# VQ35HR / VQ37VHR Fuel Pressure Gauge Kit

Installation Manual

Revision 11/7/2014

Sections:

## Section 1: Notice

Gasoline is extremely flammable and dangerous. Professional care needs to be taken while servicing the fuel system.

Proper ventilation needs to be provided around the vehicle while the fuel system is open.

The mini fuel pressure gauge is filled with liquid silicone. This liquid extends the gauge life by lubricating the internals and dampens the gauge needle reading. There is a rubber plug on the side of the gauge where the liquid was filled. This plug can accidently become dislodged, allowing the fluid to leak out. **Silicone containment is not guaranteed or warrantied from customer/installer handling.**

Recommended tools and supplies:

- 10mm Wrench
- 7/16 Wrench
- 10mm Deep Socket with Ratchet
- 5mm Hex Key Wrench
- Needle-Nose Pliers
- Many rags and paper towels
- Flashlight
- PTFE/Teflon Thread Tape
- Protective Eye-Wear
- Band-Saw or Hack Saw (optional)

## Section 2: Vehicle Preparation

Park the car somewhere with good ventilation.

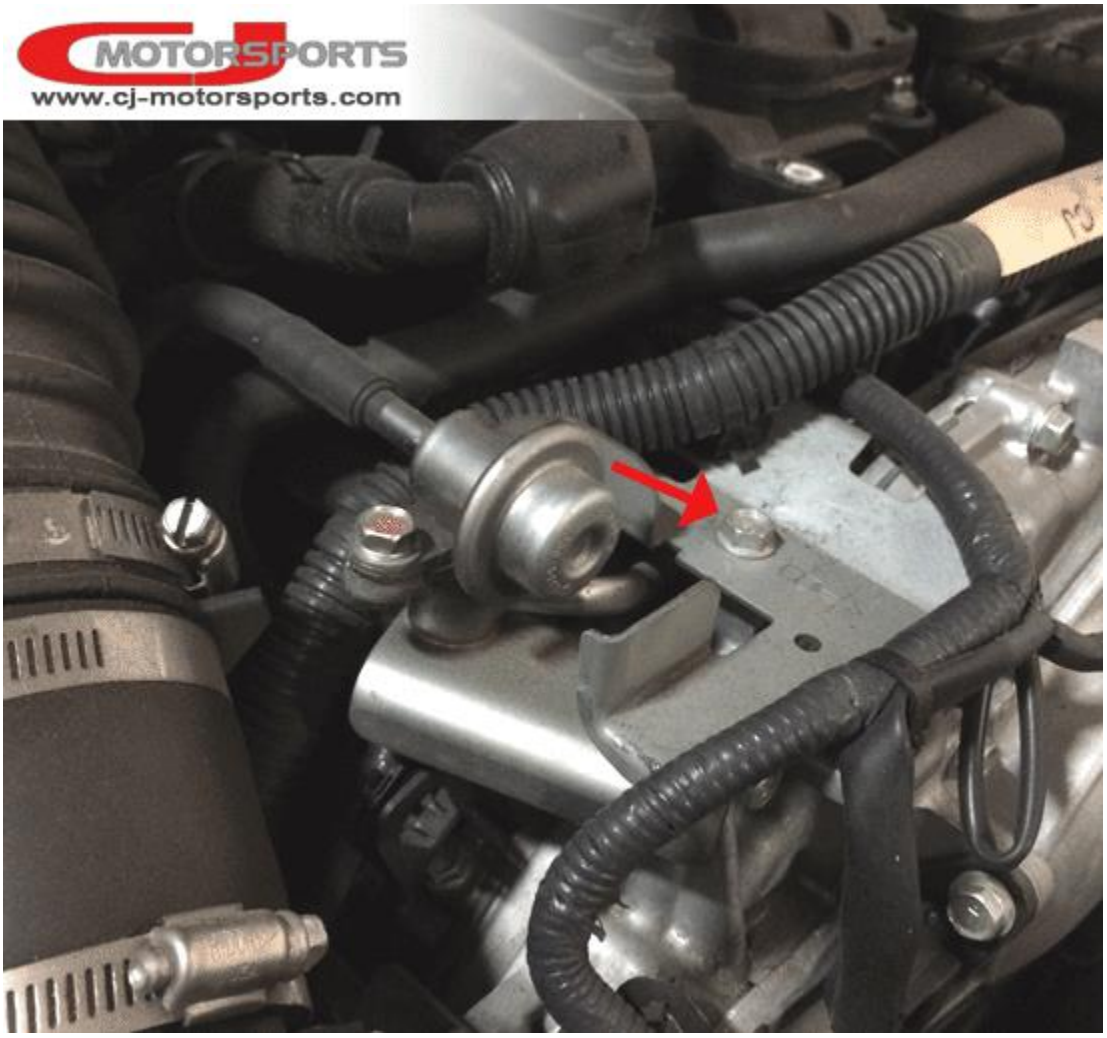
Set the parking brake firmly.

