

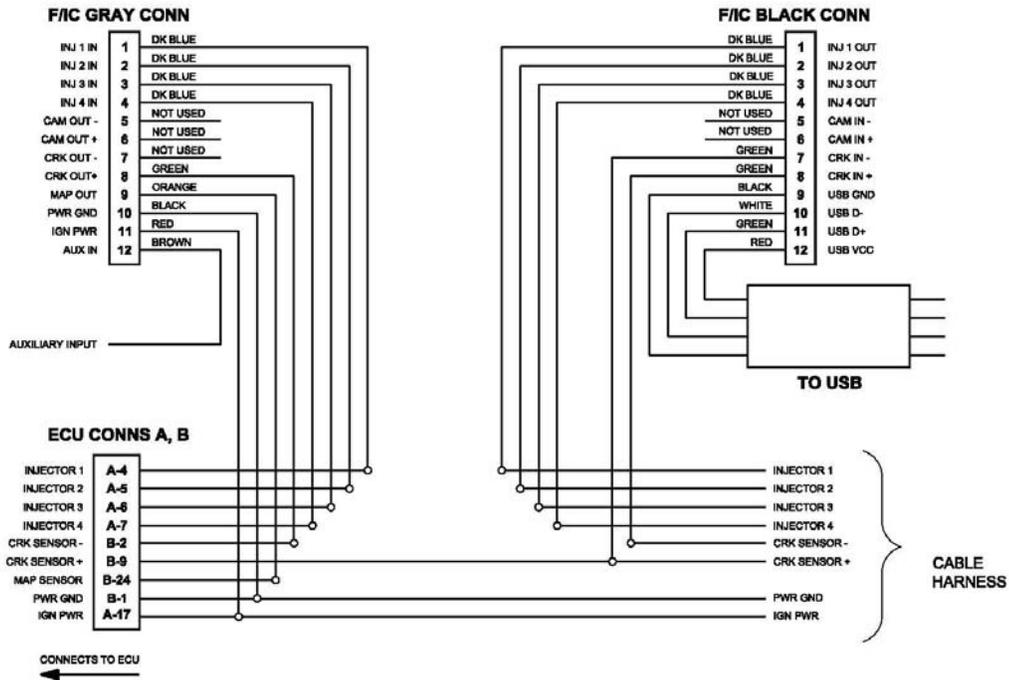
F/IC Quick Start Guide/Tuning Tips

99-01 Suzuki GSX 1300R Hayabusa

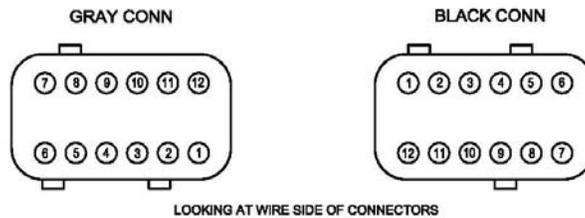
F/IC P/N 30-1921

AEM F/IC4 WIRING DIAGRAM

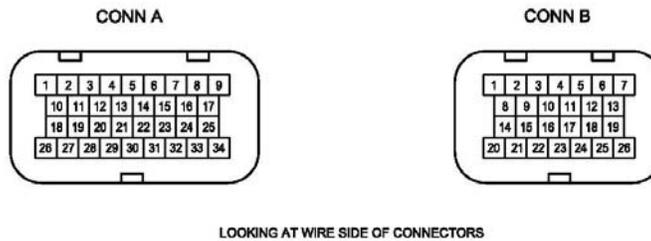
1999-2001 SUZUKI HAYABUSA GSX1300R



F/IC CONNECTOR PIN NUMBERS



ECU CONNECTOR PIN NUMBERS



F/IC OVERVIEW

The new F/IC Powersport from AEM Performance Electronics is a powerful tuning tool, designed to allow the addition of forced induction intake systems on normally aspirated, computer controlled powersports race vehicles. By design, the new F/IC is a “piggyback” style ECU that works in conjunction with the factory ECU, retaining factory drivability while allowing for increased performance and power.

