

AMS PERFORMANCE INFINITI V830 FUEL FILTER KIT / ALPHA



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INFINITI Q50/Q60

FUEL FILTER KIT

Introduction

The goal of AMS Performance is to provide the highest quality, best performing products available. By utilizing research and development, and rigorous testing programs AMS Performance will never compromise the quality or performance of our products. In addition, AMS Performance will only provide the finest customer service offering only parts and advice that are in the best interests of the customer. AMS Performance was built on a foundation of integrity. This is who we are; this is what you can count on.

A vehicle modified by the use of performance parts may not meet the legal requirements for use on public roads. Federal and state laws prohibit the removal, modification, or rendering inoperative of any part or element of design affecting emissions or safety on motor vehicles used for transporting persons or property on public streets or highways. Use or installation of performance parts may adversely affect the drivability and reliability of your vehicle, and may also affect or eliminate your insurance coverage, factory warranty, and/or new OEM part warranty. Performance parts are sold as-is without any warranty of any type. There is no warranty stated or implied due to the stresses placed on your vehicle by performance parts and our inability to monitor their use, tuning, or modification.

These instructions are provided as a guide only as there are many variables that cannot be accounted for concerning your particular vehicle, including but not limited to model year differences, model differences, the presence of non-OEM parts, and modifications that may already be or were previously installed. A basic knowledge of automotive parts and systems is helpful but a better understanding of the parts and systems on your particular vehicle may be required.

If you have any questions or issues at any time during the installation of your AMS Performance product(s) please call us for technical assistance. The AMS Performance tech line can be reached during business hours at 847-709-0530 for AMS Performance products only.

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INFINITI Q50-Q60 Fuel Filter Kit Installation Instructions

Fuel Pressure Relief

Warning! Make sure the engine has cooled down. Disconnecting fuel lines on a hot engine can lead to fuel rushing out of fuel lines at random, caused by fuel boiling when opened to atmosphere. Fuel temperatures in the low side fuel line can be as high as 150 degrees Fahrenheit at the inlet of the HPFP and the high side can be significantly higher, especially at pressures of 200 bar. At a minimum, fuel in the high side rails and lines will follow engine bay temperature. Make sure to follow the OEM fuel pressure relieving procedure. (Without Consult Tool)

1) Pull the #52 (15A) Fuse listed as Fuel Pump in the IPDM. The IPDM (Intelligent Power Distribution Module) is the fuse box located next to the battery in the engine compartment.

Note: The battery may need to be removed to remove the IPDM cover.

2) Start the engine

3) After the engine stalls, crank it for two or three times to release all the fuel pressure

4) Turn the ignition OFF

5) Disconnect the battery

6) Reinstall the fuel pump fuse after the flex fuel installation, see step #20

Note- It is highly recommended to flush out all the lines included in this kit prior to installation. Brake parts cleaner and compressed air will help flush out any potential contaminants left over from the manufacturing process.

Mounting the Filter:

1. Start by removing both the engine cover and the brake master cylinder cover.



2. The fuel filter housing will mount to the secondary firewall just behind the drivers side intercooler. There are two holes here, one is covered with a round plastic plug and the other with tape. You will need to remove the plastic plug and poke a hole or remove the tape to reveal the mounting holes. Once this is done you can mount the filter housing using the supplied hardware.



Line Routing:

- From here, the process will change if you have our Alpha Flex Fuel Kit or not. If you do not have the flex fuel kit installed, continue to step 3. If you do have the kit installed continue to step 13.

Non- Flex Fuel



Flex Fuel



Non- Flex Fuel:

- With no flex fuel kit, you will need to run the new low-pressure fuel feed line.

