



# NOSTRUM

HIGH PERFORMANCE



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## VR30DDTT HPFP Big Bore Kit Installation Guide

Part #: H086-0623

**WARNING! PLEASE FOLLOW ALL WARNINGS AND INSTRUCTIONS FOUND IN YOUR VEHICLE OWNER'S MANUAL. THE FOLLOWING INSTRUCTIONS MUST BE READ AND FULLY UNDERSTOOD BEFORE BEGINNING INSTALLATION. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN VEHICLE DAMAGE, PERSONAL INJURY OR DEATH. IF THESE INSTRUCTIONS ARE NOT FULLY UNDERSTOOD, DO NOT ATTEMPT INSTALLATION.**

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**INFINITI VR30DDTT**  
**HIGH FLOW HIGH PRESSURE FUEL PUMP KIT**  
**INSTALLATION INSTRUCTIONS**  
INFINITI VR30DDTT KIT PART #: H086-0623

**Installation Instructions**

1. Remove fuel pump fuse. See owner's manual.
2. Start engine, after engine stalls, attempt to start it 1-2 times to release any fuel pressure
3. Turn ignition off
4. Remove black "crash" bracket in front of high pressure fuel pump. Remove the L-shaped stock high pressure fuel bracket. **(See fig. 1a and 1b.)**

Uninstall stock high pressure tube bracket by removing the two 10mm bolts. **(See fig. 1c)**



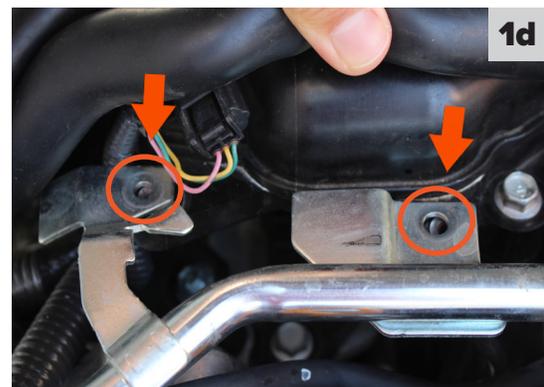
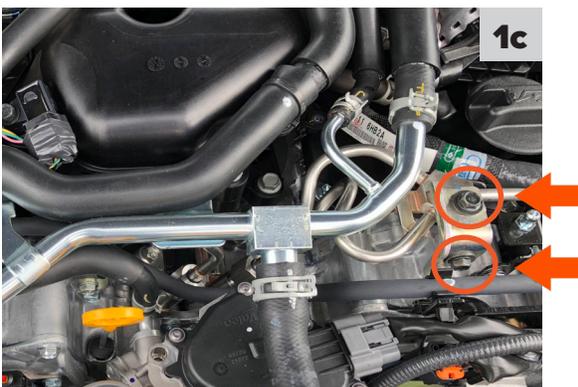
*Remove the L shape crash bracket*



