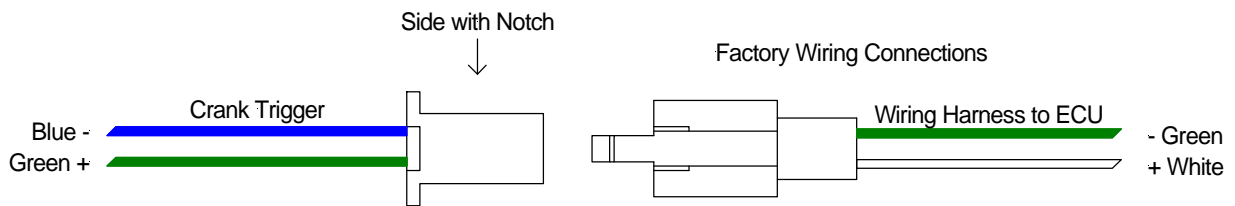


EFIR-13

Hayabusa Ignition Retard Module

1—Description, The EFIR-13 Retard Module allows the user to Retard the Ignition Timing on Fuel Injected Motorcycles. Never install Solid Core Sparkplug wires as this will cause the Retard Module and the Factory ECU to malfunction. The Factory Wires are designed to work with Micro-Processor controlled devices.

2—Installation, The EFIR-13 Module is designed to plug into the existing Crankshaft Trigger wiring harness. The connector is located on the left side of the engine under the tank. It will be grouped with the Generator Wires coming from the engine case. Find the 2 position connector and unplug it. Plug the EFIR-13 connectors into the Trigger and Factory Harness.



NOTE—The Retard Module will not allow the Trigger Signal to pass if it is NOT on. To operate with Module OFF (no power applied) you must re-connect the factory connectors without the Retard Module.

Connect the Black wire to the Battery Negative Terminal.

Connect the Red wire to +12V switched source (comes on with the Ignition Switch).

Connect the Yellow wire(+12V Activation wire) to the NOS Activation Switch or a +12V activation source (i.e.—Timer Output from [Progressive “2” Nitrous Controller](#))

NOTE—With the EFIR-13 Retard Module Installed the Factory Timing will be Retarded 1.5 degrees at 10,000 RPM. This can be adjusted, if necessary, using a Power Commander® that has timing control. This 1.5 Degrees will be Added to the Amount of Retard Selected with the Programming Switches as outlined below.

NOTE—The Red LED Lamp will light when power is applied and will flash with each Crankshaft Trigger signal that it receives. The Green LED Lamp will Flash if the Activation Signal is applied without the engine running. If the Activation Signal is applied with the engine running the Green LED Lamp will be on steady.

IMPORTANT—The EFIR-13 can be used with or without a Power Commander® Installed. If ran without a Power Commander® a Fuel Solenoid will need to be added to provide the extra fuel required when the Nitrous is on.

IMPORTANT—It is recommended that the TRE-002-IVAN Timing Retard Eliminator be used with the EFIR-13. This will provide the same timing map (5th gear map) for each gear. Contact Schnitz Racing for product information and pricing.

NOTE—The NC-2000 Progressive “2” Nitrous Controller was designed to work with the EFIR-13 for precision Nitrous Power Control. Contact Schnitz Racing for product information and pricing.

3—Setting the EFIR-13, Please refer to the Diagram below and on the inside cover of the EFIR-13 for correct switch settings for desired operation.

ACTIVATION STYLE	
#9 = ON	↑ RESET ALWAYS
#9 = OFF	↓ HOLD & RESUME

Switch #9 determines how the EFIR-13 operates when the Activation Signal is removed during operation.

RESET ALWAYS—If the Activation Signal is turned OFF the EFIR-13 will Reset and Start again.

HOLD & RESUME—If the Activation Signal is turned OFF the EFIR-13 will NOT Reset and will continue from the point it was turned OFF (Retard does not have to build up again).

Use Switches 1,2,3,4 to set the Degrees of Retard Desired. Use Chart below for correct settings.

Use Switches 5,6,7,8 to set the Retard Build Time in Seconds Desired. Use Chart below for correct settings.

DEGREES OF
RETARD

#	1	2	3	4
1 =	↓	↓	↓	↓
2 =	↑	↓	↓	↓
3 =	↓	↑	↓	↓
4 =	↑	↑	↓	↓
5 =	↓	↓	↑	↓
6 =	↑	↓	↑	↓
7 =	↓	↑	↑	↓
8 =	↑	↑	↑	↓
9 =	↓	↓	↓	↑
10 =	↑	↓	↓	↑
11 =	↓	↑	↓	↑
12 =	↑	↑	↓	↑
13 =	↓	↓	↑	↑
14 =	↑	↓	↑	↑
15 =	↓	↑	↑	↑
16 =	↑	↑	↑	↑

BUILD TIME

#	5	6	7	8
.100 =	↓	↓	↓	↓
.250 =	↑	↓	↓	↓
.375 =	↓	↑	↓	↓
.500 =	↑	↑	↓	↓
.625 =	↓	↓	↑	↓
.750 =	↑	↓	↑	↓
.875 =	↓	↑	↑	↓
1.000 =	↑	↑	↑	↓
1.250 =	↓	↓	↓	↑
1.500 =	↑	↓	↓	↑
1.750 =	↓	↑	↓	↑
2.000 =	↑	↑	↓	↑
2.250 =	↓	↓	↑	↑
2.500 =	↑	↓	↑	↑
2.750 =	↓	↑	↑	↑
3.000 =	↑	↑	↑	↑