



**CAUTION: CAREFULLY READ INSTRUCTIONS BEFORE PROCEEDING.
NOT LEGAL FOR USE OR SALE ON POLLUTION CONTROLLED VEHICLES.**

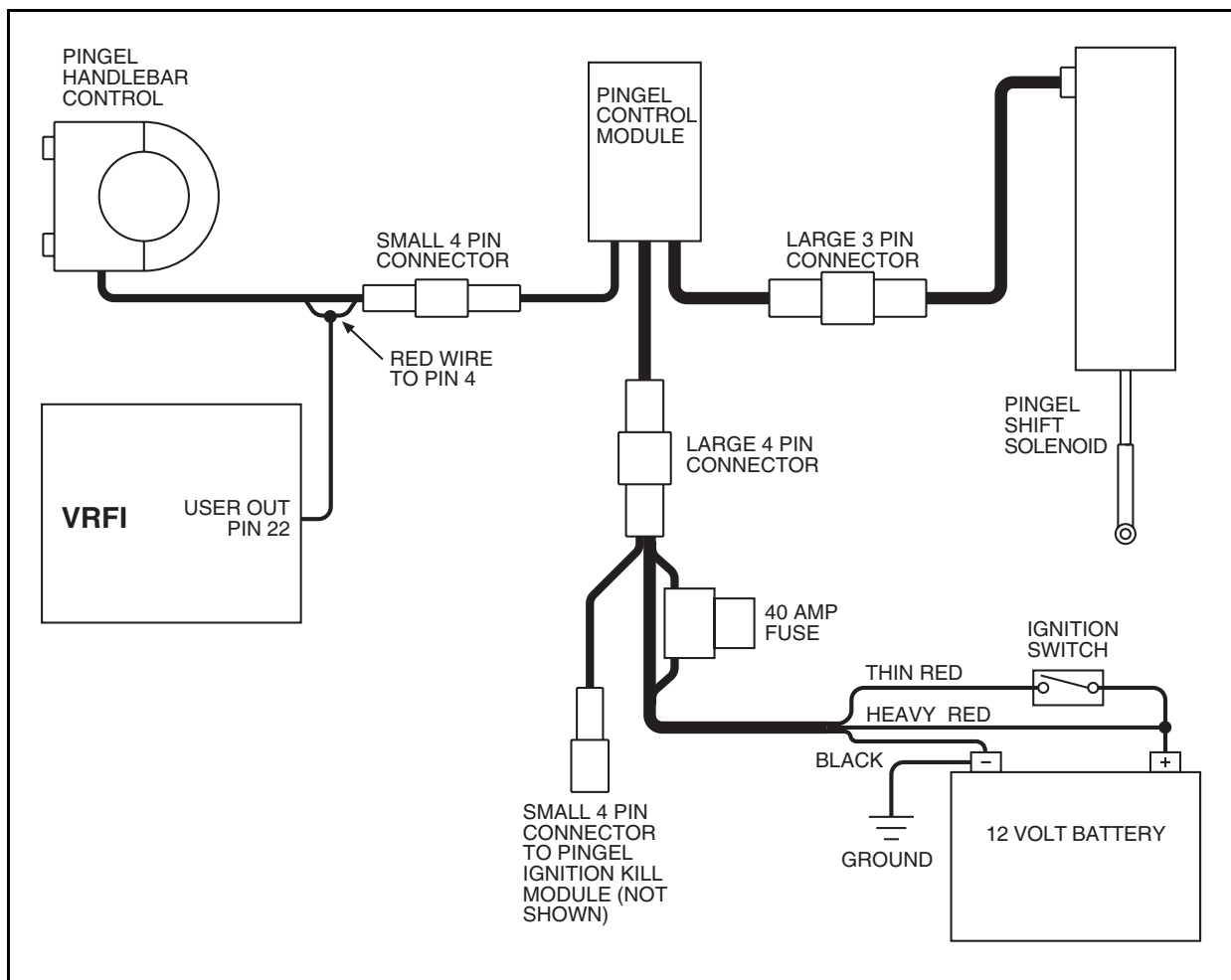
OVERVIEW

The VRFI can be used to automatically trigger an upshift with a Pingel Electric Shifter P/N 819. Manual operation of the Pingel system is not affected.

INSTALLATION

1. Install the Pingel system. Follow the Pingel instructions.
2. Connect the VRFI to the Pingel system as shown in Figure 1. You will have to add a wire going from the Delphi connector at the VRFI to the Pingel system. Terminals for the Delphi connector are available from your local H-D® dealer or directly from Daytona Twin Tec. Use 20 AWG stranded tinned copper wire. Cut the insulation near the Pingel connector and tap into the Pingel cable as shown. Solder the connection. Wrap with electrical tape for protection.

Figure 1 – VRFI Hookup to Pingel Electric Shift System



3. Use PC Link VRFI to setup the User Functions as shown in Figure 2. Select a reasonable shift RPM (RPM On) and Ignition Kill Time. To prevent spurious coil firing during switching, the ignition kill time selected on the VRFI should be slightly longer than the time set on the Pingel ignition kill module.

Some experimentation may be required.
To avoid inadvertent shifts at part throttle or in neutral, do not use zero values for TPS On and Minimum VSS.

Figure 2 – VRFI User Functions Setup for Pingel Electric Shift System

The screenshot shows a software window titled "User Functions" with a blue title bar and standard window controls. The window is divided into three main sections:

- User Input:** Contains five radio button options: "0-5 Volt Analog (Default)", "Ignition Retard", "Ignition Kill (Active High)", "Stage RPM Limit", and "Timed Ignition Kill (Active Low)". Below these is a text input field for "Stage RPM Limit (100 RPM steps)" with the value "5800".
- User Output:** Contains four radio button options: "Off (Default)", "RPM And TPS Based Switch", "NOS Trigger", and "Electric Shift" (which is selected). Below these are five text input fields: "RPM On (100 RPM steps)" with value "8500", "RPM Off (100 RPM Steps)" with value "4000", "TPS On (%)" with value "50", "TPS Off (%)" with value "20", and "Minimum VSS (MPH)" with value "20".
- User Parameters:** Contains two text input fields: "User Retard (0-10 deg)" with value "0" and "Ignition Kill Time (msec)" with value "64".

At the bottom of the window are three buttons: "OK", "Cancel", and "Restore Defaults".