

INSTALLATION GUIDE

TOYOTA 86 FLEX FUEL KIT



IMPORTANT INFORMATION

Thank you for purchasing our Flex Fuel Kit, installing this product indicates your acceptance of the responsibility and liability associated with the fitment and use of this product.



1. Open kit check all parts supplied
2. De-pressurise fuel system by removing fuel pump relay from vehicle and crank engine until it will not start and relieve any remaining tank pressure by removing and reinstalling fuel cap.
3. Disconnect battery terminals and remove battery. This will allow access required at a later stage.



ENGINEERING PERFORMANCE SINCE 1955

INSTALLATION GUIDE

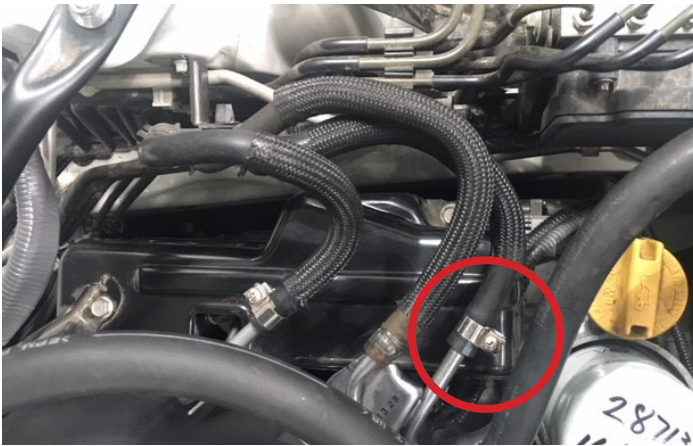
TOYOTA 86 FLEX FUEL KIT



4. Fuel line routing and flex fuel sensor mounting;

Note: If installing kit to Supercharged vehicle – Install injectors.

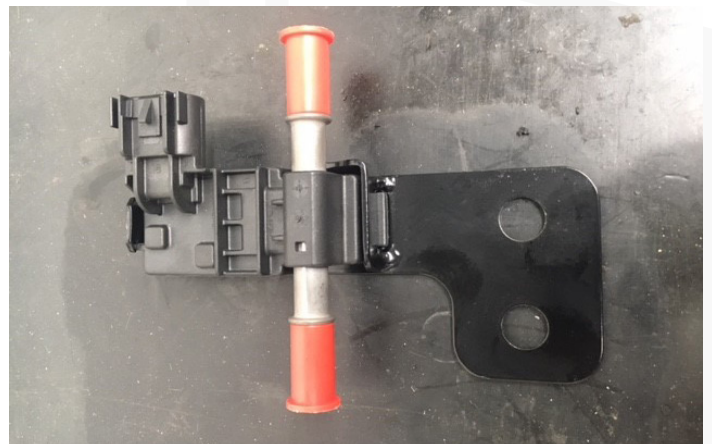
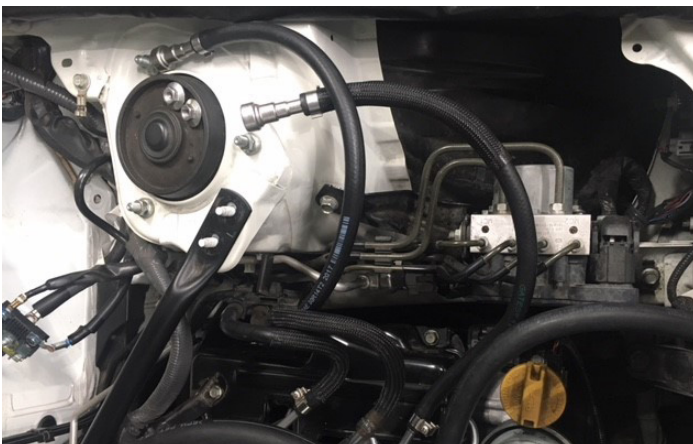
4.1 Disconnect main flexible fuel supply line from engine and vehicle hard line (this line is the most forward facing line in the engine bay)



4.2 Using 550mm from supplied E85 compatible fuel line, install 1 x straight connector, cobra clamp to hose. Using factory hose clamp, install hose to vehicle body hard line.

4.3 Using 450mm from supplied E85 compatible fuel line, reuse hose sleeve from original supply hose, install 1 x straight connector, cobra clamp to hose. Using factory hose clamp, install hose to engine hard line.