*Remove the crash bracket*

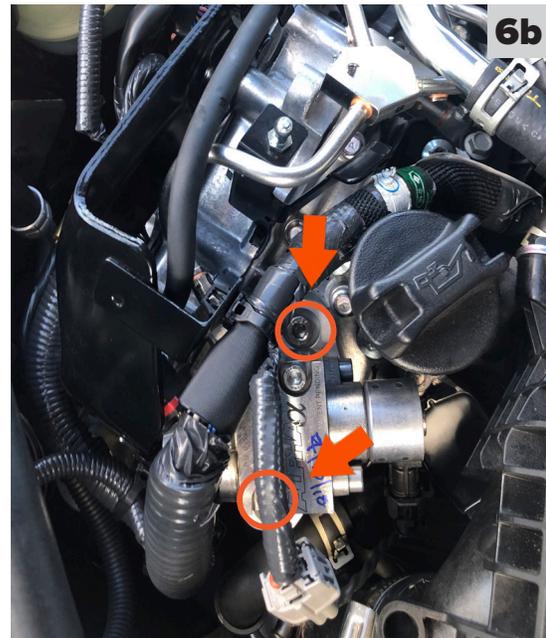
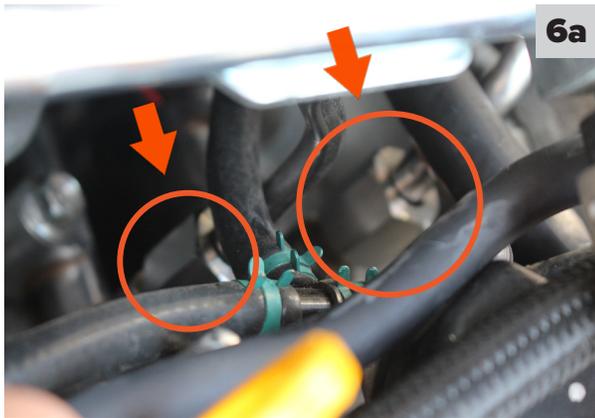
5. Remove electrical connector located above the intercooler tube. Be sure to hold the terminal housing and not the wires while applying the disconnecting force. Loosen the intercooler bracket by removing the 10mm bolts. **(See fig. 1d)**

**"Note:** this bracket will not be re-used during pump install."



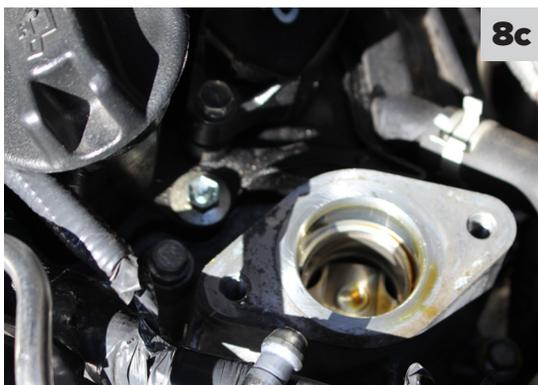
6. Loosen the two 19mm high pressure tube compression nuts at the fuel rails. Remove low pressure line quick connect fitting from pump while absorbing any spilled gas.

To access these, you will need to use a 19mm “crows foot” with a ratchet extension to loosen line nuts. **(See fig. 6a)** Disconnect high pressure fuel pump electrical connector. Proceed to remove stock pump. Alternately loosen 10mm pump flange bolts while removing. **(See fig. 6b)**



7. Make sure pump mounting face is clean prior to pump installation. Place the new pump/flange assembly onto cylinder head with the solenoid facing the back of engine. The flange may not sit flush with the cylinder head due to cam lobe positioning. This is normal.

8. Hand start the two 25mm M8 flange bolts. **(Do not completely torque down yet)** **(See fig. 8c and 8d)**



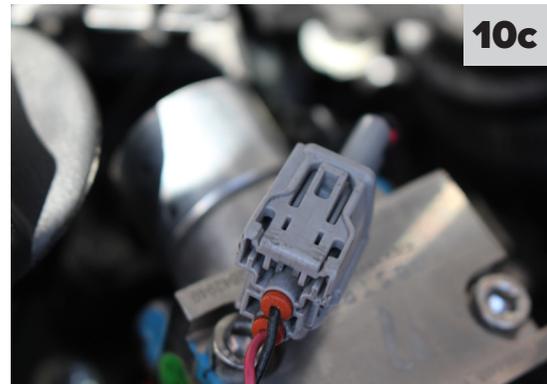
*Pump cylinder head*



9. Apply one rotation to each flange bolt at a time to ensure even installation. **Torque the bolts to 20 ft-lb.**



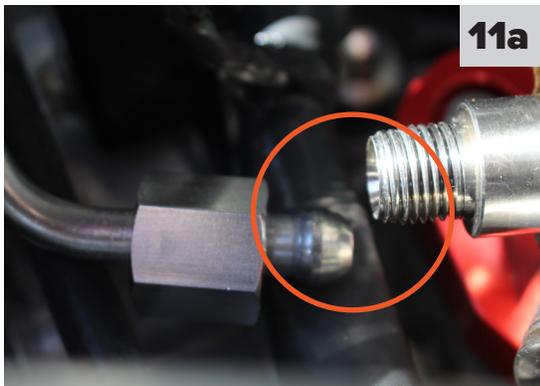
10. Connect the pump electrical connector to the stock terminal. You should hear a **“click”** when the connector has been fully installed. (See fig. 10b and 10c)



