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Installation of Fuel Rail Valve Shim Kit



GM 6.6L Duramax 2004.5 – 2010 Models LLY & LBZ & LMM
Dodge 6.7L Cummins 2007.5 – 2011

P/N# 1040360

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION

KIT CONTENTS:

Please check to make sure that you have all the parts listed in this kit **before** you start the disassembly of your truck.

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<i>Nut Tool</i>	<i>Hardened Steel Shim</i>
Qty: 1	Qty: 3

Required Tools

- 1 3/8" or 30 mm Wrench
- Torque Wrench
- 10,11, 12, 18 mm Socket
- Punch
- 10,11,18 mm Wrench
- Hammer

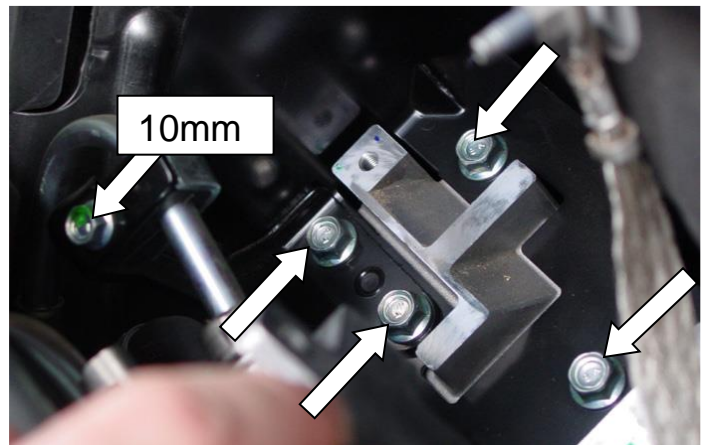
GM/CHEVY INSTALLATION

VEHICLE SHOULD BE SAFELY SECURED BEFORE INSTALLATION.

1. On the Driver's side of the firewall locate the glow plug controller and remove the 2 bolts that hold the cover.
(10mm Socket)

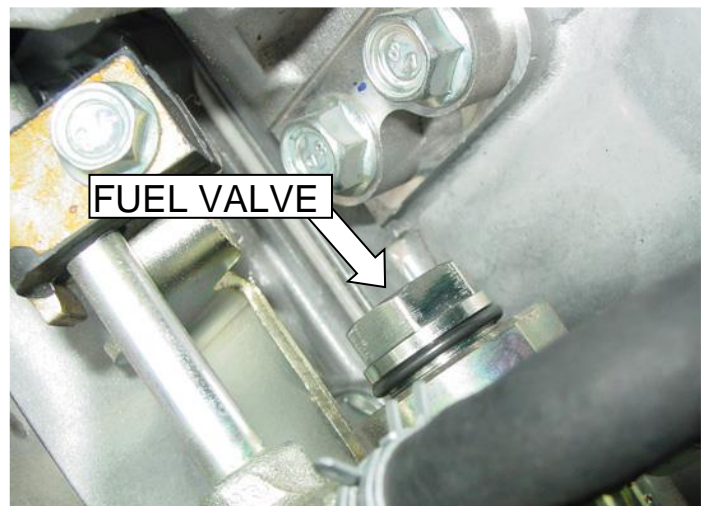


2. Remove the 5 bolts shown, four on the case and 1 on the metal tubing shown. Remove black metal casing under the bolts to access the fuel pressure valve.
(12mm & 10mm Socket)

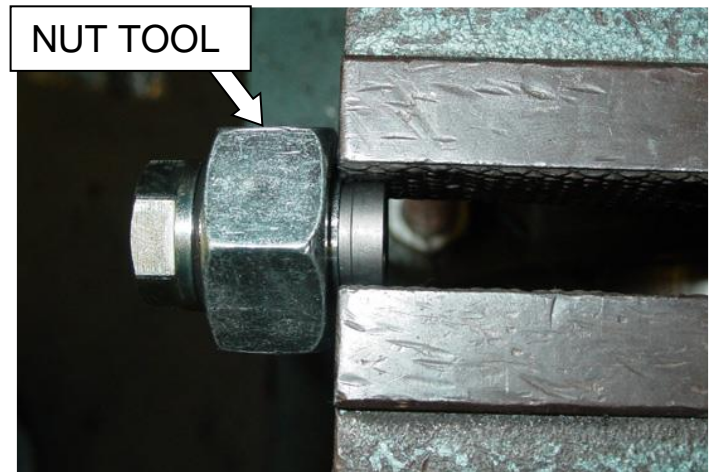


3. Once the glow plug controller is removed you can access the fuel pressure valve. Unscrew valve to detach from fuel rail.
(18mm Wrench or Socket)

NOTE: LLY may not be exactly as shown in photo.



