

Dan's Diesel Performance

# CP3 Conversion Kit

## Install Guide

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These instructions are an outlier of how to prepare your old CP4 and new CP3 for the vehicle as well as a guide on where to install the lines.

### **Remove the CP4 pump and remove the nut and gear**

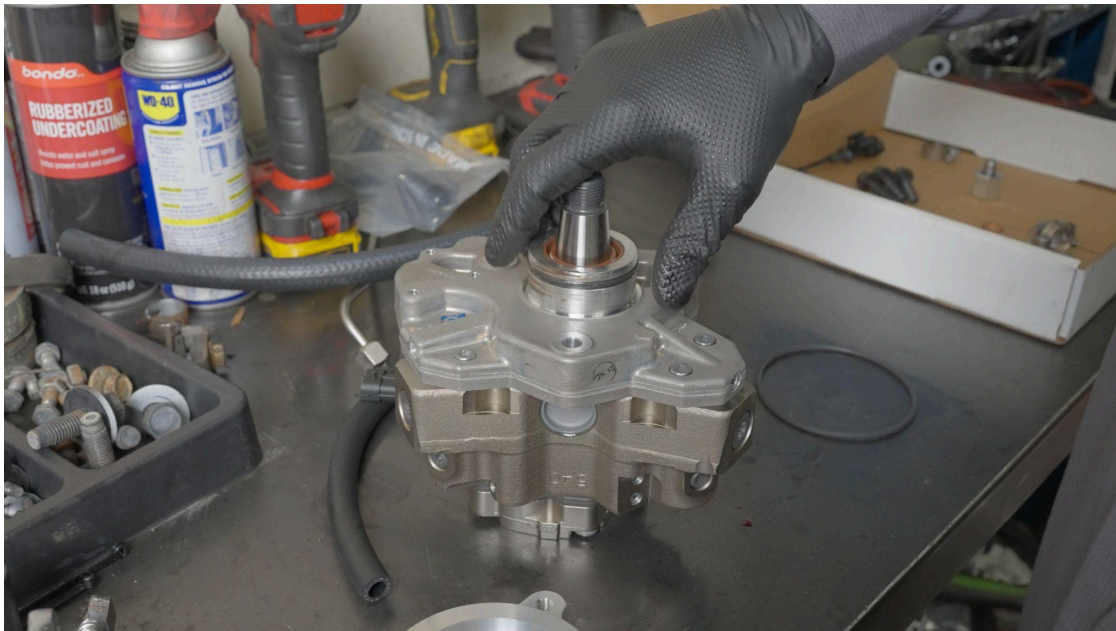
An impact will be easiest to remove the nut, the gear however will remain in place. The easiest way to remove it is by holding the pump in one hand by the gear and smacking the shaft of the pump to shock the gear off the shaft.

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### **Add the small O-ring to the shaft of the new CP3**

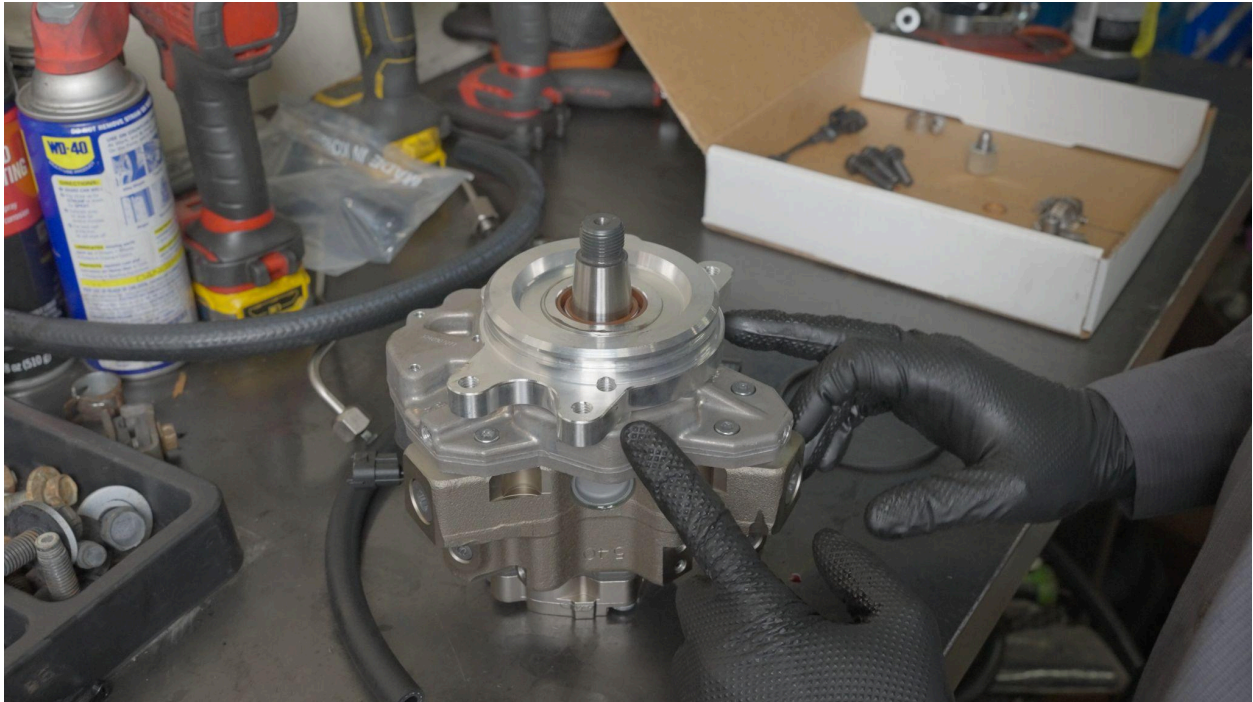
Make sure to use a grease to help hold the o-ring in place during installation.



