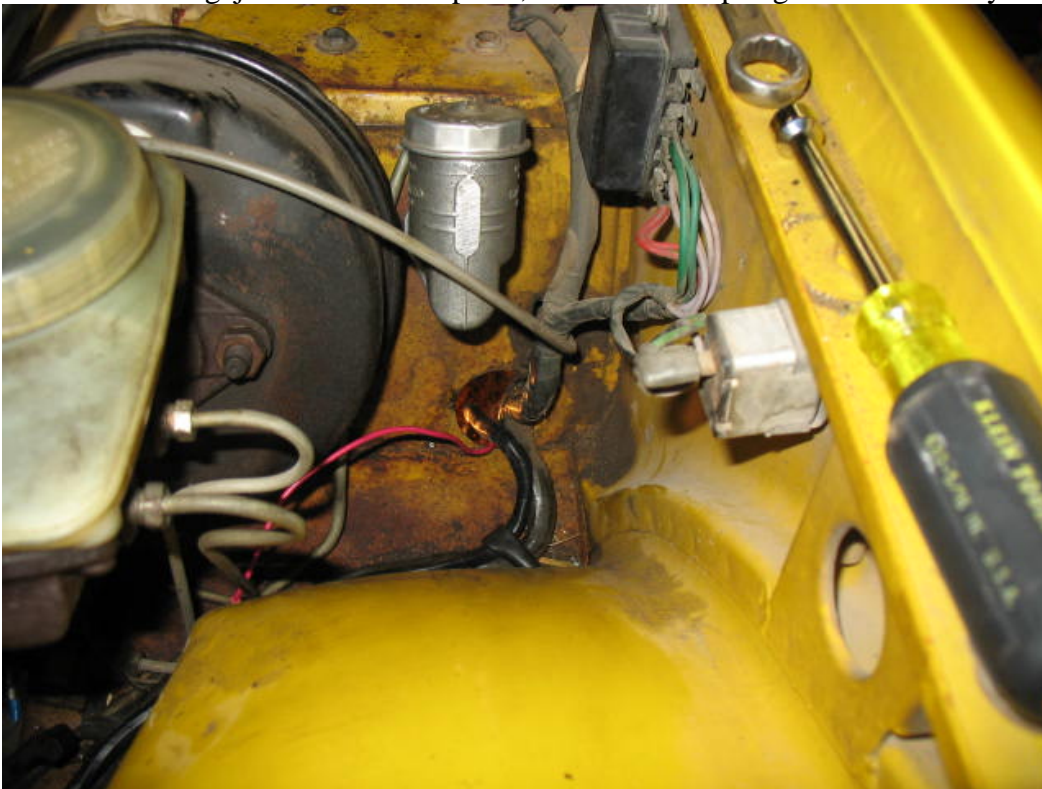


# Installation

There are four segments to the installation; wiring harness, EDIS and Megajolt, coil pack, and Timing wheel and VR sensor. If the car needs to be driven, install everything except the coil pack and the Timing wheel/damper. Seal off the ends of the wiring harness to prevent dirt or moisture ruining the connectors and wiring. The longest installation, time wise, is the timing wheel/Damper. These instructions are not inclusive. Therefore, consult a Haynes or Bentley shop manual as appropriate. It is highly recommended that you clean your engine bay, especially the front of the engine prior to proceeding. Pay special attention to the area around the damper, the side of the engine where the coil is, and the engine bay side of the inner drivers wheel arch under the brake/clutch master cylinders. For the wiring harness purchase a new main harness rubber grommet (fits around main harness where it passes through the firewall just under the clutch master cylinder).

## Wiring Harness

1. Remove left hand footwell trim panel from driver's footwell. Typically secured by several Philips head screws.
2. Gently loosen rubber grommet around main wiring harness toward the inside of footwell. The harness passes through the firewall directly below the clutch master cylinder. Pushing from the engine compartment side works best. Be careful the rubber may be hardened. (note: if replacing this grommet, the left forward wiring harness will need to be disconnected from the lights/horn/coil/alternator. The new grommet will need to be fed from the forward ends down the length to the firewall). The alternative is to split a new grommet, fit it around the harness with the split up, reinstall it after the Megajolt harness is in place, and RTV the split/grommet liberally.



