Race-Spec FK8 Flex Fuel Kit Instructions

The kit includes the following:

- (1) GM Flex Sensor
- (1) Mounting Bracket with Integrated Flex Mount
- (1) KTUNER Flex Converter
- (1) Race Spec Wire Harness
- (2) 3/8" SAE Quick Disconnect Fittings to 6an (go on Flex Sensor)
- (1) 28" Low Pressure Hose (90 deg/45 deg hose ends)
- (1) 5/16" SAE Fuel Line Adapter to 6an male (to fuel line on firewall)
- (1) 5/16" SAE Quick Disconnect to 6an male (to HPFP)
- (1) 6an female swivel connect
- OPTIONAL -6an Fuel Pressure Take-Off Fitting (1/8" npt for gauge or sensor)

With any install of this nature, we recommend taking your vehicle to a professional. Before beginning installation, make sure fuel pressure has dissipated (you may need to leave the car overnight) and that proper care is taken while working on any fuel lines.

Disconnect the negative battery terminal and place it out of the way.

FUEL LINES

Disconnect both ends of the factory low pressure fuel lines and remove it. You will need to remove the cover and fuel line mount on the firewall. You can re-use this bracket with some modification later, or you can choose to discard it depending on the look you are going for here.

The Flex mount bracket will align with three holes on the fire wall. One of them is a plastic cap that holds part of the sound/heat deadening materials, remove the cap and put it back on. Re-use the two screws and rubbers spacers from the firewall bracket for the other two holes. These are slotted to allow for some wiggle room as needed. If needed, the flex sensor can easily be removed from the mount as it is a snap fit and may make installation easier here. Then just snap it back in place after.



Install the 5/16" SAE Fuel Line Adapter to 6an male to the factory hardline. Next use the 6an Swivel coupler to connect between the 3/8" SAE fitting on the Flex Sensor and connect them together. You can leave all of the fittings slightly loose as you install everything, and then go back and tighten each fitting later.

Connect the braided fuel line to the other side of the flex sensor using the 90 degree hose end.





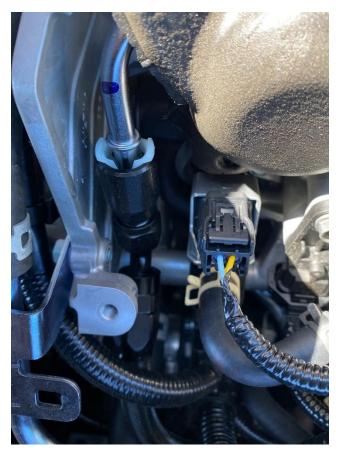
*** IMPORTANT *** Next take the 5/16 SAE quick disconnect (with plastic) and install that into the 45 degree hose end and tighten. It will be difficult to tighten later if you do not do it before connecting it to the HPFP (high pressure fuel pump)



Route the hose in the same general way the factory line was routed, use the included tie wraps to secure the hose as you go.

Go back and tighten all fuel fittings and check everything is secure.

Connect the quick disconnect fitting attached to the line to the HPFP.



WIRE HARNESS

The wire harness is to be routed out of the way of any moving parts and should be of the proper length with a little flexibility. Use common sense and best judgement.



The one branch with two connectors mounts INLINE to the Mass Airflow Sensor (MAF). Route it to that general area, disconnect your MAF, and plug that factory connector into the male connector on the harness. Connect the other one to the MAF.

The longest branch is to be routed down to the ECT2 sensor which is on the bottom of the radiator on the drivers side. You will most likely need to remove the flexible intake to gain access to that area. Disconnect the factory ECT2 connector and plug that into the male connector on the harness. Again, route and secure the wire in an appropriate fashion.



The last wire with a ring terminal is the ground and will go to the negative terminal on the battery. Connect this wire and reconnect the negative battery terminal during this step.

CHECK FOR LEAKS by keying ON the vehicle (key on, engine off) but do not start it yet. You will hear the low pressure fuel pump prime and you should check ALL lines and fittings for leaks. Do not go any further without making sure there are zero leaks or "sweat" on the fuel lines.

Next you must update your tune file by disabling the ECT2 sensor at the very least in your tune file. The factory calibration uses the ECT2 sensor to turn fans on/off and when this sensor is disconnected and no longer in use it must be disabled in your tune file. You can also enable flex fuel during this time if you like as well. Please speak with your tuner before this point if you do not know how to do this yourself. They should be able to send you an updated tune file before you begin this process.

Upload your new tune file, and then speak to your tuner or tune for flex fuel from there.