Disconnect negative terminal of battery.

If the engine is warm, allow it to cool down for several hours.

Use a deep 10mm socket to remove the 2 bolts securing the front engine cover to the intake manifold. Set the cover aside.

Remove the Wiring Harness Support Bracket by removing the following 10mm bolt and using the pliers to remove the 2 wiring harness clips.



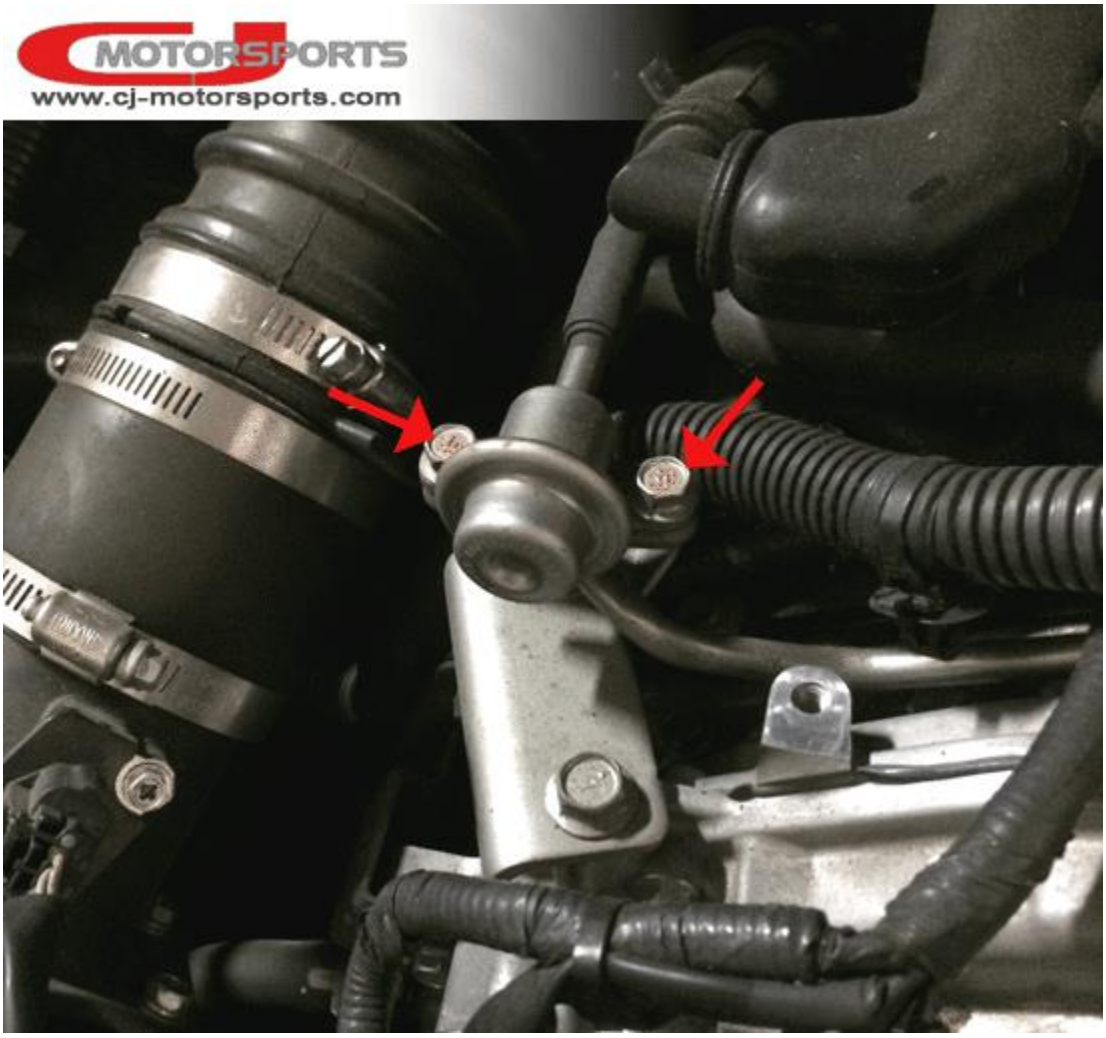
## Section 3: Depressurize Fuel System

OEM automotive fuel injection systems are intended to maintain fuel pressure after the engine is shut off. This means that, unless the vehicle has been sitting for a very long period of time, the fuel system will still be under pressure.