*Megajolt harness passing through firewall before reinstallation of rubber grommet.*

3. Gently pass the coil pack connector through the grommet followed by the VR sensor connector. Feed the wiring harness through the grommet to approximately halfway.

4. Route the wiring harness under the main harness (forward of the firewall). The coil pack connector will be right next to the regular coil. Inside the footwell, the wiring harness will follow along the main harness then curve around the edges (aft and sides) of the clutch/brake pedal box. This should place the EDIS connector up to and just forward of the speaker on the right side trim panel. The Megajolt loop will pass back to the left and be bent in a u shape manner toward the pedal box.

5. Connect the Megajolt, EDIS, Coil Pack, and VR sensor connectors. The black ground wire is affixed to the lower left coil pack mounting bolt. The male connector next to the coil pack (red wire) is connected to the normal coil power lead. (stock lead). Connect the power wire to the fuse block upper fuse. This is a switched power that is on with the ignition switch. If running the car in stages of installation, install the EDIS, Megajolt, and VR sensor. Connect these up to harness. Protect any unconnected plugs from the environment and any mechanical harm.



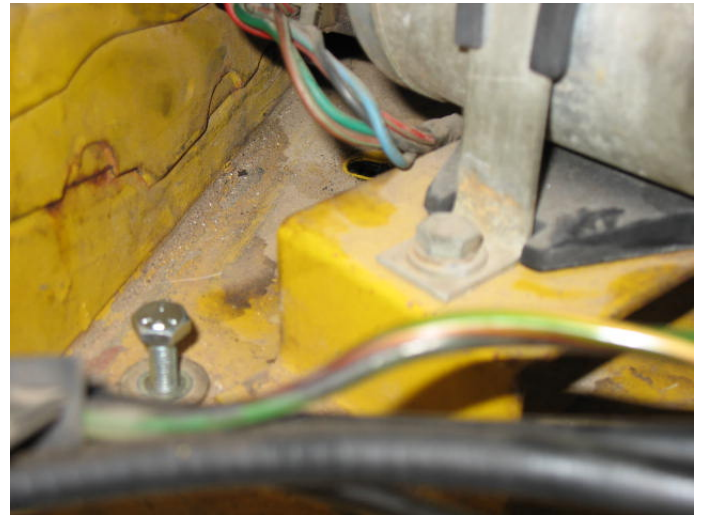
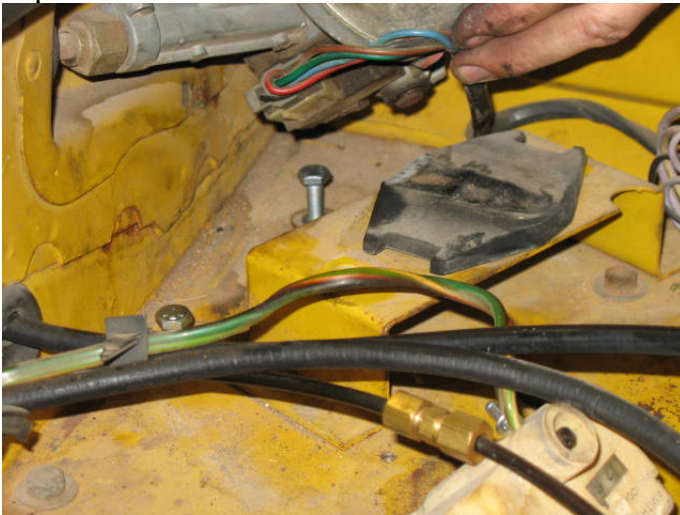
6. Recheck fit of harness and adjust. It is highly recommended that you take a piece of 3/8" fuel line, split it, and put it around the VR sensor wire to protect it from any type of chaffing. It is also recommended that the VR sensor plug is lightly tie wrapped into place on the sensor. Wrap one tie wrap around the plug and one through that one down around the sensor itself.