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### **Add the plate over top of the shaft of the new CP3**

Be sure to place the plate with the vertical line facing down towards the pump. The plate will make a noticeable “Click” when it is set into place.



### **Ensure that the bolts are put in place to fasten the plate**

Apply threadlocker to the 3 black hex head bolts and secure the plate to the pump. These will be set to 18 Ft-lbs.





### **Remove the factory fittings on the CP4 Pump**

In the image below, we have removed the fittings that will need to be replaced. These fittings will be replaced by two that are provided in the kit with copper washers.



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## **Add the new fittings on the CP3 Pump**

Add the correct fittings to the pump and be sure to use the copper washers that are provided to seal the fittings to the pump. The feed fitting is the horizontal fitting that faces the turbo and the larger of the two at  $\frac{1}{2}$ ". The return fitting is the vertical fitting that is the smaller of the two at  $\frac{3}{8}$ ".



## **Add the gear back to the pump shaft with nut and plate o-ring**

This can be tricky to tighten down as the gear will need to be held in place while you tighten the nut. An oil filter wrench on the gear can help hold it in place while you torque the nut to 72ft lbs. The nut will not be flush and have a couple unused threads. This is normal and nothing to be concerned about.





### **You are now ready to place the CP3 into the truck**

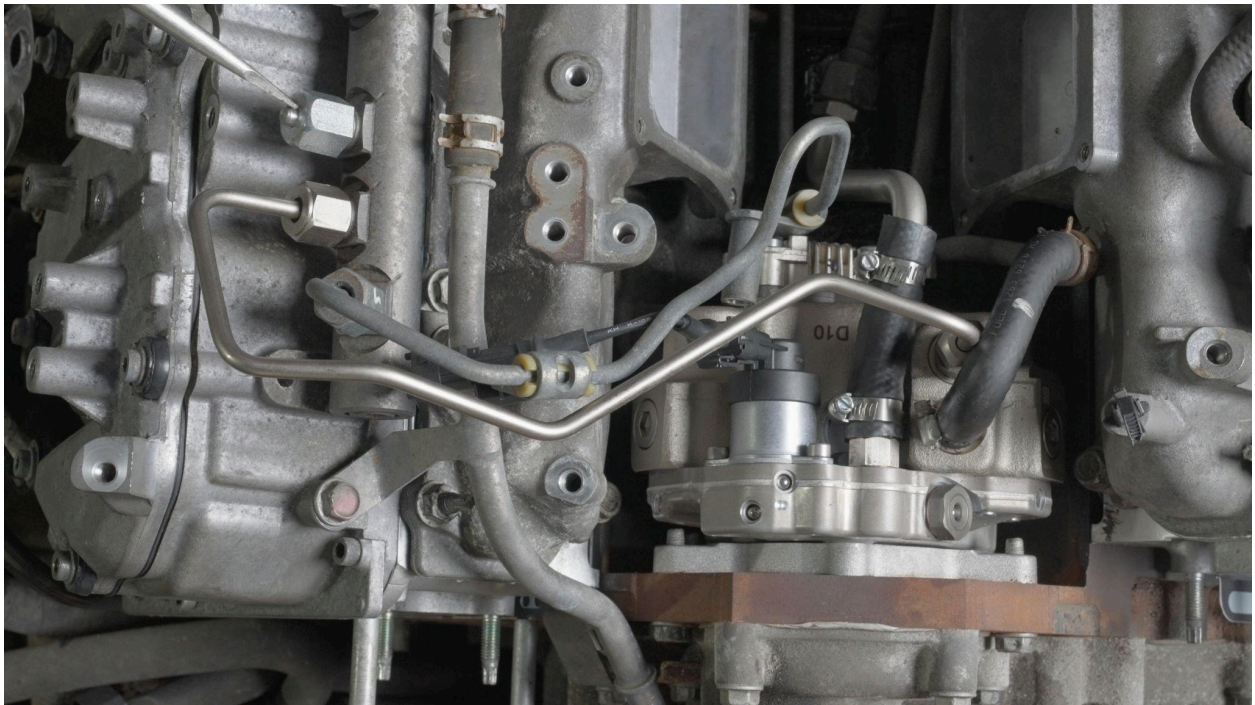
Lubricate the O-Ring before insertion of the pump. This is a good time to clean the bore and valley of the engine. The mounting bolts for the pump will be set to 18 Ft lbs.



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## Run your lines for the new pump

Starting from the drivers side, the  $\frac{3}{8}$ " supplied line will need to be cut to size and clamped into place (Be weary that the line does not have a kink and an flow freely). In the middle, your feed line will depend on if you are running a lift pump or the stock location fuel filter. Pictured below is the more common setup with a filtered lift pump system (Fass Fuel Systems/Air Dog). This is connected to a  $\frac{1}{2}$ " inch hose with two hose clamps connecting it into place that will need to be trimmed to fit. The longer high pressure line will connect to your fuel rail (passengers side second port from the front). The unused rail port will be plugged off with the supplied nut and plug. The 9th injector plug with the o-ring will need to be inserted into your injector return line connector.



## Wiring of the pump

Black and yellow wires will need to be ran to "Pump FCA"

Purple and yellow wires will need to be ran to "Drivers side rail FPR"

Double brown will plug into "CP4 temp sensor" (For best results this sensor will be laid in the valley underneath the pump)

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Your truck should now be ready to be reassembled without the worry of a CP4 failure!  
Dan's Diesel Performance thanks you for your support. If you have any questions please  
feel to reach out at [matt@dansdieselperformance.com](mailto:matt@dansdieselperformance.com)

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