

# Dyna FS Ignition

YFZ-350 Yamaha Banshee

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 stock coils, coil wires, plug caps, and spark plugs. 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, bracket, and instruction sheet. This is a complete kit, and includes everything needed to install the ignition.

## Installation

- 1) Locate the stock ignition box, it is under the seat and accessible from beneath.
- 2) 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.
- 3) Remove the two bolts that are holding the ignition on. 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 supplied 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 may 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(exhausts 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**

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.

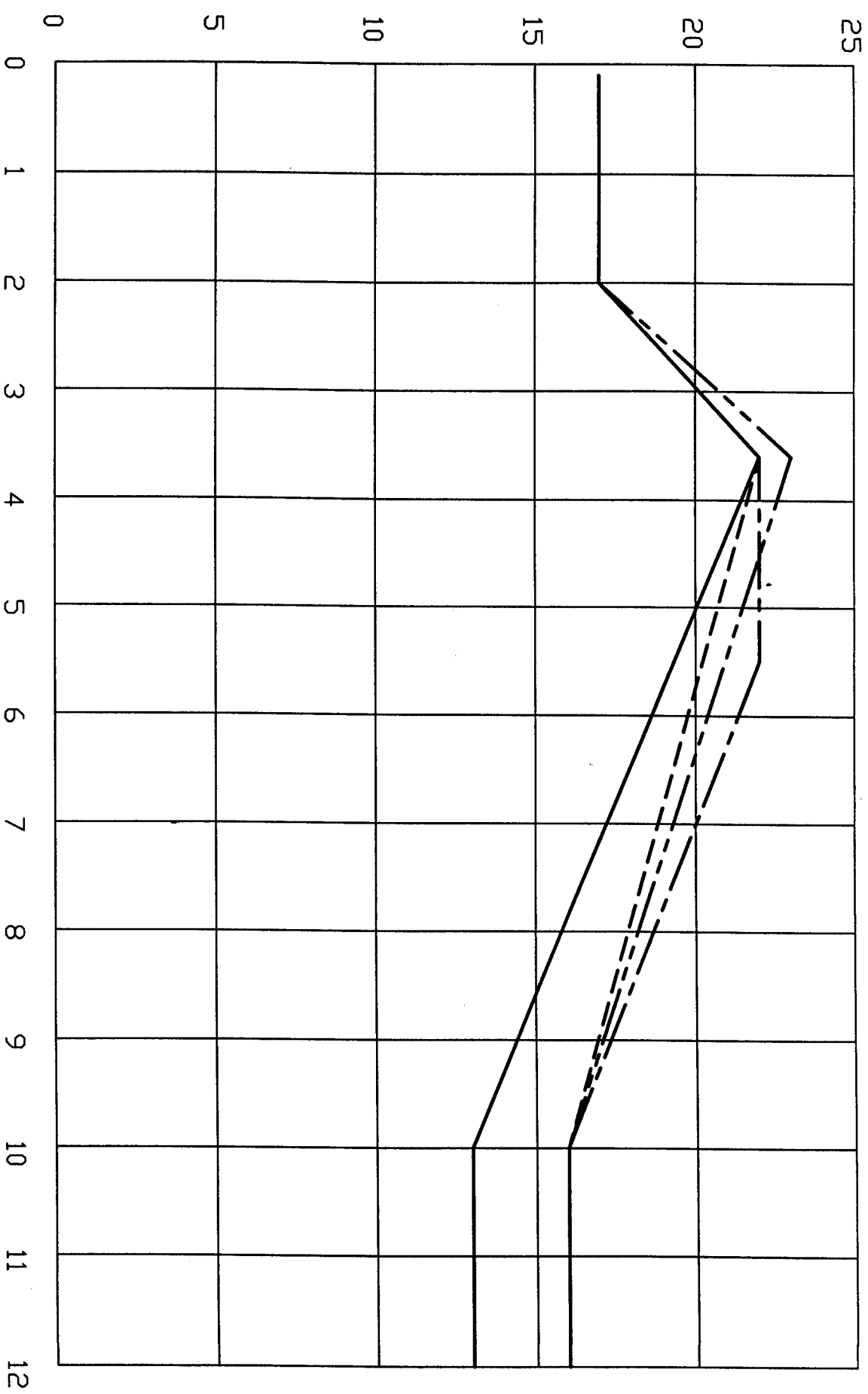
Some programmable ignitions are shipped with additional leads coming out of the ignition. These leads allow the ignition to control other features. The use of these is covered in the instructions for the programming kit.

### **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 owners 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 owners manual to pinpoint the problem.

ADVANCE (degrees BTDC)



RPM x 1000

- Curve 1
- Curve 2
- Curve 3
- Curve 4

<b>DYNATEK</b>			
164 S. VALENCIA ST., GLENDORA, CA 91741			
DFS IGNITION - YFZ 350 BANSHEE			
PRODUCTION ADVANCE CURVES			
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# DFS7-1 Ignition Installation for pre 1997 models

Dynatek is in the process of making direct plug in replacements for the 87-94, and 95-96 model Banshees. Estimated production date is 6/2001. Until these are available, it is possible to splice the DFS7-1 module directly into the harness on these earlier models using the following instructions.

Installing on a 1987-1996 Banshee will require cutting of the stock harness.

## Directions:

- 1) Locate and remove the stock CDI box. There should be 2 connectors there you will have to cut these connectors off. Cut them approximate 2" away from the connector, so that if you need to put them back on, you can at a later date.
- 2) On the Dyna ignition, there are several connectors. One of these connectors is a 6 pin clear plastic connector, and it has a 4 pin white connector next to it. You will need to cut these two connectors off, cut them close to the connector. Do NOT cut any black connectors on the Dyna ignition. One is for the Curve Selector Switch, and the other is the optional programming connector.
- 3) Now that you have the wires on both the FS ignition, and the stock harness, you need to splice them together. **THE COLORS DO NOT EXACTLY MATCH, SO DO NOT SIMPLY SPLICE TOGETHER THE SAME WIRE COLORS.** For best results, solder the spliced wires together, then cover each splice with adhesive lined heat shrink tubing to help ensure a water tight connection.

Use the following table to determine which wires to splice together:

	splice to this wire
stock harness	on DFS
Red	Red/Blue
Green	Red/White
White/Green	Green/White
White/Red	Black/Green
Orange	Yellow
Black/White	Black/White
Black	Black/Yellow
Red/Black	Violet
Green/Yellow	Violet/White

The Green/Yellow is the parking brake switch. Most models will not have this wire. If it is not on your Banshee, leave the Violet/White wire disconnected.