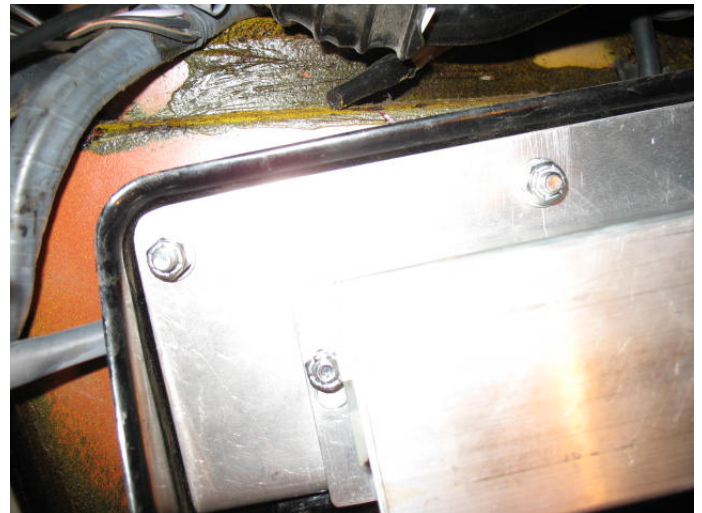
7. Refit main harness rubber firewall grommet.

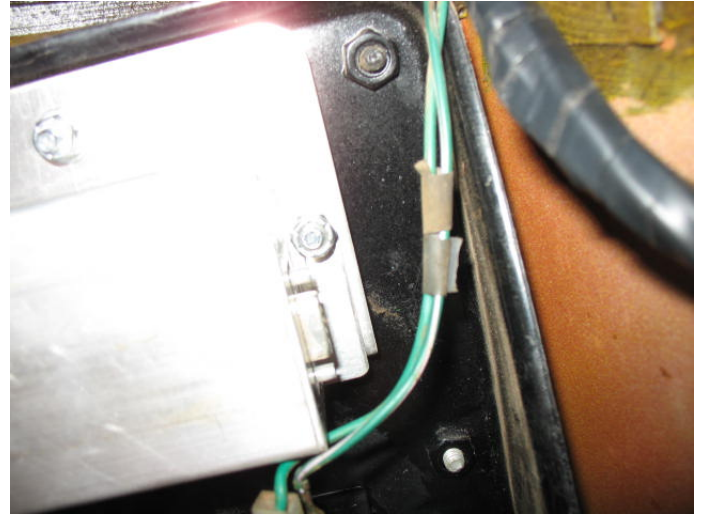
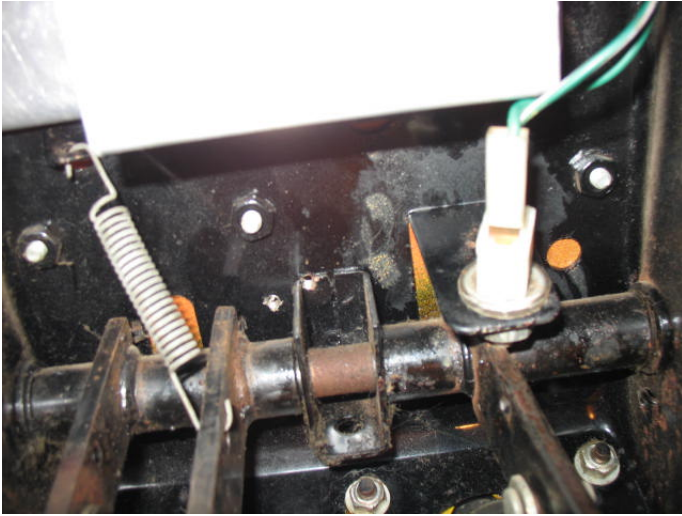
## EDIS and Megajolt

1. Remove battery and battery box.
2. Remove right side trim panel from driver's footwell. Panel holds the left side speaker and is held in by an aft clip into the center console and 2 Phillips head screws.
3. Remove the furthest aft left side and center bolts (looking forward from the driver's seat) affixing the clutch/brake pedal box to the body of car. The 2 bolts are right next to or under the windshield wiper motor. Replace with the 2 longer bolts included in kit and tighten. Loosening or removing the wiper motor mount will facilitate this.