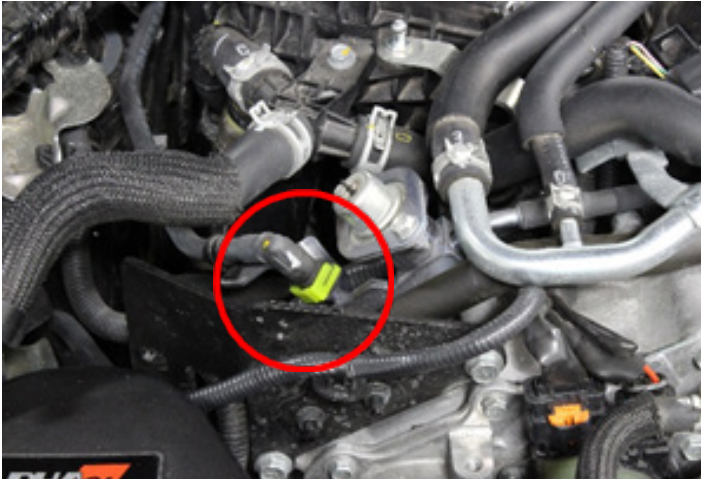
3. Remove the bracket in front of the HPFP. Unclip the harness and fuel line from the bracket. Unbolt the two 12mm bolts from the lower area of the bracket and remove. This bracket will not be reused.



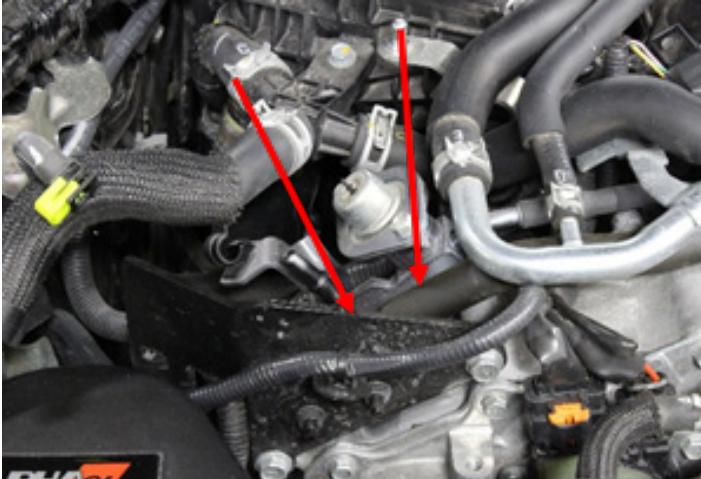
4. Make sure the fuel pressure has been relieved properly as noted in the first part of the instructions. Disconnect the low-pressure fuel supply hose from the HPFP.



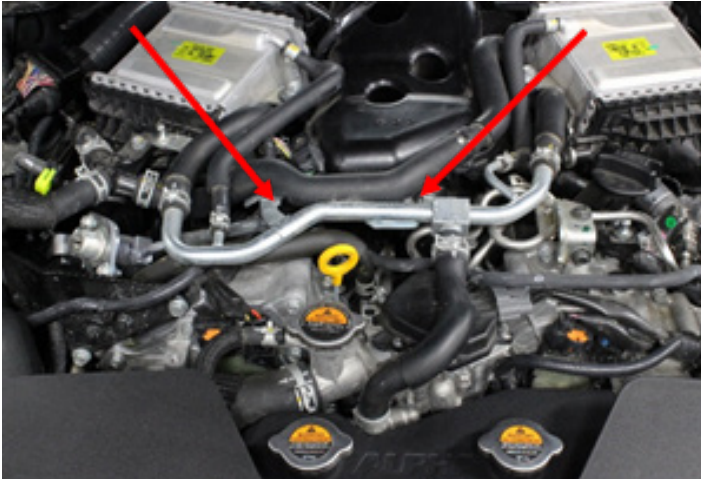
5. On the passenger side of the engine, disconnect the low-pressure fuel line from the bracket on the engine as shown.



6. Unbolt the fuel line bracket from the engine. It is held in place by two M6 bolts located behind the black bracket shown.