When opening the fuel system, there will be a brief blast of fuel escaping. You need to take care to prevent this from spraying in an unpleasant or hazardous direction. **Wear your protective eyewear for the duration of this section.**

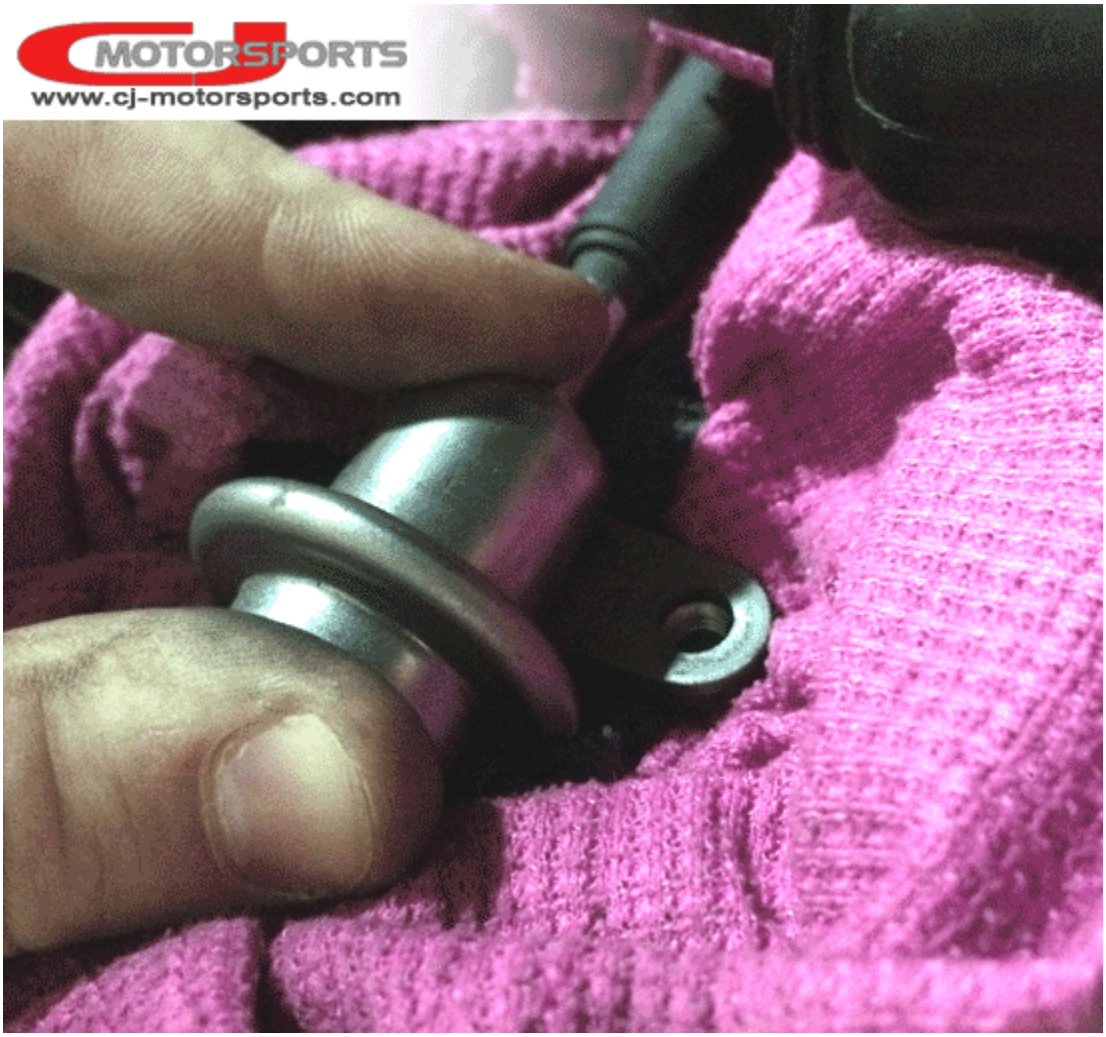
It important that the battery remains disconnected while the fuel system is open. Some vehicles will seemingly unpredictably charge the fuel system even with the ignition off. While this is not typical of current Nissans, removing battery power is a good habit to build.