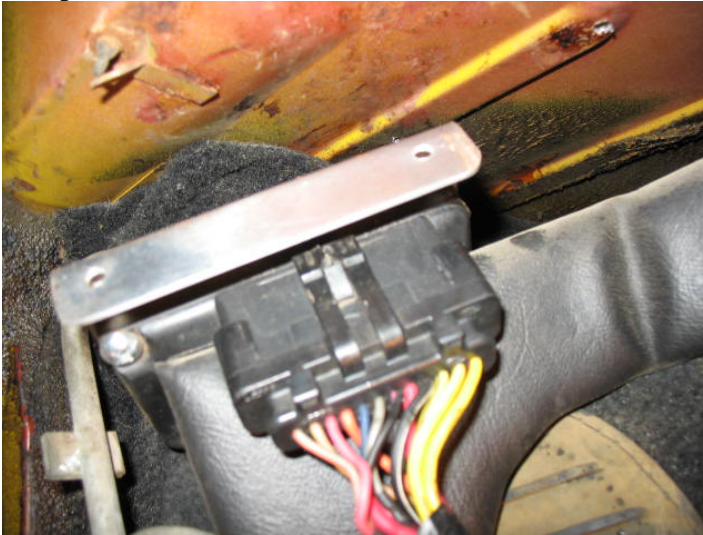


4. Fit Megajolt mounting plate to the 2 bolts from step 3. Add washers and nyloc nuts. Tighten. The Megajolt box will be just in front of the pedals with the serial connector on the right side. Be extra careful of the brake pedal braking light switch. It will just clear.





5. Fit the EDIS mount up to the left side of car reinforcing bead of the body shell under the battery from inside of the footwell. This will place the EDIS just in front of the speaker and just inside of the trim panel. Drill 2 holes through the body for two rivets. From the engine compartment side, fit 2 pop rivets through holes. Marry up the EDIS from inside the car with washers on the rivets and pop rivet into place.



6. Refit right hand trim panel.

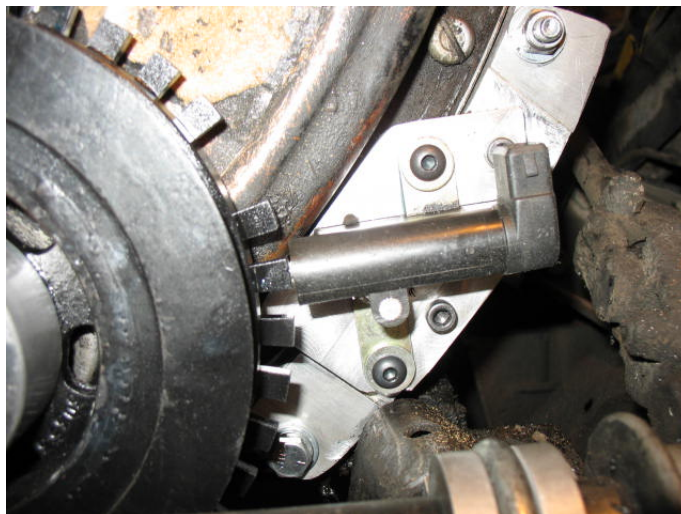
7. Refit battery and battery box.

## Timing Wheel and VR Sensor

1. Remove alternator, alternator belt adjustment brackets, and air pump if fitted.
2. Remove harmonic damper/crankshaft pulley. This will require the removal of the radiator if a stock cooling fan is in place. Remove the fan and fan extension, loosen and rotate the front suspension cross tube out of the way. Use a proper pulley puller on the damper as it may be damaged with improper removal. Don't lose the crankshaft woodruff key!!



