CZP Aftermarket Fuel Pump Install Kit - Nissan 370Z 09+ Z34

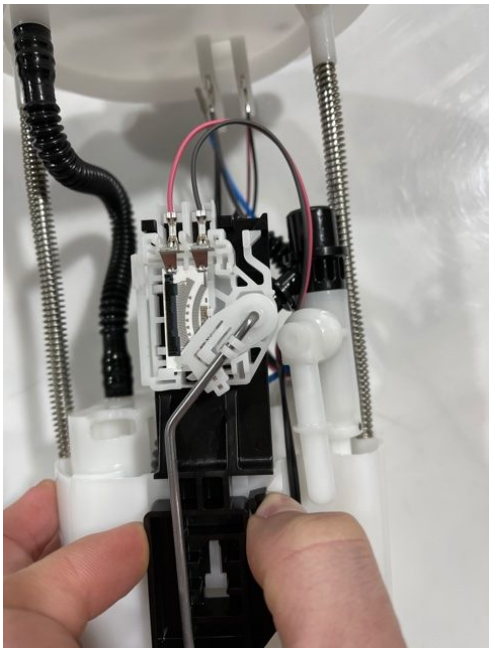
Installation Guide

Thank you for your purchase of the CZP aftermarket fuel pump install kit. Please make sure your kit came with all of the necessary components listed below:

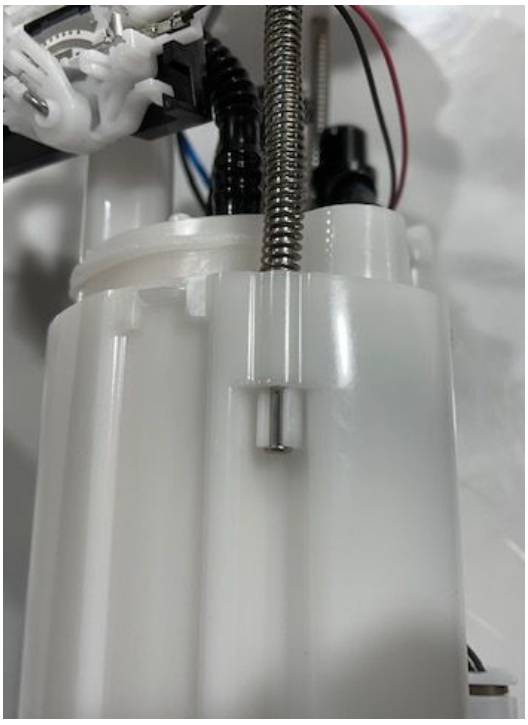
1x Fuel Pump Support Foam
2x Vibrant Stainless Steel Hose Clamps
1x OEM Style PTFE Fuel Line
1x Walboro Fuel Pump Pickup Strainer
2x Molex Spade Terminals ***OPTIONAL***
1x Walbro 255 Pigtail Harness ***OPTIONAL***

1. Remove the fuel pump sending unit as instructed in the Nissan factory service manual:
   https://conceptzperformance.com/items/64592/docs/Config.book(FL.fm).pdf

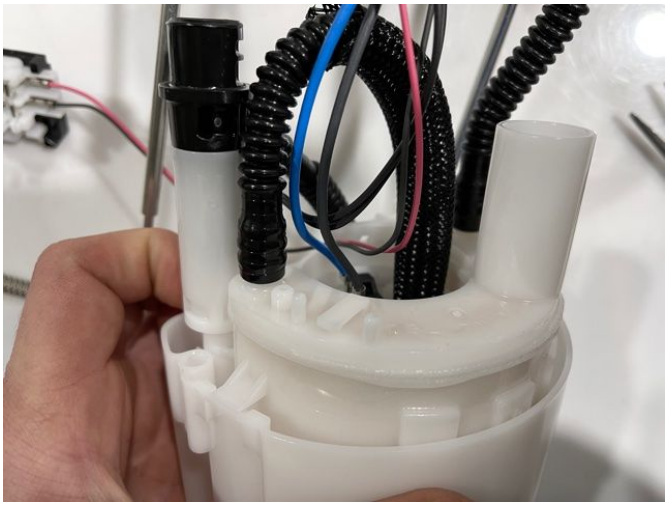
2. Remove the fuel level sensor by gently depressing the retaining tab on the right side of the assembly and sliding the black level sensor assembly upward toward the top hat. Unplug its spade terminals at the bottom of the top hat and set it to the side for now.

