PART 2: Installing JHM Fueling Kit

1) Disconnect the negative terminal on the battery.

2) Disconnect the throttle body connector and the intake air temperature sensor from the intake manifold.

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3) Remove the three bolts holding the coolant pipe to the intake manifold.

4) Remove the two available intake manifold bolts. (They are the loose bolts shown in the photo)

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5) Before disconnecting the high pressure fuel line, the pressure will need to be relived from the fueling system. Pull the N276 connector from the high pressure fuel pump. This is the connector on the top of the HPFP. It should say “N276” on it. Start the car. Let the car idle until it dies or starts sputtering. This will drain the high pressure line and make it safe to disconnect the high pressure line.

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6) Once fuel line is removed, remove the PCV or Catch Can System.

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7) Remove the throttle body hose or pipe from the throttle body.

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8) Disconnect the N80 Valve harness and remove the hose.

9) Remove the bolt holding the Dipstick.

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10) Remove the four bolts holding the throttle body to the manifold.

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11) Remove the nut holding the support to the manifold, located underneath the manifold behind the throttle body opening.

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12) Remove the bottom bolt holding the manifold support to the block and remove the support from the engine bay for more room.

13) Remove the other connector from the bottom of the High Pressure Fuel Pump.

14) Remove the fuel line connected to the bottom of the HPFP.

15) Remove the three bolts holding the HPFP to the Timing Chain Cover. You may need to remove the black bleeder on top of the third bolt to get proper access for third bolt removal.

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(Photo showing where the bleeder would be)

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16) Now that the HPFP is out, you can easily disconnect the hose on the bottom of the pump to get it the rest of the way out.

17) Install the JHM HPFP Upgrade internals into the HPFP while you have it removed. YouTube Video instructions here: https://youtu.be/DZPpQvJo4iU or search "JHM High Pressure Fuel Pump (HPFP) Upgrade Installation Procedure" in Google.

A) Gather installation tools mentioned in the video.(18mm Deep Socket, JHM install tool, Brake Clean, Socket Wrench, Torque Wrench)
B) Use lint free rags.
C) Have some motor oil handy.
D) Put HPFP in a vice securely.
E) Clean 18mm socket thoroughly.
F) Clean the inside of the pump with brake clean.
G) Use 18mm deep socket to remove pump internals.
H) Tap the piston out of the internal housing.
I) Install JHM components into internal housing.
J) Make sure retainer is secure by using installation tool.
K) Reassemble the piston assembly into the HPFP.

18) Finish removing the eight remaining intake manifold bolts so the manifold can lift off of the head.

19) Remove fuel line connected to the rail valve. Remove the rail valve and replace it with the supplied Performance Rail Valve.

20) Disconnect the Cam Position Sensor harness from the front of the cylinder head.

21) Disconnect the High Pressure/Thrust Sensor.

22) Disconnect all four injectors from the harness and remove the intake manifold. Some injectors might stay inside of the manifold, and that is okay.

23) After removal all four stock injectors, clean the surface area in preparation for the new injector installation. NOTE: Now is a great time to perform a carbon cleaning.

24) After carbon cleaning, install the new S3 Injectors using the FSI Specific Injector Installation tools. (If you do not have these tools, contact us for more information.) Once all four S3 Injectors are installed you can complete these steps in reverse order starting on step #23 to complete the installation of the intake manifold and fueling components.