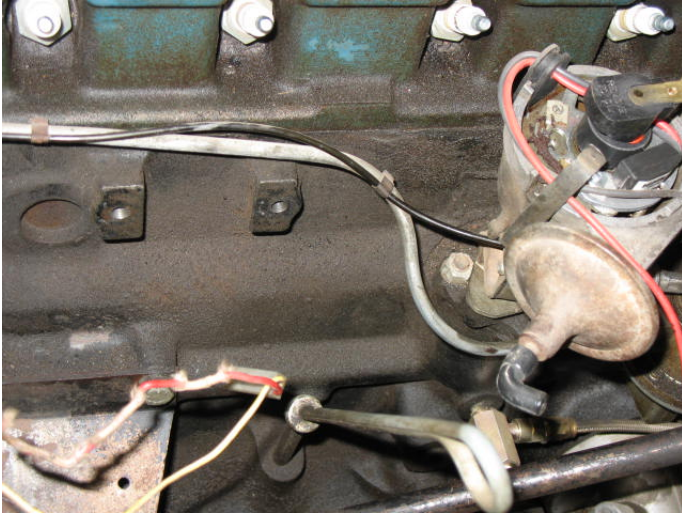
3. Bend timing mark index back against timing chain cover. Fit the new rebuilt damper with timing wheel. Ensure that it clears the timing index.
5. Remove bolt from lower left corner (driver's side) of the block just outside of the timing chain cover next to the slotted head screw. This bolt secures the engine front plate to the block.
6. Marry up the VR sensor mount lower bolt hole to this hole in step 4. Use the longer length bolt included in kit. Rotate VR mount up to alternator mount or belt adjustment bracket bolt on upper left side of engine front plate depending on year. Modify the mount/adjuster as needed. Affix upper VR mount with alternator mount/bracket bolt. Tighten both bolts securely. You may need to trim a 1/4" off the back edge of the steering rack mount part of the frame for clearance.



7. Check clearance between VR sensor and a tooth on timing wheel. It should be between 0.040 – 0.060 “. Loosen VR mounting bolts and adjust if needed. Refit fan extension, fan, and radiator.

## Coil Pack

1. Remove stock coil.
2. Ensure fuel line is straight behind the coil (parallel to the head) and next to the cylinder head. It may need to be persuaded slightly. Do not over-bend or kink. The coil mounting plate allows limited room for the fuel line.