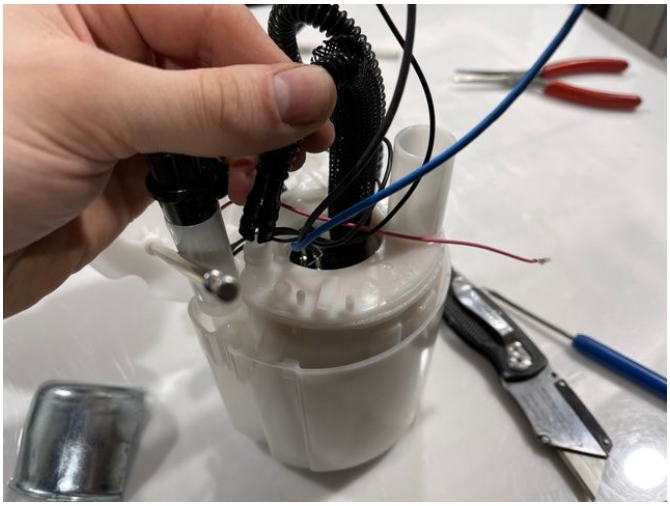


3. Remove the small white retaining clip at the base of one of the support rods. It is easiest to get a small flathead or pick between the clip and the rod and gently pry the clip off. Separate (not completely as there are wires and a tube connecting them still) the top hat from the fuel basket and set the retaining clip and springs to the side.

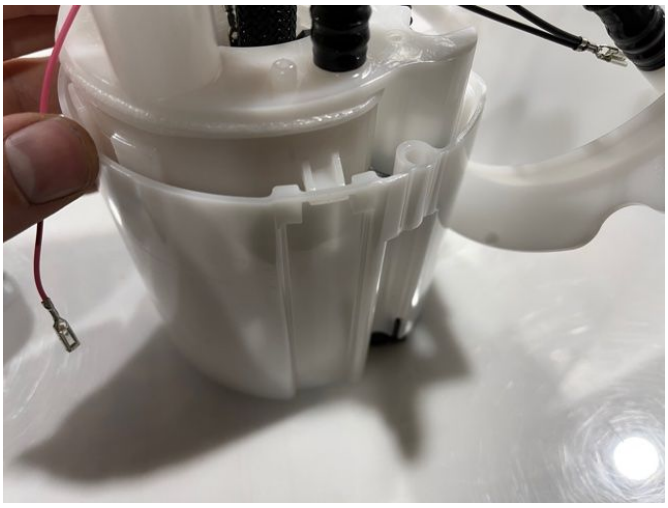


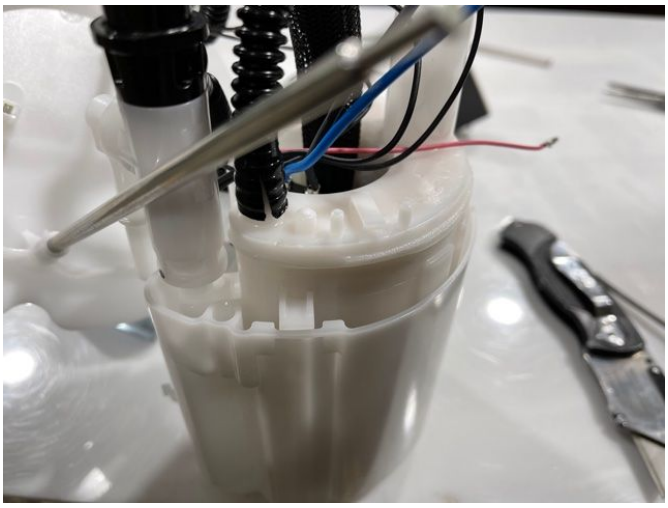
4. Now that you have the top hat removed you can see the pump feed line and the power and ground wires running from the pump to the top hat, disconnect the wires. Take a sharp blade and **carefully** make a small slit in the side of the tube going from the pump to the filter assembly and pull it from the barb as shown below, trying not to mar the white plastic barb underneath.



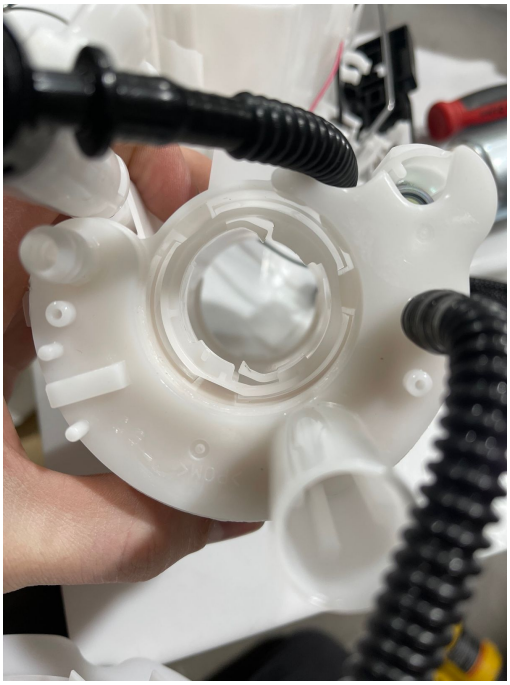


5. You can now squeeze the basket slightly to release the two retaining tabs that keep the pump and filter assembly inside the basket and pull the assembly out.



