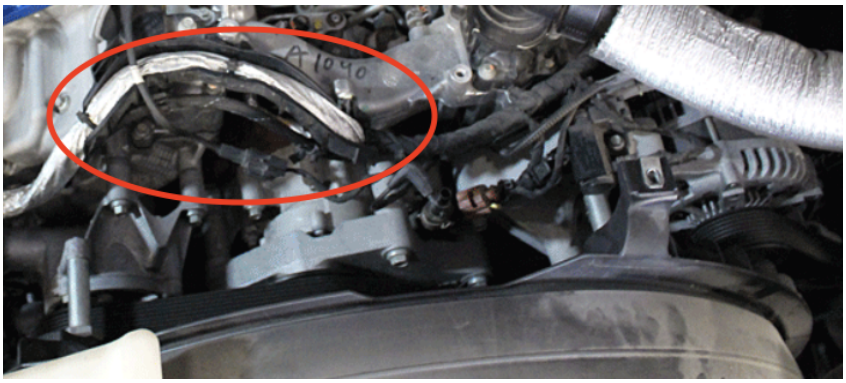
6.7 Powerstroke Dual Fueler Kit Instructions

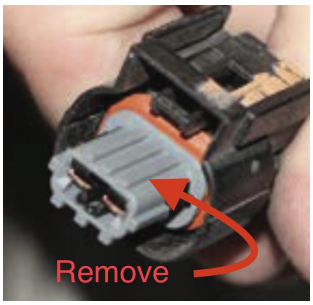
This kit may not work with some factory or aftermarket parts installed. It is solely up to the purchaser to make sure the kit works with their applicaion. Engine tuning must be used with this product otherwise it will not work properly and may even cause engine damage. Contact your tuning provider prior to installation to ensure that proper tuning is available for your application.

**NOTE: This kit can be connected to a factory lift pump/fuel system, although SPE does recommend some type of aftermarket lift pump setup especially for high horsepower applications, even if it's to supply the CP3 only and the factory lift pump supplies the CP4 as factory, which is our recommended combo.

1. Disconnect the negative battery terminals from both batteries. Remove the air intake assembly from the vehicle. Bleed the fuel system as if you were changing the upper fuel filter.