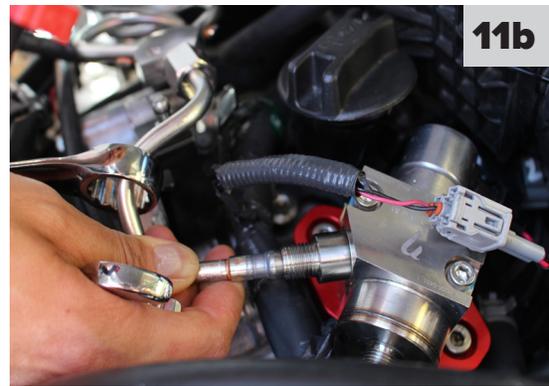
11. Bend the stock high pressure tube such that the globe fitting is aligned and seats onto the pump fuel fitting.

We have provided a forming template to help the bending process. If the tube is bent correctly, it will fit inside the template. **See template instruction for further detail.**

Ensure the tube is bent in such a way that the globe fittings on both ends of the tube are straight and center to their mounting locations. The compression nuts should be able to spin freely onto their mounting threads on the pump. If there is resistance when hand-tightening the nuts, the tube ends are misaligned. In such a case, repeat step 11 and ensure tube ends are straight and center to their mounting locations. If the nuts are installed misaligned, **the tube will not seal properly, and you risk having fuel leak. (See fig. 11a, 11b, and 11c)**



**INCORRECT**



**CORRECT!**

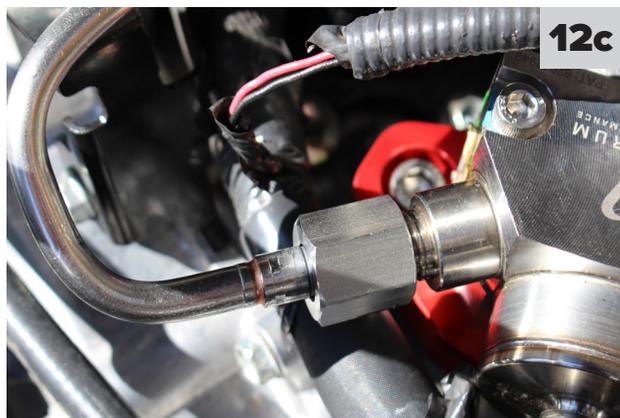
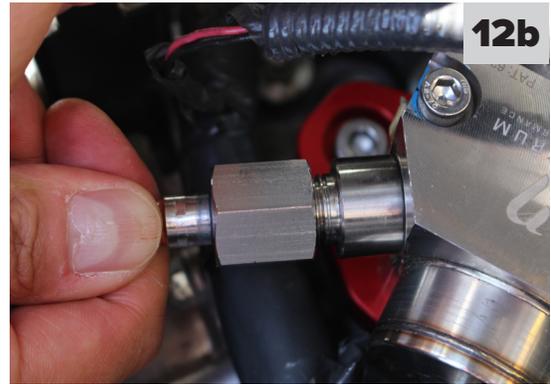
*Aligned the seats to pump fuel fitting*



**11c**



12. While holding the tube in place to ensure alignment, apply **25.8 ft-lb** torque to the compression nut on the pump side. Complete the tube installation by applying **25.8 ft-lb** torque to the two nuts on the fuel rail side. (See fig. 12a, 12b, and 12c)



13. If so supplied; A new high pressure tune bracket is provided in this kit. It includes a clip for the low pressure tube. Install the new tube bracket using the factory bolts. Apply **10 ft-lb** torque to each bolt.