4. Thread the supplied nut tool into the valve, then place into a vise clamping down on the valve cap side.



5. Use a 1 3/8" or 30mm wrench to unscrew the nut tool this will remove the **spring loaded** valve cap.



6. Remove the spring and insert the supplied **hardened steel shims** into the valve.

NOTE: Some vehicles require three shims but most only use two.



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7. Reinsert the valve spring then the cap.

Note: The three holes on the inside of the valve cap do not need to be aligned or removed.



8. Place the valve back into the vise with a piece of cardboard behind the valve cap to prevent damage to the valve seal surface. Tighten the vise until snug so the valve cap re-enters the valve until fully seated.

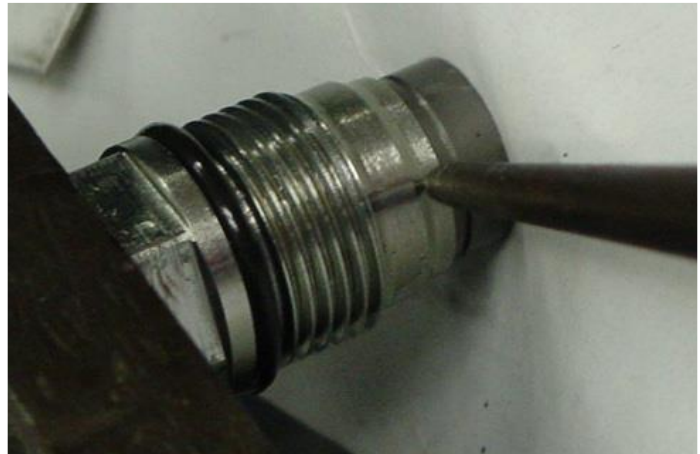
Do not over tighten vise.



9. Using a punch and small hammer re-strike the factory indentations along the lip where the valve casing covers the valve cap (3 places). You may need to rotate the valve to access the three locations by slightly loosening the vise ensuring the cap stays fully seated in the valve while it is being rotated.

Important: Do not let the spring push the cap out.

Once all 3 indentations are complete remove valve from vise then check to make sure the cap is being held by the indentations.

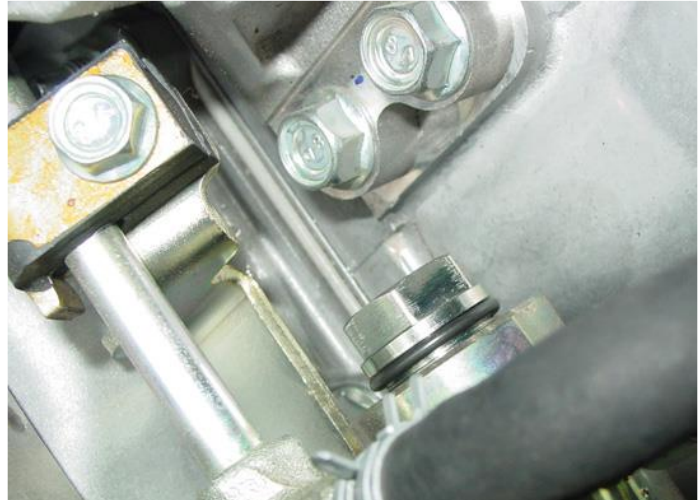


10. Reinstall fuel pressure relief valve back into the fuel rail. (torque to 76 ft/lbs)

Then reinstall the black metal casing reusing the 4 factory bolts. (torque to 18 ft/lbs)

As well the fuel line support reusing the factory bolt. (torque to 89in/lbs)

And complete the installation by reinstalling the 2 bolts in the glow plug controller. (torque to 89 in/lbs)



DODGE 6.7L INSTALLATION

VEHICLE SHOULD BE SAFELY SECURED BEFORE INSTALLATION.