1) WIRING THE F/IC

Install the F/IC into your vehicle using the supplied plug and play wiring harness. Remove the seat and locate the factory ECU. See Figure 1. With the key off and the positive battery terminal disconnected, unplug the factory harness from the ECU. Plug the F/IC harness into the ECU. Plug the factory harness into the mating ECU connectors on the F/IC harness. Plug the black and grey F/IC connectors into the mating connectors on the F/IC. Reconnect the positive battery terminal

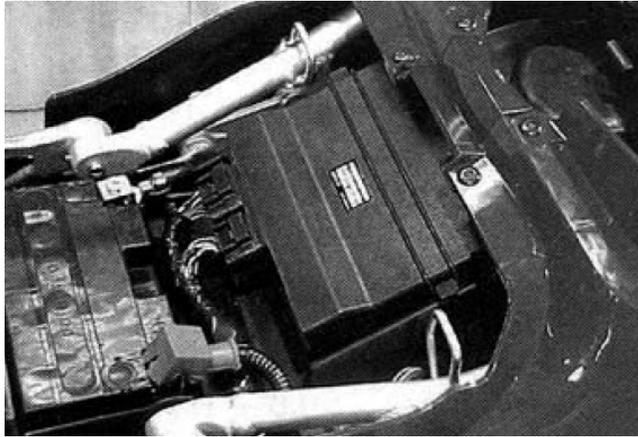


Figure 1 Factory ECU

2) Boost Reference

Connect the pressure port on the front panel of the F/IC to an adequate intake manifold pressure source (downstream of the throttle body) using the supplied boost hose, tee fitting, and zip ties.

3) Configuring the F/IC

Go to the powersports section of the AEM Electronics forum and download the latest version of the F/IC software and basemap. <http://forum.aempower.com/forum/index.php/board,97.0.html> Once downloaded, double click on the file to start the install. Follow the on-screen instructions to complete the process. Open the F/IC software and go to File>Open and direct the software to the Basemap that was downloaded.

Basemap: Base Cal 1921 99-01 Busa.fi8

Connect the F/IC to the computer using the supplied USB cable and allow the USB drivers to load. In the F/IC software, go to ECU>Connect. When the Cal File Mismatch window appears, click on the button “To F/IC” to connect. The basemap contains very conservative fuel and timing maps, along with the necessary MAP settings. The basemap is intended to get your engine running, and point you in the right direction for tuning. It is NOT a fine tuned map for your vehicle. **Further tuning is required.**

4) STARTING THE ENGINE

Before starting the engine, it is a good idea to recheck all electrical connections to make sure all connectors are properly seated and latched. Loose connections can cause poor running and intermittent problems that are difficult to troubleshoot.

5) TUNING RECOMMENDATIONS

Visit the video gallery at www.aemelectronics.com for F/IC instructional videos.

All tuning should be performed on a suitable chassis dyno, using an Air Fuel Ratio (AFR) monitoring device such as the AEM 30-4100 Digital Wideband UEGO Gauge, or the 30-5130 Analog Style Wideband UEGO Gauge. For datalogging and easy AFR reference, the analog output (White wire on gauge harness) from either of the Wideband UEGO Gauges can be connected to the F/IC using the unterminated Brown wire on the plug and play harness. The Red (12 volts) , and Black (ground) wires on the gauge harness connect to the unterminated Red and Black wires on the plug and play harness.

If further tuning help is needed be sure to visit the video gallery at www.aemelectronics.com for comprehensive instructional videos.

6) Notes:

The basemap file and MAP table were developed on a stock bike to effectively reproduce the signals and conditions that a stock ECU expects to see. Be sure to visit the video gallery at www.aemelectronics.com for additional tuning tips and information on the methods used to develop the basemap.

7) Recommended Parts:

30-4100 AEM Digital Wideband UEGO Gauge
30-5130 AEM Analog Wideband UEGO Gauge
30-4406 AEM Digital Boost Gauge
30-5131 AEM Analog EGT Gauge
30-5132 AEM Analog Boost Gauge
30-3000 AEM Water/Methanol Injection Kit

Need additional help? Contact the AEM Performance Electronics tech department at 1-800-423-0046 or tech@aempower.com, or visit the AEM Performance Electronics forum at <http://forum.aemelectronics.com/forum/>

Legal in California only for racing vehicles which may never be used upon a highway.