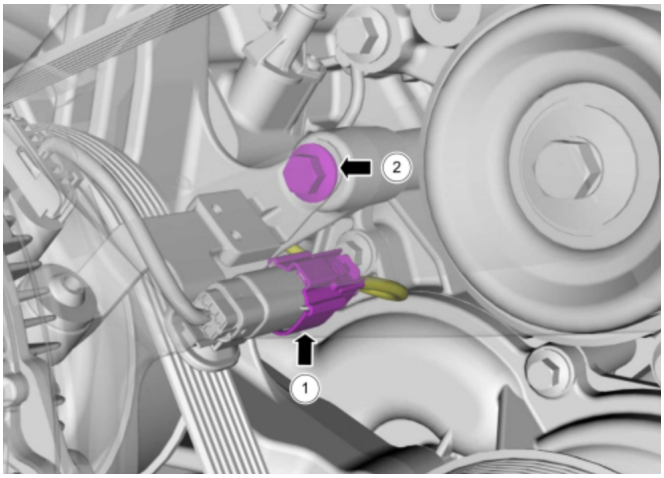


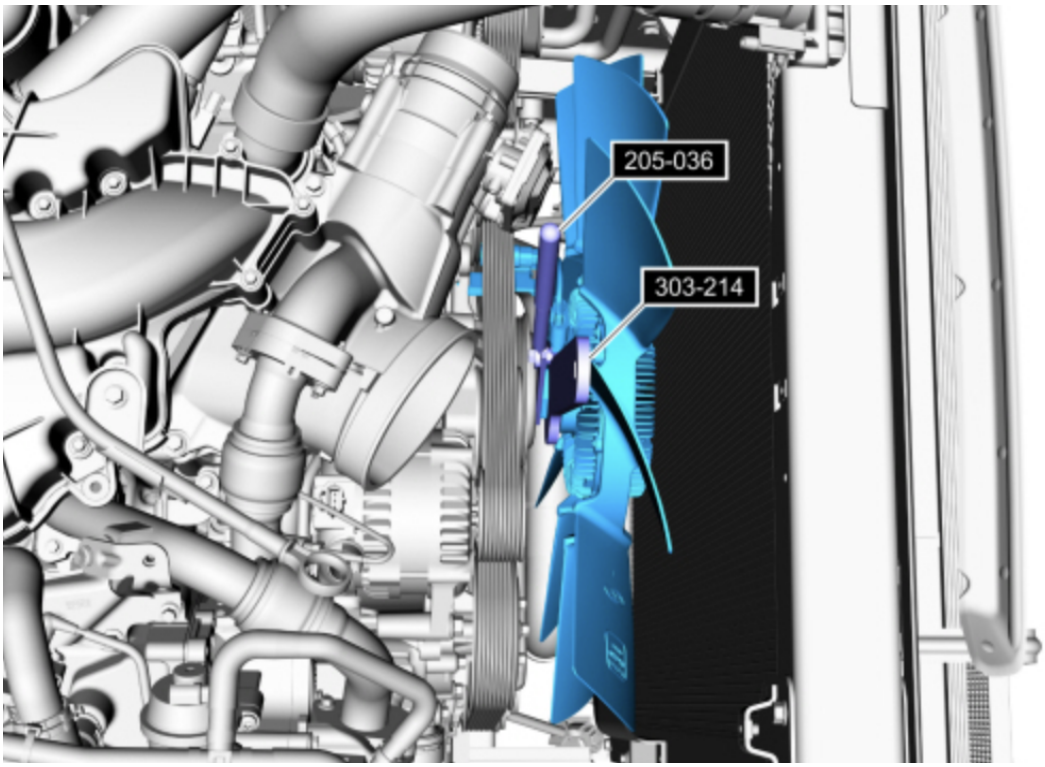
2. Cut zip ties and remove the two plastic wiring harness guides at the top side of the engine behind the front accessory drive.



3. Locate and unplug the factory CP4 wire harness connector. Re-route the harness toward the front of the engine, exposing the connector for easy access. Remove the gray locking sleeve from the connector. Pull outward to remove it. Then plug the male factory CP4 harness into the female

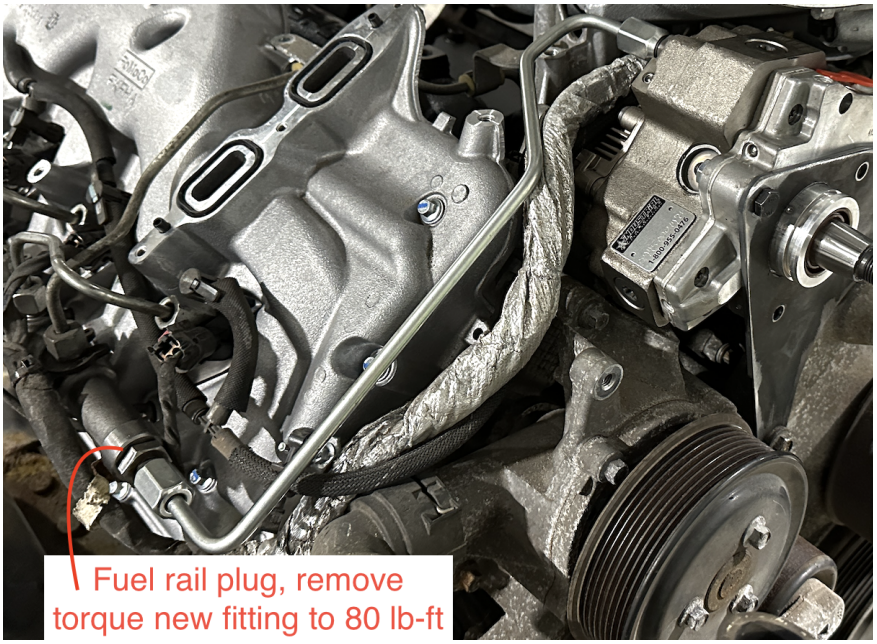
connection on the supplied harness. Plug the opposite male harness into the factory CP4 pump Mprop/volume control valve.





4. Unplug cooling fan speed sensor harness. Loosen and remove bolt holding cooling fan wire harness assembly. Remove the factory serpentine belt and both upper idler pulleys. Loosen cooling fan hub nut. Remove the fan shroud support stud on the secondary water pump.

