

Dyna FS Ignition

2004-07 Honda TRX450R DFS1-13. DFS1-15

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 quad will take longer.

The Dyna FS ignition was designed to work best with stock coils, coil wires, plug caps, and spark plugs. The increase in spark energy from using the Dyna FS 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: Dyna FS ignition, 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 top cover plastic bodywork, between the headlight and handlebars. With the top cover removed the ignition is visible just behind the headlight. For the connectors on the ignition, press the locking tab in, and remove the connectors. Remove the ignition and rubber sleeve from the mounting bracket by sliding it back towards the handle bars.
- 2) Pull the stock ignition out of the rubber sleeve. Keep the stock ignition in a safe place it may be required for troubleshooting.
- 3) Feed the wires from the Dyna ignition through the rubber sleeve, and bring them out of the hole in the end of the sleeve. Once these are through,
- 4) Slide the Dyna ignition into the rubber sleever. Slide the Dyna ignition over the mounting bracket. The 2006+ models will require that the bracket be tweaked to fit the smaller Dyna ignition. Use the supplied zip ties to secure the ignition in the rubber sleeve.
- 5) Plug the 8 and 6 pin ignition connectors into the Dyna ignition. On the 2006+ models, there is a 4 pin adapter that needs to be plugged into the 4 pin connector from the stock wiring harness, and then connected to the 4 pin connector on the Dyna ignition.
- 6) Reinstall the top cover.

Calibration

The TRX450R Dyna FS ignition is programmed with a reshaped timing curve designed to improve performance of a modified engine, with more advance at most RPM, and an 11,000 RPM rev limit. 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. Using the ignition without properly jetting the carburetor may result in a lean misfire condition when operating at RPMs above the stock RPM limit. Do not operate the engine in a lean condition for extended periods or damage may result.

This ignition allows 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 or valve train for example) may be found. It may be necessary to replace these parts for best engine performance. Consult with an engine builder for what works best for your engine and application.

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 switching to the stock module

DYNATEK 164 S. Valencia St., Glendora, CA 91741 800-928-3962 www.dynaonline.com

does not fix the problem, then the problem is somewhere else on the bike. Follow the troubleshooting procedures outlined in your owners manual.

Toubleshooting (continuted)

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.

WARNING:

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

Magneto-CDI (Banshee/TRX250R/400EX/450R/etc.): Use a <u>normally open</u> tether kill switch connected in parallel with the stock kill switch input to the ignition. When the tether is removed, it should ground the input to the ignition.

TRX450R KILL INPUT – BLACK/WHITE at the ignition module. The KEY SWITCH uses this same circuit.

2801248B REV. B 8-03-07

DYNA FS / HONDA TRX450R ATV IGNITION CURVE 50-45 - STOCK CLOSED THROTTLE CURVE 40-DFS CURVE WOT STOCK WOT CURVE 35 ORANKSHAFT DEGREES 30 IGNITION ADVANCE STOCK WOT CURVE 25 20 -15 -10 5 0 10 11 12 11.200 RPM max RPM / 1000

Note: Advance varies between WOT and Closed Throttle Curves based on TPS