Turn the pair of 10mm bolts securing the pulsation damper to the fuel inlet pipe 90 degrees counter-clockwise, and **do not loosen them any further**.



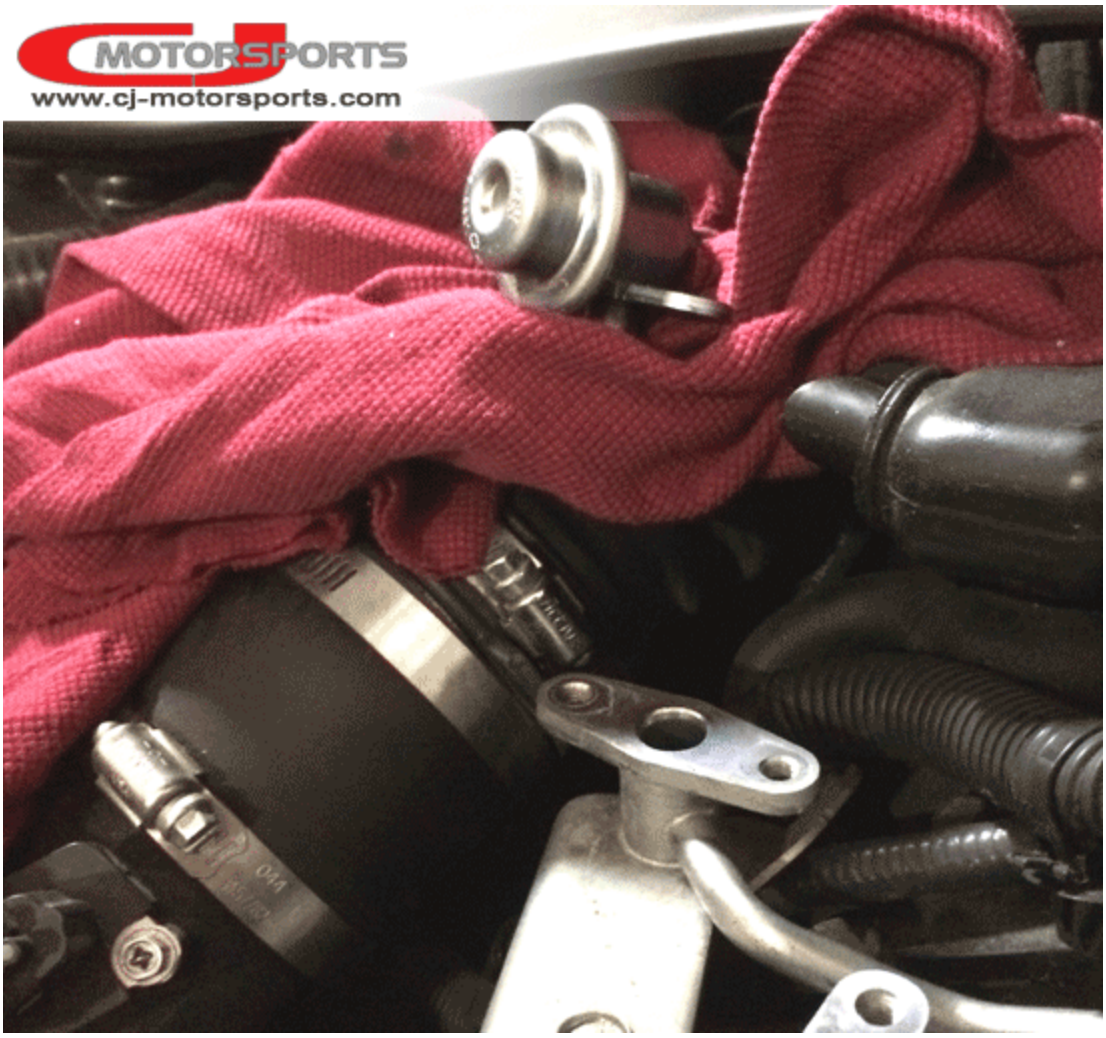
Stuff shop rags around and underneath the 2 bolt flange of the pulsation damper. Tuck them in well to absorb all the fuel that will discharge when the damper is lifted.

Use one hand to hold down on the damper while using your other hand to remove the previously loosened 10mm bolts. Continue holding the damper down so that fuel pressure does not lift it off before you choose to.



Continuously apply downward pressure to prevent the damper from lift-off while covering the rest of the area with rags.


When satisfied with rag coverage, you may slowly relieve pressure from the damper and begin to apply upward pressure on it. It will need to raise about ¼" up before the o-ring will begin to exit the bore and allow fuel to escape. You will hear it, and you will feel it soaking into the rags. It is recommended to relieve pressure in a controlled manner rather than all at once. You can let out a little at a time several times until there is no longer any pressure.