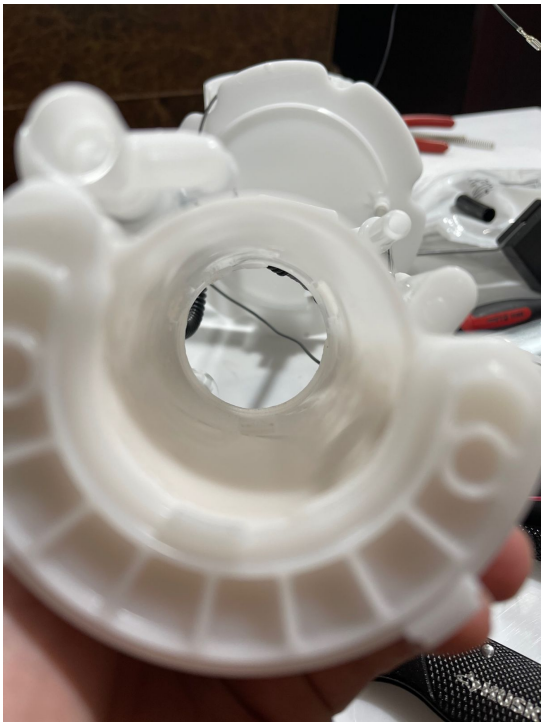


6. Now you can see the two small retaining tabs (top and bottom of the circle in the picture) that keep the pump in its place at the center of the filet and venturi assembly. Using two small screwdrivers or picks, pry those tabs outwards and twist the pump counterclockwise and it should almost fall out the bottom of the assembly.



7. Now flip the filet and venturi assembly over and take the same sharp blade from earlier and cit the three small strips of plastic that hold the pump retaining ring to the filter, **being careful to not cut into the filter unit**.

8. If there are large portions of plastic left behind, take a rounded file and remove the leftover plastic as best as you can, being sure **not** to wear through any part of the filter housing.



9. Now take your foam sleeve and slide it onto your new aftermarket pump of choice and take the included pickup sock and install it onto your new pump with a firm press as well.

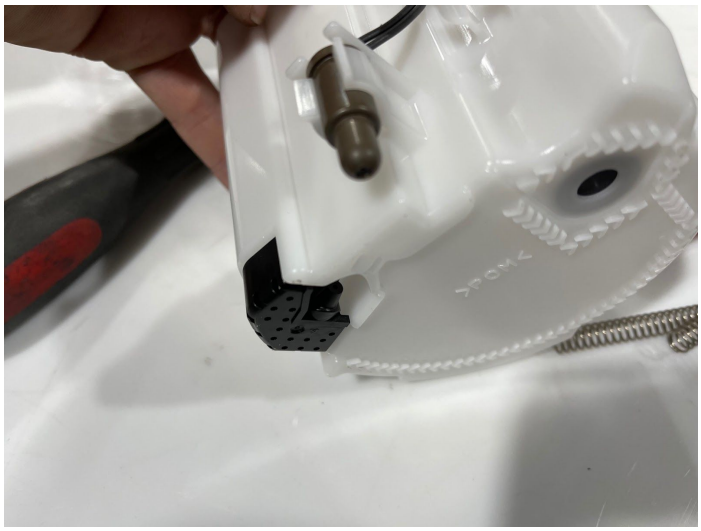
10. Take the fuel pump with the sock and sleeve installed and slide it into the bottom of the filter assembly where the old pump used to sit.

11. Take the included PTFE tube and use a hair dryer or heat gun to slowly and **carefully** heat one end till you can slip it over the barb where we cut and removed the hose from earlier (the fuel filter inlet barb) and secure it with one of the included clamps.