***NOTE: No need to completely remove the fan assembly from the vehicle, Remove the cooling fan and wire harness assembly. Carefully set it in the factory fan shroud.



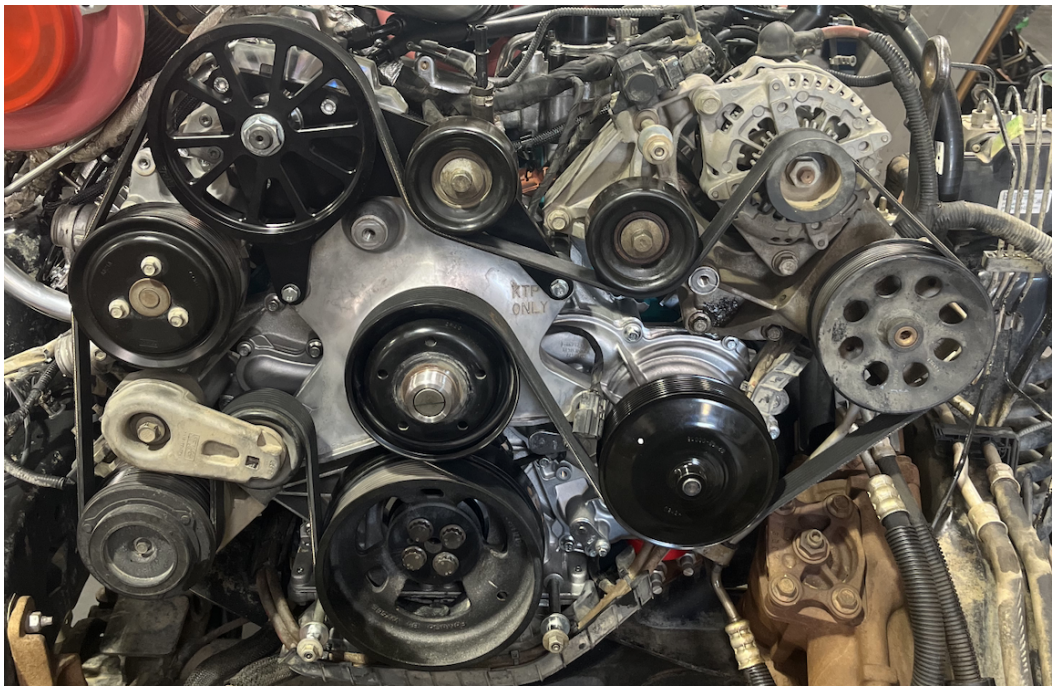
5. Remove the passenger fuel rail plug using a 10mm 12 point torx socket. Apply lube to the sealing surface of the supplied rail feed fitting and install the fitting into the fuel rail. Torque to 80 ft-lbs. Install the supplied CP3 pump bracket onto the Bosch CP3 pump with the supplied M8x45 bolts, washers and nuts. Torque hardware to 20 ft-lbs. Orientate the pump with low pressure fuel fittings facing up towards the driver side. Gather the supplied hardware for the pump/bracket installation - (3) M8x1.25x140mm bolts, (3) flat washers. Lower the pump/bracket assembly into place with supplied high pressure fuel line. Blow compressed air through the line to ensure it is free of any debris. Lube the tip of the line (to help seat fitting later when torqued) and loosely install the supplied high pressure fuel line to the CP3 pump high pressure outlet.

   **NOTE: You may need to use a file or sanding wheel to clearance the coolant crossover boss as shown below. Remove enough to add adequate clearance for the fuel line.

6. Install the (3) supplied M8x1.25x150mm bolts into the pump bracket and tighten evenly while supporting weight of pump to ensure no binding occurs. Torque bolts to 20 ft-lbs. Using the supplied washer and nut, install the supplied CP3 pulley. Torque to 75 ft-lbs. Install the lower portion of the high pressure fuel line onto the previously installed fuel rail feed fitting. Torque the upper and lower high pressure fuel line nuts to 40 ft-lbs.