1. Remove the plastic cover (4 bolts) and the dipstick from the top of the engine.

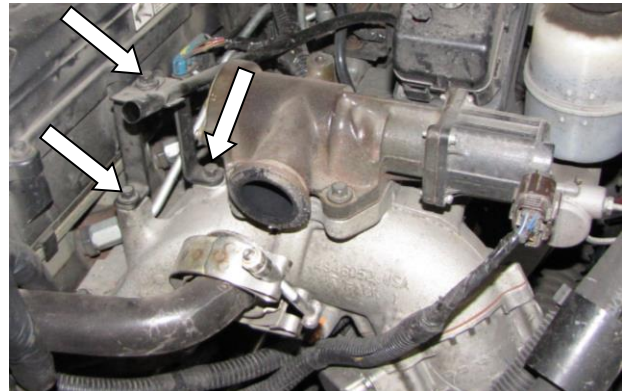


2. Loosen/remove the two clamps that hold the EGR tube that crosses the front of the engine, and tilt the tube out of the way. (11mm wrench)



3. Remove the bolt that holds the dipstick tube to the air intake horn bracket then remove the six bolts that hold the air intake horn to the manifold (10mm socket and wrench) gently slide the intake horn forward to access the front of the fuel rail.

Important: Do not damage the gasket.



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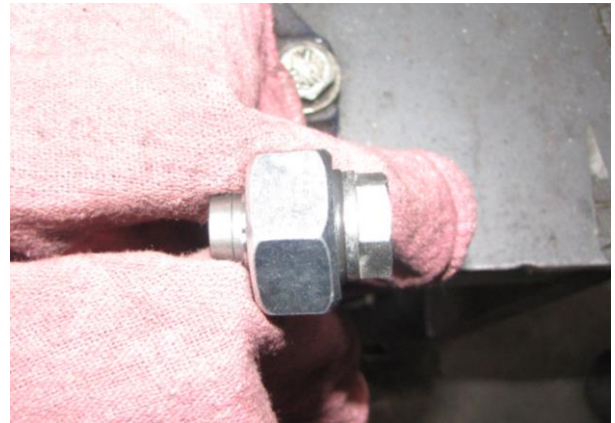
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4. Remove the fuel rail valve located at the front of the fuel rail.
(18mm wrench)



5. Once removed thread the supplied nut tool onto the valve and place into a vise clamping the sides of the valve cap.



6. Unthread nut tool against vise using a wrench to remove the valve cap.

NOTE: The valve is spring loaded so hold onto the end of the valve when removing the valve cap.



7. Release the valve from the vise and remove the spring to insert the supplied **hardened steel shims** into the valve.



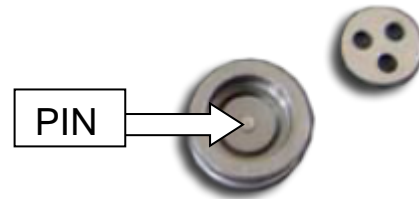
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8. Re-insert the spring and cap ensuring not to lose the small pin in that is inside the valve cap.



9. Using a piece of wood behind the valve cap place the assembly back into the vise. Tighten vise until valve cap is fully seated inside the valve.

NOTE: The wood will help to prevent damage to the valve seal surface.



10. Using a small hammer and punch re-strike the factory indentations along the lip where the valve casing covers the cap (3 places).

Once complete release the valve from the vise and confirm the valve cap is being held by the indentations.



11. Reinstall the fuel valve and torque to 76 ft/lbs.



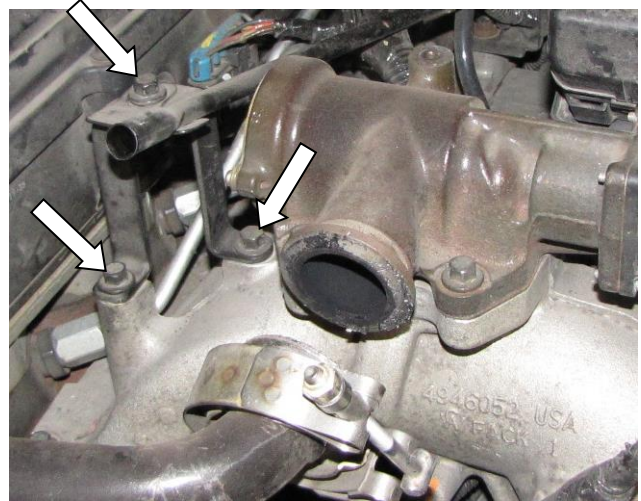
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12. Reinstall the air horn insuring to align the gasket holes and reinstall the dipstick tube to the air horn. (Torque to 18 ft/lbs)



13. Reinstall the clamps back onto the EGR pipe and Re tilt the pipe back into position. Tighten one side slightly to allow enough movement to connect the other side, torque to 89 in/lbs once both sides are correctly aligned.

Complete the installation by reinstalling the plastic cover and the dipstick to the top of the engine.



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