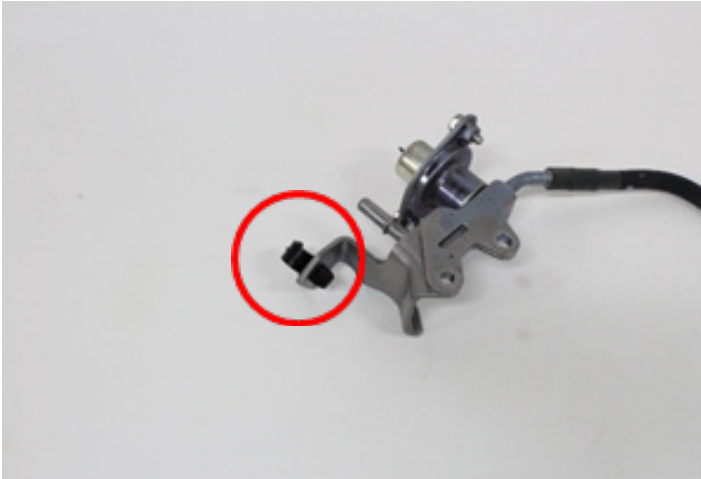


7. To make the removal of the fuel line easier, remove the two M6 bolts from the water pipe so it can be moved out of the way. The bolts are hidden under the rubber hose that crosses over from one intercooler to the other. Remove the entire low-pressure fuel line and bracket as shown.



Installation

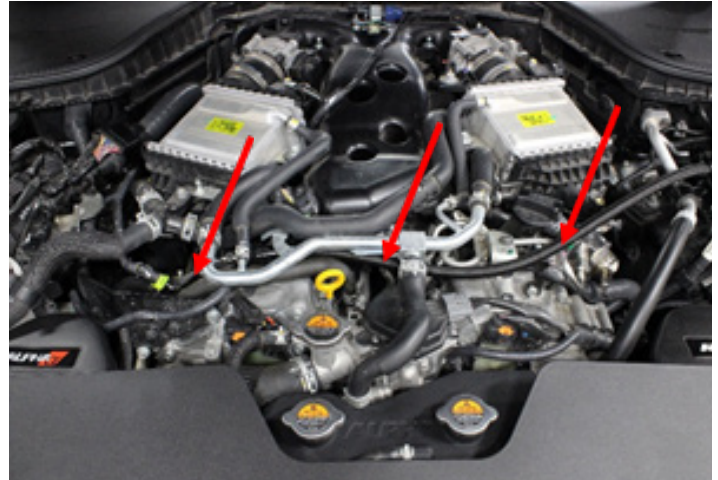
8. Locate the new low-pressure fuel line bracket. Swap the plastic fuel line clip from the OEM fuel line to the new bracket in the same orientation.



