



Twin Tec VRFI Gen 4 Fuel Injection System Installation Guide

CAUTION: NOT LEGAL FOR SALE OR USE IN CALIFORNIA OR ON ANY POLLUTION CONTROLLED VEHICLES.

READ BEFORE INSTALLING ANY PRODUCTS

If this is your first encounter with the VRFI, you need to make a realistic assessment of your skill level and commitment. We have encountered issues with customers that simply lacked the requisite PC literacy and resources to be successful with the VRFI. If you have never worked with H-D® EFI systems, the VRFI is not the place to start. Tuning the VRFI requires competency in PC operation, using Microsoft Windows based programs, and basic engine tuning and fuel injection mapping concepts. The VRFI installer is assumed to be familiar with the Delphi® fuel injection system and to have access to basic test equipment and factory service manuals.

If you have experience with the Screamin Eagle® Race Tuner (SERT), you should have no difficulty transitioning to the VRFI. From a software standpoint, the SERT Tuning Mode corresponds to our PC Link VRFI and the SERT Data Mode corresponds to our VRFI Log.

Our tech support is limited to VRFI and engine tuning issues. We cannot provide tech support for PC or Windows related issues. Please do not ask us to explain how to use a mouse, open/close files, copy files to disk, organize folders, send email, download from the web, or other basic Windows or PC operations. You will require broadband Internet access to download software and firmware updates and an email account to send us files for tech support purposes. You will also require a program such as PKZIP or WinZIP to archive files prior to attaching to an email.

One often overlooked resource is time. When you are first starting with the VRFI, you should budget some time to read the instructions and practice with the software.

The VRFI cannot be made to work with every possible combination of engine parts. A small percentage of applications have underlying mechanical or parts compatibility issues that cannot be resolved by tuning alone. The most common issues encountered include inappropriate exhaust systems and mechanical or thermal problems with aftermarket or modified throttle bodies.

WARNING: If you can insert a broomstick through the mufflers, you have the equivalent of open drag pipes and the WEGO sensors will not read accurate AFR values except at wide open throttle. If you plan to use the VRFI system with drag pipes or other open pipes, special steps must be taken during the auto-tuning process as explained on page 10 of the VRFI Gen 4 Installation & Tuning Manual.

Please pay careful attention to the following areas where new customers have frequently made mistakes that required tech support (details are given in the VRFI Gen 4 Installation & Tuning Manual):

1. **Software installation.** You must install the latest versions of PC Link VRFI and VRFI Log software downloaded from our website. You will encounter serious problems if you attempt to use older software versions.
2. **Communications.** New customers often encounter issues installing the USB interface drivers and setting the correct COM port in our software. You must be familiar with installing USB devices and be able to use Windows Device Manager to check the COM port assignment.
3. **Installation.** The WEGO IIID must be connected properly to the 36 pin Delphi connector at the ECM. All models require installation of a PC link jumper wire (refer to the VRFI Gen 4 Installation & Tuning Manual).
4. **Initial setup.** You must enter the correct values for injector size, estimated horsepower, and VSS frequency for correct speedometer/odometer readings.
5. **Throttle body setup and idle TPS adjustment.** If you have an aftermarket throttle body, please read the material on page 4 of the VRFI Gen 4 Installation & Tuning Manual.