

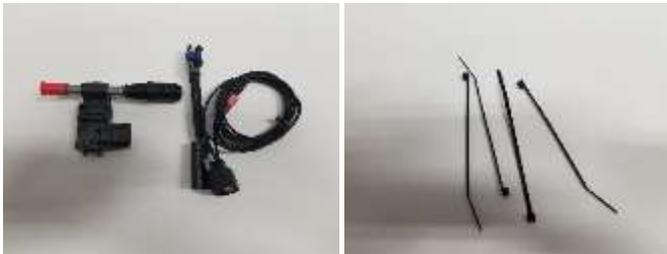
Skid Mark Garage Flex Fuel Kit

Congratulations on purchasing the number one bang for the buck modification you can add to your car!

Tools required for install

- 16mm or 5/8" open ended wrench (to gently snug the cap on the fuel fitting)
- Small flat tip screwdriver
- Tweezers or small needle nose pliers
- 3/8 fuel line disconnect tool (if you did not purchase one from us, they can be rented at most parts stores for free)

Included in kit, and zip ties to secure wires



Getting started

Connecting the sensor to your fuel supply

1. Working in a well-ventilated area, make sure car has been off for 30 minutes or more to allow fuel pressure to bleed off and allow any engine components to cool off. Locate the factory hardline where it meets the flexible crossover tube on the passenger side of the engine next to your abs brake unit
2. Place a shop rag just below the fitting to catch any fuel drips and using a 3/8" fuel line quick disconnect tool similar to one pictured below (available at most auto parts stores as a free rental) disconnect the hardline from the flexible line.
3. Unscrew the little black cap from the aluminum adapter on your sensor, and place it behind the ridge on the hardline just like the sample pic shown below



4. Slide the sensor assembly over the hardline and thread the cap back into adapter and snug up hand tight with a 16mm or 5/8" wrench. No need to use excessive force, just snug See image below for an example.



5. Next remove red shipping cap (if equipped) from sensor module tube and then connect the flexible tube onto the sensor, you should feel it click into place. And it will look similar to the image below.



6. Verify connections are secure and then start car to check for leaks. Once verified you have no leaks, shut off and continue onto the electrical portion of the installation.

Making the electrical connections

1. Your harness is plug and play. That means no cutting, splicing or any permanent modification is necessary. The harness contains 3 OEM style connectors, and one bare terminal for the PCM connection.
2. Taking the sensor side connector, attach to the sensor and route the other 2 connectors to the nearest ignition coil. (you may have to remove the snap on cosmetic valve cover to access the coils). Disconnect the existing plug from the coil and install our jumper harness between the coil and OEM harness as shown below (which ever coil you choose does not matter as long as the wire reaches the flex sensor).



3. Route the remaining single white tipped signal wire forward towards the fuse panel, securing it safely around anything hot or likely to pinch it. Route it ultimately to the PCM.
4. Locate the PCM just below the fuse box and find connector x1 and remove the red clip and disconnect the harness from the pcm and around to the front where its easier to work (loosening the fuse box and setting to the side can help create more access to the pcm)
5. With the x1 connector at hand, remove both the blue cover (small flat blade screwdriver and gently pry around the perimeter) on the face of the plug as well as the black cover on the back to expose the wires.



Cover installed (shown above) here protects the terminals



Same plug with the plastic terminal cover removed to expose the terminals and ensure the signal wire gets seated



As seen in this picture (above), the sensor wire is pulled through the harness to be aligned then seated flush like (below) before cap is reinstalled



Another view of the terminal once made flush, note the orientation of the terminal is the same as the others

1. Find Pin location #40 as shown in the picture above. With a small pin or pick push out any plastic slug from the terminal side if hole is plugged, take the white wire and insert into the #40 pin location and seat all the way down just like the other factory terminals making sure you have the pin aligned the same way as the others. If necessary, remove the plastic trim cover from the face of the plug to ensure you have fully seated the pin terminal.
2. From the wire side of the plug, slide the terminal/white wire into the hole and align it flush like the existing terminals in the harness. (be sure to make it face the same direction as the others). If the wire is snug to insert, a little spray silicon or dielectric grease on the terminal can help. We tend to use a small tweezers or needle nose

This step is the most critical and will eliminate 99% of all signal issues we get calls on. Be sure to insert the white signal wire fully into the newly opened location 40. To help ensure you have fully inserted the white signal wire into location 40 completely, you can remove the black cap like shown again below to make sure the terminal is fully seated and oriented the same as the other connectors. The cap simply pops off with a small flat tip screw driver and will go back on when finished. The red circle below indicates where the white wire will come out from this side. Be sure it is oriented and flush to the end of the connector like the other terminals are.

3. Reassemble harness, pug back into PCM and use remaining zip ties to secure the wires/loom out of any danger.
4. Start car, check for leaks. You can now go get your car tuned to read from the flex sensor.
5. **DO NOT FILL YOUR CAR UP WITH E85 UNTIL YOU HAVE BEEN TUNED, THE SENSOR WILL NOT BE ACTIVE UNTIL IT HAS BEEN TURNED ON WITHIN YOUR TUNE. YOU WILL ALSO NOT BE ABLE TO SEE ETHANOL CONTENT ON A GAUGE OR SCAN TOOL UNTIL THE SENSOR IS AVTIVATED**

Questions? Email info@skidmarkgarage.net