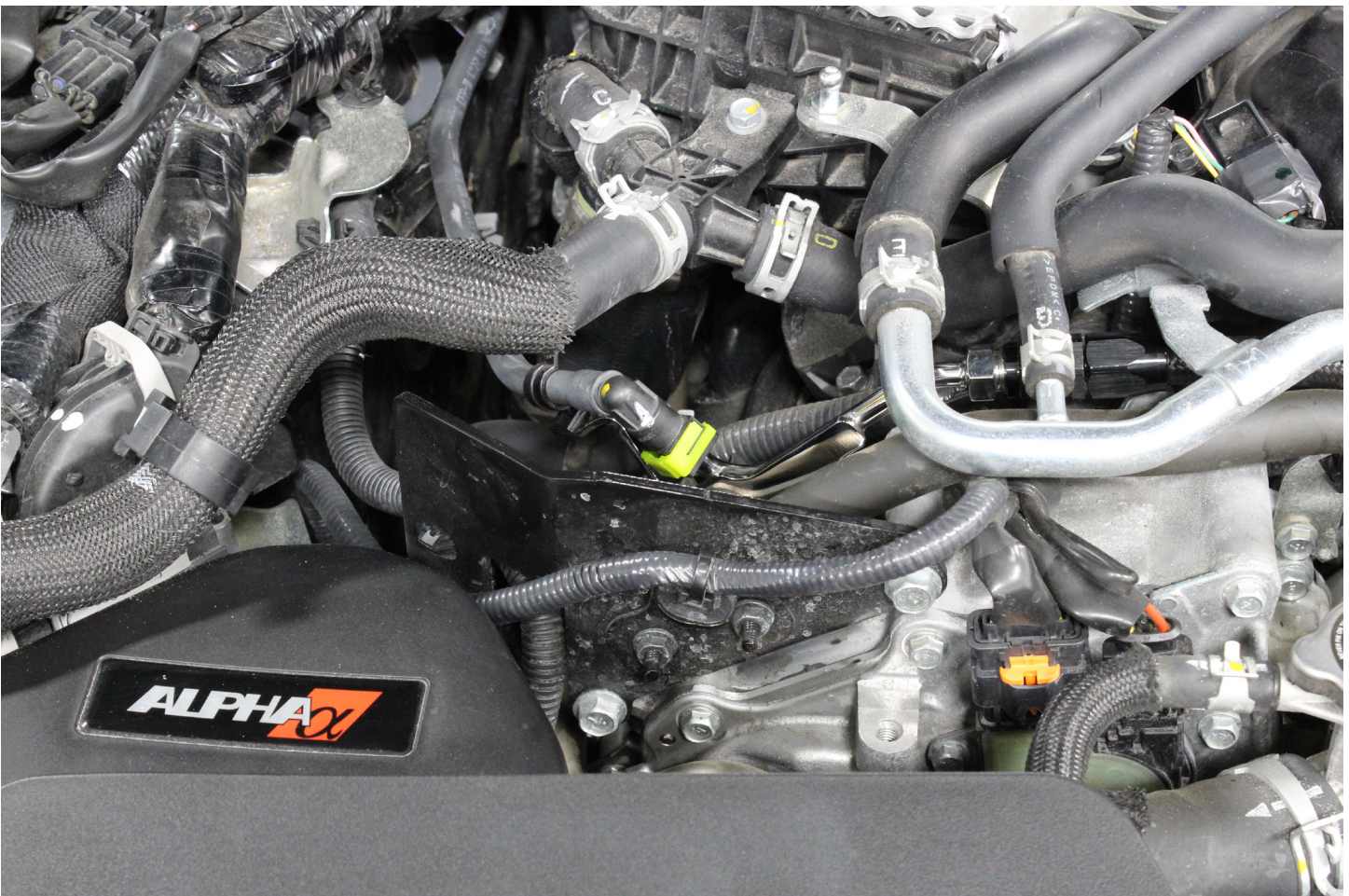
9. Locate the longer -6AN hose and install the straight hose end on the new fuel line bracket while on the bench. Tighten the straight fitting onto the new fuel line bracket.



10. Install the new fuel line and bracket as shown under the intercooler water pipe. Once in place, reinstall the two M6 bolts holding water pipe to the intercooler.



11. Reattach the fuel line to the new bracket as shown on the right side of the engine. Make sure the OEM fuel line is properly clipped into the plastic bracket.