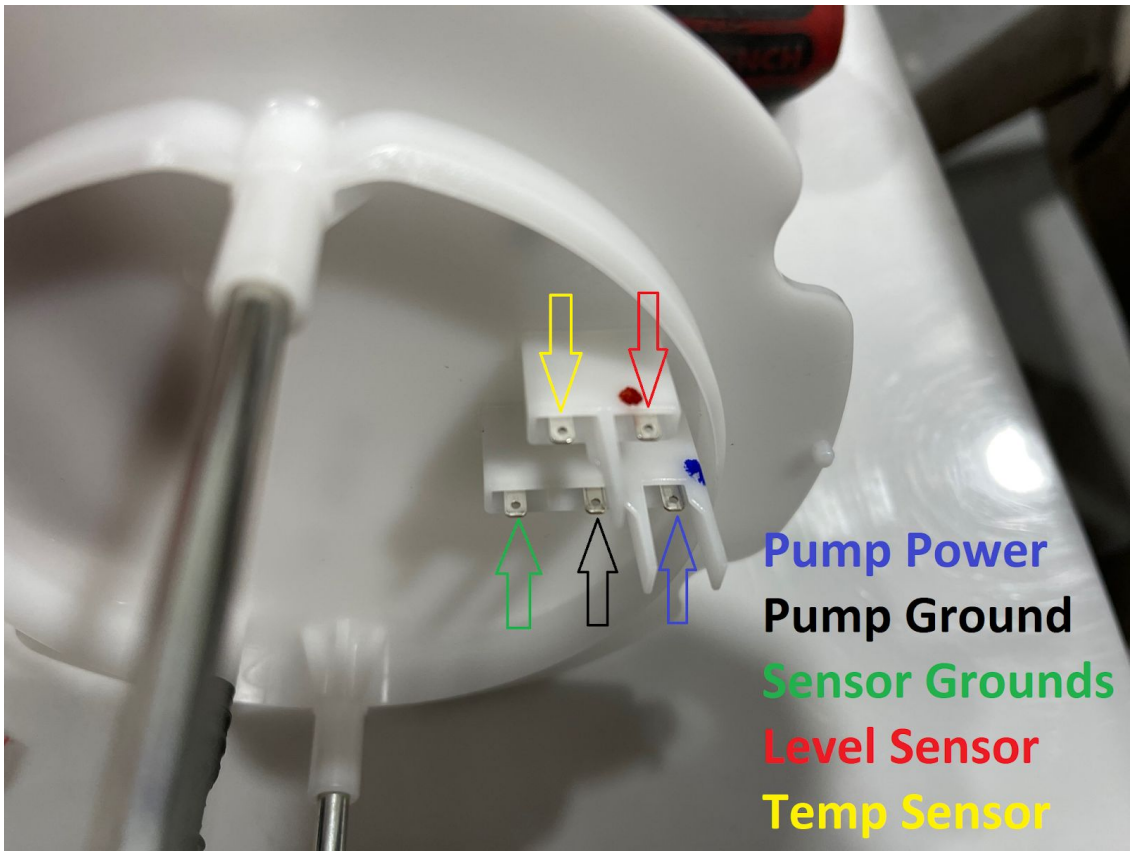
12. Making sure to **be careful** of all of the other plastic parts, slowly heat the other end of the PTFE tube and connect it to the fuel pump outlet and secure it with a clamp. It should look something like this when it is all installed.

13. Crimp the spade connectors onto the new fuel pumps pigtail and plug the connector into the pump.

14. Now before we start reassembling everything we need to modify the venturi system that draws fuel from the other side of the saddle style tank. When you put a higher flow fuel pump in, at idle and lower RPMs the fuel pressure regulator works a bit harder and has to bleed off more fuel than the venturi system is expecting, leading to a build up of pressure in the system and as a result inconsistent fuel pressures. In order to fix this we need to enlarge the venturi output nozzle. The stock diameter is around 0.050 inches and for larger fuel pumps you need to increase its size accordingly. We have found a diameter of 0.075 inches work well for pumps that flow around 255 liters per hour. For even higher flow rate pumps this diameter needs to be expanded even more to around 0.100 inches or possibly even larger. In order to get access to the venturi, you need to push it out from the bottom of the basket where it is clipped in. By pressing down firmly from the top you can pop it out around half an inch or so which is enough room to be able to use a drill and very **carefully** bore it out to the correct diameter making sure **not** to go all the way through the backside of the plastic. With that final step, the modifications to our sending unit are complete and we can start reassembly.



15. Connect all of the wires to the top hat, making sure to connect everything to its corresponding pin shown below.



16. Now that the pump is in its final location and all plumbed and wired, you can put the pump/filter/venturi assembly back into the basket making sure both clips are correctly located.

17. Slide the springs back on the rods and reinstall the basket to the top hat by replacing the small retaining clip removed in step #3.

18. Reattach the fuel level sensor, making sure to clip it fully into place.

19. Reinstall the fuel pump sending unit as instructed in the Nissan factory service manual:
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