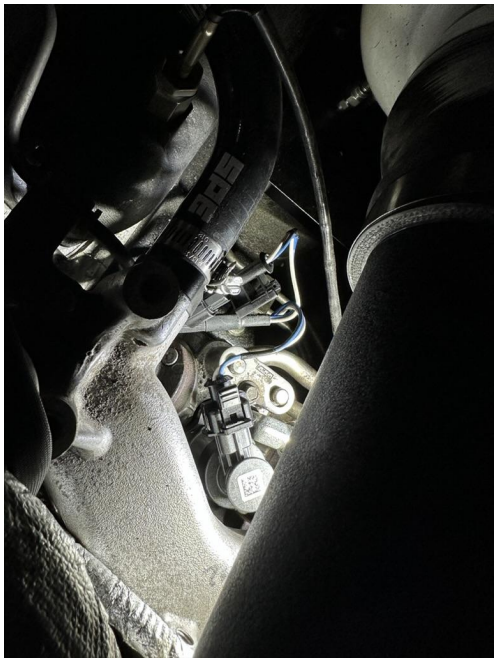
NOTE: Verify that there is adequate clearance between the modified factory idler post and secondary water pump pulley before tightening CP3 pulley.

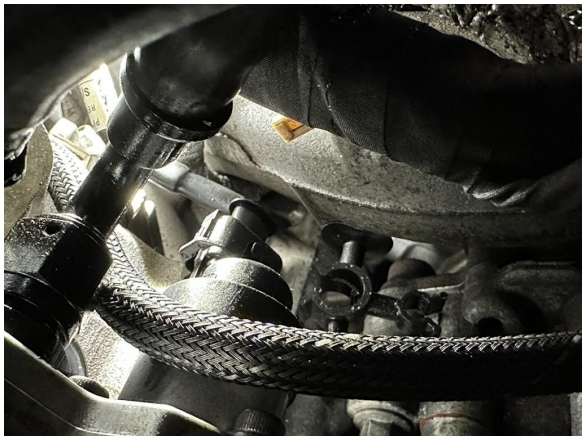
7. Install the factory Idler into the cp3 bracket standoff as shown above. Move the other idler to the left as shown below.



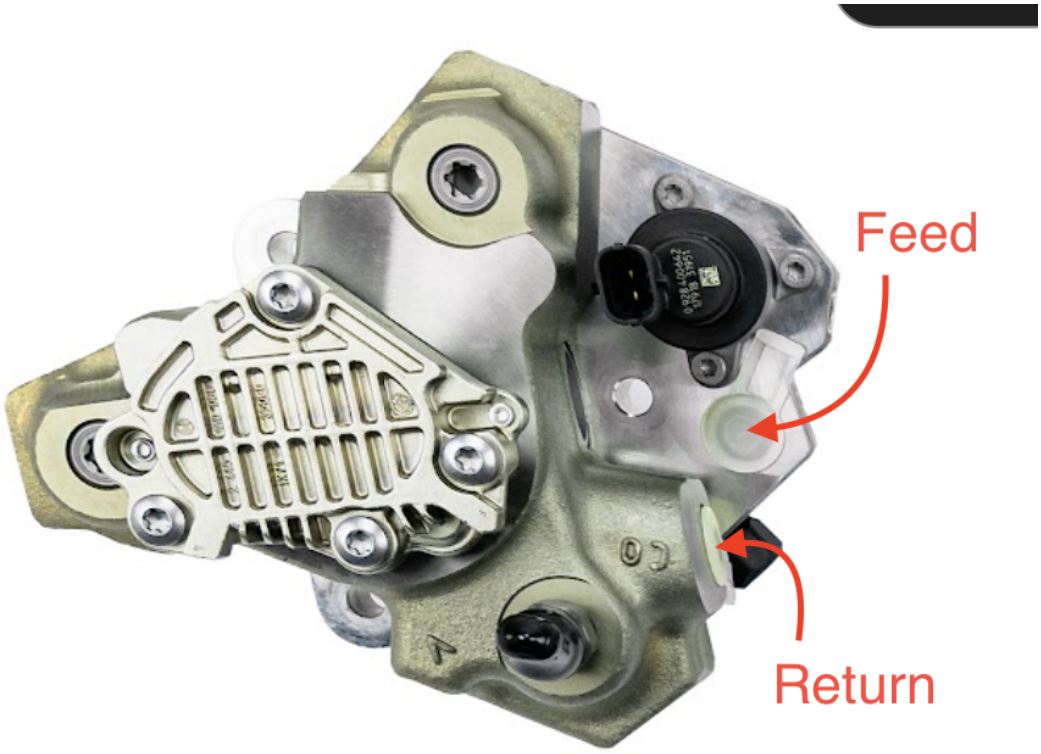
8. Install the serpentine belt as shown. Re-install the factory cooling fan. The fan shroud/stator mount that attaches to the secondary water pump will need to be removed all together it will no longer be needed. The shroud can be trimmed to give it a cleaner look.