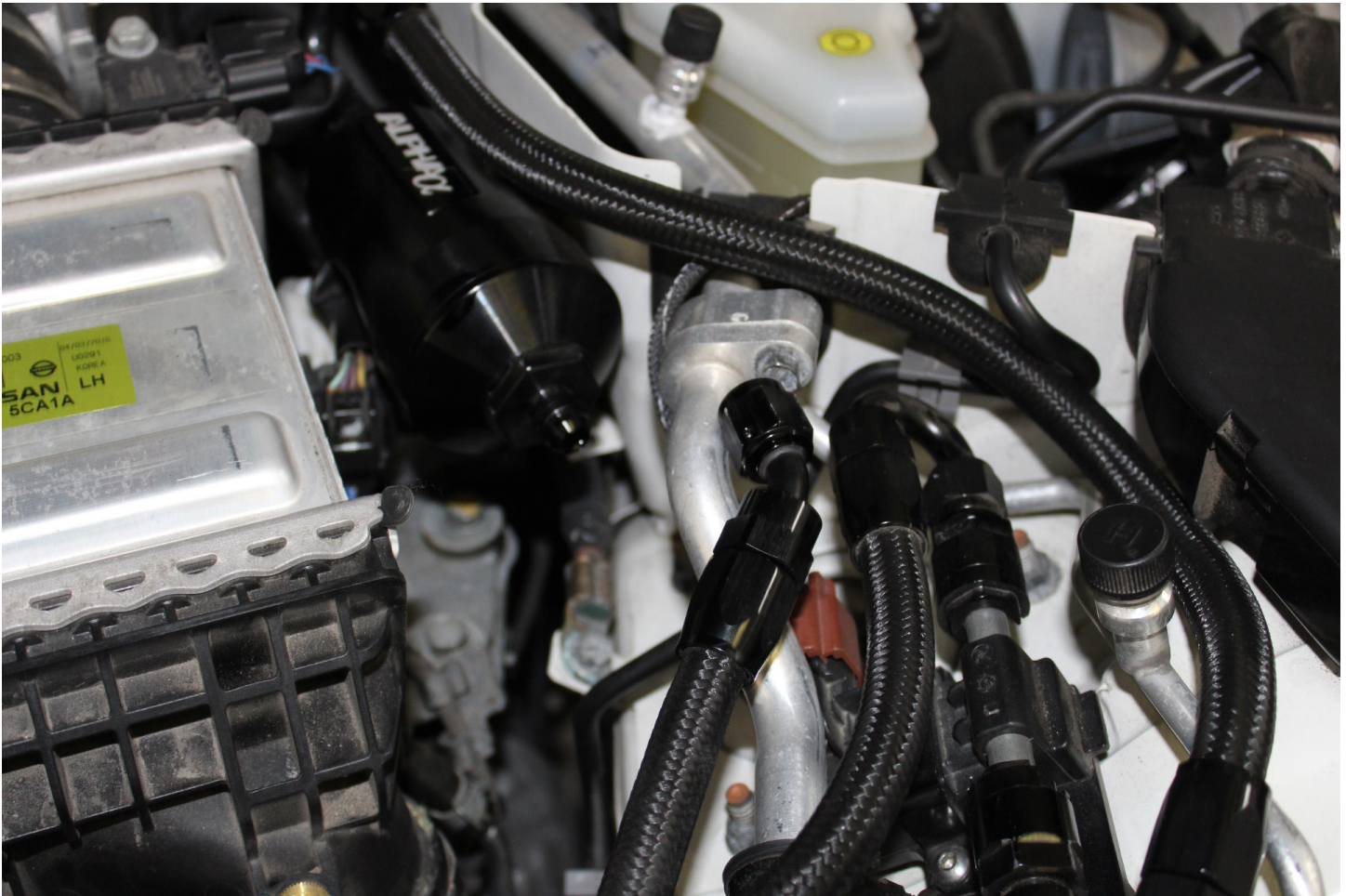
12. Route the hose as shown to the forward most fitting on the fuel filter and tighten the fitting. The outlet hose routes from the back fitting on the filter to the inlet fitting of the high-pressure fuel pump. The 180 degree fitting attaches to the filter and the smaller 150 degree fitting will be connected to the pump.



Flex Fuel:

- If you have not already installed our flex fuel kit, follow the instructions and complete that installation before continuing with step 13.

13. With the flex fuel sensor installed, simply remove the low pressure feed line from the inlet of the sensor and attach it to the forward most fitting of the fuel filter.



14. The inlet of the flex fuel sensor will now come from the outlet of the fuel filter. Attach the 180 degree fitting to the rear fitting on the fuel filter and the 150 degree fitting on the forward fitting of the flex fuel sensor. Tighten both fittings and this installation is complete.



Before starting:

- Turn the ignition on without starting the engine to prime the low side fuel system. Allow the pump to run until it shuts off which will take a few seconds. Repeat this process 2-3 times before starting the engine.
- Be sure to follow the tuning guidelines in the Flex Fuel Kit instructions if you are installing that kit at the same time as the Fuel Filter Kit.