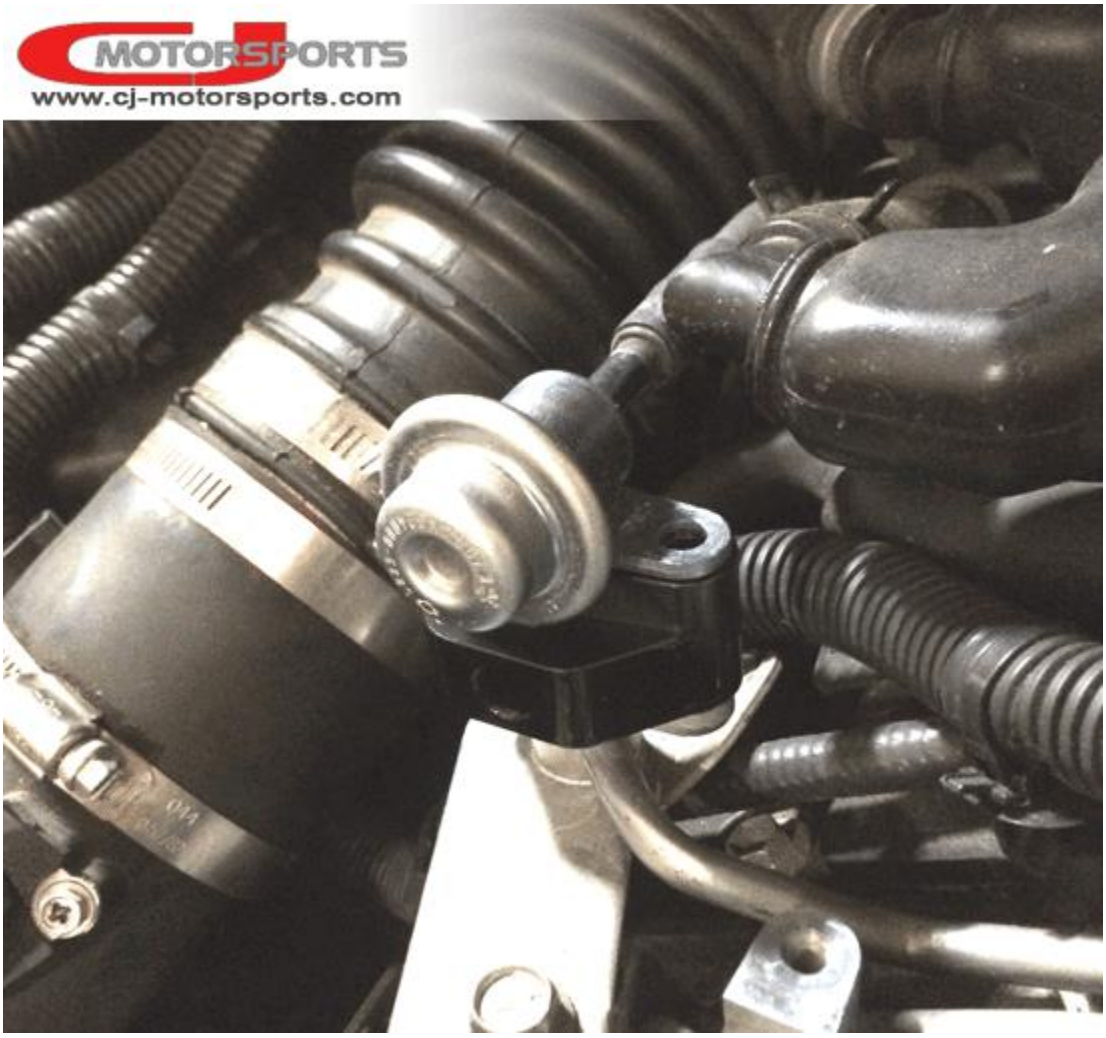



Keep a rag under the pulsation damper until it is reinstalled. It may continue to drip for a while.

## Section 4: Installation

Apply a light coating of engine oil to the o-ring on the bottom of the billet spacer block and insert the spacer block into the fuel inlet tube in-place of the pulsation damper. Take special care that the o-ring does not get pinched or damaged while inserting.

Lubricate the pulsation damper o-ring and insert the damper to the top of the billet spacer block.




Install the supplied 5mm hex bolts with washers to secure the damper to the fuel inlet tube, sandwiching tight the billet spacer block.

Apply thread sealant tape to the pressure gauge. Generally 2 wraps is plenty. Wrap it around in a clockwise direction so that the tape does not get peeled back when threaded in.


Thread the gauge into the billet spacer block until hand tight. Use the 7/16 wrench on the square nut at the base of the gauge to further tighten until the gauge is upright.