***NOTE: Trucks with dual sided belts will need to change the Idler pulleys and fan hub plate to a 15+ for the smooth pulleys.





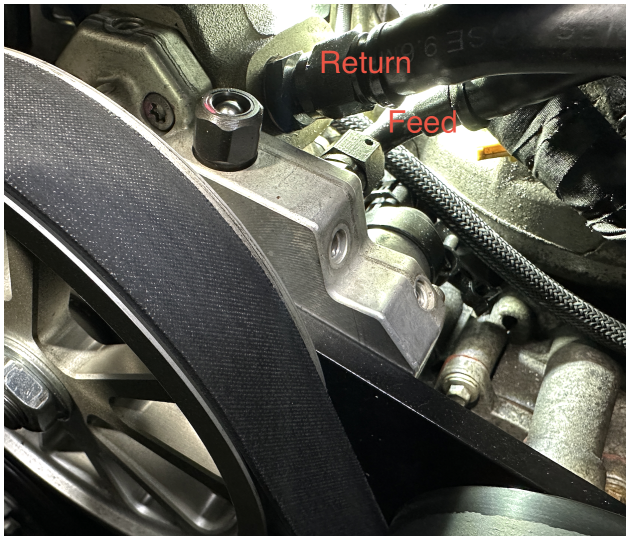
9. Connect the CP3 harness to the CP3 pump routing it so the wiring is not disturbed.

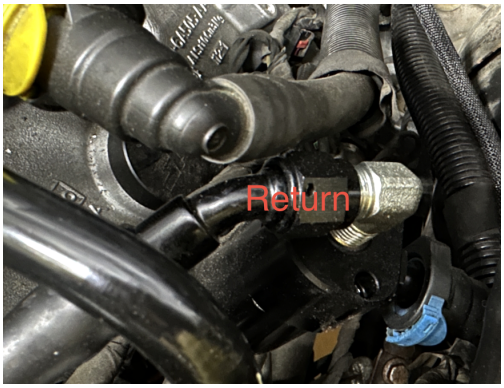


10. Install the supplied -6AN fuel feed and return fittings with the included copper washers into the CP3 pump.

11. The fuel system portion has many options to connect the CP3 pump. As shown above, you can see the routing for fuel flow. You can use this to help with routing other supply options. You can call with question or help with your particular setup. We will cover connecting the fuel system with the SPE DPK sytem for 11-19 models, which we always recommend having! Later model 20+ trucks can be adapted easily with our CAT fuel filter system with the upper fuel T-manifold.

12. Remove the ¼ inch plug in the end of the fuel manifold on the CP4 fuel supply tube. Install the 90 degree supplied fitting. Install the -6an 90 hose end and route the hose to a 90 degree hose end on the CP3 Feed fitting. Take care in routing the hoses away from heat and sharp objects. Before final tightening, make sure the hoses are free of debris.





13. The return fitting coming from the pump can be configured with a straight or 45 degree supplied -6an hose end, depending on what works best for your application. Install the new supplied exofilter lid on to the return body on the return fuel rail. Install the included 90 degree 1/4npt to -6 fitting in the lid pointing it towards the front of the truck. Install a 45 or straight -6 hose end. Connect the return hose end fittings from the CP3 to exofilter lid with the provided hose taking care to route it away from heat and sharp objects.

14. Now that you have completed the installation, prime your fuel system with multiple key cycles. Check for leaks verify all connections. Now your vehicle is ready to make use of the added fuel volume and start making more power!

**** Note: Due to so many different possible combinations and aftermarket parts its almost impossible to verify all of them. We recommend contacting SPE with any questions so that we can help guide you in the best way possible with your install.

*** Note: Dual alternator trucks will need to be converted to a single alternator.