14. Now install the low pressure fittings. Install the 90deg female-to-female 6AN adapter to the fuel pump. Apply **1.5 ft-lb torque**. (See fig. 13a)

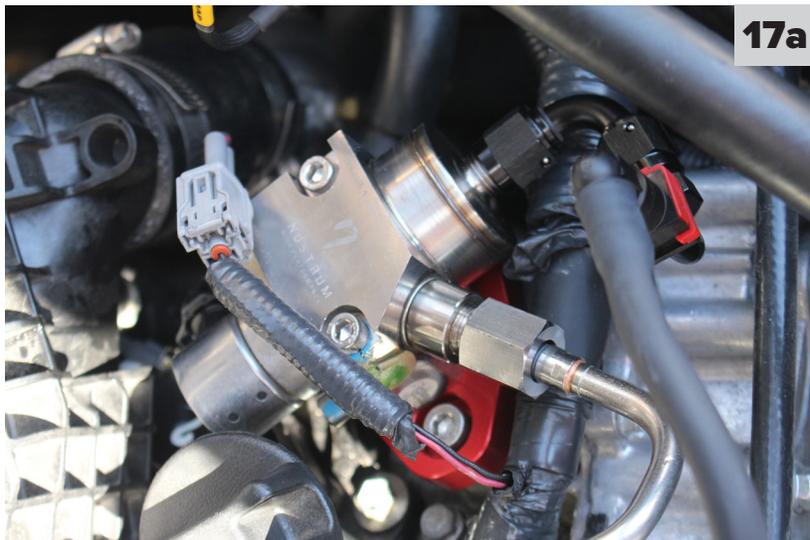


15. If so supplied; Install the 90deg male QC 6AN adapter to the adapter installed in step 11. Hand tighten the adapter. *(See fig. 15a)*



16. Install the factory stock low pressure female QC to the male QC adapter installed in step 12 and apply **13 ft-lb** torque.

17. Re-install the inter-cooler brackets and electrical connector from step 1 & 3. *(See fig. 17a)*



18 Check to make sure all removed bolts have been reinstalled and all disconnected connectors are reconnected.



## Hardware installation is complete.

### First Start-Up

1. Be sure to remove all installation tools and loose items from the engine compartment. Follow good, safe practices when working on your vehicle. Be sure to reassemble all parts and components according to your OE maintenance manual.
2. Key cycle the vehicle into the “Accessory On” position (do not go to Ignition position). The low- pressure fuel pump will activate and the low pressure side of the pump will pressurize. Check the high-pressure fuel pump and the low pressure side for leaks. If OK, proceed to step 3.
3. Key cycle to ignition and let the car attempt several start cycles. Remember that the fuel lines, pump and part of the fuel rail are filled with air, therefore this step is necessary to evacuate that air and get the system charged. If it starts, OK. If it doesn't, key off the vehicle. Check the high- pressure lines to the fuel rail, to the pump and the pump itself for leaks. If OK, proceed to step 4.
4. Key cycle one more time all the way to ignition. Engine should start-up and idle. If not, proceed with steps 2-4 again.
5. Let the car idle for a few minutes. Check for leaks on low and high-pressure portions again.
6. Installation is complete! **Time for a Tune!!**

***NOTE: a fault code may appear at the first key cycle due to the long ignition time or the low pressure in the fuel rail, both due to the air in the fuel system.  
This code should self-clear after the OEM defined quantity of key cycles.***

***NOTE: After driving the car and letting it cool, next day, check for fuel leaks again (from thermal expansion and contraction). Retighten fittings if needed.***

For more information or specific support questions:  
email [support@nostrumshop.com](mailto:support@nostrumshop.com) or call 734-548-8677 (during normal business hours)