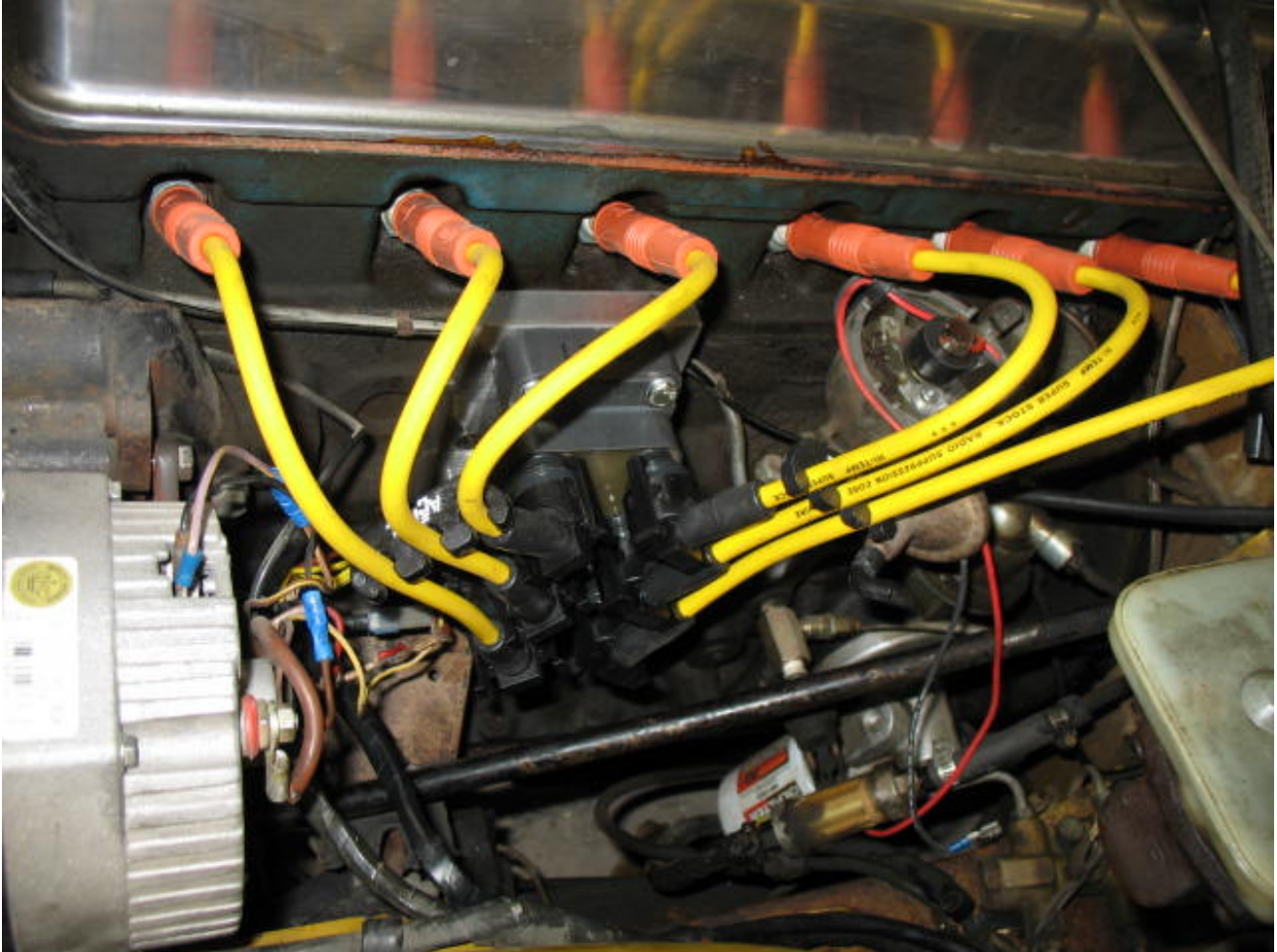


3. Loosen the distributor and rotate it so that the vacuum advance/retard modules are not in the way.
4. Disassemble coil pack from coil pack mounting plate. The coil pack is mounted with the connector facing toward the front of the car.
5. Fix coil pack mounting plate to engine block at the stock coil mounts using the socket head bolts included in kit. The bottom of the plate has an expansion cut through the mount. Use threadlock on threads and tighten. Ensure that the fuel line is not pinched or rubbing against mounting plate.
6. Refit coil pack to mounting plate. The lower left (forward) bolt is used for the ground wire connection.



7. Remove, clean, regap, and refit the sparkplugs. The gap should be set at 0.054". If you are using platinum tip spark plugs, use the proper tool to regap the plug to prevent damage to the insulator. It is highly recommended that platinum tip plugs are used. The system generates higher voltages than stock which will lead to plug tip erosion.

8. Install the spark plug wires. The left hand coils go to cylinders 1, 2, and 3. The right go to 4, 5, and the top set of coils is 3 and 4. The middle set is 2 and 5. The bottom set is 1 and 6. Adjust wires.



9. Check fit of oil dipstick and if needed, bend the handle gently to just clear coil pack.

## Software and Programming

You will need to download the programming software for your PC/Laptop from (note I couldn't get my Vista PC to operate a USB port cable to serial cable adapter). Easiest bet is computer with a built serial port.

**[http://www.autosportlabs.net/index.php?title=Main\\_Page](http://www.autosportlabs.net/index.php?title=Main_Page)**

Sign up and register. Navigate to the main page from the navigation menu in the upper left of the web page. Select *Configuration Software* from under the Downloads section of the main page (located in the center of the page). Select latest download version. Download released version. Save the *mjljConfig\_v3.0.0.exe* to your desktop. Double click on the desktop icon. Follow install directions. Delete icon off of desktop. Go to *Start , All Programs ,* and select *Megajolt Lite Jr Configurator* program. Read the Readme files. Open the MJLJ Configurator software and go to options. Set the number of cylinders to 6. The user configurable outputs are software switches that when that values is reached it switches to ground . If you have some device wired to that switch on the MJLJ connector it will turn on. It can used for all kinds things, like status LED's, electric fan relay switching, shift lights, rev limits ect. I currently have a series of LED's that light up at certain RPM (1000, 2000, 3000, 4000, 4500, and 5000). In the tool bar for the program there are 10 icons and 6 drop down menus. File lets you save advance values files (configurations) and data logging. Edit lets you define the manifold and rpm values for the map axes. Tools lets you select the COM port and load type. View lets you select advance value, RPM, and load while the engine is running. Perspective lets you select configuration, runtime and tuning views. Places these values in a perspective view. Several of the icon buttons allow quick access to some of these options. The icons of importance are Get Ignition Configuration, Write Ignition Configuration, and Commit Configuration to Flash. These get the current values from the controller, write the PC values to the controller (but not change the flash values), and commit the values to the flash memory of the processor. The processor uses the values that are written on the flash when it is not hooked up to the PC. So if you change the values make sure you write them to the flash if you want the car to use them in operation.