4.4 Install flex fuel sensor to bracket



ENGINEERING PERFORMANCE SINCE 1955

INSTALLATION GUIDE

TOYOTA 86 FLEX FUEL KIT



4.5 Remove passenger side strut brace nuts, install bracket/sensor as shown and reinstall nuts

4.6 Connect hose from vehicle body hard line to in (port facing outside of car) port on flex fuel sensor (ensure straight connector to sensor is clipped onto sensor port correctly)

4.7 Connect hose from engine hard line to out port (port facing engine) on flex fuel sensor (ensure straight connector is clipped onto sensor port correctly)

Note: Ensure all hoses are run freely without any rubbing or kinking



5. ECU Access and wiring

5.1 Remove passenger side scuff plate and kick panel

5.2 Remove passenger side dash side trim and glove box lid

5.3 Remove 5 self tapping screws from glove box opening

5.4 In engine bay, cut rubber nipple from main wiring harness grommet – located in firewall – and make a small 6mm hole for the sensor wiring harness to pass through



ENGINEERING PERFORMANCE SINCE 1955

INSTALLATION GUIDE

TOYOTA 86 FLEX FUEL KIT



- 5.5 Connect the sensor harness to sensor and carefully route the harness around strut tower and feed through hole in grommet into glove box area – cable tie as required
- 5.6 Remove 2 x 10mm head nuts from ECU bracket and lower ECU to gain access to factory connectors
- 5.7 Disconnect 12V supply plug from back of glovebox trim
- 5.8 Locate supplied flex fuel content analyser wiring loom (picture)
- 5.9. Install supplied terminal to the white with blue trace wire on supplied loom (ensure correct crimping pliers are used) Prepare ECU connector for new wire as shown.
- 5.10 Install eye terminal to black wire of supplied loom.
- 5.11 Remove insulation from end of red wire.

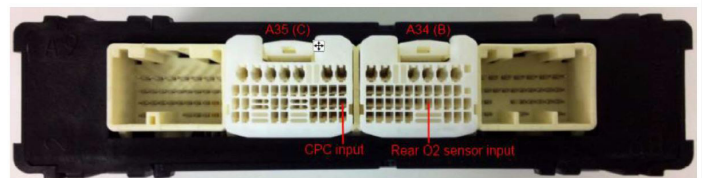
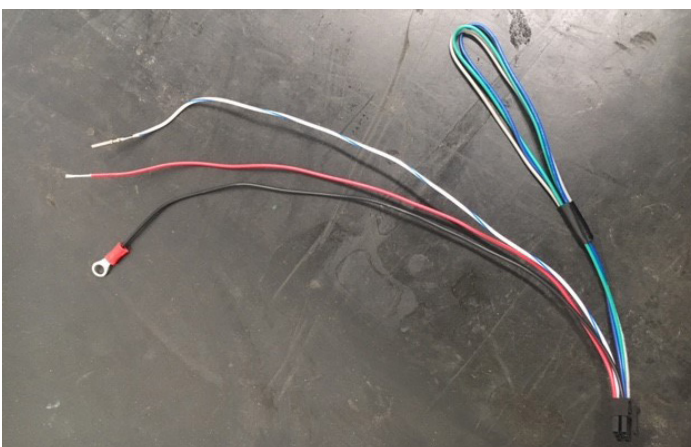
Note: The remaining wires from loom will not be used and can be taped back

- 5.12 Locate ECU connectors A35C / A34B – as shown in picture – this will be used for your custom Flex MAP.

The CPC Pressure Sensor signal normally comes from the carbon canister pump module, which is non-essential and only fitted in some markets (USA region for example), the vehicles rear O2 sensor checks for the correct functioning of the catalytic converter and also provides the ECU with fuel trim information, if the fuel trims are turned off the input can then be used for any 0-5v analogue signal to control a custom map.

Insert pre-terminated white/ blue wire from content analyser wiring loom into applicable input slot (ensure that terminal is seated flush to end of connector), reconnect ECU connector and refit ECU/bracket

Note: Selecting either the CPC module or rear o2 input may depend on application or vehicle year model. ECU connector slot will require some minor modification to allow terminal insertion – suggest a 2mm drill bit by hand to remove existing tangs.



ENGINEERING PERFORMANCE SINCE 1955

INSTALLATION GUIDE

TOYOTA 86 FLEX FUEL KIT



5.13 Black wire with eyelet can be installed under 10mm head nut from ECU

5.14 Red wire can be soldered to 12V white/black wire from rear of glove box and reconnect loom to rear of glove box.

5.15 Connect the previously run flex fuel sensor wiring to the 'sensor' port of the Content Analyser module and the content analyser loom can be connected to the 'signal' port of the module which can then be mounted and secured behind glove box using a cable tie.

Note: Recheck all connections and looms and neatly tied.

5.16 Refit glove box and trims

5.17 Refit battery and terminals

5.18 Vehicle will now require programming and tuning to enable flex fuel functionality