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## Section 5: Final Notes

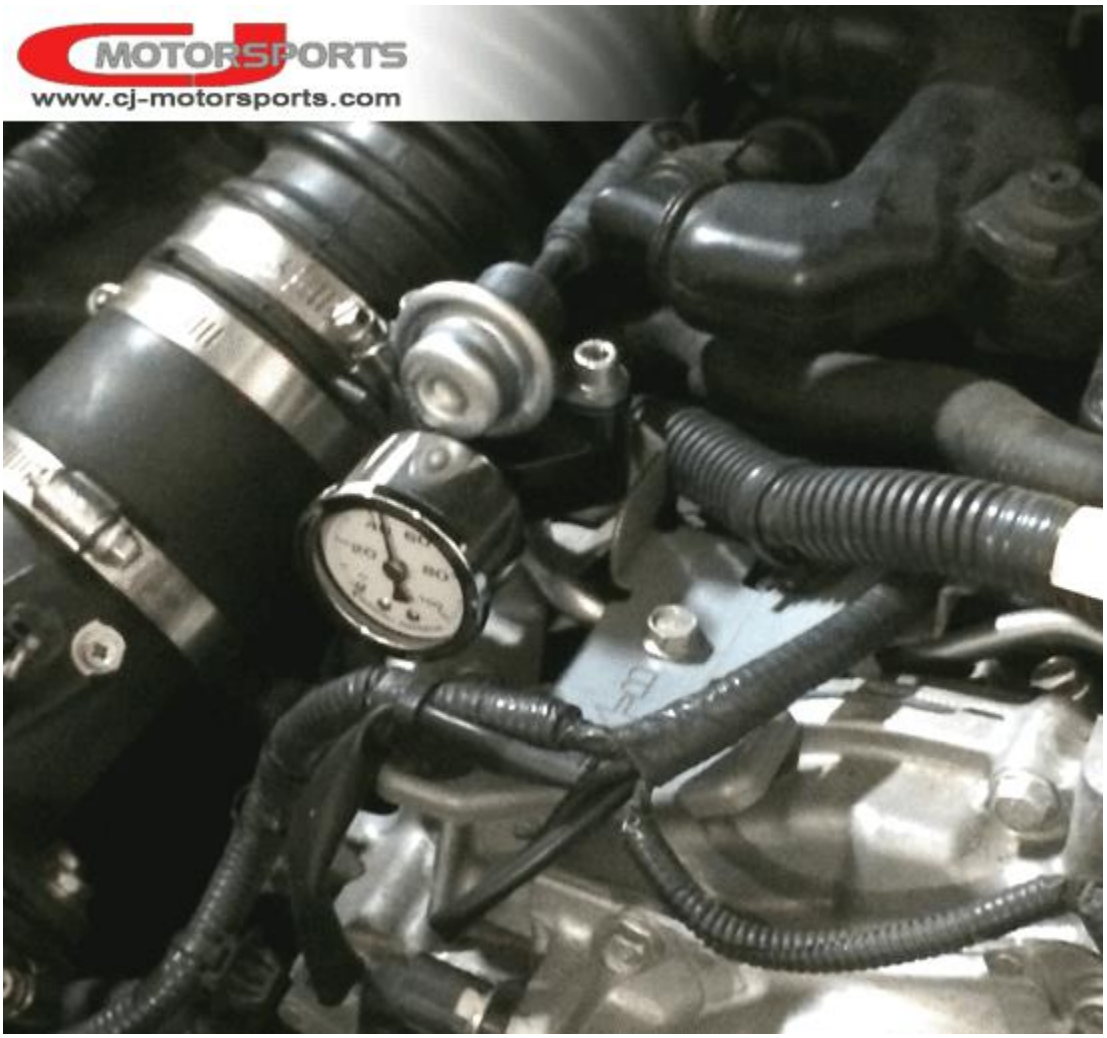
Reconnect the battery.

Without pushing down the brake or clutch pedal, push the ignition switch once. You should hear the fuel system prime for a few seconds. Turn the ignition back off. Inspect the gauge area for fuel leaks and observe fuel pressure on the gauge. One priming cycle may or may not have achieved full pressure (52-53 psi).

Prime the fuel system one more time and inspect again for leaks. With the second priming, the fuel system should achieve full pressure and hold it.

Some fuel pressure drop after the ignition is off is normal, but it should be very slow.

The wiring harness bracket can either be left out, or it can be modified with a saw to clear the gauge.



Reinstall the front engine cover.