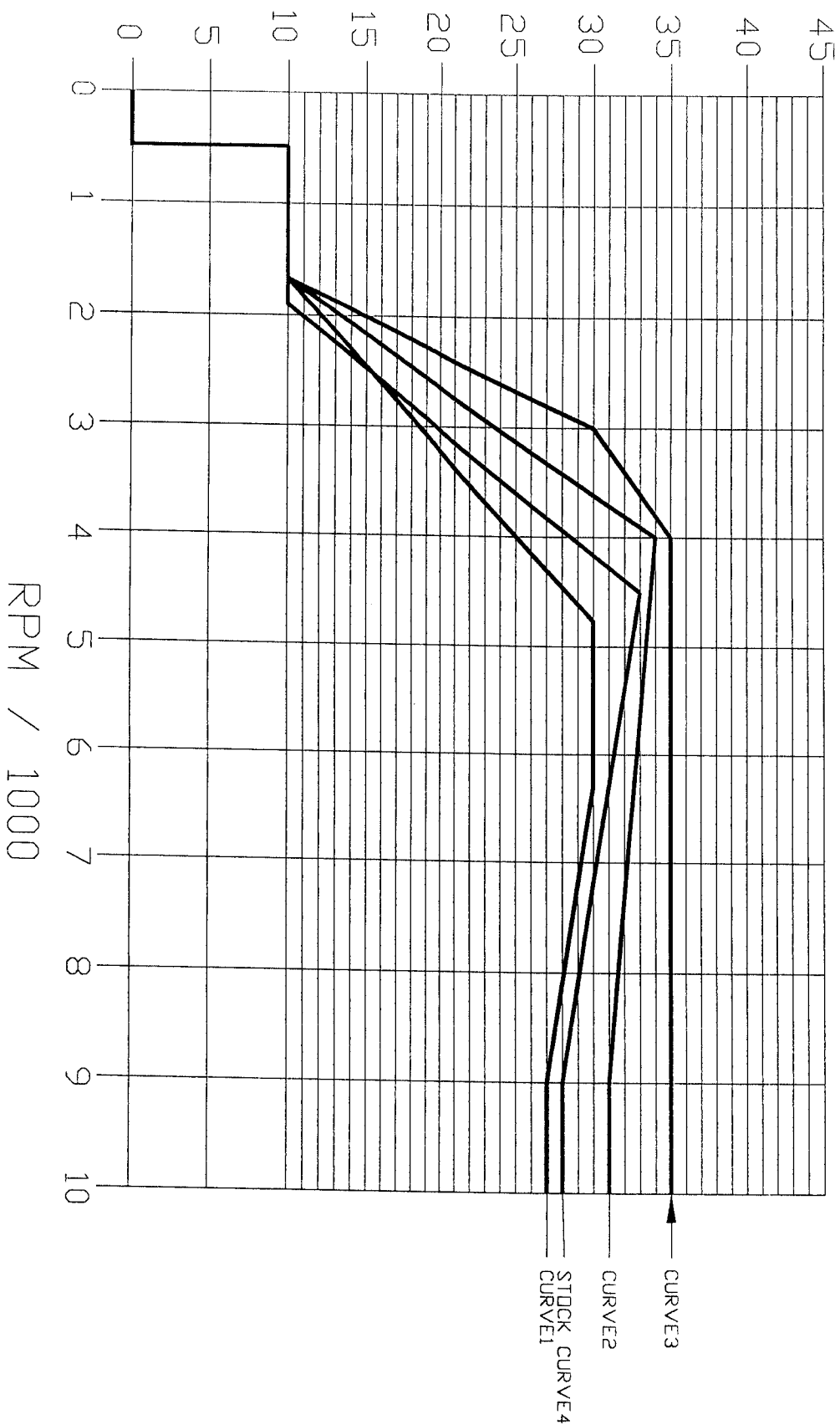
Troubleshooting

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. Then follow the procedures in the calibration section to set the Dyna ignition up to work with your bike. If calibration 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. Follow the test procedures outlined in your bike shop manual to pinpoint the problem.

DYNA FS / YAMAHA WARRIOR YFM350X IGNITION CURVES

IGNITION ADVANCE (CRANKSHAFT DEGREES)



CURVE4 = STOCK ADVANCE
(Assumes 10° base timing)

DYNATEK		REV
164 S. VALENCIA ST., GLENDBRA, CA 91741 (626)963-1659		2.0
TITLE YAMAHA WARRIOR ADV. CURVES		
DATE	MODEL	
7-26-02	YAMAHA WARRIOR 350	